



INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
RTI INFRASTRUCTURE, INC.
EUREKA SUBSEA FIBER OPTIC CABLES PROJECT

December 2020



CEQA Lead Agency:

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

Applicant:

RTI Infrastructure, Inc.
268 Bush Street, #77
San Francisco, CA 94104



MISSION STATEMENT

The California State Lands Commission provides the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care through preservation, restoration, enhancement, responsible economic development, and the promotion of public access.

CEQA DOCUMENT WEBSITE

www.slc.ca.gov/ceqa/

Geographic Location (Point at Mean High-Tide Line)

Latitude: 40° 48.19' N
Longitude: 124° 12.05' W
NAD83 Datum

Cover Photo: Aerial view of the cable landing site

EXECUTIVE SUMMARY

1 The California State Lands Commission (CSLC) is the lead agency under the California
2 Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) and has
3 prepared this Initial Study (IS)/Mitigated Negative Declaration (MND) that analyzes and
4 discloses the environmental effects associated with the proposed RTI Infrastructure, Inc.
5 Eureka Subsea Fiber Optic Cables Project (Project) in the unincorporated community of
6 Samoa, Humboldt County. The Project would authorize RTI Infrastructure, Inc. (Applicant
7 or RTI) to build telecommunication infrastructure on land (terrestrial) and in ocean
8 (marine) areas within and offshore of Samoa. The infrastructure includes transpacific fiber
9 optic cables (cables) that would carry telecommunication data to connect the United
10 States with Asia (e.g., Singapore, Taiwan, and Japan) and Australia (Figure ES-1).

11 The CSLC prepared an MND because it determined that, while the IS identifies potentially
12 significant impacts related to the Project, mitigation measures (MMs) incorporated into
13 the Project proposal and agreed to by the Applicant would avoid or mitigate those impacts
14 to a point where no significant impacts would occur.

15 **PROPOSED PROJECT**

16 The Applicant proposes to install and operate four cables (coming from Asia or Australia)
17 and their related structures on land above the ordinary high-water mark (OHWM) (outside
18 of the CSLC's jurisdiction) (Figure ES-2). The terrestrial Project components include the
19 following:

- 20 • **Cable Landing Site.** The four cables would land in an unoccupied area of the
21 Humboldt Bay Harbor, Recreation, & Conservation District. An approximately 150-
22 foot by 150-foot area would be used for the following key Project components:
 - 23 ○ Staging Area. The cable landing site would be used to park vehicles and
24 store construction-related equipment for both terrestrial and marine work.
 - 25 ○ Landing Vaults (LVs). Four LVs (approximately 8 feet wide by 12 feet long
26 by 9 feet deep) would be buried with a cast-iron vault cover (36 inches in
27 diameter) at grade level, meaning flush with the ground.
 - 28 ○ Landing Pipes. A separate landing pipe (described below) would be
29 installed from each of the LVs and would exit offshore into the Pacific
30 Ocean. Once the landing pipes are installed, each individual cable (from
31 different Project phases) would be pulled from the Pacific Ocean through its
32 own designated landing pipe into its own designated LV.
 - 33 ○ Ocean Ground Beds (OGB) Onshore. A grounding system known as an
34 OGB would be needed for cathodic protection to control corrosion and to
35 provide a ground for the electricity travelling through the cable to power the
36 marine cable amplifiers. The four OGBs (one for each cable) would be

1 installed onshore (underground in the cable landing site or offshore (about
2 50 feet west of where the landing pipes would exit).

3 The scope of this Project ends at 3 nautical miles (nm) offshore to correspond with the
4 boundaries of CSLC's jurisdiction (after 3 nm, federal waters extend 12 nm from shore
5 and the United States Exclusive Economic Zone extends 200 nm from shore). The
6 following marine Project components would start at the OHWM of the Pacific Ocean and
7 end at 3 nm from the shoreline:

- 8 • **Landing Pipes.** As noted above, four landing pipes (approximately 5 to 6 inches
9 in diameter) would be installed. Each landing pipe would be approximately 4,600
10 feet long, starting from the LV and ending offshore. The landing pipes would be
11 installed at least 35 feet under the cable landing site and beach using the horizontal
12 directional drilling (HDD) construction method; they would exit at about 3,600 feet
13 (0.5 nm or 0.6 mile) offshore at a water depth of approximately 40 feet. This exit
14 point would be just beyond the surf zone where it would be safe for divers to work.
- 15 • **Fiber Optic Cables.** The cable lay ship (with the help of a dive support vessel and
16 divers) would bring each cable (in different Project phases) from its international
17 destination to the end of the landing pipe at about 3,600 feet offshore (or 4,600 feet
18 from the LVs) where the ocean water depth is approximately 40 feet. Each cable
19 then would be pulled through its own individual landing pipe (constructed in
20 Phase 1) to its respective LV.

21 Before reaching the landing pipe, the cable would be installed as follows:

- 22 ○ In ocean water 5,904 feet deep or more, the cables would lay directly on the
23 ocean floor at approximately 32 miles offshore from the LVs at the Outer
24 Continental Shelf.
- 25 ○ In ocean water between 98 and 5,904 feet deep, the cable would be buried
26 under the ocean floor by cable plow, or by diver-assisted or remotely
27 operated vehicle- (ROV) assisted post-lay burial, depending on ocean floor
28 characteristics.
- 29 ○ In ocean water between 40 and 98 feet deep, the cable would be installed
30 by diver-assisted post-lay burial.
- 31 • **Ocean Ground Beds.** An OGB would be installed onshore or offshore (to be
32 determined after the electronic components of the cable system are designed and
33 manufactured) for each cable to ground the cable. An OGB is crucial for cathodic
34 protection to control corrosion and to provide a ground for the electricity that would
35 travel through the cable to power the marine cable amplifiers.

36 The proposed Project would be completed when the four cables are installed into the
37 landing pipes and are pulled into their respective LVs. The LVs also would provide access
38 to the landing pipes for maintenance activities related to the cables. After completing the

1 Project, the four cables would connect to a single vault that would be built by a local
2 telecommunications company (Vero Networks)¹ and would be outside of the scope of this
3 Project. The local telecommunications company project is a separate project and has
4 independent utility from the Project analyzed in this MND and requires a separate CEQA
5 analysis. Each cable would be connected to this soon-to-be-built vault that would be
6 located adjacent to the Project vaults. The local telecommunications company would then
7 install conduits west to New Navy Base Road and then northerly along New Navy Base
8 Road to connect with an existing building that will become a new cable landing station
9 (also not part of the Project).

10 This Project would be built in four phases. Phase 1 (year 2021) would be the initial phase
11 that would build the infrastructure to receive four cables and bring the very first cable from
12 Singapore to California. Phase 2 (year 2022) would connect California to Taiwan. Phase 3
13 (year 2023) and Phase 4 (year 2024) would connect California to either Japan or
14 Australia; it has not yet been determined which connection would be installed first.

15 **ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES**

16 The environmental issues checked below in Table ES-1 have the potential to be affected
17 by this Project; a checked box indicates that at least one impact would be a “potentially
18 significant impact.” The Applicant has agreed to Project revisions, including
19 implementation of mitigation measures (MMs) that would reduce the potential impacts to
20 “less than significant with mitigation,” as detailed in Section 3.0, *Environmental Checklist*
21 *and Analysis*, of this MND.

22 The Applicant has identified three Applicant Proposed Measures (APMs) that will be
23 implemented as part of the Project to avoid or minimize impacts on environmental
24 resources and to ensure that certain potential impacts are reduced to or remain at a less
25 than significant level. The following APMs are discussed for the respective resources in
26 Section 3:

- 27 • APM-1: Fishing Agreement
- 28 • APM-2: Marine Anchor Plan
- 29 • APM-3: Cable Burial Surveys

30 Table ES-2 lists the proposed MMs and APMs designed to reduce or avoid potentially
31 significant impacts. With implementation of the proposed MMs and APMs, all Project-
32 related impacts would be reduced to or remain at less than significant levels.

¹ The local telecommunications company (Vero Networks) would obtain their authorizations from the California Public Utilities Commission. Because they are a Competitive Local Exchange Carrier, they have an existing Certificate of Public Convenience and Necessity from the California Public Utilities Commission. They would obtain their authorization under that permit to connect to the LVs when the proposed Project is completed.

Table ES-1. Environmental Issues and Potentially Significant Impacts

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Cultural Resources – Tribal
<input type="checkbox"/> Energy	<input type="checkbox"/> Geology, Soils, and Paleontological Resources	<input checked="" type="checkbox"/> Greenhouse Gas Emissions
<input checked="" type="checkbox"/> Hazards and Hazardous Materials	<input checked="" type="checkbox"/> Hydrology and Water Quality	<input type="checkbox"/> Land Use and Planning
<input type="checkbox"/> Mineral Resources	<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population and Housing
<input type="checkbox"/> Public Services	<input checked="" type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation
<input type="checkbox"/> Utilities and Service Systems	<input type="checkbox"/> Wildfire	<input checked="" type="checkbox"/> Mandatory Findings of Significance

Table ES-2. Summary of Mitigation Measures and Applicant Proposed Measures

Biological Resources
MM BIO-1: Provide Environmental Awareness Training
MM BIO-2: Conduct Biological Surveying and Monitoring
MM BIO-3: Delineate Work Limits to Protect Sensitive Biological Resources
MM BIO-4: Install Covers or Some Kind of Escape Ramps in Open Trenches
MM BIO-5: Prepare and Implement an Inadvertent Return Contingency Plan
MM BIO-6: Conduct Pre-Construction Nesting Bird Surveys and Implement Avoidance Measures
MM BIO-7: Implement Best Management Practices for Horizontal Directional Drilling Activities
MM BIO-8: Cable Entanglements and Gear Retrieval
MM BIO-9: Prepare and Implement a Marine Wildlife Monitoring and Contingency Plan
MM BIO-10: Minimize Crossing of Hard Bottom Substrate
MM BIO-11: Contribute Compensation to Hard Substrate Mitigation Fund
MM BIO-12: Control of Marine Invasive Species
MM HAZ-1: Develop and Implement Spill Contingency and Hazardous Materials Management Plans
APM-1: Fishing Agreement
APM-3: Cable Burial Surveys
Cultural Resources
MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources
MM CUL-2/TCR-2: Cultural Resources Contractor Awareness Training
MM CUL-3: Conduct a Pre-Construction Offshore Archaeological Resources Survey
MM CUL-4: Conduct a Pre-Construction Offshore Historic Shipwreck Survey
MM CUL-5: Prepare and Implement an Avoidance Plan for Marine Archaeological Resources
MM CUL-6/TCR-3: Unanticipated Discovery of Human Remains
Cultural Resources – Tribal
MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources
MM CUL-2/TCR-2: Cultural Resources Contractor Awareness Training
MM CUL-6/TCR-3: Unanticipated Discovery of Human Remains
Greenhouse Gas Emissions
MM GHG-1: Purchase GHG Carbon Offsets for Construction Emissions

Table ES-2. Summary of Mitigation Measures and Applicant Proposed Measures

Hazards and Hazardous Materials
MM HAZ-1: Develop and Implement Spill Contingency and Hazardous Materials Management Plans
MM BIO-1: Provide Environmental Awareness Training
MM BIO-3: Delineate Work Limits to Protect Sensitive Biological Resources
MM BIO-5: Prepare and Implement an Inadvertent Return Contingency Plan
MM BIO-7: Implement Best Management Practices for Horizontal Directional Drilling Activities
Hydrology and Water Quality
MM BIO-5: Prepare and Implement an Inadvertent Return Contingency Plan
MM BIO-7: Implement Best Management Practices for Horizontal Directional Drilling Activities
MM HAZ-1: Develop and Implement Spill Contingency and Hazardous Materials Management Plans
Noise
MM NOI-1: Implement Construction Noise Control Measures
MM BIO-9: Prepare and Implement a Marine Wildlife Monitoring and Contingency Plan
Recreation
MM REC-1: Advanced Local Notice to Mariners
Transportation
MM REC-1: Advanced Local Notice to Mariners
APM-2: Marine Anchor Plan
Commercial and Recreational Fishing
MM BIO-10: Minimize Crossing of Hard Bottom Substrate
MM BIO-11: Contribute Compensation to Hard Substrate Mitigation Fund
MM REC-1: Advanced Local Notice to Mariners
APM-1: Fishing Agreement
APM-3: Cable Burial Surveys

Figure ES-1. Proposed Project Phases



Figure ES-2. Project Location

