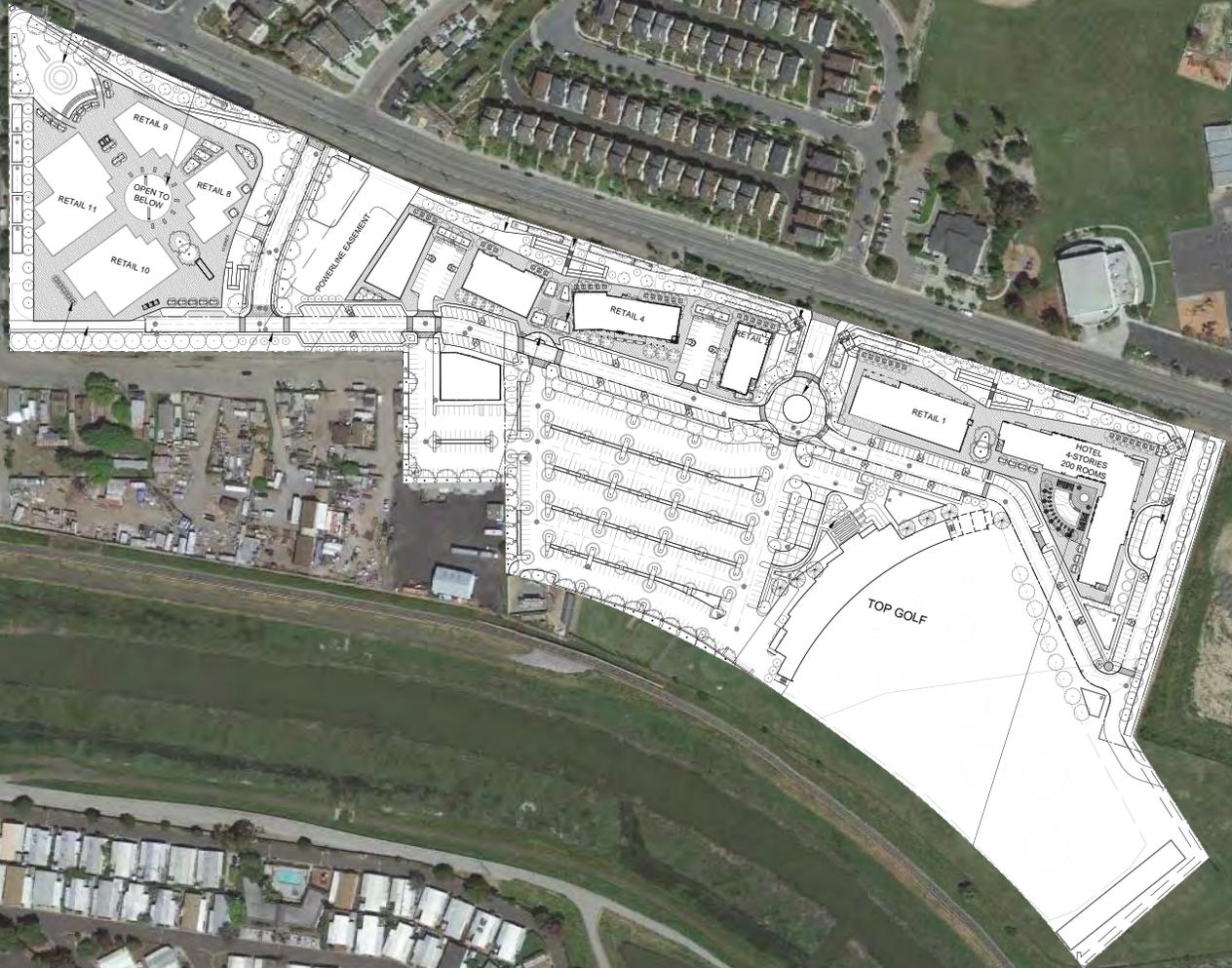


Initial Study

Topgolf @ Terra Project



File GPT16-001, PDC16-013



September 2016

MITIGATED NEGATIVE DECLARATION

The Director of Planning, Building and Code Enforcement has reviewed the proposed project described below to determine whether it could have a significant effect on the environment as a result of project completion. "Significant effect on the environment" means a substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

NAME OF PROJECT: Topgolf @ Terra Project

PROJECT FILE NUMBER: PDC16-013, GPT16-001

PROJECT DESCRIPTION:

File No. PDC16-013. Planned Development Rezoning from the CIC Combined Industrial Commercial and R-M Multiple Residence Residential Zoning Districts to the CIC(PD) Planned Development Zoning District to allow up approximately 110,000 square feet of commercial/retail space, a 200 room hotel, approximately 72,000 square feet of indoor/outdoor recreation use (Topgolf) and late night use.

File No. GPT16-001. General Plan Text Amendment to amend the Alviso Specific Plan to change the development standards for height under the "Village Area Guidelines for Commercial Development" to include a maximum allowable building height of 65 feet in certain areas and a maximum allowable non-building structure height of 170 feet in certain areas.

PROJECT LOCATION: a 36-acre site located on the south side of North First Street, between Highway 237 and Gold Street, in the Alviso area of San Jose.

ASSESSORS PARCEL NO.: 015-39-026, -020, 015-03-012, -018, -027, and -031

COUNCIL DISTRICT: 4

APPLICANT CONTACT INFORMATION: Jag Kapoor, Terra Hospitality, Inc., 461 South Milpitas Boulevard, Suite 1, Milpitas, CA 95035 jagkapoor@gmail.com

FINDING

The Director of Planning, Building & Code Enforcement finds the project described above will not have a significant effect on the environment in that the attached initial study identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this draft Mitigated Negative Declaration, has made or agrees to make project revisions that clearly mitigate the effects to a less than significant level.

MITIGATION MEASURES INCLUDED IN THE PROJECT TO REDUCE POTENTIALLY SIGNIFICANT EFFECTS TO A LESS THAN SIGNIFICANT LEVEL

- A. **AESTHETICS** – The project will not have a significant impact on this resource, therefore no mitigation is required.
- B. **AGRICULTURE AND FOREST RESOURCES** – The project will not have a significant impact on this resource, therefore no mitigation is required.
- C. **AIR QUALITY.**

Impact AQ-1: Air quality impacts resulting from construction, particularly emissions of NOx and generation of construction dust, could cause significant adverse effects.

Impact AQ-2: Construction of the proposed project could expose offsite sensitive receptors to substantial risks and hazards related to TACs.

MM AQ-1.1: All diesel-powered construction equipment larger than 50 horsepower and operating on site for more than two (2) continuous days shall meet U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.

MM AQ-1.2: Consistent with City policies, the project shall be developed in conformance with the following standard Bay Area Air Quality Management District (BAAQMD) dust control measures during all phases of construction on the project site to reduce dustfall emissions:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 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.

- 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.
- The name and phone number of the Construction/Disturbance coordinator, the phone number of the Air District, the hours of construction limitations, City File Number PDC16-013, and the City of San Jose's Code Enforcement Division phone number (408-535-7770), shall be displayed on a weatherproof sign posted at each entrance to the project site. A local phone number with answering service shall be maintained during the duration of project construction.

D. BIOLOGICAL RESOURCES.

Impact BIO-1: The project could result in significant impacts to Congdon's Tarplant.

MM BIO-1.1: Prior to any construction, a focused survey for Congdon's Tarplant shall be conducted by a qualified biologist in the California annual grassland habitat within the project's permanent impact area. The survey shall be conducted during the species' blooming period (May-November), and shall be submitted to the City's Supervising Environmental Planner for review and approval.

MM BIO-1.2: If a population of Congdon's Tarplant is identified in the project impact area, mitigation for loss of individuals shall be conducted. Mitigation shall be achieved by establishing a new population of Congdon's tarplant in the diked brackish marsh and California annual grassland habitats that occur in the basins at the south portion of the site. This area shall not be developed by the Project and contains suitable habitat types for establishing a new population. Mitigation shall be a 1:1 ratio (impact:mitigation) of plant establishment on an acreage basis.

Annual monitoring shall include quantitative sampling of the Congdon's population to determine the number of plants that have germinated and set seed. This monitoring shall continue annually or until success criteria have been met; once annual monitoring has documented that a self-sustaining population of this annual species has been successfully established on site, this mitigation measure shall be determined to have been met and the project applicant released from further responsibility.

Establishment of the plant population shall be subject to a Habitat Mitigation and Monitoring Plan (HMMP). To ensure the success of mitigation sites required for compensation of permanent impacts on Congdon's tarplant, the Project proponent shall retain a qualified biologist to prepare an HMMP. The HMMP shall be submitted to the City's Supervising Environmental Planner for review and approval prior to the start of construction. The HMMP shall include, at a minimum, the following information:

- A summary of habitat and species impacts and the proposed mitigation for each element.

- A description of the location and boundaries of the mitigation site(s) and description of existing site conditions.
- A description of any measures to be undertaken to enhance (e.g., through focused management) the mitigation site for special-status species.
- Identification of an adequate funding mechanism for long-term management
- A description of management and maintenance measures intended to maintain and enhance habitat for the target species (e.g., weed control, fencing maintenance).
- A description of habitat and species monitoring measures on the mitigation site, including specific, objective performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. Monitoring will document compliance with each element requiring habitat compensation or management. At a minimum, performance criteria will include a minimum 1:1 mitigation ratio for the number of plants in the impacted population (at least one plant preserved for each plant impacted).
- A contingency plan for mitigation elements that do not meet performance or final success criteria within described periods; the plan will include specific triggers for remediation if performance criteria are not met and a description of the process by which remediation of problems with the mitigation site (e.g., presence of noxious weeds) will occur.
- A requirement that the project proponent will be responsible for monitoring, as specified in the HMMP, for at least three (3) years post-construction; during this period, annual reporting will be provided to the City's Supervising Environmental Planner.

Impact BIO-2: The project could result in significant impacts to Burrowing Owls.

MM BIO-2.1: The project proponent shall implement Condition 15 of the Habitat Conservation Plan (HCP) and pay burrowing owl impact fees to the Santa Clara Valley Habitat Agency. Pursuant to Condition 15, a qualified biologist shall conduct pre-construction surveys in all suitable habitat areas. To maximize the likelihood of detecting owls, the preconstruction survey will last a minimum of three hours. The survey will begin one hour before sunrise and continue until two hours after sunrise (for three hours total) or begin two hours before sunset and continue until one hour after sunset. Additional time may be required for large project sites. A minimum of two surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their locations will be mapped. Surveys will conclude no more than two calendar days prior to construction. Therefore, the project proponent must begin surveys no more than four days prior to construction (two days of surveying plus up to two days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the project proponent may also conduct a preliminary survey up to fourteen (14) days before construction. This preliminary survey may count as the first of the two required surveys

as long as the second survey concludes no more than two calendar days in advance of construction.

If evidence of western burrowing owls is found during the breeding season (February 1–August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a 250-foot non-disturbance buffer zone around nests. Construction may occur outside of the 250-foot non-disturbance buffer zone. Construction may occur inside of the 250-foot non-disturbance buffer during the breeding season if:

- the nest is not disturbed, and
- the project proponent develops an avoidance, minimization, and monitoring plan is approved by the Santa Clara Valley Habitat Agency and the Wildlife Agencies prior to project construction.

If evidence of western burrowing owls is found during the non-breeding season (September 1–January 31), the project proponent will establish a 250-foot non-disturbance buffer around occupied burrows as determined by a qualified biologist. Construction activities outside of this 250-foot buffer are allowed. Construction activities within the non-disturbance buffer are allowed if the certain criteria are met, as outlined in the HCP Conditions Implementation Guide, in order to prevent owls from abandoning important overwintering sites.

The project proponent and/or contractor shall submit evidence of compliance with the HCP to the City's Supervising Environmental Planner prior to issuance of any grading permits.

Impact BIO-3: Construction of the project could result in impacts to nesting migratory birds.

MM BIO-3.1: Construction and tree removal/pruning activities shall be scheduled to avoid the nesting season to the extent feasible. If feasible, tree removal and/or pruning shall be completed before the start of nesting season to help preclude nesting. The nesting season for most birds and raptors in the San Francisco Bay area extends from February 1 through August 31.

MM BIO-3.2: If it is not possible to schedule construction activities between September 1 and January 31, a qualified ornithologist shall conduct a pre-construction survey for nesting raptors and other migratory breeding birds of the onsite trees as well as all trees within 250 feet of the site to identify active bird nests that may be disturbed during project construction.

Between February 1 and April 30, the pre-construction survey shall be completed no more than 14 days prior to the initiation of demolition/construction activities (including tree removal and pruning). During this survey, the ornithologist shall inspect all trees and

other possible nesting habitats in and immediately adjacent to the construction areas for nests.

If the survey does not identify any nesting birds that would be affected by construction activities, no further mitigation is required.

MM BIO-3.3: If an active nest is found close to work areas to be disturbed by these activities, the ornithologist (in consultation with the California Department of Fish and Wildlife) shall designate a construction-free buffer zone (typically 300 feet for raptors and 100 feet for non-raptors) to be established around the nest to ensure that no nests of species protected by the Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code will be disturbed during construction activities. The buffer shall remain in place until the breeding season has ended and/or a qualified ornithologist has determined that the nest is no longer active.

Impact BIO-4: The proposed project could result in the introduction or spread of invasive weeds.

MM BIO-4.1: All seeds and straw materials used on site shall be composed of weed-free rice (or similar material acceptable to the City) straw, and all gravel and fill material shall be certified weed free. Proof of certification, in the form of a California Department of Food and Agriculture Form 66-079 "Certificate of Quarantine Compliance (CQC)", or equivalent certification, shall be submitted to the City's Supervising Environmental Planner prior to issuance of a grading permit.

MM BIO-4.2: During construction of the proposed project, vehicles and all equipment shall be washed (including wheels, undercarriages, and bumpers) before leaving and after entering the proposed project footprint. Vehicles shall be cleaned at existing construction yards or legally operating car washes.

MM BIO-4.3: Following construction of the proposed project, temporary impact zones, on any disturbed ground that will not be under hardscape, landscaped, or maintained, shall be reseeded with a native seed mixture. Seed mixtures applied for erosion control shall be composed of native species appropriate for the site in order to provide long-term erosion control and slow colonization by invasive nonnatives.

Impact BIO-5: The project could result in substantial adverse effects on federally protected wetlands.

MM BIO-5.1: The project proponent shall implement Conditions 3 and 12 of the HCP to minimize reduce construction impacts to streams, wetlands, and riparian habitat. These HCP conditions require avoidance of wetlands and require construction setbacks for streams and riparian area during construction.

Condition 3. This condition consists of avoidance and minimization measures outlined in Table 6-2 of the Habitat Plan. All personnel working within or adjacent to the stream

setback (i.e., those people operating ground-disturbing equipment) will be trained by a qualified biologist in these avoidance and minimization measures, in the permit obligations under U.S. Army Corps of Engineers (USACE), and permit obligations under the HCP. Training materials shall be submitted to the City's Supervising Environmental Planner upon request.

Condition 12. The following conditions shall be printed on all plans and contract documents for the Project, and implemented by the project proponent or contractors during construction:

- All wetlands and ponds to be avoided by covered activities shall be temporarily staked in the field by a qualified biologist to ensure that construction equipment and personnel avoid these features.
- Fencing shall be erected along the outer edge of the project area, between the project area and a wetland or pond.
- Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into wetlands, ponds, streams, or riparian woodland/scrub. Filter fences and mesh shall be of material that will not trap reptiles and amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
- Erosion-control measures shall be placed between the wetland or pond and the outer edge of the project site. Fiber rolls used for erosion control shall be certified as free of noxious weed seed.
- Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas.
- No construction or maintenance vehicles shall be refueled within 200 feet of avoided wetlands and ponds unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill.
- All organic matter shall be removed from nets, traps, boots, vehicle tires, and all other surfaces that have come into contact with ponds, wetlands, or potentially contaminated sediments. Items should be rinsed with clean water before leaving each site.
- Used cleaning materials (e.g., liquids) shall be disposed of safely, and if necessary, taken off site for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

MM BIO-5.2: Prior to any construction activities, the project proponent shall complete a formal wetland delineation for the site that shall be submitted to the USACE for verification. If determined necessary by the USACE, the project shall obtain a Section 404 fill discharge permit from the USACE, and Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

Impact BIO-6: The project could result in significant impacts to birds as a result of bird strikes on the proposed Topgolf and hotel buildings.

MM BIO-6.1: The project proponent shall incorporate the following bird-safe features into the building design, to the satisfaction of the Director of PBCE:

- *Façade Treatments.* No more than 10 percent of the surface area of façades between the ground and 60 feet above ground shall have untreated glazing. Examples of bird-friendly glazing treatments include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass.
- *Funneling of flight paths.* The design of the buildings shall avoid the funneling of flight paths along buildings or trees towards a building façade.
- *Skyways, walkways, or glass walls.* Glass skyways or walkways and freestanding glass walls shall not be incorporated into the buildings' design.

Impact BIO-7: The project could result in significant impacts to birds as a result of bird strikes on the proposed Topgolf netting.

MM BIO-7.1: The project proponent shall place net marking devices, such as FireFlies or BirdMark BM-AG, along all sections of the netting perimeter rope and rib lines to form vertical rows of flight diverters in the center of each area of netting between support poles. The maximum distance between such marking devices, and/or between such marking devices and support poles, shall be 15 feet.

E. CULTURAL RESOURCES.

Impact CR-1: Construction of the proposed project could impact unknown buried archaeological resources and human remains, if present on site.

MM CR-1.1: Treatment Plan: Prior to the issuance of any grading permit, a project-specific Cultural Resources Treatment Plan (Treatment Plan) shall be prepared by a qualified archaeologist. The Treatment Plan shall reflect permit-level detail pertaining to depths and locations of all ground disturbing activities. The Treatment Plan shall be prepared and submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement prior to approval of any grading permit. The Treatment Plan shall contain, at a minimum:

- Identification of the scope of work and range of subsurface effects (including location map and development plan), including requirements for preliminary field investigations.
- Description of the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found).

- Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
- Detailed field strategy used to record, recover, or avoid the finds and address research goals.
- Analytical methods.
- Report structure and outline of document contents.
- Disposition of the artifacts.
- Appendices: all site records, correspondence, and consultation with Native Americans, etc.

MM CR-1.2: Investigation: Prior to project grading and excavation, the project applicant shall complete a preliminary field investigation program in conformance with the project-specific Cultural Resources Treatment Plan required under Mitigation Measure MM CR-1.1. The locations of subsurface testing and exploratory trenching shall be determined prior to issuance of any grading permit based on the Cultural Resources Treatment Plan recommendations. A qualified archaeologist shall complete a presence/absence exploration with a backhoe once the existing improvements planned for removal (i.e., dry cleaners, parking lot) are cleared from the site. If it is not possible to conduct presence/absence subsurface testing across the entire study area because of remediation or preservation plans for the historic building facades, then a combination of presence/absence exploration, where possible, along with archaeological monitoring shall be required. Results of the investigation shall be provided to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement prior to issuance of any grading permit.

If any finds were discovered during the preliminary field investigation, the project shall implement MM CR-1.4 for evaluation and recovery methodologies. The results of the preliminary field investigation and program shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement for review and approval prior to issuance of any grading permit.

MM CR-1.3: Construction Monitoring and Protection Measures: Although the data recovery and treatment program is expected to recover potentially significant materials and information from the areas impacted by the project prior to grading, it is possible that additional resources could remain on-site. Therefore, all ground-disturbing activities (e.g., grading and excavation) shall be completed under the observation of a qualified archaeologist.

The qualified archaeologist shall have authority to halt construction activities temporarily in the immediate vicinity of an unanticipated find. If, for any reasons, the qualified archaeologist is not present but construction crews encounter a cultural resource, all work shall stop temporarily within 50 feet of the find until a qualified archaeologist has been contacted to determine the proper course of action. The Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of

Planning, Building, and Code Enforcement shall be notified of any finds during the grading or other construction activities. Any human remains encountered during construction shall be treated according to the protocol identified in MM CR-1.5.

MM CR-1.4: Evaluation and Data Recovery: The Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement shall be notified of any finds during the preliminary field investigation, grading, or other construction activities. Any historic or prehistoric material identified in the project area during the preliminary field investigation and during grading or other construction activities shall be evaluated for eligibility for listing in the California Register of Historic Resources. Data recovery methods may include, but are not limited to, backhoe trenching, shovel test units, hand augering, and hand-excavation.

The techniques used for data recovery shall follow the protocols identified in the project-specific Cultural Resources Treatment Plan. Data recovery shall include excavation and exposure of features, field documentation, and recordation.

MM CR-1.5: Human Remains: Native American coordination shall follow the protocols established under Assembly Bill 52, State of California Code, and applicable City of San José procedures.

If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Project Applicant shall immediately notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the qualified archaeologist, who will then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his/her authority, the Coroner shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American.

If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD, will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts.

If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

MM CR-1.6: Site Security: At the discretion of the Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement, site fencing shall be installed on-site during the investigation, grading, building, or other construction activities to avoid destruction and/or theft of potential cultural resources. The responsible qualified archaeologist shall advise the Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement as to the necessity for a guard. The purpose of the security guard shall be to ensure the safety of any potential cultural resources (including human remains) that are left exposed overnight. The Director of PBCE shall have the final discretion to authorize the use of a security guard at the project site.

MM CR-1.7: Final Reporting: Once all analyses and studies required by the project-specific Cultural Resources Treatment Plan have been completed, the project applicant, or representative, shall prepare a final report summarizing the results of the field investigation, data recovery activities and results, and compliance with the Cultural Resources Treatment Plan during all demolition, grading, building, and other construction activities. The report shall document the results of field and laboratory investigations and shall meet the Secretary of the Interior's Standards for Archaeological Documentation. The contents of the report shall be consistent with the protocol included in the project-specific Cultural Resources Treatment Plan. The report shall be submitted to the Director of Planning, Building, and Code Enforcement for review and approval prior to issuance of any Certificates of Occupancy (temporary or final). Once approved, the final documentation shall be submitted to the Northwest Information Center at Sonoma State University, as appropriate.

MM CR-1.8: Curation: Upon completion of the final report required by the project-specific Cultural Resources Treatment Plan, all recovered archaeological materials shall be transferred to a long-term curation facility. Any curation facility used shall meet the standards outlined in the National Park Services' Curation of Federally Owned and Administered Archaeological Collections (36 CFR 79). The project applicant shall notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement of the selected curation facility prior to the issuance of any Certificates of Occupancy (temporary or final).

Treatment of materials to be curated shall be consistent with the protocols included in the project-specific Cultural Resources Treatment Plan.

- F. **GEOLOGY AND SOILS** – The project will not have a significant impact on this resource, therefore no mitigation is required.
- G. **GREENHOUSE GAS EMISSIONS** – The project will not have a significant impact on this resource, therefore no mitigation is required.
- H. **HAZARDS AND HAZARDOUS MATERIALS.**

Impact HAZ-1: Residual soil and groundwater contamination could expose construction workers and members of the public to hazardous materials during construction activities.

MM HAZ-1.1: Sampling. The project applicant shall retain a qualified hazardous materials professional to conduct focused sampling and analysis for contamination of soil, soil vapor, and/or groundwater on-site prior to issuance of any grading permit. Sampling on the site shall be under the oversight of the Santa Clara County Department of Environmental Health, or equivalent regulatory agency, in accordance with a Work Plan prepared by a qualified professional and approved by the Santa Clara County Department of Environmental Health or equivalent regulatory agency such as the California Department of Toxic Substances Control, or the California Regional Water Quality Control Board, (hereafter referred to as the “Agency”).

MM HAZ-1.2: Work Plan. The approved Work Plan shall describe sample methodology, sample locations, the quality assurance/quality control plan, reporting, and schedule. The Work Plan shall be implemented by the project and the results of the sampling shall be submitted to the Santa Clara County Department of Environmental Health (or equivalent regulatory agency). If additional investigation is required to sufficiently delineate the contaminants of concern, additional sampling shall be proposed and reviewed and approved by the Santa Clara County Department of Environmental Health (or equivalent regulatory agency).

A letter (or equivalent assurance) from Santa Clara County Department of Environmental Health (or equivalent regulatory agency) documenting completion of the Work Plan for on-site sampling to the satisfaction of the Santa Clara County Department of Environmental Health (or equivalent regulatory agency) shall be provided to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the Compliance Officer/Hazardous Materials Specialist of the City of San José Department of Environmental Services. In the event no further testing or remediation is required, a No Further Action letter (or equivalent assurance) from Santa Clara County Department of Environmental Health (or equivalent regulatory agency) shall be provided prior to issuance of any grading permit.

MM HAZ-1.3: Site Management Plan. A Site Management Plan shall be prepared by a qualified hazardous materials consultant to establish management practices for handling contaminated soil or other materials encountered during construction activities. The sampling results shall be compared to appropriate risk-based screening levels in the Site

Management Plan. The Site Management Plan shall identify potential health, safety, and environmental exposure considerations associated with redevelopment activities and shall identify appropriate mitigation measures. The Site Management Plan shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and Santa Clara County Department of Environmental Health (or equivalent regulatory agency) for approval prior to commencing construction activities. The Site Management Plan shall include, but is not limited to, the following:

- Proper mitigation as needed for demolition of existing structures;
- Management of stockpiles, including sampling, disposal, and dust and runoff control including implementation of a stormwater pollution prevention program;
- Management of underground structures encountered, including utilities and/or underground storage tanks;
- Procedures to follow if evidence of an unknown historic release of hazardous materials (e.g., underground storage tanks, polychlorinated biphenyls [PCBs], asbestos containing materials, lead-based paint, etc.) is discovered during excavation or demolition activities;
- Traffic control during site improvements;
- Noise, work hours, and other relevant City regulations;
- Mitigation of soil vapors (if required);
- Procedures for proper disposal of contaminated materials (if required); and
- Monitoring, reporting, and regulatory oversight arrangements.

MM HAZ-1.4: Health and Safety Plan. A site-specific Health and Safety Plan shall be prepared by the project applicant prior to issuance of any grading permit for project construction to address potential health and safety hazards associated with implementation of the Work Plan and proposed redevelopment activities (e.g., site preparation, demolition, grading and construction). The Health and Safety shall govern activities of all personnel present during field activities. Any contractor performing a task not covered in the Health and Safety shall be required to develop a job hazard analysis (JHA) specific to that task prior to performing the task. The Health and Safety Plan shall be submitted to Santa Clara County Department of Environmental Health (or equivalent regulatory agency) for review and approval prior to commencing construction activities. A copy of the Santa Clara County Department of Environmental Health (or equivalent regulatory agency) approval shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the Compliance Officer/Hazardous Materials Specialist of the City of San José Department of Environmental Services.

MM HAZ-1.5: Should asbestos be detected in soil samples taken on the site, the project applicant shall prepare an Asbestos Dust Mitigation Plan and submit the plan to the Bay Area Air Quality Management District (BAAQMD) for review and approval prior to

grading activities. The plan must describe dust control measures during grading as well as long term dust control measures. The plan shall include, at a minimum, the following measures:

- Track-out prevention and control measures;
- Active stockpiles shall be adequately wetted or covered with tarps;
- Control for disturbed surface areas and storage piles that remain inactive for more than seven days;
- Control for traffic on unpaved roads, parking lots, and staging areas;
- Control for earthmoving activities; and,
- Control for off-site transport.

I. HYDROLOGY AND WATER QUALITY – The project will not have a significant impact on this resource, therefore no mitigation is required.

J. LAND USE AND PLANNING – The project will not have a significant impact on this resource, therefore no mitigation is required.

K. MINERAL RESOURCES – The project will not have a significant impact on this resource, therefore no mitigation is required.

L. NOISE.

Impact NOI-1: The project could result in significant noise impacts to nearby residences during construction.

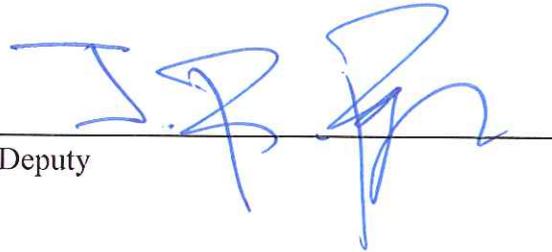
MM NOI-1.1: The project proponent shall implement the following noise reduction measures during construction activities:

- Noise-generating construction operations shall be limited to the hours between 7:00 AM and 7:00 PM Monday through Friday, unless otherwise expressly allowed in a development permit. This includes the staging of equipment and construction personnel. The construction hours shall be printed on all plans for the project used to construct the project.
- All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses.
- All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- All motorized construction equipment shall be shut down when not in use to prevent idling.

- Contractors shall be required to use “new technology” power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used at the project site, as well as at off-site locations with project construction, shall be equipped with adequate muffling devices. All equipment shall be in good mechanical condition, to minimize noise created by faulty or poorly maintained engine, drive-train and other components.
- The contractor shall schedule on-site and off-site construction activities in shifts to avoid high noise levels caused by simultaneously operating several pieces of noise-generating equipment.
- Temporary berms or noise barriers, such as lumber, or other material stockpiles shall be installed during construction activities.
- The following equipment shall be used during construction
 - Earth Removal: Use scrapers as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
 - Backfilling: Use a backhoe for backfilling, as it is less costly and quieter than either noisier bulldozers or loaders.
 - Ground Preparation: Use a motor grader rather than a bulldozer for final grading.
 - Building Construction: Power saws should be shielded or enclosed where practical to decrease noise emissions. Nail guns should be used where possible, as they are less noisy than manual hammering.
- Assembly Area. Workers shall not arrive to the site until the opening of the project gates. The applicant shall designate a location without adjacent residential units for workers to wait prior to the opening of the project gates.
- Disturbance Coordinator. A Construction/Disturbance Coordinator shall be identified by the developer for this project. The Construction/ Disturbance Coordinator shall be responsible for ensuring compliance with the hours of construction, site housekeeping, and other nuisance compliance conditions in this permit. The coordinator shall also compile information regarding construction phasing/operations and keep the neighborhood informed of the stages of development. The coordinator shall also listen and respond to neighborhood concerns regarding construction, determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem in a timely manner. The coordinator shall maintain a log of calls and shall make that log available to the City of San Jose upon request.
- Posting of Telephone Number. The name and phone number of the Construction/Disturbance coordinator, the hours of construction limitations, City File Number PDC16-013, and the City of San Jose’s Code Enforcement Division phone number (408-535-7770), shall be displayed on a weatherproof sign posted at each entrance to the project site. A local phone number with

1. Review the Draft Mitigated Negative Declaration (MND) as an informational document only; or
2. Submit written comments regarding the information and analysis in the Draft MND. Before the MND is adopted, Planning staff will prepare written responses to any comments, and revise the Draft MND, if necessary, to reflect any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Harry Freitas, Director
Planning, Building and Code Enforcement



A handwritten signature in blue ink, consisting of stylized initials and a surname, is written over a horizontal line.

Circulated on: **September 16, 2016**

Deputy

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SECTION 1.0 INTRODUCTION AND PURPOSE

This Initial Study (IS) of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the City of San Jose. This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from implementation of the proposed Topgolf @ Terra Project.

The City of San Jose is the Lead Agency under CEQA and has prepared this Initial Study to address the environmental impacts of implementing the proposed project.

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Topgolf @ Terra Project

2.2 PROJECT LOCATION

The 36-acre project site is located on the south side of N. First Street, between Highway 237 and Gold Street, in the Alviso area of San Jose (APNs 015-39-020, -026, 015-03-012, -018, -027, -031). Regional and vicinity maps of the site are shown on Figures 2.0-1 and 2.0-2, and an aerial photograph of the project site and surrounding area is shown on Figure 2.0-3.

2.3 LEAD AGENCY CONTACT

Whitney Berry, Planner II
Planning, Building and Code Enforcement
City of San Jose
200 East Santa Clara Street, 3rd Floor
San Jose, CA 95113
(408) 535-7829

2.4 PROJECT PROPONENTS

Ted Heilbron
Development Manager
Topgolf
8750 N. Central Expressway, Suite 1200
Dallas, TX 75231

Jag Kapoor
Terra Hospitality, Inc.
461 S. Milpitas Boulevard, Suite 1
Milpitas, CA 95035

2.5 APPLICATION NUMBER

GPT16-001 and PDC16-013

2.6 EXISTING GENERAL PLAN AND ZONING DISTRICT

General Plan: Combined Industrial/Commercial (CIC) and Open Space, Parklands, and Habitat (OSPH)

Zoning District: CN-Commercial Neighborhood and RM-Multiple Residence

2.7 EXISTING SITE CONDITIONS

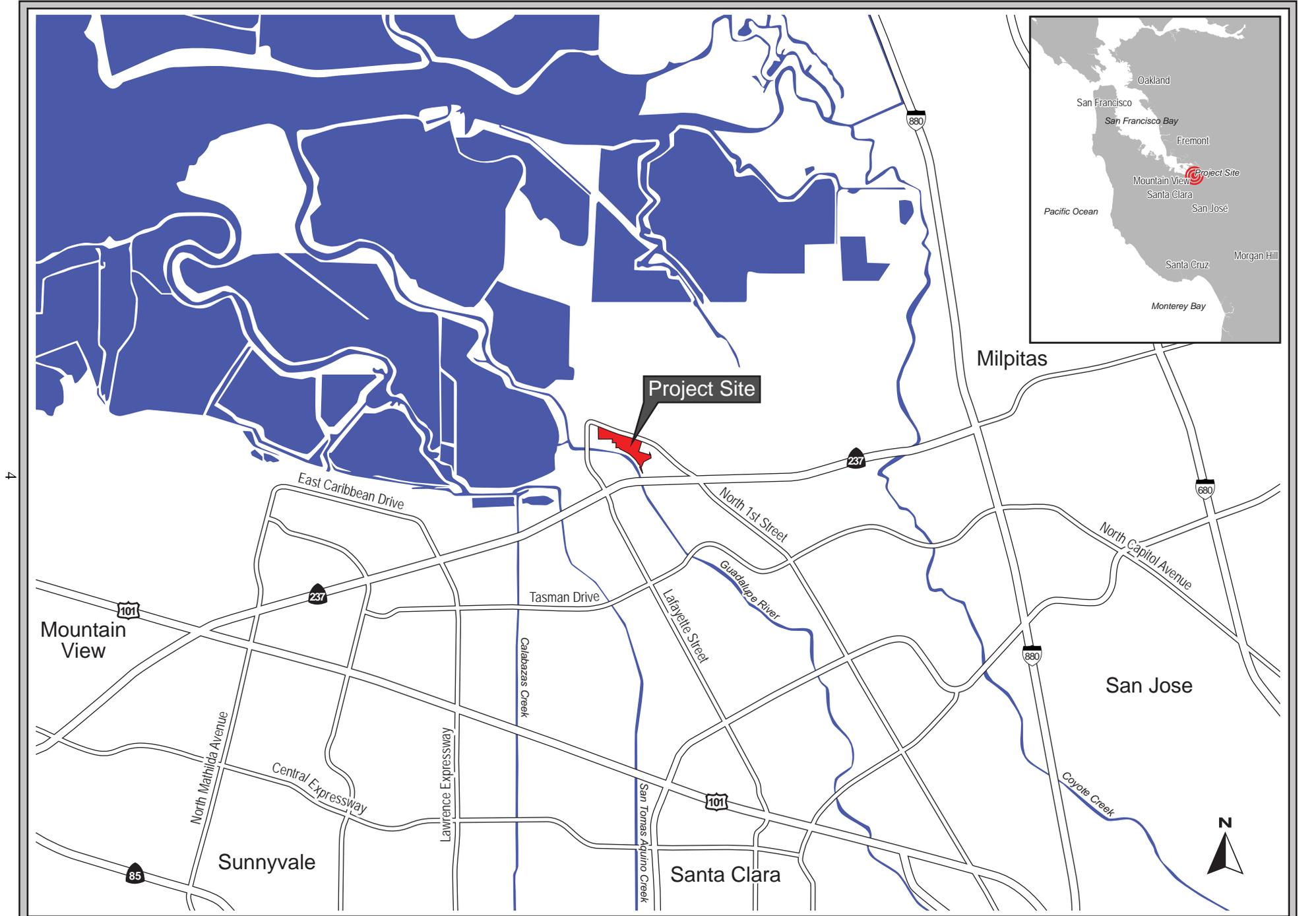
The eastern portion of the site is currently developed with the Pin High Golf Center and is used for recreational and commercial uses. The western portion of the site is used as an RV storage yard and is primarily vacant.

2.8 USES OF THE INITIAL STUDY

This Initial Study (IS) provides decision-makers in the City of San Jose (the CEQA Lead Agency), responsible agencies, and the general public with relevant environmental information to use in considering the project. This IS may also be relied upon for other agency approvals necessary to implement the project.

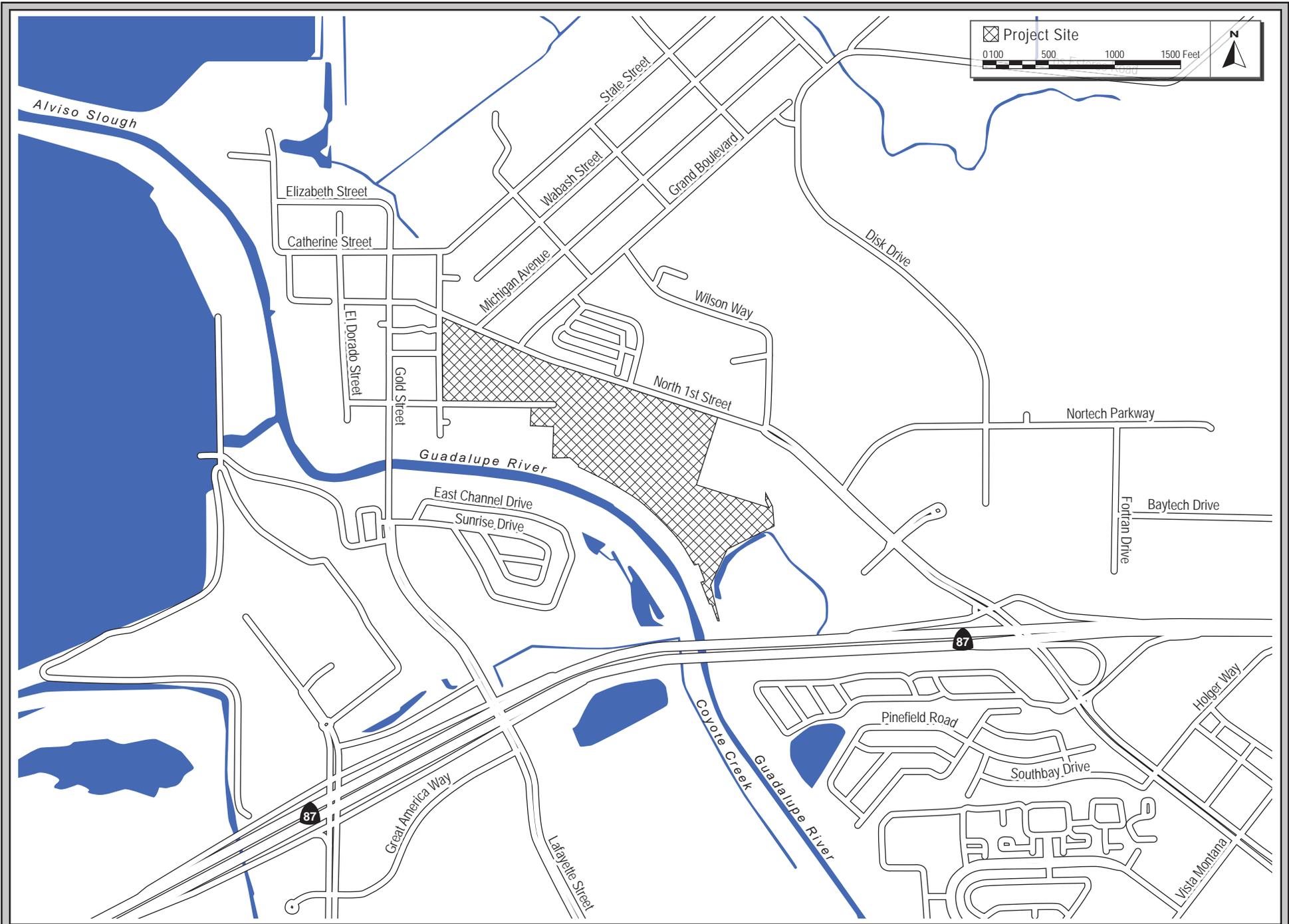
The project would require the following approvals from the City of San Jose:

- General Plan Text Amendment
- Planned Development Rezoning
- Development Permit(s)
- Grading Permit(s)
- Building Permit(s)
- Santa Clara Valley Habitat Plan Application for Private Projects



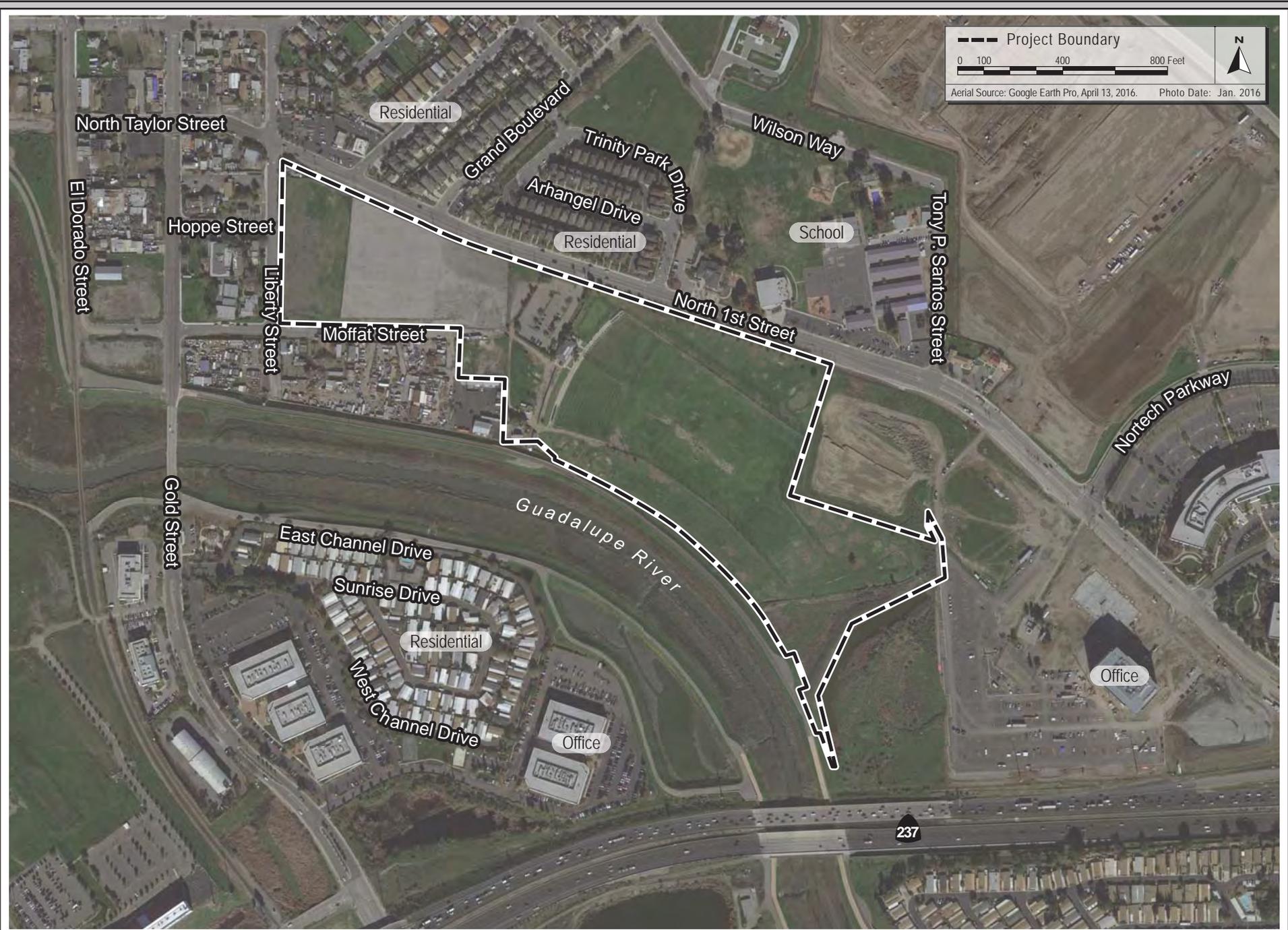
REGIONAL MAP

FIGURE 2.0-1



VICINITY MAP

FIGURE 2.0-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.0-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 Existing Setting

The 39-acre project site is located on the south side of N. First Street, between Highway 237 and Gold Street, in the Alviso area of San Jose. The eastern portion of the site is currently developed with the Pin High Golf Center, which consists of a ground-level driving range, three golf holes, and additional golf instructional areas, along with associated infrastructure such as 90-foot tall net poles, netting, and light standards for night lighting of the driving range. The driving range operates until 8:00 PM seven days a week. The western portion of the site is partially developed with a paved area used for recreational vehicle storage.

3.2 Proposed Development

The project proposes to redevelop the site with a Topgolf entertainment complex, 200-room hotel, and 110,000 square feet (sf) of retail space. All existing improvements on the site would be removed to accommodate the proposed development, with the exception of a communications antenna and associated mechanical equipment located within a fenced area in the southwest corner of the Pin High Golf Center property, adjacent to the Guadalupe River Trail.

Topgolf Facility

The proposed Topgolf entertainment complex would be located on the southern portion of the site and would include a three-story, 71,456 square-foot structure reaching up to 54 feet in height that would be enclosed on the north, east and west sides. The south side of the structure would consist of an open face containing roughly 120 hitting bays which would face south toward a 5.2-acre artificial turf outfield enclosed by poles and netting that would reach up to 170 feet in height. Patrons would hit golf balls from the hitting bays toward lighted target areas in the outfield area. Each hitting bay can accommodate up to six players at a time but it's not unusual to have one or two players in some bays. Hitting bays include seating, television screens to monitor sporting events and track Topgolf scoring, and include overhead speakers providing amplified music.



Photo 3.0-1: Exterior of Hitting Bays at Existing Topgolf Facility

The facility would also include a full-service restaurant, bar, lounges, rooftop entertainment area, corporate/event meeting space, and a family entertainment area with games. Additional details of the proposed facility are provided below.

Lower Level. The lower level features approximately 40 hitting bays including bays designated for golf instruction and team practice. The lower level features a family lounge area. This level is at grade with the outfield area.

Main Level. The entrance to the building is on the main level. The main level features approximately 40 hitting bays, a full-service bar/restaurant, a corporate and event meeting space, and a lobby area.



Photo 3.0-2: Interior of Hitting Bays at Existing Topgolf Facility

Upper Level. The upper level features approximately 40 hitting bays and an open-air rooftop terrace. The rooftop terrace would be furnished with tables, couches and fire pits. Restaurant food service is available on the roof top terrace. The terrace can accommodate live music for events.

Operations. Proposed operating hours are 9:00 AM to 2:00 AM, seven days per week. Live and DJ-generated music on the outdoor terrace on the third level would begin at 6:00 PM and end at 12:00 AM on weekdays, and would begin at 12:00 PM and end at 1:00 AM on weekends.

The project proposes to install six sports lighting standards on the roof of the Topgolf building that would illuminate the back of golf balls as they come off the tee line, allowing the players to track their balls. The sports lighting standards would consist of 10-foot poles mounted on the roof. The roof of the Topgolf building is at a height of 54 feet, meaning the light standards would reach a height of 64 feet above ground level. Each light standard would consist of two 1,000-watt metal halide fixtures. The fixtures would be directed downward with an aluminum reflector, light hood, and visor to direct light onto the field and reduce the amount of spill light. No lighting fixtures would be located on the proposed net poles. The outfield would include target areas that are dimly lit from below in the evening for easier visibility, with colors denoting level of difficulty. The targets are internally illuminated with colored LED lighting and no light would spill outside of the outfield area from these targets.

Hotel and Retail Components

The hotel and retail components of the project would be located on the northern and western portions of the site.

The four-story, 200-room hotel would be approximately 100,000 sf and up to 65 feet in height. The hotel would be located on the northeast corner of the site. The building would be an L-shaped structure with wings running parallel and perpendicular to N. First Street. An outdoor lounge area with pool and spa facilities would be situated on the south side of the building between the two wings.

The 110,000 sf of retail space would be located in 10 one- to two-story structures ranging from 7,000 sf to 18,000 sf, with maximum heights of 40 feet. The buildings would primarily be located along

the site's frontage with N. First Street. Pedestrian pathways and an internal roadway system would connect the various retail structures. A large plaza with open outdoor seating areas would be located on the western portion of the site. The plaza would be used for passive recreation and would not include the use of amplified music or events. Landscaping would be located throughout the retail areas of the site, as described in further detail below.

The retail and hotel structures in the eastern portion of the site would be situated on top of a podium, with a parking garage beneath providing 181 spaces. The retail structures in the western portion of the site also would be situated on top of a podium, with a parking garage beneath providing 234 spaces. The retail structures in the central portion of the site would be constructed at grade. An additional 768 parking spaces would be provided in surface lots located throughout the site.

A 5.8-acre area in the southeast corner of the project site would remain undeveloped. A conceptual site plan and elevations of the proposed project are shown on Figures 3.0-1 through 3.0-8.

3.2.1 *Site Access and Circulation*

Vehicular access to the project site would be provided by three driveways on N. First Street. Internal roadways would link these driveway entrances with parking garages and surface lots associated with the various uses on the site.

Roadway Improvements

N. First Street currently consists of one vehicular traffic lane in each direction adjacent to the project site. The project includes the addition of bike lane and a 10-foot wide sidewalk on the project frontage along N. First Street between Liberty Street and Tony P. Santos Street.

The project would construct a landscaped median along the project frontage of N. First Street. The intersection of Grand Boulevard and N. First Street is planned to align with the westernmost project driveway. To prevent potential traffic cut-through the Alviso neighborhood, the median would be channelized to allow left-turns onto Grand Boulevard from southbound N. First Street and prevent left-turns into and out of the project driveway, making the westernmost driveway right-in and right-out only. The median would also prevent through movements between Grand Boulevard and the project site. A crosswalk with flashing beacons would be installed at this intersection.

A dedicated left-turn pocket into the project driveway would be provided at the intersection of Trinity Park and N. First Street, but there is not sufficient cross sectional width to allow U-turn movements at this location. The Trinity Park driveway would be full-access from the site. The project would upgrade this driveway/intersection from side-street stop-controlled to a signal control. Signalizing the intersection would also provide a controlled crossing for pedestrians crossing N. First Street.

The proposed raised median along N. First Street would prevent vehicles from turning left into the George Mayne Elementary School's inbound driveway and from turning left out of the school's primary outbound driveway. There would be a break in the median to allow outbound left turns at the school's westernmost outbound driveway, which is also shared with the Alviso Youth Center.

Vehicles that currently turn left out of the primary outbound driveway onto N. First Street would shift to the western driveway.

A driveway at the project's eastern property line would primarily serve hotel patrons, as it provides direct access to the hotel's porte cochere. A break in the median and left-turn pocket would allow left turns into the driveway from northbound N. First Street. No U-turns would be allowed at this location and the driveway would be right-in and right-out only.

Currently, there are no sidewalks along the project frontage with N. First Street. The project would construct sidewalks along the project frontage which would connect with existing sidewalks north and south of the site, providing pedestrian access to the site from the surrounding area. Existing bike lanes on N. First Street along the project frontage would be modified to work with the new sidewalk. Additional sidewalk is proposed along the project frontage on Liberty Street.

The project would also provide the full curb return at intersection of Liberty Street and N. First Street including sidewalk, curb, bulb-outs, and gutter along the project boundary on Liberty Street. Sidewalk, curb and gutter would also be included along project boundary on Moffat Street. Additionally, N. Taylor Street would be restriped between Liberty Street and Gold Street to include buffered bike lanes as a traffic calming measure. Proposed street cross sections are shown on Figure 3.0-9.

The project would include a pedestrian/bicycle path that would connect N. First Street and the Guadalupe River Trail through a privately owned and maintained public recreational easement along the eastern property line of the project site (refer to Figure 3.0-1).

No easement is proposed or needed for the frontage street improvements. Right of way would be granted to the City for the required street improvements.

3.2.2 *Utilities*

The project site is currently served by a six-inch sanitary sewer pipe in N. First Street. Preliminary estimates for each of the subareas for sewer capacity calculation have been completed and the project may need to upsize the sewer main located along the site's North First Street frontage to meet the project capacity requirements. Sewer upsizing of these lines may be required after further analysis is conducted on anticipated flows from the project. The required sizing of the system would be determined as a part of the PD Permit for the project. Any improvements for the sanitary sewer connection would occur on-site and within existing road right-of-way and would not result in significant environmental impacts with implementation of construction mitigation described in this Initial Study.

The proposed project would create additional impervious area and stormwater runoff within the proposed development would be collected and treated on-site. Based on the 50 percent rule requirements of the Municipal Regional Permit (MRP), the project would need to provide treatment measures. Bioretention areas and self- treating areas are proposed at various locations at the site (refer to Figures 3.0-10 through 3.0-12). Project-specific Low Impact Development Measures would be determined as part of the PD Permit process.

This project is not under the Hydromodification Management Plan (HMP) requirement of the MRP; however, due to constraints of existing improvements and to maintain same maximum peak run-off for pre and post condition, flow treatment devices or site design measures would be provided to keep the post-development discharge to the existing Alviso system at or below the existing maximum peak flow. Detailed design of any detention area(s) would be subject to review and approval during the project PD permit process.

Water service would be provided via an existing 18-inch water main in N. First Street. A separate, private looped system for domestic and fire service would be installed on the site and would connect to the existing water main.

Existing overhead electric utility lines along the site's frontage with N. First Street would be converted to underground lines as part of the project. The project would connect to these new underground electric utility lines, as well as an existing underground gas line in N. First Street. An existing high-voltage electric transmission line that crosses the western portion of the project site would remain in place.

3.2.3 *Landscaping*

The project proposes to install landscaping throughout the site, as shown on Figure 3.0-13. The species of trees, shrubs, and groundcover to be planted are detailed in Figure 3.0-14. The most prominent landscape features would be sloping berms located along the project's frontage with N. First Street. The berms would extend from the street level, which is at an elevation of roughly two to four feet above mean sea level (amsl), to the podium level/first floors of the retail and hotel structures, which would be at an elevation of 13.5 amsl as required by the City's Special Flood Hazard Area Regulations (refer to Section 4.9 Hydrology and Water Quality for a discussion of flood hazards). The landscaped berms would serve to shield views of the at-grade parking garages that would be situated below the podium level/first floors of the retail and hotel structures, and would include stairways and ADA-compliant pathways to allow pedestrians to access the structures from the proposed sidewalk on N. First Street.

As described previously, the project includes installation of a landscaped median in the center of N. First Street along the project frontage. Additionally, street trees would be planted along the proposed sidewalk on the project's frontage with N. First Street. No landscaping is proposed in the 100-foot riparian setback from the Guadalupe River along the western border of the site, or in the 5.8-acre undeveloped area at the south end of the site.

3.2.4 *Site Grading and Construction Duration*

Grading would include the placement of roughly one to two feet of fill over existing grades to achieve final ground surface elevations across the site. Additionally, fill would be imported to form the landscaped berms described in Section 3.2.3, above. A total of up to 50,000 cubic yards (c.y.) of fill would be imported to the site. The project would require minimal cut on the site, mostly limited to the removal of existing paved surfaces, which would result in the off-haul of up to 20,000 tons of materials. The project proposes weekend (Saturday-Sunday) construction hours, 9:00 AM to 5:00 PM, as part of their Planned Development (PD) Permit. The duration of construction for all project elements would be roughly 24 months.

3.2.5 *Alviso Master Plan and Envision 2040 General Plan Text Amendment*

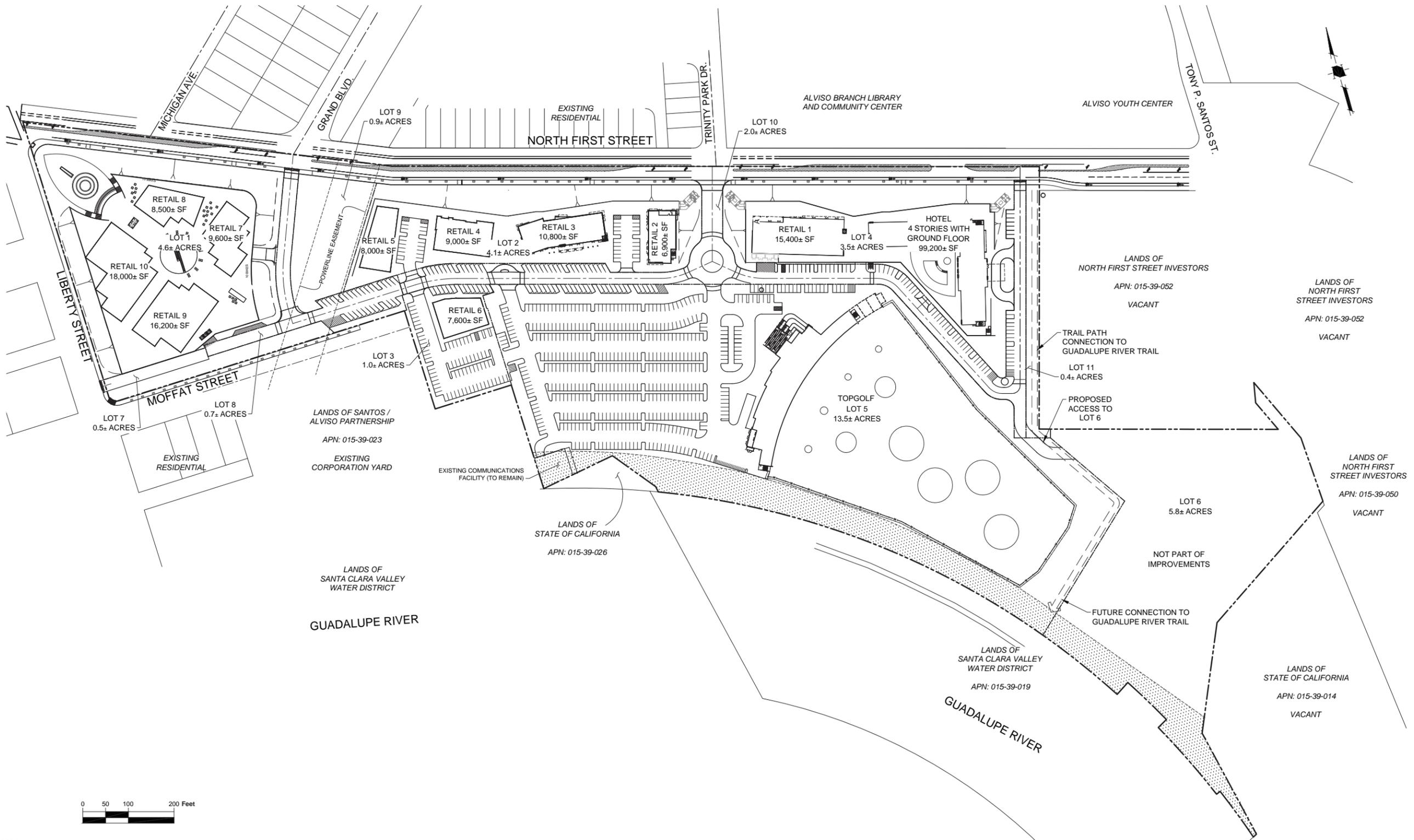
The project proposes the following text amendment (shown in underline) to the Alviso Master Plan, and by extension the Envision 2040 General Plan, to accommodate the proposed heights of the hotel and Topgolf entertainment facility structures, as well as the Topgolf net poles and netting.

Page 55: Village Area Guidelines for Commercial Development, Section 5 Development Standards, Subsection A.

Height: 40 feet, 2 stories above flood elevation. For properties on the west side of North First Street between Liberty and Tony P. Santos Streets, the maximum allowable building height shall not exceed 65 feet, 5 stories above flood elevation. Non-building structural uses, including structures on top of or attached to buildings, such as but not limited to, energy saving devices, wireless communication antennae, net poles, and other associated structures through the development project review shall establish a specific height, not to exceed the maximum allowable height of 170 feet on sites with non-residential or non-urban land use designations.

LEGEND

PROJECT BOUNDARY	
PROPERTY LINE	
PROPERTY LINE (EXISTING)	
RIGHT-OF-WAY	
APPROXIMATE RIPARIAN SETBACK	



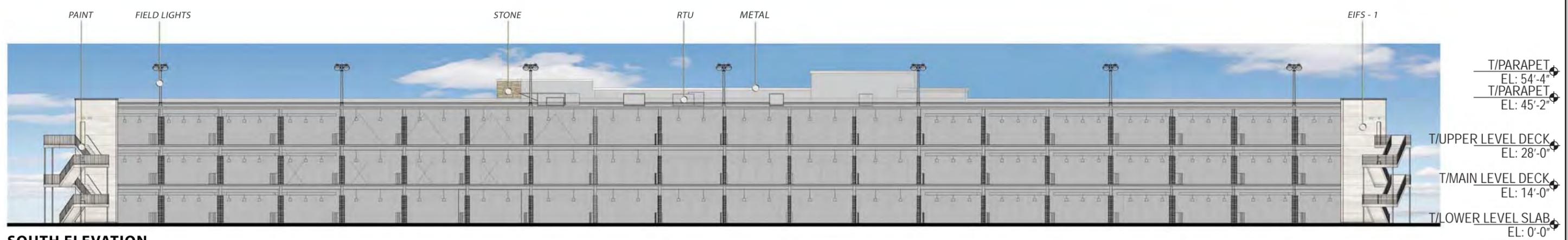
Source: HMM, Aug. 26, 2016.

CONCEPTUAL SITE PLAN

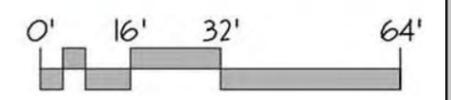
FIGURE 3.0-1



NORTH ELEVATION

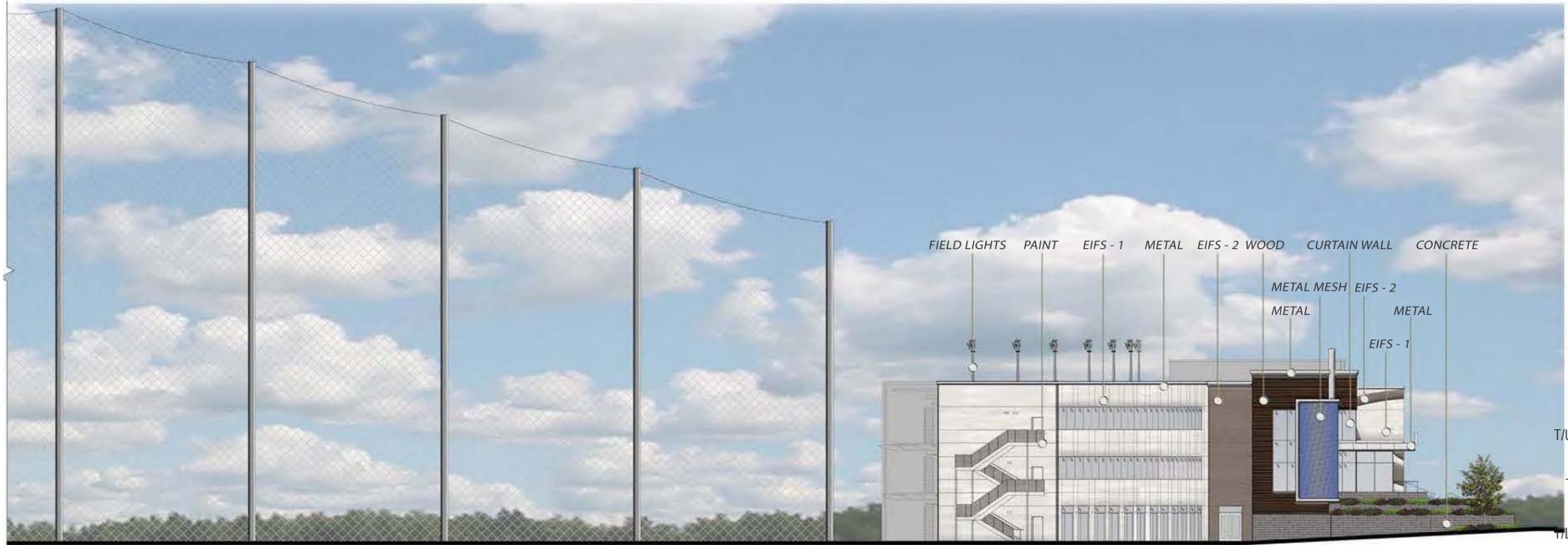


SOUTH ELEVATION



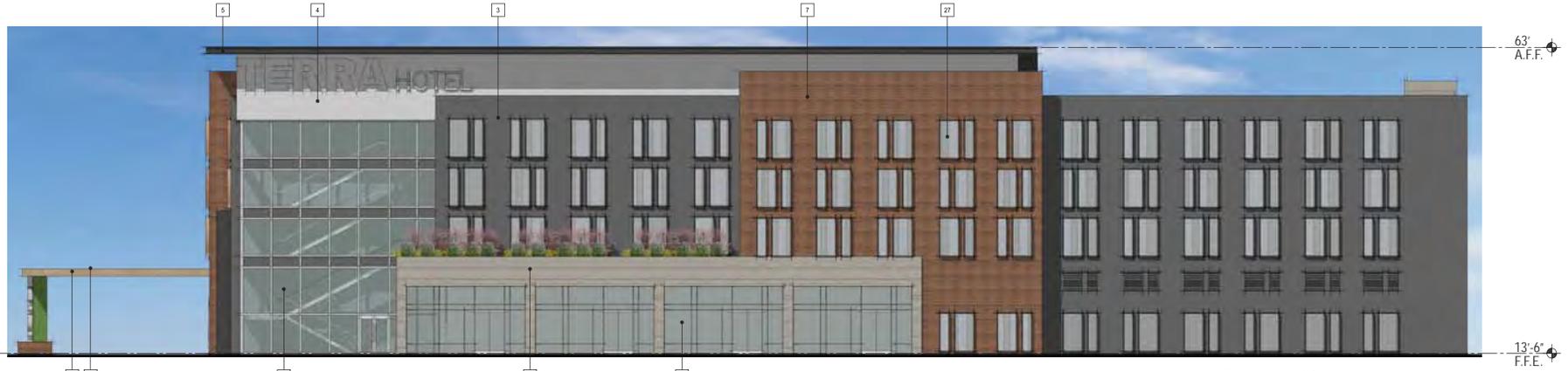
TOPGOLF ELEVATIONS - NORTH-SOUTH

FIGURE 3.0-2



EAST ELEVATION

- T/NETTING
EL: 170'-0"
- T/PARAPET
EL: 54'-4"
- T/PARAPET
EL: 45'-2"
- T/UPPER LEVEL DECK
EL: 28'-0"
- T/MAIN LEVEL DECK
EL: 14'-0"
- T/LOWER LEVEL SLAB
EL: 0'-0"



2. NORTH



1. SOUTH

COLORS & MATERIAL LEGEND

1 20/30 SAND FINISH STUCCO-1	5 CANOPIES/RAILINGS/ LOUVERS	9 CHU VENEER	13 CORRUGATED METAL SINWEAVE	17 PORCELAIN TILE	21 MODULAR LIVING WALL	25 METAL LOUVERS	29 BUILT UP ROOFING
2 20/30 SAND FINISH STUCCO-2	6 STONE VENEER	10 CORRUGATED METAL V-BEAM	14 CORRUGATED METAL B-DECK	18 FIBER CEMENT TILE	22 METAL CANOPY	26 STOREFRONT WINDOW	30 STANDING SEAM METAL ROOFING
3 20/30 SAND FINISH STUCCO-3	7 THIN BRICK VENEER	11 CORRUGATED METAL V-BEAM	15 WOOD LOOKING PORCELAIN TILE	19 RECLAIMED WOOD SIDING	23 GLASS CANOPY	27 VINYL WINDOW	
4 20/30 SAND FINISH STUCCO-4	8 THIN BRICK VENEER	12 CORRUGATED METAL SINWEAVE	16 WEATHERED WOOD LOOKING PORCELAIN TILE	20 WOOD SHINGLES	24 GLASS RAILING	28 MURAL/ART	



Source: KTGy Group, Inc. June 24, 2016.



2. WEST

1. EAST

COLORS & MATERIAL LEGEND

1 20/30 SAND FINISH STUCCO-1	5 CANOPIES/RAILINGS/ LOUVERS	9 CMU VENEER	13 CORRUGATED METAL SINWAVE	17 PORCELAIN TILE	21 MODULAR LIVING WALL	25 METAL LOUVERS	29 BUILT UP ROOFING
2 20/30 SAND FINISH STUCCO-2	6 STONE VENEER	10 CORRUGATED METAL V-BEAM	14 CORRUGATED METAL S-DECK	18 FIBER CEMENT TILE	22 METAL CANOPY	26 STOREFRONT WINDOW	30 STANDING SEAM METAL ROOFING
3 20/30 SAND FINISH STUCCO-3	7 THIN BRICK VENEER	11 CORRUGATED METAL V-BEAM	15 WOOD LOOKING PORCELAIN TILE	19 RECLAIMED WOOD SIDING	23 GLASS CANOPY	27 VINYL WINDOW	
4 20/30 SAND FINISH STUCCO-4	8 THIN BRICK VENEER	12 CORRUGATED METAL SINWAVE	16 WEATHERED WOOD LOOKING PORCELAIN TILE	20 WOOD SHINGLES	24 GLASS RAILING	28 MURAL/ART	



Source: KTGy Group, Inc. June 24, 2016.

HOTEL ELEVATIONS - EAST-WEST

FIGURE 3.0-5



COLORS & MATERIAL LEGEND

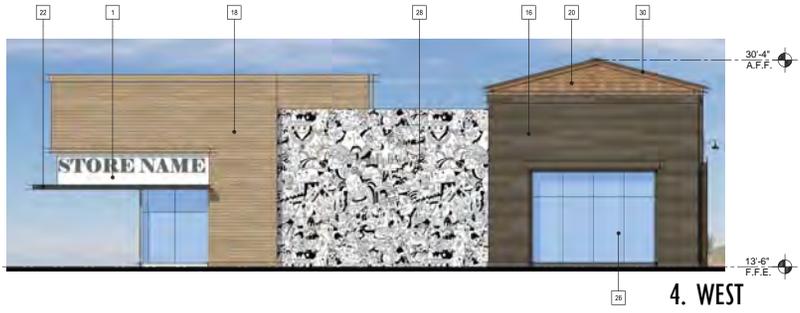
1 20/30 SAND FINISH STUCCO-1	5 CANOPIES/RAILINGS/ LOUVERS	9 CMU VENEER	13 CORRUGATED METAL SINEWAVE	17 PORCELAIN TILE	21 MODULAR LIVING WALL	25 METAL LOUVERS	29 BUILT UP ROOFING
2 20/30 SAND FINISH STUCCO-2	6 STONE VENEER	10 CORRUGATED METAL Y-BEAM	14 CORRUGATED METAL B-DECK	18 FIBER CEMENT TILE	22 METAL CANOPY	26 STOREFRONT WINDOW	30 STANDING SEAM METAL ROOFING
3 20/30 SAND FINISH STUCCO-3	7 THIN BRICK VENEER	11 CORRUGATED METAL V-BEAM	15 WOOD LOOKING PORCELAIN TILE	19 RECLAIMED WOOD SIDING	23 GLASS CANOPY	27 VINYL WINDOW	
4 20/30 SAND FINISH STUCCO-4	8 THIN BRICK VENEER	12 CORRUGATED METAL SINEWAVE	16 WEATHERED WOOD LOOKING PORCELAIN TILE	20 WOOD SHINGLES	24 GLASS RAILING	28 MURAL/ART	

Source: KTGy Group, Inc. June 24, 2016.



RETAIL ELEVATIONS - PLAZA 1

FIGURE 3.0-6

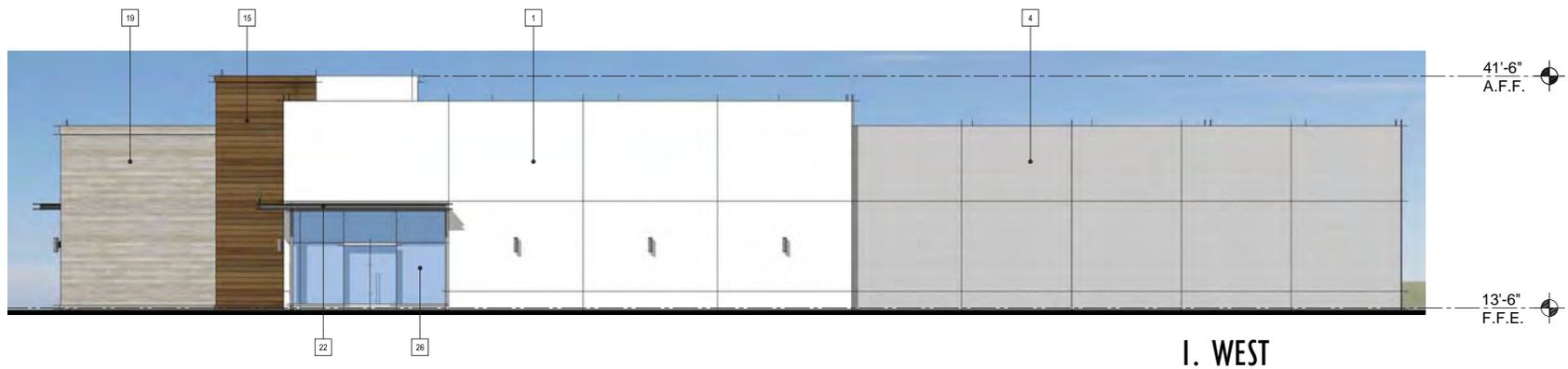
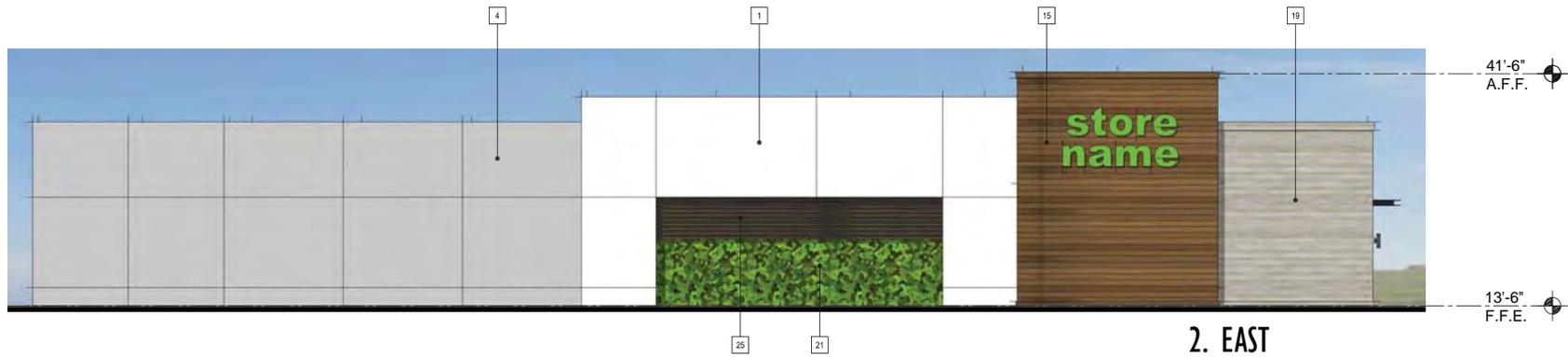


COLORS & MATERIAL LEGEND

1 20/30 SAND FINISH STUCCO-1	5 CANOPIES/RAILINGS/ LOUVERS	9 CMU VENEER	13 CORRUGATED METAL SINEWAVE	17 PORCELAIN TILE	21 MODULAR LIVING WALL	25 METAL LOUVERS	29 BUILT UP ROOFING
2 20/30 SAND FINISH STUCCO-2	6 STONE VENEER	10 CORRUGATED METAL V-BEAM	14 CORRUGATED METAL B-DECK	18 FIBER CEMENT TILE	22 METAL CANOPY	26 STOREFRONT WINDOW	30 STANDING SEAM METAL ROOFING
3 20/30 SAND FINISH STUCCO-3	7 THIN BRICK VENEER	11 CORRUGATED METAL V-BEAM	15 WOOD LOOKING PORCELAIN TILE	19 RECLAIMED WOOD SIDING	23 GLASS CANOPY	27 VINYL WINDOW	
4 20/30 SAND FINISH STUCCO-4	8 THIN BRICK VENEER	12 CORRUGATED METAL SINEWAVE	16 WEATHERED WOOD LOOKING PORCELAIN TILE	20 WOOD SHINGLES	24 GLASS RAILING	28 MURAL/ART	

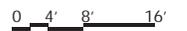


Source: KTG Group, Inc. June 24, 2016.

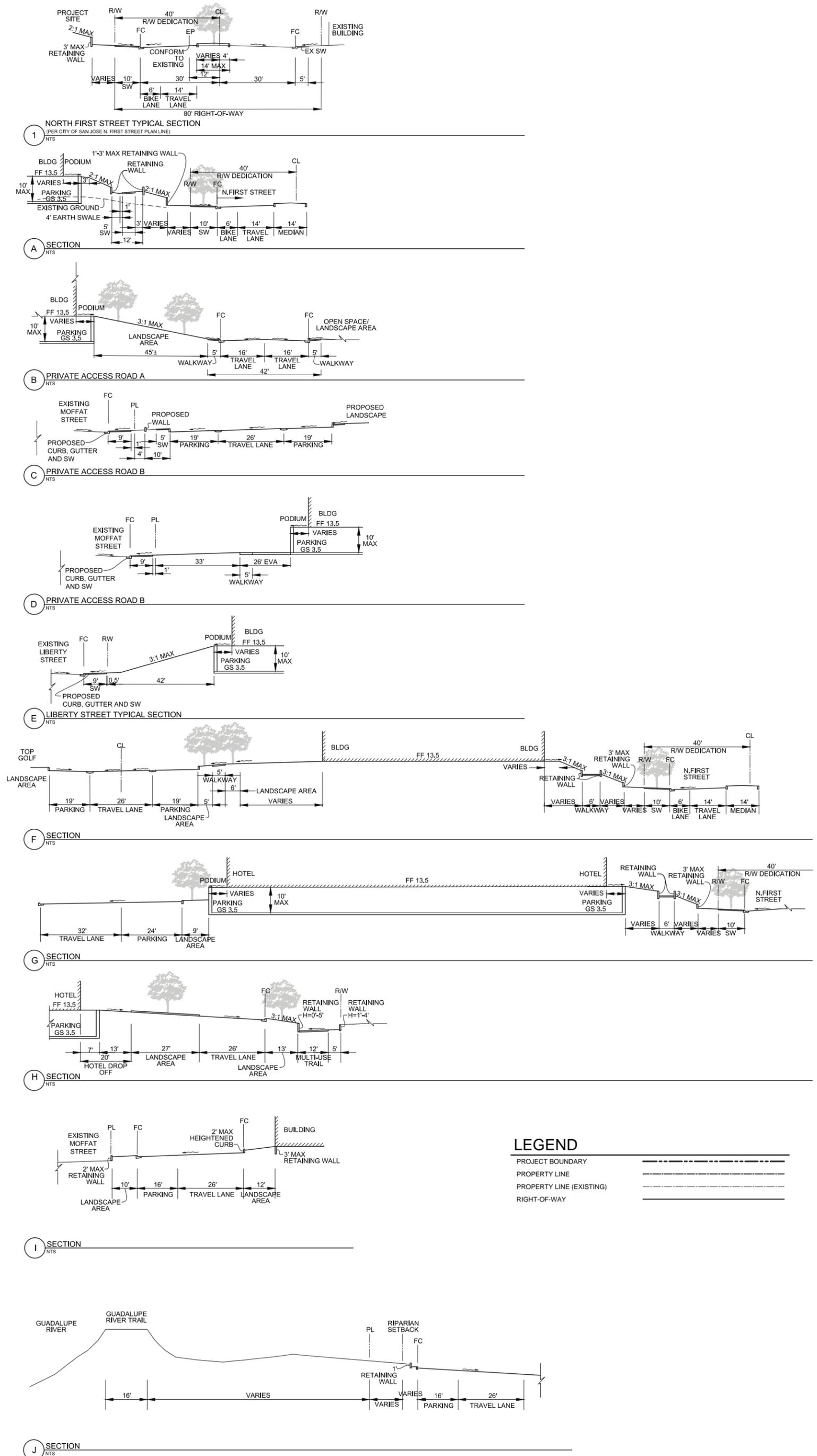


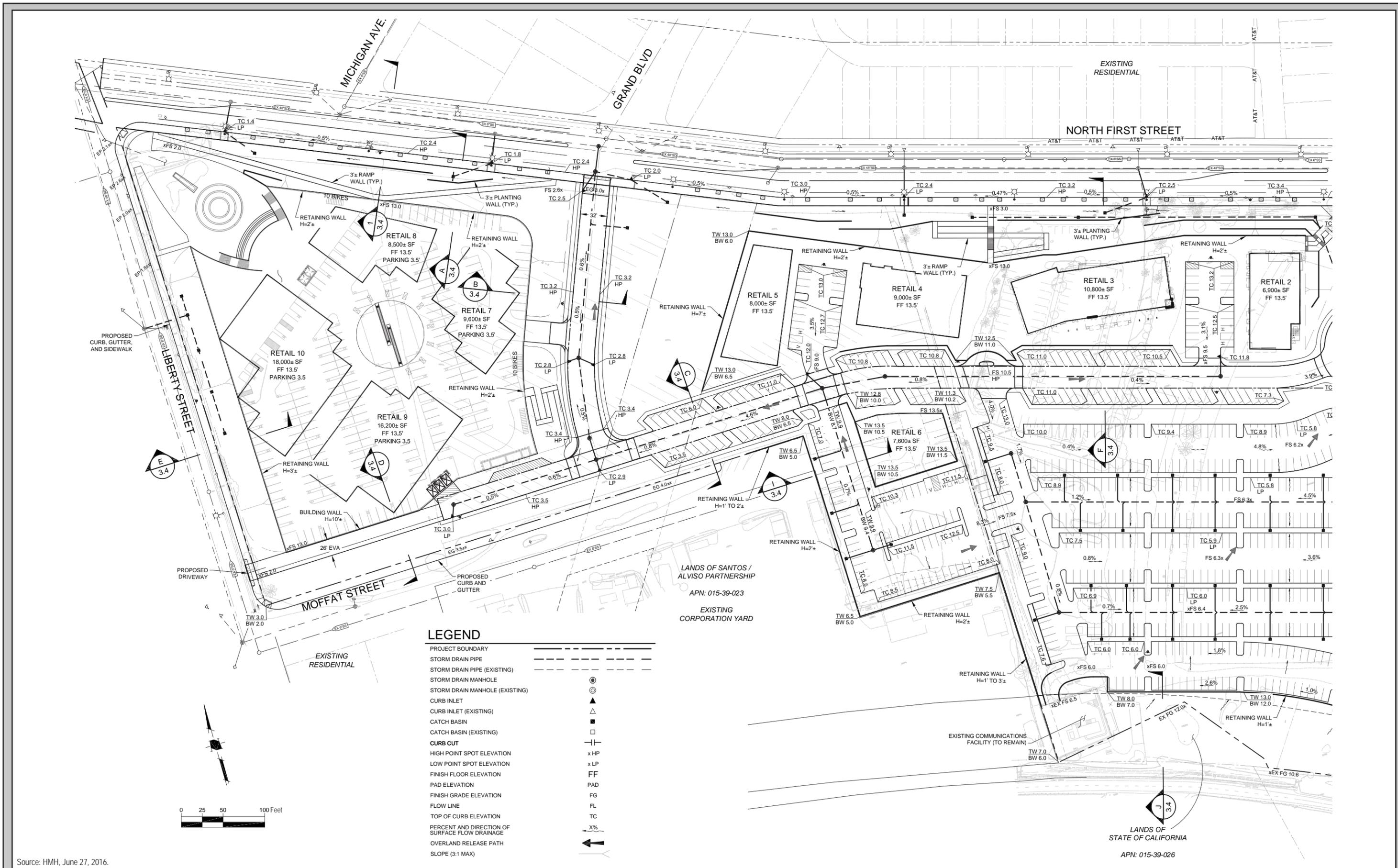
COLORS & MATERIAL LEGEND

1 20/30 SAND FINISH STUCCO-1	5 CANOPIES/RAILINGS/ LOUVERS	9 CMU VENEER	13 CORRUGATED METAL SINEWAVE	17 PORCELAIN TILE	21 MODULAR LIVING WALL	25 METAL LOUVERS	29 BUILT UP ROOFING
2 20/30 SAND FINISH STUCCO-2	6 STONE VENEER	10 CORRUGATED METAL V-BEAM	14 CORRUGATED METAL B-DECK	18 FIBER CEMENT TILE	22 METAL CANOPY	26 STOREFRONT WINDOW	30 STANDING SEAM METAL ROOFING
3 20/30 SAND FINISH STUCCO-3	7 THIN BRICK VENEER	11 CORRUGATED METAL V-BEAM	15 WOOD LOOKING PORCELAIN TILE	19 RECLAIMED WOOD SIDING	23 GLASS CANOPY	27 VINYL WINDOW	
4 20/30 SAND FINISH STUCCO-4	8 THIN BRICK VENEER	12 CORRUGATED METAL SINEWAVE	16 WEATHERED WOOD LOOKING PORCELAIN TILE	20 WOOD SHINGLES	24 GLASS RAILING	28 MURAL/ART	



Source: KTG Group, Inc. June 24, 2016.





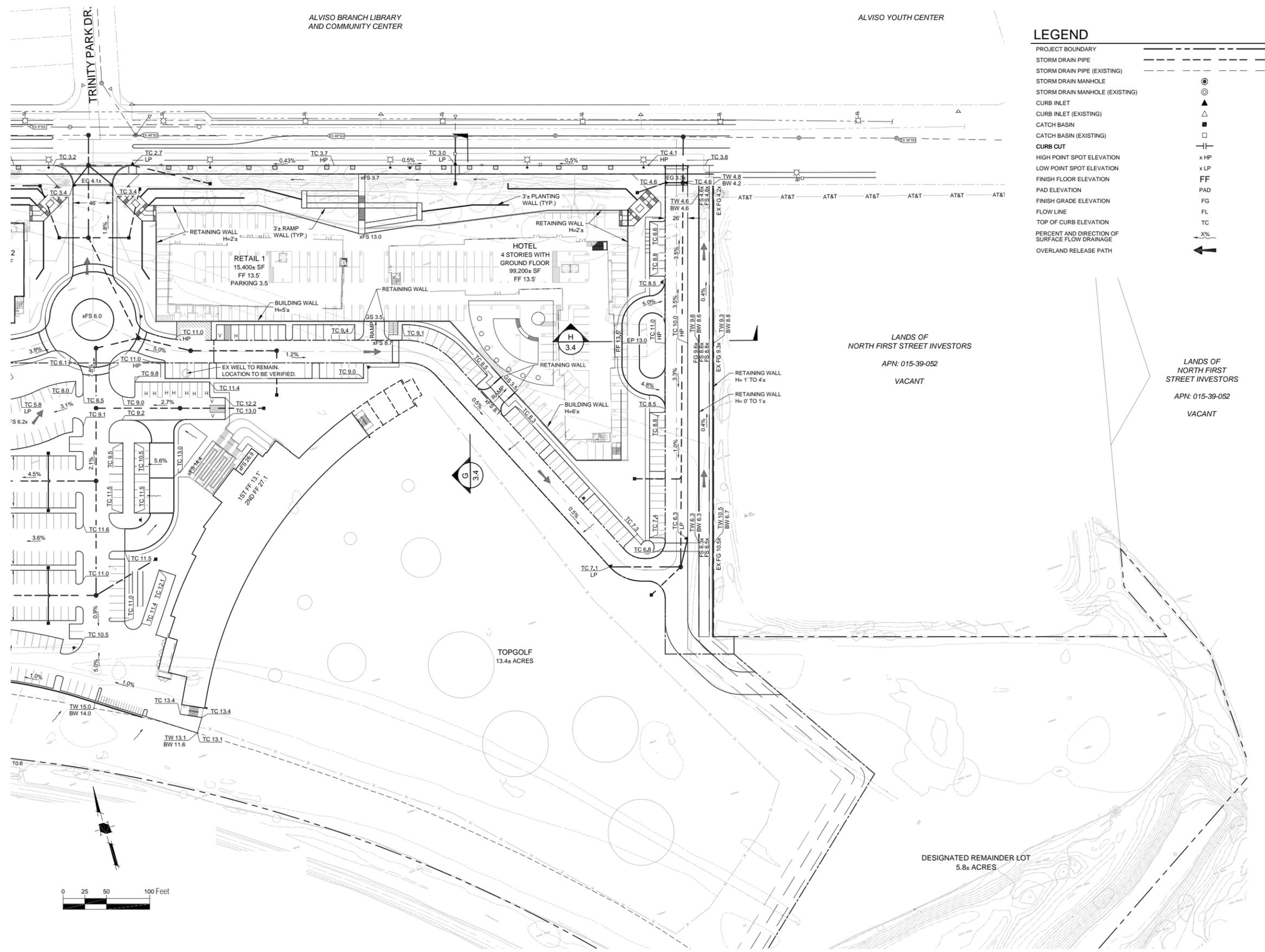
LEGEND

PROJECT BOUNDARY	---
STORM DRAIN PIPE	---
STORM DRAIN PIPE (EXISTING)	---
STORM DRAIN MANHOLE	⊙
STORM DRAIN MANHOLE (EXISTING)	⊙
CURB INLET	▲
CURB INLET (EXISTING)	▲
CATCH BASIN	■
CATCH BASIN (EXISTING)	■
CURB CUT	⊥
HIGH POINT SPOT ELEVATION	x HP
LOW POINT SPOT ELEVATION	x LP
FINISH FLOOR ELEVATION	FF
PAD ELEVATION	PAD
FINISH GRADE ELEVATION	FG
FLOW LINE	FL
TOP OF CURB ELEVATION	TC
PERCENT AND DIRECTION OF SURFACE FLOW DRAINAGE	X%
OVERLAND RELEASE PATH	←
SLOPE (3:1 MAX)	←

Source: HMM, June 27, 2016.

GRADING AND DRAINAGE PLAN - WEST

FIGURE 3.0-10



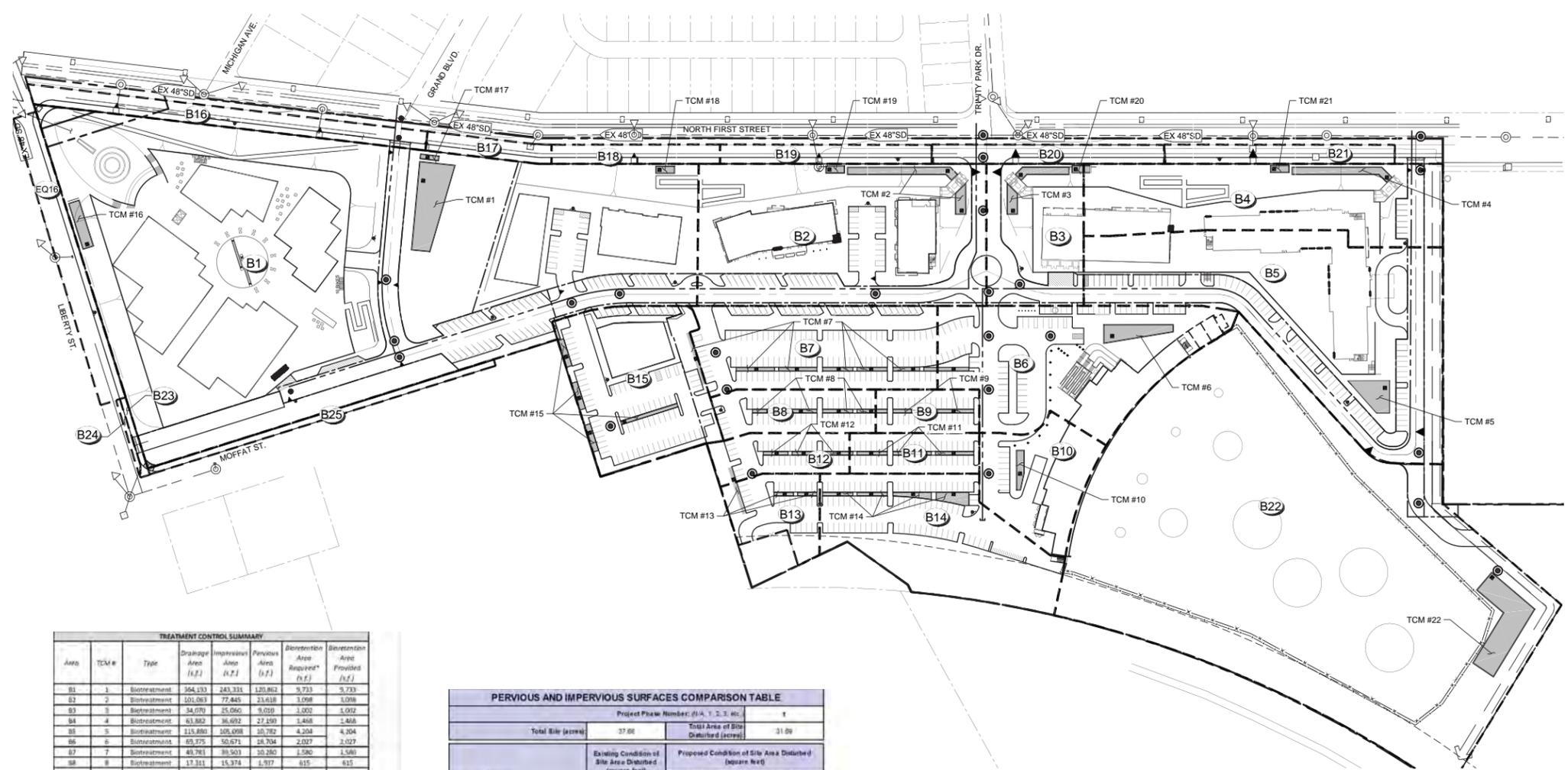
LEGEND

PROJECT BOUNDARY	—————
STORM DRAIN PIPE (EXISTING)	-----
STORM DRAIN MANHOLE (EXISTING)	⊙
STORM DRAIN MANHOLE	⊙
CURB INLET	▲
CURB INLET (EXISTING)	△
CATCH BASIN	■
CATCH BASIN (EXISTING)	□
CURB CUT	— —
HIGH POINT SPOT ELEVATION	x HP
LOW POINT SPOT ELEVATION	x LP
FINISH FLOOR ELEVATION	FF
PAD ELEVATION	PAD
FINISH GRADE ELEVATION	FG
FLOW LINE	FL
TOP OF CURB ELEVATION	TC
PERCENT AND DIRECTION OF SURFACE FLOW DRAINAGE	—X%
OVERLAND RELEASE PATH	←

Source: HMH, June 27, 2016.

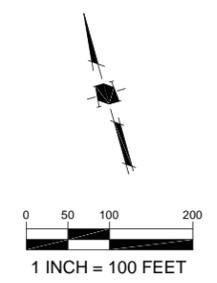
GRADING AND DRAINAGE PLAN - EAST

FIGURE 3.0-11



LEGEND

- PROJECT BOUNDARY
- STORM DRAIN PIPE
- STORM DRAIN PIPE (EXISTING)
- STORM DRAIN MANHOLE
- STORM DRAIN MANHOLE (EXISTING)
- CURB INLET
- CURB INLET (EXISTING)
- CATCH BASIN
- CATCH BASIN (EXISTING)
- CURB CUT
- HIGH POINT SPOT ELEVATION
- LOW POINT SPOT ELEVATION
- FINISH FLOOR ELEVATION
- PAD ELEVATION
- FINISH GRADE ELEVATION
- FLOW LINE
- TOP OF CURB ELEVATION
- PERCENT AND DIRECTION OF SURFACE FLOW DRAINAGE
- OVERLAND RELEASE PATH
- VEGETATIVE SWALE DRAINAGE AREA



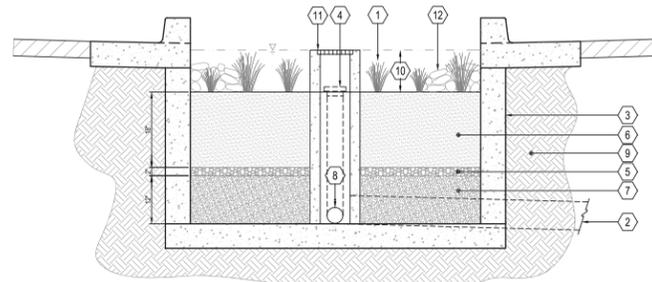
Area	TCM #	Type	Drainage Area (sf)	Impervious Area (sf)	PerVIOUS Area (sf)	Bioretention Area Required* (sf)	Bioretention Area Provided (sf)
B1	1	Bioretention	364,133	243,331	120,863	9,733	9,733
B2	2	Bioretention	101,063	77,445	23,618	3,098	3,098
B3	3	Bioretention	34,070	25,062	9,010	1,002	1,002
B4	4	Bioretention	63,802	36,092	27,709	1,468	1,468
B5	5	Bioretention	115,800	105,098	10,702	4,204	4,204
B6	6	Bioretention	69,375	50,671	18,704	2,027	2,027
B7	7	Bioretention	49,783	39,503	10,280	1,580	1,580
B8	8	Bioretention	17,311	15,374	1,937	615	615
B9	9	Bioretention	11,301	9,513	1,788	381	381
B10	10	Bioretention	28,017	22,948	5,073	918	918
B11	11	Bioretention	13,020	11,211	1,789	489	489
B12	12	Bioretention	14,073	10,837	3,236	413	413
B13	13	Bioretention	15,486	9,646	5,840	586	586
B14	14	Bioretention	55,113	27,305	27,808	1,092	1,092
B15	15	Bioretention	40,731	18,000	22,731	1,520	1,520
B16	16	Bioretention	18,938	18,918	0	0	0
B17	17	Bioretention	18,918	18,918	0	0	0
B18	18	Bioretention	1,957	1,957	0	0	0
B19	19	Bioretention	3,020	3,020	0	0	0
B20	20	Bioretention	5,988	5,988	0	0	0
B21	21	Bioretention	10,954	10,954	0	0	0
B22	22	Bioretention	10,982	10,882	100	435	435
B23	23	Bioretention	305,963	217,420	88,543	9,097	9,097
B24	24	Roadway Project	1,277	1,277	0	0	0
B25	25	Maintenance	673	673	0	0	0
B25	25	Roadway Project	5,857	5,857	0	0	0
Total			1,390,547	1,022,596	357,991	40,592	40,592

* Bioretention required area based on 4% method (Impervious area x 0.04)
 Per Chapter 2.3 of the C-3 Stormwater Handbook, roadway projects that add new sidewalks and bike lanes but do not add 1 or more lanes of travel are exempt from Provision C.3 of the Municipal Stormwater permit. Equipment treatment areas are areas that are not required to be treated and are equal to or greater than the areas indicated for treatment sizing.

Project Phase Number: (1/A, 1, 2, 3, etc.)				
Total Site (acres)		Total Area of Site Disturbed (acres)		
37.00		31.00		
Impervious Surfaces	Existing Condition of Site Area Disturbed (square feet)	Proposed Condition of Site Area Disturbed (square feet)		
	Replaced*	New*	Net*	
Roof Areas	8,897	8,897	156,485	
Paving	251,636	251,636	0	
Sidewalks, Patios, Paths, etc.	13,733	13,733	422,432	
Streets (public)	75,649	75,649	5,857	
Streets (private)			87,914	
Total Impervious Surfaces:	349,915	349,915	672,688	
Pervious Surfaces	Existing Condition of Site Area Disturbed (square feet)	Proposed Condition of Site Area Disturbed (square feet)		
	Replaced*	New*	Net*	
	Landscape Areas	611,162	357,991	0
	Paved Parking			0
Other Pervious Surfaces (grass, soil, etc.)	213,487	0	0	
Total Pervious Surfaces:	824,649	357,991	0	
Total Proposed Replaced + New Impervious Surfaces:		1,022,596		
Total Proposed Replaced + New Pervious Surfaces:		357,991		

Regulated Project: Any project that creates new and/or replaces (individually or collectively) 10,000 square feet or more of impervious surface area. Additional data verifying the percent replacement of impervious surface area may be requested for any Regulated Project that appears to be subject to Provisions C.3 b.i. (1)(c) or C.3 b.i. (1)(d) (commonly known as the "50% Rule").

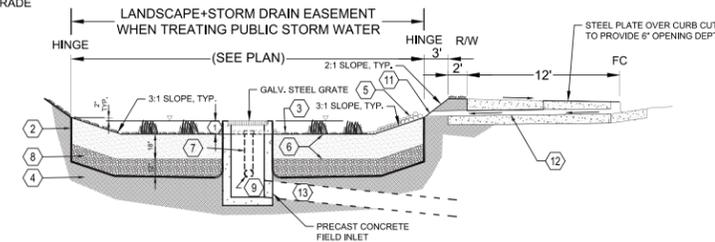
Replaces:
 *Proposed Replaced Impervious Surface: All impervious surfaces added to any area of the site that was a previously existing impervious surface.
 *Proposed New Impervious Surface: All impervious surfaces added to any area of the site that was a previously existing pervious surface.



TYP BIORETENTION AREA
NTS

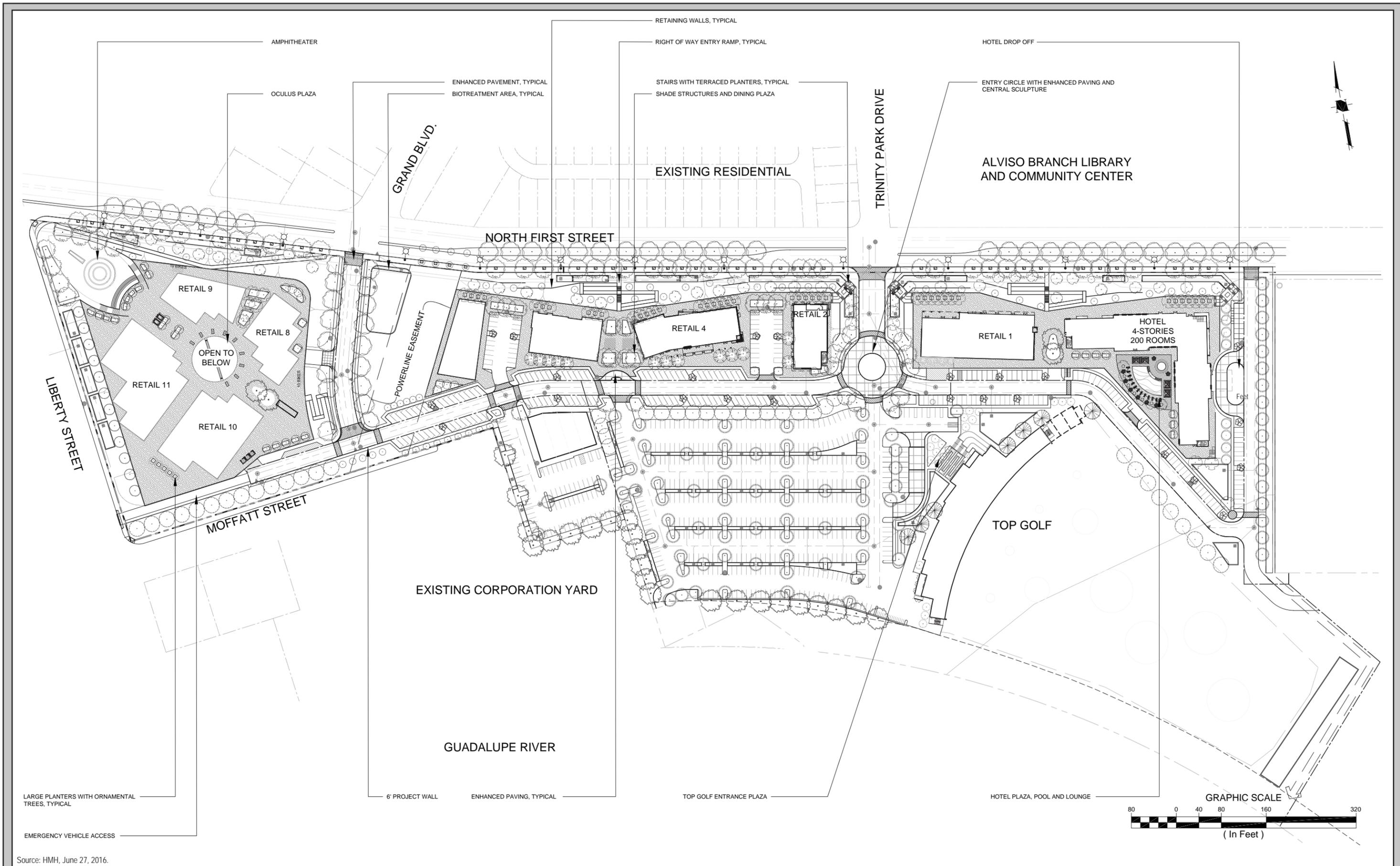
- 1 SEE LANDSCAPE PLANS FOR PLANTING AND MULCH INFORMATION
- 2 CONNECTION TO STORM DRAIN
- 3 CURB/RETENTION AREA WALL (AS REQUIRED)
- 4 CLEANOUT BEYOND WITH CAP AT FINISHED GRADE
- 5 2" PEA GRAVEL
- 6 BSM SOIL WITH PERCOLATION RATE OF 5" TO 10" PER HOUR (18" DEPTH), SOIL TO CONFORM TO SOIL SPECIFICATIONS AS LISTED IN APPENDIX C OF THE C3 STORMWATER HANDBOOK.
- 7 12" MIN (TO INCREASE WITH PERFORATED PIPE SLOPE) OF CLASS 2 PERMEABLE BASE ROCK PER CALTRANS SPECIFICATIONS)
- 8 PERFORATED UNDERDRAIN WITH PERFORATIONS DOWN, SLOPE AT 0.5% MIN.
- 9 NATIVE GRADE OR ENGINEERED FILL
- 10 12" PONDING DEPTH.
- 11 12"x12" OVERFLOW RISER WITH GRATED LID
- 12 NATIVE SOIL DO NOT COMPACT

- 1 PONDING DEPTH FROM INLET OPENING TO GRADE (MAX 12" DEPTH ALLOWED)
- 2 IMPERMEABLE LINER (SEE GEOTECHNICAL RECOMMENDATIONS), ATTACH TO WALL PER MANUFACTURER'S RECOMMENDATIONS, WHERE APPLICABLE.
- 3 GROUND COVER AND/OR VEGETATION (SEE LANDSCAPE PLANS FOR PLANTING AND IRRIGATION)
- 4 NATIVE GRADE OR CERTIFIED COMPACTED SUBGRADE
- 5 COBBLE STONE DISSIPATOR
- 6 18" OF BIOTREATMENT SOIL MIX (BSM) PER C3 SPECIFICATIONS INFILTRATION RATE MIN 5"/HR AND MAX 10"/HR.
- 7 CLEANOUT WITH CAP AT FINISHED GRADE
- 8 12" MIN (TO INCREASE WITH PERFORATED PIPE SLOPE) OF CLASS 2 PERMEABLE BASE ROCK PER CALTRANS SPECIFICATIONS
- 9 6" PERFORATED PVC SUBRAIN (STANDARD DRAIN PIPE WITH DRAIN HOLES INSTALLED DOWN) MIN. SLOPE IS 0.5%
- 10 ADDED 6" CONCRETE SLAB WITH EXPANSION AT CATCH BASIN (SEE DETAIL 3)
- 11 CUT END TO MATCH SLOPE FACE
- 12 SIDEWALK CROSS DRAIN
- 13 OUTLET PIPE



TYP BIORETENTION AREA FOR PUBLIC RIGHT-OF-WAY
NTS

Source: HMM, Aug. 26, 2016.



LANDSCAPE PLAN

FIGURE 3.0-13

PROPOSED PLANT PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	MINIMUM CONTAINER SIZE	HxW	WUCOLS WATER USE
TREES					
	ACER RUBRUM 'ARMSTRONG'	COLUMNAR RED MAPLE	15 GALLON	45'X15'	M
	AESCULUS CARNEA	FLOWERING HORSECHESTNUT	15 GALLON	45'X45'	M
	BETULA JACQUEMONTII	WHITE BIRCH	15 GALLON	40'X20'	M
	CORNUS STOLONIFERA	CREEK DOGWOOD	15 GALLON	25'X12'	M
	CERCIS CANADENSIS 'OKLAHOMA'	OKLAHOMA REDBUD	15 GALLON	15'X15'	M
	CERCIDIUM MICROPHYLLUM	PALO VERDE	15 GALLON	20'X18'	M
	CHITALPA TASHIKENTENSIS 'PINK DAWN'	PINK DAWN CHITALPA	15 GALLON	25'X25'	L
	CUPANIOPSIS ANACARDIODES	CARROT WOOD	15 GALLON	30'X25'	L
	GINKGO BILOBA (MALE)	MAIDENHAIR TREE	15 GALLON	50'X35'	M
	MYOPORUM LAETUM	NGAIO	15 GALLON	30'X20'	M
	OLEA EUROPEA (FRUITLESS)	OLIVE	15 GALLON	30'X25'	L
	PINUS PINEA	ITALIAN STONE PINE	15 GALLON	60'X26'	M
	PISTACIA CHINENSIS	CHINESE PISTACHIO	15 GALLON	35'X35'	L

VINES

	CLYSTOMA CALLISTEIGODES	LAVENDER TRUMPET VINE	5 GALLON		M
	HARDENBERGIA VIOLACEA	LILAC VINE	5 GALLON		M
	SOLANUM JASMINOIDES	POTATO VINE	5 GALLON		M

GROUND COVER

	LOTUS BERTHELOTII	PARROT'S BEAK	1 GALLON	3'X SPREADING	L
	MYOPORUM PARVIFOLIUM	CREeping MYOPORUM	1 GALLON	1'X15'	L
	PENNISETUM SPP.	GRASS	1 GALLON	2'X2'	L
	SANTOLINA CHAMAECYARISSUS	LAVANDER COTTON	1 GALLON	1'X3'	L
	SEDUM SPP.	STONE CROP	1 GALLON	6'X3'	L
	SENECID SPP.	CHALK STICKS	1 GALLON	3'X3'	L

PROPOSED PLANT PALETTE CONTINUED

SYMBOL	BOTANICAL NAME	COMMON NAME	MINIMUM CONTAINER SIZE	HxW	WUCOLS WATER USE
SHRUBS AND GRASSES (LARGE)					
	AGAVE SPP.	AGAVE	5 GALLON	5'X8'	L
	ALOE SPP.	ALOE	5 GALLON	3'X2'	L
	ARTEMISIA CALIFORNICA	CALIFORNIA SAGEBRUSH	5 GALLON	4'X4'	L
	CALYCANTHUS OCCIDENTALIS	SPICE BUSH	5 GALLON	3'X10'	M
	DASYLIRION WHEELERI	DESERT SPOON	5 GALLON	6'X4'	L
	ECHUM CANDICANS	PRIDE OF MADEIRA	5 GALLON	6'X6'	L
	PITTOSPORUM TENUIFOLIUM 'SILVER SHEEN'	KOHUHU	5 GALLON	25'X15'	L

SHRUBS AND GRASSES (MEDIUM)

	AMIGOZANTHOS SPP.	KANGAROO PAW	1 GALLON	2'X2'	M
	ASTELIA SPP.	SILVER SPEAR	1 GALLON	4'X4'	M
	CALAMAGROSTIS 'KARL FOERESTER'	FEATHER REED GRASS	1 GALLON	3'X3'	L
	CEANOTHUS SPP.	WILD LILAC	1 GALLON	3'X10'	L
	CHONDRAPETALUM SPP.	CAPE RUSH	1 GALLON	3'X4'	L
	CORNUS STOLONIFERA	DOGWOOD	1 GALLON	5'X3'	M
	EUPHORBIA SPP.	SPURGE	1 GALLON	3'X3'	L
	FURCRAEA SELLOA	FUCRAEA	1 GALLON	4'X4'	L
	GUARA LINDHEIMERI	BEE'S BLOSSOM	1 GALLON	4'X2'	L
	KNIFOPHIA SPP.	RED HOT POKER PLANT	1 GALLON	3'X2'	L
	LEYMUS CONDENSATUS 'CANYON PRINCE'	WILD RYE	1 GALLON	3'X3'	L
	LEUCADENDRON SPP.	CAROLINA CHERRY LAUREL	1 GALLON	5'X6'	L
	LOMANDRA SPP.	MAT RUSH	1 GALLON	3'X4'	L
	MISCANTHUS SPP.	EULALIA GRASS	1 GALLON	10'X6'	M
	NEPETA 'WALKER'S LOW'	CAT MINT	1 GALLON	3'X3'	M
	PEROVSKIA ATRIPPLICIFOLIA	RUSSIAN SAGE	1 GALLON	3'X4'	L
	PHLOMIS FRUTICOSA	JERUSELUM SAGE	1 GALLON	4'X4'	L
	PHORMIUM SPP.	NEW ZEALAND FLAX	1 GALLON	4'X4'	L
	ROSMARINUS SPP.	ROSEMARY	1 GALLON	6'X4'	L

SHRUBS AND GRASSES (SMALL)

	AEONIUM SPP.	AEONIUM	1 GALLON	2'X2'	L
	ALLIUM SCHOENOPRASUM	ROCK PURSLANE	1 GALLON	2'X2'	M
	CALANDRINA GRANDIFLORA	ROCK PURSLANE	1 GALLON	1'X3'	L
	CAREX SPP.	BERKELEY SEDGE	1 GALLON	2'X2'	L
	DIANELLA SPP.	BLUE FLAX LILY	1 GALLON	2' SPREADING	L
	ECHIVERIA SPP.	ECHIVERIA	1 GALLON	2'X2'	L
	HEBE SPP.	HEBE	1 GALLON	3'X3'	M
	IRIS DOUGLASIANA	DOUGLAS IRIS	1 GALLON	2'X3'	M
	JUNCUS SPP.	CALIFORNIA RUSH	1 GALLON	2'X2'	L
	LIMONIUM SPP.	SEA LAVENDER	1 GALLON	3'X3'	L
	LIRIOPE MUSCARI	LILY TURF	1 GALLON	1'X1'	M
	TRADESCANTIA OHIENSIS	SPIDERWORT	1 GALLON	3'X3'	L

Source: HMH, June 27, 2016.

SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. Mitigation Measures are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guideline 15370).

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., noise) affecting a proposed project, which are also addressed below. 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 City policies pertaining to existing conditions. 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, in a high noise environment, or on/adjacent to sites involving hazardous substances.

4.1 AESTHETICS

4.1.2 Existing Setting

The site is located within the Alviso community of San Jose, which is at the southerly end of the San Francisco Bay. Within the Alviso community there is a mosaic of single-family and multi-family developments, many of which are one- to two-story wood frame structures built before 1970. Single-story, wood and stucco commercial buildings and small parking lots are found clustered in the central section of Alviso, off Gold Street and North First Street. Industrial uses in the Alviso Village area include a variety of building types and densities, ranging from modern concrete and glass office buildings to localized concentrations of outdoor storage and corporation yards. There are many trails and public open space areas in the area, including the San Francisco Bay National Wildlife Refuge, Alviso Marina County Park (gateway to the wildlife refuge), Guadalupe River Trail, San Francisco Bay Trail and Sunnyvale Baylands Park. East and west of Alviso are the foothills which border the Santa Clara Valley.

The topography of the project site is relatively flat with ground surface elevations ranging from roughly two feet above mean sea level (amsl) in the areas closest to N. First Street to 14 feet amsl in the interior of the site. The eastern portion of the site is occupied by the Pin High Golf Center, which consists of a ground-level driving range and three golf holes. The driving range includes canopies over portions of the hitting area and is surrounded by net poles and netting reaching roughly 90 feet in height. A one-story clubhouse building and ancillary maintenance structures, as well as a paved parking area, are located adjacent to the driving range. The facility includes field lighting on the net poles and on 90-foot tall light standards for nighttime operation of the driving range, which stays open until 8:00 PM seven days a week. The light standards are located west of the hitting area and face east, toward the driving range outfield. The western portion of the site is occupied by a large paved parking area that is utilized for RV storage. An undeveloped open space area comprised of non-native grassland vegetation is located at the far west end of the site adjacent to the paved parking area. The Guadalupe River forms the southern boundary of the site. The Guadalupe River Trail is situated on top of the levee that separates the site from the river. High-voltage electrical transmission lines traverse north-to-south through the western portion of the site. Trees and shrubbery located along the site's frontage with N. First Street provide partial screening from land uses to the north. Refer to Photographs 4.1-1 through 4.1-6 for views of the project site and surrounding area.

Surrounding Area

Development immediately north of the site, across N. First Street, includes the George Mayne Elementary School, Alviso Youth Center, Alviso Branch Library, single-family residences, and a small strip mall. The George Mayne Elementary School consists of one-story education buildings adjacent to paved parking and play areas as well as a large grass field. The two-story Alviso Youth Center and one-story Alviso Branch Library are located on the same property as the school, adjacent to the grass field. Three-story single family residences of recent construction and consisting of modern architectural elements are located west of the library. The ground floors of the residences are elevated above street level for flood protection purposes. A sloping landscaped berm with stairways is located along the residential development's frontage with N. First Street. A retail center is located across from the far western end of the project site and consists of one-story retail buildings and a paved parking area.



Photo 4.1-1: View of the Pin High Golf Center driving range from the Guadalupe River Trail, looking northeast



Photo 4.1-2: View of the Pin High Golf Center netting from the Guadalupe River Trail, with the Guadalupe River on the right side of the photo and the adjacent six-story structure under construction in the distance, looking east



Photo 4.1-3: View of the Pin High Golf Center netting and residences along N. First Street in the distance, from the Guadalupe River Trail, looking north



Photo 4.1-4: View of the RV parking area on the site with residences along N. First Street and the Pin High Golf Center field light poles in the distance, looking southeast



Photo 4.1-5: View of the undeveloped area in the western portion of the site, looking southwest



Photo 4.1-6: View of N. First Street with electrical transmission lines and residences in the foreground and the Pin High Golf Center netting and field lighting poles in the background, looking south

Development to the west of the site across Liberty Street consists of one-story single family residences, a two-story health clinic with associated paved parking area, and a small community center consisting of a one-story building and landscaped areas. Properties on the east side of Liberty Street containing a towing yard and one-story single family residences are situated between the Guadalupe River and a portion of the western area of the site.

Development to the south of the site across the Guadalupe River consists of a mobile home community and a two-story commercial office development.

An active construction site is located east of the project site on N. First Street. An office building currently under construction is six-stories and 104 feet in height. Three additional office buildings approved for development on the same property would range from three to six stories and 62 to 104 feet in height.

Existing Light Sources

Existing light sources on the project site and in the surrounding area include field lighting associated with the existing driving range facility on the site, as well as streetlights, vehicle headlights, and security lighting. Existing ambient nighttime light levels on and adjacent to the site were measured to characterize existing light levels in the project area. Figure 4.1-1 shows existing light levels on the driving range property during nighttime operations, and Figure 4.1-2 shows existing light levels on the remainder of the project site as well as the surrounding area. Existing light levels on the driving range property range from a high of 8.8 footcandles¹ near the hitting area to a low of .01 footcandles at the far southeast end of the property near the Guadalupe River. The western portion of the project site, which contains a paved parking area used for RV storage, is unlit at night, with light levels of .01 footcandles. Light levels at the residential uses across N. First Street from the site range from .18 to .56 footcandles in areas near street lights. Light levels at the property containing the school, youth center, and library range from .04 to 11.5 footcandles, with the higher light levels being associated with lighting adjacent to buildings and parking areas.

Scenic Vistas and Resources

The project site is not located along or visible from a state-designated scenic highway.² The nearest state-designated scenic highway is Interstate 280 (I-280), approximately seven miles south and not visible from the site. Views of the Diablo Range foothills (to the east) are visible from the project site. The views of the Santa Cruz Mountains are slightly visible from the site, however, these views of these foothills are interrupted by existing urban development.

The City's General Plan identifies Gateways and Urban Throughways (urban corridors) where preservation and enhancement of views of the natural and man-made environment are crucial. The nearest Gateway to the project site is located on the N. First Street overpass where it crosses over

¹ For reference, a full moon creates about 0.1 footcandles of light.

² The State Scenic Highways Program is under the jurisdiction of the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263.



EXISTING NIGHTTIME LIGHT LEVELS AT PIN HIGH GOLF CENTER

FIGURE 4.1-1



EXISTING NIGHTTIME LIGHT LEVELS IN SURROUNDING AREA

FIGURE 4.1-2

State Route 237 (SR 237), approximately 0.5 miles southeast of the site. The site is visible from the overpass. The City has designated SR 237 as an Urban Throughway from the I-880 intersection to Fair Oaks Avenue in Sunnyvale. The site is visible from SR 237.

Due to the site’s flat topography, current views of the project site are limited to the site’s immediate vicinity. The existing 90-foot tall driving ranging net poles and netting, as well as the high-voltage transmission line extending across the northern area of the site, are visible from areas further away due to their heights.

4.1.1.1 *Applicable Plans, Policies, and Regulations*

Envision San José 2040 General Plan

The General Plan includes the following policies applicable specifically to development projects in San Jose:

Envision San José 2040 Relevant Aesthetic Policies

Policy	Description
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-1.23	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-1.27	When approving new construction, require the undergrounding of distribution utility lines serving the development. Encourage programs for undergrounding existing overhead distribution lines. Overhead lines providing electrical power to light rail transit vehicles and high tension electrical transmission lines are exempt from this policy.
Policy CD-10.2:	Require that new public and private development adjacent to Gateways, freeways (including U.S.101, I-880, I-680, I-280, SR17, SR85, SR237, and SR87), and Grand Boulevards consist of high-quality architecture, use high-quality materials, and contribute to a positive image of San José.
Policy CD-10.3:	Require that development visible from freeways (including U.S.101, I-880, I-680, I-280, SR17, SR85, SR237, and SR87) be designed to preserve and enhance attractive natural and man-made vistas.

Alviso Master Plan

The Alviso Master Plan is a policy document that provides the background, vision, and character to guide the future of a unique area at the northern edge of San José. One of the stated purposes of the Plan is to protect and enhance the small town quality of Alviso by guiding appropriate new development, community facilities, infrastructure, and beautification. The Master Plan establishes the location, intensity, and character of land uses; the circulation pattern, and necessary infrastructure improvements to support development. The following policies are specific to aesthetics and are applicable to the proposed project:

Alviso Master Plan Relevant Policies and Design Guidelines

Policies	Description
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.
Landscaping Policy 3	Landscaping should be used to screen unattractive uses and soften the effect of taller buildings due to the flood protection requirements.
Landscaping Policy 4:	Landscaping should not block views of the rivers, natural riparian areas, or marshlands.
River Orientation Policy 1	Commercial land uses adjacent to the Guadalupe River should provide access to the waterway.
River Orientation Policy 2	Development along the Guadalupe River should be designed to reflect and acknowledge the river environment by orienting seating areas, windows, decks, balconies, and open spaces to the river while orienting utility, parking, storage, and trash areas away from it.
River Orientation Policy 3	New buildings adjacent to the Guadalupe River/Alviso Slough should be of an appropriate scale and character to enhance this waterway as a public oriented recreation resource and as a natural riparian corridor.

City of San Jose Outdoor Lighting Policy (Policy 4-3)

The City of San Jose's Outdoor Lighting Policy requires outdoor lighting on private properties to be directed downward and include shielding to reduce light pollution and spill light. The policy also requires the use of energy efficient lighting fixtures.

4.1.2 Aesthetics Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
d. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,5

4.1.3 Impacts Evaluation

Aesthetic values are, by their nature, subjective. Opinions as to what constitutes a degradation of visual character will differ among individuals. One of the best available means for assessing what constitutes a visually acceptable standard for new buildings are the City’s design standards and implementation of those standards through the City’s design process. The following discussion addresses the proposed changes to the visual setting of the project area and factors that are part of the community’s assessment of the aesthetic values of a project’s design, consistent with the assumptions in the Alviso Master Plan and the Envision San José General Plan Final EIR.

Project Overview

The project proposes to redevelop the 36-acre project site with a Topgolf entertainment complex, 200-room hotel, and 110,000 sf of retail space. All existing improvements on the site would be removed to accommodate the proposed development.

The proposed Topgolf entertainment complex would be located on the southern portion of the site and would include a three-story, 71,225 square-foot structure reaching up to 54 feet in height above ground level. The structure would consist of glass and stucco facades on its north, east, and west sides, and open hitting bays on its south façade. The lighted interiors of the hitting bays, with patrons hitting golf balls and utilizing amenities such as TVs and seating areas, would be visible from the south (refer to Photos 3.0-1 and 3.0-2). The facility would include a 5.2-acre artificial turf outfield enclosed by poles and netting that would reach up to 170 feet in height. The Topgolf facility would remain open as late as 2:00 AM and would include field lighting during operating hours. Light standards would be situated on ten foot poles on the roof of the structure, reaching heights of 64 feet.

The hotel and retail components of the project would be located on the northern and western portions of the site. The four-story 200-room hotel would be approximately 100,000 sf in size and 65 feet in height above ground level. The 110,000 sf of retail space would be comprised of 10 one- to two-story structures ranging from 3,000 sf to 38,000 sf, with maximum heights of 40 feet. The retail and hotel structures would generally consist of glass and stucco facades, and would be situated on top of podiums with ground-level parking garages underneath.

The project proposes to install landscaping throughout the site. The most prominent landscape features would be sloping berms located along the project's frontage with N. First Street which would serve to shield views of the at-grade parking garages that will be situated below the first floors of the retail and hotel structures. These berms would include stairways and ADA-compliant pathways to allow pedestrians to access the structures from the proposed sidewalk on N. First Street. The project also includes installation of a landscaped median in the center of N. First Street along the project frontage. Additionally, street trees would be planted along the sidewalk the project proposes to install on its frontage with N. First Street.

Photosimulations of the proposed structures and landscaping can be seen in Figures 4.1-4 through 4.1-15.

a. Would the project have a substantial adverse effect on a scenic vista?

Impacts to a scenic vista consist of modification of a scenic feature, such as hillside, or bayland areas, or scenic skyline or built environment. While the project would not modify a scenic feature, the proposed structures, especially the net poles and netting, would be visible to users of nearby public open spaces including Alviso Marina County Park, the Guadalupe River Trail, San Francisco Bay Trail and Sunnyvale Baylands Park. The proposed structures would also be visible from SR 237 and the N. First Street overcrossing, which are identified as an Urban Throughway and a Gateway, respectively, in the City's General Plan.

View from the SR 237 and the N. First Street Overcrossing

Figures 4.1-12 and 4.1-13 show daytime and nighttime photosimulations of the project as viewed from the N. First Street overcrossing over SR 237. As shown in the figures, the proposed structures and netting would be clearly visible from this location. Although the project would introduce prominent features on the site that would be visible from a designated Gateway and Urban Throughway, commercial development of the density proposed by the project was anticipated in the City's Envision 2040 General Plan, and the Final EIR completed for the General Plan concluded that development on the site in accordance with the General Plan would not represent a significant aesthetics impact.

As described previously, however, the project proposes a text amendment to the Alviso Master Plan, which is considered to be incorporated into the General Plan, which would increase allowed building heights on the project site from 40 feet to 65 feet. Additionally, non-building structural elements such as net poles would be allowed at heights up to 170 feet. Although the increase in allowed building heights would result in taller structures on the site than anticipated in the General Plan, the proposed structures would be similar in scale to existing buildings east and west of the site that are visible from these locations. Also, an office building on the property directly east of the site that is



Source: Digital Imaging Studio, 6/25/16.

PHOTOSIMULATION LOCATIONS

FIGURE 4.1-3



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.



Existing



Conceptual Project

Source: Digital Imaging Studio, 6/25/16.

currently under construction is six-stories and 104 feet in height (APNs 015-39-046, -050, -051, and -052). Three additional office buildings approved for development on the same property would range from three to six stories and 62 to 104 feet in height. This property is situated directly between the project site and the viewpoints from SR 237 and the N. First Street overcrossing. The building currently under construction, as well as the additional structures approved for future construction, would block views of the structures proposed by the project from the N. First Street overcrossing. The project would be visible from segments of SR 237, but the proposed structures would be similar in scale to existing structures on nearby properties.

The proposed net poles would be substantially taller than any surrounding structures, including those currently under construction on the adjacent property. However, the net poles would not block views in the same nature as a solid structure, and the netting between the poles would be mostly transparent. As described in Section 4.4 Biological Resources, the project would be required to install net-marking devices on the proposed netting to prevent significant impacts related to bird strikes (MM BIO-7.1). The net-markers would be small in size (maximum diameter of 5.5 inches) and, although visible, would not block views through the transparent netting. 90-foot tall net poles and netting associated with the existing driving range facility are currently present on the site. Although the proposed net poles and netting would be taller than those currently on the site, the visual effect would be similar to existing conditions.

For the reasons described above, the proposed project's impact on the designated Urban Thoroughfare and Gateway would be less than significant.

Views from Trails and Parks

Figures 4.1-4, 4.1-5, 4.1-14, and 4.1-15 show daytime and nighttime photosimulations of the project from the Guadalupe River Trail, which is located along the site's southern boundary. Currently, views from the trail looking towards the project site include the existing driving range net poles and netting on the site, structures immediately north of the site such as the three-story residential structures and school property described previously, and large multi-story commercial office developments further in the distance to the east. All of these existing developments partially block views of the distant foothills that form the eastern boundary of Santa Clara Valley (refer to Photo 4.1-3).

The proposed hotel and retail buildings would be located adjacent to N. First Street, and would be set back from the Guadalupe River corridor by roughly 350 to 500 feet. The Topgolf facility would be located adjacent to the Guadalupe River Trail, but all project elements, including the proposed net poles and netting, would be set back by at least 100 feet as required by the City's Riparian Corridor Policy. The structures proposed by the project would modify views from the segment of the trail located adjacent to the site by introducing new structures. As described previously, however, commercial development of the density proposed by the project was anticipated in the City's Envision 2040 General Plan, and the Final EIR completed for the General Plan concluded that development on the site in accordance with the General Plan would not represent a significant aesthetics impact.

The project includes a proposed amendment to the Alviso Master Plan, and by extension the Envision 2040 General Plan, to allow building heights of 65 feet for the hotel structure and 54 feet

for the Topgolf structure. The 10 additional structures proposed by the project would retain the 40-foot maximum height currently allowed in the Alviso Master Plan. An increase in allowed height on two of the 12 proposed structures on the site would not block views to a substantially greater extent than currently allowed building heights. The proposed Alviso Master Plan and General Plan text amendment would also allow net poles and netting on the site at heights up to 170 feet. Although the proposed net poles and netting would be substantially taller than the existing netting on the site, the existing netting currently obscures views from the trail, and the effect of the proposed netting on views from the trail would be generally the same as existing conditions.

Structures proposed by the project, especially the net poles and netting, would be visible from portions of the Alviso Marina County Park, San Francisco Bay Trail, and Sunnyvale Baylands Park. These parks and trails are located along the San Francisco Bay, west and north of the project site. Views of the project site from these locations look south and east toward existing developed areas in Alviso, San Jose, and Milpitas. These views currently include structures similar in height and scale to those proposed by the project, as well as the existing 90-foot tall net poles and netting located on the project site. As a result, the structures and netting proposed by the project would not result in a substantially adverse effect on views from these locations. **[Less than Significant Impact]**

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no state-designated scenic highways in the vicinity of the site and, therefore, the project would not damage scenic resources within any state-designated scenic highways. **[No Impact]**

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

As described previously, the eastern portion of the site is currently developed with a driving range facility surrounded by net poles and netting reaching roughly 90 feet in height. A one-story clubhouse building and ancillary maintenance structures, as well as a paved parking area, are located adjacent to the driving range. The facility includes field lighting on top of the 90-foot tall net poles and on 90-foot tall light standards for nighttime operation of the driving range. The western portion of the site is occupied by a large paved parking area that is utilized for RV storage.

The project would redevelop the site with 10 retail structures reaching up to 40 feet in height, a hotel reaching up to 65 feet in height, and a Topgolf facility reaching up to 54 feet in height with net poles and netting reaching up to 170 feet in height. The project would include landscaping throughout the interior of the site and along its frontage with N. First Street. The project also would install a landscaped median in the center of N. First Street. While the project would introduce visually prominent commercial development on the site, the proposed structures would be similar in scale to existing structures on nearby properties. Although the proposed net poles and netting would be taller than those currently on the site, the visual effect would be similar to existing conditions.

The project would be required to implement policies from the City's Commercial Design Guidelines and the Alviso Master Plan's Village Area Guidelines for Commercial Development to reduce the project's effects on the visual character of the area related to architectural design, use of quality materials, and landscaping near the river corridor. With implementation of these policies, the project

would not substantially degrade the existing visual character or quality of the site and its surroundings. **[Less Than Significant Impact]**

d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The project proposes to install six sports lighting standards on the roof of the Topgolf building that would illuminate the back of golf balls as they come off the tee line, allowing the players to track their balls. The sports lighting standards would consist of 10-foot poles mounted on the roof. The roof of the Topgolf building is at a height of 54 feet, meaning the light standards would reach a height of 64 feet above ground level. Each light standard would consist of two 1,000-watt metal halide fixtures. The fixtures would be directed downward with an aluminum reflector, light hood, and visor to direct light onto the field and reduce the amount of spill light. No lighting fixtures would be located on the proposed net poles. The outfield ground would include illuminated round target areas, with different colors denoting levels of difficulty. The targets are internally illuminated with colored LED lighting and no light would spill outside of the outfield area from these targets. This is a unique lighting and would be one of the first in the City of San Jose; therefore, there are no City policies to address this type of lighting. The target lights would be subject to City review and approval as part of the PD Permit process. The lighting would operate as late as 2:00 AM seven days a week.



Photo 4.1-1: Example of proposed light standards

Currently, field lighting on the site is situated on top of 90-foot poles surrounding the existing driving range. The existing lights face north, south, and east, depending on their location on the perimeter of the driving range. The lights proposed by the project would be located 64 feet above the ground surface. The lights and poles would be painted a non-reflective color which would reduce glare during the day. The lights would face southeast, away from the nearest residential uses across N. First Street to the north and the Guadalupe River to the south. Although the lights would be visible from the surrounding area, they would be situated lower in the sky compared to the existing driving range lighting, and there would no longer be lighting facing the nearest residential uses to the north and south.

The proposed light fixtures would be angled downward and would include light visors and light hoods to direct the light down onto the field and minimize the amount of spill light onto adjacent properties. These same features also restrict a person from seeing the bulbs (the brightest part of the light) from the areas surrounding the facility. Even with these features, some spill light from the proposed project would result, due to the reflection off the outfield and other surfaces below the lights.

Light levels are generally additive. As discussed previously, existing streetlights, headlights, security lighting, and other sources of light currently illuminate the project area. Light levels at the residential uses across N. First Street from the site range from .18 to .56 footcandles in areas near

street lights. Light levels at the property containing the school, youth center, and library range from .04 to 11.5 footcandles, with the higher light levels being associated with lighting adjacent to buildings and parking areas. The spill light resulting from operation of the proposed lights was calculated and is shown in Figure 4.1-16. The calculations were completed by *Qualite Sports Lighting, LLC* using the lighting software AutoLUX. Calculations were based on the specific design of the proposed project, as well as manufacturing specifications for the proposed fixtures obtained through testing at Independent Testing Laboratories (ITL). As shown on Figure 4.1-16, project spill light levels would be reduced to zero footcandles before reaching the property line of the project site, meaning spill light would not reach the Guadalupe River or surrounding land uses. As described previously, existing light levels on the driving range property reach as high as 8.8 footcandles near the hitting area. As shown on Figure 4.1-16, light levels in the outfield of the proposed Topgolf facility would reach a maximum of six footcandles, which is lower than existing light levels on the site.

As described in Section 4.4 Biological Resources, the project would be required to install net-marking devices on the proposed netting to prevent significant impacts related to bird strikes (MM BIO-7.1). The net-markers would include reflective surfaces to aid in nighttime visibility for birds flying in the area. The markers may also remain glowing after dark to further aid visibility. The net-markers would be small in size (maximum diameter of 5.5 inches) and, although visible at night, would not create a new source of substantial light or glare.

In addition to the field lighting described above, the project also would install security lighting throughout the site in parking areas, along pathways, and adjacent to buildings. All lighting would conform to the City's Outdoor Lighting Policy (4-3) as applicable, and be shielded to direct light downwards to ensure that lighting does not spill over onto adjacent residential properties, consistent with City standards.

For the reasons described above, the proposed project would not create a substantial source of daytime or nighttime glare. Although individual views from the adjacent residential development may be affected, there is existing field lighting in operation on the project site, and the use of the proposed lighting would not substantially affect nighttime views of the surrounding area compared to existing conditions. The lighting would be designed to use modern technology, as previously described, to reduce spill light and the visibility of the lights. **[Less Than Significant Impact]**

4.1.4 Conclusion

Implementation of the proposed project would not result in significant adverse visual or aesthetic impacts. **[Less than Significant Impact]**



PROJECTED SPILL LIGHT FROM TOPGOLF FIELD LIGHTING

FIGURE 4.1-16

4.2 AGRICULTURAL AND FORESTRY RESOURCES

4.2.1 Setting

The project site is zoned as *R-M-Residence District (Multiple Unit/Lot)* and *CN-Commercial Neighborhood*, and has a General Plan Designation of *CIC-Combined Industrial/Commercial*.

According to the Santa Clara County Important Farmland 2012 map, the project site is designated as Urban and Built-Up Land, meaning that the land contains a building density of at least six units per 10-acre parcel or is used for industrial or commercial purposes, golf courses, landfills, airports, or other utilities.³

The project site is currently developed as a driving range and RV storage area and does not contain any forest land and no forest or timberland is located in the vicinity of the project site.

4.2.2 Agricultural and Forestry Resources Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3,6
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3,4,6
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3,4,6
d. Result in a loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3,4,6
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3,4,6

³ California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012*. Published August, 2014. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/sc112.pdf>. Accessed January 18, 2016.

4.2.3 Impacts Evaluation

- a. - b. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use? Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The project site is not designated, used, or zoned for agricultural purposes. The project site is not part of a Williamson Act contract. For these reasons, the proposed project would not result in impacts to agricultural or forest resources. **[No Impact]**

- c. - d. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Would the project result in a loss of forest land or conversion of forest land to non-forest use?*

The project site and surrounding area are not used or zoned for timberland or forest land. The project would not impact timberland or forest land. **[No Impact]**

- e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

According to the Santa Clara County Important Farmland 2012 map, the project site and surrounding area are designated as Urban and Built-Up Land. The development of the project site would not result in conversion of any forest or farmlands. **[No Impact]**

4.2.4 Conclusion

Implementation of the proposed project would not result in an impact to agricultural or forestry resources in the area. **[No Impact]**

4.3 AIR QUALITY

The following discussion is based in part on an Air Quality Report prepared by *Illingworth & Rodkin, Inc.* in April 2016. The Air Quality Report is included as Appendix A of this Initial Study.

4.3.1 Setting

4.3.1.1 *Background*

Air quality and the concentration of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine. The project area is within the southwestern portion of the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin.

4.3.1.2 *Topography and Climate*

The proximity of Santa Clara County to both the Pacific Ocean and San Francisco Bay has a moderating influence on the climate. Northwest winds and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula.

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. This alignment of the terrain also channels winds from the north to south, carrying pollution from the northern San Francisco Bay Peninsula toward Santa Clara County.

4.3.1.3 *Regional and Local Criteria Pollutants*

Major criteria pollutants, listed in "criteria" documents by the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter (PM). These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms. Ozone also damages leaf tissue in trees and other plants.

Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. The Bay Area as a whole does not meet State or Federal ambient air quality standards for ground level ozone or State standards for PM₁₀ and PM_{2.5}. The area is considered attainment or unclassified for all other pollutants.

4.3.1.4 *Local Community Risks/Toxic Air Contaminants and Fine Particulate Matter*

Besides criteria air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs). These contaminants tend to be localized and are found in relatively low concentrations in ambient air; however, they can result in adverse chronic health effects if exposure to low concentrations occurs for long periods.

Fine Particulate Matter (PM_{2.5}) is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to PM_{2.5} can cause a wide range of health effects. In addition to anthropogenic sources, there are also natural or “biogenic” sources of some pollutants. For example, some species of trees and vegetation emit volatile organic compounds (VOCs) that contribute to formation of ozone in the atmosphere.⁴

Common stationary source types of TACs and PM_{2.5} include gasoline stations, dry cleaners, and diesel backup generators which are subject to permit requirements. The other, often more significant, common source is motor vehicles.

4.3.1.5 *Sensitive Receptors*

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, child-care centers, retirement homes, convalescent homes, hospitals, and medical clinics. The closest sensitive receptor to the project site is an existing residence located on the southern corner of N. First Street and Liberty Street, adjacent to the northwest boundary of the site. Residences are also located across N. First Street, Liberty Street, and Moffat Street from the site. Additionally, George Mayne Elementary School is located across N. First Street from the site.

4.3.1.6 *Regulatory Setting and Programs*

Federal, state, and regional agencies regulate air quality in the Bay Area Air Basin. At the federal level, the USEPA is responsible for overseeing implementation of the Federal Clean Air Act (CAA). The CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The primary agency that regulates air quality in the project area is BAAQMD. BAAQMD has permit authority over stationary sources, acts as the primary reviewing agency for environmental documents, and develops regulations that must be consistent with or more stringent than, federal and state air quality laws and regulations.

BAAQMD prepared and adopted the Bay Area 2010 Clean Air Plan (CAP). This CAP updates the most recent ozone plan, the 2005 Ozone Strategy. Unlike previous Bay Area CAPs, the 2010 CAP is a multi-pollutant air quality plan addressing four categories of air pollutants:

- Ground-level ozone and the key ozone precursor pollutants (reactive organic gases and nitrogen oxide), as required by State law;
- Particulate matter, primarily PM_{2.5}, as well as the precursors to secondary PM_{2.5};
- Toxic air contaminants (TACs); and
- Greenhouse gases.

⁴ BAAQMD. 2010. *Bay Area 2010 Clean Air Plan*. p. 1-9.

4.3.1 Air Quality Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,8,9
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,8,9
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,7,8,9
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,7,8,9
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.3.2.1 *Air Quality Impact Thresholds of Significance*

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City of San José, and other jurisdictions in the San Francisco Bay Area Air Basin, often utilize the thresholds and methodology for assessing air emissions and/or health effects adopted by the Bay Area Air Quality Management District (BAAQMD) based upon the scientific and other factual data prepared by BAAQMD in developing those thresholds.

Thresholds prepared and adopted by BAAQMD in May 2011 were the subject of a lawsuit by the California Building Industry Association (BIA)⁵ and a subsequent appeal by BAAQMD.⁶ The Appellate Court decision on August 13, 2013 concluded that the thresholds were supported by substantial evidence.

The determination of whether a project may have a significant effect on the environment is subject to the discretion of each lead agency, based upon substantial evidence. The City has carefully

⁵ *California Building Industry Association v. Bay Area Air Quality Management District*, Alameda County Superior Court Case No. RG10548693)

⁶ *California Building Industry Association v. Bay Area Air Quality Management District*, Cal. Ct. App. 1st, Case No. A135335, August 13, 2013. The Appellate Court ruled that the BAAQMD CEQA thresholds were adopted using a valid public review process and were supported by substantial evidence.

considered the thresholds prepared by BAAQMD in May 2011 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin. Evidence supporting these thresholds has been presented in the following documents:

- BAAQMD. *CEQA Air Quality Guidelines*. Updated May 2011.
- BAAQMD. *Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance*. October 2009.
- California Air Pollution Control Officers Association. *Health Risk Assessments for Proposed Land Use Projects*. July 2009.
- California Environmental Protection Agency, California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. 2005.

The analysis in this Initial Study/Mitigated Negative Declaration is based upon the general methodologies in the most recent *BAAQMD CEQA Air Quality Guidelines* (dated May 2012) and numeric thresholds identified for the San Francisco Bay Area Air Basin in the May 2011 *BAAQMD CEQA Air Quality Guidelines*, as shown in Table 4.3-1, below.

Pollutant	Construction	Operation-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG, NO_x	54	54	10
PM₁₀	82 (exhaust)	82	15
PM_{2.5}	54 (exhaust)	54	10
Fugitive Dust (PM₁₀/PM_{2.5})	Best Management Practices	None	None
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
Risk and Hazards for New Sources and Receptors (Project)	Same as Operational Threshold	<ul style="list-style-type: none"> • Increased cancer risk of > 10.0 in one million • Increase non-cancer risk of >10.0 Hazard Index (chronic or acute) • Ambient PM_{2.5} increase: >0.3 μ/m³ [Zone of influence: 1,000-foot radius from property line of source or receptor] 	
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as Operational Threshold	<ul style="list-style-type: none"> • Increased cancer risk of > 100 in one million • Increase non-cancer risk of >10.0 Hazard Index (chronic or acute) • Ambient PM_{2.5} increase: >0.8 μ/m³ [Zone of influence: 1,000-foot radius from property line of source or receptor] 	
Sources: Bay Area Air Quality Management District <i>CEQA Guidelines</i> (updated May 2011) and BAAQMD. <i>Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance</i> . October 2009.			

Additionally, the *BAAQMD CEQA Air Quality Guidelines* recommend that projects be evaluated for community risk when they are located within 1,000 feet of freeways, high traffic volume roadways (10,000 average annual daily trips or more), and/or stationary permitted sources of toxic air contaminants (TACs).

4.3.3 Impacts Evaluation

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The BAAQMD prepared and adopted the Bay Area 2010 Clean Air Plan (2010 CAP). Determining consistency with the 2010 CAP involves assessing whether applicable control measures contained in the 2010 CAP are implemented. Implementation of control measures improve air quality and protect public health. These control measures are organized into five categories: Stationary Source Measures, Mobile Source Measures, Transportation Control Measures (TCMs), Land Use and Local Impact Measures, and Energy and Climate Measures. Applicable control measures and the project’s consistency with them are summarized in Table 4.3-2, below.

Table 4.3-2: Bay Area 2010 Clean Air Plan Applicable Control Measures		
Control Measures	Description	Project Consistency
<i>Transportation Control Measures</i>		
Improve Bicycle Access and Facilities	Expand bicycle facilities serving transit hubs, employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.	Existing bicycle facilities in the vicinity of the site include the Guadalupe River Trail and bike lanes on N. First Street. The project would include bicycle parking facilities, and would connect existing bicycle facilities with proposed retail uses. The project is consistent with this control measure.
Improve Pedestrian Access and Facilities	Improve pedestrian access to transit, employment, and major activity centers.	The project would construct a new sidewalk along the site’s frontage with N. First Street. The project, therefore, is consistent with this control measure.
<i>Energy and Climate Measures</i>		
Energy Efficiency	Increase efficiency and conservation to decrease fossil fuel use in the Bay Area.	The project will comply with the 2013 California Energy Code. The project will comply with the City’s Green Building Ordinance through the incorporation of measures qualifying the project as GreenPoint Rated (minimum 50 points). The project is consistent with this control measure.
Tree-Planting	Promote planting of low-VOC-emitting shade trees to reduce urban heat island effects, save energy, and absorb CO ₂ and other air pollutants.	The project would plant trees throughout the site. Tree replacement as required by the City would reduce the urban heat island effect. The proposed project is consistent with this control measure.

The project includes applicable transportation and energy control measures and is generally consistent with the Clean Air Plan. The project, therefore, would not result in a significant impact related to consistency with the 2010 CAP. **[Less Than Significant Impact]**

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Operational Criteria Pollutants

Operational air emissions from the project would be generated primarily from autos driven by patrons and employees. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are also typical emissions from the proposed uses. The CalEEMod model was used to predict net emissions from operation of the proposed project assuming full build-out. As shown in Table 4.3-3, average daily and annual emissions of ROG, NO_x, PM₁₀, or PM_{2.5} would not exceed the significance thresholds.

Table 4.3-3: Operational Criteria Pollutant Emissions				
Scenario	ROG	NO_x	PM₁₀	PM_{2.5}
Annual Project Operational emissions (tons)	9.36 tons	6.44 tons	4.96 tons	1.40 tons
Existing Operational Emissions (tons)	(0.15 tons)	(0.28 tons)	(0.17 tons)	(0.05 tons)
Adjustment for Parking Structure Consumer Products ROG	(1.11 tons)	--	--	--
Total Net Project Operational emissions (tons)	8.10 tons	6.16 tons	4.79 tons	1.35 tons
<i>Thresholds (tons per year)</i>	<i>10 tons</i>	<i>10 tons</i>	<i>15 tons</i>	<i>10 tons</i>
<i>Exceed Threshold?</i>	No	No	No	No
Average Daily Net Project Operational Emissions (pounds) ¹	44.4 lbs.	33.8 lbs.	26.2 lbs.	7.4 lbs.
<i>Thresholds (pounds per day)</i>	<i>54 lbs.</i>	<i>54 lbs.</i>	<i>82 lbs.</i>	<i>54 lbs.</i>
<i>Exceed Threshold?</i>	No	No	No	No

¹ Assumes 365-day operation.

Construction Criteria Pollutants and Dust

Construction activities such as earthmoving, construction vehicle traffic, and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water based paints, thinners, some insulating materials, and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

The CalEEMod was used to predict construction emissions resulting from the project, including emissions associated with truck trips importing fill to the site. As shown in Table 4.3-4, predicted project NO_x emissions would exceed the significance threshold.

Table 4.3-4: Construction Criteria Pollutant Emissions				
Scenario	ROG	NO_x	PM₁₀ Exhaust	PM_{2.5} Exhaust
Topgolf Entertainment Complex construction emissions (tons)	4.46 tons	7.76 tons	0.38 tons	0.35 tons
Hotel/Retail construction emissions (tons)	3.27 tons	6.07 tons	0.28 tons	0.26 tons
Total construction emissions (tons)	7.73 tons	13.83 tons	0.66 tons	0.61 tons
Average daily emissions (pounds) ¹	39.0 lbs.	69.8 lbs.	3.3 lbs.	3.1 lbs.
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs.	54 lbs.	82 lbs.	54 lbs.
Exceed Threshold?	No	Yes	No	No
With Tier 4 Construction Mitigation				
Topgolf Entertainment Complex construction emissions (tons)	3.97 tons	2.57 tons	0.06 tons	0.05 tons
Hotel/Retail construction emissions (tons)	2.90 tons	2.31 tons	0.03 tons	0.03 tons
Total construction emissions (tons)	6.87 tons	4.88 tons	0.09 tons	0.08 tons
Average daily emissions (pounds) ¹	34.7 lbs.	24.6 lbs.	0.5 lbs.	0.4 lbs.
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs.	54 lbs.	82 lbs.	54 lbs.
Exceed Threshold?	No	No	No	No
Notes: ¹ Assumes 396 workdays.				

Additionally, construction dust could affect local air quality at various times during construction of the project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere. Construction activities would increase dustfall and locally elevated levels of PM₁₀ downwind.

Impact AQ-1: Air quality impacts resulting from construction, particularly emissions of NO_x and generation of construction dust, could cause significant adverse effects. **[Significant Impact]**

Mitigation Measures: Implementation of the following mitigation measures would reduce construction emissions and dust to less than significant levels.

MM AQ-1.1: All diesel-powered construction equipment larger than 50 horsepower and operating on site for more than two (2) continuous days shall meet U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.

MM AQ-1.2: Consistent with City policies, the project shall be developed in conformance with the following standard Bay Area Air Quality Management District (BAAQMD) dust control measures during all phases of construction on the project site to reduce dustfall emissions:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 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.
- 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.
- The name and phone number of the Construction/Disturbance coordinator, the phone number of the Air District, the hours of construction limitations, City File Number PDC16-013, and the City of San Jose's Code Enforcement Division phone number (408-535-7770), shall be displayed on a weatherproof sign posted at each entrance to the project site. A local phone number with answering service shall be maintained during the duration of project construction.

As shown in Table 4.3-4, implementation of the mitigation measures described above would reduce construction emissions and dust to less than significant levels. **[Less Than Significant Impact With Mitigation]**

Construction TACs

In 1998 the California Air Resources Board identified particulate matter from diesel fueled engines as a TAC. Health risks from TACs are a function of both concentration and duration of exposure. The proposed project will require the use of various diesel-powered vehicles and equipment. Given the proximity and location of the proposed project to existing sensitive receptor in the project area, sensitive receptors could be exposed to substantial TAC concentrations.

An assessment of construction emissions was performed to determine whether offsite sensitive receptors would be exposed to a substantial incremental increase in TAC emissions that exceed excess cancer risk, acute hazard index, chronic hazard index, and PM_{2.5} thresholds at the “maximum exposed individual” (MEI). First, emissions were estimated, and then the offsite air concentrations that would result from the emissions were calculated. Lastly, the risks associated with those concentrations at offsite receptors were calculated.

The existing development on the site would be demolished and removed, followed by the construction of the proposed project. For the modeling, the project applicant provided information on the construction phasing and scheduling which were used with both the CalEEMod and OFFROAD2007 models. The ambient concentrations of pollutants resulting from these on-site construction activities were then estimated.

Sensitive offsite receptors in the vicinity of the project include residential uses to the north, south, and west, as well as an elementary school to the north. Based on orientation with respect to the predominant wind direction and other factors, modeling was completed for the MEI in the project vicinity.

The maximum modeled annual residential diesel particulate matter (DPM) concentration (i.e., from construction exhaust) was 0.243 µg/m³, which is below the threshold of 0.3 µg/m³. The maximum computed hazard index (HI) based on this DPM concentration is 0.05, which is below the significance threshold of 1.0. The maximum HI for a school child would be 0.02, which is also below the significance threshold.

Results of the assessment indicate that the maximum increased residential cancer risks would be 47.9 in one million for an infant exposure and 0.8 in one million for an adult exposure. The maximum increased cancer risk for a school child exposure at the George Mayne Elementary School was 2.8 in one million. The maximum residential excess cancer risk would be greater than the significance threshold of 10 in one million.

The maximum-modeled annual PM_{2.5} concentration, which is based on combined exhaust and fugitive dust emissions, was 0.4 µg/m³, occurring at the residential MEI. The maximum annual PM_{2.5} concentration at the George Mayne Elementary School was 0.2 µg/m³. The maximum annual PM_{2.5} concentration at the MEI residential receptor location would exceed the significance threshold of 0.3 µg/m³.

Impact AQ-2: Construction of the proposed project could expose offsite sensitive receptors to substantial risks and hazards related to TACs. **[Significant Impact]**

Mitigation Measures: Implementation of mitigation measures MM AQ-1.1 and MM AQ-1.2, identified above, would reduce construction TAC impacts to a less than significant level. Implementation of Mitigation Measure AQ-1 is considered to reduce exhaust emissions by five percent. Implementation of Mitigation Measure AQ-2 would further reduce on-site diesel exhaust emissions. This would reduce the cancer risk proportionally, such that the mitigated risk would be less than 3.4 in one million and the maximum annual PM_{2.5} concentration would be reduced to 0.1 µg/m³. **[Less Than Significant Impact With Mitigation]**

Cumulative Construction TAC Impacts

Cumulative TAC impacts associated with construction of the project were assessed by predicting the combined community risk impacts from the project and nearby sources at the sensitive receptor most affected by project construction. A review of the project area identified N. First Street as the only other source of TAC emissions that could adversely affect the project construction MEIs. No stationary sources of TACs (e.g., emergency backup generators or gas stations) were identified within 1,000 feet of the site. All other roadways near the construction MEIs are assumed to have average daily traffic (ADT) volumes of below 10,000 or below the BAAQMD screening criteria.

For local roadways, BAAQMD has provided a screening calculator to determine if roadways with traffic volumes of over 10,000 vehicles per day may have a significant effect on a proposed project. Based on the cumulative plus project volumes obtained from the project traffic report, and assuming that ADT is approximately ten times the peak hour volume, N. First Street would have an ADT volume of 11,820 in the project area. Using the BAAQMD *Roadway Screening Analysis Calculator* for Santa Clara County for east-west directional roadways and at a distance of approximately 50 feet north of the roadway, estimated cancer risk from N. First Street at the construction MEIs would be 5.0 per million and PM_{2.5} concentration would be 0.1 µg/m³. Chronic or acute HI for the roadway would be below 0.03. Therefore, when added to the community risk from construction, cumulative cancer risk would be 52.9 in one million and PM_{2.5} concentration would be 0.5 µg/m³, which would be below the significance thresholds of 100 in one million and 0.8 µg/m³, respectively. **[Less Than Significant Impact]**

- c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?*

As described above in the response to checklist question “b”, the project would not result in a considerable net increase of any criteria pollutant with implementation of mitigation measures. **[Less Than Significant Impact With Mitigation]**

- d. Would the project expose sensitive receptors to substantial pollutant concentrations?*

As described above in the response to checklist question “b”, with implementation of identified mitigation measures, the project would not expose sensitive receptors to substantial pollutant concentrations. **[Less Than Significant Impact With Mitigation]**

- e. Create objectionable odors affecting a substantial number of people?*

The project does not include any odor-causing operations, and any odors emitted during construction would be temporary and localized. **[Less Than Significant Impact]**

4.3.4 Conclusion

With implementation of mitigation measures, the project would result in less than significant air quality impacts. **[Less Than Significant Impact With Mitigation]**

4.4 BIOLOGICAL RESOURCES

The discussion in this section is based in part on a Biological Resources Report completed by *H.T. Harvey & Associates* and an Arborist Report completed by *HMH* in July 2016. These reports are attached as Appendices B-1 and B-2 of this Initial Study.

4.4.1 Existing Setting

The project site is located within the Guadalupe River watershed, at the southern end of the San Francisco Bay. The eastern portion of the site is developed with the Pin High Golf Center, while the western half of the site consists of an RV storage yard and a vacant lot.

4.4.1.1 *Habitat Conditions and Wildlife Use on the Site*

Field surveys completed on the site in June and December of 2015 identified six general biotic habitat/land cover types: California annual grassland, golf courses/urban parks, urban/suburban, pond, diked brackish marsh, and coastal and valley freshwater marsh. These habitats are described in detail below. Table 4.4-1 provides a summary of the land cover acreages on the site, and their distribution is depicted in Figure 4.4-1.

Land Cover Type	Area (acres)	Percentage of Site
California annual grassland	6.03	16%
Golf courses/urban parks	19.80	52%
Urban/Suburban	11.38	30%
Pond	0.61	1%
Diked brackish marsh	0.45	1%
Coastal and valley freshwater marsh	0.01	<0.1%
Total	38.28	100%

Golf Courses/Urban Parks

The majority of the project site is a maintained grass field for the existing golf facility. The grassland is a groomed lawn with sand traps and greens. Landscaped trees and other ornamentals are also present. Because of the manicured lawn and ornamentals, native plant species are largely absent from this habitat. Tall poles and netting are in place to separate the various driving range areas.

This habitat provides relatively few nesting or foraging opportunities for wildlife. Some bird species, including the American robin (*Turdus migratorius*), Brewer's blackbird (*Euphagus cyanocephalus*), and house finch (*Haemorhous mexicanus*), are well adapted to developed landscapes and are likely to breed in the ornamental vegetation, and species such as the golden-crowned sparrow (*Zonotrichia atricapilla*), white-crowned sparrow (*Zonotrichia leucophrys*), and California towhee (*Pipilo crissalis*) will forage on the golf course. In addition, several species of raptors may occasionally forage over the golf course, including the white-tailed kite (*Elanus leucurus*), northern harrier



HABITATS ON THE PROJECT SITE

FIGURE 4.4-1

(*Circus cyaneus*), and Cooper's hawk (*Accipiter cooperi*). Although the ornamental trees on the site are too small to support nesting raptors, Mexican fan palms (*Washingtonia robusta*) scattered around the edges of this habitat may provide suitable nesting habitat for the barn owl (*Tyto alba*). California ground squirrels (*Spermophilus beecheyi*) and other small mammals, such as California voles (*Microtus californicus*), occur along the margins of this habitat.

California Annual Grassland

On the project site, this type of grassland is typically present in vegetated areas not maintained for golf lawns or landscaping. The grassland is ruderal, meaning that it is typically composed of a suite of non-native annual species that tolerate disturbance. Native vegetation is limited in ruderal grassland habitats. Wild oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), red stem filaree (*Erodium cicutarium*), Smilo grass (*Stipa miliacea*), and black mustard (*Brassica nigra*) are the common plants in the California annual grassland. Fennel (*Foeniculum vulgare*), Italian thistle (*Carduus pycnocephalus*), and perennial pepperweed (*Lepidium latifolium*) are also present. Agricultural practices have not been in use recently and ruderal, non-native, herbaceous vegetation is currently present. On the western side of the site along Liberty Street, the grassland has been recently disturbed as evidenced by the low vegetation cover and turned soils. At the southern side of the site, which includes a basin feature, a suite of non-native species occurs on the side slopes of the bermed area between the existing golf lawn, basin bottom, and the Guadalupe River levee.

Wildlife use of the grassland habitat on the site is limited by the small extent of the habitat and the high levels of human disturbance that occur both on the site and in nearby areas. As a result, wildlife species associated with more extensive grassland habitats in the region, such as the grasshopper sparrow (*Ammodramus savannarum*), are absent from this habitat within the site, and many of the species that occur on the site are species that occur in adjacent urban areas and use the site for foraging. Such species include the American crow (*Corvus brachyrhynchos*), California towhee, mourning dove (*Zenaida macroura*), and bushtit (*Psaltriparus minimus*). Likewise, a few species nesting on nearby bridges and overpasses, such as the cliff swallow (*Petrochelidon pyrrhonota*), barn swallow (*Hirundo rustica*), rock pigeon (*Columba livia*), black phoebe (*Sayornis nigricans*), and European starling (*Sturnus vulgaris*), also forage on or over the grassland habitat on the site. The ruderal grassland provides nesting habitat for only a few species, such as the western meadowlark (*Sturnella neglecta*), due to its limited extent. During winter and migration, common nonbreeding species such as the white-crowned sparrow, golden-crowned sparrow, Lincoln's sparrow (*Melospiza lincolnii*), lesser goldfinch (*Carduelis psaltria*), and American goldfinch (*Carduelis tristis*) forage on the ground or in herbaceous vegetation, primarily for seeds.

Reptiles and amphibians occurring in the grasslands on the site include the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*), and common garter snake (*Thamnophis sirtalis*). Small mammals present include the western harvest mouse (*Reithrodontomys megalotis*), house mouse (*Mus musculus*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel. These species, in turn, attract raptors such as the American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), and Cooper's hawk. Larger mammals, such as the striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and black-tailed hare (*Lepus californicus*), are also likely to occur in this habitat.

Urban/Suburban

These areas are generally described as developed and landscaped. The site has asphalt paved streets and parking lots, gravel lots and roads, and a few buildings. Ornamental trees such as Peruvian pepper tree (*Schinus molle*) are planted in the parking lot near the current golf facility. Otherwise, vegetation is largely absent. A few areas may support scattered non-native disturbance-loving herbaceous vegetation such as riggut brome and wild oats in asphalt cracks or at the edges of gravel areas. Native plant species are generally considered absent from this habitat because of the level of disturbance and extent of ground cover materials, such as asphalt.

Asphalt and gravel areas do not provide high-quality wildlife habitat; however, snakes and lizards may bask on these surfaces, and a variety of wildlife cross or move along these areas en route to other habitats.

Pond

Standing water exists in a remnant river channel that has been disconnected from its flow regime at the southeastern end of the site. Based on historic aerial photos, this feature was once part of the meandering slough that formed as the lower Guadalupe River flowed north to the San Francisco Bay prior to 1968. Between 1960 and 1968, the lower Guadalupe River was straightened and channelized. Now the pond is permanently disconnected from Guadalupe River surface flows. Since the 1960s to the present day, it has functioned as a pond, since the levee along the Guadalupe River isolates the feature from the current active river channel. Currently the pond has standing water that is a murky greenish-brown color and does not support emergent vegetation. The presence of pickleweed (*Salicornia pacifica*) and saltgrass (*Distichlis spicata*) around the edge of the feature indicates that the water is likely brackish or saline. Salinity may be a result of various factors including the historic tidal influence from the San Francisco Bay via tidal action at the Guadalupe River mouth and from evaporative water loss that contributes to salt concentration.

Because the water within the pond feature is brackish, it is unlikely to support amphibians or turtles. However, several species of ducks and wading birds, including the American coot (*Fulica americana*), may occasionally forage here.

Diked Brackish Marsh

Hydrophytic (water-loving) plants are present at the lowest elevations in a basin feature between the golf facility and the Guadalupe River Trail. Diked brackish marsh is also present around the pond feature. Presumably, this area was historically influenced by the stream course of the Guadalupe River, but the area has been diked off from the existing Guadalupe River channel. The low-lying area has wetland features in flat locations at the bottom of the basin. Currently, water is received from incident precipitation events and localized sheetflow. Groundwater may also be an input to the area based on the site elevation and proximity to the Guadalupe River. No ponded water was observed at the time of the survey.

A variety of bird species are likely to use the vegetation in the diked brackish marsh. The Alameda song sparrow (*Melospiza melodia pusillula*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), and red-winged blackbird (*Agelaius phoeniceus*) nest in this habitat, and ducks and

other waterfowl forage here year-round. The California vole is a common small mammal species found in marshes in the Project vicinity, and will breed in adjacent terrestrial habitats and forage in the brackish marsh; it in turn serves as prey for the great blue heron (*Ardea herodias*) and great egret (*Ardea alba*), as well as raptors.

Coastal and Valley Freshwater Marsh

One small feature supporting cattails (*Typha* sp.) is located at the edge of California annual grassland and urban/suburban habitats in the central portion of the site. The area appears to be a low-lying drainage ditch or swale along a gravel road. At the time of the survey, no ponded water was observed in the feature and the cattail was over six feet tall. Dominance by cattail indicates that this is a freshwater marsh. Prior site wetland and habitat mapping conducted in 2004 did not identify this feature, which indicates that the feature is of recent origin. Given the landscape position, isolation from other aquatic or wetland features, and its likely recent origin, this feature may be supplied by artificial hydrology. In the absence of groundwater input, the naturally occurring local surface flow into this feature would be limited because of local topography. Therefore, the freshwater marsh may be a result of the golf facility's irrigation management practices.

Special-Status Species

Special-status species are plants and animals that are legally protected under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Special-status plants include the following: plants listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species, plants listed under CESA as threatened, endangered, rare, or a candidate species, plants listed by the California Native Plant Society (CNPS) as rare or endangered on California Rare Plant Rank (CRPR) lists 1A, 1B, 2, 3, or 4. Special-status wildlife include the following: animals listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species, animals listed under CESA as threatened, endangered or a candidate threatened or endangered species, animals designated by the California Department of Fish and Wildlife (CDFW) as a California species of special concern, and animals listed in Sections 3511, 4700, 5050, or 5515 the California Fish and Game Code as a fully protected species.

Information concerning threatened, endangered, and other special-status species that occur in the project area was collected from several sources and reviewed to develop a list of species potentially occurring in the study area (refer to Appendix B).

4.4.1.2 *Special-Status Species*

Special-Status Plant Species

Based upon species habitat occurrences, soil requirements, and ranges, 14 special-status plant species were determined to have some potential to occur on the project site. These species are: alkali milk-vetch (*Astragalus tener* var. *tener*), brittlescale (*Atriplex depressa*), lesser saltscare (*Atriplex minuscula*), Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Point Reyes salty bird's-beak (*Chloropyron maritimum* ssp. *palustre*), Hoover's button-celery (*Eryngium aristulatum* var. *hooveri*),

San Joaquin spearscale (*Extriplex joaquiniana*), Contra Costa goldfields (*Lasthenia conjugens*), prostrate vernal pool navarretia (*Navarretia prostrata*), Gairdner's yampah (*Perideridia gairdneri* ssp. *gairdneri*), hairless popcornflower (*Plagiobothrys glaber*), California alkali grass (*Puccinellia simplex*), California seablite (*Suaeda californica*), and saline clover (*Trifolium hydrophilum*).

Based on further analysis of these species, all but Congdon's tarplant were determined to be absent from the project site. Although suitable habitat for the other species is present, the condition of the habitat is too disturbed to support those species. The entire site is surrounded by existing urbanized areas in Alviso, areas under current development, or has been separated from the Guadalupe River corridor by dikes. The California annual grassland is dominated by non-native annual grasses and is largely fragmented from other surrounding natural vegetation as a result of urbanization. Therefore, this grassland is unsuitable for many species because of its low quality. The diked brackish marsh is also moderately degraded because it has been physically separated from the Guadalupe River corridor. Characteristic pool-associated species for nearby populations of special-status plants were not observed in the diked brackish marsh. Invasive perennial pepperweed grows around the edges of the habitat, and thickets of pickleweed and saltgrass preclude other species from establishing in the interior. For these reasons, and in light of the complete absence of these species from surrounding areas, brittlescale, lesser saltgrass, prostrate vernal pool navarretia, Gairdner's yampah, California alkali grass, and saline clover were determined to be absent. Only Congdon's tarplant was determined to potentially occur at the site. It is described in more detail below.

Congdon's Tarplant. Congdon's tarplant is an annual herb in the composite family (Asteraceae) that has a variable blooming period extending from June through November. It occurs in valley and foothill grasslands, particularly those with alkaline substrates, and in slumps or disturbed areas where water collects in lower elevation wetlands below approximately 760 feet. This subspecies tolerates disturbance and often occurs in disked fields with non-native, California annual grassland habitat with hood canary grass (*Phalaris paradoxa*) and alkali mallow (*Malvella leprosa*). This species is documented from 91 occurrences, including several from Alviso, and it is considered seriously threatened by development. The closest known CNDDDB record of Congdon's tarplant (CNDDDB occurrence #41) is located approximately 0.25 miles north of the site in disturbed grassland.

Based on the proximity of the site to known occurrences of the species and this species' ability to grow in disturbed habitats, it was determined that potentially suitable habitat for Congdon's tarplant exists within the site in the small area of California annual grassland habitat along Liberty Street and in the diked brackish marsh. Congdon's tarplant is most commonly found in seasonal alkaline wetland depressions that are periodically disturbed (often with mowing or disking). This species is also known to tolerate disturbance of the type that has occurred on portions of the site, and it is known from several occurrences including Alviso and the Sunnyvale Baylands Park. Therefore, it may be present on the project site.

Special-Status Wildlife Species

No federal or state listed species are expected to occur on the project site. However, six California species of special concern, the burrowing owl (*Athene cunicularia*), western pond turtle (*Actinemys marmorata*), northern harrier (*Circus cyaneus*), loggerhead shrike (*Lanius ludovicianus*), San Francisco common yellowthroat, and Alameda song sparrow, may be present on the site, as well as the white-tailed kite, a fully protected species. These species are discussed in detail below.

Burrowing Owl. Burrowing owls occur year-round in the Santa Clara Valley, using open, agricultural or grassland areas with active small mammal burrows, which they use for nesting and roosting. Typical burrowing owl habitat is treeless (because tall trees provide perches for raptors that can easily prey on burrowing owls), with minimal shrub cover and woody plant encroachment, and low density and foliage height diversity, which allows the owls to observe approaches to their nest or roost burrows. In the San Francisco Bay Area, burrowing owls are chiefly associated with burrows of California ground squirrels, which, in addition to providing nesting, roosting, and escape burrows, improve habitat for burrowing owls in other ways. The burrowing owl nesting season, as recognized by the California Department of Fish and Wildlife (CDFW), runs from February 1 through August 31.

The grasslands on the project site provide suitable nesting, foraging, and roosting habitat for the burrowing owl, and the site is mapped as burrowing owl nesting habitat by the Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (HCP). Although the species has not been recorded within the project boundaries, several records are located within one mile of the site.

Western Pond Turtle. The western pond turtle occurs in ponds, streams, and other aquatic habitats in the Pacific Slope drainages of California and northern Baja California, Mexico. Ponds or slack-water pools with suitable basking sites (such as logs) are an important habitat component. Nesting season typically occurs from April through July with the peak occurring in late May to early July. The western pond turtle is a covered species under HCP. As expressed in Conservation Goal 19, the HCP seeks to maintain and, where appropriate, increase the number of individuals and expand the distribution of the western pond turtle within the Reserve System to maintain viable populations and contribute to the regional recovery of the species.

Although breeding populations have been extirpated from most agricultural and urbanized areas in the project region, individuals of this long-lived species still occur in urban streams and ponds in the Santa Clara Valley. No suitable aquatic habitat is present on the project site. However, individuals have occasionally been recorded along the lower reaches of the Guadalupe River in the project vicinity and could occasionally disperse into or nest in upland habitats within the Project site.

Northern Harrier. The northern harrier nests in marshes and grasslands with tall vegetation and sufficient moisture to inhibit accessibility of nest sites to predators. The species is fairly widespread as a forager in grasslands, extensive wetlands, and agricultural areas in the project region during migration and winter. The California annual grassland and diked brackish marsh habitat on the site provides suitable nesting and foraging habitat for the northern harrier.

Loggerhead Shrike. The loggerhead shrike is a predatory songbird associated with open habitats interspersed with shrubs, trees, poles, fences, or other perches from which it can hunt. Nests are built in densely foliated shrubs or trees, often containing thorns, which offer protection from predators and upon which prey items are impaled. The breeding season for loggerhead shrikes may begin as early as mid-February and lasts through July. Nationwide, loggerhead shrike populations have declined significantly over the last 20 years.

Loggerhead shrikes nest in a number of locations in the project region where open grassland, ruderal, or agricultural habitat with scattered brush, chaparral, or trees that provide perches and nesting sites occurs. This species occurs slightly more widely (i.e., in smaller patches of open areas providing foraging habitat) during the nonbreeding season. The ruderal grassland habitat on the project site provides suitable nesting and foraging habitat for the loggerhead shrike. Based on the extent of suitable habitat on the project site and typical territory sizes of this species, however, no more than one pair of loggerhead shrikes is expected to nest on the site.

White-tailed Kite. In California, white-tailed kites can be found in the Central Valley and along the coast, in grasslands, agricultural fields, cismontane woodlands, and other open habitats. White-tailed kites are year-round residents of the state, establishing nesting territories that encompass open areas with healthy prey populations, and snags, shrubs, trees, or other nesting substrates. In the Project vicinity, white-tailed kites are known to nest along the northern edge of Santa Clara County throughout the open areas edging the San Francisco Bay. Suitable foraging habitat for the white-tailed kite is present on the project site. Although suitably large trees for nesting are not present within the project boundaries, suitable nesting sites are present in trees roughly 100 feet from the site.

San Francisco Common Yellowthroat. The San Francisco common yellowthroat inhabits emergent vegetation and nests in fresh and brackish marshes and moist floodplain vegetation around the San Francisco Bay. In the South Bay, the San Francisco common yellowthroat is a fairly common breeder in fresh and brackish marshes. It is known to nest abundantly in the marshes along the lower Guadalupe River adjacent to the project site and the diked brackish marsh on the site provides suitable nesting and foraging habitat for this species.

Alameda Song Sparrow. The Alameda song sparrow is one of three subspecies of song sparrows that nest only in salt marsh habitats in the San Francisco Bay area. Prime habitat for Alameda song sparrows consists of large areas of tidally influenced salt marsh dominated by cordgrass and gumplant and intersected by tidal sloughs, offering dense vegetative cover and singing perches. Song sparrows nest as early as March, but peak nesting activity probably occurs in May and June. Song sparrows breed commonly in the marshes along the lower Guadalupe River adjacent to the project site, and the diked brackish marsh on the site provides suitable nesting and foraging habitat.

Sensitive Natural Communities and Habitats

Impacts to CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA. Additionally, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the US Fish and Wildlife Service (USFWS).

Approximately 1.07 acres of regulated habitats occur within the project site in the form of coastal and valley freshwater marsh wetlands (0.01 acres), diked brackish marsh wetlands (0.45 acres), and pond (0.61 acres). These regulated habitats are considered sensitive natural communities.

There is no CDFW riparian jurisdiction on the project site. Riparian habitats along stream and drainage corridors are typically claimed by CDFW because they offer unique resources for wildlife. Section 1602 of the Fish and Game Code establishes jurisdiction over the bed, channel, or bank of any river, stream, or lake. In accordance with this guidance, it was determined that riparian habitat is absent from the project site. The pond habitat on the site is remnant channel from the Guadalupe River but it no longer functions as a stream feature. Rather, it now holds standing water that does not have surface flows. Because the pond is no longer functioning as a stream, it does not have associated riparian banks. The extent of the CDFW riparian corridor around the Guadalupe River is to the inboard edge of the top of levee, which is entirely outside the project site.

4.4.1.3 *Applicable Plans, Policies, and Regulations*

Regulated Habitats

United States Army Corps of Engineers Jurisdiction

Areas meeting the regulatory definition of “Waters of the United States” (jurisdictional waters) are subject to the jurisdiction of the US Army Corps of Engineers (USACE). The USACE, under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899), has jurisdiction over “Waters of the US” These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as Waters of the US., tributaries of waters otherwise defined as Waters of the US, the territorial seas, and wetlands adjacent to Waters of the US.

Three different types of potentially jurisdictional features were identified on the site. The pond, diked brackish marsh, and coastal and valley freshwater marsh are all features that are likely to be considered jurisdictional wetlands or waters of the US. The pond up to the ordinary high water mark is considered waters of the US. The diked brackish marsh surrounding the pond and the two other nearby brackish marsh features to the northwest are likely to be considered as wetlands/special aquatic sites.

In its current condition, the coastal and valley freshwater marsh is also likely to be considered a wetland/special aquatic site because it presently supports hydrophytic vegetation (cattails). This wetland is of low quality because it is fragmented and surrounded by developed habitats, it is situated in an upland roadside ditch setting, and it is not connected to any adjacent wetlands or waters features. A prior regulated habitat mapping that was conducted at the site in 2004 did not identify this feature on the site. Thus, based upon its setting and presumed absence in 2004, there is potential that the source hydrology may be artificial, potentially from irrigation management or leaking pipes. In its current condition the USACE may claim jurisdiction on the feature as an unmaintained ditch excavated in uplands that supports wetland vegetation. However, if the source of hydrology is

artificial, and if that hydrology source was removed and the wetland vegetation died back, then USACE jurisdiction would no longer apply.

The Guadalupe River, up to the high tide line, is considered waters of the U.S. but it is entirely outside the project site. No other features occur on the Project site that would be considered waters of the U.S.

Clean Water Act/Porter-Cologne Water Quality Control Act

The California Environmental Protection Agency State Water Resources Control Board works in coordination with the nine Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect Waters of the State. Porter-Cologne broadly defines Waters of the State as “any surface water or groundwater, including saline waters, within the boundaries of the state.”

State jurisdiction over wetlands and other waters covers a broader area than that of the federal jurisdiction because it includes associated uplands up to the top of bank. On the project site, the pond is considered waters of the State up to the top of the surrounding levee banks. This includes the diked brackish marsh surrounding the pond. The other two diked brackish marsh features to the northwest of the pond are also considered waters of the State. The coastal and valley freshwater marsh is also currently considered waters of the State. However, as stated above, if artificial hydrology is the source and if it was removed and the wetland vegetation died back, then State jurisdiction would no longer apply. The Guadalupe River, up to the levee hinge point, is considered waters of the State but it is entirely outside the project site. No other features occur on the site that would be considered waters of the State.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States’ 200-nautical-mile limit. A number of fish species regulated by the Coastal Pelagics and Pacific Groundfish Fisheries Management Plans under the Act, such as the starry flounder, leopard shark, and big skate, occur in the tidal habitats of South San Francisco Bay and are expected to occasionally disperse upstream into the reaches of Guadalupe River adjacent to the project site. Species such as the northern anchovy, Pacific sardine, and jack mackerel also occur in the South Bay; these species are less likely to occur in the uppermost tidal reaches of Guadalupe River, but small numbers could potentially occur there.

City of San Jose Riparian Policy

The City’s riparian policy is administered through use of a Riparian Corridor Policy Study that describes suggested buffer widths. The 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 adjacent upland habitats. 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. However, the Policy Study also states that setback distances for individual sites may vary if

consultation with the City and a qualified biologist, or other appropriate means, indicates that a smaller or larger setback is more appropriate for consistency with riparian preservation objectives.

The top of bank line is the stream boundary where a majority of normal discharges and channel forming events take place; containing the active channel, active floodplain, and their associated banks. The top of bank of the Guadalupe River adjacent to the project site is the inner, river-side edge of the top of levee. At this location and for the purposes of this project, the riparian setback extends 100 feet from the top of bank of Guadalupe River. Riparian vegetation does not extend beyond the top of the levee adjacent to the project site.

Birds of Prey/Migratory Birds

Federal Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the US Department of the Interior. This act protects whole birds, parts of birds, and bird nests and eggs; and prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described by the Department of Interior.

California Fish and Game Code Sections 3503, 3513, and 3800 – Birds of Prey

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW. Raptors (i.e., eagles, hawks, and owls) and their nests are specifically protected in California under Code §3503.5. Section 3503.5 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.”

City of San José Bird-Safe Building Design Standards

In March 2015, the City of San José adopted voluntary bird friendly design standards. These voluntary measures can be used in new construction and renovations as well in existing buildings as operating practices.

They include but are not limited to the following:

- Reduce large areas of transparent or reflective glass.
- Locate water features and other bird habitat away from building exteriors to reduce reflection.
- Reduce or eliminate the visibility of landscaped areas behind glass.
- Reduce or eliminate spotlights on buildings.
- Turn non-emergency lighting off at night, especially during bird migration season (February-May and August-November).

Bats and Non-Game Mammals

California Fish and Game Code Section 415

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered “take” by the CDFW.

Habitat Conservation Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (HCP), which encompasses a study area of 519,506 acres (or approximately 62 percent of Santa Clara County), was adopted by six local entities in Santa Clara County. The plan went into effect in October 2013 and the Santa Clara Valley Habitat Agency is charged with implementing the plan. The area for which development activities are covered by the plan is located south and east of the Legacy Terrace/America Center Development. The HCP was developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, the Santa Clara Valley Water District, and the Santa Clara Valley Transportation Authority (collectively termed the ‘Local Partners’), the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife.

The HCP is a conservation program to promote the recovery of endangered species in portions of Santa Clara County while accommodating planned development, infrastructure and maintenance activities. The species of concern identified in the HCP include, but are not limited to, the California tiger salamander, California red-legged frog, western burrowing owl, Bay Checkerspot butterfly, and a number of species endemic to serpentine grassland and scrub. The project site is within the HCP boundaries, and the proposed project would be considered a covered activity and is subject to the fees and conditions of the HCP.

Envision San José 2040 General Plan

The 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 biological resources and are applicable to the proposed project.

Envision San José 2040 Relevant Biological Resource Policies

Policies	Description
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 environmental 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.
- Policy ER-2.4 When disturbances to riparian corridors cannot be avoided, implement appropriate measures to restore, and/or mitigate damage and allow for fish passage during construction.
- Policy ER-2.5 Restore riparian habitat through native plant restoration and removal of nonnative/invasive plants along riparian corridors and adjacent areas.
- 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-5.1 Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance of activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.
- Policy ER-5.2 Require that development projects incorporate measures to avoid impacts to nesting migratory birds.
- Policy ER-6.5 Prohibit use of invasive species, citywide, in required landscaping as part of the discretionary review of proposed development.
- 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 the riparian habitats of lower Coyote Creek.
- Policy MS-21.8: For Capital Improvement Plan or other public development projects, or through the entitlement process for private development projects, require landscaping including the selection and planting of new trees to achieve the following goals:
1. Avoid conflicts with nearby power lines.
 2. Avoid potential conflicts between tree roots and developed areas.
 3. Avoid use of invasive, non-native trees.
 4. Remove existing invasive, non-native trees.
 5. Incorporate native trees into urban plantings in order to provide food and cover for native wildlife species.
 6. Plant native oak trees and native sycamores on sites which have adequately sized landscape areas and which historically supported these species.

Alviso Master Plan

The Alviso Master Plan is a policy document that provides the background, vision, and character to guide the future of a unique area at the northern edge of San Jose. The following policies are specific to riparian, aquatic and biological resources and are applicable to the proposed project.

Alviso Master Plan Relevant Land Use Policies

Policies	Description
Environmental Protection Policy 3	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.
Environmental Protection Policy 5:	To protect aquatic habitats that receive storm runoff, all new development must comply with adopted City Council policy entitled "Post-Construction Urban Runoff Management.
River Orientation Policy 1	Commercial land uses adjacent to the Guadalupe River should provide access to the waterway.
River Orientation Policy 2	Development along the Guadalupe River should be designed to reflect and acknowledge the river environment by orienting seating areas, windows, decks, balconies, and open spaces to the river while orienting utility, parking, storage, and trash areas away from it.
River Orientation Policy 3	New buildings adjacent to the Guadalupe River/Alviso Slough should be of an appropriate scale and character to enhance this waterway as a public oriented recreation resource and as a natural riparian corridor.

4.4.1

Biological Resources Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,10
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,10
c. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,10
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,10
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,4
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.4.3 Impacts Evaluation

- a. *Would the project 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 (CDFW) and Wildlife or US Fish and Wildlife Service?*

As described previously, special-status plant and wildlife species could be present on the site. Impacts to individual species are discussed below.

Congdon's Tarplant

The presence of Congdon's tarplant is possible in the California annual grassland and diked brackish marsh on the project site. If Congdon's tarplant is present on the site, construction activities could affect the plants through direct or indirect disturbance of populations and disturbance, modification, or destruction of suitable habitat. Damage to this species may occur as a result of crushing by equipment; trampling; and compaction of soil, which could result in damage to plant roots. These activities could result in death, altered growth, or reduced seed set through physically breaking, crushing, wilting, or uprooting plants. Additionally, placement of asphalt or other paving material, including the paving material that will underlie the artificial turf in the Topgolf outfield area, would eliminate the vegetation in the affected area.

The project would not result in any disturbance of the diked brackish marsh habitat present on the site, so any Congdon's tarplant individuals or suitable habitat in this location would remain intact. Potential impacts on Congdon's tarplant resulting from disturbance of California annual grasslands are limited because of the small extent of this habitat that would be impacted at the site, and the low quality of the habitat to be impacted. Nevertheless, loss of individuals of this species from the site would be considered significant because this species' populations are limited locally as well as regionally. Specifically, in the Alviso area, habitat loss is a known threat for this species.

Impact BIO-1: The project could result in significant impacts to Congdon's Tarplant.
[Significant Impact]

Mitigation Measures: The following mitigation measures would reduce impacts to Congdon's Tarplant to a less than significant level.

MM BIO-1.1: Prior to construction, a focused survey for Congdon's tarplant shall be conducted by a qualified biologist in the California annual grassland habitat within the project's permanent impact area. The survey shall be conducted during the species' blooming period (May-November), and shall be submitted to the City's Supervising Environmental Planner for review and approval.

MM BIO-1.2: If a population of Congdon's tarplant is identified in the project impact area, mitigation for loss of individuals shall be conducted. Mitigation shall be achieved by establishing a new population of Congdon's tarplant in the diked brackish marsh and California annual grassland habitats that occur in the basins at the south portion of the site. This area shall not be developed by the

project and contains suitable habitat types for establishing a new population. Mitigation shall be a 1:1 ratio (impact:mitigation) of plant establishment on an acreage basis.

Annual monitoring shall include quantitative sampling of the Congdon's population to determine the number of plants that have germinated and set seed. This monitoring shall continue annually or until success criteria have been met; once annual monitoring has documented that a self-sustaining population of this annual species has been successfully established on site, this mitigation measure shall be determined to have been met and the project applicant released from further responsibility.

Establishment of the plant population shall be subject to a Habitat Mitigation and Monitoring Plan (HMMP). To ensure the success of mitigation sites required for compensation of permanent impacts on Congdon's tarplant, the project proponent shall retain a qualified biologist to prepare an HMMP. The HMMP shall be submitted to the City's Supervising Environmental Planner for review and approval prior to the start of construction. The HMMP shall include, at a minimum, the following information:

- A summary of habitat and species impacts and the proposed mitigation for each element
- A description of the location and boundaries of the mitigation site(s) and description of existing site conditions
- A description of any measures to be undertaken to enhance (e.g., through focused management) the mitigation site for special-status species
- Identification of an adequate funding mechanism for long-term management
- A description of management and maintenance measures intended to maintain and enhance habitat for the target species (e.g., weed control, fencing maintenance)
- A description of habitat and species monitoring measures on the mitigation site, including specific, objective performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. Monitoring will document compliance with each element requiring habitat compensation or management. At a minimum, performance criteria will include a minimum 1:1 mitigation ratio for the number of plants in the impacted population (at least one plant preserved for each plant impacted).
- A contingency plan for mitigation elements that do not meet performance or final success criteria within described periods; the plan

will include specific triggers for remediation if performance criteria are not met and a description of the process by which remediation of problems with the mitigation site (e.g., presence of noxious weeds) will occur

- A requirement that the project proponent will be responsible for monitoring, as specified in the HMMP, for at least three (3) years post-construction; during this period, annual reporting will be provided to the City's Supervising Environmental Planner. **[Less Than Significant Impact With Mitigation]**

Burrowing Owl

Grasslands on the project site contain ground squirrel burrows that provide potential nesting, wintering, and foraging habitat for burrowing owls. If active burrowing owl nests are present on the site at the time of construction, construction-related disturbance could result in injury or mortality of an owl. In addition, construction-related disturbance could lead to the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Even if burrowing owls are not breeding on the site, construction could result in injury or mortality of an owl in the event that an occupied burrow is filled or compacted during construction. The project would also result in the permanent loss of up to 3.72 acres of potential nesting, wintering, and foraging habitat, including habitat mapped as burrowing owl nesting habitat by the HCP.

Given the regional rarity of burrowing owls, and recent population declines in the Bay Area, any loss of burrowing owls, any activities resulting in the destruction of occupied burrowing owl burrows, or the loss of occupied burrowing owl habitat would substantially impact the species, and would be considered a significant impact.

Impact BIO-2: The project could result in significant impacts to Burrowing Owls. **[Significant Impact]**

Mitigation Measures: The following mitigation measures would reduce impacts to burrowing owls to a less than significant level.

MM BIO-2.1: The project proponent shall implement Condition 15 of the HCP and pay burrowing owl impact fees to the Habitat Agency. Pursuant to Condition 15, a qualified biologist shall conduct pre-construction surveys in all suitable habitat areas. To maximize the likelihood of detecting owls, the preconstruction survey will last a minimum of three hours. The survey will begin one hour before sunrise and continue until two hours after sunrise (for three hours total) or begin two hours before sunset and continue until one hour after sunset. Additional time may be required for large project sites. A minimum of two surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their locations will be mapped. Surveys will conclude no more than two calendar days prior to construction. Therefore, the project proponent must begin surveys no more than four days prior to construction (two days of

surveying plus up to two days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the project proponent may also conduct a preliminary survey up to fourteen (14) days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than two calendar days in advance of construction.

If evidence of western burrowing owls is found during the breeding season (February 1–August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a 250-foot non-disturbance buffer zone around nests. Construction may occur outside of the 250-foot non-disturbance buffer zone. Construction may occur inside of the 250-foot non-disturbance buffer during the breeding season if:

- the nest is not disturbed, and
- the project proponent develops an avoidance, minimization, and monitoring plan is approved by the Habitat Agency and the Wildlife Agencies prior to project construction.

If evidence of western burrowing owls is found during the non-breeding season (September 1–January 31), the project proponent will establish a 250-foot non-disturbance buffer around occupied burrows as determined by a qualified biologist. Construction activities outside of this 250-foot buffer are allowed. Construction activities within the non-disturbance buffer are allowed if the certain criteria are met, as outlined in the HCP Conditions Implementation Guide, in order to prevent owls from abandoning important overwintering sites.

The project proponent and/or contractor shall submit evidence of compliance with the HCP to the City’s Supervising Environmental Planner prior to issuance of grading permits. **[Less Than Significant Impact With Mitigation]**

Western Pond Turtle

Although the Guadalupe River adjacent to the project site provides suitable aquatic habitat for western pond turtles, populations along the lower reaches of this river are very low due to the long duration of urban impacts in this part of the Santa Clara Valley. In addition, no suitable aquatic habitat is present on the project site. Therefore, the project would not result in the loss of aquatic foraging or dispersal habitat or upland nesting habitat. Although potentially suitable upland nesting and dispersal habitat is present on the project site, it is unlikely that dispersing individuals or nests would be present within the site because a chain link fence located along the southern boundary of the site, between the Guadalupe River and the project site, serves as an impediment to western pond turtle movement onto the site. As a result, the project would not result in significant impacts to western pond turtles.

Northern Harrier and Loggerhead Shrike

Implementation of the project would result in the loss of up to 3.72 acres of potential nesting and foraging habitat for the loggerhead shrike and northern harrier (both California species of special concern). These species are assessed together because the potential impacts of the proposed project on these species would be alike.

Proposed construction activities could result in the destruction or abandonment of active nests of these species, should they nest on the site during project implementation. No more than one pair each of these species is expected to nest on or immediately adjacent to the site, if these species are present as breeders at all, and thus the loss of individuals potentially resulting from project activities would represent a very small fraction of the regional populations of these species.

Additionally, the project would avoid direct impacts on the highest quality grasslands within the project boundary (i.e., those located adjacent to the diked brackish marsh and pond). Only the small area of grassland located adjacent to the current parking lot and the recently disturbed grasslands at the eastern-most edge of the site, which provide low-quality foraging habitat, would be lost as a result of the project. Further, this represents a small proportion of the habitats that support these species regionally. Therefore, the project would not result in a significant impact on these species or their habitats.

White-Tailed Kite

The white-tailed kite (a state fully protected species) is known to occur year-round in grassland habitats in and around the project site. Although suitably large trees for nesting are not present within the project boundaries, suitable nesting sites are present in trees roughly 100 feet from the site, and the site provides suitable foraging habitat for this species. Thus, heavy ground disturbance, noise, and vibrations caused by proposed construction could potentially disturb foraging white-tailed kites and cause them to move away from work areas. Project grading could result in the disturbance of white-tailed kites nesting adjacent to the site, possibly to the point of abandonment of active nests with eggs or nestlings. However, based site observations, the areal extent of the site, and known breeding densities of this species, no more than one pair of white-tailed kites is expected to nest on or adjacent to the site, if these species are present at all. Therefore, the loss of individuals potentially resulting from project activities would represent a very small fraction of the regional populations of this species.

Project activities would also result in the loss of foraging habitat for the white-tailed kite. Development of the site would permanently remove 3.72 acres of foraging habitat for this species. However, the loss of 3.72 acres of foraging habitat is not expected to result in a substantial effect on populations of this species given the local and regional abundance of suitable foraging habitat, and the very small proportion of suitable habitat that would be impacted. For these reasons, the project would not result in significant impacts to white-tailed kites.

San Francisco Common Yellowthroat and Alameda Song Sparrow

Suitable breeding habitat (i.e., diked tidal marsh) for the Alameda song sparrow and San Francisco common yellowthroat (both California species of special concern) is present on the project site and along the adjacent Guadalupe River. These species are assessed together because the potential impacts of the proposed project on these species would be similar.

Project activities would not result in the loss of any foraging or nesting habitat for Alameda song sparrows and San Francisco common yellowthroats. However, similar to the impacts described for the white-tailed kite above, ground disturbance, noise, and vibrations caused by proposed construction could potentially disturb foraging or roosting individual Alameda song sparrows and San Francisco common yellowthroats and cause them to move away from work areas. In addition, if these species are present in the diked brackish marsh on the project site or in the marsh habitat along the Guadalupe River, construction activities within the project footprint could result in the disturbance of nesting Alameda song sparrow's and San Francisco common yellowthroats, possibly to the point of abandonment of active nests with eggs or nestlings.

Based on the extent of suitable habitat within and adjacent to the project site and typical territory sizes of these species, no more than two to four pairs of each species are expected to nest close enough to the project footprint to be disturbed by construction activities. Therefore, the loss of individuals potentially resulting from project activities would represent a very small fraction of the regional populations of these species. The project, therefore, would not result in significant impacts to these species.

Tri-Colored Blackbird

Potentially suitable nesting habitat (riparian vegetation and wetlands) is present adjacent to the Project site along the Guadalupe River. The HCP maps a portion of the project site adjacent to the Guadalupe River as habitat for the tricolored blackbird, a state candidate for listing. Although potentially suitable nesting habitat was identified along the river, no tricolored blackbirds were observed within or immediately adjacent to the project site during the site survey conducted during the breeding season. Tricolored blackbirds do not nest in the project vicinity, and the species is determined to be absent.

Nevertheless, pursuant to Condition 17 of the HCP, pre-construction surveys will be required to establish presence or absence of occupied breeding habitat for the tricolored blackbird. For example, if a freshwater wetland that could provide suitable breeding habitat for tricolored blackbird is present on site, a preconstruction survey on the site would need to be conducted prior to construction to determine if the site is occupied. If results indicate that breeding tricolored blackbirds are present, then avoidance and minimization measures and construction monitoring must occur, as described in Condition 17.

Impacts to Nesting Birds

A total of 114 trees are located on the site, all of which would be removed as part of the project. Existing trees on site are a mixture of mainly non-native or not naturally-occurring, planted, ornamental species and include Mexican fan palm (*Washingtonia robusta*), Canary Island date palm

(*Phoenix canariensis*), Peruvian pepper tree (*Schinus molle*), redwood (*Sequoia sempervirens*), pine (*Pinus brutia*), and evergreen ash (*Fraxinus uhdei*). Raptors and nesting birds protected under the Federal Migratory Bird Treaty Act (MBTA) and California Department of Fish and Wildlife (CDFW) Code could use these trees for nesting and foraging habitat. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact.

Impact BIO-3: Construction of the project could result in impacts to nesting migratory birds. **[Significant Impact]**

Mitigation Measures: The following mitigation measures will be implemented during construction to reduce impacts to nesting birds to a less than significant level.

MM BIO-3.1: Construction and tree removal/pruning activities shall be scheduled to avoid the nesting season to the extent feasible. If feasible, tree removal and/or pruning shall be completed before the start of nesting season to help preclude nesting. The nesting season for most birds and raptors in the San Francisco Bay area extends from February 1 through August 31.

MM BIO-3.2: If it is not possible to schedule construction activities between September 1 and January 31, a qualified ornithologist shall conduct a preconstruction survey for nesting raptors and other migratory breeding birds within onsite trees as well as all trees within 250 feet of the site to identify active bird nests that may be disturbed during project construction.

Between February 1 and April 30, the pre-construction survey shall be completed no more than 14 days prior to the initiation of demolition/construction activities (including tree removal and pruning). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats in and immediately adjacent to the construction areas for nests.

If the survey does not identify any nesting birds that would be affected by construction activities, no further mitigation is required.

MM BIO-3.3: If an active nest is found close to work areas to be disturbed by these activities, the ornithologist (in consultation with the California Department of Fish and Wildlife) shall designate a construction-free buffer zone (typically 300 feet for raptors and 100 feet for non-raptors) to be established around the nest to ensure that no nests of species protected by the Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code will be disturbed during construction activities. The buffer shall remain in place until the breeding season has ended and/or a qualified ornithologist has determined that the nest is no longer active. **[Less Than Significant Impact With Mitigation]**

Impacts from Field Lighting

Many animals are extremely sensitive to light cues, which influence their physiology and shape their behaviors, particularly during the breeding season. Artificial lighting may indirectly impact mammals and birds by increasing the nocturnal activity of predators like owls, hawks, and mammalian predators. The presence of artificial light may also influence habitat use by rodents and by breeding birds, by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.

Lighting from the proposed project would primarily be the result of light fixtures illuminating the outfield of the Topgolf facility, along with building architectural lighting, and parking lot and pedestrian lighting. Areas to the north, west, and east of the project site are primarily developed urban and ruderal habitats that do not support sensitive species that might be significantly impacted by illuminance from the proposed project. However, the diked brackish marsh habitat within the southern portion of the project site, as well as the marsh habitat along the Guadalupe River adjacent to the southwestern project boundary, provide suitable habitat for a variety of wildlife, including sensitive species such as the Alameda song sparrow and San Francisco common yellowthroat. These species and others using the river or marsh habitat may be subject to increased predation, decreased habitat availability (for species that show aversions to increased lighting), and alterations of physiological processes if the proposed project were to produce substantially greater illuminance than the existing conditions.

Existing field lighting is currently present on the site. As shown on Figures 4.1-1 and 4.1-2, existing ambient light levels on the site range from .01 to .12 footcandles in the vicinity of the diked brackish marsh and Guadalupe River. As described in Section 4.1 Aesthetics, and shown on Figure 4.1-16, spill light levels from the proposed field lighting would be reduced to zero footcandles before reaching these sensitive areas. Thus, impacts to biological resources from the proposed field lighting would be less than significant.

Impacts from Noise

Similar to the impact of increased lighting described above, operation of the proposed project has the potential to generate noise that may adversely affect wildlife inhabiting the diked brackish marsh habitat within the southern portion of the project site, as well as the marsh habitat along the Guadalupe River adjacent to the southwestern project boundary. These areas provide suitable habitat for a variety of wildlife, including sensitive species such as the Alameda song sparrow and San Francisco common yellowthroat. These species and others using the river or marsh habitat may be subject to decreased habitat availability (for species that show aversions to increased noise) and alterations of physiological processes if subject to substantially greater noise than existing conditions

The project is subject to the noise standards established in the City's General Plan. In accordance with Goal EC 1.3 of the General Plan, because the project site is adjacent to a property used or zoned for noise sensitive residential and public/quasi-public land uses (i.e., the Guadalupe Trail and Guadalupe River Open Space), the project would be required to mitigate noise generation to 55 dBA DNL at the property line. As described in Section 4.12 Noise, the project would not result in noise levels exceeding the City's standards at the property line. **[Less Than Significant Impact]**

Impacts from Invasive Weeds

The introduction or spread of noxious and invasive species is a special concern for native plant and animals. Noxious and invasive weeds pose a threat to the natural processes of plant community succession, fire frequency, biological diversity, and species composition. Noxious and invasive weeds can affect the persistence of some populations of special-status species by replacing the foraging base, altering habitat structure, or excluding a species by vegetative growth. Invasive weeds occur in all habitat types and can be difficult to eradicate. Many non-native, invasive plant species produce seeds that germinate readily following disturbance. Further, disturbed areas are highly susceptible to colonization by non-native, invasive species that occur locally, or whose propagules are brought in by personnel, vehicles, and other equipment.

Local sources of two weed species with “high” impact ratings were observed on the project site at the time of the surveys (fennel and perennial pepperweed). These species could potentially invade and/or spread onto additional areas of the project site. Introduction or spread of invasive weeds would be a significant impact.

Impact BIO-4: The proposed project could result in the introduction or spread of invasive weeds. **[Significant Impact]**

Mitigation Measures: The following mitigation measures will be implemented by the project to reduce impacts related to invasive weeds to a less than significant level.

MM BIO-4.1: All seeds and straw materials used on site shall be composed of weed-free rice (or similar material acceptable to the City) straw, and all gravel and fill material shall be certified weed free. Proof of certification, in the form of a California Department of Food and Agriculture Form 66-079 “Certificate of Quarantine Compliance (CQC)”, or equivalent certification, shall be submitted to the City’s Supervising Environmental Planner prior to issuance of a grading permit.

MM BIO-4.2: During construction of the proposed project, vehicles and all equipment shall be washed (including wheels, undercarriages, and bumpers) before leaving and after entering the proposed project footprint. Vehicles shall be cleaned at existing construction yards or legally operating car washes.

MM BIO-4.3: Following construction of the proposed project, temporary impact zones on any disturbed ground that will not be under hardscape, landscaped, or maintained, shall be reseeded with a native seed mixture. Seed mixtures applied for erosion control shall be composed of native species appropriate for the site in order to provide long-term erosion control and slow colonization by invasive nonnatives. **[Less Than Significant Impact With Mitigation]**

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?***

Riparian Habitat

As described previously, the City of San Jose has a riparian buffer policy meant to limit development and protect sensitive riparian resources. The required riparian setback for the Guadalupe River extends 100 feet landward from the top of bank, which for this site is the inner, river-side edge of the top of levee. In addition, the HCP requires a 100-foot setback from the top of bank for projects that are adjacent to Category 1 streams, such as the Guadalupe River.

As shown in Figure 3.0-1, the proposed project has been designed to avoid impacts on the riparian buffer and no project activities will occur within the 100-foot riparian setback. The project, therefore, would not result in a significant impact to a riparian corridor.

Sensitive Natural Community

As described previously, approximately 1.07 acres of regulated habitats occur within the project site in the form of coastal and valley freshwater marsh wetlands (0.01 acres), diked brackish marsh wetlands (0.45 acres), and pond (0.61 acres). These potentially regulated habitats are considered sensitive natural communities. Impacts to these habitats are described in further detail in the response to checklist question “c”, below, and mitigation measure MM BIO-3.1 would reduce impacts to sensitive natural communities to a less than significant level. **[Less Than Significant Impact With Mitigation]**

- c. Would the project 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?***

Surveys completed on the site identified aquatic and seasonal wetland habitats. Areas within the aquatic and seasonal wetland habitats are likely considered jurisdictional habitats and may be subject to the regulatory authority of the U.S. Army Corps of Engineers (Corps), the California Department of Fish and Wildlife (CDFW), and the California Regional Water Quality Control Board (RWQCB). Project implementation could result in potentially significant impacts on them.

As described previously, approximately 1.07 acres of regulated habitats occur within the project site in the form of coastal and valley freshwater marsh wetlands (0.01 acres), diked brackish marsh wetlands (0.45 acres), and pond (0.61 acres). Aquatic habitat, such as the pond, and wetlands, facilitate groundwater recharge, and control water quality and watershed functions. These regulated habitats are considered sensitive natural communities under CEQA and waters of the U.S. and State.

Project related activities would result in permanent removal of the 0.01 acre coastal and valley freshwater marsh feature due to construction of parking lots and retail buildings. The coastal and valley freshwater marsh is likely jurisdictional under current conditions. However, if the feature is supported by artificial source hydrology, then jurisdiction may no longer apply if the source

hydrology is removed and the wetland vegetation dies back. This coastal and valley freshwater marsh is very small (0.01 acre) and it is situated in close proximity to the large tidal salt marsh wetland complex that lines the San Francisco Bay. The marsh provides low-quality habitat as a result of being in a fragmented landscape setting surrounded by urban development; it is likely excavated in uplands, and is likely supported by artificial hydrology. Therefore, the loss of this wetland would not constitute a substantial adverse impact on local wetlands in the project vicinity. Although the impact on coastal and valley freshwater marsh would not be considered significant under CEQA, it should be noted that any work within jurisdictional waters of the U.S. (i.e., wetlands and other waters) may require a Section 404 fill discharge permit from the USACE and Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

The proposed project would have no direct impacts on the pond and diked brackish marsh features at the south end of the site. However, both may be indirectly affected due to increased hardscape in upland habitats that can lead to an increase in runoff, a decrease in infiltration and groundwater recharge, and possible introduction of anthropogenic contaminants such as petrochemicals, herbicides, and fertilizers into regulated habitats. Project activities such as grading, tree and plant removal, and other soil disturbances can increase the potential for soil erosion on site. These construction activities could increase the amount of soils and sediments entering waterways, thereby negatively influencing aquatic habitats and water quality. Because the pond and diked brackish marsh are remnants of the Guadalupe River corridor prior to its channelization and may retain connection to the river via groundwater, contamination of these aquatic features has the potential to migrate into the river. As a result, indirect project impacts on the pond and diked brackish marsh would constitute substantial adverse effects on water quality.

Implementation of Conditions 3 and 12 of the HCP would reduce impacts on waters of the U.S./State to a less than significant level. HCP Condition 3 requires implementation of design phase, construction phase, and post-construction phase measures, including programmatic BMPs, performance standards, and control measures, to minimize increases of peak discharge of storm water and to reduce runoff of pollutants to protect water quality, including during project construction. HCP Condition 12 requires the implementation of design phase and construction phase measures to avoid and minimize impacts on wetlands and ponds, including erosion control measures, fencing of avoided wetlands during construction, establishment of buffers between wetlands and refueling areas, and measures to minimize the spread of invasive species.

In addition to compliance with the Habitat Plan, the applicant will comply with all state and federal regulations related to disturbance to jurisdictional waters that are not covered by the Habitat Plan. Therefore, the applicant may be required to obtain a CWA section 401 water quality certification from the RWQCB for impacts to waters of the State. All of the aquatic features on the site are believed to be isolated and, therefore, not requiring a Clean Water Act section 404 permit from the USACE. However, should the USACE take jurisdiction over these features, a CWA section 404 individual permit would be necessary.

Impact BIO-5: The project could result in substantial adverse effects on federally protected wetlands. **[Significant Impact]**

Mitigation Measures: The following mitigation measures would reduce impacts to wetlands to a less than significant level.

MM BIO-5.1: The project proponent shall implement Conditions 3 and 12 of the HCP to reduce construction impacts to streams, wetlands, and riparian habitat. These HCP conditions require avoidance of wetlands and require construction setbacks for streams and riparian area during construction.

Condition 3. This condition consists of avoidance and minimization measures outlined in Table 6-2 of the Habitat Plan. Applicable avoidance and minimization measures shall be implemented during construction. To this end, all personnel working within or adjacent to the stream setback (i.e., those people operating ground-disturbing equipment) will be trained by a qualified biologist in the avoidance and minimization measures outlined in Table 6-2 of the Habitat Plan and in the permit obligations of project proponents working under the HCP. Training materials shall be submitted to the City's Supervising Environmental Planner upon request.

Condition 12. The following conditions shall be printed on all plans and contract documents for the Project, and implemented by the project proponent or contractors during construction:

- All wetlands and ponds to be avoided by covered activities shall be temporarily staked in the field by a qualified biologist to ensure that construction equipment and personnel avoid these features.
- Fencing shall be erected along the outer edge of the project area, between the project area and a wetland or pond.
- Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into wetlands, ponds, streams, or riparian woodland/scrub. Filter fences and mesh shall be of material that will not trap reptiles and amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
- Erosion-control measures shall be placed between the wetland or pond and the outer edge of the project site. Fiber rolls used for erosion control shall be certified as free of noxious weed seed.
- Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas.
- No construction or maintenance vehicles shall be refueled within 200 feet of avoided wetlands and ponds unless a bermed and lined

refueling area is constructed and hazardous material absorbent pads are available in the event of a spill.

- All organic matter shall be removed from nets, traps, boots, vehicle tires, and all other surfaces that have come into contact with ponds, wetlands, or potentially contaminated sediments. Items should be rinsed with clean water before leaving each site.
- Used cleaning materials (e.g., liquids) shall be disposed of safely, and if necessary, taken off site for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

MM BIO-5.2: Prior to any construction activities, the project proponent shall complete a formal wetland delineation for the site that shall be submitted to the USACE for verification. If determined necessary by the USACE, the project shall obtain a Section 404 fill discharge permit from the USACE, and Section 401 Water Quality Certification from the RWQCB. **[Less Than Significant Impact With Mitigation]**

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?

Impacts from Bird Strikes on Proposed Buildings

Once the proposed buildings are constructed, they will increase the risk of avian mortality due to collisions. Glass building facades can result in injury or mortality of birds due to birds' collisions with these surfaces. Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation. The majority of avian collisions with buildings occur within the first 60 feet of the ground, where birds spend the majority of their time engaged in foraging, territorial defense, nesting, and roosting activities, and where vegetation is most likely to be reflected in glazed surfaces.

The proposed buildings are within the "Bird Collision Zone", (i.e., within the first 60 feet above the ground). However, the project would not include any vegetated atria wherein vegetation is present behind glass. Nevertheless, the designs of the three-story Topgolf facility and four-story hotel, both of which would be allowed increased building heights by the proposed text amendment to the Alviso Master Plan (refer to Section 3.0 Project Description), include extensive glass facades. By virtue of the extent of glass, there is potential for bird collisions with this glass to occur. Although design plans specify that 91 percent of the glazing on the Topgolf facility would be tinted gray, this is expected to reduce the risk of collisions only slightly in the absence of other glazing treatments.

The species that would be affected include the common, urban-adapted species that currently use the site, as these are the species that would spend the most time in the vicinity of the new buildings. However, a wide variety of migrant birds may also be affected. A number of songbirds migrate

through the South San Francisco Bay area. Many of these migrate at night, and at dawn, they descend to find suitable habitat for foraging and rebuilding energy reserves. Migrant landbirds that occur over the South Bay at dawn and are descending from their nocturnal migration may seek out vegetation in the Alviso area (because of the lack of suitable vegetation in baylands areas) and may thus be moving near the project site.

Landscaping is also relevant to bird safe design. First, the provision of plant species that provide particular resources to birds, such as food (seeds, fruits, nectar, or foliage that support insect prey), nesting sites, roosting sites, and cover from predators can enhance the ecological value of the development to birds, thus helping to increase populations of the species that tolerate urban areas. Second, the location of vegetation planting that attracts birds relative to hazards such as glass surfaces and powerlines is important to reduce the potential for collisions. The project will provide vegetation that will be of some use to native birds common to the vicinity. It will incorporate trees, shrubs, grasses, and forbs into the landscaping that will provide some food and structural resources for common, urban-adapted birds of the project area, as well as for migrants that may use the area during spring and fall migration and for winter residents. A high voltage electric transmission line currently crosses the western portion of the project site, just east of Grand Boulevard. No trees capable of growing to heights approaching the height of this transmission line (roughly 90 feet) will be planted in the immediate vicinity of the transmission line. As a result, the potential for bird collisions with the transmission line will not increase as a result of the project.

In summary, the proposed project incorporates landscaping in a manner that may be of some use to birds while not attracting birds to potential hazards such as glass surfaces and powerlines. In addition, the project does not incorporate the use of wetlands or open water features that are expected to attract birds to potential hazards. Because large portions of the façades of the Topgolf facility and hotel would be composed of transparent or reflective glass, and because the project's landscape position (close to the edge of the baylands) is in an area where fairly large numbers of migratory birds occur, the project may result in a significant impact on birds as a result of bird strikes.

Impact BIO-6: The project could result in significant impacts to birds as a result of bird strikes on the proposed Topgolf and hotel buildings. **[Significant Impact]**

Mitigation Measures: The following mitigation measures would reduce impacts related to bird strikes on proposed buildings to a less than significant level.

MM BIO-6.1: Façade Treatments. No more than 10 percent of the surface area of façades between the ground and 60 feet above ground shall have untreated glazing. Examples of bird-friendly glazing treatments include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass.

Funneling of flight paths. The design of the buildings shall avoid the funneling (i.e. directing) of flight paths along buildings or trees towards a building façade.

Skyways, walkways, or glass walls. Glass skyways or walkways and freestanding glass walls shall not be incorporated into the buildings' design. **[Less Than Significant Impact With Mitigation]**

Impacts from Bird Strikes on Proposed Netting

The outfield area of the proposed Topgolf facility would be enclosed on all three sides by netting strung between poles reaching up to 170 feet in height, 80 feet taller than the existing netting on the site. Given the project's landscape position relative to bird habitat such as the Guadalupe River and Don Edwards San Francisco Bay National Wildlife Refuge, and the presence of fairly large numbers of migrants moving through the general area, it is possible the flight paths of birds could result in collisions with the netting, resulting in injury or entanglement. A review of the scientific literature revealed little information concerning the potential for birds to become entangled in, or be injured by collisions with, golf barrier netting. Thus, the potential for such an impact was analyzed based on a comparison of the physical characteristics of the proposed golf barrier netting compared to the typical characteristics of nets that are intentionally used to capture birds (i.e., mist nets).

Mist nets are generally large panels of either nylon, polyester, or monofilament mesh. Horizontal shelf strings of thicker, stronger thread are woven through the mesh at the top and bottom of the net and at equal distances in between. The net is strung between poles, which hold it upright. The shelf strings form pockets of netting. Birds fly into the net and usually drop into the pockets and become entangled (Photo 4.4-1). Mesh size is measured by stretching the net diagonally and measuring the diagonal distance of a square. Different meshes have different catching efficiencies for different species. Based on information provided in the *North American Banding Council Banders' Study Guide*, a one-inch stretched mesh is appropriate to catch hummingbirds, 1.25-inch stretched mesh is appropriate to catch small to moderate-sized birds, 1.5-inch stretched mesh is appropriate for larger songbirds, and 2.5- to four-inch stretched mesh is appropriate for larger hawks. Small birds can become unduly tangled in large-mesh nets, whereas large birds often bounce out of small-mesh nets.



Photo 4.4-1: Example of Mist Net

In addition to mesh size, another factor that affects the likelihood of birds becoming caught in netting is the denier (weight) of the component thread. The bulkier the strand, the lower the likelihood of entanglement. Material with a high denier count tends to be thick, sturdy, and durable, whereas material with a low denier count tends to be sheer, soft, and silky. In general, 75 denier strands are recommended for most mist nets, which is considered a low denier and, therefore, appropriate for nets intentionally hung to capture birds.

The proposed golf barrier netting would be composed of Redden #930 polyester golf range netting, 250 denier, with 2.6-inch stretched mesh (one-inch square mesh), manufactured with ultraviolet treated yarn and coated with a black resin dye. All sections of the netting would be connected to a 3/8-inch black perimeter rope, and all net panels would be erected in a manner that would result in taut panels upon completion.



Photo 4.4-2: Golf Barrier Netting at an Existing Topgolf facility

The mesh size of the proposed golf barrier netting is much larger than that typically used to catch birds other than large hawks and large waterfowl. In addition, it is substantially bulkier (250 denier versus 75 denier) than the material typically used for mist nests, making it much more likely that birds would see the netting in time to avoid it and less likely that birds, even larger birds like hawks, would become entangled should they fly into it. Finally, golf barrier netting, once installed, is taut (Photo 4.4-2), whereas, mist nests are set loosely to prevent birds from bouncing out. Thus, the mesh size, denier, and tautness of the proposed golf ball safety netting reduce the likelihood that the net would result in bird strikes.

The color black, however, is the least visible of colors used in netting construction, and given the location of the proposed netting, it is possible that birds descending toward the river from the north or east could be moving at speeds at which the net could not be detected in time to avoid a collision. Such impacts could result in a substantial increase in the number of bird injuries and/or mortalities compared to the existing driving range netting, as the proposed netting would be 80 feet higher than the current netting on the site, and it would thus extend farther into potential flight paths of birds moving through the area.

As described above, no research was found on the potential impacts of golf barrier netting on birds or methods to avoid such impacts. Information is available regarding methods to reduce bird impacts with power lines, however. It has been found that any sufficiently large line marking device that thickens the appearance of a power line for at least 7.8 inches in length and is placed with at least 16.4 to 32.8 feet spacing is likely to lower collision rates by 50 to 80 percent. Therefore, net marking devices (refer to Photo 4.4-3) shall be utilized by the project to reduce the impact of bird collisions with the golf barrier netting to a less than significant level.



Photo 4.4-3: Examples of net marking devices

Impact BIO-7: The project could result in significant impacts to birds as a result of bird strikes on the proposed Topgolf netting. **[Significant Impact]**

Mitigation Measures: The following mitigation measures would reduce impacts related to bird strikes on proposed netting to a less than significant level.

MM BIO-7.1: Net marking devices, such as FireFllys or BirdMark BM-AG, shall be placed along all sections of the netting perimeter rope and rib lines to form vertical rows of flight diverters in the center of each area of netting between support poles. The maximum distance between such marking devices, and/or between such marking devices and support poles, shall be 15 feet. **[Less Than Significant Impact With Mitigation]**

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of San Jose maintains the urban landscape partly by controlling the removal of ordinance trees on private property (San Jose Municipal Code *Section 13.32*). Ordinance trees are defined as trees over 56 inches in circumference, or approximately 18 inches in diameter, at a height of 24 inches above natural grade. Ordinance trees are generally mature trees that help beautify the City, slow erosion of topsoil, minimize flood hazards, minimize the risk of landslides, increase property values, and improve local air quality. A tree removal permit is required from the City of San Jose for the removal of ordinance trees.

Table 4.4-2: Tree Replacement Ratios				
Circumference of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
56 inches or more	5:1	4:1	3:1	24-inch box
38-56 inches	3:1	2:1	None	24-inch box
Less than 38 inches	1:1	1:1	None	15-gal container
x:x= tree replacement to tree loss ratio Note: Trees greater than or equal to 56-inch circumference shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.				

As described previously, the project would remove all 114 trees on the project site, six of which are considered ordinance-size. Existing trees on site are a mixture of mainly non-native or not naturally-occurring, planted, ornamental species and include Mexican fan palm (*Washingtonia robusta*), Canary Island date palm (*Phoenix canariensis*), Peruvian pepper tree (*Schinus molle*), redwood (*Sequoia sempervirens*), pine (*Pinus brutia*), and evergreen ash (*Fraxinus uhdei*). Consistent with San Jose’s Municipal Code, the project will replace the removed trees at the ratios shown in table 4.4-2 above, in consultation with the City Arborist. Tree replacement amounts shall be subject to the

City's Director of Planning, Building, and Code Enforcement, who will determine the final mitigation for impacts to protected trees. Compliance with local laws, policies or guidelines, as proposed by the project, will reduce impacts to the urban forest to a less than significant level. [**Less Than Significant Impact**]

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The proposed project is a covered project under the Santa Clara Valley Habitat Plan (HCP). The HCP defines measures to avoid, minimize, and mitigate impacts on covered species and their habitats while allowing for the implementation of certain covered projects. Chapter 6 of the HCP includes detailed and comprehensive conditions to avoid and minimize impacts on the 18 “covered species” (nine animal species and nine plant species) included in the plan area.

In conformance with the HCP, project proponents are required to pay impact fees in accordance with the types and acreage of habitat or “land cover” impacted, and to implement conservation measures specified by the HCP. Land cover impacts are used because it is the best predictor of potential species habitat, and is applicable to all of the covered species (with the exception of the burrowing owl). Additional fees (i.e., specialty fees) in-lieu of providing compensatory mitigation are imposed for projects that impact serpentine habitat, wetlands, and burrowing owls, and for certain projects that result in atmospheric nitrogen emissions, although in some cases, project proponents may provide land to restore or create habitats types protected by the HCP in lieu of payment of fees.

Applicable HCP Fees

The majority of the project site is within the HCP permit area, and is designated as Land Cover Fee Zone A (Ranchlands and Natural Lands). The HCP maps the majority of the project site as Burrowing Owl Occupied Habitat; fees and conditions for impacts on burrowing owl habitat will apply. Fees for impacts on wetlands may apply. Because the proposed project entails new development, nitrogen deposition fees would apply.

Applicable HCP Conditions

Condition 1 - Avoid Direct Impacts on Legally Protected Plant and Wildlife Species. Several wildlife species that occur in the project vicinity are protected under state and federal laws. Some of these animal species are listed as fully protected under the California Fish and Wildlife Code (e.g., American peregrine falcon [*Falco peregrinus anatum*] and white-tailed kite), and eagles are protected under the Bald and Golden Eagle Protection Act. Further, all native bird species and their nests are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Actions conducted under the HCP must comply with the provisions of the MBTA and California Fish and Wildlife Code. Mitigation measures MM BIO-1 through MM BIO-7 would ensure the project complies with Condition 1 of the HCP.

Condition 3 - Maintain Hydrologic Conditions and Protect Water Quality. Condition 3 applies to all projects and identifies a set of programmatic best management practices (BMPs), performance standards, and control measures to minimize increases of peak discharge of storm water and to reduce runoff of pollutants to protect water quality, including during project construction. These

requirements include pre-construction, construction site, and post-construction actions. Pre-construction conditions are site design planning approaches that protect water quality by preventing and reducing the adverse impacts of stormwater pollutants and increases in peak runoff rate and volume. They include hydrologic source control measures that focus on the protection of natural resources. Construction site conditions include source and treatment control measure to prevent pollutants from leaving the construction site and minimizing site erosion and local stream sedimentation during construction. Post-construction conditions include measures for stormwater treatment and flow control. Mitigation measure MM BIO-5 would ensure the project complies with Condition 3 of the HCP.

Condition 11 – Stream and Riparian Setbacks. Condition 11 applies to covered projects that may affect streams and associated riparian vegetation within the HCP plan area. This condition requires new covered projects to adhere to setbacks from creeks and streams and associated riparian vegetation to minimize and avoid impacts on aquatic and riparian land cover types, covered species, and wildlife corridors. The required setback for the reach of the Guadalupe River (a Category 1 stream) adjacent to the project site is 100 feet from the top of bank. The project would be set back at least 100 feet from the Guadalupe River, and would therefore comply with Condition 11 of the HCP.

Condition 12 - Wetland and Pond Avoidance and Minimization. Condition 12 applies to covered projects that would directly or indirectly affect wetlands or ponds. The purpose of Condition 12 is to minimize impacts on wetlands and ponds and avoid impacts on high quality wetlands and ponds by prescribing vegetated stormwater filtration features, proper disposal of cleaning materials, and other requirements. Project proponents are required to pay a wetland fee for impacts on wetlands and ponds to cover the cost of restoration or creation of aquatic land cover types required by the HCP. Covered activities can avoid paying the wetland fee if they avoid impacts on wetlands. The project would pay all applicable fees and implement mitigation measure MM BIO-5 to ensure compliance with Condition 12 of the HCP.

Condition 15 - Western Burrowing Owl. Condition 15 requires the implementation of measures to avoid and minimize direct impacts on burrowing owls, including pre-construction surveys, establishment of 250-foot non-disturbance buffers around active nests during the breeding season (February 1 through August 31), establishment of 250-foot non-disturbance buffers around occupied burrows during the nonbreeding season, and construction monitoring. Pre-construction surveys for burrowing owls are required by the HCP in areas mapped as breeding habitat, which include the project site. As mentioned above, additional fees in-lieu of providing compensatory mitigation are imposed for HCP covered projects that impact burrowing owls. Because the project site includes habitat for burrowing owls as mapped by the HCP, a specialty fee for impacts on habitat for this species would apply. The project would pay all applicable fees and implement mitigation measure MM BIO-2 to ensure compliance with Condition 15 of the HCP.

Condition 17 – Tricolored Blackbird. Condition 17 calls for surveys of project areas within 250 feet of any riparian, coastal and valley freshwater marsh (perennial wetlands), or pond land cover types for potential tricolored blackbird nesting substrate. The project site is located within a designated tricolored blackbird survey area under the HCP. Although potentially suitable nesting habitat was identified along the Guadalupe River, no tricolored blackbirds were observed within or immediately adjacent to the project site during the site survey conducted during the breeding season, and the species is determined to be absent. Even though it is likely that blackbirds are absent from the

project site and all areas within 250 feet of the site, based on the species' known distribution, the project applicant will be required to demonstrate compliance with this condition for HCP compliance purposes. The following standard HCP conditions would apply to the project:

Standard HCP Conditions: The project would be required to implement the following standard HCP conditions to demonstrate compliance with Condition 17.

- *Implement Condition 17 of the HCP.* To avoid direct impacts of covered activities on nesting tricolored blackbird colonies, the following procedures will be implemented.
 - *Preconstruction Survey.* Prior to any ground disturbance related to covered activities, a qualified biologist will:
 - Make his/her best effort to determine if there has been nesting at the site in the past 5 years. This includes checking the CNDDDB, contacting local experts, and looking for evidence of historical nesting (i.e., old nests).
 - If no nesting in the past 5 years is evident, conduct a preconstruction survey in areas identified in the habitat survey as supporting potential tricolored blackbird nesting habitat. Surveys will be made at the appropriate times of year when nesting use is expected to occur. The surveys will document the presence or absence of nesting colonies of tricolored blackbird. Surveys will conclude no more than two calendar days prior to construction.

To avoid last minute changes in schedule or contracting that may occur if an active nest is found, the project proponent may also conduct a preliminary survey up to 14 days before construction. If a tricolored blackbird nesting colony is present (through step 1 or 2 above), a 250-foot buffer will be applied from the outer edge of all hydric vegetation associated with the site and the site plus buffer will be avoided (see below for additional avoidance and minimization details). The Wildlife Agencies will be notified immediately of nest locations.

- *Avoidance and Minimization.* If tricolored blackbird colonies are identified during the breeding season, covered activities will be prohibited within a 250-foot no-activity buffer zone around the outer edge of all hydric vegetation associated with the colony. This buffer may be reduced in areas with dense forest, buildings, or other habitat features between the construction activities and the active nest colony, or where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance. Depending on site characteristics, the sensitivity of the colony, and surrounding land uses, the buffer zone may be increased. Land uses potentially affecting a colony will be observed by a qualified biologist to verify that the activity is not disrupting the colony. If it is, the buffer will be increased. Implementing Entity technical staff will coordinate with the Wildlife Agencies and evaluate exceptions to the minimum no-activity buffer distance on a case-by-case basis.
- *Construction Monitoring.* If construction takes place during the breeding season when an active colony is present, a qualified biologist will monitor construction to ensure that the 250-foot buffer zone is enforced. If monitoring indicates that construction outside of the buffer is affecting a breeding colony, the buffer will be

increased if space allows (e.g., move staging areas farther away). If space does not allow, construction will cease until the colony abandons the site or until the end of the breeding season, whichever occurs first. The biological monitor will also conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event that tricolored blackbirds fly into an active construction zone (i.e., outside the buffer zone).

Project's Overall Compliance with the HCP

As described above, implementation of mitigation measures and standard HCP conditions, along with payment of all applicable fees, would ensure the project's compliance with the HCP. **[Less Than Significant Impact With Mitigation]**

4.4.4 Conclusion

With implementation of mitigation measures and standard HCP conditions, along with payment of all applicable HCP fees, the project would have a less than significant impact on biological resources. **[Less Than Significant Impact With Mitigation]**

4.5 CULTURAL RESOURCES

The discussion in this section is based in part on an Archaeological Survey Report prepared for the project by *Holman & Associates*, in November 2015. The report is included as Appendix C.

4.5.1 Setting

The project site is located in Santa Clara Valley, where Native American occupation extended over 5,000 to 8,000 years and possibly longer. Before European settlement, Native Americans resided in the area that encompasses the project site. The South Bay Area's favorable environment during the prehistoric period included alluvial plains, foothills, many water courses, and bay margins that provided an abundance of wild food and other resources.

4.5.1.1 *Prehistoric and Historic Resources*

Cultural resources are evidence of past human occupation and activity and include both historical and archaeological resources. These resources may be located above ground or underground and have significance in the history, prehistory, architecture, architecture of culture of the nation, State of California, or local or tribal communities.

Prehistoric resources are resources that have significance in prehistory, which is defined as events of the past occurring prior to advent of written records. Historic resources are generally 50 years or older in age and include, but are not limited to, buildings, districts, structures, sites, objects and areas. Archaeological resources are resources associated with human activity in the past and encompass both prehistoric and historic resources.

Based on the archaeological survey report prepared by *Holman & Associates*, portions of the project site are moderately to highly sensitive to contain buried Native American sites. There is also a high potential for historic-era archaeological deposits associated with the buildings formerly located on the project site.

In October 2015, surface reconnaissance of the site was completed to inspect for the presence of cultural resources. No resources were discovered during the reconnaissance.

4.5.1.2 *Paleontological Resources*

Paleontological resources are fossils, the remains or traces of prehistoric life preserved in the geologic record. They range from the well-known and well-publicized (such as mammoth and dinosaur bones) to scientifically important fossils. Based on a Paleontological Evaluation Report completed for the City's General Plan, the project site is located in an area of Bay Mud that has a high sensitivity to paleontological resources at depth.

4.5.1.3 *Applicable Plans, Policies, and Regulations*

National Register of Historic Places

The National Register of Historic Places (National Register or 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 Port of Alviso is a listed NRHP district. The district is bounded on the north by an arm of Alviso Slough, on the west by the Alviso Slough and the Guadalupe River, on the south by Moffat Street, and on the east by Gold Street. The project site is roughly 375 east of the boundary of the Port of Alviso NRHP district.

California Register of Historic Resources (CRHR)

The CRHR establishes a list of properties that are to be protected from substantial adverse change (PRC Section 5024.1). 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 are very similar, with emphasis on local and state significance. They are:

- 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;
- It is associated with the lives of persons important to local, California, or national history;
- 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
- It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.

The CHRIS has plotted no cultural resources within the project site. Three cultural resources detailing the built environment are recorded within a quarter mile:

- P-43-346, also designated CA-SCL-339H, documents the standing concrete wall and foundation of the former Bayside Cannery Warehouse;
- P-43-1110, also designated CA-SCL-810H, describes a historic ship building facility at the Port of Alviso which operated during World War II; and
- P-43-1468, consists of the 18th and 19th century Port of Alviso District including residences, public buildings, warehouses, and docks, and is listed on the National California registers.

Envision San José 2040 General Plan

The 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 cultural resources and are applicable to the proposed project.

Envision San José 2040 Relevant Cultural Resources Policies	
Policies	Description
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 pre-historic resources.

City of San José Historic Resources Inventory (HRI)

The HRI is an inventory of San José’s historically and architecturally significant buildings. According to 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.

Five City Landmarks are located within the Port of Alviso NRHP district, the boundary of which is roughly 375 feet west of the project site. None are located on or adjacent to the site.

4.5.2 Cultural Resources Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Cause a substantial adverse change in the significance of an historical resource as defined in §15063.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15063.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,11
c. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,11
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.5.3 Impacts Evaluation

a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15063.5?*

The site is developed with a golf driving range and auto storage yard. No historic buildings or structures are located on the project site. As described previously, historic resources such as the Port of Alviso NHRP, City Landmarks, and a State Landmark are located in the vicinity of the site; however, the project would not result in impacts to these historic resources. **[Less Than Significant Impact]**

b., d. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15063.5? Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Although portions of the project site contain substantial amounts of artificial fill (up to 14 feet in some areas), the proposed project includes disturbance of native soils for trenching, site grading, and other construction activities. The Native American Heritage Commission and Native American contacts were consulted during the development of the Archaeological Survey Report and no specific Native American resource was identified within or adjacent to the study area. While there are no recorded archaeological or historic sites on the project site there is a potential for buried archaeological to occur on the site.

Impact CR-1: Construction of the proposed project could impact unknown buried archaeological resources and human remains, if present on-site. **[Significant Impact]**

Mitigation Measures: The project will be required to implement the following mitigation measures to reduce possible impacts to cultural resources to a less than significant level.

MM CR-1.1: Treatment Plan: Prior to the issuance of any grading permit, a project-specific Cultural Resources Treatment Plan shall be prepared by a qualified archaeologist. The Cultural Resources Treatment Plan shall reflect permit-level detail pertaining to depths and locations of all ground disturbing activities. The Cultural Resources Treatment Plan shall be prepared and submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement prior to approval of any grading permit. The Treatment Plan shall contain, at a minimum:

- Identification of the scope of work and range of subsurface effects (including location map and development plan), including requirements for preliminary field investigations.
- Description of the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found).
- Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
- Detailed field strategy used to record, recover, or avoid the finds and address research goals.
- Analytical methods.
- Report structure and outline of document contents.
- Disposition of the artifacts.
- Appendices: all site records, correspondence, and consultation with Native Americans, etc.

MM CR-1.2: Investigation: Prior to project grading and excavation, the project applicant shall complete a preliminary field investigation program in conformance with the project-specific Cultural Resources Treatment Plan required under Mitigation Measure MM CR-1.1. The locations of subsurface testing and exploratory trenching shall be determined prior to issuance of any grading permit based on the Cultural Resources Treatment Plan recommendations. A qualified archaeologist shall complete a presence/absence exploration with a backhoe once the existing improvements planned for removal (i.e., dry cleaners, parking lot) are cleared from the site. If it is not possible to conduct presence/absence subsurface testing across the entire study area because of remediation or preservation plans for the historic building facades, then a combination of presence/absence exploration, where possible, along with archaeological monitoring shall be required. Results of the investigation shall be provided to the Supervising Environmental Planner of the City of San José

Department of Planning, Building, and Code Enforcement prior to issuance of any grading permit.

If any finds were discovered during the preliminary field investigation, the project shall implement MM CR-1.4 for evaluation and recovery methodologies. The results of the preliminary field investigation and program shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement for review and approval prior to issuance of any grading permit.

MM CR-1.3: Construction Monitoring and Protection Measures: Although the data recovery and treatment program is expected to recover potentially significant materials and information from the areas impacted by the project prior to grading, it is possible that additional resources could remain on-site. Therefore, all ground-disturbing activities (e.g., grading and excavation) shall be completed under the observation of a qualified archaeologist.

The qualified archaeologist shall have authority to halt construction activities temporarily in the immediate vicinity of an unanticipated find. If, for any reasons, the qualified archaeologist is not present but construction crews encounter a cultural resource, all work shall stop temporarily within 50 feet of the find until a qualified archaeologist has been contacted to determine the proper course of action. The Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement shall be notified of any finds during the grading or other construction activities. Any human remains encountered during construction shall be treated according to the protocol identified in MM CR-1.5.

MM CR-1.4: Evaluation and Data Recovery: The Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement shall be notified of any finds during the preliminary field investigation, grading, or other construction activities. Any historic or prehistoric material identified in the project area during the preliminary field investigation and during grading or other construction activities shall be evaluated for eligibility for listing in the California Register of Historic Resources. Data recovery methods may include, but are not limited to, backhoe trenching, shovel test units, hand augering, and hand-excitation.

The techniques used for data recovery shall follow the protocols identified in the project-specific Cultural Resources Treatment Plan. Data recovery shall include excavation and exposure of features, field documentation, and recordation.

MM CR-1.5: Human Remains: Native American coordination shall follow the protocols established under Assembly Bill 52, State of California Code, and applicable City of San José procedures.

If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Project Applicant shall immediately notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the qualified archaeologist, who will then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his/her authority, the Coroner shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American.

If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD, will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts.

If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

MM CR-1.6: Site Security: At the discretion of the Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement, site fencing shall be installed on-site during the investigation, grading, building, or other construction activities to avoid destruction and/or theft of potential cultural resources. The responsible

qualified archaeologist shall advise the Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement as to the necessity for a guard. The purpose of the security guard shall be to ensure the safety of any potential cultural resources (including human remains) that are left exposed overnight. The Director of PBCE shall have the final discretion to authorize the use of a security guard at the project site.

MM CR-1.7: Final Reporting: Once all analyses and studies required by the project-specific Cultural Resources Treatment Plan have been completed, the project applicant, or representative, shall prepare a final report summarizing the results of the field investigation, data recovery activities and results, and compliance with the Cultural Resources Treatment Plan during all demolition, grading, building, and other construction activities. The report shall document the results of field and laboratory investigations and shall meet the Secretary of the Interior's Standards for Archaeological Documentation. The contents of the report shall be consistent with the protocol included in the project-specific Cultural Resources Treatment Plan. The report shall be submitted to the Director of Planning, Building, and Code Enforcement for review and approval prior to issuance of any Certificates of Occupancy (temporary or final). Once approved, the final documentation shall be submitted to the Northwest Information Center at Sonoma State University, as appropriate.

MM CR-1.8: Curation: Upon completion of the final report required by the project-specific Cultural Resources Treatment Plan, all recovered archaeological materials shall be transferred to a long-term curation facility. Any curation facility used shall meet the standards outlined in the National Park Services' Curation of Federally Owned and Administered Archaeological Collections (36 CFR 79). The project applicant shall notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement of the selected curation facility prior to the issuance of any Certificates of Occupancy (temporary or final).

Treatment of materials to be curated shall be consistent with the protocols included in the project-specific Cultural Resources Treatment Plan.

The proposed project would be required to implement the provisions of a project-specific Cultural Resources Treatment Plan, as outlined in the mitigation measures above. Implementation of these measures would ensure extensive subsurface investigation where subsurface excavation and groundwork would occur. Through this field investigation and data recovery program, the project would avoid demolition, substantial alteration, or relocation of an eligible resource. Significant disturbance of any human remains, Native American or otherwise, would be avoided through a robust protection program designed to respond to an encounter with cultural resources and/or human remains in consultation with appropriate parties (e.g. the Most Likely Descendant). **[Less Than Significant Impact With Mitigation]**

c. *Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?*

There are no unique geologic features on the project site. The site is located in an area of high sensitivity for paleontological resources at depth, based on the age and type of native surface soils. The following City of San José standard condition shall be implemented during project construction to avoid and reduce the potential for impacts to paleontological resources.

Standard Permit Condition: Consistent with Envision San José 2040 General Plan policy ER-10.3, the following standard permit condition is included in the project to reduce or avoid impacts to subsurface paleontological resources.

- If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. 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. The project proponent will be responsible for implementing the recommendations of the paleontological monitor.

With implementation of the standard condition listed above, the proposed project would result in a less than significant impact to paleontological resources. **[Less Than Significant Impact]**

4.5.4 Conclusion

With implementation of the mitigation measures and standard permit conditions, the proposed project would result in a less than significant impact on cultural resources. **[Less Than Significant Impact with Mitigation]**

4.6 GEOLOGY

The following discussion is based on Preliminary Geotechnical Investigation reports prepared by *Cornerstone Earth Group* in February 2016 and April 2016. The reports are attached as Appendices D-1 and D-2.

4.6.1 Setting

The City of San José is located within the Santa Clara Valley, which is a broad alluvial plain that lies between the Santa Cruz Mountains to the southwest and west, and the Diablo Range to the northeast. The San Andreas Fault system exists within the Santa Cruz Mountains and the Hayward and Calaveras Fault systems exist within the Diablo Range.

4.6.1.1 *On-Site Geologic Conditions*

Topography and Soils

Surface and subsurface materials on the 36-acre site consist of up to 14 feet of undocumented fill materials on top of native soils. Native soils are stiff, silty clay and are found to a depth of at least 35 feet. The undocumented fill material contains significant accumulations of concrete and asphalt debris. Soils on the site are considered to have low to moderate expansion potential.

The proposed project site is situated on the coastal plain immediately south of tidal flats that fringe the southern San Francisco Bay. The topography is relatively flat with a slight downward slope towards the north.

Groundwater

The depth to groundwater in the project area ranges from feet 14 to 15 feet below ground surface, based on the Phase I ESA report (Appendix E) completed for the site. Groundwater typically flows northwest toward the San Francisco Bay, but recently groundwater has flowed to the southeast due to drought conditions. Seasonal fluctuations in rainfall influence groundwater levels and may cause several feet of variation.

Seismicity and Seismic-Related Hazards

The project site is located within the seismically active San Francisco Bay Area region. There is a 72 percent probability that one or more major earthquakes (6.7 in magnitude or greater) will occur in the region by 2044.⁷ Although the site is within a seismically active region, it is not located within a designated Alquist-Priolo Earthquake Fault Zone⁸ and no known active or potentially active faults

⁷ US Geological Survey. *UCERF3: A New Earthquake Forecast for California's Complex Fault System*. Fact Sheet 2015–3009. March 2015. Available at: <<http://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>>. Accessed March 17, 2015.

⁸ California Geological Survey. Regional Geologic Hazards and Mapping Program. *Alquist-Priolo*. Available at: <<http://www.conservation.ca.gov/cgs/rghm/ap/Pages/index.aspx>>. Accessed May 14, 2015.

exist on the site. Since no known surface active faults cross the site, fault rupture is not a significant geologic hazard on the site.

Significant active faults (which have a capability generating an earthquake with a magnitude of 6.7 or greater)⁹ within the region include the Hayward Fault, Calaveras Fault, and San Andreas Fault, located roughly five miles northeast, nine miles east, and 13 miles west of the site, respectively. Other significant faults in the region include the San Gregorio Fault, Greenville, Concord-Green Valley, and Healdsburg Roger Creek Faults (which range from 25 to 50 miles in distance from the site). Due to the proximity of the project site to these active or potentially active faults, ground shaking, ground failure, and/or liquefaction as a result of an earthquake could cause damage to structures on the site.

Liquefaction

Liquefaction is a result of seismic activity and is characterized as the transformation of loose, water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and groundwater level. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Liquefaction can result in ground surface deformations and settlement.

Surficial soils on the proposed project site are classified as Holocene-age levee deposits, consisting of loose, moderate- to well-sorted or clayey silt grading to sandy or silty clay. The project site is located within a State of California Hazard Zone for liquefaction¹⁰ and also within a County of Santa Clara Liquefaction Hazard Zone.¹¹

Lateral Spreading

Liquefaction-induced lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material within an underlying liquefied layer, toward an open or “free” face such as an open body of water, channel, or excavation. Generally, in soils this movement is due to failure along a weak plane, formed within an underlying liquefied layer. As cracks develop within the weakened material, blocks of soil displace laterally towards the free face.

The project site is adjacent to the Guadalupe River and there are liquefiable sand layers underlying the site and, therefore, there is a potential for horizontal displacement during an earthquake.

⁹ Active faults is one that has ruptured in the last 11,000 years. California Geological Survey. Alquist-Priolo Earthquake Fault Zoning Act. Available at: <<http://www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx>>. Accessed May 14, 2015.

¹⁰ Association of Bay Area Governments. Resilience Program. *Liquefaction: Official California Seismic Hazards Zone Map*. Available at: <<http://resilience.abag.ca.gov/earthquakes/>>. Accessed May 14, 2015.

¹¹ County of Santa Clara. *County Geologic Hazard Zones*. Map 11. February 2002.

Differential Settlement

Differential (uneven) settlement is associated with loose unsaturated sands and gravels. These soils typically settle during strong seismic shaking. Soils that are variable in nature and contain organic materials are more susceptible to differential settlement than uniform soils. The settlement of a structure is the magnitude of a foundation's downward movement.¹² Differential settlement during seismic shaking occurs when the foundation settles unevenly, which can cause one part of a structure to settle into the ground more than other which could cause damage to buildings, roadways, utilities, and hardscape improvements. The existing undocumented fill on the site may be susceptible to settlement.

Landslides

Landslides are the movement of rock, debris, or earth down a slope and typically occur in connection with other natural disasters such as earthquakes and floods. Landslides occur when the stability of a slope changes from a stable to an unstable condition. In general, slopes steeper than approximately 15 degrees are typically most susceptible to landslides.¹³ Earthquakes can induce landslides in hillside areas and along creeks.

The project site is not located within a California Seismic Hazard Zone¹⁴ for landsliding or within a County of Santa Clara Landslide Hazard Zone. The project area is relatively flat and, therefore, the probability of landslides occurring at the project sites during a seismic event is low.

4.6.1.2 *Applicable Plans, Policies and Regulations*

California Building Code

The California Building Code prescribes a standard for constructing safer buildings throughout the State of California. It contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, strength of the ground and distance to seismic sources. The Code is renewed on a triennial basis every three years; the current version is the 2014 Building Standards Code.

City of San José Municipal Code

Title 24 of the San José Municipal Code includes the 2013 California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical 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 17.10 (Building Code, Part 6

¹² California Geological Survey. *Note 33*.

<http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_33/Pages/index.aspx>. Accessed April 14, 2015.

¹³ Association of Bay Area Governments. *Landslide Maps and Information*. Available at: <<http://resilience.abag.ca.gov/landslides/>>. Accessed October 30, 2014.

¹⁴ California Geological Survey. *State of California Seismic Hazard Zones. Milpitas Quadrangle. Official Map*. October 2004.

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, including State Seismic Hazard Zones for Liquefaction.

Envision San José 2040 General Plan

The 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 geological resources and are applicable to the proposed project.

Envision San José 2040 Relevant Geology and Soil Policies

Policy	Description
Policy EC-4.2	Development 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. 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 a soil disturbance of one acre or more, adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 1 and April 30.
Action EC-4.11:	Require 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.
Action EC-4.12:	Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of grading permits by the Director of Public Works.
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.

4.6.2 Geology and Soils Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1. Rupture of a known earthquake fault, as described 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,13
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,13
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
c. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,12,
d. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,13
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,13

4.6.3 Impacts Evaluation

As previously discussed in Section 4.0, 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 or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, such as locating structures in geologic hazard zones, which are discussed below.

The policies of the City of San Jose 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 Jose 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.

The analysis below includes discussion of both impacts of the environment on the project, such as hazards to proposed structures due to undocumented fill on the site, and impacts from the project on the environment, such as the potential for the proposed project to result in off-site geologic hazards. Impacts of the project on the environment are discussed in terms of their significance under CEQA, while impacts of the environment on the project are discussed in terms of the project's consistency with relevant City policies.

a., c. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, ii) strong seismic ground shaking, iii) seismic-related ground failure, or iv) landslides? Would the project be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impacts to the Project

The project site is located in a seismically active region of California and strong ground shaking would be expected during the lifetime of the proposed project. There are no known active faults traversing the project site and the site is not located in an Alquist-Priolo Earthquake Fault Zone. Potential for surface rupture from displacement or fault movement directly beneath the proposed project is, therefore, considered low. Depending on the intensity and magnitude of a seismic event, new buildings may experience shaking due to the site's proximity to the active Hayward, San Andreas, Monte Vista-Shannon, and Calaveras Faults.

The project site is located within a State of California Liquefaction Hazard Zone. 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 accordance with the recent California Building Code. Adherence to the California Building Code will ensure the project resists minor earthquakes without damage and major earthquakes without collapse. The project site is located in a relatively flat area and would not be

exposed to substantial slope instability, erosion, or landslide-related hazards. Dewatering is not required for the construction of the project. The project would be required to implement the standard permit conditions listed below to geologic and seismic hazards.

Standard Permit Conditions: To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Building design and construction at the site will be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be reviewed and approved by the City Geologist. The structural designs for the proposed development will account for repeatable horizontal ground accelerations. The report shall be reviewed and approved of by the City of San Jose's Building Division as part of the building permit review and issuance process. The proposed buildings shall meet the requirements of applicable Building and Fire Codes, including the 2013 California Building Code Chapter 16, *Section 1613*, as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on the site and projects shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

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

Impacts from the Project

As described above, the project site would experience intense ground shaking in the event of a large earthquake. The project site and surrounding areas are, however, relatively flat, and development of the project site would not expose adjacent or nearby properties to landslide hazards. The project would comply with a design-specific geotechnical report and the California Building Code, which would ensure that the project would not result in off-site impacts related to liquefaction, lateral spreading, subsidence, or collapse. 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]**

b. Would the project result in substantial soil erosion or the loss of topsoil?

Ground disturbance would be required for removal of the existing pavement, grading, trenching, and construction of the proposed project. Ground disturbance would expose soils and increase the potential for wind or water related erosion and sedimentation until construction is complete.

Impacts to the Project

Construction activities could result in the loss of topsoil on the site. 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 FEIR concluded that with the regulatory programs currently in place, the possible impacts of accelerated erosion during construction would be less than significant. The City will require all phases of the project to comply with all applicable City regulatory programs pertaining to construction related erosion. Because the project would comply with the regulations identified in the General Plan FEIR, the project would be consistent with City policies related to erosion hazards.

Impacts from the Project

Demolition and construction on the project site would temporarily increase the potential for erosion and sedimentation that could be carried by runoff into the San Francisco Bay. The project will implement the following measures, consistent with the regulations identified in the General Plan FEIR, for avoiding and reducing construction related erosion impacts.

Standard Permit Conditions:

- Because this project involves a land disturbance of more than one acre, the project is required to submit a Notice of Intent to the State Water Resources Control Board and to prepare a Storm Water Pollution Prevention Plan (SWPPP) for controlling storm water discharges associated with construction activity.
- This project will be required to prepare and submit an Erosion Control Plan with the Grading and Drainage Plan for review and approval by the Department of Public Works.
- 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.

With implementation of these measures and compliance with the City's grading ordinance, construction of the proposed project would have a less than significant impact. [**Less Than Significant Impact**]

d. Would the project 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?

Surficial soils on the project site have a low to moderate expansion potential. The presence of expansive soil conditions could potentially damage the future buildings and improvements on the project site, which can be avoided by incorporating appropriate engineering into grading and foundation designs.

Standard Permit Conditions: The project shall be constructed in accordance with the standard engineering practices in the most recent California Building Code, as adopted by the City of San José. In addition, the City of San José Department of Public Works requires a grading permit to be obtained prior to the issuance of a Public Works Clearance. These standard practices, including the specific measures outlined below, would ensure that future buildings on the site are designed properly to account for expansive soils on the site.

- The project shall conform to the recommendations in engineering reports for the project including design considerations for proposed foundations.

- Due to the expansion potential of near-surface soils, the amount of surface water infiltrating these soils near structures and slabs-on-grade shall be restricted. The following design considerations shall be included in the landscaping proposed for the project:
 - Landscaping shall be selected that requires little or no watering, especially within three feet of at grade structures, slabs-on-grade, or pavements,
 - Low precipitation sprinkler heads shall be used,
 - the amount of water distributed to lawn or planter areas shall be regulated by installing Timers on the sprinkler system,
 - surface grades shall drain rainfall or landscape watering to appropriate collection systems and away from structures, slabs-on-grade, or pavements,
 - Water shall not drain toward or pond near building foundations, slabs-on-grade, or pavements, and
 - Open planting areas shall be avoided within three feet of the building perimeters.

The project, with the implementation of standard engineering practices as outlined above, would be consistent with City policies related to geologic hazards. 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 related to expansive soils. **[Less Than Significant Impact]**

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project site is located within an urbanized area of San José where sewers are available to dispose of wastewater from the project site. Therefore, the site will not need to support septic tanks or alternative wastewater disposal systems. **[No Impact]**

4.6.4 Conclusion

With implementation of standard permit conditions, the project would not result in significant geology and soil impacts. **[Less Than Significant Impact]**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Setting

4.7.1.1 *Background Information*

Unlike criteria air pollutant and TAC emissions, which are discussed in *Section 4.3 Air Quality*, and 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 over time. 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/manufacturing, utility, residential, commercial, and agricultural sectors.

4.7.1.2 *Existing On-Site GHG Emissions*

The 36-acre site is currently developed with the Pin High Golf Center and an RV storage area. Existing uses generate GHG emissions from electricity use and transportation trips to and from the Pin High Golf Center and RV storage lot.

4.7.1.3 *Applicable Plans, Policies and Regulations*

State of California

In California, GHG emission reduction goals are set into law primarily through Assembly Bill 32 (AB 32) and Senate Bill 375 (SB 375). AB 32, also known as the Global Warming Solutions Act, established a goal to reduce GHG emissions in the State to 1990 levels by 2020. SB 275 builds on AB 32 by requiring the California Air Resources Board 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.

Regional 2010 Bay Area Clean Air Plan

The Bay Area 2010 Clean Air Plan (CAP) is a multi-pollutant plan that addresses GHG emissions along with other air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the CAP is climate protection. The current CAP includes performance objectives, consistent with the state’s climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

City of San José Regulations, Policies and Programs

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 Ordinance (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Reduction in Parking Requirements with Transportation Demand Program (Section 20.70.330)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

Envision San José 2040 General Plan and Greenhouse Gas Reduction Strategy

The City of San José has also adopted localized policies to regulate GHG emissions. The Envision 2040 General Plan includes strategies, policies, and action items that are incorporated in the City’s GHG Reduction Strategy to help reduce GHG emissions. The GHG Reduction Strategy identifies GHG reduction measures to be implemented by development projects in 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.

4.7.2 Greenhouse Gas Emissions Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,8
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,8

4.7.3 Impacts Evaluation

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As described previously, in jurisdictions where a qualified GHG Reduction Strategy has been reviewed under CEQA and adopted by the 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. As described below, the project would comply with the City's adopted GHG Reduction Strategy. **[Less Than Significant Impact]**

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The GHG Reduction Strategy in the Envision San Jose 2040 General Plan FEIR identifies a series of GHG emissions reduction measures to be implemented by development projects that would allow the City to achieve its GHG reduction goals. The measures center around five strategies: energy, waste, water, transportation, and carbon sequestration. When the GHG Reduction Strategy was in effect, some measures were considered mandatory for all proposed development projects, while others were considered voluntary. Voluntary measures were incorporated as mitigation measures for proposed projects at the discretion of the City.

For the purposes of tracking the proposed project's consistency with the City's Strategy, the measures below are identified as mandatory or voluntary.

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 GHGRS 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 operation 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.

Although the project proposes a text amendment to the Alviso Master Plan to allow increased building heights for the Topgolf and hotel structures, the proposed uses are consistent with the General Plan designations set for the site in the Land Use/Transportation Diagram, and the amount of development proposed is within the range assumed for the site in the General Plan. The proposed height increases would not increase the amount of allowed development on the site, nor would the proposed development differ from the assumptions of future land uses on the site utilized when the City developed its GHG Reduction Strategy. Therefore, the City's GHG Reduction Strategy would still apply to this project, and the project would be consistent with Mandatory Criteria 1.

New structures would comply with the San Jose Green Building Ordinance (Policy 6-32) and the California Green Building Code (CALGreen). The project proposes a Planned Development (PD) rezoning of the site, and would be consistent with the conditions applied to the newly created PD zoning. The project includes improvements to pedestrian and bicycle facilities in the project area. The project, therefore, would be consistent with Mandatory Criteria 2 and 3.

Criteria 4, 5, 6, and 7 are not applicable to the proposed project because the site does not contain historic structures, the project is not an energy-intensive use, the project is not a large employer, and the project does not propose vehicle-serving uses.

Voluntary Criteria

Table 4.7-1 provides a summary of the voluntary criteria and describes the proposed project's compliance with each criterion.

Table 4.7-1: Voluntary Greenhouse Gas Reduction Strategy Criteria

Policies	Description of Project Measure	Project Conformance/ Applicability
BUILT ENVIRONMENT AND RECYCLING		
Installation of solar panels or other clean energy power generation sources on development sites, especially over parking areas MS-2.7, MS-15.3, MS-16.2	The project does not propose installation of solar panels or other clean energy sources on-site.	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Not Proposed or <input type="checkbox"/> Not Applicable
Use of Recycled Water Use recycled water wherever feasible and cost-effective (including non-residential uses outside of the Urban Service Area) MS-17.2, MS-19.4	The project would utilize recycled water for landscape irrigation.	<input checked="" type="checkbox"/> Required/ Proposed <input type="checkbox"/> Not Proposed or <input type="checkbox"/> Not Applicable
TRANSPORTATION AND LAND USE		
Install and maintain trails adjacent to designated trail locations. Have new residential developers build and maintain trails when development occurs adjacent to a designated trail location. PR-8.5, TN-2.7	Although the project site is located adjacent to the Guadalupe River Trail, the City of San Jose is responsible for trail maintenance.	<input type="checkbox"/> Proposed <input type="checkbox"/> Not Proposed or <input checked="" type="checkbox"/> Not Applicable
Car share programs Promote car share programs to minimize the need for parking spaces TR-8.5	A car share program is not currently proposed as a part of the proposed rezoning and no spaces are proposed to be reserved in the parking lot for this use.	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Not Proposed or <input type="checkbox"/> Not Applicable

Table 4.7-1: Voluntary Greenhouse Gas Reduction Strategy Criteria		
Policies	Description of Project Measure	Project Conformance/ Applicability
Parking in Downtown and Urban Village Overlay areas Avoid the construction of surface parking except as an interim use and use structured parking to fulfill parking requirements. CD-2.11	The project site is not located in Downtown or an Urban Village Overlay area.	<input type="checkbox"/> Surface Parking Proposed <input type="checkbox"/> Surface Parking Not Proposed or <input checked="" type="checkbox"/> Not Applicable
Limit parking above code requirements TR-8.4	The proposed number of parking spaces would exceed requirements in the Municipal Code.	<input type="checkbox"/> Project is Parked at or below Code Requirements <input checked="" type="checkbox"/> Project is Parked above Code Requirements or <input type="checkbox"/> Not Applicable
Consider opportunities for reducing parking spaces (including measures such as shared parking, TDM, and parking pricing to reduce demand) TR-8.12	A reduced parking plan is not proposed.	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Project Does Not Propose or <input type="checkbox"/> Not Applicable

The proposed project is consistent with the mandatory criteria of the San Jose GHG Reduction Strategy. Therefore, the proposed project is consistent with the San Jose GHG Reduction Strategy and GHG emissions impacts would be less than significant. **[Less Than Significant Impact]**

4.7.4 Conclusion

Development of the proposed project, in conformance with applicable plans and policies including the City’s GHG Reduction Strategy, Municipal Code including the Green Building Ordinance, and General Plan policies, would not result in significant impacts. The proposed project would be consistent with applicable GHG plans, policies and regulations. **[Less Than Significant Impact]**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on a Phase I Environmental Site Assessment and a Phase II Soil and Groundwater Investigation completed by *Geologica Inc.* in November 2015 and March 2016, respectively. The reports are attached as Appendices E and F.

4.8.1 Setting

4.8.1.1 *Background Information*

Hazardous materials are commonly used by large institutions and commercial and industrial businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident.

4.8.1.2 *Site Existing and Historic Uses*

Historic Uses

The project site was mostly farmland from before 1939 until around 1970. In the parcel where the Pin High Golf Center currently operates, there was a complex of farm buildings until the late 1960s/early 1970s. Other buildings of uncertain use were formerly located on the south side of the property that is currently used as an RV storage yard from before 1939 until the late 1960s or early 1970s.

Turner Equipment and Excel Landscape first occupied the site that is currently occupied by the Pin High Golf Center in the 1980s, and then vacated the area by about 2009. In the late 1980s to early 1990s, the middle of the Pin High Golf Center site was used as a storage yard for trailers, boats etc., while the rest of the site was vacant.

South Bay Asbestos Area

The entire town of Alviso, including the project site, is located within a former Superfund site called the South Bay Asbestos Area. Three sources of asbestos were identified in the area: the “ring levee”, truck yards, and former landfills where asbestos containing materials were historically disposed. Asbestos fibers from these sources proliferated throughout the 550-acre South Bay Asbestos Area. Remediation of the truck yards and ring levee were completed in 1994 and 1997, respectively. Following the completion of remediation activities and subsequent testing by the EPA, the South Bay Asbestos Area was removed from the Superfund list. Other than deed restrictions placed on the properties containing the former landfills to prevent the release of asbestos resulting from future development activities, no remaining Superfund regulations apply to the area.

The former Sainte Claire Landfill site is located immediately west of the project site, along either side of Gold Street south of Moffat Street. This landfill was identified by the EPA as having the potential for asbestos-containing waste materials. In 2011, the property owner performed additional sampling work under EPA oversight sufficient to show that the former Sainte Claire landfill need not

be deed restricted to prevent potential exposure to asbestos containing waste. Of the 28 samples analyzed, only one had over the one percent concentration action level. All of the other concentrations were less than 0.25 percent or none detected, which means the 0.29 percent average for all samples is substantially less than the one percent action level established for the site by the EPA. The EPA coordinated its review of this sampling effort and the analytical results closely with the supporting state agency, the California DTSC. The DTSC has concurred with EPA that based on sampling results, a deed restriction (i.e. land use covenant) is not needed for the Sainte Claire Landfill. As a result, the landfill is not subject to the requirements and restrictions of the South Bay Asbestos Area.¹⁵

Existing Conditions

The site is currently used by the Pin High Golf Center for recreational and commercial uses. The western portion of the site is used as an RV storage yard and is primarily a vacant lot.

The site was noted to previously be at or below sea level, and the present topography is the result of a continuing program of land fill. Up to 14 feet of uncompacted fill and rubble materials have been placed on top of native soils on the site. Given that the project site is known to contain imported soils and fill from unknown locations, there is a potential for contaminated soils to be on the project site.

Groundwater

The site is located within the Santa Clara Valley Groundwater Basin. Historic groundwater depths are approximately 14 to 15 feet below ground surface (bgs), however, borings taken in 1985 encountered groundwater at seven to eight feet bgs. In 1987, groundwater was reported as high as five feet bgs. Groundwater beneath the site is not a source of drinking water. Groundwater flows beneath the site have historically been northwesterly parallel to the Guadalupe River (toward the San Francisco Bay), however, recent data has shown that groundwater has reversed to the southeasterly direction. This change is assumed to be associated with drought conditions.

4.8.1.3 *Surrounding Land Uses*

The site is bordered on the east by vacant land that is being developed in phases as an office business park with a hotel. The site is bordered to the west by Liberty Street, beyond which are residences, the Alviso Community Center, the Alviso Health Center, and a gated and fenced parking lot. N. First Street is on the northern border of the project site. Across N. First Street, to the north, is the George Mayne Elementary School, youth center, public library, two residential subdivisions and, at the northeast corner of First and Liberty Streets, a small retail center. The southern side of the project site is bounded by the Guadalupe River with an adjacent paved bicycle trail along the riverfront.

The Syntax Court Waste Disposal site is located southeast of the property, near the intersection of Highway 237 and North First Street. The former Sainte Claire Landfill site is located west of the

¹⁵ US EPA. Explanation of Significant Differences to the Record of Decision - South Bay Asbestos Superfund Site Operable Unit 2 - Overall Site. September 28, 2011.

project site, along either side of Gold Street south of Moffat Street. The project site is not within the bounds of either the Syntax Court Disposal or Sainte Claire Landfill sites.

4.8.1.4 *Recognized Environmental Conditions*

Based on previous site investigations, a field reconnaissance, and records searches, the Phase I ESA prepared for the project identified the following potential sources of hazardous contamination on the project site:

- Undocumented fill containing concrete debris and other materials underlies most or all of the project site.
- Soil samples taken in 2004 found concentrations of petroleum hydrocarbons and heavy metals in exceedance of Regional Water Quality Control Board (RWQCB) Environmental Screening Levels. Oil stains were observed on the existing maintenance yard and RV storage yard during a site visit completed for the proposed project's Phase I ESA.
- Off-site shallow groundwater has been impacted by chlorinated volatile organic compounds (VOCs), which are believed to be sourced from a localized area near the intersection of North First Street and Highway 237. In-situ groundwater remediation by injection is in process, however, the leading edge of the plume appears to extend onto the project site.

Several other environmental compliance issues were noted, including a lack of a hazardous materials business plan and an out-of-service irrigation well located on the eastern corner of the site adjacent to North First Street. In addition, two groundwater piezometers (i.e., devices used to measure groundwater pressure) are known to be on the site but their location is unknown, and they were never properly abandoned or closed under a County permit.

4.8.1.5 *Phase II Soil & Groundwater Investigation*

Several soil and groundwater investigations have been completed for the project site to date; for a review of these studies, refer to the proposed project's Phase II Investigation (Appendix F). To evaluate the currently proposed project, *Geologica* took 11 soil and groundwater samples on the site in January 2016. Continuous soil cores and temporary groundwater monitoring wells were utilized, with sample depths ranging from the surface to between 16 and 24 feet bgs. The samples were analyzed for many varieties of total petroleum hydrocarbons (TPH), heavy metals, organochlorine pesticides, and polychlorinated biphenyls (PCBs). Supplemental soil and groundwater sampling was completed in February 2016 to further assess site conditions. The complete results of the investigations are provided in Appendix E along with maps showing the soil boring locations and details pertaining to methodology and quality control. The results of the sampling are summarized and discussed below.

Soil Samples

Asbestos

Asbestos testing was completed at 15 locations on the site in 1996 to evaluate for asbestos in the onsite fill. Sampling locations were not clearly identified, but did not include a small portion of the site located west of the Pin High Golf Center and south of the RV parking lot. The laboratory analyses did not detect the presence of asbestos in any of the samples. Because the testing locations are unknown and did not include a portion of the site, asbestos may be present in the undocumented fill in areas of the site that were not previously tested.

Total Petroleum Hydrocarbons (TPH)

No TPH as gasoline was detected in any of the soil samples. TPH for diesel (TPH-d) and motor oil (TPH-mo) were detected at concentrations up to 1,400 mg/kg and 4,800 mg/kg, respectively, in the vicinity of the Pin High Golf Center. The highest concentrations were detected around seven to eight feet bgs. Near the maintenance yard, TPH-d and TPH-mo were detected at 46 mg/kg and 90 mg/kg, while at the Turner & Excel yard, they were detected at 21 mg/kg and 110 mg/kg. The concentrations increased near the RV yard (56 mg/kg and 240 mg/kg, respectively), and were even higher in the vacant lots on the site (400 mg/kg and 2,100 mg/kg, respectively).

The RWQCB has established ESLs for Direct Exposure of 1,200 mg/kg and 140,000 mg/kg for TPH-d and TPH-mo, respectively. Only one sample had a TPH-d detection greater than the Direct Exposure ESL of 1,200 mg/kg. TPH-d was not reported at concentrations greater than the Soil to Groundwater Leaching ESL of 3,600 mg/kg. None of the reported TPH-mo concentrations exceeded the Direct Exposure ESL of 140,000 mg/kg.

Pesticides

A range of organochlorine pesticides were detected at generally low concentrations in several soil samples from around the site. Dieldrin (a type of pesticide) was found at concentrations above its Soil and Groundwater Leaching Level, but below its Commercial/Industrial Direct Exposure ESL. No other pesticides were detected at concentrations greater than their respective ESLs.

Metals

Several metals were detected in on-site soils at concentrations exceeding their respective ESLs. They are as follows:

- Arsenic - detected in several samples at up to 44 mg/kg. Background (i.e. typical) concentrations usually range up to 15 mg/kg, thus the concentrations found on the project site are considered elevated above normal.
- Lead - detected at concentrations ranging from 130 mg/kg to 710 mg/kg. Only one sample contained a concentration exceeding the Commercial/Industrial Direct Exposure ESL of 320 mg/kg

- Beryllium and Cadmium - detected at concentrations above their respective Commercial/Industrial Direct Exposure ESLs of 0.39 and 0.058 mg/kg, respectively. The detected concentrations are consistent with background levels, however.

Polychlorinated Biphenyls (PCBs)

PCBs were detected in one soil sample at a concentration of 130 µg/kg, which is below all ESLs for PCBs. No PCBs were reported in other soil samples.

Volatile Organic Compounds (VOCs)

Acetone was the only VOC reported in any of the soil samples. It was detected at a concentration of 110 µg/kg in one soil sample. No other VOCs were reported above laboratory detection limits.

Groundwater

Total Petroleum Hydrocarbons (TPH)

No TPH as gasoline was detected; however, TPH-d and TPH-mo were detected in all but two of the groundwater samples. Near the Pin High Golf Center, maximum TPH-d concentrations ranged up to 1,900 µg/L (micrograms per liter) while maximum TPH-mo concentrations ranged up to 10,000 µg/L. Numerous detected concentrations of TPH-mo exceeded the applicable ESLs. Concentrations of TPH-d at the maintenance yard, Turner & Excel Yard, and vacant lot ranged from 65 to 150 µg/L, while concentrations of TPH-mo at those locations ranged from 120 to 390 µg/L. These concentrations do not exceed applicable ESLs.

Volatile Organic Compounds (VOCs)

Several VOCs were reported at low concentrations in groundwater samples. 1,1-dichloroethene and vinyl chloride were detected at 18 µg/L and 0.69 µg/L, respectively, which exceed applicable ESLs. Benzene was detected in groundwater samples at two locations at 6.5 and 0.73 µg/L, which exceed the Drinking Water ESL but are below the Aquatic Habitat and Vapor Intrusion ESLs. No other VOCs were detected at concentrations exceeding ESLs.

Dissolved Metals

Groundwater samples from all borings except one indicated detections of cobalt and nickel above the groundwater Aquatic Habitat ESL. Given the consistent detections, it is likely that these detections represent background levels. Mercury was detected in three groundwater “grab” samples at concentrations slightly above its Aquatic Habitat ESL of 0.000051 µg/L. No other metals were detected above their respective ESLs.

4.8.1.6 *Other Hazards*

Asbestos Containing Materials

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. ACMs are of concern because exposure to ACMs has been linked to cancer. Use of friable asbestos products was banned in 1978. Given that the existing buildings on the site were constructed in the 1990s, ACMs are assumed to be absent for the purposes of this analysis.

As described previously, given the history of asbestos contamination in the Alviso area, undocumented fill on portions of the site that were not previously tested may contain asbestos.

Lead-Based Paint

Lead-based paint is of concern both as a source of direct exposure through ingestion of paint chips, and as a contributor to lead in interior dust and exterior soil. In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials containing lead. Given that the existing buildings on the site were constructed in the 1990s, lead-based paint is assumed to be absent for the purposes of this analysis.

Airports

The San Jose Airport is located approximately four miles south of the project site. Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (referred to as FAR Part 77), requires that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. None of the proposed structures on the project site, including the 170-foot high net poles, would exceed the FAR Part 77 thresholds requiring FAA airspace safety review.

Wildland Fire Hazards

The project site is located in an urban area and is not within a Very-High Fire Hazard Severity Zone for wildland fires.¹⁶

4.8.1.7 *Applicable Hazardous Materials and Hazards Regulations and Policies*

Federal and State Hazardous Materials Laws and Regulations

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Key federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the U.S. Environmental Protection Agency (EPA) has granted most enforcement authority

¹⁶ California Department of Forestry and Fire Protection. [Santa Clara County FHSZ Map](http://calfire.ca.gov/fire_prevention/fhsz_maps_santaclara.php). November 6, 2007. Available at: http://calfire.ca.gov/fire_prevention/fhsz_maps_santaclara.php. Accessed September 21, 2015.

over federal hazardous materials regulations to the California Environmental Protection Agency (Cal/EPA). In turn, local agencies including the Santa Clara County Department of Environmental Health (SCCDEH) have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program. Other regional agencies are responsible for programs regulating emissions to the air, surface water, and groundwater include the Bay Area Air Quality Management District (BAAQMD), which has oversight over air emissions, and the Regional Water Quality Control Board (RWQCB) which regulates discharges and releases to surface and groundwater. Oversight over investigation and remediation of sites impacted by hazardous materials releases can be performed by state agencies, such as DTSC (a division of Cal/EPA), regional agencies, such as the RWQCB, or local agencies, such as SCCDEH. The SCCDEH oversees investigation and remediation Leaking Underground Storage Tank (LUST) sites in San José. Other agencies that regulate hazardous materials include the California Department of Transportation and California Highway Patrol (transportation safety), and Cal/EPA Division of Occupational Safety and Health, better known as Cal/OSHA (worker safety).

Hazardous Materials Sites: Pursuant to Government Code Section 65962.5

Section 65962.5 of the Government Code requires California Environmental Protection Agency (Cal EPA) to develop and update (at least annually) a list of hazardous waste and substances sites. This list is used by the State, local agencies, and developers to comply with CEQA requirements. The list includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB).

Envision San José 2040 General Plan

The 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 hazards and hazardous materials and are applicable to the proposed project.

Envision San José 2040 Relevant Hazardous Material Policies

Policy	Description
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.
Action EC-7.9:	Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control or other applicable regulatory agencies, as appropriate, on projects with

Envision San José 2040 Relevant Hazardous Material Policies

Policy	Description
	contaminated soil and/or groundwater or where historical or active regulatory oversight exists.
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.

4.8.2 Hazards and Hazardous Materials Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,14
b. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,14
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,14
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,14
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
f. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
h. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3

4.8.3 Impacts Evaluation

a. – b. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The proposed project is the construction of a Topgolf facility and associated amenities, a hotel, and retail buildings and would not require the routine transport, use, or disposal of hazardous materials. Any hazardous materials used on the site in the future would be associated with landscaping and minor construction repairs (pesticides, herbicides, paint, etc.) over time and would be used and stored on the sites in accordance with all pertinent local, state, and federal regulations.

As described above, contaminated soil and groundwater exists on the site. Construction activities could result in the exposure of construction workers to hazardous materials.

Impact HAZ-1: Residual soil and groundwater contamination could expose construction workers and members of the public to hazardous materials during construction activities. **[Significant Impact]**

Mitigation Measures: As a condition of approval, the project proponent shall implement the following measures to reduce impacts from hazardous materials to a less than significant level:

MM HAZ-1.1: Sampling. The project applicant shall retain a qualified hazardous materials professional to conduct focused sampling and analysis for contamination of soil, soil vapor, and/or groundwater on-site prior to issuance of any grading permit. Sampling on the site shall be under the oversight of the Santa Clara County Department of Environmental Health, or equivalent regulatory agency, in accordance with a Work Plan prepared by a qualified professional and approved by the Santa Clara County Department of Environmental Health or equivalent regulatory agency such as the California Department of

Toxic Substances Control, or the California Regional Water Quality Control Board, (hereafter referred to as the “Agency”).

MM HAZ-1.2: Work Plan. The approved Work Plan shall describe sample methodology, sample locations, the quality assurance/quality control plan, reporting, and schedule. The Work Plan shall be implemented by the project and the results of the sampling shall be submitted to the Santa Clara County Department of Environmental Health (or equivalent regulatory agency). If additional investigation is required to sufficiently delineate the contaminants of concern, additional sampling shall be proposed and reviewed and approved by the Santa Clara County Department of Environmental Health (or equivalent regulatory agency).

A letter (or equivalent assurance) from Santa Clara County Department of Environmental Health (or equivalent regulatory agency) documenting completion of the Work Plan for on-site sampling to the satisfaction of the Santa Clara County Department of Environmental Health (or equivalent regulatory agency) shall be provided to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the Compliance Officer/Hazardous Materials Specialist of the City of San José Department of Environmental Services. In the event no further testing or remediation is required, a No Further Action letter (or equivalent assurance) from Santa Clara County Department of Environmental Health (or equivalent regulatory agency) shall be provided prior to issuance of any grading permit.

MM HAZ-1.3: Site Management Plan. A Site Management Plan shall be prepared by a qualified hazardous materials consultant to establish management practices for handling contaminated soil or other materials encountered during construction activities. The sampling results shall be compared to appropriate risk-based screening levels in the Site Management Plan. The Site Management Plan shall identify potential health, safety, and environmental exposure considerations associated with redevelopment activities and shall identify appropriate mitigation measures. The Site Management Plan shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and Santa Clara County Department of Environmental Health (or equivalent regulatory agency) for approval prior to commencing construction activities. The Site Management Plan shall include, but is not limited to, the following:

- Proper mitigation as needed for demolition of existing structures;
- Management of stockpiles, including sampling, disposal, and dust and runoff control including implementation of a stormwater pollution prevention program;

- Management of underground structures encountered, including utilities and/or underground storage tanks;
- Procedures to follow if evidence of an unknown historic release of hazardous materials (e.g., underground storage tanks, polychlorinated biphenyls [PCBs], asbestos containing materials, lead-based paint, etc.) is discovered during excavation or demolition activities;
- Traffic control during site improvements;
- Noise, work hours, and other relevant City regulations;
- Mitigation of soil vapors (if required);
- Procedures for proper disposal of contaminated materials (if required); and
- Monitoring, reporting, and regulatory oversight arrangements.

MM HAZ-1.4: Health and Safety Plan. A site-specific Health and Safety Plan shall be prepared by the project applicant prior to issuance of any grading permit for project construction to address potential health and safety hazards associated with implementation of the Work Plan and proposed redevelopment activities (e.g., site preparation, demolition, grading and construction). The Health and Safety shall govern activities of all personnel present during field activities. Any contractor performing a task not covered in the Health and Safety shall be required to develop a job hazard analysis (JHA) specific to that task prior to performing the task. The Health and Safety Plan shall be submitted to Santa Clara County Department of Environmental Health (or equivalent regulatory agency) for review and approval prior to commencing construction activities. A copy of the Santa Clara County Department of Environmental Health (or equivalent regulatory agency) approval shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the Compliance Officer/Hazardous Materials Specialist of the City of San José Department of Environmental Services.

MM HAZ-1.5: Should asbestos be detected in soil samples taken on the site, the project applicant shall prepare an Asbestos Dust Mitigation Plan and submit the plan to the Bay Area Air Quality Management District (BAAQMD) for review and approval prior to grading activities. The plan must describe dust control measures during grading as well as long term dust control measures. The plan shall include, at a minimum, the following measures:

- Track-out prevention and control measures;
- Active stockpiles shall be adequately wetted or covered with tarps;
- Control for disturbed surface areas and storage piles that remain inactive for more than seven days;
- Control for traffic on unpaved roads, parking lots, and staging areas;
- Control for earthmoving activities; and,
- Control for off-site transport.

With implementation of General Plan policies, appropriate clean-up actions, and precautionary measures, development of the project site would not expose construction workers, the public, or the environment to significant hazards related to soil or groundwater contamination. **[Less Than Significant Impact with Mitigation]**

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is located across N. First Street from an elementary school. The project site would be remediated prior to redevelopment with a Topgolf facility, hotel and retail buildings, and existing contaminated soils would be removed according to all pertinent local, state, and federal regulations. Some hazardous materials associated with landscaping and minor construction repairs would be stored onsite, but would not affect the nearby school. Traffic associated with the proposed development would emit Toxic Air Contaminants (TACs) as discussed in *Section 4.3 Air Quality*. However, these impacts would be less than significant with mitigation measures incorporated in the project (MM AQ-1.1 and MM AQ-1.2). **[Less Than Significant Impact With Mitigation]**

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to [Government Code Section 65962.5] and, as a result, would it create a significant hazard to the public or the environment?

The proposed project is not listed on the Cortese List. **[No Impact]**

e. - f. 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?

The project site is not located within an airport land use plan nor within the vicinity of a public or private airport. Proposed structures on the project site will not require FAA airspace review under FAR Part 77. **[Less Than Significant Impact]**

g. - h. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? 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?

The proposed project would not impair or interfere with the implementation of an adopted City of San Jose or County of Santa Clara emergency response plan or emergency evacuation plan.

The project site is not located near an urban-wildland interface and is not subject to hazards from wildland fires. Implementation of the proposed project would not expose people or structures to any risk from wildland fires. **[No Impact]**

4.8.4 Conclusion

The project is not proposing new hazardous materials uses and is not located on a site contaminated with hazardous materials. Implementation of the identified mitigation measures would reduce any potential impacts to a less than significant hazards and hazardous materials impact. **[Less Than Significant Impact With Mitigation]**

4.9 HYDROLOGY AND WATER QUALITY

The following discussion is based in part on a Storm Drain Impact Analysis prepared by *Schaaf & Wheeler* in July 2016. This report is attached as Appendix G.

4.9.1 Setting

4.9.1.1 *Hydrology and Water Quality*

Water Quality

The project site is located within the Guadalupe River watershed which covers a 170 square-mile area, including the Guadalupe River/Alviso Slough (adjacent to the west of the site). The water quality of the river/slough can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as “non-point” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Grading and excavation activities during construction could increase the amount of surface water runoff (i.e., particles of fill or excavated soil) from the site, or could erode soil downgradient, if the flows are not controlled).

Groundwater

The project site is located in the Santa Clara Valley Groundwater Basin between the Diablo Mountains to the east and Santa Cruz Mountains to the west. The Santa Clara Valley Groundwater Basin is filled by valley floor alluvium and the Santa Clara Formation. Groundwater at the project site can range from 14 to 15 feet below ground surface (bgs).¹⁷ Groundwater levels typically fluctuate seasonally depending on the variation in rainfall, irrigation from landscaping, and other factors. The project site does not contribute to the recharging of the County’s groundwater aquifers managed by the Santa Clara Valley Water District.

Storm Drainage

Runoff from the developed areas of the project site currently flows to storm drains on Liberty Street and N. First Street and is conveyed to a pump station near Gold Street.

4.9.1.2 *Flooding*

The elevation of the project site ranges from about sea level to approximately 14 feet above mean sea level (amsl) as a result of fill soils imported during and prior to the mid-1980s.¹⁸

According to the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Map, the site is located within Zone AE, which is defined as special flood hazard areas subject to inundation by the one percent annual flood (100-year flood), where base flood elevations have been

¹⁷ *Geologica, Inc.* Phase I Environmental Site Assessment: Pin High Golf Center & 3 Adjacent Parcels. November 10, 2015.

¹⁸ *Ibid.*

determined.¹⁹ The base flood elevation (the water-surface elevation of the 100-year flood) on the project site is 12 feet amsl.

The site is protected from San Francisco Bay tidal flooding by a series of non-accredited levees to the north. This non-accreditation means that for the purpose of meeting requirements set forth by the NFIP, those protective levees are assumed to be non-functional. The site is also protected from Guadalupe River floodwaters by a levee system. This system is, however, accredited and meets the requirements of the National Flood Insurance Program (NFIP), so the site is protected from Guadalupe River flooding.

4.9.1.3 Other Inundation Hazards

Dam Failure

According to the Santa Clara County Geologic Hazard Zones Map, the project site is located in a dam failure inundation zone for Anderson Dam.²⁰

Sea Level Rise

Among the potential implications of global climate change are rising sea levels. Sea level rise is a concern for many Bay Area residents, community leaders, and resource managers, especially along the margins of San Francisco Bay.

The National Oceanic and Atmospheric Administration (NOAA) has developed a range of sea level rise scenarios from zero to six feet, as well as potential impacts to marshes and human communities. The elevation of the proposed 36-acre site ranges from sea level to 14 feet amsl. Based on NOAA's coastal management tool for assessing potential sea level rise effects, the project site would be subject to sea-level rise of as little as one foot.²¹ The IPCC predicts that sea levels will rise from 1.7 to 3.2 feet by the year 2100.²²

Earthquake-Induced Waves and Mudflow Hazards

A seiche is the oscillation of a body of water which most frequently occurs in enclosed or semi-enclosed basins such as bays, lakes, or harbor. Seiches may be triggered by strong winds, changes in atmospheric pressure, earthquakes, tsunamis, or tides. A tsunami is a large tidal wave caused by an underwater earthquake, volcanic eruption or undersea landslides. Tsunamis affecting the San Francisco Bay Area would originate west of the San Francisco Bay in the Pacific Ocean. A mudflow is a large rapid mass of mud (which can accelerate up to 50 miles per hour) formed by loose earth

¹⁹ Federal Emergency Management Agency, *Flood Insurance Rate Map*. Map Numbers: 06085C0061H and 06085C0062J. May 18, 2009. Accessed on January 19, 2016.

²⁰ Santa Clara County, *Geologic Hazard Zones Map*. October 26, 2012. Available at: <https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf> Accessed on January 20, 2016.

²¹ National Oceanic and Atmospheric Administration. *Sea Level Rise and Coastal Flooding Impacts*. Available at: <<https://coast.noaa.gov/slr/>> Accessed on January 20, 2016.

²² IPCC. *Climate Change 2014: The Physical Science Basis*. Available at: <http://www.ipcc.ch/report/ar5/wg1/#.UlvpNH_Ix8E>. Accessed on May 22, 2016.

and water. Hillsides and slopes of unconsolidated material could be at risk to mudflows if these areas become saturated.

Based on the Association of Bay Area Government's (ABAG) Tsunami Inundation Map for Coastal Evacuation, the project site is not considered vulnerable to a tsunami. The site is not located adjacent to hillsides and, therefore, is not subject to mudflows.²³ The project site is not adjacent to an enclosed body of water, so seiches are not likely to occur at the site.

4.9.1.5 *Applicable Plans, Policies, and Regulations*

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.

The Federal Emergency Management Agency (FEMA) manages the NFIP and creates Flood Insurance Rate Maps (FIRMs) that designates 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. The project site is located in flood hazard zone AE, defined as a special flood hazard area with a one percent annual chance flood event (also known as the 100-year flood zone) as determined by the FEMA NFIP. Tidal inundation from San Francisco Bay under the regulatory assumptions necessitated by a non-accredited outboard levee system inundates the project site to a base flood elevation of 12 feet.

Federal and State Laws and Programs Regarding Water Quality

The Federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. The CWA governs discharges to the "Waters of the United States" which includes oceans, bays, rivers, streams, lakes, ponds, and wetlands. The Porter-Cologne Act established the State Water Resources Control Board (SWRCB).

Regulations set forth by the EPA and the SWRCB have been developed to fulfill the requirements of this legislation. EPA's regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into Waters of the United States. These regulations are implemented at the regional level by water quality control boards. For the City of San Jose, the water board is the San Francisco Bay RWQCB. Regional Boards are responsible for developing and enforcing water quality objectives and implementation plans, known as Basin Plans.

CWA Section 303(d) lists polluted water bodies which require further attention to support future beneficial uses. The San Francisco Bay and Guadalupe River are on the Section 303(d) list as an impaired water body for urban runoff/storm sewer and unpermitted discharges.

²³ Association of Bay Area Governments. *Tsunami Inundation Map for Emergency Planning*. Available at: <http://gis.abag.ca.gov/website/Hazards/?hlyr=tsunami> Accessed on January 20, 2016.

State Water Quality Control Board Nonpoint Source Pollution Program

In 1988, the SWRCB adopted the Nonpoint Source Management Program in an effort to control nonpoint source pollution in California. The Nonpoint Source Management Program requires individual permits to control discharge associated with construction activities. The Nonpoint Source Program is administered by RWQCB under the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities. Projects must comply with 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 Activities 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.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirements

The San Francisco Bay RWQCB has also issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP). Under provisions of the NPDES Municipal Permit, redevelopment 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. Amendments to the MRP require all of the post-construction runoff to be treated by using Low Impact Development (LID) treatment controls, such as biotreatment facilities, unless the project qualifies for Special Project credit reduction, which would allow the project to implement non-LID measures for all or a portion of the site depending on the project characteristics. This would also require a narrative discussion as to why the implementation of 100 percent LID measures is not feasible per the MRP.

City of San Jose Post-Construction Urban Runoff Management (Policy 6-29)

The City of San Jose's Policy No. 6-29 implements the stormwater treatment requirements of Provision C.3 of the Municipal Regional Stormwater NPDES Permit. The City of San Jose's Policy No. 6-29 requires all new development and redevelopment projects to implement post-construction Best Management Practices (BMP) and Treatment Control Measures (TCM). This policy also established specific design standards for post-construction TCM for projects that create, add, and/or replace 10,000 sf or more of impervious surfaces.

City of San Jose Hydromodification Management (Policy 8-14)

The City of San Jose'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 (with some exceptions) 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).

City of San Jose Floodplain Ordinance

The City’s Floodplain Ordinance establishes minimum elevations for finished building floors based on base flood elevations (BFEs) established for the NFIP, and generally prohibits any improvements that will cause a cumulative rise of more than one foot to the base flood elevation at any point in San Jose.

Envision San Jose 2040 General Plan

The 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 hydrology and water quality and are applicable to the proposed project.

Policy	Description
Policy IN-3.7	Design new projects to minimize potential damage due to stormwaters and flooding to the site and other properties.
Policy IN-3.9	Require developers to prepare drainage plans for proposed developments that define needed drainage improvements per City standards.
Policy MS-3.4	Promote the use of green roofs (i.e., roofs with vegetated cover), landscape-based treatment measures, pervious materials for hardscape, and other stormwater management practices to reduce water pollution.
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.
Policy ER-8.3	Ensure that private development in San José includes adequate measures to treat stormwater runoff.
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 stormwater controls.
Policy EC-5.7	Allow new urban development only when mitigation measures are incorporated into the project design to ensure that new urban runoff does not increase flood risks elsewhere.
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.

Alviso Master Plan

The Alviso Master Plan establishes the location, intensity, and character of land uses; the circulation pattern, and necessary infrastructure improvements to support development. The following policies are specific to hydrology and water quality and are applicable to the proposed project.

Alviso Master Plan Relevant Utilities Policies

Policies	Description
Storm Drainage Policy 1	All new development projects should be evaluated to determine the possible need for additional storm drainage facilities
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

4.9.2 Hydrology and Water Quality Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
c. 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 will result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
d. 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 will result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,20

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
e. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,20
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
g. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,16
h. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,16, 19
i. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.9.3 Impacts Evaluation

a., f. Would the project violate any water quality standards or waste discharge requirements? Would the project otherwise substantially degrade water quality?

Construction-Related Water Quality Impacts

Construction of the proposed project, including demolition, grading, and excavation activities, may result in temporary impacts to surface water quality. Surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. Construction of the project would disturb more than one acre of soil and, therefore, compliance with the National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities is required. As part of development of the proposed project, a Notice of Intent (NOI) would be submitted to the State Water Quality Control Board (SWQCB). Prior to initiation of construction or demolition activities a Storm Water Pollution Prevention Plan (SWPPP) would be prepared in accordance with the NPDES requirements. The SWPPP would identify specific Best Management Practices (BMPs) that would be used at the project site to treat and control stormwater, reduce sedimentation, and prevent erosion.

All development projects in San José shall comply with the City's Grading Ordinance. The City of San José Grading Ordinance requires the use of erosion and sediment controls to protect water

quality while a site is under construction. Prior to issuance of a permit for grading activity occurring during the rainy season (October 1 to April 30), the applicant is required to submit an Erosion Control Plan to the Director of Public Works for review and approval. The Plan must detail the Best Management Practices (BMPs) that would be implemented to prevent the discharge of stormwater pollutants.

The Municipal Regional Permit and City Council Policy 8-14 requires regulated projects to include measures to control hydromodification impacts where the project would otherwise cause increased erosion, silt pollutant generation, or other adverse impacts to local rivers and creeks. Development projects that create and/or replace one acre or more of impervious surface and are located in a subwatershed or catchment that is less than 65 percent impervious, must manage increases in runoff flow and volume so that post-project runoff shall not exceed estimated pre-project rates and durations. Projects located within catchment areas that drain to hardened channels that extend continuously to the Bay, or projects located within tidally-influenced creek areas or Bayland areas, are not subject to the City's hydromodification requirements.

Based on the SCVUPPP Watershed Map for the City of San Jose, the project site is currently exempt from the NPDES hydromodification requirements because it is located in a subwatershed that drains into a hardened channel and/or tidal area.²⁴

Standard Permit Conditions: Consistent with the General Plan, standard permit conditions that shall be implemented to prevent stormwater pollution and minimize potential sedimentation during construction include, but are not limited to the following:

- Utilize on-site sediment control BMPs to retain sediment on the project site;
- Utilize stabilized construction entrances and/or wash racks;
- Implement damp street sweeping;
- Provide temporary cover of disturbed surfaces to help control erosion during construction; and
- Provide permanent cover to stabilize the disturbed surfaces after construction has been completed.

The project, with the implementation of the SWPPP and standard permit conditions, would not result in significant construction-related water quality impacts.

²⁴ Santa Clara Valley Urban Runoff Pollution Prevention Program web site. http://www.scvurppp-w2k.com/hmp_maps.htm

Post-Construction Water Quality Impacts

Table 4.9-1 below shows the estimated change in impervious and pervious surfaces on the 36-acre project site. The project would increase the amount of impervious surfaces on the project site compared to existing conditions.

Table 4.9-1: Pervious and Impervious Surfaces On-Site					
Site Surface	Existing/Pre-Construction (SF)	%	Project/Post-Construction (SF)	%	Difference (SF)
<i>Impervious</i>					
Building Footprint and Hardscape	349,908	25%	1,022,596	74%	+ 672,688
<i>Pervious</i>					
Pervious Surfaces	1,030,679	75%	357,991	26%	-672,688
<i>Total</i>	1,380,587	100%	1,380,587	100%	
Note: While the total site is 37.66 acres, this table is based upon the total area of the disturbed site, which is 31.69 acres (1,380,587 sf). The undisturbed area is at the south end of the site.					

Under existing conditions, the site is 75 percent pervious. The proposed project would increase the amount of impervious surfaces on-site by approximately 672,688 square feet, resulting in site coverage of 26 percent pervious surfaces. The result of this change would be an increase in the amount of stormwater runoff generated from the project site.

Due to the substantial increase in impervious area from development, the proposed project could adversely impact water quality. Pollutants and chemicals associated with urban development drain from new impervious surfaces into the Guadalupe River and ultimately to San Francisco Bay. These pollutants may include, but are not limited to, pesticides and insecticides, heavy metals from automobile emissions, oil, grease, debris, and air pollution residue. Contaminated urban runoff that remains relatively untreated may result in incremental long-term degradation of water quality. The Guadalupe River is listed as an impaired water body by the EPA 303(d) for trash and diazinon, a pesticide linked to aquatic toxicity. Potential sources for these pollutants include urban runoff and storm sewers.

The project would comply with the City of San José’s Post-Construction Urban Runoff Policy 6-29 and the RWQCB Municipal Regional NPDES permit. The City’s Post-Construction Urban Runoff Policy 6-29 establishes specific requirements to minimize and treat stormwater runoff from new and redevelopment projects. The RWQCB Municipal Regional NPDES permit mandates the City of San José use its planning and development review authority to require that stormwater management measures such as Site Design, Pollutant Source Control, and Treatment measures are included in new and redevelopment projects to minimize and properly treat 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.

In order to meet these requirements, stormwater runoff from the site would be collected via new on-site catch basins, most of which would be located in proposed bio-retention areas on-site. Stormwater collected in the bio-retention areas would be treated prior to discharge to the City's storm drain system. The proposed treatment facilities would be numerically sized and would have sufficient capacity to treat the runoff entering the storm drainage system consistent with the NPDES requirements.

The General Plan FEIR 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 requirements 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]**

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge?

The project site does not presently contribute to recharging of the groundwater aquifers used for water supply (managed by the Santa Clara Valley Water District) and this condition would not change once development is complete. As a result, implementation of the project would not interfere with groundwater recharge or cause a reduction in the overall groundwater supply. **[Less Than Significant Impact]**

c. Would the project 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 will result in substantial erosion or siltation on-or off-site?

The project site is exempt from the hydromodification control requirements in the Municipal Regional NPDES permit and Council Policy 8-14 because it is located in a subwatershed that drains into a hardened channel and/or tidal area. Moreover, details of specific site design and stormwater treatment control measures demonstrating compliance with Municipal Regional NPDES permit and City Council Policy 6-29 shall be included in the project design, to the satisfaction of the Director of Planning, Building and Code Enforcement.

The project would not alter the course of a stream or river. As part of the development of the proposed project, a SWPPP would be prepared in compliance with NPDES requirement and would ensure erosion or siltation impacts are less than significant. **[Less Than Significant Impact]**

d. Would the project 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 will result in flooding on-or off-site?

Stormwater catch basins would be located throughout the site (refer to Figure 3.0-12). Stormwater would be collected in the catch basins, then directed to bioretention areas for treatment and detention before being conveyed off-site to an existing 48-inch storm drain in N. First Street. Although the

project would increase the amount of impervious surfaces on the site, the proposed detention system would limit runoff from the proposed project to the equivalent of existing conditions.

Storm drain system models for the North San José area created by *Schaaf & Wheeler* for the City of San José have been used to evaluate the impact of the project on flood conditions in the area and the impact to existing storm drain system capacity (refer to Appendix G). The modeling determined that the detention system proposed by the project, which would limit runoff to the equivalent of existing conditions, would prevent on- and off-site flooding impacts related to stormwater runoff generated by the project. **[Less than Significant Impact]**

e. Would the project create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As described previously, the project would include a detention system that would limit runoff from the proposed project to the equivalent of existing conditions on the site. The project, therefore, would not create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems. The proposed project is also required to comply with the City of San José's Post-Construction Urban Runoff Policy 6-29 and the RWQCB Municipal Regional NPDES permit. Compliance with these Standard Permit Conditions would ensure the project would not provide substantial additional sources of polluted runoff. **[Less than Significant Impact]**

g. – i. Would the project 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? Would the project place within a 100-year flood hazard area structures which will impede or redirect flood flows? Would the project 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?

Impacts to the Project

As previously discussed in Section 4.0, 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 or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, such as flooding impacts to proposed projects, which are discussed below.

The project site is located within the special flood hazard area (SFHA) Zone AE, subject to inundation by the 1% annual flood (100-year flood). Tidal inundation from San Francisco Bay under the regulatory assumptions necessitated by a non-accredited outboard levee system inundates the project site to a base flood elevation of 12 feet.

Standard Permit Conditions: The project would implement the following standard permit conditions to reduce flooding impacts to proposed structures in order to comply with relevant City policies.

- By placing all structures on engineered fill compacted in conformance with NFIP standards with the minimum lowest adjacent grade of habitable floors one foot above elevation of 12 feet, structures would not be placed within a 100-year flood hazard area. An Elevation Certificate (FEMA Form 81-31) for the proposed structures, based on construction drawings, is required prior to issuance of a building permit. Building support utility systems such as HVAC, electrical, plumbing, air conditioning equipment, and other service facilities must be elevated above the base flood elevation or protected from flood damage.

Dam Inundation

According to dam failure inundation maps of the northern San José region, the project site is located within the inundation area for Anderson Dam.²⁵ Routine inspections and analysis of the potential risks to the Anderson Dam are performed by the Santa Clara Valley Water District (SCVWD). Results from the most recent evaluation in 2009 determined an expected maximum inundation depth of 8.05 feet (elevation 17 feet) in the project area within six hours and 44 minutes after dam failure.²⁶

These values assume dam failure at full capacity during a large storm event, whereas currently, the maximum depth is currently maintained below 68 percent full, following a recent SCVWD seismic analysis.²⁷ It was recommended that the water level should remain 25 feet below the spillway until seismic retrofits can be completed (anticipated date of completion is 2018). Due to the high water surface elevations occurring with a dam failure, designing the project to withstand dam inundation is infeasible.

While the project site is subject to deep inundation should Anderson Dam fail catastrophically, the dam is inspected twice a year by the District in the presence of representatives from the California Division of Safety of Dams and the Federal Energy Regulatory Commission. Furthermore as previously discussed, Anderson Reservoir is managed to prevent significant damage during a maximum credible earthquake. So while potential inundation resulting from catastrophic dam failure could damage property and proposed structures within the project site posing a severe safety hazard, the probability of such failure is extremely remote.

Impacts from the Project

The placement of structures within a 100-year flood hazard area which will impede or redirect flood flows would be considered an impact from the project on the environment.

The placement of fill within an area inundated by San Francisco Bay tides does not change the elevation of the tide and therefore does not impede or redirect tidal flooding. Current storm water

²⁵ ABAG. Dam Failure Inundation Hazard Map for NW San Jose/Milpitas/ Santa Clara. October 20, 2003

²⁶ Schaaf & Wheeler. Hydrology and Water Quality Review Midpoint Project. January 10, 2014.

²⁷ Santa Clara Valley Water District. Anderson Dam Seismic Stability Study. July 2011. Available at: <http://www.valleywater.org>

runoff modeling within the interior areas of north San José (i.e. those areas protected from flooding by the outboard levee system, Guadalupe River levees, and Coyote Creek levees north of Montague Expressway) shows that proposed buildings in the project area will not substantially impede or redirect flood flows.²⁸ **[Less Than Significant Impact]**

j. Would the project expose people or structures to inundation by seiche, tsunami, or mudflow?

The project site is not within a tsunami inundation area or subject to a seiche. A seiche is the resonant oscillation of water generated in an enclosed body of water, such as San Francisco Bay, from seismic activity. Seiches are related to tsunamis for enclosed bays, inlets, and lakes. These tsunami-like waves can be generated by earthquakes, subsidence or uplift of large blocks of land, submarine and onshore landslides, sediment failures and volcanic eruptions. The strong currents associated with these events may be more damaging than inundation by waves. The largest seiche wave ever measured in the San Francisco Bay, following the 1906 earthquake, was four inches high. The Bay Area has not been adversely affected by seiches during its history within this seismically active region of California.²⁹ Thus the risk of inundation of seiche at the project site low.

Tsunami hazards for the Santa Clara County coastline have been modeled by the California Emergency Management Agency (Cal EMA) to identify areas at risk for tsunami inundation. Multiple source events were selected to represent local and distant earthquakes, and hypothetical extreme undersea, near-shore landslides occurring around the San Francisco Bay region. As defined by the Tsunami Inundation Map for Emergency Planning Milpitas Quadrangle dated July 31, 2009, the risk of inundation by tsunami at the proposed site is low.

The adhesive nature of site soils and the relatively flat grading at the site do not promote mudflow. Therefore, the possibility of landslide and mudflow hazards at the project site is low.

As previously discussed in Section 4.0, 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 or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, such as flooding impacts to proposed projects. The project is unlikely to be affected by seiches, tsunamis, or mudflows, and therefore would not conflict with relevant City policies. Additionally, the project would not exacerbate risks from seiche, tsunami, or mudflow. **[Less Than Significant Impact]**

4.9.4 Conclusion

With implementation of standard permit conditions, the project would not result in significant hydrology and water quality impacts. **[Less Than Significant Impact]**

²⁸ Schaaf & Wheeler. Hydrology and Water Quality Review Midpoint Project. January 10, 2014.

²⁹ US Army Corps of Engineers San Francisco District, Port of Oakland. *Oakland Harbor Navigation Improvement (-50 foot) Project SCH No. 97072051 Final Environmental Impact Statement/Report*, May 1998, updated January 2000.

4.10 LAND USE

4.10.1.1 *Existing and Past Land Uses*

The eastern portion of the site is currently used by the Pin High Golf Center for recreational and commercial uses. The western portion of the site is used as an RV storage yard and is primarily a vacant lot.

The property was mostly farmland from before 1939 until around 1970. In the parcel where Pin High Golf Center currently operates, there was a complex of farm buildings until the later 1960s/early 1970s. Other buildings of uncertain use were formerly located on the south side of the property that is currently used as an RV storage yard from before 1939 until the later 1960s or early 1970s. In the late 1980s to early 1990s, the middle of the Pin High Golf Center property was used as a storage yard for trailers, boats etc., while the rest of the site was vacant. The Pin High Golf Center was constructed in 1993, and the RV storage area became operational around the same time.

The site was noted to previously be at or below sea level, and the present topography is the result of a continuing program of land fill. Areas in Alviso in the site vicinity are known to have been used historically as informal or formal dumping grounds for excess soils and demolition debris. The material dumped on the subject property was primarily composed of soil with incorporated asphalt and concrete chunks.

4.10.1.2 *Surrounding Land Uses*

The site is located north of SR 237, northeast of the Guadalupe River, southwest of N. First Street, and east Liberty Street.

Development immediately north of the site, across N. First Street, includes the George Mayne Elementary School, Alviso Youth Center, Alviso Branch Library, single-family residences, and a small strip mall. Development to the west of the site, across Liberty Street, consists of one-story single family residences, a two-story health clinic with associated paved parking area, and a small community center consisting of a one-story structure and landscaped areas. Properties on the east side of Liberty Street contain a towing yard, and one-story single family residences are situated between the Guadalupe River and the western area of the site. Development to the south of the site, across the Guadalupe River, consists of a mobile home community and a two-story commercial office development.

An active construction site is located southeast of the project site on N. First Street. A structure currently under construction is six-stories and 104 feet in height. Three additional structures approved for development on the same property would range from three to six stories and 62 to 104 feet in height.

The 57-acre property directly east of George Mayne Elementary School, across N. First Street from the project site, is approved for the development of four office buildings (two to three stories in height) and three industrial warehouse buildings.

4.10.1.3 *Site Constraints*

Several conditions on or adjacent to the site constrain development of the site or require consideration. These conditions are listed below followed by the discussion of each constraint.

- The site is highly visible from segments of public trail and open space areas in the Alviso community.
- Geotechnical and hazardous materials hazards are associated with on-site soils.
- High voltage electric transmission lines transect the western portion of the site.
- Proximity to wildlife habitat along the riparian corridor of the Guadalupe River.
- Construction activities associated with the project could affect residences in the vicinity of the site.
- Noise generated by the proposed uses could affect residences in the vicinity of the site.

Potential impacts related to the proximity of the project to wildlife habitat is discussed in Section 4.4 *Biological Resources*. Issues associated with geologic and hazardous materials conditions are discussed in Sections 4.6 *Geology and Soils* and 4.8 *Hazards and Hazardous Materials*. Noise conditions are addressed in Section 4.12 *Noise*. Impacts associated with construction activities are discussed in Sections 4.3 *Air Quality* and 4.12 *Noise*. Aesthetic conditions are discussed in Section 4.1 *Aesthetics*.

4.10.1.4 *General Plan and Zoning Designations*

Envision San Jose 2040 General Plan

The majority of the project site is designated *Combined Industrial/Commercial (CIC)* in the Envision San Jose 2040 General Plan. The *CIC* designation allows for commercial and/or low-density light industrial uses with building heights which range from one to 24 stories and densities of up to a floor area ratio (FAR) of 12.

The southern boundary of the project site, adjacent to the Guadalupe River Trail and within the 100-foot riparian setback from the Guadalupe River, is designated as *Open Space, Parklands, and Habitat (OSPH)* in the Envision San José 2040 General Plan. The *OSPH* designation is intended for low-intensity uses, typically devoted to open space, parks, recreation areas, trail, habitat buffers, nature preserves and other permanent open space areas.

Alviso Master Plan

The project site is located within the boundaries of the Alviso Village. The Alviso Master Plan, adopted in 1998, shows a land use designation of *Combined Industrial/Commercial* for the project site. Allowed uses under the *Combined Industrial/Commercial* designation include commercial activities, industrial uses, or a compatible mix. Commercial uses could include retail, restaurant, office, hotel, or other commercial establishments. Other allowed non-industrial uses are primary/secondary schools, freestanding day care centers, churches, and sports, social, or arts centers.

Zoning Ordinance

The western portion of the project site, currently occupied by the RV storage lot, is zoned as *CN-Commercial Neighborhood*. A *Commercial Neighborhood* designation is used for neighborhood centers, multi-tenant commercial along connectors and main streets, and small corner commercial. Allowable industrial uses under this designation include warehousing, office, light manufacturing, wholesaling, and service establishments.

The remainder of the site, occupied by the Pin High Golf Center is zoned as *RM-Multiple Residence*. The intended use for *RM* zoning is to reserve land for the construction, use and occupancy of higher density residential development. This zoning allows a minimum of 6,000 sf of building area, a maximum height of 45 feet (three stories).

4.10.1.4 *Applicable Plans, Policies, and Regulations*

Envision San José 2040 General Plan

The 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 land use and are applicable to the proposed project.

Envision San José 2040 Relevant Land Use Policies

Policies	Description
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 environmental 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.
Policy ER-2.4	When disturbances to riparian corridors cannot be avoided, implement appropriate measures to restore, and/or mitigate damage and allow for fish passage during construction.
Policy ER-2.5	Restore riparian habitat through native plant restoration and removal of nonnative/invasive plants along riparian corridors and adjacent areas.

Alviso Master Plan

The Alviso Master Plan is a policy document that provides the background, vision, and character to guide the future of a unique area at the northern edge of San Jose. One of the stated purposes of the Plan is to protect and enhance the small town quality of Alviso by guiding appropriate new development, community facilities, infrastructure, and beautification. The master plan establishes the location, intensity, and character of land uses; the circulation pattern, and necessary infrastructure improvements to support development. The following policies are specific to land use and are applicable to the proposed project.

Alviso Master Plan Relevant Land Use Policies

Policies	Description
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.
River Orientation Policy 1	Commercial land uses adjacent to the Guadalupe River should provide access to the waterway.
River Orientation Policy 2	Development along the Guadalupe River should be designed to reflect and acknowledge the river environment by orienting seating areas, windows, decks, balconies, and open spaces to the river while orienting utility, parking, storage, and trash areas away from it.
River Orientation Policy 3	New buildings adjacent to the Guadalupe River/Alviso Slough should be of an appropriate scale and character to enhance this waterway as a public oriented recreation resource and as a natural riparian corridor.
Trail Circulation Policy 1	The trails that pass through Alviso should be maintained and new trails should be developed.
Development Standards for Commercial Development in the Village Area	A. Height: 40 feet, two stories above flood elevation. E. Riparian Setback: For properties adjacent to the Guadalupe River, buildings, parking, and other paved areas, and ornamental landscaping must be at least 100 feet from the riparian edge. Viewing decks, seating areas, balconies, and/or other pedestrian access points are permitted in the riparian setback area.

Habitat Conservation Plan/Natural Community Conservation Plan

As described in Section 4.4 *Biological Resources*, the Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (HCP), which encompasses a study area of 519,506 acres (or approximately 62 percent of Santa Clara County), was adopted by six local entities in Santa Clara County and went into effect in October 2013. The entire 36-acre project site is contained within the boundaries of the HCP, and the project would be considered a covered activity.

4.10.2 Land Use Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.10.3 Impacts Evaluation

a. *Would the project physically divide an established community?*

The project proposes to construct a Topgolf entertainment facility, a 200-room hotel, and 110,000 sf of retail uses on the 36-acre project site. The site would be accessed by existing streets (N. First Street and Liberty Street). The project would not physically divide an established community. [**Less Than Significant Impact**]

b. *Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?*

San José 2040 General Plan and Alviso Master Plan

The proposed project would be consistent with the current *Combined Industrial/Commercial* General Plan land use designation, which allows commercial and/or low-density light industrial uses with building heights which range from one to 24 stories and densities of up to a FAR of 12. The proposed project would be consistent with the *Combined Industrial/Commercial* designation.

The Alviso Master Plan, which is incorporated into the City’s General Plan, includes building height restrictions for structures within the Alviso Village, the area in which the project site is located. The project proposes the following text amendment (shown in underline) to the Alviso Master Plan to accommodate the proposed heights of the hotel and Topgolf entertainment facility structures, as well as the Topgolf net poles and netting.

Page 55: Village Area Guidelines for Commercial Development, Section 5 Development Standards, Subsection A.

Height: 40 feet, 2 stories above flood elevation. For properties on the west side of North First Street between Liberty and Tony P. Santos Streets, the maximum allowable building height shall not exceed 65 feet, 5 stories above flood elevation. Non-building structural uses, including structures on top of or attached to buildings, such as but not limited to, energy saving devices, wireless communication antennae, net poles, and other associated structures through the development project review shall establish a specific height, not to exceed the maximum allowable height of 170 feet on sites with non-residential or non-urban land use designations.

Although the proposed text amendment would allow increased building heights on the site, the amount of development allowed on the site under the *Combined Industrial/Commercial* would not change, and the uses proposed by the project would be consistent with those allowed under the General Plan designation.

With adoption of the proposed text amendment to allow increased building and non-building structure heights, and conformance to General Plan Policies and policies of the Alviso Master Plan, the project would be consistent with the General Plan and Alviso Master Plan. **[Less Than Significant Impact]**

Zoning Regulations

The project site is proposed to be rezoned from *CN-Commercial Neighborhood* and *RM-Multiple Residence* to a planned development [*A(PD)*] zoning district to allow construction of a Topgolf entertainment facility, a 200-room hotel, and 110,000 sf of retail uses on the site. The purpose of the rezoning is to allow the development of commercial uses on the portion of the site currently zoned *RM-Multiple Residence*. With the proposed rezoning, the project would not conflict with the City's zoning ordinance.

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The project site is located within the boundaries of the HCP, and would be considered a covered activity. As described in Section 4.4 *Biological Resources*, the project would comply with the requirements of the HCP. **[Less Than Significant Impact]**

4.10.4 Conclusion

The proposed project would not result in a significant land use impact. **[Less Than Significant Impact]**

4.11 MINERAL RESOURCES

4.11.1 Existing Setting

Mineral resources found in Santa Clara County include construction aggregate deposits such as sand, gravel, and crushed stone. The only area in the City of San Jose that is designated by the State Mining and Geology Board under the Surface Mining and Reclamation Act of 1975 (SMARA) as containing mineral deposits which are of regional significance is Communications Hill, which is located over 11 miles southeast of the project site and generally bounded by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue.³⁰

4.11.2 Mineral Resources Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
d. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
e. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3

4.11.3 Impacts Evaluation

a. – b. Would the project result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state or in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project site is not located in an area containing known mineral resources. **[No Impact]**

4.11.4 Conclusion

The project would not result in the loss of availability of known mineral resources. **[No Impact]**

³⁰ City of San Jose. 2011. *Envision San Jose 2040 General Plan Final Program EIR*.

4.12 NOISE

The following discussion is based on the noise assessment completed by *Bollard Acoustical Consultants, Inc.* in September 2016. The report is attached as Appendix H of this IS.

4.12.1 Existing Setting

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a “decibel” (dB) scale which serves as an index of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the “A-weighted” decibel or dBA. Further, sound is averaged over time and penalties are added to the average for noise that is generated during times that may be more disturbing to sensitive uses such as early morning or late evening.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as Leq, DNL (also referred to as Ldn), or CNEL.³¹ Additional terminology to describe noise includes Lmax, which refers to instantaneous maximum noise levels.

4.12.1.1 *Existing Noise Conditions*

The project site is currently occupied by the Pin High Golf Center and an RV storage area. Commercial buildings are located at the western border of the project site. Residential neighborhoods are north of the project across N. 1st Street. Adjacent to the east of the residences are the Alviso Branch Library, Alviso Park, and the George Mayne Elementary School. The southern section of the site is bordered by the Guadalupe River Trail and the Guadalupe River. Residential uses are also located west of the site across the Guadalupe River and south of the site across SR-237.

A noise monitoring survey was completed at various locations near the site on Wednesday December 16, 2016 and Thursday December 17, 2016. The locations of the monitoring devices are shown in Figure 4.12-1. Measurements were taken at the residential areas across N. First Street (Site A), across the Guadalupe River (Site B), and across SR-237 (Site C). Due to a similar setback from North First Street, the noise measurement taken along North First Street (Site A) is representative of existing noise exposure at the residential area across North First Street, the George Mayne Elementary School, Alviso Branch library, and the residences north of the site on Liberty Street.

³¹ **Leq** stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. **Ldn or DNL** stands for Day-Night Level and is a 24-hour average of noise levels, with 10 dB penalties applied to noise occurring between 10:00 PM and 7:00 AM. **CNEL** stands for Community Noise Equivalent Level; it is similar to the DNL except that there is an additional five (5) dB penalty applied to noise which occurs between 7:00 PM and 10:00 PM. Generally, where traffic noise predominates, the CNEL and DNL are typically within two (2) dBA of the peak-hour L_{eq} .



Legend

- A Long-Term Noise Measurement Sites
- Overall Project Area
- Topgolf Project Area

Scale (feet)

0 250 500

NOISE MEASUREMENT LOCATIONS

FIGURE 4.12-1

The existing noise environment in the project vicinity is dominated by vehicular traffic noise from SR-237 and N. First Street. Airplane flyovers also contribute to ambient noise levels at the site and in the project vicinity. Table 4.12-1 summarizes the results of the noise monitoring survey.

Table 4.12-1: Existing Ambient Noise Monitoring Results							
Site	Location	Date	L_{dn}	Measured Hourly Noise Levels (dB)			
				Daytime (7 AM – 10 PM)		Nighttime (10 PM – 7 AM)	
				L_{eq}	L_{max}	L_{eq}	L_{max}
A	Residences on N. First Street	12/16/15	65	63	74-88	56	71-81
		12/17/15	66	63	75-82	56	71-81
B	Residences west of Guadalupe River	12/16/15	62	58	72-82	52	59-76
		12/17/15	64	60	75-86	53	55-76
C	Residences south of SR-237	12/16/15	62	60	71-80	52	61-78
		12/17/15	62	60	71-80	52	61-75

4.12.1.2 Sensitive Receptors

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, child-care centers, retirement homes, convalescent homes, hospitals, and medical clinics. The closest sensitive receptor to the project site is an existing residence located on the southern corner of N. First Street and Liberty Street, adjacent to the northwest boundary of the site. Residences are also located across N. First Street, Liberty Street, and Moffat Street from the site. Additionally, George Mayne Elementary School is located across N. First Street from the site.

4.12.1.3 Applicable Plans, Policies, and Regulations

State Building Code, Title 24, Part 2

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dBA DNL or CNEL in any habitable room.

Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects with the City. The following policies are specific to noise and vibration and are applicable to the proposed project. In addition, the noise and land use compatibility guidelines set forth in the General Plan are shown in Table 4.12-2.

Envision San José 2040 Relevant Noise and Vibration Policies

Policies	Description
Policy EC-1.1	<p>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. Applicable standards and guidelines for land uses in San José include:</p> <p><u>Interior Noise Levels</u></p> <ul style="list-style-type: none"> • The City’s standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected <i>Envision General Plan</i> traffic volumes to ensure land use compatibility and General Plan consistency over the life of this plan.
Policy EC-1.2	<p>Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Land Use Categories 1, 2, 3 and 6 in Table EC-1 in the General Plan or Table 4.12-2 in this Initial Study) 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:</p> <ul style="list-style-type: none"> • 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	<p>Mitigate noise generation of new nonresidential 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.</p>
Policy EC-1.6	<p>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.</p>
Policy EC-1.7	<p>Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City’s Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:</p> <ul style="list-style-type: none"> • Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

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 (peak particle velocity) 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.

Table 4.12-2: 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.

City of San José Municipal Code

The Municipal Code restricts construction hours within 500 feet of a residential unit to 7:00 AM to 7:00 PM Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval.³²

The Municipal Code also limits noise levels at adjacent properties. Chapter 20.40.600 states that in commercially zoned areas, sound pressure levels generated by any use or combination of uses on a property shall not exceed 55 dBA at the property line of an adjacent property used or zoned for residential purposes except upon issuance and in compliance with a planning permit approval. Although the project does not share a property line with land zoned for residential use, residential uses are located near the site across N. First Street and can be considered adjacent to the project site.

4.12.2 Noise Environmental Checklist

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,17
b. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,17
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,17
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,17
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
f. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3

³² The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.

4.12.2.1 *Noise and Vibration Thresholds*

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Based on the applicable noise standards and policies for the hotel site (refer to Section 4.12.1.3), a significant noise impact would result if interior day-night average noise levels exceed 45 dBA Ldn (General Plan Policy EC-1.1).

In addition, a substantial permanent noise increase would occur if the noise level increase resulting from the project (e.g., noise from project operations or project-generated traffic) is three (3) dBA Ldn or greater at noise-sensitive receptors, with an ambient noise level of 60 dBA Ldn or greater. Where noise levels would remain at or below the normally acceptable noise level standard with the project, noise level increases of five (5) dBA Ldn or greater would be considered significant (General Plan Policy EC-1.2).

Temporary construction noise impacts from the project would be significant if the project is located within 500 feet of residential uses (or 200 feet of commercial or office uses) and would involve substantial noise generating activities (such as grading, excavation, and pile driving, etc.) for more than one year (General Plan Policy EC-1.7); and if hourly average noise levels exceed 60 dBA Leq and are at least five dBA above the ambient noise environment at nearby residential uses.

Construction vibration impacts would be considered significant when construction activities are anticipated to generate a peak vertical particle velocity of 0.08 in/sec at sensitive historic structures and 0.20 in/sec at buildings of normal conventional construction (General Plan policy EC-2.3). Based on a noise assessment completed for the implementation of Envision San José 2040 General Plan, heavy tracked vehicles (e.g., bulldozers or excavators) can generate distinctly perceptible groundborne vibration levels when this equipment operates within approximately 25 feet of sensitive land uses. Impact pile drivers can generate distinctly perceptible ground-borne vibration levels at distances up to approximately 100 feet, and may exceed building damage thresholds within 25 feet of any building, and within 50 to 100 feet of a historical building, or building in poor condition.

In summary, and based on the above thresholds and the City's standards, a significant noise impact would result if:

- The interior day-night average noise levels for the proposed hotel would exceed 45 dBA DNL (General Plan Policy EC-1.1);
- The project would expose sensitive residential receptors to day-night average noise levels exceeding the General Plan noise standard of 55 dBA DNL (or the ambient noise level if existing noise levels currently exceed the standard) (General Plan Policy EC-1.3);
- A permanent noise level increase resulting from the project is three dBA DNL or greater, with a future noise level of 60 dBA DNL or greater. Where noise levels would remain at or below the normally acceptable noise level standard with the project, noise level increases of five (5) dBA DNL or greater would be considered significant (General Plan Policy EC-1.2); or
- A temporary noise level increase would occur where noise from project construction activities exceed 60 dBA Leq and the ambient noise environment by at least five dBA Leq at noise-

sensitive uses in the project vicinity for a period greater than one year (General Plan Policy EC-1.7);

- Construction activities are anticipated to generate a peak vertical particle velocity of 0.08 in/sec at sensitive historic structures and 0.20 in/sec at buildings of normal conventional construction (General Plan policy EC-2.3).

4.12.3 Impacts Evaluation

- a. **Would the project 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 applicable standards of other agencies?***

Noise from Project-Generated Traffic

With development of the proposed project, traffic volumes on the local roadway network will increase. Those increases in daily traffic volumes will result in a corresponding increase in traffic noise levels at existing uses located along those roadways. Project-generated traffic volumes contained in the Transportation Impact Analysis prepared for the project (refer to Appendix I) were added to existing traffic volumes on nearby roadways to estimate the increase in traffic noise resulting from the project. The results, as shown in Table 4 of Appendix H, indicate that project-generated traffic would result in a maximum increase of 2.9 dBA, which would occur on N. First Street between Trinity Park Drive and Nortech Parkway. Because the project would not increase traffic noise by three dBA on any nearby roadway, it would result in a less than significant impact (refer to Appendix H). **[Less Than Significant Impact]**

Noise from Project Operation

Parking Lot Noise

The project proposes both surface level and garage parking. Garage parking areas will be located beneath the proposed structures and would be shielded from the nearest noise-sensitive receptors located opposite the project site on N. First Street by landscaped berms. As a result, noise generated by garage parking lot activities would be reduced due to shielding provided by intervening topography and structures.

As a means of predicting the noise generation due to parking lot activities, such as engine startups, door slams, and car horns, noise level data collected at various parking lots was utilized. That data indicate that a typical maximum noise level associated with parking lot activity did not exceed 65 dBA L_{max} at a reference distance of 50 feet.

Because individual cars entering and leaving the proposed parking areas will result in brief periods of noise generation, impacts associated with parking lot movements are assessed relative to the City's Municipal Code maximum noise level standard (L_{max}) of 55 dBA at the property line shared with the residential use.

The distance between the nearest proposed garage parking spaces and the closest existing residences to the north, is approximately 150 feet. At that distance, maximum noise levels generated by the

nearest parking lot activities are predicted to be approximately 55 dBA Lmax prior to consideration of shielding provided by the landscape berms. That shielding is predicted to result in a reduction of approximately 10 dBA at the nearest residences, resulting in lower level parking lot noise emissions of 45 dBA Lmax at the nearest residences.

The distance between the nearest proposed ground level parking spaces and the closest existing residence to the north is approximately 250 feet. The residences to the north will be partially screened from view of the ground level parking spaces by intervening commercial buildings. That screening is predicted to result in a minimum five dBA reduction in parking lot noise levels at those northern residences. Resulting maximum ground level parking lot noise levels at these residences would be approximately 46 dBA Lmax.

The residences to the south, on the opposite side of the Guadalupe River, are located approximately 500 feet from the nearest ground level parking space at the project site. These residences would not be shielded from view of the proposed ground-level parking areas. Maximum ground-level parking lot noise levels at these residences are predicted to be approximately 45 dBA Lmax.

The residences south of SR-237 are approximately 1,700 feet from the nearest proposed ground level parking area associated with the project site. Those residences are substantially shielded from view of the project site by a grade differential as well as the masonry sound wall along the southern side of SR-237. Resulting maximum ground level parking lot noise levels at the residences identified within Area 3 would be approximately 19 dBA Lmax.

At the lone residence located at the southern corner of N. First Street and Liberty Street, as well as at George Mayne Elementary School and Alviso Branch Library, parking lot noise from the proposed project would be substantially screened by intervening structures and attenuated due to the considerable setbacks from these sensitive locations and the nearest parking areas. As a result, maximum ground-level parking lot noise levels at George Mayne Elementary School and Alviso Branch Library are predicted to be 34 and 25 dB Lmax, respectively. These levels would satisfy the City's Zoning Code 55 Lmax exterior noise level standard. Parking lot noise levels within the school classrooms and library within Area 4 would be 20 dB lower due to noise attenuation provided by the building façade.

As described above, noise from parking lot activities on the project site would not exceed 55 dBA at the adjacent residential property line, resulting in a less than significant impact. **[Less Than Significant Impact]**

Mechanical Equipment Noise

The heating, ventilation, and air conditioning (HVAC) systems for maintaining comfortable temperatures within the proposed hotel, commercial/retail, and Topgolf facility office uses will vary. For the commercial buildings, HVAC systems would likely consist of packaged rooftop air conditioning systems. For the proposed hotel use, mechanical equipment could either be located internally within a mechanical equipment room or on the rooftop. The mechanical equipment for the Topgolf facility is located within a mechanical equipment enclosure.

Because mechanical equipment operation typically generates sustained, steady-state, noise levels, impacts of HVAC system usage are assessed in this study relative to the City's General Plan daytime/nighttime 55 Ldn exterior and 45 Ldn interior noise level standards.

Noise from generic rooftop HVAC units has been measured to be approximately 50 dBA at a reference distance of 100 feet from the building façades of similar uses. HVAC systems located within dedicated mechanical equipment rooms typically result in even lower noise levels.

At the nearest residence to the site, which would be located a minimum of 150 feet from any project-related HVAC equipment, average HVAC exterior noise levels are predicted to be approximately 46 dBA Leq/Lmax and 50 dBA Ldn, conservatively assuming the mechanical equipment were to operate 12 daytime and four nighttime hours per day. Based on more typical operating conditions, predicted HVAC system levels are predicted to be even lower at the nearest residences to the project site.

Within the nearest residences, noise levels would be approximately 15 dBA lower with windows open, and 25 dBA lower with windows closed. Resulting interior noise levels would range from approximately 25-35 dBA Ldn within the nearest residences.

Predicted HVAC system noise levels at the nearest existing residences would be satisfactory relative to the City's exterior noise level standards of 55 dBA Lmax and 55 Ldn , and 45 dBA Ldn interior noise level standard. In addition, predicted HVAC system noise levels would be well below measured ambient conditions at all of the nearest residences to the project site, resulting in a less than significant impact. **[Less Than Significant Impact]**

Topgolf Facility Noise

Proposed operating hours of the Topgolf facility are Sunday through Thursday from 9:00 AM to 1:00 AM, and Friday and Saturday from 9:00 AM to 2:00 AM. The design of the Topgolf facilities is such that music is played above the individual hitting bays, as well as on the outdoor third level terrace. Live and DJ-generated music on the outdoor terrace on the third level would stop at midnight during weekdays and at 1:00 AM during weekends, while recorded music played in the hitting bays would continue during all operating hours. In addition to this music, sound would also be generated at the Topgolf facility by patrons conversing, sometimes in raised voices, and hitting golf balls.

To evaluate the noise generation of the proposed Topgolf facility, data was utilized from an extensive sound level survey at the Topgolf facility in Gilbert, Arizona. Surveys were completed from 5 PM on Friday September 25 to 12 PM on Sunday, September 27, 2015. The surveys consisted of both short and long-term sound level measurements at 17 locations in and around the Topgolf facility. Measured sound levels resulting from typical weekend Topgolf activities at the Gilbert facility were plotted on the project site in the location of the proposed Topgolf facility (refer to Figure 4.12-2). The Figure 4.12-2 "heat map" highlights the range of noise levels which can be expected throughout the site. Noise generation of the proposed Topgolf San Jose facility would be comparable to that of the Gilbert facility where the sound level surveys were conducted because the design and layout is nearly identical.

The noise level data collected at the Gilbert facility locations were projected to the nearest residences to the proposed project site assuming standard spherical spreading of sound (minus six dBA per doubling of distance from the source). The project noise was then added to the existing (baseline) noise measurements to evaluate the relative increase resulting from the project. The results of the noise assessment at those locations are shown in Table 4.12-3.

Location	Distance from Topgolf Facility (ft)	Predicted Topgolf Noise Levels, dB ¹			Baseline Ldn, dB ⁴	Baseline + Project Ldn, dB	Project Related Increase in Ldn, dB
		L _{eq}	L _{max}	L _{dn} ²			
Nearest Residences to North (Area 1)	700	45	53	48	65	65	0
Nearest Residences to West (Area 2)	580	47	55	50	63	63	0
Nearest Residences to South ³ (Area 3)	1,900	37	44	40	62	62	0
Interior of Library and School Classrooms ³ (Area 4)	400	27	40	30	65	65	0
Single Residence at N. First Street and Liberty Street (Area 5)	1,700	37	45	40	65	65	0

Notes:

1. Predicted levels are based on reference levels from BAC file data, and 6 dBA per doubling of distance attenuation rate.
2. Ldn calculations conservatively assume continuous Topgolf noise generation between 9 am and 2 am.
3. A -10 dBA offset was conservatively applied to the residences represented by Area 3 due to shielding provided by the existing grade differential and SR-237 noise barrier. Interior spaces of library and school classrooms were conservatively estimated to be 20 dBA lower than exterior noise levels due to noise reduction provided by the library and school buildings.
4. Baseline noise levels are identified in Table 4.12-1.

Source: Bollard Acoustical Consultants, Inc. (2015, 2016)

Table 4.12-3 indicates the predicted average (Leq), maximum (Lmax), and day-night average level (Ldn), at each of the nearest noise-sensitive areas to the project site would be satisfactory relative to the relevant thresholds of significance. Additionally, the project-related increase in ambient noise levels at the nearest sensitive receptors would be zero dB, which is also below the City’s threshold of significance. As a result, noise impacts associated with on-site Topgolf activities, including amplified music and sound generated by facility patrons, is considered less than significant. **[Less Than Significant Impact]**

Combined Noise Impacts from All On-Site Noise Sources

The combined noise levels for each proposed on-site noise source, Topgolf, the hotel, commercial uses, and parking structure, operating concurrently were projected to the nearest sensitive receptors to the project site assuming standard spherical spreading of sound (minus six dBA per doubling of

distance from the source). The combined project noise (using decibel addition of the individual noise sources) was then added to the existing (baseline) noise measurements to evaluate the relative increase resulting from the overall project. The results of the noise assessment at those locations are shown in Table 4.12-4. It should be noted that project construction noise would not occur simultaneously with the combined operational noise (since all uses would be operational), and was not included in this calculation.

Table 4.12-4: Predicted Noise Levels at Receptors from All On-Site Noise Sources Combined							
Location	Distance from Topgolf Facility (ft)	Predicted Project Noise Levels, dB¹			Baseline Ldn, dB⁴	Baseline + Project Ldn, dB	Project Related Increase in Ldn, dB
		L_{eq}	L_{max}	L_{dn}²			
Nearest Residences to North (Area 1)	700	49	54	53	65	65	0
Nearest Residences to West (Area 2)	580	48	55	51	63	63	0
Nearest Residences to South ³ (Area 3)	1,900	37	44	40	62	62	0
Interior of Library and School Classrooms ³ (Area 4)	400	29	40	32	65	65	0
Single Residence at N. First Street and Liberty Street (Area 5)	1,700	45	48	48	65	65	0
Notes:							
<ol style="list-style-type: none"> 1. Predicted levels are based on the decibel addition of noise levels reported previously for individual sources, and 6 dBA per doubling of distance attenuation rate. 2. Ldn calculations conservatively assume continuous Topgolf noise generation between 9 am and 2 am. 3. A -10 dBA offset was conservatively applied to the residences represented by Area 3 due to shielding provided by the existing grade differential and SR-237 noise barrier. Interior spaces of library and school classrooms were conservatively estimated to be 20 dBA lower than exterior noise levels due to noise reduction provided by the library and school buildings. 4. Baseline noise levels are identified in Table 4.12-1. 							
Source: Bollard Acoustical Consultants, Inc. (2015, 2016)							

As shown in Table 4.12-4, noise generated by all on-site sources combined would satisfy the City of San Jose exterior noise criteria applied at the property line of residential land uses. The combined project-related increase in ambient noise levels at the nearest sensitive receptors would be zero dB, which is also below the City’s threshold of significance. As a result, noise impacts associated with the combined project operations, is considered less than significant. **[Less Than Significant Impact]**



PROJECTED TOPGOLF NOISE LEVELS

FIGURE 4.12-2

Noise from Project Construction

Construction activities associated with the project would add to the noise environment in the immediate project vicinity. Activities involved in typical construction would generate maximum noise levels ranging from 70 to 90 dBA at a distance of 50 feet. The nearest existing residences are located between 100 and over 1,000 feet to the proposed construction areas within the project site. At this range of distances, maximum noise levels would range from approximately 50 to 85 dBA L_{max} at the nearest sensitive receptors. The project proposes weekend (Saturday – Sunday) construction hours, 9 a.m. to 5 p.m., as part of their Planned Development (PD) Permit.

The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses would involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months. Construction for the entire project, Topgolf, the hotel, and commercial development, is estimated to last a total of 24 months, with most of the tasks involving heavy noise generators most likely occurring within the first three to five months of the construction cycle. Substantial noise-generating activity for construction of the entire project would last less than 12 months. The remaining 12 months would be the actual building construction, exterior and interior, landscaping, and hardscape.

Impact NOI-1: The project could result in significant noise impacts to nearby residences during construction. **[Significant Impact]**

Mitigation Measures: The following mitigation measures would reduce construction noise impacts to a less than significant level.

MM NOI-1.1: The project shall develop and implement a construction noise logistics plan during all phases of construction on the project site. The noise logistics plan shall include, but not be limited to the following:

- Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, unless otherwise expressly allowed in a development permit. This includes the staging of equipment and construction personnel. The construction hours shall be printed on all plans for the project used to construct the project.
- All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses.
- All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.

- All motorized construction equipment shall be shut down when not in use to prevent idling.
- Contractors shall be required to use “new technology” power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used at the project site, as well as at off-site locations with project construction, shall be equipped with adequate muffling devices. All equipment shall be in good mechanical condition, to minimize noise created by faulty or poorly maintained engine, drive-train and other components.
- The contractor shall schedule on-site and off-site construction activities in shifts to avoid high noise levels caused by simultaneously operating several pieces of noise-generating equipment.
- Temporary berms or noise barriers, such as lumber, or other material stockpiles shall be installed during construction activities.
- The following equipment shall be used during construction
 - Earth Removal: Use scrapers as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
 - Backfilling: Use a backhoe for backfilling, as it is less costly and quieter than either noisier bulldozers or loaders.
 - Ground Preparation: Use a motor grader rather than a bulldozer for final grading.
 - Building Construction: Power saws should be shielded or enclosed where practical to decrease noise emissions. Nail guns should be used where possible, as they are less noisy than manual hammering.
- *Assembly Area.* Workers shall not arrive to the site until the opening of the project gates. The applicant shall designate a location without adjacent residential units for workers to wait prior to the opening of the project gates.
- *Disturbance Coordinator.* A Construction/Disturbance Coordinator shall be identified by the developer for this project. The Construction/Disturbance Coordinator shall be responsible for ensuring compliance with the hours of construction, site housekeeping, and other nuisance compliance conditions in this permit. The coordinator shall also compile information regarding construction phasing/operations and keep the neighborhood informed of the stages of development. The coordinator shall also listen and respond to neighborhood concerns regarding construction, determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem in a timely manner. The coordinator shall maintain a log of calls and shall make that log available to the City of San Jose upon request.

- *Posting of Telephone Number.* The name and phone number of the Construction/Disturbance coordinator, the hours of construction limitations, City File Number PDC16-013, and the City of San Jose’s Code Enforcement Division phone number (408-535-7770), shall be displayed on a weatherproof sign posted at each entrance to the project site. A local phone number with answering service shall be maintained during the duration of project construction. **[Less Than Significant Impact With Mitigation]**

Noise Impacts to the Project

As previously discussed in Section 4.0, 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 or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, such as interior noise levels in proposed residences or hotels, which are also discussed below.

Based on the distance from N. First Street to the nearest façade of the proposed hotel building (roughly 100 feet), the future traffic noise exposure at that façade would be 63.6 dB Ldn (based on 4.5 dB decrease per doubling of distance from source). Based on an exterior noise exposure of 63.6 dB Ldn, the building façade of the proposed hotel would need to provide at least 19 dBA of traffic noise attenuation to achieve compliance with the City of San Jose interior noise exposure standard of 45 dBA Ldn. Because standard hotel building design would provide approximately 30 dBA of exterior to interior traffic noise reduction, interior noise levels within the hotel rooms are predicted to be approximately 34 dBA Ldn or less, which would meet the City’s standard for interior noise.

b. Would the project result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

There are no existing sources of substantial groundborne vibration or noise in the project area that would affect the proposed project.

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, etc.) are used in areas adjoining developed properties. Construction activities would include grading, site preparation work, foundation work, and new building framing and finishing. Construction vibration impacts would be considered significant when construction activities are anticipated to generate a peak vertical particle velocity of 0.20 in/sec at buildings of normal conventional construction (General Plan policy EC-2.3).

Pile driving would not occur for this project. Vibration generated by construction activities near the common property lines of the site would at times be perceptible; however, groundborne vibration from project construction would be minimal and dissipate rapidly. No vibration-related impacts were identified at any of the nearest sensitive receptors to the project site. Therefore, the project would

have a less than significant impact upon structures and residents in the project vicinity. **[Less Than Significant Impact]**

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed in the response to checklist question “a” above, the project would not result in a substantial permanent increase in ambient noise levels in the project vicinity. **[Less Than Significant Impact]**

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed in the response to checklist question “a” above, the project includes mitigation measures (MM NOI-1.1) to reduce temporary construction noise impacts to a less than significant level. With implementation of the identified mitigation measures, the result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity. **[Less Than Significant Impact With Mitigation]**

e-f. For a project located within an airport land use plan or, where such a plan has not yet been adopted, within 2 miles of a public use airport, would the project expose people residing or working in the project area to excessive noise levels? 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?

According to the City’s noise projections for San Jose International Airport, the project site is exposed to aircraft noise levels of less than 60 dB CNEL. The project site is not located within an airport land use plan, within two miles of a public use airport, or within the vicinity of a private airstrip. **[No Impact]**

4.12.4 Conclusion

With the incorporation of mitigation measures, the proposed project would not result in significant noise impacts. **[Less Than Significant Impact With Mitigation]**

4.13 POPULATION AND HOUSING

4.13.1 Existing Setting

The City of San Jose population was estimated to be approximately 1,016,480 with a total of 327,650 housing units in January 2015.³³ The average number of persons per household in San José was estimated at 3.17³⁴ and the City has approximately 1.5 employed residents per household.³⁵ Based on the City’s General Plan, the projected population in 2035 would be 1.3 million persons occupying 429,350 households.

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. San José currently has a higher number of employed residents than jobs but this trend is projected to reverse with full build-out under the current General Plan.

4.13.2 Population and Housing Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

³³ California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2015 with 2010 Census Benchmark*. Available at:

<<http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php>>. Accessed May 18, 2015.

³⁴ California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2015 with 2010 Census Benchmark*. Available at:

<<http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php>>. Accessed May 18, 2015.

³⁵ Association of Bay Area Governments. *Plan Bay Area Projections 2013*. December 2013.

4.13.3 Impacts Evaluation

- a. *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would result in a net increase in jobs in the City. As noted above, San José currently has a higher number of employed residents than jobs. The increase in jobs will incrementally decrease the overall jobs/housing imbalance within the City. The project site is within the City's Urban Growth Boundary and Urban Service Area and is served by utilities and infrastructure previously extended to the site. It would not generate demand for housing at a rate that was not envisioned in the General Plan FEIR. The project, therefore, would not induce substantial population growth. **[Less Than Significant Impact]**

- b., c. *Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?*

The project will develop land already planned for job growth in the General Plan. The site is not currently and has not been used for residential purposes in the recent past; therefore, the proposed development would not displace existing housing or people. **[Less Than Significant Impact]**

4.13.4 Conclusion

The proposed project would not result in significant population and housing impacts. **[Less Than Significant Impact]**

4.14 PUBLIC SERVICES

4.14.1 Existing Setting

4.14.1.1 *Fire Protection Services*

Fire protection services for the project site are provided by the San Jose Fire Department (SJFD). The SJFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the City. The closest fire stations to the project site are Station No. 25 located at 5215 Wilson Way, approximately 0.2 miles north of the project site and Station No. 29 at 199 Innovation Drive (2.1 miles southeast of the project site).

For fire protection services, the City has a total response time goal of eight minutes and a total travel time goal of four minutes for 80 percent of emergency incidents (per General Plan Policy ES-3.1).

4.14.1.2 *Police Protection Services*

Police protection services for the project site are provided by the San Jose Police Department (SJPD), which is headquartered at 201 West Mission Street, approximately six miles southeast of the project site. SJPD is divided into four geographic divisions: Central, Western, Foothill, and Southern. The project site is directly served by the SJPD Central Division, which includes three lieutenants, four patrol officers and two crime prevention specialists. For the last several years, the most frequent calls for service in the City have dealt with larceny, burglary, vehicle theft, and assault.

For police protection services, SJPD has 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 (non-emergency) calls (per General Plan Policy ES-3.1).

4.14.1.3 *Parks*

The City of San Jose owns and maintains approximately 3,435 acres of parkland, including neighborhood parks, community parks, and regional parks. The City also has 54 community centers and neighborhood centers. Other recreational facilities include five public pools, six public skate parks and over 55 miles of trails.

The City's Department of Parks, Recreation, and Neighborhood Services is responsible for development, operation, and maintenance of all City park facilities. Nearby City park and recreational facilities including the Guadalupe River trail, which forms the southern boundary of the project site, and Alviso Park and Alviso Branch Library and Community Center (across N. First Street from the project site). Other facilities include the San Francisco Bay Trail at Sunnyvale Baylands Park (1.6 miles northwest of the project site) and Alviso Marina County Park (0.6 miles northwest of the project site).

4.14.1.4 *Schools and Libraries*

The project area is served by the Santa Clara Unified School District and residences near the site are assigned to George Mayne Elementary School (located at 5030 N. First Street, across from the

project site) Don Callejon Middle School (located at 4176 Lick Boulevard, Santa Clara, approximately 1.9 miles southeast of the project site), and Adrian Wilcox High School (located at 3250 Monroe Street, Santa Clara, approximately four miles south of the project site).³⁶ The nearest library to the project site is Alviso Branch Library and Community Center, located at 5050 North First Street, San Jose, directly across from the project site.

4.14.2 Public Services Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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:					
1. Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
2. Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
4. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
5. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.14.3 Impacts Evaluation

a. ***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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 public services?***

Fire and Police Protection Services

The proposed increase in development on the project site is accounted for in the planned growth for the City. The project would incrementally increase demand for fire and police services. This increase in demand would not result in a substantial adverse physical impact associated with a need for new facilities in order to maintain acceptable levels of services or performance objectives.

³⁶ Santa Clara Unified School District. *Santa Clara USD SchoolFinder. Attendance Boundary Maps*. Available at: <http://www.schfinder.com/SantaClaraUSD/>. Accessed May 29, 2015.

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 to avoid unsafe building conditions and promote public safety. The proposed development would not require new fire stations to be constructed or existing fire stations to be expanded to serve the proposed development. **[Less Than Significant Impact]**

Schools and Libraries

The project proposes a Topgolf facility, retail buildings and 200-room hotel and would not introduce new students or library users to the community. Therefore the project would not impact school or library facilities in San Jose. **[No Impact]**

Parks and Trails

While employees and patrons of the site may utilize nearby parks and trails, they would not place a physical burden or a substantial increase in demand on these facilities such that it would result in the need for new facilities. **[Less Than Significant Impact]**

4.14.4 Conclusion

The project would result in a less than significant impact to public services. **[Less Than Significant Impact]**

4.15 RECREATION

4.15.1 Existing Setting

The City of San Jose owns and maintains approximately 3,435 acres of parkland, including neighborhood parks, community parks, and regional parks. The City also has 54 community centers and neighborhood centers. Other recreational facilities include five public pools, six public skate parks and over 55 miles of trails.

As discussed in Section 4.14 Public Services, the City's Department of Parks, Recreation, and Neighborhood Services is responsible for development, operation, and maintenance of all City park facilities. Nearby City park and recreational facilities include the existing Guadalupe River Trail (adjacent to the southern boundary of the project site), and Alviso Park and Alviso Branch Library and Community Center (adjacent to the project site across North First Street). Other facilities include the San Francisco Bay Trail at Sunnyvale Baylands Park (approximately 1.9 miles northwest of the project site) and Alviso Marina County Park (approximately 0.6 miles northwest of the project site).

4.15.2 Recreation Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.15.3 Impacts Evaluation

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?*

The project is not anticipated to place a physical burden on existing nearby parks and recreational facilities. While employees and patrons of the site may utilize nearby parks and trails, the use of these facilities would not result in substantial physical deterioration. **[Less Than Significant Impact]**

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As described previously, employees and patrons of the project could utilize nearby recreational facilities such as parks and trails. Implementation of the project would not result in the need for new recreational facilities or physically alter existing public parks or recreation facilities.

[Less Than Significant Impact]

4.15.4 Conclusion

The proposed project would result in a less than significant impact on existing recreational facilities.

[Less Than Significant Impact]

4.16 TRANSPORTATION

The discussion in this section is based in part on a Traffic Impact Analysis (TIA) prepared by *Fehr & Peers* in September 2016. The report is attached as Appendix I to this Initial Study.

4.16.1 Existing Setting

The following existing conditions includes a description of all major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities. The existing levels of service of the key intersections and freeway segments in the project area are also discussed in this section.

4.16.1.1 *Existing Transportation Network*

Roadway Network

Regional access to the project site is provided by SR 237 and Montague Expressway. Local access to the project site is provided via Gold Street, Great America Parkway, Gold Street Connector, Tasman Drive, and Lafayette Street. These facilities are described below.

SR 237 is a six-lane freeway and extends in an east/west direction between Sunnyvale and Milpitas, providing access to I-880 and US Route 101 (US 101). Two of the six lanes (one in each direction) are designated as high occupancy vehicle (HOV) lanes between Zanker Road and US 101. There are toll lanes (one in each direction) provided between Zanker Road and I-880. Access to the project site is provided via its interchange with Great America Parkway and N. First Street.

Montague Expressway is an eight-lane divided expressway that begins at I-680 in Milpitas and transitions into San Tomas Expressway south of US 101, at which point the roadway narrows to two lanes in each direction. Two of the eight lanes (one in each direction) are designated at HOV lanes with the westbound HOV lane beginning at O'Toole Avenue/McCarthy Boulevard and ending at the US 101 Lafayette Bridge overcrossing, and the eastbound HOV lane beginning at Mission College Boulevard and ending at O'Toole Avenue/McCarthy Boulevard.

Great America Parkway is a six-lane, north-south thoroughfare that begins at US 101 and extends northward to SR 237, providing access to US 101, Central Expressway and El Camino Real.

N. First Street is a north-south four to six-lane divided arterial that provides direct access to the project site. N. First Street extends from downtown San Jose to Alviso. N. First Street between Tony P. Santos Street and Liberty Street narrows to one lane in each direction with Class II bicycle lanes and parking on the north side of the street. N. First Street is six lanes between SR 237 and Tasman Drive, and then narrows to four lanes south of Tasman Drive. The Santa Clara County Light Rail operates in the median of the roadway between Tasman Drive and downtown San Jose and there are Class II bike lanes along most of its length.

Taylor Street is an east-west two-lane residential street from El Dorado Street/Union Pacific railroad tracks to Liberty Street where it becomes N. First Street.

Lafayette Street is a four-lane divided north-south arterial that connects to SR 237 and US 101. From the SR 237 interchange to N. First Street, Lafayette Street becomes a two-lane divided roadway. South of the SR 237 interchange, there are limited sidewalks and pedestrian facilities. Union Pacific railroad tracks with Amtrak and ACE commuter rail passenger service and high-voltage power lines run parallel to the roadway along the west (southbound side).

Gold Street is a north-south two-lane roadway that is divided from Gold Street Connector to the south to Sunrise Drive to the north. It is an undivided two-lane roadway from Sunrise Drive to Elizabeth Street.

Zanker Road is a four to six-lane arterial that is parallel to and east of N. First Street in San Jose. It begins near downtown San Jose at US 101/I-880 interchange and ends north of SR 237 near the San Jose-Santa Clara Regional Wastewater Facility.

Nortech Parkway is an east-west four-lane roadway that terminates just east of Fortran Drive. It serves as an access street to multiple office parks. There are bike lanes on both sides of the roadway.

Holger Way is an east-west two-lane roadway from N. First Street to Zanker Road. It has Class II bike lanes along its entire length.

Vista Montana is a north-south two-lane roadway that begins at N. First Street and terminates at Tasman Drive to the south. The VTA Route 831 runs along this roadway and there is on-street parking available on both sides of the street.

Rose Orchard Way is a two-lane loop road that connects to Headquarters Drive to the northwest and N. First Street to the southwest. It provides access to multiple office parks.

Tasman Drive is a six-lane east-west divided arterial with center-running, at-grade light rail (VTA Light-rail Mountain View-Winchester route), between I-880 in the east to Fair Oaks Avenue in the West. Tasman Drive narrows to two lanes in each direction west of Great America Parkway.

Rio Robles is an east-west roadway that provides access to office parks west of N. First Street and to residential uses east of N. First Street.

River Oaks Parkway is a divided roadway from N. First Street to Montague Expressway and provides access to various multi-family residential complexes. VTA Route 58 and Route 828 runs along this roadway.

Gold Street Connector is a two-lane east-west roadway connecting Great America Parkway and Gold Street/Lafayette Street.

Transit Service

Existing transit service to the study area is provided by the VTA, the Altamont Commuter Express (ACE), and Amtrak. Existing transit facilities in the project area are shown on Figure 4.16-1.

Santa Clara Valley Transportation Authority (VTA) provides light rail, bus and paratransit service to Santa Clara County, including the City of San Jose. Light rail trains operate at 15, 20, and 60-minute frequencies depending on the time of day. VTA bus routes generally operate between 5:00 AM and 1:00 AM on weekdays and 6:00 AM and 12:30 AM on weekends.

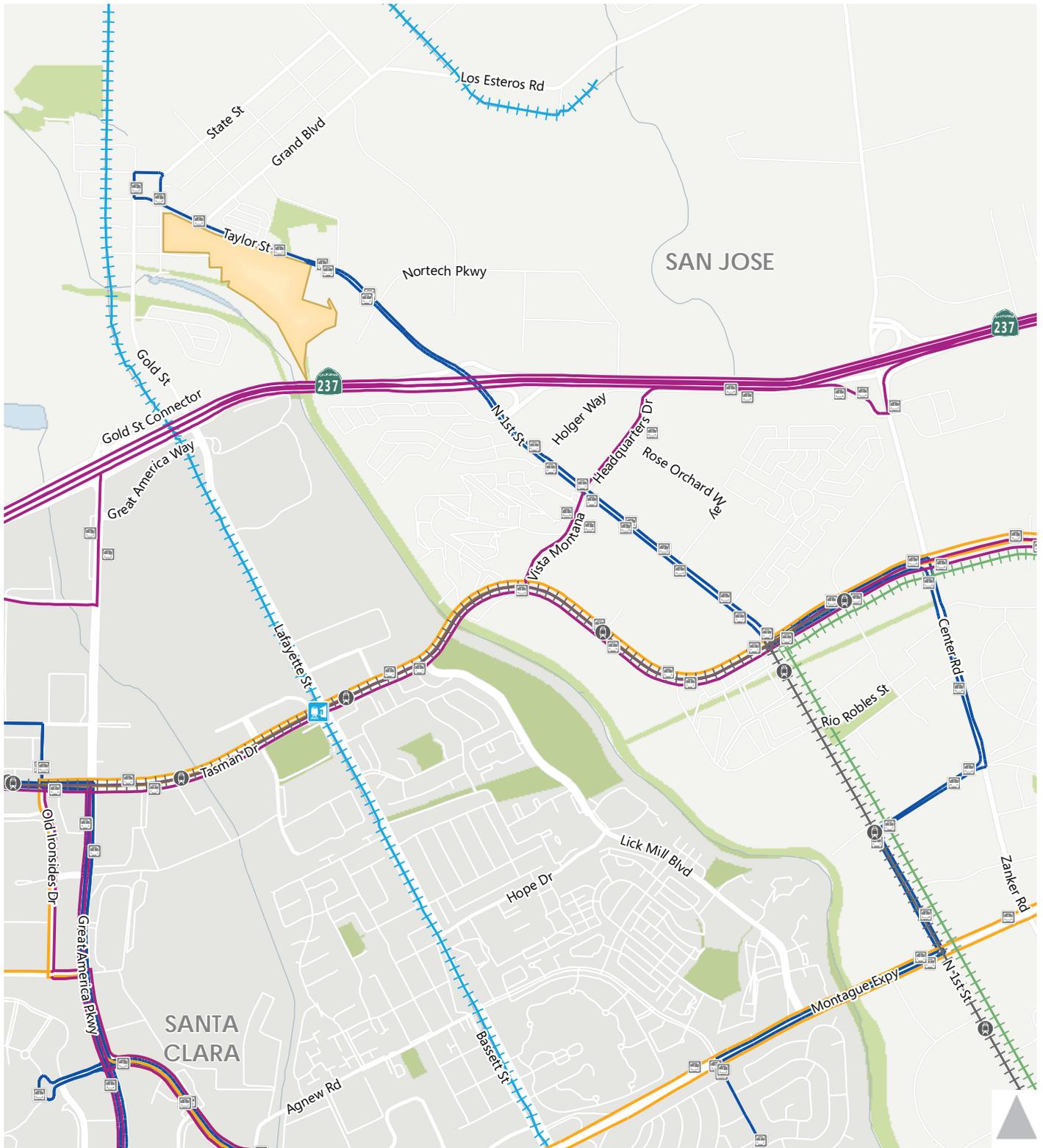
Bus Route 58 includes stops on N First Street in the vicinity of the project site. Route 58 provides service between the Alviso area and West Valley Community College in Saratoga, and includes connections to the Alum Rock-Santa Teresa Light Rail Route (Line 901), the Mountain View-Winchester Light Rail Route (Line 902). The closest light rail station to the site is located on N. First Street, south of Tasman Drive, roughly two miles southeast of the site. The station serves Lines 901 and 902, mentioned above, which provide service every 15 minutes during peak commute hours.

Altamont Commuter Express (ACE) provides passenger rail service across the Altamont corridor, extending between San Jose and Stockton. ACE trains connect to Caltrain at the Santa Clara and San Jose Diridon Stations. The full ACE line is comprised of 10 stations. The San Joaquin Regional Rail Commission (SJRRRC) is the owner and operator of ACE services. ACE's hour of operation for westbound trains are 4:20 AM to 9:17 AM on weekdays. Eastbound trains operate between 3:35 PM and 8:50 PM on weekdays.

The nearest ACE station to the study area is the Santa Clara/Great America Station (5099 Stars and Stripes Drive, Santa Clara), roughly 2.5 miles south of the site.

Shuttle service from the station to employment centers, including the America Center development, are provided by eight ACE shuttles. ACE Green Shuttle (823) operates on Tasman Drive, with scheduled stops at the Convention Center and Tasman Drive, and the ACE Great America Station on its route between the Great America ACE Station and the America Center. The shuttle provides service on weekdays only with four runs in the westbound direction in the morning (between 6:00 and 9:30 AM) and four runs in the eastbound direction in the evening (between 3:30 and 6:45 PM)

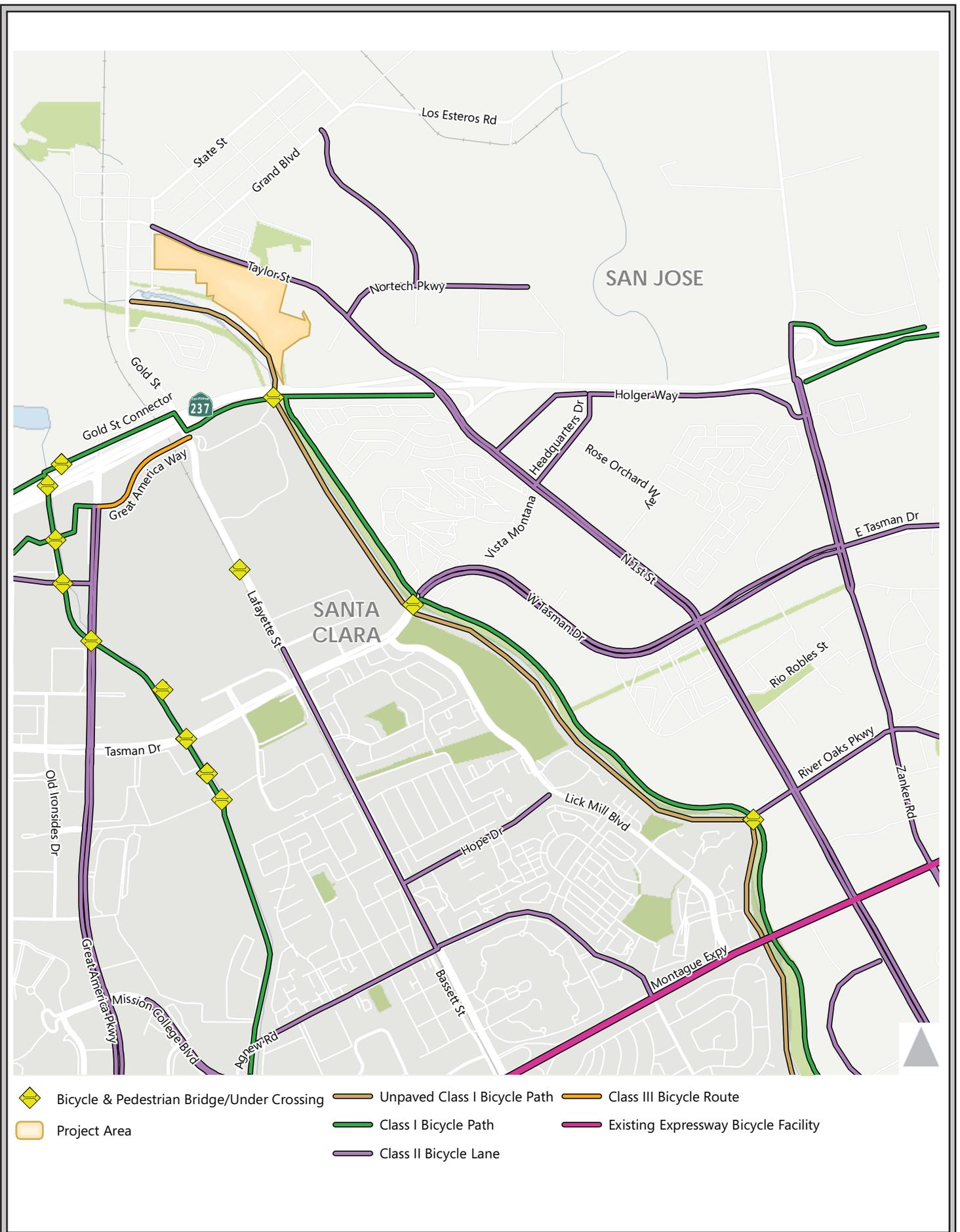
Capital Corridor is an Amtrak service that provides intercity passenger rail service to Sacramento, Oakland, and San Jose with Amtrak thruway bus connections to nearby cities. Capital Corridor trains operate between 4:30 AM and 11:55 PM. Trains depart about every hour to two hours during the weekdays. The Santa Clara/Great America Station, mentioned above, is the nearest Capital Corridor station to the site.



- | | | | |
|------------------|---------------------------|--|--|
| Bus Stops | VTA Transit Routes | Express Bus Route | ACE & Amtrak Capitol Corridor |
| Light Rail Stops | Local Bus Route | Light Rail Route: Alum Rock - Santa Teresa | Great America Station (ACE and Amtrak) |
| Project Area | Limited Stop Bus Route | Light Rail Route: Mountain View - Winchester | |

EXISTING TRANSIT FACILITIES

FIGURE 4.16-1



EXISTING BICYCLE FACILITIES

FIGURE 4.16-2

Bicycle and Pedestrian Facilities

Bicycle Facilities

Bicycle facilities are divided into three classes of relative significance. Class I bikeways are bicycle paths which are physically separated from motor vehicles and provide bicycle (two-way) and pedestrian travel on a separate path. Class II bikeways are striped bicycle lanes on roadways (for one-way bicycle travel) which are marked by signage and pavement markings. Class III bikeways are bicycle routes which allows shared use with pedestrian or motor vehicle traffic.

Bicycle connectivity to the project site is provided by Class II bike lanes along the project frontage on both sides of N. First Street that extend from Liberty Street in the north and East Brokaw Road in the south. However, there are notable missing bicycle connections on Gold Street between the Guadalupe River Trail and N. Taylor Street and on N. Taylor Street between Gold Street and Liberty Street. Northwest of the project site, bike lanes are provided on Nortech Parkway and Disk Drive. Great America Parkway has on-street bicycle lanes that extend from SR 237 past US 101 until just south of Central Expressway.

Off-street trails along SR 237 connect bicyclists to business districts along N. First Street. The Guadalupe River and San Tomas Aquino Creek bicycle trails provide access to central San Jose and Santa Clara.

Existing bicycle facilities in the project area are shown on Figure 4.16-2.

Pedestrian Facilities

Pedestrian connectivity in the vicinity of the project site is provided by a largely complete network of sidewalks and crosswalks that serve the adjacent Alviso neighborhoods. There is currently missing sidewalk along the southern side of N. First Street between Liberty Street and Tony P. Santos Street, which is the segment that directly fronts the project site.

4.16.1.2 *Analysis Methodology*

Signalized Intersection Levels of Service

The method described in Chapter 16 of the 2000 Highway Capacity Manual (HCM) was used to prepare the level of service (LOS) calculation for the study intersections. This LOS method, which is approved by the City of San Jose and VTA, analyzes a signalized intersection's operation based on average control delay per vehicle. Control delay includes the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay is calculated using the TRAFFIX analysis software and is correlated to an LOS designation as shown in Table 4.16-1.

Table 4.16-1: Signalized Intersection Level of Service Definitions		
Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B+	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 12.0
B		12.1 to 18.0
B-		18.1 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 23.0
C		23.1 to 32.0
C-		32.1 to 35.0
D+	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0
D		39.1 to 51.0
D-		51.1 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.	55.1 to 60.0
E		60.1 to 75.0
E-		75.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Unsignalized Intersection Levels of Service

The operations of the unsignalized intersections were evaluated using the method contained in Chapter 17 of the 2000 HCM. LOS ratings for stop-sign-controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side-street-controlled intersections, the average control delay is calculated for each stopped movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. Table 4.16-2 summarizes the relationship between delay and LOS for unsignalized intersections.

Table 4.16-2: Unsignalized Intersection Level of Service Definitions		
Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	≤ 10.0
B	Short traffic delays.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Neither the City of San Jose nor the City of Santa Clara have an established LOS standard for unsignalized intersections. Discussions of unsignalized intersection LOS are included in this analysis for informational purposes only.

The City of San Jose applies the California Manual on Uniform Traffic Control Devices (CA MUTCD) peak-hour volume signal warrant to evaluate operations at unsignalized intersections to verify whether the addition of project-generated traffic will create an operation problem at the intersection that would require installation of a traffic signal.³⁷

Freeway Segment Operations

Freeway segments are evaluated using VTA's analysis procedure, which is based on the density of the traffic flow using methods described in the 2000 HCM. Density is expressed in passenger cars per mile per lane. The Congestion Management Program's ranges of densities for each freeway segment level of service are shown in Table 4.16-3.

Table 4.16-3: Freeway Segment Level of Service Definitions	
Level of Service	Density (Passenger Car Per Mile Per Lane)
A	≤ 11
B	11.1 to 18.0
C	18.1 to 26.0
D	26.1 to 46.0

³⁷ Signal warrant analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared to a sub-set of the standard traffic signal warrants recommended in the California Manual on Uniform Traffic Control Devices (CA MUTCD) guidelines. While satisfying one or more of these warrants could justify the installation of a signal at an intersection, this analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated by an experienced engineer based on field-measured rather than forecast traffic data and a thorough study of traffic and roadway conditions.

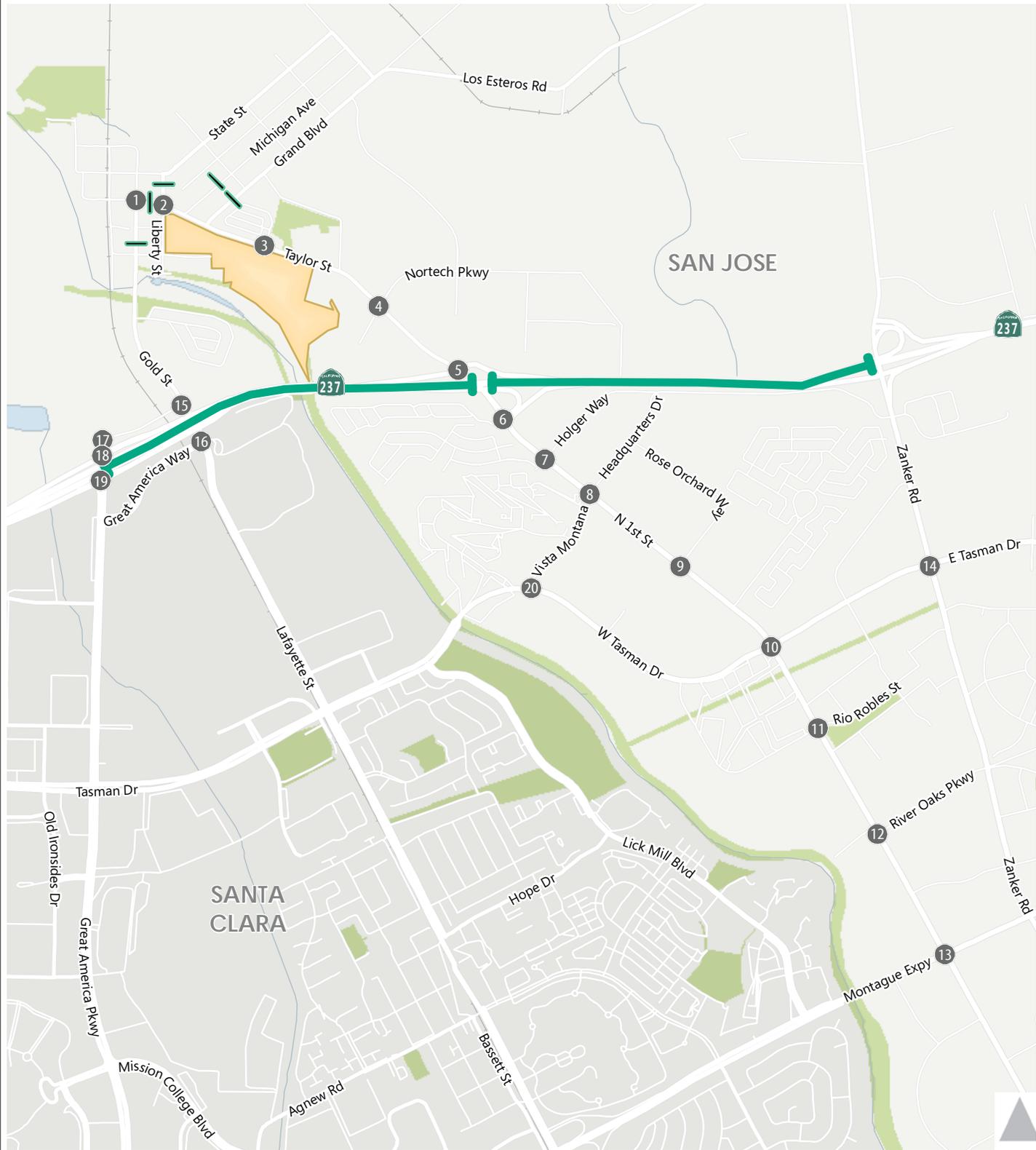
Table 4.16-3: Freeway Segment Level of Service Definitions	
Level of Service	Density (Passenger Car Per Mile Per Lane)
E	46.1 to 58.0
F	> 58.0

4.16.1.3 *Study Intersections and Freeway Segments*

Study Intersections

The potential impacts related to the proposed development were evaluated following the standards and methodologies set forth by the cities of San Jose and Santa Clara, and the Santa Clara Valley VTA. AM and PM peak-hour traffic conditions for 16 signalized intersection and four unsignalized intersections within the cities of San Jose and Santa Clara were analyzed. Intersections located within the boundaries of the North San Jose Area Development Policy (NSJADP), which would be subject to the requirements of the NSJADP are noted. Santa Clara County Congestion Management Program (CMP) intersections are identified, as well. The study intersections are shown on Figure 4.16-3 and listed in Table 4.16-4, below.

Table 4.16-4: Study Intersections		
ID	Intersection	Jurisdiction
1	Gold Street and N. Taylor Street*	San Jose
2	Liberty Street and N. Taylor Street*	San Jose
3	Trinity Park Drive and N. First Street*	San Jose
4	N. First Street and Nortech Parkway	San Jose
5	N. First Street and SR-237 Westbound Ramps	San Jose (NSJADP & CMP)
6	N. First Street and SR-237 Eastbound Ramps	San Jose (NSJADP & CMP)
7	N. First Street and Holger Way	San Jose (NSJADP)
8	N. First Street and Vista Montana	San Jose (NSJADP)
9	N. First Street and Rose Orchard Way	San Jose (NSJADP)
10	N. First Street and Tasman Drive	San Jose (NSJADP)
11	N. First Street and Rio Robles Street	San Jose (NSJADP)
12	N. First Street and River Oaks Parkway	San Jose (NSJADP)
13	N. First Street and Montague Expressway	Santa Clara County (CMP)
14	Zanker Drive and Tasman Drive	San Jose (NSJADP)
15	Gold Street and Gold Street Connector	San Jose
16	Lafayette Street and Great America Way*	Santa Clara
17	Great America Parkway and Gold Street Connector	San Jose
18	Great America Parkway and SR-237 Westbound Ramps	San Jose (CMP)
19	Great America Parkway and SR-237 Eastbound Ramps	San Jose (CMP)
20	Vista Montana and Tasman Drive	San Jose (NSJADP)
* Unsignalized intersection.		



- ① Study Intersection
- ▭ City of Santa Clara
- ▭ City of San Jose
- Study Segment
- Roadway Segment
- ▭ Project Area

STUDY INTERSECTIONS

FIGURE 4.16-3

Study Freeway Segments

According to VTA's Transportation Impact Analysis Guidelines, a freeway segment analysis should be analyzed if a project meets one of the following requirements:

1. The proposed development project is expected to add traffic equal to at least one percent (1%) of a freeway segment's capacity.
2. The proposed development project is adjacent to one of the freeway segment's access or egress points.
3. Based on engineering judgment, Lead Agency staff determines that the freeway segment should be included in the analysis.

The project meets the first two criteria and a freeway segment analysis was conducted for the proposed project.

Freeway segments were selected in consultation with the City of San Jose following VTA guidelines. The following segments were selected for analysis because a) the project site is adjacent to SR 237 and b) project access is provided via the SR 237 interchanges at Great America Parkway, N. First Street, and Zanker Road:

1. SR 237 (Eastbound & Westbound): Great America Parkway to N. First Street
2. SR 237 (Eastbound & Westbound): N. First Street to Zanker Road

4.16.1.4 *Existing Intersection Levels of Service and Operations*

Signalized Intersection Levels of Service

Table 4.16-7, which can be found in Section 4.16.2.2 below, shows the LOS of signalized study intersections under existing conditions. For the purposes of this Initial Study, existing conditions were established at the time the City initiated the traffic analysis for the proposed project (February 2016). The results of the LOS calculations indicate that all of the signalized study intersections operate at acceptable levels (LOS D or better for City intersections; LOS E or better for regionally significant intersections) under existing conditions.

Intersection and Roadway Operations

Field observations of the study intersections were conducted during the weekday AM and PM peak hours in March 2016 to verify the calculated LOS operations, to verify any existing traffic problems, and to observe overall transportation characteristics at the study facilities. In most cases, the intersections were observed to operate at the calculated levels of service for each peak hour. In a few locations, however, there were differences between the observed and calculated intersection operations. For example, during the PM peak commute periods, operations at the SR 237 eastbound ramps experienced high traffic volumes that resulted in long queues and heavy congestion, which are

not reflected in the LOS calculations reported in 4.16-5. Specific descriptions of unique observations are listed below.

Intersection 6: N. First Street & SR 237 Eastbound Ramps. No operational issues, such as queuing, were observed during the AM peak hour at the N. First Street and SR 237 Eastbound Ramps intersection. The ramp meters were also noticeably off during the morning period. Under the PM peak hour, ramp metering on the SR 237 eastbound on-ramp causes vehicle queues to extend for the entire length of the ramp and back onto northbound N. First Street. The worst queue observed was when the channelized northbound right-turn was no longer operating free flow because the spillback had reached the Target driveway about 400 feet south of the intersection. Up to three southbound left-turn vehicles were observed to occasionally block the intersection because of the PM peak hour on-ramp congestion. When vehicles blocked the intersection it further prevented vehicles to travel through in the northbound direction. This occurrence did not happen every cycle and the southbound left-turn storage lengths were still able to adequately serve the southbound volumes. Based on the field observations, the LOS C reported at Intersection 6: N. First Street & SR 237 Eastbound Ramps is not a true reflection of the existing PM peak hour operations.

Intersection 18: Great America Parkway & SR 237 Westbound Ramps. No queuing issues were observed during the AM peak hour at the N. First Street and SR 237 Westbound Ramps intersection. In the PM peak hour, no major queues or delays were observed at this intersection, primarily because of the bottleneck at the Great America Parkway/SR 237 Eastbound ramps intersection. The majority of vehicles turning westbound left from Intersection 17: Great America Parkway & Gold Street Connector are trying to access the SR 237 westbound on-ramp. Thus, poor lane utilization occurs because a significant amount of traffic traveling in the inside southbound through lane are trying to change lanes in order to turn right onto the SR 237 westbound on-ramp and only have about 135 feet to do so. Furthermore, existing intersection volumes collected show that during the AM and PM peak hours, approximately 230 to 410 vehicles are turning southbound right in comparison to only 60 to 130 vehicles traveling southbound through

Intersection 19: Great America Parkway & SR 237 Eastbound Ramps. No operational issues, such as queuing, were observed during the AM peak hour at the Great America Parkway and SR 237 Eastbound Ramps intersection. The ramp meters were also noticeably off during the morning period. Under the PM peak hour, ramp metering on the SR 237 eastbound on-ramp causes vehicle queues to extend for the entire length of the ramp and back onto northbound Great America Parkway. The worst queue observed was when the spillback at the northbound right-turn reached the Great America Parkway/Great America Way intersection. Furthermore, the heavy right-turn traffic and extensive queue frequently prevents vehicles in the northbound through/right lane to travel through and clear during each green phase of the signal cycle.

Operations on N. First Street Adjacent to the Project Site. Based on AM and PM field observations, traffic is negligible along N. First Street fronting the project site and drivers traveling through this roadway experience free flow operations. No operational issues were observed adjacent to the project site and no vehicles were seen entering and exiting the Pin High Golf Center driveway.

Operations at George Mayne Elementary School. George Mayne Elementary School is located across the street from the project site with inbound and outbound driveways located on northwest of the Tony P. Santos Street. Field observations of the existing school drop-off and pick-up operations

were conducted to establish a baseline condition before the completion of the project in close proximity. Since school starts at 8:00 AM drop-off observations were conducted from 7:45 AM to 8:15 AM. Pick-up observations were conducted from 2:00 PM to 2:30 PM since school ends at 2:20 PM. Described below are the existing school operating conditions observed.

- Morning peak activity occurs starting from 7:45 AM until the bell rings at 8:00 AM.
- From 7:45 AM to 7:50 AM drop-off activity increases, but there are no queues onto N. First Street.
- Some minor queueing (no more than two cars) onto N. First Street were observed from 7:50 AM to 8:00 AM at the inbound driveway due to the right-in traffic.
- Parents park along the Tony P. Santos Street located west of the school to walk their kids to class morning and/or wait for their kids to get out. The street allows for two-way traffic although it is fairly narrow and there are posted signs that prohibits parking.
- No major school activity was observed at N. First Street and Trinity Park Drive in both the morning and afternoon.
- Most of the inbound traffic was right-in turning vehicles coming from N. First Street to the south during both the morning and afternoon observations.
- Very few vehicles were observed turning left into the inbound driveway on N. First Street during both the morning and afternoon observations.
- Vehicles exiting the outbound driveway were split 50/50 on either turning right onto N. First Street or turning left onto N. First Street during both the morning and afternoon observations.
- Major activity on Wilson Way, a roadway located behind the school, was observed in the morning and afternoon because students can access and leave campus through the back. Thus, drop-off and pick-up operations also occur on Wilson Way.
- Afternoon peak activity occurs starting from 2:10 PM until 2:30 PM.
- Between 2:10 PM and 2:20 PM parents start parking around the perimeter of the school along Wilson Way, Tony P. Santos Street, and N. First Street waiting for their kids to be released.
- Similar to morning observations, some minor queueing (no more than three cars) onto N. First Street were observed.
- Rectangular rapid flash beacons (RRFBs) are in the process of being installed along with a high visibility crosswalk along the west leg of the N. First Street and Tony P. Santos intersection.

4.16.1.5 Existing Freeway Segment Levels of Service and Operations

Table 4.16-8, which can be found in Section 4.16.2.2 below, contains the existing freeway segment LOS for the mixed-flow and HOV lanes based on the segment densities reported in the VTA's 2014 CMP Monitoring and Conformance Report, which is the most recent report available as of March 2016. For mixed-flow lanes, freeway segment capacities are defined as 2,200 vehicles per hour per lane (vphpl) for four-lane freeway segments and 2,300 vphpl for six-lane freeway segments. HOV lane capacities are defined between 1,800 to 1,900 vphpl.

The following freeway segments operate unacceptably (LOS F) under existing conditions:

- Eastbound SR 237 between Great America Parkway and N. First Street during the PM peak hour (mixed-flow lanes only)

- Eastbound SR 237 between N. First Street and Zanker Road during the PM peak hour (mixed-flow lanes only)

The PM peak hour congestion suggested by the operations analysis on the eastbound study segments was confirmed by observations in the field.

4.16.1.6 Background Conditions

Background traffic conditions are defined as traffic conditions in the area when the project construction is near completion. The background scenario predicts the traffic conditions which would occur as approved but not yet constructed development gets constructed and occupied. For the purposes of this Initial Study, background conditions were established at the time the City initiated the traffic analysis for the proposed project (February 2016).

Background Signalized Intersection Levels of Service

Table 4.16-9, which can be found in Section 4.16.2.2 below, shows the LOS of signalized study intersections under background conditions. The results of the background intersection operations analysis show that 13 of the 16 signalized study intersections are projected to operate at an acceptable service level during all analyzed peak hours, using the HCM methodology and their respective jurisdiction’s LOS threshold. The remaining four study intersections are projected to operate at a deficient LOS (LOS E/F for City intersections and LOS F for regionally significant intersections) during at least one of the analyzed peak hours:

- Intersection 6: N. First Street & SR 237 Eastbound Ramps (LOS F, AM peak hour)
- Intersection 10: N. First Street & Tasman Drive (LOS E+, PM peak hour)
- Intersection 13: N. First Street & Montague Expressway (LOS F, AM and PM peak hour)
- Intersection 14: Zanker Drive & Tasman Drive (LOS E+, AM peak hour)

Background Transportation Network

No new roadway improvements were identified for the background condition; therefore, the existing roadway network was assumed for the background analysis.

4.16.1.8 Applicable Plans, Policies, and Regulations

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 level of service (LOS) methodology 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).³⁸ 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.

North San Jose Area Traffic Impact Fee

The North San José Area Traffic Impact Fee (TIF) establishes a mechanism to fund and implement the identified transportation improvements that will be needed to serve all of the anticipated development growth within the boundary of the North San José Area Development Policy (NSJADP). As development proceeds in North San José, improvements to the transportation system will be needed to serve increases in traffic volumes, as well as transit use. The present version of the TIF was approved by the City Council on June 16, 2009.

December 17, 2013, the City Council modified the NSJADP to allow projects outside the policy area boundary (such as the proposed project) that contribute trips to intersections within the policy area to pay the TIF fee. TIF fee payment allows projects to pay fair share fees to fund planned transportation improvements, as well as deficiency plan improvements such as multi-modal improvements, transit upgrades, installation of bike lanes, and pedestrian improvements as traffic mitigation.

Bike Plan 2020

The City of San José *Bike Plan 2020* (adopted in 2009) contains policies for guiding the development and maintenance of bicycle and trail facilities within San José, as well as the following goals for improving bicycle access and connectivity: 1) Complete 500 miles of bikeways, 2) Achieve a five percent bike mode share, 3) Reduce bike collision rates by 50 percent, 4) Add 5,000 bicycle parking spaces, and 5) Achieve Gold-Level Bicycle Friendly Community status. The Bike Plan defines a 500 mile network of bikeways that focuses on connecting off-street bikeways with on-street bikeways.

The Guadalupe River Trail is shown as an existing off-street bike route. Additional off-street bike routes are planned along San Tomas Aquino Creek and the Bay Trail. An on-road bike route is shown in Santa Clara on Lafayette Street that would connect with routes on or near Gold Street in the project area.

Envision San José 2040 General Plan

The Circulation Element of the Envision 2040 General Plan contains various long-range goals and policies that are intended to:

- provide a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts);
- improve multimodal accessibility to employment, housing, shopping, entertainment, schools, and parks;
- create a city where people are less reliant on driving to meet their daily needs; and
- increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips.

³⁸ Examples of unacceptable impacts include reducing the width of a sidewalk or bicycle lane below the city standard or creating unsafe pedestrian operating conditions.

The 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.

Envision San José 2040 Relevant Transportation Policies

Policy	Description
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-1.6	Require that public street improvements provide safe access for motorists and pedestrians along development frontages per current City design standards.
Policy TR-2.8	Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.
Policy TR-5.3	The minimum overall roadway performance during peak travel periods should be level of service “D” except for designated areas and specified exceptions identified in the General Plan including the Downtown Core Area. Mitigation measures for vehicular traffic should not compromise or minimize community livability by removing mature street trees, significantly reducing front or side yards, or creating other adverse neighborhood impacts.
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-2.3	Enhance pedestrian activity by incorporating appropriate design techniques and regulating uses in private developments, particularly in Downtown, Urban Villages, Corridors, Main Streets, and other locations where appropriate.
Policy CD-3.3:	Within new development, create a pedestrian friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets.

Alviso Master Plan

The following Alviso Master Plan policies specific to circulation are applicable to the proposed project.

Alviso Master Plan Relevant Land Use Policies

Policies	Description
Bicycle Policy 3	New commercial and industrial development should accommodate safe bicycle travel by their employees and customers.
Trail Circulation Policy 1	The trails that pass through Alviso should be maintained and new trails should be developed.

4.16.2 Transportation Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,18
b. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,18
c. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3,18
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,18
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,18

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,18

4.16.2.1 *Thresholds of Significance*

Impacts on intersections are based on the significance criteria and thresholds of the jurisdiction in which the intersection is located. For this analysis, significance criteria for impacts on intersections are based on the Cities of San Jose and Santa Clara Level of Service standards. Project impacts also were analyzed according to the CMP methodology for the three CMP-designated intersections.

City of San Jose Definition of Significant Intersection Impacts

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of San Jose if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection 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 San Jose standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions (i.e., traffic conditions just prior to completion of the proposed project) or better.

City of Santa Clara Definition of Significant Intersection Impacts

The project is said to create a significant adverse impact on traffic conditions at a non-CMP signalized intersection in the City of Santa Clara if for either peak hour:

1. 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
2. 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 0.01.

An exception to this criteria applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

A significant impact by the City of Santa Clara 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 background conditions.

CMP Definition of Significant Intersection LOS Impacts

The definition of a significant impact at a CMP intersection is the same as for each of the Cities, except that the CMP stand for acceptable level of service at a CMP intersection is LOS E or better. A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection conditions to an acceptable level or no worse than background conditions.

CMP Definition of Significant Freeway Segment Impacts

The CMP defines an acceptable level of service for freeway segments as LOS E or better. A project is considered to create a significant impact on traffic conditions on a freeway segment if for either peak hour:

1. The level of service on the freeway segment degrades from an acceptable LOS E or better under existing conditions to an unacceptable LOS F, or
2. The level of service on the freeway segment is LOS F under existing conditions and the number of project trips on that segment constitutes more than one percent of capacity on that segment.

A significant impact by CMP standards is considered to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to background conditions or better.

4.16.3 Impacts Evaluation

- a. – b. *Would the project 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? Would the project 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?*

Please note that the analysis of the project's impacts to intersections is based on a previously proposed retail square footage of 117,000. Subsequent to preparation of the traffic analysis, the project description was changed and the proposed retail square footage was reduced to 110,000. Because this reduction in square footage had no effect on the significance of any impacts to intersections resulting from project traffic, the analysis of intersection impacts was not revised and is still based on a retail square footage of 117,000, which represents a conservative scenario for the determination of project impacts.

The reduction in retail square footage would, however, effect the significance determination of the project's impacts to freeway segments. As a result, the analysis of the project's impacts to freeway segments presented below is based on the currently proposed retail square footage of 110,000.

Trip Generation, Distribution and Assignment

The traffic generated by the project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The project trip generation estimates the volume of traffic entering and exiting the site for the AM and PM peak hours. The trip distribution estimates the directions to and from which the project trips would travel. The trip assignment assigns the project-generated traffic to specific streets and intersections in the study area. These procedures are discussed below.

The project's trip generation associated with the proposed hotel and retail uses was estimated using the trip generation rates published in the Institute of Transportation Engineers' (ITE) Trip Generation Manual. Trip generation from the proposed Topgolf facility was estimated by utilizing traffic and parking counts completed at an existing Topgolf facility in Scottsdale, Arizona. The proposed facility on the project site would be slightly larger than the existing facility in Scottsdale, and trip generation rates were adjusted accordingly. Trip reductions associated with internalized and non-motorized project trips, pass-by trips, and credit for existing uses on the site that would be removed were also applied.

As described above, the analysis of the project's impacts to intersections is based on a previously proposed retail square footage of 117,000, which represents a conservative scenario. Under this scenario, it is estimated that the proposed project would generate 6,915 daily trips, with 231 trips (151 inbound and 80 outbound) occurring during the AM peak hour and 624 trips (304 inbound and

320 outbound) occurring during the PM peak hour. Trip generation calculations under this scenario are presented in Table 4.16-5.

The analysis of the project's impacts to freeway segments is based on the currently proposed retail square footage of 110,000. Under this scenario, it is estimated that the proposed project would generate 6,691 daily trips, with 224 trips (147 inbound and 77 outbound) occurring during the AM peak hour and 605 trips (296 inbound and 309 outbound) occurring during the PM peak hour. Trip generation calculations under this scenario are presented in Table 4.16-6.

The project trips were assigned to the roadway system in accordance with the estimated trip distribution pattern, based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses.

Roadway Improvements Proposed by the Project

As described in Section 3.0 Project Description, the project would construct a landscaped median along this stretch of N. First Street, with left-turn cut-outs in the northbound direction at Trinity Park Drive and Liberty Street, and in the southbound direction at Grand Boulevard and Trinity Park Drive. Additionally, the project would install a traffic signal at the intersection of Trinity Park Drive and N. First Street, which would become the main project access point.

Currently, there are no sidewalks along the project frontage with N. First Street. The project would install sidewalks on the project frontage which would connect with existing sidewalks north and south of the site, providing pedestrian access to the site from the surrounding area. Existing bike lanes on N. First Street along the project frontage would be maintained. The bike lane in the southbound direction would be shifted to the west with the addition of the vehicular traffic lane.

The following analysis accounts for the roadway improvements described above.

Table 4.16-5: Trip Generation Estimates Used for Intersections Analysis

<i>Summary of Rates And Percentage Distribution Splits</i>									
Land Use	Rate	Daily Rate	AM Peak Hour			PM Peak Hour			
			In %	Out%	Rate	In %	Out%	Rate	
Hotel	per Room	7.09	59%	41%	0.53	51%	49%	0.60	
Shopping	per KSF	42.7	62%	38%	0.96	48%	52%	3.71	
Topgolf	per Hitting Bay	18.0	87%	13%	0.31	50%	50%	1.80	
<i>Vehicle Trip Estimates</i>									
Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	200	Room	1,417	63	43	106	61	59	120
<i>Hotel Internal Trips (10% mixed-use trip reduction for hotel to retail)</i>			-142	-6	-4	-10	-6	-6	-12
Net New External Hotel Trips			1,275	57	39	96	55	53	108
Retail	117.0	KSF	4,996	70	43	113	208	226	434
<i>Retail Internal Trips (10% mixed-use trip reduction for retail to hotel)</i>			-142	-4	-6	-10	-6	-6	-12
<i>Retail Driveway Trips</i>			4,854	66	37	103	202	220	422
<i>Pass-by Reduction (-25% Daily & PM peak hour)</i>			-1,214	0	0	0	-51	-55	-106
Net New External Retail Trips			3,640	66	37	103	151	165	316
Topgolf	125	Hitting Bays	2,250	34	5	39	112	113	225
<i>Existing Uses to be Removed</i>			-250	-6	-1	-7	-14	-11	-25
Total Net New External Vehicle Trips			6,915	151	80	231	304	320	624

Table 4.16-6: Trip Generation Estimates Used for Freeway Analysis

Summary of Rates And Percentage Distribution Splits

Land Use	Rate	Daily Rate	AM Peak Hour			PM Peak Hour		
			In %	Out%	Rate	In %	Out%	Rate
Hotel	per Room	7.09	59%	41%	0.53	51%	49%	0.60
Shopping Center	per KSF	42.7	62%	38%	0.96	48%	52%	3.71
Topgolf	per Hitting Bay	18.0	87%	13%	0.31	50%	50%	1.80

Vehicle Trip Estimates

Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	200	Room	1,417	63	43	106	61	59	120
<i>Hotel Internal Trips (10% mixed-use trip reduction for hotel to retail)</i>			-142	-6	-4	-10	-6	-6	-12
Net New External Hotel Trips			1,275	57	39	96	55	53	108
Retail	117.0	KSF	4,697	66	40	106	196	212	408
<i>Retail Internal Trips (10% mixed-use trip reduction for retail to hotel)</i>			-142	-4	-6	-10	-6	-6	-12
<i>Retail Driveway Trips</i>			4,555	62	34	96	190	206	396
<i>Pass-by Reduction (-25% Daily & PM peak hour)</i>			-1,139	0	0	0	-47	-52	-99
Net New External Retail Trips			3,416	62	34	96	143	154	297
Topgolf	125	Hitting Bays	2,250	34	5	39	112	113	225
<i>Existing Uses to be Removed</i>			-250	-6	-1	-7	-14	-11	-25
Total Net New External Vehicle			6,691	147	77	224	296	309	605

Existing Plus Project Conditions

This section describes existing traffic conditions with the addition project-generated traffic. Existing plus project traffic conditions could potentially exist if the project was constructed and occupied prior to the other approved projects in the area. It is unlikely that this traffic condition would occur, since other approved projects anticipated to add traffic to the area would likely be constructed and occupied during the time the project is going through development review and construction. This scenario does not include potential traffic from prior approvals. Existing plus project conditions also does not include any planned and funded roadway improvements that have not been constructed.

Existing Plus Project Conditions Signalized Intersection Levels of Service Analysis

The results of the signalized intersection level of service analysis under existing plus project conditions are summarized in Table 4.16-7.

The results of the LOS calculations indicate that all signalized study intersections operate at acceptable LOS during the AM and PM peak hours under existing plus project conditions. Given that the LOS calculations indicate that all study intersection operate at acceptable service levels based on their respective jurisdiction criteria, the project would have a less than significant impact at all study intersections under the existing plus project conditions.

It should be noted that some of the study intersections, such as Intersection 4: N. First Street and Nortech Parkway, show a reduction in average critical day with the addition of project traffic, which is counterintuitive. The average delays in Table 4.16-7 are weighted averages. Weighted average delays will be reduced when traffic is added to a movement with a low delay, such as the major through movements, as opposed to the side-street approach. Conversely, relatively small volume increase to movements with high delays can substantially increase the weighted average delay.

Existing Plus Project Conditions Unsignalized Intersection Levels of Service Analysis

Under existing plus project conditions, all the unsignalized study intersections operate at LOS B or better with the exception of Intersection 16: Lafayette Street & Great America Way. LOS F operations are reported for this intersection during the PM peak hour. This intersection currently operates at LOS F under existing conditions without the addition of project trips. The City of Santa Clara does not have an established significance criteria for unsignalized intersections. The peak-hour signal warrant is met under existing conditions for this intersection, meaning installation of a traffic signal is warranted even without the addition of project trips. Signalization is primarily due to the heavy eastbound right-turn volume, and the proposed project will not add trips to this movement; therefore, the project's contribution to this poorly operating intersection is negligible.

Table 4.16-7: Existing Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Existing		Existing Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴			
4	N. First Street & Nortech Parkway	Signal	D (City of San Jose)	AM	11.3	B+	11.4	B+	-0.1	0.038	NO
				PM	14.6	B	13.7	B	-1.1	0.08	NO
5	N. First Street & SR 237 Westbound Ramps	Signal	D (City of San Jose) E (CMP)	AM	12.4	B	12.8	B	0.7	0.018	NO
				PM	20.0	B-	20.0	B-	0.9	0.075	NO
6	N. First Street & SR 237 Eastbound Ramps	Signal	D (City of San Jose) E (CMP)	AM	28.2	C	29.3	C	1.4	0.023	NO
				PM	24.8	C	31.3	C	6.2	0.037	NO
7	N. First Street & Holger Way	Signal	D (City of San Jose)	AM	30.7	C	30.7	C	0.1	0.014	NO
				PM	27.2	C	26.4	C	-0.6	0.028	NO
8	N. First Street & Vista Montana	Signal	D (City of San Jose)	AM	39.9	D	39.6	D	-0.2	0.015	NO
				PM	42.2	D	42.7	D	0.6	0.018	NO
9	N. First Street & Rose Orchard Way	Signal	D (City of San Jose)	AM	10.8	B+	11.0	B+	0.4	0.014	NO
				PM	17.3	B	16.6	B	0.2	0.032	NO
10	N. First Street & Tasman Drive	Signal	D (City of San Jose)	AM	34.2	C-	34.4	C-	0.6	0.02	NO
				PM	37.8	D+	38.7	D+	0.6	0.016	NO
11	N. First Street & Rio Robles Street	Signal	D (City of San Jose)	AM	35.4	D+	35.5	D+	0.4	0.005	NO
				PM	41.3	D	41.5	D	0.6	0.014	NO

Table 4.16-7: Existing Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Existing		Existing Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴			
12	N. First Street & River Oaks Parkway	Signal	D (City of San Jose)	AM	25.5	C	25.5	C	0.2	0.009	NO
				PM	22.7	C+	22.5	C+	-0.2	0.014	NO
13	N. First Street & Montague Expressway	Signal	E (CMP)	AM	61.1	E	61.4	E	0.5	0.005	NO
				PM	59.0	E+	59.7	E+	0.2	0.009	NO
14	Zanker Drive & Tasman Drive	Signal	D (City of San Jose)	AM	45.6	D	45.5	D	0	0	NO
				PM	37.5	D+	37.3	D+	-0.2	0.008	NO
15	Gold Street & Gold Street Connector	Signal	D (City of San Jose)	AM	13.8	B	14.3	B	0.7	0.031	NO
				PM	13.3	B	13.6	B	0.3	0.055	NO
17	Great America Parkway & Gold Street Connector	Signal	D (City of San Jose)	AM	12.3	B	12.0	B+	-0.1	0.007	NO
				PM	12.6	B	13.0	B	0.2	0.031	NO
18	Great America Parkway & SR 237 Westbound Ramps	Signal	E (CMP)	AM	18.0	B	17.9	B	0	0.001	NO
				PM	17.4	B	17.4	B	0	0.008	NO
19	Great America Parkway & SR 237 Eastbound Ramps	Signal	E (CMP)	AM	13.1	B	13.4	B	0.2	0.005	NO
				PM	11.9	B+	12.7	B	1	0.015	NO
20	Vista Montana & Tasman Drive	Signal	D (City of San Jose)	AM	26.4	C	26.2	C	-0.1	0.002	NO
				PM	30.9	C	30.7	C	0	0.007	NO

Table 4.16-7: Existing Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Existing		Existing Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴			

Notes:

¹ Signal = Signalized Intersection

² LOS threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service). **Bold** indicates unacceptable operations by jurisdiction's level of standard.

³ Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.

⁴ LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software package, which apply the methods described in the *2000 Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County conditions for signalized intersections. **Bold** indicates unacceptable operations by jurisdiction's level of standard.

⁵ Change in critical movement delay between Existing and Existing plus Project Conditions.

⁶ Change in critical volume-to-capacity (V/C) ratio between Existing and Existing plus Project Conditions.

⁷ Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

⁸ Change in intersection weighted average control delay between Existing Conditions and Existing plus Project with Mitigation Conditions.

Existing Plus Project Conditions Freeway Segment Level of Service Analysis

Freeway segments of SR 237 between Great America Parkway and Zanker Road were analyzed during the AM and PM peak hours by calculating the amount of project traffic projected to be added to these freeway segments. Project trips were assigned to HOV lanes assuming an HOV factor of 25 percent. The results of the freeway segment level of service analysis under existing plus project conditions are summarized in Table 4.16-8.

As shown in Table 4.16-8, the proposed project would not add trips greater than one percent of the freeway segment capacity to the freeway study segments operating at LOS F during the AM and PM peak hours. Therefore, based on VTA's impact criteria, the project would have less than significant impacts at the identified freeway study segments under existing plus project conditions.

Background Plus Project Conditions

This section describes near-term traffic conditions that would likely occur when the project is complete. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts. This traffic scenario represents a more congested traffic condition than the existing plus project scenario, since it includes traffic generated by approved projects in the area that are under construction but not yet occupied.

Background Plus Project Conditions Signalized Intersection Levels of Service Analysis

The results of the signalized intersection level of service analysis under background plus project conditions are summarized in Table 4.16-9.

Using the respective traffic impact significance criteria that governs each study intersection, the project would result in significant impacts at the following three study intersections during at least one of the analyzed peak hours:

- Intersection 5: N. First Street & SR 237 Westbound Ramps (LOS E, PM peak hour)
- Intersection 6: N. First Street & SR 237 Eastbound Ramps (LOS F, AM peak hour)
- Intersection 10: N. First Street & Tasman Drive (LOS E+, PM peak hour)

Impact TRAN-1: The project would result in significant impacts at the following intersections under background plus project conditions: N. First Street & SR 237 Westbound Ramps, N. First Street & SR 237 Eastbound Ramps, and N. First Street & Tasman Drive. **[Significant Impact]**

Table 4.16-8: Existing Plus Project Freeway Segment Levels of Service

Freeway Segment	Dir ¹	Peak Hour ¹	Capacity (Vph) ²		Existing Conditions				Existing Plus Project						
			Mixed	HOV	Mixed Density ³	HOV Density ³	Mixed LOS ⁴	HOV LOS	Trips ⁵	Mixed Density ³	HOV Density ³	Mixed LOS ⁴	HOV LOS	Mixed Impact ⁶	HOV Impact ⁶
1. SR 237, between Great America Parkway and N. First Street	EB	AM PM	4,600	1,650	46 88	14 55	D F	B E	23 59	46 89	14 55	D F	B E	0.41% 0.96%	0.24% 0.91%
	WB	AM PM	4,600	1,650	48 44	32 14	E D	D B	15 61	48 45	32 14	E D	D B	0.24% 1.09%	0.24% 0.67%
2. SR 237, between N. First Street and Zanker Road	EB	AM PM	4,600	1,650	46 76	19 54	D F	C E	14 59	46 77	19 54	D F	C E	0.24% 0.96%	0.18% 0.91%
	WB	AM PM	4,600	1,650	55 49	36 22	E E	D C	28 57	55 50	36 22	E E	D C	0.46% 0.93%	0.42% 0.85%

Notes:

¹ Dir = direction, AM = morning peak hour, PM = afternoon peak hour

² Vph = vehicles per hour per lane

³ Measured in passenger cars per mile per lane

⁴ LOS = Level of Service. **Bold** font indicates unacceptable operations based on VTA's LOS E Standard.

⁵ Project trips added to individual freeway segments

⁶ Percent impact on mixed flow lanes determined by dividing the number of project trips by the freeway segment's capacity.

Table 4.16-9: Background Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Background		Background Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴			
4	N. First Street & Nortech Parkway	Signal	D (City of San Jose)	AM	11.7	B+	11.7	B+	-0.1	0.038	NO
				PM	15.0	B	14.3	B	-1	0.08	NO
5	N. First Street & SR 237 Westbound Ramps	Signal	D (City of San Jose) E (CMP)	AM	31.5	C	36.8	D+	8.7	0.034	NO
				PM	45.2	D	68.5	E	28.3	0.075	YES
6	N. First Street & SR 237 Eastbound Ramps	Signal	D (City of San Jose) E (CMP)	AM	110.5	F	120.5	F	15.1	0.035	YES
				PM	26.6	C	29.4	C	6.6	0.151	NO
7	N. First Street & Holger Way	Signal	D (City of San Jose)	AM	30.7	C	30.6	C	0.1	0.014	NO
				PM	27.1	C	26.2	C	-0.6	0.028	NO
8	N. First Street & Vista Montana	Signal	D (City of San Jose)	AM	40.3	D	40.4	D	0.3	0.015	NO
				PM	44.2	D	45.0	D	1	0.018	NO
9	N. First Street & Rose Orchard Way	Signal	D (City of San Jose)	AM	11.2	B+	11.2	B+	0.3	0.014	NO
				PM	17.6	B	17.2	B	0.2	0.032	NO
10	N. First Street & Tasman Drive	Signal	D (City of San Jose)	AM	42.1	D	43.0	D	1.5	0.02	NO
				PM	55.8	E+	59.0	E+	4.3	0.016	YES
11	N. First Street & Rio Robles Street	Signal	D (City of San Jose)	AM	37.1	D+	37.3	D+	0.4	0.005	NO
				PM	44.9	D	45.6	D	1.1	0.014	NO

Table 4.16-9: Background Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Background		Background Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴			
12	N. First Street & River Oaks Parkway	Signal	D (City of San Jose)	AM	26.1	C	26.2	C	0.3	0.009	NO
				PM	24.0	C	24.0	C	-0.1	0.014	NO
13	N. First Street & Montague Expressway	Signal	E (CMP)	AM	125.1	F	126.0	F	1.5	0.005	NO
				PM	99.6	F	101.5	F	1.7	0.004	NO
14	Zanker Drive & Tasman Drive	Signal	D (City of San Jose)	AM	58.4	E+	58.3	E+	0	0	NO
				PM	42.2	D	42.4	D	0.3	0.008	NO
15	Gold Street & Gold Street Connector	Signal	D (City of San Jose)	AM	15.2	B	15.7	B	0.8	0.031	NO
				PM	14.1	B	14.6	B	0.4	0.021	NO
17	Great America Parkway & Gold Street Connector	Signal	D (City of San Jose)	AM	25.7	C	25.9	C	0.6	0.007	NO
				PM	13.1	B	13.8	B	0.4	0.031	NO
18	Great America Parkway & SR 237 Westbound Ramps	Signal	E (CMP)	AM	21.1	C+	21.1	C+	0.1	0.001	NO
				PM	28.3	C	29.3	C	1.3	0.015	NO
19	Great America Parkway & SR 237 Eastbound Ramps	Signal	E (CMP)	AM	15.6	B	15.7	B	0.2	0.006	NO
				PM	15.2	B	15.8	B	0.7	0.015	NO
20	Vista Montana & Tasman Drive	Signal	D (City of San Jose)	AM	22.4	C+	22.3	C+	0	0.002	NO
				PM	28.2	C	28.1	C	0	0.007	NO

Table 4.16-9: Background Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Background		Background Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴			

Notes:

¹ Signal = Signalized Intersection

² LOS threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service). **Bold** indicates unacceptable operations by jurisdiction's level of standard.

³ Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.

⁴ LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software package, which apply the methods described in the *2000 Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County conditions for signalized intersections. **Bold** indicates unacceptable operations by jurisdiction's level of standard.

⁵ Change in critical movement delay between Background and Background plus Project Conditions.

⁶ Change in critical volume-to-capacity (V/C) ratio between Background and Background plus Project Conditions.

⁷ Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

⁸ Change in intersection weighted average control delay between Background Conditions and Background plus Project with Mitigation Conditions.

Mitigation Measures: The three impacted intersections identified above are located with the boundary of the NSJADP. As described previously, on December 17, 2013, the City Council modified the NSJADP to allow projects outside the policy area boundary (such as the proposed project) that contribute trips to intersections within the policy area to pay the TIF to pay fair share fees to fund traffic mitigation. Therefore, it would be appropriate for the proposed project to pay the NSJ impact fee for its contribution to impacted intersections within the NSJADP boundary, even though the project is not within the NSJADP boundary. The payment of the NSJ impact fee would provide a proportional fair share payment toward the required improvements to the N. First Street and SR 237 intersections, and would constitute effective mitigation of the project's impacts.

MM TRAN-1: The project shall pay the North San Jose Area Traffic Impact Fee (TIF) established under the North San Jose Area Development Policy. Payment would be based on the project's percent contribution of added traffic at impacted intersections. TIF payment includes deficiency plan improvements such as multi-modal improvements, transit upgrades, installation of bike lanes, and pedestrian improvements. Payment of the TIF would represent a fair share contribution to transportation improvements that would mitigate the project's impacts to this intersection. **[Less Than Significant Impact With Mitigation]**

Background Plus Project Conditions Unsignalized Intersection Levels of Service Analysis

LOS F operations are reported for the unsignalized study intersection of Lafayette Street and Great America Way during the PM peak hour. This intersection currently operates at LOS F under existing and background conditions without the addition of project trips, and the project adds trips through this intersection, worsening the critical delay. The City of Santa Clara does not have an established significance criteria for unsignalized intersections. The peak-hour signal warrant is met under existing and background conditions for this intersection, meaning installation of a traffic signal is warranted without the addition of project trips. Signalization is primarily due to the heavy eastbound right-turn volume, and the proposed project will not add trips to this movement; therefore, the project's contribution to this poorly operating intersection is negligible.

Cumulative Plus Project Conditions

Cumulative Conditions

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 Jose to background condition traffic volumes. The trips for each of the cumulative projects where trip generation was estimated were then assigned to the roadway network based on population and employment data, existing and estimated future travel patterns, and recent TIAs completed in the area. Appendix I contains a full list of pending projects from the City of San Jose and the City of Santa Clara, as well as the assumed trip generation estimates for the major developments that have been included in the projection of cumulative volumes. For the purposes of this Initial Study, cumulative conditions were established at the time the City initiated the traffic analysis for the proposed project (February 2016).

Cumulative Signalized Intersection Levels of Service

Table 4.16-10, below, shows the LOS of signalized study intersections under cumulative conditions. The results of the cumulative condition intersection operations analysis show that 10 of the 17 study intersection are projected to operate at an acceptable service level during all analyzed peak hours, using the HCM methodology and their respective jurisdiction's LOS threshold. The remaining nine study intersections are projected to operate at a deficient LOS (LOS E/F for City intersections and LOS F for regionally significant intersections) during at least one of the analyzed peak hours:

- Intersection 5: N. First Street & SR 237 Westbound Ramps (LOS F, AM peak hour)
- Intersection 10: N. First Street & Tasman Drive (LOS F, AM and PM peak hour)
- Intersection 13: N. First Street & Montague Expressway (LOS F, AM and PM peak hour)
- Intersection 14: Zanker Drive & Tasman Drive (LOS F, AM peak hour; LOS E+, PM peak hour)
- Intersection 15: Gold Street & Gold Street Connector (LOS F, AM peak hour)
- Intersection 16: Lafayette Street & Great America Way (LOS E, AM peak hour)
- Intersection 18: Great America Parkway & SR 237 Westbound Ramps (LOS F, AM and PM peak hour)
- Intersection 19: Great America Parkway & SR 237 Eastbound Ramps (LOS F, AM and PM peak hour)

Cumulative Transportation Network

Details of key transportation system assumptions made for the study's cumulative conditions are described below. These improvements, whether the result of local capital improvement programs or in connection with planned or approved projects, would result in improved traffic operations and/or capacity changes at study locations when compared to existing and background baseline conditions.

- Intersection 6: N. First Street & SR 237 Eastbound Ramps – As part of the SR 237/N. First Street Interchange Improvements (VTP 2040 Project – H34), N. First Street will be widened to three lanes in the northbound direction at this location. In order to accommodate the additional through lane, this improvement will also include the widening of the existing 237 overpass.
- Intersection 16: Lafayette Street & Great America Way – The proposed City Place development will add a considerable amount of traffic to this location. Thus, signal implementation and reconfiguration of the intersection geometry, where the northbound and southbound approaches will include one left-turn lane, one through lane, and one through/right-turn lane and the eastbound and westbound approaches will include one left-turn lane, one through lane, and one right-turn lane, are assumed as part of the full buildout of City Place. Although these improvements are considered City Place project improvements, they were assumed to be in place in this study's Cumulative Condition because the projected cumulative baseline volumes (which includes City Place) will contribute to oversaturated conditions at this location if it were to remain unsignalized.

Cumulative Plus Project Conditions

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 Jose to background condition traffic volumes. Cumulative plus project conditions are the cumulative no project condition plus project generated traffic.

A single project's contribution to a cumulative intersection impact is deemed considerable in the City of San Jose if the proportion of project traffic represents 25 percent or more of 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 Jose if the measures implemented would restore the intersection LOS to background conditions or better at non-protected intersections.

Cumulative Plus Project Conditions Signalized Intersection Levels of Service Analysis

The results of the intersection level of service analysis under cumulative plus project conditions are summarized in Table 4.16-10.

Using the respective traffic impact significance criteria that governs each study intersection, the project would result in a significant impact at the following study intersection during at least one of the analyzed peak hours because project-generated traffic would represent more than 25 percent of the increase in total traffic volume from background traffic conditions to cumulative traffic conditions:

- Intersection 5: N. First Street & SR 237 Westbound Ramps (LOS E, PM peak hour)

Impact C-TRAN-1: The project would result in significant impacts at the following intersection under cumulative plus project conditions: N. First Street & SR 237 Westbound Ramps. **[Significant Impact]**

Mitigation Measures: The impacted intersection identified above is located with the boundary of the NSJADP. As described previously, on December 17, 2013, the City Council modified the NSJADP to allow projects outside the policy area boundary (such as the proposed project) that contribute trips to intersections within the policy area to pay the TIF to pay fair share fees to fund traffic mitigation. Therefore, it would be appropriate for the proposed project to pay the NSJ impact fee for its contribution to impacted intersections within the NSJADP boundary, even though the project is not within the NSJADP boundary. The payment of the NSJ impact fee would provide a proportional fair share payment toward the required improvements to the N. First Street and SR 237 intersection, and would constitute effective mitigation of the project's impacts.

MM C-TRAN-1: The project shall pay the North San Jose Area Traffic Impact Fee (TIF) established under the North San Jose Area Development Policy. Payment would be based on the project's percent contribution of added traffic at impacted intersections. Payment of the TIF would represent a fair share contribution to roadway improvements that would mitigate impacts to the identified intersections. **[Less Than Significant Impact With Mitigation]**

Table 4.16-10: Cumulative Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Cumulative		Cumulative Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	% Contribution	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴				
4	N. First Street & Nortech Parkway	Signal	D (City of San Jose)	AM	11.5	B+	11.6	B+	0	0.038	-	NO
				PM	13.4	B	13.1	B	-0.6	0.08	-	NO
5	N. First Street & SR 237 Westbound Ramps	Signal	D (City of San Jose) E (CMP)	AM	42.1	D	48.7	D	11	0.034	-	NO
				PM	85.7	F	113.0	F	34.9	0.075	55%	YES
6	N. First Street & SR 237 Eastbound Ramps	Signal	D (City of San Jose) E (CMP)	AM	44.9	D	49.1	D	4.2	0.017	-	NO
				PM	29.4	C	34.3	C-	10	0.115	-	NO
7	N. First Street & Holger Way	Signal	D (City of San Jose)	AM	30.6	C	30.6	C	0.1	0.014	-	NO
				PM	27.0	C	26.1	C	-0.6	0.028	-	NO
8	N. First Street & Vista Montana	Signal	D (City of San Jose)	AM	41.4	D	41.6	D	0.4	0.015	-	NO
				PM	47.0	D	47.9	D	-1.9	0.025	-	NO
9	N. First Street & Rose Orchard Way	Signal	D (City of San Jose)	AM	14.0	B	14.0	B	0.3	0.014	-	NO
				PM	20.3	C+	19.9	B-	0.1	0.032	-	NO
10	N. First Street & Tasman Drive	Signal	D (City of San Jose)	AM	83.2	F	87.0	F	6	0.02	5%	NO
				PM	110.2	F	116.5	F	7.1	0.016	12%	NO
11	N. First Street &	Signal		AM	39.1	D	39.4	D	0.6	0.005	-	NO

Table 4.16-10: Cumulative Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Cumulative		Cumulative Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	% Contribution	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴				
	Rio Robles Street		D (City of San Jose)	PM	52.6	D-	54.4	D-	2.8	0.014	-	NO
12	N. First Street & River Oaks Parkway	Signal	D (City of San Jose)	AM	28.3	C	28.5	C	0.4	0.009	-	NO
				PM	27.0	C	27.1	C	0.3	0.016	-	NO
13	N. First Street & Montague Expressway	Signal	E (CMP)	AM	175.3	F	176.2	F	1.4	0.005	-	NO
				PM	146.7	F	149.4	F	3.2	0.004	-	NO
14	Zanker Drive & Tasman Drive	Signal	D (City of San Jose)	AM	86.8	F	87.1	F	0	0	-	NO
				PM	58.5	E+	59.7	E+	2	0.009	-	NO
15	Gold Street & Gold Street Connector	Signal	D (City of San Jose)	AM	208.5	F	204.6	F	-1.9	0.006	-	NO
				PM	42.0	D	47.3	D	8.0	0.021	-	NO
16	Lafayette Street & Great America Way	SSSC	D (City of San Jose)	AM	71.0	E	71.5	E	0.7	0.002	-	NO
				PM	41.6	D	41.8	D	0.3	0.005	-	NO
17	Great America Parkway & Gold Street Connector	Signal	D (City of San Jose)	AM	39.9	D	40.8	D	1.6	0.007	-	NO
				PM	12.6	B	13.2	B	0.4	0.031	-	NO
18		Signal	E (CMP)	AM	114.9	F	115.2	F	0.6	0.001	-	NO

Table 4.16-10: Cumulative Plus Project Signalized Intersection Levels of Service

ID	Intersection	Control ¹	Los Threshold ²	Peak Hour	Cumulative		Cumulative Plus Project		Δ In Average Critical Delay ⁵	Δ In Critical V/C ⁶	% Contribution	Significant Impact? ⁷
					Delay ³	LOS ⁴	Delay ³	LOS ⁴				
	Great America Parkway & SR 237 Westbound Ramps			PM	>180	F	>180	F	3.6	0.008	-	NO
19	Great America Parkway & SR 237 Eastbound Ramps	Signal	E (CMP)	AM	73.5	E	75.0	E	2.6	0.006	-	NO
				PM	30.1	C	33.3	C-	5.2	0.015	-	NO
20	Vista Montana & Tasman Drive	Signal	D (City of San Jose)	AM	24.1	C	24.1	C	0.1	0.002	-	NO
				PM	31.4	C	31.7	C	0.5	0.007	-	NO

Notes:

¹ Signal = Signalized Intersection

² LOS threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service). **Bold** indicates unacceptable operations by jurisdiction's level of standard.

³ Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.

⁴ LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software package, which apply the methods described in the *2000 Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County conditions for signalized intersections. **Bold** indicates unacceptable operations by jurisdiction's level of standard.

⁵ Change in critical movement delay between Cumulative Conditions and Cumulative plus Project Conditions.

⁶ Change in critical volume-to-capacity (V/C) ratio between Cumulative Conditions and Cumulative plus Project Conditions.

⁷ In addition to looking at the change in critical movement delay and critical V/C, the City of San Jose's cumulative significant impact criteria also requires looking at the percentage of project trips traversing a deficient intersection. A project's contribution to a cumulative impact is deemed considerable if the proportion of project traffic represents 25% or more of the increase in total intersection volume from Background to Cumulative Conditions. **Bold** indicates project traffic is at least 25% of the of the volume increase.

⁸ Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

⁹ Change in intersection weighted average control delay between Cumulative Conditions and Cumulative plus Project with Mitigation Conditions.

Cumulative Plus Project Conditions Unsignalized Intersection Levels of Service Analysis

LOS F operations are reported for the unsignalized study intersections of Gold Street and N. Taylor Street as well as Trinity Park Drive and N. First Street during the PM peak hour. While the proposed project would add trips to the intersection, worsening the critical delay, the City of San Jose does not have an established significance criteria for unsignalized intersections. The peak-hour signal warrant is met under cumulative plus project conditions at both intersections.

Intersection and Freeway On-Ramp Operations Analysis (Vehicle Queues)

The analysis of project intersection level of service was supplemented with an analysis of intersection operations for selected signalized intersections. The operations analysis is based on vehicle queuing for high-demand movements at intersections. The results of the vehicle queuing and left-turn pocket storage analyses for the AM and PM peak hours are shown in Appendix I and are summarized below.

It should be noted that the analysis provided below is for informational purposes only. Under CEQA, the City of San José analyses impacts to intersections based on the level of service thresholds of significance. There are no thresholds of significance related to vehicle queues at intersections, and, as a result, any potential queuing issues resulting from the project would not be considered significant impacts under CEQA.

Freeway On-Ramps

With the additional project traffic, there is the potential for increased ramp queuing during the peak hours. Queuing is not considered an environmental impact per CEQA, but rather an operational consideration. Thus, this analysis summarizes the additional traffic and estimates the change in vehicle queue length compared to the existing available vehicle storage on each study ramp. Current ramp-metering plans provided by Caltrans in March 2016 were used to evaluate existing on-ramp queues and were set to match queues observed during field observations. Off-ramp queues that terminate at an intersection were evaluated using ramp-terminal intersection queue estimates from the intersection LOS calculations (using TRAFFIX 8.0 software package).

The operations of on-ramps at two interchanges along the SR 237 near the project site were evaluated for existing and existing plus project Conditions. The off-ramps were not analyzed because they were part of the intersection operations analysis. In other words, vehicular flow on the off-ramps are controlled by the upstream signals which were already included as study intersections. Freeway ramps that were analyzed during the weekday morning and afternoon peak hours include:

1. SR 237 and Great America Parkway Eastbound On-Ramp
2. SR 237 and Great America Parkway Westbound On-Ramp
3. SR 237 and N. First Street Eastbound On-Ramp
4. SR 237 and N. First Street Westbound On-Ramp

The changes in the estimated vehicle queue lengths under existing plus project conditions are compared to existing conditions and available vehicle storage on each study ramp. Background and cumulative conditions are not evaluated since Caltrans typically determines the ramp metering plans

based on existing volumes and does not evaluate future conditions as part of the metering plan development.

Under existing conditions, on-ramp queues at the SR 237 interchanges at Great America Parkway and N. First Street are currently contained within the available storage areas for the westbound ramps for both the AM and PM peak hour and the eastbound ramps for the PM peak hour. During the AM peak period, the eastbound ramps at both interchanges had observed queues that exceeded the storage length. Specifically, northbound right-turn vehicles and southbound left-turn vehicles were observed to occasionally queue and spill back several hundred feet onto Great America Parkway and N. First Street before entering the eastbound on-ramps.

Under existing plus project conditions, the westbound on-ramps for both interchanges will likely continue to have little to no queuing because of the relatively small amount of project trips added (the largest increase is 51 added trips during the PM peak hour for the SR 237/N. First Street interchange). The eastbound on-ramp at Great America Parkway would experience a moderate increase in queue length because of the added project volume. While the eastbound on-ramp at N. First Street would experience a substantial increase in queue length; the project would only add 49 trips to this on-ramp and conditions are already oversaturated for the PM peak period.

c. 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?

See Section 4.8 Hazards and Hazardous Materials for discussion of the project's compliance with federal aviation regulations. Air traffic patterns would not be affected by the project. **[No Impact]**

d. – e. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)? Would the project result in inadequate emergency access?

Site Access

The project would construct a landscaped median along the project frontage of N. First Street and three two-way driveways on the west side of the N. First Street would provide access to the project and into a network of interior roadways that provides access to all proposed land uses (although the degree of direct access to different uses vary by driveway). Two of the project driveways will align with existing roadways at Grand Boulevard and Trinity Park Drive. The spacing between the project driveways at Grand Boulevard and at Trinity Park Drive is about 850 feet, while the spacing between the project driveways at Trinity Park Drive and the new project roadway is about 650 feet, thus there is adequate spacing between the intersections.

The intersection of Grand Boulevard and N. First Street is planned to align with the westernmost project driveway. To prevent potential traffic cut-through the Alviso neighborhood, the median will be channelized to allow left-turns onto Grand Boulevard from southbound N. First Street and prevent left-turns into and out of the project driveway, making the westernmost driveway right-in and right-out only. The median will also prevent left turns out of Grand Boulevard or through movements into the project site. This driveway will operate acceptably with a side-street stop-control under all “plus

Project” conditions (i.e., Existing plus Project, Background plus Project, and Cumulative plus Project).

The project driveway at the intersection of Trinity Park and N. First Street is centrally located and provides the most direct access to a majority of the uses proposed on the site, especially the Topgolf entertainment complex. Thus, it is assumed that the majority of project-generated traffic will access the site using this driveway. As described previously, the project would install a traffic signal at this intersection and the driveway will be full-access from the site. A dedicated left-turn pocket into the project driveway from northbound N. First Street will be provided at this location, but there is not sufficient cross sectional width to allow U-turn movements at this location. The signalized project driveway will operate acceptable at LOS C or better during the weekday peak hours under all “plus Project” conditions. Signalizing the intersection will also provide a controlled crossing for pedestrians crossing N. First Street, including pedestrians from the neighborhood accessing the site, elementary school students, and users of the future park trail connection.

The proposed raised median along N. First Street will prevent vehicles from turning left into the George Mayne Elementary School’s inbound driveway and from turning left out of the school’s primary outbound driveway. There will be a break in the median to allow outbound left turns at the school’s westernmost outbound driveway, which is also shared with the Alviso Youth Center. Vehicles that currently turn left out of the primary outbound driveway onto N. First Street will shift to the western driveway. The reassignment of school trips with the implementation of the proposed raised median would not affect operations of any of the study intersections, since the primary changes in circulation would occur within the school’s parking lot and at Tony P. Santos Street.

A driveway at the project’s eastern property line will primarily serve hotel patrons, as it provides direct access to the hotel’s porte cochere. A break in the median and left-turn pocket will allow left turns into the driveway from northbound N. First Street. No U-turns would be allowed at this location and the driveway would be right-out only. This driveway will operate acceptably with a side-street stop-control under all “plus Project” conditions

Emergency Access

Based on the proposed site plan, corner radii and aisle widths would allow for the circulation of fire trucks and larger vehicles (i.e. delivery trucks) through the site’s internal roadways, including the roundabout. Additionally, emergency vehicle access is provided at a separate driveway east of the intersection of Liberty Street and Moffat Street. The project, therefore, would not result in inadequate emergency access.

On-Site Circulation

The on-site circulation was reviewed in accordance with generally accepted traffic engineering standards. The network of interior roadways provide access to the project’s various clusters of buildings and parking areas. One of the key internal circulation features is the roundabout located directly west of Intersection 3: Trinity Park Drive & N. First Street (refer to Figure 3.0-1). The implementation of the roundabout feature allows for the large concentration of project traffic accessing to/from the main driveway to travel more free flow compared to an all-way stop control at this location. The roundabout also provides quality access to various areas of the site.

Bisecting the roundabout is the primary north-south roadway that runs end to end of the project site. Also interior roadway aisles accommodate for two-way traffic and provide 60-degree and 90-degree parking spaces. The design of these aisles within the various on-site parking areas adhere to City of San Jose design guidelines. For example, a standard 26-foot aisle width is required where 90-degree parking is provided. The site layout also provides continuous circulation through all the parking areas with no dead-end aisles. Overall, the on-site circulation is generally considered to be acceptable.

For the reasons stated above, the project would not substantially increase hazards due to a design feature or incompatible land uses, nor would it result in inadequate emergency access. **[Less Than Significant Impact]**

Left-Turn Queuing at Intersections

The addition of project traffic along the roadway network has the potential to add vehicles to left-turn movements such that the left-turn queues would exceed the turn pocket storage lengths. Queues that exceed the turn pocket storage length can impede through traffic movement along an approach.

Potentially affected intersections were selected for this evaluation based on where the project would add a minimum of 10 vehicles to a dedicated left-turn movement in at least one of the peak hours, which includes the following signalized intersections:

- Intersection 6: N. First Street & SR 237 Eastbound Ramps (Southbound left-turn pocket)
- Intersection 8: N. First Street & Vista Montana (Eastbound left-turn pocket)
- Intersection 10: N. First Street & Tasman Drive (Southbound and Eastbound left-turn pockets)
- Intersection 13: N. First Street & Montague Expressway (Southbound and Eastbound left-turn pockets)
- Intersection 15: Gold Street & Gold Street Connector (Eastbound left-turn pocket)
- Intersection 17: Great America Parkway & Gold Street Connector (Westbound left-turn pocket)
- Intersection 19: Great America Parkway & SR 237 Eastbound Ramps (Southbound left-turn pocket)

The 95th percentile queues from the TRAFFIX LOS analysis for the “plus project” scenarios were used to evaluate the projected queues at the identified left-turn movements for the Existing and Background Conditions. The results of the left-turn queue analysis are presented in Appendix I and are summarized below.

Based on the queue analysis, all the intersections evaluated have sufficient capacity to accommodate the project queues under both existing plus project and background plus project conditions, with the exception of Intersection 13: N. First Street & Montague Expressway. The analysis indicates that eastbound left-turn vehicle queues will exceed available storage at this location in the AM peak hour under background and background plus project conditions. The existing storage length at this location is about 870 feet, which is longer than typical storage lengths. No physical improvements are recommended to mitigate the eastbound left-turn queuing issues because it will require

significant right-of-way and a left-turn pocket length (i.e. 1,400 feet) that is not recommended from an engineering standpoint. It should also be noted that the queuing issue at the N. First Street and Montague Expressway intersection is attributed primarily to other background projects because the project only adds six (6) trips to the eastbound left-turn movement during the AM peak hour and the queue length exists under background conditions without the project in place.

In addition to looking at study intersections within the vicinity of the project site, the main project driveway at the intersection of Trinity Park Drive and N. First Street was also evaluated for queuing issues under the “plus project” conditions when it becomes signalized. The estimated queue length during the AM peak hour under existing plus project, background plus project, and cumulative plus project conditions is about 50 feet, which can be accommodated within the intersection’s anticipated 140-foot storage length for the northbound left-turn pocket at N. First Street. The project is estimated to add 188 trips in the PM peak hour to the intersection’s northbound left-turn movement (N. First Street turning into project driveway) which results in longer queues in the AM than the PM peak hour. During the PM peak hour the estimated queue length ranges between 150 to 175 feet in length under “plus project” conditions, which could result in a one to two car spillback from the left-turn pocket into the through lane along N. First Street.

- f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

Transit Facilities

The front of the project site is directly adjacent from the N. First Street and Alviso Park bus stop, N. First Street and Tony P. Santos bus stop, and N. First Street and Grand bus stop. As part of the project, sidewalks will be provided all along the project frontage, which would allow for better pedestrian access to the transit stops.

Bicycle Facilities

Even with the proposed N. First Street enhancements (i.e. widening and installation of a raised median), the dedicated bike lanes along both sides of the roadway will remain, which provide direct cyclist access to and from the site. Overall, the project encourages biking with its inclusion of on-site bike parking and maintenance of the Class II facilities on N. First Street.

Pedestrian Facilities

Currently, there are sidewalk gaps along N. First Street adjacent to the project site. One of the major project features that will improve the walkability and connectivity between the pedestrian networks of the project site and Alviso neighborhood is the installation of sidewalks along the project’s frontage. The proposed project site plan illustrates a network of sidewalks along both sides of the internal roadways, as well as internal landscaped walking paths, which provide pedestrian connections between parking areas and various project uses.

The proposed project is not expected to substantially increase the walking, biking, or transit demand to a level where it could not be accommodated by existing or planned facilities. Rather, the project

will provide additional sidewalks and other facilities that will enhance the pedestrian and bicycling networks and will provide improved access to transit and nearby land uses. Therefore, the project's impacts to transit, bicycle, and pedestrian facilities and services are considered less than significant. **[Less Than Significant Impact]**

4.16.4 Conclusion

With implementation of identified mitigation measures, the project would not result in significant transportation impacts. **[Less Than Significant With Mitigation]**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1.1 *Water Supply*

Water service to the project site is provided by the San Jose Municipal Water System, which is owned and operated by the City of San Jose. Customers in Alviso and North San Jose receive a blend of Hetch Hetchy water and treated water purchased from San Francisco Public Utilities Commission (SFPUC). An 18-inch water is located in N. First Street adjacent to the site.

Recycled water lines convey recycled water from the San José/Santa Clara Regional Wastewater Facility and the South Bay Recycling retailer on Zanker Road to a range of users. The nearest recycled water line is located on N. First Street adjacent to the project site.³⁹

4.17.1.2 *Storm Drainage*

Runoff from the developed areas of the project site currently flows to storm drains on Liberty Street and N. First Street and is conveyed to a pump station near Gold Street. The runoff is ultimately conveyed to the San Francisco Bay.

4.17.1.3 *Wastewater/Sanitary Sewer System*

The project site is currently served by a six-inch sanitary sewer pipe in N. First Street. Wastewater from the project area is treated at the San José/Santa Clara Regional Wastewater Facility (Wastewater Facility), formerly known as the San José/Santa Clara Water Pollution Control Plant (WPCP). The Wastewater Facility has a capacity to treat 167 million gallons per day (gpd) of sewage during dry weather flow.⁴⁰ In 2012, the Facility's average dry weather effluent flow was 85.3 mgd.⁴¹ The resulting fresh water from the Wastewater Facility is discharged to the South San Francisco Bay or delivered to the South Bay Water Recycling Project for distribution.

According to the General Plan FEIR, the City of San José generates approximately 69.8 million gallons per day (mgd) of dry weather sewage flow. The City's share of the San José/Santa Clara Regional Wastewater Facility treatment capacity is 108.6 mgd, which based on the 2010 data used for the General Plan FEIR leaves the City with approximately 38.8 mgd of excess treatment capacity.⁴²

³⁹ South Bay Water Recycling. *Recycled Water Pipeline System*. Map. July 28, 2011.

⁴⁰ City of San José. *San José/Santa Clara Regional Wastewater Facility*. May 4, 2010. Available at: <http://www.sanjoseca.gov/index.aspx?NID=1663>

⁴¹ City of San José. *Clean Bay Strategy Reports*. February 2013. Available at: <http://www.sanjoseca.gov/ArchiveCenter/ViewFile/Item/1629>

⁴² City of San José. *Envision San José 2040 General Plan Integrated Final Program EIR*. September 2011. Page 648.

4.17.1.4 Solid Waste

Santa Clara County’s Integrated Waste Management Plan (IWMP) was approved by the California Integrated Waste Management Board in 1996 and recently updated in June 2011. Each jurisdiction in the County has a landfill diversion requirement of 50 percent per year. In 2008, the City of San José diverted approximately 60 percent of the waste generated in the City. According to the IWMP, the County has adequate disposal capacity beyond 2022. In October 2007, the San José City Council adopted a Zero Waste Resolution which set a goal of 75 percent waste diversion by 2013 and zero waste by 2022.

The City of San José has an existing contract with Newby Island Sanitary Landfill (NISL) through December 31, 2020 with the option to extend the contract as long as the landfill is open. The City has an annual disposal allocation for 395,000 tons per year. As of March 2014, NISL had approximately 20.1 million cubic yards of capacity remaining.⁴³

Republic Services collects most standard garbage, recycling, and organics from businesses in the City. All San José residential garbage goes to NISL.

4.17.1.5 Other Utilities

Pacific Gas & Electric (PG&E) supplies electricity and natural gas to the project site. High voltage electric transmission lines cross the western portion of the site.

4.17.2 Utilities and Service Systems Environmental Checklist

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

⁴³ McGourty, Scott. Personal communications with Republic Services, Inc. Environmental Manager at NISL. May 19, 2014.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
e. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
g. Comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

4.17.3 Impacts Evaluation

a., e. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Would the project 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?

As stated above, the City currently has approximately 38.8 mgd of excess treatment capacity at the Wastewater Facility. Based on a sanitary sewer hydraulic analysis prepared for the General Plan FEIR, full build out under the General Plan would increase average dry weather flows by approximately 30.8 mgd. As a result, development allowed under the General Plan would not exceed the City's allocated capacity at the Wastewater Facility. The proposed project is consistent with the development assumptions in the General Plan. Therefore, implementation of the proposed project would have a less than significant impact on the Wastewater Facility. **[Less Than Significant Impact]**

b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project would require a connection to the existing six-inch sanitary sewer line in North First Street. Sewer upsizing of these lines may be required after further flow monitoring of existing surrounding sanitary mains is conducted. The improvements for the sanitary sewer connection would occur on-site and within the existing right-of-way of N. First Street. The environmental impacts of construction activities associated with proposed improvements to sanitary sewer

infrastructure serving the site are included in the analysis contained in this Initial Study. The project would implement the identified improvements and standard permit conditions to reduce construction-related impacts to a less than significant level. **[Less Than Significant Impact]**

c. Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project would increase the amount of impervious surfaces on-site by approximately 672,688 square feet. The result of this change would be an increase in the amount of stormwater runoff generated from the project site.

The project would comply with the City of San José's Post-Construction Urban Runoff Policy 6-29 and the RWQCB Municipal Regional NPDES permit. The City's Post-Construction Urban Runoff Policy 6-29 establishes specific requirements to minimize and treat stormwater runoff from new and redevelopment projects. The RWQCB Municipal Regional NPDES permit mandates the City of San José use its planning and development review authority to require that stormwater management measures such as site design, pollutant source control, and treatment measures are included in new and redevelopment projects to minimize and properly treat 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.

The proposed project would create additional impervious area and stormwater runoff within the proposed development would be collected and treated on-site. Based on the 50% rule requirements of the MRP permit, the project will need to provide treatment measures. Bioretention areas and self-treating areas are proposed at various locations at the site (refer to Figures 3.0-10 through 3.0-12). Project-specific Low Impact Development Measures will be determined as part of the PD Permit process.

In order to meet these requirements, stormwater runoff from the site would be collected via new on-site catch basins, most of which would be located in proposed bio-retention areas on-site (refer to Figure 3.0-12). Stormwater collected in the bio-retention areas would be treated prior to discharge to the City's storm drain system. The proposed treatment facilities would be numerically sized and would have sufficient capacity to treat the runoff entering the storm drainage system consistent with the NPDES requirements. With the proposed treatment and retention facilities, stormwater runoff from the project would not exceed existing levels. The project, therefore, would not require or result in the construction of new off-site stormwater drainage facilities or expansion of existing facilities.

This project is not under the HMP requirement of the MRP; however, due to constraints of existing improvements and to maintain same maximum peak run-off for pre and post condition, flow treatment devices or site design measures would be provided to keep the post-development discharge to the existing Alviso system at or below the existing maximum peak flow. Detailed design of any detention area(s) would be subject to review and approval during the project PD permit process.

The environmental impacts associated with construction of the proposed on-site stormwater facilities are included in the analysis contained in this Initial Study. The project would implement standard permit conditions to reduce construction-related impacts to a less than significant level. **[Less Than Significant Impact]**

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The San José General Plan FEIR determined that the three water suppliers for the City could serve planned growth under the Envision 2040 General Plan until 2025. Water demand could exceed water supply with implementation of the General Plan during dry and multiple dry years after 2025. The General Plan has specific policies to reduce water consumption including expansion of the recycled water system and implementation of water conservation measures. The General Plan FEIR concluded that with implementation of existing regulations and adopted General Plan policies, full build out under the General Plan would not exceed the available water supply.

The proposed project is consistent with planned growth in the Alviso area under the Envision 2040 General Plan. Additionally, the project would utilize recycled water for landscape irrigation. Therefore, implementation of the proposed project not create the need for major new utility or water supply infrastructure and would have a less than significant impact on the City's water supply. **[Less Than Significant Impact]**

f.g. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Would the project comply with federal, state and local statues and regulations related to solid waste?

The proposed project would increase the total solid waste generated by the project site compared to existing conditions. The General Plan FEIR 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]**

4.17.4 Conclusion

The project would not result in any utility or service facility exceeding its current capacity. With implementation of mitigation measures and standard permit conditions included in the project, construction of new utilities infrastructure would not result in significant impacts. **[Less Than Significant Impact With Mitigation]**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

4.18.1 Mandatory Findings Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1-19
b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1-19
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1-19

4.18.2 Impacts Evaluation

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed in the individual sections, the proposed project would not degrade the quality of the environment with the implementation of identified standard permit conditions and mitigation measures. As discussed in Section 4.4, *Biological Resources*, the project would have a less than significant impact on sensitive habitat or species with the implementation of mitigation measures and compliance with the HCP. While there is a potential for buried archaeological or paleontological resources on-site, implementation of the identified mitigation measures in *Section 4.5 Cultural Resources*, would avoid or reduce impacts to these resources to a less than significant level. **[Less than Significant Impact With Mitigation]**

b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects “that are individually limited, but cumulatively considerable.” As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

Because a project’s GHG emissions would contribute to regional and global emissions of such pollutants, the identified project-level thresholds were developed such that a project-level impact would also be a cumulatively considerable impact. With the implementation of measures included in the City’s GHG Reduction Strategy (Section 4.7 Greenhouse Gas Emissions) the project would not result in significant cumulative GHG emissions.

With the implementation of the identified mitigation measures and standard permit conditions, the project would not significantly impact cultural resources, geology and soils, hazardous materials, hydrology and water quality, and utilities and service systems. The project would have a less than significant impact on land use, public services, population and housing, and recreation. The project would have no impacts on agricultural and forestry resources or mineral resources. The project would not make a considerable contribution to cumulative impacts to these resource. **[Less than Significant Impact With Mitigation]**

The project’s cumulative air quality and traffic impacts are addressed in Sections 4.3 Air Quality and 4.16 Transportation, respectively. The cumulative analyses determined that, with implementation of mitigation measures and standard permit conditions, the project would not result in or make a considerable contribution to significant cumulative impacts.

Three environmental issue areas, aesthetics, biological resources, and noise are discussed in further detail below.

4.18.2.1 Cumulative Aesthetics Impacts

As described previously, the project would redevelop the site with 10 retail structures reaching up to 40 feet in height, a hotel reaching up to 65 feet in height, and a Topgolf facility reaching up to 54 feet in height with net poles and netting reaching up to 170 feet in height. As described in Section 4.1 Aesthetics, while the project would introduce visually prominent commercial development on the site, the project would not result in significant aesthetics impacts.

The City’s General Plan calls for substantial development in the Alviso area in the vicinity of the project site. Much of this development would include multi-story structures such as office buildings and hotels that would be similar in scale to those proposed by the project. The General Plan FEIR

concluded that build-out of the General Plan would result in a less than significant cumulative impact to visual resources, assuming General Plan policies are implemented by individual projects.

The proposed heights of the hotel building and the Topgolf building and net poles would be taller than currently allowed in the Alviso Master Plan, and by extension the City's General Plan. The project is proposing a text amendment to the Alviso Master Plan to allow the proposed structures (refer to Section 3.2.5 Alviso Master Plan Text Amendment). Although the project would amend the Alviso Master Plan and the City's General Plan by allowing taller structures on a portion of the site, the project would be required to implement policies from the City's Commercial Design Guidelines and the Alviso Master Plan's Village Area Guidelines for Commercial Development to reduce the project's effects on the visual character of the area related to architectural design, use of quality materials, and landscaping near the river corridor. With implementation of relevant City policies, the project would not result in a new cumulative aesthetics impact, nor would it make a considerable contribution to an existing significant cumulative aesthetics impact. **[Less than Significant Impact]**

4.18.2.2 *Cumulative Biological Resources Impacts*

The proposed project, in combination with other projects in the area and other activities that impact the species and habitats that are affected by this project, could contribute to cumulative effects on special-status species and sensitive habitats. Other projects in the area include both development and maintenance projects that could adversely affect these species and habitats as well as restoration projects that will benefit these species.

Locally, within Alviso Slough (which represents the lower tidal portions of the Guadalupe River system), the recently constructed boat launch in the Alviso Marina County Park impacted 0.02 acres of brackish marsh and mudflat. The loss of brackish water marsh vegetation was mitigated through the removal of 18,000 square feet of existing marina floats and discontinuation of use of the existing boat ramp.

The SCVWD's Stream Maintenance Program involves maintenance activities in SCVWD flood control channels, creeks, and canals within jurisdictional waters of the U.S. The maintenance activities include bank stabilization, sediment removal, minor in-channel maintenance activities, and mitigation projects. Implementation of BMPs will avoid or minimize impacts on special-status species associates with these habitats, and mitigation for impacts was provided via tidal restoration at the "Island Ponds" (i.e., Ponds A19, A20, A21) on the north side of Coyote Creek.

Most of the other foreseeable projects in the San Francisco Bay area that will affect marsh habitat are tidal restoration projects such as the South Bay Salt Ponds Restoration Project and the Suisun Marsh Restoration Project. These projects are expected to result in the restoration of thousands of acres of much higher-quality marsh habitat than will be impacted by the project.

Other projects in the region will impact suitable habitat for the burrowing owl and Congdon's tarplant; however, the HCP will require implementation of conservation measures for the burrowing owl and the HCP land conservation plan. The HCP will help to ensure the conservation of the burrowing owl and its habitat throughout the project region. Many projects in the region that impact resources similar to those impacted by the proposed project will be covered activities under the HCP and will mitigate impacts on sensitive habitats and many special-status species through that program,

which will require payment of fees for habitat restoration and conservation. Although Congdon's tarplant is not covered specifically in the HCP, through its land conservation plan, suitable habitat for the species may be preserved. The HCP calls for protection of 13,300 acres of California annual grassland and 15 acres of wetlands (perennial or seasonal), potentially suitable habitat for the Congdon's tarplant.

Further, the project would implement a number of BMPs and mitigation measures to reduce impacts on sensitive habitats and to both common and special-status species, as described in Section 4.4 Biological Resources. Thus, the project will not make a cumulatively considerable contribution to substantial cumulative effects on biological resources. **[Less than Significant Impact With Mitigation]**

4.18.2.3 *Cumulative Noise Impacts*

The primary way the project would contribute to cumulative noise impacts is through an increase in traffic noise on surrounding roadways. As discussed in Section 4.12 Noise, traffic trips associated with the proposed project would increase ambient noise levels on the adjacent residential streets. The proposed project, combined with other pending and approved projects in the immediate area would further increase ambient noise levels over existing conditions.

A detailed analysis of cumulative traffic noise levels, both with and without the project, is provided in Appendix H. The two roadway segments to which the project would contribute the most traffic noise under cumulative conditions are on N. First Street between Trinity Park Drive and Nortech Parkway, and on Nortech Parkway between N. First Street and Disk Drive. The project would increase cumulative traffic noise levels on along those roadway segments by 1.9 and 1.8 dBA Ldn, respectively, which are both below the significance threshold of three dBA Ldn. The project, therefore, would not result in or make a considerable contribution to significant cumulative noise impacts. **[Less than Significant Impact]**

c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include hazardous materials, toxic air contaminants, and noise. Implementation of mitigation measures and standard permit conditions would, however, reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified. **[Less than Significant Impact With Mitigation]**

Checklist Sources:

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.
2. City of San José. *Envision San Jose 2040 General Plan*. November 2011.
3. City of San Jose. *Alviso Master Plan: A Specific Plan for the Alviso Community*. December 1998.
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7. Illingworth & Rodkin, Inc. *Topgolf Entertainment Complex and Hotel Air Quality Assessment*. April 2016.
8. Bay Area Air Quality Management District. *Bay Area 2010 Clean Air Plan*. September 15, 2010.
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13. Santa Clara County. *Geologic Hazard Zones Map. Map 11*. February 2002.
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15. Geologica, Inc. *Phase II – Soil and Groundwater Investigation*. March 2016.
16. Federal Emergency Management Agency. *Flood Insurance Rate Map. Panel 06085C0061H*. May 2009.
17. Bollard Acoustical Consultants, Inc. *Environmental Noise Assessment, Terra-Topgolf Development Project*. September 2016.
18. Fehr & Peers. *Transportation Impact Analysis: Topgolf*. September 2016.
19. Schaaf & Wheeler. *Hydrology and Water Quality Review Midpoint Project*. January 10, 2014.
20. Schaaf & Wheeler. *Topgolf Development Storm Drain Impact Analysis*. July 15, 2016.

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