Appendix A

Initial Study

City of Hermosa Beach

REVISED NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND PUBLIC REVIEW PERIOD

Revised notice is hereby given that the City of Hermosa Beach, Community Development Department, will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know your views as to the scope and content of the environmental information to be prepared for the proposed project. Revised notice is being given due a change in the location of one of the proposed beach landing sites for the marine cable. The cable landing site originally proposed on the beach just west of Longfellow Avenue has been eliminated and replaced with a proposed landing site on the beach just west of Neptune Street in Hermosa Beach. The other proposed landing sites remain unchanged.

PROJECT TITLE: Transpacific Fiber-Optic Cables Project.

PROJECT APPLICANT: MC GLOBAL BP4, 16 Walkabout Lane, Napa, CA 94558.

PROJECT LOCATION: The cable landing sites would be on the beach just west of 25th Street and on the beach just west of Neptune Street. Optional sites are proposed on Longfellow Avenue and 25th Street between Hermosa Avenue and Manhattan Avenue. Proposed power feed equipment would be located at 1529 Valley Drive, 102 Pacific Coast Highway, 1601 Pacific Coast Highway, and/or Valley Park. Fiber-optic cable would be installed in various City streets.

PROJECT DESCRIPTION: The project consists of the installation and operation of up to four transpacific submarine cable systems, which would connect the United States to various Pacific Rim locations such as Southeast Asia, China, Australia, and Japan. The terrestrial components of the Project would include marine directional bores, beach manholes, buried conduit systems, power feed equipment facilities, fiber optic cables, ocean ground beds, and other ancillary components. The marine components of the project are comprised of the marine fiber optic cables and the marine portion of the directional bores.

PROBABLE EFFECTS OF THE PROJECT: Based on the results of the Initial Study, the project may result in significant effects related to the following environmental topics: aesthetics, air quality, biological resources, cultural resources, geology/soils, greenhouse gas emissions, hazardous materials, water quality, land use, noise, public services, recreation, and transportation/traffic.

SCOPING MEETING: Pursuant to Section 21083.9 of the Public Resources Code, a Scoping Meeting for the EIR was held on April 8, 2015. At the Scoping Meeting, overviews of the project and the EIR process were presented. Members of the public in attendance asked questions and provided comments regarding the project, potential environmental effects, and alternatives. No additional scoping meetings are planned.

A copy of the Initial Study describing the project location and potential environmental effects is available at the Community Development Department, City of Hermosa Beach, 1315 Valley Drive, Hermosa Beach, California, 90254, or online at http://www.hermosabch.org/index.aspx?page=482.

The public review period for submitting comments on the scope of the EIR is June 18, 2015, to July 20, 2015. All comments need to be mailed or submitted no later than July 20, 2015. Please send your response to Ken Robertson, Community Development Director, City of Hermosa Beach, 1315 Valley Drive, Hermosa Beach, CA, 90254, (310) 318-0242 or via email to krobertson@hermosabch.org including your name, address, and concerns.

Ken Robertson, Director of Community Development Department

Lead Agency: City of Hermosa Beach

Contact: Ken Robertson, Director
Community Development Department
1315 Valley Drive
Hermosa Beach, CA 90254

Phone: (310) 318-0242
E-mail: kroberston@hermosabch.org

Initial Study

Transpacific Fiber-Optic Cables Project

Applicant: MC GLOBAL BP4

Location: **Project Phases.** The Project would be developed in four phases, corresponding to four marine cable alignments (Phases 1-4, alignments 1-4) from Hermosa Beach to Southeast Asia, China, and two other locations on the west side of the Pacific Ocean that are not yet known. The proposed marine cable alignments would traverse the California continental shelf (see Figures 1 and 2).

Terrestrial Components. The terrestrial portion of the Project has three components: landing sites, power feed equipment sites, and fiber-optic cable systems.

- Each marine alignment would terminate at a cable landing site. For Phase 1, the applicant's preferred landing site is located on the beach just west of 25th Street ("25th Street landing site"). Phase 1 would also include the establishment of a second landing site on the beach just west of Neptune Avenue ("Neptune Avenue beach landing site"), which would be used as the termination point for the marine cable in Phase 2. Optional sites are proposed in Longfellow Avenue and in 25th Street between Hermosa Avenue and Manhattan Avenue.
- One power feed equipment facility (PFE) would be installed for each phase of the Project. PFE for all phases may be located at the same site, or at one or more of four locations in the City shown in Figure 3. The proposed locations for the power feed equipment are 555 6th Street inside the City of Hermosa Beach maintenance yard, 1529 Valley Drive inside the commercial building, 1601 Pacific Coast Highway inside the commercial building, and/or 102 Pacific Coast Highway inside the commercial building.
- Depending on the location of the landing site(s) and PFE site(s), fiber-optic cable could be installed in the following street rights-of-way (see Figure 3):
  - Ardmore Avenue,
  - Ingleside Drive,
  - Loma Drive,
  - Longfellow Avenue,
  - Manhattan Avenue,
  - Monterey Boulevard,
  - 1st Place,
  - 6th Street,
  - 16th Street,
  - 24th Place,
  - 25th Street,
  - 30th Street, and

- Pier Avenue,
- Valley Drive,
- 35th Street.

General Plan: The Project's terrestrial fiber-optic cables and the two optional cable landing sites would generally be located within public street rights-of-way. These streets traverse areas with the following General Plan land use designations: Low, Medium, and High Density Residential; Commercial Corridor, Neighborhood Commercial, General Commercial, Industrial, Mobile Home Park, Beach, and Open Space. Two cable landing sites are located on the beach, which has a Beach designation. General Plan designations are not applicable to the marine portions of the Project. Coastal Land Use Plan designations include Low, Medium, and High Density Residential; General Commercial; Neighborhood Commercial; Industrial; and Open Space.

Zoning: OS (Beach, landing sites); C-2 (power feed equipment location); SPA-8 (power feed equipment location); SPA-7 (power feed equipment location); otherwise the project is located within public rights-of-way which have the same zoning as the adjacent land. Zoning at the PFE locations and along the terrestrial cable routes is shown in Figure 4.

A. Project Description

The applicant proposes to install and operate up to four transpacific submarine cable systems with United States landings in Hermosa Beach, California (Figures 1 and 2). The proposed Project would be implemented in four phases consisting of one phase for each of the four cable systems. Each cable system would entail installing a fiber-optic cable system onto the continental shelf, landing at one of two sites in Hermosa Beach, and then connecting to a terminal on land at one of four potential power feed equipment (PFE) facility locations. In Phase 1, the applicant proposes to construct two cable landing sites on the beach just west of the Strand at Neptune Avenue ("Neptune Avenue beach landing site") and just west of the Strand at 25th Street ("25th Street beach landing site"). If the landing sites cannot be constructed from the beach area, the optional landing sites, which would lie within the respective city street rights of way between Hermosa Avenue and Manhattan Avenue would be utilized. Phase 2 would utilize the 25th Street cable landing site. Phases 3 and 4 would use one or the other of the cable landing sites depending on cable alignment. Ultimately, each cable landing site would support two cables. The four potential PFE facility sites that would be considered for each phase of the Project would all be located within the City of Hermosa Beach. Each PFE location will be evaluated in the EIR. Buried terrestrial conduit systems would be installed within public street rights-of-way to connect cable systems from the landing sites to the PFE facilities and to a local telecommunications carrier. The other appurtenant facilities necessary for the cable systems would be installed during various phases of work as described below.

The four independent cable systems would connect the United States to Pacific Rim locations, such as Southeast Asia, China, Australia, and Japan. At this time, two cable system connections have been identified; these would be accommodated in the first two phases of the proposed Project. The other cables would follow in future phases as additional connection points in other countries are identified. The four phases currently proposed are summarized below.

- **Phase 1: Southeast Asia to the United States (SEA–US).** This cable system would be the first cable to land as part of the proposed Project. The SEA–US cable system would have landings in Hawaii, Guam, the Philippines, and Indonesia. The major work elements comprising Phase 1 subject to local, state, and federal jurisdiction are listed below. The SEA–US cable system would include marine and

terrestrial fiber-optic cable, ground cable, and power cable. The SEA–US cable system would use the 25th Street beach landing site. The major work elements of Phase 1 are listed below.

- One PFE facility would be installed for the SEA–US cable system. The PFE location would be determined during final design and consultation with the City. The PFE would likely be constructed at either 1601 Pacific Coast Highway or 102 Pacific Coast Highway, inside the commercial building present at both sites.
- One ocean ground bed would be installed for the SEA–US cable system at the 25th Street beach landing site. The ocean ground bed would consist of anodes installed into holes drilled in the beach down to the seawater level below the beach surface.
- Four marine directional bores (one for each of the four cable systems) would be conducted to provide a housing for the fiber-optic conduit. Two directional bores would be conducted on the beach at the Neptune Avenue landing site, and two on the beach at the 25th Street landing site. Each directional bore has an alternative bore site located on the respective existing city streets for use if the beach landings are unavailable. Each directional bore would be approximately 4,000 feet in length and would extend offshore into the Pacific Ocean.
- Two beach manholes would be installed at the directional bore locations to provide access to the conduit; one at the Neptune Avenue beach landing site and one at the 25th Street beach landing site.
- A buried terrestrial conduit system would be constructed from the beach manhole at the Neptune Avenue landing site to the PFE facility for the SEA–US cable system and interconnect with the local telecommunication carrier interconnection point within the City. The interconnection point will be located at the PFE facility, and connect with the local telecommunications carrier on site.

- **Phase 2: China to the United States (China–US).** This cable system would likely be the second cable to land and would connect directly to China. The major work elements of Phase 2 are listed below.
  - The China–US cable system would include marine and terrestrial fiber-optic cable, ground cable, and power cable. This cable system would use the Neptune Avenue landing site.
  - One PFE facility, one ocean ground bed, and other ancillary facilities.
  - One terrestrial conduit system to connect from the manhole (installed as part of Phase 1) to the PFE facility for this cable to the local telecommunication carrier interconnection point.
- **Phase 3.** The third cable system is projected to land between 2017 and 2020. The cross-Pacific connection point is not known at this time. This cable would use either the Neptune Avenue or 25th Street beach landing sites. The major work elements of Phase 3 would be the same as Phase 2 and include the marine and terrestrial cable systems, a PFE facility, an ocean ground bed, and ancillary facilities.
- **Phase 4.** The fourth cable system is projected to land between 2020 and 2025. The cross-Pacific connection point is not known at this time. This cable would use either the Neptune Avenue or 25th Street beach landing sites. The major work elements of Phase 4 would be the same as Phase 2 and include the marine and terrestrial cable systems, a PFE facility, an ocean ground bed, and ancillary facilities.

The EIR will evaluate the impacts of all four phases of the proposed Project, even though dates for implementation of Phases 3 and 4 have not yet been established. Supplemental CEQA review of Phases 3 and 4 may be needed depending on conditions that exist at that time and on whether any components of those phases differ substantially from those analyzed in the EIR.

Terrestrial and Marine Components

The ***terrestrial components*** of the Project would include marine directional bores, beach manholes, buried conduit systems, PFE, fiber-optic cables, ocean ground bed, and other ancillary components. Terrestrial construction activities would entail delivery of staging materials and equipment, surface preparation, trenching, PVC and steel conduit placement, backfilling, trenchless installation, directional boring, conventional boring, manhole installation, installation of the inner PVC conduits (innerduct), cable pulling, and surface restoration.

The ***marine components*** of the Project are comprised of the marine fiber-optic cables and the marine portion of the directional bores described above. The marine cables are shown in Figure 2. The cables would extend from the mean high water mark out to the edge of the Continental Shelf at a water depth of approximately 5,904 feet (1,800 meters, or 984 fathoms). Where the water depth is less than approximately 3,936 feet (1,200 meters), the cable would be installed by plowing or by post-lay burial below the seafloor, as feasible depending on the substrate. At water depth greater than approximately 3,936 feet (1,200 meters), the cable would not be buried and instead would be placed on the seafloor.

The pre-construction and construction phases for the both the terrestrial and marine components of the Project are described below. Activities associated with operation and maintenance of the Project, as well as its eventual decommissioning, are also described below.

Pre-Construction

Terrestrial Components

Prior to directional bore operations, a detailed engineering plan and profile drawing would be produced. This drawing would depict the horizontal and vertical alignment that would best fit the landing site conditions based on previous surveys of the land and sea floor. In addition, a soil boring sample would be taken to determine the subsurface geology. This information is used to select the correct depths, mud mixes, and drilling head types. The sub-bottom profile of the ocean floor and the proposed drill path alignment would also be used to verify the depths provided are correct and to establish a true running line and elevation for the drill path. At the proposed exit point (i.e., where the directional boring operation proposes to “daylight” on the seabed offshore), a marine support crew would set a buoy at the exit and this distance would be measured and verified. The depth of the bore path is also intended to hinder the release of drilling mud to the surface while remaining above unknown subterranean formations that may occur at greater depths.

Marine Components

Prior to cable installation, a pre-lay grapnel run would be performed to clear debris, such as discarded fishing gear, from the seafloor along the corridors where the cables are to be buried. To accomplish this, a grapnel, typically of the flatfish type (Figure 15), would be dragged along the cable routes before cable installation. The grapnel would be attached to a length of chain to ensure contact with the bottom and towed by a workboat similar to the Dock Express 20 at a speed of approximately 1 mile per hour (approximately 0.9 knot or 1.6 kilometer per hour). The arms of the grapnel are designed to hook debris lying on the seafloor or shallowly buried to approximately 1.3 feet (0.4 meter). If debris is hooked and towing tension increases, then towing would cease and the grapnel would be retrieved by winch. Any debris recovered during the operation would be stowed on the vessel for subsequent disposal in port.

Construction

Terrestrial Components

One beach manhole would be installed at each of the two landing sites. The beach manholes would allow access to the directional bores (also known as horizontal directional drilling) that will be installed out to a point beyond the surf zone approximately 3,000 feet (914 meters) offshore. The directional bores are guided by a drill head fitted with a steering tool and devices to track the bore location. Five- to six-inch steel conduit would be advanced in 30-foot sections through the boreholes as they are created. The directional bore machine occupies the bore entry site where the beach manholes are located. The beach manholes, which would allow access to the marine bore pipes, would be the connection point between the marine cables and the terrestrial cables and conduit systems. The terrestrial conduit system would be buried to a minimum depth of 3 feet (0.9 meter) and would include typical manholes for access. The construction areas are illustrated in Figures 5 through 10.

A drilling fluid (typically a solution of bentonite clay and water) would be circulated into the bore hole to prevent it from caving in and to coat the wall of the bore hole to minimize fluid losses to permeable rock and soil types. Drilling fluid also serves as a lubricant for the drill head and carries the cuttings (pieces of drilled rock) back to the entry pit, where the cuttings are removed. Clean drilling fluids are then recirculated into the bore hole. The drilling fluid—a non-toxic, inert material—would be used for drilling all but the final approximately 30 feet (9 meters) of the bore hole. To minimize the potential for release of silty material into the marine environment, the last section of the bore hole would be drilled using potable water as a drilling fluid. Spent drilling fluids (except for those lost to the surrounding subsurface material) and cuttings would be collected and disposed of at a permitted landfill.

A PFE facility would be installed for each cable system. The PFE housed in the facility would require approximately 740 square feet and would include an emergency backup generator. The PFE would be installed in existing commercial buildings or in a City of Hermosa Beach public works maintenance yard. The PFE facility is detailed in Figure 11.

The ocean ground beds would be installed under the beach at a minimum depth of 10 feet (3 meters) to the top of the ground rods. The ocean ground beds would be connected to the beach manhole. A ground bed is an electrode array that is installed beneath the ground to give off a path with low resistance to the ground. It is a vital component of the grounding system, and helps prolong the lifespan of the Project by providing cathodic protection. The ocean groundbed is detailed in Figure 12.

Approximately 90 percent of terrestrial conduit installation is expected to utilize trenchless construction rather than utility trenching. Trenchless technology uses small guided bores that can be steered. This approach allows the bore machine to sit at normal ground level, to bore down under an obstruction or along an alignment, and to be steered back up to the surface at a distant point. Once the bore reaches the opposite side of the resource or obstruction being avoided, the conduit is attached to the bore pipe and pulled back through the bore opening.

Conventional boring may be used on this Project to a limited extent. Conventional boring is accomplished by simultaneously boring a horizontal hole and pushing a conduit under an obstruction (e.g., a road). A push pit approximately 6 feet (1.8 meters) wide and 25 feet (7.6 meters) long would be excavated to the bore depth. The pit accommodates the drilling and jacking equipment and the equipment operators. The actual boring process involves driving (or pushing) a rotating auger in a conduit from the push pit under the obstruction. As the auger and conduit are advanced, excavated material is carried out of the excavation through the casing. The process continues until the bore is completed into the receiving pit,

which is an excavation that permits access to the auger and casing. In the final step, the auger is extracted and the conduit installed within the casing.

Short segments of the terrestrial conduit system could be installed using trenching methods where boring is infeasible or undesirable. Short segments of trenching would likely be required at manhole locations and connection points to existing structures for the PFE facilities. The trenches would typically be 12 to 18 inches (31 to 46 centimeters) wide and 48 to 60 inches (122 to 152 centimeters) deep (depending on underground utilities encountered). A typical trench detail is illustrated in Figure 13.

Trenches would be excavated with a rubber-tired backhoe or similar excavating equipment. Conduit placement would begin immediately following trench excavation. Where existing utilities are encountered, a minimum clearance of 12 inches (31 centimeters) would be maintained between the utility and the conduit. Generally, when existing utilities are encountered, the new facilities would be placed below the utilities so as not to interfere with their future maintenance.

Once the conduit system is constructed, an innerduct (typically high-density polyethylene piping) would be pulled into the conduits and the cable installed. The innerduct and cable pulling processes are essentially the same. The innerducts are illustrated in Figure 14. The innerducts and the cable would be installed by pulling them from one intermediate manhole to the next. Equipment required for this operation includes trailers to transport the innerduct and cable and truck-mounted mechanical pulling equipment. Although cable pulling does not disturb the ground surface physically, traffic control may be required for manholes located in traffic lanes. The applicant is proposing to work during daylight hours 7 days a week for all terrestrial construction activities, except terrestrial conduit installation and terrestrial innerduct and cable pulling. For the terrestrial conduit installation, the applicant has proposed construction hours of 8:00 a.m. to 6:00 p.m., 6 days a week, for 4 weeks. The applicant has proposed construction hours for the terrestrial innerduct and cable pulling of 8:00 a.m. to 6:00 p.m., 6 days a week, for 1 week. All construction activities would be compliant with the City of Hermosa Beach noise ordinance. The equipment required for terrestrial construction activities are listed below.

Directional Bores

- 1 front-end loader or grader
- 1 backhoe
- 1 forklift
- 1 fluid management system with generator
- 1 directional bore machine
- 1 control shack
- 1 pickup truck
- 1 equipment and supply trailer

Terrestrial (Trenchless) Conduit Installation

- 1 bore machine with self-contained water mixing tank
- 1 backhoe
- 1 pickup truck
- 1 equipment and supply trailer
- 1 saw cutter
- 1 vibratory compactor

Conventional Boring

- 1 bore machine
- 1 backhoe or excavator
- 1 supply and equipment trailer
- 1 pickup trick
- 1 saw cutter
- 1 vibratory compactor

Trench Construction

- 1 backhoe, trencher, or excavator
- 1 pickup truck
- 1 Equipment and supply trailer
- 1 dump truck
- 2 handheld vibratory compactors
- 1 saw cutter

Manhole Installation

- 1 excavator
- 1 delivery truck with boom
- 1 pickup truck
- 1 equipment and supply trailer
- 1 dump truck
- 1 handheld vibratory compactor

Ocean Ground Bed Installation

- 1 backhoe
- 1 well-drilling machine
- 1 pickup truck
- 1 equipment and supply trailer

Innerduct and Terrestrial Cable Pulling

- 1 cable-pulling truck
- 1 pickup truck with cable reel trailer
- 1 supply and equipment truck

Marine Cable Pulling

- 1 crane or boom truck
- 1 generator
- 1 hydraulic winch
- 1 pickup truck
- 1 equipment and supply trailer

Marine Components

Marine construction activity would include directional bores to extend the cables bored in the terrestrial portion of the Project out past the surf zone, at approximately the 32-foot (10-meter) water depth. Each marine directional bore would involve a bore pipe approximately 4,000 feet (1,219 meters) long, extending from the eastern side of the beach, under the beach at a minimum depth of 25 feet, to a point in the ocean beyond the surf zone. This is illustrated in Figures 16 and 17. One marine fiber-optic cable would be pulled into each bore pipe. Once the cable is past the surf zone, construction activities would vary depending on the water depth

Beginning at the end of the bore pipe, the cable would be temporarily laid directly on the seafloor to a water depth of approximately 328 feet (100 meters) until it can be post-lay buried by divers or a remotely operated vehicle (ROV) as described below. For the remainder of the buried section of cable, burial would be achieved by cable plowing or by ROV-assisted post-lay burial. Marine cable-laying activities would generally run 24 hours a day, 7 days a week except for diver-assisted cable burial which would be conducted during daylight hours.

Cable plowing can be used between the water depths of 328 feet (100 meters) and 3,037 feet (1,200 meters). A cable plow is a burial tool in the form of a large sled that is deployed by the main cable ship after the shore-end landing operations are complete. Once deployed to the bottom, divers assist with loading the cable into the plow's articulated feed chute and burial shank. These mechanical movements are controlled through an umbilical cord connecting the plow to the cable ship by an operator watching the divers through a video camera mounted on the plow. When the ready signal is given, the ship moves away with the plow in tow. As it is towed, the plow mechanically buries the cable to its desired depth. The plow accomplishes this by slicing through the ocean floor sediments while at the same time the cable is fed through the plow shank and into the bottom of the furrow in one operation, as illustrated in Figure 18. The plow furrow would be a narrow area of approximately 3.3 feet (1 meter) wide. The plow would be supported by two sled outriggers to a total width of approximately 20 feet (6.1 meters). The furrow created by the shank of the cable plow tool naturally closes under the weight of the sediments and the plow sleds that transmit the weight of the plow to each side of the furrow, effectively adding compacting

force to the sediment. The combination of the two forces—the weight of the soil and the weight of the sled—is sufficient to fully close and compact the furrow. No further compacting would be required.

In locations where plow burial is not possible, the cable would be buried using post-lay burial methods. These methods would include diver-assisted jet burial and ROV burial.

Diver-Assisted Post-Lay Burial

Diver-assisted burial can be used in shallow water depths typically between 33 and 98 feet (10 and 30 meters). Once the cable has been securely anchored at the beach manhole, the main cable ship is given the order to begin moving out along the predetermined course, paying out the marine cable as it goes. The ship would move away at a rate of approximately 0.5 mile per hour (0.4 knot or 0.7 kilometer per hour).

Diver-assisted burial would be used from the end of the bore pipes to a water depth of approximately 98 feet (30 meters), and cables would be installed using diver-assisted jetting equipment. For diver-assisted burial, divers would use hand jets to open a narrow furrow beneath the cable. This action would allow the heavy cable to drop into the furrow as it is opened, and the disturbed sediments would then settle back over the cable. This would fill the furrow and restore the surface to original grade. Depending on bottom conditions, the cable would be buried to a 3.3-foot (1.0-meter) water depth, where feasible based on localized conditions.

Remotely Operated Vehicle Post-lay Burial

Between water depths of approximately 98 feet (30 meters) and 328 feet (100 meters), or where the sea plow cannot achieve the targeted burial depth because of bottom conditions, an ROV would be used to attempt to bury the cable. These sections of cable would be laid temporarily on the ocean floor by the cable ship awaiting post-lay burial attempt at a later date by the ROV.

An ROV is a robotic device operated from the vessel. The ROV would be deployed and operated from the main cable ship or a similar vessel. The ROV moves under its own power and is tethered to and guided from the cable ship. In a manner similar to the hand jets used in diver-assisted burial, ROV jets would loosen the seafloor sediments beneath the cable, allowing it to settle to the desired depth. The disturbed sediments would then settle back over the area to their original grade, leaving the cable buried. The cable is typically left at a depth of 3 to 4 feet (1 to 1.2 meters). The ROV has a nominal speed of 0.35 mile per hour (0.3 knot or 0.56 kilometer per hour) when jetting. However, the overall rate of forward progress depends on the number of passes needed to attain target burial depths, which in turn is a function of sediment stiffness. Up to three passes may be required; therefore, the overall rate of burial using an ROV is estimated to be 0.1 mile per hour (0.09 knot or 0.2 kilometer/hour). Post-lay burial of the cable by ROV would take place between 1 day and 3 weeks from when the cable is first laid on the ocean floor.

The post-lay burial of cable by ROV would disturb the seafloor. The typical width of disturbance associated with this activity is 15 feet (4.6 meters). This disturbance addresses the seafloor only, not disturbance to the water column.

Operation and Maintenance

Differential geographic positioning system navigation would be used during installation of the cable systems. Extensive records would be maintained to track the exact location of the cable-lay ship, sea plows, or ROVs during the installation process. After installation, the data would be compiled into a standard-format cable record. The record would be distributed to all cable maintenance zone ships,

government charting agencies, and other data users. Records can then be used to locate the cables on the seabed when a cable repair is needed. These records would be maintained throughout the system's life and after the system is retired.

Other than ensuring that the power feed and transmission equipment in the terminal station are in proper working order, no routine maintenance is planned for the submerged segments of the cable network. These cables typically operate for 25 years. Because of the stability of the ocean-bottom environment, regular maintenance is unnecessary.

Decommissioning/Abandonment

The project would have a life of approximately 25 years. Within 90 days of either taking the cable out of service or the expiration of the City lease, the applicant would advise the City, the California Coastal Commission, and any other agencies with jurisdiction over the cable of the status and proposed disposition of the inactive cable. The cable owner would also work with the City to determine if removal of facilities would be necessary. All terrestrial facilities, including the conduit and manhole system would be left in place and available for use by other cables. The directional bores installed to facilitate the cable landings would also be left in place. Similarly, the buried portions of the marine cable are expected to be left in place. If any non-buried segments of cable occur within state waters, the cable owner would work with the City to determine if removal is appropriate. If non-buried segments occur and it is determined that removal is required, the cable owner would conduct the removal.

Applicant Mitigation Measures

The applicant has proposed the following mitigation measures to reduce Project impacts:

Aesthetics

- Screen construction staging areas to minimize visual impacts.
- Design façade of the new PFE facility to match existing structures.

Air Quality and Greenhouse Gases

- Implement clean diesel repowers for the main lay vessel within waters under the City's and state's jurisdiction.
- Implement clean diesel retrofits for all marine vessels to the extent practicable.
- Use a modern onroad fleet for onroad material delivery and haul trucks.
- Implement diesel-reduction measures.
- Pay offsets.

Biological Resources (Marine)

- Modify vessel operations when marine mammals are present. Include a biologist for marine mammal and sea turtle monitoring during all vessel activities. Monitoring will occur by a biologist familiar with sea turtle behavior during all activities. In the event that sea turtles are present in the immediate area of the project vessels or are approaching the work area such that interactions may occur then the biologist has the authority to halt vessel operations until after the risk of collision has passed. Any collisions will be reported immediately to the proper authorities.
- Bury and inspect cable wherever feasible.
- The proposed cable routes will be aligned to the extent possible to avoid areas of known fishing activity using bottom contact fishing gear and minimize crossing of hard-bottom substrate communities.

Biological Resources (Terrestrial)

- Avoid disturbing roosting western snowy plover through timing or other appropriate measures.
- Conduct preconstruction surveys for nesting raptors and other birds.
- Implement measures to minimize impacts on common wildlife.

Cultural Resources (Terrestrial)

- Stop work, evaluate resources, and develop appropriate archaeological treatment plan.
- Stop work if human or substantial fossil remains are encountered during ground-disturbing activities.

Fisheries

- Communicate schedule of project-related marine activities and coordinate with fishery associations.
- Align cable routes to avoid known areas of fishing activity.
- Bury and inspect marine cable to the extent practicable.
- Compensate fishers for lost gear.

Geology and Soils

- Conduct a geotechnical study prior to construction.

Hazardous Materials

- Implement appropriate treatment of contaminated soils.

Land Use and Recreation

- Coordinate cable location and construction activities with appropriate agencies and personnel.
- Provide as-laid specifications to appropriate agencies and personnel.
- Fund beach-related improvements as part of a conservation easement with the City of Hermosa Beach.

Noise

- Employ noise-reducing construction practices.

Public Services, Utilities, and Energy

- Coordinate with public service agencies regarding construction work affecting roads.
- Prepare an emergency response plan.
- Coordinate with utility providers and agencies.
- Repair or replace underground infrastructure damaged by project activities.

Transportation

- Prepare traffic control plan.
- Limit delivery of construction materials to off-peak hours.
- Provide businesses and residences with advance notification of driveway blockage.
- Coordinate with appropriate public agencies to ensure emergency access around construction zones.
- Keep existing traffic lanes clear during non-working hours.
- Issue appropriate notification of activities that could interfere with marine traffic.

Surrounding Land Uses and Setting

Land uses surrounding the Project in the City of Hermosa Beach consist of low density and high density residential neighborhoods as well as commercial corridors and open space. Hermosa Beach is a beachfront city located in the South Bay region of the greater Los Angeles area. It is bordered by Manhattan Beach to the north and Redondo Beach to the south and east. The City itself extends only about 15 blocks from east to west and 40 blocks from north to south, with the Pacific Coast Highway traversing the city north and south. The Hermosa Beach General Plan Land Use Designations are detailed in Figure 4.

The City is located near the southwest end of the Santa Monica Bay and includes 1.8 miles of coastline. Santa Monica Bay is an integral part of the larger geographic region commonly known as the Southern California Bight. The Bay itself is the submerged portion of the Los Angeles Coastal Plain (SMBRC, 2013). The Santa Monica Bay watershed is located in one of the world's most sprawling metropolitan areas (SMBRC, 2010). Habitat in the region has been substantially altered in the last one hundred years and many terrestrial areas have been developed. Nonetheless the diverse ecosystems within the Santa Monica Bay watershed provide habitats for more than five thousand species of plants, fish, birds, mammals, and other wildlife (*ibid*). The Santa Monica Bay also supports a wide variety of commercial and recreational activities.

The Bay Restoration Plan was approved by Governor Pete Wilson in 1994 and by U.S. EPA Administrator Carol Browner in 1995. The 1995 Plan identified almost 250 actions, including 74 priority actions, that address critical problems such as storm water and urban runoff pollution, habitat loss and degradation, and public health risks associated with seafood consumption and swimming near storm drain outlets. The Plan was updated in 2013 and is administered by the Santa Monica Bay Restoration Commission (SMBRC) whose mission is to "improve water quality, conserve and rehabilitate natural resources, and protect the Bay's benefits and values (SMBRC, 2013)."

The City-owned beach/beachfront is known for a myriad of outdoor activities such as volleyball, surf-boarding, skateboarding, and boogie boarding. Other favorite activities include walking, jogging, skating or biking along the Strand (Marvin Braude Bike Trail), the paved path paralleling the beach and connecting Hermosa with the neighboring beach cities. The County of Los Angeles Department of Beaches and Harbors maintains the beach. The proposed PFE facility locations are within commercial buildings and an existing City of Hermosa Beach maintenance yard.

Required Public Agency Permits or Approvals

Required public agency permits or approvals identified at this time include the following:

City of Hermosa Beach

- Precise Development Plan for Project development (Planning Commission)
- Planned Development Permit for development in Open Space Zone (Planning Commission)
- Fiber-Optic Cable Easement for development of landings (City Council)
- Construction/excavation permits (Building Official, Community Development Dept.); encroachment permits for placement of conduit and construction activities (Public Works Director)

Coastal Commission

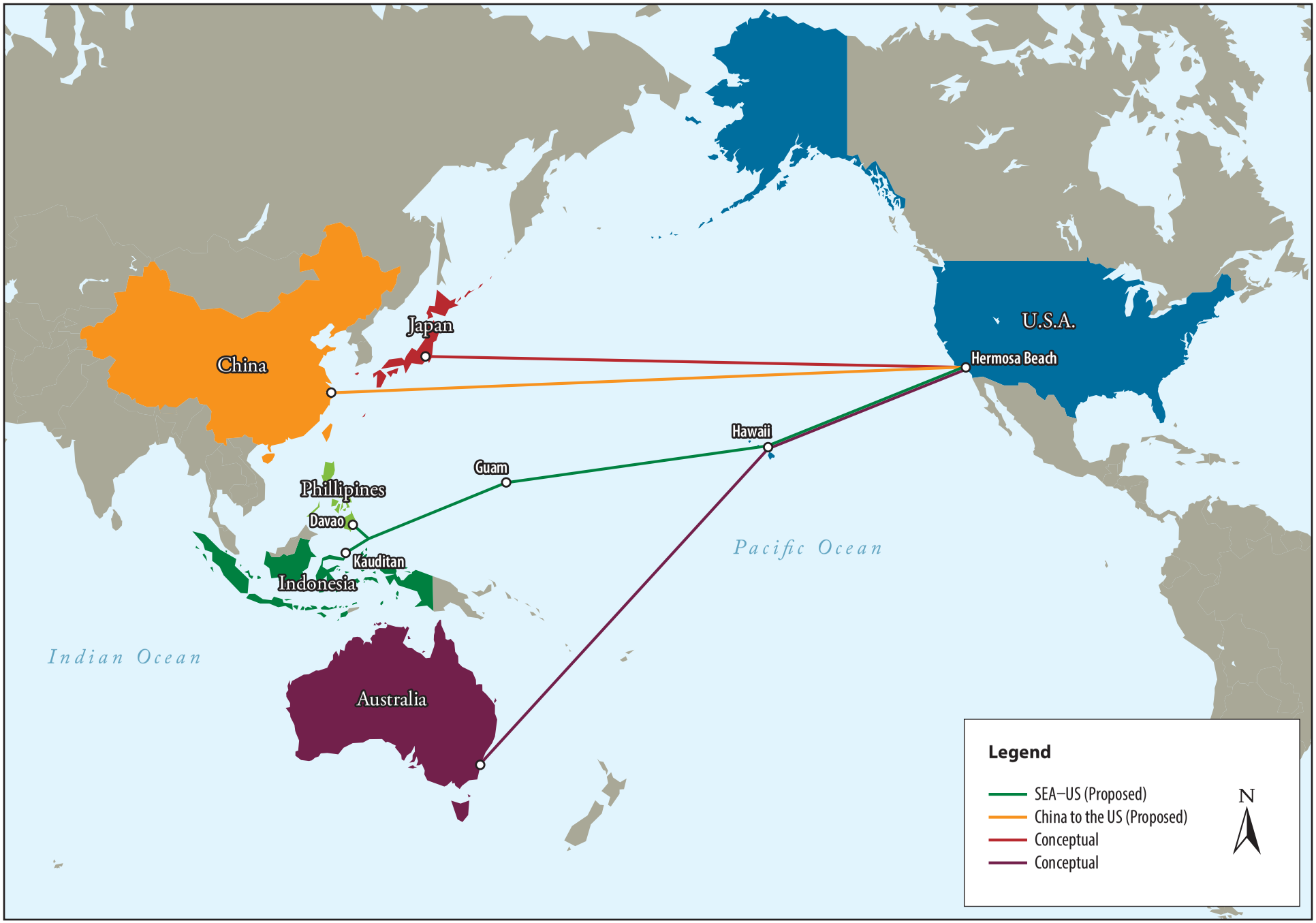
- Coastal Development Permit
- Coastal Zone Management Act Consistency Certification

Regional Water Quality Control Board

- Clean Water Act, Section 401 Water Quality Certification

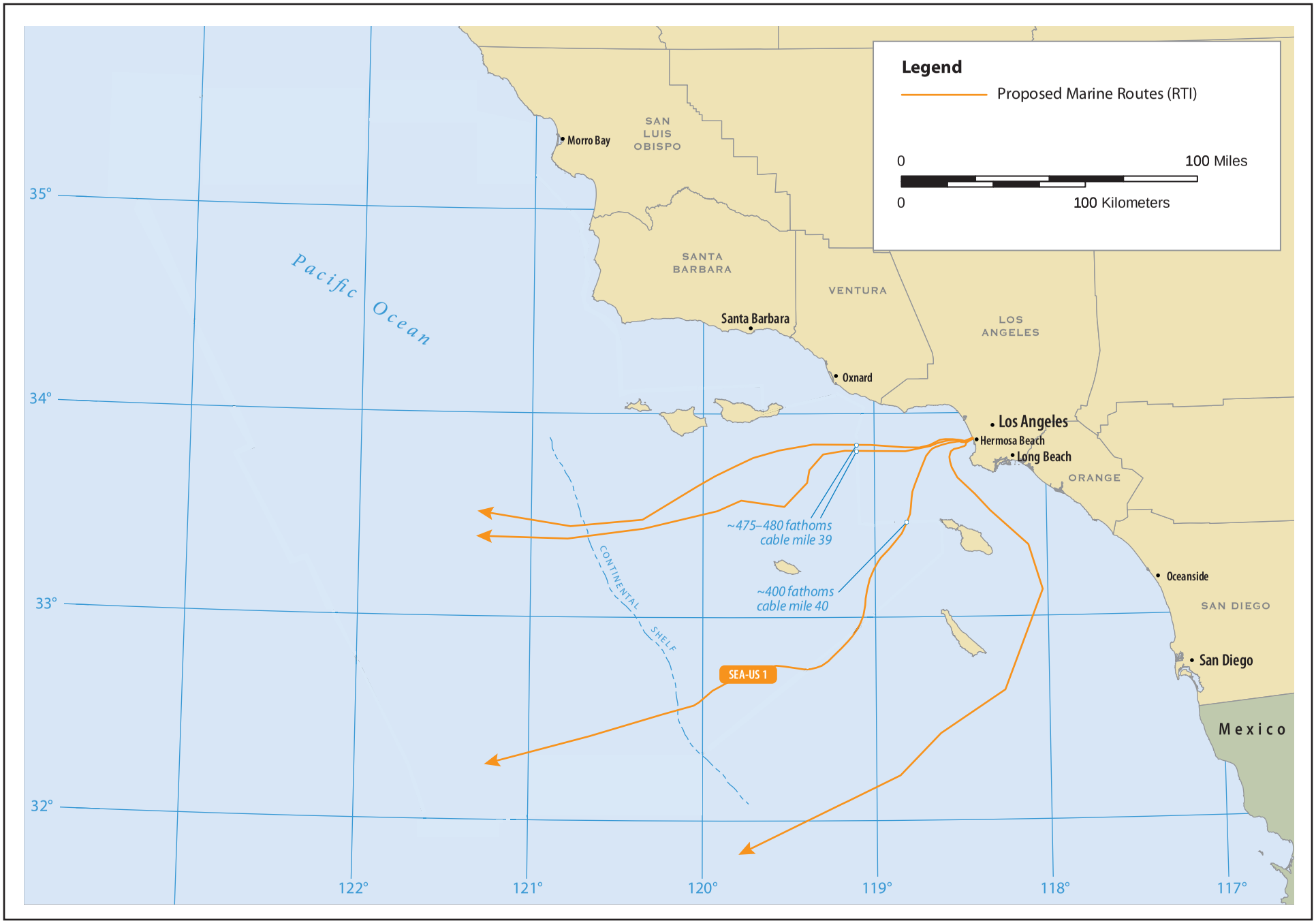
U.S. Army Corps of Engineers

- Clean Water Act, Section 404, Nationwide 12 Authorization



Source: ICF International

Figure 1
Systems Overview



Source: ICF International

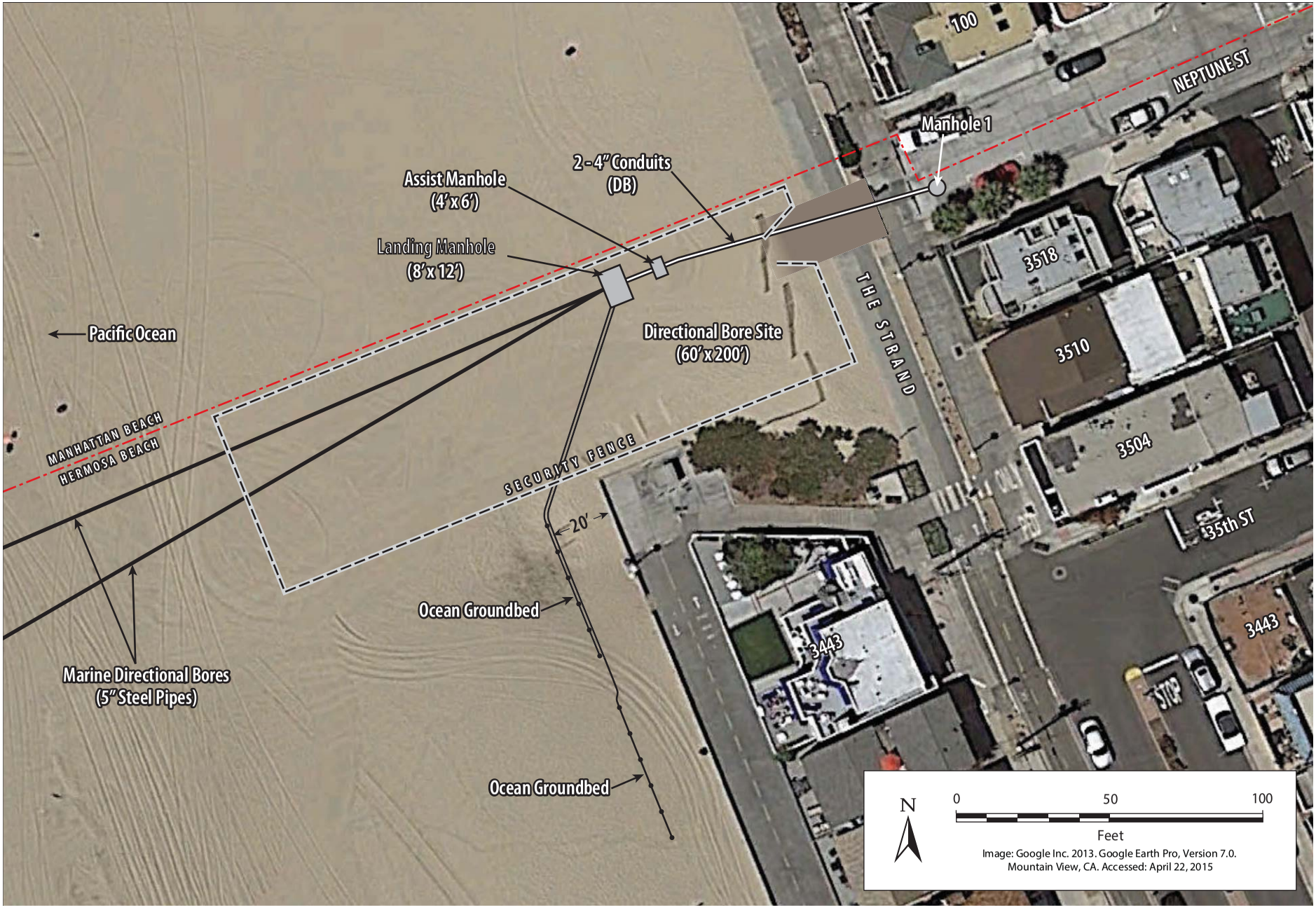
Figure 2
Proposed Marine Routes

Source: ICF International, City of Hermosa Beach, NAIP Imagery, 2014

Figure 3
Terrestrial Facilities Conceptual Layout

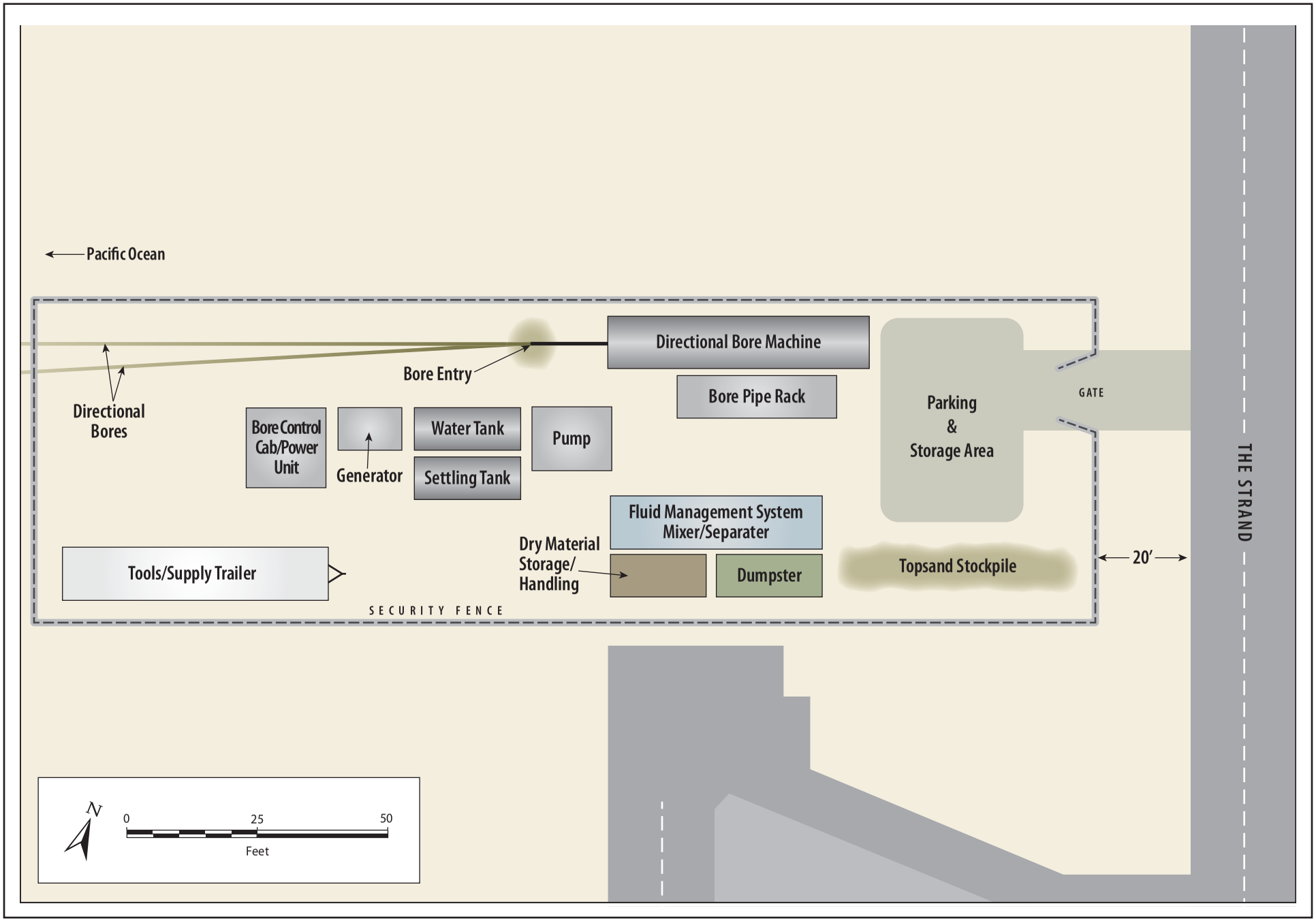
Source: ICF International, City of Hermosa Beach

Figure 4
Zoning



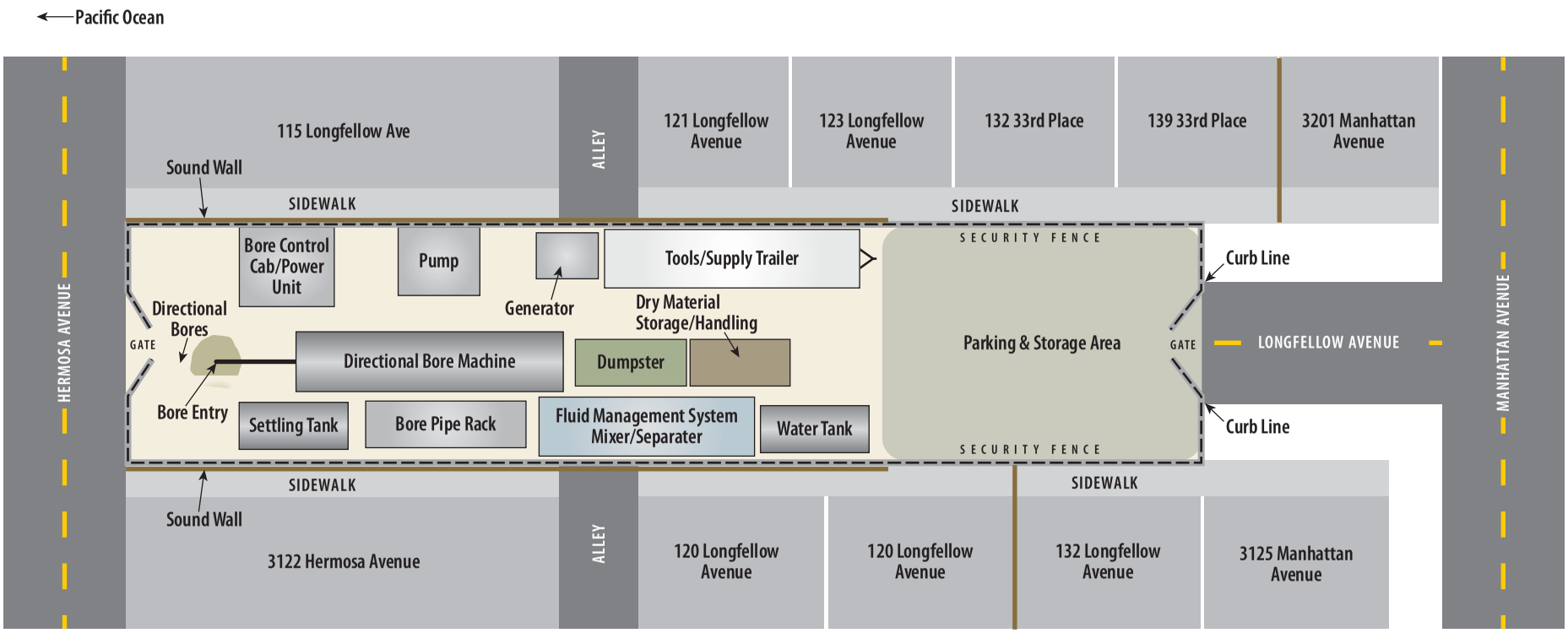
Source: ICF International

Figure 5
Neptune Avenue Preferred Landing Site Plan

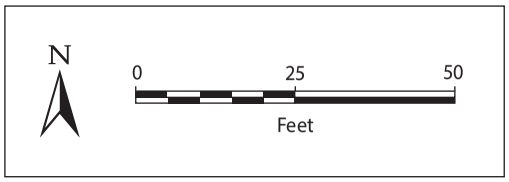


Source: ICF International

Figure 6
Neptune Avenue Preferred Directional Bore Site

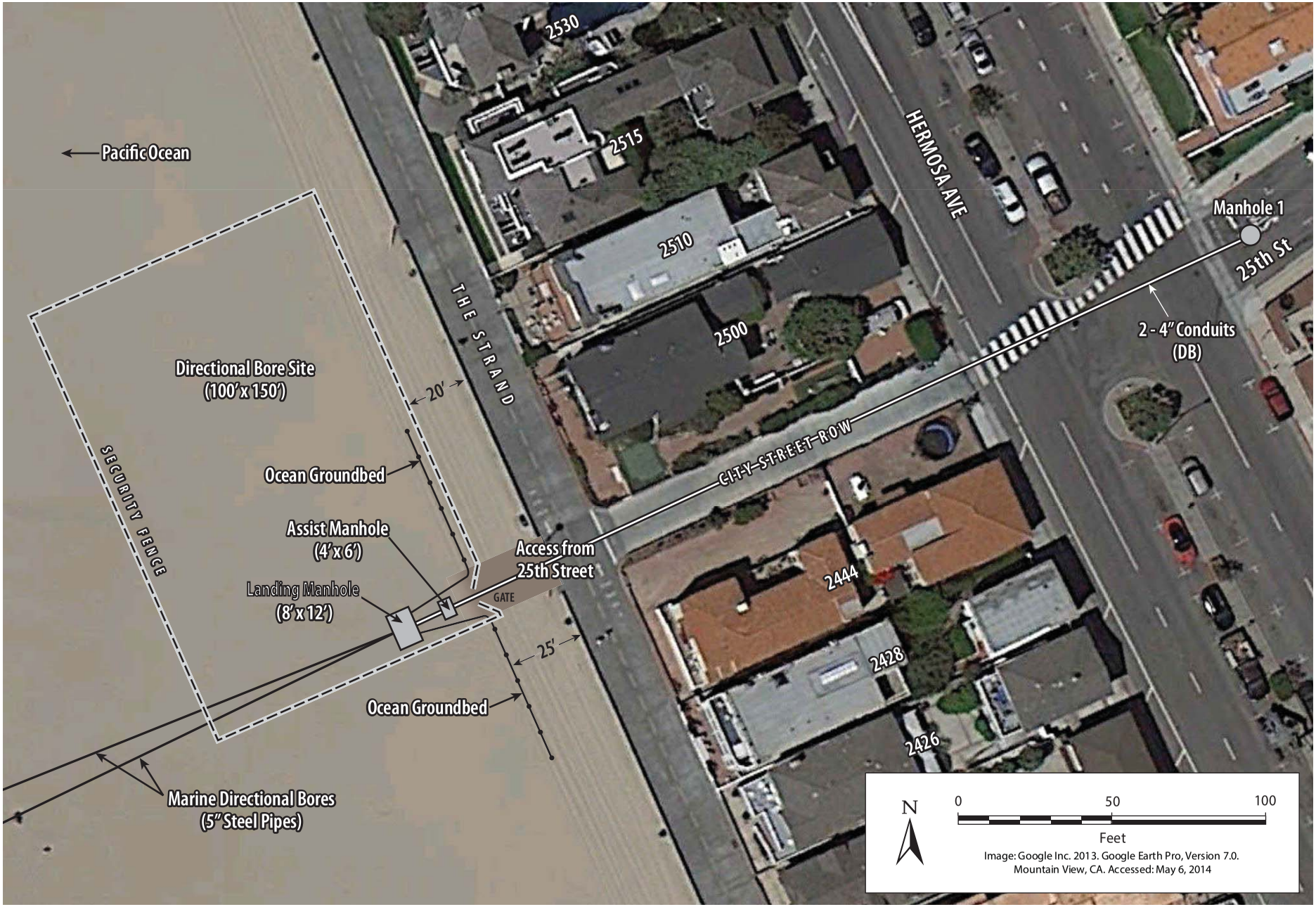


Note: Street will be closed to vehicular access.
Pedestrian access will be maintained on at least one sidewalk.



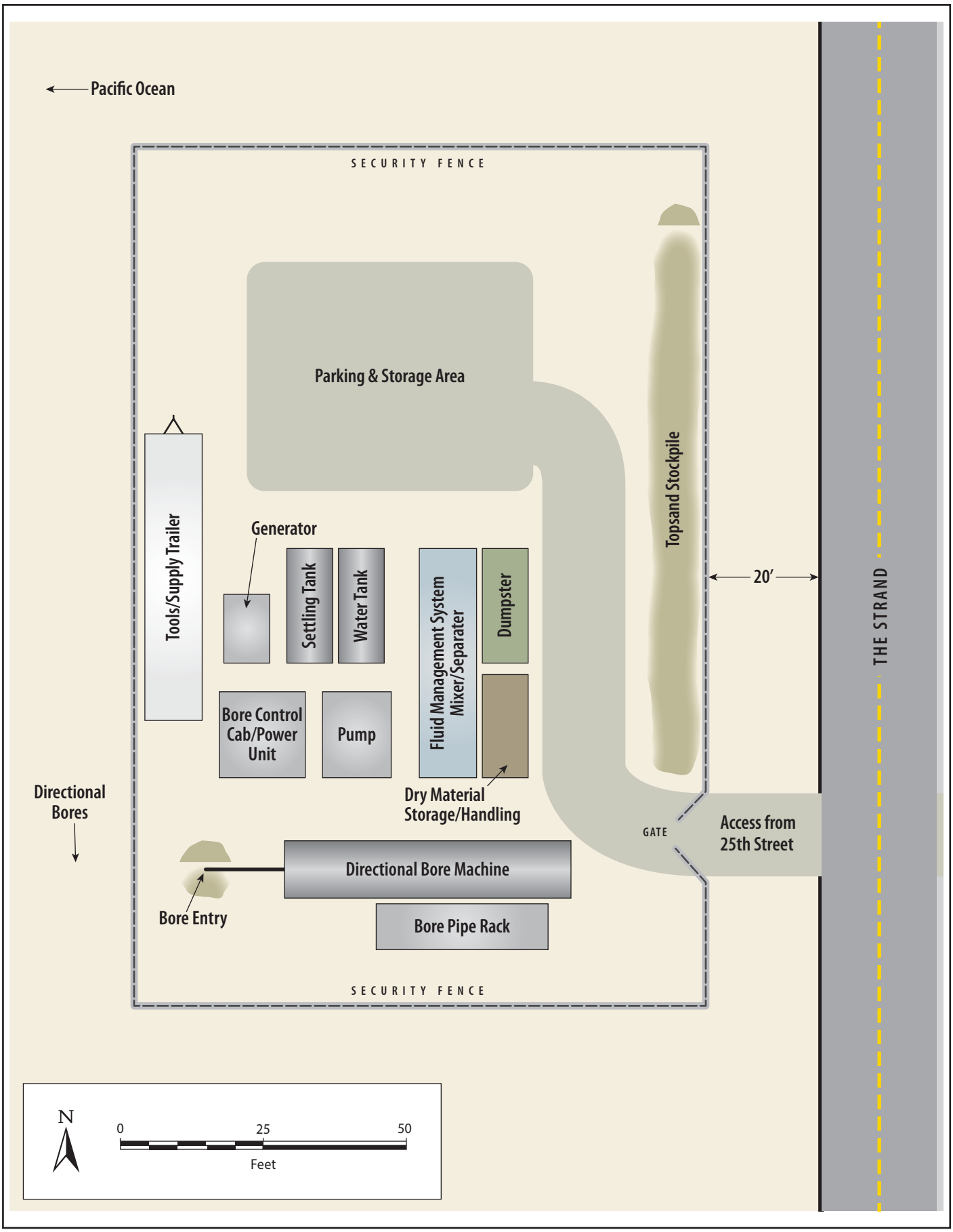
Source: ICF International

Figure 7
Longfellow Avenue Alternative Directional Bore Site
Typical 40' x 200' Layout



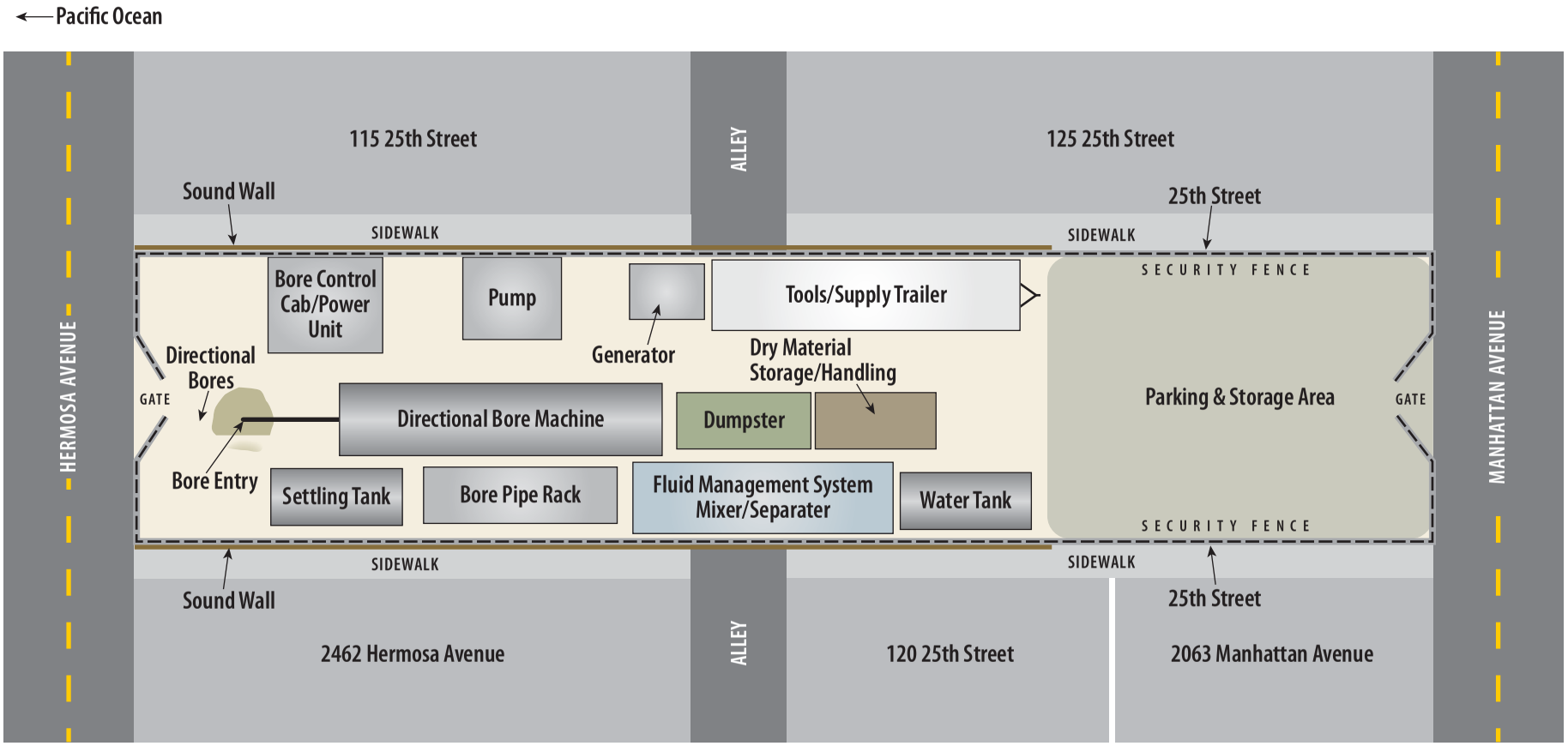
Source: ICF International

Figure 8
25th Street Preferred Site Plan

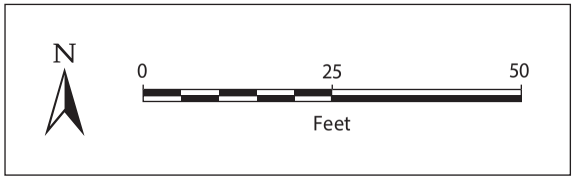


Source: ICF International

Figure 9
25th Street Preferred Directional Bore Site
Typical 100' x 150'

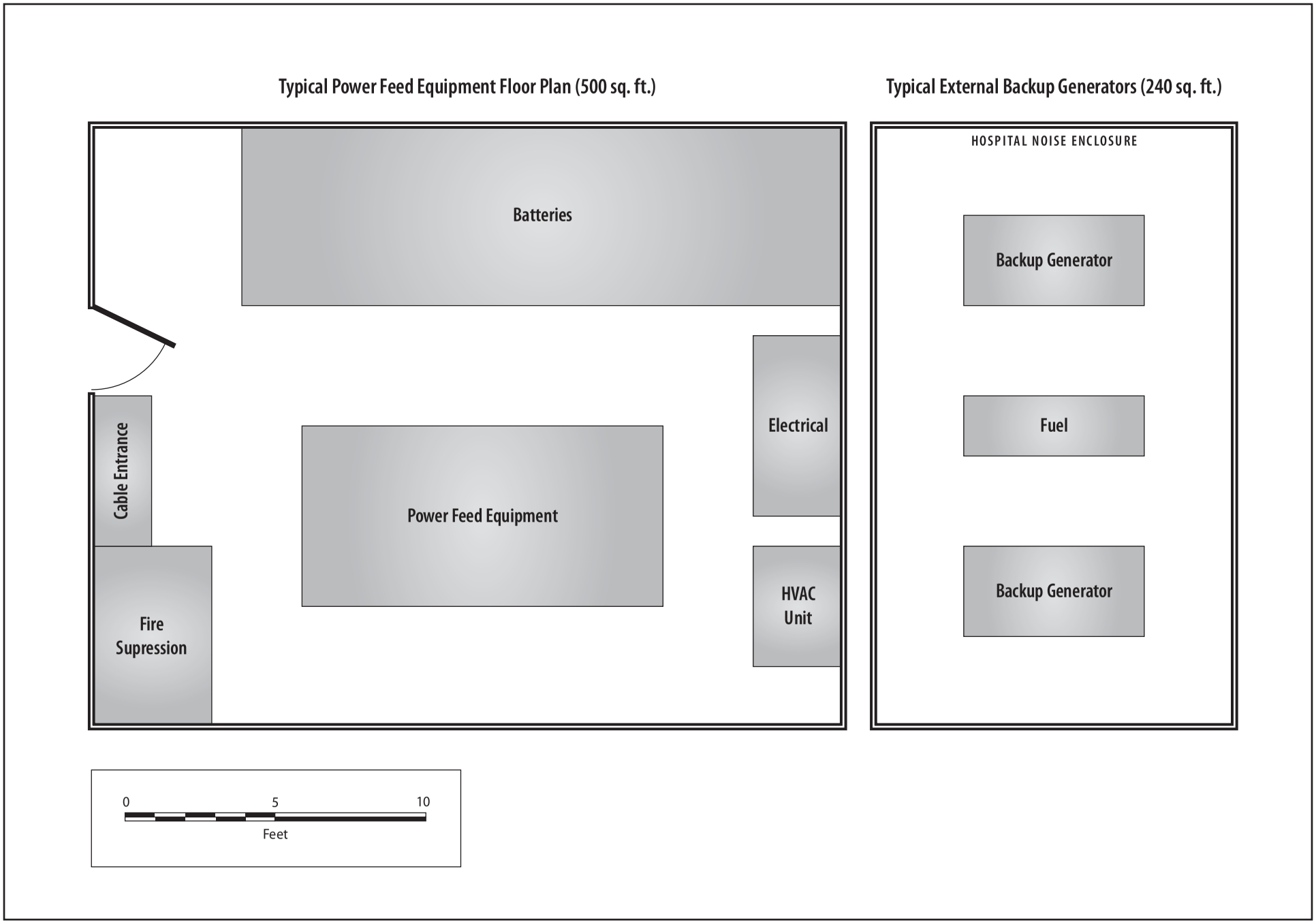


Note: Street will be closed to vehicular access.
Pedestrian access will be maintained on at least one sidewalk.



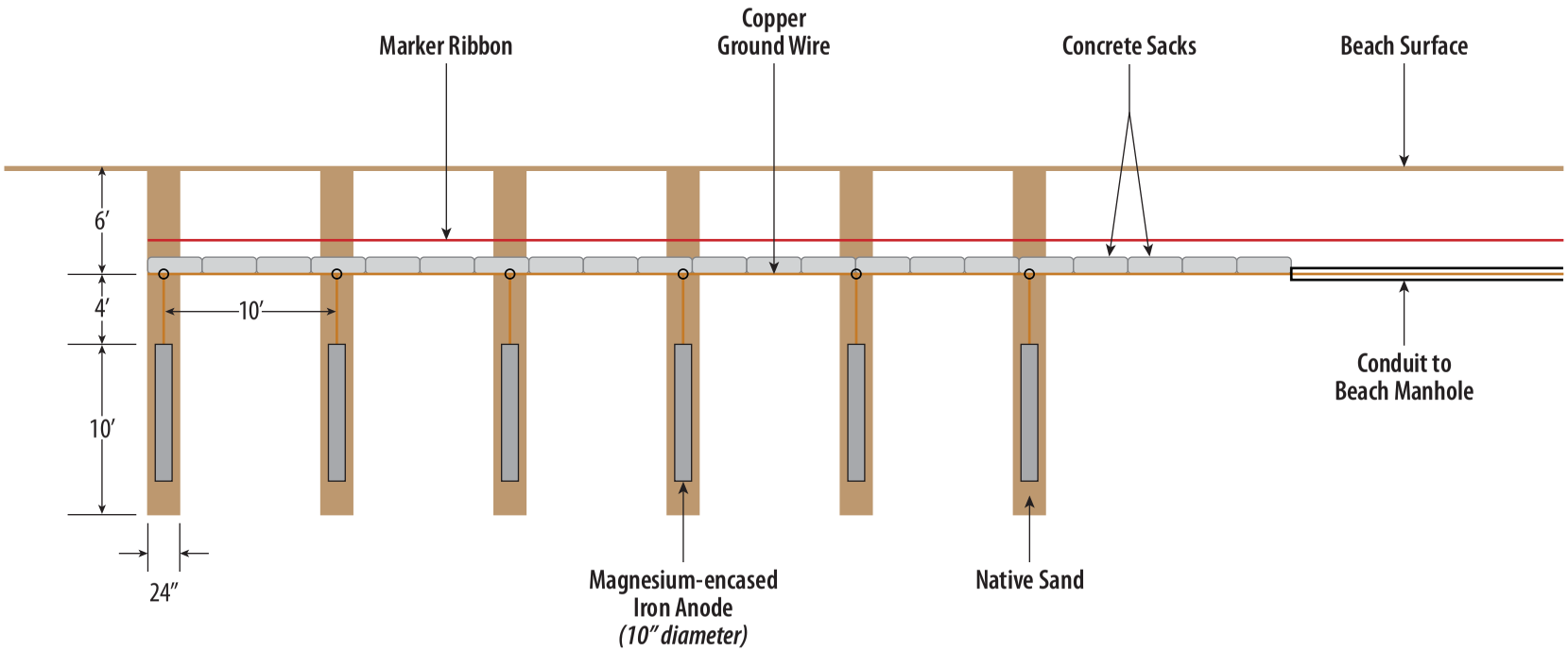
Source: ICF International

Figure 10
25th Street Alternative Directional Bore Site
Typical 40' x 200' Layout



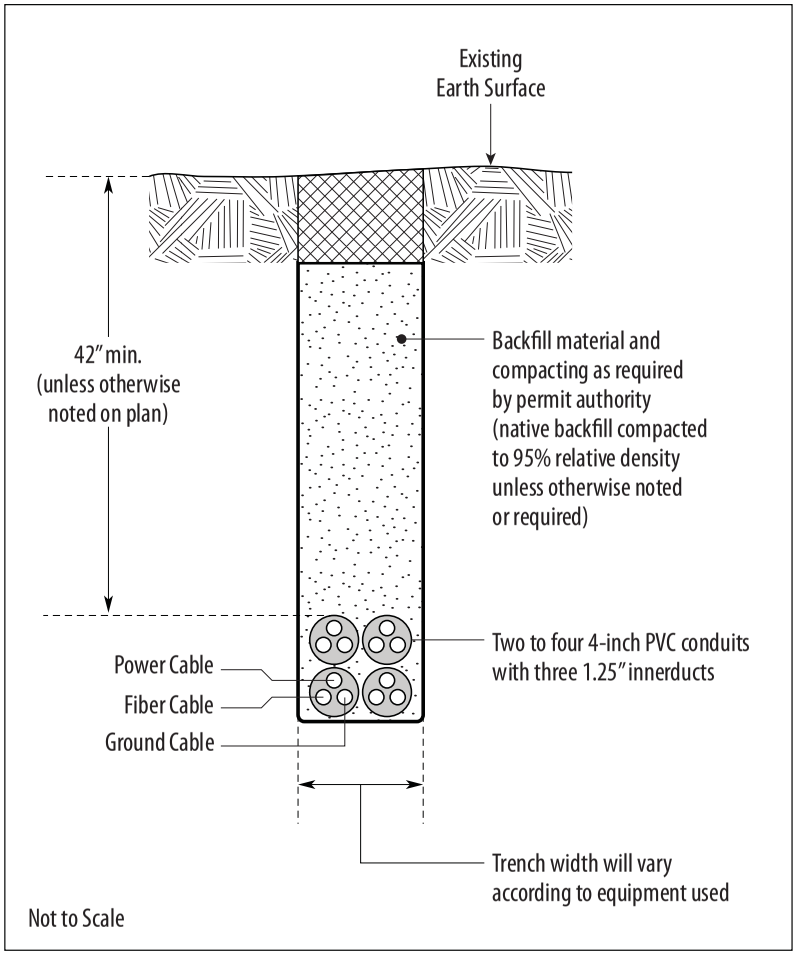
Source: ICF International

Figure 11
Power Feed Equipment Facility

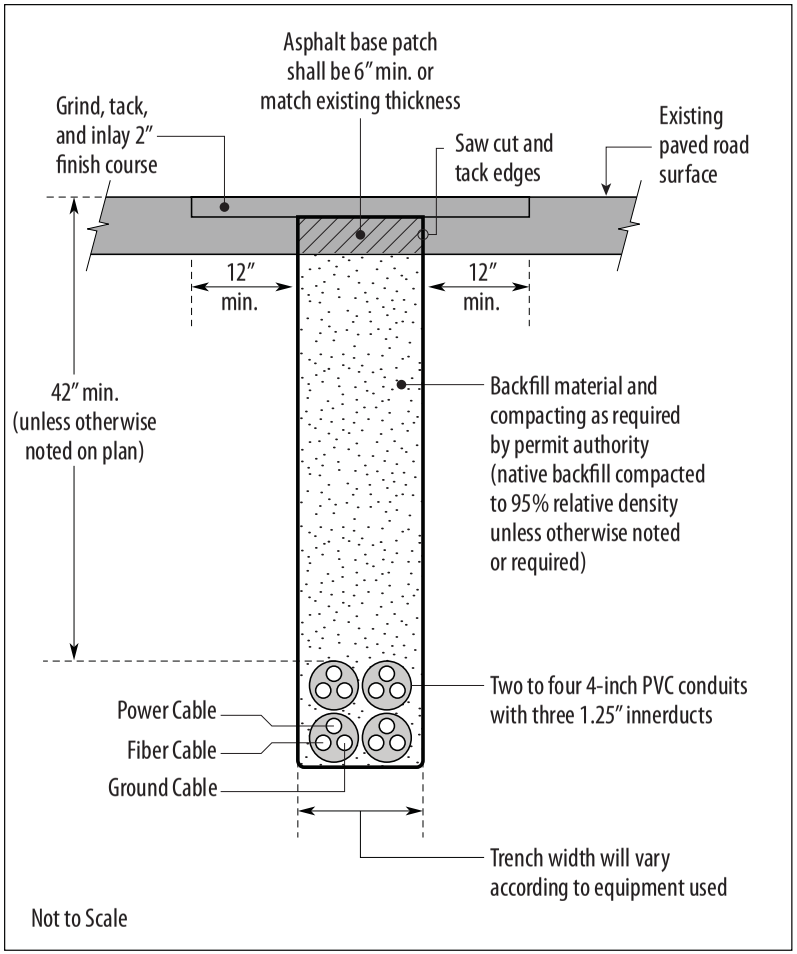


Source: ICF International

Figure 12
Proposed Ocean Ground Beds



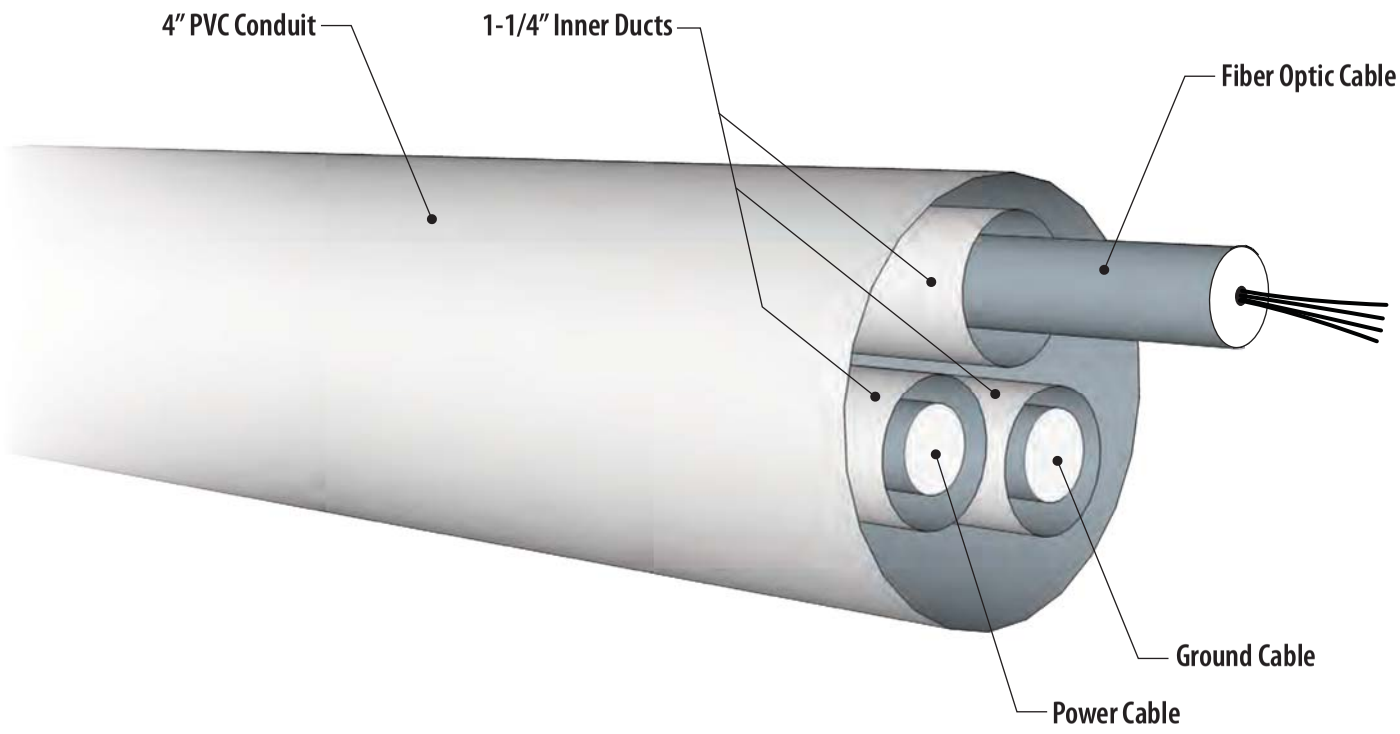
Detail of Trench Under Earth



Detail of Trench Under Asphalt

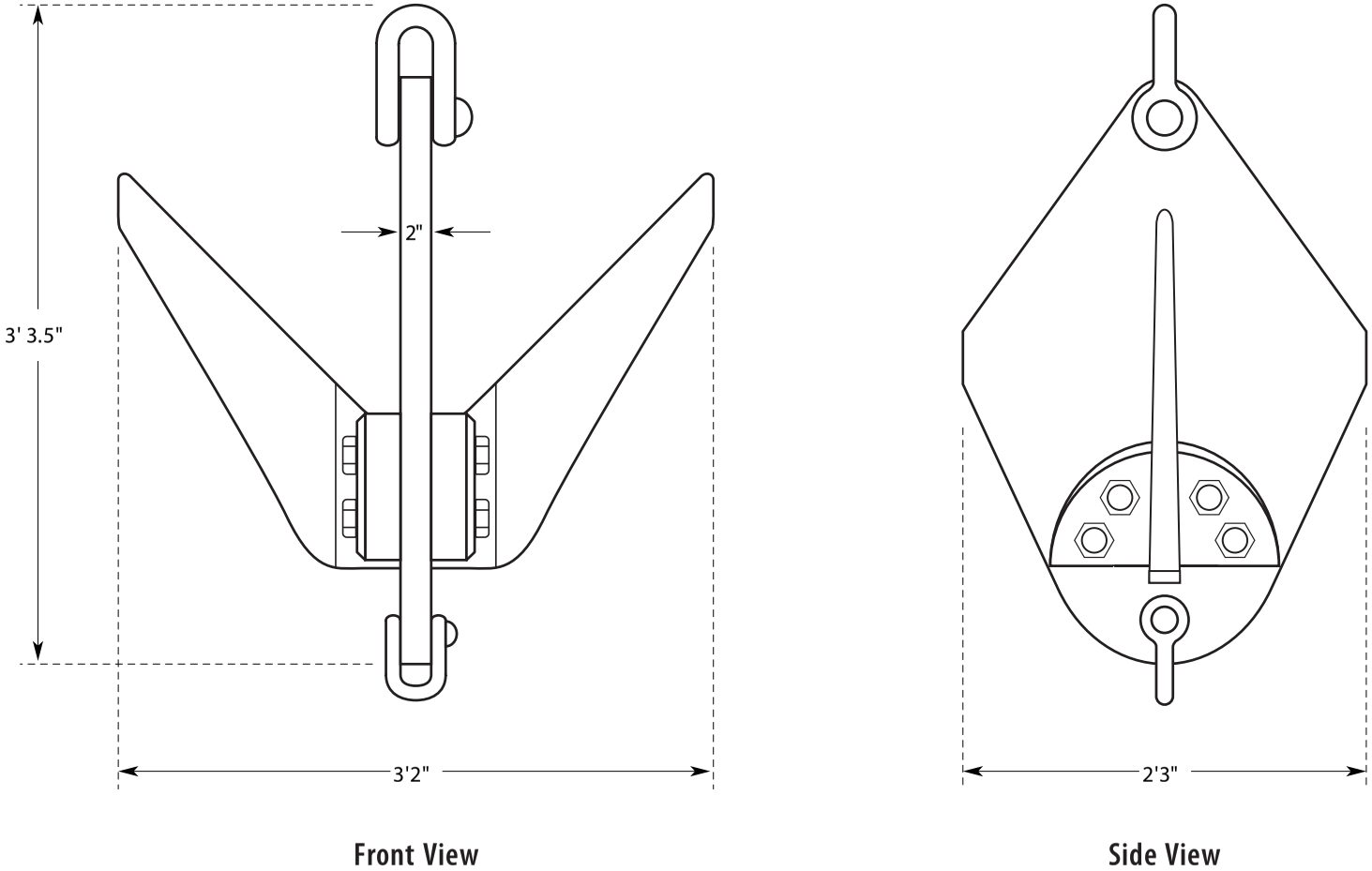
Source: ICF International

Figure 13
Typical Trench Detail



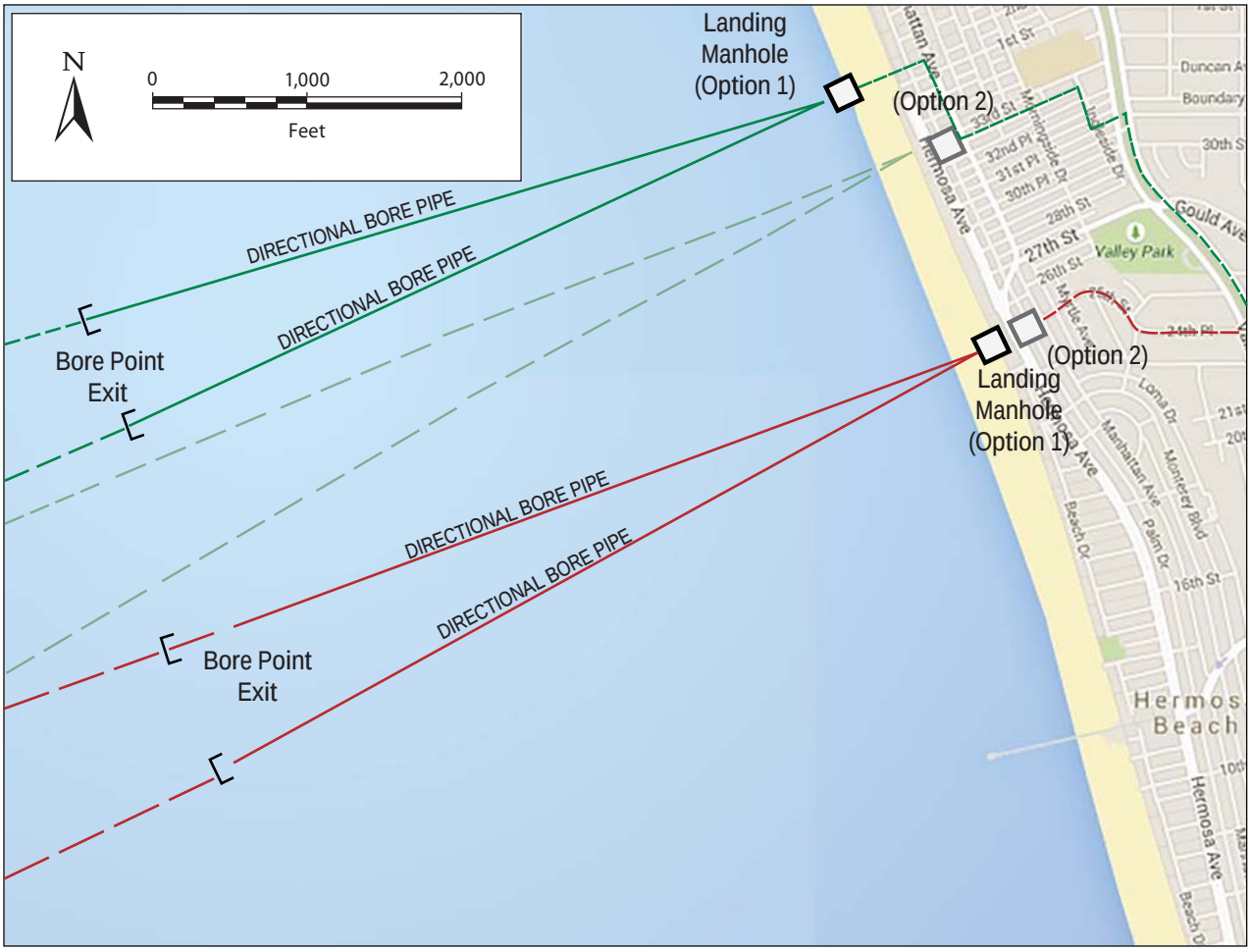
Source: ICF International

Figure 14
Terrestrial Conduit, Innerduct, and Fiber Optic Cable

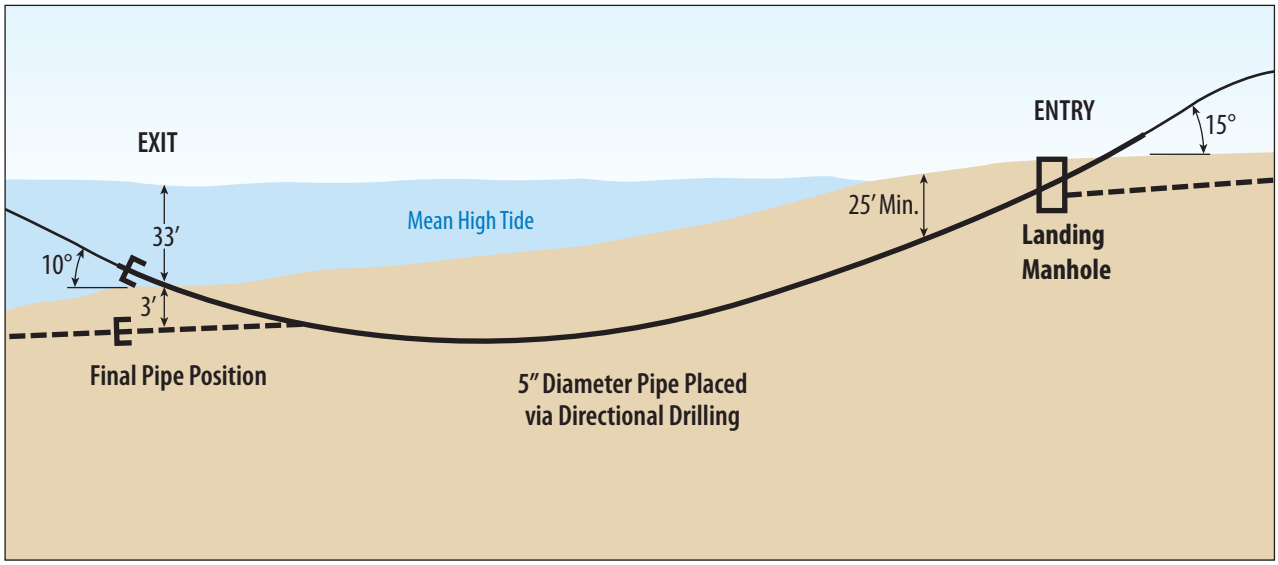


Source: ICF International

Figure 15
Proposed Flat Fish Grapnel



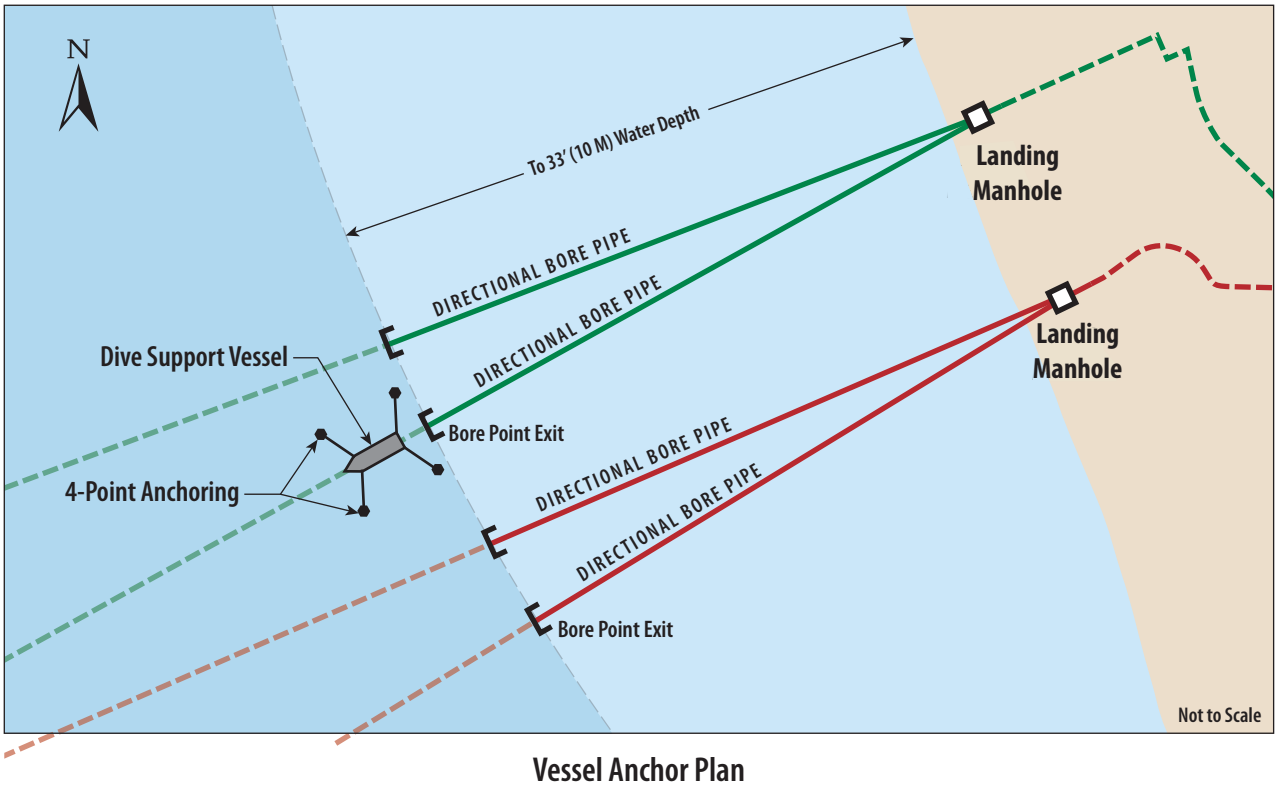
Marine Directional Bore Plan View



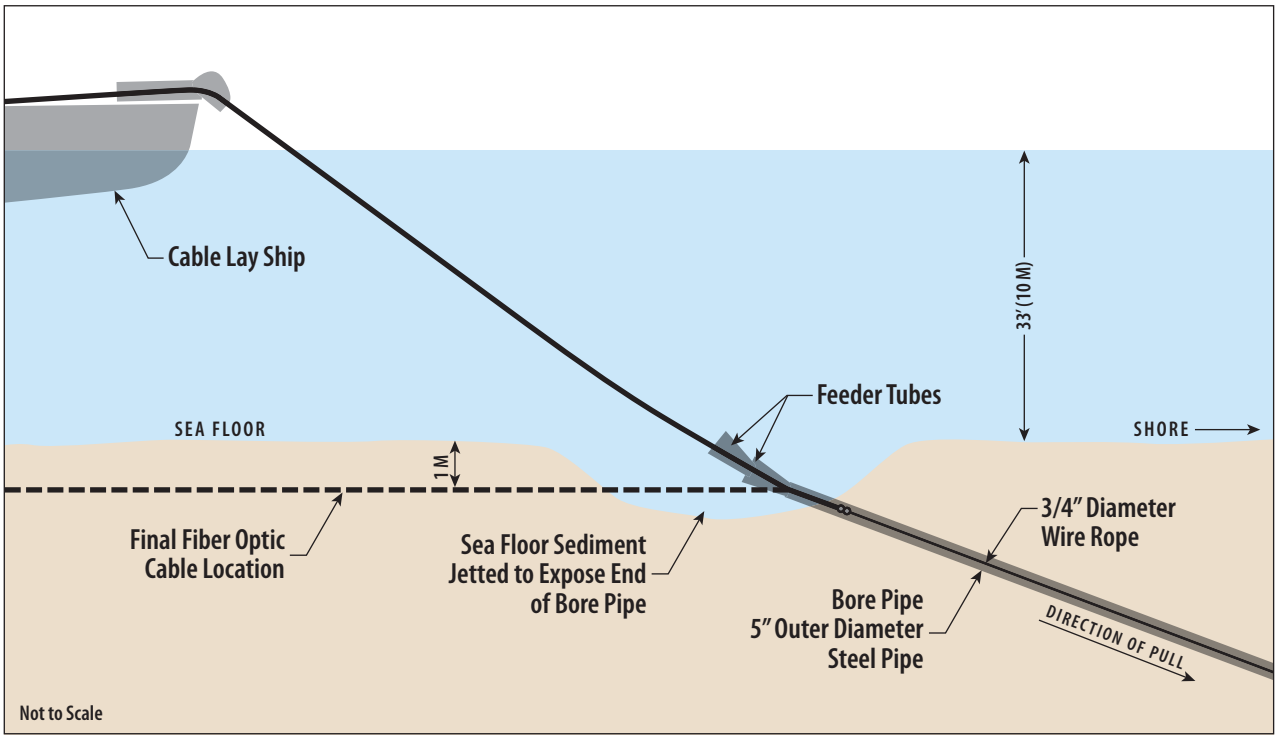
Marine Directional Bore Profile View (Typical)

Source: ICF International

Figure 16
Marine HDD Plan and Profile



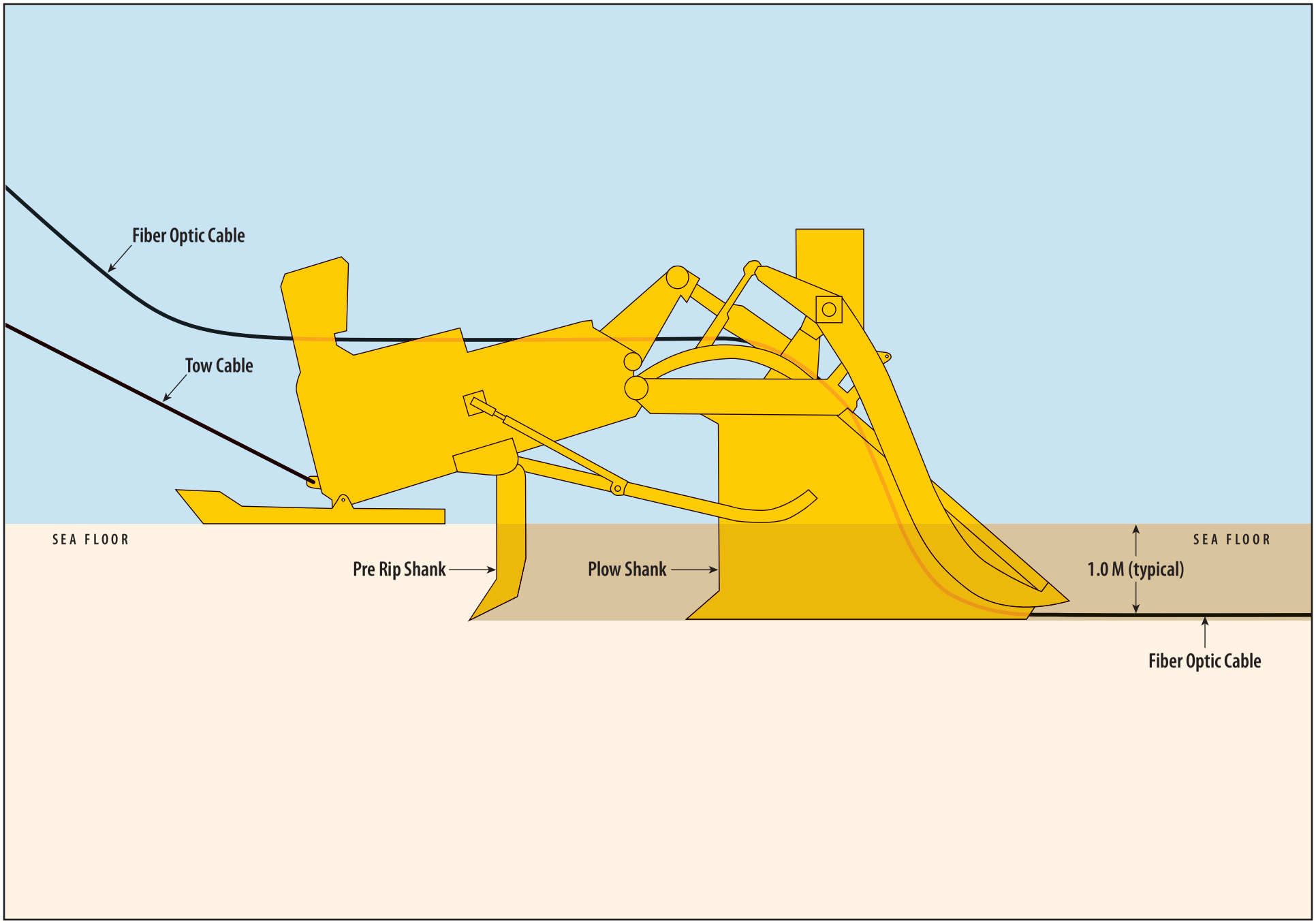
Vessel Anchor Plan



Cable Pullback Operation

Source: ICF International

Figure 17
Vessel Anchor Plan and Marine Cable Pullback Operation



Source: ICF International

Figure 18
Proposed Sea Plow

B. Environmental Determination

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" and requiring implementation of mitigation as indicated by the checklist on the following pages.

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

Environmental Determination

On the basis of this initial evaluation:

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

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

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

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

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

Ken Robertson, Director
Community Development Department

6/9/15
Date

C. Evaluation of Environmental Impacts

The questions presented in this section are derived from the Environmental Checklist Form in Appendix G of the State CEQA Guidelines except where noted. Information provided in response to the Environmental Checklist questions is derived from multiple sources, including environmental information submitted by the applicant and the City of Hermosa Beach Existing Conditions Report (October 2014). Other sources are noted in the answers to the Checklist questions and full references are provided in Section D.

Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

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

The Project proposes installing two separate landing locations each located on the beach at separate locations. During construction, security fencing will be erected around the bore sites. This would temporarily affect beach and ocean views from the homes located between Hermosa Avenue and the Strand. Alternatively, cable landing sites may be located in 25th Street and Longfellow Avenue east of Hermosa Avenue, which would temporarily affect views from adjacent properties. Activities to install fiber-optic cable in public streets will also be locally visible, as will vessels involved in near-shore cable-laying. Potential visual impacts would be temporary and short term and would only be associated with the construction process. The EIR will evaluate potential impacts of the proposed Project on views and scenic vistas.

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

The only State Highway within the incorporated limits of Hermosa Beach is Pacific Coast Highway, U.S Highway 1. According to the California Department of Transportation, U.S Highway 1 is not designated a State Scenic highway through the City of Hermosa Beach. Therefore, views from State scenic highways would not be affected by the proposed Project.

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

During construction, temporary fencing will be erected around each drill site. The presence of this fencing and the portions of the boring equipment and operations that may still be visible with the fencing will result in a temporary adverse effect on the visual character or quality of the site and its surroundings, especially from the upper stories of adjacent residences. Activities to install fiber-optic cable in public streets will also be locally visible, as will vessels involved in near-shore cable-laying. The EIR will evaluate this and other potentially adverse effects on visual character and quality.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project may temporarily increase light or glare from necessary security and/or inspection lighting installed and illuminated during the nighttime. The EIR will evaluate this potential effect in greater detail.

Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a. Would the project 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 (FMMP) of the California Resources Agency, to Non-agricultural use?

The proposed Project is not located on or near 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 Department of Conservation (CDOC, 2014). There are no agricultural uses or Farmland within the City of Hermosa Beach. Therefore, implementation of the proposed Project would not result in impacts to Farmland or agricultural uses.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The proposed Project is not located on or near zoning for agricultural use or a Williamson Act Contract. Therefore, implementation of the proposed Project would not result in impacts to existing agricultural resources or Williamson Act contracts.

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

The proposed Project is not located on or near forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the proposed Project would not result in impacts to forestry resources.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The proposed Project is not located on or near forest lands. The proposed Project would not involve the conversion of forest land to non-forest use. Therefore, implementation of the proposed Project would not result in impacts to forestry resources.

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

The proposed Project is not located on or near Farmland, nor would involve in the conversion of Farmland to non-agricultural use.

Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

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

The proposed Project site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Project construction would result in an increase in air emissions from on-shore and off-shore borings, cable-laying activities, development of landings, power feed equipment facility installation/construction, construction equipment, trucks, fugitive dust, and worker trips. Project operation would also result in an increase in air emissions generated by inspection and maintenance activities, from emergency backup generator use, and indirect emissions from electricity use.

The proposed Project would be required to comply with all applicable SCAQMD rules and regulations, but Project emissions could, nonetheless, interfere with implementation of the SCAQMD's AQMP. The EIR will evaluate potential impacts of the proposed Project on the applicable air quality plan.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The U.S EPA and California Air Resources Board (CARB) have established ambient air quality standards for air quality criteria pollutants including: ozone (O_3); carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); and particulate matter smaller than or equal to 10 microns in diameter (PM10) and particulate matter smaller than or equal to 2.5 microns in diameter (PM2.5). Construction and operation of the proposed Project would contribute to an increase in air quality emissions for criteria pollutants. As such, air quality impacts from construction and operation of the Project require detailed evaluation using the regional and localized thresholds of significance established by the SCAQMD. Short-term emissions would result from the use of on-shore and off-shore construction equipment and trips generated by construction workers as well as haul/material delivery trucks. Long-term emissions would result from operation and maintenance activities, including emergency generator operation. Compliance with SCAQMD rules and regulations would be required during construction and operation. Mitigated construction and/or operation emissions could result in the violation of air quality standards or the exceedance of air quality thresholds of significance, which may contribute to an existing or projected air quality violation. The EIR will evaluate this and other potentially adverse effects on air quality.

c. Would the project 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Construction and/or operation emissions could result in the violation of air quality standards or the exceedance of air quality thresholds of significance, which may result in a cumulatively considerable net increase to an existing or projected air quality violation The EIR will evaluate potential cumulative impacts of the proposed Project.

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

Emissions generated from construction activities, especially particulate matter emissions, could potentially expose nearby sensitive receptors (such as schools, churches, hospitals, and nursing homes) to substantial pollutant concentrations. Operational activities could also expose nearby sensitive receptors to increased levels of air pollution. The comparison of Project emissions against SCAQMD toxic air contaminant thresholds could identify a potential for adverse localized impacts. The EIR will evaluate potential adverse effects of the proposed Project on sensitive receptors.

e. Would the project create objectionable odors affecting a substantial number of people?

The Project would not involve the construction of facility normally associated with odor complaints, such as landfills, agricultural uses, food processing plants, chemical plants, dairies, etc. The Project's normal operation and maintenance activities are minimal and only include on-road vehicle and emergency engine emissions sources which would not create substantial odors.

The Project's construction would include subsurface boring and marine activities that could create offensive odors. The subsurface boring could generate boring wastes with organic materials that have the potential to generate objectionable odors, but these materials would be immediately vacuumed into a truck for export so the potential exposure to this odor source would be limited and brief. Offshore odors from vessel operation and cable-laying activities would occur far enough away from shore that any marine-related offensive odor sources would disperse before reaching onshore

populations. Additionally, Project construction would include other mildly objectionable odors sources, such as asphalt paving repair work, painting, and diesel exhaust. None of these other odor sources are particularly offensive or unusual in the Project's urban setting. The Project would also be required to comply with SCAQMD Rule 402 – Nuisance during construction and operation that that does not allow the discharge of air contaminants or other materials that would cause injury, nuisance or annoyance to any considerable number of people. Therefore, due to the small size of the active construction area, the measures that will be used to limit boring waste odors, the distance from the marine activity odor sources to shore, and the types and intensity of the other odor sources, the Project's odors would not be objectionable or affect a substantial number of people. Impacts resulting from Project-generated objectionable odors are not expected to be significant.

Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☒	☐	☐	☐

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The terrestrial portion of the proposed Project would be constructed on open sandy beaches, city streets, bikeways, residential communities, and commercial properties. Habitat along the proposed fiber-optic line consists of developed areas and landscaping. With the exception of disturbance tolerant species sensitive plants or wildlife are expected to have a low potential to occur in these areas.

Western snowy plover (*Charadrius alexandrinus nivosus*) and the California least tern (*Sternula antillarum browni*) are known to inhabit the region. Western snowy plover is federally threatened and

a California species of special concern. Designated Critical Habitat (Subunit CA 45D) for this species is located south of the proposed Project area between 12th Court and 2nd Street (USFWS 2012). California least tern is a State and federally endangered species. Neither of these species is known to nest within five miles of the cable landing areas (Cughen pers. comm., California Department of Fish and Wildlife 2014 and Frost, 2013). Based on the level of existing activity on the beach, including routine grooming, recreation, and patrolling, these species are expected to have a low potential to nest in the Project area.

During winter, western snowy plovers are known to roost on Hermosa Beach and are regularly observed adjacent to 19th to 22nd Streets and from 26th to 28th Streets (Ryan et al. 2014). Other sensitive species are not expected to routinely occur at or near the terrestrial sites. However, due to the proximity of the ocean, it is possible that marine mammals or other sensitive species may be present in the intertidal zone. Implementation of the proposed Project has the potential to result in direct and indirect impacts on a variety of marine resources. These include a broad array of sensitive marine mammals, sea turtles, fish, birds, and unique invertebrates. Similarly, the alignment is expected to cross soft and hard bottom benthic communities that may support cold water corals and other important invertebrates. Marine mammals, including harbor seals (*Phoca vitulina*), sea lions (*Zalophus californianus*), gray whales (*Eschrichtius robustus*), and many other cetaceans and pinnipeds, are common in the Santa Monica Bay and Channel Islands. These species may be adversely affected from collisions with vessels, noise, or other disturbance during cable-laying activities.

The proposed Project may adversely affect sensitive wildlife species and natural communities as identified by the California Department of Fish and Wildlife, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. The EIR will evaluate effects of the proposed Project on marine biological resources.

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

Cable-laying activities would be conducted in Essential Fish Habitat and would be required to comply with the Magnuson-Stevens Fishery Conservation and Management Act. The proposed Project would require a federal permit from the U.S. Army Corps of Engineers and a certification pursuant to Section 307 (c)(3)(A) of the Coastal Zone Management Act. The EIR will evaluate any direct or indirect effects of the proposed Project on any protected or sensitive natural community.

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?

The marine portion of the Project would be located in State and federal waters which would require a permit from the U.S. Army Corps of Engineers. Construction of the proposed Project is not expected to result in impacts to wetland waters as defined by the U.S. Army Corps of Engineers. The EIR will evaluate effects of the proposed Project on State and federal jurisdictional waters.

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

Coastal regions of California are known to support important migratory pathways for a variety of species including marine mammals, fish, and sea turtles. The proposed Project would also be constructed in Essential Fish Habitat. The EIR will evaluate effects of the proposed Project on the movement of native resident or migratory species.

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

The City of Hermosa Beach General Plan, including the Coastal Land Use Plan, does not specifically identify any sensitive biological resources nor has the City adopted ordinances specifically intended to protection biological resources. The EIR will evaluate the consistency between the proposed Project and any applicable local policies or ordinances for protecting biological resources.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No known habitat conservation plans or other habitat plans have been identified for the terrestrial portion of the Project. According to the California Department of Fish and Wildlife, the closest plan is the Palos Verde Peninsula NCCP/HCP (CDFW, 2014). However, the EIR will evaluate the Project's compliance with any adopted plans or policies intended to protect marine resources.

Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in §15064.5 (§15064.5 generally defines historical resource under CEQA)?

Cultural resource inventories will be conducted within the Project area. The proposed cable route may affect previously undiscovered historical resources including sunken ships and aircraft. Mitigation may be necessary if impacts cannot be avoided through Project design, establishment of exclusion zones, or other means. The EIR will evaluate the potential adverse effects of the proposed Project on historic resources.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

An archaeological survey of the Project area will be completed and resources will be avoided if possible. Unknown and potentially significant buried resources could be inadvertently unearthed during ground-disturbing activities associated with Project construction. The EIR will evaluate potential effects on significant buried resources that may be inadvertently uncovered during excavation activities associated with the Project.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The proposed Project area generally is located on sandy substrate and is not expected to disturb fossil-bearing rock. However, it is possible that unknown buried resources could be inadvertently unearthed during ground-disturbing activities associated with Project construction. The EIR will evaluate potential for effects on important paleontological resources during boring and excavation activities associated with the Project.

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains are known to be located within the Project area. However, there is a possibility that unmarked burials could be inadvertently unearthed during excavation activities, which could result in damage to these human remains. The EIR will evaluate this potential effect and identify measures to be implemented if any remains are discovered during excavation activities associated with the Project.

Geology and Soils

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

a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, 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.

The proposed Project is located in a seismically active area and may be subject to hazards associated with seismic activity. However, according to the Department of Conservation, the proposed Project is not located in an Alquist-Priolo zone.

ii) Strong seismic ground shaking?

The proposed Project is located in a seismically active area and is subject to hazards associated with seismic activity, including strong seismic ground shaking. The EIR will evaluate potential effects on the Project related to strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

According to the California Geological Survey Seismic Hazard Zones maps (USGS, 1999a; USGS, 1999b), the proposed Project is partially located in a liquefaction hazard zone. The EIR will evaluate potential effects on the Project from seismic-related ground failure.

iv) Landslides?

According to the California Geologic Survey Seismic Hazard Zone Landslide and/or Liquefaction maps (USGS, 1999a; USGS, 1999b), the onshore portion of the proposed Project is not located in an area at risk for earthquake-induced landslides. However, the submarine cable route may be located in areas subject to landslides on the sea floor. The EIR will evaluate the potential for hazards from landslides on the sea floor along the submarine cable route.

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

The Project primarily proposes to utilize underground directional boring for cable installation, which would minimize ground-disturbing activities for the terrestrial portion of the Project. Industry standard best management practices (BMPs) will be applied where the boring or trenching activities would occur. Because the onshore portion of the project will primarily be located within public streets and developed areas, the potential for soil erosion and loss of topsoil is low. However, the EIR will evaluate potential impacts related to soil erosion in greater detail.

c. Would the project be located on geologic units 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?

The onshore portion of the Project will be located in developed areas that are generally not prone to landslide. The nature of the Project makes it unlikely to trigger unstable geologic or soil conditions, although some potential may exist. The offshore portion of the Project may traverse areas of the sea floor with potential instability, although such areas would be avoided to the degree possible. The EIR will evaluate these and other potential adverse effects associated with unstable geologic or soils conditions that may exist in the Project area, including potentially unstable conditions along the submarine cable route. The EIR will also evaluate the potential impacts of corrosive soils located within the proposed Project area.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The terrestrial portion of the proposed Project is generally underlain with soils consisting of sandy substrate, which typically have low expansion potential. However, the EIR will evaluate the potential for adverse effects resulting related to expansive soil.

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

The City is sewered. The Project would not include any facilities requiring wastewater or sewage disposal and would, therefore, not need wastewater disposal systems. No impact would occur.

Greenhouse Gas Emissions

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

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

Greenhouse gas (GHG) emissions would be generated from off-shore equipment uses and on-shore equipment and vehicle trips during construction. Direct GHG emissions would most likely be generated by the construction activities. Indirect GHG emissions could also occur due to the electricity needs during construction and operation. These GHG emissions could exceed the SCAQMD GHG emissions threshold of significance. Potential impacts related to GHG emissions associated with the proposed Project will be evaluated in the EIR.

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

The project may conflict with applicable plans, policies and regulations adopted for the purpose of reducing GHG emissions. Potential impacts related to compliance with GHG emission reduction plans, policies, and regulations will be evaluated in the EIR.

Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

During construction of the proposed Project, routine transport and use of hazardous materials, including fuels such as gasoline or diesel, may be necessary to support construction activities. Implementation of industry standard BMPs will reduce the potential for a hazard resulting from the use of these materials. The EIR will evaluate the potential adverse effects associated with routine hazardous material transport, use, and disposal.

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

The proposed Project will utilize multiple engines in various capacities during construction. There is a potential for a release of gasoline or diesel fuel as a result of a refueling activities. The proposed Project also includes a fuel tank at each power feed equipment site. The EIR will evaluate the potential for a release of hazardous materials into the environment.

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

Portions of the Project would pass within one-quarter mile of Valley View School. Portions of the Project would also be located in the vicinity of the former North School site, which is currently in use as an adult school and child care center. Installation of the fiber-optic cable would emit toxic air contaminants primarily in the form of diesel particulate matter. However, the toxic air emissions would occur over a limited construction timeframe and would not persist over the life of the Project. The EIR will evaluate potential effects related to toxic air emissions during cable installation.

Because the fiber-optic cables will be electrically powered in order to transmit and amplify telecommunication signals, they will generate electric and magnetic fields. The size of these fields will be disclosed in the EIR and effects of exposure will also be discussed.

d. Would the project be located on a site that 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?

According to the Department of Toxic Substances Control ENVIROSTOR Hazardous Waste and Substances Site List, there are no listed sites located within the incorporated limits of Hermosa Beach. Therefore, proposed Project would not be located on a listed site and no subsequent impact would occur.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The nearest airport to the proposed Project is Los Angeles International Airport, located approximately 5 miles north of the Project area. Because the Project is not located within an airport land use plan or within two miles of an airport, it would not result in an aviation-related safety hazard for people residing or working in the Project area.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

There are no private airstrips in the vicinity of the proposed Project. Therefore, the Project does not have the potential to result in any safety hazards associated with the operation of private airstrips.

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction of the proposed Project may necessitate traffic control in certain locations. This could result in short-term interference with emergency response routes, including an increase in emergency response times. The EIR will evaluate the Project's potential effect on adopted emergency response or evacuation plans.

h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The proposed Project location is in an urbanized environment and is not located in close proximity any wildlands. Therefore, the Project will not elevate wildland fire risk in the area.

Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater discharge such that there would be a net deficit in the aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	☐	☐	☒	☐
e. 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?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☒	☐	☐	☐
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map?	☐	☐	☐	☒
h. Place within 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.	☐	☐	☐	☒
j. Expose people or structures to significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a. Would the project violate any water quality standards or waste discharge requirements?

There is a possibility that project-related construction or maintenance activities could result in the violation of applicable water quality or waste discharge standards. Such violations could occur through an accidental release of potentially hazardous materials (fuel, lubricants, cleaning fluids, etc.), either terrestrially or in the marine environment. Similarly, there is potential for accidental release of hazardous substances into the marine environment from the cable-laying vessel and other vessels associated with the Project. Cable installation on the sea floor will also temporarily increase turbidity in the water and could potentially disturb contaminated sediments that may exist along the cable routes. The proposed Project includes features to avoid water quality degradation; however, potential impacts will be evaluated in the EIR, including with regards for potential water quality degradation to result in the violation of a water quality standard or waste discharge requirement.

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

During construction, the proposed Project would require a water supply, primarily to create the drilling mud used as part of the boring process. A small amount of water would also be used for dust control and other incidental purposes. It is estimated that a total of 500,000 gallons of water would be used for the Project; this equates to approximately 1.5 acre-feet. This water would be provided by an existing water purveyor anticipated to be provided via municipal fire hydrant(s) in the City of Hermosa Beach. This water consumption will be temporary and will not affect long-term supplies. The Project will not require a supply of local groundwater that would contribute to the lowering of the

local groundwater table. In addition, the terrestrial portion of the Project is located in an existing urbanized area and the Project would not introduce new impermeable surfaces that would affect groundwater recharge.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?

There are no streams or rivers within the Project area. The proposed Project is not anticipated to alter the drainage pattern of the Project area in any substantial way. The terrestrial portion of the Project is located in an urbanized area served by a stormwater drainage system (municipal separate storm sewer system (MS4)). The Project primarily consists of underground infrastructure that would not affect that drainage system or change existing drainage patterns. Terrestrial construction activities may result in highly localized alterations to surface drainage patterns, such as through the presence of equipment, machinery, and ground disturbance. Best management practices typically used to avoid adverse effects associated with such features of Project construction include the protection of disturbed areas and the placement of straw wattles to avoid erosion and siltation, among other BMPs that may be employed depending on site-specific conditions at the time of construction (such as the timing of most recent or anticipated precipitation event). Due to the site-specific nature of potential drainage patterns associated with the Project, and the use of standard erosion control BMPs, implementation of the Project is not anticipated to result in substantial erosion or siltation on or off site.

d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

The terrestrial portion of the Project is located in an urbanized area served by a stormwater drainage system. The Project primarily consists of underground infrastructure that would not affect that drainage system or change existing drainage patterns. As described under (a), the Project would require a water supply to create the drilling mud used as part of the boring process, and possibly also for dust control purposes and other incidental uses associated with the construction process. Water used for dust control would only be applied to the ground surface in quantities necessary to achieve dust abatement goals, and would not be applied in quantities capable of resulting in flooding. During construction of the Project, any waste materials generated would be appropriately contained, collected, and/or disposed of, including as related to the drilling mud used during the boring process; the Project would not discharge water to the ground surface. The Project also would not introduce new impervious areas that could cause existing surface runoff to increase in velocity or quantity. As described above under (c), potential drainage pattern alterations that could be introduced during construction are expected to be highly localized, and would be treated with standard BMPs to avoid potentially adverse effects. Therefore, the Project is not anticipated to result in flooding on or off site.

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

As described above, the Project would not discharge water to the ground surface. Also as previously described, the Project would require a water supply primarily to create the drilling mud used as part of the boring process; it is anticipated that any waste material generated would be appropriately contained, collected, and/or disposed of, including as related to the drilling mud used during the

boring process. Also as noted above, the Project would not introduce new impervious areas that could cause existing surface runoff to increase in velocity or quantity. The terrestrial portion of the Project is located in an urbanized area served by an existing stormwater drainage system (municipal separate storm sewer system (MS4)). The Project primarily consists of underground infrastructure that would not affect that drainage system or change existing drainage patterns.

As described under (a), during Project construction there is potential that an accidental release of hazardous substances could occur, and this issue will be evaluated in the EIR for the potential of resulting in water quality degradation. As described, the Project would not create or contribute a new source of runoff in the area, and would not discharge water to the ground surface. Therefore, in order for an accidental spill of hazardous materials to result in water quality degradation, surface water runoff typical of the Project area and not related to Project activities would need to occur after the accidental spill but before response and clean-up has been complete. The Project would not provide substantial additional sources of polluted runoff, although water quality impacts to existing runoff could occur and will be evaluated in the EIR.

f. Would the project otherwise substantially degrade water quality?

Potential water quality effects associated with the proposed Project are characterized above under (a) and (e); as described, the potential for water quality degradation to occur as a result of the Project will be evaluated in the EIR.

g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed Project does not include and would not induce the construction of any housing, and would therefore not place housing within a 100-year floodplain as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. No impact would occur.

h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows?

According to the Federal Emergency Management Agency's Flood Map Service Center, the preferred and optional beach landing sites are located within a 100-year flood plain as mapped on a federal Flood Insurance Rate map. The Project would be designed with industry standard BMPs to withstand potential hazards associated with a 100-year flood event and the Project would not divert flows such that housing not currently in a Flood Hazard Area would be inundated during a 100-year flow event. No impact would occur.

i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

There are no levees or dams in the vicinity of the Project that could experience failure and cause flooding as a result of the Project. The nearest dam to the Project site is the Walteria Dam, located more than six miles (linear) to the southeast of the proposed Project location. The proposed Project would not result in adverse effects on people or structures from flooding.

j. Would the project expose people or structures to significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?

The proposed Project location is near the Pacific Ocean and in a region not subject to inundation by seiche or mudflow. There are no large bodies of fresh water within a 5-mile radius of the proposed Project location, and no hills within the City of Hermosa Beach which could potentially support a mudflow. The proposed Project would not cause inundation by seiche or mudflow. The proposed Project area is subject to tsunami hazards, where tsunamis are a series of water waves caused by the displacement of a large volume of water. Tsunamis can be triggered by earthquakes, volcanic eruptions or other underwater impacts. Although the proposed Project area may be subject to future tsunami events, such hazards would not be introduced as a result of the proposed Project, and the Project would not cause inundation by tsunami. No impact would occur.

Land Use and Planning

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a. Would the project physically divide an established community?

Onshore construction activities would be contained within designated locations, which are currently used for transportation (city streets), recreation (beach), and commerce (power feed equipment locations). Once installed, the fiber-optic cable would be buried and out of sight and, therefore, would not physically divide any part of the community. No impact would occur.

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No conflicts with plans, policies, or regulations intended to avoid or minimize environmental effects have been identified at this time. However, the EIR will provide a more thorough evaluation of the Project's consistency with applicable plans and policies, including the Hermosa Beach General Plan, Coastal Land Use Plan and Municipal Code.

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

According to the California Department of Fish and Wildlife, there are no marine protected areas (MPAs) located within the 3 nautical mile maritime limit of the City of Hermosa Beach, and the proposed alignment would not pass through any MPAs further offshore. No other habitat conservation plans or habitat plans have been identified for the terrestrial portion of the Project. According to

the California Department of Fish and Wildlife, the closest plan is the Palos Verde Peninsula NCCP/HCP (CDFW, 2014).

Mineral Resources

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

a. Would the project 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?

According to the U.S. Geological Survey's (USGS) Mineral Resource Data System, there are no known mineral resources located within the City of Hermosa Beach or in the proposed offshore cable alignments. Construction and operation of the proposed Project would not result in the loss of availability of mineral resources.

b. Would the project 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 mineral resources have been identified by the City of Hermosa Beach's General Plan at the proposed Project site or the immediate vicinity. Therefore, construction and operation of the proposed Project would not prevent access to any locally important mineral resource recovery site. No impact would occur.

Noise

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction of the Project will generate noise associated with the operation of boring and trenching equipment, as well as the use of vehicles to transport equipment and materials to work sites. These noise effects will be temporary and will cease after all Project components have constructed or installed. The Project will be implemented in phases; therefore, construction noise will re-occur with the construction of each Project phase. Project operation is not expected to generate substantial noise unless repairs are required in the future. One potential source of noise during operation is the Project's power feed equipment. Because this equipment will be located within buildings, noise generated by the operation of the power feed equipment is not expected to exceed applicable noise standards. The impacts associated with both construction and operational noise will be assessed in the EIR.

The City of Hermosa Beach General Plan Noise Element identifies goals and policies related to the ambient noise environment within the City. Furthermore, City of Hermosa Beach Municipal Code Section 8.24.050 outlines applicable noise performance standards pertaining to construction and operational noise sources. The EIR will evaluate the potential for construction and operational noise to conflict with the standards identified within these applicable documents.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction would involve directional boring, the use of other construction equipment, and operation of large delivery haul trucks that would create temporary vibration-generating activities in close proximity to residential and other structures. The EIR will evaluate the potential impacts of groundborne vibration on affected receptors and structures.

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The Project's long-term operational noise sources would be limited to periodic maintenance activities and necessary use of emergency backup generators. The EIR will evaluate potential impacts of these operational noise sources.

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Short-term increases in ambient noise levels would occur during construction as a result of both on-site construction equipment and off-site vehicle use from the transport of construction workers, construction equipment and materials. Short-term increases in ambient noise levels would also occur during periodic maintenance activities during operations. Noise from ships trenching the sea floor would only be of concern when occurring closest to the shoreline. Some noise may travel across the ocean to the beach. However, because these activities would occur beyond the surf zone and only for a short-duration (as the ship works away from the shoreline), this noise would likely not exceed ambient noise levels at the beach created by crashing waves. Residential uses, which are considered to be a noise-sensitive land use, are located in the immediate vicinity of the Project. Adverse noise impacts may especially affect the upper stories of adjacent residences. The EIR will evaluate potential temporary impacts on ambient noise levels.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The closest airport is Los Angeles International Airport, located approximately 5 miles north of the Project area. The proposed Project is not anticipated to result in a safety impact for people residing or working in the Project area due to potential impacts on airports. No impact will occur.

f. For a project within the vicinity of a private air strip, would the project expose people residing or working in the project area to excessive noise levels?

There are no private airstrips in the vicinity of the proposed Project. No impact will occur and this issue will not be evaluated further within the EIR.

Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
d. Have a substantial disproportionate adverse effect on a minority or low-income population? *	☐	☐	☐	☒

* This question is not included in Appendix G of the State CEQA Guidelines.

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Project does not propose housing and will not induce the need for housing. Because construction would be short-term and temporary, a relatively small number of construction workers will be required at any time and most construction personnel are expected to be drawn from the greater Los Angeles area. As such, the proposed Project would not generate a permanent increase in population levels or a decrease in available housing, and no impacts to existing or future population growth levels would occur as a result of construction of the proposed Project.

During the operation period, maintenance activities include regular inspections of facilities. The proposed Project would not result in the creation of a substantial number of new permanent jobs and there would not be a need for new housing. Therefore, operation of the proposed Project would not generate a direct or indirect increase in the permanent population of the area. No impact would occur.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Onshore installation of the fiber-optic cable would primarily occur within city streets, and the preferred landing sites would be located on the beach, or at the optional landing sites in city streets. The marine portion of the Project would have no effect on housing. Therefore, implementation of the

proposed Project would not result in the displacement of housing, nor would it necessitate the construction of replacement housing. No impacts would occur.

c. Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

As described above, the Project would be installed at locations without existing housing and, therefore, would not necessitate the displacement of people or necessitate the construction of new housing elsewhere. No impacts would occur.

d. Would the project have a substantial disproportionate adverse effect on a minority or low-income population?

According to the City of Hermosa Beach General Plan Housing Element and the 2010 U.S. Census, approximately 19 percent of City residents are a minority population, compared to 72.2 percent of Los Angeles County as a whole. The U.S Census tracts that would contain the proposed Project components also do not have a minority population greater the Los Angeles County as a whole. Therefore, the proposed Project would not have a substantial disproportionate adverse effect on a minority population.

According to the 2010 U.S. Census, 3.5 percent of the City of Hermosa Beach population exists below the poverty level, compared to 17.1 percent for Los Angeles County as a whole. The proposed Project would also be constructed within U.S census tracts that have a lower percentage of low-income population than Los Angeles County as a whole. Therefore, the proposed Project would not have a substantial disproportionate adverse effect on a low-income population.

Public Services

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:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Fire protection?	☒	☐	☐	☐
b. Police protection?	☒	☐	☐	☐
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

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:

a. Fire protection?

The City of Hermosa Beach Fire Department provides fire suppression and emergency medical services to the Project area. The primary fire station that would serve the Project area is Hermosa Beach Fire Department Station, located at 540 Pier Avenue. The proposed Project includes a fuel tank

installed in the power feed equipment facility locations, which will need to comply with fire and building code regulations for storage of fuel at these locations. No new or substantially altered fire facilities will be required to serve the Project. Construction of the proposed Project may necessitate traffic control in certain locations, which could temporarily affect routes used by the Fire Department to respond to emergencies. The EIR will provide further evaluation of effects on fire protection services.

b. Police Protection?

Police protection services in the proposed Project area are provided by the City of Hermosa Beach Police Department. The City of Hermosa Beach Police Station, located at 540 Pier Avenue, would be the primary station to service the proposed Project area. No new or substantially altered police facilities will be required to serve the Project. Construction activities could result in temporary traffic congestion along some local streets, which could temporarily affect routes used by the Police Department for patrol and to respond to emergencies. The EIR will provide further evaluation of effects on police protection services.

c. Schools?

A relatively small number of construction workers would be required to construct the Project. It is expected that most of these workers would commute to Project work sites from the surrounding region on a daily basis. As a result, substantial temporary increases in population that would adversely affect local school populations are not expected. Operation and maintenance activities would not generate a permanent increase in population that would affect school populations. Therefore, no new or substantially altered school facilities will be required to serve the Project. No impact would occur.

Although no impact has been identified relative to this checklist question, the EIR will evaluate Project effects related to the disruption of recreational uses during construction, as well as any long-term diminishment of recreational facilities and/or activities at the beach.

d. Parks?

It is possible the Project workers may occasionally utilize local park facilities during the construction phases of the Project, but this is not expected to result in additional demand for park facilities. Operation and maintenance activities would not generate a permanent increase in population that would affect park facilities or conditions. Therefore, no new or substantially altered park facilities will be required to serve the Project. No impact would occur.

e. Other Public Facilities?

Any population increases experienced during the construction phases would be temporary and no additional population would be required for operation and maintenance. Consequently, the Project's effect on other types of public facilities is expected to be minimal and will neither substantially affect public facilities nor create the need for any new or altered public facilities. No impact would occur.

Recreation

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

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No direct population increases are associated with the proposed Project. During construction, workers will commute to work sites within the City, but these workers are not expected to utilize nearby parks or recreational facilities to any significant degree. Therefore, no substantial increase in the use of existing parks or recreational is anticipated that would substantially contribute to the deterioration of such facilities. Operation and maintenance activities would not generate a permanent increase in population that might have a long-term effect on park facilities or conditions.

Although no impact has been identified relative to this checklist question, the EIR will evaluate Project effects related to the disruption of recreational uses during construction, as well as any long-term diminishment of recreational facilities and/or activities at the beach.

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

The proposed Project plan does not include recreational facilities or require the construction or expansion of recreational facilities. No impact would occur.

Transportation/Traffic

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e. Result in inadequate emergency access?	☒	☐	☐	☐
f. Conflict with adopted policies, plans, or programs supporting regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☒	☐	☐	☐

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Construction workers traveling to the work sites as well as deliveries of equipment and materials would generate vehicle trips to the area. Construction-related trips and temporary lane closures could decrease the existing level of service (LOS) on all affected roadway segments and intersections. The EIR will evaluate any potential conflicts with applicable plans, ordinance, or policies related to these potential impacts.

b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Pacific Coast Highway is the nearest designated Congestion Management Plan (CMP) roadway to the Project. The EIR will evaluate any potential impacts from construction related vehicle trips against the performance standards designated by the 2010 Los Angeles County CMP for this CMP roadway.

c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The nearest public airport facility to the Project area is Los Angeles International Airport, located approximately 5 miles north of the Project area. Due to the distance of this airport and the subsurface nature of the Project components, the proposed Project would have no impact to existing air traffic patterns or result in a change in air traffic levels that could result in a substantial safety risk. No impact would occur.

d. Would the project substantially increase hazards because of a design feature or incompatible uses?

The Project would generate construction trips and may require temporary roadway and pedestrian/bicycle lane closures, which could temporarily disrupt typical daily movement and conditions at affected locations. Construction vehicles traveling slowly on these roadways, accessing work sites, and temporary lane closures could create temporary traffic hazards. Furthermore, temporary detours of pedestrians/bicycles will require an evaluation for safety. The potential for construction-related traffic and temporary lane closures to result in safety hazards will be evaluated in the EIR.

e. Would the project result in inadequate emergency access?

The Project would generate construction trips and may require temporary roadway lane closures and impede beach access that could impact the movement and access of emergency service providers. This potential impact will be evaluated in the EIR.

f. Conflict with adopted policies, plans, or programs supporting regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The Project may result in temporary roadway lane closures that could disrupt bicycle and pedestrian traffic in the City of Hermosa Beach. The EIR will evaluate any potential impacts to any transit, bicycle, or pedestrian facilities as well as any conflicts with applicable goals and policies pertaining to such facilities.

Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

During the construction period, wastewater generated from boring activities would be contained in a settling tank and disposed of at an approved facility. Other minimal quantities of wastewater would be contained within portable toilet facilities and disposed of at an approved site. During operation, the proposed Project would not generate wastewater.

As described under "Hydrology and Water Quality", the Project would require a water supply to create the mud used during the boring process, and potentially for dust abatement and other incidental uses, but would not discharge wastewater to the ground surface or create a new source of runoff in the Project area. Criteria (a) and (e) under "Hydrology and Water Quality" describe that during construction of the Project, there is potential for an accidental spill or leak of hazardous materials to occur, and that if surface water runoff encounters such a spill or leak before it is cleaned up, there is potential to result in water quality degradation which could in turn cause the violation of the water

quality standard or waste discharge requirement. The Project includes features to avoid such an occurrence, but because there is potential, this issue will be further addressed in the EIR under "Hydrology and Water Quality".

b. Would the project require, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

During construction, wastewater would be contained within portable toilet facilities and disposed of at an approved site. Water would be used during construction for producing drilling mud (for directional bores) and dust control and would be achieved by applying water obtained using an existing water purveyor. It is anticipated that the City of Hermosa Beach municipal water supplier (California Water Service Company) will provide water for the Project, and that the construction contractor will arrange for a meter to be placed at a nearby fire hydrant(s) in order to obtain the construction water supply. Additional discussion of water associated with Project construction is provided above, under "Hydrology and Water Quality". The Project would not require a supply of potable water (it is anticipated that construction workers would use bottled water and would not need a new potable water supply for drinking purposes). Operation of the Project is not expected to generate wastewater or require the regular use of any substantial quantities of water. No new or expanded water or wastewater facilities would be required for the proposed Project and, therefore, no impact would occur.

c. Would the project require, or result in the construction of, new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed Project facilities (cables and vaults) will primarily be located underground and will be located to avoid existing stormwater drainage facilities. The Project will not generate additional stormwater runoff nor alter stormwater drainage patterns. Therefore, the Project would not require the construction of new or expanded stormwater facilities. No impact would occur.

d. Would the project have sufficient water supplies available to serve the proposed project from existing entitlements and resources, or would new or expanded entitlements be needed?

The Project will utilize water to produce the drilling mud necessary for the operation of the directional boring rig, as well as to provide dust abatement and possibly other incidental purposes. Water uses associated with the Project are also addressed above under "Hydrology and Water Quality". As described in that section, construction of the proposed Project would require 500,000 gallons of water, or approximately 1.5 acre-feet of water. These water supply requirements are further explained below.

- 400,000 gallons the four marine directional bores (approximately 100,000 gallons for each marine directional bore)
- 63,000 gallons (rounded) to construct three miles of terrestrial conduit systems (approximately four gallons per linear foot of terrestrial conduit)
- 30,000 gallons incidental purposes and dust control

The total of the water uses listed above is 493,000 gallons, rounded up to the aforementioned 500,000 gallons. This water supply would be provided by California Water Service Company via the City of Hermosa Beach municipal water system, and would be obtained through metered fire hydrant(s) in

the Project area. The Project's temporary construction-related water supply requirements are not expected to adversely affect water supply availability or supply reliability. A long-term supply of water is not needed during Project operation. Sufficient water supply is available from existing sources without the need for new entitlements.

e. Would the project result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it has adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments?

The amount of wastewater potentially generated from the Project has not yet been estimated by the applicant. As noted under (a), wastewater generated from boring activities would be contained in a settling tank and disposed of at an approved facility. The EIR will identify the wastewater treatment provider which can accommodate the additional volume and evaluate any potential adverse effects.

f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs?

A small amount of waste will be generated by Project construction. The Project will not be an ongoing source of solid waste and, therefore, will not make a significant contribution to depletion of the capacity of landfills that serve the area. The EIR will characterize and evaluate the Project's solid waste disposal requirements.

g. Would the project comply with federal, State, and local statutes and regulations related to solid waste?

The Project is not expected to result in any violations of applicable regulations related to solid waste. As described above, the Project will not be an ongoing source of solid waste, with solid waste only expected during the construction phase of the Project.

Mandatory Findings of Significance

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

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or

restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As described in Biological Resources section, the proposed Project could result in impacts to habitats that support sensitive species, primarily coastal and marine habitats. The Cultural Resource section describes that the proposed cable route may affect previously undiscovered cultural or historical resources, including sunken ships and aircraft. Therefore, there may be significant biological and cultural resource impacts associated with the proposed Project and, therefore, the EIR will evaluate potential impacts to these resources.

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

CEQA defines a cumulative impact as an effect that is created as a result of the combination of the proposed project together with other projects (past, present, or future) causing related impacts. Cumulative impacts of a project need to be evaluated when the project's incremental effect is cumulatively considerable and, therefore, potentially significant.

As discussed in preceding sections many of the potential impacts of the proposed Project would occur during construction, with few lasting operational effects. Because the construction-related impacts of the proposed Project would largely be temporary and localized, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close proximity. Construction impacts caused by the proposed Project (primarily related to aesthetics, air quality, biological resources, noise, and traffic) could combine with similar effects of other projects being built in the area. The Project's contribution to potentially significant cumulative impacts will be evaluated in the EIR.

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

The preceding sections of this Initial Study discuss various types of impacts that could have adverse effects on human beings, including:

- Air pollutants emitted during construction activities (see Air Quality);
- Exposure to potential hazards and hazardous emissions (see Hazards and Hazardous Materials);
- Generation of greenhouse gas emissions (see Greenhouse Gas Emissions);
- Noise and/or vibration generated by Project construction and operation (see Noise);
- Potentially adverse impacts to fire and police protection services (see Public Services); and
- Construction-related traffic (see Transportation and Traffic).

These are primarily temporary impacts associated with Project construction activities. Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated, and this Initial Study concludes that these impacts may be significant. Therefore, these potentially significant impacts associated with the proposed Project will be evaluated in the EIR.

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