Trans Americas Fiber (TAF) U.S., LLC.

Written Testimony for Major CZM Permit #CZMJWL0001-24

Applicant: Trans Americas Fiber (TAF) U.S., LLC.
Project: Butler Bay, St. Croix USVI Trans-Caribbean Fiber System Cable Landing Project
Location: Butler Bay Cable Station, 4-A Estate North Side, Frederiksted, VI 00840

Prepared by: Tysam Tech, LLC

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1. PROJECT LOCATION

The project is located at the following physical address:

Butler Bay Cable Station
4-A Estate North Side
Frederiksted, VI 00840

The Butler Bay, St. Croix, USVI Trans-Caribbean Fiber System Cable Landing Project is located in northwestern St. Croix, on the coast between Hams Bay and Butler Bay, on Highway 63. The cable landing bores are positioned at 17°45'28.9"N 64°53'22.2"W while the cable station is located at 17°45'28.4"N 64°53'18.0"W. Figures 1.1 and 1.2 include Location and Agency Review Maps for the project location.

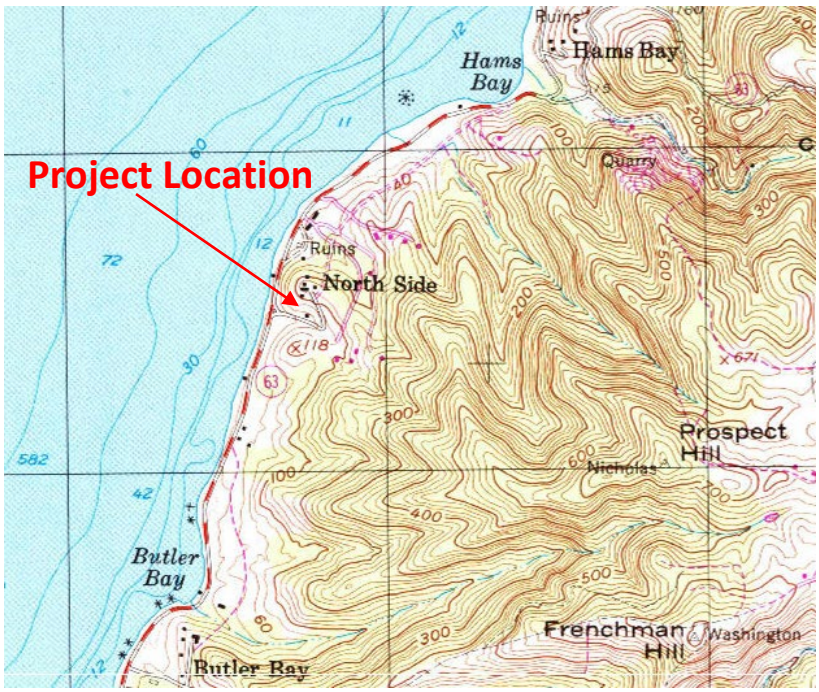

Figure 1.1 – Location and Agency Review Map (USGS Quadrangle Map, Frederiksted, VI, 1958, 1966 ed.)

2. PROJECT SUMMARY

Existing telecommunication cables routing through the Americas and the Caribbean are approaching the end of their operational lives, lacking the necessary accessibility, capacity, and scalability to meet rapidly escalating future demands. It is clear that new build activity is required to provide essential internet services. Once the bandwidth limitations of the existing infrastructure are addressed with new systems, we can expect the market to grow.

This project intends to bring a massive boost to the region's bandwidth capability and reliability, significantly improving the Territory's internet connectivity by installing a new telecommunication line, the TAM-1. The TAM-1 submarine cable system is made up of a number of fiber pairs capable of terabits of data transfer. These line rates, combined with fiber counts create a huge amount of capacity not previously available to the region, essential for addressing the escalating demand for high-speed internet and data services in the territory.

As the existing older systems near the end of their operational life, TAM-1's advanced technology will provide much-needed capacity, accessibility, and scalability. The geographical reach of TAM-1 is extensive, connecting the United States (Florida) to various countries across the Caribbean, Central America, and South America. The planned landing points include Puerto Rico, the US Virgin Islands, the British Virgin Islands, Mexico, Guatemala, Honduras, Costa Rica, Colombia, Panama, the Dominican Republic, and future connectivity to the Netherlands Antilles and other locations. By providing a cross-Caribbean route, the system addresses the connectivity challenges faced by national Caribbean carriers and governments.

The proposed landing site for the St. Croix connection point is located within 4A Estate Northside, at the Butler Bay Cable Station, a telecommunications building owned and operated by AT&T of the Virgin Islands. This project seeks to install an armored telecommunication fiber cable at Butler Bay as part of a major Trans-Caribbean Fiber System venture to improve capacity and connectivity between the continental United States of America and the Caribbean.

Of an approximate 4,393-kilometer cable system delineated across numerous segments, 2,166 kilometers will connect between Vero Beach, Florida and Butler Bay, St. Croix. The submarine fiber optic cable is proposed to be laid on the seafloor coming from the west from deep water into shallow water at the northwest corner of St. Croix and enter existing pipeline bores at Butler Bay. The anticipated start date of this project is August 2025.

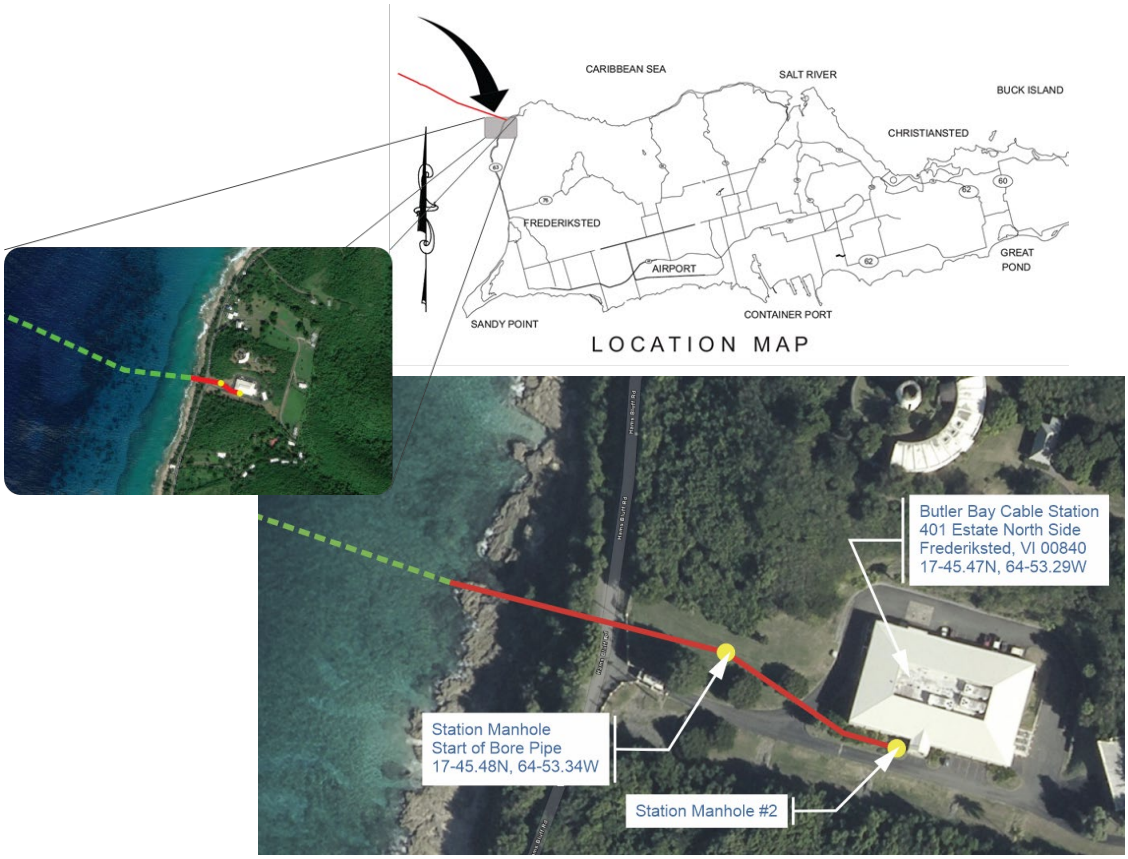

Figure 2.1 – Vicinity Map (Google Earth)

Cable design and type were developed in the planning stages based on engineering considerations identified during the route planning process. The landings were selected to optimize the approach to existing infrastructure, minimize interference with existing cables, and use existing infrastructure where available to install new cable, minimizing environmental impact and maximizing the protection and projected life of the

cables. Existing bores at the St. Croix landing will be used to avoid disruption of the shoreline and shallow water seafloor, as well as following seafloor contours that effectively function as a natural corridor for the cable route. This will allow for a shorter installation timeline with less impact through the use of minimally impacting installation methods.

An important component of the route planning process is the minimization of impacts to the marine environment within the Waters of the USVI, particularly coral reefs and other benthic habitat. Deepwater marine route segment surveys were conducted along the cable route to the approach and entry into USVI Waters, in conjunction with concurrent benthic habitat surveys of the shallow and medium-depth waters from the edge of USVI Waters to shoreline transition points. Based on the proposed route noted in Figure 4.1 below, lack of critical, sensitive or protected species within the cable route corridor, and the method of installation of the proposed cable, this project is anticipated to have minimal impact during temporary construction activities as well as long-term presence and operation, while providing a significant benefit to the island of St. Croix.

3. PROJECT PURPOSE

The objectives of this proposed project are to improve strength, bandwidth, reliability, and accessibility of telecommunications and network services in St. Croix, USVI, and to minimize the risk of communications disruption by providing cable route diversity and alternative bandwidth access to existing cables in the Atlantic-Caribbean region.

This project has the potential to achieve a greater flow of information through public services and utilities that rely on higher telecommunication reliability thus benefiting the social lives of their consumers. There will be an increase in reliability, stability and capacity of the telecommunications system on St. Croix, within the USVI, as well as with other countries as a result of this project.

The most notable effect is the increase in productivity. This is due to the level of individuals and organizations generated by advances in communications, connectivity and efficient access to information. Increased telecommunications in the region can create substantial amounts of consumer surplus and generate new employment opportunities particularly in remote areas as it enables a large number of workers to work from home (i.e. telecommuting) and thus reduces the importance of distances.

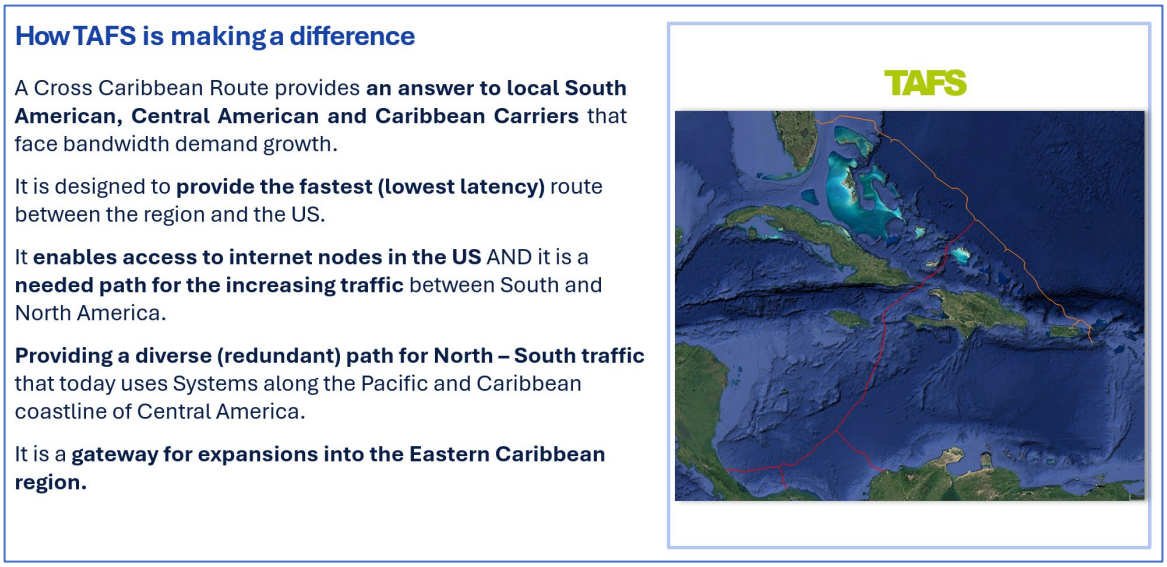

Figure 3.1. Benefits to the USVI and greater Caribbean area.

4. PROJECT LAYOUT AND DETAILS

Cable Route and Installation Plan

As provided in Figure 4.1, the proposed route through USVI Waters entails three connecting straight runs, starting from shore through the bore, to a slight jog in the bearing at the borehole, and finally another slight jog in 22 meters deep water (Route Jog Point).

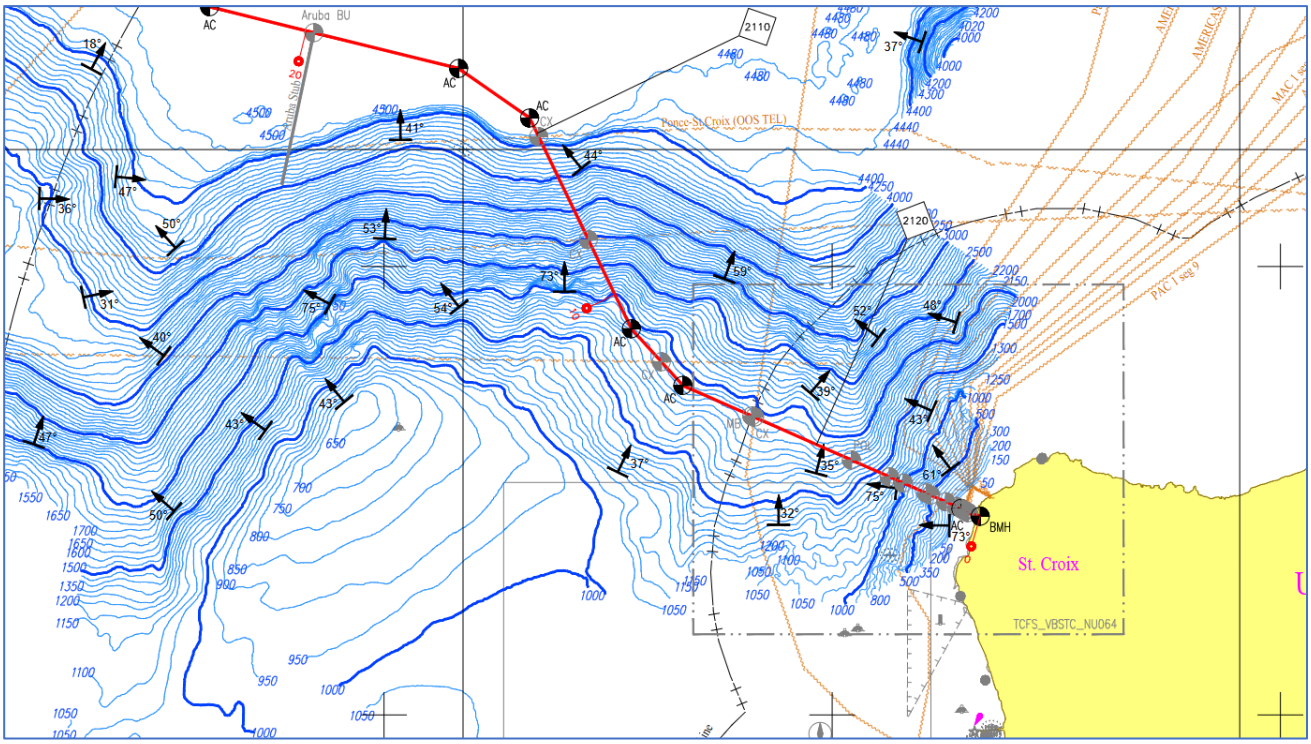

Figure 4.1– Proposed route based on Hydrographic & Geophysical Surveys conducted in 2022.

A double-armored submarine fiber optic cable is proposed to be laid on the seafloor coming from the west in from deep water into shallower Waters of the USVI from the northwest of St. Croix. As it enters the 3 nm boundary of USVI Waters, it will transition from Lightweight (LW) submarine cable type to more durable Single Armor (SA) submarine cable at approximately 2.24 km offshore (17°46'14.8"N 64°54'20.3"W). At this distance, the cable will be placed using the same specialized transmission cable vessel used in deep waters. It will lay cable through the majority of these deeper segments of the USVI Waters for the St. Croix route with the assistance of sonar, GPS, and ROVs.

As the depth gets shallower, the cable placement will transition to small vessel, placing and floating the cable into place with the use of ROVs and eventually divers guiding placement. Within ½ km from shore, the cable will be switched to Double Armor (DA) cable until the route termination point at an existing capped steel pipe conduit (bore) in shallow water (borehole) previously installed by AT&T circa 1996.

The cable will be pulled through this existing pipeline bore installed at Butler Bay, St. Croix and connect to the AT&T of the Virgin Islands distribution telecommunications building located at the referenced project address, No. 4-A Estate Northside, St. Croix USVI.

Figure 4.2– Installation vessels and process.

Water Quality Protections

The applicant has carefully considered how installation as well as long-term operation would affect water quality and the benthic habitat along the proposed route. The installation phase will be carefully executed in order to protect the nearshore and in-water environment, with considerations for water quality, benthic habitat, and long-term impacts.

No earth disturbance or construction is required on the land portion of the cable route.

Existing conduits (i.e. bores) at the St. Croix landing will be used to avoid disruption of the shoreline and shallow water seafloor, as well as following seafloor contours that effectively function as a natural corridor for the cable route. Shallow water laying will be aided by scuba divers while semi-deep and deepwater laying will be aided by remote operated vehicles.

In-water work will require no directional drilling, digging or addition/removal of dredged materials.

Any disturbance to the seafloor due to placement activities will be monitored at all times and a Water Quality Plan will be implemented during any in-water activities. If stabilization, pinning or anchoring of the cable is required, these activities will be done by divers and in a manner that minimizes potential sediment or sand plumes in the water.

Benthic Habitat Considerations

Benthic surveys were conducted in 2022 to determine potential impact to the benthic habitat along the proposed route. From the bore hole to the sand halo habitat section, the proposed cable path is inhabited almost entirely by the invasive sea grass *Halophila stipulacea*; see Figure 4.2 below. There are scattered occurrences of sponges and soft corals, but none are anticipated to be impacted by the cable's installation. During cable laying activities, the cable can be easily repositioned by divers to any location near the proposed path before it even reaches the bottom. A denser abundance of scattered sponges and soft corals can be found in the sand halo habitat section of the cable path than the previous section; the cable will be positioned to be entirely in sand in this area.

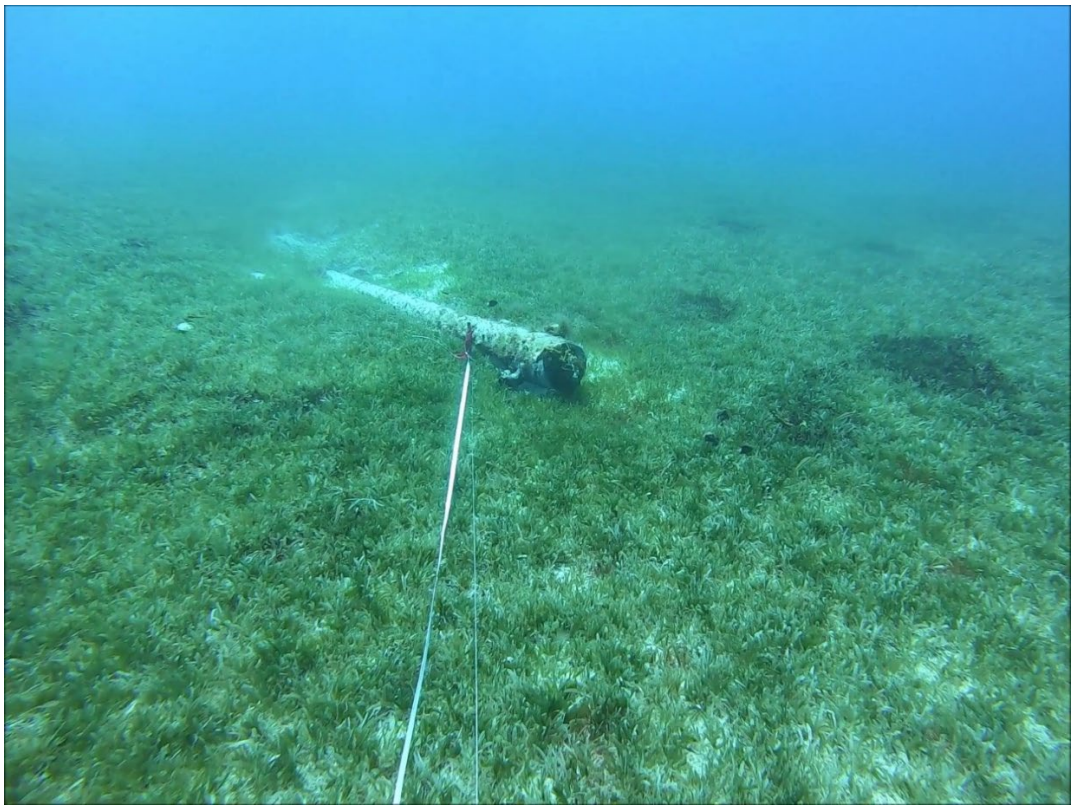

Figure 4.3 – Bore Hole Exit Conduit showing end cap in place. The same benthic habitat is found continuously out to the sand halo

The final section where the route ends at the West End Wall, found along most of the west coast of St. Croix, the bottom drops off steeply starting at approximately 100 feet in depth at the western edge of the sand halo. The habitat is a homogenous mix of sponges and soft corals scattered throughout. As with the other two habitat types, the placement of the cable can be made to avoid any potential critical habitats or living organisms. This avoidance is possible because the density of organisms in this habitat is not high. The project is anticipated to have very little alteration or impact to the existing seabed along the entire route.

Long Term Impacts

The cable is designed, and path planned to have the least amount of impact on marine life, environmental resources and recreational uses. Most of the impacts will be temporary and short term during the placement and installation of the cable and pinning or anchoring for long term use. Once in place, the cable will require minimal to no maintenance and have no effect on existing or future marine or terrestrial habitats in the project area. As a result of this project, St. Croix will have a significant improvement to the existing telecommunication capabilities with minimal impact to existing natural, cultural or functional resources of the island.