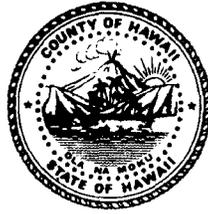


Mitchell D. Roth
Mayor



Steven Ikaika Rodenhurst, P.E.
Director

Lee E. Lord
Managing Director

Stephen M. Pause, P.E.
Deputy Director

County of Hawai'i
DEPARTMENT OF PUBLIC WORKS

Aupuni Center

101 Pauahi Street, Suite 7 · Hilo, Hawai'i 96720-4224
(808) 961-8321 · Fax (808) 961-8630
public_works@hawaiicounty.gov

October 18, 2021

Mary Alice Evans, Director
Office of Planning and Sustainable Development
Environmental Review Program
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Evans,

Subject: **Draft Environmental Assessment, Hulikoa Baseyard Building Addition and Renovations, TMK (3rd) 7-3-058: 041, North Kona District, Island of Hawaii**

The enclosed Draft EA (DEA) assesses the potential effects of construction and operating the proposed improvements to the facilities of the Hulikoa Baseyard Building. The County of Hawaii, Department of Public Works as the proposing and approving agency, anticipates the proposed action is not likely to have a significant effect and therefore is issuing a notice of an Anticipated Finding of No significant impact, subject to the public review provisions of HAR Section 11-200.1-20. Please publish a notice of the DEA and AFONSI in the next edition of *The Environmental Notice*.

We are providing the action summary, significance criteria, and other required information via the Environmental Notice online submittal platform.

Please contact our project consultant, Ron Terry of Geometrician Associates, at (808) 968-7090, if you have any questions.

Sincerely,

Steven Ikaika Rodenhurst, PE
Director, Department of Public Works

Copy – Ron Terry, Geometrician Associates (PDF via email)

From: webmaster@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Tuesday, October 19, 2021 7:57:50 AM

Action Name

Hulikoa Baseyard Building Addition and Renovations

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

North Kona, Hawai'i

Tax Map Key(s) (TMK(s))

(3) 7-3-058: 041

Action type

Agency

Other required permits and approvals

Grading and Grubbing Permits (County DPW) Building Permits and Plan Approval (County DPW and Planning) Chapter 6e, HRS, Determination on Effects to Historic Properties (State Historic Preservation Division) Disability and Communication Access Board (DCAB) plan review and approval Plumbing Permit (County DPW) Electrical Permit (County DPW) Air Conditioning and Ventilation Form 1 Permit (DOH)

Proposing/determining agency

Hawai'i County Department of Public Works

Agency contact name

Noland Eskaran

Agency contact email (for info about the action)

Noland.Eskaran@hawaiicounty.gov

Email address or URL for receiving comments

Noland.Eskaran@hawaiicounty.gov

Agency contact phone

(808) 987-4826

Agency address

101 Pauahi Street, Suite 7
Hilo, HI 96720
United States
[Map It](#)

Was this submittal prepared by a consultant?

Yes

Consultant

GEOMETRICIAN ASSOCIATES, LLC

Consultant contact name

Ron Terry

Consultant contact email

rterry@hawaii.rr.com

Consultant contact phone

(808) 969-7090

Consultant address

10 Hina Street
Hilo, HI 96720
United States
[Map It](#)

Action summary

The Hawai'i County DPW proposes to construct improvements at the 1-acre baseyard within Kohanaiki Business Park involving a new metal building, photovoltaic system, and upgrade, repairs and maintenance to various facilities. This will allow consolidation of several divisions of DPW in West Hawai'i on one centrally-located property. Because of the limited scale of improvements on a fully developed property, along with planned mitigation, no impacts to any biological resources would occur. Erosion and sedimentation impacts will be avoided by adherence to Best Management Practices. Kona International Airport operations will not be affected. No permanent traffic or scenic impacts would occur. No archaeological features or other historic properties are present, and there are no cultural sites or practices to be affected. Impacts are confined to very minor construction-phase noise, air quality and traffic effects that are mitigable.

Reasons supporting determination

Chapter 11-200.1-13, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

(a) In considering the significance of potential environmental effects, agencies shall consider and evaluate the sum of effects of the proposed action on the quality of the environment.

(b) In determining whether an action may have a significant effect on the environment, the agency shall consider every phase of a proposed action, the expected impacts, and the proposed mitigation measures. In most instances, an action shall be determined to have a significant effect on the environment if it may:

(1) Irrevocably commit a natural, cultural, or historic resource;

No valuable natural or cultural resources would be committed or lost by the Proposed Action, which would not involve significant historic sites or native species or habitat. No cultural resource or practices occur on the site or will be affected, and mitigation measures will reduce impacts to adjacent natural and cultural resources to minimal levels.

(2) Curtail the range of beneficial uses of the environment;

The Proposed Action expands and in no way curtails beneficial uses of the environment.

(3) Conflict with the State's environmental policies or long-term environmental goals established by law;

The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The Proposed Action is minor, environmentally beneficial, and fulfills aspects of these policies calling for an improved social environment by enhancing vital public works activities in a sustainable manner without causing environmental harm. It is thus consistent with all elements of the State's long-term environmental policies.

(4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

The Proposed Action will benefit the social and economic welfare of the community and State by making public works baseyard use more efficient, promoting better public services.

(5) Have a substantial adverse effect on public health;

The Proposed Action will not have any adverse effect on public health.

(6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

No secondary effects are expected to result from the Proposed Action, which does not expand facilities in such a way as to induce in-migration or unduly affect roads or other public facilities.

(7) Involve a substantial degradation of environmental quality;

The Proposed Action is minor and environmentally benign and would thus not contribute to environmental degradation, given adherence to Best Management Practices that are being integrated into the project.

(8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;

The Proposed Action is not related to activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.

(9) Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat;

The project site is completely developed for baseyard use and no rare, threatened or endangered plant species are present. Impacts to rare, threatened or endangered species of fauna will not occur, with planned restrictions on lighting and the timing of disturbance to woody vegetation taller than 15 feet, if any is necessary.

(10) Have a substantial adverse effect on air or water quality or ambient noise levels;

Slight increases in noise and effects to air quality will occur during construction, but they will be temporary and mitigated to non-significant levels. Sedimentation will be controlled through project BMPs developed as part of grading and engineering plans.

(11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

Although the Proposed Project is located in an area with volcanic and seismic risk, the entire Island of Hawai'i shares this risk. The Proposed Action is not imprudent to undertake and will employ design and construction standards appropriate to the seismic zone. The property is not located in a flood zone or any other hazardous area, and it would not affect any such area. Due to the elevation of the property at 292

feet above sea level, there is no risk to the Proposed Project from sea level rise. The Proposed Action has adapted to climate change by accounting for the potential for larger storms, through minimizing hard surfaces that generate runoff in heavy rainfall, and by designing with adequate wind load to account for potentially greater storm winds.

(12) Have a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies;

The Proposed Action would not adversely impact any scenic sites or viewplanes.

(13) Require substantial energy consumption or emit substantial greenhouse gases.

Improvements to the buildings and facilities and new construction of the facilities would involve unavoidable small but non-negligible carbon emissions. Continued baseyard activities would entail greenhouse gas emissions that would be essentially the same regardless of where the activities were taking place, likely leading to no net increase. The project is being designed to the requirements of various building and energy conservation codes that establish minimum requirements for building systems and energy-efficient buildings based on prescriptive and performance-related provisions, using new materials and new energy-efficient designs. The Proposed Project would not be expected to contribute significantly to global climate change.

For the reasons above, the Proposed Action would not have any significant effect in the context of Chapter 343, Hawai'i Revised Statutes and section 11-200-12 of the State Administrative Rules.

Attached documents (signed agency letter & EA/EIS)

- [Draft-EA-Hulikoa-Baseyard-Building-Additiona-and-Renovations.pdf](#)
- [AFONSI-letter-Hulikoa.pdf](#)

Action location map

- [Hulikoa-Baseyard-Property.zip](#)

Authorized individual

Ronald N Terry

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

Hulikoa Baseyard Building Addition and Renovations Draft Environmental Assessment

TMK (3rd.) 7-3-058: 041
North Kona District, Hawai‘i Island, State of Hawai‘i

November 2021

Hawai‘i County Department of Public Works
101 Pauahi Street, Suite 7
Hilo HI 96720

DRAFT ENVIRONMENTAL ASSESSMENT

Hulikoa Baseyard Building Addition and Renovations

TMK (3rd.) 7-3-058: 041
North Kona District, Hawai'i Island, State of Hawai'i

**PROPOSING/
APPROVING AGENCY:**

Hawai'i County Department of Public Works
101 Pauahi Street, Suite 7
Hilo Hawai'i 96720

CONSULTANT:

Geometrician Associates LLC
10 Hina Street
Hilo Hawai'i 96720

CLASS OF ACTION:

Use of County Land and County Funds

This document is prepared pursuant to:
The Hawai'i Environmental Protection Act,
Chapter 343, Hawai'i Revised Statutes (HRS), and
Title 11, Chapter 200.1, Hawai'i Department of Health Administrative Rules (HAR).

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TABLE OF CONTENTS

SUMMARY	ii
PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED AND E.A. PROCESS.....	1
1.1 Project Description and Location	1
1.2 Purpose and Need	1
1.3 Environmental Assessment Process.....	2
1.4 Public Involvement and Agency Coordination	2
1.5 Cost and Schedule	7
PART 2: ALTERNATIVES	7
2.1 No Action Alternative.....	7
2.2 Alternative Locations or Strategies for Baseyard Activities.....	7
PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION	7
3.1 Physical Environment	8
3.1.1 Climate, Geology, Soils and Geologic Hazard	8
3.1.2 Flood Hazards	11
3.1.3 Water Quality.....	11
3.1.4 Flora, Fauna, and Ecosystems	13
3.1.5 Air Quality, Noise and Scenic Resources	16
3.1.6 Hazardous Substances, Toxic Waste and Hazardous Conditions	17
3.2 Socioeconomic and Cultural	18
3.2.1 Socioeconomic Characteristics	18
3.2.2 Cultural Resources	18
3.2.3 Archaeology and Historic Sites	21
3.3 Infrastructure	22
3.3.1 Utilities and Public Services	22
3.3.2 Transportation.....	22
3.4 Secondary and Cumulative Impacts.....	24
3.5 Required Permits and Approvals	25
3.6 Consistency with Government Plans and Policies.....	25
3.6.1 Hawai'i State Plan	25
3.6.2 Hawai'i State Land Use Law	25
3.6.3 Hawai'i County Zoning	25
3.6.4 Hawai'i County General Plan and Kona CDP	26
PART 4: DETERMINATION	30
PART 5: FINDINGS AND REASONS.....	30
REFERENCES	33

LIST OF FIGURES

FIGURE 1 Location Map	3
FIGURE 2 Project Site Photos	43
FIGURE 3 Site Plan.....	5
FIGURE 4 Sea Level Rise Map.....	10
FIGURE 5 Flood Hazard Map.....	12

LIST OF APPENDICES

APPENDIX 1a Comments in Response to Early Consultation

SUMMARY OF THE PROPOSED ACTION, ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The Hawai‘i County Department of Public Works (DPW) proposes to construct a variety of improvements at the 1.011-acre Hulikoa Baseyard, located within Kohanaiki Business Park *mauka* of Queen Ka‘ahumanu Highway in North Kona. Major elements include:

- A new pre-engineered, 3,000 square-foot (sf) metal building addition for warehouse and vehicle storage uses.
- A new photovoltaic system.
- Extensive repairs and renovations to an existing 3,200-sf, pre-engineered metal building currently used for vehicle storage and offices.
- Improvements to air conditioning, electrical systems and plumbing utilities.
- New/replacement shielded LED lighting wall packs on the exterior of new and renovated buildings.
- Relocation of existing fire hydrant and waterline.
- Decommissioning of existing wash area oil separator and disconnection from septic system leach pit. Removal of existing concrete wash pad and drain and replacement with asphalt paving.
- Connection of new restroom to existing septic system.
- Installation of geosynthetic reinforced slope stabilization along rear property line

The County of Hawai‘i purchased this property in 2019 because DPW’s West Hawai‘i Traffic Division (Traffic) operations had outgrown their previous split facilities in Kealahou. The previous locations consisted of a County-owned facility that was shared with the Building Division and Automotive Division and an adjacent rented property. These Kealahou facilities presented challenges with response times to DPW’s primary service areas further north. Also, the steep grade of the rented property had inherent challenges with delivery services and restricted storage space. DPW has long had a goal to provide improvements that would facilitate consolidation and relocation of Traffic operations to one facility in Kailua-Kona. Having a baseyard in Kailua provides the opportunity to be closer to the majority of West Hawai‘i traffic assets, particularly the traffic signals along heavily used Highway 19, Highway 11, and Kuakini Highway, as well as the traffic signs and markings in the Kona and Waikoloa areas. The current property is also in close proximity to the County fueling stations on Hale Makai Place, the County’s street light vendor, and other equipment, service, and supply vendors.

Because of the limited scale of improvements on a fully developed property, along with planned mitigation, no impacts to any biological resources would occur. Erosion and sedimentation impacts will be avoided by adherence to Best Management Practices. Kona International Airport operations will not be affected. No permanent traffic or scenic impacts would occur. No archaeological features or other historic properties are present, and there are no cultural sites or practices to be affected. Impacts are confined to very minor construction-phase noise, air quality and traffic effects that are mitigable.

PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED AND ENVIRONMENTAL ASSESSMENT PROCESS

1.1 Project Description and Location

The Hawai'i County Department of Public Works (DPW) proposes to construct a variety of improvements at its Hulikoa Baseyard in Kona. The baseyard is located within Kohanaiki Business Park near the upper end of Hulikoa Drive, which extends *mauka* from Queen Ka'ahumanu Highway between Hina Lani Street and Kona International Airport and contains a number of industrial facilities (Figures 1-2). The 1.011-acre property is identified by TMK (3) 7-3-058:041 and is owned by the County of Hawai'i. The Proposed Action consists of a variety of new or expanded improvements and is illustrated in the Site Plans in Figure 3. Major elements include:

- A new pre-engineered, 3,000 square-foot (sf) metal building addition for warehouse and vehicle storage uses.
- A new photovoltaic system.
- Extensive repairs and renovations to an existing 3,200-sf, pre-engineered metal building currently used for vehicle storage and offices.
- Improvements to air conditioning, electrical systems and plumbing utilities.
- New/replacement shielded LED lighting wall packs on the exterior of new and renovated buildings.
- Relocation of existing fire hydrant and waterline.
- Decommissioning of existing wash area oil separator and disconnection from septic system leach pit. Removal of existing concrete wash pad and drain and replacement with asphalt paving.
- Connection of new restroom to existing septic system.
- Installation of geosynthetic reinforced slope stabilization along rear property line.

1.2 Purpose and Need

The County of Hawai'i purchased this property in 2019 because DPW's West Hawai'i Traffic Division (Traffic) operations had outgrown their previous split facilities in Kealahou. The previous locations consisted of a County-owned facility that was shared with the Building Division and Automotive Division and an adjacent rented property. These Kealahou facilities presented challenges with response times to DPW's primary service areas further north. Also, the steep grade of the rented property had inherent challenges with delivery services and restricted storage space.

DPW has long had a goal to provide improvements that would facilitate consolidation and relocation of Traffic operations to one facility in Kailua-Kona. Having a baseyard in Kailua provides the opportunity to be closer to the majority of West Hawai'i traffic assets, particularly the traffic signals along heavily used Highway 19, Highway 11, and Kuakini Highway, as well as the traffic signs and markings in the Kona and Waikoloa areas. The current property is also in close proximity to the County fueling stations on Hale Makai Place, the County's street light vendor, and other equipment, service, and supply vendors.

1.3 Environmental Assessment Process

This Environmental Assessment (EA) is being conducted in accordance with Chapter 343 of the Hawai‘i Revised Statutes, and Title 11, Chapter 200.1, of the Hawai‘i Administrative Rules. This law and its implementing regulations are the basis for the environmental impact process in the State of Hawai‘i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the anticipated finding that no significant impacts are expected to occur; Part 5 lists each criterion and presents the findings for each made by the Hawai‘i County Department of Public Works, the proposing and approving agency. If, after considering comments to the Draft EA, the approving agency concludes that no significant impacts would be expected to occur, then the agency will issue a Finding of No Significant Impact (FONSI), and the action will be permitted to proceed to other appropriate approval and permit processes. If the agency concludes that significant impacts are expected to occur as a result of the Proposed Action, then an Environmental Impact Statement (EIS) will be prepared.

1.4 Public Involvement and Agency Coordination

The following agencies, organizations and individuals were consulted by letter during development of the Environmental Assessment.

State:

- Department of Health
- Department of Land and Natural Resources
- Department of Transportation
- Office of Hawaiian Affairs

County:

- County Council
- Department of Environmental Management
- Department of Water Supply
- Finance Department
- Fire Department
- Planning Department
- Police Department

Private:

- Sierra Club
- Neighboring Property Owners/Lesseees: Oka & Oka Hawaii LLC; Morning Glory Trading LLC; RRS Inc.; Kona Business Park Phase II LLC; Santosha Trust

Responses received are contained in Appendix 1a.

Figure 1. Location Map

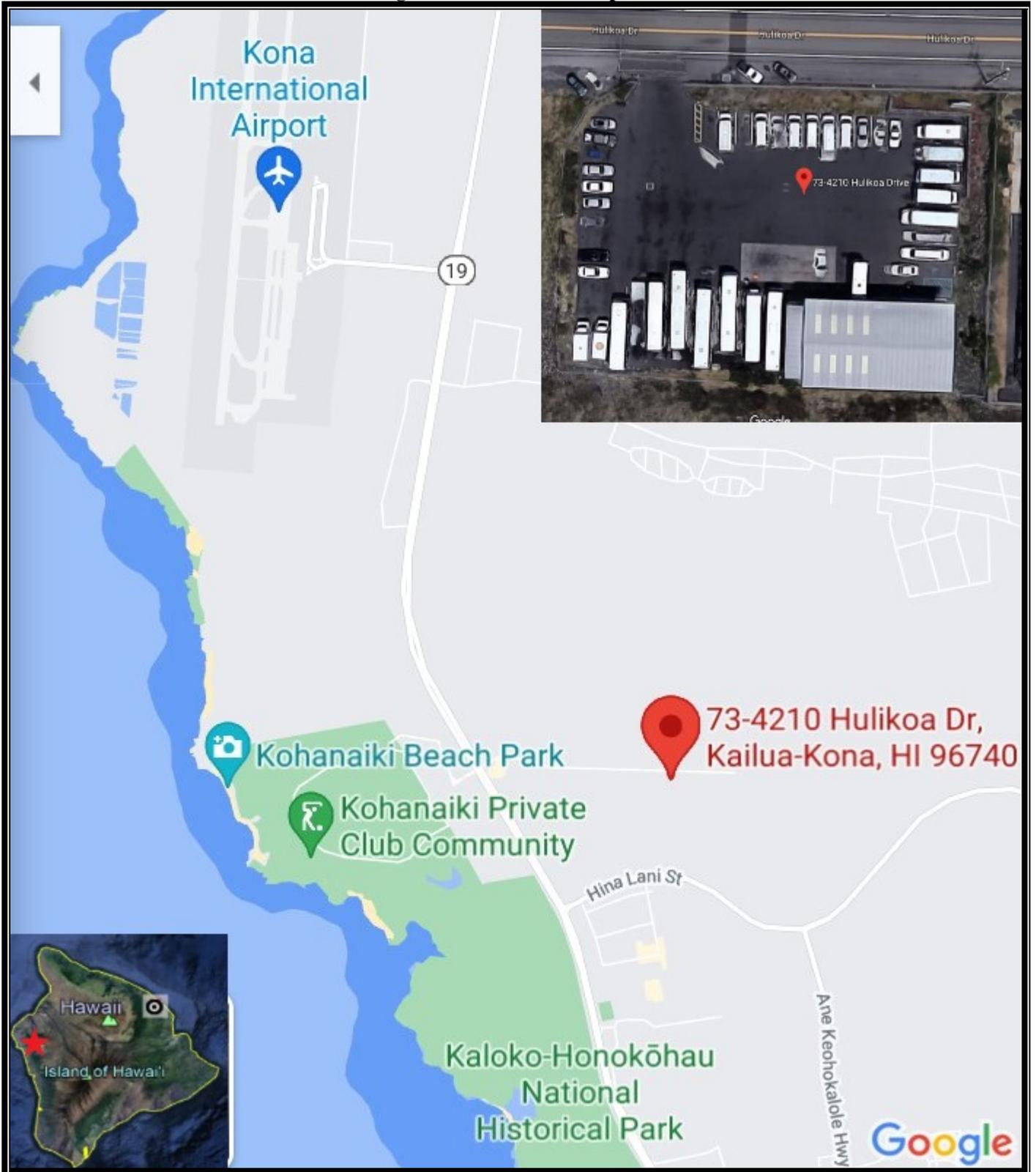


Figure 2. Project Site Photos



a. Baseyard view from Hulikoa Drive ▲ ▼ b. Baseyard view from southwest corner



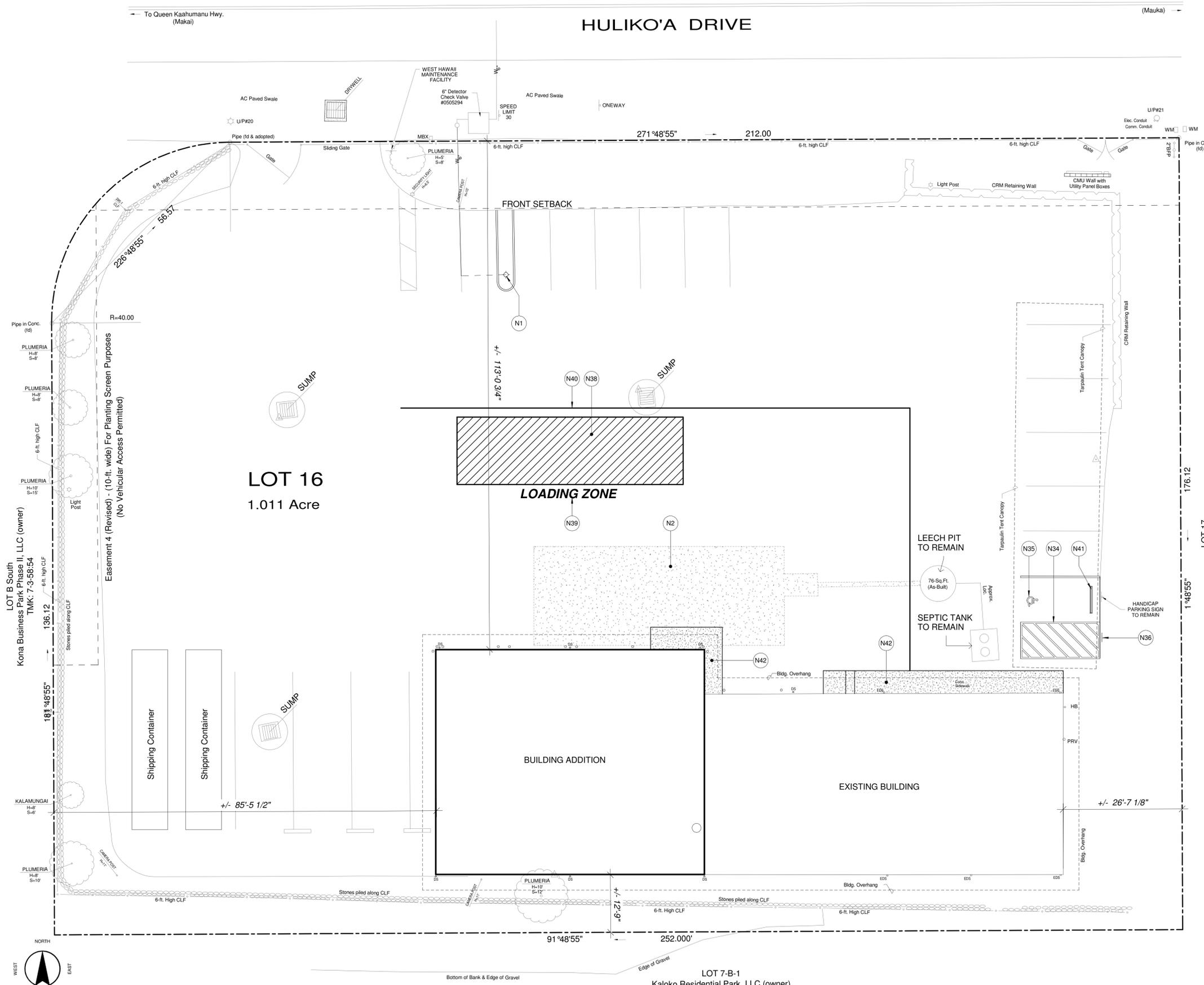
HULIKO'A DRIVE

KEYNOTES/EXIST

KEYNOTES/NEW

- N1 RELOCATE FIRE HYDRANT, PROVIDE NEW WATER LINE AS REQ, SCD
- N2 ADD A.C. PAVEMENT, SCD
- N34 ADD PAINT STRIPING @ ACCESS AISLE, SCD
- N35 ADD PAINT STRIPING, ISA SYMBOL, SCD
- N36 ADD SIGN AT ACCESS AISLE, SCD
- N38 ADD PAINT STRIPING @ LOADING ZONE, SCD
- N39 ADD PAINTED TEXT "LOADING ZONE", SCD
- N40 ADD PAINT STRIPING, SCD
- N41 RELOCATE WHEEL STOP, SCD
- N42 ADD CONC WALK, SCD

TRUE NORTH



LOT 16
1.011 Acre

LOADING ZONE

BUILDING ADDITION

EXISTING BUILDING

LOT B South
Kona Business Park Phase II, LLC (owner)
TMK: 7-3-56:54

LOT 17
R R S, Inc. (owner)
TMK: 7-3-58:42

LOT 7-B-1
Kaloko Residential Park, LLC (owner)
TMK: 7-3-009:025

1 EXISTING / NEW SITE PLAN
3/32" = 1'-0"

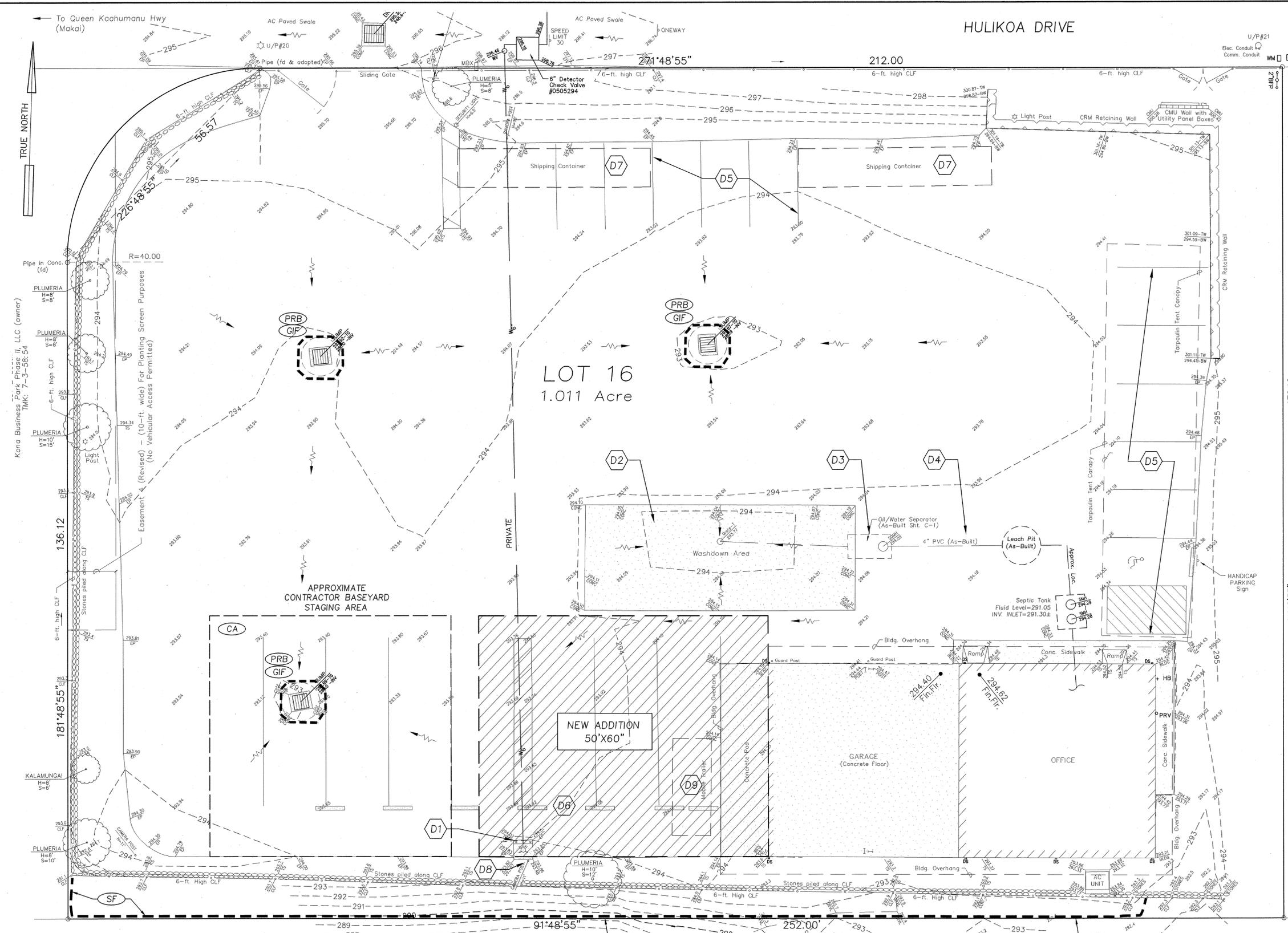
0' 5'-4" 10'-8"
SCALE IN FEET



EXP. DATE: 4-30-2022
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION, AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION, OBSERVATION AS DETAILED IN CHAPTER 16-115 OF THE HAWAII ADMINISTRATIVE RULES, DEPT. OF COMMERCE AND CONSUMER AFFAIRS, ENTITLED PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPED ARCHITECTS.
JOB NO.: 21007.00



REVISION:	DATE:	DESCRIPTION:	MADE BY:	APPROVED
COUNTY OF HAWAII DEPT. OF PUBLIC WORKS - BUILDING DIVISION COUNTY OF HAWAII HULIKO'A TRAFFIC DIVISION ADDITIONS & ALTERATIONS 73-4210 HULIKO'A DRIVE KALAOA, KONA, HAWAII, 96740 TMK: (3) 7 - 3 - 058 : 041				
EXISTING / NEW SITE PLAN				
REVIEWED BY:				
DESIGNED BY: SF				
DRAWN BY: SM				
CHECKED BY: JM				
DATE: SEPT 2021				
DRAWING: A2.1.2				
SHEET .XXX. OF .XXX				



- DEMOLITION / RELOCATION**
- D1 RELOCATE EXISTING FIRE HYDRANT AND APPURTENANCES. SEE SHEET C2.2
 - D2 REMOVE AND PROPERLY DISPOSE OF 22'X56' CONCRETE PAD. RESTORE PAVEMENT SECTION TO MATCH EXISTING, TYP. GRADE TO SLOPE AND DRAIN TO EXISTING DRAIN SUMP, TYP.
 - D3 REMOVE AND PROPERLY DISPOSE OF OIL SEPARATOR BOX AND CONTENTS, TYP. BACKFILL TO GRADE. RESTORE SURFACE TO MATCH EXISTING, TYP.
 - D4 REMOVE AND PROPERLY DISPOSE OF GRATE INLET AND BOX AND PVC PIPING UP TO SEEPAGE PIT, TYP. RESTORE SURFACE TO MATCH EXISTING, TYP.
 - D5 ERADICATE PAVEMENT STRIPING, TYP.
 - D6 RELOCATE EXIST. CONCRETE WHEEL STOPS. 5 EACH, TYP.
 - D7 RELOCATE TWO EXIST. 8'X40' SHIPPING CONTAINER USED FOR STORAGE, TYP. COORDINATE LOCATION WITH TRAFFIC DIV. STAFF.
 - D8 RELOCATE SECURITY CAMERA AND POST. COORDINATE WITH TRAFFIC DIVISION.
 - D9 RELOCATE 8'X20' MOBILE TRAILER. COORDINATE LOCATION WITH TRAFFIC DIVISION STAFF.

- EROSION CONTROL MEASURES**
- (SF) SILT FENCE
 - (PRB) PERMEABLE ROLL BARRIER
 - (GIF) GRATED INLET FILTER
 - (CA) CONTAINMENT AREA
1. SEE SHEET CXX "WATER POLLUTION & EROSION CONTROL NOTES AND DETAILS".
 2. THE CONTRACTOR SHALL MAKE NECESSARY SITE SPECIFIC ADJUSTMENTS TO EROSION CONTROL MEASURES TO PREVENT STORM WATER RUNOFF FROM THE WORK AREA.
 3. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES THAT MAY BE NECESSARY AS THE WORK PROGRESSES AND GROUND CONDITIONS CHANGE DUE TO EARTHWORK ACTIVITIES.

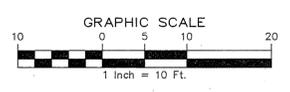
REVISION	DATE	DESCRIPTION	MADE BY	APPROVED

COUNTY OF HAWAII
DEPARTMENT OF PUBLIC WORKS, BUILDING DIVISION

HULIKOA TRAFFIC DIVISION ADDITION & ALTERATIONS
73-4210 HULIKOA DRIVE
KALAOA, NORTH KONA, HAWAII 96740
JOB NO. B-4558
TMK: (3) 7 - 3 - 058 : 041

EXIST. SITE PLAN / DEMOLITION PLAN EROSION CONTROL PLAN	DESIGN BY: DRAWN BY: CHECKED BY: DATE: xx, 2021
REVIEWED:	DRAWING: C2.1
INABA ENGINEERING, INC. LICENSE EXP. DATE: 04/30/2022	DATE: _____ SHEET OF _____

1 EXIST. SITE PLAN / DEMOLITION PLAN / EROSION CONTROL PLAN
SCALE: 1"=10'



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

1.5 Cost and Schedule

Construction is anticipated to begin January 2023 and complete by January 2024. The current construction budget is \$2.0 million, a figure which will be refined as design is finalized.

PART 2: ALTERNATIVES

2.1 No Action Alternative

Under the No Action Alternative, the Department of Public Works would not make improvements to Hulikoa Baseyard. The current inefficiencies related to having split facilities in non-optimum locations would persist. However, there would be no disturbance of the baseyard and no temporary impacts to traffic, noise or dust during construction. The No Action Alternative provides a basis for comparing the impacts of the proposed project.

2.2 Alternative Locations or Strategies for Baseyard Activities

The process of choosing this site for DPW Traffic operations began in 2019, when the site's locational, topographic and size advantages were major factors in its selection prior to purchase. Several other sites were considered at that time, including the former wastewater treatment plant site on Pawai Place and a property occupied by the Hawai'i Fire Department on Palani Road. Due to the size requirements of Traffic's operation and the changing needs and demands of the other agencies, it became apparent that sharing a property would be difficult. The current property offers the space Traffic needs, as well as the convenience of being in the core West Hawai'i service area. It continues to have major advantages over any alternate location to which Traffic's operations might be moved, even discounting the cost of relocation.

As stated in Section 1.2, the County's goal has always been to consolidate and relocate Traffic operations to one facility in Kailua-Kona, and the alternative of continuing to have split operations has significant strategic disadvantages. After careful consideration of options and all their implications, no alternative sites or strategies have been advanced in this Environmental Assessment.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Basic Geographic Setting

The location for the Proposed Action is referred to throughout this EA as the *project site* (see Figures 1-3). The term *project area* is used to describe the general environs of this part of northern urban Kona. The project site is within Kohanaiki Business Park, a long, narrow commercial/industrial development serviced by Hulikoa Drive. The project site is bounded on the south side by two vacant properties totaling 585 acres and zoned Agriculture and Open, by Hulikoa Drive on the north side, by an industrially-zoned property on the east side, and on the west side by a vacant lot that is slated for future use as a north-south, mid-level arterial road that would cross Hulikoa Drive.

3.1 Physical Environment

3.1.1 Climate, Geology, Soils and Geologic Hazards

Environmental Setting

The project site is within the Kekaha area of Kona, known for its extensive, nearly bare lava flows and hot and dry climate. At an elevation of 292 feet above sea level, temperatures are warm to hot in the daytime and sometimes mild at night. Average annual rainfall is about 23 inches. Winds are generally light upslope sea breezes in the daytime and light downslope land breezes at night (UH Hilo Dept. of Geography 1998; Giambelluca et al. 2013).

The geologic substrate in this area is lava flows from Hualālai Volcano dated at between 3,000 to 5,000 years before the present (Wolfe and Morris 1996). Soil here classified by the U.S. Natural Resources Conservation Service as *Lava flows-Honokohau complex, 2 to 20 percent slopes*. This complex contains both lightly weathered lava flows and Honokohau or similar soils derived from recent lava. In general, permeability for this complex is rapid, runoff is variable, and erosion hazard slight (U.S. Soil Conservation Service 1973). Agriculturally, the 1972 Detailed Land Classification, Island of Hawai‘i by the University of Hawai‘i’s Land Study Bureau classifies the project site lands as E289, indicating low suitability for agriculture. The project site is not classified in the Agricultural Lands of Importance to the State of Hawaii (ALISH) system. The well-drained substrate is poorly suited for agriculture but suitable for urban uses.

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. The U.S. Geological Survey assesses volcanic hazard on the slopes of the currently inactive volcano Hualālai as Lava Flow Hazard Zone 4, on a scale of ascending risk 9 to 1 (Heliker 1990:23). The hazard risk is based on the fact that Hualālai has steep slopes and is historically the third most active volcano on the island. In Zone 4, about 5 percent of the area has been covered with lava since 1800, with less than 15 percent covered in the past 750 years.

The Island of Hawai‘i experiences high seismic activity and is at risk from major earthquake damage (USGS 2000), especially to structures that are poorly designed or built. On Sunday, October 15, 2006, two damaging earthquakes of magnitude 6.7 and 6.0 struck the west side of Hawai‘i Island. These earthquakes caused no known damage to the baseyard or any of its facilities. There are no natural steep slopes that might induce rockfall or landslide hazard, but there is some undermining of the asphalt at the south of the yard adjacent to a graded slope that will require remediation as part of the project.

Lava tubes, which are the long cavities left behind by underground channels of lava, are common on pahoehoe lava flows in Hawai‘i and can also be present on ‘a‘a flows. Some lava tubes have openings large enough for human entry and may thus be classified as caves. Lava tube caves in Hawai‘i may have value as historic sites, recreation areas, unique geological features, or for other reasons. No lava tubes were reported by facility users or observed during the course of engineering, architectural or biological surveys on the project site, which covered the entire area of effect but did not investigate upslope properties. It’s likely that any pre-existing shallow lava tubes would have been previously breached by grading for construction at or near the site.

Impacts and Mitigation Measures

Lava flow, seismic hazards and mass wasting conditions per se impose no constraints on the Proposed Action, which is the continued utilization of the project site as a public works baseyard. The addition to and improvement of facilities is not imprudent to undertake in terms of geological hazards. Most of the surface of Hawai'i Island is subject to eventual lava inundation, and any facilities in Kona face risk. Given the need for the facilities, the Department of Public Works has determined that it is sensible to construct them in this location. Project design will take the seismic setting into account, and no mitigation measures are expected to be required.

There is a scientific consensus that the earth is warming due to manmade increases in greenhouse gases in the atmosphere, according to the United Nations' Intergovernmental Panel on Climate Change (UH Manoa Sea Grant 2014). Global mean air temperatures are projected to increase by at least 2.7°F by the end of the century. This will be accompanied by the warming of ocean waters, expected to be highest in tropical and subtropical seas of the Northern Hemisphere. For Hawai'i, where warming air temperatures are already quite apparent, not only is the equable climate at risk but also agriculture, ecosystems, the visitor industry and public health. Guidance to federal agencies for addressing climate change issues in environmental reviews was released in August 2016 by the Council on Environmental Quality (US CEQ 2016). The guidance urged that when addressing climate change, agencies should consider: 1) the potential effects of a project on climate change as indicated by assessing greenhouse gas emissions in a qualitative, or if reasonable, quantitative way; and 2) the effects of climate change on a project and its environmental impacts. It recommends that agencies consider the short- and long-term effects and benefits in the alternatives and mitigation analysis in terms of climate change effects and resiliency to the effects of a changing climate. The State of Hawai'i in Hawai'i Revised Statutes §226-109 encourages a similar analysis, and both Act 17 of the 2018 Hawai'i Legislature and Title 11, Chapter 200.1 now require analysis of sea-level rise and greenhouse gases in environmental impact statements.

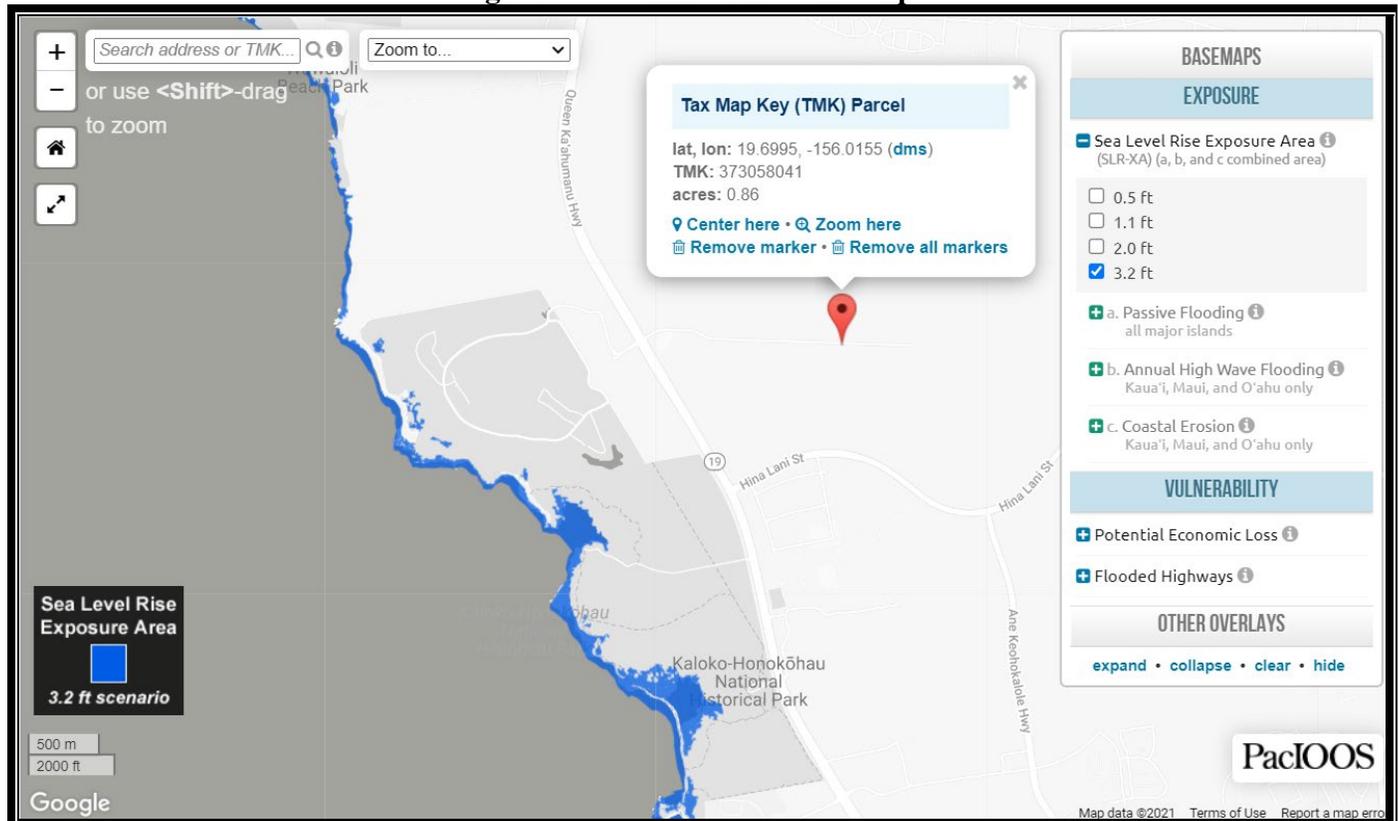
In terms of precipitation, wet and dry season contrasts will increase, and wet tropical areas in particular are likely to experience more frequent and extreme precipitation. In general, rainfall in Hawai'i has been variable in the recent past, with some years drier and some wetter than average. The El Niño Southern Oscillation (i.e., periodic variation in winds and sea surface temperatures in the Pacific, the warming phase of sea temperature known as El Niño and the cooling phase as La Niña) will likely continue to dominate precipitation patterns from year to year in the tropical Pacific. Climate change-related increases in air temperatures will lead to more evaporation and more moisture in the air. As a result, the variability in El Niño-related precipitation will probably increase, making rainfall predictions difficult. However, it is very likely that warmer temperatures and larger and more frequent tropical storms and hurricanes will affect the Hawaiian Islands in the future.

Land uses in Hawai'i – and not only coastal properties vulnerable to sea level rise – will be subject to increasing stress as a result of climate change. In addition to greater overland flooding, stronger and more frequent tropical storms may bring increased wind strength. New construction as part of the project will be designed to meet International Building Code 2018 requirements. The code provides adequate wind load to account for potentially greater storm winds. As discussed in Section 3.1.2, project design will direct surface runoff into facilities of sufficient disposal capacity to accommodate runoff.

A sea level rise viewer from the Pacific Island Ocean Observing System (<https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/>) provides graphic representation of how locations will be affected by sea level rise. Due to the elevation of the property at 292 feet above sea level, there is no risk to the Proposed Project from sea level rise (Figure 4).

Improvements to the buildings and facilities and new construction of the facilities would involve unavoidable small but non-negligible carbon emissions. However, the project is being designed to the requirements of the 2018 IBC, 2018 IEBC and 2018 IECC. The International Building, Existing Building and Energy Conservation Codes (IBC, IEBC, and IECC respectively) establish minimum requirements for building systems and energy-efficient buildings using prescriptive and performance-related provisions. They are founded on broad-based principles that make possible the use of new materials and new energy-efficient designs. Continued baseyard activities would entail greenhouse gas emissions that would be essentially the same regardless of where the activities were taking place, likely leading to no net increase. The Proposed Project would not be expected to contribute significantly to global climate change.

Figure 4 Sea Level Rise Map



Source: Pacific Island Ocean Observing System: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/>

3.1.2 Flood Hazard

Existing Environment

Floodplain status for many areas of the island of Hawai‘i has been determined by the Federal Emergency Management Agency (FEMA), which produces the National Flood Insurance Program’s Flood Insurance Rate Maps (FIRM). The project site is depicted on the FIRM map within Zone X: areas determined to be outside the 0.2% annual chance floodplain (Figure 4). Maps printed by the Pacific Tsunami Warning Center/Hawai‘i County Civil Defense Agency locate the project site outside the area that should be evacuated during a tsunami warning (<https://tsunami.coast.noaa.gov/#/>). The project site has three 8-inch deep drainage sumps that dispose of runoff.

Impacts and Mitigation Measures

There will be no impact to the floodplain in the area. The Department of Public Works will ensure that it and any contractors perform all earthwork and grading in conformance applicable standards and regulations of Chapter 27, *Flood Control*, of the Hawai‘i County Code, as well as the *Storm Drainage Standards* of the County of Hawai‘i, October, 1970 (as revised). Chapter 27 and Storm Drainage Standards require that all increases in runoff due to a project’s development must be captured and disposed of. Rainfall runoff for the site accounting for all new development will be calculated during final design by the project engineers using the *Storm Drainage Standards*. No additional runoff is expected and the three existing drainage sumps should be capable of absorbing runoff. If necessary, expanded or additional drainage structures will be designed and constructed to capture and retain the increase in rainfall runoff.

3.1.3 Water Quality

Existing Environment

No permanent streams, wetlands or ponds are present in or near the project site. Sensitive receiving waters at the project site are found 1.4 miles downslope in the shoreline of the Pacific Ocean itself at Kohanaiki. The shoreline in the vicinity contains various embayments and also anchialine ponds, which are tidally influenced water bodies with no direct surface connection to the sea. The waters of this part of Kona are classified as “AA,” with the highest level of water quality goals. Hawai‘i Administrative Rules (HAR) Chapter 11-54 03(c)(1) states that class AA waters are “high quality waters ... in which water quality is expected to exceed that necessary to support oceanographic research, propagation of aquatic communities and wildlife, compatible recreation and aesthetic enjoyment. It is the objective of class AA waters that these waters remain in their natural pristine state as nearly as possible with an absolute minimum of pollution or alteration of water quality from any human caused source or actions. To the extent practicable, the wilderness character of these areas shall be protected.” These coastal waters are important for fishing, recreation, visual quality, and traditional practices.

Figure 4. Flood Hazard Map





Flood Hazard Assessment Report
www.hawaiiinfip.org

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND
(Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100-year), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

	Zone A: No BFE determined.
	Zone AE: BFE determined.
	Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
	Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
	Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
	Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
	Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

	Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

	Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.
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Property Information

COUNTY: HAWAII
 TMK NO: (3) 7-3-058:041
 WATERSHED: KEAHOLE
 PARCEL ADDRESS: ADDRESS NOT DETERMINED
 KAILUA KONA, HI 96740

Notes:

Flood Hazard Information

FIRM INDEX DATE: SEPTEMBER 29, 2017
 LETTER OF MAP CHANGE(S): NONE
 FEMA FIRM PANEL: 1551660709F
 PANEL EFFECTIVE DATE: SEPTEMBER 29, 2017

THIS PROPERTY IS WITHIN A TSUNAMI EVACUATION ZONE: NO
 FOR MORE INFO, VISIT: <http://www.scd.hawaii.gov/>

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO
 FOR MORE INFO, VISIT: <http://dlnreng.hawaii.gov/dam/>



Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as 'PRELIMINARY', please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

Source: Hawaii DLNR <http://gis.hawaiiinfip.org/FHAT/>

The existing Kohanaiki watershed contains an area of approximately 3,700 acres and extends from the western slopes of Hualālai volcano to the coast. The area is considered part of the Kiholo Aquifer system. Elevations in the watershed range from 4,800 feet to mean sea level, and ground slope varies from about eight percent in the upper elevations to about one percent near the coast. The average ground slope of the watershed area is approximately six percent. The project site is situated seaward of the Underground Injection Control (UIC) line, which is the boundary set by the Department of Health to delineate areas of watershed recharge. Beneath the proposed project area highly permeable layered basalts contain basal groundwater, i.e., fresh-brackish water floating on sea water. The salinity of this water ranges from very brackish at the coast to moderately brackish near Queen Ka‘ahumanu Highway. From the highway inland to Mamalahoa Highway, the groundwater quality is moderate to weakly brackish. Groundwater beneath the project site is likely to have chloride concentrations too high to be suitable as a potable water source (PBR Hawaii 1991).

Impacts and Mitigation Measures

Minimal landclearing is expected as part of the improvements, but actual grading would occur in an area much less than one acre and thus will not require a National Pollutant Discharge Elimination System (NPDES) permit. Plans submitted as part of the application for a County grading permit will ensure that offsite erosion and sedimentation impacts will be minimized, if not completely avoided. The Hawai‘i County DPW will ensure that it and any contractors perform all earthwork and grading in conformance with: Chapter 10, *Erosion and Sedimentation Control*, of the Hawai‘i County Code.

Construction plans will specify Best Management Practices (BMPs) to minimize the potential for sedimentation, erosion and pollution of coastal waters. BMPs that will be specified in final design for the Proposed Action will likely include, but may not be limited to:

- The total amount of land disturbance will be minimized, and construction will be limited to the delineated construction work areas within the project site.
- Construction will mitigate any sediment that leaves the site.
- Construction activities with the potential to produce polluted runoff will not be allowed during unusually heavy rains or storm conditions that might generate storm water runoff.
- Cleared areas will be replanted or otherwise stabilized as soon as possible.
- Structures for sediment control will include grated inlets and permeable roll barriers in the parking area.

3.1.4 Flora, Fauna and Ecosystems

Existing Environment

The natural vegetation of this part of Kona was most likely dry coastal grassland and shrubland dominated by ‘ilima (*Sida fallax*), ‘uhaloa (*Waltheria indica*) and pili grass (*Heteropogon contortus*) (Gagne and Cuddihy 1990). Where the surface has not been mechanically altered, these species are still prominent components of the vegetation, but invasive species including fountain grass (*Cenchrus setaceus*), kiawe (*Prosopis pallida*) and koa haole (*Leucaena leucocephala*) tend to dominate.

As illustrated in the photos in Figure 2, the lot is almost entirely covered in pavement and occupied by a metal building, containers and neat stockpiles of building materials. Several ornamentals and weeds are present on the margins, including plumeria (*Plumeria* sp.), shower trees (*Cassia* sp.), Madagascar periwinkle (*Catharanthus roseus*) and pigweed (*Portulaca oleracea*), along with one hardy native herb, 'uhaloa (*Waltheria indica*). Weeds are managed mechanically and chemically. No plant species classified as threatened or endangered (USFWS 2021) are present or would be expected on the project site.

The baseyard does not offer habitat for native terrestrial fauna. No birds were observed during our site reconnaissance. Based on previous surveys of this zone, typical expected birds in the general area include common myna (*Acridotheres tristis*), spotted dove (*Streptopelia chinensis*), zebra dove (*Geopelia striata*), saffron finch (*Sicalis flaveola*), nutmeg mannikin (*Lonchura punctulata*), and black francolin (*Francolinus francolinus*). Very few native species of native birds would be expected at the project site, and none would find it appropriate habitat. It is well outside the forest bird zone and the nesting range of the Hawaiian hawk or 'io (*Buteo solitarius* – listed as endangered by the State of Hawai'i and formerly federally listed). It is likely that the Hawaiian sub-species of the short-eared owl or pueo (*Asio flammeus sandwichensis*) is sometimes present in the general area, although the sparse vegetation is not ideal habitat. It is very unlikely that other native forest birds, such as various species of Hawaiian honeycreepers, would use the project site due to its low elevation, recent lava substrate, urban context, alien vegetation and lack of adequate forest resources.

As with all of the island of Hawai'i, several threatened or endangered seabirds may overfly the general project area, including the endangered Hawaiian petrel (*Pterodroma sandwichensis*), the endangered band-rumped storm petrel (*Oceanodroma castro*), and the threatened Newell's shearwater (*Puffinus auricularis newelli*). Although they may fly over the project site on their way to and from mountain nesting areas and the open ocean, no suitable nesting habitat for any of these seabird species is present in the project area. The primary cause of mortality for these seabirds is thought to be predation by alien mammalian species at the nesting colonies. Collision with man-made structures is another significant cause. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. Disoriented seabirds may collide with manmade structures and, if not killed outright, become easy targets of predatory mammals.

It is likely that endangered Hawaiian hoary bats (*Lasiurus cinereus semotus*), the only native Hawaiian land mammals, forage in the sparse shrublands and may even roost in some of the kiawe, koa haole and ornamental trees in the general area. They have been found throughout the island of Hawai'i. Bats are often visible while they are feeding on flying insects near dusk and dawn. Their presence can also be verified by ultrasound detectors or radar. If bats are detected during a night's study, this merely indicates that they were present in the area. Conversely, a lack of bat detections does not indicate an absence of bats, which may have been absent for only a night, a week, or a season, or may have been present but undetected. Determination of bat populations or usage patterns requires much more sophisticated, long term studies. No bats were observed in our site reconnaissance, which took place in full daylight and did not use any detection equipment. For the purposes of this assessment, it is assumed that Hawaiian hoary bats are present at least some of the time, as they have been frequently seen or detected by ultrasound and radar in rural Kona. Hawaiian hoary bats are vulnerable to disturbance during the summer pupping season and require special mitigation measures.

We did not observe any non-native mammals on the property. The property is fully fenced, which during normal operations would exclude the feral pigs (*Sus scrofa*) and feral goats (*Capra hircus*) that are present in many parts of Kona. Feral cats (*Felis catus*), Indian mongooses (*Herpestes a. auropunctatus*), mice (*Mus* spp.), rats (*Rattus* spp.), and domestic dogs (*Canis f. familiaris*) are sometimes present in the area. There are no native terrestrial reptiles or amphibians in Hawai‘i. No reptiles were seen but there are probably various species of skink (Family: Scincidae) and gecko (Gekkonidae) present. The very dry conditions and lack of water bodies or moist areas likely excludes amphibians. None of these alien animals have conservation value and all are deleterious to native flora and fauna.

No invertebrate survey was undertaken as part of the survey, but in general, rare, threatened or endangered invertebrates on the Island of Hawai‘i tend to be associated with either higher-elevation, older substrate rainforests (e.g., various *Drosophila*); coastal dry shrubland (e.g., various *Hylaeus*); the summit of Mauna Kea (*Nysius wekiuicola*); extremely dry, disturbed ‘a‘a flows (Blackburn’s sphinx moth or *Manduca blackburnii*); or aquatic settings (various *Megalagrion*). Of these, only Blackburn’s sphinx moth has some potential to be present. The endangered Blackburn’s sphinx moth has been found at various locations throughout West Hawai‘i, including many dry, disturbed areas of North Kona. The adult moth feeds on nectar from native plants including beach morning glory (*Ipomoea pes-caprae*), ilie‘e (*Plumbago zeylanica*), and maiapilo (*Capparis sandwichiana*). Moth larvae feed upon non-native tree tobacco (*Nicotiana glauca*), which occupies disturbed areas such as open fields and roadway margins, and the rare native aiea (*Nothoestrum* sp.), which is found in dry to moist forests at elevations ranging from 1,500 to 5,000 feet. There is no aiea near the project site, but tree tobacco is common throughout disturbed sites in North Kona, and it can rapidly spread into adjacent undisturbed areas. Systematic survey of the project site and nearby areas determined that no tree tobacco was present.

Impacts and Mitigation Measures

Because of the lack of native ecosystems or threatened or endangered plant species on the project site, the Proposed Action would have no adverse impacts to native vegetation or habitat. Mitigation measures will be instituted in order to avoid impacts to Hawaiian hoary bats and listed seabirds:

- There will be no clearing of woody vegetation taller than 15 feet during the bat pupping season, which runs from June 1 through September 15 each year. [Note: no trees taller than 15 feet would be affected by any activity.]
- Outdoor lighting may attract endangered seabirds, which may become disoriented by the lighting, resulting in birds being downed. To avoid potential seabird downing through interaction with outdoor lighting, no construction or unshielded equipment lighting will be used after dark between the months of April and October. All permanent lighting will be kept to minimum necessary levels, with shielded lights so as to lower the ambient glare, in conformance with the Hawai‘i County Outdoor Lighting Ordinance (Hawai‘i County Code Chapter 9, Article 14). Furthermore, all exterior lighting will consist of blue-deficient lighting such as filtered LED lights or amber LED lights, with a Correlated Color Temperature (CCT) of 3200 Kelvin. This will not only reduce the risk that threatened or endangered seabirds may be attracted to and then disoriented by lighting, but will also assist in protecting dark skies.

3.1.5 Air Quality, Noise, and Scenic Resources

Environmental Setting

As discussed in Section 3.1.2, winds in the area exhibit a daily reversal, with light sea breezes during the daytime (peaking in the afternoon) and a shallow mountain drainage wind from the east at night. Wind speeds are generally light and seldom exceed an average daily speed of 10 miles per hour. Light and variable westerly “kona” winds occasionally replace this pattern, most often in winter (UH-Manoa, Dept. of Geography 1998). Air quality in the project area is somewhat affected by emissions from motor vehicles, industry and natural sources. For 35 continuous years, volcanic emissions of sulfur dioxide from Kilauea Volcano converted into particulate sulfate, forming a volcanic haze, locally called vog. Vog becomes trapped in the Kona atmosphere because of the diurnal wind reversal, which creates a largely closed airshed system. In August 2018, eruption activity at Kilauea ceased, which reduced vog to essentially zero. Since that time, several summit eruptions have briefly resumed, with fewer emissions that produce reduced levels of vog. At the time of this writing in October 2021, another summit eruption is occurring. Manmade air pollution sources include oil-fired power plants, which emit sulfur dioxide, nitrogen oxides, and particulate matter, and motor vehicles, which emit carbon monoxide, nitrogen oxides and hydrocarbons (an ozone precursor), as well as smaller amounts of other pollutants. The location of the baseyard exposes it to minor levels of exhaust pollutants from motor vehicles and various equipment on Hulikoa Drive.

Noise levels on the site are moderate and are derived mainly from motor vehicles and various equipment on Hulikoa Drive, as well as some minor levels of noise from Kona International Airport. In the context of an industrial park these noise levels are not significant. No noise-sensitive properties are present nearby.

The Hawai‘i County General Plan (Hawai‘i County 2005:7-12) notes regarding scenic resources in North Kona that:

“The Kona districts have long attracted people because of their natural beauty. Although man-made structures are in some places dominant, the vast expanse of the Kona landscape is still the area's most striking feature. North Kona, in the area called Kekaha, is characterized by a sense of openness created by expansive areas of lava flows. Vegetation on the lava is comprised of low pockets of grasses and scrub trees. From the coastline, the land climbs slowly to the distant saddle plateau between Mauna Kea and Mauna Loa. This long natural grade also contributes to the sense of openness and space. The rest of North Kona is dominated by Hualālai. Its steep slopes provide a green backdrop when viewed from the coast, or spectacular views of the coastline, ocean and horizon from higher elevations. Part of Kona’s natural beauty is also due to the wide range of climatic conditions in a relatively short distance. Such variations extending from the coastal areas to the higher elevations are evidenced by changes in vegetation, producing a wide scope of different physical environments.”

The project site and its structures are barely visible from most public locations, are not scenic, and do not block ocean views from highways or interfere with any scenic vantages.

Impacts and Mitigation Measures

Due to the minor scale of improvements, the Proposed Action would not measurably affect air quality, except temporarily and minimally during construction; dust will be strictly controlled through BMPs.

Some noise would occur during construction, but it would not likely exceed the Department of Health's (DOH) "maximum permissible" property-line noise levels; in any case, all adjacent uses are industrial and there are no sensitive nearby receptors. If DPW determines that exceedances will occur, it will consult with DOH and determine whether the activity should obtain a permit per Title 11, Chapter 46, HAR (Community Noise Control) prior to construction. DOH will review the proposed activity, location, equipment, project purpose and timetable in order to decide upon conditions and mitigation measures, such as restriction of equipment type, maintenance requirements, restricted hours and portable noise barriers. Such measures, when needed, are effective in reducing noise to minimal levels. No permanent noise impacts would occur. The project site is well outside the high-noise area associated with the Kona International Airport that may cause workplace disruption.

The Hawai'i County General Plan calls for preserving the quality of areas endowed with natural beauty and protecting scenic vistas and view planes from becoming obstructed. No impacts to scenic sites, vistas or viewplanes would occur. All permanent lighting will be kept to minimum necessary levels, with shielded lights so as to lower the ambient glare, in conformance with the Hawai'i County Outdoor Lighting Ordinance (Hawai'i County Code Chapter 9, Article 14). Furthermore, all exterior lighting will consist of blue-deficient lighting such as filtered LED lights or amber LED lights, with a Correlated Color Temperature (CCT) of 3200 Kelvin. This serves the double purpose of protecting dark skies and reducing the risk that threatened or endangered seabirds may be attracted to and then disoriented by lighting.

3.1.6 Hazardous Substances, Toxic Waste and Hazardous Conditions

Environmental Setting

A Phase I Environmental Site Assessment and site cleanup was conducted for the project site and buildings at the time of its original purchase by the County of Hawai'i. DPW personnel are not aware of any hazardous substances, toxic waste or hazardous conditions. Small quantities of fuel, lubricants, paints, solvents and similar materials are used as part of operations, but no major waste is generated and the site is not a registered Resource Conservation and Recovery Act (RCRA) hazardous waste generator. State databases did not indicate any Underground Storage Tanks (USTs), Leaking Underground Storage Tanks (LUSTs), or records of incidents or releases at the project site or in adjacent properties (<https://eha-cloud.doh.hawaii.gov/iheer/#!/viewer>).

Impacts and Mitigation Measures

Although it is not anticipated that any potentially hazardous, toxic or radioactive waste are present on the project site, reasonable precautions will be undertaken in the context of project construction Best Management Practices to include provisions for appropriate response and remediation should any such hazardous, toxic, or radioactive material be encountered during the construction phase of the Proposed Action.

3.2 Socioeconomic and Cultural

3.2.1 Socioeconomic Characteristics

The project site is within the Kohanaiki Business Park, which has commercial zoning and retail and service businesses in the *makai* end near the highway, and in the *mauka* end where the project site is located has industrial zoning and uses. No residential, agricultural, recreational or other uses are located within a mile.

Impacts and Mitigation Measures

The Proposed Action would benefit County baseyard activities by providing a more efficient workspace for Traffic Division activities. There is no local “neighborhood” in this industrial area and there would be no impacts to neighbors such as noise, traffic, odors, views or incompatible activities. Consultation to date with the closest property owners and local officials has not revealed any objections to the Proposed Action.

3.2.2 Cultural Resources

The cultural value of the project site was assessed as part of this EA. The purpose of this investigation was to determine whether the industrial lot supported any traditional gathering uses, was vital for access to traditional cultural sites, or had other important symbolic associations for native Hawaiians. It should be emphasized that the project is entirely restricted to a completely fenced, disturbed and developed area.

Cultural and Historical Background

The first colonization of Hawai‘i Island is believed to have occurred on the eastern side by roughly 1000 A.D. Early settlers are thought to have first come to the leeward side of the Hawai‘i Island for the procurement of resources during the Early Expansion period up to 1600 A.D. (Cordy 1995). Permanent habitation of Kona began toward the end of that period (Cordy 1995; Schilt 1984).

The Expansion Period was characterized by significant social stratification, socioeconomic changes and land modification. Most of the ecologically favorable zones of the windward and coastal regions of all major islands were settled and the more marginal leeward areas were being developed. The greatest population growth occurred during the Expansion Period, as did efforts to increase upland agriculture. Settlement at this time was related to seasonal, recurrent occupation in which coastal sites were occupied in the summer to exploit marine resources, and upland sites were occupied during the winter months, with a focus on agriculture. An increasing reliance on agricultural products may have altered social networks as well, according to Hommon (1976). Hommon argued that kinship links between coastal settlements disintegrated as those links within the *mauka-makai* settlements expanded to accommodate exchange of agricultural products for marine resources. This change is believed to have resulted in the establishment of the *ahupua‘a* system discussed below. The implications of this model include a shift in residential patterns from seasonal, temporary occupation to permanent dispersed occupation of both coastal and upland areas.

The project site is located in the traditional district of Kona, one of six major *moku-o-loko* within the island. Kona became a residence of many of the *ali'i* (chiefs) of the Island of Hawai'i beginning with Umi-a-liloa, who unified the island circa 1525. By this time, the island was divided into six districts or *moku-o-loko* (Fornander 1996 – Vol. II: 100-102). Kona extends from the shore across the entire volcanic mountain of Hualālai, and continues to the summit of Mauna Loa. Kona was apparently first settled along the sheltered and watered bays in the region extending south from Kailua. As population increased, people began establishing permanent settlements in more arid zones. Many events documented in the traditional history of Kona are associated with 'Umi-a-Liloa, whose father was the first to unify rule there. Kona was a popular dwelling place of chiefs (Kamakau 1992), and traditional Hawaiian political authority was centered in the area from Kailua to Keauhou from at least the 15th century to the reign of Kamehameha I.

Kona, like other large districts on Hawai'i, was divided into 'okana or *kalana* (ancient regions). In the region now known as Kona 'akau (North Kona), there are several *kalana*. The southern portion of North Kona was known as "Kona kai 'ōpua" (interpretively translated by Maly as "Kona of the distant horizon clouds above the ocean"), and included the area extending from Lanihau (the present-day vicinity of Kailua Town) to Pu'uohau. The northernmost portion of North Kona was called "Kekaha", a term used to describe an arid coastal region. Native residents of the region affectionately referred to their home as Kekaha-wai-'ole o nā Kona ("Waterless Kekaha of the Kona district"), or simply as the 'āina *kaha*. The zonation of land into various cultivated zones so commonly found in other areas of Kona (see Menzies 1920) was less pronounced here, as only the shoreline area and gardens high in the upper elevations were heavily used, with the waterless intermediate areas – such as the project site – serving mainly as the source for specialized rock materials, burial sites, and temporary shelters.

Sometime during the A.D. 1400s, the *moku* were further divided into distinct land units known as *ahupua'a* (Kirch 1985). *Ahupua'a* were prototypically long wedge-shaped slices of land that incorporated all of the eco-zones from the mountains to the sea and several hundred yards beyond, which afforded their inhabitants unlimited access to a diverse subsistence resource base (Cordy 2000). Entire *ahupua'a* or portions thereof were managed by appointed *konoiki*, or lesser chiefs, who acted as overseers under the rule of an *ali'i 'ai ahupua'a*. The *moku* of Kona stretching from north to south has over 100 *ahupua'a*, and approximately 44 of these fall within Kona's fertile central region. The majority of the *ahupua'a* in central Kona are fairly narrow and include a combination of forest lands, upland farms, coastal *kula*, and offshore resources. The project site for the Hulikoa Baseyard is within the *ahupua'a* of Kohanaiki.

Hawai'i's history took a sharp turn on January 18, 1778 with the arrival of British Capt. James Cook in the islands. On a return trip to Hawai'i 10 months later, with the Maui turmoil still raging, the future king Kamehameha visited Cook aboard his ship helped him navigate his way to Hawai'i Island. Cook exchanged gifts with Kalaniopu'u – a warrior chief who had conquered East Maui – at Kealakekua Bay the following January, and Cook attempted to leave Hawai'i in February. However, his ship sustained damage to a mast in a severe storm off Kohala and returned to Kealakekua, setting the stage for his death on the shores of the bay. The following year, in 1780, Kalaniopu'u designated his son, Kiwalao, to be his successor, and granted Kamehameha guardianship of the war god Kūka'ilimoku. When it appeared Kiwalao was not honoring his land claims, Kamehameha usurped Kiwalao's authority with a sacrificial ritual and retreated to his district of Kohala where he farmed the land, growing taro and sweet potatoes. Civil war broke out when Kalaniopu'u died in 1782 and Kiwalao was killed. The wars between Maui and Hawai'i Island would continue until 1795. By 1796, Kamehameha had conquered every island kingdom

except Kaua‘i, but it wasn’t until 1810, after Kaumuali‘i of Kaua‘i pledged his allegiance to Kamehameha, that all of the Hawaiian Islands were unified under a single ruler. Kawaihae eventually became one of the royal centers of the island at which Kamehameha resided. But like Umi-a-liloa did centuries before, after he unified all the islands Kamehameha I moved his court to Kamakahonu in present-day Kailua-Kona. Here Kamehameha spent the last years of his life and died in 1819 (Menton 1994: pp. xv-xvii).

In 1819, following the death of Kamehameha I, Liholiho (Kamehameha II) retreated to Kawaihae. Following the period of mourning and purification, he returned to Kailua. Kamakau (1961) reported that on the way there he stopped at Honokōhau and dedicated a *heiau* to his god and prepared for his return. It was soon after this that Liholiho declared *ai noa* (free eating), a breaking of the *kapu* (restrictions) of the gods that quickly led to the demise of the ancient religious system.

Social change soon accelerated, driven by disease, drought, missionary activity, trade and urbanization. Trade with both the Western world and Asia brought the beginnings of a money economy, and demand for sandalwood proved lucrative to the *ali‘i*, distracting their attention from food production. Whaling and other forms of trading began to center around the growing urban centers of Kailua, Lahaina, and Honolulu. In upper Kona, significant changes in agriculture occurred due to trade and frequent importation of exotic species, with the addition of western technologies. Farmers started cultivating cotton, coffee, citrus, pineapple, and tobacco, which were often grown not as staples but for export and trade.

While historical references are few, some vivid pictures of life in this arid region were written. In 1840-41, Charles Wilkes of the U.S. Exploring Expedition wrote:

“A considerable trade is kept up between the south and north end of this district. The inhabitants of the barren portion of the latter are principally occupied in fishing and the manufacture of salt, which articles are bartered with those who live in the more fertile regions of the south, for food and clothing.” (Wilkes 1845)

In 1924, J.W.H.I. Kihe wrote a series of accounts in the Hawaiian language newspaper *Ka Hōku o Hawai‘i*. One discussed the depopulation of Kekaha:

“The lands of Honokōhau were filled with people in those days, there were many women and children with whom I traveled with joy in the days of my youth. Those families are all gone, and the land is quiet. There are no people, only the rocks remain, and a few scattered trees growing, and only occasionally does one meet with a man today [1924]. One man and his children are all that remain.”

Profound religious, socioeconomic and demographic changes in the early 1800s resulted in the establishment of a Euro-American style of land tenure. The *Māhele ‘Āina* of 1848 was the vehicle used to divide the land between the crown, government, *konohiki* and native tenants. Prior to this land “reform”, all the land and natural resources of Hawai‘i were held in trust by the *ali‘i* who, in concert with *konohiki* land agents, meted out use rights to the native tenants at will. The *Māhele ‘Āina* of 1848 would forever change the land tenure and the landscape of the Hawaiian Islands. During the *Māhele* all lands were placed in one of three categories: Crown Lands (for the occupant of the throne), Government Lands, and

Konohiki Lands; all three types of land were subject to the rights of the native tenants therein. Over 800 *kuleana* property awards to native Hawaiians were made in Kona at this time and many other thousands of acres of Kingdom lands were sold to both Hawaiians and foreigners. Kohanaiki Ahupua‘a was Government land; no *kuleana* were awarded in this part of Kohanaiki. In conjunction with the *Kuleana* Act, the King authorized the issuance of Land Grants to applicants for tracts of Government land that were allocated during the *Māhele*. These Land Grants were generally larger than those awarded by the Land Commission. The Act resolved that portions of the Government Lands should be set aside and sold as grants ranging in size from one to fifty acres, at a cost of fifty cents per acre. The project site appears to have originally been part of Grant 2942 to Hulikoa, namesake of the street.

The next significant change for Kona was the advent of tourism, marked by the construction in 1928 of the area’s first major hotel, the Kona Inn (Menton 1994). Starting in the 1960s, the area between Kailua and Keauhou became increasingly dominated by resort residential land use. In the late 20th and early 21st centuries, various commercial and industrial parks were set up on vacant lands to service the growing Kona urban area. The current Kohanaiki Business Park was created in the early 1990s as a commercial/light industrial subdivision encompassing 52 lots (PBR Hawaii 1991). The purpose of the project was to provide a subdivision in the North Kona area for the immediate commercial operation and industrial activity needs of the then-property owners’ own businesses. The project also provided alternative light industrial properties from which suppliers of products and services could readily serve the existing, under-construction and planned resort/residential projects in the North Kona and South Kohala Districts, as well as existing businesses and services in West Hawai‘i, including Keahole Airport.

Summary of Identification of and Impacts to Valued Natural, Cultural and Historical Resources

The project site is a fenced, graded and developed lot utilized fully as a baseyard. As part of the EA process, an effort was made to obtain information about any potential traditional cultural properties and associated practices that might be present, or have taken place on the property. The Office of Hawaiian Affairs was contacted but did not supply any information relative to the existence of traditional cultural properties or current use of the small project site for traditional and customary practices. No caves, springs, pu‘u, native forest groves, gathering resources or other natural features are present on or near the project site. No natural vegetation exists that would be important for native gathering. As no resources of a potential traditional cultural nature appear to be present on or near the project site, and there is no evidence of any traditional gathering uses or other cultural practices, the proposed improvement of the baseyard would not appear to impact any culturally valued resources or cultural practices.

The Office of Hawaiian Affairs and the State Historic Preservation Division were supplied a link to the Draft EA, which may also be reviewed by other agencies and the general public, in order to help finalize the mitigation measures.

3.2.3 Archaeology and Historic Properties

No historic properties including archaeological sites are known or expected to exist on or near the project site. The Kohanaiki Business Park was inspected for archaeological resources in connection with its original development, and none were found (PBR Hawaii 1991). Since then, the project site has been fully graded and has been paved over and used for industrial purposes and/or a baseyard since the 1990s. The 20 to 30-year old structures on the site have no historical significance. As such, no historic properties are

present. In the unlikely event that archaeological resources are encountered during grading or construction, contract conditions will require that work in the immediate area of the discovery will be halted and the State Historic Preservation Division (SHPD) will be contacted as outlined in Hawai‘i Administrative Rules 13§13-275-12. In order to assist in compliance with the Chapter 6e, Hawai‘i Revised Statutes (HRS) process, the State Historic Preservation Division (SHPD) was provided a link to a digital copy of the Draft EA for their comment on the presumed lack of archaeological resources and no effect to significant historic properties. The Department of Public Works will submit information concerning the Proposed Action to SHPD, if required, at the conclusion of the Draft EA comment period in order to advance review under Chapter 6e, HRS process.

3.3 Infrastructure

3.3.1 Utilities and Public Services

Existing Facilities and Services, Impacts and Mitigation Measures

Electrical power to the site is supplied by Hawaiian Electric, a privately owned utility company, via its island-wide distribution network, with poles and lines on Hulikoa Drive, Telephone service is supplied by Hawaiian Telcom. The property is currently served by the Hawai‘i County Department of Water Supply (DWS) with a 5/8-inch water meter connected to the existing 12-inch water main within Hulikoa Drive. The site has adequate fire protection. The baseyard is connected to the County of Hawai‘i wastewater system. Current connections for all these utilities are sufficient to service the new and expanded facilities, and there will be no effect on these utilities’ ability to service the area.

The baseyard generates modest levels of solid waste and recyclable material that are disposed of or delivered to the West Hawai‘i Sanitary Landfill by County trucks. No increased quantity of solid waste is expected to result from the operation of the baseyard, which will consolidate existing activities from two locations. Fire, police and emergency services are available from stations in Kailua, within two to five miles of miles of the baseyard. No other public services are expected to be required.

3.3.2 Transportation

Existing Environment: Roadways and Traffic

The baseyard is on Hulikoa Drive, 0.85 miles *mauka* of its stoplight-controlled intersection with Queen Ka‘ahumanu Highway. Since the recently completed improvement of Queen Ka‘ahumanu Highway, this intersection operates well above minimum acceptable level of service at peak hours. Hulikoa Drive is a two-lane, two-way street with no cross-streets, wide paved shoulders and a speed limit of 35 MPH. It currently terminates about 0.5 miles *mauka* of the baseyard. The project site is bordered on the west by a vacant lot that is slated in the Hawai‘i County General Plan and Kona Community Development Plan to be used at an unspecified time in the future for a north-south mid-level arterial road (Kamanu Street) across Hulikoa Drive. This road would eventually connect to Hina Lani Street on the south and Kaiminami Street on the north.

Traffic in and out of the baseyard involves on weekdays the daily arrival and departure of various full-time employees for various jobs, as well as outside vendors and service providers. On weekends the

baseyard is generally not used, except during emergencies or special situations. Traffic currently has 12 personnel positions. Eight are involved in Traffic Signs and Markings and start work at 6:30 AM and end at 3:00 PM. Four are involved in Traffic Signals and Street Lights and start at 7:00 AM and end at 3:30 PM. DPW has analyzed the traffic produced by all activity at the baseyard and concluded that the baseyard generates only minimal traffic, even at peak hours. For example, at and prior to AM peak hour on the adjacent highway, DPW estimates that there are eight right turns daily from Queen Ka‘ahumanu Highway to Hulikoa Drive from 6:00-6:30 AM and four right turns to Hulikoa Drive from 6:30-7:00 AM. Similarly, DPW estimates eight left turns from Hulikoa Drive to Queen Ka‘ahumanu Highway at 3:00-3:30 PM and four left turns from Hulikoa Drive at 3:30-4:00 pm. These trips do not contribute in any significant way to traffic congestion at this or other intersections.

Impacts and Mitigation Measures

DPW plans eventually to increase staff by a third, but this will not produce any significant increase in traffic and does not require mitigation measures. The proposed project would not interfere with the future extension of Kamanu Street as a north-south mid-level arterial road across Hulikoa Drive.

For the construction phase of the project, during movement of heavy equipment on or off the site, and at any times when there is a potential for project construction to impede traffic, professional traffic control will be utilized. Such activities will not occur during peak hour traffic for Queen Ka‘ahumanu Highway Drive unless it is unavoidable.

In the letter of September 3, 2021 in response to early consultation (see Appendix 1a), the Hawai‘i Department of Transportation (HDOT) Highways Division noted that:

“... based on the information provided, the proposed project does not appear to significantly impact the State highway system. Therefore, the HDOT-HWY has no comments on or objections to the proposed project. However, in the event there are any unexpected traffic issues attributed to the project, the Applicant shall mitigate them to the satisfaction of the HDOT-HWY, at no cost to the State.”

Existing Environment: Airports

In the letter of September 3, 2021, the HDOT Airports Division supplied comments concerning interaction of the project with operations at the Ellison Onizuka Kona International Airport at Keahole (KOA), which it noted is located approximately 1.51 miles from the project site. HDOT advises all projects within five miles of Hawai‘i State airports to consult an HDOT Airports Division Technical Assistance Memorandum for guidance with development and activities that may require further review and permits. In particular, as the project site is approximately 13,730 feet from the end of Runway 17 at KOA, the Federal Aviation Administration (FAA) regulation requires the submittal of *FAA Form 7460-1 Notice of Proposed Construction or Alteration* pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet. Details on construction equipment and staging area heights, including heights of temporary construction cranes, must be included in the submittal. DPW will be submitting *FAA Form 7460-1* as part

of project design. As there are no proposed tall permanent or temporary structures such as towers, or other structures or construction methods that would interfere with flight approaches, no issues are anticipated.

HDOT Airports also noted that photovoltaic (PV) systems located in or near the protected approach and departure air space can create a hazardous condition for pilots due to possible glint and glare reflected from the PV array. Also, PV systems have been known to emit radio frequency interference (RFI) to aviation-dedicated radio signals, thereby disrupting the reliability of air-to-ground communications. If glint, glare or radio interference from the PV array creates a hazardous condition for pilots, the owner of the PV system must be prepared to immediately mitigate the hazard upon notification by the HDOT Airports and/or FAA. HDOT Airports advised the project to submit a separate *FAA Form 7460-1* including a glint and glare analysis for the site of the proposed PV system. DPW will be submitting a separate *FAA Form 7460-1* for the PV system as part of project design.

As requested, when DPW has received the FAA determinations, it will provide a copy to HDOT-Airports Division for their review and files.

Finally, HDOT Airports advised of the potential for noise, fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project location. The distance of the airport from the project site would mitigate most of the concerns to negligible levels; noise is specifically discussed above in Section 3.1.5.

3.4 Secondary and Cumulative Impacts

The Proposed Action will not involve any secondary impacts, such as population changes or effects on public facilities. Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. The Proposed Action will have only very limited impacts, all of them temporary and associated with the construction period, such as noise, traffic, dust and potential sedimentation.

Review of Chapter 343 documents in the *OEQC Environmental Notice* as well as press coverage indicates that there are a number of planned or ongoing projects in Kona in the 2021 to 2023 timeframe. Many are centered in the growing Kailua to Keahole area, which is also the location of the Hulikoa Baseyard. Projects include improvements to various highways and roads; Kona International Airport; administrative offices, energy facilities, aquaculture facilities and road construction at the Natural Energy Laboratory of Hawai'i (NELHA); various housing and community facility development at the Villages of La'i'ōpua and on Hina Lani Drive; homeless center improvements in the Old Kona Industrial Area; and the West Hawai'i Regional Park at Kealakehe. All of these activities are located sufficiently far from the project site on Hulikoa Drive such there is only minor interaction potential for construction impacts, especially given the low level of project impacts. No major projects are known to be in planning for the immediate area. There does not appear to be any need for additional mitigation for construction-phase impacts, based on distance, scale and nature.

3.5 Required Permits and Approvals

The following permits and approvals would be required:

- Grading and Grubbing Permits (County DPW)
- Building Permits and Plan Approval (County DPW and Planning)
- Chapter 6e, HRS, Determination on Effects to Historic Properties (State Historic Preservation Division)
- Disability and Communication Access Board (DCAB) plan review and approval
- Plumbing Permit (County DPW)
- Electrical Permit(County DPW)
- Air Conditioning and Ventilation Form 1 Permit (DOH)

3.6 Consistency with Government Plans and Policies

3.6.1 Hawai‘i State Plan

Adopted in 1978 and last revised in 1991 (Hawai‘i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State’s long-run growth and development activities. The three themes that express the basic purpose of the *Hawai‘i State Plan* are individual and family self-sufficiency, social and economic mobility, and community or social well-being. The Proposed Action would promote these goals by allowing more efficient use of the baseyard to enhance County public works services for the residents of the County of Hawai‘i, with no adverse environmental or social impacts, thereby enhancing quality-of-life and community and social well-being.

3.6.2 Hawai‘i State Land Use Law

Hawai‘i State Land Use District. All land in the State of Hawai‘i is classified into one of four land use categories – Urban, Rural, Agricultural, or Conservation – by the State Land Use Commission, pursuant to Chapter 205, HRS. The property is in the State Land Use Urban District. The Proposed Action is an appropriate use of urban land within the County’s industrial zoning district and is consistent with intended uses for the Urban Land Use District.

3.6.3 Hawai‘i County Zoning

The project site is County-zoned ML1-a (Limited Industrial, 1 acre minimum lot size). The ML district applies to areas for business and industrial uses which are generally in support of but not necessarily compatible with those permissible activities and uses in other commercial districts. Baseyards are not explicitly named in the Hawai‘i County Zoning Code (HCC), Chapter 25. However, Section 25-5-142. Permitted uses. (a) (46), includes: “ Utility facilities, public and private, including offices or yards for equipment, material, vehicle storage, repair or maintenance.” No change of zone or Use Permit is expected to be required for the project.

3.6.4 Hawai‘i County General Plan and Kona CDP

The *General Plan* for the County of Hawai‘i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai‘i. The plan was adopted by ordinance in 1989 and revised in 2005 (Hawai‘i County Planning Department). The *General Plan* itself is organized into thirteen elements, with policies, objectives, standards, and principles for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai‘i. Most relevant to the Proposed Action are the following Goal and Policies, and Courses of Action within particular chapters of the General Plan:

HISTORIC SITES

6.2 GOALS

- (a) Protect, restore, and enhance the sites, buildings, and objects of significant historical and cultural importance to Hawai‘i.
- (b) Appropriate access to significant historic sites, buildings, and objects of public interest should be made available.

Discussion: No historic properties including archaeological sites are known or expected to exist on or near the project site. The Kohanaiki Business Park was inspected for archaeological resources in connection with its original development, and none were found (PBR Hawaii 1991). Since then, the project site has been fully graded and has been paved over and used as an industrial facility or baseyard since the 1990s. The 20 to 30-year old structures on the site have no historical significance. As such, no historic properties are present. In the unlikely event that archaeological resources are encountered during grading or construction, contract conditions will require that work in the immediate area of the discovery will be halted and the State Historic Preservation Division (SHPD) will be contacted as outlined in Hawai‘i Administrative Rules 13§13-275-12. In order to assist in compliance with the Chapter 6e, Hawai‘i Revised Statutes (HRS) process, the State Historic Preservation Division (SHPD) was provided a link to a digital copy of the Draft EA for their comment on the presumed lack of historic properties. The Department of Public Works will submit information concerning the Proposed Action to SHPD, if required, at the conclusion of the Draft EA comment period in order to advance review under Chapter 6e, HRS process. Therefore the Proposed Action is not inconsistent with the relevant goals, policies, and courses of action for historic sites in Hawai‘i County.

NATURAL BEAUTY

7.2 GOALS

- (a) Protect, preserve and enhance the quality of areas endowed with natural beauty, including the quality of coastal scenic resources.
- (b) Protect scenic vistas and view planes from becoming obstructed.
- (c) Maximize opportunities for present and future generations to appreciate and enjoy natural and scenic beauty.

7.3 POLICIES

- (a) Increase public pedestrian access opportunities to scenic places and vistas.
- (d) Access easement to public or private lands that have natural or scenic value shall be provided or acquired for the public.
- (i) Do not allow incompatible construction in areas of natural beauty.

Discussion: The Proposed Action does not involve adverse impacts to scenic areas or vantages and would not affect the natural beauty of Kona. Therefore the action is consistent with relevant goals, policies, and courses of action of the Natural Beauty section of the Hawai'i County General Plan.

FLOOD CONTROL

5.2 GOALS

- (a) Protect human life.
- (b) Prevent damage to man-made improvements.
- (c) Control pollution.
- (d) Prevent damage from inundation.
- (e) Reduce surface water and sediment runoff.
- (f) Maximize soil and water conservation.

5.3 POLICIES

- (a) Enact restrictive land use and building structure regulations in areas vulnerable to severe damage due to the impact of wave action. Only uses that cannot be located elsewhere due to public necessity and character, such as maritime activities and the necessary public facilities and utilities, shall be allowed in these areas.
- (g) Development-generated runoff shall be disposed of in a manner acceptable to the Department of Public Works and in compliance with all State and Federal laws.

5.4 STANDARDS

- (a) "Storm Drainage Standards," County of Hawaii, October, 1970, and as revised.
- (b) Applicable standards and regulations of Chapter 27, "Flood Control," of the Hawaii County Code.
- (c) Applicable standards and regulations of the Federal Emergency Management Agency (FEMA).
- (d) Applicable standards and regulations of Chapter 10, "Erosion and Sedimentation Control," of the Hawaii County Code.
- (e) Applicable standards and regulations of the Natural Resources Conservation Service and the Soil and Water Conservation Districts.

Discussion: The entire property is within Zone X, or areas outside of the 500-year floodplain as determined by detailed methods in the Flood Insurance Rate Maps (FIRM). The Proposed Action will conform to applicable drainage regulations and policies of the County of Hawai'i.

NATURAL RESOURCES

8.2 GOALS

- (a) Protect and conserve the natural resources from undue exploitation, encroachment and damage.
- (b) Provide opportunities for recreational, economic, and educational needs without despoiling or endangering natural resources.
- (c) Protect and promote the prudent use of Hawaii's unique, fragile, and significant environmental and natural resources.
- (e) Protect and effectively manage Hawaii's open space, watersheds, shoreline, and natural areas.

8.3 POLICIES

- (b) Encourage a program of collection and dissemination of basic data concerning natural resources.

- (h) Encourage public and private agencies to manage the natural resources in a manner that avoids or minimizes adverse effects on the environment and depletion of energy and natural resources to the fullest extent.
- (i) Encourage an overall conservation ethic in the use of Hawaii's resources by protecting, preserving, and conserving the critical and significant natural resources of the County of Hawaii.
- (u) Ensure that activities authorized or funded by the County do not damage important natural resources.

Discussion: The Proposed Action does not involve destruction of natural resources and is consistent with the goals, standards and policies of the Natural Resources chapter of the Hawai'i County General Plan.

PUBLIC FACILITIES

10.1.2 GOAL

- (a) Encourage the provision of public facilities that effectively service community and visitor needs and seek ways of improving public service through better and more functional facilities in keeping with the environmental and aesthetic concerns of the community.

10.1.3 POLICIES

- (a) Continue to seek ways of improving public service through the coordination of service and maximizing the use of personnel and facilities.

Discussion: The Proposed Action satisfies the relevant goal and policies through improvements of services at an existing location that maximizes the efficiency of operations and minimizes costs, without environmental or scenic impacts.

LAND USE

14.2 GOALS

- (a) Designate and allocate land uses in appropriate proportions and mix and in keeping with the social, cultural, and physical environments of the County.
- (b) Protect and encourage the intensive and extensive utilization of the County's important agricultural lands.

14.4.2 INDUSTRIAL LAND USE GOALS

- (a) Designate and allocate industrial areas in appropriate proportions and in keeping with the social, cultural, and physical environments of the County.
- (b) Promote and encourage the rehabilitation of industrial areas that are serviced by basic community facilities and utilities.

14.4.3 INDUSTRIAL LAND USE POLICIES

- a) Support the creation of industrial parks in appropriate locations as an alternative to strip development.
- (b) Achieve a broader diversification of local industries by providing opportunities for new industries and strengthening existing industries.

(c) Locate industrial areas convenient to transportation facilities, and provide a variety of industrial zoned districts and lot sizes, depending on the needs of the industries and the communities.

Discussion: The Proposed Action would be highly consistent with industrial goals and policies and would promote efficient use of an existing facility.

The *Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG)*. The LUPAG map component of the *General Plan* is a graphic representation of the Plan's goals, policies, and standards as well as of the physical relationship between land uses. It establishes the basic urban and non-urban form for the County and identifies critical planned public and cultural facilities, public utilities and safety features, and transportation corridors. The project site is classified as Urban Expansion in the LUPAG. Continuing use of the project site for a public works baseyard is consistent with this designation.

Kona Community Development Plan

The Kona Community Development Plan (CDP) encompasses the judicial districts of North and South Kona, and was developed under the framework of the February 2005 County of Hawai'i General Plan. Community Development Plans are intended to translate broad General Plan Goals, Policies, and Standards into implementation actions as they apply to specific geographical regions around the County. CDPs are also intended to serve as a forum for community input into land-use, delivery of government services and any other matters relating to the planning area.

The General Plan now requires that a Community Development Plan shall be adopted by the County Council as an "ordinance," giving the CDP the force of law. This is in contrast to plans created prior to 2008, which were adopted by "resolution" and served only as guidelines or reference documents to decision-makers. The Kona CDP was adopted in September 2008 by the County Council.

The Plan has many elements and wide-ranging implications, but there are several major strategies that embody the guiding principles related to the economy, energy, environmental quality, flooding and other natural hazards, historic sites, natural beauty, natural resources and shoreline, housing, public facilities, public utilities, recreation, transportation and land use. Concerning public facilities, the Plan calls for providing

...infrastructure and essential facilities concurrent with growth. Future growth should occur where infrastructure (roads and utilities) and essential facilities (i.e. police, fire, and schools) are already in place. These facilities should be maintained at a level that will enhance the quality of life for Kona residents.

The Proposed Action is highly consistent with this dictate, as it retains and improves an existing facility that will benefit public infrastructure. The public services and transportation sections do not explicitly discuss public works baseyards. The Kohanaiki Business Park is not discussed in the Plan, but Hulikoa Drive is shown connecting to future roads both *mauka* and north and south. No aspect of the Proposed Action would be contrary with such connections.

PART 4: DETERMINATION

Based on the information to this point, the Hawai'i County Department of Public Works expects to determine that the proposed project will not significantly alter the environment. It is therefore anticipated that an Environmental Impact Statement is not warranted and that the Department will issue a Finding of No Significant Impact (FONSI). A final determination will be made by the Department after consideration of comments on the Draft EA.

PART 5: FINDINGS AND REASONS

Chapter 11-200.1-13, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

- (a) In considering the significance of potential environmental effects, agencies shall consider and evaluate the sum of effects of the proposed action on the quality of the environment.
- (b) In determining whether an action may have a significant effect on the environment, the agency shall consider every phase of a proposed action, the expected impacts, and the proposed mitigation measures. In most instances, an action shall be determined to have a significant effect on the environment if it may:

- (1) Irrevocably commit a natural, cultural, or historic resource;

No valuable natural or cultural resources would be committed or lost by the Proposed Action, which would not involve significant historic sites or native species or habitat. No cultural resource or practices occur on the site or will be affected, and mitigation measures will reduce impacts to adjacent natural and cultural resources to minimal levels.

- (2) Curtail the range of beneficial uses of the environment;

The Proposed Action expands and in no way curtails beneficial uses of the environment.

- (3) Conflict with the State's environmental policies or long-term environmental goals established by law;

The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The Proposed Action is minor, environmentally beneficial, and fulfills aspects of these policies calling for an improved social environment by enhancing vital public works activities in a sustainable manner without causing environmental harm. It is thus consistent with all elements of the State's long-term environmental policies.

- (4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

The Proposed Action will benefit the social and economic welfare of the community and State by making public works baseyard use more efficient, promoting better public services.

(5) Have a substantial adverse effect on public health;

The Proposed Action will not have any adverse effect on public health.

(6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

No secondary effects are expected to result from the Proposed Action, which does not expand facilities in such a way as to induce in-migration or unduly affect roads or other public facilities.

(7) Involve a substantial degradation of environmental quality;

The Proposed Action is minor and environmentally benign and would thus not contribute to environmental degradation, given adherence to Best Management Practices that are being integrated into the project.

(8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;

The Proposed Action is not related to activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.

(9) Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat;

The project site is completely developed for baseyard use and no rare, threatened or endangered plant species are present. Impacts to rare, threatened or endangered species of fauna will not occur, with planned restrictions on lighting and the timing of disturbance to woody vegetation taller than 15 feet, if any is necessary.

(10) Have a substantial adverse effect on air or water quality or ambient noise levels;

Slight increases in noise and effects to air quality will occur during construction, but they will be temporary and mitigated to non-significant levels. Sedimentation will be controlled through project BMPs developed as part of grading and engineering plans.

(11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

Although the Proposed Project is located in an area with volcanic and seismic risk, the entire Island of Hawai'i shares this risk. The Proposed Action is not imprudent to undertake and will employ design and construction standards appropriate to the seismic zone. The property is not located in a flood zone or any other hazardous area, and it would not affect any such area. Due to the elevation of the property at 292 feet above sea level, there is no risk to the Proposed Project from sea level rise. The Proposed Action has adapted to climate change by accounting for the potential for larger storms, through minimizing hard surfaces that generate runoff in heavy rainfall, and by designing with adequate wind load to account for potentially greater storm winds.

(12) Have a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies;

The Proposed Action would not adversely impact any scenic sites or viewplanes.

(13) Require substantial energy consumption or emit substantial greenhouse gases.

Improvements to the buildings and facilities and new construction of the facilities would involve unavoidable small but non-negligible carbon emissions. Continued baseyard activities would entail greenhouse gas emissions that would be essentially the same regardless of where the activities were taking place, likely leading to no net increase. The project is being designed to the requirements of various building and energy conservation codes that establish minimum requirements for building systems and energy-efficient buildings based on prescriptive and performance-related provisions, using new materials and new energy-efficient designs. The Proposed Project would not be expected to contribute significantly to global climate change.

For the reasons above, the Proposed Action would not have any significant effect in the context of Chapter 343, Hawai'i Revised Statutes and section 11-200-12 of the State Administrative Rules.

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**Environmental Assessment
Hulikoa Baseyard Building Addition and Renovations**

APPENDIX 1a Comments in Response to Early Consultation

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Mitchell D. Roth
Mayor



Paul K. Ferreira
Police Chief

Kenneth Bugado, Jr
Deputy Police Chief

County of Hawai'i

POLICE DEPARTMENT

349 Kapi'olani Street • Hilo, Hawai'i 96720-3998
(808) 935-3311 • Fax (808) 961-2389

August 27, 2021

Mr. Ron Terry
Principal
Geometrician Associates, LLC
10 Hina Street
Hilo, HI 96720

Dear Mr. Terry:

SUBJECT: EARLY CONSULTATION FOR ENVIRONMENTAL ASSESSMENT FOR HULIKOA BASEYARD RENOVATIONS AND BUILDING ADDITION PROJECT, TMK (3RD) 7-3-058:041, NORTH KONA DISTRICT, ISLAND OF HAWAII

The above-referenced Early Consultation for Environmental Assessment for Hulikoa Baseyard Renovations and Building Addition Project has been reviewed and we offer no comments at this time.

Should you have any questions, please contact Captain Gilbert Gaspar Jr., Commander of the Kona District, at 326-4646, extension 299.

Sincerely,

PAUL K. FERREIRA
POLICE CHIEF

A handwritten signature in black ink, appearing to read "Chad Basque", is written over a circular stamp.

CHAD BASQUE
ASSISTANT POLICE CHIEF
AREA II OPERATIONS

GG/jaj
21HQ0853

From: Zimpfer, Jeff F <Jeff_Zimpfer@nps.gov>
Sent: Tuesday, August 31, 2021 10:25 AM
To: rterry@hawaii.rr.com
Cc: Broward, John <John_Broward@nps.gov>; Lane-Kamahele, Melia M <Melia_Lane-Kamahele@nps.gov>
Subject: Early consultation for the Hulikoa Baseyard

Aloha Ron,

Thanks for reaching out to us regarding the early consultation for the Hulikoa Baseyard. We do not have any comments at this time. Please included us in outreach when the draft EA is available.

~Jeff

Jeff Zimpfer, Ph.D.
National Park Service
Environmental Protection Specialist
Kaloko-Honokōhau National Historical Park
73-4786 Kanalani St., #14
Kailua Kona, HI 96740
ph: 808-329-6881 x1500
fax: 808-329-2597
jeff_zimpfer@nps.gov
<http://www.nps.gov/kaho/index.htm>

The National Park Service cares for special places saved by the American people so that all may experience our heritage

Mitchell D. Roth
Mayor

Lee E. Lord
Managing Director



Kazuo S.K.L. Todd
Fire Chief

Eric H. Moller
Deputy Fire Chief

County of Hawai'i
HAWAII FIRE DEPARTMENT
25 Aupuni Street • Suite 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

September 7, 2021

Ron Terry, Principal
Geometrical Associate
10 Hina Street
Hilo, Hawai'i 96720
Email: rterry@hawaii.rr.com

Dear Mr. Terry:

SUBJECT: Early Consultation for Environmental Assessment for Hulikoa Baseyard
Renovations and Building addition project
TMK (3) 7-3-058:041 North Kona District, Island of Hawai'i

We are in receipt of your letter dated August 18, 2021 in regards to a Early Consultation Environmental Assessment finding of no significant Impact for the above listed subject. The Hawai'i Fire Department has no comments or issues.

If you should have any questions, please feel free to contact my office at (808) 932-2911.

Mahalo,

A handwritten signature in black ink, appearing to read "Kazuo S.K.L. Todd".

KAZUO S.K.L. TODD
Fire Chief

KV/ds



DAVID Y. IGE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

JADE T. BUTAY
DIRECTOR

Deputy Directors
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

IN REPLY REFER TO:
DIR 0826
STP 8.3249

September 3, 2021

VIA EMAIL: rterry@hawaii.rr.com

Mr. Ron Terry
Principal
Geometrician Associates
10 Hina Street
Hilo, Hawaii 96720

Dear Mr. Terry:

Subject: Early Consultation for Environmental Assessment
Hulikoa Baseyard Renovations and Building Addition Project
North Kona, Hawaii
Tax Map Key: (3) 7-3-058:041

Thank you for your letter dated August 18, 2021 requesting early consultation comments for the subject Hulikoa Baseyard project. The State of Hawaii Department of Transportation (HDOT) has reviewed your letter and understands the Hawaii County Department of Public Works is proposing to construct building additions and various other improvements at the existing Hulikoa Baseyard in the upper area of the Kohanaiki Business Park. Access to the project site is via Hulikoa Drive which intersects with Queen Kaahumanu Highway (State Route 19) to the west.

HDOT has the following comments:

Airports Division (HDOT-A)

1. The proposed facility is approximately 1.51 miles from the property boundary of Ellison Onizuka Kona International Airport at Keahole (KOA). All projects within 5 miles from Hawaii State airports are advised to read the Technical Assistance Memorandum (TAM) for guidance with development and activities that may require further review and permits. The TAM can be viewed at this link:
http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.
2. The proposed facility is approximately 13,730 feet from the end of Runway 17 at KOA. Prior to construction, Federal Aviation Administration (FAA) regulation requires the submittal of FAA Form 7460-1 Notice of Proposed Construction or alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet. Construction equipment and staging area heights, including heights of temporary

construction cranes, shall be included in the submittal. The form and criteria for submittal can be found at the following website:
<https://oeaaa.faa.gov/oeaaa/external/portal.jsp>

3. Due to the proximity to the airport, the developer should be aware of potential noise from aircraft operations. There is also a potential for fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project location. These impacts may increase or decrease over time and depending on airport operations.
4. Photovoltaic (PV) systems located in or near the protected approach and departure air space can create a hazardous condition for pilots due to possible glint and glare reflected from the PV array. If glint or glare from the PV array creates a hazardous condition for pilots, the owner of the PV system shall be prepared to immediately mitigate the hazard upon notification by the HDOT-A and/or FAA.

PV systems have also been known to emit radio frequency interference (RFI) to aviation-dedicated radio signals, thereby disrupting the reliability of air-to-ground communications. Again, the owner of the PV system shall be prepared to immediately mitigate the RFI hazard upon notification by the HDOT-A and/or FAA.

The HDOT-A recommends that the developer submit a separate FAA Form 7460-1 for the site of the proposed PV system. Note that you will need latitude, longitude, ground elevation and the above ground elevation data for the installation site in order to fully complete this form.

A glint and glare analysis must be attached to the PV submittal of FAA Form 7460-1. The following website may assist you with preparation of a glint and glare analysis: <https://share-ng.sandia.gov/glare-tools/>. When you have received the FAA determination from your submittal of FAA Form 7460-1, please provide a copy to HDOT-A for our files.

Highways Division (HDOT-HWY)

Based on the information provided, the proposed project does not appear to significantly impact the State highway system. Therefore, the HDOT-HWY has no comments on or objections to the proposed project. However, in the event there are any unexpected traffic issues attributed to the project, the Applicant shall mitigate them to the satisfaction of the HDOT-HWY, at no cost to the State.

If there are any questions, please contact Mr. Blayne Nikaido of the HDOT Statewide Transportation Planning Office at (808) 831-7979 or via email at blayne.h.nikaido@hawaii.gov.

Sincerely,



JADE T. BUTAY
Director of Transportation



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

September 7, 2021

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, HI 96721

Dear Mr. Terry:

**Subject: Pre-Environmental Assessment for Hulikoa Baseyard Renovations and
Building Addition Project
North Kona District, Island of Hawai'i
Tax Map Key 7-3-058:041**

This is in response to your Pre-Environmental Assessment Consultation request dated August 18, 2021.

Please be informed that there is an existing 12-inch waterline along Hulikoa Drive fronting the subject parcel. There is an existing 5/8-inch meter serving the subject parcel, which is limited to an average usage of 400 gallons per day.

We request that an estimated maximum daily water demand calculation for the overall water use of the facilities, prepared by a professional engineer licensed in the State of Hawai'i, be submitted for review and approval. The water usage calculations should include the estimated peak flow in gallons per minute and the total estimated maximum daily water usage in gallons per day.

Based on the water usage calculation provided, the Department will determine if existing the water meter is adequate.

For your information, the Department's water system facilities cannot support any additional demand for the proposed project on the subject parcel at this time. Extensive improvements and additions must be constructed to support the additional demand, which may include, but not be limited to, source, storage, transmission, and distribution facilities. Currently, funding is not available from the Department and no schedule is set for such improvements.

Should there be any questions, please contact Mr. Ryan Quitarano of our Water Resources and Planning Branch at 961-8070, extension 256.

Sincerely yours,

Keith K. Okamoto, P.E.
Manager-Chief Engineer

RQ:dj

... Water, Our Most Precious Resource ... Ka Wai A Kāne ...

The Department of Water Supply is an Equal Opportunity provider and employer.