

**CITY OF BELVEDERE**  
**RESOLUTION NO. 2023-49**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELVEDERE,  
CALIFORNIA CERTIFYING AN ENVIRONMENTAL IMPACT REPORT, APPROVING  
THE BELVEDERE SEISMIC UPGRADE PROJECT, ADOPTING ENVIRONMENTAL  
FINDINGS, AND ADOPTING A MITIGATION MONITORING AND REPORTING  
PROGRAM IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL  
QUALITY ACT**

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**WHEREAS**, the City of Belvedere (City) proposes to approve the Belvedere Seismic Upgrade Project (Project), which includes installation of sheet piling along specific segments of San Rafael Avenue and Beach Road in an area of existing levees to address seismic safety issues; and

**WHEREAS**, the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) requires preparation of an Environmental Impact Report (EIR) analyzing the potential environmental impacts of the Project prior to approval; and

**WHEREAS**, for purposes of CEQA and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City is the lead agency for the Project; and

**WHEREAS**, the City prepared a Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Project, which was circulated for public review between January 11, 2022 and February 9, 2022; and

**WHEREAS**, the City prepared a Draft EIR for the Project, which it made available for public review from October 5, 2022 to November 28, 2022; and

**WHEREAS**, the Draft EIR informed the public of the Project's environmental effects and proposed mitigation measures to avoid or substantially lessen the significant effects; and

**WHEREAS**, written comments were received from the public agencies and the public during the review period which ended on November 28, 2022; and

**WHEREAS**, on November 2, 2023 the City issued a document entitled, Final Environmental Impact Report for the Belvedere Seismic Upgrade Project (Final EIR), which included, among other information, responses to all significant environmental issues raised in timely comments on the Draft EIR and a Mitigation Monitoring and Reporting Program for the Project (MMRP); and

**WHEREAS**, CEQA Guidelines section 15090 requires that, prior to approving a project for which a Final EIR has been prepared, a lead agency's decision-making body must certify that: (1) the Final EIR has been completed in compliance with CEQA; (2) the Final EIR was presented to the decision-making body of the lead agency, and the

decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and (3) the Final EIR reflects the lead agency's independent judgment and analysis; and

**WHEREAS**, when approving a proposed project for which a Final EIR has identified significant environmental effects, a lead agency's decision making body is required, pursuant to Public Resources Code section 21081, subdivision (a), and CEQA Guidelines section 15091, to adopt findings demonstrating that the decision-making body has considered and adopted all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant project-related environmental effects (CEQA Findings of Fact); and

**WHEREAS**, when approving a project that requires the adoption of feasible mitigation measures to substantially lessen or avoid significant environmental effects, a lead agency's decision-making body is required by Public Resources Code section 21081.6, subdivision (a), to adopt a Mitigation Monitoring and Reporting Program to ensure that the mitigation measures adopted by the lead agency are carried out; and

**WHEREAS**, on December 11, 2023, the City Council conducted a duly-noticed public hearing to evaluate the Project and Final EIR and determined that based on all of the evidence presented, including, but not limited to written and oral testimony given at meetings, it is appropriate to certify the Final EIR as adequate to address environmental impacts associated with the Project, to adopt CEQA Findings of Fact for the Project, and to adopt the MMRP.

**NOW, THEREFORE, BE IT RESOLVED**, by the City Council of the City of Belvedere as follows:

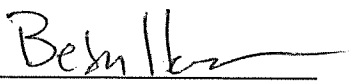
1. The above recitals are true and correct and are included herein by reference as findings.
2. The City Council makes three findings necessary to certify the Final EIR, namely that the document (a) has been completed in compliance with CEQA; (b) was presented to the City Council, which has considered the information contained therein; and (c) reflects the City's independent judgment and analysis. The Final EIR consists of the Draft EIR and Appendices (State Clearinghouse No. 202210159), a list of persons, organizations, and agencies that provided comments on the Draft EIR, responses to significant environmental issues raised in comments received regarding the Draft EIR, and errata or revisions to the Draft EIR.
3. The City Council hereby approves the Belvedere Seismic Upgrade Project as described in the Final EIR.

4. The City Council adopts the CEQA Findings of Fact for the Project attached as **Exhibit A** to this Resolution.
5. The City Council adopts the MMRP for the Project attached as **Exhibit B** to this Resolution.

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Belvedere on December 11, 2023, by the following vote:

**AYES:** Cooper, Kemnitzer, Lynch, Wilkinson, Mark  
**NOES:** None  
**ABSTAIN:** None  
**ABSENT:** None

**APPROVED:**   
Peter Mark, Mayor

**ATTEST:**   
Beth Haener, City Clerk

# **Exhibit A**

## **City of Belvedere**

### **FINDINGS OF FACT REGARDING ENVIRONMENTAL IMPACTS OF THE BELVEDERE SEISMIC UPGRADE PROJECT (State Clearinghouse No. 2022010159)**

#### **1. INTRODUCTION**

Pursuant to the California Environmental Quality Act (“CEQA”) (Pub. Resources Code, § 21000 et seq.), the City Council, as the decision-making body for the City of Belvedere (“City” or “Belvedere”), hereby makes the following environmental findings in connection with the Belvedere Seismic Upgrade Project (“Project”), as more fully described in the Final Environmental Impact Report (“Final EIR”). These findings are based on the entire record before the City Council, including: the January 11, 2022 Notice of Preparation (“NOP”), the October 2022 Draft Environmental Impact Report and Appendices (“Draft EIR”), and the November 2023 Final EIR. These documents are collectively referenced as the “EIR,” and are incorporated herein by reference. The EIR was prepared by Belvedere acting as the lead agency under CEQA to address the potential effects of the Project.

#### **2. BACKGROUND**

The City released an NOP for public review on January 11, 2022. The Draft EIR was circulated for a 45-day public review period between October 5, 2022 and November 28, 2022. On November 2, 2023, the City issued the Final EIR for the Project, which included, among other information, responses to all significant environmental issues raised in timely comments on the Draft EIR.

#### **3. PROJECT SUMMARY**

The Project involves installation of sheet piles within and near the San Rafael Avenue and Beach Road rights-of-way, which are situated on levees. Sheet piling would stabilize the levees and provide substantial protection against deformation during a strong earthquake. By stabilizing the levees, access for evacuation and emergency vehicles would be maintained and critical utilities buried under the roads (e.g., water pipelines, wastewater pipelines, gas/electrical lines, and internet/phone lines) would be protected.

##### **3.1. Project Objectives**

The City has identified the following Project objectives:

- To reduce the risk of seismic impacts that could damage property, critical roads, utilities, and other infrastructure and put residents at risk.
- To minimize impacts on Belvedere residents during construction while providing the needed seismic upgrades.
- To minimize impacts on sensitive biological resources during construction.

- To avoid direct impacts on fully tidal waters and wetlands to the maximum extent feasible during construction.
- To minimize disruption to traffic flow, parking, and pedestrian access during construction and at Project completion.
- To design for long-term needs while making the Project cost-effective for current residents.

### **3.2. Project Location**

The Project would take place in the northern portion of Belvedere, along San Rafael Avenue, and in the south-central portion along Beach Road as more fully described in Chapter 3 of the Draft EIR.

### **3.3. Project Description**

The Project consists of installation of sheet piles to reduce deformation and the risk of damage to roads and utilities during seismic events. Steel sheet piles<sup>1</sup> would be installed at depths of 40 to 50 feet along specific segments of Beach Road and San Rafael Avenue to provide a vertical barrier between Richardson Bay and the adjoining roads and utilities. These sheet piles would reduce the lateral displacement of the levees during earthquakes and thereby reduce the risk of levee deformation and resultant damage to roads and utilities. Along San Rafael Avenue, sheet piles would be placed along about one half the total length of the levee, from the southern end of San Rafael Avenue at West Shore Road north to Windward Road. A short (145-foot) section of sheet piles would also be installed in the Belvedere Lagoon between Windward Road and Edgewater Road. Along Beach Road, sheet piles would be installed along nearly the full length from the San Rafael Avenue intersection to the Main Street intersection.

## **4. FINDINGS REQUIRED UNDER CEQA**

Public Resources Code section 21081 requires agencies to adopt findings before approving projects for which EIRs are required. For each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of the three permissible conclusions set forth in Public Resources Code section 21081, subdivision (a).

These Findings do not attempt to describe the full analysis of each environmental impact. Instead, they provide a summary description of each significant impact and the applicable mitigation measures identified in the EIR and adopted by the City, and state the conclusions regarding significance of each impact after incorporation of the identified mitigation measures. A comprehensive explanation of these environmental impact conclusions can be found in the EIR, as supplemented and explained in staff reports, and other relevant materials in the administrative

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<sup>1</sup> / Sheet piles are interlocking steel panels, which each panel ranging from ¼ to 1 inch in thickness.

record. The EIR contains substantial evidence to support all conclusions presented in these Findings.

#### **4.1. Procedural Findings**

Based on a review of the entire record, the City Council finds that the EIR reflects the independent judgment of the City Council and Belvedere. The City Council has exercised independent judgment in accordance with Public Resources Code section 21082.1, subdivision (c)(3) in retaining its own environmental consultant, directing the consultant in preparing the EIR, and reviewing, analyzing, and revising material prepared by the consultant.

#### **4.2. Location and Custodian of Records**

The documents and other materials which constitute the record of proceedings for Belvedere's findings and approval of the Project are located at 450 San Rafael Avenue, Belvedere, California. Belvedere is the custodian of all documents in the record.

#### **4.3. Effects Found Not to be Significant**

Effects of the Project found to be less than significant, and which require no mitigation, are identified in the Draft EIR. The EIR's discussion and analysis is incorporated herein. The City Council has reviewed the record and agrees with the conclusion that such impacts would be less than significant, and therefore no additional findings are needed.

##### Aesthetics

- The Project would not have a substantial adverse effect on a scenic vista (Draft EIR, p. 4.1-7.)

##### Air Quality

- The Project would not conflict with or obstruct implementation of the Bay Area Clean Air Plan. (Draft EIR, p. 4.2-9.)
- Other than fugitive dust emissions during construction, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under applicable federal or state ambient air quality standard. (Draft EIR, pp. 4.2-9 to 4.2-12.)
- The Project would not expose sensitive receptors to substantial pollutant concentrations. (Draft EIR, pp. 4.2-12 to 4.2-15.)
- The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Draft EIR, p. 4.2-15.)

##### Biological Resources

- The Project would not 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. (Draft EIR, p. 4.3-21.)

- The Project would generally conform with local plans and policies of the City of Belvedere as related to biological resources, and no major conflicts are anticipated. (Draft EIR, p. 4.3-21.)

#### Energy

- The Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (Draft EIR, pp. 4.5-2 to 4.5-3.)

#### Geology/Soils

- The Project would not directly or indirectly cause risks involving rupture of a known earthquake fault. (Draft EIR, p. 4.6-12.)
- The Project would not directly or indirectly cause risks involving strong seismic ground shaking. (Draft EIR, p. 4.6-12.)
- The Project would not result in substantial soil erosion or the loss of topsoil. (Draft EIR, pp. 4.6-12 to 4.6-13.)
- The Project would not result in on-site or off-site subsidence or collapse. (Draft EIR, p. 4.6-13.)
- The Project would not result in substantial direct or indirect risks related to expansive soils. (Draft EIR, p. 4.6-13.)
- The Project would have no impacts related to use of septic tanks or alternative wastewater disposal systems. (Draft EIR, p. 4.6-13.)
- The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Draft EIR, p. 4.6-13.)

#### Greenhouse Gas Emissions

- The Project would not generate GHG emissions, directly or indirectly, that may have a significant impact on the environment. (Draft EIR, pp. 4.7-8 to 4.7-9.)
- The Project would not conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs. (Draft EIR, p. 4.7-9.)

#### Hazards and Hazardous Materials

- The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Draft EIR, pp. 4.8-9 to 4.8-10.)
- The Project would not 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. (Draft EIR, p. 4.8-10.)

- The Project would not result in impacts related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Draft EIR, p. 4.8-11.)
- The Project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. (Draft EIR, p. 4.8-11.)
- The Project would not be located in the vicinity of a public airport and therefore would not result in airport-related safety hazards or excessive noise for people residing or working in the Project area. (Draft EIR, p. 4.8-11.)
- The Project would not expose people or structures, either directly or indirectly, to significant risk of loss, injury, or death involving wildland fires. (Draft EIR, pp. 4.8-11 to 4.8-12.)

#### Hydrology

- The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. (Draft EIR, p. 4.9-14.)
- The Project would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion or siltation on- or off-site. (Draft EIR, p. 4.9-14.)
- The Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. (Draft EIR, pp. 4.9-14 to 4.9-15.)
- The Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Draft EIR, p. 4.9-15.)
- The Project would not impede or redirect flood flows. (Draft EIR, pp. 4.9-15 to 4.9-16.)
- The Project would not involve activities or actions that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Draft EIR, p. 4.9-16.)

#### Land Use

- The Project would not physically divide an established community. (Draft EIR, p. 4.10-6)
- The Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Draft EIR, p. 4.10-6.)

#### Public Services

- The Project would not result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police, schools, parks, or other public facilities. (Draft EIR, p. 4.12-12.)



### Noise

- The Project would not expose people residing or working in the Project area to excessive aircraft-related noise levels. (Draft EIR, pp. 4.11-9 to 4.11-10.)
- Project construction traffic would not generate a substantial increase in ambient noise levels. (Draft EIR, p. 4.11-10.)
- Once constructed, the Project would not generate a substantial increase in ambient noise levels. (Draft EIR, p. 4.11-10.)
- Once constructed, the Project would not generate excessive groundborne vibration or groundborne noise levels. (Draft EIR, p. 4.11-10.)

### Recreation

- The Project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (Draft EIR, p. 4.13-2.)
- The Project would not include recreational facilities and would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. (Draft EIR p. 4.13-2.)

### Transportation/Traffic

- The Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) regarding vehicle miles traveled. (Draft EIR, p. 4.14-5.)
- The Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Draft EIR, p. 4.14-6.)
- The Project would not result in inadequate emergency access for vehicles. (Draft EIR, p. 4.14-6.)

### Utilities and Service Systems

- The Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Draft EIR, pp. 4.16-3 to 4.16-4.)
- The Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry or multiple dry years. (Draft EIR, p. 4.16-4.)
- The Project would not result in a determination by the wastewater treatment provider that serves the Project site that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. (Draft EIR, p. 4.16-4.)

- The Project would not 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. (Draft EIR, p. 4.16-5.)

#### **4.4. Significant Impacts Associated with the Project**

The EIR identified potentially significant environmental impacts in the areas discussed below. The EIR identified feasible mitigation measures to avoid or substantially reduce the environmental impacts in these areas to a less-than-significant level.

##### **4.4.1. Air Quality**

**Impact AIR-1:** The generation of fugitive dust emissions of coarse particulate matter (PM<sub>10</sub>) and fine particulate matter (PM<sub>2.5</sub>) could result in a cumulatively considerable net increase in regional PM<sub>10</sub> and PM<sub>2.5</sub> concentrations.

**Mitigation Measure AIR-1:** During Project construction, the contractor shall implement a dust control program that includes the following measures recommended by the Bay Area Air Quality Management District (BAAQMD) and these measures shall be included in contract specifications for construction of the Project.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- A publicly visible sign shall be posted with the telephone number and person to contact at the City of Belvedere regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

**Facts:** The relevant facts are set forth in Chapter 4.2 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The Draft EIR's discussion and analysis is incorporated herein. BAAQMD does not have a quantitative threshold of significance for fugitive dust PM<sub>10</sub> and PM<sub>2.5</sub> emissions; however, the BAAQMD considers implementation of best management practices to control dust during construction sufficient to reduce air quality impacts from fugitive dust to a less-than-significant level. BAAQMD's recommended best management practices for controlling dust are included in Mitigation Measure AIR-1. With implementation of Mitigation Measure AIR-1 impacts associated with fugitive dust emissions would be **less than significant**.

#### 4.4.2. Biological Resources

**Impact BIO-1:** Special-status fish species could be adversely affected by construction in the intertidal zone of Belvedere Cove.

**Mitigation Measure BIO-1a:** Appropriate construction controls and restrictions shall be taken to prevent inadvertent loss of special-status fish species and other aquatic life as a result of construction activities within or near areas of tidal influence and open water habitat of San Francisco Bay to avoid possible inadvertent take of Central California Coastal steelhead, green sturgeon, Central Valley spring-run chinook salmon, and longfin smelt, if present in the area during the time of construction. This shall be accomplished through implementation of the following provisions.

- Adequate measures shall be taken to minimize disturbance and sedimentation in aquatic habitat of the bay and Belvedere Lagoon. These measures shall include installing turbidity curtains around in-water construction zones, restricting in-water operations to low tide periods, lowering surface water elevations in the Belvedere Lagoon during sheet pile installation, and timing restrictions for in-water construction among other possible controls and restrictions.
- Preconstruction clearance surveys shall be conducted by a qualified biologist for any in-water construction as called for in Mitigation Measure BIO-1b.
- Any pumping as part of dewatering construction areas shall be adequately screened according to the latest screening guidelines of the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) to prevent entrainment of special-status fish and other aquatic life during the pumping operation.

- Any in-water construction activities shall be restricted to the period from June 1 through October 31, when stray or dispersing special-status fish species would most likely not be expected within the affected areas.
- All construction work within regulated waters shall be restricted to daylight hours to avoid disturbing aquatic habitat with artificial light source that could attract fish and other wildlife into the construction zone.

**Mitigation Measure BIO-1b:** Prior to initiation of grading or vegetation removal, a qualified biologist shall be retained to train workers on the regulations related to jurisdictional waters, special-status species, and the possible risk of inadvertent take in advance of construction. The qualified biologist shall be someone knowledgeable about the biology and regulations regarding jurisdictional waters, as well as protected species known or with the potential to occur in or adjacent to the Project site, including steelhead, Chinook salmon, green sturgeon, and longfin smelt. The following provisions shall apply:

- The qualified biologist shall oversee installation of turbidity curtains, conduct preconstruction surveys for nesting birds as required in Mitigation Measure BIO-2, and inspect the construction zone in tidal areas, as necessary.
- The worker training shall be conducted prior to starting work on the Project and upon the arrival of any new worker into the tidal zone. The training program shall include a description of protected species and their habitat needs, any known occurrences in the site vicinity, an explanation of the status of these species and their protection under state and federal legislation, a description of regulated waters and the need to follow all regulatory authorizations, a list of measures being taken to avoid and minimize impacts to protected species during the work, and procedures to follow if a protected species is discovered to be present in the work area.
- Fact sheets containing the information presented during the worker training program shall be provided to the Project Foreman and kept on-site for the duration of construction.
- The qualified biologist shall train the Project Foreman to serve as an Environmental Monitor who will make sure workers are following all required controls, inspect the construction zone and condition of turbidity curtains to confirm they are functioning, and check for any signs of protected species.
- A record of all personnel trained during the Project shall be maintained for compliance verification.

**Mitigation Measure BIO-1c:** The City of Belvedere shall obtain all necessary authorizations from the CDFW, NMFS, and USFWS as required by federal and state law for potential harm to special-status fish species. Such authorization would be obtained through interagency coordination in accordance with the U.S. Army Corps of Engineers Section 404 consultation and the CDFW Section 2081 Incidental Take Permit process. The Project shall adhere to any additional conditions and restrictions required as part of the authorizations from regulatory agencies. This shall include

any required compensatory mitigation for the permanent loss of an estimated 1,200 square feet (0.03 acre) of benthic habitat at the base of the existing seawall, provided at a minimum 1:1 ratio or as negotiated with the regulatory agencies.

**Facts:** The relevant facts are set forth in Chapter 4.3 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. Proposed construction in aquatic habitat near Beach Road could adversely affect special-status fish species known or suspected to occur in Richardson Bay and Belvedere Cove, including steelhead, Chinook salmon, green sturgeon, and longfin smelt. No special-status fish or other species are believed to be present in the waters of the Belvedere Lagoon because of its hydrologic isolation from Richardson Bay, poor water quality, and managed condition. Potential adverse effects on fish species associated with the shoreline and open waters of San Francisco Bay could include degraded water quality and elevated underwater sound levels during construction, as well as potential take of individuals if adequate avoidance measures are not implemented as part of the Project to separate the construction zone from aquatic habitat. Authorizations from regulatory agencies for impacts to regulated waters would contain Avoidance and Minimization Measures that would also be implemented as part of Project construction, in addition to Mitigation Measures BIO-1a through BIO-1c. With implementation of Mitigation Measures BIO-1a through BIO-1c, potential impacts to special-status fish or other species would be **less than significant**.

**Impact BIO-2:** Project implementation may result in adverse impacts on nesting birds, if present in the site vicinity during construction.

**Mitigation Measure BIO-2:** Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code when nests are in active use. This shall be accomplished by taking the following steps:

- If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal or construction, in order to identify any active nests on the Project site and in the vicinity of proposed construction.
- If construction is curtailed for more than 7 days, another focused survey shall be conducted during the nesting season to confirm that no new nests have been established in the vicinity of the proposed construction.
- If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through January), construction may proceed with no restrictions.

- If active nests are found, an adequate setback shall be established around the next location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from CDFW and may vary depending on species and sensitivity to disturbance. The no-disturbance zone shall be fenced with temporary orange construction fencing or other conspicuous demarcation such as signage and flagging if construction is to be initiated on the remainder of the development site.
- A report of findings shall be prepared by the qualified biologist and submitted to the City of Belvedere for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report shall either confirm absence of any active nests or confirm that any young birds have fledged within a designated no-disturbance zone.

**Facts:** The relevant facts are set forth in Chapter 4.3 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The Draft EIR's discussion and analysis is incorporated herein. A standard method to address the potential for nesting birds is either to initiate construction during the non-nesting season, which in Marin County is typically from September 1 to January 31, or to conduct a nesting survey within 14 days prior to initiating construction to determine whether any active nests are present that must be protected until any young have fledged and are no longer dependent on the nest. Protection of the nests, if present, would require that construction setbacks be provided during the nesting and fledging period, with the setback depending on the type of bird species, degree to which the individuals have already acclimated to other ongoing disturbance, and other factors. Suggested edits to Mitigation Measure BIO-2 from the Department of Fish and Wildlife have been incorporated. With implementation of Mitigation Measure BIO-2 potential impacts to nesting birds would be **less than significant**.

**Impact BIO-3:** Construction of the Project would require modifications within regulated waters.

**Mitigation Measure BIO-3:** A compensatory mitigation program shall be developed and implemented to provide adequate mitigation for jurisdictional waters affected by proposed improvements. A jurisdictional wetland delineation shall be prepared by a qualified wetland specialist and submitted for verification by the U.S. Army Corps of Engineers (Corps). A Regulated Waters Protection and Replacement Program (RWPRP) shall be prepared by the qualified wetland specialist and implemented to provide compensatory mitigation where jurisdictional waters are affected, shall minimize disturbance to unvegetated waters, and shall be reviewed and approved by regulatory agencies. The RWPRP shall contain the following components:

- The RWPRP shall include appropriate implementation measures to prevent inadvertent loss and degradation of jurisdictional waters to be protected and shall provide for

replacement of the estimated 1,200 square feet (0.03 acre) of regulated waters eliminated by sheet pile construction at a minimum 1:1 replacement ratio.

- Where verified waters of the U.S. are present and cannot be avoided, authorization for modifications to these features shall be obtained from regulatory agencies with jurisdiction. These agencies include the Corps under Section 404 permitting process where waters of the United States are affected by the Project and the Regional Water Quality Control Board (RWQCB) as part of the Section 401 Certification process. All conditions required as part of the authorizations by the Corps and RWQCB shall be implemented as part of the Project.
- Consultation or incidental take permits may be required under the California Endangered Species Act and Federal Endangered Species Act. The City of Belvedere shall obtain all legally required permits or other authorizations from the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) under the Endangered Species Acts.
- Temporary fencing or another system shall be installed to demarcate the limits of proposed construction in jurisdictional waters. The turbidity curtain may serve as the temporary construction containment fencing.
- Grading, construction, and restoration work within the jurisdictional waters shall be conducted in a way that avoids or minimizes disturbance of existing aquatic habitat as called for in Mitigation Measure BIO-1a.

**Facts:** The relevant facts are set forth in Chapter 4.3 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. While the proposed Project would only affect relatively small areas of regulated waters, with an estimated 1,200 square feet (0.03 acre) of permanently impacted waters and 11,100 square feet (0.25 acre) of temporary impacts, potential impacts on regulated waters would be significant. Modifications to regulated waters would require appropriate authorizations from state and federal regulatory agencies, including the Corps and RWQCB under Sections 404 and 401 of the Clean Water Act. Further review would be provided by the Corps and RWQCB when a permit application is formally submitted for authorization of activities within jurisdictional limits. This review would include consultation with the USFWS and NMFS as part of the Section 7 consultation conducted by the Corps. Based on the requirements associated with the 2019 emergency repairs to the existing seawall along the east side of Beach Road, it is likely that a compensatory mitigation program would be required as part of the regulatory agency authorizations for at minimum the estimated 1,200 square feet of permanent impacts within the intertidal zone. This work could include removal of additional abandoned pilings and other debris in the tidal zone, as was required as part of the 2019 emergency repair authorization. With implementation of Mitigation Measure BIO-3, potential impacts to regulated waters would be **less than significant**.

#### 4.4.3. Cultural Resources

**Impact CULT-1:** The Project would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section. There is one built-environment historical resource adjacent to the Project area (China Cabin –P-21-1055) and one archaeological resource being treated as a historical resource within the Project site.

**Mitigation Measure CULT-1a:** To minimize architectural and structural damage to the China Cabin, no more than a peak particle velocity (PPV) of 0.25 inches per second (in/sec) is recommended at the structure. Furthermore, if a 0.25 PPV level or lower is maintained, Project construction activities would not affect character-defining features, the structural integrity, and interior architectural features, resulting in no impact on the integrity or significance of the China Cabin building, meaning the proposed Project would have a less-than-significant impact on this historical resource as defined by CEQA. The following measures to minimize architectural and structural damage to the China Cabin building from construction-related ground vibrations shall be implemented:

1. A preconstruction survey and structural integrity inspection shall be conducted at the potentially affected historic buildings. The preconstruction survey shall include descriptions and photographs of both the exterior and interior of the buildings that could potentially be damaged during construction, including documentation of existing damage such as cracks and loose or damaged features.
2. Vibration levels at the China Cabin shall be monitored during construction activities with appropriate equipment such as a seismograph (monitor) and geophone (sensor).
3. Construction vibration specifications shall be included as part of the construction contract documents (e.g., “The contractor shall not exceed the construction vibration criterion of 0.25 in/sec PPV, at the historic structures, within the established critical distance for each construction activity. If any time the ground vibration level exceeds the specified criterion of 0.25 in/sec PPV due to any construction activity, then the construction operation shall stop. Construction shall recommence until the source of vibration is determined and replaced by an alternative construction technique or equipment”).
4. In the event the Project exceeds the construction vibration criterion of 0.25 in/sec PPV, a historic architect or qualified historic preservation professional shall inspect the China Cabin and proceed as follows:
  - If no damage has occurred to the China Cabin, the historic architect or qualified historic preservation professional shall submit a monthly report to the City of Belvedere for review. This report shall identify and summarize the vibration level exceedances and describe the actions taken to reduce vibration.
  - If vibration has damaged the China Cabin, the historic architect or qualified historic preservation professional shall immediately notify the City and prepare a damage report documenting the features of the China Cabin that has been damaged.



- Should damage occur to the China Cabin due to construction-related vibration, the China Cabin shall be restored to its pre-construction condition in consultation with the historic architect or qualified historic preservation professional and the City.
- After the construction is complete, the City shall receive a final report from the historic architect or qualified historic preservation professional. The report shall include, at minimum, collected monitoring records, building conditions summaries, descriptions of all instances of vibration level exceedance, identification of damage incurred due to vibration, and corrective actions taken to restore the China Cabin in its pre-construction condition.

**Mitigation Measure CULT-1b:** The City of Belvedere shall retain a qualified professional archaeologist to monitor ground-disturbing activities. The archaeologist shall meet the Secretary of the Interior’s professional qualifications standards for archaeology. The archaeologist shall have the authority to stop grading or construction work within 50 feet of any discovery of potential historical or archaeological resources in order to implement the procedures in Mitigation Measure CULT-3 and make a finding of significance under Section 15064.5 of the CEQA Guidelines.

**Mitigation Measure CULT-1c:** If subsurface deposits believed to be cultural or human in origin are discovered during construction by the monitor, all work must halt within a 50-foot radius of the discovery. A qualified professional archaeologist, who will evaluate the significance of the find, shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, they shall immediately notify the City of Belvedere and the United States Army Corps of Engineers (Corps), which shall consult on a finding of eligibility. If the find is determined to be a historical resource under the California Environmental Quality Act (CEQA) or a historic property under National Historic Preservation Act Section 106, then, appropriate treatment measures would be implemented. Work may not resume within the no-work radius until the City of Belvedere and the Corps, through consultation as appropriate, determine either that (1) the site is not a historical resource under CEQA or a historic property under Section 106, or (2) the treatment measures have been completed to their satisfaction. The preferred treatment would be avoidance and preservation in place.
- If the find includes human remains, or remains that are potentially human, Mitigation Measure CULT-3 shall apply.

**Facts:** The relevant facts are set forth in Chapter 4.4 of the EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. The impact assessment prepared for the Project (ECORP, 2022) concluded that the use of an impact hammer within 52 feet of the China Cabin could produce vibration levels that exceed the threshold for historic and old buildings, thereby affecting its architectural significance and potentially making the resource no longer eligible for the CRHR under Criterion 3. With the incorporation of Mitigation Measure CULT-1a, CULT-1b, and CULT-1c, the impacts on the China Cabin and the archaeological historical resource would be **less than significant**.

**Impact CULT-2:** The Project could cause significant adverse changes in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5.

The cultural resources inventory concluded that due to the presence of one prehistoric archaeological site located within the Project site, two prehistoric archaeological sites located adjacent to the Project site, and the multiple prehistoric archaeological sites located throughout Belvedere Island, there always exists the potential for buried pre-contact archaeological sites in the Project area. There is a high likelihood for pre-contact archaeological sites in the Project area due to its proximity to intermittent drainages and San Francisco Bay. Another factor to consider is that 13 pre-contact resources have been previously identified within a 0.5-mile radius of the Project site, seven of which yielded human burials. Therefore, the probability of buried pre-contact archaeological sites is considered moderate to high.

**Mitigation Measure CULT-2:** Requires implementation of Mitigation Measure CULT-1b and CULT-1c, which are set forth in full above.

**Facts:** The relevant facts are set forth in Chapter 4.4 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. Ground disturbance associated with the Project could encounter known or unknown pre-contact resources, and if it does, the impact could be significant. Incorporation of procedures to monitor and address unanticipated discoveries would reduce this impact to less than significant. With the implementation of Mitigation Measures CULT-1b and CULT-1c, the impact on known and unknown archaeological resources would be **less than significant**.

**Impact CULT-3:** The Project could disturb human remains, including those interred outside of dedicated cemeteries.

**Mitigation Measure CULT-3:** If human remains, or remains that are potentially human, are encountered, the City of Belvedere shall ensure reasonable protection measures are taken to protect the discovery from disturbance (in accordance with Assembly Bill [AB] 2641). The qualified professional archaeologist retained by the City (see Mitigation Measure CULT-1b) shall notify the

Marin County Coroner (per Section 7050.5 of the California Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code (PRC), and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the Native American Heritage Commission (NAHC), which then would designate a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the PRC). The designated MLD would have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they would not be further disturbed (Section 5097.98 of the PRC). This shall also include either recording the site with the NAHC or the appropriate California Historical Resources Information System Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the City of Belvedere, through consultation with the MLD as appropriate, determines that the treatment measures have been completed to its satisfaction.

**Facts:** The relevant facts are set forth in Chapter 4.4 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. As there are known archaeological resources within and adjacent to the Project site known to contain human remains, it is possible that human remains could be uncovered during ground-disturbing activities, including in areas not previously known to contain human remains. If human remains are encountered during Project construction, a significant impact could result. Implementation of procedures to address discoveries in accordance with existing state law would reduce this impact to less than significant. With implementation of Mitigation Measure CULT-3 impacts to human remains uncovered during Project construction would be **less than significant**.

#### 4.4.4. Geology/Soils

**Impact GEO-1:** The Project could result in potential substantial adverse effects on existing critical utilities due to seismic-related ground failure including liquefaction, lateral spreading, and landslides.

**Mitigation Measure GEO-1:** City of Belvedere staff shall work with utility agencies to find an effective means to install flexible utility connections on utilities that have non-flexible pipes (including water, wastewater, and gas lines) that are located near the eastern and western ends of the proposed sheet piles along Beach Road and new utility laterals that would cross the proposed sheet piles along Beach Road to ensure that utilities would be capable of withstanding expected ground movements during seismic events and future settlement. The City shall retain a qualified geotechnical engineer to assist in the design of the improved utility connections. The installation of the new flexible connections shall occur prior to the conclusion of construction.

**Facts:** The relevant facts are set forth in Chapter 4.6 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. The potential for the Project to exacerbate conditions related to differential ground displacement and adversely affect existing critical utilities is considered a potentially significant impact. The Geotechnical Investigation (Miller Pacific Engineering Group, 2022) recommended that flexible joints be added to water lines to reduce potential for pipe breakage. With implementation of Mitigation Measure GEO-1, impacts to existing utilities would be **less than significant**.

**Impact GEO-2:** The Project could result in potential impacts on existing utilities and other improvements due to vibration-induced settlement of unstable soil during sheet pile installation.

**Mitigation Measure GEO-2:** A geotechnical report shall be prepared by a qualified geotechnical engineer and shall evaluate the potential for vibration-induced settlement from proposed sheet pile installation and the potential for damage to existing improvements (e.g., structures, utilities, fences, walls, guardrails, walkways, and patios) from vibration-induced settlement. If the geotechnical report identifies existing improvements that could potentially be damaged by vibration-induced settlement, a preconstruction survey of the potentially affected improvements shall be performed, allowable settlement amounts shall be estimated for the potentially affected improvements, and the allowable settlement amounts shall account for estimated future settlement amounts that are expected to occur due to the construction of the existing levees and placement of fill materials that previously occurred in the Project area. Settlement monitoring shall be performed during construction activities. If the geotechnical report identifies any existing improvements that are very likely to experience damage due to vibration-induced settlement, measures shall be implemented to prevent such damage prior to the start of sheet pile installation near the existing improvements. Such measures may include relocation of utilities, installation of flexible connections on utilities, temporary shoring/bracing of the existing improvements, or use of alternative methods for sheet pile installation near the existing improvements, such as use of a silent pile driver.

If settlement monitoring indicates that construction activities have caused unacceptable levels of settlement or observable damage to existing improvements, or that construction activities would be expected to cause unacceptable levels of settlement if construction activities continue using the same methods, the vibration-causing activities shall cease and measures shall be implemented to prevent further settlement or damage to existing improvements. Such measures may include relocation of utilities, installation of flexible connections on utilities, temporary shoring/bracing of existing improvements, or use of alternative methods for sheet pile installation such as use of a silent pile driver. If any damage is caused to existing improvements as a result of vibration-induced settlement during sheet pile installation, the City of Belvedere shall repair the damage following the completion of Project construction activities near the area of damage.

**Facts:** The relevant facts are set forth in Chapter 4.6 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The Draft EIR's discussion and analysis is incorporated herein. The installation of sheet piles using vibratory or impact hammer methods could result in localized settlement of soil near the sheet piles due to consolidation of loose soils by subsurface vibrations. Such settlement would be most pronounced adjacent to the sheet piles, and the amount of settlement would decrease with distance from the sheet piles. There are existing utilities and other improvements such as fences, walls, guardrails, walkways, and patios that are located in close proximity to proposed sheet piles and that could also be adversely affected by vibration-induced settlement. With implementation of Mitigation Measure GEO-2, vibration-induced settlement of unstable soil during Project construction would be **less than significant**.

**Impact GEO-3:** Past, present, and reasonably foreseeable future Projects, which include placement of loads over a geologic unit that is unstable and could result in settlement, could combine with the Project to cause a cumulative adverse effect on existing improvements.

**Mitigation Measure GEO-3:** Implement Mitigation Measures GEO-1 and GEO-2, which are set forth fully above.

**Facts:** The relevant facts are set forth in Chapter 4.6 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. The Geotechnical Investigation indicates that the settlement from past actions, including the original construction of two "land bridges" in the 1940s that were converted into San Rafael Avenue and Beach Road, is ongoing, though almost complete. It is reasonably foreseeable that flood barriers, such as walls and similar features to protect against flooding and sea level rise (see description of the Flood Barrier Project in Chapter 6, Other CEQA Considerations, of this EIR), would be constructed within or adjacent to the Project site in the future—and would initiate a new phase of settlement that could adversely affect existing improvements and proposed improvements such as the new utility laterals that would be installed through the proposed sheet piles on Beach Road. Implementation of Mitigation Measure GEO-1 would include the installation of flexible connections on new utility laterals which would ensure that potential settlement from future flood barriers would not damage the new utility laterals. Implementation of Mitigation Measure GEO-2 would reduce vibration-induced settlement impacts from the Project to a less than cumulatively considerable level. With implementation Mitigation Measures GEO-1 and GEO-2 the Project's contribution to the cumulative impacts on existing improvements would be **less than significant**.

#### **4.4.5. Hazards and Hazardous Materials**

**Impact HAZ-1:** Use of Belvedere Way for construction staging could physically interfere with the use of Belvedere Way as a pedestrian evacuation route in an emergency.

**Mitigation Measure HAZ-1:** The use of Belvedere Way for construction staging shall not include the storage of combustible or flammable materials on Belvedere Way. The use of Belvedere Way for construction staging may include the posting of signs indicating that the area is restricted from public access except for emergency evacuation purposes; however, the use of Belvedere Way for construction staging shall not physically restrict public access to Belvedere Way and shall allow for the safe passage of pedestrians along Belvedere Way at all times. The proposed construction staging uses of Belvedere Way shall be outlined in a Construction Staging Plan to be prepared by the Project contractor and submitted to the City of Belvedere and the Tiburon Fire Protection District for review and approval to ensure that construction staging activities would not interfere with the use of Belvedere Way as a pedestrian evacuation route. The Construction Staging Plan shall designate the materials and equipment that would be stored along Belvedere Way and the areas where they would be stored and shall describe the safety measures (e.g., placement of barricades, cones, and caution tape) to ensure that the storage of materials and equipment would not pose a safety hazard to pedestrians using Belvedere Way.

**Facts:** The relevant facts are set forth in Chapter 4.8 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. Belvedere Way is a designated evacuation route that connects from the southern end of West Shore Road to Belvedere Avenue and is the only access point to West Shore Road other than the northern entrance from San Rafael Avenue. The lower segment of Belvedere Way is a pedestrian lane that is not passable by vehicles, and this segment of Belvedere Way is proposed to be used as a construction staging area as shown in Draft EIR, Figure 3-9. The lower segment of Belvedere Way is also surrounded by dense vegetation that makes the area susceptible to fire hazards. While no heavy equipment or materials that could potentially increase the risk of fire hazards would be allowed on Belvedere Way (as indicated in Figure 3-9), the proposed use of Belvedere Way for construction staging could physically interfere with the use of this evacuation route that could be critical for safe pedestrian evacuation away from West Shore Road. With implementation of Mitigation Measure HAZ-1 impacts to designated evacuation routes would be **less than significant**.

#### 4.4.6. Hydrology and Water Quality

**Impact HYDRO-1:** During construction, the Project could result in degradation of water quality in the Belvedere Lagoon and San Francisco Bay.

**Mitigation Measure HYDRO-1a:** The following measures shall be implemented to reduce the risk of disturbed soils and spills/releases from affecting water quality in nearby surface waters during construction activities near or below the waterline of San Francisco Bay and the Belvedere Lagoon:

- The contractor(s) shall avoid sheet piling installation in the Bay along the exterior side of the Beach Road levee during tidal periods when the tidal water level is at 2.5 feet mean lower low water (MLLW) or higher.
- The contractor(s) shall install a turbidity curtain in the Bay to hydraulically isolate the narrow, approximately 400-foot-long strip of the Bay where sheet pile installation occurs from the rest of the Bay. The turbidity curtain shall remain in place for the duration of installation activities and thereafter until such time that any increased turbidity has settled out and concrete has fully cured.
- The contractor(s) shall install a turbidity curtain in the lagoon to hydraulically isolate the portion of the lagoon where sheet pile installation occurs from the rest of the lagoon. The turbidity curtain shall remain in place for the duration of installation activities and thereafter until such time that any increased turbidity has settled out.
- The contractor(s) shall coordinate with the City of Belvedere Public Works Department and the Belvedere Lagoon Property Owners Association (BLPOA) to ensure that the lagoon is drawn down to the winter operating level prior to and for the duration of sheet pile installation activities in the lagoon and BLPOA's culverts and other water control facilities along San Rafael Avenue are shut off from the Bay for the duration of sheet piling installation and thereafter while the turbidity curtain remains installed, and further coordinate with BLPOA to ensure that interference with BLPOA's critical water control operations is avoided or minimized to the extent practical.

**Mitigation Measure HYDRO-1b:** The following measures shall be implemented to reduce the risk of spills, releases, and disturbed soils affecting water quality in nearby surface waters during construction activities.

- The contractor(s) shall designate storage areas suitable for material delivery, storage, and waste collection for disposal. Waste shall be disposed of off-site in a manner that complies with applicable regulations for waste disposal. These locations shall be as far away from catch basins, gutters, drainage courses, and water bodies as possible. All hazardous materials and wastes used or generated during Project site development activities shall be labeled and stored in accordance with applicable local, state, and federal regulations. In addition, an accurate up-to-date inventory, including Material Safety Data Sheets (MSDSs), shall be maintained on-site to assist emergency response personnel in the event of a hazardous materials incident.
- All maintenance and fueling of construction vehicles and equipment shall be performed in a designated bermed area, or over a drip pan that would not allow runoff of spills. Vehicles and equipment shall be regularly checked and have leaks repaired promptly at an off-site location. Secondary containment shall be used to catch leaks or spills any time vehicle or equipment fluids are dispensed, changed, or poured.

- The contractor shall implement a Storm Water Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer (QSD) and designed to reduce potential adverse impacts on surface water quality during the construction period. The SWPPP shall include the minimum BMPs required for the identified risk level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction. The SWPPP shall be designed to address the following objectives:
  - 1) All pollutants and their sources, including sources of sediment associated with construction activity, are controlled.
  - 2) Where not otherwise required under a Regional Water Quality Control Board (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated.
  - 3) Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity.
  - 4) Stabilization BMPs installed to reduce or eliminate pollutants and erosion of exposed soil after construction are completed. Stabilization BMPs may include but would not be limited to hydroseeding, planting of vegetation, installation of jute/burlap netting, and installation of swales in graded areas.
  - 5) BMPs shall be designed to mitigate construction-related pollutants and at a minimum, including the following:
    - a. Practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, and adhesives) with stormwater shall be included. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain.
    - b. Practices to reduce erosion of exposed soil, which may include but are not limited to soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins, shall be included.
    - c. If grading or other ground-disturbing activities must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control (i.e., keeping sediment on the site). End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. Ingress and egress from the construction site shall be carefully controlled to minimize offsite tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional during both dry and wet conditions.
  - 6) The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor and shall include both dry and wet weather inspections. Monitoring shall



be required during the construction period for pollutants that may be present in the runoff that are “not visually detectable in the runoff.”

- Site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.
- A Qualified SWPPP Practitioner (QSP), hired by the contractor, shall be responsible for overseeing implementation of BMPs at the site. The QSP shall be a qualified professional that has the required professional credentials and has passed specific training courses in accordance with the Construction General Permit. The QSP shall also be responsible for performing all required monitoring, and BMP inspection, maintenance, and repair activities. The QSP shall retain an independent monitor to conduct weekly inspections and provide written weekly reports to the City of Belvedere Public Works Department and/or the Project team to ensure compliance with the SWPPP.

**Mitigation Measure HYDRO-1c:** Contractor(s) shall obtain applicable resource agency permits and approvals and comply with permit requirements to prevent impacts on water quality and demonstrate that water quality standards and/or waste discharge requirements are not violated. Permit requirements and avoidance measures that may be required by the U.S. Army Corps of Engineers and/or the San Francisco Bay Regional Water Quality Control Board (RWQCB) may include but not be limited to the following:

- Installation of physical barriers (e.g., silt curtains, turbidity curtains) to prevent potential localized impacts on water quality (e.g., increase in turbidity) from spreading to surrounding surface waters;
- Installation of physical barriers or use of tanks to contain wastewater generated during construction and prevent potential localized impacts to water quality of surrounding surface waters; and
- Performance of water quality monitoring, including sampling and analysis for turbidity and total suspended solids.

At the direction of the applicable resource agency, the results of the water quality monitoring shall be compared to established performance standards. If water quality monitoring indicates that performance standards are not being achieved, additional avoidance measures (e.g., installation of additional silt curtains) shall be implemented until water quality monitoring indicates that performance standards are being achieved, which would mitigate the potential impacts on water quality to a less-than-significant level.

**Facts:** The relevant facts are set forth in Chapter 4.9 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. Construction activities adjacent to the Bay would cause disturbance of soil or sediments along the banks of the Bay that could result in increased turbidity in surface waters. This is a potentially significant impact. Compliance with the Construction General Permit and implementation of Mitigation Measures HYDRO-1a, HYDRO-1b, and HYDRO-1c would ensure that potential impacts on water quality would be **less than significant**.

#### 4.4.7. Noise

**Impact NOISE-1:** During Project construction, use of construction equipment would generate a substantial temporary increase in ambient noise levels in the Project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

**Mitigation Measure NOISE-1:** Noise reduction measures shall be implemented to reduce noise impacts related to Project construction. Noise reduction measures shall include but are not limited to the following:

- The contractor shall implement a site-specific noise reduction plan prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval by the City of Belvedere. The plan shall identify site-specific pile driving noise reduction measures that must be implemented prior to and during all construction activities to ensure noise levels would not exceed the 90 dBA Leq threshold at nearby residences.
- Temporary noise barriers shall be placed between the proposed construction activities and nearby receptors when feasible. A sound blanket system hung on scaffolding, or other noise reduction materials that result in an equivalent or greater noise reduction than plywood, may also be used. The composition, location, height, and width of the barriers during different phases of construction shall be determined by a qualified acoustical consultant and incorporated into the site-specific noise reduction plan for the Project.
- Avoid impact pile-driving where feasible in noise-sensitive areas. Pre-drilling or the use of a vibratory pile driver or silent pile driver are quieter alternatives where the geological conditions permit their use.
- Noise-generating construction and demolition activities, including material and equipment deliveries, shall be limited to between the hours of 8:00 AM and 5:00 PM Monday through Friday. Occasionally, Saturday construction could occur with prior approval from the City.
- All construction equipment powered by internal combustion engines shall be properly muffled.
- Unnecessary idling of combustion engines shall be prohibited. Haul trucks shall not be allowed to idle for periods greater than 5 minutes, except as needed to perform a specified function such as concrete mixing.

- All stationary noise-generating construction equipment shall be located as far as practical from existing nearby residences and other noise-sensitive land uses. Such equipment shall also be acoustically shielded.
- Quiet construction equipment and technologies shall be selected whenever feasible. Motorized equipment shall be fitted with proper mufflers in good working order.
- Businesses and residents adjacent to the Project site shall be notified in writing in advance of the proposed construction schedule before construction activities commence.
- The Project contractor shall designate a “noise disturbance coordinator” responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem (potentially including erection of a temporary noise barrier/wall). A telephone number for the disturbance coordinator shall be posted at the construction site.
- All of the above measures will be required to be included in contract specifications.

**Facts:** The relevant facts are set forth in Chapter 4.11 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR’s discussion and analysis is incorporated herein. The Project’s construction noise levels were estimated at the nearest noise-sensitive receptors along San Rafael Avenue and Beach Road for each construction phase. Pile driving with and without the impact pile driving method was included in the analysis. Based on this analysis, Project construction would generate noise levels that exceed the 90 dBA Leq threshold established by the FTA during sheet pile installation and other construction activities. The potential for the Project to generate a substantial temporary increase in ambient noise levels in the Project vicinity is considered a potentially significant impact. Construction activities, specifically pile driving, can generate noise levels that have the potential to cause adverse effects on sensitive biological resources such as fish unless appropriate controls are implemented, as is proposed as part of the Project. As set forth in the Final EIR, peak sound pressure levels from an impact hammer are expected to be lower than the National Marine Fisheries Service criteria. Sound pressure levels from vibratory hammer would be substantially lower. With implementation of Mitigation Measure NOISE-1 noise impacts associated with use of construction equipment **would be less than significant.**

**Impact NOISE-2:** Construction of the Project could generate excessive groundborne vibration.

**Mitigation Measure NOISE-2:** The following measures shall be implemented to reduce vibration impacts related to Project construction:

- **Pre-Construction Survey.** Prior to the start of any vibration-generating construction activity, the City of Belvedere shall engage a consultant to undertake a pre-construction survey of potentially affected buildings within 45 feet of the proposed sheet pile alignment, provided that the property owner approves of the survey. All pre-construction surveys of potentially affected buildings and/or structures shall be prepared by a structural engineer or other professional with similar qualifications. The pre-construction surveys shall include descriptions and photographs of both the exterior and interior of the buildings that could potentially be damaged during construction, including documentation of existing damage such as cracks and loose or damaged features. The pre-construction surveys shall be submitted to the City for review and approval prior to the start of vibration-generating construction activity.
- **Avoid Impact Pile Driving Where Feasible.** The use of impact pile driving equipment shall be limited to situations where the target depth cannot be reached using other pile driving equipment. The use of impact pile driving shall be prohibited within 45 feet of residential/commercial buildings to avoid potential vibration damage. When necessary, alternative methods, such as pre-drilling or excavation of soil to depths of up to approximately 10 feet, shall be performed prior to sheet pile installation to remove potential obstructions (e.g., large rocks) in the fill material of the levees to ensure that vibratory or silent pile driving methods will reach the target depth.
- **Limited Use of Vibratory Pile Driving.** The use of vibratory pile driving shall be prohibited within 16 feet of residential/commercial buildings to avoid potential vibration damage. When necessary, alternative methods, such as a silent pile driver, shall be used to ensure that construction vibration levels do not exceed the established standard. The silent pile driving method requires the use of vibratory pile driving to install the first few piles of a continuous sheet pile segment; therefore, the use of the vibratory pile driving to install the first few piles shall be performed in areas that are as far away as possible from the potentially affected buildings and/or structures.
- **Limited Use of Vibratory Roller.** The use of a vibratory roller shall be prohibited within 19 feet of residential/commercial buildings to avoid potential vibration damage. When necessary, alternative methods, such as non-vibratory rollers or plate compactors, shall be used to ensure that construction vibration levels do not exceed the established standard.
- **Vibration Management and Monitoring Plan.** The contractor shall implement a monitoring plan prepared by a qualified engineer to avoid or reduce Project-related construction vibration damage to adjacent buildings and/or structures and to ensure that any such damage is documented and repaired. The vibration management and monitoring plan shall apply to all potentially affected buildings and/or structures. The plan shall be submitted to the City for review and approval prior to the start of vibration generating construction activity. The vibration management and monitoring plan shall include, but not be limited to, the following components:

  - Maximum Vibration Level. The plan shall establish a maximum vibration level that shall not be exceeded at each building/structure on adjacent properties. The

maximum vibration level shall be based on existing conditions, character-defining features, soil conditions, and anticipated construction practices (common standards are a peak particle velocity [PPV] of 0.25 inch per second for historic buildings, 0.3 inch per second for older residential structures, and 0.5 inch per second for residential structures and modern industrial/commercial buildings.

- Buffer Distances. The plan shall identify the buffer distances to be maintained based on vibration levels and site constraints between the operation of vibration generating construction equipment and the potentially affected building and/or structure, as presented in Table 4.11-9 of the Environmental Impact Report (EIR), to avoid damage to the extent possible.
- Vibration Monitoring and Reporting. The plan shall lay out the method and equipment for vibration monitoring and develop reporting protocol for City review. To ensure that construction vibration levels do not exceed the established standard, the contractor shall monitor vibration levels at each affected building and/or structure on adjacent properties and prohibit vibratory construction activities that generate vibration levels in excess of the standard.
- Alternative Construction Equipment and Techniques. The plan shall identify potential alternative equipment and techniques that could be implemented if construction vibration levels are observed in excess of the established threshold. Alternative construction equipment and techniques that can be used to reduce the vibration impact include, but are not limited to, the following:
  - Pre-drilling or excavation of soil to depths of up to approximately 10 feet.
  - Use of static load piling system such as a silent pile driver.
  - Avoidance of vibratory rollers and packers near sensitive areas.
  - Use of smaller, lighter equipment.
- Repairing Damage. The plan shall identify provisions to be followed should damage to any building and/or structure occur due to construction-related vibration. The building(s) and/or structure(s) shall be remediated by the City to their preconstruction condition at the conclusion of vibration-generating activity on the Project site, provided that the property owner approves of the repair.
  - **Halting of Construction.** Should construction vibration levels be observed in excess of those established in the plan, the contractor(s) shall halt construction and implement alternative construction techniques identified in the plan.
  - **Inspections and Damage Notifications.** Any inspections of buildings and/or structures for potential damage shall be performed by a qualified engineer. If vibration was damaged nearby buildings and/or structures, the qualified engineer shall immediately notify the City.

- **Vibration Monitoring Results Report.** After construction is complete, the City shall receive a final report from the professionally registered historic architect or qualified historic preservation professional (for effects on historic buildings and/or structures) and/or structural engineer (for effects on historic and non-historic buildings and/or structures). The report shall include, at minimum, collected monitoring records, building and/or structure condition summaries, descriptions of all instances of vibration level exceedance, identification of damage incurred due to vibration, and corrective actions taken to restore damage buildings and structures.
- For potential impacts to the historic China Cabin, implement Mitigation Measure CULT-1a.

**Facts:** The relevant facts are set forth in Chapter 4.11 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR’s discussion and analysis is incorporated herein. An impact pile drive would require a 45-foot buffer to avoid damaging residential/commercial buildings and a 52-foot buffer to avoid damaging the historic building. There are six residential structures along San Rafael Avenue and six residential structures, the San Francisco Yacht Club, and the China Cabin along Beach Road that are located within the buffer distance of the impact pile driver for potential damage to structures. Construction of the Project would have the potential to cause vibration damage to the historic building (China Cabin), the San Francisco Yacht Club, and the residential buildings along the Project site on Beach Road and San Rafael Avenue, which is considered a potentially significant impact and requires mitigation.

With implementation of Mitigation Measure NOISE-2 the potential for construction-generated vibration to cause damage to adjacent buildings would be **less than significant**.

#### 4.4.8. Transportation

**Impact TRANS-1:** Construction traffic would occur over an 8-month period and could conflict with Belvedere General Plan Policy TC-1.3, which states that “Traffic generated by construction activities, service vehicles, tourists, and special events should be minimized.”

**Mitigation Measure TRANS-1a:** The contractor shall produce a Traffic Control Plan (TCP) for construction activities that abides by the City of Belvedere’s provisions regarding transportation and parking management during construction activities. The TCP shall be consistent with the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD).

The TCP developed for the Project shall coordinate construction activities in the area to maintain shuttle access to the off-site parking areas; maintain vehicle, pedestrian, and bicyclist access; and provide detours, as appropriate, for drivers, pedestrians, and bicyclists.

**Mitigation Measure TRANS-1b:** The TCP shall be prepared by the contractor and approved prior to the issuance of an encroachment permit by the Police Chief or City of Belvedere Public Works Manager.

**Mitigation Measure TRANS-1c:** The TCP shall, at a minimum, include the following provisions:

- Based on the daily volume of on-haul, the timing of trucks shall be adjusted to limit/minimize hauling activities during peak traffic hours.
- Whenever the contractor's operations affect normal conditions for traffic or for public access, the contractor shall furnish, erect, and maintain, at its expense, all fences, barricades, lights, signs, and other devices necessary to prevent collisions or damage or injury to the public.
- Construction area signs shall be furnished, installed, maintained, and removed when no longer required, in accordance with the provisions of Caltrans' Section 12 of the "State Specifications for Temporary Traffic Control" and any requirements of the special provisions.
- The contractor shall furnish flaggers and guards necessary to give adequate warning to traffic and to the public of construction conditions. Flaggers and guards assigned to direct traffic or to warn the public of construction conditions shall perform their duties, and shall be provided with the necessary equipment, in accordance with the current edition of the Caltrans publication "Instructions to Flaggers." The equipment shall be furnished and kept clean and in good repair by the contractor. Signs, lights, flags, and other warning and safety devices shall conform to the requirements set forth in the current Caltrans "Manual of Traffic Controls for Construction and Maintenance Work Zones."
- No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, including in pedestrian walkways, and at the end of each day and at other times when construction operations are suspended for any reason, the contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.
- Construction activity shall not result in the closure of existing pedestrian sidewalks/walkways, bicycle facilities, or public transit facilities. The contractor shall provide safe, clearly identifiable and separated pedestrian pathways, per the California Manual on Uniform Traffic Control Devices (CA MUTCD). Signs and barricades shall be required to direct pedestrians through or around the construction work zones and shall be shown on the TCP. More specifically, any sidewalk or walkway closure, or any other work that does not provide a continuous 4-foot-wide clear path of travel on the same side of the street, shall result in the identification of a marked detour route for pedestrians. Detours shall include pedestrian separation from moving vehicles by cones, k-rails, or another form of physical separation. The barriers must be provided and maintained at all times. Sidewalks and walkways shall not be closed in the middle of the block as this generally results in pedestrians having to walk around the work site, usually into the street, to continue down

the sidewalk. The contractor shall be required to post and maintain the appropriate pedestrian signs, including “SIDEWALK CLOSED AHEAD / USE OTHER SIDE,” “SIDEWALK CLOSED,” “NO PEDESTRIAN CROSSING,” and “USE CROSSWALK.”

**Mitigation Measure TRANS-1d:** The contractor shall obtain authorization from Marin Transit and Golden Gate Transit if construction requires the temporary closure of any existing bus stops. If required by the transit agencies, the contractor shall establish temporary bus stops with appropriate passenger amenities during the construction period.

**Mitigation Measure TRANS-1e:** The contractor shall maintain all existing bicycle routes. During construction, temporary bike facilities may be delineated by cones, but the contractor shall maintain a clear and clean path of travel for bicyclists at all times. A bike route detour may be provided pending approval from the City. Signs such as “Bicyclists Allowed Full Use of Lane” or “Bicycle Route Detour” signs shall be posted.

**Facts:** The relevant facts are set forth in Chapter 4.14 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR’s discussion and analysis is incorporated herein. Project construction activities would meet Belvedere Municipal Code requirements and Project Regulation Information Contractor Guidelines. However, Project construction traffic could still cause temporary disruption and delays to drivers, pedestrians, and bicyclists, and could conflict with Belvedere General Plan Policy TC-1.3, which calls for traffic generated by construction activities to be minimized. This would be a potentially significant impact. With implementation of Mitigation Measures TRANS-1a through TRANS-1e, the potential impact related to conflict with Belvedere General Plan Policy TC-1.3 would be **less than significant**.

#### 4.4.9. Tribal Cultural Resources

**Impact TCR-1:** The Project could cause a substantial adverse change in the significance of a tribal cultural resource (TCR), defined in Public Resources Code (PRC) Section 21074.

**Mitigation Measure TCR-1a:** One tribal monitor shall be retained to monitor all vegetation clearing and removal, surface grading, excavation, and trenching within the Project site. The tribal monitor shall have the authority to temporarily pause ground disturbance within 100 feet of the discovery for a duration long enough to examine potential tribal cultural resources (TCRs) that may become unearthed during the activity. If no TCRs are identified, then construction activities may proceed, and no agency notifications are required. In the event that a TCR is identified, the monitor shall flag off the discovery location and notify the City of Belvedere immediately to implement Mitigation Measure TCR-1b. Work can continue in other areas of the Project during implementation of Mitigation Measure TCR-1b, as long as it is monitored if required.

**Mitigation Measure TCR-1b:** If any suspected tribal cultural resources (TCRs) are



discovered during ground-disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed-upon distance based on the Project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area shall be immediately notified and shall determine if the find is a TCR (see Public Resources Code [PRC] Section 21074). The Tribal Representative shall make recommendations for further evaluation and culturally appropriate treatment as necessary. If deemed necessary by the City of Belvedere, a qualified cultural resources specialist meeting the Secretary of Interior's Standards and Qualifications for Archeology may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work at the discovery location may not resume until the City, in consultation as appropriate and in good faith, determines that all necessary investigation and treatment of the discovery under the requirements of the California Environmental Quality Act (CEQA), including Assembly Bill (AB) 52, have been satisfied.

**Mitigation Measure TCR-1c:** The City of Belvedere shall require the Project contractor to provide a cultural resource and tribal cultural resource (TCR) sensitivity and awareness training program (Worker Environmental Awareness Program [WEAP]) for all personnel involved in Project construction, including field consultants and construction workers. The WEAP shall be developed in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, as well as culturally affiliated Native American tribes. The City shall invite a Native American representative from interested culturally affiliated Native American tribes to participate. The WEAP shall be conducted before any Project-related construction activities begin at the Project site. The WEAP shall include relevant information regarding sensitive cultural resources and TCRs, including applicable regulations, protocols for avoidance, and consequences of violating state laws and regulations. The WEAP shall also describe appropriate avoidance and impact minimization measures for cultural resources and TCRs that could be located at the Project site and shall outline what to do and whom to contact if any potential cultural resources or TCRs are encountered. The WEAP shall emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and shall discuss appropriate behaviors and responsive actions, consistent with Native American tribal values. With implementation of Mitigation Measures TCR-1a through TCR-1c impacts to tribal cultural resources would be **less than significant**.

**Facts:** The relevant facts are set forth in Chapter 4.15 of the Draft EIR.

**Finding:** *Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.*

**Rationale:** The EIR's discussion and analysis is incorporated herein. Ground-disturbing activities could result in the unanticipated discovery of TCRs and prehistoric archaeological sites that may be considered TCRs. As such, the impact on unknown TCRs is considered potentially significant. Tribal monitoring during ground-disturbing activities, coupled with specific procedures for managing any unanticipated discoveries of TCRs, would ensure that any TCRs that

may be unearthed during ground-disturbing activities are identified immediately and damage is minimized.

With implementation of Mitigation Measures TCR-1a, TCR-1b, and TCR-1c, the potential impact on unknown TCRs would be **less than significant**.

## **5. ALTERNATIVES**

The EIR's discussion and analysis is incorporated herein.

CEQA requires discussion of a reasonable range of project alternatives that could feasibly attain the Project's objectives. (CEQA Guidelines, § 15126.6, subd. (a).) An EIR must evaluate a reasonable range of alternatives to the project or to the location of the project that: (1) offers substantial environmental advantages over the proposed project; and (2) may be feasibly accomplished in a successful manner and within a reasonable period of time considering the economic, environmental, legal, social and technological factors involved. The purpose in analyzing alternatives to a proposed project is to determine if an alternative is capable of eliminating or reducing potential significant adverse environmental effects, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (CEQA Guidelines, § 15126.6, subd. (b).)

The selection of alternatives for analysis is described in Chapter 5 of the Draft EIR. Each alternative to the proposed Project was evaluated for its ability to reduce or eliminate impacts. Two alternatives are evaluated in this section:

- Alternative 1: No Project Alternatives
- Alternative 2: Use of Silent Pile Drivers Alternative

The selection of alternatives for analysis is described in Chapter 5 of the Draft EIR. Each alternative to the Project was evaluated for its ability to reduce or eliminate impacts. The following discussion sets forth the City Council's evaluation of each alternative to determine whether there are feasible alternatives to the proposed action and whether the alternative can eliminate or substantially lessen significant impacts of the Project.

### **5.1. Analysis of Impacts and Findings Regarding Alternatives**

#### **Alternative 1: No Project**

The No Project Alternative would involve no new sheet piles placed along Beach Road or San Rafael Avenue. Existing conditions would remain unchanged and seismic instability risks would still exist, with the associated risk of damages to these major roads that could limit emergency vehicle access to Belvedere Island. No impacts identified in the Draft EIR would occur. Thus, no mitigation measures would be necessary. The No Project Alternative would not, however, meet any of the objectives of the Project. No seismic upgrades for Beach Road and San Rafael Avenue

would occur and risks to the integrity of these roads for emergency vehicle access from seismic events would remain.

### **Alternative 2: Use of Silent Pile Drivers Alternative**

This alternative would be similar in location and scope to the Project. However, silent pile drivers would be used in place of vibratory pile drivers as a means of reducing noise and vibration associated with Project construction. The limited use of impact pile driving equipment could also be required under Alternative 2 for the same reason as the Project (i.e., if the target depth cannot be reached using other pile driving equipment); however, the use of impact pile driving equipment would only be performed in areas that are an adequate distance away from sensitive receptors and structures, utilities, or other improvements such that exposure to excessive noise or damage from vibrations and vibration-induced settlement would not occur.

Impacts associated with Alternative 2 would substantially reduce noise and vibration impacts from pile driving. However, limited use of impact pile driving methods could still occur. The precise areas where vibratory or impact pile driving methods would be used under the Alternative 2 cannot be determined prior to construction as these would depend on the construction contractor's phasing of work, which could depend on various constraints such as the timing of site preparation and utility work. Because it is not known exactly where vibratory or impact pile driving equipment could be used, and because Alternative 2 could also include the use of other construction equipment that could generate noise and vibrations (e.g., excavators and compactors), Alternative 2 could result in similar potentially significant impacts as the Project and would require the same mitigation measures as the Project related to noise and vibration.

Alternative 2 would meet all of the Project objectives except the following:

- To design for long-term needs while making the Project cost-effective for current residents.

The use of silent pile drivers would be significantly higher in cost for the City of Belvedere, and residents could be affected by the increased price depending on the funding mechanism used to pay for the Project.

**Finding:** Based on the whole record, the Project alternatives referenced herein, would result in fewer environmental impacts than (No Project Alternative) or similar environmental impacts to (Alternative 2) the Project.

The No Project Alternative is infeasible because it would not meet any of the Project objectives and the risks to the integrity of these roads for emergency vehicle access from seismic events would remain.

Alternative 2 is infeasible because it would be significantly higher in cost for the City of Belvedere, which could affect local residents depending on the funding mechanism used to pay for the Project. Additionally, Alternative 2 could result in similar potentially significant impacts as the Project and would require the same mitigation measures as the Project related to noise and vibration.

## 5.2. Environmentally Superior Alternative

CEQA Guidelines section 15126.6, subdivision (e) requires that an environmentally superior alternative in addition to the No Project Alternative be identified.

**Finding:** Alternative 2 would be the environmentally superior alternative due to the reduced noise and vibration impacts even though the costs for the City would be higher and depending on the selected funding mechanism it would not meet the identified Project objective to make the Project cost-effective for current residents.

## Exhibit B

### Chapter IV MITIGATION MONITORING AND REPORTING PROGRAM



This MMRP (see Table IV-1) has been prepared to comply with the requirements of State of California law (Public Resources Code Section 21081.6). State law requires the adoption of a mitigation monitoring program when mitigation measures are required to avoid significant impacts. The monitoring program is intended to ensure compliance during implementation of the project.

This MMRP has been formulated based upon the findings of the DEIR and the comments received on the DEIR and addressed herein. This MMRP identifies mitigation measures recommended in the DEIR to avoid or reduce identified impacts, and specifies the agencies/parties responsible for implementation and monitoring of the measure.

The first column identifies the mitigation measure. The second column, entitled "Party Responsible for Ensuring Implementation," lists the person or agency that would undertake the mitigation measures. The third column, entitled "Party Responsible for Monitoring," lists the person or agency responsible for ensuring that the mitigation measure has been implemented and recorded. The fourth column, entitled "Monitoring Timing," identifies when and/or for how long the monitoring shall occur. If an impact was found to be less than significant and did not require mitigation, no monitoring would be required.

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial Date	Compliance Verification Project/ Comments
<p><b>Air Quality</b></p> <p><b>AIR-1:</b> During project construction, the contractor shall implement a dust control program that includes the following measures recommended by the Bay Area Air Quality Management District (BAAQMD) and these measures shall be included in contract specifications for construction of the project:</p> <ul style="list-style-type: none"> <li>▪ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>▪ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>▪ 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.</li> <li>▪ All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).</li> <li>▪ 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.</li> <li>▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).</li> </ul> <p>Clear signage shall be provided for construction workers at all access points.</p> <ul style="list-style-type: none"> <li>▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> <li>▪ A publicly visible sign shall be posted with the telephone number and person to contact at the City of Belvedere regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.</li> </ul> <p>Implementation of these measures would ensure that emissions of coarse particulate matter (PM<sub>10</sub>) and fine particulate matter (PM<sub>2.5</sub>) from dust generated during project construction activities would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment, and this impact would be less than significant.</p>	<p>City of Belvedere Public Works Dept. and contractor</p>	<p>City of Belvedere Public Works Dept.</p>	<p>During construction</p>		
<p><b>Biological Resources</b></p> <p><b>BIO-1a:</b> Appropriate construction controls and restrictions shall be taken to prevent inadvertent loss of special-status fish species and other aquatic life as a result of construction activities within or near areas of tidal influence and open water habitat of San Francisco Bay to avoid possible inadvertent take of Central California Coastal steelhead, green sturgeon,</p>	<p>City of Belvedere Public Works Dept. working with biological</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial Date	Compliance Verification Project/ Comments
<p>Central Valley spring-run chinook salmon, and longfin smelt, if present in the area during the time of construction. This shall be accomplished through implementation of the following provisions:</p> <ul style="list-style-type: none"> <li>▪ Adequate measures shall be taken to minimize disturbance and sedimentation in aquatic habitat of the bay and Belvedere Lagoon. These measures shall include installing turbidity curtains around in-water construction zones, restricting in-water operations to low tide periods, lowering surface water elevations in the Belvedere Lagoon during sheet pile installation, and timing restrictions for in-water construction, among other possible controls and restrictions.</li> <li>▪ Preconstruction clearance surveys shall be conducted by a qualified biologist for any in-water construction as called for in Mitigation Measure BIO-1b.</li> <li>▪ Any pumping as part of dewatering construction areas shall be adequately screened according to the latest screening guidelines of the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) to prevent entrainment of special-status fish and other aquatic life during the pumping operation.</li> <li>▪ Any in-water construction activities shall be restricted to the period from June 1 through October 31, when stray or dispersing special-status fish species would most likely not be expected within the affected areas.</li> <li>▪ All construction work within regulated waters shall be restricted to daylight hours to avoid disturbing aquatic habitat with artificial light source that could attract fish and other wildlife into the construction zone.</li> </ul>	<p>consultant and contractor</p>				
<p><b>BIO-1b:</b> Prior to initiation of grading or vegetation removal, a qualified biologist shall be retained to train workers on the regulations related to jurisdictional waters, special-status species, and the possible risk of inadvertent take in advance of construction. The qualified biologist shall be someone knowledgeable about the biology and regulations regarding jurisdictional waters, as well as protected species known or with the potential to occur in or adjacent to the project site, including steelhead, Chinook salmon, green sturgeon, and longfin smelt. The following provisions shall apply:</p> <ul style="list-style-type: none"> <li>▪ The qualified biologist shall oversee installation of turbidity curtains, conduct preconstruction surveys for nesting birds as required in Mitigation Measure BIO-2, and inspect the construction zone in tidal areas, as necessary.</li> <li>▪ The worker training shall be conducted prior to starting work on the project and upon the arrival of any new worker into the tidal zone. The training program shall include a description of protected species and their habitat needs, any known occurrences in the site vicinity, an explanation of the status of these species and their protection under state and</li> </ul>	<p>City of Belvedere Public Works Dept. working with biological consultant and contractor</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial	Date	Project/ Comments
<p>federal legislation, a description of regulated waters and the need to follow all regulatory authorizations, a list of measures being taken to avoid and minimize impacts to protected species during the work, and procedures to follow if a protected species is discovered to be present in the work area.</p> <ul style="list-style-type: none"> <li>▪ Fact sheets containing the information presented during the worker training program shall be provided to the Project Foreman and kept on-site for the duration of construction.</li> <li>▪ The qualified biologist shall train the Project Foreman to serve as an Environmental Monitor who will make sure workers are following all required controls, inspect the construction zone and condition of turbidity curtains to confirm they are functioning, and check for any signs of protected species.</li> <li>▪ A record of all personnel trained during the project shall be maintained for compliance verification.</li> </ul>	<p>City of Belvedere Public Works Dept. working with biological consultant</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to construction</p>			
<p><b>BIO-1c:</b> The City of Belvedere shall obtain all necessary authorizations from the CDFW, NIMFS, and USFWS as required by federal and state law for potential harm to special-status fish species. Such authorization would be obtained through interagency coordination in accordance with the U.S. Army Corps of Engineers Section 404 consultation and the CDFW Section 2081 Incidental Take Permit process. The project shall adhere to any additional conditions and restrictions required as part of the authorizations from regulatory agencies. This shall include any required compensatory mitigation for the permanent loss of an estimated 1,200 square feet (0.03 acre) of benthic habitat at the base of the existing seawall, provided at a minimum 1:1 ratio or as negotiated with the regulatory agencies.</p> <p>The combination of the above measures would reduce this potential impact to less than significant.</p>	<p>City of Belvedere Public Works Dept. working with biological consultant</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>			
<p><b>BIO-2:</b> Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code when nests are in active use. This shall be accomplished by taking the following steps.</p> <ul style="list-style-type: none"> <li>▪ If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal or construction, in order to identify any active nests on the project site and in the vicinity of proposed construction.</li> <li>▪ If construction is curtailed for more than 7 days, another focused survey shall be conducted during the nesting season to confirm that no new nests have been established in the vicinity of proposed construction.</li> </ul>	<p>City of Belvedere Public Works Dept. working with biological consultant and contractor</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>			



**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification	Project/ Comments
<ul style="list-style-type: none"> <li>▪ If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through January), construction may proceed with no restrictions.</li> <li>▪ If active nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the California Department of Fish and Wildlife (CDFW) and may vary depending on species and sensitivity to disturbance. The no-disturbance zone shall be fenced with temporary orange construction fencing or other conspicuous demarcation such as signage and flagging if construction is to be initiated on the remainder of the development site.</li> <li>▪ A report of findings shall be prepared by the qualified biologist and submitted to the City of Belvedere for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report shall either confirm absence of any active nests or confirm that any young birds have fledged within a designated no-disturbance zone and construction can proceed.</li> </ul> <p>The combination of the above measures would reduce this potential impact to less than significant</p>	City of Belvedere Public Works Dept. working with biological consultant	City of Belvedere Public Works Dept.	Prior to and during construction		
<p><b>BLO-3:</b> A compensatory mitigation program shall be developed and implemented to provide adequate mitigation for jurisdictional waters affected by proposed improvements. A jurisdictional wetland delineation shall be prepared by a qualified wetland specialist and submitted for verification by the U.S. Army Corps of Engineers (Corps). A Regulated Waters Protection and Replacement Program (RWPRP) shall be prepared by the qualified wetland specialist and implemented to provide compensatory mitigation where jurisdictional waters are affected, shall minimize disturbance to unvegetated waters, and shall be reviewed and approved by regulatory agencies. The RWPRP shall contain the following components:</p> <ul style="list-style-type: none"> <li>▪ The RWPRP shall include appropriate implementation measures to prevent inadvertent loss and degradation of jurisdictional waters to be protected and shall provide for replacement of the estimated 1,200 square feet (0.03 acre) of regulated waters eliminated by sheet pile construction at a minimum 1:1 replacement ratio.</li> <li>▪ Where verified waters of the U.S. are present and cannot be avoided, authorization for modifications to these features shall be obtained from regulatory agencies with jurisdiction. These agencies include the Corps under Section 404, permitting process where waters of the United States are affected by the project and the Regional Water Quality Control Board (RWQCB) as part of the Section 401 Certification process. All conditions required as part</li> </ul>	City of Belvedere Public Works Dept. working with biological consultant	City of Belvedere Public Works Dept.	Prior to and during construction		

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial Date	Compliance Verification Project/ Comments
<p>of the authorizations by the Corps and RWQCB shall be implemented as part of the project.</p> <ul style="list-style-type: none"> <li>▪ Consultation or incidental take permits may be required under the California Endangered Species Act and Federal Endangered Species Act. The City of Belvedere shall obtain all legally required permits or other authorizations from the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) under the Endangered Species Acts.</li> <li>▪ Temporary fencing or another system shall be installed to demarcate the limits of proposed construction in jurisdictional waters. The turbidity curtain may serve as the temporary construction containment fencing.</li> <li>▪ Grading, construction, and restoration work within the jurisdictional waters shall be conducted in a way that avoids or minimizes disturbance of existing aquatic habitat as called for in Mitigation Measure BIO-1a.</li> </ul> <p>The combination of the above measures would reduce this potential impact to less than significant.</p>	City of Belvedere	City of Belvedere Public Works Dept.	Prior to and during construction		
<p><b>Cultural Resources</b></p> <p><b>CULT-1a:</b> To minimize architectural and structural damage to the China Cabin, no more than a peak particle velocity (PPV) of 0.25 inches per second (in/sec) is recommended at the structure. Furthermore, if a 0.25 PPV level or lower is maintained, project construction activities would not affect character-defining features, the structural integrity, and interior architectural features, resulting in no impact on the integrity or significance of the China Cabin building, meaning the proposed project would have a less-than-significant impact on this historical resource as defined by CEQA. The following measures to minimize architectural and structural damage to the China Cabin building from construction-related ground vibrations shall be implemented:</p> <ol style="list-style-type: none"> <li>1. A preconstruction survey and structural integrity inspection shall be conducted at the potentially affected historic buildings. The preconstruction survey shall include descriptions and photographs of both the exterior and interior of the buildings that could potentially be damaged during construction, including documentation of existing damage such as cracks and loose or damaged features.</li> <li>2. Vibration levels at the China Cabin shall be monitored during construction activities with appropriate equipment such as a seismograph (monitor) and geophone (sensor).</li> <li>3. Construction vibration specifications shall be included as part of the construction contract documents (e.g., "The contractor shall not exceed the construction vibration criterion of 0.25 in/sec PPV, at the historic structures, within the established critical distance for each construction activity. If at any time the ground vibration level exceeds the specified</li> </ol>	City of Belvedere Public Works Dept. working with Contractor, qualified historic preservation professional or historic architect, and qualified archaeologist	City of Belvedere Public Works Dept.	Prior to and during construction		

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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial	Date	Project/ Comments
<p>criterion of 0.25 in/sec PPV due to any construction activity, then the construction operation shall stop. Construction shall not recommence until the source of vibration is determined and replaced by an alternative construction technique or equipment.")</p> <p>4. In the event the project exceeds the construction vibration criterion of 0.25 in/sec PPV, a historic architect or qualified historic preservation professional shall inspect the China Cabin and proceed as follows:</p> <ul style="list-style-type: none"> <li>▪ If no damage has occurred to the China Cabin, the historic architect or qualified historic preservation professional shall submit a monthly report to the City of Belvedere for review. This report shall identify and summarize the vibration level exceedances and describe the actions taken to reduce vibration.</li> <li>▪ If no damage has occurred to the China Cabin, the historic architect or qualified historic preservation professional shall submit a monthly report to the City of Belvedere for review. This report shall identify and summarize the vibration level exceedances and describe the actions taken to reduce vibration.</li> <li>▪ If vibration has damaged the China Cabin, the historic architect or qualified historic preservation professional shall immediately notify the City and prepare a damage report documenting the features of the China Cabin that has been damaged.</li> <li>▪ Should damage occur to the China Cabin due to construction-related vibration, the China Cabin shall be restored to its pre-construction condition in consultation with the historic architect or qualified historic preservation professional and the City.</li> <li>• After construction is complete, the City shall receive a final report from the historic architect or qualified historic preservation professional. The report shall include, at minimum, collected monitoring records, building condition summaries, descriptions of all instances of vibration level exceedance, identification of damage incurred due to vibration, and corrective actions taken to restore the China Cabin to its pre-construction condition.</li> </ul>						
<p><b>CULT-1b:</b> The City of Belvedere shall retain a qualified professional archaeologist to monitor ground-disturbing activities. The archaeologist shall meet the Secretary of the Interior's professional qualifications standards for archaeology. The archaeologist shall have the authority to stop grading or construction work within 50 feet of any discovery of potential historical or archaeological resources in order to implement the procedures in Mitigation Measure CULT-3 and make a finding of significance under Section 15064.5 of the California Environmental Quality Act (CEQA) Guidelines.</p>						
<p><b>CULT-1c:</b> If subsurface deposits believed to be cultural or human in origin are discovered during construction by the monitor, all work must halt within a 50-foot radius of the discovery. A qualified professional archaeologist, who will evaluate the significance of the find, shall have</p>						

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial Date	Compliance Verification Project/ Comments
<p>the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:</p> <ul style="list-style-type: none"> <li>▪ If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.</li> <li>▪ If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, they shall immediately notify the City of Belvedere and the United States Army Corps of Engineers (Corps), which shall consult on a finding of eligibility. If the find is determined to be a historical resource under the California Environmental Quality Act (CEQA) or a historic property under National Historic Preservation Act Section 106, then, appropriate treatment measures would be implemented. Work may not resume within the no-work radius until the City of Belvedere and the Corps, through consultation as appropriate, determine either that (1) the site is not a historical resource under CEQA or a historic property under Section 106, or (2) the treatment measures have been completed to their satisfaction. The preferred treatment would be avoidance and preservation in place.</li> <li>▪ If the find includes human remains, or remains that are potentially human, Mitigation Measure CULT-3 shall apply.</li> </ul> <p>With the incorporation of Mitigation Measure CULT-1a, CULT-1b, and CULT-1c, the impacts on the China Cabin and the archaeological historical resource would be less than significant.</p>					
<p><b>CULT-2:</b> With the implementation of Mitigation Measures CULT-1b and CULT-1c, the impact on known and unknown archaeological resources would be less than significant.</p>	<p>Refer to CULT-1b and CULT-1c above.</p>	<p>Refer to CULT-1b and CULT-1c above.</p>	<p>Refer to CULT-1b and CULT-1c above.</p>		
<p><b>CULT-3:</b> If human remains, or remains that are potentially human, are encountered, the City of Belvedere shall ensure reasonable protection measures are taken to protect the discovery from disturbance (in accordance with Assembly Bill [AB] 2641). The qualified professional archaeologist retained by the City (see Mitigation Measure CULT-1b) shall notify the Marin County Coroner (per Section 7050.5 of the California Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code (PRC), and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the Native American Heritage Commission (NAHC), which then would designate a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the PRC). The designated MLD would have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they would not be</p>	<p>City of Belvedere Public Works Dept. working with qualified professional archaeologist and the Marin County Coroner, if needed</p>	<p>City of Belvedere Public Works Dept.</p>	<p>During construction</p>		

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification	
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<p>further disturbed (Section 5097.98 of the PRC). This shall also include either recording the site with the NAHC or the appropriate California Historical Resources Information System Information Center; using an open space or conservation zoning designation or easement; or recording a reinvestment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the City of Belvedere, through consultation with the MLD as appropriate, determines that the treatment measures have been completed to its satisfaction.</p> <p>Implementation of Mitigation Measure CULT-3 would reduce impacts on human remains and dedicated cemeteries to less than significant.</p>					
<b>Geology and Soils</b>					
<p><u>GEO-1:</u> City of Belvedere staff shall work with utility agencies to find an effective means to install flexible utility connections on utilities that have non-flexible pipes (including water, wastewater, and gas lines) that are located near the eastern and western ends of the proposed sheet piles along Beach Road and new utility laterals that would cross the proposed sheet piles along Beach Road to ensure that utilities would be capable of withstanding expected ground movements during seismic events and future settlement. The City shall retain a qualified geotechnical engineer to assist in the design of the improved utility connections. The installation of the new flexible connections shall occur prior to the conclusion of construction.</p>	<p>City of Belvedere Public Works Dept. working with utility agencies and geotechnical engineer</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		
<p><u>GEO-2:</u> A geotechnical report shall be prepared by a qualified geotechnical engineer and shall evaluate the potential for vibration-induced settlement from proposed sheet pile installation and the potential for damage to existing improvements (e.g., structures, utilities, fences, walls, guardrails, walkways, and patios) from vibration-induced settlement. If the geotechnical report identifies existing improvements that could potentially be damaged by vibration-induced settlement, a preconstruction survey of the potentially affected improvements shall be performed, allowable settlement amounts shall be estimated for the potentially affected improvements, and the allowable settlement amounts shall account for estimated future settlement amounts that are expected to occur due to the construction of the existing levees and placement of fill materials that previously occurred in the project area. Settlement monitoring shall be performed during construction activities. If the geotechnical report identifies any existing improvements that are very likely to experience damage due to vibration-induced settlement, measures shall be implemented to prevent such damage prior to the start of sheet pile installation near the existing improvements. Such measures may include relocation of utilities, installation of flexible connections on utilities, temporary shoring/bracing</p>	<p>City of Belvedere Public Works Dept. working with geotechnical engineer and utility agencies as needed</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification	
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<p>of the existing improvements, or use of alternative methods for sheet pile installation near the existing improvements, such as use of a silent pile driver.</p> <p>If settlement monitoring indicates that construction activities have caused unacceptable levels of settlement or observable damage to existing improvements, or that construction activities would be expected to cause unacceptable levels of settlement if construction activities continue using the same methods, the vibration-causing activities shall cease and measures shall be implemented to prevent further settlement or damage to existing improvements. Such measures may include relocation of utilities, installation of flexible connections on utilities, temporary shoring/bracing of existing improvements, or use of alternative methods for sheet pile installation such as use of a silent pile driver. If any damage is caused to existing improvements as a result of vibration-induced settlement during sheet pile installation, the City of Belvedere shall repair the damage following the completion of project construction activities near the area of damage.</p>					
<p><b>GEO-3:</b> Implement Mitigation Measures GEO-1 and GEO-2.</p> <p>Implementation of these measures would reduce the project's contribution to the cumulative impact to less than significant.</p>					
<p><b>Hazards and Hazardous Materials</b></p> <p><b>HAZ-1:</b> The use of Belvedere Way for construction staging shall not include the storage of combustible or flammable materials on Belvedere Way. The use of Belvedere Way for construction staging may include the posting of signs indicating that the area is restricted from public access except for emergency evacuation purposes; however, the use of Belvedere Way for construction staging shall not physically restrict public access to Belvedere Way and shall allow for the safe passage of pedestrians along Belvedere Way at all times. The proposed construction staging uses of Belvedere Way shall be outlined in a Construction Staging Plan to be prepared by the project contractor and submitted to the City of Belvedere and the Tiburon Fire Protection District for review and approval to ensure that construction staging activities would not interfere with the use of Belvedere Way as a pedestrian evacuation route. The Construction Staging Plan shall designate the materials and equipment that would be stored along Belvedere Way and the areas where they would be stored and shall describe the safety measures (e.g., placement of barricades, cones, and caution tape) to ensure that the storage of materials and equipment would not pose a safety hazard to pedestrians using Belvedere Way.</p>					
	Refer to GEO-1 and GEO-2	Refer to GEO-1 and GEO-2	Refer to GEO-1 and GEO-2		
	City of Belvedere Public Works Dept. working with contractor and Tiburon Fire Protection District	City of Belvedere Public Works Dept.	Prior to and during construction		

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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial Date	Compliance Verification Project/ Comments
<p><b>Hydrology and Water Quality</b></p> <p><b>HYDRO-1a:</b> The following measures shall be implemented to reduce the risk of disturbed soils and spills/releases from affecting water quality in nearby surface waters during construction activities near or below the waterline of San Francisco Bay and the Belvedere Lagoon:</p> <ul style="list-style-type: none"> <li>▪ The contractor(s) shall avoid sheet piling installation in the Bay along the exterior side of the Beach Road levee during tidal periods when the tidal water level is at 2.5 feet mean lower low water (MLLW) or higher.</li> <li>▪ The contractor(s) shall install a turbidity curtain in the Bay to hydraulically isolate the narrow, approximately 400-foot-long strip of the bay where sheet pile installation occurs from the rest of the Bay. The turbidity curtain shall remain in place for the duration of installation activities and thereafter until such time that any increased turbidity has settled out and concrete has fully cured.</li> <li>▪ The contractor(s) shall install a turbidity curtain in the lagoon to hydraulically isolate the portion of the lagoon where sheet pile installation occurs from the rest of the lagoon. The turbidity curtain shall remain in place for the duration of installation activities and thereafter until such time that any increased turbidity has settled out.</li> <li>▪ The contractor(s) shall coordinate with the City of Belvedere Public Works Department and the Belvedere Lagoon Property Owners Association (BLPOA) to ensure that the lagoon is drawn down to the winter operating level prior to and for the duration of sheet pile installation activities in the lagoon and BLPOA's culverts and other water control facilities along San Rafael Avenue are shut off from the Bay for the duration of sheet piling installation and thereafter while the turbidity curtain remains installed, and further coordinate with BLPOA to ensure that interference with BLPOA's critical water control operations is avoided or minimized to the extent practical.</li> </ul> <p><b>HYDRO-1b:</b> The following measures shall be implemented to reduce the risk of spills, releases, and disturbed soils affecting water quality in nearby surface waters during construction activities:</p> <ul style="list-style-type: none"> <li>▪ The contractor(s) shall designate storage areas suitable for material delivery, storage, and waste collection for disposal. Waste shall be disposed of off-site in a manner that complies with applicable regulations for waste disposal. These locations shall be as far away from catch basins, gutters, drainage courses, and water bodies as possible. All hazardous materials and wastes used or generated during project site development activities shall be labeled and stored in accordance with applicable local, state, and federal regulations. In addition, an accurate up-to-date inventory, including Material Safety Data Sheets (MSDSs), shall be maintained on-site to assist emergency response personnel in the event of a hazardous materials incident.</li> </ul>	<p>City of Belvedere Public Works Dept. working with contractor and Belvedere Lagoon Property Owners Association</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		
	<p>City of Belvedere Public Works Dept. working with contractor and Belvedere Lagoon Property Owners Association</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification	
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<p>■ All maintenance and fueling of construction vehicles and equipment shall be performed in a designated bermed area, or over a drip pan that would not allow runoff of spills. Vehicles and equipment shall be regularly checked and have leaks repaired promptly at an off-site location. Secondary containment shall be used to catch leaks or spills any time vehicle or equipment fluids are dispensed, changed, or poured.</p> <p>■ The contractor shall implement a Storm Water Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer (QSD) and designed to reduce potential adverse impacts on surface water quality during the construction period. The SWPPP shall include the minimum BMPs required for the identified risk level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction. The SWPPP shall be designed to address the following objectives:</p> <ol style="list-style-type: none"> <li>1) All pollutants and their sources, including sources of sediment associated with construction activity, are controlled.</li> <li>2) Where not otherwise required to be under a Regional Water Quality Control Board (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated.</li> <li>3) Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity.</li> <li>4) Stabilization BMPs installed to reduce or eliminate pollutants and erosion of exposed soil after construction are completed. Stabilization BMPs, may include but would not be limited to: hydroseeding, planting of vegetation, installation of jute/burlap netting, and installation of swales in graded areas.</li> <li>5) BMPs shall be designed to mitigate construction-related pollutants and at a minimum, include the following:                         <ol style="list-style-type: none"> <li>a. Practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, and adhesives) with stormwater shall be included. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain.</li> <li>b. Practices to reduce erosion of exposed soil, which may include but are not limited to soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins, shall be included.</li> <li>c. If grading or other ground-disturbing activities must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control (i.e., keeping sediment on the site). End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. Ingress and egress from the</li> </ol> </li> </ol>					



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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial	Date	Project/ Comments
<p>construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional during both dry and wet conditions.</p> <p>6) The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor and shall include both dry and wet weather inspections. Monitoring shall be required during the construction period for pollutants that may be present in the runoff that are "not visually detectable in the runoff."</p> <ul style="list-style-type: none"> <li>▪ Site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance shall be specified in the SWPPP.</li> <li>▪ A Qualified SWPPP Practitioner (QSP), hired by the contractor, shall be responsible for overseeing implementation of BMPs at the site. The QSP shall be a qualified professional that has the required professional credentials and has passed specific training courses in accordance with the Construction General Permit. The QSP shall also be responsible for performing all required monitoring, and BMP inspection, maintenance, and repair activities. The QSP shall retain an independent monitor to conduct weekly inspections and provide written weekly reports to the City of Belvedere Public Works Department and/or the project team to ensure compliance with the SWPPP.</li> </ul>	<p>City of Belvedere Public Works Dept. working with contractor and applicable agencies</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>			
<p><b>HYDRO-1c:</b> Contractor(s) shall obtain applicable resource agency permits and approvals and comply with permit requirements to prevent impacts on water quality and demonstrate that water quality standards and/or waste discharge requirements are not violated. Permit requirements and avoidance measures that may be required by the U.S. Army Corps of Engineers and/or the San Francisco Bay Regional Water Quality Control Board (RWQCB) may include but not be limited to the following:</p> <ul style="list-style-type: none"> <li>▪ Installation of physical barriers (e.g., silt curtains, turbidity curtains) to prevent potential localized impacts on water quality (e.g., increase in turbidity) from spreading to surrounding surface waters;</li> <li>▪ Installation of physical barriers or use of tanks to contain wastewater generated during construction and prevent potential localized impacts to water quality of surrounding surface waters; and</li> <li>▪ Performance of water quality monitoring, including sampling and analysis for turbidity and total suspended solids.</li> </ul> <p>At the direction of the applicable resource agency, the results of the water quality monitoring shall be compared to established performance standards. If water quality monitoring indicates that performance standards are not being achieved, additional avoidance measures (e.g., installation of additional silt curtains) shall be implemented until water quality monitoring</p>						

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

<b>Mitigation Measure</b>	<b>Party Responsible for Ensuring Implementation</b>	<b>Party Responsible for Monitoring</b>	<b>Monitoring Timing</b>	<b>Initial Date</b>	<b>Project/ Comments</b>
<p>indicates that performance standards are being achieved, which would mitigate the potential impacts on water quality to a less-than-significant level.</p> <p>Compliance with the Construction General Permit and implementation of Mitigation Measures HYDRO-1a, HYDRO-1b, and HYDRO-1c would ensure that potential impacts on water quality would be less than significant.</p>	<p>City of Belvedere Public Works Dept. working with contractor and noise disturbance coordinator</p>	<p>City of Belvedere Public Works Dept.</p>	<p>Prior to and during construction</p>		
<p><b>Noise</b></p>	<p><b>NOISE-1:</b> Noise reduction measures shall be implemented to reduce noise impacts related to project construction. Noise reduction measures shall include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>▪ The contractor shall implement a site-specific noise reduction plan prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval by the City of Belvedere. The plan shall identify site-specific pile driving noise reduction measures that must be implemented prior to and during all construction activities to ensure noise levels would not exceed the 90 dBA <math>L_{eq}</math> threshold at nearby residences.</li> <li>▪ Temporary noise barriers shall be placed between the proposed construction activities and nearby receptors when feasible. A sound blanket system hung on scaffolding, or other noise reduction materials that result in an equivalent or greater noise reduction than plywood, may also be used. The composition, location, height, and width of the barriers during different phases of construction shall be determined by a qualified acoustical consultant and incorporated into the site-specific noise reduction plan for the project.</li> <li>▪ Avoid impact pile-driving where feasible in noise-sensitive areas. Pre-drilling or the use of a vibratory pile driver or silent pile driver are quieter alternatives where the geological conditions permit their use.</li> <li>▪ Noise-generating construction and demolition activities, including material and equipment deliveries, shall be limited to between the hours of 8:00 AM and 5:00 PM Monday through Friday. Occasionally, Saturday construction could occur with prior approval from the City.</li> <li>▪ All construction equipment powered by internal combustion engines shall be properly muffled.</li> <li>▪ Unnecessary idling of combustion engines shall be prohibited. Haul trucks shall not be allowed to idle for periods greater than 5 minutes, except as needed to perform a specified function such as concrete mixing.</li> <li>▪ All stationary noise-generating construction equipment shall be located as far as practical from existing nearby residences and other noise-sensitive land uses. Such equipment shall also be acoustically shielded.</li> </ul>				

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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Compliance Verification			
			Monitoring Timing	Initial	Date	Project/ Comments
<ul style="list-style-type: none"> <li>▪ Quiet construction equipment and technologies shall be selected whenever feasible. Motorized equipment shall be fitted with proper mufflers in good working order.</li> <li>▪ Businesses and residents adjacent to the project site shall be notified in writing in advance of the proposed construction schedule before construction activities commence.</li> <li>▪ The project contractor shall designate a "noise disturbance coordinator" responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem (potentially including erection of a temporary noise barrier/wall). A telephone number for the disturbance coordinator shall be posted at the construction site.</li> <li>▪ All of the above measures shall be required to be included in contract specifications.</li> </ul> <p>Implementation of Mitigation Measure NOISE-1 would reduce this impact to less than significant.</p>	City of Belvedere Public Works Dept. working with noise/vibration consultant, structural engineer, and contractor as well as qualified architect or historic preservation professional	City of Belvedere Public Works Dept.	Prior to and during construction			
<p><b>NOISE-2:</b> The following measures shall be implemented to reduce vibration impacts related to project construction:</p> <ul style="list-style-type: none"> <li>▪ <b>Pre-Construction Survey.</b> Prior to the start of any vibration-generating construction activity, the City of Belvedere shall engage a consultant to undertake a pre-construction survey of potentially affected buildings within 45 feet of the proposed sheet pile alignment, provided that the property owner approves of the survey. All pre-construction surveys of potentially affected buildings and/or structures shall be prepared by a structural engineer or other professional with similar qualifications. The pre-construction surveys shall include descriptions and photographs of both the exterior and interior of the buildings that could potentially be damaged during construction, including documentation of existing damage such as cracks and loose or damaged features. The pre-construction surveys shall be submitted to the City for review and approval prior to the start of vibration-generating construction activity.</li> <li>▪ <b>Avoid Impact Pile Driving Where Feasible.</b> The use of impact pile driving equipment shall be limited to situations where the target depth cannot be reached using other pile driving equipment. The use of impact pile driving shall be prohibited within 45 feet of residential/commercial buildings to avoid potential vibration damage. When necessary, alternative methods, such as pre-drilling or excavation of soil to depths of up to approximately 10 feet, shall be performed prior to sheet pile installation to remove potential obstructions (e.g., large rocks) in the fill material of the levees to ensure that vibratory or silent pile driving methods will reach the target depth.</li> <li>▪ <b>Limited Use of Vibratory Pile Driving.</b> The use of vibratory pile driving shall be prohibited within 16 feet of residential/commercial buildings to avoid potential vibration damage.</li> </ul>						

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<p>When necessary, alternative methods, such as a silent pile driver, shall be used to ensure that construction vibration levels do not exceed the established standard. The silent pile driving method requires the use of vibratory pile driving to install the first few piles of a continuous sheet pile segment; therefore, the use of the vibratory pile driving to install the first few piles shall be performed in areas that are as far away as possible from the potentially affected buildings and/or structures.</p> <ul style="list-style-type: none"> <li>▪ <b>Limited Use of Vibratory Roller.</b> The use of a vibratory roller shall be prohibited within 19 feet of residential/commercial buildings to avoid potential vibration damage. When necessary, alternative methods, such non-vibratory rollers or plate compactors, shall be used to ensure that construction vibration levels do not exceed the established standard.</li> <li>▪ <b>Vibration Management and Monitoring Plan.</b> The contractor shall implement a monitoring plan prepared by a qualified engineer to avoid or reduce project-related construction vibration damage to adjacent buildings and/or structures and to ensure that any such damage is documented and repaired. The vibration management and monitoring plan shall apply to all potentially affected buildings and/or structures. The plan shall be submitted to the City for review and approval prior to the start of vibration-generating construction activity. The vibration management and monitoring plan shall include, but not be limited to, the following components: <ul style="list-style-type: none"> <li>◦ <b>Maximum Vibration Level.</b> The plan shall establish a maximum vibration level that shall not be exceeded at each building/structure on adjacent properties. The maximum vibration levels shall be based on existing conditions, character-defining features, soil conditions, and anticipated construction practices (common standards are a peak particle velocity [PPV] of 0.25 inch per second for historic buildings, 0.3 inch per second for older residential structures, and 0.5 inch per second for new residential structures and modern industrial/commercial buildings).</li> <li>◦ <b>Buffer Distances.</b> The plan shall identify the buffer distances to be maintained based on vibration levels and site constraints between the operation of vibration-generating construction equipment and the potentially affected building and/or structure, as presented in Table 4.11-9 of the Environmental Impact Report (EIR), to avoid damage to the extent possible.</li> <li>◦ <b>Vibration Monitoring and Reporting.</b> The plan shall lay out the method and equipment for vibration monitoring and develop reporting protocol for City review. To ensure that construction vibration levels do not exceed the established standard, the contractor shall monitor vibration levels at each affected building and/or structure on adjacent properties and prohibit vibratory construction activities that generate vibration levels in excess of the standard.</li> </ul> </li> </ul>					

**TABLE IV-1 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial Date	Compliance Verification	Project/ Comments
<ul style="list-style-type: none"> <li>◦ <u>Alternative Construction Equipment and Techniques</u>. The plan shall identify potential alternative equipment and techniques that could be implemented if construction vibration levels are observed in excess of the established threshold. Alternative construction equipment and techniques that can be used to reduce the vibration impact include, but are not limited to, the following:                             <ul style="list-style-type: none"> <li>▪ Pre-drilling or excavation of soil to depths of up to approximately 10 feet.</li> <li>▪ Use of a static load piling system such as a silent pile driver.</li> <li>▪ Avoidance of vibratory rollers and packers near sensitive areas.</li> <li>▪ Use of smaller, lighter equipment.</li> </ul> </li> <li>◦ <u>Repairing Damage</u>. The plan shall identify provisions to be followed should damage to any building and/or structure occur due to construction-related vibration. The building(s) and/or structure(s) shall be remediated by the City to their pre-construction condition at the conclusion of vibration-generating activity on the project site, provided that the property owner approves of the repair.</li> <li>▪ <u>Halting of Construction</u>. Should construction vibration levels be observed in excess of those established in the plan, the contractor(s) shall halt construction and implement alternative construction techniques identified in the plan.</li> <li>▪ <u>Inspections and Damage Notifications</u>. Any inspections of buildings and/or structures for potential damage shall be performed by a qualified engineer. If vibration has damaged nearby buildings and/or structures, the qualified engineer shall immediately notify the City.</li> <li>▪ <u>Vibration Monitoring Results Report</u>. After construction is complete, the City shall receive a final report from the professionally registered historic architect or qualified historic preservation professional (for effects on historic buildings and/or structures) and/or structural engineer (for effects on historic and non-historic buildings and/or structures). The report shall include, at minimum, collected monitoring records, building and/or structure condition summaries, descriptions of all instances of vibration level exceedance, identification of damage incurred due to vibration, and corrective actions taken to restore damaged buildings and structures.</li> <li>▪ For potential impacts to the historic China Cabin, implement Mitigation Measure CULT-1a.</li> </ul> <p>Implementation of Mitigation Measure NOISE-2 would reduce the potential of construction-generated vibration to cause damage to adjacent buildings to a less-than-significant level.</p>						
<b>Transportation/Traffic</b>						
<p><u>TRANS-1a</u>: The contractor shall produce a Traffic Control Plan (TCP) for construction activities that abides by the City of Belvedere's provisions regarding transportation and parking management during construction activities. The TCP shall be consistent with the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD).</p>	City of Belvedere Public Works Dept. working with	City of Belvedere Public Works Dept.	Prior to and during construction			

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<p>The TCP developed for the project shall coordinate construction activities in the area to maintain shuttle access to the off-site parking areas; maintain vehicle, pedestrian, and bicyclist access; and provide detours, as appropriate, for drivers, pedestrians and bicyclists.</p> <p>TRANS-1b: The TCP shall be prepared by the contractor and approved prior to the issuance of an encroachment permit by the Police Chief or City of Belvedere Public Works Manager.</p> <p>TRANS-1c: The TCP shall, at a minimum, include the following provisions:</p> <ul style="list-style-type: none"> <li>▪ Based on the daily volume of on-haul, the timing of trucks shall be adjusted to limit/minimize hauling activities during peak traffic hours.</li> <li>▪ Whenever the contractor's operations affect normal conditions for traffic or for public access, the contractor shall furnish, erect, and maintain, at its expense, all fences, barricades, lights, signs, and other devices necessary to prevent collisions or damage or injury to the public.</li> <li>▪ Construction area signs shall be furnished, installed, maintained, and removed when no longer required, in accordance with the provisions of Caltrans' Section 12 of the "State Specifications for Temporary Traffic Control" and any requirements of the special provisions.</li> <li>▪ The contractor shall furnish flaggers and guards necessary to give adequate warning to traffic and to the public of construction conditions. Flaggers and guards assigned to direct traffic or to warn the public of construction conditions shall perform their duties, and shall be provided with the necessary equipment, in accordance with the current edition of the Caltrans publication "Instructions to Flaggers." The equipment shall be furnished and kept clean and in good repair by the contractor. Signs, lights, flags, and other warning and safety devices shall conform to the requirements set forth in the current Caltrans "Manual of Traffic Controls for Construction and Maintenance Work Zones."</li> <li>▪ No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, including in pedestrian walkways, and at the end of each day and at other times when construction operations are suspended for any reason, the contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.</li> <li>▪ Construction activity shall not result in the closure of existing pedestrian sidewalks/ walkways, bicycle facilities, or public transit facilities. The contractor shall provide safe, clearly identifiable and separated pedestrian pathways, per the California Manual on Uniform Traffic Control Devices (CA MUTCD). Signs and barricades shall be required to direct pedestrians through or around the construction work zones and shall be shown on</li> </ul>	<p>contractor and Police Chief</p>				

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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Compliance Verification			
			Monitoring Timing	Initial	Date	Project/ Comments
<p>the TCP. More specifically, any sidewalk or walkway closure, or any other work that does not provide a continuous 4-foot-wide clear path of travel on the same side of the street, shall result in the identification of a marked detour route for pedestrians. Detours shall include pedestrian separation from moving vehicles by cones, k-rails, or another form of physical separation. The barriers must be provided and maintained at all times. Sidewalks and walkways shall not be closed in the middle of the block as this generally results in pedestrians having to walk around the work site, usually into the street, to continue down the sidewalk. The contractor shall be required to post and maintain the appropriate pedestrian signs, including "SIDEWALK CLOSED AHEAD / USE OTHER SIDE," "SIDEWALK CLOSED," "NO PEDESTRIAN CROSSING," and "USE CROSSWALK."</p> <p><b>TRANS-1d:</b> The contractor shall obtain authorization from Marin Transit and Golden Gate Transit if construction requires the temporary closure of any existing bus stops. If required by the transit agencies, the contractor shall establish temporary bus stops with appropriate passenger amenities during the construction period.</p> <p><b>TRANS-1e:</b> The contractor shall maintain all existing bicycle routes. During construction, temporary bike facilities may be delineated by cones, but the contractor shall maintain a clear and clean path of travel for bicyclists at all times. A bike route detour may be provided pending approval from the City. Signs such as "Bicyclists Allowed Full Use of Lane" or "Bicycle Route Detour" signs shall be posted.</p> <p>Implementation of Mitigation Measures TRANS-1a through TRANS-1e would ensure that the potential impact related to conflict with Belvedere General Plan Policy TC-1.3 would be less than significant.</p>	City of Belvedere Public Works Dept. working with Tribal Representative and qualified cultural resources specialist	City of Belvedere Public Works Dept.	During construction			
<p><b>Tribal Cultural Resources</b></p> <p><b>TCR-1a:</b> One tribal monitor shall be retained to monitor all vegetation clearing and removal, surface grading, excavation, and trenching within the project site. The tribal monitor shall have the authority to temporarily pause ground disturbance within 50 feet of the discovery for a duration long enough to examine potential tribal cultural resources (TCRs) that may become unearthed during the activity. If no TCRs are identified, then construction activities may proceed, and no agency notifications are required. In the event that a TCR is identified, the monitor shall flag off the discovery location and notify the City of Belvedere immediately to implement Mitigation Measure TCR-1b. Work can continue in other areas of the project during implementation of Mitigation Measure TCR-1b, as long as it is monitored if required.</p>						

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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial	Date	Compliance Verification Project/ Comments
<p><b>TCR-1b:</b> If any suspected tribal cultural resources (TCRs) are discovered during ground-disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed-upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area shall be immediately notified and shall determine if the find is a TCR (see Public Resources Code [PRC] Section 21074). The Tribal Representative shall make recommendations for further evaluation and culturally appropriate treatment as necessary. If deemed necessary by the City of Belvedere, a qualified cultural resources specialist meeting the Secretary of Interior's Standards and Qualifications for Archeology may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work at the discovery location may not resume until the City, in consultation as appropriate and in good faith, determines that all necessary investigation and treatment of the discovery under the requirements of the California Environmental Quality Act (CEQA), including Assembly Bill (AB) 52, have been satisfied.</p>						
<p><b>TCR-1c:</b> The City of Belvedere shall require the project contractor to provide a cultural resource and tribal cultural resource (TCR) sensitivity and awareness training program (Worker Environmental Awareness Program [WEAP]) for all personnel involved in project construction, including field consultants and construction workers. The WEAP shall be developed in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, as well as culturally affiliated Native American tribes. The City shall invite a Native American representative from interested culturally affiliated Native American tribes to participate. The WEAP shall be conducted before any project-related construction activities begin at the project site. The WEAP shall include relevant information regarding sensitive cultural resources and TCRs, including applicable regulations, protocols for avoidance, and consequences of violating state laws and regulations. The WEAP shall also describe appropriate avoidance and impact minimization measures for cultural resources and TCRs that could be located at the project site and shall outline what to do and whom to contact if any potential cultural resources or TCRs are encountered. The WEAP shall emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and shall discuss appropriate behaviors and responsive actions, consistent with Native American tribal values.</p>						
<p>The combination of Mitigation Measures TCR-1a, TCR-1b, and TCR-1c would reduce this impact to less than significant.</p>						