# Appendix D: Mitigation Monitoring and Reporting Program RTI Transpacific Fiber-Optic Cables Project

## MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) is intended to be used by the City of Hermosa Beach (City) to ensure that each mitigation measure, adopted as a condition for Project approval, is implemented. The MMRP meets the requirements of CEQA (CEQA Guidelines, Section 15091(d)) for the implementation of mitigation.

# **Mitigation Measures**

The City will be responsible for monitoring the implementation of mitigation measures (listed in Table D-1). The City will designate specific personnel to implement and document all aspects of the MMRP. The City will ensure that the designated personnel have authority to enforce mitigation requirements and will be capable of terminating Project activities if they are found to be inconsistent with mitigation objectives.

The City will demonstrate compliance with applicable permit conditions to appropriate regulatory agencies. They will also be responsible for ensuring that construction personnel understand their responsibilities for adhering to the performance requirements of the mitigation plan and other contractual requirements related to the implementation of mitigation as part of the Transpacific Fiber-Optic Cables Project.

Table D-1. Mitigation Monitoring and Reporting Program

Proposed Mitigation Measures		
Aesthetics	Aesthetics	
A-1	<b>Nighttime Lighting Guidelines.</b> The Project's Construction Management Plan shall specify the equipment, placement and methods for night lighting to ensure that night lighting complies with the following standards:	
	All lighting shall be hooded and directed toward the working area to avoid light spill to neighboring residences and to prevent a direct line-of-sight from any light source to lower or upper floor windows of neighboring residences.	
	All light levels shall be of minimum brightness consistent with safety needs. Temporary light levels shall not exceed lumens of adjacent streetlights.	
	The quantities of temporary night lights utilized shall be minimized to not exceed that which is necessary for safety.	
	Night lighting shall be permitted only under special circumstances that necessitate temporary and limited nighttime construction and shall be subject to the approval of the Community Development Director.	
Location	Throughout terrestrial portion of Project Area	
Monitoring/Reporting Action	The Applicant shall provide the Construction Management Plan to the City for approval, and shall obtain approval from the Community Development Director and California Coastal Commission for night lighting.	
Effectiveness Criteria	Light or glare from night lighting affecting views from neighboring residences is minimized or reduced.	
Responsible Agency	City of Hermosa Beach and California Coastal Commission	
Timing	Submit Construction Management Plan prior to construction of terrestrial components, and obtain approval prior to use of night lighting	
Air Quality		
AQ-1	<b>Vessel Emissions Reduction.</b> The marine vessels used for the Project's construction shall reduce emissions through the following actions: (1) The Applicant will perform a due diligence search to obtain the nearest location available for support vessels berthing, such	

Proposed Mitigation	
	as at Kings Harbor, assuming appropriately sized slips are available during the Project's marine construction period; and (2) the Applicant will perform a due diligence search to obtain properly sized support vessels that have the highest available engine tiers.
Location	Throughout marine portion of Project Area
Monitoring/Reporting Action	The Applicant shall report the results of due diligence searches to the City.
Effectiveness Criteria	Vessel emissions are reduced.
Responsible Agency	City of Hermosa Beach
Timing	Prior to construction of marine components
<b>Biological Resources</b>	
BIO-1	Avoidance of Roosting Western Snowy Plovers or California Least Terns. To protect nesting birds that may occur adjacent to the Project boundary, CDFW recommends that no construction activities occur from February through September. If the beach Ocean Ground Bed (OGB) site is selected, and beach construction/installation activities must be completed during the roosting season (October through March), a qualified biologist approved by the City California Coastal Commission will contact USFWS and CDFW to determine if the site is within a Special Protection Zone for roosting western snowy plovers. If the beach OGB site is within a Special Protection Zone, construction activities will not be allowed until western snowy plovers are no longer present. If the area is not within a Special Protection Zone, a qualified biologist will survey the beach OGB work area plus a 300-foot buffer for western snowy plovers and California least terns using established protocols. If present, no work will be completed within the 300-foot buffer. The Lead Agency will notify and consult with the CDFW and USFWS if a roost is detected in the Project Area. The buffer may be adjusted by the qualified avian biologist based on existing conditions, planned construction activities, and the behavior of the birds. If western snowy plovers and California least terns are not detected within the 300-foot buffer, work may proceed as long as the qualified biologist is present during all work activities to ensure that western snowy plovers or California least terns are detected should they arrive in the area subsequent to work commencing. The beach OGB site will include fencing/walls that will prevent western snowy plovers or California least terns from entering the work areas. The biologist will conduct daily site visits to ensure that fence/walls are intact until construction activities are finished at the site and all equipment is removed from the beach. The results of the preconstruction survey will be submitted to the City prior to the establishmen
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide results of CDFW and USFWS coordination and preconstruction surveys to the City and California Coastal Commission.
Effectiveness Criteria	Roosting western snowy plovers and California least terns are avoided.
Responsible Agency	City of Hermosa Beach California Coastal Commission
Timing	Prior to construction of terrestrial components
BIO-2	Preconstruction Surveys for Nesting Raptors and Other Birds. Prior to the commencement of construction, the Applicant shall retain a qualified avian biologist approved by the City of Hermosa Beach to conduct pre-construction surveys for nesting birds within 100 feet of work areas along urban ROWs, on the beach, and along the Greenbelt. The preconstruction survey for active nests will be conducted within 1 week of the start of construction activities if construction activities in these areas would be completed between March 1 and August 31 (the period covering the nesting season for most birds). If an active nest is identified during the survey, a 50-foot (15-meter) buffer

### **Proposed Mitigation Measures**

zone will be established around the nest to minimize potential impacts on nesting activities from vegetation trimming and construction noise.

The prescribed buffers may be adjusted by the qualified avian biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified avian biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The avian biologist shall be responsible for documenting the results of the surveys, nest buffers implemented, and the results of ongoing monitoring and shall provide a copy of the monitoring reports for impact areas to the City on a monthly basis.

Work is anticipated to be required on the Greenbelt but just behind the curb line of Ardmore Avenue where no vegetation occurs. Therefore, no trees or vegetation are anticipated to be removed or trimmed within the Project area. However, if trees or any existing structures with nests are to be removed as part of Project-related construction activities, they shall be done so outside of the nesting season to avoid impacts on nesting raptors and other birds. If removal during the nesting season cannot be avoided, all trees shall be inspected for active nests by the biologist. If nests are found within these structures and contain eggs or young, no activities within a 50-foot buffer shall be completed until the young have fledged the nest.

Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide results of pre-construction surveys to the City.
Effectiveness Criteria	Nesting raptors and other birds are avoided.
Responsible Agency	City of Hermosa Beach
Timing	Prior to construction of terrestrial components
BIO-3	Marine Mammal and Sea Turtle Monitoring During All Vessel Activities. A biologist familiar with marine mammal and sea turtle behavior will be present on the vessel during all marine cable laying, post-lay burial, inspection activities, and decommissioning that would be required within the continental shelf of California. The biologist will have access to berthing and direct communication with the ship's captain or controlling officer. In the event marine mammals or sea turtles are present in the immediate area of the Project vessels or are approaching the work area such that interactions may occur, the biologist will have the authority to halt vessel operations until any risk of collision has passed. A report documenting the monitoring activities, including the number and type of marine mammals or turtles observed and any avoidance actions required, will be submitted to the U.S. Fish and Wildlife Service City within 30 days of cable-laying operations on the continental shelf.
Location	Throughout marine portion of Project Area within the continental shelf of California
Monitoring/Reporting Action	The Applicant shall submit a report documenting the monitoring activities, including the number and type of marine mammals or turtles observed and any avoidance actions required, to the

Timing BIO-4

Effectiveness Criteria

Responsible Agency

Within 30 days of cable-laying operations on the continental shelf

Modification of Vessel Operations When Marine Mammals and Sea Turtles Are Present. If marine mammals or sea turtles are present in the area, the vessels will modify their

Marine mammals and sea turtles are avoided.

City of Hermosa Beach U.S. Fish and Wildlife Service

operations to reduce the potential for collisions.

<b>Proposed Mitigation</b>	Measures
	<ul> <li>Maintain species-appropriate distances from marine mammals and sea turtles (100 yards for whales, 50 yards for sea turtles, seals, sea lions, dolphins, and porpoises).</li> </ul>
	When paralleling whales or sea turtles, support vessels will operate at a constant speed that is not faster than the whales or sea turtles that are present within the species-appropriate buffers.
	■ Female whales will not be separated from their calves.
	Support vessels will not be used to herd or drive whales or sea turtles.
	If a whale or sea turtle engages in evasive or defensive action, Project vessels will drop back until the animal calms or moves out of the area.
Location	Throughout marine portion of Project Area within the continental shelf of California
Monitoring/Reporting Action	The Applicant shall submit a report documenting the monitoring activities, including the number and type of marine mammals or turtles observed and any avoidance actions required, to the City.
Effectiveness Criteria	Marine mammals and sea turtles are avoided.
Responsible Agency	California Department of Fish and Wildlife City of Hermosa Beach
Timing	Within 30 days of cable-laying operations on the continental shelf
BIO-5	<b>Collision Reporting.</b> Collisions with marine mammals or sea turtles will be reported to the City within 8 hours and to federal and State agencies pursuant to each agency's reporting procedures. Should a vessel collide with an animal and require assistance (as determined by the on-board biologist), the Applicant shall provide all required funds to ensure the recovery and management of the animal as determined by the responsible agency.
Location	Throughout marine portion of Project Area within the continental shelf of California
Monitoring/Reporting Action	The Applicant shall submit a report documenting collisions with marine mammals or sea turtles to the City National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries), as well as federal and State agencies.
Effectiveness Criteria	Assistance is provided to ensure the management and recovery of marine mammals and sea turtles.
Responsible Agency	National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries)City of Hermosa Beach
Timing	Within 8 hours of a vessel collision
BIO-6	Minimized Crossing of Hard-Bottom Substrate Communities. The proposed cable routes will be set to minimize crossing of high-relief rocky outcroppings. Sections that cross high-relief rocky outcroppings that may have suitable habitat for sensitive species and communities (e.g., deep-sea coral communities, chemoautotrophic communities) will be identified during geophysical surveys. Attempts will be made to adjust the cable alignment within boundaries of the surveyed route to avoid or reduce crossing these habitats. The Applicant will include in the burial report a detailed account of all hard-bottom substrate communities crossed during the cable-laying activities, including the measures taken to reduce and/or minimize the amount crossed.
	To avoid the damage caused to hard-bottom habitats and communities during cable repairs, grapnel hooks should be deployed on soft sediment habitat and far enough away from these areas, such that there is limited risk of dragging the cable across habitat whenever feasible.
Location	Throughout marine portion of Project Area
Monitoring/Reporting Action	The Applicant shall submit the burial report to the City.
Effectiveness Criteria	The crossing of hard-bottom substrate communities is avoided or minimized.

Responsible Agency	City of Hermosa Beach
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Timing	Prior to construction of marine components  Compared by the Hard Potter Mitigation Fund. The following mitigation shall be applied.
BIO-7	<b>Compensation to Hard Bottom Mitigation Fund.</b> The following mitigation shall be applied for damage to slow-growing, hard-bottom organisms.
	<ul> <li>Areas of impact will be limited to the width of the cable and a narrow area around the cable, for an approximate total width of 20 feet (6.1 centimeters).</li> </ul>
	■ California Coastal Commission (CCC) compensation fees (based on past projects) will be required that fund the University of California, Davis (UC Davis) Wildlife Health Center's California Lost Fishing Gear Recovery Project, or other conservation programs at \$100,000 per 5,500 square feet of high-relief, in response to the hard-bottom substrate impacts from the Project.
	A final determination of the amount of high-relief, hard-bottom substrate affected (used to calculate the total compensation fee) will be determined based on a review of the final burial report from the cable installation. The total assessment and methods used to calculate this figure will be provided to the <a href="City-California Coastal Commission">City California Coastal Commission</a> for their review and approval. The City will also be provided with documentation of the total amount of mitigation paid, and the activities for which the funds will be used.
Location	Throughout marine portion of Project Area
Monitoring/Reporting Action	The Applicant shall submit the burial report, along with an assessment of the compensation fee, for <a href="City-Coastal Commission">City-Coastal Commission</a> review and approval. A copy shall be provided to the City of Hermosa Beach.
Effectiveness Criteria	Compensation is provided to the hard bottom mitigation fund.
Responsible Agency	City of Hermosa Beach California Coastal Commission
Timing	After construction of marine components
<b>Cultural and Tribal Cult</b>	ural Resources
CULT-1	Cultural Resources Avoidance Plan. Prior to the beginning of the offshore cable laying along either cable route, a qualified maritime archaeologist who meets the Secretary of the Interior's Professional Qualification Standards will prepare an Underwater Cultural Resources Avoidance Plan (plan) similar to Macfarlane (2016b). The elements of the plan will ensure that all resources identified in Macfarlane (2016a) or Macfarlane (2018 will be avoided) and will provide methods for addressing discoveries of previously unidentified resources encountered during marine construction and provide mitigation monitoring if deemed necessary during construction to ensure compliance.
Location	Throughout marine portion of Project Area
Monitoring/Reporting Action	The Applicant shall submit an Underwater Cultural Resources Avoidance Plan to the City.
Effectiveness Criteria	Cultural resources are avoided.
Responsible Agency	City of Hermosa Beach
Timing	Prior to the beginning of the offshore cable laying
CULT-2	Construction Crew Training. Prior to the beginning of Project construction, an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards will conduct a cultural resources training session. The training session will be provided to all construction personnel, including the Project superintendent and key members of all major excavation and trenching operations. The training will advise all personnel to be alert for the possible destruction of buried cultural resource materials, will instruct all personnel to recognize signs of historic and prehistoric use of the Project area, and the process of reporting any such finds (or suspected finds) to the Project's Archaeological Monitor immediately, so damage to such resources may be prevented. If

Proposed Mitigation Measures	
	construction personnel rotate throughout the life of the Project, the Archaeological Monitor will conduct additional training sessions to provide new personnel the appropriate training.
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide proof of training sessions to the City.
Effectiveness Criteria	Cultural resources are avoided.
Responsible Agency	City of Hermosa Beach
Timing	Prior to construction of terrestrial components
CULT-3	Archaeological Monitoring Plan. Prior to the beginning of Project construction, an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards will prepare an Archaeological Monitoring Plan (AMP). The AMP will define what procedures to follow if historical, archaeological, or cultural resources not previously known to be on site or in the area are discovered during construction. The AMP will include methods to assure the protection of known or discovered resources, identify lines of communication between construction personnel, the archaeological monitor, and construction supervisors. The AMP will include the details of environmental monitoring requirements under the pertinent laws and regulations and a description of how monitoring will be accomplished. The AMP will include what actions must be taken if inadvertent discoveries (e.g., artifacts, features, or potential human remains) are made during Project construction.
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide the Archaeological Monitoring Plan to the City.
Effectiveness Criteria	Cultural resources are avoided.
Responsible Agency	City of Hermosa Beach
Timing	Prior to construction of terrestrial components
CULT-4	<b>Cultural Resource Monitor.</b> Any Project-related ground-disturbing activities, with the exception of trenchless construction or directional boring, that will affect naturally occurring sediments below any artificial fill must be done in the presence of an archaeological monitor who meets the Secretary of the Interior's Professiona Qualification Standards. Although it is not possible to monitor trenchless construction, directional boring, or conventional boring, the excavation of the entry/exit sites for these construction methods will be monitored.
	If, during the course of monitoring, a potentially significant resource is discovered, the archaeological monitor will have the authority to stop or redirect ground-disturbing activities away from the resource until it can be evaluated. The monitor shall identify, record, evaluate, and determine appropriate treatment for any resources inadvertently discovered during ground disturbance. If cultural resources are encountered inadvertently, treatment shall be implemented as provided for in the Archaeological Monitoring Plan (see MM CULT-3).
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide proof of a contract for services with a qualified archaeological monitor that spans the duration of the construction. The Applicant shall provide documentation of monitoring results to the City.
Effectiveness Criteria	Cultural resources are avoided.
Responsible Agency	City of Hermosa Beach
Timing	During construction of terrestrial components

<b>Proposed Mitigation</b>	Proposed Mitigation Measures		
CULT-5	Treatment of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code (HSC) and Section 5097.98 of the Public Resources Code (PRC), if human remains are found, all ground-disturbing activities shall halt within 165 feet (50 meters) of the discovery. The Archaeological Monitor and the construction supervisor shall be notified. The construction supervisor shall contact the Los Angeles County Coroner within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie potential remains shall take place until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains do not require an assessment of cause of death and that the remains are or are believed to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with PRC Section 5097.98, the NAHC must immediately notify those persons it believes to be the Most Likely Descendent (MLD) of the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD shall then determine, in consultation with the Lead Agency, the disposition of the human remains.		
Location	Throughout terrestrial portion of Project Area		
Monitoring/Reporting Action	The Applicant shall provide documentation of the coordination and treatment of any discovered human remains.		
Effectiveness Criteria	Human remains are avoided.		
Responsible Agency	City of Hermosa Beach		
Timing	During construction of terrestrial components		
CULT-6	Treatment of Tribal Cultural Resources. In the event that unanticipated Tribal Cultural Resources are encountered during ground-disturbing or other construction activities, work must cease within 20 feet (6 meters) of the discovery, and the Project's archaeological monitor, construction supervisor, and local tribal representatives shall be notified that work may continue only after the resources are recorded and evaluated by the archaeological monitor and examined by tribal representatives qualified to identify Tribal Cultural Resources as defined in Assembly Bill 52 (PRC § 21080.3.1(a)).		
Location	Throughout terrestrial portion of Project Area		
Monitoring/Reporting Action	The Applicant shall provide documentation of the coordination and treatment of any discovered Tribal Cultural Resources.		
Effectiveness Criteria	Tribal Cultural Resources are avoided.		
Responsible Agency	City of Hermosa Beach		
Timing	During construction of terrestrial components		
Geology and Soils			
GEO-1	<b>Geotechnical Study Prior to Construction.</b> Prior to construction, the Applicant will conduct a Geotechnical study evaluation of sea floor conditions and geologic hazards for the marine portion of the Project area. Using this information, the Applicant shall re-align the cable where possible to avoid unstable areas or hazards.		
	The geotechnical study will be prepared by a qualified engineer and must contain bathymetry data, characterization of sub-surface sediments, and grain size of sub-surface sediments of the seabed at representative areas. The marine geotechnical survey will be conducted using an accurate electronic positioning system (accuracy of 3 meters or less), and a side-scan sonar at a minimum. Vessel speed should not exceed 4 knots. The side-scan sonar should have a resolution capability of 600 kilohertz (KhZ) operating at 50 meters or less per channel. The Applicant will use these studies to determine the appropriate engineering for the marine portions of the Project to minimize geotechnical hazard impacts.		

Proposed Mitigation Measures		
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall submit the geotechnical study to the <u>U.S. Army Corps of Engineers</u> and California Coastal Commission City.	
Effectiveness Criteria	Geotechnical hazards are minimized.	
Responsible Agency	City of Hermosa Beach U.S. Army Corps of Engineers and California Coastal Commission	
Timing	Prior to construction of marine components	
GEO-2	<b>Evaluation and Treatment of Incidentally Discovered Paleontological Resources.</b> If paleontological resources are encountered during terrestrial subsurface construction, all ground-disturbing activities within 25 feet (7.6 meters) will be halted or redirected to avoid additional impact, and a qualified paleontologist will be contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel will not collect or move any paleontological materials. Adverse effects on such deposits will be avoided by Project activities.	
	Upon completion of the assessment, a report documenting methods, findings, and recommendations will be prepared and submitted to the City of Hermosa Beach and, if paleontological materials are recovered, they would be stored at a paleontological repository, such as the Natural History Museum of Los Angeles County.	
Location	Throughout terrestrial portion of Project Area	
Monitoring/Reporting Action	The Applicant shall provide documentation of the coordination and treatment of any discovered paleontological resources.	
Effectiveness Criteria	Paleontological resources are avoided.	
Responsible Agency	City of Hermosa Beach	
Timing	During construction of terrestrial components	
GEO-3	Monitoring for Paleontological Resources. A paleontological monitor will be present during excavation when a depth of approximately 8 feet (2.4 meters) or greater is reached to monitor for paleontological resources that may be encountered in the older Quaternary terrace deposits that underlie the surficial dune and beach deposits. The paleontological monitor will be able to: (1) recognize fossils and paleontological deposits, and deposits that may be paleontologically sensitive; (2) take accurate and detailed field notes, photographs, and locality coordinates; and (3) document Project-related ground-disturbing activities, their locations, and other relevant information, including a photographic record.	
Location	Throughout terrestrial portion of Project Area	
Monitoring/Reporting Action	The Applicant shall demonstrate proof of a contract with a qualified paleontologist. The Applicant shall provide documentation of the monitoring results to the City.	
Effectiveness Criteria	Paleontological resources are avoided.	
Responsible Agency	City of Hermosa Beach	
Timing	Before and dDuring construction of terrestrial components	
Hazards and Hazardous	s Materials	
HAZ-1	<b>Spill Prevention and Contingency Plan.</b> The Applicant will prepare a Spill Prevention and Contingency Plan (SPCP) for terrestrial construction activities. The SPCP will be submitted to the City of Hermosa Beach Fire Department for approval prior to issuance of the City's construction permit. At a minimum, the Plan will include the following:	
	<ul> <li>Hazard assessment,</li> <li>Spill prevention and containment,</li> <li>Emergency Response Procedures,</li> <li>Reporting procedures, including a contact list, and</li> </ul>	

<b>Proposed Mitigation</b>	Proposed Mitigation Measures		
	■ Closing the spill incident.		
Location	Throughout terrestrial portion of Project Area		
Monitoring/Reporting Action	The Applicant shall submit the SPCP for City of Hermosa Beach Fire Department approval.		
Effectiveness Criteria	Spills are prevented or addressed immediately to minimize hazards.		
Responsible Agency	City of Hermosa Beach		
Timing	Prior to issuance of the City's construction permit		
HAZ-2	<b>Worker Training.</b> Prior to construction, all construction site workers will be trained to recognize and respond to spills as mandated by the required plans, including which authorities to contact. The crews will be supplied with, and trained in, the use of containment devices and spill kits, which contain at a minimum sorbent booms and pads, personal protective equipment, and detailed emergency response guidance. Records of all training will be sent to the City at the end of prior to each Project construction phase, along with a report detailing the training plans.		
Location	Throughout terrestrial portion of Project Area		
Monitoring/Reporting Action	The Applicant shall submit records of all training to the City, along with a report detailing the training plans.		
Effectiveness Criteria	Spills are addressed immediately to minimize hazards.		
Responsible Agency	City of Hermosa Beach		
Timing	At the end of each Prior to each Project construction phase		
HAZ-3	<b>Maintenance of Equipment.</b> Prior to entry on the construction site, and periodically daily during construction, all construction equipment will be visually inspected for line breakage and leakage. Any equipment found to be chronically or continuously leaking will be immediately removed off site and repaired before returning to operation.		
Location	Throughout terrestrial portion of Project Area		
Monitoring/Reporting Action	The Applicant shall submit records of inspections and equipment repairs to the City monthly.		
Effectiveness Criteria	Equipment leaks and spills are avoided or minimized.		
Responsible Agency	City of Hermosa Beach		
Timing	Prior to entry on the construction site, and periodically during construction		
Hydrology and Water (	Quality		
HWQ-1	Frac-out Contingency Plan. The Applicant shall develop and adhere to a Frac-out Contingency Plan. The Frac-out Contingency Plan will establish the operational procedures and responsibilities for the prevention, containment, and clean-up of frac-outs associated with the Project's directional boring operation. Any frac-out shall be reported to the City within 4 hours. In addition to utilizing industry standard practices during boring, the Plan shall specify which, if any, additives are to be used in the boring process. These additives shall be industry standard and non-toxic. In the event of a suspected marine frac-out, divers and non-toxic tracking dye shall be utilized to locate and confirm the frac-out. If a marine frac-out does occur, cleanup activities shall be conducted consistent with safe working practices. If a frac-out persists uncontained in the marine environment for more than 48 hours after attempting to correct the discharge, the boring contractor shall remove the bore pipe as necessary, and a new bore path shall be attempted. At the end of terrestrial construction activities, the Applicant shall prepare a concise summary report detailing all frac-out-related activities, including incidents, response, and cleanup activities. The summary report shall contain copies of the monitoring logs.		

### **Proposed Mitigation Measures** The Frac-out Contingency Plan shall specify a designated frac-out monitor who will observe the surface conditions as the drill head progresses and look for evidence of a frac-out. The frac-out monitor shall be required to maintain a separate log of all potential and actual frac-out events. The log shall contain the following information: Details on the release, • Estimate of the amount of bentonite released and size of the area affected Location, date, and time of release Success of cleanup action Name and telephone number of person reporting, How the release occurred, Type of activity surrounding the area of the frac-out, Description of methods used to clean up and secure the site, and Listing of current permits obtained for the Project. Location Throughout terrestrial portion of Project Area Monitoring/Reporting The Applicant shall submit the Frac-Out Contingency Plan to the CityRegional Water Action Quality Board, California Department of Fish and Wildlife and U.S. Fish and Wildlife Service, report any frac-out to the City, and submit a summary report to the City detailing all frac-out-related activities. Effectiveness Criteria Frac-outs are prevented or contained. Responsible Agency Regional Water Quality Board, California Department of Fish and Wildlife and U.S. Fish and Wildlife Service City of Hermosa Beach **Timing** Submit Frac-Out Contingency Plan prior construction of terrestrial components, report any frac-out within 4 hours, and submit a summary report detailing all frac-out-related activities at the end of terrestrial construction activities HWQ-2 Marine Spill Prevention Plan. The Applicant shall prepare a Marine Spill Prevention Plan to ensure fuel, oils, and fluids used for equipment operation and maintenance are prevented from entering the marine environment. The Plan shall also include the procedures for reporting all spills to relevant agencies, and completing a report, to be prepared by the Applicant and submitted to the City California Department of Fish and Wildlife at the end of each construction phase, documenting all incidents during each phase. All the vessels that are expected to be utilized as part of the Project would be required to maintain compliance with the Vessel General Permits as required by Section 402 of the Clean Water Act. The Permits impose strict limits on incidental discharges, including those from lubricants, for all vessels that operate within 3 nautical miles of the U.S. coastline. The Permits also require the use of environmentally acceptable lubricants and implementation of preventative measures (USEPA 2012). Failure to comply with the requirements of the Vessel General Permits would result in a violation of Section 402 of the Clean Water Act. Location Throughout marine portion of Project Area Monitoring/Reporting The Applicant shall submit the Marine Spill Prevention Plan to the City. Action Effectiveness Criteria Equipment leaks and spills are avoided or minimized. Responsible Agency City of Hermosa Beach California Department of Fish and Wildlife Prior to entry on the construction site, and periodically during construction Timing HWQ-3 Vessel Waste Management Plan. The Applicant shall prepare a Vessel Waste Management Plan, which will require that all vessels be equipped to collect, contain, and treat waste products. If any ballast water is discharged, the location and volume must be documented, and all debris falling into the water must be documented by time, date, and location. All documented incidents shall be reported to the City and California State Lands

<b>Proposed Mitigation</b>	Proposed Mitigation Measures	
	<u>Commission -otherand other</u> relevant agencies at the end of each construction phase. <u>A copy of the report shall be provided to the City of Hermosa Beach.</u>	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall submit the Vessel Waste Management Plan and incident reports to the City.	
Effectiveness Criteria	Vessel waste discharges are avoided or minimized.	
Responsible Agency	City of Hermosa Beach	
Timing	Submit Vessel Waste Management Plan prior to construction of marine components, and report incidents at the end of each construction phase	
HWQ-4	Shipboard Oil Pollution Emergency Plan. The Applicant shall prepare Shipboard Oil Pollution Emergency Plans (SOPEPs) that must be implemented during the installation, repair, and monitoring of the Project. The SOPEPs must be compliant with the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex I (Prevention of Pollution by Oil) and V (Prevention of Pollution by Garbage from Ships). The Plan must contain preventative measures and procedures that will be followed in the event of a spill in the nearshore or offshore environment and will include at a minimum:	
	<ul> <li>Purpose and need for the plan,</li> <li>Assessment of potential hazards,</li> <li>Spill Prevention and containment,</li> <li>Emergency response procedures,</li> <li>Reporting procedures to the City and other relevant agencies,</li> <li>Closing of the spill incident, and</li> <li>Spill notification contact list.</li> </ul>	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall submit the Shipboard Oil Pollution Emergency Plans (SOPEPs) to <a href="mailto:the-united-states">the United States Coast Guard and California Fish and Wildlife</a> . An approved copy shall also be provided to the City.	
Effectiveness Criteria	Shipboard oil pollution is avoided or minimized.	
Responsible Agency	City of Hermosa Beach California Fish and Wildlife	
Timing	Submit SOPEPs prior to construction of marine components, and report incidents if they occur	
Land Use and Recreation	on	
LU-1	Notice of Marine Construction Activities Provided to Appropriate Agencies and Personnel. The Applicant shall provide notice to the California Department of Conservation, the U.S. Navy, the California Coastal Commission, and the City of Hermosa Beach 2 weeks prior to commencement of marine cable installation and marine cable removal. The notice shall be kept current (every 2 weeks) and shall include the location of the work site, the size and type of equipment used to perform the work, associated guard ships, name and radio call signs for working vessels, if applicable, telephone numbers of onsite contact representatives, and the schedule for completing the Project.	
	The Applicant shall keep its Local Notice to Mariners current by providing written update notices to the Commander, Eleventh Coast Guard District, Coast Guard Island Building 50-2, Alameda, California 94501, every 2 weeks during Project installation and Project decommissioning.	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall provide notice of marine construction activities to the California Department of Conservation, the U.S. Navy, the California Coastal Commission, and the City of Hermosa Beach, as well as keep its Local Notice to Mariners current by providing	

<b>Proposed Mitigation</b>	Measures
	written update notices to the Commander, Eleventh Coast Guard District.
Effectiveness Criteria	Appropriate agencies are notified of marine construction activities throughout the duration of marine construction.
Responsible Agency	California Department of Conservation, U.S. Navy, California Coastal Commission <del>, and City of Hermosa Beach</del>
Timing	2 weeks prior to commencement of marine cable installation and marine cable removal, with updates every 2 weeks during Project installation and Project decommissioning
LU-2	As-Laid Specifications Provided to Appropriate Agencies and Personnel. After the marine alignments have been installed, the Applicant shall submit as-laid plans, including depth of burial from the Mean High Water line to the 5,904-foot (1,800-meter) water depth, to the California Department of Conservation, U.S. Navy, California Coastal Commission, and the City of Hermosa Beach. The fiber optic cable location shall be recorded using a differential Global Positioning System (GPS), with the transponder mounted on the equipment (cable plow or remotely operated vehicle [ROV]) used for burial.
Location	Throughout marine portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide as-laid plans to the California Department of Conservation, U.S. Navy, California Coastal Commission, and the City of Hermosa Beach.
Effectiveness Criteria	Appropriate agencies are provided with as-laid plans for the marine alignments.
Responsible Agency	California Department of Conservation, U.S. Navy, California Coastal Commission, and City of Hermosa Beach
Timing	After the marine alignments have been installed
LU-3	Disclosure of Marine Cable Locations. One month prior to commencement of marine cable installation, the Applicant shall inform fishing companies and personnel of the cable locations by providing copies of the marine route position list. The Applicant shall consult directly with the fishing operators and inform them of the requirements of the Submarine Cable Act, specifically Sections 24 and 25, which require vessels to maintain a distance of at least 1 nautical mile from the cable-laying vessel (during construction) and cable-removal vessel (during decommissioning), and fishing vessels to keep nets from cables at a distance of at least 1 nautical mile. Two weeks prior to commencement of marine cable installation and marine cable removal, the Applicant shall provide the City with documentation of these consultation efforts.
Location	Throughout marine portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide the City with documentation of these consultation efforts.
Effectiveness Criteria	Interference with fishing activities are avoided or minimized.
Responsible Agency	City of Hermosa Beach
Timing	Two weeks prior to commencement of marine cable installation and marine cable removal
LU-4	Coordination with City on Right-of-way (ROW) Restoration. Prior to the start of construction, the Applicant shall coordinate ROW restoration activities with the City to minimize additional roadway repaving or accelerated deterioration. All paved and unpaved surfaces disturbed by Project construction will be returned to conditions that comply with City standards. Paved surface restoration would include pavement repair, curb and gutter reconstruction, and pavement re-striping as needed. Unpaved surface restoration would include minor grading to restore original land contours; installing erosion-control devices where needed; and seeding, mulching, and fertilizing to establish preconstruction conditions.

Proposed Mitigation	
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall coordinate ROW restoration activities with the City.
Effectiveness Criteria	Disturbed surfaces are restored to conditions that comply with City standards.
Responsible Agency	City of Hermosa Beach
Timing	Coordinate with City prior to the start of construction, and restore disturbed areas after construction is completed
LU-5	Construction Schedule Coordinated with Sports Programs. At least 1 month prior to terrestrial conduit installation, the Applicant shall communicate the anticipated construction schedule with the City's sports programs that utilize Clark Stadium and Field and South Park. During conduit installation, the Applicant shall ensure that Saturday construction activities: (1) do not preclude access to Clark Stadium and Field via 11th Street, and (2) do not preclude access to South Park via Loma Drive.
Location	In the terrestrial conduit installation portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide the anticipated construction schedule and provide documentation that access to Clark Stadium and Field and south Park are not precluded during Saturday construction activities.
Effectiveness Criteria	Access to Clark Stadium and Field and South Park is maintained during Saturday construction activities.
Responsible Agency	City of Hermosa Beach
Timing	Communicate construction schedule at least 1 month prior to terrestrial conduit installation, and ensure Saturday construction activities do not preclude access to Clark Stadium and Field and South Park during conduit installation
Noise and Vibration	
N-1	<b>Construction Work Hours Authorization.</b> Construction activities are prohibited outside the following hours and days without obtaining necessary variances from the City of Hermosa Beach:
	■ Between the hours of 8:00 a.m. and 6:00 p.m., Monday through Friday (except national holidays), and 9:00 a.m. and 5:00 p.m. on Saturdays, as specified in Chapter 8.24.050 of the City of Hermosa Beach Municipal Code.
	Any request for a variance from the City shall specify the location, duration, expected noise level, affected receptors, and type of proposed construction activity occurring outside the allowable days and hours presented within Chapter 8.24.050 of the City of Hermosa Beach Municipal Code.
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall obtain necessary variances for construction activities outside the hours allowed by the City's Municipal Code.
Effectiveness Criteria	Noise from construction activities outside the hours allowed by the City's Municipal Code will be minimized and will only occur with the City's approval of necessary variances.
Responsible Agency	City of Hermosa Beach
Timing	Prior to construction of terrestrial components that would be completed outside the hours allowed by the City's Municipal Code
N-2	<b>Employment of Noise-Reducing Construction Practices.</b> The construction contractor shall implement noise-reducing construction practices to reduce noise to the greatest extent feasible. Measures that can be implemented include, but are not limited to, the following:

### **Proposed Mitigation Measures**

- At directional bore construction locations on either 6th or 10th Street, installation
  of an 8-foot-high temporary noise barrier shall be required around the selected
  cable landing site on all sides facing sensitive receptors.
- All stationary construction equipment shall be located at the greatest distance feasible from residences and other noise-sensitive receptors.
- Based on the equipment layout, portable noise barriers shall be strategically positioned around equipment at each cable landing site to absorb and reduce noise generated by operation of the equipment. The noise barriers will be positioned so as not to interfere with the operation of the equipment. These portable noise barriers will be in addition to the perimeter noise barrier to be installed around the cable landing site.
- All construction equipment, including the horizontal directional drill rig, shall be well
  maintained and include mufflers or other sound attenuation devices consistent with
  manufacturer specifications (as applicable).
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall provide documentation of construction noise reduction measures that will be implemented to the City for approval.
Effectiveness Criteria	Noise from construction activities will be reduced to the greatest extent feasible.
Responsible Agency	City of Hermosa Beach
Timing	Submit documentation of measures prior to construction of terrestrial components, and implement noise reduction measures during construction of terrestrial components

N-3

Construction Noise Complaint Program. Prior to construction, the Applicant and/or construction contractor shall establish a telephone number for use by the public to report any nuisance noise conditions associated with construction activities. The Applicant and/or construction contractor shall ensure that a noise liaison is assigned to respond to all public construction noise and vibration complaints in a timely manner, and either (a) the telephone number is staffed by the noise liaison during construction hours; or (b) the phone number is connected to an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. Public noise complaints shall be forwarded to the City of Hermosa Beach within 48 hours.

This telephone number shall be posted at entrances to all work areas and construction yards in a manner visible to passersby.

The Applicant and construction contractor(s) shall document how noise complaints were responded to and the resolution of those complaints. These actions shall include, but not be limited to:

- Ambient noise measurements shall be taken near the complainant location(s).
- In the event construction noise levels have significantly exceeded 85 dBA Lmax at residences, additional attenuation methods shall be explored to reduce temporary construction noise levels to the degree feasible. These additional noise-attention methods might include repositioning equipment and/or noise barriers, or adding more noise shielding (e.g., barriers, acoustical blankets, etc.).

In the event a noise or vibration complaint cannot be resolved, the Applicant and construction contractor(s) shall notify the City of Hermosa Beach within 12 hours.

Location

Throughout terrestrial portion of Project Area

Proposed Mitigation  Monitoring/Reporting	The Applicant shall provide the noise liaison and phone number to the City, as well as
Action	forward noise complaints, document the response to noise complaints, and notify the City if a noise or vibration complaint cannot be resolved.
Effectiveness Criteria	Noise complaints during Project construction are resolved.
Responsible Agency	City of Hermosa Beach
Timing	Establish noise liaison and telephone number prior to construction of terrestrial components, forward noise complaints to the City within 48 hours, document the response to noise complaints when they occur during construction, and notify the City within 12 hours if a noise or vibration complaint cannot be resolved
Transportation	
T-1	<b>Construction Traffic Control Plan.</b> Prior to the start of construction, the Applicant shall submit a Construction Traffic Control Plan for review and approval by the City of Hermosa Beach. The Construction Traffic Control Plan shall include, but not be limited to:
	■ The locations and use of flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc. according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices, the Standard Specifications for Public Works Construction, and/or the California Joint Utility Traffic Control Manual.
	The locations of all road or traffic lane segments that would need to be temporarily closed or disrupted due to construction activities.
	Planned detour routes around road closures on 6th Street (between Hermosa Avenue and Manhattan Avenue) and 10th Street (between Hermosa Avenue and Manhattan Avenue).
	Methods to reduce temporary traffic delays to the maximum extent feasible and prohibit delivery of construction materials during peak traffic periods (6:00 to 9:00 a.m. and 3:30 to 6:30 p.m. Monday through Friday, or as directed in writing by the affected public agency in encroachment or other permits). This should also include feasible ways to avoid construction-related trips during peak traffic periods.
	Plans to provide written notification to property owners and tenants at properties affected by access restrictions to inform them about the timing and duration of obstructions and to arrange for alternative access if necessary. The coordination shall be conducted at least 1 week prior to any blockages.
	■ Plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Police departments and fire departments shall be notified in advance by the Applicant of the proposed locations, nature, timing, and duration of any roadway disruptions, and shall be advised of any access restrictions. At locations where roads will be blocked, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, providing short detours, and developing alternate routes in conjunction with the public agencies. Documentation of the coordination with police and fire departments shall be provided to the City of Hermosa Beach Planning Department prior to the start of construction.
	Provisions for ensuring safe movement of pedestrians and bicyclists through all detours or affected transportation facilities.
	Define the method for maintaining close coordination, prior to and during construction with all agencies responsible for encroachment permits on each affected roadway, to minimize the cumulative impacts of multiple simultaneous construction project affecting shared portions of the circulation system.
Location	Throughout terrestrial portion of Project Area
Monitoring/Reporting Action	The Applicant shall submit the Traffic Control to the City for approval.

Proposed Mitigation Measures		
Effectiveness Criteria	Emergency vehicle access and motorist, pedestrian, and bicycle safety and access are maintained during Project construction.	
Responsible Agency	City of Hermosa Beach	
Timing	Prior to construction of terrestrial components	
T-2	Appropriate Notification and Location of Activities for Navigation Hazards Associated with Marine Bores. The Applicant will ensure that sufficient information is provided to the U.S. Coast Guard (USCG) in order for a Local Notice to Mariners—(LNM) to be issued. Location of the moored vessels, likely transit routes of mobile vessels, notice of divers in the water, and the approximate dates, durations and working times shall be given.	
	All vessels (working boats and cable vessel) shall show the appropriate shapes and lights for their status, whether moored or in transit. When divers are in the water, the appropriate shapes and lights will be displayed to warn other marine vessels and users.	
	Stationary anchors will be appropriately marked.	
	All vessels shall follow the Navigation Rules and will inform San Pedro Traffic of all intended movements.	
	All vessels shall meet the minimum requirements for navigation safety (crewing, navigation systems, etc.), as stipulated by 46 CFR Parts 1-399.	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall provide sufficient information to the U.S. Coast Guard in order for the Local Notice to Mariners to be issued. Documentation of notification shall also be provided to the City of Hermosa Beach.	
Effectiveness Criteria	Marine vessel navigation hazards are avoided or minimized.	
Responsible Agency	U.S. Coast Guard <del>and City of Hermosa Beach</del>	
Timing	Prior to construction of marine components	
T-3	Appropriate Notification and Location of Activities for Navigation Hazards Associated with Grapnel Towing. In addition to the Local Notice to Mariners,, all vessel movements will be reported to the local Vessel Traffic Services (VTS) (San Pedro Traffic). If the grapnel tow is halted (to clear or retrieve debris), San Pedro Traffic shall be informed immediately, and again when towing starts up again.	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall report all vessel movements associated with grapnel towing to San Pedro Traffic, as well as when the grapnel tow is halted. Documentation shall also be provided to the City of Hermosa Beach for informational purposes.	
Effectiveness Criteria	Marine vessel navigation hazards are avoided or minimized.	
Responsible Agency	San Pedro Traffic <del>and City of Hermosa Beach</del>	
Timing	During construction of marine components	
T-4	Appropriate Notification and Location of Activities for Navigation Hazards Associated with Cable Laying and Plowing. In addition to the Local Notice to MarinersLNM, all vessel movements, particularly estimated times and exact routes, will be reported to the local Vessel Traffic Service (San Pedro Traffic). The cable-laying vessel, by law, is defined to be a vessel with restricted movement. Therefore, all other marine traffic utilizing the Traffic Separation Scheme will be required to avoid the cable-laying vessel. The VTS is assumed to convey this information to approaching vessels.	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall report all vessel movements associated with cable laying and plowing, including estimated times and exact routes, to San Pedro Traffic.	

Proposed Mitigation Measures		
	Documentation shall also be provided to the City of Hermosa Beach.	
Effectiveness Criteria	Marine vessel navigation hazards are avoided or minimized.	
Responsible Agency	San Pedro Traffic <del>and City of Hermosa Beach</del>	
Timing	During construction of marine components	
T-5	<b>Removal of Construction-Related Equipment and Debris.</b> After construction, the Applicant shall remove all construction-related equipment, including anchors, debris, etc. from the seabed, and confirm through either photography, video, or survey that the seabed has been returned to its pre-construction elevation – i.e., no ridges or humps higher than the chart-documented elevation. This documentation shall be submitted to the City and, if requested, the California Coastal Commission.	
Location	Throughout marine portion of Project Area	
Monitoring/Reporting Action	The Applicant shall provide documentation to the City, and if requested, the California Coastal Commission that all construction-related equipment has been removed and the seabed has been returned to its pre-construction condition.	
Effectiveness Criteria	Marine vessel navigation hazards are avoided or minimized.	
Responsible Agency	City of Hermosa Beach and California Coastal Commission	
Timing	After construction of marine components	