City of Berkeley
Parks, Recreation & Waterfront

October 22, 2024

Draft CEQA Initial Study/Mitigated Negative Declaration for Tom Bates Regional Sports Complex Restroom and Community Space

1. Project title: Tom Bates Regional Sports Complex Restroom and Community Space

2. Lead agency name and address: City of Berkeley; Parks, Recreation & Waterfront
1947 Center St 3rd Floor, Berkeley, CA 94704

3. Contact person and phone number:

Jesus Espinoza
Email: jespinoza@berkeleyca.gov
Phone number: (510) 981-6708

4. Project location: 400-408 Gilman St, Berkeley, County of Alameda, CA 94710

5. Project sponsor's name and address: City of Berkeley; Parks, Recreation & Waterfront,
1947 Center St 5th Floor, Berkeley, CA 94704

6. **General plan designation**: Waterfront/Marina

7. Zoning: Specific Plan

8. Surrounding land uses and setting:

The Tom Bates RSC encompasses approximately 20 acres; the proposed Project is planned for approximately 3.69 acres (Figure 1) of the total area. The project site is located along the City of Berkeley shoreline. A geotechnical investigation conducted at the project site in November 2022 by CE&G (2023) revealed subsurface soil conditions that were generally consistent with regional geological mapping. The findings identified three primary soil types: artificial fill, young bay mud, and older alluvium.

The project site is bounded by Gilman Street to the north, West Frontage Road, and Interstate 80/Interstate 580 (I-80/I-580) to the east, McLaughlin Eastshore State Park to the south, and the San Francisco Bay to the west.

In proximity to the Tom Bates Regional Sports Complex (RSC), west of I-80/I-580, there are various recreational and entertainment venues. These include the recently closed Golden Gate Fields Racetrack located to the north of Gilman Street, McLaughlin Eastshore State Park situated just south of the complex, and the Berkeley Marina to the southwest/west of the project. The Bay Trail runs along the north and east perimeter of the McLaughlin Eastshore State Park.

To the west of the project site, the San Francisco Bay watershed spans an area of 4,600 square miles, with the San Francisco Bay covering 1,600 square miles, constituting the largest Pacific estuary in the Americas (EPA, 2023). The area located directly east of I-80/I-580 is zoned for manufacturing uses.

9. Description of project:

The City adopted an Initial Study/Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring and Reporting Plan (MMRP) on October 18, 2005 for a General Plan/Waterfront Specific Plan Amendment, Zoning Ordinance Amendment and Gilman Street Playing Fields Project. The Gilman Street Playing Fields are now known as the Tom Bates RSC. The IS/MND described the project in two phases:

- Phase I – construct two artificial turf soccer fields, Gilman Street parking lot, basic drainage, and utility systems
- Phase II – construct three natural turf fields for softball and hardball, irrigation, a second parking lot, tot lot, a field house and lighting system

The phases were to be built as funding became available. In 2008, the City installed a lighting system for the two soccer fields, grass fields, and an irrigation system. In 2011, the City completed the baseball field and part of the second parking lot. The City is currently proposing to develop the remainder of Phase 2, which includes three natural turf fields, a tot lot, a field

house, and additional upgrades, as described in this section. The project site is owned by the East Bay Regional Park District (EBRPD) and managed under a sublease by the City. The project is sponsored by the City which is serving as the lead agency for the land use approvals under the terms of a Joint Exercise of Powers Agreement executed in 2003 by the cities of Berkeley, Emeryville, Albany, Richmond, and El Cerrito calling for the collaborative development of sports fields for regional use.

The City proposes implementing various new elements to the existing Tom Bates RSC (Project). Figure 1 (all figures are in Attachment 1) shows the Project location and existing layout. Figure 2 shows the proposed conceptual layout which includes a new Community Space Facility with restrooms, multi-use room and storage room; new soccer field for players under the age of 8 (U8), eight pickleball courts and bleachers for two of the courts; reconfigured parking lot to add more stalls and electric vehicle (EV) charging stations and temporary lot during construction; bicycle racks and lockers and walkways that are compliant with the Americans with Disability Act (ADA); stormwater bioretention features and landscaped areas; new electric service and a sanitary sewer lift station. The project components are discussed in more detail below. The City will implement the commitments listed in Attachment 2 for design, construction, and operation as part of the Project and will continue to implement best practices for site maintenance.

Construction is anticipated to commence in April 2025 and last approximately six months. The construction workdays and hours would be Monday to Friday inclusive, 7:00 AM to 5:00 PM local time. Work at the site on weekends or holidays will not be permitted unless the construction contractor requests otherwise from City in writing at least 48 hours in advance and City approves in its sole discretion.

Community Space Facility

The 1,408 square foot community space facility is a prefabricated concrete masonry building comprised of four transportable modules constructed and fabricated in Minden, Nevada, about 200 miles from the site. A mobile crane would lower the building modules into place on the project site. The facility would include a multi-use room for light storage and meetings, five gender neutral restrooms three of which will be ADA compliant, a storage room, and drinking fountains. Concrete piles to support the Community Space Facility would be cast in auger and drilled into 25-foot-deep holes. Pile driving would not occur.

The area surrounding the proposed community space facility would include security gates and fencing, access stairs, an ADA-compliant switchback ramp, and retaining wall to accommodate the approximately 6-foot change in elevation. Wall-mounted lighting would illuminate the area around the community space facility. In addition, one light pole and light would illuminate the ADA-compliant switchback ramp. All lighting would use fixtures approved by the International Dark-Sky Association.

The building will be Leadership in Energy and Environmental Design (LEED) certified as per the U.S. Green Building Council Certified Level LEED Building Design and Construction Version 4.1 (2023). The project is designed for LEED certification. If the LEED designation is not awarded, the design would still meet the requirements of the California State Green Building Code (CALGreen) by following the CALGreen Code Compliance Checklist (Non-Residential).

The facility will contain a new sanitary sewer lift station and force main, electrical, communications, and potable water service. The Project also includes the expansion of the existing post-construction stormwater treatment bioswale and a new bioretention basin, compliant with the Clean Water Program C.3 Stormwater Technical Guidance (2023), to accommodate the proposed site improvements.

Pickleball Courts

Eight pickleball courts will be installed featuring a concrete or asphalt surface. Six courts will measure approximately 30 x 64 feet, and two courts will measure approximately 34 x 64 feet. Excavations will be to a depth of up to two feet. All will have corresponding court striping and nets. The two larger courts will have a bleacher installed to the west of the courts. No new lighting for the courts is proposed as part of the project.

U8 Soccer Field

A U8 soccer field will be constructed to accommodate youth soccer leagues. In addition, adult users may utilize the field for practices. Excavations will be to a depth of up to two feet. The field will be comprised of natural grass. Full irrigation will be included. The field will have security gates and fencing where required. No additional lighting for the field is proposed as part of the project.

Parking

Parking facility improvements are included as part of the Project. The existing parking lot will be reconfigured, increasing parking spaces from 94 to 125, and improved by adding 13 active and 25 ready EV charging stations. The number of proposed charging stations meets CALGreen Code 5.106.5.3.3 and City of Berkeley Municipal Code 19.37.040: 10 percent of the parking spaces will be wired, and 20 percent of the parking spaces will have the infrastructure for future EV charging stations. ADA-compliant walkways will be provided connecting the parking lot and community space facility. The Project also includes optimization measures for traffic circulation to be able to accommodate the additional parking stalls.

During construction, the existing paved area to the west of the RSC will be striped and utilized as a temporary parking lot with capacity for up to 94 automobile parking stalls, including four ADA stalls. This will also include widening the access driveway to accommodate traffic circulation and the inclusion of an ADA-compliant walkway.

The design of the parking facilities includes pedestrian and bike access to the Bay Trail extension which is part of the Gilman Street project (Caltrans, 2019).

The Project includes new bicycle parking. Bicycle parking capacity will increase from the existing approximately eight bicycle rack spaces to include up to 18 bike lockers.

Additional parking is currently available at the unpaved parking lot (Figure 1) with approximately 70 stalls, including 3 ADA-compliant stalls. An existing paved road bordering the west side of the grass field provides access from this lot to the south end of the Project.

Utilities

The Project will include improvements to on-site drainage through the creation of a new three-foot deep bioretention basin and enhancement of the existing bioswale. The project will include a new sanitary sewer lift station and force main, communications and potable water. The lift station foundation will be 13 feet deep. Connections will be made to existing infrastructure that is already located onsite within the park boundaries. The capacity of the existing on-site utilities is adequate to serve the new park uses. The storm drain connection will be constructed at a depth of six feet.

A new electric service and transformer will be required from Pacific Gas & Electric Company (PG&E) to provide sufficient capacity for the EV charging stations. This connection will likely be made at the existing PG&E switch located on City property at the northeast corner of the RSC and will run underground along the north side of the existing soccer fields to the existing parking lot. The electrical service will be designed to accommodate a planned 1000-amp service. Of those, 200 amps of electrical capacity are designated for use by the proposed Community Space Facility, with the remaining 800 amps dedicated to electric car charging stations in the parking lot.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

The City would construct the Project as funding becomes available. The City will obtain permits from or coordinate with agencies as listed below.

- San Francisco Bay Conservation and Development Commission (BCDC) - permit
- EBRPD – coordination to review and, if needed, modify, the lease agreement under which the City operates the RSC.
- San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)
    - Coordination for construction in area with contaminated soil
    - Notice of Intent for construction on areas exceeding 1 acre

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?

California Native American tribes traditionally and culturally affiliated with the project area--the Ohlone Indian Tribe and the Confederated Villages of Lisjan Nation--requested consultation. The City consulted with both of these tribes and no project-related concerns or tribal cultural resources were identified as a result and no topics requiring confidentiality were discussed.

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 on the following pages.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:		
☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology /Soils	☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

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.

☐I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Jesus Espinoza	Associate Civil Engineer
Printed Name	Title

EVALUATION OF ENVIRONMENTAL IMPACTS:

In preparing this Initial Study, the City considered the MND it adopted on October 18, 2005 for the General Plan/Waterfront Specific Plan Amendment, Zoning Ordinance Amendment and Gilman Street Playing Fields Project which is now known as the Tom Bates RSC. After reviewing the MND and materials prepared to accompany this Initial Study, no Significant Impacts were identified for the Project. The Initial Study determined that the project would either have no impact or a less than significant impact to the environment.

I. AESTHETICS

Environmental Setting

The Project is located at the Tom Bates RSC, 400-408 Gilman Street, in the City of Berkeley in Alameda County, California. The City's Parks, Recreation & Waterfront Department manages and operates the Tom Bates RSC under a sub-lease to the EBRPD. The project site is generally bounded by Gilman Street on the north, West Frontage Road, and I-80/I-580 on the east, McLaughlin Eastshore State Park on the south, and the San Francisco Bay on the west. The Tom Bates RSC is located in an area of the city with several other recreational and entertainment venues including the Golden Gate Fields Racetrack north of Gilman Street (which is now closed); McLaughlin Eastshore State Park just south of the complex; and the Berkeley Marina to the southwest/west of the project. The Bay Trail runs along the east and north perimeter of the park.

The Tom Bates RSC encompasses approximately 20 acres; the proposed Project is planned for approximately 3.69 acres (Figure 1) of the total area. The site currently consists of two synthetic turf full-size soccer fields and a parking lot on the northern side, and a natural turf multi-use sports fields and baseball field on the southern side. The Project site is located on the northwest portion of the Tom Bates RSC on the site of the existing parking lot and the vacant land to the south and west of the parking lot.

Impact Analysis

Except as provided in Public Resources Code Section 21099, would the project:

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact

Question	CEQA Determination
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a 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?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact: The Berkeley Municipal Code defines view corridors in Section 23.502.020 as the following: "A significant view of the Berkeley Hills, San Francisco Bay, Mt. Tamalpais, or a significant landmark such as the Campanile, Golden Gate Bridge, and Alcatraz Island or any other significant vista that substantially enhances the value and enjoyment of real property..." The City's General Plan also notes that construction should avoid blocking views of San Francisco Bay but does not go as far as to designate any specific vantage points. There are no notable public vantage points of the Berkeley Hills, San Francisco Bay, Mt. Tamalpais, or other significant landmarks from areas east of the Project site. If any unofficial vantage points exist, the Project area is at a lower elevation than the land east of it, allowing the only physical structure being added to the project site (the community space facility) to fall lower than an existing viewshed. While it is unlikely that the construction of the Project will impact a scenic vista, a small structure is being added to the Project site that may fall within existing viewsheds of the San Francisco Bay. Due to higher elevations east of the Project site and the small size of the building, impacts are expected to be negligible, if any. Therefore, the impact would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact: The Project area is not on an officially designated scenic highway, with the closest designated highway located over five (5) miles away outside of the City of Berkeley. Therefore, there would be no impact.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a 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?

No Impact: The Project is located in an urbanized area and located in the Specific Plan zoning district as detailed in the City's Waterfront Master Plan. The proposed uses of the Project are consistent with the uses envisioned in the goals and policies established by the Waterfront Master Plan and are also consistent with existing uses at the project site. Therefore, the project would not

conflict with applicable zoning or other regulations governing scenic quality, and there would be no impact.

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

Less Than Significant Impact: The Project does not propose to add any additional lighting for the parking lot, pickleball fields, or soccer fields. The Project does include wall-mounted lighting to illuminate the area around the community space facility and, in addition, one light pole and in-ground fixtures would illuminate the ADA-compliant switchback ramp. Exterior lights will use fixtures approved by the International Dark-Sky Association and consistent with the City's Condition of Approval (COA) that require that all exterior lighting to be energy efficient where feasible; and shielded and directed downward and away from property lines to prevent excessive glare beyond the subject property.

While the Project does include some additional lighting, the specific types have been chosen so that the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore, the impact would be less than significant.

II. AGRICULTURE AND FOREST RESOURCES

Environmental Setting

The project site is a park in Berkeley, California and does not contain agricultural or forestry resources (see Figure 1). The project site is not located on or adjacent to agricultural land or forest land and the proposed project would not involve development that could result in the conversion of farmland to non-agricultural uses.

Impact Analysis

Would the project:

Question	CEQA Determination
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact

Question	CEQA Determination
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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?	No Impact

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?

No Impact: The Project site has never been in agricultural use and is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, there would be no impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact: The Project site is not zoned for agricultural use, nor is it under a Williamson Act Contract. Therefore, there would be no impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact: The Project would not conflict with existing zoning for forest land, or timberland zoned Timberland Production. Therefore, there would be no impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact: The Project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, there would be no impact.

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?

No Impact: The Project would not involve other changes in the existing environment which, due to their location or nature, could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, there would be no impact.

III. AIR QUALITY

Environmental Setting

The Project site is located within the San Francisco Bay Area Air Basin. Air quality in the region is affected by natural factors, such as proximity to the bay and ocean, topography, meteorology, and existing air pollution sources. The San Francisco Bay Area is characterized by a Mediterranean-type

climate, with warm, dry summers and cool, wet winters. The prevailing winds are from the west. The Project site is directly exposed to strong, unbuffered, winds that blow across the open Bay waters from the westerly directions.

Certain land uses are considered more sensitive to air emissions than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. Residences are not located adjacent the Project site, while the closest residential areas are more than 1,300 feet to the east on the other side of Interstate 80. The closest school is the Black Pine Circle School, which is located 0.8 miles from the limits of the Sports Complex.

Under the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), the six criteria pollutants are carbon monoxide (CO), lead, nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), and sulfur dioxide (SO_2). PM is regulated both as PM with an aerodynamic diameter less than or equal to 2.5 micrometers ($PM_{2.5}$), and as PM with an aerodynamic diameter less than or equal to 10 micrometers (PM_{10}).

For individual criteria pollutants, geographical areas have been designated as attainment or nonattainment areas in regard to both federal and California air-quality standards. “Attainment” status means that the region meets the standard for a pollutant, while “nonattainment” status means air pollutant concentrations for a specific pollutant have not met the federal or state standards. An area is considered “unclassified” if it cannot be designated, based on available information, as meeting or not meeting the standards.

The Project area is designated as nonattainment for the federal 8-hour O_3 and 24-hour $PM_{2.5}$ standards, while is in attainment or unclassified for all other federal NAAQS standards. For the state CAAQS, the area is designated nonattainment for 1-hour and 8-hour O_3, 24-hour PM_{10}, annual PM_{10}, and annual $PM_{2.5}$ (Bay Area Air Quality Management District [BAAQMD], 2023).

Impact Analysis

Would the project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
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?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact: The applicable air quality plan for the Project area is the 2017 Clean Air Plan: Spare the Air, Cool the Climate (BAAQMD 2017). The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. The proposed Project would be consistent with the control measures in the 2017 Clean Air Plan to reduce motor vehicle trips, increase use of electric vehicles, promote energy efficiency by LEED certification, reuse and recycle construction debris, and support the use of alternative means of transportation. The control measures are evaluated below.

Transportation Control Measures. The 2017 Clean Air Plan includes measures to reduce demand for motor vehicle travel by promoting alternative means of transportation (such as walking, bicycling, and transit), and by providing the charging/fueling infrastructure for zero-emission vehicles (such as battery electric). To support use of electric vehicles, the proposed Project would provide electric vehicle charging capabilities consistent with the City and CALGreen requirements. To encourage bicycle use, the proposed Project would include additional bicycle parking by installing bike lockers. The additional bicycle racks and lockers included in the Project, in addition to the Project's location adjacent to the Bay Trail, would support the ability to use alternative modes of transportation and therefore reduce motor vehicle travel.

Building Control Measures. The 2017 Clean Air Plan includes control measures for buildings, by promoting energy and water efficiency in new buildings. To reduce electric power consumption and associated emissions under the proposed Project, the Community Space Facility would be designed to be certified as LEED, consistent with the latest City requirements. The 2017 Clean Air Plan also includes control measures for new buildings to use electricity, rather than fossil fuels such as natural gas. The Project would be designed to be all-electric and would not include the use of any traditional natural gas systems.

Waste Management Control Measures. A variety of air pollutants are produced as waste decomposes in landfills and composting operations. The 2017 Clean Air Plan includes measures to increase the waste diversion rates through efforts to reduce, reuse, and recycle. The proposed Project would be consistent with the Berkeley Green Code that requires 100 percent of concrete, asphalt, excavated soil, and land clearing debris to be reused and recycled during construction.

If approval of a project would not disrupt, delay, or otherwise hinder the implementation of any control measures in an air quality plan, the project is considered consistent with the air quality plan for the Project area, 2017 Clean Air Plan). The BAAQMD Air Quality Guidelines (BAAQMD, 2022) identify examples of projects that may cause disruption or delay of control measures, such as projects that preclude an extension of a transit line or bike path, and projects that propose parking beyond parking requirements. The proposed Project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area. The proposed Project would tie in with the Bay Trail improvements to be constructed by Caltrans on Gilman Street. In addition, the number of parking spaces would comply with the City code provisions. Therefore, there would be no impact.

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?

Less Than Significant Impact: This question addresses construction and operational emissions of criteria pollutants. The six criteria pollutants in the federal NAAQS and state CAAQS are ground-level O_3, CO, PM_{10}, $PM_{2.5}$, SO_2, NO_2, and lead. For the criteria pollutants, the San Francisco Bay Area Air Basin is currently designated as a nonattainment area for the California and NAAQS for O_3 and PM.

Emissions of criteria pollutants and GHGs under the proposed Project have been estimated with the California Emissions Estimator Model (CalEEMod) Version 2022.1 (CAPCOA 2022). CalEEMod is a statewide land use emissions model developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with California air districts. CalEEMod quantifies O_3 precursors, criteria pollutants, and GHG emissions from the construction and operation of new land use development and linear projects in California.

CalEEMod utilizes widely accepted methodologies for estimating emissions combined with default data that can be used when site-specific information is not available. Because the proposed Project is in the conceptual design phase, the default assumptions from CalEEMod have been used to estimate Project emissions.

Short-Term Construction-Related

Site preparation and construction activities would intermittently generate PM, odors, and engine exhaust in the vicinity of the Project site. PM (dust, $PM_{2.5}$ and PM_{10}) can be emitted from ground clearing, excavation, material piles, building construction, and trucks depositing mud on streets. Exhaust emissions from construction vehicles and equipment can include CO, O_3 precursors, $PM_{2.5}$ and PM_{10}, and GHGs. Diesel-powered construction equipment can emit small amounts of diesel exhaust and air toxics. Engine exhaust and paving activities can be sources of odors at times. Emissions during construction would be short-term, vary daily as construction-activity levels change, and be mostly localized to the vicinity of the construction activity.

Construction of the proposed Project is anticipated to start in April 2025 and would occur over approximately six months. Construction-related emissions of criteria pollutants under the proposed Project have been estimated with CalEEMod. Table 1 compares the construction emissions under the proposed Project to the emission thresholds (BAAQMD, 2022). Table 1 presents emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x), which are the precursors of O_3.

Table 1: Estimated Construction Pollutant Emissions

	ROG (pounds/day)	NO_x (pounds/day)	PM_{10} Exhaust (pounds/day)	$PM_{2.5}$ Exhaust (pounds/day)
2025 Construction Unmitigated Proposed Project	0.7	6	0.2	0.2
BAAQMD Construction Thresholds	54	54	82	54
Exceed Threshold?	No	No	No	No

Source: Thresholds from BAAQMD, 2022

As shown by Table 1, construction emissions under the proposed Project be minimal and would not exceed the BAAQMD thresholds for criteria pollutants. Off-road construction equipment and dust from material moving would be the sources of the majority of the emissions. In addition to construction controls, the project would comply with the City's standard COA.

Public Works – Implement BAAQMD-Recommended Measures during Construction: For all proposed projects, BAAQMD recommends implementing all the Basic Construction cult Measures, listed below to meet the best management practices (BMP) threshold for fugitive dust.

Construction Best Management Practices

The Project will implement the BMPs to reduce fugitive dust emissions, consistent with the BAAQMD's (2022) and the City's requirements (Table 2).

Table 2: BMPs for Construction-Related Air Quality Emissions

BMP ID	Basic Best Management Practice
B-1	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
B-2	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
B-3	All visible mud or dirt track out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
B-4	All vehicle speeds on unpaved roads shall be limited to 10 mph.

BMP ID	Basic Best Management Practice
B-5	All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
B-6	All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 15 mph.
B-7	All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
B-8	Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
B-9	Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.
B-10	Ensure that idling time for all heavy equipment is minimized to reduce on-site emissions
B-11	Maintain equipment in good mechanical condition.

Source: B-1 through B-9, BAAQMD, 2022. B-10 and B-11, City of Berkeley, Division 1 General Requirements, Section 01 1100 Summary of Work, Part 1 General, 1.13 Air Quality Standards

Note: The City of Berkeley has lower vehicle speed (B-4) and wind speeds (B-6) than BAAQMD. The table reflects the City's limits in accordance with Division 1 General Requirements, Section 01 1100 Summary of Work, Part 1 General, 1.13 Air Quality Standards. Compliance with the above COA would ensure that construction-related fugitive dust emissions would be less than significant impact.

Long-term Permanent Impacts

After a project is built, operational emissions are anticipated to occur continuously throughout a project's lifetime. Operational emissions can include stationary sources (e.g., industrial processes), mobile sources (e.g., vehicle trips), and energy sources (e.g., electricity). Operational emissions under the proposed Project would primarily be increases in vehicular traffic and indirect emissions from electricity consumption. The proposed Project would not include any new stationary sources such as backup diesel generators, boilers, or other types of combustion equipment. The proposed Project would be designed to be all electric and would not utilize natural gas. Therefore, the impact would be less than significant.

Operational emissions under the proposed Project have been estimated with CalEEMod. Table 3 compares the net operation emissions under the proposed Project to the emission thresholds (BAAQMD, 2022). Table 3 presents emissions of ROG and NO_x, which are the precursors of O_3.

Table 3: Estimated Operational Criteria Pollutant Emissions

	ROG (pounds/day)	NO_x (pounds/day)	PM_{10} Exhaust (pounds/day)	$PM_{2.5}$ Exhaust (pounds/day)
2026 Operations Unmitigated Proposed Project	0.1	<0.1	<0.1	<0.1
BAAQMD Operational Thresholds	54	54	82	54
Exceed Threshold?	No	No	No	No

Source: Thresholds from BAAQMD, 2022

As shown by Table 3, changes in operational emissions under the proposed Project would be minimal and would not exceed the BAAQMD thresholds for criteria pollutants. The major sources of emissions during operation would be mobile exhaust and on-road fugitive dust. Vehicle-related emissions would be low because the proposed Project would generate few additional vehicle trips. Therefore, the impact would be less than significant.

Localized Carbon Monoxide Impacts

Although the San Francisco Bay Area Air Basin is in attainment for CO, elevated localized concentrations of CO can still warrant consideration in the environmental review process in limited situations. The major source of CO is vehicular exhaust, and potential CO impacts from traffic tend to be localized. The highest levels of CO typically occur in urban areas along roads with heavy traffic and at congested intersections.

The BAAQMD Air Quality Guidelines provide a screening-level analysis of potential local CO impacts, to determine whether a project would result in CO emissions that exceed the thresholds of significance (BAAQMD 2022). If all the following screening criteria are met, then operation of the proposed Project would result in a less-than-significant impact related to CO:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.

- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Implementation of the proposed Project would not conflict with the policies or programs of the Alameda County Transportation Commission. The proposed Project would generate minimal additional traffic volumes, as evaluated in the Transportation Section of the Environmental Checklist. The proposed Project would meet the BAAQMD screening criteria for CO. No further analysis is required for local CO impacts. Therefore, the impact would be less than significant.

Cumulative Impacts

A cumulative impact is the change in the environment that results from the incremental impact of the project under review in conjunction with other past, present, and reasonably foreseeable probable future projects.

The San Francisco Bay Area Air Basin is currently designated under the NAAQS and CAAQS as nonattainment areas for the O_3 and PM, which are considered regional pollutants. Past, present, and future development and transportation projects have contributed or will contribute to the region's nonattainment status on a cumulative basis. A single project is not sufficient in size, by itself, to result in nonattainment of ambient air quality standards at the regional level. Instead, a project's individual emissions could contribute to existing cumulatively significant adverse air quality impacts.

The BAAQMD provides project-level thresholds of significance for criteria air pollutants for which the Air Basin is in nonattainment. These are the levels at which the BAAQMD has determined whether an individual project's contribution to the cumulative impact would be cumulatively considerable. If a project exceeds the significance thresholds, then its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Under the proposed Project, the construction and operational emissions of criteria pollutants would be minimal and would be well below the BAAQMD thresholds of significance (Table 1 and Table 3). In additional, the proposed Project would implement BMPs B-1 through B-11 listed in Table 2 to further reduce the impact of construction-related fugitive dust and vehicle emissions. Therefore, the Project would not result in a cumulatively considerable net increase of the criteria pollutants for which the region is non-attainment. Therefore, the impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact: Certain community members are more susceptible to poor air quality. These individuals, referred to as sensitive receptors, are typically children, the elderly, and

those with preexisting serious health problems. Examples of sensitive receptors include residential communities, schools and playground, hospitals and hospices, childcare facilities, and senior housing. None of these sensitive receptors are located within 1,000 feet of the Project site. The closest residential areas are more than 1,300 feet to the east on the other side of I-80/I-580. The closest school is the Black Pine Circle School, which is located 0.8 miles from the limits of the Tom Bates RSC.

PM is the most important health risk driver in Bay Area air, both as fine $PM_{2.5}$ and as diesel PM, a toxic air contaminant. $PM_{2.5}$ is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. $PM_{2.5}$ can be emitted directly and also can be formed in the atmosphere through reactions among different pollutants. Both long-term and short-term exposure to $PM_{2.5}$ can cause a wide range of health effects, and epidemiological studies have established that exposure to $PM_{2.5}$ has serious adverse health impacts because $PM_{2.5}$ can travel deep into lungs and enter the bloodstream (BAAQMD, 2022).

Construction and operational emissions of $PM_{2.5}$ under the proposed Project have been estimated with CalEEMod (Table 1 and Table 3). Daily emissions of $PM_{2.5}$ during operation are estimated to be less than 0.1 pounds per day, which would be well below the BAAQMD thresholds.

The major sources of long-term emissions during operation would be mobile exhaust. Mobile emissions of $PM_{2.5}$ would be negligible because the proposed Project would generate few additional vehicle trips (see Transportation Section of the Environmental Checklist). The majority of vehicle trips would be passenger cars, and not a substantial number of diesel vehicles.

Because sensitive receptors are more than 1,000 feet away and emissions of $PM_{2.5}$ and associated toxic hazards would be negligible, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the impact would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Impact: Odor impacts could occur if a project introduces a new odor source near existing receptors. The BAAQMD Air Quality Guidelines identify typical odor-generating sources, such as wastewater treatment plants, landfills, composting facilities, refineries, food processing facilities, chemical manufacturing, and rendering plants (BAAQMD, 2022). No such sources are included in the proposed Project.

During construction of the proposed Project, diesel-powered vehicles, and equipment in use on site would intermittently create localized odors. Any construction odors would be temporary, typically dissipate quickly, and are not likely to be noticeable for extended periods of time beyond the Project site. Therefore, there would be no impact.

IV. BIOLOGICAL RESOURCES

Environmental Setting

The Biological Study Area (BSA) is within the city limits at the Tom Bates RSC located at 400-408 Gilman Street in the City in Alameda County, California. The City's Parks, Recreation & Waterfront Department manages and operates the Tom Bates BSA under a sub-lease to the EBRPB. The Project site is generally bounded by Gilman Street on the north, West Frontage Road, and Interstate 80/Interstate 580 (I-80/I-580) on the east, McLaughlin Eastshore State Park on the south, and the San Francisco Bay on the west.

The Tom Bates RSC encompasses approximately 20.16 acres, of which the Project footprint is approximately 3.69 acres. The full RSC site currently consists of two synthetic turf full-size soccer fields and a parking lot on the northern side, and a natural turf multi-use sports fields and baseball field on the southern side. The BSA is located on the northwest portion of the Tom Bates RSC. The BSA includes the existing parking lot and the vacant land to the south and west of the parking lot.

The BSA is part of an urban developed area bordering the San Francisco Bay. The *Environmental Initial Study for the Gilman Street Playing Fields* (City of Berkeley, 2005) analysis identifies the area defined by the BSA as being a paved area, with uses including employee parking, hay storage, horse trailer parking, and semi-trailer parking. During the post-2005 development of the Tom Bates Regional Sports Complex, the southern half of the BSA was built up with soil to a height of approximately 7 feet above the surrounding area. The southern portion of the BSA is now vegetated with a mix of ruderal species, such as pampas grass (*Cortaderia jubata*), brome grass (*Bromus* species), foxtail barley (*Hordeum murinum*), bermuda grass (*Cynodon dactylon*), black mustard (*Brassica nigra*) and scattered oak (*Quercus* species) shrubs. This area was classified based on field observations on October 11, 2023 as non-native annual grassland, covering an area of approximately 1.4 acres. The remainder of the BSA (2.29 acres) is paved. There is no likelihood of wetlands present in the BSA based on the resource review in combination with field observations. No waterbodies are present in the BSA. Figure 3 shows the landcover in the BSA. The multi-database search identified 58 species that may have or have occurred in or near the BSA. Figures 4 and 5 show the approximate locations of plant and animal species, respectively, identified by the California Natural Diversity Database (CNDDB) within five miles of the BSA. Due to the BSA being a combination of paved areas and recently vegetated non-native grassland, the potential for suitable protected species habitat to be present in the BSA is limited. San Francisco Bay, west of the BSA, does contain designated critical habitat. As the BSA defines the potential limits of impact, which does not intersect with San Francisco Bay.

Impact Analysis

Would the project:

Question	CEQA Determination
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 and Game or U.S. Fish and Wildlife Service?	Less Than Significant with Mitigation Incorporated
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 by the California Department of Fish and Game or US Fish and Wildlife Service?	No Impact
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?	No Impact
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?	Less Than Significant with Mitigation Incorporated
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

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 and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated:

Short-term Construction-Related Impacts

Short-term construction-related effects would result from the presence and movement of construction equipment, construction fencing, and additional lighting sources provided on the Project site, which could affect or destroy habitat, or otherwise “take” protected plant or animal species. As identified in Attachment 3, the BSA does not contain habitat to support any of the

special-status plant species known to occur in the larger vicinity. The Project would therefore not result in impacts to any special-status plant species. No avoidance, mitigation, or minimization measures are proposed for special status plant species.

As identified in Attachment 3, no special status animal species, other than the burrowing owl, has any likelihood of use of habitat within the BSA. While they would likely avoid the construction area, it is feasible that special status bird species may fly through the BSA; however, they are unlikely to interact with construction equipment during this brief pass-through. The burrowing owl has a low likelihood of presence in the BSA based on analysis of habitat presence but has been observed in the general area in the past, such as at Tom Bates RSC and Cesar Chavez Park (City of Berkeley, 2005; Golden Gate Bird Alliance, 2023). Impacts to burrowing owls would be significant. To avoid significant impacts to the burrowing owl, mitigation measure BIO-1 would be implemented:

- **BIO-1 -** Burrowing Owl Survey Protocol and Mitigation: Prior to ground disturbing activity, a pre-construction survey for burrowing owls shall be completed by a qualified biologist according to Burrowing Owl Survey Protocol and Mitigation Guidelines and the California Department of Fish and Wildlife (CDFW) protocol identified in the Staff Report on Burrowing Owl Mitigation prior to disturbance of non-native annual grassland areas occupied by ground squirrels (Attachment 4, CDFW, 2012). After the survey is complete, the qualified biologist shall prepare a report that includes but is not limited to: Description of the proposed project or proposed activity, including the proposed project start and end dates, as well as a description of disturbances or other activities occurring on-site or nearby. The survey report will be provided to the City's Planning Department for review and approval. If any occupied burrows are identified during the breeding season, buffer areas will be established around them and protected until the nesting activities are complete. Any occupied burrow identified outside the nesting season (June-July) will have a one-way gate installed to allow burrowing owls to leave the site. Any identification of burrowing owls will be coordinated with the CDFW. The phases listed below shall be completed by the qualified biologist:
    - Phase I: Habitat assessment
    - Phase II: Burrow survey
    - Phase III: Burrowing owl surveys, census, and mapping
    - Phase IV: Resource summary, written report

In addition to construction controls, the project shall comply with the City's standard COA to avoid disturbance of nesting birds and initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible.

If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided.

The proposed project could result in a potential impact to burrowing owls. However, with required adherence to California Department of Fish and Wildlife requirements, existing regulations, and implementation of Mitigation Measure BIO-1, the impact would be less than significant.

To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest).

No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.

Long-term Permanent Impacts

Permanent effects would be due to the removal of suitable habitat or direct take of species during the construction or operation of the Project. No suitable habitat for special status species, special plant communities, or wetlands is present on site, and no removal of suitable habitat is required, with the potential exception of the burrowing owl nesting habitat (ground squirrel burrows). No direct take of species is anticipated due to the lack of suitable habitat or with implementation of measures outlined above for the burrowing owl. No long-term permanent impacts to Biological Resources are associated with Project implementation based on the resources studied in this report.

Cumulative Impacts

Cumulative impacts are those effects of past, present, and future federal, state, or private activities that are reasonably certain to occur within or adjacent to the BSA that may lead to impacts to biological resources. No suitable habitat for special status species, except for burrowing owls, special plant communities, or wetlands is present in the Project implementation area and there would be either no or minor impacts. For burrowing owls, with implementation of Mitigation Measure BIO-1, the impacts would be less than significant. The *Environmental Initial Study for the Gilman Street Playing Fields* (City of Berkeley, 2005) determined that burrowing owls have no potential to occur in the BSA. Therefore, there would be no contribution to adverse cumulative impact to biological resources.

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 by the California Department of Fish and Game or US Fish and Wildlife Service?*

No Impact: There is no riparian habitat on the site, and the site is not within a natural community conservation area. Therefore, there would be no impact.

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?*

No Impact: No wetlands are present on the Project site, and implementation of the Project would not require a Section 404 permit from the US Army Corps of Engineers. Therefore, there would be no impact.

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?*

Less Than Significant Impact with Mitigation Incorporated: The Project would not affect migratory fish, nor would it affect resident or migratory wildlife corridors. Potential effects to burrowing owls are addressed under a) above.

Lighting related to the operation of the Project could disturb wildlife outside of the Project area; However, the Project does not propose to add any additional lighting for the parking lot, pickle ball fields, or soccer fields. The Project does include wall-mounted lighting to illuminate the area around the community space facility and, in addition, one light pole and in-ground fixtures would illuminate the ADA-compliant switchback ramp. Exterior lights will use fixtures approved by the International Dark-Sky Association and consistent with the City's COAs that require that all exterior lighting to be energy efficient where feasible; and shielded and directed downward and away from property lines to prevent excessive glare beyond the subject property.

While the Project does include some additional lighting, is being added through the Project, the specific types have been chosen so that the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore, the impact would be less than significant.

As identified in Attachment 3, no special status animal species, other than the burrowing owl, has any likelihood of use of habitat within the BSA. While they would likely avoid the construction area, it is feasible that special status bird species may fly through the BSA; however, they are unlikely to interact with construction equipment during this brief pass-through. The burrowing owl has a low likelihood of presence in the BSA based on analysis of habitat presence but has been observed in the general area in the past, such as at Tom Bates RSC and Cesar Chavez Park (City of Berkeley, 2005; Golden Gate Bird Alliance, 2023). Impacts to burrowing owls would be significant. To avoid significant impacts to the burrowing owl, mitigation measure BIO-1 would be implemented. Therefore, the impact would be less than significant with mitigation incorporated.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact: The Project would not conflict with any City or EBRPD policies or ordinances intended to project biological resources. No trees would be removed in conjunction with construction of the Project. Therefore, there would be no impact.

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

No Impact: The site is neither within an area covered by a Natural Community Conservation Plan nor a Habitat Conservation Plan or other similar local, regional, or State plan. Therefore, there would be no impact.

V. CULTURAL RESOURCES

Environmental Setting

A cultural resources study was conducted by InContext under contract to TranSystems, Inc. for the Project in compliance with CEQA. The study consisted of a records search at the Northwest Information Center, literature review, outreach to the Native American Heritage Commission and California Native American tribes, outreach to historical societies and the City of Berkeley Landmarks Commission, and a pedestrian survey. The cultural resources study was completed under the direction of Trish Fernandez, M.A., who meets the Secretary of Interior's Standards for Professional Qualifications in Archaeology, History, and Architectural History. Ms. Fernandez is also a California Registered Historian and a Registered Professional Archaeologist.

No historical resources or archaeological resources defined under Public Resources Code Section 15064.5 were identified as a result of this study.

Impact Analysis

Would the project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant with Mitigation Incorporated

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

Less than Significant: No historical resources defined under Public Resources Code Section 15064.5 were identified as a result of this study. Therefore, the impact would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant: No archaeological resources defined under Public Resources Code Section 15064.5 were identified as a result of this study. In addition, because the Project limits consist of fill material above reclaimed marshland, the specific Project limits do not appear sensitive for the presence of subsurface archaeological resources. The potential for discovering subsurface archaeological resources is low. Mitigation measures will be implemented as part of the project to ensure that inadvertently discovered archaeological resources remains are addressed. Therefore, the impact would be less than significant.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant With Mitigation Incorporated: No human remains, including those interred outside dedicated cemeteries were identified as a result of this study. In addition, because the Project limits consist of fill material above reclaimed marshland, the specific Project limits do not appear sensitive for the presence of human remains. The potential for discovering human remains is low. Mitigation measures will be implemented as part of the project to ensure that inadvertently discovered human remains are addressed so that their impact would be less-than-significant.
Because the Project limits consist of fill material above reclaimed marshland, the specific Project limits do not appear sensitive for the presence of subsurface archaeological resources. The potential for discovering subsurface archaeological resources or human remains is low. Mitigation Measures CR-1 and CR-2 be implemented as part of the project to ensure that inadvertently discovered archaeological resources or human remains are addressed so that their impact would be less-than-significant.

- **CR-1 -** Inadvertent Discovery of Archaeological Resources: Workers involved in ground-disturbing activities should be trained in the recognition of buried cultural resources, procedures to report such discoveries, laws prohibiting destruction of historical resources, and other appropriate protocols. In the event that archaeological artifacts or cultural soil deposits are encountered during project implementation, all work shall stop in the immediate vicinity of the find until the discovery area can be evaluated by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding, and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.

- **CR-2 -** Inadvertent Discovery of Human Remains: If human remains are discovered anywhere on the site other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered determines that no investigation of the cause of death is required and the coroner determines the remains to be Native American. If the coroner makes those determinations, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the person or persons it believes to be the most likely descended (MLD) from the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code section 5097.98. If the NAHC is unable to identify an MLD or the MLD fails to make a recommendation within 24 hours, or if the landowner or their authorized representative rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner, then the landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

VI. ENERGY

Environmental Setting

California's Building Standards Code (24 CCR) comprises two key components: 1) the Building Energy Efficiency Standards (Energy Code), found in Part 6 of Title 24, and 2) the California Green Building Standards (CALGreen Code), located in Part 11 of Title 24. The Energy Code governs newly constructed buildings, additions, and alterations. PG&E supplies electricity to the site.

Impact Analysis

Would the project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less Than Significant Impact

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Less than significant: Construction of the proposed project would result in short-term consumption of energy from the use of construction equipment and processes. Energy use during

construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary grid power may also be needed for construction trailers or electric construction equipment. Energy use during construction would be temporary in nature, and construction equipment used would be typical of construction projects in the region. It is reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs.

The project would comply with the California Air Resources Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation, which imposes limits on idling and restricts the use of older vehicles. This would reduce fuel consumption and lead to the use of fuel-efficient vehicles on the construction site. Construction equipment would be maintained to applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. The CALGreen Building Standards Code includes specific requirements related to recycling, construction materials, and energy efficiency standards that would apply to construction of the proposed project to minimize wasteful, inefficient, and unnecessary energy consumption.

Operational energy use would include use of transportation fuel. California requires that all motorists use California Reformulated Gasoline, a cleaner formulation of gasoline that results in lower emissions of O_3, CO and other air pollutants when burned.

Operation of the Project would consume electricity to provide the Community Space Facility with heating and power, lighting, and water conveyance, among other operational requirements. The proposed Project would increase the amount of electricity consumed compared to the existing uses on the Project site. The Project would meet LEED qualifications or, at minimum, CALGreen Building Standards. In compliance with the City's ordinance prohibiting natural gas infrastructure in new buildings, the project would not utilize natural gas. Project energy consumed would represent an incremental increase in energy usage compared to existing energy use in Berkeley, and the proposed Project would implement energy-efficient components to reduce energy demand. Additionally, the Project would meet CALGreen specific requirements for energy efficiency and would incorporate water efficient landscape features.

As stated in the Project Description, a new electric service and transformer will be required from Pacific Gas & Electric Company (PG&E) to provide sufficient capacity for the EV charging stations. This connection will likely be made at the existing PG&E switch located on City property at the northeast corner of the RSC and will run underground along the north side of the existing soccer fields to the existing parking lot. The electrical service will be designed to accommodate a planned 1000-amp service. Of those, 200 amps of electrical capacity are designated for use by the proposed Community Space Facility, with the remaining 800 amps dedicated to electric car charging stations in the parking lot.

Therefore, construction and operation of the proposed project would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy and this impact would be less than significant.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

Less than significant: The City's Climate Action Plan (CAP) sets a year 2050 target to achieve an 80 percent absolute reduction below year 2000 community-wide emissions and identifies actions to achieve the target. The CAP contains GHG reduction policies for transportation and land use, building energy use, as well as waste reduction and recycling (see Section VIII Greenhouse Gas Emissions). The project would be designed to achieve CALGreen requirements and would include energy efficient appliances and lighting as well as water efficient fixtures and irrigation. The siting and design of the proposed Project encourages alternative transportation options, such as bicycling and pedestrian use, consistent with the CAP. The Project site is located next to the San Francisco Bay Trail, and the design of the proposed Project would incorporate the Bay Trail. The proposed Project also would include new bicycle parking with additional bicycle racks and bike lockers. Furthermore, it includes electric vehicle parking and charging stations. The project would be all electric. Overall, the project would be consistent with the CAP and the energy efficiency strategies contained therein. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact would be less than significant.

VII. GEOLOGY AND SOILS

Environmental Setting

Several active earthquake faults are located near the Project site, including the Hayward Fault, approximately 2.4 mile to the east and the San Andreas Fault, approximately 16.8 miles to the west. Other faults in the region and up to 22 miles from the site are the Calaveras, Concord, Serra, San Gregorio, and Rogers Creek faults (CE&G 2023).

A Geotechnical investigation was conducted for the Project site in November 2022 by CE&G (2023). Five geotechnical borings were drilled in the vicinity of the planned improvements as part of the investigation. Subsurface soil conditions encountered in our borings were generally consistent with regional geologic mapping.

- Artificial Fill: In each boring artificial fill with thicknesses ranging was encountered from approximately 2 to 11 feet within the proximity of the borings. This fill material primarily comprised moist clays, exhibiting a spectrum from soft to hard consistency. A secondary layer of more diverse fill was identified between the surface fill and the underlying bay sediments. This layer exhibited significant variability, containing silt, clay, and organic matter. Generally, this material displayed a loose, granular nature and ranged from soft to medium stiffness in fine-grained areas. The thickness of this layer extended up to 11 to 12 feet.

- Young Bay Mud: Beneath the fill in borings B-1 through B-3, young estuarine deposits, commonly referred to as Bay mud, were encountered which varied in thickness from approximately 7 to 13 feet. The Young Bay Mud was composed of very soft clays and silts with medium to high plasticity characteristics.

- Older Alluvium: Beneath the identified fill and/or Bay mud, alluvium extending to the maximum depth explored was encountered, which was 50 feet below ground surface (bgs). This alluvial layer predominantly comprised medium stiff to very stiff lean and fat clays, interspersed with alternating layers of wet, loose to medium dense sandy silt, silty sand, and poorly graded sand.

Impact Analysis

Would the project:

Question	**CEQA Determination**
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.	Less Than Significant Impact
ii) Strong seismic ground shaking?	Less Than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	Less Than Significant Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
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?	Less Than Significant Impact
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?	Less Than Significant Impact
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?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

Because of the proximity of earthquake faults, the design will adhere to current structural engineering codes. Structural engineering and geologic engineering disciplines will prepare the design based on current geologic site information.

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.*

Less Than Significant Impact: Several active earthquake faults are located nearby. The Project site, however, is not within an earthquake special studies zone, and the risk of fault rupture across the surface of the site during a major earthquake would be limited. Furthermore, because users of the RSC will primarily be outside and because the Community Space Facility is designed to current structural engineering code, the potential for adverse effects, including the risk of loss, injury, or death is less than significant. Therefore, the impact would be less than significant.

ii. *Strong seismic ground shaking?*

Less Than Significant Impact: A substantial earthquake event on any of these fault systems has the potential to induce significant ground shaking in the vicinity of the planned improvement. The site falls within an area prone to severe ground shaking and intense seismic activity, as indicated by the Modified Mercalli Scale, during major earthquakes occurring along the Hayward or San Andreas Faults.

A substantial earthquake has the potential to damage underground pipes, cause the emergence of noticeable ground cracks, and cause significant damage to masonry and frame structures. Because users of the RSC will primarily be outside and because the Community Space Facility is designed to current structural engineering code, the potential for adverse effects, including the risk of loss, injury, or death is less than significant. Therefore, the impact would be less than significant.

iii. *Seismic-related ground failure, including liquefaction?*

Less Than Significant: Impact A geotechnical investigation conducted for the Project site in November 2022 by CE&G (2023) revealed that below the groundwater table, layers of clays and clayey sands are present underneath the site, these layers typically exhibit a low susceptibility to liquefaction. According to previous geotechnical surveys and the CE&G (2023) investigation's subsurface exploration, seismic densification was deemed low. This conclusion is supported by the elevated groundwater table and the absence of granular soils above it.

Because users of the RSC will primarily be outside and because the Community Space Facility is designed to current structural engineering code, the potential for adverse effects, including the risk of loss, injury, or death is less than significant.

As with seismic ground shaking, liquefaction poses a risk to structures and to their occupants during an earthquake. The liquefaction risk would be a function of the seismic ground shaking risk, and the design of all structures proposed as a part of the project shall be reviewed by a qualified structural engineer, in consultation with an engineering geologist, who shall provide

recommendations for reducing life safety hazards for field users during a major earthquake. The design should address the high groundwater level at the site, for example, by requiring a heavier bottom for the lift station to counter buoyancy. Therefore, the impact would be less than significant.

iv. Landslides?

No Impact: The site has very little topographic variation, and no landslide hazards are present. Therefore, there would be no impact.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact: The Project would involve grading and excavation activities during construction, which includes the removal, relocation, and transportation of soil. Without proper site management, there is a potential risk of substantial soil erosion due to wind or rainfall. For construction, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared according to the City's COA and implemented, as required by the State Water Resources Control Board for projects involving more than one acre of land disturbance.

The City's COA Stormwater Requirements requires that the applicant shall demonstrate compliance with the requirements of the City's National Pollution Discharge Elimination System (NPDES) permit as described in BMC Section 17.20. The following conditions apply:

- The project plans shall identify and show site-specific Best Management Practices (BMPs) appropriate to activities conducted on-site to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system, regardless of season or weather conditions.
- Trash enclosures and/or recycling area(s) shall be covered; no other area shall drain onto this area. Drains in any wash or process area shall not discharge to the storm drain system; these drains should connect to the sanitary sewer. Applicant shall contact the City and EBMUD for specific connection and discharge requirements. Discharges to the sanitary sewer are subject to the review, approval, and conditions of the City and EBMUD.
- Landscaping shall be designed with efficient irrigation to reduce runoff, promote surface infiltration, and minimize the use of fertilizers and pesticides that contribute to stormwater pollution. Where feasible, landscaping should be designed and operated to treat runoff. When and where possible, xeriscape and drought tolerant plants shall be incorporated into new development plans.
- Design, location and maintenance requirements and schedules for any stormwater quality treatment structural controls shall be submitted to the Department of Public Works for review with respect to reasonable adequacy of the controls. The review does not relieve the property owner of the responsibility for complying with BMC Chapter 17.20 and future revisions to the City's overall stormwater quality ordinances. This review shall be conducted prior to the issuance of a Building Permit.
- All paved outdoor storage areas must be designed to reduce/limit the potential for runoff to contact pollutants.

- All on-site storm drain inlets/catch basins must be cleaned at least once a year immediately prior to the rainy season. The property owner shall be responsible for all costs associated with proper operation and maintenance of all storm drainage facilities (pipelines, inlets, catch basins, outlets, etc.) associated with the project, unless the City accepts such facilities by Council action. City's Public Works Engineering Dept. may require additional cleaning.
- All private or public projects that create and/or replace 10,000 sf or more of impervious surface must comply with Provision C.3 of the Alameda County NPDES permit and must incorporate stormwater controls to enhance water quality. Permit submittals shall include a Stormwater Requirement Checklist and detailed information showing how the proposed project will meet Provision C.3 stormwater requirements, including a) Site design measures to reduce impervious surfaces, promote infiltration, and reduce water quality impacts; b) Source Control Measures to keep pollutants out of stormwater runoff; c) Stormwater treatment measures that are hydraulically sized to remove pollutants from stormwater; d) an O & M (Operations and Maintenance) agreement for all stormwater treatment devices and installations; and e) Engineering calculations for all stormwater devices (both mechanical and biological).
- All on-site storm drain inlets must be labeled "No Dumping – Drains to Bay" or equivalent using methods approved by the City.
- Most washing and/or steam cleaning must be done at an appropriately equipped facility that drains to the sanitary sewer. Any outdoor washing or pressure washing must be managed in such a way that there is no discharge or soaps or other pollutants to the storm drain. Sanitary connections are subject to the review, approval, and conditions of the sanitary district with jurisdiction for receiving the discharge.
- All loading areas must be designated to minimize "run-on" or runoff from the area. Accumulated wastewater that may contribute to the pollution of stormwater must be drained to the sanitary sewer or intercepted and pretreated prior to discharge to the storm drain system. The property owner shall ensure that BMPs are implemented to prevent potential stormwater pollution. These BMPs shall include, but are not limited to, a regular program of sweeping, litter control and spill cleanup.
- Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. If pressure washed, debris must be trapped and collected to prevent entry to the storm drain system. If any cleaning agent or degreaser is used, wash water shall not discharge to the storm drains; wash waters should be collected and discharged to the sanitary sewer. Discharges to the sanitary sewer are subject to the review, approval, and conditions of the sanitary district with jurisdiction for receiving the discharge.
- The applicant is responsible for ensuring that all contractors and subcontractors are aware of and implement all stormwater quality control measures. Failure to comply with the approved construction BMPs shall result in the issuance of correction notices, citations, or a project stop work order.

Construction will be conducted during the dry season. Stockpiled soil will be covered and protected with temporary erosion control measures. Therefore, the impact would be less than significant.

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?*

Less Than Significant Impact: As stated under a) iii, based on the investigations conducted in November 22 by CE&G (2023), layers of clays and clayey sands underlain the project site, which typically exhibit a low susceptibility to liquefaction, below the groundwater table. Because users of the RSC will primarily be outside and because the Community Space Facility is designed to current structural engineering code, the potential for adverse effects, including the risk of loss, injury, or death is less than significant. Therefore, the impact would be less than significant.

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?*

Less Than Significant Impact: The Project site is located on expansive soil. However, the engineering design will address this soil condition and because the RSC is used predominantly for outdoor activities, the risk to life or property is less than significant. Therefore, the impact would be less than significant.

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?*

No Impact: No septic systems are proposed for this Project. Therefore, there would be no impact.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No Impact: The Project site does not have any unique geologic features, according to Geotechnical investigations performed in the site (C&G, 2023). Given the Project site's history of previous ground disturbances and multiple soil samplings and geotechnical investigations, at various depths, the likelihood of encountering paleontological resources is considered low. However, site preparation, grading, and other construction activities could potentially impact any previously unidentified fossils.

To address this risk, the project will follow City's standard COA for Paleontological Resources. (Ongoing throughout demolition, grading, and/or construction). In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards [SVP 1995,1996]). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource

important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval. Therefore, there would be no impact.

VIII. GREENHOUSE GAS EMISSIONS

Environmental Setting

A greenhouse gas (GHG) is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. The major GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), halogenated fluorocarbons (HCFCs), O_3, perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and hydrofluorocarbons (HFCs). To make the effects of different GHGs comparable, GHG emissions are typically reported as CO_2 equivalents (CO_2e).

These GHGs are widely seen as the principal contributors to human-induced global climate change. Global climate change is caused primarily by an increase in levels of GHG emissions in the atmosphere. The potential effects of global climate change include, among other things, rising surface temperatures, loss in snowpack, sea level rise, ocean acidification, an increase in the number of extreme heat days per year, increased occurrence and severity of wildfires, and an increase in the number of drought years.

The rise of combustion of fossil fuels (e.g., gasoline, diesel, coal) since the beginning of the industrial revolution has resulted in a substantial increase in atmospheric levels of GHGs. CO_2 levels have increased from long-term historical levels of around 280 parts per million (ppm) before the mid-18th century to more than 400 ppm today. This increase in GHGs has already caused noticeable changes in the climate.

Impact Analysis

Would the project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

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

Less Than Significant: In summary, short-term construction and long-term operations impacts would be less than significant. GHG construction emissions, stemming mostly from use of off-road construction equipment, would be minimal under the proposed Project. During operation of the proposed Project, the primary sources of long-term GHG emissions would be building energy use and motor vehicles to and from the Project site. The proposed Project would not include any new stationary sources such as backup diesel generators, boilers, or other types of combustion equipment. The Community Space Facility would be powered by electricity. Indirect GHG

emissions from electricity consumption would decrease as California's grid becomes cleaner, and once the grid consists of 100 percent renewable generation sources, the building would have zero operational emissions associated with electricity usage. Therefore, the impact would be less than significant.

Short-Term Construction-Related GHG Emissions

During construction of the proposed Project, the primary sources of short-term GHG emissions would be construction equipment and worker vehicles, each of which typically uses fossil-based fuels.

Construction of the proposed Project is anticipated to start in April 2025 and would occur over approximately six months. Construction-related GHG emissions under the proposed Project have been estimated with CalEEMod. Table 4 presents the estimated construction emissions of GHGs under the proposed Project.

Table 4 - Estimated Construction GHG Emissions

Construction Year	CO_2 (metric tons/year)	CH_4 (metric tons/year)	N_2O (metric tons/year)	CO_2e (metric tons/year)
2025 Unmitigated	200	< 0.1	< 0.1	200

As shown in Table 4, the GHG construction emissions would be minimal under the proposed Project. Off-road construction equipment would be the source of the majority of the GHG emissions. Therefore, the short-term construction related GHG emissions impact would be less than significant.

Long-term Operation Impacts

During operation of the proposed Project, the primary sources of long-term GHG emissions would be building energy use and motor vehicles to and from the Project. The proposed Project would not include any new stationary sources such as backup diesel generators, boilers, or other types of combustion equipment.

Operational GHG emissions under the proposed Project have been estimated with CalEEMod. Table 5 presents the net operational emissions estimated for the proposed Project.

Table 5 - Estimated Operational GHG Emissions

Operational Year	CO_2 (metric tons/year)	CH_4 (metric tons/year)	N_2O (metric tons/year)	CO_2e (metric tons/year)
2026 Unmitigated	7	< 0.1	< 0.1	7

As shown in Table 5, changes in GHG emissions would be minimal during operation of the proposed Project. The major sources of GHG emissions during operation would be electricity and mobile exhaust. Mobile emissions would be low because the proposed Project would generate few additional vehicle trips (see Transportation Section of the Environmental Checklist). Emissions from building electrical use would be low because the 1,408-square foot Community Space Facility would consist of restrooms, a multi-use room, and storage room.

Under the proposed Project, the Community Space Facility would be powered by electricity. Indirect GHG emissions from electricity consumption would decrease over time as California's grid becomes cleaner, and once the grid consists of 100 percent renewable generation sources, the building would have zero operational emissions associated with electricity usage. Therefore, the long-term construction related GHG emissions impact would be less than significant.

Cumulative Impacts

The BAAQMD Air Quality Guidance recommends a "fair share" approach for determining whether an individual project's GHG emissions would be cumulatively considerable. If a project would contribute its "fair share" of what is needed to achieve the State's long-term GHG reduction goals, then the lead agency can find that the project is adequately contributing to solving the problem of global climate change and that the project's impact is not significant (BAAQMD, 2022).

Under its "fair share" approach, the BAAQMD has identified the necessary design elements required of new land use projects to achieve California's long-term climate goal of carbon neutrality by 2045. If a land use project incorporates the design elements necessary for the project to be carbon neutral by 2045, then it will contribute its "fair share" to achieving the State's climate goals. A lead agency can therefore conclude that a project would make a less-than-cumulatively-considerable climate impact.

The design elements are identified in the thresholds of significance for climate impacts, as presented in Table 6.

The BAAQMD also has developed thresholds of significance for climate impacts from greenhouse gas emissions. Table 6 summarizes the BAAQMD thresholds for evaluating climate impacts.

Table 6 - Climate Impact Thresholds of Significance

Thresholds of Significance for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements: 1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

Thresholds of Significance for Land Use Projects (Must Include A or B)
2. Transportation a. The project will achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target that reflects the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory: Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT b. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section **15183.5(b).**

Source: BAAQMD, 2022

While rebuilding part of Tom Bates RSC is not a "new" land use project, the proposed Community Space Facility, soccer field, and pickleball courts were reviewed with respect to the design elements in Table 6. If the proposed Project were to include, at a minimum, the design elements in Table 6, then the proposed Project would have a less-than-significant impact related to operational GHG emissions. The design elements are evaluated below.

Natural Gas Usage. For the building sector to achieve carbon neutrality, natural gas usage will need to be phased out and replaced with electricity usage. The proposed Project would be designed to be all electric and would not include natural gas appliances or natural gas plumbing. Because the proposed Project would exclude natural gas use, the proposed Project would be consistent with this design element in Table 6.

Building Energy Usage. Minimizing energy use in new buildings will facilitate the transition from fossil fuels to carbon-free energy. The proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy (see the Energy Section of the Environmental Checklist). To ensure energy efficiency under the proposed Project, the Community Space Facility would be designed to be certified as LEED. As such, the proposed Project would be consistent with this design element in Table 6.

Transportation. The Office of Planning and Research (OPR) Technical Advisory on evaluating transportation impacts using vehicle miles traveled (VMT) provides guidance on how lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing (OPR 2018). As discussed in the Transportation Section of this Environmental Checklist, the VMT under the proposed Project would be below the screening thresholds and therefore cause a less-than significant transportation impact. Because the proposed Project would

result in minimal VMT and a less-than significant transportation impact, the proposed Project would be consistent with the VMT threshold in Table 6.

The siting and design of the proposed Project would encourage alternative transportation options, such as bicycling and pedestrian use, which would reduce VMT. The Project site is located next to the San Francisco Bay Trail, and the design of the proposed Project would incorporate the Bay Trail. The proposed Project also would include new bicycle parking with additional bicycle racks and bike lockers.

Electric Vehicle Charging Spaces. The requirements for EV charging infrastructure in new land use development projects are governed by the CALGreen regulatory standards and by the City. To support widespread adoption of electric vehicles, the proposed Project would provide 13 active and 25 ready electric vehicle (EV) charging stations. The proposed Project would provide electric vehicle charging capabilities consistent with CALGreen and City requirements.

The proposed Project would be consistent with the BAAQMD's project design elements related to natural gas, building energy, VMT, and EV requirements shown in Table 6. The proposed Project would contribute its "fair share" to achieving the State's climate goals, and it would contribute a less-than-cumulatively-considerable climate impact.

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

No Impact: The proposed Project would be consistent with the Berkeley Climate Action Plan (CAP, 2009) and City of Berkeley Municipal Code, Chapter 19.37 Berkeley Green Code. In addition, the proposed Project would not generate GHG emissions that would exceed the project-level GHG significance criteria established by the BAAQMD (Table 5).

The applicable climate plan for the proposed Project is the Berkeley CAP. Key strategies in the Berkeley CAP address sustainable transportation and land use, energy efficiency for buildings, waste reduction and recycling, community outreach and empowerment, and preparing for climate change impacts. Its GHG reduction target is 80% below 2000 emission levels by the year 2050 (City of Berkeley, 2009). The proposed Project would be consistent with the following goals and policies in the Berkeley CAP:

- **Sustainable Transportation & Land Use Actions, Goal 8: Encourage the use of low-carbon vehicles and fuels**. A purpose of this goal is to create the infrastructure necessary to support low-carbon forms of transportation, such as electricity and biodiesel. The proposed Project would provide electric vehicle charging capabilities consistent with the City and CALGreen requirements.
- **Sustainable Transportation & Land Use Actions, Goal 5: Accelerate Implementation of the City's Bicycle and Pedestrian Plans**. The underlying policy is to continue to expand and improve Berkeley's bicycle and pedestrian infrastructure. The proposed Project would create additional bicycle parking in Berkeley by installing additional bike lockers.
- **Building Energy Use Actions, Goal 1: Make green building business as usual in the new construction and remodel market**. Green buildings conserve resources such as energy and

water. To put green building for new construction into practice, the standard commonly used throughout the U.S. for new nonresidential projects is LEED. The City's current green building policy requires LEED silver certification for new City buildings. Under the proposed Project, the Community Space Facility would be designed to be LEED certified, consistent with the latest City requirements. A building that is LEED certificated typically includes design features for efficient use of energy and water during construction and operation, which would reduce associated GHG emissions.

- **Waste Reduction & Recycling Actions, Goal 3: Increase recycling of construction and demolition (C&D) debris**. GHG emissions can be reduced by minimizing construction debris and recycling construction materials. The proposed Project would be consistent with the Berkeley Green Code that requires 100 percent of concrete, asphalt, excavated soil, and land clearing debris to be reused and recycled during construction. A Construction Waste Management Plan would be completed that meets the requirements of BMC Chapter 19.37.

The proposed Project also would be subject to applicable City codes and planning requirements related to GHG emissions. The Berkeley Green Code requires the use of low-carbon concrete, by specifying that construction projects should reduce the amount of cement used in concrete by at least 25% (BMC Chapter 19.37). Under the proposed Project, the Community Space Facility would be a concrete masonry unit, to be prefabricated offsite. Because concrete used for construction is a source of GHG emissions, complying with the City's low-carbon concrete requirements for the Community Space Facility would reduce GHG emissions during construction of the proposed Project. Therefore, there would be no impact.

IX. HAZARDS AND HAZARDOUS MATERIALS

Environmental Setting

The project site borders San Francisco Bay on the west side of the City. The San Francisco Bay Area, including Berkeley, is a developed, urban area with residential, commercial, industrial land uses.

Desktop Analysis

In April 2023, a comprehensive Environmental Desktop Study was conducted for the project site (CE&G 2023). This study, informed by various documents, revealed that the site was used as a construction debris and municipal waste landfill from the 1930s to the early 1950s. Additionally, an active remediation case covering McLaughlin Eastshore State Park, including Berkeley North Basin Strip-II, was identified through the GeoTracker database. Contaminants of concern included Petroleum Hydrocarbon (TPH-d), metals (lead, arsenic, mercury), and methane.

EKI developed an Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) (EKI 2003) to address remaining TPH-d and soil vapor contamination on the site. Protocols in the RRMP are designed to guide future developments and the utilization of the site as a park, aligning with the RRMP in effect for neighboring sections of the McLaughlin Eastshore State Park.

The SFBRWQCB ascertained in December 2003 that the site investigations have reached a state of completion. Consequently, no further remediation was deemed necessary, provided that the

requirements described within the RRMP, and addendum(s) are adhered to during all future site-related activities. In November 2022, Farallon conducted an annual inspection in the project area, and no environmental issues of concern were identified at the Berkeley North Basin site.

2024 Soil Sampling and Analysis

In March 2024, an Environmental Screening was conducted by Haley & Aldrich for the project site to preliminarily evaluate the presence of constituents of concern. The purpose of the screening was to plan for soil disposal. A total of seven borings were drilled (SB-01 through SB-07). Based on the soil screening results, disposal of most of the on-site soil is expected to be acceptable for disposal at a Class II or III landfill as non-hazardous waste. Soils collected from areas close to SB-01 and SB-03 could be classified as non-RCRA California hazardous waste, due to lead Soluble Threshold Limit Concentration (STLCs) results. Depending on analytical results for soil excavated during construction, disposal at a Class I landfill may be required.

Based on the screening results of this investigation, Haley & Aldrich recommended the following:

- Contractors working with shallow soils or groundwater should consider these results when selecting appropriate personal protective equipment (PPE) (Capture by HAZ-1 below).
- On-site soils that are removed during construction should be sampled and analyzed for proper waste characterization and disposal (Capture by HAZ-3 below).

Impact Analysis

Would the project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant with Mitigation Incorporated
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?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
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 or excessive noise for people residing or working in the project area?	No Impact

Question	CEQA Determination
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact with Mitigation Incorporated:

Excavation: Given the site's history of soil contamination, excavation during construction has the potential to expose hazardous waste, including TPH-d, metals (predominantly lead, arsenic, and mercury), and methane. Excavated material that is contaminated will be disposed at a permitted facility. The following Mitigation Measures will be implemented as part of the project to minimize environmental effects:

- **HAZ-1**- Risk Management Plan: The latest version of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II, along with any associated addendums, must be provided to all contractors intending to engage in work on the Project. Contractors who anticipate interacting with shallow on-site soils should consult the Risk Management Plan for guidance on construction monitoring prerequisites and for identifying the appropriate personal protective equipment (PPE), including protective measures for encountering methane.
- **HAZ-2-** Water Quality Control Board Coordination: The City will coordinate site excavation activities with the San Francisco Bay Regional Water Quality Control Board to align site construction with the provisions of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II.
- **HAZ-3-** Soil Sampling: During Project construction, sample and analyze on-site soils that are being removed to characterize them prior to disposal at approved facilities.

Transport, use, storage, and disposal of hazardous materials: In the short term, construction would involve the management, application, storage of hazardous materials, leading to the generation of both hazardous and non-hazardous solid waste. Among the anticipated hazardous materials for use in constructing the proposed facilities are paints, thinners, solvents, and petroleum-based products. These materials, frequently employed at construction sites for transport and equipment, pose potential health and safety risks to both the public and construction workers if mishandled or spilled.

- **HAZ–4-** Regulations: Contractors will comply with the California Health and Safety Code (HSC) and Resource Conservation and Recovery Act (RCRA) for the management, treatment, storage, and disposal of hazardous waste.

Therefore, the impact would be considered less than significant with the incorporation of the above mitigation measures.

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?

Less Than Significant Impact: Project construction would pose a risk neither to the public nor the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials because the Project does not store or use large amounts of hazardous chemicals, such as gasoline, propane, or acids. The Project would use small quantities of hazardous materials including fuels, lubricating fluids, cleaners, or solvents and the risk to the public and environment from accidental spills would be low.

The design would address the high groundwater level at the site, for example, by minimizing the length and depth of utility trenches to reduce the potential to encounter contaminated groundwater and soil. Groundwater collected during construction from displacement will be tested and disposed in accordance with applicable regulations. Therefore, the impact would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact: The Project would not release hazardous emissions or involve the handling of hazardous materials within one-quarter mile of an existing or proposed school. The closest school, Black Pine Circle School, is located at 2027 Seventh St, Berkeley, CA, approximately 0.8 mile to the east of the project site. Therefore, there would be no impact.

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

No Impact: The Project site is not included on the Department of Toxic Substance Control's site cleanup list (as per Government Code Section 65962.5), as it falls under the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) jurisdiction.

The SFBRWQCB ascertained in December 2003 that the site investigations have reached a state of completion, and no further remediation was deemed necessary, provided that the requirements described within the RRMP, and addendum(s) are adhered to during all future site-related activities. Therefore, there would be no impact.

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 or excessive noise for people residing or working in the project area?

No Impact: The Project site is not within the referral areas for the Alameda Airport Land Use Commissions (ALUC) or the Contra Costa ALUC. Nor is it within 2 miles of a public airport. Therefore, there would be no impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact: The Project would not interfere with City's emergency response or evacuation plans. The construction and operations associated with the Project would not alter surrounding streets, access routes, or evacuation opportunities. Additionally, the Project will not necessitate full street closures. Therefore, there would be no impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact: The proposed project is not located in or near a mapped Fire Hazard Severity Zone in a State Responsible Area, or in the wildland/urban interface area, or in or near lands classified as a Very High Fire Hazard Severity Zone within a Local Responsibility Area (CAL FIRE, 2023). Also see Section XX Wildfire. Therefore, there would be no impact.

X. HYDROLOGY

Environmental Setting

The Project site is situated in an urbanized area adjacent to the San Francisco Bay. Notably, the Project site has already undergone significant development: as documented in the *Environmental Initial Study for the Gilman Street Playing Fields* (City of Berkeley, 2005), the southern half of the site was elevated by approximately seven feet with soil fill, raising it above the surrounding ground level.

The Project site is designated in the City of Berkeley Stormwater Project Mapping Viewer as a C.3.b project, which is defined by the SFBRWQCB as maintaining stormwater drainage controls on-site (SFBRQQCB 2022). Stormwater currently percolates through a vegetated swale on the west side of the study area.

Based on a review of U.S. Fish and Wildlife Service National Wetlands Inventory (USFWS 2023b) information, the I-80/Gilman Interchange Project reports, jurisdictional determinations related to the I-80/Gilman Interchange Project, and field verification, there are no waterways or wetlands present in the RSA.

The 100-foot band of BCDC jurisdiction encompasses 0.8 acre of the RSA. BCDC jurisdiction relative to the Project site is shown in Figure 6

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates there is 1.6 acre of area that present a 1% chance of flooding (AE floodplain) located on the Project site. The AE floodplain designation represents a one-percent annual chance of flood risk. The floodplain is primarily located in the north half of the project site in an area that is currently predominantly paved. The floodplain is associated with San Francisco Bay to the west. FEMA floodplain data is shown in Figure 7

Beneficial uses of the nearest receiving water, San Francisco Bay, identified by the RWQCB (1975, Amended 2023) include: industrial service supply, industrial process supply, commercial and sports fishing, shellfish harvesting, estuarine habitat, fish migration, preservation of rare and endangered

species, fish spawning, wildlife habitat, water contact recreation, non-contact water recreation, and navigation.

The 303(d) list for the bay identifies the following pollutants with Total Maximum Daily Loads (TMDL) identified: mercury, polychlorinated biphenyls (PCB), and selenium. The following pollutants are identified without TMDLs identified: dichlorodiphenyltrichloroethane (DDT), dioxin compounds, furan compounds, invasive species, trash, chlordane, and dieldrin.

Water from the parking area generally runs off into the on-site bio-swale and parked cars are not generally a point source of identified TMDLs.

The Project site is located in the Santa Clara Valley – East Bay Plain hydrologic region groundwater basin (CDWR 2003). The region contains 483 wells of which approximately five are water supply wells. Groundwater makes up nearly zero percent of the basin's water supply. No wells are located in the Project site.

Impact Analysis

Would the project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact
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:	Less Than Significant Impact
i. result in a substantial erosion or siltation on- or off-site.	Less Than Significant Impact
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.	Less Than Significant Impact
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	Less Than Significant Impact
iv. impede or redirect flood flows?	Less Than Significant Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less Than Significant Impact

Question	CEQA Determination
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact: The Project would have the potential to introduce pollutants related to operation of construction equipment, such as antifreeze/coolant, cleaning solvents, gasoline, or hydraulic oil, to the surrounding environment through stormwater runoff. Project construction would use small quantities and the risk environment from accidental spills would be low.

To reduce the pollutant loads in runoff from the parking lots, the final design will direct parking lot runoff to vegetated swales for bio-filtration. The bio-filtration design will conform to applicable non-point source BMPs.
Prior to project construction (any ground disturbance), a Stormwater Pollution Prevention Plan (SWPPP) will be prepared as part of the Project, as required by Section 402 of the Clean Water Act for projects involving more than one acre of land disturbance. The Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented according to the City's COA Stormwater Requirements that requires that the applicant shall demonstrate compliance with the requirements of the City's National Pollution Discharge Elimination System (NPDES) permit as described in BMC Section 17.20.

The SWPPP will incorporate appropriate BMPs to control soil and surface water runoff during excavation, filling, trenching, and grading. Ground disturbing activities are planned to be conducted during the dry season. Stockpiled soil will be covered and protected with temporary erosion control measures. The SWPPP will include temporary erosion control measures in the event that rainy weather occurs during construction. With implementation of standard stormwater construction BMPs, to be documented in the SWPPP, impacts to water quality during construction would be minor.

The project would include construction within the 100-foot band of shoreline regulated by BCDC. Impacts within BCDC jurisdictional area are based on development within BCDC area of jurisdiction. Prior to project construction, the City, or their representative, will prepare and submit a permit application BCDC for development. With adherence to permit conditions, which are anticipated to include a comprehensive plan review and approval process prior to the commencement of construction, as well as requirements for maintaining public access and view corridors to the Bay. The permitting approval process involves submitting detailed construction plans for review to ensure they meet regulatory requirements, followed by a thorough review by the BCDC and other relevant agencies. This process includes opportunities for public input and consultation to address community concerns. Once all conditions are met and approvals are granted, permits are issued, allowing construction to proceed under specified conditions.

Additionally, ongoing compliance monitoring is required to ensure that public access and view corridors to the Bay are maintained throughout the project. By following these steps and adhering to the conditions outlined in the permits, the project's impacts within the BCDC-regulated area are anticipated to be minimal. Therefore, the impact would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact: The Project does not involve any activity that would draw from groundwater either during construction or during operation of the Project. It would rely on an existing water service, provided by East Bay Municipal Utility District. Therefore, there would be no impact.

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.

Less Than Significant Impact: There is a minor potential for wind- or water-driven erosion associated with ground disturbance during construction which is planned to occur during the dry season. BMPs for erosion control will be implemented to manage soil and sediment during construction. By focusing on pre-construction planning, effective erosion and sediment control measures during construction, and final stabilization practices, the impact of erosion would be minimized. Therefore, the impact would be less than significant.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

Less Than Significant Impact: The amount of impervious surface would remain similar to the existing conditions on site and, therefore, there would not be increased opportunity for flooding either on-site or off. Because the Project site is in an area designated as floodplain, the local floodplain administrator, i.e., the City's Director of Public Works, will approve the design. Additionally, the area containing the pickleball courts and soccer field would drain into a new bioretention basin located on the eastern side of this zone. Drainage from the new building area will be directed to a separate bioretention basin. Parking lot improvements would continue to utilize the existing bioretention basin located on the western side of the parking lot. Therefore, the impact would be less than significant.

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

Less Than Significant Impact: The site is designated for on-site processing of stormwater. Stormwater flow would be directed to on-site bio-swales, which are incorporated into the Project design. Therefore, the impact would be less than significant.

iv. impede or redirect flood flows?

Less Than Significant Impact: The Project would place a relatively small structure, a Community Space Facility with approximately 1,408 square feet, at the RSC. This structure and the modified open areas with new sports fields would not substantially impede or redirect flood flows. Because the Project site is in an area designated as floodplain, the local floodplain administrator will approve the design, according to Chapter 17.12 - Floodplain Management (Berkeley Municipal Code). Therefore, the impact would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact: The Project would not introduce significant new sources of pollutants to the area, only, for example, cleaning materials stored in the Community Space Facility, and, therefore, the increased risk of pollutant spread due to inundation is minor. Therefore, the impact would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact: The Project would incorporate water efficient landscape features. The Project, as described, does not conflict with any identified water quality control plan or groundwater management plan for the region. Therefore, there would be no impact.

XI. LAND USE AND PLANNING

Environmental Setting

The Project Footprint is within the Tom Bates Regional Sports Complex (Complex). The Complex is a park with recreational improvements. Two lit and fenced turf soccer fields and one unlit baseball field are the current recreational facilities on-site. There is also a paved parking lot (entirely within the study area), with a capacity for approximately 100 vehicles. The Complex is bounded on the north by Gilman Street, further north by the stables of the Golden Gate Fields, which is a horse racing track, and to the south by the McLaughlin Eastshore State Park. The site abuts the San Francisco Bay to the west and is separated from the rest of Berkeley (to the east) by the Eastshore Freeway (I-80/I-580) and its ancillary frontage roads. The Bay Trail runs in the West Frontage Road right-of-way on the east edge of the Complex. A pedestrian and bike bridge crossing over the Eastshore Freeway connects the Bay Trail running along the east edge of the Complex with the rest of Berkeley. Current bike, pedestrian, and vehicle access is via Gilman Street. The California Department of Transportation (Caltrans) is constructing round-abouts on Gilman Street near the Complex (State of California, 2019). The current use of the Complex acts as a transition between the passive recreation, such as hiking and bird watching, and natural lands to the south and the private, organized, spectator driven recreation to the north.

Impact Analysis

Would the project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
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?	Less Than Significant Impact

a) *Physically divide an established community?*

No Impact: The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. The Project will be constructed within the boundaries of the existing RSC and would not physically divide an established community. Therefore, there would be no impact.

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?*

Less Than Significant Impact: The Project would not conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigation an environmental effect, such as a habitat conservation plan or natural community conservation plan. Therefore, the impact would be less than significant.

Short-Term Construction-Related

The gravel lot to the south of the existing parking lot is scheduled to be used for parking during construction, so users of the existing soccer fields would not experience a loss in parking availability during the construction process. Therefore, the impact would be less than significant.

Long-Term Permanent Impacts

The complex was established in 2008, and construction of the recreational facilities would remain within the RSC. The following plans apply to the Community Space Facility, Pickleball Courts and Soccer Field at the Complex:

The original **Master Development Plan** for the Complex encourages recreational developments at the park, which the Community Space Facility, Pickleball Courts, and Soccer Field fall under. This is consistent with Open Space Policy 13 (OS-13) of the **Berkeley General Plan** (2002), which encourages projects involving recreational, open space and environmental uses in the Waterfront area and Policy LU-43 (implementation of the Waterfront Specific Plan, discussed below). The Community Space Facility, Pickleball Courts and Soccer Field fulfill the following goals of LU-43:

- Establishes the waterfront as an area primarily for recreational, open space, and environmental uses.

The Waterfront Specific Plan, first adopted in 1986, was amended October 18, 2005. The following amended sections are applicable to the proposed recreational facilities:

- Chapter 3, Land Use/Open Space add Section 3.5.12. This section would allow public or commercial recreational sports facilities and ancillary facilities, such as field houses, restrooms, play equipment, fences, screening, outdoor light, and parking. These uses shall be permitted as a matter of right and shall not require Master Development Plans and Use Permits.
- Chapter 7, Plan Implementation amend Section 7.3.1.1. Recreational Developments exempted. Consistent with Open Space Policy 13 (OS-13) of the 2002 Berkeley General Plan, projects involving recreational, open space and environmental uses are encouraged in the Waterfront area. Projects proposed by public agencies and for public purposes involving recreation, open space and environmental uses shall not require a Master Development Plan (MDP) and Use Permit.

Therefore, the amended Waterfront Specific Plan permits the proposed recreational facilities at the Complex under the added Section 3.5.12 and the facilities are exempt from the requirement of a Master Development Plan or Use Permit under the amended Section 7.3.1.1.

Additionally, the Project site is bounded by the Eastshore State Park on the west and south sides and a walkway connects into the Bay Trail. The fields are adjacent to the Eastshore General Plan project area. The Project would not impact **Eastshore State Park General Plan** (California Department of Parks and Recreation, et al., 2002). According to the General Plan, only a specific portion of the waterfront, between the Albany Waterfront Area and the Emeryville Crescent, is designated for development with recreational facilities.

As part of the California State Lands Commission's **Granted Lands Program**, the City was granted sovereign salt marsh, tide, and submerged lands in trust in 1913 for the establishment, improvement, and conduct of a harbor and other utilities, structures, and appliances necessary or convenient for the promotion and accommodation of commerce and navigation (Section 1 of Chapter 347 of the Statutes of 1913). In 1961, the grant was amended (Chapter 55, Section 5) to approve additional uses that were in the general statewide interest, including public recreation, and for all works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient for the promotion and accommodation of any such uses. The 1961 amendment applies to the proposed recreational facilities.

There would be a less than significant impact on the **San Francisco Bay Plan.** This plan is issued by the BCDC and states that in waterfront parks, recreational facilities that do not need a waterfront location, e.g., golf courses and playing fields, should generally be placed more than 100 feet from the shore, which is where the proposed recreational facilities would be constructed. In addition, construction would not affect land use of the Bay Trail because the trail is not in the Project footprint. However, while the proposed recreation facilities are beyond the 100-foot-wide

shoreline band under BCDC jurisdiction, the Project footprint does encroach on that 100-foot buffer (the parking lot in particular). Therefore, it is anticipated that the project will require a permit from the BCDC, depending on project phasing and build-out.

XII. MINERAL RESOURCES

Environmental Setting

According to the California Geological Survey (2024), there are no mineral resources within the project site or its vicinity.

Impact Analysis

Would the project:

Question	CEQA Determination
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?	No Impact
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?	No Impact

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?*

No Impact: There are no mineral resources within the Project site. Therefore, there would be no impact.

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?*

No Impact: The Project site does not contain a mineral resource recovery site. Therefore, there would be no impact.

XIII. NOISE

Environmental Setting

The Project is located at the RSC, in the western portion of the City. Land uses adjacent to the RSC include the Golden Gate Fields Racetrack to the north, West Frontage Road, and Interstate 80/Interstate 580 (I-80/I-580) to the east, McLaughlin Eastshore State Park to the south, and the San Francisco Bay to the west. In addition, the San Francisco Bay Trail (Class 1 multi-use path) runs along the east and north perimeters of the RSC. The land uses surrounding the Project site are described in the Section XI Land Use and Planning.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The

primary noise source in the vicinity of the project site is traffic on I-80/I-580, particularly along the eastern side of the RSC closest to I-80/I-580. Traffic noise sources along the north side of the RSC include local traffic on Gilman Street and vehicles entering and exiting the parking lot for the RSC. Other sources of noise include human voices from users participating in active outdoor sports at the existing soccer fields, ballpark, and other park facilities and along the Bay Trail.

Previous noise measurements at the site of the RSC indicate that freeway traffic on I-80/I-580 was the dominant noise source, with higher noise levels on the eastern portion of the site (City of Berkeley, 2005). Noise measurements along the east side ranged from 61 to 68 decibels (dBA), which was predominately freeway traffic. Noise levels at the westerly side of the site were lower, in the 54 to 62 dBA range. While conditions might have changed, these noise measurements are useful to describe the existing noise conditions at the project site.

Impact Analysis

Would the project result in:

Question	**CEQA Determination**
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
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?	No Impact

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact: The Project site is situated in an area where existing ambient noise levels are relatively high due to proximity to a highway. The constant traffic noise from the highway contributes a background level of sound that can help mask the noise produced by pickleball activities. Additionally, the pickleball courts are not situated near any residential development. This distance reduces the likelihood of noise-related disturbances affecting residents. With no immediate residential neighbors, the potential for noise complaints is significantly minimized. he Berkeley Community Noise Code specifies the maximum noise levels,

based on the receiving land use type and the time of day. Table 7 presents the exterior noise limits for the various categories of land use. Therefore, the impact would be less than significant.

Table 7: Exterior Noise Limits

Zoning District	Time Period	Noise Level (dBA)
Exterior Noise Limits (not to be exceeded more than 30 minutes in any hour)		
R-1, R-2, R-1A, R-2A, and ESR	7:00 a.m. – 10:00 p.m. 10:00 p.m. – 7:00 a.m.	55 45
R-3 and above	7:00 a.m. – 10:00 p.m. 10:00 p.m. – 7:00 a.m.	60 55
Commercial	7:00 a.m. – 10:00 p.m. 10:00 p.m. – 7:00 a.m.	65 60
Industry	Anytime	70

The Berkeley Community Noise Code includes provisions for construction noise. Construction activities are prohibited between weekday hours of 7 p.m. and 7 a.m., or between 8 p.m. and 9 a.m. on weekends or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real property line. Emergency work is allowed.

For daytime construction, the Berkeley Community Noise Code includes limits on construction noise for mobile and stationary equipment. Mobile equipment includes jackhammers, backhoes, drills, saws, sander grinders, and similar tools. Stationary equipment is fixed or motionless, such as pumps, compressors, and generators. The maximum sound levels for mobile and stationary construction equipment are presented in Table 8.

Table 8: Mobile and Stationary Equipment Construction Noise Limits

	R-1, R-2 Residential	R-3 and above Multi-Family Residential	Commercial/Industrial
Mobile Equipment: Maximum sound levels for nonscheduled, intermittent, short-term operation (less than 10 days)			
Weekdays 7:00 a.m. to 7:00 p.m.	75 dBA	80 dBA	85 dBA
Weekends 9:00 a.m. to 8:00 p.m. and legal holidays	60 dBA	65 dBA	70 dBA

	R-1, R-2 Residential	R-3 and above Multi-Family Residential	Commercial/Industrial
Stationary Equipment: Maximum sound levels for repetitively scheduled and relatively long-term operation (period of 10 days or more)			
Weekdays 7:00 a.m. to 7:00 p.m.	60 dBA	65 dBA	70 dBA
Weekends 9:00 a.m. to 8:00 p.m. and legal holidays	50 dBA	55 dBA	60 dBA

Construction noise could result from activities like site preparation, and construction activities under the Project. Construction noise would be a short-term impact, vary daily depending on the construction phase, and be mostly localized to the vicinity of the construction activity.

Construction of the Project is anticipated to start in April 2025 and would occur over approximately six months. Work would be completed during regular daytime hours of 7:00 am to 5:00 pm, Monday through Friday, with no weekend construction work anticipated. Construction activities during daytime hours would be consistent with the requirements of Chapter 13.40, Community Noise, of the Berkeley Municipal Code (City of Berkeley, 2023).

Construction noise would depend on the types of construction equipment under the Project. Demolition of any existing asphalt concrete pavement would require saw cutting, possible jackhammering, and removal by heavy equipment (e.g., backhoe). The playing field, courts, and building locations would require earthmoving activities for grading and utility installation that would be performed by typical heavy equipment such as backhoes, excavators, and dozers. Construction would require carpentry for creating concrete forms and delivery of concrete using concrete trucks. Asphalt pavement replacement would be performed using typical milling and paving equipment. Parking lot striping and markings would be accomplished using typical striping equipment.

The new building for the Community Space Facility would be prefabricated and therefore constructed off-site. However, a mobile crane would be required to lower the building modules into place on the project site. Piles to support the Community Space Facility would be cast in auger-drilled holes. Pile driving would not occur.

Table 9 summarizes noise levels produced by construction equipment anticipated for the Project. The maximum sound levels (L_{max}) have been predicted with FHWA's RCNM model for construction noise (FHWA, 2006). Noise levels in Table 7 are for outside uses, while interior noise levels would be 10 to 35 dBA lower depending on the building type and window conditions (FHWA, 2011).

Noise from construction equipment would be intermittently higher than existing ambient noise levels within 50 to 200 feet of the project site but would decrease with distance and shielding. The construction noise levels in Table 9 were predicted at 1,300 feet, which is the distance from the project site to the closest residential area. At 1,300 feet, construction noise from mobile equipment would range from 42 to 52 dBA, which would not exceed the Berkeley Community Noise Code limit of 60 dBA for mobile equipment shown in Table 8. Construction noise levels of 42 to 52 dBA would not likely be noticeable at residential areas 1,300 feet to the east of the project site, when compared to background noise levels.

Table 9: Construction Equipment Noise

Equipment	Maximum Noise Level at 50 feet L_{max} dBA	Maximum Noise Level at 200 feet L_{max} dBA	Maximum Noise Level at 1,300 feet L_{max} dBA (1)
Concrete Saw	90	78	52
Auger Drill Rig	85	73	47
Excavator	85	73	47
Dozer	85	73	47
Crane	85	73	47
Concrete Mixer Truck	85	73	47
Jackhammer	85	73	47
Paver	85	73	47
Roller	85	73	47
Dump Truck	84	72	46
Generator	82	70	44
Compactor	80	68	42
Backhoe	80	68	42
Vacuum Street Sweeper	80	68	42

Note: predictions at 1,300 feet include a conservative shielding factor of 10 dBA, for shielding by both the elevated I-80/I-580 and rows of buildings.

Potential sources of long-term noise under the Project include traffic, human voices from outdoor recreational facilities, and mechanic equipment for buildings. While these activities are potential noise sources, the noise sources under the Project would increase ambient noise levels in residential uses that are 1,300 feet or more from the project site.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Impact: Construction activities would not result in the generation of groundborne vibration because pile driving, blasting, and building demolition would not occur under the Project.

Traffic, including heavy trucks traveling on a highway, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage (Caltrans 2020). Studies of operational traffic-induced vibrations have shown that both measured and predicted vibration levels are less than any known criteria for structural damage to buildings (FHWA 2011). Operation of the Project would generate minimal traffic volumes, which would not generate vibration that could cause structural damage. Therefore, there would be no impact.

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?

No Impact: The Project site is not located within two miles of a public airport or public use airport. Public airports in the Berkeley area include the Oakland International Airport (approximately 12 miles south of the site) and San Francisco International Airport (approximately 18 miles southwest of the site). Buchanan Field Airport, approximately 15 miles northeast of the site, is a general and business public airport in Contra Costa County. Therefore, there would be no impact.

XIV. POPULATION AND HOUSING

Environmental Setting

According to the 2022 estimates from the California Department of Finance (DOF), the population of Berkeley is approximately 123,563. The city has approximately 52,921 housing units and the average persons per household is approximately 2.17 (DOF 2023).

Impact Analysis

Would the project:

Question	CEQA Determination
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

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)?*

No Impact: The project would not include substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure). Therefore, there would be no impact.

b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact: There is no housing on the project site, and the project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. Therefore, there would be no impact.

XV. PUBLIC SERVICES

Environmental Setting

Currently, according to the City (City of Berkeley, n.d.), approximately 19,000 visitors per year (52 visitors per day). The site is owned by the EBRPD which has its own fire and law enforcement departments. Under a mutual aid agreement between EBRPD and the City, the City provides fire and police protection. The Tom Bates RSC is located in the City's Fire District E6 and the nearest fire station, Fire Station 6 (999 Cedar Street), is located approximately 1.0 miles southeast of the RSC. The RSC is located in Beat 15 of the City's Police Department. The closest school, Black Pine Circle School, located at 2027 Seventh St, Berkeley, CA, serving kindergarten through grade 8, is situated approximately 0.8 mile southeast of the Project site.

Impact Analysis

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

The proposed Project would improve the existing facility at the site. As determined under Section XVII Transportation, 45 additional persons per day are estimated to use the RSC upon Project completion which is an increase compared to existing conditions of 52 users per day, totaling 97 users per day, this represents less than 0.1% of the community population.

a) Fire protection?

No Impact: The Berkeley Fire Department is well-equipped to serve the City of Berkeley, including the University of California, Berkeley, which has a combined population of over 120,000 residents. The department responds to more than 16,000 service calls each year (City of Berkeley, n.d.). The project would not increase the City's population, nor will it necessitate new fire facility. Therefore, there would be no impact.

b) Police protection?

No Impact: The Berkeley Police Department is well-equipped to serve the City of Berkeley, including the University of California, Berkeley, which has a combined population of over 120,000 residents (City of Berkeley, n.d.). The project would not increase the City's population, nor will it necessitate new police facility. Therefore, there would be no impact.

c) Schools?

No Impact: The Project would not affect schools because of the distance to the nearest school (located approximately 0.8 miles southeast of the Project site) and its location east of I-80/I-580. The Project would not increase the City's population or construct new housing that could increase the number of school children. Therefore, there would be no impact.

d) Parks?

No Impact: The proposed Project would not affect the existing RSC facilities and uses. Access to the RSC and its uses would be maintained during construction of the Project. As noted under the Recreation, the project could reduce demand for pickle ball courts and U8 soccer fields at other parks in Berkeley, resulting in a beneficial impact, unless latent demand offsets this reduction. Changes in user numbers would not require the construction of new park facilities, as the project would be developed within an existing park. Therefore, there would be no impact.

e) Other public facilities?

No Impact: The Project would not increase the City's population or construct new housing would impact or require the construction of new public facilities. Therefore, there would be no impact.

XVI. RECREATION

Environmental Setting

The Project site provides sports fields consisting of two (2) synthetic turf soccer fields with lights, two (2) turf soccer fields, and one (1) baseball diamond. Approximately 19,000 visitors per year (52 visitors per day) use the RSC. As determined under Section XVII Transportation, 45 additional persons per day are estimated to use the RSC upon Project completion.

Impact Analysis

Would the project:

Question	CEQA Determination
a) 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?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

The Project would improve the existing facility, adding a community space facility, pickleball courts, U8 soccer fields, and additional parking. The number of persons using the facilities upon Project completion is expected to increase the number of users compared to existing conditions as additional users would be expected to use the new amenities and facilities (City of Berkeley, 2020).

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?

No Impact: The proposed Project would improve and add recreational facilities at the RSC and would not affect other existing neighborhood and regional parks or other recreational facilities such that they would deteriorate. By providing additional recreational opportunities, the project could reduce demand for pickle ball courts and U8 soccer fields at other parks in Berkeley overall. Therefore, there would be no impact.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

No Impact: The Project would improve parking and provide additional facilities at the RSC. The potential environmental impacts are discussed throughout this Initial Study and BMPs further reduce impacts deemed less than significant. Therefore, there would be no impact.

XVII. TRANSPORTATION

Environmental Setting

The Project site is generally bounded by Gilman Street on the north, West Frontage Road and Interstate 580/80 on the east, McLaughlin Eastshore State Park on the south and the San Francisco Bay on the west. The Tom Bates RSC encompasses approximately 16 acres of which the proposed Project is planned for approximately 3.5 acres.

Built in 2008, the Tom Bates RSC (also commonly referred to as the Gilman Fields) is one of the most highly used public sports complexes in the region. It is located within the McLaughlin Eastshore State

Park and is operated by the EBRPD. The City's Parks, Recreation & Waterfront Department manages and operates the Tom Bates RSC under a sub-lease to the EBRPD.

The RSC is located in an area of the city with several other recreational and entertainment venues including the Golden Gate Fields Racetrack north of Gilman Street; McLaughlin Eastshore State Park just south of the complex; and the Berkeley Marina to the southwest/west of the Project. In addition, the Bay Trail (Class 1 multi-use path) runs along the west and north perimeter of the park.

The Project site currently consists of two synthetic turf full-size soccer fields and a parking lot on the northern side, and a natural turf multi-use sports fields and baseball field on the southern side.

Impact Analysis

Would the project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	Less Than Significant Impact
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact: The Project does not conflict with any objectives set forth in the Transportation section of the City of Berkeley General Plan (City of Berkeley, 2002). The Project promotes and expands on public recreational opportunities as identified in the Open Space & Recreation Element section of the City of Berkeley General Plan. The Project provides additional bicycle parking as compared to the existing condition of the site and is adjacent to the existing Bay Trail recreational corridor. The Project incorporates ADA, pedestrian, and bicycle facilities and no elements of the Project would conflict with or detract from existing transit, pedestrian, or bicycle facilities in the surrounding area. Furthermore, the Project includes the addition of 13 active and 25 ready EV charging stations, which is consistent with goals to incentive EV use as set forth in the City of Berkeley Climate Action Plan. Therefore, there would be no impact.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact: The proposed additional land use for the site is categorized as "Public Park" per the Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Edition. Based on the acreage of the pickleball courts and the additional soccer field (0.85 acres) and using ITE standard trip generation procedures (also from the ITE Trip Generation Manual), an additional 45 trips per day are estimated for the proposed site improvements.

On average, 52 users per day visit the RSC (19,000 users per year, per City of Berkeley's website). Assuming that they all arrive in single-occupancy vehicles, this means that 52 vehicle trips occur per day. The proposed Project would add 45 trips (users), totaling a median of 97 trips per day. The MND (City of Berkeley, 2005) stated that "the proposed project is expected to generate an average of 788 new weekday daily vehicle trips". It recommended that the final design address the integration of the Golden Gate Fields with the design of the twin roundabout interchange proposed for the northeast corner of the project site. The need for the planning ensured that traffic flow is efficient and that potential conflicts between vehicle movements and parking activities are minimized.

Per the CEQA Guidelines § 15064.3, subdivision (b), vehicle miles traveled is the primary measure of this compliance criteria for land use projects. Per the Technical Advisory on Evaluating Transportation Impacts in CEQA published by the State of California, new projects which are estimated to generate fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact to vehicle miles traveled. The Project would generate fewer than 110 additional trips per day. Therefore, the impact would be less than significant.

c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact: Access to the proposed parking lot will continue to be at the north end of the lot adjacent to Gilman Street. No changes to the configuration of the parking lot driveway at Gilman Street are proposed or anticipated for the Project. Therefore, there would be no impact.

d) Result in inadequate emergency access?

No Impact: The proposed parking and site layout would not differ significantly from the existing condition. Emergency access will continue to be provided from Gilman Street to the north of the parking lot. Therefore, there would be no impact.

XVIII. TRIBAL CULTURAL RESOURCES

Environmental Setting

A cultural resources study was conducted by InContext in October 2023 for the Project site in compliance with CEQA. The study consisted of a records search at the Northwest Information Center, literature review, outreach to the Native American Heritage Commission and California Native American tribes, outreach to historical societies and the City of Berkeley Landmarks Commission, and a pedestrian survey.

No tribal cultural resources were identified within the Project Limits as a result of the study.

Impact Analysis

Would the project:

Question	CEQA Determination
a) 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:	No Impact
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	No Impact
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

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 of historical resources as defined in Public Resources Code section 5020.1(k), or

ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

No Impact: The City's effort to determine if the Project could cause a substantial adverse change in the significance of a Tribal Cultural Resources as defined by Public Resources Code section 21074 began on October 23, 2023, with a request to the Native American Heritage Commission (NAHC) for a search of their sacred lands file and a list of Native American contacts (Appendix B). On November 15, 2023, the NAHC responded that a search of their files indicated the presence of Native American Sacred Lands resource in the project vicinity associated with the North Valley Yokuts Tribe. Attached to the letter, the

NAHC provided a list of Native American individuals who might have knowledge of cultural resources in the project region. On December 7, 2023, the City sent AB52 Notification letters to the tribes provided by the NAHC. The City received two responses requesting consultation. The results of those two separate consultations are described below.

Andrew Galvan of The Ohlone Indian Tribe responded to the City on December 12, 2023 with an email requesting additional information regarding the project. At the request of the City, Trish Fernandez responded via email on January 16, 2024, with a description of the project and ground disturbing components of the project. The same day, Mr. Galvan requested a copy of the cultural resources report, to which Ms. Fernandez responded that it would be sent to Mr. Galvan when it was available. On February 16, Ms. Fernandez followed up with Mr. Galvan by providing him with a summary of the findings from a previously conducted Extended Phase I (XPI) study and map showing the closest locations of the testing pits excavated as part of the XPI (Appendix C). Ms. Fernandez also informed Mr. Galvan that the cultural report was expected to be completed and available mid-March 2024. The City sent the completed report to Mr. Galvan on March 13, 2024, requesting information regarding the Project's potential to impact a Tribal Cultural Resource. After receiving no response, the City sent Mr. Galvan follow-up emails on March 22 and April 22, 2024, as Mr. Galvan had demonstrated that email was an appropriate mode of conversation. After receiving no response, the City determined that they had made a reasonably good faith effort to consult with the Ohlone Indian Tribe as the Tribe requested, but that such consultation had not resulted in the identification of a Tribal Cultural Resource that the Project could impact because the Tribe has failed to provide comments or otherwise engage (PRC §21082.3(d)(2).

Corrina Gould of the Confederated Villages of Lisjan Nation responded to the City on December 21, 2023, via email requesting information regarding the project. At the request of the City, Trish Fernandez responded via email on January 16, 2024, informing her that the Records Search and Sacred Lands File information had been received and provided a summary of the previous XPI results. Ms. Gould responded the same day with a formal request for consultation. On January 31, 2024, a zoom meeting was held with Ms. Gould, Ms. Fernandez, Jesus Espinoza from the City, and Karin Lilienbecker of TranSystems in attendance. The City provided a project impacts map and Ms. Gould requested more detailed information regarding the findings of the XPI study. On February 6, 2024, Ms. Fernandez sent a summary of the results and a map showing the locations of the testing pits. On February 13, 2024, Ms. Fernandez sent Ms. Gould a copy of the entire XPI report, which Ms. Fernandez acquired from Caltrans after the zoom meeting. On February 28, 2024, a follow-up zoom meeting was held during which the XPI results were discussed. The same day, Ms. Gould emailed Ms. Fernandez, the City, and TranSystems that Tribe was satisfied that the project would not impact traditional cultural resources important to the Tribe and that the Tribe considered AB52 consultation complete.

Because no Tribal Cultural Resources were identified, there would be no impact to Tribal Cultural Resources.

The City's COA Halt Work/Unanticipated Discovery of Tribal Cultural Resources will be implemented for in the event that cultural resources of Native American origin are identified during construction. All work

within 50 feet of the discovery shall be redirected. The project applicant and project construction contractor shall notify the City Planning Department within 24 hours. The City will again contact any tribes who have requested consultation under AB 52, as well as contact a qualified archaeologist, to evaluate the resources and situation and provide recommendations. If it is determined that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

XIX. UTILITIES AND SERVICE SYSTEMS

Environmental Setting

A 3" on-site water lateral and a separate irrigation system as well as electrical and communication lines are already on or near the RSC. A sewer line runs along Gilman Street. The City disposes waste at the Altamont landfill and requires diversion of construction debris.

Impact Analysis

Would the project:

Question	CEQA Determination
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 telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less Than Significant Impact
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant Impact
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?	Less Than Significant Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact

The proposed Project would require a modest increase in water consumption and wastewater generation to serve the public restrooms.

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 telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Less Than Significant Impact: None of the required utility constructions will cause significant environmental effects.

No new water service is required. The existing 3" on-site water lateral will connect to the proposed fieldhouse building. Existing irrigation systems, which use a separate lateral from the one proposed for drinking water, will be maintained.

A new sanitary sewer lateral and force main along with a lift station will be constructed from the proposed Community Space Facility near the southeast corner of the parking lot to the north edge of the property where it will connect to an existing sanitary sewer line installed along Gilman Street. These will be limited to the size and capacity required to support the proposed Community Space Facility.

A new electrical service from PG&E will be installed, reaching from the existing switch at the RSC's northeast corner to the proposed Community Space Facility. This electrical service will be designed to accommodate a planned 1000-amp service. 200 amps of electrical capacity are designated for use by the proposed Community Space Facility, with the remaining 800 amps dedicated to electric car charging stations in the parking lot. Ten percent of all parking stalls in the parking lot will receive electrical charging stations, while an additional twenty percent will have wiring and other underground infrastructure pre-installed to accommodate future installation of charging stations. All electrical infrastructure will be connected through the proposed Community Space Facility.

No natural gas infrastructure is planned.

Communication lines will be connecting the proposed Community Space Facility to existing American Telephone and Telegraph Company (AT&T) equipment along Gilman Street. Therefore, the impact would be less than significant.

b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

Less Than Significant Impact: The East Bay Municipal Utility District (EBMUD) is the provider of potable water for the City. Its Water Supply Management Program 2040 (EBMUD, 2012) defined the anticipated demand for water from many different users and contrasted this against the anticipated supply of water from primary, secondary, and alternative sources available in extended drought conditions. It describes conditions and provides evidence that the EBMUD will be able to meet projected demand during normal, dry, and multiple dry years.

The WSP2040 specifically notes that during periods of extended dry years, rationing of water will be one way to ensure that demand is available for critical users. The project's existing irrigation system uses a separate lateral than the proposed drinking water connection, so the project is well placed to respond to rationing by avoiding irrigation while still providing connection to the proposed fieldhouse and restrooms.

EBMUD is implementing the East Baysore Recycled Water Project. Limited existing piping exists near the RSC and EBMUD plans to connect it to a new pipeline along Seventh Street in a future project phase (EBMUD, n.d. a). As required in the MND (City of Berkeley, 2005), the design would facilitate a conversion to recycled water as expeditiously and economically as feasibly once the supply becomes available. Therefore, the impact would be less than significant.

c) *Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact: Operation of the proposed Project would result in the addition of wastewater from the five bathrooms to the volume of water EBMUD treats. The additional wastewater added to is minor compared to EBMUD's wastewater treatment plant's capacity. EBMUD treats wastewater at their Main Wastewater Treatment Plan, which treats a daily average of 63 million gallons per day (MGD), while having a primary treatment capacity of 320 MGD (EBMUD, n.d. b). Therefore, the impact would be less than significant.

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?*

Less Than Significant Impact: The City is committed to Zero Waste Programs to reduce, eliminate, and divert the waste that is disposed at landfills conventionally. The City will require its contractors to comply with the Berkeley Green Code for Waste Diversion (City of Berkeley, n.d.) which requires recycling or salvage for use of

- 100 percent of each of the following: excavated soil and land-clearing debris, concrete, asphalt
- 65 percent of nonhazardous construction and demolition waste.

Construction debris that cannot be reused or recycled would be disposed at the nearest landfill. Excavated materials, particularly those generated during demolition and trenching, could be contaminated, and managed as described in Section IX Hazards and Hazardous Materials. The overall volume of solid construction waste requiring disposal would be minimal in comparison to the available capacities of local landfills.

The proposed Project is not anticipated to generate a substantial increase in solid waste over the current amounts generated at the RSC. The City collects trash and recyclables at the RSC. Solid waste from the City is primarily transported to the Altamont Landfill. As of 2018, the Altamont Landfill had over 65 million cubic yards of refuse capacity and, given anticipated fill rates, had an estimated closure date of 2049 (Alameda County Waste Management Authority, 2023). Therefore, the impact would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact: The proposed Project will comply with federal, state, and local statutes related to solid waste, including waste diversion requirements discussed under d) above. Therefore, the impact would be less than significant.

XX. WILDFIRE

Environmental Setting

The California Department of Forestry and Fire Protection (CAL FIRE) has classified the severity of fire hazards in California. Fire Hazard Severity Zones are areas with significant fire hazards, based on fire history, fuel loading (natural vegetation), terrain, and typical fire weather. These Fire Hazard Severity Zones can be located in both State Responsibility Areas and Local Responsibility Areas.

State Responsibility Areas include those areas where the state has financial responsibility for wildfire protection and prevention. Incorporated cities and federal ownership are not included in State Responsibility Areas. Local Responsibility Areas are incorporated cities, urban regions, agriculture lands, and portions of the desert where the local government is responsible for wildfire protection. CAL FIRE has worked with local governments to make recommendations on the Very High Fire Hazard Severity Zones within Local Responsibility Areas.

According to the CAL FIRE's Fire Hazard Severity Zone Viewer, the proposed project is not located in or near a mapped Fire Hazard Severity Zone in a State Responsible Area, or in or near lands classified as a Very High Fire Hazard Severity Zone within a Local Responsibility Area (CAL FIRE, 2023). The nearest mapped fire hazard is the Very High Fire Hazard Severity Zone located approximately 2 miles northeast of the project site in the Berkeley Hills.

The City has developed its city-wide Community Wildfire Protection Plan (City of Berkeley, 2023a). The Community Wildfire Protection Plan focuses on the Wildland-Urban Interface areas as identified by the Berkeley Fire Code. Fire Zone 2 (Hillside Overlay) and Fire Zone 3 (Panoramic Hill) are designated as Wildland-Urban Interface Fire Areas and correspond to the Local Responsibility Area mapped by CAL FIRE. The proposed project is not located within the Wildland-Urban Interface Fire Areas as defined by the City.

Impact Analysis

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact

Question	CEQA Determination
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
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?	No Impact
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?	No Impact

No Impact: The Project is not located in or near a state responsibility area or lands classified as very high fire hazard severity zones. The Project would have no impact with respect to Wildfire.

As the Project involves no installation of new infrastructure, it does not include the construction or modification of roads, fuel breaks, emergency water sources, power lines, or other utilities. Additionally, there will be no maintenance or alteration of existing infrastructure that could influence fire safety. Therefore, there would be no impact.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Setting

The proposed Project site is located on the waterfront of Berkeley and upgrades an existing complex of sports courts and fields.

Impact Analysis

Question	CEQA Determination
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?	Less Than Significant with Mitigation Incorporated
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant with Mitigation Incorporated

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?

Less Than Significant Impact with Mitigation Incorporated: The proposed Project could affect burrowing owls or their habitat. Impacts to burrowing owls would be significant. To avoid significant impacts to the burrowing owl, mitigation measure BIO-1 would be implemented:

- **BIO-1 -** Burrowing Owl Survey Protocol and Mitigation: Prior to ground disturbing activity, a pre-construction survey for burrowing owls shall be completed by a qualified biologist according to Burrowing Owl Survey Protocol and Mitigation Guidelines and the California Department of Fish and Wildlife (CDFW) protocol identified in the Staff Report on Burrowing Owl Mitigation prior to disturbance of non-native annual grassland areas occupied by ground squirrels (Attachment 4, CDFW, 2012). After the survey is complete, the qualified biologist shall prepare a report that includes but is not limited to: Description of the proposed project or proposed activity, including

the proposed project start and end dates, as well as a description of disturbances or other activities occurring on-site or nearby. The survey report will be provided to the City's Planning Department for review and approval. If any occupied burrows are identified during the breeding season, buffer areas will be established around the burrow and protected until the nesting activities are completed. Any occupied burrow identified outside the nesting season (June-July) will have a one-way gate installed to allow burrowing owls to leave the site. Any identification of burrowing owls will be coordinated with the CDFW. The phases listed below shall be completed by the qualified biologist:

- Phase I: Habitat assessment
- Phase II: Burrow survey
- Phase III: Burrowing owl surveys, census, and mapping
- Phase IV: Resource summary, written report

In addition to construction controls, the project shall comply with the City's standard COA to avoid disturbance of nesting birds and initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible.

If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided.

The proposed project could result in a potential impact to burrowing owls. However, with required adherence to California Department of Fish and Wildlife requirements, existing regulations, and implementation of Mitigation Measure BIO-1, the impact would be less than significant.

In addition to construction controls, the project would comply with the City's standard COA to avoid disturbance of nesting birds and initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. Therefore, the impact would be less than significant with mitigation incorporated.

In 1989, the Legislature amended CEQA to require that public agencies adopting feasible mitigation measures outlined in Environmental Impact Reports (EIRs) and negative declarations also implement a mitigation monitoring and reporting program. This program is designed to ensure compliance with any project modifications mandated by the public agency to reduce or avoid significant environmental impacts. A Mitigation Monitoring and Reporting Plan (MMRP) has been developed for the project (Attachment 5).

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

No Impact: As stated in the MND (City of Berkeley, 2005), the proposed Project serves existing, insufficiently met needs for field sports playing areas generated by residents of Berkeley, Emeryville, Albany, El Cerrito, and Richmond. The proposed Project further advances the original project goal and, as an upgrade of an existing facility, does not have impacts that are cumulatively considerable, as they are anticipated to be less than significant individually. To further mitigate potential effects, best management practices and mitigation measures will be implemented to minimize and avoid environmental impacts. As a result, the project is expected to have a negligible impact when evaluated within the broader context of cumulative environmental effects. Therefore, there would be no impact.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant Impact with Mitigation Incorporated: The proposed Project results in less than significant impacts with mitigations incorporated to humans' beings as identified in this Initial Study.

Given the site's history of soil contamination, excavation during construction has the potential to expose hazardous waste, including TPH-d, metals (predominantly lead, arsenic, and mercury), and methane. Excavated material that is contaminated will be disposed at a permitted facility. The following Mitigation Measures will be implemented as part of the project to minimize environmental effects:

- **HAZ-1-** Risk Management Plan: The latest version of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II, along with any associated addendums, must be provided to all contractors intending to engage in work on the Project. Contractors who anticipate interacting with shallow on-site soils should consult the Risk Management Plan for guidance on construction monitoring prerequisites and for identifying the appropriate personal protective equipment (PPE), including protective measures for encountering methane.
- **HAZ-2-** Water Quality Control Board Coordination: The City will coordinate site excavation activities with the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) to align site construction with the provisions of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II.
- **HAZ-3-** Soil Sampling: During Project construction, sample and analyze on-site soils that are being removed to characterize them prior to disposal at approved facilities.

Transport, use, storage, and disposal of hazardous materials: In the short term, construction would involve the management, application, storage of hazardous materials, leading to the generation of both hazardous and non-hazardous solid waste. Among the anticipated hazardous materials for use in constructing the proposed facilities are paints, thinners, solvents, and petroleum-based products. These materials, frequently employed at construction sites for transport and equipment, pose potential health and safety risks to both the public and construction workers if mishandled or spilled.

- **HAZ-4-** Regulations: Contractors will comply with the California Health and Safety Code (HSC) and Resource Conservation and Recovery Act (RCRA) for the management, treatment, storage, and disposal of hazardous waste.

In 1989, the Legislature amended CEQA to require that public agencies adopting feasible mitigation measures outlined in Environmental Impact Reports (EIRs) and negative declarations also implement a mitigation monitoring and reporting program. This program is designed to ensure compliance with any project modifications mandated by the public agency to reduce or avoid significant environmental impacts. A Mitigation Monitoring and Reporting Plan (MMRP) has been developed for the project (Attachment 5). Therefore, the impact would be less than significant with mitigation incorporated.

XXII. REFERENCES USED IN THE COMPLETION OF THE INTIAL STUDY CHECKLIST

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Attachment 1 – Figures

Figure 1: Tom Bates Regional Sports Complex Project Location

PROJECT LOCATION

PROJECT VINICITY

EXISTING CONFIGURATION AND PROJECT FOOTPRINT

TOM BATES REGIONAL SPORTS COMPLEX - BERKELEY, CA

PROJECT LOCATION

TRANSYSTEMS

Legend

Project Footprint

Bay Trail

N 0 225 450 Feet

SOURCE: METROPOLITAN TRANSPORTATION COMISSION. ACCESSED ON NOVEMBER 1, 2023.

FIGURE 1

Figure 2: Tom Bates Regional Sports Complex Project Concept

TOM BATES REGIONAL SPORTS COMPLEX - BERKELEY, CA

PROJECT CONCEPT

Legend

Project Footprint

Bay Trail

TRANSYSTEMS

N 0 35 70 140 Feet

SOURCE: METROPOLITAN TRANSPORTATION COMISSION. ACCESSED ON NOVEMBER 1, 2023.

FIGURE 2

Figure 3: Landcover

TOM BATES REGIONAL SPORTS COMPLEX - BERKELEY, CA
LANDCOVER

TRANSYSTEMS

Legend

Project Footprint

Non-native Annual Grassland

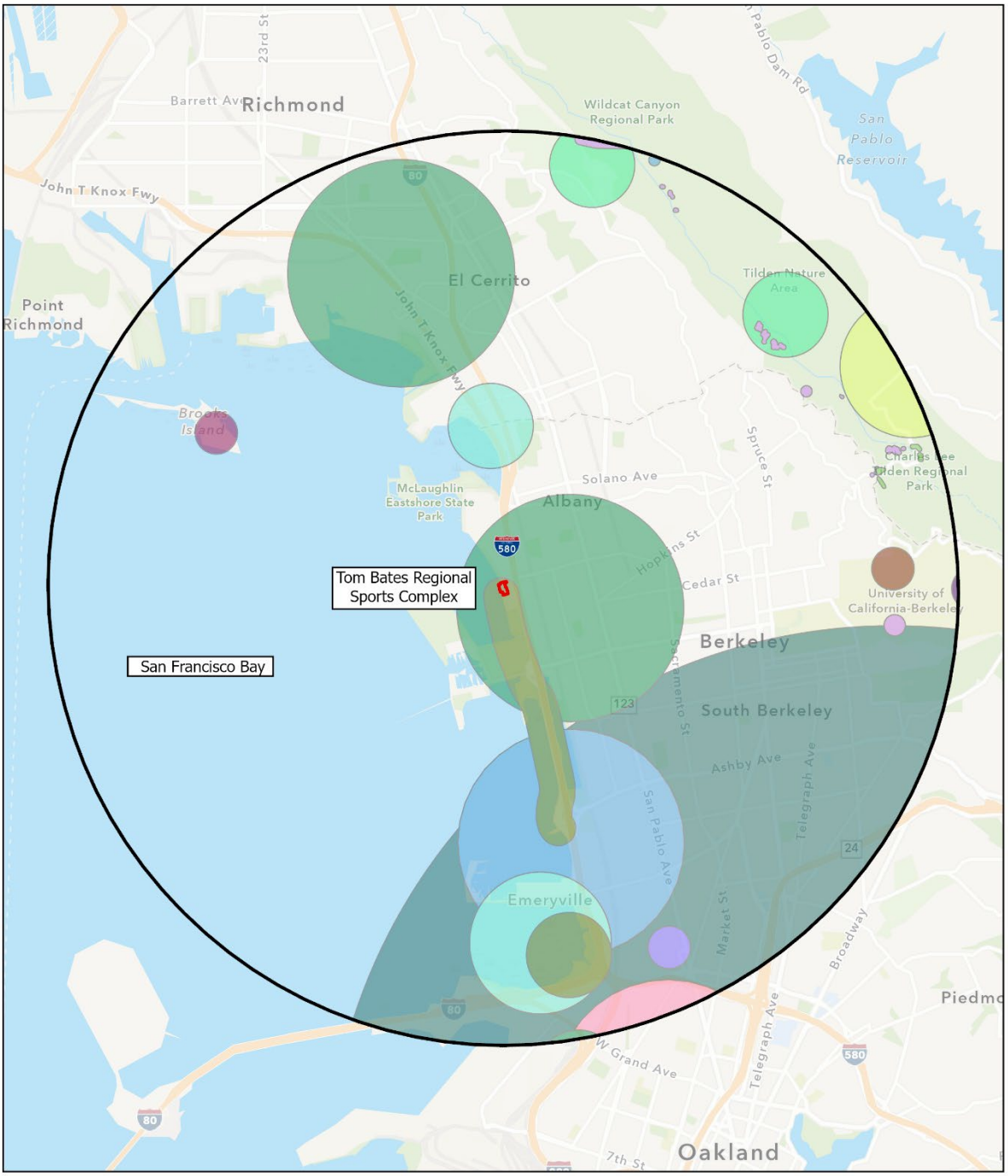
N

0 75 150 225 Feet

SOURCE: TRANSYSTEMS ANALYSIS

FIGURE 3

Figure 4: CNDDB Vegetation



TOM BATES REGIONAL SPORTS COMPLEX - BERKELEY, CA

CNDDB VEGETATION

TRANSYSTEMS

Legend

- Project Footprint
- 5-mile Site Buffer
- California seablite
- Choris' popcornflower
- Diablo helianthella
- Kellogg's horkelia
- Marin knotweed
- Point Reyes salty bird's-beak
- San Francisco Bay spineflower
- San Joaquin spearscale
- Santa Cruz tarplant
- alkali milk-vetch
- bent-flowered fiddleneck
- coastal bluff morning-glory
- dark-eyed gilia
- fragrant fritillary
- minute pocket moss
- oval-leaved viburnum
- pallid manzanita
- saline clover
- western leatherwood

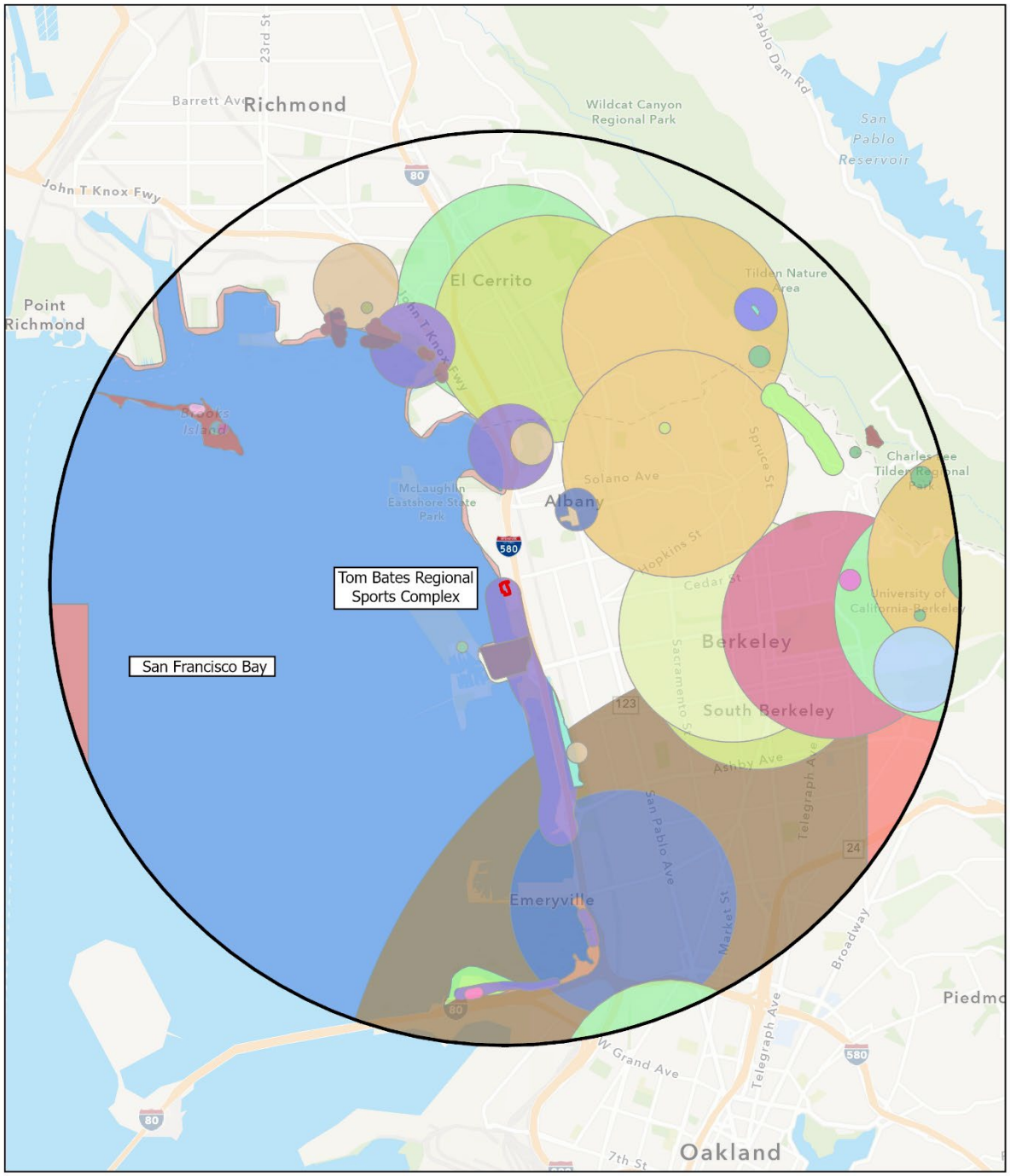
N

0 3,000 6,000 Feet

SOURCE: CDFW CNDDB

FIGURE 4

Figure 5: CNDDB Wildlife



TOM BATES REGIONAL SPORTS COMPLEX - BERKELEY, CA

CNDDB WILDLIFE

TRANSYSTEMS

Legend

Project Footprint
5-mile Site Buffer
Alameda song sparrow
Alameda whipsnake
American peregrine falcon
Berkeley kangaroo rat
Bridges' coast range shoulderband
California Ridgway's rail
California black rail
California red-legged frog
Caspian tern
Crotch bumble bee
Lee's micro-blind harvestmen
Pacific walker
Sacramento perch
Townsend's big-eared bat
big free-tailed bat
black-crowned night heron
burrowing owl
green sturgeon - southern DPS
hoary bat
longfin smelt
monarch - California overwintering population
northern harrier
obscure bumble bee
pallid bat
salt-marsh harvest mouse
saltmarsh common yellowthroat
silver-haired bat
snowy egret
tidewater goby
western bumble bee
western pond turtle
white-tailed kite

N

0 3,000 6,000 Feet

SOURCE: CDFW CNDDB

FIGURE 5

Figure 6: BCDC Jurisdiction

TOM BATES REGIONAL SPORTS COMPLEX - BERKELEY, CA
BCDC JURISDICTION

TRANSYSTEMS

Legend

Project Footprint
Coastline
BCDC 100 Foot Jurisdiction
BCDC Impact Area

N
0 75 150 225 Feet

FIGURE 6

Figure 7: Flood Zone Map

FIGURE 7

Attachment 2 – Commitment List

Tom Bates Regional Sports Complex – Commitment List

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
Aesthetics, Biological Resources	Lighting: Wall-mounted lighting to illuminate the area around the community space facility and, in addition, one light pole and in-ground fixtures would illuminate the ADA-compliant switchback ramp. Exterior lights will use fixtures approved by the International Dark-Sky Association and consistent with the City's Condition of Approval (COA) that require that all exterior lighting to be energy efficient where feasible; and shielded and directed downward and away from property lines to prevent excessive glare beyond the subject property.	City of Berkeley	X			Verified by:
Air Quality, Hydrology	Best Management Practice (BMP): The proposed Project would implement BMPs B-1 through B-11: B-1: All exposed surfaces shall be watered two times per day. B-2: All haul trucks transporting soil, sand, or other loose material off-site shall be covered. B-3: All visible mud or dirt track out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. B-4: All vehicle speeds on unpaved roads shall be limited to 10 mph. B-5: All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. B-6: All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 15 mph. B-7: All trucks and equipment, including their tires, shall be washed off prior to leaving the site. B-8: Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel. B-9: Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's (BAAQMD) General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.	City of Berkeley, Contractor		X		Verified by:

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
	B-10: Ensure that idling time for all heavy equipment is minimized to reduce on-site emissions. B-11: Maintain equipment in good mechanical condition.					
Air Quality, Hydrology	Comply with the California Air Resources Board (CARB): The City will require the Contractor to comply with the California Air Resources Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation, which imposes limits on idling and restricts the use of older vehicles during construction.	City of Berkeley		X	X	Verified by:
Air Quality, Hydrology	Comply with CALGreen Building Standards Code: The City will require the Contractor to adhere to CALGreen Building Standards Code which includes specific requirements related to recycling, construction materials, and energy efficiency standards.	City of Berkeley	X	X	X	Verified by:
Biological Resources	BIO-1: Burrowing Owl Survey Protocol and Mitigation: Prior to ground disturbing activity, a pre-construction survey for burrowing owls shall be completed by a qualified biologist according to Burrowing Owl Survey Protocol and Mitigation Guidelines and the California Department of Fish and Wildlife (CDFW) protocol identified in the Staff Report on Burrowing Owl Mitigation prior to disturbance of non-native annual grassland areas occupied by ground squirrels (Attachment 4, CDFW, 2012). After the survey is complete, the qualified biologist shall prepare a report that includes but is not limited to: Description of the proposed project or proposed activity, including the proposed project start and end dates, as well as a description of disturbances or other activities occurring on-site or nearby. The survey report will be provided to the City's Planning Department for review and approval. If any occupied burrows are identified during the breeding season, buffer areas will be established around the burrow and protected until the nesting activities are completed. Any occupied burrow identified outside the nesting season (June-July) will have a one-way gate installed to allow burrowing owls to leave the site. Any identification of burrowing owls will be coordinated with the CDFW. The phases listed below shall be completed by the qualified biologist: Phase I: Habitat assessment Phase II: Burrow survey Phase III: Burrowing owl surveys, census, and mapping Phase IV: Resource summary, written report	Contractor	X			Verified by:

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
Biological Resources	Tree Removal: Tree removal is not authorized.	City of Berkeley	X	X	X	Verified by:
Biological Resources	Avoid disturbance of nesting birds: In addition to construction controls, the project would comply with the City's standard COA to avoid disturbance of nesting birds and initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.	Contractor	X			Verified by:
Cultural Resources	CR-1 - Inadvertent Discovery of Archaeological Resources: In the event that archaeological artifacts or cultural soil deposits are encountered during project implementation, all work shall stop in the immediate vicinity of the find until the discovery area can be evaluated by a qualified archaeologist.	City of Berkeley, Contractor		X		Verified by:

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
Cultural Resources	CR-2 – Inadvertent Discovery of Human Remains: If human remains are discovered anywhere on the site other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered determines that no investigation of the cause of death is required and the coroner determines the remains to be Native American. If the coroner makes those determinations, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the person or persons it believes to be the most likely descended (MLD) from the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code section 5097.98.	City of Berkeley, Contractor		X		Verified by:
Geology and Soils, Hydrology	Adhere to Current Structural Engineering Codes: The design will adhere to current structural engineering codes. Structural engineering and geologic engineering disciplines will prepare the design based on current geologic site information.	Contractor	X			Verified by:
Geology and Soils, Hydrology	Design to Withstand Earthquakes: The design of all structures proposed as a part of the project will be reviewed by a qualified structural engineer, in consultation with an engineering geologist, who shall provide recommendations for reducing life safety hazards for field users during a major earthquake.	City of Berkeley	X			Verified by:
Geology and Soils, Hydrology	Design to Address High Groundwater Level: The design will address the high groundwater level at the site, for example, by requiring a heavier base for the lift station wet well to counter buoyancy.	City of Berkeley	X			Verified by:
Geology and Soils, Hydrology	Develop a Storm Water Pollution Prevention Plan (SWPPP): For construction, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared according to the City's COA and implemented, as required by the State Water Resources Control Board for projects involving more than one acre of land disturbance. The City's COA Stormwater Requirements requires that the applicant shall demonstrate compliance with the requirements of the City's National Pollution	City of Berkeley	X			Verified by:

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
	Discharge Elimination System (NPDES) permit as described in BMC Section 17.20. The following conditions apply: The project plans shall identify and show site-specific Best Management Practices (BMPs) appropriate to activities conducted on-site to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system, regardless of season or weather conditions. Trash enclosures and/or recycling area(s) shall be covered; no other area shall drain onto this area. Drains in any wash or process area shall not discharge to the storm drain system; these drains should connect to the sanitary sewer. Applicant shall contact the City and EBMUD for specific connection and discharge requirements. Discharges to the sanitary sewer are subject to the review, approval, and conditions of the City and EBMUD. Landscaping shall be designed with efficient irrigation to reduce runoff, promote surface infiltration, and minimize the use of fertilizers and pesticides that contribute to stormwater pollution. Where feasible, landscaping should be designed and operated to treat runoff. When and where possible, xeriscape and drought tolerant plants shall be incorporated into new development plans. Design, location and maintenance requirements and schedules for any stormwater quality treatment structural controls shall be submitted to the Department of Public Works for review with respect to reasonable adequacy of the controls. The review does not relieve the property owner of the responsibility for complying with BMC Chapter 17.20 and future revisions to the City's overall stormwater quality ordinances. This review shall be conducted prior to the issuance of a Building Permit. All paved outdoor storage areas must be designed to reduce/limit the potential for runoff to contact pollutants. All on-site storm drain inlets/catch basins must be cleaned at least once a year immediately prior to the rainy season. The property owner shall be responsible for all costs associated with proper operation and maintenance of all storm drainage facilities (pipelines, inlets, catch basins, outlets, etc.) associated with the project, unless the City accepts such facilities by Council action. City's Public Works Engineering Dept. may require additional cleaning. All private or public projects that create and/or replace 10,000 sf or more of impervious surface must comply with Provision C.3 of the Alameda County					

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
	NPDES permit and must incorporate stormwater controls to enhance water quality. Permit submittals shall include a Stormwater Requirement Checklist and detailed information showing how the proposed project will meet Provision C.3 stormwater requirements, including a) Site design measures to reduce impervious surfaces, promote infiltration, and reduce water quality impacts; b) Source Control Measures to keep pollutants out of stormwater runoff; c) Stormwater treatment measures that are hydraulically sized to remove pollutants from stormwater; d) an O & M (Operations and Maintenance) agreement for all stormwater treatment devices and installations; and e) Engineering calculations for all stormwater devices (both mechanical and biological). All on-site storm drain inlets must be labeled “No Dumping – Drains to Bay” or equivalent using methods approved by the City. Most washing and/or steam cleaning must be done at an appropriately equipped facility that drains to the sanitary sewer. Any outdoor washing or pressure washing must be managed in such a way that there is no discharge or soaps or other pollutants to the storm drain. Sanitary connections are subject to the review, approval, and conditions of the sanitary district with jurisdiction for receiving the discharge. All loading areas must be designated to minimize “run-on” or runoff from the area. Accumulated wastewater that may contribute to the pollution of stormwater must be drained to the sanitary sewer or intercepted and pretreated prior to discharge to the storm drain system. The property owner shall ensure that BMPs are implemented to prevent potential stormwater pollution. These BMPs shall include, but are not limited to, a regular program of sweeping, litter control and spill cleanup. Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. If pressure washed, debris must be trapped and collected to prevent entry to the storm drain system. If any cleaning agent or degreaser is used, wash water shall not discharge to the storm drains; wash waters should be collected and discharged to the sanitary sewer. Discharges to the sanitary sewer are subject to the review, approval, and conditions of the sanitary district with jurisdiction for receiving the discharge.					

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
	The applicant is responsible for ensuring that all contractors and subcontractors are aware of and implement all stormwater quality control measures. Failure to comply with the approved construction BMPs shall result in the issuance of correction notices, citations, or a project stop work order. Construction will be conducted during the dry season. Stockpiled soil will be covered and protected with temporary erosion control measures. Therefore, the impact would be less than significant.					
Geology and Soils, Hydrology	Design to Address Expansive Soil: The Project site is located on expansive soil and the engineering design will address this soil condition.	City of Berkeley	X			Verified by:
Greenhouse Gas Emissions	Low-carbon Concrete: The Berkeley Green Code (BMC Chapter 19.37) requires the use of low-carbon concrete, by specifying that construction projects should reduce the amount of cement used in concrete by at least 25%.	City of Berkeley	X	X		Verified by:
Hazards and Hazardous Materials	HAZ-1- Risk Management Plan: The latest version of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II, along with any associated addendums, must be provided to all contractors intending to engage in work on the Project. Contractors who anticipate interacting with shallow on-site soils should consult the Risk Management Plan for guidance on construction monitoring prerequisites and for identifying the appropriate personal protective equipment (PPE), including protective measures for encountering methane.	City of Berkeley, Contractor		X		Verified by:
Hazards and Hazardous Materials	HAZ-2- Water Quality Control Board Coordination: The City will coordinate site excavation activities with the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) to align site construction with the provisions of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II.	City of Berkeley	X			Verified by:
Hazards and Hazardous Materials	HAZ-3- Soil Sampling: During Project construction, sample and analyze on-site soils that are being removed to characterize them prior to disposal at approved facilities.	City of Berkeley	X	X		Verified by:
Hazards and Hazardous Materials	HAZ-4- Regulations: Contractors will comply with the California Health and Safety Code (HSC) and Resource Conservation and Recovery Act (RCRA) for the management, treatment, storage, and disposal of hazardous waste.	Contractor		X	X	Verified by:

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
Hazards and Hazardous Materials	Contaminated Groundwater: The design will address the high groundwater level at the site, for example, by minimizing the length and depth of utility trenches to reduce the potential to encounter contaminated groundwater and soil. Groundwater collected during construction from displacement will be tested and disposed in accordance with applicable regulations.	City of Berkeley, Contractor	X	X		Verified by:
Hydrogeology	San Francisco Bay Conservation and Development Commission (BCDC) – Permit: The project would include construction within the 100-foot band of shoreline regulated by BCDC. Impacts within BCDC jurisdictional area are based on development within BCDC area of jurisdiction. Prior to project construction, the City, or their representative, will prepare and submit a permit application BCDC for development. With adherence to permit conditions, which are anticipated to include a comprehensive plan review and approval process prior to the commencement of construction, as well as requirements for maintaining public access and view corridors to the Bay.	City of Berkeley	X			Verified by:
Hydrology, Land use and Planning	Final Design to Address Pollutant Load Runoff: To reduce the pollutant loads in runoff from the parking lots, the final design will direct parking lot runoff to vegetated swales for bio-filtration.	City of Berkeley	X			Verified by:
Hydrology, Land use and Planning	Construction of Shoreline: The project will obtain a permit from the San Francisco Bay Conservation and Development Commission (BCDC) for work in the 100-ft band of shoreline in its jurisdiction.	City of Berkeley	X			Verified by:
Hydrology, Land use and Planning	Floodplain: Construction will commence after the local floodplain administrator approves the design.	City of Berkeley	X			Verified by:
Hydrology, Land use and Planning	Efficient Landscape Features: The Project would incorporate water efficient landscape features.	City of Berkeley	X			Verified by:
Noise	Construction Activities: Construction activities are prohibited between weekday hours of 7 p.m. and 7 a.m., or between 8 p.m. and 9 a.m. on weekends or holidays. Emergency work is allowed.	Contractor and City of Berkeley		X		Verified by:
Noise	Maximum Sound Levels: The contractor will comply with the Berkeley Community Noise Code.	Contractor and City of Berkeley		X	X	Verified by:
Tribal Cultural Resources	The City's COA Halt Work/Unanticipated Discovery of Tribal Cultural Resources will be implemented in the event that cultural resources of Native American origin are identified during construction, all work within 50 feet of the discovery shall be redirected. The project applicant and project construction contractor shall notify the City Planning Department within 24 hours. The City	Contractor		X		Verified by:

Resource Area	Commitment	Responsible Party	Before	During	After	Verification of Compliance Date
	will again contact any tribes who have requested consultation under AB 52, as well as contact a qualified archaeologist, to evaluate the resources and situation and provide recommendations. If it is determined that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.					
Utilities and Service Systems	Design to Address Water Recycling: As required in the MND (City of Berkeley, 2005), the design would facilitate a conversion to recycled water as expeditiously and economically as feasibly once the supply becomes available.	City of Berkeley	X			Verified by:
Utilities and Service Systems	Zero Waste Program: The City will require its contractors to comply with the Berkeley Green Code for Waste Diversion (City of Berkeley, 2024).	City of Berkeley		X		Verified by:

Attachment 3 – Listed, Proposed Species, Natural communities, and Critical Habitat Potentially Occurring or Known to Occur in the Biological Study Area.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Plants				
Bent-flowered fiddleneck *Amsinckia lunaris*	1B.2	Cismontane woodland, coastal bluff scrub, and valley and foothill grassland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Pallid manzanita *Arctostaphylos pallida*	FT, SE, 1B.1	Broadleaved upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, and coastal scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Alkali milk-vetch *Astragalus tener var. tener*	1B.2	Alkali playa, valley and foothill grassland, vernal pools, and wetlands	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Coastal bluff morning-glory *Calystegia purpurata ssp. Saxicola*	1B.2	Coastal bluff scrub, coastal scrub, coastal dunes, and north coast coniferous forest	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Bristly sedge *Carex comosa*	2B.1	Coastal prairies, valley and foothill grassland, and wetland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Point Reyes salty bird's-beak *Chloropyron maritimum ssp. Palustre*	1B.2	Salt marsh, marsh, swamp, and another wetland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
San Francisco Bay spineflower *Chorizanthe cuspidata var. cuspidata*	1B.2	Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Robust spineflower *Chorizanthe robusta var. robusta*	FE, 1B.1	Chaparral, cismontane woodland, coastal bluff scrub, coastal dunes	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Western leatherwood *Dirca occidentalis*	1B.2	Broadleaved upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, and riparian forests and woodland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
San Joaquin spearscale *Extriplex joaquinana*	1B.2	Alkali playa, chenopod scrub, meadows and seeps, valley, and foothill grassland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Fragrant fritillary *Fritillaria liliacea*	1B.2	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland.	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Blue coast gilia Gilia capitata ssp. chamissonis	1B.1	Coastal dunes and scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Dark-eyed gilia *Gilia millefoliata*	1B.2	Coastal dunes	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Diablo helianthella *Helianthella castanea*	1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Congested-headed hayfield tarplant *Hemizonia congesta ssp. congesta*	1B.2	Valley and foothill grassland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Water star-grass *Heteranthera dubia*	2B.2	Marsh and swamps	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Loma Prieta hoita *Hoita strobilina*	1B.1	Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Santa Cruz tarplant *Holocarpha macradenia*	FT, SE, 1B.1	Coastal prairie, costal scrub, valley, and foothill grassland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Kellogg's horkelia *Horkelia cuneata var. sericea*	1B.1	Chaparral, closed-cone coniferous woodland, coastal dunes, and coastal scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Beach layia *Layia carnosa*	FT, SE, 1B.1	Coastal dunes and coastal scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Rose leptosiphon *Leptosiphon rosaceus*	1B.1	Coastal bluff scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Choris' popcornflower *Plagiobothrys chorisianus var. chorisianus*	1B.2	Chaparral, coastal prairie, and coastal scrub	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Marin knotweed *Polygonum marinense*	3.1	Brackish marsh, marsh and swamp, salt marsh, wetland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Adobe sanicle *Sanicula maritima*	1B.1	Chaparral, coastal prairie, meadow and seep, valley, and foothill grassland	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Long-styled sand-spurrey *Spergularia macrotheca var. longistyla*	1B.2	Marsh, swamps, meadows, and seeps	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
California seablite *Suaeda californica*	1B.1	Freshwater marsh, swamp, and other wetlands.	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Saline clover *Trifolium hydrophilum*	1B.2	Marshes and swamps, Valley and foothill grassland, Vernal pools, and other wetlands	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Oval-leaved viburnum *Viburnum ellipticum*	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest	A	The BSA is limited to non-native annual grassland, developed area, and landscaped area. No suitable habitat is present in the BSA.
Fish				
Green Sturgeon – Southern DPS *Acipenser medirostris*	FT	Anadromous. Spawns in the Sacramento, Feather, and Yuba Rivers. Present in the Stanislaus and San Joaquin Rivers. Non-spawning adults occupy marine/estuarine waters. The delta estuary is important for rearing juveniles.	A	The BSA does not intersect or impact water resources. Suitable habitat does not exist in the BSA.
Sacramento perch *Archoplites interruptus*	SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley.	A	The BSA does not intersect or impact water resources. Suitable habitat does not exist in the BSA.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Tidewater goby *Eucyclogobius newberryi*	FE	Found in brackish water along the coast between Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River		The BSA does not intersect or impact water resources. Suitable habitat does not exist in the BSA.
Longfin smelt *Spirinchus thaleichthys*	FC, ST	Found in the open waters of estuaries, mostly in the middle or bottom of the water column.	A	The BSA does not intersect or impact water resources. Suitable habitat does not exist in the BSA.
Amphibians/Reptiles				
California Tiger Salamander *Ambystoma californiense* – central California DPS	FT, ST	Breeds in ponded water or vernal pools. Adults spend the summer in small mammal burrows.	A	No suitable areas of ponded water or vernal pools are not present in the project vicinity. Suitable habitat does not exist in the BSA.
Western pond turtle *Emys marmorata*	SSC	Agricultural wetlands and other wetlands, such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and associated uplands.	A	No wetlands or waters are present in the BSA. Suitable habitat does not exist in the BSA.
Alameda whipsnake *Masticophis lateralis euryxanthus*	FT, ST	Found in chaparral and scrub land, mostly on south-facing slopes and ravines, with rock outcrops, deep crevices, or abundant rodent burrows, where shrubs are mixed with oak trees and grasses.	A	The vegetation in the BSA is limited to non-native annual grassland with some scattered shrubs. Suitable habitat does not exist in the BSA.
California red-legged frog *Rana draytonii*	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	A	No sources of deeps water or emergent vegetation are present. Suitable habitat does not exist in the BSA.
Mammals				
Pallid bat *Antrozous pallidus*	SSC	Deserts, grasslands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	A	No suitable rocky roosting areas are present. Suitable habitat does not exist in the BSA.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Townsend's big-eared bat *Corynorhinus townsendii*	SSC	Found throughout California in a variety of habitats. Its most common in mesic sites, roosting in the open, hanging from walls and ceiling. It is extremely sensitive to human disturbance.	A	No suitable roosting area is present in the BSA and there is a high level of human activity in the area. Suitable habitat does not exist in the BSA.
San Pablo vole *Microtus californicus sanpabloensis*	SSC	Saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay.	A	The project location is outside of the species range, and no saltmarsh habitat is present.
Big free-tailed bat *Nyctinomops macrotis*	SSC	Low-lying arid areas with high cliffs or rocky outcrops for roosting sites.	A	The BSA is not contain any cliffs or rocky outcroppings that would be suitable for roosting. Suitable habitat does not exist in the BSA.
Salt-marsh harvest mouse *Reithrodontomys raviventris*	FE, SE, SSC	Saline emergent wetlands of San Francisco Bay and its tributaries.	A	No wetlands are present in the BSA. Suitable habitat does not exist in the BSA.
Alameda Island mole *Scapanus latimanus parvus*	SSC	Only known from Alameda Island.	A	The project is outside this species known range.
Salt-marsh wandering shrew *Sorex vagrans halicoetes*	SSC	Salt marshes of the south arm of San Francisco Bay	A	No salt marshes are present in the BSA. Suitable habitat does not exist in the BSA.
Birds				
Burrowing owl *Athene cunicularia*	SSC	Frequents open grasslands and shrublands with perches and burrows. Primarily nests in old ground squirrel or other small mammal burrows	HP	This species has a history of presence on this site, being known to occur pre-development. No current occurrence is known, and no small mammal burrows are present. Due to the past usage of this site, habitat is considered to be present.
Northern harrier *Circus hudsonius*	SSC	Coastal salt and freshwater marsh, nesting and foraging in grasslands, from salt grass in desert sinks to mountain ciénagas.	A	No Marsh or grassland suitable for foraging or nesting is present in the BSA. Suitable habitat does not exist in the BSA.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Yellow rail *Coturnicops noveboracensis*	SSC	Freshwater marshlands.	A	No marshlands are present in the BSA. Suitable habitat does not exist in the BSA.
White-tailed kite *Elanus leucurus*	SFP	Nests in isolated trees or woodland areas with suitable open foraging habitat.	A	No isolated trees or woodland habitat is present in the BSA. Suitable habitat does not exist in the BSA.
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	SSC	Fresh and saltwater marshes in the San Francisco Bay region. Requires thick continuous cover to the water surface for foraging and tall grasses, tule patches, or willows for nesting.	A	No marshes are present in the BSA. Suitable habitat does not exist in the BSA.
California black rail *Laterallus jamaicensis coturniculus*	ST, SFP	Freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	A	No marshes or wet meadows are present in the BSA. Suitable habitat does not exist in the BSA.
Alameda song sparrow *Melospiza melodia pusillula*	SSC	Salt marshes bordering the south arm of San Francisco Bay, nesting in *Grindelia* bushes and in *Salicornia*.	A	No marshes are present in the BSA. Suitable habitat does not exist in the BSA.
San Pablo song sparrow *Melospiza melodia samuelis*	SSC	Salt marshes along the north side of San Francisco and San Pablo bays, nesting in *Grindelia* bordering slough channels.	A	No marshes are present in the BSA. Suitable habitat does not exist in in the BSA.
California Ridgway's rail *Rallus obsoletus obsoletus*	FE, SE, SFP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay.	A	No marshes are present in the BSA. Suitable habitat does not exist in the BSA.
California least tern *Sternula antillarum browni*	FE, SE, SFP	Nests along the coast from San Francisco Bay south to northern Baja California, nesting on bare or sparsely vegetated, flat substrates including sand beaches, alkali flats, landfills, or paved areas.	A	Flat nesting substrates in the area are limited to the paved parking lot and a nearby fire lane. These areas are used frequently and are unlikely to be used by the least tern.

Species	Status*	General Habitat Description	Habitat Present/ Absent*	Rationale
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	SSC	Nests in deciduous riparian woodland, particularly with dense stands of cottonwood and willow. Nests are placed in a dense cover of trees, shrubs, or vines.	A	No riparian woodland is present. Suitable habitat does not exist in the BSA.
Invertebrates				
Crotch bumble bee *Bombus crotchii*	SC	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum.*	A	The BSA is dominated by non-native annual grassland, which does not provide particularly suitable feeding opportunities. Suitable habitat does not exist in the BSA.
Western bumble bee *Bombus occidentalis*	SC	A wide variety of natural, agricultural, urban, and rural habitat types.	A	As a habitat generalist, the western bumble bee may be found in the BSA. Due to the BSA being dominated by non-native annual grassland, the area is not likely to provide particularly valuable habitat.
Monarch butterfly California Overwintering Population *Danaus plexippus plexippus*	FC	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	A	No tree groves are present in the BSA. Suitable habitat does not exist in the BSA.

Legend
Presence/Absence A = Absent – no habitat present and no further analysis needed. HP = Habitat Present – habitat is or may be present. P = Present – The species is present
Federally Listed Species: FE = Federal Endangered FT = Federal Threatened FC = Candidate CH = Critical habitat
State Listed Species SE = State Endangered ST = State Threatened SC = State Candidate SFP = State Fully Protected SSC = Species of Special Concern
CNPS Rank Categories 1A = Plants presumed extirpated in CA and either rare or extinct elsewhere 2A = Plants rare, threatened, or endangered in CA and elsewhere 2B = Plants rare, threatened, or endangered in CA but more common elsewhere 3 = Plants about which more information is needed 4 = Plants of limited distribution
Threat Ranks 0.1 = Seriously threatened in CA 0.2 = Moderately threatened in CA 0.3 = Not very threatened in CA

Attachment 4 – Burrowing Owl Survey Protocol and Mitigation Guidelines

BURROWING OWL SURVEY PROTOCOL AND MITIGATION GUIDELINES

Prepared by:

The California Burrowing Owl Consortium

April 1993

INTRODUCTION

The California Burrowing Owl Consortium developed the following Survey Protocol and Mitigation Guidelines to meet the need for uniform standards when surveying burrowing owl *(Speotyto cunicularia)* populations and evaluating impacts from development projects. The California Burrowing Owl Consortium is a group of biologists in the San Francisco Bay area who are interested in burrowing owl conservation. The following survey protocol and mitigation guidelines were prepared by the Consortium's Mitigation Committee. These procedures offer a decision-making process aimed at preserving burrowing owls in place with adequate habitat.

California's burrowing owl population is clearly in peril and if declines continue unchecked the species may qualify for listing. Because of the intense pressure for development of open, flat grasslands in California, resource managers frequently face conflicts between owls and development projects. Owls can be affected by disturbance and habitat loss, even though there may be no direct impacts to the birds themselves or their burrows. There is often inadequate information about the presence of owls on a project site until ground disturbance is imminent. When this occurs there is usually insufficient time to evaluate impacts to owls and their habitat. The absence of standardized field survey methods impairs adequate and consistent impact assessment during regulatory review processes, which in turn reduces the possibility of effective mitigation.

These guidelines are intended to provide a decision-making process that should be implemented wherever there is potential for an action or project to adversely affect burrowing owls or the resources that support them. The process begins with a four-step survey protocol to document the presence of burrowing owl habitat, and evaluate burrowing owl use of the project site and a surrounding buffer zone. When surveys confirm occupied habitat, the mitigation measures are followed to minimize impacts to burrowing owls, their burrows and foraging habitat on the site. These guidelines emphasize maintaining burrowing owls and their resources in place rather than minimizing impacts through displacement of owls to an alternate site.

Each project and situation is different and these procedures may not be applicable in some circumstances. Finally, these are not strict rules or requirements that must be applied in all situations. They are guidelines to consider when evaluating burrowing owls and their habitat, and they suggest options for burrowing owl conservation when land use decisions are made.

Section 1 describes the four phase Burrowing Owl Survey Protocol. Section 2 contains the Mitigation Guidelines. Section 3 contains a discussion of various laws and regulations that protect burrowing owls and a list of references cited in the text.

We have submitted these documents to the California Department of Fish and Game (CDFG) for review and comment. These are untested procedures and we ask for your comments on improving their usefulness.

SECTION 1 BURROWING OWL SURVEY PROTOCOL

PHASE I: HABITAT ASSESSMENT

The first step in the survey process is to assess the presence of burrowing owl habitat on the project site including a 150-meter (approx. 500 ft.) buffer zone around the project boundary (Thomsen 1971, Martin 1973).

Burrowing Owl Habitat Description

Burrowing owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat: both natural and artificial burrows provide protection, shelter, and nests for burrowing owls (Henny and Blus 1981). Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also may use man-made structures, such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement.

Occupied Burrowing Owl Habitat

Burrowing owls may use a site for breeding, wintering, foraging, and/or migration stopovers. Occupancy of suitable burrowing owl habitat can be verified at a site by an observation of at least one burrowing owl, or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance. Burrowing owls exhibit high site fidelity, reusing burrows year after year (Rich 1984, Feeney 1992). A site should be assumed occupied if at least one burrowing owl has been observed occupying a burrow there within the last three years (Rich 1984).

The Phase II burrow survey is required if burrowing owl habitat occurs on the site. If burrowing owl habitat is not present on the project site and buffer zone, the Phase II burrow survey is not necessary. A written report of the habitat assessment should be prepared (Phase IV), stating the reason(s) why the area is not burrowing owl habitat.

PHASE II: BURROW SURVEY

1. A survey for-burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (approx 500 ft.) of the project impact zone. This 150-meter buffer zone is included to account for adjacent burrows and foraging habitat outside the project area and impacts from factors such as noise and vibration due to heavy equipment which could impact resources outside the project area.

2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx. 100 ft.), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (approx. 160 ft.) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.

3. If burrows or burrowing owls are recorded on the site, a map should be prepared of the burrow concentration areas. A breeding season survey and census (Phase III) of burrowing owls is the next step required.

4. Prepare a report (Phase IV) of the burrow survey stating whether or not burrows are present.

5. A preconstruction survey may be required by project-specific mitigations no more than 30 days prior to ground disturbing activity.

PHASE III: BURROWING OWL SURVEYS, CENSUS AND MAPPING

If the project site contains burrows that could be used by burrowing owls, then survey efforts should be directed towards determining owl presence on the site. Surveys in the breeding season are required to describe if, when, and how the site is used by burrowing owls. If no owls are observed using the site during the breeding season, a winter survey is required.

Survey Methodology

A complete burrowing owl survey consists of four site visits. During the initial site visit examine burrows for owl sign and map the locations of occupied burrows. Subsequent observations should be conducted from as many fixed points as necessary to provide visual coverage of the site using spotting scopes or binoculars. It is important to minimize disturbance near occupied burrows during all seasons. Site visits must be repeated on four separate days. Conduct these visits from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys should be conducted during weather that is conducive to observing owls outside their burrows. Avoid surveys during heavy rain, high winds (> 20 mph), or dense fog.

Nesting Season Survey. The burrowing owl nesting season begins as early as February 1 and continues through August 31 (Thomsen 1971, Zam 1974). The timing of nesting activities may vary with latitude and climatic conditions. If possible, the nesting season survey should be conducted during the peak of the breeding season, between April 15 and July 15. Count and map all burrowing owl sightings, occupied burrows, and burrows with owl sign. Record numbers of pairs and juveniles, and behavior such as courtship and copulation. Map the approximate territory boundaries and foraging areas if known.

Survey for Winter Residents (non-breeding owls). Winter surveys should be conducted between December 1 and January 31, during the period when wintering owls are most likely to be present. Count and map all owl sightings, occupied burrows, and burrows with owl sign.

Surveys Outside the Winter and Nesting Seasons. Positive results, (i.e., owl sightings)- outside of the above survey periods would be adequate to determine presence of owls on site. However, results of these surveys may be inadequate for mitigation planning because the numbers of owls and their pattern of distribution may change during winter and nesting seasons. Negative results during surveys outside the above periods are not conclusive proof that owls do not use the site.

Preconstruction Survey. A preconstruction survey may be required by project-specific mitigations and should be conducted no more than 30 days prior to ground disturbing activity.

PHASE IV: RESOURCE SUMMARY, WRITTEN REPORT

A report should be prepared for CDFG that gives the results of each Phase of the survey protocol, as outlined below.

Phase I: Habitat Assessment

1. Date and time of visit(s) including weather and visibility conditions; methods of survey.

2. Site description including the following information: location, size, topography, vegetation communities, and animals observed during visit(s).

3. An assessment of habitat suitability for burrowing owls and explanation.

4. A map of the site.

Phase II: Burrow Survey

1. Date and time of visits including weather and visibility conditions; survey methods including transect spacing.

2. A more detailed site description should be made during this phase of the survey protocol including a partial plant list of primary vegetation, location of nearest freshwater (on or within one mile of site), animals observed during transects.

3. Results of survey transects including a map showing the location of concentrations of burrow(s) (natural or artificial) and owl(s), if present.

Phase III: Burrowing Owl Surveys, Census and Mapping

1. Date and time of visits including weather and visibility conditions; survey methods including transect spacing.

2. Report and map the location of all burrowing owls and owl sign. Burrows occupied by owl(s) should be mapped indicating the number of owls at each burrow. Tracks, feathers, pellets, or other items (prey remains, animal scat) at burrows should also be reported.

3. Behavior of owls during the surveys should be carefully recorded (from a distance) and reported. Describe and map areas used by owls during the surveys. Although not required, all behavior is valuable to document including feeding, resting, courtship, alarm, territorial, parental, or juvenile behavior.

4. Both winter and nesting season surveys should be summarized. If possible include information regarding productivity of pairs, seasonal pattern of use, and include a map of the colony showing territorial boundaries and home ranges.

5. The historical presence of burrowing owls on site should be documented, as well as the source of such information (local bird club, Audubon society, other biologists, etc.).

Burrowing: Owl Survey Protocol

April 1993

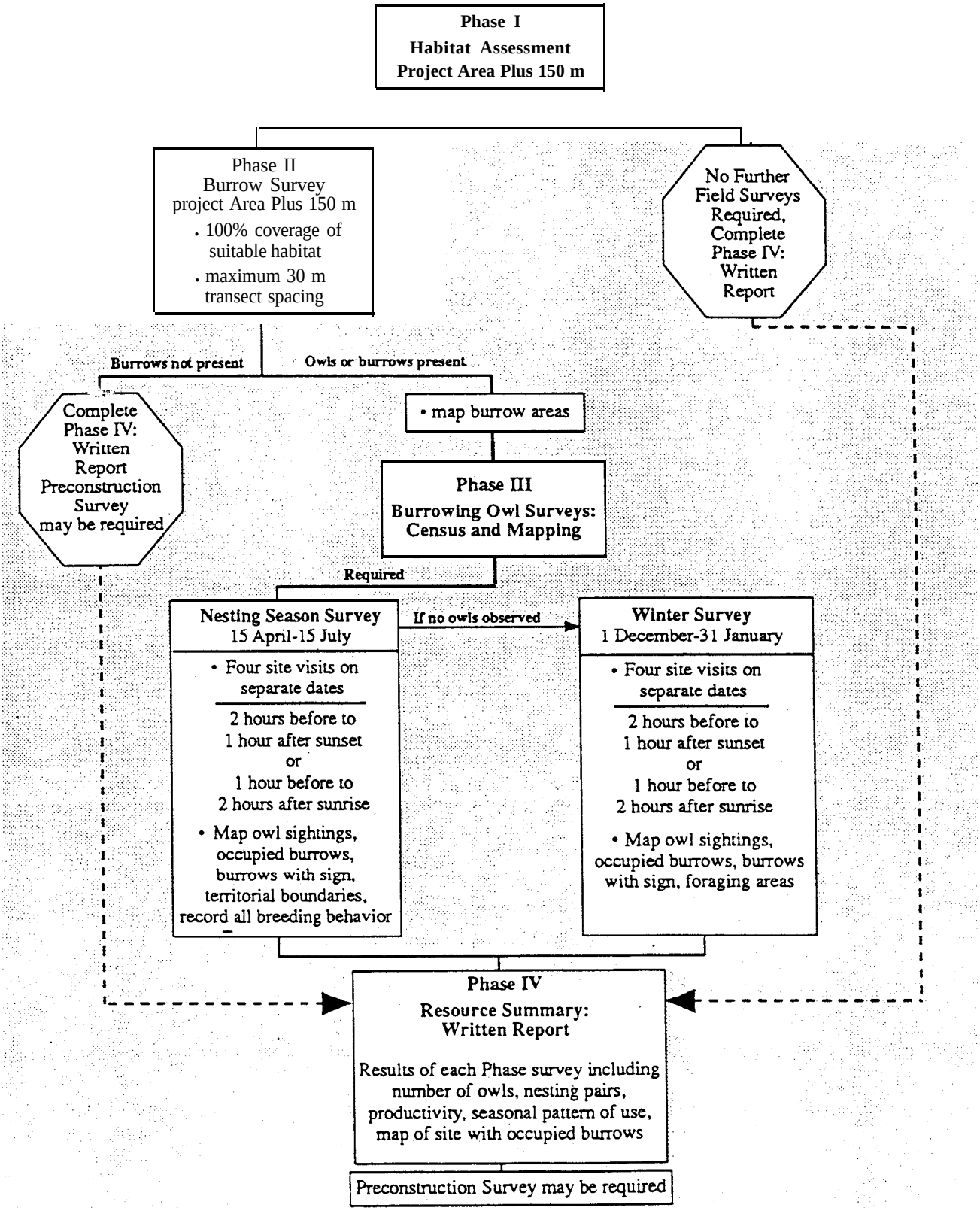


Figure 1.

SECTION 2 BURROWING OWL MITIGATION GUIDELINES

The objective of these mitigation guidelines is to minimize impacts to burrowing owls and the resources that support viable owl populations. These guidelines are intended to provide a decision-making process that should be implemented wherever there is potential for an action or project to adversely affect burrowing owls or their resources. The process begins with a four-step survey protocol (see *Burrowing Owl Survey Protocol)* to document the presence of burrowing owl habitat, and evaluate burrowing owl use of the project site and a surrounding buffer zone. When surveys confirm occupied habitat, the mitigation measures described below are followed to minimize impacts to burrowing owls, their burrows and foraging habitat on the site. These guidelines emphasize maintaining burrowing owls and their resources in place rather than minimizing impacts through displacement of owls to an alternate site.

Mitigation actions should be carried out prior to the burrowing owl breeding season, generally from February 1 through August 31 (Thomsen 1971, Zarn 1974). The timing of nesting activity may vary with latitude and climatic conditions. Project sites and buffer zones with suitable habitat should be resurveyed to ensure no burrowing owls have occupied them in the interim period between the initial surveys and ground disturbing activity. Repeat surveys should be conducted not more than 30 days prior to initial ground disturbing activity.

DEFINITION OF IMPACTS

1. Disturbance or harassment within 50 meters (approx. 160 ft.) of occupied burrows.

2. Destruction of burrows and burrow entrances. Burrows include structures such as culverts, concrete slabs and debris piles that provide shelter to burrowing owls.

3. Degradation of foraging habitat adjacent to occupied burrows.

GENERAL CONSIDERATIONS

1. Occupied burrows should not be disturbed during the nesting season, from February 1 through August 31, unless the Department of Fish and Game verifies that the birds have not begun egg-laying and incubation or that the juveniles from those burrows are foraging independently and capable of independent survival at an earlier date.

2. A minimum of 6.5 acres of foraging habitat, calculated on a 100-m (approx. 300 ft.) foraging radius around the natal burrow, should be maintained per pair (or unpaired resident single bird) contiguous with burrows occupied within the last three years (Rich 1984, Feeney 1992). Ideally, foraging habitat should be retained in a long-term conservation easement.

3. When destruction of occupied burrows is unavoidable, burrows should be enhanced (enlarged or cleared of debris) or created (by installing artificial burrows) in a ratio of 1:1 in adjacent suitable habitat that is contiguous with the foraging habitat of the affected owls.

4. If owls must be moved away from the disturbance area, passive relocation (see below) is preferable to trapping. A time period of at least one week is recommended to allow the owls to move and acclimate to alternate burrows.

5. The mitigation committee recommends monitoring the success of mitigation programs as required in Assembly Bill 3180. A monitoring plan should include mitigation success criteria and an annual report should be submitted to the California Department of Fish and Game.

AVOIDANCE

Avoid Occupied Burrows

No disturbance should occur within 50 m (approx. 160 ft.) of occupied burrows during the non-breeding Season of September 1 through January 31 or within 75 m (approx. 250 ft.) during the breeding Season of February 1 through August 31. Avoidance also requires that a minimum of 6.5 acres of foraging habitat be preserved contiguous with occupied burrow sites for each pair of breeding burrowing owls (with or without dependent young) or single unpaired resident bird (Figure 2).

MITIGATION FOR UNAVOIDABLE IMPACTS

On-site Mitigation

On-site passive relocation should be implemented if the above avoidance requirements cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 50 m from the impact zone and that are within or contiguous to a minimum of 6.5 acres of foraging habitat for each pair of relocated owls (Figure 3). Relocation of owls should only be implemented during the non-breeding season. On-site habitat should be preserved in a conservation easement and managed to promote burrowing owl use of the site.

Owls should be excluded from burrows in the immediate impact zone and within a 50 m (approx. 160 ft.) buffer zone by installing one-way doors in burrow entrances: One-way doors should be left in place 48 hours to insure owls have left the burrow before excavation. One alternate natural or artificial burrow should be provided for each burrow that will be excavated in the project impact zone. The project area should be monitored daily for one week to confirm owl use of alternate burrows before excavating burrows in the immediate impact zone. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels

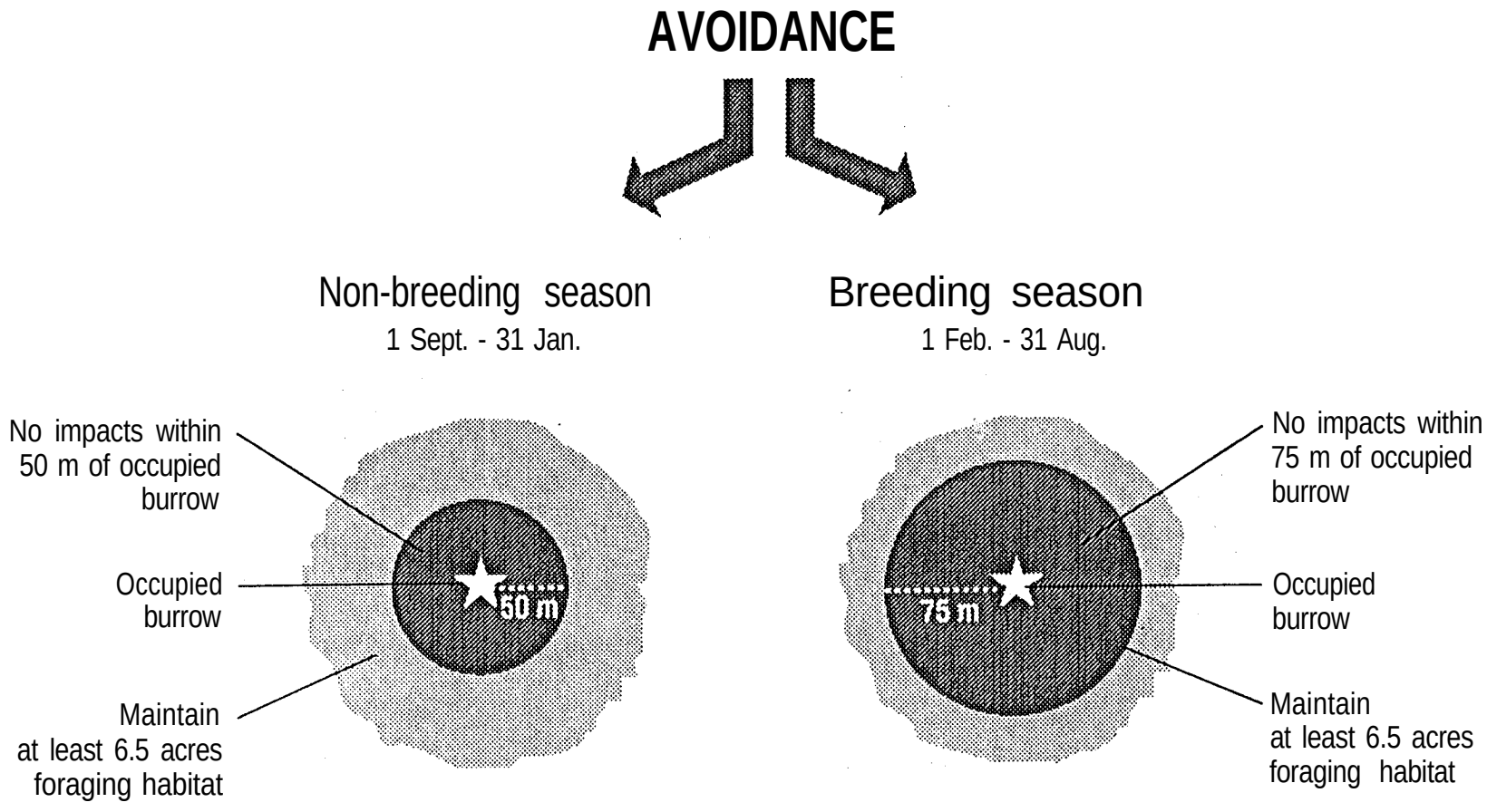


Figure 2. Burrowing owl mitigation guidelines.

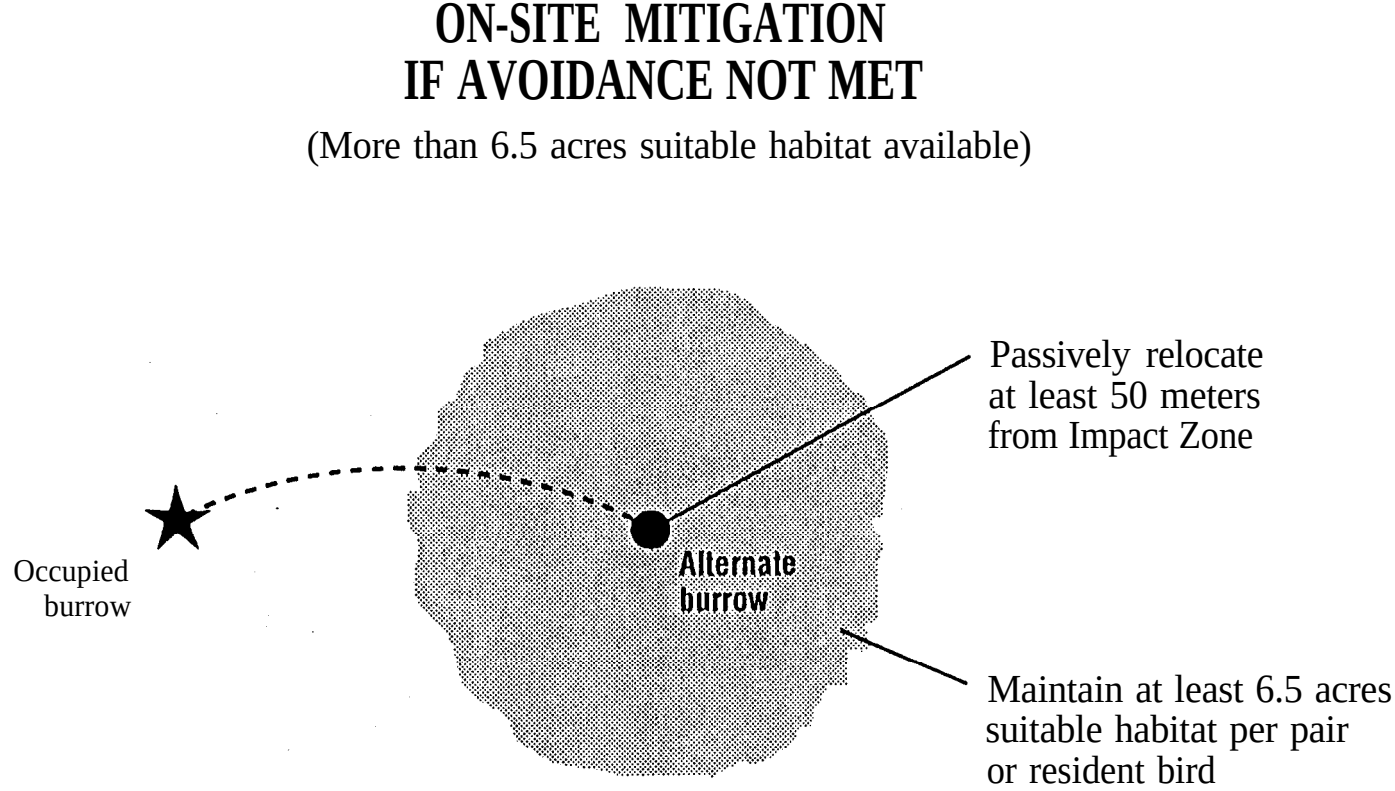


Figure 3. Burrowing owl mitigation guidelines.

during excavation to maintain an escape route for any animals inside the burrow.

Off-site Mitigation

If the project will reduce suitable habitat on-site below the threshold level of 6.5 acres per relocated pair or single bird, the habitat should be replaced off-site. Off-site habitat must be suitable burrowing owl habitat, as defined in the *Burrowing Owl Survey Protocol*, and the site approved by CDFG. Land should be purchased and/or placed in a conservation easement in perpetuity and managed to maintain suitable habitat. Off-site mitigation should use one of the following ratios:

1. Replacement of occupied habitat with occupied habitat: 1.5 times 6.5 (9.75) acres per pair or single bird.

2. Replacement of occupied habitat with habitat contiguous to currently occupied habitat: 2 times 6.5 (13.0) acres per pair or single bird.

3. Replacement of occupied habitat with suitable unoccupied habitat: 3 times 6.5 (19.5) acres per pair or single bird.

SECTION 3 LEGAL STATUS

The burrowing owl is a migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter, any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). Sections 3503, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (March 1 - August 15, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

The burrowing owl is a Species of Special Concern to California because of declines of suitable habitat and both localized and statewide population declines. Guidelines for the Implementation of the California Environmental Quality Act (CEQA) provide that a species be considered as endangered or "rare" regardless of appearance on a formal list for the purposes of the CEQA (Guidelines, Section 15380, subsections b and d). The CEQA requires a mandatory findings of significance if impacts to threatened or endangered species are likely to occur (Sections 21001(c), 21083. Guidelines 15380, 15064, 15065). Avoidance or mitigation must be presented to reduce impacts to less than significant levels.

CEQA AND SUBDIVISION MAP ACT

CEQA Guidelines Section 15065 directs that a mandatory finding of significance is required for projects that have the potential to substantially degrade or reduce the habitat of, or restrict the range of a threatened or endangered species. CEQA requires agencies to implement feasible mitigation measures or feasible alternatives identified in EIR's for projects which will otherwise cause significant adverse impacts (Sections 21002, 21081, 21083; Guidelines, sections 15002, subd. (a)(3), 15021, subd. (a)(2), 15091, subd. (a).).

To be legally adequate, mitigation measures must be capable of "avoiding the impact altogether by not taking a certain action or parts of an action"; "minimizing impacts by limiting the degree or magnitude of the action and its implementation"; "rectifying the impact by repairing, rehabilitating or restoring the impacted environment"; "or reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action." (Guidelines, Section 15.370).

Section 66474 (e) of the Subdivision Map Act states "a legislative body of a city or county shall deny approval of a tentative map or parcel map for which a tentative map was not required, if

it makes any of the following findings:... (e) that the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish and wildlife or their habitat". In recent court cases, the court upheld that Section 66474(e) provides for environmental impact review separate from and independent of the requirements of CEQA (Topanga Assn. for a Scenic Community v. County of Los Angeles, 263 Cal. Rptr. 214 (1989).). The finding in Section 66174 is in addition to the requirements for the preparation of an EIR or Negative Declaration.

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Feeney, L. 1992. Site fidelity in burrowing owls. Unpublished paper presented to Raptor Research Annual Meeting, November 1992. Seattle, Washington.

Haug, E. A. and L. W. Oliphant. 1990. Movements, activity patterns, and habitat use of burrowing owls in Saskatchewan. J. Wildlife Management 54:27-35.

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Martin, D. J. 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75:446-456.

Rich, T. 1984. Monitoring burrowing owl populations: Implications of burrow re-use. Wildlife Society Bulletin 12: 178- 180.

Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73: 177-192.

Zam, M. 1974. Burrowing owl. U. S. Department of Interior, Bureau of Land Management. Technical Note T-N 250. Denver, Colorado. 25pp.

Attachment 5 – Mitigation Monitoring and Reporting Plan (MMRP)

Mitigation Measure	Mitigation Activities	Implemented by	Monitored by	Before	During	After	Verification of Compliance date:
BIO-1	BIO-1 - Burrowing Owl Survey Protocol and Mitigation: In order to avoid any impacts to Burrowing Owl, a pre-construction survey for burrowing owls will be completed by a qualified biologist according to Burrowing Owl Survey Protocol and Mitigation Guidelines and the CDFW protocol identified in the Staff Report on Burrowing Owl Mitigation prior to disturbance of non-native annual grassland areas occupied by ground squirrels (Attachment 4, CDFW, 2012). After the survey is complete, the qualified biologist will develop a report that includes but is not limited to: Description of the proposed project or proposed activity, including the proposed project start and end dates, as well as a description of disturbances or other activities occurring on-site or nearby. The survey report will be provided to the City's Planning Department for review and approval. If any occupied burrows are identified during the breeding season, buffer areas will be established around the burrow and protected until the nesting activities are completed. Any occupied burrow identified outside the nesting season (June-July) will have a one-way gate installed to allow burrowing owls to leave the site. Any identification of burrowing owls will be coordinated with the California Department of Fish and Wildlife. The Steps below would be followed: Phase I: Habitat assessment Phase II: Burrow survey Phase III: Burrowing owl surveys, census, and mapping Phase IV: Resource summary, written report.	Contractor	City of Berkeley	X			Verified by: Date:
CR-1	Inadvertent Discovery of Archaeological Resources: Workers involved in ground-disturbing activities should be trained in the recognition of buried cultural resources, procedures to report such discoveries, laws prohibiting destruction of historical resources, and other appropriate protocols. In the event that archaeological artifacts or cultural soil deposits are encountered during project implementation, all work shall stop in the immediate vicinity of the find until the discovery area can be evaluated by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding, and a	Contractor	City of Berkeley		X		Verified by: Date:

Mitigation Measure	Mitigation Activities	Implemented by	Monitored by	Before	During	After	Verification of Compliance date:
	time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.						
CR-2	Inadvertent Discovery of Human Remains: If human remains are discovered anywhere on the site other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered determines that no investigation of the cause of death is required and the coroner determines the remains to be Native American. If the coroner makes those determinations, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the person or persons it believes to be the most likely descended (MLD) from the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code section 5097.98. If the NAHC is unable to identify an MLD or the MLD fails to make a recommendation within 24 hours, or if the landowner or their authorized representative rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner, then the landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.	Contractor	City of Berkeley		X		Verified by: Date:
HAZ-1	The latest version of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II, along with any associated addendums, must be provided to all contractors intending to engage in work on the Project. Contractors who anticipate interacting with shallow on-site soils should consult the Risk Management Plan for guidance on construction monitoring prerequisites and for identifying the appropriate personal protective	Contractor	City of Berkeley	X	X		Verified by: Date:

Mitigation Measure	Mitigation Activities	Implemented by	Monitored by	Before	During	After	Verification of Compliance date:
	equipment (PPE), including protective measures for encountering methane.						
HAZ-2	The City will coordinate site excavation activities with the San Francisco Bay Regional Water Quality Control Board to align site construction with the provisions of the Addendum to the Eastshore State Park Remediation and Risk Management Plan (RRMP) Berkeley North Basin Strip-II.	City of Berkeley	City of Berkeley	X			Verified by: Date:
HAZ-3	During Project construction, sample and analyze on-site soils that are being removed to characterize them prior to disposal at approved facilities.	Contractor	City of Berkeley		X		Verified by: Date:
HAZ-4	Contractors will comply with the California Health and Safety Code (HSC) and Resource Conservation and Recovery Act (RCRA) for the management, treatment, storage, and disposal of hazardous waste.	Contractor	City of Berkeley		X		Verified by: Date: