Initial Study/Mitigated Negative Declaration

Carter Park Improvement Project

(Project file #: PDP-19-059)

Prepared by

THE CITY OF HALF MOON BAY CALIFORNIA

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

November 2020

City of Half Moon Bay

Community Development Department

City Hall, 501 Main Street, Half Moon Bay CA 94019 Phone: (650) 726-8250 Website: www.half-moon-bay.ca.us

NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION

To: Interested Individuals
County of San Mateo

This is to advise that the **City of Half Moon Bay** has prepared an **Initial Study (IS)** to evaluate the environmental impacts of the project identified below, as required by the California Environmental Quality Act (CEQA). As mandated by State Law, the review period for this document is not less than 30 (thirty) days. Based upon the conclusions set forth in the IS, the City of Half Moon Bay proposes to adopt a Mitigated Negative Declaration (MND).

Project Title: Carter Park Improvement (project file PDP-19-059)

Project Location: The project is proposed at the site of the existing Carter Park, which is located in Downtown Half Moon Bay on Main Street, north of Pilarcitos Creek.

Project Description: The project proposes to renovate Carter Park with a new amphitheater and support building, children's play area, a picnic area, restroom/concession building, solidarity trail, entry sidewalks and pathway, and landscaping.

The 30-day review period for the IS and MND begins on November 4, 2020 and closes on December 4, 2020. Persons having comments concerning this project, including objections to the basis of determination set forth in the IS, are invited to furnish their comments summarizing the specific and factual basis for their comments, in writing to the City of Half Moon Bay. Please provide your contact information and send your comments to:

City of Half Moon Bay
Attention: Scott Phillips, Associate Planner
City Hall, 501 Main Street, Half Moon Bay, CA 94019
Fax: (650) 726-8261 or Email: SPhillips@hmbcity.com

The MND, IS, and appendices are available for download from the City's website: http://www.half-moon-bay.ca.us

In response to the COVID-19 and Shelter-in-Place policy, hard copies are no longer available at the typical locations such as the City of Half Moon Bay Community Development Department, Planning Division, located at City Hall, 501 Main Street; and at the Half Moon Bay Library, located at 620 Correas Street during normal business hours.

Therefore, if requested, a hard copy will be mailed to you. Please allow time for printing and delivery. For questions, please contact Scott Phillips at SPhillips@hmbcity.com.

City of Half Moon Bay

Community Development Department, Planning Division

City Hall, 501 Main Street, Half Moon Bay, CA 94019 Phone: (650) 726-8270 Website: www.half-moon-bay.ca.us

DRAFT
MITIGATED NEGATIVE DECLARATION

I. DESCRIPTION OF PROJECT:

APNs: 056-391-040

Project Title: Carter Park Improvement Project (PDP-19-059)

Project Location: The project is located at 10 Stone Pine Road within the existing Carter Park.

Project Applicant: City of Half Moon Bay

Project Description: The project proposes renovations to Carter Park including a new amphitheater with terraced seating, a stage/support building, children's play area, a picnic area, restroom and concession stand, trail, entry sidewalks and pathway, and landscaping.

II. DETERMINATION

In accordance with the City of Half Moon Bay procedures for compliance with the California Environmental Quality Act (CEQA), the City has completed an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. On the basis of that study, the City makes the following determination:

- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures are included in the project and, therefore, this **MITIGATED NEGATIVE DECLARATION** has been prepared.

III. CONDITIONS (Mitigation and Avoidance Measures):

Aesthetics

Light and Glare Impacts

Mitigation Measure: The following measure, consistent with the Parks Master Plan IS/MND, shall be implemented to reduce light and glare impacts:

MM AES-4.1: To avoid light and glare impacts from park projects and to protect the coastside dark night skies valued by the Park Master Plan, the City shall prepare a photometric lighting plan for each park project that contains a night lighting element to it. The lighting plan should provide design and illumination requirements of the project and address how the plan reduces any light and glare impacts and protects dark night skies. The lighting plan shall specify how light will be shielded and contained within the park site to the greatest extent possible. The lighting plan shall be subject to review and approval by the Planning Commission to ensure the photometric lighting plan adequately reduces light and glare impacts to a less than significant level.

Air Quality

Construction Dust Emissions

Standard Condition: The project shall implement the following standard BAAQMD dust control measures during all phases of construction on the project site:

- All active construction areas shall be watered twice daily or more often if necessary. Increased watering frequency shall be required whenever wind speeds exceed 15 miles-per-hour.
- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads and parking and staging areas at construction sites.
- Cover stockpiles of debris, soil, sand, and any other materials that can be windblown. Trucks transporting these materials shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day or as often as necessary to keep them free of dust and

debris associated with site construction. The use of dry power sweeping is prohibited.

- Subsequent to clearing, grading, or excavating, exposed portions of the site shall be watered, landscaped, treated with soil stabilizers, or covered as soon as possible. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for 10 days or more.
- Installation of sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replanting of vegetation in disturbed areas as soon as possible after completion of construction.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. 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.
- Post a publicly visible sign with the telephone number and person to contact at the City of Half Moon Bay 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.

Biological Resources

Special Status Animal Species

Mitigation Measures: The project shall implement the following measures to reduce impacts to special status animal species:

MM BIO-1.1: Receive Agency Approval of Qualified Biologist. The qualifications of biologist(s) experienced with the California red-legged frog, San Francisco garter snake, and western pond turtle will be submitted to the USFWS and CDFW for review and written approval at least thirty (30) calendar days prior to the start of project activities.

MM BIO-1.2: Install Temporary Wildlife Exclusion Barrier. Prior to any ground disturbance in the impact area, an agency-approved temporary wildlife exclusion barrier will be installed along the limits of disturbance, including along the areas of new/re-paved paths from Main Street and the proposed concrete and resin paths at the southeastern corner of the site, and along the proposed path that loops around the stage through the 50-foot riparian setback. An agency-approved biologist will inspect the area prior to installation of the barrier. The barrier will be designed to allow the California red-legged frog, San Francisco garter snake, and western pond turtle to leave the impact area and prevent them from entering the impact area, and will remain in place until all development activities have been completed. This barrier will be inspected daily and maintained and repaired as necessary to ensure that it is functional and is not a hazard to individuals of these species on the outer side of the barrier.

MM BIO-1.3: Conduct Preconstruction Survey. No more than twenty-four (24) hours prior to the date of initial ground disturbance and before any work within the riparian setback until the exclusion fence is fully erected, a pre-construction survey for the California red-legged frog, San Francisco garter snake, and western pond turtle will be conducted by an agency-approved biologist within the impact area. The survey will consist of walking

the limits of impact to ascertain the possible presence of the species. The agency-approved biologist will investigate all potential areas that could be used by individuals of these species for feeding, breeding, sheltering, movement, and other essential behaviors. This includes an adequate examination of mammal burrows, such as California ground squirrels or gophers.

MM BIO-1.4: Worker Environmental Awareness Program. All construction personnel will participate in a worker environmental awareness program. These personnel will be informed about the possible presence of all special-status species and habitats associated with the species identified here to be potentially present in the project area. Prior to construction activities, the agency-approved biologist will instruct all construction personnel about (1) the description and status of the species; (2) the importance of their associated habitats; and (3) a list of measures being taken to reduce impacts on these species during project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the construction crew and anyone else who enters the project site.

MM BIO-1.5: Construction Monitoring. An agency-approved biologist(s) will be onsite during all project activities that may result in take of any of these three species (e.g., during all clearing and rough grading, or during any activities that are not enclosed within the wildlife exclusion barrier). The agency-approved biologist(s) will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site, otherwise associated with the project, the USFWS, the CDFW, or their designated agents. The agency-approved biologist will have oversight over implementation of all the conservation measures and will have the authority and responsibility to stop project activities if they determine any of the associated requirements are not being fulfilled. The agency-approved biologist(s) may modify the daily monitoring requirement based upon professional judgement, in consultation with the City. If the agency-approved biologist(s) exercises this authority, the USFWS will be notified by telephone and electronic mail within twenty-four (24) hours.

MM BIO-1.6: Steep-walled Holes and Trenches. To prevent inadvertent entrapment of the California red-legged frog, San Francisco garter snake, or western pond turtle during construction, the agency approved biologist and/or construction foreman/manager will ensure that all excavated, steep-walled holes or trenches more than one foot deep are completely covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the agency-approved biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the agency-approved biologist and/or construction foreman/manager. If at any time a trapped California red-legged frog, San Francisco garter snake, or western pond turtle is discovered by the agency-approved biologist or anyone else, the steps in MM BIO-1.7 will be followed.

MM BIO-1.7: Protocol if California Red-legged Frog, San Francisco Garter Snake, or Western Pond Turtle is Encountered. If a California red-legged frog, San Francisco garter snake, western pond turtle, or any animal that construction personnel believes may be either of these species, is encountered during project construction, the following procedures will be followed:

- All work that could result in direct injury, disturbance, or harassment of the

individual animal shall immediately cease.

- The foreman and agency-approved biologist will be immediately notified.
- The agency-approved biologist will determine if the animal is a California red-legged frog, San Francisco garter snake, or western pond turtle and if so will follow MM BIO-1.8 for California red-legged frog or western pond turtle, or MM BIO-1.9 for San Francisco garter snake.

MM BIO-1.8: Relocation of California Red-legged Frogs and Western Pond Turtles. If any life stages of the California red-legged frog are found, the agency-approved biologist will contact the USFWS to determine if moving individuals is appropriate. If the USFWS approves moving animals, the biologist will move the red-legged frogs to suitable habitat at least 300 m from the project area. The same procedure will be followed with respect to western pond turtles, although no USFWS approval to relocate that species is necessary. Only agency-approved biologists will capture, handle, and move California red-legged frogs or western pond turtles. The agency-approved biologist will monitor any relocated frog or turtle until it is determined that it is not imperiled by predators or other dangers.

MM BIO-1.9: Monitor San Francisco Garter Snake. The agency-approved biologist will monitor any individual of the San Francisco garter snake encountered within the impact area but allow it to leave the impact area on its own. If the agency-approved biologist determines that the snake cannot leave on its own, then the USFWS and CDFW will be consulted to determine if the snake can be captured and relocated to appropriate habitat on the outside of the impact area.

MM BIO-1.10: Daytime Restriction. Construction activities related to park improvements will be restricted to the daytime. No nighttime construction will occur.

MM BIO-1.11: Food and Trash. To eliminate an attraction for the predators of the California red-legged frog, San Francisco garter snake, and western pond turtle, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site. As part of routine park maintenance, City staff will remove trash on a regular schedule to prevent trash bins from overfilling.

MM BIO-1.12: Prohibition of Plastic Mono-filament Netting. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material will not be used at the project site to prevent trapping California red-legged frogs, San Francisco garter snakes, western pond turtles, or other species.

MM BIO-1.13: Best Management Practices. The project shall obtain a NPDES permit, which will contain standard Best Management Practices (BMPs). During all construction implementation, standard BMPs will be used to minimize erosion and impacts to water quality to protect water quality in areas used by the California red-legged frog, San Francisco garter snake, and western pond turtle. These will be incorporated into the proposed project. Construction BMPs shall include but are not limited to the following:

- No litter, debris, or sediment will be dumped into existing site drainage systems. Trash and debris will be removed from the project site on a daily basis during construction and regularly during park operations.

- Equipment staging and parking of vehicles will occur on established access roads and flat surfaces.
- The integrity and effectiveness of construction fencing and erosion control measures will be inspected on a daily basis. Corrective actions and repairs will be carried out immediately for fence breaches and ineffective BMPs.
- No fueling, washing, and maintenance of vehicles shall occur on the site. Equipment will be regularly maintained to avoid fluid leaks. Any leaks will be captured in containers until equipment is moved to a repair location. Hazardous materials will not be stored on the site during construction
- Sediment-laden water will not be allowed to enter the stream channel.
- Absorbent materials designated for spill containment and clean-up activities shall be available on site for use in an accidental spill.

MM BIO-1.14: Avoidance. Construction activities will be scheduled to avoid the nesting season to the extent practicable. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Preconstruction Surveys. If it is not practicable to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds will be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., shrubs and bridges) in and immediately adjacent to the impact area for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

MM BIO-1.15: Surveys for roosting bats as required by state and local regulations shall be undertaken in areas where suitable habitat for such species is present to minimize potential adverse impacts to these species. No more than five days before the start of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading), a survey of suitable roosting bat habitat shall be conducted within the project site, including a 50-foot buffer. If evidence of bat roosting (e.g., guano accumulation, acoustic or visual detections) is found, CDFW shall be consulted to determine appropriate measures, such

as bat exclusion methods, if the roost cannot be avoided. The results of the surveys shall be documented.

MM BIO-1.16: Reduce and Minimize Lighting Impacts. The City shall prepare a photometric lighting plan. The plan shall ensure that during park operations, production lighting is focused or shielded so that lighting is directed towards the stage, not above the stage and not to the side. The lighting plan shall be subject to review and approval by the Planning Commission to ensure the photometric lighting plan adequately reduces light and glare impacts to a less than significant level.

Impacts to Riparian Areas

Mitigation Measure: The project shall implement the following measure to reduce impacts to riparian areas:

MM BIO-2.1: If project activities require pruning of riparian trees or shrubs, a certified arborist will be retained to perform any necessary pruning to minimize harm to vegetation, ensure rapid regeneration, and limit pruning to the minimum area necessary.

MM BIO-2.2: Invasive Species Best Management Practices (BMPs). The following BMPs will be implemented to limit the spread of invasive species into sensitive habitats:

- All ground disturbing equipment used adjacent to the riparian habitat will be washed (including wheels, tracks, and undercarriages) at a legally operating equipment yard both before and after being used at the site.
- All applicable construction materials used on site, such as straw wattles, mulch, and fill material, will be certified weed free.
- The project will follow a stormwater pollution prevention plan as per the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ) if applicable.
- All bare soil resulting from project disturbance will be stabilized and planted with landscaping or a native seed mix from a local source following construction.
- Any cape ivy removed from the riparian corridor, i.e. during pruning near the entrance path, will be disposed of at a legally operating landfill or other off-site facility capable of handling noxious weed material.

Impacts to Trees

Standard Conditions: Consistent with the City of Half Moon Bay Standard Planning Conditions and Municipal Code, the proposed project would implement the following measures:

- The three (3) Heritage Trees to be removed will be replaced on a one-for-one basis with a minimum size twenty-four-inch-box specimen tree of a species and in a location approved by the City manager or his or her designee.
- The following tree protection measures shall be implemented during construction:

- Prior to commencement of construction, construction fencing shall be placed around the drip line of all trees proposed for preservation.
- No grading or other construction shall occur within the drip line of any tree proposed for preservation except in conformance with a Tree Protection Plan approved by the Community Development Director.
- No vehicle, equipment or materials shall be parked or stored within the drip line of any tree proposed for preservation.

Cultural Resources

Impacts to Archaeological Resources

Standard Condition: Consistent with the City of Half Moon Bay Standard Planning Conditions, the proposed project would implement the following measure:

- If subsurface historic or archaeological resources are uncovered during construction, all work shall stop, the applicant shall notify the Community Development Director and retain a qualified archaeologist to perform an archaeological reconnaissance and identify any mitigation measures required to protect archaeological resources. Subsurface excavation shall not resume until expressly authorized by the Director.

Standard Condition: Consistent with the City of Half Moon Bay Standard Planning Conditions, the proposed project would implement the following measure:

- Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the NAHC who shall attempt to identify descendants of the deceased Native American(s). If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the permittee shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

Geology and Soils

Seismicity

Standard Condition: Consistent with the City of Half Moon Bay Standard Planning Conditions, the proposed project would implement the following measure:

- All structures shall be constructed in compliance with the standards of the 2019 California Codes of Regulations Title 24, including Building Code, Residential Code, Administrative Code, Mechanical Code, Plumbing Code, Electrical Code, Energy Code, Fire Code and Green Building Code to the satisfaction of the Building Official.

Erosion

Standard Condition: Prior to issuance of grading permits, an erosion and sediment control plan shall be submitted that shows effective Best Management Practices (BMP) and erosion and sediment control measures for the site. Construction plans shall also include the "construction best management practices" plan sheet.

Paleontological Resources

Mitigation Measure: The project shall implement the following measure to reduce impacts to potential paleontological resources:

MM GEO-6.1: If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The City will be responsible for ensuring that the recommendations of the paleontologist regarding treatment and reporting are implemented.

Hydrology and Water Quality

Water Quality Impacts

Standard Condition: Consistent with the City of Half Moon Bay Standard Planning Conditions, the proposed project would implement the following measure:

- Prior to the issuance of grading permits, an erosion and sediment control plan shall be submitted that shows effective Best Management Practices (BMP) and erosion and sediment control measures for the site. Construction plans shall also include the "construction best management practices" plan sheet.

Standard Conditions: Consistent with the MRP and City of Half Moon Bay Standard Planning Conditions, the proposed project would implement the following measures:

- Prior to issuance of a building permit, a stormwater management-treatment plan shall be submitted showing site design, source control, stormwater treatment, low impact development (LID), hydro modification management (HM) controls, and construction best management practices (BMP) for compliance with Provision C.3 of the Municipal Regional Stormwater Permit.

- The stormwater management-treatment plan shall include exhibit(s) showing drainage areas and location of Low Impact Development (LID) treatment measures; project watershed; total project site area and total area of land disturbed; total new and/or replaced impervious area; treatment measures and hydraulic sizing calculations; a listing of source controls and site design measures to be implemented at the site; hydro modification management measures, and supporting calculations. Hydro modification controls shall be designed using the Bay Area Hydrology Model (BAHM),

unless the applicant uses an alternative continuous simulation hydrologic computer model as described in Attachment E of the MRP.

III. FINDING

The City of Half Moon Bay Community Development Director hereby finds that the proposed project could have a significant effect on the environment; however, there would not be a significant effect in this case because the mitigation measures summarized above and described in the Initial Study are included in the project.

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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Half Moon Bay, as the Lead Agency, has prepared this Initial Study for the Carter Park Improvement Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City Half Moon Bay, California.

The project proposes to renovate Carter Park with a new amphitheater and support building, children's play area, a picnic area, restroom and concession stand, solidarity trail, entry sidewalks and pathway, and landscaping. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments during the 30-day public review period concerning the environmental review contained in this Initial Study should be sent to:

Scott Phillips, Associate Planner
City of Half Moon Bay Planning Division
501 Main Street
Half Moon Bay, CA 94019

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Half Moon Bay will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Half Moon Bay will file a Notice of Determination (NOD) at the County Clerk's Office and the State Clearinghouse, which will be available for public inspection for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Carter Park Improvement Project

2.2 LEAD AGENCY CONTACT

Scott Phillips, Associate Planner
City of Half Moon Bay Planning Division
501 Main Street
Half Moon Bay, CA 94019
650-726-8299
sphillips@hmbcity.com

2.3 PROJECT APPLICANT

City of Half Moon Bay

2.4 PROJECT LOCATION

10 Stone Pine Road, Half Moon Bay, CA 94019

2.5 ASSESSOR'S PARCEL NUMBER

APN: 056-391-040

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan/Local Coastal Land Use Designation: Planned Development (PD) District (Andreotti PD)
Zoning District: PUD – Planned Unit Development

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

The required permits for the project approval include a Coastal Development Permit, Architectural Review, Use Permit and Parking Exception. A Reciprocal Parking and Access Agreement with the adjacent landowner is also anticipated.

SECTION 3.0 PROJECT DESCRIPTION

3.1 EXISTING CONDITIONS

John L. Carter Park is located in Downtown Half Moon Bay. The 0.96-acre park is bounded by Main Street to the west, Pilarcitos Creek to the south and east, and a parking lot with commercial uses to the north. Refer to Figure 3.2-1, Figure 3.2-2, and Figure 3.2-3 for regional, vicinity, and aerial maps of the park, respectively.

The park slopes down to the south towards Pilarcitos Creek (which forms the southern border of the park) and flattens at the center, forming a bowl-like topography that is used as an amphitheater. A City planted redwood grove with a small circular brick mortar wall and sculpture are located at the center of the park. A paved sidewalk along the northern perimeter of the park connecting to Main Street and the commercial parking lot to the north provides access to the park. A paved pathway from the sidewalk to the center of the park provides Americans with Disabilities Act (ADA) access. Metal stairs with concrete headers and footers also connect the sidewalk to the center of the park. The existing park amenities are shown on Figure 3.2-4.

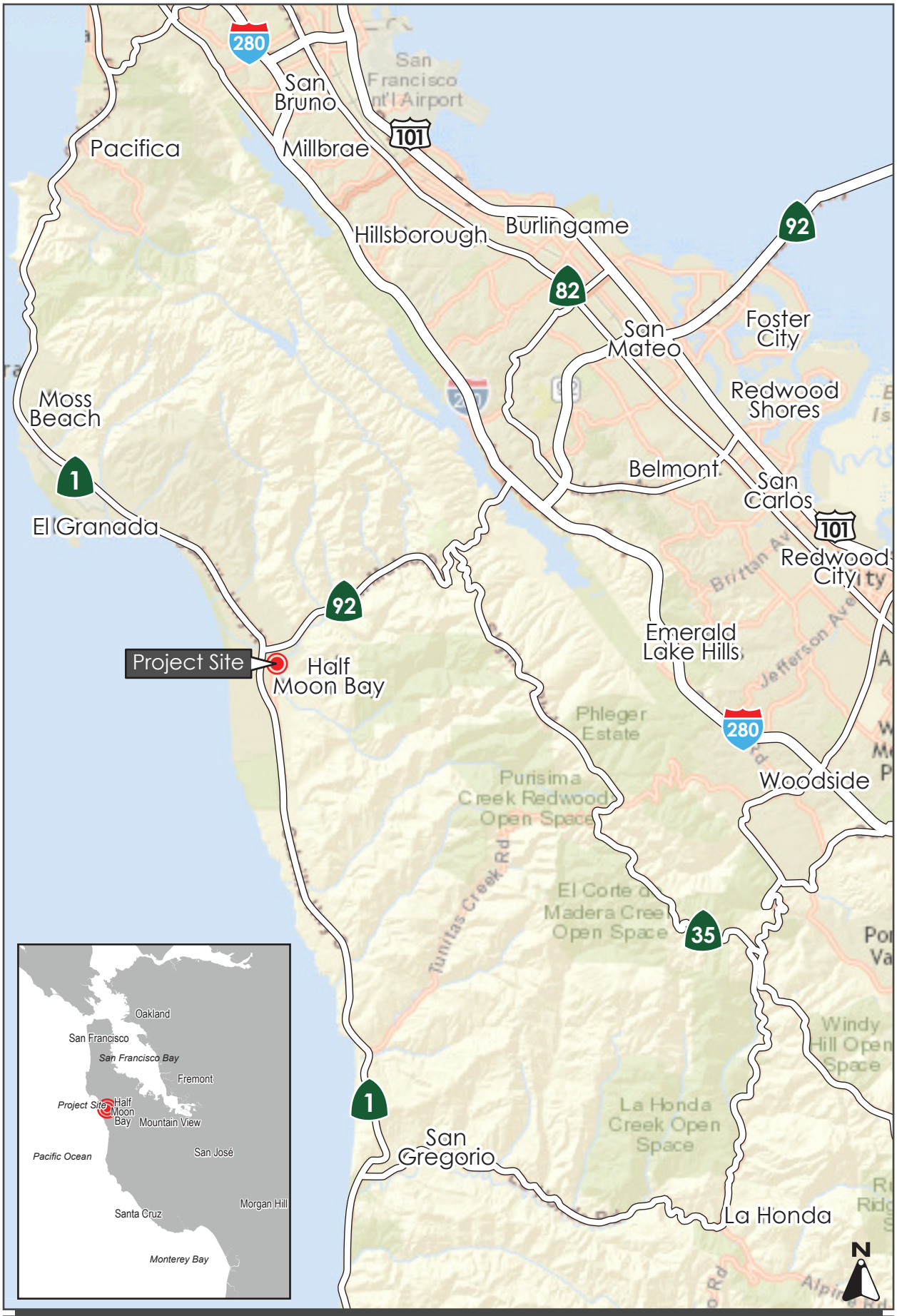
The Pilarcitos Creek 50-foot riparian buffer zone extends into the developed Carter Park. Existing park development within the riparian buffer zone includes the eastern and western end of the sidewalk and the eastern end of the ADA pathway. Small sections of the existing sidewalk and the ADA pathway are also within the Pilarcitos Creek riparian corridor. Refer to Figure 3.2-4 for the demolition plan showing the existing development.

The park is generally open from sunrise to sunset, seven days a week. The park is primarily used for picnicking, dog walking, and performing arts (i.e., Shakespeare in the Park and the Summer's End Music Festival). For picnicking, there is a small circular seat wall and grassy area. For performing arts, temporary enhancements must be rented or constructed on the site each year for performances. Shakespeare in the Park holds up to three weekends of performances, and average attendance is around 20 people per performance. The Summer's End Music Festival consists of live music, children's activities, informational booths, and food and drinks. Attendance has increased in recent years from an estimated 200 to 500 people over the course of the all-day event. The park does not contain parking or restroom facilities. For this and other larger events parking is provided via public parking in the downtown area and within adjoining businesses with agreements. Portable restrooms are used to address needs of patrons in larger events.

3.2 PROPOSED PROJECT

Consistent with the adopted Half Moon Bay Parks Master Plan and associated adopted Mitigated Negative Declaration (Parks Master Plan MND), the project proposes renovations to Carter Park including a new amphitheater with terraced seating, a stage/support building, children's play area, a picnic area, restroom and concession stand, trail, entry sidewalks and pathway, and landscaping.[1] The proposed site plan is shown on Figure 3.2-5.

[1] (1) City of Half Moon Bay. *Parks Master Plan*. January 2019. Page 4.13. (2) City of Half Moon Bay. Parks Master Plan Initial Study/Mitigated Negative Declaration. February 5, 2019.

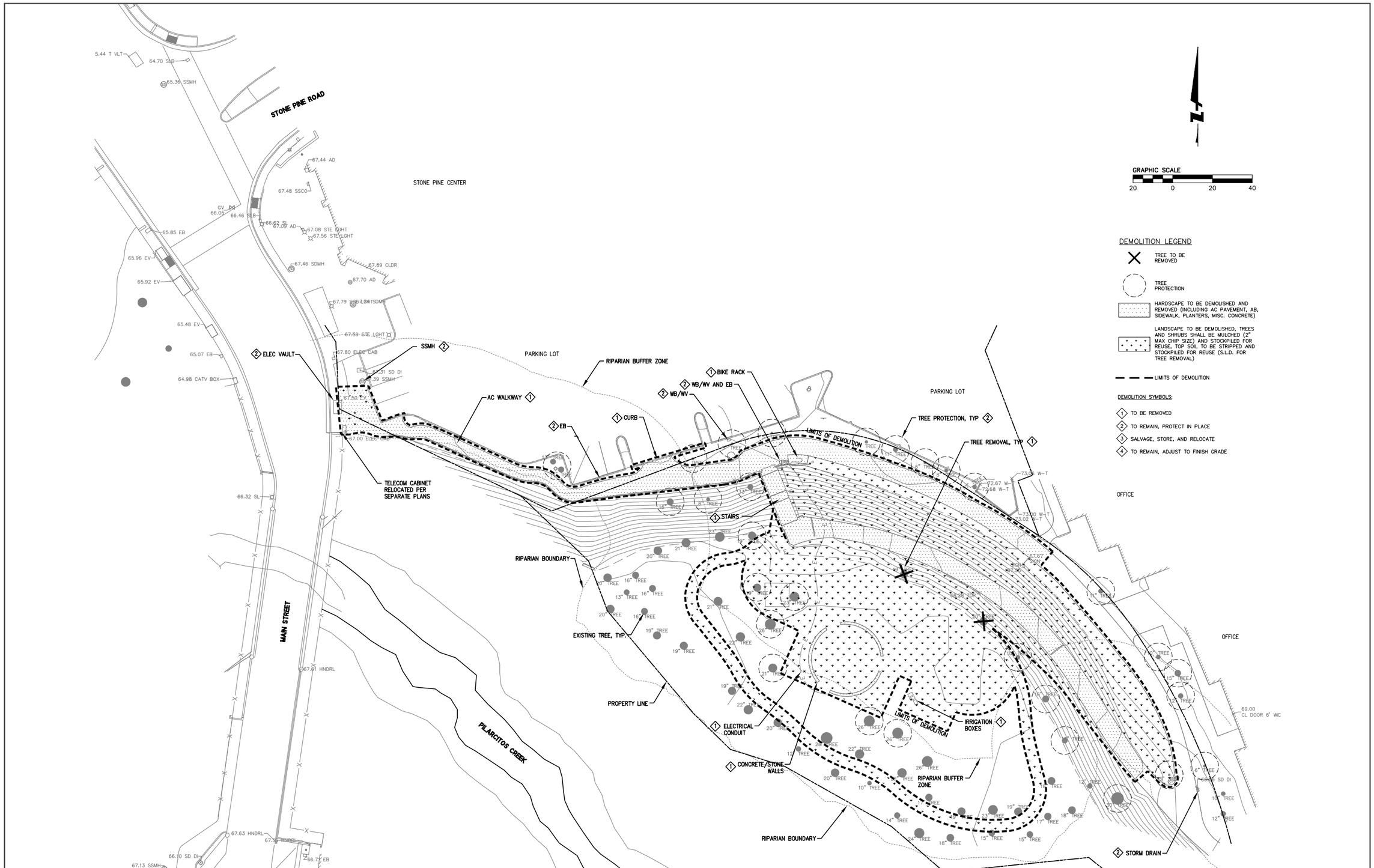


REGIONAL MAP | FIGURE 3.2-1

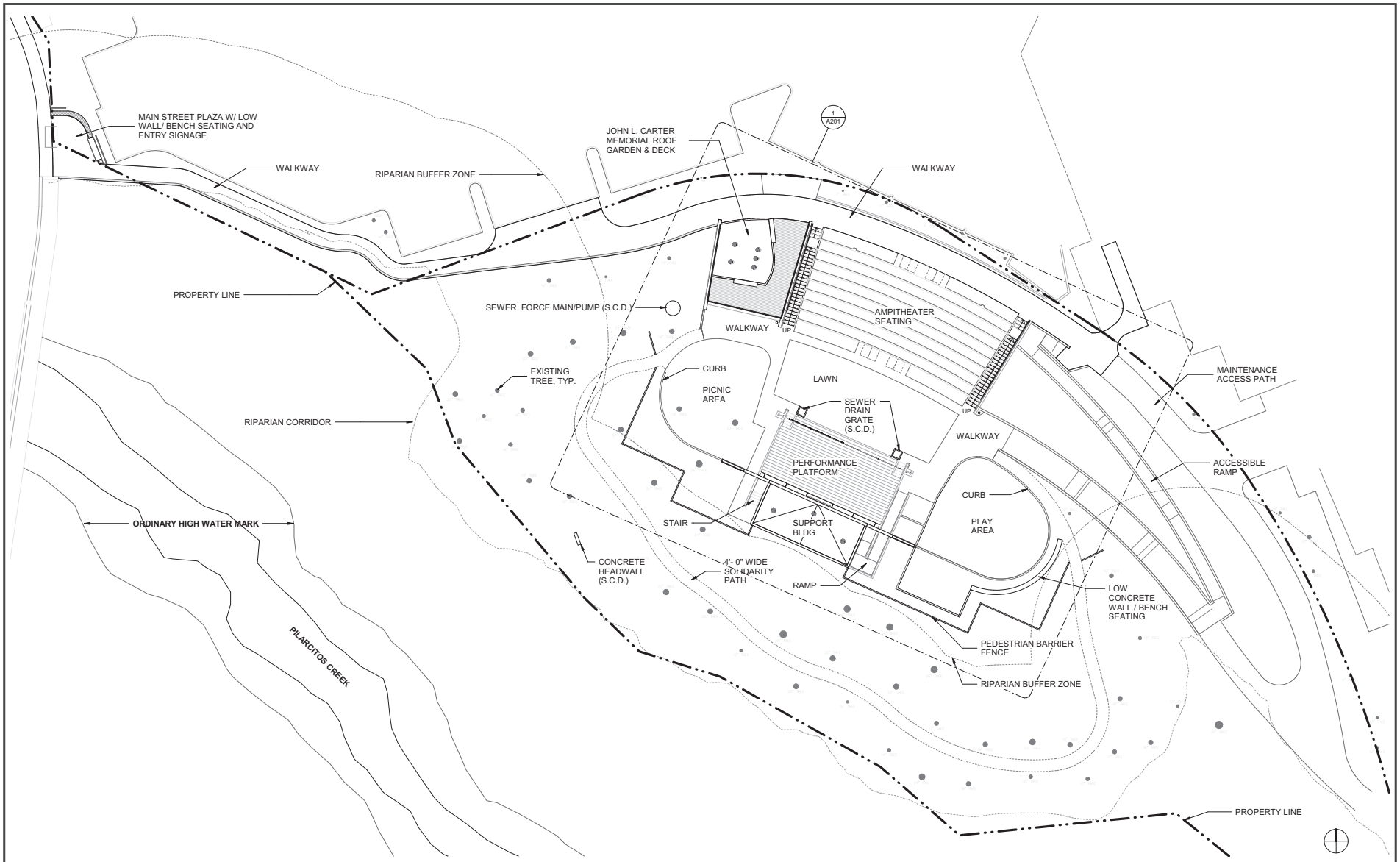
VICINITY MAP

FIGURE 3.2-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3.2-3



DEMOLITION PLAN | FIGURE 3.2-4



CONCEPTUAL SITE PLAN | FIGURE 3.2-5

3.2.1 Amphitheater and Seating

The proposed amphitheater would seat approximately 440 people. The amphitheater stage would face north, away from the creek. Seating would consist of terraced steps covered in artificial turf or hearty groundcover on the existing park slope, and lawn seating in front of the stage. A small support building providing storage space and changing rooms would be located behind the stage. The proposed amphitheater and support building would be located entirely outside the 50-foot riparian buffer zone.

3.2.2 Play Area, Picnic Area, and Restroom/Concession Building

A children's play area is proposed and would be located to the east of the amphitheater stage. This area would have rubberized surfacing and play structures. A new restroom/concession building with a garden rooftop would be located to the west of the amphitheater seating, and a picnic area with tables and decomposed granite paving would be located to the west of the amphitheater stage.

3.2.3 Park Access

Park access would remain similar to existing conditions. New signage would be installed at the Main Street park entrance (near the Main Street Bridge), and a new concrete sidewalk would replace the existing sidewalk from Main Street leading to the park. The existing ADA compliant pathway at the east end of the sidewalk would be partially replaced and reconfigured to include an additional switchback.

3.2.4 Landscaping, Trail, and Lighting

Updated irrigated landscaping with several native species would be installed throughout the renovated park. The project would remove two trees and plant nine trees within the park.

A "solidarity" trail looping behind the amphitheater and connecting the proposed picnic area on the west side of the park to the ADA compliant pathway on the east side of the park would be constructed. Interpretive signage and split rail fencing would also border the trail. The decomposed granite trail would be partially located in the riparian buffer zone, as allowed under the City's Municipal Code **(**Section 18.38.075 [Riparian Corridors and Buffer Zones]) in light of its educational and interpretive nature

Proposed lighting within the park includes bollard lighting for security and public safety and evacuations, and two 18-foot high lighting poles within the lawn seating area to support stage productions. Alarm systems and motion lights would be installed on all structures. A blue light emergency call box would also be installed on-site. All proposed lighting would be shielded and angled down towards the ground and away from Pilarcitos Creek, except for the production lighting, which would only be used during performances and would be turned off when the park closes at sunset.

3.2.5 Utilities

New water and sanitary sewer utilities are to be extended to the proposed restroom and concessions building. A four-inch sanitary sewer line would connect the building to the existing sanitary sewer main in Main Street. The building would connect to the existing water line serving the park.

3.2.6 Operation

The proposed improvements would formalize the existing park uses. The park hours are set by the City Council and codified in the Municipal Code. No changes are proposed presently, and the park would remain open sunrise to sunset, seven days a week. Performances (e.g., Shakespeare in the Park, Summer's End Music Festival, and possibly other performances) would continue to take place at the park on Fridays and weekends. The existing and new park improvements, as well as landscaped areas would be regularly maintained. Large events, such as the Shakespeare in the Park and Summer's End Music Festival, will continue to be subject to special event permits that will address the unique needs of each event. It is anticipated the park would host approximately 15 large events per year.

3.2.7 Construction

Most of the existing park facilities would be demolished and removed prior to the proposed park renovation (refer to Figure 3.2-4). Soil cut and fill during project construction activities are estimated at approximately 1,330 and 830 cubic yards, respectively, resulting in a net of approximately 500 cubic yards to be off-hauled to the Ox Mountain Sanitary Landfill. Soils would be sampled to characterize the soil prior to off-hauling. Clean soils transported to Ox Mountain Sanitary Landfill are recycled for use. Project construction, including demolition and removal of existing park facilities, is estimated to take approximately six to nine months to complete if constructed in a single phase. Due to funding issues, the project may be constructed in up to three phases with total construction time likely extending to 12-months.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

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

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State Route (SR) 1, which is located approximately 0.3 miles (over 500 yards) west of Carter Park, is a state designated Scenic Highway beginning at the southern City limits and continuing south. The stretch of SR 1 within City limits is not an officially designated Scenic Highway.[2] The park is not visible from SR 1.

Local

Half Moon Bay Municipal Code

Chapter 18.37 of the City of Half Moon Bay Municipal Code contains several visual resource protection standards. The visual resource protection standards include scenic corridor standards, upland slope standards, old downtown standards, landscape design standards, screening standards, and standards for utilities, lighting and signs. The following policies are applicable to the proposed project:

- 18.37.020 Visual Resources Areas: New development within planned development areas shall be subject to development conditions as stated in the local coastal program land use plan for each planned development, to design review standards set forth in this title, and to standards set forth in this chapter regarding landscaping, signs, screening, lighting, parking areas and utilities. Highway 1 is a designated visual resource area; however, the project site is 0.3 miles (over 500 yards) away and not visible from the highway.
- 18.37.045 Significant Plant Communities: Significant plant communities including riparian vegetation along stream banks and bodies of water, notable tree stands, and unique species shall be preserved wherever possible.
- 18.37.050 Landscape Design Standards: Approval of a landscape plan will be based upon how well the plan addresses environmental and visual conditions specific to the site.

[2] California Department of Transportation. "Scenic Highways" Accessed April 7, 2020. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Local Coastal Program Policies

Chapter seven of the Land Use element of the City's Local Coastal Program (LCP) addresses the protection of views of scenic areas and visual resources visible from public roads and trails, public vista points, public recreation areas, and beaches and the preservation of the character and quality of distinctive architectural and historical resources of the City. The following visual and scenic resource policies are included in the City's LCP and are applicable to the proposed project:

- Policy 7-4: Utilities shall continue to be placed underground in all new developments.
- Policy 7-5: All new development, including additions and remodeling, shall be subject to design review and approval by the City Architectural Review Committee.
- Policy 7-8: New development, alterations to existing structures, and proposed demolitions in the downtown area, as designated on the Visual Resource Overlay Map, shall be subject to design approval in accordance with the following criteria: (a) Scale and style similar to that of the predominant older structures. (b) Continuity in building lines maintained along Main Street. (c) Existing older buildings which contribute significantly to the character of the area not demolished or altered in a manner which eliminates key architectural features.
- Policy 7-9: New development shall be sited and designed so as to avoid or minimize destruction or significant alteration of significant existing plant communities identified in the General Plan (which include riparian vegetation along stream banks, and notable tree stands).
- Policy 9.3.15 b (Andreotti): The total project area shall retain 25% in common or public open space (excluding public/private street and off-street parking areas).

4.1.1.2 *Existing Conditions*

Project Site

The 0.96-acre John L. Carter Park is located in downtown Half Moon Bay. The park slopes down to the south towards Pilarcitos Creek and flattens at the center, forming a bowl-like topography (see Photos 1 through 4). A City planted redwood grove with a small circular brick mortar wall and sculpture are located at the center of the park. A paved sidewalk along the northern perimeter of the park connecting to Main Street and the commercial parking lot to the north provides access to the park. A paved pathway from the sidewalk to the center of the park provides ADA access. A concrete stairway connects the upper access sidewalk to the center of the park. Views of the park are limited to the adjacent commercial uses to the north of the site. The park is not visible from Main Street.

As shown on the Half Moon Bay LCP Visual Resources Overlay Map, the existing park is located within a Planned Unit Development Zoning District Visual Resource Area. Projects within a Planned Unit Development Zoning District are required to be consistent with design criteria described in Section 18.37.020 of the Half Moon Bay Municipal Code.

Surrounding Area

Carter Park is bounded by Main Street to the west, Pilarcitos Creek to the south and east, and a parking lot with commercial uses to the north. The commercial buildings to the north consist of one-story, stucco buildings with Spanish tile roofs, and two-story, wood-structured buildings.

Main Street contains one- and two-story buildings with a mix of eclectic older and contemporary designs and older historic residences that have been converted to shops and restaurants. The area surrounding Main Street, including Carter Park, is located within "Old Downtown" and is considered a visual resource within City of Half Moon Bay due to its historic architectural character. Development within the Old Downtown is required to be consistent with design criteria described in Section 18.37.040 of the Half Moon Bay Municipal Code.

Photo 1: View of entrance to Carter park.

Photo 2: View of Carter Park from the metal stairs.

PHOTOS 1 & 2

Photo 3: View of Carter Park from the entrance pathway looking east.

Photo 4: View of Carter Park from the entrance pathway looking west.

PHOTOS 3 & 4

Light and Glare

Existing sources of ambient nighttime lighting include lighting of building exteriors for safety or architectural accents, lights within buildings that illuminate the exteriors of buildings through windows, landscape lighting, street lighting, parking lot lighting, and vehicle headlights. Glare in the project area is caused by the reflection of sunlight and electric lights off existing windows and building surfaces and vehicle headlights.

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [3] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

As described above, Carter Park slopes down towards the center of the park, forming a bowl-like topography. The center of the park is located at an elevation of 42 feet, which is 14 feet lower in elevation than the parking lot to the north. Views of the surrounding area are limited due to its topography and screening from the trees and vegetation along Pilarcitos Creek. For these reasons, the proposed project would not impact a scenic vista in compliance with the visual resource standards identified in Chapter 18.37. **(Less than Significant Impact)**

[3] Public views are those that are experienced from publicly accessible vantage points.

Impact AES-2:	The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(Less than Significant Impact)**

SR 1 is a state designated Scenic Highway beginning at the southern City limits and continuing south. The stretch of SR 1 within City limits is not an officially designated Scenic Highway; therefore, implementation of the proposed project would not impact a scenic resource within a state scenic highway. Regardless, the site is located 0.3 miles (over 500 yards) east of SR-1 with intervening downtown development and is not visible from SR-1. In addition, the proposed project would be consistent with adopted City policies including those in Chapter Seven of the LCP and Chapter 18.37 of the City's Municipal Code; and furthermore, the project design is consistent with the policy requirements for the Andreotti PD District as specified in the certified Local Coastal Land Use Plan (Policy 9.3.15). Thus, the project would not have a significant impact on scenic resources. **(Less than Significant Impact)**

Impact AES-3:	The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. **(Less than Significant Impact)**

Carter Park is bounded by a variety of land uses including commercial buildings, a church, an office park, Pilarcitos Creek, and Main Street. As mentioned above, the park is located in a significant plant community, as defined by Section 18.37.045 of the City's Municipal Code, due to its location adjacent to Pilarcitos Creek. In addition, the park contains a small grove of City planted and introduced non-indigenous redwood trees; however, they are not identified as a significant plant community and are not proposed to be removed as part of the project. The Parks Master Plan MND determined that consistency with Chapter 18.37.045 of the City's Municipal Code and existing LCP policies would ensure construction of the proposed project would not have a significant impact on the existing or surrounding visual character of the park. **(Less than Significant Impact)**

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact with Mitigation Incorporated)**

Carter Park is located south of a developed commercial area (Stone Pine Shopping Center) with existing sources of light and glare, and north of Pilarcitos Creek which is a riparian area with no artificial lighting. Proposed lighting within the park includes bollard lighting for security and public safety and evacuations, and two 18-foot tech lighting poles within the lawn seating area to support stage productions. Alarm systems and motion lights would be installed on all structures. A blue light emergency call box would also be installed on-site. All proposed lighting would be shielded and angled down towards the ground and away from Pilarcitos Creek except for the production lighting, which would be angled down towards the stage and Pilarcitos Creek. The production lighting would only be used during performances and would be turned off after each event, therefore, would not be a source of substantial light and glare. Improvements to the park could introduce new lighting and glare that significantly affects the riparian community in Pilarcitos Creek. As identified in the Parks

Master Plan MND, the following mitigation measure is included in the proposed project to reduce light and glare impacts to a less than significant level.

Mitigation Measure:

MM AES-4.1: To avoid light and glare impacts from park projects and to protect the coastside dark night skies valued by the Park Master Plan, the City shall prepare a photometric lighting plan for each park project that contains a night lighting element to it. The lighting plan should provide design and illumination requirements of the project and address how the plan reduces any light and glare impacts and protects dark night skies. The lighting plan shall specify how light will be shielded and contained within the park site to the greatest extent possible. The lighting plan shall be subject to review and approval by the Planning Commission to ensure the photometric lighting plan adequately reduces light and glare impacts to a less than significant level.

With implementation of MM AES-4.1 and the standard condition of approval, the proposed project would have a less than significant light and glare impact on the riparian community of Pilarcitos Creek. **(Less than Significant Impact with Mitigation Incorporated)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[4]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[5]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[6] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to Carter Park.[7]

4.2.1.2 *Existing Conditions*

Carter Park is located within a developed area of Half Moon Bay. The park site is designated "Urban and Built-Up Land" by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP).[8] The park does not meet the definition of forest land or timberland.

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[4] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 26, 2019. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

[5] California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.

[6] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

[7] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 26, 2019. http://frap.fire.ca.gov/.

[8] California Department of Conservation. *San Mateo County Important Farmland 2016*. February 2018.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

Carter Park is located in a developed area of the City and is zoned for urban uses. The park is not zoned for agricultural purposes nor is it subject to a Williamson Act contract. For these reasons, the proposed project would not result in impacts to agricultural or forest resources. **(No Impact)**

Impact AG-2: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

See discussion above under Impact AG-1. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

"Forest land" is defined as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

The project site is not designated timberland, forest land, or for Timberland Production. For this reason, the proposed project would have no impact arising from a conflict with forestland, timberland, or land zoned for Timberland Production. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

See discussion above under Impact AG-3. **(No Impact)**

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

See discussion above under Impact AG-1 and Impact AG-3. **(No Impact)**

4.3 AIR QUALITY

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[9] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

[9] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead, therefore, these criteria pollutants are not discussed further.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[10] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels

[10] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed May 21, 2020. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[11]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

4.3.1.3 *Existing Conditions*

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10}

[11] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Note: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations.

4.3.2.1 *Thresholds of Significance*

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Half Moon Bay has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2 below.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Average Daily Emissions (pounds/day)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 µg/m^3	0.8 µg/m^3 (average)	

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant Impact)**

Construction

The project would be smaller than the BAAQMD CEQA Air Quality Guidelines Construction-Related Pollutant Screening Size for city parks (67 acres). Therefore, the project would not result in the generation of construction-related criteria air pollutants and/or precursors that exceed the thresholds shown in Table 4.3-2.

Operation

Project operation would not conflict with the 2017 CAP because it would be smaller than the BAAQMD CEQA Air Quality Guidelines Operational Criteria Pollutant Screening Size for city parks (2,613 acres), is considered urban infill, and would be located near bike paths and transit with regional connections. Because the project would not exceed the BAAQMD screening criteria, it would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the thresholds shown in Table 4.3-2. Thus, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Further, implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air

quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

Impact AIR-2:	The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact)**

Carbon monoxide emissions from project-generated traffic would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of carbon monoxide. Air pollutant monitoring data indicate that carbon monoxide levels have been at healthy levels (i.e., below state and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as an area of attainment for the standard. The highest measured level over any eight-hour averaging period during the last three years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. The proposed project would not cause increased traffic volumes at any intersection such that the intersection would exceed more than 44,000 vehicles per hour or affect any intersections where horizontal mixing is substantially limited (e.g. tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway).[12] Therefore, the proposed project would not violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation. **(Less than Significant Impact)**

Impact AIR-3:	The project would not expose sensitive receptors to substantial pollutant concentrations**. (Less than Significant Impact)**

Construction Air Quality Impacts

Fugitive Dust/Particulate Matter

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of respirable particulate matter (PM_{10} and $PM_{2.5}$). Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soil. The amount of dust generated would be variable, and would be dependent on the size of the area disturbed at any given time, the amount of construction activity, soil type and moisture, and meteorological conditions. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices (BMPs) are employed to reduce these emissions. The proposed project would be required to incorporate the following standard condition of approval to reduce fugitive dust during construction.

Standard Condition: The project shall implement the following standard BAAQMD dust control measures during all phases of construction on the project site:

[12] For projects such as the proposed park project, the BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized carbon monoxide concentrations if the project would not increase traffic at affected intersections with more than 44,000 vehicles per hour. Source: BAAQMD. *CEQA Air Quality Guidelines*. May 2017.

- All active construction areas shall be watered twice daily or more often if necessary. Increased watering frequency shall be required whenever wind speeds exceed 15 miles-per-hour.
- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads and parking and staging areas at construction sites.
- Cover stockpiles of debris, soil, sand, and any other materials that can be windblown. Trucks transporting these materials shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day or as often as necessary to keep them free of dust and debris associated with site construction. The use of dry power sweeping is prohibited.
- Subsequent to clearing, grading, or excavating, exposed portions of the site shall be watered, landscaped, treated with soil stabilizers, or covered as soon as possible. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for 10 days or more.
- Installation of sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replanting of vegetation in disturbed areas as soon as possible after completion of construction.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. 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.
- Post a publicly visible sign with the telephone number and person to contact at the City of Half Moon Bay 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.

With implementation of the above standard condition of approval, the proposed project would not result in significant construction dust emissions impacts. **(Less than Significant Impact)**

Community Risk Impacts – Toxic Air Contaminants

Emissions from construction-related equipment and associated heavy-duty diesel truck traffic are the primary concern due to release of DPM, which is a known TAC. Construction activities are also a source of $PM_{2.5}$. The nearest sensitive receptors are single-family homes located approximately 350 feet north of Carter Park across Stone Pine Road. While construction of the proposed project would emit $PM_{2.5}$ in the form of DPM, these emissions would not be at substantial concentrations due to the fact the improvements are relatively small in nature and construction time would be short in duration ranging from 6 to 12 months depending upon ultimate funding and phasing. For these reasons, the project would not expose sensitive receptors to substantial TAC concentrations. **(Less than Significant Impact)**

Impact AIR-4:	The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

Project construction activities would generate typical odors, such as fuel and oil odors and asphalt paving odors. The odors generated would be intermittent, localized in nature, and would disperse quickly. Therefore, implementation of the proposed project would not create objectionable odors affecting a substantial number of people. **(Less than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based upon a biological resource report prepared by H.T. Harvey & Associates in July 2020. A copy of this report is provided as Appendix A to this Initial Study.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and State endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[13] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control

[13] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed May 21, 2020. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Local Coastal Program

The California Coastal Act (Coastal Act) of 1976 required local governments within the Coastal Zone to produce and implement Local Coastal Programs (LCPs), which are discussed further in Section 4.10 Land Use. LCPs include Coastal Act policies that are designed to protect environmentally sensitive habitat areas located within the Coastal Zone. Unique animal and plant species listed in the LCP include raptors (e.g. owls, haws, eagles, and vultures), red-legged frogs, sea mammals (e.g. whales, dolphins, seals, sea otters, and sea lions), Monterey pine, and California wild strawberry. Raptors, red-legged frogs, and Monterey Pine are present at the project site. There is no suitable habitat for California wild strawberry and no sea mammals are present at the project site.

Half Moon Bay Heritage Trees

Chapter 7.40 of the City of Half Moon Bay Municipal Code prohibits the removal of heritage trees without a tree removal permit. The Municipal Code defines a "heritage tree" as a) A tree located on public or private property, exclusive of eucalyptus, with a trunk diameter of twelve inches or more, or a circumference of at least thirty-eight inches measured at forty-eight inches above ground level, b) A tree or stand of trees so designated by resolution of the city council based on its findings of special historical, environmental or aesthetic value, and or c) A tree located within the public right-of-way along the entire length of Main Street or along Kelly Avenue between San Benito Street and SR 1. If removed, a heritage tree must be replaced, pursuant to the aforementioned tree removal permit, on a one-for-one basis with a minimum size twenty-four-inch-box specimen tree of a species and in a location approved by the City.

Half Moon Bay Coastal Resource Conservation Standards

Chapter 18.38 of the Half Moon Bay Zoning Code limits or prohibits urban development within coastal resource areas that would have an adverse impact on sensitive habitat and biological resources in the City. Areas considered to be sensitive habitat include sand dunes, marine habitats, sea cliffs, riparian areas, wetlands (e.g., coastal tidelands, marshes, lakes, ponds), coastal off-shore areas containing breeding and/or nesting sites or used by migratory and resident water-associated birds for resting and feeding, areas used for scientific study and research concerning fish and wildlife and existing game or wildlife refuges and reserves, habitats containing or supporting unique species or any rare and endangered species defined by the State Fish and Game Commission, rocky intertidal zones, riparian corridors, and coastal scrub community associated with coastal bluffs and gullies.

4.4.1.2 *Existing Conditions*

Carter Park is located in an urban area of the City and the majority of the site is developed with an existing park. A hardscape path enters the park from Main Street to the west and curves into the interior of the park. The project area contains three different types of habitat and are described further below.

Park/Ornamental Woodland

Vegetation

Park/ornamental woodland habitat includes areas where permanent features such as benches, statues, and/or pavement have been placed along with landscaping. Such landscaping includes introduced native coast redwood and Monterey pine trees. However, these plantings have been installed as part of a landscape plan and do not naturally occur on site. As such, the area is considered developed. The central and upper areas of the park contain maintained lawn areas. The park habitat type comprises the majority of Carter Park and consists of two main areas: an open area in the north containing the paths and landscaping beds and lawns, as well as scattered landscape trees, while a dense grove of planted, mature coast redwoods is located in the south portion of the site adjacent to the riparian corridor, with no lawn beneath. While redwoods can grow as riparian tree species, they are not restricted to riparian areas as they are able to gather moisture from the coastal fog layer. There is no understory vegetation here, as the area around these planted redwoods is actively maintained by the City.

Wildlife

The park/ornamental woodland habitat in the park is contiguous with arroyo willow riparian habitat (described below) and provides habitat for many of the same urban-adapted wildlife species. However, the turf grasses and ornamental vegetation of this habitat provide little to no understory cover, as well as low-quality foraging opportunities compared to the adjacent riparian habitats. Common urban-adapted wildlife species, such as the striped skunk, raccoon, nonnative Virginia opossum, and eastern gray squirrel nest and forage in the landscaped trees and shrubs in the ornamental woodland. The redwood trees on the site provide preferred nesting sites for lesser goldfinches, Anna's hummingbirds, American crows, American robins, and bushtits. The shrubs adjacent to the paths in the park provide potential nesting substrate for house finches, California towhees, and western scrub-jays. Monarch butterflies are not anticipated to be present on the project site as there is no suitable breeding or feeding habitat (e.g. milkweed or eucalyptus trees).

Arroyo Willow Riparian Forest

Vegetation

The arroyo willow riparian forest habitat is found along Pilarcitos Creek, along the southeast margin of Carter Park. The riparian vegetation in this reach of Pilarcitos Creek is characterized by an overstory predominately consisting of arroyo willow, red willow, and alder. The understory contains a dense growth of cape ivy, garden nasturtium, and California blackberry. The riparian habitat is mostly buffered from the main portions of the park by the planted coast redwood grove in the south central portion of the site, but the riparian forest abuts developed portions of the park at the far

eastern and western ends. At the border of the riparian habitat, increased sun has allowed cape ivy to form even more dense infestations. Some areas have been cleared and are periodically used as homeless encampments. Cape ivy is ranked as highly invasive by the California Invasive Plant Council and is considered to have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure.

Wildlife

Urban riparian forests typically provide high-quality habitat for a variety of native and nonnative wildlife. The high levels of human activity associated with the park and adjacent periodic homeless encampments, as well as the presence of high densities of invasive, nonnative plants (e.g., cape ivy and garden nasturtium) have greatly reduced the suitability of the riparian habitat in the study area for most riparian associated species. However, the riparian corridor along the creek provides suitable nesting habitat for a variety of common bird species such as the California scrub-jay, American robin, American crow, lesser goldfinch, and bushtit. The red-shouldered hawk and Cooper's hawk may use larger trees in the riparian corridor for nesting, but no raptor nests were detected in the riparian forest during a September 25, 2019 survey (see Appendix A). Other common wildlife species that may inhabit or forage in urban riparian corridors are the striped skunk, raccoon, and nonnative Virginia opossum and eastern gray squirrel. Individual bats may be attracted to riparian areas to roost in trees; however, none of the trees in the project area contained large cavities that represented potential habitat for a roosting or maternity colony.

Perennial Freshwater Stream

Vegetation

To the south of Carter Park, Pilarcitos Creek is a perennial freshwater stream with a connection to groundwater and flows overland through the southern portion of the park. It originates approximately 12 miles northeast of the park on the eastern flanks of Montara Mountain in the Santa Cruz Mountains. The creek flows under the Main Street Bridge near the southwestern boundary of the park and discharges into the Pacific Ocean approximately 1.3 miles downstream of the park. Arroyo willow riparian forest habitat is found along Pilarcitos Creek (see above).

Wildlife

Pilarcitos Creek supports native fish species such as the California roach, hardhead, and threespine stickleback. In addition, the federally threatened Central California Coast (CCC) steelhead and coho salmon, and California red-legged frog have been documented within Pilarcitos Creek, and the federally and state endangered San Francisco garter snake could possibly occur there. Pacific tree frogs, California newts, western pond turtle, non-native bullfrogs, and crayfish may be present in the creek, and birds such as the wood duck, green heron, and belted kingfisher also likely forage in the creek. Bats may occasionally forage aerially on insects over the aquatic habitat within Pilarcitos Creek.

Special Status Species

Special status species habitat is located in the project area, including habitat for Central California Coast (CCC) steelhead, CCC coho salmon, San Francisco garter snake, California red-legged frog,

western pond turtle, yellow warbler, San Francisco yellowthroat, and white-tailed kite. These species are discussed in further detail in the impacts section below for continuity of the impact discussion. There are no known special status plant species within the project area.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☒	☐	☐
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
4) 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?	☐	☐	☒	☐
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1:	The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

Special Status Plant Species

As discussed under existing conditions, Carter Park is mostly developed with park/ornamental woodland habitat. The biological resources report (see Appendix A) found no suitable special status plant species habitat present within the project area, and all potentially occurring species are considered absent from the site. Thus, the proposed project would not impact special status plants. **(No Impact)**

Special Status Animal Species

California Red-Legged Frog, San Francisco Garter Snake, and Western Pond Turtle

Due to the developed nature of Carter Park, the number of California red-legged frogs, San Francisco garter snakes, and western pond turtles expected to be found at the park is low. Continued operation of the park would not result in impacts to special status animal species. Nevertheless, project construction activities could result in the direct loss and indirect disturbance of a very small number of individuals of these species, and very limited areas of their habitats. In the absence of mitigation measures, the project could result in direct impacts on individuals through injury or mortality from trampling by construction personnel or equipment. An increase in native and non-native predators attracted to the park due to trash left on the work site might result in increased mortality of individuals of these species. Due to the rarity of these species, any project-related impacts on individual California red-legged frogs, San Francisco garter snakes, and western pond turtles would be significant. The proposed project would be required to implement the following measures.

Mitigation Measures:

MM BIO-1.1: Receive Agency Approval of Qualified Biologist. The qualifications of biologist(s) experienced with the California red-legged frog, San Francisco garter snake, and western pond turtle will be submitted to the USFWS and CDFW for review and written approval at least thirty (30) calendar days prior to the start of project activities.

MM BIO-1.2: Install Temporary Wildlife Exclusion Barrier. Prior to any ground disturbance in the impact area, an agency-approved temporary wildlife exclusion barrier will be installed along the limits of disturbance, including along the areas of new/re-paved paths from Main Street and the proposed concrete and resin paths at the southeastern corner of the site, and along the proposed path that loops around the stage through the 50-foot riparian setback. An agency-approved biologist will inspect the area prior to installation of the barrier. The barrier will be designed to allow the California red-legged frog, San Francisco garter snake, and western pond turtle to leave the impact area and prevent them from entering the impact

area, and will remain in place until all development activities have been completed. This barrier will be inspected daily and maintained and repaired as necessary to ensure that it is functional and is not a hazard to individuals of these species on the outer side of the barrier.

MM BIO-1.3: Conduct Preconstruction Survey. No more than twenty-four (24) hours prior to the date of initial ground disturbance and before any work within the riparian setback until the exclusion fence is fully erected, a pre-construction survey for the California red-legged frog, San Francisco garter snake, and western pond turtle will be conducted by an agency-approved biologist within the impact area. The survey will consist of walking the limits of impact to ascertain the possible presence of the species. The agency-approved biologist will investigate all potential areas that could be used by individuals of these species for feeding, breeding, sheltering, movement, and other essential behaviors. This includes an adequate examination of mammal burrows, such as California ground squirrels or gophers.

MM BIO-1.4: Worker Environmental Awareness Program. All construction personnel will participate in a worker environmental awareness program. These personnel will be informed about the possible presence of all special-status species and habitats associated with the species identified here to be potentially present in the project area. Prior to construction activities, the agency-approved biologist will instruct all construction personnel about (1) the description and status of the species; (2) the importance of their associated habitats; and (3) a list of measures being taken to reduce impacts on these species during project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the construction crew and anyone else who enters the project site.

MM BIO-1.5: Construction Monitoring. An agency-approved biologist(s) will be onsite during all project activities that may result in take of any of these three species (e.g., during all clearing and rough grading, or during any activities that are not enclosed within the wildlife exclusion barrier). The agency-approved biologist(s) will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site, otherwise associated with the project, the USFWS, the CDFW, or their designated agents. The agency-approved biologist will have oversight over implementation of all the conservation measures and will have the authority and responsibility to stop project activities if they determine any of the associated requirements are not being fulfilled. The agency-approved biologist(s) may modify the daily monitoring requirement based upon professional judgement, in consultation with the City. If the agency-approved biologist(s) exercises this authority, the USFWS will be notified by telephone and electronic mail within twenty-four (24) hours.

MM BIO-1.6: Steep-walled Holes and Trenches. To prevent inadvertent entrapment of the California red-legged frog, San Francisco garter snake, or western pond turtle during construction, the agency approved biologist and/or construction

foreman/manager will ensure that all excavated, steep-walled holes or trenches more than one foot deep are completely covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the agency-approved biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the agency-approved biologist and/or construction foreman/manager. If at any time a trapped California red-legged frog, San Francisco garter snake, or western pond turtle is discovered by the agency-approved biologist or anyone else, the steps in MM BIO-1.7 will be followed.

MM BIO-1.7: Protocol if California Red-legged Frog, San Francisco Garter Snake, or Western Pond Turtle is Encountered. If a California red-legged frog, San Francisco garter snake, western pond turtle, or any animal that construction personnel believes may be either of these species, is encountered during project construction, the following procedures will be followed:

- All work that could result in direct injury, disturbance, or harassment of the individual animal shall immediately cease.
- The foreman and agency-approved biologist will be immediately notified.
- The agency-approved biologist will determine if the animal is a California red-legged frog, San Francisco garter snake, or western pond turtle and if so will follow MM BIO-1.8 for California red-legged frog or western pond turtle, or MM BIO-1.9 for San Francisco garter snake.

MM BIO-1.8: Relocation of California Red-legged Frogs and Western Pond Turtles. If any life stages of the California red-legged frog are found, the agency-approved biologist will contact the USFWS to determine if moving individuals is appropriate. If the USFWS approves moving animals, the biologist will move the red-legged frogs to suitable habitat at least 300 m from the project area. The same procedure will be followed with respect to western pond turtles, although no USFWS approval to relocate that species is necessary. Only agency-approved biologists will capture, handle, and move California red-legged frogs or western pond turtles. The agency-approved biologist will monitor any relocated frog or turtle until it is determined that it is not imperiled by predators or other dangers.

MM BIO-1.9: Monitor San Francisco Garter Snake. The agency-approved biologist will monitor any individual of the San Francisco garter snake encountered within the impact area but allow it to leave the impact area on its own. If the agency-approved biologist determines that the snake cannot leave on its own, then the USFWS and CDFW will be consulted to determine if the snake can be captured and relocated to appropriate habitat on the outside of the impact area.

MM BIO-1.10: Daytime Restriction. Construction activities related to park improvements will be restricted to the daytime. No nighttime construction will occur.

MM BIO-1.11: Food and Trash. To eliminate an attraction for the predators of the California red-legged frog, San Francisco garter snake, and western pond turtle, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site. As part of routine park maintenance, City staff will remove trash on a regular schedule to prevent trash bins from overfilling.

MM BIO-1.12: Prohibition of Plastic Mono-filament Netting. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material will not be used at the project site to prevent trapping California red-legged frogs, San Francisco garter snakes, western pond turtles, or other species.

MM BIO-1.13: Best Management Practices. The project shall obtain a NPDES permit, which will contain standard Best Management Practices (BMPs). During all construction implementation, BMPs will be used to minimize erosion and impacts to water quality to protect water quality in areas used by the California red-legged frog, San Francisco garter snake, and western pond turtle. These will be incorporated into the proposed project. Construction BMPs shall include but are not limited to the following:

- No litter, debris, or sediment will be dumped into existing site drainage systems. Trash and debris will be removed from the project site on a daily basis during construction and regularly during park operations.
- Equipment staging and parking of vehicles will occur on established access roads and flat surfaces.
- The integrity and effectiveness of construction fencing and erosion control measures will be inspected on a daily basis. Corrective actions and repairs will be carried out immediately for fence breaches and ineffective BMPs.
- No fueling, washing, and maintenance of vehicles shall occur on the site. Equipment will be regularly maintained to avoid fluid leaks. Any leaks will be captured in containers until equipment is moved to a repair location. Hazardous materials will not be stored on the site during construction
- Sediment-laden water will not be allowed to enter the stream channel.
- Absorbent materials designated for spill containment and clean-up activities shall be available on site for use in an accidental spill.

With implementation of MM BIO-1.1 through MM BIO-1.13, the proposed project would have a less than significant impact on the California red-legged frog, San Francisco garter snake, and western pond turtle. **(Less than Significant Impact with Mitigation Incorporated)**

Special Status Fish Species

CCC steelhead, and possibly CCC coho salmon, may be present in Pilarcitos Creek adjacent to or downstream of Carter Park. Project construction will not occur within Pilarcitos Creek; thus, direct

impacts of construction related activities are not expected to occur. Additionally, the majority of the park improvements are located outside of the 50-foot riparian buffer. The only improvement within the 50-foot riparian buffer would be an interpretive trail behind the amphitheater support building made from decomposed granite. Pilarcitos Creek is protected by an additional approximately 60 to 150 feet of dense arroyo willow riparian habitat, which provides a natural buffer to sedimentation. The project will also comply with a stormwater pollution prevention plan during construction to prevent disturbed soils from releasing sediment into the riparian corridor (see Section 4.10 Hydrology and Water Quality). During construction, however, minor and temporary increases in turbidity within the creek may occur if sediment mobilized by the project is washed (e.g., in runoff) into Pilarcitos Creek. Implementation of MM BIO-1.13 will further minimize potential impacts on CCC steelhead and CCC coho salmon as a result of increased turbidity in Pilarcitos Creek, thereby reducing this impact to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Yellow Warbler, White-tailed Kite, and San Francisco Common Yellowthroat

The yellow warbler, San Francisco common yellowthroat, and white-tailed kite are associated with riparian habitats, and may nest in this habitat and forage in the BSA. Heavy ground disturbance, noise, and vibrations caused by project development in the BSA could disturb foraging or roosting individuals, causing them to move away from impact area. Although adult birds are not expected to be killed or injured, as they could easily fly from the impact area prior to such effects occurring, eggs or young in nests or roosts could be injured or killed. In addition, project activities causing a substantial increase in noise, movement of equipment, or human presence near active nests could result in the abandonment of such nests, and possibly the loss of eggs or young as a result.

However, based on the extent of suitable habitat within the riparian habitat associated with Pilarcitos Creek in the project area and typical territory sizes of these species, no more than one pair of each of these species may nest in the project area. Therefore, the loss of nesting effort potentially resulting from project activities would represent a very small fraction of the regional populations of these species. Migratory birds are protected under provisions of the Migratory Bird Treaty Act and CDFW Code Sections 3503, 3503.5, and 3800. The CDFW defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact.

Mitigation Measure:

MM BIO-1.14: Avoidance. Construction activities will be scheduled to avoid the nesting season to the extent practicable. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Preconstruction Surveys. If it is not practicable to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds will be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than seven days prior to the initiation of construction activities. During this

survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., shrubs and bridges) in and immediately adjacent to the impact area for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

Implementation of MM BIO-1.14 would reduce potential impacts to yellow warblers, white-tailed kites, common yellowthroats, and other nesting or migratory birds to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Bats

While none of the trees in the project area contained large cavities that represented potential habitat for a roosting or maternity colony, the following mitigation measures are required to reduce any potential loss of roosting bats.

Mitigation Measure:

MM BIO-1.15: Surveys for roosting bats as required by state and local regulations shall be undertaken in areas where suitable habitat for such species is present to minimize potential adverse impacts to these species. No more than five days before the start of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading), a survey of suitable roosting bat habitat shall be conducted within the project site, including a 50-foot buffer. If evidence of bat roosting (e.g., guano accumulation, acoustic or visual detections) is found, CDFW shall be consulted to determine appropriate measures, such as bat exclusion methods, if the roost cannot be avoided. The results of the surveys shall be documented.

Implementation of MM BIO-1.15 would reduce potential impacts to roosting bats to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impacts Related to Increased Lighting

In general, the project will re-develop already developed areas within the park, which have some lighting currently. The majority of lighting will be low bollards. However, to support the proposed stage and amphitheater, there will be production lighting erected on two, 18-foot-tall poles facing the stage. This light will be directed towards the riparian corridor based on the site design. Although this lighting would be used intermittently when performances are taking place, this will represent an increase in light levels in proximity to the riparian corridor, and therefore this impact could still have negative effects on special status species that would be considered potentially significant. Increased light levels could lead to greater predation on California red legged frogs, western pond turtles, or San Francisco garter snakes. Additionally, were the light able to reach the creek bed itself, it could affect CCC steelhead migration patterns. However, the stage will be located in front of an approximately 50-foot wide grove of mature coast redwood trees, which would create a screen to the riparian habitat much higher than the 18-foot production lighting, and which would prevent the majority of additional lighting from affecting special status species and their use of the riparian corridor.

Mitigation Measure:

MM BIO-1.16: Reduce and Minimize Lighting Impacts. The City shall prepare a photometric lighting plan. The plan shall ensure that during park operations, production lighting is focused or shielded so that lighting is directed towards the stage, not above the stage and not to the side. The lighting plan shall be subject to review and approval by the Planning Commission to ensure the photometric lighting plan adequately reduces light and glare impacts to a less than significant level.

As stated above, the stage will be located in front of an approximately 50-foot wide grove of mature coast redwood trees, which would create a screen to the riparian habitat much higher than the 18-foot production lighting, and which would prevent the majority of additional lighting from affecting special status species and their use of the riparian corridor. Additionally, production lighting will only be used during a production, and will not be used at other times. Production lights will be turned off promptly following nighttime productions. This would include any lighting that guides people to the amphitheater seats in the dark but that would not be needed during nights when productions are not being held in the amphitheater. implementation of MM BIO-1.16 would reduce light impacts to special status animal species within the Pilarcitos Creek riparian area to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-2:	The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

Arroyo willow riparian forest habitat is present along the banks of Pilarcitos Creek adjacent to Carter Park. The City's Zoning Code and LCP includes riparian area and corridors as sensitive habitats. The City of Half Moon Bay Zoning Code defines the Riparian Buffer Zone as "land on both sides of riparian corridors which extends from the 'limit of riparian vegetation' 50 feet outward for perennial streams and wetlands. Also, the riparian habitat along Pilarcitos Creek includes the red

willow-arroyo willow vegetation alliance, which is classified as a sensitive vegetation alliance, and considered jurisdictional riparian habitat under Sections 1600 et seq. of the State Fish and Game Code by CDFW.

The project has been specifically designed to avoid direct impacts to the riparian corridor. Indirect impacts to these habitats will be minimized and avoided through compliance with the project stormwater pollution prevention plan (see Section 4.10 Hydrology and Water Quality), as well as observance of the 50-foot riparian buffer zone. The existing path on the eastern side of the park that proceeds from street level down the slope into the park will be re-constructed partially as "resin pavement", and partially as concrete.[14] A small (approximately 54-foot long) length of new concrete path will also be constructed in the riparian setback to accommodate the ADA compliant ramp path from the top of the park to the bottom of the amphitheater. The permeable, decomposed granite path around the back of the stage will wind through the coast redwood grove within the riparian buffer, being located at least 20 feet away from the riparian corridor in all locations. No new lighting is planned for this path, although existing lighting may be replaced within the riparian buffer where the existing paths are being re-constructed. Similarly, no new structures would be placed in the riparian buffer, as the play area, the stage, amphitheater seating, new picnic area, and concession/restroom building are all located outside the riparian buffer. Light pruning of some riparian trees might be necessary for the proposed project, implementation of the following mitigation measure and MM BIO-1.14 would reduce pruning impacts to a less than significant level.

Mitigation Measure:

MM BIO-2.1: If project activities require pruning of riparian trees or shrubs, a certified arborist will be retained to perform any necessary pruning to minimize harm to vegetation, ensure rapid regeneration, and limit pruning to the minimum area necessary.

Several non-native, invasive plant species occur in riparian habitat located within or near the project area, with the most important and impactful weed being cape ivy. Disturbed areas are highly susceptible to colonization by non-native, invasive species that occur locally, or whose propagules are transported by personnel, vehicles, and other equipment. Activities such as trampling, equipment staging, and vegetation removal are all factors that would contribute to disturbance. Areas of disturbance could serve as the source for promoting the spread of non-native species, which could degrade the ecological values of riparian habitat and adversely affect native plants and wildlife that occur there.

Mitigation Measure:

MM BIO-2.2: Invasive Species Best Management Practices (BMPs). The following BMPs will be implemented to limit the spread of invasive species into sensitive habitats:

- All ground disturbing equipment used adjacent to the riparian habitat will be washed (including wheels, tracks, and undercarriages) at a legally operating equipment yard both before and after being used at the site.

[14] Resin pavement is a permeable pavement made from a soil emulsion.

- All applicable construction materials used on site, such as straw wattles, mulch, and fill material, will be certified weed free.
- The project will follow a stormwater pollution prevention plan as per the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ) if applicable.
- All bare soil resulting from project disturbance will be stabilized and planted with landscaping or a native seed mix from a local source following construction.
- Any cape ivy removed from the riparian corridor, i.e. during pruning near the entrance path, will be disposed of at a legally operating landfill or other off-site facility capable of handling noxious weed material.

With implementation of MM BIO-2.1 and MM BIO-2.2, the proposed project would have a less than significant impact on riparian and other sensitive habitats. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Less than Significant Impact)**

Waters of the U.S./state occur within the bed and banks of Pilarcitos Creek to the south of Carter Park. The project proposes no impacts to these habitats, and the project work boundary is located some 80 to 170 feet away from the creek itself. In addition, the project would implement Best Management Practices and MM BIO-1.13 (see Section 4.10 Hydrology and Water Quality) to limit erosion and runoff to Pilarcitos Creek from Carter Park. Therefore, there will be no impacts to waters claimed by the U.S. or State and no mitigation is required. **(Less than Significant Impact)**

Impact BIO-4:	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. **(Less than Significant Impact)**

Implementation of the proposed project would not result in any permanent or temporary loss of aquatic or associated riparian habitat: the project footprint is located entirely within the currently developed portions of Carter Park. Thus, while Pilarcitos Creek and its associated riparian zone provide an east-west movement corridor for wildlife, development of the park, which sits on the outer, developed margin of this east-west corridor, will not disrupt wildlife movement along the corridor (i.e., CCC steelhead and coho salmon). Abundant, urban-adapted species such as raccoon and striped skunk, may currently move across the developed portion of the park into adjacent developed areas, and the proposed addition of facilities (stage, restrooms, and playground equipment) may curtail movement of these animals somewhat. However, the animals that currently use the park as a dispersal corridor are regionally abundant and common in California; as such, impacts on these species from project activities do not constitute a significant impact. **(Less than Significant Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

The proposed project would result in the removal of three (3) trees meeting the definition of a Heritage Tree. The City's Heritage Tree ordinance requires replacement of heritage trees on a 1 to 1 basis, with a minimum twenty-four-inch-box size tree. The project would plant replacement trees, preferably within the same watershed and with approval from the City. Compliance with the City Ordinance will be ensured through the following standard permit condition of approval.

Standard Conditions: Consistent with the City of Half Moon Bay Standard Planning Conditions and Municipal Code, the proposed project would implement the following measures:

- The three (3) Heritage Trees to be removed will be replaced on a one-for-one basis with a minimum size twenty-four-inch-box specimen tree of a species and in a location approved by the City manager or his or her designee.
- The following tree protection measures shall be implemented during construction:
    - Prior to commencement of construction, construction fencing shall be placed around the drip line of all trees proposed for preservation.
    - No grading or other construction shall occur within the drip line of any tree proposed for preservation except in conformance with a Tree Protection Plan approved by the Community Development Director.
    - No vehicle, equipment or materials shall be parked or stored within the drip line of any tree proposed for preservation.

The proposed project, with implementation of the standard conditions listed above, would not conflict with the City's heritage tree ordinance. **(Less than Significant Impact)**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

Carter Park is not located within the boundary of an adopted habitat conservation plan or natural community conservation plan. **(No Impact)**

4.5 CULTURAL RESOURCES

The following discussion is based upon an Archaeological Survey Report (ASR) prepared by Holman & Associates in March 2020. The ASR discusses locations of specific archaeological sites and is, therefore, confidential under State law. For this reason, it is not included in this Initial Study. Qualified personnel, however, may request a copy of the report from the Half Moon Bay Community Development Department located at 501 Main Street during normal business hours or by emailing Scott Phillips at sphillips@hmbcity.com.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed, or eligible for listing, in the NRHP must be evaluated under CEQA.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. The CRHR listing criteria are similar to the NRHP. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[15]

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if

[15] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

Half Moon Bay Historic Resources Inventory

The Historic Resources Inventory is an inventory of the City of Half Moon Bay's historic resources defined as, "any real property or improvement thereon such as a building, structure, object or archaeological excavation that is significant because of its location, design, setting, materials, workmanship, or aesthetic feeling and is designated as such by the city council." According to the City of Half Moon Bay's Historic Resources Preservation Ordinance (Chapter 14.39 of the Municipal Code), designation of historic resources may be initiated by the city council, the planning commission, or upon application of the owner, or the authorized representative of the owner, of the property for which the designation is requested.

Local Coastal Program

The City's Local Coastal Program (LCP) section from 1993, based on background information from 1979, outlines policies relating to the protection and identification of archaeological and paleontological Resources. It discusses the overall heightened sensitivity of the Half Moon Bay region and provides policies that include archaeological study prior to issuance of a grading permit for certain projects. Archaeological surveys are required for;

- projects of one acre or more within archaeologically sensitive zones, and
- municipal improvement projects, and general protection of archaeological resources where feasible.

Half Moon Bay Municipal Code

Title 18 (Zoning) of the City of Half Moon Bay Municipal Code contains several provisions regarding the identification, treatment and protection of archaeological and historical resources including Chapter 18.38 Coastal Resources Protection and Chapter 18.39 Historic Resources Preservation.

Chapter 18.38 Coastal Resources Protection requires the Community Development Director to prepare and maintain maps of all designated coastal resource areas within the City including:

Archaeological Resource Areas. Any area shown in the Half Moon Bay LCP land use plan map of potential archeological resources as potentially containing archaeological resources. Specific areas are:

1. The coastal strip where exploitable resources occurred;
2. All major creek shores, such as Pilarcitos, Arroyo Leon, and Frenchmans Creek;
3. All minor inland water courses, including historic or prehistoric springs, streams or marshes;
4. The foothill strip above the over two-hundred-foot elevation;
5. Areas of prehistoric site evidence and pertinent historic places such as cemeteries, houses and buildings; and
6. Isolated hills and knolls. (Ord. C-2015-04 §1(part), 2015; 1996 zoning code (part)).

4.5.1.2 *Existing Conditions*

Historic Resources

San Mateo County was created in 1856 from the southern part of San Francisco County and enlarged by annexing part of Santa Cruz County in 1868. In contrast to the densely populated east county, Half Moon Bay is within the narrow San Mateo County coastal strip characterized by many beach parks and small towns. The City of Half Moon Bay was initially settled in 1839 with buildings constructed in the 1840s. There are no existing structures in Carter Park. The closest historic resource to the park is Main Street Bridge, located directly west, and is the City's most recent National Register listing. Historical research indicated an 1800s house was once extant on the lower terrace and an earlier, shorter bridge could have spanned the creek at that location. None of the previous studies have identified any historic-era artifacts or structural remains on the lower terrace. Typically, domestic debris associated with rural households would often have been discarded onto creek banks to be washed away during periodic flooding. Since the 1800s house was in use, decades of flooding likely carried away most if not all of the remains.

Archaeological Resources

The project area is situated within an environmentally advantageous area for Native Americans. The area would have provided a favorable environment during the prehistoric period with coastal, riparian and inland resources readily available. No archaeological resources have been identified in Carter Park. The nearest recorded archaeological resource is located adjacent to the northern park boundary. The site has been recorded, its built environment researched and documented, and the prehistoric component has been tested. None of this resource's components were recommend as eligible to the National Register. Based on the limited variety and scant amount of artifacts recovered the site would not be eligible to the California Register of Historical Resources. Carter Park has been previously studied for at least three different projects beginning in 1970 under different conditions. A field survey for the proposed project did not identify any cultural materials, deposits, or indications of a paleosol (buried natural surface).

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

There are no historic structures within Carter Park. The statue of John L. Carter within the park is not listed in the City's Historic Resources Inventory or identified as a historic resource in the City's Local Coastal Program.[16,17] The nearest historic structure to the park is the Main Street Bridge directly west. Views of the Main Street Bridge, however, are shielded from Carter Park due to native vegetation along Pilarcitos Creek. Thus, the project would not cause a substantial adverse change to a historic resource. **(No Impact)**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

There are no known historic or prehistoric archaeological resources within Carter Park. Based on the findings of the ASR, the project area appears to have a low potential for Native American archaeological resources and a moderate potential for historic-era resources. Because the soils in Carter Park were previously disturbed during construction of the existing park and adjacent shopping center and natural flooding of Pilarcitos Creek, it is unlikely that intact archaeological resources are present at the site. The possibility of uncovering archaeological resources during construction of the proposed project, however, cannot be completely dismissed. The project would be required to implement the following standard condition of approval.

[16] City of Half Moon Bay. *Coastal Land Use Plan, Figure 8.1*. October 2018. Accessed July 13, 2020. https://nebula.wsimg.com/fa605e08283c76e2fadead9ccbc47eb5?AccessKeyId=06ACEAA5216D33A5C3B0&disposition=0&alloworigin.
[17] City of Half Moon Bay. *Historic Resources Inventory*. 1995. Accessed July 13, 2020. https://www.half-moon-bay.ca.us/DocumentCenter/View/677/Historic-ResourcesContributors-Inventory1995.

Standard Condition: If subsurface historic or archaeological resources are uncovered during construction, all work shall stop, the applicant shall notify the Community Development Director and retain a qualified archaeologist to perform an archaeological reconnaissance and identify any mitigation measures required to protect archaeological resources. Subsurface excavation shall not resume until expressly authorized by the Director.

With implementation of the above standard condition of approval, the project would have a less than significant impact on archaeological resources. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3:	The project could disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in Impact CUL-2, there are no known archaeological resources or burial grounds in Carter Park; however, the possibility of uncovering human remains during construction of the proposed project cannot be completely dismissed. The project would be required to implement the following standard condition of approval in addition to MM CUL-2.1.

Standard Condition: Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the NAHC who shall attempt to identify descendants of the deceased Native American(s). If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the permittee shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

With implementation of the above standard condition and MM CUL-2.1, the proposed project would have a less than significant impact on any unknown human remains. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

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

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[18] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[19]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

[18] California Building Standards Commission. "California Building Standards Code." Accessed January 21, 2020. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[19] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed January 21, 2020. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel efficiency.[20]

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.[21] Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.[22] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in San Mateo County in 2018 was consumed primarily by the commercial sector (64 percent), with the residential sector consuming 36 percent. In 2018, a total of approximately 4,226 GWh of electricity was consumed in San Mateo County.[23]

Peninsula Clean Energy (PCE) is a public and locally controlled electricity provider for the County of San Mateo. Electricity provided by PCE is delivered through PG&E transmission lines. Commercial and residential customers in San Mateo County are included in the PCE service area and can choose to have 50 to 100 percent of their electricity supplied from carbon-free and renewable sources. Customers are automatically enrolled in the ECOplus plan, which generates its electricity from 85 percent carbon-free sources, with at least 50 percent from renewable sources. Customers have the option to enroll in the ECO100 plan, which generates its electricity from 100 percent carbon-free, renewable sources. [24] City facilities participate in the 100-percent renewable portfolio of PCE through the ECO100 plan.

Natural Gas

PG&E provides natural gas services within the City of Half Moon Bay. In 2018, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply

[20] California Air Resources Board. "The Advanced Clean Cars Program." Accessed May 22, 2020. https://ww2.arb.ca.gov/our-work/topics/clean-cars.
[21] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed May 22, 2020. https://www.eia.gov/state/?sid=CA#tabs-2.
[22] Ibid.
[23] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed May 22, 2020. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[24] Sources: 1) Peninsula Clean Energy. "Frequently Asked Questions." Accessed May 22, 2020. https://www.peninsulacleanenergy.com/faq/. 2) Peninsula Clean Energy. "Energy Choices." Accessed May 22, 2020. https://www.peninsulacleanenergy.com/our-power/energy-choices/.

was imported from other western states and Canada.[25] In 2018, residential and commercial customers in California used 34 percent of the state's natural gas, power plants used 35 percent, the industrial sector used 21 percent, and other uses used 10 percent. Transportation accounted for one percent of natural gas use in California. In 2018, San Mateo County used approximately 1.7 percent of the state's total consumption of natural gas.[26]

Fuel for Motor Vehicles

In 2018, 15.5 billion gallons of gasoline were sold in California.[27] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2018.[28] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks model years 2011 through 2020. [29,30]

Current operation of Carter Park consumes energy several ways including, but not limited to: automobile operation, maintenance activities (e.g. lawn mowers, leaf blowers, etc.), water transport, electricity usage, and waste disposal activities.

4.6.2 Impact Discussion

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

[25] California Gas and Electric Utilities. 2019 *California Gas Report.* Accessed May 22, 2020. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.
[26] California Energy Commission. "Natural Gas Consumption by County." Accessed May 22, 2020. http://ecdms.energy.ca.gov/gasbycounty.aspx.
[27] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed May 22, 2020. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[28] United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.
[29] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed May 22, 2020. http://www.afdc.energy.gov/laws/eisa.
[30] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed May 22, 2020. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

Impact EN-1:	The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Less than Significant Impact)**

Construction

Project construction would require energy for the manufacture and transportation of building materials, site preparation and grading, and construction of the amphitheater and support building, concession/restroom building, and pathways. Construction processes are generally designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel are not typically used wastefully on the site because of the added expense associated with renting the equipment, as well as maintenance and fuel. In addition, as discussed in Section 3.3 Air Quality, the project would implement measures discussed under Impact AIR-3 to minimize the idling of construction equipment thus reducing the potential for energy waste. For these reasons, project construction would not use energy in a wasteful manner. **(Less than Significant Impact)**

Operational

Park operation would continue as it does today, with the exception of the addition of the proposed new amphitheater and support building, children's play area, a picnic area, and concession/restroom building. The operation of the new amphitheater and support building would result in a net increase in energy use on-site. Project operation would consume energy for multiple purposes including, but not limited to, building heating (i.e., portable space heaters in concession stand), lighting for the proposed buildings and amphitheater, and operation of appliances and electronics. Energy would also be consumed during each vehicle trip generated by visitors. The project would comply with Title 24 and CALGreen energy efficiency measures and obtain 100 percent carbon free electricity through the ECO100 plan. The project also encourages alternatives to single-vehicle occupancy trips by being centrally located and adequately served by pedestrian and bicycle facilities. For these reasons, project operation would not use energy in a wasteful manner. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

The project would be consistent with the regulations described in Section 4.6.1.1 by:

- Complying with Title 24 and CALGreen
- Complying with 2017 CAP measures

The proposed project would comply with control measure EN-2 (Decrease Electricity Demand) of the 2017 CAP by installing LED safety lighting, water efficient irrigation systems, water-saving fixtures in bathrooms, and planting drought tolerant and low water-use plants. The project, therefore, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Code (CBC) prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years and the City recently adopted the latest update dated 2019.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Half Moon Bay Municipal Code

Title 14 of the City of Half Moon Bay Municipal Code includes the 2019 California Building Standards Codes as required by State law

Local Coastal Program

The City of Half Moon Bay is located within the California Coastal Zone and the City's Local Coastal Program (LCP) provides the following policies related to geology, soils, and seismicity:

- Policy 4-6: Applications for grading and building permits and applications for subdivisions shall be reviewed for adjacency to, threats from, and impacts on geologic hazards arising from seismic events, tsunami run-up, landslides, flooding, or other geologic hazards such as expansive soils and subsidence areas. In areas of known geologic hazards, as indicated on the Geologic Hazards Map, a geologic report shall be required. Mitigation measures shall be required where necessary.
- Policy 4-9: All development shall be designed and constructed to prevent increases in runoff that would erode natural drainage courses. Flows from graded areas shall be kept to an absolute minimum, not exceeding the normal rate of erosion and runoff from that of the undeveloped land. Storm water outfalls, gutters, and conduit discharge shall be dissipated.

4.7.1.2 *Existing Conditions*

Regional Geology

The City of Half Moon Bay is located on the San Francisco Peninsula, approximately 15 miles south of San Francisco, along the Pacific Ocean and at the base of the Santa Cruz Mountains. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains. The City is primarily underlain by a broad, gently sloping marine terrace consisting of poorly consolidated shallow marine sands, silts, and gravels resting on top of an ancient wave-cut bedrock platform. Soils in Carter Park consist of silty clay and imported granite gravel.[31]

[31] Holman & Associates. *Archaeological Survey Report for the Carter Park Improvement Project*. March 2020.

Seismicity

Carter Park is located within the seismically-active San Francisco Bay region; however, the site is not located within a designated Alquist-Priolo Earthquake Fault Zone. There are two major active faults in the vicinity of the site: the San Andreas Fault, approximately 5.3 miles east of the site, and the San Gregorio Fault, approximately 2.5 miles west of the site. The smaller Monte Vista-Shannon Fault is approximately 15 miles southeast of the site. There are no known earthquake faults crossing the site. Due to the high seismic activity of the region, the potential exists for strong ground shaking at the site during an earthquake.

Expansive Soils

Expansive soils shrink and swell as a result of moisture changes. As discussed above, Carter Park is underlain by silty clay and imported granite gravel.[32] These types of soils have low expansion potential.

Landslides

The site is relatively flat and gently slopes towards Pilarcitos Creek, except for the short slope (i.e., 50 feet) leading into the park from the Stone Pine Shopping Center parking lot, therefore, the potential for landslides, earthquake-induced or otherwise, is considered low to non-existent.

Liquefaction

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength due to increased pore water pressure resulting from cyclic stress applications induced by earthquakes or other vibrations. Soils most susceptible to liquefaction are loose, uniformly graded, fine-grained, sands, and loose silts with very low cohesion. The site is located within a zone of medium liquefaction susceptibility as identified by the United States Geological Survey (USGS).[33]

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavated area. Pilarcitos Creek is located adjacent to Carter Park; however, the proposed areas of construction would be done at least 150 feet from the creek channel. Accordingly, the potential for lateral spreading to occur is low.

Paleontological Resources

Paleontological resources comprise fossils, together with the geologic context in which they occur. As documented in the Parks Master Plan MND, there are no known paleontological resources within the project area.

[32] Ibid.
[33] USGS. *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region California*. 2006.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

Impact GEO-1:	The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant Impact)**

The proposed project is located within a zone of medium liquefaction susceptibility and near existing active faults that can cause substantial ground shaking. Therefore, the site would likely be subject to strong shaking during the lifetime of the proposed project. Carter Park is gently sloped and not located in an area mapped as a localized landslide area. The project proposes work on the slope which could result in some slope instability. However, the proposed project would be required to comply with Policy 4-6 of the City's LCP which requires projects to submit a geotechnical report with their grading and building permit applications and follow all recommendations. In addition, the project would implement the following Standard Condition:

Standard Condition: All structures shall be constructed in compliance with the standards of the 2019 California Codes of Regulations Title 24, including Building Code, Residential Code, Administrative Code, Mechanical Code, Plumbing Code, Electrical Code, Energy Code, Fire Code and Green Building Code to the satisfaction of the Building Official.

With implementation of the standard condition described above and Policy 4-6 of the LCP, seismic and seismic-related impacts would be less than significant and the project would not exacerbate existing geologic conditions on adjacent sites. **(Less than Significant Impact)**

Impact GEO-2:	The project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact)**

Ground disturbance would be required for site preparation, removal of existing improvements, construction, and on-site improvements. Ground disturbance would expose soils and increase the potential for wind or water related erosion and sedimentation at the site until construction is complete.

The City's National Pollutant Discharge Elimination System (NPDES) Municipal Permit and urban runoff policies are the primary means of enforcing erosion control measures through the grading and building permit process. The project is required to comply with applicable City regulatory programs pertaining to construction-related erosion; therefore, compliance with the City's NPDES Municipal Permit will be ensured through the following standard project would be required to implement the standard permit condition of approval.

Standard Condition: Prior to issuance of grading permits, an erosion and sediment control plan shall be submitted that shows effective Best Management Practices (BMP) and erosion and sediment control measures for the site. Construction plans shall also include the "construction best management practices" plan sheet.

With implementation of the above standard condition of approval, and compliance with applicable regulations and City policies, construction of the proposed project would have a less than significant impact due to erosion. **(Less than Significant Impact)**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Less than Significant Impact)**

Carter Park is located in a liquefaction hazard zone and subject to very strong ground shaking during an earthquake. As discussed in Impact GEO-1, the proposed project would be constructed in compliance with the CBC to address soil instability and development of Carter Park would not change or exacerbate the geologic conditions of the project area and would not result in a significant geology hazards impact. **(Less than Significant Impact)**

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

Onsite soils have low expansive potential; however, the project would be designed and constructed in accordance with the CBC to address any potential expansive soils.[34] **(Less than Significant Impact)**

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **(No Impact)**

Carter Park is located within an urbanized area of Half Moon Bay where sewers are available to dispose of wastewater from the park. The project does not require septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

There are no records of paleontological resources in the project area. Because the soils in Carter Park were previously disturbed during construction of the existing park and adjacent Stone Pine Center, it is unlikely that intact paleontological resources are present at the site. Although unlikely, the potential remains for paleontological resources to be uncovered during construction of the proposed project.

[34] Holman & Associates. *Archaeological Survey Report for the Carter Park Improvement Project*. March 2020.

Mitigation Measure:

MM GEO-6.1: If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The City will be responsible for ensuring that the recommendations of the paleontologist regarding treatment and reporting are implemented.

With implementation of MM GEO-6.1, the proposed project would not result in a significant impact to paleontological resources. **(Less than Significant Impact with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO_2E ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area 2040 establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Half Moon Bay Municipal Code

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

- Water Conservation in Landscaping Regulations (Chapter 13.04)
- Indoor Water Use Efficiency Regulations (Chapter 13.05)
- Requirement for Construction and Demolition Waste Recycling (Chapter 14.50)

4.8.1.3 *Existing Conditions*

Current operation of Carter Park generates GHG emissions several ways including, but not limited to: automobile operation, maintenance activities (e.g. lawn mowers, leaf blowers, etc.), water transport, electricity usage, and waste disposal activities.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☐	☒

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Construction Emissions

GHG emissions from project construction would be primarily from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Construction of the proposed project, however, would result in fewer GHG emissions than a typical construction projects, as the proposed project requires no road building, minimal grading, and small structures. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. **(Less than Significant Impact)**

Operational Emissions

Operation of the proposed project would generate GHG emissions primarily from vehicle trips to and from Carter Park. BAAQMD has developed screening criteria based on the size of a project to determine whether detailed modeling to estimate GHG emissions is necessary. The screening threshold for city parks is 600 acres. Carter Park is 0.96-acres, which is significantly below the screening size; therefore, the project would have a less than significant operational GHG impact. **(Less than Significant)**

Impact GHG-2: The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(No Impact)**

The Parks Master Plan MND concluded that buildout of the Parks Master Plan would assist in the reduction of GHG emissions and support the 2017 CAP's primary goals. Table 4.8-1 shows the proposed project's conformance with the 2017 CAP control. Thus, the proposed project would not conflict with applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. **(No Impact)**

Table 4.8-1: Applicable Control Measures form the 2017 Clean Air Plan

Control Measure	Applicability
Energy Control Measure EN2, Decrease Electricity Demand	The proposed project would meet the building code and Water Efficient Landscape Ordinance requirement and includes installing LED safety lighting, water efficient irrigation systems, water-saving fixtures in bathrooms, and planting drought tolerant and low water-use plants to reduce energy needs. Further, the City subscribes to ECO 100 PCE portfolio for electricity.
Natural and Working Lands Control Measures NW2, Urban Tree Planting	The proposed project would plant native and climate appropriate trees to conserve water and energy, and absorb CO_2 and other air pollutants.
Control Measure TR9, Bicycle and Pedestrian Access and Facilities	The proposed project would improve the existing pedestrian and bicycle paths throughout Carter Park and is served by existing pedestrian and bicycle facilities. Additional bicycle racks (consistent with Municipal Code Section 18.36.070) would also be installed near the entrance to Carter Park.
Water Control Measures WR2, Support Water Conservation	The proposed project would use water efficient irrigation systems, installing water-saving elements in bathrooms, and replacing high water use landscaping with drought tolerant and low water-use landscaping.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, and the Resource Conservation and Recovery Act. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[35]

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released.

Asbestos-Containing Materials

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common

[35] CalEPA. "Cortese List Data Resources." Accessed May 22, 2020. https://calepa.ca.gov/sitecleanup/corteselist.

examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Local

Half Moon Bay General Plan Safety Element

The City's Safety Element contains policies related to hazardous materials management including the proper use, storage, transportation, handling and disposal of hazardous substances. It also includes land use policies to protect sensitive land uses for exposure to hazardous substances and includes the preparation and maintenance of the City's Hazardous Incident Response Plan.

4.9.1.2 *Existing Conditions*

Carter Park is currently developed with recreational park uses and contains walking paths and a circular brick mortar wall. There are no structures on-site that contain hazardous materials. The surrounding properties are commercial and office buildings that do not pose and environmental concern. A review of federal, state, and local regulatory agency databases was completed to evaluate the likelihood of contamination incidents at and near Carter Park. The park is not identified on any of the regulatory databases and is not on the Cortese list.[36] Several nearby sites were identified in the database search. None of the surrounding database listings pose a significant environmental risk to the park given that remediation has been completed, properties were issued closed case status or required no further action, and/or a workplan is in order to remediate contamination.[37]

Carter Park is located 4.9 miles southeast of the Half Moon Bay Airport and is not located within a Fire Hazard Severity Zone.[38]

[36] City of Half Moon Bay. *Park Master Plan Initial Study/Mitigated Negative Declaration.* October 2018.
[37] DTSC. "EnviroStor Database". Accessed April 30, 2020. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=half+moon+bay%2C+ca.
[38] 1) State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in LRA*. November 24, 2008. 2) State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in SRA*. November 6, 2007.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

The project does not propose any on-site use of hazardous materials. Herbicides or pesticides would continue to be stored off-site, similar to existing conditions. These hazardous materials would continue to be managed in accordance with existing laws and regulations that ensure proper containment **(Less than Significant Impact)**

Impact HAZ-2:	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. **(Less than Significant Impact)**

As discussed above, Carter Park does not have any recorded contamination on-site including recognized environmental conditions (RECs), historical RECs, and de minimis conditions. Furthermore, none of the current or previous site history is expected to have included the storage or use of hazardous substances or petroleum products. In addition, no nearby threats posed by other properties with environmental liabilities were identified. The project, therefore, would not create a hazard to the public or the environment involving the release of hazardous materials. **(Less than Significant Impact)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(No Impact)**

Future operations at Carter Park, under the proposed project, would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Furthermore, there are no existing or proposed schools within one-quarter mile of the park. Cunha Intermediate School is located approximately 0.3 miles southwest of Carter Park and Half Moon Bay High School is located approximately 0.5 mile north. For these reasons, the project would not emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school. **(No Impact)**

Impact HAZ-4:	The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **(No Impact)**

The project is not listed on a hazardous materials database or on the Cortese List.[39] **(No Impact)**

Impact HAZ-5:	The project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. **(Less than Significant Impact)**

Carter Park is not located within the Half Moon Bay Airport Land Use Compatibility Plan. The park is, however, within the San Francisco International Airport's (SFO) Airport Influence Area A (all of San Mateo County). SFO is located approximately 11 miles northeast of Carter Park and the area is well outside of the Outer Boundary of Safety Zones of the airport.[40] Thus, the proposed project would not result in an airport safety hazard. **(Less than Significant Impact)**

[39] City of Half Moon Bay. *Park Master Plan Initial Study/Mitigated Negative Declaration.* October 2018.
[40] City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November 2012

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

Built structures proposed by the project (i.e., amphitheater, support building, and concession/restroom building) would be constructed in accordance with current building and fire codes to ensure structural stability and safety in the event of a seismic or seismic-related hazard. In addition, the City would review the site development plans to ensure fire protection design features are incorporated and adequate emergency access is provided. For these reasons, the proposed project would not impair implementation of or physically interfere with the City's Safety Element. **(Less than Significant Impact)**

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(No Impact)**

Carter Park is not located in a Fire Hazard Severity Zone and is not subject to hazards from wildland fire.[41] The Coastside Fire Protection District has reviewed the project for fire safety and their comments have been incorporated into the project design. Development of the proposed project would not expose people or structures to increased risk from wildland fires. **(No Impact)**

[41] 1) State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in LRA*. November 24, 2008. 2) State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in SRA*. November 6, 2007.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay Regional Water Quality Control Board (RWQCB) regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3.

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[42] Under Provision C.3 of the MRP, new and redevelopment

[42] MRP Number CAS612008

projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

Local Coastal Program

Carter Park is located within the California Coastal Zone. The City's Local Coastal Program (LCP) contains the following policies relevant to hydrology and water quality and are applicable to the proposed project.

- Policy 4-8: No new permitted development shall cause or contribute to flood hazards.
- Policy 4-9: All development shall be designed and constructed to prevent increases in runoff that would erode natural drainage courses. Flows from graded areas shall be kept to an absolute minimum, not exceeding the normal rate of erosion and runoff from that of the undeveloped land. Storm water outfalls, gutters, and conduit discharge shall be dissipated.

4.10.1.2 *Existing Conditions*

Flooding

Carter Park is located in Flood Zone X and not within a 100-year flood hazard zone designated by FEMA.[43] Flood Zone X is a 500-year flood hazard zone. the City considers park and open space uses appropriate in the flood plain and such uses are consistent with the Parks Master Plan.

Dam Failure

Carter Park is located within the Pilarcitos Dam failure inundation zone; however, the City considers park and open space uses appropriate in the inundation zone.[44]

[43] FEMA. *Flood Insurance Rate Map Panel Number 06081C0260E*. October 16, 2012.
[44] County of San Mateo. *Hazard and Vulnerability Assessment*. January 2, 2015.

Seiches, Tsunamis, and Mudflows

There are no landlocked bodies of water near Carter Park that would affect the site in the event of a seiche. The project is not within a tsunami inundation hazard zone.[45,46] The site is located on the nearly flat valley floor topography and is not subject to the risk of mudflows.

Storm Drainage System

The City of Half Moon Bay operates and maintains the storm drainage system that serves Carter Park. Currently the park is mostly pervious, with concrete walkways running through the park as the only impervious surfaces. Stormwater on-site is allowed to percolate into the ground or directed towards pervious areas of the park. There are no existing storm drain lines within the park.

Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain. The nearest waterway to Carter Park is the Pilarcitos Creek, directly south of park. Water quality monitoring of Pilarcitos Creek indicate the creek has high fecal coliform counts relative to similar coastal streams and high levels of zinc, copper, and nutrients.[47]

Groundwater

Carter Park is located within the Lower Pilarcitos Creek Sub-basin. Regionally, groundwater flows east to west towards the Pacific Ocean. This outflow to the ocean results in large seasonal changes in groundwater levels, as well as a dynamic fresh-salt water interface. Greater groundwater withdrawal, less recharge, and/or drought conditions could move this interface inland. Groundwater in the region is estimated to be around 30 feet below ground surface (bgs).[48]

[45] Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region.* Accessed April 16, 2020. http://quake.abag.ca.gov/tsunamis.
[46] California Emergency Management Agency. *Tsunami Inundation Map for Emergency Planning Half Moon Bay Quadrangle*. June 15, 2009.
[47] City of Half Moon Bay. *Park Master Plan Initial Study/Mitigated Negative Declaration.* October 2018.
[48] City of Half Moon Bay. *Half Moon Bay Library Replacement Initial Study/Mitigated Negative Declaration*. March 2016.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact with Mitigation Incorporated)**

Construction

Construction of the proposed project, including grading and excavation activities, may result in temporary impacts to surface water quality. When disturbance to underlying soils occurs, surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system or Pilarcitos Creek. All construction or demolition activity that results in land

disturbances equal to or greater than one acre must obtain coverage under the NPDES General Permit for Construction Activities, which is administered by the SWRCB. Carter Park is less than one acre; therefore, the proposed project would not require coverage under the NPDES General Permit for Construction Activities.

As required by State and local water quality regulations and Local Coastal Program policies, the proposed project would be required to implement the following standard condition of approval.

Standard Condition: Prior to issuance of grading permits, an erosion and sediment control plan shall be submitted that shows effective Best Management Practices (BMP) and erosion and sediment control measures for the site. Construction plans shall also include the "construction best management practices" plan sheet.

With implementation of the above standard condition of approval, the project would not result in significant construction-related water quality impacts. **(Less than Significant Impact)**

Post-Construction

The project would increase the amount of impervious surfaces on Carter Park, thereby increasing stormwater runoff and potential pollutant levels. As described in the project description, the garden rooftop on the proposed restroom/concession building has been designed to reduce run-off from the building. The proposed project would add/replace more than 10,000 square feet of impervious surfaces and, therefore, would be subject to Provision C.3 of the MRP. As required by Provision C.3 of the MRP and City of Half Moon Bay policies, the project would implement the following standard condition of approval.

Standard Condition: Consistent with the MRP and City of Half Moon Bay Standard Planning Conditions, the proposed project would implement the following measures:

- Prior to issuance of a building permit, a stormwater management-treatment plan shall be submitted showing site design, source control, stormwater treatment, low impact development (LID), hydro modification management (HM) controls, and construction best management practices (BMP) for compliance with Provision C.3 of the Municipal Regional Stormwater Permit.
- The stormwater management-treatment plan shall include exhibit(s) showing drainage areas and location of Low Impact Development (LID) treatment measures; project watershed; total project site area and total area of land disturbed; total new and/or replaced impervious area; treatment measures and hydraulic sizing calculations; a listing of source controls and site design measures to be implemented at the site; hydro modification management measures, and supporting calculations. Hydro modification controls shall be designed using the Bay Area Hydrology Model (BAHM), unless the applicant uses an alternative continuous simulation hydrologic computer model as described in Attachment E of the MRP.

With implementation of the above standard condition of approval and compliance with Provision C.3 of the MRP, the project operation would have a less than significant impact water quality impact. **(Less than Significant Impact)**

Impact HYD-2:	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. **(No Impact)**

The proposed project would increase impervious surfaces at Carter Park, incrementally reducing groundwater recharge. Surface runoff would be directed to onsite pervious areas for infiltration. In addition, there is no substantial recharge area within the existing park. For these reasons, the proposed project would not substantially decrease groundwater supplies or recharge. **(No Impact)**

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

The project would incrementally increase the amount of impervious surfaces on-site. As discussed in Impact HYD-1, the project would implement BMPs during construction to reduce erosion and comply with Provision C.3 of the MRP (see standard condition of approval under Impact HYD-1). Project construction would also occur mostly outside of the riparian corridor of Pilarcitos Creek and include a green roof (see Figure 3.2-5), with the only construction in the riparian corridor consisting of replacing existing pathways. For these reasons, the project would not substantially alter the existing drainage pattern of the site such that erosion or siltation would occur, nor would the project result in a substantial increase in the rate or amount of surface runoff. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

Carter Park is not subject to inundation by tsunami or seiche; therefore, there would be no risk of release of pollutants at the park due to tsunamis or seiches. **(No Impact)**

In the event of a flood or inundation from Pilarcitos Dam at the site, the project would not risk release of pollutants because the small quantities of cleaning supplies, herbicides, and pesticides used on-site would be stored off-site and managed in accordance with existing laws and regulations that ensure proper containment. **(Less than Significant Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

As discussed in Impact HYD-1, the proposed project would implement identified project conditions, would be required to comply with the NPDES MRP, and would not impact groundwater recharge consistent with the Basin Plan. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

State

California Coastal Act and Local Coastal Program

In November 1972, California voters approved a ballot initiative known as Proposition 20, which called attention to the management of California's vast coastal resources. As a result, the Coastal Commission and six regional commissions were established to manage the coastal zone as a resource of statewide interest though permit control and preparation of a comprehensive Coastal Plan. The intent of the plan is "to preserve, protect, and where possible, restore the resources of the coastal zone for the enjoyment of the current and succeeding generations." The State Legislature passed the California Coastal Act of 1976 to implement recommendations found appropriate in the Coastal Plan. A key element in the Coastal Act of 1976 is that the bulk of the authority granted to the state and regional commissions by the Act was to be transferred to local governments through adoption and certification of "Local Coastal Programs." The Local Coastal Program (LCP) includes a local government's land use plans, zoning ordinance, zoning district maps, and other implementing actions which, when taken together, meet the requirements of and implement the provisions and policies of the Coastal Act. Each LCP should reflect the coastal issues and concerns of the local jurisdiction and must be consistent with the statewide policies of the Coastal Act. Once adopted, the LCP becomes legally binding on local governments and provides a permanent program for coastal protection. The adoption of the LCP also transfers permit authority, except in limited cases, to the local government.

Local

Local Coastal Program

The entire City of Half Moon Bay is located within the Coastal Zone as designated by the California Coastal Act; therefore, the City has prepared and implemented a LCP. The Land Use Plan portion of the City's LCP also serves as the Land Use Element of the City's General Plan, which designates the Andreotti Planned Development District. This designation is intended to provide for appropriately sited and scaled development including all associated infrastructure while maintaining community character and protecting the area's environmental attributes, including scenic resources, environmentally sensitive habitat areas, and viable farmland.

Zoning Ordinance

The Zoning Ordinance establishes the regulations and development criteria that would guide the proposed project. The main intents of the Ordinance include controlling the City's future growth; preventing excessive population densities and overcrowding; protecting the character and economic stability of all areas within the city; providing adequate light, air, privacy, and access to property; ensuring that demand not exceed capacity for public services; and conserving the City's architectural, historical, cultural, visual, and natural resources. The Ordinance establishes the City's zoning districts and their associated development standards. It also specifies the administrative processes for

the permitting of development within the City. Carter Park is currently zoned *PUD* – Planned Unit Development.

4.11.1.2 *Existing Conditions*

Project Site

Carter Park is located in an urban area of the City near the intersection of Main Street and Stone Pine Road. The site is currently developed with John L. Carter Memorial Park.

Surrounding Land Uses

Carter Park is located just north of downtown Half Moon Bay. North and east of the park is the Stone Pine Center which contains commercial buildings, and business park, and a surface parking lot. Pilarcitos Creek bounds the park to the east and south. Main Street bounds the park to the west.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☐	☒
2) 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?	☐	☐	☒	☐

Impact LU-1:	The project would not physically divide an established community. **(No Impact)**

The project proposes improvements to an existing park. Implementation of the proposed project would not result in the division of an established community. **(No Impact)**

Impact LU-2:	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. **(Less than Significant)**

The proposed project is consistent with the land use designation and zoning for the site. The proposed park is an existing use and is compatible with adjacent uses. The project is subject to mitigation measures to minimize environmental impacts, including hazardous materials and biological resources impacts, and would be consistent with federal, state, and local policies adopted to avoid or mitigate environmental effects as described in the individual resource sections of this Initial Study. For these reasons, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Existing Conditions*

The California Department of Conservation, Geologic Survey (CGS) classifies lands into aggregate and mineral resource zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974. These MRZs identify whether known or inferred significant mineral resources are present in areas. Lead agencies are required to incorporate identified MRZs into their General Plans. According to the Half Moon Bay Local Coastal Program Land Use Plan Map, Carter Park is not located with a MRZ.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact MIN-1: The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

Carter Park is not located in an area containing known mineral resources. **(No Impact)**

Impact MIN-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. **(No Impact)**

See response to Impact MIN-1. **(No Impact)**

4.13 NOISE

The following discussion is based upon an updated noise report prepared by Charles M. Salter & Associates in May 2020. A copy of this report is provided as Appendix B to this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[49] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[49] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.

Local

Half Moon Bay General Plan

The City of Half Moon Bay's General Plan Noise Element (1991) is intended to protect public health and welfare by eliminating existing noise problems and by preventing significant degradation of the future acoustic environment. The General Plan sets forth the following policies related to noise and noise control:

- Policy 2.c: The City shall ensure the effective enforcement of City, State and Federal noise levels by all appropriate City divisions.
- Policy 3.a: The City shall establish a new Community Noise Ordinance to mitigate noise conflicts from non-transportation noise sources. The City of Half Moon Bay does not currently have a problem with non-transportation sources of noise (e.g. industrial noise sources). Therefore, it does not seem prudent to adopt a Noise Ordinance aimed at the sources. However, in-fill construction is occurring throughout the City, and this can impact existing residential areas. Therefore, it is proposed to limit construction activities that occur within 500 feet of existing residences to Monday through Friday from 7:00 AM to 7:00 PM only. Construction also should not be allowed on federal holidays.

- Exhibit 7 sets the maximum acceptable noise level for the land use category of playgrounds and neighborhood parks at 70 CNEL.
- Exhibit 13 sets interior and exterior CNEL standards for single- (40 dBA interior, 60 dBA exterior) and multi-family residences (40 dBA interior).

Half Moon Bay Municipal Code

Title 9, Chapter 23 of the City's Municipal Code specifies no person shall, between the hours of 10:00 PM and 8:00 AM make, cause, suffer or permit to be made any offensive noise (1) which is made within one hundred feet of any building or place regularly used for sleeping purposes, or (2) which disturbs, or would tend to disturb, any person within hearing distance.

Title 14, Chapter 40 of the City's Municipal Code establishes performance standards for impulsive noise that it is unlawful for any residential, commercial, and industrial construction work to occur outside of the following hours:

- Monday through Friday, 7:00 AM to 6:00 PM;
- Saturdays 8:00 AM to 6:00 PM; and
- Sundays and holidays 10:00 AM to 6:00 PM.

4.13.1.3 *Existing Conditions*

The park is generally open from sunrise to sunset, seven days a week. The park is primarily used for picnicking, dog walking, and performing arts (i.e., Shakespeare in the Park and the Summer's End Music Festival). For picnicking, there is a small circular seat wall and grassy area. For performing arts, temporary enhancements must be rented or constructed on the site each year for performances. Shakespeare in the Park holds up to three weekends of performances, and average attendance is around 20 people per performance. The Summer's End Music Festival consists of live music, children's activities, informational booths, and food and drinks. Attendance has increased in recent years from an estimated 200 to 500 people over the course of the all-day event.

Ambient Noise Levels

The project site is located just north of downtown Half Moon Bay in an urban area of the City. Two long-term noise measurements (LT-1 and LT-2) were completed on the project site between Friday August 23, 2019 and Sunday August 27, 2019 (see Figure 4.13-1). Ambient noise levels at LT-1were 60 dBA and ambient noise levels at LT-2 were 51 dBA. The primary noise sources at the project site are vehicular traffic on local roadways and occasional aircraft flyovers. The nearest noise sensitive receptor is a multi-family residence approximately 400 feet north of the project site.

Figure 4.13-1: Noise Monitoring Locations

4.13.2 Impact Discussion

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

4.13.2.1 *Noise and Vibration Thresholds*

The following criteria were used to evaluate the significance of environmental noise and vibration resulting from the project:

Long-Term Noise Thresholds

- A significant noise impact would be identified if the operation of the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code.
- A significant impact would be identified if traffic generated by the project would increase noise levels at sensitive receivers in the vicinity using the following criteria contained in the General Plan:
    - the noise level increase is five dBA CNEL or greater, with a future noise level of less than 60 dBA CNEL, or
    - the noise level increase is three dBA CNEL or greater, with a future noise level of 60 dBA CNEL or greater.

Short-Term Noise Thresholds

- A significant noise impact would be identified if construction related noise would temporarily increase ambient noise levels at sensitive receivers based on the following criteria:
    - Hourly average noise levels intermittently exceeding 60 dBA Leq, and the ambient by at least 5 dBA Leq, for a period of one year or more.

Vibration Thresholds

- A significant impact would be identified if groundborne vibration levels will exceed 0.3 in/sec PPV at a nearby structure.

Impact NOI-1:	The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact)**

Project Construction

Project construction is expected to last approximately six to nine months. Noise impacts during the construction phase will depend on the noise levels generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. The closest noise sensitive receptor is located approximately 400 feet north of the project site across Stone Pine Road. In the City of Half Moon Bay, construction noise is exempt from the hours of 7:00 AM to 6:00 PM Monday through Friday and 8:00 AM to 6:00 PM on Saturdays, and 10:00 AM to 6:00 PM Sundays and holidays (Municipal Code Chapter 14.40) so long as conditions identified in Policy 3.a of the City's General Plan, which limits construction activities that occur within 500 feet of existing residences to Monday through Friday from 7:00 AM to 7:00 PM only and no construction on federal holidays, are met. The proposed project would comply with the City's Municipal Code and General Plan Policy 3.a. In addition, construction activities would last less than one year. For these reasons, the project would not result in a significant construction noise impact. **(Less than Significant Impact)**

Project Operation

The proposed project would improve and formalize existing uses at Carter Park. Under the proposed project, Carter Park would continue to be used for picnicking, dog walking, and performing arts (i.e., Shakespeare in the Park and the Summer's End Music Festival). Based on noise measurements taken during the weekend of the 2019 Shakespeare in the Park, the estimated ambient noise level at the nearest noise sensitive receptor (residences approximately 400 feet north of the project site) would be 58 to 59 CNEL. Noise measurements were taken during an amplified music event at Mac Dutra Plaza and used to model future events at Carter Park (see Appendix B). Based on this modeling, estimated noise levels during an amplified music event at the nearest noise sensitive receptor would be 58 CNEL. This would be a one dBA or less difference compared to existing ambient noise levels and would not exceed the exterior noise standard of 60 CNEL in the City's General Plan. For this reason and because Carter Park is used for plays and concerts under existing conditions (i.e., the project would not introduce a new use to the park), future events at Carter Park under the proposed project would not result in a significant noise impact. **(Less than Significant Impact)**

<u>Project Generated Traffic</u>

The proposed project would improve and formalize existing uses at Carter Park. Under the proposed project, Carter Park would continue to be used for picnicking, dog walking, and performing arts (i.e., Shakespeare in the Park and the Summer's End Music Festival). Typically, traffic volumes must

double to result in a three dBA increase in noise levels. Located immediately north of Downtown Half Moon Bay, traffic volumes in the project area are relatively high. The proposed project would not double traffic volumes in the project area and, therefore, project-generated traffic would not substantially increase noise levels in the project area. **(Less than Significant Impact)**

Impact NOI-2:	The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

Construction of the proposed project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams, etc.) are used. Construction activities would include excavation, grading, site preparation work, foundation work, and new building framing and finishing.

The nearest residential building is located 400 feet north of the project site and the nearest commercial building is located adjacent to the northern property line of the project site. The majority of the construction work along the edges of the project site, closest to neighboring buildings, would consist of improving existing pathways and require minimal construction equipment. Construction of the proposed amphitheater stage, support building, and restroom and concession stand building would occur near the center of Carter Park, at least 20 feet from the nearest property line. At this distance, vibration levels are not expected to be substantial and would not result in cosmetic damage to adjacent structures. **(Less than Significant Impact)**

Impact NOI-3:	The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. **(No Impact)**

The project site is not located within the Half Moon Bay Airport Land Use Compatibility Plan. The project site is, however, within the San Francisco International Airport's (SFO) Airport Influence Area A (all of San Mateo County). SFO is located approximately 11 miles northeast of the project site and the area is well outside of the noise contours of the airport.[50] **(No Impact)**

[50] City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November 2012

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Existing Conditions*

The City of Half Moon Bay is located on the Pacific Coast approximately 28 miles south of San Francisco and seven miles west of the City of San Mateo in San Mateo County. Half Moon Bay has a population of approximately 12,431 and approximately 4,731 housing units.[51]

4.14.2 Impact Discussion

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

Impact POP-1:	The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(No Impact)**

The project proposed improvements to an existing park. No residential, commercial, or office development is proposed as part of the project. Implementation of the project, therefore, would not induce substantial population growth. **(No Impact)**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

The project proposed improvements to an existing park. Thus, the project would not displace existing people or housing. **(No Impact)**

[51] State of California Department of Finance. "E-5 Population and Housing Estimates". May 2020. Accessed May 7, 2020. http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Local

Half Moon Bay General Plan

The current General Plan establishes a standard of eight acres of park land per 1,000 residents, including five acres of neighborhood park land and three acres of community park land. The General Plan sets forth the following additional policies related to parks and recreation, which are applicable to the proposed project:

- Policy 1.1.5: Locate parks throughout the City to assure equitable distribution and convenient access for all residents.
- Policy 1.1.6: Develop cultural, performing arts, and community center facilities as an integral part of the park system.
- Policy 1.3.3: Improve and update existing facilities to provide for changing recreation needs.
- Policy 4.2.1: Maintain facilities at appropriate levels.

4.15.1.2 *Existing Conditions*

Fire and Police Protection

Fire protection services in the project area are provided by the Coastside Fire Protection District (District).[52] The District provides the fire protection services for the City of Half Moon Bay and the communities of Montara, Moss Beach, Princeton, El Granada and Miramar in addition to the surrounding unincorporated areas with a total District size of 50 square miles and a population of 30,000 residents. The District operates three fire stations and has twenty-three volunteer firefighter positions along with twenty paid positions. The closest fire station to Carter Park is Fire Station 40 at 1191 Main Street, approximately one mile south of the site.

Police protection services in the project area are provided under contract by the San Mateo County Sherriff's Office.[53] Within the San Mateo County Sherriff's Office, the Coastal Patrol Bureau is responsible for law enforcement activities in the area as well as for over 60 percent of San Mateo County. The closest police station to Carter Park is the Half Moon Bay Substation at 537 Kelly Avenue, approximately 0.2 miles west of the site.

Schools

Carter Park is located within the Cabrillo Unified School District (School District). The District currently operates four elementary schools, one intermediate school, two high schools, a continuation school, and an adult education program.[54] The closest school to the park is Cunha Intermediate School, which is 0.3 miles southwest of the park. Half Moon Bay High School is located 0.5 miles north.

Parks

The City of Half Moon Bay operates 13 parks totaling approximately 59.2 acres.[55] In addition, there are 247 acres of preserved open space within city limits. The open space is owned and managed by public and non-profit entities, including the Peninsula Open Space Trust (128 acres), the Coastside Land Trust (71 acres), and the City of Half Moon Bay (42 acres).[56] The City currently provides approximately five acres of developed parks per 1,000 residents.

Half Moon Bay extends over six miles along the Pacific Ocean. The coast is generally characterized by bluff-backed sandy beaches, with bluffs rising up to 80 feet in height, with higher bluffs in the south. About three-quarters (4.5 miles) of the coastline is in public ownership, including nearly the entire coastline from El Granada (Surfers' Beach) to Kelly Avenue (Francis Beach, a part of Half Moon Bay State Beach), as well as the City-owned Poplar Beach. California State Parks and Beaches owns and manages most of this land, with smaller amounts managed by the City and County.

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[52] Coastside Fire Protection. "Coastside Fire Protection District." Accessed April 28, 2020. http://www.coastsidefire.org/.
[53] San Mateo County Sheriff's Office. "North Coast Substation." Accessed April 28, 2020. http://www.smcsheriff.com/divisions/operations-division/area-office-emergency-services/homeland-security/northcoast-substatio.
[54] Cabrillo Unified School District. "Description and Mission." Accessed April 28, 2020. https://www.cabrillo.k12.ca.us/about_us/district_profile.
[55] City of Half Moon Bay. *Parks Master Plan Initial Study/Mitigated Negative Declaration*. October 2018.
[56] Ibid.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☒	☐	☐
5) Other Public Facilities?	☐	☐	☐	☒

Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. **(Less than Significant Impact)**

Carter Park is currently served by the Coastside Fire Protection District. Coastside Fire Protection District has reviewed the project for fire safety and their comments have been incorporated into the project design. Implementation of the proposed project would not change the current uses of the park and would not require the construction of new or expansion of existing fire facilities. The project would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies to promote public and property safety. For these reason, implementation of the project would not result in a significant impact to fire protection services. **(Less than Significant Impact)**

Impact PS-2:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. **(Less than Significant Impact)**

As discussed in Impact PS-1 above, the proposed improvements to Carter Park would not alter the uses of the park. The San Mateo County Sherriff's Office has reviewed the project for safety and their comments have been incorporated into the project design. Lighting and access to the project

would be maintain according to City standards and policies. For these reasons, the project would have a less than significant impact on police protection services. **(Less than Significant Impact)**

Impact PS-3:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. **(No Impact)**

The project does not include residential development and would, therefore, not increase student enrollment in the project area. **(No Impact)**

Impact PS-4:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. **(Less than Significant Impact with Mitigation Incorporated)**

The project proposes improvements to Carter Park consistent with the City's Parks Master Plan and would move the City towards its performance standards for parks (eight acres of park land per 1,000 residents). The proposed project, with implementation of the standard conditions of approval and mitigation measures, would have a less than significant impact on the environment, as described further in the individual resource sections of this Initial Study. For these reasons, the project would have a less than significant impact on park facilities. **(Less than Significant Impact with Mitigation Incorporated)**

Impact PS-5:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. **(No Impact)**

The proposed project does not include residential development that would contribute to the use of other public facilities. Thus, the project would have no impact on other public facilities. **(No Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Local

Half Moon Bay General Plan

The City's General Plan establishes a standard of eight acres of park land per 1,000 residents, including five acres of neighborhood park land and three acres of community park land. The General Plan sets forth the following additional policies related to parks and recreation, which are applicable to the proposed project:

- Policy 1.1.5: Locate parks throughout the City to assure equitable distribution and convenient access for all residents.
- Policy 1.1.6: Develop cultural, performing arts, and community center facilities as an integral part of the park system.
- Policy 1.3.3: Improve and update existing facilities to provide for changing recreation needs.
- Policy 4.2.1: Maintain facilities at appropriate levels.

4.16.1.2 *Existing Conditions*

The City of Half Moon Bay operates 13 parks totaling approximately 59.2 acres.[57] In addition, there are 247 acres of preserved open space within city limits. The open space is owned and managed by public and non-profit entities, including the Peninsula Open Space Trust (128 acres), the Coastside Land Trust (71 acres), and the City of Half Moon Bay (42 acres).[58] The City currently provides approximately five acres of developed parks per 1,000 residents.

Half Moon Bay extends over six miles along the Pacific Ocean. The coast is generally characterized by bluff-backed sandy beaches, with bluffs rising from about two to 80 feet in height, with higher bluffs in the south. About three-quarters (4.5 miles) of the coastline is in public ownership, including nearly the entire coastline from El Granada (Surfers' Beach) to Kelly Avenue (Francis Beach, a part

[57] City of Half Moon Bay. *Parks Master Plan Initial Study/Mitigated Negative Declaration*. October 2018.
[58] Ibid.

of Half Moon Bay State Beach), as well as Poplar Beach. California State Parks and Beaches owns and manages most of this land, with smaller amounts managed by the City and County.

4.16.2 Impact Discussion

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

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

The project proposes improvements to Carter Park consistent with the Parks Master Plan. This could result in an incremental increase in the park's usage compared to existing conditions; however, the proposed project is part of the Park Master Plan which is designed to accommodate both existing and future populations. Since the proposed project is consistent with the Parks Master Plan, the project would have a less than significant impact on park and recreational facilities. **(Less than Significant Impact)**

Impact REC-2: The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact with Mitigation Incorporated)**

Unlike a residential development, which may involve or require construction or expansion of recreational facilities, the project proposes improvements to Carter Park. The proposed improvements are consistent with the PMP. As described further in the individual resource sections of this Initial Study, the proposed project would have a less than significant impact on the environment with implementation of standard conditions of approval and applicable mitigation measures. For these reasons, the project would have a less than significant impact on the environment. **(Less than Significant Impact with Mitigation Incorporated)**

4.17 TRANSPORTATION

Parking is no longer considered an impact under CEQA and thus is not of focus of this study. That said, it is locally important and the project is seeking a Parking Exception, and a Reciprocal Parking and Access Agreement with the adjacent land owner is also anticipated. Parking is also provided at Half Moon Bay High School (approximately 0.5 mile north of the project site) via an online reservation system for offsite events. To that end, a parking occupancy survey was conducted, and the Planning Commission will receive an analysis associated with parking needs and impacts with the project staff report.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including San Mateo County. The MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. The MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions are required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notabley, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.[59]

[59] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and

Regional and Local

Congestion Management Program

The City/County Association of Governments (C/CAG) of San Mateo County, as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) on a biennial basis. The purpose of the CMP is to identify strategies to respond to future needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The 2017 CMP, which was developed to be consistent with Metropolitan Commission's Plan Bay Area, provides updated program information and performance monitoring results for the CMP roadway system.

Policy 2-1 in the Circulation Element of the General Plan states, "The City will support Level-of-Service (LOS) C as the desired Level-of-Service on State Route (SR) 1 and SR 92, except during the peak commuting and recreational periods when LOS E will be considered the minimum acceptable standard." The City's LOS criteria are consistent with CMP published by the C/CAG, except for the intersection of SR 92 and Main Street for which C/CAG has defined a LOS standard of F. Additionally, the CMP does not include a LOS standard for weekend operations.

Half Moon Bay Municipal Code

Title 10 of the City's Municipal Code outlines numerous policies relating to vehicles and traffic. Policies relating to the project discuss traffic control devices, bicycle and pedestrian regulations, and parking, all of which have the purpose of increasing traffic safety and relieving traffic congestion in the City.

Title 18 (Zoning) of the Municipal Code ensures service demands associated with new development do not exceed the capacity of existing streets, utilities, or other public services.

4.17.1.2 *Existing Conditions*

Regional Access

Regional access to Carter Park is provided via State Route (SR) 1 and SR 92. SR 1 runs in the north-south direction through Half Moon Bay. It is a major regional highway and runs along California's coastline. In the vicinity of the project area, SR 1 has one lane in both the northbound and southbound directions and the posted speed limit is 40 miles per hour. SR 92 runs in an east-west direction and connects the City with Interstate (I-) 280, US 101, San Francisco International Airport and the greater Bay Area.

afternoon peak commute periods." Source: Office of Planning and Research. "Changes to CEQA for Transit Oriented Development – FAQ." October 14, 2014. Accessed May 28, 2020. http://www.opr.ca.gov/ceqa/updates/sb-743/transit-oriented.html.

Local Access

Local access to Carter Park is provided via Main Street and Stone Pine Road. Main Street runs north to south through downtown Half Moon Bay with one lane in each direction. Stone Pine Road runs west to east and provides access to the Stone Pine Center north of the park.

Pedestrian and Bicycle Facilities

The City's Bicycle and Pedestrian Master Plan (BPMP) was adopted in September 2019. Figures 3-2 and 3-8 of the BPMP include a recommended Class 1 multi-use path alignment in the vicinity of Carter Park known as the Pilarcitos Creek Trail. The Pilarcitos Creek Trail alignment is not yet defined; however, when the trail was considered in the BPMP, the intention for future improvements to Carter Park were known and thus flexibility in trail alignment for this and other important factors was provided for in the BPMP. The project would not conflict or block the future alignment of the Pilarcitos Creek Trail.

All local roadways in the project area provide paved sidewalks, including pedestrian pathways through Carter Park. SR 1 does not have sidewalks, but there is a Class I Multi-Use Path that runs parallel on the west side to SR 1, south of Kelly Avenue.

The Circulation Element of the Half Moon Bay General Plan references the San Mateo County Comprehensive Bicycle and Pedestrian Plan, stating that the existing system consists of three classifications of bicycle facilities:

- Multi-Use Path (Class I) allows for two-way, off-street bicycle use and may be used by pedestrians, skaters, people in wheelchairs, joggers, and other non-motorized users.
- Bike Lanes (Class II) are defined as a portion of the roadway designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are generally appropriate for major arterial and collector roadways and are five to seven feet wide.
- Bike Routes (Class III) are defined as streets shared with motor vehicles and signed for bicyclists. They are appropriate for roads with low speeds and traffic volumes; however, they can be used on higher volume roads that have wide outside lanes or shoulders.

Within the vicinity of the park, there is a Class I path along the west side of SR 1, south of Kelly Avenue. Additional Class I paths and other safety improvements on the east side of SR 1 are currently under construction or in the design phase. These improvements would provide safer, more convenient bike and pedestrian access to downtown from outlying areas.

Transit Facilities

Existing fixed route transit services include SamTrans, the regional bus service, DIAL-A-RIDE, a limited and demand-responsive transit service, and RediCoast, which is a paratransit service.

- SamTrans Route 17 - is a coastal community bus that provides service connecting Pacifica, Moss Beach, El Granada, Half Moon Bay, and Pescadero. The nearest stop to Carter Park is located 0.25 miles northwest on SR 92.

- SamTrans Route 294 - is a regional service that connects Half Moon Bay with San Mateo Medical Center, Hillsdale Caltrain Station, Hillsdale Shopping Center, and the College of San Mateo, via SR 92, with a loop in downtown Half Moon Bay. It provides a vital link to the Hillsdale Caltrain station in San Mateo and the rest of the Bay Area. The nearest stop to the park is 400 feet north on Main Street.
- DIAL-A-RIDE is a limited, demand-responsive transit services are available in Half Moon Bay under certain conditions for eligibility.
- RediCoast is a paratransit service managed by the San Mateo County Transit District. The service is provided under the Americans with Disabilities Act of 1990 (ADA). RediCoast provides curb-to-curb for disabled citizens living between Devil's Slide and the border of Santa Cruz County, including Princeton, Moss Beach, El Granada, Half Moon Bay, and several other coastal communities. Travel outside of these areas is possible through arrangement with respective paratransit providers (e.g. Redi-Wheels for eastern San Mateo County, Outreach for Santa Clara County, etc.).

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
4) Result in inadequate emergency access?	☐	☐	☐	☒

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

The proposed improvements to Carter Park would not introduce new or expanded uses and use of the park is anticipated to result in only a modest increase in park visitors. Therefore, the proposed improvements are not anticipated to result in a significant impact on intersection LOS, bicycle, or pedestrian circulation. Events at Carter Park utilizing the amphitheater would continue to be managed in accordance with the City's Municipal Code and General Plan policies to reduce and manage traffic in the project area.

Bicycle and pedestrian access to the park would remain the same, with entrances to the park from Main Street and the Stone Pine Center maintained. Walkways within the park would be improved as part of the project and increase pedestrian access within the park.

For these reasons, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less Than Significant Impact)**

CEQA Guidelines Section 15064.3(b) describes factors that might indicate whether a development project's VMT may be significant. The City of Half Moon Bay has not adopted a VMT policy. Section 15064.3(b)(3) allows for a qualitative VMT analysis if, as in the case of the proposed project, existing models or methods are not available to estimate project VMT, stating the qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc.

The project proposes improvements to Carter Park, which is located immediately north of downtown Half Moon Bay and adjacent to existing commercial and residential uses. The park is primarily used by local residents and is served by transit, pedestrian, and bicycle facilities that connect it to the surrounding areas. Approximately 15 large events would be held at Carter Park per year that could attract visitors from neighboring cities; however, these are occasional events and are not representative of the parks daily use throughout the majority of the year. In addition, the proposed improvements to the existing park would be utilized by people already visiting the downtown area for other purposes (i.e., restaurants, shopping, hotels, etc.) and would not generate a significant amount of new vehicle trips on its own; rather, the trips would be shared with surrounding uses and not result in a significant increase in VMT compared to existing conditions. For these reasons, the project would not conflict with CEQA Guidelines Sections 15064.3, subdivision (b). **(Less Than Significant Impact)**

Impact TRN-3:	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). **(No Impact)**

The proposed improvements to Carter Park, an existing park located near Downtown Half Moon Bay, are compatible with the surrounding uses in the project area and do not include geometric design features that would substantially increase hazards. The proposed project would not alter sidewalks, bicycle paths, streets, or driveways serving the existing park. **(No Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(No Impact)**

The proposed project will not alter the existing roadway system in a manner that would impact emergency access. Pedestrian access to the park would also remain the same. Therefore, there will be no impact. **(No Impact)**

4.18 TRIBAL CULTURAL RESOURCES

The following discussion is based, in part, upon an ASR prepared by Holman & Associates in March 2020. The ASR discusses locations of specific archaeological sites and is, therefore, confidential under State law. For this reason, it is not included in this Initial Study. Qualified personnel, however, may request a copy of the report from the City's Planning Department located at 501 Main Street during normal business hours.

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

The project area is situated within an environmentally advantageous area for Native Americans. The area would have provided a favorable environment during the prehistoric period with coastal, riparian and inland resources readily available. No archaeological resources have been identified on Carter Park. The nearest recorded archaeological resource is located adjacent to the park's northern boundary; however, none of the resources components were recommended as eligible to the National Register or the California Register of Historical Resources.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Impact TCR-1:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact with Mitigation Incorporated)**

To date, no tribes have contacted the City to request notification under AB 52.

Carter Park has been disturbed and studied multiple times, and no tribal cultural resources are known to occur on the property. In the event that an inadvertent discovery of a tribal cultural resource is made, mitigation measure MM CUL-2.1 and standard conditions of approval will be implemented, as stated in Section 4.5 Cultural Resources of this Initial Study. **(Less than Significant Impact with Mitigation Incorporated)**

Impact TCR-2:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Less than Significant Impact with Mitigation Incorporated)**

See response to Impact TCR-1. **(Less than Significant Impact with Mitigation Incorporated)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Half Moon Bay is part of the Coastside County Water District (CCWD) which adopted its most recent UWMP in September 2016.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Local

Half Moon Bay Ordinance 14.50

Prior to commencement of any building project valued in excess of $5,000, the ordinance requires a building permit applicant to complete a Construction and Demolition Debris Waste Management Plan and submit it to the City for review. The Waste Management Plan includes:

- Contractor and project identification information
- Procedures to be used
- Materials to be re-used and recycled and materials disposed
- Estimated quantities of materials
- Names and locations of re-use/recycling facilities and disposal facilities

4.19.1.2 *Existing Conditions*

Water Supply

Water service to Carter Park is provided by CCWD and there is an existing CCWD water valve in the park, near the proposed concession/restroom building. Existing water usage on the site is approximately 3,166 gallons per day (gpd).[60]

Wastewater/Sanitary Sewer System

Wastewater from the project area will be conveyed by the City's collection system to the Sewer Authority Mid-Coastside (SAM) Wastewater Treatment Facility in Half Moon Bay.[61] There are currently no facilities in Carter Park that require connection to the City sewer.

Storm Drainage

Currently, Carter Park is mostly pervious, with concrete walkways running through the park as the only impervious surfaces. Stormwater on-site is allowed to percolate into the ground or directed towards pervious area for infiltration. There are no existing storm drain lines within the park.

Solid Waste

Allied Waste Services (AKA Republic Services) is Half Moon Bay's franchised municipal waste hauler, providing residential curbside collection of recyclables and greenwaste (yard waste), and commercial collection for recyclables. The majority of the city's solid waste is directed to the Corinda Los Trancos Sanitary Landfill (known as Ox Mountain), which is a Class III disposal facility located at 12310 San Mateo Road (State Route 92). The current remaining permitted landfill airspace for refuse and cover is calculated at 22,180,000 cubic yards, as of December 31, 2015.[62] Based upon current waste disposal rates, average density of the waste, and daily cover usage at the facility, the estimated closure date for the landfill is 2034.[63]

[60] CalEEMod. *Appendix D Default Data Tables: Table 9.1 Water Use Rates*. October 2017. Water usage rates were calculated based on the land use type of City Park.
[61] Sewer Authority Mid-Coastside. "Sewer Authority Mid-Coastside". Accessed April 28, 2020. https://samcleanswater.org/.
[62] CalRecycle. "SWIS Facility Detail Corinda Los Trancos Landfill". Accessed April 28, 2020. https://www2.calrecycle.ca.gov/SWFacilities/Directory/41-AA-0002/Detail.
[63] Ibid.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) 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?	☐	☐	☒	☐
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Impact UTL-1: 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. **(No Impact)**

The proposed project would connect to the City's existing stormwater, electric, natural gas, telecommunications, waste, and wastewater system infrastructure. The proposed project would incrementally increase the demand on existing utilities in the City of Half Moon Bay. The analysis in the following sections discusses the potential impacts of the project on existing facilities. Based on the following analysis, no relocation of existing or construction of new facilities are needed to serve the proposed project; therefore, there would be no impact. **(No Impact)**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

As discussed above, Carter Park currently uses approximately 3,166 gpd of water for landscape irrigation. The proposed project would decrease the amount of landscaped area by constructing a concession/restroom building, a new amphitheater, and a support building. These new buildings would use water intermittently during large events at the park, compared to the constant use of water for landscaping. As a result, the proposed project would use less water compared to existing conditions.

In addition, according to the Parks Master Plan MND, the UWMP accounted for the proposed project in their water supply projections and that the CCWD has adequate water supplies to serve the park. Since the project is consistent with the Parks Master Plan, there would be adequate water supplies to meet the project's demand. **(Less than Significant Impact)**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

The proposed project would construct a new concession/restroom building in Carter Park. These buildings would connect to a new four-inch sanitary sewer line that would run west and connect to an existing sanitary sewer line on the western boundary of the Stone Pine Center. This would result in an incremental increase in wastewater from the park. City collection capacity is sufficient to handle the incremental increase. The SAM treatment plant has adequate capacity to handle the small incremental increase. In addition, Chapter 18.05.020 of the City's Municipal Code prioritizes uses of reserved sewer capacity for recreational uses; therefore, the Municipal Code assures there is adequate sewer capacity for the proposed project. **(Less than Significant Impact)**

Impact UTL-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. **(Less than Significant Impact)**

The project proposes improvements to Carter Park; however, maintenance of the park is expected to generate a similar amount of waste compared to existing conditions. The concession/restroom building would generate additional solid waste from the park, but the Parks Master Plan MND concluded that current remaining space at Ox Mountain Landfill is adequate to meet the proposed project's needs. Thus, there is sufficient landfill capacity to serve the project. **(Less than Significant Impact)**

Impact UTL-5:	The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(No Impact)**

The proposed project would not negatively impact the provision of solid waste services and would comply with City Ordinance 14.50 and implement a Waste Management Plan. In addition, the project would be required to direct and recycle waste consistent with federal, state, and local requirements. Thus, the project would not impair the attainment of solid waste reduction goals. **(No Impact)**

4.20 WILDFIRE

4.20.1 Environmental Setting

Carter Park is not located within a Fire Hazard Severity Zone, however, the park contains fuel (i.e., riparian habitat and other vegetation) and is located approximately 1,400 feet southwest of a local responsibility Very High Fire Hazard Severity Zone (VHFHZ) and approximately 2,500 feet southwest of a state or federal responsibility VHFHZ.[64]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Although not located within a Fire Hazard Severity Zone, Carter Park is located near local and state VHFHZ.

Impact WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan? **(Less than Significant Impact)**

The project proposes improvements to Carter Park, including pathways, landscaping, and two new structures (an amphitheater and concession stand). The park is not an integral component (e.g., an

[64] 1) State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in LRA*. November 24, 2008. 2) State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in SRA*. November 6, 2007.

emergency shelter or emergency evacuation route) of an adopted emergency response plan or emergency evacuation plan. Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

Impact WF-2:	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? **(Less than Significant Impact)**

The prevailing wind direction is from the northwest to the southeast. Carter Park is located southwest of the VHFHZ; therefore, the park is not downwind of fire hazard zones. For this reason, the proposed park improvements would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. **(Less than Significant Impact)**

Impact WF-3:	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? **(Less than Significant Impact)**

The project proposes improvements to an existing park located in a developed area adjacent to Downtown Half Moon Bay. The project does not propose installation or maintenance of roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or that are associated with wildfire management and could result in temporary or ongoing impacts to the environment. **(Less than Significant Impact)**

Impact WF-4:	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? **(Less than Significant Impact)**

The project site is not located down slope or immediately downstream of wildfire hazard area. Therefore, the project would not expose people or structures to significant risk, such as flooding, or landslides resulting in wildfire in the project area. **(Less than Significant Impact)**

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in the individual resource sections of this Initial Study, the proposed project would not degrade the quality of the environment with the implementation of identified standard conditions of approval and mitigation measures. The project would implement MM BIO-1.1 through MM BIO-1.15 to reduce potential impacts to special-status species during project construction activities and would implement standard conditions of approval to reduce potential disturbance to nesting birds and raptors in the project vicinity (see Section 4.4 Biological Resources). The project would implement MM CUL-2.1 to reduce potential impacts buried cultural resources to a less than significant level (see Section 4.5 Cultural Resources).

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact with Mitigation Incorporated)**

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In addition, under Section 15152(f) of the CEQA Guidelines, where a lead agency has determined that a cumulative effect has been adequately addressed in a prior EIR, the effect is not treated as significant for purposes of later environmental review and need not be discussed in detail.

The proposed project would result in temporary air quality, biology, and noise impacts during construction. With implementation of the identified mitigation measures, standard conditions of approval, and consistency with adopted City policies, the construction impacts would be mitigated to a less than significant level. As the identified impacts are temporary and would be mitigated, the project would not have cumulatively considerable impacts on air quality, biology, and noise in the project area.

The project would have a less than significant impact on aesthetics, geology and soils, hydrology and water quality, population and housing, public services, recreation, transportation, tribal cultural resources and utilities, and would not contribute to cumulative impacts to these resources given the limited scope of the project. The project would not impact agricultural and forest resources or mineral resources. Therefore, the project would not contribute to a significant cumulative impact on these resources.

Impact MFS-3:	The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include construction TACs and noise. However, implementation of mitigation measures, standard conditions of approval, and City policies would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified. **(Less than Significant Impact with Mitigation Incorporated)**

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region.* Accessed April 16, 2020. http://quake.abag.ca.gov/tsunamis.

BAAQMD. *CEQA Air Quality Guidelines*. May 2017.

BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Cabrillo Unified School District. "Description and Mission." Accessed April 28, 2020. https://www.cabrillo.k12.ca.us/about_us/district_profile.

CalEEMod. *Appendix D Default Data Tables: Table 9.1 Water Use Rates*. October 2017.

CalEPA. "Cortese List Data Resources." Accessed October 22, 2018. https://calepa.ca.gov/sitecleanup/corteselist.

California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 16, 2018. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

California Air Resources Board. "The Advanced Clean Cars Program." Accessed April 6, 2018. https://www.arb.ca.gov/msprog/acc/acc.htm.

California Building Standards Commission. "California Building Standards Code." Accessed January 21, 2020. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 26, 2019. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.

California Department of Conservation. *San Mateo County Important Farmland 2016*. February 2018.

California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 26, 2019. http://frap.fire.ca.gov/.

California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed February 11, 2020. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

California Department of Transportation. "Scenic Highways" Accessed April 7, 2020. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

California Energy Commission. "2019 Building Energy Efficiency Standards." Accessed January 21, 2020. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Energy Commission. "Natural Gas Consumption by County." Accessed February 21, 2019. http://ecdms.energy.ca.gov/gasbycounty.aspx.

California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed March 15, 2019. http://ecdms.energy.ca.gov/elecbycounty.aspx.

California Gas and Electric Utilities. 2019 *California Gas Report.* Accessed August 27, 2019. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.

California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

CalRecycle. "SWIS Facility Detail Corinda Los Trancos Landfill". Accessed April 28, 2020. https://www2.calrecycle.ca.gov/SWFacilities/Directory/41-AA-0002/Detail.

Charles M. Salter Associates, Inc. *Carter Park Amphitheater Update to Music Noise Measurement Results and Analysis*. May 8, 2020.

City of Half Moon Bay. *Half Moon Bay Library Replacement Initial Study/Mitigated Negative Declaration*. March 2016.

City of Half Moon Bay. *Park Master Plan Initial Study/Mitigated Negative Declaration.* October 2018.

City of Half Moon Bay. *Parks Master Plan*. January 2019. Page 4.13.

City of Half Moon Bay. *Bicycle & Pedestrian Master Plan*. September 2019

City of Half Moon Bay. *Bicycle & Pedestrian Master Plan Initial Study/Mitigated Negative Declaration.* October 2018.

City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November 2012.

Coastside Fire Protection. "Coastside Fire Protection District." Accessed April 28, 2020. http://www.coastsidefire.org/.

County of San Mateo. *Hazard and Vulnerability Assessment*. January 2, 2015.

DTSC. "EnviroStor Database". Accessed April 30, 2020. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=half+moon+bay%2C+ca.

FEMA. *Flood Insurance Rate Map Panel Number 06081C0260E*. October 16, 2012.

Holman & Associates. *Archaeological Survey Report for the Carter Park Improvement Project.* March 2020.

H.T. Harvey & Associates. John L. Carter Park Improvements, Phase II Project Biological Resources Report. July 2020.

Peninsula Clean Energy. "Energy Choices." Accessed June 11, 2018. https://www.peninsulacleanenergy.com/our-power/energy-choices/.

Peninsula Clean Energy. "Frequently Asked Questions." Accessed June 11, 2018. https://www.peninsulacleanenergy.com/resources/frequently-asked-questions/.

Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed February 8, 2018. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

San Mateo County Sheriff's Office. "North Coast Substation." Accessed April 28, 2020. http://www.smcsheriff.com/divisions/operations-division/area-office-emergency-services/homeland-security/northcoast-substatio.

Sewer Authority Mid-Coastside. "Sewer Authority Mid-Coastside". Accessed April 28, 2020. https://samcleanswater.org/.

State of California Department of Finance. "E-5 Population and Housing Estimates". May 2020. Accessed May 7, 2020. http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in LRA.* November 24, 2008.

State of California Department of Forestry and Fire Protection. *San Mateo County, Very High Fire Hazard Severity Zones in SRA.* November 6, 2007.

United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed February 8, 2018. http://www.afdc.energy.gov/laws/eisa.

United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed March 28, 2019. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed August 1, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.

USGS. *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region California*. 2006.

SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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