Kaawanui Solar Project

County of Kauaʻi
Planning Commission Hearing
March 10, 2026

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Agenda

- → Project Overview
- → Project Benefits
- → Representative Photos of Equipment
- → Site Studies, Community Feedback, and Design Considerations
- → Project Timeline
- → Permitting & Entitlements
- → Q & A

Project Overview

Solar + Storage Technology

- 43 MWac Solar Photovoltaic (PV) array
- 172 MWh Battery Energy Storage System (BESS)

Utility-Scale Renewable Energy Project

- 25-year Power Purchase Agreement (PPA)
- Interconnected to Kaua‘i Island Utility Cooperative’s (KIUC) grid
- Critical grid infrastructure project
- Supports Hawai‘i's renewable energy goals

Land

- Landowner: Robinson Family Partners
- Land Manager: Gay & Robinson, Inc.
- 269 acres Project Permit Area

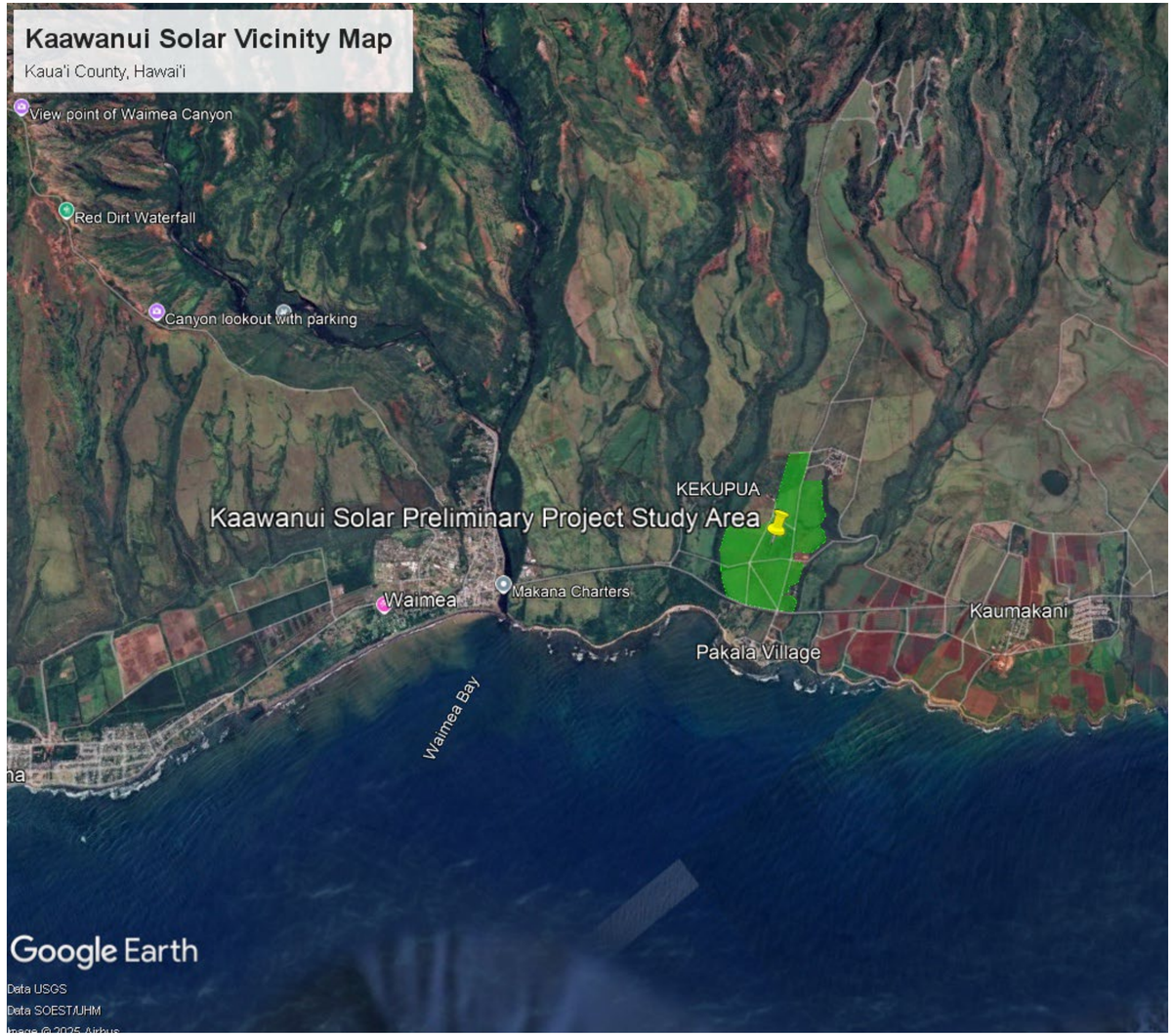
Temporary, Permitted Land Use

- County Zoning
  - Agriculture (A) (~92%), and Open (O) (~8%)
  - Allowed use with County Special Use Permit per CZO § 8-2.4(q)(16) and § 8-2.4(r)(12) and (14).
  - Complies with permit criteria (CZO § 8-8.1)
- State Land Use
  - Agriculture
  - LSB Class B (~98%) and E (~2%)
  - Allowed use with State Special Permit per HRS § 205
  - Decommissioning – return land to its original condition or comparable

Project Location

- Makaweli Ahupua‘a, West Kaua‘i
  - West Kaua‘i Community Plan: Agriculture
  - Kaua‘i General Plan: Agricultural
- TMK: (4) 1-7-006:006 (portion)

  (4)-1-7-006:010 (portion)
  - Overall TMKs: 5,006.740 acres
  - Project Permit Area: 269.195 acres



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Project Benefits

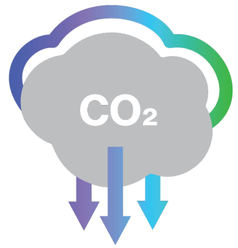
Advances Renewable Energy Goals

- **~17.5%** of Kaua‘i’s energy needs
- Improves grid reliability

1,064+ jobs

- Direct, indirect, and induced full-time-equivalent (FTE) jobs anticipated

16,000+ homes powered annually



179+ million gallons of fuel offset over its 25-year lifespan.

$216+ million to the economy

- Direct, indirect, and induced economic activity anticipated

Low, fixed-price of power for 25 years

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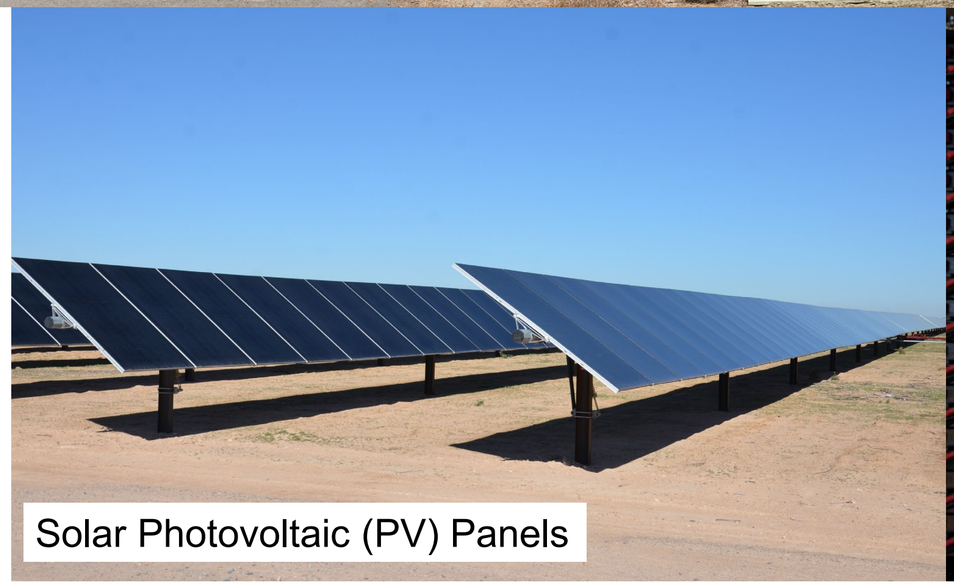
Representative Photos of Equipment

Power Conversion Station (PCS)

Battery Energy Storage System (BESS)



Solar Photovoltaic (PV) Panels

Battery Modules within the BESS

Representative Photos of Equipment

Direct Injection Release Tubes for Fire Suppression Foam

Fire Suppression Foam Applicator

Fire Suppression Agent Container

Horn/Strobe Fire Alarm

Smoke Detectors

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Proactive Fire Mitigation

- → Other Design Features
  - ○ Clearance Zones
  - ○ Multiple Ingress/Egress Points
  - ○ Fire Breaks
- → Remote Operations Control Center (ROCC)
- → Emergency Response Plans
- → Vegetation Management
- → County Fire Codes and State Regulations
  - Agency collaboration throughout permitting, construction, and operations
  - Project plans are reviewed by the county prior to permit approvals

Site Studies, Community Feedback, and Design Considerations

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Due Diligence and Site Studies

Design and Technical

- Hydrology & Hydraulics (H&H) Study and Storm Water Management Design Analysis
- Geotechnical Investigation and Pile-Load Testing
- Wind Study
- Topographic Surveys
- Decommissioning Plan

Archeological

- Archeological Literature Review and Field Inspection (LRFI)
- Archeological Inventory Survey (AIS) & Architectural Reconnaissance Level Survey
- Archeological Oversight for Geotechnical Survey

Cultural

- Cultural Impact Assessment (CIA) with Ka Pa‘akai Analysis

Environmental Resources

- Biological Resources Survey
- Wetland Survey
- Greenhouse Gas Analysis

Community and Economic Impacts

- Compatible Agricultural Feasibility Study
- Community Outreach Report
- Economic Impact Report
- Traffic Impact Analysis Report (TIAR)
- View Impact Study and Visual Simulations
- Landscaping Plan
- Glare Analysis

Listening to the Community

Outreach To Date

- **Cultural Impact Assessment**
  - (48 groups and individuals: Native Hawaiian Organizations, agencies, cultural practitioners, kūpuna, and community members)
- **Open Houses**
  - Kaawanui, Pākalā, and Kaumakani Villages
- **Presentations**
  - Area Elected Officials
  - Community Leaders and Associations
  - Public Community Meeting 9/24/25

Top Community-Identified Concerns

- Visual impacts
- Traffic during construction
- Noise
- Fire Safety
- Stormwater runoff, flooding
- Hurricane resilience

On-Going Effort

- Project website, hotline, and email inbox

~140 people reached with in-person presentations

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Minimize Traffic Impact

→ **Traffic Study –** Traffic Impact Analysis Report (TIAR) concluded no significant intersection impacts during the construction phase were identified; the Project will generate a negligible amount of vehicle traffic once fully operational.

→ **Construction Traffic Best Management Practices**

- Multiple access points
- Staggered worker arrival to the site if necessary
- Deploy manual traffic control on the highway if necessary
- Deliveries during off-peak hours
- Construction Traffic Management Plan

Avoidance of Cultural and Archaeological Resources

- **Literature Review and Field Investigation (LRFI) – Complete**
- **Cultural Impact Assessment (CIA) w/ Ka Paʻakai Analysis – Complete**

  Consultation
  - Lineal and cultural descendants
  - Kūpuna, kamaʻāina, cultural practitioners
  - Community groups
- **Archaeological Inventory Survey (AIS)**

  •Pedestrian survey, geotechnical boring monitoring, and architectural reconnaissance level survey

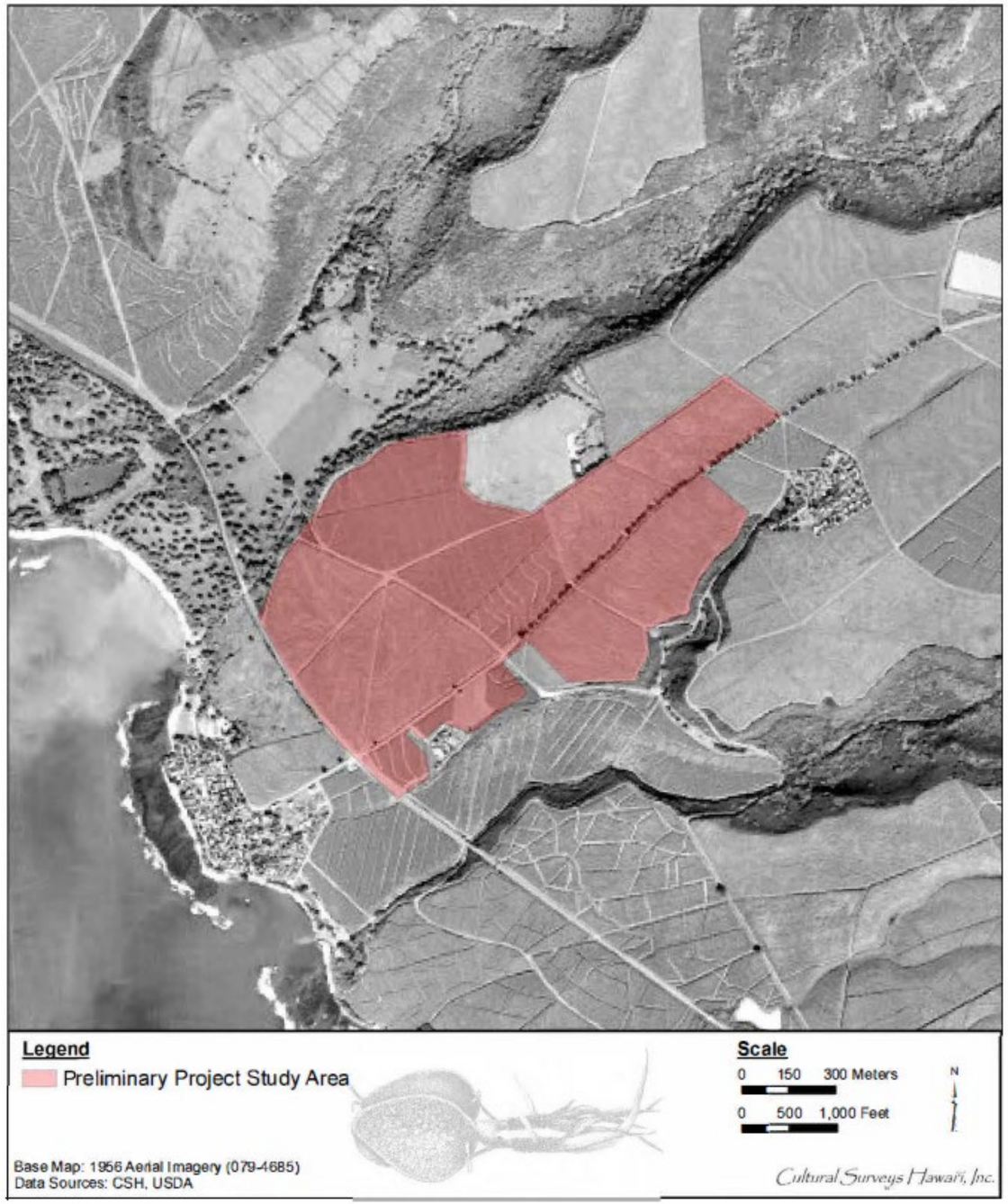

Figure 14. Portion of a 1965 USDA aerial image showing the study area

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Temporary Use of Land

→ **HRS 205-4.5(a)(21) Compliance**

- Project fully decommissioned within 12 months of the conclusion of operation at AES' expense
- Proof of financial security for the cost of decommissioning
- Land returned to substantially the same condition as prior to development

→ **Maintain compliance with state, local, and federal regulations and environmental standards**

- Best and highest use (refurbished, recycled, salvaged, or repurposed)

→ **No major Project equipment will be disposed of in Hawai'i's landfills** (PV modules and batteries)

Comprehensive Stormwater Management

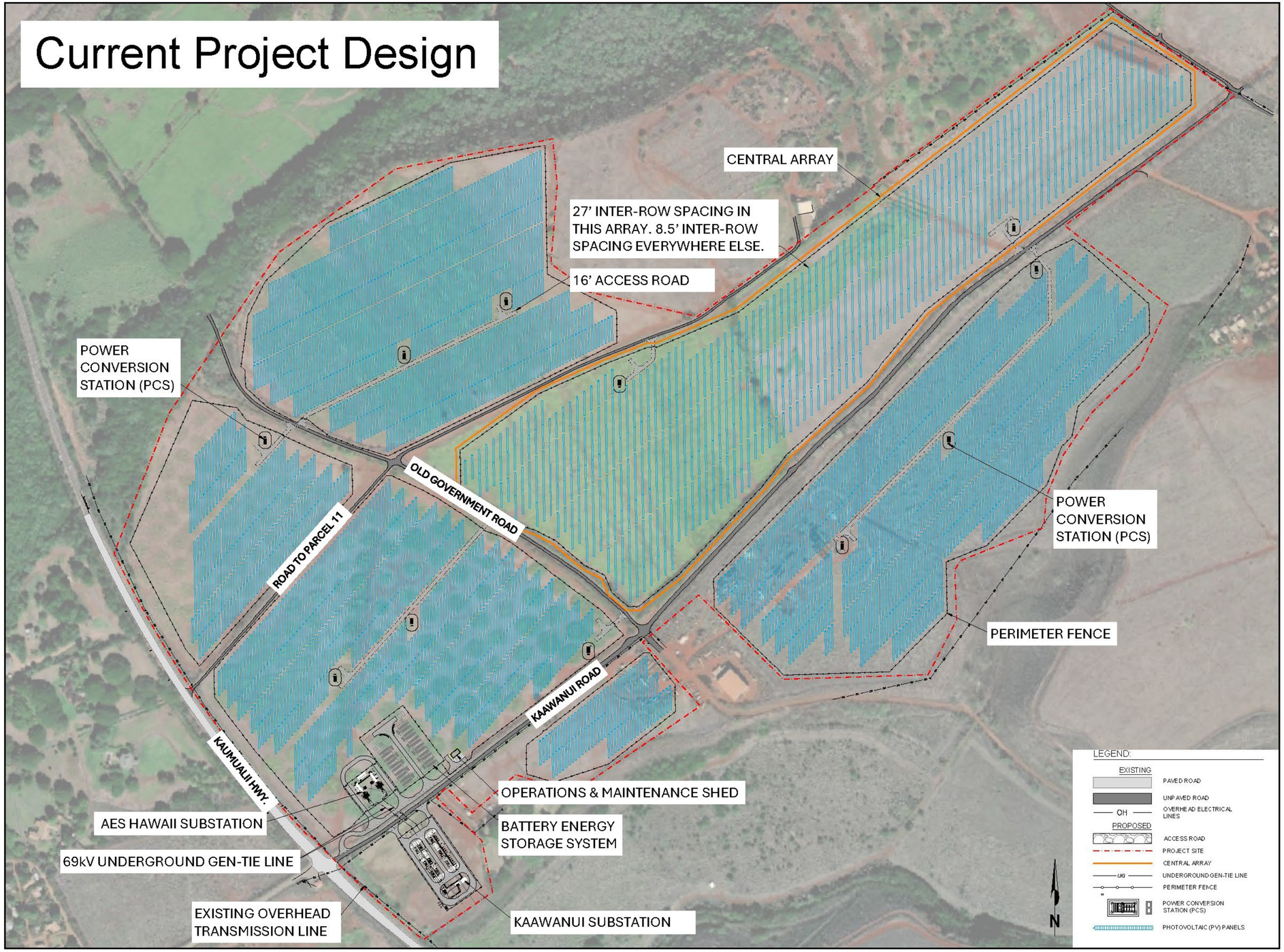
➢ Construction and Site Preparation Strategy

- Stormwater Pollution Prevention Plan (SWPPP)/National Pollution Discharge Elimination System (NPDES), Drainage and Erosion Control Plan, and Best Management Practices (BMPs): Silt fencing, sediment basins, perimeter controls before ground disturbance; water trucks for compaction and dust control
- Where feasible, grading is limited to equipment pads, AES Hawai‘i substation, Kaawanui Substation, and internal access routes
- PV panel racking/mounting technology allows us to better maintain natural contours, reducing the need for mass grading

➢ Post-construction management and design

- Stormwater retention basins at downgradient edges for water quality control
- Surface flow is maintained at or below existing levels
- Existing vegetation is maintained where feasible and allowed to re-grow for stabilization

Current Project Design



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LAKEWOOD, CO 80215
(303) 431-7895 www.neieng.com

PE STAMP:

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE LIC. EXP. DATE

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW & APPROVAL ONLY

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	11/14/25	ISSUED FOR PERMITTING
B	12/01/25	RE-ISSUED FOR PERMITTING

PROJECT TITLE:

KAAWANUI SOLAR, LLC

PROJECT LOCATION:

KAUAI COUNTY, MAKAWELI, HI [TMKS: (4) 1-7-006:006 POR. AND 010 POR.]

SHEET TITLE & DESCRIPTION:

PROJECT LAYOUT

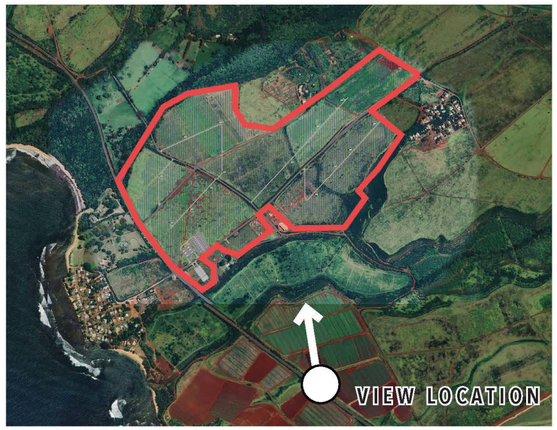
PROJ NUM:
DES:
DWN:
CHK:
APV:
DATE:

SCALE AT 24" x 36":
0 100' 200' 300' 400'
1" = 200'

SHEET NO: SHEET 1
REV: B

Controlling Visual Impact

- → Low profile PV panels
- → Strategic placement of landscaping
- → No glare impacts
- → Visual Simulations
  - → Representative simulations photograph position simulates a view with the naked eye
  - → Photograph taken from human-scale height



AFTER

Project elements blocked
from view in this location

KAAWANUI SOLAR

VIEW FROM KAUMUALI'I HIGHWAY HEADING TOWARD WAIMEA

VISUAL SIMULATIONS

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AFTER

KAAWANUI SOLAR

VIEW FROM KAUMUALI'I HIGHWAY HEADING TOWARDS WAIMEA

VISUAL SIMULATIONS

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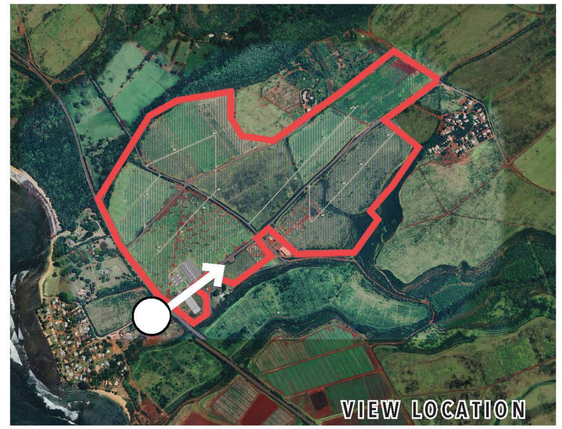

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KAAWANUI SOLAR

VIEW FROM MAKAWELI POST STATION

VISUAL SIMULATIONS

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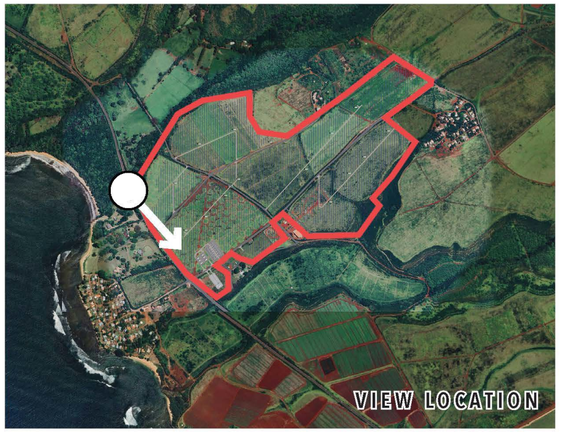
VIEW LOCATION


BEFORE


AFTER
MILE
2
1

Project Timeline

Q3 2024
Project awarded through KIUC's Request for Proposal

Q3 2024 – Q4 2026
Project design and engineering

Q1 2025 – Q1 2026
Public Utilities Commission PPA review and approval

Q1 2025 – Q1 2027
Agency consultation, approvals, and permitting

Q1 2027 – Q2 2028
Construction and commissioning

2028 Operation
Proposed commercial operation

Permitting & Entitlements

Required Permits & Approvals

- Special Permit, State Land Use Commission
- Use Permit, County of Kauaʻi Planning Commission
- Class IV Zoning Permit, County of Kauaʻi Planning Department
- Construction Permits, County of Kauaʻi Department of Public Works

Compatible Agriculture

HRS § 205-4.5 allows solar on agricultural land with soil classified as LSB productivity rating class B or C, provided that "the area occupied by solar energy facilities is also made available for compatible agricultural activities at a lease rate that is fifty percent below the fair market rent for comparable properties"

Prioritizing Agriculture


Lāwa'i Solar + Storage

Partnering with Local Agricultural Operators

- Partnering with agricultural experts and consultants
- Local Farmers/Ranchers
- No-Cost Land Lease
- Design accommodations (interrow spacing, irrigation infrastructure, pre-negotiated water rate, and allotment)

Productive Agricultural Activities

- Sheep Grazing
- Poultry and Egg Production
- Vegetable Crops

Achieving Kaua'i Agriculture and Energy Goals Together

- Landowner + Developer + Local Ag Partners

Conclusion

Locally generated and reliable energy for Kaua‘i

- 43 MW solar PV + 172 MWh battery storage
- ~16,000+ homes powered
- ~17.5% of the island’s energy needs
- Improves grid reliability

Supports local economy & employment

- ~ 1,000+ jobs generated
- ~$216M+ in economic output

Conscientious land use and site design

- Setbacks and limited grading
- Compatible agriculture design accommodations
- Thorough biological, cultural, and hydrologic study informing each stage of design and construction

Mahalo!

Kaawanui Solar, LLC (applicant)	**Megan Kāne – Sr. Manager, Project Development** **Priya Kumar – Manager, Environmental Compliance**
Belles Graham	**Max Graham & Michael Belles – Kaua‘i County Counsel**
Matsubara, Kotake & Tabata	**Curtis Tabata – State LUC Counsel**
Group 70	**Barbara Natale – Applicant Planner**
AECOS	**Eric Guinther – Biological and Wetlands**
Cultural Surveys Hawai‘i	**David Shideler – Cultural and Archeological**
3J	**Aaron Murphy – Civil, Hydrological, Water Quality & BMPs**
Gay & Robinson	**Howard Greene – Land Manager**
Scott E. Enright Company	**Scott Enright – Compatible Agriculture**
KIUC	**Cameron Kruse – Utility**