Initial Study/Mitigated Negative Declaration for the

Franklin Canyon RV Resort Project

RV and Tent Camping and a Redeveloped Golf Course Facility

3100 Franklin Canyon Road
City of Hercules
March 2021

Prepared by MIG, Inc. Berkeley, CA

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Franklin Canyon RV Resort

1.2 Lead Agency Name and Address
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1.3 Contact Person and Phone Number
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Community Development Director
City of Hercules
510-799-8248
rreber@ci.hercules.ca.us

1.4 Project Sponsors Names and Addresses
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Copperopolis, CA 95228

1.5 General Plan Designation
Franklin Canyon Area – Measure M

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1.7 Introduction
This Initial Study of environmental impacts has been prepared to conform to the requirements of the Public Resources Code California Environmental Quality Act (CEQA Statutes), the California Code of Regulations section 15000 et. seq. (CEQA Guidelines), and the regulations and policies of the City of Hercules. The report is intended to inform City of Hercules (City) decision-makers, responsible agencies, and the general public of the Franklin Canyon RV Resort Project (project) and its environmental consequences. The City of Hercules is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project. The primary objective of the project is to provide a visitors' destination recreational vehicle (RV) and camping area with amenities plus a new public putting course.

1.8 Project Location and Context
The following section describes the project site location, characteristics, surrounding land uses, and land use designations.

Location: See Figures 1 and 2. The project site is located in northwest Contra Costa County in the eastern part of the City of Hercules at 3100 Franklin Canyon Road (APN 362-020-021-6). The project site is located at the existing Franklin Canyon Golf Course property, adjacent to State Highway 4.

Surrounding Land Uses: The site has a General Plan and zoning designation of Franklin Canyon Area/Measure M. The property is bordered by Highway 4 (John Muir Parkway) to the north, and Burlington Northern Santa Fe (BNSF) Railroad tracks that loop around north and then to the east around the site. To the east, the site is bordered by Fernandez Ranch, a PG&E substation, and private ranchlands. Open space lies adjacent to the south and includes Franklin Canyon, Fernandez Ranch, and East Bay Municipal Utilities District (EBMUD) lands. Private ranchlands are adjacent to the west of the project site.

Site Characteristics: The site is an irregularly shaped parcel totaling approximately 161.95 acres. Currently, the western 116.8 acres of the site comprise the 18-hole Franklin Canyon Golf Course. Much of the golf course area is planted with non-native and ornamental plant species. The remaining 45.15 acres consist of rolling hills, with native vegetation on the steeper terrain to the south, east, and west. Rodeo Creek flows along the northern boundary of the project, and eventually drains into San Pablo Bay.

Existing onsite facilities include the 18-hole golf course, a two-story 7,200-square-foot golf clubhouse with a restaurant and lounge in the center of the site, two surface parking lots to the north of the clubhouse, and associated driveways which provide interior access through the central and southern portions of the site. There is also a 5,330-square-foot maintenance structure for equipment storage.

Potable water to the site is provided by the East Bay Municipal Utilities District (EBMUD) for domestic use and irrigation of the golf course. The water main connects to the site under the existing parking lot and runs to the clubhouse. Irrigation water for the golf course is supplemented by an onsite well that would be abandoned due to lack of production. Wastewater collection and treatment for the existing development is provided by an onsite septic system.

1.9 Project Description

The property consists of one parcel located at 3100 Franklin Canyon Road (APN 362-020-021-6), totaling approximately 161.95 acres, collectively called the Franklin Canyon RV Resort Project (project). The property has operated as a golf course since its construction in 1967. The applicant is proposing development of 160 RV visitors' camping spaces and 22 walk-in campsites with tent bungalows. The proposed project would eliminate the existing 18-hole golf course but would retain the existing driving range and build a new 18-hole putting green and clubhouse to feature dining facilities, a fitness and wellness center, and an outdoor swimming pool. The site plan is shown on Figure 3.

The project would remove the existing two-story 7,200-square-foot clubhouse and replace it with a new two-story 10,500-square-foot clubhouse with employee housing on the second story. Other proposed facilities would include a 2,500-square-foot maintenance building, a 120-square-foot security and information building, and 50 covered RV storage spaces (approximately 27,000-square-feet; distinct from the 160 RV active camping spaces). The project would construct a total of 40,000 square feet of permanent structures, for a net increase of 27,470 square feet of structures over existing conditions. The project would include open areas for recreation, including playgrounds, a pickle ball court(s), and horseshoe pits.

Construction: Construction is anticipated to start in October 2021, with phases of construction as follows:

- October 1 – 15: Site demolition, clearing, and grubbing.
  Equipment: 3 bulldozers, loaders, and water truck

- October 15 – November 17: Site grading and fine grading.
  Equipment: 3 bulldozers, 2 graders, water truck

- November 1 – 30: Clubhouse utility stubs and foundation concrete.
  Equipment: 30 concrete mixers

- November 30 – April 15: Clubhouse framing, electrical, plumbing, mechanical, roofing, windows and finishing.
  Equipment: Pettibones, forklift, 10 to 15 materials delivery trucks

- November 10 – December 15: Utility installation, sewage treatment/disposal system installation, RV site fine grading, and base placement.
  Equipment: 2 excavators, 2 graders

- December 1 – February 15, 2022: Road base and pavement, clubhouse foundation.
  Equipment: 2 graders, paving machine, aggregate base and asphalt trucking, 2 vibratory rollers

Construction is estimated at 8 hours of run time 5 days per week between 7:00a.m. and 5:00p.m.

Circulation and Parking: The project site would continue to be accessed by the westbound Franklin Canyon Road exit off Highway 4. The entry driveway from the parking area over Rodeo Creek is planned to be widened to approximately 36 feet. A proposed, second access from Christie Road would be for emergency vehicles only. The existing parking lot would remain, and approximately 95 parking spaces would be dedicated in the existing parking lot for use by the John Muir Land Trust (JMLT) to allow access to the open space trails located at the southwestern boundary of the property. Within the resort area, an additional 117 parking spaces are proposed, including 50 covered RV storage parking spaces.

Although the proposed project would generate emissions from mobile sources (i.e., trips to and from the site), the site already generates trips through operation of the existing golf course. Per the transportation studies, the proposed project is anticipated to generate less trips to the site on a daily basis, and result in reduced or unchanged vehicle miles traveled (VMT) to and from the site (Abrams Associates, 2020; DKS Associates, 2020).

Landscape and Open Space: The topography of the site is a mix of gently rolling hills and flat areas, with an area of steeper slopes rising to Franklin Ridge along the southern boundary. Drainage and runoff originate in the higher hills to the south, flowing north and west via creeks, tributaries, and riparian corridors into Rodeo Creek, which runs along the northern boundary of the site and drains into San Pablo Bay. Several public access trails adjacent to the project site are managed by East Bay Municipal Utilities District (EBMUD) and JMLT.

The project would include both landscaping features as well as open space and recreational facilities. Approximately 70 acres of the 75 acres that is currently used as the westernmost nine holes of the golf course would be deeded to JMLT for use as public open space. This part of the parcel is relatively flat with existing golf cart paths that could be used for hiking, biking, and equestrian trails. This southwest portion of the property would provide access to the adjoining JMLT open space. Additionally, the project proposes to lease approximately five acres in the northeastern corner of the site to JMLT to allow for development and operation of a community garden on land that is zoned for agriculture. In total, the project would create approximately 75 acres of public open space. The project would include the planting of drought-tolerant plants and trees. The landscape plans are shown on Figures 6 through 9.

Grading: Grading would be balanced onsite and would occur within the area that has already been disturbed by prior site improvements. The project proposes a total cut of 40,000 cubic yards (CY) and a total fill of 40,000 CY for the entire site. Figures 9 and 10 show the grading plan.

Utilities and Infrastructure: Existing water, wastewater collection and treatment, storm drainage, PG&E electricity, PG&E natural gas, and telecommunication infrastructure would be modified as necessary. The proposed project would continue to use water as currently serviced by EBMUD. The existing onsite well would be abandoned. The proposed project would replace and upgrade the existing septic system and develop an onsite wastewater treatment facility featuring an onsite subsurface disposal system. The utilities plan is shown on Figure 11.

City Actions/Approvals. The proposed project would require the following City approvals:

- Adoption of the Mitigated Negative Declaration – City of Hercules Planning Commission and City Council
- Lot Line Adjustment (to donate 70 acres to JMLT) – City Planning Commission and City Council
- Design Review – City of Hercules Planning Commission (and City Council upon appeal)
- Building/Fire Permit and Plan Check – City of Hercules
- Vesting Tentative Map with Parcel Subdivision – City of Hercules Planning Commission

1.10 Native American Consultation

No California Native American tribes traditionally and culturally affiliated with the project area have requested consultation pursuant to Public Resources Code section 21080.3.1. As no requests have been made, no consultation has been conducted. This process, commonly known as AB52, is considered complete for this document.

Pursuant to the California Government Resources Code Section 65562.5 regarding tribal cultural resources in a proposed open space area, no Native American tribe has given notice pursuant to Public Resources Code Section 65092. As no requests have been made, no consultation has been conducted. This process, commonly known as SB18, is considered complete for this document.

Figure 1: Project Location Map

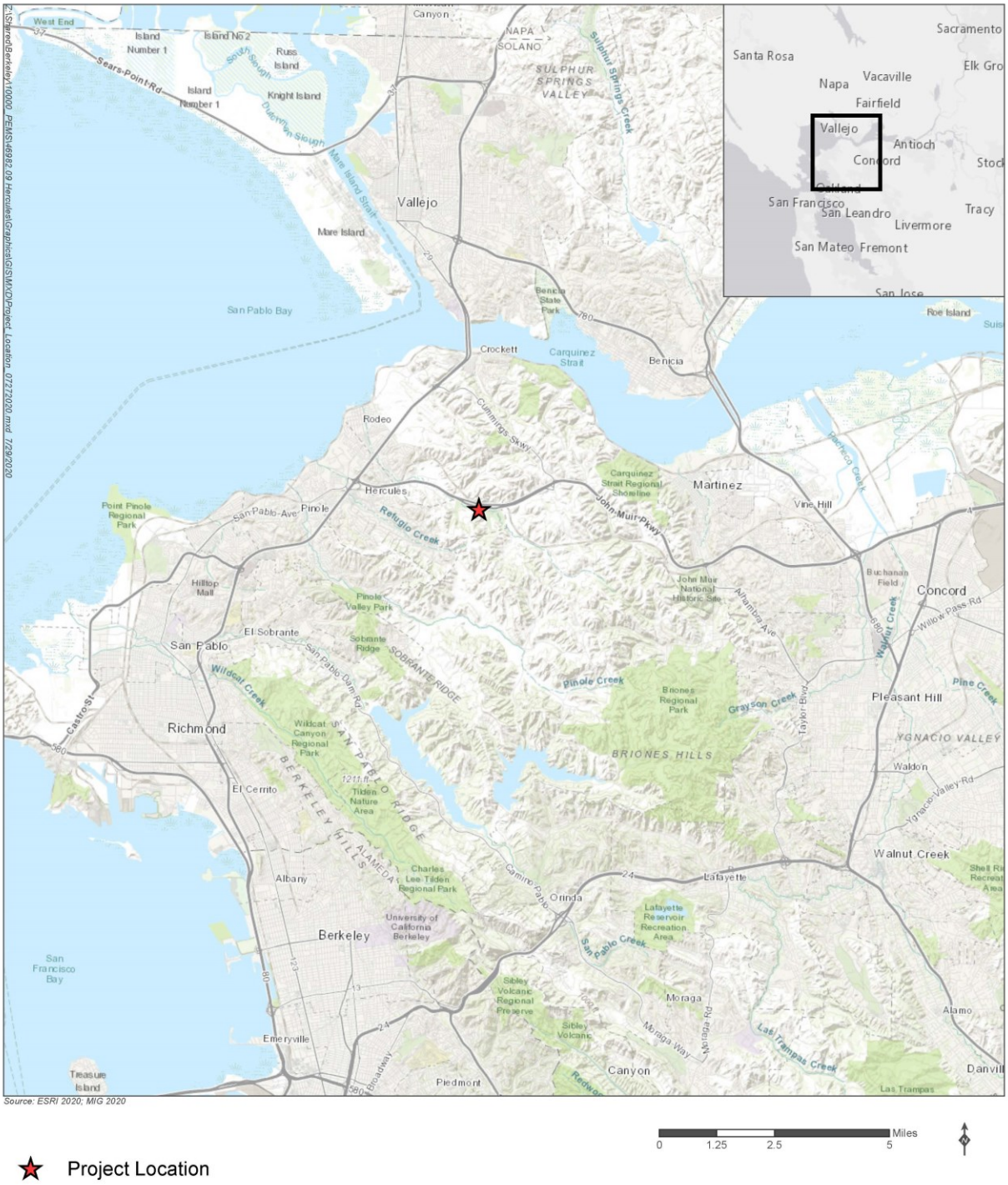


Figure 1 Project Location
Franklin Canyon RV Resort Project

Figure 2: Project Vicinity Map

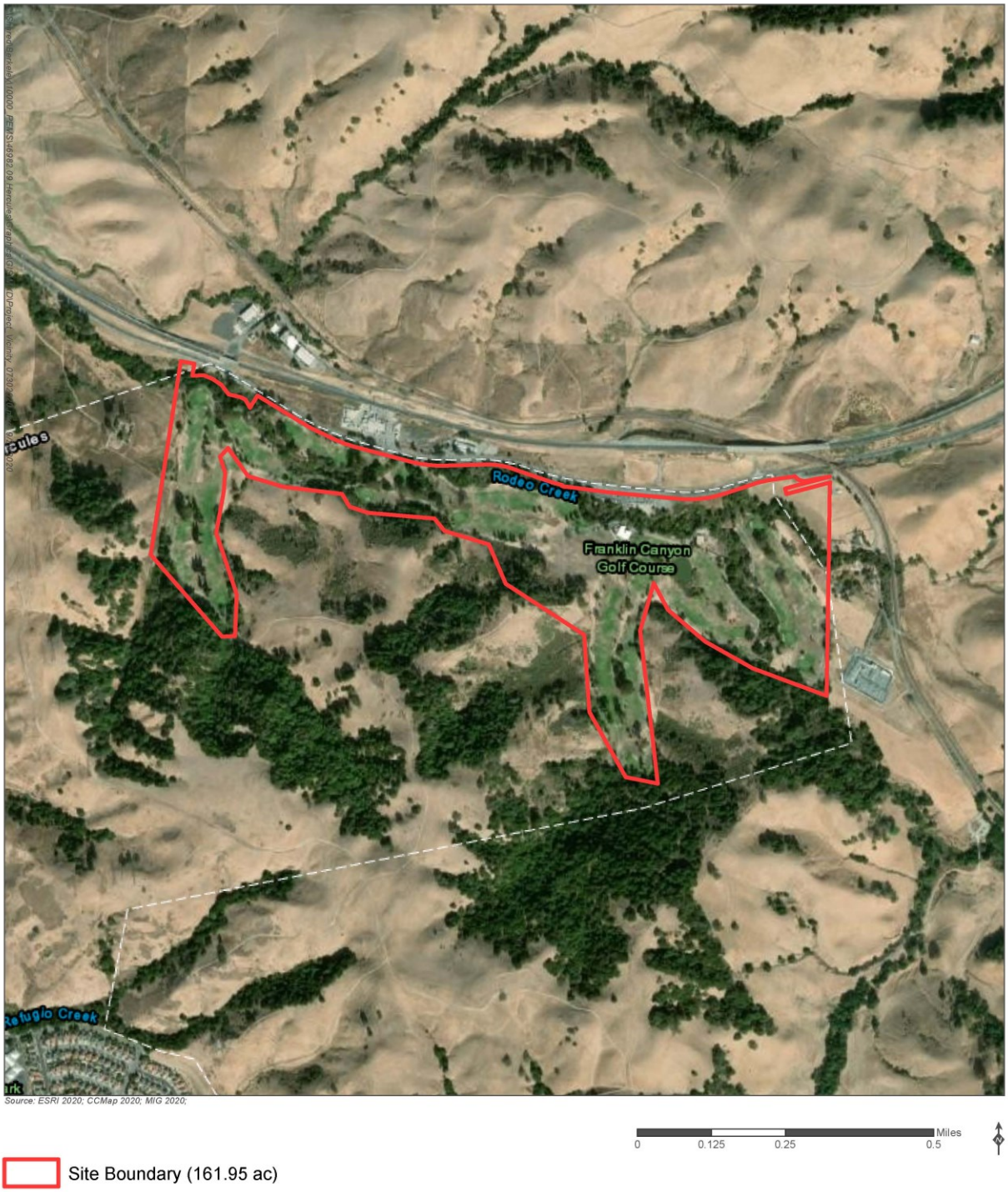


Figure 2 Project Vicinity

Franklin Canyon RV Resort Project

Figure 3: Overall Site Plan

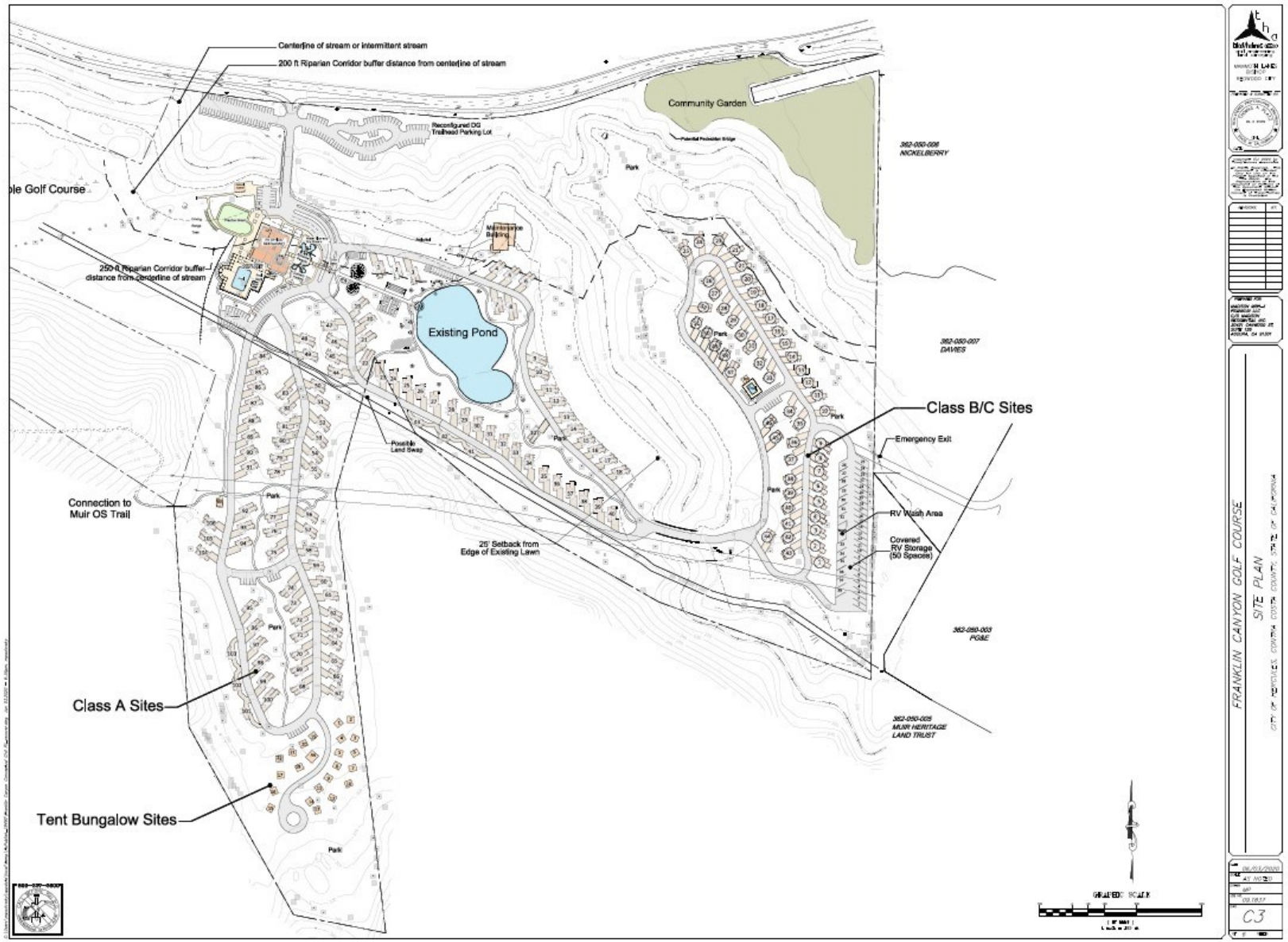


Figure 4: Schematic Wastewater Treatment & Disposal Layout

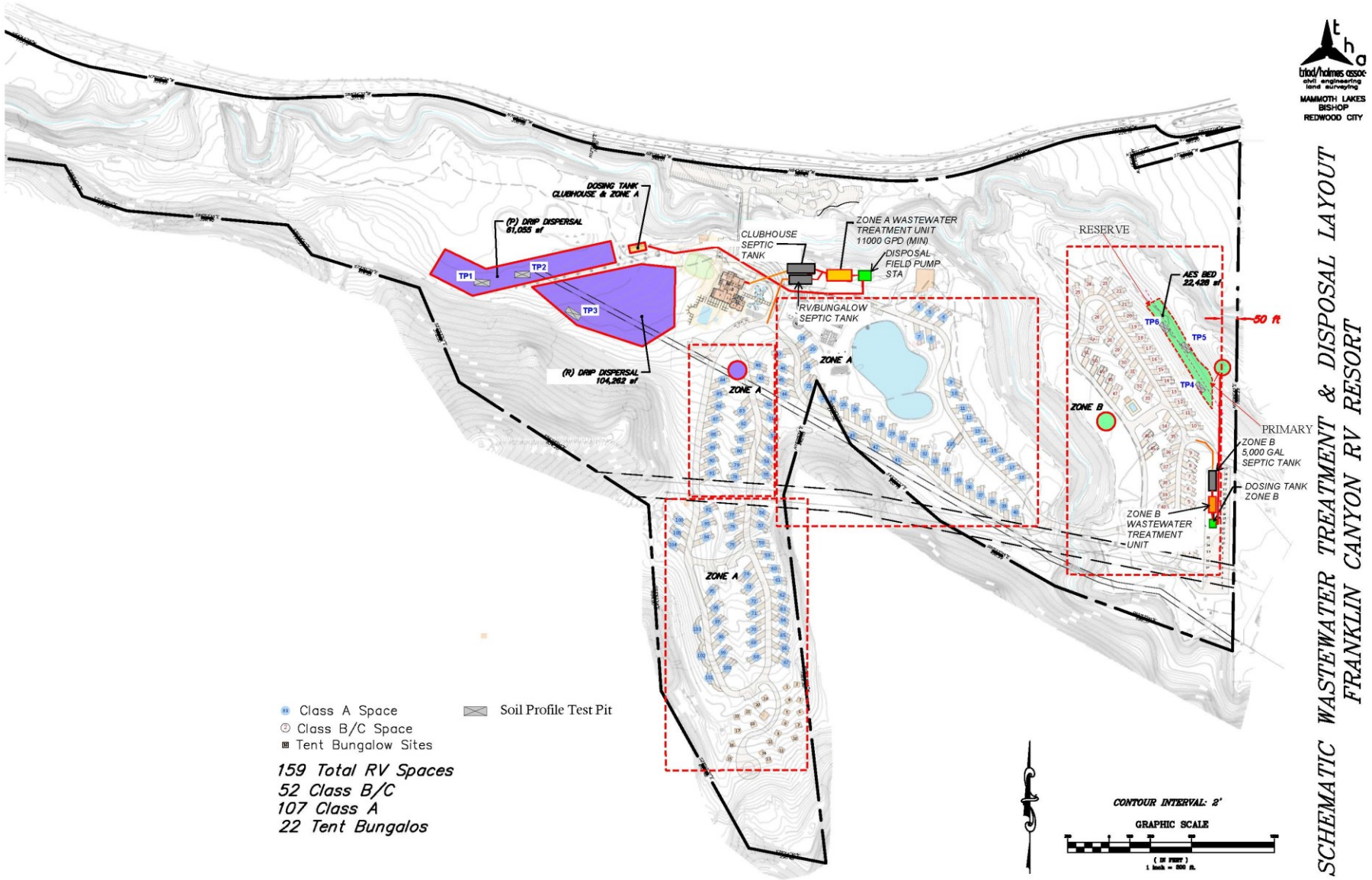


Figure 5: Conceptual Landscape Plan

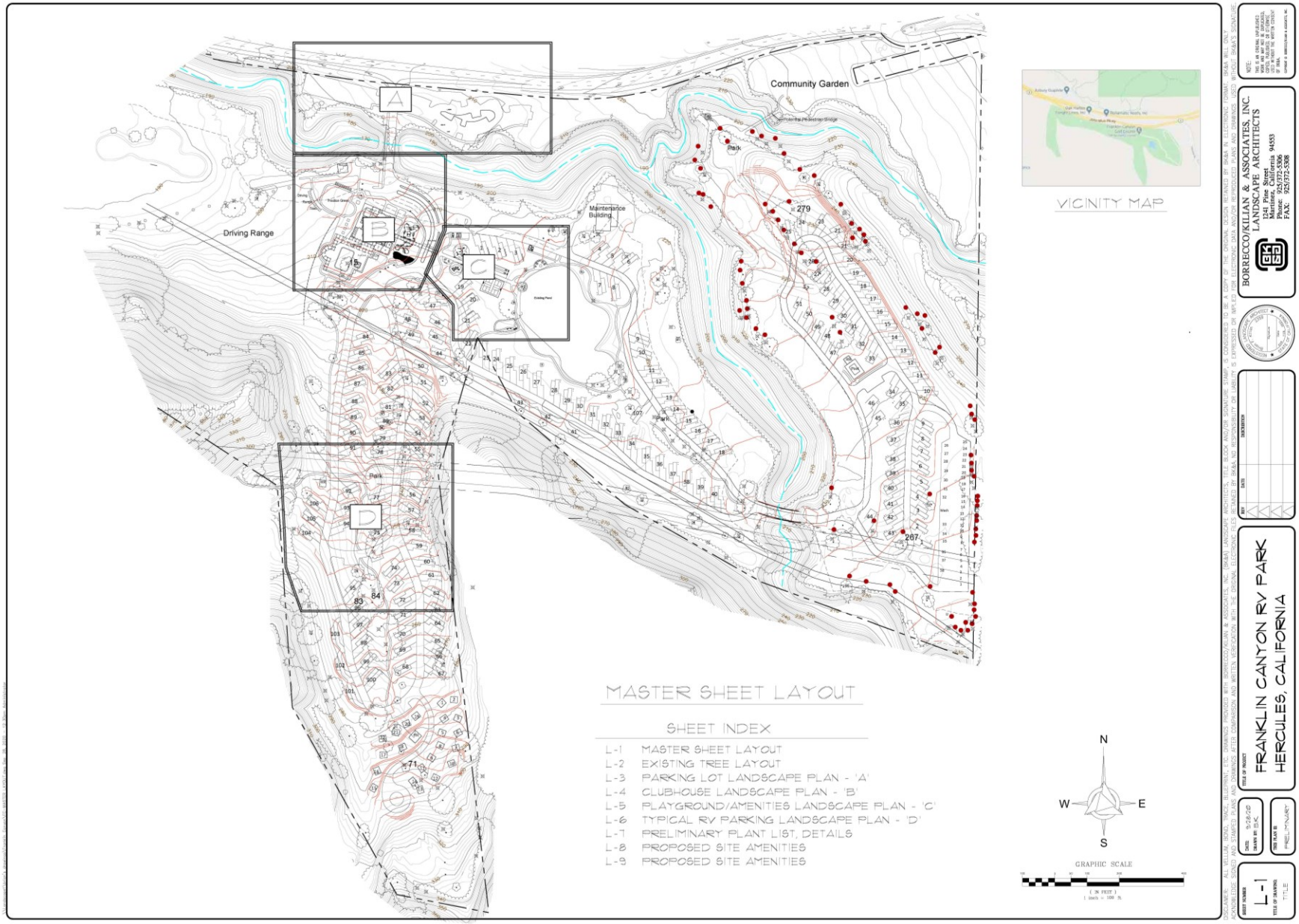


Figure 6: Conceptual Landscape Plan

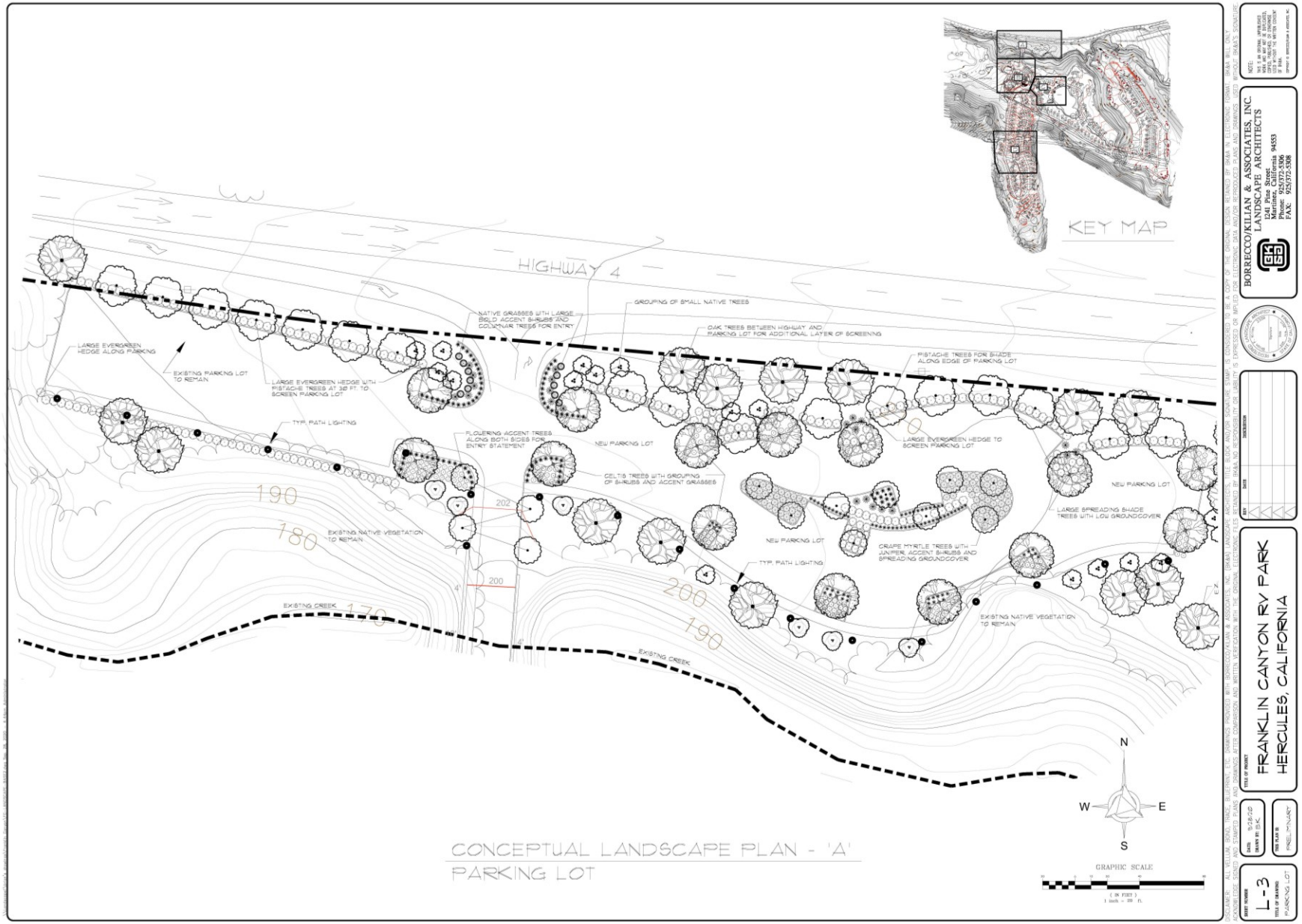


Figure 7: Conceptual Landscape Plan

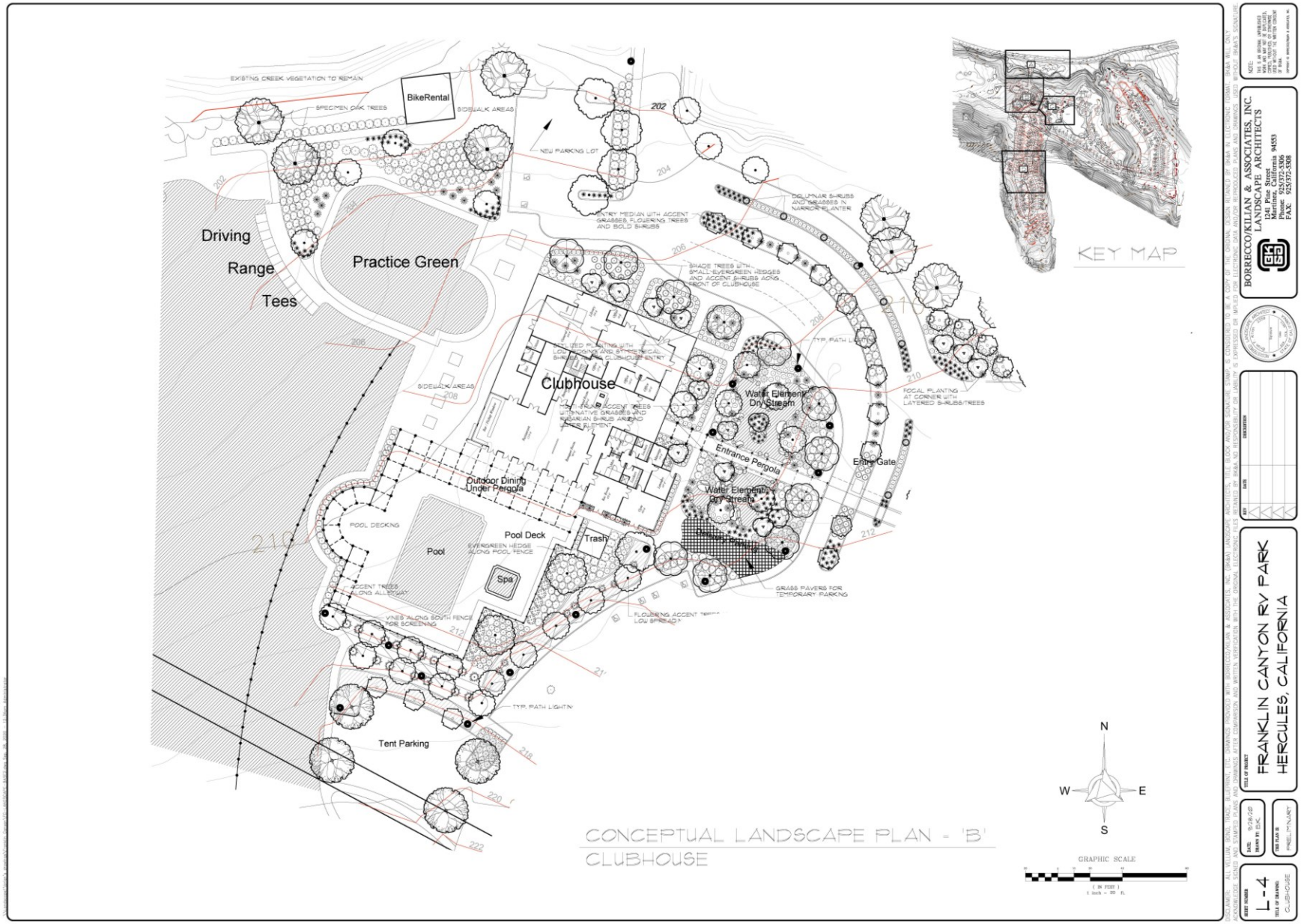


Figure 8: Conceptual Landscape Plan

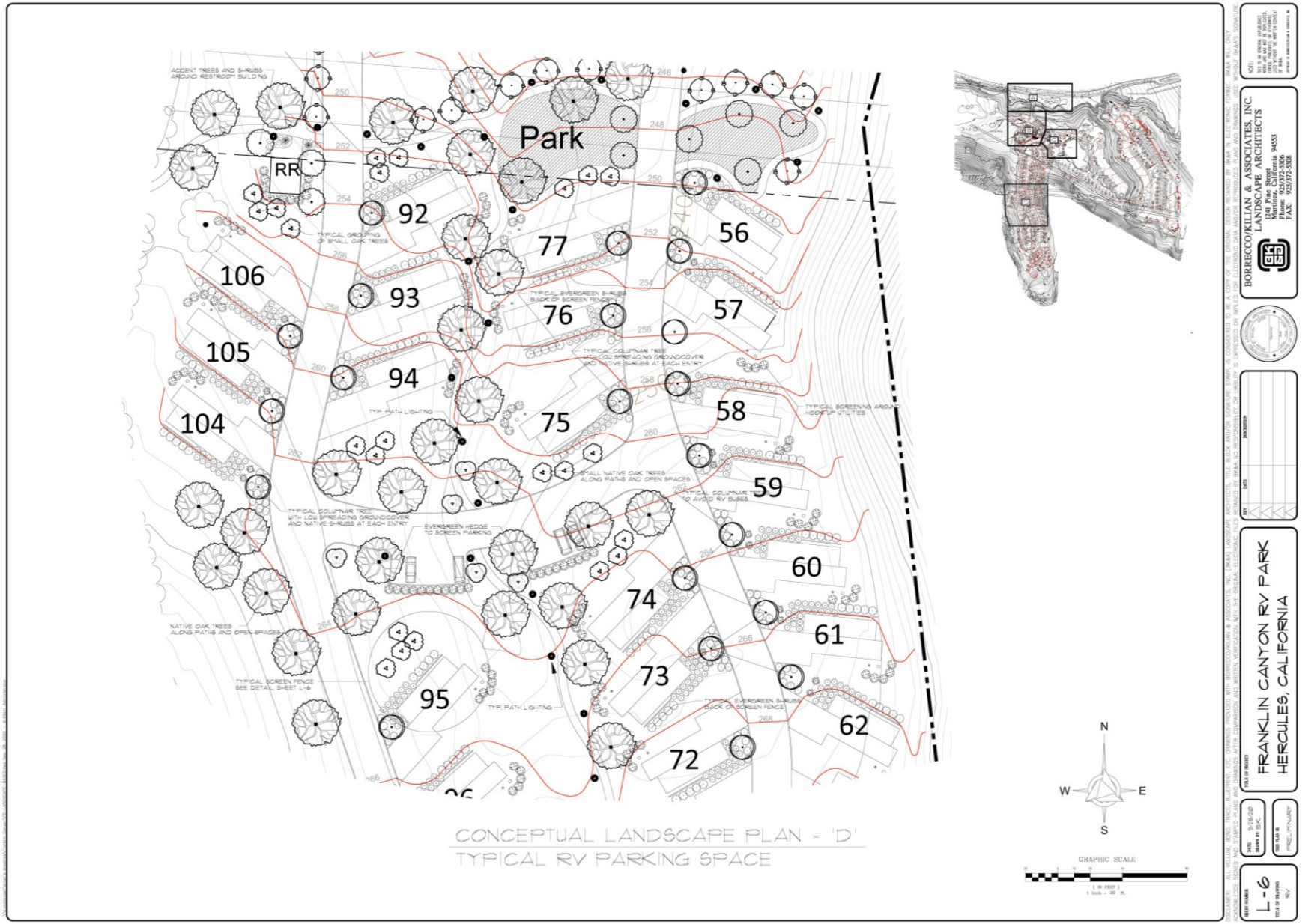


Figure 9: Conceptual Grading Plan - Overall

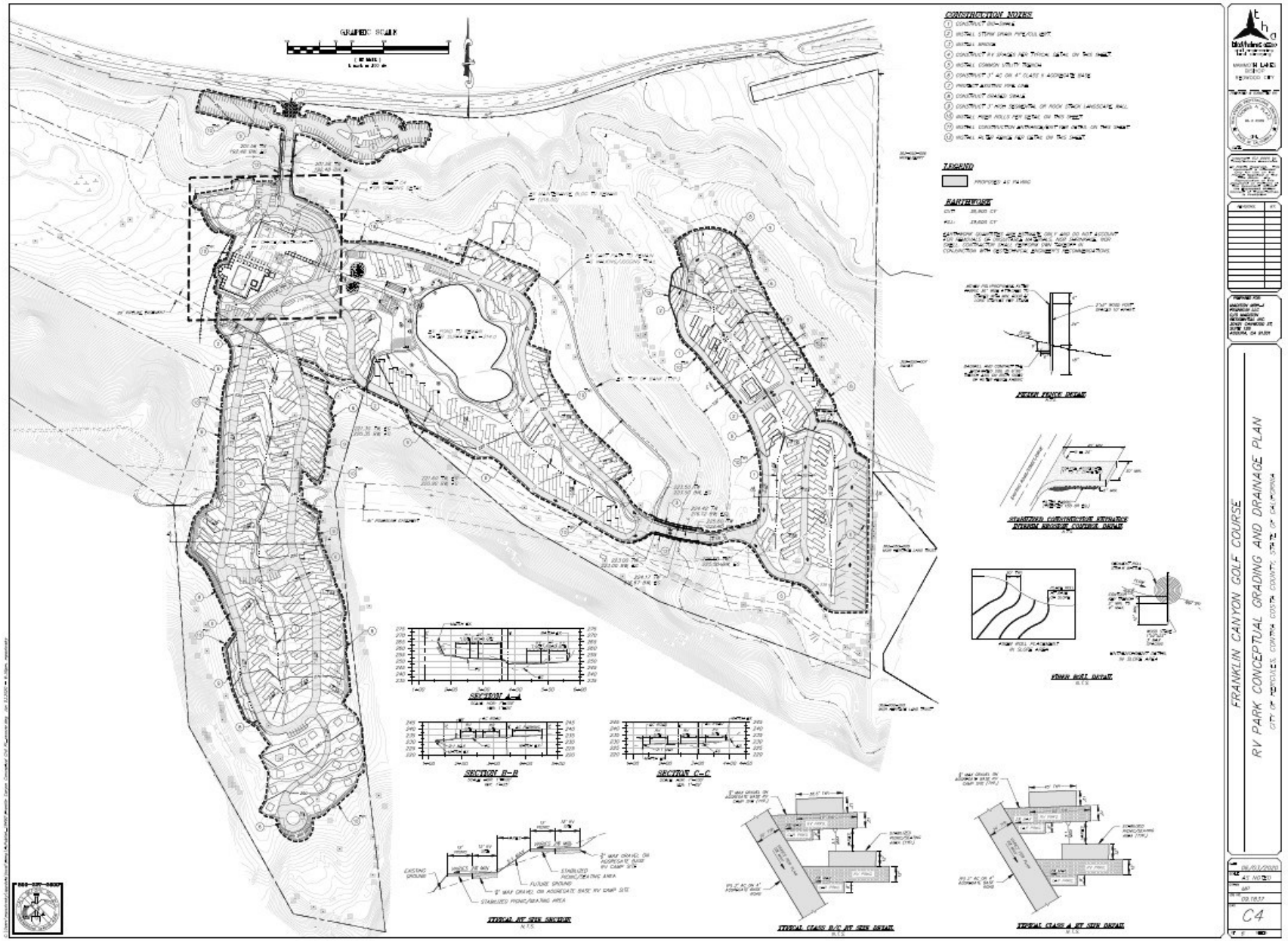


Figure 10: Conceptual Grading Plan - Clubhouse

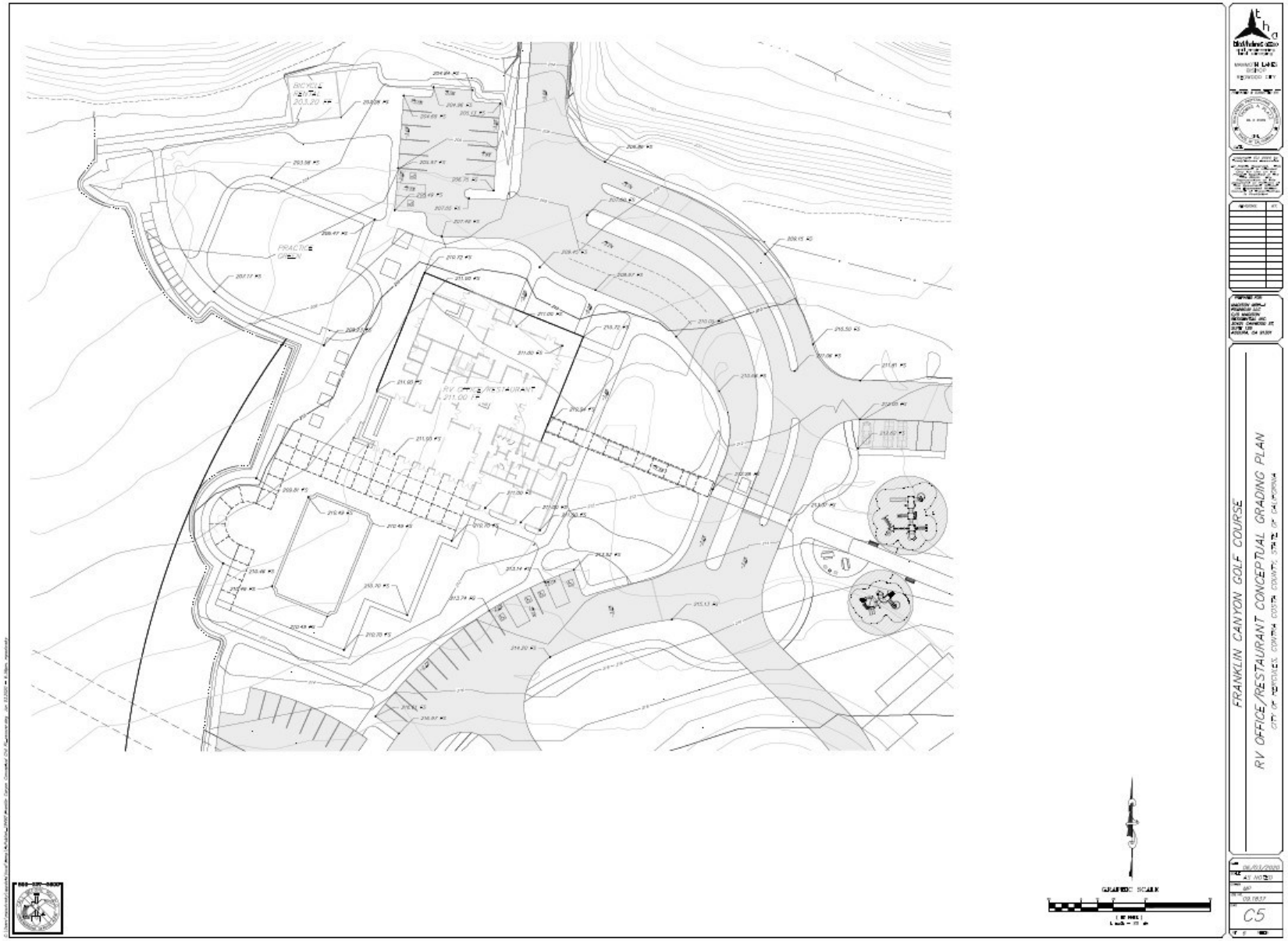


Figure 11: Utilities Plan

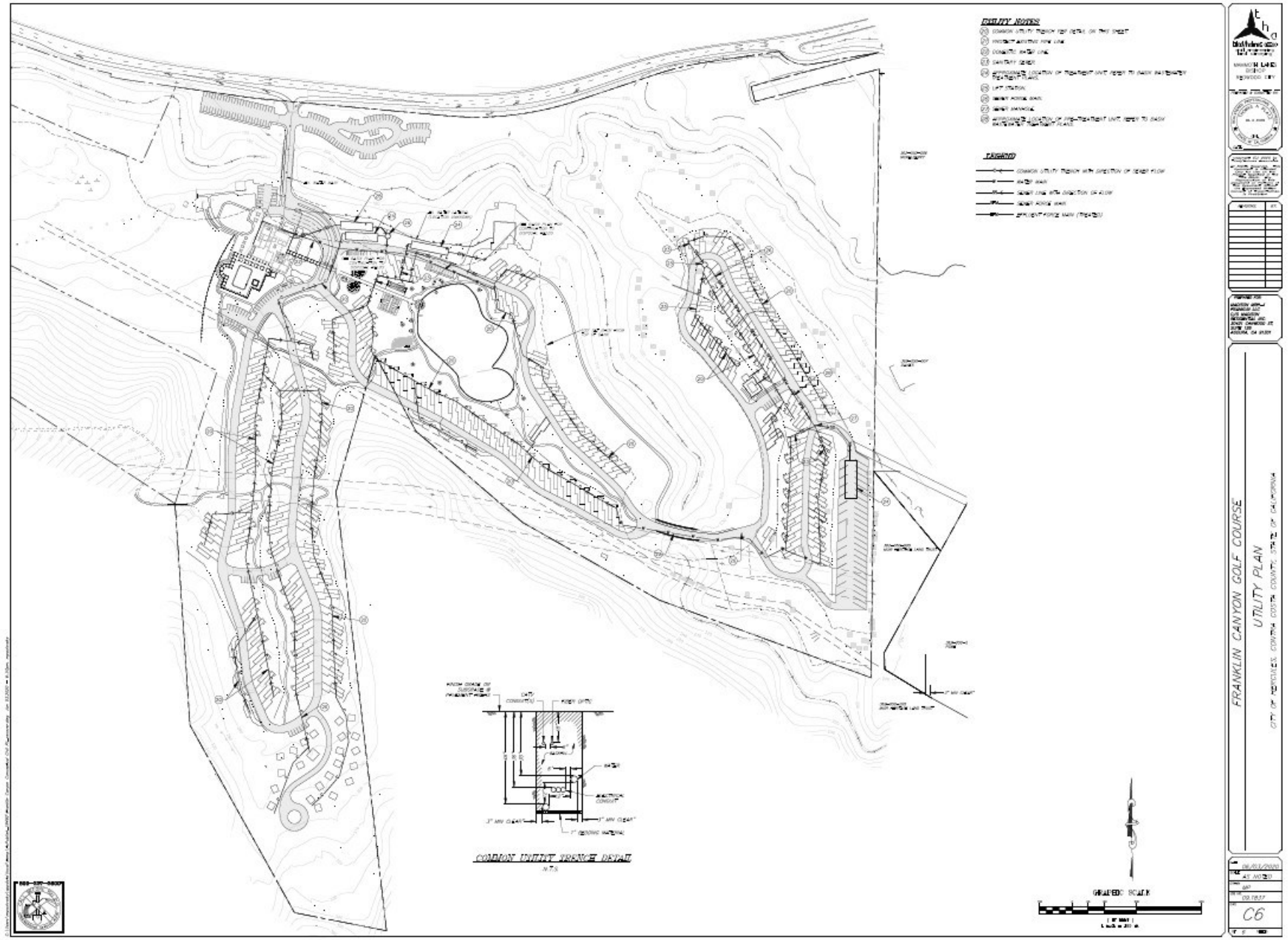
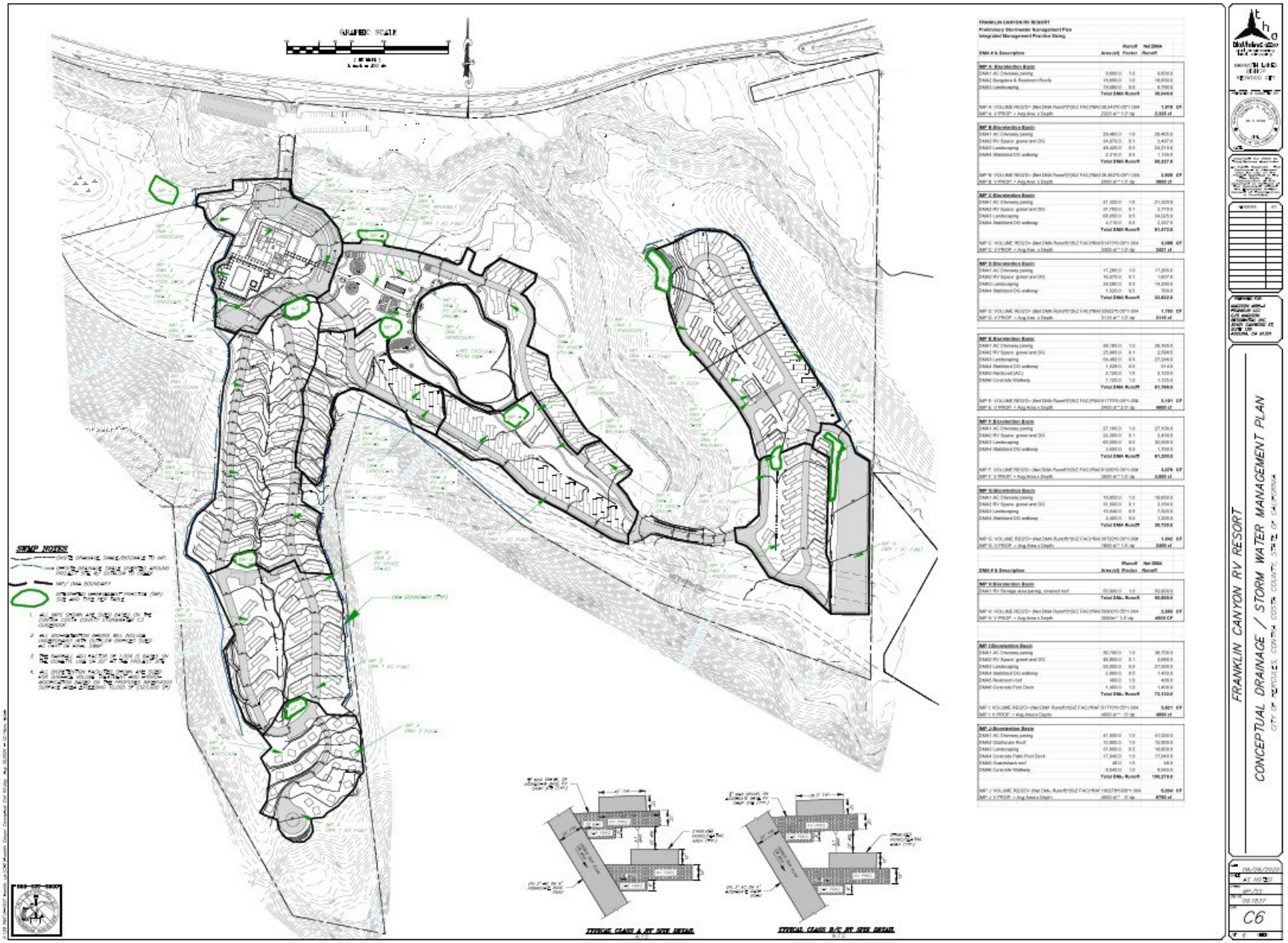


Figure 12: Conceptual Drainage and Stormwater Management Plan



2. Summary of Findings: Impacts and Mitigations

Impact findings and mitigation measures identified in this report, the completed Initial Study checklist and narrative are summarized below. The mitigations listed below represent conditions for the Initial Study/Mitigated Negative Declaration for the proposed project.

Aesthetics
No significant impacts have been identified; no mitigation is necessary.

Agricultural and Forestry Resources
No significant impacts have been identified; no mitigation is necessary.

Air Quality
Implementation of the following mitigation measures would ensure impacts are less than significant.

Mitigation Measure AIR-1: To reduce fugitive dust that would be generated during project construction activities, the City and/or its designated contractors, contractor's representatives, or other appropriate personnel to implement the following BAAQMD basic dust control measures.

- Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions.
- Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
- Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the proposed project.
- Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
- Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time of diesel-powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project.
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
- Post a publicly visible sign with the name and telephone number of the construction contractor and City staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the Bay Area Air Quality Management District to ensure compliance with applicable regulations.

Biological Resources
Implementation of the following mitigation measures would ensure impacts are less than significant.

Mitigation Measure BIO-1: Employee Education Program. An employee education program shall be conducted, consisting of a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the project. The program will include the following: a description of relevant special-status species and nesting birds along with their habitat needs as they pertain to the project; a report of the occurrence of these species

in the vicinity of the project site, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources, including environmentally sensitive habitats, during project construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and anyone else who may enter the project site. Upon completion of training, employees will sign a form stating that they attended the training and agree to the conservation and protection measures.

Mitigation Measure BIO-2: Pre-Construction Survey for Special-Status Plants (Mt. Diablo Fairy Lantern, Western Leatherwood, Diablo Helianthella, and Contra Costa Goldfields). To determine presence or absence of special-status plant species within the project site, a qualified botanist shall conduct focused surveys according to CDFW guidelines prior to the onset of construction activities.

- A comprehensive, site-wide survey will be conducted during April to coincide with the peak blooming periods of all special-status plant species that may be present. Following the completion of the surveys, a survey results report shall be prepared and provided to the City. This report shall be a condition of project approval and shall include, but shall not be limited to, the following: (1) a description of the survey methodology; (2) a discussion of the survey results; and (3) a map showing the survey area and the location of any special-status plants encountered. If no rare plants are found, then no further mitigation would be required.
- If rare plant(s) is (are) found during the survey, the number of individuals present shall be documented, and the limits of the population shall be marked with flagging and avoided by construction personnel. If the project cannot be redesigned to avoid the species or the species may be adversely impacted indirectly, the applicant shall notify CDFW and/or USFWS (depending on protection status) to discuss avoidance, minimization, and mitigation measures as appropriate for each species population, including measures to be taken and protocols to be followed.
- CDFW and/or USFWS may require the preparation and implementation of a mitigation plan that details avoidance, preservation, and/or compensation for the loss of individual special-status plant species. Mitigation may include the purchase of mitigation bank credits, preserving and enhancing existing onsite populations, creation of off-site populations through seed collection and/or transplantation and monitoring these populations to ensure their successful establishment, and/or preserving occupied habitat off-site in perpetuity.

Mitigation Measure BIO-3: Avoid Use of Pesticides Outside Developed Areas. To avoid mortality of western bumblebees within the project site, pesticide use outside of the developed areas of the project site shall be avoided (i.e., avoiding Rodeo Creek corridor, coast live oak woodland and scrub, and grassland; reference Appendix B).

Mitigation Measure BIO-4: Pre-Construction Survey for Special-Status Herptile Species (California Red-Legged Frog, Alameda Whipsnake, Western Pond Turtle). Due to the riparian habitat along Rodeo Creek and the coast live oak woodland and scrub habitat within the project site, the project site contains dispersal habitat for special-status herptile species (amphibians and reptiles), especially following precipitation for California red-legged frog and western pond turtle. To avoid impacting these species, the following measures shall be followed:

- Within 3-5 days prior to initiating work at the project site (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), a qualified biologist shall perform a pre-construction survey for

CRLF, Alameda whipsnake, and WPT individuals within the boundaries of the project site plus a 500-foot buffer zone downstream of the project site along Rodeo Creek where access permission is granted from the landowner. To communicate due diligence, any non-access issues will be clearly communicated in report notes and provided to the client, CDFW, and/or USFWS if requested.

- If CRLF or Alameda whipsnake are found during the pre-construction survey, the qualified biologist shall immediately inform the construction manager that work should be not be initiated until they have dispersed from the work area. The qualified biologist shall then consult with USFWS and CDFW immediately and provide a short description of observations, including a count of individuals and the life stage(s), condition at the site, and other aquatic species observed (if applicable). Unless explicitly authorized by these agencies, CRLF and Alameda whipsnake shall not be relocated if encountered in the project site. If the animals do not disperse of their own volition, the qualified biologist shall monitor the frog or snake and consult with CDFW to determine the appropriate course of action.
- In the event WPT are found in the project area during pre-construction surveys, it shall be left alone to move out of the area on its own. If it does not move on its own, the qualified biologist shall notify CDFW and relocate the individuals(s) to a reach of Rodeo Creek at least 250 feet away from the project location. Relocation areas shall be of suitable habitat, on shallow banks with slow moving water and shall be far enough away so as not to be affected by project activities.
- The applicant shall not resume project activities until CDFW and USFWS have provided written approval of the proposed avoidance measures or actions.
- Work shall be avoided if precipitation (defined as the National Weather Service 24-hour weather forecast indicating a 40 percent chance or higher of precipitation of at least 0.10 inch of precipitation) is forecasted or has been recorded at the project site within a 24-hour window. An NWS forecast may be utilized to plan project work accordingly.

Mitigation Measure BIO-5: Pre-Construction Survey for San Francisco Dusky-Footed Woodrat. Within 30 days prior to the start of construction activities, a qualified biologist shall map all San Francisco dusky-footed woodrat houses within a 25-foot buffer around the project footprint. Environmentally sensitive habitat fencing shall be placed to protect the houses with a minimum 25-foot buffer. If a 25-foot buffer is not feasible, a smaller buffer may be allowable based on advice from a qualified biologist with knowledge of woodrat ecology and behavior. Removal and/or translocation of woodrat houses is not required as the project will not be impacting riparian habitat where woodrat houses have been observed to occur.

Mitigation Measure BIO-6: Pre-Construction Survey for Cooper's Hawk, Golden Eagle, Ferruginous Hawk, Northern Harrier, White-Tailed Kite, Loggerhead Shrike, and Other Nesting Birds. To avoid impacts to special-status and other nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after September 15). If construction and construction noise occurs within the avian nesting season (from February 1 to September 15), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. A nest is considered active if: a bird is building a nest,

sitting on a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, as appropriate, until the chicks have fledged. Monitoring shall be required to ensure compliance with relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

Mitigation Measure BIO-7: Pre-Construction Survey for Bat Roosts. Within 14 days before the start of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading), a survey for tree cavities suitable for roosting bats will be conducted within the project site, including a 50-foot buffer, as feasible. There should also be a five-day window for consultation with CDFW prior to the start of construction within the 14-day period. If suitable tree cavities are found, an emergence survey of the cavities will be conducted by a qualified biologist for colony bat roosts before the onset of construction-related activities. If an occupied maternity or colony roost is detected, CDFW shall be consulted to determine appropriate measures, such as bat exclusion methods, if the roost cannot be avoided. The results of the surveys shall be documented.

Mitigation Measure BIO-8: Domestic Pets. To avoid general impacts to special-status wildlife during use of the planned RV resort, project implementation should include fencing and/or signage to prevent domestic animals (i.e., dogs) from entering riparian and/or coast live oak woodland areas of the project site.

Mitigation Measure BIO-9: Restriction of Nighttime Construction and Construction and/or Project Lighting. Nighttime construction will be minimized to the extent possible. In addition, any lighting associated with project implementation should be directional and should not light the riparian corridor of Rodeo Creek.

Mitigation Measure BIO-10: Protect Sensitive Habitat.

- Travel and parking of vehicles and equipment will be limited to pavement, existing roads, and previously disturbed areas. Ground disturbance and vegetation removal will not exceed the minimum amount necessary to complete work at the site.
- Temporary work areas will be restored with respect to pre-existing contours and conditions upon completion of work. Restoration work including re-vegetation and soil stabilization will be evaluated upon completion of work and performed as needed.
- The potential for adverse effects to water quality in aquatic habitat within the project site will be avoided by implementing Best Management Practices (BMPs), and the project will require a Stormwater Pollution and Prevention Plan (SWPPP) for construction. These BMPs will be used to minimize any erosion or other sources of water pollution. The following BMPs are suggested:
    a) Store, handle, and dispose of construction materials and wastes properly to prevent their contact with stormwater.
    b) Control and prevent the discharge of all potential pollutants, including solid wastes, paints, concrete, petroleum products, chemicals, wash water or sediment and non-stormwater discharges to storm drains and water courses.

c) Avoid cleaning, fueling, or maintaining vehicles on site, except in a designated area in which run-off is contained and treated.
d) Perform clearing and earth moving activities during dry weather to the maximum extent practical.
e) Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and discharge course with field markers.
f) Remove spoils promptly and avoid stockpiling fill materials when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
g) Limit construction access routes and stabilize designated access points.
h) Deposit trash and construction related solid wastes into a covered receptacle to prevent contamination and dispersal by wind.
i) Maintain sanitary facilities on the project site at all times.
j) Take measures to collect or clean any accumulation or deposit of dirt, mud, sand, rocks, gravel, or debris on the surface of any street, alley, or public place or in public storm drain systems. The removal of aforesaid shall be done by street sweeping or hand sweeping. Water shall not be used to wash sediments into public or private drainage facilities.
k) Cease all grading work immediately in the event of rain.
l) Prepare and implement an erosion control plan during the wet season (September 15 through April 15). The following measures are suggested to be included in the plan:
    - During the rainy season, the project site shall be maintained to minimize sediment-laden run-off to any storm drainage system, including existing drainage swales and water courses.
    - Inlet protection shall be installed to prevent sediment from entering the storm drain system where applicable.
    - Weed and net/filament free straw rolls shall be placed at the toe of barren slopes and along the down slope perimeter of the project site to capture sediment in storm runoff.

- Develop a hazardous spill plan prior to construction. The plan will describe what actions will be taken in the event of a spill. The plan will also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site will immediately cease until the contractor has contained and mitigated the spill. The contractor will immediately prevent further contamination and notify appropriate authorities and mitigate damage as appropriate. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, shall be available on site at all times. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided at the project site.
- A SWPPP that complies with the statewide General Permit administered by the State Water Board for the National Pollutant Discharge Elimination System will be developed and implemented to protect the water quality of aquatic resources that lie in or adjacent to the proposed project area. Appropriate erosion and sediment control and non-sediment pollution control (i.e., sources of pollution generated by construction equipment and material) BMPs will be prescribed in the SWPPP, and erosion and sediment control material included in the SWPPP will be certified as weed-free.
- After construction is completed, a final cleanup will include removal of all stakes, temporary fencing, flagging, and other refuse generated by construction.

Mitigation Measure BIO-11: General Biological Resource Protections During Project Construction.

- Designation of Work Area. Prior to project activities, a qualified biologist will clearly delineate any vegetation and/or habitat areas to be avoided near planned project work.
- Construction Site Sanitation. Food items may attract wildlife onto the construction site, which will expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) will be placed in closed containers and properly disposed of.
- Wildlife Entrapment. The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials. All holes greater than one-foot deep must be covered overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30 percent slope will be positioned such that entrapped wildlife will be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.
- Species Discovery. If an animal is found at the work site and is believed to be a protected species, work must halt and the project biologist shall be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species shall be handled and/or removed from the project site by anyone except a qualified biologist.

Cultural Resources

Implementation of the following mitigation measures would ensure impacts are less than significant.

Mitigation Measure CUL-1: Conduct Subsurface Archaeological Investigation. The applicant shall retain a qualified professional archaeologist or archaeological firm to conduct a series of subsurface investigations in the proposed area of disturbance, where the project has the potential of encountering subsurface resources, or would come within two vertical feet of encountering subsurface resources, i.e. any excavation into or close to the existing ground level of the project area where excavation or over excavation may disturb subsurface archaeological resources. The methodology of the subsurface investigation shall be determined by the investigating archaeologist and will use archaeological augering, shovel test pits, or a combination of the two. The investigations shall be used to determine if archaeological resources are present in areas where native soils could be encountered and the edges and depths of archaeological resources. No more than the minimum level of physical disturbance into a cultural resource shall be permitted, to ensure the integrity of the resource is retained, while being able to definitively establish the presence of a cultural resource. Investigation to depths beyond the maximum depth of disturbance plus a two-foot buffer shall not be required, as cultural resources present below that horizon would be protected from construction activity. The archaeologist/firm shall write a report of their findings, documenting if the proposed project would impact archaeological resources based on the depth and features identified by the subsurface research. In the event that the area of disturbance changes to include areas not investigated by this method, additional investigation shall be required using the criteria contained in this mitigation measure.

Mitigation Measure CUL-2: Avoid Archaeological Resources. After the archaeological investigations are complete, an avoidance strategy shall be determined in consultation with both the applicant, the City, and a qualified professional archaeologist or archaeological firm. The avoidance strategy shall ensure that proposed ground-disturbing activities shall either avoid the archaeological resource entirely by ensuring that either a ten-foot minimum buffer surrounds the resource in which no ground moving activity shall be permitted or have at least two feet of clearance between the depth of the excavation, and the depth of the resource, or both. Fill may be used to raise the ground height to a

point where there will be two feet between the excavation and the resource. Excavation shall not be permitted if there is the possibility of excavation being closer than either two feet vertically or ten feet horizontally to the edges/depth of the resource. An archaeologist shall map and stake out the edge of known and newly discovered resources to ensure construction workers know where sensitive locations are.

Mitigation Measure CUL-3: Conduct Archaeological Monitoring. The applicant shall retain a qualified professional archaeologist or archaeological firm to conduct archaeological monitoring during project construction within 50 feet of a previously known or newly identified archaeological resource during project construction. In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated and the qualified archaeologist can determine the appropriate action, which may include development of a treatment plan. In the event that the construction workers discover archaeological resources determined to be prehistoric, Native American tribes/individuals shall be contacted and consulted, and Native American construction monitoring shall be initiated. A monitoring report will be written detailing all archaeological finds and submitted to the City and the NWIC.

Mitigation Measure CUL-4: Conduct Archaeological Sensitivity Training for Construction Personnel. The applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall include a handout and a log of all attendees and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event.

Energy

No significant impacts have been identified; no mitigation is necessary.

Geology and Soils

Implementation of the following mitigation measure would ensure impacts are less than significant.

Mitigation Measure GEO-1: Erosion and Sediment Control Plan or Stormwater Pollution Prevention Plan. The Applicant shall submit an Erosion and Sediment Control Plan, or Stormwater Pollution Prevention Plan (SWPPP) prepared by a registered professional engineer or qualified stormwater pollution prevention plan developer as an integral part of the grading plan. The Plan shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during construction, including runoff control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. The Plan shall include the following measures as applicable:

a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
b) All drainage ways, wetland areas, and creek channels shall be protected from silt and sediment in storm runoff using appropriate Best Management Practices (BMPs) such as silt fences, diversion berms, and check dams. Fill slopes shall be stabilized and covered when

appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.

c) All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15. Erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15. The applicant shall be responsible for notifying construction contractors about erosion control requirements.
d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; minimizing disturbance on slopes exceeding 30 percent; using berms, swales, ditches, vegetative filter strips, and catch basins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.
e) The applicant shall also develop an inspection program to evaluate if there is any significant onsite erosion as a result of rainfall. If there were problem areas at the site, recommendations will be made to improve methods to manage onsite erosion, subject to review and approval by the City.

Mitigation Measure GEO-2: Conduct Paleontological Sensitivity Training for Construction Personnel. The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology and shall conduct a paleontological sensitivity training for construction personnel prior to commencement of excavation activities. The Applicant and/or qualified professional paleontologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The Applicant shall notify the City at least 48 hours before holding the training and keep a log of all attendees. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of paleontological monitors, notification and other procedures to follow upon discovery of resources, and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

Mitigation Measure GEO-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered. If paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

Greenhouse Gas Emissions

No significant impacts have been identified; no mitigation is necessary.

Hazards and Hazardous Materials

Implementation of the following mitigation measure would ensure impacts are less than significant.

Mitigation Measure HAZ-1: Asbestos-Containing Materials (ACMs). Prior to any demolition activities, the applicant shall prepare a written Asbestos Abatement Plan describing activities and procedures for removal, handling, and disposal of these ACMs using EPA- and OSHA-approved procedures, work practices, and engineering controls. The plan shall be subject to review and approval by the City of Hercules.

Mitigation Measure HAZ-2: Lead-Based Paints. The applicant shall have all lead-based paint removed and disposed of following lead abatement performance standards included in the U.S. Department of Housing and Urban Development Guidelines for Evaluation and Control of Lead-Based Paint program, in compliance with Title 8 California Code of Regulations (including Section 1532.1).

Hydrology and Water Quality

Implementation of **Mitigation Measure GEO-1** would result in less than significant impacts with respect to hydrology and water quality.

Land Use and Planning

No significant impacts have been identified; no mitigation is necessary.

Mineral Resources

No significant impacts have been identified; no mitigation is necessary.

Noise

Implementation of the following mitigation measure would ensure impacts are less than significant.

Mitigation Measure NOI-1: The City shall require the Applicant to incorporate the following construction noise best management practices into all applicable project bid, design, and engineering documents:

1) *Limit Construction Hours*: Construction activities shall be limited to the least noise-sensitive times and will comply with the City's noise ordinances. Construction, activities shall be allowed on weekdays between the hours of 7:00 AM and 7:00 PM, and on Saturdays between the hours of 10:00 AM and 6:00 PM. No construction shall be allowed on Sundays and federal holidays. All noisy construction activities (including truck traffic) shall be scheduled for periods, according to the construction permit, to limit impacts on adjacent sensitive receptors.
2) *Locate Staging Areas away from Sensitive Receptors:* The City's construction specification shall require that the contractor select staging areas as far as feasibly possible from sensitive receptors.
3) *Maintain Mufflers on Equipment:* Heavy equipment engines shall be covered, and exhaust pipes shall include a muffler in good working condition.
4) *Equipment Location and Shielding:* Stationary equipment such as compressors, generators, and welder machines shall be located as far away from surrounding residential land uses as possible. The project shall connect to existing electrical service at the site to avoid the use of stationary, diesel-, or other alternatively-fueled power generators, if feasible.
5) *Prohibit Radios and Other Amplified Sound Devices:* No radios or other amplified sound devices shall be audible beyond the property line of the construction site.
6) *Impact Tools:* Impact tools such as jack hammers shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically

powered tools. When use of pneumatic tools is unavoidable, it shall be ensured the tool will not exceed a decibel limit of 85 dBA at a distance of 50 feet. Pneumatic tools shall also include a noise suppression device on the compressed air exhaust.

Population and Housing
No significant impacts have been identified; no mitigation is necessary.

Public Services
No significant impacts have been identified; no mitigation is necessary.

Recreation
No significant impacts have been identified; no mitigation is necessary.

Transportation
Implementation of the following mitigation measure would ensure impacts are less than significant.

Mitigation Measure TRANS-1: Construction Period Transportation Impacts. The applicant shall submit a construction period Traffic Control Plan subject to City review and approval. As noted by Abrams Associated in the TIA, the Traffic Control Plan could include, but are not limited to, the following: truck drivers be notified of and required to use the most direct route between the site and the freeway, as determined by the City Engineering Department; all site ingress and egress would occur only at the main driveways to the project site, and construction activities may require installation of a temporary traffic signal(s) as determined by the City Engineer; specifically designated travel routes for large vehicles would be monitored and controlled by flaggers. The plan shall include traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications ("Construction Area Traffic Control Devices") to be followed during construction. The plan shall also specify provision of adequate signing and other precautions for public safety to be provided during project construction. In addition, the plan shall address parking and emergency vehicle access during construction. The applicant or their general contractor for the project shall notify the Public Works Division and local emergency services (i.e., the police and fire departments) prior to construction to inform them of the proposed construction schedule and that traffic delays may occur. Prior to approval of a grading permit, the City shall review and approve the construction period Traffic Control Plan. During construction, the City shall periodically verify that traffic control plan provisions are being implemented.

Tribal Cultural Resources
Implementation of **Mitigation Measures CUL-1** and **CUL-4** would result in less than significant impacts with respect to tribal cultural resources.

Utilities and Service Systems
No significant impacts have been identified; no mitigation is necessary.

Wildfire
No significant impacts have been identified; no mitigation is necessary.

3. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist below. No significant impacts would result after mitigation.

- ☐ Aesthetics
- ☐ Agriculture and Forestry
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Energy Resources
- ☐ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards & Hazardous Material
- ☐ Hydrology/Water Quality
- ☐ Land Use/Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population/Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation/Traffic
- ☐ Tribal Cultural Resources
- ☐ Utilities/Service Systems
- ☐ Wildfire
- ☐ Man. Findings of Sig

4. Determination

On the basis of this initial evaluation:

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

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

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

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

Robert C Reber — Signature

3-10-21 — Date

Robert Reber, AICP,
Community Development Director — Printed Name

3-10-21 — Date

5. Evaluation of Environmental Impacts

(1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(2) All answers must take account of the whole action involved, including off-site as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation incorporated, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

(4) "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as explained in [5] below, may be cross-referenced).

It is noted that many potential environmental impacts can be avoided or reduced through implementation of uniformly applied development policies, standards, or regulations – such as building and fire codes, design guidelines, a noise ordinance, a historic resource ordinance, a tree preservation ordinance, and other requirements that the lead agency applies uniformly toward all project proposals. Consistent with CEQA streamlining provisions (e.g., section 15183), these uniformly applied requirements are not distinguished as project-specific "mitigation measures," primarily because they have already been adopted to avoid or reduce potential environmental impacts of all future project proposals, not only the particular project being evaluated at the moment.

(5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (CEQA Guidelines section 15063[b][1][c]). In this case, a brief discussion should identify the following:

(a) Earlier Analysis Used. Identify and state where they are available for review.

(b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

(c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

(6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

(7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

(9) The explanation of each issue should identify:

(a) The significance criteria or threshold, if any, used to evaluate each question; and

(b) The mitigation measure identified, if any, to reduce the impact to less than significant.

6. Issues

6.1 Aesthetics

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, Would the project:				
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?			✓	
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ("Glare" is defined in this EIR as the reflection of harsh bright light sufficient to cause physical discomfort or loss in visual performance and visibility.)			✓	

Conclusion: Regarding aesthetics, the proposed project would not result in any significant environmental impacts.

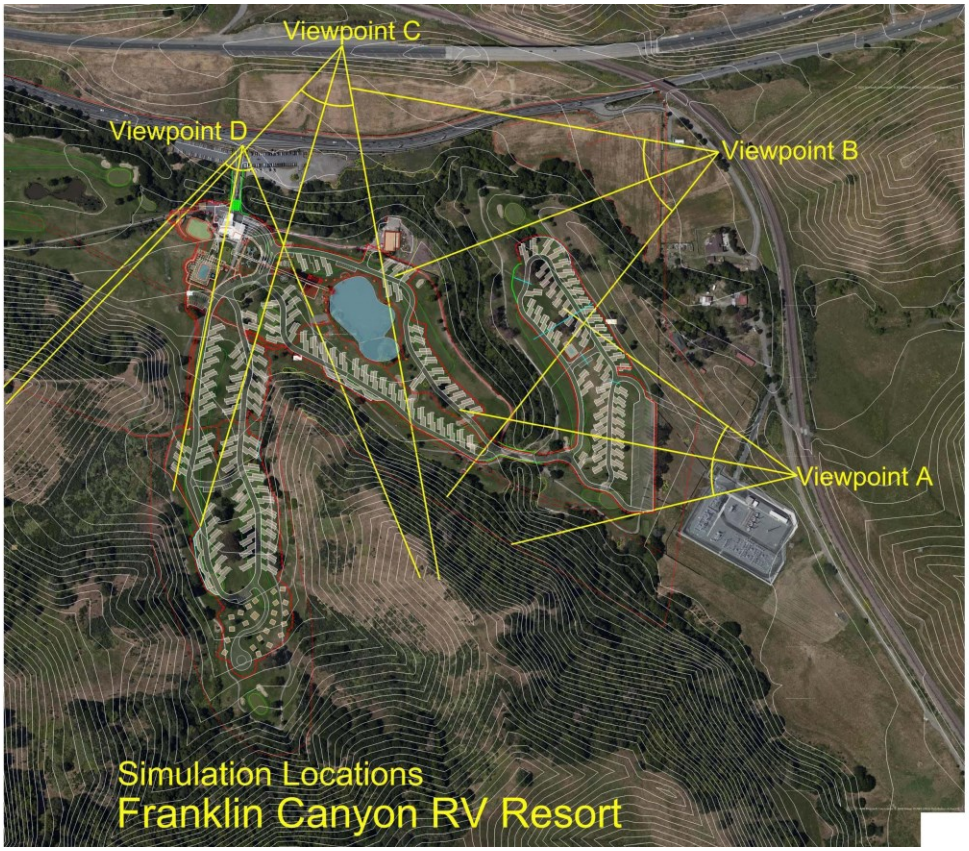
Documentation:

a. Less than Significant Impact. The project is located in an area of mixed topography, with gently rolling hills and flat areas, and steeper slopes rising to Franklin Ridge along the southern boundary. The site is visible from Highway 4 and Christie Road, adjacent to the north. To the east, the site is bordered by Fernandez Ranch, a PG&E substation, and private ranchlands. Open space lies adjacent to the south and includes Franklin Canyon, Fernandez Ranch, and East Bay Municipal Utilities District (EBMUD). Private ranchlands are adjacent to the west of the project site.

The site is bordered on the south by open space properties (including Fernandez Ranch), is afforded expansive scenic views, and has prominent ridges. The Contra Costa General Plan's Open Space Element (Chapter 9) has designated the ridge to the south of the project site to be a "major scenic ridge" in Figure 9-1 of the County's General Plan.

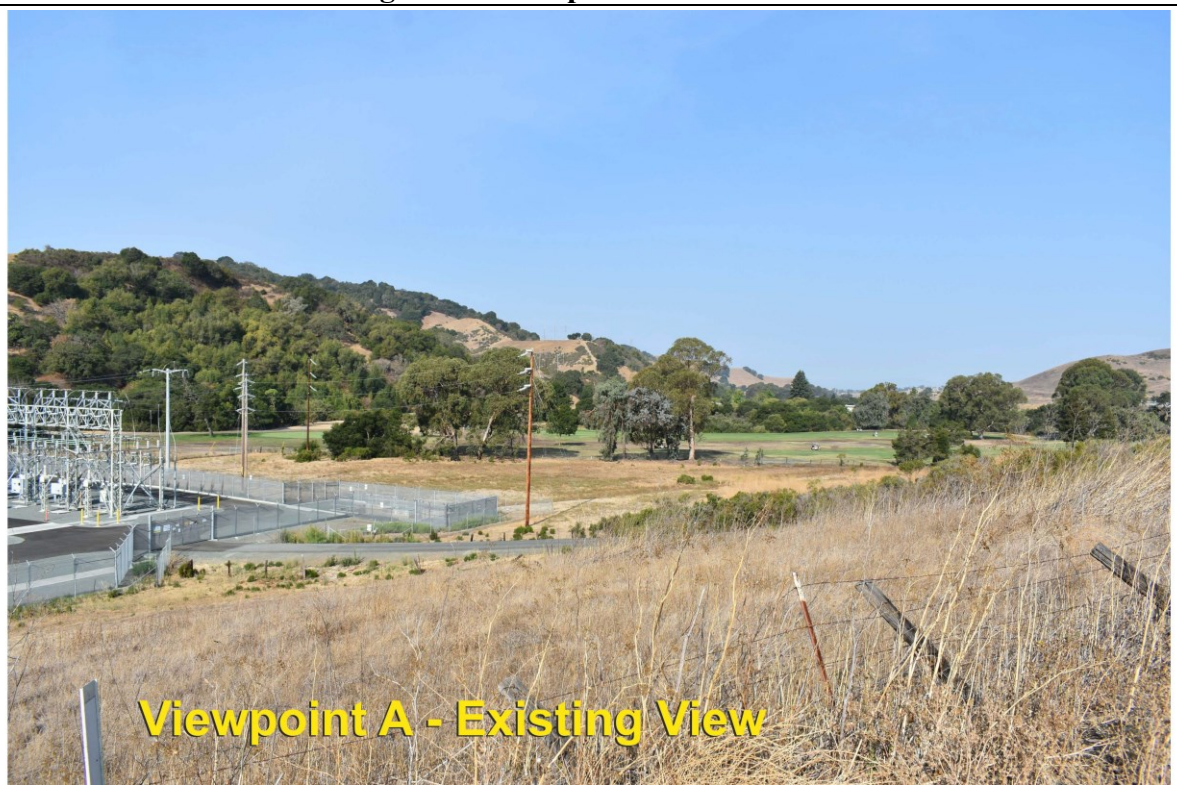
New construction would be partially visible from Highway 4, including the clubhouse and some of the higher-elevation campsites. The impact does not interfere with the scenic vistas (see Figures 13-17 for the photo simulations). New construction would be partially visible from the highway, but project compliance with Measure M would preclude a substantial adverse effect on a scenic vista, and the impact resulting from the project would be less than significant.

Figure 13. Photo Simulation Viewpoints



Source: Applicant provided

Figure 14. Viewpoint A Simulation



Note: Viewpoint from Christie Road further from Highway 4.

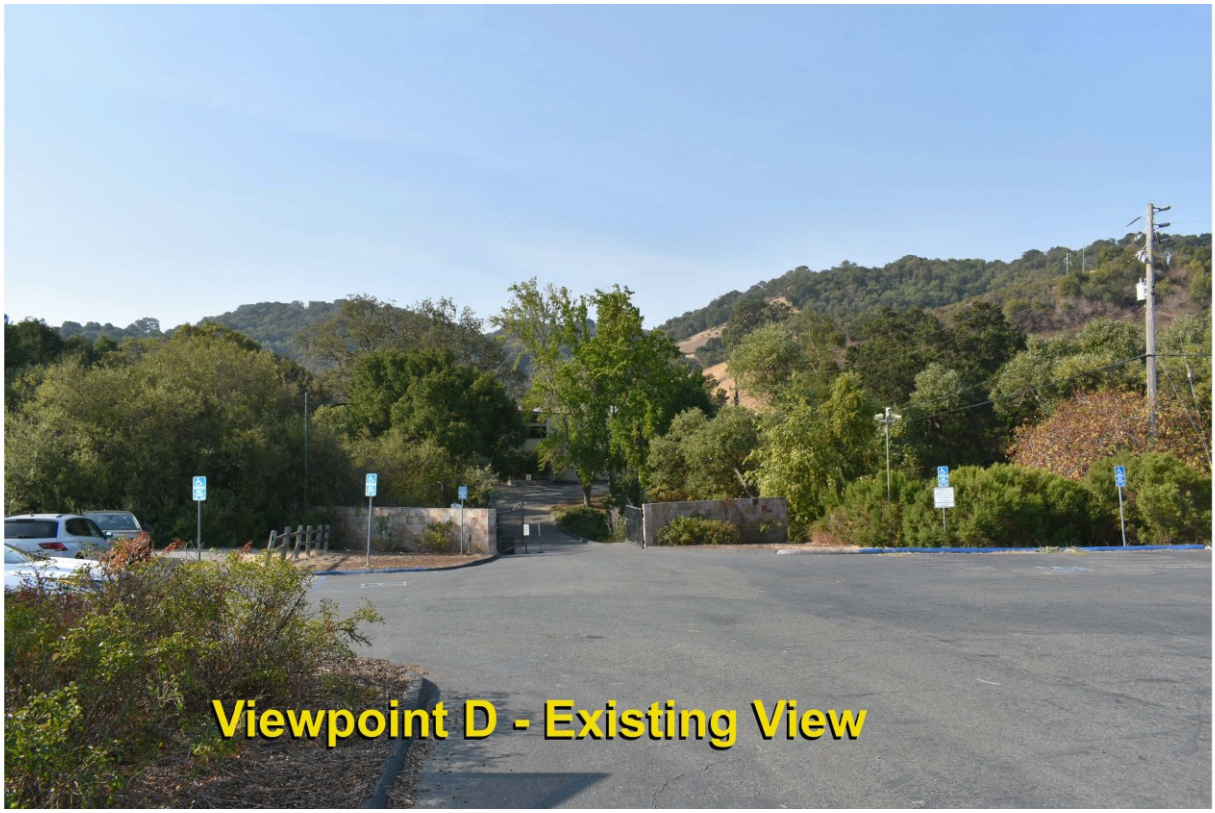
Figure 15. Viewpoint B Simulation

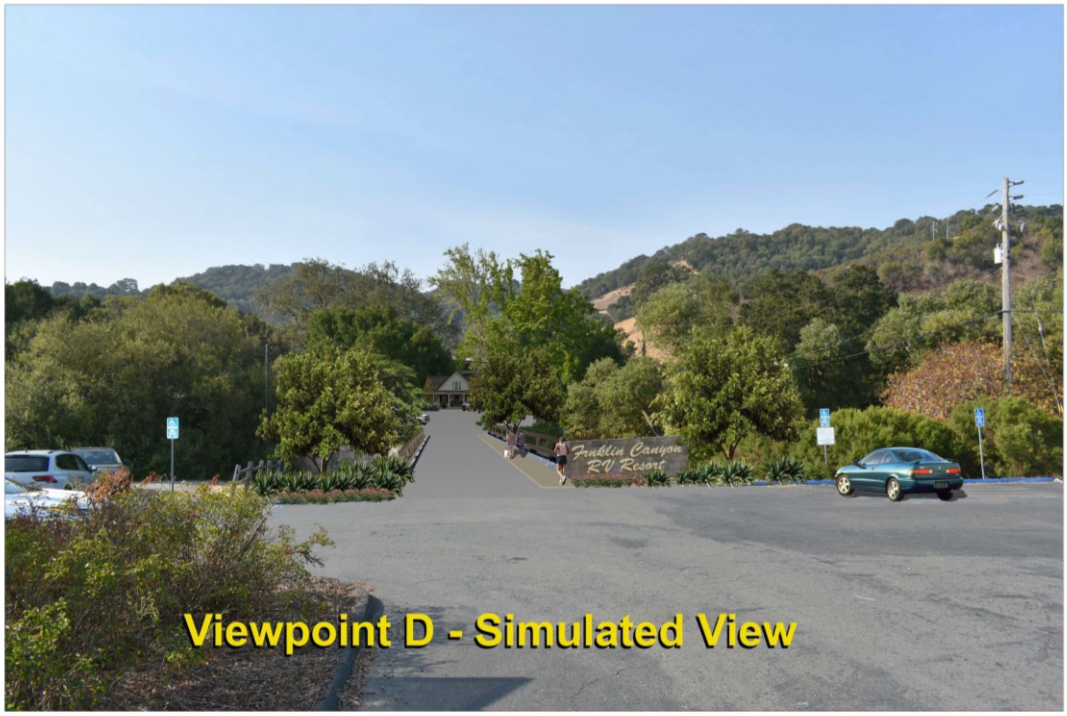
Note: Viewpoint from Christie Road close to Highway 4.

Figure 16. Viewpoint C Simulation

Note: Viewpoint from Highway 4 looking South.

Figure 17. Viewpoint D Simulation





Note: Viewpoint from Site Entrance.

b. Less than Significant Impact. The project site is located at the base of a scenic ridge and is currently developed as a golf course and driving range. There is no State Scenic Highway in the project vicinity, but the Hercules General Plan Circulation Element has recognized the scenic character of

Highway 4 by designating the highway as a Scenic Route and providing implementation measures for development. Per Policy 3.B.2, New Development and Scenic Routes, project design and site layout of new development on or in close proximity to a Scenic Route shall consider the visual impact of the development on the Scenic Route and any impact on existing vistas from the Scenic Route.

State Scenic Highways are designated by the California Department of Transportation (Caltrans) to promote the protection and enhancement of the natural scenic beauty of California's highways and adjacent corridors. There are no State Scenic Highways within City limits. The closest Scenic Highway is State Route (SR) 24, about eight miles south of the project site. While the proposed project structures, RVs, and campsites would not be visible from a State Scenic Highway, the project site itself is located along a City-designated Scenic Route and visible from a County-Designated scenic highway. The proposed project would not substantially degrade scenic resources because the project has been deliberately designed to avoid adverse effects on scenic resources on the site, as evidenced by the photo simulations and project plans. Project construction and operation would not substantially damage scenic resources, and the impact would be less than significant.

c. Less than Significant Impact. The proposed project clubhouse would be partially visible from public vantage points that are accessed along Christie Road. The project components would not be visible from the County-designated scenic Highway 4, which offers limited views south to the Franklin Canyon/Fernandez Ranch area, and north to Crockett Hills Regional Park. Project construction and operation would not substantially interfere with public views, due to the project's low building elevations and new landscaping.

The proposed project would demolish the existing golf clubhouse and construct a new clubhouse and indoor fitness and wellness center, with a maximum building height of 32 feet, 9.5 inches as a two-story building. The proposed RV storage and camping area would not be visible from any public vantage points. The project proposes creation of an adjacent open space parcel managed by John Muir Land Trust (JMLT). Assuming the necessary lot line adjustment is approved, the project would slightly change the character of the western part of the site's open space; the proposed project would increase access to the open space and would landscape the western space with native plants. The project architect has provided a landscaping plan for the project site, including the planting of native plants, trees, and shrubs to provide natural screening of the clubhouse; the plan is subject to review and approval by the City. See Figures 6 through 9 for the landscaping plans.

The Hercules General Plan includes the following Goals that guide development in scenic areas and apply to the project site.

- Open Space and Conservation: The Upper drainage views from higher elevations of Parcel 13 easterly up the floor of Franklin Canyon shall be preserved to the maximum extent feasible. Lower drainage ridge views from Franklin Canyon and the Refugio Creek floodplain shall be preserved to the maximum extent feasible.
- Land Use: Program 7A.1. Provide landscaping along major regional streets and highways. This landscaping should soften the appearance of traffic and parking along these routes, while allowing view corridors to retail and other businesses.
- Circulation: 3.B.2 New Development and Scenic Routes. The design and site layout of new development on or in close proximity to a Scenic Route shall consider the visual impact of the development on the Scenic Route, and any impact on existing vistas from the Scenic Route.

- Circulation: 3.B.3 Scenic Views. Key 'public' views visible from Scenic Routes, as determined by the City, shall be preserved to the extent practical.

As described in this Aesthetics section, the project would result in less than significant aesthetic impacts, includes project plans and a landscaping plan subject to City review and approval, and is consistent with applicable Hercules General Plan goals and policies. The project would not substantially degrade the existing visual character or quality of the site and its surroundings, and the impact would be less than significant.

d. Less than Significant Impact. Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused by unshielded or misdirected lighting sources, or by reflective surfaces (i.e., polished metal, window treatments). Subject to City review and approval as a standard development review requirement, the applicant shall provide a photometric plan and descriptions/illustrations of outdoor fixtures.

The project would increase overall illumination in the project vicinity. The project would comply with Visual Safeguards in City-adopted Measure M, Section 13, which would be verified during Design Review. Additionally, the project would be required to comply with the City's General Plan Open Space/Conservation Program 13e.1: "The City shall evaluate the light and glare potential of new development on a parcel specific basis and apply the following measures: Screening of parking areas by using vegetation or trees, using hooded lights to direct light downwards, and use of non-reflective windows." Because visitors would stay overnight there is the possibility of increased light at night from RV campsites. Review of the project would include quiet or dark hours. Project compliance with these standards ensure that there would be no new source of substantial light or glare which would adversely affect day or nighttime views in the area. The impact would be less than significant.

References:

Borrecco Kilian and Associates Landscape Architects, September 28, 2020. Preliminary Landscape Plans (sheet L-1). Included as Figures 5 though 8.

Caltrans. Map Viewer website, "California Scenic Highways," Available at: https://www.arcgis.com/home/webmap/viewer.html?layers=f0259b1ad0fe4093a5604c9b838a486a (accessed July 20, 2020).

County of Contra Costa, January 18, 2005. General Plan, Circulation Element (2018). Available at: https://www.ci.hercules.ca.us/government/planning/general-plan (accessed July 22, 2020)

County of Contra Costa January 18, 2005. General Plan Land Use Element (1998). Available at: https://www.contracosta.ca.gov/DocumentCenter/View/30919/Ch9-Open-Space-Element?bidId= (accessed July 21, 2020).

County of Contra Costa January 18, 2005. General Plan, Open Space/Conservation (1998, amended April 14, 2015). Available at: https://www.contracosta.ca.gov/DocumentCenter/View/30919/Ch9-Open-Space-Element?bidId= (accessed July 21, 2020)

City of Hercules, 1998. General Plan, September 22, 1998. Open Space and Conservation (Amended April 14, 2015), Land Use (1998), Circulation (February 27, 2018). Available at: https://www.ci.hercules.ca.us/government/planning/general-plan (accessed July 24, 2020)

City of Hercules, June 26, 2019. Planning Division, Notice of Decision “Application # ZD 19-01 For Zoning Clearance for Allowable Use Determination for Franklin Canyon Recreational Vehicle (RV) Resort and Golf Course Project. Available at https://www.ci.hercules.ca.us/home/showdocument?id=12982 (accessed July 20, 2020).

6.2 Agriculture and Forest Resources

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assess in impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51140 (g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

Conclusion: Regarding agricultural and forest resources, the proposed project would not result in any significant environmental impacts.

Documentation:

a. No Impact. The property is bordered by Highway 4 (John Muir Parkway) to the north, and Burlington Northern Santa Fe (BNSF) Railroad tracks that loop around north and then to the east around the site. To the east, the site is bordered by Fernandez Ranch, a PG&E substation, and private ranchlands. Open space lies adjacent to the south and includes Franklin Canyon, Fernandez Ranch's publicly accessible grazing lands and undeveloped East Bay Municipal Utility Department (EBMUD) land. Private ranchlands are adjacent to the west of the project site. The map of Important Farmland in California (2016) prepared by the Department of Conservation does not identify the project site as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The site is classified as "Urban and Built-Up-Land" which is described as "occupied by structures with

a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel." Because the project site is classified as Urban and Built-Up-Land, the project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use.

b. No Impact. No land within the City limits is zoned for agricultural use. The project site is zoned for recreational usage, with the proposal to change part of the parcel to open space. Lands within the project area are not under Williamson Act contracts nor would the project impact any lands under Williamson Act contracts. Therefore, the proposed project would not impact existing zoning for agricultural use, or a Williamson Act contract.

c. No Impact. There is no forest land or timberland located on or near the project site. The project site is surrounded by open space and a mix of public and private grazing land. The project proposes increasing access to open space and would not impact timberland zoning.

d. No Impact. Refer to 6.2.c. There is no forest land on or nearby the project. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Project development would not impact forest land.

e. No Impact. Refer to Sections 6.2.a and 6.2.c. The project site is currently developed on a parcel adjacent to agricultural and open space lands. The proposed project would be developed within the existing footprint of disturbed land and would not change the existing environment in a manner that will result in the conversion of forest land to a non-forest land use or agricultural land to a non-agricultural use. Therefore, no impact would occur.

References:

California Department of Conservation, California Important Farmland Finder 2016. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed July 23, 2020).

City of Hercules, 2019. Open Space at Franklin Canyon and Fernandez Ranch Properties. Available at: https://www.ci.hercules.ca.us/government/community-development/development-projects/franklin-canyon/franklin-canyon-fernandez-ranch (accessed July 23, 2020)

6.3 Air Quality

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		✓		
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

Conclusion: Regarding air quality, the proposed project would not result in any significant environmental impacts after mitigation.

Documentation:

a. No Impact. The proposed project would not conflict with nor obstruct implementation of the Bay Area Air Quality Management District (BAAQMD) *2017 Clean Air Plan*. The *2017 Clean Air Plan* includes increases in regional construction, area, mobile, and stationary source activities, and operations in its emission inventories and plans for achieving attainment of air quality standards. Chapter 5 of the *2017 Clean Air Plan* contains the BAAQMD's strategy for achieving the plan's climate and air quality goals. This control strategy is the backbone of the *2017 Clean Air Plan* (BAAQMD, 2017a).

The proposed project consists of redeveloping an existing golf course with a new RV resort and partial conversion to open space. The proposed project would not exceed the level of population or housing foreseen in City of Hercules or regional planning efforts; therefore, it would not have the potential to substantially affect housing, employment, and population projections within the region, which are the basis of the *2017 Clean Air Plan* projections. The control measures in the *2017 Clean Air Plan* do not apply to the proposed project and, therefore, the proposed project would not conflict with the *2017 Clean Air Plan*. Furthermore, as described under b), below, the increase in regional operational emissions generated by the proposed project would be less than the BAAQMD's emissions thresholds. No impact relevant to the *2017 Clean Air Plan* would occur.

b. Less than Significant Impact with Mitigation Incorporated. The proposed project would generate both short-term construction emissions and long-term operational emissions through onsite operations associated with the RV resort. As described in more detail below, the proposed project

would not generate short-term or long-term emissions that exceed BAAQMD-recommended criteria air pollutant thresholds after the implementation of Mitigation Measure AIR-1.

The proposed project is located within the San Francisco Bay Area Air Basin (Basin), where efforts to attain state and federal air quality standards are governed by the BAAQMD. Both the State of California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as criteria pollutants). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS (CAAQS) are more stringent than the national AAQS (NAAQS). The U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and BAAQMD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- **Attainment.** A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.

- **Nonattainment.** If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.

- **Unclassified.** An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Air pollution levels are measured at monitoring stations located throughout the air basin. Table 1, *San Francisco Bay Area Air Basin Attainment Status*, summarizes the Basin's attainment status for the CAAQS and NAAQS.

Table 1. San Francisco Bay Area Air Basin Attainment Status

Pollutant	Averaging Time	Attainment Status[(A)]	
		CAAQS	NAAQS
O_3	1-Hour	N	--
	8-Hour	N	N
PM_{10}	24-Hour	N	U
	Annual Average	N	--
$PM_{2.5}$	24-Hour	--	N
	Annual Average	N	A
CO	1-Hour	A	A
	8-Hour	A	A
NO_2	1-Hour	A	U
	Annual Average	--	A
SO_2	1-Hour	A	U
	24-Hour	A	--
Sulfates	24-Hour	A	--
Lead	1-Hour	U	--
Visibility Reducing Particles	24-Hour	--	--

Source: BAAQMD, 2017b, U.S. EPA, 2020

(A) A= Attainment, N= Nonattainment, U=Unclassified.

The proposed project would generate both short-term construction emissions and long-term operational emissions. The project's potential emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.

Construction Emissions: The proposed project involves redeveloping approximately half of an existing golf course with a new RV resort and clubhouse facility over an approximately 10-month period, beginning as soon as October 2021 and the remainder of the golf course will be converted into open space. Construction activities are anticipated to disturb approximately 35 acres, and include: demolition of the existing clubhouse, site clearing and grubbing, grading, utility infrastructure (e.g., sewer, water, electricity, etc.) installation, foundation / base placement, paving, vertical development of a new clubhouse and associated amenities, and architectural coating work. Soil and earthwork quantities are anticipated to be balanced on site during grading.

The proposed project's potential construction emissions were estimated using CalEEMod, based on construction phasing and equipment runtime estimates provided by the project applicant and supplemented with CalEEMod defaults assumptions, and are shown in Table 2, *Construction Activity, Duration, and Typical Equipment*.

Table 2. Construction Activity, Duration, and Typical Equipment

Construction Activity	Duration (days)(A)	Typical Equipment Used
Demolition, Clearing, and Grubbing	11	Bulldozer, Loader, and Water Truck
Grading	24	Bulldozers, Graders, and Water Truck
Clubhouse Utility Stubs and Foundation Concrete	22	Concrete Mixers
Utility Installation, Sewage Treatment/Disposal System Installation; RV Site Fine Grading	26	Excavators and Graders
Clubhouse Framing, Electrical, Plumbing, Mechanical, Roofing, Windows, and Finishing	99	Pettibone and Forklift
Road Base and Pavement, Clubhouse Foundation	55	Graders, Paving Machine, Vibratory Rollers
Architectural Coating	55	Air Compressor

Source: Wendel Rosen, 2021, and MIG, 2020 (See Appendix A).
(A) Days refer to total active work days in the construction phase, not calendar days.

The proposed project's daily unmitigated annual and average daily construction emissions are shown in Table 3. **Estimated Project Construction Criteria Air Pollutant Emissions**

Year	Pollutant Emissions (Tons per Year)						
	ROG	NOx	CO	PM_{10}		$PM_{2.5}$	
				Dust	Exhaust	Dust	Exhaust
Year 1(A)	0.6	1.8	1.0	0.2	0.1	0.1	0.1
Year	**Pollutant Emissions (Average Pounds per Day)(B)**						
	ROG	**NOx**	**CO**	**PM_{10}**		**$PM_{2.5}$**	
				Dust	**Exhaust**	**Dust**	**Exhaust**
Year 1(A)	5.5	16.6	9.1	1.8	0.7	0.8	0.7
BAAQMD CEQA Threshold	**54**	**54**	**--**	**--**	**82**	**--**	**54**
Potentially Significant Impact?	**No**	**No**	**No(C)**	**Yes(D)**	**No**	**Yes(D)**	**No**

BAAQMD 2017c and MIG 2020. See Appendix A.
(A) Emissions for "Year 1" reflects the combined (i.e., total sum of) emissions for years 2021 and 2022, since project construction is anticipated to last approximately seven (7) months (i.e., less than a year) and the BAAQMD's CEQA thresholds are based on an average daily emissions performance standard.
(B) Average daily emissions reflect 154 total construction days (22 construction days per month for seven months).
(C) The BAAQMD does not maintain construction-related thresholds of significance for CO; however, the project would be of relatively short duration (i.e., seven months) and located in a rural environment, giving pollutants ample time to disperse. The proposed project's construction-related CO emissions would not result in a significant impact.
(D) For all projects, the BAAQMD recommends implementing eight basic construction best management practices (BMPs) to control fugitive dust from construction activities. As described below, Mitigation Measure AIR-1 would be incorporated into the project to address potentially significant fugitive dust emissions during project construction.

, *Estimated Project Construction Criteria Air Pollutant Emissions*. Please refer to Appendix A for CalEEMod output files and detailed construction emissions assumptions.

Table 3. Estimated Project Construction Criteria Air Pollutant Emissions

Year	Pollutant Emissions (Tons per Year)

	ROG	NOx	CO	PM_{10}		$PM_{2.5}$	
				Dust	Exhaust	Dust	Exhaust
Year 1[(A)]	0.6	1.8	1.0	0.2	0.1	0.1	0.1
Year	**Pollutant Emissions (Average Pounds per Day)[(B)]**						
	ROG	**NOx**	**CO**	**PM_{10}**		**$PM_{2.5}$**	
				Dust	**Exhaust**	**Dust**	**Exhaust**
Year 1[(A)]	5.5	16.6	9.1	1.8	0.7	0.8	0.7
BAAQMD CEQA Threshold	**54**	**54**	**--**	**--**	**82**	**--**	**54**
Potentially Significant Impact?	**No**	**No**	**No[(C)]**	**Yes[(D)]**	**No**	**Yes[(D)]**	**No**

BAAQMD 2017c and MIG 2020. See Appendix A.

(E) Emissions for "Year 1" reflects the combined (i.e., total sum of) emissions for years 2021 and 2022, since project construction is anticipated to last approximately seven (7) months (i.e., less than a year) and the BAAQMD's CEQA thresholds are based on an average daily emissions performance standard.

(F) Average daily emissions reflect 154 total construction days (22 construction days per month for seven months).

(G) The BAAQMD does not maintain construction-related thresholds of significance for CO; however, the project would be of relatively short duration (i.e., seven months) and located in a rural environment, giving pollutants ample time to disperse. The proposed project's construction-related CO emissions would not result in a significant impact.

(H) For all projects, the BAAQMD recommends implementing eight basic construction best management practices (BMPs) to control fugitive dust from construction activities. As described below, Mitigation Measure AIR-1 would be incorporated into the project to address potentially significant fugitive dust emissions during project construction.

As shown in Table 3. **Estimated Project Construction Criteria Air Pollutant Emissions**

Year	**Pollutant Emissions (Tons per Year)**						
	ROG	**NOx**	**CO**	**PM_{10}**		**$PM_{2.5}$**	
				Dust	**Exhaust**	**Dust**	**Exhaust**
Year 1[(A)]	0.6	1.8	1.0	0.2	0.1	0.1	0.1
Year	**Pollutant Emissions (Average Pounds per Day)[(B)]**						
	ROG	**NOx**	**CO**	**PM_{10}**		**$PM_{2.5}$**	
				Dust	**Exhaust**	**Dust**	**Exhaust**
Year 1[(A)]	5.5	16.6	9.1	1.8	0.7	0.8	0.7
BAAQMD CEQA Threshold	**54**	**54**	**--**	**--**	**82**	**--**	**54**
Potentially Significant Impact?	**No**	**No**	**No[(C)]**	**Yes[(D)]**	**No**	**Yes[(D)]**	**No**

BAAQMD 2017c and MIG 2020. See Appendix A.

(I) Emissions for "Year 1" reflects the combined (i.e., total sum of) emissions for years 2021 and 2022, since project construction is anticipated to last approximately seven (7) months (i.e., less than a year) and the BAAQMD's CEQA thresholds are based on an average daily emissions performance standard.

(J) Average daily emissions reflect 154 total construction days (22 construction days per month for seven months).

(K) The BAAQMD does not maintain construction-related thresholds of significance for CO; however, the project would be of relatively short duration (i.e., seven months) and located in a rural environment, giving pollutants ample time to disperse. The proposed project's construction-related CO emissions would not result in a significant impact.

(L) For all projects, the BAAQMD recommends implementing eight basic construction best management practices (BMPs) to control fugitive dust from construction activities. As described below, Mitigation Measure AIR-1 would be incorporated into the project to address potentially significant fugitive dust emissions during project construction.

, construction emissions associated with the proposed project would be below all BAAQMD significance thresholds for criteria air pollutant emissions; however, as indicated in the BAAQMD's *CEQA Guidelines*, fugitive dust emissions are considered potentially significant, regardless of the quantity of PM_{10} or $PM_{2.5}$ emitted unless the BAAQMD's eight recommended fugitive dust BMPs are implemented during construction activities (BAAQMD 2017c, pg. 8-4). Accordingly, Mitigation Measure AIR-1, is presented below to reduce fugitive dust emissions from the proposed project's construction activities.

Impact AIR-1: Project construction would result in fugitive dust emissions which, if not controlled pursuant to BAAQMD Guidance, could be significant.

> **Mitigation Measure AIR-1:** To reduce fugitive dust that would be generated during project construction activities, the City and/or its designated contractors, contractor's representatives, or other appropriate personnel to implement the following BAAQMD basic dust control measures.
>
> - Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions.
> - Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
> - Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the proposed project.
> - Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
> - Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
> - Minimize idling time of diesel-powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project.
> - Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
> - Post a publicly visible sign with the name and telephone number of the construction contractor and City staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the Bay Area Air Quality Management District to ensure compliance with applicable regulations.

After the implementation of Mitigation Measure AIR-1, the proposed project's construction fugitive dust emissions would be less than significant.

Operational Emissions: Upon completion of construction activities, the proposed project would function as a new RV resort. The operation of this land use would generate emissions of regulated air pollutants from:

- **"Area" Sources.** The proposed land use would generate emissions from small area sources, including landscaping equipment, and the use of consumer products (e.g., paints, cleaners, and fertilizers) that result in the evaporation of chemicals into the atmosphere during product use.
- **Energy Use and Consumption.** The proposed land use would generate emissions from the combustion of natural gas in water and space heating equipment, as well as from onsite hookups (i.e., sewer, water, power, and cable TV) that would be available at the RV parking locations. Since these hookups would be available, it is anticipated that RVs would rarely use generators for power.
- **Mobile Sources.** The proposed project site would generate emissions from vehicles traveling to and from the project site.

The proposed project's operational emissions were estimated using CalEEMod.[1] The operational emissions generated in CalEEMod are based on the project's full first year of operation (presumed to be 2022) using default data assumptions provided by CalEEMod, with the following project-specific modification:

- **Mobile Source Emissions**. Although the proposed project would generate emissions from mobile sources (i.e., trips to and from the site), the site already generates trips through operation of the existing golf course. Per the transportation studies prepared for the proposed project by Abrams Associates and DKS Associates, the proposed project is anticipated to generate approximately 126 less trips to the site on a daily basis, and result in reduced or unchanged vehicle miles traveled (VMT) to the site (Abrams Associates, 2020; DKS Associates, 2020). Consistent with these findings, no changes in mobile source emissions were anticipated to occur.

The proposed project's maximum daily unmitigated operational emissions are shown in Table 4, *Estimated Project Operational Criteria Air Pollutant Emissions*. As shown in Table 4, operational criteria air pollutant emissions associated with the proposed project would be well below the BAAQMD regional thresholds. Therefore, operation of the proposed project would not generate operational-related emissions that exceed BAAQMD thresholds, and impacts would be less than significant.

[1] Estimated operational emissions include emissions from operation of the clubhouse and general RV resort campus. Emissions from specific project elements, such as the pool, and other recreational amenities (e.g., bocce ball courts) were not specifically estimated as they are considered ancillary to the primary recreational use of the RV resort and contribute negligibly to air quality emissions.

Table 4. Estimated Project Operational Criteria Air Pollutant Emissions

Source	Pollutant Emissions (Tons per Year)				
	ROG	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	0.2	0.0	<0.0[A]	0.0	0.0
Energy Demand	<0.0[A]	0.1	0.1	<0.0[A]	<0.0[A]
Total[B]	0.2	0.1	0.1	<0.0[A]	<0.0[A]
BAAQMD CEQA Threshold	**10**	**10**	**--**	**15**	**10**
Potentially Significant Impact?	**No**	**No**	**No**	**No**	**No**
Source	**Pollutant Emissions (Average Pounds per Day)**				
	ROG	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	1.0	0.0	<0.0[A]	0.0	0.0
Energy Demand	0.1	0.5	0.4	<0.0[A]	<0.0[A]
Total[B]	1.1	0.5	0.4	<0.0[A]	<0.0[A]
BAAQMD CEQA Threshold	**54**	**54**	**--**	**82**	**54**
Potentially Significant Impact?	**No**	**No**	**No**	**No**	**No**

BAAQMD 2017c and MIG 2020. See Appendix A.
a. <0.0 does not mean emissions are zero; rather, it means emissions are greater than zero, but less than 0.05.
b. Average daily emissions are based on a 365-day calendar year.

c. Less than Significant Impact. Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive air quality receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The sensitive air quality receptors adjacent or in close proximity to the perimeter of the project include single-family residential receptors, immediately east of the project site on Christie Road.

In addition to criteria air pollutants such as NOx (an ozone precursor), CO, PM_{10}, and $PM_{2.5}$, the U.S. EPA and CARB have classified certain pollutants as hazardous air pollutants (HAPs) and toxic air contaminants (TACs), respectively. These pollutants can cause severe health effects at very low concentrations, and many are suspected or confirmed carcinogens. The U.S. EPA has identified 187 HAPs, including such substances as arsenic and chlorine; CARB considers all U.S. EPA-designated HAPS, as well as diesel particulate matter (DPM) emissions from diesel-fueled engines and other substances, to be TACs.

During project construction, the heavy-duty, diesel-powered, off-road construction equipment, as well as diesel-powered vendor and haul tucks, would emit DPM as part of their exhaust emissions; however, these emissions would not result in pollutant concentrations that could generate substantial adverse health risks to adjacent sensitive receptors for several reasons. First, as shown in Table 3. **Estimated Project Construction Criteria Air Pollutant Emissions**

Year	Pollutant Emissions (Tons per Year)						
	ROG	NOx	CO	PM_{10}		$PM_{2.5}$	
				Dust	Exhaust	Dust	Exhaust
Year 1[(A)]	0.6	1.8	1.0	0.2	0.1	0.1	0.1
Year	**Pollutant Emissions (Average Pounds per Day)[(B)]**						
	ROG	**NOx**	**CO**	**PM_{10}**		**$PM_{2.5}$**	
				Dust	**Exhaust**	**Dust**	**Exhaust**
Year 1[(A)]	5.5	16.6	9.1	1.8	0.7	0.8	0.7
BAAQMD CEQA Threshold	**54**	**54**	**--**	**--**	**82**	**--**	**54**
Potentially Significant Impact?	**No**	**No**	**No[(C)]**	**Yes[(D)]**	**No**	**Yes[(D)]**	**No**

BAAQMD 2017c and MIG 2020. See Appendix A.

(M) Emissions for "Year 1" reflects the combined (i.e., total sum of) emissions for years 2021 and 2022, since project construction is anticipated to last approximately seven (7) months (i.e., less than a year) and the BAAQMD's CEQA thresholds are based on an average daily emissions performance standard.

(N) Average daily emissions reflect 154 total construction days (22 construction days per month for seven months).

(O) The BAAQMD does not maintain construction-related thresholds of significance for CO; however, the project would be of relatively short duration (i.e., seven months) and located in a rural environment, giving pollutants ample time to disperse. The proposed project's construction-related CO emissions would not result in a significant impact.

(P) For all projects, the BAAQMD recommends implementing eight basic construction best management practices (BMPs) to control fugitive dust from construction activities. As described below, Mitigation Measure AIR-1 would be incorporated into the project to address potentially significant fugitive dust emissions during project construction.

, the proposed project's emissions would be below all BAAQMD construction emissions thresholds. Second, project construction emission activities would only occur intermittently, between the hours of 7 AM and 7 PM, Monday through Friday, and between the hours of 10 AM and 6 PM on Saturday, in accordance with Mitigation Measure NOI-1. The intermittent nature of project construction activities would provide time for emitted pollutants to disperse on an hourly and daily basis according to the prevailing wind in the area. Finally, the proposed project would not disturb the entire project parcel (161.95 acres), and most of the heavy-duty equipment operation would take place toward the western two-thirds of the project site, approximately 800 feet or more from sensitive receptor locations. Given the relatively large size of the project site, mobile nature of construction equipment, and the distance from where emissions would be emitted in relation to sensitive receptors, emissions would not expose the same receptor to pollutant concentrations continuously throughout the day, week, or construction-period as a whole. Finally, the proposed project would implement mitigation measures for air quality and noise, which would help reduce fugitive dust emissions, and would require construction equipment be staged as far away from residential receptors as possible, thus reducing the quantity of exhaust emitted in proximity to sensitive receptors. For these reasons, emission sources would be temporary, intermittent, and move throughout the project site, and pollutants would have time and space to disperse before potentially reaching receptor locations. This impact would be less than significant.

d. Less than Significant Impact. Construction of the project would generate typical odors associated with construction activities, such as fuel and oil odors, asphalt paving odors, and painting/coating odors. The odors generated by the project would be intermittent and localized in nature and would disperse quickly.

Once operational, the proposed project could generate typical odors associated with operation of the RV resort, such as: the unanticipated, but potential, infrequent use of generators; and refuse collection stations. Two main trash pickup locations are shown in site plans north of the clubhouse and at the maintenance building. Trash will be taken to those locations from receptacles throughout

the resort picked up by maintenance crews. Most of these activities would occur approximately 800 feet or more from sensitive receptor locations and, similar to construction emissions, have ample time to disperse. Furthermore, these potential sources of odors would not affect a substantial number of people; there are only two single-family homes east of the project site. Therefore, the project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant.

References:

Abrams Associates Traffic Engineering, Inc. (Abrams Associates) 2020. *Transportation Impact Analysis Franklin Canyon RV Resort and Golf Course Contra Costa County*. March 18, 2020.

BAAQMD 2017a. *2017 Clean Air Plan: Spare the Air, Cool the Climate*. BAAQMD, Planning, Rules, and Research Division. April 19, 2017.

Bay Area Air Quality Management District (BAAQMD). 2017b. "Air Quality Standards and Attainment Status". BAAQMD, Research & Data, Air Quality Standards & Attainment Status. January 5, 2017. Accessed on April 30, 2020 at http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status.

BAAQMD. 2017c. *California Environmental Quality Act Air Quality Guidelines*. San Francisco, CA. June 2010, updated May 2017.

DKS Associates 2020. *Franklin Canyon VMT Analysis (Draft)*. August 18, 2020.

United States Environmental Protection Agency (U.S. EPA) 2020. *Green Book.* "PM-2.5 (2012) Designated Area / State Information.". Current as of September 30, 2020. Accessed October 1, 2020. https://www3.epa.gov/airquality/greenbook/kbtc.html

Wendel Rosen 2021. Personal Communication. Email, Subject: Franklin Canyon – Revised Construction schedule. From Patricia E Curtain, Wendel, Rosen, Black & Dean, to Erica Rippe, MIG. February 19, 2021.

6.4 Biological Resources

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

Conclusion: The project site includes annual grassland, urban, coast live oak riparian forest, and coast live oak woodland and scrub. Implementation of Mitigation Measures BIO-1 through BIO-11 would reduce potential impacts to less than significant levels.

Documentation:

a. Less than Significant with Mitigation Incorporated for Special-Status Plant Species. Four (4) special-status plant species were determined to have moderate or high potential to occur within the project site: Mt. Diablo fairy lantern (*Calochortus pulchellus*; California Rare Plant Rank [CRPR] 1B.2), western leatherwood (*Dirca occidentalis*; CRPR 1B.2), Diablo helianthella (*Helianthella castanea*; CRPR 1B.2), and Contra Costa goldfields (*Lasthenia conjugens*; Federal endangered; CRPR 1B.1). Special-status plants may be directly impacted by project activities by crushing during vegetation clearing, equipment staging, or any other ground disturbance.

Less than Significant with Mitigation Incorporated for Special-Status Wildlife. Eleven (11) special-status wildlife species were determined to have moderate or high potential to occur or are known to be present within the project site: western bumblebee (*Bombus occidentalis*; candidate State endangered), California red-legged frog (*Rana draytonii*; Federal threatened; California Species of Special Concern [CSSC]), Alameda whipsnake (*Masticophis lateralis euryxanthus*; Federal threatened; State threatened), western pond turtle (*Actinemys marmorata*; CSSC), Cooper's hawk (*Accipiter cooperii*; CDFW Watch List), golden eagle (*Aquila chrysaetos*; California Fully-Protected Species [CFP]), ferruginous hawk (*Buteo regalis*; CDFW Watch List), northern harrier (*Circus hudsonius*; CSSC), white-tailed kite (*Elanus leucurus*; CFP), loggerhead shrike (*Lanius ludovicianus*; CSSC), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*; CSSC). Special-status wildlife may be directly impacted by project activities by crushing individuals or nests during vegetation clearing, equipment staging, or any other ground disturbance. Special-status wildlife may also be indirectly impacted by project activities by permanent removal of habitat, fragmenting of occupied habitat, noise, night lighting, or other disturbance associated with the use of an RV resort.

The relevant regulatory framework and a description of onsite resources and mitigation measures follows.

Special-Status Species Regulatory Framework

Federal Endangered Species Act (FESA): The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under FESA. FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NOAA Fisheries), (3) prohibitions against "taking" (i.e., harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take." Recovery plans and the designation of critical habitat for listed species are defined in FESA.

Under Section 7 of FESA, any federal agency that is authorizing, funding, or carrying out an action that may jeopardize the continued existence of federally listed threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species must consult with the federal agency that oversees the protection of that species, typically the USFWS and/or NOAA Fisheries, depending on the species that may be affected. Non-federal agencies and private entities can seek authorization for take of federally listed species under Section 10 of FESA, which requires the preparation of a Habitat Conservation Plan (HCP). This project will not require preparation of an HCP.

Migratory Bird Treaty Act of 1918 (MBTA): The United States Migratory Bird Treaty Act (MBTA; 16 USC §§ 703 et seq., Title 50 Code of Federal Regulations [CFR] Part 10) states it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill; attempt to take, capture or kill; possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or in part, of any

such bird or any part, nest or egg thereof…" In short, under the MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. The USFWS enforces MBTA. The MBTA does not protect birds that are non-native or human-introduced or that belong to families that are not covered by any of the conventions implemented by MBTA.

In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as directly and knowingly removing a nest to construct a project, hunting, and poaching. However, California Fish and Game Code (CFGC) also protects nesting birds (see below).

Bald and Golden Eagle Protection Act: The Bald and Golden Eagle Protection Act regulates take, possession, sale, purchase, barter, transport, import and export of any bald or golden eagle or its parts (e.g., nests, eggs, young) unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). Take was broadly defined to include shoot, wound, kill, capture, collect, molest, or disturb.

California Endangered Species Act (CESA): The California Endangered Species Act (CESA; CFGC 2050 et seq.) generally parallels the FESA. It establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. Section 2080 of the CFGC prohibits the take, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or by the regulations. "Take" is defined in Section 86 of the CFGC as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." This definition differs from the definition of "take" under FESA. CESA is administered by CDFW. CESA allows for take incidental to otherwise lawful projects but mandates that State lead agencies consult with the CDFW to ensure that a project would not jeopardize the continued existence of threatened or endangered species.

California Fully Protected Species and Species of Special Concern: The classification of California fully protected (CFP) species was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The CFGC Code sections (§5515 for fish, §5050 for amphibian and reptiles, §3511 for birds, §4700 for mammals) deal with CFP species and state that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species" (CDFW Fish and Game Commission 1998). "Take" of these species may be authorized for necessary scientific research. This language makes the CFP designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with CFP species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California species of special concern (CSSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly

known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

California Fish and Game Code Sections 3503 and 3513: Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." In addition, under CFGC Section 3503.5, "it is unlawful to take, possess, or destroy any birds in the orders 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." Passerines and non-passerine land birds are further protected under CFGC 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

California Fish and Game Code Sections 4150-4155 (Non-Game Mammals): Sections 4150-4155 of the CFGC protects non-game mammals, including bats. Section 4150 states, "A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission." The non-game mammals that may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under CFGC.

California Migratory Bird Protection Act: CFGC Section 3513 states that Federal authorization of take or possession is no longer lawful under the state CFGC if the federal rules or regulations are inconsistent with state law. The California Migratory Bird Protection Act (MBPA) was passed in September 2019 to provide a level of protection to migratory birds in California consistent with the United States MBTA prior to the 2017 rule change limiting protection of migratory birds under the United States MBTA to purposeful actions (i.e., directly and knowingly removing a nest to construct a project, hunting, and poaching). Thus, the MBPA protections for migratory birds in California are consistent with rules and regulations adopted by the United States Secretary of the Interior under the United States MBTA before January 1, 2017, or those adopted subsequent to that date as long as they are consistent with the CFGC. The MBPA reverts to existing provisions of the United States MBTA on January 20, 2025.

Native Plant Protection Act: The Native Plant Protection Act (NPPA) was created in 1977 with the intent to preserve, protect, and enhance rare and endangered plants in California (CFGC sections 1900 to 1913). The NPPA is administered by CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take." CDFW maintains a list of plant species that have been officially classified as endangered, threatened, or rare. These special-status plants have special protection under California law and projects that directly impact them may not qualify for a categorical exemption under CEQA guidelines.

Sensitive Vegetation Communities: Sensitive vegetation communities are natural communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans,

policies, or regulations, or by the CDFW (i.e., CNDDB) or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority (Holland 1986; CDFW 2016). Impacts to sensitive natural communities and habitats must be considered and evaluated under CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

Other Sensitive Plants—California Native Plant Society: The CNPS is a non-profit plant conservation organization that publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (http://www.rareplants.cnps.org/).

The Inventory assigns plants to the following categories:

1A Presumed extinct in California;
1B Rare, threatened, or endangered in California and elsewhere;
2 Rare, threatened, or endangered in California, but more common elsewhere;
3 Plants for which more information is needed – A review list; and
4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
2 Fairly endangered in California (20-80% occurrences threatened).
3 Not very endangered in California (<20% of occurrences threatened or no current threats known).

Plants that are Rank 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing by the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. California Rare Plant Rank (CRPR) 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents.

Project Site Plant Communities and Associated Wildlife Habitats:

The project site contains annual grassland, urban habitat, and sensitive aquatic and oak woodland habitats, as described in this section. The habitat types are defined by the California Wildlife Habitat Relationships System (CDFW 2021b) and are shown in Figure 3 of the biological resource report (MIG 2021) (included as Appendix B).

Non-Sensitive Plant Communities

Annual Grassland (6.0 acres). Grassland habitat exists primarily in the northeastern corner of the project site (MIG 2021). Grassland within the project vicinity is highly variable among stands and is composed of both native and non-native annual species. Dominant species are generally bromes (*Bromus* spp.). In the project site, this community is dominated by non-native grasses such as slender wild oat (*Avena barbata*), soft chess (*Bromus hordeaceus*) and rip-gut brome (*Bromus diandrus*) (City of Hercules 2010). There are also pockets of native creeping wildrye (*Leymus triticoides*) within the grassland habitat as well (Circlepoint 2018).

Urban (Currently Developed/Landscaped; 123.8 acres). The project site is currently developed and utilized as a public golf course. The majority of the project site consists of irrigated turf grass managed as fairways, tees, and greens with sand traps and two manmade irrigated ponds. Paved

walkways, golf cart roads, restrooms, and a clubhouse are also within this area. Coast live oak are also scattered throughout the golf course fairways, as well as trees that are not native to the project site, including: Monterey pine (*Pinus radiata*), coast redwood (*Sequoia sempervirens*), sweet gum (*Liquidambar styraciflua*), birch (*Betula* sp.), and Tasmanian bluegum (*Eucalyptus globulus*) (Circlepoint 2018).

Sensitive Plant Communities and Waters

The following are habitat features within the project site that are considered "sensitive" and are regulated by the resource agencies.

Coast Live Oak Riparian Forest (20.3 acres); CDFW Sensitive Natural Community. The riparian woodland follows Rodeo Creek, which flows along the northern project site boundary and bisects the eastern portion of the project site (Figure 3 of Appendix B). The upper creek banks are dominated by coast live oak (*Quercus agrifolia*) and bay laurel (*Umbellularia californica*), while the lower banks and flood zones consist of red willow (*Salix laevigata*) and few California buckeye (*Aesculus californica*) (Circlepoint 2018). Understory vegetation includes: coyote brush (*Baccharis pilularis*), Pacific poison oak (*Toxicodendron diversilobum*), poison hemlock (*Conium maculatum*), and California blackberry (*Rubus ursinus*) (Circlepoint 2018).

Coast Live Oak Woodland and Scrub (10.5 acres); CDFW Sensitive Natural Community. Coast oak and scrub habitat generally occurs within the project site along the southern border. Areas of scrub habitat are dominated by coyote brush, Pacific poison oak, and immature coast live oaks (Circlepoint 2018). The woodland habitat consists of coast live oak and bay laurel, with an understory of mostly native herbs (Circlepoint 2018).

Federal Jurisdictional Waters (3.8 acres); According to the 2018 ERS, Inc. wetland delineation: "Approximately 3.83 acres of the site meet the U.S. Army Corps of Engineers (USACE) 'Waters of the United States [WOUS]' and 'Ordinary High-Water Mark' definition and are therefore considered jurisdictional. The reach of Rodeo Creek meeting WOUS definition will be protected by establishment of an Open Space area ["Open Space area" within the 2018 ERS report refers to the 75 acres that are planned for JMLT management, as well as general avoidance of the Rodeo Creek corridor through project plans and riparian setback]." These features are shown on sheet C1 of the site plans.

Aquatic Features

The following describes aquatic features (e.g., potential wetlands, drainages, perennial /intermittent/ephemeral creeks, lakes, marshes) observed within the project site.

Rodeo Creek. Rodeo Creek follows the northern property boundary of the project site and bisects the eastern portion of the project site. The creek banks are generally steep and well-defined, with the extent of riparian vegetation being confined to the creek floodplain and banks. The tree canopy in the riparian zone is generally denser in the eastern portion of the project site and becomes increasingly less dense in the western portion of the site. Rodeo Creek is approximately 22-28 feet in depth during a 100-year flood event, but the OHWM indicates that the normal flow is 1-2 feet in depth along most of the creek (Circlepoint 2018).

Seasonal drainages and swales. There are multiple seasonal drainages and swales along and near the project site's western and southern boundary, some of which support wetland-associated vegetation such as willows, cattails, willow herb (*Epilobium ciliatum*), flatsedge, and stinging nettle (*Urtica dioica*) (Circlepoint 2018).

Manmade Ponds. Observations recorded in the wetland delineation conducted by ERS, Inc., describe the hydrological inputs and vegetation communities of the two manmade ponds within the project site as follows:

> The larger pond, located in the eastern portion of the project site, is artificially maintained by the use of the adjacent water well and pumping station and is used for irrigation as water is pumped into and out of this pond for golf course-related purposes. Clusters of cattails (*Typha latifolia*) occur along some margins of the pond and several small willows (*Salix* spp.), coyote brush (*Baccharis pilularis)* shrubs, and flatsedge (*Cyperus eragrostis*) border portions of the pond. A few of the willows are mature and shade portions of the pond and provide exposed networks of roots, but the vast majority of the pond is open and has no canopy cover.
>
> The second, smaller pond is located in the central portion of the golf course. This pond is maintained by the same pond irrigation system and was dry at the time of most of the site visits [July 2018]. Approximately one third of the pond is utilized by cattails (*Typha* sp.), so it is surmised that the pond can hold water or maintain saturated soils for a long enough period to allow the cattail growth. Similar to the other pond, this pond generally lacks canopy cover, and flat sedge and an assemblage of weedy vegetation border the pond. Each of these ponds can only hold water to a depth of approximately 6-12 inches (2018).

Special-Status Species with Potential to Occur on Project Site:

An assessment of biological resources within the project site involved a review of available background information pertaining to sensitive species and habitats on the site and in the nearby vicinity, and a field survey. The methods of the background review and field survey are summarized within the biological resources report (MIG 2021), and included as Appendix B.

Potential impacts and associated impact avoidance, minimization, and mitigation measures are discussed below.

Mitigation Measure BIO-1: Employee Education Program. An employee education program shall be conducted, consisting of a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the project. The program will include the following: a description of relevant special-status species and nesting birds along with their habitat needs as they pertain to the project; a report of the occurrence of these species in the vicinity of the project site, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources, including environmentally sensitive habitats, during project construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and anyone else who may enter the project site. Upon completion of training, employees will sign a form stating that they attended the training and agree to the conservation and protection measures.

Special-Status Plant Species: Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened, or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in CEQA, Section 15380.

A table of special-status plant species with the potential to occur on the project site is provided in the biological resources report (Appendix B). According to the CNPS Inventory and CDFW's CNDDB, a total of 64 special-status plant species have been documented within the project site

vicinity (Benicia USGS 7.5 center quadrangle and eight surrounding). A table of special-status plant species with the potential to occur on the project site is provided in the original biological resources report (Appendix B). The project site was determined to have no or only low potential to support 60 special-status plant species that were evaluated for their potential presence. Most of these plants occur in specialized habitats such as chaparral, vernal pools, freshwater marshes, coastal prairie and scrub, and coniferous forest habitats which do not occur on or near the project site. These species are not discussed further within this report.

Four special-status plants were determined to have moderate to high potential to occur within the project site. A description of these plants and their potential to occur within the project site are described below.

Mt. Diablo fairy lantern (*Calochortus pulchellus*; California Rare Plant Rank 1B.2)
Mt. Diablo fairy lantern is a rare species of the lily family. Endemic to California, it occurs primarily on Mount Diablo in Contra Costa County, although there are historical occurrences in surrounding counties. It inhabits chaparral and woodland on San Francisco Bay-facing slopes. The plant is a perennial herb, with a branching stem that grows up to approximately 30 cm. The basal leaf grows up to 40 cm long (without withering after flowering), with two or three smaller leaves farther up the stem. The flower cluster is a solitary flower or a cluster of several flowers, typically spherical with petal tips touching. The three sepals and three petals are 2–3 cm long and pale to deep yellow in color. The petals have thin hairs inside and are often fringed with yellow hairs. The fruit is a winged capsule 2–3 cm in length (CNPS 2021).

This species has been documented approximately 3 miles northeast of the project site. The woodland, grassland, and scrub habitat along and near the project site's west, east, and south boundaries provide potential habitat for this species. The species also has some potential to occur within the onsite riparian woodland. Overall, there is high potential for this species to occur within the project site.

Western leatherwood (*Dirca occidentalis*; California Rare Plant Rank 1B.2)
Western leatherwood is a deciduous shrub with leaves 3–7 cm in length. Yellow flowers emerge prior to leafing and the plant grows on moist and shaded slopes. This species is rare and endemic to the San Francisco Bay area of California (CNPS 2021). This species has been documented approximately 2 miles north of the project site.

The woodland, grassland, and scrub habitats along and near the project site's west, east and south boundary provide potential habitat for this species, as well as along the riparian woodland adjacent to Rodeo Creek. Overall, there is moderate potential for this species to occur within the project site.

Diablo helianthella (*Helianthella castanea*; California Rare Plant Rank 1B.2)
Diablo helianthella is a perennial herb, found within the San Francisco Bay Area and primarily in and around Mount Diablo State Park. The species is member of the daisy and sunflower family. Flowers are bright yellow and daisy-like, with ridged petals and the plant grows in clumps of green foliage, and with flowers on long stems (CNPS 2021).

This species has been documented at several locations near the project site. The woodland, grassland, and scrub habitat along and near the project site's west, east, and south boundaries provide potentially suitable habitat for this species. The species also has some potential to occur within the onsite riparian woodland along Rodeo Creek. Overall, this species has moderate potential to occur within the project site.

Contra Costa goldfields (*Lasthenia conjugens*; Federal Endangered; California Rare Plant Rank 1B.1)
Contra Costa goldfield is an annual herb that typically flowers from March through June. Colonies grow in vernal pools, swales, and other depressions in open grassland and woodland communities at elevations below 100 meters ASL. Current distribution is limited to the Sacramento Delta Valley, primarily in Napa and Solano counties. However, the historic range of this species is known to be significantly larger. Historically the range likely included parts of the North Coast, Sacramento Valley, and San Francisco Bay Area as well as the South Coast (CNPS 2021). The project site contains woodland and grassland habitat that may support this species.

There are several documented occurrences of this species within 5 miles of the project site, including one 1.3 miles north. Overall, this species has moderate potential to occur within the project site. Critical habitat for this species borders the project site immediately to the northwest, on the opposite side of State Route 4.

Mitigation Measure BIO-2: Pre-Construction Survey for Special-Status Plants (Mt. Diablo Fairy Lantern, Western Leatherwood, Diablo Helianthella, and Contra Costa Goldfields). To determine presence or absence of special-status plant species within the project site, a qualified botanist shall conduct focused surveys according to CDFW guidelines prior to the onset of construction activities.

- A comprehensive, site-wide survey will be conducted during April to coincide with the peak blooming periods of all special-status plant species that may be present. Following the completion of the surveys, a survey results report shall be prepared and provided to the City. This report shall be a condition of project approval and shall include, but shall not be limited to, the following: (1) a description of the survey methodology; (2) a discussion of the survey results; and (3) a map showing the survey area and the location of any special-status plants encountered. If no rare plants are found, then no further mitigation would be required.
- If rare plant(s) is (are) found during the survey, the number of individuals present shall be documented and the limits of the population shall be marked with flagging and avoided by construction personnel. If the project cannot be redesigned to avoid the species or the species may be adversely impacted indirectly, the applicant shall notify CDFW and/or USFWS (depending on protection status) to discuss avoidance, minimization, and mitigation measures as appropriate for each species population, including measures to be taken and protocols to be followed.
- CDFW and/or USFWS may require the preparation and implementation of a mitigation plan that details avoidance, preservation, and/or compensation for the loss of individual special-status plant species. Mitigation may include the purchase of mitigation bank credits, preserving and enhancing existing onsite populations, creation of off-site populations through seed collection and/or transplantation and monitoring these populations to ensure their successful establishment, and/or preserving occupied habitat off-site in perpetuity.

Special-Status Wildlife Species: Special-status wildlife species include: those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; species of special concern to the CDFW; and CDFW fully protected species. A list of all special-status wildlife species with the potential to occur in the project site is provided in Appendix B.

A total of 50 special-status wildlife species were reported to have potential to occur within the vicinity of the project site (Benicia USGS 7.5 center quadrangle and eight surrounding), based on a search of the CNDDB and IPaC databases. 39 species are not expected or have low potential to occur within the project site due to lack of required habitat (e.g.,. brackish, vernal pool, coastal prairie), lack of host plant availability, no connectivity to occupied habitat, etc. These species are not discussed further within this report.

Eleven (11) special-status wildlife species were determined to have moderate or high potential to occur within the project site. Their life histories and potential to occur are discussed below.

Western bumblebee (*Bombus occidentalis*; Candidate State Endangered)
The western bumblebee occurs along the Pacific coast and western portions of North America. This species has many color variations, though the two most common within California are those with yellow hair on the front part of the thorax only and those with yellow hairs creating two "stripes" on the abdomen, as well as yellow thorax hairs (Xerces Society 2021). Bumblebees are generalist foragers, though they depend heavily on endemic and native plant species. There are documented occurrences of this species within 5 miles of the project site. In addition, typical food plant genera were observed within the project site during the July 2018 wetland delineation (ESR, Inc. 2018). Overall, this species has high potential to occur within the project site.

California red-legged frog (*Rana draytonii*; Federal Threatened, California Species of Special Concern)
California red-legged frog (CRLF) is endemic to California and northern Baja California. Adults range from 1.75–5.25 inches long and have an identifying "dorsolateral" ridge (along each side of the body, striking through the eye). Unlike other ranids (frogs of the genus *Rana*), the larger CRLF is not a strong swimmer in waterbodies with higher currents. Consequently, CRLF frequent ponds, lakes, reservoirs, marshes, bogs, swamps, and slower-moving reaches of streams (e.g., intermittent streams that dry down in warmer months). CRLF have also been known to utilize artificially created waterbodies that mimic natural conditions, including stock ponds. CRLF breeding takes place from November–April, depending on the local climate, and lasts for approximately two weeks. Females can lay from 300–4,000 eggs (with an average of 2,000) near the water's surface and attached to aquatic plants. Eggs hatch into larvae in approximately four weeks. Larvae eat and mature for 47 months; and some populations have been known to overwinter (in the absence of limiting predators and/or other anthropogenic factors) before metamorphosing into juveniles.

There is aquatic habitat suitable for this species within the project site in Rodeo Creek, as well as documented occurrences of this species within and near the project site. While predatory fish and nonnative bullfrog within the two manmade ponds reduce the quality of the aquatic habitat, they may be occasionally utilized by this species (Circlepoint 2018). However, deep pool habitat along Rodeo Creek may provide breeding habitat, and drainage to and from the project site as well as bank vegetation may provide migration and aestivation habitat for this species. This species is considered present within the project site. Critical habitat for CRLF borders the south side of the site.

Alameda whipsnake (*Masticophis lateralis euryxanthus*; Federal Threatened, State Threatened)
The range of the Alameda whipsnake is restricted to the inner Coast Range in western and central Contra Costa and Alameda counties (USFWS 2000). The Alameda whipsnake is associated with scrub communities, including mixed chaparral, chamise-redshank chaparral, coastal scrub, and annual grassland/oak woodland adjacent to scrub habitats that contain areas of rock outcroppings.

Rock outcroppings are important as they are a favored location for lizard prey. Whipsnakes frequently venture into adjacent habitats, including grassland, oak savanna, and occasionally oak-bay woodland.

This species' critical habitat is adjacent to the southeastern portion of the project site, and there is a documented occurrence described as "upslope (south) of Franklin Canyon golf course." Woodland, grassland, and scrub habitat along the west, east, and south edge of the project site, as well as the onsite riparian woodland, provide potential habitat for this species. The developed golf course areas within the project site do not provide high quality habitat for this species, but individuals may migrate through to more suitable habitat surrounding the golf course. Overall, this species has high potential to occur within the project site.

Western pond turtle (*Actinemys marmorata* [also *Emys marmorata*]; California Species of Special Concern)
Western pond turtle (WPT) is a small to medium-sized freshwater turtle and the only freshwater turtle native to California. Adult WPT can range from 3.5–8.5 inches in shell length, with a plastron (underside of the shell) lacking hinges and containing six pairs of cream or yellowish shields. Shields may either have large dark markings or be unmarked completely. Adults' legs and heads have black "freckling" and may appear cream or yellow overall. Adults are also sexually dimorphic, with males having a lighter throat typically with no markings, a flatter overall shell, and a concave plastron. In contrast, females typically show markings on their throats, have a taller relative shell, and have a flat or convex plastron compared with males. Hatchlings are approximately one (1) inch in shell length and have tails much longer relative to their overall size, often measuring almost as long as the shell itself.

WPT mating occurs in April and May. Between April and August, female turtles climb out of waterbodies in search of nesting habitat near water margins, though individuals have been known to travel over 300 feet from water edges in search of suitable nesting substrate (Stebbins 2003). Nests are in small openings and nesting substrate can vary widely, though most notably the soil at a nesting site must be friable to about 4 inches in depth. Females typically lay clutches of 2–11 eggs, sometimes laying two clutches per year. Hatchlings emerge approximately 70–84 days after deposition, though they overwinter in their nests and emerge in search of aquatic habitat in March or April of the following year.

There are documented occurrences of this species within the project site, both along the Rodeo Creek corridor and near the manmade ponds within the golf course. This species is considered present within the project site.

Cooper's hawk (*Accipiter cooperii*; CDFW Watch List)
Cooper's hawks are crow-sized and breed in forests and woodland throughout the United States, southern Canada, and northern Mexico. Males and females are highly sexually dimorphic, with females up to 33% larger than males. This species often utilizes urban and suburban landscapes for nesting, showing adaptation to human disturbance. Prey includes medium-sized wildlife including: doves, jays, robins, and smaller rodents (Rosenfeld et al 2019). There is a documented occurrence of this species along the southwestern project site boundary. This species may utilize any areas of woodland within the project site for nesting, especially along Rodeo Creek. Individuals likely forage throughout the project site as well. This species is considered present within the project site.

Golden eagle (*Aquila chrysaetos*; California Fully Protected Species)
Golden eagle is a very large, dark raptor that occurs throughout North America, where its breeding distribution extend from Canada and Alaska, through much of the western half of the United States and north and western Mexico. It is most common in and near open spaces that provide hunting habitat, typically near cliffs or trees adjacent to open space. Prey includes rabbits, ground squirrels, and other medium-sized birds (Katzner et al 2020). This species has been observed multiple times in and near the project site (eBird 2021). While this species is more likely higher up in the hills south of the project site, golden eagles may utilize woodland in and/or near the project site for roosting and may forage within the project site, especially along the southern edge. Trees along the southern edge may rarely be utilized for nesting. Overall, this species has moderate potential to occur within the project site.

Ferruginous hawk (*Buteo regalis*; CDFW Watch List)
The ferruginous hawk is light in color and is the largest *Buteo* species in North America, and inhabits grassland, shrub-steppes, and desert in North America. Nests are placed in cliffs, trees, manmade structures, and occasionally on level ground. Within California, this species most often preys on jackrabbits and ground squirrels (Ng et al 2017). This species has been observed multiple times in and near the project site (eBird 2021). This species may utilize woodland in and/or near the project site for nesting and may forage within the project site, especially along the southern edge. Overall, this species has high potential to occur within the project site.

Northern harrier (*Circus hudsonius*; California Species of Special Concern)
Northern harrier is a medium-sized low-flying raptor with an owl-like face that inhabits tundra, grassland, agricultural fields, and marshes throughout North America. This species nests on the ground, typically in tall, dense clumps of vegetation. Northern harriers prey on small to medium-sized mammals and birds (Smith et al 2011). This species was observed on the August 11, 2020 site reconnaissance survey. There are documented occurrences and recent observations of this species within 5 miles of the project site (eBird 2021). This species may utilize the margins of the project site for nesting and may forage within the project site, especially along the southern edge. This species is considered present within the project site.

White-tailed kite (*Elanus leucurus*; California Fully-Protected Species)
The white-tailed kite is a light-colored medium-sized raptor that is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates. This species has been observed multiple times near the project site (eBird 2021). This species may utilize woodland in and/or near the project site for nesting and may forage within the project site, especially along the southern edge. Overall, this species has high potential to use the project site for both nesting and forage habitat.

Loggerhead shrike (*Lanius ludovicianus*; California Species of Special Concern [Nesting])
The loggerhead shrike is a small black, white, and gray predatory songbird that occurs throughout North America This species hunts from perches and impales its prey—typically invertebrates or small lizards. Loggerhead shrikes nest in trees and shrubs, preferring to place nests in denser, leafier regions of vegetation. This species frequents open space with short vegetation for foraging (Yosef

1996). This species has been observed in close vicinity to the project site (eBird 2021) and may utilize the relatively small amount of woodland and shrubby habitat within the margins of the project site for roosting and/or nesting. This species may also often forage within the project site. Overall, this species has moderate potential to occur within the project site.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*; California Species of Special Concern)
The San Francisco dusky-footed woodrat is a habitat specialist found in heavy chaparral; hardwood, conifer, and mixed forests, typically in densely wooded areas with heavy undergrowth; and riparian woodlands. This species builds houses with debris on the ground or in trees. Woodrat houses tend to be in shaded, relatively cool areas with good cover. Houses can also be used by many generations over several years (NatureServe 2020). San Francisco dusky-footed woodrat nests were observed within the onsite riparian woodland and within the woodland and scrub habitats along and near the project site's west, east, and south perimeters (Circlepoint 2018). This species is considered present within the project site.

Mitigation Measure BIO-3: Avoid Use of Pesticides Outside Developed Areas. To avoid mortality of western bumblebees within the project site, pesticide use outside of the developed areas of the project site shall be avoided (i.e., avoiding Rodeo Creek corridor, coast live oak woodland and scrub, and grassland; reference Appendix B).

Mitigation Measure BIO-4: Pre-Construction Survey for Special-Status Herptile Species (California Red-Legged Frog, Alameda Whipsnake, Western Pond Turtle). Due to the riparian habitat along Rodeo Creek and the coast live oak woodland and scrub habitat within the project site, the project site contains dispersal habitat for special-status herptile species (amphibians and reptiles), especially following precipitation for California red-legged frog and western pond turtle. To avoid impacting these species, the following measures shall be followed:

- Within 3–5 days prior to initiating work at the project site (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), a qualified biologist shall perform a pre-construction survey for CRLF, Alameda whipsnake, and WPT individuals within the boundaries of the project site plus a 500-foot buffer zone downstream of the project site along Rodeo Creek where access permission is granted from the landowner. To communicate due diligence, any non-access issues will be clearly communicated in report notes and provided to the client, CDFW, and/or USFWS if requested.
- If CRLF or Alameda whipsnake are found during the pre-construction survey, the qualified biologist shall immediately inform the construction manager that work should be not be initiated until they have dispersed from the work area. The qualified biologist shall then consult with USFWS and CDFW immediately and provide a short description of observations, including a count of individuals and the life stage(s), condition at the site, and other aquatic species observed (if applicable). Unless explicitly authorized by these agencies, CRLF and Alameda whipsnake shall not be relocated if encountered in the project site. If the animals do not disperse of their own volition, the qualified biologist shall monitor the frog or snake and consult with CDFW to determine the appropriate course of action.
- In the event WPT are found in the project area during pre-construction surveys, it shall be left alone to move out of the area on its own. If it does not move on its own, the qualified biologist shall notify CDFW and relocate the individuals(s) to a reach of Rodeo Creek at least 250 feet away from the project location. Relocation areas shall be of suitable habitat, on

shallow banks with slow moving water, and shall be far enough away so as not to be affected by project activities.

- The applicant shall not resume project activities until CDFW and USFWS have provided written approval of the proposed avoidance measures or actions.
- Work shall be avoided if precipitation (defined as the National Weather Service 24-hour weather forecast indicating a 40 percent chance or higher of precipitation of at least 0.10 inch of precipitation) is forecasted or has been recorded at the project site within a 24-hour window. An NWS forecast may be utilized to plan project work accordingly.

Mitigation Measure BIO-5: Pre-Construction Survey for San Francisco Dusky-Footed Woodrat. Within 30 days prior to the start of construction activities, a qualified biologist shall map all San Francisco dusky-footed woodrat houses within a 25-foot buffer around the project footprint. Environmentally sensitive habitat fencing shall be placed to protect the houses with a minimum 25-foot buffer. If a 25-foot buffer is not feasible, a smaller buffer may be allowable based on advice from a qualified biologist with knowledge of woodrat ecology and behavior. Removal and/or translocation of woodrat houses is not required as the project will not be impacting riparian habitat where woodrat houses have been observed to occur.

Nesting Birds. Nesting birds within and near the project site may be directly and indirectly impacted by construction activities, including vegetation grubbing, human disturbance, and equipment noise. Most actively nesting birds are protected under the CFGC, MBTA, and MBPA; eagles are protected under the Bald and Golden Eagle Protection Act. Construction activities, including vegetation clearing, and noise and vibration have a potential to result in direct (i.e., loss of viable eggs and death or injury of young) and indirect (i.e., nest abandonment) impacts to nesting songbirds and raptors. The loss of an active nest of common or special-status bird species would be considered a violation of CFGC Sections 3503, 3503.5, 3513.

Mitigation Measure BIO-6: Pre-Construction Survey for Cooper's Hawk, Golden Eagle, Ferruginous Hawk, Northern Harrier, White-Tailed Kite, Loggerhead Shrike, and Other Nesting Birds. To avoid impacts to special-status and other nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after September 15). If construction and construction noise occurs within the avian nesting season (from February 1 to September 15), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. A nest is considered active if: a bird is building a nest, sitting on a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, as appropriate, until the chicks have

fledged. Monitoring shall be required to ensure compliance with relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

Roosting Bats. Bats may day-roost in trees within the project site, however the overpasses along State Route 4 to the north of the project site provide the only likely night and/or maternity roosting habitat for bats (City of Hercules 2010).

Mitigation Measure BIO-7: Pre-Construction Survey for Bat Roosts. Within 14 days before the start of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading), a survey for tree cavities suitable for roosting bats will be conducted within the project site, including a 50-foot buffer, as feasible. There should also be a five-day window for consultation with CDFW prior to the start of construction within the 14-day period. If suitable tree cavities are found, an emergence survey of the cavities will be conducted by a qualified biologist for colony bat roosts before the onset of construction-related activities. If an occupied maternity or colony roost is detected, CDFW shall be consulted to determine appropriate measures, such as bat exclusion methods, if the roost cannot be avoided. The results of the surveys shall be documented.

b. No Impact. Sensitive natural vegetation communities within the project site include the 10.5 acres of Coast Live Oak Woodland and Scrub along the southern boundary and the 20.3 acres of Coast Live Oak Riparian Woodland along Rodeo Creek. Because project activities will only occur within the footprint of existing development within the project site, no impacts to Coast Live Oak Riparian Woodland or Coast Live Oak Woodland and Scrub are anticipated with the implementation of the planned project and therefore no avoidance and/or minimization measures are required.

Sensitive Natural Vegetation Community Regulatory Framework

California Fish and Game Code Sections 1600-1607: Sections 1600-1607 of the CFGC require that a Notification of Lake or Streambed Alteration Agreement (LSAA) application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions in the application and, if necessary, prepares a LSAA that includes measures to protect affected fish and wildlife resources, including mitigation for impacts to bats and bat habitat.

Sensitive Natural Communities: Sensitive vegetation communities are natural communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW (i.e., CNDDB) or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority (Holland 1986; CDFW 2016). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

c. No Impact. According to the 2018 ERS, Inc. wetland delineation: "Approximately 3.83 acres of the site meet the USACE 'Waters of the United States' and 'Ordinary High-Water Mark' definition and are therefore considered jurisdictional. The reach of Rodeo Creek meeting WOUS definition will be protected by establishment of an Open Space area ["Open Space area" within the 2018 ERS report refers to the 75 acres that are planned for JMLT management, as well as general avoidance of the Rodeo Creek corridor through project plans and riparian setback]." The project proponent plans to incorporate a 100-foot open space zone from the top of bank of Rodeo Creek, which would make

the project in compliance with Measure M and increase the existing setback from the creek (ESR, Inc. 2019). Therefore, no avoidance and/or minimization measures are required to reduce impacts as jurisdictional waters will not be directly impacted by the project. No alteration of jurisdictional waters or of the Rodeo Creek corridor and vegetation are proposed currently. However, if disturbance of the creek or associated riparian vegetation is unavoidable during planning, a LSAA from CDFW, a Section 404 permit from the USACE, and 401 Certification from RWQCB would be required.

Federal and State Wetland Regulatory Framework

Clean Water Act: The Clean Water Act (CWA) is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the United States Environmental Protection Agency (EPA). However, the EPA depends on other agencies, such as the individual states and the United States Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Sections 404 and 401 of the CWA apply to activities that would impact waters of the United States. The USACE enforces Section 404 of the CWA and the California State Water Resources Control Board (SWRCB) enforces Section 401, as well as state water laws (see Section 3.2, below).

Section 404

As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into "waters of the U.S.", which include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks.

Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3(b)). The discharge of dredged or fill material into waters of the United States is prohibited under the CWA except when it is in compliance with Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE's administration of the Section 404 program and may override a USACE decision with respect to permitting.

Projects that minimally affect waters of the United States may meet the conditions of one of the existing Nationwide Permits, provided that certain conditions are satisfied. Substantial impacts to waters of the United States may require an Individual Permit, which, among other requirements, involves an alternatives analysis to demonstrate why impacts cannot be avoided. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

Section 401

Any applicant for a federal permit to impact waters of the United States under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The "401 Certification" is provided by the SWRCB through the local Regional Water Quality Control Board (RWQCB).

The RWQCB issues and enforces permits for discharge of treated water, landfills, storm-water runoff, filling of any surface waters or wetlands, dredging, agricultural activities and wastewater recycling. The RWQCB recommends the "401 Certification" application be made at the same time

that any applications are provided to other agencies, such as the USACE, USFWS, or NOAA Fisheries. The application is not final until completion of environmental review under CEQA. The application to the RWQCB must include:

- a description of the habitat that is being impacted,
- how much habitat is being impacted temporarily and permanently,
- a description of how the impact is proposed to be minimized, and
- mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed, is often required. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as good as or better than the water-based habitat that is being removed.

Porter-Cologne Water Quality Act

The intent of the Porter-Cologne Water Quality Control Act (Porter-Cologne) is to protect water quality and the beneficial uses of water, and it applies to both surface and ground water. Under this law, the SWRCB develops statewide water quality plans, and the RWQCBs develop basin plans, which identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of both statewide and basin plans. Waters regulated under Porter-Cologne, referred to as "waters of the State," include isolated waters that are not regulated by the USACE. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, any person discharging, or proposing to discharge, waste (e.g., dirt) to waters of the State must file a Report of Waste Discharge and receive either waste discharge requirements (WDRs) or a waiver to WDRs before beginning the discharge.

d. Less than Significant with Mitigation Incorporated. While project implementation would not drastically alter development within the project site, the change in use from a golf course to an RV resort will alter the nighttime use of the project site and may involve an increase in domestic animals within the project site as patrons bring pets. As many wildlife species are active nocturnally, increased nighttime human disturbance has potential to permanently impact wildlife migration through the project site.

Mitigation Measure BIO-8: Domestic Pets. To avoid general impacts to special-status wildlife during use of the planned RV resort, project implementation should include fencing and/or signage to prevent domestic animals (e.g., leash requirements for dogs) from entering riparian and/or coast live oak woodland areas of the project site.

Mitigation Measure BIO-9: Restriction of Nighttime Construction and Construction and/or Project Lighting. Nighttime construction will be minimized to the extent possible. In addition, any lighting associated with project implementation should be directional and should not light the riparian corridor of Rodeo Creek.

e. Less than Significant with Mitigation Incorporated. The project will comply with all local policies and regulations outlined in this section through design and implementation of all included Mitigation Measures.

Mitigation Measure BIO-10: Protect Sensitive Habitat.

- Travel and parking of vehicles and equipment will be limited to pavement, existing roads, and previously disturbed areas. Ground disturbance and vegetation removal will not exceed the minimum amount necessary to complete work at the site.
- Temporary work areas will be restored with respect to pre-existing contours and conditions upon completion of work. Restoration work including re-vegetation and soil stabilization will be evaluated upon completion of work and performed as needed.
- The potential for adverse effects to water quality in aquatic habitat within the project site will be avoided by implementing Best Management Practices (BMPs), and the project will require a Stormwater Pollution and Prevention Plan (SWPPP) for construction. These BMPs will be used to minimize any erosion or other sources of water pollution. The following BMPs are suggested:

a) Store, handle, and dispose of construction materials and wastes properly to prevent their contact with stormwater.
b) Control and prevent the discharge of all potential pollutants, including solid wastes, paints, concrete, petroleum products, chemicals, wash water or sediment and non-stormwater discharges to storm drains and water courses.
c) Avoid cleaning, fueling, or maintaining vehicles on site, except in a designated area in which run-off is contained and treated.
d) Perform clearing and earth moving activities during dry weather to the maximum extent practical.
e) Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and discharge course with field markers.
f) Remove spoils promptly and avoid stockpiling fill materials when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
g) Limit construction access routes and stabilize designated access points.
h) Deposit trash and construction related solid wastes into a covered receptacle to prevent contamination and dispersal by wind.
i) Maintain sanitary facilities on the project site at all times.
j) Take measures to collect or clean any accumulation or deposit of dirt, mud, sand, rocks, gravel, or debris on the surface of any street, alley, or public place or in public storm drain systems. The removal of aforesaid shall be done by street sweeping or hand sweeping. Water shall not be used to wash sediments into public or private drainage facilities.
k) Cease all grading work immediately in the event of rain.
l) Prepare and implement an erosion control plan during the wet season (September 15 through April 15). The following measures are suggested to be included in the plan:
    - During the rainy season, the project site shall be maintained to minimize sediment-laden run-off to any storm drainage system, including existing drainage swales and water courses.
    - Inlet protection shall be installed to prevent sediment from entering the storm drain system where applicable.
    - Weed and net/filament free straw rolls shall be placed at the toe of barren slopes and along the down slope perimeter of the project site to capture sediment in storm runoff.

- Develop a hazardous spill plan prior to construction. The plan will describe what actions will be taken in the event of a spill. The plan will also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site will immediately cease until the contractor has contained and mitigated the spill. The

contractor will immediately prevent further contamination and notify appropriate authorities and mitigate damage as appropriate. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, shall be available on site at all times. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided at the project site.

- A SWPPP that complies with the statewide General Permit administered by the State Water Board for the National Pollutant Discharge Elimination System will be developed and implemented to protect the water quality of aquatic resources that lie in or adjacent to the proposed project area. Appropriate erosion and sediment control and non-sediment pollution control (i.e., sources of pollution generated by construction equipment and material) BMPs will be prescribed in the SWPPP, and erosion and sediment control material included in the SWPPP will be certified as weed-free.
- After construction is completed, a final cleanup will include removal of all stakes, temporary fencing, flagging, and other refuse generated by construction.

Mitigation Measure BIO-11: General Biological Resource Protections During Project Construction.

- Designation of Work Area. Prior to project activities, a qualified biologist will clearly delineate any vegetation and/or habitat areas to be avoided near planned project work.
- Construction Site Sanitation. Food items may attract wildlife onto the construction site, which will expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) will be placed in closed containers and properly disposed of.
- Wildlife Entrapment. The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials. All holes greater than one-foot deep must be covered overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30 percent slope will be positioned such that entrapped wildlife will be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.
- Species Discovery. If an animal is found at the work site and is believed to be a protected species, work must halt and the project biologist shall be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species shall be handled and/or removed from the project site by anyone except a qualified biologist.

Habitat-Level Regulatory Framework

City of Hercules General Plan Open Space Conservation Plan

As stated on the City of Hercules General Plan website: "The City's General Plan is the community's vision about how it will grow and reflects the community's priorities and values while shaping the future. As the legal underpinning for land use decisions within the City, the General Plan consists of an introduction and nine separate "elements" (listed below), which are topics that California law requires to be covered in a general plan (Gov. Code § 65302)" (City of Hercules 2021). The following are policies within the General Plan that pertain to the protection of biological resources within the project area:

- **Policy 4a**: The City shall require project proponents to design facilities to prevent degradation of riparian and wetland communities from urban pollutants in storm runoff.
    - *Program 4a.1*: To minimize pollution downstream from sedimentation, the City shall require installation of sedimentation and grease basins in the storm drain system in parking lots in accordance with National Pollution Discharge Elimination System

(NPDES) regulations and shall require that property owners maintain the basins annually, or as required by NPDES regulations. Parking lots shall be swept periodically to decrease the amount of debris that could potentially contaminate the riparian or wetland habitat.

- **Policy 6b:** The City shall require that development within the General Plan area incorporate features to preserve habitat for sensitive species.
    - *Program 6b.1*: Areas that could provide habitat for sensitive species shall be surveyed by qualified biologists provided by project sponsors prior to project design. Surveys in sensitive areas shall be conducted prior to any development. Sensitive areas within the study area includes eucalyptus groves, freshwater wetlands and adjacent trees, open grasslands, ponds and creeks, and buildings which are abandoned or slated for destruction. If any species is present, coordination with the CDFG will be required for mitigation of impacts and redesigning of the project footprint to avoid any sensitive species or sensitive habitat. If avoidance is unavailable, coordination with the CDFG will be required for relocation of these species and for determining replacement of habitat.
- **Policy 6c:** As much open space as possible within sites proposed for development shall be retained as informal open space for wildlife habitat, rather than as formal, landscaped parks or grounds. The City shall require that native plants from local area be used in landscaping, and in areas with a lower water table, native drought tolerant species shall be used in landscaping.
    - *Program 6c.1*: Development, subdivision and planned development plan applications shall be reviewed and conditioned to implement the following:
        - Wildlife areas shall be revegetated with native or non-native grass land and native species of shrubs requiring no irrigation and little management beyond the first year after planting.
        - Wildlife habitat shall be consolidated into "preserves" that are as large as possible.
        - Habitats on adjoining parcels shall be as contiguous as possible, to create wildlife corridors.
        - Wildlife open space shall be placed adjacent to other wildlife habitat, to preserve the greatest ecological value.
        - Public access to wildlife habitat shall be minimized by placing trails close to buildings so as to provide the largest area of habitat possible with the least amount of impact from the public.
        - Open space areas shall be designed into the footprint of proposed projects and shall be located adjacent to existing open space areas, providing a larger continuous area for wildlife to use.
        - Open space areas, if disturbed during construction, shall be landscaped with native species.
        - Trails, if any, shall be placed close to buildings so as not to disturb wildlife nesting/denning areas.

<u>City of Hercules Measure M (Ordinance Number 401)</u>

The purpose of Measure M is to "protect Franklin Canyon and nearby open space lands from harmful and unnecessary development," and its objectives are to "preserve and protect natural resources, watersheds and water quality, wildlife habitat, beauty and tranquility, and scenic hill views, while permitting proximity to nature and outdoor recreation for the residents of Hercules" (City of Hercules 2004).

In Section 10 of the ordinance, restrictions relating to "Areas of Special Environmental Concern" within the Franklin Canyon area are listed as follows:

- *Wetlands and Riparian Corridors:* No development or use is permitted if the quantity or biological quality of wetlands will be reduced measurably. "Wetlands" are areas permanently or periodically covered by water, where hydrophytic vegetation is present under normal conditions, or that have soils primarily hydric in nature. No development is permitted that appreciably impairs the quantity or biological quality of water or habitat in a riparian corridor, except for flood control purposes necessary to protect human health and safety. "Riparian corridors" are the areas within 250 feet from the center of a permanent or intermittent stream bed.
- *Critical Wildlife Habitat:* No development or use may be permitted that would impair a habitat or migratory corridor for special-status or other protected species so as to reduce the number, or prevent the recovery in number, of one or more species.
- *Steep Slopes*: No building site, in whole or in part, may be located on a slope of twenty percent (20%) or more. No building may be located on a site that cumulatively has access of more than fifty (50) feet over a slope of twenty percent (20%) or more. No grading may take place on a slope of twenty percent (20%) or more unless necessary to maintain fire trails. No greenhouses, in whole or in part, may be located on a slope of fifteen percent (15%) or more. Cultivated agriculture may not be conducted on a slope of twenty percent (20%) or more. Percentages are based on the steepness of slopes in their natural, unaltered state, and are calculated by dividing altitude increase by twenty over each twenty feet of surface distance.
- *Ridgelines and Hilltops:* Structures may not be located on ridgelines or hilltops, or where they will project into the visual plane of a ridge line or hilltop, as viewed from public roads, trails, or other public places, unless there is no other building site on the parcel. Unless there is no other possible configuration, new parcels may not be created that have no building sites other than a ridge line or hilltop, or that would entail a building projecting into the visual plane of a ridgeline or hilltop, as viewed from a public place.

The project is consistent with the objectives of Measure M because the project does not propose to develop any area of Franklin Canyon outside the footprint of the existing golf course, and the project would increase access to nearby open space.

f. No Impact. The project site is not located within the plan area of any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state Habitat Conservation Plan.

References:

CDFW, 2021b. Wildlife Habitats-California Wildlife Habitat Relationships System. Available at: https://wildlife.ca.gov/Data/CWHR/Wildlife-Habitats [Accessed January 2021].

Circlepoint, 2018. "RE: Franklin Canyon Golf Course—Constraints Analysis Memorandum" dated January 26, 2018 addressed to Thomas Hix of Integrated Development Strategies, Inc.

City of Hercules, 2004. "Ordinance No. 401." Available at: https://www.ci.hercules.ca.us/Home/ShowDocument?id=5274 [Accessed January 2021].

City of Hercules, 2010. Initial Study/Mitigated Negative Declaration: Project: Franklin Canyon/Eastern Panhandle Annexation. Available at: https://www.ci.hercules.ca.us/government/planning/hercules-projects/annexation [Accessed January 2021].

City of Hercules, 2021. General Plan. Available at: https://www.ci.hercules.ca.us/government/planning/general-plan [Accessed January 2021].

CNPS, 2021. California Native Plant Society: Calscape: Species Accounts. Available at: https://calscape.org/ [Accessed January 2021].

Dunk, J.R., 1995. White-tailed kite (Elanus leucurus). Available at: https://birdsoftheworld.org/bow/species/whtkit/cur/introduction [Accessed January 2021].

eBird, 2021. Explore: Species. Available at: https://ebird.org/explore [Accessed January 2021].

ESR, Inc., 2018. Delineation Report Waters of the United States: Franklin Canyon Golf Course.

ESR, Inc., 2019. Franklin Canyon Development RV Resort and Remodeled Golf Course Project Potential Environmental Impacts.

Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program. California Department of Fish and Wildlife.

Katzner, T.E., Kochert, M.N., Steenhof, K., McIntyre, C.L., Craig, E.H., and Miller, T.A., 2020. Golden Eagle: Aquila chrysaetos. Available at: http://birdsoftheworld.org/bow/species/goleag/cur/introduction [Accessed January 2021].

MIG, 2021. General Biological Resources Assessment: Franklin Canyon RV Resort. Berkeley, California.

NatureServe, 2020. Neotoma fuscipes annectens: San Francisco dusky-footed woodrat. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.101629/Neotoma_fuscipes_annectens [Accessed January 2021].

Ng, J., Giovanni, M.D., Bechard, M.J., Schmutz, J.K., and Pyle, P., 2017. Ferruginous hawk: Buteo regalis. Available at: https://birdsoftheworld.org/bow/species/ferhaw/cur/introduction [Accessed January 2021].

Rosenfeld, R.N., Madden, K. K., Bielefeldt, J., and Curtis, O. E., 2019. Cooper's hawk: Accipiter cooperii. Available at: https://birdsoftheworld.org/bow/species/coohaw/cur/introduction [Accessed January 2021].s://birdsoftheworld.org/bow/species/goleag/cur/introduction [Accessed January 2021].

Smith, K.G., Wittenberg, S.R., Macwhirter, R.B., and Bildstein, K.L., 2011. Northern Harrier: Circus hudsonius. Available at: https://birdsoftheworld.org/bow/species/norhar2/cur/introduction [Accessed January 2021].

USFWS, 2000. Endangered and threatened wildlife and plants; final determination of critical habitat for the Alameda whipsnake (Masticophis lateralis euryxanthus). (65:192 FR October 3, 2000).

Xerces Society, 2021. Western Bumble Bee: Bombus occidentalis. Available at: https://xerces.org/endangered-species/species-profiles/at-risk-bumble-bees/western-bumble-bee

[Accessed January 2021].

Yousef, R., 1996. Loggerhead shrike: Lanius ludovicianus. Available at: https://birdsoftheworld.org/bow/species/logshr/cur/introduction [Accessed January 2021].

6.5 Cultural Resources

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines §15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

Conclusion: Implementation of Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts to less than significant levels. Regarding cultural resources, the proposed project would not result in any significant environmental impacts with mitigation incorporated.

Documentation:

a) No Impact. The cultural resources records search results from the California Historical Resources Information System (CHRIS) search at the Northwest Information Center (NWIC) indicate there are no previously recorded historic buildings or structures within the site boundaries. There are seven historic buildings/structures located within a 0.5-mile radius of the project site. These resources are summarized in Table 5 below.

Table 5. Historic Resources Within 0.5 Miles of the Project Site

Resource Number	Resource Name	Resource Type
P-07-000513	Barry Ranch	Building, District
P-07-000514	Atchison, Topeka & Santa Fe Telephone Poles	Structure
P-07-000515	Segment of Route 4	Structure
P-07-000517	Segment of Route 4/Telephone Line	Structure
P-07-000518	Segment of Route 4/Windmill	Structure
P-07-000806	Atchison, Topeka & Santa Fe Railroad	Structure
P-07-001026	Christie Underpass	Structure
Source: NWIC 2020		

The seven historic buildings/structures identified by the NWIC would not be impacted by the proposed project, as these historic resources are located outside the project's boundary. No direct or indirect impact would occur.

The City of Hercules does not keep its own historic register, although several historic resources within the city are either on or eligible for the National Register of Historic Places (NRHP) (City of Hercules, 2018).

All the resources listed on the City's website are outside the project boundary and are not within line of sight of the project boundary.

There are two structures on the project site, a maintenance building, constructed in the 1960s, which is to remain on the site, and a clubhouse that was likely constructed between 1978 and 1981, based on aerial photography and topo map imagery, which is to be demolished (Historic Aerials 2020).

The clubhouse does not display any unusual or distinctive architectural features, and research does not suggest that the building was designed or built by an architect of significance. Additionally, there is no evidence to show that the building is connected with famous historic people or events in history. Therefore, the building is not considered eligible for inclusion in the California Register of Historic Resources (CRHR), as it does not meet any of the relevant criteria for inclusion. As such, the building is not considered a historic resource under CEQA, and demolition and removal of the building would not result in an impact.

Because there are no known historic buildings or structures eligible for inclusion on a historic register on the site, there are no impacts to known historic resources or built environments included on a historic register as a result of the proposed project.

b) Less than Significant with Mitigation Incorporated. A Sacred Lands File (SLF) search was conducted through the Native American Heritage Commission (NAHC), which was returned with negative results on August 6, 2020. It was recommended that the *Amah Mutsun Tribal Band of Mission San Juan Bautista*, *Guidiville Indian Rancheria, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the SF Bay Area, North Valley Yokuts Tribe, The Ohlone Indian Tribe of the SF Bay Area, and The Confederated Villages of Lisjan* be contacted as an extension of the SLF.

Emails were sent to all the tribes recommended. The emails included a topographic map of the project area and details of the proposed project undertaking. None of the tribes responded to the emails.

The cultural resources records search results reported by the NWIC indicate there are three prehistoric period archaeological resources located within the project's boundaries. These are summarized in Table 6 below.

Table 6. Archaeological Resources within the Project Site

NWIC Resource Number	Trinomial Number	Resource Name	Resource Type	Age
P-07-000022	CA-CCO-2	N/A	Site	Prehistoric
P-07-000440	CA-CCO-0259	Barker's Rodeo/Fernandez Mound	Site	Prehistoric
P-07-000460	CA-CCO-0481	Golfball Site	Site	Prehistoric
Source: NWIC 2020				

The records for P-07-000022 are missing, and additional information regarding the site is unavailable. It is situated in the portion of the project site designated for open space.

P-07-000440 (Barker's Rodeo/Fernandez Mound) is a prehistoric shell midden indicated by black, greasy soil, located on the golf course. Archaeological reports indicate it is still beneath the turf, although its exact boundaries are unknown.

P-07-000460 (Golfball Site) is a prehistoric (or potentially historic period) site. Information on the site is limited due to early confusion from the NWIC when assigning resource numbers. The site was initial misidentified by the NWIC/archaeological recorders as being part of a different site, over 0.25 miles away. This site appears to be a mound or midden containing glass scrapers (likely obsidian, although this could be a historic period, Native American artifact made from American glass; information is lacking in this regard) as well as a burial. There is potential for the burial to have remained in situ, as there are no notes on if the burial was removed.

All three of these sites appear to meet either the definition of a unique archaeological resource or a historic resource under CEQA.

There is one historic period archaeological site within 0.5 miles of the project site: Resource P-07-004823, also called Sanders Site 1, is the remains of a historic windmill structure from circa 1930.

There are six reports on record with the NWIC that are within or partially within the proposed project's boundaries. These are summarized in Table 7 below.

Table 7. Archaeological Reports within the Project Site

Report Number	Company/Author	Year	Title
S-013800	Holman & Associates	1992	Archaeological Literature Review and Field Inspection of the Franklin Canyon EIR (letter report)
S-013808	Holman & Associates	1983	Archaeological Field Investigation of Parcels A and B Located Behind Crockett (letter report)
S-18900	William Self Associates	1996	Archaeological Survey Report Route 4 (West) Gap Project
S-039375	Archeo-Tec	2006	Phase I Cultural Resource Assessment Report for the Fernandez Ranch Creek Restoration Project
S-044872	PAR Environmental Services, Inc.	2008	Cultural Resources Constraints Study for the Replacement of 10 Poles on the Christie-Franklin No. 1 High Voltage Transmission Line
S-044875	PAR Environmental Services, Inc.	2008	Cultural Resources Constraints Study for the Replacement of 3 Poles on the Christie-Franklin No. 2 High Voltage Transmission Line
Source: NWIC 2020			

Report S-013800 was written specifically for the Franklin Canyon EIR and describes the rediscovery of P-07-000022, although the report failed to locate P-07-000460, postulating it may have been graded away. This report also discovered the presence of P-07-000440. The report recommends archaeological augering along Rodeo Creek and near known archaeological sites to determine both the extent and depth of the sites.

Report S-013808 is an earlier version of the field study S-013800 and does not give any information beyond that. Recommendations are similar.

Report S-018900 is a three-part report including a Phase I cultural assessment as well as a historic architecture review and cultural resources overview. This is for the road corridor for Route 4. The report is mostly outside the project boundary, and the report does not identify any additional archaeological resources.

Report S-039375 is a Phase I cultural assessment for the Fernandez Ranch to the south of the project. A very small part of the survey is within the project boundary. The report did identify several other archaeological sites along Rodeo Creek that were outside the boundary of the CHRIS report.

Both reports S-044872 and S-044875 are small reports based on the replacement of high voltage poles. The reports themselves are for a small area to the east of the project site, and barely touch the perimeter of the site. Both reports mention the proximity of P-07-000440 and P-07-000460, although they do not identify any additional information or relevant recommendations.

As part of the historic review for this project, historic aerial photographs and maps were consulted. Historic topo maps from 1933 show at least two buildings within the development area of the project site that have since been removed or demolished. Historic foundations or historic period sites associated with settlement could exist below the surface of the project site. This is also indicated by the evidence of historic development, such as Sanders Site 1 (P-07-004823) in the project vicinity.

Rodeo Creek is associated with Native American activity. Streams and creeks in general are often associated with Native American activity and burials. There is one marked tributary to Rodeo Creek passing through the site on historic topographic maps of the area. Additionally, the topography is suggestive that there may at one time have been several tributaries to Rodeo Creek passing through the site, draining down from the hills to the south (Historic Aerials 2020).

Soil and subsurface conditions data show that the majority of the project site is clay-loam overlying alluvial deposits related to Rodeo Creek. The hills to the south of the site are formed of predominantly Briones sandstone overlain by loam soils (Vollmar Consulting 2006). Prehistoric archaeological resources are predominantly found in alluvial deposits, and the location on an alluvial plane, near a creek and next to hills, would be a typical area which Native Americans would have utilized.

In general terms, based on the evidence from the discussion above, the entire area of the project site should be considered sensitive for archaeological resources. The potential for the discovery of previously undiscovered prehistoric archaeological resources is considered high and is considered moderate for previously undiscovered historic period archaeological resources.

In terms of impacts to known resources, P-07-000022 is on the west of the golf course, and as that part of the site is designated to be open space, and thus no development would occur, the project has no potential to impact the resource. However, both P-07-000440 and P-07-000460 are within the proposed area of development on the eastern side of the golf course. Although previous investigations failed to re-locate P-07-000460, it is possible it is still in situ at depths below the current ground level.

Development is proposed directly on top of these sites and has the potential to damage or destroy these sites. The destruction or damage of a unique archaeological resource, or a historic resource is likely to be a significant and unavoidable impact.

The following mitigation measures are included to reduce the potential impacts of project development to a less than significant level.

Mitigation Measure CUL-1: Conduct Subsurface Archaeological Investigation. The applicant shall retain a qualified professional archaeologist or archaeological firm to conduct a series of subsurface investigations in the proposed area of disturbance, where the project has the potential of encountering subsurface resources or would come within two vertical feet of encountering subsurface resources, i.e., any excavation into or close to the existing ground level of the project area where excavation or over excavation may disturb subsurface archaeological resources. The methodology of the subsurface investigation shall be determined by the investigating archaeologist and will use archaeological augering, shovel test pits, or a combination of the two. The investigations shall be used to determine if archaeological resources are present in areas where native soils could be encountered and the edges and depths of archaeological resources. No more than the minimum level of physical disturbance into a cultural resource shall be permitted, to ensure the integrity of the resource is retained, while being able to definitively establish the presence of a cultural resource. Investigation to depths beyond the maximum depth of disturbance plus a two-foot buffer shall not be required, as cultural resources present below that horizon would be protected from construction activity. The archaeologist/firm shall write a report of their findings, documenting if the proposed project would impact archaeological resources based on the depth and features identified by the subsurface research. In the event that the area of disturbance changes to include areas not investigated by this method, additional investigation shall be required using the criteria contained in this mitigation measure.

Mitigation Measure CUL-2: Avoid Archaeological Resources. After the archaeological investigations are complete, an avoidance strategy shall be determined in consultation with both the applicant, the City, and a qualified professional archaeologist or archaeological firm. The avoidance strategy shall ensure that proposed ground-disturbing activities shall either avoid the archaeological resource entirely by ensuring that either a ten-foot minimum buffer surrounds the resource in which no ground moving activity shall be permitted or have at least two feet of clearance between the depth of the excavation, and the depth of the resource, or both. Fill may be used to raise the ground height to a point where there will be two feet between the excavation and the resource. Excavation shall not be permitted if there is the possibility of excavation being closer than either two feet vertically or ten feet horizontally to the edges/depth of the resource. An archaeologist shall map and stake out the edge of known and newly discovered resources to ensure construction workers know where sensitive locations are.

Mitigation Measure CUL-3: Conduct Archaeological Monitoring. The applicant shall retain a qualified professional archaeologist or archaeological firm to conduct archaeological monitoring during project construction within 50 feet of a previously known or newly identified archaeological resource during project construction. In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated, and the qualified archaeologist can determine the appropriate action, which may include development of a treatment plan. In the event that the construction workers discover archaeological resources determined to be prehistoric, Native American tribes/individuals shall be contacted and consulted, and Native American construction monitoring shall be initiated. A monitoring report will be written detailing all archaeological finds and submitted to the City and the NWIC.

Mitigation Measure CUL-4: Conduct Archaeological Sensitivity Training for Construction Personnel. The applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall include a handout and a log of all attendees and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event.

c. **Less than Significant with Mitigation Incorporated.** One known burial site is within the project boundary, within the proposed area of disturbance, and there is the possibility of additional burials within the project's area of disturbance. The implementation of Mitigation Measures CUL-1 through CUL-4 would reduce the chance of impacts to human remains to a less than significant level. In the event of accidental discovery, adherence to existing laws and regulations (California Health and Safety Code, Sections 7050 and 7052; Chapter 10 of Part 3 of Division 2 of Title 3 of the California Government Code; and Section 5097.98 of the California Public Resources Code) would ensure that any human remains would be protected, and Native American burials treated, appropriately.

References:

Archeo-Tec, 2006. Phase I Cultural Resource Assessment Report for the Fernandez Ranch Creek Restoration Project. Confidential document kept on file with the NWIC and MIG, Inc.

California Office of Historic Preservation, 2020. California Historical Resources. Available at https://ohp.parks.ca.gov/ListedResources/ (accessed on September 10, 2020).
City of Hercules, 2018. Historic Preservation in Hercules. Available at: https://www.ci.hercules.ca.us/Home/ShowDocument?id=1380 (accessed on September 9, 2020).

Holman & Associates, 1983. Archaeological Field Investigation of Parcels A and B Located Behind Crockett, Contra Costa County, California. Confidential document kept on file with the NWIC and MIG, Inc.

Holman & Associates, 1992. Archaeological Literature Review and Field Inspection of the Franklin Canyon EIR, Contra Costa County, California. Confidential document kept on file with the NWIC and MIG, Inc.

Historic Aerials, 2020. Topographic maps and aerial photographs 1897 – 2018 of Franklin Canyon Golf Course. Available at: https://www.historicaerials.com/viewer (accessed on September 10, 2020).

Kroeber, A.L. 1976. Handbook of the Indians of California. Dover Publications Inc. New York. (Originally Published 1925)

Levy, Richard, L. 1976. Costanoan Internal Relationships. University of California. Berkeley.
1978. Handbook of North American Indians. Washington: Smithsonian Institution. Washington D.C. (Ed. Robert F. Heizer).

National Park Service, 2020. National Register of Historic Places Digital Archive on NPS Gallery. Available at https://npgallery.nps.gov/NRHP/AdvancedSearch/ (accessed on September 10, 2020).

Native American Heritage Commission, 2020. Scared Lands File Search Prepared in Support of the Franklin Canyon RV Resort Project, Santa Cruz County. August 6, 2020. Unpublished document kept on file with the NAHC and MIG, Inc.

Northwest Information Center, 2020. Cultural Resources Records Search in Support of the 547 Airport Blvd Project (No. File No. 20-0242). Unpublished document kept on file with the NWIC and MIG, Inc.

PAR Environmental Services, Inc. 2008a. Cultural Resources Constraints Study for the Replacement of 10 Poles on the Christie-Franklin No. 1 High Voltage Transmission Line. Confidential document kept on file with the NWIC and MIG, Inc.

PAR Environmental Services, Inc. 2008b. Cultural Resources Constraints Study for the Replacement of 3 Poles on the Christie-Franklin No. 2 High Voltage Transmission Line. Confidential document kept on file with the NWIC and MIG, Inc.

Vollmar Consulting, 2006. Biological Resources Report Fernandez Ranch Project. Available at http://www.ci.hercules.ca.us/Home/ShowDocument?id=5272 (accessed on September 11, 2020).

William Self Associates, 1996. Archaeological Survey Report Route 4 (West) Gap Project. Confidential document kept on file with the NWIC and MIG, Inc.

6.6 Energy Resources

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✓	

Conclusion: Regarding energy resources, the proposed project would not result in any significant environmental impacts.

Documentation:

a. **Less than Significant Impact.** Construction activities associated with the proposed project would require the use of heavy-duty, off-road equipment and construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. Heavy-duty construction equipment would be required to comply with CARB's airborne toxic control measures, which restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and required to conduct development activities, it would not be wasteful or inefficient. Due to energy efficiency standards being improved over time, the new clubhouse developed at the project site would be far more efficient than that of the one currently on site. The improvements to energy efficiency are in large part related to updates to the California Green Building Standards Code (2019). As estimated in CalEEMod, the proposed project is estimated to consume approximately 870,503 kWh of electricity and 1,952,070 kBTU on an annual basis. Although more electricity and natural gas would be consumed on an annual basis compared to the existing building on site (i.e., the existing clubhouse), the proposed structures would use the energy in a more efficient manner. As such, the proposed project's energy consumption would not be wasteful, inefficient, or unnecessary. This impact would be less than significant.

b. **Less than Significant Impact.** The proposed project would not conflict with nor obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. As discussed under response a), the newly proposed clubhouse would be constructed to the latest CalGreen Code, which would make it more energy efficient than the existing structure at the project site. This impact would be less than significant.

References:

California Green Building Standards Commission (CalGreen), 2019. Division 5.2. Available at: https://up.codes/viewer/california/ca-green-code-2019/chapter/5/nonresidential-mandatory-measures#divider_5.2 (accessed September 8, 2020).

6.7 Geology and Soils

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

Conclusion: Regarding geology and soils, the proposed project would not result in any significant environmental impacts. Implementation of Mitigation Measures GEO-1 through GEO-3 would reduce potential impacts to less than significant levels.

Documentation:

ai. No Impact. The proposed project site is not located in an Alquist-Priolo fault zone, and the project would not have an impact.

aii. Less than Significant Impact. Much of the Bay Area is subject to seismic shaking that would result from earthquakes along the San Andreas and Hayward Fault Zone Systems. The Hayward Fault lies about two and a half miles southwest of Hercules, and the Concord-Green Valley Fault lies about 11

miles to the east. The San Andreas Fault lies about 21 miles to the southwest of Hercules. The Rodgers Creek Fault, which connects with the Hayward Fault beneath San Pablo Bay, is about 10 miles west of the city. The Association of Bay Area Governments (ABAG) estimates that the project vicinity would be subject to very strong ground motion in the event of a moderate to severe earthquake.

Predicting seismic events is not possible, nor is providing mitigation that can entirely reduce the potential for injury and damage that could occur during a seismic event. However, by applying geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage from seismic activity can be diminished by exposing fewer people and less property to the effects of a major earthquake. The project proposes construction of the caretaker's quarters on the second level of the clubhouse. The design and construction of new structures are subject to engineering standards of the California Building Code (CBC), which consider soil properties, seismic shaking, and foundation type. All construction activities must meet the CBC regulations for seismic safety. Construction plans shall be subject to review and approval of the City prior to the issuance of a building permit, and actual construction shall be subject to inspection by the City. Standard conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements. Therefore, the potential impact from strong seismic ground shaking would be less than significant.

aiii. Less than Significant Impact. Strong ground shaking can result in liquefaction (the sudden loss of sheer strength in saturated sandy material), resulting in ground failure and displacement. According to the USGS San Francisco Bay Area Liquefaction Hazard Maps, the project site is located in a region that has low to moderate liquefaction potential. Design of the buildings incorporate mandatory CBC standards regarding liquefaction potential. Impacts from liquefaction and ground failure would be less than significant.

aiv. Less than Significant Impact. The urban and developed areas of Hercules are primarily characterized by rolling rills with gradual to moderate slopes. In areas underlain by weak or unconsolidated earth materials, landslides are a hazard. There are 3.8 acres of Federal Jurisdictional Waters around Rodeo Creek. The terrain slopes steeply up to an open space ridge and publicly accessible grazing lands. According to the California Department of Conservation, the parcel has not been evaluated for seismic landslide hazards. According to Hazard Mapping for Selected California Highway Corridors, the project site is not located in an area susceptible to landslides. Design of the buildings would incorporate mandatory CBC standards regarding landslide hazards. Impacts from landslides would be less than significant.

b. Less than Significant with Mitigation Incorporated. The project would include grading on a previously developed site. Grading is expected to be balanced, and all within the footprint of the previously developed area. The applicant proposes 40,000 cubic yards (CY) of cut, and 40,000 CY of fill, which requires the issuance of a grading permit by the City. Improper grading, both during and post-construction, has the potential to increase the volume of runoff from a site. Increased runoff and soil erosion on- and off-site could adversely impact downstream water quality.

Site plans from October 2, 2020, indicate that throughout the site, the applicant proposes construction of bioswales, graded swales, and culverts to promote proper runoff. The potential soil erosion impact of the project would be less than significant with incorporation of Mitigation Measure GEO-1.

Mitigation Measure GEO-1: Erosion and Sediment Control Plan or Stormwater Pollution Prevention Plan. The Applicant shall submit an Erosion and Sediment Control Plan, or Stormwater Pollution Prevention Plan (SWPPP) prepared by a registered professional engineer or qualified stormwater pollution prevention plan developer as an integral part of the grading plan. The Plan shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during construction, including runoff control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. The Plan shall include the following measures as applicable:

a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
b) All drainage ways, wetland areas, and creek channels shall be protected from silt and sediment in storm runoff using appropriate Best Management Practices (BMPs) such as silt fences, diversion berms, and check dams. Fill slopes shall be stabilized and covered when appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.
c) All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15. Erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15. The applicant shall be responsible for notifying construction contractors about erosion control requirements.
d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; minimizing disturbance on slopes exceeding 30 percent; using berms, swales, ditches, vegetative filter strips, and catch basins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.
e) The applicant shall also develop an inspection program to evaluate if there is any significant onsite erosion as a result of rainfall. If there were problem areas at the site, recommendations will be made to improve methods to manage onsite erosion, subject to review and approval by the City.

c. Less than Significant Impact. The project site is subject to seismic shaking, and discussions of impacts related to liquefaction and landslides are in Section 6.aiii 6.7.aiv. Lateral spreading occurs when soils liquefy during an earthquake, and the liquefied soils along with the overlying soils move laterally to unconfined spaces, causing horizontal ground displacements. According to the Association of Bay Area Governments (ABAG) Hazard viewer, the project site ranges from very low to very high susceptibility. The high susceptibility is along the Rodeo Creek Channel, with lesser susceptibility in the hills above Franklin Canyon. While there is some susceptibility, compliance with the CBC would prevent significant impacts related to lateral spreading and subsidence.

d. Less than Significant with Mitigation Incorporated. Soil types found on the project site are categorized as Hydrologic Soil Group C by the USDA Natural Resource Conservation Service (NRCS). The NRCS maps the majority of the project's soils as Botella clay loam (2 to 9 percent slopes) with Conejo clay loam (0 to 2 percent slopes). Group C soils typically have slow infiltration

rates and consist mostly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Project construction and grading activities must be conducted in compliance with the CBC and City Code Chapter 2-7 (Construction Grading and Drainage Ordinance). Compliance with all applicable construction and grading regulations, and the implementation of Mitigation Measure GEO-1, would reduce impacts to life and property created from soil expansion to less than significant levels.

e. Less than Significant Impact. The proposed project would not be served by a public sewer system. The project proposal includes installation of four septic tanks and two zones of wastewater disposal serving the RV Class A sites and Class B/C sites. The new construction would be required to submit an engineering geologist's report, a revised geologic map, and cross-sections with recommendations regarding the location of buildings and sewage disposal systems per City Ordinance 242 Div. 2 (part), 1986. These new systems would be required to prove that onsite soil could support the septic tanks. Impacts regarding soil ability to support septic tanks and wastewater disposal systems would be less than significant.

f. Less than Significant with Mitigation Incorporated. The site is a developed area, and the Geological Map of California does not reveal the presence of, or potential for, unique geological features. There would be no impact to unique geologic features.

An examination of the Geological Map of California indicates that the Franklin Canyon geological area, which contains the project site, is comprised of Miocene and marine deposits ranging in age from the Oligocene to Pliocene (California Division of Mines and Geology, 1977). Although the underlying geology of granitic and metamorphic rocks are not the types of geology that normally yield fossilized material, older alluvial deposits have the potential to contain fossils, especially at depths. Development of the site would not encounter previously undisturbed soils. The depths of excavation are not anticipated to reach a horizon of deeper alluvial soils or bedrock where fossils are more likely to be found.

At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Paleontological monitoring may be required as part of the treatment plan.

Mitigation Measure GEO-2: Conduct Paleontological Sensitivity Training for Construction Personnel. The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology and shall conduct a paleontological sensitivity training for construction personnel prior to commencement of excavation activities. The Applicant and/or qualified professional paleontologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The Applicant shall notify the City at least 48 hours before holding the training and keep a log of all attendees. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of paleontological monitors, notification and other procedures to follow upon discovery of resources, and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

Mitigation Measure GEO-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered. If paleontological resources and/or unique

geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

References:

Association of Bay Area Governments (ABAG). July 21, 2014. Contra Costa County Earthquake Hazard. https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer (accessed July 23, 2020)

California Department of Conservation. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed July 23, 2020)

California Division of Mines and Geology, 1977. Jennings, C.W., Strand, R.G., and Rogers, T.H., Geologic map of California: scale 1:750,000., available at: https://mrdata.usgs.gov/geology/state/state.php?state=CA (Accessed August 3, 2020)

City of Hercules, 1998, Amended April 14, 2015. General Plan Safety Element. Available at https://www.ci.hercules.ca.us/home/showdocument?id=12569 (accessed July 23, 2020)

Triad Holmes and Associates, 2020. Franklin Canyon RV Resort Conceptual Grading and Erosion Control Plan, sheet C3. October 2, 2020. (Included as Figures 9 and 10.

United States Geologic Survey (USGS). San Francisco Bay Area Liquefaction Hazard Maps. Available at: https://earthquake.usgs.gov/hazards/urban/sfbay/liquefaction/sfbay/ (accessed August 4, 2020)

6.8 Greenhouse Gas Emissions

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Conclusion: Regarding greenhouse gas emissions, the proposed project would not result in any significant environmental impacts.

Documentation:

a. Less than Significant Impact. Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). The six most common GHGs are listed below.

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Sulfur hexafluoride (SF_6)
- Hydrofluorocarbon (HFCs)
- Perfluorocarbons (PFCs)

GHGs that contribute to climate change are a different type of pollutant than criteria or hazardous air pollutants, as previously discussed in Section 6.3, Air Quality, because climate change is global in scale, both in terms of causes and effects. Some GHGs are emitted to the atmosphere naturally by biological and geological processes such as evaporation (water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments such as swamps or exposed permafrost (methane); however, GHG emissions from human activities such as fuel combustion (e.g., carbon dioxide) and refrigerants use (e.g., hydrofluorocarbons) significantly contribute to overall GHG concentrations in the atmosphere, which affects climate regulation and results in a changing climate globally. Examples of the effects of global climate change include rising temperatures and increased severe weather events such as drought and flooding.

GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO_2, which has a GWP of one. By comparison, CH_4 has a GWP of 25, which means that one molecule of CH_4 has 25 times the effect on global warming as one molecule of CO_2. Multiplying the estimated emissions for non-CO_2 GHGs by their GWP determines their carbon dioxide equivalent (CO_2e), which enables a project's combined global warming potential to be expressed in terms of mass CO_2 emissions. Most often, GHG emissions associated with projects are referred to in terms of metric tons of CO_2e, or $MTCO_2e$.

In 1997, the United Nations' Kyoto Protocol was adopted in Kyoto, Japan, establishing an international treaty that set targets for reductions in emissions of four specific GHGs – CO_2, CH_4, N_2O, and SF_6 – and two groups of gases – HFCs and PFCs. As previously mentioned, these GHGs

are the primary GHGs emitted into the atmosphere by human activities. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change.

The State of California has several regulations and executive directives aimed at reducing GHG emissions. In 2005, for instance, the governor issued Executive Order S-3-05, establishing statewide GHG emissions reduction targets. Executive Order S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels (CalEPA, 2006). In 2006, the California Global Warming Solutions Act (AB 32) was signed into law. AB 32 codifies the statewide GHG emission reduction targets and required CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline, which was approved in 2008 and updated in 2014 and 2017.

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, sets a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. By directing state agencies to take measures consistent with their existing authority to reduce GHG emissions, this order establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through Executive Order B-30-15, Governor Brown went on to sign SB-32 and AB-197 on September 8, 2016. SB-32 made the GHG reduction target to reduce GHG emissions by 40 percent below 1990 levels by 2030 a requirement as opposed to a goal. AB-197 gives the Legislature additional authority over CARB to ensure the most successful strategies for lowering emissions are implemented, and requires CARB to, "protect the state's most impacted and disadvantaged communities …[and] consider the social costs of the emissions of greenhouse gases."

On December 14, 2017 CARB adopted the second update to the Scoping Plan, the *2017 Climate Change Scoping Plan Update* (*2017 Scoping Plan Update*; CARB, 2017). The primary objective of the *2017 Scoping Plan Update* is to identify the measures needed to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030), as established under Executive Order B-30-15 and SB 32. The *2017 Scoping Plan Update* identifies an increasing need for coordination among state, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. It notes emission reduction targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 million $MTCO_2e$ and 83 million $MTCO_2e$ by 2020 and 2050, respectively. To achieve these goals, the *2017 Scoping Plan Update* includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons per capita by 2050.

The BAAQMD maintains a 1,100 $MTCO_2e$ operational GHG threshold for non-stationary sources[2] (BAAQMD, 2017). The 1,100 $MTCO_2e$ GHG threshold was established by the BAAQMD to align project's GHG emissions with state-wide goals for 2020. Since the proposed project is estimated to

[2] Per the BAAQMD CEQA Guidelines, a stationary source, "consists of s single emission source with an identified emission point, such as a stack at a facility… Major stationary sources are typically associated with industrial processes, such as refineries or power plants. Minor stationary sources are typically land uses that may require air district permits, such as gasoline dispensing stations, and dry cleaning establishments" (BAAQMD, 21017; pg. 4-2). The proposed project would consist of the construction and operation of an RV resort; it would not be a stationary source. Thus, the BAAQMD non-stationary source threshold is used in this analysis.

become operational in 2022 (i.e., two years after 2020), the 1,100 $MTCO_2e$ threshold is not directly applicable to the proposed project. Instead, an interpolated threshold of 660 $MTCO_2e$ is applied for the purposes of this analysis, since it takes the BAAQMD's recommended 2020 threshold and adjusts it downward for the State's next codified GHG reduction goal for 2030 (i.e., 40% below 1990 levels by 2030; SB 32).[3]

The BAAQMD has not adopted a threshold of significance for construction-related GHG emissions. The BAAQMD's *CEQA Air Quality Guidelines* do, however, encourage lead agencies to quantify and disclose construction-related GHG emissions, determine the significance of these emissions, and incorporate BMPs to reduce construction-related GHG emissions. Accordingly, construction-related GHG emissions are amortized over the lifetime of the proposed project (presumed to be a minimum of 30 years). This normalizes construction emissions so that they can be grouped with operational emissions and compared to appropriate thresholds, plans, etc.

The proposed project would generate GHG emissions from both short-term construction and long-term operational activities. Construction activities would generate GHG emissions primarily from equipment fuel combustion as well as worker, vendor, and haul trips to and from the project site during demolition, site preparation, grading, building construction, paving, and architectural coating activities. Construction activities would cease to emit GHGs upon completion, unlike operational emissions that continue year after year until the non-residential facilities constructed as part of the project close or cease operation. Once operational, the proposed project would generate GHG emissions from area, mobile, water/wastewater, and solid waste sources.

GHG emissions from construction and operation of the proposed project were estimated using CalEEMod, version 2016.3.2, based on default data assumptions contained in CalEEMod, with the project-specific modifications described in Section 6.3.

The proposed project's estimated construction and operational emissions are presented below in Table 8, *Project Greenhouse Gas Emissions*.

Table 8. Project Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL[(A)]
Area	<0.0[(B)]	0.0	0.0	<0.0[(B)]
Energy	357.4	<0.0[(B)]	<0.0[(B)]	359.0
Solid Waste	27.2	1.6	0.0	67.5
Water/Wastewater	7.2	0.1	<0.0[(B)]	10.9
Amortized Construction	7.6	<0.0[(B)]	<0.0[(B)]	7.6
Total Project Emissions[(C)]	***399.4***	***1.7***	***<0.0[(B)]***	***445.1***
BAAQMD 2020 Threshold	--	--	--	1,100
Derived 2030 Emission Goal	--	--	--	660
Exceeds Goals?	--	--	--	No

Source: MIG 2020 (see Appendix A)

[3] The 660 MTCO2e/yr goal was developed by taking the 1,100 $MTCO_2e$/yr threshold, which was the threshold to reduce land us sector emissions back to 1990 levels and reducing it by 40 percent (1,100 $MTCO_2e$/yr * (1 - 0.4) = 660 $MTCO_2e$/yr). This linear reduction approach oversimplifies, but demonstrates the progress required to meet GHG reduction requirements under SB 32. The City is not adopting nor proposing to use 660 $MTCO_2e$ as a CEQA GHG threshold for general use; rather, it is only intended for use on this project as a means to provide context for whether the project would directly or indirectly generate GHG emissions that may have a significant effect on the environment.

Note:
(A) $MTCO_2e$
(B) <0.0 does not mean emissions are zero; rather, it means emissions are greater than zero, but less than 0.05.
(C) Slight variations may occur due to rounding.

As shown in Table 8, development of the proposed project would generate approximately 445.1 $MTCO_2e$, which is below the BAAQMD 2020 GHG threshold and derived 2030 GHG emissions goal. Therefore, this impact would be less than significant.

b. Less than Significant Impact. The proposed project would not conflict with CARB's Scoping Plan or the Association of Government / Metropolitan Planning Commission's (ABAG/MTC) *Plan Bay Area 2040*. The project's consistency with these plans is described in more detail below.

CARB Scoping Plan

The *2017 Climate Change Scoping Plan* is CARB's primary document used to ensure State GHG reduction goals are met. The plan identifies an increasing need for coordination among State, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. The major elements of the 2017 Climate Change Scoping Plan, which is designed to achieve the State's 2030 GHG reduction goal, include:

- Continued implementation of SB 375.
- Implementing and/or increase the standards of the Mobile Source Strategy, which include increasing zero emission vehicle (ZEV) buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewable Portfolio Standard (RPS) to 50 percent and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH_4 and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Nearly all of the specific measures identified in the *2017 Climate Change Scoping Plan* would be implemented at the state level, with CARB and/or another state or regional agency having the primary responsibility for achieving required GHG reductions. The proposed project, therefore, would not directly conflict with any of the specific measures identified in the *2017 Climate Change Scoping Plan*.

ABAG/MTC Plan Bay Area 2040

The overarching goal of *Plan Bay Area 2040* is to concentrate development in areas where there are existing services and infrastructure rather than allocate new growth in outlying areas where substantial transportation investments would be necessary to achieve the per capita passenger vehicle, vehicle miles traveled (VMT), and associated GHG emissions reductions (ABAG/MTC 2017). The proposed project would replace an existing golf course with a new RV resort and open space. Based on the traffic analyses conducted for the proposed project, the site would result in a net

reduction in trips generated at the site and is likely to result in reduced or unchanged VMT (Abrams Associates, 2020; DKS Associates, 2020). Therefore, the project would not conflict with *Plan Bay Area 2040* in that it would likely serve to reduce per capita VMT and associated GHG emissions. As further noted in the VMT analysis prepared for the project, the RV resort would not be a tourist draw in and of itself, and most of the trips associated with the proposed project would likely not generate new trips but rather provide an additional or alternative stop for travelers already on a long-distance RV trip and most likely travelling along Highway 4, U.S. 80, or other regional highways (DKS Associates, 2020). Therefore, unlike the existing golf course land use, most trips associated with the proposed project would occur with or without the proposed project. The proposed project would not conflict with *Plan Bay Area 2040*.

Conclusion

As discussed above, the proposed project would neither conflict with nor obstruct implementation of the CARB *2017 Climate Change Scoping Plan* and ABAG/MTC *Plan Bay Area 2040*. This impact would be less than significant.

References:

Abrams Associates Traffic Engineering, Inc. (Abrams Associates) 2020. *Transportation Impact Analysis Franklin Canyon RV Resort and Golf Course Contra Costa County*. March 18, 2020.

Association of Bay Area Governments / Municipal Transit Commission (ABAG/MTC). 2017. *Plan Bay Area 2040.* Approved July 26, 2017.

Bay Area Air Quality Management District (BAAQMD), 2017. *CEQA Air Quality Guidelines*. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed September, 8 2020).

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Available at: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (accessed September 8, 2020).

California Environmental Protection Agency (CalEPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: https://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF (accessed September 8, 2020).

DKS Associates 2020. *Franklin Canyon VMT Analysis (Draft)*. August 18, 2020.

6.9 Hazards and Hazardous Materials

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

Conclusion: Regarding hazards and hazardous materials resources, the proposed project would not result in any significant environmental impacts after mitigation.

Documentation:

a. Less than Significant Impact. Construction of the proposed project, as well as ongoing operation, may involve the intermittent transport, use, and disposal of potentially hazardous materials, including fuels and lubricants, paints, solvents, and other common materials. To maintain the health and safety of the public and environment during project construction and operation, any onsite hazardous materials that may be used, stored, or transported would be required to follow protocols determined by the U.S. EPA, California Department of Health and Safety, and City of Hercules.

As a part of the Hercules General Plan, the City has drafted a Hazardous Waste Management Plan Element, which outlines Hazardous Waste Management Policies, siting guidelines, large and small quantity generators, transportation, emergency response procedures, and storage regulations. The

Hercules General Plan also has policies that guide development in compliance with hazardous material management.

- Safety Element: Policy 2C: The City will update the Earthquake Preparedness and Emergency Response Plan as necessary to establish emergency access points to evaluate the comprehensiveness of the City's evacuation routes in relation to the specific effects of seismic-induced ground shaking, liquefaction, and lurching within the community.

Project construction may involve short-term transport, storage, and use of hazardous materials. Any hazardous substances generated, stored, transported, used, or disposed during construction would be subject to applicable federal, State, and local regulations. Given the City's General Plan goals and federal, State, and local regulation and oversight of hazardous materials, the threat to public health and safety and to the environment would be less-than-significant.

b. Less than Significant with Mitigation Incorporated. A Phase 1 Environmental Site Assessment (ESA) was performed in 2016 on the project site by Gribi Associates to identify current and historical, potential, and actual recognized environmental conditions (RECs) for the site. A REC is the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to historical or present activities or conditions.

Construction of the proposed project would require the use of paints and solvents and could result in a release of hazardous materials (e.g., asbestos-containing materials, lead-based paint). However, the project would be required to comply with construction practices and mitigation measures to prevent, contain, and/or clean-up potential spills and contamination from paints, fuels, solvents, concrete wastes, and other potentially hazardous materials, such as asbestos-containing materials (ACMs) and lead-based paint.

The Phase 1 did not identify any active or historical RECs, but activities associated with the golf course operation could cause a REC for the site. These activities include the storage and handling of various lawn care chemicals, the operation and maintenance of mechanized lawn care equipment and golf carts, and the operation of a sanitary leach field southwest of the clubhouse building. The current golf carts are electric and do not pose a significant environmental risk. Per the Phase 1 conclusions, it is possible that lube oil from the golf cart wash area could wash into the adjacent leach field, but the nature and amounts of these oils would be expected to be minimal and would not represent a significant environmental concern. Regarding the leach field, the Phase 1 concludes that based on its age, usage, and maintenance, this leach field would not pose a significant environmental risk.

Asbestos-Containing Materials

EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants that require a thorough asbestos survey be performed prior to demolition or renovation activities that may disturb ACMs. This requirement may be enforced by federal, state, and local regulatory agencies, and specifies that all suspect materials be sampled to determine the presence or absence of asbestos prior to any renovation or demolition activities which may disturb them, to prevent potential exposure to workers, building occupants, and the environment.

Information provided by the property owner included a Hazardous Materials Survey Report, completed by RGA Environmental, Inc., which included both an asbestos survey and a lead-based paint survey of the golf course clubhouse. The report contains certifications showing compliance with both federal and state guidelines and statutes. A total of 12 building materials samples were

collected and analyzed for ACMs. ACM identified in the clubhouse included: roof flashing; acoustic spray; floor tile and mastic; linoleum and mastic; drywall, tape, and joint compound; and carpet mastic. ACMs were commonly used in building construction until the 1980s. Asbestos generally does not pose a threat when it remains intact. However, when asbestos is disturbed and becomes airborne during demolition activities, significant impacts to human health could occur. Construction workers completing demolition activities, as well as surrounding uses, could be exposed to airborne asbestos emissions during clubhouse demolition due to the presence of ACMs.

Mitigation Measure HAZ-1: Asbestos-Containing Materials (ACMs). Prior to any demolition activities, the applicant shall prepare a written Asbestos Abatement Plan describing activities and procedures for removal, handling, and disposal of these ACMs using EPA- and OSHA-approved procedures, work practices, and engineering controls. The plan shall be subject to review and approval by the City of Hercules.

Lead-Based Paints

Due to the age of the existing clubhouse, lead-based paints (LBPs) could be present. For the Phase 1 report, a total of six paint chip samples were analyzed for lead-based paint, and two of the samples showed detectable concentrations of lead.

Mitigation Measure HAZ-2: Lead-Based Paints. The applicant shall have all lead-based paint removed and disposed of following lead abatement performance standards included in the U.S. Department of Housing and Urban Development Guidelines for Evaluation and Control of Lead-Based Paint program, in compliance with Title 8 California Code of Regulations (including Section 1532.1).

c. No Impact. The nearest existing schools are farther than one-quarter mile from the project site. The schools are Hanna Ranch Elementary (approximately 0.8 miles south of the project site, over the southern ridge) and Lupine Hills Elementary (approximately 1.2 miles west of the project site). No schools are proposed within one-quarter mile of the project site.

d. No Impact. The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5 (Cortese List). There are no known hazardous material sites within or adjacent to the project limits, based on review of the following databases on July 24, 2020:

- State Water Resources Control Board Geotracker database,
- California Department of Toxic Substances Control EnviroStor database,
- California Integrated Waste Management Board Solid Waste Information System (SWIS).

According to the project-specific Phase 1 report, the project site (listed as Franklin Canyon Golf Course and 3100 Franklin Canyon Road) is included on two underground storage tank (UST) lists (SWEEPS and HIST). These listings for the project site indicated that two USTs, a 500-gallon regular gasoline tank and a 1,000-gallon unleaded gasoline tank, were present onsite. County records for the site indicate that only one 1,000-gallon gasoline UST was present onsite, as the other UST was removed in 1995, and the site was granted regulatory closure in February 1996. Additionally, there are no Cortese List sites in the project area, and the project site is not located on a hazardous materials site pursuant to Government Code 65962.5 (Cortese List).

e. No Impact. The project is not included within an airport land use plan or within two miles of a public airport. The closest public airport is Buchanan Field Airport, over eight miles east from the

project site, in the City of Concord. The project would not result in a safety hazard for people residing or working in the project area, and there would be no impact.

f. Less than Significant Impact. The City of Hercules has been involved with several other nearby cities including Pinole, San Pablo, Richmond, and El Cerrito to form an emergency response Joint Powers Authority to respond to emergencies. Additionally, Contra Costa County has an established disaster plan through the Office of Emergency Services. The Transportation Impact Analysis (TIA) confirmed that the project would not create, interrupt, or otherwise reduce the ability of streets to circulate traffic, but rather, the project proposes a second access from Christie Road for emergency vehicles only (Abrams, 2020). Any need for construction-related traffic partial street closures would be temporary, intermittent, localized, and subject to standard City traffic management practices. The project would not impair implementation of or physically interfere in emergency response or evacuation plans. The impact would be less than significant.

g. Less than Significant Impact. The project site is located in a local responsibility area and a high fire hazard severity zone, according to the CalFire Fire and Resource Assessment Program (FRAP) Map. The project would result in more people onsite during the summer months, a situation which has the potential to increase fire risk due to the increased use.

Per the Rodeo-Hercules Fire Protection District, the applicant must submit a Fire Protection Plan that describes strategies to limit wildfire exposure. See Section 6.20 (Wildfire) for further discussion. Per the Fire Protection District, all onsite roads must have a minimum 24-foot diameter to allow access by fire protection vehicles and equipment. The final emergency vehicle access plan would be subject to final approval from the Fire Protection District. Therefore, the proposed project is expected to have less than significant impact regarding emergency vehicle access.

References:

Abrams Associates, March 18, 2020. Transportation Impact Analysis: Franklin Canyon RV Resort and Golf Course. (Included as Appendix D)

CalFire, 2019. Contra Costa County Fire Hazard Severity Zones. https://osfm.fire.ca.gov/media/6661/fhszl06_1_map7.pdf (Accessed July 24, 2020)

Cal Recycle, Solid Waste Information System (SWIS) Facility/Site Search. Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/ (accessed July 24, 2020)

County of Contra Costa, January 18, 2005. General Plan, Safety Element. Available at: https://www.contracosta.ca.gov/DocumentCenter/View/30920/Ch10-Safety-Element?bidId= (accessed July 24, 2020)

City of Hercules, 1990. Hazard Waste Management Plan Element (Part 6). Available at: https://www.ci.hercules.ca.us/home/showdocument?id=166 (accessed July 24, 2020)

Email to Bryan Craig, Rodeo-Hercules Fire Chief. "RE: Application completeness for Franklin Canyon RV Resort proposal." Email dated August 20, 2020.

The Department of Toxic Substances Control EnviroStor Database. Available at: http://www.envirostor.dtsc.ca.gov/public/ (accessed July 24, 2020)

Gribi Associates, 2016. Phase 1 Environmental Site Assessment. September 27, 2016.

State Water Resources Control Board Geotracker Database. Available at: http://geotracker.waterboards.ca.gov/ (accessed July 24, 2020)

County of Contra Costa, 2020. Buchanan Field Airport (CCR) Available at: https://www.contracosta.ca.gov/3801/Buchanan-Field-CCR (accessed July 24, 2020)

6.10 Hydrology and Water Quality

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

Conclusion: Regarding hydrology and water quality, the proposed project would not result in any significant environmental impacts after mitigation.

Documentation:
This hydrology analysis references the Preliminary Stormwater Control Plan on page C6 of the Triad Holmes Civil Plans from August 28, 2020. Included as Figure 12.

a. Less than Significant Impact. The project site is currently developed with an 18-hole golf course, a 7,200-square-foot two-story golf clubhouse with a restaurant and lounge, two surface parking lots to the north of the clubhouse, and associated driveways that provide interior access through the central and southern portions of the site. There is also a 5,330-square-foot maintenance structure for equipment storage. The applicant is proposing grading and increasing impervious area, including the

construction of approximately 40,000 square feet of impervious area, for a net increase of 27,470 square feet of new impervious area over existing conditions. In addition, paved access roads would be constructed throughout the site. The applicant estimates that the project would result in a total of 8.37 acres of impervious surface. Currently, the site has 3.36 acres of impervious surface. After project construction, the total impervious area would increase by 5.01 acres, or 218,235 square feet.

Grading would be balanced onsite and would occur within the area that has already been disturbed by prior site improvements. The project proposes a total cut of 40,000 cubic yards (CY) and a total fill of 40,000 CY for the entire site. After grading activities are completed, there would be the potential for wind and water erosion to discharge construction contaminants, sediment, and/or other urban pollutants into stormwater runoff. Violations of water quality standards due to urban runoff can be prevented through compliance with existing regional water quality regulations and plans, including compliance with the East Bay Municipal Utilities District 2015 Urban Water Management Plan (UWMP) and the Contra Costa Clean Water Program's C.3 Guidebook for stormwater standards. The project proposes directing runoff from new impervious surfaces to bioretention basins located throughout the site (Figure 12).

The State Water Resources Control Board (SWRCB) is responsible for regulating stormwater discharge associated with project construction activities such as clearing, grading, and excavation, should they result in land disturbance of one or more acres. The City maintains a National Pollutant Discharge Elimination System (NPDES) permit which requires applicants to demonstrate that their project is covered by the State's General Construction Permit before obtaining any construction related permits. The State's General Construction Permit requires project applicants to prepare a Storm Water Pollution Prevention Plan (SWPPP) for their project. The purpose of the SWPPP is to describe and prescribe Best Management Practices (BMPs) to control sediment and other pollutants during construction from possibly entering stormwater, and the SWPPP must address grading and erosion impacts as well as non-point source pollution impacts from their project, including post-construction operations. Because the project would disturb over one acre of land, the applicant would be required to obtain the State's General Construction Permit and prepare a SWPPP. Because the project would place more than 10,000 square feet of impervious surface, per Hercules Municipal Code (Section 5-8.050), the project is also required to develop a Stormwater Control Plan that meets the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater C.3. Guidebook.

These regulations reduce non-point source pollutants through the implementation of Best Management Practices (BMPs) and other control measures that minimize or eliminate pollutants from urban runoff, thereby protecting downstream water sources. BMPs implemented to address commercial pollutant sources generally involve maintenance of storm drain facilities, parking lots, vegetated areas, and dissemination of educational materials. Project construction would be subject to City's NPDES permit requirements during construction activities in addition to standard NPDES operational requirements.

A preliminary Storm Water Management Plan has been prepared by Triad Holmes Associates, dated August 28, 2020, and is shown on Figure 12. In the project design, the applicant proposes various Integrated Management Practices (IMPs – a type of Low Impact Development) and BMPs for construction and operation. The applicant proposes storm drainage improvements with underdrains and outflows, consisting of bioretention basins and IMPs with landscaped areas to collect and filter onsite stormwater and irrigation run-off. These features would be finalized in a final Storm Water Control Plan (SWCP), subject to review and approval of the City Engineer.

Prior to issuance of the grading permit, the applicant is required to prepare a SWPPP. The applicant shall also file a Notice of Intent (NOI) and pay the associated fee to the SWRCB. The project SWPPP shall be used to prescribe and implement BMPs. Construction and project operations shall implement BMPs to reduce pollutants within stormwater discharges to the maximum extent possible. The applicant shall submit the project SWPPP and SWCP for review and approval by the City Engineer. The approved SWPPP shall be maintained throughout the construction period. The City shall verify that all post-construction BMPs are installed and functioning properly prior to issuing a certificate of occupancy. As a uniformly applied standard regulation, the project applicant shall prepare a final SWPPP and SWCP which would control and minimize pollutants from construction and operation of the project. These standard requirements would ensure that impacts on surface and groundwater quality would be less than significant.

b. Less than Significant Impact. The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project would rely on the existing water service from EBMUD, and the existing onsite well would be abandoned. During operation, the project is anticipated to require approximately 80% less water than current demand conditions. The water reduction would be reached through the removal of the 18-hole golf course and donation of 70 acres for open space access and preservation to JMLT. Although the project would increase impervious surface onsite, the proposed installation of IMP areas would allow for treatment and percolation of water into the underlying soils, which would, in turn, contribute to groundwater recharge. Because the project does not involve an increase in groundwater extraction, and would increase recharge, the project would not substantially interfere with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. The impact would be less than significant.

ci. Less than Significant with Mitigation Incorporated. The proposed project would increase impervious area, resulting in the construction of approximately 40,000 square feet of coverage, for a net increase of 27,470 square feet of coverage over existing conditions. In addition, paved access roads would be constructed throughout the site. The applicant estimates that the project would result in a total of 8.37 acres of impervious surface. Currently, the site has 3.36 acres of impervious surface. After project construction, the total impervious area would increase by 5.01 acres, or 218,235 square feet.

Grading would be balanced onsite and would occur within the area that has already been disturbed by prior site improvements. As mentioned in 6.10.a, because the project would disturb over one acre of land, the applicant would be required to obtain the State's General Construction Permit and prepare a SWPPP. The project proposes a total cut of 40,000 cubic yards (CY) and a total fill of 40,000 CY for the entire site. Runoff from all proposed impervious surfaces would be directed to the bioretention facilities throughout the site where water quality treatment would begin. Bioretention areas remove pollutants by filtering runoff slowly through an active layer of soil. The project must comply with the EBMUD UWMP and City requirements to treat stormwater runoff and reduce pollutants. In addition, all cities within Contra Costa County are required to implement surface water control standards that comply with Provision C.3 of the Regional Water Quality Control Board (RWCB) Municipal Regional Storm Water NPDES Permit No. R2-201500049. The Contra Costa County Clean Water Program created a C.3 guidebook for the implementation of C.3 requirements. Because this project involves the creation of more than 10,000 square feet of net new impervious surface, it is required that stormwater be contained and treated onsite. This containment and treatment of stormwater is currently proposed via new bioretention areas and IMP areas.

Improper project grading activities, both during and post-construction, have the potential to increase the volume of runoff from a site and subsequently increase erosion. Increased runoff and soil erosion on and off site could adversely impact downslope water quality. However, as discussed in Geology and Soils Section 6.7.b, the potential soil erosion impact of the project would be less than significant through implementation of Mitigation Measure GEO-1 that would require the applicant to finalize and implement the project Storm Water Control Plan. Because of these regulatory standards and the mitigation measure, substantial siltation and erosion is not anticipated; the impact would be less than significant after mitigation.

cii. Less than Significant Impact. The project design incorporates strategies to reduce and manage runoff. The project site has natural vegetation and drainage along its southern (north-facing) sloped portion. This area contains a natural drainage tributary that drains into Rodeo Creek. As proposed, impervious surfaces would be dispersed throughout the site to provide access and camping slips for RVs. The proposed bioretention areas and landscaping would be developed throughout the site and would be designed to carry runoff safely away from building foundations and footings, consistent with the California Building Code (CBC). For example, the project would comply with the following CBC site design measures:

a. Direct roof runoff onto vegetated areas safely away from building foundations and footings,
b. Direct runoff form sidewalks, walkways, and/or patios onto vegetated areas safely away from building foundations and footings,
c. Direct runoff from uncovered parking lots onto vegetated areas safely away from building foundations and footings.

Design measures would be implemented to prevent surface runoff and flooding on and off site. Furthermore, the City would require the project's use of BMPs, as listed in the post-construction requirements. BMPs preventing flooding and runoff include protection of storm drains through vegetated filter traps and/or catch basins. The BMPs would prevent the alteration of site drainage or increase in surface runoff, and also would reduce flooding potential. Project Low Impact Development (LID) techniques would include limiting impervious surfaces, dispersing development into smaller areas, and creation of storm water detainment areas. With these design measures and BMPs in place, the impact would be less than significant.

ciii. Less than Significant Impact. The proposed project would not create or contribute runoff water that would exceed capacity of existing or planned stormwater drainage systems. In order to satisfy water quality requirements, runoff from events up to the 95th percentile 24-hour rainfall event (1.3 inches) shall be retained onsite. Per the Preliminary Stormwater Control Plan (SWCP), the project's proposed bioretention basins have capacity to capture stormwater in excess of the required amount as shown in Table 9 below.

Table 9. Bioretention Basins /Detention Pond Requirements

Bioretention Area	Required Size in Cubic Feet	Provided Size in Cubic Feet
A	1,910	2,325
B	2,928	3,000
C	3,086	3,421
D	1,703	3,115
E	3,101	4,800
F	3,076	4,500
G	1,542	2,400
H	2,555	4,500
I	3,621	4,000
J	5,034	6,750
TOTAL	**28,556 CF**	**38,811 CF**
Source: Triad Holmes Engineering. Preliminary Stormwater Control Plan. Page C6		

The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems. Discharge generated from project development would be managed and treated with design improvements and BMPs. The project has adequate capacity to treat stormwater runoff for the proposed development. Drainage patterns would not be altered, and the impact would be less than significant.

civ. Less than Significant Impact. Rodeo Creek is a blue line stream on the project site and areas around the creek are within the 100-year flood zone or Special Flood Hazard Area (SFHA) (i.e., the area that would be inundated by the flood event having a one percent chance of being equaled or exceeded in any given year). New development would be located within the same footprint as existing development. The project would not encroach in the flood zone, and no flood flows would be altered. Refer to responses 10.c.ii and 10.c.iii above for discussion of hydrological impacts. Impacts on flood flows are less than significant.

d. Less than Significant Impact. The project is not located in a tsunami zone, nor seiche zone. Most of the steeper terrain and hills on the site are rated by the Federal Emergency Management Agency (FEMA) as Zone X, defined as an "area of minimal flood hazard." However, the project's lower elevations along Rodeo Creek have been rated a Special Flood Hazard Zone A, which is within a 100-year floodplain. If the project's final design would encroach into the flood zone, additional hydraulic analysis would be necessary. The setback from the RV Resort is proposed at 100 feet from the top of Rodeo Creek's bank. Per ESR's Habitat Assessment, the proposed setback does not appreciably impair the quantity or biology quality of water or habitat in the riparian corridor. All potential pollutants would be held outside of the flood zone, which is limited to the banks on either side of Rodeo Creek. All project construction would occur outside of the flood zone. The impact would be less than significant.

e. Less than significant Impact. As a result of planned drainage treatment features, impacts related to violation of water quality standards would be less than significant. A preliminary SWCP was prepared by Triad Holmes and a final SWCP shall be prepared in accordance with Hercules Municipal Code Sec. 5-8.050. The stormwater control measures proposed for this development are the bioretention facilities, which would be certified by the City Engineer.

The City's 2015 adoption of the State's Model Water Efficient Landscape Ordinance (MWELO) applies to projects requiring a planning-level permit that contains over 500 square feet of new or rehabilitated landscape areas. The new MWELO reduces the size of turf areas in residential projects and prohibits turf in commercial projects. It also requires the use of highly efficient irrigation methods and is predicted to reduce landscape water use in new projects by 30 percent or more.

During construction, temporary BMPs and erosion control measures would be put in place to reduce construction and post-construction siltation. For more information on BMPs, see Section 6.10.ci-ciii. The project would remove turf and add ornamental and native landscaping throughout the site. The project would not conflict with a groundwater management plan, and compliance with the existing stormwater regulations and standards would ensure that the impact would be less than significant.

References:

East Bay Municipal Utilities District (EBMUD), 2016. 2015 Urban Water Management Plan. Available at: https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/ (accessed August 17, 2020).

Contra Costa Clean Water Program, 2017. Stormwater C.3 Guidebook. Available at: https://www.cccleanwater.org/userfiles/kcfinder/files/Stormwater_C3_Guidebook_7th_Edition_2017-05-12%281%29.pdf (accessed November 6, 2020)

Environmental Site Restoration (ESR), Inc. 2019. Email to Tom Hix RE: Franklin Canyon Development RV Resort and Remodeled Golf Course Project Potential Environmental Impacts. March 8, 2019.

Federal Emergency Management Administration (FEMA). Flood Map: Search by Address. Available at: https://msc.fema.gov/portal/search?AddressQuery=city%20of%20hercules%2C%20ca#searchresultsanchor (accessed August 4, 2020)

State of California Department of Conservation, 2009. Tsunami Inundation Map for Emergency Planning. Available at: https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami_Inundation_Benicia_Quad_ContraCosta.pdf (accessed August 6, 2020).

Triad Holmes Associates, 2017. Flood Analysis for Franklin Canyon Golf Course. December 27, 2017. (In Appendix B)

Triad Holmes and Associates, 2020. Franklin Canyon RV Resort Conceptual Drainage/Stormwater Management Plan, sheet C6. August 28, 2020. (See Figure 12)

Wendel Rosen 2020. Memorandum Re: Applicant's Response to Incomplete Letter on Franklin Canyon RV Resort. From Patricia E. Curtin, Wendel Rosen, to Robert Reber, City of Hercules. August 28, 2020.

6.11 Land Use and Planning

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Physical divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

Conclusion: Regarding land use and planning, the proposed project would not result in any significant environmental impacts.

Documentation:

a. No Impact. The project represents development on property with existing structures and access. The main access route would remain unchanged, and an additional emergency vehicle access has been proposed. The project would not physically divide an established community and does not involve the construction of a physical structure or removal of a primary access route that would limit mobility within an established community or between a community and outlying areas. There is no impact.

b. No Impact. The City has determined the project is consistent with Measure M, which passed in 2004 and guides development in the "Franklin Canyon Area." The Area is comprised of approximately 970 acres including the project site, the area located to the south of the golf course owned by JMLT, and an additional area outside the City limits but within the Sphere of Influence.

The purpose of Measure M is to "protect Franklin Canyon and nearby open space lands from harmful and unnecessary development" and "maintains existing use of the Canyon and surrounding areas for agriculture, outdoor recreation, very low-density residential, and open space uses. The objectives are to preserve and protect natural resources, watersheds and water quality, wildlife habitat, beauty and tranquility, and scenic hill views, while permitting proximity to nature and outdoor recreation for the residents of Hercules." The project is consistent with the objectives of Measure M because the project does not propose to develop any area of Franklin Canyon outside the footprint of the existing golf course, and the project would increase access to nearby open space.

The project would be consistent with all relevant Measure M standards including the following:

- Section 9(e) allows Commercial uses, limited to the following:
  - *(1) Low-intensity outdoor recreation that preserves the natural qualities of the area.* The project includes amenities and continuation of some golf course operations, pickle ball, half basketball court, bocce ball, and outdoor pool/hot tub area, which are considered outdoor uses that can continue to preserve the natural qualities of the area.
  - *(2)Nature observation, study or enjoyment.* The project uses would enhance nature observation through the proposed access to the JMLT open space by providing a permanent easement for 50 parking spaces via a lot line adjustment to create a new connection to open space.
  - *(3) Accommodations for short term occupancy and for provision of food and drink (including low-intensity campgrounds and picnic facilities).* The RV campsites and

tent bungalows are proposed to have a limited 30 day or less stay and would prohibit long-term RV occupancy. Persons would have access to onsite food and drink at the clubhouse.

- At a minimum, the project would be subject to Measure M standards in Sections 8, 10–14:
    - The project complies with minimum parcel size requirements of Section 8, and the maximum floor area requirements of Section 12.
    - The project's environmental impacts, if any, would be analyzed during Design Review, in compliance with the requirements of Section 10.
    - The project's draft layout design includes contiguous development envelopes, required by Section 11.
    - The project appears to comply with Visual Safeguards in Section 13, which would be verified during Design Review.
    - The project does not appear to conflict with the lot line adjustment requirements of Section 14, which would be verified during Design Review.

The project site would be subdivided into two parcels to double the allowable structure square footage. The project would be required to comply with regional waste discharge requirements and the City's regulations to minimize stormwater, surface water, and groundwater pollution, including utilization of BMPs. The City determined the project complies with all applicable policies and regulations. The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

References:

City of Hercules, 1998. General Plan Land Use Element. Available at: https://www.ci.hercules.ca.us/government/planning/general-plan (accessed July 21, 2020).

City of Hercules, June 26, 2019. Planning Division, Notice of Decision "Application # ZD 19-01 For Zoning Clearance for Allowable Use Determination for Franklin Canyon Recreational Vehicle (RV) Resort and Golf Course Project. Available at https://www.ci.hercules.ca.us/home/showdocument?id=12982 (accessed July 20, 2020).

City of Hercules, 2004. Measure M – Hercules General Plan Amendment and Land Use Designations for the Franklin Canyon Area. https://www.ci.hercules.ca.us/home/showdocument?id=5274 (accessed July 22, 2020)

6.12 Mineral Resources

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				✓
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

Conclusion: Regarding mineral resources, the proposed project would not result in any significant environmental impacts.

Documentation:

a. No Impact. The State Board of Mining and Geology has adopted regulations to protect lands classified as MRZ-2 (i.e., lands where information indicates that significant stone, sand, and/or gravel deposits are present, or where a high likelihood for their presence exists; and lands otherwise designated as areas of statewide or regional significance relative to mineral resources). No MRZ-2 designated resource zones have been identified by the California Department of Conservation, Division of Mines and Geology for the Hercules area. However, Hercules does have areas that have been identified as containing mineral deposits with a significance that cannot be evaluated from available data (labeled "MRZ-3 zones").

The Hercules General Plan identifies that MRZ-3 zones have been mapped for the hills to the north and south of Highway 4 east of Highway 80 and the high area north of John Muir Parkway to the west of Highway 80. While these zones have been identified, according to the City's General Plan, "there is no information to suggest that these areas have extractable minerals of commercial value such that existing and planned land uses would be of less benefit to the community and region." The project does not propose mineral extraction and would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.

b. No Impact. Refer to Section 6.12.a, above. The project would have no impact in mineral availability.

References:

City of Hercules, 1998. General Plan, Open Space / Conservation Element, page V-15 (Amended April 14, 2015). Available at: https://www.ci.hercules.ca.us/home/showdocument?id=12571 (accessed July 21, 2020).

State of California Department of Conservation, 1982. Division of Mines and Geology. Mineral Land Classification Map: Benicia Quadrangle Plate 2.27. Available at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_146-2/ (accessed July 21, 2020)

6.13 Noise

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

Conclusion: Regarding potential noise and vibration impacts, the proposed project would not result in any significant environmental impacts after the incorporation of mitigation. Consistent with Hercules General Plan Noise Element policy, a mitigation measure for the control of temporary construction noise levels has been identified to address a potentially significant impact and incorporated into the project (Mitigation Measure NOI-1).

Documentation:

a. Less than Significant with Mitigation Incorporated. As described further below, the proposed project would generate a temporary, construction-related increase in ambient noise levels in the vicinity of the project site. This impact would be less than significant after implementation of Mitigation Measure NOI-1.

Noise Fundamentals: "Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. For example, airborne sound is the rapid fluctuation of air pressure above and below atmospheric pressure. "Noise" may be defined as unwanted sound that is typically construed as loud, unpleasant, unexpected, or undesired by a specific person or for a specific area.

Sound has three properties: frequency (or pitch), amplitude (or intensity or loudness), and duration. Pitch is the height or depth of a tone or sound and depends on the frequency of the vibrations by which it is produced. Sound frequency is expressed in terms of cycles per second, or Hertz (Hz). Humans generally hear sounds with frequencies between 20 and 20,000 Hz and perceive higher frequency sounds, or high pitch noise, as louder than low-frequency sound or sounds low in pitch. Sound intensity or loudness is a function of the amplitude of the pressure wave generated by a noise source combined with the reception characteristics of the human ear. Atmospheric factors and obstructions between the noise source and receptor also affect the loudness perceived by the receptor. The frequency, amplitude, and duration of a sound all contribute to the effect on a listener, or

receptor, and whether or not the receptor perceives the sound as "noisy" or annoying. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms, such as "noisiness" or "loudness."

Sound pressure levels are typically expressed on a logarithmic scale in terms of decibels (dB). A dB is a unit of measurement that indicates the relative amplitude (i.e., intensity or loudness) of a sound, with 0 dB corresponding roughly to the threshold of hearing for the healthy, unimpaired human ear. Since decibels are logarithmic units, an increase of 10 dBs represents a ten-fold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, etc. In general, there is a relationship between the subjective noisiness or loudness of a sound and its intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50\ decibels + 50\ decibels\ \neq 100\ decibels$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * \ 10\ log\left(10^{\left(\frac{50}{10}\right)} + \ 10^{\left(\frac{50}{10}\right)}\right) = 53\ decibels$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Although humans generally can hear sounds with frequencies between 20 and 20,000 Hz, most of the sound humans are normally exposed to do not consist of a single frequency, but rather a broad range of frequencies perceived differently by the human ear. In general, humans are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. Instruments used to measure sound, therefore, include an electrical filter that enables the instrument's detectors to replicate human hearing. This filter—known as the "A-weighting" or "A-weighted sound level"—filters low and very high frequencies, giving greater weight to the frequencies of sound to which the human ear is typically most sensitive. Most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Sound levels are usually not steady and vary over time. Therefore, a method for describing either the average character of the sound or the statistical behavior of the variations over a period of time is necessary. The continuous equivalent noise level (Leq) descriptor is used to represent the average character of the sound over a period of time. The Leq represents the level of steady-state noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. Leq is useful for evaluating shorter time periods over the course of a day. The most common Leq averaging period is hourly, but Leq can describe any series of noise events over a given time period.

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable because household noise has

decreased as people begin to retire and sleep. Accordingly, a variety of methods for measuring and normalizing community environmental noise have been developed. The California Office of Planning and Research's General Plan Noise Element Guidelines identifies the following common metrics for measuring noise (OPR, 2017):

- **Ldn (Day-Night Average Level):** The average equivalent A-weighted sound level during a 24-hour day, divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM). A 10 dB "penalty" is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45-dBA nighttime sound level (e.g., at 2 AM) would contribute as much to the overall day-night average as a 55-dBA daytime sound level (e.g., at 7 AM).
- **CNEL (Community Noise Equivalent Level):** The CNEL descriptor is similar to Ldn, except that it includes an additional 5 dBA penalty for noise events that occur during the evening time period (7 PM to 10 PM). For example, a 45-dBA evening sound level (e.g., at 8 PM) would contribute as much to the overall day-night average as a 50-dBA daytime sound level (e.g. at 8 AM).

The artificial penalties imposed during Ldn and CNEL calculations are intended to account for a receptor's increased sensitivity to noise levels during quieter nighttime periods. As such, the Ldn and CNEL metrics are usually applied when describing longer-term ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. In contrast, the Leq metric is usually applied to shorter reference periods where sensitivity is presumed to remain generally the same.

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. The strength of the source is often characterized by its "sound power level." Sound power level is independent of the distance a receiver is from the source and is a property of the source alone. Knowing the sound power level of an idealized source and its distance from a receiver, sound pressure level at the receiver point can be calculated based on geometrical spreading and attenuation (noise reduction) as a result of distance and environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and shielding by terrain or barriers.

For an ideal "point" source of sound, such as mechanical equipment, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. In contrast, a "line" source of sound, such as roadway traffic or a rail line, spreads out in a cylindrical pattern and theoretically attenuates by 3 dB with each doubling of distance from the line source; however, the sound level at a receptor location can be modified further by additional factors. The first is the presence of a reflecting plane such as the ground. For hard ground, a reflecting plane typically increases A-weighted sound pressure levels by 3 dB. If some of the reflected sound is absorbed by the surface, this increase will be less than 3 dB. Other factors affecting the predicted sound pressure level are often lumped together into a term called "excess attenuation." Excess attenuation is the amount of additional attenuation that occurs beyond simple spherical or cylindrical spreading. For sound propagation outdoors, there is almost always excess attenuation, producing lower levels than what would be predicted by spherical or cylindrical spreading. Some examples include: attenuation by sound absorption in air; attenuation by barriers; attenuation by rain, sleet, snow, or fog; attenuation by grass, shrubbery, and trees; and attenuation from shadow zones created by wind and

temperature gradients. Under certain meteorological conditions, like fog and low-level clouds, some of these excess attenuation mechanisms are reduced or eliminated due to noise reflection.

Noise Effects on Human Beings: Human response to sound is highly individualized because many factors influence a person's response to a particular noise, including the type of noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the noise occurs. In addition, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence a person's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed" with annoyance being an expression of negative feelings resulting from interference with activities, the disruption of one's peace of mind, or degradation of the enjoyment of one's environment.

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects. Noise can mask important sounds and disrupt communication between individuals in a variety of settings, resulting in a slight irritation to a serious safety hazard, depending on the circumstance. Noise-induced sleep interference is a critical factor in community and personal annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep resulting in short-term adverse effects such as mood changes, job/school performance, etc.

Physiological effects are usually limited to prolonged and/or repeated exposure to high noise environments at facilities such as, but not limited to, industrial and manufacturing facilities or airports.

Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it to the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible; however, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

Existing Noise and Vibration Environment: The proposed project site is located in the easternmost portion of the City. It is bounded by Highway 4 to the north, open space to the west and south, and by generally vacant land to the east, with the exception of two single family residences that are located in the unincorporated Contra Costa County community of Christie.

The General Plan Noise Element identifies transportation noise as the predominant source of noise in the City. Highway 4 west of Franklin Canyon is identified as a major noise source in the City, and Highway 4 east of Franklin Canyon is identified as a moderate noise source (City of Hercules, 1998 pg. 7). The Noise Element also identifies the BNSF railway as a moderate noise source.

Ambient noise measurements were collected at the site over an approximately 48-hour period from 2:30 PM on August 10, 2020 to approximately 2:00 PM on August 12, 2020 (see Appendix C). The ambient noise levels were digitally measured and stored using two (2) Larson Davis SoundTrack LxT sound level meters that meet American National Standards Institute requirements for a Type 1 integrating sound level meter. Each sound meter was calibrated immediately before the monitoring period using a reference one-kilohertz (1kH) check frequency and 114 dB sound pressure level and found to be operating within normal parameters for sensitivity. Measurements were continuously collected over the sample periods in one-minute intervals. Weather conditions during the monitoring were generally hazy during the daytime. Temperatures ranged from the high 50's (overnight) to the mid-60's / mid-70's (in the later afternoon). Winds were generally light and variable and ranged from calm conditions during the nighttime and morning to approximately 5- to 10-miles per hour during later afternoon periods.

The ambient noise monitoring conducted included one (1) long-term (LT) measurement and three (3) short-term (ST) measurement at locations selected to:

- Provide direct observations and measurements of existing noise sources at and in the vicinity of the Franklin Canyon Golf Course; and
- Determine typical, ambient noise levels at and in the vicinity of the Franklin Canyon Golf Course.

The ambient noise monitoring locations are shown on **Error! Reference source not found.** and described below.

- **Location LT-1** was located east of the Hole 7 fairway, approximately 170 feet from the project site's eastern property line. Ambient noise levels at this location were measured from approximately 2:30 PM on August 10th to approximately 2:00 PM on August 12th. The meter was attended by a qualified field monitor from approximately 2:30 PM to 4:15 PM on August 10th. The ambient noise levels measured at location LT-1 are considered representative of the day- and night-time ambient noise levels along the project site's eastern property line that is shared with the single-family home at 1025 Christine Road.
- **Location ST-1** was located southeast of the Hole 7 putting green, approximately 225 feet from the flag. Ambient noise levels at this location were measured from approximately 2:30 PM to 3:00 PM on August 10th. The ambient noise levels measured at location ST-1 are considered representative of the daytime noise levels at the single-family home located east of the meter at 1015 Christine Road. ST-1 was taken toward the property line, which is topographically higher than the rest of the project site to the west.
- **Location ST-2** was located north of the Hole 8 tee-off location, and approximately 250 feet south of the Highway 4 centerline. Ambient noise levels at this location were measured from approximately 3:10 PM to approximately 3:40 PM on August 10th. The ambient noise levels

measured at location ST-2 are considered representative of the daytime noise levels along the northern portion of the project property.

Figure 18. Ambient Sound Monitoring Locations

Note: The center of the sound meter icon reflects the location of the ambient noise measurement.

- **Location ST-3** was located immediately east of, and adjacent to, the Hole 7 tee-off location. Ambient noise levels at this location were measured from approximately 3:50 PM to 4:20 PM on August 10th. The ambient noise levels measured at location ST-3 are considered representative of the daytime noise levels along the southern portion of the project property, adjacent to a PG&E substation and open space.

Based on observations made during the ambient noise monitoring, the existing noise environment in the project vicinity consists primarily of highway noise associated with vehicular activity on Highway 4, nature sounds (e.g., birds chirping), golfers recreating (e.g., conversations, golf cart operation, clubs making contact with golf balls), and the occasional passing of freight trains (e.g., train horns and wheels screeching while in contact with rail lines). Table 10, *Summary of Measured Ambient Noise Levels*, summarizes the results of the ambient noise monitoring. Please refer to Appendix C for detailed ambient noise monitoring results.

Table 10. Summary of Measured Ambient Noise Levels (dBA)

Site	Duration	L_{min} (A)	L_{max} (A)	L_{eq} Range (A)			CNEL (B)
				Daytime (7 AM – 7 PM)	Evening (7 PM – 10 PM)	Nighttime (10 PM – 7 AM)	
LT-1	24-hours; 9/10-9/11	35.1	79.0	47.7 - 54.2	48.6 – 51.3	44.9 – 52.0	55.5
	24-hours; 9/11-9/12	34.4	72.9	46.0 – 52.3	49.0 – 49.4	43.9 – 50.5	54.7
ST-1	30-minutes	52.4	80.4	59.0 – 65.8	--	--	--
ST-2	30-minutes	51.6	73.5	59.9 – 60.4	--	--	--
ST-3	25-minutes	45.0	67.4	49.1 – 50.6	--	--	--

Source: MIG, 2020 (See Appendix C)

(A) All noise levels are presented in terms of dBA. L_{eq} values are hourly averages for LT-1 and 10-minute averages for ST-1 through ST-3 (except for the first interval for ST-3, which was 5 minutes). L_{min} and L_{max} values represent the lowest and highest measured ambient noise level over the total measurement period (e.g., 34.4 dBA is the lowest measured noise level over the 24-hour monitoring period for 9/11 – 9/12 at LT-1).

(B) CNEL values include penalties for evening (5 dBA) and nighttime (10 dBA) periods. There is insufficient monitoring data at ST-1 through ST-3 to compute CNEL values.

As shown in Table 10, the measured ambient noise levels at and in proximity of the project site are relatively low and do not fluctuate substantially. Average hourly noise levels during the daytime period (7 AM to 7 PM) ranged from approximately 46.0 to 65.8 dBA across the site, with higher noise levels associated with locations in closer proximity to recreational activities (i.e., the ST measurements, which were located to tee-off and putting activities, are higher than the LT measurement, which was located in an area that was not frequented often by golfers) and measurements taken closer to Highway 4. Based on field observations during monitoring periods, L_{max} noise levels at the site are associated with freight trains passing (i.e., use of the horn and contact between metal wheels and the railroad tracks), while typical ambient background primarily consisted of traffic along Highway 4 and nature sounds.

Noise Sensitive Receptors

Noise sensitive receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, hospitals, schools, and parks are examples of noise sensitive receptors that could be sensitive to changes in existing environmental

noise levels. The noise sensitive receptors adjacent or in close proximity (within 1,000 feet) of the perimeter of the proposed project include:

- The single-family residential homes located at 1015 and 1025 Christie Road, adjacent to the project site's eastern property line.

Applicable Noise Standards: **The California Building Standards Code** is contained in Title 24 of the California Code of Regulations and consists of 11 different parts that set various construction and building requirements. Part 2, California Building Code, Section 1207, Sound Transmission, establishes sound transmission standards for interior walls, partitions, and floor/ceiling assemblies. Specifically, Section 1207.4 establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA DNL or CNEL (as set by the local General Plan) in any habitable room.

The California Green Building Standards Code is Part 11 to the California Building Standards Code. Chapter 5, Nonresidential Mandatory Standards, Section 5.507 establishes the following requirements for non-residential development that may be applicable to the proposed project.

- Section 5.507.4.1.1 sets forth that buildings exposed to a noise level of 65 dB Leq (1-hour) during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composting sound transmission class (STC) rating of at least 45 (or an outdoor indoor transmission class (OITC) of 35), with exterior windows of a minimum STC of 40.
- Section 5.507.4.2 sets forth that wall and roof assemblies for buildings exposed to a 65 dBA Leq pursuant to Section 5.507.4.1.1, shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed 50 dBA Leq in occupied areas during any hour of operation. This requirement shall be documented by preparing an acoustical analysis documenting interior sound levels prepared by personnel approved by the architect or engineer of record.

The Hercules General Plan Noise Element includes the following policies relevant to the proposed project:

- **Policy 2:** New non-residential land development projects shall meet acceptable exterior noise levels standards as set forth in the General Plan in Table [11] (*City of Hercules Noise / Land Use Compatibility Standards*). The noise contour map on file at City Hall shall be used to screen projects to determine if acoustical studies will be required.
- **Policy 3:** Protect existing noise-sensitive land uses from long-term noise impacts generated by new projects. The city shall use the following criteria to judge the significance of long-term noise impacts on existing noise-sensitive land uses:
    - Noise level increases resulting from traffic will be considered significant if: (1) the noise level increase is 5 dBA Ldn or greater and the future noise levels is less than 60 dBA Ldn; or (2) the noise levels increase is 3 dBA Ldn or greater and the future noise level is 60 dBA Ldn or greater.
    - Noise levels produced by stationary sources associated with new projects will be considered significant if they exceed the noise levels identified in [Table 12] (*City of Hercules Maximum Allowable Noise Exposure to Stationary Sources*), as measured at any affected noise-sensitive land use.
    - Noise levels produced by other noise sources (such as ballfields, etc.) will be considered significant if an acoustical study demonstrates that a significant adverse community

response would occur. The criteria to judge the community response would be based on acceptable analysis techniques such as the International Standards Organization's "Assessment of Noise with Respect to Community Response, ISO R-1996-1971."

- **Policy 4:** Noise created by commercial or industrial sources associated with new projects or developments shall be controlled so as not to exceed the noise level standards set forth in [Table 12] as measured at any affected residential land use.
- **Policy 6:** Control the noise level at sensitive land uses generated by construction activities through implementation of the following measures:
    - For construction near noise-sensitive areas, as determined by the Community and Business Development Department, require that noisy construction activities (including truck traffic) be scheduled for period according to construction permit to limit impact on adjacent residents or other sensitive receptors.
    - Develop a construction schedule that minimized potential cumulative construction noise impacts and accommodates particularly noise-sensitive period for nearby land uses (e.g., schools, churches, etc.).
    - Where feasible, require that holes for driven poles be pre-drilled to reduce the level and duration of noise impacts.
    - Where feasible, construct temporary solid noise barriers between source and sensitive receptors(s) to reduce offsite propagation of construction noise. This measure could reduce construction noise by up to 5 decibels.
    - Require internal combustion engines used for construction purposes to be equipped with a properly operating muffler of a type recommended by the manufacturer. Also, require impact tools to be shielded per manufacturer's specifications.
- **Policy 7:** Reduce the level of truck-generated noise in residential areas through implementation of the following restrictions:
    - The City shall restrict truck traffic in residential areas except for non-regular deliveries within the area or on designated truck routes. The City shall review and update the noise ordinance to limit truck traffic noise impacts to sensitive receptors.
    - The City shall post signs prohibiting trucks from using the proposed Claeys Road extension, except local deliveries. All other trucks shall be required to use Sycamore Avenue to reach the Claeys Road / SR 4 interchange.

Table 11. City of Hercules General Plan Noise / Land Use Compatibility Standards (continued)

Land Use Category	Community Noise Exposure Level (CNEL)					
	55	60	65	70	75	80
Residential, Hotels, and Motels						
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, and Nursing Homes						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						

Table 11. City of Hercules General Plan Noise / Land Use Compatibility Standards (continued)

Land Use Category	Community Noise Exposure Level (CNEL)					
	55	60	65	70	75	80
Industrial, Manufacturing, Utilities, and Agriculture						

Source: City of Hercules General Plan Noise Element, Table 6: Land Use Compatibility for Community Noise Environments in the City of Hercules (modified) (Hercules, 1998)

Key:

Normally Acceptable – Specified land use is satisfactory, based on the assumption that any building involved are of normal construction, without and special noise insulation requirement.

Conditionally Acceptable – Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features are included in the design to mitigate noise to normally acceptable levels..

Unacceptable – New construction should be generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Table 12. City of Hercules Maximum Allowable Noise Exposure to Stationary Sources

Metric	Standard (dBA)[A]	
	Daytime (7 AM to 10 PM)[B]	Nighttime (10 PM to 7 AM)[B][C]
Hourly Leq[D]	50	45
Maximum Level, Lmax[D]	70	65
Maximum Level for Impulsive Noise, Lmax[E]	65	60

Source: City of Hercules General Plan Noise Element, Table 7: Maximum Allowable Noise Exposure Station Noise Sources (modified) (Hercules, 1998)

Notes:

(A) As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

(B) Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels. Allowable levels shall be reduced 5 dBA if the ambient hourly Leq is at least 10 dBA lower than the allowable level.

(C) Applies only where the receiving land use operates or is occupied during nighttime hours.

(D) Sound level measurements shall be made with "slow" meter response.

(E) Sound level measurements shall be made with a "fast" meter response.

City of Hercules Municipal Code. The City of Hercules adopted a Zoning Ordinance with applicable noise standards in Section 13-31.300(11): Noise. Many of the ordinances and standards are duplicative of the policies contained in the Noise Element of the City's General Plan; however, the following additional regulation would also apply to the proposed project:

- **Section 13-31.300(11)(E): Noise Attenuation Techniques.** Where noise levels exceed community noise level standards for a proposed land use, one or more of the following techniques may be required to reduce the noise to acceptable level:
    - Proper site planning to reduce noise impacts should be investigated for a project. By taking advantage of the natural shape and contours of the site, it is often possible to arrange the buildings and other uses in a manner which will reduce and possibly eliminate noise impact. Site planning techniques include:
        - Increasing the distance between the noise sources and the receiver.
        - Placing non-noise sensitive structures such as parking lots maintenance facilities and utility areas between the source and the receiver.
        - Using non-noise sensitive structures such as garages to shield noise-sensitive areas.
        - Orienting buildings to shield outdoor spaces from a noise source.

- Architectural Layout. In many cases, noise reduction requirements can be met by giving attention to layout of **noise**-sensitive spaces. Bedrooms, for example, will be considerably quieter if placed on the side of the house facing away from the freeway. Similarly, balconies facing freeways should be avoided. Quiet outdoor spaces can be provided next to a noisy highway by creating a U-shaped development which faces away from the highway.
- Noise Barriers. To be effective, a noise barrier must be massive enough to prevent significant noise transmission through it and high enough to shield the receiver from the noise source. The minimum acceptable surface weight for a noise barrier is 4 lbs./sq. ft. (equivalent to 3/4-inch plywood) and the barrier must be carefully constructed so that there are no cracks or openings. To be effective, a barrier must interrupt the line-of-sight between the noise source and the receiver.

Noise Impact Analysis

Temporary Construction Noise: As described in Section 6.3, Air Quality, the proposed project involves redeveloping approximately half of an existing golf course with a new RV resort and clubhouse facility over an approximately 10-month period, beginning as soon as August 2021. Construction activities are estimated to disturb approximately 35 acres, and include: demolition of the existing clubhouse, site clearing and grubbing, grading, utility infrastructure (e.g., sewer, water, electricity, etc.) installation, foundation / base placement, paving, vertical development of a new clubhouse and associated amenities, and architectural coating work. Project construction activities, duration, and typical equipment usage are shown in previous Table 2, *Construction Activity, Duration, and Typical Equipment*, of this Initial Study (Section 6.3, Air Quality).

Project construction would require the use of heavy-duty construction equipment that could temporarily increase noise levels at adjacent property lines near work areas. The type of equipment used would include bulldozers, loaders, graders, compactors/rollers, a small crane, and material handlers, lifts, and trucks. Table 13, *Typical Construction Equipment Noise Levels (dBA)*, presents the estimated, worst-case noise levels that could occur from operation of typical construction equipment used to develop the project. Potential construction noise levels are estimated for worst-case equipment operations at a distance of 50 feet (reference noise level) and 150 feet (the approximate distance from the construction work area to a sensitive receptor property line).

Table 13. Typical Construction Equipment Noise Levels (dBA)

Equipment	Reference Noise Level at 50 Feet (Lmax)[(A)]	Percent Usage Factor[(B)]	Predicted Noise Levels (Leq) at:	
			50 Feet	150 Feet
Bulldozer	85	40	81	71
Compact Roller	80	20	73	63
Crane	85	16	77	67
Excavator	85	40	81	71
Grader	85	40	81	71
Paver	85	50	82	72
Pneumatic tools	85	50	82	72
Scraper	85	40	81	71
Delivery Truck	85	40	81	71

Sources: Caltrans, 2013 and FHWA, 2010.
(A) L_{max} noise levels based on manufacturer's specifications.
(B) Usage factor refers to the amount of time the equipment produces noise over the time period.

The worst-case Leq and Lmax noise levels associated with the operation of bulldozers, graders, and scrapers are predicted to be approximately 81 and 85 dBA, respectively, at a distance of 50 feet from the equipment operating area. At an active construction site, it is not uncommon for two or more pieces of construction equipment to operate at the same time and in close proximity. A single bulldozer provides a sound level of 71 dBA Leq at a distance of 150 feet; when two identical sound levels are combined, the noise level increases to 74 dBA Leq and when three identical sound levels are combined, the noise level increases to 76 dBA Leq. These estimates assume no shielding or other noise control measures are in place at or near the work areas. These maximum noise levels would occur for a short period time as site clearing and grading are occurring (estimated to be approximately two to two-and-a-half months total). The majority of activities at the site (e.g., paving, building development, etc.) would likely involve less operation of heavy-duty off-road equipment and most of the construction activities (including site clearing and grading) would generally tend to occur toward the interior of the site, away from property lines and sensitive receptor locations.

The noise generated from project construction would be temporary and would not produce the same sound levels every day. In addition, the City does not maintain numeric thresholds for the purposes of evaluating construction noise level. Neither the General Plan nor the Hercules Municipal Code specify a noise level for construction activities; however, according to Policy 6 in the City's General Plan, noise-producing construction activity is required to be controlled through the implementation of best management noise reduction practices. Accordingly, the City would implement Mitigation Measure NOI-1 to ensure compliance with best management noise reduction practices and restrictions on permissible hours of construction to reduce the project's construction noise impact. With the incorporation of Mitigation Measure NOI-1, construction noise impacts would be less than significant.

Mitigation Measure NOI-1: The City shall require the applicant to incorporate the following construction noise best management practices into all applicable project bid, design, and engineering documents:

1) *Limit Construction Hours*: Construction activities shall be limited to the least noise-sensitive times and will comply with the City's noise ordinances. Construction activities shall be allowed on weekdays between the hours of 7:00 AM and 7:00 PM, and on

Saturdays between the hours of 10:00 AM and 6:00 PM. No construction shall be allowed on Sundays and federal holidays. All noisy construction activities (including truck traffic) shall be scheduled for periods, according to the construction permit, to limit impacts on adjacent sensitive receptors.

2) *Locate Staging Areas away from Sensitive Receptors:* The City's construction specification shall require that the contractor select staging areas as far as feasibly possible from sensitive receptors.
3) *Maintain Mufflers on Equipment:* Heavy equipment engines shall be covered, and exhaust pipes shall include a muffler in good working condition.
4) *Equipment Location and Shielding:* Stationary equipment such as compressors, generators, and welder machines shall be located as far away from surrounding residential land uses as possible. The project shall connect to existing electrical service at the site to avoid the use of stationary, diesel-, or other alternatively fueled power generators, if feasible.
5) *Prohibit Radios and Other Amplified Sound Devices:* No radios or other amplified sound devices shall be audible beyond the property line of the construction site.
6) *Impact Tools:* Impact tools such as jack hammers shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. When use of pneumatic tools is unavoidable, it shall be ensured the tool will not exceed a decibel limit of 85 dBA at a distance of 50 feet. Pneumatic tools shall also include a noise suppression device on the compressed air exhaust.

Exterior Noise / Land Use Compatibility: The proposed project consists of developing a new RV resort on an existing golf course. As part of construction activities, the existing clubhouse would be demolished and replaced by a new, approximately 10,500 square foot clubhouse. Onsite receptors that would utilize the RV resort are not considered "sensitive receptors" because they are transient (i.e., they would not be at the site for a prolonged amount of time) and are bringing their own form of shelter (i.e., RV or tent) which would have varying attenuation capacities. It is anticipated most individuals utilizing the RV resort would engage in outdoor activities (e.g., golfing or swimming). Therefore, the City's noise and land use criteria identified in the General Plan for "Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds" land uses are utilized for identifying noise / land use compatibility. According to the City's General Plan land use and noise compatibility guidelines (see Table), "Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds" are considered "Normally Acceptable" up to 65 dBA CNEL. Based on the results of the noise monitoring, average 24-hour noise levels are anticipated to be approximately 55 dBA CNEL toward the interior of the site. While noise levels may be slightly higher toward the northern portion of the site (i.e., toward Highway 4), the proposed land use is considered to be compatible with the existing noise environment because 1) ambient noise measurements taken at the site, which include a conservative estimate of train noise present along the eastern portion of the site, indicate the ambient noise environment is appropriate for the proposed use, and 2) the site is currently used for outdoor recreation activities and, while the specific outdoor activities may change slightly under implementation of the proposed project, the amenities provided by the project (e.g., pools, golfing, etc.) are generally encompassed by the "Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds" land use designation. Therefore, the proposed project's land use would be compatible with the existing noise environment.

Potential Onsite Operational Noise Levels: Once constructed, the proposed project would generate noise from daily activities typical of RV resorts (e.g., doors opening and closing, washing of RVs,

onsite vehicular circulation) and outdoor recreational activities associated with the amenities proposed as part of the project (e.g., pools and golfing). Specifically, the proposed project's onsite noise sources would include:

- Automobile travel along onsite roads, RV parking, and other miscellaneous mobile noise sources such as doors closing and engine start-up and revving. The project's potential mobile noise sources would not operate continuously. Once parked and engines shut off, noise would cease to be generated. Onsite utility connections would be provided, so the use of generators is not anticipated.
- RV washing, which would occur toward the southeastern portion of the project property, in the same location that covered RV storage parking would be provided.
- Human use of common areas, such as the outdoor dining/pool area, open space/pond area, and courtyard with bocce ball.

The project noise sources described above would not have the potential to generate substantial noise levels that could exceed the City's maximum allowable noise exposure standards for stationary sources (see Table) for the following reasons. First, most of the proposed activities that would be located toward the eastern portion of the site would consist of mobile (i.e., non-stationary) sources (e.g., onsite travel, parking, doors closing, etc.). As noted previously, the proposed project would provide onsite utility hook-ups, which would eliminate the need to run the RV's engine or separate, standalone auxiliary generator; however, there is still the possibility that someone at the site may run their generator at the site for one reason or another. Most new generators, such as a Westinghouse iGen2200, produces a sound level reading of 52 dBA. Based on the distance between where this equipment would be operating and the nearest sensitive receptor location, this noise source would be indistinguishable from the background noise environment, which is characterized by traffic along Highway 4. Second, the RV wash station that would be constructed as part of the proposed project would be located in an area that would be used for long-term RV storage. The presence of the physical structure used to house RVs that are not in use, in conjunction with the stored RVs, would serve to inhibit noise from this source from reaching sensitive receptor locations, because it would provide a direct line-of-sight impediment and more than 450 feet from the nearest sensitive receptor location. This is consistent with the intent of Municipal Code Section 13-31(11)(E), which suggests orienting buildings to shield outdoor spaces from a noise source. Finally, the primary noise generating sources associated with the proposed project (e.g., pool use and other outdoor recreational activities) would generally take place toward the interior of the site, near the clubhouse, where these amenities would be located. The distance between these noise sources and sensitive receptor locations (at least approximately 1,400 feet, or more than ¼ mile) is sufficiently far to ensure that noise levels from these sources would be substantially lower than measured background noise associated with vehicular activity on Highway 4. The project's potential onsite noise levels, therefore, would not exceed the day- and night-time noise standards for stationary sources. This impact would be less than significant.

Potential Off-Site Traffic Noise Levels: The proposed project would generate traffic that would be distributed onto the local roadway system and potentially increase noise levels along some travel routes in proximity of the project site.

Based on the traffic analyses conducted for the proposed project, the site would result in a net reduction in trips generated at the site and is likely to result in reduced or unchanged vehicle miles traveled (VMT) (Abrams Associates, 2020; DKS Associates, 2020). Therefore, although the types of vehicles that would travel to and from the site may change, the proposed project would ultimately

result in fewer trips on the local roadways. The larger vehicles (i.e., RVs) could produce slightly higher noise levels than those associated with automobiles, but the number of trips would be less frequent and therefore would not have the potential to cause the existing noise level to increase by 3 dBA or more (commonly noted as an increase that can be perceived in a non-complex noise environment).[4] Furthermore, the ambient noise environment is heavily dominated by traffic along Highway 4. Therefore, even if the fewer trips to the site are slightly louder, the change would likely be imperceptible and drowned out by other vehicular activity.

The proposed project would result in substantially less than a doubling of traffic volumes and, although the new trips may be slightly louder, they would not be at a sufficient rate nor magnitude of loudness to cause the noise environment to increase by 3 dBA or more. Therefore, the proposed project would not result in a substantial, permanent increase in noise levels along the roadways used to access the project. This impact would be less than significant.

b. Less than Significant Impact. As described further below, the proposed project would not generate excessive groundborne vibration or groundborne noise levels. This impact would be less than significant.

Vibration Background Information: Vibration is the movement of particles within a medium or object such as the ground or a building. Vibration may be caused by natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or humans (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources are usually characterized as continuous, such as factory machinery, or transient, such as explosions.

As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or discussed in dB units in order to compress the range of numbers required to describe vibration. As with airborne sound, the groundborne velocity can also be expressed in decibel notation as velocity decibels, or dBV (FTA, 2018). The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a low-frequency rumble noise, referred to as groundborne noise. This report uses peak particle velocity (PPV) to describe vibration effects. Vibration impacts to buildings are usually discussed in terms of PPV in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (e.g., crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments, such as an electron microscope.

Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

[4] Caltrans generally considers a doubling of total traffic volume to result in a three dBA increase in traffic-related noise levels (Caltrans, 2013).

Caltrans' *Transportation and Construction Vibration Guidance Manual* provides a summary of vibration criteria that have been reported by researchers, organizations, and governmental agencies (Caltrans, 2018). Chapter six of this manual provides guidelines and criteria for the evaluation of potential vibration impacts on buildings and humans from transportation and construction projects. These criteria are summarized below in Table , *Caltrans' Vibration Criteria for Building Damage*, and Table , *Caltrans' Vibration Criteria for Human Response*.

Table 14. Caltrans' Vibration Criteria for Building Damage

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
Source: Caltrans, 2018		

Table 15. Caltrans' Vibration Criteria for Human Response

Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
Source: Caltrans, 2018		

Vibration Impact Analysis: The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. For the proposed project, the largest earthmoving equipment would primarily operate during grading and paving work. This equipment would, at worst-case and for limited periods of time (e.g., 25 days for grading and 55 days for paving; see earlier Table 2, *Construction Activity, Duration, and Typical Equipment* in Section 6.3, Air Quality, of this Initial Study) and take place at a distance of approximately 200 feet or more from the nearest sensitive receptor locations on Christie Road.[5] Table 16, *Potential Groundborne Vibration* Levels, lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during project construction, as well as the estimated vibration levels at distances of 50 feet, 200 feet, and 400 feet from the project site.

[5] 200 feet is the approximate distance between the nearest RV parking location on the eastern portion of the site, and the residence at 1025 Christie Road; some light grading may take place at a distance closer than 200 feet; however, as no project amenities are proposed closer than 200 feet, it is unlikely and unanticipated there would be equipment operating within 200 feet of a residence for more than a few hours or more, at a maximum. The use of 200 feet for the vibration analysis is more appropriate than the 150 feet used for the construction noise analysis, since vibration would be more likely to be perceived while in a structure. Airborne noise levels would be more likely to be heard either inside or outside a building.

Table 16. Potential Groundborne Vibration Levels

Equipment	Peak Particle Velocity[(A)] (Inches/Second) at Distance		
	50 Feet	200 Feet	400 Feet
Vibratory Roller	0.098	0.021	0.010
Large Bulldozer	0.042	0.009	0.004
Small Bulldozer	0.014	0.003	0.001
Loaded Truck	0.035	0.008	0.004
Jackhammer	0.016	0.004	0.002

Sources: Caltrans, 2013 and FTA 2018.
(A) Estimated PPV calculated as: PPV(D)=PPV(ref*(25/D^1.3)) where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.3 for competent sands, sandy clays, silty clays, and silts).

As shown in Table, construction equipment vibration levels from a roller, or large bulldozer could slightly exceed Caltrans vibration detection thresholds (see Table) for "barely perceptible" (0.035 inches/second) when operating in close proximity (within 50 feet) to adjacent residences; however, as discussed previously, the majority of earthwork would generally take place 200 feet or more from the nearest sensitive receptor location and vibration noise levels associated with any equipment used would not be perceptible at this distance. As such, this is not considered to be excessive, because any equipment operation near property lines would be short in duration and intermittent (lasting only a few hours in work areas adjacent to property lines; i.e., approximately 50 feet from residential buildings). As construction equipment moves around the site and operates at distances of 50 feet or more from nearby residences, vibration levels would begin to drop to levels that would not be perceptible according to Caltrans' thresholds. Additionally, potential construction vibration levels would not result in structural damage because the estimated vibration levels are substantially below Caltrans' thresholds for potential damage to even the most sensitive of residential buildings (0.50 inches/second for older, un-reinforced concrete masonry buildings or historic buildings). Thus, short-term, intermittent construction equipment vibration levels would not be excessive.

Once operational, the proposed project would not result in the operation of sources that would generate substantial groundborne vibration levels.

c. No Impact. The proposed project is not within the vicinity of a private airstrip or an airport land use plan, nor is it within two miles of a public or private airport. The nearest airport in proximity of the project site, Buchanan Field Airport, is located approximately 8.3 miles to the east. The proposed project would not expose people residing or working in the project area to excessive noise levels. No impact would occur.

References:

Abrams Associates Traffic Engineering, Inc. (Abrams Associates) 2020. *Transportation Impact Analysis Franklin Canyon RV Resort and Golf Course Contra Costa County*. March 18, 2020.

California Office of Planning and Research (OPR) 2017. State of California General Plan Guidelines. Sacramento, CA.

California Department of Transportation (Caltrans) 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol.* Sacramento, California. September 2013.

California Department of Transportation (Caltrans) 2018. *Transportation and Construction Vibration Guidance Manual*. Sacramento, California. April 2018.

DKS Associates 2020. *Franklin Canyon VMT Analysis (Draft)*. August 18, 2020.

Hercules, City of. 1998. *General Plan Noise Element*. Adopted September 22, 2998.

Hercules, City of. 2019. City of Hercules Municipal Code. Accessed at https://www.codepublishing.com/CA/Hercules/ (accessed November 1, 2020).

U.S. Federal Highway Administration (FHWA) 2010. "Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges." *U.S. Department of Transportation FHWA*. August 24, 2017. Accessed November 1, 2020 at: <http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm>

U.S. Federal Transit Administration (FTA) 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC. September 2018.

6.14 Population and Housing

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

Conclusion: Regarding population and housing, the proposed project would not result in any significant environmental impacts.

Documentation:

a. No Impact. There are no new homes or businesses proposed as part of the project, and the project would not result in direct population growth. The RV campsites and tent bungalows are proposed to have a limited 30 day or less stay and would prohibit long-term RV occupancy. Living quarters for the onsite caretaker would be located on the second floor of the clubhouse. During construction there would be a short-term increase in construction jobs. It is anticipated that workers would be employed locally and live within Hercules or nearby. The project would include infrastructure improvements only to serve the project itself. As a result, there would be no impact from unplanned population growth, either directly or indirectly.

b. No Impact. One residence would be constructed, but there is no existing housing onsite, so no people would be displaced due to project development. There would be no impact from displacement.

References:

City of Hercules, June 26, 2019. Planning Division, Notice of Decision "Application # ZD 19-01 For Zoning Clearance for Allowable Use Determination for Franklin Canyon Recreational Vehicle (RV) Resort and Golf Course Project. Available at https://www.ci.hercules.ca.us/home/showdocument?id=12982 (accessed July 20, 2020).

6.15 Public Services

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or 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:				
a) Fire protection			✓	
b) Police protection			✓	
c) Schools				✓
d) Parks			✓	
e) Other Public Facilities			✓	

Conclusion: Regarding public services, the proposed project would not result in any significant environmental impacts.

Documentation:

a. Less than Significant Impact. The City of Hercules is served by the Rodeo-Hercules Fire Protection District. The District provides 24-hour protection to the City of Hercules and the unincorporated areas of Rodeo. A 24-hour dispatch service is provided to the District under contract with the City of Pinole. The District has an automatic response agreement with the Pinole Fire Department

The Rodeo-Hercules Fire Protection District has two fire stations. The closest to the project site is a three-bay station at 1680 Refugio Valley Road in Hercules (Station #76). An additional, four-bay station is at 326 Third Street in Rodeo. District equipment includes six pumping machines, four wildland units, one rescue truck, one utility truck, and four staff vehicles.

Station #76 is located approximately 2 miles west of the project site. This station would be the first to respond to calls from the project site, and driving distance is estimated at 12 minutes. The response times to the project site from Fire Station #76 do not meet the current industry standard of 6 minutes on-scene time. The proposed project would not change the response times from the existing conditions, nor require the construction of additional fire facilities. Additionally, the Rodeo-Hercules Fire Protection District and Fire Inspector would review the project design prior to the issuance of a building permit to ensure incorporation of adequate fire and life safety features in the project.

The City has also adopted the California Fire Code (Chapter 15 of the municipal code) with modifications for local conditions. The proposed project would comply with the adopted Fire Code and policies related to fire protection. Per the Rodeo-Hercules Fire Protection District, the RV park would be considered a Special Occupancy Park which requires compliance with the California Code of Regulations Title 25, Division 1, Chapter 2.2, Section 2000. This Code includes specific

requirements for RV park construction, maintenance, use, occupancy, and design. Also included are requirements for items such as lot identification, lighting, roadway width, plans, permits, accessory structures and buildings, application procedures, fees, and enforcement. The clubhouse design and building construction must meet California Building and Fire Code elements specified in the 2019 Uniform Building and Fire Codes. The Rodeo-Hercules Fire Protection District anticipates no or negligible increase in demand for fire services, and final project plans would be reviewed by the Fire Protection District. Impacts would be less than significant.

b. Less than Significant Impact. The City of Hercules is within the jurisdiction of the City of Hercules Police Department (HPD). HPD provides police protection services throughout the city. HPD headquarters are located at 111 Civic Drive, approximately 2.5 miles west of the project site and roughly 10 minutes away driving.

The Hercules Police Department anticipates no or negligible demand for police protection services and is not expected to compromise response times or exceed planned staffing levels/equipment nor directly require the construction of additional police facilities. The project site has previously been developed for recreation uses, and the proposed project would not result in substantial adverse physical impacts to police service facilities.

Emergency responders must enter the site east on Highway 4 to Cummings Skyway before heading west on Highway 4, which is unavoidable to get back to the city, and this situation increases response time. Per Google Maps, depending on the type of call at the RV park and the time of day/night, this extended site exit would add 3 to 4 minutes of driving to the next call waiting in the city. With the construction of the additional emergency exit via Christie Road on the east end of the project site, response times would decrease, and the impact would be less than significant.

c. No Impact. The project does not propose any residential development and would not affect the number of students attending public schools. The school development impact fee only applies to retail, or single- and multi-family developments. There would be no impact on school facilities.

d. Less than Significant Impact. The proposed project does not propose any residential development that would result in population growth. The project would incrementally increase demand on local and regional recreational facilities. The project site is adjacent to open space areas and would improve access to surrounding open spaces, including Franklin Ridge and Fernandez Ranch. The project proposes a donation of 70 acres (formerly the westernmost nine golf holes) to the John Muir Land Trust, which would reduce project-generated demand on existing parks and recreational facilities. The proposed project would increase access to open space and provide additional recreational area.

The City estimates that the additional new 3,300-square-feet of space for the future 10,500-square-foot clubhouse (compared to the existing 7,200-square-foot clubhouse) would qualify the use as retail/flex/commercial space. The applicant would pay development impacts fees at the time of building permit issuance.

The project would generate (a) property taxes that would go into the City's General Fund to help finance park maintenance and (b) impact fees to fund future park construction. The project developer is also required to pay the City Recreation & Parks Facilities fee for new development. Given the increased access to open space in addition to proposed onsite recreational facilities, impacts to new or existing recreational facilities would be less than significant.

e. Less than Significant Impact. The project would not result in population growth that would incrementally affect other public services such as libraries, public transit, public meeting places, or community centers. There is a chance the project would increase tourism and may result in increased use of the downtown areas of Hercules. The applicant is also considering a shuttling program to the downtown areas. Additional usage generated by the project would not be significant enough to warrant new or physically altered public transit (see section 6.17 Transportation) or other public facilities, including libraries. Impacts would be less than significant.

References:

City of Hercules, 2019. Development Impact Fees. Available at: https://www.ci.hercules.ca.us/government/finance/impact-fees (accessed July 29, 2020)

City of Hercules. Fire Code Chapter 15. Available at: https://www.rhfd.org/wp-content/uploads/2019/12/ORD-2019-01-FiIRE-CODE.pdf (accessed July 30, 2020)

Email to Chief William Imboden, Hercules Police Department. "RE: Application completeness for Franklin Canyon RV Resort proposal" Email dated August 5, 2020.

Email to Robert Reber, Community Development Department. "RE: Franklin Canyon." Email dated August 11, 2020.

Rodeo-Hercules Fire District, 2020. Available at: https://www.rhfd.org/ (accessed July 24, 2020).

West Contra Costa Unified School District, 2020. Available at: https://www.wccusd.net/ (accessed July 24, 2020)

6.16 Recreation

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

Conclusion: Regarding recreation, the proposed project would not result in any significant environmental impacts. Also see Section 6.15.d, above.

Documentation:

a. Less than Significant Impact. The project proposes improving access to open space and is expected to increase the use of the surrounding regional open spaces. The project would include several onsite recreational amenities, including playgrounds, a pickle ball court(s), and horseshoe pits. These amenities would reduce the need for use of offsite recreational facilities, as patrons are anticipated to use onsite facilities.

The closest open space to the project site is the western 70 acres of the site that would be deeded to the John Muir Land Trust (JMLT) to connect to the Franklin Canyon and Fernandez Ranch open spaces. Per Measure M, development in Franklin Canyon should "preserve and protect natural resources, watersheds and water quality, wildlife habitat, beauty and tranquility, and scenic hill views, while permitting proximity to nature and outdoor recreation for the residents of Hercules." Although there is likely to be an increase in open space use with the improved access in the project vicinity, the increased use is not expected to substantially deteriorate the facilities. The project would improve access to trails and open space areas.

The City estimates that the additional new 3,300-square-feet of space for the future 10,500-square-foot clubhouse (compared to the existing 7,200-square-foot clubhouse) would qualify the use as retail/flex/commercial space. The applicant would pay development impacts fees at the time of building permit issuance.

The project would generate (a) property taxes that would go into the City's General Fund to help finance park maintenance and (b) impact fees to fund future park construction. The project developer is also required to pay the City Recreation & Parks Facilities fee for new development. Given the increased access to open space along with proposed onsite recreational facilities, impacts to new or existing recreational facilities would be less than significant. Project development is expected to improve access and increase the use of open space in the vicinity. The impact would be less than significant.

b. Less than Significant Impact. The proposed project includes onsite recreational amenities. The impacts from the facilities have been analyzed as part of the overall project. For example, for construction impacts; see Sections 6.3 Air Quality, 6.13 Noise, and 6.17 Transportation. Impacts would be less than significant.

References:

City of Hercules, 1998, amended April 14, 2015. General Plan, Open Space/Conservation Circulation Element. Available at: https://www.ci.hercules.ca.us/government/planning/general-plan (accessed July 22, 2020)

6.17 Transportation

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

Conclusion: Regarding transportation, the proposed project would not result in any significant environmental impacts after mitigation.

Documentation:

a. Less than Significant Impact. The project would not have a significant impact because none of the improvements as part of the project would reduce the availability or efficiency of facilities providing alternative transportation, including bus systems, bicycle routes, and pedestrian walkways.

Abrams Associates prepared a Transportation Impact Analysis (TIA) for the project (Appendix D) in March 2020. This section summarizes and assesses the calculations made and the conclusions reached in the TIA. The analysis compared the traffic generation from the existing use with the proposed project. Table 17 summarizes the results of the trip generation analysis. The proposed project is estimated to generate 147 average trips per day (a 126-trip decrease per day over existing conditions). As shown in Table 17, the project is expected to generate approximately 15 net new vehicle trips during the AM peak hour, and 14 net new vehicle trips during the PM peak hour.

Table 17. Trip Generation Summary

Land Use	*Size*	*ADT*	*AM Peak Hour*			*PM Peak Hour*		
			In	*Out*	*Total*	*In*	*Out*	*Total*
Campground/RV Park Trip Rates (ITE Land Use Code 416)		0.95	0.08	0.13	0.21	0.18	0.19	0.27
Unadjusted Campground/RV Park Trip Generation	182 sites	173	14	24	38	32	17	49
Reduction for Occupancy (20%)		35	3	5	8	6	4	10
Net New Campground/RV Park Trip Generation		138	11	19	30	26	13	39
RV/Self-Storage Trip Rates (ITE Land Use Code 151)		17.96	0.71	0.68	1.39	0.977	0.98	1.95
RV Storage Facility Trip Generation	50 units	9	1	0	1	0	1	1
Subtotals for the Proposed Project		***147***	***12***	***19***	***31***	***26***	***14***	***40***
Golf Course Trip Rates (ITE Land Use Code 430)		30.38	1.39	0.37	1.76	1.54	1.37	2.91
Existing Portion of the Golf Course Being Removed	9 holes	273	13	3	16	14	12	26
Net New Project Trip Generation		***-126***	***-1***	***16***	***15***	***12***	***2***	***14***

Abrams Associates, 2019. Based on rates from *Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition.*

Transit Facilities

Transit service in Western Contra Costa County is provided by WestCAT. Bus Route 30Z to Martinez operates on the adjacent segment of State Route 4, and there are no bus stops near the project site. The nearest bus stops are located about 3 miles away in the city of Hercules. From the Hercules Transit Center there are connections to BART, which provides regional transportation throughout the Bay Area. BART runs from Richmond to Fremont, and in the east-west direction it runs from Antioch to the San Francisco International Airport.

According to the TIA, the proposed project would not interfere with any existing bus routes and would not remove or relocate any existing bus stops. The proposed project could also potentially help support existing bus services with additional transit ridership and would not conflict with any transit plans or goals of the County or WestCAT. Although the proposed project does have the potential to incrementally increase patronage on bus lines in the area, the project would not result in significant impacts to transit service in the project area.

As an added voluntary benefit, the applicant is considering a shuttle program for RV resort visitors.

Roadway Facilities

The project would increase the total traffic on SR 4 during both AM and PM peak hours by approximately 15 trips. This increase is forecast to be less than one half of a percent of existing traffic. The project also would not conflict with any standards established by the Contra Costa Transportation Authority (CCTA) and, therefore, the project would have a less than significant impact on freeway and roadway operations.

Bicycle Facilities
There are no designated bike facilities adjacent to the project site. Although the proposed project could increase bicycle traffic in the project vicinity, it is not expected to significantly impact or change any existing bicycle facilities or create any new safety problems for bicyclists in the vicinity.

Pedestrian Facilities
There are no designated pedestrian sidewalks or trails along the Highway 4 access. Although the proposed project could increase pedestrian traffic in the project vicinity, it is not expected to significantly impact or change any existing pedestrian facilities or create any new safety problems for pedestrians in the vicinity.

b. Less than Significant Impact. Per CEQA Guidelines Section 15064.3(c) (Applicability), the provisions of Section 15064.3 (Determining the Significance of Transportation Impacts) are applicable as of July 1, 2020. The City currently does not have an adopted vehicle mile traveled (VMT) management plan nor a congestion management plan. As a member agency, the City supports the Contra Costa Transportation Authority's efforts to develop local standards for future VMT analyses. In the interim, OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* has been consulted to determine if the project's VMT may be assumed to cause a less-than-significant transportation impact.

DKS completed a VMT Analysis (Appendix E) for the proposed project in September 2020. The analysis considered the difference in traffic from the existing golf use to the proposed recreational and RV use. DKS' analysis found that the proposed project is likely to result in reduced or unchanged VMT. DKS concluded, "on average, if each patron diverts to the nearest alternative golf course, the trip distance will decrease by 4.92 miles per round trip. This will lead to a reduction in VMT, with the total reduction depending on vehicle occupancy." To ensure that overall VMT is reduced or unchanged, the applicant could implement VMT reducing measures that reduce the need for RV park patrons to travel offsite in their motor vehicles. The putting green, dining facilities, and outdoor recreation amenities all reduce the need for RV campground patrons to travel offsite for dining and recreation. The proposed general store in the clubhouse would further reduce the need to travel offsite for shopping and supplies. VMT under the project would be reduced, remain unchanged, or increase slightly, and the impacts related to VMT, per CEQA Guidelines Section 15064.3(c), would be less than significant.

As an added voluntary benefit, the applicant is considering a shuttle program for RV resort visitors. DKS recommends provision of a shuttle service to downtown Hercules and/or nearby attractions. A shuttle service could provide connection to nearby dining, shopping, and additional recreation opportunities, such as the San Francisco Bay Trail along the coast, and further reduce VMT associated with the campground.

c. Less than Significant Impact. A significant impact would occur if the proposed project considerably increased hazards due to a design feature or introduced incompatible uses to the existing circulation system. The project does not include any feature that would create a roadway or traffic hazard.

The proposed project would have one unsignalized driveway and one secondary access (for emergency vehicles only). An additional emergency vehicle entrance is being considered on Christie Road. Abrams Associates' review of the proposed site plan determined that the site circulation would function well and would not cause any safety or operational problems. The project site design is required to conform to City design standards, and the site plan is not expected to result in any significant impacts to pedestrians, bicyclists, or traffic operations. Therefore, impacts related to site access and circulation to the proposed project would be less than significant. The project would not result in incompatible uses related to transportation and traffic.

Construction activities may create temporary hazardous conditions for pedestrians, bikers, and drivers. Construction-related impacts would cease upon project completion. Abrams Associates measured construction traffic by assuming a worst-case scenario construction period of 24 months.

Heavy Equipment
Approximately six pieces of heavy equipment are estimated to be transported on and off the site during each construction phase of the proposed project (see *Construction* section of Project Description). Heavy equipment transport to and from the site could cause traffic impacts in the vicinity of the project site during construction. However, each load would be required to obtain all necessary permits, which would include standard, mandatory operating and safety conditions. Prior to issuance of grading and building permits, the project applicant would be required to submit a Traffic Control Plan to the City Engineer for review and approval.

The requirements in the Traffic Control Plan could include, but are not limited to, the following: truck drivers would be notified of and required to use the most direct route between the site and the freeway, as determined by the City Engineering Department; all site ingress and egress would occur only at the main driveways to the project site, and construction activities may require installation of a temporary traffic signal(s) as determined by the City Engineer; specifically designated travel routes for large vehicles would be monitored and controlled by flaggers for large construction vehicle ingress and egress; warning signs indicating frequent truck entry and exit would be posted on adjacent roads; and any debris and mud on nearby streets caused by trucks would be monitored daily and may require instituting a street cleaning program. In addition, eight loads of heavy equipment being hauled to and from the site each month would be short-term and temporary.

Employees
Weekday construction work is expected to begin around 7:00 AM and end around 4:00 PM, with construction workers arriving between 6:30 AM and 7:30 AM, and departing between 4:00 PM and 5:00 PM. The number of trips generated during construction would be temporary and would be less than the project operational trip generation. According to the Abrams Associates TIA, based on past construction of similar projects, construction workers could require parking for up to 40 vehicles during the peak construction period. Additionally, deliveries, visits, and other activities may generate peak non-worker parking demand of 10 to 20 trucks and automobiles per day. Therefore, up to 60 vehicle parking spaces may be required during the peak construction period for the construction site. Furthermore, the Traffic Control Plan would require construction employee parking be provided on the project site or in offsite parking lots to eliminate conflicts with nearby residential areas. Project construction could be staggered so that employee parking demand can be met by using onsite parking. Based on the requirements of the Traffic Control Plan, impacts of construction-related traffic and parking are considered less than significant.

Construction Material Import

The proposed project would require importation of construction material, including raw materials for the building camp pads, the new clubhouse and information kiosk, parking areas, RV storage areas, and landscaping. Under the provisions of the Traffic Control Plan, if importation and exportation of material becomes a traffic nuisance, then the City Engineer may limit the hours the activities can take place.

Traffic Control Plan

The Traffic Control Plan would detail how parking for workers would be provided during construction and ensure a safe flow of traffic in the project area during construction. The TIA analysis assumed construction of the entire project in one phase to identify the potential worst-case traffic effects. If the project is built in phases over time, the effects of each phase would be the same or less. Each phase would be subject to a Traffic Control Plan and oversight by the City Engineer. The last "phase" of construction may require added worker parking measures, depending on the circumstances, as there may not be any remaining vacant land for parking. Based on implementation and monitoring of the Traffic Control Plan, the construction activities associated with the proposed project (or its individual phases) would not lead to noticeable congestion in the vicinity of the site or the perception of decreased traffic safety. The impact would be less than significant after implementation of Mitigation Measure TRANS-1, below.

Mitigation Measure TRANS-1: Construction Period Transportation Impacts. The applicant shall submit a construction period Traffic Control Plan subject to City review and approval. As noted by Abrams Associated in the TIA, the Traffic Control Plan could include, but are not limited to, the following: truck drivers be notified of and required to use the most direct route between the site and the freeway, as determined by the City Engineering Department; all site ingress and egress would occur only at the main driveways to the project site, and construction activities may require installation of a temporary traffic signal(s) as determined by the City Engineer; specifically designated travel routes for large vehicles would be monitored and controlled by flaggers. The plan shall include traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications ("Construction Area Traffic Control Devices") to be followed during construction. The plan shall also specify provision of adequate signing and other precautions for public safety to be provided during project construction. In addition, the plan shall address parking and emergency vehicle access during construction. The applicant or their general contractor for the project shall notify the Public Works Division and local emergency services (i.e., the police and fire departments) prior to construction to inform them of the proposed construction schedule and that traffic delays may occur. Prior to approval of a grading permit, the City shall review and approve the construction period Traffic Control Plan. During construction, the City shall periodically verify that traffic control plan provisions are being implemented.

d. Less than Significant Impact. Sufficient emergency access is determined by factors such as number of access points, roadway width, and proximity to fire stations. The land use plan for the proposed project includes a primary entrance onto State Route 4 along with secondary entrance onto Christie Road (for emergency vehicles only). All lane widths within the project would meet the minimum width that can accommodate emergency vehicles, and the final emergency vehicle access plan would be subject to final approval from the Rodeo-Hercules Fire District. The impact would be less than significant.

References:

Abrams Associates, March 18, 2020. Transportation Impact Analysis: Franklin Canyon RV Resort and Golf Course. Included as Appendix D

DKS Associates, September 22, 2020. Franklin Canyon VMT Analysis. Included as Appendix E.

6.18 Tribal Cultural Resources

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register or historical resources as defined in Public Resources Code section 6020.1(k), or		✓		
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

Conclusion: Regarding tribal cultural resources, the proposed project would not result in any significant environmental impacts with mitigation incorporated. Implementation of Mitigation Measures CUL-1 through CUL-4 and TRI-1 would reduce potential impacts to less than significant levels.

Documentation:

a. i. Less Than Significant with Mitigation Incorporated. As detailed in Section 6.5 Cultural Resources, the California Historical Resources Information System (CHRIS) search at the Northwest Information Center (NWIC) showed that there are known Native American sites within the project boundaries which qualify as tribal cultural resources (TCRs). Although a Sacred Lands File (SLF) search was conducted through the Native American Heritage Commission (NAHC), which was returned with a negative result, and the tribes contacted did not respond to the CEQA consultant's scoping letters (See Section 6.5), the information gathered during additional background research shows that the project site and surrounding area is very sensitive for prehistoric archaeological resources, and thus TCRs.

Based on the results of the cultural research detailed in Section 6.5, known TCRs are present on the site, and there is a high potential that additional TCRs could be present below the surface of the site. Therefore, project excavation could result in the discovery of TCRs. In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features, sites or artifacts which qualify as TCRs, a significant impact could occur. Implementation of

Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts to undiscovered archeological resources to a less than significant level.

ii. Less Than Significant with Mitigation Incorporated. Some Native American artifacts may not be considered unique archaeological resources under the CEQA guidelines (i.e., if there is not a demonstrable public interest in that information, it does not possess a special and particular quality such as being the oldest of its type or the best available example of its type, and it is not directly associated with a scientifically recognized important prehistoric event or person). However, it is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and therefore be considered a significant resource under CEQA. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 until the lead agency has enough evidence to determine significance. This ensures that the default assumption is that all Native American artifacts are significant resources under CEQA. Implementation of Mitigation Measures CUL-1 through CUL-4 would reduce impacts to TCRs to less than significant.

Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts to Native American artifacts to a less than significant level.

References:

Archeo-Tec, 2006. Phase I Cultural Resource Assessment Report for the Fernandez Ranch Creek Restoration Project. Confidential document kept on file with the NWIC and MIG, Inc.

California Office of Historic Preservation, 2020. California Historical Resources. Available at https://ohp.parks.ca.gov/ListedResources/ (accessed on September 10, 2020).
City of Hercules, 2018. Historic Preservation in Hercules. Available at: https://www.ci.hercules.ca.us/Home/ShowDocument?id=1380 (accessed on September 9, 2020).

Holman & Associates, 1983. Archaeological Field Investigation of Parcels A and B Located Behind Crockett, Contra Costa County, California. Confidential document kept on file with the NWIC and MIG, Inc.

Holman & Associates, 1992. Archaeological Literature Review and Field Inspection of the Franklin Canyon EIR, Contra Costa County, California. Confidential document kept on file with the NWIC and MIG, Inc.

Historic Aerials, 2020. Topographic maps and aerial photographs 1897 – 2018 of Franklin Canyon Golf Course. Available at: https://www.historicaerials.com/viewer (accessed on September 10, 2020).

Kroeber, A.L. 1976. Handbook of the Indians of California. Dover Publications Inc. New York. (Originally Published 1925)

Levy, Richard, L. 1976. Costanoan Internal Relationships. University of California. Berkeley.
1978. Handbook of North American Indians. Washington: Smithsonian Institution. Washington D.C. (Ed. Robert F. Heizer).

National Park Service, 2020. National Register of Historic Places Digital Archive on NPS Gallery. Available at https://npgallery.nps.gov/NRHP/AdvancedSearch/ (accessed on September 10, 2020).

Native American Heritage Commission, 2020. Scared Lands File Search Prepared in Support of the Franklin Canyon RV Resort Project, Santa Cruz County. August 6, 2020. Unpublished document kept on file with the NAHC and MIG, Inc.

Northwest Information Center, 2020. Cultural Resources Records Search in Support of the 547 Airport Blvd Project (No. File No. 20-0242). Unpublished document kept on file with the NWIC and MIG, Inc.

PAR Environmental Services, Inc. 2008a. Cultural Resources Constraints Study for the Replacement of 10 Poles on the Christie-Franklin No. 1 High Voltage Transmission Line. Confidential document kept on file with the NWIC and MIG, Inc.

PAR Environmental Services, Inc. 2008b. Cultural Resources Constraints Study for the Replacement of 3 Poles on the Christie-Franklin No. 2 High Voltage Transmission Line. Confidential document kept on file with the NWIC and MIG, Inc.

Vollmar Consulting, 2006. Biological Resources Report Fernandez Ranch Project. Available at http://www.ci.hercules.ca.us/Home/ShowDocument?id=5272 (accessed on September 11, 2020).

William Self Associates, 1996. Archaeological Survey Report Route 4 (West) Gap Project. Confidential document kept on file with the NWIC and MIG, Inc.

6.19 Utilities and Service Systems

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

Conclusion: Regarding utilities and service systems, the proposed project would not result in any significant environmental impacts.

Documentation:

a. Less than Significant Impact. The proposed project would not result in the relocation or construction of new or expanded water supply, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities that would cause a significant environmental effect.

Water:

Potable water is provided by East Bay Municipal Utilities District (EBMUD), which supplies water and provides wastewater treatment for a large part of Alameda and Contra Costa counties. Based on 2010 census data and Association of Bay Area Government's (ABAG) Projections 2013, approximately 1.4 million people are served by EBMUD's water system in a 332-square-mile area. The project would connect to the existing water main near the clubhouse. Prior to issuance of building permits, the applicant would be required to provide the City with a detailed study indicating specifications of the new water infrastructure and any modifications needed to the existing municipal conveyance system to accommodate project needs. Construction of new water supply infrastructure would be conducted in compliance with the City-approved utilities construction BMPs and the applicable construction-related mitigation measures identified in this Initial Study (e.g., air

emissions, noise, traffic). Therefore, water infrastructure construction impacts would be less than significant.

Water would be supplied through a distribution system connected to the existing 6-inch EBMUD water main that connects to the site under the existing parking lot and runs to the clubhouse. This pipeline would be extended going east from the clubhouse to the pond area and distributed throughout the site through utility trenches. Each RV site would have a water spigot, and all restrooms and shower buildings within the RV park would be connected to the same distribution system. The clubhouse would be supplied with fire sprinkler and potable water from the same 6-inch pipe. Because all water system improvements would be onsite and constructed to serve only the proposed project, no new public water supply facilities would be needed to serve the proposed project.

Wastewater

Hercules provides wastewater collection and conveyance service for the City's incorporated area. Treatment is provided at the Pinole-Hercules Wastewater Treatment Plant (WWTP). The Cities of Hercules and Pinole each have a 50% ownership in the WWTP, although Pinole is the designated operator (Contra Costa Local Agency Formation Commission 2014). The project applicant would be required to obtain a sewer connection permit and pay fees for permitting and connection to the WWTP system. By paying this fee and obtaining appropriate permits, this would help ensure that WWTP has adequate system capacity to serve the project's current and future service demands.

Franklin Canyon Golf Course is served by an existing Wastewater Disposal System (WTDS) designed by Questa Engineering and permitted by Contra Costa County Environmental Health. The existing system has a volume of less than 10,000 gallons and is approved by WTDS. The project proposes replacing the existing septic system and upgrading with an onsite treatment facility featuring an onsite subsurface disposal system. This new WTDS would be permitted by the Bay Area Regional Water Quality Control Board (RWQCB) through a Waste Discharge Permit. Because the volume of the proposed system is over 10,000 gallons, approval is from RWQCB is required. A detailed Report of Waste Discharge would be submitted to the RWQCB for review and approval.

The project proposes development of two disposal zones (A and B), per the Schematic Wastewater Treatment & Disposal Layout (Figure 4). Zone A would treat wastewater from the Class A RV sites (RVs with bus or truck chassis), bungalows, clubhouse/restaurant, and supporting bathrooms. Zone B would treat wastewater and sewage from the Class B/C RV sites (Class B is the smallest class, and Class C RVs typically are built on a truck or van chassis), the pool, and supporting bathrooms. All wastewater to be disposed in Zone A would flow to a subsurface onsite wastewater treatment and disposal system located between the clubhouse and existing maintenance building. Wastewater in Zone B would flow to a subsurface onsite wastewater treatment and disposal system located adjacent to the RV storage area.

Zone A is projected to have a maximum effluent flow of 10,950 gallons per day (GPD). Zone A would be composed of a treatment system with two septic tanks, one of which would provide primary treatment for the flow from the Class A RV sites and tent bungalows with 10,000-gallon capacity. The second septic tank would have a 7,500-gallon capacity for effluent flows from the clubhouse/restaurant. All post-septic tank effluent would flow to National Sanitation Foundation (NSF) certified FujiClean 12,000 GPD secondary treatment units. The wastewater from Zone A would be pumped for secondary treatment to a shallow subsurface system covering approximately

101,262 square feet, which would also provide irrigation to the driving range. A reserve 61,000 square-foot area is also proposed, as required by the RWQCB.

Zone B is projected to have a maximum effluent flow of 2,600 GPD. The wastewater from Zone B would be pumped for primary treatment to a shallow subsurface system covering approximately 22,400 square feet. The applicant has stated that the swimming pool water would be drained when the RV resort is at low occupancy to eliminate the chance of overloading the system. Effluent from the Class B/C RV sites would flow into a lift station and be pumped into a separate onsite wastewater treatment and disposal system. Zone B would be treated by two 5,000-gallon septic tanks to serve the Class B/C sites for primary treatment, and then a FujiClean secondary treatment unit, which could treat up to 2,700 GPD of effluent in compliance with the City's NPDES Permit.

Prior to issuance of building permits, the applicant would be required to provide the City Engineer, for review and approval, with a detailed study indicating specifications of the new wastewater infrastructure. Because all wastewater system improvements would be onsite and constructed to serve only the proposed project, no new public wastewater conveyance or treatment facilities would be needed to serve the proposed project. The impact would be less than significant.

Stormwater
Because the proposed project would involve the creation of more than 10,000 square feet of net new impervious surface, it is required that stormwater be contained and treated onsite.

Existing improvements onsite include a clubhouse, auxiliary structures, parking lot, and an internal access route formerly used by golf carts. Most of the site is undeveloped and pervious, and the proposed project would generate stormwater runoff from increased impervious surfaces, which would total 218,235 additional square feet. Stormwater retention would be accomplished through a combination of underground filtration and above-ground retention infrastructure. Runoff would be diverted by drainage channels and swales into drains below the bioretention areas. All runoff would be routed through media filters for water quality and then to underground infiltration facilities for quantity. Refer to Section 6.10 Hydrology and Water Quality for further details of project stormwater infrastructure and runoff treatment.

The project's Preliminary Stormwater Management Plan was prepared by Triad Holmes and a final Stormwater Control Plan (SWCP) shall be prepared in accordance with Hercules Municipal Code Section 5-8.050. Runoff from proposed impervious surfaces would be directed to the bioretention areas, where a water quality treatment process would begin. Bioretention areas would remove pollutants by filtering runoff slowly through an active layer of soil. In addition, all cities within Contra Costa County are required to implement surface water control standards for projects in compliance with Provision C.3 of the Regional Water Quality Control Board (RWCB) Municipal Regional Storm Water NPDES Permit No. R2-201500049. The Contra Costa County Clean Water Program created a C.3 guidebook for the implementation of C.3 requirements. As a result of planned drainage treatment features, impacts would be less than significant.

Electric Power
The project would generate increased demand for electric power by providing power to each RV site with either a 50-amp connection for the Class A sites, or 30-amp pedestal for the Class B/C sites. The new clubhouse would be served using the existing electrical infrastructure. The electricity to the RV sites would be distributed in a utility trench.

The project would connect to and be served by existing electricity infrastructure owned and operated by PG&E. Multiple PG&E transmission poles and power lines are located adjacent to the project site along Highway 4. The process of connecting the project to existing infrastructure is expected to be standard for conveying electrical power to new development. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

Natural Gas

The proposed project would generate demand for natural gas. The project would connect to and be served by existing natural gas infrastructure owned and operated by PG&E. According to the PG&E Pipe Locator, natural gas pipelines run through the City to the west of the project site, and north through Crockett Hills Regional Park. Though no new natural gas supply facilities would be needed to serve the proposed project, natural gas infrastructure improvements would be required to connect project components to existing natural gas pipelines. The process of connecting the project to existing infrastructure is expected to be standard for conveying natural gas to a mixed-use development. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

Telecommunications

The proposed project would connect to existing telecommunications infrastructure, and cable TV would be supplied in the utility trenches serving the RV sites with a connection point at each site. A telecommunications provider for the project has not yet been selected. Telecommunications infrastructure is often grouped with electric power infrastructure on utility poles and transmission towers; therefore, it can be reasonably assumed the project would connect to telecommunications infrastructure on existing PG&E utility poles. The process of connecting the project to existing infrastructure is standard for transmitting internet and other telecommunications services. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

In summary, the project would not require or result in the construction of new public utilities and service facilities. Project construction would require connection of a new, onsite water main to existing infrastructure under the site's parking lot leading to Highway 4 frontage. Other infrastructure improvements would connect project components to existing, onsite private utility infrastructure. City standards would include undergrounding all new connections, including electric, telephone, and television lines. Construction of the new or expanded utilities infrastructure would comply with City standards and BMPs, and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

b. Less than Significant Impact. The site is currently served by public water provided by EBMUD. Operation of the proposed project would result in less water demand than the current use. The project is proposing to rely on the existing water service from EBMUD while the existing onsite well would be abandoned. Project water consumption is expected to be approximately 30.28-acre-feet per year (AFY), which is approximately 80% less than current use.

According to the EBMUD 2015 Urban Water Management Plan (UWMP), the City of Hercules' primary source of potable water is the Mokelumne River. The Mokelumne Aqueducts convey the Mokelumne River supply from Pardee Reservoir across the Sacramento-San Joaquin River Delta. The secondary source of water comes from local runoff. However, in dry years, evaporation can exceed runoff, resulting in net loss of local supply. Local runoff, on average, supplies the East Bay with 15 to 25 MGD during normal hydrologic years and with almost no runoff during dry hydrologic years. While runoff supplies vary in availability, the 2015 UWMP concludes the City will continue to be able to provide water to customers in normal, dry, and multiple dry years.

The applicant has estimated that the current water use for the existing golf course is approximately 48,000,000 gallons per year (GPY), or 147.30 acre-feet per year (AFY), mainly for irrigation, divided among the following approximations:

- 1,000,000 GPY for irrigation (per acre irrigated). For 47 irrigated acres, the total is 47,000,000 GPY total
- 1,000,000 GPY for the clubhouse and restaurant

During proposed project operation, the applicant estimated that water usage would be 9,869,000 GPY, or 30.28 AFY, divided among the following approximations:

- Average resort usage (assuming 65% capacity) would be 3,200,000 GPY
- Landscaping and driving range irrigation (based on estimate provided by the landscape architect, BK&A) demand: 6,489,000 GPY, divided among the following approximations:
    - Trees: 463,000 GPY; Shrubs: 526,000 GPY; Lawn areas (includes driving range): 5,500,000 GPY
    - Estimated valve systems: Trees: 48 valves; Shrubs: 82 valves; Lawns: 27 valves
    - The driving range would be irrigated by water from the Zone A wastewater treatment system, which is not factored into this usage calculation.

Using these projections, operation of the proposed project would result in a water usage reduction from 147.3 AFY to 30.28 AFY, or approximately 80%. The applicant proposes that treated wastewater from the Class A RV sites and clubhouse area would irrigate the grass for the driving range. Based on the 65% occupancy rate, the treated wastewater would provide over 2,000,000 GPY to the driving range, which would result in further water use reduction. Additionally, all irrigation heads located in the western portion of the project site, to be deeded to JMLT, would be removed.

No new water supply sources or entitlements would be necessary for project operation, and all new water systems would be reviewed by the City Engineer under uniformly applied development standards. Considering existing and future projected water supplies, and the proposed reduction in water use, there would be sufficient water supplied to meet demand. Impacts would be less than significant.

c. No Impact. See the wastewater discussion in Section 19.a above. All wastewater would be treated onsite and would not be connected to public wastewater utilities. There would be no impact on the capacity of wastewater treatment providers to serve the project.

d. Less than Significant Impact. Republic Services, the solid waste services provider, confirmed that municipal solid waste collected in Hercules is taken to the Golden Bear Transfer Facility in

Richmond, California, where it is reloaded into larger transfer vehicles and taken to Keller Canyon Landfill in Pittsburg, California. Both facilities are permitted and able to accept waste generated by project construction and operation. There are two main trash pickup locations located north of the clubhouse and at the maintenance building. Trash will be taken to those locations from receptacles throughout the resort to be picked up by maintenance crews.

The project proposes various land uses that would generate waste at different rates. Using the CalRecycle Estimated Solid Waste Generation Rates for the project, the project would generate approximately 607 pounds of solid waste per day, as listed below:

- Commercial Retail: 0.006 pounds per square foot x (810 square feet of General Store) = **4.9 pounds per day**
- Offices: 1.24 pounds per day x 5 employees (1 Onsite Manager, 1 Assistant Manager, 2 Maintenance workers, 1 Security Guard) = **6.2 pounds per day**
- Residential (Onsite employee apartment): 5.31 pounds x 1 dwelling unit = **5.31 pounds per day**
- Motel (for RVs): 3.6 pounds per unit x 160 RV sites = **576 pounds per day**
- Restaurant: 0.005 pounds per square foot per day x 2,818 square feet of onsite restaurant = **14.1 pounds per day**

In total, the project would generate approximately 607 pounds of solid waste per day.[6] This would be more solid waste produced than the current uses, but the above estimation assumes the RV resort would be operating at 100% capacity, and the approximated 607 daily pounds would likely be less, due to the resort not being at capacity every day. While the project would increase solid waste generation, the local infrastructure and service provider would be able to accept the waste and has capacity to serve the project. Impacts would be less than significant.

e. Less than Significant Impact. The primary State legislation regarding solid waste is AB939, the Integrated Waste Management Act, adopted in 1989. AB939 requires local jurisdictions to achieve a minimum 50 percent solid waste diversion rate. The project would include construction and demolition as well as materials disposal and recycling. Per Hercules Municipal Code Section 5.408.1 Construction Waste Management, the City requires that the applicant recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste. When project construction is completed, the applicant must submit quantities of recycled or diverted materials and all weight receipts to the City Building Department.

The project would not conflict with State laws governing construction or operational solid waste diversion and would comply with local implementation requirements. The impact would be less than significant.

References:

Basix, 2020. Report of Waste Discharge, Franklin Canyon Golf & RV Resort. Updated September 2020.

[6] 4.9 + 6.2 + 5.3 + 576 + 14.1 = approximately 607 pounds of solid waste per day. (Rounded to nearest whole number)

California Department of Resources Recycling and Recovery (CalRecycle), 2019. Estimated Solid Waste Generation Rates. Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed on November 25, 2020).

Contra Costa Local Agency Formation Commission, 2014. Contra Costa Water and Wastewater Agencies Combined Municipal Service Review and Sphere of Influence Study. Available at: http://www.contracostalafco.org/municipal_service_reviews/Water-Wastewater/FINAL%20DRAFT_Contra%20Costa%20LAFCO%20MSR%205_4_2014.pdf (accessed February 4, 2021).

East Bay Municipal Utilities District (EBMUD), 2016. 2015 Urban Water Management Plan. Available at: https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/ (accessed August 17, 2020).

Hercules Municipal Code, 2020. Title 9, Building Regulations. Available at: https://www.codepublishing.com/CA/Hercules/#!/Hercules09/Hercules0916.html (Accessed November 18, 2020)

Pacific Gas & Electric (PG&E), 2020. https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page (Accessed August 17, 2020)

Republic Services. Email from Janna Coverston to Erica Rippe. *RE: Question about Hercules, CA Waste on behalf of City of Hercules*. November 20, 2020.

Triad Holmes and Associates, 2020. Franklin Canyon RV Resort Conceptual Utility Plan, sheet C6. October 2, 2020. Included as Figure 11.

Wendel Rosen 2020. Memorandum Re: Applicant's Response to Incomplete Letter on Franklin Canyon RV Resort. From Patricia E. Curtin, Wendel Rosen, to Robert Reber, City of Hercules. August 28, 2020.

6.20 Wildfire

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			✓	
b) Due to scope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			✓	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			✓	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			✓	

Conclusion: Regarding wildfire, the proposed project would not result in any significant environmental impacts. Also see Section 6.9.g Hazards and Hazardous Materials (regarding wildland fires).

Documentation:

a. Less than Significant Impact. The proposed project would not impair the emergency response or emergency evacuation plan for the City. The Transportation Impact Analysis (TIA) confirmed that the project would not create, interrupt, or otherwise reduce the ability of streets to circulate traffic, but rather, the project proposes a second access from Christie Road for emergency vehicles only (Abrams 2020). The project would not impair implementation of or physically interfere in emergency response or evacuation plans. The impact would be less than significant. See Section 6.9.f Hazards and Hazardous Materials for information on emergency response and evacuation.

b. Less than Significant Impact. The project site is located in a local responsibility area, and according to the CalFire FRAP Map, is located in a high fire hazard severity zone. The site has historically been grazed to keep fuel loads down and to limit vegetation growth. Additionally, the applicant must submit to the Fire District, subject to District review and approval, a Fire Protection Plan that details strategies and mitigations to minimize potential for loss from wildfire exposure.

c. Less than Significant Impact. The project site is located in a high fire hazard severity zone. The proposed project includes the installation of an additional emergency vehicle access from Highway 4. The existing transmission lines located along publicly accessible roads would continue to be maintained by PG&E.

As part of the building permit process, the applicant is required to prepare a Fire Prevention Plan for construction and ongoing operations, which includes provisions for emergency vehicle access and turn-around, vegetation management, defensible space, and fire break maintenance around all structures. During project construction and operation, the use of powered equipment for installation, maintenance, and improvements could temporarily increase fire risk on the project site. Compliance with all applicable fire protection design and operational standards, including emergency water supply, temporary emergency access, and fuel reduction, must meet or exceed Fire District wildland-urban interface requirements and California Fire Code Sections 4906 and 4907. The project would not require the installation of any associated infrastructure or utilities outside of the existing site footprint. Compliance with the Fire Prevention Plan would reduce the temporary impacts to a less than significant level.

d. Less than Significant Impact. The project is located in a valley surrounded by steep ridges and is in a high fire severity zone. Per the Rodeo-Hercules Fire Protection District, the RV park would be considered a Special Occupancy Park, which requires compliance with the California Code of Regulations Title 25, Division 1, Chapter 2.2, Section 2000. This Code includes specific requirements for park construction, maintenance, use, occupancy, and design. Also included are requirements for items such as lot identification, lighting, roadway width, plans, permits, accessory structures and buildings, application procedures, fees, and enforcement. The clubhouse design and building must meet California Building and Fire Code elements specified in the 2019 Uniform Building and Fire Codes. The impact would be less than significant.

References:

CalFire, 2019. Contra Costa County Fire Hazard Severity Zones. https://osfm.fire.ca.gov/media/6661/fhszl06_1_map7.pdf (Accessed July 24, 2020)

Craig, Bryan, Hercules Fire Chief, 2020. "RE: Application completeness for Franklin Canyon RV Resort proposal." Email to MIG staff dated August 20, 2020.

6.21 Mandatory Findings of Significance

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other projects, and the effects of probable future projects.)		✓		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

Conclusion: The proposed project would not result in any significant environmental impacts, as related to mandatory findings of significance.

Documentation:

a. **Less than Significant with Mitigation Incorporated.** The project would increase and improve access to open space and encourage recreation throughout the site and throughout the surrounding open space areas. The project would create habitat for wildlife with the removal of the westernmost golf holes. Any biological resource impacts would be less than significant with incorporation of Mitigation Measures BIO-1 through BIO-11.

   The project site is not known to have any association with an important example of California's history or prehistory. The site would be redeveloped within an already disturbed area, and adverse impacts to archaeological and paleontological resources are not likely to occur. Construction-phase procedures would be implemented in the event any archaeological or paleontological resources are discovered during grading and excavation, consistent with Mitigation Measures CUL-1, CUL-2, and GEO-2 and GEO-3. Implementation of these mitigation measures would ensure that impacts related to cultural and paleontological resources would be less than significant.

b. **Less than Significant with Mitigation Incorporated.** Cumulative impacts can result from the interactions of environmental changes resulting from one proposed project with changes resulting from other past, present, and future projects that affect the same resources, utilities and infrastructure systems, public services, transportation network components, the air basin, the watershed, and other

physical conditions. For the proposed project, such impacts would be short-term and temporary, usually consisting of overlapping construction impacts, as well as long-term, due to the permanent land use changes involved in the project.

Short-term, construction-related impacts resulting from air pollutant emissions and noise would be less than significant after mitigation (Mitigation Measures AIR-1 and NOI-1) and would not contribute substantially to any other concurrent construction operations that might occur in the project vicinity, especially because the project site is relatively isolated from other potential development.

The project's contribution to long-term, cumulative impacts would not be significant, primarily because project impacts would be confined to the site. In addition, the project would be subject to development impact fees and property taxes to offset project- related impacts to public services and utility systems such as fire protection services, roadways, storm drain facilities, water facilities, and other public facilities and operations. The impacts would be less than significant.

c. Less than Significant with Mitigation Incorporated. Potential environmental impacts of the proposed project were analyzed in Sections 6.1 thru 6.20, and all potential impacts would be either less than significant with no mitigation required, or less than significant after mitigation. Potentially significant impacts were identified in the Hazardous Materials Survey Report, which included both an asbestos survey and a lead-based paint survey of the clubhouse. The clubhouse could contain lead-based paints, and asbestos-containing materials, which pose a threat to human health. With implementation of the Mitigation Measures HAZ-1 and HAZ-2, there would be no substantial, adverse impacts on human beings, directly or indirectly.

References:

Identified throughout this Initial Study.

7. Lead Agency and Consultants

Lead Agency:
City of Hercules
Community Development Department
111 Civic Drive, Hercules, CA 94547

Robert Reber, AICP
Community Development Director

Consultants:
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Erica Rippe, CEQA Lead
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