

# ALOHA SOLAR ENERGY FUND II - KALAELOA

TMK (1) 9-1-013:070  
Honouliuli (Kalaeloa), 'Ewa, O'ahu, Hawai'i



## Hawai'i Community Development Authority Variance Permit Application

**Applicant:**



2969 Mapunapuna Place, Suite 220  
Honolulu, HI 96819

**October 2017**

**Prepared by:**



925 Bethel Street, 5th Floor  
Honolulu, HI 96813

# EXHIBIT B



October 30, 2017

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Executive Director Jesse K. Souki  
Hawai'i Community Development Authority (HCDA)  
547 Queen Street  
Honolulu, Hawai'i 96813

**Subject: HCDA Kalaeloa Request for Variance Application  
Aloha Solar Energy Fund II (Kalaeloa, O'ahu, Hawai'i)  
TMK: (1) 9-1-013:070**

Dear Director Souki:

On behalf of the Aloha Solar Energy Fund II, LLC (ASEF II), G70 submits this Request for Variance (Major) Application for the ASEF II Kalaeloa photovoltaic (PV) farm project perimeter fence located on TMK (1) 9-1-013:070 for review and approval. This submittal complies with the requirements of Hawaii Administrative Rules (HAR), Chapter 15-215 ("Kalaeloa Community Development District (KCDD) Rules") for a Request for Variance.

### **I. Background**

The KCDD lands were once under federal authority while in use and operation as part of the Naval Air Station Barbers Point (NASBP), which was designated for closure by the U.S. Department of Defense Base Realignment and Closure Process in 1993. The NASBP was formally decommissioned in 1999, whereupon the former base lands were conveyed to various Federal, State, and County agencies. In 2002, the HCDA assumed the responsibility for implementing the Kalaeloa Community Redevelopment Plan, which expanded the designation of the KCDD to encompass all land within the former NASBP. Currently, the HCDA is overseeing implementation of the Kalaeloa Master Plan as adopted in 2006.

For purposes of this Request for Variance Application, the ASEF II project meets the definition of a "solar farm" under HAR §15-215-8. The ASEF II project proposes to develop a 5-megawatt AC solar farm to be built on a portion of approximately 44.28 acres of land owned by the HCDA in Kalaeloa, O'ahu, Hawai'i, identified as TMK (1) 9-1-013:070.

Power generated by this solar farm would be transferred along an approximate 1.78-mile 12 kilovolt (kV) interim distribution line. The line would be routed within an existing right of way managed by the State Department of Transportation, Highways Division, along the eastern side of Coral Sea Road, eventually connecting to the Hawaiian Electric Company ("HECO") grid. The 12-kV interim distribution line is not a part of this Request for Variance Application.

## **II. Request for Variance**

The ASEF II project will require the construction of a perimeter fence for two main reasons: a) to ensure the public's safety during the operations of the solar farm facility; and b) to ensure the long-term protection of important historic sites that have been determined to be preserved pursuant to state historic preservation laws. In general, the proposed perimeter fence will comply with the architectural standards under HAR §15-215-43(c)(1) inclusive of the fence being either painted or constructed out of a decorative material. It is proposed that the perimeter fence be constructed as a PVC coated or a painted galvanized steel fence. Signage indicating "Danger High Voltage – Keep Out" would be placed on the fence, in accordance to applicable City and County of Honolulu rules and regulations as provided for in its Land Use Ordinance. However, the ASEF II project is filing this Request for Variance Application for the following conditions:

### **1. Increase the allowable height of the perimeter fence from 3 feet to 6 feet tall along the front yard.**

Pursuant to HAR §15-215-43(c), fences are to be constructed to a height of six feet in any side or rear yard and to a height of only three feet in any portion of a front yard. The front yard for the ASEF II project is the portion of the property along Coral Sea Road. This Request for Variance Application seeks to accommodate a 6-foot tall fence around the entire perimeter for the stated purposes of public safety and protection of historic properties.

### **2. Situate the perimeter fence on the property line in the front yard without a setback.**

Under HAR §15-215 Regulating Plan (Figure 1.2), the ASEF II project lies within the Transect 2 (T2) Rural/Open Space Zone. According to HAR §15-215, Development Standards Summary (Figure 1.3), the setback requirements in the T2 zone for a front yard is 5 to 15 feet. This Request for Variance Application seeks to place the fence on the property line without a setback to essentially eliminate the possibility of unwarranted and illegal parking or occupation in frontage area of the parcel along Coral Sea Road by trespassers. As a power generation facility, the potential for electrocution is a legitimate public safety concern without sufficient preventative measures in place to restrict area access. Situating the perimeter fence at the property line would help to appropriately manage the use and occupation of HCDA property.

Additionally, there are at least 3-4 historic site features that are in near proximity to the property line of the parcel. As agreed-to in early discussions with the State Historic Preservation Division (SHPD), all identified historic sites and their features shall have both a permanent and construction related buffer extending from the extent of each of the site. This buffer in total is approximately 20 feet. Extending the fence to the perimeter of the property line will also help to ensure the required permanent and construction buffers for these historic property features can be maintained.

### **3. Exclude the provision for landscaping and irrigation along the front yard.**

The proposed placement of the fence along the property line will also eliminate the need for the project to fulfill the requirements for landscaping under HAR §15-215-44, which states within the T2 Rural/Open Space zone, all required yards shall be landscaped and include an automatic irrigation system. If the fence is placed along the property line, there is no front yard to be landscaped. Accordingly, this Request for Variance Application seeks to formally waive the requirement for landscaping and irrigation along the frontage of Coral Sea Road. However, the project has considered the possibility to maintain some native groundcover within the interior portion of the project area to be developed for the solar farm.

### **III. Justification for Variance**

The purpose of the fence is to ensure the public's safety due to hazardous conditions that will be present during operations. Also, the fence will deter illegal trespassers onto the property and prevent the possible tampering/damage to solar panels, facility equipment, historic properties. Therefore, the requested allowances under this Request for Variance Application will help to provide relief from the strict application of the KCDD rules. This Request for Variance Application is a major variance as the ASEF II project is on a parcel over 40,000 square feet and therefore is subject to the Authority's review and action.

Regarding public safety concerns, the 2014 National Electrical Safety Code, Article 690.31(A) requires that all PV source and output circuits operating at maximum system voltages greater than 30 volts installed in readily accessible locations be guarded. Definitions in Article 100 includes Guarded as "covered, shielded, fenced, enclosed, or otherwise protected by means of suitable covers, casings, barriers, rails, screens, mats, or platforms to remove the likelihood of approach or contact by persons or objects to a point of danger." While no height requirements are specified for fencing in the National Electrical Safety Code, the 6-foot perimeter fence was sized as the minimal recommendation to reduce the likelihood of illegal trespassing that could impede upon safety and security measures for the solar farm's operation.

Regarding the protection of historic resources, an agreement between HCDA, ASEF II, and SHPD includes a provision for a perimeter fence as a remediation measure in the 2012 Mitigation Plan. This was further agreed upon in a meeting held in February 2017 between SHPD, HCDA, and the ASEF II project team as an appropriate long-term mitigation commitment to protect the 23 historic properties identified within the parcel. Consultation with key community and cultural groups have also validated the concern about unlawful entry onto the property by potential trespassers and looters. The provision of a fence would also help to minimize and possibly eliminate this concern.

#### **IV. Findings of Fact**

Per HAR §15-215-81(d), the approval of a variance requires five (5) findings of fact. Accordingly, the following is provided as a response to the findings of fact:

- 1. Uniqueness.** The unique physical conditions of the property as well as its location along a main road does increase the project's visibility and accessibility. The fence placement up to the property line in the front yard will increase the security and safety measures in place to further prevent trespassing in front of and on to the property. The standards set forth by the National Electrical Safety Code make it difficult to comply strictly with the standards of the KCDD rules. Also, in its 2014 and 2017 amendment as to a determination of effect, SHPD concurred with the provision to protect all 23 identified historic properties and their features. A standard perimeter fence height of 3 feet along the front yard would not provide adequate security and protection of these historic sites nor would it properly address concerns of trespassing and human safety. A 6-foot perimeter fence will provide an additional deterrent of protection, safety, and security on-site.
- 2. Self-created hardship.** The practical difficulties claimed as the basis for a variance were not created by the owner or by a predecessor in title. The safety and security of the public from potential shock and electrocution is of utmost importance and requires the fence at its proposed height to enclose the entire project area up to the property line. Further, the historic properties, which require formal preservation measures, are in-situ resources which existed prior to any development plans of the subject lot. Finally, the height and placement of the fence for these purposes have restricted the ability to fulfill the landscaping requirements and therefore negate the need to install an irrigation system.
- 3. Minimal deviation.** The request for variance, if granted, will afford relief of the KCDD standards for the front yard fence height, which will deviate from the standards by a minimal 3 feet, which should be sufficient to deter trespassing and ensure safety of the public within the operational area of the solar farm. There is also concern as to the potential impacts to the historic properties from illegal access and entry. The 6-foot high chain link fence will be consistent with the security fence surrounding the adjacent Kalaeloa Airport as a fair comparable within the immediate vicinity. Further, the adjustment of the front yard is the only condition that will deviate from the standards, which require a 5-15 foot setback. There are no development standards in the T2 Rural/Open Space zone for side or rear yards.
- 4. Character of the transect.** The request for variance, if granted, will not alter the existing or planned character of the transect in which the lot is located. The 6-foot high chain link fence along the property line will not alter the character of the T2 Rural/Open Space zone in which the property is located as there are other comparable conditions already in existence in near vicinity. The proposed 6-foot fence along the front yard will not substantially impair the appropriate use or development of adjacent properties. The purpose of the perimeter

fence is to prevent trespassing and damage to the assets of the proposed solar farm, ensure public safety, and protection of historic properties on site. The 6-foot front yard fence will not be detrimental to public welfare. The absence of added front yard landscaping and an irrigation system will also not alter the existing natural terrain of the immediate area.

- 5. No adverse impact.** The request for variance, if granted, will allow the development of a 6-foot fence which is not detrimental to or will result in an adverse impact to adjacent properties. The adjoining uses around the parcel include the Kalaeloa Airport, the Kalaeloa Heritage Park, undeveloped lands of the Department of Hawaiian Home Lands, and the beach front opposite of Coral Sea Road. These existing conditions and operations would not be affected by the proposed request for variance.

#### **V. Project Plans**

Attached as a part of this application are two sets of fully dimensioned project plans for the fence, including (1) a location map of the project site in relation to the surrounding land uses, (2) a site plan with the proposed fence and the fence's relationship to the surrounding context, and (3) standard details of a typical 6-foot chain link fence per County standards. This plan set satisfies the project plans submittal requirements as specified in the HCDA Variance Filing Procedures for the KCDD.

Pursuant to the Fee Schedule in §15-215-91, HAR, of the KCDD Rules, a check in the amount of \$500.00 is included with this submittal. We understand that additional fees may be imposed for public hearing costs by HCDA once the hearing has been conducted. Those additional fees will be paid at the time of the hearing.

Please contact us if you have any questions or require additional information. Please notify us once this Request for Variance Application has been deemed complete. Mahalo for your consideration.

Sincerely,

Group 70 International Inc. (dba G70)



Jeffrey H. Overton, AICP, LEED AP  
Principal Planner

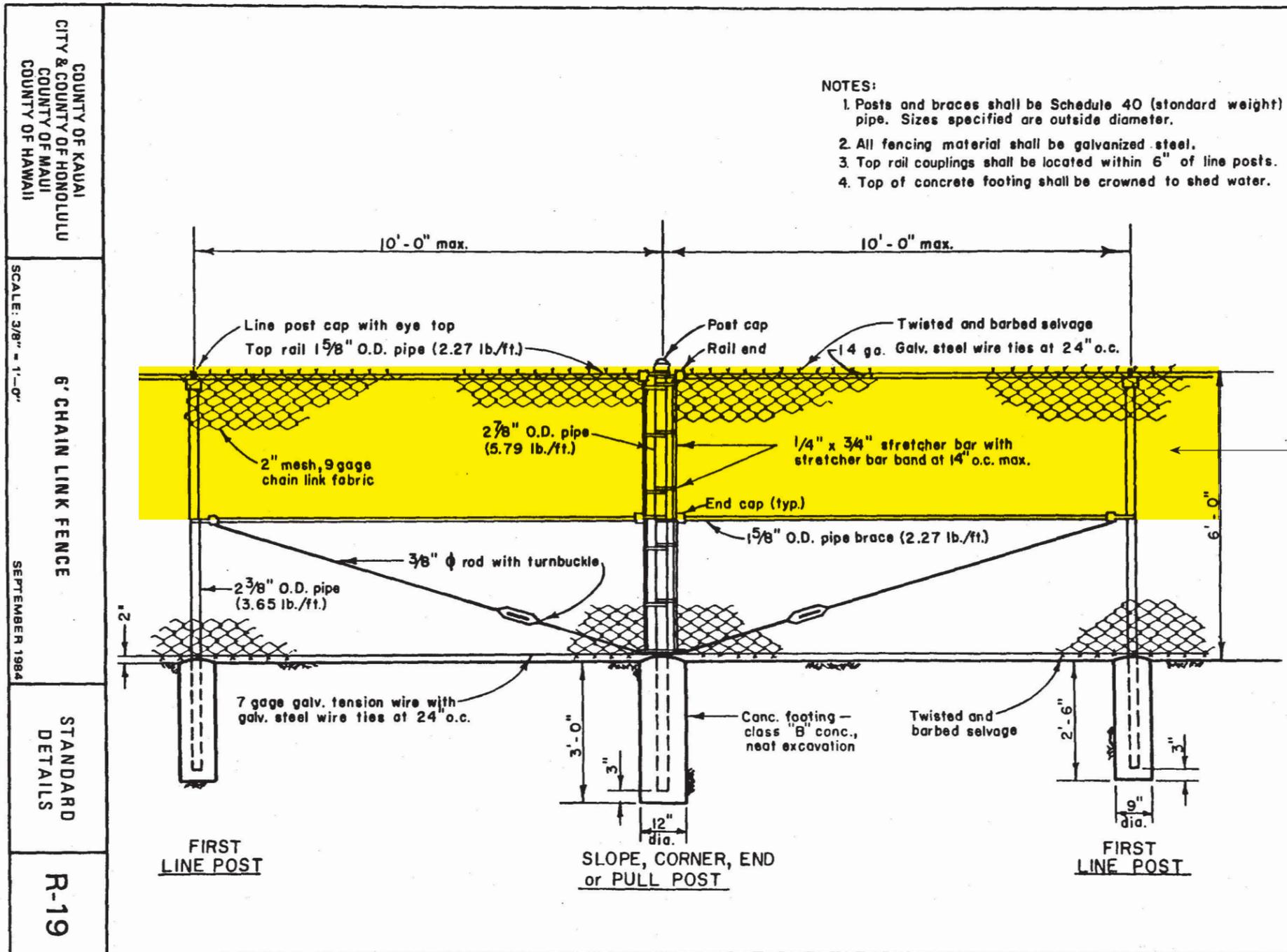


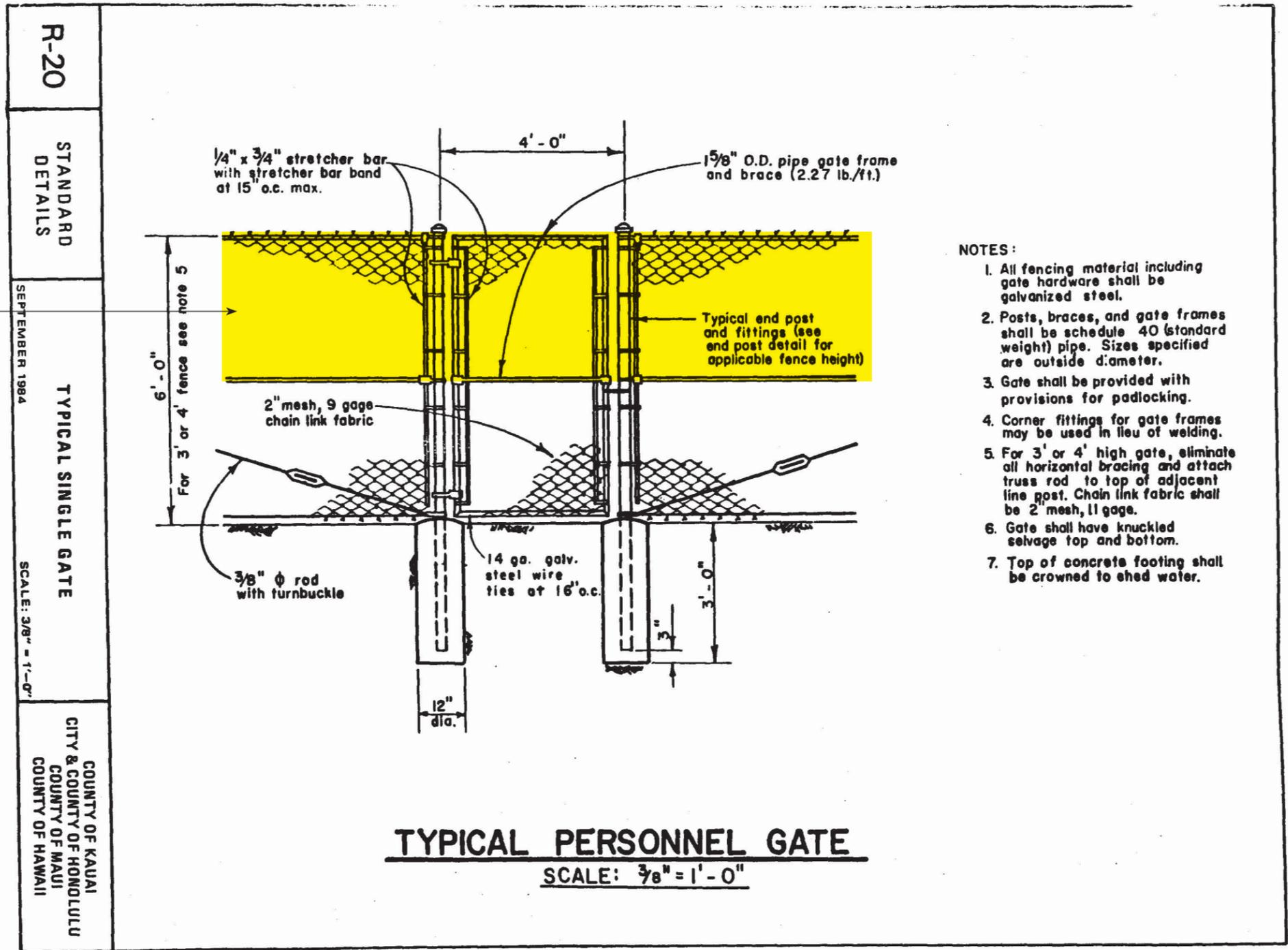
**LEGEND**

Electrical Conduit

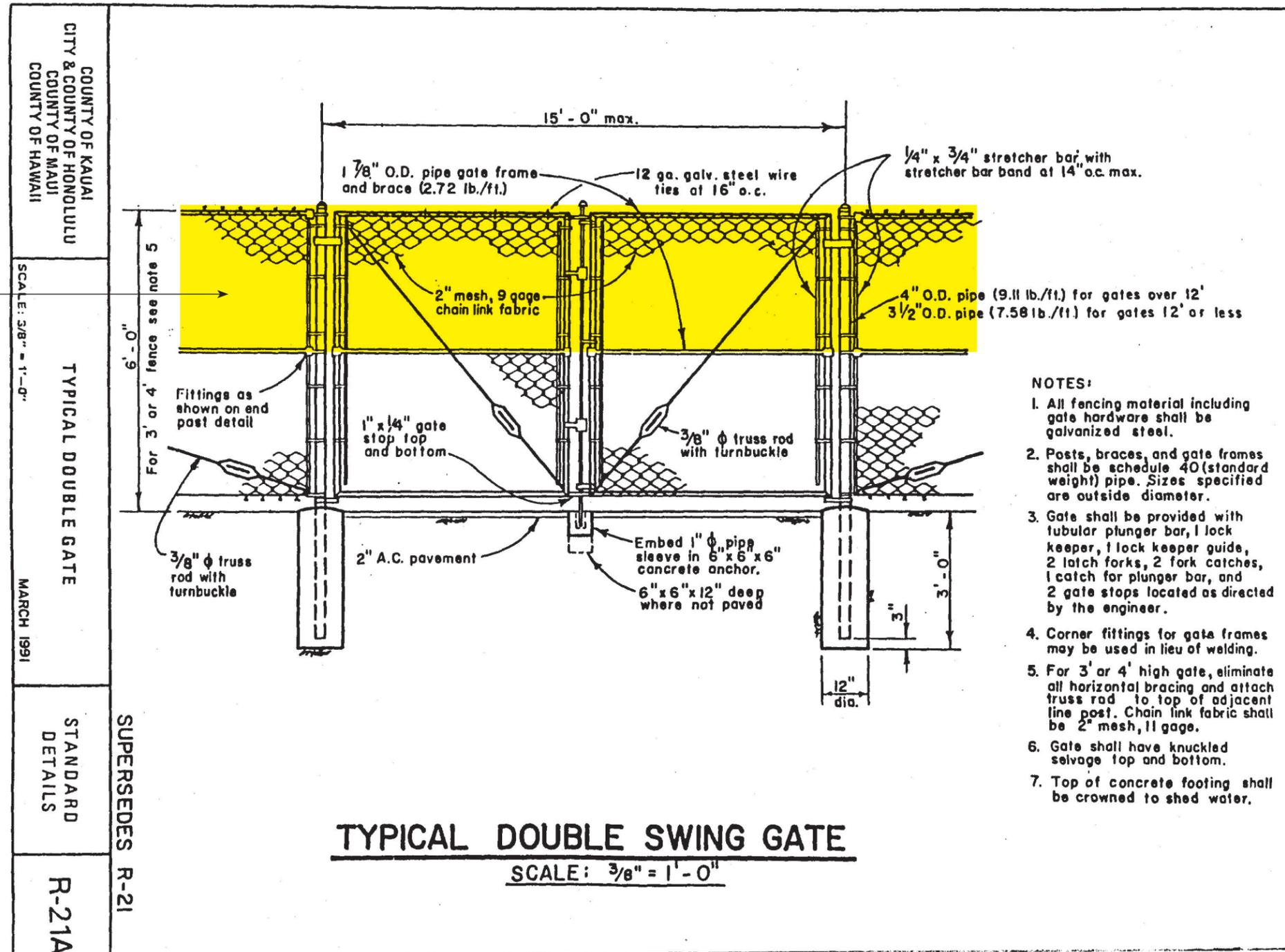
- Proposed Distribution Line (Overhead)
- - - Proposed Distribution Line (Underground)
- Project Area







PORTION OF FENCE ABOVE 3' THAT REQUIRES A VARIANCE APPROVAL



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