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ENGINEERING
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HISTORIC PRESERVATION
KAHO'OLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAI'I 96809

Ref: OCCL:RB

SPA: MA 23-31

OCT 25 2022

David Lonborg
University of Hawaii
Institute of Astronomy
2680 Woodlawn Dr.
Honolulu, HI 96822

SUBJECT: Site Plan Approval (SPA) for installation of a new 500-foot conduit line
Por Kula, Makawao, Maui
TMK: (2) 2-2-007:008 and 2-2-007:016

Dear Mr. Lonborg:

The Office of Conservation and Coastal Lands (OCCL) is in receipt of your SPA to install a 500-foot conduit line to run from Hawaiian Electric pole (E-5) to the FAA building. This new line will be trenched 2 feet deep. The proposed new line will run parallel and adjacent to the existing conduit path. The existing conduit line will remain in place. The purpose is because structural failures were identified in multiple areas of the existing line which is 30-40 years old.

The OCCL is unable to process your SPA application at this time because as a state entity (as the landowner) and a federal agency (as the applicant), it is your responsibility to comply with both Section 106 of the National Historic Preservation Act and HRS Chapter 6E regarding historic properties Once you have received concurrency regarding historic properties from the State Historic Preservation Division, you may wish to resubmit a SPA application.

Additionally note that you must comply with the National Environmental Policy Act (NEPA) and the Hawaii Environmental Review Process (HEPA). If you are proposing a Categorical Exclusion (NEPA) or a Hawaii Revised Statutes (HRS) §343 Exemption, please provide the proposed exemption in your SPA application.

You will need to resubmit a revised SPA. Should you have any questions, please feel free to contact Rachel Beasley at rachel.e.beasley@hawaii.gov or work cell (808)798-6481.

Sincerely,

for Michael Cain, Administrator
Office of Conservation and Coastal Lands

c: MDLO, Maui County Planning Department

SPA MA-23-31

Kuba, Sharleen K RB

From: David Lonborg <dlonborg@hawaii.edu>
Sent: Tuesday, October 18, 2022 1:37 PM
To: Kuba, Sharleen K
Cc: Cain, Michael
Subject: [EXTERNAL] Site Plan Approval application for FAA electrical project
Attachments: SPA_FAA_USCG_Upgrade-HO_2022-07-1AA-signature-WD-DL.pdf

Aloha Sharleen,

Attached is a Site Plan Approval application for a project to repair and update the FAA's electrical conduit crossing the Haleakala High Altitude Observatory site. Please confirm receipt and let me know when it's assigned to a planner, or let me know if there's a different process needed to submit now. Many thanks!

David

David Lonborg
Associate Director
Institute for Astronomy
University of Hawaii

(808) 956-8768 (office)
(808) 375-9340 (mobile)
dlonborg@hawaii.edu

SITE PLAN APPROVAL APPLICATION (SPA)

File No:	
Acceptance Date:	30-Day Expiration Date:
Assigned Planner:	

for DLNR Use

RECEIVED
2022 OCT 20 A 7:04
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

Pursuant to Hawai'i Administrative Rules (HAR) §§13-5-22 through 24, identified land uses beginning with letter (B) require a site plan approval by the department.

PROJECT NAME: FAA/USCG Electrical Distribution Upgrade Project

Conservation District Subzone: General

Identified Land Use: P-6 Public Purpose Uses (D-1)

(Identified Land Uses are found in HAR §13-5-22 through §13-5-25)

Project Address: FAA/USCG Facility located at Haleakala Summit Site

Tax Map Key(s): (2) 2-2-007-008 and (2) 2-2-007:016

Ahupua`a:Papa`anui District: Waiakoa Island: Maui

Proposed Commencement Date: Upon approval of CDUP

Proposed Completion Date:

Estimated Project Cost:

Total size / area of proposed use:

ATTACHMENTS

- ☐ $50 application fee *(ref §13-5-32 through 34)*
- ☒ Location map
- ☒ Site plan
- ☐ Construction, grading, site restoration, landscaping, or fire buffer plans, as applicable

Note: The application fee for State projects is waived pursuant to HAR §13-5-32.

REQUIRED SIGNATURES

Applicant
Name / Agency: US DOT FEDERAL AVIATION ADMINISTRATION
WLSA, NMR, Real Estate & Utilities Group
Street Address: 2200 s 216TH Street, Des Moines, WA 98198

Contact Person & Title: Brandi Bohanon, Real Estate Contracting Officer
(RECO) Phone: (206) 231-3427 Fax:
Email: Brandi.J.Bohanon@faa.gov
Interest in Property:

Signature: WAYNE DARRINGTON Digitally signed by WAYNE DARRINGTON Date: 2022.08.17 11:30:31 -07'00' **Date:**

Signed by an authorized officer if for a Corporation, Partnership, Agency or Organization

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Landowner (if different than the applicant)
Name: University of Hawai'i, Institute for Astronomy (IfA)
Title; Agency:
Mailing Address: 2680 Woodlawn Dr. Honolulu, HI 96822-1839

Phone: +1 808 956-8312 Fax:+1 808 988-2790
Email: dlonborg@hawaii.edu

Signature: David Lonborg Digitally signed by David Lonborg Date: 2022.10.18 13:30:09 -10'00' **Date:**

For State and public lands, the State of Hawai'i or government entity with management control over the parcel shall sign as landowner.

Agent
Agency:
Contact Person & Title:
Mailing Address:

Phone: Fax:
Email:

Signature: _____ **Date:**

For DLNR Managed Lands

State of Hawai'i
Chairperson, Board of Land and Natural Resources
State of Hawai'i
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809-0621

Signature _____ **Date:**

PROPOSED USE

Please provide a detailed description of the proposed land use. Please also include information regarding secondary improvements including, but not limited to, grading and grubbing, placement of accessory equipment, installation of utilities, roads, driveways, fences, landscaping, etc. Description of project should include dimensions and quantities of materials as applicable.

Location

In 1961, Executive Order (EO) 1987 by Hawaii's Governor Quinn to UH, set aside 18.166 acres of land on the summit of Haleakalā to establish the Haleakalā High Altitude Observatories (HO) site, as amended by EO 4452 in 2014. EO 1987 has no expiration date. This area of the Conservation District was set aside for "...Haleakalā High Altitude Observatory Site purposes only" (EO 1987).

The proposed project is within the 18.166-acre HO site. Figure 2 is the tax map key (TMK) and general location of the proposed project. Figure 3 is a map showing HO and the adjacent properties. Figure 4 is a topographic map showing the property boundaries at Pu'u Kolekole, which includes HO. Figure 5 shows an aerial view of the HO site with the existing facilities and proposed location of the Project.

Hawaiian Electric is requesting to replace the existing conduit (pre-regulation) at the summit. Structural failures have been identified in multiple areas of the existing conduit requiring Hawaiian Electric to de-energize power the FAA facility on the summit. The conduit was installed approximately 30-40 years ago and is owned by FAA and the 3-phase wire installed in the same timeframe is the responsibility of Hawaiian Electric.

The FAA proposes to leave the existing conduit run in place and will trench a new conduit run consisting of 500 feet. They propose to run the new conduit line parallel and adjacent to existing conduit run. The new conduit will be located approximately 12 inches on the North side of the existing conduit path, see figure 5. The contractor will need to trench 500 feet from Hawaiian Electric pole (E-5) to the FAA building, see figure 6.

The contractor work is as follows with Hawaiian Electric responsibilities explicitly noted below:

1) 500-foot conduit run from Hawaiian Electric pole (E-5) to FAA building will be trenched 2- feet deep, see figure 7A and 7B.

2) Install Schedule 80 conduit and place magnetic tape over the entire 500-foot conduit run

3) Extracted volcanic soil will be used to back fill the existing hole - NO volcanic soil will be removed from site.

5) Hawaiian Electric installs the new 3- phase cable from Hawaiian Electric pole (E-5) to FAA facility. We will use the existing pull boxes for the 3-phase cable run see figure 8.

6) Connect new wire to underground transformer.

7) Reconnect fuses from Hawaiian Electric pole (E-5) and power will be restored to the FAA facility see figure 9.

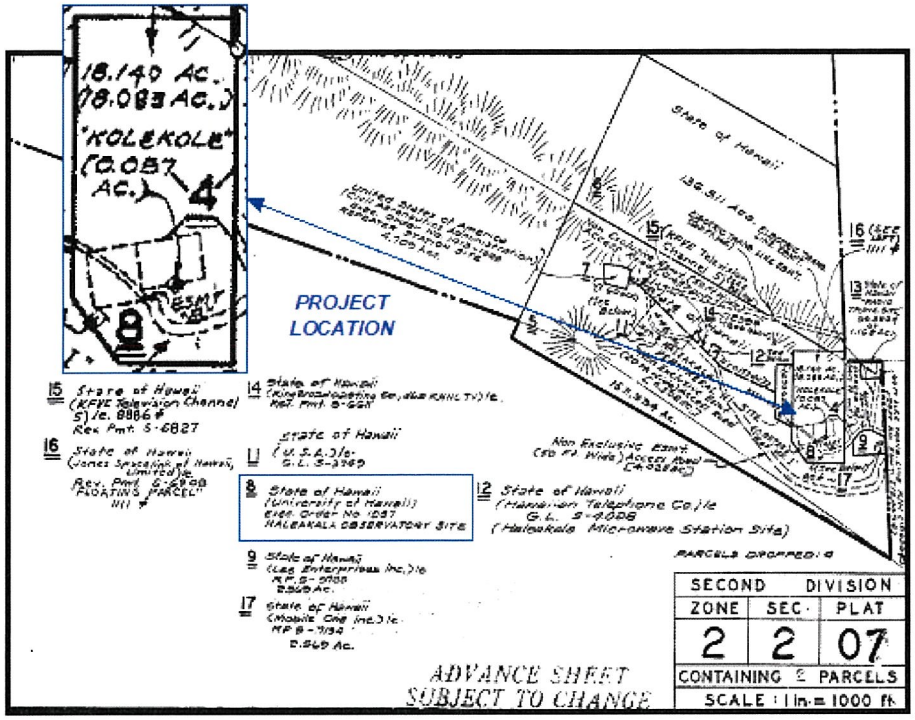


Figure 1. State of Hawai'i Tax Map Key and General Location of Proposed Project

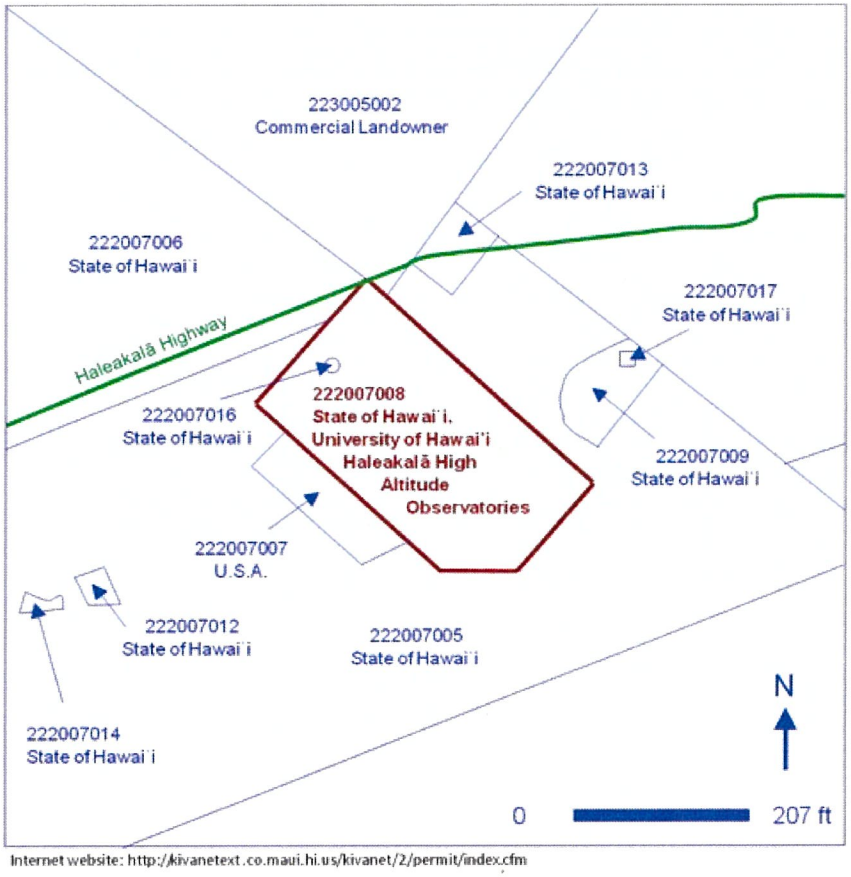


Figure 2. Map Displaying HO and Adjacent Property Owners

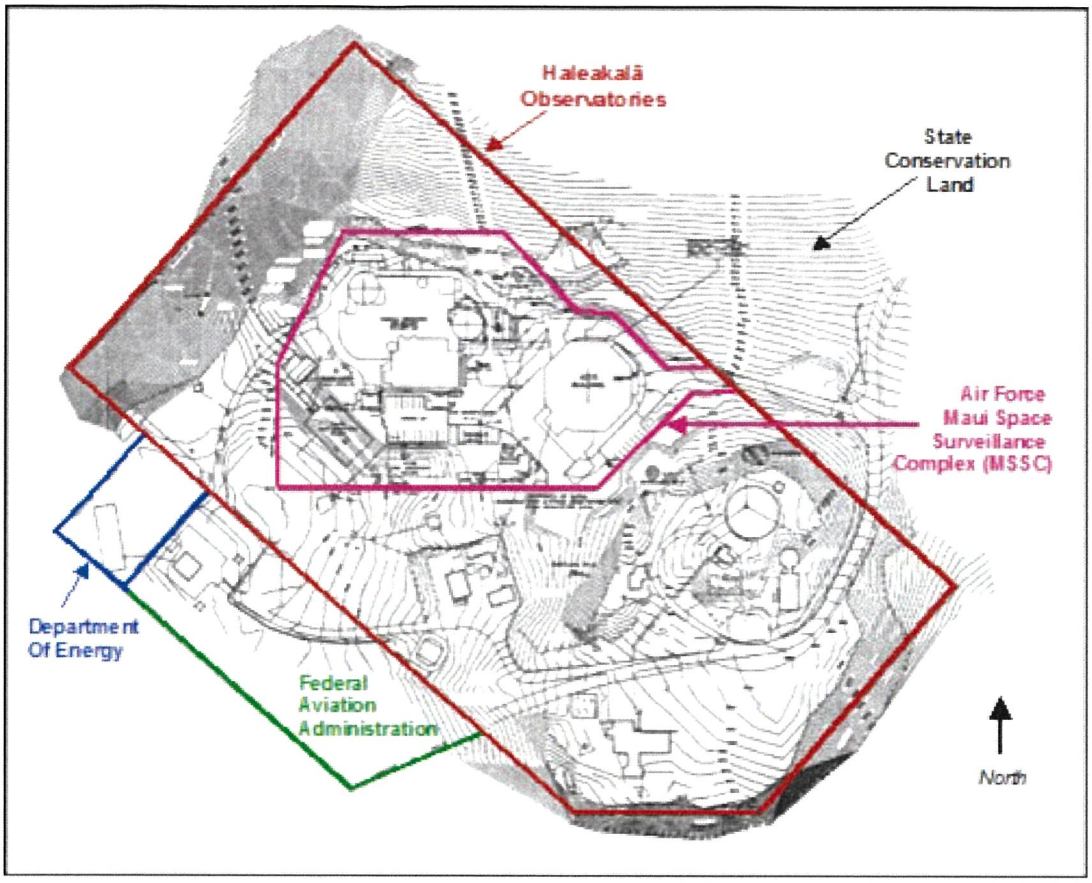


Figure 3. Topographic Map of the Pu‘u Kolekole with Property Boundaries

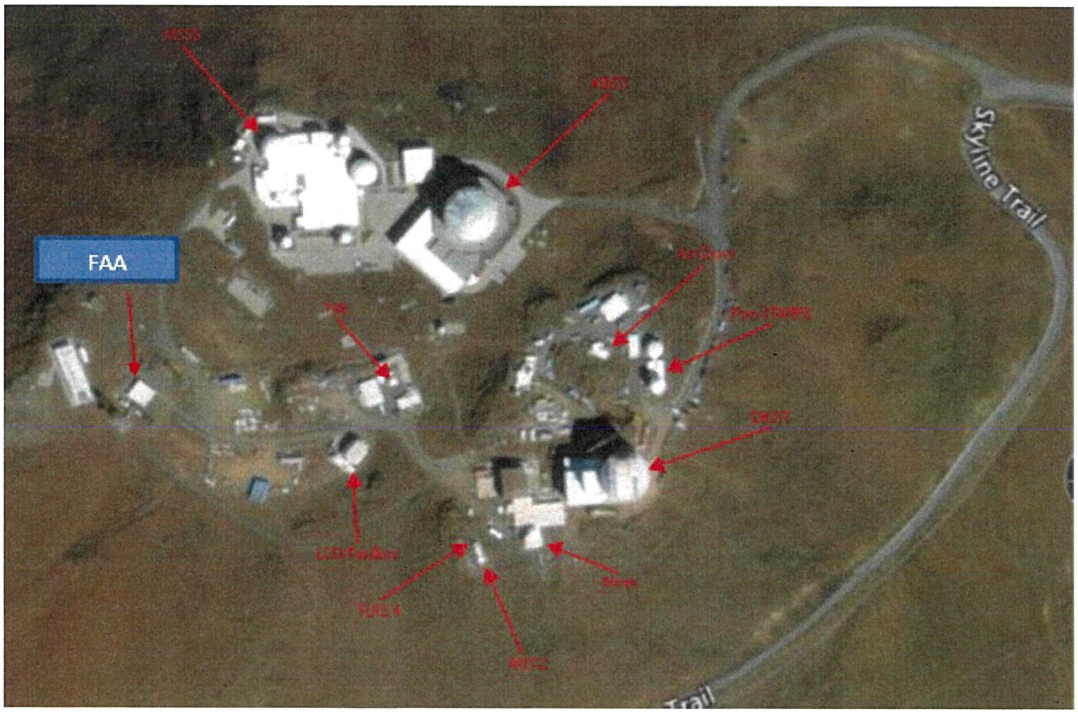


Figure 4. Aerial View of the HO Site and Location of the Project

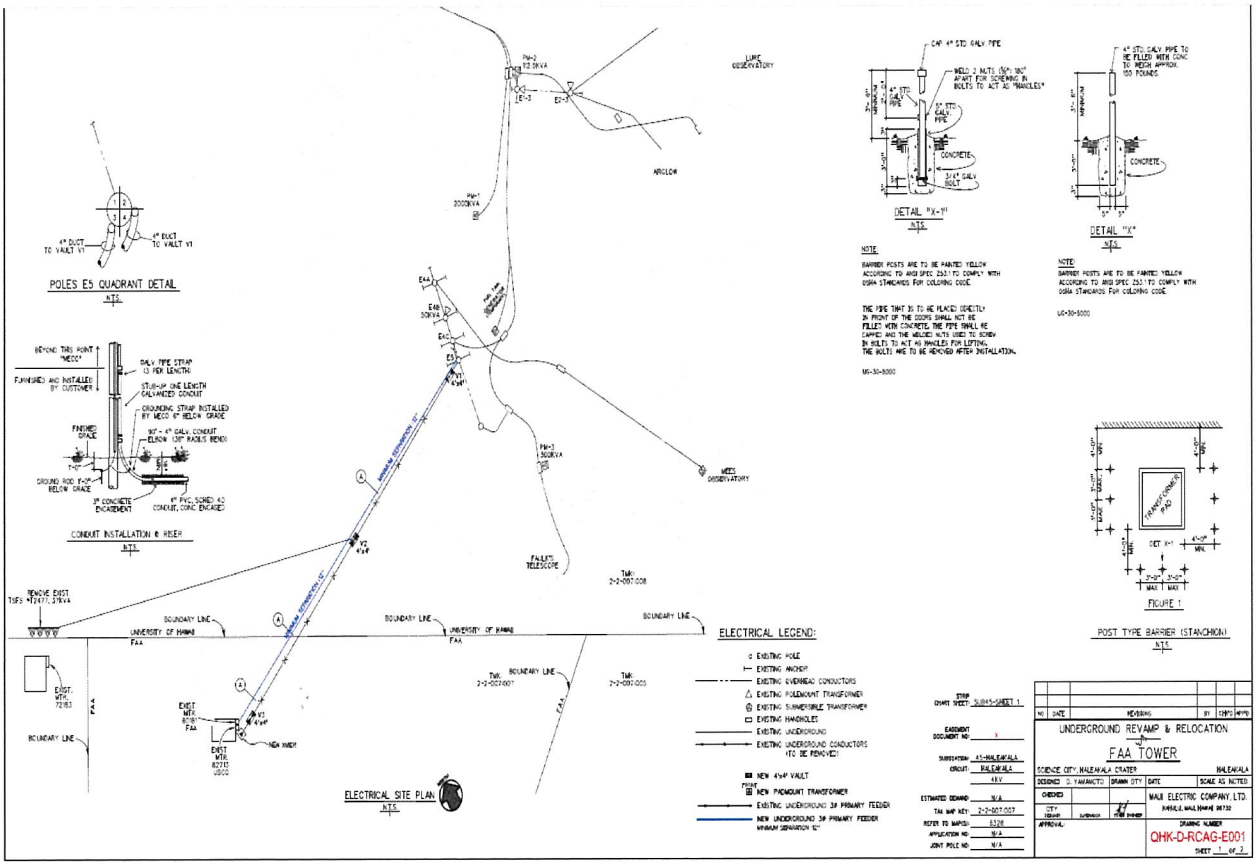


Figure 5. Proposed schedule 80 conduit run - highlighted in blue

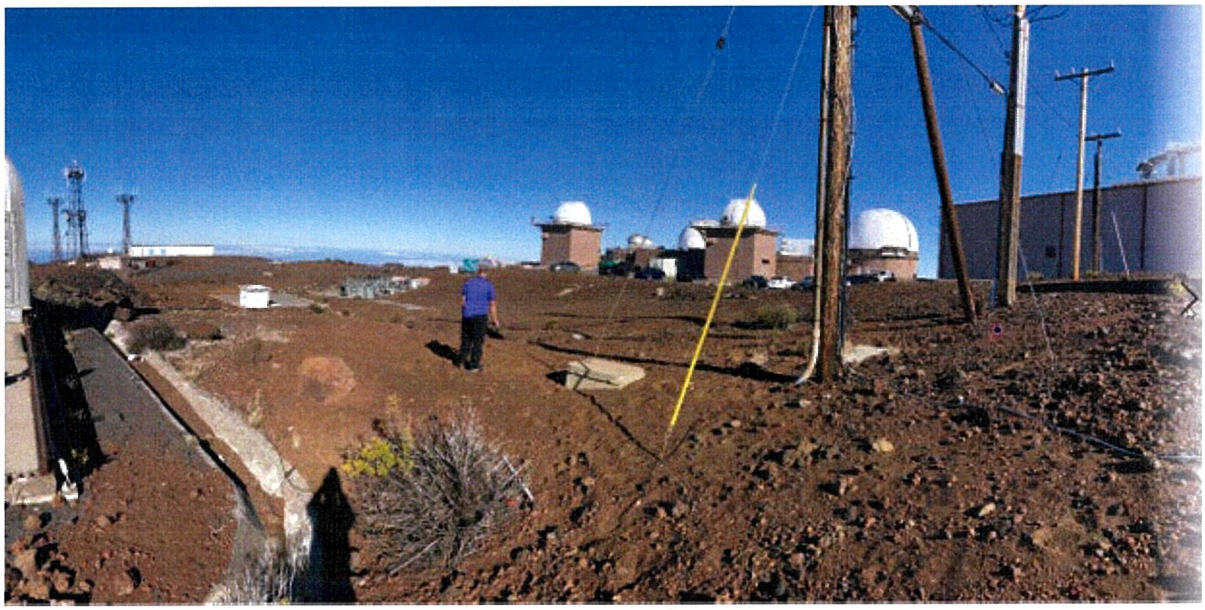
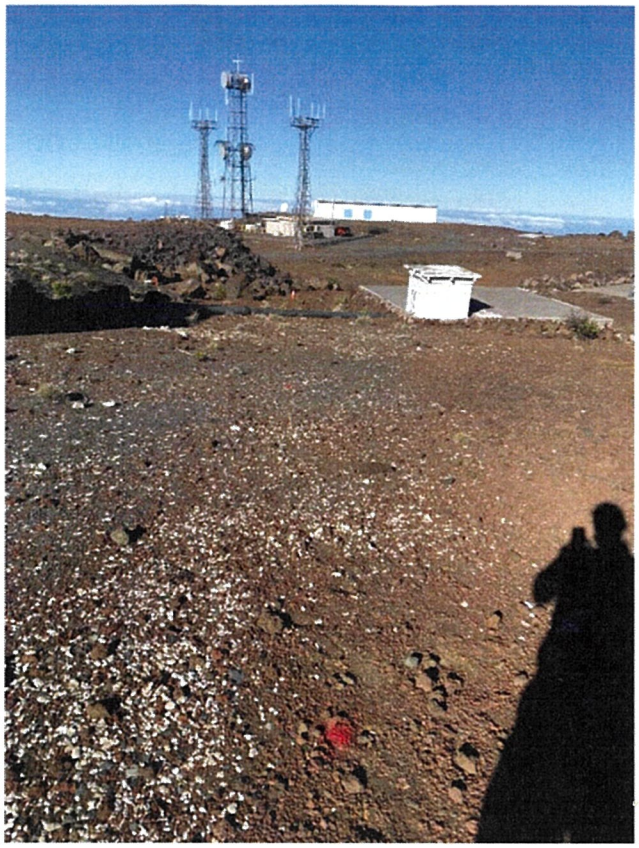


Figure 6. Contractor to trench 500 feet from Hawaiian Electric pole to FAA facility



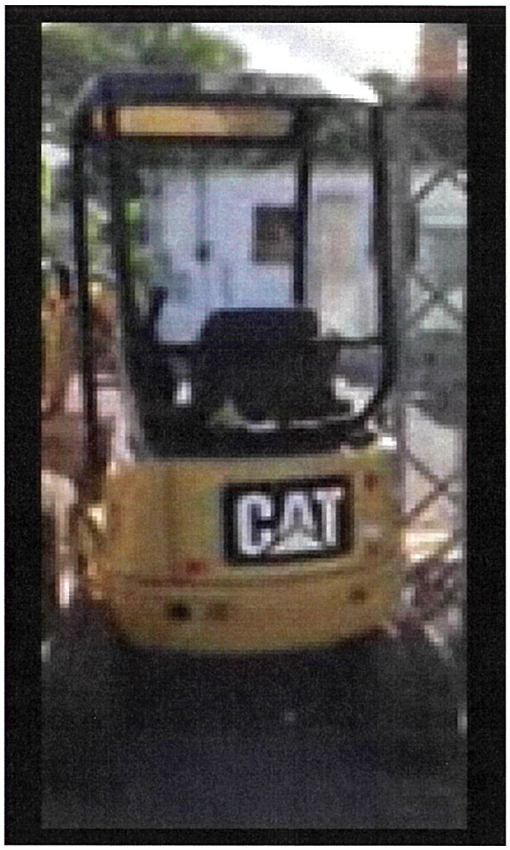


Figure 7A. Start of 500 ft. of Conduit Run, Figure 7B. General Image of Equipment to Perform Trenching





Figure 8A. Existing Pull Boxes for Wire Splices, Figure 9A. Reconnect Fuses to Energize Power to FAA Facility

EXISTING CONDITIONS

Please describe existing conditions on the parcel (geology, ecology, cultural and recreational resources, historic resources, structures, landscaping, etc). Provide information regarding existing buildings and structures as well as infrastructure and utilities as applicable.

The proposed use is constrained to the side of an existing building. The proposed activity will not result in a permanent change to the surrounding environment nor will the visual and environmental character of the site change.

Geology & Hazards: The summit area is covered with volcanic ejecta consisting of lava, cinder, and ash of the Kula and Hana Volcanic Series. There is no soil development in the immediate vicinity of HO. Soil development occurs with increased distance (greater than 1.5 miles) from the summit. Most of the area is situated on Cinder Land (rCl), which is thought to be of the Kula period of volcanism (U.S. Soil Conservation Service, 1972). A foundation investigation conducted in 1991, in the northern area of HO revealed that cinder in this area is underlain by 5 feet of volcanic clinker and 16 feet of volcanic cinder.

Flora, Fauna, Ecology, Water Resources: None. The IfA performs routine monitoring for invasive species.

Cultural Resources: Comprehensive inventories have been conducted of HO: A Cultural Resource Survey (CKM 2003), Traditional Practices Assessment (CKM 2002), and an archeological inventory (Fredericksen 2003). In 2006 a subsequent cultural resources study, Cultural and Historical Compilation of Resources Evaluation and Traditional Practices Assessment was conducted (CKM 2006). Cultural Surveys Hawai'i, Inc. (CSH) conducted a Supplemental Cultural Impact Assessment (SCIA) in 2007 and annual routine monitoring continues by the IfA.

EVALUATION CRITERIA

The Department or Board will evaluate the merits of a proposed land use based upon the following eight criteria *(ref §13-5-30 (c))*:

1. The purpose of the Conservation District is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. *(ref §13-5-1)* How is the proposed land use consistent with the purpose of the conservation district?

   The FAA Mt Haleakala Remote Communication Air/Ground (QHK RCAG) is situated on land that has already been modified and no additional changes to the land are required. The purpose of the RCAG is to provide Radio Frequency (RF) communications for various services within the Air Traffic Control (ATC) system. The present ATC system is required to provide coverage of the entire airspace over the Hawaii, and Pacific control zones. This coverage extends from ground surface at terminal areas to an altitude of 70,000 ft at en route areas.

   In addition to the FAA ATC system, the building is shared with US Coast Guard for their military operation of the Isle Of Maui.

2. How is the proposed use consistent with the objectives of the subzone of the land on which the land use will occur? *(ref §13-5-11 through §13-5-15)*

   The proposed project will provide reliable infrastructure for power service to the RCAG Facility. With reliable power to the facility, the ATC system will improve flight safety and will reduce the potential for flight accidents. Reduced flight accidents will reduce adverse impacts on the land and population

3. Describe how the proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled "Coastal Zone Management" *(see 205A objectives on p. 8).*

   205A-2.b.2.a: The system is low profile and low visual impact. While at the same time providing valuable air/ground communication related data, to allow pilots to make more informed flight decisions, thereby reducing potential physical impacts with the land.

   205A-2.b.4.a: By reducing the potential for aircraft accidents in the area, this system will also aid in minimizing adverse impacts on the coastal ecosystems.

   205A-2.b.5.a: Improved air/ground communication awareness allows safer, more informed flight routing. This in turn allows safer travel for visitors who are an important component of the State's economy.

   205A-2.b.6.a: Improved air/ground communication awareness reduces the hazard to life and property from changing weather conditions in coastal areas.

   205A-2.b.7.a: The Ground-based UHF and VHF transmitting and receiving RCF engage in two-way communications with aircraft both on the ground and in flight. This provides a valuable resource for training, education, and awareness of the coastal resources around the locations.

   205A-2.b.8.a: Increased access to communication data allows the public to participate by stimulation of interest, awareness, and education for the flying public.

   205A-2.b.9b.a: By having remote access to the data, it has the added benefit of not needing to actually visit the site, thus further reducing the eco-impacts on the area.

4. Describe how the proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community, or region.

FAA is replacing conduit run over a period of years that has gotten damaged

5. Describe how the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The proposed activity will not directly affect the scientific, natural resource, or historic properties in the summit region. No long-term changes to the physical conditions and capabilities of the parcel will occur. The activity is wholly within and consistent with the terms and conditions as identified in the 2010 Haleakala Observatories Management Plan. The RCAG has a low profile that will blend in with the existing site infrastructure. The new underground distribution system will fit within the existing footprint of the existing infrastructure. See Site Plan drawing.

6. Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

The proposed activity will not result in a permanent change to the surrounding environment nor will the visual and environmental character of the site change. FAA will be returning the land as they have found it and will take extra precautions in. The surrounding land is a research site operated by University of Hawaii, with many other structures in close proximity that have a much higher visual impact than the RCAG Facility. The low-profile characteristics of the underground system will make it difficult to distinguish from the surrounding structures.

7. If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

Not applicable as no subdivision is involved.

8. Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.

There are no hazardous materials utilized for the new underground distribution system. It is passive, self-supporting, and utilizes commercial power. Conversely, by providing air/ground communication service/data, and having a reliable ATC system, the health, safety, and welfare of the public will be improved.

CERTIFICATION

I hereby certify that I have read this completed application and that, to the best of my knowledge, the information in this application and all attachments and exhibits is complete and correct. I understand that the failure to provide any requested information or misstatements submitted in support of the application shall be grounds for either refusing to accept this application, for denying the permit, or for suspending or revoking a permit issued on the basis of such misrepresentations, or for seeking of such further relief as may seem proper to the Land Board.

I hereby authorize representatives of the Department of Land and Natural Resources to conduct site inspections on my property. Unless arranged otherwise, these site inspections shall take place between the hours of 8:00 a.m. and 4:30 p.m.

_____

Signature of authorized agent(s) or if no agent, signature of applicant

AUTHORIZATION OF AGENT

I hereby authorize _____ to act as my representative and to bind me in all matters concerning this application.

_____

_____

Signature of applicant(s)