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April 2, 2025

Mary Alice Evans, Interim Director
State of Hawai'i
Department of Business, Economic Development, and Tourism
Office of Planning and Sustainable Development
Environmental Review Program
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA/AFONSI)
'Ewa Villages Telecom Facility Project
91-1760 Park Row, 'Ewa District, Island of O'ahu, Hawai'i
Tax Map Key No. (1) 9-1-182:009 (portion)

Dear Ms. Evans:

With this letter, the Department of Enterprise Services hereby transmits the subject Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA/AFONSI) for the subject action for publication in the next issue of the periodic bulletin, The Environmental Notice.

The required publication forms and files, including an electronic copy of the DEA/AFONSI in PDF format, have been provided via the online submission platform. Concurrently with the electronic filing, and as required by HAR § 11-200.1-5(e)(1)(B), printed copies of the DEA/AFONSI have been submitted to the 'Ewa Beach Public Library and Hawai'i State Library Documents Center.

Publication of the DEA/AFONSI in The Environmental Notice initiates a 30-day public comment period for the public to provide comments regarding potential effects of the Proposed Action.

Should there be any questions, contact Jordan Abe, Golf Course System Administrator, at (808) 768-7201 or jabe@honolulu.gov.

Sincerely,

Dita Holifield
Director

From: webmaster@hawaii.gov
To: DBEDT OPSD Environmental Review Program
Subject: New online submission for The Environmental Notice
Date: Tuesday, April 15, 2025 2:57:29 PM

Action Name

ʻEwa Villages Telecom Facility Project

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

ʻEwa, Oʻahu

Tax Map Key(s) (TMK(s))

(1) 9-01-082:009 (portion)

Action type

Applicant

Other required permits and approvals

Conditional Use Permit-Minor; HRS § 6E Historic Preservation Review; Zoning Waiver; Building

Discretionary consent required

Lease agreement

Agency jurisdiction

City and County of Honolulu

Approving agency

Department of Enterprise Services

Agency contact name

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Map It

Applicant

TowerCo

Applicant contact name

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Map It

Is there a consultant for this action?

Yes

Consultant

Planning Solutions, Inc.

Consultant contact name

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Consultant contact email

jim@psi-hi.com

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Consultant address

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Honolulu, HI 96813
United States
Map It

Action summary

TowerCo is proposing to construct and manage a telecom facility, that includes a 120-foot-tall monopole, on a small portion of TMK No. 9-1-182:009, which is occupied by ʻEwa Villages Golf Course. The purpose of the proposed project is to provide a strategically placed facility from which multiple service providers can improve and expand mobile communication services in the region. The project site is in the State of Hawaiʻi's Urban Land Use District and, while most of the golf course is in the City and County of Honolulu's AG-1 Restricted Agricultural District, the project site is in the R-5 Residential District.
The proposed project would use a 50-by-50-foot area near the golf course's parking lot. The 120-foot-tall monopole and associated infrastructure would be within a fenced area that would be shielded by landscaping and would not

affect golf play. The monopole is currently envisioned to have a monopine disguise that would consist of radio frequency transparent branches from roughly 40 to 125 feet above ground. The facility could support the operations of up to four service providers and improve service for the rapidly expanding population in the region.

Reasons supporting determination

The Department of Enterprise Services is issuing an Anticipated Finding of No Significant Impact, based on the analysis of significance criteria provided in Chapter 5 of the DEA/AFONSI.

Attached documents (signed agency letter & EA/EIS)

- 2025-04-23_OA-DEA-EwaVillagesCommunicationsFacility1.pdf
- DES-to-ERP-Memorandum-DEA-Ewa-Villages-Telecom-Facility-signed1.pdf

ADA Compliance certification (HRS §368-1.5):

The authorized individual listed below acknowledges that they retain the responsibility for ADA compliance and are knowingly submitting documents that are unlocked, searchable, and not in an ADA-compliant format for publication. The project files will be published without further ADA compliance changes from ERP, with the following statement included below the project summary in The Environmental Notice: "If you are experiencing any ADA compliance issues with the above project, please contact (agency submitting the project and phone and/or email)."

Action location map

- ‘Ewa-Villages-Telecom-Facility-Project1.zip

Authorized individual

Jim Hayes

Email

jim@psi-hi.com

Phone

(808) 550-4559

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

DRAFT ENVIRONMENTAL ASSESSMENT & ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT, ʻEWA VILLAGES TELECOM FACILITY PROJECT

PREPARED FOR:
City and County of Honolulu
Department of Enterprise Services

PREPARED BY:
PLANNING SOLUTIONS

APRIL 2025

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LIST OF ACRONYMS

AFONSI	Anticipated Finding of No Significant Impact
BMP	Best Management Practice
CCH	City and County of Honolulu
CUP	Conditional Use Permit
CUPm	Conditional Use Permit - Minor
CZM	Coastal Zone Management
DEA	Draft Environmental Assessment
DES	Department of Enterprise Services
DLNR	Department of Land and Natural Resources
DPP	Department of Planning and Permitting
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERP	Environmental Review Program
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HAR	Hawai‘i Administrative Rules
HCCMAC	Hawaii Climate Change Mitigation and Adaptation Commission
HWWTP	Honouliuli Wastewater Treatment Plant
HICRIS	Hawai‘i Cultural Resources Information System
HRS	Hawai‘i Revised Statutes
LCA	Land Commission Award
LUO	Land Use Ordinance
MPH	Miles Per Hour
MSL	Mean Sea Level
NOAA	National Oceanographic and Atmospheric Agency

OR&L	Oahu Railway and Land Co.
PGA	Peak Ground Acceleration
PSI	Planning Solutions, Inc.
ROH	Revised Ordinances of Honolulu
SDG	Sustainable Development Goal
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Places
SLR	Sea Level Rise
SLR-XA	Seal Level Rise Exposure Area
SMA	Special Management Area
TMK	Tax Map Key
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1 INTRODUCTION

TowerCo is proposing to construct and operate a telecom facility, that includes a 120-foot-tall monopole, on a small portion of TMK No. 9-1-182:009. That parcel is the City and County of Honolulu (CCH) owned ‘Ewa Villages Golf Course, with a street address of 91-1760 Park Row in ‘Ewa Beach, O‘ahu, Hawai‘i. The project site is in the State of Hawai‘i’s Urban Land Use District and the CCH’s R-5 Residential District, while the bulk of the golf course parcel is in the AG-1 Restricted Agriculture District. The location of the proposed project is shown in Figure 1-1. The project site’s zoning is provided in Figure 1-2.

The proposed project would involve the use of a roughly 50 by 50-foot area that is currently landscaped near the golf course’s parking lot. The 120-foot-tall monopole would be within the 2,500 square foot area and is currently envisioned to have a “monopine” disguise with radio frequency transparent branches from roughly 40 to 125 feet above ground.[1] The facility could support the operations of multiple service providers.

1.1 PURPOSE AND NEED

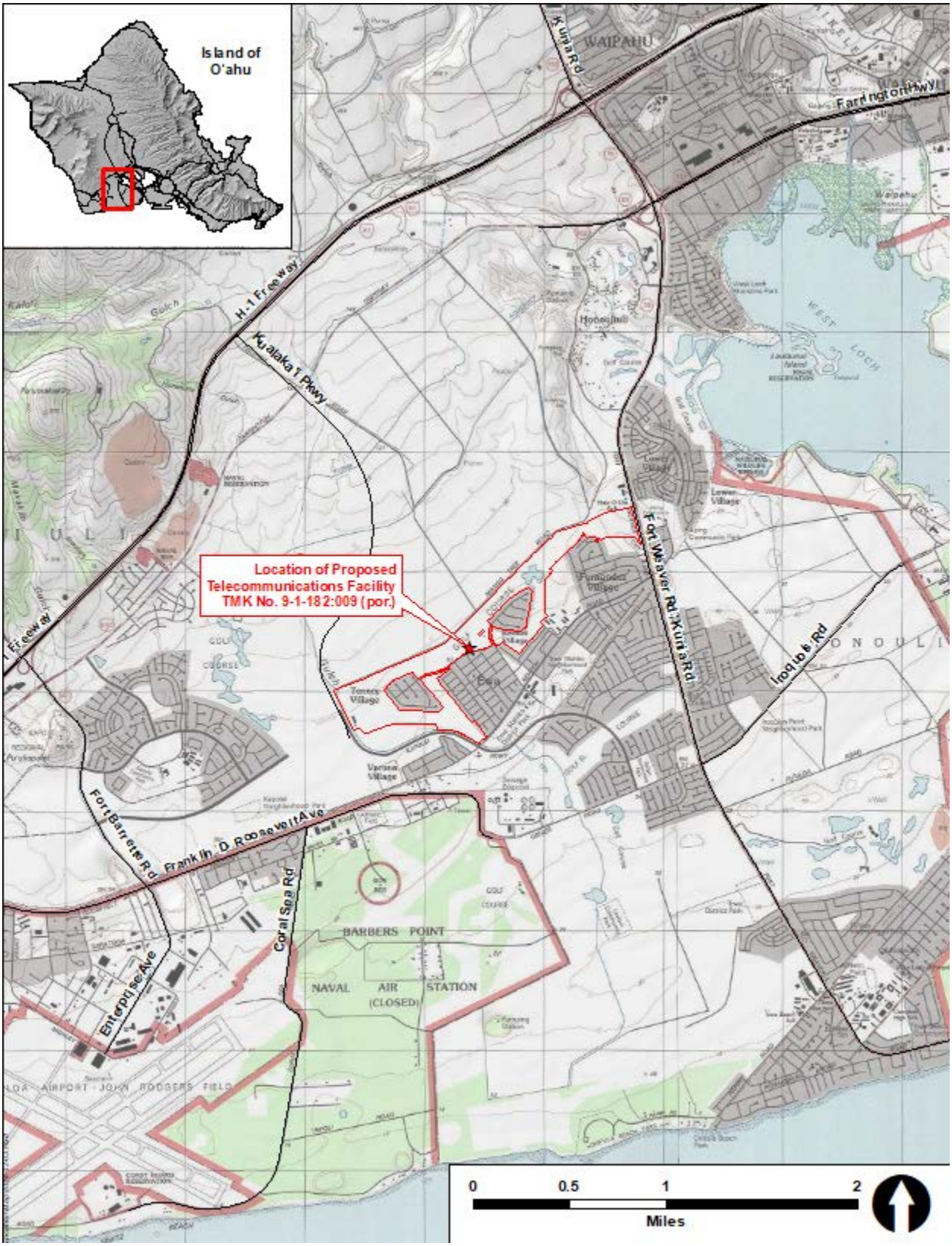
The purpose of the proposed telecom facility is to improve and expand wireless communications service in the region, specifically Ho‘opili, ‘Ewa, and Kapolei. It is needed to address limitations in the area and serve the rapidly growing population in the region. With the rapidly growing population, the demand for wireless service grows; additional towers and antennas are needed to meet this demand. As the urban area expands as programmed in regional planning documents, locations that are dead or low-bar spots will need improved service; additional towers and antennas are needed to eliminate the dead spots. Service provider antennas need to be sited at various locations to provide the level of service their customers have come to expect. Antennas with various azimuths are needed at each location and the antennas also need to be elevated above structures that would block radio frequencies and result in dead spots.

1.2 ENVIRONMENTAL ASSESSMENT TRIGGER

Hawai‘i Revised Statutes (HRS) Chapter 343, specifically HRS 343-5, states: “[e]xcept as otherwise provided, an environmental assessment (EA) shall be required for actions that: (a) Propose the use of state or county lands or the use of state or county funds.” The proposed project involves the use of CCH land; TMK No. (1) 9-1-182:009 is owned by the CCH and managed by the Department of Enterprise Services (DES), Golf Course Division. Therefore, HRS Chapter 343 is triggered.

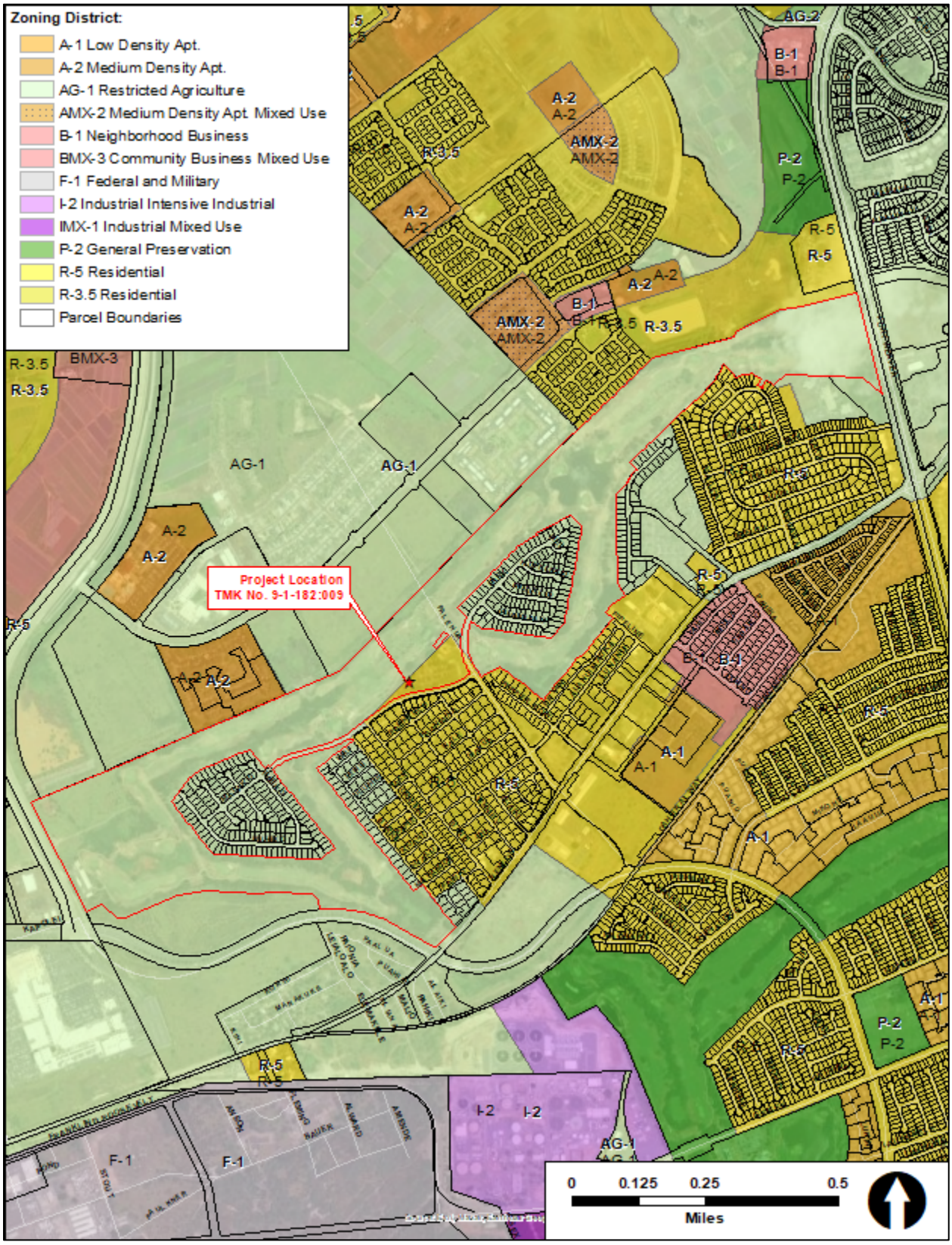
[1] “Monopine” cell towers are skillfully disguised monopoles designed to appear like a pine tree, helping them to blend into the surrounding landscape in an aesthetically satisfactory way.

Figure 1-1: Location Map



Source: Planning Solutions, Inc., USGS map, and CCH GIS shapefiles.

Figure 1-2: Zoning Map



Source: Planning Solutions, Inc. (2024)

Pursuant to HRS Chapter 343, the proposed project is an “applicant action” and CCH has determined that it requires an EA because it: (*i*) involves the use of county-owned land; (*ii*) requires a discretionary approval, a lease agreement; and (*iii*) is not considered an exempt class of action by the CCH.

This EA has been prepared in accordance with the requirements of HRS Chapter 343 and its implementing regulations contained in Hawai‘i Administrative Rules (HAR), Title 11, Chapter 200.1. The EA will support future permit applications.

1.3 ENVIRONMENTAL ASSESSMENT PROCESS

This DEA has been prepared as an applicant action with DES being the approving agency. It is being published in the Office of Planning and Sustainable Development, Environmental Review Program’s (ERP) bi-monthly bulletin, *The Environmental Notice*, which initiates a 30-day public review and comment period. After the 30-day public review period is complete, all substantive comments will be considered, addressed during the preparation of the Final EA (FEA), and provided with a response. The FEA will reflect revisions based upon any relevant information received during the public review period. At this time, it is anticipated that DES will issue a Finding of No Significant Impact (FONSI) with the FEA.

1.4 TELECOMMUNICATION FACILITIES IN REGION

There are several existing telecommunications facilities in the region. These facilities come with certain limitations. As stated in Section 1.1, the purpose of the proposed project is to fill a recognized hole in the capabilities of the current telecommunications facilities in the region as the population expands. This section does not provide a list of all telecommunications facilities in the region, it merely identifies several examples of similar facilities to provide an understanding of the types of facilities that currently serve the community. Examples include:

- A 120’ tall lattice tower with multiple service providers in the northwest corner of the CCH-owned Honouliuli Wastewater Treatment Plant (on TMK 9-1-069:003, near TMK 9-1-069:002 and Verona Village).
- A 120’ tall monopole with a multiple service providers located in the southeast corner of the CCH-owned Honouliuli Wastewater Treatment Plant (on TMK 9-1-069:003, near Coral Creek Golf Course).
- Three 100’ tall monopole light standards at Kapolei High School’s football stadium with one service provider per pole.
- A 100’ tall monopole with a single service provider located in an agricultural area roughly 1,800 feet mauka of the H-1/Kunia Road interchange.
- A 100’ tall monopole with a single service provider located at the bottom of Waipio near the H-1/H-2 interchange.
- A monopole with a single service provider located on CCH-owned land near the intersection of Fort Weaver Road and Renton Road (on mauka-Diamond Head side intersection). This facility has a palm tree disguise.

Service provider antennas are often mounted on buildings in urban areas. This is not common practice in the region because there are few structures that are substantially taller than other structures in the region. However, there are service provider antennas mounted on several sides of Queens Medical Center West O‘ahu, which is roughly 75 feet tall.

2 PROPOSED ACTION, PROJECT, AND ALTERNATIVES

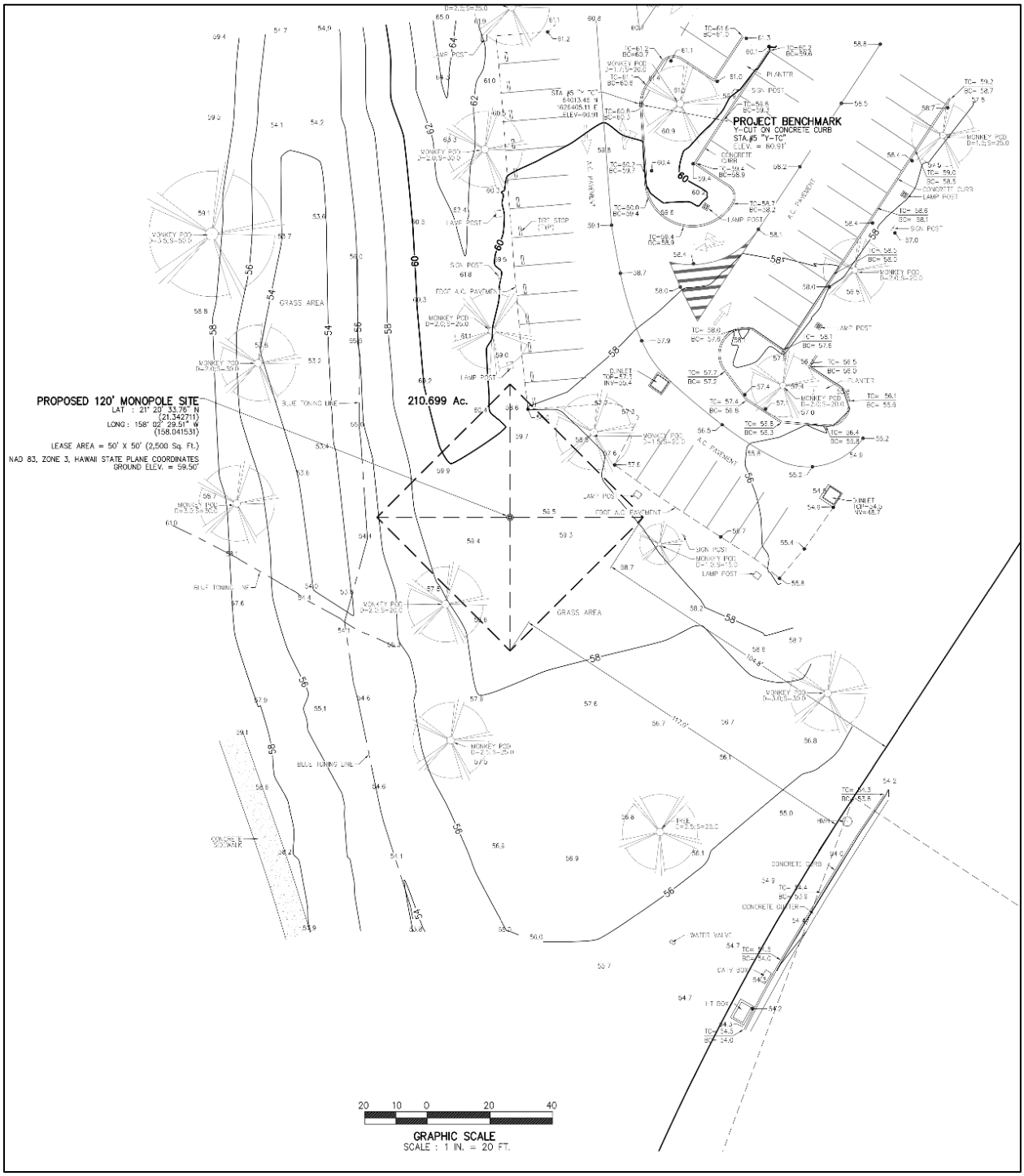
2.1 PROJECT SITE

The project site is located at ‘Ewa Villages Golf Course, TMK No. (1) 9-1-182:009 and owned by the CCH, with a street address of 91-1760 Park Row in ‘Ewa Beach, O‘ahu, Hawai‘i. Relevant data regarding the site is summarized in Table 2-1. Site topography is shown in Figure 2-1. Site conditions are depicted in Figure 2-2 .

Table 2-1: Characteristics of the Project Site

Lot/Project Area	TMK 9-1-182:009 is 210.699 acres. The project site is 2,500 square feet (0.057 acre).
Lot/Project Zoning	The bulk of TMK 9-1-182:009 is in the AG-1 Restricted Agriculture District. The project site and golf course parking lot is in the R-5 Residential District.
Lot Shape	TMK 9-1-182:009 has an irregular shape. The proposed project site is square.
Topography	The site is mostly flat. The site elevation is approximately 60 feet.
Current Development	Most of the parcel is occupied by ‘Ewa Villages Golf Course; the project site is an undeveloped portion of the parcel.
Surrounding Uses	The project site is surrounded by the ‘Ewa Villages Golf Course, beyond which is predominantly residential development. The nearest residence is approximately 170 feet to the south of the project site on the makai side of Malako Street.
Nearest Bodies of Water	Kaloʻi Gulch runs directly adjacent to the western boundary of the project parcel, approximately 0.7 miles away from the project site. The nearest perennial stream is Honouliuli Stream, 1.8 miles from the project site to the northwest. Also, the project site is approximately 1.7 miles from the West Loch of Pearl Harbor, an inlet of the Pacific Ocean.
Soil Classifications	HxA: Honouliuli clay, 0 to 2 percent slopes. This series consists of well-drained soils on coastal plains on the island of O‘ahu in the ‘Ewa area. These soils developed in alluvium derived from basic igneous material. They are nearly level and gently sloping.
Vegetation	The landscape is a well-maintained public golf course and consists primarily of grass, a few volunteer shrubs, and monkeypod trees.
Flood Zone	Flood Zone X: An area of minimal flood hazard.
Tsunami Zone	Safe Zone.

Figure 2-1: Topographical Survey of Project Site



Source: TowerCo (2024)

Figure 2-2: Google Street View of Project Site

Source: Google Earth (2024), photograph dated June 2011.

As shown in Figure 2-1 and as evident in the Street View photograph in Figure 2-2, the project site is a grassy area adjacent to the ‘Ewa Villages Golf Course parking lot. No structures or infrastructure are currently present on the site.

During the brief construction phase of approximately 3 months, portions of the golf course parking lot and/or portions of the landscaped area around the project site would be used for construction staging and/or a base of operations for large equipment, such as a crane.

2.2 PROPOSED PROJECT DESCRIPTION

The proposed project consists of TowerCo leasing an approximately 50’ by 50’ foot area (2,500 square foot) adjacent to the parking area at ‘Ewa Villages Golf Course. The area is currently dirt

or grass surrounded by monkeypod canopy trees. Within this area a 40′ x 40′ fenced area would enclose a 120-foot-tall monopole and service provider equipment. The area between the lease boundary and fence, which would be 5 feet wide around the fence, would be landscaped to buffer the appearance of the security fence. The monopole would have a “monopine” design, skillfully disguising it as a tree to soften its appearance and better blend in with the surrounding area. Once constructed, the facility could support the telecommunications operations of up to three service providers.

Per the requirements of the Revised Ordinances of Honolulu (ROH) Chapter 21, the Land Use Ordinance (LUO), specifically 21-5.650 the proposed project will: (*i*) have landscaping that visually buffers the installation from adjacent streets and highways, (*ii*) have fencing and/or other barriers to restrict public access; (*iii*) restrict public access to areas where they could be exposed to a power density of 0.1 milliwatt/cubic centimeter of radio frequencies.

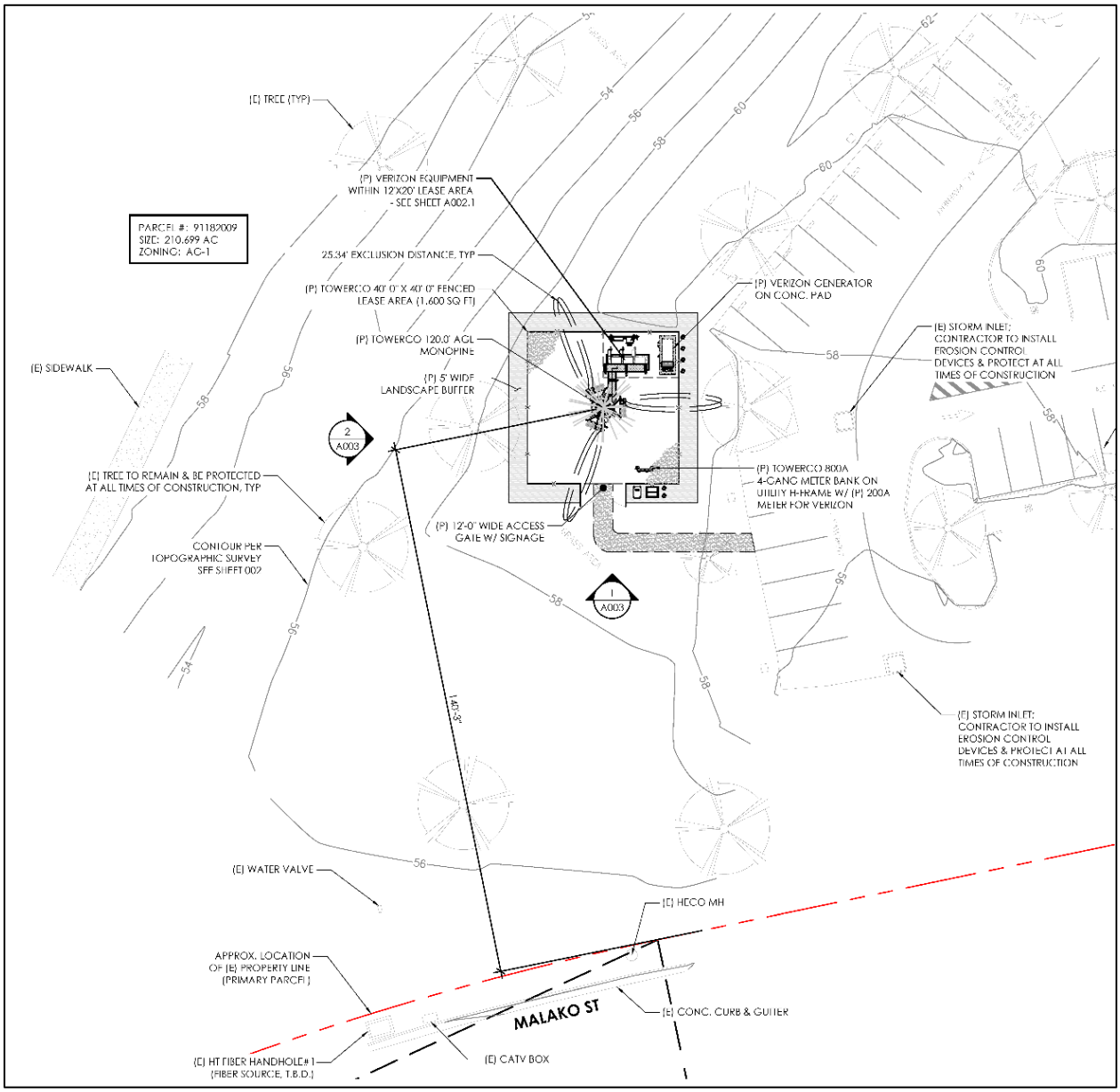
Generally, project implementation would progress through the following steps:

1. Establish temporary Best Management Practices (BMPs).
2. Prepare and enclose project site.
3. Install monopole and related telecom improvements.
4. Stabilize the site and allow landscaping to become established.
5. Remove temporary BMPs.

All development would be confined to the project site (a 2,500 square foot portion of TMK No. 9-1-182:009). All development would conform to applicable regulations and standards (see Chapter 4), except for the proposed height of the monopine, for which a zoning height waiver would be sought. Each of the project steps listed above are discussed in the sections below. The following figures illustrate the proposed project:

- Figure 2-3 shows the site plan for the proposed telecom facility;
- Figure 2-4 provides an enlarged site plan with additional detail;
- Figure 2-5 shows elevation views of the proposed project; and
- Figure 2-6 depicts the antenna plan for the proposed telecommunications tower.

Figure 2-3: Site Plan



Source: TowerCo (2024)

Figure 2-4: Enlarged Site Plan

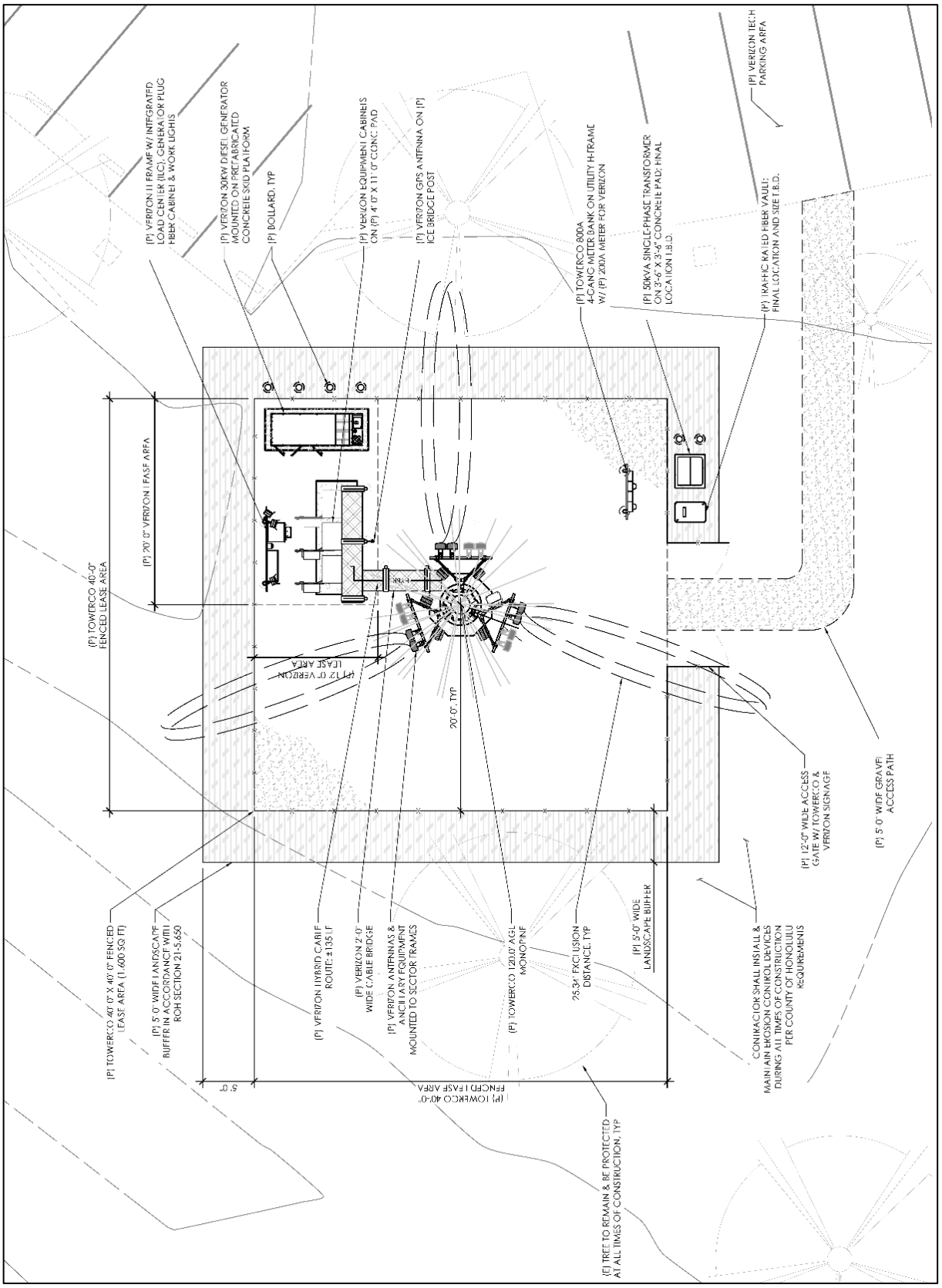
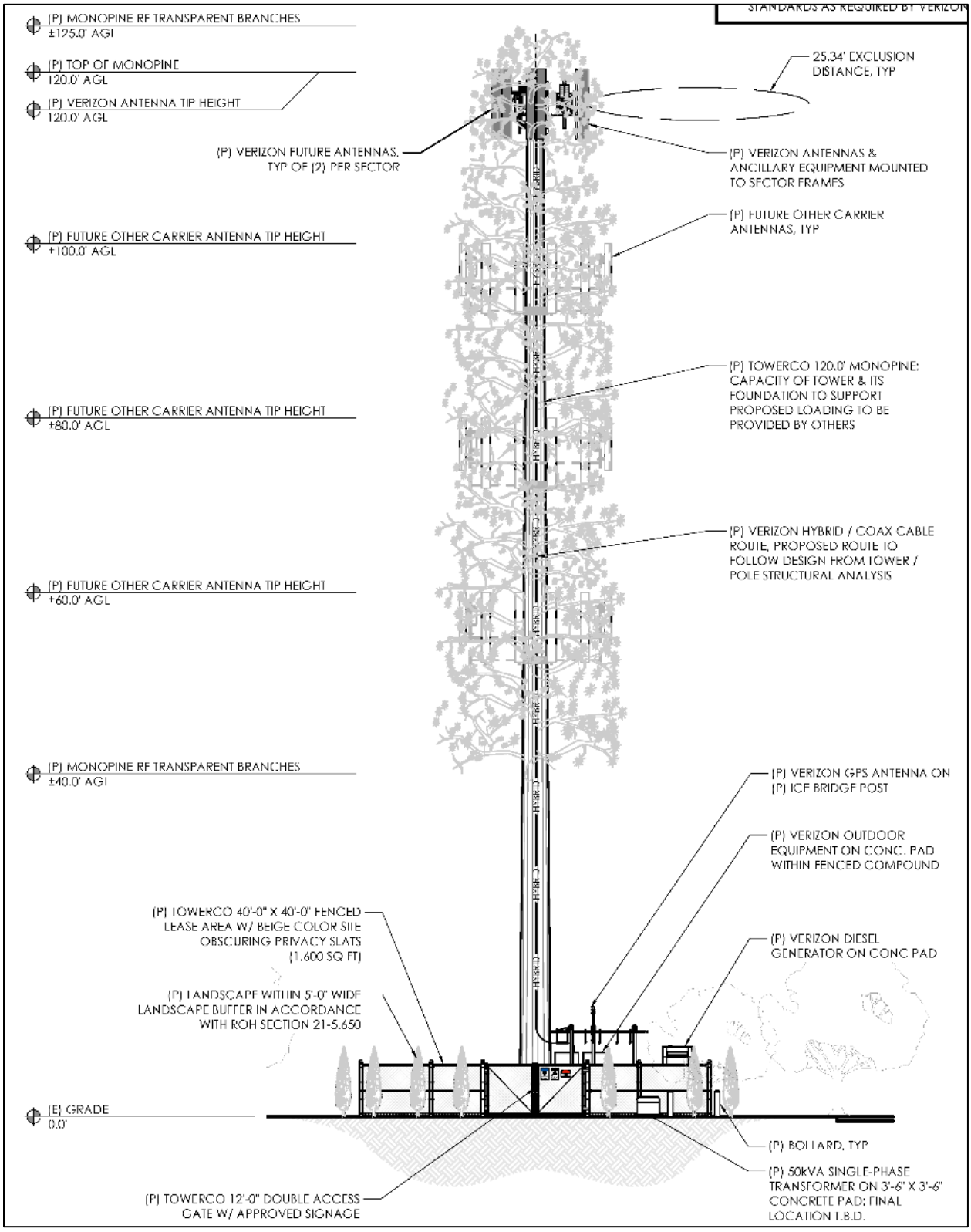
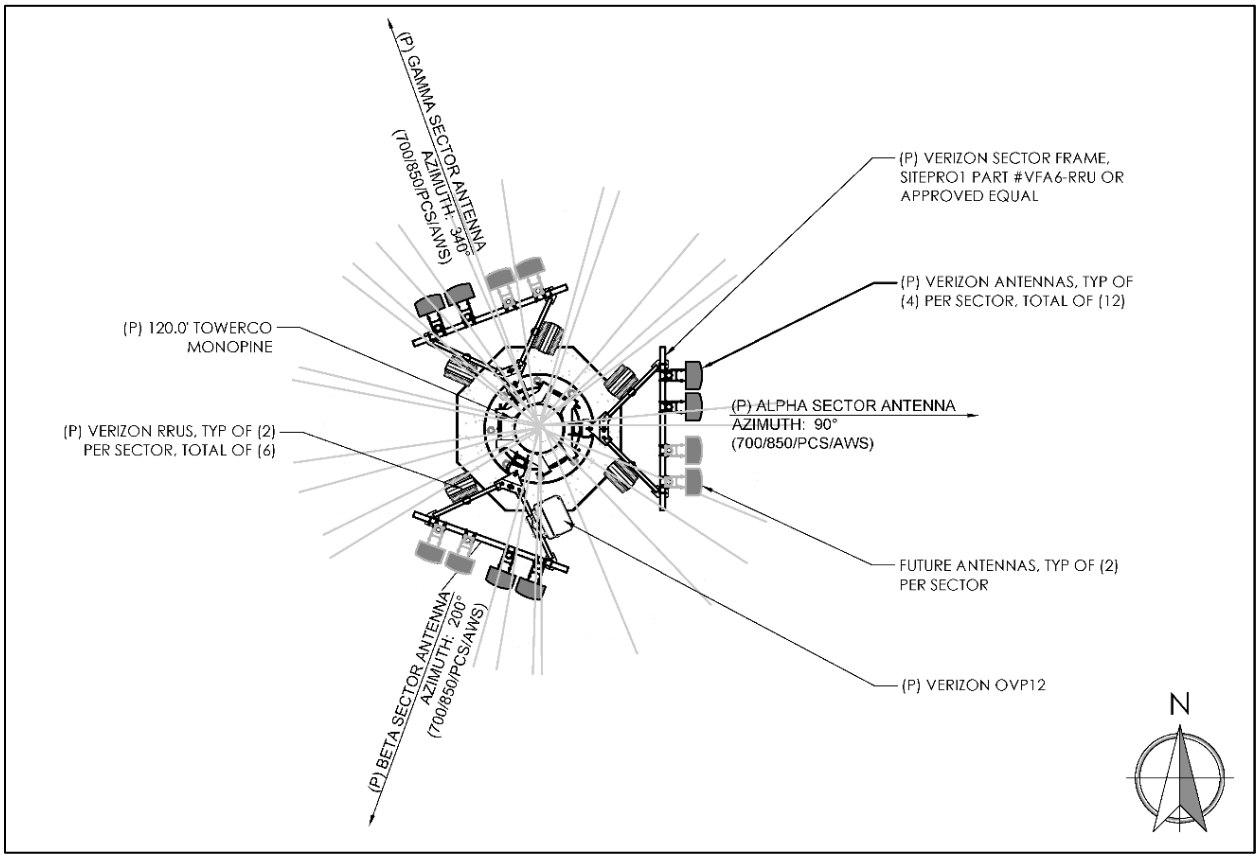


Figure 2-5: Elevation Views



Source: TowerCo (2024)

Figure 2-6: Antenna Plan



Source: TowerCo (2024)

2.2.1 TEMPORARY CONSTRUCTION BEST MANAGEMENT PRACTICES

Temporary BMPs would be established prior to ground-disturbing activity and be maintained and modified appropriately throughout the entire process, from mobilization to site stabilization. The BMPs would be employed to manage fugitive dust, storm water runoff, solid waste, and address other topics. The BMPs would include:

- Conduct construction activities such that they comply with (*i*) Honolulu's *Rules Relating Storm Drainage Standards*, (*ii*) HAR § 11-54 *Water Quality Standards*, and (*iii*) HAR § 11-55 *Water Pollution Controls*. Physical BMPs could include perimeter silt fences and/or silt socks and stabilized construction access. The plans submitted to obtain building permits would detail the erosion and sediment control BMPs.
- All work would be conducted during standard work hours: Monday through Friday (excluding holidays) from 7 a.m. to 6 p.m. and Saturday from 9 a.m. to 6 p.m. and comply with all applicable provisions of HAR § 11-46 *Community Noise Control*. No work would be conducted between sunset and sunrise that would require exterior lighting. If any impact tools need to be used (e.g., jackhammer), they would be used after 9 a.m. to reduce potential impacts.

- Maintain all construction equipment in proper tune according to manufacturer’s specifications and further minimize noise by properly maintaining mufflers and other noise-attenuating equipment.
- Fuel all off-road equipment, including but not limited to backhoes, cranes, generator sets, and compressors, in a designated location with sufficient spill response equipment and materials on hand.
- Clearly designate work areas and keep them confined to a limited area that does not reduce the public use of other nearby facilities unnecessarily. Provide areas for worker parking in the project area or elsewhere so that ample public parking remains available at the ‘Ewa Villages Golf Course and maintain access to the golf course throughout construction periods.

2.2.2 SITE PREPARATION AND FENCING

The project site is an undeveloped area of the golf course that is dirt and grass with canopy trees; it is adjacent to the golf course parking lot (Figure 2-1 and Figure 2-2). Consequently, only limited site preparation is required. Once the location of the site has been flagged and the temporary BMPs identified in Section 2.2.1 installed, any vegetation greater than three (3) inches in height will be removed using a combination of power and hand tools. Earthwork will be confined to the 50′ x 50′ (i.e., 2,500 square foot) project site and a trench extending from the site to a nearby utility pole for the installation of conduit for electrical and communication lines. Within the project site, excavations will be required for the monopole foundation, underground conduits, concrete slabs for service provider equipment, perimeter fence posts, and landscape plantings. The depth and extent of excavation required for the monopole foundation will be determined following geotechnical testing. The excavations for other elements will not exceed a depth of 3.5 feet below ground.

The necessary underground utilities will be extended to the project site. To provide fiberoptic interconnection and electrical services to the site, a traffic rated fiberoptic telecommunications vault and 50 kilovolt-amperes single-phase transformer will be installed just outside the fence line (but within the project site) on the southern side of the proposed facility, adjacent to the access gate. The transformer, which will be linked to Hawaiian Electric’s island-wide electrical transmission and distribution system, will be mounted on a concrete pad. A pair of bollards will protect this equipment from inadvertent damage by motor vehicles. Three phase power to the site will be via a trenched conduit to the nearest available point of interface with Hawaiian Electric Co., Inc.’s power lines along Malako Road.

A 40’ x 40’ x 6’ high chain link fence clad with beige colored, site obscuring privacy slats will be built. The southern side of the fence will be equipped with a 12′-0″ wide double access security gate equipped with all required signage including safety signs warning of the presence of high voltage equipment.

2.2.3 MONOPOLE AND TELECOMMUNICATIONS EQUIPMENT

The central component of the proposed project is the 120-foot high monopole telecommunications tower (Figure 2-3, Figure 2-4, and Figure 2-5). The 120-foot-tall monopole would be installed in the center of the site and is currently envisioned to have a “monopine” disguise with radio

frequency transparent branches from roughly 40 to 125 feet above ground. The monopole will be fabricated from steel. Service provider antennas could be mounted on the monopole at four levels: 60-, 80-, 100-, and 120-foot levels (Figure 2-5).

Service providers that choose to utilize the monopole will mount their antennas on the monopole and sublease portions of the project site. Verizon’s antenna plan, which involves antennas at three azimuths, is shown in Figure 2-6; other service providers would likely have similar antenna configurations. Verizon’s 12′ x 20′ sublease area is depicted on Figure 2-3 and Figure 2-4. Other service providers could sublease similarly sized portions of the project site. Within their sublease areas, the service providers would place their equipment, which is likely to include telecommunications equipment in outdoor cabinets and a backup generator. The equipment would be mounted on concrete pads.

2.2.4 LANDSCAPING AND SITE STABILIZATION

Exposed ground within the fenced area will be stabilized with gravel.

The 40′ x 40′ fenced enclosure will be surrounded by a five-foot-wide strip of landscaping, except at the entrance gate. The landscaping in combination with the beige colored, site obscuring privacy slats, it will help to visually buffer the project from adjacent uses. The landscaping will be installed by TowerCo’s contractor, who will be responsible for its installation and tasked with monitoring its establishment.

A 5-foot-wide gravel access path will be laid to connect the proposed facility to the golf course parking lot (Figure 2-3).

2.2.5 PERMITS AND APPROVALS

The permits and approvals required to implement the proposed improvements at ‘Ewa Villages Golf Course are identified in Table 2-2.

Table 2-2: Permits and Approvals

Permit or Approval	*Issuing Authority*
HRS Chapter 343 EA and FONSI	DES
HRS Chapter 6E Historic Preservation Review	State Historic Preservation Division
Conditional Use Permit-Minor (CUPm)	Department of Planning and Permitting
Zoning Waiver	Department of Planning and Permitting
Building Permit	Department of Planning and Permitting

The zoning waiver is related to the height of the proposed 125-foot high monopine. That height exceeds the applicable LUO height limit. A zoning waiver to allow for that exceedance will be sought following the completion of this EA.

2.2.6 PRELIMINARY SCHEDULE

The major project-related tasks, and their preliminary schedule for completion, are presented in Table 2-3 below.

Table 2-3: Preliminary Schedule for the Proposed Action

Task	*Estimated Start Date*	*Estimated Completion Date*
Environmental Assessment	8/2024	8/2025
Conditional Use Permit	8/2025	1/2026
Other Permitting, Construction Bidding, and Contractor Selection	10/2025	3/2026
Construction, Phase 1	3/2026	6/2026

2.3 ALTERNATIVES

2.3.1 FRAMEWORK FOR CONSIDERATION OF ALTERNATIVES

HAR § 11-200.1-18 establishes the process for the preparation and content of an EA. Among the requirements listed, HAR § 11-200.1-18(d)(7) requires the identification and analysis of impacts of alternatives considered during project planning. TowerCo considered several alternatives before determining that the proposed project described above is its preferred alternative. The scoping response from DPP stated that they “recommend explaining why colocation onto an existing tower is not possible and how network coverage will be impacted if the Project is not built.”

2.3.1 ALTERNATIVES FOR DETAILED CONSIDERATION

TowerCo has concluded that the only alternatives that merit detailed consideration in this EA are:

- The Proposed Action Alternative. This alternative is described Sections 2.1 and 2.2. TowerCo has determined that constructing the proposed telecommunications facility and subleasing portions of it to service providers would enable it to best meet the project’s purpose and need as characterized in Section 1.1.
- The No Action Alternative. Under the No Action Alternative, existing conditions at the proposed project site would not be changed. No attempts would be made to construct a telecommunications facility adjacent to the ‘Ewa Villages Golf Course parking lot or any other location owned by CCH. While the No Action Alternative does not meet the project’s purpose and need as defined in Section 1.1, it is considered here pursuant to the recommendations of HRS, Chapter 343 and HAR § 11-200.1, and to provide a baseline for comparison and contrast with the action alternative (i.e., the Proposed Action).

Only these two alternatives are analyzed in Chapters 3 and 4.

2.3.2 ALTERNATIVES CONSIDERED BUT REJECTED

This section briefly describes the other alternatives considered and the factors that were used to decide that they should be excluded from detailed consideration.

DPP recommended that co-location be considered. TowerCo, the Applicant, is not a service provider; it is in the business of building monopoles and other structures in strategic locations so that service providers can co-locate their telecommunication facilities. The service provided by TowerCo generally results in fewer telecommunication facilities being developed in a community because the facility is not dedicated to a single service provider. The proposed height of the facility is necessary to maximize the opportunity for co-location, which is a CCH policy; therefore, shorter monopoles were not considered.

DPP also recommended that the EA explain how network coverage will be impacted if the project is not built. Unfortunately, it is difficult to predict how network coverage will be impacted. If the proposed project is not built, then the individual service providers will seek alternative locations from which to serve the growing Hoʻopili, ‘Ewa Beach, and Kapolei communities. This would likely lead to a greater number of telecommunications facilities and the outcome may yield different levels of service for the service providers.

Alternative locations were considered; however, the proposed project site is one of the few locations in the region where conditions were deemed likely to suit the long-term presence of a 120-foot-tall monopole telecommunication facility. The factors considered included: (*i*) elevation relative to surroundings, with a preference for elevated area instead of depressions; (*ii*) the likelihood of conflicting new development, with a preference for areas that have already been developed such that neighboring land use will not change and new tall structures are unlikely to be developed nearby; (*iii*) surrounding clear space and ability to comply with height setbacks. Given these considerations, a location in ‘Ewa Villages was preferred over a location in Hoʻopili, which is still being developed and includes areas where the building height limit is 90 feet. Golf courses are not usual locations for telecommunications facilities due to these factors.

3 EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION

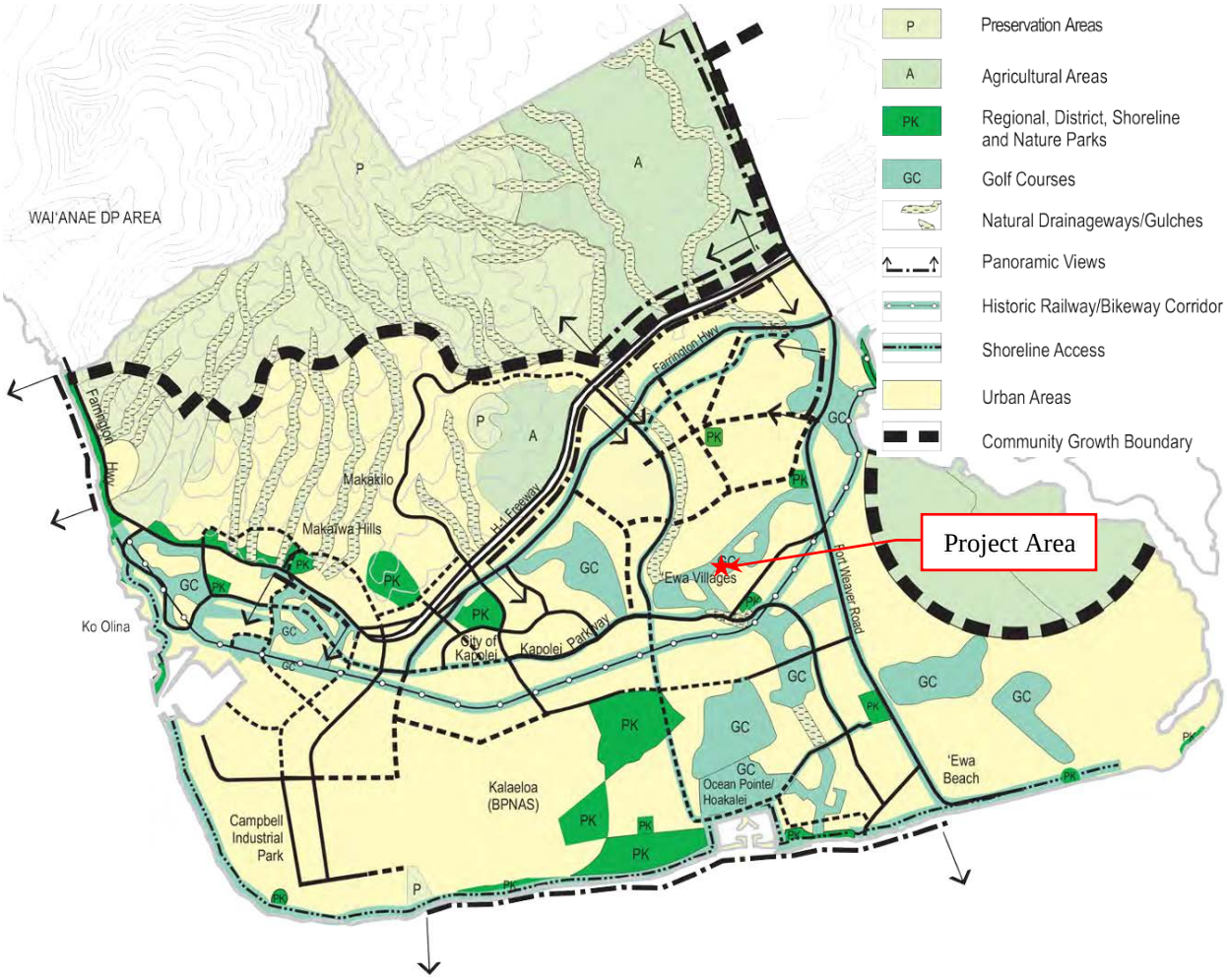
This chapter is organized by topic (e.g., biological resources, archaeological and cultural resources, etc.). The discussion under each topic includes: (*i*) an overview of existing conditions on the project site and, where appropriate, area (within 300 feet of the site) or region; (*ii*) the potential environmental impacts that may occur as a result of implementation of the alternatives considered in this EA; and, where appropriate, (*iii*) any measures that have been or will be taken to avoid, minimize, or mitigate potential adverse effects. The scale of the discussion related to each topic is commensurate with the potential for impacts. The discussion of impacts also distinguishes between short-term impacts (i.e., those occurring when construction equipment and personnel are actively implementing demolition and construction processes) and those that may result over the long-term.

3.1 SCENIC RESOURCES

3.1.1 EXISTING CONDITIONS

As shown in Figure 2-2, the project site a grassy clearing adjacent to the parking area at the ‘Ewa Villages Golf Course, which is located in the *‘Ewa Development Plan* (EDP) area. The EDP, last amended in 2020, has specific policies and guidelines related to: (*i*) scenic resources, (*ii*) ‘Ewa Villages, and (*iii*) antennae. Regarding open space and the visual environment, Section 3.1.1 of the EDP makes it a general policy of the CCH to use open space, including the ‘Ewa Villages Golf Course, “to protect scenic views and natural, cultural, and historic resources.” The Open Space map of the EDP (reproduced here as Figure 3-1) identifies specific panoramic views which merit protection, including views from H-1 towards the ocean.

Figure 3-1: Scenic Resources in the EDP Area



Source: EDP Open Space Map (2020; https://www.honolulu.gov/rep/site/dpp/pd/pd_docs/Ewa_DP_2013_Amended_2020_Ordinance_20-46.pdf)

The only view identified in the EDP in which the proposed project may be visible are the panoramic views from H-1 towards the ocean. Figure 3-2 provides a photograph from H-1 at its nearest location to the project site, roughly 1.75 miles away near the Makakilo Quarry. Figure 3-3 provides the view from H-1 near Kualakai Parkway toward the project site, which is roughly 2 miles away. The project site is roughly in the center of these two photographs.

Figure 3-2: View toward the Project Site from H-1 near Makakilo Quarry

Note: Project site is roughly in the middle of the image.
Source: Google Street View (image capture July 2019).

Figure 3-3: View toward the Project Site from H-1 near Kualakai Parkway

Note: Project site is roughly in the middle of the image.
Source: Google Street View (image capture July 2019).

The EDP further develops guidelines for open space and scenic views within the ‘Ewa Villages community. While not all provisions relate to the proposed project, Section 3.7 of the EDP prioritizes the maintenance of open space buffers and establishes that it be maintained, “in a manner that preserves and enhances the open space appearance of the villages.”

EDP Section 4.9 offer specific principles for aerial antennae including monopoles, as follows:

> *“Section 4.9*
>
> *The following are general principles governing utilization of antennas:*
>
> > *Encourage co-location of antennas; towers should host the facilities of more than one service provider to minimize their proliferation and reduce visual impacts.*
> >
> > *Use stealth technology (e.g. towers disguised as trees) especially on freestanding antenna towers in order to blend in with the surrounding environment and minimize visual impacts.”*

The photographs in Figure 3-4 depict the project site as seen from nearby vantage points and were taken during a site visit on August 27, 2024. Figure 3-5 provides a key to the photo locations. These photographs provide an overview of the existing conditions associated with potentially sensitive viewer groups near the proposed project, including patrons of ‘Ewa Villages Golf Course and its clubhouse, residents and people transiting through the ‘Ewa Villages, and residents of Ho‘opili developments near the golf course.

Figure 3-4: Views toward the Project Site from ‘Ewa Villages and Ho‘opili

A. View of the project site from the southeast (golf course parking lot is to the left) and from roughly 50 feet away.

B. View west towards the project site from the ‘Ewa Villages Golf Course parking lot and from roughly 50 away.

C. View west towards the project site from outside the ‘Ewa Villages Golf Course clubhouse and from roughly 400 feet away.

D. View northeast towards the project site from the intersection of Malako Street and Tenney Street and from roughly 250 feet away.

E. View north towards the project site from the intersection of Tenny Street and Paehe‘ulu Street and from roughly 450 feet away.

F. View northeast towards project site from the intersection of Malako Street and Bond Street and from roughly 600 feet away.

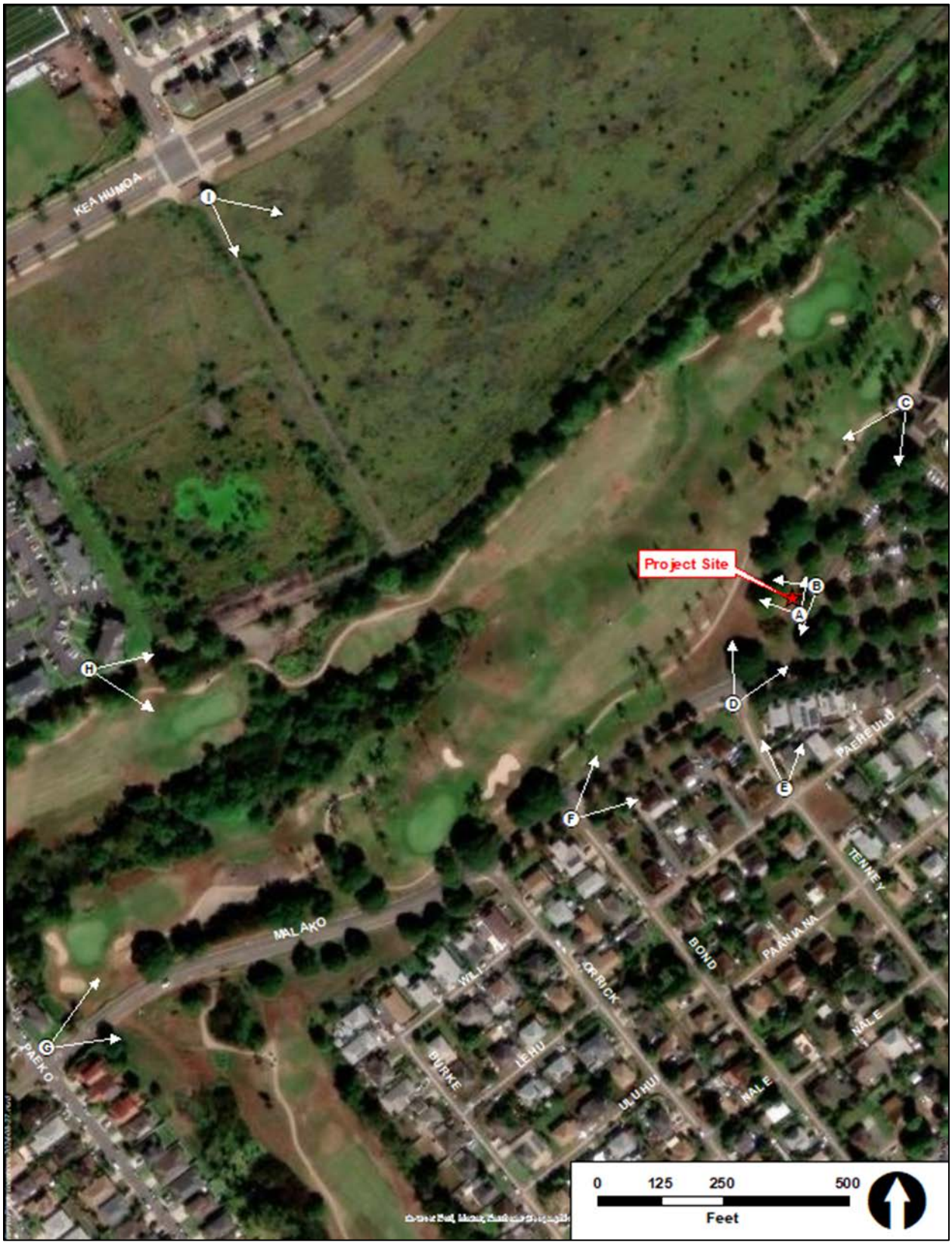
G. View northeast towards the project site from the intersection of Malako Street and Paeko Street and from roughly 1,700 feet away.

H. View southeast towards the project site from the southern side of the Koʻoloaʻula parking area and from roughly 1,400 feet away.

I. View south towards the project site from the intersection of Keahumoa Parkway and Maweke Street and from roughly 1,400 feet away.

Source: Planning Solutions, Inc., all photos taken August 27, 2024.

Figure 3-5: Key to Photo Locations



Source: Planning Solutions, Inc.

3.1.2 POTENTIAL IMPACTS

The potential for the proposed project to impact visual and scenic resources is almost entirely related to the height of the proposed 125-foot-tall monopine (Figure 2-5). In compliance with the required design standards, the project’s fenced area will be buffered by a 5-foot-wide strip of landscaping that will be selected to soften the facility’s ground level appearance so that the fence and ground level equipment (equipment less than roughly 6 feet tall) will not be visible, except for the entry gate that will face south, toward Malako Street. In addition, the chain link fence and gate will be clad with beige colored privacy slats to further enhance the visual buffer. The landscaping and slates will limit the visibility and soften the impact of new visual presence of the fence and most equipment within the facility.

The proposed project is generally consistent with the EDP policies and guidelines regarding aerial antennae. The monopole will have capacity for antennas on four tiers, thereby it will be capable of co-locating the equipment of up to four service providers. Further, the project will have a monopine disguise to soften its appearance and blend with the surrounding landscape and minimize visual impacts to the degree possible.

Despite the foregoing, at 125 feet in height, the proposed monopine will be a new visual element that will be taller or as tall as similar structures in the region. There are no poles of similar height within one-half mile of the project site but there are many utility poles in the ‘Ewa Villages, streetlights on Malako Street and Park Row, and there is an emergency warning siren near the entrance to the golf course parking lot. The following sections discuss the impacts of the monopile from different vantage points.

3.1.2.1 Views Identified in Plans (View from H-1)

The only view identified in regional plans in which the monopine may appear is the panoramic views from H-1, which is roughly 1.75 to 2 miles from the project site. As can be seen in Figure 3-2 and Figure 3-3:

- There is substantial urban development between H-1 and the project site.
- There are several tall utility poles much closer to H-1 than the project site. Those poles appear in, and most would say detract from, but do not block the panoramic views toward the ocean. The utility poles along Kualakai Parkway and along Farrington Highway east of the parkway are the most visible poles because the extent above the horizon; they are roughly 120-foot-tall monopoles.
- The other tall telecommunication facilities in the region (Section 1.4), including two 120-foot-tall facilities at the Honouliuli Wasterwater Treatment Plant, are not noticeable in these views because they are at a lower elevation and further away than the 120-foot-tall utility poles mentioned above.

Like the telecommunication facilities at the Honouliuli Wasterwater Treatment Plant, the proposed project would not be noticeable in view from H-1 because it would be roughly 2 miles away and would not extend above the horizon. The proposed project would not block or substantially degrade the identified view from H-1. Therefore, the project’s visual impact would be less than significant.

In addition, as shown in Figure 3-1, the proposed monopine lies in the path of a scenic panorama from Interstate H-1 towards the ʻEwa coastline identified in the EDP. The following subsections discuss the potential for visual impacts to these and the other potential viewer groups noted in Section 3.1.1.

3.1.2.2 Views from ʻEwa Villages and other Nearby Areas

The proposed facility, especially the 125-foot-tall monopine, may be visible from vantage points within ʻEwa Villages Golf Course, from the nearby ʻEwa Villages residential areas, and from nearby Hoʻopili residential areas. It will only be visible from locations where buildings and vegetation do not block views toward the proposed facility. Given the density of development in the villages and the density of canopy trees in the villages and around the golf course, the facility will not be visible from many vantage points.

This is demonstrated by the visibility of the existing telecom facilities in the area. For example, the two 120-foot-tall facilities at the Honouliuli Wastewater Treatment Plant, which are not near canopy trees or disguised, only appear to be substantial features when viewed from within roughly 1,000 feet of them. Those facilities do not appear taller than or more obtrusive than streetlights and power poles when more than 1,000 feet away. Furthermore, within 1,000 feet of them, they are often not visible due to intervening structures and vegetation. For example, the communication facility is not visible from most points on Manakuke Street in Varona Village even though it is only 500 feet away. The structures and vegetation in Tenney Village is similar to Varona Village, therefore, the proposed facility is not expected to be visible from most points on Paeheulu Street, the nearest interior street to the proposed facility.

When visible, the combination of vegetation and other structures within the view will diminish the impact of the proposed facility. From locations within 1,000 feet, the facility will appear to be the tallest element where it is visible above the canopy trees and will appear to be incongruous with familiar and natural elements of the view. The use of the monopile disguise will minimize the impact of the facility, helping to make the facility appear to be the tallest “tree” in the area.

Visual simulations were prepared to help visualize the proposed project and understand how it may appear when viewed from nearby areas. These images were prepared with a three-dimensional modeling software which creates photorealistic representations of the proposed project. The simulation locations are from: (*i*) the golf course club house (Figure 3-6), from a distance of roughly 400 feet at a location similar to Figure 3-4-C; (*ii*) Malako Street near its intersection with Tenney Street (Figure 3-7), from a distance of roughly 250 feet at a location similar to Figure 3-4-D; and (*iii*) Malako Street near its intersection with Bond Street (Figure 3-8), from a distance of roughly 600 feet at a location similar to Figure 3-4-F.

Figure 3-6: Conceptual Rendering from Golf Course Club House

Note: View from roughly 400 feet from the prposed facility.
Source: Capital Design Services (2024)

Figure 3-7: Conceptual Rendering of View from Malako St. near Tenney St.

Note: View from roughly 250 feet from the prposed facility.
Source: Capital Design Services (2024)

Figure 3-8: Conceptual Rendering of View from Malako St. near Bond St.

Note: View from roughly 600 feet from the prposed facility.
Source: Capital Design Services (2024)

As can be seen from the renderings, the effect that the proposed project will have on views along Malako Road and from the golf course club house will vary depending on the specific vantage point and, mostly, its distance from the proposed facility. Views of the project are also dependent on the relative height of the vantage point, grade, and intervening structures and vegetation. At closer ranges, the proposed telecommunications tower will be prominent, as the tallest structure in the immediate area. This singular appearance is substantially softened by the monopine disguise that is incorporated into its design, and this screening or camouflaging effect remains effective as the viewer moves further away from the project site.

In addition, and as a matter of perspective, the proposed facility will appear smaller as the distance from it increases. This, in combination with the presence of large, intervening trees and other upright structures, results in a reduced visual impression of size for the proposed telecommunications tower; at a distance of roughly 600 feet (Figure 3-8) the proposed facility appears smaller than nearby vegetation and not substantially taller than nearby streetlights.

3.1.2.3 Conclusions

The proposed project will be partially visible from select vantage points. The only scenic view identified in State or City plans in which the monopine would appear is the panorama from Interstate H-1 towards the Pacific Ocean. The impact to that view will be less than significant because the proposed project will barely be perceptible when it is specifically being looked for and, most importantly, will not block the identified view.

Visual impacts within the villages community will be modest for the few residents on Malako Street that face or have prominent exposures toward the project site, are within 1,000 feet of the project site, and lack canopy trees that inhibit upward views toward the future project site. The number of residents potentially impacted is very limited because Malako Street has monkeypod trees on the golf course side of the street and shower trees on the Tenney Village side of the street (Figure 3-4-D). Other residences on Malako Street are not oriented toward the project site and the project will not appear in views from them toward the golf course and the distant Wai‘anae Mountain range.

Visual impacts within other areas of the villages community will be negligible. Overall, the project’s visual impact will be slight and less than significant.

The No Action Alternative would not involve the development of new aboveground elements that would be visible from important viewpoints identified in state and regional plans. Therefore, it does not have the potential to have an adverse effect on visual and aesthetic resources.

3.1.3 AVOIDANCE, MINIMIZATION AND MITIGATION

Measures which TowerCo will take to avoid, minimize, or mitigate the potential visual impact of the proposed project include:

- Consistent with applicable rules and guidelines, the proposed facility will include use of a “monopine” design to disguise it as a tree to soften its appearance and better blend in with the surrounding area.

- Also consistent with applicable rules and guidelines, the facility will have capacity for antennas mounted on it in four tiers, allowing co-location of up to four service providers.
- In compliance with the required LUO design standards, the site will be enclosed by a 6-foot-high chain link fence clad with beige colored, site obscuring privacy slats.
- The fenced area will be surrounded by a 5-foot-wide visual buffer of landscaping.

3.1 GEOLOGY AND SOILS

3.1.1 EXISTING CONDITIONS

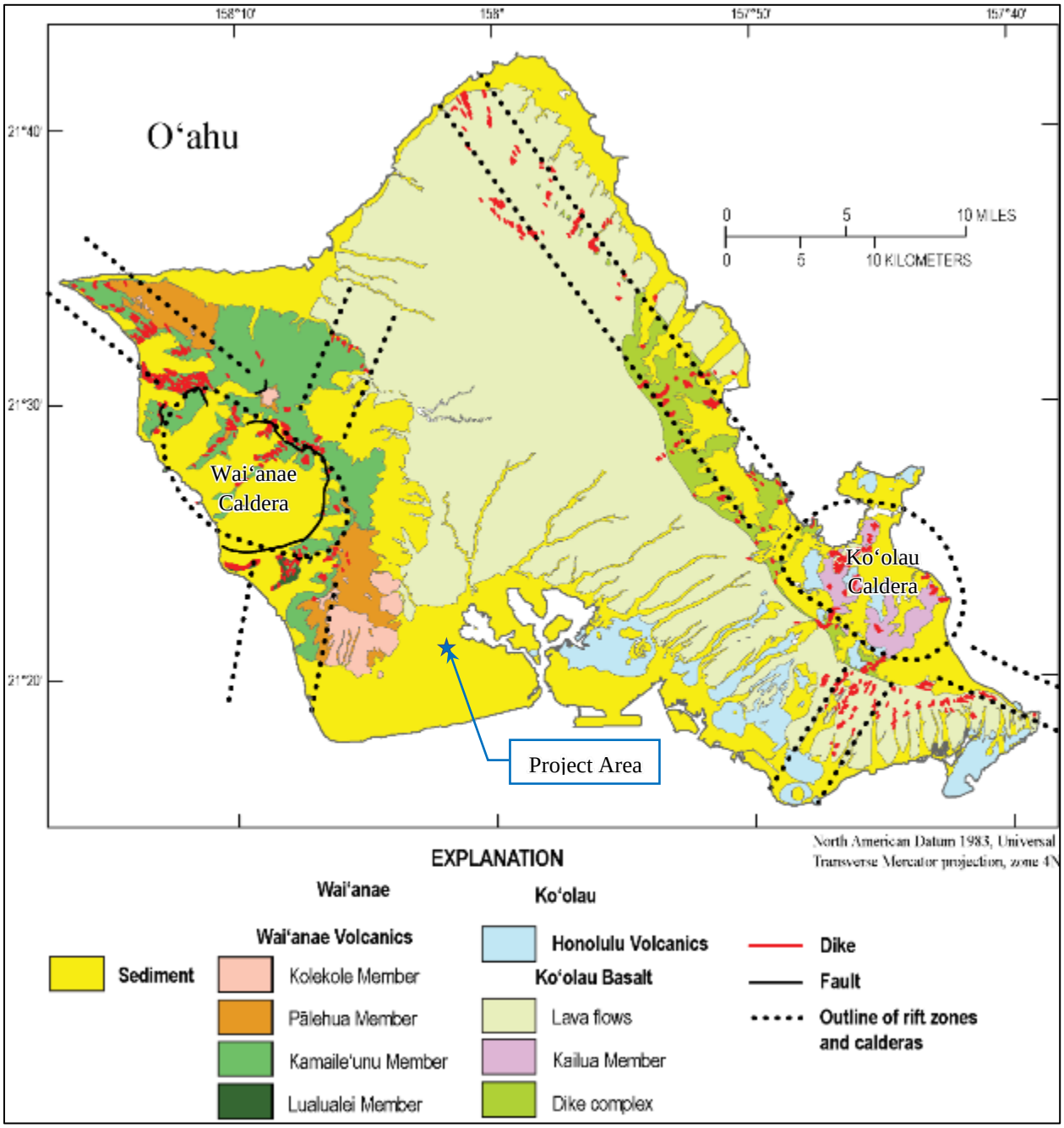
O‘ahu consists of the eroded remnants of two elongated shield volcanoes: the older, western Wai‘anae Volcano (main shield-building stage approximately 3.8-2.95 million years ago) and the younger, eastern Ko‘olau Volcano (shield-building stage approximately 2.5-1.7 million years ago). The rift zone and caldera locations are interpreted based on the location of dikes and other evidence. Dikes are fractures through which magma rose to the surface when the volcano was active. When magma cools in the fractures, it forms dense, near vertical sheet-like bodies of intrusive rock which are referred to as dikes. The approximate area of the caldera are shown on Figure 3-9.

The proposed project is situated on the ‘Ewa Plain in the southwestern portion of the island of O‘ahu. This ‘Ewa Plain, south of the Central O‘ahu plateau, was created by the now inactive Wai‘anae volcano. The topography in the project area is essentially flat, with the broader region gently sloping to the south. Elevation at the project site is approximately 60 feet above mean sea level (+msl) (Figure 2-3).

Three soil suitability studies have been prepared for the Hawaiian Islands. The principal focus of these studies is to describe the physical attributes and relative productivity ratings on the different soil-types for agricultural production within the State of Hawai‘i. The three studies are:

- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service, formerly the U.S. Soil Conservation Service, Soil Survey.
- The University of Hawai‘i, Land Study Bureau, Detailed Land Classification.
- State of Hawai‘i, Department of Agriculture, Agricultural Lands of Importance to the State of Hawai‘i.

Figure 3-9: Simplified Geologic Map of O‘ahu



Source: USGS, 2018, Figure 31.

According to the USDA Soil Conservation Service’s *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (USDA SCS 1972), seven soil associations are present on the island of O‘ahu. The soil association within the project area is the Lualualei-Fill Land-‘Ewa association, which is defined as, “a deep, nearly level to moderately sloping, well-drained soils that have a fine textured or moderately fine textured subsoil or underlying material and areas of fill land located on coastal plains.”

All the soil present on the project site is classified as Honouliuli Clay (HxA), with 0 to 2 percent slopes. This series consists of well-drained soils on coastal plains on the island of O‘ahu in the ‘Ewa area. These soils developed in alluvium derived from basic igneous material. They are nearly level and gently sloping.

3.1.2 POTENTIAL IMPACTS

Because the project site is located within the ‘Ewa Villages Golf Course and has already been cleared and graded, construction of the proposed telecommunications facility will require little or no grading or site preparation (Section 2.2.2). Construction, including conduits to connect to electricity and communications utilities, will minimally modify site topography and would not alter storm water patterns. The limited ground disturbance associated would temporarily increase the potential for erosion and sediment discharge when compared to the existing condition; the BMPs discussed in Section 2.2.1 and 3.1.3 would address this. The short-term activities do not have the capacity to adversely affect geology or soil in a significant way; the impacts would have a limited extent, be temporary, and not affect soils that are important for agriculture.

In the long-term, during operations, the vegetation around the site would be managed and repairs to equipment made as needed. Those activities would only affect areas disturbed during construction and would not result in permanent changes to soil or geological characteristics. Geological and soil resources would not be adversely impacted over the long-term.

The No Action Alternative would not involve construction or ground-disturbing activities at the project site that have the capacity to affect soil or geologic conditions beyond ongoing golf course maintenance.

3.1.3 AVOIDANCE, MINIMIZATION, OR MITIGATION

TowerCo will obtain all required permits and approvals prior to performing the work and all staff/contractors will be required to comply with permit conditions. The project shall comply with HAR, Title 11, Chapter 54 *Water Quality Standards*.

Temporary BMPs would be implemented during ground-disturbing activities to avoid and minimize soil erosion. Those BMPs are likely to include perimeter controls like silt fences and silt socks, stabilized construction access areas, designated fueling and storage areas, soil stockpile protections, dust control measures, and site stabilization measures.

Additionally, the following avoidance and minimization measures would be employed:

- Stopping work and stabilizing the site during periods of heavy rainfall. Stabilization methods could include mulch cover, erosion blankets, plastic sheets, and other measures.
- Existing vegetation would be preserved to the maximum practicable extent.
- Clearing and grubbing prior to rain events would be avoided.
- Stabilizing disturbed areas as soon as possible.
- Maintaining temporary BMPs (perimeter controls like silt fences and silt socks, stabilized construction access areas, designated fueling and storage areas, soil stockpile

protections, and dust control measures such as periodic ground wetting) until permanent stabilization has been achieved.

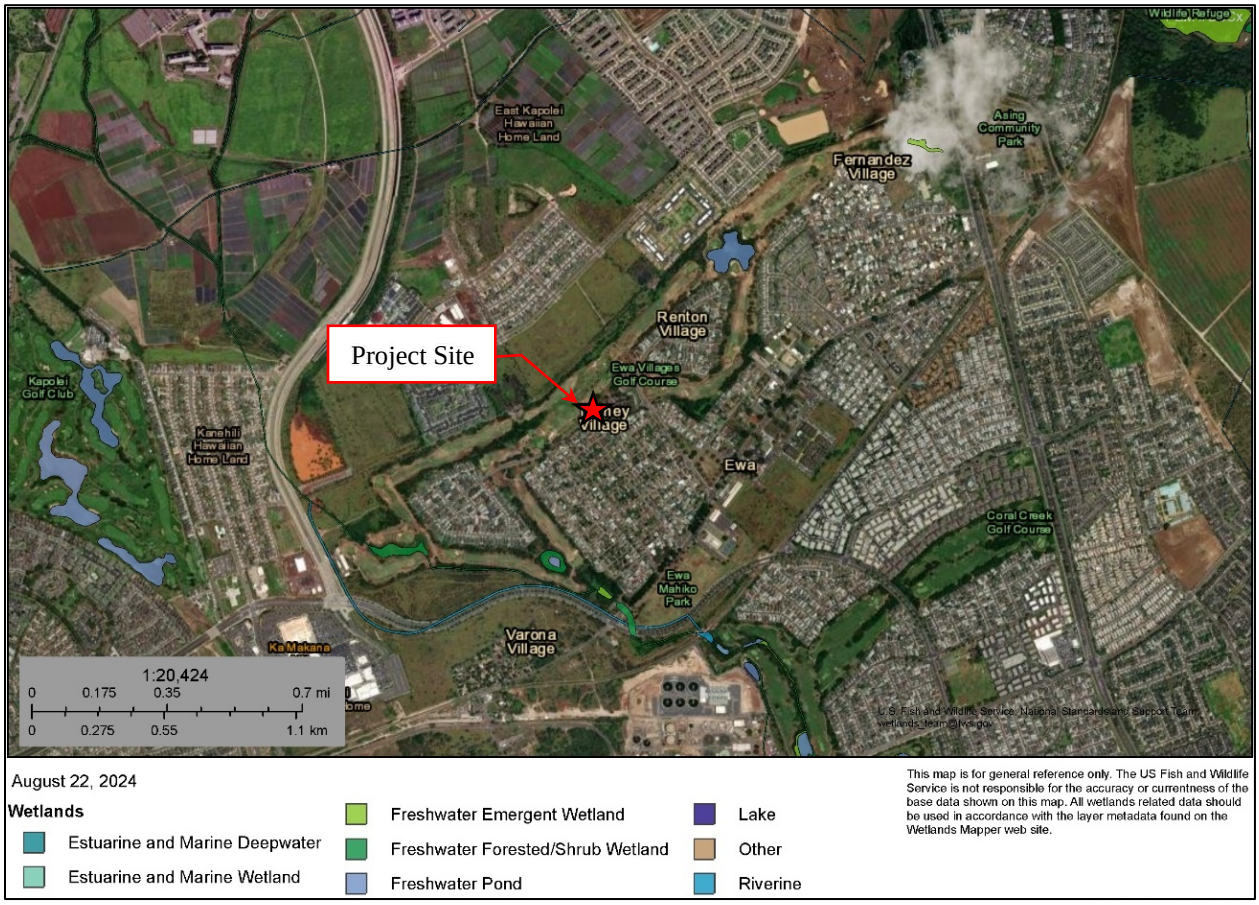
- The project shall comply with the CCH's *Storm Drainage Standards* and the *Rules Relating to Water Quality*.

3.2 WATER RESOURCES

3.2.1 EXISTING CONDITIONS

There are no surface waters at the project site; the site and most of the golf course is an upland area. Figure 3-10 shows the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory Map of the project area. As shown in that figure, the nearest surface waters are ponds associated with the golf course. One pond is roughly 1,900 feet to the south-southwest and a second pond is about 2,300 feet to the northeast. Kalo'i Gulch is a non-perennial stream that is adjacent to the western boundary of the golf course parcel, approximately 0.7 miles west from the project site. The nearest perennial stream is Honouliuli Stream, 1.8 miles from the project site to the northwest. Also, the project site is approximately 1.7 miles from the West Loch of Pearl Harbor, an inlet of the Pacific Ocean.

Figure 3-10: USFWS National Wetlands Inventory Map



Source: USFWS (2024)

The project site is located within the Waipahu-Waiawa system within the DLNR’s Pearl Harbor Aquifer Sector. The sustainable yield for the Waipahu-Waiawa system is approximately 16 MGD, and it is the primary source of drinking water for the area. The closest well to the project site is more than 2 miles to the north, which is upgradient relative to groundwater flow. Like most of the central and southern O‘ahu, the golf course and project site is located within the Southern O‘ahu Basal Aquifer, which is designated as a Sole Source Aquifer by the EPA. EPA review is required for federally funded projects within a Sole Source Aquifer to determine whether the potential project poses a risk of contamination. However, as this project is not subject to federal funding or approvals, no EPA review is required.

3.2.2 POTENTIAL IMPACTS

Construction of the proposed project within the existing, previously developed ‘Ewa Villages Golf Course will not require significant earthwork. Only very modest ground-disturbing activities related to the concrete equipment pads, foundations, and utility conduits are required to implement the project, and the erosion and sediment control measures discussed in Section 3.1.3 will prevent storm water runoff exiting the site and impacting area waterways or features.

The proposed project will result in a very small increase in impermeable surfaces. The surrounding area will continue to be open landscaping. The project will not have a significant effect on the quantity or rate of groundwater recharge in the area. In addition, the quality of water recharging the groundwater will remain unchanged. Finally, construction and operation of the proposed project does not require significant water use, and will not, therefore, affect groundwater withdrawals.

The No Action Alternative does not involve any construction activities and therefore does not have the potential to adversely impact surface or groundwater resources in the project area or elsewhere on the island.

3.2.3 AVOIDANCE, MINIMIZATION OR MITIGATION

To reduce the potential for adverse impacts to wetlands during construction, BMPs related to storm water would be implemented as summarized in Section 3.1.3.

3.3 BIOLOGICAL RESOURCES

The project planning team conducted a site visit on August 27, 2024. This section of the report is drawn from that visit, other observations made by project personnel, online state and federal resources, and work performed on/by nearby projects.

3.3.1 EXISTING CONDITIONS

The area where the proposed telecommunications facility would be located is a clearing with a dirt and grass surface that is surrounded by monkeypod trees and situated between the southern edge of the ‘Ewa Villages Golf Course, its parking lot, and CCH-owned Malako Road (Figure 1-2 and Figure 2-2). The trees and grass in the area are maintained by the golf course maintenance staff.

The only fauna observed at the project site has been common introduced avian species, such as mynah birds, and Indian mongoose. Although rodents were not observed, it is likely that the roof rat, brown rat, Polynesian rat, and European house mouse are present in the area. Feral pigs, dogs, and cats are also likely to visit the project site. The non-native wildlife is detrimental to most native species, both flora and fauna. They feed on most types of native wildlife, and they disturb the habitat in a manner that benefits invasive plant species so that native plants are consumed or outcompeted.

None of the flora or fauna observed are considered rare; all are common over a broad area and some are considered invasive. Because the grass is maintained by the golf course maintenance staff, it is kept short and does not form habitat conducive to native owl nesting. No plant or avian species listed under the federal Endangered Species Act, listed under HRS Chapter 195D, or protected by the Migratory Bird Treaty Act were observed during site visits. No listed waterbirds, seabirds, migratory shorebirds, owls, Hawaiian hoary bat, or damselflies were observed. Although not observed, it is likely that Hawaiian hoary bats are periodically present in the project area and/or certain protect bird species overfly the project area or are present in the region during certain times of the year. There is no USFWS-designated critical habitat in the project vicinity.

To better understand and assess the potential for biological impacts, project planners also consulted the USFWS' Information for Planning and Consultation (IPaC) assessment tool. The primary information provided by an IPaC report is the known or expected range of each species. Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. The complete IPaC report for the ʻEwa Villages Telecom Facility Project is included in this report as Appendix B.

According to the USFWS IPaC report, the following birds may be present in the region and potentially affected by activities in this location: (*i*) Band-rumped Storm-Petrel; (*ii*) Hawaiian Common Gallinule; (*iii*) Hawaiian Coot; (*iv*) Hawaiian Duck; (*v*) Hawaiian Petrel; (*vi*) Hawaiian Stilt; and (*vii*) Newell's Shearwater. The only mammal mentioned in the IPaC report was the Hawaiian hoary bat. The only reptile mentioned in the IPaC report was the Hawksbill Sea Turtle, however this seems unlikely as the project site is roughly 1.7 miles from the nearest shoreline.

Finally, the following native plants may be present in the region and potentially affected by activities in this location: (*i*) ʻakoko (*Euphorbia celastroides*); (*ii*) ʻakoko (*Euphorbia skottsbergii*); (*iii*) ʻenaʻena; (*iv*) awiwi; (*v*) ihi; (*vi*) ohai; (*vii*) puʻukaʻa; (*viii*) round-leaved chaff-flower; and (*ix*) Vigna o-wahuensis. As noted above, none of these species were noted during physical inspection of the site. Damselflies and shorebirds are not known to occur in the project area. None of these species have been seen at the project site.

3.3.2 POTENTIAL IMPACTS

The proposed project would modify the environment at the 2,500 square foot (0.057 acre) project site, which is a small portion (0.027 percent) of the roughly 211-acre golf course parcel. The surrounding monkeypod trees will need to be trimmed during construction so that the monopole can safely be erected using a crane. And the dirt and grass will be replaced with shrubs in a 5-foot wide buffer around the fenced area, new grass, and gravel. Over the long-term, the monkeypod trees will be allowed to grow naturally and only be trimmed in the unlikely event that they contact

or threaten to damage the telecommunications infrastructure. The modification will not substantially change the habitat or the range of flora and fauna at the project site.

The implementation of the measures specified in Section 3.3.3 will avoid and minimize the potential for impacts to protected species. The design of the project and the implementation of these measures would decrease the already negligible possibility for the project to “take” protected species. The project would have a negligible effect on biological resources.

The planting of indigenous and endemic species is not planned because, (*i*) within the telecommunications facility site they would detract from the ability to inspect and access the infrastructure and act as a fire hazard, and (*ii*) outside of the fenced area they would not be able to complete with fast-growing invasive species that dominate the surrounding area.

The No Action Alternative would not involve any new construction and would not affect any listed species or the habitat upon which they rely.

3.3.3 AVOIDANCE, MINIMIZATION OR MITIGATION

The following measures would be implemented to avoid and minimize potential impacts to biological resources, except for emergency response situations:

- Hawaiian hoary bat:
  - Woody plants greater than 15 feet tall (the monkeypod trees) would not be disturbed, removed, or trimmed during the bat birth and pup rearing season from June 1 through September 15.
  - Barbed wire will not be used on the perimeter security fence.
- Seabirds:
  - Construction activities would not occur at night. If for unforeseen reasons night work is required, it would not occur during seabird fledging season (i.e., September 15 through December 15) and fully shielded lights would be used outside of that period.
  - Outside lights installed as part of the project (e.g., security/work lights) would be dark sky compliant and seabird friendly by being fully shielded and considered “acceptable” per the DLNR guidance (https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf). They would utilize automatic motion sensor switches and controls when possible.
- Waterbirds:
  - In the event a listed species of waterbird, such as Hawaiian stilt, Hawaiian coot, or Hawaiian gallinule, should occur in or around the project site, all work within 100 feet will cease until the bird leaves the area of its own accord.
  - If a nest for any such species is encountered in the project area, TowerCo or its contractor(s) will contact the O‘ahu Branch Division of Forestry and Wildlife Office at (808) 973-9778 and establish a buffer zone around the nest.
- Hawaiian short-eared owl or pueo: To avoid adverse impacts to endemic pueo, prior to the start of construction activities project personnel and/or contractor(s) will conduct

a ground survey of the 2,500 square foot site for the presence of owls or depressions in the ground that could harbor an owl nest.

- Invasive species control:
  - Contractor(s) will be required to consult with the Oʻahu Invasive Species Committee and maintain equipment, material, and personnel clean of excess soil and debris to minimize the risk of spreading invasive species.
  - To avoid attracting cats, mongooses, and rats, contractor personnel will place all waste in covered trash receptacles and no food or food waste will be left on the site at the end of each workday. Due to concerns about the project's location near a residential area, no cat removal or bait stations are currently being considered.

3.4 ARCHAEOLOGICAL RESOURCES

No on-site studies were conducted during the preparation of this document. To better understand the potential effects of the Proposed Action on archaeological and cultural resources, this EA relied on the substantial body of archaeological, historical, and cultural research that has been conducted in the area. These include reports for area developments, including the archaeological review and Cultural Impact Assessment prepared for the directly adjacent *Final Environmental Assessment of Finding of No Significant Impact for the ʻEwa Villages R-1 Replacement Project* (Department of Facility Maintenance, 2020) and the *Final Environmental Assessment and Finding of No Significant Impact for the HWWTP Biogas Project* (Hawaiʻi Gas, 2018).

3.4.1 EXISTING CONDITIONS

The project area is in the ahupuaʻa of Honouliuli in the moku (district) of ʻEwa ("crooked"). Honouliuli ahupuaʻa is the largest and western-most ahupuaʻa in ʻEwa. The translation of Honouliuli is "dark bay" and likely refers to the nature of West Loch (west side of Pearl Harbor or Puʻuloa). Early historical accounts and Hawaiian legends of Honouliuli ahupuaʻa indicate wide-spread pre-Contact habitation of the region, including Hawaiian aliʻi occupation. Marine resources were plentiful, irrigated lowlands were suitable for wetland taro cultivation, and forest resources were found along the lower mountain slopes. Following the Great Māhele of 1848, kuleana Land Commission Awards (LCA) in the Honouliuli ahupuaʻa were concentrated in areas containing water resources near Puʻuloa; no LCAs were found near the project area.

Historic background research reveals the majority of the ʻEwa Plain, and the entire project area, was heavily modified by sugarcane cultivation and residential development. From the late-19th century through the latter half of the 20th century, plantation sugar cultivation was the dominant industry throughout the ʻEwa plain. The ʻEwa Plantation Company was in operation from the 1890s to the 1970s. By the early 1900s, the ʻEwa Plantation Company grew to encompass most of the eastern half of Honouliuli ahupuaʻa, including the project area. With growth of the sugar industry introducing more demand for residential development to house the increasing numbers of immigrant workers in the fields, the plantation company constructed more than 1,200 residences in eight distinct villages. Construction of the Oahu Railway and Land Co. (OR&L) Railroad began in 1889, and the railroad reached the ʻEwa Plantation Company lands in 1892.

The project parcel is adjacent to, but outside of, the ʻEwa Sugar Plantation Villages Historic District (i.e., State Inventory of Historic Places [SIHP] No. 50-80-12-9786), listed on the State Register of Historic Places (henceforth, "State Register"). Several previous archaeological studies have been conducted within the historic district with only surface findings of plantation-era houses, foundations, and structures. No significant sub-surface findings have been recorded. Historic sites in the project vicinity are summarized in Table 3-1.

Table 3-1: Historic Sites in the Project Vicinity

SIHP No.	*Site Summary*	*Approximate Distance from Proposed Project Site*
50-80-12-9786	ʻEwa Sugar Plantation Villages Historic District.	150 feet
50-80-12-7133	A historic concrete street light post located along the north side of Renton Road near Paʻalua Street.	2,800 feet
50-80-12-9714	The OR&L Right-of-Way.	2,900 feet
50-80-12-7387	The Hawaiian Railway Society ʻEwa Railroad Yard.	3,400 feet
50-80-12-9761	Within the railroad yard are several train cars that are listed on the state and national registers, including the OR&L rolling stock.	3,400 feet
50-80-12-9708	Waialua Agricultural Company Locomotive No. 6.	3,400 feet

Source: Compiled by Planning Solutions, Inc. (2024)

The site is an undeveloped area of dirt and grass that is easily inspected. Pedestrian inspection of the 2,500 square foot project site did not identify any surface features. No historic properties or cultural materials are present on the project site. It is very likely that any precontact (pre-AD 1778), traditional Hawaiian surface features and/or subsurface cultural deposits that may have existed in the area at one time were destroyed by historic modifications conducted throughout the vicinity. Historic modifications included use of the area by sugar cane plantations for fields, roadways, or support areas. Subsequent development of the golf course likely further modified the site too; the existing topography was likely created to provide visual interest, manage runoff, and create interesting play.

3.4.2 POTENTIAL IMPACTS

The project will not have a direct effect on any historic property. No construction or development will occur within the ʻEwa Sugar Plantation Villages Historic District. The proposed project will be visible from areas within the historic district. The project's indirect visual effect will be nominal. Views from within the district are dominated by the historic residences and the canopy trees within the district and planted around the perimeter of the district, including the monkeypod trees on the golf course. The historic district also includes above ground utilities and streetlights that appear in views within the district. The proposed telecommunications facility will not appear in most views within the district because it will be shielded by structures or vegetation. When it is visible, it will appear similar to a large pine tree and will not block the view of distant mountains in a manner different than existing utilities poles do.

Based on this assessment, TowerCo has determined the Ewa Villages Telecom Facility Project will have "no adverse effect" on historic properties.

The No Action Alternative would not involve any ground-disturbing activities at the ‘Ewa Villages Golf Course. It would not involve any activities that would have the potential to adversely affect archaeological or historic resources.

3.4.3 AVOIDANCE, MINIMIZATION, OR MITIGATION

The following measures would be implemented to continue to avoid and minimize potential impacts to historic and cultural resources:

- Complete the HRS 6E review process.
- Brief project construction workers on the history of the area and inform them of the possibility of inadvertently encountering unknown historic/cultural resources, including human remains.
- Cease all activities if historic/cultural resources are inadvertently encountered during construction activities and notify SHPD pursuant to HAR § 13-280-3. If iwi kūpuna (i.e., ancestral remains) are identified, all earth moving activities in the area would stop, the area would be cordoned off, and SHPD, the medical examiner, and the Honolulu Police Department would be notified pursuant to HAR § 13-300-40.

3.5 CULTURAL RESOURCES

Articles IX and XII of the Constitution of the State of Hawai‘i impose on government agencies a duty to promote and protect the cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups when discharging their respective mandates, including issuing permits and approvals such as an easement or long-term lease. To clarify the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai‘i Supreme Court provided the following analytical framework as an outcome of *Ka Pa‘akai O Ka ‘Āina v. Land Use Commission* (94 Hawai‘i 31, 7 P.3d 1068, September 11, 2000). This framework is referred to as “Ka Pa‘akai Analysis” and consists of a three-part assessment of:

1. “Valued cultural, historical, or natural resources” in the project area, including the extent to which traditional and customary native Hawaiian rights are exercised in the project area;
2. The extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
3. The feasible action(s), if any, to be taken to reasonably protect native Hawaiian rights if they are found to exist.

The Proposed Action is located on land owned and managed by the CCH. As discussed in Section 1.3, commitment of lands owned by the State or any county triggers the requirements of HRS, Chapter 343, and its implementing regulations contained in HAR, Title 11, Chapter 200.1. The purpose of this EA is to satisfy these statutory requirements and to provide the necessary information and analyses to support this process.

3.5.1 STEP 1: IDENTIFY VALUABLE CULTURAL RESOURCES

This EA relies on the substantial body of archaeological, historical, and cultural research that has been conducted in the area. These include reports for area developments, including the archaeological review and Cultural Impact Assessment prepared for the directly adjacent *Final Environmental Assessment of Finding of No Significant Impact for the ʻEwa Villages R-1 Replacement Project* (Department of Facility Maintenance, 2020).

On October 2, 2024, project representatives also reached out to the following organizations seeking input on (*i*) the presence of historic resources or cultural practices in the area, (*ii*) their thoughts on the potential for the proposed project to impact historic resources and/or cultural practices, and (*iii*) suggestions regarding measures to avoid potential adverse impacts to historic resources and/or cultural practices. Project representatives provided these organizations with a brief description of the project and outlined the findings of our analysis as documented in DEA Sections 3.4 and 3.5.

- Ulu Aʻe Learning Center
- Hoakalei Cultural Foundation
- ʻEwa Villages Historical Society
- Kapolei Hawaiian Civic Club
- Kalaeloa Heritage and Legacy Foundation
- Maluʻōhai Residents Association

No responses have been received from these organizations.

After examining the project site and reviewing available information regarding historic and cultural resources in the region, it has been established that there are no valuable cultural resources on or traditional and customary practices occurring on the project site.

The following valuable cultural resources have been identified in the region:

- The Hoakalei Foundation site, which oversees preservation areas, including archaeological sites, in the Hoakalei development roughly 2 miles to the south.
- Cultural practices including hula, resource management, and other traditional activities at Puʻuokapolei, which is roughly 2 miles to the west.
- The cultural practice of fishing at various locations in Pearl Harbor, which is located roughly 2 miles to the east.
- The Kalaeloa Heritage Park, which is 2.5 miles to the southwest and hosts educational programs, resource management, and workshops.

3.5.2 STEP 2: POTENTIAL IMPACTS

Neither the culturally important historic sites nor the identified traditional and customary practices occurring in the region are near the project site. The sites and practices will not be affected by the proposed project. It is also unlikely that the proposed project would adversely impact intangible cultural resource, such as mele concerning the ʻEwa region.

3.5.3 STEP 3: FEASIBLE ACTION(S) TO AVOID IMPACT

No actions beyond those identified in Section 3.4.3 are deemed warranted to avoid impacts to cultural resources.

3.6 NATURAL HAZARDS

3.6.1 EXISTING CONDITIONS

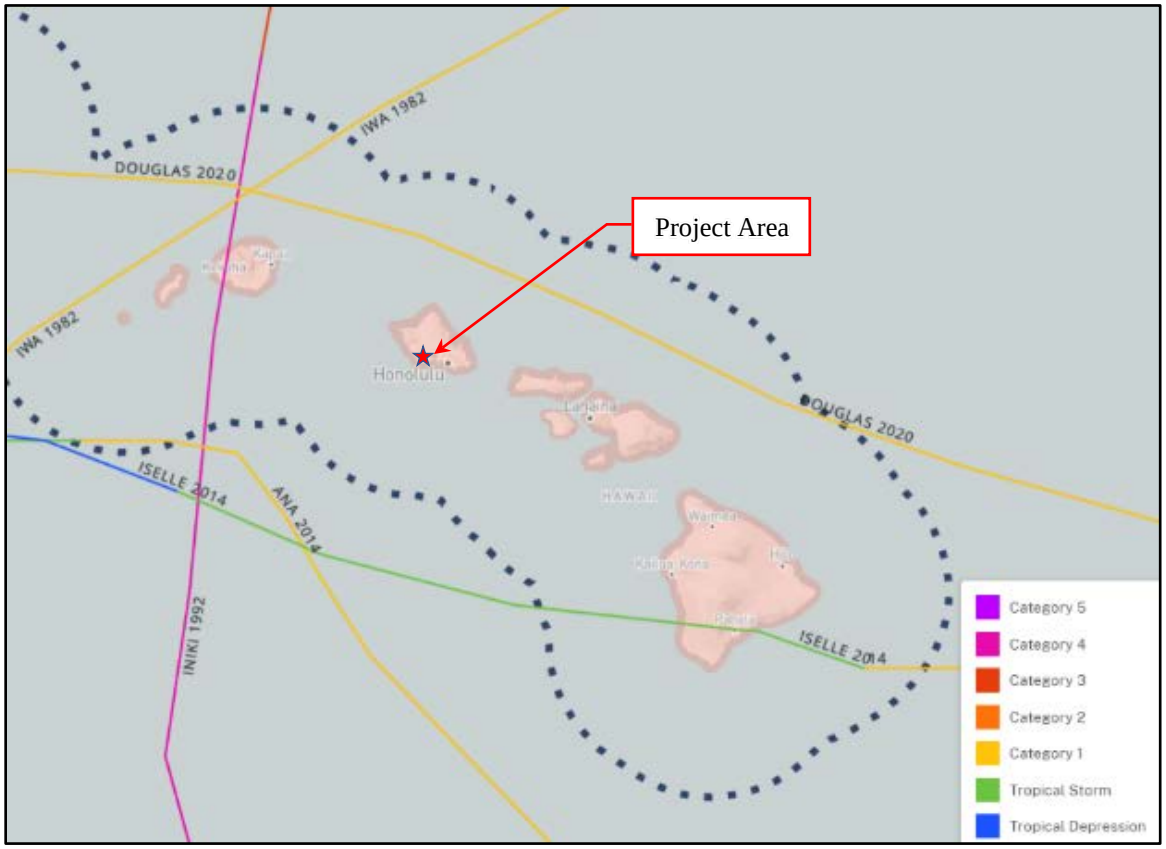
3.6.1.1 Hurricanes and Tropical Storms

Tropical cyclones originate over tropical or subtropical waters with organized deep convection and closed surface wind circulation around a well-defined center. Tropical cyclones extract heat energy from the ocean at high temperatures and export heat to the upper troposphere at low temperatures. Both hurricanes and tropical storms are tropical cyclones, with hurricanes having sustained wind speed of 74 miles per hour (mph) or more and tropical storms having wind speeds that range from 39 to 73 mph (National Oceanic Atmospheric Administration [NOAA]).

Generally, the National Weather Service’s Central Pacific Hurricane Warning Center can expect four to five tropical cyclones in a normal season, with August and September being historically active months for storms in the region. Hurricanes are rare, as the combination of dry air, cooler water, large volcanic mountains, and wind shear results in downgrading to tropical storm as cyclones approach Hawai‘i.

The first officially recognized hurricane to materialize in Hawaiian waters was Hurricane Hiki in 1950 and since then, there have been five hurricanes that have caused significant damage: Nina 1957, Dot 1959, ‘Iwa 1982, Estelle 1986, and ‘Iniki 1992 (School of Ocean and Earth Science and Technology, University of Hawai‘i). Figure 3-11 shows the hurricanes have passed within 60 miles of the main Hawaiian Islands in the past 40 years.

Figure 3-11: Hurricanes Within 60 Miles of the Main Hawaiian Islands (1982-2022)

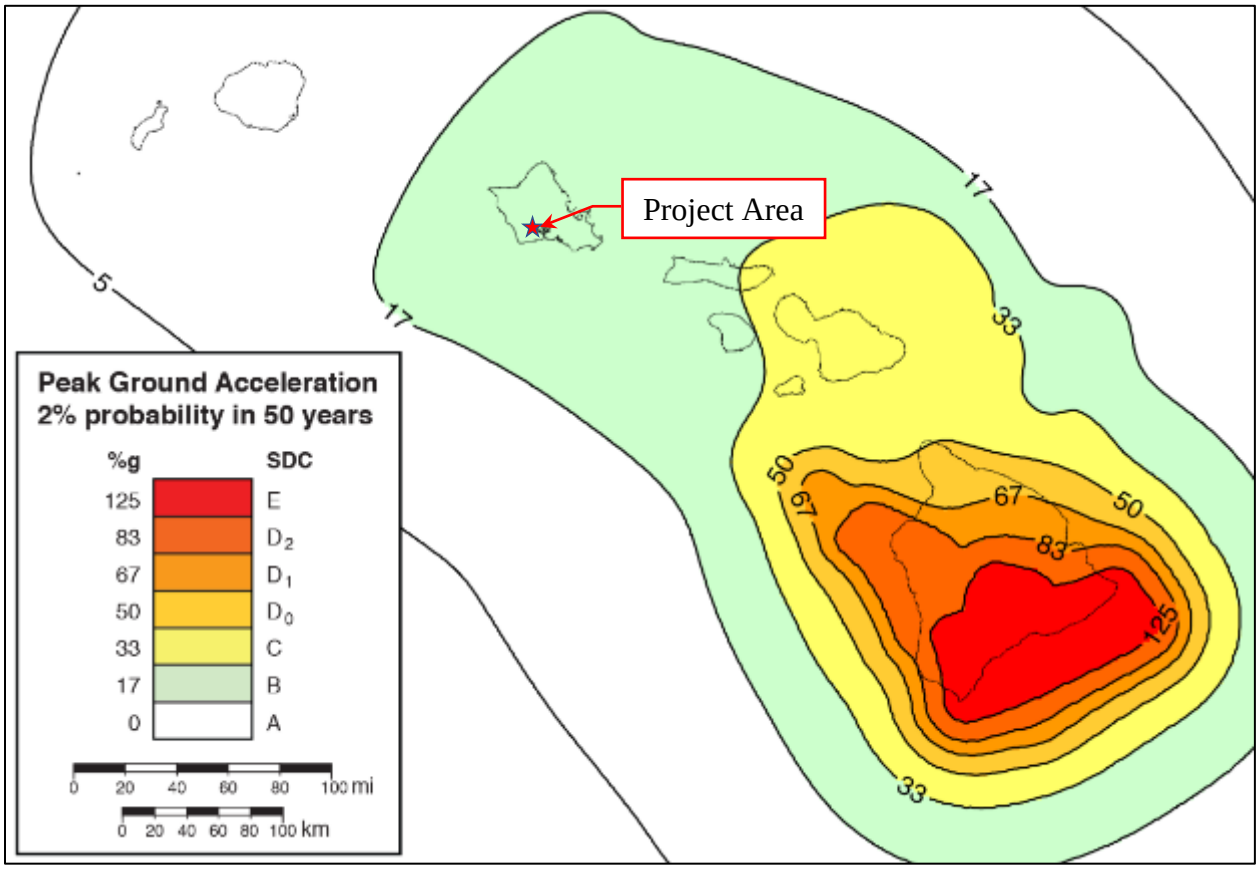


Source: https://coast.noaa.gov/hurricanes/#map=4/32/-80.

3.6.1.2 Earthquakes

The USGS has developed seismic hazard maps to represent the results of risk analysis and help estimate likely locations of future damaging earthquakes and the hazard they might pose in terms of ground shaking. Based on the USGS Seismic Hazard Map (Figure 3-12), O‘ahu has a general seismic Peak Ground Acceleration (PGA) risk that has a 2 percent chance of exceeding 17 percent of Earth’s gravitational acceleration (%g) PGA in the next 50 years. This corresponds to Seismic Design Category B, with potential effects of shaking that include moderate shaking felt by all, some heavy furniture is moved, fallen plaster, and slight damage.

Figure 3-12: USGS Seismic Hazard Map Based on Past Earthquakes



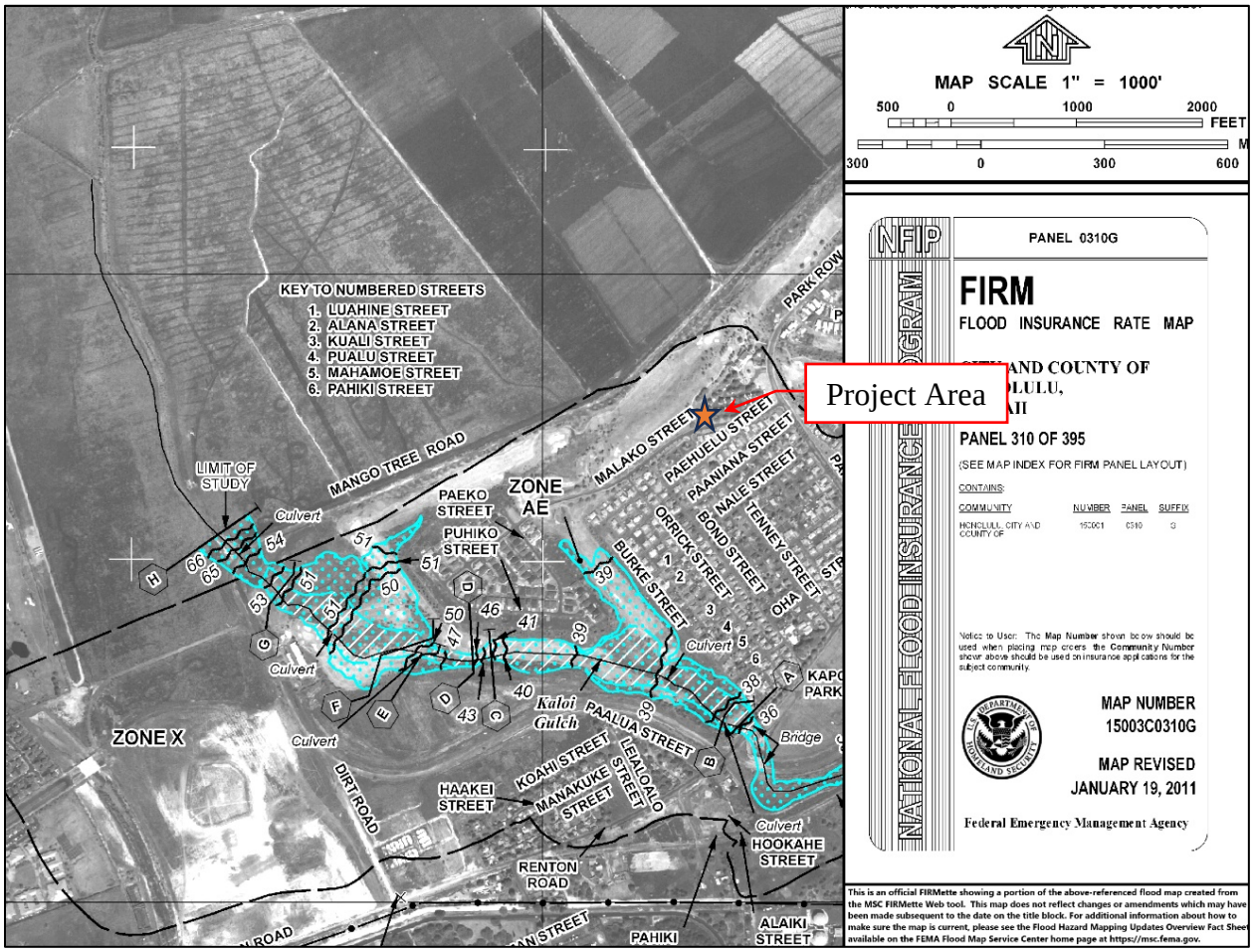
Source: https://www.usgs.gov/media/images/seismic-hazard-state-hawaii-based-past-earthquakes

Like all of O‘ahu, the project site is designated by the Uniform Building Code as Seismic Zone 2a. Current building codes, including the International Building Code, include minimum design criteria for structures to address the potential for damage due to seismic disturbances specific to each seismic zone. There is no threat of volcanic eruptions directly affecting the project area.

3.6.1.3 Flooding

Figure 3-13 illustrates the flood zones in the project area based on Federal Emergency Management Agency’s (FEMA) flood hazard insurance maps. The entire project site is in Flood Zone X. Flood Zone X corresponds to unstudied areas outside of the 0.2 percent annual chance floodplain. Because these are areas where flooding is not anticipated, no base flood elevations or depths have been prepared. The project is not in a floodway or any special flood hazard area.

Figure 3-13: FEMA Flood Insurance Rate Map



Source: FEMA (2024)

3.6.1.4 Tsunami Inundation

Coastal areas of O‘ahu are in the tsunami evacuation zone with certain areas further from the shoreline being in the extreme tsunami evacuation zone. The project site has an elevation of roughly 60 feet and is more than 2.5 miles from the coast. It is well beyond the tsunami zones.

3.6.1.5 Sea Level Rise

The project site is more than 2.5 miles from the coast and is at an elevation of 60 feet. Sea level rise (SLR) is not projected to rise more than roughly 3.2 feet. The project site is well outside of hazard zones associated with SLR.

3.6.2 POTENTIAL IMPACTS

Neither the Proposed Action nor the No Action Alternative would have any discernible impact on the susceptibility of the area to natural hazards such as storms, earthquakes, flooding, tsunami, or SLR. Hazards may episodically impact all or portions of the project vicinity and any development within it, including the proposed project site. None of the hazards are anticipated to significantly impact the proposed project, which will be designed to withstand storm and earthquake events.

3.6.3 AVOIDANCE, MINIMIZATION, OR MITIGATION

Because one of the goals of the Proposed Action is to improve the quality of the mobile communications system, this section details the measures it incorporates to ensure reliability in the event of natural hazards:

- Constructing all infrastructure in compliance with regulatory controls to meet current seismic, storm, building, and critical infrastructure code design requirements, reducing the risk of failure in the event of hazards.
- Locating all project elements outside of flood zones (Figure 3-13), Tsunami Evacuation Zones (Section 3.6.1.4), and the SLR exposure areas (Section 3.6.1.5).
- Having backup generators on-site in the event of power loss.

3.7 OTHER RESOURCES AND TOPICS

The Proposed Action consists of constructing and operating a 50′ x 50′ telecommunications facility in a vacant corner of the previously developed ‘Ewa Villages Golf Course. As such, there are certain categories of resources the Proposed Action does not have the potential to substantially impact. Therefore, the following topics are only briefly mentioned in this section:

- *Public Health*. Thousands of scientific studies have evaluated the safety of radiofrequency electromagnetic fields. Based on the available scientific evidence, there are no health risks from exposure via cell phones, cell phone towers, antennas, and 5G devices at levels below current standards (a power density of 0.1 milliwatt/cubic centimeter). No publicly accessible area will be subject to radiofrequency electromagnetic fields exceeding current standards, as required by LUO ROH §21-5.650.
- *Climate*. The climate in the Hawaiian Islands is considered subtropical with annual temperatures in the project area ranging from 60˚F in the winter to 85˚F in summer and mean monthly temperatures ranging from 73˚F in January and February, to 81˚F in August. The proposed project does not have the potential to impact the regional climate or area microclimate. None of the proposed facilities are substantial structures that might serve as windbreaks or contain large masses of material that could act as heat sinks.
- *Air Quality*. The project area and the entire State of Hawai‘i is an “attainment area,” which indicates none of the federal air quality standards have been excessed and air quality is good. BMPs would be employed during the brief construction period to control dust. In the long-term the project would not generate any air emissions except for the occasional operation or testing of emergency generators. The generators will be small and operate rarely. The minor consumption of fuel will have a negligible effect on air quality in the area.
- *Noise*. The predominant noise sources in the vicinity are wind, vehicular traffic from Interstate H-1 and other roadways, and passing aircraft traveling to or from Daniel K. Inouye International Airport or Kalaeloa Airport. Aside from some brief increase due to construction activities, the Proposed Action does not involve activities or uses that

have the potential to meaningfully affect the sonic environment beyond limits of the project parcel.

- *Roadways, Traffic, and Parking*. Materials and equipment deliveries plus construction workers will generate trips to the project site during the brief construction period. Access to a portion of the golf course parking lot will be restricted during the brief construction period; however, the parking lot will retain ample parking for golf course patrons. Once built, the proposed facilities will be operated remotely. Service providers and TowerCo will periodically visit the site to maintain equipment and landscaping; this is likely to result in roughly 1 trip to the site each week. The proposed project will not adversely affect the volume of traffic or level of service on area roadways.

- *Public Utilities, Infrastructure, and Services*.
  - *Electricity.* Currently, Hawaiian Electric Co., Inc. provides electrical service to the project parcel, but not the portion of the parcel where the project site is located. As discussed in Section 2.2.2, as part of the construction process, power will be extended to the site via a trenched conduit from the nearest available connection point. A 50 kilovolt-amperes single-phase transformer will be installed just outside the fence line on the southern side of the proposed facility, adjacent to the access gate. TowerCo has held discussions with Hawaiian Electric regarding the potential demand and have received assurances that power infrastructure and supply are adequate to meet the demand.
  - *Communications.* Fiberoptic communications lines will be provided by Hawaiian Telcom via an underground conduit from a nearby utility pole.
  - *Wastewater*. The project parcel is served by the Department of Environmental Services municipal wastewater management system, which transmits wastewater to HWWTP for treatment and disposal. The proposed project will not generate wastewater during either construction or operation and will have no impact on this system.
  - *Storm Drainage.* There are storm drains in the golf course parking lot and Malako Street. The project will not impact the existing facilities. During construction, the project will implement the BMPs discussed in Section 2.2.1. The project will not generate new substantial impermeable area and will stabilize the area with vegetation and gravel. Therefore, it will not substantially affect the volume or quality of storm water runoff.
  - *Solid Waste.* The Proposed Action would generate small quantities of solid waste during construction. Once complete, the proposed telecommunications facility will not produce appreciable quantities of solid waste. The volume and type of waste generated would not be unusual and would be disposed of at on-island facilities in accordance with applicable rules.
  - *Fire.* Leeward Oʻahu is served by the Honolulu Fire Department’s Fourth Battalion, the Kapolei Fire Station, which is headquartered at Station 40. The Nānākuli Fire Station (Station 28) and Waiʻanae Fire Station (Station 26), each have an engine and a tanker. The Makakilo Fire Station (Station 35) has a single engine, as does the ‘Ewa Beach Fire Station (Station 24). The project does not

represent a substantial new fire risk and would not burden the Fire Department’s operation.

- *Police.* Honolulu Police Department District 8 encompasses the Wai‘anae Coast, Makakilo, ‘Ewa, and the City of Kapolei. The district headquarters is in Kapolei. The unmanned telecommunications facility will not burden the Police Department’s operation.
- *Schools.* The project area is served by: (*i*) ‘Ewa Elementary School; (*ii*) Honouliuli Middle School; and (*iii*) Kapolei High School. The Proposed Action will not affect the operations or attendance of area schools.

- *Parks.* The project site is within the ‘Ewa Villages Golf Course, which is a public recreational resource. The project site is near the golf course’s parking lot and well away from tees, fairways, greens, and the ordinary area of play. The facility would not affect recreational activities at the golf course. The nearest public parks are ‘Ewa Mahiko District Park, Kōnane Park, and Geiger Community Park. The proposed project would not affect access to or operations at these or any other parks.

3.8 CUMULATIVE IMPACTS

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of a specific (proposed) project. Cumulative impacts may result from a series of projects that individually do not generate significant adverse effects, but collectively add up to a significant negative impact on the environment. The proposed project is not intended to foster or promote development or regional population growth. No other current or planned projects in the area are contingent on the proposed telecommunications facility, nor are any other developments dependent on this project’s approval. Neither will the proposed facility create demand for additional telecommunications facilities or towers in the area. For these reasons, TowerCo has determined that the proposed project will not contribute to any cumulative impacts when considered together with other past, present, and reasonably foreseeable future actions in the ‘Ewa region.

3.9 SECONDARY IMPACTS

Secondary effects are associated with an activity but do not result directly from the activity. The Proposed Action does not appear to have the potential to involve significant secondary impacts to property valuation, population, housing, community services, public facility needs, employment, and compatibility with surrounding land uses. This is because the Proposed Action would not result in substantial changes in the cost or availability of water or other resources that land use changes and development depend on. For example, the Proposed Action:

- Would not foster regional population growth.
- Would not curtail or otherwise disrupt ongoing operations elsewhere at ‘Ewa Villages Golf Course or the broader ‘Ewa Villages community.
- Would not impact employment opportunities in the ‘Ewa region.

- Would not require the amendment of any state land use boundary or county zoning designation.
- Would not result in the subdivision of any land.
- Would neither provide access to currently inaccessible areas nor curtail access to currently accessible areas.
- Does not require other actions to be taken or services to be provided in the project area by government agencies or private parties.

Therefore, the Proposed Action would not induce land use changes or demographic changes in the region and would not cause significant secondary impacts.

4 CONSISTENCY WITH LAND USE PLANS, POLICIES, AND CONTROLS

This chapter discusses the relationship of the proposed project to applicable land use plans, policies, and regulations at the county and state level. Compliance with existing regulations and requirements, complying with the conditions of the permits required (Section 2.2.5), and implementing the avoidance and minimization measures outlined throughout Chapter 3, will help to ensure the proposed project will not result in significant impacts on current land uses and comply with applicable policies plans, policies, and controls.

4.1 STATE OF HAWAI‘I

4.1.1 HAWAI‘I STATE PLAN, HRS CHAPTER 226

Adopted in 1978 and last revised in 2023, the *Hawai‘i State Plan* is intended to guide the future long-range development of the State by:

- Identifying goals, objectives, policies, and priorities for the State;
- Providing a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water and other resources; and
- Establishing a system for plan formulation and program coordination to provide for an integration of all major state, and county activities.

The Hawai‘i State Plan is a policy document. It depends on implementing laws and regulations to achieve its goals. While not all sections of the Hawai‘i State Plan are directly applicable to the ‘Ewa Villages Telecom Project, the most relevant are identified and discussed in further detail below, beginning with the Plan’s objectives and policies related to telecommunications.

> ***§226-18.5 Objectives and policies for facility systems--telecommunications.*** *(a) Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people.*
>
> *(b) To achieve the telecommunications objective, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable telecommunications services to accommodate demand.*
>
> *(c) To further achieve the telecommunications objective, it shall be the policy of this State to:*
>
> > *(1) Facilitate research and development of telecommunications systems and resources;*
> >
> > *(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;*
> >
> > *(3) Promote efficient management and use of existing telecommunications systems and services; and*

(4) Facilitate the development of education and training of telecommunications personnel. [L 1994, c 96, §2]

Discussion: The proposed project is wholly consistent with and supportive of the Hawai‘i State Plan’s objectives and policies related to telecommunications. It is intended to promote dependable, efficient, and economical wireless service in the ‘Ewa region. By partnering with the CCH to develop this facility on a vacant portion of a City-owned facility, the project represents a public-private partnership for well-planned and managed development of telecommunications capacity in the region. As such, it will help to ensure adequate, reasonably priced, and dependable telecommunications services for the secondary urban center of ‘Ewa.

§226-12 Objective and policies for the physical environment--scenic, natural beauty, and historic resources. *(a) Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.*

(b) To achieve the scenic, natural beauty, and historic resources objective, it shall be the policy of this State to:

(1) Promote the preservation and restoration of significant natural and historic resources.

(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.

(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.

(5) Encourage the design of developments and activities that complement the natural beauty of the islands. [L 1978, c 100, pt of §2; am L 1986, c 276, §11]

Discussion: The *Hawai‘i State Plan* emphasizes the State’s natural beauty and scenic assets, and its objectives and policies are intended to promote and incentivize their preservation. The proposed project will be partially visible from multiple vantage points throughout the region, as discussed in detail Section 3.1.2. However, the only scenic view identified in any State or City plan in which the proposed facility would appear would be the panorama from Interstate H-1 towards the Pacific Ocean. Its impact on that view will be less than significant due to the combined presence of screening topography, vegetation, and structures in most areas, including vertical structures such as utility and telecommunications pole(s), and the roughly 2 mile distance between viewpoint(s) and the project site. The potential for impact will be reduced by employing the avoidance and minimization measures in Section 3.1.3. The monopine design of the telecommunication facility is designed to complement the natural beauty of the area. For these reasons, the proposed project is consistent with the Hawaii State Plan’s objectives and policies related to scenic and natural beauty.

§226-10.5 Objectives and policies for the economy--information industry. *(a) Planning for the State's economy with regard to telecommunications and information technology shall be directed toward recognizing that broadband and*

wireless communication capability and infrastructure are foundations for an innovative economy and positioning Hawaii as a leader in broadband and wireless communications and applications in the Pacific Region.

(b) To achieve the information industry objective, it shall be the policy of this State to:

(1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawaii and between Hawaii and the world, and make high speed communication available to all residents and businesses in Hawaii;

(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;

(5) Encourage greater cooperation between the public and private sectors in developing and maintaining a well-designed information industry;

(8) Foster a recognition of the contribution of the information industry to Hawaii's economy;

Discussion: The proposed project is intended to improve wireless communications service in the region, which will support future growth and innovation in Hawai‘i’s economy. It is needed to address system limitations in the area, including the range, quality, and speed of communications services. By partnering with the CCH to develop this facility on a vacant portion of a City-owned facility, the project represents a public-private partnership for well-planned and managed development and expansion of telecommunications infrastructure in the region. As wireless communications capability and infrastructure are recognized by statute as foundations of the State’s economy, the proposed project will help to advance Hawai‘i as a leader in broadband and wireless communications and applications in the Pacific Region.

4.1.2 HAWAI‘I 2050 SUSTAINABILITY PLAN

The *Hawai‘i 2050 Sustainability Plan* is a blueprint for Hawai‘i’s preferred future. It is the most comprehensive planning process since the *Hawai‘i State Plan* was developed over four decades ago and was updated in 2021. The *Hawai‘i 2050 Sustainability Plan* has seventeen major Sustainable Development Goals (SDGs), designed to achieve the State’s preferred future by the year 2050, and relating to: (*i*) no poverty; (*ii*) zero hunger; (*iii*) good health and well-being; (*iv*) quality education; (*v*) gender equality; (*vi*) clean water and sanitation; (*vii*) affordable and clean energy; (*viii*) decent work and economic growth; (*ix*) industry, innovation, and infrastructure; (*x*) reduce inequalities; (*xi*) sustainable cities and communities; (*xii*) responsible consumption and production; (*xiii*) climate action; (*xiv*) life below water; (*xv*) life on land; (*xvi*) peace, justice, and strong institutions; and (*xvii*) partnerships.

Considered together, the *Hawai‘i 2050 Sustainability Plan*’s SDGs identify what it hopes to achieve, the strategic actions characterize the paths to reaching the plan’s goals, and the indicators serve to measure progress along the way. While not all the plan’s SDGs are directly applicable to the Proposed Action, the specific SDG most applicable to the Proposed Action are:

Sustainable Development Goal 9 *– build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.*

The SDG’s targets include:

Improving the sustainability and equity of all existing and future infrastructure.

Promoting sustainable industrialization that encourages innovation.

Increasing access to technology and supporting technology development.

Discussion: The proposed project is consistent with the *Hawai‘i 2050 Sustainability Plan*’s SDG related to creating resilient infrastructure and fostering innovation. Pursuant to HRS, 226-10.5 of the *Hawai‘i State Plan*, the *Hawai‘i 2050 Sustainability Plan* is supportive of the development of high-speed wireless communications system to facilitate innovation, encourage job creation and ensure economic growth in the interest of Hawai‘i’s people. The proposed project will further this SDG by improving access to reliable, fast, and economical wireless communications service in an underserved portion of the island. The proposed facility will include the latest and most innovative technologies currently on the market. As such, the project will directly increase access to wireless telecommunications and support technological development in the CCH. For these reasons, TowerCo has concluded that the proposed project, while not interfering with the ability to achieve the other goals in the *Hawai‘i 2050 Sustainability Plan*, is consistent with and advances the *Hawai‘i 2050 Sustainability Plan*’s goal of building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation.

4.1.3 HAWAI‘I LAND USE LAW; HRS § 205

HRS § 205 established the State Land Use Commission and gives this body the authority to designate all lands in the State as Urban, Rural, Agricultural, or Conservation District. The proposed project is in the State’s Urban Land Use District. The counties make all land use decisions within the Urban District in accordance with their respective county general plans, development plans, and zoning ordinances. HAR, § 15-15-18 characterizes the Urban Land Use District as exhibiting “city-like” concentrations of people, structures, streets, with an urban level of services and other related land uses. It also stresses the importance of ensuring availability of basic services and utilities in urban areas.

Discussion: The proposed project is consistent with the land uses envisioned for the State Land Use Urban District. It is a telecommunications facility that benefits a “city-like” concentration of similar uses. Consequently, TowerCo has concluded that the proposed project is an appropriate land use in the Urban Land Use District.

4.1.4 COASTAL ZONE MANAGEMENT PROGRAM, HRS § 205A

The objectives of the Hawai‘i CZM Program are set forth in HRS § 205A. The State Office of Planning and Sustainable Development administers Hawai‘i’s CZM Program. The program is intended to promote the protection and maintenance of valuable coastal resources. All lands in Hawai‘i are classified as valuable coastal resources. A general discussion of the proposed project’s consistency with the objectives and policies of Hawai‘i’s CZM Program follows.

4.1.4.1 Recreational Resources

Objective: Provide coastal recreational opportunities accessible to the public.

Policies:

A) Improve coordination and funding of coastal recreational planning and management; and

B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;

ii) Requiring restoration of coastal resources that have significant recreational and ecosystem value, including but not limited to coral reefs, surfing sites, fishponds, sand beaches, and coastal dunes, when these resources will be unavoidably damaged by development; or requiring monetary compensation to the State for recreation when restoration is not feasible or desirable;

iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;

iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;

v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;

vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and

viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting that dedication against the requirements of section 46-6.

Discussion: The proposed project is in a vacant portion of the CCH-owned ‘Ewa Villages Golf Course; thus, the project site is itself part of a public recreational resource. The nearest public parks are ‘Ewa Mahiko District Park, Kōnane Park, and Geiger Community Park. The proposed project would not affect access to or operations at the golf course, nearby parks, or any other recreational facility. The proposed project will have no impact on any existing shoreline access, open space, or coastal recreational opportunities. No development is proposed in the shoreline setback area, nor will any work occur on any shoreline lot. Therefore, the proposed project is unlikely to have any adverse impact on coastal recreational resources.

4.1.4.2 Historic Resources

Objective: Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

A) Identify and analyze significant archaeological resources;

B) Maximize information retention through preservation of remains and artifacts or salvage operations; and

C) Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion: Section 3.4 of this report assesses the potential for impacts to historic resources. No historic properties will be affected by the proposed project. TowerCo will coordinate with SHPD to the extent necessary. The proposed project includes the appropriate protocols in the unlikely event that historic resources are encountered during project implementation (Section 3.4.3).

4.1.4.3 Scenic and Open Space Resources

Objective: Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

A) Identify valued scenic resources in the coastal zone management area;

B) Ensure that new developments are compatible with their visual environment by designing and locating those developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and

D) Encourage those developments that are not coastal dependent to locate in inland areas.

Discussion: Due to its height, the proposed project will be visible from a variety of vantage points as discussed in detail in Section 3.1. However, the facility has been designed to be as compatible as possible with the visual environment and minimize its impact on scenic resources, including the scenic panoramas identified in the EDP. The proposed project will not have any impact on shoreline open space or natural landforms. Consequently, the proposed project is not anticipated to have any significant adverse impact on any valued scenic resources identified in any state or county planning document(s).

4.1.4.4 Coastal Ecosystems

Objective: Protect valuable coastal ecosystems, including reefs, beaches, and coastal dunes from disruption, and minimize adverse impacts on all coastal ecosystems.

Policies:

A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;

B) Improve the technical basis for natural resource management;

C) Preserve valuable coastal ecosystems of significant biological or economic importance, including reefs, beaches, and dunes;

D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

Discussion: As discussed in detail in Section 3.3, TowerCo has determined that there is no federally designated critical habitat within, or in the immediate vicinity, of the project site. That section provides a detailed discussion of biota present in the region, potential impacts resulting from implementation of the proposed project, and measures to avoid and minimize the potential for the project to adversely affect protected species. No significant impacts will occur and water quality will be protected by stabilizing the project site.

4.1.4.5 Economic Uses

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

A) Concentrate coastal dependent development in appropriate areas;

B) Ensure that coastal dependent development and coastal related development are located, designed, and constructed to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts in the coastal zone management area; and

C) Direct the location and expansion of coastal development to areas designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal development outside of designated areas when:

i) Use of designated locations is not feasible;

ii) Adverse environmental effects and risks from coastal hazards are minimized; and

iii) The development is important to the State’s economy.

Discussion: The proposed project will not encourage new coastal development in any way. The proposed project is located well away from the coastline and does not directly abut any shoreline properties. The proposed project does not encourage or support expanded development in the area. The telecommunications equipment and associated infrastructure is located at an existing

recreational facility outside of special coastal hazard areas; it will be outside of the Tsunami Inundation Zone and designed in such a way as to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts in the coastal zone management area.

4.1.4.6 Coastal Hazards

Objective: Reduce hazard to life and property from coastal hazards.

Policies:

> *A) Develop and communicate adequate information about the risks of coastal hazards;*
>
> *B) Control development, including planning and zoning control, in areas subject to coastal hazards;*
>
> *C) Ensure that developments comply with requirements of the National Flood Insurance Program; and*
>
> *D) Prevent coastal flooding from inland projects.*

Discussion: As discussed in detail in Section 3.6, the proposed project is well inland and not exposed to coastal hazards. All proposed new infrastructure is outside of designated hazard zones including any floodway or special flood hazard area. The proposed project will not increase the vulnerability of the area to the effects of coastal floodings, nor is it anticipated to have any deleterious effects on coastal hazards or emergency response when such hazards occur. Consequently, TowerCo has concluded that the proposed project is consistent with the CZM policies related to coastal hazards.

4.1.4.7 Managing Development

Objective: Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

> *A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*
>
> *B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and*
>
> *C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

Discussion: The proposed project complies with applicable laws and policies regarding coastal development. Chapter 6 of this EA details the outreach conducted to date. TowerCo will continue to work cooperatively with all government agencies with oversight responsibilities to facilitate efficient processing of permits and informed decision-making by the responsible parties.

4.1.4.8 Public Participation

Objective: Stimulate public awareness, education, and participation in coastal management.

Policies:

A) Promote public involvement in coastal zone management processes;

B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and

C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Discussion: This EA has been prepared to disclose potential short-term and long-term impacts of the proposed improvements to interested individuals, organizations, and agencies. A notice of availability for the Draft EA will be published in the Office of Planning and Sustainable Development, ERP’s bi-monthly bulletin, *The Environmental Notice* with a request for review and comment.

4.1.4.9 Beach and Coastal Dune Protection

Objective: (A) Protect beaches and coastal dunes for: (i) public use and recreation; (ii) the benefit of coastal ecosystems; and (iii) use as natural buffers against coastal hazards; and (B) Coordinate and fund beach management and protection.

Policies:

A) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;

B) Prohibit construction of private shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;

C) Minimize the construction of public shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;

D) Minimize grading of and damage to coastal dunes;

E) Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and

F) Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.

Discussion: The proposed project will not have any impact on area beaches and coastal dunes. The project area is approximately 1.7 miles from the shoreline; the site is entirely composed of Honouliuli Clay (HxA), with 0 to 2 percent slopes (Section 3.1). This series consists of well-drained soils on coastal plains on the island of O‘ahu in the ‘Ewa area. The proposed project will not locate any new structures within the shoreline area, nor will it harden any shoreline. No portion of the project will be located within a beach transit corridor, nor will it interfere with or encroach upon any beach transit corridor.

4.1.4.10 Marine and Coastal Resources

Objective: Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

> *A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
>
> *B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*
>
> *C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*
>
> *D) Promote research, study, and understanding of ocean and coastal processes, impacts of climate change and sea level rise, marine life, and other ocean resources to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*
>
> *E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Discussion: The proposed project is located at the ‘Ewa Villages Golf Course, approximately 1.7 miles from the shoreline. It will not use, develop, or otherwise impact any marine or coastal resources.

4.2 CITY AND COUNTY OF HONOLULU

4.2.1 O‘AHU GENERAL PLAN

The *O‘ahu General Plan* (2021), originally titled the *General Plan for the City and County of Honolulu*, was adopted in 1977, and has been subsequently amended. The most recent amendment to it was adopted by the Honolulu City Council on December 1, 2021, via Resolution 21-023, CD1, and signed by the Mayor on January 14, 2022. The *O‘ahu General Plan* is a comprehensive statement of objectives and policies which sets forth the long-range aspirations of O‘ahu’s residents and the strategies to achieve them. It is the first tier of and lays the foundation for a comprehensive planning process that addresses physical, social, cultural, economic, and environmental concerns affecting the CCH.

The *O‘ahu General Plan* recognizes that designation of ‘Ewa as a secondary urban center and the population growth that comes with it results in increased demands for government services, as well as the communication, electricity, and other utility systems provided by the private sector (CCH, 2021).

The *O‘ahu General Plan* poses several objectives related to utilities. Chapter V, Transportation and Utilities, Objective C, proposes: “To ensure reliable, cost-effective, and responsive service for all utilities with equitable access for residents.” Further developing this theme, Chapter V, Objective B, Policies 1 through 3 state:

> *Policy 1*
>
> *Maintain and upgrade utility systems in order to avoid major breakdowns and service interruptions.*
>
> *Policy 2*
>
> *Provide improvements to utilities in existing neighborhoods to reduce substandard conditions, and increase resilience to use fluctuations, natural hazards, extreme weather, and other climate impacts.*
>
> *Policy 3*
>
> *Facilitate timely and orderly upgrades and expansions of utility systems.*

The *O‘ahu General Plan* further develops the theme of utility planning. Chapter V, Transportation and Utilities, Objective D states the CCH’s policy, “To maintain transportation and utility systems which support O‘ahu as a desirable place to live and visit.” Specific policies follow from that, including:

> *Policy 1*
>
> *Provide adequate resources to ensure the maintenance and improvement of transportation systems and utilities.*
>
> *Policy 2*
>
> *Evaluate the social, cultural, economic, and environmental impact of additions to the transportation and utility systems before they are constructed.*
>
> *Policy 5*
>
> *Evaluate impacts of sea level rise on existing public infrastructure, especially sewage treatment plants, roads, and other public and private utilities located along or near O‘ahu's coastal areas, and avoid the placement of future public infrastructure in threatened areas.*

Discussion: The proposed project is intended to improve wireless communications service in the region. It is needed to address system limitations in a growing area and will help ensure the adequacy of wireless communications services for existing and new residents. This will also have the effect of improving the resilience of communications services in the face of SLR and other coastal hazards. TowerCo understands its mandate to evaluate the potential social, cultural, economic, and environmental impacts of the proposed project; this EA is intended to address this

policy requirement. Thus, the proposed project actively promotes the policies of the *O‘ahu General Plan* related to utilities.

4.2.2 ‘EWA DEVELOPMENT PLAN

The ‘Ewa Development Plan’s (EDP) relationship to the proposed project has been discussed at length in Section 3.1. While not all aspects of the EDP pertain to the current proposal, the EDP, last amended in 2020, has specific policies and guidelines related to: (*i*) scenic resources, (*ii*) ‘Ewa Villages, and (*iii*) antennae. Regarding open space and the visual environment, Section 3.1.1 of the EDP makes it a general policy of the CCH to use open space, including the ‘Ewa Villages Golf Course, “to protect scenic views and natural, cultural, and historic resources.” Exhibit 3.2 of the EDP identifies views from Interstate H-1 towards the ocean across the ‘Ewa Villages area as a scenic panorama (see Figure 3-1).

The EDP further develops guidelines for open space and scenic views within the ‘Ewa Villages community. While not all provisions are applicable, Section 3.7 of the EDP prioritizes the maintenance of open space buffers and establishes it be maintained, “in a manner that preserves and enhances the open space appearance of the villages.” The EDP also provides specific guidance for antennae. Section 4.9 of the EDP offer specific principles for aerial antennae including monopoles, as follows:

> *“Section 4.9*
>
> *The following are general principles governing utilization of antennas:*
>
> > *Encourage co-location of antennas; towers should host the facilities of more than one service provider to minimize their proliferation and reduce visual impacts.*
> >
> > *Use stealth technology (e.g. towers disguised as trees) especially on freestanding antenna towers in order to blend in with the surrounding environment and minimize visual impacts.”*

Discussion: While not all its elements are applicable to the current proposal, the proposed project is within the Community Growth Boundary and is generally consistent with the policies and guidelines of the EDP regarding: (*i*) scenic resources, (*ii*) antennae, and the (*iii*) ‘Ewa Villages community. The proposed project will be partially visible from multiple vantage points throughout the region, as discussed in detail in Section 3.1.2. However, the only scenic view identified in any State or City plan in which the facility may be visible is the panorama from Interstate H-1 towards the Pacific Ocean. These impacts will be less than significant due to the combined presence of screening topography, vegetation, and structures in most areas, including vertical structures such utility and telecommunications pole(s), and the intervening distance between viewpoint(s) and project site. The potential for impact will be further reduced by employing the avoidance and minimization measures in Section 3.1.3.

Consistent with EDP guidelines, the proposed facility will include use of a “monopine” design for the telecommunications tower, skillfully disguised as a tree to soften its appearance and better blend in with the surrounding area. Also consistent with the EDP, the proposed design for the tower will have capacity for antennas mounted on it in four tiers, allowing co-location of multiple

antennae/service providers on a single structure. For the foregoing reasons, TowerCo has concluded the proposed project complies with the policies and guidelines of the EDP.

4.2.3 ʻEWA VILLAGES MASTER PLAN

The *ʻEwa Villages Master Plan Executive Summary* (CCH, 1992) was developed by the CCH's Department of Housing and Community Development in response to the closure of the Oahu Sugar Co. with the expiration of its land lease from the Estate of James Campbell. At that time, the CCH began exploring ways to ensure the continued tenancy of the residents who lived in the three villages: (*i*) Tenny; (*ii*) Renton; and (*iii*) Varona. Ultimately, the CCH acquired the land, rehabilitated the existing structures, and subsequently offered for sale each house and lot to its occupant at the time. The *ʻEwa Villages Master Plan* cataloged existing conditions and development issues facing the villages at that time, and then established a master plan for the revitalization of the community. As part of that master plan, the CCH proposed and built the ʻEwa Villages Golf Course to serve as a recreational resource and community center (1992):

> *"An 18-hole public golf course is being proposed to provide flood control and public recreation as well as serve as an open space amenity that will add beauty and value to the project. The golf course will include a club house, lighted driving range, putting green and maintenance complex. The western portion of the course will contain flood waters that emanate from Kaloi Ditch and channel the flows away from existing and future housing areas. Portions of Kaloi Ditch will be routed through the golf course and used to create water features. The golf course will also be used to receive storm drainage flows from portions of the adjacent residential areas. In addition, the majority of the housing units will be buffered by the golf course from incompatible sugar cane burning and hauling activities that occur next to the project site. Finally, it will serve to separate new housing development from the existing villages."*

While the plan did provide design guidelines for the rehabilitation of existing structures, the construction of new ones, and for public and quasi-public facilities design guidelines, the *ʻEwa Villages Master Plan* does not directly address the topic of antennae, telecommunications facilities, or features within the golf course.

Discussion: While it does not provide specific design guidelines for telecommunications facilities, the proposed project is generally consistent with the purpose and function of the ʻEwa Villages Golf Course as characterized in the *ʻEwa Villages Master Plan*. Once constructed, the proposed project will not disrupt the golf course's normal operations in any way. The golf course will continue to function as a public recreational resource and to serve its twin roles as a community amenity and flood control measure. The golf course will also continue to receive storm drainage flows from adjacent residential areas and to function as a buffer from development in adjacent areas (e.g., Hoʻopili to the north). TowerCo has concluded that the proposed project is consistent with the applicable provisions of the *ʻEwa Villages Master Plan*.

4.2.4 LAND USE ORDINANCES, ROH § 21

The purpose of the CCH's LUO, contained in ROH § 21, is to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the

O‘ahu General Plan and the EDP. These standards govern the location, height, area, and location of structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences, and other purposes.

Discussion: The proposed project is in the CCH’s R-5 residential zone (Figure 1-2) while the bulk of the golf course parcel is the AG-1 agricultural zone. The stated intent of the R-5 zone is to provide areas for urban residential development. Typically, small telecommunications stations are classified as Utility Installations, Type A. However, pursuant to ROH, § 21-10.1, the proposed project is classified as a Utility Installations, Type B because of the inclusion of a “freestanding antenna” (i.e., the monopole with multiple antennas mounted on it).

Type B Utility Installations are an allowable use in the R-5 zone with a Conditional Use Permit-Minor (CUPm) from the Department of Planning and Permitting (DPP). Further, and in accordance with the ROH § 21-5.650, Utility Installations, Type B must have a landscape plan that shows buffering for the installation from adjacent streets and highways, fencing and other barriers to restrict public access, and antennas must not exceed the governing height limit if located in residential districts where utility lines are predominantly located underground. Figure 2-4 and Figure 2-5 depict the fencing and landscaping proposed as part of the project. Utility lines are predominantly above ground in the ‘Ewa Villages.

Furthermore, according to ROH § 21-2.140-l(i), antennas my not exceed 10 feet above the governing height, except in residential districts with underground utility lines. The governing height in the R-5 district is 25 feet in Flood Zone X where the ground is relatively flat. Furthermore, according to ROH § 21-5.50(a)(3), freestanding antennas and towers, such as the proposed monopole, shall be set back from every property line a minimum of one foot for every five feet of height. The proposed monopole is 120 feet tall and the monopile disguise will extend to a height of 125 feet, which exceeds the maximum height limit by 100 feet. Pursuant to ROH § 21-2.130(a)(l), utility installations are eligible for a waiver from development or design standards if the request is reasonable, and circumstances and conditions will not adversely affect the health and safety of persons or be materially detrimental to the public welfare or injurious to nearby property improvements. The proposed facility will be setback 140 feet from the nearest property line; this far exceeds the required setback and protects nearby improvements. The CUPm and Waiver will be submitted together and processed concurrently.

5 ANTICIPATED DETERMINATION

5.1 SIGNIFICANCE CRITERA

Hawai‘i Administrative Rule § 11-200.1-14 establishes procedures for determining whether an EA should be prepared or if an EIS is warranted. HAR § 11-200.1-14(d) provides that proposing agencies should issue an EIS preparation notice for actions that it determines may have a significant effect on the environment. HAR § 11-200.1-13(b) lists the following criteria to be used in making that determination.

In most instances, an action shall be determined to have a significant effect on the environment if it:

1. Irrevocably commit (e.g., results in the loss or destruction of) a natural, cultural, or historic resource;
2. Curtails the range of beneficial uses of the environment;
3. Conflicts with the State’s environmental policies or long-term environmental goals established by law;
4. Results in a substantially adverse effect on the economic welfare, social welfare, or cultural practices of the community or State;
5. Results in a substantial adverse effect on public health;
6. Involves adverse secondary impacts, such as population changes or effects on public facilities;
7. Involves a substantial degradation of environmental quality;
8. Is individually limited but cumulatively has substantial adverse effect on the environment or involves a commitment for larger actions;
9. Results in a substantial adverse effect on a rare, threatened, or endangered species, or its habitat;
10. Results in a substantial adverse effect on air or water quality or ambient noise levels;
11. Has a substantial adverse effect on or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;
12. Has a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies; or,
13. Requires substantial energy consumption or emits substantial greenhouse gases.

5.2 FINDINGS

The potential effects of the proposed project were evaluated relative to these 13 significance criteria. TowerCo’s findings with respect to each criterion are summarized in the following subsections.

5.2.1 IRREVOCABLE LOSS OR DESTRUCTION OF NATURAL, CULTURAL, OR HISTORIC RESOURCES

As discussed in Section 3.3, Section 3.4, and Section 3.5 there are no know natural, cultural, or historic resources present where work will occur, and the area has been substantially modified by past agricultural use and development of the golf course. The action does not involve the loss of any significant or valuable natural, cultural, or historic resource(s). As outlined in Section 3.3.3 and Section 3.4.3, measures would be employed to avoid and minimize effects to resources that could be present in the area.

5.2.2 CURTAILS THE RANGE OF BENEFICIAL USES

As discussed in Section 4.1.3 and 4.2.4, the proposed project represents an appropriate and beneficial use of the site. The project is in a vacant portion of the ‘Ewa Villages Golf Course, which has been in use as a public recreational resource for many decades. Use of the site for the proposed project will not prohibit or interfere with continued use of the site as a public recreational resource, is consistent with all applicable plans, and will promote its beneficial use.

5.2.3 CONFLICTS WITH ENVIRONMENTAL POLICIES OR LONG-TERM GOALS

As discussed in Chapter 4, the proposed project is consistent with all applicable plans, policies, and controls, including the *O‘ahu General Plan*, the EDP, and the LUO. Further, the proposed project is consistent with the State of Hawai‘i’s long-term environmental policies and goals, as expressed in HRS, Chapter 344 and elsewhere in state law.

5.2.4 SUBSTANTIALLY AFFECTS ECONOMIC/SOCIAL WELFARE OR CULTURAL PRACTICES

The proposed project will not have substantial effects on economic welfare, social welfare, or cultural practices (Section 3.5.2). No adverse effects to cultural practices will occur. The ‘Ewa Villages Golf Course will continue to benefit the community as a public recreational resource and the use is consistent with all applicable plans, policies, and controls.

5.2.5 SUBSTANTIALLY AFFECTS PUBLIC HEALTH

The proposed project will not adversely affect air or water quality, including water sources used for drinking or recreation. Neither will it generate other emissions that will have a significant adverse effect on public health.

5.2.6 INVOLVES ADVERSE SECONDARY IMPACTS

As discussed in Section 3.9, the proposed project will not produce substantial secondary impacts; it will not foster population growth, promote economic development, or stress public facilities or services.

5.2.7 SUBSTANTIALLY DEGRADE THE ENVIRONMENTAL QUALITY

The proposed project will not have substantial environmental effects. The work will temporarily elevate noise levels and generate limited nuisance airborne dust during construction, but these impacts will be localized, minor, and of limited duration. Adequate measures (Section 2.2.1) will be taken to control the intensity of construction noise and dust.

5.2.8 CUMULATIVE EFFECTS OR COMMITMENT TO A LARGER ACTION

As discussed in Section 3.8, the proposed project does not represent a commitment to a larger action and is not intended to facilitate substantial economic or population growth.

5.2.9 SUBSTANTIALLY EFFECTS RARE, THREATENED, OR ENDANGERED SPECIES

As discussed in Section 3.3, no rare, threatened, or endangered species are known to utilize the portion of the golf course where work will occur, and no activities are contemplated that would pose a threat to rare, threatened, or endangered species, or their habitat. In addition, the proposed project would not utilize any resource or habitat needed for the protection of rare, threatened, or endangered species.

5.2.10 ADVERSE EFFECTS ON AIR OR WATER QUALITY OR AMBIENT NOISE LEVELS

Noise levels and airborne emissions will temporarily increase during construction activities. BMPs will be implemented (Section 2.2.1), and any effects will be brief, relatively minor, and restricted to the immediate vicinity of the work area. Once construction is completed, the proposed telecommunications facility will not produce airborne emissions, waterborne pollution, or noise.

5.2.11 ADVERSE EFFECTS ON ENVIRONMENTALLY SENSITIVE AREA

The project is not located in, or in proximity to, the shoreline or any other environmentally sensitive area. It is outside both the tsunami evacuation zone and extreme tsunami evacuation zone. It is not in an area prone to erosion nor is it in an area projected to be impacted by SLR. The parcel is in the State of Hawai‘i’s Urban Land Use District and has been designated as being in the R-5 residential zone by the CCH. These designations indicate that state and local governments do not consider the project site to be an environmentally sensitive area.

5.2.12 ADVERSE EFFECTS ON SCENIC VISTAS AND VIEW PLANES

As discussed in Section 3.1, although the proposed communications facility will be visible from certain viewpoints, it will not block or create a substantial new element in scenic vistas identified in county or state plans or studies.

5.2.13 REQUIRES SUBSTANTIAL ENERGY CONSUMPTION OR EMISSIONS

The construction operations that are proposed will require the use of modest amounts of energy and temporary and minor emissions of greenhouse gases. However, once these relatively brief construction operations are complete, the proposed improvements will use only moderate amounts of power, commensurate with other, similar facilities around the island.

5.1 ANTICIPATED DETERMINATION

In view of the foregoing, TowerCo’s draft assessment is that the proposed ‘Ewa Villages Telecom Project will not have a significant adverse impact on the environment. Consequently, it is anticipated that DES will issue a FONSI for the proposed project.

6 CONSULTATION AND DISTRIBUTION

6.1 EARLY CONSULTATION

Pursuant to HAR § 11-200.1-18(a), TowerCo has sought to:

> *“conduct early consultation seeking, at the earliest practicable time, the advice and input of the county agency responsible for implementing the county's general plan for each county in which the Proposed Action is to occur, and consult with other agencies having jurisdiction or expertise as well as those citizen groups and individuals that the proposing agency or approving agency reasonably believes may be affected.”*

On August 19, 2024, Planning Solutions, Inc. (PSI), acting on behalf of TowerCo, sent letters to the agencies identified in Table 6-1. All responses received were considered during the preparation of this EA. The scoping letter and all responses received are contained in Appendix A of this report.

Table 6-1: Early Consultation Letter Recipients

Level	***Department***	***Division***	***Recipient***	***Response***
State of Hawai‘i	Department of Business, Economic Development and Tourism (DEBDT)	Office of Planning and Sustainable Development	Scott J. Glenn, Director	Yes
State of Hawai‘i	Department of Land and Natural Resources (DLNR)	Land Division	Russell Y. Tsuji, Administrator	Yes
CCH	Department of Planning and Permitting (DPP)	--	Dawn Takeuchi Apuna, Director	Yes
CCH	Neighborhood Commission Office	Neighbhorhood Board No. 23 ‘Ewa	Chair John Clark, III	No

6.2 DISTRIBUTION OF THE DEA/AFONSI

TowerCo has provided the Draft EA to the parties listed in Table 6-2 with a request for review and comment. The Draft EA has also been provided to all owners of parcels adjoining the golf course; this resulted in more than 380 notices being sent.

Table 6-2: DEA Distribution List

State Agencies	City and County of Honolulu
Department of Agriculture	Board of Water Supply
Department of Accounting and General Services	Department of Community Services
DBEDT, Office of Planning and Sustainable Development	Department of Design and Construction
Department of Education	Department of Environmental Services
Department of Hawaiian Home Lands	Department of Facility Maintenance
Department of Health, Env. Management Division	Department of Parks and Recreation
Department of Human Services	Department of Planning and Permitting
DLNR, Land Division (see note)	Department of Transportation Services
Department of Transportation	Honolulu Fire Department
Office of Hawaiian Affairs	Honolulu Police Department
Elected Officials	**Utilities**
City Councilmember Augie Tulba (District 9)	Hawai‘i Gas
State Representative Daimond Garcia (District 42)	Hawaiian Electric Co., Inc.
State Senator Mike Gabbard (District 21)	Hawaiian Telcom
‘Ewa Neighborhood Board No. 23	**Libraries and Depositories**
Neighbors	Hawai‘i State Library Documents Center
Notice sent to owners to 384 adjoining properties	Kapolei Public Library
Media	**Organizations**
Honolulu Star Advertiser	O‘ahu Ahu Moku
Honolulu Civil Beat	‘Ewa Pu‘uloa Hawaiian Civic Club

Note: Department of Land and Natural Resources (DLNR) Land Division routes submitted documents to other DLNR divisions, including Division of Aquatic Resources, Engineering Division, Division of Forestry and Wildlife, Office of Conservation and Coastal Lands, and Commission on Water Resources Management.

7 REFERENCES

City and County of Honolulu, Department of Facility Maintenance, 2020. *Final Environmental Assessment of Finding of No Significant Impact for the ‘Ewa Villages R-1 Replacement Project.*

City and County of Honolulu, Department of Planning and Permitting, November 2021. *O‘ahu General Plan, Our Island, Our Future*. Approved January 14, 2022, by CCH Resolution 21-23, CD1.

Hawai‘i Gas, 2018. *Final Environmental Assessment and Finding of No Significant Impact for the HWWTP Biogas Project.*

McAllister, J. Gilbert, 1933. Archaeology of Oahu. Bernice P. Bishop Museum Bulletin 104.

Sterling, E.P., and C.C. Summers (Compilers), 1978. *Sites of Oahu*. Department of Anthropology, B.P. Bishop Museum, Honolulu.

Appendix A. Early Consultation Letters and Responses

PLANNING SOLUTIONS

August 19, 2024

Name
Agency (see DEA Table 6-1 for list of recipients)
Address
City, State Zip

Subject: **Pre-Assessment Consultation**
‘Ewa Village Telecom Facility Project
‘Ewa, O‘ahu, Hawai‘i
Tax Map Key No. (1) 9-1-182:009 (portion)

Dear Name:

TowerCo is proposing to construct and operate a telecom facility, that includes a 120-foot-tall tower, on a small portion of TMK No. (1) 9-1-182:009. That parcel is the City and County of Honolulu-owned ‘Ewa Villages Golf Course, with a street address of 91-1760 Park Row in ‘Ewa Beach, O‘ahu, Hawai‘i (Attachment 1 and Attachment 2). The purpose of the telecom facility is to improve cellular phone service in the region. The project site is in the State of Hawai‘i’s Urban Land Use District and the City and County of Honolulu’s AG-1 Restricted Agricultural District.

In accordance with Hawai‘i Revised Statues (HRS) Chapter 343, the project is an “applicant action” and been determined to require an Environmental Assessment (EA) because it (a) involves the use of county-owned land; (b) requires a discretionary approval, a lease agreement; and (c) is not considered an exempt class of action by the City and County of Honolulu. An EA meeting the content requirements contained in Hawai‘i Administrative Rules, Title 11, Chapter 200.1 will be prepared. The EA will document potential environmental impacts associated with the proposed project.

A drawing of the proposed telecom facility is provided in Attachment 3 and an elevation view is shown in Attachment 4. The proposed project would involve the use of a roughly 40-foot square area (1,200 square feet) that is currently landscaped near the golf course’s parking lot. The 120-foot-tall tower would be within the fenced area and is currently envisioned to have a monopine disguise. The facility could support the operations of multiple service providers.

Per the Revised Ordinances of Honolulu (ROH), Chapter 21 Land Use Ordinance (LUO), the proposed telecom facility is an allowable use at the site with a Conditional Use Permit (CUP). The LUO requires that the telecom facility have: (*i*) landscaping that visually buffers the installation from adjacent streets and highways, (*ii*) fencing, and (*iii*) other barriers to restrict public access. The proposed tower will also require a height waiver.

Pacific Park Plaza, Suite 950 • 711 Kapi‘olani Boulevard • Honolulu, Hawai‘i 96813-5213
Phone: 808-550-4483 • www.psi-hi.com

We are seeking your input on the following topics:

- The range and content of the alternatives that should be considered.
- The nature and scope of the analyses to be included in the Draft EA.
- Information regarding resources, uses, or activities present in the region and information regarding other projects in the region.
- Potential environmental impacts associated with the proposed project, and measures to avoid, minimize, or mitigate those potential impacts.

Please provide your written comments within thirty (30) days of the date of this letter. Comments should be sent to:

Mākena White, AICP, Senior Planner
Planning Solutions, Inc.
711 Kapiʻolani Boulevard #950
Honolulu, HI 96813
makena@psi-hi.com

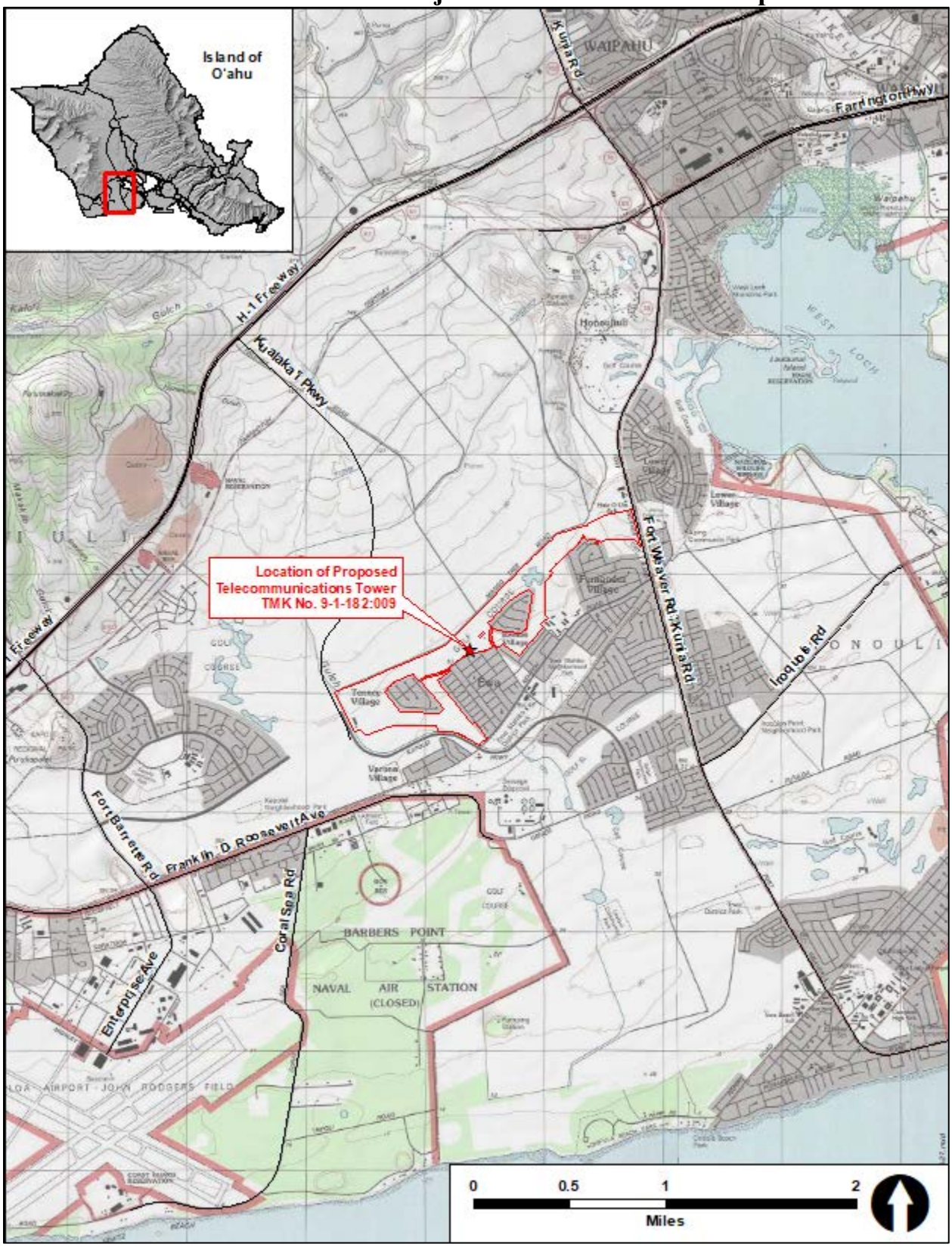
Thank you for participating in the planning process for this proposed project. If you have any questions or need clarification regarding the proposed project, please contact me at jim@psi-hi.com or (808) 550-4559.

Sincerely,

James T. Hayes
Principal Environmental Planner

Attachments

Attachment 1. Project Location on USGS Map

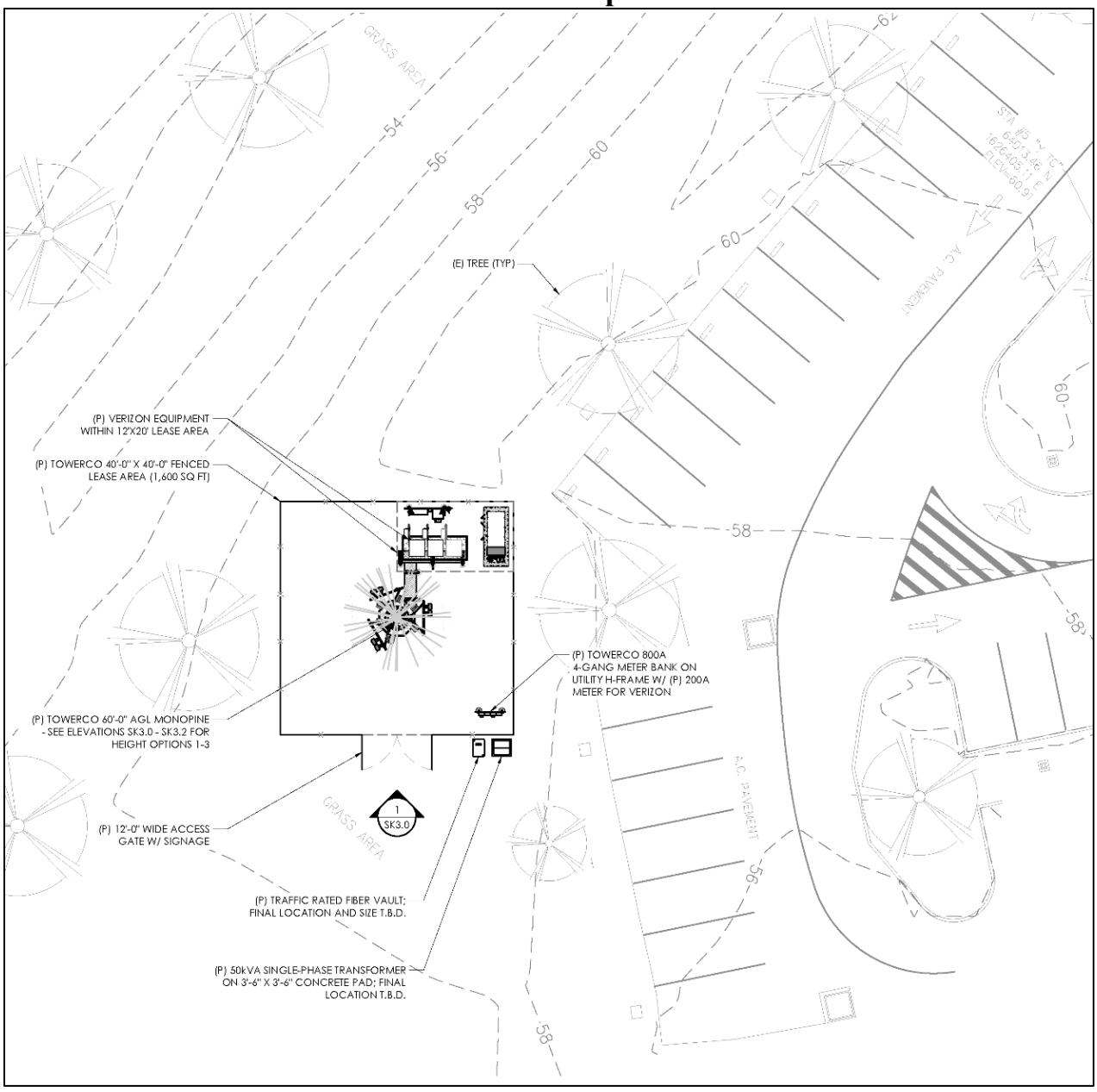


Source: PSI, State of Hawai'i GIS, City and County of Honolulu GIS.

Attachment 2. Project Location on Aerial Photograph

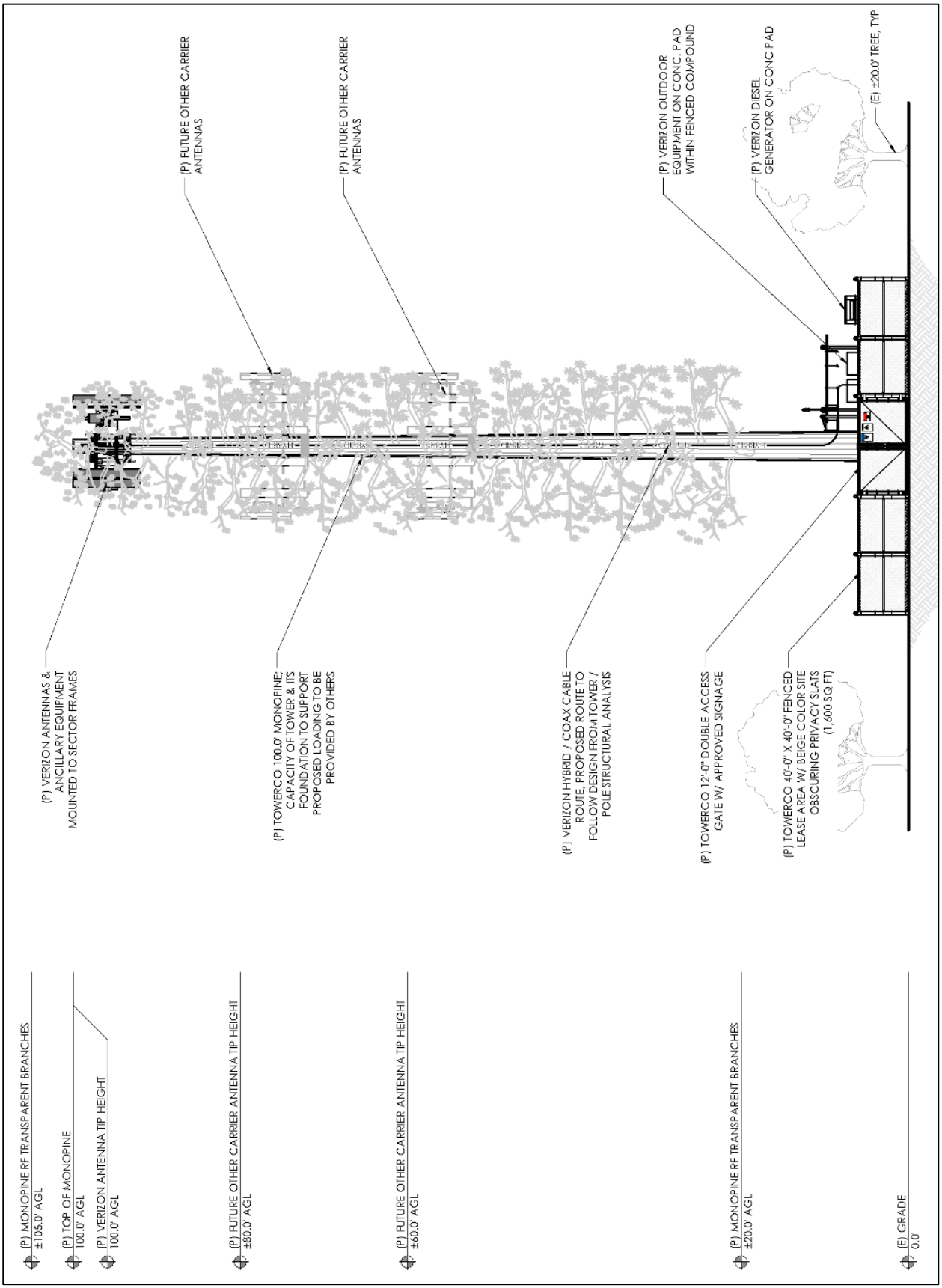
Source: PSI, State of Hawai'i GIS, City and County of Honolulu GIS.

Attachment 3. Conceptual Site Plan



Source: TowerCo.

Attachment 4. Elevation View



Source: TowerCo.

Makena White

From: DBEDT State Planning <dbedt.stateplanning@hawaii.gov>
Sent: Wednesday, August 21, 2024 3:40 PM
To: Makena White
Cc: Balassiano, Katia
Subject: Pre-Assessment Consultation for Ewa Village Telecom Facility Project

Aloha,

Thank you for the opportunity to provide input. The Office of Planning and Sustainable Development has no comment at this time.

Thank you,

Megumi Nakayama
Administrative Assistant, Land Use Division
State of Hawai´i Office of Planning & Sustainable Development
Dept. of Business, Economic Development & Tourism
235 S. Beretania Street, 6th Floor
Honolulu, Hawaii 96813
(808) 587-2842

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL
RESOURCES DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: 9/9/24
DAR # 6749

MEMORANDUM

TO: Brian J. Neilson
DAR Administrator

FROM: Elizabeth Monaghan, Aquatic Biologist

SUBJECT: Pre-Assessment Consultation
Ewa Village Telcom Facility Project

Request Submitted by: Planning Solutions, Inc.

Location of Project: Ewa, O'ahu, Hawai'i
Tax Map Key No.: (1) 9-1-182: 009 (portion)

Brief Description of Project:

TowerCo is proposing to construct and operate a telecom facility that includes a 120-foot-tall tower on a small portion of TMK No. (1) 9-1-182:009. That parcel is the City and County of Honolulu-owned 'Ewa Villages Golf Course, with a street address of 91-1760 Park Row in 'Ewa Beach, O'ahu, Hawai'i . The purpose of the telecom facility is to improve cellular phone service in the region. The project site is in the State of Hawai'i's Urban Land Use District and the City and County of Honolulu's AG-1 Restricted Agricultural District.

In accordance with Hawai'i Revised Statutes (HRS) Chapter 343, the project is an "applicant action"

Comments:

☐ No Comments ☒ Comments Attached

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.

Comments Approved: Edward Kekoa Jr. Date: Sep 10, 2024

For Brian J. Neilson
DAR Administrator

DAR# 6749

Brief Description of Project

and has been determined to require an Environmental Assessment (EA) because it (a) involves the use of county-owned land; (b) requires a discretionary approval, a lease of agreement; and (c) is not considered an exempt class of action by the City and County of Honolulu. An EA meeting presenting the content requirements contained in Hawai'i Administrative Rules, Title 11, Chapter 200.1 will be prepared. The EA will document potential environmental impacts associated with the proposed project.

The proposed project would involved the use of a roughly 40-foot square area (1,200 square feet) that is currently landscaped near the golf course's parking lot. The 120-foot-tall tower would be within the fenced area and is currently envisioned to have a monopine disguise. The facility could support the operations of multiple service providers.

Per the Revised Ordinances of Honolulu (ROH), Chapter 21 Land Use Ordinance (LUO), the proposed telecom facility is an allowable use at the site with a Conditional Use Permit (CUP). The LUO requires that the telecom facility have: (i) landscaping that visually buffers the installation from adjacent streets and highways, (ii) fencing, and (iii) other barriers to restrict public access. The proposed tower will also require a height waiver.

The requester is seeking input on:

- The range and content of the alternatives that should be considered.
- The nature and scope of the analyses to be included in the Draft EA.
- Information regarding resources, uses, or activities present in the region and information regarding other projects in the region.
- Potential environmental impacts associated with the proposed project, and measures to avoid, minimize, or mitigate those potential impacts.

DAR# 6749

Comments

Thank you for the opportunity to comment. Please see the below notes for consideration in the draft EA:

Post-construction, DAR recommends that the applicant take steps to plant native vegetation that actively acts to retain surface storm-water run-off and sediment during precipitation events. Short grass will be likely ineffective at retaining surface stormwater run-off and sediment. Planting an effective vegetated buffer, down the slope of the construction site will help to capture soil and pollutants and absorb excess surface runoff from precipitation before they reach the shoreline.

DAR recommends planting native species. The most effective native soil/sand stabilizer and with water and sediment retention capabilities is Pohinahina (Vitex rotundifolia). Others include
`aki`aki (Sporobolus virginicus), Pa`u o Hi`iaka (Jaquemontia sandwicense), Pohuehue (Ipomoea pes-capre). The former species will act as a barrier much like a gravel berm, whereas the latter species are low-growing and hearty enough for walking on. They can be purchased at Hui Ku Maoli Ola nursery www.hawaiiannativeplants.com

Another good practice would be to keep all unearthed or loose soil covered by native vegetation (grass, shrubs and trees) to reduce run-off.

In addition, the applicant could consult with CTAHR for alternative vegetation options or consult the following literature:

University of Hawaii
College of Tropical Agriculture & Human Resources
Dept. of Natural Resources and Environmental Management
1910 East-West Road
Honolulu, HI 96822
(808) 956-7774
www.ctahr.hawaii.edu/nrem/
http://www.huihawaii.org/uploads/1/6/6/3/16632890/plant_foster_parent_handbook_final_draft_for_pdf.pdf
https://dlnr.hawaii.gov/occl/files/2013/08/dune-management.pdf

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/Russell Y. Tsuji
Ref: Pre-Assessment Consultation
Ewa Village Telcom Facility Project
Location: Ewa, O'ahu, Hawai'i
TMK(s): (1) 9-1-182: 009 (portion)
Applicant: Planning Solutions, Inc.

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

Type text here

The owner of the project property and/or their representative is responsible for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHAT) (fhat.hawaii.gov) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7139.
- Kauai: County of Kauai, Department of Public Works (808) 241-4849.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: Sep 9, 2024

DEPARTMENT OF PLANNING AND PERMITTING
KA ʻOIHANA HOʻOLĀLĀ A ME NĀ PALAPALA ʻAE
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAIʻI 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041 • WEBSITE: honolulu.gov/dpp

RICK BLANGIARDI
MAYOR
MEIA

DAWN TAKEUCHI APUNA
DIRECTOR
PO'O

BRYAN GALLAGHER, P.E.
DEPUTY DIRECTOR
HOPE PO'O

REGINA MALEPEAI
2ND DEPUTY DIRECTOR
HOPE PO'O KUALUA

September 9, 2024 2024/ELOG-1616 (MAK)

Mr. James T. Hayes
Planning Solutions, Inc.
711 Kapiʻolani Boulevard #950
Honolulu, Hawaiʻi 96813

Attn: Mr. Mākena White

Dear Mr. Hayes:

SUBJECT: Pre-Consultation - Environmental Assessment (EA)
ʻEwa Village Telecommunication Facility Project
ʻEwa, Oʻahu, Hawaiʻi
Tax Map Key 9-1-182:009 (portion)

This is in response to your letter, received August 21, 2024, requesting comments regarding the upcoming preparation of an EA in compliance with Hawaiʻi Revised Statutes (HRS) Chapter 343. We understand that the proposal is to allow a lease agreement of county-owned land to those seeking to operate a new telecommunication facility (i.e. Type B utility installation) consisting of a 120-foot (ft.) tall monopine within a 1,600 square (sq.)-ft. fenced compound on the subject site (Project). The Department of Planning and Permitting has the following comments that should be addressed in the Draft EA.

- Existing and Proposed Structures: The Draft EA should describe any existing or proposed structures, including when the existing structures were built, and identify any associated building permits or other land use approvals.

- Land Use Consistency: The Draft EA should describe the Project's consistency with the Oʻahu General Plan, and ʻEwa Development Plan.

- Other Permits and Approvals: The Project is within the AG-1 Restricted Agricultural District with a maximum height limit of 24 ft. The Draft EA should

include a discussion of any other discretionary permits and approvals that the proposed Project will require prior to the Project's implementation. Both a Conditional Use Permit and Zoning Waiver are required for the Project. Therefore, the Draft EA should also address how the Project will meet the objectives, policies, and guidelines for Revised Ordinances of Honolulu (ROH) Chapter 21 for receiving these discretionary land approvals, which is available on our website.

- Proposed Alternatives: The Draft EA must include a section identifying alternatives to the proposed Project and discuss why these options were not viable. We recommend explaining why colocation onto an existing tower is not possible and how network coverage will be impacted if the Project is not built.

- Flood Hazards: The Project is also located within the Flood Zone X, as mapped by the Federal Emergency Management Agency. Flood Zone X are areas of minimal flood hazard that are determined to be outside the 0.2 percent annual chance floodplain. Therefore, the Draft EA should evaluate the proposed Project's compliance with the City's Flood Hazard Areas Ordinance (ROH Chapter 21A), which is available on our website.

- Cultural Impact Assessment: The Draft EA must include a discussion analyzing the impact of the proposed Project on cultural practices and features associated within the Project area. Guidelines for assessing cultural impacts can be found on the Environmental Review Program's website at:

  https://planning.hawaii.gov/erp/

- Historic Properties: The Draft EA should include a discussion identifying historic properties within the Project area, the potential impacts as a result of the Project, and the appropriate mitigation to be implemented. According to our records, the Project is adjacent to a known historic district, 'Ewa Sugar Plantation Villages. Additionally, the Project should be submitted to the State Historic Preservation Division (SHPD) for review and comment under HRS Chapter 6E-42. Please include our request for comment letter when submitting the Project to the SHPD, which is available online at:

  www.honolulu.gov/rep/site/dpp/dpp_docs/SHPD-Comment-Request.pdf

Copies of available records for the Subject property can be obtained from our Data Access and Imaging Branch. Please note that any request for permit research and/or copies (e.g., a Certificate of Occupancy, or a specific land use or building permit) must be accompanied with a research request fee. A money order or certified check in

the amount of $5.00, made payable to the City and County of Honolulu, will initiate the process of researching and copying the specific records you are interested in obtaining. There will also be a copy charge of $0.50 for the first page of every record, and $0.25 for each page of the same record, thereafter. In addition to the copy charge, there is a research fee of $5.00 per 10 minutes, or fraction thereof, of research time. Shipping and handling charges will also be added to your total cost for this type of request. These charges will be imposed separately from the zoning clearance and confirmation request fee. Please contact our Customer Service Division at (808) 768-8272 for cost estimates to initiate the request.

Should you have any questions, please contact Michael Kat, of our Zoning Regulations and Permits Branch, at (808) 768-8013 or via email at michael.kat@honolulu.gov.

Very truly yours,

FOR Dawn Takeuchi Apuna
Director

Appendix B. IPaC Report

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Honolulu County, Hawaii

Local office

Pacific Islands Fish And Wildlife Office

(808) 792-9400
(808) 792-9580

MAILING ADDRESS

300 Ala Moana Boulevard, Box 50088
Honolulu, HI 96850-5000

PHYSICAL ADDRESS

300 Ala Moana Boulevard, Room 3-122
Honolulu, HI 96850-0056

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office

of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Hawaiian Hoary Bat Lasiurus cinereus semotus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/770	Endangered

Birds

NAME	STATUS
Band-rumped Storm-petrel Hydrobates castro No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1226	Endangered
Hawaiian Common Gallinule Gallinula galeata sandvicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6612	Endangered
Hawaiian Coot (alae Ke`oke`o) Fulica alai Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7233	Endangered
Hawaiian Duck Anas wyvilliana Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7712	Endangered
Hawaiian Petrel Pterodroma sandwichensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6746	Endangered

Hawaiian Stilt Himantopus mexicanus knudseni — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2082

Newell''s Shearwater Puffinus newelli — Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2048

Reptiles

NAME	STATUS
Hawksbill Sea Turtle Eretmochelys imbricata Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3656	Endangered

Flowering Plants

NAME	STATUS
`akoko Euphorbia celastroides var. kaenana Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3842	Endangered
`akoko Euphorbia skottsbergii var. skottsbergii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6793	Endangered
`ena`ena Pseudognaphalium sandwicensium var. molokaiense Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5993	Endangered

Awiwi Schenkia sebaeoides — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/7103

Ihi Portulaca villosa — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4886

Ohai Sesbania tomentosa — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8453

Pu`uka`a Cyperus trachysanthos — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/7749

Round-leaved Chaff-flower Achyranthes splendens var. rotundata — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/4709

Vigna o-wahuensis — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8445

Ferns and Allies

NAME	STATUS

Ihi`ihi Marsilea villosa Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2169

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your

project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
'apapane Himatione sanguinea This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands.	Breeds Dec 1 to Jul 31
O'ahu 'amakihi Chlorodrepanis flava This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands.	Breeds Apr 1 to Jul 1
Wandering Tattler Tringa incana This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands.	Breeds elsewhere

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled

"Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

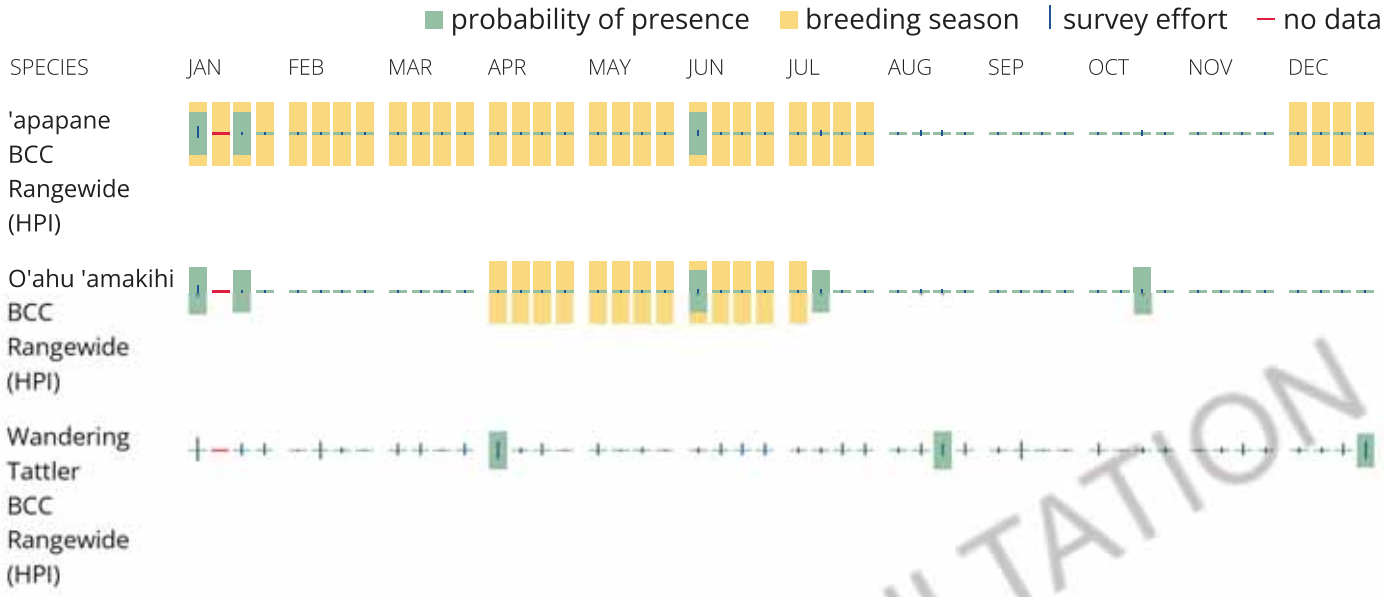
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the

year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

CBRA information is not available at this time

This can happen when the CBRS map service is unavailable, or for very large projects that intersect many coastal areas. Try again, or visit the CBRS map to view coastal barriers at this

location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to

view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.