STATE OF HAWAII
HAWAII COMMUNITY DEVELOPMENT AUTHORITY
Kalaeloa Community Development District
Honolulu, Hawaii, 96813

October 4, 2017

Chairperson and Members
Hawaii Community Development Authority
State of Hawaii
Honolulu, Hawaii

HCDA Board Members:

SUBJECT: Shall the Authority Approve a Finding of No Significant Impact for the Final Environmental Assessment for the Proposed Aloha Solar Energy Fund II Project in the Kalaeloa Community Development District, Tax Map Key Parcel: 9-1-013:070 and Portion of 30-foot-wide State of Hawaii, Department of Transportation Highway along Coral Sea Road, in Accordance with Hawaii Revised Statutes, Chapter 343?

SUMMARY:

In accordance with Hawaii Revised Statutes (HRS) Chapter 343, the Authority is being asked to approve a Finding of No Significant Impact for the Final Environmental Assessment (EA) for the proposed construction of a 5 MW photovoltaic utility installation on Tax Map Key (TMK): 9-1-013:070 and an approximate 1.78-mile long 12 kV interim electrical distribution line located on a 30-foot-wide portion of right-of-way along the eastern edge of Coral Sea Road that border TMKs: 9-1-013:039, 040, 043, 044, 072, 099, and 100. The proposed project is called Aloha Solar Energy Fund II – Kalaeloa (ASEF II) and the applicant is Aloha Solar Energy Fund II LLC.

AUTHORITIES:

Applicable policies include: HRS § 206E-194 and Hawaii Administrative Rules (HAR) §11-200-4(b).

BACKGROUND:

TMK: 9-1-013:070 is owned by the HCDA and the 30-foot-wide portion of right-of-way along the eastern edge of Coral Sea Road that borders TMKs: 9-1-013:039, 040, 043, 044, 072, 099, and 100 is owned by the State of Hawaii Department of Transportation, Highways Division. The current zoning of TMK: 9-1-013:070 is Transect 2, Rural/Open Space Zone. A location map is provided as Exhibit A.

On March 2, 2017, the Authority authorized the Executive Director to enter into lease negotiations with Aloha Solar Energy Fund II LLC to develop a 5 MW photovoltaic utility installation on TMK: 9-1-013:070.

HRS § 343-5, establishes nine types of actions that trigger environmental review, including use of State or county lands or funds. Inasmuch as the ASEF II site is located on State land, compliance with HRS Chapter 343 is required. A Draft EA for the ASEF was prepared as an Applicant action with the HCDA as the approving agency as provided in HAR § 11-200-4(b).

ANALYSIS:

A Draft Environmental Assessment and Anticipated Finding of No Significant Impact ("DEA-AFONSI") was prepared by Aloha Solar Energy Fund II LLC’s consultant G70.

On June 26, 2016, the HCDA transmitted a DEA-AFONSI for the proposed Project to the Office of Environmental Quality Control. The DEA-AFONSI was published in the Environmental Notice on July 8, 2017. Agencies and organizations with possible interest in the Project were consulted during a pre-consultation period as well as during the review of the DEA-AFONSI.

Comments were received from the following agencies and organizations. A summary of the comment letters is provided as Exhibit B.

Pre-consultation:
- State of Hawaii
  1. Department of Health, Clean Water Branch
  2. Department of Land and Natural Resources – Division of Forestry and Wildlife
  3. Department of Transportation
- City and County of Honolulu
  1. Department of Planning and Permitting

Draft EA-AFONSI:
- Federal
  1. United States Geological Survey
- State of Hawaii
  4. Department of Health, Clean Water Branch
  5. Department of Health – Environmental Planning Office
6. Department of Land and Natural Resources – Division of Forestry and Wildlife
7. Department of Land and Natural Resources – Engineering Division
8. Department of Land and Natural Resources – Land Division
9. Office of Planning
10. Department of Transportation, Airports Division

- **City and County of Honolulu**
  1. Board of Water Supply
  2. Department of Parks and Recreation
  3. Department of Planning and Permitting
  4. Department of Transportation Services
  5. Honolulu Fire Department

- **Advisories, Citizen Groups, and Individuals:**
  1. Kalaehoa Heritage and Legacy Foundation
  2. Kanehili Cultural Hui
  3. Owen Miyamoto
  4. Naval Air Museum Barbers Point

The thirty (30) day comment period ended on August 7, 2017. All comment letters were responded to and comments adequately addressed.

In considering the significance of potential environmental effects, the approving agency shall consider the sum of effects on the quality of the environment, and shall evaluate the overall and cumulative effects of the proposed action, as required by and based on the criteria provided in HAR §11-200-12. Table 1 below summarizes the overall and cumulative effects of the ASEF II project.

**Table 1: Summary of overall and cumulative effects of ASEF II project**

<table>
<thead>
<tr>
<th>Section</th>
<th>Potential Impact</th>
<th>Proposed Mitigation</th>
<th>Significance after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topography</td>
<td>Soil erosion, fugitive dust</td>
<td>Implement BMPs</td>
<td>NSI</td>
</tr>
<tr>
<td>Soils and Geologic</td>
<td>NI</td>
<td>-</td>
<td>NI</td>
</tr>
<tr>
<td>Climate</td>
<td>NI</td>
<td>-</td>
<td>NI</td>
</tr>
<tr>
<td>Natural Hazards</td>
<td>Flooding, tsunami, seismic</td>
<td>Conform to building codes</td>
<td>NSI</td>
</tr>
<tr>
<td>Flora and Fauna</td>
<td>Protected seabirds and bats</td>
<td>Lighting, construction protection/mitigation</td>
<td>NSI</td>
</tr>
<tr>
<td>Air Quality</td>
<td>Fugitive dust from construction</td>
<td>Dust Control Plan</td>
<td>NSI</td>
</tr>
<tr>
<td>Noise</td>
<td>Construction noise</td>
<td>Limit to daytime hours</td>
<td>NSI</td>
</tr>
<tr>
<td>Utilities and</td>
<td>Construction drainage</td>
<td>Construction BMPs, NPDES permit</td>
<td>NSI</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>runoff, waste, storm water</td>
<td>-</td>
<td>NSI</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>NI</td>
<td>-</td>
<td>NI</td>
</tr>
<tr>
<td>Electrical and Communications</td>
<td>Additional sustainable power generation for City and County</td>
<td>-</td>
<td>NI</td>
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<td>-----------------------------</td>
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<tr>
<td>Traffic and Roadways</td>
<td>Limited during construction</td>
<td>-</td>
<td>NSI</td>
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<tr>
<td>Parking</td>
<td>NI</td>
<td>-</td>
<td>NI</td>
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<tr>
<td>Socio-Economic</td>
<td>Positive economic benefits</td>
<td>-</td>
<td>+PSI</td>
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<tr>
<td>Land Use Constraints</td>
<td>Navigable Airspace</td>
<td>Consult FAA</td>
<td>NSI</td>
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<tr>
<td>Public Facilities and Services</td>
<td>NSI</td>
<td>-</td>
<td>NSI</td>
</tr>
<tr>
<td>Historical and Archaeological Resources</td>
<td>NSI with potential discovery of unidentified sites during subgrade work.</td>
<td>Preservation plan, burial treatment plan, archaeological monitoring plan w/ SHPD coordination</td>
<td>NSI</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>NSI</td>
<td>-</td>
<td>NSI</td>
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<tr>
<td>Visual Resources</td>
<td>NSI</td>
<td>-</td>
<td>NSI</td>
</tr>
</tbody>
</table>

**NI - No Impact**  
**NSI - No Significant Impact**  
**PSI - Potentially Significant Impact**  
**SI - Significant Impact**  
**+PSI - Positive Significant Impact**

The HCDA staff review of the Draft Final EA (DFEA) finds that the potential impacts of the ASEF II has been disclosed and fully examined in the DFEA. This finding is based on the assessments as presented below for criterion (1) through (13) form HAR §11-200-12 and can be found in Chapter 6.3 of the DFEA. A copy of the DFEA is provided as Exhibit C.

(1) **Involve an irrevocable loss or destruction of any natural or cultural resources.**

I. Natural and cultural resources have been documented in studies conducted specifically for the two distinct project areas. As detailed in Section 3.14 and 3.15 of the DFEA, the project does not involve any known loss or destruction of existing natural, cultural, archeological or historical resources (Appendix E, Appendix F, and Appendix G). Twenty-three historic properties comprised of 146 features were newly identified as a result of the project’s initial development efforts. Two previously identified sites were re-located (State Sites 50-80-12-5119 and 5080-12-5120). These sites have been evaluated for significance, as outlined in HAR Chapter 13-275-6.

All sites have been assessed as significant under ‘Criterion d,’ with State Sites 50-80-12-7483, Feature 4, and State Site 50-80-12-7486, Feature 2, also being assessed as Significant under ‘Criterion e’ due to the possible presence of a human burial. All sites documented during this study are recommended for Preservation. These include State Site 50-80-12-7486, Feature 5 and State Site 50-80-12-7491, Feature 1, both coastal trail segments.

Four mitigation measures are recommended to address the potential for construction of the solar farm to adversely affect historic properties. These consist
of (1) a preservation plan for all historic properties recommended for preservation (see Table 1); (2) a burial treatment plan for Site 7483, Feature 4 and for Site 7486, Feature 2 which have been identified as probable burial features; (3) a data recovery plan for Site 7487, Features 2A-2C and for Site 7502, Feature 1; and (4) an archaeological monitoring plan for on-site monitoring during all project-related ground disturbing activities to address any potential subsurface historic properties that may be encountered and to ensure that the sites recommended for preservation are not adversely impacted during construction.

The field inspection for the distribution line work area found no historic properties within the Coral Sea Road Right of Way. The Department of Land and Natural Resources, State Historic Preservation Division (SHPD) will need to complete the historic preservation review process for the distribution line area of work as guided under HRS 6E-42 to make an anticipated determination of “no effect” to historic properties. We anticipate that SHPD will concur with the recommendation that no further work is required for the distribution line project areas.

Based on the information presented in the Cultural Impact Assessment, archaeological mitigation measures have been developed through consultation with SHPD and appropriate cultural stakeholders as described in Section 3.16. If cultural or archaeological resources are unearthed or ancestral remains are inadvertently discovered, SHPD, the Oahu Island Burial Council representative and participating interests of cultural descendants will be notified. The treatment of these resources will be conducted in strict compliance with the applicable historic preservation and burial laws.

(2) **Curtail the range of beneficial uses of the environment.**
The proposed activities of the ASEF II project will not curtail the range of beneficial uses of the environment. Existing uses conform to existing land use designations or are similar in nature to adjoining land uses. The project area’s State Land Use Designation and County Zoning allow for the proposed use. The ASEF II project is consistent with the Kalaeleoa Community Development District Rules and the current regulating plan for the district, as it is an allowable use in the T2 – Rural/Open Space transect overlay zone the project is located in. The ASEF II project is also of a limited initial (20 year) duration, after which the property is available for other potential uses.

(3) **Conflict with the State’s long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.**
The proposed ASEF II project does not conflict with the State’s long-term environmental policies or goals and guidelines as expressed in HRS Chapter 344,
and any revisions thereof and amendments thereto, court decisions, or executive orders.

(4) **Substantially affects the economic or social welfare of the community or State.** Short-term economic benefits anticipated during construction will include direct, indirect, and induced employment opportunities and multiplier effects but not at a level that would generate significant economic expansion. The long-term economic benefits from the project include promoting new venues for Hawaii in renewable energy production. The ASEF II project will create both short-term and longer-term economic benefits including the provision of jobs during construction and operation. The project is expected to cost approximately $27 million, which will provide positive economic benefits to the State and City and County of Honolulu. No public funds will be used for this project.

(5) **Substantially affects public health.**

The project is consistent with existing land uses and is not expected to affect public health. However, there will be temporary short-term impacts to air quality from possible dust emissions and temporary noise in the immediate vicinity of both project sites resulting from construction equipment. Construction and operation-related impacts of noise, dust, and emissions will be mitigated by compliance with the State Department of Health, Administrative Rules and compliance with applicable county permits for the project. Long-term public health benefits are expected to accrue as a result of the reduction in emissions from fossil fuel plants located on Oahu.

(6) **Involves substantial secondary impacts, such as population changes or effects on public facilities.**

Although the ASEF II project will introduce new uses on vacant lands, it will not result in population changes in Kalaeloa. The project will create a small increase in employment; however, this will have an incidental impact on population. Public facilities near both project sites will not be adversely impacted by the project. Additional uses of public facilities are not anticipated to occur as a result of the project. Existing utilities and infrastructure are not anticipated to be impacted or relocated during project construction.

(7) **Involves a substantial degradation of environmental quality.**

The ASEF II project will not involve a substantial degradation of environmental quality. The project design is a low-impact development with no long-term effect to the land. Federal, State, and County environmental regulations will be met throughout the construction and operation of the project. Any stormwater runoff/drainage will be met through the integration and development of low impact development standards and technology.
(8) *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.*

The project’s development will not have a considerable effect on the environment or involve a commitment for larger actions. Although the project’s contribution to the local area does provide a stable resource of power, the project itself will not generate effects upon the environment that are a precursor for other future actions.

(9) *Substantially affects a rare, threatened or endangered species, or its habitat.*

Although the project site is overwhelmingly dominated by non-native kiawe trees and buffel grass, the potential exists for several listed plant species known from generally similar environments in the general Campbell Industrial Park / ‘Ewa Beach / ‘Ewa Plain area. However, no rare native species were found during both botanical surveys.

As discussed in Section 3.5.2 of the DFEA, the principal potential impact that construction of the project and the operation of the PV facility poses to protected seabirds is the increased threat that birds will be disoriented by lights associated with the project during the seabird nesting season. To minimize the potential that the project’s operation will attract endangered waterbirds, mitigation measures will be incorporated into the security lighting design to discourage listed birds from landing within the facilities. The principal potential impact that construction of the project poses to bats is during clearing and grubbing phases of construction as vegetation is removed. With that said, the tall trees on the site are all kiawe, a species not usually identified as a bat roosting tree. Therefore, any risk from clearing activity on this species is highly unlikely at the project site.

No mammalian species currently protected or proposed for protection under either the federal or State of Hawaii endangered species programs was detected during the course of the survey, nor were any expected. No federally delineated Critical Habitat incorporates any part of the project site or transmission line route.

(10) *Detrimentally affects air or water quality or ambient noise levels.*

General temporary effects associated with construction of the ASEF II project has been identified in Section 3.0 of the DFEA. Mitigation measures which are outlined in the DFEA will be applied during construction activities. No detrimental long-term impacts to air, water, or acoustic quality are anticipated with project operations. The project will not detrimentally affect air or water quality or ambient noise levels.

(11) *Affects or is likely to suffer damage by being located in an environmentally sensitive area such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.*

The project site is located within Zone D (Unclassified) and within the designated normal tsunami zone (See Figure 1-10 of the DFEA). Similar to the adjacent
Kalaeloa Airport, the development footprint is susceptible to the impact of an unknown tsunami risk. However, the facility will be in accordance with the State and County-approved standards relative to coastal inundation and flood design requirements. The facility is mainly remotely monitored and operated system with infrequent manned maintenance activities. Part of the site safety plan for the project will include proper notification for maintenance personnel as to nearest evacuation route and tsunami safe zone. The development of the project site will not affect any known environmentally sensitive areas. The ASEF II design is low-impact development and will have no long-term effect to the land. No significant adverse impacts are anticipated.

(12) Substantially affects scenic vistas and view-planes identified in county or state plans or studies.
The ASEF II project will not affect scenic vistas and view-planes identified in County or State plans or studies. Critical lines of sight for aircraft at John Rodgers Field will not be obstructed. The proposed PV module systems will not exceed 10 feet in height and therefore will not impact mauka and makai views in the project vicinity. Additionally, a natural vegetation buffer will be located along a portion of the property boundaries that will make the project generally less visible from roadways. Utility poles along the distribution line path on Coral Sea Road are estimated to be approximately 40'-0" in height, and will not impact visibility for airport operations or scenic view planes.

(13) Require substantial energy consumption.
While the ASEF II project will consume power during construction, the outcome of the project will result in the generation of 5 MW of electricity that will be fed back into the HECO grid. This clean source of power will contribute to energy security and will reduce greenhouse gas emissions. This will help Hawaii move towards achieving the HCEI goals for renewable energy production.

The DFEA adequately responds to each of the required criteria of significance, and it is reasonable for the HCDA to determine that the proposed construction of a 5 MW photovoltaic utility installation on TMK: 9-1-013:070 and an approximate 1.78-mile long 12 kV interim electrical distribution line located on a 30-foot-wide portion of right-of-way along the eastern edge of Coral Sea Road will not have a significant effect on the environment, warranting a Finding of No Significant Impact.

RECOMMENDATION:

Staff recommends that the Authority approve a Finding of No Significant Impact for the Final Environmental Assessment for the proposed construction of a 5 MW photovoltaic utility installation and an approximate 1.78-mile long 12 kV interim electrical distribution line located on Tax Map Keys: 9-1-013:070 and a 30-foot-wide
portion of right-of-way along the eastern edge of Coral Sea Road that border TMKs: 9-1-013:039, 040, 043, 044, 072, 099, and 100, in accordance with HRS Chapter 343.

Respectfully submitted,

Tesha H. Malama,
Kalaeloa Director of Planning and Development

APPROVED FOR SUBMITTAL:

Jesse K. Souki, Executive Director
Hawaii Community Development Authority

Attachments:

Exhibit A: Location Map
Exhibit B: Summary of Comment Letters and Responses
Exhibit C: Draft Final EA and AFONSI for the Proposed ASEF II
### Exhibit B: Summary of Comment Letters and Responses

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Comments</th>
<th>Response</th>
</tr>
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<tbody>
<tr>
<td><strong>Pre-consultation Comments Received:</strong></td>
<td></td>
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<tr>
<td><strong>STATE</strong></td>
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<tr>
<td>DOH, Clean Water Branch</td>
<td>1) Must meet state water quality criteria</td>
<td>1. We acknowledge that any project must meet state antidegregation policies (HAR, Section 11-54-1.1), designated uses (HAR, Section 11-54-3), and water quality criteria (HAR, Sections 11-54-4 through 11-54-8). All drainage requirements will be mitigated on-site with no anticipation of impacting State waters. 2. The project will file an application and all submittal requirements to obtain an NPDES permit per HAR, Chapter 11-55. This and other permit requirements necessary and prior to construction are listed in the DEA, Section 1.5. 3. This project does not involve work in, over, or under waters of the United States. 4. This project will comply with the State’s Water Quality Standards, including requirements as applicable in HAR, Chapter 11-54 and 11-55. The project is not anticipated to affect either inland or marine waters. Appropriate measures to mitigate drainage and stormwater retention on-site are included in the DEA, Section 3.8.</td>
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<td>2) Applicant may be required to obtain NPDES permit</td>
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<td>3) If project involves work in, over, or under waters of the US, contact the ACE</td>
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<td>4) All discharges related to project construction/operation must comply with State Water Quality Standards</td>
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<tr>
<td>Department of Land and Natural Resources, DOFAW</td>
<td>Past records indicate that endangered species Chamaesyce skottsbergii var skottsbergii (aka chamaesyce skottsbergii var kalaeloana,akoko) have been found in areas near the project site. There is also a species of concern, Capparis sandwichiana, which is known from near this site. Biological surveys should be conducted within the property prior to development. Should threatened or endangered species be detected, we recommend consulting with DOFAW.</td>
<td>We appreciate the resources you have provided relating to endangered species previously found in areas near the proposed project site. Biological surveys have been conducted for the project parcel and distribution line area of work along Coral Sea Road, and can be found in EA Section 3.5 – Flora and Fauna, and the report featured in Appendix C. Botanical surveys focused on locating rare native species if present. However, none were found. There are no known nesting colonies of any protected seabird species on or within close proximity of the project site. None of the avian species detected during the course of these two surveys are listed under either the federal Endangered Species Act of 1973, as amended, or the State of Hawaii’s endangered species statute Hawaii Revised Statutes 195D. No mammalian species currently protected or proposed for protection under either the federal or State of Hawaii’s endangered species programs was detected during the course of this survey, nor were any expected. No federally delineated Critical Habitat incorporates any part of the project site or transmission line route.</td>
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1. The proposed location of the photovoltaic system is adjacent to end of Runway II at Kalaaeloa Airport. We have serious concerns that photovoltaic systems, located in or near the approach path of the aircraft into the Airport, can create a hazardous condition for a pilot due to possible glint and glare reflected from the PV array.

2. Provides a website to assist with a glint and glare analysis.

3. An agreement between the operator of the solar facility and the DOT-Airports Division should be pursued to address any impacts to flight operations that may occur as a result of the solar facility and to ensure that the appropriate mitigation measures are implemented.

4. Due to the close proximity to Kalaaeloa Airport, we recommend the developer file a Federal Aviation Administration Form 7460-1, Notice of Proposed Construction or Alteration, be filed with the FAA according to the Code of Federal Regulations, Title 14, Part 77, Subpart E.

We acknowledge your concerns regarding the PV systems proximity and potential hazards to Kalaaeloa Airport approach paths. POWER Engineers, glint and glare consultant for this project, have completed studies for multiple approach angles for a variety of times during the year to evaluate all potential hazard conditions for approach paths.

Occurrences of glare at Kalaaeloa Airport resulting from proposed solar operations are anticipated to be minimal, and would occur intermittently in morning when the sun is low in the sky. Potential glare within the focus view will occur for less than 15 minutes around the Summer Solstice. Any potential glare reported in the pilot's focus view occurs at a distance greater than one mile from the Project site. Also, PV modules are designed to absorb a majority of the sun's energy, resulting in reflection levels less than that of many other common materials (e.g., metal, glass, water). This glare would be similar in intensity to glare currently experienced by pilots on final approach to Runways 4R, 4L, and 25, which travel directly over the reflecting waters of the Pacific Ocean.

Although occurrences of glare are anticipated to be low, airport officials must be ready to mitigate glare if there are complaints received by pilots. In these cases, the following mitigation measures may be implemented:

- Educate pilots regarding any potential occurrences of glare. Provide times and seasons where glare may be visible to pilots. Include this information on the AIRNAV Website.
- Use solar covers on offending solar panels specific to seasonal glare.

For full glare data and analysis, see Appendix D.

We acknowledge your recommendation regarding Federal Aviation Administration (FAA) notification and coordination. A Form 7450-1 is currently in progress for the project and will be submitted to the FAA for review when complete.

We acknowledge the Department of Planning and Permitting has no comments to offer at this time.

We acknowledge the US Geological Survey Pacific Islands Water Science Center is unable to review this document due to prior commitments and lack of available staff.
| **DOH, Clean Water Branch** | 1) Must meet state water quality criteria  
2) Applicant may be required to obtain NPDES permit  
3) If project involves work in, over, or under waters of the US, contact the ACE  
4) All discharges related to project construction/operation must comply with State Water Quality Standards  
5) All projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. | 1) All drainage requirements will be mitigated on-site with no anticipation of impacting State waters.  
2) The project will file an application and all submittal requirements to obtain an NPDES permit. This and other permit requirements necessary and prior to construction are listed in FEA, Section 1.4  
3) The project does not involve work in, over, or under waters of the US  
4) The project will comply with the State’s Water Quality Standards. Appropriate measures to mitigate drainage and stormwater retention on-site are included in the FEA, Section 1.5  
5) This project will consider BMPs and sustainable design practices where practically possible. The FEA articulates the State’s position on water quality and BMPs in Section 1.5 and 2.5. |
| **DOH, Environmental Planning Office** | Recommended references: Environmental Planning Office, Environmental Health Portal, Clean Water Branch requirements, NPDES permit, Solid Waste Management resources. | We appreciate the resources you have provided relating to HAR 11-200-2:  
The Environmental Planning Office, the Hawai‘i Environmental Health Portal, Clean Water Branch requirements in HAR 11-54-1.1, the National Pollutant Discharge Elimination System permit, HAR Chapter 11-58.1 and Solid Waste Management Control. The project will apply these and other sustainability strategies and principles to the extent required and the extent possible. |
| **DLNR, Division of Forestry and Wildlife** | 1) Waterbirds Interaction with solar panels.  
Recommendation for a wildlife education program to inform site personnel of species that may occur in the vicinity and could potentially be harmed by solar panels.  
2) Endangered Hawaiian short-eared owl or Pueo has potential to occur in the project vicinity. DOFAW recommends twilight preconstruction surveys prior to clearing vegetation. If pueo nests are present, a buffer zone should be established in which no clearing occurs until nesting ceases and notify DOFAW staff.  
3) State and Federally listed Hawaiian hoary bat has the potential to occur in the vicinity of the proposed project. DOFAW recommends avoiding using barbed wire. If any trees are planned for removal during the breeding season, there is a risk of injury or mortality to juvenile bats. To minimize the potential for impacts, woody plants greater than 15 feet tall should not be disturbed, removed, or trimmed during the bat birthing and pup rearing season. Site clearing should be timed to avoid disturbance to breeding hoary bats.  
4) DOFAW requests that ASEF consult with DOFAW and the USFWS to determine if a threatened or endangered species is likely to be impacted by this project. | 1) We acknowledge your recommendation of a wildlife education program to inform site personnel of waterbird species that may occur in the vicinity, as well as informing them to immediately report any mortality or injuries of these species to DOFAW for assistance. We also acknowledge your comment regarding “seabird-friendly lighting” during the seabird nesting season beginning in March through mid-December. The project currently does not plan to utilize any outdoor lighting, however, the project will coordinate with DOFAW for technical assistance in developing “seabird-friendly lighting” if necessary in the future.  
2) We acknowledge your recommendation regarding the Hawaiian short-eared owl, or Pueo, and twilight preconstruction surveys that are recommended prior to clearing vegetation, and the buffer zones to be established in the event Pueo nests are present. According to our biology fauna technical report found in Appendix C of the EA, no Pueo or Pueo nests were observed in the site parcel or distribution line work areas.  
3) We acknowledge your comment regarding the Hawaiian hoary bat, or 'Ope‘ape‘a. Per the technical report found in Appendix C of the EA, 'Ope‘ape‘a typically nest in woody vegetation taller than 15 feet in height. With that said, tall trees on site are all kiauea, a species not usually identified as a roosting tree. Risk to this species from clearing activity on this site is low, and barbed wire is not planned to be utilized on this project. Per your recommendation, any observations of 'Ope‘ape‘a in the project area will be reported to DOFAW.  
4) The project team has sent copies of the EA to the US Fish and Wildlife service and will continue to coordinate with them and DOFAW as the project moves forward. |
<table>
<thead>
<tr>
<th>DLNR, Engineering Division</th>
<th>Per Section 3.4 of the Environmental Assessment, the entire ASEF II project site is within flood Zone D, and is located over 250 feet outside the 100-year flood plain. Because the project area does not include existing flowing water courses, stream flooding is not anticipated.</th>
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<tr>
<th>DLNR, Land Division</th>
<th>We have no comments</th>
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<tr>
<th>Department of Transportation</th>
<th>We acknowledge the Department of Land and Natural Resources, Land Division – O‘ahu District has no comments at this time.</th>
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| Department of Transportation | 1) We acknowledge that the photovoltaic system is directly adjacent to the airport taxiway and Runway 29 at the Kaeloia Airport. We are aware of the Technical Assistance Memorandum (TAM) related to this project, and will keep construction contractors apprised of the duties of the state and county agencies in implementing the recommendations included in the TAM.  
2) The Determination of No Hazard to Air Navigation issued in August 2017 from the FAA determined that the project would not physically or electronically interfere with any public-use airports or FAA navigational facilities. The Determination includes tail equipment that may be used during construction.  
3) Thank you for the correction regarding the responsibility of mitigating any glare that creates hazardous conditions for pilots. We stand corrected that in the event glint or glare from the PV array creates a hazard upon notification by the DOT-AIR or the FAA. |
|---------------------------|---------------------------------------------------------------------|

1) The PV system is directly adjacent to the airport taxiway and Runway 29 at Kalaeloa Airport. All applicants, agencies, and construction contractors need to be aware of the duties of the state and county agencies to implement the Technical Assistance Memorandum related to the project.  
2) We are aware that the developer has received a Determination of No Hazard to Air Navigation from the FAA. This requirement is also applicable to tail equipment, such as cranes, that may be used during construction.  
3) Any glint/glare mitigation measures for the solar farm is the responsibility of the PV system’s owner. If glint or glare from the PV array creates a hazardous condition for pilots, the owner must be prepared to immediately mitigate the hazard upon notification by DOT or FAA.
| Office of Planning | 1) Describes topics and issues under OP Jurisdiction.  
2) SMA requirements  
3) Expand Section 5.1.2 to include all objectives and policies of the Hawaii CZM Program  
4) Expand Section 5.2.1 to include project consistency with HRS Chapter 226 Overall Themes, Goals, Objectives and Policies; Part II - Planning Coordination and Implementation; Part II Priority Guidelines. Should also examine project's consistency with HRS 226-108 on sustainability. |
|---|---|
| DOT-HWY: | 1) The scope and location of the work will not trigger federal action required by the National Environmental Policy Act, as no Federal action, assistance, or licensing will be involved in the project. Consultation with SHPD has confirmed that the Federal Preservation Office of the FAA does not trigger Section 106 of the National Historic Preservation Act.  
2) The solar farm will be an unmanned facility. Traffic associated with maintenance for the project will be comprised of 1-2 vehicle trips per month, as noted in Section 3.1.1 of the Final EA.  
3) Only one utility pole will be located on HCDA property; it is not anticipated that any additional poles will be installed on State facilities. The portion of the parcel that is being preserved is populated with trees that are taller than the proposed utility poles for the project and FAA has issued a Determination of No Hazard to Air Navigation.  
4) The details of construction hours and activities will be coordinated at the time of securing appropriate permits from DOT. Road closures will be coordinated closer to permitting, however the project will avoid movement of construction equipment at peak periods of major thoroughfares within the district.  
5) Permits for construction for all work done in the right-of-way including driveway access within the Coral Sea Road and the Franklin D. Roosevelt Avenue will be submitted to the DOT-HWY, Right of Way Branch’s review.  
6) The types of construction and heavy equipment vehicles that will be used on the site will be determined at the time of the required DOT-HWY permits to allow for oversized/overweight equipment and loads within State highways facilities. |
| CITY | 2) The portion of the perimeter fence that is within the SMA will be submitted for permitting with OP  
3) Section 5.1.2 has been updated to include an analysis on the project's consistency with all objectives and policies of the Hawaii CZM program applicable to the project  
4) Section 5.2.1 has been updated to include an examination on the project's ability to meet Parts I, II, and III of HRS Chapter 226. The Final EA affirmatively states any themes that are not applicable to the project with discussion paragraphs. Section 5.2.1 also examines the project's consistency with HRS 226-108(2) regarding priority guidelines on sustainability. |
| Board of Water Supply | Water service cannot be made to the proposed project. Water service should be provided by a private water system serving this area.  
We acknowledge your comment that water service cannot be made available to the project, and that BWS does not have a water system serving this area. Water service will be provided by a private company serving the area. |
| Department of Planning & Permitting | 1) The project is not subject to ROH, Chapter 21, LUCO. Final EA should analyze the possible impact of sea level rise for new public and private projects in shoreline areas and incorporate, where appropriate, measures to reduce risk and increase resiliency to impacts of sea level rise.

2) A DPP trenching permit is not required. There is no such thing as a driveway connection permit issued by DPP. Construction and post construction storm water quality BMPs shall comply with the prevailing soil erosion and storm water quality standards. Current soil erosion and water quality standards will be superseded with The Rules Relating to Water Quality effective August 16, 2017. The project’s compliance with the City’s storm drainage and water quality standards will be verified at the time that the construction/grading plans are submitted to DPP for review. |

| Department of Parks and Recreation | No comments to offer as the project will have no impact on any program or facility of the Department. |

| Department of Transportation Services | 1. Construction materials and equipment should be transferred to and from the project site during off-peak traffic hours (8:30 am to 3:30 pm) to minimize any possible disruption to traffic on the local streets

2. The area Neighborhood Board, as well as the area residents, businesses, emergency personnel, Oahu Transit Services Inc., etc should be kept apprised of the details of the proposed project and the impacts that the project may have on the adjoining local street area network. |

| 1) Land Use Permits - We acknowledge your comment that the project is not subject to the Revised Ordinances of Honolulu, Chapter 21, Land Use Ordinance. We also acknowledge your request for the Final EA to address the possible impact of sea level rise, and have added language to address this possible impact in Sections 3.3 and 3.4 of the EA. |

2) Civil Engineering Branch - We acknowledge your comments on the following:

- A DPP trenching permit is not required for the project.
- Construction and post-construction storm water quality best management practices (BMPs) shall comply with the prevailing soil erosion and storm water quality standards.
- The notice that current soil erosion and water quality standards will be superseded in its entirety with "The Rules Relating to Water Quality" effective August 16, 2017.
- The project’s compliance with the City’s storm drainage and water quality standards will be verified at the time of DPP’s construction/grading plan review. |

We acknowledge your comments. Construction materials and equipment will be transferred to and from the project site during off-peak traffic hours (8:30am to 3:30pm) when feasible. ASEF II will also notify the area Neighborhood Board and area residents, businesses, and agencies to the extent possible to keep them apprised of the details of the project and impacts the projects may have on the local street area network.
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<tr>
<th>ADVISORIES &amp; CITIZEN GROUPS, INDIVIDUALS</th>
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<tr>
<th>Kalaeloa Heritage and Legacy Foundation</th>
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We hope that the proper care is taken with regard to the existing cultural landscape in alignment with SHPPO recommendations. The Kalaeloa Heritage and Legacy Foundation supports the work of Aloha Solar Energy Fund II project.

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<th>Kanehili Cultural Hui</th>
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1. Hawaii Public Utilities Commission (PUC), no apparent knowledge of this project, no Power Purchase Agreement (PPA) on file.

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<tr>
<th>2. Is the 12-kV proposal a scheme to switch to 46 kV later?</th>
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See EA Section 2.4.5, Power and Telecommunications. The project is proposing a 12-kV line with no plans to increase voltage.

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<tr>
<th>3. Other development purposes</th>
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There are no other development purposes for this parcel. The project purpose is described in full in EA Section 2.1. This solar project is subject to HECO’s FIT program, which has a 20-year term. The HCDA lease and development permit will only permit ASEF II to utilize the property for a photovoltaic system.

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<tr>
<th>4. Concern about destruction and impact to historic and cultural sites</th>
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ASEF II’s design for the site will only utilize about half the acreage parcel in a manner that avoids all twenty-three (23) known archaeological/historic sites comprised of 146 features identified in 2013. The project has been coordinating with the State Historic Preservation Division (SHPD) since that time to address the required components of a burial treatment plan, an archaeological preservation plan, and an archaeological monitoring plan. A subsequent archaeological investigation was recently completed in 2017 for Coral Sea Road right-of-way with no significant finds. All efforts relative to the design of the project and the establishment of an archaeological preserve have been conducted in consultation with cultural and community input, including Mr. Michael Kumukauha Lee.

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<tr>
<th>5. HCDA promises of all underground wiring are being totally violated.</th>
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The provision of the 12-kV line is an interim line that would be a combination above and below ground line to minimize the extent of required ground and utility disturbance. This does not preclude the future use and possibility of permanently placing the entire line below ground.
6. Underground installation of utility facilities along federal-aid highways, see $264-33.5

| Work proposed by this project within the State Department of Transportation (DOT) right-of-way will obtain all required approvals from their Highways Division before construction. HRS 264-33.5 applies to the installation of utility cables and facilities during the design or construction of any new or existing federal-aid highway project. It is our understanding that this is not a requirement applicable to our project. |

7. Previous bulldozing work done without permit.

| It has been acknowledged that prior to the issuance of a right of entry, an unfortunate event occurred with an unauthorized entry and subsequent work conducted within the parcel on April 16, 2012. This resulted with mechanical disturbance within the parcel. An investigation was immediately conducted by the HCDA with all work ceased in the affected parcel. Through consultation with the State Historic Preservation Division and the ‘Ahalu Siwla Hawai‘i o Kapolei, and project proponent, remediation measures were identified as required corrective action. These measures were summarized in a Mitigation Plan submitted by project proponents to HCDA. On August 16, 2012, the HCDA authorized its Executive Director to address damages from these unauthorized activities through the specified measures of the Mitigation Plan which were subsequently approved with SHPD’s concurrence in October 2012. |

| Archaeological field work was conducted from February 20 through April 10, 2013. It should be noted that during the unauthorized entry, a portion of State Site 50-80-12-5119 was bulldozed. This site contains 37 surface features which include three karst pits, 26 rock mounds, two U-shaped structures, one semi-walled structure, three C-shape structures, one L-shaped structure, and one enclosure. The site has been interpreted as a habitation, agriculture, refuse, storage, military complex associated with pre- and early post-Contact through Historic Period. |

| State Site 50-80-12-7484 is a site comprised of two karst pits and one surface midden scatter. Of specific note, Feature 3 was a midden scatter identified within the bulldozed cut. The traditional artifacts identified in that scatter included one basalt micro-adze and several volcanic glass debitage flakes. This feature was mechanically altered and thus is in poor condition. Shovel Probes were conducted to identify any additional features or artifacts. |

| At present, the current project owners are working diligently with SHPD, the O‘ahu Island Burial Council, recognized state cultural descendants, and community/cultural organizations to prepare an interim preservation plan and long-term archaeological preservation plan as well as a burial treatment plan. The current project team is committed to ensure the long-term stewardship of these historic properties. |

8. We believe massive damage will be done because construction crews are given the green light to destroy everything and totally flatten the ground surface, filling in karts water holes with concrete.

| The ASEF II project layout was purposefully designed to avoid all historic sites, all of which will be preserved. The majority of the northern portion of the property has been proposed to be a buffered archaeological preserve. See Figure 2-1 of the EA. |

9. WWII sites not even mentioned by SHPD will be destroyed!

| The military historical sites mentioned in your comment letter are discussed in the project AIS report that has been reviewed by SHPD and included in the EA. These sites and their related features are recommended for preservation. |


| We acknowledge your comment regarding the Hunt Corporation violating the programmatic agreement. We note that Hunt’s Ewa Field PV Farm is unrelated to the ASEF II project. |

11. Concern of historical and cultural integrity forever destroyed which is the intention of the second phase of land development.

| There are no plans for a "second phase" of land development for this parcel. An early alternative for the ASEF II project considered the possibility of two 5 MW systems located on the parcel. That alternative was dismissed in the EA as not feasible due to the discovery of 23 historic sites comprised of 146 features which are recommended for long-term preservation. |

12. Section 106 signed agreement with Navy and community at Ordy Pond.

| This project currently has no federal component and therefore not subject to federal reviews like Section 106 of the National Historic Preservation Act. We note that agreements between the Navy and the community regarding Ordy Pond is unrelated to the ASEF II project. |
| 13. This PV Farm project is within a Tsunami and Hurricane Storm Surge Inundation Flood zone. | Use of Powerlines down Coral Sea Road versus underground lines. Power lines and poles will be designed and constructed to meet required building permit requirements to withstand natural hazards, including wind hazards, and are being reviewed by the Federal Aviation Administration (FAA) for appropriate height clearances. See Section 3.14.1 of the EA for additional information. The distribution line will meet all applicable requirements from agencies within the area of work. |
| 14. The City of Honolulu adopted the underground utility installation policy in the 1960's and HCDA's Kaaawa Master Plan ALSO adopted this as planning policy. However, this project is in VIOLATION! | The underground utility installation policy stated in Chapter 22 of the Revised Ordinances of Honolulu applies to residential subdivisions. The proposed overhead lines along Coral Sea Road is proposed as an interim measure. |
| 15. Land Title is clouded because of Allodial Title. | We acknowledge your comment that land title of the project is clouded because of Allodial Title. Pursuant to the Quitclaim Deed (Land Court Document No. 4113681), title to the subject parcel was transferred to the Hawai‘i Community Development Authority in 2011. |
| 16. State Environmental Policy, Chapter 344 HRS | This EA was prepared in accordance with Chapter 343, HRS and Hawaii Administrative Rules Chapter 11-200. The project supports the state environmental policy’s purpose to “encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawaii”. |
| 17. Unfortunately addressing knowledge of the subsurface karst water system, caves and water channels is widely disregarded to allow large scale land development and waste sites without having to take any cultural or environmental responsibilities. | Drainage for the project is described in Section 2.0. The project will comply with NPDES permit requirements for construction activity. A NPDES permit for discharge of stormwater associated with construction activities will be obtained for the site. Construction, grading and drainage plans for the project will be submitted to the appropriate review agencies. Further, a geotechnical study under an a SHPD-approved monitoring plan will be conducted to verify the geological substrate to support the foundational requirements for the panels. |
| 18. “The area is the location of ancient Hawaiian karst ponds as seen in 1928 and later NASBP air photos. Air photos show this area has perennial surface water features and is historically a wetlands area that attracts migratory and endangered bird birds of many kinds. Surface water features that contain water at all times throughout the year.” | Botanical surveys of the parcel site and the distribution line path line of work were conducted as a part of this report, see EA Section 3.5. Botanical surveys focused on locating rare native species if present. However, none were found by the survey. For those plants that have cultural value and importance, it has been recommended that an appropriate cultural group or nursery be provided access to the site prior to construction to either gather seeds, clipping, or roots for purposes of cultural use or prorogation for future plantings for other Kaaawa ecosystem restoration projects. |
| | There are no known nesting colonies of any protected seabird species on or within proximity of the project site. None of the avian species detected during these two surveys are listed under either the federal Endangered Species Act of 1973, as amended, or the State of Hawai‘i’s endangered species statute Hawai‘i Revised Statutes (HRS) 1950. |
19. The PV farm site is in an ancient area known as Kamehili. Current project proponents recognize the cultural importance of this area of Kahului and are committed to ensure the long-term preservation and burial treatment measures are developed in concert and consultation with key agencies, recognized cultural descendants, and key cultural/community organizations to ensure the area's cultural heritage is protected.

20. "Final Environmental Assessment Disposal and Reuse of Surplus Property at Naval Air Station Barbers Point, O'ahu, Hawai‘i, August 2011, Department of the Navy, Base Realignment and Closure Program Management Office stated regarding former NAS Barbers Point lands: "Open Space/Recreation. This land area would be comprised of mostly passive open space land uses and preserve/cultural park space. These parcells contain a relatively high density of cultural and artifactual sites.” The project use is consistent with HCDA’s Kahului Master Plan, see EA Section 5.2.7. The KMP zoning map shows the project area located in a space designated for Open Space/Recreation, specifically recreation and cultural uses. The project’s protection of historical, archaeological, and cultural resources as described in EA Sections 3.14 and 3.15, along with its lack of tall structures that obscure view planes and open space, complies with the intent of this zoning. Also, the ASEF II project is consistent with allowable uses as prescribed in Hawaii Administrative Rules, Chapter 215, Kahului Community Development District Rules, October 2012, which is the current regulating plan for the district. The ASEF II project is in an area designated as part of a T2-Rural/Open Space transect overlay zone which includes PV energy farms as an allowable use.

21. "CULTURAL LANDSCAPE REPORT SHOULD BE DONE ON THIS SOLAR PV SITE, Executive Order 12898" Per the US Department of the Interior National Park Service document written in 1998, the purpose of Cultural Landscape Reports is to guide management and treatment decisions about a landscape within National Park lands. The ASEF II project is not located within National Park lands. The Executive Order you commented on emphasizes the importance of the National Environmental Policy Act’s (NEPA) public participation process. The ASEF II project does not trigger NEPA review as it is not located on Federal lands, and does not utilize Federal funds. However, the project is complying with all applicable processes required by the Hawai‘i Environmental Policy Act as it pertains to Environmental Assessment reports, including the public comment period for the Draft EA that you are participating in.

22. Definitions under Chapter 200, Environmental Impact Statement Rules HAR 11-200. This EA was prepared in accordance with Chapter 343, HRS and Hawaii Administrative Rules Chapter 11-200. Short- and long-term impacts have been enumerated in the Draft EA and were subject to the legal 30-day review by key agencies, organizations, elected officials, and other parties.

23. "Karst Systems Covered Under US Clean Water Act" This project, as described fully in Section 2.1 of the EA, will develop a photovoltaic system comprised of aboveground raked PV modules, with an overhead transmission line. Drainage for the project is described in Section 2.0. Operations and proper maintenance of the solar farm equipment will ensure that the chemicals contained in the photovoltaic modules are not exposed to the environment. The project will comply with all required permits, including US Clean Water Act, if applicable.

24. Deep karst waterway channels flow underground through the entire Ewa Plain.

A geotechnical study under an a SHPD-approved monitoring plan will be conducted to verify the geological substrate to support the foundational requirements for the panels. The project will also comply with NPDES permit requirements for construction activity. A NPDES permit for discharge of stormwater associated with construction activities will be obtained for the site. Construction, grading and drainage plans for the project will be submitted to appropriate agencies, such as DOT-HD, for review and approval. The City and State DOT will be consulted to ensure compliance with stormwater regulations continues after construction is complete.
<table>
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<tr>
<th>Miyamoto, Owen</th>
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<tr>
<td>Recommend overhead section from the clear zones for runways 4-22 to Franklin D Roosevelt Avenue be placed underground. Power generated by the project will be transmitted to the HECO distribution system by underground and overhead lines. Plans for power on Enterprise Ave by HCDA will be underground. The use of underground utilities is consistent with long range plans for the development of Kalaeloa to comply with City and County planning codes. New construction at Kalaeloa should meet current subdivision standards to facilitate the transfer of infrastructure to the City and County, which has objected to the transfer claiming the infrastructure does not meet their building requirements.</td>
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<tr>
<td>We acknowledge your comment that recommends the overhead section from the clear zones for runways 4-22 to Franklin D. Roosevelt Avenue be placed underground, and that new construction at Kalaeloa should meet current subdivision standards to facilitate the transfer of the infrastructure to the City and County. The project is coordinating with and is under review by the Federal Aviation Administration (FAA) and will meet all guidelines as required by the FAA and by the Hawai'i Community Development Authority for the Kalaeloa Community Development District.</td>
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<th>Naval Air Museum Barbers Point</th>
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<tr>
<td>F-4 Phantom Wreckage from Bureau Number 153380 is still there. The Marines killed on 17 December 1971 right before Xmas deserve to have their crash site and site of their deaths preserved and left untouched by any means.</td>
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<tr>
<td>We acknowledge your comments regarding the F-4 Phantom Wreckage site in the project parcel. Preservation in place has been recommended for this crash site per the approved Archaeological Inventory Survey as part of the project's Chapter 6E-8 Historic Preservation Review by the State Historic Preservation Division (SHPD). This SHPD Acceptance letter, dated February 25, 2014, can be found in Appendix E of the Final EA.</td>
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25. The health of the reef and wetlands directly sustains Oahu's marine life and karst geology.