



# Mountain View Solar Plus Storage Project

March 16, 2022  
AES Clean Energy

## Housekeeping

- Meeting is being recorded
- Use Q&A function for comments, feedback and questions

## AGENDA

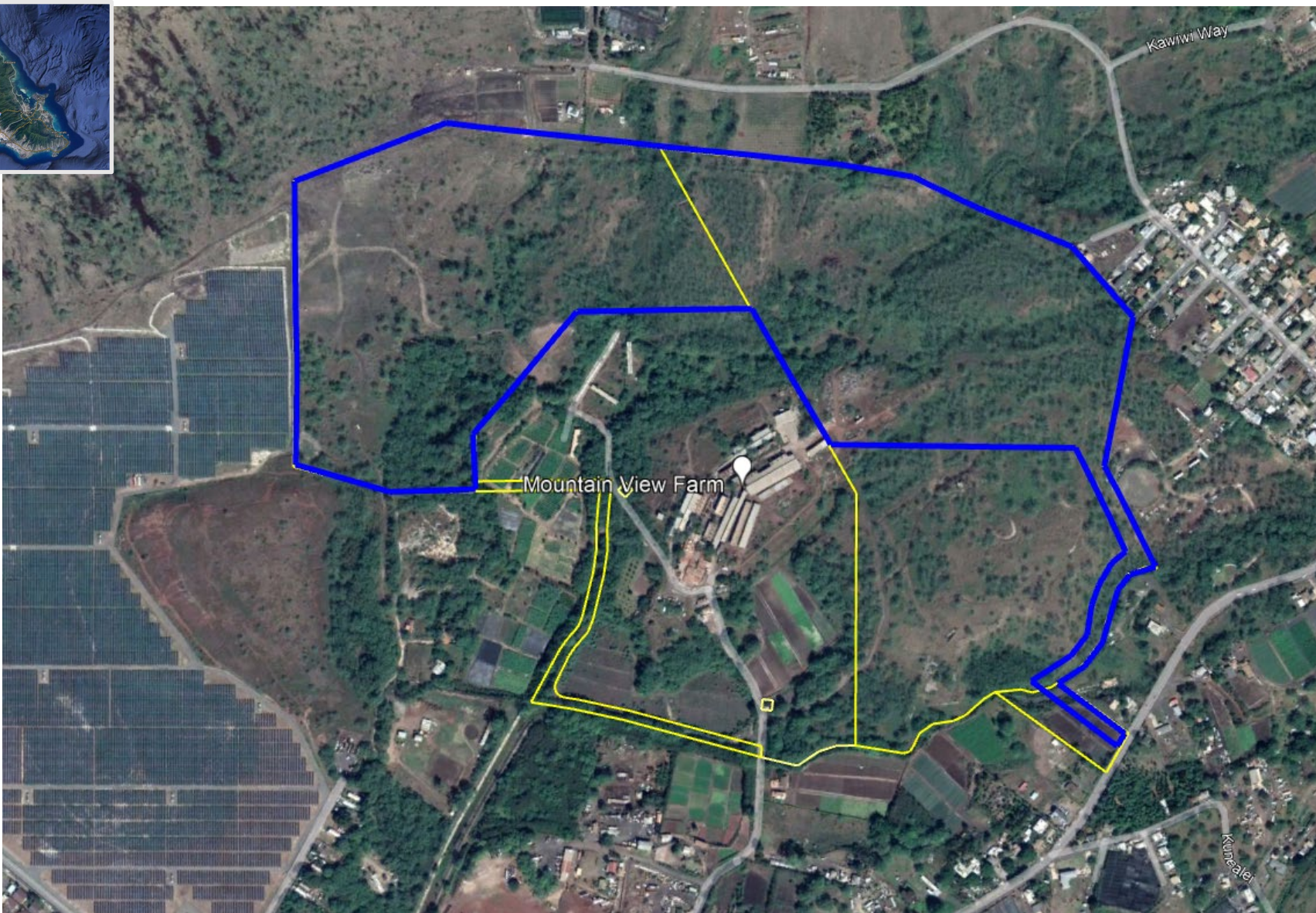
- 6:00 - 6:30 - Presentation
- 6:30 - 7:30 - Feedback Session + Q&A

# Purpose

- Provide update on project
  - Re-design based on community feedback
  - Community benefits
- Gather feedback
- Answer questions



# Original Project Area



## Legend

- Property Boundary
- Project area (~105 acres)



# Representative Photos of Equipment



Photovoltaic Panels and Racking System



Containerized Lithium-Ion Batteries

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# Overall Project Benefits

# Benefits: Jobs & Economy

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## Job Creation

- ~ **200 FTE jobs** (Direct, Indirect, Induced)

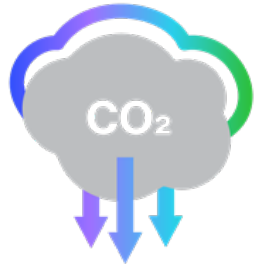


## Economic Output

- ~ **\$45 Million**

# Benefits: Environment

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- **~872,886 barrels of oil avoided**
- **Less fossil fuel**
- **Reduce Greenhouse Gas Emissions**



# Benefits: Costs

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- **5,000 homes powered** (equivalent)



- **\$0.13/kWh** low cost and fixed price over 25-years

# Benefits: Agriculture + Energy

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- Enables the **preservation** and long term **sustainability of farming** operations
- Mountain View Farm, over 70 year-old family farm and dairy
- Project to be sited on underutilized lands

*“To continue the legacy of farm activity on this land, it is vital to diversify our revenue through renewable energy.” – David Wong, Mountain View Farm*

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# Feedback

# Gathering Feedback

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- **July 14, 2020** – Early-stage virtual community meeting
- **May 19, 2021** – 2<sup>nd</sup> virtual community meeting
- **September 29, 2021** – 3<sup>rd</sup> virtual community meeting
- **December 16, 2021** – 4<sup>th</sup> virtual community meeting
- **March 16, 2022** – 5<sup>th</sup> virtual community meeting
- **Community consultation ongoing**



# Feedback Received

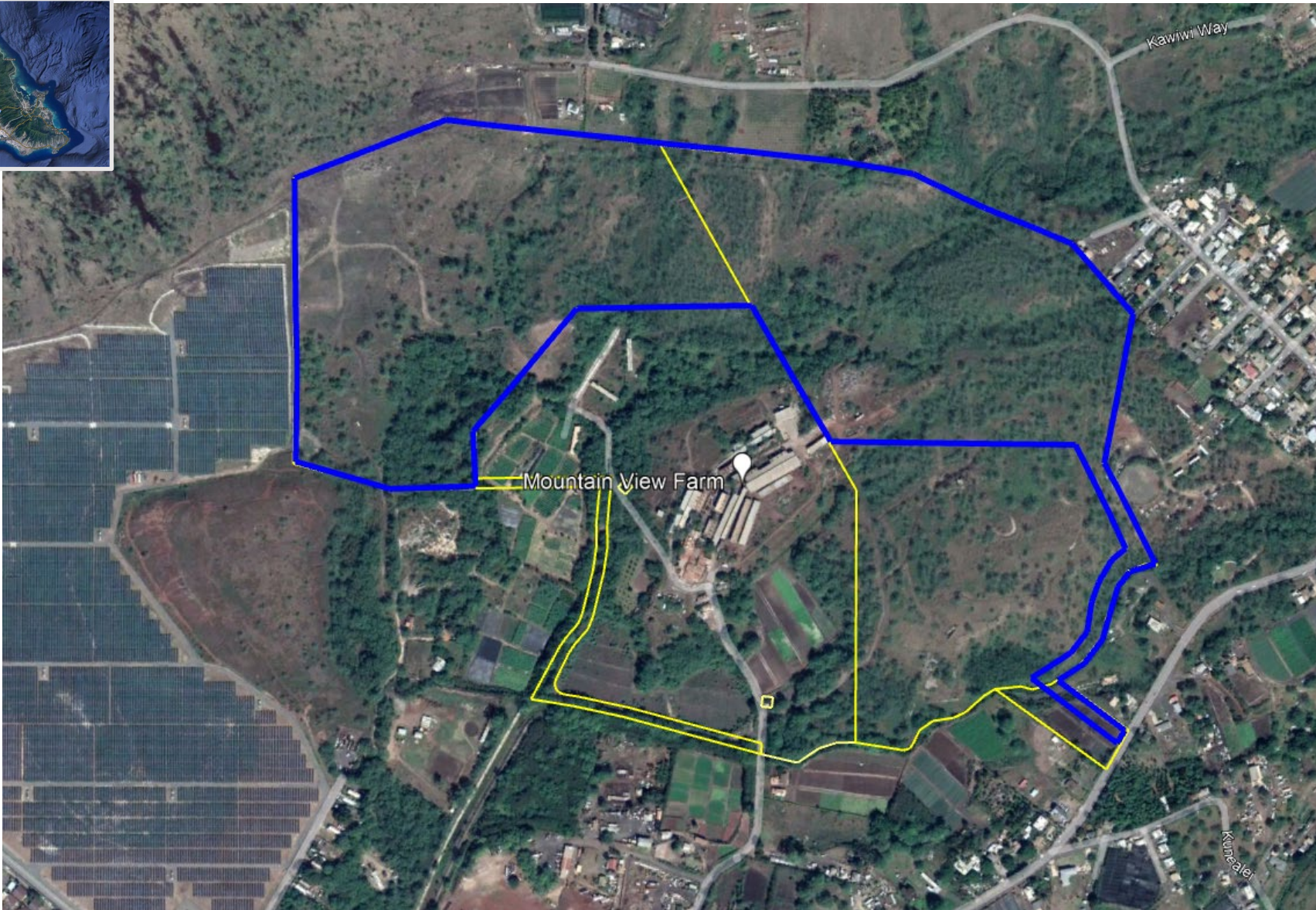
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- Visual Impacts
- Dust
- Heat
- Proximity
- Job Opportunities for Waianae Residents
- Educational Opportunities for Area Students

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# Updated Project Design

# Original Project Area

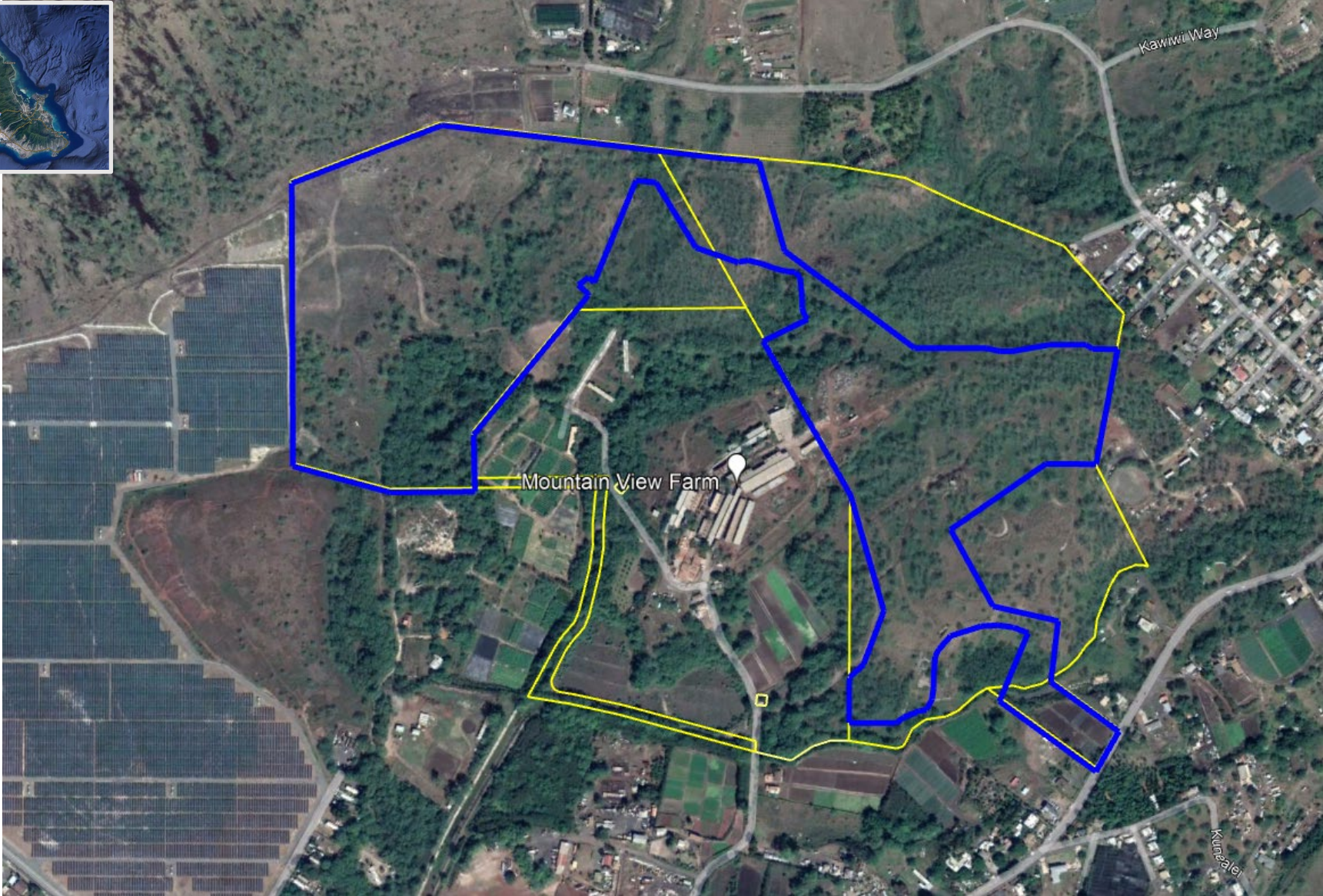


## Legend

- Property Boundary
- Project area (~105 acres)



# Updated Project Area



## Legend

- Property Boundary
- Project area (~93.7 acres)



# Addressing Community Feedback

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## Visual Impacts

- Project Area reduced to ~93.7 acres from ~105 acres
- Relocated battery storage containers to lower elevations
- Landscaping with native plant species

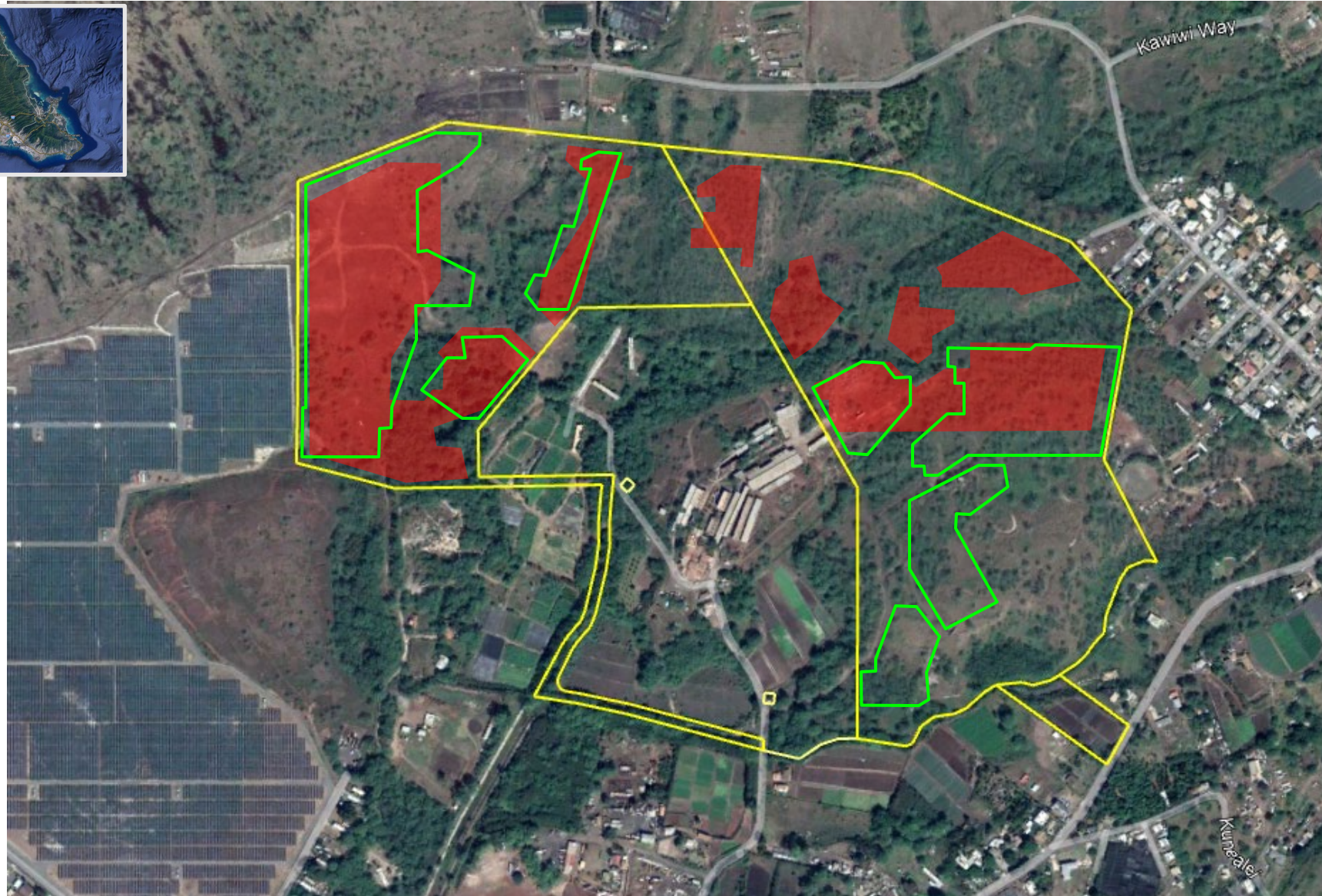
## Proximity

- Shifted away from adjacent residences – Average distance to nearest homes approximately 695'
- Doubled min. distance from homes - 100' to 200'

## Dust

- 55% decrease in site grading/soil disturbance
- 150,800 Cubic Yards of grading/fill avoided

# Panel Layout Comparison

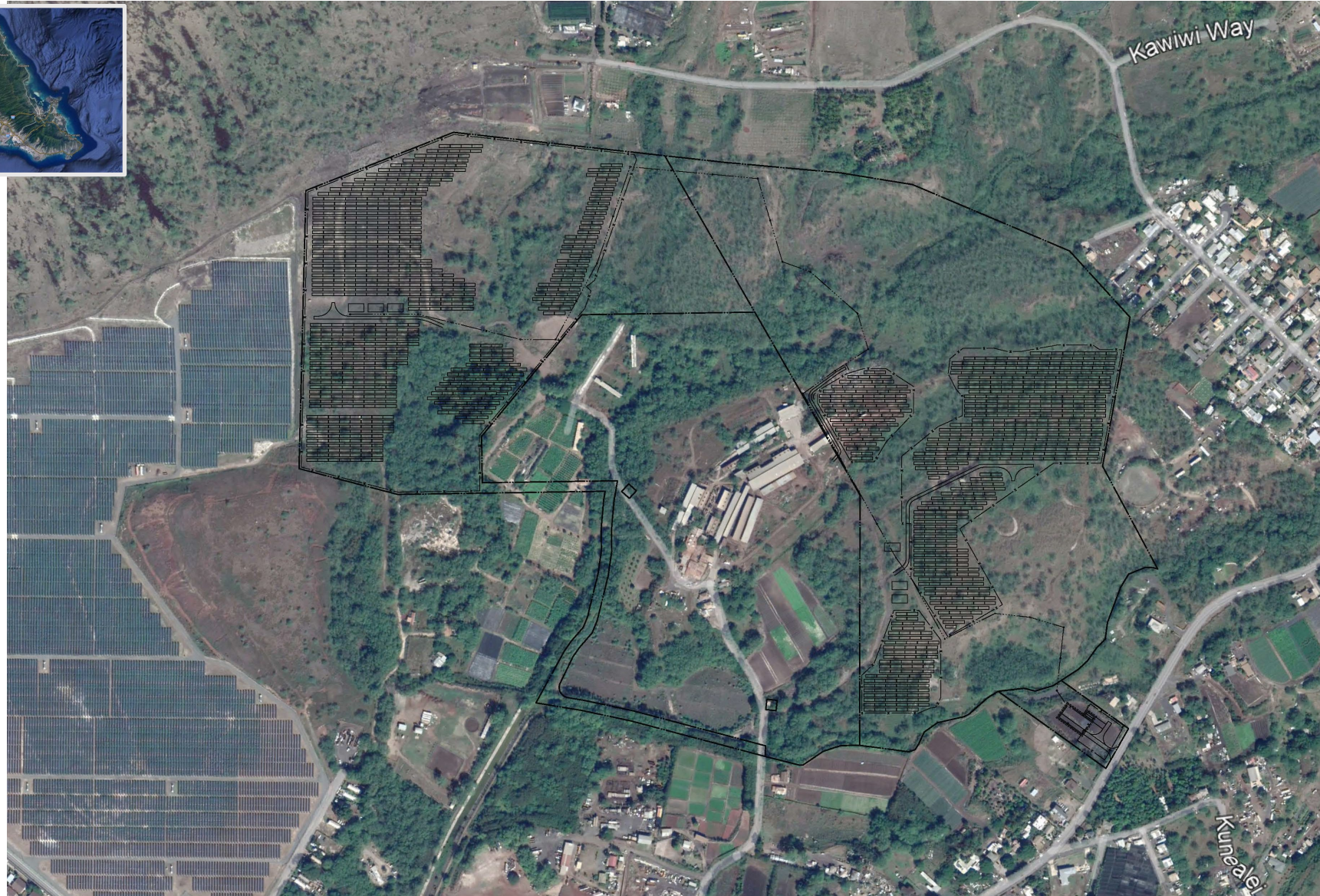


## Legend

- Property Boundary
- Solar Panel Areas (Current)
- Solar Panel Areas (Original)



# Updated Conceptual Site Plan





# Landscaping – Native Species

- Drought-tolerant native plant palette
- Limited-to-no water resources
- Balances safety, water, and effectiveness as visual buffer



Kou  
(*Cordia subcordata*)



Lonomea  
(*Sapindus oahensis*)



Kolomana  
(*Senna gaudichaudii*)



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# Community Benefits

# Community Benefits

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## \$30,000 for Waianae household energy efficiency

- **Waianae households** eligible to receive free or low-cost energy-efficient appliances
- Through Hawai'i Energy and Makaha Learning Center



Source: Hawaii Energy

# Community Benefits

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## **\$10,000 in STEM Scholarships for College Students from Waianae**

- Through Hawai'i Community Foundation
- \$30,000 Statewide



Source: UH Manoa.edu

# Community Benefits

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## **\$50,000** Technology Package for area students

- Equivalent to ~200 Chromebooks



Source: StarAdvertiser.com



# Community Benefits



## Sustainability Education Programs for Waianae schools

- Partnership with area schools
- Including: mentorship, hands-on-project-based learning, site-tours (virtual and/or in-person), career guidance and more



Source: civilbeat.org



Source: facebook.com

# Community Benefits

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## Partnerships with construction trade unions

- Electricians
- Carpenters
- Operating Engineers
- Training and apprenticeship programs available for Waianae residents



Source: [hetf1186.org](http://hetf1186.org)



Source: [digitaleditions.carpenters.org/](http://digitaleditions.carpenters.org/)

# Community Benefits

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## Over **\$1,000,000** Community Benefits Package Value

- Project redesign
- Technology package
- STEM Scholarships for Waianae Students
- Waianae household energy efficiency
- Sustainability programs for Waianae schools
- Construction trade unions partnerships



Source: facebook.com

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# Community Sentiments

# Waianae and Leeward Public Polling

## Mountain View Support

### Waianae Respondents:

**61.0% SUPPORT**

- 19.2% NEUTRAL
- 18.4% OPPOSE
- 1.4% DK/REFUSE

### All Leeward Respondents:

**58.6% SUPPORT**

- 17.9% NEUTRAL
- 19.3% OPPOSE
- 4.1% DK/REFUSE

*“A solar project called Mountain View solar is being proposed near Wai‘anae Valley Road on roughly 100 acres about one mile from Farrington Highway.*

*It will supply power to the Hawaiian Electric grid and enable the future closure of fossil fuel power plants on O‘ahu.*

*The project will also support farm operations on the land where the project is located. The project will create more than 150 jobs, reduce greenhouse gas emissions, provide clean energy for the equivalent of 5,000 homes and add \$45 million to the local economy.”*



# Waianae and Leeward Public Polling

## Top Three Reasons for Support

	<u>Waianae</u>	<u>All Leeward</u>
1. Job Creation	38.9%	26.2%
2. Reduction in Electricity Cost	21.4%	22.8%
3. Good for Environment/Climate	16.6%	19.4%

# Visual Simulation

## Existing Condition Pokai Bay



### Existing Conditions





# Visual Simulation

## Original Layout Pokai Bay



### Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Revised Layout Pokai Bay



### Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

Existing Condition  
Ala Hema Street



Existing Conditions





# Visual Simulation

Original Layout  
Ala Hema Street

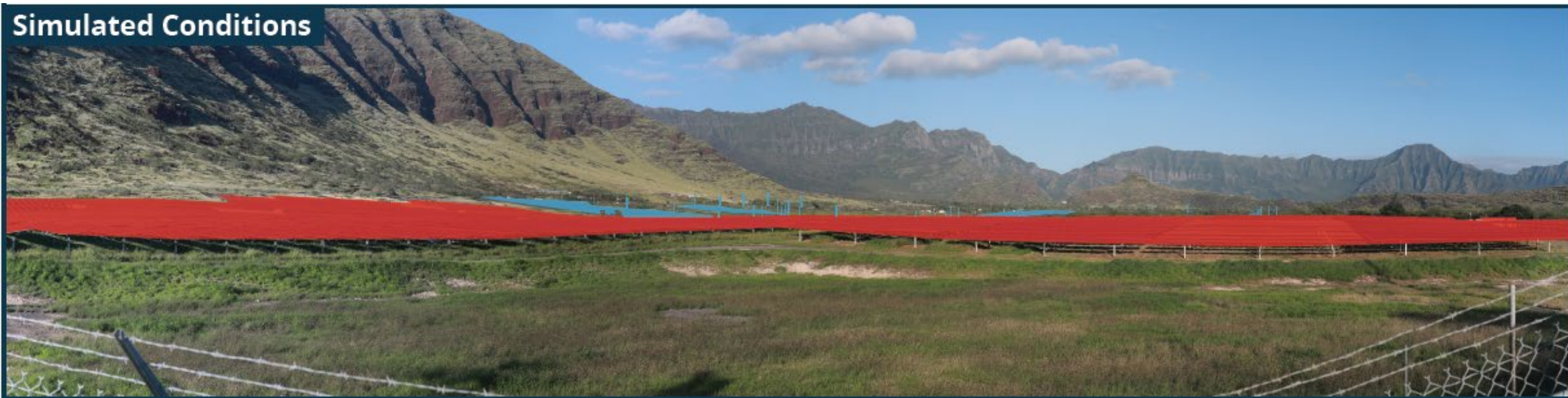


- Existing Eurur Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Revised Layout Ala Hema Street



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Existing Condition Waianae Valley Road



### Existing Conditions





# Visual Simulation

## Original Layout Waianae Valley Road



### Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Revised Layout Waianae Valley Road



Without Proposed Landscaping



# Visual Simulation

## Revised Layout Waianae Valley Road

(transparency for illustrative purposes)



### Simulated Conditions





# Visual Simulation

## Existing Condition Kamaile Academy PCS



### Existing Conditions





# Visual Simulation

Original Layout

Kamaile Academy PCS



## Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Revised Layout Kamaile Academy PCS

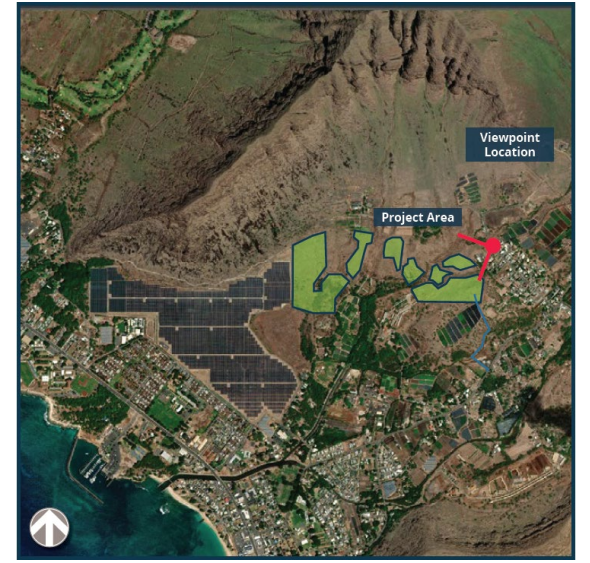


- Existing Eurys Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Existing Condition Piliuka Place



### Existing Conditions





# Visual Simulation

## Original Layout Piliuka Place



### Simulated Conditions



- Existing Eurys Solar Project
- Proposed Mountain View Solar Project

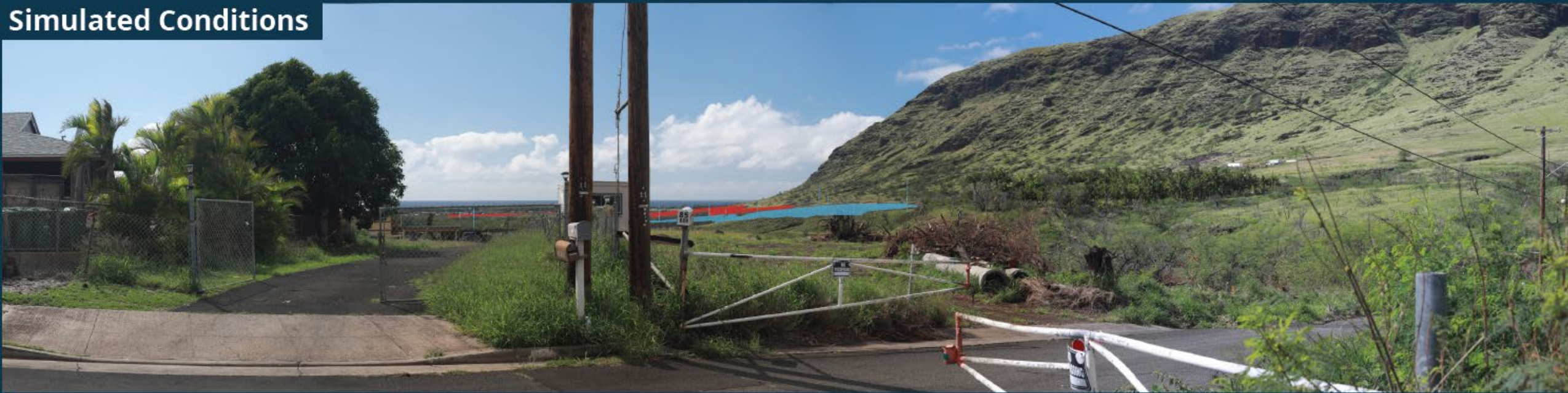


# Visual Simulation

## Revised Layout Piliuka Place



### Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Existing Condition Kaupuni Neighborhood Park



### Existing Conditions





# Visual Simulation

## Original Layout Kaupuni Neighborhood Park



### Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project



# Visual Simulation

## Revised Layout Kaupuni Neighborhood Park



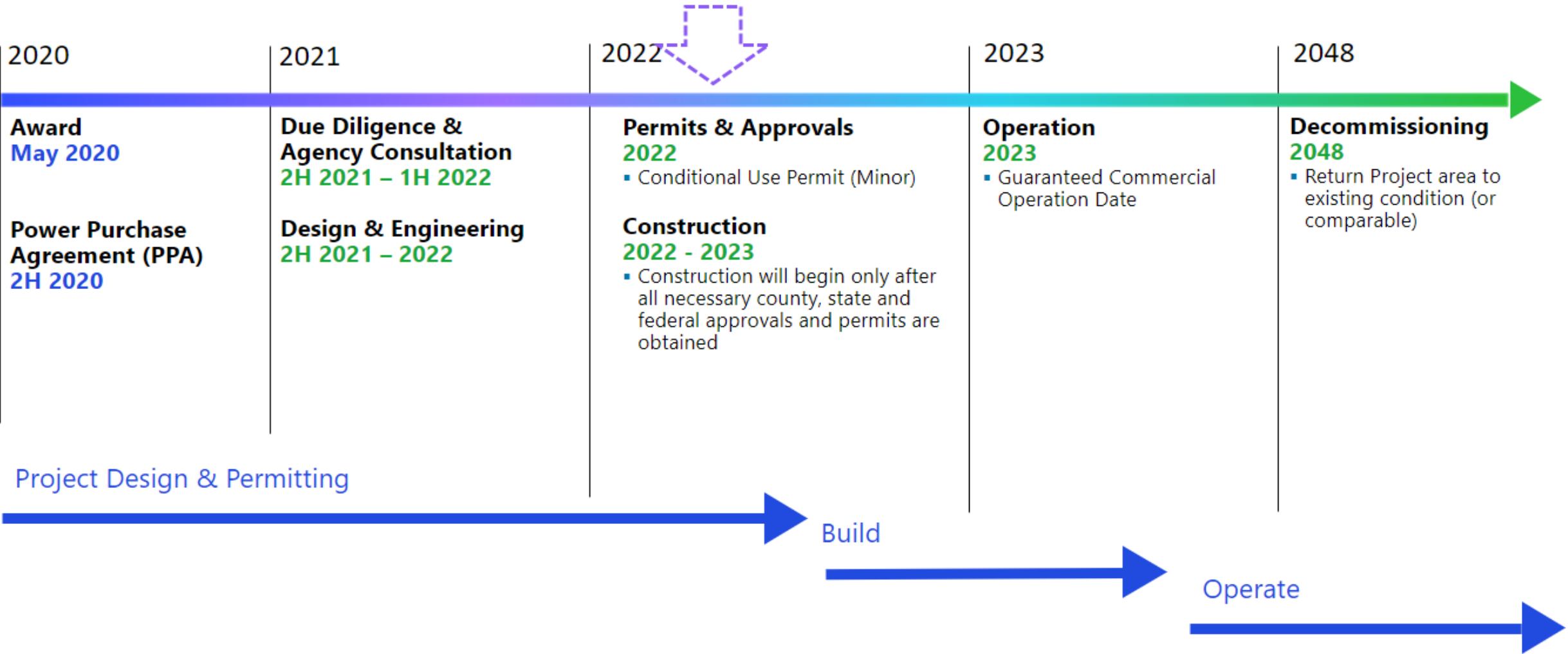
### Simulated Conditions



- Existing Eurus Solar Project
- Proposed Mountain View Solar Project

# Project Timeline

*Community consultation continues throughout the lifecycle of the Project*





# Project Specifications

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- 7 MWac PV
- 35 MWh battery energy storage (BESS)
- Feeds into HECO utility grid
- ~93.7 acres, reduced from ~105 acres
- ~25-year Power Purchase Agreement (PPA); temporary use
- Requires Commercial Operation in 2023
- Decommissioning – restore land to existing condition (or comparable) at end of lifespan

# Conclusion

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- **200 jobs** generated
- **\$45M** in economic output
- Over **\$1,000,000** Community Benefits Package Value
  - Project redesign
  - Technology package
  - STEM Scholarships for Waianae Students
  - Waianae household energy efficiency
  - Sustainability programs for Waianae schools
  - Construction trade unions partnerships
- **5,000 homes powered**
- **Closing of fossil fuel plants**
- **Preserves farming**



Mountain View Solar + Storage Project



# Mahalo

Provide your comments or get the latest project information.

Email: [AESMountainViewSolar@aes.com](mailto:AESMountainViewSolar@aes.com)

Web: [www. AESMountainViewSolar.com](http://www.AESMountainViewSolar.com)