Waimānalo Federal Authority Survey Project
- Nationwide Federal land surveyor specializing in Native Trust Lands
- U.S. DOI, Bureau of Land Management (BLM) CERTIFIED SURVEYOR
- Surveys for Native Hawaiian, American Indian, and Alaska Native Trust lands
- Surveyed in Hawai’i for over a decade
- More than 40 years experience in large acreage cadastral surveying
- A native lands advocate in federal and state land policy

Certified Federal Surveyor
James M. Powers, PLS, RPLS, CFedS, CP
- Certified Federal Authority Surveyor
- Founder and Owner / CEO of RPS
- Holds 32 state licenses, including Hawai’i, PLS
- Certified Federal Surveyor CFedS BLM
- Certified Photogrammetrist CP

PowerPath Solutions LLC
L. Diane Powers Stegall
- Federal Contract Administrator
- Specializing in Federal compliance and project completion
- Extensive experience in Tribal lands, Fee-to-Trust, process compliance for BLM State and Federal offices
Hawai‘i-Based Partner

Steve Hochart
• Dudek Hawai‘i/National Mapping and Surveying Practice Leader
• Dudek Waimānalo Project Manager
• Brings more than two decades of mapping in Hawai‘i to the team

Stephen Paul PLS
• Dudek Hawai‘i Senior Project Surveyor and CADD Production Manager
• Brings vast Hawai‘i survey experience to the team

Project Team has worked with DHHL since 2015.

DUDEK Hawai‘i

• National, multidisciplinary land surveying, environmental, and engineering firm
• Projects in 50 states
• Ranked as one of the Top 125 U.S. Environmental Firms (Engineering News-Record, 2020)
• Dudek's Hawai‘i office has provided survey services across all Hawaiian islands for over 20 years
• Dudek's Hawai‘i office has been a consultant to the Department of Hawaiian Home Lands
RPS/DUDEK Survey Team has delivered more than 300,000 acres of projects together - here in Hawai‘i and across the continental United States.

Specializing in native lands reclamation and protection through boundary survey
RPS/Dudek surveys assist the Department of the Interior by identifying and marking the boundary lines of the Waimānalo sites.

This is accomplished by:

1. Researching all title(s) of origin and investigating all necessary land records to determine exact legal boundaries as first recorded.

2. Ascertaining the actual location of HHL boundaries on the ground by marking the exterior boundaries, boundaries of inholdings of the HHL parcels, and related rights-of-way. Noting any encroachments, exceptions, and abuses.

3. Providing the necessary data and information to list each parcel in the BLM official land records system.

These Federal Authority boundaries will be defended by the United States and can be relied upon by Federal agencies and courts. They will support keeping Hawaiian Home Lands intact and the protection of, and investments in, the Hawaiian Home Lands Trust.
Supporting Native American Self-Determination and Self-Governance

▪ Assisting the United States with its trust responsibilities to protect Native American trust lands
▪ Assisting Native American communities in identifying, protecting, and stewarding their ancestral and trust lands
▪ Providing land survey training to Native American surveyors within their native homelands
▪ Providing intern opportunities to learn from, work with, and eventually become a Certified Federal Surveyor (CFedS) to conduct Federal Authority Surveys of native trust lands
▪ Supporting native land stewardship, capacity building, and community development

RPS owner Mick Powers was invited to the inaugural CFedS class due to his long tenure in native trust land surveying and his interest in supporting the culture within native lands preservation thus preserving our nation's heritage . . . "embracing of heritage, culture and the legacy that native lands represent . . ."
CFedS - Certified Federal Surveyor Program
What is it and what does it do?

Purpose
The Department of the Interior was mandated to create a program to improve the quality of surveys on:
- Native Federal Trust Lands
- Expanded to include ALL Federal Boundaries
- Protecting Government and Native property rights is paramount.

Program
The CFedS Program is jointly administered by the BLM and the American Congress on Surveying and Mapping (ACSM).
CFedS is an intensive training program in boundary survey along or near Federally mandated boundary lines.

Training
Complexities of the Public Land Survey System (PLSS) are rarely taught at universities. The criteria greatly impact the accuracy of trust land boundaries, affecting land control and the distribution of rights.

Topics covered in CFedS licensing:
1. Land Survey Law
2. Federal Survey System (PLSS)
3. Federal Boundary Standards
4. Records research and analysis
5. Trust Land Law
Red Plains Surveying and Native Lands CFedS Surveying

**Internship**

Red Plains Surveying offers internships for Native Hawaiian, American Indian, and Alaska Native land surveyors to enter into the CFedS program through their doors in order to invest in the cultural stewardship of these ancestral homelands and their resources by their respective indigenous nations and communities.

**Training/Employment**

Red Plains Surveying offers opportunities and seeks out qualified applicants to work with them on projects within Native lands.

Internships train Native surveyors in the CFedS program, supplies hours toward licensing, and provides employment for Native lands surveyors.

**Business Development**

Developing a Native Hawaiian CFedS, Federal Surveyor, in Hawaii opens the door to the beginning of a Native Hawaiian business opportunity for land surveyors caring for their homelands.

Red Plains offers business mentorship for smaller new businesses to enter the Small Business Administration’s 8(a) or similar mentorship programs.
Coordinate with local school principals to schedule times for children K-8 to learn about the applications of Technology for Land Surveying.

Mentoring Time Covers:
- UAV Imagery Collection for their school.
- Teach the students how 100s of images are combined into a single image of their campus.
- Teach the students how the image can be used to map their campus and how it relates to Land Surveying.

Waimānalo Specific:
- Educate the students on the land surveying work being completed in their backyards and how it will benefit them and their community.
Dudek will coordinate with Kamehameha Schools and Kailua High School to offer an internship program for graduated or graduating seniors (ages 18 and older).

Internship will cover:
- Learning about field applications of land surveying.
- Learning about office data processing of field collected land surveying data.
- Working in the field and office with the Dudek Hawai‘i team to complete the land surveying projects for DOI's Federal Survey of Hawaiian Home Lands.
The Survey Team continues to track the COVID-19 cases and positivity rate and is encouraged by the dropping numbers in the Waimānalo community.

The Survey Team follows national and local news about current and projected trends.

The Survey Team will continue to monitor the COVID-19 cases and positivity rate throughout the field survey work.
The Survey Team continues to track the community's vaccination rates as well.

The Survey Team also tracks other community activities and concerns.
Federal, State, and County COVID-19 Compliance

All Federal contractors working on DOI's Federal Survey of Hawaiian Home Lands projects are required to comply with Federal, State, and local government requirements and to follow Federal, State, and local government guidance and protocols.
Red Plains Surveying and Dudek are implementing protocols to keep the communities and their crews safe.

Staff and their vehicles will be identifiable in the field.

Field crews will have in their vehicles, among other things -

- Copy of Safety Plan which is regularly updated and reviewed;
- Complete a daily safety briefing in the field.
- Protocols for the discovery of iwi kūpuna and cultural resources.
Hawai'i

Notices and Parcel-Specific Rights of Entry

Coordination with Land Managers and Adjoining Landowners

- Where Hawaiian Home Lands are general leased or licensed, Dudek will coordinate with the respective entity's land manager.
- Some boundaries will be surveyed from the adjoining land, thus Dudek will seek entry through the respective landowners and land managers, i.e., State Dept. of Transportation (HDOT), Dept. of Ag. (HDOA).

30-Day Notification to Lessees and Adjoining Landowners

- Dudek will mail notices and a request for right of entry to the individual homestead lots.
Project Areas

93% of the project area for Waimānalo can be surveyed utilizing access through open space and agricultural land with no residential homestead lot access or interactions.
Surveying the boundaries of the Makapu‘u and Kaupō Beach Parks parcels will be executed in coordination with the HDOT and DHHL's licensee, the City and County of Honolulu, through its beach park managers.
Surveying the boundaries of the Waimānalo and Kaiona Beach Parks parcels will be executed in coordination with the HDOT and DHHL's licensee, the City and County of Honolulu, through its beach park managers.
Area 3

The boundary being surveyed in this area is between open spaces of Department of Land and Natural Resources (DLNR) land and agricultural leased lots under HDOA and a major parcel of Hawaiian Home Lands designated as part of the Waimānalo Forest Reserve which is managed by DLNR.

The ridge UAV survey will also be coordinated with neighboring landowners DLNR and Kamehameha Schools.
Area 4

The boundaries being surveyed in this area are adjacent to DLNR and HDOA lands.

The Survey Team will survey the boundaries primarily by accessing the bordering open space and agricultural areas.

The Survey Team will provide notification to DHHL’s general lessees, licensees, and permittees for their awareness and will coordinate activities as necessary.
Area 5

The boundaries being surveyed in this area border residential and agricultural lands.

The Survey Team will obtain individual ROEs before starting in this area and will follow COVID safety protocols and guidance. The Survey Team minimizes its proximity to residences to the best of its ability.
Area 6

This area includes the residential homestead areas of Kumuhau and Kaka‘ina.

The boundaries being surveyed in this area will require substantial residential homestead lot access.

The Survey Team will obtain individual ROEs before starting in this area and will follow COVID safety protocols and guidance.
Area 7

The boundaries being surveyed in this area will require some residential homestead lot access as well as coordination with general lessees. The Survey Team will obtain individual ROEs before starting in this area and will follow COVID safety protocols and guidance.
Area 8

The boundaries in this area are adjacent to DLNR and HDOA lands.

The Survey Team will survey the boundaries primarily through neighboring open space and agricultural areas, though some may require residential homestead lot access.

The Survey Team will obtain individual ROEs as needed before starting in this area and will follow COVID safety protocols and guidance.
Online map portal is available to track:

- **Individual Right of Entry Status**
  - Approved
    - in writing
    - over the phone
    - in-person
  - Pending
  - Other
  - Rejected
  - Other

- **Survey Line/Activity Status**

**Portal will be accessible to authorized DHHL staff.**
Waimānalo Projected Timeline

Issuance of ROE + 2 months

- During the first month
  - 30-day notice to Hawaiian Home Lands lessees and adjoining landowners
  - Virtual open house, community engagement, internship recruitment
  - Survey Areas 1 through 4 which do not include residential homesteads
- In the second month, survey Areas 5 through 8

+ 3 months for computations, reports, and review

- Surveyor submits their field notes, data, calculations, and maps to BLM for review
- BLM has 30 days to review and provide directions
- Surveyor resets monuments if necessary, submits final documentation for BLM approval

+ 3 months for Federal Register publication and processing protests, if any

- BLM publishes in Federal Register that survey plat and field notes have been officially filed
- Protestants have 30 days in which to file a protest
- Plat becomes official
Establish Project Control Network → Traverse and Location Surveys → Quality Control Compliance → Boundary Survey Submittal To BLM → Boundary Survey Monumentation

- **RESEARCH CREW**
  - Research Hawaii land records for all original documentation
  - Research for any discrepancy while in the field.
  - BLM Standards for Boundary Evidence will be applied.

- **FIELD CREW**
  - Measure and mark boundaries, easements, right of ways, encroachments. In the field.
  - Certified Federal Surveyor will oversee procedures.

- **OFFICE CREW**
  - Draft parcels and prepare submittals for preliminary PLS boundary analysis.
  - Communicate with BLM survey office.
  - Provide revisions and final product to BLM.

**SURVEYING THE LAND: Simultaneous Compliance**
Using record documents and calculations to recover field monumentation and evidence for the project area.

Collect survey coordinates on all evidence utilizing RTK, static GPS and conventional Total Stations.

Review the perimeter boundaries for evidence of unauthorized use and encroachments along the parcel boundaries.

SURVEYING THE LAND: Traverse and Location Surveys
All work will be completed under existing right of ways and public access and specific Limited and full Right of Entry Permits issued by DHHL for this project.

Establish a control network of GPS coordinates. This control will consist of static observations, as well as RTK datasets to densify the control network.

The control network will incorporate NGS monuments and local known coordinate stations setting permanent survey nails and spikes near the project boundary and in public right of ways.

SURVEYING THE LAND: Establishing Control
RPS/Dudek will train every member of the survey team to perform Federal Authority Survey standards, to understand and perform each step of the survey, from research to production to filing - in compliance with BLM standards.

The RPS/Dudek team will document to BLM standards through each section.

The RPS/Dudek team retains an outsourced Federal Quality Control check for every survey prepared for submittal to BLM.

SURVEYING THE LAND: BLM Compliance
RPS/Dudek team will submit the surveys to the California BLM office. The survey will be submitted as certified by the RPS/Dudek Certified Federal Surveyor as technically accurate, federally compliant, by BLM oversight.

RRPS/Dudek will review with the BLM and incorporate all BLM desired adjustments. This review a will finalize the survey document for the project area.

From beginning to end, the RPS/Dudek Hawaii CFedS team for Waimānalo will have provided communication and compliance to meet the needs of the Department of the Interior, Office of Native Hawaiian Relations, Bureau of Land Management, and the Department of Hawaiian Homelands.
RPS/Dudek provided the necessary data and information to provide Federal Authority Surveys for approval by the Bureau of Land Management

1. Waimanalo Hawaiian Homelands Trust surveys now meet or exceed Federal and State of Hawai‘i survey standards.

2. All boundaries are now correctly measured, monumented and admissible to be recorded

3. All work completed by the RPS/Dudek team is now in COMPLIANCE PER THE BLM STANDARDS allowing them to list each parcel in the BLM official land records system.

4. The RPS/ DUDEK team will have set new monuments where needed or reset incorrect monuments.

The Correct BLM recorded surveys now provide the tools needed to access benefits, and make land management choices, providing aide to beneficiaries.