

## DEVELOPMENT PERMIT REQUEST

### Variance Request Hearing Staff Report KAL 21-004: Kalaeloa Home Lands Solar Project

September 2, 2021

#### I. VARIANCE REQUEST

The development permit application is for constructing a new 29.84-acre photovoltaic solar power generation facility on Tax Map Key (1) 9-1-013: 029 (Project) owned by the Department of Hawaiian Home Lands (DHHL). The Project site is located North of Navy Bio-solids parcel, South of Midway Road, East of Perimeter Road and West of the Kalaeloa Airport crosswind runway 11-29.

The applicant Kalaeloa Home Lands Solar, LLC (Applicant) is requesting variance from the following provisions of the Kalaeloa Community Development Administrative Rules (Rules).

1. HAR §15-215-43(c): *Fences, walls and hedges may be constructed or installed to a height of six feet in any side yard or rear yard and to a height of three feet in any portion of a front yard or side yard that faces a thoroughfare.*

Variance request: Allow a six-foot tall chain-link fence along the Western Perimeter Road and the remaining perimeter for security. The fence will include a visual barrier cloth or similar material as a security measure to obscure views within the solar PV compound. While there is no clear "front yard" the Western Perimeter Road is the only side of the parcel having frontage that is readily accessible to the public.

Since the Western Perimeter Road as it currently exists is not a thoroughfare as envisioned the Rules, there is no "front yard" in the typical sense of a residential area. The subject parcel is more typical of industrial areas. Having a three-foot height fence will not provide an adequate barrier to protect intruders from entering the property and potentially harming themselves, others, or the equipment on the project. Since the Project will be an unmanned facility the increased fence height is necessary to ensuring security. In addition, the increased fence height will not detract from positive visual aspects of the area or alter the character of the T3 zone as the project is near the airports and industrial lots. Although the parcel will be landscaped, the Western Perimeter Road is primarily used for industrial purposes and will not adversely affect the adjacent properties or cause visual blight. The parcel is unavailable for most other uses. Finally, there is minimal deviation as there is no clear front yard for the project.

2. HAR § 15-215-44(1), (4): *All required yards shall be landscaped. Landscaping shall have an automatic irrigation system with rain or moisture sensor, or with a system that eliminates water waste.*

Variance request: Modify the requirement for landscaping and automatic irrigation on the parcel, to include only perimeter landscaping and temporary irrigation. Vegetation of any type is not desirable within a solar PV generation facility. Weed mat or other barriers to vegetation will be placed beneath the solar panels to reduce vegetative growth and maintenance. Perimeter vegetation will be designed to be based on xeriscape plants consistent with the plants recommended for T3 zone in the Kalaeloa Rules. A temporary irrigation system will be installed along the Western Perimeter Road, which is the only accessible side of the property. The temporary irrigation system will be shut off at the appropriate time after the landscaping is established, as determined by the project landscaper.

The project functionality requires minimal vegetation or landscaping near the equipment in order to be effective. Limiting landscaping to xeriscape plants would limit the need for an irrigation system. The Project would maintain xeriscape plants along the accessible perimeter of the property to maintain the character of the transect zone and limit the deviation from the Kalaeloa Rules. There is no adverse impact to the adjacent airport property; conversely, this request is consistent with the adjacent airport property as vegetation is limited in these areas for aircraft operational safety.

3. HAR 15-215-46(c): *For any project in the Kalaeloa CDD, a minimum of twenty per cent of each lot shall be provided as open space. One third of this requirement shall be satisfied at grade, with the remaining two-thirds at any elevation.*

Variance request: Allow for 10% of open space for the Project. The complete lot coverage at full development is limited to 55%, including open space between panels and the vacant areas surrounding transmission equipment and internal roads. Lot coverage also varies with the angle of the panels at various times of the day. In an abundance of caution, the Applicant is seeking a variance as the solar PV equipment will not provide for open space in the traditional sense at full development.

The Project will provide 10% of the lot area as open space. Since the Project is a solar farm, providing open above grade is not an option. Based on the nature of the PV installation, 45% of the lot area will remain open to the sky. Since the Project is PV installation and not occupied by people on a regular basis, open space in the Project tend to get overgrown by vegetation and become a maintenance issue. Since this area of the district is mostly in industrial use, lack of open space will not have negative impact on adjacent parcels.

## **II. KALAELOA COMMUNITY DEVELOPMENT DISTRICT ADMINISTRATIVE RULE REQUIREMENTS**

The Kalaeloa Community Development District Administrative Rules §15-215-81 requires the following findings of facts in considering a variance request.

- (1) Uniqueness. That there are unique physical conditions, including irregularity, narrowness or shallowness of lot size or shape, or exceptional topographical or other physical conditions peculiar to and inherent in the particular lot; and that, as a result of such unique physical conditions, practical difficulties or unusual hardship arise in complying strictly with the standards of the rules;
- (2) Self-created hardship. That the practical difficulties or unusual hardship claimed as the basis for a variance has not been created by the owner or by a predecessor in title;
- (3) Minimal deviation. That the variance, if granted, is the minimum deviation necessary to afford relief; and to this end, the decision-maker may permit a lesser variance than that applied for;
- (4) Character of the transect. That the variance, if granted, will not alter the existing or planned character of the transect in which the lot is located; will not substantially impair the appropriate use or development of adjacent property; and will not be detrimental to the public welfare; and
- (5) No adverse impact. The variance would result in development that is not detrimental to or that would adversely impact adjacent properties.

## **III. PUBLIC TESTIMONIES**

At the time of submitting this report, HCDA staff did not receive any public testimony on this Project.

Attachments:

Appendix A Applicant's Request for Variances