PLANNING COMMISSION

KAAINA S. HULL, CLERK OF COMMISSION

FRANCIS DEGRACIA, CHAIR
GERALD AKO, VICE CHAIR
HELEN COX, MEMBER
GLENDA NOGAMI STREUFERT, MEMBER
JERRY ORNELLAS, MEMBER
LORI OTSUKA, MEMBER

25 AUG 20 P12 :36

- **The Planning Commission Meeting will be at:**

  Līhuʻe Civic Center, Moikeha Building
  Meeting Room 2A-2B
  4444 Rice Street, Līhuʻe, Kauaʻi, Hawaiʻi

- **Oral testimony** will be taken on specific agenda items, **at the public meeting location** indicated on the meeting agenda.

- **Written testimony** indicating your 1) name or pseudonym, and if applicable, your position/title and organization you are representing, and 2) the agenda item that you are providing comment on, may be submitted on any agenda item in writing to planningdepartment@kauai.gov or mailed to the County of Kauaʻi Planning Department, 4444 Rice Street, Suite 473, Līhuʻe, Hawaiʻi 96766. Written testimony received by the Planning Department at least **24 hours prior** to the meeting will be posted as testimony to the Planning Commission's website prior to the meeting (https://www.kauai.gov/Government/Boards-and-Commissions/Planning-Commission). Any testimony received after this time will be retained as part of the record, but we cannot assure the Commission will receive it with sufficient time for review prior to the meeting.

IF YOU NEED AN AUXILIARY AID/SERVICE, OTHER ACCOMMODATION DUE TO A DISABILITY, OR AN INTERPRETER FOR NON-ENGLISH SPEAKING PERSONS, PLEASE CONTACT THE OFFICE OF BOARDS & COMMISSIONS AT (808) 241-4917 OR ADAVIS@KAUAI.GOV AS SOON AS POSSIBLE. REQUESTS MADE AS EARLY AS POSSIBLE WILL ALLOW ADEQUATE TIME TO FULFILL YOUR REQUEST. UPON REQUEST, THIS NOTICE IS AVAILABLE IN ALTERNATE FORMATS SUCH AS LARGE PRINT, BRAILLE, OR ELECTRONIC COPY.

PLANNING COMMISSION MEETING NOTICE AND AGENDA

Tuesday, August 26, 2025
9:00 a.m. or shortly thereafter
Līhu'e Civic Center, Moikeha Building
Meeting Room 2A-2B
4444 Rice Street, Līhu'e, Kaua'i, Hawai'i

25 AUG 20 P12:36

A. CALL TO ORDER

B. ROLL CALL

C. APPROVAL OF AGENDA

D. MINUTES OF THE MEETING(S) OF THE PLANNING COMMISSION

1. None for this meeting.

E. RECEIPT OF ITEMS FOR THE RECORD

F. COMMITTEE REPORTS

1. Subdivision Committee Report

    a. Subdivision Application No. S-2017-6
    Moloa'a Valley Homeowners, LLC.
    Proposed 7-Lot Subdivision
    TMK: (4) 4-9-011: 01
    Kawaihau, Kaua'i

    b. Subdivision Application No. S-2023-4
    Kukui'ula Parcel J1-A Subdivision
    BBCP Kukui'ula Development, LLC.
    Proposed 18-Lot Subdivision
    TMK: (4) 2-6-023: 040
    Kōloa (Makai), Kōloa, Kona, Kaua'i

    c. Subdivision Application No. S-2024-1
    Jiro Yukimura Trust and Jennie T. Yukimura Trust
    Proposed 4-Lot Subdivision
    TMK: (4) 3-7-006: 002
    Hanamā'ulu, Līhu'e, Kaua'i

    d. Subdivision Application No. S-2024-10
    Lima Ola Phase 2 Subdivision
    County of Kaua'i Housing Agency
    Proposed 4-Lot Consolidation and Re-subdivision into 70-Lots
    TMKs: (4) 2-1-013: 044, 052, 053, and 055
    'Ele'ele, Kaua'i

e. Subdivision Application No. S-2024-7
Hōkūala Resort Subdivision 1
Tower Kauai Lagoons Sub 1, LLC.
Proposed 10-Lot Consolidation and Re-subdivision into 16-Lots
TMK: (4) 3-5-004: 100 to 109
Kalapakī, Līhuʻe, Kauaʻi

f. Subdivision Application No. S-2024-8
Hōkūala Resort Subdivision 1A
2014 Tower Kauai Lagoons Golf, LLC. /
Tower Kauai Lagoons Land, LLC. /
Tower Kauai Lagoons Sub 7, LLC.
Proposed 2-Lot Consolidation and Re-subdivision into 15-Lots
TMK: (4) 3-5-001: 027 and 168
Kalapakī, Līhuʻe, Kauaʻi

G. HEARINGS AND PUBLIC COMMENT

1. Continued Agency Hearing

a. None for this meeting.

2. New Agency Hearing

a. **CLASS IV ZONING PERMIT Z-IV-2026-1** to allow the construction of a 42,000 square feet warehouse/distribution facility and associated site improvements on Lot 4 of the Ahukini Business Park Subdivision in Lihue, involving a parcel situated on the makai side of Kapule Highway and immediately adjacent to the County of Kauai Ahukini Transfer Station, further identified as Tax Map Key: (4) 3-7-002:021 and containing a total area of 14.671 acres – **BHD LAND DEVELOPMENT LLC. [Director's Report Received, 8/12/2025].**

1. Director's Report pertaining to this matter.
2. Transmittal of agency comments to Planning Commission.

b. **SPECIAL MANAGEMENT AREA USE PERMIT (SMA(U)-2026-1), CLASS IV ZONING PERMIT (Z-IV-2026-2), and USE PERMIT (U-2026-1)** to accommodate improvements to the existing Wastewater Treatment Plant (WWTP) on property identified as the Ching Young Village Shopping Center in Hanalei Town, further identified as 5-5190 Kūhiō Highway, Tax Map Key: (4) 5-5-002:040, containing a total area of 2.485 acres = **MICHAEL G. CHING, ET AL. [Director's Report Received, 8/12/2025].**

1. Director's Report pertaining to this matter.
2. Transmittal of agency comments to Planning Commission.

3. Continued Public Hearing

a. None for this meeting.

4. **New Public Hearing**

   a. **ZA-2026-1: A bill (2969)** for an ordinance amending Chapter 8, Article 27 of the Kaua'i County Code 1987, as amended, relating to Shoreline Setback and Coastal Protection. The purpose of this Ordinance is to amend the Shoreline Setback Ordinance by adding safeguards that protect life and property and ensure the longevity and integrity of Kauai's coastal and beach resources along the shoreline = **KAUAI COUNTY COUNCIL.**

      1. Director's Report pertaining to this matter.
      2. Transmittal of agency comments to Planning Commission.

H. CONSENT CALENDAR

1. **Status Reports**

   a. None for this meeting.

2. **Director's Report for Project(s) Scheduled for Agency Hearing**

   a. **SPECIAL MANAGEMENT AREA USE PERMIT (SMA(U)-2026-2), CLASS IV ZONING PERMIT Z-IV-2026-3, and USE PERMIT U-2026-2** for the construction of a farm dwelling unit and associated site improvements within Lot 15 of the Seacliff Plantation Subdivision in Kilauea, involving a parcel situated at the terminus of Makana'ano Place, approx. 1,200 east of its intersection with Pali Moana Place, further identified as Tax Map Key: (4) 5-2-004:088 containing a total area of 5.11 acres = **CAROLINE NEAL.**

      1. Director's Report pertaining to this matter.

3. **Class III Zoning Permits**

   a. None for this meeting.

I. GENERAL BUSINESS MATTERS

1. None for this meeting.

J. COMMUNICATIONS

1. None for this meeting.

K. UNFINISHED BUSINESS (For Action)

1. **None for this meeting.**

L. NEW BUSINESS (For Action)

1. **CLASS IV ZONING PERMIT Z-IV-2026-1** to allow the construction of a 42,000 square feet warehouse/distribution facility and associated site improvements on Lot 4 of the Ahukini Business Park Subdivision in Lihue, involving a parcel situated on the makai side of Kapule Highway and immediately adjacent to the County of Kauai Ahukini Transfer Station, further identified as Tax Map Key: (4) 3-7-002:021 and containing a total area of 14.671 acres – **BHD LAND DEVELOPMENT LLC. [Director's Report Received, 8/12/2025].**

2. **SPECIAL MANAGEMENT AREA USE PERMIT (SMA(U)-2026-1), CLASS IV ZONING PERMIT (Z-IV-2026-2), and USE PERMIT (U-2026-1)** to accommodate improvements to the existing Wastewater Treatment Plant (WWTP) on property identified as the Ching Young Village Shopping Center in Hanalei Town, further identified as 5-5190 Kūhiō Highway, Tax Map Key: (4) 5-5-002:040, containing a total area of 2.485 acres = **MICHAEL G. CHING, ET AL. [Director's Report Received, 8/12/2025].**

M. EXECUTIVE SESSION

Pursuant to Hawaii Revised Statutes Sections 92-4 and 92-5(a)(4), the purpose of this executive session is to consult with the County's legal counsel on questions, issues, status, and procedural matters. This consultation involves consideration of the powers, duties, privileges, immunities, and/or liabilities of the Commission and the County as they relate to the following matters:

1. Subdivision Application No. S-2017-6
   Moloa'a Valley Homeowners, LLC.
   Proposed 7-Lot Subdivision
   TMK: (4) 4-9-011: 01
   Kawaihau, Kaua'i

2. Subdivision Application No. S-2023-4
   Kukui'ula Parcel J1-A Subdivision
   BBCP Kukui'ula Development, LLC.
   Proposed 18-Lot Subdivision
   TMK: (4) 2-6-023: 040
   Kōloa (Makai), Kōloa, Kona, Kaua'i

3. Subdivision Application No. S-2024-1
   Jiro Yukimura Trust and Jennie T. Yukimura Trust
   Proposed 4-Lot Subdivision
   TMK: (4) 3-7-006: 002
   Hanamā'ulu, Līhu'e, Kaua'i

4. Subdivision Application No. S-2024-10
   Lima Ola Phase 2 Subdivision
   County of Kaua'i Housing Agency
   Proposed 4-Lot Consolidation and Re-subdivision into 70-Lots
   TMKs: (4) 2-1-013: 044, 052, 053, and 055
   'Ele'ele, Kaua'i

5. Subdivision Application No. S-2024-7
   Hōkūala Resort Subdivision 1
   Tower Kauai Lagoons Sub 1, LLC.
   Proposed 10-Lot Consolidation and Re-subdivision into 16-Lots
   TMK: (4) 3-5-004: 100 to 109
   Kalapakī, Līhu'e, Kaua'i

6. Subdivision Application No. S-2024-8
   Hōkūala Resort Subdivision 1A
   2014 Tower Kauai Lagoons Golf, LLC. /
   Tower Kauai Lagoons Land, LLC. /
   Tower Kauai Lagoons Sub 7, LLC.
   Proposed 2-Lot Consolidation and Re-subdivision into 15-Lots
   TMK: (4) 3-5-001: 027 and 168
   Kalapakī, Līhu'e, Kaua'i

7. **CLASS IV ZONING PERMIT Z-IV-2026-1** to allow the construction of a 42,000 square feet warehouse/distribution facility and associated site improvements on Lot 4 of the Ahukini Business Park Subdivision in Lihue, involving a parcel situated on the makai side of Kapule Highway and immediately adjacent to the County of Kauai Ahukini Transfer Station, further identified as Tax Map Key: (4) 3-7-002:021 and containing a total area of 14.671 acres **– BHD LAND DEVELOPMENT LLC. [Director's Report Received, 8/12/2025].**

8. **SPECIAL MANAGEMENT AREA USE PERMIT (SMA(U)-2026-1), CLASS IV ZONING PERMIT (Z-IV-2026-2), and USE PERMIT (U-2026-1)** to accommodate improvements to the existing Wastewater Treatment Plant (WWTP) on property identified as the Ching Young Village Shopping Center in Hanalei Town, further identified as 5-5190 Kūhiō Highway, Tax Map Key: (4) 5-5-002:040, containing a total area of 2.485 acres = **MICHAEL G. CHING, ET AL. [Director's Report Received, 8/12/2025].**

9. **ZA-2026-1: A bill (2969)** for an ordinance amending Chapter 8, Article 27 of the Kaua'i County Code 1987, as amended, relating to Shoreline Setback and Coastal Protection. The purpose of this Ordinance is to amend the Shoreline Setback Ordinance by adding safeguards that protect life and property and ensure the longevity and integrity of Kauai's coastal and beach resources along the shoreline = **KAUAI COUNTY COUNCIL.**

10. **SPECIAL MANAGEMENT AREA USE PERMIT (SMA(U)-2026-2), CLASS IV ZONING PERMIT Z-IV-2026-3, and USE PERMIT U-2026-2** for the construction of a farm dwelling unit and associated site improvements within Lot 15 of the Seacliff Plantation Subdivision in Kilauea, involving a parcel situated at the terminus of Makana'ano Place, approx. 1,200 east of its intersection with Pali Moana Place, further identified as Tax Map Key: (4) 5-2-004:088 containing a total area of 5.11 acres = **CAROLINE NEAL.**

N. ANNOUNCEMENTS

1. Topics for Future Meetings.

   The following regularly scheduled Planning Commission meeting will be held at 9:00 a.m., or shortly thereafter, on September 9, 2025. The Planning Commission anticipates this meeting to be held in-person at the Lihue Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, Hawaii. The Commission will announce its intended meeting method via an agenda electronically posted at least six days prior to the meeting date.

O. ADJOURNMENT

SPECIAL MANAGEMENT AREA (SMA) Minor Determinations

Date (Action)	SMA Minor Permit number	Location (TMK)	Activity/ structure
	None for this meeting.		

Pursuant to Section 8-27.8 (6) of the Kaua'i County Code (1987), as amended, the following shoreline setback determinations by the Director are disclosed for purposes of public notification.

August 26, 2025
SHORELINE SETBACK DETERMINATIONS

Application No.	**Name of Applicant(s)**	**Property I.D. (Tax Map Key)**	**Location**	**Development/Reasons**
SSD-2026-7	Kapa'a Shores	4-3-009:004	Kapa'a	Repair/ Re-roof for Building A, B, and C. Work deemed unsubstantial per DPW letter dated 9/25/2024. Building A (16%), Building B (45.1%), and Building C (14.7%).

DEPARTMENT OF PLANNING

STANDARD ZONING PERMIT APPLICATION

Fees vary based on permits required.

This application shall be filled out by all seeking Class I, II, and III Zoning permits pursuant to the Kauai County Code, Hawai'i Revised Statutes Chapter 205A and all relevant rules and regulations of the Planning Commission and Department.

DEPARTMENT USE ONLY			
Zoning			Intake By:
Use			
Variance			Intake Date:
SMA			
PDU			Acceptance Date/By:
TOTAL FEE:			
Additional Fees:			
Receipt Number			
Building Permit No.			

Permitting fees may be made via cash, check or online payment. All checks shall be made out to: **"Director of Finance"**

Complete Information Below			
Tax Map Key Number	4-3-7-002-021	**Condominium Number**	
Property Owner Name(s)	David Hinazumi		
Property Owner Mailing Address	3-1850 Kaumualli Highway Lihue, Hawaii 96766		
Property Owner Email	dhinazumi@grovefarm.com	**Property Owner Phone**	808-245-3678

If you are an authorized agent for the property owner, complete the following:			
Authorized Agent Name(s)	Tracy Hammer		
Authorized Agent Mailing Address	2425 E. Camelback Rd, Suite 220		
Authorized Agent Email	thammer@bhdevco.com	**Authorized Agent Phone**	602-520-4745

What is the proposed construction and/or intended use of the structure or parcel (may attach additional info)?

SEE ENCLOSED CLASS IV and SMA MINOR APPLICATION NARRATIVE

Applicant Declarations (incorrect responses may slow your permit review)

Please place an "X" under Yes or No under the following:

		YES	**NO**	**Staff Verification**
1	Is there a structure on the property that is 50 years old or older?		x	
2	Is this a permit for an after-the-fact construction or activity?		x	
3	Are there known burials on the site?		x	
4	Will the project involve ground disturbance?	x		
5	Is this a conversion of a legally existing single-family dwelling unit into a multi-family two dwelling unit?		X	

G.2.a.
Aug 26, 2025

~~H.2.a.~~
~~Aug 12, 2025~~

Submittal Checklist

Please **INITIAL** under "Yes" or not applicable "N/A" regarding each of the statements:

		YES	NA	Staff Verification
1	All plot plans I have submitted are drawn to scale.	x		
2	I have ensured all TMK numbers are visible on all plan sheets.	x		
3	Any plans I have submitted clearly show all structures	x		

Acknowledgements - Please INITIAL next to each of the statements:

I UNDERSTAND:	Initial Here
Additional fees and/or the submittal of other application forms may be necessary to complete this application for acceptance and processing.	DvA
Tender of fees by the County does not imply acceptance of this application.	DvA
Errors in self-declaration or missing or incomplete information will delay acceptance and processing of your application.	DvA
Any purposeful misrepresentations in this application may result in delay, denial, permit revocation, violations, fines and even criminal prosecution.	DvA

The owner and/or authorized representative is hereby made aware that the construction, work, use or activity approved in this permit shall be subject to inspection by the Planning Department personnel. The applicant is advised that inspection may occur prior to or during construction and use to ascertain the activity is conducted in compliance with the law. Further, I am a duly authorized agent or have 100% ownership rights.

WARNING: if you are a property owner of a Unit within a Condominium Property Regime (CPR), you are obligated to acknowledge and understand your rights and duties under the documents governing your CPR. The Kaua'i County Planning Department (Department) has no duty or obligation to enforce CPR Documents. By submitting this application [or, authorization for], you hereby indemnify and hold harmless the Department from any and all liability arising from disputes or actions resulting from the interpretation or enforcement of your CPR documents.

OWNER/AGENT SIGNATURE: ______________ DATE: 4-10-25

FOR PLANNING DEPARTMENT USE ONLY (THIS CONSTITUTES PERMIT IF FILLED OUT BY DEPT.):

APPROVED ☐ DENIED ☐ BY: ______________ DATE: ______________

DIRECTOR'S CONDITIONS OF APPROVAL (staff to **initial** next to applicable conditions):

This permit shall expire if no building permit is issued within one (1) year after the approval date and/or if construction does not start within one (1) year of building permit issuance.	
Should any archaeological or historic resources be discovered during ground disturbing/construction work, all work in the area of the find shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures.	
Additional Conditions (State):	

DEPARTMENT OF PLANNING
STANDARD ZONING PERMIT APPLICATION

One (1) original; if providing plans, five (5) sets, including original, required.
Fees vary based on permits required and range from $30 to over $1000.
Proof of 100% fee ownership rights or authorized agent must be attached.

DEPARTMENT USE ONLY				
Zoning				Intake By:
Use				
Variance				Intake Date:
SMA				
PDU				Acceptance Date/By:
TOTAL FEE:				
Additional Fees:				
Receipt Number				
Building Permit No.				
Associated Permits (e.g. SSD)				

Check One: ☐ Paper Plans ☒ Electronic Plans

This application shall be filled out by all seeking Zoning, Use, Variance, SMA Use or PDU permits pursuant to the Kauai County Code, Hawaiʻi Revised Statutes Chapter 205A and all relevant rules and regulations of the Planning Commission and Department. Supplemental information may be attached to form. SMA applications may also require additional SMA assessment forms.

Permitting fees may be made via cash or check. All checks shall be made out to: **"Director of Finance"**

Complete Information Below			
Tax Map Key Number	(4) 3-7-002: 021	Condominium Number	
Applicant Name(s)	BHD Land Development		
Property Address	3130 Ahukini Road, Lihue, Kauai 96766		
Mailing Address	2425 E. Camelback Rd., Suite 220, Phoenix, AZ 85016		
Parcel Area	14.671 Acres	Contact Phone	808-523-2500
Zoning Designation	I-G	Contact Email (if applicable)	pthoene@carlsmith.com

Onaona P. Thoene, Carlsmith Ball LLP

Applicant Declarations (incorrect responses may slow your permit review)

Please place an "X" under Yes or No under the following:

		YES	NO	Staff Verification
1	Is this property located in the Special Management Area (SMA)?	X		
2	Is this property part of a Condominium Property Regime (CPR)?		X	
3	Is this property within 500 feet of the shoreline?	X		
4	Is this property within the Agriculture Zoning District?		X	
5	Is there a structure on the property that is 50 years old or older?		X	
6	Do you have an Additional Dwelling Unit Certificate?		X	
7	Is this a permit for an after-the-fact construction or activity?		X	
8	I hold at least a 100% property interest in the property.		X	
9	Are you an agent for the property owner? Applicant has the owner's authorization.		X	
10	Has a similar application been previously denied?		X	
11	Is this an application for an agriculture structure under 200 square feet		X	
12	Are there known burials on the site?		X	
13	Are you using water not provided by a domestic water system?		X	
14	Does existing grade under building footprint change by 2' or more in any direction?			
15	The proposed residential unit is a Multi-Family Dwelling Unit?		X	
16	Is this a conversion of a legally existing single-family dwelling unit into a multi-family two dwelling unit?		X	
17	Is this structure a guest house?		X	
18	Does guest house contain a kitchen?		X	

1. What is the proposed construction and/or intended use of the structure or parcel (may attach additional info)? Warehouse and distribution facility.
2. If this is not the first dwelling unit on the subject property identified on this application, please state how many dwelling units presently exist: None.

Submittal Checklist

Please **INITIAL** under "Yes" or not applicable "N/A" regarding each of the statements:

		YES	NA	Staff Verification
1	All plot plans I have submitted are drawn to scale.	X		
2	I have ensured all TMK numbers are visible on all plan sheets.	X		
3	Any plans I have submitted clearly show all structures and setback dimensions.	X		
4	My plans provide lot coverage calculations	X		
5	I have ensured kitchens are marked with the 8' radii required by the Planning Department's Administrative Rules.		X	
6	Because this application involves a CPR, the plot plan shows all existing structures.		X	
7	Building plate does not exceed 20 feet from the finished grade at entry.		X	

Acknowledgements - Please **INITIAL** next to each of the statements:

I UNDERSTAND:	**Initial Here**
Additional fees and/or the submittal of other application forms may be necessary to complete this application for acceptance and processing.	PT
Tender of fees by the County does not imply acceptance of this application.	PT
Errors in self-declaration or missing or incomplete information will delay acceptance and processing of your application.	PT
Any purposeful misrepresentations in this application may result in delay, denial, permit revocation, violations, fines and even criminal prosecution.	PT

The owner and/or authorized representative is hereby made aware that the construction, work, use or activity approved in this permit shall be subject to inspection by Planning Department personnel. The applicant is advised that inspection may occur prior to or during construction and use to ascertain the activity is conducted in compliance with the law. Further, I am a duly authorized agent or have 100% ownership rights.

WARNING: if you are a property owner of a Unit within a Condominium Property Regime (CPR), you are obligated to acknowledge and understand your rights and duties under the documents governing your CPR. The Kaua'i County Planning Department (Department) has no duty or obligation to enforce CPR documents. By submitting this application [or, authorization form], you hereby indemnify and hold harmless the Department from any and all liability arising from disputes or actions resulting from the interpretation or enforcement of your CPR documents.

OWNER/AGENT SIGNATURE: ______________ DATE: 05-19-2025

FOR PLANNING DEPARTMENT USE ONLY (THIS CONSTITUTES PERMIT IF FILLED OUT BY DEPT.):

APPROVED ☐ DENIED ☐ BY: ______________ DATE: ______________

DIRECTOR'S CONDITIONS OF APPROVAL (staff to **initial** next to applicable conditions):

This permit shall expire if no building is issued within one (1) year after the approval date and/or if construction does not start within one (1) year of building permit issuance.	
Director's standard conditions for non-residential agricultural structures (attach)	
Should any archaeological or historic resources be discovered during ground disturbing/construction work, all work in the area of the find shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures.	
Additional Conditions (State):	

PLANNING DEPARTMENT
COUNTY OF KAUAʻI

GENERAL SUBMITTAL REQUIREMENTS

The following is a list of General Application requirements for Class III and IV Zoning Permits, Use Permits, Project Development Use Permits, Variance Permits, Special Permits, and Special Management Area Permits (SMA). In preparing Applications for permit applications or petitions, please provide an exhibit and/or page reference for the application submittal, information, and documents requested. Zoning Permit Application Forms, Special Management Assessment Forms, and Special Treatment District Checklist are also available at the Planning Department, 4444 Rice Street, Suite A473, Līhuʻe, Hawaiʻi 96766.

Pre-permit application consultation with the Planning Department and various County and State Agencies are recommended.

Instructions for Petitions for General Plan Amendments, State Land Use District Boundary Amendments (15 acres or less) and Zoning Amendments, are also available at the Planning Department.

An original plus one copy of the following items shall be submitted for review by the Planning Department for suitability for processing based on the attached checklist. Upon deeming the application suitable for agency review, the Planning Department will contact the applicant to request the additional number of application packets needed to complete the land use application for processing. The applicant shall provide 12 copies of the final application form and supporting information to complete the application for processing in accordance with Section 8-3.1(f) of the Kauai County Code, 1987, as amended.

Application shall be deemed complete when the above requirements have been satisfied and the following have been received:

1. Twelve (12) copies of the *FINAL* application.
2. Non-refundable filing fee payable to the COUNTY OF KAUAI, DIRECTOR OF FINANCE.
3. The filing fees are as follows:
   - State Land Use District Boundary Amendment = $150.00
   - General Plan Amendment = $600.00
   - Zoning Amendment = $300.00
   - Special Permit = $150.00
   - Use Permit, Project Development Use Permit, Variance Permit = $300.00
   - Class III Zoning Permit = $200.00
   - Class IV Zoning Permit = $800.00
   - Special Management Area Use Permit = $1,776.46
   - Special Management Area Minor Permit = $150.00
   - Shoreline Setback Variance Permit = $300.00
4. Digital copy (.PDF preferred) of entire transmittal including documents & exhibits.

☐ Incomplete ____
____

☐ Application Deemed Complete as all information has been submitted and necessary fees have been paid.

By: ______________________ Date: ______________________

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

COUNTY OF KAUA'I
1965
STATE OF HAWAI'I

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

GENERAL CLASS III & IV ZONING REQUIREMENTS CHECKLIST

Project Name: BHD - Project Winston - Distribution Facility	TMK: (4) 3-7-002: 021
Applicant(s): BHD Land Development, LLC	Permit Nos.

REQUIRED INFORMATION

	APPLICANT & PROPERTY INFORMATION	Exhibit and/or Page Number	Staff Comments
1	Zoning Permit Application Form or Petition for Amendments. The Application Form or Petition shall be completed and provide the required information pertaining to the property, such as: Tax Map Key number(s), State Land Use District Designation (SLUD), General Plan Designation, and County Zoning Designation.	See written application narrative.	
2	Documents that verify ownership of the property under the subject application(s), or that the Applicant is the Authorized Agent o the property owner(s).	Attachment 1	
3	If the Applicant is not the owner(s) of the subject parcel, then a notarized written authorization for the application by the owner shall be included. Said authorization shall include the owner's name, mailing addresses, contact information (i.e. phone number, cell number, email address)	Attachment 2	
4	Agent's name, mailing address, and contact information (i.e. phone number, cell number, email address)	See Class IV Application	

	GRAPHIC & SCHEMATIC REQUIREMENTS	Exhibit and/or Page Number	Staff Comments
5	Location Map identifying the project site, adjacent roadway, and identifying landmarks.	Ex. 1	
6	Schematic Site Development Plan of Plot Plans drawn to scale that identify the following:		
	o Property lines and easements with its dimensions, total land or parcel area calculations;	Ex. 1	
	o County and SLUD Zoning and General Plan Designation areas of the property and applicable densities;	Ex. 3	
	o Flood Zone(s) and required elevations;	Ex. 11	
	o Location, size, and dimensions of all existing and proposed buildings, structures, improvements and uses;	Ex. 3	
	o Building setback distances to property lines, between buildings, right-of-ways, and parking lots;	Ex. 3	
	o Proposed Lot Coverage calculations and areas;	Ex. 3	
	o Topographic information showing existing features, conditions and drainage patterns, and proposed grading & finished grade elevations, and drainage patterns;	Ex. 6	
	o Location of environmentally sensitive areas, habitat and botanical features which include, but are not limited to, wetlands, streams, rock outcroppings, endangered plants and animals, and exceptional trees;	Ex. 8	
	o Existing and proposed landscaping which depicts open spaces, plantings and trees;	Ex. 3	
	o Existing and proposed roadways, and accesses to the project site; and	Ex. 2	
	o Certified Shoreline, shoreline setback lines, stream and other setback lines.	Exs. 3, 4	

7	Conceptual Building Plans (drawn to scale):		
	o All existing and/or proposed building elevations with finished material called out. Exterior Elevations shall identify the existing and finished grade;	Ex. 3	
	o Building heights, maximum wall plate height, cross sections that are drawn to scale and clearly define the architectural character of the development; and	Ex. 3	
	o Floor plans of all buildings and typical unit types for multi-family projects;	Ex. 3	

WRITTEN REQUIREMENTS		Exhibit and/or Page Number	Staff Comments
8	A Report or Statement addressing the following:		
	o Description of the proposed project and proposed uses, operations and management of the proposed use which includes, but is not limited to, proposed employee housing plan, hours of operation;	Pp. 3-5	
	o Summary of Permits (i.e. Use Permit, Variance Permit, Special Permit, Class IV Zoning etc.) or Land Use Amendments requested, and the application section of the Kaua'i County Code or regulation citing the specific standards and criteria for granting of the permit or amendment being requested;	Pp. 5-8	
	o Policies and Objectives of the General Plan; the provisions of the Community Development Plan applicable to the application (including design standards and application requirements); the provisions of the applicable zoning district; and an analysis of the extent to which the application, if granted, conforms to these provisions of the applicable district; and an analysis of the extent to which the application, if granted, conforms to these policies, objectives and provisions;	Pp. 6-8, 13-24	
	o Detailed land use history of the parcel, which includes but is not limited to, former and existing State and County land use designations, violations and uses;	Pp. 3, 25-32	
	o Status reports of all Zoning Amendment ordinance conditions, existing Land Use Permit conditions, and Subdivision Application conditions pertaining to the project site;	Pp. 25-32	
	o Analysis of the secondary impacts of the proposed use on the surrounding area, which includes but is not limited to, increases in property value, population, housing, community services and facility needs, secondary jobs and employment generated, and compatibility with the surrounding uses;	Pp. 11-13	
	o Water source, supply and distribution system analysis, which includes but is not limited to, methods of irrigation that exists on the parcel and proposed for the application, location and use of groundwater and non-potable water sources;	P. 10	
	o Sewage Disposal Analysis – A description of a proposed method of sewage disposal;	P. 10	
	o Solid Waste Disposal Analysis – A description of a proposed method of solid waste disposal, including methods for recycling, reclamation and waste stream diversion; and	P. 11	
	o Description of environmentally sensitive areas, habitat and botanical features, which includes but is not limited to, wetlands streams, rock outcroppings, endangered plants and animals, and exceptional trees.	P. 3, 15-17, 21-22	
	o **Ka Pa'akai Assessment** – A detailed description that address a three-part analytical framework to assist the State and Counties in fulfilling their constitutional obligation to preserve and protect traditional and customary practices (TCP) exercised by Native Hawaiians, to the extent feasible. The analytical framework was established by the Hawaii Supreme Court and developed to assist with balancing both the rights of Native Hawaiians to exercise their TCPs, and the private landowners. It should provide information for the department staff to apply the Ka Pa'akai 3-step analytical framework as set forth below: ▪ Identify whether any valued cultural, historical, or natural resources are present within the project area, and identify the extent to which Native Hawaiian TCP rights are exercised ▪ Determine the extent to which the identified resources and rights will be affected or impaired by the proposed project. ▪ Specify any feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist, either currently or possibly in the past. (Please refer to the Planning Department Worksheet for Ka Pa'akai Assessment for details)	P. 11, Ex. 7	

9	A completed evaluation form or written comments from the County Housing Division relative to the County's housing requirements, pursuant to Ordinance No. 860.	N/A P. 13	

ADDITIONAL INFORMATION (SUBJECT TO DIRECTOR'S DETERMINATION)

APPLICANT & PROPERTY INFORMATION		Exhibit and/or Page Number	Staff Comments
10	Title Report necessary for the project site. Title Insurance will be mandatory for all affected Kuleana parcel(s).		

GRAPHIC & SCHEMATIC REQUIREMENTS		Exhibit and/or Page Number	Staff Comments
11	Schematic Site Development Plans of Plot Plans drawn to scale, which identify the following:		
	o Location of existing or required access to shoreline or traditional site either on property or adjacent to; and		
	o Certified Shoreline, shoreline setback lines, stream and other setback lines.		
12	Three (3) dimensional drawings of models, which clearly indicates the relation of the proposed development to other uses and structure within the surrounding area, and show the development in the context of significant viewplanes.		
13	Dated photographs of the project site, existing structures, and the surrounding area.		

WRITTEN REQUIREMENTS		Exhibit and/or Page Number	Staff Comments
14	Additional information to the included in the required report:		
	o Preliminary archaeological and historical data;	Pp. 16, 20; Ex. 10	
	o A preservation/mitigation plan;		
	o Traffic Impact analysis showing level of service with and without the project, when required by the State Department of Transportation OR County Department of Public Works;		
	o A Transportation Master Plan, which includes vehicle, pedestrian and other forms of circulation to adjacent services and destinations;		
	o For parcel located in SLUD Agricultural or County Agriculture zoning district, an assessment of the impact which the proposed use may have on agricultural use of the parcel, which includes but is not limited to, feasibility analysis of potential agricultural uses suited for the project site;		
	o A Water Master Plan, which aligns to the goals of the 2020 Water Plan for Kaua'i;		
	o A baseline study and preservation/mitigation plan for environmentally sensitive areas and endangered species habitat;		
	o A summary of all meetings held between the Applicant and any community or residential group that may be impacted by the Applicant's proposal, the issues raised at these meetings, and any proposed mitigation measures by the Applicant to deal with the raised concerns;		
	o For properties adjacent to the shoreline or containing traditional access or sites requiring access – A Preservation/Mitigation Plan detailing how access will be allowed and managed;		
	o For projects near the shoreline, riparian areas or wetlands, or those involving intensive landscaping or turf management, such as golf courses – Identification and assessment of chemicals and fertilizers used, including but not limited to, detailing effects upon surface, underground and marine water resources and neighboring properties and surrounding flora & fauna. If applicable, provide a mitigation plan and maintenance program and schedule;		
	o For properties listed on the Kaua'i Historic and Non-Historic Resource Inventory – An inventory and description of historic features on the property;		
	o Proposed Employee Housing Plan; and		

	○ Description of sustainable strategies incorporated into project, including but not limited to, strategies to reduce water and energy and material consumption, promote alternative forms of transportation, reduce wastewater and storm runoff, waste stream diversion and encourage the preservation of function ecosystem, i.e. LEEDS, Los Impact Design, Green Building principles, recycling, composting, BMP's, etc..		

ADDITIONAL PERMITS		Exhibit and/or Page Number	Staff Comments
15	For projects located within the Special Treatment District – The Applicant shall comply with necessary requirements of Section 8-11.5 of the KCC, and provide information noted in the Special Treatment District Checklist.		
16	For projects located within the Special Management Area (SMA) – The Applicant shall complete & submit an SMA Assessment application of the proposed development.	Pp. 15-25	
17	For properties located within 500 feet of the shoreline – The Applicant shall comply with the requirements of Section 8-27 of the KCC, entitled "Shoreline Setback and Coastal Protection," and provide the necessary information contained in the Shoreline Setback checklist.		
18	If applicable, the petition requirements and content for a Special Permit, pursuant to Chapter 13 of the Rules of Practice and Procedures of the Planning Commission, and Chapter 205 of the Hawai'i Revised Statutes (HRS).		
19	A Finding of No Significant Impact (FONSI) or Final Environmental Impact Statement (EIS), when required by Chapter 343 of the Hawai'i Revised Statutes (HRS).		

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

I. Part A

APPLICANT INFORMATION

Applicant: BHD Land Development LLC
Address: 2425 E. Camelback Road, Suite 220
Phoenix, AZ 85016
Phone: 602-510-4745

Applicant's Status: (Check one)

☐ Owner of the Property	(Holder of at least 100% of the equitable and legal title)
☐ Lessee of the Property	Lessee must have an **unexpired and recorded** lease of five (5) years or more from the date of filing of this application. If not, Owner(s) must provide a Letter of Authorization.
☑ Authorized Agent	Attach Letter of Authorization

Contact Person: Onaona P. Thoene, Esq., Carlsmith Ball LLP
Address: 1001 Bishop Street, Suite 2100, Honolulu, HI 96813
Phone: 808-523-2500
Email: pthoene@carlsmith.com

PROJECT INFORMATION
(attach additional sheets if necessary)

Site Address: N/A
Tax Map Key: (4) 3-7-002: 021
Lot Area: 14.6710 Acres
State Land Use District: Urban
County Zoning: I-G (General Industrial)
General Plan Designation: Urban Center
Nature of Development: Warehouse and distribution facility. See written application narrative.

* **NOTE**: An Environmental Assessment in accordance with HRS Chapter 343 is required for actions requiring a Shoreline Setback Variance (SSV). Please contact the Planning Department for further information.

Valuation of Development: $437,528. See Exhibit 5.
(Estimate Attached)

Date of Application: MAY 19, 2025

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA)
PERMIT ASSESSMENT

See enclosed written narrative.

II. Part B

The petitioner shall be responsible for filing the following required information with the department before an application is considered complete:

1. A **written** description of the proposed project, location and a statement of reasons/justification for project.
2. If property abuts a shoreline, a certified shoreline survey conducted by a registered land surveyor within 6 months of an application shall be submitted, when required by the Planning Agency.
3. A plot plan of the property, drawn to scale, with all proposed and existing structures and other pertinent information. Also, preliminary building sketch plans are to be submitted.
4. Any other plans or information requirements by the Director.

   Note: An Environmental Assessment or Environmental Impact Statement that has been declared adequate under the National Environmental Policy Act (NEPA) or under Chapter 343, HRS, may constitute a valid filing under this section.
5. Project Assessment:

   a. Description of the area and environment involved including flora and fauna, and other features;

   b. Description of the existing land uses of the project site and surrounding areas;

   c. Description of how the proposed project will affect the area involved and surrounding areas. Specifically the assessment should evaluate if the proposal:

	YES	NO
i. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites, Special Treatment Districts as established by the County of Kauai Comprehensive Zoning ordinance, view planes or scenic corridors as outlined in the Community Development Plans, and recreation areas and resources;	☐	☐

Discussion:

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

ii. Curtails the range of beneficial uses of the environment; YES ☐ NO ☐

Discussion:

iii. Conflicts with the County's or the State's long-term environmental policies or goals; YES ☐ NO ☐

Discussion:

iv. Substantially affects the economics or social welfare and activities or the community, County or State; YES ☐ NO ☐

Discussion:

v. In itself has no significant adverse effect but cumulatively has considerable effect upon the environment or involves a commitment for larger actions; YES ☐ NO ☐

Discussion:

vi. Substantially affect a rare threatened, or endangered species of animal or plant, or its habitat; YES ☐ NO ☐

Discussion:

vii. Detrimentally affects air or water quality or ambient noise levels; or YES ☐ NO ☐

Discussion:

		YES	NO
viii.	Affects an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal water;	☐	☐

Discussion:

		YES	NO
ix.	May have a major effect on the quality of the environment or affect the economic or social welfare of the area; and	☐	☐

Discussion:

		YES	NO
x.	Would possibly be contrary to the policies and guidelines of the Rules and Regulations, the County's General Plan, Development Plans, and Zoning and Subdivision Ordinances.	☐	☐

Discussion:

d. Evaluation of the proposed development relative to the objective and policies as contained in Chapter 205A, HRS; and Section 3.0 of the Special Management Area (SMA) Rules and Regulations: (complete following questionnaire)

RECREATIONAL RESOURCES:	Objective Provide coastal recreation opportunities accessible to the public.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

		YES	NO
1.	Will the proposed development adversely affect coastal resources uniquely suited for recreational activities that cannot be provided in other areas?	☐	☐

Discussion:

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

2. Will the project require replacement of coastal resources having significant recreational value, including but not limited to surfing sites, sandy beaches and fishing areas, when such resources will be unavoidably damaged by the proposed development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable? YES ☐ NO ☐

Discussion:

3. Is the project site near a State or County Park? YES ☐ NO ☐

Discussion:

4. Will the proposed development affect an existing public access to or along the shoreline? YES ☐ NO ☐

Discussion:

5. Will the proposed development provide public access to and/or along the shoreline? YES ☐ NO ☐

Discussion:

6. Will the proposed development encourage expanded recreational use of County, State, or federally owned or controlled shoreline lands and waters having recreational value? YES ☐ NO ☐

Discussion:

7. Will the development generate point or non-point sources of pollution that will affect recreation value of coastal area? YES ☐ NO ☐

Discussion:

HISTORICAL RESOURCES:	Objective Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the Special Management Area that are significant in Hawaiian and American history and culture.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Is the project site within a Federal, State and/or County designated historical/cultural district? YES ☐ NO ☐

Discussion:

2. Is the project site listed on or nominated to the Hawaii or National Register of Historic Places? YES ☐ NO ☐

Discussion:

3. Does the project site include land(s) which have not been previously surveyed by an archaeologist? YES ☐ NO ☐

Discussion:

4. If an archeological survey has been conducted for the project site, has the survey been submitted to the State Historic Preservation Office for review and recommendations? YES ☐ NO ☐

Discussion:

5. Has any site survey revealed any information on historic or archaeological resources? (Please provide a copy or reference of survey) YES ☐ NO ☐

Discussion:

6. Is the project site within or near a Hawaiian fishpond? YES ☐ NO ☐

Discussion:

7. Is the project located within or near a historic settlement area? (Cemeteries, burials, heiaus, etc.) YES ☐ NO ☐

Discussion:

SCENIC & OPEN SPACE RESOURCES:	Objective Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Does the project site abut or affect a valued scenic resources or landmark within the SMA? YES ☐ NO ☐

Discussion:

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

2. Does the proposed development affect existing shoreline open space and scenic resources? YES ☐ NO ☐

Discussion:

3. Does the proposed development involve alteration to natural landforms and existing public views to and along the shoreline? YES ☐ NO ☐

Discussion:

4. Is the project compatible with the visual environment? YES ☐ NO ☐

Discussion:

5. Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline? YES ☐ NO ☐

Discussion:

6. Is the project site within the Shoreline Setback Area (20 or 40 feet inland from the shoreline)? YES ☐ NO ☐

Discussion:

COASTAL ECOSYSTEMS:	Objective Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

1. Is the project site a habitat for endangered species of flora and fauna? YES ☐ NO ☐

Discussion:

2. Will the proposed development adversely affect valuable coastal ecosystems of significant biological or economic importance? YES ☐ NO ☐

Discussion:

3. Will the proposed involve disruption or degradation of coastal water ecosystems through stream diversions, channelization, and similar land and water uses? YES ☐ NO ☐

Discussion:

4. Will the proposed development include the construction of special waste treatment facilities, such as injection wells, discharge pipes, septic tank systems or cesspools? YES ☐ NO ☐

Discussion:

5. Is there a wetland on the project site? YES ☐ NO ☐

Discussion:

6. Is the project site situated in or abutting a Natural Area Reserve or Wildlife Refuge or Sanctuary? YES ☐ NO ☐

Discussion:

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

ECONOMIC USES:	Objective Provide public or private facilities and improvements important to the State's economy in suitable locations.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Does the project involve a harbor or port? YES ☐ NO ☐

   Discussion:

2. Is the proposed development related to or near to an existing major hotel, multi-family, or condominium project? YES ☐ NO ☐

   Discussion:

3. Does the project site include agricultural lands designated for such use? YES ☐ NO ☐

   Discussion:

4. Does the proposed development relate to commercial fishing or seafood production? YES ☐ NO ☐

   Discussion:

COASTAL HAZARDS:	Objective Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

1. Is the project site within a potential tsunami inundated area as depicted on the National Flood Insurance Rate maps (FIRM)? YES ☐ NO ☐

Discussion:

2. Is the project site within a potential flood inundation area according to a FIRM? YES ☐ NO ☐

Discussion:

3. Does the project comply with the requirements of the Federal Flood Insurance Program? YES ☐ NO ☐

Discussion:

4. Has the project site or nearby shoreline areas experienced shoreline erosion? YES ☐ NO ☐

Discussion:

5. Have any seawalls/revetments/etc. been constructed or exist in the immediate vicinity? YES ☐ NO ☐

Discussion:

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

PROJECT ASSESSMENT:	

e. Evaluation of the impacts which cannot be avoided and mitigating measures proposed to minimize that impact:

Discussion:

f. Evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations in accordance with the following aspects:

i. Substantial adverse environmental or ecological effects;

Discussion:

ii. Consistency or compliance of the proposed development relative to the goals and objectives of Chapter 205A, HRS; and Section 3.0 of the SMA Rules and Regulations; and

Discussion:

iii. Consistency or compliance of the proposed development relative to the County General Plan, Development Plan, and Zoning Ordinances.

Discussion:

[name], [title] — Date: MAY 19, 2025

Authorized Agent of BHO LAND DEVELOPMENT LLC

PLANNING DEPARTMENT
SHORELINE SETBACK APPLICATION

FOR OFFICIAL USE ONLY:	
SSD 202___- ____	
Acceptance Date:	
Website Posting Date:	
Determination Date:	
Planning Commission Date:	
Expiration Date:	
Planner Assigned:	

Instructions: File all information requested under Part A for processing the Determination of Applicability (§8-27.1), including signature page. Fill out Parts A and B if you know that your parcel will require a Certified Shoreline Survey, due to the proximity to the shoreline. If you are proposing a permitted structure or subdivision within the shoreline setback area fill in Part C. For applications involving a variance, complete Part D.

Applicant Information

Applicant: BHD Land Development, LLC

Mailing Address: 2425 E. Camelback Road, Suite 220
Phoenix, AZ 85016

Phone: 602-510-4745

Email: THammer@bhdevco.com

Applicant's Status: (Check one)

☐ Owner of the Property	(Holder of at least 100% of the equitable and legal title)
☑ Authorized Agent	Attach Letter of Authorization

Transmittal Date: ____________________

Project Information (attach additional sheets, if necessary)

County Zoning District:	I-G (General Industrial)	Tax Map Key(s):	(4) 3-7-002: 021
Building Permit Number: (If building plans submitted)		Land Area:	14.671 Acres

Nature of Development: (Description of proposed structure or subdivision)	Warehouse and distribution facility.

NO PERMITS WILL BE ISSUED WITHOUT PLANNING COMMISSION ACCEPTANCE, EXCEPT AS PROVIDED IN §8-27.8(c)(8)

Part A

Shoreline Setback Determination of Applicability (§8-27.1)

Check all that apply, fill in applicable information. Any box checked must be accompanied by additional information, photos and/or documentation.

1. Property is Abutting the Shoreline
   - ☐ Proposed project's approximate distance from shoreline (based on aerial map): ______________ ft.
2. Property is Not Abutting the Shoreline
   - ☑ Proposed project's approximate distance from shoreline (based on aerial map): 500 feet or greater except for a minor structure within 500 ft. setback (appropriately 300 linear feet of perimeter fencing, 0.3 acre of grassing and 140 linear feet of a bio-swale). Encroachment of approximately less than 120 feet at its greatest point of encroachment. See Exhibit 4. ft.
3. Additional Information:
   - ☐ Shoreline Change (Erosion/Accretion) Rate: ______________ ft./year (Information available here: Kauai Shoreline Change (arcgis.com))
   - ☑ Number and description of parcels (including roads, buildings, structures) between Shoreline and this parcel:

One parcel lies between the Property and the shoreline, TMK No. (4) 3-7-002: 001, a vacant parcel. See Exhibit 1.

COUNTY OF KAUAI
STATE OF HAWAII

PLANNING DEPARTMENT
SHORELINE SETBACK APPLICATION

☐ Topography (undulating, flat, slope, etc.) and ground elevation of subject parcel (Lowest and Highest elevations)

Generally flat. Exhibit 3, 6, 13.

☐ Shoreline type (e.g. beach, dune, rocky, sandy with rocky outcropping, etc.)

☐ Artificially armored Shoreline
  ☐ If checked, what type of armoring (e.g. seawall, revetment, bulkhead): _________
  ☐ Is the armoring permitted/authorized? _________
  ☐ Date of authorization (attach copy of authorization letter): _________
☐ Is property in coastal floodplain (if checked, what zone)? _________
☐ Has this property been subject to coastal hazards (i.e. flooding, erosion, tsunami, etc.) in the past?

Not to Applicant's knowledge.

PLEASE NOTE:

Any misrepresentation of information in this shoreline setback application will result in revocation of this determination and may result in fines and criminal prosecution.

Applicant's Signature

Signature ________________ Date 05.19.25

Applicability (to be completed by Planning Department)
☐ **Setback Determination necessary.** Requirements of Ordinance No. 979 are applicable.
☐ **Setback Determination is NOT necessary.** Requirements of Ordinance No. 979 are not applicable.
Planning Director or designee ________________ Date

If **Part A** has been deemed that a Determination will be necessary, the additional information will be required for submission of this application.

Part B

☐ A non-refundable processing fee of **one hundred dollars ($100.00)** shall accompany a request for determination. (§8-27.8(e))
☐ An aerial map/image (ex. Google Maps or Google Earth) with a line drawn from the shoreline/vegetation line (approximate shoreline) to the proposed project and the calculated distance in feet.
☐ A detailed Plot Plan **to scale** with all existing and proposed structures including driveways, visible lot coverage, setbacks and measurement details, fences, gates, and walls, etc.
☐ Coastal Hazard Disclousre Statement Form

PLANNING DEPARTMENT
SHORELINE SETBACK DETERMINATION

Exemption Determination

☑ **Exemption 1**
In cases where the applicant can demonstrate to the satisfaction of the Planning Director that the applicant's proposed structure or subdivision will not affect beach processes, impact public beach access, or be affected by or contribute to coastal erosion or hazards, excluding natural disasters. Factors to be considered shall include, but not be limited to, proximity to the shoreline, topography, properties between shoreline and applicant's property, elevation, and the history of coastal hazards in the area.

☐ **Exemption 2**
Pursuant to §8-27.7, those structures and uses found exempt in Table 3 (see pg. 7) including repairs and renovations to a lawfully existing structure, including nonconforming structures, provided that:

(A) The repairs DO NOT enlarge, add to or expand the structure; increase the size or degree of non-conformity; or intensify the use of the structure or its impact on coastal processes;

(B) The repairs DO NOT constitute a substantial improvement of the structure; and

(C) The repairs are permitted by the Comprehensive Zoning Ordinance, Development Plans, building code, floodplain management regulations, special management area requirements under HRS Chapter 205A and any other applicable rule or law.

☐ Letter from the Department of Public Works stating that the proposed project does **NOT** constitute "Substantial Improvement," pursuant to §8-27.2 (If applicable, will require valuation of project).

Exemption Determination (to be completed by Planning Department)

☐ Pursuant to §8-27.3 the Kaua'i County Code, 1987 as amended, the Planning Department hereby certifies the proposed structure(s) or subdivision(s) as exempt from those shoreline setback determination requirements established under §8-27.8.

☐ Pursuant to §8-27.7 the Kaua'i County Code, 1987 as amended, the proposed structure(s) is permitted within the shoreline setback area. While exempt from those shoreline setback determination requirements established under §8-27.8, the proposed structure(s) is subject to the conditions of §8-27.7(b). (See pg. 8)

Planning Director or designee — Date

☐ **Additional comments/conditions:**

BHD LAND DEVELOPMENT LLC
CLASS IV ZONING PERMIT APPLICATION AND
SPECIAL MANAGEMENT AREA ASSESSMENT (MINOR PERMIT) APPLICATION
FOR DEVELOPMENT OF WAREHOUSE AND DISTRIBUTION FACILITIES

Lot 4, Ahukini Business Park, Hanamāʻulu, Līhuʻe, Kauaʻi

Tax Map Key No. (4) 3-7-002: 021

Prepared for:
BHD Land Development LLC
2425 E. Camelback Rd., Suite 220
Phoenix, AZ 85016

Prepared by:
Carlsmith Ball LLP
Jon T. Yamamura
Onaona P. Thoene
Derek B. Simon
1001 Bishop Street, Suite 2100
Honolulu, Hawaiʻi 96813
Telephone: (808) 523-2500

May 2025

TABLE OF CONTENTS

Page

LIST OF ATTACHMENTS AND EXHIBITS 1

PROPERTY SUMMARY 2

I. APPLICANT AND FEE OWNER INFORMATION 3

II. PROPERTY INFORMATION 3

III. DESCRIPTION OF THE PROPOSED PROJECT 3

IV. REQUIRED PERMITS AND APPROVALS 5

V. CLASS IV ZONING PERMIT CRITERIA 6

- A. TRAFFIC 8
- B. SOLID WASTE 9
- C. WASTEWATER 10
- D. POTABLE WATER 10
- E. STORMWATER 11
- F. KA PA‘AKAI ANALYSIS 11
- G. SECONDARY IMPACTS ANALYSIS 11
- H. APPLICABILITY OF ORDINANCE NO. 860 RELATED TO HOUSING 13
- I. COMMUNITY OUTREACH 13

VI. CONSISTENCY WITH GENERAL PLAN AND LĪHU‘E COMMUNITY PLAN POLICIES 13

VII. SPECIAL MANAGEMENT AREA CRITERIA 15

VIII. HISTORY OF THE PARCEL; LAND USE CONDITIONS; SUBDIVISION CONDITIONS 25

IX. CONCLUSION 32

List of Attachments and Exhibits

Attachment 1 - Fee Owner's Authorization
Attachment 2 - Authorized Agent Authorization

Exhibit No.	**Exhibit**
1.	Project Permit Design Set State Land Use Designation (Sheet 2) County Zoning Designation (Sheet 2) Site Photos (Sheet 3) 3D Views (Sheet 4) Overall Site Plan (Sheet 5) Preliminary Floor Plan (Sheet 6) Exterior Elevations (Sheet 7) TMK Map with Project Site and Existing Easements (Sheet 8) Flood Zone (Sheet 9) Topography & Utility Connection Points (Sheet 10) Environmentally Sensitive Areas (Sheet 11) Access Roads (Sheet 12) Shoreline Setback (Sheet 13) Shoreline Access (Sheet 14) Special Management Area (Sheet 15) Landscaping Plans (Sheets 16-22)
2.	Project Valuation for SMA
3.	*Ka Paʻakai* Assessment
4.	Drainage Report
5.	SHPD no historic properties affected letter dated Sept. 28, 2018).
6.	Ordinance No. PM-326-96
7.	Photo Log (Existing Conditions)

CLASS IV ZONING PERMIT APPLICATION

SUMMARY

Applicant:	BHD Land Development LLC
Property Location:	Tax Map Key ("**TMK**") No. (4) 3-7-002: 021 (the "**Property**") is identified as Lot 4 of the Ahukini Business Park, situate at Hanamāʻulu, Līhuʻe, Kauaʻi.
Request:	Class IV Zoning Permit and Special Management Area Assessment/Minor Permit approval for the development of warehouse and distribution facilities and related infrastructure on the Property.

Property Description:

Tax Map Key No.	(4) 3-7-002: 021
Property Size	14.6710 acres, more or less
State Land Use Designation	Urban District
County Zoning Designation	I-G (General Industrial)
Special Management Area (SMA) Designation	A portion of the Property is located in the SMA. Exhibit 1, Sheet 15.
Shoreline Setback	The Property is not a shoreline lot but a portion of the Property is within the 500 foot shoreline setback. Exhibit 1, Sheet 13.
General Plan Designation	Urban Center
Līhuʻe Community Plan	Urban Center
Scenic and Open Space Resources	The Property is currently vacant and covered in tall grasses. The Property was previously in sugar cane cultivation. The Project will be no greater than 28 feet in height from the existing grade and is not expected to adversely impact existing viewplanes. Approximately 3.8 acres of the Property will remain undeveloped as a regional stormwater retention basin for the Ahukini Makai Subdivision. Exhibit 1 (Site Plan), Sheet 5; Exhibit 7.
Access	Access to the Property will be via Ahukini Road to Kapule Highway, with future access planned via Kaualoki Place to Waiʻaleʻale Street, which will connect both to Kapule Highway and Ahukini Road. Exhibit 1, Sheet 12.
Water System	County Water System via connection to the County's Puhi-Līhuʻe-Hanamaulu Water System.
Flood Insurance Rate Map	Zone X, Area of Minimal Flood Hazard. Exhibit 3, Sheet 9.
Police and Fire Services	Police and fire protection services are provided from the Līhuʻe police station, Līhuʻe fire station, and emergency medical services are available at the Wilcox Medical Center.

Utilities	Existing electrical, telephone and cable services are provided to the Property. Exhibit 1, Sheet 10.
Wastewater	Connection to County sewer. Exhibit 1, Sheet 10.

I. APPLICANT AND FEE OWNER INFORMATION

The Applicant is BHD Land Development LLC, an Arizona limited liability company, whose mailing address is 2425 E. Camelback Rd., Suite 220, Phoenix, AZ 85016. The Applicant is under contract to purchase the Property from the fee owner, Visionary LLC, a Virginia limited liability company. The fee owner has authorized the filing of this Application. *See* Attachment 1 (Fee Owner's Authorization).

For purposes of this application, Carlsmith Ball LLP is Applicant's Authorized Agent. *See* Attachment 2.

II. PROPERTY INFORMATION

This Class IV Zoning Application and Special Management Area Minor Application (this "**Application**") is for the development of a warehouse and distribution facility and related infrastructure on Lot 4 of the Ahukini Makai Industrial Subdivision, identified by TMK No. (4) 3-7-002: 021 (the "**Property**"), situate at Hanamāʻulu, Līhuʻe, Kauaʻi. The Property is north of the Līhuʻe Airport and adjacent to the Lihue Refuse Station. *See* Exhibit 1, Sheet 8 (TMK Map); Exhibit 1, Sheet 5 (Site Plan). Small residential communities are located to the northwest and southwest. The Property is part of the Līhuʻe-Hanamaulu Master Plan (1995) and Lot 4 was created as part of the Ahukini Makai industrial subdivision.

The Property is currently undeveloped, fallow, former sugar cane lands that are mostly covered in buffalo grass. The *Ka Paʻakai* analysis prepared for the Ahukini Makai Industrial Subdivision (Exhibit 3) notes that the Hanamāʻulu lands were developed in sugarcane well before the year 1900. The Ahukini Makai subdivision lands have been mostly fallow since the closure of the Lihue Plantation in the year 2000. *Id.* at 45. There are no known environmentally sensitive areas, habitat, or flora and fauna within the Property. *See* Exhibit 1, Sheet 11.

The Property is designated in the State Land Use ("**SLU**") Urban District and zoned by the County of Kauaʻi ("**County**") in the I-G (General Industrial) zoning district. *See* Exhibit 1, Sheet 2 (SLU and Zoning Maps). The Property is within the Urban Center as shown on the County General Plan and Līhuʻe Community Plan. *See* Exhibit 1, Sheet 2 (General Plan Map).

The eastern/makai portion of the Property is located within the Special Management Area ("**SMA**"). Exhibit 1, Sheet 2 and Exhibit 1, Sheet 15 (SMA).The Property is not a shoreline lot but a portion of the Property is within the 500-foot setback. Exhibit 1, Sheet 13.

III. DESCRIPTION OF THE PROPOSED PROJECT

Applicant proposes to develop an approximately 42,000 square foot ("**s.f.**") warehouse and distribution facility and related infrastructure (approximately 29,964 s.f. for the primary building and approximately 11,984 s.f. for the exterior canopy where vehicles will be loaded) on an approximately 8.8 acre portion of the Property (the "**Project Site**") (Exhibit 1, Sheet 5) including:

- (i) Receiving, storing, assembling, displaying, shipping, distributing, preparing, selling, and serving as a pick-up/drop-off location for products, materials, and general merchandise;
- (ii) Customer pickup of pre-ordered merchandise and other items;
- (iii) Parking, dispatch, maintenance, fueling and use of machinery and vehicles including, but not limited to automobiles, fleet vehicles, vans, trucks and trailers;
- (iv) Printing and making products on demand;
- (v) Warehouse and office use;
- (vi) Using, handling or storing hazardous materials in the ordinary course of business in compliance with all applicable laws (not including high hazard materials that require special storage or handling), including:
    - a. in any packaged merchandise to be sold, handled, and/or held for shipment to customers;
    - b. maintenance, fueling (including alternative fuels) and charging of vehicles, equipment and machinery;
- (vii) Installing and operating battery storage systems and electrical generators;
- (viii) Outdoor and indoor storage, loading/unloading (including driving into and through the building for loading and unloading and parking inside of the building) of vehicles including, but not limited to automobiles, fleet vehicles, vans, trucks and trailer and storage and activities during the loading and unloading of the foregoing; and
- (ix) ancillary and related uses for any of the foregoing, all on a twenty-four-hour, seven-days-per-week, fifty-two-weeks-per-year basis.

The warehouse and distribution facility will likely be a pre-engineered metal building. The Applicant intends to develop a last mile delivery station that will service customers in various neighborhoods on the Island of Kauaʻi. Delivery stations power the last mile of the order process and help speed up deliveries. The package handling process begins at the U.S. mainland Air Gateway where packages are scanned and loaded on aircraft bound for Kauaʻi.

Packages are picked up from Līhuʻe Airport loaded on box trucks and routed to the delivery station. Delivery stations offer entrepreneurs the opportunity to build their own business delivering packages, as well as independent contractors the flexibility to be their own boss and create their own schedule.

The proposed distribution facility will operate 24/7 to support the delivery of packages to customer locations between 9:00 a.m. and 2:00 pm. The facility will receive shipments that are sorted based on zip codes and dispatched for delivery to customers. It is anticipated that 3-line haul trucks will deliver packages to the facility each day, with most of the sortation activity being done in the middle of the night when the line haul trucks arrive. Because the delivery network is the Island of Kauaʻi, all goods must come by ship or by air. It is expected that the limited line-haul operations will be from the air cargo operations at the Līhuʻe Airport, which is about three quarters of a mile from the Property.

After the packages are sorted, the items are then transferred to a van or to a flex driver. There will be approximately 62 on-site employees and 25 van drivers to support this operation. In addition, there will be up to 82 flex drivers that will use personal vehicles to deliver packages and work in concert with standard van drivers.

The uses described above are referred to herein as the "**Project**". The site plan for the Project is attached as Exhibit 1, Sheet 5 (Site Plan).

All Project elements will be sited on the western portion of the Property and outside of the SMA, with the exception of certain limited Project elements that will be within the SMA: a portion of the internal roadways (truck parking/turn around and loading dock) and dumpster enclosure (collectively approximately 16,527 s.f.); approximately 582 s.f. of sidewalk; approximately 750 linear feet of perimeter fencing; landscaping; and a portion of a bioswale. *See* Exhibit 1, Sheet 15 (SMA).

IV. REQUIRED PERMITS AND APPROVALS

The I-G zoning district includes the following uses: "all business, industrial processing, or storage uses that are generally considered offensive to the senses or pose some potential threat or hazard to health, safety and welfare." Kauaʻi County Code ("**KCC**") § 8-7.2(c). Warehouses and transportation terminals and docks are permitted in the I-G zoning district with a Class IV Zoning Permit.

A SMA Minor permit for those portions of the Project that are located within the SMA may also be required. As shown on Exhibit 1, Sheet 15 (SMA), certain limited project elements will be within the SMA: a portion of the internal roadways, dumpster enclosure wall, sidewalk, approximately 750 linear feet of perimeter fencing, landscaping and a portion of a bioswale, but no other Project elements fall within the SMA. *See* Exhibit 1, Sheet 15. The valuation of the Project elements that will be located within the SMA is estimated at $437,528.00; thus, a SMA Minor permit would be appropriate here. *See* Exhibit 2 (Project Valuation for SMA).

The Project may also require a National Pollutant Discharge Elimination System ("**NPDES**") permit during construction.

As of the date of this application, portions of the Property and the Project Site have been graded by the fee owner. *See* Exhibit 1, Sheet 3 (Site Photos) (Views 1, 2, 11); Exhibit 4 (Drainage Report), at 3; Exhibit 7 at 4-6. The Project Site is expected to be graded in its entirety to some extent by the fee owner to the same elevation as the Ahukini Makai Subdivision roadways when the Property is turned over to the Applicant. Exhibit 4 (Drainage Report), at 3. Additional grading of the Project Site will likely be required depending on the extent of grading done by the fee owner. Specific grading plans will be submitted to the Planning Department during the grading permit process. The portion of the Property that will not be used for the Project will remain as an undeveloped stormwater retention basin. Exhibit 1, Sheet 5 (Site Plan);

Exhibit 4 (Drainage Report), at 11. The retention basin area is unimproved and covered with buffalo grass. *See* Exhibit 1, Sheet 3 (Site Photos) (Views 4-7).

Summary of Permits / Approvals:

Permit	Approving Agency
Class IV Zoning Permit	County of Kauaʻi Planning Commission
Special Management Area Minor	County of Kauaʻi Planning Department
Building Permit	County of Kauaʻi, Public Works Department
Grading, Grubbing, Stockpiling Permit	County of Kauaʻi, Public Works Department
NPDES (for construction activities)	State of Hawaiʻi, Department of Health

The Project does not trigger environmental review Hawaiʻi Revised Statutes ("**HRS**") Chapter 343 review as there is no proposed use of State or County land or funds, use within a shoreline area, or other identified trigger. *See* HRS § 343-5(a). The Property and the proposed industrial use of the Property were analyzed in the January 1995 Final Environmental Impact Statement for the Lihue-Hanamaulu Master Plan ("**1995 EIS**") completed in support of the District Boundary Amendment ("**DBA**") of which the Property was included.[1]

No project elements will be within the 500-foot shoreline setback except for approximately 300 linear feet of perimeter fencing, 0.3 acres of grassing, and 140 linear feet of bio-swale. These limited Project elements will encroach into the 500-foot shoreline setback area by approximately less than 120 feet at its greatest point of encroachment. *See* Exhibit 1, Sheet 13 (Shoreline Setback). With this application, Applicant requests that the Planning Director determine that the proposed fencing within the 500-foot shoreline setback is a minor structure. The estimated cost of the fencing within the shoreline setback area is approximately $7,500. *See* Exhibit 2 (Project Valuation for SMA). The fencing is expected to be a chain-link fence that will not adversely affect beach processes, interfere with public access or views to the shoreline, impede natural processes or movement of the shoreline, or alter the grade of shoreline setback area. *See* KCC § 8-27.2; Exhibit 1, Sheet 13. The Project's consistency with KCC Article 8 and HRS Chapter 205A is discussed in Parts V, VI, and VII below.

V. CLASS IV ZONING PERMIT CRITERIA

The specific application requirements for a Class IV Permit are set forth in KCC § 8-3.1. A zoning permit application must conform to the standards established by KCC Chapter 8, the Comprehensive Zoning Ordinance ("**CZO**"). The I-G General Industrial district "shall include all business, industrial processing, or storage uses that are generally considered offensive to the senses or pose some potential threat or hazard to health, safety and welfare." KCC § 8-7.2(c). Pursuant to KCC § 8-7.3, this Application must, and does, meet the following standards for industrial development:

---

[1] The 1995 EIS is available on the Office of Planning and Sustainable Development, Environmental Review Program's website at https://files.hawaii.gov/dbedt/erp/EA_EIS_Archive/1995-02-08-KA-FEIS-Lihue-Hanamaulu-Master-Plan.pdf.

	I-G District Standard	This Project
Minimum Lot Size	10,000 s.f. KCC § 8-7.3(a)(2)	14.6710 acres 639,069 s.f.
Setback	(A) Minimum distance of any building from the right-of-way of a public or private street shall be 15 feet. (B) Minimum distance of any building from a side property line when the adjacent Use District is industrial shall be zero. When the adjacent Use District is other than industrial, the minimum distance to the side property line shall be 15 feet. (C) Minimum distance of any building to a rear property line shall be 15 feet. KCC § 8-7.3(b)(2)	The Project will be setback a minimum of 15 feet from all property lines and the right of way. *See* Exhibit 1, Sheet 5 (Site Plan). The Project will also comply with the 500 foot shoreline setback, except for some fencing that will be located within the 500 foot shoreline setback. *See* Exhibit 1, Sheet 13.
Minimum Distance Between Buildings	10 feet KCC § 8-7.3(c)	The Project will comply with this requirement. *See* Exhibit 1, Sheet 5 (Site Plan).
Driveways and Parking Areas	(1) The minimum driveway width in Industrial Districts shall be 20 feet if there is two-way traffic and 14 feet if there is one-way traffic. (2) Parking areas shall conform to standards of design and construction established by the County Engineer, provided that: (A) No parking lot pavement edge may be located closer than five feet from the right-of-way line of a public street; (B) No part of parked vehicles shall protrude into that setback; (C) All parking lots shall be screened from public thoroughfares by a fence, wall or plant screen not less than four feet high, provided that the screening height shall be lowered to the standard as required under the County Traffic Code or to the standards of the Department of Public Works, at street corners, driveway intersections, and other locations. The setback area between the parking area paving and the public right-of-way shall be planted and shall not be paved. (3) Paved off-street parking shall be provided as follows: (A) One parking stall for each three employees, or one parking stall for every 500 square feet of gross floor area of the buildings where the number of employees is unknown; (B) One parking stall designated for visitors for each 200 square feet of office space; and (C) Parking spaces for trucks, equipment, or other	The Project will comply with these requirements. *See* Exhibit 1, Sheet 5 (Site Plan).

	I-G District Standard	This Project
	vehicles used in the conduct of the business. KCC § 8-7.3(e)	
Building Height	Maximum 50 feet	The maximum height of the warehouse structure will be approximately 27 feet 8 inches. *See* Exhibit 1, Sheet 7 (Exterior Elevations).
Sewers	All industrial development accessible to a public sewer shall provide for adequate sanitary sewer facilities in accordance with standards established by the Department of Public Works and the State Department of Health. In developments not accessible to public sewers, a private sewage disposal system shall be provided that meets the requirements of the Department of Public Works and the requirements of Chapter 57 of the Public Health Regulations of the State Department of Health.	The Project will connect to the County sewer system. *See* Exhibit 1, Sheet 10 (Topo and Utility Connection Points).

A. TRAFFIC

The Property is currently accessed from Ahukini Road, which in turn connects to Kapule Highway. Future access is planned via Kaualoki Place to Waiʻaleʻale Street, which will connect both to Kapule Highway and Ahukini Road. *See* Exhibit 1, Sheet 12. The distribution facility will be located on a currently vacant site, within a proposed ±42,000 s.f. industrial building (approximately 29,964 s.f. for the primary building and approximately 11,984 s.f. for the exterior canopy where vehicles will be loaded).

The developer of the Ahukini Makai subdivision prepared two traffic assessments for the overall subdivision: (1) Supplemental Traffic Impact Analysis Report Wailani development (inclusion of Ahukini Makai) dated September 17, 2010, and (2) Traffic Assessment for Revised Site Plan for Ahukini Makai dated February 18, 2020.

The table below provides a summary of the Applicant-provided and Institute of Transportation Engineers (ITE) daily and peak hourly trips anticipated to be generated by the proposed Project. The Applicant provided information yields higher overall trips throughout the day as well as during the morning peak hour. Based on the planned use of the facility, the user-specific trip generation is the more conservative data on which to base the analysis.

Land Use	Source	Intensity	Daily	AM Peak Hour			PM Peak Hour		
				IN	OUT	TOTAL	IN	OUT	TOTAL
Dist. Facility	Applicant	±30,000 sf	394	35	13	48	0	8	8

Delivery drivers will arrive at the facility at approximately 8:00 a.m. daily. Starting at approximately 9:00 a.m. and ending at approximately 10:30 a.m., 25 delivery vans will load and depart from the facility at a rate of 5 vans every 20 minutes to facilitate a regulated traffic flow into the surrounding area. The departure window is designed to mitigate impact on rush hour periods. Approximately 9 to 10 hours after dispatch, delivery routes are completed, and the vans return to the station between 6:30 and 7:30 p.m. The drivers park the delivery vans onsite and leave using a personal vehicle or public transportation.

The Project will also use FLEX drivers to deliver packages from this location. These drivers use personal vehicles to deliver packages and work in concert with standard van delivery drivers. Approximately 82 flex vehicles will enter the facility staggered between 10:00 AM and 2:00 PM. Flex vehicles will load and depart every 15 minutes.

B. SOLID WASTE

The Project will be a neighbor to the Lihue Refuse Transfer Station. The Project will generate various types of solid waste, including packaging materials, shipping materials, employee waste, and maintenance waste. To manage solid waste generated by the Project and minimize environmental impact, the following waste disposal methods will be implemented:

1. Centralized Waste Collection:
    a. Waste from different areas within the warehouse (receiving, sorting, packaging, and administrative areas) will be collected at designated points.
    b. Collection stations will be clearly labeled for general waste, recyclables, and compostable materials.
    c. Regular waste pickups will be scheduled to maintain cleanliness and efficiency.
2. Recycling and Reclamation Methods:
    a. Cardboard and Paper Recycling:
        i. A significant volume of waste is expected from cardboard packaging and paper products.
        ii. A dedicated recycling area will be established within the warehouse to collect and bale cardboard for recycling.
        iii. Partnering with local recycling facilities to process baled cardboard and paper waste.
    b. Plastic and Packaging Material Recycling:
        i. Recycling bins will be placed near processing and packaging areas to collect plastic wraps, strapping, and other recyclables.
        ii. Use of compactors and balers for efficient storage and transportation of recyclable materials.
    c. Pallet and Wood Waste Management:
        i. Broken or unusable pallets will be collected and either repaired, repurposed, or sent to wood recycling facilities.
        ii. Whenever possible, pallets will be refurbished for reuse within the warehouse.

d. Electronics and E-Waste:

    i. Electronic waste generated from IT equipment and maintenance operations will be collected separately and disposed of through certified e-waste recycling partners.

3. Waste Stream Diversion:

    a. Waste Reduction through Reuse:

        i. Implementing practices to reuse shipping containers and packaging materials within the distribution network.

        ii. Encouraging employees to minimize single-use items and opt for reusable materials.

    b. Organic Waste and Composting:

        i. Organic waste from break rooms and cafeteria areas will be collected separately for composting.

        ii. Partnership with local composting facilities to ensure responsible processing.

C. WASTEWATER

The Project intends to connect to the County's wastewater sewer system served in this area by the Līhuʻe Wastewater Treatment Plant ("**WWTP**") as shown on Exhibit 1, Sheet 10 (Topo & Utility Connections). The estimated wastewater demand for the Project is approximately 788 gallons per day ("**GPD**"). Per the approved Wastewater Master Plan for the Līhuʻe-Hanamaulu Master Planned Community Lands, as of 2008, the WWTP has a design capacity of 2.5 million GPD, with about half of that capacity being used.

D. POTABLE WATER

A Water Master Plan for the Līhuʻe-Hanamaulu Master Planned Community dated July 21, 2009 was approved by the County Department of Water ("**DOW**") by letter dated July 14, 2009.

Potable water for the Project will be provided by the County Department of Water. The Project will connect to the County's Puhi-Līhuʻe-Hanamaulu Water System via a lateral as shown on Exhibit 1, Sheet 10 (Topo & Utility Connections). Under the 2009 Water Master Plan for the Lihue-Hanamaulu Master Planned Community, parcels zoned in the I-G District are estimated to use 4,000 gallons per acre per day (or approximately 56,000 GPD for a 14-acre parcel). 2009 Water Master Plan at 25-26. The actual amount of water needed for the Project for uses related to operation of the warehouse and distribution facility, including domestic and irrigation landscaping needs, is far below that amount, estimated at approximately 23,940 GPD.

The irrigation system for the Project will utilize eight (8) drip valves and twelve (12) standards valves with rain sensors.

E. STORMWATER

The eastern/makai portion of the Property will not be developed with any Project infrastructure but will serve as an unimproved stormwater retention basin for the Ahukini Makai subdivision. *See* Exhibit 1, Sheet 5 (Site Plan). Stormwater generated by the project will be managed on-site through naturalized open areas and bio swales within the Project Site, and the existing regional drainage basin on the Property. *See* Exhibit 1, Sheets 16-22 (Landscape Plans).

F. KA PAʻAKAI ANALYSIS

In connection with the Ahukini Makai subdivision application, a *Ka Paʻakai O Ka ʻĀina* Analysis was prepared by Cultural Surveys Hawaiʻi, Inc. ("**CSH**") for the entire subdivision, including the Property (the "**Analysis**"). *See* Exhibit 3. This analysis was submitted to the County Planning Commission on December 6, 2023. The *Ka Paʻakai* analysis involved community outreach and interviews with 37 individuals or groups being invited to participate. Ten (10) individuals responded to CSH; two (2) provided written testimony, and two met with CSH for interviews. *Id.* Figures 1 through 3 of the Analysis identify the study area, which includes the Property. The Analysis contemplates various industrial subdivision uses.

The *Ka Paʻakai* analysis concluded that:

- There are no known Native Hawaiian traditional or customary practices, including special gathering practices, presently occurring within the Ahukini Makai subdivision or within the vicinity of the site;
- The project should not detrimentally inhibit access to any streams, shoreline areas, or gathering along streams, the shoreline, or the ocean;
- There are no records of trails in the project area;
- There are no known religious practices taking place within the project area;
- There are no known pre-contact cultural or historical sites or resources located within the project area; and
- There are no known burials within the project area.

To the Applicant's knowledge, there are no known Native Hawaiian traditional or customary practices, presently occurring within or on the Property. The Project is not anticipated to adversely impact Native Hawaiian traditional or customary practices or resources.

G. SECONDARY IMPACTS ANALYSIS

The Project will offer employment opportunities to the Kauaʻi community. The Project is expected to generate both temporary construction jobs and permanent employment. The Applicant will use local contractors.

The Project will generate approximately 169 permanent positions: approximately 62 on-site employees, 25 van drivers, and up to 82 flex drivers that will use personal vehicles to deliver packages and work in concert with standard van drivers.

Since 2010, the ultimate end user of the Project has invested over $800 million in Hawaiʻi's economy, focusing on infrastructure and employee compensation, employing more than 1,000 Hawaiʻi residents.

The Project will contribute to job growth in the State. In addition to an average hourly wage exceeding $20.50, employees receive comprehensive benefits starting on day one, including health coverage, paid parental leave, and prepaid college tuition through a Career Choice education program.

Empowering small businesses is also a top priority for the Applicant. Over 60 percent of the end user's online store sales come from independent sellers, primarily small and medium-sized businesses. It is estimated that more than 1,500 independent sellers in Hawaiʻi operate in the end user's stores.

The end user also provides hundreds of thousands of hours of free educational content for small businesses at all stages of their entrepreneurial journey, access to optional services like the end user's fulfillment network, and tools to expand their sales to new countries, among many other resources.

The end user's partnership with small businesses creates significant opportunities, and we are proud of how we have supported small businesses to grow and succeed by selling in our stores.

Since 2021, the end user has also partnered with the Council for Native Hawaiian Advancement to launch a Pop-Up Mākeke on the end user's .com platform, showcasing small businesses in Hawaiʻi. From authentic Aloha shirts to Hawaiian coffee and local art, we take pride in supporting and empowering local businesses by providing them with a global audience of potential customers through a centralized online marketplace.

Other Project-Related Economic Benefits

Job Creation. The logistics sector is a major employer, and investments in infrastructure and technology can generate new job opportunities in fields like warehousing, transportation, and logistics management. This new delivery station will create over 180 full and part-time direct jobs as well as indirect and induced employment, positively impacting the island of Kauaʻi.

Investment in Local Infrastructure. Investments in logistics often involve infrastructure enhancements, such as roads, ports, and warehouses, which can benefit the broader economy. This Project will improve local infrastructure in the Kauaʻi community. Our infrastructure investments include soft costs, site development, hard costs, tenant improvements, and building operations. We believe this new investment will result in increased and enhanced economic resiliency of Kauaʻi by strengthening the local product delivery infrastructure for local, national, and international goods and products.

Investment in the Hawaiʻi Workforce. The end user provides a Career Choice program that is just one of 10 upskilling programs offered through our Upskilling 2025 Pledge. The end user invests up to $5,250 per associate annually to support their educational enrichment and career goals. We are proud to provide a range of skills training options that meet learners at various stages of their careers. The end user has formalized its partnership with Honolulu Community College and the University of Hawaiʻi as its Career Choice educational partners in Hawaiʻi.

H. APPLICABILITY OF ORDINANCE NO. 860 RELATED TO HOUSING

Ordinance No. 860 requires residential and resort developments to provide workforce housing opportunities. The Project does not include any residential or resort development. Therefore the requirements of Ordinance No. 860 do not apply.

I. COMMUNITY OUTREACH

The prior owners and current owner and developer of the Ahukini Makai Subdivision completed extensive outreach for the Ahukini Makai Subdivision and the proposed industrial uses that will comprise the subdivision, including the Project. Outreach and public comments on the Ahukini Makai industrial subdivision began as early as 1994 with the filing the DBA application to amend the district boundaries of the lands from SLU Conservation and Agricultural to SLU Urban, along with a 1995 Environmental Impact Statement ("**EIS**") for the Līhuʻe-Hanamāʻulu master plan, which included the industrial subdivision and the Property.

The Applicant will initiate community outreach on the Project once this application is submitted to and accepted by the County Planning Department.

VI. CONSISTENCY WITH GENERAL PLAN AND LĪHUʻE COMMUNITY PLAN POLICIES

The General Plan provides that the policies for the Līhuʻe Urban Center are set forth in the Līhuʻe Community Plan ("**LCP**"), which sets forth fourteen (14) policy objectives for the Līhuʻe District. The Project is directly supportive of the following 10 policy objectives:

1. Concentrate development within a 10-minute walking radius of the existing communities of Līhuʻe, Puhi, and Hanamāʻulu. This will discourage development and sprawl that depends on the automobile as the primary means of transportation, and facilitate the goals of walkability, sustainability, and revitalization.

The Project is consistent with this objective because it will be in the Ahukini Makai industrial subdivision. The Property is within the Urban Core designated on the General Plan. This area is part of the Līhuʻe-Hanamaulu Master Plan which has designated this area to be in industrial use for many decades.

2. Renew and revitalize the Līhuʻe Town Core as a walkable, well-landscaped, attractive hub with Rice Street as a central destination.

The Project site is located approximately 2 miles from Rice Street, within the Līhuʻe urban core area. The Project site will be well-landscaped as shown on the enclosed Landscape

Plan. *See* Exhibit 1, Sheets 16-22 (Landscape Plans).

3. Forge an identity for the communities in the Līhuʻe District that retains unique character while reinvigorating the individual communities.

As discussed in Part V.G. above, the Project is expected to result in significant economic and community benefits to the Island of Kauaʻi, including the creation of temporary construction jobs and approximately 169 permanent positions that are expected to be filled by existing Kauaʻi residents.

4. Introduce and implement smart growth principles to foster walkable, compact, and connected communities within the Līhuʻe District.

The Project will be located in area designated for urban growth within an already highly urbanized area of Kauaʻi. The Property is located in very close vicinity to the Līhuʻe Airport and is located approximately 2 miles from Līhuʻe's Town Core (i.e., Rice Street).

5. Define and uphold community character through the application of Special Planning Areas and design standards. These tools can build upon the unique attributes of a community while making it a more attractive place for residents. The relationship of buildings to the street, the availability of parking, pedestrian facilities, and amenities, the creation of civic gathering places and open spaces, and the mix of uses in a given area are aspects of place-making that the LCP seeks to implement using Special Planning Areas and associated design standards.

The majority of consumer goods and services on the Island of Kauaʻi arrive by ship or plane. The Project is intended to streamline the delivery of goods from the U.S. continent to the Island of Kauaʻi. The Project will be located in area that has been designated by the General Plan and Līhuʻe Community Plan for urban growth and specifically, industrial uses. The Project will include more than enough off-street parking stalls to accommodate its operations.

8. Set sustainable growth patterns that uphold the vision and take into account planned and permitted uses. There is a substantial amount of planned and entitled growth in the Līhuʻe District. The Līhuʻe Community Plan update process sought to integrate these plans and understand how they will interface with and change the existing community in developing policies and recommendations for future growth.

The Project is located in an area that has been designated by the General Plan and Līhuʻe Community Plan for urban growth and specifically, industrial uses.

9. Maintain distinct community edges and green space buffers between communities. Residents expressed a desire to keep the individual communities within the Līhuʻe District distinct and compact, with defined edges that honor the natural constraints of topography and environment. The Līhuʻe Community Plan proposes land use patterns, including an Urban Edge Boundary, with this objective in mind.

As shown on Exhibit 1, Sheets 16-22, the perimeter of the Project will be landscaped so as to provide a buffer between the Project and surrounding uses. The Project borders other industrial uses and is located in the Ahukini Makai industrial subdivision. The location of the

Project will not result in urban uses outside of designated urban growth are areas, as the Project will be located in an area that has been designated by the General Plan and Līhuʻe Community Plan for urban growth and specifically, industrial uses.

10. Preserve agriculture, open space, and preservation uses throughout the majority of the District. The vast majority of land within the Līhuʻe District is classified as open space or agricultural use. Concentrating future development around existing urban centers as proposed in the LCP will help to preserve those lands presently under agricultural and open space use.

As discussed above, the Project will be located in an area that has been designated by the General Plan and Līhuʻe Community Plan for urban growth and specifically, industrial uses. The Property is zoned I-G (General Industrial) and the proposed Project is a permitted use with the approval of a Class IV Zoning Application. Nearly half of the Property (the makai portion) will remain as undeveloped, open space, which will serve as a stormwater retention basin for the Property and surrounding areas.

11. Retain historic buildings, significant trees, valued view planes, and cultural resources, and utilize them as anchors in revitalization and reinvigoration efforts. The LCP identifies valued historic, cultural, and heritage resources and recommends policies that support preservation and retention of these features as key place-making features that help to define the character and design direction for each community.

There are no historic buildings, significant trees, or known cultural resources on the Property. The proposed Project is planned as a one-story building that will not exceed approximately 28 feet in height, well below the I-G zoning district's maximum height of 50 feet. This will help to preserve viewplanes makai of the facility.

12. Ensure that public infrastructure and amenities are incorporated into development plans. The Līhuʻe Community Plan describes existing public infrastructure and identifies areas that require improvements to support recommended development. Recommendations for public amenities and facilities are also included.

The Project is supportive of this policy in that the Project will provide significant economic benefits to the County of Kauaʻi, including taxes due to the State and County general funds, which the County may use for public infrastructure.

VII. SPECIAL MANAGEMENT AREA CRITERIA

As discussed above, limited Project elements will be located within the SMA, consisting of a portion of the internal roadways, dumpster enclosure wall, sidewalk, approximately 750 linear feet of perimeter fencing, landscaping and a portion of a bioswale. *See* Exhibit 1, Sheet 15 (SMA). The total value of the Project elements that will be sited within the SMA are less than $500,000, therefore an SMA Minor permit is appropriate. *See* Exhibit 2 (Project Valuation for SMA).

The Project satisfies the SMA criteria:

a. *Description of the area and environment involved including flora and fauna, and* *other features*. The Property is described in more detail in Part II above. The Property is comprised of former sugar cane lands that were in active production for more than 100 years. The Property is largely covered in buffalo grass. *See* Exhibit 1, Sheet 3 (Site Photos) (Views 4-7). There are no known environmentally sensitive areas, habitat, or flora and fauna within the Property. *See* Exhibit 1, Sheet 11.

b. *Description of the existing land uses of the project site and surrounding areas*. The Property is currently vacant and undeveloped fallow agricultural land, except that some grading has been done by the fee owner. The Property was formerly in active sugarcane cultivation for more than 100 years. The Property is very close to other industrial uses, including the Lihue Refuse Transfer Station and the Lihue International Airport. The Property is Lot 4 of the Ahukini Makai Industrial Subdivision, intended to house other industrial uses as designated by the General Plan and Līhuʻe Community Plan. The Property is also in the vicinity of existing agricultural uses as well as Hanamaulu Bay.

c. *Description of how the proposed project will affect the area involved and surrounding areas*.

   i. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites, Special Treatment Districts as established by the County of Kauai Comprehensive Zoning ordinance, view planes or scenic corridors as outlined in the Community Development Plans, and recreation areas and resources*. The Project is located in the Ahukini Makai Industrial Subdivision, an area that has long been designated for industrial development in an area designated as the Urban Core under the General Plan. There are no known environmentally sensitive areas, habitat, or flora and fauna within the Property. *See* Exhibit 1, Sheet 11. There are no known archaeological, historic, or cultural resources on the Property. The Property was actively farmed for more than 100 years. Due to the extensive prior farming of the Property and the larger Ahukini Makai Industrial Subdivision, the State Historic Preservation Division ("**SHPD**") determined in connection with the fee owner's proposed grading of approximately 127.68 acres, that "no significant sites occur in the project area and that the project will have no effect on significant historic properties[.]" Exhibit 5 (SHPD no historic properties affected letter dated Sept. 28, 2018).

   The Project will not significantly adversely impact view planes, recreation areas or recreational resources. As shown on Exhibit 1, Sheet 3 (Site Photos), there are no significant viewplanes from the Property. The maximum height of the buildings proposed will be less than 30 feet height, far less than the 50 foot height limit for the I-G zoning district.

   The Project will not impact access to recreation areas or recreation resources.

ii. *Curtails the range of beneficial uses of the environment*. The Project will not curtail the range of beneficial uses of the environment. Although the Project will be located on former sugarcane lands, the Property has not been actively farmed since the closure of the Lihue Plantation in 2000. *See* Exhibit 3 (Ka Pa‘akai Analysis) at 45. The Project will be located on land that is designated in the SLU Urban District in an area designated as the Urban Center on the General Plan. The Property is already zoned in the I-G zoning district and has long been designated for industrial use.

iii. *Conflicts with the County’s or the State’s long-term environmental policies or goals*. The Project does not conflict with the County's or State's long-term environmental policy or goals. As discussed above, the Project will be located on land that is designated in the SLU Urban District in an area designated as the Urban Center on the General Plan. The Property is already zoned in the I-G zoning district and has long been designated for industrial use. The Project is consistent with the uses allowed in the I-G zoning district. See also the discussion about the Project's consistency with the General Plan in Part VI above.

iv. *Substantially affects the economics or social welfare and activities or the community, County or State*. As discussed in Part V.G. above, the Project is expected to have significant beneficial socio-economic impacts in the form of a generating approximately 169 permanent positions: approximately 62 on-site employees, 25 van drivers, and up to 82 flex drivers that will use personal vehicles to deliver packages and work in concert with standard van drivers, as well as temporary construction jobs. The Project will also be an investment in local infrastructure and the local workforce.

v. *In itself has no significant adverse effect but cumulatively has considerable effect upon the environment or involves a commitment for larger actions*. The Project is not anticipated to result in significant adverse effects or cumulative adverse effects on the environment, or involve a commitment for larger actions. The Project proposes industrial uses that are permitted in the I-G zoning district in an area that is designated for industrial use under the General Plan and Līhu‘e Community Plan.

vi. *Substantially affect a rare threatened, or endangered species of animal or plant, or its habitat*. There are no known rare, threatened, or endangered flora or fauna on the Property. *See* Exhibit 1, Sheet 11. The Property was extensively farmed for more than 100 years.

vii. *Detrimentally affects air or water quality or ambient noise levels*; or The Project is not expected to generate significant air pollution or adverse impacts to water quality. While there may be noise in excess of ambient noise levels during the construction phase of the Project, the Project is not expected to operate above ambient noise levels in the area. The Project is located less than a quarter-mile from the Līhuʻe International Airport.

viii. *Affects an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal water*; or
The Project is not proposed in an environmentally sensitive area. *See* Exhibit 1, Sheet 11. The Property is not a shoreline parcel and is subject to a 500-foot shoreline setback. All Project elements will be outside of the 500-foot shoreline setback area, with the exception of approximately 300 linear feet of perimeter fencing, 0.3 acre of grassing and 140 linear feet of a bio-swale. The project elements will encroach into the 500-foot shoreline setback area by approximately less than 120 feet at its greatest point of encroachment. *See* Exhibit 1, Sheet 13 (Shoreline Setback).

ix. *May have a major effect on the quality of the environment or affect the economic or social welfare of the area*; and
The Project is anticipated to have significant beneficial socio-economic impacts such as generating additional employment options on the island of Kauaʻi in the form of approximately 169 permanent positions: approximately 62 on-site employees, 25 van drivers, and up to 82 flex drivers that will use personal vehicles to deliver packages and work in concert with standard van drivers, as well as temporary construction jobs. The Project will also be an investment in local infrastructure and the local workforce. The Project will not have an adverse effect on the quality of the environment. It is located in an area that was disturbed by agricultural activities for more than 100 years and has long been designated for industrial uses.

x. *Would possibly be contrary to the policies and guidelines of the Rules and Regulations, the County's General Plan, Development Plans, and Zoning and Subdivision Ordinances*. As discussed throughout Parts V, VI, and VII, the proposed Project is consistent with the General Plan, Līhuʻe Community Plan, and Article 8 of the CZO.

d. *Evaluation of the proposed development relative to the objective and policies as contained in Chapter 205A, HRS; and Section 3.0 of the Special Management Area (SMA) Rules and Regulations*:

RECREATIONAL RESOURCES:	Objective Provide coastal recreation opportunities accessible to the public.

1. *Will the proposed development adversely affect coastal resources uniquely suited for recreational activities that cannot be provided in other areas*? No. The Project is not expected to adversely impact coastal resources uniquely suited for recreational activities. The Project will be sited more than 500 feet

from the shoreline, with the exception of a portion of the perimeter fencing, grassed area, and a bioswale. *See* Exhibit 1, Sheet 13 (Shoreline Setback).

2. *Will the project require replacement of coastal resources having significant recreational value, including but not limited to surfing sites, sandy beaches and fishing areas, when such resources will be unavoidably damaged by the proposed development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable*? No, the Project will not require the replacement of resources of significant recreational value. The Property is located within the Ahukini Makai Industrial Subdivision in an area that has long been planned for industrial development. The Property is comprised of former sugarcane lands that were in agricultural development for more than 100 years. The Property is in very close vicinity to other industrial uses, including the Lihue Refuse Transfer Station and the Lihue International Airport.

3. *Is the project site near a state or county park*? The Property is approximately 0.6 mile from the Ahukini Recreational Pier State Park and approximately 0.4 mile from the Hanamāʻulu Beach Park.

4. *Will the proposed development affect an existing public access to or along the shoreline*? No, the Project will not affect an existing public access to or along the shoreline.

5. *Will the proposed development provide public access to and/or along the shoreline*? No, the Project will not provide or affect an existing public access to or along the shoreline. *See* Exhibit 1, Sheet 14 (Shoreline Access).

6. *Will the proposed development encourage expanded recreational use of county, state, or federally owned or controlled shoreline lands and waters having recreational value*? The Project will not adversely impact or expand recreational use of government owned shoreline lands having recreational value. The Property is located within the Ahukini Makai Industrial Subdivision in an area that has long been planned for industrial development. The Property is in very close vicinity to other industrial uses, including the Lihue Refuse Transfer Station and the Lihue International Airport.

7. *Will the development generate point or non-point sources of pollution that will affect recreation value of coastal area*? No. The Project will not generate pollution that will affect the recreational value of a coastal area. All stormwater runoff generated by the Project will be managed on-site through bio swales, naturalized open areas, and the regional stormwater retention basin on the Property.

HISTORICAL RESOURCES:	Objective Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the Special Management Area that are significant in Hawaiian and American history and culture.

1. *Is the project site within a federal, state and/or county designated historical/cultural district*? No.

2. *Is the project site listed on or nominated to the Hawaii or national register of historic places*? No.

3. *Does the project site include land(s) which have not been previously surveyed by an archaeologist*? No.

4. *If an archeological survey has been conducted for the project site, has the survey been submitted to the state historic preservation office for review and recommendations*? Yes, several archaeological surveys have been completed for the Project area and the larger Ahukini Makai Industrial Subdivision over many years. *See* Exhibit 3 (*Ka Pa‘akai* Assessment), at 47-64. On September 28, 2018, SHPD issued a determination that no significant historic properties have been identified within the Ahukini Makai Industrial Subdivision project area and that no historic properties would be affected by the fee owner's proposed grading of the Ahukini Makai Industrial Subdivision. *See* Exhibit 5 (SHPD Letter).

5. *Has any site survey revealed any information on historic or archaeological resources? (please provide a copy or reference of survey).* As discussed above, SHPD determined in connection with the fee owner's proposed grading of approximately 127.68 acres, that "no significant sites occur in the project area and that the project will have no effect on significant historic properties[.]" Exhibit 5 (SHPD no historic properties affected letter dated Sept. 28, 2018).

6. *Is the project site within or near a Hawaiian fishpond*? No.

7. *Is the project located within or near a historic settlement area? (Cemeteries, burials, heiaus, etc.)* No, the Project is located in an area that was farmed as a part of large-scale sugarcane operations for more than 100 years. As discussed above, SHPD determined in connection with the fee owner's proposed grading of approximately 127.68 acres, that "no significant sites occur in the project area and that the project will have no effect on significant historic properties[.]" Exhibit 5 (SHPD no historic properties affected letter dated Sept. 28, 2018).

SCENIC & OPEN SPACE RESOURCES:	Objective Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

1. *Does the project site abut or affect a valued scenic resources or landmark within*

the SMA? No.

2. *Does the proposed development affect existing shoreline open space and scenic resources*? No.

3. *Does the proposed development involve alteration to natural landforms and existing public views to and along the shoreline*? The Project will result in modest impacts to views to the shoreline due to the addition of one or more structures on the parcel. The maximum proposed height of the buildings on the Property will be approximately less than 30 feet, more than 20 feet below the maximum height of 50 feet for the I-G zoning district. Exhibit 1, Sheet 7 (Exterior Elevations). Existing conditions on the Property are shown on Exhibit 1, Sheet 3 and Exhibit 7.

4. *Is the project compatible with the visual environment*? Yes, the Project is compatible with the visual environment. The Property is part of the larger Ahukini Makai Industrial Subdivision. The Property is in the I-G zoning district which is subject to a maximum height limit of 50 feet. The Project proposes to develop one or more structures that will be no greater than 30 feet in height. The Property is surrounded by existing industrial uses, including the Līhuʻe International Airport and Lihue Refuse Station.

5. *Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline*? The Project structures may be visible from the nearest coastal roadway or the shoreline, however, the Project will be setback a minimum of 500 feet, in compliance with the designated shoreline setback for this area.

6. *Is the project site within the shoreline setback area (20 or 40 feet inland from the shoreline)*? The Property is subject to a 500 foot shoreline setback. Exhibit 1, Sheet 13. No portion of the Project will be located within the 500-foot shoreline setback with the exception of approximately 300 linear feet of perimeter fencing and approximately 140 linear feet of a bio-swale. *Id.* Under KCC Article 8, fencing qualifies as a "minor structure".

COASTAL ECOSYSTEMS:	Objective Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

1. *Is the project site a habitat for endangered species of flora and fauna*? No, not to Applicant's knowledge. There is no known habitat for flora or fauna on the Project Site. Exhibit 1, Sheet 11.

2. *Will the proposed development adversely affect valuable coastal ecosystems of significant biological or economic importance*? No, the Project is not anticipated to result in significant adverse environmental impacts to valuable coastal

ecosystems of significant biological or economic importance. The Applicant is seeking a SMA minor permit for certain limited Project elements that will be within the SMA and all Project elements (except for a portion of the perimeter fence and bio-swale) will be located outside of the 500-foot shoreline setback. Exhibit 1, Sheets 13 and 15.

3. *Will the proposed involve disruption or degradation of coastal water ecosystems through stream diversions, channelization, and similar land and water uses*? No. All runoff generated by the Project will be managed on site through naturalized open areas, bio swales, and the regional stormwater basin on the Property.
4. *Will the proposed development include the construction of special waste treatment facilities, such as injection wells, discharge pipes, septic tank systems or cesspools*? No. The Project will connect to the County's sewer and water systems. Exhibit 1, Sheet 10.
5. *Is there a wetland on the project site*? No. It is noted that a portion of the Property will continue to be used as a regional stormwater retention basin. Exhibit 1, Sheet 5.
6. *Is the project site situated in or abutting a natural area reserve or wildlife refuge or sanctuary*? No.

ECONOMIC USES:	Objective Provide public or private facilities and improvements important to the State’s economy in suitable locations.

1. *Does the project involve a harbor or port*? No, however, the Project will be located in close proximity to Līhu‘e International Airport and the proposed operations of the Project will involve delivery and pickup of goods from the airport that will be sorted at the Project facility and then distributed across the Island of Kaua‘i. The Project is expected to result in improvements to the State's economy by providing for nearly 170 full time positions as well as temporary construction jobs.
2. *Is the proposed development related to or near to an existing major hotel, multi-family, or condominium project*? No. The nearest residence to the Project is approximately 0.6 miles away. The nearest major hotel is the Outrigger Kauai Beach Resort which is approximately 1.6 miles away.
3. *Does the project site include agricultural lands designated for such use*? No. The Project site is former agricultural land that has not been in active agricultural use since the early 2000s. The Property is zoned in the I-G zoning district. The Proposed use is permitted under the I-G zoning. Exhibit 1, Sheet 2.
4. *Does the proposed development relate to commercial fishing or seafood*

production? No.

COASTAL HAZARDS:	Objective Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence.

1. *Is the project site within a potential tsunami inundated area as depicted on the national flood insurance rate maps (FIRM)*? Although the very northeastern tip of the Property appears to be within the tsunami evacuation zone, no Project elements are located within that zone. Exhibit 1, Sheet 2.

2. *Is the project site within a potential flood inundation area according to a FIRM*? No, the Property is located in Flood Zone X - area of Minimal Flood Hazard outside of the 100 year flood plain. Exhibit 1, Sheet 9.

3. *Does the project comply with the requirements of the federal flood insurance program*? The Project is not required to comply with the federal flood insurance program requirements because the Property is designate din Flood Zone X. Exhibit 1, Sheet 9.

4. *Has the project site or nearby shoreline areas experienced shoreline erosion*? Not to the Applicant's knowledge.

5. *Have any seawalls/revetments/etc. been constructed or exist in the immediate vicinity*? Not to the Applicant's knowledge.

PROJECT ASSESSMENT:

e. *Evaluation of the impacts which cannot be avoided and mitigating measures proposed to minimize that impact*:

As discussed above, the Project is not expected to result in significant adverse environmental impacts to SMA resources that cannot be avoided or minimized. The Project will be located on land that was previously disturbed by agricultural cultivation for more than 100 years. The Property is designated in the Urban Center by the General Plan and Līhuʻe Community Plan and is zoned for industrial use. The Project will involve industrial uses that are permitted with a Class IV zoning permit and are appropriate in the already existing industrial area of the island. The Project will implement all required Best Management Practices during construction.

Although the Project will increase the total permeable area on the Property, the proposed Project does not seek to fully build out the Property to the maximum allowed by the zoning code. A significant portion of the Project will remain undeveloped as a regional stormwater retention basin. In addition, the Project Site will include grassed and landscaped areas along with two (2) bio-swales to manage runoff generated by the Project. *See* Exhibit 1, Sheets 10 (Topo), 16-22

(Landscaping Plans).

f. *Evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations in accordance with the following aspects*:

  i. *Substantial adverse environmental or ecological effects*;

    1. *Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and natural reserves is provided to the extent consistent with sound conservation principles*;

       The Project will not adversely impact access to publicly owned or used beaches, recreation areas, or natural reserves.

    2. *Adequate and properly located public recreation areas and wildlife preserves are reserved*;

       The Project will not result in substantial adverse impacts to public recreation areas in the vicinity of the Project.

    3. *Provisions are made for solid and liquid waste treatment, disposition, and management that will minimize adverse effects upon special management area resources*; and

       Refer to Parts V.B, V.C, and V.E above, which describe how solid waste, wastewater, and stormwater will be managed as part of the proposed Project so as to minimize adverse effects on SMA resources.

    4. *Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, wind damage, storm surge, landslides, erosion, siltation, or failure in the event of earthquake.*

       The Project will result in alteration to the existing landscape in terms of grading of a portion of the Property (i.e., the Project Site) and the development of one or more buildings along with other Project elements and landscaping, however, only minimal impacts from the Project are anticipated. The Property was previously in active sugarcane cultivation for nearly 100 years before going fallow once sugar operations ceased. The Project will impact scenic resources to the extent that one or more permanent structures will be developed on the Property in an area that is currently vacant. However, the building(s) on the Property will be no greater than 30 feet in height, which is more than 20 feet below the maximum height limit of 50 feet allowed in the I-G zoning district. Exhibit 1, Sheet 7 (Exterior Elevations).

ii. *Consistency or compliance of the proposed development relative to the goals and objectives of Chapter 205A, HRS; and Section 3.0 of the SMA Rules and Regulations*; and

The Project is consistent with the policies and objectives of HRS Chapter 205A, as set forth in HRS § 205A-2. See the discussion above in this Part VII.

iii. *Consistency or compliance of the proposed development relative to the County General Plan, Development Plan, and Zoning Ordinances*. See Part IV above for a discussion of the Project's consistency with the County General Plan and Līhuʻe Community Plan. See Part VIII below for a discussion of the Project's compliance with the land use and zoning conditions applicable to the Project.

VIII. HISTORY OF THE PARCEL; LAND USE CONDITIONS; SUBDIVISION CONDITIONS

The Property is part of a larger area, approximately 541.769 acres (the "**Petition Area**"), that was reclassified via a District Boundary Amendment ("**DBA**") in November 1995 from the SLU Conservation and SLU Agricultural Districts to the SLU Urban District in LUC Docket No. A94-703. The Property was part of a larger area used for extensive agricultural uses in the past (i.e., former sugarcane land).

The DBA petition was for the development of single-family and multi-family residential uses, public and quasi-public facilities, village mixed-uses, industrial uses, parks, infrastructure, and open space as proposed in the Lihue-Hanamaulu Master Plan. The DBA approval was subject to 24 conditions of approval, which conditions are still applicable to the Petition Area, including the Property, today, as set forth in the LUC's Findings of Fact, Conclusions of Law and Decision and Order dated November 22, 1995 (the "**Original D&O**"). Conditions Nos. 2 and 7 were amended by that certain D&O dated April 12, 1996, and Conditions Nos. 1, 2 and 7 were further amended by that certain D&O dated December 18, 2006 (the Original D&O, as amended, is referred to herein as the "**D&O**").

The conditions of approval were further amended by that certain Petition for a Zoning Amendment (Bill No. 1775), which was approved by the County Council and signed into law by the Mayor on May 13, 1996 as Ordinance No. PM-326-96 (the "**County Zoning Amendment**"), a copy of which is enclosed as Exhibit 6.

The Petitioner under the DBA is required to submit an annual report to the LUC. The 2024 annual report dated February 18, 2025[2] filed for the Petition Area provides that the conditions of approval have been amended as shown below (amendments indicated by

---

[2] The 2024 Annual Report dated February 18, 2025 filed by Visionary, LLC is available at https://luc.hawaii.gov/wp-content/uploads/2025/02/A94-703-Kauai-Plantation-2025-02-20-Annual-Report-2024.pdf.

underlined and bolded language). The status of compliance of the conditions, as well as the applicability of the conditions to the Property, are noted in the chart below.

No.	Condition	Status	Applies to the Property?
1.	Petitioner shall provide affordable housing opportunities for low, low-moderate, and gap group income residents of the State of Hawaiʻi to the satisfaction of the County of Kauaʻi Housing Agency **within the entire Petition Area.** The location and distribution of the affordable housing or other provisions for affordable housing shall be under such terms as may be mutually agreeable between the Petitioner and the County of Kauaʻi. **An Affordable Housing Agreement** between the Petitioner and the County of Kauaʻi shall be obtained prior to the Petitioner applying for county zoning permits **or receiving final approval of any subdivision, whichever comes first, for any portion of the Petition Area other than the 30.106 acre portion of the Petition Area located within the Hanamaulu Triangle.**	In progress	Not applicable. No housing is proposed as part of the Project and the Property is not located within the Hanamāʻulu Triangle.
2.	Petitioner shall provide its fair-share contribution for school facilities necessitated by the proposed Lihue-Hanamaulu Project, and for the benefit of the State Department of Education ("DOE"). **Terms of the donation shall be agreed upon in writing by Petitioner and the DOE prior to Petitioner receiving final subdivision approval, or apply for a building permit, whichever comes first, for any portion of the Petition Area**.	In progress	Not applicable. The Project does not include residential housing which would create a need for school facilities.
3.	Petitioner shall participate in the pro rata funding and construction of adequate civil defense measures as determined by the State of Hawaii and County of Kauaʻi civil defense agencies.	In progress	Not applicable.
4.	Petitioner shall participate in the funding and developing of water source, storage, and transmission facilities to serve the proposed development.	Partially satisfied; in progress.	Not applicable.
5.	Petitioner shall participate in the funding and construction of adequate wastewater treatment, transmission and disposal facilities, as determined by the State Department of Health and the County of Kauaʻi.	Partially satisfied; in progress.	Not applicable.
6.	Should any human burials or any historic sites such as artifacts, charcoal deposits, or stone platforms, pavings or walls be found, the Petitioner shall stop work in the immediate vicinity and contact the State Historic Preservation Division ("Division"). The significance of these finds shall then be determined and approved by the Division. The Division must verify that the fieldwork portion of the mitigation plan has been successfully executed prior to work proceeding in the immediate vicinity of the find. Burials must be treated under specific provisions of Chapter 6E, Hawaiʻi Revised Statutes.	Continuing requirement.	Yes. Applicant will comply with this condition.
7.	Petitioner shall participate in the pro rata funding and construction of local and regional transportation	Condition was amended in	No.

	improvements and programs including dedication of rights-of-way as determined by the State Department of Transportation ("DOT") and the County of Kauai. Agreement between the Petitioner and the DOT as to the level of funding and participation shall be obtained prior to the Petitioner applying for county zoning permit or receiving final approval of any subdivision, whichever comes first, **for any portion of the Petition Area other than the 30.106 acre portion of the Petition Area located within the Hanamaʻulu Triangle.** **Agreement between the Petitioner and the DOT as to the level of funding and participation required for the 30.106 acre portion of the Petition Area located within the Hanamaʻulu Triangle shall be obtained prior to the Petitioner applying for a county building permit or receiving final approval of any subdivision, whichever comes first, for the 30.106 acre portion of the Petition Area located within the Hanamaʻulu Triangle**.	December 2006. This amendment allows D.R. Horton to proceed upon satisfaction of the DOT conditions. In 2020, Petitioner reached an agreement with the Department of Transportation on a Memorandum of Agreement for its fair share of regional highway improvements	
8.	Petitioner shall fund the design and construction of drainage improvements required as a result of the development of the Property to the satisfaction of the appropriate State of Hawaii and County of Kauai agencies.	Partially satisfied; continuing obligations.	Yes. Applicant will comply with drainage master plan and implement the proposed drainage improvements on the Property.
9.	Petitioner shall not construct single or multi-family residential, hotels, or transient lodging, and other noise sensitive public use structures (schools, day care centers, libraries, churches, health care facilities, nursing homes, or hospitals) within areas exposed to aircraft noise levels of 60 Ldn or greater as indicated on the 1994 and 2010 aircraft noise contours within the Petitioner's January 1995 EIS. Other public use structures (government services and office buildings serving the public, transportation facilities, and parking areas), commercial facilities, government facilities not normally accessible to the public, industrial and agricultural facilities, and recreational facilities (except for outdoor music shells, amphitheaters, professional/resort sport facilities, medial event facilities, etc.) are permitted within areas exposed to aircraft noise levels of 60 Ldn or greater. The State of Hawaii will not be responsible for mitigation of facilities developed within areas exposed to aircraft noise levels of 60 Ldn or greater.	Partially satisfied; continuing obligations.	No. Applicant does not propose to develop the types of facilities enumerated in this condition.
10.	Petitioner shall grant to the State of Hawaii an avigation (right to flight) easement in the form prescribed by the State of Department of Transportation ("DOT") and such easement and form shall be mutually acceptable to the DOT and the Petitioner.	Satisfied.	Yes. The DBA Petitioner granted such an easement to the State of Hawaii, recorded October 18, 2019.
11.	Petitioner shall not construct any object that would constitute a hazard to air navigation at Lihue Airport as defined in Title 14, Code of Federal Regulations Part 77, (14 C.F.R. 77) and	Continuing obligations.	Yes. Applicant will comply with this

	Title 19, Hawaii Administrative Rules Chapter 12 (19 H.A.R. 12), provided that this requirement shall be applicable to the construction of those improvements set forth in Petitioner's Exhibit 54, 55 and 56.		condition.
12.	Petitioner shall participate in an air quality monitoring program as specified by the State Department of Health.	N/A	No.
13.	Petitioner shall cooperate with the State Department of Health and the County of Kauaʻi Department of Public Works to conform to the program goals and objectives of the Integrated Solid Waste Management Act, Chapter 342G, Hawai'i Revised Statutes, and the County of Kauaʻi's approved integrated solid waste management plans in accordance with a schedule and timeframe satisfactory to the State Department of Health.	Continuing obligations.	Yes.
14.	Petitioner shall implement efficient soil erosion and dust control measures to the satisfaction of the State Department of Health and County of Kauai.	Continuing obligations.	Yes.
15.	Petitioner shall notify all prospective buyers of property that the Hawaii Right-to-Farm Act, Chapter 165, Hawaii Revised Statutes, limits the circumstances under which pre-existing activities may be deemed a nuisance.	Continuing obligations.	No.
16.	Petitioner shall maintain the alignment of existing cane haul roads or shall provide alternative cane haul roads at its expense to serve any continuing sugarcane cultivation within the Property.	N/A	No. No cane haul roads are present within the property.
17.	Petitioner shall initiate and fund a stream biological monitoring program. The monitoring program shall include quarterly monitoring as warranted, and be reviewed by the U.S. Fish and Wildlife Service, and approved by the State Division of Aquatic Resources, Department of Land and Natural Resources. The Petitioner shall implement mitigation measures necessitated by this Project if the results of the monitoring program warrant them. Mitigation measures, if necessary, shall be reviewed by the U.S. Fish and Wildlife Service, and approved by the State Division of Aquatic Resources, Department of Land and Natural Resources.	Continuing obligations for stream monitoring in accordance with the monitoring plan.	No.
18.	Petitioner shall initiate and fund a near shore and stream water quality monitoring program. The monitoring program shall be approved by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the State Department of Health and the State Division of Aquatic Resources, Department of Land and Natural Resources. Mitigation measures shall be implemented by the Petitioner if the results of the monitoring program warrant them. Mitigation measures shall be approved by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the State Department of Health and the State Division of Aquatic Resources, Department of Land and Natural Resources.	Continuing obligations for stream monitoring in accordance with the monitoring plan.	No.
19.	Petitioner shall develop the Property in substantial compliance with the representations made to the Commission. Failure to so develop the Property may result in	Continuing obligation.	Yes.

	reversion of the Property to its former classification or change to a more appropriate classification.		
20.	Petitioner shall give notice to the Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interests in the Property, prior to development of the Property.	Continuing obligation.	Yes.
21.	Petitioner shall timely provide without any prior notice, annual reports to the Commission, the Office of State Planning, and the County of Kauaʻi Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.	Continuing obligation.	No. This obligation remains with the fee owner (petitioner under the DBA).
22.	The Commission may fully or partially release the conditions provided herein as to all or any portion of the Property upon timely motion and upon the provision of adequate assurance of satisfaction of these conditions by Petitioner.	N/A	N/A
23.	Within 7 days of the issuance of the Commission's Decision and Order for the subject reclassification, Petitioner shall (a) record with the Bureau of Conveyances a statement that the Property is subject to conditions imposed herein by the Land Use Commission in the reclassification of the Property, and (b) shall file a copy of such recorded statement with the Commission.	Satisfied	N/A
24.	Petitioner shall record the conditions imposed herein by the Commission with the Bureau of Conveyances pursuant to Section 15-15-92, Hawaii Administrative Rules.	Satisfied	N/A

County Zoning Amendment. The Property was rezoned as part of the larger Līhuʻe-Hanamaulu master planned area to the I-G District through Ordinance No. PM-326-96 (Exhibit 6). The following chart discusses the conditions of the Zoning Amendment:

Condition No.	Condition	Applicable to the Applicant/Project?
1.	The outright permitted uses allowed under the Commercial District (C-N) as prescribed in the Comprehensive Zoning Ordinance shall be allowed with the exception of "single family detached dwellings on lots or parcels of no less than 6,000 square feet, and to a density not to exceed six units per acre.	No. The Property is zoned I-G.
2.	Prior to and/or concurrent with permitting, the applicant shall submit to the Planning Department for review and comments design criteria and possible standards for development of the Residential District (R-8) zone and the "Hanamaulu triangle" portion. The design criteria and standards shall be included in a master plan to address community-wide design including density allocations, open space systems, and infrastructure. These design criteria and standards may be amended by applicant, as necessary. The standards governing the development, construction and use of housing and dwelling facilities within the Residential District (R-8) zone shall be those as prescribed in Chapter 8, Article 3, KCC 1987 (Residential Districts). Residential	No.

	District (R-8) shall permit a maximum of 8 dwelling units per acre as calculated in accordance with Sec. 8-3.8, KCC 1987. To ensure a proper blend of unit types along with view planes and open spaces to eliminate a congested appearance, project development standards for R-8 residential projects with densities greater than 6 dwelling units per acre shall be reviewed and approved through the Project Development Use Permit process. Applicable development standards are available in the CZO (Chapter 8, KCC 1987) for the respective types of unit development. In cases where standards are not available, the applicant will be afforded the opportunity to develop its own project standards through the Project Development Use Permit process.	
3.	The outright permitted uses allowed under the Industrial District (I-G) as prescribed in the Comprehensive Zoning Ordinance shall be allowed except that retail sales shall be allowed only as an accessory to a permitted use. Otherwise, retail sales shall require a use permit.	Yes.
4.	Should there be a surplus in Environmental Impact Assessment fee credits for elements which are eligible, the excess can be applied to future projects proposed by the applicant within the Lihue District only.	No.
5.	The applicant shall resolve with the County of Kauai the amount of area needed for acquisition along with the details for land acquisition for the development of a public facilities complex prior to and/or concurrent with permit applications. The following alternatives shall be available for resolution of land acquisition: a. Land be acquired in fee at Agriculture land values. b. Land be acquired through credits in fees. c. A combination of alternatives a and b. d. Land be exchanged for infrastructure costs; i.e. either government constructing the infrastructure or sharing in the cost of construction in exchange for land. e. A combination of all 4 or a number of the alternatives stated. f. Any other alternative(s) deemed feasible by both parties. Further, as agreed, the applicant shall assist government agencies and/or other occupants with their permits for their respective projects in this project area by authorizing the permit application(s) if the land is not yet conveyed. However, it is understood that an agreement to cover eventual conveyance must first be finalized if such action is ever needed.	No.
6.	The contents of Exhibit I entitled "Draft Urban Design Plan" of the August 1995 Petition for a Zoning Amendment, Lihue-Hanamaulu Master Plan are acceptable and shall apply to the project's respective zoning districts. Any amendments to the design criteria shall be subject to the review and approval of the Planning Commission throughout the duration of the project.	Yes.
7.	A park master plan for the project shall be approved by the Planning Commission prior to and/or concurrent with permitting to ensure that correct crediting and assessments are made. It would be to the benefit of the applicant and County that this matter be resolved early before any permits are applied for. The master plan shall cover the following: a. Location of parks. b. Design; i.e., fields versus passive parks, sizes, secondary function as detention basins. c. Credits for open space areas (inclusive of the "gateway"), bike paths, pedestrian paths, and other recreational amenities that may be developed	No.

	within the project. Overall park requirement and overage of park space; i.e. how much is the actual requirement based on densities and how would the applicant like to be credited for the overage, if any.	
8.	The roadway system as shown on the applicant's petition shall be developed as proposed. Also, the applicant shall be bound to its representations within its petition on the resolution of condition 3 of the General Plan Amendment Ordinance No. PM-310-95 regarding the resolution of traffic concerns. Any modification to representations made regarding this matter shall be subject to County Council approval.	No.
9.	The applicant shall reserve a fifteen (15) acre site within the Ahukini Mauka portion of the project for a future school site for a one (1) year period from the date which the Zoning Amendment ordinance is adopted. The exact location and configuration shall be resolved with the applicant, County Planning Department and Department of Education during the 1 year period. The 1 year period is to enable the Planning Department to resolve with the DOE the development of school facilities within the Lihue District. The timeframe can extend over a year only upon the consent of the applicant, however such extension shall be not less than ninety (90) days and shall establish a deadline to resolve the matter as agreed to by the applicant. Also, should the DOE elect to acquire a site within the project, such acquisition shall require that the land be purchased through negotiations between the applicant and DOE, or be acquired through another means which is mutually acceptable to the County, Department of Education and the applicant.	Condition complied with by fee owner per September 15, 2008 Planning Department letter.
10.	The applicant shall establish a construction material disposal site for the project. Should the site be open to the public at reasonable rates, Environmental Impact Assessment fee (EIA) credit shall be provided. Details of crediting shall be resolved during the permitting process with the Planning Commission.	Condition complied with by fee owner per September 15, 2008 Planning Department letter.
11.	The applicant shall explore the possibility of establishing a solid waste landfill site with the Planning and Public Works Departments prior to permitting. Should a site be selected and receive permit approvals, the applicant shall then qualify for Environmental Impact Assessment fee credit. This extent of this credit shall be resolved with the Planning and Public Works Departments.	No.
12.	Intersection improvements at the Ahukini Rd./Kapule Hwy., Kapule Hwy./Rice St., and the Ahukini Rd./Kuhio Hwy. intersections, if built by the applicant shall qualify for Environmental Impact Assessment fee credit. The extent of credit shall be determined at the time of construction plan approval for these project(s). Likewise land dedication for right-of-way widening along with preparation of construction plans to facilitate improvement of government roads in the immediate area could qualify for fee credit pending review and approval of the Planning Commission during permitting.	No.
13.	The applicant shall provide for civil defense infrastructure such as sirens. Environmental Impact Assessment fee (EIA) credit shall be assigned to the improvements at the time permits are sought for these facilities.	No.
14.	The imposition of affordable housing requirements shall be reserved until the outcome of negotiations for the public facilities complex and affordable housing site are finalized. Also, the imposition of affordable housing requirements (if	No.

	any) shall be allowed to be established at the permitting level with the input of the County Council.	
15.	The applicant shall prepare a master plan addressing the development of infrastructure for the entire project. This master plan shall cover timing, locations, costs, and alternatives for developing the infrastructure which includes (but not be limited to) drainage, water, sewer, and roads. Also, this master plan shall be submitted for the review and approval of the Planning Commission (in conjunction with the respective agencies whose infrastructure facilities are affected) prior to and/or concurrent with permitting.	N/A
16.	The contents of Exhibit I entitled "Draft Urban Design Plan" of the August 1995 Petition for a Zoning Amendment, Lihue-Hanamaulu Master Plan regarding the "gateway" shall be followed for the design and development of this site. Should the State of Hawaii not be involved in the development of this "gateway", the applicant shall resolve with the County Planning Department the timing for the construction of this improvement prior to and/or concurrent with permitting.	N/A
17.	The minimum density for the project shall be 1,400 units. The maximum density for the project shall be the units allowed by zoning should the applicant elect to develop beyond the 1,400 minimum amount. The applicant shall note that the maximum density can be exceeded if the housing project is for affordable units that are government funded.	No.
18.	There shall be a thirty (30) foot building setback along the Hanamaulu Valley from the edge of the bluff of TMK: 3-7-01:01 (1996) and 3-7-02:12 (1996) (referred to as Ahukini Mauka).	No.
19.	To help mitigate any adverse drainage and runoff impacts resulting from development, there shall be no buildings developed on the slopes between the zoned area and Hanamaulu Stream. This slope shall remain as a buffer.	No.
20.	Prior to development, lands shall be kept in agriculture or diversified agriculture (as defined in Sec. 8-1.5, KCC 1987) or otherwise maintained in a well-kept condition.	Yes.
21.	Each differently zoned area shall be developed in an orderly manner designed to avoid excessive buildup of unsold inventory and unsightly expanses of vacant lots. A status report shall be submitted to the Planning Department in five (5) year increments from the date of this ordinance until the project is 90% complete. The status report shall address (but not limited to the following): a) any project modification, b) progress of projects; c) compliance to conditions; and d) other items relating to project development.	Yes.
22.	The applicants shall comply with all applicable requirements of State, County and Federal agencies during project development and use. Any additional government agency conditions and requirements that may be imposed shall be the responsibility of the applicants to resolve with the respective agencies.	Yes.

IX. CONCLUSION

For the reasons set forth above, this Application meets the required criteria for issuance of a Class IV Zoning Permit and Special Management Area Minor Permit. Additionally, the fencing proposed within 500-foot shoreline setback area qualifies as a minor structure.

WINSTON INDUSTRIAL

KAUAI, HI

EXHIBIT 1

3130 AHUKINI ROAD, LIHUE, KAUAI, HI 96766

PLANNING SUBMITTAL

PROJECT DESCRIPTION

THIS PROJECT IS A NEW INDUSTRIAL WAREHOUSE AT 41,163 SQUARE FEET IN LIHUE, KAUAI IN THE STATE OF HAWAII. THE SCOPE OF WORK INCLUDES SITE WORK AND GRADING, LANDSCAPING, NEW BUILDING SHELL, AND NEW RELATED UTILITIES. THE USE OF THE BUILDING WILL BE FOR STORAGE AND DISTRIBUTION.

PROJECT DIRECTORY

OWNER:
BH DEVCO
2425 E. CAMELBACK ROAD, SUITE 220
PHOENIX, AZ 85016
ATTN: TRACY HAMMER
THAMMER@BHDEVCO.COM
602.510.4745

CIVIL ENGINEER:
KODANI & ASSOCIATES ENGINEERS
3126 AKAHI STREET
LIHUE, KAUAI, HI 96766
ATTN: WILLIAM EDDY
BILL@KODANI.COM
808.245.9591

LANDSCAPE ARCHITECT:
MAXWELL DESIGN GROUP
P.O. BOX 551
KIHEI, MAUI, HI 96753
ATTN: BRYAN P. MAXWELL
MDGHAWAII@GMAIL.COM
808.281.3800

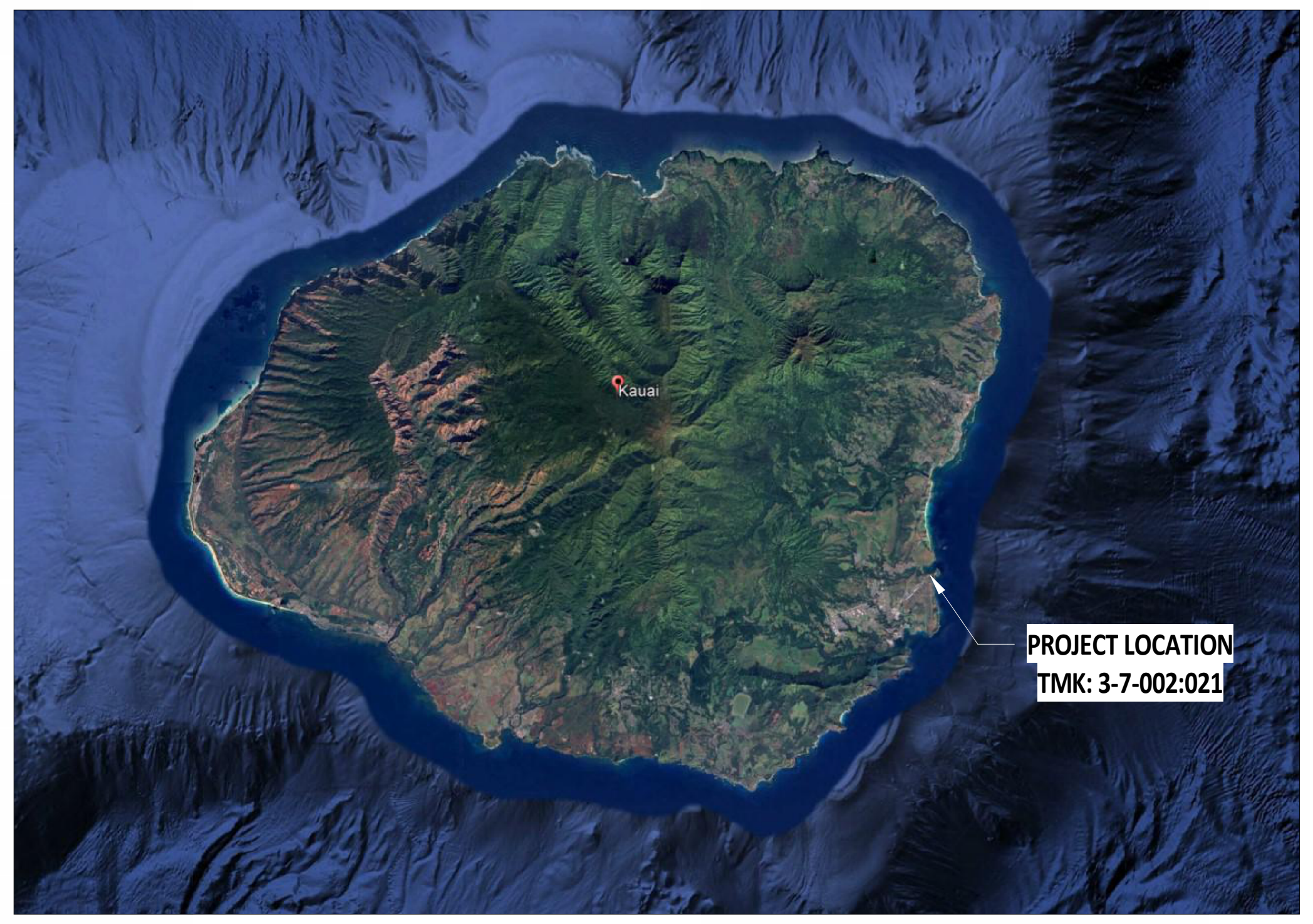
TRAFFIC:
NV5
200 SOUTH PARK ROAD, SUITE 350
HOLLYWOOD, FL 33021
ATTN: JOHN KARNOWSKI
JOHN.KARNOWSKI@NV5.COM
678.373.6827

DESIGN ARCHITECT:
CESO
2800 CORPORATE EXCHANGE DRIVE, SUITE 400
COLUMBUS, OH 43231
ATTN: CORY RISOLA
CORY.RISOLA@CESOINC.COM
740.261.9328

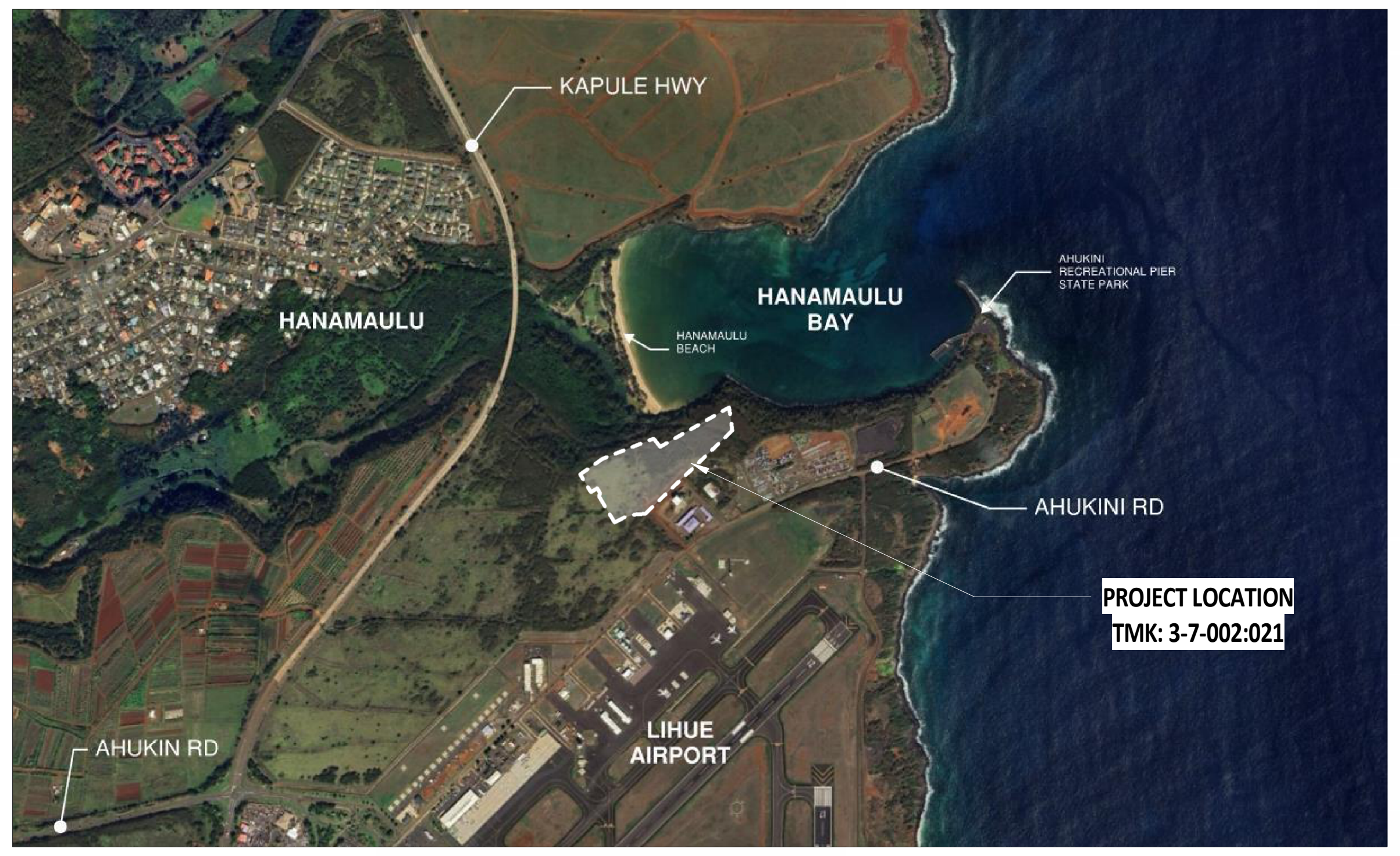
ARCHITECT:
LOWNEY ARCHITECTURE
360 17th STREET, SUITE 100
OAKLAND, CA 94612
ATTN: DONG ZHANG
DONG@LOWNEYARCH.COM
510.836.5400

VICINITY MAPS

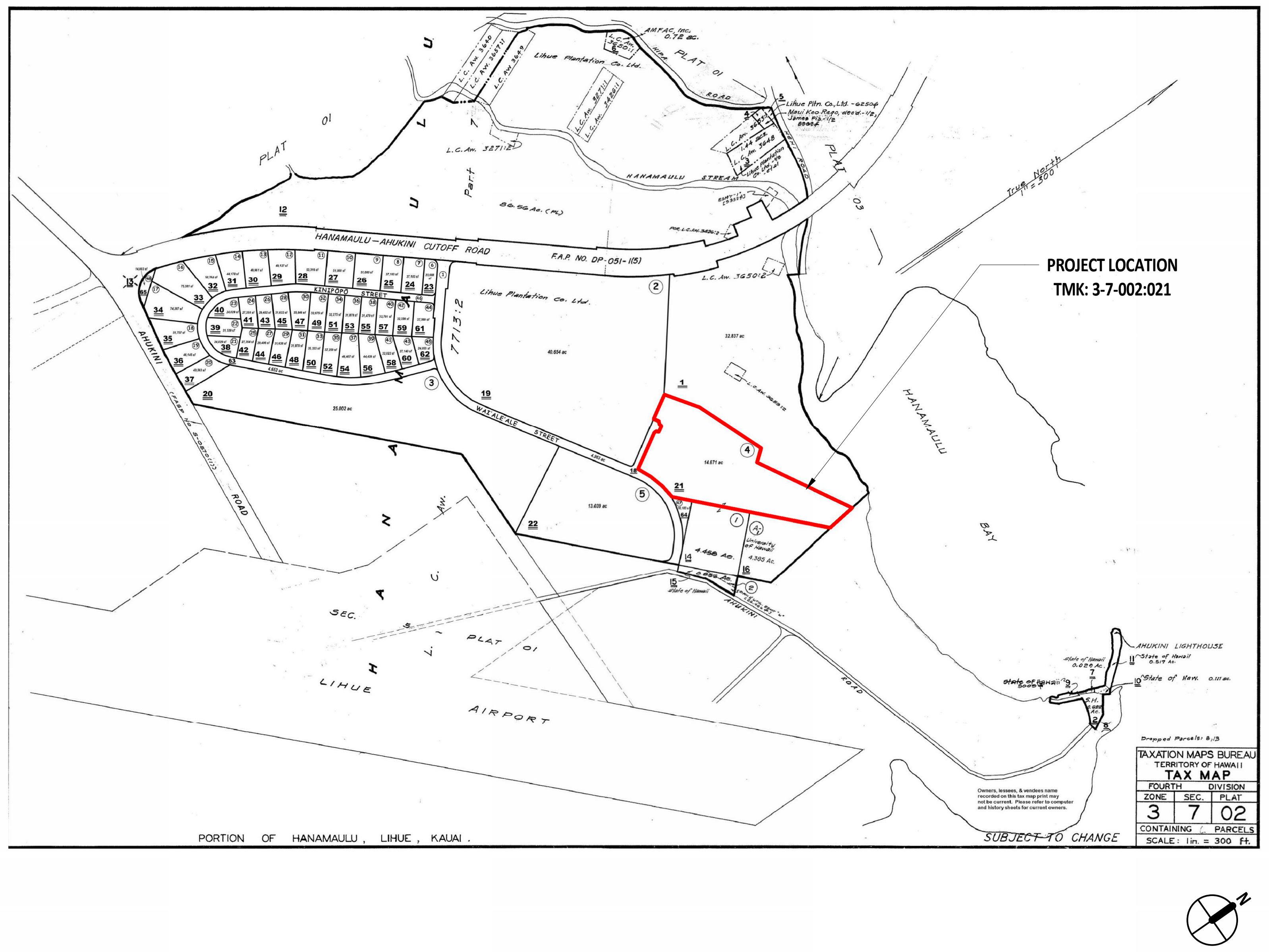
ISLAND OF KAUAI



LIHUE



PARCEL MAP



SHEET INDEX

SHEET NUMBER	SHEET NAME
ARCHITECTURAL	
G00	COVER SHEET
G01	CONTEXTUAL MAPS
G02	CONTEXTUAL PHOTOS
G03	3D VIEWS
A0.1	OVERALL SITE PLAN
A2.1	PRELIMINARY FLOOR PLAN
A3.1	EXTERIOR ELEVATIONS
CIVIL	
6a.	PROPERTY LINES & EASEMENTS
6c.	FLOOD ZONE
6g.	TOPOGRAPHY
6h.	ENVIRONMENT
6j.	ROADS
6k.	SHORELINE
11.	SHORELINE ACCESS
16.	SMA & SHORELINE
LANDSCAPE	
LP-SITE-1	LANDSCAPE PLANTING PLAN SITE
LP-SITE-2	LANDSCAPE PLANTING PLAN SITE
LP-1	LANDSCAPE PLANTING PLAN AREA 1
LP-2	LANDSCAPE PLANTING PLAN AREA 2
LP-3	LANDSCAPE PLANTING PLAN AREA 3
LP-4	LANDSCAPE PLANTING PLAN AREA 4
LP-5	LANDSCAPE PLANTING DETAILS

ZONING INFORMATION

TMK: 3-7-002:021

ZONING DISTRICT: I-G (INDUSTRIAL GENERAL)
GENERAL INDUSTRIAL SHALL INCLUDE ALL BUSINESS, INDUSTRIAL PROCESSING, OR STORAGE USES THAT ARE GENERALLY CONSIDERED OFFENSIVE TO THE SENSES OR POSE SOME POTENTIAL THREAT OR HAZARD TO HEALTH, SAFETY, AND WELFARE. THIS DISTRICT SHALL NOT BE LOCATED ADJACENT TO RESIDENTIAL OR RESORT DISTRICTS UNLESS THERE IS PHYSICAL OR GEOGRAPHICAL PROTECTION FROM THOSE CHARACTERISTICS OF THE USES CONSIDERED TO BE OFFENSIVE OR HAZARDOUS.

LOT SIZE: 14.6710 ACRES
639,069 SQUARE FEET

STATE LAND USE DISTRICT: URBAN CENTER

TAX CLASSIFICATION: INDUSTRIAL

FEMA FLOOD ZONE: ZONE X, AREA OF MINIMAL FLOOD HAZARD

TSUNAMI EVACUATION ZONE: YES (PORTION OF LOT TO THE NORTH)

SPECIAL MANAGEMENT AREA: YES (PORTION OF LOT TO THE NORTH)

HEIGHT LIMIT: 50 FEET (IN GENERAL INDUSTRIAL DISTRICT)
UNLESS GREATER HEIGHT IS ESSENTIAL TO THE FUNCTIONING OF THE DEVELOPMENT AND THAT NO REASONABLE ALTERNATIVE EXISTS.

SETBACKS:
FRONT OR FROM PUBLIC/PRIVATE RIGHT OF WAY: 15 FEET
SIDE (INDUSTRIAL ZONING ADJACENT): 0 FEET
SIDE (OTHER ZONING ADJACENT): 15 FEET
REAR: 15 FEET

THE PLANNING DIRECTOR MAY IMPOSE GREATER SETBACK REQUIREMENTS BECAUSE OF TOPOGRAPHIC, DRAINAGE, AIR, LANDSCAPING, OR OTHER HEALTH, SAFETY AND WELFARE CONDITIONS.

DEVELOPMENT GUIDELINES:
MINIMUM DISTANCE BETWEEN BUILDINGS ON THE SAME PARCEL: 10 FEET

MINIMUM LOT AREA: 10,000 SQUARE FEET
MINIMUM FRONTAGE ON A PUBLIC STREET: 100 FEET
AVERAGE DEPTH OF PARCEL IS NOT GREATER THAN: 400 FEET
MINIMUM AVERAGE WIDTH: 100 FEET

MINIMUM DRIVEWAY WIDTH: 20 FEET IF THERE IS TWO-WAY TRAFFIC
14 FEET IF THERE IS ONE-WAY TRAFFIC

PARKING AREAS: NO PARKING LOT PAVEMENT EDGE MAY BE LOCATED CLOSER THAN 5 FEET FROM THE RIGHT-OF-WAY LINE OF A PUBLIC STREET.

ALL PARKING LOTS SHALL BE SCREENED FROM PUBLIC THROUGHFARES BY A FENCE, WALL, OR PLANT SCREEN NOT LESS THAN 4 FEET HIGH, PROVIDED THAT THE SCREENING HEIGHT SHALL BE LOWERED TO THE STANDARD AS REQUIRED UNDER THE COUNTY TRAFFIC CODE OR TO THE STANDARDS OF THE DEPARTMENT OF PUBLIC WORKS, AT STREET CORNERS, DRIVEWAY INTERSECTIONS, AND OTHER LOCATIONS.

THE SETBACK AREA BETWEEN THE PARKING AREA PAVING AND THE PUBLIC RIGHT-OF-WAY SHALL BE PLANTED AND SHALL NOT BE PAVED.

PARKING REQUIREMENTS: 1 PARKING STALL FOR EACH 3 EMPLOYEES OR
1 PARKING STALL FOR EVERY 500 SQUARE FEET OF GROSS FLOOR AREA OF THE BUILDINGS WHERE NUMBER OF EMPLOYEES IS UNKNOWN.

1 PARKING STALL DESIGNATED FOR VISITORS FOR EACH 200 SQUARE FEET OF OFFICE SPACE.

PARKING SPACES FOR TRUCKS, EQUIPMENT, OR OTHER VEHICLES USED IN THE CONDUCT OF BUSINESS.

ELECTRIC VEHICLES: 40% FOR EV READY
10% FOR EV INSTALLED

COVERAGE: NO SINGLE RETAIL OR WHOLSALE ESTABLISHMENT WITHIN AN INDUSTRIAL DISTRICT MAY OCCUPY MORE THAN 75,000 GROSS SQUARE FEET IN FLOOR AREA.

PERMITS REQUIRED

- CLASS IV ZONING PERMIT
- SPECIAL MANAGEMENT AREA MINOR PERMIT
- DIVISION OF WASTEWATER MANAGEMENT SEWER CONNECTION PERMIT

NOTE: CITY STAFF TO REVIEW THE LISTED PERMITS TO CONFIRM THEIR APPLICABILITY AND ADVISE ON ANY ADDITIONAL REQUIREMENTS FOR THIS PROJECT.

BUILDING INFORMATION

TOTAL SITE AREA:	639,069 SQUARE FEET	TOTAL CPR SITE AREA:	366,159 SQUARE FEET
PROPOSED GROSS BUILDING AREA:	36,148 SQUARE FEET	PROPOSED GROSS BUILDING AREA:	36,148 SQUARE FEET
PROPOSED GROSS CANOPY AREA:	5,015 SQUARE FEET	PROPOSED GROSS CANOPY AREA:	5,015 SQUARE FEET
PROPOSED TOTAL GROSS AREA:	41,163 SQUARE FEET	PROPOSED TOTAL GROSS AREA:	41,163 SQUARE FEET
AREA COVERAGE:	7%	AREA COVERAGE:	11%

BICYCLE PARKING: N/A

VEHICLE PARKING: FOR EMPLOYEES:
1 PARKING STALL FOR EACH 3 EMPLOYEES OR
1 PARKING STALL FOR EVERY 500 SQUARE FEET OF GROSS FLOOR AREA
REQUIRED: 41,164 SQUARE FEET / 500 = 83 STALLS

FOR VISITORS:
1 PARKING STALL DESIGNATED FOR VISITORS FOR EACH 200 SQUARE FEET OF OFFICE SPACE.
REQUIRED: TBD

OTHER:
PARKING SPACES FOR TRUCKS, EQUIPMENT, OR OTHER VEHICLES USED IN THE CONDUCT OF BUSINESS.
REQUIRED: TBD

76 TO 100 SPACES - 4 REQUIRED ADA STALLS
101 TO 150 SPACES - 5 REQUIRED ADA STALLS
REQUIRED: TBD

ADA PARKING: 1 OF EVERY 6 ADA SPACES MUST BE VAN ACCESSBLE
REQUIRED: TBD

ELECTRIC VEHICLES: 40% FOR EV READY
REQUIRED: TBD

10% FOR EV INSTALLED
REQUIRED: TBD

CESO
WWW.CESOINC.COM
175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

CONFIDENTIAL

WINSTON INDUSTRIAL
3130 AHUKINI ROAD, LIHUE, KAUAI, HI 96766
TMK: 3-7-002:021

Revisions / Submissions

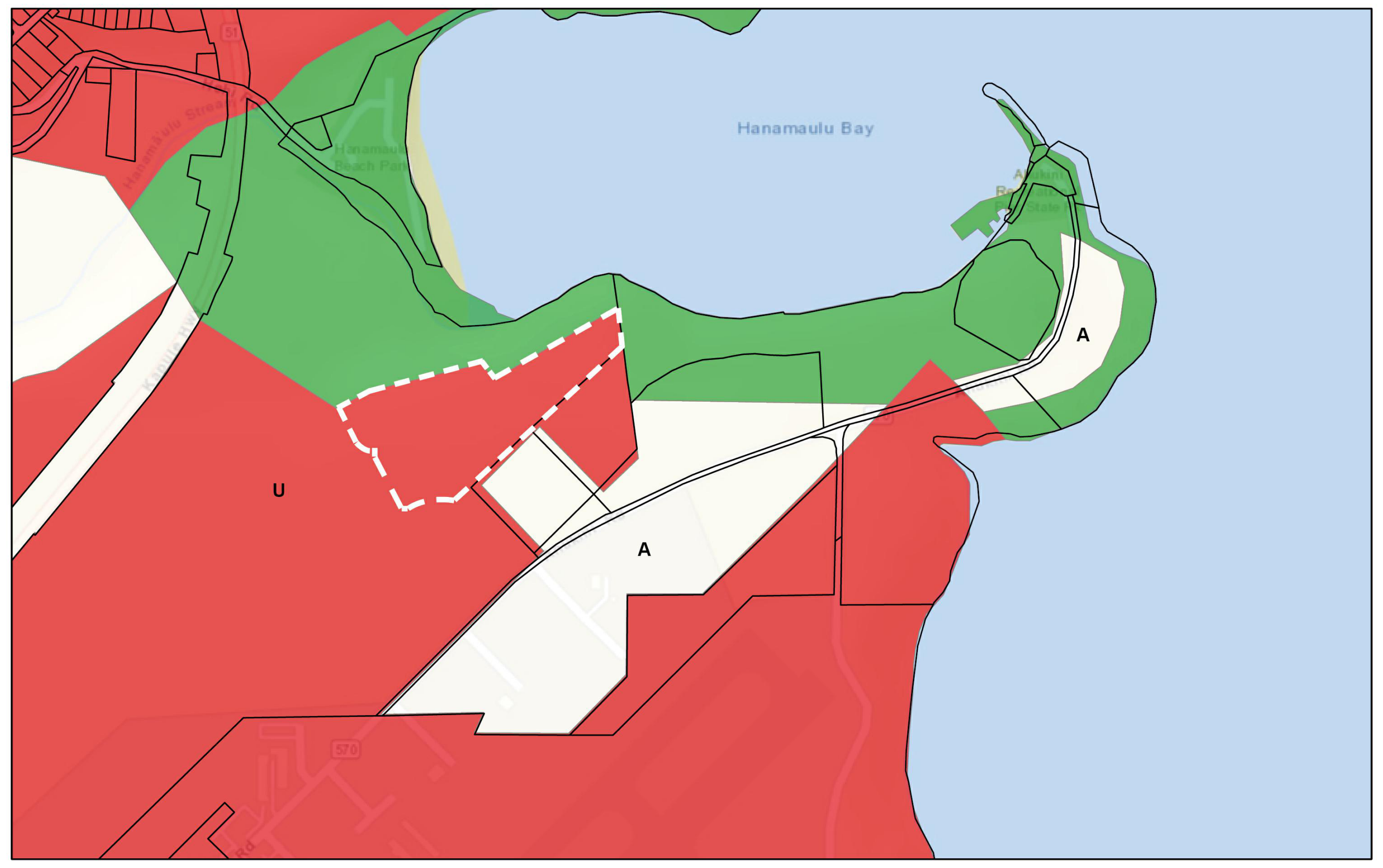
ID	Description	Date

© 2025 CESO, INC.

Project number: HNL24-IN-010
Scale: AS NOTED
Drawn By: CB
Checked By: CB
Date: 05/09/2025
Issue: PRELIMINARY

Sheet Title:
COVER SHEET

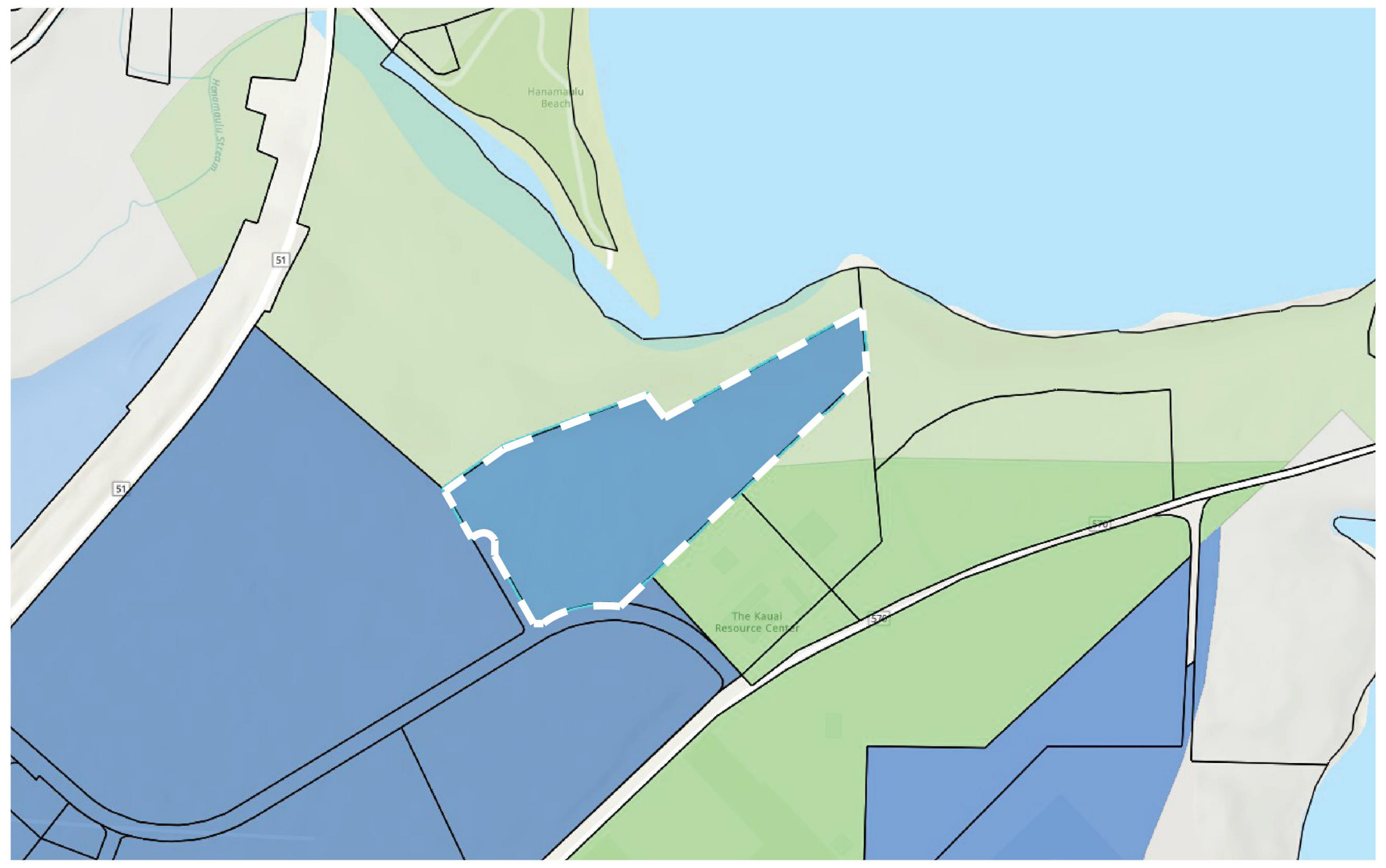
G00


Hanamaulu Bay
U
A
A
A

HAWAII SLUD LOCATOR

LEGEND

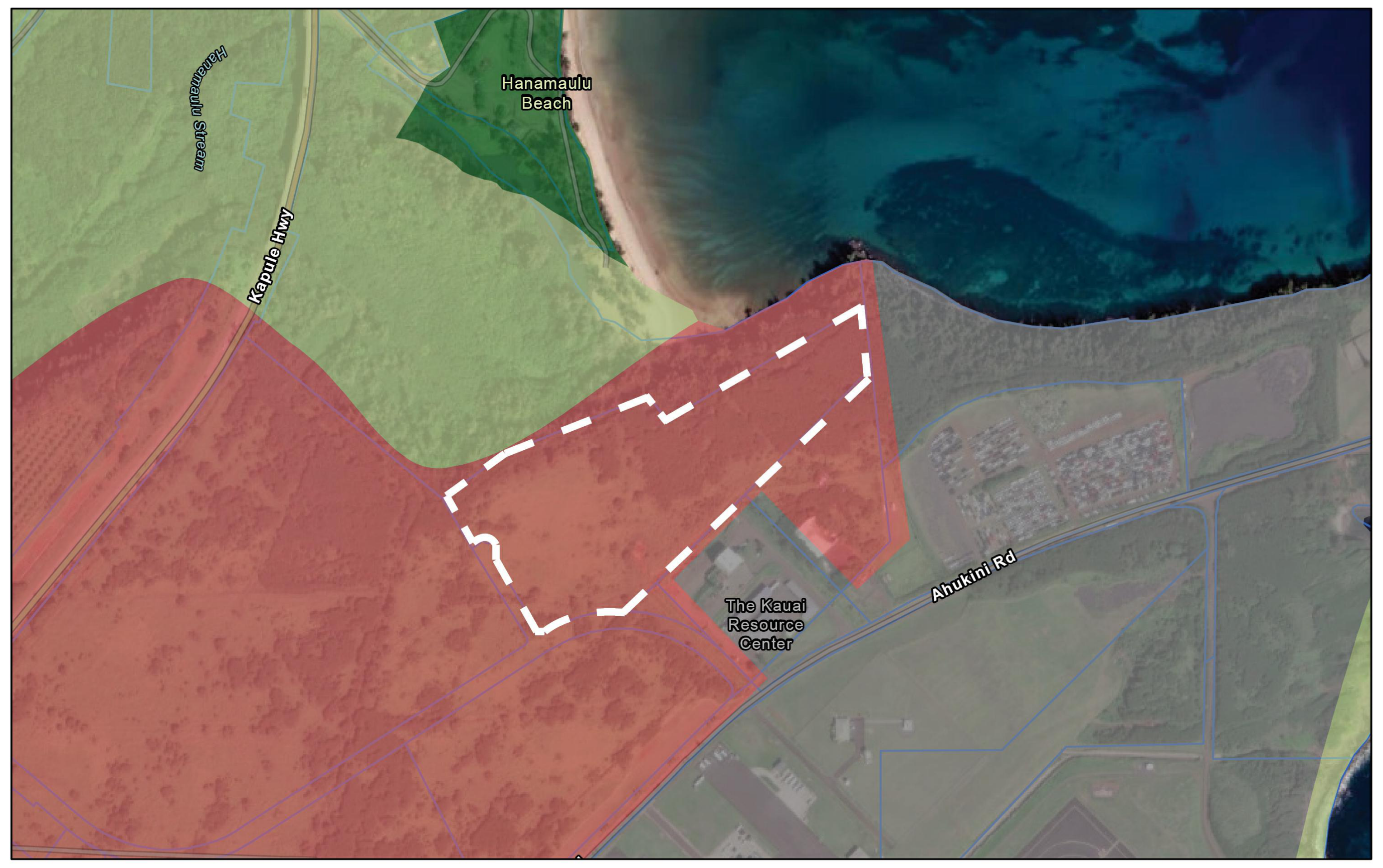
☐ TMK Parcels
🟩 Conservation
☐ Agricultural
🟥 Urban



ZONING

LEGEND

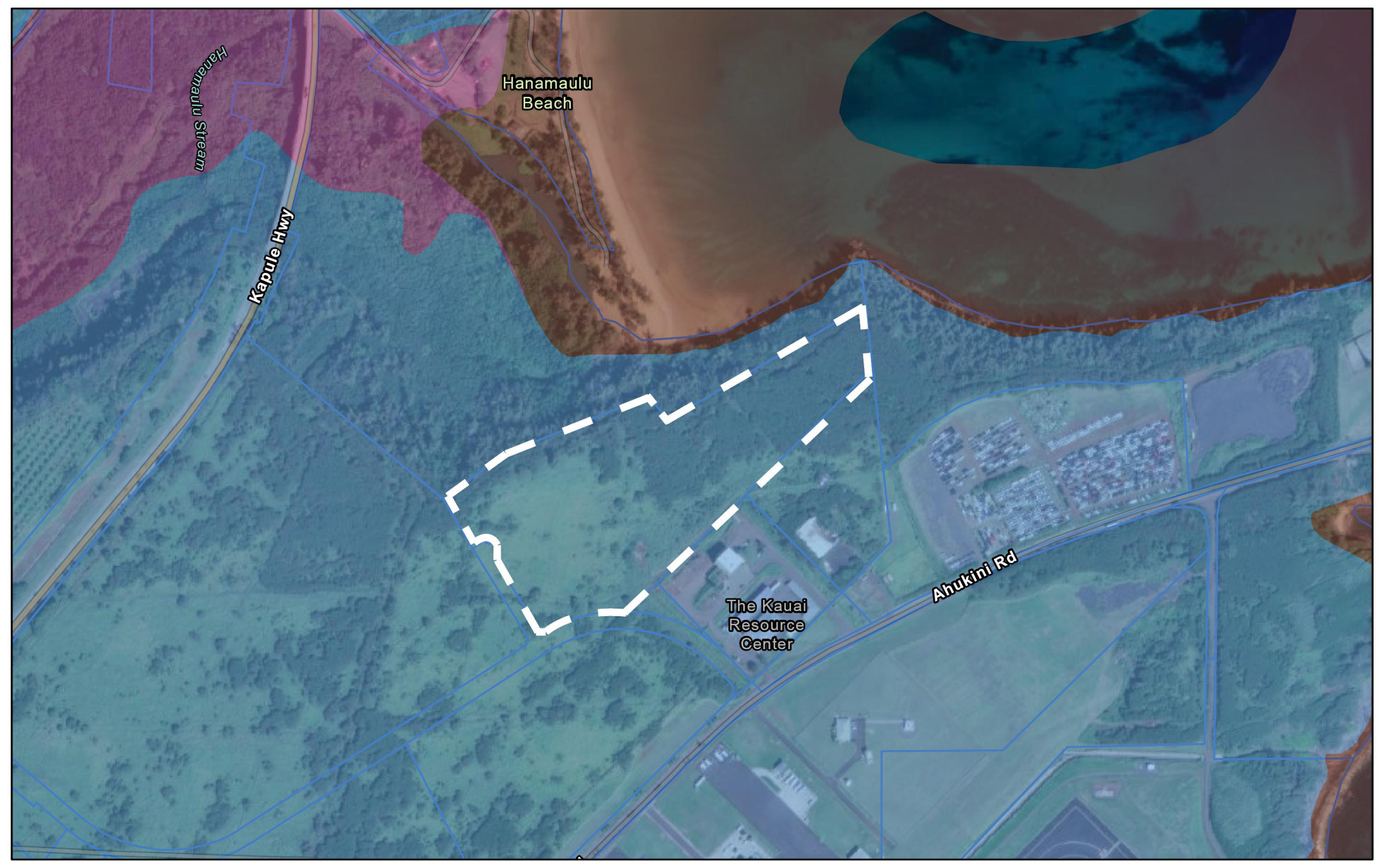
☐ Parcels and CPRs
▨ O
🟦 I-G
▨ I-L
▨ CON
🟩 A


Hanamaulu Beach
Kapule Hwy
The Kauai Resource Center
Ahukini Rd

GENERAL PLAN

LEGEND

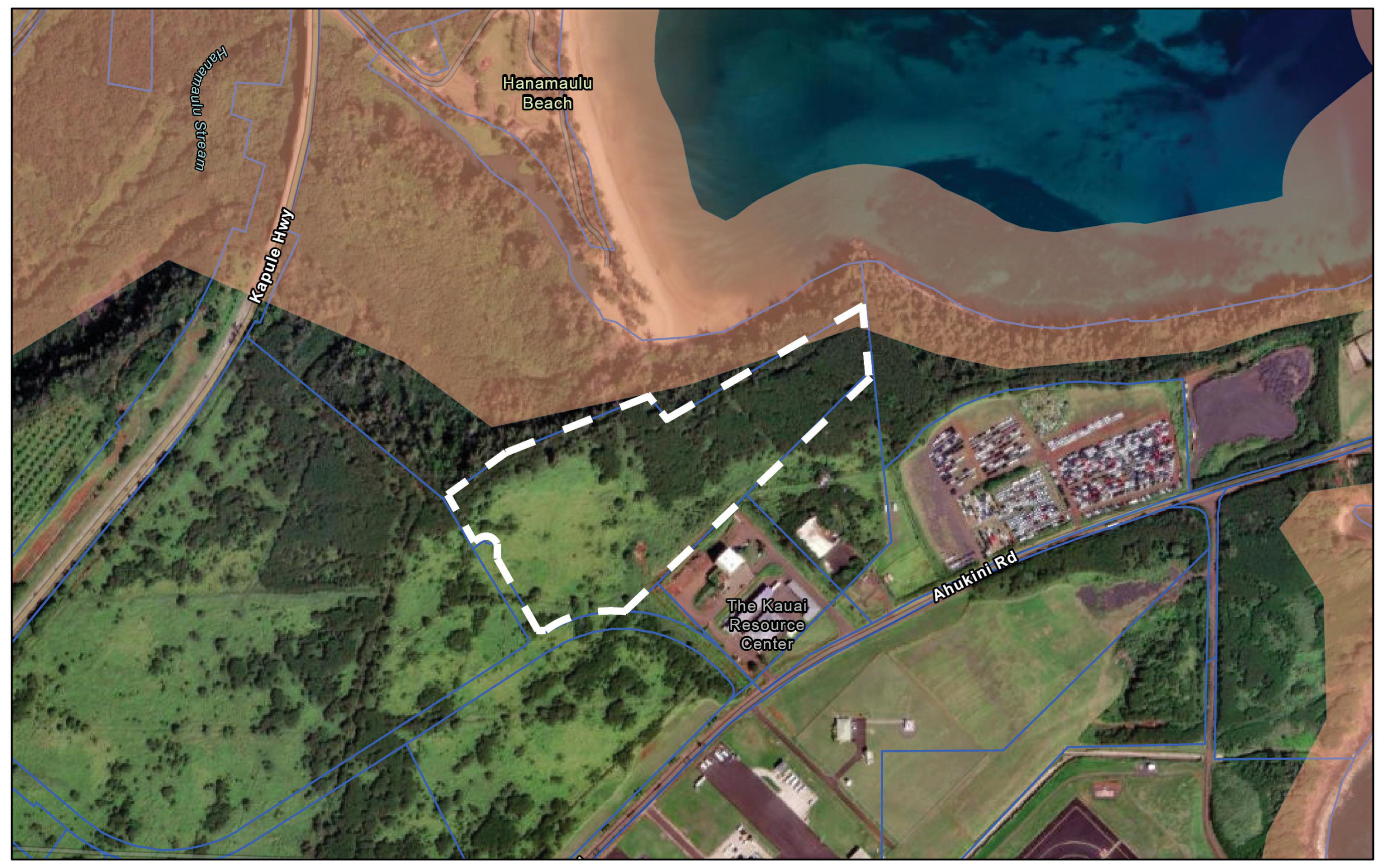
▨ Natural
▨ Parks and Recreation
▨ Transportation
🟥 Urban Center
☐ Parcels and CPRs


Hanamaulu Beach
Kapule Hwy
The Kauai Resource Center
Ahukini Rd

FLOOD ZONES

LEGEND

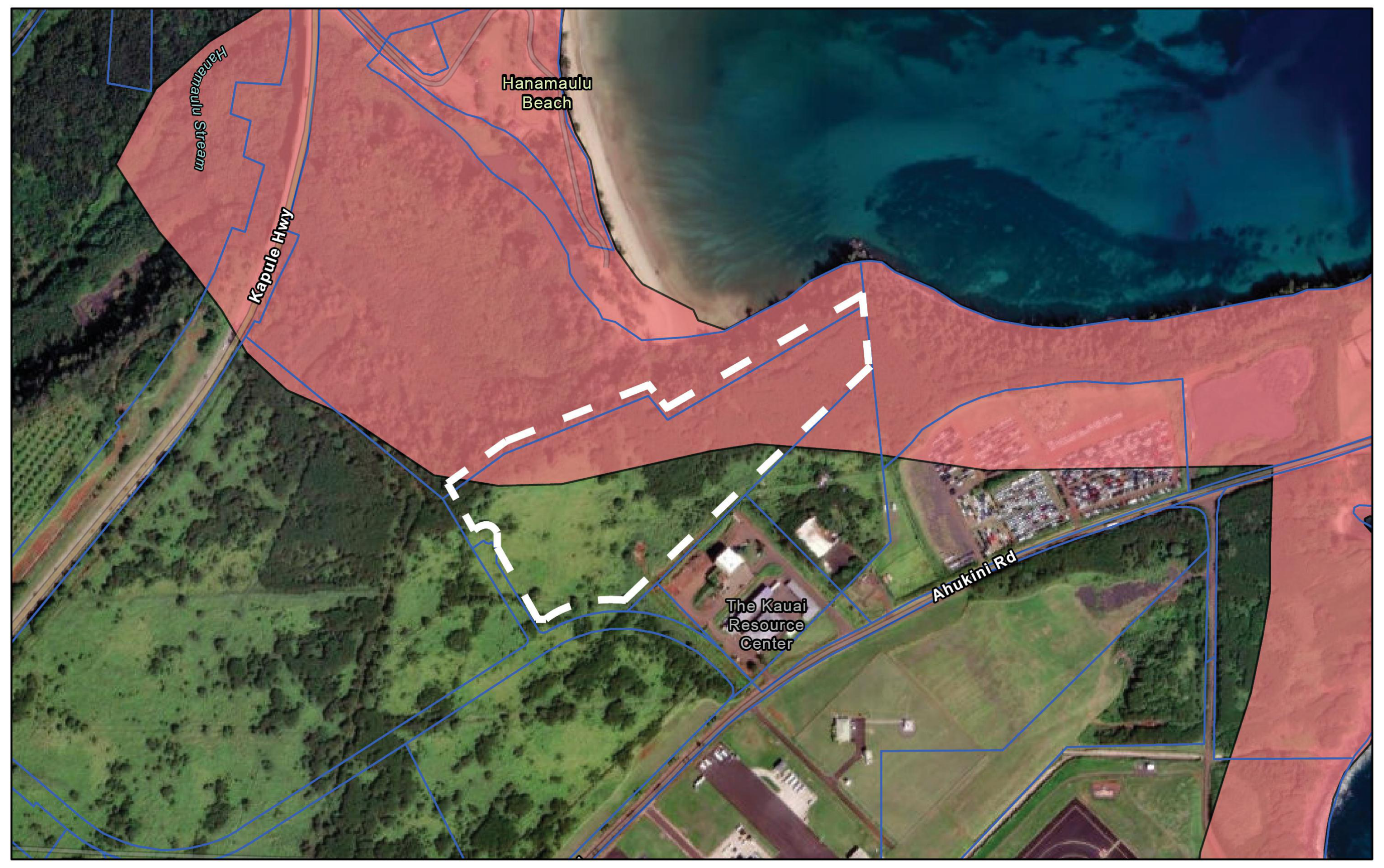
▨ AE
▨ VE
▨ X


Hanamaulu Beach
Kapule Hwy
The Kauai Resource Center
Ahukini Rd

TSUNAMI EVACUATION ZONES

LEGEND

▨ Tsunami Evacuation Zones
☐ Parcels and CPRs


Hanamaulu Beach
Kapule Hwy
The Kauai Resource Center
Ahukini Rd

SMA

LEGEND

☐ Parcels and CPRs
🟥 Special Management Areas (SMA)

N

CESO
WWW.CESOINC.COM
175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

CONFIDENTIAL

WINSTON INDUSTRIAL

3130 AHUKINI ROAD, LIHUE, KAUAI, HI 96766
TMK: 3-7-002:021

Revisions / Submissions

ID	Description	Date

© 2025 CESO, INC.

Project number:	HNL24-IN-010
Scale:	AS NOTED
Drawn By:	CB
Checked By:	CB
Date:	05/09/2025
Issue:	PRELIMINARY

Sheet Title:
CONTEXTUAL MAPS

G01

VIEW 1

VIEW 2

VIEW 3

VIEW 4

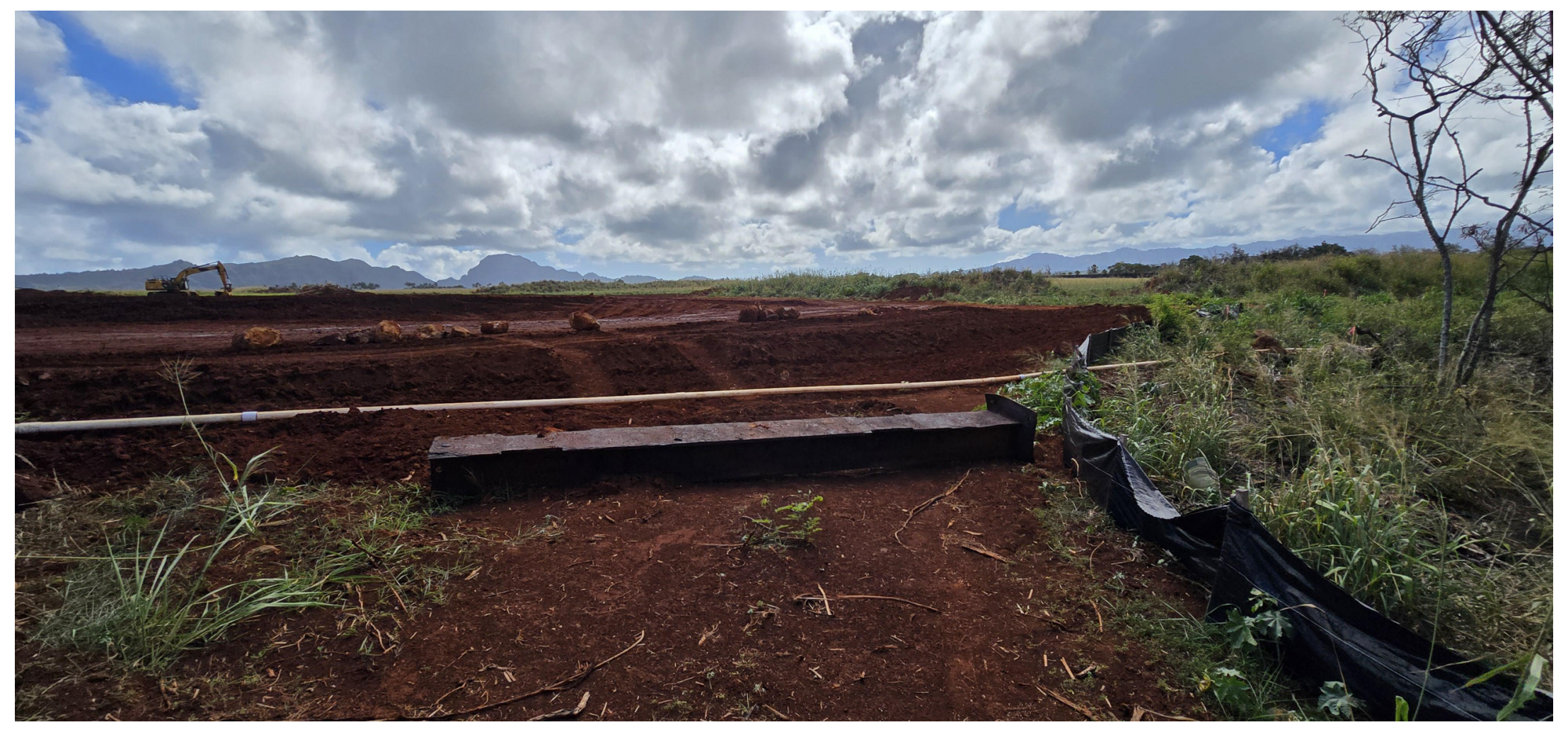
VIEW 5

VIEW 6

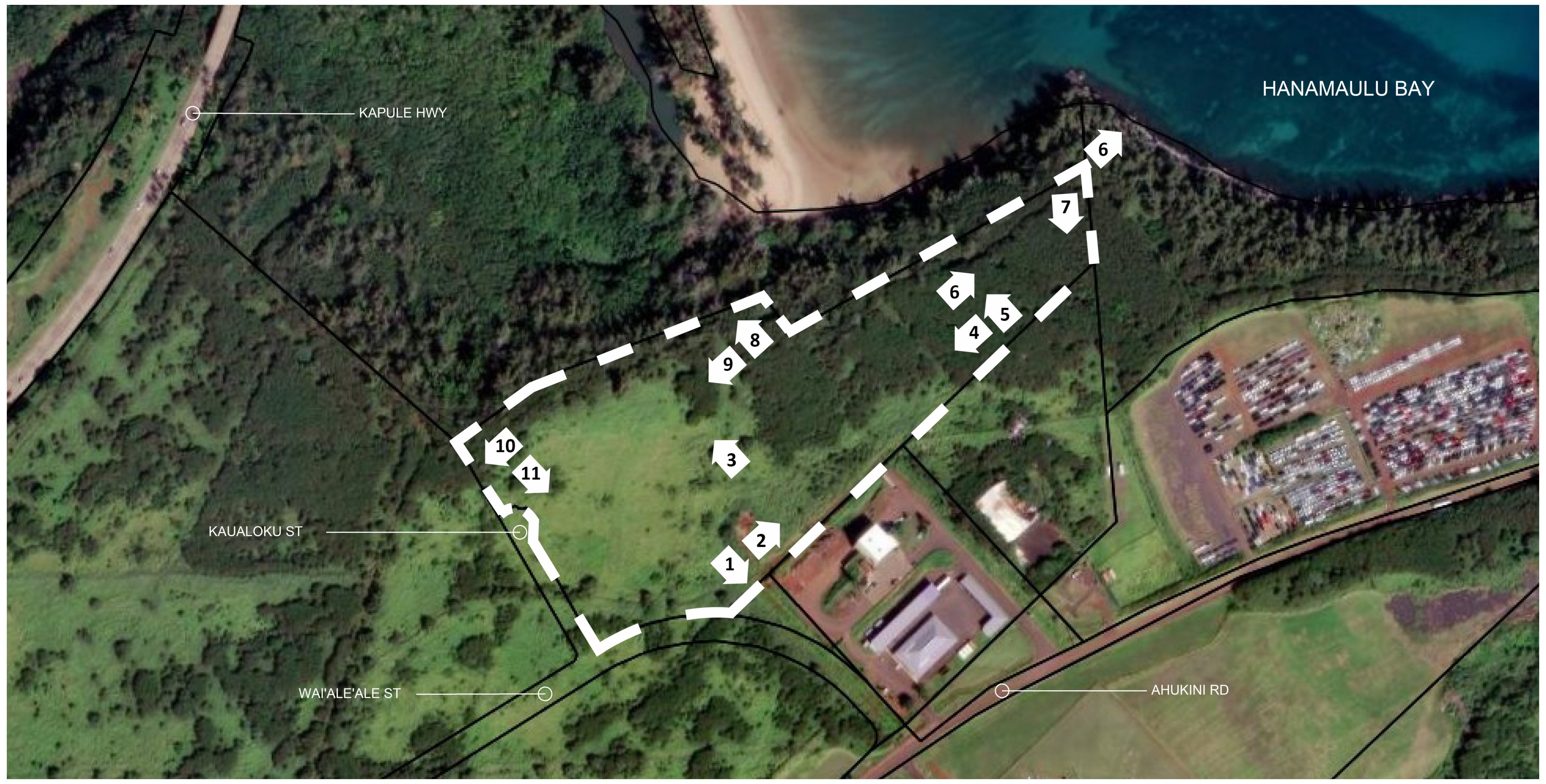
VIEW 7

VIEW 8

VIEW 9


VIEW 10

VIEW 11


HANAMAULU BAY
KAPULE HWY
KAUALOKU ST
WAI'ALE'ALE ST
AHUKINI RD
1
2
3
4
5
6
7
8
9
10
11
6

SITE KEY MAP

CESO
WWW.CESOINC.COM
175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

CONFIDENTIAL

WINSTON INDUSTRIAL

3130 AHUKINI ROAD, LIHUE, KAUAI, HI 96766
TMK: 3-7-002:021

Revisions / Submissions

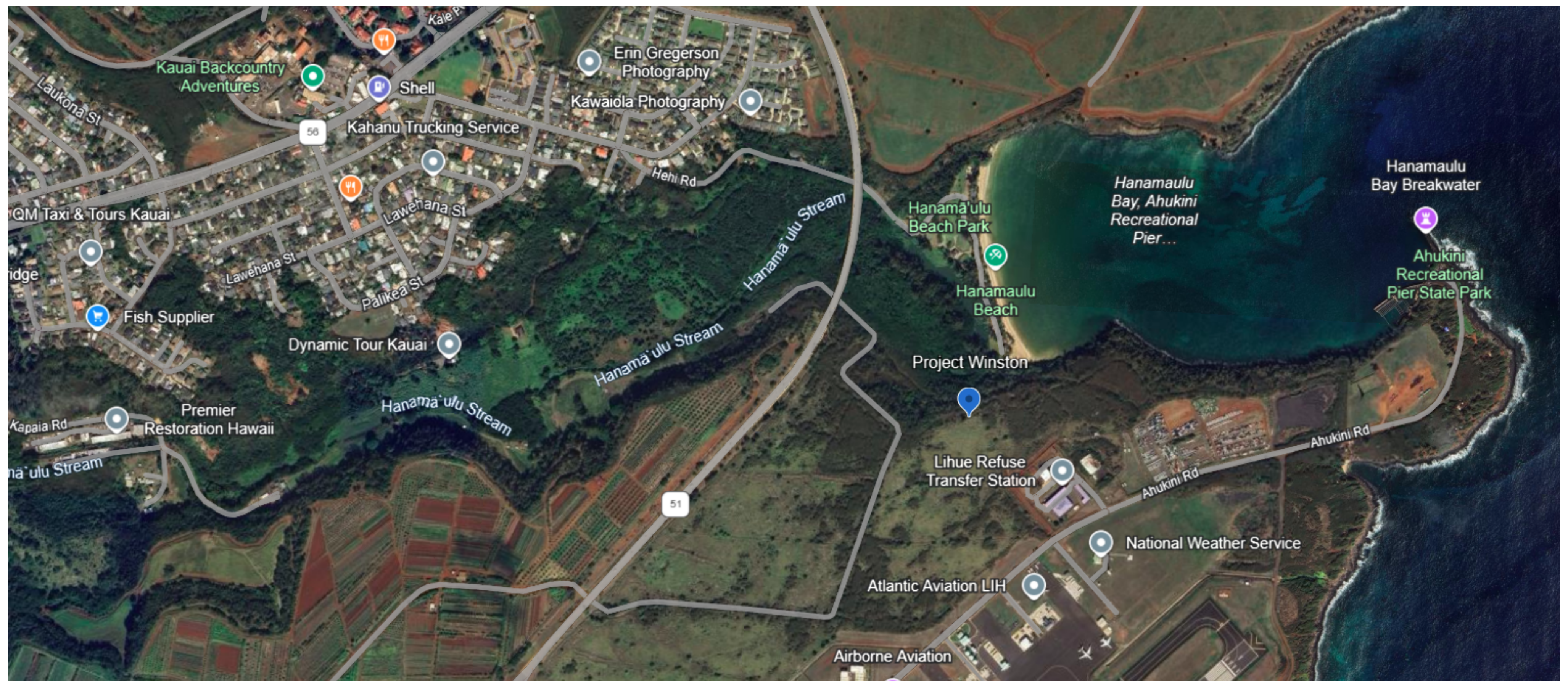
ID	Description	Date

© 2025 CESO, INC.

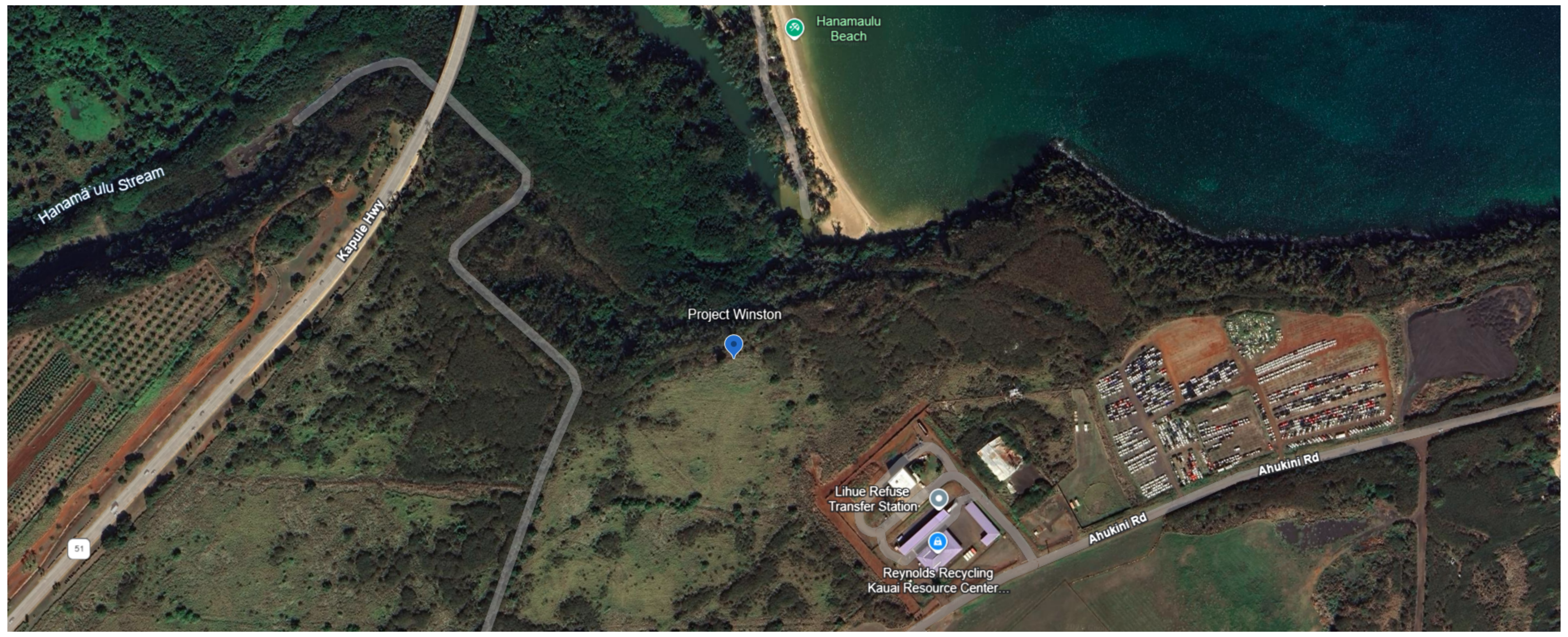
Project number:	HNL24-IN-010
Scale:	AS NOTED
Drawn By:	CB
Checked By:	CB
Date:	05/09/2025
Issue:	PRELIMINARY

Sheet Title:
CONTEXTUAL PHOTOS

G02


Kauai Backcountry Adventures
Shell
Erin Gregerson Photography
Kawaiola Photography
Kahanu Trucking Service
QM Taxi & Tours Kauai
Fish Supplier
Dynamic Tour Kauai
Premier Restoration Hawaii
Hanama'ulu Stream
Hanama'ulu Beach Park
Hanamaulu Beach
Hanamaulu Bay, Ahukini Recreational Pier…
Hanamaulu Bay Breakwater
Ahukini Recreational Pier State Park
Project Winston
Lihue Refuse Transfer Station
National Weather Service
Atlantic Aviation LIH
Airborne Aviation
Ahukini Rd
51
56

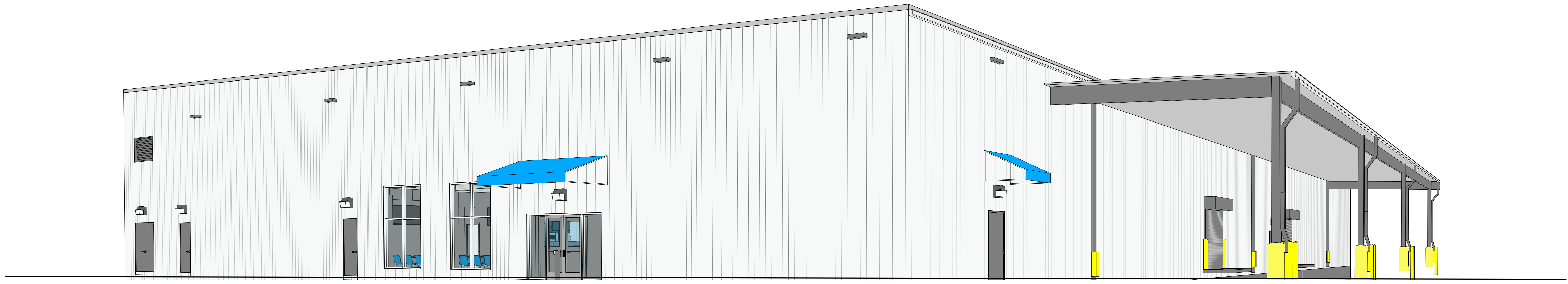
SITE - OVERALL AERIAL VIEW


Hanama'ulu Stream
Hanamaulu Beach
Kapule Hwy
Project Winston
Lihue Refuse Transfer Station
Reynolds Recycling Kauai Resource Center
Ahukini Rd
51

SITE ENLARGED AERIAL VIEW

Wailua
Kapa'a
Hanama'ulu Stream
Project Winston
Hanamaulu Bay, Ahukini Recreational Pier
Ahukini Rd
Blue Hawaiian Helicopters

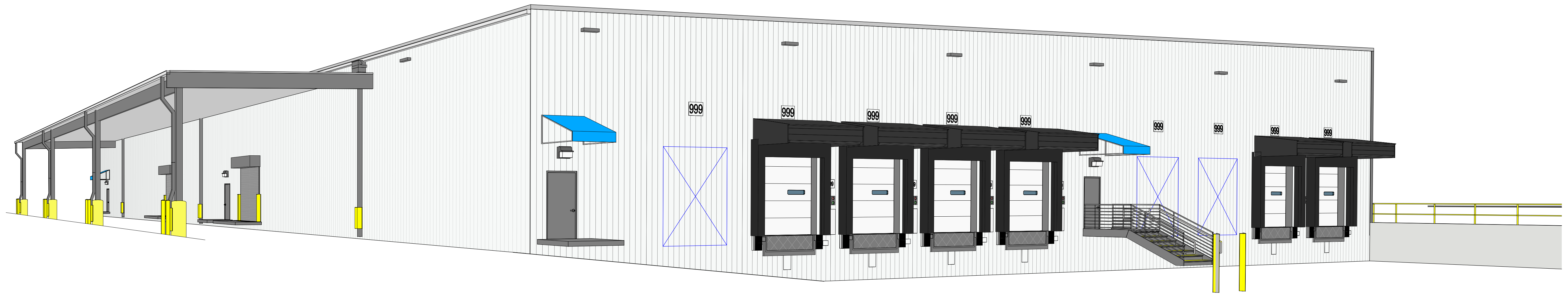
AERIAL VIEW - LOOKING SOUTH



MODEL VIEW AT ENTRANCE - NORTH ELEVATION

Island Cars - Discount Car Rental
Island Helicopters Kauai
Blue Hawaiian Helicopters
Airborne Aviation
Atlantic Aviation LIH
National Weather Service
Reynolds Recycling Kauai Resource Center
Lihue Refuse Transfer Station
Ahukini Rd
Project Winston
Hanamaulu Beach
Hehi Rd

AERIAL VIEW - LOOKING NORTH


999
999
999
999
999
999
999
999

MODEL VIEW AT TRUCK DOCKS - SOUTH ELEVATION

CESO
WWW.CESOINC.COM

3300 South Market Street, Suite 230
Rogers, AR 72758
Phone: 479.271.8058

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

BH DEV CO

PROJECT WINSTON
AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

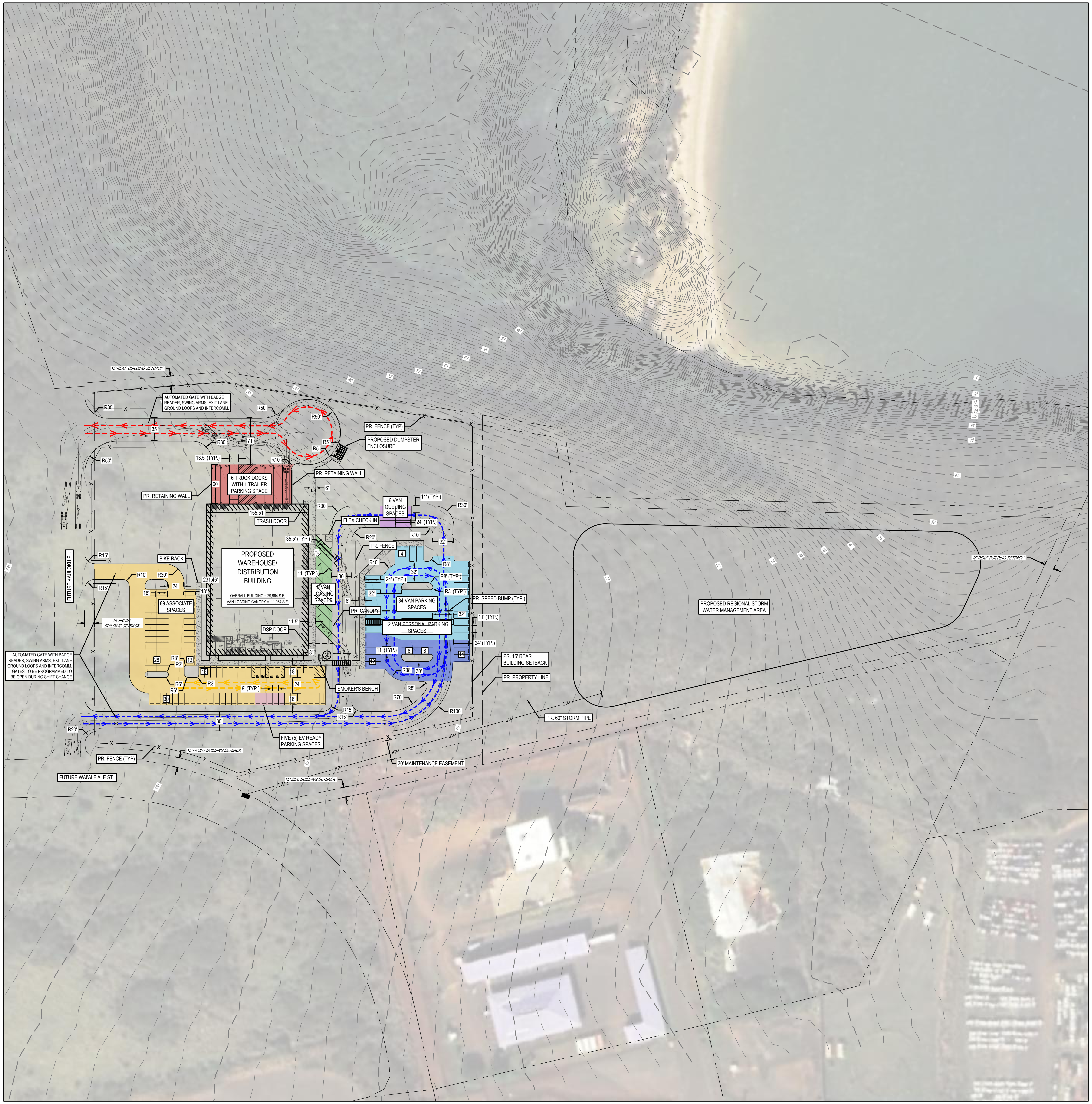
ID	Description	Date

© 2025 CESO, INC

Project number:	765525-01
Scale:	
Drawn By:	JM
Checked By:	AP
Date:	05/09/2025

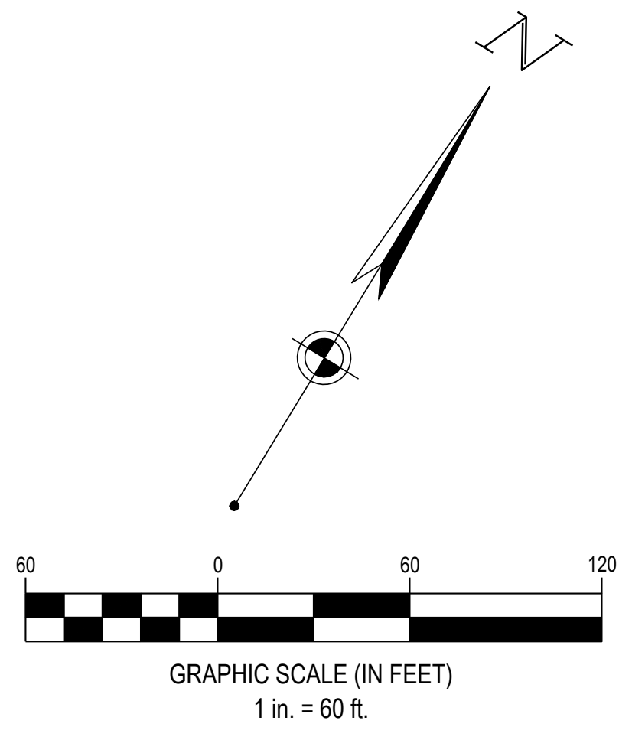
Sheet Title:
3D VIEWS

G03


15' REAR BUILDING SETBACK
AUTOMATED GATE WITH BADGE READER, SWING ARMS, EXIT LANE GROUND LOOPS AND INTERCOMM.
R35'
R50'
35'
71'
R30'
13.5' (TYP.)
R10'
R5'
R5'
R50'
PR. FENCE (TYP)
PROPOSED DUMPSTER ENCLOSURE
PR. RETAINING WALL
6 TRUCK DOCKS WITH 1 TRAILER PARKING SPACE
60'
PR. RETAINING WALL
6'
155.51'
TRASH DOOR
R30'
6 VAN QUEUING SPACES
11' (TYP.)
R30'
FLEX CHECK IN
24' (TYP.)
R20'
R10'
32'
PR. FENCE
35.5' (TYP.)
R40'
R8'
32'
R8' (TYP.)
24' (TYP.)
R3' (TYP.)
PR. SPEED BUMP (TYP.)
34 VAN PARKING SPACES
32'
11' (TYP.)
12 VAN PERSONAL PARKING SPACES
24' (TYP.)
11' (TYP.)
PR. CANOPY
9 VAN LOADING SPACES
30'
8'
PROPOSED WAREHOUSE/ DISTRIBUTION BUILDING
OVERALL BUILDING = 29,964 S.F.
VAN LOADING CANOPY = 11,984 S.F.
231.46'
11.5'
DSP DOOR
BIKE RACK
89 ASSOCIATE SPACES
FUTURE KAULOKU PL.
R15'
R15'
R10'
R30'
24'
18'
18'
15' FRONT BUILDING SETBACK
AUTOMATED GATE WITH BADGE READER, SWING ARMS, EXIT LANE GROUND LOOPS AND INTERCOMM. GATES TO BE PROGRAMMED TO BE OPEN DURING SHIFT CHANGE
28
13
18
30
R3'
R3'
R3'
R6'
R6'
9' (TYP.)
24'
18'
18'
SMOKER'S BENCH
SB
4
8
8
12
14
R38'
30'
R8'
R70'
R100'
R15'
R15'
30'
R20'
FIVE (5) EV READY PARKING SPACES
PR. FENCE (TYP)
15' FRONT BUILDING SETBACK
FUTURE WAI'ALE'ALE ST.
15' SIDE BUILDING SETBACK
30' MAINTENANCE EASEMENT
PR. 15' REAR BUILDING SETBACK
PR. PROPERTY LINE
PR. 60" STORM PIPE
STM
PROPOSED REGIONAL STORM WATER MANAGEMENT AREA
15' REAR BUILDING SETBACK
WB-67 AASHTO 2018 (US)
E450 - VAN Custom
105
100
95
90
85
80
75
70
65
60

LEGEND

— — —	*EXISTING PROPERTY LINE*
— — —	*EXISTING SETBACK LINE*
– – ➤ – – ➤	ASSOCIATE TRAFFIC FLOW DIRECTION
– – ➤ – – ➤	VAN TRAFFIC FLOW DIRECTION
– – ➤ – – ➤	TRUCK TRAFFIC FLOW DIRECTION
X	PARKING COUNT
▨	CONCRETE PAVEMENT
SB	SMOKER BENCH
▥	PEDESTRIAN WALKWAY



GRAPHIC SCALE (IN FEET)
1 in. = 60 ft.

PRELIMINARY PARCEL INFORMATION *

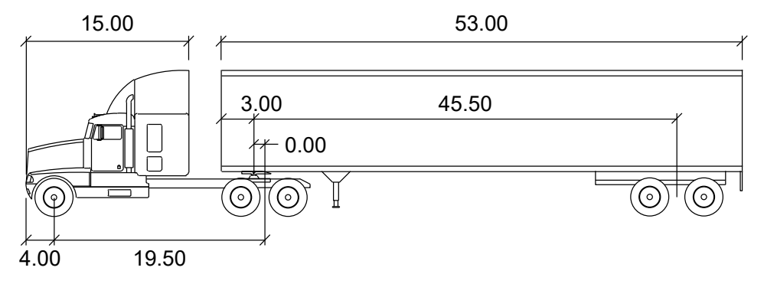
APPROXIMATE ACREAGE	±14.67 AC
EXISTING ZONING/LAND USE	INDUSTRIAL
REQUIRED PARKING	1 STALL PER 500 SF OF GFA +1 VISITOR STALL PER 200 SF OF OFFICE = TBD
MINIMUM FRONT YARD SETBACK	15'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	15'
PAVEMENT SETBACK	N/A
LANDSCAPE REQUIREMENTS	5' PARKING LANDSCAPE BUFFER REQUIRED ON STREET SIDE
MINIMUM DRIVE AISLE DIMENSIONS	20' FOR TWO-WAY 14' FOR ONE-WAY
MINIMUM PARKING STALL DIMENSIONS	STANDARD: 9' X 18'

* = PARCEL INFORMATION BASED ON KAUA'I COUNTY COMPREHENSIVE ZONING ORDINANCE.

RED FLAGS

1. MINIMUM OF 5% OF PARKING MUST BE EV.

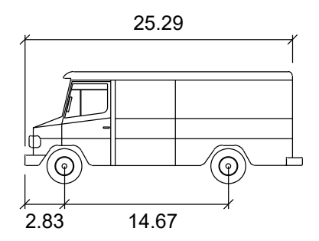
TRUCK TEMPLATE


15.00
53.00
3.00
45.50
0.00
4.00
19.50

WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

VAN TEMPLATE


25.29
2.83
14.67

E450

	feet
Width	: 9.75
Track	: 9.75
Lock to Lock Time	: 6.0
Steering Angle	: 34.3

SITE SKETCH NOTES

1. UTILITIES AND EASEMENTS MAY NEED TO BE RELOCATED BASED ON PROPOSED IMPROVEMENTS.
2. STORMWATER IS MANAGED VIA PROPOSED DETENTION BASIN AND REGIONAL DETENTION BASIN.
3. ADDITIONAL STORMWATER MANAGEMENT MAY BE REQUIRED BASED ON THE SCOPE OF SITE IMPROVEMENTS. FURTHER ANALYSIS IS REQUIRED.

PARKING BREAKDOWN

	PARKING	REQUIRED PER DESIGN	PROPOSED ON-SITE	PROPOSED OFF-SITE	GAP
	APPROXIMATE LOT AREA = 14.67 AC				
	APPROXIMATE LOT AREA UTILIZED = 14.67 AC				
AUTO (9'X18')	ASSOCIATE SPACES	85	85		0
	ADA SPACES (AUTO)	3	3		0
	ADA SPACES (VAN)	1	1		0
	TOTAL	**89**	**89**	**0**	**0**
LAUNCH PAD	VAN SPACES	9	9		0
QUEUEING PAD	VAN SPACES	6	6		0
BOX TRUCK (12'X37')	BOX TRUCK PARKING	0	0		0
	BOX TRUCK PERSONAL	0	0		0
	TOTAL	**0**	**0**	**0**	**0**
LINEHAUL (13.5'x60')	LINEHAUL DOCKING	6	6		0
	LINEHAUL PARKING	1	1		0
	TOTAL	**7**	**7**	**0**	0
VAN (11'X24')	VAN PERSONAL	12	12		0
	VAN PARKING SPACES	34	34		0
	TOTAL	**46**	**46**	**0**	**0**
TOTAL PARKING	**TOTAL**	142	142		0

CESO
WWW.CESOINC.COM

3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

PROJECT WINSTON

AHUKINI BUSINESS (SITE #4) AT KAUALOKU
LIHUE, HI 96766

Revisions / Submissions

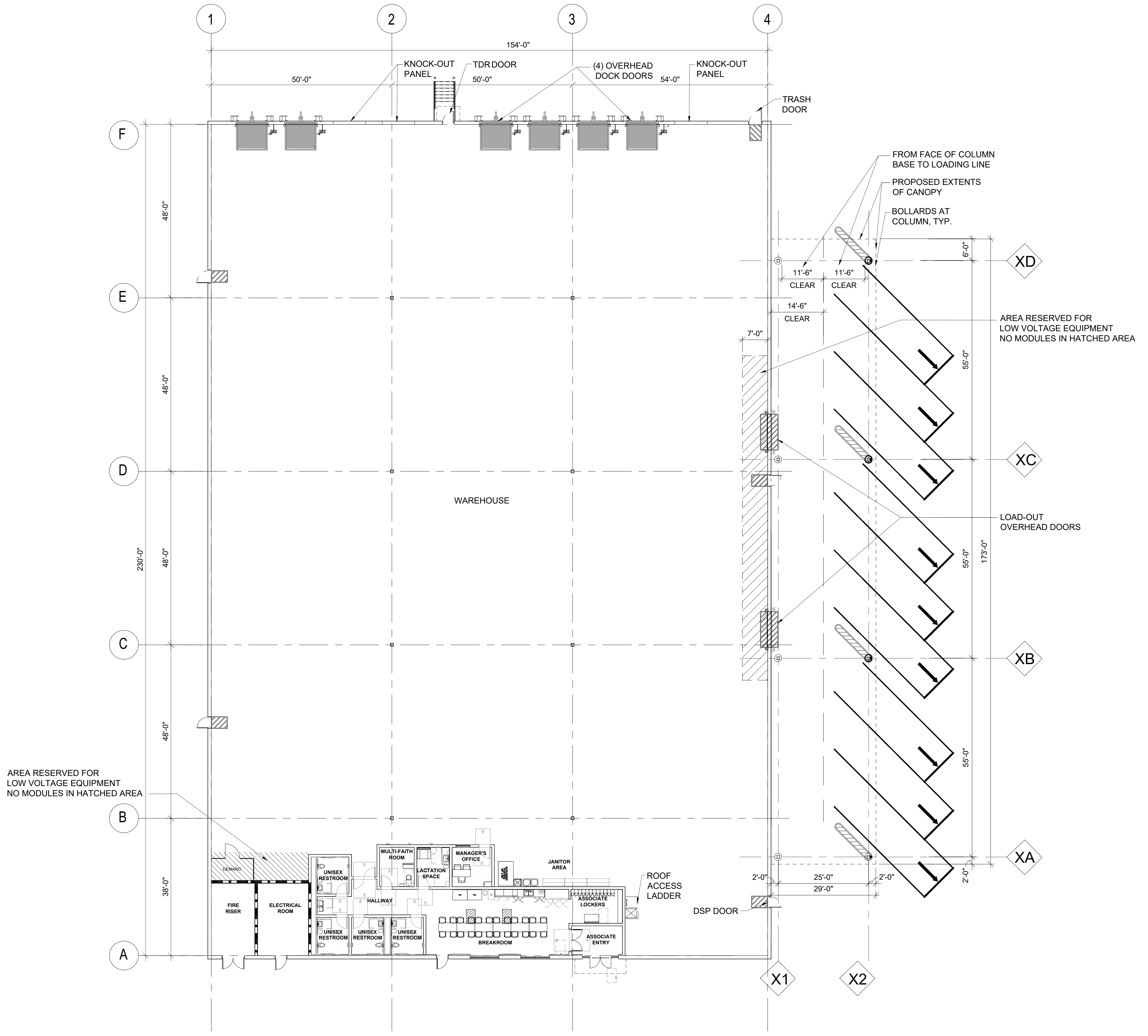
ID	Description	Date

Project Number:	765525
Scale:	AS SHOWN
Drawn By:	CTM
Checked By:	JGL
Date:	5/15/2025
Issue:	CONCEPT

Drawing Title:
OVERALL SITE PLAN

A0.1

ASSOCIATE COUNTS:
C1 SHIFT HC (PEAK): 45
TOTAL HC ONSITE: 60


1
2
3
4
154'-0"
50'-0"
KNOCK-OUT PANEL
TDR DOOR
50'-0"
(4) OVERHEAD DOCK DOORS
54'-0"
KNOCK-OUT PANEL
TRASH DOOR
F
E
D
C
B
A
48'-0"
48'-0"
230'-0"
48'-0"
48'-0"
38'-0"
WAREHOUSE
FROM FACE OF COLUMN BASE TO LOADING LINE
PROPOSED EXTENTS OF CANOPY
BOLLARDS AT COLUMN, TYP.
11'-6" CLEAR
11'-6" CLEAR
14'-6" CLEAR
7'-0"
6'-0"
XD
AREA RESERVED FOR LOW VOLTAGE EQUIPMENT NO MODULES IN HATCHED AREA
55'-0"
XC
LOAD-OUT OVERHEAD DOORS
55'-0"
173'-0"
XB
55'-0"
XA
2'-0"
AREA RESERVED FOR LOW VOLTAGE EQUIPMENT NO MODULES IN HATCHED AREA
DEMARC
FIRE RISER
ELECTRICAL ROOM
UNISEX RESTROOM
HALLWAY
MULTI-FAITH ROOM
LACTATION SPACE
MANAGER'S OFFICE
SCRUBBER PARKING 60" x 80"
JANITOR AREA
ASSOCIATE LOCKERS
UNISEX RESTROOM
UNISEX RESTROOM
UNISEX RESTROOM
BREAKROOM
ASSOCIATE ENTRY
ROOF ACCESS LADDER
2'-0"
25'-0"
2'-0"
29'-0"
DSP DOOR
X1
X2

1 PFP-1 PRELIMINARY FLOOR PLAN
1/16"=1'-0"

NORTH

CESO
WWW.CESOINC.COM

3300 South Market Street, Suite 230
Rogers, AR 72758
Phone: 479.271.8058

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

BH DEV CO

PROJECT WINSTON
Ahukini Business Park, Lihue, HI
TMK: 3-7-002:021

Revisions / Submissions

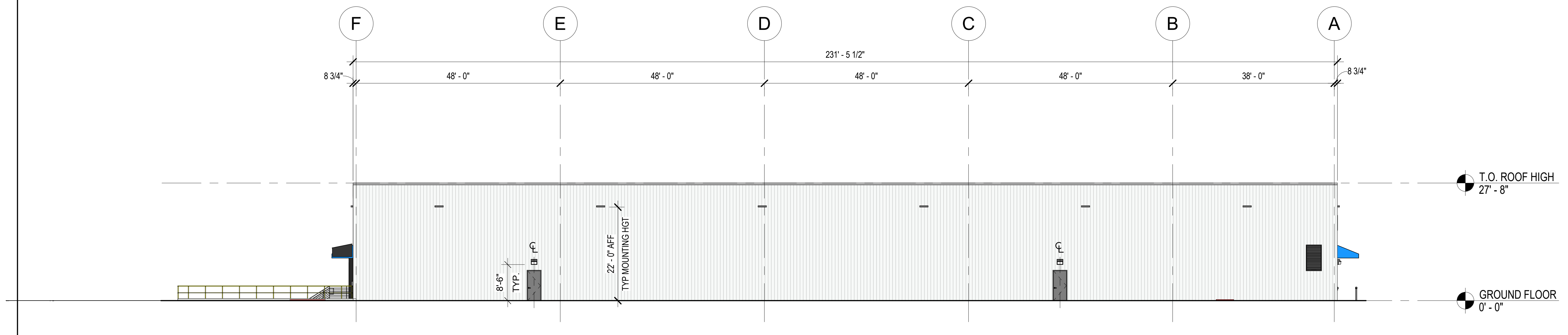
ID	Description	Date

© 2025 CESO, INC.

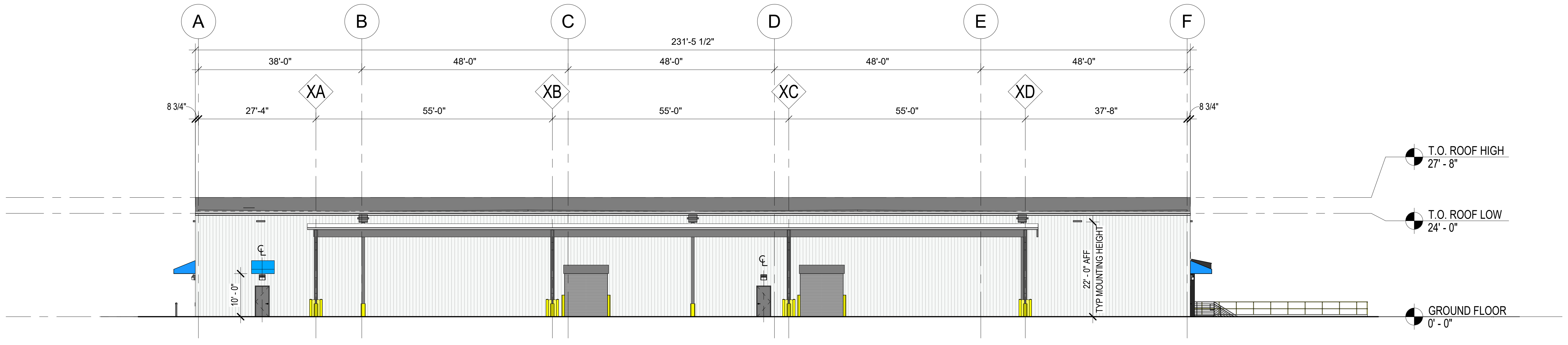
Project Number:	765525-01
Scale:	AS NOTED
Drawn By:	AL
Checked By:	AP
Date:	05/09/2025
Issue:	PRELIMINARY

Drawing Title:

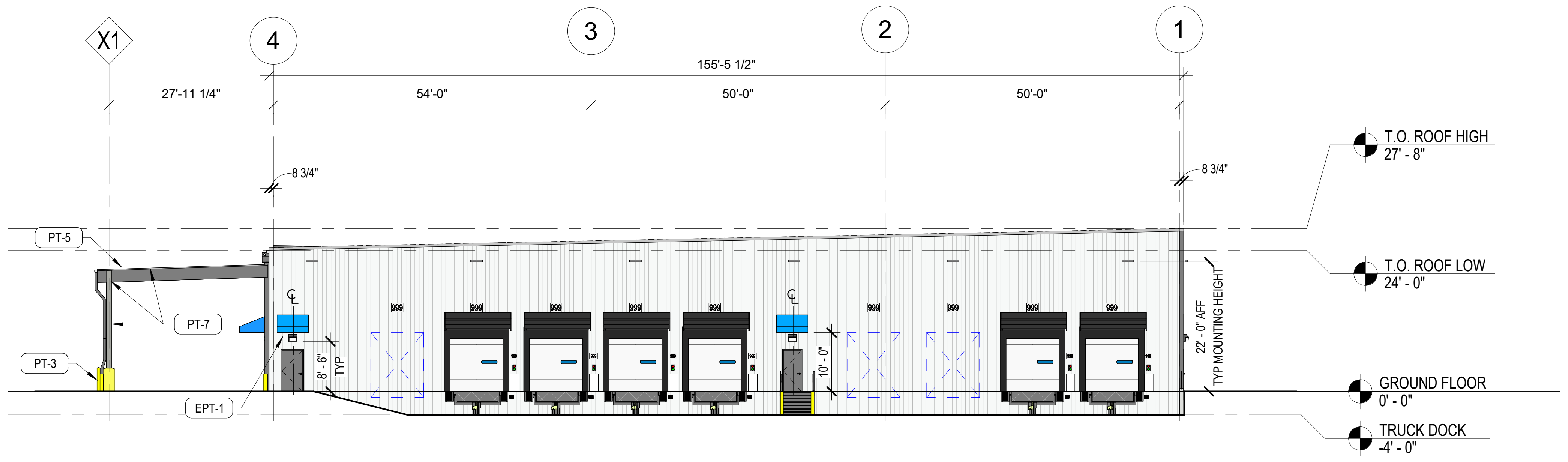
PRELIMINARY FLOOR PLAN


F
E
D
C
B
A
231' - 5 1/2"
8 3/4"
48' - 0"
48' - 0"
48' - 0"
48' - 0"
38' - 0"
8 3/4"
T.O. ROOF HIGH
27' - 8"
8'-6"
TYP
22' - 0" AFF
TYP MOUNTING HGT
GROUND FLOOR
0' - 0"

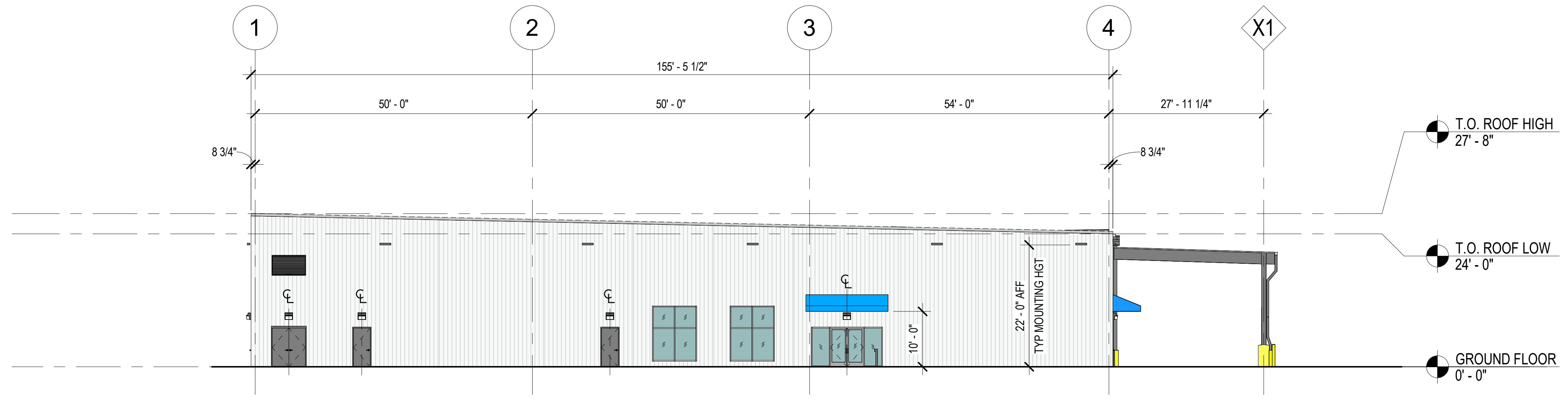
4 **WEST ELEVATION**
A2.01 Scale: 1/16" = 1'-0"


A
B
C
D
E
F
231'-5 1/2"
38'-0"
48'-0"
48'-0"
48'-0"
48'-0"
8 3/4"
XA
XB
XC
XD
27'-4"
55'-0"
55'-0"
55'-0"
37'-8"
8 3/4"
T.O. ROOF HIGH
27' - 8"
T.O. ROOF LOW
24' - 0"
10' - 0"
22' - 0" AFF
TYP MOUNTING HEIGHT
GROUND FLOOR
0' - 0"

3 **EAST ELEVATION**
A2.01 Scale: 1/16" = 1'-0"


X1
4
3
2
1
155'-5 1/2"
27'-11 1/4"
54'-0"
50'-0"
50'-0"
8 3/4"
8 3/4"
T.O. ROOF HIGH
27' - 8"
T.O. ROOF LOW
24' - 0"
PT-5
PT-7
PT-3
EPT-1
8' - 6"
TYP
10' - 0"
22' - 0" AFF
TYP MOUNTING HEIGHT
GROUND FLOOR
0' - 0"
TRUCK DOCK
-4' - 0"

2 **NORTH ELEVATION**
A2.01 Scale: 1/16" = 1'-0"


1
2
3
4
X1
155' - 5 1/2"
50' - 0"
50' - 0"
54' - 0"
27' - 11 1/4"
8 3/4"
8 3/4"
T.O. ROOF HIGH
27' - 8"
T.O. ROOF LOW
24' - 0"
10' - 0"
22' - 0" AFF
TYP MOUNTING HGT
GROUND FLOOR
0' - 0"

1 **SOUTH ELEVATION**
A2.01 Scale: 1/16" = 1'-0"

SHEET NOTES

A. PROVIDE FLASHING/MOISTURE PENETRATION PROTECTION AT ALL PENETRATIONS.
B. BRANDED BUILDING SIGNAGE IS NOT INCLUDED IN THE BUILDING PERMIT AND SHALL REQUIRE A SEPARATE PERMIT PRIOR TO INSTALLATION, U.N.O.
C. ALL EMERGENCY LIGHTING AT DOORS TO BE CENTERED ABOVE DOOR U.N.O., REFERENCE ELECTRICAL DRAWINGS.
D. REFER TO ELECTRICAL DRAWINGS FOR ALL LIGHTING LOCATIONS.
E. REFER TO STRUCTURAL AND MECHANICAL FOR ADDITIONAL INFORMATION RELATED TO BUILDING OPENINGS.
F. INSTALL JOINT SEALANT OVER EXPANSION JOINT FILLER AT ALL EXTERIOR WALL JOINTS AND AT ALL CUTS AND HOLES THROUGH WALLS. REFER TO SPECIFICATIONS.
G. REFER TO STRUCTURAL FOR LOCATION OF GROUTED AREAS AT STRUCTURAL CONNECTION.
H. PARAPET MEMBRANE FLASHING SHALL BE OF THE SAME MATERIAL AS SINGLE-PLY ROOFING MEMBRANE.
I. REFER TO BUILDING SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
J. TIE ALL DOWNSPOUTS AT GRADE TO STORM DRAINS. REFER TO CANOPY PLAN, SECTIONS, AND CIVIL DRAWINGS.
K. PAINT ALL BOLLARDS SAFETY YELLOW.
L. REFER TO SPECIFICATIONS FOR SPECIFIC PAINT PRODUCTS REQUIRED.

CANOPY FINISH NOTES

A. STEEL AND METAL DECK ARE TO BE SHOP PRIMED. DO NOT GALVANIZE. (REFER TO SPEC 053100)
B. TWO COATS PAINT TO FIELD APPLIED OVER ALL EXPOSED SHOP-PRIMED STRUCTURE AND METAL DECK, ALONG WITH ANY EXPOSED CONDUITS, PIPING, ETC. (REF SPEC 099000).
C. CONCRETE SURROUND TO BE PAINTED SAFETY YELLOW. REFER TO SPEC 099000 FOR PRIMER & TOP COAT REQUIREMENTS.

EXTERIOR COLOR LEGEND

(TEXTURED FINISH AT CONCRETE WALL PANELS)

REFER TO FINISH SCHEDULE SHEET A1.03; REFER TO CANOPY FINISH NOTES FOR PAINT AT CANOPY

EPT-1	2121-70 - CHANTILLY LACE
EPT-2	SW7650 - ELLIE GRAY
EPT-3	TENANT BLUE TO MATCH PANTONE 2727C

CESO
WWW.CESOINC.COM
175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

BH DEV CO

PROJECT WINSTON
AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

ID	Description	Date
	EXTERIOR ELEVATIONS	03.18.2025

© 2025 CESO, INC.

Project number:	765525-01
Scale:	AS NOTED
Drawn By:	NR
Checked By:	NR
Date:	05/09/2025
Issue:	EXTERIOR ELEVATIONS

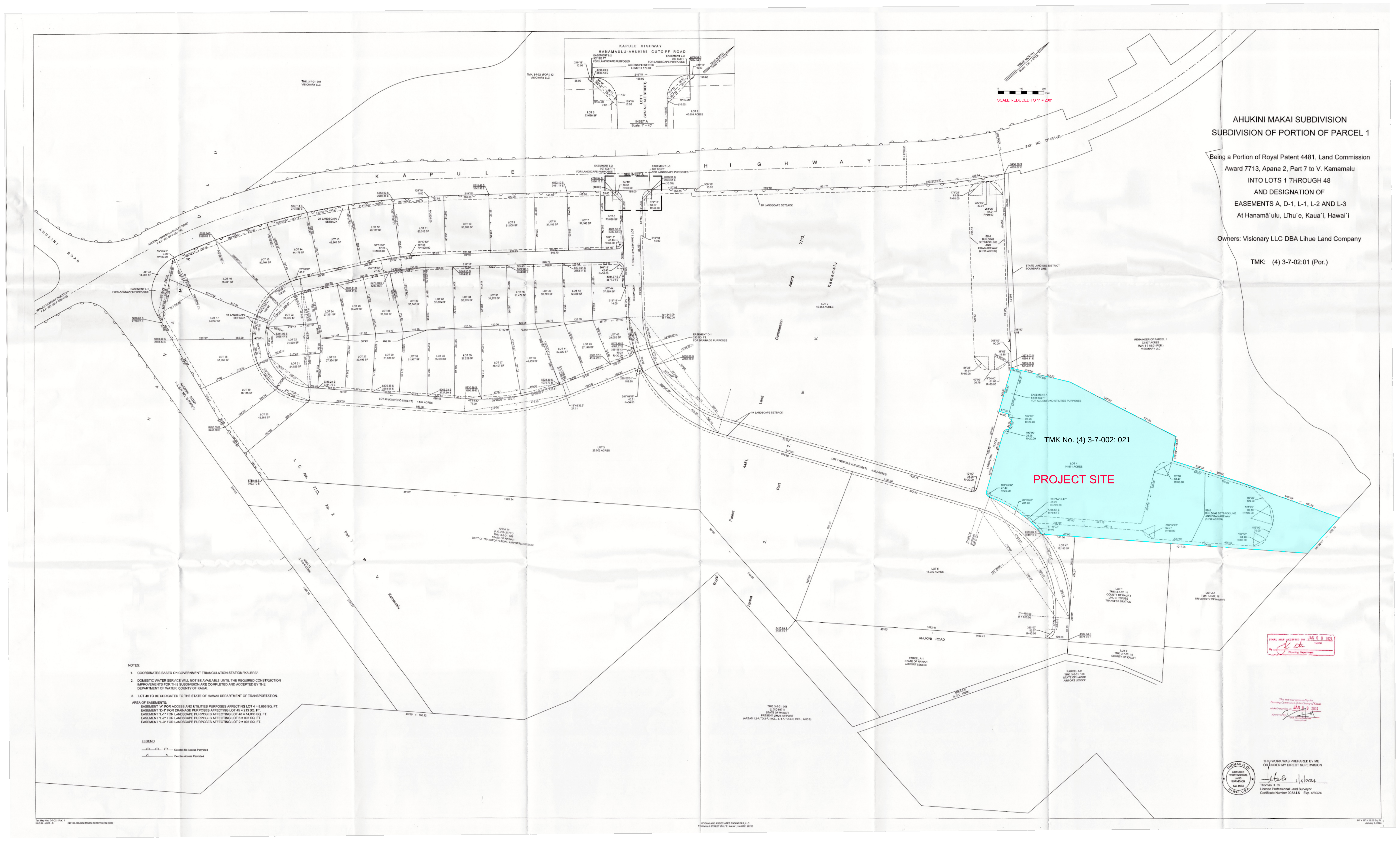
Sheet Title:
EXTERIOR ELEVATIONS

A3.1

CESO
WWW.CESOINC.COM

3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.



AHUKINI MAKAI SUBDIVISION
SUBDIVISION OF PORTION OF PARCEL 1

Being a Portion of Royal Patent 4481, Land Commission
Award 7713, Apana 2, Part 7 to V. Kamamalu
INTO LOTS 1 THROUGH 48
AND DESIGNATION OF
EASEMENTS A, D-1, L-1, L-2 AND L-3
At Hanamā`ulu, Līhu`e, Kaua`i, Hawai`i

Owners: Visionary LLC DBA Lihue Land Company

TMK: (4) 3-7-02:01 (Por.)

NOTES:

1. COORDINATES BASED ON GOVERNMENT TRIANGULATION STATION "KALEPA".
2. DOMESTIC WATER SERVICE WILL NOT BE AVAILABLE UNTIL THE REQUIRED CONSTRUCTION IMPROVEMENTS FOR THIS SUBDIVISION ARE COMPLETED AND ACCEPTED BY THE DEPARTMENT OF WATER, COUNTY OF KAUAI.
3. LOT 48 TO BE DEDICATED TO THE STATE OF HAWAII DEPARTMENT OF TRANSPORTATION.

AREA OF EASEMENTS:
EASEMENT "A" FOR ACCESS AND UTILITIES PURPOSES AFFECTING LOT 4 = 8,666 SQ. FT.
EASEMENT "D-1" FOR DRAINAGE PURPOSES AFFECTING LOT 45 = 213 SQ. FT.
EASEMENT "L-1" FOR LANDSCAPE PURPOSES AFFECTING LOT 48 = 14,003 SQ. FT.
EASEMENT "L-2" FOR LANDSCAPE PURPOSES AFFECTING LOT 6 = 907 SQ. FT.
EASEMENT "L-3" FOR LANDSCAPE PURPOSES AFFECTING LOT 2 = 907 SQ. FT.

LEGEND

⌒ ⌒ ⌒ Denotes No Access Permitted
◁ ▷ Denotes Access Permitted

FINAL MAP ACCEPTED ON JAN 0 8 2024
(Date)
By K. Este
Planning Department

This map was approved by the
Planning Commission of the County of Kauai,
at their meeting on JAN 0 9 2024
Approved by
Chair, Planning Commission
County of Kauai

THOMAS H. OI
LICENSED PROFESSIONAL LAND SURVEYOR
No. 9033
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY DIRECT SUPERVISION
1/4/2024
Thomas H. Oi
License Professional Land Surveyor
Certificate Number 9033-LS Exp. 4/30/24

60" x 36" = 15.00 Sq. Ft.
January 3, 2024

FIGURE SHOWING PROPERTY LINES AND EASEMENTS
WITH ITS DIMENSIONS, TOTAL LAND AREA

PROJECT WINSTON

AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

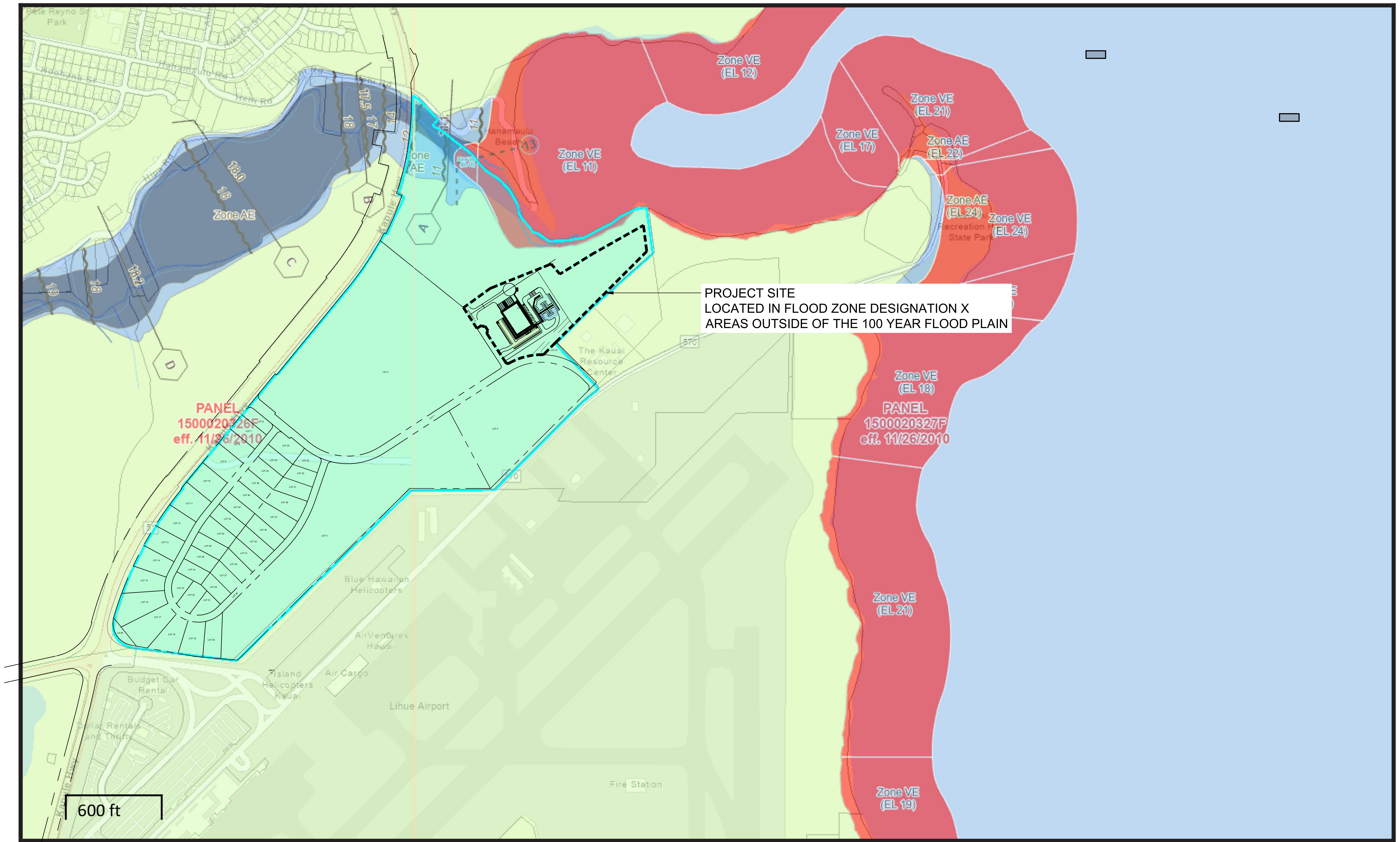
Revisions / Submissions

ID	Description	Date

Project Number:	765525-01
Scale:	AS NOTED
Drawn By:	
Checked By:	
Date:	05/09/2025
Issue:	

Drawing Title:

**ZONING PERMIT
APPLICATION
6a PROPERTY**


Zone VE (EL 12)
Zone VE (EL 21)
Zone VE (EL 17)
Zone AE (EL 22)
Zone VE (EL 11)
Zone AE (EL 24)
Zone VE (EL 24)
Zone AE
Zone AE
Hanamaulu Beach
Recreation State Park
PROJECT SITE
LOCATED IN FLOOD ZONE DESIGNATION X
AREAS OUTSIDE OF THE 100 YEAR FLOOD PLAIN
The Kauai Resource Center
Zone VE (EL 18)
PANEL 1500020327F eff. 11/26/2010
PANEL 1500020326F eff. 11/26/2010
Zone VE (EL 21)
Zone VE (EL 19)
Blue Hawaiian Helicopters
AirVentures Hawaii
Island Helicopters Kauai
Air Cargo
Lihue Airport
Budget Car Rental
Dollar Rent A Car and Thrifty
Fire Station
Hehi Rd
600 ft

Flood Hazard Map

Title: Ahukini Makai Subdivision, Lot 4

Notes:

Map generated
on 03/27/2025

Map Legend

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.

FIGURE SHOWING FLOOD ZONE MAP OVERLAYED
ONTO PROPERTY LINE MAP

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

PROJECT WINSTON
AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

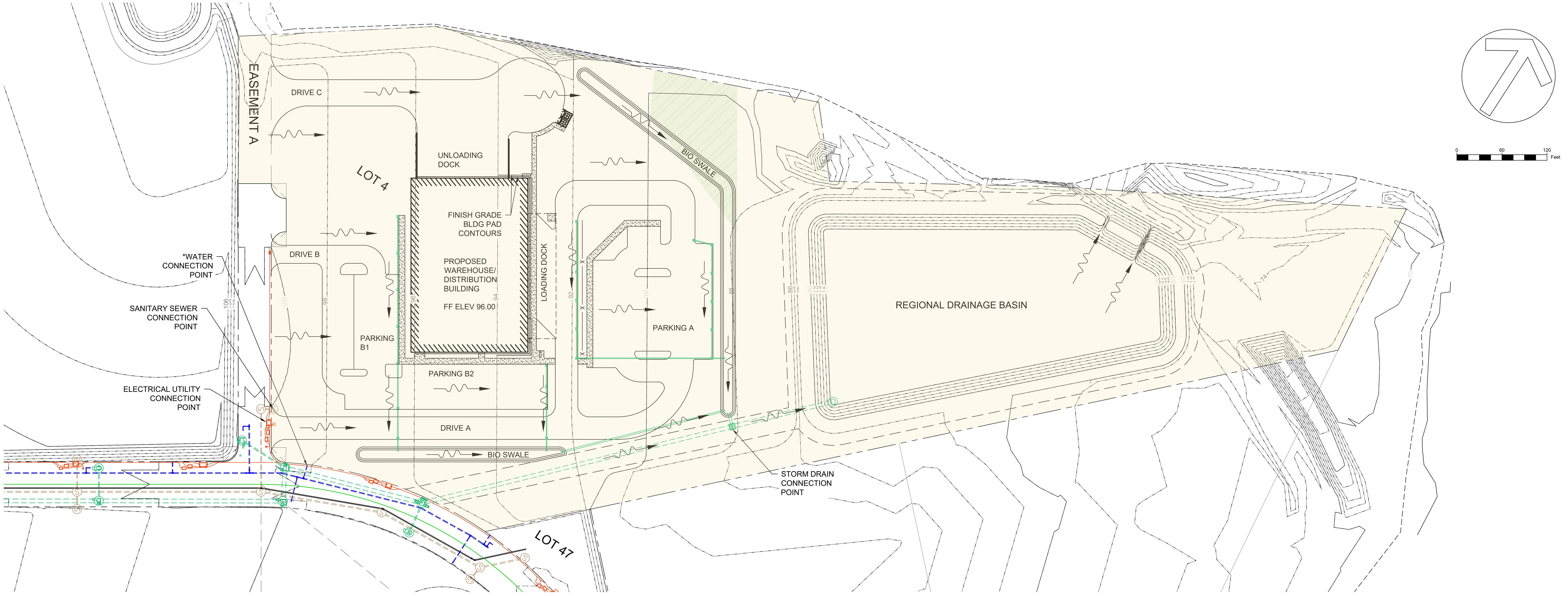
Revisions / Submissions

ID	Description	Date

Project Number:	HNL24-IN-010
Scale:	AS NOTED
Drawn By:	
Checked By:	
Date:	05/09/2025
Issue:	PRELIMINARY

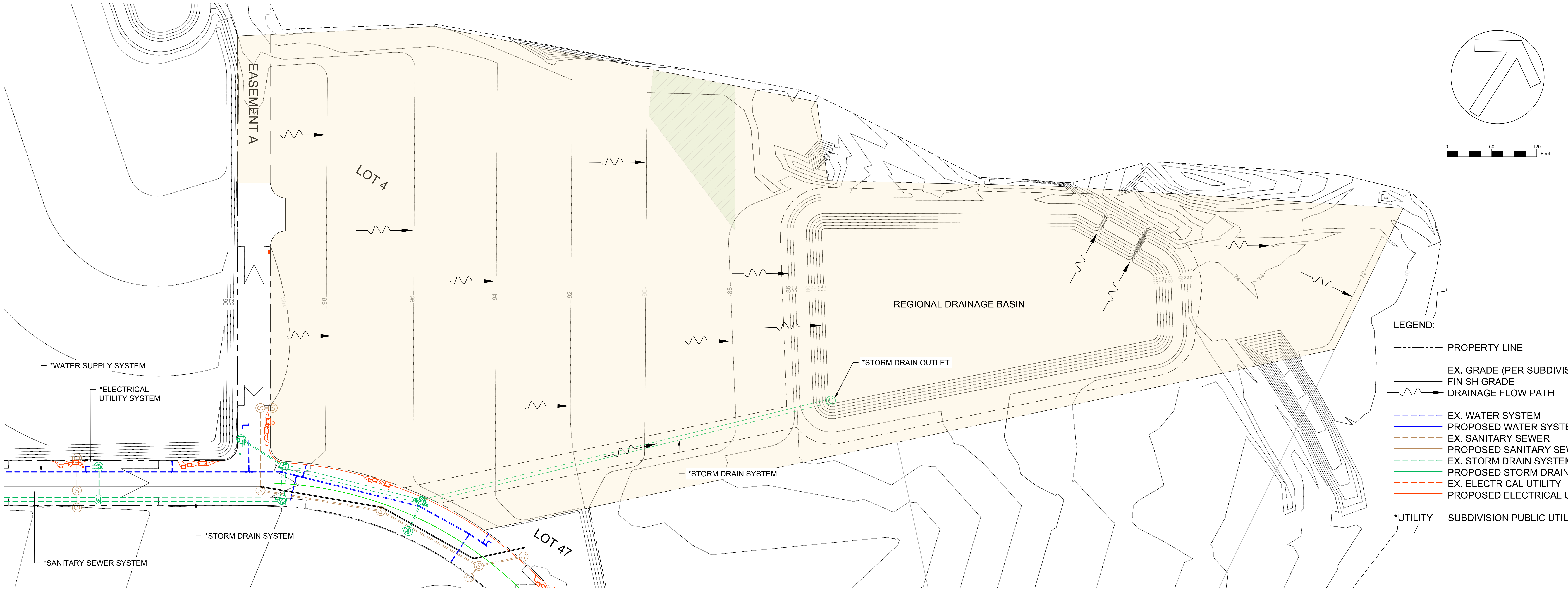
Drawing Title:

**ZONING PERMIT
APPLICATION
6a PROPERTY**


EASEMENT A
DRIVE C
UNLOADING DOCK
LOT 4
FINISH GRADE BLDG PAD CONTOURS
PROPOSED WAREHOUSE/ DISTRIBUTION BUILDING
FF ELEV 96.00
LOADING DOCK
BIO SWALE
DRIVE B
PARKING B1
PARKING B2
PARKING A
DRIVE A
BIO SWALE
REGIONAL DRAINAGE BASIN
*WATER CONNECTION POINT
SANITARY SEWER CONNECTION POINT
ELECTRICAL UTILITY CONNECTION POINT
STORM DRAIN CONNECTION POINT
LOT 47
106
98
96
94
92
88
86
74
72
0
60
120
Feet

TOPOGRAPHY - PROPOSED

SCALE : 1" = 60'


EASEMENT A
LOT 4
REGIONAL DRAINAGE BASIN
*WATER SUPPLY SYSTEM
*ELECTRICAL UTILITY SYSTEM
*STORM DRAIN SYSTEM
*SANITARY SEWER SYSTEM
*STORM DRAIN OUTLET
*STORM DRAIN SYSTEM
LOT 47
106
98
96
94
92
88
86
74
72
0
60
120
Feet

TOPOGRAPHY - EXISTING

SCALE : 1" = 60'

LEGEND:

PROPERTY LINE

EX. GRADE (PER SUBDIVISION)
FINISH GRADE
DRAINAGE FLOW PATH

EX. WATER SYSTEM
PROPOSED WATER SYSTEM
EX. SANITARY SEWER
PROPOSED SANITARY SEWER
EX. STORM DRAIN SYSTEM
PROPOSED STORM DRAIN SYSTEM
EX. ELECTRICAL UTILITY
PROPOSED ELECTRICAL UTILITY

*UTILITY SUBDIVISION PUBLIC UTILITY

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

PROJECT WINSTON

AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

ID	Description	Date

Project Number:	HNL24-IN-010
Scale:	AS NOTED
Drawn By:	
Checked By:	
Date:	05/09/2025
Issue:	PRELIMINARY

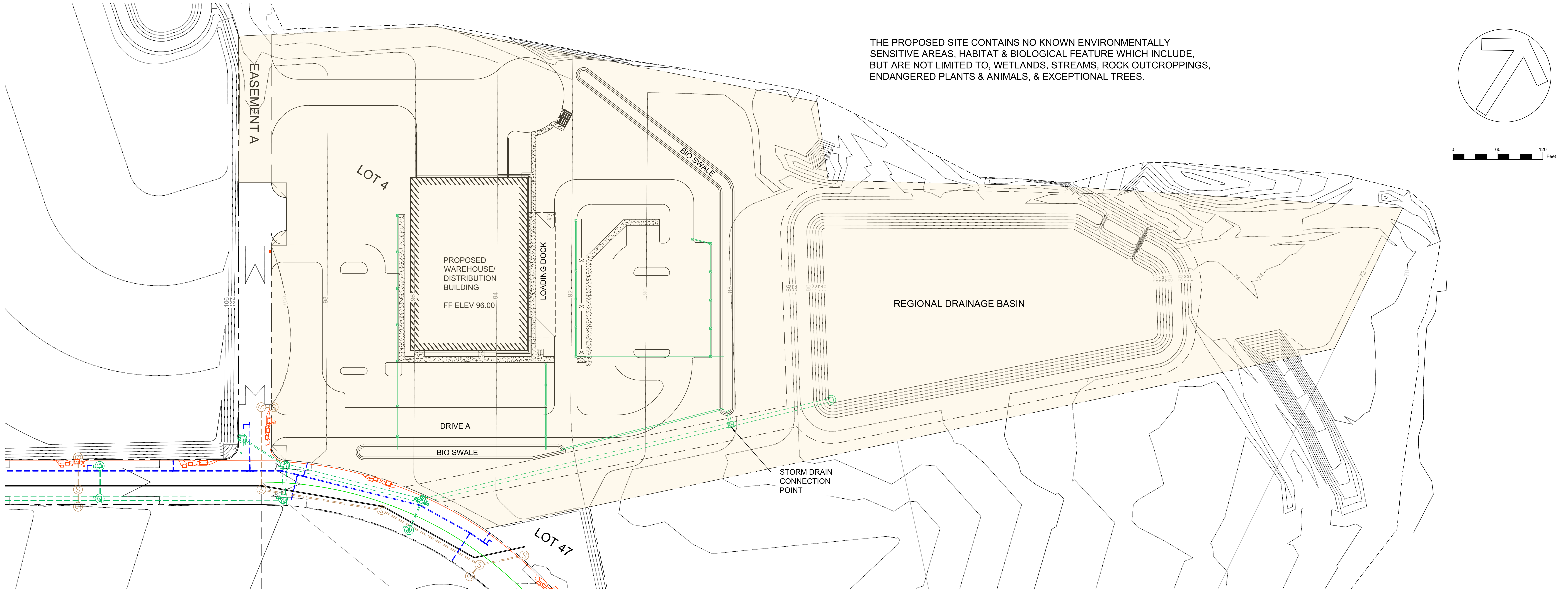
Drawing Title:

ZONING PERMIT APPLICATION

6g TOPOGRAPHY

FN:250503 Project Winston Civil.dwg

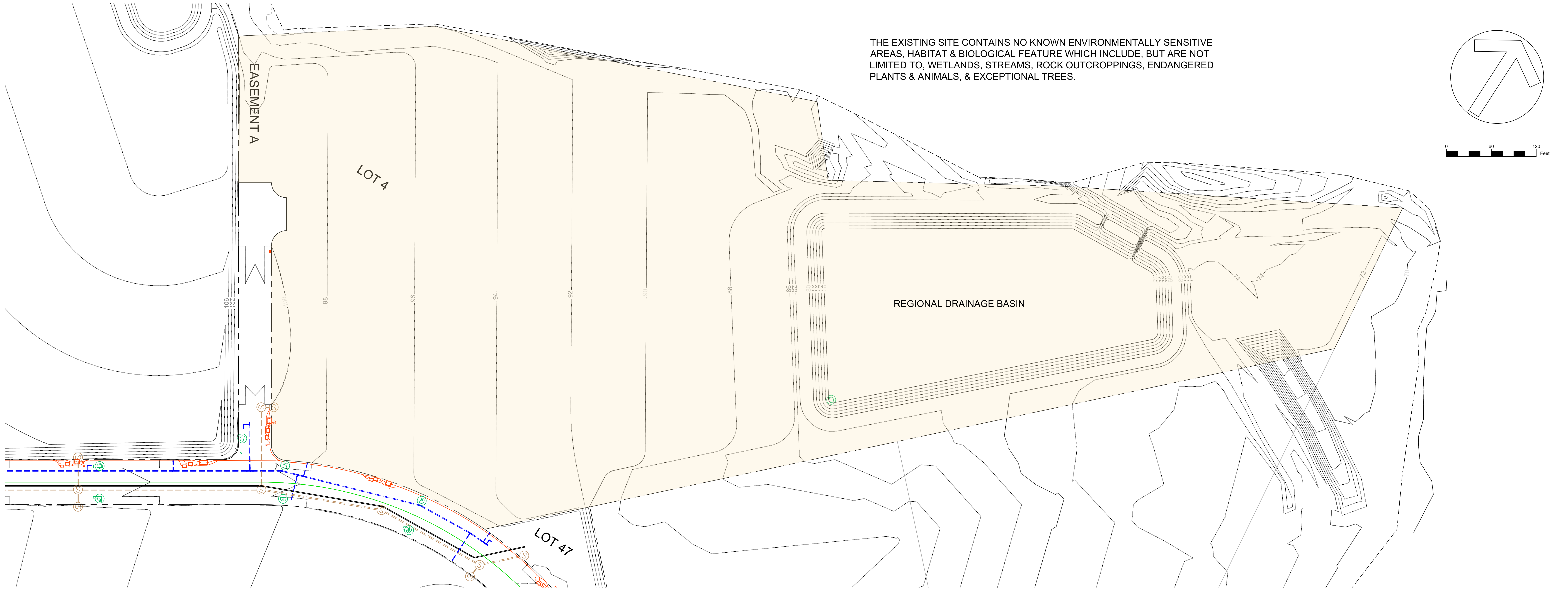
THE PROPOSED SITE CONTAINS NO KNOWN ENVIRONMENTALLY SENSITIVE AREAS, HABITAT & BIOLOGICAL FEATURE WHICH INCLUDE, BUT ARE NOT LIMITED TO, WETLANDS, STREAMS, ROCK OUTCROPPINGS, ENDANGERED PLANTS & ANIMALS, & EXCEPTIONAL TREES.


EASEMENT A
LOT 4
PROPOSED WAREHOUSE/ DISTRIBUTION BUILDING
FF ELEV 96.00
LOADING DOCK
BIO SWALE
DRIVE A
BIO SWALE
REGIONAL DRAINAGE BASIN
STORM DRAIN CONNECTION POINT
LOT 47
106
98
94
92
88
86
74
72
0
60
120
Feet

SITE - PROPOSED

SCALE : 1" = 60'

THE EXISTING SITE CONTAINS NO KNOWN ENVIRONMENTALLY SENSITIVE AREAS, HABITAT & BIOLOGICAL FEATURE WHICH INCLUDE, BUT ARE NOT LIMITED TO, WETLANDS, STREAMS, ROCK OUTCROPPINGS, ENDANGERED PLANTS & ANIMALS, & EXCEPTIONAL TREES.


EASEMENT A
LOT 4
REGIONAL DRAINAGE BASIN
LOT 47
106
98
96
94
92
88
86
74
72
0
60
120
Feet

SITE - EXISTING

SCALE : 1" = 60'

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

PROJECT WINSTON
AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

ID	Description	Date

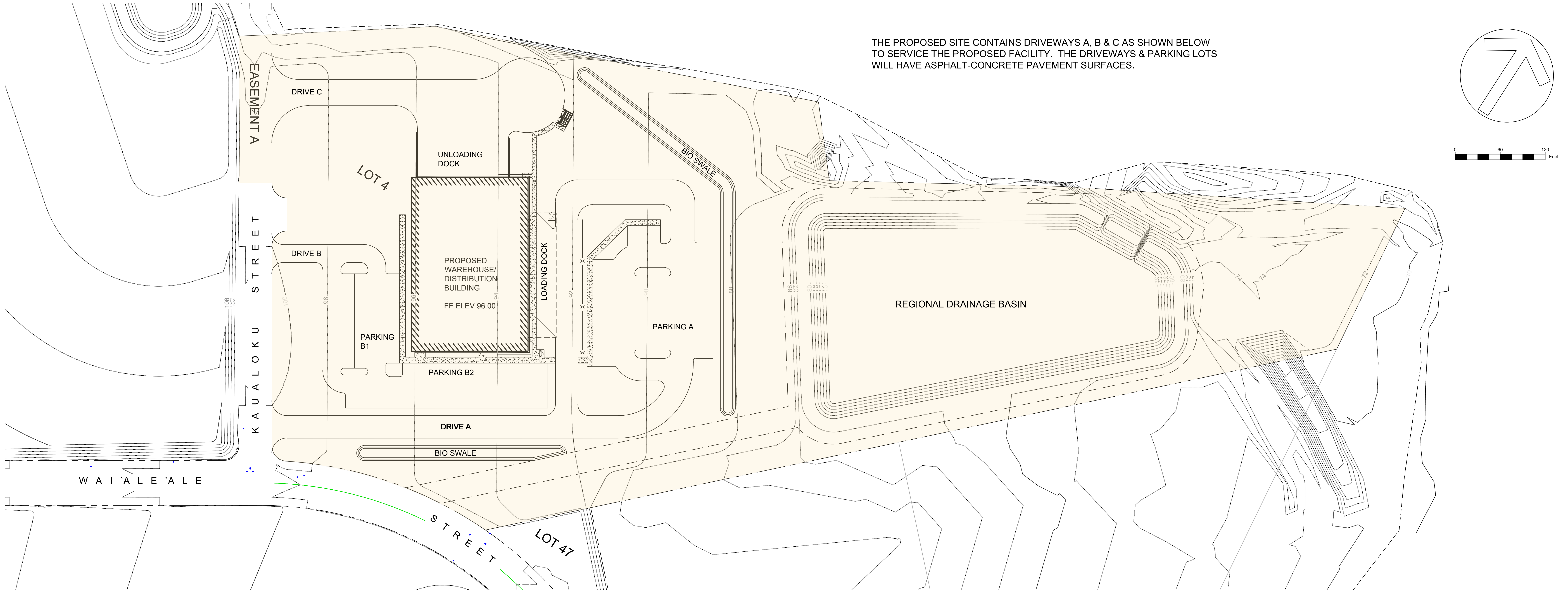
Project Number: HNL24-IN-010
Scale: AS NOTED
Drawn By:
Checked By:
Date: 05/09/2025
Issue: PRELIMINARY

Drawing Title:

ZONING PERMIT APPLICATION

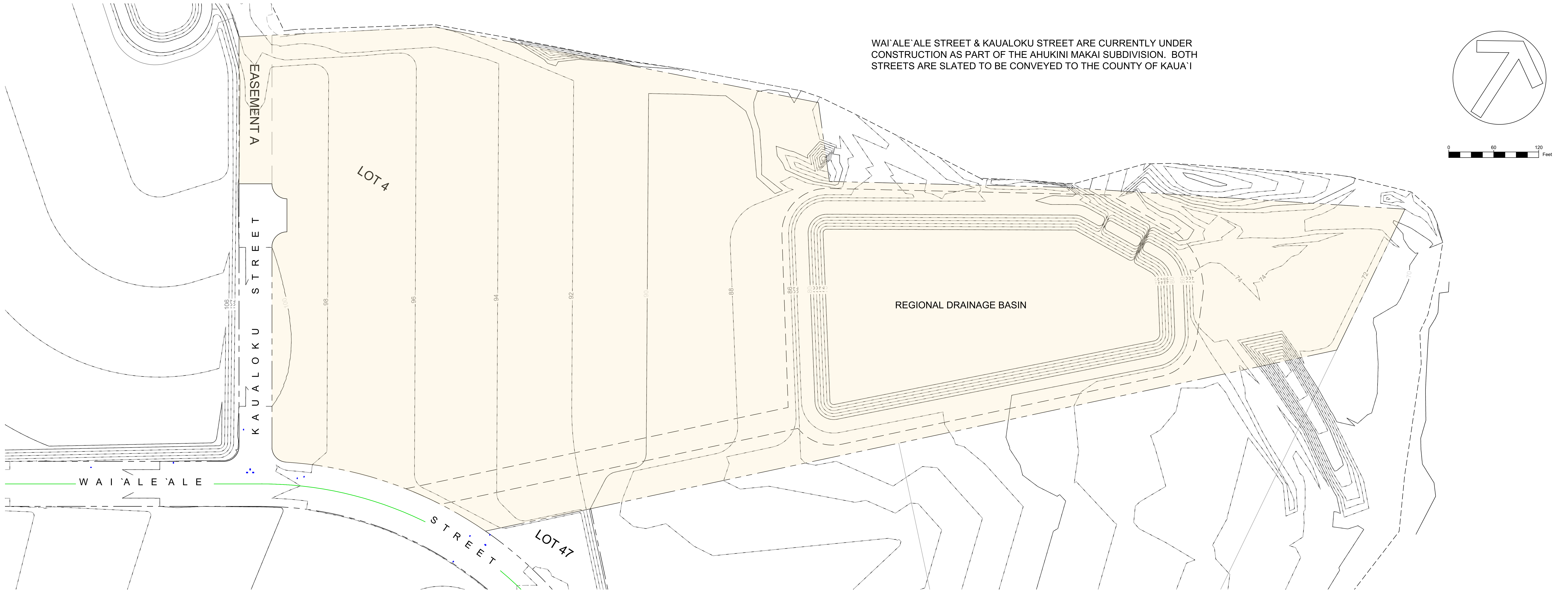
6h ENVIRONMENT SENSITIVE

FN:250503 Project Winston Civil.dwg


EASEMENT A
DRIVE C
UNLOADING DOCK
LOT 4
PROPOSED WAREHOUSE/ DISTRIBUTION BUILDING
FF ELEV 96.00
LOADING DOCK
BIO SWALE
DRIVE B
PARKING B1
PARKING B2
PARKING A
DRIVE A
BIO SWALE
REGIONAL DRAINAGE BASIN
KAUALOKU STREET
WAI`ALE`ALE STREET
LOT 47
106
98
94
92
88
86
74
72
0
60
120
Feet

THE PROPOSED SITE CONTAINS DRIVEWAYS A, B & C AS SHOWN BELOW TO SERVICE THE PROPOSED FACILITY. THE DRIVEWAYS & PARKING LOTS WILL HAVE ASPHALT-CONCRETE PAVEMENT SURFACES.

SITE - PROPOSED
SCALE : 1" = 60'


EASEMENT A
LOT 4
REGIONAL DRAINAGE BASIN
KAUALOKU STREET
WAI`ALE`ALE STREET
LOT 47
106
98
96
94
92
88
86
74
72
0
60
120
Feet

WAI`ALE`ALE STREET & KAUALOKU STREET ARE CURRENTLY UNDER CONSTRUCTION AS PART OF THE AHUKINI MAKAI SUBDIVISION. BOTH STREETS ARE SLATED TO BE CONVEYED TO THE COUNTY OF KAUA`I

SITE - EXISTING
SCALE : 1" = 60'

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

PROJECT WINSTON

AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

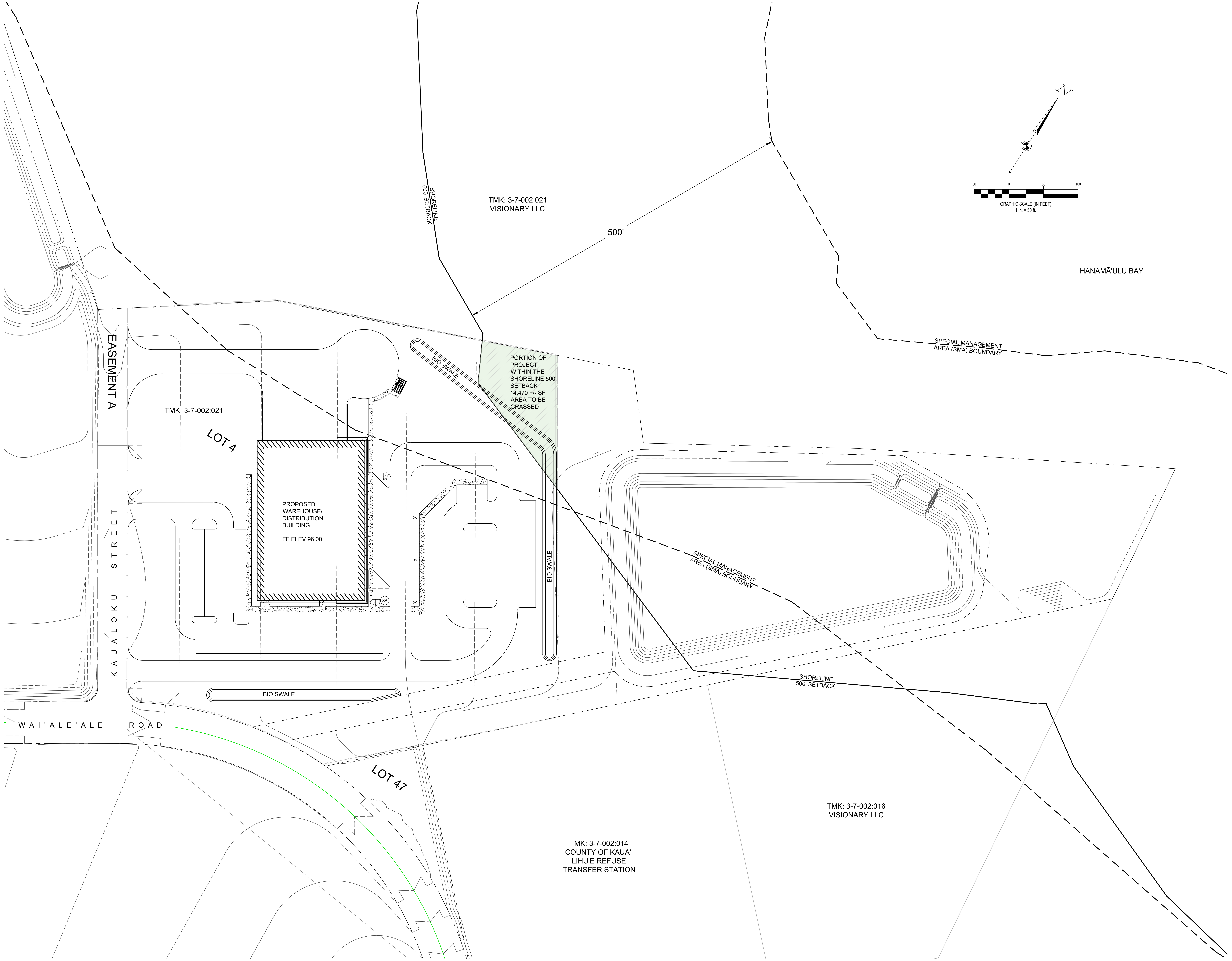
ID	Description	Date

Project Number:	HNL24-IN-010
Scale:	AS NOTED
Drawn By:	
Checked By:	
Date:	05/09/2025
Issue:	PRELIMINARY

Drawing Title:

ZONING PERMIT APPLICATION

6j ROADS


N
50
0
50
100
GRAPHIC SCALE (IN FEET)
1 in. = 50 ft.
SHORELINE
500' SETBACK
TMK: 3-7-002:021
VISIONARY LLC
500'
HANAMĀ'ULU BAY
SPECIAL MANAGEMENT
AREA (SMA) BOUNDARY
EASEMENT A
BIO SWALE
PORTION OF
PROJECT
WITHIN THE
SHORELINE 500'
SETBACK
14,470 +/- SF
AREA TO BE
GRASSED
TMK: 3-7-002:021
LOT 4
PROPOSED
WAREHOUSE/
DISTRIBUTION
BUILDING
FF ELEV 96.00
SB
BIO SWALE
SPECIAL MANAGEMENT
AREA (SMA) BOUNDARY
KAUALOKU STREET
BIO SWALE
SHORELINE
500' SETBACK
WAI'ALE'ALE ROAD
LOT 47
TMK: 3-7-002:016
VISIONARY LLC
TMK: 3-7-002:014
COUNTY OF KAUA'I
LIHU'E REFUSE
TRANSFER STATION

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

WILLIAM A. EDDY JR.
LICENSED
PROFESSIONAL
ENGINEER
No. 8100-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

W. Eddy EXP. 4/26
SIGNATURE

PROJECT WINSTON

AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

ID	Description	Date

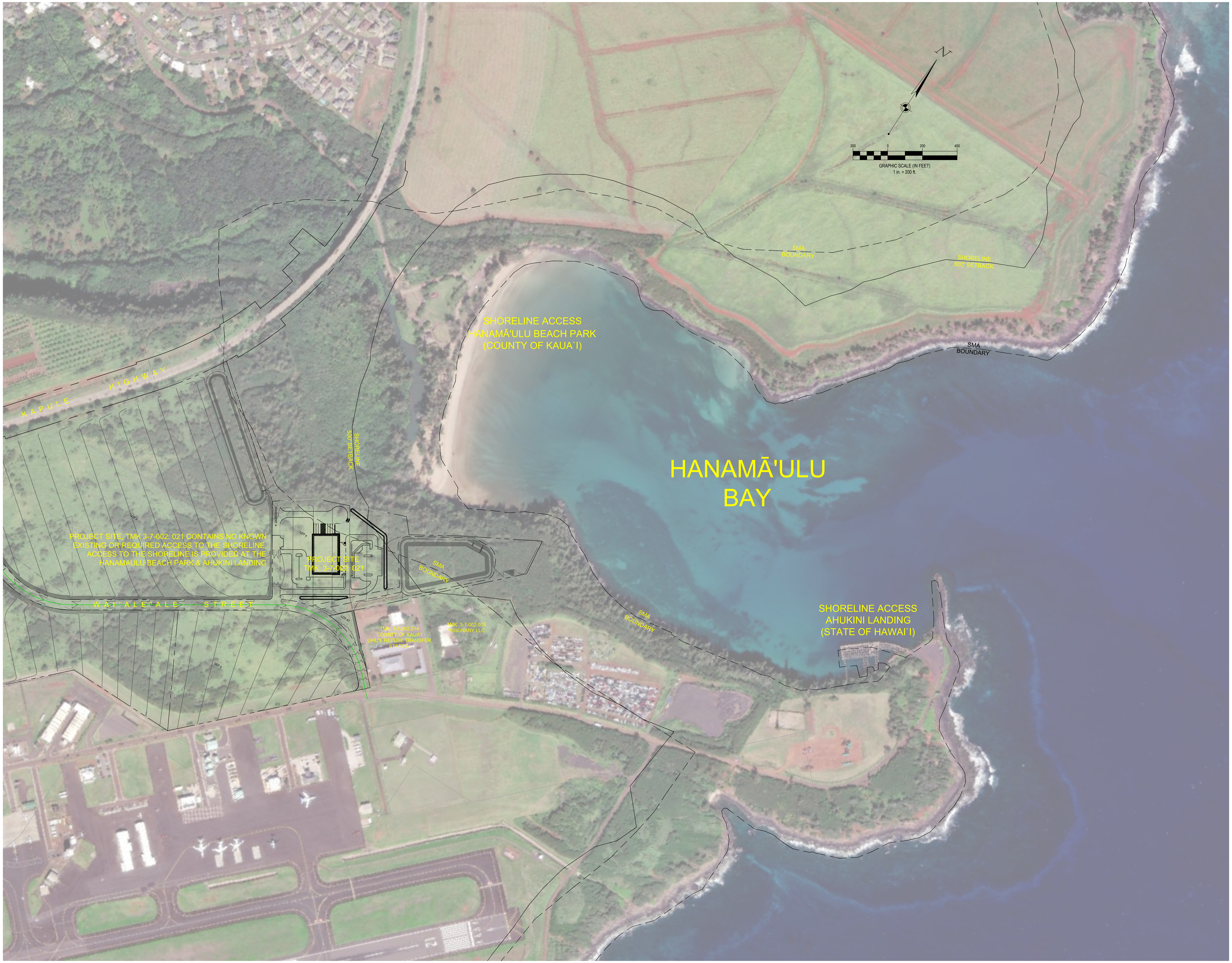
Project Number: HNL24-IN-010
Scale: AS NOTED
Drawn By:
Checked By:
Date: 05/09/2025
Issue: PRELIMINARY

Drawing Title:

ZONING PERMIT APPLICATION

6k SHORELINE
500-FT SETBACK

FN:250503 Project Winston Civil.dwg


N
200
0
200
400
GRAPHIC SCALE (IN FEET)
1 in. = 200 ft.
SMA BOUNDARY
SHORELINE 500' SETBACK
SHORELINE ACCESS
HANAMĀ'ULU BEACH PARK
(COUNTY OF KAUA`I)
SMA BOUNDARY
KAPULE HIGHWAY
SHORELINE 500' SETBACK
HANAMĀ'ULU BAY
LOT 2
EASEMENT A
LOT 4
PROJECT SITE, TMK 3-7-002: 021 CONTAINS NO KNOWN EXISTING OR REQUIRED ACCESS TO THE SHORELINE. ACCESS TO THE SHORELINE IS PROVIDED AT THE HANAMAULU BEACH PARK & AHUKINI LANDING
PROJECT SITE
TMK: 3-7-002: 021
SMA BOUNDARY
WAI'ALE'ALE STREET
LOT 47
LOT 5
TMK: 3-7-002:014
COUNTY OF KAUA'I
LIHU'E REFUSE TRANSFER STATION
TMK: 3-7-002:016
VISIONARY LLC
SMA BOUNDARY
SHORELINE ACCESS
AHUKINI LANDING
(STATE OF HAWAI`I)

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

WILLIAM A. EDDY JR.
LICENSED PROFESSIONAL ENGINEER
No. 8100-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

W. Eddy EXP. 4/26
SIGNATURE

PROJECT WINSTON

AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

ID	Description	Date

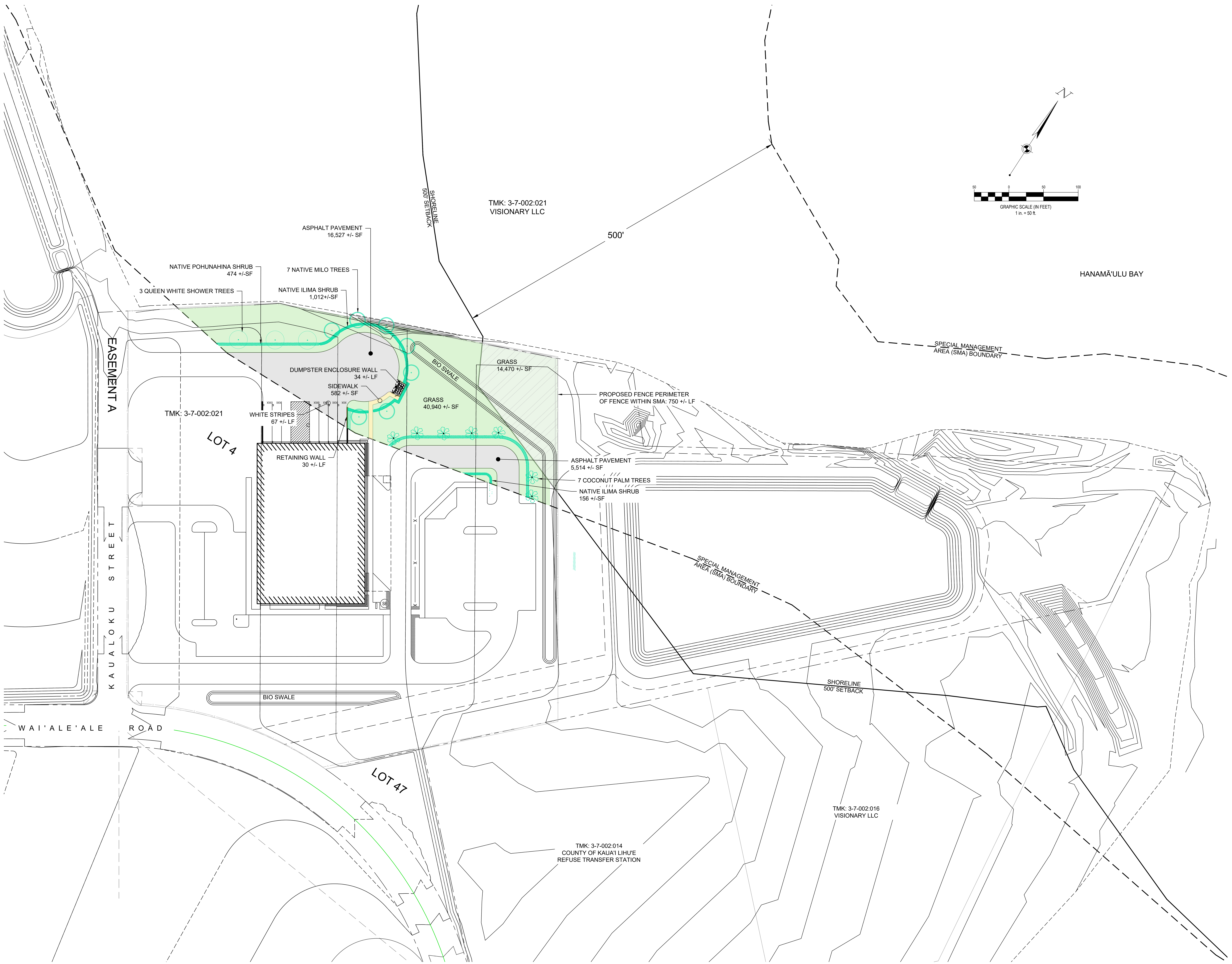
Project Number: HNL24-IN-010
Scale: AS NOTED
Drawn By:
Checked By:
Date: 05/09/2025
Issue: PRELIMINARY

Drawing Title:

ZONING PERMIT APPLICATION

11a. & 11b.
SHORELINE ACCESS & SETBACK

FN:250503 Project Winston Civil.dwg


TMK: 3-7-002:021
VISIONARY LLC
SHORELINE
500' SETBACK
500'
HANAMĀ'ULU BAY
N
50 0 50 100
GRAPHIC SCALE (IN FEET)
1 in. = 50 ft.
ASPHALT PAVEMENT
16,527 +/- SF
NATIVE POHUNAHINA SHRUB
474 +/-SF
7 NATIVE MILO TREES
3 QUEEN WHITE SHOWER TREES
NATIVE ILIMA SHRUB
1,012+/-SF
DUMPSTER ENCLOSURE WALL
34 +/- LF
SIDEWALK
582 +/- SF
GRASS
14,470 +/- SF
BIO SWALE
GRASS
40,940 +/- SF
PROPOSED FENCE PERIMETER
OF FENCE WITHIN SMA: 750 +/- LF
SPECIAL MANAGEMENT
AREA (SMA) BOUNDARY
EASEMENT A
TMK: 3-7-002:021
LOT 4
WHITE STRIPES
67 +/- LF
RETAINING WALL
30 +/- LF
ASPHALT PAVEMENT
5,514 +/- SF
7 COCONUT PALM TREES
NATIVE ILIMA SHRUB
156 +/-SF
SPECIAL MANAGEMENT
AREA (SMA) BOUNDARY
KAUALOKU STREET
BIO SWALE
SHORELINE
500' SETBACK
WAI'ALE'ALE ROAD
LOT 47
TMK: 3-7-002:016
VISIONARY LLC
TMK: 3-7-002:014
COUNTY OF KAUA'I LIHU'E
REFUSE TRANSFER STATION

FN:250503 Project Winston Civil.dwg

CESO
WWW.CESOINC.COM

3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

WILLIAM A. EDDY JR.
LICENSED PROFESSIONAL ENGINEER
No. 8100-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

W. Eddy EXP. 4/26
SIGNATURE

PROJECT WINSTON
AHUKINI BUSINESS PARK LIHUE, HI
TMK: 3-7-002:021

Revisions / Submissions

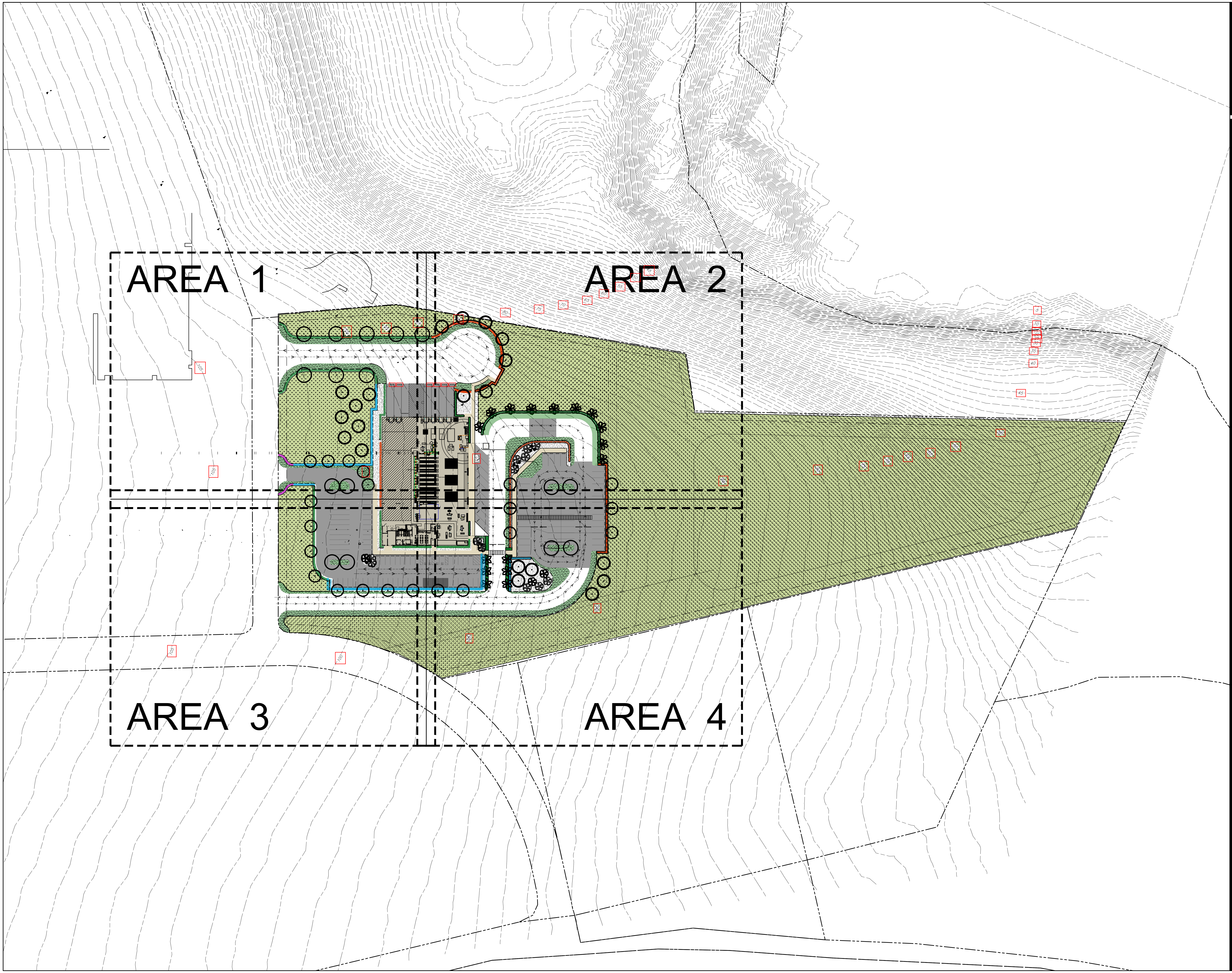
ID	Description	Date

Project Number:	HNL24-IN-010
Scale:	AS NOTED
Drawn By:	
Checked By:	
Date:	05/09/2025
Issue:	PRELIMINARY

Drawing Title:

ZONING PERMIT APPLICATION

16.
SPECIAL MANAGEMENT AREA (SMA)



WWW.CESOINC.COM
175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1
TEST FIT

Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	XX	XX

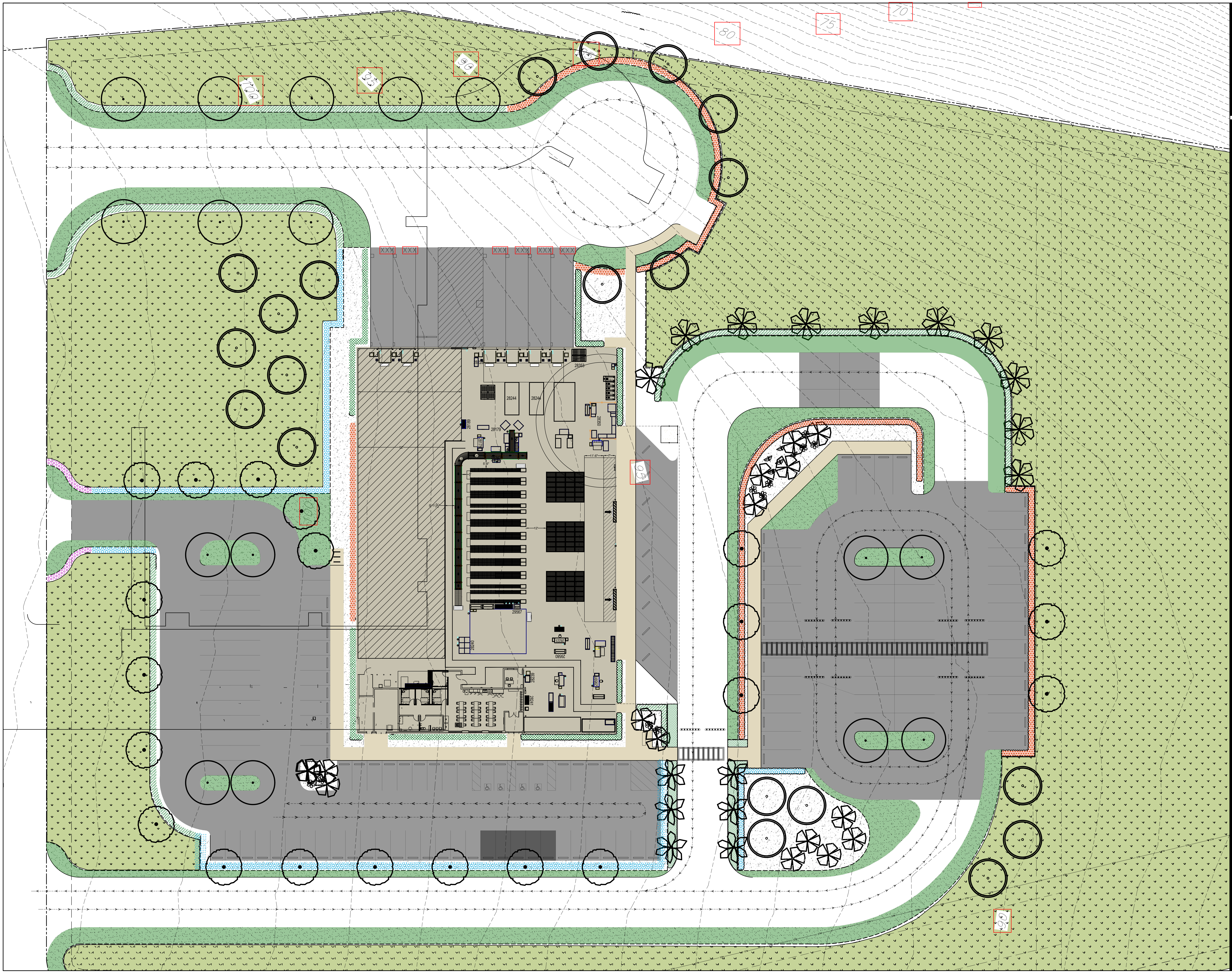
© 2024 CESO, INC.

Project Number: 7790
Scale: 1" = 60'
Drawn By: KJ/BPM
Checked By: BPM
Date: 12 MAY 2025
Issue: PRELIMINARY

Drawing Title:

LANDSCAPE PLANTING PLAN SITE

LP-SITE-1


80
75
70
XXX
XXX
XXX
XXX
XXX
XXX
28353
28244
28244
28179
29567

CESO

WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1 TEST FIT

Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	XX	XX

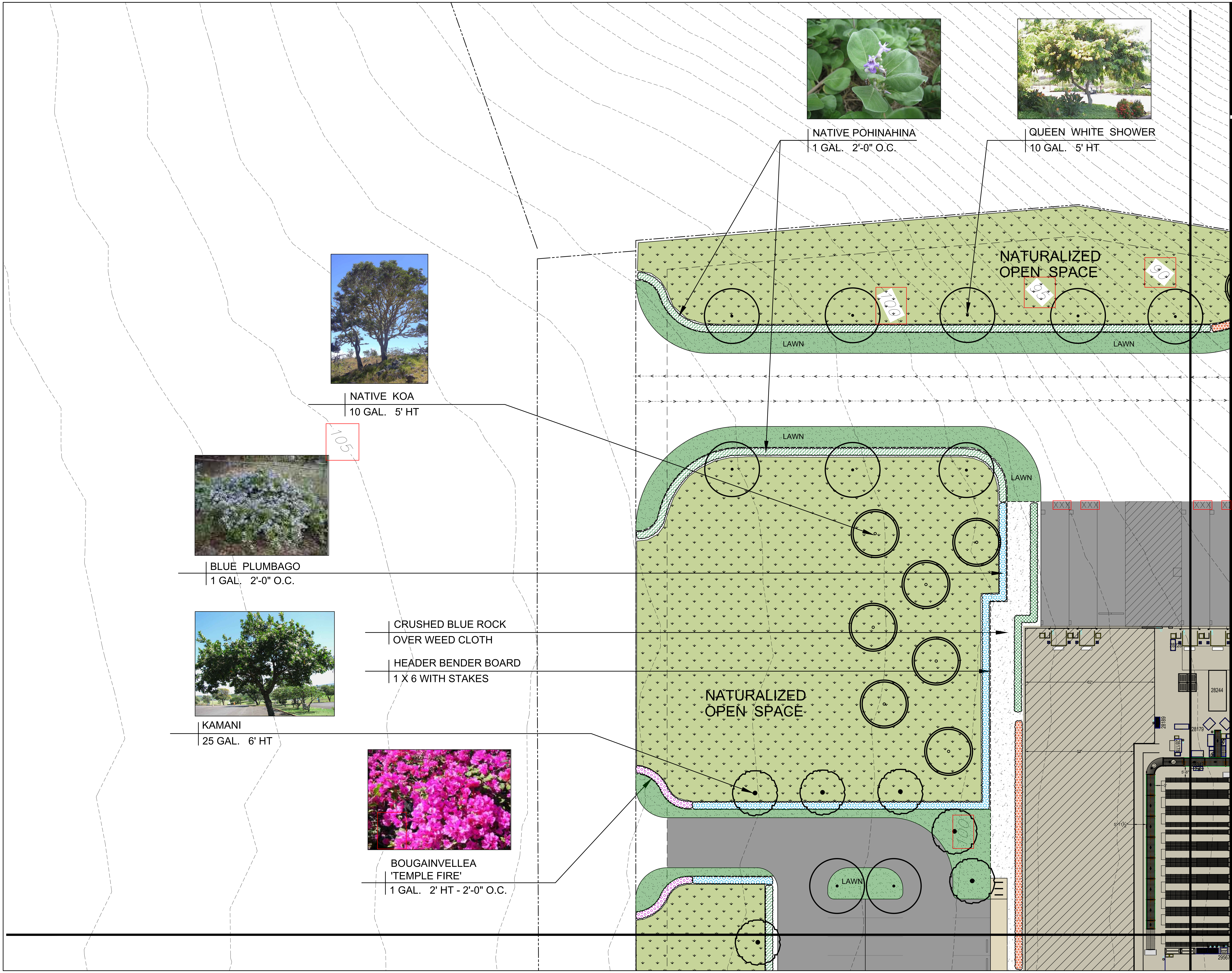
© 2024 CESO, INC.

Project Number:	7790
Scale:	1" = 20'
Drawn By:	KJ/BPM
Checked By:	BPM
Date:	12 MAY 2025
Issue:	PRELIMINARY

Drawing Title:

LANDSCAPE PLANTING PLAN SITE

LP-SITE-2


NATIVE POHINAHINA
1 GAL. 2'-0" O.C.
QUEEN WHITE SHOWER
10 GAL. 5' HT
NATIVE KOA
10 GAL. 5' HT
BLUE PLUMBAGO
1 GAL. 2'-0" O.C.
CRUSHED BLUE ROCK
OVER WEED CLOTH
HEADER BENDER BOARD
1 X 6 WITH STAKES
KAMANI
25 GAL. 6' HT
BOUGAINVELLEA
'TEMPLE FIRE'
1 GAL. 2' HT - 2'-0" O.C.
NATURALIZED OPEN SPACE
NATURALIZED OPEN SPACE
LAWN
LAWN
LAWN
LAWN
LAWN
100
95
90
105
XXX
XXX
XXX
28244
28179
28169
29567

CESO
WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1
TEST FIT

Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	Preliminary Floor Plan	11.22.2014

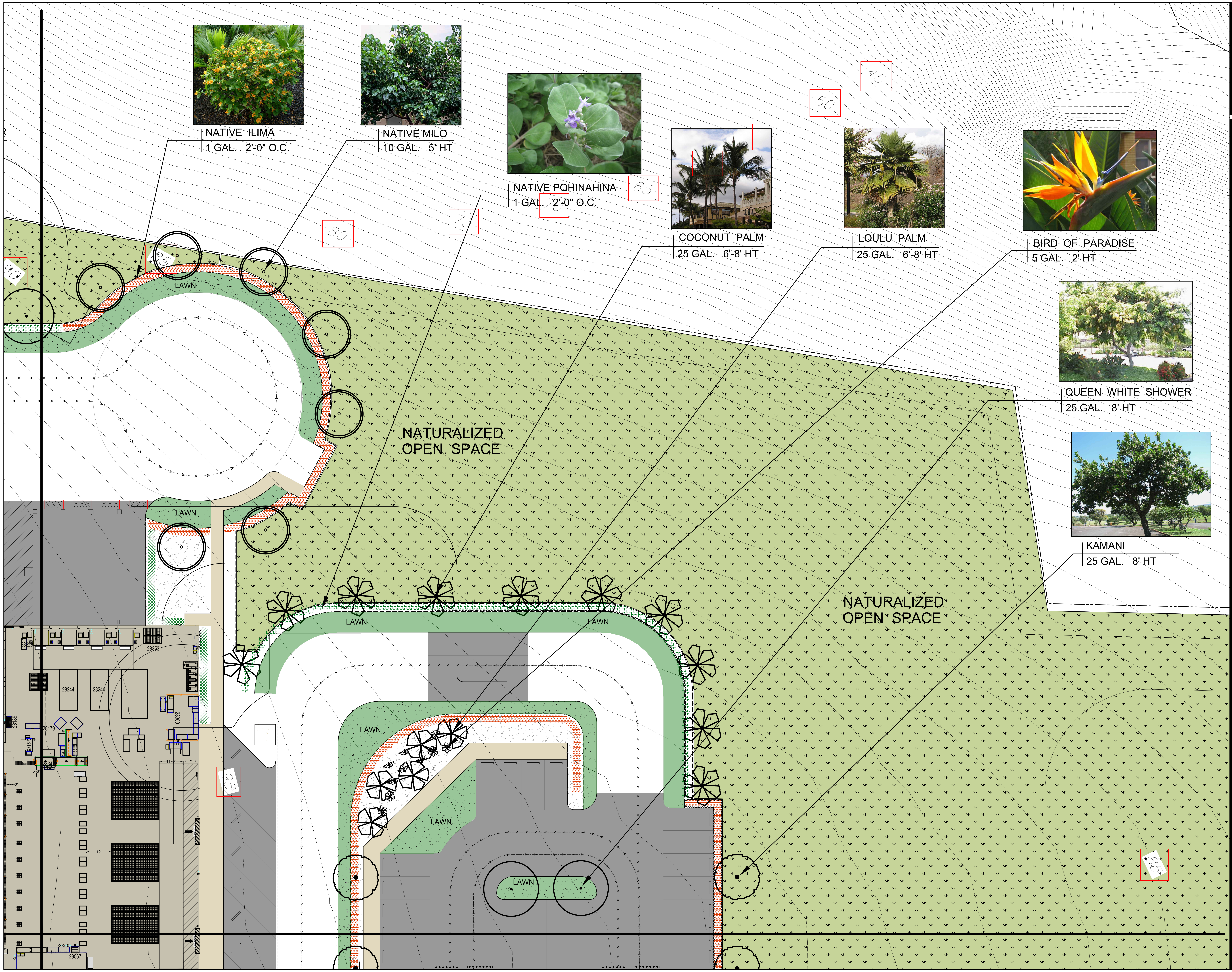
© 2024 CESO, INC.

Project Number:	7790
Scale:	1/16" = 1'-0"
Drawn By:	KJ/BPM
Checked By:	BPM
Date:	12 MAY 2025
Issue:	PRELIMINARY

Drawing Title:

LANDSCAPE PLANTING PLAN AREA 1

LP-1


NATIVE ILIMA
1 GAL. 2'-0" O.C.
NATIVE MILO
10 GAL. 5' HT
NATIVE POHINAHINA
1 GAL. 2'-0" O.C.
COCONUT PALM
25 GAL. 6'-8' HT
LOULU PALM
25 GAL. 6'-8' HT
BIRD OF PARADISE
5 GAL. 2' HT
QUEEN WHITE SHOWER
25 GAL. 8' HT
KAMANI
25 GAL. 8' HT
NATURALIZED OPEN SPACE
NATURALIZED OPEN SPACE
LAWN
LAWN
LAWN
LAWN
LAWN
LAWN
LAWN
45
50
65
75
80
85
90
95
28353
28244
28244
28350
28179
28169
29567

CESO
WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1
TEST FIT
Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	Preliminary Floor Plan	11.22.2014

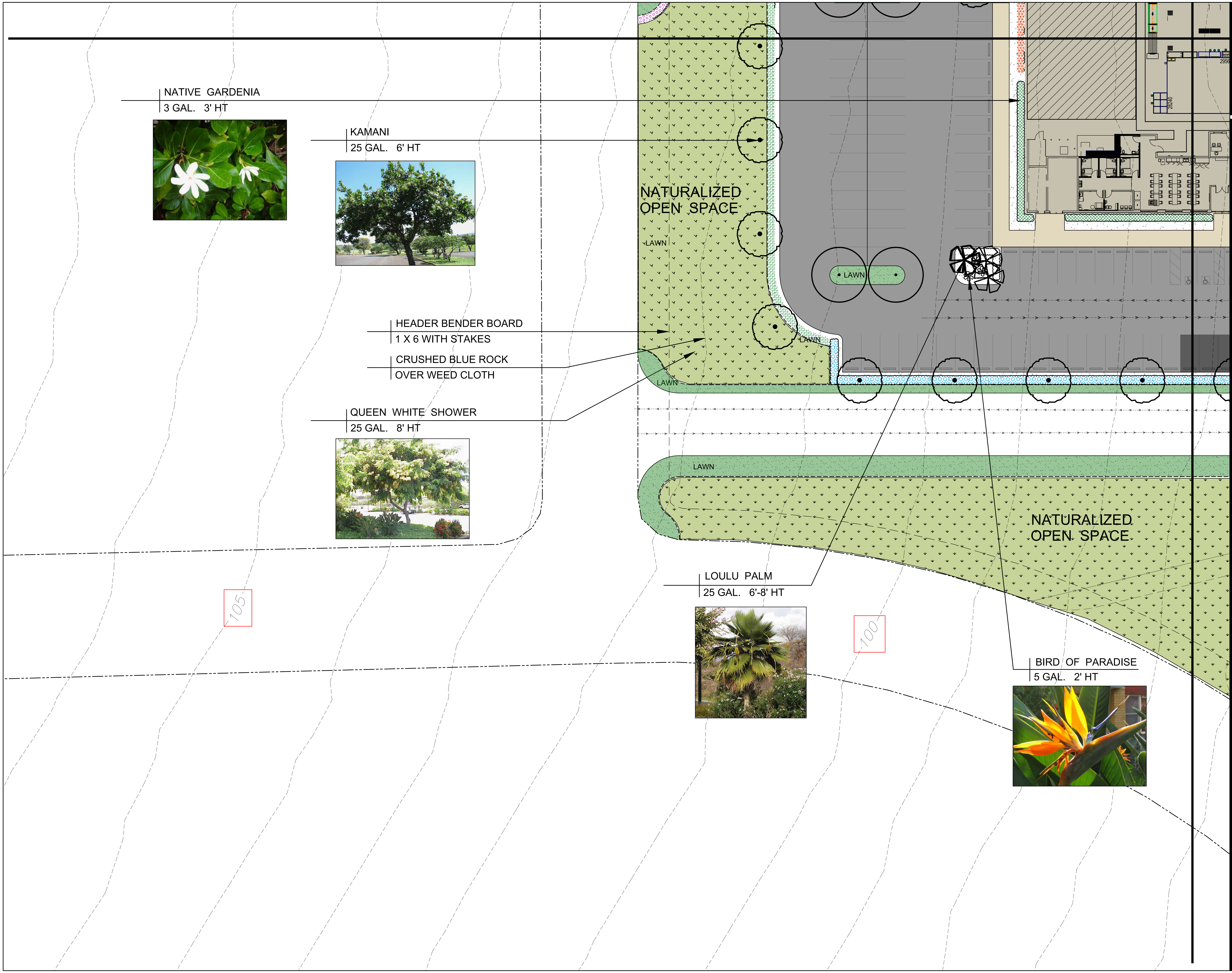
© 2024 CESO, INC.

Project Number:	7790
Scale:	1/16" = 1'-0"
Drawn By:	KJ/BPM
Checked By:	BPM
Date:	12 MAY 2025
Issue:	PRELIMINARY

Drawing Title:

LANDSCAPE PLANTING PLAN AREA 2

LP-2


NATURALIZED OPEN SPACE
LAWN
LAWN
LAWN
LAWN
LAWN
NATURALIZED OPEN SPACE
105
100
2956
28240

NATIVE GARDENIA
3 GAL. 3' HT

KAMANI
25 GAL. 6' HT

HEADER BENDER BOARD
1 X 6 WITH STAKES

CRUSHED BLUE ROCK
OVER WEED CLOTH

QUEEN WHITE SHOWER
25 GAL. 8' HT

LOULU PALM
25 GAL. 6'-8' HT

BIRD OF PARADISE
5 GAL. 2' HT

CESO
WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1
TEST FIT

Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	Preliminary Floor Plan	11.22.2014

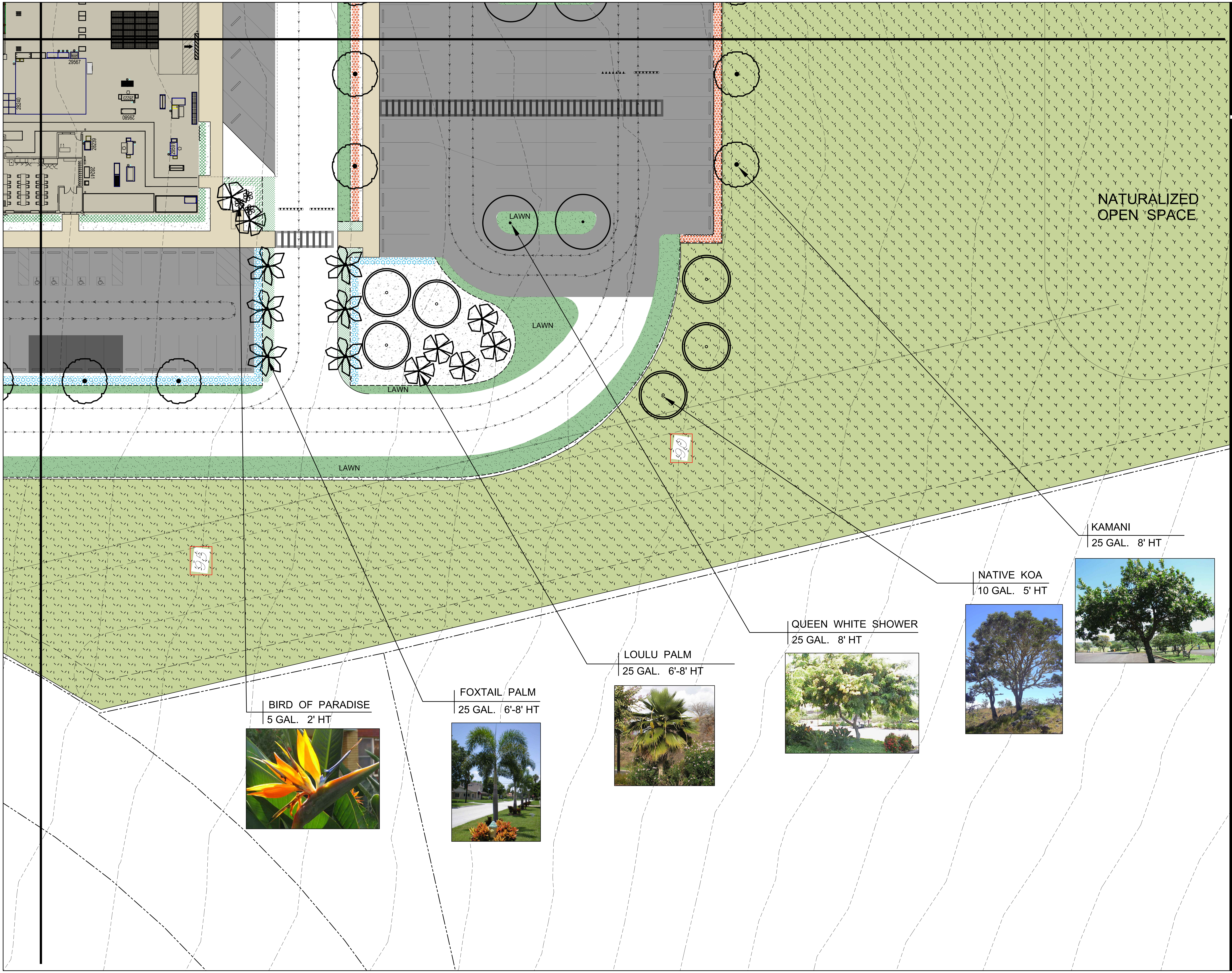
© 2024 CESO, INC.

Project Number:	7790
Scale:	1/16" = 1'-0"
Drawn By:	KJ/BPM
Checked By:	BPM
Date:	12 MAY 2025
Issue:	PRELIMINARY

Drawing Title:

LANDSCAPE PLANTING PLAN AREA 3

LP-3


NATURALIZED OPEN SPACE
LAWN
LAWN
LAWN
LAWN
KAMANI
25 GAL. 8' HT
NATIVE KOA
10 GAL. 5' HT
QUEEN WHITE SHOWER
25 GAL. 8' HT
LOULU PALM
25 GAL. 6'-8' HT
FOXTAIL PALM
25 GAL. 6'-8' HT
BIRD OF PARADISE
5 GAL. 2' HT
29567
28240
29560
28239
28241

CESO
WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1
TEST FIT
Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	Preliminary Floor Plan	11.22.2014

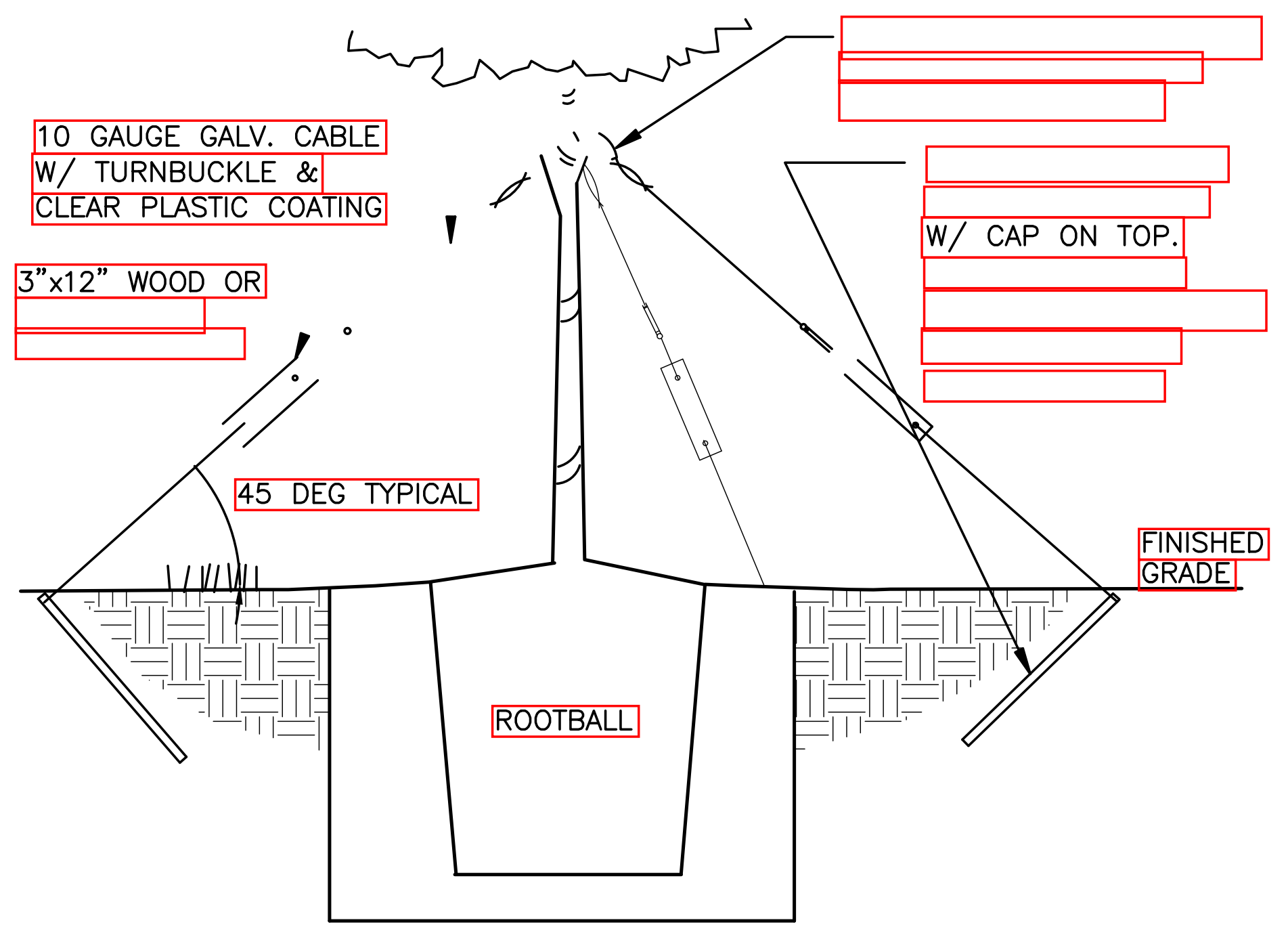
© 2024 CESO, INC.

Project Number:	7790
Scale:	1/16" = 1'-0"
Drawn By:	KJ/BPM
Checked By:	BPM
Date:	12 MAY 2025
Issue:	PRELIMINARY

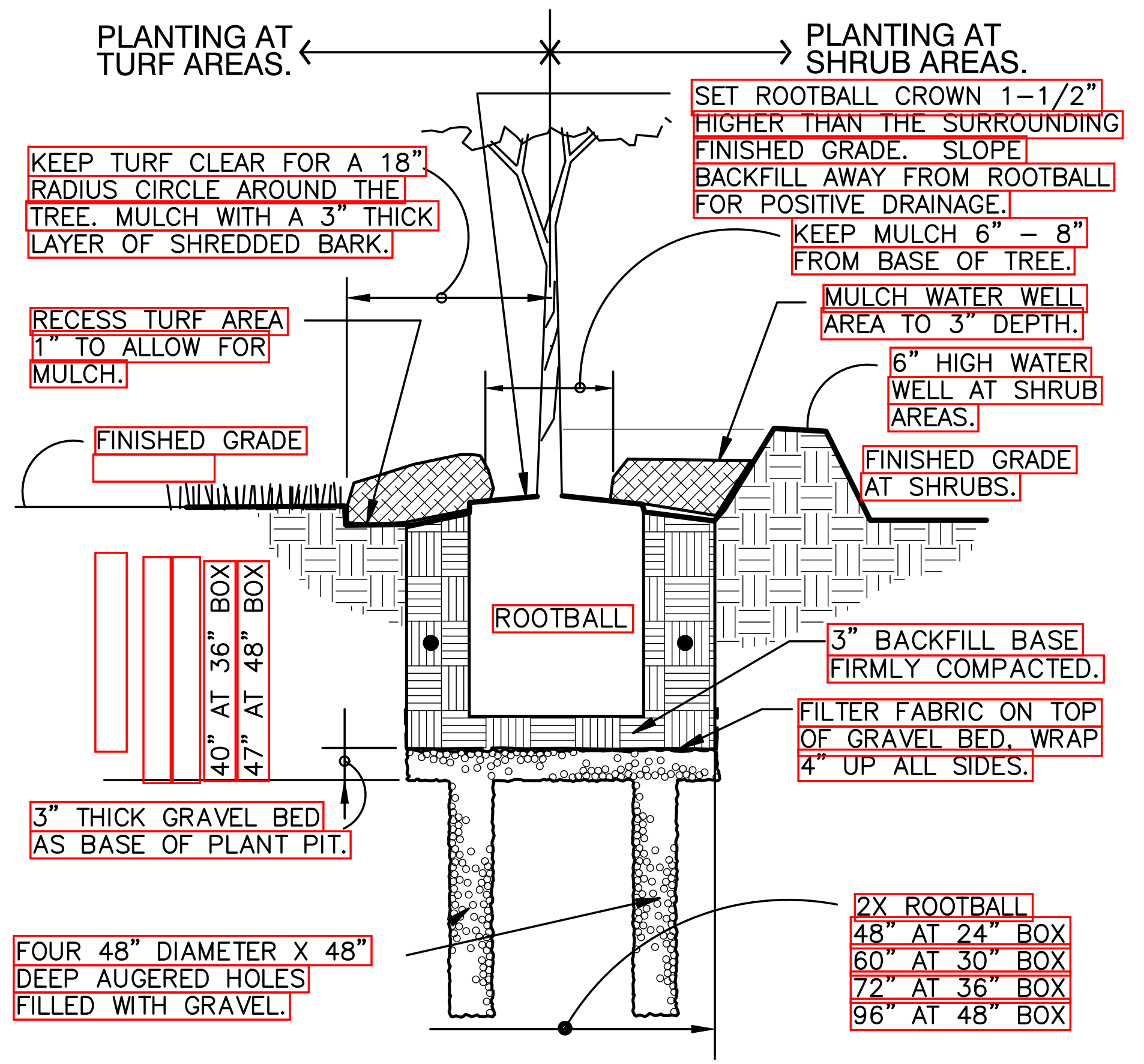
Drawing Title:

LANDSCAPE PLANTING PLAN AREA 4

LP-4

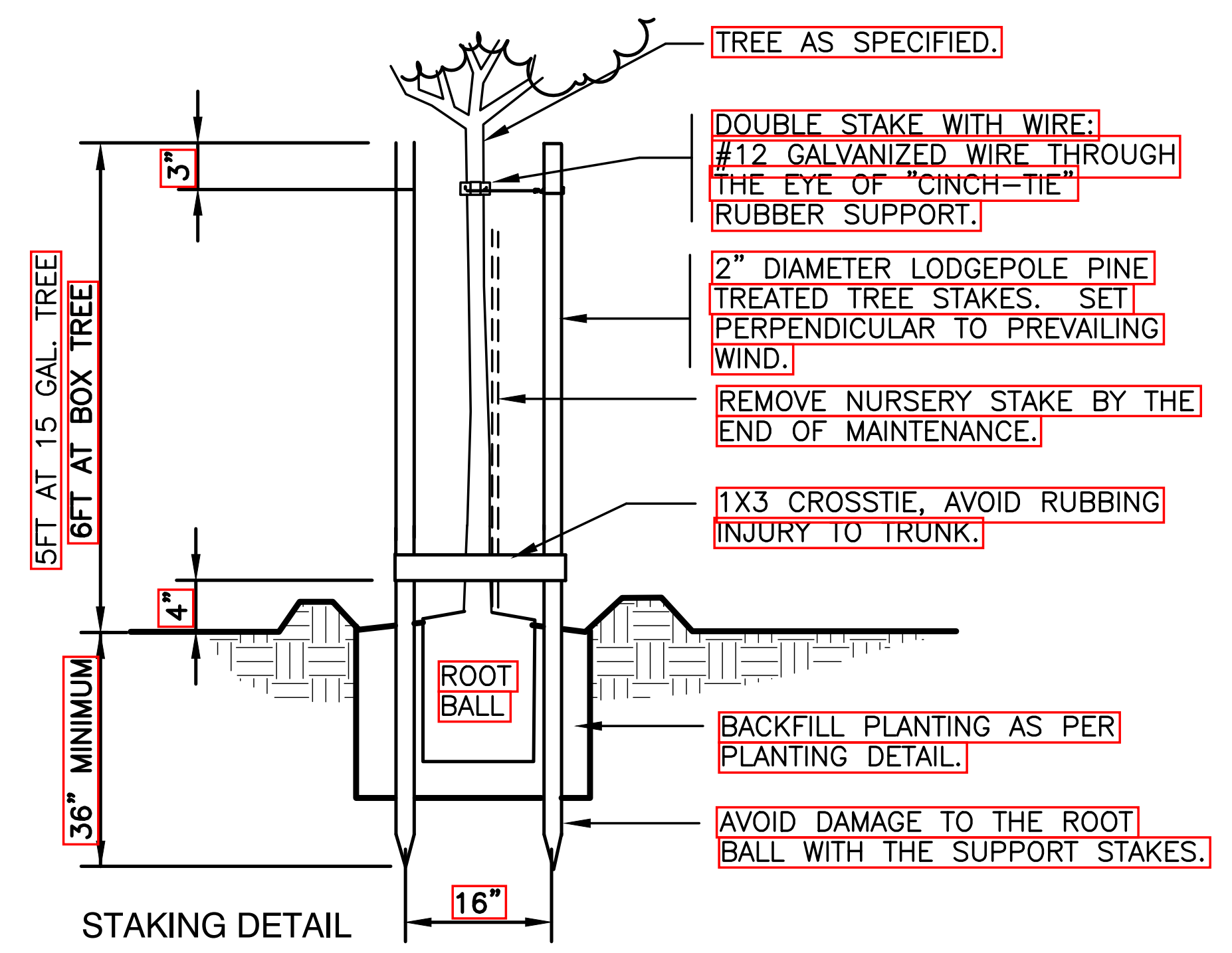

10 GAUGE GALV. CABLE
W/ TURNBUCKLE &
CLEAR PLASTIC COATING
3"x12" WOOD OR
W/ CAP ON TOP.
45 DEG TYPICAL
FINISHED GRADE
ROOTBALL

STAKING DETAIL

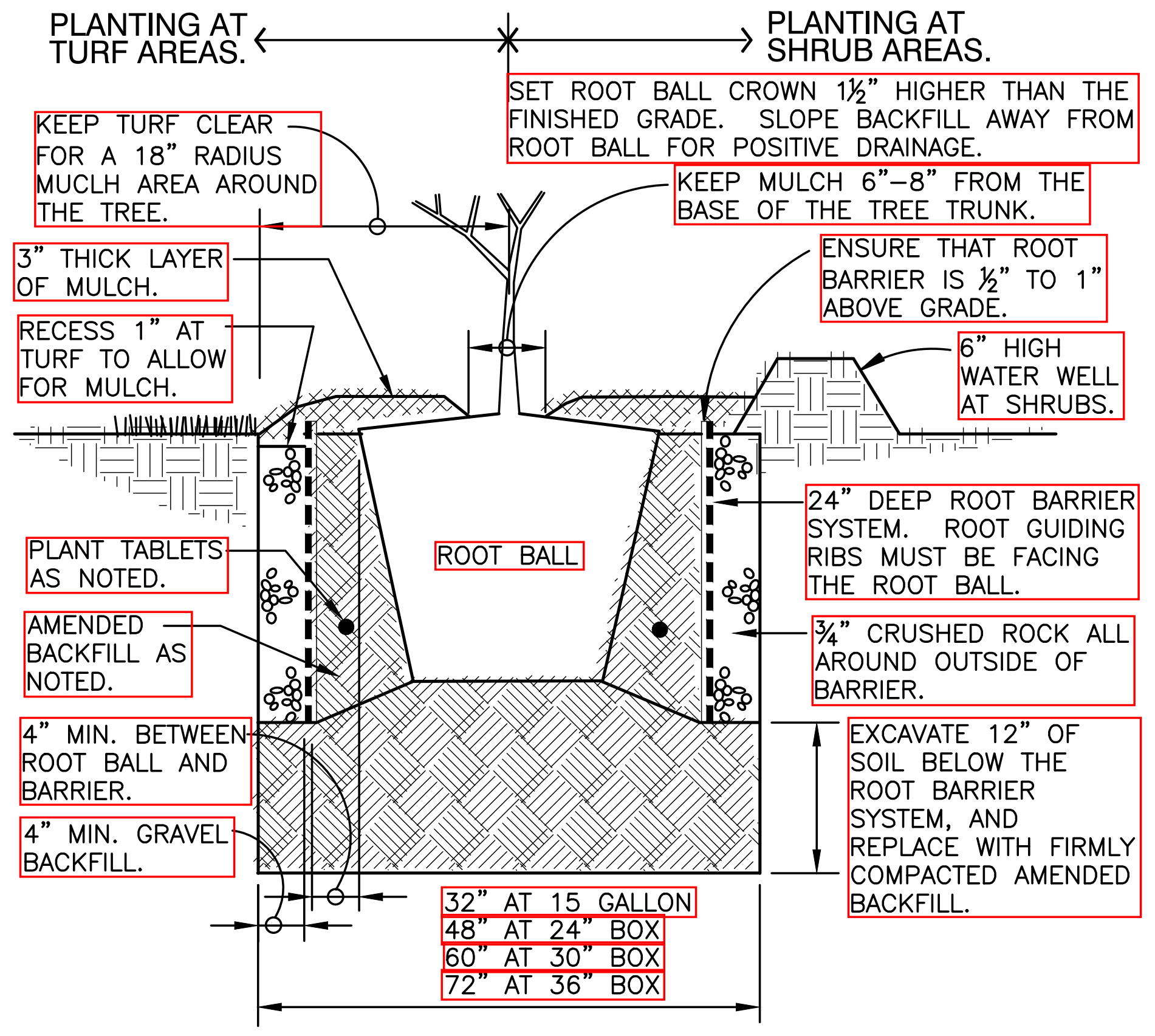

PLANTING AT TURF AREAS.
PLANTING AT SHRUB AREAS.
SET ROOTBALL CROWN 1-1/2" HIGHER THAN THE SURROUNDING FINISHED GRADE. SLOPE BACKFILL AWAY FROM ROOTBALL FOR POSITIVE DRAINAGE.
KEEP TURF CLEAR FOR A 18" RADIUS CIRCLE AROUND THE TREE. MULCH WITH A 3" THICK LAYER OF SHREDDED BARK.
KEEP MULCH 6" - 8" FROM BASE OF TREE.
MULCH WATER WELL AREA TO 3" DEPTH.
RECESS TURF AREA 1" TO ALLOW FOR MULCH.
6" HIGH WATER WELL AT SHRUB AREAS.
FINISHED GRADE
FINISHED GRADE AT SHRUBS.
ROOTBALL
40" AT 36" BOX
47" AT 48" BOX
3" BACKFILL BASE FIRMLY COMPACTED.
FILTER FABRIC ON TOP OF GRAVEL BED, WRAP 4" UP ALL SIDES.
3" THICK GRAVEL BED AS BASE OF PLANT PIT.
FOUR 48" DIAMETER X 48" DEEP AUGERED HOLES FILLED WITH GRAVEL.
2X ROOTBALL
48" AT 24" BOX
60" AT 30" BOX
72" AT 36" BOX
96" AT 48" BOX

PLANT PIT DETAIL

1 SPECIMEN TREE GUY WIRE PLANTING


TREE AS SPECIFIED.
DOUBLE STAKE WITH WIRE: #12 GALVANIZED WIRE THROUGH THE EYE OF "CINCH-TIE" RUBBER SUPPORT.
2" DIAMETER LODGEPOLE PINE TREATED TREE STAKES. SET PERPENDICULAR TO PREVAILING WIND.
REMOVE NURSERY STAKE BY THE END OF MAINTENANCE.
1X3 CROSSTIE, AVOID RUBBING INJURY TO TRUNK.
3"
5FT AT 15 GAL. TREE
6FT AT BOX TREE
4"
36" MINIMUM
ROOT BALL
BACKFILL PLANTING AS PER PLANTING DETAIL.
AVOID DAMAGE TO THE ROOT BALL WITH THE SUPPORT STAKES.
16"

STAKING DETAIL

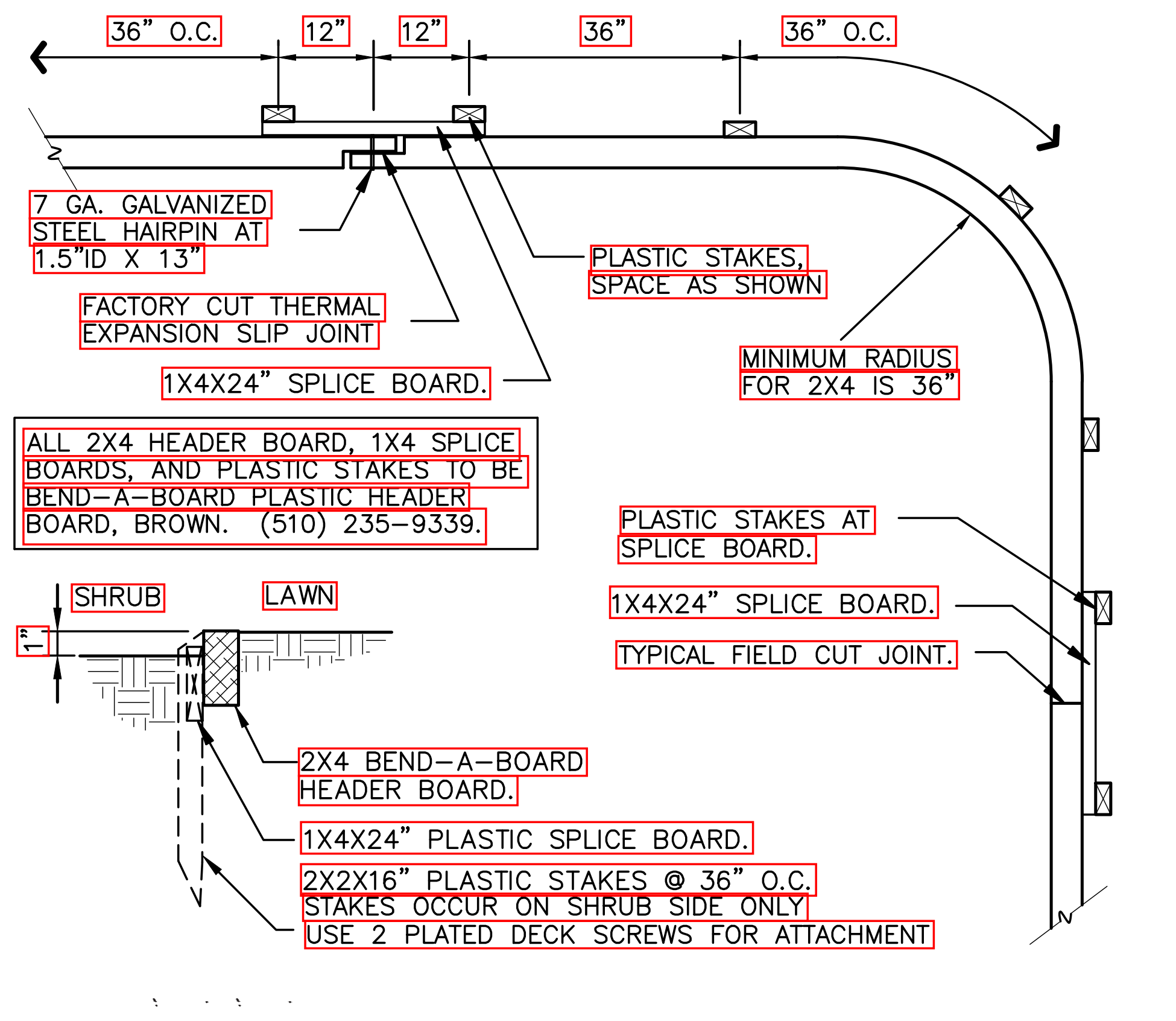

PLANTING AT TURF AREAS.
PLANTING AT SHRUB AREAS.
SET ROOT BALL CROWN 1½" HIGHER THAN THE FINISHED GRADE. SLOPE BACKFILL AWAY FROM ROOT BALL FOR POSITIVE DRAINAGE.
KEEP TURF CLEAR FOR A 18" RADIUS MUCLH AREA AROUND THE TREE.
KEEP MULCH 6"-8" FROM THE BASE OF THE TREE TRUNK.
3" THICK LAYER OF MULCH.
ENSURE THAT ROOT BARRIER IS ½" TO 1" ABOVE GRADE.
RECESS 1" AT TURF TO ALLOW FOR MULCH.
6" HIGH WATER WELL AT SHRUBS.
24" DEEP ROOT BARRIER SYSTEM. ROOT GUIDING RIBS MUST BE FACING THE ROOT BALL.
PLANT TABLETS AS NOTED.
ROOT BALL
AMENDED BACKFILL AS NOTED.
¾" CRUSHED ROCK ALL AROUND OUTSIDE OF BARRIER.
4" MIN. BETWEEN ROOT BALL AND BARRIER.
4" MIN. GRAVEL BACKFILL.
EXCAVATE 12" OF SOIL BELOW THE ROOT BARRIER SYSTEM, AND REPLACE WITH FIRMLY COMPACTED AMENDED BACKFILL.
32" AT 15 GALLON
48" AT 24" BOX
60" AT 30" BOX
72" AT 36" BOX

PLANT PIT DETAIL

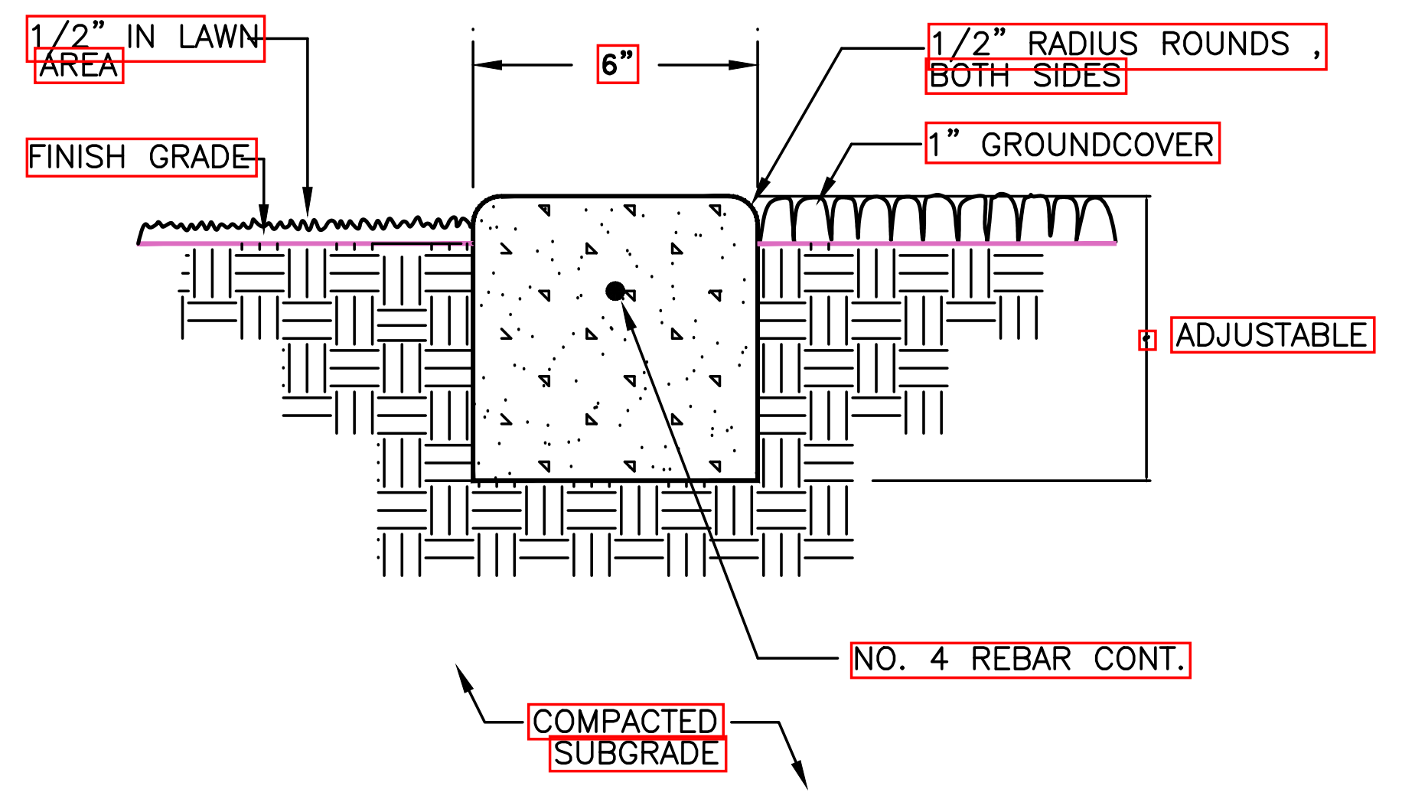
2 ROOT BARRIER TREE PLANTING

PLANT NOTES

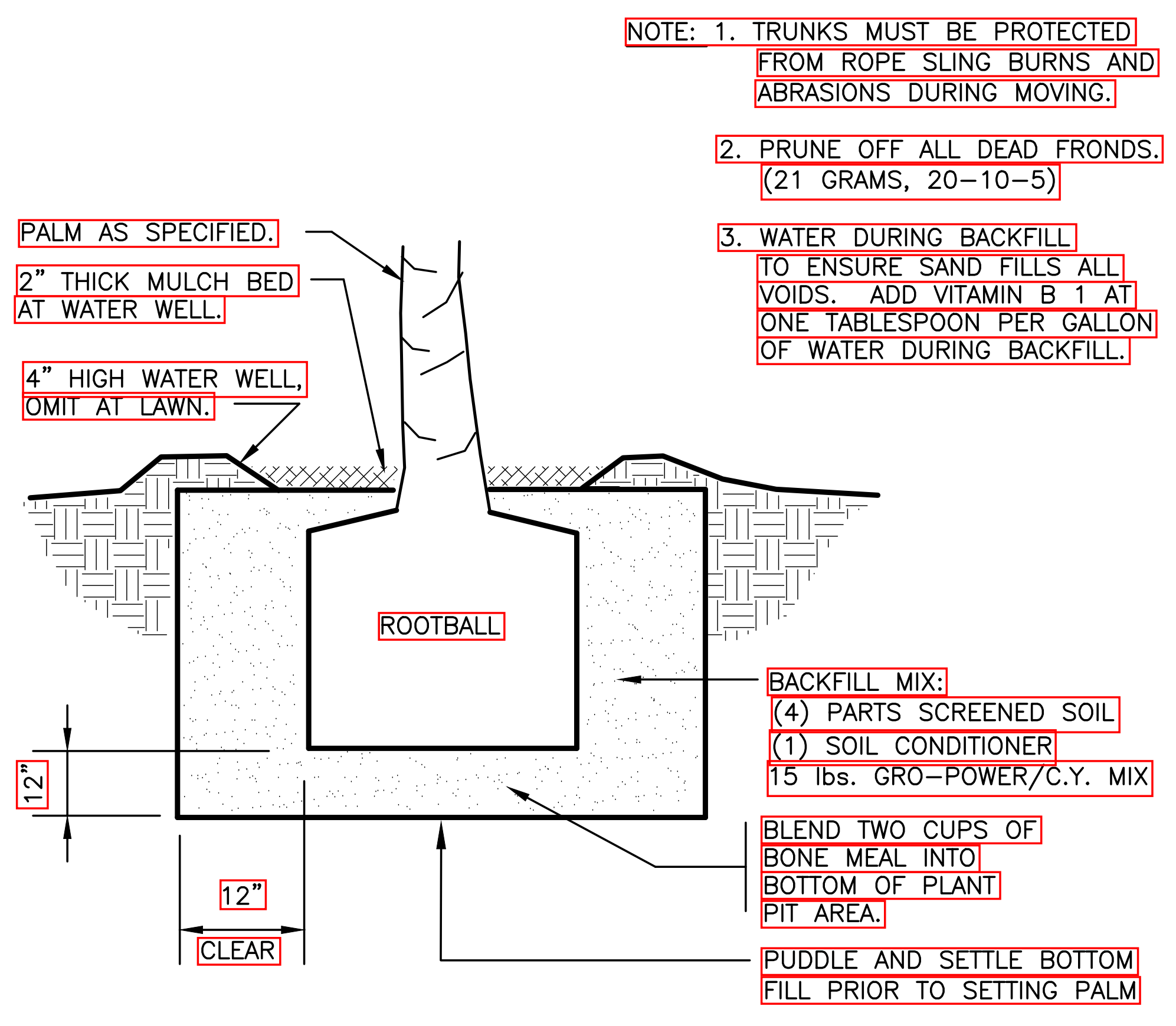
1. Contractor shall verify all plant quanities and dimension prior to construction.
2. Contractor shall be responsible for locating and protecting all existing utilities.
3. Notify and meet with the Landscape Architect prior to plant installation for verification and interpretation of plans.
4. Landscape contractor shall clear and grub planting areas prior to commencing with work.
5. All trees and palms to be field placed by landscape architect. Call 1 week prior to planting for coordination.
6. All trees and palms within 5'-0" of Road, Concrete,Irrigation Main or Utilities to have Rootbarrier.
7. All planting areas to have 6" depth of imported top soil.


36" O.C.
12"
12"
36"
36" O.C.
7 GA. GALVANIZED STEEL HAIRPIN AT 1.5"ID X 13"
FACTORY CUT THERMAL EXPANSION SLIP JOINT
1X4X24" SPLICE BOARD.
PLASTIC STAKES, SPACE AS SHOWN
MINIMUM RADIUS FOR 2X4 IS 36"
ALL 2X4 HEADER BOARD, 1X4 SPLICE BOARDS, AND PLASTIC STAKES TO BE BEND-A-BOARD PLASTIC HEADER BOARD, BROWN. (510) 235-9339.
PLASTIC STAKES AT SPLICE BOARD.
1X4X24" SPLICE BOARD.
TYPICAL FIELD CUT JOINT.
SHRUB
LAWN
1"
2X4 BEND-A-BOARD HEADER BOARD.
1X4X24" PLASTIC SPLICE BOARD.
2X2X16" PLASTIC STAKES @ 36" O.C. STAKES OCCUR ON SHRUB SIDE ONLY USE 2 PLATED DECK SCREWS FOR ATTACHMENT

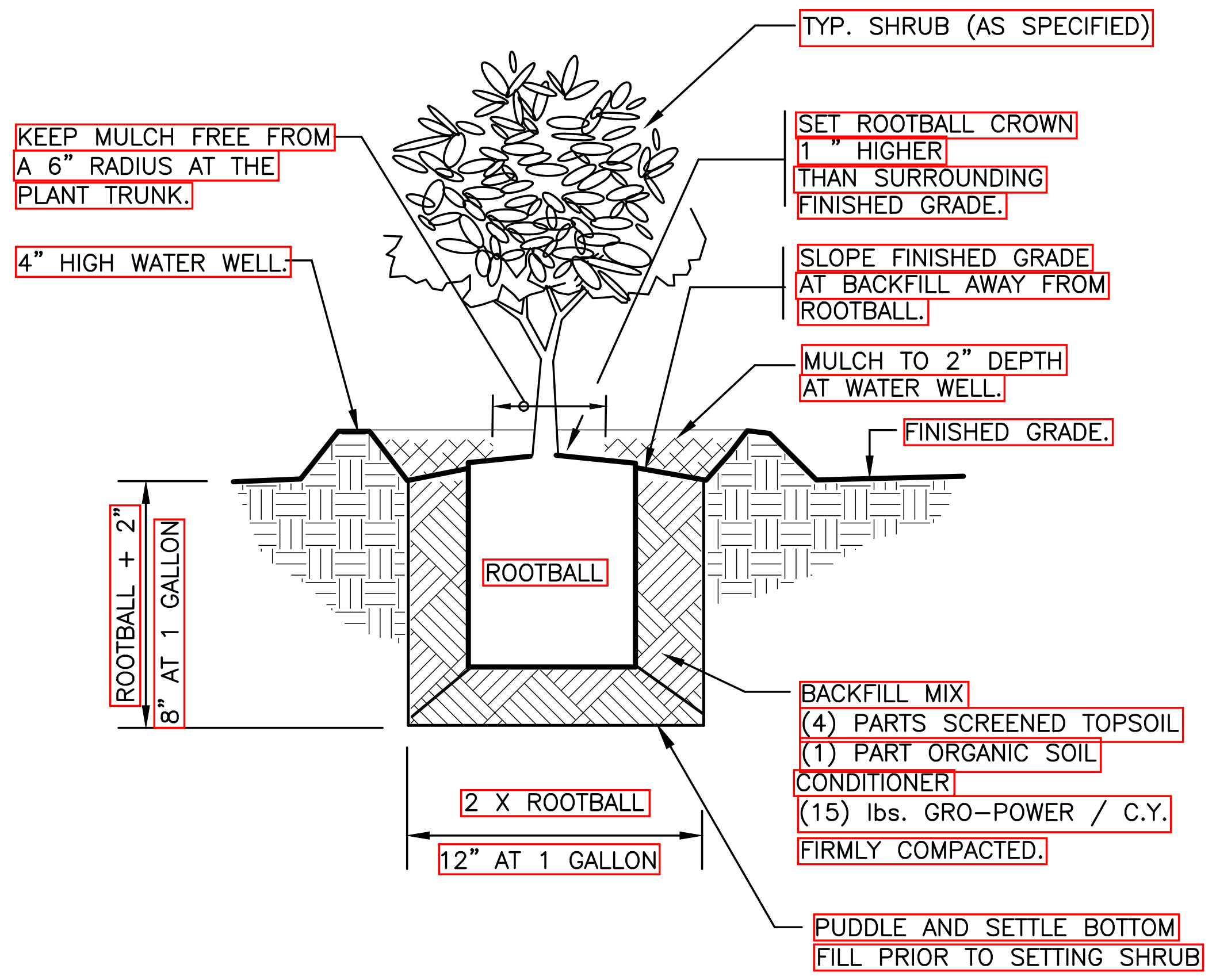
3 TREX 1 X 6 HEADER


1/2" IN LAWN AREA
FINISH GRADE
6"
1/2" RADIUS ROUNDS , BOTH SIDES
1" GROUNDCOVER
ADJUSTABLE
NO. 4 REBAR CONT.
COMPACTED SUBGRADE

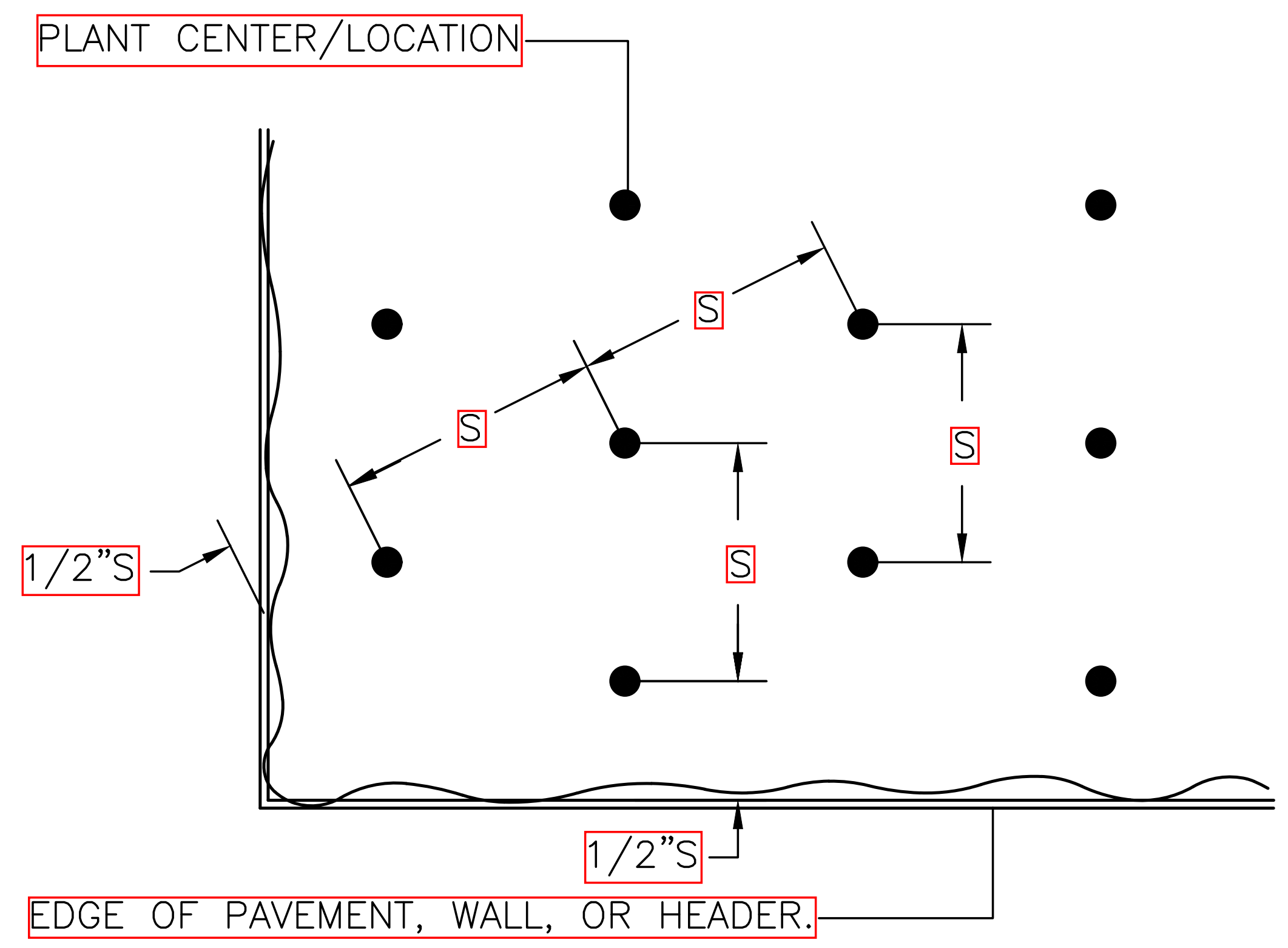
4 CONCRETE HEADER


NOTE: 1. TRUNKS MUST BE PROTECTED FROM ROPE SLING BURNS AND ABRASIONS DURING MOVING.
2. PRUNE OFF ALL DEAD FRONDS. (21 GRAMS, 20-10-5)
3. WATER DURING BACKFILL TO ENSURE SAND FILLS ALL VOIDS. ADD VITAMIN B 1 AT ONE TABLESPOON PER GALLON OF WATER DURING BACKFILL.
PALM AS SPECIFIED.
2" THICK MULCH BED AT WATER WELL.
4" HIGH WATER WELL, OMIT AT LAWN.
ROOTBALL
BACKFILL MIX:
(4) PARTS SCREENED SOIL
(1) SOIL CONDITIONER
15 lbs. GRO-POWER/C.Y. MIX
12"
BLEND TWO CUPS OF BONE MEAL INTO BOTTOM OF PLANT PIT AREA.
12"
CLEAR
PUDDLE AND SETTLE BOTTOM FILL PRIOR TO SETTING PALM

4 PALM TREE PLANTING


TYP. SHRUB (AS SPECIFIED)
KEEP MULCH FREE FROM A 6" RADIUS AT THE PLANT TRUNK.
SET ROOTBALL CROWN 1 " HIGHER THAN SURROUNDING FINISHED GRADE.
4" HIGH WATER WELL.
SLOPE FINISHED GRADE AT BACKFILL AWAY FROM ROOTBALL.
MULCH TO 2" DEPTH AT WATER WELL.
FINISHED GRADE.
ROOTBALL + 2"
8" AT 1 GALLON
ROOTBALL
BACKFILL MIX
(4) PARTS SCREENED TOPSOIL
(1) PART ORGANIC SOIL CONDITIONER
(15) lbs. GRO-POWER / C.Y.
FIRMLY COMPACTED.
2 X ROOTBALL
12" AT 1 GALLON
PUDDLE AND SETTLE BOTTOM FILL PRIOR TO SETTING SHRUB

5 SHRUB PLANTING


PLANT CENTER/LOCATION
S
S
S
S
1/2"S
1/2"S
EDGE OF PAVEMENT, WALL, OR HEADER.

NOTES: S = SPACING, REFER TO PLANT LIST FOR DISTANCE
2. USE SPACING LAYOUT FOR SHRUBS,
GROUNDCOVERS AND ANNUALS

6 PLANT SPACING

CESO
WWW.CESOINC.COM
175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.

WHI1
TEST FIT
Ahukini Business Park,
Lihue, HI 96766

Revisions / Submissions

ID	Description	Date
	X	X

© 2024 CESO, INC.

Project Number:	7790
Scale:	AS NOTED
Drawn By:	KJ/BPM
Checked By:	BPM
Date:	12 MAY 2025
Issue:	PRELIMINARY

Drawing Title:
LANDSCAPE PLANTING DETAILS

LP-5

EXHIBIT 2

KODANI & ASSOCIATES ENGINEERS, LLC

Date: 4/21/2025
Project: Project Winston - SMA Portion Option of Probable Construction Cost
Location: Ahukini Business Park, Lot 4, TMK (4) 3-7-002: 021
Client: BH DevCo
Stage: Preliminary Design

Notes: This estimate includes only the proposed development within SMA zone.

Item #	Quantity	Unit	Description	Unit Price	Total Price
1	1.8	AC	Clearing & Grubbing	$ 20,000.00	$ 36,000.00
2	2,500	CY	Earthwork - Embankment	$ 20.00	$ 50,000.00
3	22,040	SF	Street Paving (8" Agg, 3" Asphalt)	$ 8.00	$ 176,320.00
4	582	SF	Sidewalk, Concrete	$ 40.00	$ 23,280.00
5	67	LF	Pavement Marking	$ 20.00	$ 1,340.00
6	750	LF	Site, Fencing	$ 25.00	$ 18,750.00
7	30	LF	Site, PR.Retaining Wall	$ 1,000.00	$ 30,000.00
8	34	LF	Site, Dumpster Enclosure Wall	$ 400.00	$ 13,600.00
9	55,410	SF	Landscape,Grass	$ 1.00	$ 55,410.00
10	19	EA	Landscape, Trees	$ 500.00	$ 9,500.00
11	2664	SF	Landscape, Shrub	$ 2.00	$ 5,328.00
12	1.8	AC	Landscape, Irrigation	$ 10,000.00	$ 18,000.00
				Opinion of Probable Construction Cost:	437,528.00

EXHIBIT 3

DEPARTMENT OF PLANNING
KAʻĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

COUNTY OF KAUAʻI
STATE OF HAWAIʻI

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

SUPPLEMENT #1 TO SUBDIVISION REPORT

DATE: December 26, 2023

RE: Subdivision Application No. S-2005-41
(Ahukini Makai Subdivision)

APPLICANT: Visionary, LLC.

Background

At the Planning Commission Meeting held on May 9, 2023, the subject subdivision application was featured as an agenda item on the Subdivision Committee's agenda for Final Subdivision Map Approval. During the meeting there were concerns raised regarding the requirement and submission of a Ka Paʻakai O Kaʻaina Analysis for the project area. Consequently, the Planning Commission voted to refer the subdivision application back to the Subdivision Committee, pending the submission of a Ka Paʻakai O Kaʻaina Analysis.

On December 6, 2023, the Applicant submitted a Ka Paʻakai O Kaʻaina Analysis for project area, and it is attached as Exhibit 'A' for the Planning Commission's reference.

Evaluation and Conclusion

A Ka Paʻakai O Kaʻaina Analysis was prepared by Cultural Surveys Hawaiʻi, Inc. for the proposed development. The analysis describes the historic and traditional accounts associated with the Hanamāʻulu Ahupuaʻa as well as provides a summary of archaeological studies that have been conducted in the vicinity of the project area. The analysis also provides a detailed summary of the community outreach that was conducted including oral and written testimony of individuals that were contacted.

The consultation outreach involved attempting to contact Hawaiian organizations, agencies, and community members as well as cultural and lineal descendants in order to identify individuals with cultural expertise and/or knowledge of the project area and vicinity. Community outreach letters were sent to 37 individuals or groups by email and/or U.S. Postal Service with additional follow-up by text or phone. As represented, Cultural Surveys Hawaii completed the community consultation in July 2023 and ten (10) individuals had responded in which two provided written testimony, and two of these Kamāʻaina and/or Kūpuna met with Cultural Surveys Hawaii for more in-depth interviews.

F.1.a.2.
Jan. 9, 2024

Based on the information contained in the analysis and evaluating the historical information that was available to the department, the department finds that the proposed development at its designated location should have no impact on any known Hawaiian traditional or customary practices for the following reasons:

- There are no known traditional or customary practices of Native Hawaiians that are presently occurring at the project site.
- There are no known special gathering practices taking place or resources located at the project site or within the vicinity of the project site.
- The Project should not detrimentally inhibit access to any streams; access to the shoreline or other adjacent shoreline areas; gathering along any streams, the shoreline or in the ocean.
- There are no records of trails running through the Ahukini Makai Subdivision project area.
- There are no known religious practices taking place within the project site.
- There are no known pre-contact cultural or historic sites or resources located within the Project Site.
- There are no known burials within the Project Area.

The analysis also discussed concerns regarding the indirect adverse impacts to the ʻāina, wai, and kai of Hanamāʻulu by project-related erosion or wastewater management. As discussed in the analysis, the County of Kauaʻi has a drainage policy that applies to development projects. A drainage report was prepared for this project and approved by the County of Kauaʻi. Based on the proposed grading and drainage improvement designs, the post-development drainage conditions will be less than the pre-development drainage conditions.

Recommendation

Following the evaluation and conclusion outlined above, the department maintains its recommendation of Final Subdivision Map Approval for Subdivision Application No. S-2005-41, as recommended at the Planning Commission Meeting held on May 9, 2023.

By ______________ for
~~Kaaina Hull~~
Director of Planning

Exhibit ‘A’

(Ka Pa‘akai O Ka‘aina Analysis)

LETTER OF TRANSMITTAL

Date: December 6, 2023

To:
Kenny Estes
Staff Planner
Planning Department
County of Kauai
4444 Rice Street, Suite A473
Lihue, HI 96766

COUNTY OF KAUAI
'23 DEC -6 P2:20
PLANNING DEPT.

Re:
TMK (4) 3-6-002:001, 017 and 027
TMK (4) 3-7-001:001 and (4) 3-7-002:012
TMK (4) 3-7-002:001

We are sending you (X) enclosed ( ) under separate cover, the following:

Copies of Final Ka Pa`akai Analysis Covering:
Wailani Subdivision Project
Ahukini Mauka Subdivision Project
Ahukini Makai Subdivision Project

(X) For your information
( ) For your files
( ) For review and comment
( ) For correction
( ) For distribution
( ) Per your request
( ) Per our agreement
( ) Per our conversation
( ) Approved
( ) Approved as noted
( ) Disapproved
( ) For payment

( ) For necessary action
( ) For signature in BLACK INK & RETURN
( ) For signature in BLACK INK and FORWARD TO:
____
____
( ) For filing or recording
( ) Checks enclosed to cover filing or recording fee
____

(X) See remarks below

REMARKS: Enclosed are copies of the Final Ka Pa`akai Analysis for the above-referenced project sites. Should you have any questions, please feel free to contact me at 808-245-3775.

By: ________________________
David Hinazumi
Senior Vice President

Encl.

3-1850 Kaumualii Highway, Lihue, HI 96766-7069
Phone: 808.245.3678 Fax: 808.246.9470

Final

Ka Pa‘akai Analysis for the Ahukini Makai Subdivision Project, Hanamā‘ulu Ahupua‘a, Līhu‘e District, Kaua‘i

TMK: (4) 3-7-002:001

Prepared for
Visionary LLC

Prepared by
Kellen Tanaka, B.A.,
David W. Shideler, M.A.,
and
Hallett H. Hammatt, Ph.D.

Cultural Surveys Hawai‘i, Inc.
Kailua, Hawai‘i
(Job Code: HANAMAULU 15)

December 2023

O‘ahu Office
P.O. Box 1114
Kailua, Hawai‘i 96734
Ph.: (808) 262-9972
Fax: (808) 262-4950

www.culturalsurveys.com

Maui Office
1860 Main St.
Wailuku, Hawai‘i 96793
Ph.: (808) 242-9882
Fax: (808) 244-1994

Management Summary

Reference	Ka Pa'akai Analysis for the Ahukini Makai Subdivision Project, Hanamā'ulu Ahupua'a, Līhu'e District, Kaua'i, TMK: (4) 3-7-002:001 (Tanaka et al. 2023)
Date	December 2023
Project Number(s)	Cultural Surveys Hawai'i, Inc. (CSH) Job Code: HANAMAULU 15
Agencies	County of Kaua'i Department of Planning
Land Jurisdiction	Private, Visionary LLC
Project Location	The Ahukini Makai Subdivision is proposed on a 171.869-acre (69.4-hectare) TMK (4) 3-7-002:001 parcel of fallow, former sugarcane land in *makai* (seaward) Hanamā'ulu Ahupua'a on southeast Kaua'i just southwest of Hanamā'ulu Bay and approximately 2.0 km northeast of the county capital, Līhu'e. On the northwest side the proposed Ahukini Makai Subdivision is bounded by Kapule Highway and is roughly bounded on the southeast side by Ahukini Road which also bounds the south side. The north side is effectively bounded by deeply dissected Hanamā'ulu Valley. The project area is depicted on a portion of the 1996 Lihue and Kapaa U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (Figure 1) as well as several other maps and aerial photographs. An approximately 32.84 acre (13.29 hectare) Remainder of parcel 001 will not be developed but will remain in conservation (see Ahukini Makai Subdivision map, Figure 4).
Project Description	Visionary LLC is proposing to construct industrial lots and supporting infrastructure for an Ahukini Makai Subdivision. A subdivision map is provided (Figure 5). Development will involve grading and excavation for utilities, roads, industrial sites, and landscaping.
Project Acreage	Approximately 170 acres
Document Purpose and Regulatory Context	The Kaua'i County Planning Department has indicated a need for Ka Pa'akai Assessment studies to attend applications for Planning Department processing. The Planning Department has kindly supplied a Kaua'i Planning Department Worksheet for Ka Pa'akai Assessment which is regarded here as the guiding document. The purpose of the present Ka Pa'akai Analysis and Assessment is to assist the client and the Kaua'i Planning Department in their effort to 1) ensure the applicant has sufficiently assessed that the proposed project/action will not harm traditional and customary practices exercised by Native Hawaiians; and 2) to provide sufficient documentation to support the applicant's assessment. This work is designed to address the letter and spirit of the following:

	- Ka Pa'akai O Ka'aina v. Land Use Commission (94 Hawai'i 31), in which the Hawai'i Supreme Court established a three-part analytical framework to assist the state and counties in fulfilling their constitutional obligation to preserve and protect traditional and customary practices (TCP ["TCP" is used here as it is used in the *Kaua'i Planning Department Worksheet for Ka Pa'akai Assessment* to refer to "traditional and customary practices]) exercised by Native Hawaiians, to the extent feasible, and The mandate set forth by the Hawai'i State Constitution (Articles IX and XII), courts, Hawai'i Revised Statutes (HRS), and Hawai'i Administrative Rules (HAR) and other Hawai'i State laws requiring government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups.
Results of Background Research	Background research for this study yielded the following results, presented in approximate chronological order: 1. The original *moku* (district) for the study area covered in this report was Puna, which means "spring of water." Līhu'e (literally translated as "cold chill;" Pukui et al. 1974:132) became the modern political name for the traditional *moku* of Puna. According to Ethel Damon (1931:402), the name Līhu'e was first applied to this area by Kaikio'ewa, Governor of Kaua'i in the 1830s, perhaps after Kaikio'ewa's upcountry residence on the island. This late derivation of the name has been recently disputed (Griffin 2012:46). 2. The project area is in the *ahupua'a* (traditional land division usually extending from the mountains to the sea) of Hanamā'ulu. The *ahupua'a* name means "tired (as from walking) bay" (Pukui et al. 1974:41). Wichman (1998:61) relates that Hanamā'ulu Bay was given this name because it was "off the main around-the-island trail and a traveler had to walk extra miles to get there." 3. Very little is documented regarding traditional settlement patterns at Hanamā'ulu prior to the documentation of native tenant claims following the Māhele land division of 1848. A few authors that have attempted historical study of the *ahupua'a* (Kalima and Wong Smith in Corbin et al. 2002:B-1 through B-12, Creed 2006:6-28) are easily distracted by the wealth of data pertaining to Wailua Ahupua'a up the coast. "Few sources refer specifically to Hanamā'ulu and the information contained in them is general in nature" (Kalima and Wong Smith in Corbin et al. 2002:B-1). 4. There are relatively few *ka'ao* or legends pertaining to Hanamā'ulu and the references in most accounts like that of the volcano goddess Pele, her lover Lohi'au, and the cultural hero Kawelo are somewhat in passing. The suggestion of inhospitality

at Hanamā‘ulu recorded by Rice (“Lohiau found all the houses but one closed” [Rice 1923:16]) is reminiscent of the Hawaiian proverb *No Hanamā‘ulu ka ipu puehu,* or “the quickly emptied container belongs to Hanamā‘ulu” (Pukui 1983:252), which implies the food containers of Hanamā‘ulu were often bare—a plausible reason for the local residents to be stingy. The Wichman (1998:60–61) account of the Hanamā‘ulu people being known as miserly is notable.

5. In pre-Contact and early historic times, the *ahupua‘a* of Hanamā‘ulu was permanently inhabited and intensively used with traditional taro growing and fishing and a dispersed hamlet of thatched houses in the *makai* portion of Hanamā‘ulu valley. The characterization of the surrounding coastal plateau land (Figure 8) as “grassy land with volcanic boulders here and there” and the relatively low coastal rainfall help us understand why our accounts of traditional Hawaiian habitation and agriculture were almost exclusively in the *makai* portion of Hanamā‘ulu valley. The existence of a “village” in the uplands of Hanamā‘ulu related in the account of *The Greedy ‘O‘opu Eaters* (see Section 3.4) suggests there may have been upland settlement.
6. The relative absence of early identified archaeological sites (Bennett mentions two, one shared with Wailua Ahupua‘a) suggests a general absence of intensive traditional Hawaiian activity outside of Hanamā‘ulu valley. Bennett’s reference to his Site 103 dune burials may indicate a normative burial practice in coastal sands to the north.
7. Victoria Kamāmalu was awarded the *ahupua‘a* of Hanamā‘ulu (and Kalapakī) under Land Commission Award (LCA) 7713:2. The Victoria Kamāmalu award (LCA 7713:2 part 7) includes all the land within the present project area. All of the native tenant LCA awards were in Hanamā‘ulu valley and there were no native tenant awards in the project area. While we have a few insights into Hanamā‘ulu (like the reserved seafood and plants) during her ownership, she had, for example, 79 *ahupua‘a*-sized lands on O‘ahu, 14 on Maui, and 58 on Hawai‘i Island.(Kame‘eleihiwa 1992:124) so it is safe to say she did not have particularly strong connections to Hanamā‘ulu.
8. Traditional Hawaiian practices would have included some agricultural endeavors in the uplands and gathering of a variety of upland resources. The annual rainfall gradient in Hanamā‘ulu from 997 mm (39.3 inches) at the neighboring coastal Lihue Airport Station (which is suggested as marginal for non-irrigated agriculture) to 2,490 mm (98.0 inches) per year at the Kukaua Station on Kilohana Crater (Giambelluca et al. 2013) suggests

	upland activities would have most likely been significantly inland where the rainfall could support a more diverse biome. 9. Following the death of Victoria Kamāmalu in 1866, her 9,177 acres in Hanamā'ulu (according to the acre number in the Māhele award) were purchased in 1870 by Paul Isenberg (manager of Lihue Plantation from 1862–1878), which he established as a separate company, the Hanamaulu Plantation. 10. While it is unclear when most of the coastal table lands of Hanamā'ulu were developed in sugarcane, it appears to have been well before 1900. Historic maps and aerial photographs from 1900 (Figure 10), 1906 (Figure 11), 1910 (Figure 12), 1924 (Figure 13), 1941 (Figure 14), 1950 (Figure 15), 1959 (Figure 16), and 1965 (Figure 18) show the project area in a dense sea of sugarcane subject to re-plowing after each harvest. This is believed to have existed until close to 17 November 2000 when Lihue Plantation ceased operations. 11. A State Historic Preservation Division (SHPD) *§6E-42 Historic Preservation Review* dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15) renders a determination of "no historic properties affected" for the Ahukini Makai Subdivision based largely on the Franklin and Walker (1994) archaeological inventory survey. The Ahukini Makai Subdivision lands were also subject to study in the Creed et al. (2006) archaeological literature review and field inspection and the Bell et al. (2006) archaeological inventory survey. No historic properties have been identified in the Ahukini Makai Subdivision project area. 12. Seemingly no historic properties have been identified on the *makai* table lands of Hanamā'ulu south of Hanamā'ulu stream valley. About 250 m to the northwest of the project area is a site (State Inventory of Historic Places [SIHP] # 50-30-11-01847) designating approximately 53.0 acres of the flat, level Hanamā'ulu valley floor as a prehistoric agricultural historic property (Walker et al. 1991:A-6). This does serve to highlight that the area of LCAs on the valley floor is also likely to be relatively rich in archaeological resources. Kikuchi and Remoaldo (1992:76) indicate the location of a cemetery designated SIHP # 50-30-08-B019 that appears to be 100 m north of the project area on a bluff on the south side of Hanamā'ulu Valley (see Figure 21). They indicate this was one of the "Cemeteries not located." While there is thus some question as to the precise location, and even as to whether this cemetery exists at all, there is no reason to believe it is in the Ahukini Makai project area.
Results of Community Consultation	In most cases, two or three attempts were made to contact individuals, organizations, and agencies. Community outreach letters were sent to 37 individuals or groups; ten responded, two provided written testimony,

	and two of these *kama'āina* (native born) and/or *kūpuna* (elders) met with CSH for more in-depth interviews. Some concerned parties are opposed to development with little specificity regarding the nature of adverse impacts tied to a specific geographic area or specific project. While one might question whether a categorical opposition to development on Kaua'i falls within a Ka Pa'akai analysis that attempts to identify specific adverse impacts to traditional Hawaiian cultural practices by a specific project it should be stated that some Native Hawaiian parties absolutely see development as an adverse impact to traditional Hawaiian cultural practices. The testimony of Kimo and Kaniela Kaleikaumaka Matsushima was particularly compelling due to their family's indicated very long-standing involvement in Hanamā'ulu and very long history of involvement in traditional Hawaiian subsistence practices (see Section 7.5 and Appendix C). Kimo Matsushima expressed concerns for human burials he believes are present in the steep slope going down to the beach in the Ahukini Makai Subdivision project area.
Identification of Cultural Practices	The testimony of Kimo and Kaniela Kaleikaumaka Matsushima was particularly compelling due to their family's indicated very long-standing involvement in Hanamā'ulu and very long history of involvement in traditional Hawaiian subsistence practices of *mahi'ai* (farming) and *lawai'a* (fishing) drawing upon the resources of the *'āina* (land), *wai* (freshwater) and *kai* (seas) of Hanamā'ulu and adjacent lands (see Section 7.5 and Appendix C).
Identification of Impacts to Cultural Practices	Kaniela Kaleikaumaka Matsushima writes of ongoing adverse impacts to traditional Hawaiian practices and expresses his confidence that further development will make matters worse. The reader is referred to his verbatim testimony in Appendix C but concerns are expressed for the exacerbation of rain-induced erosion and trash polluting the valley and adversely impacting the plants and animals of the valley used for traditional Hawaiian subsistence, the exacerbation of pollution of the Hanamā'ulu Stream and its plants and animals used for traditional Hawaiian subsistence, sewage flooding the valley and the river causing a lot of harm to not only humans, but also to their livestock, crops, and the wildlife that call the valley home including many *maoli holoholona* (native animals including endangered species) that live in the valley like the *pua'a* (pigs), *'alae 'ula* (Hawaiian gallinule), *ae'o* (Hawaiian stilts), *kōloa maoli* (native ducks), *auku'u* (black crowned night herons), *nēnē* (Hawaiian goose), *koa'e kea* (white tailed tropic birds), *pinao* (native dragon flies), *'o'opu* (native gobies) and many more; and pollution of coastal waters leading to a decrease in the availability of fishes and other seafood including *'opihi* (limpets) and *limu* (seaweed) and even endangering safe swimming.

	A related, but somewhat separate issue is that adverse impacts to marine resources also adversely affect *'aumakua* (family or personal god) species such as *honu* (turtles) and *hīhīmanu* (eagle rays). While Mr. Matsushima acknowledges he is addressing existing, unaddressed problems, his concern is that development will only compound this burden on the *'āina, wai,* and *kai* of Hanamā'ulu and neighboring lands. Kimo Matsushima also expressed concern regarding increased runoff polluting the waters of Hanamā'ulu Stream and Hanamā'ulu Bay. He discussed how the conditions of Hanamā'ulu Stream and Hanamā'ulu Bay have changed over the years. When he was growing up, the pollution from runoff was not as bad and the water in Hanamā'ulu Bay was clean. He noted that from the 1990s to the present, pollution from runoff has caused the water in the bay to become murky, sometimes even looking like chocolate. He recalled catching fish and crabs in Hanamā'ulu Bay and setting up prawn traps in Hanamā'ulu Stream. He stated he is still able to catch crabs in Hanamā'ulu Bay, however, he noted he must filter out the pollution before it is safe to eat. He also mentioned there are still prawns in Hanamā'ulu Stream, but not as much as in the "good old days." Kimo Matsushima stated runoff from the existing Hanamā'ulu Subdivision has negatively impacted the quality of water in the stream and bay. From his farm, which is located on both sides of Hanamā'ulu Stream, he has observed the impacts of runoff to the health of the stream as well as fish and other animals who use the stream. He noted that following heavy rainfall, the water in Hanamā'ulu Stream and Hanamā'ulu Bay is very dirty. He has observed prawns and mud turtles resting on the banks of the stream to avoid the polluted water following heavy rain. He also pointed out Hanamā'ulu Stream is located in the flood zone and following heavy rain, runoff drains into the stream and right into the pasture where his cattle and goats feed. This runoff carries debris he and his *'ohana* must clean. He also mentioned sewage spills at the Kapaia Sewage Pump Station occur often causing sewage to enter into Hanamā'ulu Stream that eventually flows into Hanamā'ulu Bay. Mr. Kimo Matsushima mentioned there are *iwi kūpuna* in the slope going to the beach in the Ahukini Makai project area. He also mentioned there are *iwi kūpuna* in Hanamā'ulu Valley whose locations are marked by rocks. Ms. Kanani Fu shared her concerns regarding the quality of *wai* (water) in Hanamā'ulu Ahupua'a. She described the drastic changes to the water quality of Hanamā'ulu Stream and Hanamā'ulu Bay she has observed over the years. Before she left for boarding school around 1990, the

	water was clear and when she returned to Kaua‘i around the year 2000, she noticed a distinct difference in color due to pollution. She also observed changes in the quality and quantity of fish in the bay. Ms. Fu would like to see a balance between progress and honoring what Kaua‘i is. She emphasized that Hanamā‘ulu is one of those things that should be honored. She would like the quality and abundance of the *wai* restored in perpetuity so resources that were once abundant within Hanamā‘ulu Stream and Hanamā‘ulu Bay can be replenished. Ms. Fu is optimistic damage to the quality of *wai* can be reversed. She believes cultural resources associated with the Hanamā‘ulu Stream and Hanamā‘ulu Bay still exist and can be restored with proper management. She noted that as part of the entitlement process, it is the landowner's obligation to mitigate potential negative impacts to Hanamā‘ulu Stream and Hanamā‘ulu Bay. She pointed out that Grove Farm has developed a management plan that calls for a biological monitoring program of the water quality within Hanamā‘ulu Stream and Hanamā‘ulu Bay which just needs to be implemented.
Mitigation Possibilities Identified During Background Research and Consultation	This is a somewhat unusual case in that testimony clearly identifies existing adverse impacts to traditional cultural practices of long duration (going back more than 50 years). There is independent support for this, in particular in that "the beach at Hanamā‘ulu was closed for public use due to the high bacterial pollution levels in the nearshore waters and in the adjoining stream" from 1972 to 1974 (Clark 1990:6). For starters, mitigation would seem to be to ensure that any development projects do not make matters worse, minimally by ensuring best management practices. It is suggested that appropriate mitigation should aim not for maintaining the status quo of traditional and customary practices, but for net improvement. Given that the county and state are likely to experience financial gain from taxes from any development projects, it seems germane to suggest the county's duty in "fulfilling their constitutional obligation to preserve and protect traditional and customary practices" (Kaua‘i Planning Department Worksheet for Ka Pa‘akai Assessment) includes addressing what would appear to be an unacceptable history of adverse impact to traditional and customary practices that has existed for at least 50 years. The identification of sources of the existing adverse impact to traditional and customary practices is beyond the scope of this study (although identification of the nature and extent of existing pollution sources might be a first step of mitigation). Sources of existing pollution to be addressed and mitigated may include surface run-off into Hanamā‘ulu valley, trash disposal management, the existing sewerage system in the

	Hanamā‘ulu watershed, existing septic tanks, “fecal matter from pasture animals in the upper valley and from the piggeries in upper Kapaia” (Clark 1990:6) It is understandable that many Native Hawaiians of Kaua‘i feel development will only compound the existing burden to the *‘āina, wai* and *kai*. It is to be hoped that proper county management and mitigation associated with development projects could result in a net improvement to the *‘āina, wai,* and *kai* and traditional and customary practices and result in a win-win situation.
Ka Pa‘akai Analysis	In Ka Pa‘akai vs Land Use Commission, 94 Hawai‘i (2000) the Court held the following analysis must also be conducted: 1. The identity and scope of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary native Hawaiian rights are exercised in the project area; 2. The extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and 3. The feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian Rights if they are found to exist. Based on information gathered from the cultural and historical background and community consultation for this project, the only culturally significant resources identified within the project area per se are human burials. Mr. Kimo Matsushima mentioned there are *iwi kūpuna* in the slope going to the beach in the Ahukini Makai project area. No development will occur in this area and thus there will be no disturbance of human burials. At present, no documentation or testimony indicates traditional or customary Native Hawaiian rights are currently being exercised “for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778” (Hawai‘i State Constitution, Article XII, Section 7) within the project area per se. While no cultural resources, practices, or beliefs were identified as currently existing within the project area, Hanamā‘ulu Ahupua‘a maintains a rich cultural history in the exercise of traditional or customary Native Hawaiian rights within the project *ahupua‘a.* Given the location well back from the coast, with no notable landforms in the vicinity, the relatively low rainfall, the absence of potable water, the prior land history of intensive sugarcane cultivation with frequent plowing of the entire project area and the prevailing vegetation regime

	dominated by a mat of exotic grasses, it is concluded that no traditional and customary Native Hawaiian resources will be affected by the proposed action within the specific project area. Concerns have also been expressed in the testimony of Kaniela Kaleikaumaka Matsushima (see present Appendix C) that the development of the proposed Ahukini Makai Subdivision project area (and/or the development of the proposed Ahukini Mauka and Wailani subdivisions) will have deleterious impacts to subsistence fishing and gathering along Hanamā'ulu Stream, in Hanamā'ulu Bay, and along the adjacent coasts of Kalapakī and Hanamā'ulu. In addition to adverse impacts to subsistence practices, additional degradation of the coastal environment is suggested to have a potential adverse impact on *'aumakua* species such as *honu* and *hīhīmanu.* Kimo Matsushima also expressed concern regarding potential impacts to the waters of Hanamā'ulu Stream and Hanamā'ulu Bay due to increased runoff from the proposed Ahukini Makai Subdivision project area (and/or the development of the proposed Ahukini Mauka and Wailani subdivisions). He pointed out Hanamā'ulu Stream is located in the flood zone and following heavy rain, runoff drains into the stream and right into the pasture where his cattle and goats feed. He also mentioned sewage spills at the Kapaia Sewage Pump Station occur often causing sewage to enter into Hanamā'ulu Stream that eventually flows into Hanamā'ulu Bay. The County of Kaua'i has a drainage policy that applies to development projects. A drainage report was prepared for this project and approved by the County of Kaua'i. Based on the proposed grading and drainage improvement designs, the post-development drainage conditions will be less than the pre-development drainage conditions. Kanani Fu also shared her concerns regarding the quality of *wai* in Hanamā'ulu Ahupua'a. She described the drastic changes to the water quality of Hanamā'ulu Stream and Hanamā'ulu Bay she has observed over the years. She also observed changes in the quality and quantity of fish in the bay. Ms. Fu would like the quality and abundance of the *wai* restored in perpetuity so cultural resources that were once abundant within Hanamā'ulu Stream and Hanamā'ulu Bay can be replenished. She believes cultural resources associated with the Hanamā'ulu Stream and Hanamā'ulu Bay still exist and can be restored with proper management. She noted that as part of the entitlement process, it is the landowner's obligation to mitigate potential negative impacts to Hanamā'ulu Stream and Hanamā'ulu Bay. She pointed out Grove Farm has developed a management plan that calls for a biological monitoring program of the

	water quality within Hanamā'ulu Stream and Hanamā'ulu Bay which just needs to be implemented. An evaluation of the secondary, and/or cumulative impacts of development on Kānaka Maoli (Native Hawaiian) subsistence fishing and gathering along Hanamā'ulu Stream, in Hanamā'ulu Bay, and along the adjacent coasts of Kalapakī and Hanamā'ulu is beyond the scope of the present study. Kaniela Matsushima makes a compelling case that the status quo of Kaua'i County actions and inactions adversely impact subsistence practices and *'aumakua* species at present (and of long standing). Appropriate mitigation may include dedication of any enhanced county tax resources to addressing the present and long standing adverse impacts of county actions and inactions to these subsistence practices.

Table of Contents

Management Summary i

Section 1 Introduction 1

1.1 Project Description 1
1.2 Regulatory Context 1
1.3 Document Purpose 8
1.4 Natural Environment 9
  1.4.1 *Ka Lepo* (Soils) 9
  1.4.2 Ka Makani (Winds) 11
  1.4.3 Ka Ua (Rains) 12
  1.4.4 Nā Kahawai (Streams) 13
  1.4.5 Lihikai ame ka Moana (Seashore and Ocean) 14
1.5 Built Environment 14

Section 2 Methods 16

2.1 Archival Research 16
2.2 Community Consultation 16

Section 3 *Nā Ka'ao and Mo'olelo* 17

3.1 Pele Chants of the Winds of Hanamā'ulu and Kalapakī 18
3.2 Lohiau at Hanamā'ulu and Accounts of a Lack of Hospitality 19
3.3 Hanamā'ulu and the Legend of Kawelo 19
3.4 The Greedy *'O'opu* Eaters 20
3.5 A Man of Ahukini and the Dream Woman from O'ahu 20
3.6 The Petrifying Stench of the *Heiau* of Ka-lau-o-ka-manu 21

Section 4 Traditional and Historical Background 22

4.1 Pre-Contact Settlement Patterns 22
4.2 Place Names of Hanamā'ulu 22
4.3 Early Historic Period 25
4.4 The Māhele and the Kuleana Act 27
4.5 The Transition to Sugarcane Cultivation 33
4.6 The Contemporary Situation 45

Section 5 Previous Archaeological Research 47

5.1 Early Studies 47
  5.1.1 Thrum 1906 47
  5.1.2 Bennett 1931 47
5.2 Modern Archaeological Studies 57
  5.2.1 Hammatt 1990 57
  5.2.2 McMahon 1990 57
  5.2.3 Rosendahl 1990 57
  5.2.4 Walker et al. 1991 57
  5.2.5 Kikuchi and Remoaldo 1992 58
  5.2.6 Franklin and Walker 1994 58
  5.2.7 Hammatt 2001 58
  5.2.8 Corbin et al. 2002 59

5.2.9 Dega and Powell 2003 59
5.2.10 Hammatt 2005 59
5.2.11 Creed et al. 2006 59
5.2.12 Bell et al. 2006 60
5.2.13 Monahan and Hammatt 2008 60
5.2.14 Altizer and Hammatt 2014 60
5.2.15 Filimoehala et al. 2015 60
5.2.16 Kamai and Hammatt 2015 64
5.3 Background Summary and Predictive Model 64

Section 6 Summary and Interpretation 68

Section 7 Community Consultation 69

7.1 Introduction 69
7.2 Consideration of Prior Community Consultation in the Vicinity 69
7.3 Community Contact Letter 69
7.4 Community Contact Table 72
7.5 Summary of Responses 77

Section 8 Traditional Cultural Practices 86

8.1 Habitation and Subsistence 86
8.2 Marine Resources 87
8.3 *Iwi Kūpuna* 89

Section 9 Summary 90

9.1 Results of Background Research 90
9.2 Results of Community Consultations 92
9.3 Impacts and Recommendations 92
9.4 Ka Pa'akai Analysis 92
9.4.1 Archaeological Resources 93
9.4.2 Burials 94
9.4.3 Faunal Resources 94
9.4.4 Earth Resources 97
9.4.5 Plant Resources 97
9.4.6 Trails 98
9.4.7 *Nā Wahi Pana* 98
9.4.8 Valued Cultural, Historical, or Natural Resources in the Project Area 99
9.4.9 The Extent to which Traditional and Customary Native Hawaiian Resources will be Affected by the Proposed Action 99
9.4.10 Feasible Action, if any, to be Taken to Reasonably Protect Native Hawaiian Rights 99

Section 10 References Cited 101

Appendix A Community Contact Letter 109

Appendix B Declaration: Roslyn Cummings 117

Appendix C Declaration of Kaniela Kaleikaumaka Matsushima 125

List of Figures

Figure 1. Portions of the 1996 Lihue and Kapaa USGS 7.5-minute topographic quadrangles showing the location of the project area 2
Figure 2. Tax Map Key (TMK) [4] 3-7-002 showing the project area (Hawai'i TMK Service 2014) 3
Figure 3. Aerial photograph of the project area (Google Earth 2019) 4
Figure 4. Ahukini Makai Subdivision map (courtesy of client), note the "Remainder of Parcel 1 (32.837 acres, TMK 3-7-002:por)" in the northeast (coastal) area is not part of the development project and is to remain in conservation 5
Figure 5. Ahukini Makai Subdivision map superimposed on a contemporary aerial photograph (courtesy of client) 6
Figure 6. Overlay of *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii* (Foote et al. 1972) on a 1996 Lihue USGS topographic quadrangle, indicating soil types within and surrounding the project area (USDA SSURGO 2001) 10
Figure 7. Location of LCAs near the project area on a 1996 Lihue USGS topographic quadrangle 29
Figure 8. George C. Jackson produced an 1881 map of Nāwiliwili Harbor (here superimposed on a 1996 Lihue USGS quadrangle showing the project area). The highlighted comment on the northeast corner of the Jackson map reads "Level grassy land with volcanic boulders here and there" which is believed to characterize much of the coastal sloping table land of Kalapakī and Hanamā'ulu prior to commercial sugarcane cultivation 32
Figure 9. Portion of W.D. Alexander's 1878 Hawaii Government Survey Map of Kauai (RM 1395) showing the project area 34
Figure 10. Portion of the 1900 Monsarrat map of Lihue Plantation, Southern Portion (RM 2142), showing the project area 35
Figure 11. Portion of the 1906 Donn Hawaii Territory Survey map of Kaua'i with land use (RM 2375) showing the project area well within the "Approximate Area of Sugar Plantation" 36
Figure 12. Portion of a 1910 Lihue USGS topographic quadrangle showing the project area (with unimproved roads highlighted in yellow and trails highlighted in blue) 37
Figure 13. Historical aerial photo of Hanamā'ulu Bay (believed to be dated 4 July 1924), showing the sugarcane fields of the Hanamā'ulu lands of Lihue Plantation in the background with homes and *lo'i* in the valley (Kaua'i Historical Society, n.d.) (the Ahukini Makai project area at center left is an unbroken sea of sugarcane) 39
Figure 14. Portion of the 1941 Lihue Plantation Company map showing the project area within portions of fields 27, 28, L-29, 36, and L-36 (Condé and Best 1973:168) 40
Figure 15. 1950 USGS aerial photograph of Kalapaki (UH MAGIS) showing the project area 41
Figure 16. 1959 USGS aerial photograph of Kalapaki (UH MAGIS) showing the project area 42
Figure 17. Portion of 1963 Lihue and Kapaa USGS topographic quadrangles showing the project area 43

Figure 18. 1965 USDA aerial photograph of Kalapaki showing the project area (UH MAGIS) 44
Figure 19. Lihue Plantation Mill, view of the Boiling House (Kaua'i Historical Society, n.d.) 46
Figure 20. Portion of the 1996 Lihue and Kapaa USGS topographic quadrangles showing the locations of previous archaeological study areas within approximately 1.0 km of the Ahukini Makai project area 48
Figure 21. Portion of the 1996 Lihue and Kapaa USGS topographic quadrangle showing the locations of previously identified historic properties, in the vicinity of the project area 52
Figure 22. Map showing Līhu'e Airport improvements, Improvement archaeological inventory survey Area 6 approximating the Ahukini Makai project area (adapted from Bell et al. 2006:4) 61
Figure 23. Area 6 — Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:71) 62
Figure 24. Area 6 — Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:71) 62
Figure 25. Area 6 — Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:72) 63
Figure 26. Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:72) 63
Figure 27. SHPD §6E-42 Historic Preservation Review determination of "no historic properties affected" for the Ahukini Makai Subdivision dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, page 1) 66
Figure 28. SHPD §6E-42 Historic Preservation Review determination of "no historic properties affected" for the Ahukini Makai Subdivision dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, page 2) 67
Figure 29. Ahukini Makai Subdivision map superimposed on a contemporary aerial photograph showing the area of potential *iwi kūpuna* indicated by Kimo and Lester Matsushima (shaded area in the upper right corner) within the TMK .... (4) 3-7-002:001 parcel but outside of the Ahukini Makai Subdivision in an area that will remain in conservation outside of the Ahukini Makai Subdivision (map courtesy of client) 84
Figure 30. Community contact letter page one 109
Figure 31. Community contact letter page two 110
Figure 32. Community contact letter page three 111
Figure 33. Community contact letter page four 112
Figure 34. Community contact letter page five 113
Figure 35. Community contact letter page six 114
Figure 36. Community contact letter page seven 115
Figure 37. Community contact letter page eight 116

List of Tables

Table 1. Place names of Hanamā'ulu (largely adapted from Creed et al. 2006:67–69) 23
Table 2. Hanamā'ulu Land Commission Awards 30
Table 3. Previous archaeological studies within approximately 1.0 km of the Ahukini Makai project area 49
Table 4. Previously identified historic properties within approximately 1.0 km of the Ahukini Makai project area 53
Table 5. Community contact table 72

Section 1 Introduction

1.1 Project Description

Visionary LLC is proposing to construct industrial lots and supporting infrastructure for an Ahukini Makai Subdivision on a 171.869-acre (69.4-hectare) TMK (4) 3-7-002:001 parcel of fallow, former sugarcane land in *makai* Hanamā'ulu Ahupua'a on southeast Kaua'i just southwest of Hanamā'ulu Bay and approximately 2.0 km northeast of the county capital, Līhu'e. On the northwest side the proposed Ahukini Makai Subdivision is bounded by Kapule Highway and is roughly bounded on the southeast side by Ahukini Road which also bounds the south side. The north side is effectively bounded by deeply dissected Hanamā'ulu Valley. The project area is depicted on a portion of the 1996 Lihue and Kapaa U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (Figure 1), a tax map plat (Figure 2), a 2013 aerial photograph (Figure 3), and client's subdivision maps (Figure 4 and Figure 5). It should be noted that the "Remainder of Parcel 1 (32.837 acres, TMK 3-7-002:001por)" in the northeast (coastal) area is not part of the development project and is to remain in conservation.

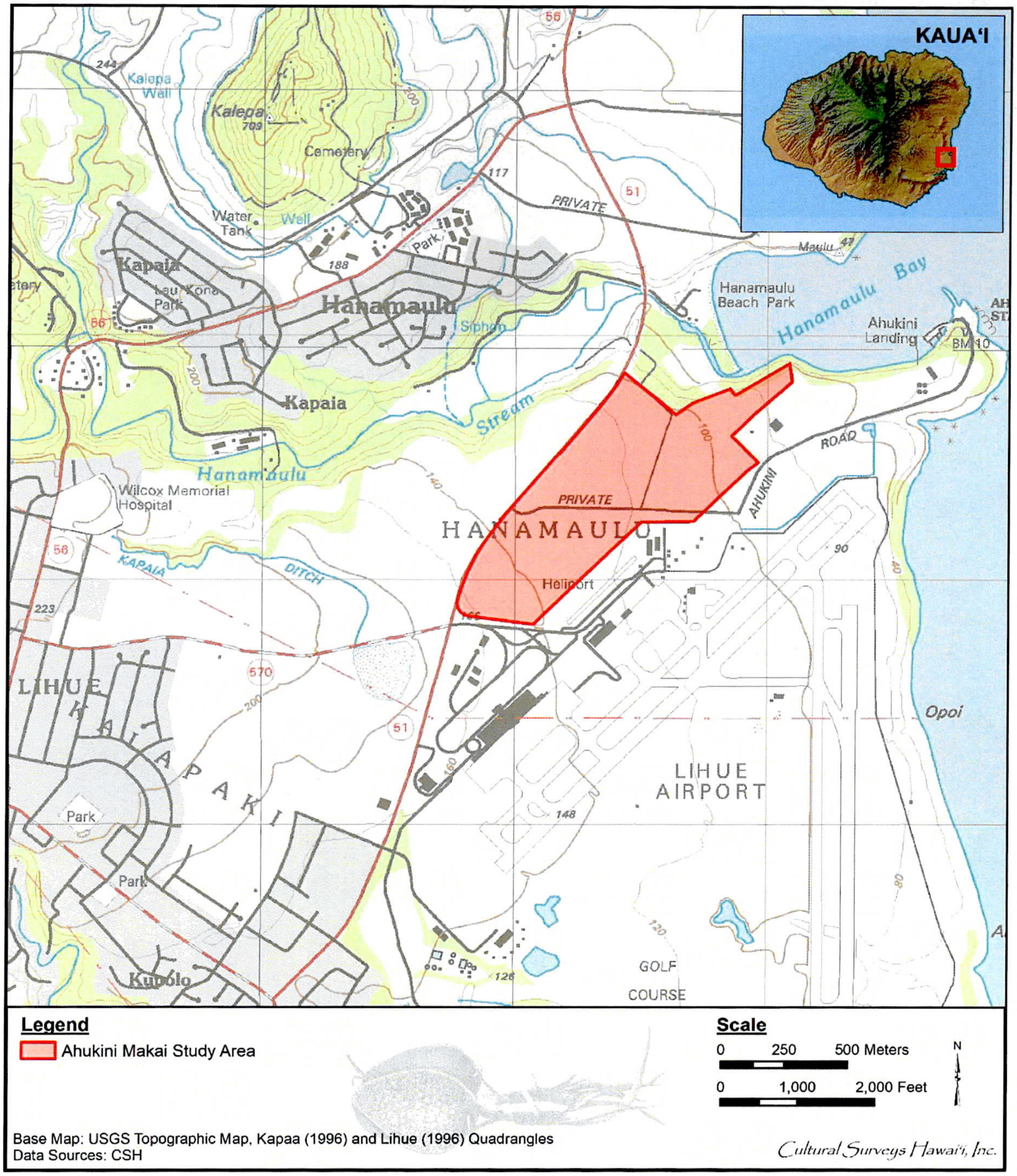
At the request of Visionary LLC, Cultural Surveys Hawai'i, Inc. (CSH) has prepared this Ka Pa'akai Analysis study to address any concerns of the Kaua'i County Planning Department within the regulatory context discussed below, as well as to address any possible concerns of Native Hawaiian Organizations.

1.2 Regulatory Context

The Kaua'i County Planning Department has indicated a need for Ka Pa'akai Assessment studies to attend applications for Planning Department processing. The Planning Department has kindly supplied a Kaua'i Planning Department Worksheet for Ka Pa'akai Assessment which is regarded here as the guiding document (text supplied below). We have added (in bold and italics) after each subheading where in the present study the point has been addressed:

Kaua'i Planning Department Worksheet for Ka Pa'akai Assessment

> In Ka Pa'akai O Ka'aina v. Land Use Commission (94 Hawai'i 31), the Hawai'i Supreme Court established a three-part analytical framework to assist the State and Counties in fulfilling their constitutional obligation to preserve and protect traditional and customary practices (TCP ["TCP" is used here as it is used in the *Kaua'i Planning Department Worksheet for Ka Pa'akai Assessment* to refer to "traditional and customary practices"]) exercised by Native Hawaiians, to the extent feasible. The analytical framework was developed to assist with balancing both the rights of Native Hawaiians to exercise their TCPs, and the private landowners.
>
> Before determining an application is complete for processing, the Planning Department will review the application to ensure: 1) the applicant has sufficiently assessed that the proposed project/action will not harm TCP rights exercised by Native Hawaiians; and 2) the applicant has provided sufficient documentation to support its assessment. The applicant's documentation should provide sufficient information for the Planning Department to apply the Ka Pa'akai 3-step analytical framework as set forth below.


KAUA‘I
Kalepa Well
Kalepa 709
Cemetery
Water Tank
Well
Park
117
PRIVATE
51
56
Maulu 47
Hanamaulu Beach Park
Hanamaulu Bay
Ahukini Landing
BM 10
Kapaia
Lau Kona Park
Hanamaulu
Siphon
188
244
200
Kapaia
Stream
Hanamaulu
100
ROAD
AHUKINI
Wilcox Memorial Hospital
PRIVATE
HANAMAULU
Heliport
90
KAPAIA
DITCH
223
570
LIHUE
KALAPAKI
LIHUE AIRPORT
Opoi
148
Park
Park
Kupolo
GOLF COURSE
126
120
80
Legend
Ahukini Makai Study Area
Scale
0 250 500 Meters
0 1,000 2,000 Feet
N

Base Map: USGS Topographic Map, Kapaa (1996) and Lihue (1996) Quadrangles
Data Sources: CSH

Cultural Surveys Hawai‘i, Inc.

Figure 1. Portions of the 1996 Lihue and Kapaa USGS 7.5-minute topographic quadrangles showing the location of the project area

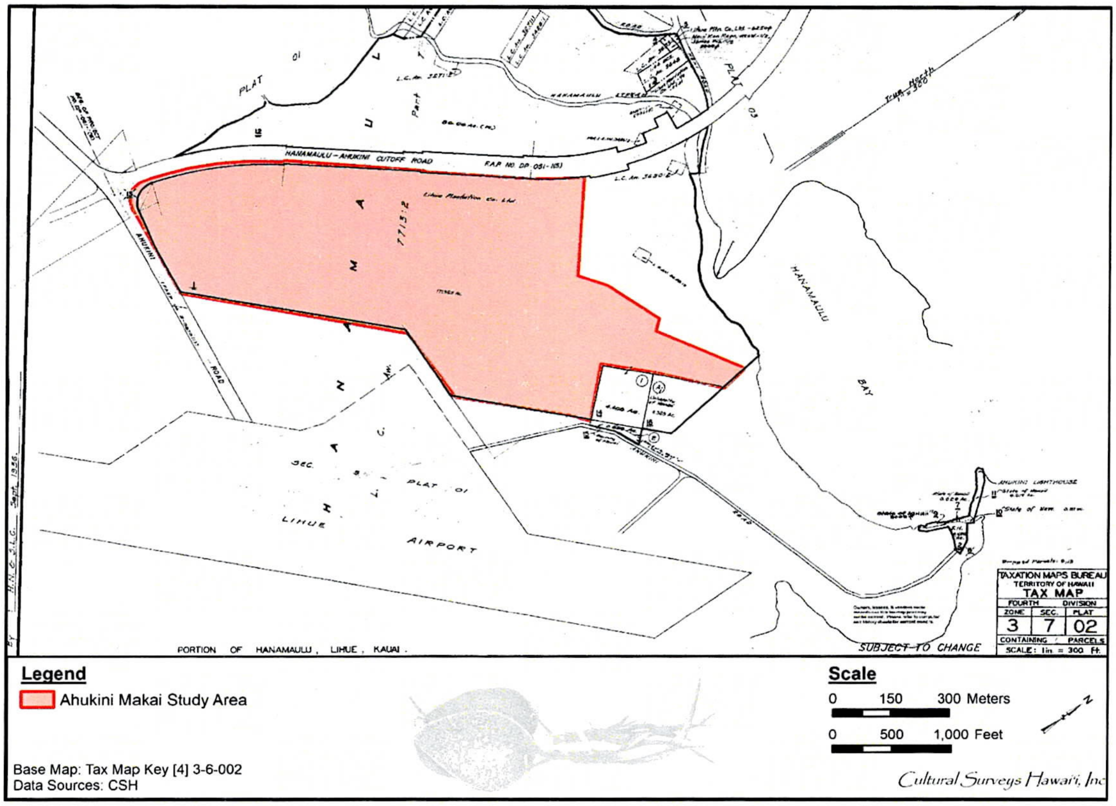

PLAT 01
HANAMAULU - AHUKINI CUTOFF ROAD
AHUKINI ROAD
HANAMAULU BAY
AHUKINI LIGHTHOUSE
SEC. 6 PLAT 01
LIHUE AIRPORT
PORTION OF HANAMAULU, LIHUE, KAUAI.
SUBJECT TO CHANGE
TAXATION MAPS BUREAU
TERRITORY OF HAWAII
TAX MAP
FOURTH DIVISION
ZONE SEC. PLAT
3 7 02
CONTAINING PARCELS
SCALE: 1in = 300 Ft.
Legend
Ahukini Makai Study Area
Scale
0 150 300 Meters
0 500 1,000 Feet
N
Base Map: Tax Map Key [4] 3-6-002
Data Sources: CSH
Cultural Surveys Hawai'i, Inc

Figure 2. Tax Map Key (TMK) [4] 3-7-002 showing the project area (Hawai‘i TMK Service 2014)

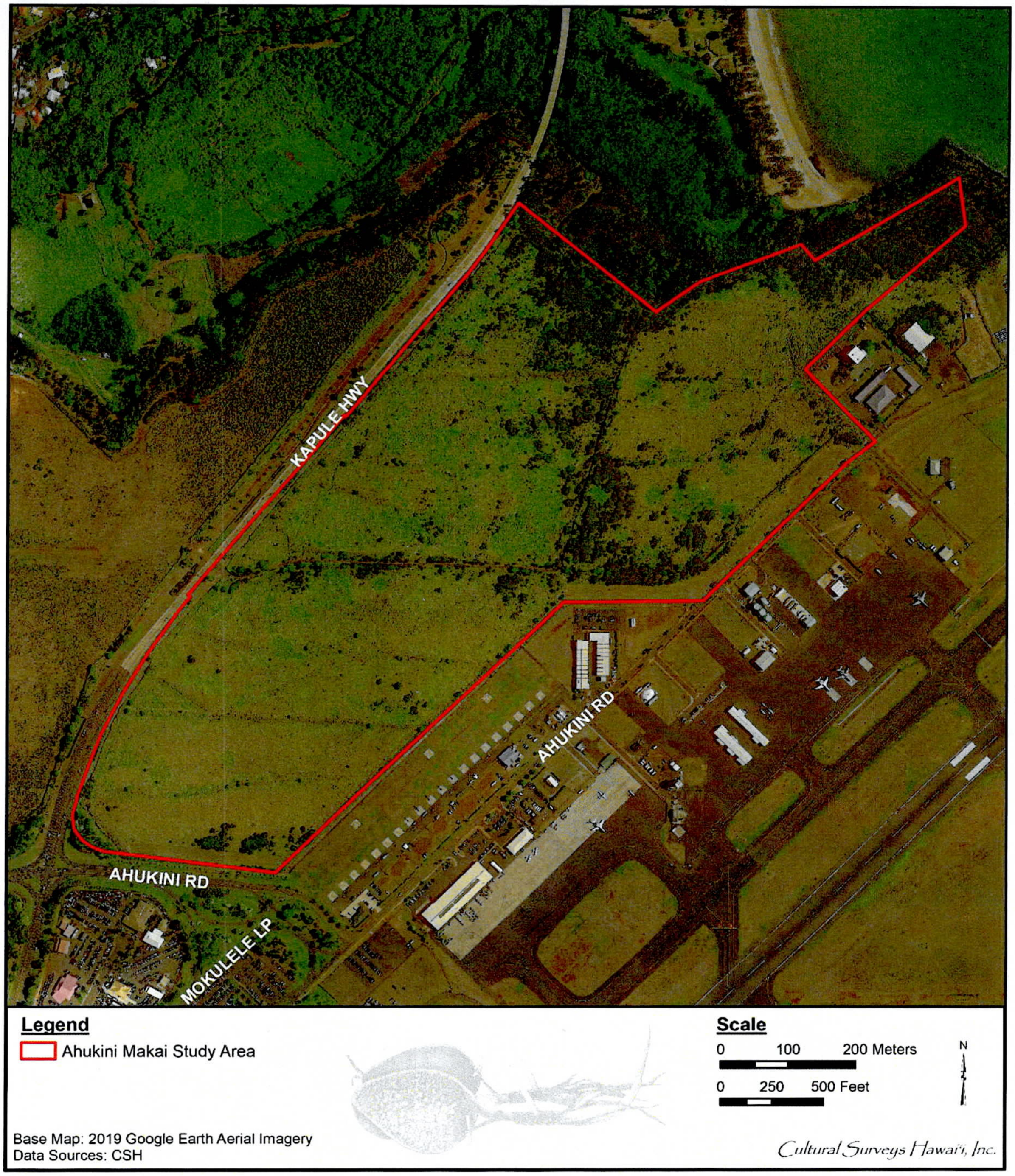

KAPULE HWY
AHUKINI RD
AHUKINI RD
MOKULELE LP
Legend
Ahukini Makai Study Area
Base Map: 2019 Google Earth Aerial Imagery
Data Sources: CSH
Scale
0 100 200 Meters
0 250 500 Feet
N
Cultural Surveys Hawai'i, Inc.

Figure 3. Aerial photograph of the Ahukini Makai Subdivision project area (Google Earth 2019)

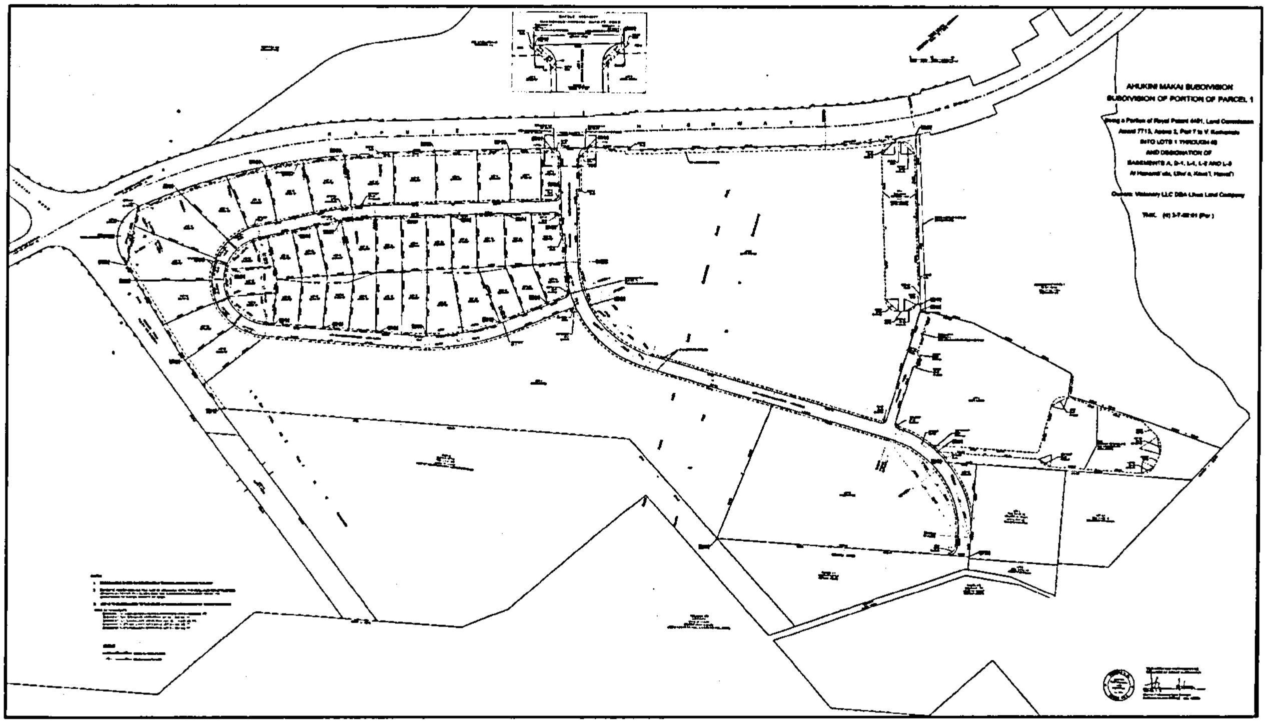


Figure 4. Ahukini Makai Subdivision map (courtesy of client), note the "Remainder of Parcel 1 (32.837 acres, TMK 3-7-002:por)" in the northeast (coastal) area is not part of the development project and is to remain in conservation

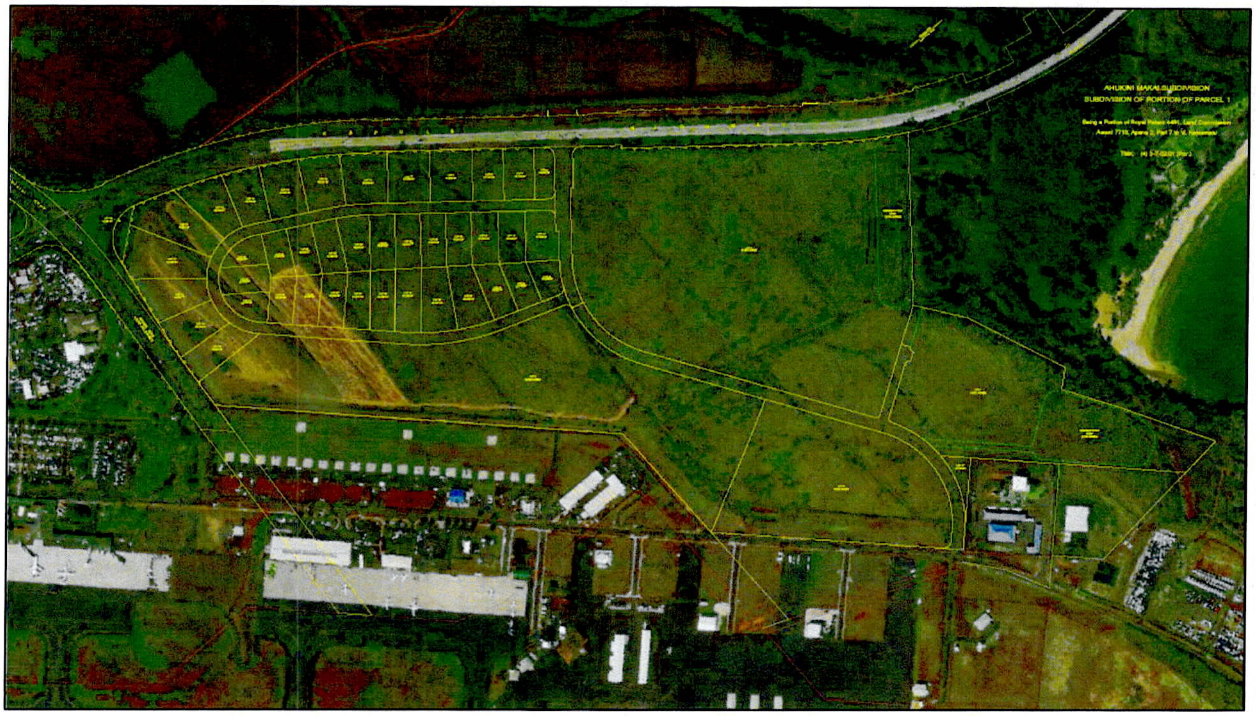

AHUKINI MAKAI SUBDIVISION
SUBDIVISION OF PORTION OF PARCEL 1

Figure 5. Ahukini Makai Subdivision map superimposed on a contemporary aerial photograph (courtesy of client)

1. **Identify whether any valued cultural, historical, or natural resources are present within the project area, and identify the extent to which Native Hawaiian TCP rights are exercised.**

Depending on the project, the applicant's documentation may include but not be limited to the following information and documentation:

a. **A detailed map of the project area**

The map shall include any proposed development in relation to the *ahupua'a*. This includes land commission awards (LCA), *kuleana* [native tenant land rights] lands (including *kama'āina* testimony during the Commission to Quiet Land Titles hearing), trails (within the *ahupua'a* and lateral to the *ahupua'a),* streams, shoreline. ***[We have included overlays of the project area on 20 maps and aerial photographs to better analyze and present the history of traditional cultural practices in the project area and ahupua'a.]***

b. **Cultural consultation** with families, Native Hawaiian Organizations, Office of Hawaiian Affairs, and the Aha Moku Advisory Council who may have a relationship or knowledge of the *ahupua'a* and specific project area, including TCP of gathering, hunting, religious ceremonies, etc. ***[Cultural consultation outreach to 37 parties is summarized in Section 6 and Section 7.]***

c. **Summary of community outreach** if any, that may include community concerns, especially from Native Hawaiians, about destruction of resources, denial of access, etc. ***[The cultural consultation outreach and responses are summarized in Section 6.]***

d. **Archaeological Inventory Survey** that includes the names of LC Awardees and *kuleana* awardees to identify potential descendants of the *ahupua'a,* archival research of previous archaeological studies, including the *mo'olelo* (stories) of the *ahupua'a* and adjacent areas, cultural consultations, etc., identification of known cultural and historic resources, including burials, *heiau* [pre-Christian place of worship], cemeteries, *lo'i kalo* [irrigated taro patch] terraces, etc.; and history of the land uses from pre-contact to present, including agricultural uses, grading and grubbing, habitation, vacant lands, etc. ***[The findings of the archaeological inventory survey and other archaeological studies are presented in Section 5 of this study. An SHPD Chapter 6E-42 Historic Preservation Review dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, renders a determination of "no historic properties affected" for the Ahukini Makai Subdivision based largely on the Franklin and Walker 1994 archaeological inventory survey. Additional information on the history of land use in Hanamā'ulu Ahupua'a is provided in Section 4.]***

e. **Cultural Impact Assessment** that includes ethnographic interviews, identification of cultural, historic, and natural resources and TCP. ***[Findings on the cultural history of Hanamā'ulu and the Ahukini Makai Subdivision in particular are summarized in Section 7 and Section 8.]***

f. **Environmental Studies** that include botany studies about potential native plants, and other relevant information ***[It is understood a compendium of environmental studies is being produced under other covers.]***

2. **Determine the extent to which the identified resources and rights will be affected or impaired by the proposed project. This will be case-by-case depending on the facts, but consider the following:**

a. Overlay the known trails, access, sensitive areas, historic sites, cultural sites (including burials), LCAs, etc. over the proposed project, including installation of utilities, to determine the proposed project's potential impacts to the valued cultural, historic, and natural resources; ***[The relationship of identified resources and rights to the project area are summarized in Section 8 and Section 9.]*** and

b. Information in the material provided by the applicant or during the public meetings or hearings from *ahupua'a* descendants or members of the community regarding potential impacts. ***[Addressed in Section 9]***

3. **Specify any feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist, either currently or possibly in the past. This will be case-by-case depending on the facts, but consider the following:**

a. Information in the material provided by the applicant or during the public meetings or hearings from *ahupua'a* descendants or members of the community regarding any feasible action to preferably avoid impacts, and if avoidance is not possible then potential mitigation measures; ***[Addressed in Section 9]*** and

b. Consider a condition that Cultural Descendants who have traditionally and customarily fished, hunted, or gathered in the area shall have right to access the subject property to fish, hunt, or gather, and they shall coordinate access with the landowner in advance, and this right shall run with the land. ***[Addressed in Section 9]***

1.3 Document Purpose

The purpose of the present Ka Pa'akai Analysis and Assessment is to assist the client and the Kaua'i Planning Department in their effort to 1) ensure the applicant has sufficiently assessed that the proposed project/action will not harm traditional and customary practices exercised by Native Hawaiians; and 2) to provide sufficient documentation to support the applicant's assessment.

This work is being carried out to address the letter and spirit of the following:

- Ka Pa'akai O Ka'aina v. Land Use Commission (94 Hawai'i 31), in which the Hawai'i Supreme Court established a three-part analytical framework to assist the state and counties in fulfilling their constitutional obligation to preserve and protect traditional and customary practices exercised by Native Hawaiians, to the extent feasible, and

- The mandate set forth by the Hawai'i State Constitution (Articles IX and XII), courts, Hawai'i Revised Statutes (HRS), and Hawai'i Administrative Rules (HAR) and other Hawai'i State laws requiring government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups.

1.4 Natural Environment

The Ahukini Makai project area is located in Hanamā'ulu Ahupua'a with the northeast corner adjacent to the cliffs of southwest Hanamā'ulu Bay and the project area extending to the southwest. The project area is on a gently sloping plateau rising from approximately 80 feet (ft) above mean sea level at the northeast corner to approximately 170-ft elevation at the southwest corner.

1.4.1 *Ka Lepo* (Soils)

The project area is almost entirely on Lihue silty clay, 0 to 8% slope soils (LhB) with very small areas of Rough broken land (rRR) in the extreme northwest side and a small area of Koloa silty clay, 15 to 25% slope soils (KvD) in the extreme northeast corner (Figure 6).

Lihue Series soils are described as follows:

> [...] well-drained soils on uplands on the island of Kauai. These soils developed in material weathered from basic igneous rock. They are gently sloping to steep. Elevations range from nearly sea level to 800 feet. [...] These soils are used for irrigated sugarcane, pineapple, pasture, truck crops, orchards, wildlife habitat, woodland, and homesites. The natural vegetation consists of lantana, guava, koa haole, joee, kikuyugrass, molassesgrass, guineagrass, bermudagrass, and Java plum. [Foote et al. 1973:82]

LhB soils are further described as, "This soil is on the tops of broad interfluves in the uplands.[...] Permeability is moderately rapid. Runoff is slow, and the erosion hazard is no more than slight" (Foote et al. 1973:82).

Rough broken land (rRR) is described as follows:

> Rough broken land (rRR) consists of very steep land broken by numerous intermittent drainage channels. In most places it is not stony. It occurs in gulches and on mountainsides on all the Islands except Oahu. The slope is 40 to 70 percent. Elevations range from nearly sea level to about 8,000 feet. The local relief is generally between 25 and 500 feet. Runoff is rapid, and geologic erosion is active. The annual rainfall amounts to 25 to more than 200 inches.
>
> These soils are variable. They are 20 to more than 60 inches deep over soft, weathered rock. In most places some weathered rock fragments are mixed with the soil material. Small areas of rock outcrop, stones, and soil slips are common. Included in mapping were areas of colluvium and alluvium along gulch bottoms.
>
> This land type is used primarily for watershed and wildlife habitat. In places it is used also for pasture and woodland. The dominant natural vegetation in the drier areas consists of guava, lantana, Natal redtop, bermudagrass, koa haole, and molassesgrass. Ohia, kukui, koa, and ferns are dominant in the wetter areas. Puakeawe, aalii, and sweet vernalgrass are common at the higher elevations. [Foote et al. 1973:119]

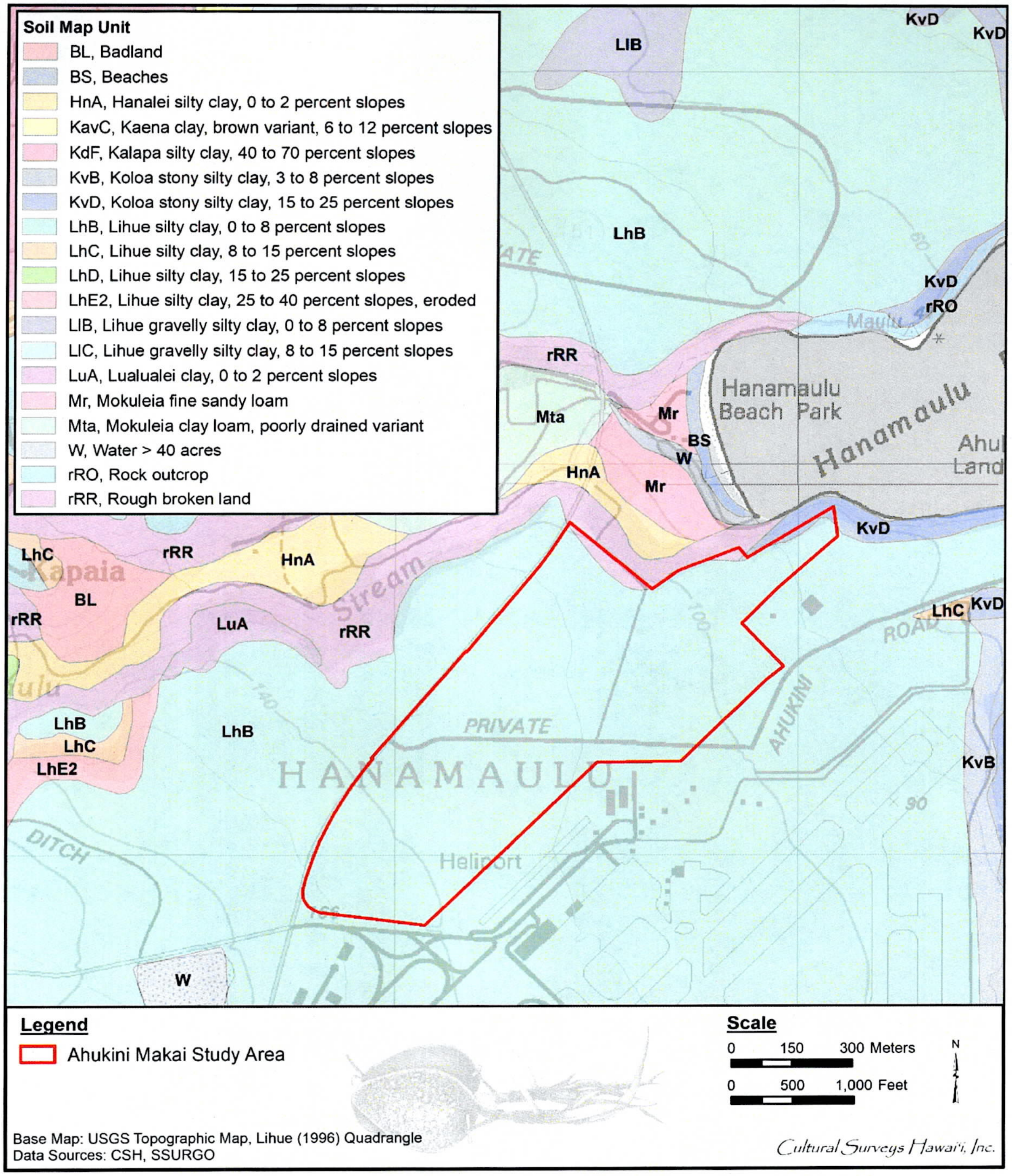

Soil Map Unit
BL, Badland
BS, Beaches
HnA, Hanalei silty clay, 0 to 2 percent slopes
KavC, Kaena clay, brown variant, 6 to 12 percent slopes
KdF, Kalapa silty clay, 40 to 70 percent slopes
KvB, Koloa stony silty clay, 3 to 8 percent slopes
KvD, Koloa stony silty clay, 15 to 25 percent slopes
LhB, Lihue silty clay, 0 to 8 percent slopes
LhC, Lihue silty clay, 8 to 15 percent slopes
LhD, Lihue silty clay, 15 to 25 percent slopes
LhE2, Lihue silty clay, 25 to 40 percent slopes, eroded
LIB, Lihue gravelly silty clay, 0 to 8 percent slopes
LIC, Lihue gravelly silty clay, 8 to 15 percent slopes
LuA, Lualualei clay, 0 to 2 percent slopes
Mr, Mokuleia fine sandy loam
Mta, Mokuleia clay loam, poorly drained variant
W, Water > 40 acres
rRO, Rock outcrop
rRR, Rough broken land
Hanamaulu Beach Park
Hanamaulu
HANAMAULU
Kapaia
Stream
PRIVATE
AHUKINI
ROAD
DITCH
Heliport
Legend
Ahukini Makai Study Area
Scale
0 150 300 Meters
0 500 1,000 Feet
N
Base Map: USGS Topographic Map, Lihue (1996) Quadrangle
Data Sources: CSH, SSURGO
Cultural Surveys Hawai'i, Inc.

Figure 6. Overlay of *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii* (Foote et al. 1972) on a 1996 Lihue USGS topographic quadrangle, indicating soil types within and surrounding the project area (USDA SSURGO 2001)

Koloa Series soils are described as follows:

> [...] well-drained soils on slopes of old volcanic vents and upland ridges on the island of Kauai These soils are underlain by hard rock at a depth of 20 to 40 inches. They developed in material weathered from basic igneous rock. They are gently sloping to moderately steep. Elevations range from nearly sea level to 300 feet. [...] These soils are used for irrigated sugarcane. The natural vegetation is mainly koa haole. [Foote et al. 1973:74]

KvD soils are further described as, "On this soil, runoff is medium and the erosion hazard is moderate to severe" (Foote et al. 1973:75).

1.4.2 Ka Makani (Winds)

Makani is the general Hawaiian term for the wind. *A‘e loa* is another of the Hawaiian names given to the prevailing northeasterly trade winds (Nakuina 1992:138) along with A‘e (Pukui and Elbert 1986:3), Moa‘e, and Moa‘e Lehua (Pukui and Elbert 1986:249). In the traditional story *The Wind Gourd of La‘amaomao*, Pāka‘a and his son Kūapāka‘a are descendants of the wind goddess La‘amaomao whose traditional home was in a wooden calabash (bowl), a gourd that also contained all of the sacred winds of Hawai‘i. La‘amaomao controlled and called forth the winds by chanting their names (Nakuina 1992). The portion of Kūapāka‘a's chant mentioning winds of the *moku* of Līhu‘e is presented below:

> Paupua is of Kipu,
>
> Ala‘oli is of Hule‘ia,
>
> Waikai is of Kalapaki,
>
> Ka‘ao is of Hanama‘ulu,
>
> Waipua‘a‘ala is the wind
>
> That knocks down hale of Konolea,
>
> Wai‘opua is of Wailua,
>
> [Nakuina 1992:53; see also Fornander 1918a:5:96–97]

In this chant, the wind of Hanamā‘ulu is the *kā‘ao*. This term in relation to winds usually means "to be calm in one place while the wind blows in another; to be smooth, as the sea in a calm, but not a dead calm" (Kent 1986:439).

In an account of the volcano goddess Pele,

He Ho‘oluako‘inehe ka makani o Hanamā‘ulu	The wind of Hanamā‘ulu is a Ho‘oluako‘inehe

> [Ho‘oulumāhiehie 2008a:18; 2008b:17 (discussed further below)]

The project area is situated near the southeast coast of Kaua‘i, and is exposed to the prevailing northeast trade winds (generally from 10–20 miles per hour) understood as the Ka‘ao wind.

1.4.3 Ka Ua (Rains)

Precipitation is a major component of the water cycle and is responsible for depositing *wai* on local flora. Pre-Contact *kānaka* (Native Hawaiians) recognized two distinct annual seasons. The first, known as *kau* (period of time, especially summer) lasts typically from May to October and is a season marked by a high-sun period corresponding to warmer temperatures and steady trade winds. The second season, *ho'oilo* (winter, rainy season) continues through the end of the year from November to April and is a much cooler period when trade winds are less frequent, and widespread storms and rainfall become more common. Each small geographic area had a Hawaiian name for its own rains. According to Akana and Gonzalez (2015),

> Rain names are a precious legacy from our kūpuna [elders] who were keen observers of the world around them and who had a nuanced understanding of the forces of nature. They knew that one place could have several types of rain, each distinct from the other. They knew when a particular rain would fall, its color, its duration, its intensity, its path, its sound, its scent, and its effect on the land and their lives [...] Rain names are a treasure of cultural, historical, and environmental information. [Akana and Gonzalez 2015:n.p.]

The *moku* of Līhu'e was no exception to the practice. Two rains were associated with Līhu'e: the Pa'upili and the Kenikeni. Other rain names associated with the area include the 'Ala and the Lihau.

1.4.3.1 Pa'upili

In a textbook on Hawaiian language, *E Kama'ilio Hawai'i Kakou: Let's Speak Hawaiian*, Kahananui and Anthony describe the Pa'upili rain as "pili [grass] soaking." They noted that "*Līhu'e, Kaua'i, has a Pa'upili rain.*"

> 20. He ua Pa'upili (pili soaking) ko Līhu'e, Kaua'i. *Līhu'e, Kaua'i, has a Pa'upili rain.*
>
> [Akana and Gonzalez 2015:226]

The Pa'upili rain is also mentioned in the *mele* (song) "Wailua alo lahilahi," also known as "Nani wale Līhu'e." The *mele* which is "credited by Lili'uokalani and Kapoli and by others to Leleiohoku and Mrs. Kamakua," describes Līhu'e as "*calm* [...] *In the mist of the Pa'upili rain.*"

> 21. Nani wale Līhu'e i ka la'i
>
> I ka noe a ka ua Pa'upilī
>
> *So beautiful is Līhu'e in the calm*
>
> *In the mist of the Pa'upili rain*
>
> [Akana and Gonzalez 2015:226]

In the *mele* "Maika'i Kaua'i," the Pa'upili rain is described as "drenching rain that clings to the house."

22. Ua nani wale ʻo Līhuʻe
I ka ua Paʻupili hale
I ka wai huʻihuʻi anu
Kahi wai aʻo Kemamo
So very beautiful is Līhu'e
In the drenching [Pa'upili] rain that clings to the house
With the cold, refreshing waters
From the springs of Kemamo
[Akana and Gonzalez 2015:226]

1.4.3.2 Kenikeni

The Kenikeni rain of Līhuʻe is mentioned in an obituary for Eda Kawaikauomaunahina Kalua.

1. E ka ua Kenikeni o Līhuʻe, ua pau kou hoʻopulu pē ʻana i ka ʻili o kuʻu aloha.
O Kenikeni rain of Līhu'e, your drenching of my love's skin has ended.
From an obituary for Eda Kawaikauomaunahina Kalua. Hawaiian source: Kalua.
English trans. by author.
[Akana and Gonzalez 2015:77]

The Kenikeni rain is also mentioned in a *kanikau* (lament) which was also written in honor of Eda Kawaikauomaunahina Kalua.

2 . Me ka ua Kenikeni o Līhuʻe
E uē helu mai ʻo Kaapuwai
With the Kenikeni rain of Līhu'e
Kaapuwai wails, recounting your deeds
[Akana and Gonzalez 2015:77]

The annual rainfall at the neighboring Lihue Airport Station is 997 mm (39.3 inches) (Giambelluca et al. 2013), suggested as marginal for non-irrigated agriculture. Rainfall increases rapidly to the northwest with elevation; Kukaua Station on Kilohana Crater reports 2,490 mm (98.0 inches) per year which is suggested as more than ample for non-irrigated agriculture.

1.4.4 Nā Kahawai (Streams)

The Līhuʻe District is well-watered and is fed by six main water sources (following the DLNR Stream Summary 1993:23, from south to north), the Hulēʻia Stream, the Pūʻali Stream, the Nāwiliwili Stream, the Hanamāʻulu Stream, the small Kawailoa watercourse, and the Wailua River (with its many tributaries). The attractiveness of this region to the early Kauaʻi residents is preserved in the following *ʻōlelo noʻeau* (proverb):

> *He nani wale no o Puna mai 'o a 'o.*
>
> There is only beauty from one end of Puna to the other.
>
> There is nothing to complain about—refers to Puna, Kaua'i. [Pukui 1983:91]

Hanamā'ulu Bay and Hanamā'ulu Valley on the immediate northside of the Ahukini Makai project area were formed by perennial Hanamā'ulu Stream which lies within 250 m of the northwest corner of the project area. On a four-point scale, Hanamā'ulu Stream is evaluated as at a one or "Limited" for "aquatic" and "cultural" resources but is ranked as a three or "Substantial" for "riparian" and "recreational" resources (State of Hawaii Commission on Water Resource Management and National Park Service Rivers Trails and Conservation Assistance Program 1993).

1.4.5 Lihikai ame ka Moana (Seashore and Ocean)

The major natural landform on the coast is Hanamā'ulu Bay with Hanamā'ulu Beach Park at the head of the bay.

> The park is a popular picnic and camping site for local residents. The narrow sand beach that fronts the park slopes gently into a shallow, sandy sea bottom nearshore. Although the conditions seem ideal for swimming, the bay waters are usually murky and not particularly appealing for in-water activities. Hanamā'ulu Stream crosses the southern end of the beach, discharging its silt-laden waters into the bay. The ocean currents circulating in the inner bay areas are not strong enough to flush out the murky water, so it lingers at the park's shoreline.
>
> During the early 1970s the water flowing in Hanamā'ulu Stream was not only dirty, but polluted as well. On June 9, 1972, the beach at Hanamā'ulu was closed for public use due to the high bacterial pollution levels in the nearshore waters and in the adjoining stream. The pollution came from fecal matter from pasture animals in the upper valley and from the piggeries in upper Kapaia. It was spread by runoff into the stream from plantation irrigation water. The beach was reopened for public swimming in June two years later when the pollution problems were corrected.
>
> The outer reaches of Hanamā'ulu Bay are much cleaner and attract scuba divers and other fishermen. Commercial net fishermen surround *akule* and other migratory schooling fish that appear seasonally. Mullet and sharks, particularly juvenile hammerheads, are also found in the bay. [Clark 1990:6]

Vegetation in the fallow former cane fields of the project area is a variety of noxious exotic weeds, grasses, and vines.

1.5 Built Environment

The project area (see Figure 1) is in an undeveloped area of former cane lands immediately north of Līhu'e Airport, Kaua'i's main (international) airport. Considering its proximity to Līhu'e Town, the county seat less than 2.0 km to the west, the vicinity of the project area is remarkably undeveloped. The small residential community of Hanamā'ulu is 800 m to the northwest and outlying eastern suburbs of Līhu'e are approximately the same distance to the southwest.

Kapule Highway, which forms the west side of the Ahukini Makai project area, joins with Kūhiō Highway just to the north forming the major vehicular artery for Kaua'i's east and north shore. Ahukini Road connects Ahukini Recreational Pier State Park (former Ahukini Landing) on the southeast corner of Hanamā'ulu Bay with the airport, roughly paralleling the southeast side of the Ahukini Makai project area and is a main artery leading from the airport up to Līhu'e Town running along the south side of the Ahukini Makai project area.

Section 2 Methods

2.1 Archival Research

Research centers on Hawaiian activities including *ka'ao* (legends), *wahi pana* (storied places), *'ōlelo no'eau* (proverbs), *oli* (chants), *mele* (songs), traditional *mo'olelo* (stories), traditional subsistence and gathering methods, ritual and ceremonial practices, and more. Background research focuses on land transformation, development, and population changes beginning with the early post-Contact era to the present day.

Cultural documents, primary and secondary cultural and historical sources, historic maps, and photographs were reviewed for information pertaining to the study area. Research was primarily conducted at the CSH library. Other archives and libraries including the Hawai'i State Archives, the Bishop Museum Archives, the University of Hawai'i at Mānoa's Hamilton Library, Ulukau, the Hawaiian Electronic Library (Ulukau.org 2014), the SHPD Library, the State of Hawai'i Department of Accounting and General Services Land Survey Division, the Hawaiian Historical Society, and the Hawaiian Mission Houses Historic Site and Archives are also repositories where CSH cultural researchers gather information. Information on Land Commission Awards (LCAs) were accessed via Waihona 'Aina Corporation's Māhele database (Waihona 'Aina 2022), the Office of Hawaiian Affairs (OHA) Papakilo Database (Office of Hawaiian Affairs 2015), and the Ava Konohiki Ancestral Visions of 'Āina website (Ava Konohiki 2015).

2.2 Community Consultation

We begin our consultation efforts with utilizing our previous in-house database of *kūpuna*, *kama'āina*, cultural practitioners, lineal and cultural descendants, Native Hawaiian Organizations (NHOs; includes Hawaiian Civic Clubs and those listed on the Department of Interior's NHO list), and community groups. We also contact agencies such as SHPD, OHA, and the appropriate Island Burial Council where the proposed project is located for their response on the project and to identify lineal and cultural descendants, individuals and/or NHO with cultural expertise and/or knowledge of the study area. CSH is also open to referrals and new contacts. A significant point of the outreach effort is a request for referrals to other *kūpuna*, *kama'āina*, and traditional cultural practitioners knowledgeable about the proposed study area portions of Hanamā'ulu Ahupua'a.

Section 3 *Nā Ka'ao and Mo'olelo*

Hawaiian storytellers of old were greatly honored; they were a major source of entertainment and their stories contained lessons while interweaving elements of Hawaiian lifestyles, genealogy, history, relationships, arts, and the natural environment (Pukui and Green 1995:IX). According to Pukui and Green (1995), storytelling is better heard than read for much becomes lost in the transfer from the spoken to the written word and *ka'ao* are often full of *kaona* or double meanings.

Ka'ao are defined by Pukui and Elbert (1986:108) as a "legend, tale [...], romance, [and/or], fiction." *Ka'ao* may be thought of as oral literature or legends, often fictional or mythic in origin, and have been "consciously composed to tickle the fancy rather than to inform the mind as to supposed events" (Beckwith 1970:1). Conversely, Pukui and Elbert (1986:254) define *mo'olelo* as a "story, tale, myth, history, [and/or] tradition." The *mo'olelo* are generally traditional stories about the gods, historic figures or stories that cover historic events and locate the events with known places. *Mo'olelo* are often intimately connected to a tangible place or space (*wahi pana).*

In differentiating *ka'ao* and *mo'olelo* it may be useful to think of *ka'ao* as expressly delving into the *wao akua* (realm of the gods), discussing the exploits of *akua* (gods) in a primordial time. *Mo'olelo* on the other hand, reference a host of characters from *ali'i* (royalty) to *akua; kupua* (supernatural beings) to *maka'āinana* (commoners); and discuss their varied and complex interactions within the *wao kānaka* (realm of man). Beckwith elaborates, "In reality, the distinction between *ka'ao* as fiction and *mo'olelo* as fact cannot be pressed too closely. It is rather in the intention than in the fact" (Beckwith 1970:1). Thus a so-called *mo'olelo,* which may be enlivened by fantastic adventures of *kupua*, "nevertheless corresponds with the Hawaiian view of the relation between nature and man" (Beckwith 1970:1).

Both *ka'ao* and *mo'olelo* provide important insight into a specific geographical area, adding to a rich fabric of traditional knowledge. The preservation and passing on of these stories through oration remains a highly valued tradition. Additionally, oral traditions associated with the study area communicate the intrinsic value and meaning of a place, specifically its meaning to both *kama'āina* and others who also value that place.

The following section presents traditional accounts of ancient Hawaiians living in the vicinity of the project area. Many relate an age of mythical characters whose epic adventures inadvertently lead to the Hawaiian race of *ali'i* and *maka'āinana.* The *ka'ao* in and around the project area shared below are some of the oldest Hawaiian stories that have survived; they still speak to the characteristics and environment of the area and its people.

The *ahupua'a* of Hanamā'ulu is on the southeast coast of Kaua'i in the traditional Puna district and the modern Līhu'e judicial district, between the *ahupua'a* of Wailua to the north and Kalapakī to the south. The *ahupua'a* name means "tired (as from walking) bay" (Pukui et al. 1974:41). Wichman (1998:61) relates that Hanamā'ulu Bay was given this name because it was "off the main around-the-island trail and a traveler had to walk extra miles to get there."

Historic documentation records the changing name of the district in which the *ahupua'a* of Hanamā'ulu is located. In earlier days, the *ahupua'a* was considered to be in the *moku* of Puna, but today it is in the judicial district of Līhu'e (meaning "cold chill," or "goose-flesh").

> The name, Līhu‘e, applied in a larger sense, included the districts of what are now Kawaihau and Līhu‘e, reaching from Anahola to the Gap, being made so by law in about the year 1861, according to early court records, but some years later divided into the present two districts. The large district was also known as the Puna district, and is found on early maps as such. It was August thirteenth, 1880, that the district was divided into two, by act of Legislature with King Kalākaua's signature. [...] Līhu‘e, in a local sense, and from which the name of the district was derived meant only that little portion of land upon which the present village, as consisting of bank, post office and store, now stands. [Rice 1914:46]

Hanamā‘ulu was permanently inhabited and intensively used in pre-Contact (pre-1778) Hawai‘i. As suggested by the *ahupua‘a* name with its clear coastal references to the distinctive bay, the coastal zone of Hanamā‘ulu was the locus for permanent habitation, *heiau* (religious structures), and numerous trails. Intensive agriculture, including irrigated *kalo lo‘i* (irrigated taro patches), covered the valley floodplain of the Hanamā‘ulu River and extended 2.5 miles inland (Handy 1940:67). In these inland areas, taro patches were often in the gulches, while houses and sweet potato patches were scattered on the *kula* (dryland areas) on each side of the gulches (Handy 1940:154). Native forests were used for their resources (wood, birds, medicinal plants, etc.) and were for the cultivation of such plants as *wauke* (paper mulberry), used to make tapa clothing (Handy 1940:198).

Hawaiian traditional stories (*mo‘olelo*) and the meanings behind noted places (*wahi pana*) elaborate on many of these features of the landscape.

3.1 Pele Chants of the Winds of Hanamā‘ulu and Kalapakī

On a visit to Kaua‘i, the Hawaiian volcano goddess Pele met the handsome Kaua‘i chief, Lohi‘au. When he requested a dance, Pele instead said she would chant all the wind guardians for Nihoa and Kaua‘i. Going from west to east, she chanted the names of the winds, from Nāwiliwili Ahupua‘a to Kalapakī Ahupua‘a, to Ahukini Point in Kalapakī, to a reference to the inland area of the district of Līhu‘e, to Kapaia, a village and *‘ili* (traditional land division smaller than an *ahupua‘a*) within Hanamā‘ulu, then Hanamā‘ulu Ahupua‘a itself (place name locations from Soehren 2014).

He Hu‘eone ka makani o Nāwiliwili	The wind of Nāwiliwili is a Hu‘eone
He Wāmua ka makani o Kalapakī	The wind of Kalapakī is Wāmua
He ‘Ehukai ka makani o Ahukini	The wind of Ahukini is an ‘Ehukai
He Pāhola ke kiu holo ki‘i makani lele kula o Līhu‘e	A Pāhola wind is the scout that fetches the winds sweeping the Līiu‘e plains
He Kuli‘āhiu ka makani o Kapaia	The wind of Kapaia is a Kuli‘āhiu
He Ho‘oluako‘inehe ka makani o Hanamā‘ulu	The wind of Hanamā‘ulu is a Ho‘oluako‘inehe

[Ho‘oulumāhiehie 2008a:18:2008b:17]

The name of the wind (*makani*) of Hanamā‘ulu, "Ho‘oluako‘inehe," is not translated, but several Hawaiian winds begin with the term *ho‘olua*, which is a strong, or forceful wind (Kent

1986:438). The name of the *makani* of neighboring Kapaia, "Kuli'āhiu," is also uncertain but "'āhiu" is a name for a wind of Kahana O'ahu with a connotation of "wild" or "untamed" (Pukui and Elbert 1984:7).

3.2 Lohiau at Hanamā'ulu and Accounts of a Lack of Hospitality

The story of the volcano goddess Pele provides more information on the reputation of the *ahupua'a.*

> Two brothers of Pele, who had come from foreign lands, saw Lohiau's body lying as a stone where the lava flow had overtaken him. Pity welled up in their hearts and they brought Lohiau to life again. One of these brothers made his own body into a canoe and carried the unfortunate Lohiau to Kauai, where he was put ashore at Ahukini. [Rice 1923:14]
>
> Coming to Hanamā'ulu, Lohiau found all the houses but one closed. In that one were two old men, one of whom recognized him and asked him to enter. The men were making *tapa,* which they expected to carry soon to Kapa'a, where games were being held in honor of Kaleiapaoa and his bride, Hi'iaka. [Rice 1923:16]

The suggestion of inhospitality at Hanamā'ulu recorded by Rice ("Lohiau found all the houses but one closed") is reminiscent of the Hawaiian proverb *No Hanamā'ulu ka ipu puehu,* or "the quickly emptied container belongs to Hanamā'ulu" (Pukui 1983:252), which implies the food containers of Hanamā'ulu were often bare—a plausible reason for the local residents to be stingy.

Wichman picks up on this in a similar story:

> Hanamā'ulu, 'tired bay,' was given its name because it was off the main around-the-island trail and a traveler had to walk extra miles to get there. Not only would a traveler have sore feet, but he could expect to go hungry once he reached the village.
>
> *No Hanamā'ulu ka ipu pueho.*
>
> 'At Hanamā'ulu the calabash is empty.'
>
> One time, some travelers from the Kona district reached the valley rim where they saw people peeling taro and heard the sound of poi pounders coming from the village. The travelers were pleased to know there would be fresh poi at the end of their journey, so they hurried down the path. When they arrived at the village, they found no poi at all, only villagers with sad faces apologizing for the lack of food. The visitors went hungry that night. Of course, the story was spread and from that time on the Hanamā'ulu people were known as stingy and miserly. [Wichman 1998:60–61, citing Pukui 1983 *Ōlelo No'eau* and Judd 1930, Hawaiian Proverbs and Riddles, No. 615.]

3.3 Hanamā'ulu and the Legend of Kawelo

Many references to Hanamā'ulu Ahupua'a are made in the "Legend of Kawelo." Kawelo-lei-makua, called Kawelo, was born at Hanamā'ulu. After having become the paramount chief of Kaua'i, he returned to Hanamā'ulu, where he lived with his parents and his wife, Kanewahineikiaoha (Fornander 1918b:4:2, 62). The hero of this *mo'olelo* is said to have lived in the last half of the seventeenth and early decades of the eighteenth century (Hommon 1976:135).

On his return from a stay in the island of O'ahu, Kawelo and his two uncles traveled in a canoe through the passage of Kaieiewaho between Wai'anae on O'ahu and Wailua Ahupua'a on Kaua'i. To navigate to the island, Kawelo followed Keolewa, the morning star.

Soon after this the dawn began to break, and Keolewa was then plainly seen by them all to windward, while the hill of Kalanipuu was also seen as though wading in the sea to meet them. When Kawelo's uncles saw these different objects, they saw that Kawelo was right after all. At this time, they were directly off Hanamaula, so the two uncles said to Kawelo in a chant as follows:

E Kaweloleimakua,	Say, Kaweloleimakua,
E Pae—e, e pae—e,	Let us land, let us land.
E kama hanau a ka lapa o Puna,	Say, offspring from the cliffs of Puna,
Na maka o Haloa i luna,	The eyes of Haloa are looking from above,
Kuu haku, Kuu alii.	My lord my chief.

[Fornander 1918b:4:34–33]

3.4 The Greedy *'O'opu* Eaters

Wichman provides a story of the greedy *'o'opu* (general name for fishes included in the families Eleotridae and Gobiidae) eaters of the uplands of Hanamā'ulu:

> In the interior of the ahupua'a is the stream Wai-ahi, 'fiery water,' that flows from Wai-'ale'ale into the Wai-aka, 'reflecting stream.' The waters of the stream were considered a kupua (the body of a supernatural being). There was a village on its banks. When the August rains came and the 'o'opu (goby fish) swarmed, the villagers prepared a bamboo fish trap and caught forty 'o'opu. These they wrapped in kī leaves and broiled them over a fire. They ate every bit with relish, without a thought of sharing them with their neighbors. Later, however, they had diarrhea because the 'o'opu were so fat. Their neighbors thought it served them right for being so greedy. [Wichman 1998:60, citing Kelsey, Notes n.d.]

In addition to telling us about a traditional subsistence pattern, the account is of interest in seemingly referencing the existence of a "village" in the uplands of Hanamā'ulu for which we have identified no other reference.

3.5 A Man of Ahukini and the Dream Woman from O'ahu

Wichman relates the following story associated with the name of a *pali* (cliff) of Hanamā'ulu:

> Across the bay from Ahukini are Na-pali-'o'oma-o-Hanamā'ulu, 'concave cliffs of Hanamā'ulu.' Here lived a young man named Pueo. It was time for him to choose a wife, but he had not found anyone on Kaua'i who compared to the woman he saw in his dreams. He went to O'ahu and there he heard of a young woman named Ke-'alohi-wai. She had refused to marry any of the men her parents had presented to her, saying that the man of her dreams would come for her. When Pueo and Ke'alohiwai met, they recognized each other immediately. They married and lived

> many years at Pali-'o'oma. After their deaths, the cliffs were renamed Ke-'alohiwai in honor of the dream woman from O'ahu. [Wichman 1998:62, citing S. Aukai, 'The Legend of Kealohiwai' (typewritten manuscript in author's possession)]

3.6 The Petrifying Stench of the *Heiau* of Ka-lau-o-ka-manu

Lahainaluna Students relate an early account of this story:

> Two men came from Kauai, Uukanipo and Kaipoleimanu. While they lived at Kahikimaiaea, they heard of the beauty of Kalauokamani and went in search of her until they arrived in the upland of Wailua. Kalauokamani was dead but her spirit saw the men, followed after them and asked, 'Where are you going?' They answered, 'To see Kalauokamani to be our wife.' The spirit said, 'There is no woman, for she is dead.' The spirit again warned them, 'Do not go up this way but go down below. There is the woman for you, Moeapakii. Do not go up this way lest you smell the stench of the body of the woman [you seek] for she lies unburied.'
>
> The men insisted on going up on the upper side of Wailua and they did smell the stench of the woman and both died. They stand at Kaohokaualu to this day. Both had turned to stone. [Lahainaluna Students 1885:I:218]

Wichman relates a slightly different version of a story associated with Ka-lau-o-ka-manu Heiau and two stones which were the remains of petrified men.

> At the foot of Kalepa there was a large *heiau*, Ka-lau-o-ka-manu, 'tip of the endpiece of the canoe.' It was greatly feared because of the many human sacrifices that were made there. The stench from the *heiau* was so bad that travelers would hurry past holding their noses. This was a large walled temple that was destroyed in 1855 to make the foundations for the Hanamā'ulu sugar mill.
>
> Beside it are two stones whose story remains but whose names are lost. Chief 'U'u-kani-pō was betrothed to Ka-lau-o-kamani, a chiefess of Hanamā'ulu and, with a friend, Ka-ipo-lei-manu, came to see her. They were walking down the path toward Kalepa from Kilohana Crater when they were accosted by a woman. The chief recognized his betrothed, Kalauokamani. 'Turn back!' she said. 'Do not go near Kalauokamanu. Go toward the mountains. There you will find my sister, Moeapaki'i. It is she you must marry.' 'U'ukanipō realized that he was seeing the ghost of his beloved and determined to find out what had happened to her. Ignoring her warnings, the two hurried toward the village. When they came near Kalauokamanu, the stench was so strong that the two men were overcome and turned into rocks that guarded the path, warning all travelers of the danger ahead. [Wichman 1998:61–62, citing the Lahainaluna students but seemingly having additional data]

As a whole, these *mo'olelo* contain a number of recurrent threads. Canoe landings are mentioned and would have been easy in the uniquely protected environs of Hanamā'ulu Bay. Whether arriving by canoe or land, travelers did not find much sustenance here, either due to lack of resources, the tight-fisted nature of the residents, or both. Finally, it is likely Hanamā'ulu was the residence of some *ali'i*-status individuals, as suggested in the *mo'olelo* of Kawelo and the presence of a major sacrificial *heiau*, Kalauokamanu.

Section 4 Traditional and Historical Background

4.1 Pre-Contact Settlement Patterns

Very little is documented regarding traditional settlement patterns at Hanamā'ulu prior to the documentation of native tenant claims following the Māhele land division of 1848. Many authors who have attempted historical study of the area (Kalima and Wong Smith in Corbin et al. 2002:B-1 through B-12; Creed 2006:6-28) are easily distracted by the wealth of data pertaining to Wailua Ahupua'a up the coast. "Few sources refer specifically to Hanamā'ulu and the information contained in them is general in nature" (Kalima and Wong Smith in Corbin et al. 2002:B-1).

As noted above, the suggestion of inhospitality at Hanamā'ulu recorded by Rice ("Lohiau found all the houses but one closed") and the one *'Ōlelo No'eau* or proverbial saying "*No Hanamā'ulu ka ipu puehu,*" or "the quickly emptied container belongs to Hanamā'ulu" (Pukui 1983:252), which implies the food containers of Hanamā'ulu were often bare—a plausible reason for the local residents to be stingy—suggest a relative poverty to the area that would seem at odds with the substantial river valley and unique relationship to the coast at Hanamā'ulu Bay with what must have been a superlative canoe landing.

The fact that Bennett (1931:125) only records two sites at Hanamā'ulu (and his Site 103 dune burials is seemingly shared with Wailua) again suggests a relatively modest traditional Hawaiian habitation area, somewhat eclipsed by neighboring *ahupua'a* to the north (Wailua) and southwest (Kōloa).

Handy and Handy (1972:425-426), however, suggest it was well-cultivated with terraced flats far upstream and sweet potato cultivation at higher elevations.

> South of Wailua there is a very large stream named Hanamaulu flowing from the side of Kilohana crater through a broad gulch in which there were many terraced flats, beginning about two and a half miles upstream. The large delta area where the stream flows into the bay undoubtedly was covered with *lo'i* for wet-taro cultivation before this land was taken over for sugar cane. Much of the higher land now planted with cane must formerly have been used for growing sweet potatoes. [Handy and Handy 1972:425–426]

4.2 Place Names of Hanamā'ulu

Relatively few place names have been reported for Hanamā'ulu Ahupua'a. A study by Creed et al. (2006:67–69) provides a list of identified place names of Hanamā'ulu (Table 1).

Table 1. Place names of Hanamā'ulu (largely adapted from Creed et al. 2006:67–69)

Place name	**Comment/Sources**
Ahukini	Coastal land section and landing north of Nawiliwili, Kaua'i, named for a son of La'a-mai-Kahiki, who came from Tahiti. Former *heiau*. Lit. altar [for] many (blessings] (Pukui, Elbert and Mookini 1974), landing, *heiau*, port community; first port on Kaua'i to have pier-to-ship facilities, ca 1920-1950; Ahukini Camp (*The Garden Island* 1993), Ahukini Road (USGS map); Chief Ahukini lived circa 1250 A.D. and was one of the three sons of La'amai-kahiki, who had come from Raiatea in the Society Islands to visit with his foster father Mō'īkeha (Wichman 1998:61).
Halu falls	Falls (TMK: 3-8-001)
Hanamā'ulu	Landing land section, village, bay, ditch, river, beach park, and birthplace of the hero Ka-welo, Līhu'e district; Lit. tired (as from walking) bay (Pukui, Elbert and Mookini 1974) Hanamaulu Mill (TMK 3-8); it was off the main around-the-island trail and a traveler had to walk extra miles to get there (Wichman 1998:61).
Hanawale	Fishing village near Līhu'e (Wilkes, Narrative of the United States Exploring Expedition, Volume 4, 1845:68)
Hipa	Road (TMK: 3-8)
Hoena	*'Ili* in Hanamā'ulu (land claim LCA 3558)
Kaaukai	*'Ili* in Hanamā'ulu (land claim LCA 3650)
Kahoewa	*'Ili* at shore in Hanamā'ulu (land claim LCA 3246)
Ka-'ili'ili-ahi-nale Ka-'ili-hina-lea	"pebblestone of the clear fire.[...] The name is a reference to the markers used in the game *kōnane*, a form of checkers, in which one player used white stones and the other either black or red stones. It is played on a square board and the object is to occupy as much space as possible. Perhaps there was a source of fiery red pebbles on this particular peak that a player would be delighted to use (Wichman 1998:62–63). There is some uncertainty, but this may be the same as "Ka-ili-hina-lea" on Kauai that Rice (1923:49) associates with a story of bird catchers (for their feathers).
Ka lau o ka manu Heiau	*Heiau* of the *po'okanaka* type, or one in which human sacrifices were offered; most of the stones from this enclosure were taken to make from the foundation of the Hanamaulu sugar mill (Damon 1931:397); Site 102. Kalauokamanu heiau, in Hanamā'ulu above the present mill. Described by Thrum as 'A large walled *heiau* that stood above the present mill; destroyed about 1855. Of *po'okanaka* class.' (Bennett 1931:125); 'tip of the endpiece of the canoe' This *heiau* was 'greatly feared because of the many human sacrifices that were made there. The stench was so bad that travelers would hurry past holding their noses. This was a large walled temple that was destroyed in 1855 to make the foundations for the Hanamaulu sugar mill (Wichman 1998:62).

Place name	Comment/Sources
Kālepa	Ridge, forest reserve, and trail, Līhu'e, Kaua'i. Lit. trade (Pukui, Elbert and Mookini 1974); the name has two meanings. The oldest meaning is "to flutter," "to wave," or "marker flag or ensign." This gives rise to the newer meaning, which is "to trade," "to sell," or "to peddle," or as a noun; "trader," "Peddler,'" or "salesman.'" Anyone who had articles for barter would raise a flag to indicate that poi or some other article was for sale or trade (Wichman 1998:61).
Kamakaihanahana /Kamakahanahana	Name of village (*kulanakauhale*) in land claim LCA 3653 for Hanamā'ulu; name of *'ili* in land claim LCA 3644
Kamilo Point	Name of land formation on USGS map
Kapaia.	Village, stream, and reservoir in Līhu'e, Kaua'i; name of *'ili* and in land claim LCA 3371 for Hanamā'ulu; Lit. the walls or bowers (Pukui, Elbert and Mookini 1974)
Kapapa	Name of *'auwai* (irrigation ditch) in land claim LCA 3647 for Hanamā'ulu; Lit. unity (Pukui, Elbert and Mookini 1974)
Kapuhala	Name of *'ili* in land claim LCA 3426 for Hanamā'ulu, possible meaning tabooed or reserved *hala* (pandanus) grove
Kauai Memorial Gardens	Cemetery in Hanamā'ulu Ahupua'a, Kaua'i (USGS)
Kawailoa	Stream at the sea on northern boundary (State Survey Office Document 336, boundaries of Hanamā'ulu)
Kaili'iliahinale	Hill on the Wailua boundary (Boundary description of Hanamā'ulu)
Ke-'alohi-wai	The cliffs of Nā-pali-'o'oma-o-Hanamā'ulu were renamed this "in honor of the dream woman from O'ahu" (Wichman 1998:62)
Kilohana Crater	Meaning "vantage point" (Wichman 1998:60). A collapsed crater at the summit of a small shield volcano that fills most of the southern part of the Lihue Basin (Macdonald:459). A home of the *Uwa'u* (petrel) Bird (Damon 1931:393–394)
Kuha	Name of *'ili* in land claim LCA 3271 for Hanamā'ulu
Limawela	Name of *'ili* in land claims LCA 3640 LCA 3657, LCA 5640B for Hanamā'ulu near border of Kalapakī
Makali'i	*'Ili* named in land claim LCA 3271 for Hanamā'ulu; Lit, tiny or Pleiades (Pukui, Elbert and Mookini 1974); Hawaiian month name; the six summer months collectively (Pukui and Elbert 1986); Makali'i (December-January) Makali'i refers to the little (*li'i*) eyes (*maka*), or shoots; of the yams, arrowroot, and turmeric beginning to show above the surface of the soil in the uplands (Handy and Handy 1972 from Pukui)
Maulili	Name of *'ili* in land claim LCA 3653 for Hanamā'ulu (Pukui, Elbert and Mookini 1974 list this place name in Maui but give no definition)
Moala	Name of land awarded in land claim LCA 3647 for Hanamā'ulu, name of *lo'i* possibly the name of an edible crab, or to relish food (*mo'ala*) (Pukui and Elbert 1986)
Momakuhana	Name of hill on border between Hanamā'ulu and Ha'ikū (Boundary description of Hanamā'ulu)

Place name	Comment/Sources
Nā-pali-'o'oma-o-Hanamā'ulu	"concave cliffs of Hanama'ulu"; Across the bay from Ahukini (Wichman 1998:62)
Noni/Ononi	Name of *'ili* in land claim LCA 3649 for Hanamā'ulu; meaning possibly the pandanus tree (Pukui and Elbert 1986)
Nukoli'i	Clark 1990:6
Okinawa Nukoli'i Reservoir	Reservoir in Hanamā'ulu Ahupua'a, Kaua'i (USGS); probably a reservoir built with Okinawan laborers.
Opai/Opoi	Name of *'ili* (Opai) in land claim LCA 3392B for Hanamā'ulu; (Opoi listed as northeasterly corner of land of Kalapakī in Hanamā'ulu in Boundaries of Hanamā'ulu)
Palaha / Palaka	Name of *'ili* in land claim LCA 3600 for Hanamā'ulu
Papua'a	Name of *'ili ku* (a nearly independent *'ili* or division of land within an *ahupua'a*) in land claim LCA 3647 for Hanamā'ulu; Lit. Pig pen; Pukui and Elbert 1974); the pig pen is often described in the Māhele documents as belonging to the *konohiki* (headman of the *ahupua'a*) or in common to the *ahupua'a*
Peaiki	Name of an *'ili* in land claim LCA 3271 for Hanamā'ulu
Po-po-pii	The Menehune hill today no longer known; connected with a Kilohana Crater story (Damon 1931:396); listed in Pukui, Elbert and Mookini 1971 as Po'opo'oiki, a valley in northeast Kaua'i, with meaning "small depression"
Puaka	Name of village named in land claim LCA 3271 for Hanamā'ulu
Pukakolu	Name of *kulanakauhale* in land claim LCA 3650 for Hanamā'ulu
Waiahi	"In the interior of the *ahupua'a* is the stream Wai-ahi, 'fiery water,' that flows from Wai-'ale'ale into the Wai-aka, 'reflecting stream.' The waters of the stream were considered a *kupua* (the body of a supernatural being)" (Wichman 1998:60).
Waiaka	"reflecting stream" see "Waiahi" (above) (Wichman 1998:60)
Waiaoao F.T./ Waiauau (NT.)	Name of *'ili* in land claim LCA 3558 for Hanamā'ulu; Waiaauau, Lit. bathing place or pool (Pukui and Elbert 1986)
Waieo	Name of *'ili* in land claim LCA3647 for Hanamā'ulu
Waiu	Land area, Līhu'e District; Lit. female breast (Pukui, Elbert and Mookini 1974)
Wilcox Memorial Hospital	Hospital in Hanamā'ulu Ahupua'a, Kaua'i (USGS) named for George N. Wilcox (1839-1933) (Pukui, Elbert and Mookini 1974)

4.3 Early Historic Period

Captain Cook, commander of the British ships *Resolution* and *Discovery*, was the first westerner to see the Hawaiian Islands. In 1778 he anchored off Waimea Bay, Kaua'i. Waimea and the shores of the neighboring island of Ni'ihau were the favored anchorages of early explorers and ships involved in the early fur trade on the northwest coast of America. The Islands were visited in the next few years by traders (mainly fur traders) who picked up furs on the northwest coast of America, stopped in Hawai'i for provisions, and then sailed to China to trade the furs for luxury goods. Pigs, sweet potatoes, and salt, among other items, were traded with these ships. It is likely that at this time agricultural production in Hanamā'ulu began to grow beyond traditional subsistence patterns (Joesting 1984:46-47).

In 1791, Captain John Kendrick anchored off Ni'ihau to get provisions. He left three of his men there, and ordered them to sail to Kaua'i to look for "pearls and sandalwood." When the British Captain Vancouver landed at Waimea in 1792, he met two of these men, named Rowbottom and Williams, as noted in his journal:

> Previously to the departure of Rowbottom and Williams, they informed me, that their captain had conceived that a valuable branch of commerce might be created, by the importation of the sandal-wood of this country into India, where it sells at an exorbitant price; that, in the fur trade, immense profits had been gained, insomuch that it was expected not less than twenty vessels would, on these pursuits, sail with their captain (Kendrick) from New England, and that they were desired to engage the native to provide several cargoes of this wood, which is easily procured, as the mountain of Attowai [Kaua'i] as well as those of Owhyhee [Hawai'i], abound with the trees from which it is produced [...] [Vancouver 1798:188]

Cutting and shipping sandalwood to Asia was probably the first real "industry" seen from a western perspective. Sandalwood was shipped from the Islands, possibly first as firewood, as early as 1791 (Joesting1984:45). An indirect reference to sandalwood trade in the Līhu'e area is supplied by Ethel Damon who recorded that Chief Forester C.S. Judd had told an early settler, Richard Isenberg, that Mount Kālepa (approximately 1.7 km northwest of the Ahukini Makai project area) had formerly been covered with sandalwood (Damon 1931:913).

Vancouver did sail by the north coast of Kaua'i, but could find no safe anchorage. However, he did note the Wailua area, north of Hanamā'ulu, was "the most fertile and pleasant district of the island" and the principal residence of the king (Vancouver 1798:221).

Missionary accounts, mainly unpublished, from the first half of the nineteenth century provide the majority of the early written records for this portion of Kaua'i, and in some ways they confirm and expand upon what can be gathered from oral tradition. Ethel Damon, in *Koamalu* (her history of the Rice family of Kaua'i), repeated the scenic description of Līhu'e given by Reverend Hiram Bingham in his book, *A Residence of Twenty-One Years in the Sandwich Islands*, published in 1847:

> In 1824, when walking around the island from Waimea to counsel the people after the wreck of *The Cleopatra's Barge*, Rev. Hiram Bingham crossed from Hanapepe, as has been seen, over the old upland trail back of Kilohana, and wrote of it as 'a country of good land, mostly open, unoccupied and covered with grass, sprinkled with trees, and watered with lively streams that descend from the forest-covered mountains and wind their way along ravines to the sea, —a much finer country than the western part of the island.'[Damon 1931:401]

William DeWitt Alexander, son of Waioli missionary William P. Alexander, traveling from Kōloa to the north shore of Kaua'i in 1849 recorded some descriptive notes of Hanamā'ulu:

> A few miles further on we crossed the picturesque valley of Hanamaulu. This valley is prettily bordered by groves of Kukui, koa, & hala trees, and is well cultivated

> with taro. A fine stream flows through the midst of it, which makes a remarkable bend at this place like a horse shoe. We then traveled along the seashore at the foot of a range of hills through groves of hau, & among hills of sand. It was now after dark, but the moon shone brightly, and there was no difficulty in finding our way. About eight o-clock we arrived at the banks of the Wailua river. [Kaua'i Historical Society 1991:121]

The Dewitt Alexander account of Hanamā'ulu in 1949 as "well cultivated" in 1849 (above) seems to stand in counter-distinction to the traditions that "the food containers of Hanamā'ulu were often bare."

4.4 The Māhele and the Kuleana Act

In 1845, the Board of Commissioners to Quiet Land Titles, also called the Land Commission, was established "for the investigation and final ascertainment or rejection of all claims of private individuals, whether natives or foreigners, to any landed property" (Chinen 1958:8).

The first *māhele*, or division, of lands among the monarch, Kamehameha III, and the *ali'i* (chiefs) and their land agents (*konohiki*) took place 27 January 1848; the last was 7 March 1848. The king and over 240 *ali'i* and *konohiki* took part in this division; the list of *ahupua'a* (large land divisions) and *'ili* (smaller land divisions) awarded to the king or each claimant was listed in a large book, now called the *Buke Māhele* (Māhele Book) (see Barrère 1994 for a detailed study of these awards). These awards became known as Konohiki Awards.

For Konohiki lands, a claim first had to be approved by the Land Commissioners. Upon confirmation of the claim, a certificate was awarded to the claimant. This certificate was called a Land Commission Award (LCA), which confirmed the claim of an individual for a parcel. The awardee could then obtain from the Minister of the Interior a Royal Patent (R.P.), which indicated the government's interest in the land had been settled by the payment of a commutation fee. Commutation means "an exchange, or replacement." The commutation fee to conclude the government's interest in the land was usually set at a maximum of one-third of the value of the unimproved land. The fee could be settled with cash, but was usually settled by the return of one-third of the lands (or cumulative value of the lands) originally awarded to the claimant. For example, if the claimant was awarded three lands, he could "return" one to pay the commutation fee, and he would "retain" the remaining two lands.

Victoria Kamāmalu (who sometimes went by the name Victoria Ka'ahumanu, as a political heir to the legacy as *kuhina nui* or prime minister of the powerful chiefesses Ka'ahumanu and Kīna'u) was awarded the *ahupua'a* of Hanamā'ulu (LCA 7713 'Āpana [Lot] 2) as well as adjacent Kalapakī Ahupua'a (another *'āpana* of her LCA 7713). Victoria Kamāmalu was fabulously land rich and the third largest landowner in the kingdom. Her lands included seven *ahupua'a*-sized parcels on Kaua'i (five in addition to Hanamā'ulu and Kalapakī), 79 on O'ahu, 14 on Maui, two on Moloka'i, and 58 on Hawai'i Island (Kame'eleihiwa 1992:124). She did not have particularly strong connections to Hanamā'ulu. The entire Ahukini Makai project area was part of Victoria Kamāmalu's LCA 7713 'Āpana 2. As was often the case when *ahupua'a* were owned basically by absentee *ali'i* (aristocracy) land lords, with little if any ties to the land, and with a relatively small total area of native tenant parcel exclusions, the alienation of the land from Hawaiian hands was made easy, as in the case of Hanamā'ulu Ahupua'a that was sold as one very large parcel upon Kamāmalu's death in 1870 (discussed further below).

On 19 October 1849, the Hawaiian Privy Council adopted resolutions to protect the rights of native tenants, the *maka'āinana*, or the "common" people. Native tenants, and long-term foreign residents, could be awarded lands they occupied or that they cultivated as Kuleana Awards.

Since the *ali'i* and *konohiki* were not required to record the use of their large land awards, the surrounding smaller *kuleana* awards of the *maka'āinana* assist in identifying land use in Hanamā'ulu (although there were no native tenant claims in the Ahukini Makai project area.

A total of 14,195 claims were filed and 8,421 awards were approved, averaging 3 acres each, equaling about 29% of the 29,220 adult Native Hawaiian males living at the time of the Māhele (Kame'eleihiwa 1992:295). Out of the potential 2,500,000 acres of Crown and Government lands, 28,658 acres of land were awarded to the *maka'āinana*, less than 1% of the total acreage of Hawai'i (Kame'eleihiwa 1992:295). The small number of *kuleana* awards and their small size prevented the *maka'āinana* from maintaining their independent subsistence, often forcing them to abandon their newly acquired property (Chinen 1958:32).

Although many Hawaiians did not submit or follow through on claims for their lands, the distribution and written testimonies of LCAs provide insight into patterns of residence and agriculture. Many of these patterns may have existed for centuries. By examining the patterns of *kuleana* LCA parcels in the vicinity of the project area, insight can be gained as to the likely intensity and nature of Hawaiian activity in the area at the time.

Twenty *kuleana* parcels were claimed within Hanamā'ulu Ahupua'a. Of these parcels, five were not awarded (LCAs 2659*K, 3370, 3392B, 3641, and 5640B) due to undocumented circumstances. The *kuleana* parcels were all located along the wide *makai* flood plain of Hanamā'ulu Stream and only extend about 100 m *mauka* of the Kapaia Bridge (no *kuleana* parcels are in the vicinity of the project area). The distribution of native tenant LCAs at Hanamā'ulu is depicted in Figure 7 and their land use is summarized in Table 2.

Nearly every LCA claim in Hanamā'ulu contained an *'auwai* (irrigation ditch), necessary for *lo'i* cultivation. The claims for LCA lots in Hanamā'ulu mention that Hawaiian *hale* (houses), *lo'i*, and *kula* lands (lands used for dryland agriculture or pasture) were located along both sides of Hanamā'ulu River, extending from the shore up to the village of Kapaia. The *lo'i* and *kula* lands were often included together in one *'āpana*, with house sites belonging to separate *'āpana*. Overall, the LCA documentation indicates traditional Hawaiian activities being practiced in close proximity to Hanamā'ulu Stream (Waihona 'Aina 2022).

George C. Jackson produced an 1881 map of Nāwiliwili Harbor (Figure 8, shown superimposed on a USGS quadrangle showing the project area). The comment on the northeast corner of the Jackson map (highlighted on Figure 8) reads "Level grassy land with volcanic boulders here and there" which is believed to be an appropriate characterization of much of the coastal sloping table land of Hanamā'ulu (including the present Ahukini Makai Subdivision project area) prior to commercial sugarcane cultivation. This relatively dry grassy land with volcanic boulders held little appeal for traditional Hawaiian habitation and agriculture which helps us understand why LCA claims in Hanamā'ulu were all confined to a relatively small area in the major valleys where water for the irrigation of crops and the general ambiance of life was plentiful.

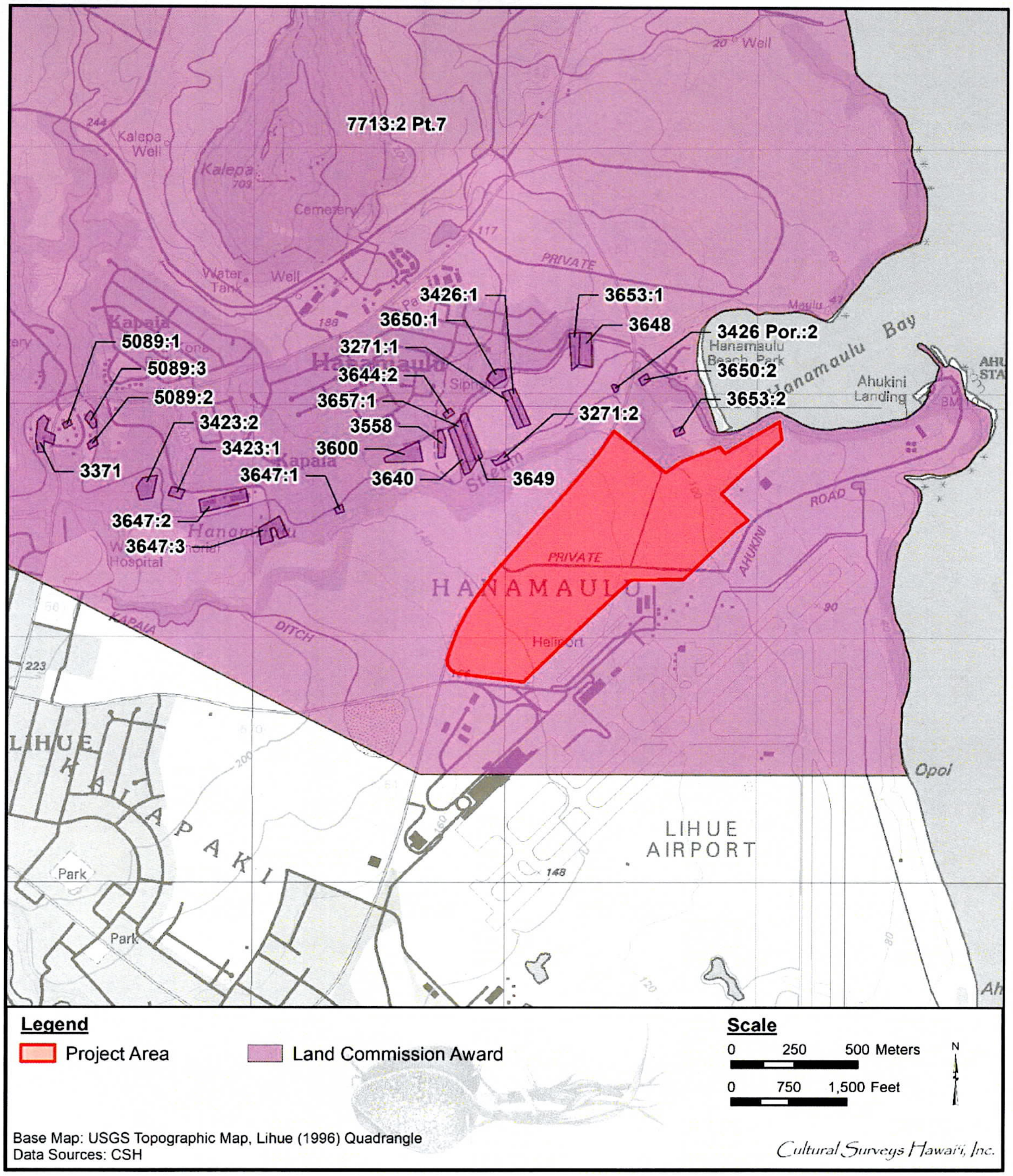

7713:2 Pt.7
3426:1
3653:1
3650:1
3648
3426 Por.:2
3271:1
3650:2
5089:1
5089:3
3644:2
5089:2
3657:1
3653:2
3423:2
3558
3271:2
3423:1
3600
3371
3647:1
3640
3649
3647:2
3647:3
Hanamaulu Bay
Ahukini Landing
HANAMAULU
LIHUE AIRPORT
Kalepa
Kapaia
LIHUE
KALAPAKI
Legend
Project Area
Land Commission Award
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: USGS Topographic Map, Lihue (1996) Quadrangle
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 7. Location of LCAs near the project area on a 1996 Lihue USGS topographic quadrangle

Table 2. Hanamāʻulu Land Commission Awards

LCA #	Claimant	Location	Description
3271	Lalahilimoku, Leimoku	Hanamāʻulu, Puna	Claimed two parcels ʻĀpana 1 for five *loʻi* (taro patches) adjacent to an *ʻauwai* (ditch) and a *kahawai* (stream); ʻĀpana 2 for a *pāhale* (house lot) adjacent to a *muliwai* (lagoonal backwater) and a *pali* (cliff)
3371	Naehu	*ʻIli* of Kapaia, Hanamāʻulu, Puna	Claimed one *ʻĀina kalo* (taro land) parcel with a *pāhale* adjacent to Hanamāʻulu Stream (*Kahawai o Hanamāʻulu*) and a ditch
3423	Paka	Hanamāʻulu, Puna	Claimed two parcels ʻĀpana 1 for a *pāhale* adjacent to a *pali* and ʻĀpana 2 for 8 *loʻi* and a *kula* next to the Hanamāʻulu watercourse (*kahawai o Hanamaulu*) and a *pali*
3426	Pelekane	Hanamāʻulu, Puna	Claimed two parcels ʻĀpana 1 for four *loʻi* next to a *muliwai* and an *ʻauwai;* ʻĀpana 2 for a *pāhale* next to a *kahawai* and the house lots of Munamuna and Paulu. The Kauaʻi Historical Society has kindly supplied the data that one of their *ʻāpana* was bounded by a fish pond. Of course this was down in the stream valley on the *muliwai/kahawai.*
3558	Keke	Hanamāʻulu, Puna	Claimed one *ʻĀina kalo* parcel by an *ʻauwai* and neighbor's *loʻi*
3600	Keolanui	Hanamāʻulu, Puna	Claimed one *loʻi* and *kula* parcel by *ʻauwai, kahawai,* and *loʻi* of neighbors.
3640	Kumakahaohao	Hanamāʻulu, Puna	Claimed one parcel of four *loʻi* by an *ʻauwai* and a *muliwai* and neighbors' *loʻi*
3644	Kaualupa	Hanamāʻulu, Puna	Claimed two parcels ʻĀpana 1 for *ʻĀina kalo* by an *ʻauwai* and a *pali* and a *muliwai* and neighbors' *loʻi,* and ʻĀpana 2 for a *pāhale* adjacent to a *pali*
3647	Kapuohi	Hanamāʻulu, Puna; parcels 2 and 3 are in the *ʻili* of Moala	Claimed three parcels ʻĀpana 1 for a *pāhale* by a piggery (*pā puaʻa*) and a *pali* and a copse of *hau* trees (*laʻau hau*), and the stream; ʻĀpana 2 for *ʻĀina kalo* parcel by a *pali* and an *ʻauwai*, and ʻĀpana 3 for another *ʻĀina kalo* parcel by a *pali*
3648	Kala	Hanamāʻulu, Puna	Claimed one *ʻĀina kalo* parcel by a *muliwai* and neighbors' *loʻi*
3649	Kamalo	Hanamāʻulu, Puna	Claimed one *ʻĀina kalo* parcel by an *ʻauwai* and the *muliwai o Hanamāʻulu* (lagoonal backwater of Hanamāʻulu), and neighbors' *loʻi*

LCA #	Claimant	Location	Description
3650	Kaluhiwaha	Hanamā'ulu	Claimed two parcels 'Āpana 1 for 2 *lo'i* next to an *'auwai* and a *pali* and the *lo'i* of a neighbor; and 'Āpana 2 for a *pāhale* next to the *kahawai* o Hanamā'ulu (Hanamā'ulu stream)
3653	Kolii	Hanamā'ulu, Puna	Claimed two parcels 'Āpana 1 for four *lo'i* next to an *'auwai* and neighbor's *lo'i* and 'Āpana 2 for a *pāhale*
3657	Niho	Hanamā'ulu, Puna	Claimed one parcel of four *lo'i* by a *pali* and *'auwai* and Hanamā'ulu lagoonal backwater (*muliwai o Hanamā'ulu*), and neighbors' *lo'i*
5089	Kuhamoana	Hanamā'ulu, Puna	Claimed three parcels 'Āpana 1 for a *pāhale*, 'Āpana 2 for a single *lo'i* near the main road to Wailua *(ka alanui o Wailua)* and the *kula* of Pierce, and 'Āpana 3 for *'Āina kalo* and *kula* by a *kahawai*, *kula* of Pierce, and a neighbor's *lo'i*
7713	Kamāmalu, V.	Hanamā'ulu, Puna (*ahupua'a*)	Notes of Survey of the Ahupua'a of Land called Hanamā'ulu, situated in the District of Puna, Island of Kaua'i. Commencing upon the sea, at the mouth of the small stream called Kawailoa, and upon the southerly bank of said stream, running from thence S 74° W. 90 Chains, to the top of the hill called Kailiiliiliahinale, Bounded by the land called Wailua, belonging to His Majesty the King, from thence, N 82° W. 494 chains, Passing the plains to the top of the Mountain range called Wai'ale'ale, thence, S16° E. 204 Chains, following along the top of the said Mt range called Wai'ale'ale to a certain peak standing upon the North westerly corner of Land called haiku, from thence, N86° E. 166 chains, to the top of the Hill called Kamoenakukaua of passing down the range of the Hill on the *makai* side of Kilauhana & through, a small ravine, to a certain *Koa* tree, a short distance South of the Hanamaulu River, thence S82 E. 186 Chains, crossing the plantation of H.A. Peirce, to a certain *Kukui* tree standing alone on the plains *makai* of the above plantation of H.A. Pierce & Co marked K. bounded by the land called Kalapakī, thence N 75° E. 102 chains, passing over the plains to the Point of Rock upon the sea called Opoi, which forms the North easterly corner of land called Kalapakī, from thence following the sea to the point of Commencement, comprising an Area Nine Thousand One Hundred and Seventy Seven Acres

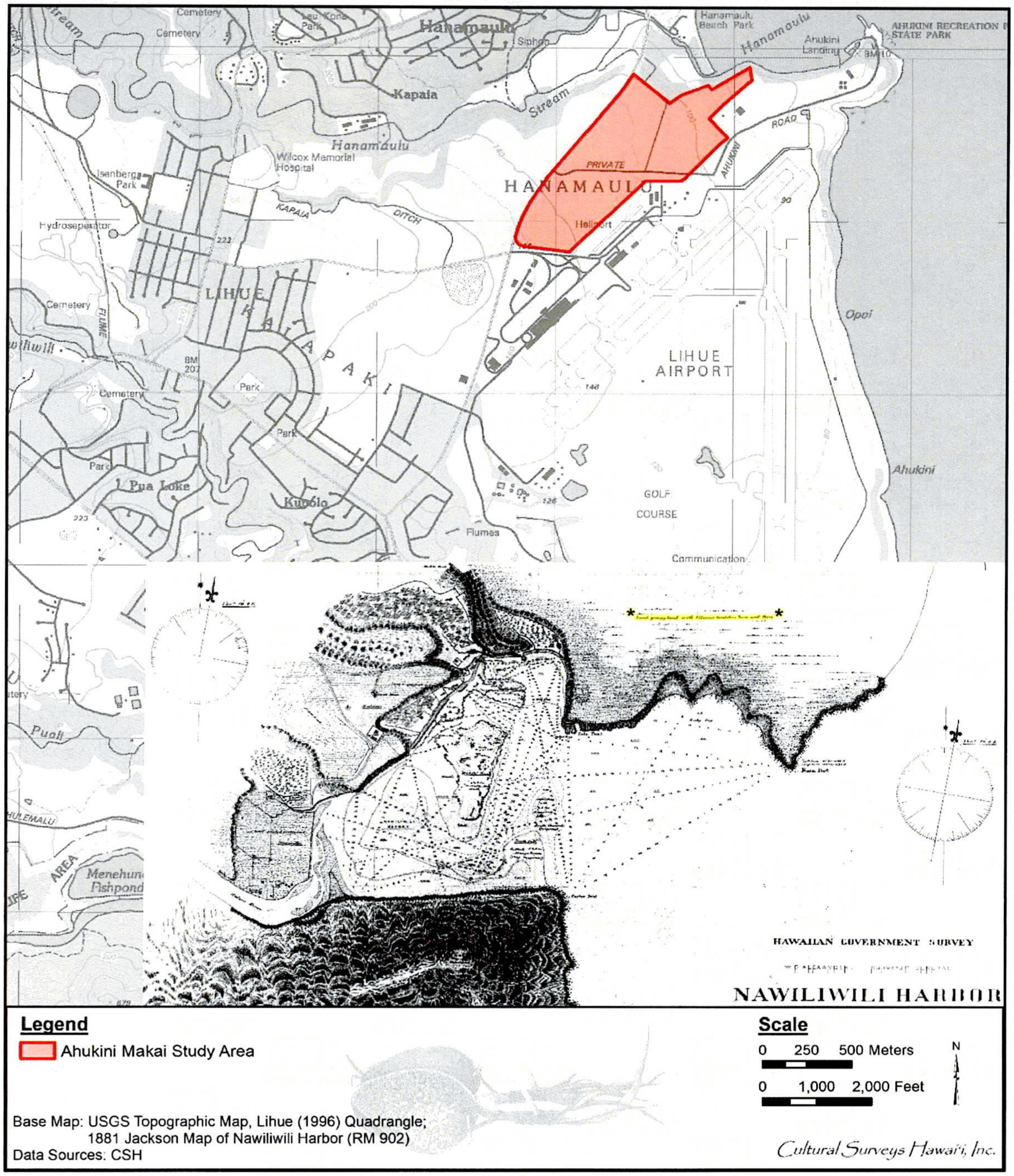

Hanamaulu
Hanamaulu Beach Park
Anukini Landing
AHUKINI RECREATION STATE PARK
Kapaia
Stream
Hanamaulu
Wilcox Memorial Hospital
HANAMAULU
PRIVATE
ROAD
AHUKINI
Heliport
Isenberg Park
Hydroseparator
KAPAIA
DITCH
LIHUE
KALAPAKI
Cemetery
FLUME
Park
Pua Loke
Kuhio
Flumes
LIHUE AIRPORT
Opoi
Ahukini
GOLF COURSE
Communication
Puali
HULEMALU
AREA
Menehune Fishpond
HAWAIIAN GOVERNMENT SURVEY
NAWILIWILI HARBOR
Legend
Ahukini Makai Study Area
Scale
0 250 500 Meters
0 1,000 2,000 Feet
N
Base Map: USGS Topographic Map, Lihue (1996) Quadrangle; 1881 Jackson Map of Nawiliwili Harbor (RM 902)
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 8. George C. Jackson produced an 1881 map of Nāwiliwili Harbor (here superimposed on a 1996 Lihue USGS quadrangle showing the project area). The highlighted comment on the northeast corner of the Jackson map reads "Level grassy land with volcanic boulders here and there" which is believed to characterize much of the coastal sloping table land of Kalapakī and Hanamā'ulu prior to commercial sugarcane cultivation

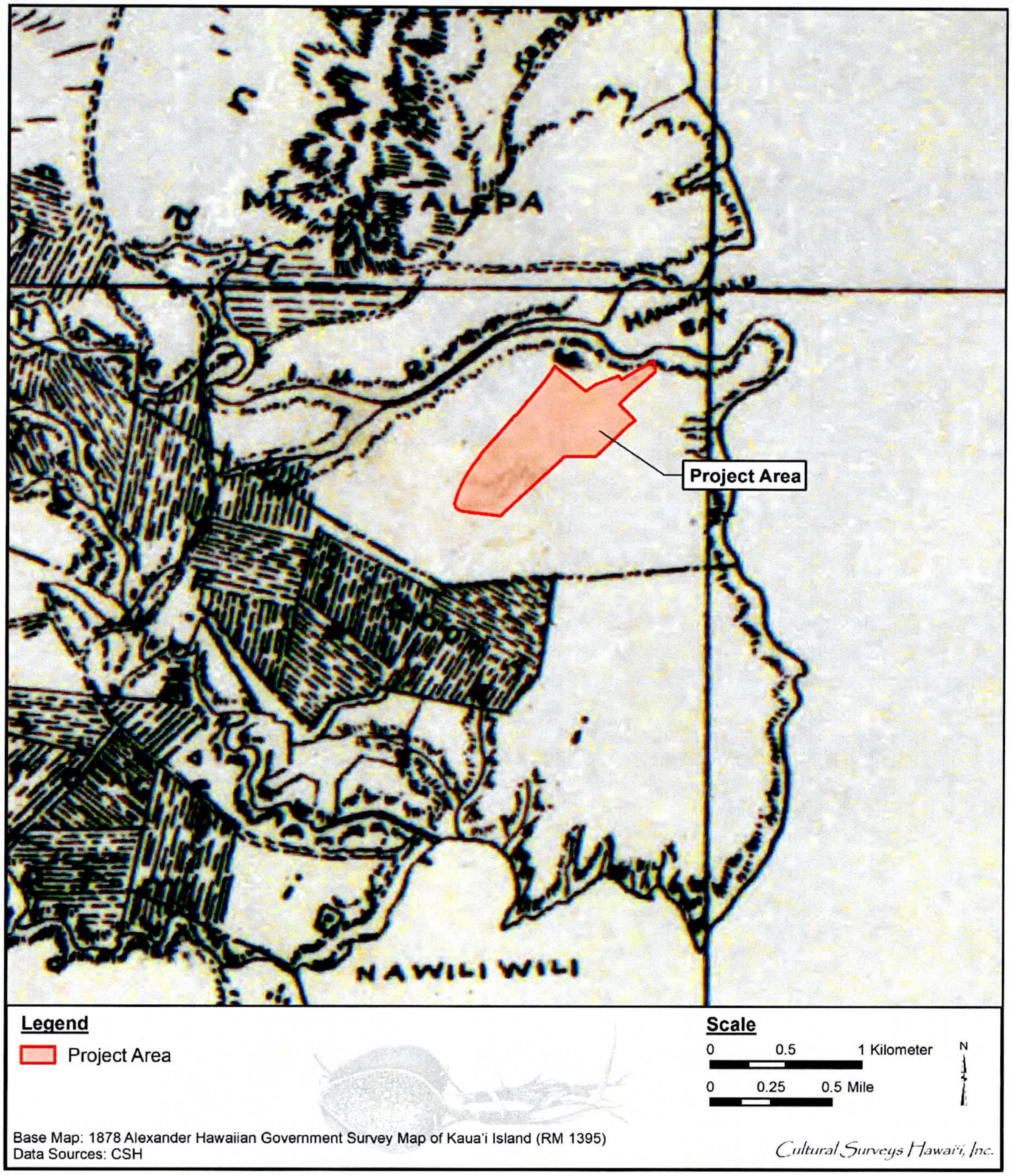
4.5 The Transition to Sugarcane Cultivation

By 1842, missionaries had moved into the area and had established five schools. Some of these missionaries attempted to introduce cotton as a cash crop, but were unsuccessful (Damon 1931:375). Sugar, however, caught on. The Lihue Plantation Company was first established in 1849 by Henry A. Pierce, Judge William Little Lee (the chairman of the Land Commission), and Charles Reed Bishop. Together they formed the Henry A. Pierce and Company (Damon 1931:409). The first 3,000 acres were purchased in Nāwiliwili (Damon 1931:414) and an additional 300 acres were purchased in Ahukini in 1866 (Hibbard and Wichman 2008:7). The Lihue Plantation became the most modern plantation at that time in all Hawai'i. It featured a steam-powered mill built in 1853, the first use of steam power on a Hawaiian sugar plantation (Dorrance and Morgan 2000:28), and the 10-mile-long Hanamaulu Ditch built in 1856 by plantation manager William H. Rice, which was the first large-scale irrigation project for any of the sugar plantations (Moffatt and Fitzpatrick 1995:103).

The success of Lihue Plantation allowed it to continue to expand. After the owner of Hanamā'ulu Ahupua'a, Victoria Kamāmalu, died in 1866, all 9,177 acres (according to the acre number in the Māhele award) in the *ahupua'a* were purchased by Paul Isenberg (manager of Lihue Plantation from 1862–1878) in 1870, which he established as a separate company, the Hanamaulu Plantation. The land commission report was in error, however, and the deed to the tract found that the early Māhele survey had underestimated the acreage, which was actually something over 19,000 acres. An even later survey placed the acreage at 17,000 acres (Damon 1931:742–747). A total of 30,000 leased acres in Wailua were added in 1878 (Hibbard and Wichman 2008:7). In 1898, Hanamaulu Plantation merged with the Lihue Plantation (Condé and Best 1973:165). The extent of the sugarcane fields near the turn of the nineteenth century can be seen in an 1878 Hawaiian Government Survey map (Figure 9). In this map, there are not yet sugarcane fields depicted in the current project area; however, well before 1900 the project area was heavily altered by the cultivation of sugarcane (Figure 10). The extent of Lihue Plantation fields is illustrated in the 1906 Donn map (Figure 11) that shows much of the *ahupua'a* of Ha'ikū, Nāwiliwili, Kalapakī, Hanamā'ulu, and Wailua in a sea of sugarcane.

Given the indicated land contours on the 1910 map (Figure 12) it seems probable significant grading took place in the Ahukini Makai project area in the early twentieth century. Seemingly no houses are depicted in the project area or in the gently sloping coastal table lands south of Hanamā'ulu Stream. Several house are depicted in Hanamā'ulu Valley. This is very much consistent with the pattern of traditional Hawaiian habitation and agriculture as indicated in the Land Commission Award data. We have highlighted unimproved roads in yellow and highlighted trails in blue on the 1910 map (see Figure 12). It appears that the major routes out of Hanamā'ulu Valley in 1910 were to the west and the north. A Lihue Plantation railroad is depicted crossing the northeast portion of the project area and on north over the mouth of Hanamā'ulu Valley on this 1910 map (see Figure 12). A spur railroad segment branches off to the west, undoubtedly to better access sugar cane fields. Ahukini Road is indicated much as it is today.

By the end of the nineteenth century, fishing on Kaua'i was minimal, even though the waters were said to teem with fish "largely accounted for by the fact that the efforts of the islanders are devoted almost exclusively to sugar-cane growing, in which more money can be made than in fishing" (Cobb 1902:498). However, the ocean and shoreline that had been so integral to the


ALEPA
BAY
Project Area
NAWILIWILI
Legend
Project Area
Scale
0 0.5 1 Kilometer
0 0.25 0.5 Mile
N
Cultural Surveys Hawai'i, Inc.

Base Map: 1878 Alexander Hawaiian Government Survey Map of Kaua'i Island (RM 1395)
Data Sources: CSH

Figure 9. Portion of W.D. Alexander's 1878 Hawaii Government Survey Map of Kauai (RM 1395) showing the project area

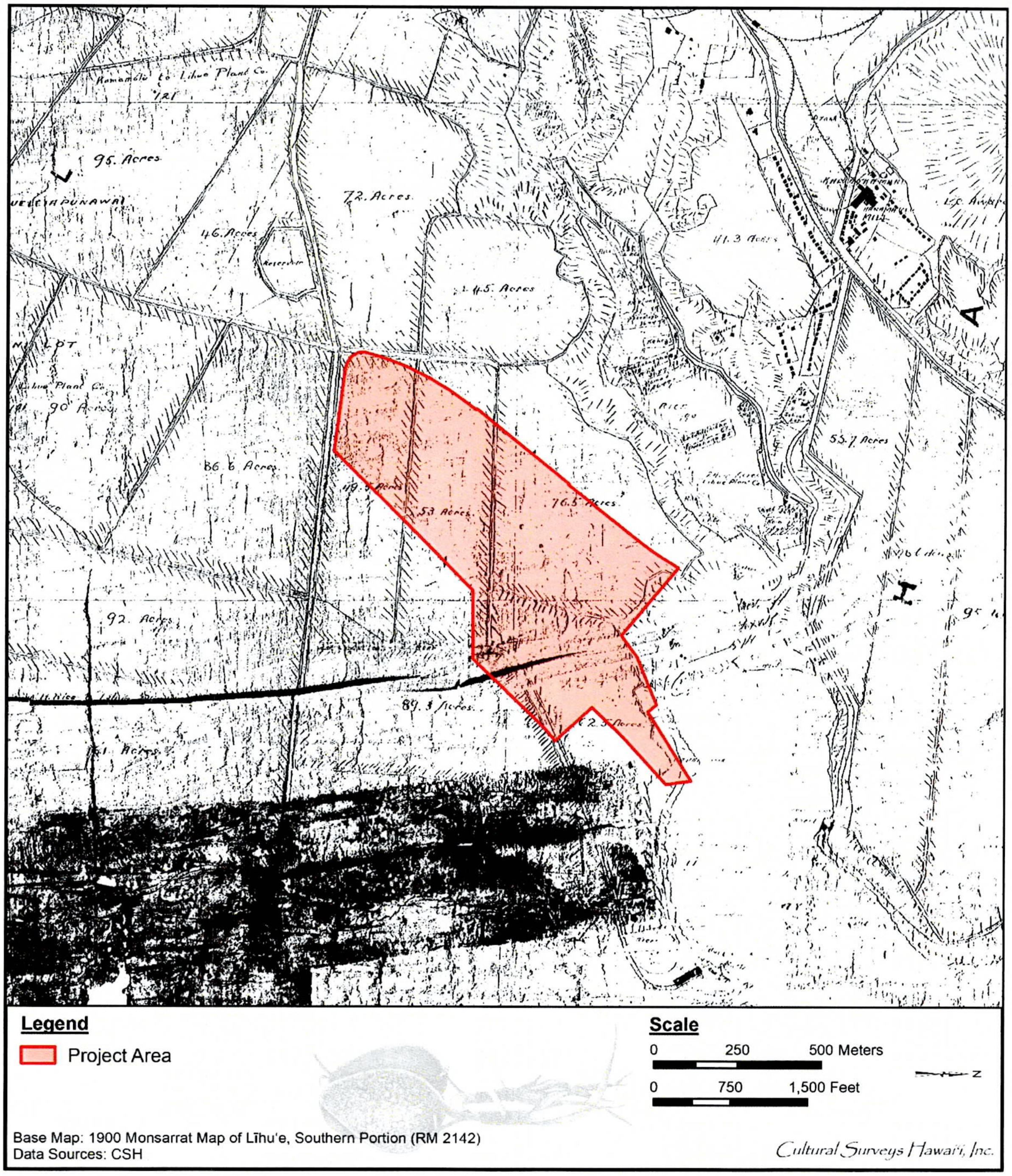
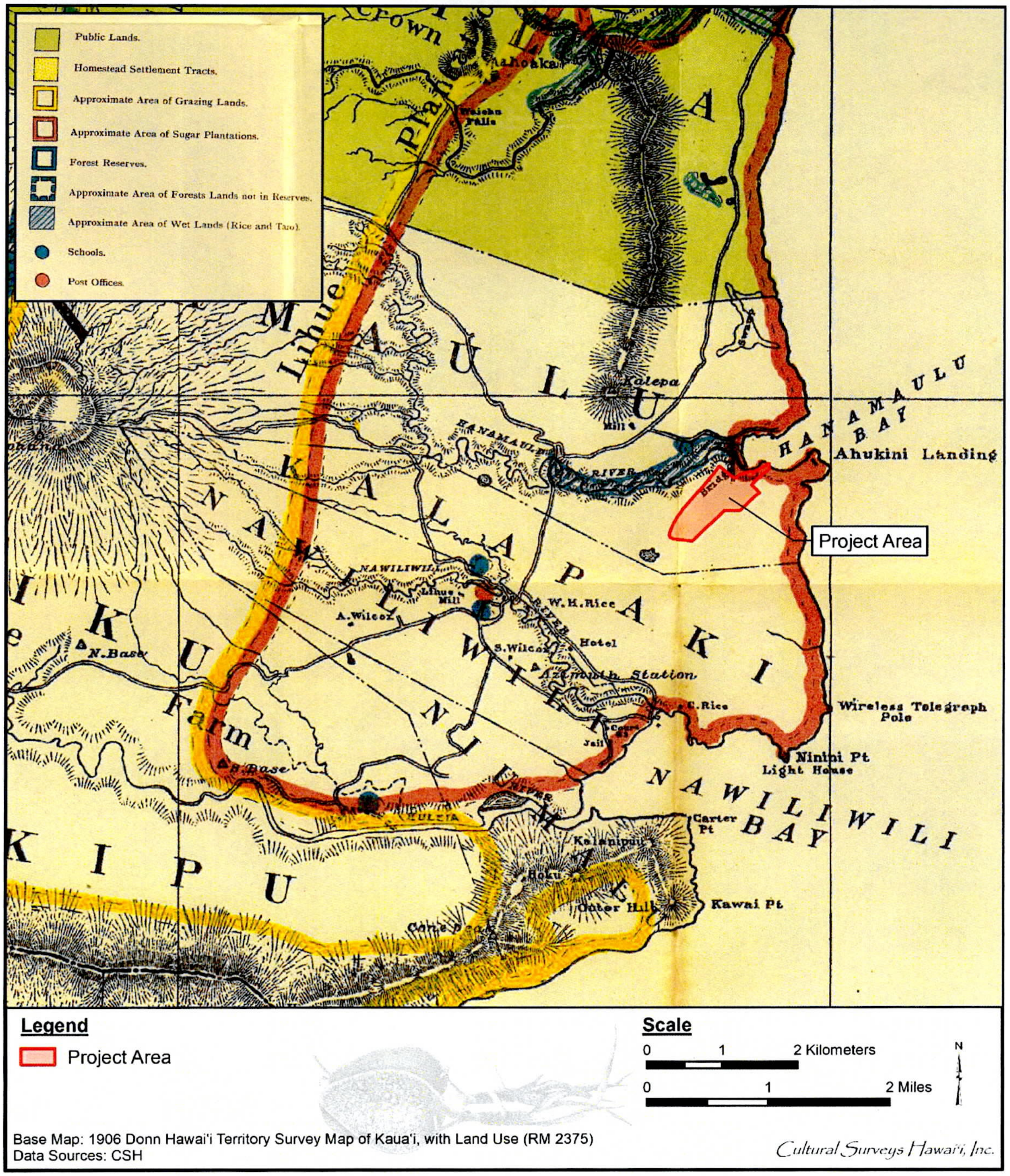

95. Acres
72. Acres
46. Acres
41.5 Acres
41.3 Acres
90 Acres
86.6 Acres
53 Acres
76.5 Acres
55.7 Acres
92. Acres
89.3 Acres
62.5 Acres
Legend
🟥 Project Area
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: 1900 Monsarrat Map of Līhu'e, Southern Portion (RM 2142)
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 10. Portion of the 1900 Monsarrat map of Lihue Plantation, Southern Portion (RM 2142), showing the project area


Public Lands.
Homestead Settlement Tracts.
Approximate Area of Grazing Lands.
Approximate Area of Sugar Plantations.
Forest Reserves.
Approximate Area of Forests Lands not in Reserves.
Approximate Area of Wet Lands (Rice and Taro).
Schools.
Post Offices.
Crown
Lihue Plantation
Waiahi Falls
Kalepa
HANAMAULU BAY
Ahukini Landing
HANAMAULU RIVER
Project Area
NAWILIWILI
Lihue Mill
A. Wilcox
W. H. Rice
Hotel
S. Wilcox
Azimuth Station
C. Rice
Wireless Telegraph Pole
Ninini Pt Light House
Jail
Court
Farm
S. Base
N. Base
NAWILIWILI BAY
Carter Pt
Kalanipuu
Hoku
Kawai Pt
MAULU
KALAPAKI
NAWILIWILI
KIPU
HULEIA
Legend
Project Area
Scale
0 1 2 Kilometers
0 1 2 Miles
N
Cultural Surveys Hawai'i, Inc.

Base Map: 1906 Donn Hawai'i Territory Survey Map of Kaua'i, with Land Use (RM 2375)
Data Sources: CSH

Figure 11. Portion of the 1906 Donn Hawaii Territory Survey map of Kaua'i with land use (RM 2375) showing the project area well within the "Approximate Area of Sugar Plantation"

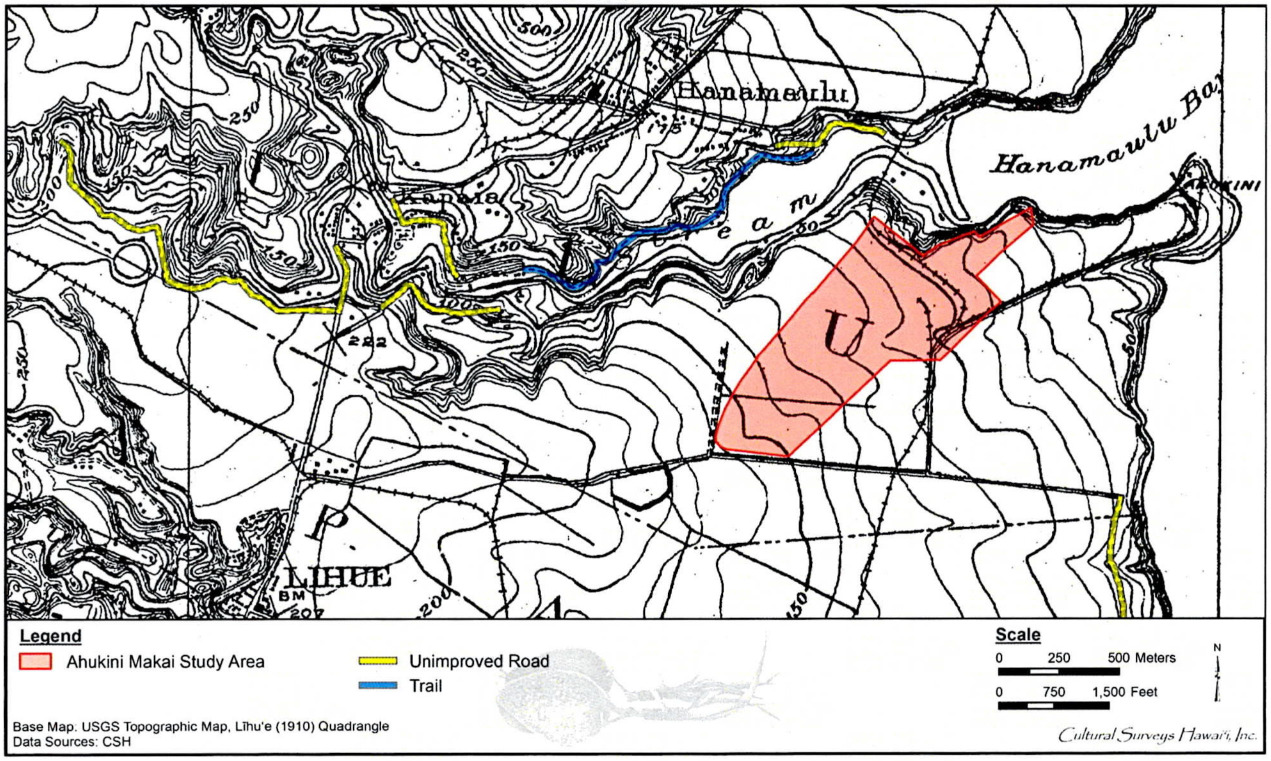

Hanamaulu
Hanamaulu Bay
Kapaia
Stream
U
P
LIHUE
AHUKINI
BM 207
500
250
222
150
100
200
50
Legend
Ahukini Makai Study Area
Unimproved Road
Trail
Base Map: USGS Topographic Map, Līhu'e (1910) Quadrangle
Data Sources: CSH
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Cultural Surveys Hawai'i, Inc.

Figure 12. Portion of a 1910 Lihue USGS topographic quadrangle showing the project area (with unimproved roads highlighted in yellow and trails highlighted in blue)

traditional Hawaiian way of life in Hanamā'ulu began to take on importance with growing harbor facilities of the early twentieth century.

Hanamaulu Sugar Company, established in 1870 (Condé and Best 1973:165) originally had its own wharf at Kou, on the north side of Hanamā'ulu Bay (Condé and Best 1973:179). This became the first wharf and boat landing area built sometime before 1885, beginning as a small wooden wharf on the beach. In 1898, this sugar company merged with the Lihue Plantation Company (Condé and Best 1973:179) and the railroads of the two companies also connected and merged. Sometime prior to 1906 the shipping operations relocated to the south side of the bay to Ahukini Landing. Newspaper accounts note Ahukini Landing was refurbished between 1906 and 1909 (Condé and Best 1973:165). The 1910 map (Figure 12) reflects the establishment of Ahukini Landing with a railroad to the pier. However, as sugar production increased and shipping vessels became larger and drew more water, a modern wharf was needed where ships could draw up alongside and load and unload supplies and passengers. Operations for this large harbor, the most modern harbor in the Islands, began in 1921, with the establishment of the Lihue Plantation-sponsored Ahukini Terminal & Railway Company (AT&R), which operated until 1934 (Condé and Best 1973:165). The AT&R railway track traversed the coastline from Ahukini Pier at Hanamā'ulu Bay to Keālia through today's Wailua Golf Course and the Kauai Beach Resort. Ahukini pier became the principal port through which sugar and pineapple was exported in the early part of the twentieth century prior to the construction of Nāwiliwili Port.

A historical aerial photo of Hanamā'ulu Bay (Figure 13, believed to be dated 4 July 1924), shows the sugarcane fields of the Hanamā'ulu lands of Lihue Plantation in the background with the Ahukini Makai project area at center left in an unbroken sea of sugarcane. The Ahukini Makai project area is believed to have looked very much like this from before 1900 (see Figure 10). This 1924 aerial (see Figure 13) provides a good view of Hanamā'ulu Valley with homes and *lo'i* in the valley floor. This depiction of Hanamā'ulu Valley is believed to be similar to the way the valley looked for centuries before Western Contact.

The expansion of Lihue Plantation's sugarcane cultivation accelerated throughout the area in the early decades of the twentieth century, transforming nearly the entirety of the traditional landscape of Hanamā'ulu. By 1931, Lihue Plantation had 6,712 acres in cane (Wilcox 1996:73). Condé and Best's map of Lihue Plantation in 1941 (Figure 14) shows the extent of the lands making up the Lihue Plantation, and indicates the project area is within sugarcane fields 27, 28, L-29, 36, and L-36 at this time. Railroad tracks are shown crossing the *makai* portion of the Ahukini Makai project area and continuing over the mouth of Hanamā'ulu Valley, much as indicated on the 1910 map (see Figure 12). No other infrastructure is depicted within the Ahukini Makai project area. Ahukini Road is shown much as it is today.

For the most part the 1950 USGS aerial photograph (Figure 15) and 1959 aerial photograph (Figure 16) show the Ahukini Makai project area much as it is believed to have looked in 1900 (see Figure 10) within a sea of sugarcane. The big change was Līhu'e Airport that opened in 1950 (*Garden Island* 10 January 1950:1:3, 11:1).

By 1950 the train tracks were gone (Figure 15, Figure 16, and particularly the 1963 USGS map Figure 17) with cane hauling accomplished by trucks. The only plantation infrastructure within the project areas indicated up through the 1965 aerial photograph (Figure 18) are cane haul roads and the old coastal railroad alignment. Lihue Plantation ceased operations on 17 November 2000 after

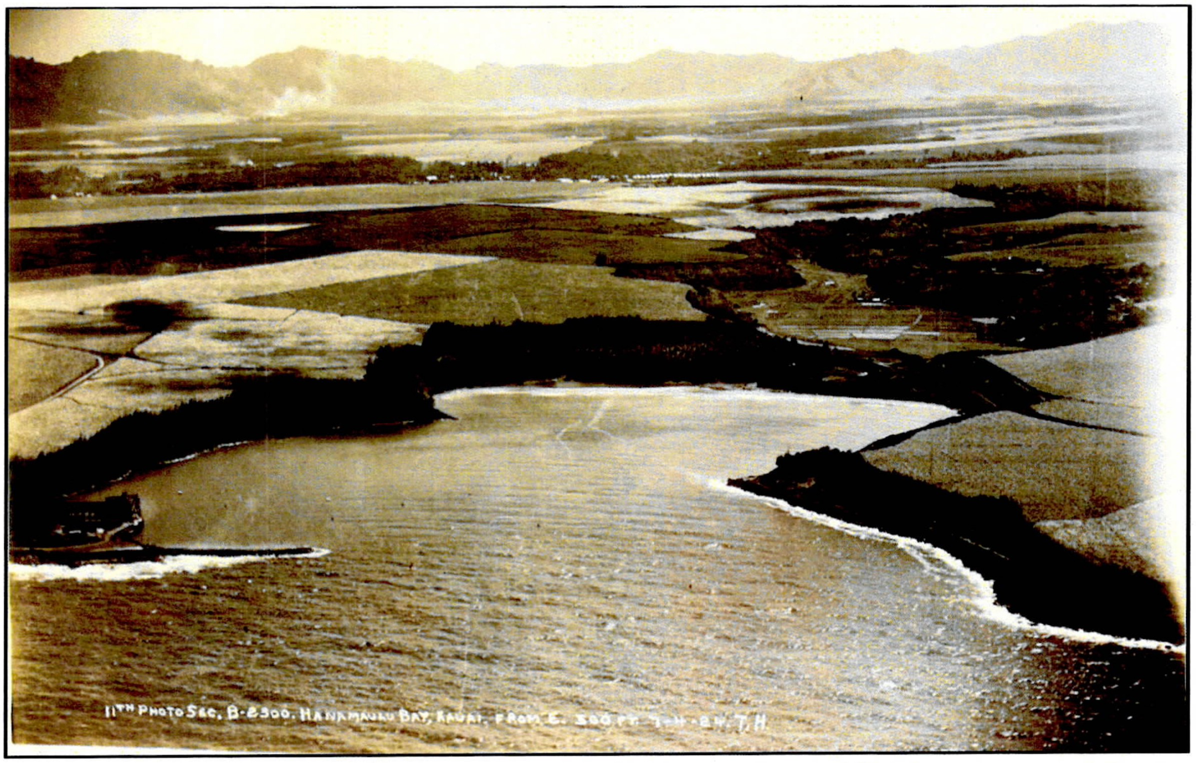

11TH PHOTO SEC. B-2300. HANAMAULU BAY, KAUAI. FROM E. 500 FT. 7-4-24. T.H.

Figure 13. Historical aerial photo of Hanamā‘ulu Bay (believed to be dated 4 July 1924), showing the sugarcane fields of the Hanamā‘ulu lands of Lihue Plantation in the background with homes and *lo‘i* in the valley (Kaua‘i Historical Society, n.d.) (the Ahukini Makai project area at center left is an unbroken sea of sugarcane)

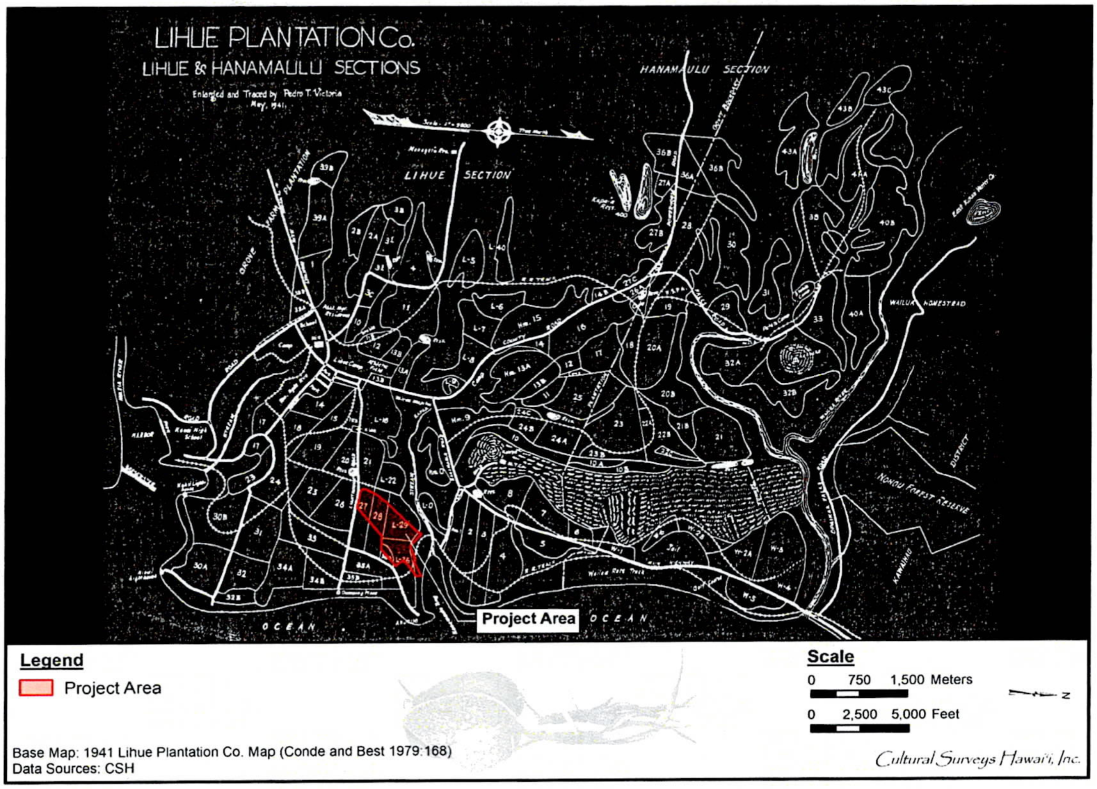

LIHUE PLANTATION Co.
LIHUE & HANAMAULU SECTIONS
Enlarged and Traced by Pedro T. Victoria May, 1941.
HANAMAULU SECTION
LIHUE SECTION
OCEAN
Project Area
OCEAN
Legend
🟥 Project Area
Scale
0 750 1,500 Meters
0 2,500 5,000 Feet
Base Map: 1941 Lihue Plantation Co. Map (Conde and Best 1979:168)
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 14. Portion of the 1941 Lihue Plantation Company map showing the project area within portions of fields 27, 28, L-29, 36, and L-36 (Condé and Best 1973:168)

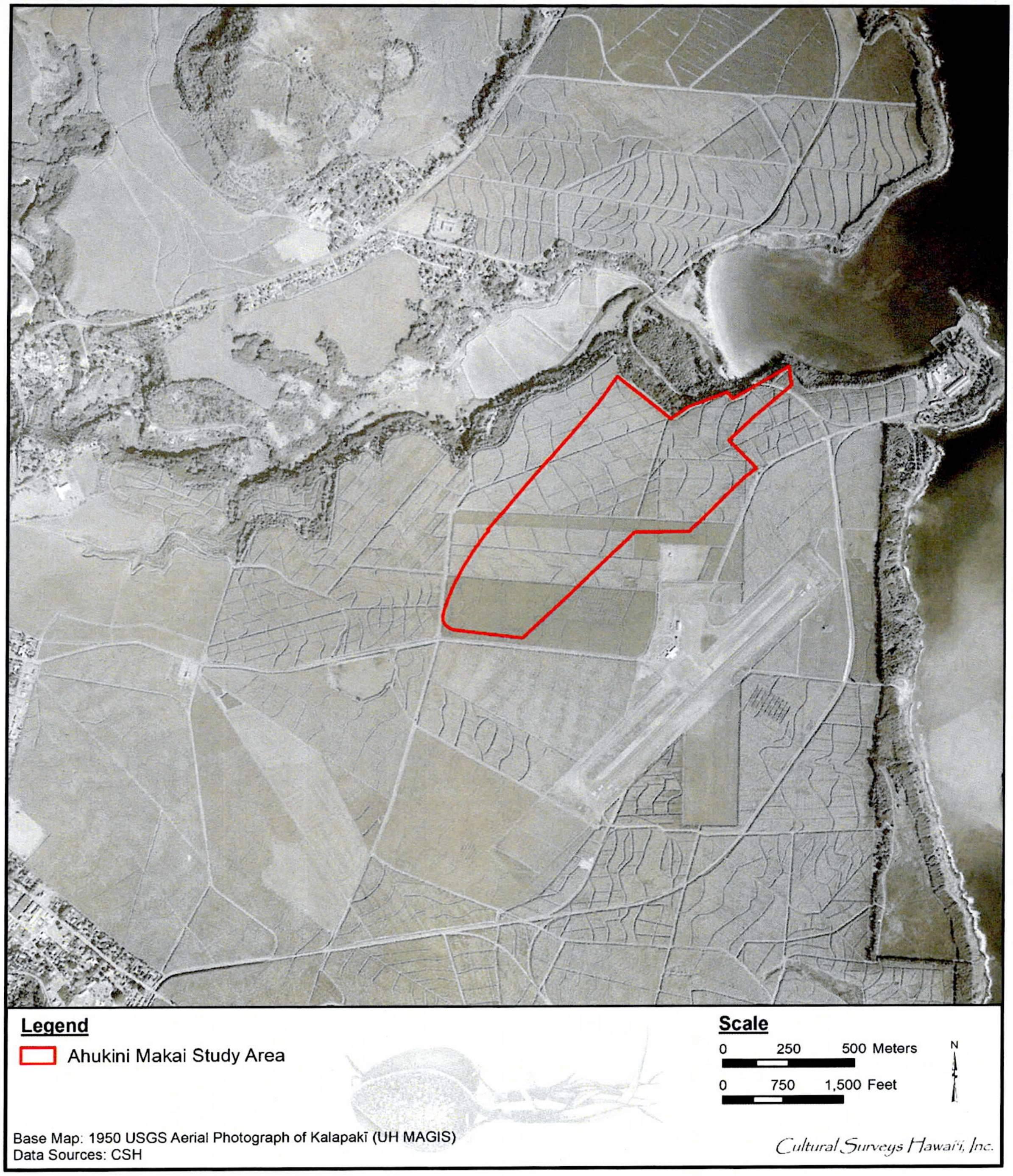

Legend
Ahukini Makai Study Area
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: 1950 USGS Aerial Photograph of Kalapakī (UH MAGIS)
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 15. 1950 USGS aerial photograph of Kalapaki (UH MAGIS) showing the project area

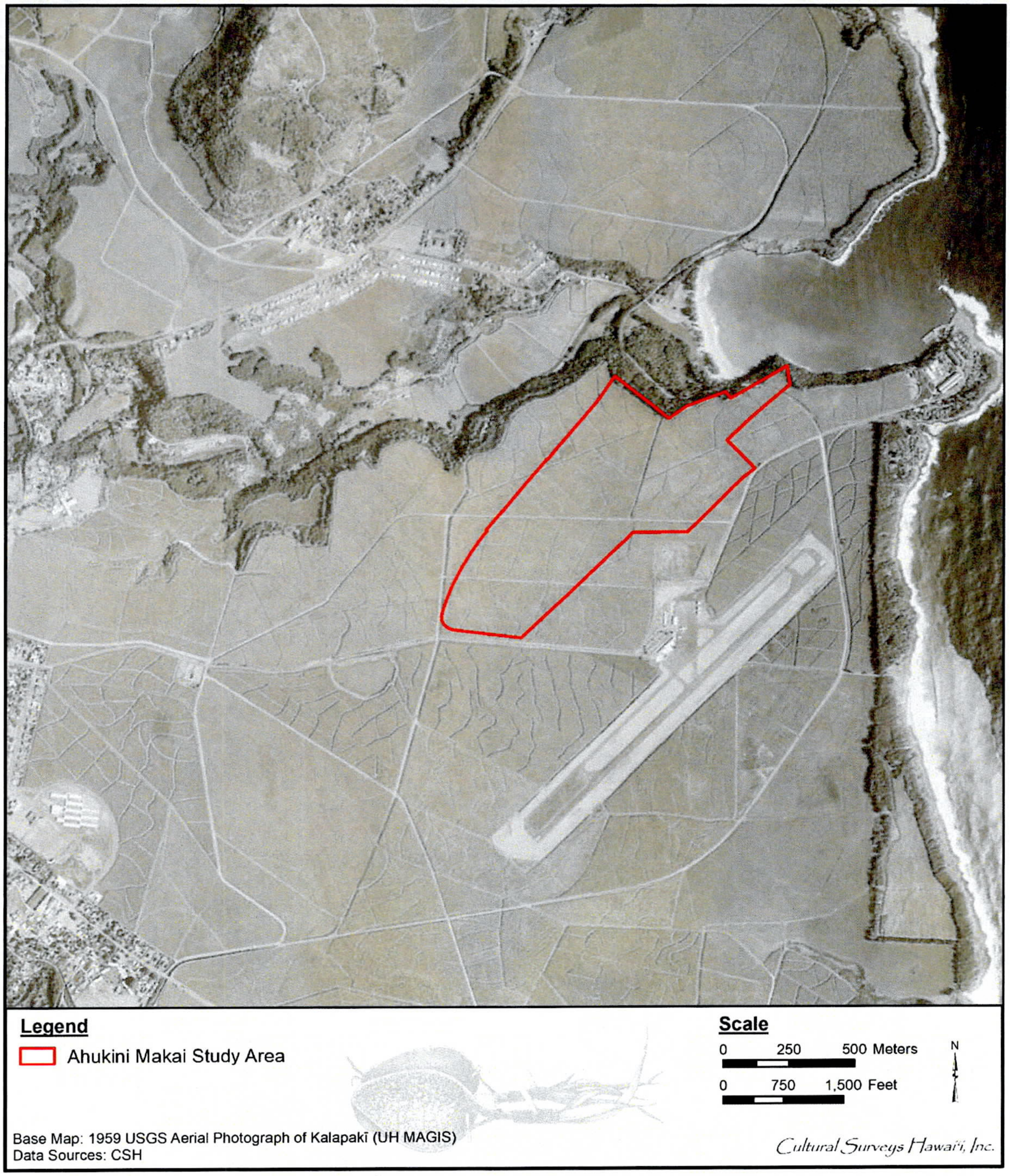

Legend
▭ Ahukini Makai Study Area
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: 1959 USGS Aerial Photograph of Kalapakī (UH MAGIS)
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 16. 1959 USGS aerial photograph of Kalapaki (UH MAGIS) showing the project area

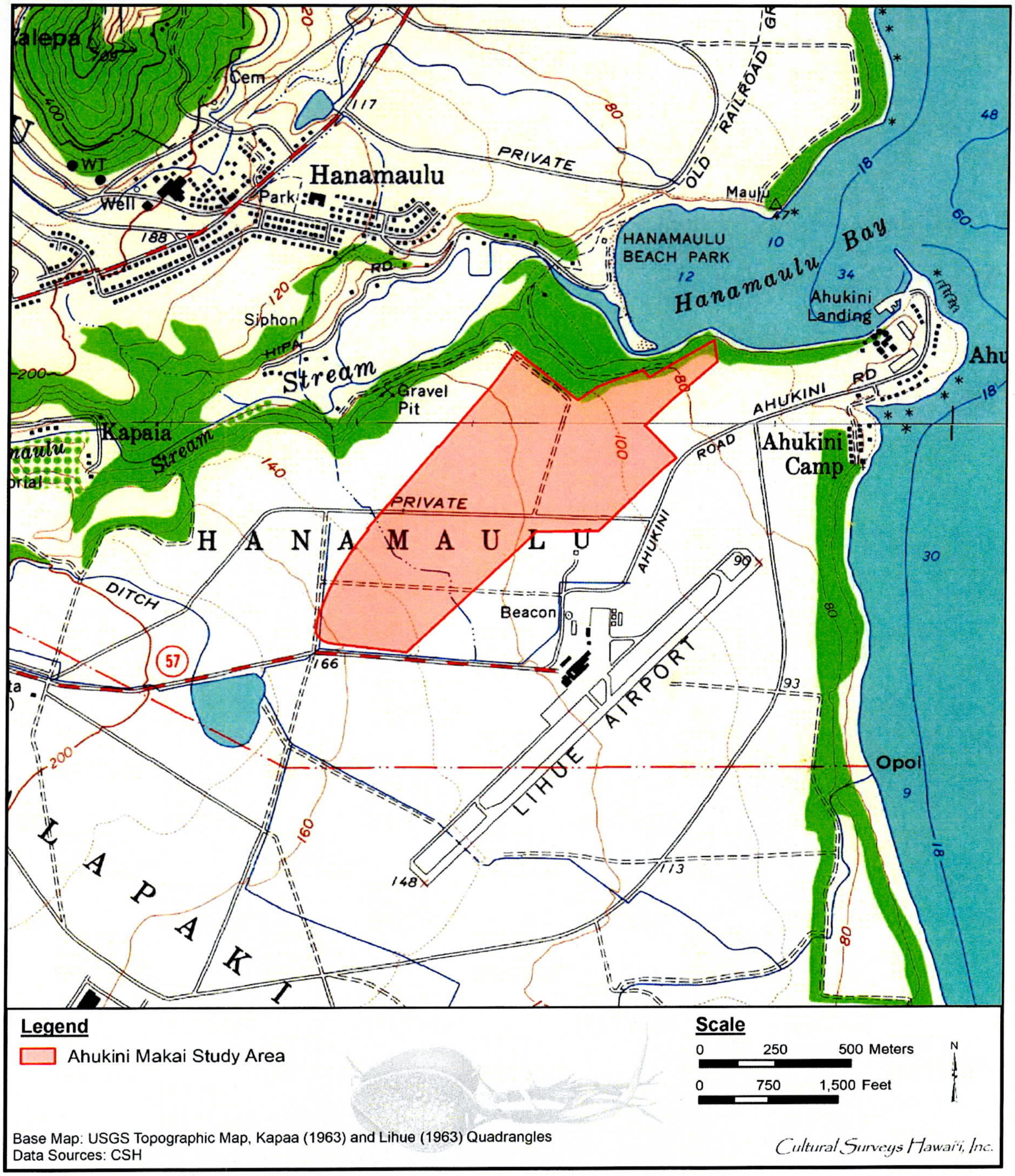

Kalepa
Cem
117
80
PRIVATE
OLD RAILROAD GRADE
WT
Well
Park
Hanamaulu
188
Maulu
HANAMAULU BEACH PARK
10
12
Hanamaulu Bay
18
48
60
34
Ahukini Landing
Ahu
RD
120
Siphon
HIPA
Stream
Gravel Pit
200
Kapaia
Stream
140
AHUKINI RD
18
Ahukini Camp
ROAD
100
PRIVATE
H A N A M A U L U
AHUKINI
90
30
DITCH
Beacon
57
166
LIHUE AIRPORT
93
80
200
Opol
9
160
L A P A K I
148
113
18
80
Legend
Ahukini Makai Study Area
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: USGS Topographic Map, Kapaa (1963) and Lihue (1963) Quadrangles
Data Sources: CSH
Cultural Surveys Hawaiʻi, Inc.

Figure 17. Portion of 1963 Lihue and Kapaa USGS topographic quadrangles showing the project area

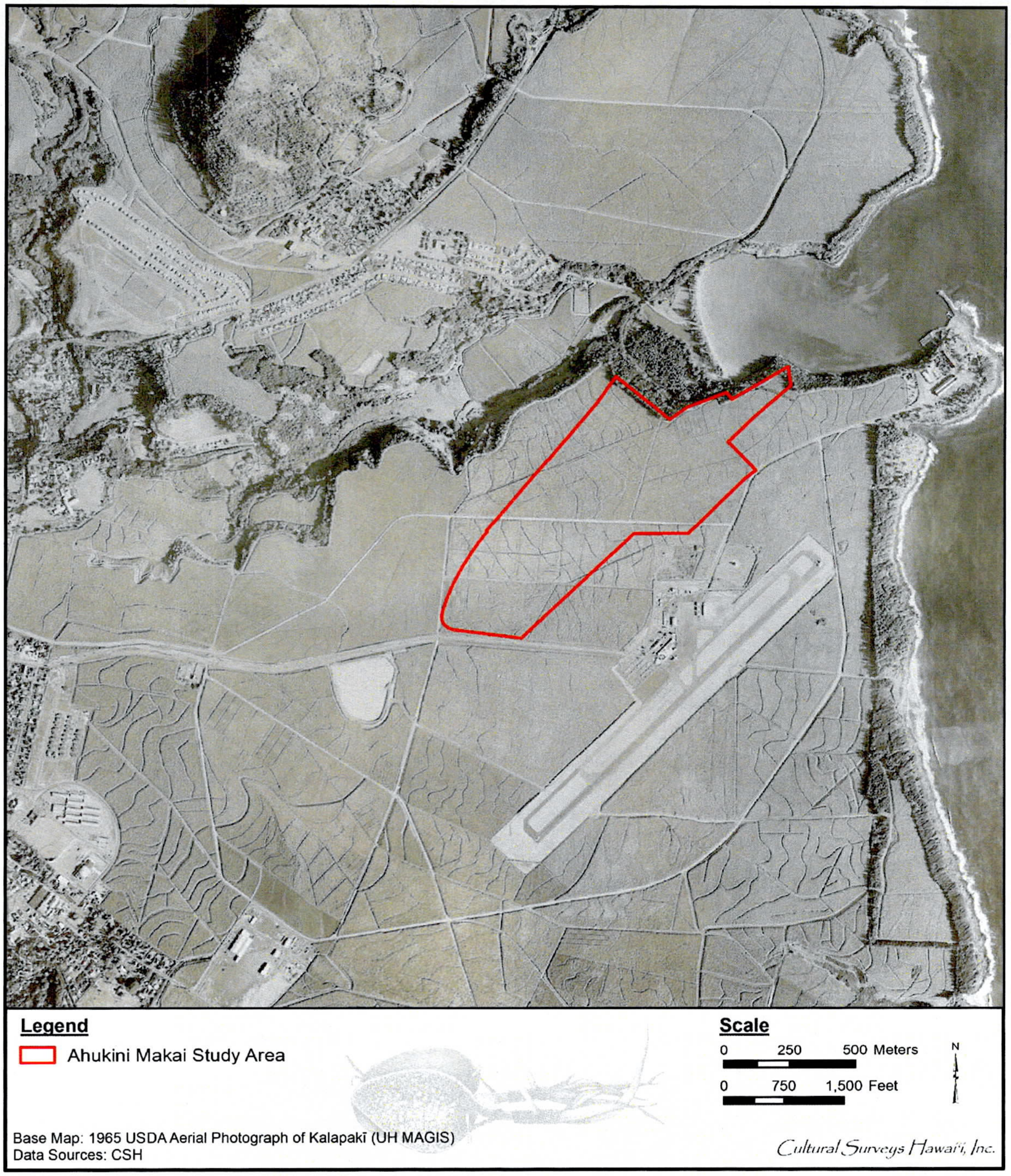

Legend
Ahukini Makai Study Area
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: 1965 USDA Aerial Photograph of Kalapakī (UH MAGIS)
Data Sources: CSH
Cultural Surveys Hawai‘i, Inc.

Figure 18. 1965 USDA aerial photograph of Kalapaki showing the project area (UH MAGIS)

151 years of sugar production (Kauai Museum 2015: Lihue Plantation Company) The Lihue Plantation Mill (Figure 19) that had dominated the landscape, economy, and culture of Līhu'e for 147 years (since 1853, rebuilt and updated overtime) was to be no more.

4.6 The Contemporary Situation

Since the closure of Lihue Plantation in 2000, the present Ahukini Makai lands have remained largely fallow. Archaeological documentation of the project area in 2006 (see Figure 23 through Figure 27) is believed to characterize conditions since the end of sugar production.

It is understood that sugarcane cultivation on Kaua'i ended with the final harvest of Gay and Robinson in October 2009 (Hawaii News Now 31 October 2009). Today, Kaua'i is a tourism-centered economy with 1,279,968 people visiting the island in 2017. The Līhu'e Community Plan (LCP 2015) addresses future land use, growth, and development. The anticipated population growth from 2010 through 2035 was 2.39% per year (LCP 2015:83). The population of Līhu'e District was anticipated to grow from 11,169 in 1990 to 23,456 in 2035 (LCP 2015:83). Housing units in Līhu'e District were anticipated to grow from 3,562 in 1990 to 9,900 in 2035 (LCP 2015:83). There would of course be a need for associated supporting infrastructure (roads, schools, transportation, water, etc.) to be developed. "Under its subsidiary, Visionary LLC, Grove Farm has three planned development projects, all with initial approvals under the title of the Līhu'e-Hanamā'ulu Master Plan" (LCP 2015:86).

Understandably for many Kānaka Maoli the rapidity of population growth suggests the lands of Hawai'i moving ever further out of Native Hawaiian control and as constituting a de facto assault on traditional Hawaiian resources and customary practices leading some to categorical opposition to development.

If indeed the anticipated population growth in Līhu'e District (2010-2035 average annual growth rate of 2.39%) is to continue, then the question is how best to manage it and how to mitigate adverse impact on traditional Hawaiian resources and customary practices, or of course ideally to improve traditional Hawaiian resources.

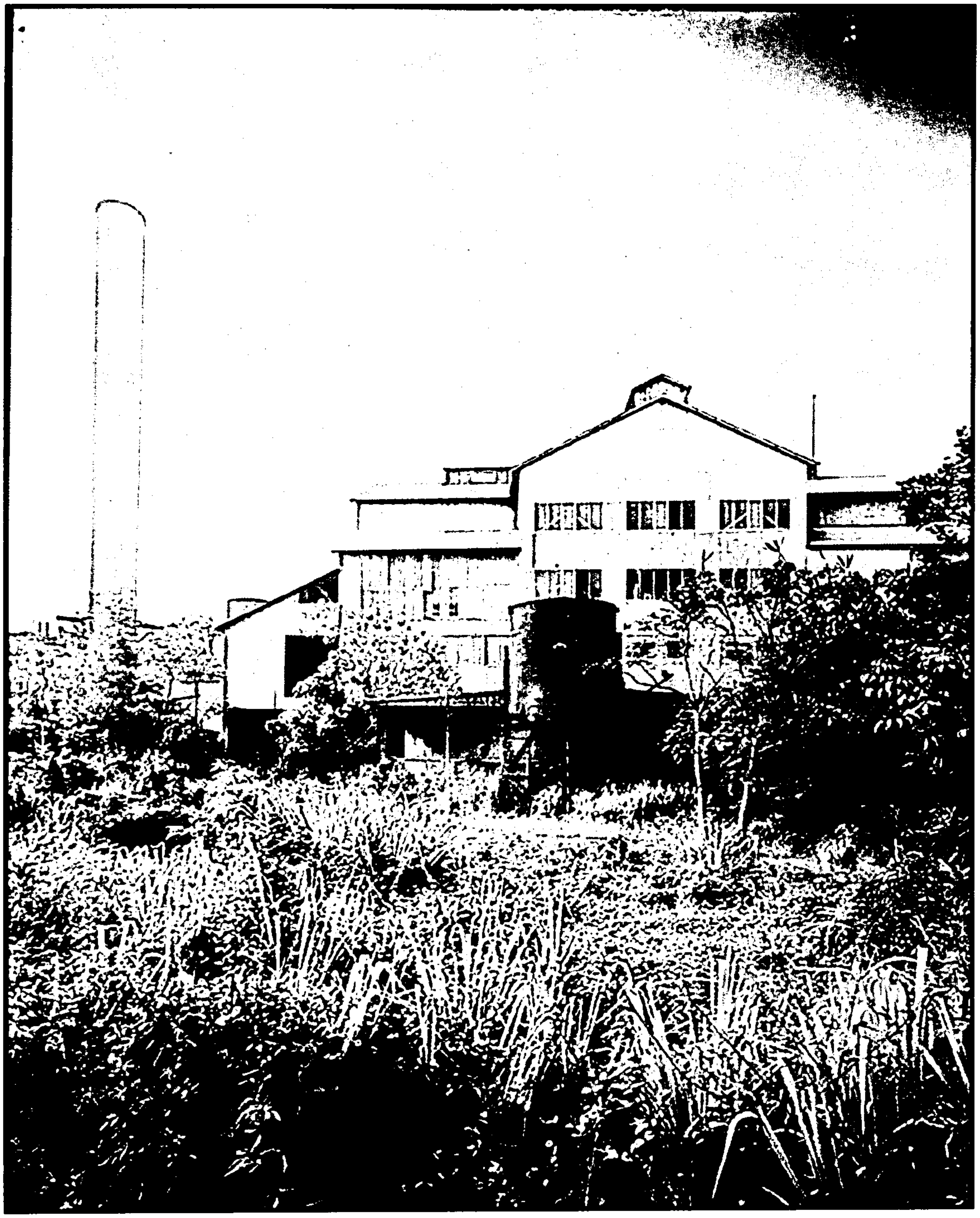


Figure 19. Lihue Plantation Mill, view of the Boiling House (Kaua‘i Historical Society, n.d.)

Section 5 Previous Archaeological Research

This section details previous archaeological studies within the vicinity of the current Ahukini Makai Subdivision project area. The locations of previous archaeological studies within approximately 1.0 km of the project area are depicted on Figure 20 and summarized in Table 3. The locations of previously identified historic properties within approximately 1.0 km of the project area are depicted in Figure 21 and summarized in Table 4.

5.1 Early Studies

5.1.1 Thrum 1906

Thomas Thrum, the publisher of the *Hawaiian Almanac*, gathered lists of *heiau* on all islands. For the *ahupua'a* of Hanamā'ulu, he noted one *heiau*—Kalauokamanu—as "a large walled heiau that stood above the present mill; destroyed about 1855. Of pookanaka class" (Thrum 1906:40). This site is located approximately 2 km southwest of the current project area and was designated as site number 102.

5.1.2 Bennett 1931

The first comprehensive archaeological survey on the island of Kaua'i was undertaken by Wendell Bennett and published in 1931. Bennett noted Thrum's description of Kalauokamanu Heiau, designated as Site 102, but there is no evidence that he physically searched for the remains of this *heiau* during his survey. Bennett also documented sand dune burials (Site 103) in Hanamā'ulu toward the Wailua River.

Ethel Damon provided additional information on Kalauokamanu Heiau:

> Within the ahupua'a of Hanamaulu was a large walled heiau called Ka-lau-o-ka-manu of the poo-kanaka type, or one in which human sacrifices were offered; but in the almost unconscious days of transition, when popular interest in such things was still asleep, most of the stones from this enclosure were taken to make firm the foundation of the Hanamaulu sugar mill. [Damon 1931:397]

A 1934 *Garden Island Press* newspaper account quoted by Ethel Damon gives additional information on the location of this *heiau*:

> Another *heiau* located in Hanamā'ulu is Kalauokamanu. This was situated just west of the Lihu'e Plantation Yard and adjacent to a cane haul road. It is said to be of the *pookanaka* class and was destroyed in 1855. [*Garden Island Press* 1934 in Corbin et al. 2002:14, paraphrasing Bennett 1931:125]

The only other site Bennett associates with Hanamā'ulu at all is his "Site 103. Dune burials. In the sand dunes that run along the shore half way between Hanamaulu and Wailua River are many burials" (Bennett 1931:125).

It would seem likely that it was a customary practice in Hanamā'ulu to bury the dead in the coastal dunes up toward Wailua. It may be noted that the population of Wailua could have traditionally been tenfold that of Hanamā'ulu, or more, and the burials along that long stretch of coast may reflect that demographic imbalance.

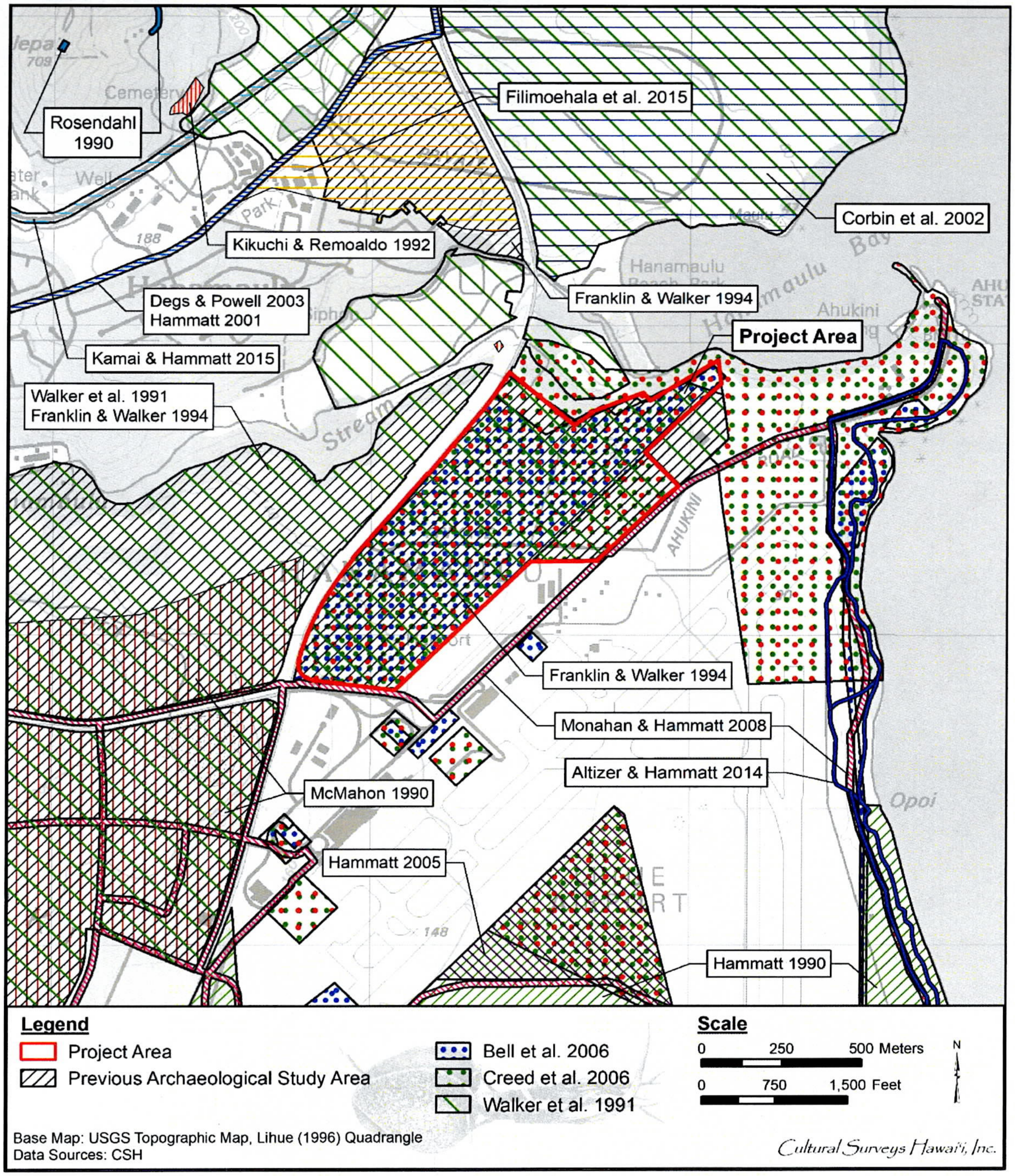

Rosendahl 1990
Filimoehala et al. 2015
Corbin et al. 2002
Kikuchi & Remoaldo 1992
Degs & Powell 2003
Hammatt 2001
Franklin & Walker 1994
Project Area
Kamai & Hammatt 2015
Walker et al. 1991
Franklin & Walker 1994
Franklin & Walker 1994
Monahan & Hammatt 2008
Altizer & Hammatt 2014
McMahon 1990
Hammatt 2005
Hammatt 1990
Hanamaulu Bay
Ahukini
Opoi
Legend
Project Area
Previous Archaeological Study Area
Bell et al. 2006
Creed et al. 2006
Walker et al. 1991
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: USGS Topographic Map, Lihue (1996) Quadrangle
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 20. Portion of the 1996 Lihue and Kapaa USGS topographic quadrangles showing the locations of previous archaeological study areas within approximately 1.0 km of the Ahukini Makai project area

Table 3. Previous archaeological studies within approximately 1.0 km of the Ahukini Makai project area

Source	**Nature of Study**	**Location**	**Results**
Thrum 1906	*Heiau* study	Island-wide	Kalauokamanu Heiau described, but listed as already destroyed by 1855
Bennett 1931	Archaeology of Kaua'i	Island-wide	Discusses Site 102, Kalauokamanu Heiau and Site 103, dune burials in sand dunes that run along shore halfway between Hanamā'ulu and Wailua River
Hammatt 1990	Archaeological reconnaissance survey	Kauai Lagoons Resort (present-day Hokuala) Kalapakī	Identified five archaeological sites along shoreline, including three somewhat close to present project area: Site 1 wall remnant (SIHP # 50-30-11-00422), Site 2 another wall remnant (SIHP # 50-30-11-00423), and Site 3 a shell midden scatter (SIHP # 50-30-11-00421)
McMahon 1990	Archaeological field check	Nāwiliwili, Kalapakī, and Hanamā'ulu *ahupua'a*	Documented three previously identified historic residential sites (SIHP #s 50-30-11-09390, -09401, and -09402)
Rosendahl 1990	Archaeological field inspection and subsurface testing	Kālepa radio station and Kālepa Rd	Conducted further archaeological work at SIHP 50-30-08-01827 concluding additional burials probably present
Walker et al. 1991	Archaeological inventory survey	Lands in Hanamā'ulu, Kalapakī, Nāwiliwili, Niumalu, and Wailua *ahupua'a*	Identified ten sites, three pre-Contact, seven historic (SIHP #s 50-30-08-01838 through -1847)
Kikuchi and Remoaldo 1992	Cemeteries of Kaua'i	Island-wide	Cemeteries inventoried in Hanamā'ulu include Kaua'i Memorial Gardens (SIHP # 50-30-08-B008), Hanamā'ulu Immaculate Conception Church II (SIHP # 50-30-08-B009); Kapaia Chinese Cemetery (SIHP # 50-30-08-B010); Immaculate Conception Roman Catholic Church Cemetery (SIHP # 50-30-08-B011)
Franklin and Walker 1994	Archaeological inventory survey	Hanamā'ulu and Kalapakī *ahupua'a*	Identified a boundary/agricultural wall: SIHP # 50-30-11-01842

Source	**Nature of Study**	**Location**	**Results**
Hammatt 2001	Archaeological field inspection and literature review	Proposed fiberoptic cable project within an 82-km road corridor	Evaluated the stretch of Ka'umuali'i Hwy from Līhu'e Town to the Wailua County Golf Course at south edge of Kokomo Ridge as of relatively low potential because of absence of sandy soils and native tenant LCAs and absence of identified sites
Corbin et al. 2002	Archaeological inventory survey	"Ocean Bay Plantation at Hanamā'ulu" on approx. 460 acres located *makai* of Kūhiō Hwy north of Hanamā'ulu Bay	Regarded as "an upgraded version" of Walker et al. 1991 study; four site complexes and six single-feature sites identified in or in vicinity of project area; most common feature types in project area are bridges (2), cultural deposits (2), and cemeteries (1 and possibly 2); other feature types in area include concrete foundations, a retaining wall, and a terrace
Dega and Powell 2003	Archaeological monitoring	Phase I of Kaua'i Rural Fiber Optic Duct Lines project	Two previously disturbed burials of traditional context identified (SIHP # 50-30-08-103) and subsurface cultural layer dating to AD 1440-1660 (SIHP # 50-30-08-00356)
Hammatt 2005	Archaeological inventory survey (termed archaeological assessment in the absence of finds)	Approx. 71-acre portion of Kauai Lagoons Resort property, Kalapakī Ahupua'a	No historic properties identified
Creed et al. 2006	Archaeological field inspection and literature review	Eleven discrete areas for proposed Līhu'e Airport Expansion, Hanama'ulu and Kalapakī *ahupua'a*; TMKs: (4) 3-5 001:005, 006, 008, 009, 109, 111, 158, and 3-7-002:por. 1	Reports fieldwork conducted in 1998 and 1999; most of present project area addressed as "Area 2"; only historic properties identified (SIHP # 50-30-08-9000) in vicinity of Ahukini Landing (designated "Area 10") well northeast of present project area
Bell et al. 2006	Archaeological inventory survey	Hanamā'ulu and Kalapakī	Identified SIHP # 50-30-08-3958, plantation-era concrete enclosures and foundation remnants that likely functioned as a piggery

Source	Nature of Study	Location	Results
Monahan and Hammatt 2008	Archaeological literature review and field inspection	Nāwiliwili-Ahukini Bike Path project passing through portions of coastal Nāwiliwili, Kalapakī and Hanamā'ulu and which ran along south side of Ahukini Makai project area	All seven historic properties discussed immediately on coast with nearest more than 500 m east of Ahukini Makai project area
Altizer and Hammatt 2014	Archaeological inventory survey	Nāwiliwili-Ahukini Bike Path project, Nāwiliwili, Kalapakī, and Hanamā'ulu Ahupua'a	Fifteen cultural resources identified
Filimoehala et al. 2015	Archaeological inventory survey	"Ho'oluana at Kohea Loa" Housing Development, Hanamā'ulu	Regarded as supplemental to Walker and Rosendahl (1990) AIS, this study documented one archaeological site, SIHP # 50-30-08-2295, a 20th century irrigation complex of Lihue Plantation Co.
Kamai and Hammatt 2015	Archaeological literature review and field inspection	Approx. 16.8 km for proposed new *mauka* Līhu'e Hanamā'ulu road within five *ahupua'a*; Hanamā'ulu, Kalapakī, Nāwiliwili, Ha'iku, and Niumalu	Identified historic properties related to plantation era (ditches, culverts, and a cemetery) located along both sides of existing cane haul roads including features associated with SIHP # 50-30-11-2218 (Morris and Hammatt 2014; Yucha et al. 2014) and five historic properties including ditches, culverts, and a siphon related to plantation water control

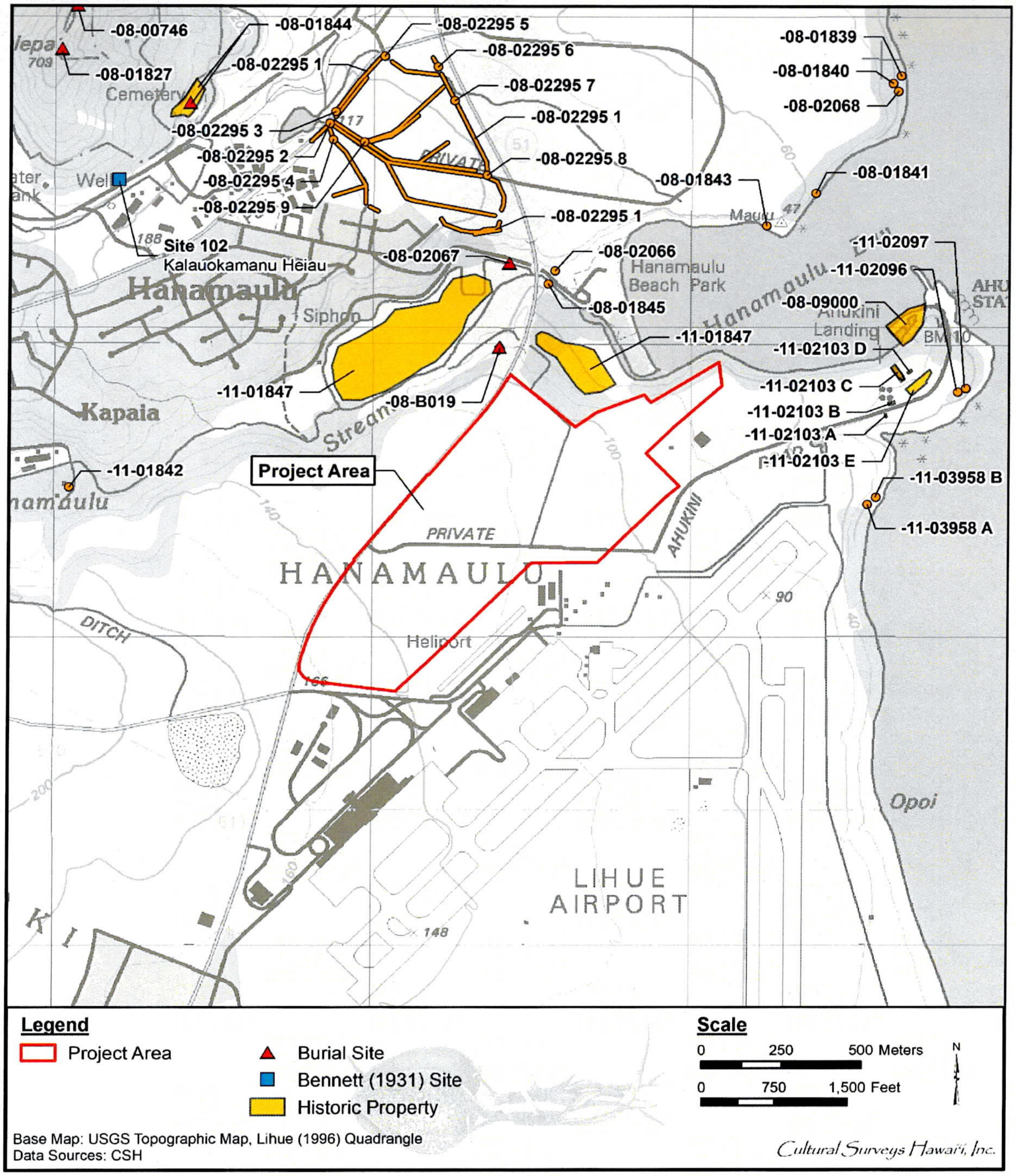

-08-00746
-08-01827
-08-01844
-08-02295 5
-08-02295 1
-08-02295 6
-08-02295 7
-08-02295 3
-08-02295 1
-08-02295 2
-08-02295 8
-08-02295 4
-08-02295 9
-08-02295 1
Cemetery
Well
Site 102
Kalauokamanu Hēiau
Hanamaulu
-08-02067
-08-02066
Hanamaulu Beach Park
-08-01845
Siphon
-11-01847
-11-01847
-08-B019
Kapaia
Stream
Project Area
-11-01842
Hanamaulu
PRIVATE
HANAMAULU
DITCH
Heliport
AHUKINI
-08-01839
-08-01840
-08-02068
-08-01843
Mauu
-08-01841
-11-02097
-11-02096
Hanamaulu
-08-09000
Ahukini Landing
-11-02103 D
-11-02103 C
-11-02103 B
-11-02103 A
-11-02103 E
-11-03958 B
-11-03958 A
Opoi
LIHUE AIRPORT
Legend
Project Area
Burial Site
Bennett (1931) Site
Historic Property
Scale
0 250 500 Meters
0 750 1,500 Feet
N
Base Map: USGS Topographic Map, Lihue (1996) Quadrangle
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 21. Portion of the 1996 Lihue and Kapaa USGS topographic quadrangle showing the locations of previously identified historic properties, in the vicinity of the project area

Table 4. Previously identified historic properties within approximately 1.0 km of the Ahukini Makai project area

SIHP # (50-30-)	**Nature of Site**	**Source**	**Comment**
102	*Heiau* (Kalauokamanu Heiau)	Thrum in Bennett 1931:125	A large walled *heiau in Hanamā'ulu* that stood above the present mill; destroyed about 1855- of *pō'okanaka* [human sacrifice *heiau*] class.
08-00746	Human burial	Rosendahl 1990	Kālepa Road Burial on Kālepa Ridge, Hanamā'ulu
08-01827	Human burial platform	Pers. comm. N. McMahon 1999	Kālepa Burial Platform on Kālepa Ridge, Hanamā'ulu
08-01839	Pre-Contact agricultural wall and terrace	Walker et al. 1991, Corbin et al. 2002	Hanamā'ulu coast, north of bay, although the function of the wall was evaluated as "agriculture" and the terrace was "indeterminate" the site function was "temporary habitation"
08-01840	Historic retaining wall	Walker et al. 1991, Corbin et al. 2002	Hanamā'ulu, retains a post-Contact road
08-01841	Historic road	Walker et al. 1991, Corbin et al. 2002	Hanamā'ulu, a road section with stacked boulder retaining walls
08-01843	Historic concrete foundation, road and concrete wall	Walker et al. 1991, Corbin et al. 2002	Hanamā'ulu, associated with historic agriculture
08-01844	Historic cemetery	Walker et al. 1991	Hanamā'ulu Japanese cemetery and a neighboring Filipino cemetery
08-01845	Historic railroad bridge	Walker et al. 1991, Corbin et al. 2002	Hanamā'ulu, the bridge is constructed of steel reinforced concrete, supported on three points. Two arches meeting at the bottom of a middle support pillar. This bridge spans a marsh.
08-02066	Complex (3 features)	Corbin et al. 2002	Includes designated Feature A an upright, Feature B a road, and Feature C a possible historic house foundation
08-02067	Historic cemetery	Corbin et al. 2002	A semi-maintained cemetery and an associated probable house foundation
08-02068	Historic trash dump	Corbin et al. 2002	Thought to date to 1880s to 1910s
08-02295 1	Ditch system	Filimoehala et al. 2015	A 2,780-m-long earthen ditch network, which forms the core structure of the irrigation network

SIHP # (50-30-)	Nature of Site	Source	Comment
08-02295 2	Sluice complex	Filimoehala et al. 2015	A ditch and sluice complex with ten water control features, including seven sluice gates and three culverts.
08-02295 3	Paved channel	Filimoehala et al. 2015	A short segment of paved irrigation ditch, located 27 m northeast of the sluice complex (Feature 2).
08-02295 4	Bridge	Filimoehala et al. 2015	A concrete bridge, which crosses an irrigation ditch, located 45 m southeast of the sluice complex (Feature 2)
08-02295 5	Culvert/sluice gate	Filimoehala et al. 2015	A concrete culvert that runs below a former vehicle entry and an associated sluice gate, located at the northern end of the project area along Kūhiō Hwy
08-02295 6	Culvert/sluice gate	Filimoehala et al. 2015	A culvert that runs underneath Kapule Hwy, and an associated sluice gate, located on the northern end of the project area
08-02295 7	Culvert/sluice gate	Filimoehala et al. 2015	A culvert that runs underneath Kapule Hwy, and an associated sluice gate, located along the road 120 m south of Feature 6
08-02295 8	Culvert/sluice gate	Filimoehala et al. 2015	A complex of two culverts and four associated sluice gates, located 250 m south of Feature 7, near Kapule Hwy
08-02295 9	Sluice gate	Filimoehala et al. 2015	A wooden sluice gate with no stone or concrete components, located 110 m southeast of Feature 2 in the interior of the project area.

SIHP # (50-30-)	Nature of Site	Source	Comment
08-09000	Ahukini Landing	Creed et al. 2006	Ahukini Landing was refurbished between 1906 and1909. However, as sugar production increased and shipping vessels became larger and drew more water a modern wharf was needed where ships could draw up alongside and load and unload supplies and passengers. The large, then most modern harbor installation in the islands, run by Ahukini Terminal & Railway Company (AT&R Co.) began its operations in 1921 and included the shipping terminal, storage sheds, oil tanks and multiple family housing units for the terminal workers.
08-B019	Cemetery	Kikuchi and Remoaldo 1992	Family cemetery, not located, possibly connected to LCA 3653:2
11-01842	Wall	Walker et al. 1991	Constructed of generally waterworn medium basalt boulders to large basalt cobbles. It is stacked five-six courses high and two to three courses wide; associated with historic agriculture.
11-01847	"River Valley"	Walker et al. 1991	Designates 53.0 acre flat, level valley floor "Although no structural remains were visible, the area may have been used prehistorically for agricultural activities"
11-02096	Concrete ditch	Altizer and Hammatt 2014	Drainage function
11-02097	Concrete ditch	Altizer and Hammatt 2014	Drainage function
11-02103 A	Concrete platform	Altizer and Hammatt 2014	Remnants of a fertilizer storage facility
11-02103 B	Building foundation	Altizer and Hammatt 2014	Labeled as a roundhouse on the 1927 Sanborn Fire Insurance map
11-02103 C	Concrete slab	Altizer and Hammatt 2014	A remnant of the Standard Oil storage facility present on the 1927 Sanborn Fire Insurance map
11-02103 D	Two adjacent concrete pads	Altizer and Hammatt 2014	Also a remnant of the Standard Oil storage facility on the 1927 Sanborn Fire Insurance map

SIHP # (50-30-)	Nature of Site	Source	Comment
11-02103 E	Railroad track remnants	Altizer and Hammatt 2014	Remnants of three sets of narrow gauge tracks imbedded in a concrete slab
11-03958 A	A series of contiguous rectangular concrete enclosures	Bell et al. 2006	These enclosures likely functioned as pigpens and dated to the early to mid-20th century
11-03958 B	Rectangular concrete foundation with wall remnants and an associated concrete drainage feature	Bell et al. 2006	Likely functioned as an animal pen, likely for pigs and dated to the early to mid-20th century

5.2 Modern Archaeological Studies

5.2.1 Hammatt 1990

CSH (Hammatt 1990) carried out an archaeological reconnaissance survey at three designated geographical phases (Phase III, IV, and V) at the Kaua'i Lagoons Resort (present day Hōkūala) in Kalapakī identifying five designated archaeological sites along the shoreline (all well to the south of the Ahukini Makai project), including Site 1 a wall remnant (State Inventory of Historic Places [SIHP] # 50-30-11-00422), Site 2 another wall remnant (SIHP # 50-30-11-00423), Site 3 a shell midden scatter (SIHP # 50-30-11-00421), Site 4 Oval Terrace Alignment on Bluff—possible prehistoric habitation structure, and Site 5 a high well-constructed wall possibly related to former Ninini Heiau.

5.2.2 McMahon 1990

In 1990, Nancy McMahon surveyed three possible locations for a new Kaua'i Judiciary Building in Nāwiliwili. Three previously identified historic residential sites (SIHP #s 50-30-11-09390, -09401, and -09402) were recorded. SIHP # -09390 is the Grove Farm manager's house; SIHP #s -09401 and -09402 were two other plantation-era residences.

5.2.3 Rosendahl 1990

In 1990, Paul H. Rosendahl, Inc. (PHRI) conducted an archaeological field inspection and limited subsurface testing for the Kalepa Radio Station and Kālepa Road improvements project. The previously identified burial platform designated SIHP # 50-30-11-1827 and areas of both disinterred and in situ burial remains were inspected to identify any archaeological remains on or alongside the road. No new historic properties were identified during the inspection of both the radio station and the road improvements. Backhoe testing was conducted in two of the three alternate radio station sites. Testing showed the units consisted of sterile silty clay mixed with weathered bedrock. No cultural materials or deposits were discovered in the units. It was concluded, however, that "additional burials are probably still present within the Radio Station project area" (Rosendahl 1990:3).

5.2.4 Walker et al. 1991

Of particular relevance to the Ahukini Makai Subdivision project is the archaeological inventory survey, Lihue/Puhi/Hanamaulu Master Plan (Walker et al. 1991). There were caveats regarding the level of coverage of their 1,550-acre project area but it appears they felt "inventory-level survey was conducted" in the majority of the present Ahukini Makai Subdivision which appears to have been largely within their 140-acre "Section 4" study area (Walker et al. 1991:ii, 2 and 3). The description of their Section No. 4 in 1990 is provided below:

> Section No. 4 consists of c. 140 ac and is located in the Land of Hanamaulu. This section is bounded on the south and east by Lihue Airport and Ahukini Road, on the west by the Hanamaulu-Ahukini cut-off road, and on the north by Hanamaulu Stream gulch. This entire parcel has been modified and is presently in sugar cane cultivation. [Walker et al. 1991:4]

Their reference to "this entire parcel [...] is presently in sugar cane" needs to be considered as their stated methodology for fieldwork is as follows:

> Because areas altered by sugar cane cultivation are unlikely to contain archaeological features, and because sugar cane cultivation within the present project area does not occur in low swale or alluvial flat areas that may contain buried cultural deposits, areas in sugar cane cultivation were not generally surveyed. Areas in sugar cane were only sampled. [...] [Walker et al. 1991:7]

They provide further clarification that: "Only very limited surface survey was done in sugar cane fields [...]" (Walker et al. 1991:18).

There was no subsurface testing in their Section No. 4 (Walker et al. 1991:11). No historic properties, artifacts, midden, or sampling were reported from their Section No. 4 (Walker et al. 1991:13, 16, 17).

5.2.5 Kikuchi and Remoaldo 1992

Kikuchi and Romoaldo (1992) conducted a survey and inventory of cemeteries on the island of Kaua'i. They documented 17 cemeteries within the Līhu'e District.

Six cemeteries were identified within Hanamā'ulu Ahupua'a: SIHP # 50-30-08-B007 (inventoried but not surveyed); Kaua'i Memorial Gardens Cemetery, SIHP # -B008 (inventoried but not surveyed); Immaculate Conception Church Cemetery II, SIHP # -B009; Kapaia Chinese Cemetery, SIHP # -B010; Immaculate Conception Church Cemetery, SIHP # -B011; and SIHP # -B019 (not located). None of the cemeteries near the vicinity of the current project should be affected during the proposed current project.

5.2.6 Franklin and Walker 1994

Franklin and Walker (1994) produced an *Additional Archaeological Inventory Survey, Molokoa Lands Project Area, Lands of Hanamaulu and Kalapaki*, addressing 552.3 acres of "Molokoa Lands" the purpose of which was to "updates and synthesizes the relevant historical research data and archaeological findings from two prior PHRI Archaeological Inventory Survey reports" (Franklin and Walker 1994:ii). One of the two reports referenced was the Walker et al. 1991 study discussed above and the other was a Walker and Rosendahl 1990 study that did not cover the area of present concern (Franklin and Walker 1994:1). This Franklin and Walker (1994) study appears to be a repackaging of prior work to address a new project area configuration.

This study appears to have addressed most of the present Ahukini Makai Subdivision project area, however, they cite an acreage of 131.0 acres for this study parcel (Franklin and Walker 1994:5) in contrast to the 170 acres associated with the present configuration of the Ahukini Makai Subdivision project area.

No historic properties were reported from their Ahukini Makai parcel (Franklin and Walker 1994:ii, 27, 17) and there is no mention of any artifacts, midden, or sampling.

Two sites were located well inland of the Ahukini Makai project area: a boundary/agricultural wall, SIHP # 50-30-11-1842, along the south side of Hanamā'ulu Valley near Kapaia; and a re-identified SIHP # 50-30-08-9402, a historic building associated with radio station KIVM (Franklin and Walker 1994:27).

5.2.7 Hammatt 2001

CSH (Hammatt 2001) carried out an archaeological field inspection and literature review for the then proposed Sandwich Isles Communication Fiberoptic Cable project within an approximately 82-km (51-mile) road corridor between Kekaha and Moloa'a. The island was analyzed in segments with the stretch of Ka'umuali'i Highway from Līhu'e Town to the Wailua County Golf Course at the south edge of Kokomo Ridge evaluated as of relatively low archaeological potential because of the absence of sandy soils, the absence of native tenant LCAs, and the absence of previously identified historic properties.

5.2.8 Corbin et al. 2002

Paul H Rosendahl, Inc. (PHRI) (Corbin et al. 2002) prepared an archaeological inventory survey for an "Ocean Bay Plantation at Hanamā'ulu" on approximately 460 acres located *makai* of Kūhiō Highway north of Hanamā'ulu Bay. This was regarded as "an upgraded version" of an earlier (Walker et al. 1991) PHRI report. Four site complexes and six single-feature sites were identified in or in the vicinity of the project area. The most common feature types in the project area are bridges (2), cultural deposits (2), and cemeteries (1 and possibly 2). Other feature types in the area include concrete foundations, a retaining wall, and a terrace.

5.2.9 Dega and Powell 2003

In 2003, Scientific Consultant Services conducted archaeological monitoring along Kūhiō Highway in eastern Kaua'i (Dega and Powell 2003). Ten archaeological sites were identified: SIHP #s 50-30-08-00868 (traditional Hawaiian and historic burials), -00871 (traditional Hawaiian and historic burials), -00872 (traditional Hawaiian burials), -00884 (traditional Hawaiian cultural layer with artifacts, charcoal, historic artifacts, and railroad bedding), -00885 (historic irrigation ditch), -00886 (pre-Contact hearth, historic ditch, traditional Hawaiian burial), -00887 (traditional Hawaiian cultural layer with charcoal), -001711 (pre-Contact hearth), -001848 (pre-Contact post molds and hearth), and -001849 (pre-Contact cultural layer). Of these, only SIHP # -00885 is located in Hanamā'ulu Ahupua'a.

5.2.10 Hammatt 2005

CSH (Hammatt 2005) carried out an archaeological inventory survey (termed an archaeological assessment in the absence of finds) of an approximately 71-acre portion of Kaua'i Lagoons Resort property in Kalapakī Ahupua'a. No historic properties were identified.

5.2.11 Creed et al. 2006

CSH (Creed et al. 2006) carried out an archaeological literature review and field inspection of 11 discrete areas as part of a project area proposed for the expansion of the Līhu'e Kaua'i Airport. The study asserts "[...] parcels of the project area received 100% surface survey coverage. No evidence of prehistoric or early historic sites were encountered within the project boundaries." Of relevance is their "Area 7" approximating the Ahukini Makai project area described as follows:

> Area 7 is a large parcel at the northwest end of the project area. Its boundary to the northwest is Kapule Highway. Presently, sugar cane is planted within the interior of this sub-area. This land which contains modifications of commercialized sugar cane production. Modifications to this area include active irrigation ditches, clearing piles, and dirt roads (Appendix Figure 27). As is often the case with sugar cane fields, there was no surface archaeological sites present. [Creed et al. 2006:46]

5.2.12 Bell et al. 2006

CSH (Bell et al. 2006) carried out an archaeological inventory survey of the proposed Līhu'e Airport improvements that included an approximation of the present Ahukini Makai area as Improvement Area 6 (Figure 22). At the time, this area was described as "Area 6 is a former cane field that is filled with tall, wild grasses" (Bell et al. 2006:42) and as an "Undeveloped, open field that is not maintained." Photographs of this project area are provided (see present Figure 23 through Figure 26). No historic properties were identified in this project area. The study advocated project-specific effect recommendations of "No adverse effect" (federal historic preservation legislation) and "No historic properties affected" (Hawai'i historic preservation legislation) and recommended no further cultural resource management work (Bell et al. 2006:57).

5.2.13 Monahan and Hammatt 2008

CSH (Monahan and Hammatt 2008) produced an archaeological literature review and field inspection report for the Nāwiliwili-Ahukini Bike Path project passing through portions of coastal Nāwiliwili, Kalapakī and Hanamā'ulu *ahupua'a* and which (in part) ran along the south side of the Ahukini Makai project area. All seven historic properties discussed were immediately on the coast with the nearest more than 500 m to the east of the Ahukini Makai project area.

5.2.14 Altizer and Hammatt 2014

CSH (Altizer and Hammatt 2014) carried out an archaeological inventory survey for approximately 6 linear miles (10 km) of the Nāwiliwili-Ahukini Bike Path Project in coastal Nāwiliwili, Kalapakī, and Hanamā'ulu Ahupua'a. A total of 15 cultural resources were identified including two walls related to plantation era sugar cane cultivation and/or ranching activities (SIHP #s 50-30-11-00422 and 50-30-11-00423); two pre-Contact habitation terraces (SIHP #s 50-30-11-02086 and 50-30-11-02094); Nāwiliwili Harbor Light and associated features (SIHP # 50-30-11-02087); the remains of a historic communications tower (SIHP # 50-30-11-02088; a possible burial mound (SIHP # 50- 30-11-02089); a military gun emplacement (SIHP # 50-30-11-02090); two sites related to historic residences (SIHP #s 50-30-11-02091 and 50-30-11-02092); one plantation era earthen drainage ditch (SIHP # 50-30-11-02093); one pre-Contact activity area (SIHP # 50-30-11-02095); two historic concrete drainage ditches (SIHP #s 50-30-11-2096 and 50-30-11-2097); and remnants of a historic industrial complex (SIHP # 50-30-11-2103).

5.2.15 Filimoehala et al. 2015

The International Archaeological Research Institute, Inc. (Filimoehala et al. 2015) prepared a supplemental archaeological inventory survey for a roughly triangular 59.7 acre "Ho'oluana at Kohea Loa" housing development at Hanamā'ulu Ahupua'a project area located immediately southwest of the junction between Kūhiō Highway and Kapule Highway. This was regarded as supplemental to the Walker and Rosendahl (1990) archaeological inventory survey and addressed the same project area. This study documented one archaeological site, SIHP # 50-30-08-2295, a 20th century irrigation complex of the Lihue Plantation Company that included nine designated features including a ditch system (Feature 1), a sluice complex (Feature 2), a paved channel (Feature 3), a bridge (Feature 4), four culvert/sluice gate features (Feature 5 through Feature 8), and a sluice gate (Feature 9).

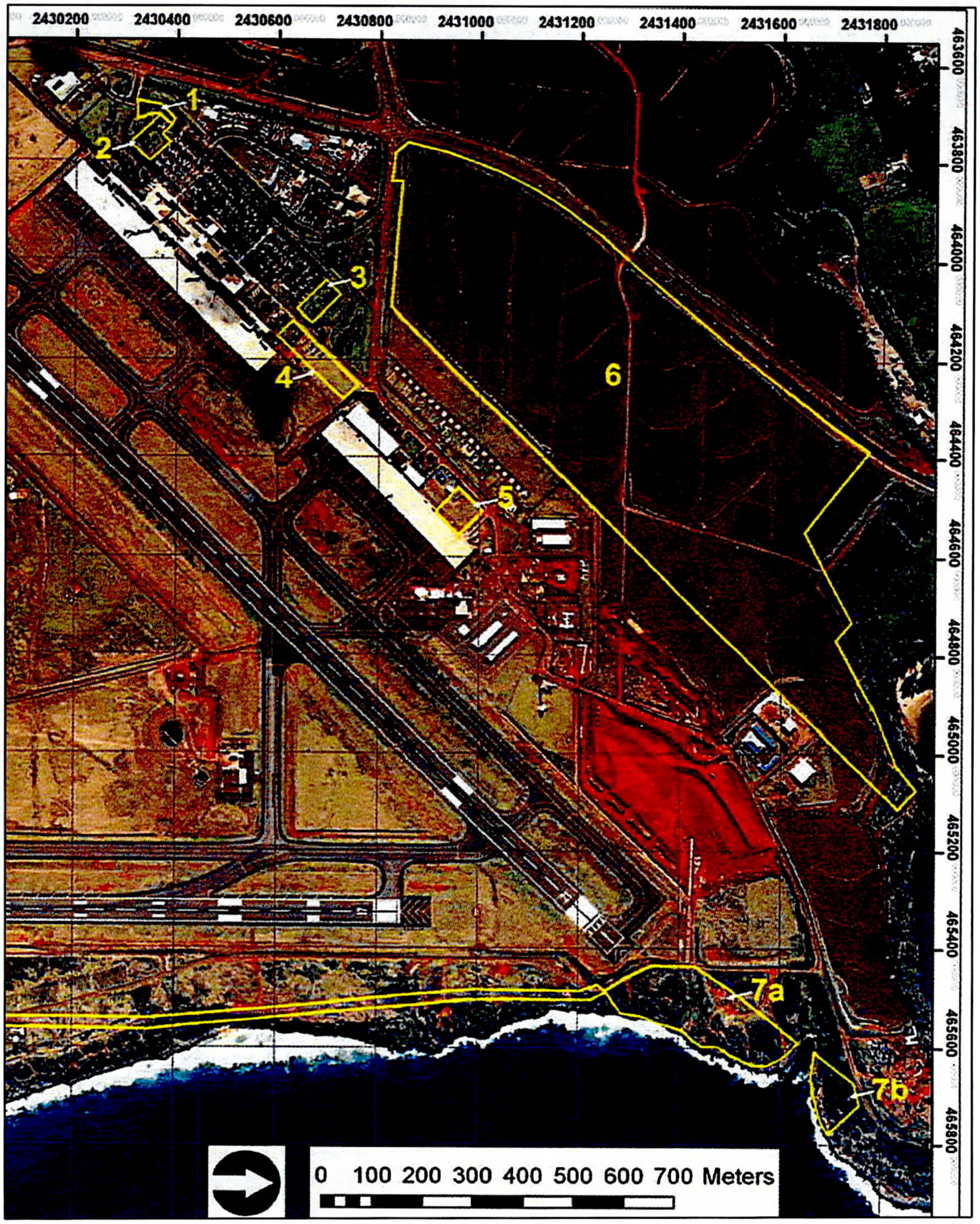

2430200
2430400
2430600
2430800
2431000
2431200
2431400
2431600
2431800
463600
463800
464000
464200
464400
464600
464800
465000
465200
465400
465600
465800
1
2
3
4
5
6
7a
7b
0 100 200 300 400 500 600 700 Meters

Figure 22. Map showing Līhu'e Airport improvements, Improvement archaeological inventory survey Area 6 approximating the Ahukini Makai project area (adapted from Bell et al. 2006:4)

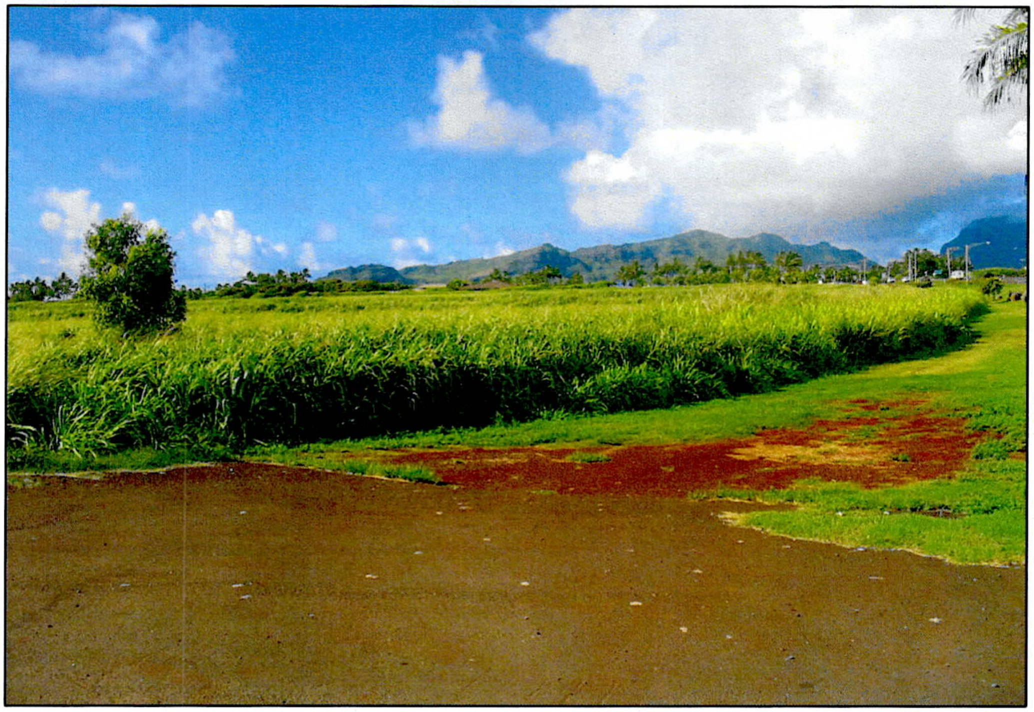


Figure 23. Area 6 — Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:71)

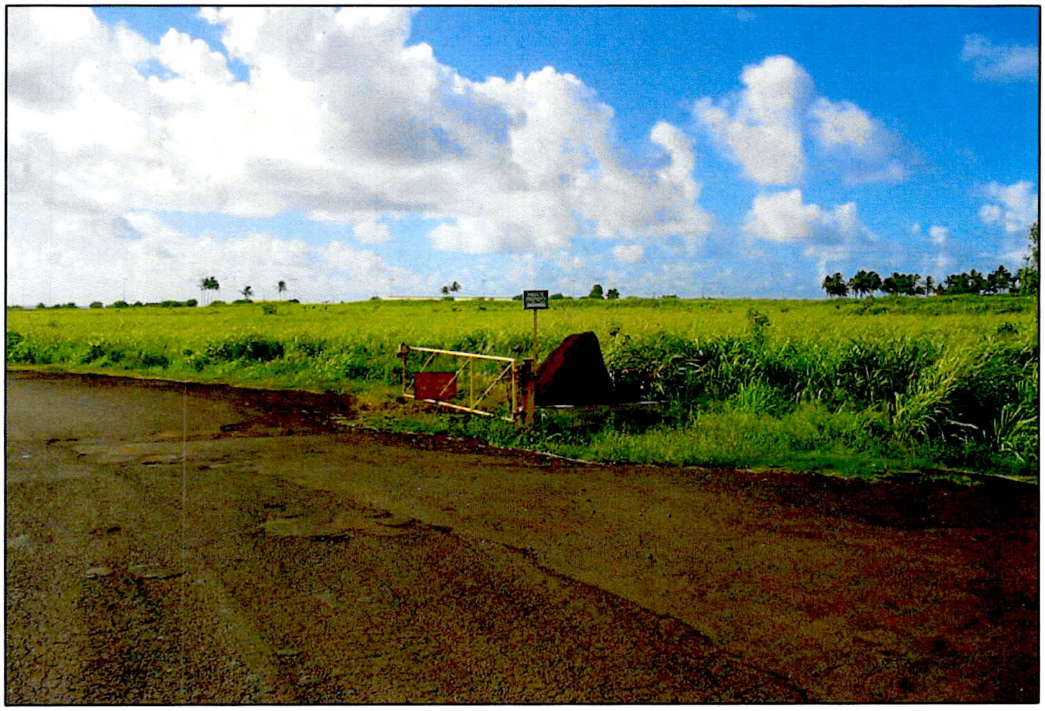


Figure 24. Area 6 — Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:71)

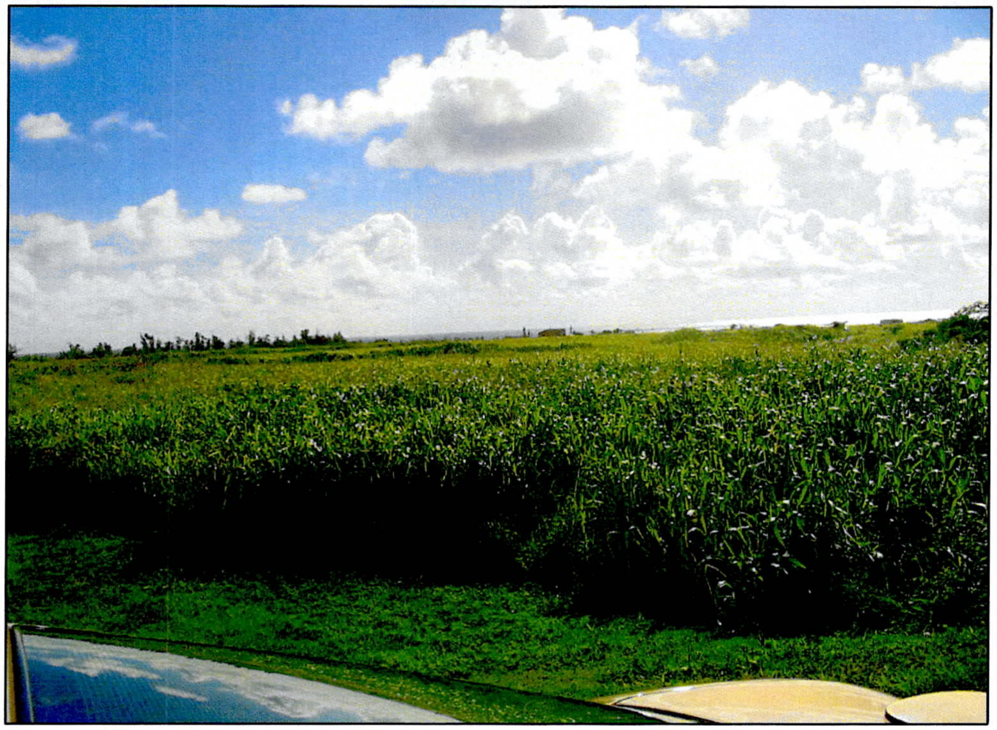


Figure 25. Area 6 — Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:72)

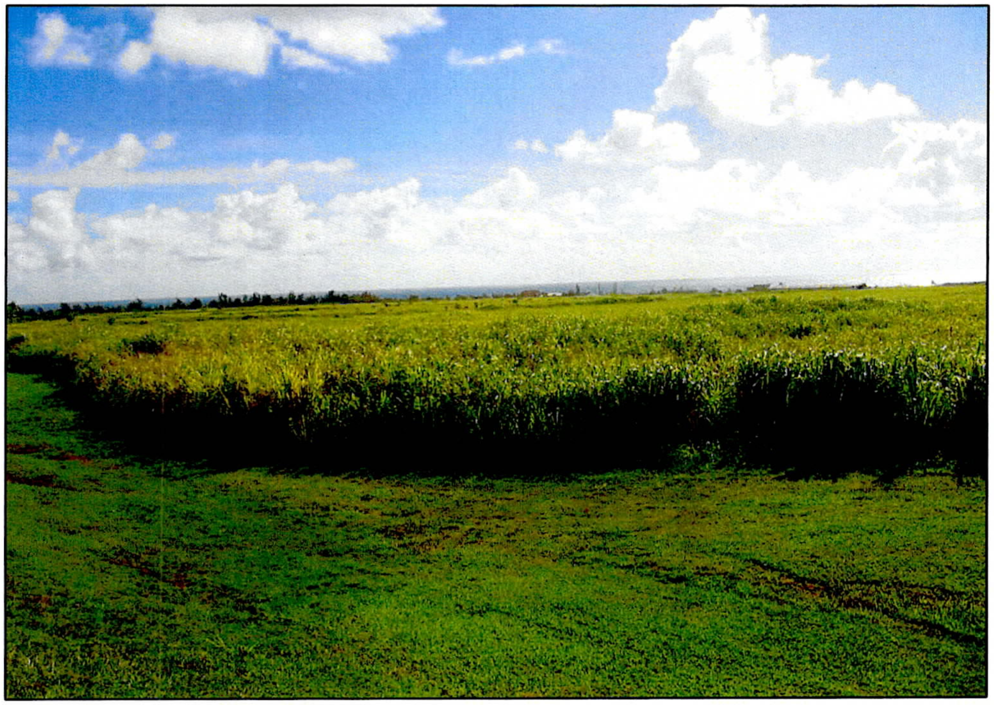


Figure 26. Tall Grass, Former Commercial Sugarcane Lands (from Bell et al. 2006:72)

5.2.16 Kamai and Hammatt 2015

CSH (Kamai and Hammatt 2015) prepared an archaeological literature review and field inspection study for an approximately 16.8-km "Līhu'e Hanamā'ulu New Mauka Road and a Future Potential Mauka Road" project. The study reported five newly identified historic properties related to the plantation era including ditches, culverts, and a cemetery located along both sides of the existing portions of cane haul roads regarded as components of previously identified SIHP # 50-30-11-2218.

5.3 Background Summary and Predictive Model

Creed et al. (2006) provide a detailed synthesis of the settlement patterns and prehistory of the *ahupua'a* of Hanamā'ulu. This synthesis includes extensive research on how the *ahupua'a* fits into the settlement patterns of Kaua'i as a whole. The synthesis presented here is largely derived from Creed et al. (2006).

As pointed out by Franklin and Walker (1994:17), two important *ahupua'a* and large rivers lie on either side of Hanamā'ulu lands. The first—Wailua Ahupua'a, home of the royal chiefs—lies immediately to the north. The other, Hulē'ia River Valley and the *ahupua'a* of Ha'ikū, lies to the south beyond Nāwiliwili and Niumalu. Thus Hanamā'ulu Ahupua'a would be expected to have less varied pre-Contact resources than its more dominant neighbors, which had greater populations along large river valleys.

Hanamā'ulu, however, would hardly have been devoid of pre-Contact structures as traditional stories assign considerable importance to the region. They portray Hanamā'ulu as the birth and death place of Kawelo, a late seventeenth century paramount chief. They reference paths crossing Hanamā'ulu as well as frequent canoe landings, and they speak of a number of *heiau,* including the large Kalauokamanu Heiau at the south tip of Kālepa Ridge, where human sacrifice was conducted. Based on Māhele records, archeological surveys, and ethno-historical accounts, the population in Hanamā'ulu was concentrated in the lower stream valley (with *kuleana* LCAs only extending about 100 m upstream of Kapaia Bridge on Kūhiō Highway) and near the shore. The *kula* lands were used for *wauke* and other dryland crops.

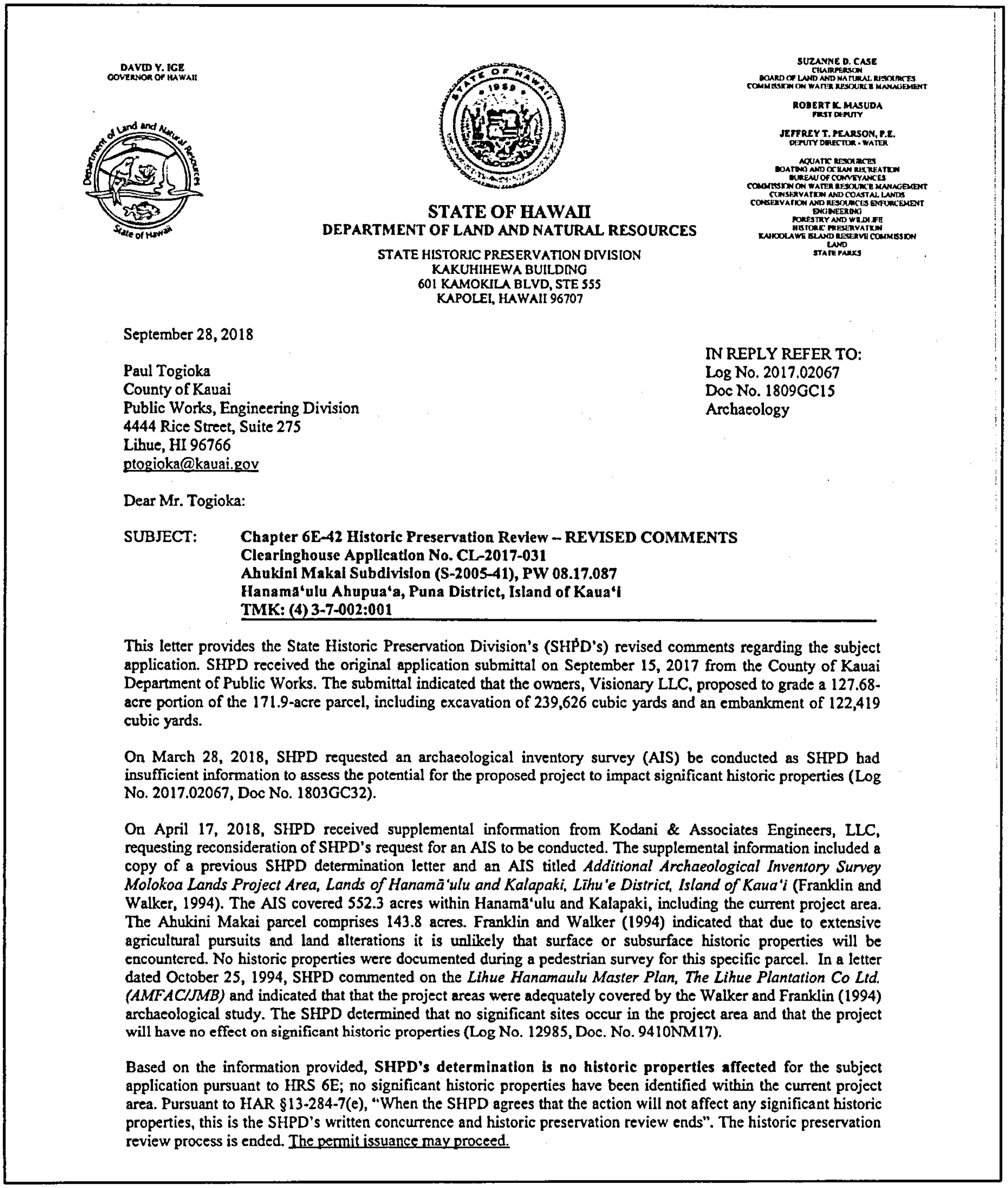
The large amount of *kula* land and the importance of the sugar industry in Hanamā'ulu dramatically altered land use patterns, perhaps more so than in prestigious traditional *ahupua'a* like Wailua and Ha'ikū. Many people moved away from the river valleys to make a living through cash crop agriculture. As a result, Hanamā'ulu would be expected to have historic resources related to sugar plantations.

The explosion of the sugar industry in Hawai'i fundamentally transformed the *ahupua'a* of Hanamā'ulu. The pattern of plantation land use (e.g., plowing, rock removal) generally obliterates most traces of pre-Contact and early historic land use. Nearly all traditional Hawaiian structures outside the lower Hanamā'ulu stream flood plain were almost certainly destroyed by commercial sugarcane operations. If archaeological remains are to be encountered they will likely relate to commercial sugarcane cultivation and plantation life.

An SHPD *Chapter 6E-42 Historic Preservation Review - REVISED COMMENTS Clearinghouse Application No. CL-2017-031 Ahukini Makai Subdivision (S-2005-41), PW 08.17.087 Hanama'ulu Ahupua'a, Puna District, Island of Kaua'i TMK: (4) 3-7-002:001* dated

28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, see following Figure 27 and Figure 28) renders a determination of "no historic properties affected" for the Ahukini Makai Subdivision based largely on the Franklin and Walker 1994 archaeological inventory survey. The Ahukini Makai Subdivision lands were also subject to study in the Creed et al. (2006) archaeological literature review and field inspection and Bell et al. (2006) archaeological inventory survey. No historic properties have been identified in the Ahukini Makai Subdivision project area.

Seemingly no historic properties have been identified on the *makai* table lands of Hanamā'ulu south of Hanamā'ulu Stream valley. It should be noted that about 250 m to the northwest of the project area is a (Walker et al. 1991) site designation SIHP # 50-30-11-01847 (see Figure 21). The site description designates approximately 53.0 acres of the flat, level valley floor as a prehistoric agricultural site noting that "Although no structural remains were visible, the area may have been used prehistorically for agricultural activities" (Walker et al. 1991:A-6). The site was recommended for detailed recording and limited excavations prior to development in that area Walker et al. 1991:10). There does not appear to have been any further archaeological study on the Hanamā'ulu valley floor. This does serve to highlight that the area of LCAs on the valley floor is also likely to be relatively rich in archaeological resources. Kikuchi and Remoaldo (1992:76) indicate the location of a cemetery designated SIHP # 50-30-08-B019 that appears to be 100 m north of the project area on a bluff on the south side of Hanamā'ulu Valley (see Figure 21). They indicate this was one of the "Cemeteries not located." While there is thus some question as to the precise location, and even as to whether this cemetery exists at all, there is no reason to believe it is in the Ahukini Makai project area.



DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

September 28, 2018

IN REPLY REFER TO:
Log No. 2017.02067
Doc No. 1809GC15
Archaeology

Paul Togioka
County of Kauai
Public Works, Engineering Division
4444 Rice Street, Suite 275
Lihue, HI 96766
ptogioka@kauai.gov

Dear Mr. Togioka:

SUBJECT: **Chapter 6E-42 Historic Preservation Review – REVISED COMMENTS**
Clearinghouse Application No. CL-2017-031
Ahukini Makai Subdivision (S-2005-41), PW 08.17.087
Hanamā‘ulu Ahupua‘a, Puna District, Island of Kaua‘i
TMK: (4) 3-7-002:001

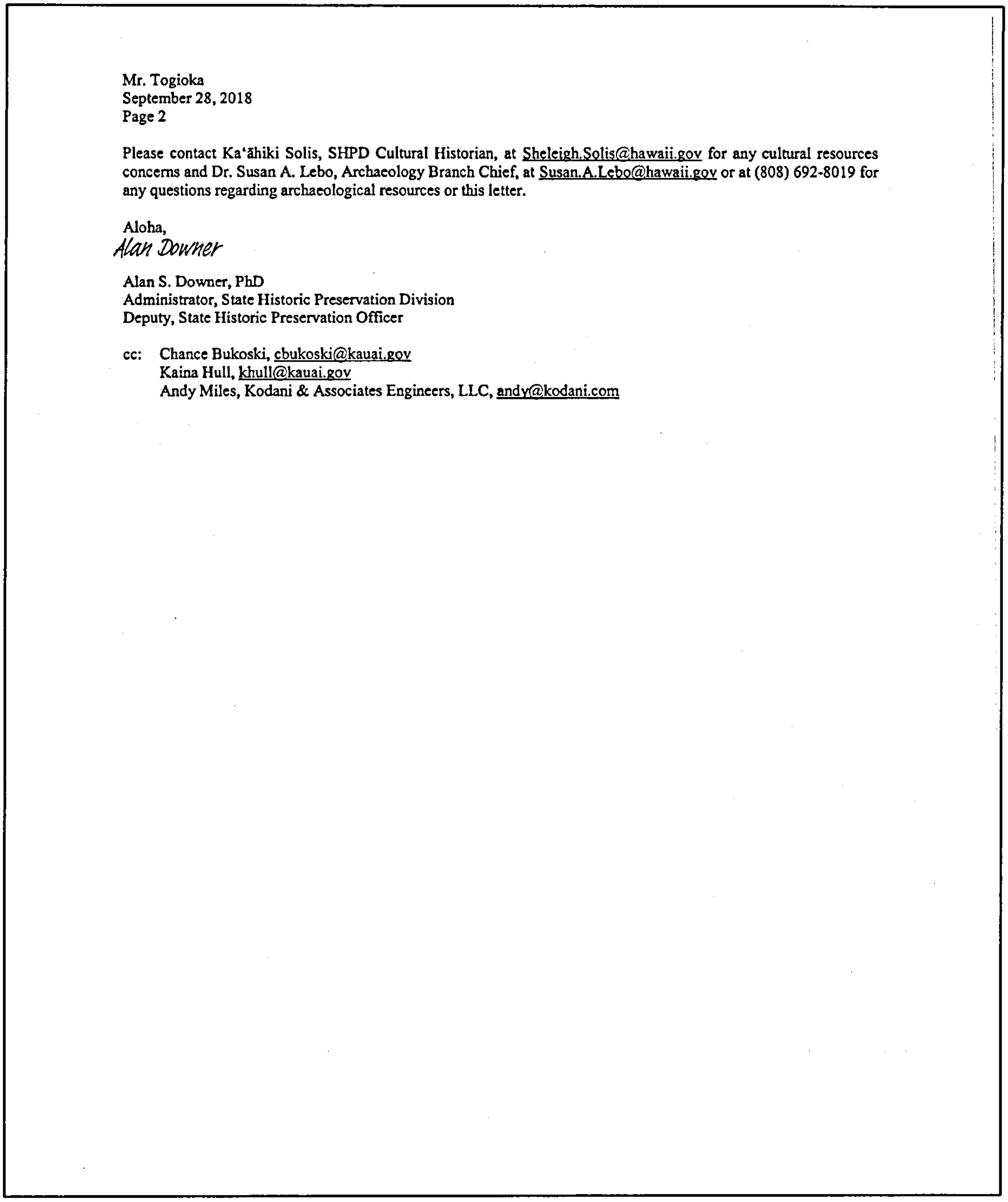
This letter provides the State Historic Preservation Division's (SHPD's) revised comments regarding the subject application. SHPD received the original application submittal on September 15, 2017 from the County of Kauai Department of Public Works. The submittal indicated that the owners, Visionary LLC, proposed to grade a 127.68-acre portion of the 171.9-acre parcel, including excavation of 239,626 cubic yards and an embankment of 122,419 cubic yards.

On March 28, 2018, SHPD requested an archaeological inventory survey (AIS) be conducted as SHPD had insufficient information to assess the potential for the proposed project to impact significant historic properties (Log No. 2017.02067, Doc No. 1803GC32).

On April 17, 2018, SHPD received supplemental information from Kodani & Associates Engineers, LLC, requesting reconsideration of SHPD's request for an AIS to be conducted. The supplemental information included a copy of a previous SHPD determination letter and an AIS titled *Additional Archaeological Inventory Survey Molokoa Lands Project Area, Lands of Hanamā‘ulu and Kalapaki, Līhu‘e District, Island of Kaua‘i* (Franklin and Walker, 1994). The AIS covered 552.3 acres within Hanamā‘ulu and Kalapaki, including the current project area. The Ahukini Makai parcel comprises 143.8 acres. Franklin and Walker (1994) indicated that due to extensive agricultural pursuits and land alterations it is unlikely that surface or subsurface historic properties will be encountered. No historic properties were documented during a pedestrian survey for this specific parcel. In a letter dated October 25, 1994, SHPD commented on the *Lihue Hanamaulu Master Plan, The Lihue Plantation Co Ltd. (AMFAC/JMB)* and indicated that that the project areas were adequately covered by the Walker and Franklin (1994) archaeological study. The SHPD determined that no significant sites occur in the project area and that the project will have no effect on significant historic properties (Log No. 12985, Doc. No. 9410NM17).

Based on the information provided, **SHPD's determination is no historic properties affected** for the subject application pursuant to HRS 6E; no significant historic properties have been identified within the current project area. Pursuant to HAR §13-284-7(e), "When the SHPD agrees that the action will not affect any significant historic properties, this is the SHPD's written concurrence and historic preservation review ends". The historic preservation review process is ended. The permit issuance may proceed.

Figure 27. SHPD §6E-42 Historic Preservation Review determination of "no historic properties affected" for the Ahukini Makai Subdivision dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, page 1)



Mr. Togioka
September 28, 2018
Page 2

Please contact Ka'āhiki Solis, SHPD Cultural Historian, at Sheleigh.Solis@hawaii.gov for any cultural resources concerns and Dr. Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov or at (808) 692-8019 for any questions regarding archaeological resources or this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy, State Historic Preservation Officer

cc: Chance Bukoski, cbukoski@kauai.gov
Kaina Hull, khull@kauai.gov
Andy Miles, Kodani & Associates Engineers, LLC, andy@kodani.com

Figure 28. SHPD §6E-42 Historic Preservation Review determination of "no historic properties affected" for the Ahukini Makai Subdivision dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, page 2)

Section 6 Summary and Interpretation

At the request of Visionary LLC, CSH has prepared this Ka Pa'akai Analysis for the proposed Ahukini Makai project in Hanamā'ulu Ahupua'a, Līhu'e District, Kaua'i, TMK: (4) 3-8-001. The approximately 170-acre (68.8-hectare) parcel owned by Visionary LLC is located approximately 2.0 km northeast of the county capital of Līhu'e on gently sloping table land (approximately 40-ft to 170m-ft elevation) on a low bluff above the southwest corner of distinctive Hanamā'ulu Bay.

Our greatest indication of traditional Hawaiian patterns of land use is the pattern of native tenant Land Commission Award records. All of the native tenant LCAs were down in Hanamā'ulu Valley taking advantage of the perennial stream and the amenities of life just back from the bay and beach. There were no native tenant LCAs in the present project area. While the nearest native tenant LCA is only about 125 m to the north, it is down a 100-ft tall scarp at the river bottom lands and in a significantly different environmental circumstance.

Undoubtedly the Hawaiian residents of Hanamā'ulu Valley gathered resources from the upland of the *ahupua'a*. The annual rainfall at the neighboring Lihue Airport Station is 997 mm (39.3 inches) (Giambelluca et al. 2013) which is suggested as marginal for non-irrigated agriculture. Native forests were used for their resources (wood, birds, medicinal plants, etc.) and for the cultivation of such plants as *wauke* (paper mulberry), which was used to make tapa clothing (Handy 1940:198). The rainfall increases rapidly to the northwest with elevation within the *ahupua'a*, however, with Kukaua Station on Kilohana Crater reporting 2,490 mm (98.0 inches) per year which is suggested as more than ample for non-irrigated agriculture. Exploitation of upland resources is indicated to have been focused further inland rather than on the coastal table lands.

Section 7 Community Consultation

7.1 Introduction

Throughout the course of this assessment, an effort was made to contact and consult with Native Hawaiian Organizations (NHO), agencies, and community members including descendants of the area in order to identify individuals with cultural expertise and/or knowledge of the *ahupua'a* of Hanamā'ulu and specifically the Ahukini Makai Subdivision project area. CSH initiated its outreach effort in March 2023 through letters and email. CSH completed the community consultation in July 2023.

7.2 Consideration of Prior Community Consultation in the Vicinity

We regard appropriate consultation as specific to a particular project area. Having said that, it made sense to consider the import, if any, of previously documented cultural consultation in the vicinity.

Mitchell et al. (2005) reported on a cultural impact evaluation of approximately 400 acres of the Kauai Lagoons Resort Property in Kalapakī Ahupua'a. Ms. Cheryl Lovell-Obatake, a prominent *kama'āina* of Kalapakī and cultural specialist, was interviewed by CSH on 20 October 2005. When Ms. Lovell-Obatake spoke of archaeological sites she spoke of "the coast and Kalapakī Point" (Mitchell et al. 2005:23). Ms. Lovell-Obatake specifically noted she "never heard of any burials in the [Mitchell et al. 2005] area of study" (Mitchell et al. 2005:23). Ms. Cheryl Lovell-Obatake expressed her concern for marine resources. Another informant expressed her concern for coastal access for fisherman (Mitchell et al. 2005:24–25) and also expressed her concern for Shearwater birds: The Shearwater nesting area was understood as immediately coastal.

Tanaka and Hammatt 2021 produced a cultural impact assessment (CIA) for approximately 46.3 acres in Kalapakī Ahupua'a located approximately 700 m south of the proposed Ahukini Makai Subdivision project in a somewhat similar area set back from the coast with a similar long history of being entirely in Lihue Plantation sugarcane cultivation until sugar went out of production and the land went fallow. In most cases, two or three attempts were made to contact individuals, organizations, and agencies. Community outreach letters were sent to 26 individuals or groups; only one responded (although she indicated she forwarded the request for consultation to a number of parties). The informant expressed concern regarding a couple of places in the immediate vicinity of the Ninini Lighthouse at Ninini Point, approximately 300 km south of the present study area.

7.3 Community Contact Letter

Letters (see Appendix A, Figure 30 through Figure 37) along with maps and an aerial photograph specific to the Ahukini Makai Subdivision project (and two immediately adjacent project areas on Grove Farm land) were mailed with the following text:

> *Aloha mai kākou,*
>
> With this letter, Cultural Surveys Hawai'i (CSH) humbly requests your *mana'o* and *'ike* (experience, insights, and perspectives) regarding past and ongoing cultural practices, beliefs, and resources within certain proposed development areas on Haili

Moe and Visionary lands within Kalapakī and Hanamā'ulu Ahupua'a (see following figures).

Consultation with *kūpuna*, *kama'āina*, and Hawai'i's diverse ethnic communities is an important and deeply valued part of our work and the environmental review process for proposed projects in Hawai'i. Your contributions will revitalize and keep alive knowledge of cultural practices, storied places, and life experiences that will remind Hawai'i's children of their history for generations to come.

Project Description

At the request of Haili Moe, Inc. and Visionary LLC, CSH is preparing a Ka Pa'akai Analysis study for the Wailani Subdivision project in Kalapakī Ahupua'a and also for the Ahukini Makai Subdivision and Ahukini Mauka Subdivision projects in Hanamā'ulu Ahupua'a.

Wailani Subdivision Project

Haili Moe, Inc. is proposing to develop a mixed-use subdivision known as the Wailani Subdivision project in Kalapakī Ahupua'a, Līhu'e District, southeast Kaua'i, TMKs: (4) 3-6-002:001, 017, and 027. The location and boundaries of the proposed Wailani Subdivision study area are delineated on a 1996 Lihue U.S. Geological Survey (USGS) map (reference to present Figure 33), a 2013-2019 aerial photograph (reference to present Figure 34), and a Tax Map Key (TMK) plat (reference to present Figure 35).

Ahukini Makai Subdivision Project

Visionary LLC is proposing to develop an industrial subdivision known as the Ahukini Makai Subdivision project in Hanamā'ulu Ahupua'a, Līhu'e District, southeast Kaua'i, TMK: (4) 3-7-002:001. The location and boundaries of the proposed Ahukini Makai Subdivision study area are delineated on a 1996 Kapaa and Lihue USGS map (reference to present Figure 33), a 2013-2019 aerial photograph (reference to present Figure 34), and a TMK plat (reference to present Figure 36).

Ahukini Mauka Subdivision Project

Haili Moe, Inc. is proposing to develop a mixed-use subdivision known as the Ahukini Mauka Subdivision project in Hanamā'ulu Ahupua'a, Līhu'e District, southeast Kaua'i, TMKs: (4) 3-7-001:001 por. and 3-7-002:012 por. The location and boundaries of the proposed Ahukini Mauka Subdivision study area are delineated on a 1996 Kapaa and Lihue USGS map (reference to present Figure 33), a 2013-2019 aerial photograph (reference to present Figure 34), and TMK plats (see present Figure 36 and Figure 37).

Purpose of this Study

The purpose of this Ka Pa'akai Analysis outreach is to 1) identity and scope valued cultural, historical, or natural resources in the study areas, including the extent to which traditional and customary Native Hawaiian rights are exercised in the study areas; 2) identify the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action. This is accomplished through consultation and background research using previously written documents, studies, and interviews. This information is used to assess potential impacts by the proposed project to the specific identified resources, practices, and beliefs in the study areas. As a knowledgeable member of the community and a holder of long-term cultural knowledge, your insight, input, and perspective provide a valuable contribution to the assessment of potential effects of this project and an understanding of how to protect these resources and practices.

Insights focused on the following topics in the study areas are especially helpful and appreciated:

- Your knowledge of traditional cultural practices of the past within the proposed study area portions of Kalapakī and Hanamā'ulu Ahupua'a
- Your specific traditional cultural practice and its connection to the proposed study areas of Kalapakī and Hanamā'ulu Ahupua'a
- The different natural resources associated with your cultural practice
- Legends, stories, or chants associated with your cultural practice and its relationship to the proposed study area portions of Kalapakī and Hanamā'ulu Ahupua'a
- Referrals to other kūpuna, kama'āina, and traditional cultural practitioners knowledgeable about the proposed study area portions of Kalapakī and Hanamā'ulu Ahupua'a
- Your comments or thoughts on the potential impacts the proposed project may have on your ongoing traditional cultural practice and natural resources within the proposed study area portions of Kalapakī and Hanamā'ulu Ahupua'a
- Your knowledge of cultural sites and wahi pana (storied places) within the proposed study area portions of Kalapakī and Hanamā'ulu Ahupua'a
- Your comments or thoughts on the potential impacts the proposed project may have on cultural sites and wahi pana within the proposed study area portions of Kalapakī and Hanamā'ulu Ahupua'a

Consultation Information

Consultation is an important and deeply valued part of a Ka Pa'akai Analysis study. Your contributions will revitalize and keep alive our combined knowledge of past and ongoing cultural practices, historic places, and experiences, reminding following generations of their history.

With your agreement to participate in this study, your contributions will become part of the comprehensive understanding of traditions of the area and part of the public record.

> As a part of this process, your knowledge may be used to inform future heritage studies of cultural practices and resources that need protection from impacts of proposed future projects. If you engage in consultation, and the mana'o and 'ike you provide appears in the study, we would like to recognize your contribution by including your name. If you prefer not to allow your name to be included, your information can be attributed to an anonymous source.
>
> The consultation interview structure and format are flexible. We will accommodate your preference on how to get together: talk story, over the phone, by email correspondence, remotely via Zoom, MS Teams, Google Chat or other remote meeting platforms.
>
> Your knowledge of the resources and potential effects of the project on traditional practices in the study area portions of Kalapakī and Hanamā'ulu Ahupua'a focusing on the topics in the bullet points above can also be submitted in a written statement. CSH will provide return postage for your written statement on request.
>
> CSH is happy to provide a list of topics for discussion, a more structured questionnaire of interview questions, or any other assistance that might be helpful.
>
> If you have questions regarding consultation, or are interested in participating in this study, please contact CSH Cultural Researcher Kellen Tanaka by email at [...] or phone at [...].
>
> *Mahalo nui loa* for your time and attention to this request for consultation.
>
> Kellen Tanaka
>
> CSH Cultural Researcher

In most cases, two or three attempts were made to contact individuals, organizations, and agencies. Community outreach letters were sent to 37 individuals or groups; ten responded, two provided written testimony, and two of these *kama'āina* and/or *kūpuna* met with CSH for more in-depth interviews. The results of the community consultation process are presented in Table 5.

7.4 Community Contact Table

Below in Table 5 are names, affiliations, dates of contact, and comments from NHOs, individuals, organizations, and agencies contacted for this project. Results are presented below in alphabetical order.

Table 5. Community contact table

Name	Affiliation	Comment
Agena, Robert	*Kama'āina*	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 18 April 2023
Ahuna, Kanoe	President and Director, EAO Hawaii Inc.	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023

Name	Affiliation	Comment
Alu Like	Their mission is to *kōkua* Hawaiian Natives who are committed to achieving their potential for themselves, their families, and communities	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 18 April 2023
Baker, Harry J.	Librarian, Kaua'i Community College	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Berg, Carl	Biologist, Chair for Surfrider Foundation, Marine Biologist, Blue Water Task Force Coordinator, watershed management, climate change	Letter and figures sent via email 3 March 2023 Mr. Berg replied via email 8 March 2023 expressing concern regarding the "adequacy of the Lihue aquifer to provide water for these developments and the Lihue WWTP [Waste Water Treatment Plant] to handle the increased amount of sewage" CSH replied via email 8 March 2023 thanking him for his response
Buckley, David	Kauai Lead Archaeologist, SHPD	Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Cockett, Pat	Kalapakī Resident	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 19 April 2023
Cummings, Roslyn	*Kama'āina*	Letter and figures sent via email 19 April 2023 Ms. Cummings replied via email 19 April 2023 CSH replied via email 20 April 2023 Ms. Cummings submitted a written declaration on 15 May 2023 Ms. Cummings' declaration is included in its entirety in Appendix B
Cummings, Sherri-Lee U'ilani	Lineal descendant of Hanamā'ulu Ahupua'a	Ms. Cummings reached out to CSH via email 20 May 2023 and expressed interest in submitting testimony regarding the proposed projects CSH replied via email 22 May 2023 and confirmed that CSH is still accepting comments Ms. Cummings replied via email 22 May 2023

Name	Affiliation	Comment
Fu, Kanani	Cultural consultant	Letter and figures sent via email 6 June 2023 Ms. Fu responded 8 June 2023 via email noting (in addition to herself) four families: (Kanani Durant and *'ohana,* Butch Durant and *'ohana* Shanks *'ohana* (Troy), and Pia *'ohana*) with ties to Hanamāʻulu that may want to be a part of this process CSH responded 9 June via email seeking to meet (remotely, initially) CSH met with Ms. Fu over the phone 20 June 2023 Interview summary sent for review 26 July 2023 Interview summary approved 16 October 2023
Gaines, Erin	Kauaʻi Regional Director, Big Brothers Big Sisters Hawaiʻi	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Griffin, Pat	Historian, Planner, Preservationist, former chair of the KHPRC, author of *Līhu'e — Root and Branch of a Hawai'i Town* (and other works)	Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Heacock, Don	Nāwiliwili Bay Watershed Council	Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Hoomanawanui, Kauanoe	Burial Sites Specialist (Kauai and Niihau)	Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Hussey, Sylvia M.	CEO, Office of Hawaiian Affairs (OHA)	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 19 April 2023
Hussey-Albao, Liberta	President, Queen Deborah Kapule Hawaiian Civic Club	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Ms. Hussey-Albao replied via email 9 March 2023 Ms. Hussey-Albao discussed the project with their board and assigned Roland Sagum to review the letter and figures CSH replied via email 9 March 2023 thanking her for her response CSH followed up with Mr. Sagum via email 20 April 2023

Name	**Affiliation**	**Comment**
Ida, Gerald	Member, Kauai Historic Preservation Commission	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 18 April 2023
Kahalekai, J. Kauilani	Kaua'i/Ni'ihau Island Burial Council (KNIBC) – Līhu'e	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023 Ms. Kahalekai responded via email 26 April 2023 Ms. Kahalekai mentioned there are "burials toward Ahukini Mauka area closer to lower areas in Kapaia valley and towards Ahukini Makai closer towards the valley and lower areas...The Durante ohana and Kane ohana have kuleana in those areas." She noted, "There would be more animal bones in all other areas." She also noted, "Closer to Ahukini Makai this is more gathering rights area... towards ocean along shoreline." CSH replied via email 26 April 2023 thanking her for her response and again on 27 April 2023 asking for contact information for the Durante *'ohana* (family) and Kane *'ohana*
Kaiola Canoe Club	Canoe Club	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 19 April 2023
Kalauhine 'Ohana	*Kama'āina*	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 19 April 2023
Kaohelauli'i, John	President, Kaua'i Native Hawaiian Chamber of Congress	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Kaua'i Historical Society	Historical Society	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Kaua'i Historical Society replied via email 3 March 2023 CSH followed up via email 20 April 2023 Kauai Historical Society's archivist replied via email 21 April 2023 recommending resources with information about Kalapakī and Hanamaulu Ahupua'a CSH replied via email 21 April 2023 thanking them for sharing their recommendations
Kauka, Sabra	Hawaiian Studies Kumu, Island School	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023

Name	Affiliation	Comment
Kekua, Kehaulani	Kaua'i Heritage Center	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Lovell, Carol	KNIBC – Kawaihau	Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Madayag, Moises	Curator, Grove Farm Homestead Museum	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Matsushima, Kaniela Kaleikaumaka	*Kama'āina* of Hanamā'ulu	Mr. Matsushima provided written testimony via email 23 May 2023 CSH replied via email 24 May 23 thanking them for their response Mr. Matsushima's testimony is included in its entirety in Appendix C
Matsushima, Kimo	*Kama'āina* of Hanamā'ulu	Letter and figures sent via email 9 June 2023 CSH met with Mr. Matsushima over the phone 21 June 2023 Interview summary sent for review 26 July 2023 Interview summary approved 16 October 2023
Matsushima, Lester	*Kama'āina* of Hanamā'ulu	Letter and figures sent via USPS 6 June 2023
Oi, Thomas	Former land surveyor, DLNR	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 18 April 2023
Peters, Sarah	Pelekikena, Kaumuali'i Hawaiian Civic Club	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Rogers, Alohilani	Cultural Education Specialist, Kawaikini New Century Public Charter School	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023 Ms. Rogers replied via email 19 April 2023 Ms. Rogers forwarded letter and figures to "a friend whose family has lived in the area for generations." CSH replied via email 20 April 2023 thanking them for their response
Rogers, Nani	Hui Ho'okipa o Kaua'i	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via USPS 18 April 2023
Santos, Donna Kaliko	Nā Kuleana o Kānaka 'Ōiwi /Aha Moku Council – Puna OHA, Community Relations Specialist	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023

Name	Affiliation	Comment
TenBruggencate, Jan	President, Mālama Hule'ia	Letter and figures sent via USPS 2 March 2023 Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023
Trugillo, William	Ka Leo o Kaua'i	Letter and figures sent via USPS 2 March 2023 Mail returned
Wichman, Randy	Former President of Kaua'i Historical Society	Letter and figures sent via email 3 March 2023 Letter and figures sent via email 19 April 2023

7.5 Summary of Responses

The substantive responses are summarized here in alphabetical order.

Carl Berg

Carl Berg replied via email 8 March 2023 expressing concern regarding the "adequacy of the Lihue aquifer to provide water for these developments and the Lihue WWTP [Waste Water Treatment Plant] to handle the increased amount of sewage." Thus he expressed concern for both the adequacy of available water to support the development as well as the adequacy of waste water treatment infrastructure to address the proposed development. While the adequacy of water (and water supply infrastructure) and wastewater infrastructure to support the development may be perceived as development questions independent of any specific ethnic community and traditional and customary Hawaiian resources and practices, we need to note that for many in the Native Hawaiian community issues of water extraction and wastewater disposal are understood as cultural issues. However legitimate these concerns may be, it is not clear that they are necessarily specific to the Ahukini Makai Subdivision lands per se.

Roslyn Cummings

Ms. Roslyn Cummings was kind enough to provide a detailed response which is provided verbatim in the present Appendix B; the reader is referred directly to that testimony and is invited to draw their own conclusions.

Ms. Cummings relates that she was born in Waimea, Kaua'i and shares much of her *mo'o kū'auhau* or geneology which she traces back to (amongst others) Kaikio'ewa, understood as a cousin of Kamehameha I and the first governor of Kaua'i (understood as born in Waimea, Kaua'i). This *mo'o kū'auhau* is offered "In protection of Kauai Mokupuni, Puna Moku, Ahupua'a O Hanamaulu, Kalapaki, Wailua (Ko Hawaii Pal Aina) a pau." It is not clear whether there is any direct genealogical connection to Puna District and the *ahupua'a* of Hanamā'ulu.

She asserts, "Our practices as Kanaka Maoli is within our inherent birthright. It does not need to be publicized to be legitimate. It does not have to be defined for every individual to know and comprehend."

She expresses opposition to development of the *'āina* (land, earth) in general: and the view that "Development is detrimental to the Ola [life, health, well-being]" with a particular focus on how "When development occurs, the water becomes polluted, diverted, depleted, [...]" A related foci is "the significant impacts of Waste management that gets pumped into our oceans and rivers

(Kai/Wai) through lack of management, infrastructure [...]" A concern for loss of access and gathering rights is expressed.

While it is understood that these points relate to the proposed Ahukini Makai Subdivision project, these points appear to be made with pertinence to the island of Kaua'i in general (with no points explicitly made specifically on the Ahukini Makai Subdivision project, Hanamā'ulu Ahupua'a, or Puna District.

J. Kauilani Kahalekai,

Ms. J. Kauilani Kahalekai was kind enough to respond via email 26 April 2023:

> I'm responding to your Ka Pa'akai Analysis study of Wailani Subdivision project in Kalapaki Ahupua'a and the Ahukini Mauka & Makai Subdivision project in Hanamaulu Ahupua'a...
>
> There is burials toward Ahukini Mauka area closer to lower areas in Kapaia valley and towards Ahukini Makai closer towards the valley and lower areas...The Durante ohana and Kane ohana have kuleana in those areas.
>
> There would be more animal bones in all other areas. Closer to Ahukini Makai this is more gathering rights area... towards ocean along shoreline..
>
> I'm sure this will aide in your projects that are planned.. if you have more questions please don't hesitate to contact.
>
> With much regards,
>
> J Kauilani Kahalekai
>
> Kauai Island Burial Council

CSH replied via email 26 April 2023:

> Mahalo for your response and for all the information you shared. We really appreciate it. With your permission, we would like to include your comments in our report. I attached a pdf of CSH's authorization and release form which grants us permission to include the information you provided in our report. Could you please sign the form and send us a scan or photo of the signed form for our records? Feel free to contact me if you have any questions.

CSH replied via email 27 April 2023:

> CSH would like to reach out to the Durante 'Ohana and Kane 'Ohana regarding the Ka Pa'akai Analysis study for the Wailani Subdivision project in Kalapakī Ahupua'a and the Ahukini Makai Subdivision and Ahukini Mauka Subdivision projects in Hanamā'ulu Ahupua'a. Would you be able to provide us with their contact information so we may send them the outreach letter or could you forward them the letter (attached) with our contact info and ask them to contact us if they would like to participate?

CSH received no response to the request for contact information.

Our understanding is that her references to burials in proximity to the Ahukini Makai and Ahukini Mauka project areas is that the burials are closer, or in, the valleys. It is our reading that if bones are found in the project areas they may well turn out to be animal bones.

Kaua'i Historical Society

The Kaua'i Historical Society (Ramona "Mona" Kincaid) was kind enough to respond on 21 April 2023 by email to our outreach:

> I looked up a few things but I'm sure your company's report Hanamaulu 10 [a reference to *Archaeological Literature Review and Field Inspection for the Approximately 16.8 kilometers Līhu'e Hanamā'ulu New Mauka Road and the Future Potential Mauka Road, Līhu'e District, Kaua'i Island (TMK: [4] 3-4-05; 3-8-02; 3-4-07; 3-8-03; and 3-8-05)* (Kamai and Hammatt 2015)] will have many of the usual cultural resources. I am not a cultural practitioner but I did give our resources a look and have attached some random notes that I found.
>
> Aloha,
>
> Mona

The kindly provided notes are given below:

> Documentation of Fisheries and Fishing Rights Recorded in the Māhele 'Āina
>
> A careful review of thousands of claims recorded during the Māhele 'Āina for all islands—with the exception of Kaho'olawe for which no claims were located—revealed that at least 1,233 claims for fishery resources were recorded in the Register and Testimony Volumes of the Land Commission 13.
>
> These claims include those of the hoa'āina [tenant] and the ali'i awardees. The break-down of fishery related claims by island includes:
>
> 76 claims on Hawai'i
>
> 83 claims on Kaua'i;
>
> 72 claims on Lāna'i;
>
> 202 claims....
>
> [LCA] 3426 Pelekane at Hanamaulu, Kauai. A lot bounded on side by a fish pond.
>
> [LCA] 238 P Kinipeki at Kalapaki, Kauai. One parcel bounded on Koolau side by fish pond.
>
> [LCA] 3280 Wawae at Kalapaki, Kauai. Three fish ponds at Kalapaki.
>
> [LCA] 3425 Paiki at Kalapaki, Kauai. A lot bounded on side by Kauhailawa's fish pond.
>
> [LCA] 3642 Kuolohu at Kalapaki, Kauai. A lot bounded on side by the pond called Koenaawanui.
>
> [LCA] 3645 Kauleoki at Kalapaki, Kauai. A lot bounded on side by the pond called Koenaawanui.

> [LCA] 3907 Nakala at Kalapaki, Kauai. Two fish ponds.
>
> Document by Kumu Pono Associates HiPe74-080103 by Kepa Maly [references Maly, Kepa and Onaona Maly 2003 *Ka Hana Lawai'a a me Na Ko'a O Na Kai 'Ewalu. A History of Fishing Practices and Marine Fisheries of the Hawaiian Islands. Compiled from: Native Hawaiian Traditions, Historical Accounts, Government Communications, Kamaaina Testimony and Ethnography* Volume 1. Kumu Pono Associates.]
>
> *Garden Island* newspaper in Chronicling America: 2/23/1915 2:3-4 History of Lihue by Mrs. William H. Rice mentions Hanamaulu. This is probably on microfilm in Lihue Library:
>
> [*Garden Island* newspaper an article] 9/17/1940 Fishing rights in Hanamaulu.
>
> Handy and Handy for native plants.
>
> I noted in the 1910 and 1912 USGS Topo maps of Kauai there seems to be an old road/path along the southern bank of Hanamaulu Stream on the north side of Ahukini Mauka. It does not appear to go to the ocean but maybe down the bank to the stream? There are a number of old time residents along the northern bank of the stream who could be queried for your project.

Regarding the supplied data on fishponds (drawn from native tenant LCA accounts), we see reference to one fishpond bounding LCA 3426 to Pelekane at Hanamā'ulu, Kaua'i (and references to fishponds bounding six native tenant LCAs at Kalapakī). The data regarding the fishpond bounding LCA 3426 to Pelekane has been incorporated in Table 2 (this fishpond was down in the stream valley on the *muliwai* [estuary]/*kahawai* [stream]).

The Maly and Maly (2003) study was consulted. While it certainly contains a wealth of information including testimonies for the island of Kaua'i and regarding the fisheries of Kaua'i, the only data specific to Hanamā'ulu Kaua'i identified were

- The LCA 3426 reference cited above (presumably also the source for reference to a "nameless" fishpond. In Hanamaulu, area small) (cited in Maly and Maly 2003:445),
- A reference to a 3 June 1857 article in the Hawaiian language newspaper *Ka Hae Hawaii* that the "*I'a Ho'omalu*" ("seafood under the protection of ...") declared by V.K. Kaahumanu (Victoria Kamāmalu) of Hanaulu (understood as Hanamā'ulu) was the *akule* (cited in Maly and Maly 2003:298),
- A reference to an Interior Department Document No. 11 (n.d. circa 1850) that the Konohiki of Hanamā'ulu was Wikolia and that under them the "*I'a Ho'omalu*" was the *'anae* (mullet) and the *La'au Ho'omalu* (plant under the protection of ...") was the *hau*. (cited in Maly and Maly 2003:303),
- A reference to an Interior Department Document No. 11 (n.d.) that among "the prohibited fish of the lands of V. Kamamalu, and Ruta Keelikolani, on the Island of Kauai" at Hanamā'ulu was the *akule* (cited in Maly and Maly 2003:303).

The 1910 Lihue and Kapaa USGS topographic quadrangles were consulted and they do indeed show an unimproved road.

The reference to the *Garden Island* 2/23/1915 2:3-4 article on the History of Līhu'e by Mrs. William H. Rice and the *Garden Island* 9/17/1940 article on fishing rights in Hanamā'ulu were sought but not found.

Kaniela Kaleikaumaka Matsushima

Kaniela Kaleikaumaka Matsushima was kind enough to provide a detailed response which is provided verbatim in the present Appendix C; the reader is referred directly to that testimony. Kaniela emphasizes he is from Hanamā'ulu Valley, that his father was born and raised in the valley, and that he is in fact the sixth generation to have been born, or to have lived in the valley. He emphasized that he:

> [...] have spent my entire life in this valley with my kūpuna. Life for our 'ohana [family] is mahi'ai (cultivating) lo'i kalo, mai'a [banana], 'ulu [breadfruit], 'uala [sweet potato], and niu [coconut], lawai'a (fishing) in the stream, the bay, and the ocean in both directions all the way to Wailua and Kalāpakī. Subsistence fishing and gathering of 'opihi [limpets] and limu [seaweed] for our 'ohana.

He emphasized that his family were traditionally the *konohiki* of Hanamā'ulu going back to the time of Kaikio'ewa (understood as governor of Kaua'i from 1825-1839).

A general decline in fish populations is noted and is attributed to "the continued pollution from the developments near and above the valley of Hanamā'ulu and stretches all the way to Kalāpakī." It is asserted that as a result of pollution it is not possible to swim in Hanamā'ulu stream and bay. We note this is supported, at least in part, by the following:

> On June 9, 1972, the beach at Hanamā'ulu was closed for public use due to the high bacterial pollution levels in the nearshore waters and in the adjoining stream. The pollution came from fecal matter from pasture animals in the upper valley and from the piggeries in upper Kapaia. It was spread by runoff into the stream from plantation irrigation water. The beach was reopened for public swimming in June two years later when the pollution problems were corrected. [Clark 1990:6]

Kaniela Kaleikaumaka Matsushima is on record in opposition to the Ahukini Makai (Ahukini Mauka and Wailani) project(s) in order to "To protect this 'āina, wai and kai from further detrimental impacts to Kanaka Maoli traditional customary rights." He asserts, "I know for certain that any more development anywhere near this valley would be a huge burden to not only the valley itself, also the stream, the ocean, and the plants and animals, and us Kanaka Maoli."

A foci of the concern is the adverse impacts of drainage "Mounds and mounds of trash and contaminants come down daily and are an even heavier burden when we have large rains" and the related "Sewage spills from the pump house in Kapaia servicing the old Hanamā'ulu neighborhoods."

> This mismanagement has led to thousands of gallons of raw sewage flooding the valley and the river causing a lot of harm to not only humans, but also to our livestock, our crops, and the wildlife that call the valley home. Many maoli holoholona, some endangered, live in the valley like the pua'a, 'alae 'ula, ae'o, koloa maoli, auku'u, nēnē, koa'e kea, pīnao, 'o'opu and many more. They all drink from this water and deserve clean water just as us humans do.

An additional aspect of the pervasive pollution of Hanamā'ulu Bay is the adverse impact to traditional *'aumākua* species such as turtles (*honu*) and eagle rays (*hīhīmanu*).

> I oppose any further developments for those reasons. Development greatly affects Kanaka Maoli ability to practice our traditional customary rights and our way of life. From our lo'i kalo, mālā [garden], our gathering of limu, opihi, and i'a [fish] from the stream and ocean. All of it. Development near Hanamā'ulu and Kalāpakī ahupua'a will cause irreversible damages. Changing our access and destroying what's left of the resources of the Hanamā'ulu and Kalāpakī ahupua'a.
>
> There is no way for me to justify further development in these areas when the past and present concerns I spoke about above have yet to be remedied. Development will only compound this burden.

Kimo Matsushima

On 21 June 2023, Cultural Surveys Hawai'i, Inc. (CSH) spoke with Kimo Matsushima, *kama'āina* (native born) of Hanamā'ulu, over the telephone to discuss the Ka Pa'akai Analysis for the Wailani Subdivision project in Kalapakī Ahupua'a and the Ahukini Makai Subdivision and Ahukini Mauka Subdivision projects in Hanamā'ulu Ahupua'a.

Mr. Matsushima was born in Līhu'e, Kaua'i. He was raised in Hanamā'ulu and has lived there his entire life. He has recently retired after working at Līhu'e Airport for 33 years.

Mr. Matsushima is a farmer. Since 1992, he has been leasing land in Hanamā'ulu Valley from Grove Farm where he raised cattle and goats for the last 25 years. For the past five years, he has also been growing bananas. Mr. Matsushima noted that 15 to 20 acres of his farm are located within the project area for the Ahukini Mauka Subdivision. He also mentioned there are other farmers with leases from Grove Farm in the Ahukini Mauka project area. He noted his neighbors are farmers from Thailand who grow fruits and vegetables.

Mr. Matsushima is also a fisherman. He recalled catching fish and crabs in Hanamā'ulu Bay. He also recalled setting up prawn traps in Hanamā'ulu Stream. Over the years, he has observed how the conditions of Hanamā'ulu Stream and Hanamā'ulu Bay have changed. He noted that when he was growing up, the pollution from runoff was not as bad and the water in Hanamā'ulu Bay was clean. From the 1990s to the present, the pollution from runoff has caused the water in the bay to become murky, and sometimes even looking like chocolate.

He stated that he is still able to catch crabs in Hanamā'ulu Bay, however, he noted he must filter out the pollution before it is safe to eat. He also mentioned there are still prawns in Hanamā'ulu Stream, but not as much as in the "good old days."

Mr. Matsushima's main concern is increased runoff polluting the waters of Hanamā'ulu Stream and Hanamā'ulu Bay. He stated that runoff from the existing Hanamā'ulu Subdivision has negatively impacted the quality of water in the stream and bay. He noted his farm is located on both sides of Hanamā'ulu Stream and he has observed, over time, the impacts of runoff to the health of the stream as well as fish and other animals who use the stream. He also noted that following heavy rainfall, the water in Hanamā'ulu Stream and Hanamā'ulu Bay is very dirty. He has observed prawns and mud turtles resting on the banks of the stream to avoid the polluted water following heavy rain. He pointed out that Hanamā'ulu Stream is located in the flood zone and following heavy rains, runoff drains into the stream and right into the pasture where his cattle and goats feed. This runoff carries debris he and his *'ohana* must clean.

Mr. Matsushima also discussed potential impacts which may result from the increase in population in the area. He questioned if the current waste water treatment facilities in Kapaia and Līhu'e have the capacity to handle the increase in population. He pointed out that sewage spills at the Kapaia Sewage Pump Station occur often causing sewage to enter into Hanamā'ulu Stream that eventually flows into Hanamā'ulu Bay. He expressed concern that the increase in population will also have negative impacts for traffic on the roads. He expressed concern about increasing numbers of people trespassing on his farm and stealing his animals and equipment.

Mr. Matsushima discussed *iwi kūpuna* (ancestral remains) within the project areas and Hanamā'ulu Ahupua'a. He stated that he is not aware of *iwi kūpuna* within the Ahukini Mauka project area, however, he mentioned there are *iwi kūpuna* in the slope going to the beach in the Ahukini Makai project area. He also mentioned there are *iwi kūpuna* in Hanamā'ulu Valley whose locations are marked by rocks.

CSH worked with Kimo Matsushima to clarify the location of the indicated *iwi kūpuna.* A map was produced (Figure 29) showing the understood location of the *iwi kūpuna* and this was shared with Kimo Matsushima and Lester Matsushima. Kimo Matsushima was kind enough to confirm by telephone on 27 November 2023, that yes, the shaded area in the upper right corner of the map is the location where he believes there are *iwi kūpuna.* We note that this indicated area shown in Figure 29 is well outside (northeast) of the proposed Ahukini Makai Subdivision and will not be affected by subdivision development.

Kanani Fu

On 20 June 2023, CSH spoke with Kanani Kagawa Fu, *kama'āina* of the *ahupua'a* of Hanamā'ulu, over the telephone to discuss the Ka Pa'akai Analysis for the Wailani Subdivision project in Kalapakī Ahupua'a and the Ahukini Makai Subdivision and Ahukini Mauka Subdivision projects in Hanamā'ulu Ahupua'a. Ms. Fu shared her concerns regarding the quality of *wai* in Hanamā'ulu Ahupua'a. She also discussed the past and current uses of Hanamā'ulu Stream and Hanamā'ulu Bay.

Ms. Fu was born in 1981 in Līhu'e, Kaua'i. She was raised in Anahola. As a child during the 1980s, Ms. Fu visited Hanamā'ulu with her father. She recalled going to Kapaia Valley in Hanamā'ulu with her father, where there were terraces of *lo'i kalo*, and watching him and his friends restore the *lo'i.* Her *hānai* (adopted) uncle also taught her how to tend to the *lo'i.* Their main tasks were restoring *wai* to the *lo'i.*

Ms. Fu described the abundance of resources available in Hanamā'ulu Stream when she was a child. She recalled gathering *'o'opu* (goby fish, families include *Eleotridae*, *Gobiidae*, and *Blennidae*) and prawns from the stream in the area from Kapaia Bridge to Hanamā'ulu Bay. She also gathered Job's Tears (*Coix lacryma-jobi*) which she used to make *lei* along the stream.

She also described the marine resources available in Hanamā'ulu Bay. She mentioned fishing was a common practice and noted that *akule* (Big-eyed or goggle-eyed scad fish; *Trachurops crumenophthalmus*) were abundant in the bay. She recalled learning how to fish from her uncle and participating in *hukilau* (a method of fishing, in which a large number of persons drive the fish into a net) with her *'ohana*. She also recalled gathering *limu* including *limu kohu*

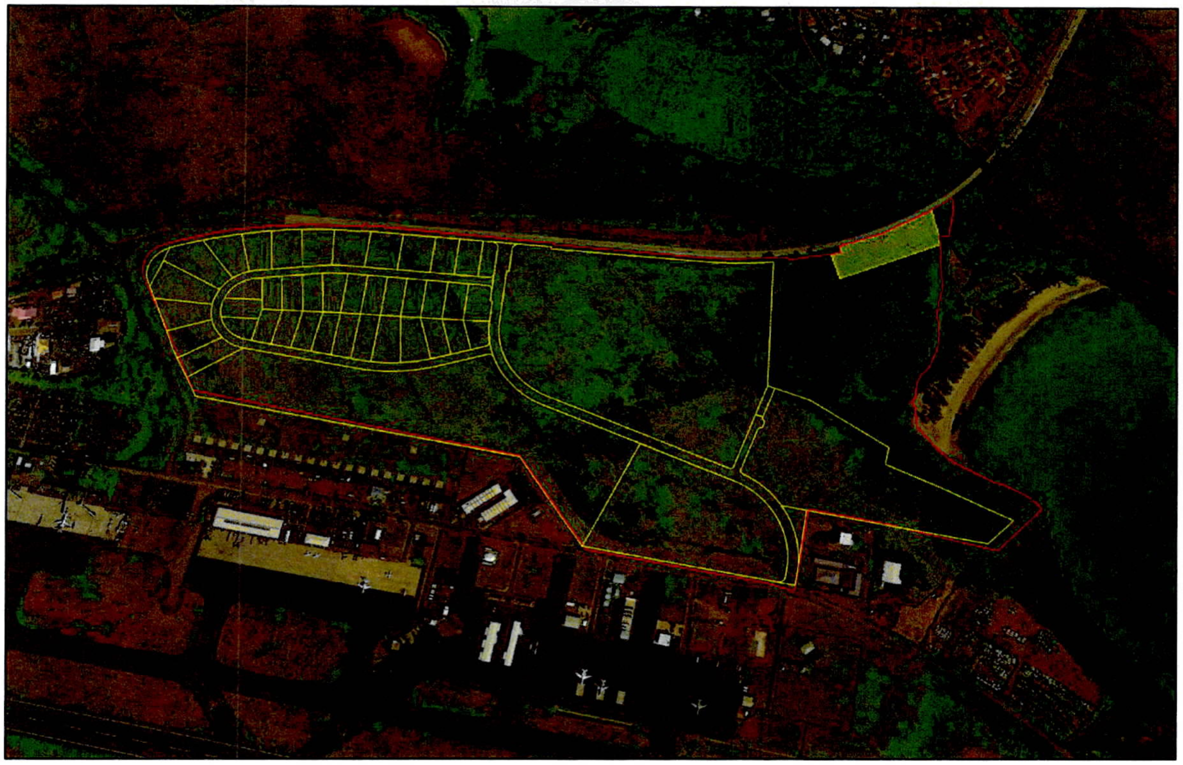


Figure 29. Ahukini Makai Subdivision map superimposed on a contemporary aerial photograph showing the area of potential *iwi kūpuna* indicated by Kimo and Lester Matsushima (shaded area in the upper right corner) within the TMK (4) 3-7-002:001 parcel but outside of the Ahukini Makai Subdivision in an area that will remain in conservation (map courtesy of client)

(*Asparagopsis taxiformis*), *limu wāwae‘iole* (*Lycopodium cernuum*), *‘opihi* (Limpets; *Cellana talcosa*, *C. sandwicensis*, *C. exarata*), and shellfish such as Samoan crabs from the bay.

Ms. Fu also mentioned that on the cliffside of Ahukini Landing in Hanamā‘ulu Bay there is a lookout spot where they would go to check the tides and the clarity of the water to see if the conditions were ideal for gathering *limu kohu*. She noted the path to the lookout has not been maintained and is currently unsafe due to the presence of homeless people and feral cats. She pointed out the area is zoned for Conservation and it is the landowner's responsibility to maintain the area.

Around 1990, Ms. Fu went off to boarding school. When she returned to Kaua‘i around the year 2000, she observed drastic changes to the water quality of Hanamā‘ulu Stream and Hanamā‘ulu Bay. Before she left for boarding school, the water was clear and when she returned, she noticed a distinct difference in color due to pollution. She also observed changes in the quality and quantity of fish in the bay.

In 2010, she moved to Hanamā‘ulu to raise her family in her home where the property abuts Hanamā‘ulu Stream; she believes it is their *kuleana* (responsibility) to observe and tend to the health of the stream.

The negative impacts of pollution on Hanamā‘ulu Stream and Hanamā‘ulu Bay have persisted until this day. She noted it takes longer to gather the amount of sustenance to feed her family. To gather fish for her family, they often have to leave Hanamā‘ulu and travel to other *ahupua‘a* such as Nāwiliwili. She also is no longer able to gather enough Job's Tears along Hanamā‘ulu Stream to make a *lei*. Now, she gathers Job's Tears from Wailua Stream.

Ms. Fu believes she is fortunate to have experienced what Hanamā‘ulu used to be. She stated that her children do not recognize the Hanamā‘ulu she describes to them and they are surprised at the things she use to do in the stream and bay such as swimming and surfing.

She would like to see a balance between progress and honoring what Kaua‘i is. She emphasized that Hanamā‘ulu is one of those things that should be honored. She would like the quality and abundance of the *wai* restored in perpetuity so resources that were once abundant within Hanamā‘ulu Stream and Hanamā‘ulu Bay can be replenished.

Ms. Fu is optimistic damage to the quality of *wai* can be reversed. She believes cultural resources associated with the Hanamā‘ulu Stream and Hanamā‘ulu Bay still exist and can be restored with proper management. She noted that as part of the entitlement process, it is the landowner's obligation to mitigate potential negative impacts to Hanamā‘ulu Stream and Hanamā‘ulu Bay. She pointed out Grove Farm has developed a management plan that calls for a biological monitoring program of the water quality within Hanamā‘ulu Stream and Hanamā‘ulu Bay which just needs to be implemented.

Section 8 Traditional Cultural Practices

Timothy R. Pauketat succinctly describes the importance of traditions, especially regarding the active manifestation of one's culture or aspects thereof. According to Pauketat,

> People have always had traditions, practiced traditions, resisted traditions, or created traditions [...] Power, plurality, and human agency are all a part of how traditions come about. Traditions do not simply exist without people and their struggles involved every step of the way. [Pauketat 2001:1]

It is understood that traditional practices are developed within the group, in this case, within the Hawaiian culture. These traditions are meant to mark or represent aspects of Hawaiian culture that have been practiced since ancient times. As with most human constructs, traditions are evolving and prone to change resulting from multiple influences, including modernization as well as other cultures. It is well known that within Hawai'i, a "broader "local" multicultural perspective exists" (Kawelu 2015:3). While this "local" multicultural culture is deservedly celebrated, it must be noted that it has often come into contact with "traditional Hawaiian culture." This contact between cultures and traditions has undoubtedly resulted in numerous cultural entanglements. These cultural entanglements have prompted questions regarding the legitimacy of newly evolved traditional practices. The influences of "local" culture are well noted throughout this section, and understood to represent survivance or "the active sense of presence, the continuance of native stories, not a mere reaction, or a survivable name. Native survivance stories are renunciations of dominance, tragedy and victimry" (Vizenor 1999:vii). Acknowledgement of these "local" influences help to inform nuanced understandings of entanglement and of a "living [Hawaiian] contemporary culture" (Kawelu 2015:3). This section strives to articulate traditional Hawaiian cultural practices as were practiced within the *ahupua'a* in ancient times, and the aspects of these traditional practices that continue to be practiced today; however, this section also challenges "tropes of authenticity" (Cipolla 2013) and acknowledges the multicultural influences and entanglements that may "change" or "create" a tradition.

This section integrates information from Sections 3–7 in examining cultural resources and practices identified within or in proximity of the project area in the broader context of the encompassing Hanamā'ulu landscape. Excerpts from interviews are incorporated throughout this section where applicable.

8.1 Habitation and Subsistence

In pre-Contact and early historic times, the *ahupua'a* of Hanamā'ulu was permanently inhabited and intensively used for traditional taro growing and fishing and a dispersed hamlet of thatched houses in the *makai* portion of Hanamā'ulu valley (see Figure 7).

At the time of the Māhele, Victoria Kamāmalu was awarded both the *ahupua'a* of Hanamā'ulu and Kalapakī under LCA 7713:2 which includes all the land within the present project area. The locations of native tenant land claims in Hanamā'ulu Ahupua'a are all within the seaward portion of Hanamā'ulu stream valley.

There were 15 native tenant claims awarded in Hanamā'ulu with claims for 25 parcels. There were nine claims for *pā hale* house lots, which were in typical Hawaiian fashion notably disbursed.

Three (LCA 3462:2, LCA 3650:3, LCA 3653:2) were clustered relatively close to the sea on the south side of Hanamā'ulu stream, but the other six (LCA 3271:2, LCA 3371, LCA 3423:1, LCA 3644:2, LCA 3647:1, and LCA 5089:1) were notably dispersed. There were 17 claims for taro land including at least 40 *lo'i* (and one *'āina kalo* [taro land]) that were again notably widely dispersed in the lower valley along the stream. There was one fishpond bounding LCA 3426 to Pelekane which was relatively small and right on the stream approximately 800 m inland.

The large tracts of inland areas (*kula*), not in the river valleys or at the shore, are not described in the claims but were probably in use. Traditional *kula* resources for all claimants would have been medicines, herbs, construction materials such as *pili* grass and trees for building houses, canoes, and perhaps lithic materials for tools. Sweet potatoes and other dryland crops, such as *wauke*, probably were cultivated in patches throughout the area at one time or another.

Kanani Fu recalled going to Kapaia Valley in Hanamā'ulu with her father, where there were terraces of *lo'i kalo*, and watching him and his friends restore the *lo'i*. Her *hānai* (adopted) uncle also taught her how to tend to the *lo'i*. Their main tasks were restoring *wai* to the *lo'i*.

Kimo Matsushima has been leasing land in Hanamā'ulu Valley from Grove Farm since 1992. He noted 15 to 20 acres of the land he leases in the valley are located within the project area for the Ahukini Mauka Subdivision. On this land, he has raised cattle and goats for the last 25 years. For the past five years, he has also been growing bananas. He also mentioned there are other farmers with leases from Grove Farm in the Ahukini Mauka project area. He noted his neighbors are farmers from Thailand who grow fruits and vegetables.

Kaniela Matsushima emphasizes the unbroken tradition of his family in subsistence farming in Hanamā'ulu Valley: "Life for our *'ohana* is *mahi'ai* (cultivating) *lo'i kalo*, *mai'a*, *'ulu*, *'uala*, and *niu*" (see Kaniela Matsushima testimony in Appendix C).

Kimo Matsushima also discussed potential impacts which may result from the increase in population in the area. He questioned if the current waste water treatment facilities in Kapaia and Līhu'e have the capacity to handle the increase in population. He pointed out sewage spills at the Kapaia Sewage Pump Station occur often causing sewage to enter into Hanamā'ulu Stream which eventually flows into Hanamā'ulu Bay. He expressed concern that the increase in population will also have negative impacts for traffic on the roads. He expressed concern about increasing numbers of people trespassing on his farm and stealing his animals and equipment.

8.2 Marine Resources

The Līhu'e District is well-watered and is fed by six main water sources (following the DLNR Stream Summary 1993:23, from south to north) , the Hulē'ia Stream, the Pū'ali Stream, the Nāwiliwili Stream, the Hanamā'ulu Stream, the small Kawailoa watercourse, and the Wailua River (with its many tributaries). Two smaller streams, Koena'awa nui and Koena'awa iki, are identified in Land Commission documents, although neither of these is named on any extant maps. Given the gently sloping character of the natural lay of the land from Līhu'e to the coast, it is possible there were once a few other smaller drainages traversing what is now the airport, resort and golf course area and that Native Hawaiian planters made use of this water.

We learn from an Interior Department Document No. 11 (n.d. ca. 1850) that the "*I'a Ho'omalu*" ("seafood under the protection of...") was the *'anae* (mullet) and we learn from an 1857 article in the Hawaiian language newspaper *Ka Hae Hawaii* that the "*I'a Ho'omalu*" declared by V.K. Kaahumanu (Victoria Kamāmalu) of Hanaulu (understood as Hanamā'ulu) was the *akule*. It seems probable that *'anae* were attracted to the freshwater outfall of the Hanamā'ulu Stream and the brackish water of Hanamā'ulu Bay. The *akule* may also have been attracted to the well-defined Hanamā'ulu Bay with the possibility that at times they may have been taken in great numbers by hook or net. The proper procedure for fishing in the bay would be when "the proper fishing season arrives all the people may take fish, and when the fish are collected, they shall be divided—one third to the fishermen, and two thirds to the landlord. [...] And the protected fish might all be for the konohiki" (Kosaki 1954:14). Clark supports this concept of a rich *akule* fishery at Hanamā'ulu Bay noting that into modern times "Commercial net fishermen surround akule and other migratory schooling fish that appear seasonally. Mullet and sharks, particularly juvenile hammerheads, are also found in the bay" (Clark 1990:6).

Kimo Matsushima recalled catching fish and crabs in Hanamā'ulu Bay. He also recalled setting up prawn traps in Hanamā'ulu Stream. Over the years, he has observed how the conditions of Hanamā'ulu Stream and Hanamā'ulu Bay have changed. He noted that when he was growing up, the pollution from runoff was not as bad and the water in Hanamā'ulu Bay was clean. From the 1990s to the present, the pollution from runoff has caused the water in the bay to become murky, sometimes even looking like chocolate.

He stated he is still able to catch crabs in Hanamā'ulu Bay, however, he noted he must filter out the pollution before it is safe to eat. He also mentioned there are still prawns in Hanamā'ulu Stream, but not as much as in the "good old days."

Kimo Matsushima also expressed concern regarding increased runoff polluting the waters of Hanamā'ulu Stream and Hanamā'ulu Bay. He stated that runoff from the existing Hanamā'ulu Subdivision has negatively impacted the quality of water in the stream and bay. He noted his farm is located on both sides of Hanamā'ulu Stream and he has observed, over time, the impacts of runoff to the health of the stream as well as fish and other animals who use the stream. He also noted that following heavy rainfall, the water in Hanamā'ulu Stream and Hanamā'ulu Bay is very dirty. He has observed prawns and mud turtles resting on the banks of the stream to avoid the polluted water following heavy rain. He pointed out that Hanamā'ulu Stream is located in the flood zone and following heavy rains, runoff drains into the stream and right into the pasture where his cattle and goats feed. This runoff carries debris he and his *'ohana* must clean.

Kaniela Matsushima emphasizes the unbroken tradition of his family in subsistence *lawai'a* (fishing) in the stream, the bay, and the ocean in both directions all the way to Wailua and Kalāpakī. Subsistence fishing and gathering of *'opihi* (limpet) and *limu* (seaweed) for his *'ohana* (see Kaniela Matsushima testimony in Appendix C).

Ms. Fu described the abundance of resources available in Hanamā'ulu Stream when she was a child. She recalled gathering *'o'opu* (goby fish, families include *Eleotridae*, *Gobiidae*, and *Blennidae*) and prawns from the stream in the area from Kapaia Bridge to Hanamā'ulu Bay.

She also described the marine resources available in Hanamā'ulu Bay. She mentioned fishing was a common practice and noted that *akule* (Big-eyed or goggle-eyed scad fish; *Trachurops crumenophthalmus*) were abundant in the bay. She recalled learning how to fish from her uncle and participating in *hukilau* with her *'ohana*.

Ms. Fu discussed the negative impacts of pollution in Hanamā'ulu Stream and Hanamā'ulu Bay. She noted it takes longer to gather the amount of sustenance to feed her family. To gather fish for her family, they often have to leave Hanamā'ulu and travel to other *ahupua'a* such as Nāwiliwili.

Ms. Fu also recalled gathering *limu* including *limu kohu* (*Asparagopsis taxiformis*), *limu wāwae'iole* (*Lycopodium cernuum*), *'opihi* (Limpets; *Cellana talcosa*, *C. sandwicensis*, *C. exarata*), and shellfish such as Samoan crabs from the bay. She also mentioned that on the cliffside of Ahukini Landing in Hanamā'ulu Bay there is a lookout spot where they would go to check the tides and the clarity of the water to see if the conditions were ideal for gathering *limu kohu*. She noted the path to the lookout has not been maintained and is currently unsafe due to the presence of homeless people and feral cats. She pointed out the area is zoned for Conservation and it is the landowner's responsibility to maintain the area.

Ms. Fu recalled gathering Job's Tears (*Coix lacryma-jobi*) which she used to make *lei* along Hanamā'ulu Stream. She noted she is no longer able to gather enough Job's Tears along Hanamā'ulu Stream to make a *lei*. Now, she gathers Job's Tears from Wailua Stream.

Ms. Fu also recalled swimming and surfing in Hanamā'ulu Stream and Hanamā'ulu Bay.

8.3 Iwi Kūpuna

No human burials or human skeletal remains (*iwi kūpuna*) have been reported within the Ahukini Makai Subdivision project area. A family cemetery, that was not identified in the field, possibly connected to LCA 3653:2 was reported by Kikuchi and Remoaldo (1992) in Hanamā'ulu Valley outside of the Ahukini Makai Subdivision project area. Concern for an area of *iwi kūpuna* was expressed by Kimo (and Lester) Matsushima but clarification shows this area of expressed concern to be well outside of the Ahukini Makai Subdivision project area (see discussion above and Figure 29).

Section 9 Summary

CSH undertook this Ka Pa'akai Analysis at the request of Visionary LLC. The research broadly covered the entire *ahupua'a* of Hanamā'ulu but focuses on the Ahukini Makai project area.

9.1 Results of Background Research

Background research for this study yielded the following results, presented in approximate chronological order:

1. The original *moku* for the study area covered in this report was Puna, which means "spring of water." Līhu'e (literally translated as "cold chill;" Pukui et al. 1974:132) became the modern political name for the traditional *moku* of Puna. According to Ethel Damon (1931:402), the name Līhu'e was first applied to this area by Kaikio'ewa, Governor of Kaua'i in the 1830s, perhaps after Kaikio'ewa's upcountry residence on the island. This late derivation of the name has been recently disputed (Griffin 2012:46).
2. The project area is in the *ahupua'a* of Hanamā'ulu. The *ahupua'a* name means "tired (as from walking) bay" (Pukui et al. 1974:41). Wichman (1998:61) relates that Hanamā'ulu Bay was given this name because it was "off the main around-the-island trail and a traveler had to walk extra miles to get there."
3. Very little is documented regarding traditional settlement patterns at Hanamā'ulu prior to the documentation of native tenant claims following the Māhele land division of 1848. A few authors that have attempted historical study of the *ahupua'a* (Kalima and Wong Smith in Corbin et al. 2002:B-1 through B-12, Creed 2006:6-28) are easily distracted by the wealth of data pertaining to Wailua Ahupua'a up the coast. "Few sources refer specifically to Hanamā'ulu and the information contained in them is general in nature" (Kalima and Wong Smith in Corbin et al. 2002:B-1).
4. There are relatively few *ka'ao* or legends pertaining to Hanamā'ulu in most accounts. The volcano goddess Pele, her lover Lohi'au, and the cultural hero Kawelo are some mentioned in passing. The suggestion of inhospitality at Hanamā'ulu recorded by Rice ("Lohiau found all the houses but one closed") is reminiscent of the Hawaiian proverb *No Hanamā'ulu ka ipu puehu,* or "the quickly emptied container belongs to Hanamā'ulu" (Pukui 1983:252), which implies the food containers of Hanamā'ulu were often bare—a plausible reason for the local residents to be stingy. The Wichman (1998:60–61) account of the Hanamā'ulu people being known as miserly is notable.
5. In pre-Contact and early historic times, the *ahupua'a* of Hanamā'ulu was permanently inhabited and intensively used for traditional taro growing and fishing and with a dispersed hamlet of thatched houses in the *makai* portion of Hanamā'ulu valley. The characterization of the surrounding coastal plateau land (see Figure 8) as "grassy land with volcanic boulders here and there" and the relatively low coastal rainfall help us understand why our accounts of traditional Hawaiian habitation and agriculture were almost exclusively in the *makai* portion of Hanamā'ulu valley. The existence of a "village" in the uplands of Hanamā'ulu related in the account of the greedy *'o'opu* eaters (see Section 3.4) suggests there may have been upland settlement.
6. The relative absence of early identified archaeological sites (Bennett mentions two, one shared with Wailua Ahupua'a) suggests a general absence of intensive traditional Hawaiian

activity outside of Hanamā'ulu valley. Bennett's reference to his Site 103 dune burials may indicate a normative burial practice in coastal sands to the north.

7. Victoria Kamāmalu was awarded the *ahupua'a* of Hanamā'ulu (and Kalapakī) under LCA 7713:2. The Victoria Kamāmalu award (LCA 7713:2 part 7) includes all the land within the present project area. All of the native tenant LCA awards were in Hanamā'ulu valley and there were no native tenant awards in the project area. While we have a few insights into Hanamā'ulu like the reserved seafood and plants during her ownership, she had, for example, 79 *ahupua'a*-sized lands on O'ahu, 14 on Maui, and 58 on Hawai'i Island.(Kame'eleihiwa 1992:124) so it is safe to say that she did not have particularly strong connections to Hanamā'ulu.
8. Traditional Hawaiian practices would have included some agricultural endeavors in the uplands and gathering of a variety of upland resources. The annual rainfall gradient in Hanamā'ulu from 997 mm (39.3 inches) at the neighboring coastal Lihue Airport Station (which is suggested as marginal for non-irrigated agriculture) to 2,490 mm (98.0 inches) per year at the Kukaua Station on Kilohana Crater (Giambelluca et al. 2013) suggests that upland activities would have most likely been significantly inland where the rainfall could support a more diverse biome.
9. Following the death of Victoria Kamāmalu in 1866, her 9,177 acres in Hanamā'ulu (according to the acre number in the Māhele award) were purchased in 1870 by Paul Isenberg (manager of Lihue Plantation from 1862–1878), which he established as a separate company, the Hanamaulu Plantation.
10. While it is unclear when most of the coastal table lands of Hanamā'ulu were developed in commercial sugarcane, it appears to have well before 1900. Historic maps and aerial photographs from 1900 (see Figure 10), 1906 (see Figure 11), 1910 (see Figure 12), 1924 (see Figure 13), 1941 (Figure 14), 1950 (Figure 15), 1959 (Figure 16), and 1965 (Figure 18) show the project area in a dense sea of sugarcane subject to re-plowing after each harvest. This is believed to have existed until close to 17 November 2000 when Lihue Plantation ceased operations.
11. An SHPD *Chapter 6E-42 Historic Preservation Review* dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, see Figure 27 and Figure 28) renders a determination of "no historic properties affected" for the Ahukini Makai Subdivision based largely on the Franklin and Walker (1994) archaeological inventory survey. The Ahukini Makai Subdivision lands were also subject to study in the Creed et al. (2006) archaeological literature review and field inspection and Bell et al. (2006) archaeological inventory survey. No historic properties have been identified in the Ahukini Makai Subdivision project area.
12. Seemingly no historic properties have been identified on the *makai* table lands of Hanamā'ulu south of Hanamā'ulu stream valley. About 250 m to the northwest of the project area is a (Walker et al. 1991) site (SIHP # 50-30-11-01847, see Figure 21) designating approximately 53.0 acres of the flat, level Hanamā'ulu valley floor as a prehistoric agricultural site noting that "Although no structural remains were visible, the area may have been used prehistorically for agricultural activities" (Walker et al. 1991:A-6). This does serve to highlight that the area of LCAs on the valley floor is also likely to be relatively rich in archaeological resources. Kikuchi and Remoaldo (1992:76) indicate the location of a cemetery designated SIHP # 50-30-08-B019 appears to be 100 m north of the project area on a bluff on the south side of Hanamā'ulu Valley (see Figure 21). They indicate this was one of the "Cemeteries not

located." While there is thus some question as to the precise location, and even as to whether this cemetery exists at all, there is no reason to believe it is in the Ahukini Makai project area.

9.2 Results of Community Consultations

CSH attempted to contact Hawaiian organizations, agencies, and community members as well as cultural and lineal descendants in order to identify individuals with cultural expertise and/or knowledge of the project area and vicinity. Community outreach letters were sent to 37 individuals or groups; ten responded, two provided written testimony, and two of these *kama'āina* and/or *kūpuna* met with CSH for more in-depth interviews.

9.3 Impacts and Recommendations

Based on information gathered from the community consultation, participants voiced and framed their concerns in a cultural context. Our main take-away is the long-standing adverse impact of present land management in the vicinity on traditional Hawaiian cultural practices. While we think of the purpose of Ka Pa'akai Analysis studies as safe-guarding the status quo of traditional Hawaiian rights and practices into the future, the picture eloquently painted by Kaniela Kaleikaumaka Matsushima, in particular, is that the impact of the status quo land-management practices on traditional Hawaiian practices is horrendous and unacceptable. Thus perhaps it should be no surprise that he concludes further development will only make matters worse, and thus is pretty categorically against further development.

As noted above many of his critiques quickly have some independent support. We understand that on 9 June 1972, the beach at Hanamā'ulu was closed for public use for two years due to the high bacterial pollution levels in the nearshore waters and in the adjoining stream (Clark 1990:6). Of course this was more than 50 years ago and had nothing to do with the proposed Ahukini Makai Subdivision project. While many sources of pollution are indicated, it would be hoped that Kaua'i County Planning would see their role as not only to keep matters from getting worse (by requiring best management practices) but to insure that any future development within this watershed be associated with improvement of water quality (as the ongoing status quo adverse impact to traditional Hawaiian cultural practices is very real).

Kanani Fu would like the quality and abundance of the *wai* restored in perpetuity so cultural resources that were once abundant within Hanamā'ulu Stream and Hanamā'ulu Bay can be replenished. She believes cultural resources associated with the Hanamā'ulu Stream and Hanamā'ulu Bay still exist and can be restored with proper management. She noted that as part of the entitlement process, it is the landowner's obligation to mitigate potential negative impacts to Hanamā'ulu Stream and Hanamā'ulu Bay. She pointed out Grove Farm has developed a management plan that calls for a biological monitoring program of the water quality within Hanamā'ulu Stream and Hanamā'ulu Bay which just needs to be implemented.

9.4 Ka Pa'akai Analysis

In Ka Pa'akai vs Land Use Commission, 94 Hawai'i (2000) the Court held the following analysis must also be conducted:

1. The identity and scope of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary Native Hawaiian rights are exercised in the project area;
2. The extent to which those resources—including traditional and customary Native Hawaiian rights—will be affected or impaired by the proposed action; and
3. The feasible action, if any, to be taken by the LUC to reasonably protect Native Hawaiian Rights if they are found to exist.

Based on information gathered from the cultural and historical background, and community consultation for this project, no culturally significant resources were identified within the project area per se. At present, there is no documentation or testimony indicating traditional or customary Native Hawaiian rights are currently being exercised "for subsistence, cultural and religious purposes and possessed by *ahupua'a* tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778" (Hawai'i State Constitution, Article XII, Section 7) within the specific project area. While no cultural resources, practices, or beliefs were identified as currently existing within the project area, Hanamā'ulu Ahupua'a maintains a rich cultural history in the exercise of traditional or customary Native Hawaiian rights within the project *ahupua'a*. Concerns have been expressed that "Development near Hanamā'ulu and Kalāpakī *ahupua'a* will cause irreversible damages." The focus of concern is largely adverse impact to the quality of the fresh water in Hanamā'ulu stream and to the quality of coastal waters but there appears to be a concern for an increase in rubbish in Hanamā'ulu Valley (see in particular the Declaration of Kaniela Matsushima in Appendix C).

9.4.1 Archaeological Resources

An AIS-level study (Franklin and Walker 1996), was recently re-evaluated by the SHPD in a §6E-42 Historic Preservation Review dated 28 September 2018 (Log No. 2017.02067, Doc. No. 1809GC15, see Figure 27 and Figure 28) leading to an SHPD determination of "no historic properties affected" for the Ahukini Makai Subdivision. There have been two additional archaeological studies (Walker et al. 1991 and Bell et al. 2006) that have identified no archaeological resources in the project area.

Historical records, maps and photographs, and archaeological fieldwork support that sugarcane cultivation and development of plantation infrastructure was the dominant land use within the project area and surrounding lands.

The documented pattern is that pre-commercial sugar plantation historic properties are immediately coastal or in the river valleys (see Figure 21). It is certainly possible there was traditional Hawaiian and early historic period land use further inland and that the traces of this were simply lost as a result of decades of intensive sugarcane cultivation but it seems the pattern of traditional Hawaiian land use was very much in the Hanamā'ulu stream valley (to the north) and Nāwiliwili stream valley (to the southwest) where the LCAs overwhelmingly were, and immediately along the coast.

It should be noted that about 250 m to the northwest of the project area is a (Walker et al. 1991) site designation SIHP # 50-30-11-01847 (see Figure 21). The site description designates approximately 53.0 acres of the flat, level valley floor as a prehistoric agricultural site noting that "Although no structural remains were visible, the area may have been used prehistorically for agricultural activities" (Walker et al. 1991:A-6). The site was recommended for detailed recording and limited excavations prior to development in that area (Walker et al. 1991:10). There does not appear to have been any further archaeological study on the Hanamā'ulu valley floor. This does serve to highlight that the area of LCAs on the valley floor is also likely to be relatively rich in archaeological resources.

9.4.2 Burials

Seemingly no burials have been previously documented on the gently sloping table lands of Hanamā'ulu such as characterize the Ahukini Makai project area (see Figure 21). Two burial sites have been discussed within 1.0 km of the project area (see Figure 21).

Kikuchi and Remoaldo (1992:76) show the location of a cemetery designated "[SIHP # 50-30] 08-B019" that appears to be 100 m north of the project area on a bluff on the south side of Hanamā'ulu Valley (see Figure 21). They indicate this was one of the "Cemeteries not located." While there is thus some question as to the precise location, there is no reason to believe it is in the Ahukini Makai project area.

A study by Corbin et al. (2002) identifies a historic cemetery (SIHP 50-30-08-02067) approximately 300 m north of the Ahukini Makai project area on the far (north) side of Hanamā'ulu Valley. This site was believed to have approximately nine to 11 graves, "The oldest visible grave with a headstone appears to date from the late 1880s, while the most recent visible grave with a headstone indicates 1952 as the year of death" (Corbin et al. 2002:A-19).

Wendell C. Bennett briefly references burials in his "Site 103. Dune burials. In the sand dunes that run along the shore halfway between Hanamaulu and Wailua River are many burials" (Bennett 1931:125). This locus of burials is well to the north. At least some burials would be expected at Kalapakī but these would be expected to be almost exclusively in the Jaucus sands immediately adjacent to the coast. The Lihue silty clay (LhB) soils of the Ahukini Makai project area (Foote et al. 1972, see Figure 6) would not have encouraged burial there.

Mr. Kimo Matsushima mentioned there are *iwi kūpuna* in the slope going to the beach in the Ahukini Makai project area. He also mentioned there are *iwi kūpuna* in Hanamā'ulu Valley whose locations are marked by rocks. No development will occur in this area and thus any human burials there will not be disturbed.

Mr. Kaniela Kaleikaumaka Matsushima (see Appendix C) references how run-off and drainage related to land development with attendant erosional deposition of trash and contaminants adversely impact "*'ohana* burials" understood as in Hanamā'ulu Stream valley.

9.4.3 Faunal Resources

Activities associated with faunal resources have and continue to be focused on marine resources. In an interview regarding cultural resources in Kalapakī, Ms. Cheryl Lovell-Obatake expressed her concern for marine resources and Ms. Sabra Kauka for fisherman using the coast (Mitchell et al. 2005:24–25). Ms. Kauka also expressed her concern for Shearwater birds:

> Fourthly, I go to mālama the rare Shearwater birds that lay their eggs in the rock walls, boulders and bushes along the coast. I have been taking my 3rd and 4th grade students from Island School to count, capture, weigh, measure, and return the chicks to their nesting sites for the past two years. We have a special permit from

> the Department of Land & Natural Resources, State Forestry Division, to do this work. Last year we counted 38 chicks there. This year, unfortunately, a predator has eliminated them. We don't know what predator it is but we couldn't find any chicks. This bird is very important to me and my students because it teaches them the connection between the kai and the 'aina. It teaches them that what humans do at sea and on the land affect other life on earth. If the birds have nowhere to nest, their species will die. If they have not fish and squid to eat, if man overharvests the ocean, the birds will have nothing to eat. They are an indicator that there is still fish in the sea for them and for us. There is still land for them and for us. [Mitchell et al. 2005:24]

The Shearwater nesting is understood as immediately coastal. No evidence of sea bird nesting has been reported for the project area. No accounts of hunting have been identified in association with this project area.

Mr. Kaniela Matsushima has expressed concerns over the prior degradation of stream, bay, and ocean faunal resources and *aumākua* species and his belief that further development will continue this pattern of pollution and degradation (see his declaration in Appendix C).

He discusses (see Appendix C) the adverse impact of ongoing pollution on native and Polynesian-introduced animals.

> Many *maoli holoholona,* [native and Polynesian introduced animals] some endangered, live in the valley like the *pua'a* [pigs], *'alae 'ula* [Hawaiian gallinule], *ae'o* [Hawaiian stilts], *kōloa maoli* [native ducks], *auku'u* [black crowned night herons] *nēnē* [Hawaiian goose], *koa'e kea* [white tailed tropic birds], *pinao* [native dragon flies], *'o'opu* [native gobies] and many more. They all drink from this water and deserve clean water just as us humans do.

He concludes, "There is no way for me to justify further development in these areas when the past and present concerns I spoke about above have yet to be remedied."

Kimo Matsushima has been leasing land in Hanamā'ulu Valley from Grove Farm since 1992. He has raised cattle and goats on this land for the last 25 years. He noted 15 to 20 acres of the land he leases in the valley are located within the project area for the Ahukini Mauka Subdivision.

Mr. Kaniela Kaleikaumaka Matsushima also discusses (see Appendix C) his family's traditions of "[...] *lawai'a* (fishing) in the stream, the bay, and the ocean in both directions all the way to Wailua and Kalāpakī" including "subsistence fishing and gathering of *'opihi* and *limu* for our *'ohana.*" He notes,

> Today, we find the fish population, *'opihi, limu* and the health of our reefs are all on the decline. Drastic difference from even when I was a keiki. A big part of that decline is due to the continued pollution from the developments near and above the valley of Hanamā'ulu and stretches all the way to Kalāpakī. As a keiki I was able to swim in the stream and the bay and now I can't because of the pollution.

Again this leads to his summary conclusion: "There is no way for me to justify further development in these areas when the past and present concerns I spoke about above have yet to be remedied."

A related, but separate, issue is the adverse impact of prior development-related pollution to *'aumākua* species such as *honu* and *hīhīmanu*. While the decline in marine species referenced appears to have been of some duration (pollution in Hanamā'ulu Bay was so severe it led to a closure for swimming more than 50 years ago), the concern that further development will make matters worse is understandable.

Kimo Matsushima also expressed concern regarding increased runoff polluting the waters of Hanamā'ulu Stream and Hanamā'ulu Bay. He discussed how the conditions of Hanamā'ulu Stream and Hanamā'ulu Bay have changed over the years. When he was growing up, the pollution from runoff was not as bad and the water in Hanamā'ulu Bay was clean. He noted that from the 1990s to the present, pollution from runoff has caused the water in the bay to become murky, sometimes even looking like chocolate.

He recalled catching fish and crabs in Hanamā'ulu Bay and setting up prawn traps in Hanamā'ulu Stream. He stated he is still able to catch crabs in Hanamā'ulu Bay, however, he noted he must filter out the pollution before it is safe to eat. He also mentioned there are still prawns in Hanamā'ulu Stream, but not as much as in the "good old days."

Kimo Matsushima stated that runoff from the existing Hanamā'ulu Subdivision has negatively impacted the quality of water in the stream and bay. From his farm, which is located on both sides of Hanamā'ulu Stream, he has observed the impacts of runoff to the health of the stream as well as fish and other animals who use the stream. He noted that following heavy rainfall, the water in Hanamā'ulu Stream and Hanamā'ulu Bay is very dirty. He has observed prawns and mud turtles resting on the banks of the stream to avoid the polluted water following heavy rain. He also pointed out that Hanamā'ulu Stream is located in the flood zone and following heavy rain, runoff drains into the stream and right into the pasture where his cattle and goats feed. This runoff carries debris he and his *'ohana* must clean. He also mentioned sewage spills at the Kapaia Sewage Pump Station occur often causing sewage to enter into Hanamā'ulu Stream that eventually flows into Hanamā'ulu Bay.

Ms. Fu described the abundance of resources available in Hanamā'ulu Stream when she was a child. She recalled gathering *'o'opu* (goby fish, families include *Eleotridae*, *Gobiidae*, and *Blennidae*) and prawns from the stream in the area from Kapaia Bridge to Hanamā'ulu Bay.

She also described the marine resources available in Hanamā'ulu Bay. She mentioned fishing was a common practice and noted that *akule* (Big-eyed or goggle-eyed scad fish; *Trachurops crumenophthalmus*) were abundant in the bay. She recalled learning how to fish from her uncle and participating in *hukilau* with her *'ohana*.

Ms. Fu discussed the negative impacts of pollution on Hanamā'ulu Stream and Hanamā'ulu Bay. She noted it takes longer to gather the amount of sustenance to feed her family. To gather fish for her family, they often have to leave Hanamā'ulu and travel to other *ahupua'a* such as Nāwiliwili.

Ms. Fu also recalled gathering *limu* including *limu kohu* (*Asparagopsis taxiformis*), *limu wāwae'iole* (*Lycopodium cernuum*), *'opihi* (Limpets; *Cellana talcosa*, *C. sandwicensis*, *C. exarata*), and shellfish such as Samoan crabs from the bay. She also mentioned that on the cliffside of Ahukini Landing in Hanamā'ulu Bay there is a lookout spot where they would go to check the tides and the clarity of the water to see if the conditions were ideal for gathering *limu kohu*. She noted the path to the lookout has not been maintained and is currently unsafe due to the presence of homeless people and feral cats. She pointed out the area is zoned for Conservation and it is the landowner's responsibility to maintain the area.

Ms. Fu shared her concerns regarding the quality of *wai* in Hanamā'ulu Ahupua'a. She described the drastic changes to the water quality of Hanamā'ulu Stream and Hanamā'ulu Bay she has observed over the years. Before she left for boarding school around 1990, the water was clear and when she returned to Kaua'i around the year 2000, she noticed a distinct difference in color due to pollution. She also observed changes in the quality and quantity of fish in the bay.

Ms. Fu would like to see a balance between progress and honoring what Kaua'i is. She emphasized that Hanamā'ulu is one of those things that should be honored. She would like the quality and abundance of the *wai* restored in perpetuity so resources that were once abundant within Hanamā'ulu Stream and Hanamā'ulu Bay can be replenished.

Ms. Fu is optimistic damage to the quality of *wai* can be reversed. She believes cultural resources associated with the Hanamā'ulu Stream and Hanamā'ulu Bay still exist and can be restored with proper management. She noted that as part of the entitlement process, it is the landowner's obligation to mitigate potential negative impacts to Hanamā'ulu Stream and Hanamā'ulu Bay. She pointed out Grove Farm has developed a management plan that calls for a biological monitoring program of the water quality within Hanamā'ulu Stream and Hanamā'ulu Bay which just needs to be implemented.

9.4.4 Earth Resources

No traditional use of the stones (or soft sediments) within the project area has been documented. Mr. Kaniela Matsushima has expressed concerns over the long-standing adverse impacts of erosion in which "Mounds and mounds of trash and contaminants come down daily and are an even heavier burden when we have large rains" (see his declaration in Appendix C).

9.4.5 Plant Resources

The project area is generally quite overgrown with a variety of exotic weedy species believed to include octopus trees (*Schefflera actinophylla*), castor bean (*Ricinus communis*), *haole koa* (*Leucaena glauca*), be-still (*Thevetia peruviana*), lantana (Lantana species), java plum (*Syzygium cumini*), and particularly exotic grasses (see Figure 23 through Figure 26). The only native species present would most likely be *'ilima* (*Sida fallax*) and *'uhaloa* (*Waltherica indica*). The dominant grass, which forms a monotypic stand over most of the project area, is believed to be guinea grass (*Megathyrsus maximus*). This grass grows quite thickly, crowding out most other species.

'Ilima and *'uhaloa* are significant plant resources for Native Hawaiians.

Abbott mentions *'ilima* first in her discussion of traditional materials for *lei pua* (flower garlands) for adornment and notes they remain "a prominent and cherished choice for lei, despite the fact that hundreds of its golden, paper-thin flowers must be gathered to make a single neck lei" (Abbott 1992:127). Ms. Lovell-Obatake mentioned using *'ilima* from neighboring Kalapakī for medicine (Mitchell 2005:24).

Abbott (1992:101) writes of *'uhaloa* that the "Stems, leaves, and the bark of the roots were pounded, strained, and used as a gargle for sore throat. Today, many Hawaiians who use none of the other traditional medicinal plants still turn to this one."

While the importance of *'ilima* and *'uhaloa* in Hawaiian culture is unquestionable, it is equally unquestionable that these species are ubiquitous and adapt readily to disturbed land. Sometimes practitioners associate particular qualities to plants from particular locations but there is nothing indicating associations with the present project area.

Castor bean (as food) and *haole koa* (for adornment), although exotic, have been plant resources for Native Hawaiians, but again these plants are ubiquitous.

Kimo Matsushima has been leasing land in Hanamā'ulu Valley from Grove Farm since 1992. He has been growing bananas on this land for the past five years. He noted 15 to 20 acres of the land he leases in the valley are located within the project area for the Ahukini Mauka Subdivision. He also mentioned there are other farmers with leases from Grove Farm in the Ahukini Mauka project area. He noted his neighbors are farmers from Thailand who grow fruits and vegetables.

Mr. Kaniela Kaleikaumaka Matsushima also discusses (see Appendix C) how prior and continuing run-off and drainage related to land development with attendant erosional deposition of trash and contaminants interferes with his family's traditional farming (*mahi'ai*) practices.

Ms. Fu recalled going to Kapaia Valley in Hanamā'ulu with her father, where there were terraces of *lo'i kalo*, and watching him and his friends restore the *lo'i*. Her *hānai* uncle also taught her how to tend to the *lo'i*. Their main tasks were restoring *wai* to the *lo'i*.

Ms. Fu recalled gathering Job's Tears (*Coix lacryma-jobi*) which she used to make *lei* (garlands) along Hanamā'ulu Stream. She noted she is no longer able to gather enough Job's Tears along Hanamā'ulu Stream to make a *lei*. Now, she gathers Job's Tears from Wailua Stream.

9.4.6 Trails

In traditional times, trails were well used for travel within the *ahupua'a* between *mauka* and *makai* and laterally between *ahupua'a*. A historical trail system existed on Kaua'i which often ran well inland (approximating modern Kaumuali'i Highway and Kūhiō Highway) effectively acting as a short cut for travel between *ahupua'a*. A coastal trail would have been used for access to marine resources and recreation, but this would have been quite close to the coast.

Cheryl Lovell-Obatake spoke of "sacred trails that run from Nāwiliwili side coming from Kalapakī Point along the coast" but these were understood to be quite close to the coast (Mitchell et al. 2005:23).

Doubtlessly there were major *mauka/makai* trails but these would have been anticipated to be focused on connecting centers of habitation, like inland of Kalapakī Beach to the uplands. The 1910 USGS map (see Figure 12) shows two unimproved roads leading out of the back of the valley to the west and another ascending the north wall of the valley. These may have been traditional trails. A trail follows the north side of the valley floor which was almost certainly a traditional alignment. There are no records of trails running through the Ahukini Makai Subdivision project area.

9.4.7 *Nā Wahi Pana*

Storied places in the vicinity would have included Ahukini, Hanamā'ulu bay and valley, and the Nā-pali-'o'oma-o-Hanamā'ulu (later called Ke'alohi-wai) cliffs (see Table 1 for details). We have identified no storied places, or even named places in the Ahukini Makai Subdivision project area. Distinctive land forms invite visitation and the development of traditions but there are none in the project area per se.

9.4.8 Valued Cultural, Historical, or Natural Resources in the Project Area

The project area was a sea of Lihue Plantation sugarcane for many decades. Since the end of sugarcane cultivation the land has pretty much been left fallow and unused and is presently virtually a thick mat of guinea grass. A concern was expressed by Kimo Matushima for the presence of human burials in the steep *makai* slope of the Ahukini Makai project area.

9.4.9 The Extent to which Traditional and Customary Native Hawaiian Resources will be Affected by the Proposed Action

Given the location back from the coast with no notable landforms in the vicinity, the relatively low rainfall, the absence of potable water, the prior land history of intensive sugarcane cultivation with frequent plowing of the entire project area and the prevailing vegetation regime dominated by a mat of guinea grass, it is concluded that the only traditional and customary Native Hawaiian resources that may be directly affected by the proposed action is the possible presence of human burials in the steep *makai* slope. No development will occur in this area and efforts should be made to avoid impacting this area. Indirect adverse impacts to the *'āina, wai,* and *kai* of Hanamā'ulu by project-related erosion or wastewater management is an expressed concern. The County of Kaua'i has a drainage policy that applies to development projects. A drainage report was prepared for this project and approved by the County of Kaua'i. Based on the proposed grading and drainage improvement designs, the post-development drainage conditions will be less than the pre-development drainage conditions.

9.4.10 Feasible Action, if any, to be Taken to Reasonably Protect Native Hawaiian Rights

If indeed the anticipated population growth in Līhu'e District (2010-2035 average annual growth rate of 2.39%, LCP 2015:83) is to continue, then the question is how best to manage it and how to mitigate adverse impact on traditional Hawaiian resources and customary practices, or of course ideally, to improve traditional Hawaiian resources.

This is a somewhat unusual case in that testimony clearly identifies existing adverse impacts to traditional cultural practices of long-duration (going back more than 50 years). There is independent support for this in particular in that "the beach at Hanamā'ulu was closed for public use due to the high bacterial pollution levels in the nearshore waters and in the adjoining stream" from 1972 to 1974 (Clark 1990:6).

For starters, mitigation would seem to ensure that any development projects do not make matters worse, minimally by ensuring best management practices.

It is suggested that appropriate mitigation should aim not for simply maintaining the status quo of traditional and customary practices, but for net improvement. Given that the county and state are likely to experience financial gain from taxes from any development projects, it seems germane to suggest the county's duty in "fulfilling their constitutional obligation to preserve and protect traditional and customary practices" (Kaua'i Planning Department Worksheet for Ka Pa'akai Assessment) includes addressing what would appear to be an unacceptable history of adverse impact to traditional and customary practices that has existed for at least 50 years.

The identification of the sources of the existing adverse impact to traditional and customary practices is beyond the scope of this study (although identification of the nature and extent of existing pollution sources might be a first step of mitigation). Sources of existing pollution to be addressed and mitigated may include surface run-off into Hanamā'ulu valley, trash disposal management, the existing sewerage system in the Hanamā'ulu watershed, existing septic tanks, and "fecal matter from pasture animals in the upper valley and from the piggeries in upper Kapaia" (Clark 1990:6).

Efforts should be made to avoid impacting the steep *makai* slope where human burials have been indicated. This study has served to document concerns regarding a heretofore undocumented area of concern for *iwi kūpuna*. While this area is outside of the Ahukini Makai Subdivision Project area, and is not a concern for the Ahukini Makai Subdivision Project, this documentation serves to protect Native Hawaiian Rights for future projects.

It is understandable that many Native Hawaiians of Kaua'i feel development will only compound the existing burden to the *'āina*, *wai,* and *kai.* It is to be hoped that proper county management and mitigation associated with development projects could result in a net improvement to the *'āina*, *wai,* and *kai* and traditional and customary practices and result in a win-win situation.

Section 10 References Cited

Abbott, Isabella Aiona

1992 *La‘au Hawaii: Traditional Hawaiian Use of Plants.* Bishop Museum Press, Honolulu.

Akana, Collette Leimomi with Kiele Gonzalez

2015 *Hānau Ka Ua, Hawaiian Rain Names*. Kamehameha Publishing, Honolulu.

Alexander, W.D.

1878 Government Survey of Kauai Island. W.D. Alexander, Surveyor General. Compiled and drawn by C.S. Kittredge. Hawai‘i Land Survey Division, Department of Accounting and General Services, Honolulu. Available online at http://dags.hawaii.gov/survey/search.php

Altizer, Kendy and Hallett H. Hammatt

2014 *Archaeological Inventory Survey Report for the Nawiliwili-Ahukini Bike Path Project Nāwiliwili, Kalapakī, and Hanamā‘ulu Ahupua‘a Līhu‘e District, Kaua‘i Island TMK: [4] 3-5-01:4, 8, 27, 60, 83, 85, 102, 118, 128, 159, and 160 por. and various rights-of-way between various plats.* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

Aukai, S.

n.d. The Legend of Kealohiwau. Typewritten manuscript in private collection.

Ava Konohiki

2015 Ancestral Visions of ‘Āina website. Available online at http://www.avakonohiki.org/.

Barrère, Dorothy B.

1994 The King's Mahele: The Awardees and Their Lands. Dorothy B. Barrere, compiler. Ms. on file, Historic Preservation Division, State of Hawaii Department of Land and Natural Resources, Honolulu.

Beckwith, Martha W.

1970 *Hawaiian Mythology.* University of Hawaii Press, Honolulu.

Bell, Matthew J., Constance R. O'Hare, Matthew McDermott, and Shawn Barnes

2006 *Archaeological Inventory Survey of the Proposed Lihue Airport Improvements, Hanamā‘ulu and Kalapakī Ahupua‘a, Līhu‘e District (Puna Moku), Island of Kaua‘i TMK [4] 3-5-001: Por. 005, 008, 102, 160, and 3-7-002: Por 001.* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

Bennett, Wendell C.

1931 *The Archaeology of Kaua‘i.* Bishop Museum Bulletin 80. Bernice Pauahi Bishop Museum, Honolulu.

Chinen, Jon J.

1958 *The Great Mahele: Hawaii's Land Division of 1848.* University of Hawaii Press, Honolulu.

Cipolla, Craig N.

2013 Native American Historical Archaeology and the Trope of Authenticity. *Historical Archaeology.* Vol. 47, ed. 3:12–22.

Clark, John R.K.

1990 *Beaches of Kauai and Niihau.* University of Hawaii Press, Honolulu.

Cobb, Scott

1902 *Commercial Fisheries of the Hawaiian Islands.* U.S. Fish Commission Report for 1901. Government Printer, Washington D.C.

Condé, Jesse C. and Gerald M. Best

1973 *Sugar Trains, Narrow Gauge Rails of Hawai'i.* Glenwood Publishers, Felton, California.

Corbin, Alan B., Alan T. Walker, Lehua Kalima, Helen Wong Smith, and Susan T. Goodfellow

2002 *Archaeological Inventory Survey Ocean Bay Plantation at Hanamā'ulu, Land of Hanamā'ulu, Lihu'e District, Island of Kaua'i (TMK: 4-3-7-3:1, 4-3-9-5:5).* Paul H. Rosendahl, Inc., Hilo, Hawai'i.

County of Kaua'i

2015 *Līhu'e Community Plan* (LCP) *"Towards a Vibrant Līhu'e: Līhu'e Community Plan: Līhu'e, Puhi, Hanamā'ulu, Nāwiliwili. County of Kaua'i."* State of Hawai'i.

Creed, Victoria, Loren Zulick, Gerald K. Ida, David W. Shideler, and Hallett H. Hammatt

2006 *Archaeological Assessment of the Proposed Līhu'e Airport Expansion Area, Hanama'ulu and Kalapakī Ahupua'a, Līhu'e District, Island of Kaua'i (TMK 3-5-01: 5,6,8,9,109,111, and 158 and 3-7-02:Por 1).* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Damon, Ethel M.

1931 *Koamalu,* 2 vols. Privately printed at Honolulu Star-Bulletin Press, Honolulu.

Dega, Michael and James Powell

2005 *Burial Treatment and Preservation Plan for a 20.81-Acre Paracel in Waipouli, North Olohena Ahupua'a, Kawaihau District, Kaua'i Island, Hawai'i. [TMK 4-3-2:15, 16, & 20].* Scientific Consultant Services, Inc., Honolulu.

DLNR Commission on Water Resource Management and the Rivers, Trails and the National Park Service Conservation Assistance Program

1993 *Hawai'i Streams: Nā Kahawai o Hawai'i.* DLNR. Honolulu.

Donn, John M.

1906 Based on 1903 map of "Kauai Hawaiian Islands" by Walter E. Wall with data from private surveys by John M. Donn. Land use as of 1906 added to map. Registered Map 2375. Hawai'i Land Survey Division, Department of Accounting and General Services, Honolulu. Available online at http://dags.hawaii.gov/survey/search.php

Dorrance, William H. and Francis S. Morgan

2000 *Sugar Islands. The 165-Year Story of Sugar in Hawai'i.* Mutual Publishing, Honolulu.

Foote, Donald E., E.L. Hill, S. Nakamura, and F. Stephens

1972 *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii.* U.S. Department of Agriculture, U.S. Government Printing Office, Washington, D.C.

Filimoehala, Christopher W., Robert Pacheco, and Timothy Rieth

2015 *Supplemental Archaeological Inventory Survey for Ho'oluana at Kohea Loa Housing Development, Hanamā'ulu Ahupua'a, Puna District, Island of Kaua'i TMK (4) 3-7-003:020.* International Archaeological Research Institute, Inc., Honolulu.

Fornander, Abraham

1918a *Fornander's Collection of Hawaiian Antiquities and Folklore.* Vol V. Bishop Museum Press, Honolulu.

1918b *Fornander's Collection of Hawaiian Antiquities and Folklore.* Vol IV. Bishop Museum Press, Honolulu.

Franklin, Leta J. and Alan T. Walker

1994 *Additional Archaeological Inventory Survey, Molokoa Lands Project Area, Lands of Hanama'ulu and Kalapakī, Lihu'e District, Island of Kauai.* Paul H. Rosendahl, Ph.D., Inc, Hilo, Hawai'i.

Garden Island (newspaper)

1950 Lihue Airport Opens. *Garden Island,* 10 January 1950. Līhu'e, Hawai'i.

Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delparte

2013 Online Rainfall Atlas of Hawai'i. *Bulletin of the American Meteorological Society volume 94, pp. 313-316, doi: 10.1175/BAMS-D-11-00228.1.* Electronic document, http://rainfall.geography.hawaii.edu (accessed 9 June 2016).

Google Earth

2019 Aerial photograph of Hawai'i. Google Inc., Mountain View, California. Available online, www.google.com/earth.html

Gotanda, Masae

1989 *Hawaiian Legends Index.* Volume I (A–J). Revised edition. Hawai'i State Public Library System, Department of Education, State of Hawai'i, Honolulu.

Griffin, Pat L.

2012 Lihue Place Name on Kauai (The). *Hawaiian Journal of History* Volume 46 (2012):61–82.

Hammatt, Hallett H.

1990 *Archaeological Assessment of Phase III, IV, V Kauai Lagoons Resort Kalapaki, Kaua'i.* Cultural Surveys Hawai'i, Kailua, Hawai'i..

2001 *Archaeological Assessment of the Proposed Sandwich Isles Communication Fiberoptic Cable Project within an Approximately 51-Mile (82-Kilometer) Road Corridor between Kekaha and Moloa'a on the Island of Kaua'i.* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

2005 *Archaeological Assessment of an Approximately 71-Acre Portion of the Kauai Lagoons Resort Property, Kalapakī Ahupua'a, Līhu'e District, Kaua'i Island.* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Handy, E.S. Craighill

1940 *The Hawaiian Planter,* Volume 1. Bishop Museum Bulletin 161. Bernice Pauahi Bishop Museum, Honolulu.

Handy E.S. Craighill and Elizabeth G. Handy

1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment.* Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu.

Hawaii News Now

2009 Final harvest marks end of sugar production on Kauai. *Hawaii News Now*, 31 October 2009. Available online, https://www.hawaiinewsnow.com/story/11420075/final-harvest-marks-end-of-sugar-production-on-kauai/

Hawai'i TMK Service

2014 Tax Map Key (4) 3-7-002. Hawai'i TMK Service, Honolulu.

Hibbard, Don J. and Wendy Wichman

2008 *Lihue Plantation Company, Sugar Mill Building, Haleko Road, Lihue, Kauai County, Hawaii.* HAER HI-82. Historic American Engineering Record, National Park Service, U.S. Department of the Interior, Washington, D.C.

Hommon, Robert J.

1976 The Formation of Primitive States in Pre-Contact Hawai'i. Ph.D. dissertation, University of Arizona, Tucson, Arizona.

Ho'oulumāhiehie

2008a *Ka Mo'olelo O Hi'iakaikapoliopele*. Awaiaulu Press, Honolulu.

2008b *The Epic Tale Of Hi'iakaikapoliopele*. Puakea Nogelmeier, translator. Awaiaulu Press, Honolulu.

Jackson George G.

1881 Map of Nāwiliwili Harbor . Registered Map 902. Hawai'i Land Survey Division, Department of Accounting and General Services, Honolulu. Available online at http://dags.hawaii.gov/survey/search.php

Joesting, Edward

1984 *Kauai. The Separate Kingdom.* University of Hawaii Press, Honolulu.

Judd. Henry P.

1930 *Hawaiian Riddles and Proverbs*. Bishop Museum Bulletin 77. Bishop Museum Press, Honolulu.

Kamai, Nancine "Missy" and Hallett H. Hammatt

2015 *Archaeological Literature Review and Field Inspection for the Approximately 16.8 kilometers Līhu'e Hanamā'ulu New Mauka Road and the Future Potential Mauka Road, Līhu'e District, Kaua'i Island (TMK: [4] 3-4-05; 3-8-02; 3-4-07; 3-8-03; and 3-8-05).* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Kame'eleihiwa, Lilikala
1992 *Native Land and Foreign Desires: Pehea Lā E Pono Ai?* Bishop Museum Press, Honolulu.

Kaua'i Historical Society
n.d. Photograph of Lihue Plantation Mill Boiling House. Kaua'i Historical Society, Līhu'e, Kaua'i.

n.d. Photograph of Hanamā'ulu Bay. Kaua'i Historical Society, Līhu'e, Kaua'i.

1991 *The Kauai Papers*. Kaua'i Historical Society, Līhu'e, Kaua'i.

Kauai Museum
2015 Kauai Museum website. Available online at http://www.kauaimuseum.org/visit/kauai-tours/46-kauai-historical-tours/171-lihue-plantation-company-1849 (accessed 29 May 2023)

Kawelu, Kathleen L.
2015 *Kuleana and Commitment: Working Toward a Collaborative Hawaiian Archaeology*. University of Hawai'i Press, Honolulu.

Kelsey, Theodore
n.d. Kaua'i Place Names. Unpublished manuscript, Kelsey Collection, Hawai'i State Archives, Honolulu.

Kent, Harold Winfield
1986 *Treasury of Hawaiian Words in One Hundred and One Categories.* Honolulu Masonic Public Library of Hawaii, Honolulu.

Kikuchi, William K. and Susan Remoaldo
1992 *Cemeteries of Kaua'i,* Vol. 1. Kaua'i Community College and University of Hawai'i, Puhi, Kaua'i, Hawai'i.

Kosaki, Richard
1954 *Konohiki Fishing Rights.* Report No. 1, 1954, Legislative Reference Bureau. University of Hawai'i, Honolulu.

Lahainaluna Students
1885 *Record of a tour of Kauai (heiaus and fishing grounds), Wailua, September 14, 1885.* Mary Kawena Pukui, translator. Lahainaluna Students Contributions, No. 19. Hms. Misc. 43. HEN (Hawaiian Ethnological Notes) I:217-222. Bernice Pauahi Bishop Museum Archives, Honolulu.

LCP (County of Kaua'i)
2015 *Līhu'e Community Plan* (LCP) *"Towards a Vibrant Līhu'e: Līhu'e Community Plan: Līhu'e, Puhi, Hanamā'ulu, Nāwiliwili. County of Kaua'i."* State of Hawai'i.

Maly, Kepa and Onaona Maly
2003 *Ka Hana Lawai'a A Me Nā Ko'a O Na Kai 'Ewalu: A History of Fishing Practices and Marine Fisheries of the Hawaiian Islands.* Kumu Pono Associates, Hilo, Hawai'i.

McMahon, Nancy

1990 *Archaeological Fieldcheck of Three Parcels in Līhu'e Judiciary District: Possible Locations for a New Kaua'i Judiciary Building, Nāwiliwili, Kalapakī, and Hanamā'ulu, Kaua'i.* Historic Preservation Program, Department of Land and Natural Resources, Honolulu.

Mitchell, Aulii, Rodney Chiogioji, and Hallett H. Hammatt

2005 *Cultural Impact Evaluation of Two Portions, Totaling Approximately 400 Acres, of the Kauai Lagoons Resort Property Kalapakī Ahupua'a, Līhu'e District, Kaua'i Island.* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Moffat, Riley M. and Gary L. Fitzpatrick

1995 *Surveying the Mahele, Mapping the Hawaiian Land Revolution* (Palapala'aina, Volume 2). Editions Limited, Honolulu.

Monahan, Christopher M. and Hallett H. Hammatt

2008 *Archaeological Literature Review and Field Inspection Report for the Nāwiliwili-Ahukini Bike Path Project Nāwiliwili, Kalapakī and Hanamā'ulu Ahupua'a Līhu'e District, Kaua'i Island TMK: (4) 3-2-004; 3-5-001, 002 & 3-6-002, 019, 020, and various rights-of-way between various plats.* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Monsarrat, M.D.

1900 Map of Lihue Plantation, Lihue, Kauai. Registered Map 2142. Hawai'i Land Survey Division, Department of Accounting and General Services, Honolulu. Available online at http://dags.hawaii.gov/survey/search.php

Morriss, Veronica, Trevor Yucha, Missy Kamai, William H. Folk, B.A. and Hallett H. Hammatt

2018 *Archaeological Inventory Survey Report for the Proposed Municipal Solid Waste Landfill and Resource Recovery Park, Hanamā'ulu and Wailua Ahupua'a, Līhu'e District, Kaua'i, TMKs: [4] 3-9-002:020 and [4] 3-8-002:001.* Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Nakuina, Moses K.

1992 *The Wind Gourd of La'amaomao.* Second edition. Esther T. Mookini and Sarah Nākoa, translators. Kalamakū Press, Honolulu.

Office of Hawaiian Affairs

2015 *Papakilo Database.* Office of Hawaiian Affairs cultural and historical database. Electronic document, http://papakilodatabase.com/main/index.php.

Pauketat, Timothy R.

2001 *The Archaeology of Traditions.* University Press of Florida, Gainesville, Florida.

Pukui, Mary Kawena

1983 *'Ōlelo No'eau: Hawaiian Proverbs and Poetical Sayings.* Bishop Museum Special Publication 71. Bernice Pauahi Bishop Museum Press, Honolulu.

Pukui, Mary K. and Samuel H. Elbert

1986 *Hawaiian Dictionary.* Second edition. University of Hawaii Press, Honolulu.

Pukui, Mary K., Samuel H. Elbert, and Esther T. Mookini

1974 *Place Names of Hawaii.* University of Hawaii Press, Honolulu.

Pukui, Mary K. and Laura C. S. Green

1995 *Folktales of Hawai'i.* Bishop Museum Press, Honolulu.

Rice, Mary A. Girvin

1914 History of Lihue. Talk presented 17 December to the Kaua'i Historical Society. In *The Kauai Papers*. Kaua'i Historical Society, Līhu'e, Kaua'i.

Rice, William Hyde

1923 *Hawaiian Legends.* Bernice Pauahi Bishop Museum, Honolulu.

Rosendahl, Paul

1990 *Archaeological Field Inspection and Limited Subsurface Testing Kalepa Radio Station and Kalepa Road Improvement Project Areas Hanamaulu, Lihue, Kauai.* Paul H. Rosendahl, Inc., Hilo, Hawai'i.

Soehren, Lloyd

2014 *Hawaiian Place Names.* Electronic database, ulukau.org/cgi-bin/hpn?l=haw.

State of Hawaii Commission on Water Resource Management and National Park Service Rivers Trails and Conservation Assistance Program

1993 *Hawai'i Streams : Nā Kahawai o Hawai'i.* State of Hawaii Commission on Water Resource Management and National Park Service Rivers Trails and Conservation Assistance Program, Honolulu.

Tanaka, Kellen and Hallett H. Hammatt

2021 *Cultural Impact Assessment (CIA) for the Hōkūala Solar Photovoltaic Facilities Project, Kalapakī Ahupua'a, Līhu'e District, Kaua'i, TMK: [4] 3-5-001:006 por.* Cultural Surveys Hawai'i, Inc., Kailua Hawai'i.

Thrum, Thomas G.

1906 Tales from the Temples, Preliminary paper in the study of the Heiaus of Hawaii, with plans of the principal ones of Kauai and Oahu. *The Hawaiian Annual.* Thos. G. Thrum, Honolulu.

Ulukau

2014 *Māhele Database.* Hawaiian Electronic Library, http://ulukau.org/cgi-bin/vicki?l=en.

USDA (U.S. Department of Agriculture)

1965 Aerial photograph of Kalapaki showing the project area (UH MAGIS)

2001 Soil Survey Geographic (SSURGO) database. U.S. Department of Agriculture, Natural Resources Conservation Service. Fort Worth, Texas. http://www.ncgc.nrcs.usda.gov/products/datasets/ssurgo/.

USGS (U.S. Geological Survey)

1910 Lihue and Kapaa USGS 7.5-minute topographic quadrangles. USGS Information Services, Denver, Colorado.

1950-1951 USGS aerial photograph (UH MAGIS). USGS Information Services, Denver, Colorado.

1959 Aerial photograph of Kalapaki (UH MAGIS). USGS Information Services, Denver, Colorado.

1963 Lihue and Kapaa USGS 7.5-minute topographic quadrangles. USGS Information Services, Denver, Colorado.

1996 Lihue and Kapaa USGS 7.5-minute topographic quadrangles. USGS Information Services, Denver, Colorado.

Vancouver, Captain George

1798 *A Voyage of Discovery to the North Pacific Ocean and Round the World . . . and Performed in the Years 1790, 1791, 1792, 1793, 1794 and 1795.* Volume I. G.G. and J. Robinson and J. Edwards, London.

Vizenor, Gerald

1999 *Manifest Manners: Narratives on Postindian Survivance.* University of Oklahoma Press, Lincoln, Oklahoma.

Walker, Alan T., Lehua Kajima, and Susan T. Goodfellow

1991 *Archaeological Inventory Survey Līhu'e /Puhi/ Hanamā'ulu Master Plan, Lands of Hanamā'ulu, Kalapaki, Nawiliwili, and Wailua, Līhu'e District, Island of Kauai (TMK 4-3-2-; 4-3-3-; 4-3-9-).* Paul H. Rosendahl, Ph.D., Inc, Hilo, Hawai'i.

Waihona 'Aina Corp.

2022 *The Māhele Database.* Electronic document, http://waihona.com.

Wichman, Frederick B.

1998 *Kauai: Ancient Place-Names and Their Stories.* University of Hawai'i Press, Honolulu.

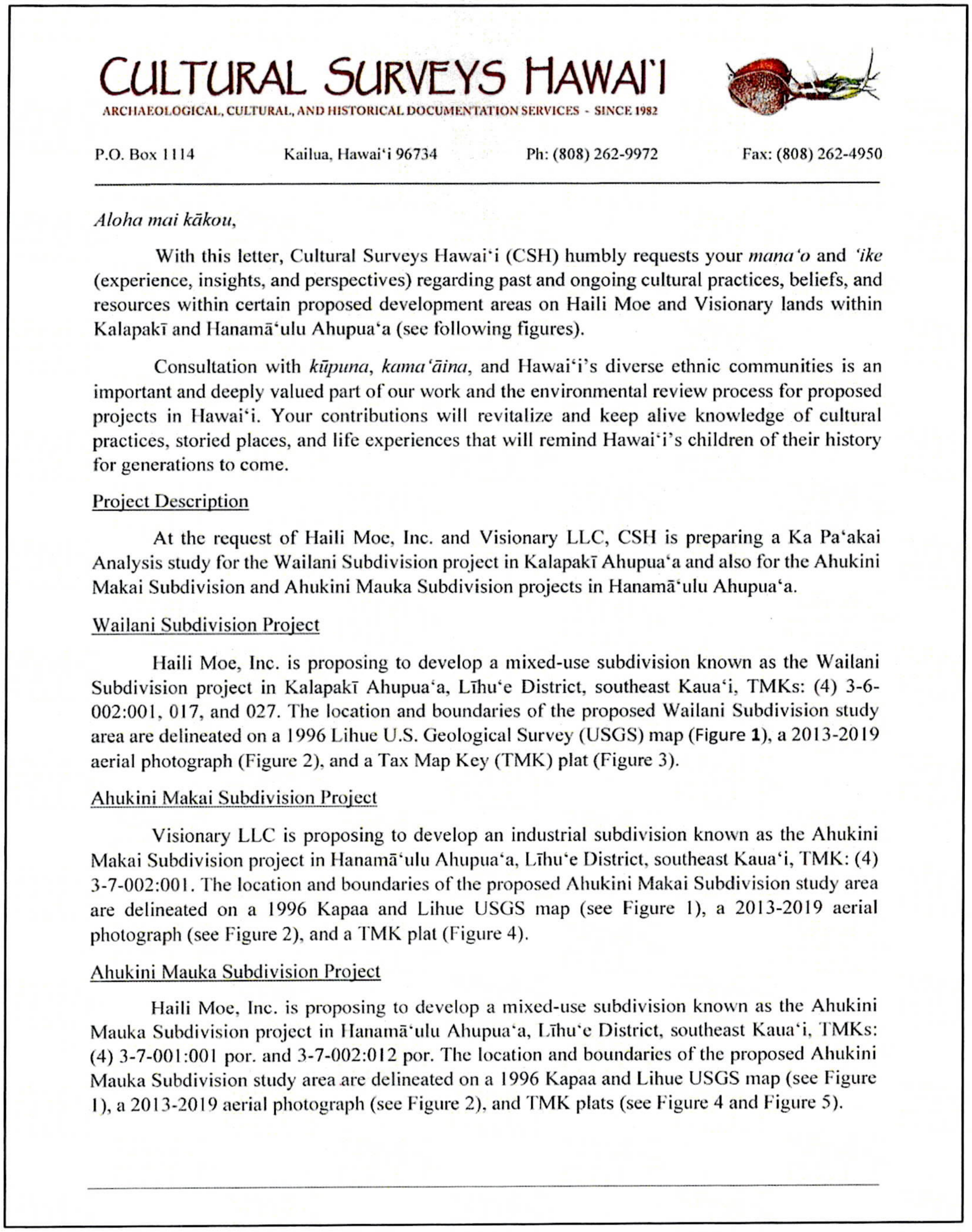
Wilcox, Carol

1996 *Sugar Water: Hawaii's Plantation Ditches.* University of Hawai'i Press, Honolulu.

Wilkes, Charles

1845 *Narrative of the United States Exploring Expedition,* Volume 4, 1845:68. Republished by The Gregg Press, Upper Saddle River, New Jersey.

Appendix A Community Contact Letter



CULTURAL SURVEYS HAWAI'I
ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL DOCUMENTATION SERVICES - SINCE 1982

P.O. Box 1114 Kailua, Hawai'i 96734 Ph: (808) 262-9972 Fax: (808) 262-4950

Aloha mai kākou,

With this letter, Cultural Surveys Hawai'i (CSH) humbly requests your *mana'o* and *'ike* (experience, insights, and perspectives) regarding past and ongoing cultural practices, beliefs, and resources within certain proposed development areas on Haili Moe and Visionary lands within Kalapakī and Hanamā'ulu Ahupua'a (see following figures).

Consultation with *kūpuna*, *kama'āina*, and Hawai'i's diverse ethnic communities is an important and deeply valued part of our work and the environmental review process for proposed projects in Hawai'i. Your contributions will revitalize and keep alive knowledge of cultural practices, storied places, and life experiences that will remind Hawai'i's children of their history for generations to come.

Project Description

At the request of Haili Moe, Inc. and Visionary LLC, CSH is preparing a Ka Pa'akai Analysis study for the Wailani Subdivision project in Kalapakī Ahupua'a and also for the Ahukini Makai Subdivision and Ahukini Mauka Subdivision projects in Hanamā'ulu Ahupua'a.

Wailani Subdivision Project

Haili Moe, Inc. is proposing to develop a mixed-use subdivision known as the Wailani Subdivision project in Kalapakī Ahupua'a, Līhu'e District, southeast Kaua'i, TMKs: (4) 3-6-002:001, 017, and 027. The location and boundaries of the proposed Wailani Subdivision study area are delineated on a 1996 Lihue U.S. Geological Survey (USGS) map (Figure **1**), a 2013-2019 aerial photograph (Figure 2), and a Tax Map Key (TMK) plat (Figure 3).

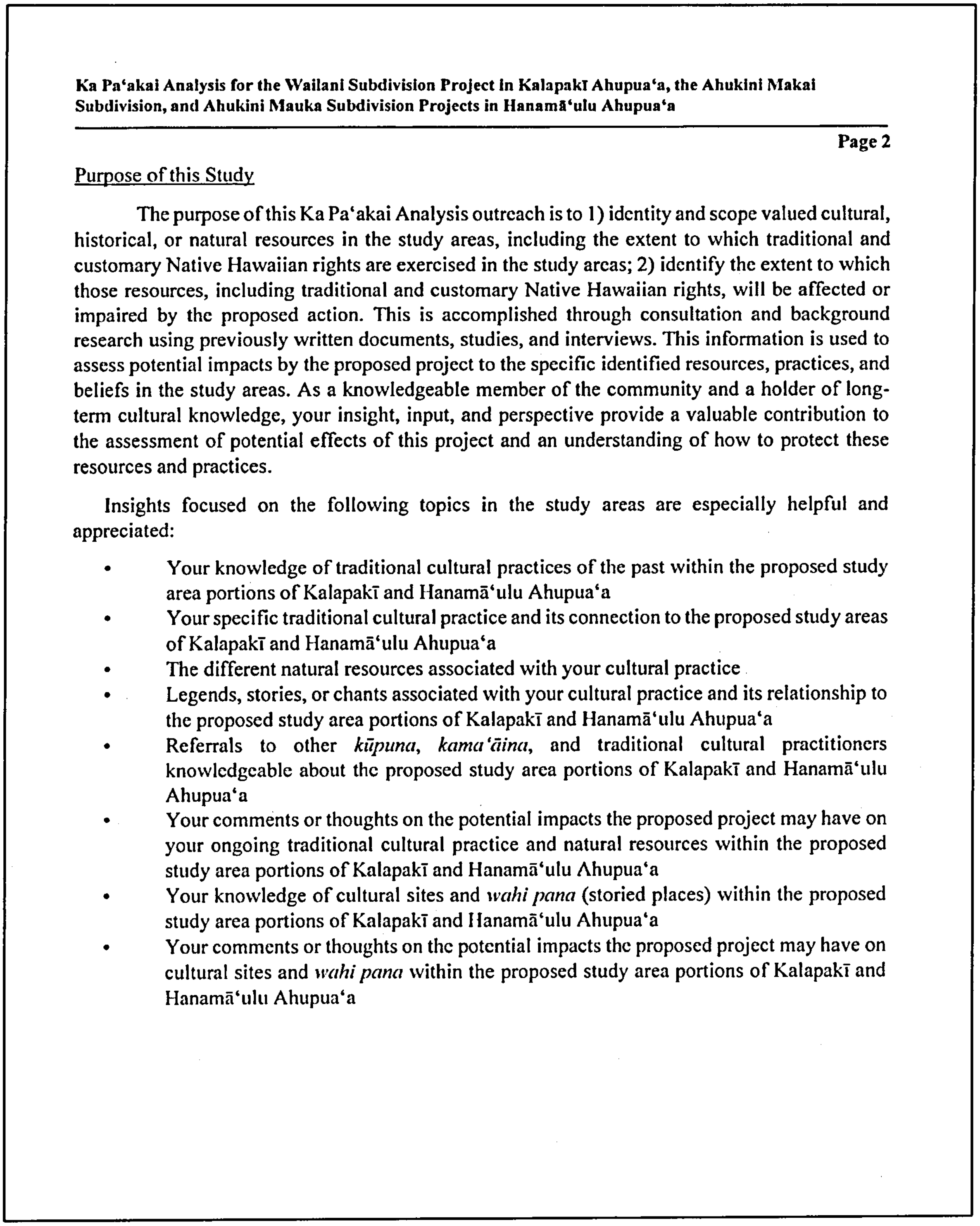
Ahukini Makai Subdivision Project

Visionary LLC is proposing to develop an industrial subdivision known as the Ahukini Makai Subdivision project in Hanamā'ulu Ahupua'a, Līhu'e District, southeast Kaua'i, TMK: (4) 3-7-002:001. The location and boundaries of the proposed Ahukini Makai Subdivision study area are delineated on a 1996 Kapaa and Lihue USGS map (see Figure 1), a 2013-2019 aerial photograph (see Figure 2), and a TMK plat (Figure 4).

Ahukini Mauka Subdivision Project

Haili Moe, Inc. is proposing to develop a mixed-use subdivision known as the Ahukini Mauka Subdivision project in Hanamā'ulu Ahupua'a, Līhu'e District, southeast Kaua'i, TMKs: (4) 3-7-001:001 por. and 3-7-002:012 por. The location and boundaries of the proposed Ahukini Mauka Subdivision study area are delineated on a 1996 Kapaa and Lihue USGS map (see Figure 1), a 2013-2019 aerial photograph (see Figure 2), and TMK plats (see Figure 4 and Figure 5).

Figure 30. Community contact letter page one



Ka Pa‘akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua‘a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā‘ulu Ahupua‘a

Page 2

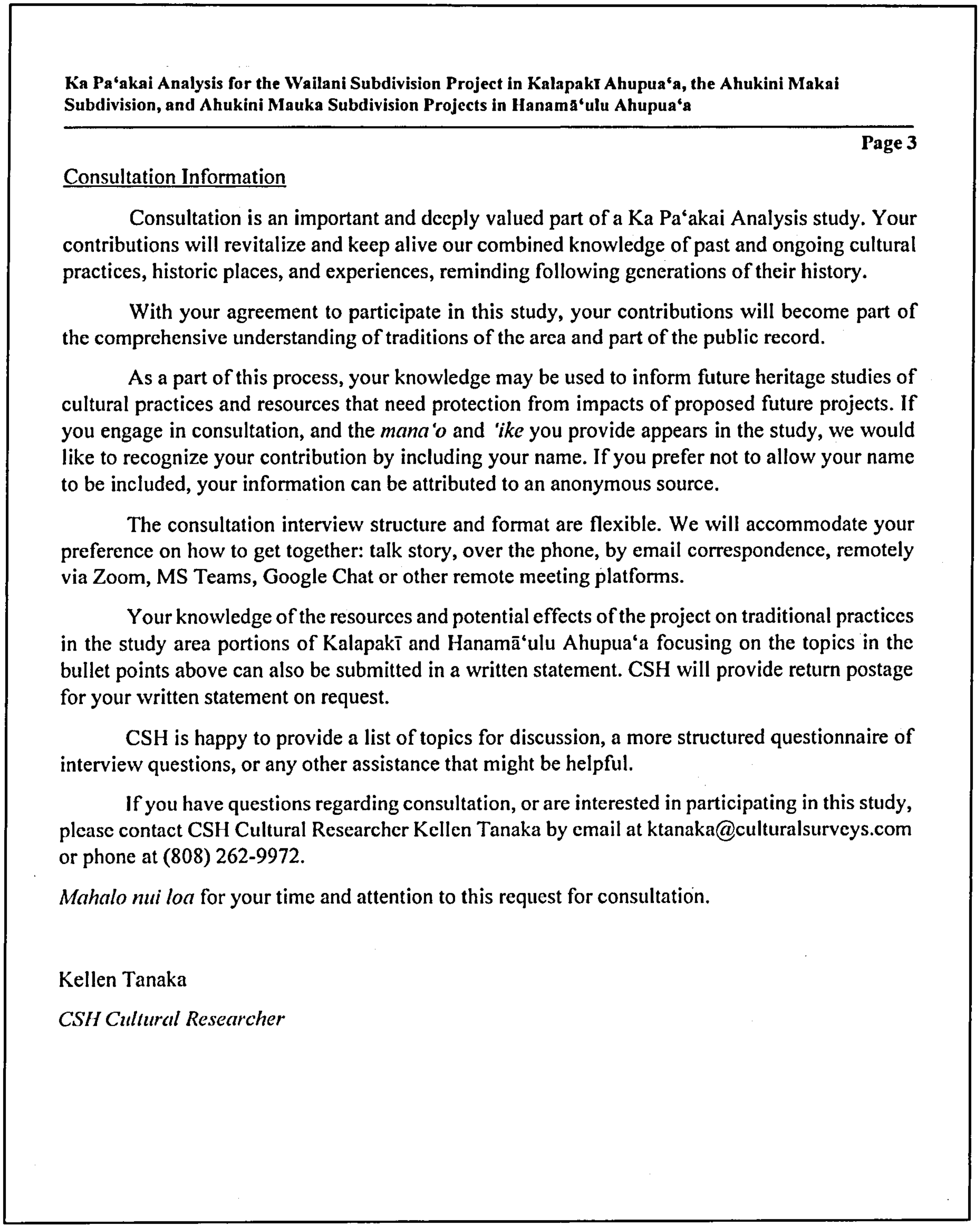
Purpose of this Study

The purpose of this Ka Pa‘akai Analysis outreach is to 1) identity and scope valued cultural, historical, or natural resources in the study areas, including the extent to which traditional and customary Native Hawaiian rights are exercised in the study areas; 2) identify the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action. This is accomplished through consultation and background research using previously written documents, studies, and interviews. This information is used to assess potential impacts by the proposed project to the specific identified resources, practices, and beliefs in the study areas. As a knowledgeable member of the community and a holder of long-term cultural knowledge, your insight, input, and perspective provide a valuable contribution to the assessment of potential effects of this project and an understanding of how to protect these resources and practices.

Insights focused on the following topics in the study areas are especially helpful and appreciated:

- Your knowledge of traditional cultural practices of the past within the proposed study area portions of Kalapakī and Hanamā‘ulu Ahupua‘a
- Your specific traditional cultural practice and its connection to the proposed study areas of Kalapakī and Hanamā‘ulu Ahupua‘a
- The different natural resources associated with your cultural practice
- Legends, stories, or chants associated with your cultural practice and its relationship to the proposed study area portions of Kalapakī and Hanamā‘ulu Ahupua‘a
- Referrals to other *kūpuna*, *kama‘āina*, and traditional cultural practitioners knowledgeable about the proposed study area portions of Kalapakī and Hanamā‘ulu Ahupua‘a
- Your comments or thoughts on the potential impacts the proposed project may have on your ongoing traditional cultural practice and natural resources within the proposed study area portions of Kalapakī and Hanamā‘ulu Ahupua‘a
- Your knowledge of cultural sites and *wahi pana* (storied places) within the proposed study area portions of Kalapakī and Hanamā‘ulu Ahupua‘a
- Your comments or thoughts on the potential impacts the proposed project may have on cultural sites and *wahi pana* within the proposed study area portions of Kalapakī and Hanamā‘ulu Ahupua‘a

Figure 31. Community contact letter page two



Ka Pa'akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua'a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā'ulu Ahupua'a

Page 3

Consultation Information

Consultation is an important and deeply valued part of a Ka Pa'akai Analysis study. Your contributions will revitalize and keep alive our combined knowledge of past and ongoing cultural practices, historic places, and experiences, reminding following generations of their history.

With your agreement to participate in this study, your contributions will become part of the comprehensive understanding of traditions of the area and part of the public record.

As a part of this process, your knowledge may be used to inform future heritage studies of cultural practices and resources that need protection from impacts of proposed future projects. If you engage in consultation, and the *mana'o* and *'ike* you provide appears in the study, we would like to recognize your contribution by including your name. If you prefer not to allow your name to be included, your information can be attributed to an anonymous source.

The consultation interview structure and format are flexible. We will accommodate your preference on how to get together: talk story, over the phone, by email correspondence, remotely via Zoom, MS Teams, Google Chat or other remote meeting platforms.

Your knowledge of the resources and potential effects of the project on traditional practices in the study area portions of Kalapakī and Hanamā'ulu Ahupua'a focusing on the topics in the bullet points above can also be submitted in a written statement. CSH will provide return postage for your written statement on request.

CSH is happy to provide a list of topics for discussion, a more structured questionnaire of interview questions, or any other assistance that might be helpful.

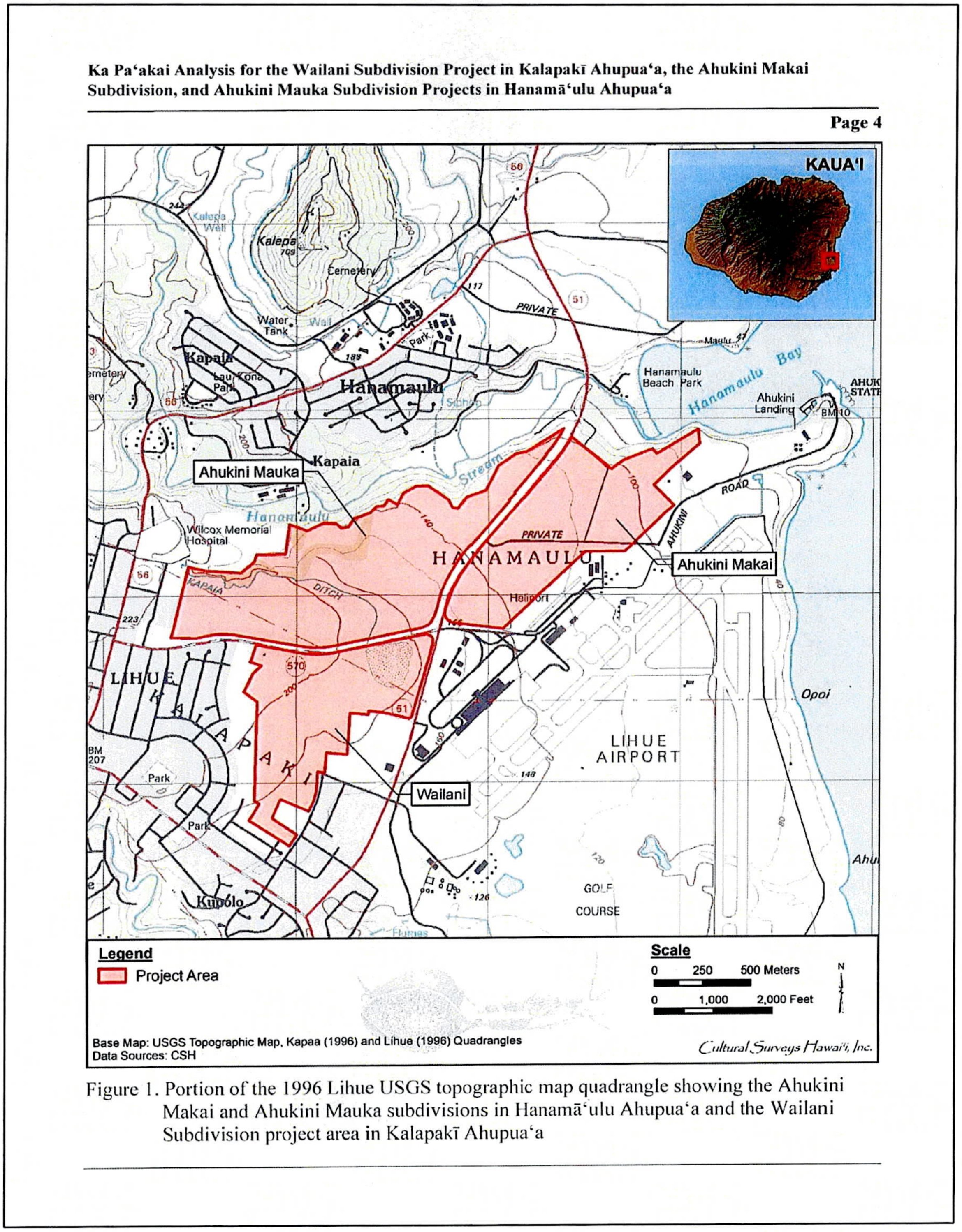
If you have questions regarding consultation, or are interested in participating in this study, please contact CSH Cultural Researcher Kellen Tanaka by email at ktanaka@culturalsurveys.com or phone at (808) 262-9972.

Mahalo nui loa for your time and attention to this request for consultation.

Kellen Tanaka

CSH Cultural Researcher

Figure 32. Community contact letter page three



Ka Pa'akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua'a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā'ulu Ahupua'a

Page 4

KAUA'I
Kalepa Well
Kalepa
709
Cemetery
Water Tank
Kapaia
Lau Kona Park
Hanamaulu
School
Park
189
117
PRIVATE
51
56
200
Maulu
Hanamaulu Beach Park
Hanamaulu Bay
Ahukini Landing
BM 10
AHUK STATE
Ahukini Mauka
Kapaia
Stream
Hanamaulu
Wilcox Memorial Hospital
140
100
PRIVATE
HANAMAULU
AHUKINI
ROAD
Ahukini Makai
Heliport
KAPAIA
DITCH
223
166
570
200
51
LIHUE
KALAPAKI
BM 207
Park
Park
Kuholo
Wailani
LIHUE AIRPORT
148
Opoi
120
GOLF COURSE
126
80
40
Ahu
Flumes

Legend

🟥 Project Area

Scale

0 250 500 Meters

0 1,000 2,000 Feet

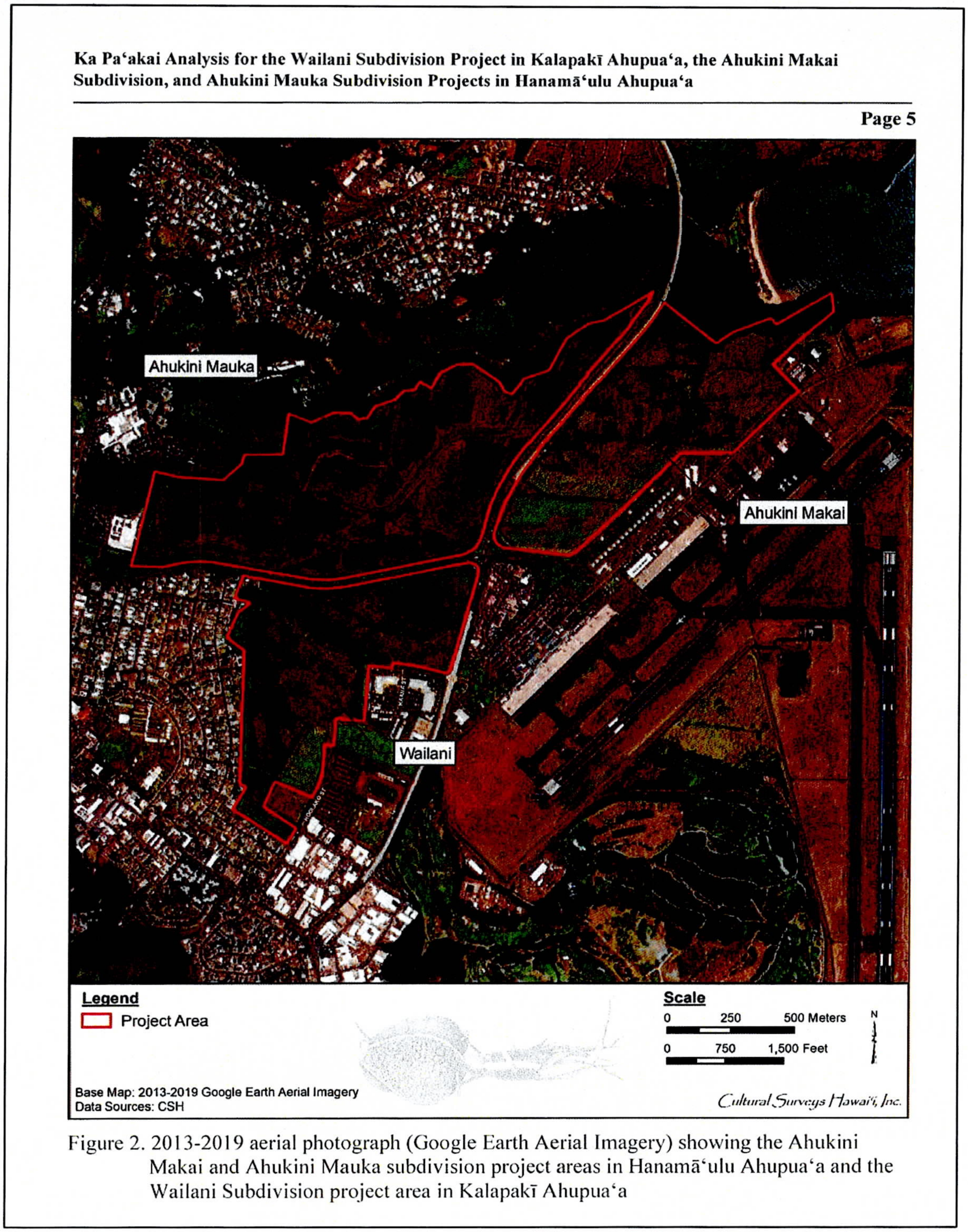
N

Base Map: USGS Topographic Map, Kapaa (1996) and Lihue (1996) Quadrangles
Data Sources: CSH

Cultural Surveys Hawai'i, Inc.

Figure 1. Portion of the 1996 Lihue USGS topographic map quadrangle showing the Ahukini Makai and Ahukini Mauka subdivisions in Hanamā'ulu Ahupua'a and the Wailani Subdivision project area in Kalapakī Ahupua'a

Figure 33. Community contact letter page four



Ka Pa‘akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua‘a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā‘ulu Ahupua‘a

Page 5

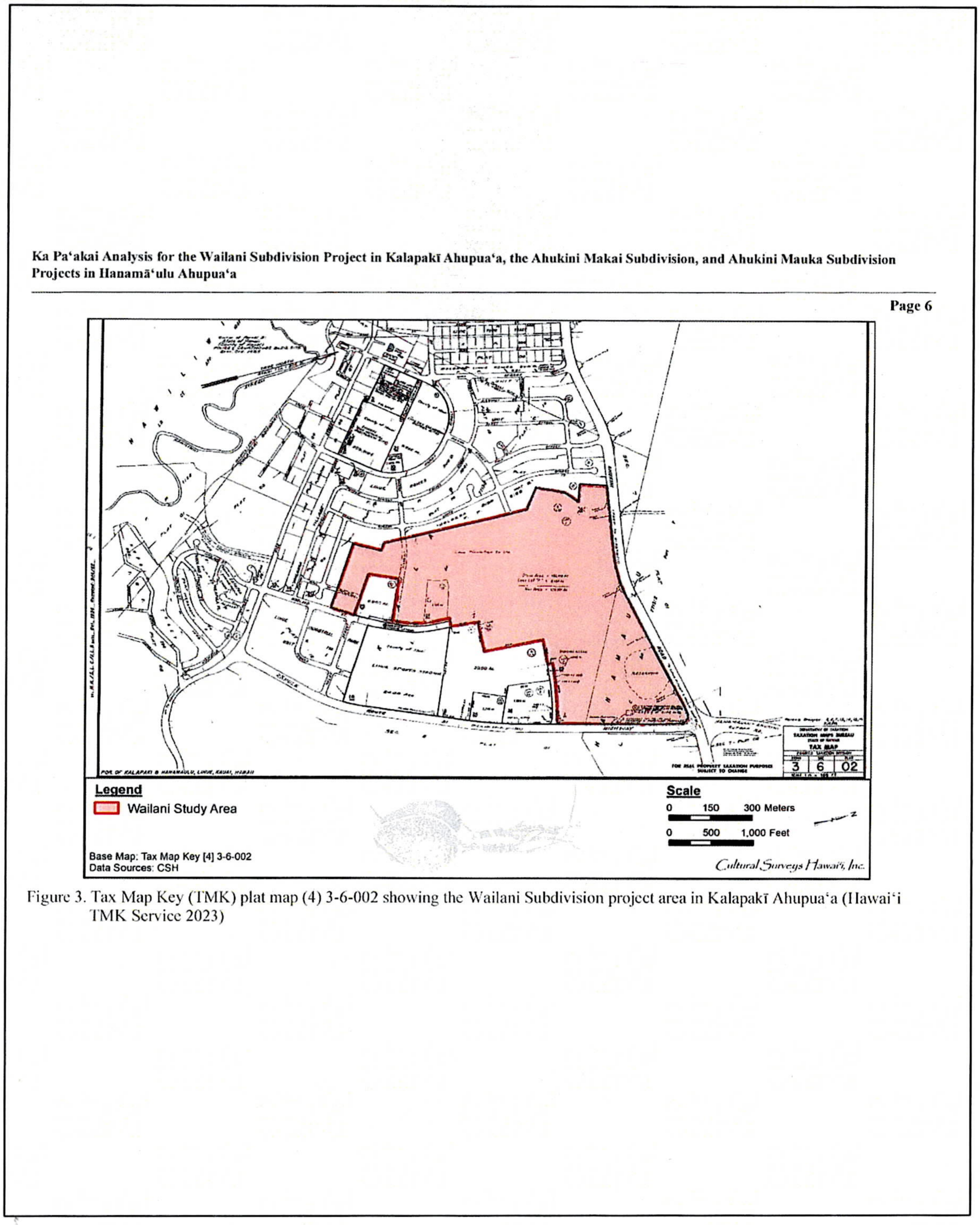
Ahukini Mauka
Ahukini Makai
Wailani
Legend
Project Area
Scale
0 250 500 Meters
0 750 1,500 Feet
N

Base Map: 2013-2019 Google Earth Aerial Imagery
Data Sources: CSH

Cultural Surveys Hawai‘i, Inc.

Figure 2. 2013-2019 aerial photograph (Google Earth Aerial Imagery) showing the Ahukini Makai and Ahukini Mauka subdivision project areas in Hanamā‘ulu Ahupua‘a and the Wailani Subdivision project area in Kalapakī Ahupua‘a

Figure 34. Community contact letter page five



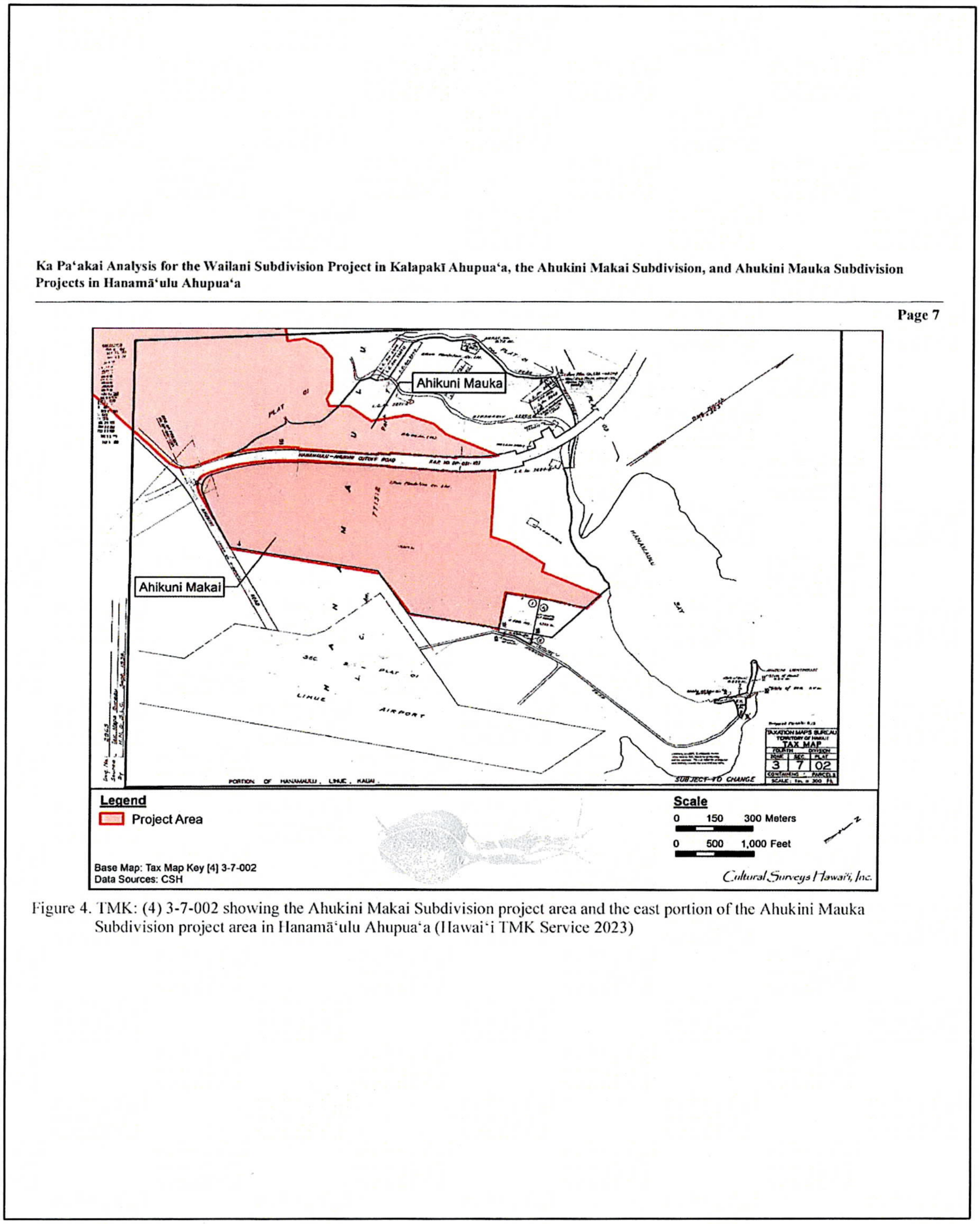
Ka Pa'akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua'a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā'ulu Ahupua'a

Page 6

Legend
🟥 Wailani Study Area
Base Map: Tax Map Key [4] 3-6-002
Data Sources: CSH
Scale
0 150 300 Meters
0 500 1,000 Feet
Cultural Surveys Hawai'i, Inc.
3 6 02

Figure 3. Tax Map Key (TMK) plat map (4) 3-6-002 showing the Wailani Subdivision project area in Kalapakī Ahupua'a (Hawai'i TMK Service 2023)

Figure 35. Community contact letter page six



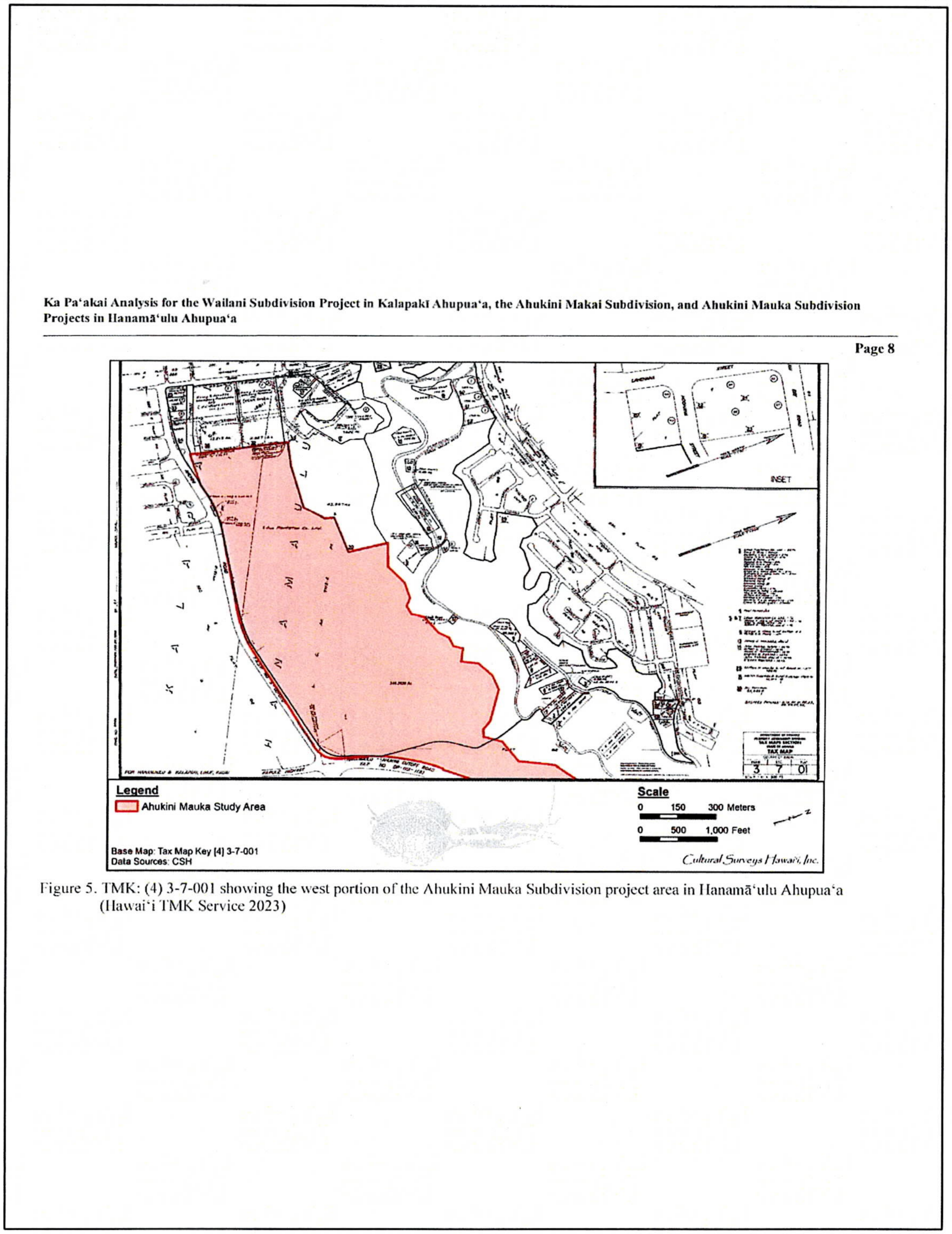
Ka Pa'akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua'a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā'ulu Ahupua'a

Page 7

Ahikuni Mauka
Ahikuni Makai
HANAMAULU - AHUKINI CUTOFF ROAD
LIHUE AIRPORT
HANAMAULU BAY
PORTION OF HANAMAULU, LIHUE, KAUAI
SUBJECT TO CHANGE
TAXATION MAPS BUREAU
TERRITORY OF HAWAII
TAX MAP
3 7 02
Legend
🟥 Project Area
Scale
0 150 300 Meters
0 500 1,000 Feet
Base Map: Tax Map Key [4] 3-7-002
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 4. TMK: (4) 3-7-002 showing the Ahukini Makai Subdivision project area and the east portion of the Ahukini Mauka Subdivision project area in Hanamā'ulu Ahupua'a (Hawai'i TMK Service 2023)

Figure 36. Community contact letter page seven



Ka Pa'akai Analysis for the Wailani Subdivision Project in Kalapakī Ahupua'a, the Ahukini Makai Subdivision, and Ahukini Mauka Subdivision Projects in Hanamā'ulu Ahupua'a

Page 8

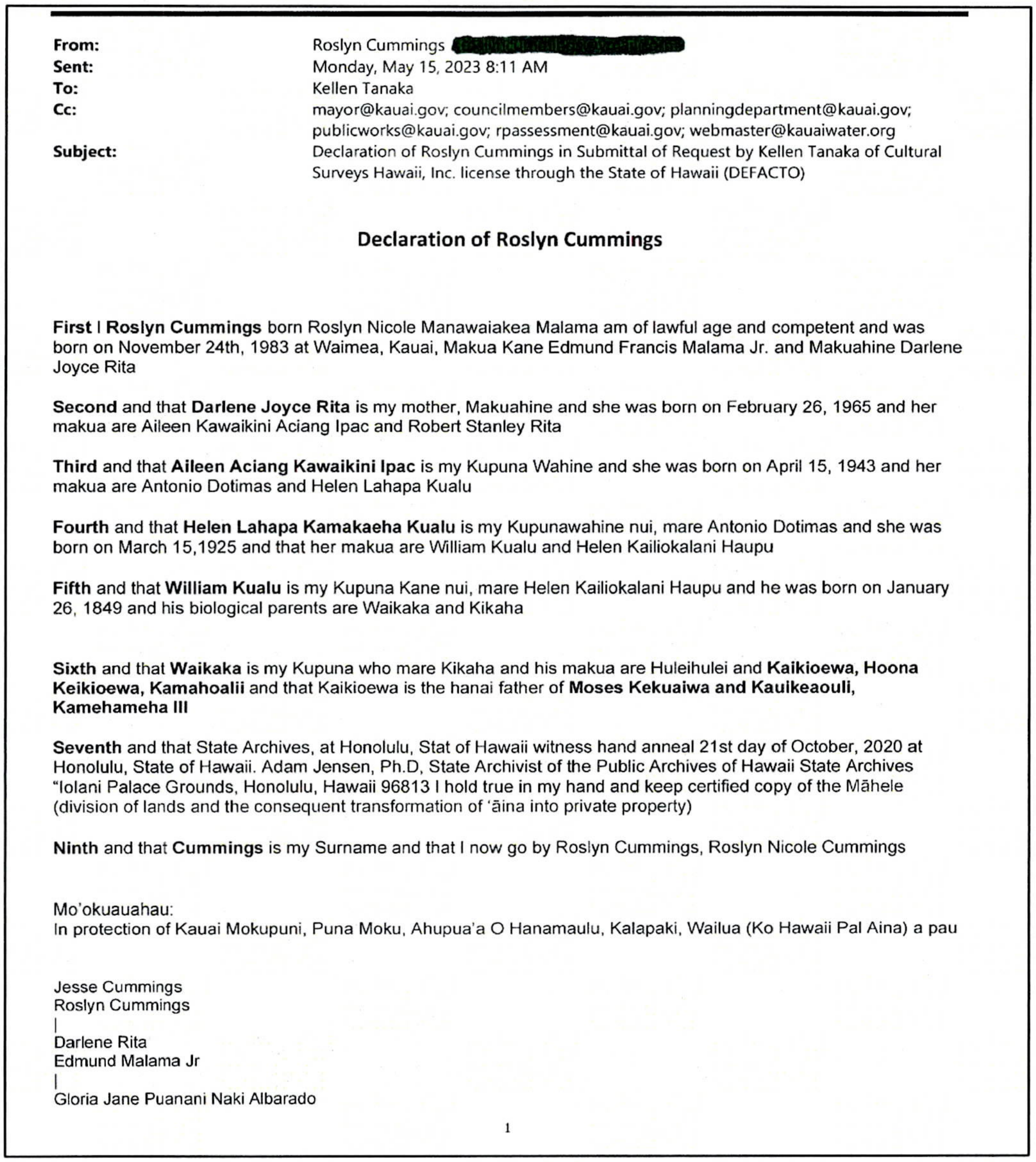
Legend
🟥 Ahukini Mauka Study Area
Scale
0 150 300 Meters
0 500 1,000 Feet
N
INSET
TAX MAP
3 7 01
Base Map: Tax Map Key [4] 3-7-001
Data Sources: CSH
Cultural Surveys Hawai'i, Inc.

Figure 5. TMK: (4) 3-7-001 showing the west portion of the Ahukini Mauka Subdivision project area in Hanamā'ulu Ahupua'a (Hawai'i TMK Service 2023)

Figure 37. Community contact letter page eight

Appendix B Declaration: Roslyn Cummings

The following is an e-mail from Ms. Roslyn Cummings dated 15 May 2023 providing a declaration in response to a request for consultation pertaining to the Ka Pa‘akai Analysis for the Ahukini Makai Subdivision (and the Wailani Subdivision and Ahukini Mauka Subdivision projects). We are providing her testimony in full here without comment redacting only her personal contact information.



From: Roslyn Cummings [redacted]
Sent: Monday, May 15, 2023 8:11 AM
To: Kellen Tanaka
Cc: mayor@kauai.gov; councilmembers@kauai.gov; planningdepartment@kauai.gov; publicworks@kauai.gov; rpassessment@kauai.gov; webmaster@kauaiwater.org
Subject: Declaration of Roslyn Cummings in Submittal of Request by Kellen Tanaka of Cultural Surveys Hawaii, Inc. license through the State of Hawaii (DEFACTO)

Declaration of Roslyn Cummings

First I Roslyn Cummings born Roslyn Nicole Manawaiakea Malama am of lawful age and competent and was born on November 24th, 1983 at Waimea, Kauai, Makua Kane Edmund Francis Malama Jr. and Makuahine Darlene Joyce Rita

Second and that **Darlene Joyce Rita** is my mother, Makuahine and she was born on February 26, 1965 and her makua are Aileen Kawaikini Aciang Ipac and Robert Stanley Rita

Third and that **Aileen Aciang Kawaikini Ipac** is my Kupuna Wahine and she was born on April 15, 1943 and her makua are Antonio Dotimas and Helen Lahapa Kualu

Fourth and that **Helen Lahapa Kamakaeha Kualu** is my Kupunawahine nui, mare Antonio Dotimas and she was born on March 15,1925 and that her makua are William Kualu and Helen Kailiokalani Haupu

Fifth and that **William Kualu** is my Kupuna Kane nui, mare Helen Kailiokalani Haupu and he was born on January 26, 1849 and his biological parents are Waikaka and Kikaha

Sixth and that **Waikaka** is my Kupuna who mare Kikaha and his makua are Huleihulei and **Kaikioewa, Hoona Keikioewa, Kamahoalii** and that Kaikioewa is the hanai father of **Moses Kekuaiwa and Kaulkeaouli, Kamehameha III**

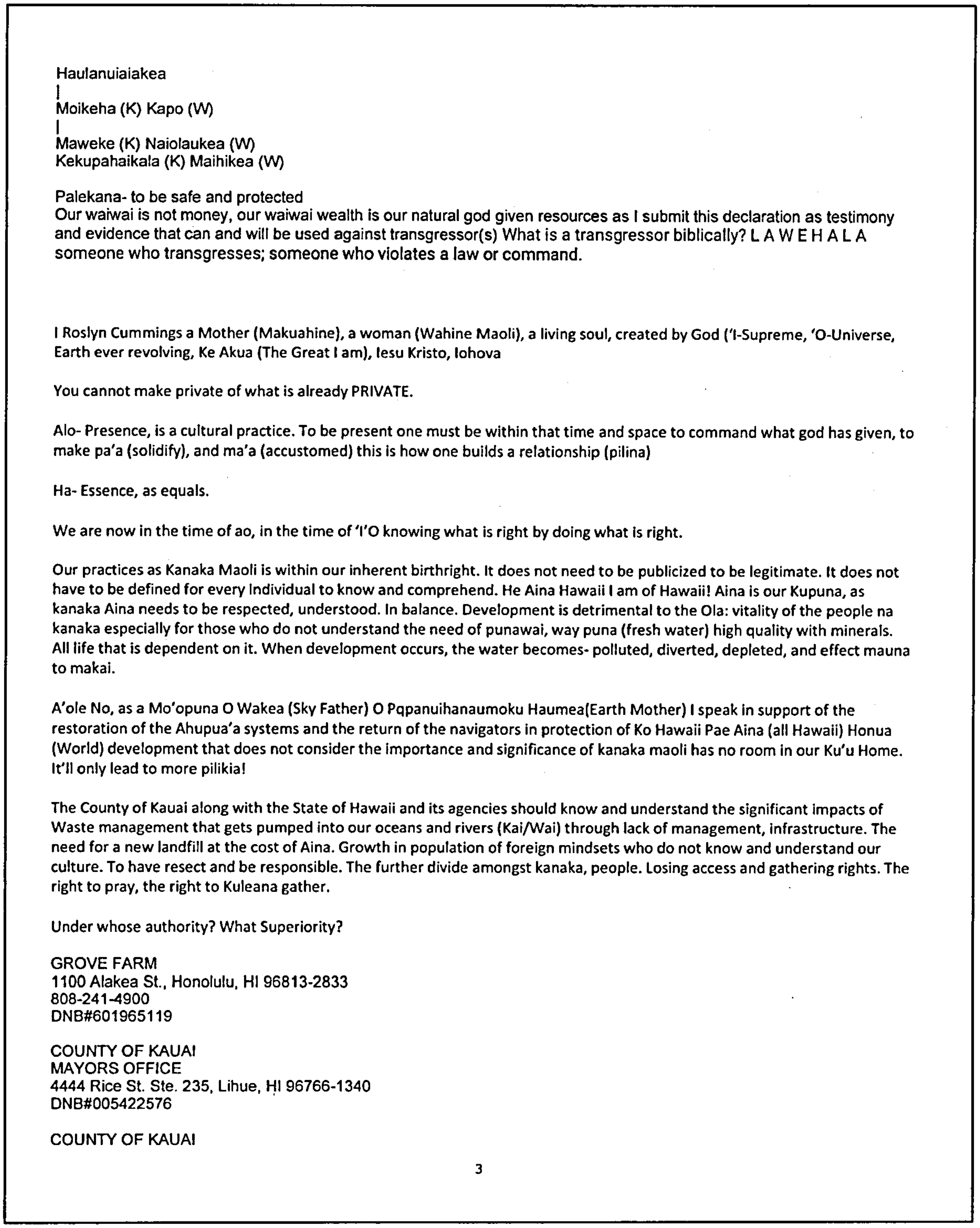
Seventh and that State Archives, at Honolulu, Stat of Hawaii witness hand anneal 21st day of October, 2020 at Honolulu, State of Hawaii. Adam Jensen, Ph.D, State Archivist of the Public Archives of Hawaii State Archives "Iolani Palace Grounds, Honolulu, Hawaii 96813 I hold true in my hand and keep certified copy of the Māhele (division of lands and the consequent transformation of ‘āina into private property)

Ninth and that **Cummings** is my Surname and that I now go by Roslyn Cummings, Roslyn Nicole Cummings

Mo'okuauahau:
In protection of Kauai Mokupuni, Puna Moku, Ahupua'a O Hanamaulu, Kalapaki, Wailua (Ko Hawaii Pal Aina) a pau

Jesse Cummings
Roslyn Cummings
|
Darlene Rita
Edmund Malama Jr
|
Gloria Jane Puanani Naki Albarado

Edmund Malama Sr
|
Lucille Luukia Kaaloa Ahana
Joseph Ku Keoua Malama
|
Ku Nahinu Malama he kane
Hana Keoua Puahi Pauahi
|
Lono, Haalou Hana
Moses Keoua Puahi
|
Kalani he wahine
Kaukapawa ke Kane
|
Kamaholelani
|
Kiha (K)
Kahalemanuolono (W)
|
Kaumeheiwa (K)
Kaapuwai (W)
|
Lonoikahaupu (K)
Kaumumuokalani (W)
|
Kauakahilau (K)
Kuluina (W)
|
Kane Kahaka (K)
Kealohipeekoa (W)
|
Kauiahiwa (K)
Kuuwelokawai (W)
|
Ilimealani (K)
Kamili (W)
Brother of
**Kahakumakaliua|Kahakumakalina (K) Kahakumai'a (W)
|
Kalanikukuma (K) Kapoleikauila (W)
|
Kahakumakapaweo (K) Kahakukukanea (W)
|
Kuwalupaukamoku (K) Hameawahaula (W)
|
Kahakuakane (K) Manukaikoo (W)
|
Kaumakaamano (K) Kapoinukai (W)
|
Manokalanipo (K) Naekapulani (W)
|
Kukona (K) Laupuapuamaa (W)
|
Luanuu (K) Kalanimoeikawaikai (W) At
|
Kamahano (K) Kaaueanuiokalani (W)
|
Ahukinialaa (K) **Ha'iakamaio (W)
|
Laamaikahiki (K) **Waolena (W)
|



Haulanuiaiakea
|
Moikeha (K) Kapo (W)
|
Maweke (K) Naiolaukea (W)
Kekupahaikala (K) Maihikea (W)

Palekana- to be safe and protected
Our waiwai is not money, our waiwai wealth is our natural god given resources as I submit this declaration as testimony and evidence that can and will be used against transgressor(s) What is a transgressor biblically? LAWEHALA someone who transgresses; someone who violates a law or command.

I Roslyn Cummings a Mother (Makuahine), a woman (Wahine Maoli), a living soul, created by God ('I-Supreme, 'O-Universe, Earth ever revolving, Ke Akua (The Great I am), Iesu Kristo, Iohova

You cannot make private of what is already PRIVATE.

Alo- Presence, is a cultural practice. To be present one must be within that time and space to command what god has given, to make pa'a (solidify), and ma'a (accustomed) this is how one builds a relationship (pilina)

Ha- Essence, as equals.

We are now in the time of ao, in the time of 'I'O knowing what is right by doing what is right.

Our practices as Kanaka Maoli is within our inherent birthright. It does not need to be publicized to be legitimate. It does not have to be defined for every Individual to know and comprehend. He Aina Hawaii I am of Hawaii! Aina is our Kupuna, as kanaka Aina needs to be respected, understood. In balance. Development is detrimental to the Ola: vitality of the people na kanaka especially for those who do not understand the need of punawai, way puna (fresh water) high quality with minerals. All life that is dependent on it. When development occurs, the water becomes- polluted, diverted, depleted, and effect mauna to makai.

A'ole No, as a Mo'opuna O Wakea (Sky Father) O Pqpanuihanaumoku Haumea(Earth Mother) I speak in support of the restoration of the Ahupua'a systems and the return of the navigators in protection of Ko Hawaii Pae Aina (all Hawaii) Honua (World) development that does not consider the importance and significance of kanaka maoli has no room in our Ku'u Home. It'll only lead to more pilikia!

The County of Kauai along with the State of Hawaii and its agencies should know and understand the significant impacts of Waste management that gets pumped into our oceans and rivers (Kai/Wai) through lack of management, infrastructure. The need for a new landfill at the cost of Aina. Growth in population of foreign mindsets who do not know and understand our culture. To have resect and be responsible. The further divide amongst kanaka, people. Losing access and gathering rights. The right to pray, the right to Kuleana gather.

Under whose authority? What Superiority?

GROVE FARM
1100 Alakea St., Honolulu, HI 96813-2833
808-241-4900
DNB#601965119

COUNTY OF KAUAI
MAYORS OFFICE
4444 Rice St. Ste. 235, Lihue, HI 96766-1340
DNB#005422576

COUNTY OF KAUAI

KAUAI FIRE DEPARTMENT
4444 Rice St. Ste. 315, Lihue, HI 96766-1340
DNB#

County of Kauai
Kauai Police Department
3990 Kanna St., Suite 200
Lihue,Hawaii 96766–1268
808-241-1711
DNB#929385867

City of Lihue
Kauai Emergency Management Agency
3990 Kaana St., Suite 100
Lihue, Hawaii 96766–1268
808-241-1711
DNB#

COUNTY OF KAUAI
the Prosecuting Attorney
3990 Kaana St., Ste 210
Lihue, Hawaii 96766-1268
808-241-1888
DNB#007119125

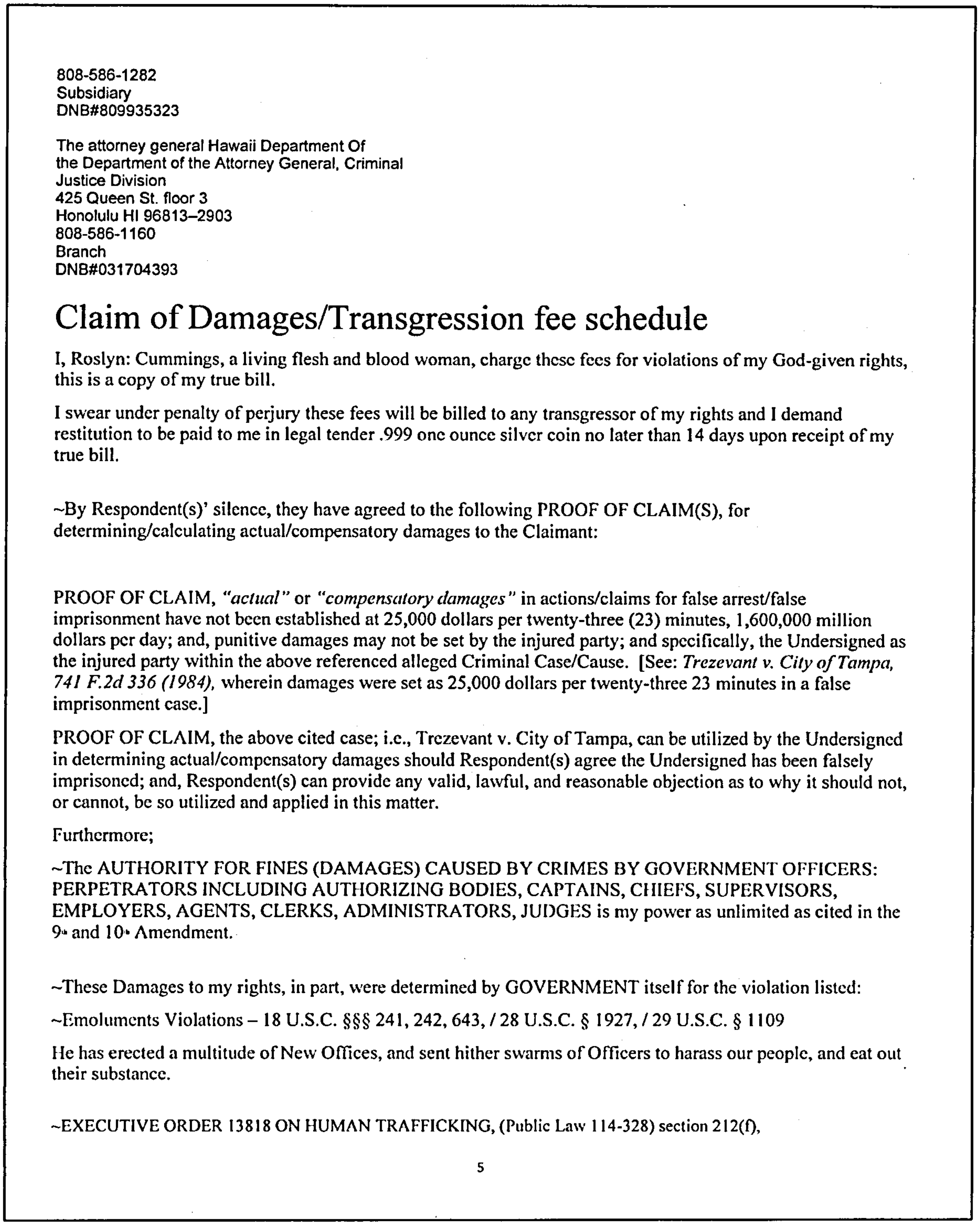
Executive office of the president
The White House office,
Office is the vice president,
Office of management and budget,
National security council
725 17th St. NW., Washington,, DC 20503–0004
202-456-1414
DNB#031648897

Executive office of the United States government
White House
1600 Pennsylvania Ave. NW. Washington DC 20500–0005
202-456-1414
Subsidiary
DNB#161906078

Government of the United States,
White House
1600 Pennsylvania Ave. NW. Washington DC
20500–0005
202-456-1414
Headquarters
DNB#161906193

Executive office of the State of Hawaii
Office of the governor, executive chamber state capital
415 South Beretania St. Fl 5 Honolulu
HI 96813–2407
808-586-0034
Subsidiary
DNB#809930217

The attorney general who is Department of
Department of the Attorney General
425 Queen St., Honolulu, HI 96813–2903



808-586-1282
Subsidiary
DNB#809935323

The attorney general Hawaii Department Of
the Department of the Attorney General, Criminal
Justice Division
425 Queen St. floor 3
Honolulu HI 96813–2903
808-586-1160
Branch
DNB#031704393

Claim of Damages/Transgression fee schedule

I, Roslyn: Cummings, a living flesh and blood woman, charge these fees for violations of my God-given rights, this is a copy of my true bill.

I swear under penalty of perjury these fees will be billed to any transgressor of my rights and I demand restitution to be paid to me in legal tender .999 one ounce silver coin no later than 14 days upon receipt of my true bill.

~By Respondent(s)' silence, they have agreed to the following PROOF OF CLAIM(S), for determining/calculating actual/compensatory damages to the Claimant:

PROOF OF CLAIM, *"actual"* or *"compensatory damages"* in actions/claims for false arrest/false imprisonment have not been established at 25,000 dollars per twenty-three (23) minutes, 1,600,000 million dollars per day; and, punitive damages may not be set by the injured party; and specifically, the Undersigned as the injured party within the above referenced alleged Criminal Case/Cause. [See: *Trezevant v. City of Tampa, 741 F.2d 336 (1984),* wherein damages were set as 25,000 dollars per twenty-three 23 minutes in a false imprisonment case.]

PROOF OF CLAIM, the above cited case; i.e., Trezevant v. City of Tampa, can be utilized by the Undersigned in determining actual/compensatory damages should Respondent(s) agree the Undersigned has been falsely imprisoned; and, Respondent(s) can provide any valid, lawful, and reasonable objection as to why it should not, or cannot, be so utilized and applied in this matter.

Furthermore;

~The AUTHORITY FOR FINES (DAMAGES) CAUSED BY CRIMES BY GOVERNMENT OFFICERS: PERPETRATORS INCLUDING AUTHORIZING BODIES, CAPTAINS, CHIEFS, SUPERVISORS, EMPLOYERS, AGENTS, CLERKS, ADMINISTRATORS, JUDGES is my power as unlimited as cited in the 9th and 10th Amendment.

~These Damages to my rights, in part, were determined by GOVERNMENT itself for the violation listed:

~Emoluments Violations – 18 U.S.C. §§§ 241, 242, 643, / 28 U.S.C. § 1927, / 29 U.S.C. § 1109

He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our people, and eat out their substance.

~EXECUTIVE ORDER 13818 ON HUMAN TRAFFICKING, (Public Law 114-328) section 212(f), 8 U.S.C. 1182(f), (INA), 3 U.S.C. section 301, 28 U.S.C. §§ 1608, 1330 / Qui Tam 31 U.S. Code, § 3730(b),(c)

Breach	Penalty	Authority
To attend meetings, hearings under duress, against my consent	$1,000.00 per minute	
A-VIOLATION OF OATH OF OFFICE:	$250,000.00	18 USC 3571, 28 USC 3002 (15)
B-ARMED ABUSE OF OFFICE:	$200,000.00	
C-ARMED ABUSE OF AUTHORITY:	$200,000.00	
D-ARMED USE OF EMERGENCY LIGHTING IN A NON-EMERGENCY:	$200,000.00	
E-ARMED USE OF EMERGENCY SIREN IN A NON-EMERGENCY:	$200,000.00	
F-ARMED ASSAULT AND BATTERY:	$200,000.00	
G-ARMED THREAT OF VIOLENCE:	$200,000.00	
H-ARMED COERCION:	$200,000.00	
I-DENIED PROPER WARRANT(S):	$250,000.00	18 USC 3571
J-DENIED RIGHT OF REASONABLE DEFENSE ARGUMENTS:	$250,000.00	18 USC 3571
K-DEFENSE EVIDENCE (RECORDS):	$250,000.00	18 USC 3571
L-DENIED RIGHT TO TRUTH IN EVIDENCE:	$250,000.00	18 USC 3571
M-ARMED VIOLATION OF DUE PROCESS:	$200,000.00	
N-SLAVERY (Forced Compliance to contracts not held):	$250,000.00	18 USC 3571
O-DENIED PROVISIONS IN THE CONSTITUTION:	$250,000.00	18 USC 3571
P-ARMED TREASON, WAR AGAINST AMERICANS:	$250,000.00	18 USC 3571
Q-GENOCIDE AGAINST HUMANITY:	$1,000,000.00	18 USC 1091
R-APARTHEID:	$1,000,000.00	
S-ARMED DEPRIVATION OF RIGHTS	$2000,000.00	
UNDER COLOR OF LAW:	$200,000.00	18 USC 242
T-EMOTIONAL DISTRESS:	$200,000.00	32 CFR 536.77(a)(3)(vii)
U-MENTAL ANGUISH ABUSE:	$200,000.00	42 CFR 488.301
V-PEONAGE (Felony):	$200,000.00	18 USC 1581, 42 USC 1994
W-UNLAWFUL INCARCERATION:	$200,000.00	
X-MALICIOUS PROSECUTION:	$200,000.00	
Y-DEFAMATION OF CHARACTER:	$200,000.00	
Z-SLANDER:	$200,000.00	
AA-LIBEL:	$200,000.00	

BB-ARMED TRESPASS:	$200,000.00	
CC-NEGLECT/FAILURE TO PROTECT/ACT:	$200,000.00	18 USC 1621, 42 USC 1986
DD-ARMED GANG PRESSING:	$200,000.00	
EE-ARMED LAND PIRACY/PLUNDER:	$200,000.00	
FF-UNAUTHORIZED BOND PRODUCTION:	$200,000.00	
GG-ARMED FORGERY:	$200,000.00	
HH-ARMED EMBEZZLEMENT:	$200,000.00	
II-GENOCIDE:	$1,000,000.00	
JJ-ARMED STALKING:	$200,000.00	
KK-ARMED IMPERSONATING A PUBLIC OFFICIAL:	$200,000.00	
LL-ACTING AS AGENTS OF FOREIGN PRINCIPLES:	$200,000.00	18 USC 219
MM-ARMED TORTURE:	$200,000.00	
NN-ARMED OPERATING STATUTES WITHOUT BOND:	$200,000.00	
OO-EXPLOITATION OF A LEGAL JUSTICE MINORITY GROUP	$500,000.00	
BY BAR CLOSED UNION COURTS- CIVIL RIGHTS:	$1,000,000.00	
PP-BAR VIOLATION OF ANTI-TRUST LAWS:	$200,000.00	
QQ-ICTITIOUS CONVEYANCE OF LANGUAGE:	$200,000.00	Chap. 2b 78FF
RR-MISAPPROPRIATION OF TAXPAYER FUNDS:	$200,000.00	18 USC 641-664
VIOLATIONS OF THE UNIVERSAL DECLARATION OF HUMAN RIGHTS		
SS-ARMED BREACH OF TRUST:	$200,000.00	
TT-ARMED DISTURBING THE PEACE:	$200,000.00	
UU-ARMED KIDNAPPING:	$200,000.00	18 USC 1201
VV-ARMED MALFEASANCE/MALPRACTICE:	$200,000.00	22 CFR 13.3
WW-ARMED MISREPRESENTATION/PERSONAGE:	$200,000.00	
XX-MIS-PRISON OF FELONY:	$500.00	18 USC 4
YY-ARMED CONSPIRACY AGAINST RIGHTS OF PEOPLE:	$200,000.00	18 USC 241
ARMED CRIMINAL EXTORTION/		
ZZ-ECONOMIC OPPRESSION:	$200,000.00	18 USC 141, 872, 25 CFR 11.417
AB-ARMED EXTORTION OF RIGHTS:	$200,000.00	Title 15
AC-ARMED ROBBERY:	$200,000.00	
AD-ARMED THEFT BY FORCED REGISTRATION:	$200,000.00	
AE-MAIL THREATS:	$5,000.00	18 USC 876
AF-MAIL FRAUD:	$10,000.00	18 USC 1341
AG-ARMED FRAUD:	$10,000.00	18 USC 1001

AH-ARMED VIOLATION OF LIEBER CODE AGAINST NON-COMBATANTS:	$200,000.00	
AI-ARMED WRONGFUL ASSUMPTION OF STATUS/STANDING:	$200,000.00	
AJ-ARMED FALSIFICATION OF DOCUMENTS/RECORD:	$10,000.00	18 USC 1001, 26 USC 7701(a)(1)
AK-ARMED FICTITIOUS OBLIGATIONS:	$200,000.00	18 USC 514
AL-ARMED PERJURY:	$2,000.00	18 USC 1621
AM-ARMED SUBORDINATION OF PERJURY:	$2,000.00	18 USC 1622
AN-To determine multiply no. of counts by damage		
AO-ARMED RACKETEERING (Criminal, Felony):	$200,000.00	18 USC 1961-1968
AP-ARMED RACKETEERING (Civil):	$200,000.00	
AQ-Wages Taken $x3=		18 USC 1964 (c)
(Sustained Damages [total] x3)		

The lien debtors will be responsible for any IRS obligations resulting from the discharge or cancellation of any debts, as well as earned income resulting from accepted settlements.

~Dealing with claims of "Immunity"~Any claim of "Immunity" is a fraud because, if valid, it would prevent removal from office for crimes against the people, which removal is authorized or mandated under U.S. Constitution Article 2, Section IV; as well as 18 USC 241, 42 USC 1983, 1985, 1986, and other state Constitutions.~Precedents of Law established by Court cases which are in violation of law render violations of law legally unassailable. Such a situation violates several specifically stated intents and purposes of the Constitution set forth in the Preamble; to establish justice, insure domestic tranquility, and secure the blessings of liberty.

All These factual fees for transgressions of my God-given rights are true and correct to the best of my memory and all statements are made in good faith and sworn to under penalty of perjury in common law. All my God given rights are reserved.

Roslyn Cummings
[redacted]

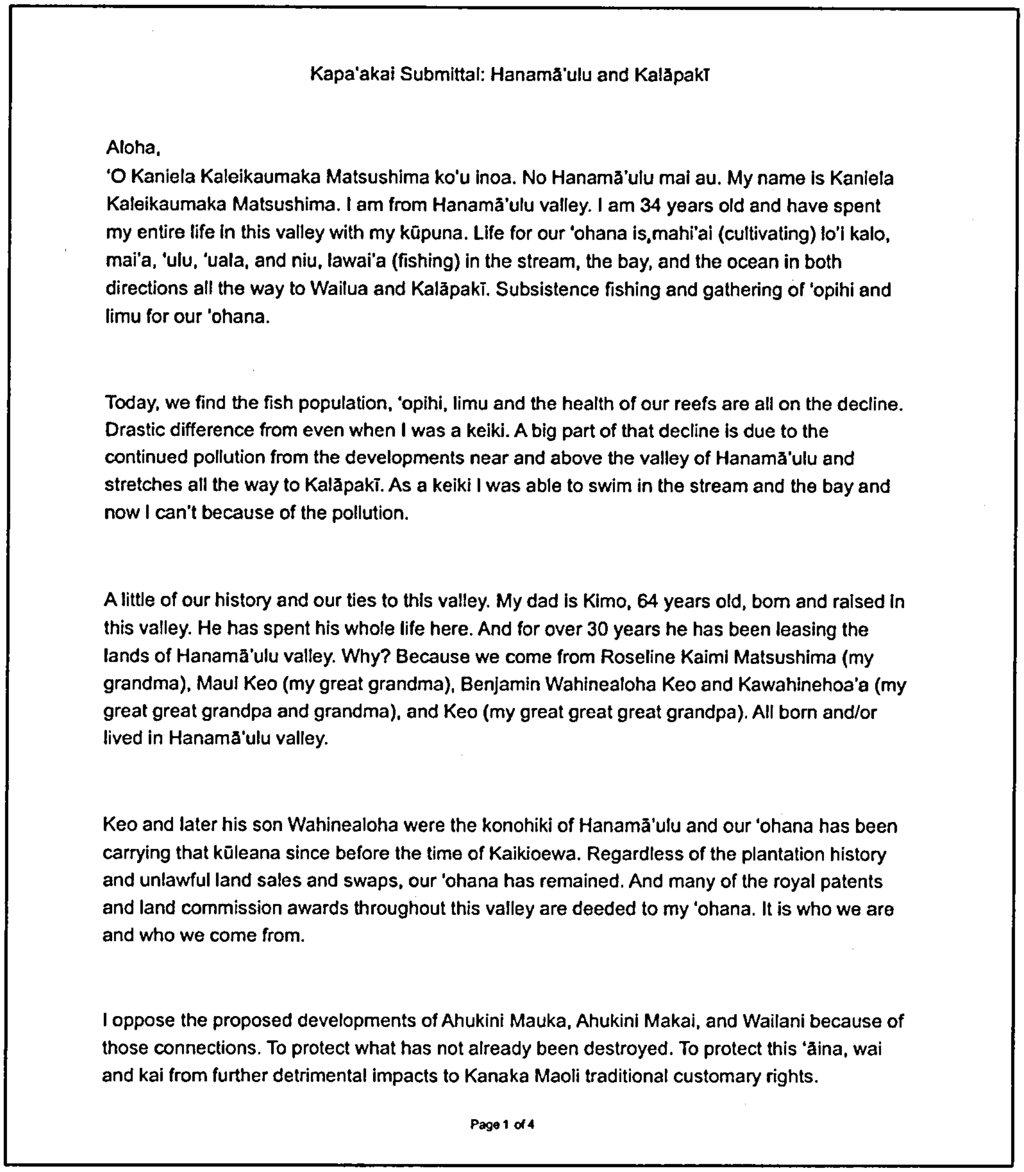
Notice to agent(s) is notice to principal, Notice to principal is notice to agent(s).

This is The End of this Declaration
Only Future Amendment(s) and or Affidavit(s) of Acceptance of Trustee(s) documents shall be attached.

8

Appendix C Declaration of Kaniela Kaleikaumaka Matsushima

The following is an e-mail from Kaniela Kaleikaumaka Matsushima of 23 May 2023 providing a declaration in response to a request for consultation pertaining to the Ka Pa'akai Analysis for the Ahukini Makai (and the Wailani Subdivision and Ahukini Mauka Subdivision projects). We are providing their testimony in full here without comment redacting only their personal contact information.



Kapa'akai Submittal: Hanamā'ulu and Kalāpakī

Aloha,
'O Kaniela Kaleikaumaka Matsushima ko'u inoa. No Hanamā'ulu mai au. My name is Kaniela Kaleikaumaka Matsushima. I am from Hanamā'ulu valley. I am 34 years old and have spent my entire life in this valley with my kūpuna. Life for our 'ohana is,mahi'ai (cultivating) lo'i kalo, mai'a, 'ulu, 'uala, and niu, lawai'a (fishing) in the stream, the bay, and the ocean in both directions all the way to Wailua and Kalāpakī. Subsistence fishing and gathering of 'opihi and limu for our 'ohana.

Today, we find the fish population, 'opihi, limu and the health of our reefs are all on the decline. Drastic difference from even when I was a keiki. A big part of that decline is due to the continued pollution from the developments near and above the valley of Hanamā'ulu and stretches all the way to Kalāpakī. As a keiki I was able to swim in the stream and the bay and now I can't because of the pollution.

A little of our history and our ties to this valley. My dad is Kimo, 64 years old, born and raised in this valley. He has spent his whole life here. And for over 30 years he has been leasing the lands of Hanamā'ulu valley. Why? Because we come from Roseline Kaimi Matsushima (my grandma), Maui Keo (my great grandma), Benjamin Wahinealoha Keo and Kawahinehoa'a (my great great grandpa and grandma), and Keo (my great great great grandpa). All born and/or lived in Hanamā'ulu valley.

Keo and later his son Wahinealoha were the konohiki of Hanamā'ulu and our 'ohana has been carrying that kūleana since before the time of Kaikioewa. Regardless of the plantation history and unlawful land sales and swaps, our 'ohana has remained. And many of the royal patents and land commission awards throughout this valley are deeded to my 'ohana. It is who we are and who we come from.

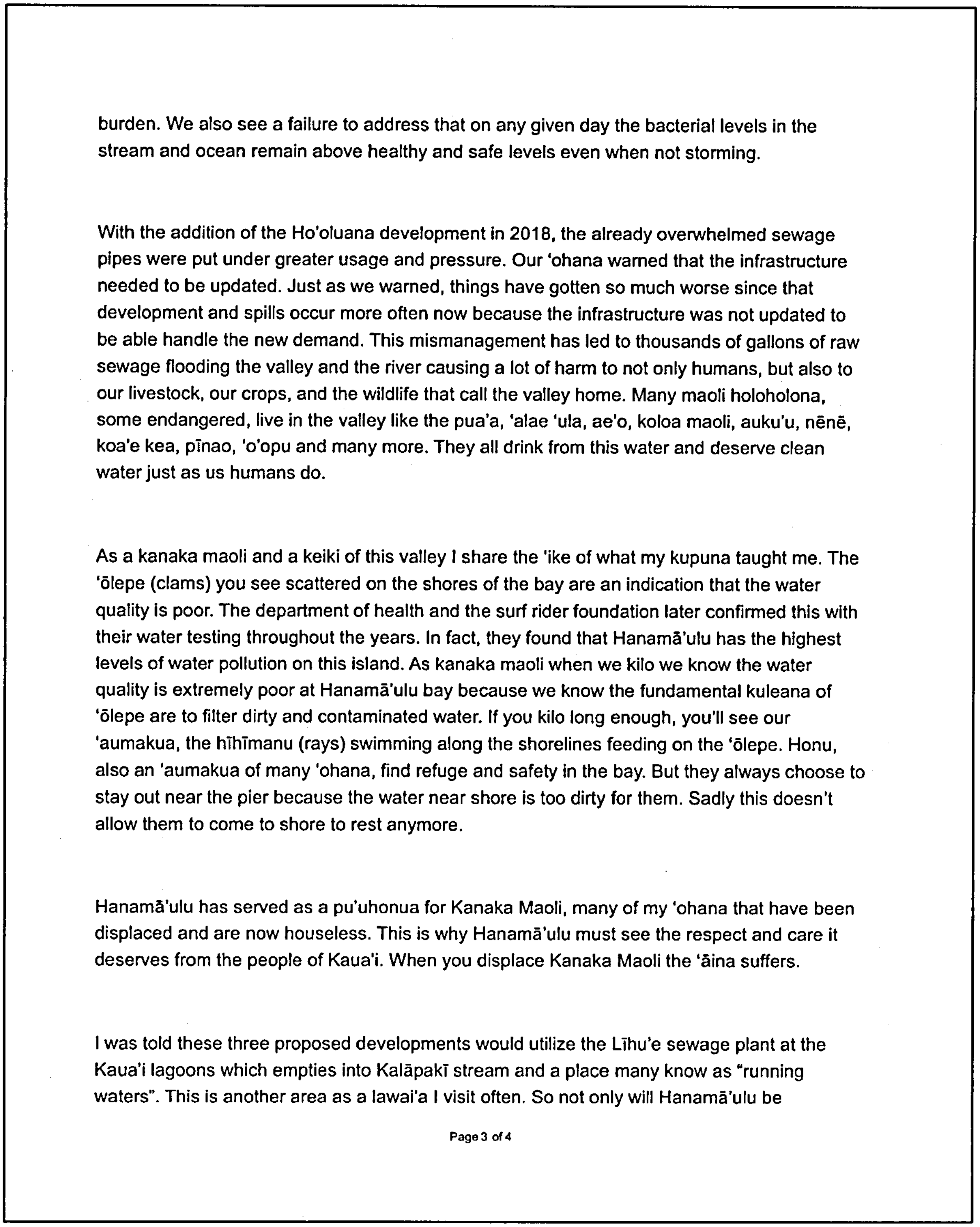
I oppose the proposed developments of Ahukini Mauka, Ahukini Makai, and Wailani because of those connections. To protect what has not already been destroyed. To protect this 'āina, wai and kai from further detrimental impacts to Kanaka Maoli traditional customary rights.

Page 1 of 4

While most of our 'ohana were forced off their lands, I live in gratitude today to say that we, the descendants of the Keo lineage are still here living our culture and native rights. The only way my dad saw he was able to keep our family, his keiki and mo'opuna in this valley to maintain kūleana and be with their ancestors was through a lease. Over the years due to the changes of our lands from ag to development, to the desecration of our sacred places, heiau, and family burials, I started to learn about development and what is involved in the process. Start to finish. The analysis, pulling permits, groundwork, etc. From what I've seen and learned, I know for certain that any more development anywhere near this valley would be a huge burden to not only the valley itself, also the stream, the ocean, and the plants and animals, and us Kanaka Maoli. It would have substantial negative impacts on our ability to sustain ourselves and exercise our traditional customary practices.

I am very familiar with the topography of the valley and plains above so I know where the drainage points would be if this development were to go through. These developments would funnel their run off and drainage directly into our lo'i kalo and mālā having huge impacts on our ability to mahi'ai. Over the years our 'ohana was forced to abandon their lo'i kalo and mālā on the Wailua side of Hanamā'ulu valley due to the locations of the old upside and downside Hanamā'ulu development's three drainage systems. They not only empty in what was once our 'ohana lo'i but also our 'ohana burials. Mounds and mounds of trash and contaminants come down daily and are an even heavier burden when we have large rains. I remember since a kid having to haul out trash from our pasture after heavy rain. It got to the point where we were spending more time dealing with trash than being able to mahi'ai and lawai'a.

Sewage spills from the pump house in Kapaia servicing the old Hanamā'ulu neighborhoods have occurred as far back as I can remember and sadly became "normal" for us and something we "just had to deal with" because the agencies that are supposed to help us haven't. My 'ohana has notified multiple agencies over the years of the health and sanitation concerns we have to protect the health and safety of our people and to try and remedy the situation with little to no avail. They seem to just put up signage and notify people to stay out of the water until the bacteria "flushes out" yet they fail to address the root cause of why this happens in the first place. It is the duty of those in public office to protect the health and safety of the people and instead we see the continued permitting of more projects that add to the



burden. We also see a failure to address that on any given day the bacterial levels in the stream and ocean remain above healthy and safe levels even when not storming.

With the addition of the Ho'oluana development in 2018, the already overwhelmed sewage pipes were put under greater usage and pressure. Our 'ohana warned that the infrastructure needed to be updated. Just as we warned, things have gotten so much worse since that development and spills occur more often now because the infrastructure was not updated to be able handle the new demand. This mismanagement has led to thousands of gallons of raw sewage flooding the valley and the river causing a lot of harm to not only humans, but also to our livestock, our crops, and the wildlife that call the valley home. Many maoli holoholona, some endangered, live in the valley like the pua'a, 'alae 'ula, ae'o, koloa maoli, auku'u, nēnē, koa'e kea, pīnao, 'o'opu and many more. They all drink from this water and deserve clean water just as us humans do.

As a kanaka maoli and a keiki of this valley I share the 'ike of what my kupuna taught me. The 'ōlepe (clams) you see scattered on the shores of the bay are an indication that the water quality is poor. The department of health and the surf rider foundation later confirmed this with their water testing throughout the years. In fact, they found that Hanamā'ulu has the highest levels of water pollution on this island. As kanaka maoli when we kilo we know the water quality is extremely poor at Hanamā'ulu bay because we know the fundamental kuleana of 'ōlepe are to filter dirty and contaminated water. If you kilo long enough, you'll see our 'aumakua, the hīhīmanu (rays) swimming along the shorelines feeding on the 'ōlepe. Honu, also an 'aumakua of many 'ohana, find refuge and safety in the bay. But they always choose to stay out near the pier because the water near shore is too dirty for them. Sadly this doesn't allow them to come to shore to rest anymore.

Hanamā'ulu has served as a pu'uhonua for Kanaka Maoli, many of my 'ohana that have been displaced and are now houseless. This is why Hanamā'ulu must see the respect and care it deserves from the people of Kaua'i. When you displace Kanaka Maoli the 'āina suffers.

I was told these three proposed developments would utilize the Līhu'e sewage plant at the Kaua'i lagoons which empties into Kalāpakī stream and a place many know as "running waters". This is another area as a lawai'a I visit often. So not only will Hanamā'ulu be negatively affected by these developments, so will all of Kalāpakī. Same as the Kapaia pump, the sewage treatment plant in Līhu'e is also overburdened. The waste then gets released near shore and has negative effects on all of the same things we talked about with Hanamā'ulu.

I oppose any further developments for those reasons. Development greatly affects Kanaka Maoli ability to practice our traditional customary rights and our way of life. From our lo'i kalo, mālā, our gathering of limu, opihi, and i'a from the stream and ocean. All of it. Development near Hanamā'ulu and Kalāpakī ahupua'a will cause irreversible damages. Changing our access and destroying what's left of the resources of the Hanamā'ulu and Kalāpakī ahupua'a. There is no way for me to justify further development in these areas when the past and present concerns I spoke about above have yet to be remedied. Development will only compound this burden.

ʻAʻole aʻe kau i ka pūlima
Ma luna o ka pepa o ka ʻēnemi
Hoʻohui ʻāina kūʻai hewa
I ka pono sivila aʻo ke kanaka

ʻAʻole mākou aʻe minamina
I ka puʻu kālā o ke aupuni
Ua lawa mākou i ka pōhaku
I ka ʻai kamahaʻo o ka āina

Ellen Wright Prendergast

Kaniela Kaleikaumaka Matsushima
[redacted]

Notice to agent(s) is notice to principal, notice to principal is notice to agent(s).

23, Mei, 2023

COUNTY OF KAUAʻI
PLANNING DEPARTMENT

SUBDIVISION REPORT
(REVISED)

S-2005-41

Applicant: VISIONARY LLC.
Surveyor/Authorized Agent Clyde T. Kodani/Kodani & Associates, Inc.

Date Accepted: January 15, 2009
Prelim Approval Not Applicable

Map Title *SUBDIVISION OF PORTION OF PARCEL 1 (TMK: 3-7-02), BEING PORTIONS OF R.P. 4481, L.C. AW. 7713, APANA 2, PART 7 TO V. KAMAMALU INTO LOTS 1 THROUGH 45, AT KALAPAKĪ AND HANAMĀʻULU, LĪHUʻE, KAUAʻI, HAWAIʻI*

GENERAL INFORMATION

Tax Map Key (4)	**Property Size**	**Zoning**	**General Plan**	**State Land Use Designation**
3-7-02:01 (Portion)	137 acres	Industrial (I-G)	Urban Center	Urban

Amount of Lots	**Land Classification (for Ag Parcels)**	**Permits Required**	**Maximum Density Utilized**
45	Not Applicable	None	No

CZO Requirements Met: [✓]Yes [ ]No If No, Explain: The subject parcel obtained a zoning amendment (ZA-96-2) which was approved by the Planning Commission on 2/08/96. The amendment reclassified portions of the property from Agriculture District (A) to Industrial District (I-G).

AGENCY COMMENTS

✓	**Public Works:**	March 21, 2009	✓	**Water:**	April 13, 2009	✓	**Health:**	March 31, 2009
✓	**DOT-Highways:**	January 03, 2006	✓	**SHPD:**	April 18, 2005		Other:	

EXISTING ROAD RIGHT-OF-WAY(S)

Road Name	Existing Width	Required Width	Paved **YES**	**NO**	Reserve	Dedication
Kāpule Highway	Varies	80 feet	✓			
Ahukini Road	Varies	80 feet	✓			

APPLICABLE FEES

☐	Environmental Impact Assessment (EIA)	☐	Park Dedication	☐	Determined by Appraisal Report

TENTATIVE APPROVAL

EVALUATION: The proposed subdivision establishes a total of 39 lots, 4 "bulk" lots that can be further developed, and 2 roadway lots within lands makai of Kāpule Highway. The development area is referenced as "Ahukini Makai" shall be subject to the applicable requirements of Ordinance No. PM-326-96, which was a part of the Līhuʻe-Hanamāʻulu Master Planned Area. As such, the EIA & Park Fees shall be determined upon further development of the lots and resolution of the conditions of the ordinance.

RECOMMENDATION: [✓]**Tentative Approval Subject to Conditions** *<Next Page>*

Staff Planner **21 April 2009**
Date

[ ]**Approved as Recommended** **Comments:** ____

Planning Director D.D. FOR 4/23/09
Date

FINAL APPROVAL

Acceptance Date: ____ [ ]**All Conditions Complied With**
Comments: ____

Approved and Recommended to the Commission:

Staff Planner *Date* *Planning Director* *Date*

G.1.a.1.

MAY 09 2023

CONDITIONS OF TENTATIVE APPROVAL: S-2005-41

1. Requirements of the Planning Department:

   a. An updated preliminary title report shall be submitted to the Planning Department for review.

   b. The Applicant shall resolve with the State Highways Division the establishment of a future road widening reserve along the frontage of Kāpule Highway and Ahukini Road. Should a reserve be required, it shall be subject to the specifications of the State Highways Division. There shall be no new structures permitted within the reserve, and any new structures should be setback from the reserve. The reserve along with its restrictions shall be incorporated into the deed descriptions of the affected lots, draft copies of which shall be submitted to the Planning Department for review and approval.

   c. All existing and proposed easements shall be identified in the deed descriptions of affected lots and shown on the final subdivision map. Draft copies of the deed descriptions shall be submitted to the Planning Department for review and approval.

   d. The Applicant is made aware that the streets designated within the subdivision must be officially named before the Department approves the construction plans. Street names should be in Hawaiian and be submitted to our Department for review and approval, along with a request letter and 12 maps (on 8½" x 14" paper). The maps should be detailed such that emergency vehicles, police services, postal deliveries, etc., are able to locate the street. References to roadway, such as the highway and other surrounding roads, should be shown on the street-naming map.

   e. The Applicant shall prepare and obtain construction plan approvals for necessary road, water, drainage, electrical and telephone utilities and facilities, and either construct the same or post a surety bond for completion.

   f. There shall be no direct access permitted onto Kāpule Highway and Ahukini Road from any of the lots within the proposed subdivision. Semi-circles denoting no direct access permitted shall be shown on the final subdivision map. This provision shall be incorporated as a restrictive covenant for the subject lots, draft copies of which shall be submitted to the Planning Department for review and approval.

   g. The Applicant shall be subject to the applicable requirements of Ordinance No. PM-326-96. Specifically, the following conditions shall apply to this subdivision:

      Conditions of Ordinance No. PM-326-96:

      - 4. (EIA credit)
      - 6. (design criteria outlined in "Draft Urban Design Plan")
      - 7. (park master plan)
      - 8. (roadway system)
      - 10. (construction material disposal site)
      - 11. (solid waste landfill site)
      - 12. (intersection improvements)
      - 13. (civil defense infrastructure)
      - 14. (affordable housing requirements)
      - 15. (infrastructure master plan)
      - 17. (density)
      - 19. (no development zone)
      - 21. (status report)

   h. Relative to the requirements/standards setforth in Ordinance No. 777, the subdivider shall resolve with the Planning Department the provision of public access.

      If public access is required, the applicant shall propose an access plan identifying the access location(s) for the review and approval of the Planning and Public Works

Departments. Furthermore, proper documents shall be prepared and ready for execution prior to final subdivision approval. The Planning Department reserves the right to impose additional conditions relating to this matter while in the process of resolving this condition

i. As noted on the subdivision application, the zoning designation for the project area is General Industrial District (I-G). In reviewing the subdivision layout as represented on the preliminary subdivision map, it is the department's position that Lots 21 and 23 is undersized to accommodate industrial-type uses based on its present configuration. Prior to final subdivision approval, the Applicant shall work with the Planning Department to seek feasible alternatives to resolve this matter.

j. The department strongly encourages the Applicant to consider establishing common driveway access locations for lots that are adjacent to one another, affecting Lots 7 through 45, in order to minimize access points along Roadway Lot 6, facilitate industrial vehicular traffic, and to assure public health, safety, and welfare is not compromised.

It would be the department's preference that common driveways serve as the primary access for adjacent lots and that it would be wide enough to accommodate two-way vehicular traffic.

k. The proposed subdivision is situated in close proximity to the Lihu'e Airport and will be impacted by the aircraft noise nuisances from this facility. As such, the subdivider shall establish covenants or disclosure documents to inform potential buyers within the project area that the proposed lots are subject to aircraft noise nuisances. Draft copies of the documents shall be submitted to the Planning Department for review and approval.

l. Pursuant to Section 9-3.8(b) of the Subdivision Ordinance, Kaua'i County Code (1987), the Applicant shall submit to the Planning Department an electronic record (digitized format) of the final subdivision map(s) on disk for record keeping purposes prior to final subdivision approval.

2. Requirements of the Department of Public Works (DPW):

DRAINAGE

a. There are natural drainage ways and swales that flow through and along the property. These natural water courses will collect and concentrate storm flows through the site. A Drainage Study and provisions need to be established to prevent structures from being built in flood prone areas and to preserve the function and capacity of the watercourses.

b. The natural pond in Lot 4 should be maintained.

c. The subdivision and subsequent development of residences and other impermeable surfacing will increase storm water flowage. A Drainage Study needs to be made to evaluate the impact of the increased storm runoffs. Measures to keep flow rates and drainage patterns to predevelopment levels are required. There shall be no increase in storm flowage to the County Līhu'e Refuse Transfer Station.

d. A Grading Permit will be required for this project. The property size is more than 10 acres. The maximum area that may be opened for grading or grubbing at any one time is ten (10) acres. The area of land that may be opened shall not exceed ten (10) acres. Grading/grubbing shall be accomplished in increments not more than 10 acres. Best Management Practices (BMP's) shall be provided to the maximum extent practicable to prevent damage by erosion, sedimentation and dust to streams, water courses, natural drainage areas, and the property of others.

e. If required, curbs, gutters, and sidewalks shall be provided. Sidewalks shall comply with the American Disability Act and shall comply with the American Disability Act. A copy of the final document review by DCAB shall be submitted to the County's ADA Coordinator and to the Department of Public Works.

f. The Applicant shall obtain construction plan approvals for the necessary roadways, water, drainage, electrical, telephone and derby cable utilities.

3. Requirements of the Department of Water (DOW):

a. The subdivider shall prepare and receive Department of Water's approval of a Water Master Plan for full development of the Līhu‘e-Hanamā‘ulu Master Plan by the Applicant. The Water Master Plan shall also address all source, storage and transmission requirements for the planned development area.

b. The subdivider shall pay the Department of Water, a Facilities Reserve Charge of $202,400* (44 lots at $4,600 per lot). The subdivider shall pay any rate increase and/or applicable charges in effect at the time of receipt.

* The subdivider is made aware that FRC offsets may apply if source, storage or qualifying transmission facilities are provided by the subdivider.

c. The subdivider shall prepare and get Department of Water's approval on construction drawings for necessary water system facilities and either construct said facilities or post a performance bond for construction. These facilities shall also include:

(1) All water system facilities as required for the subdivision in the approved Water Master Plan.

d. If a bond is filed to secure final subdivision approval, the subdivider shall clearly letter the following on the approved construction plans, final subdivision map and deeds:

> *"Domestic water service will not be available until the required construction improvements for this subdivision are completed and accepted by the Department of Water, County of Kaua`i."*

The subdivider shall record this deed restriction with the Bureau of Conveyances within ninety (90) days of final subdivision approval by the Planning Department.

4. Requirements of the State Department of Health (DOH):

a. The subject project is located in close proximity to the County sewer system serving the Līhu‘e area. All new wastewater generated shall be disposed in the County sewer system serving the Līhu‘e area.

b. The property could be harboring rodents that will be dispersed to the surrounding areas when the site is cleared. In accordance with Chapter 11-26, entitled "Vector Control", Title 11, HAR, the Applicant shall ascertain the presence or absence of rodents on the property. Should the presence of rodents be determined, the applicant shall eradicate the rodents prior to clearing the site.

c. Noise will be generated during the site preparation and construction phase of this project. The applicable maximum permissible sound levels as stated in Chapter 11-46, entitled "Community Noise Control", Title 11, HAR, shall not be exceeded unless a noise permit is obtained from the Department of Health.

d. Temporary fugitive dust emissions could be emitted when the subdivided lots are developed. In accordance with Chapter 11-60.1, entitled "Air Pollution Control", Title 11, HAR, effective air pollution control measures shall be provided to minimize or prevent any fugitive dust emissions caused by the construction work from impacting the surrounding areas. This includes the off-site roadways used to enter/exit the project. The control measures include but are not limited to the use of water wagons, sprinkler systems, dust fences, etc.

e. In accordance with Chapter 11-58.1, entitled "Solid Waste Management Control", Title 11, HAR, the construction waste that will be generated by the project shall be disposed of at a solid waste disposal facility that is in compliance with the State Department of Health. The open burning of any of these wastes on or off site is prohibited.

f. The Department of Health, Clean Water Branch (CWB) has reviewed the subject document and offers these comments. Please note that the review is based solely on the information provided in the subject document and its compliance with Hawai'i Administrative Rules (HAR), Chapters 11-54 and 11-55. The Applicant may be responsible for fulfilling additional requirements related to the department's program. The department recommends that the Applicant reads the standard comments found on our website at: http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

(1) Any project and its potential impacts to State waters must meet the following criteria:

(A) Antidegradation policy (HAR Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected;
(B) Designated uses (HAR Section 11-54-3), as determined by the classification of the receiving State waters; and
(C) Water quality criteria (HAR Sections 11-54-4 through 11-54-8).

g. The Army Corps of Engineers should be contacted at (808) 438-9258 to identify whether a Federal Permit (including a Department of Army Permit) is required for this project. Pursuant to Section 401(a)(1) of the Federal Water Pollution Act (commonly known as the "Clean Water Act"), a Section 401 Water Quality Certification is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters..."

h. A National Pollutant Discharge Elimination System (NPDES) general permit coverage is required for discharges of wastewater, including storm water runoff, into State surface waters (HAR Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, the Applicant may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

(1) Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations, Section 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi);
(2) Construction activities including clearing, grading, and excavation that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and different schedules under a larger common plan of development or sale. **An NPDES Permit is required before the commencement of the construction activities.**
(3) Discharge of treated effluent from leaking underground storage tank remedial activities;
(4) Discharge of once through cooling water less than one (1) million gallons per day;
(5) Discharge of hydrotesting water;
(6) Discharge of construction dewatering effluent;
(7) Discharge of treated effluent from petroleum bulk stations and terminals;

(8) Discharge of treated effluent from well drilling activities;
(9) Discharges of treated effluent from recycled water distribution systems;
(10) Discharges of storm water from a small municipal separate storm sewer system; and
(11) Discharge of storm water from decorative ponds and tanks.

i. The Clean Water Branch (CWB) requires that a Notice of Intent (NOI) to be covered by a NPDES general permit for any of the above activities be submitted at least 30 days before the commencement of the respective activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

j. The Applicant may be required to apply for an individual NPDES Permit if there is any type of activity in which wastewater is discharged from the project into State waters, and/or coverage of the discharge(s) under the NPDES general permit(s) is not permissible. An application for the NPDES Permit is to be submitted at least 180 days before the commencement of the activities. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

k. Hawai‘i Administrative Rules, Section 11-55-38, also requires the owner to either submit a copy of the NOI or NPDES Permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD) or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHPD. The Applicant shall provide a copy of the request for review by SHPD or SHPD's determination letter for the project along with the NOI or NPDES permit application, as applicable.

l. Please note that in general, anyone causing or contributing to a violation of the State water quality standards must apply for an NPDES permit coverage. Discharges which are not an integral and normal part of the operation, but are caused by heavy rains, floods, or other events outside the reasonable control of the owner or operation must also be permitted. Point sources include vehicle wash discharges or a discharge or processed wastewater from your construction activity. If there is a discharge of any pollutant to State waters, Hawai‘i Revised Statutes (HRS), Section 342D-30, provides for penalties of up to $25,000 per day for each violation.

The owner/applicant is advised to contact the CWB at 808.596.4309 to resolve any NOI or NPDES concerns.

5. Requirements of the Highways Division of the State Department of Transportation (DOT):

Highway Issues

a. The proposed location of accesses to our State road/highway will need to be reviewed and approved by our Highways Division. The Applicant should submit a written request for any new accesses or change of existing accesses to our Right-of-Way Branch, Highways Division. The Highways Division will likely impose a number of conditions and requirements on the grant of new accesses or the revision of existing ones. The DOT may require changes to the proposed accesses based on an evaluation of the access openings, including, without limitation, the location and number of accesses.

b. A Traffic Impact Analysis Report (TIAR), including intersection signal studies, reflecting the development timetable and impact of all the subdivisions through to full build out (including the potential for further subdivisions of the subject properties) should be prepared by Visionary LLC (Visionary) and submitted to the DOT for review and approval. This should be done before Visionary is permitted to proceed with the development.

For any changes or revisions to the development plans or timetable, Visionary must submit a supplement and update to the TIAR, addressing the changes or revisions, for the DOT's review and prior written approval. This should be done before Visionary is permitted to continue the development.

Any TIAR submitted to the DOT must contain recommendations regarding traffic mitigation measures and improvements. The TIARs should also contain Visionary's commitment to pay for and fund the design, construction and implementation of the traffic mitigation and improvements measures. Without the proper mitigation and roadway improvements, the development of the proposed subdivisions will likely create significant adverse traffic impacts to our facilities. If the Applicant has development plans for the subdivisions, the plans, drawings, maps and other supporting documentation should be submitted with the TIARs and any supplements thereto.

c. No additional storm water runoff will be allowed onto our road/highway right-of-ways.

d. Construction plans for any work within or adjoining our road/highway right-of-way must meet our highway standards and be submitted to our Highways Division for prior review and approval. The Applicant (and/or its contractors) will need to obtain and have applicable building and environmental permits, including a permit to work in our road/highway right-of-ways from our Highways Division.

e. The Applicant will be required to enter into and comply with use and occupancy agreement(s) with our Highways Division for all utilities and services to the subdivisions that are within our road/highway right-of-way.

Airport Issues

f. No access connection to Ahukini Road from the proposed Road "B" and "C" will be considered at this time. Such access would require resolution of a number of issues. Access to and use of airport roads require terminal road circulation study, security controls and arrangements for the use, management and maintenance of the roads meeting FAA guidelines, and detailed reviews by our Airports Division for consistency and compatibility with Līhu'e Airport (LIH) development and expansion plans.

g. The development of the subdivision will affect our LIH helicopter operations and any developed lots in this Ahukini Makai area will be impacted by aircraft noise and flight patterns and any future expansion of LIH. Development of the subdivision lands with structures and other improvements will alter the conditions under which aircraft and pilots now operate. At a minimum, safety perimeter or other clear or safety zones may have to be established within the Ahukini Makai area. Consequently, to address these and other issues relating the development impact on airport and aircraft operations, we strongly recommend consulting with our Airports Division before the subdivision/development plans progress any further.

h. Also, the Airports Division has had previous discussions with Visionary or its predecessor about possible acquisition of land in the Ahukini Makai area based on the land's agricultural zoning and designation. The land area would be used for the expansion of LIH and to accommodate existing and/or additional airport activities at LIH. Our Airports Division has been in the process of seeking funding approval for the acquisition. We plan to continue these discussions with Visionary.

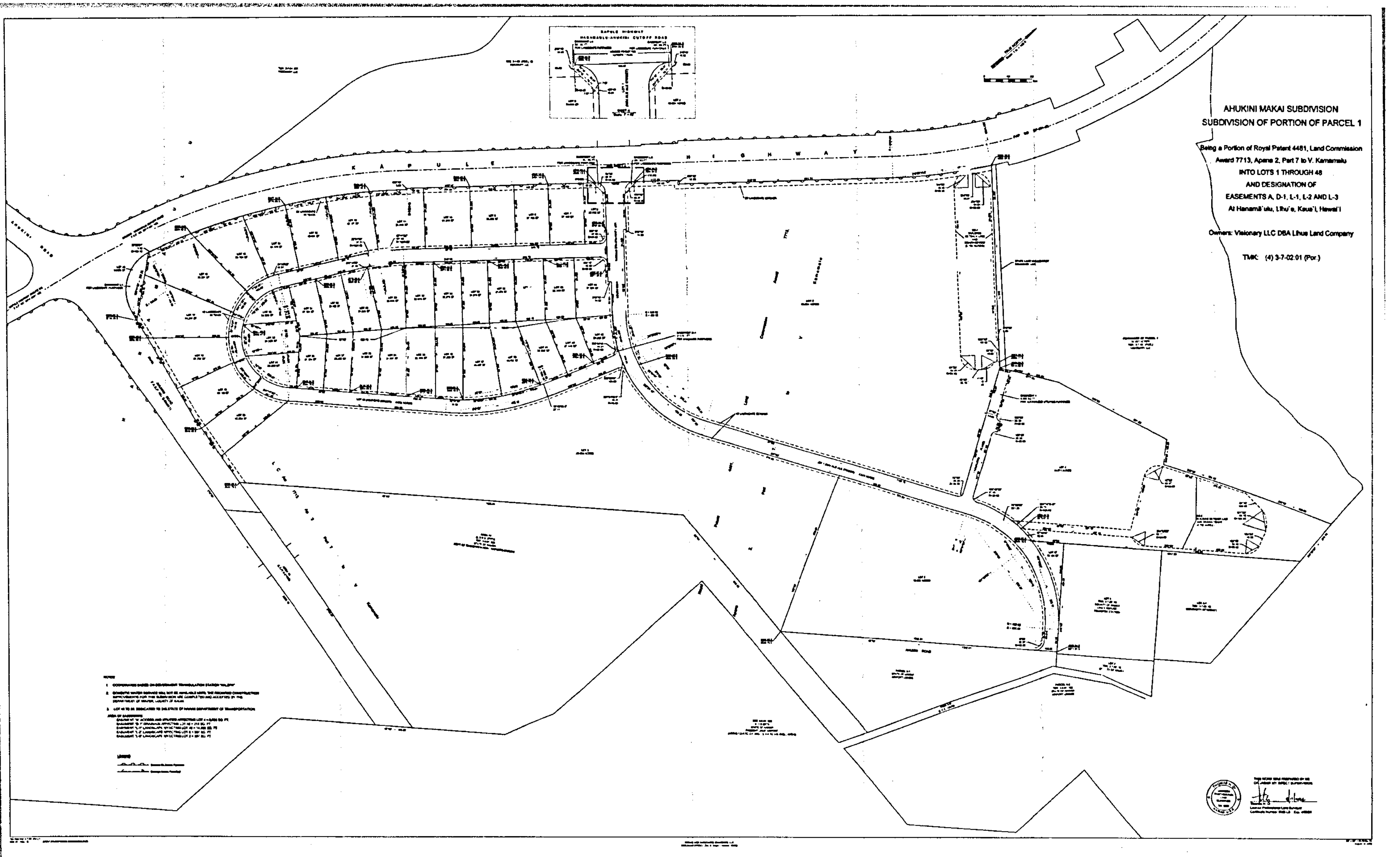
i. The topography of the Ahukini Makai area has surface and storm water drainage and runoff sloping toward our LIH roads and property. No such additional flow from the proposed subdivision development will be allowed onto our airport roads, drainage systems and land areas.

j. Similar to Condition 5.d. above, for our highways, the same requirements for construction plans are applicable to work affecting or next to LIH and Ahukini Road and with submittals going to our Airports Division.

k. The Applicant is made aware that the Department's concerns should be first addressed and resolved to our satisfaction because of the impacts to our facilities. The Department is willing to discuss our transportation concerns and our interest in the Ahukini Makai lands with Visionary.

6. As recommended by the State Historic Preservation Division of the Department of Land and Natural Resources, in the event that historic resources including human skeletal remains are identified during routine construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, Kaua'i Section, needs to be contacted immediately at (808) 742-7033.

7. The applicant is advised that prior to and/or during construction and use additional conditions may be imposed by government agencies. Should this occur, the applicant shall resolve these conditions with the respective agency(ies).

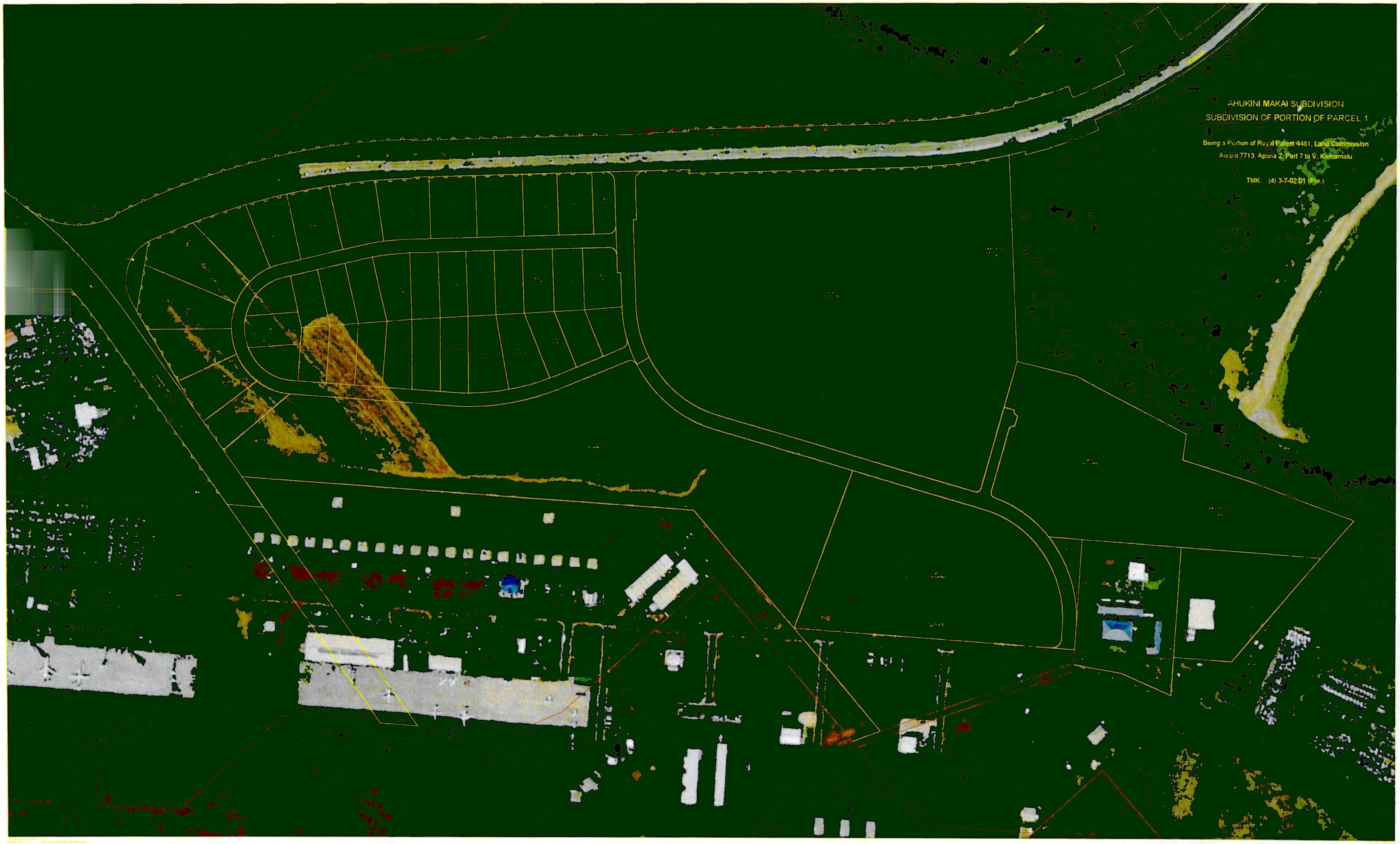


AHUKINI MAKAI SUBDIVISION
SUBDIVISION OF PORTION OF PARCEL 1

Being a Portion of Royal Patent 4481, Land Commission
Award 7713, Apana 2, Part 7 to V. Kamamalu
INTO LOTS 1 THROUGH 48
AND DESIGNATION OF
EASEMENTS A, D-1, L-1, L-2 AND L-3
At Hanamā`ulu, Līhu`e, Kaua`i, Hawai`i

Owners: Visionary LLC DBA Lihue Land Company

TMK: (4) 3-7-02:01 (Por.)



AHUKINI MAKAI SUBDIVISION
SUBDIVISION OF PORTION OF PARCEL 1

Being a Portion of Royal Patent 4481, Land Commission
Award 7713, Apana 2, Part 7 to V. Kamamalu

TMK. (4) 3-7-02:01 (Por.)

[redacted]

COUNTY OF KAUAʻI
PLANNING DEPARTMENT
4444 RICE STREET, SUITE A473 LĪHUʻE, HAWAIʻI 96766
(808) 241-4050

SUBDIVISION APPLICATION ROUTING FORM

DATE: January 30, 2023

Subdivision Map Review and Approval			
REQUEST:	☐ **Preliminary** ☒ **Pre-Final**	☐ **Final** ☐ **Extension**	
SUDIVISION APPLICATION NO:	**Pre-Final Subdivision No. 2005-41**		
Owner(s)/Applicant(s):	**Ahukini Makai Subdivision** **Applicant: Visionary LLC. DBA Līhuʻe Land Company**		
Name of Surveyor/Engineer/Authorized Agent:			
Tax Map Key:	**Tax Map Key (4) 3-7-002:001**	**Assigned to:**	**Kenny**
Improvements:			

Route To:

☒	DPW-Engineering	☐	Department of Transportation - STP
☐	DPW-SolidWaste	☐	DOT-Highway, Kauai
☒	DPW-Wastewater	☒	State Department of Health
☐	Fire-Department	☒	State Historic Preservation Division
☐	Department of Parks & Recreation	☐	UH Sea Grant
☒	County Housing-Agency	☒	U.S. Postal Department
☐	KHPRC	☐	Other:
☒	County Water Department		
☒	County Transportation Agency		

COMMENTS from DPW Engineering:

We have no further comments and recommend proceeding to Final Map.

Sincerely,

Digitally signed by Michael Moule
Date: 2023.01.30 15:24:24 -10'00'

Michael Moule, P.E.
Chief, Engineering Division

Department of Water
County of Kaua'i

4398 PUA LOKE STREET
LIHU'E, KAUA'I, HAWAI'I 96766
PHONE: (808) 245-5400 / FAX: (808) 245-5813

Water has no substitute……Conserve it!

SUBDIVISION REPORT

TO: **PLANNING DEPARTMENT**
FROM: **DEPARTMENT OF WATER**

TMK: 3-7-02:001 NAME: Grove Farm, Inc. (Ahukini Makai) SURVEYOR: *Kodani* REPORT NO: **S-2005-41**

1.	Domestic water is adequate. Tentative approval is recommended.	☐
	Water Requirements are not affected. Tentative approval is recommended.	☐
2.	All requirements have been fully met and; therefore, Final approval is recommended.	☒
3.	Before final approval can be recommended, the subdivider must:	☐
A.	Pay the Department of Water the following charges in effect at the time of receipt. At the present time, these charges include:	☐
1)	The Facilities Reserve Charge (FRC): ______ Lot @ $14,115 per lot = $ ______	☐
2)	Payment to install _____, or relocate _____, service connections(s) at the fixed cost of $ _____. If the subdivider causes a delay in the service connection installation after one year since final map approval, the subdivider shall be charged the increase in the fixed cost, if any.	☐
3)	Deposit (the subdivider will either be billed or returned the difference between this deposit and the actual cost of construction of $ _____ for construction by the Department of Water.	☐
B.	Submit to the Department of Water a copy of the subdivider's permit to perform work upon a State highway from the State Highways Division	☐
C.	Prepare and receive Department of Water's approval of construction drawings for the necessary water system facilities and either construct said facilities or post a performance bond for construction. These facilities shall also include:	☐
D.	Prepare and convey to the Department of Water a Right-of-Entry and Temporary Grant of Easement for the purpose of construction, repair, maintenance, and operation of the subdivision water system improvements installed in other than County-owned property.	☐
E.	If a bond is filed, to secure final subdivision approval, the subdivider shall clearly letter the following on the approved construction plans, final subdivision map, and deeds: "Domestic water service will not be available until the required construction improvements for this subdivision are completed and accepted by the Department of Water, County of Kaua'i." This deed restriction shall be recorded with the Bureau of Conveyances within ninety (90) days of final subdivision approval by the Planning Department.	☐
4.	Installation of service connections will not be required until request for water service is made. The applicant for service will be charged the applicable service connection charges at that time.	☐
5.	Other (or remarks):	☐

Steven Kyono
Steven Kyono (Apr 25, 2020)

Steve Kyono, P.E., Board Advisor
Department of Water, County of Kauai

04/24/2020
Date

SUBDIVISION REPORT NO. **S-2005-41**

RF:mlm
S-2005-41, FINAL APPROVAL, Grove Farm, 3-7-002-001

DAVID Y. IGE
GOVERNOR OF HAWAII

BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

JANET M. BERREMAN, M.D., M.P.H., F.A.A.P.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
KAUAI DISTRICT HEALTH OFFICE
3040 UMI STREET
LIHUE, HAWAII 96766

County of Kauai
PLANNING DEPT.
20 JAN 31 P2:1
RECEIVED

January 22, 2020

Mr. Ka'aina Hull, Director
County of Kauai
Planning Department
4444 Rice Street, Suite A473
Lihue, Hawaii 96766

Dear Mr. Hull:

SUBJECT: **PRE-FINAL** Subdivision Map Review and Approval
Subdivision No.: **S-2005-14**
Applicant: **Visionary, LLC**

We have no additional environmental health concerns to add to those previously submitted on March 31, 2009.

Should you have any questions, please call me at 241-3323.

Sincerely,

Patrick Peck, Chief
District Environmental Health Program Kauai

Enc.
PP:DT/ckn

LINDA LINGLE
GOVERNOR

CHIYOME LEINAALA FUKUNO, M.D.
DIRECTOR OF HEALTH

DILEEP G. BAL, M.D., M.S., M.P.H.
KAUAI DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
KAUAI DISTRICT HEALTH OFFICE
3040 UMI STREET
LIHUE, HAWAII 96766

'09 APR -1 P4:26

March 31, 2009

Mr. Ian Costa, Director
County of Kauai
Planning Department
4444 Rice Street, Suite 473
Lihue, HI 96766

Dear Mr. Costa:

SUBJECT: **REVISED** Preliminary Subdivision Map Review and Approval
Subdivision No.: **S-2005-41**
Applicant: **Visionary LLC.**

We have reviewed the subject application and the comments that we previously submitted on May 26, 2005. We offer the following updated environmental health concerns for your consideration.

1. The subject project is located in close proximity to the County sewer system serving the Lihue area. All new wastewater generated shall be disposed in the County sewer system serving the Lihue area.

2. The property may harbor rodents which will be dispersed to the surrounding areas when the site is cleared. In accordance with Chapter 11-26, entitled Vector Control of Title 11, Hawaii Administrative Rules (HAR), the applicant shall ascertain the presence or absence of rodents on the property. Should the presence of rodents be determined, the applicant shall eradicate the rodents prior to clearing the site.

3. Noise will be generated during the site preparation and construction phase of this project. The applicable maximum permissible sound levels as stated in Title 11, HAR, Chapter 11-46, entitled

Community Noise Control shall not be exceeded unless a noise permit is obtained from the Department of Health.

4. Temporary fugitive dust emissions could be emitted when the project site is prepared for construction and when construction activities occur. At the time in accordance with Title 11, HAR, Chapter 11-60.1 entitled Air Pollution Control effective air pollution control measures shall be provided to prevent or minimize any fugitive dust emissions caused by construction work from impacting the surrounding areas. This includes the off-site roadways used to enter/exit the project.

5. The construction waste that will be generated by the project shall be disposed of at a solid waste disposal facility that is in compliance with the applicable provisions of Title 11, HAR, Chapter 11-58.1 entitled Solid Waste Management Control. The open burning of any of these wastes on or off site prohibited.

6. The Department of Health, Clean Water Branch (CWB) has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

   I. Any project and its potential impacts to State waters must meet the following criteria:

      a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
      b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

      c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

   II. Please call the Army Corps of Engineers at (808) 438-9258 to see if this project requires a Department of the Army (DA) permit. Permits may be required for work performed in, over, and under navigable waters of the United States.

Projects requiring a DA permit also require a Section 401 Water Quality Certification (WQC) from our office.

III. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

a. Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi).

b. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. **An NPDES permit is required before the start of the construction activities.**

c. Treated effluent from leaking underground storage tank remedial activities.

d. Once through cooling water less than one (1) million gallons per day.

e. Hydrotesting water.

f. Construction dewatering effluent.

g. Treated effluent from petroleum bulk stations and terminals.

h. Treated effluent from well drilling activities.

i. Treated effluent from recycled water distribution systems.

j. Storm water from a small municipal separate storm sewer system.

k. Circulation water from decorative ponds or tanks.

7. You must submit a separate NOI form for each type of discharge at least 30 days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

8. For types of wastewater not listed in Item 3 above or wastewater discharging into Class 1 or Class AA waters, you must obtain an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

9. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

10. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54 and/or permitting requirements, specified in HAR, Chapter 11-55 may be subject to penalties of $25,000 per day per violation.

    If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at (808) 586-4309.

Due to the general nature of the application submitted, we reserve the right to implement future environmental health restrictions when more detailed information is submitted.

Should you have any questions, please call me at 241-3323.

Sincerely,

Gerald N Takamura

Gerald N. Takamura, Chief
District Environmental Health Program

GNT

JOSH GREEN, M.D.
GOVERNOR

EDWIN H. SNIFFEN
DIRECTOR

Deputy Directors
DREANALEE K. KALILI
TAMMY L. LEE
ROBIN K. SHISHIDO
JAMES KUNANE TOKIOKA

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
KAUAI DISTRICT
1720 HALEUKANA STREET
LIHUE, HAWAII 96766

IN REPLY REFER TO:

DIR 0854
HWY-K 4.230038

February 23, 2023

Mr. Kaaina Hull, Director
County of Kauai Department of Planning
4444 Rice Street, Ste. A473
Lihue, Hawaii 96766
Attention: Mr. Kenneth A. Estes, Planner

Dear Mr. Hull:

Subject: Pre-Final Subdivision Map Review and Approval
Subdivision No. S-2005-41 (Ahukini Makai Subdivision)
Applicant: Visionary LLC dba Lihue Land Company

The subject map was received at our Director's office in Honolulu on September 6, 2022. The Kauai District Office completed the initial review and forwarded comments to Visionary on September 20, 2022. Visionary responded with the requested information on January 18, 2023.

We have completed our review and find the Pre-Final Subdivision Map received on September 6, 2022, to be acceptable.

Should you have any questions, please contact me at (808) 241-3006 or via email at lawrence.j.dill@hawaii.gov.

Sincerely,

Lawrence J. Dill, P.E.
Kauai District Engineer

c: David Hinazumi, Visionary LLC

JOSH GREEN, M.D.
GOVERNOR

1959

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

EDWIN H. SNIFFEN
DIRECTOR

Deputy Directors
DREANALEE K. KALILI
TAMMY L. LEE
ROBIN K. SHISHIDO
JAMES KUNANE TOKIOKA

IN REPLY REFER TO:

AIR-PM 23.0353

County of Kaua'i
PLANNING DEPT.

'23 ABR 24 A8:50

RECEIVED

April 21, 2023

Mr. Kaaina Hull, Director
County of Kauai
Department of Planning
4444 Rice Street, Suite A473
Lihue, Hawaii 96766

Attention: Mr. Kenneth A. Estes, Planner

Dear Mr. Hull:

Subject: Pre-Final Subdivision Map Review and Approval
Ahukini Makai – Subdivision No. S-2005-41
Lihue, Kauai, Hawaii
Tax Map Key: (4) 3-7-002:001

The State of Hawaii, Department of Transportation, Airports (DOTA) is in receipt of your April 12, 2023, memorandum requesting review and approval to the Pre-Final Subdivision Map dated July 1, 2022, Subdivision No. S-2005-41.

Based on DOTA's review of the Pre-Final Subdivision Map and discussions with the landowner, DOTA approves the Pre-Final Subdivision Map dated July 1, 2022.

If there are any questions, please contact Mr. Mike Auerbach, Land Agent of our Airports Property and Business Development Staff at (808) 838-8684, or by email at mike.auerbach@hawaii.gov.

Sincerely,

EDWIN H. SNIFFEN
Director of Transportation

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

September 28, 2018

IN REPLY REFER TO:
Log No. 2017.02067
Doc No. 1809GC15
Archaeology

Paul Togioka
County of Kauai
Public Works, Engineering Division
4444 Rice Street, Suite 275
Lihue, HI 96766
ptogioka@kauai.gov

Dear Mr. Togioka:

SUBJECT: **Chapter 6E-42 Historic Preservation Review – REVISED COMMENTS**
Clearinghouse Application No. CL-2017-031
Ahukini Makai Subdivision (S-2005-41), PW 08.17.087
Hanamāʻulu Ahupuaʻa, Puna District, Island of Kauaʻi
TMK: (4) 3-7-002:001

This letter provides the State Historic Preservation Division's (SHPD's) revised comments regarding the subject application. SHPD received the original application submittal on September 15, 2017 from the County of Kauai Department of Public Works. The submittal indicated that the owners, Visionary LLC, proposed to grade a 127.68-acre portion of the 171.9-acre parcel, including excavation of 239,626 cubic yards and an embankment of 122,419 cubic yards.

On March 28, 2018, SHPD requested an archaeological inventory survey (AIS) be conducted as SHPD had insufficient information to assess the potential for the proposed project to impact significant historic properties (Log No. 2017.02067, Doc No. 1803GC32).

On April 17, 2018, SHPD received supplemental information from Kodani & Associates Engineers, LLC, requesting reconsideration of SHPD's request for an AIS to be conducted. The supplemental information included a copy of a previous SHPD determination letter and an AIS titled *Additional Archaeological Inventory Survey Molokoa Lands Project Area, Lands of Hanamāʻulu and Kalapaki, Līhuʻe District, Island of Kauaʻi* (Franklin and Walker, 1994). The AIS covered 552.3 acres within Hanamāʻulu and Kalapaki, including the current project area. The Ahukini Makai parcel comprises 143.8 acres. Franklin and Walker (1994) indicated that due to extensive agricultural pursuits and land alterations it is unlikely that surface or subsurface historic properties will be encountered. No historic properties were documented during a pedestrian survey for this specific parcel. In a letter dated October 25, 1994, SHPD commented on the *Lihue Hanamaulu Master Plan, The Lihue Plantation Co Ltd (AMFAC/JMB)* and indicated that that the project areas were adequately covered by the Walker and Franklin (1994) archaeological study. The SHPD determined that no significant sites occur in the project area and that the project will have no effect on significant historic properties (Log No. 12985, Doc. No. 9410NM17).

Based on the information provided, **SHPD's determination is no historic properties affected** for the subject application pursuant to HRS 6E; no significant historic properties have been identified within the current project area. Pursuant to HAR §13-284-7(e), "When the SHPD agrees that the action will not affect any significant historic properties, this is the SHPD's written concurrence and historic preservation review ends". The historic preservation review process is ended. The permit issuance may proceed.

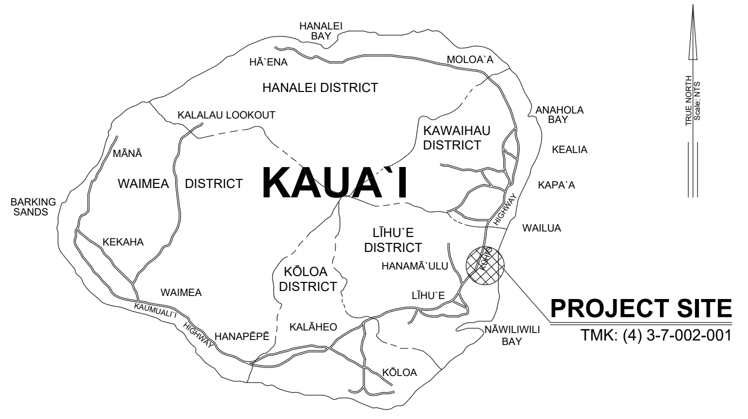
Please contact Ka'āhiki Solis, SHPD Cultural Historian, at Sheleigh.Solis@hawaii.gov for any cultural resources concerns and Dr. Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov or at (808) 692-8019 for any questions regarding archaeological resources or this letter.

Aloha,
Alan Downer

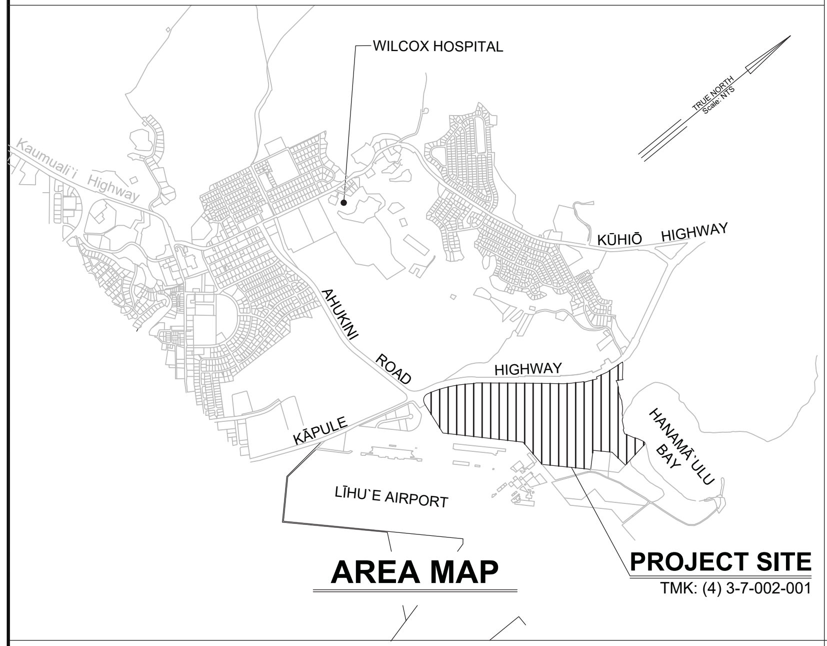
Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy, State Historic Preservation Officer

cc: Chance Bukoski, cbukoski@kauai.gov
Kaina Hull, khull@kauai.gov
Andy Miles, Kodani & Associates Engineers, LLC, andy@kodani.com

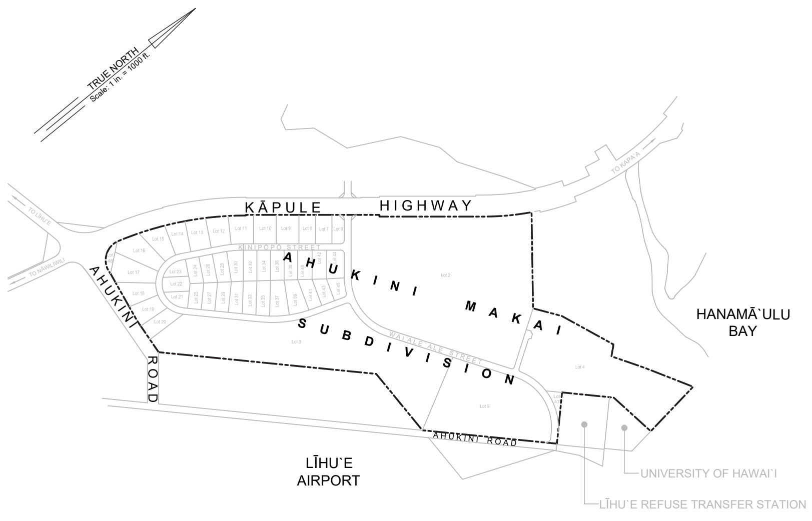
APPENDIX O. CONSTRUCTION PLANS (SELECTED SHEETS)


HANALEI BAY
HĀ`ENA
MOLOA`A
HANALEI DISTRICT
KALALAU LOOKOUT
ANAHOLA BAY
KAWAIHAU DISTRICT
KEALIA
MĀNĀ
WAIMEA
DISTRICT
KAUA`I
KAPA`A
BARKING SANDS
WAILUA
KEKAHA
LĪHU`E DISTRICT
HANAMĀ`ULU
KŌLOA DISTRICT
WAIMEA
LĪHU`E
KAUMUALI`I HIGHWAY
HANAPĒPĒ
KALĀHEO
NĀWILIWILI BAY
KŌLOA
TRUE NORTH Scale: NTS
PROJECT SITE
TMK: (4) 3-7-002-001

ISLAND MAP


WILCOX HOSPITAL
TRUE NORTH Scale: NTS
Kaumuali`i Highway
KŪHIŌ HIGHWAY
AHUKINI ROAD
HIGHWAY
KĀPULE
HANAMĀ`ULU BAY
LĪHU`E AIRPORT
PROJECT SITE
TMK: (4) 3-7-002-001

AREA MAP


TRUE NORTH
Scale: 1 in. = 1000 ft.
KĀPULE HIGHWAY
TO LĪHU`E
TO NĀWILIWILI
TO KAPA`A
KINIPŌPŌ STREET
AHUKINI MAKAI SUBDIVISION
WAI`ALE`ALE STREET
AHUKINI ROAD
HANAMĀ`ULU BAY
LĪHU`E AIRPORT
UNIVERSITY OF HAWAI`I
LĪHU`E REFUSE TRANSFER STATION

LOCATION MAP

AHUKINI MAKAI SUBDIVISION

(S-2005-41)

Tentative Approval July 12, 2005
Līhu`e, Kaua`i, Hawai`i
Tax Map Key: 3-7-002:001 (4th Division)
Water Master Plan For:
Former AMFAC / JMB Līhu`e - Hanamā`ulu Master Planned Community

PREPARED FOR:

VISIONARY LLC
P.O.BOX 662069
LĪHU`E, KAUA`I, HAWAI`I 96766

PREPARED BY:

KODANI & ASSOCIATES ENGINEERS, LLC
3126 AKAHI STREET, LIHU`E, KAUA`I, HAWAI`I 96766
EMAIL: KODANI@KODANI.COM PH: 808.245.9591 FAX: 808.246.6368
KODANIENGINEERS.COM

INDEX TO DRAWINGS

SHEET DESCRIPTION	PAGE NUMBER	SHEET DESCRIPTION	PAGE NUMBER	SHEET DESCRIPTION	PAGE NUMBER
Cover Sheet	1	Cross Sections	27	Construction Notes & Details	53
Construction Notes	2	Cross Sections	28	Electrical Details	54
Construction Notes	3	Cross Sections	29	Electrical Details	55
Existing Conditions	4	Cross Sections	30	Electrical Trench Sections & Micellanerous Details	56
General Site Plan	5	Storm Water Management Basin	31	Hawaiian Telcom Manhole Details	57
General Sign and Striping Plan	6	Details	32		
General Utility Plan	7	Details	33		
Wai`ale`ale Street Plan & Profile	8	Intersection Curb Return Details	34		
Wai`ale`ale Street Plan & Profile	9	Curb Ramp Details	35		
Kaualoku Street Plan & Profile	10	Curb Ramp Details	36		
Kinipopo Street Plan & Profile	11	Curb Ramp Details	37		
Kinipopo Street Plan & Profile	12	Curb Ramp Details	38		
Kinipopo Street Plan & Profile	13	Water Utility Details	39		
Kaualoku Place Plan & Profile	14	Water Utility Details	40		
Utilities Cross Sections Kinipōpō Street	15	Water Utility Details	41		
Utilities Cross Sections Wai`ale`ale Street	16	Water Utility Details	42		
General Grading Reference Map	17	Erosion Control BMP Details	43		
Partial Grading Plan	18	Traffic Control Plan	44		
Partial Grading Plan	19	Electrical Site Plan Reference Map	45		
Partial Grading Plan	20	Electrical Facilities Plan	46		
Partial Grading Plan	21	Electrical Facilities Plan	47		
Partial Grading Plan	22	Electrical Facilities Plan	48		
Partial Grading Plan	23	Electrical Facilities Plan	49		
Partial Grading Plan	24	Electrical Pullbox Details	50		
Partial Grading Plan	25	Electrical Pullbox Details	51		
Cross Sections	26	Electrical Pullbox Details	52		

APPROVED:

DIRECTOR, PLANNING DEPARTMENT DATE
COUNTY OF KAUA`I

COUNTY ENGINEER, DEPT. OF PUBLIC WORKS DATE
COUNTY OF KAUA`I

CHIEF, WASTEWATER MANAGEMENT DIVISION, DEPT. OF PUBLIC WORKS DATE
COUNTY OF KAUA`I

MANAGER & CHIEF ENGINEER, DEPT. OF WATER DATE
COUNTY OF KAUA`I

CHIEF, ENVIRONMENTAL MANAGEMENT DIVISION, DEPARTMENT OF HEALTH DATE
STATE OF HAWAI`I

DISTRIBUTION ENGINEER DATE
KAUA`I ISLAND UTILITY COOPERATIVE

DESIGN ENGINEER DATE
HAWAIIAN TELCOM

DESIGN ENGINEER DATE
SPECTRUM

DEPUTY DIRECTOR - AIRPOTS DIVISION, DEPARTMENT OF TRANSPORTATION DATE
STATE OF HAWAII
N/A

ADMINISTRATOR, HIGHWAYS DIVISION, DEPARTMENT OF TRANSPORTATION, DATE
(APPROVAL GRANTED FOR WORK WITHIN STATE RIGHT-OF-WAY ONLY)
APPROVAL LETTER NO._____ DATE:_____ (I.P. NO._____)

SHEET LABEL: 0cs

K04-4022B AHUKINI MAKAI SUBDIVISION (S-2005-41) GF
April 22, 2020

FILE NAME:200401 K04-4022B_AhukiniMakai_SheetSet.dwg

ENVIRONMENTAL CONTROL NOTES FOR GRADING

1. IN ACCORDANCE WITH CHAPTER 11-60.1, AIR POLLUTION CONTROL, TITLE 11, HAWAI`I ADMINISTRATIVE RULES, THE PROPERTY OWNER / DEVELOPER SHALL BE RESPONSIBLE FOR ENSURING THAT EFFECTIVE CONTROL MEASURES ARE PROVIDED TO MINIMIZE OR PREVENT ANY VISIBLE DUST EMISSION CAUSED BY THE CONSTRUCTION WORK FROM IMPACTING THE SURROUNDING AREAS INCLUDING THE OFF-SITE ROADWAYS USED TO ENTER / EXIT THE PROJECT. THESE MEASURES INCLUDE BUT ARE NOT LIMITED TO THE USE OF WATER WAGONS, SPRINKLER SYSTEMS, DUST FENCES, ETC.

2. IN ACCORDANCE WITH CHAPTER 11-55, WATER POLLUTION CONTROL AND CHAPTER 11-54, WATER QUALITY STANDARDS, TITLE 11, HAWAI`I ADMINISTRATIVE RULES, THE PROPERTY OWNER / DEVELOPER SHALL BE RESPONSIBLE FOR ENSURING THAT THE BEST MANAGEMENT PRACTICE (BMP) TO MINIMIZE OR PREVENT THE DISCHARGE OF SEDIMENTS, DEBRIS AND OTHER WATER POLLUTANT INTO STATE WATERS ARE PROVIDED AT ALL TIMES.

3. IN ACCORDANCE WITH CHAPTER 11-58, SOLID WASTE MANAGEMENT CONTROL, TITLE 11, HAWAI`I ADMINISTRATIVE RULES, THE PROPERTY OWNER / DEVELOPER SHALL BE RESPONSIBLE FOR ENSURING THAT GRUB MATERIAL, DEMOLITION WASTE AND CONSTRUCTION WASTE GENERATED BY THE PROJECT ARE DISPOSED OF IN A MANNER OR AT A SITE APPROVED BY THE STATE DEPARTMENT OF HEALTH. DISPOSAL OF ANY OF THESE WASTES BY BURNING IS PROHIBITED.

4. THE PROPERTY OWNER / DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL APPLICABLE PERMITS FROM THE DEPARTMENT OF HEALTH INCLUDING BUT NOT LIMITED TO NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), NOTICE OF INTENT AND GENERAL PERMIT FOR STORM WATER, HYDROSTATIC TEST AND DEWATERING DISCHARGES PRIOR TO COMMENCING CONSTRUCTION. NPDES PERMIT SHALL BE REQUIRED PRIOR TO GRADING OR GRUBBING WORK OVER AN AREA OF ONE ACRE OR MORE.

5. AFTER EACH RAINFALL EVENT, THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM THIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE COUNTY ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.

6. BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE EMPLOYED AT ALL TIMES TO THE MAXIMUM EXTENT PRACTICABLE TO PREVENT DAMAGE BY SEDIMENTATION, EROSION OR DUST TO STREAMS, WATERCOURSES, NATURAL AREAS AND THE PROPERTY OF OTHERS.

7. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR ALL PROJECTS WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND. THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAI`I AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM.

8. IN ACCORDANCE WITH CHAPTER 11-46, COMMUNITY NOISE CONTROL, HAWAI`I ADMINISTRATIVE RULES, THE CONTRACTOR AND THE PROPERTY OWNER AND DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING EFFECTIVE CONTROL MEASURES TO MINIMIZE OR PREVENT CONSTRUCTION RELATED NOISE FROM IMPACTING THE RESIDENTS IN THE IMMEDIATE AREA. IF REQUIRED, NOISE REDUCTION MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR DURING THE CONSTRUCTION WORK.

9. THE PROPERTY MAY HARBOR RODENTS WHICH WILL BE DISPERSED TO THE SURROUNDING AREAS WHEN THE SITE IS CLEARED. IN ACCORDANCE WITH CHAPTER 11-26, ENTITLED VECTOR CONTROL OF TITLE 11, HAR, THE APPLICANT SHALL ASCERTAIN THE PRESENCE OR ABSENCE OF RODENTS ON THE PROPERTY. SHOULD THE PRESENCE OF RODENTS BE DETERMINED, THE APPLICANT SHALL ERADICATE THE RODENTS PRIOR TO CLEARING THE SITE.

10. A COPY OF THE PLANS, CONSTRUCTION SCHEDULE AND / OR WRITTEN MEASURES THAT IS REQUIRED TO BE SUBMITTED BY THE CONTRACT (DUST CONTROL MEASURES / PLANS) SHOULD ALSO BE SENT TO THE DEPARTMENT OF HEALTH FOR MONITORING PURPOSES.

ENVIRONMENTAL NOTES

1. IN ACCORDANCE WITH CHAPTER 11-60.1, AIR POLLUTION CONTROL, TITLE 11, HAWAI`I ADMINISTRATIVE RULES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EFFECTIVE CONTROL MEASURES ARE PROVIDED TO MINIMIZE OR PREVENT ANY VISIBLE DUST EMISSION CAUSED BY THE CONSTRUCTION WORK FROM IMPACTING THE SURROUNDING AREAS INCLUDING THE OFF-SITE ROADWAYS USED TO ENTER / EXIT THE PROJECT. THESE MEASURES INCLUDE BUT ARE NOT LIMITED TO THE USE OF WATER WAGONS, SPRINKLER SYSTEMS, DUST FENCES, ETC.

2. IN ACCORDANCE WITH CHAPTER 11-55, WATER POLLUTION CONTROL AND CHAPTER 11-54, WATER QUALITY STANDARDS, TITLE 11, HAWAI`I ADMINISTRATIVE RULES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE BEST MANAGEMENT PRACTICE (BMP) TO MINIMIZE OR PREVENT THE DISCHARGE OF SEDIMENTS, DEBRIS AND OTHER WATER POLLUTANT INTO STATE WATERS IS PROVIDED AT ALL TIMES.

3. IN ACCORDANCE WITH CHAPTER 11-58, SOLID WASTE MANAGEMENT CONTROL, TITLE 11, HAWAI`I ADMINISTRATIVE RULES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT GRUB MATERIAL, DEMOLITION WASTE AND CONSTRUCTION WASTE GENERATED BY THE PROJECT ARE DISPOSED OF IN A MANNER OR AT A SITE APPROVED BY THE STATE DEPARTMENT OF HEALTH. DISPOSAL OF ANY OF THESE WASTES BY BURNING IS PROHIBITED.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL APPLICABLE PERMITS FROM THE DEPARTMENT OF HEALTH INCLUDING BUT NOT LIMITED TO NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), NOTICE OF INTENT AND GENERAL PERMIT FOR STORM WATER, HYDROSTATIC TEST AND DEWATERING DISCHARGES PRIOR TO COMMENCING CONSTRUCTION. NPDES PERMIT SHALL BE REQUIRED PRIOR TO GRADING OR GRUBBING WORK OVER AN AREA OF ONE ACRE OR MORE.

5. AFTER EACH RAINFALL EVENT, THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM THIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE COUNTY ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.

6. BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE EMPLOYED AT ALL TIMES TO THE MAXIMUM EXTENT PRACTICABLE TO PREVENT DAMAGE BY SEDIMENTATION, EROSION OR DUST TO STREAMS, WATERCOURSES, NATURAL AREAS AND THE PROPERTY OF OTHERS.

7. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS FOR ALL PROJECTS WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND. THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAI`I AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM.

8. IN ACCORDANCE WITH CHAPTER 11-46, COMMUNITY NOISE CONTROL, HAWAI`I ADMINISTRATIVE RULES,THE CONTRACTOR AND THE PROPERTY OWNER AND DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING EFFECTIVE CONTROL MEASURES TO MINIMIZE OR PREVENT CONSTRUCTION RELATED NOISE FROM IMPACTING THE RESIDENTS IN THE IMMEDIATE AREA. IF REQUIRED, NOISE REDUCTION MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR DURING THE CONSTRUCTION WORK.

9. THE PROPERTY MAY HARBOR RODENTS WHICH WILL BE DISPERSED TO THE SURROUNDING AREAS WHEN THE SITE IS CLEARED. IN ACCORDANCE WITH CHAPTER 11-26, ENTITLED VECTOR CONTROL OF TITLE 11, HAR, THE APPLICANT SHALL ASCERTAIN THE PRESENCE OR ABSENCE OF RODENTS ON THE PROPERTY. SHOULD THE PRESENCE OF RODENTS BE DETERMINED, THE APPLICANT SHALL ERADICATE THE RODENTS PRIOR TO CLEARING THE SITE.

10. A COPY OF THE PLANS, CONSTRUCTION SCHEDULE AND / OR WRITTEN MEASURES THAT IS REQUIRED TO BE SUBMITTED BY THE CONTRACT (DUST CONTROL MEASURES / PLANS) SHOULD ALSO BE SENT TO THE DEPARTMENT OF HEALTH FOR MONITORING PURPOSES.

TEMPORARY DUST CONTROL MEASURES FOR GRADING

1. THE GRADED OR PROJECT SITE THAT IS CLEARED OF VEGETATION SHALL BE KEPT DAMP WITH WATER CONTINUOUSLY FOR SEVEN (7) DAYS A WEEK. AT THE END OF EACH DAY, THE SITE SHALL BE SUFFICIENTLY DAMPENED WITH WATER ON A CONTINUAL BASIS SO THAT THE SITE WILL REMAIN MOISTENED DURING THE NIGHT.

2. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO THAT EXCAVATION, EMBANKMENT,AND IMPORTED MATERIAL SHALL BE DAMPENED WITH WATER ON A CONTINUAL BASIS TO PREVENT DUST PROBLEMS.

3. IN APPLYING FOR A GRADING PERMIT, THE CONTRACTOR SHALL SUBMIT PLANS, SCHEDULES AND / OR WRITTEN MEASURES WHICH PROVIDES FOR DUST CONTROL. THE DUST CONTROL MEASURES SHALL CONTAIN POSITIVE STATEMENTS WHICH REQUIRE ACTIONS OR WORK THAT PREVENT DUST PROBLEMS. NO PERMITS WILL BE ISSUED UNLESS THE COUNTY IS ASSURED THAT DUST AND EROSION PROBLEMS WILL BE MINIMIZED.

TEMPORARY EROSION CONTROL MEASURES FOR GRADING

1. TEMPORARY VEGETATIVE COVER SHALL BE PLANTED WITHIN A PERIOD OF 30 CALENDAR DAYS AFTER THE SITE HAS BEEN GRADED OR BARED OF VEGETATION OR IF THE SITE WILL BE SUSPENDED FOR MORE THAN THIRTY (30) CALENDAR DAYS.

2. TEMPORARY VEGETATIVE COVER SHALL CONSIST OF 40 LBS. COMMON RYE GRASS SEED PER ACRE, 400 LBS. PER ACRE 10-10-10 OR EQUIVALENT FERTILIZER WORKED INTO THE SEED BED BEFORE PLANTING. TEMPORARY SPRINKLER SYSTEM IS TO BE INSTALLED CONCURRENTLY WITH ALL PLANTINGS. PLANTING AND MAINTENANCE OF GRASS SHALL CONFORM TO THE "HAWAI`I STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2005" AND ITS AMENDMENTS.

PERMANENT EROSION CONTROL MEASURES FOR GRADING

1. THE CONTRACTOR SHALL GRASS THE ENTIRE PROJECT SITE, EXCEPT PAVED AREAS WITH BERMUDA GRASS SPRIGS. THE GRASS SHALL BE PLANTED, FERTILIZED, AND MAINTAINED IN ACCORDANCE WITH THE "HAWAI`I STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2005" AND ITS AMENDMENTS.

2. THE CONTRACTOR SHALL GRASS ALL EXPOSED AREAS THAT HAVE BEEN CONSTRUCTED TO FINAL GRADES WITHIN A PERIOD OF 30 CALENDAR DAYS.

3. IN LIEU OF GRASS SPRIGS (NOTE 1), THE CONTRACTOR MAY USE HYDROMULCH WITH SEEDINGS AND IRRIGATION SPRINKLER SYSTEM.

PAVEMENT AND TRENCH RESTORATION NOTES

1. TRENCH REPAVING SHALL BE A MINIMUM 8-INCHES THICK BASE AND 2-INCHES MINIMUM ASPHALT CONCRETE (STATE MIX V). IF THE EXISTING PAVEMENT STRUCTURE IS GREATER IN THICKNESS AND QUALITY, THE REPAVING SHALL MATCH THE EXISTING PAVEMENT STRUCTURE.

2. PAVEMENT RESURFACING WORK SHALL INCLUDE 2-INCH THICKNESS OF EXISTING A.C. TO BE COLD PLANED AND CONSTRUCTION OF A MINIMUM OF 2-INCH OF NEW A.C. (STATE MIX V) LAYER.

3. ROAD RESTORATION FOR TRENCHES ALIGNED ALONG THE LONGITUDINAL DIRECTION SHALL INCLUDED PAVEMENT RESURFACING AS FOLLOWS:

A. ROADS WITH PAVEMENT WIDTHS OF LESS THAN 12 FEET WIDE SHALL BE REPAVED THE ENTIRE WIDTH.

B. ROADWAYS BETWEEN 12 FEET AND 28 FEET WIDE WITH NO STRIPING SHALL BE PAVED FOR HALF OF THE ROADWAY.

C. ROADWAYS WITH NO STRIPING AND PAVEMENT WIDTHS GREATER THAN 28 FEET SHALL HAVE A 12-FOOT WIDE TRAVEL WAY RESURFACED.

4. ROAD RESTORATION FOR TRENCHES ALIGNED PERPENDICULAR TO THE ROADWAY SHALL INCLUDE ROAD RESURFACING FOR A MINIMUM OF 6 FEET BEYOND THE TRENCH EDGES.

5. THE ENTIRE ROAD INTERSECTION SHALL BE RESURFACED WHENEVER TRENCH REPAVING IS REQUIRED WITHIN ANY PORTION OF AN INTERSECTION. THE LIMITS OF RESURFACING SHALL BE THE CURVE RETURNS OF THE ROADWAYS OF THE INTERSECTIONS.

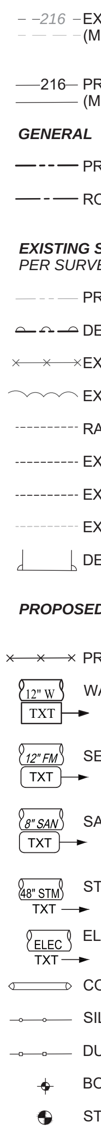
6. ALL EXISTING PAVEMENT STRIPING DISTURBED BY THIS PRODUCT SHALL BE RESTORED.THE STRIPING MATERIALS SHALL BE THERMOPLASTIC TAPE OR THERMOPLASTIC EXTRUSION. PAINTING IS NOT ACCEPTABLE.

7. THE LIMITS OF ROAD RESTORATION WORK MAY BE REVISED BY THE ENGINEERING DIVISION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS DURING PROCESSING OF ROAD PERMITS FOR THIS PROJECT.

ABBREVIATIONS

A.C.	ASBESTOS CEMENT (WHEN USED TO DESIGNATE PIPE TYPE)
AC	ASPHALT CONCRETE (WHEN USED TO DESIGNATE PAVEMENT TYPE)
AM	ANTE MERIDIAN (BEFORE NOON)
APPROX	APPROXIMATE (APX)
APR	APRIL
ARV	AIR RELIEF VALVE OR COMBINATION AIR VALVE
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AT&T	AMERICAN TELEPHONE AND TELEGRAPH
AUG	AUGUST
ᴮL (BL)	BASELINE
BGGV	BEVEL GEAR GATE VALVE
BMP	BEST MANAGEMENT PRACTICE
BO	BLOW OFF
BTC	BOTTOM OF CURB
BV	BUTTERFLY VALVE (WHEN USED TO DESIGNATE A VALVE)
BV	BOTTOM VERTICAL (WHEN USED TO DESIGNATE A BEND)
BVB	BOTTOM VERTICAL BEND
BWS	BOARD OF WATER SUPPLY
℄ (CL)	CENTERLINE
C	CHORD
CB	CATCH BASIN
C.I.	CAST IRON
CL	CLASS
CLR	CLEARANCE
COK	COUNTY OF KAUAI
CONC	CONCRETE
CVR	COVER
Δ	DEFLECTION OR CURVE ANGLE (DELTA)
Ø (D)	DIAMETER
DEC	DECEMBER
DET	DETAIL
D.I.	DUCTILE IRON (WHEN USED TO DESIGNATE A MATERIAL TYPE)
DI	DRAIN INLET (WHEN USED TO DESIGNATE A STRUCTURE)
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
DOW	DEPARTMENT OF WATER
DWG	DRAWING
DWS	DEPARTMENT OF WATER SUPPLY
EA	EACH
EW	EACH WAY
ELEC	ELECTRICAL
ELEV	ELEVATION
EP	EDGE PAVEMENT
EX.	EXISTING
EXP	EXPIRE
FE	FLANGE END
FEB	FEBRUARY
FH	FIRE HYDRANT
FM	SEWER FORCE MAIN
FT	FEET
FF	FINISH FLOOR
GALV	GALVANIZE
GF	GROVE FARM
GV	GATE VALVE
H	HORIZONTAL
HDOT	HAWAII DEPARTMENT OF TRANSPORTATION
HDPE	HIGH-DENSITY POLYETHYLENE
HEX	HEXAGONAL
HORIZ	HORIZONTAL
HTEL	HAWAIIAN TELCOM
HWY	HIGHWAY
I.D.	INSIDE DIAMETER
INCH	INCHES
IRR	IRRIGATION
INT	INTERSECTION
INV	INVERT
JAN	JANUARY
JUN	JUNE
JUL	JULY
KDOW	KAUAI DEPARTMENT OF WATER
LC	LENGTH OF CURVE
LF	LINEAR FEET
LG	LONG
LT	LEFT
MAR	MARCH
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MPH	MILES PER HOUR
MPT	MALE PIPE THREAD
NA (N/A)	NOT APPLICABLE
NO	NUMBER
NOV	NOVEMBER
N.T.S.	NOT TO SCALE
O/S	OFFSET
OC	ON CENTER
OCT	OCTOBER
OF	OVERFLOW
O.T.	OUTSIDE DIAMETER
PC	POINT OF CURVATURE
PE	PLAIN END
PH	PHONE
ᴾL (PL)	PROPERTY LINE
PLCS	PLACES
PLH	PUHI-LIHUE-HANAMAULU
PM	POST MERIDIAN (AFTER NOON)
PP	POWER POLE
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS
RC	REINFORCED CONCRETE
RD	ROAD
REF	REFERENCE
REIN	REINFORCEMENT
ROW	RIGHT OF WAY
RT	RIGHT
RWGV	RESILIENT WEDGE BEVEL GEAR GATE VALVE
SAN	SANITARY SEWER
S4C	TYPE OF BACKFILL MATERIAL
SDMH	STORM DRAIN MANHOLE
SEPT	SEPTEMBER
SHT	SHEET
SIC	SANDWICH ISLE COMMUNICATIONS, INC.
SMH	SEWER MANHOLE
SS	STAINLESS STEEL
ST.	STREET
STA	STATION
STD	STANDARD
STM	STORM SEWER
STY	STYRENE
T	TANGENT (LENGTH, WHEN USED TO DESIGNATE CURVE DATA)
T	THICKNESS (WHEN USED TO DESIGNATE MATERIAL CHARACTERISTICS)
TCP	TRAFFIC CONTROL PLAN
THK	THICK
TMK	TAX MAP KEY
TV	TOP VERTICAL
TVB	TOP VERTICAL BEND
TXT	TEXT
TYP	TYPICAL
V	VERTICAL
VB	VERTICAL BEND
VCP	VITRIFIED CLAY PIPE
W/	WITH
W	WATER
WL	WATERLINE
WSS	WATER SYSTEM STANDARDS
WTP	WATER TREATMENT PLANT
X	BY
ZRC	ZINC RICH COATING

LEGEND:



SURFACE

EXISTING CONTOURS (MAJOR)
(MINOR)

PROPOSED CONTOUR (MAJOR)
(MINOR)

GENERAL

PROPERTY LINE OF PROJECT SITE

ROAD CENTERLINE

EXISTING SITE FEATURES
PER SURVEY & EXISTING MAPS

PROPERTY LINE

DENOTES NO VEHICLE ACCESS PERMITTED

EXISTING WIRE FENCE

EXISTING TREE LINE

RADIAL LINES

EXISTING WATER

EXISTING UTILITIES *(ELEC/TEL/CABLE)*

EXISTING REFERENCED FEATURES

DENOTES ACCESS PERMITTED

PROPOSED SITE FEATURES

PROPOSED FENCE

WATER

SEWER FORCE MAIN

SANITARY SEWER

STORM SEWER

ELECTRIC AND COMMUNICATION

COMPOSITE FILTER BERM

SILT FENCE

DUST FENCE

BORE HOLE

STATION EQUALITY

CLYDE T. KODANI
No. 4808–C

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

CONSTRUCTION NOTES

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

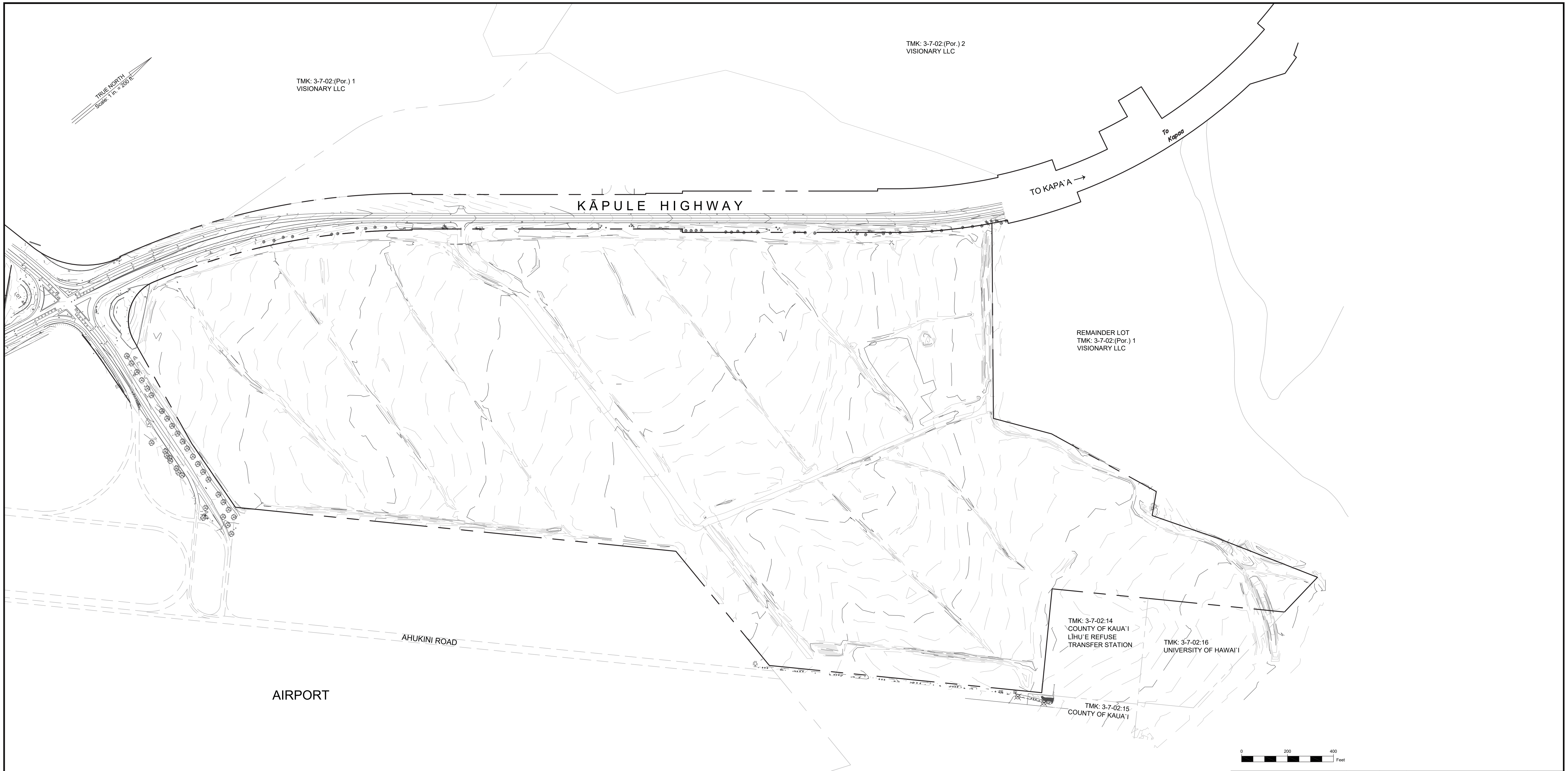
APPROVED:

N/A

MANAGER & CHIEF ENGINEER, DATE
DEPT. OF WATER, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

Gen02	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 3 OF 57 SHEETS


TRUE NORTH
Scale: 1 in. = 200 ft.
TMK: 3-7-02:(Por.) 1
VISIONARY LLC
TMK: 3-7-02:(Por.) 2
VISIONARY LLC
KĀPULE HIGHWAY
TO KAPA`A →
To Kapaa
REMAINDER LOT
TMK: 3-7-02:(Por.) 1
VISIONARY LLC
TMK: 3-7-02:14
COUNTY OF KAUA`I
LĪHU`E REFUSE
TRANSFER STATION
TMK: 3-7-02:16
UNIVERSITY OF HAWAI`I
TMK: 3-7-02:15
COUNTY OF KAUA`I
AHUKINI ROAD
AIRPORT
0
200
400
Feet

CLYDE T. KODANI
No. 4808-C

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

EXISTING CONDITIONS

APPROVED:

COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I DATE

APPROVED:

N/A

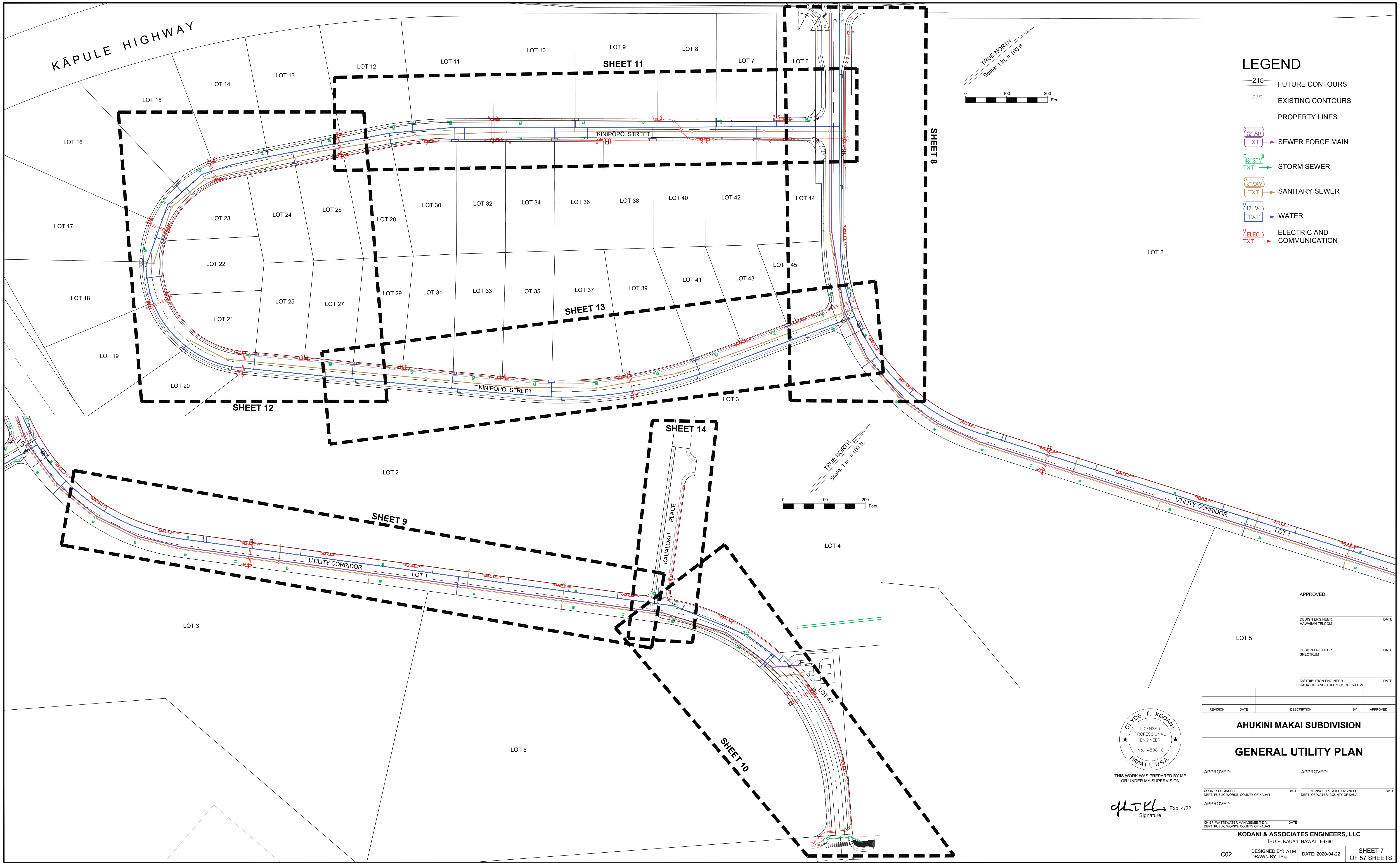
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUA`I DATE

APPROVED:

CHIEF, WASTEWATER MANAGEMENT DIV. DEPT. PUBLIC WORKS, COUNTY OF KAUA`I DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

SP03
DESIGNED BY: ATM
DRAWN BY: TP.
DATE: 2020-04-22
SHEET 4
OF 57 SHEETS


KĀPULE HIGHWAY
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 20
LOT 21
LOT 22
LOT 23
LOT 24
LOT 25
LOT 26
LOT 27
LOT 28
LOT 29
LOT 30
LOT 31
LOT 32
LOT 33
LOT 34
LOT 35
LOT 36
LOT 37
LOT 38
LOT 39
LOT 40
LOT 41
LOT 42
LOT 43
LOT 44
LOT 45
LOT 47
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
KINIPOPO STREET
KAUALOKU PLACE
UTILITY CORRIDOR
SHEET 8
SHEET 9
SHEET 10
SHEET 11
SHEET 12
SHEET 13
SHEET 14
15
TRUE NORTH
Scale: 1 in. = 100 ft.
0
100
200
Feet
LEGEND
215 FUTURE CONTOURS
215 EXISTING CONTOURS
PROPERTY LINES
12" FM TXT SEWER FORCE MAIN
48" STM TXT STORM SEWER
8" SAN TXT SANITARY SEWER
12" W TXT WATER
ELEC TXT ELECTRIC AND COMMUNICATION

APPROVED:

DESIGN ENGINEER DATE
HAWAIIAN TELCOM

DESIGN ENGINEER DATE
SPECTRUM

DISTRIBUTION ENGINEER DATE
KAUA`I ISLAND UTILITY COOPERATIVE

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

AHUKINI MAKAI SUBDIVISION

GENERAL UTILITY PLAN

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

APPROVED:

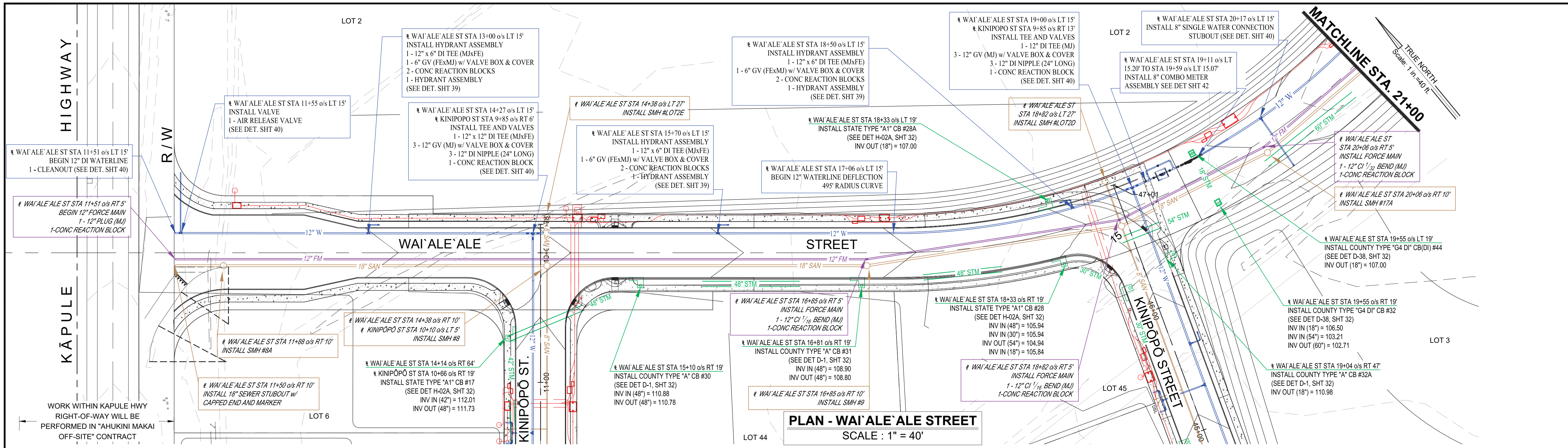
MANAGER & CHIEF ENGINEER, DATE
DEPT. OF WATER, COUNTY OF KAUA`I

APPROVED:

CHIEF, WASTEWATER MANAGEMENT DIV. DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C02
DESIGNED BY: ATM
DRAWN BY: TP☺
DATE: 2020-04-22
SHEET 7
OF 57 SHEETS

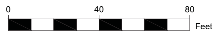

HIGHWAY
KĀPULE
R/W
LOT 2
LOT 6
LOT 44
LOT 45
LOT 3
WAI`ALE`ALE
STREET
KINIPŌPŌ ST.
KINIPŌPŌ STREET
MATCHLINE STA. 21+00
TRUE NORTH
Scale: 1 in.=40 ft.
12" W
12" FM
18" SAN
48" STM
℄ WAI`ALE`ALE STA 11+51 o/s LT 15' BEGIN 12" DI WATERLINE 1 - CLEANOUT (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 11+51 o/s RT 5' BEGIN 12" FORCE MAIN 1 - 12" PLUG (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 11+55 o/s LT 15' INSTALL VALVE 1 - AIR RELEASE VALVE (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 13+00 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 14+27 o/s LT 15' ℄ KINIPOPO ST STA 9+85 o/s RT 6' INSTALL TEE AND VALVES 1 - 12" x 12" DI TEE (MJxFE) 3 - 12" GV (MJ) w/ VALVE BOX & COVER 3 - 12" DI NIPPLE (24" LONG) 1 - CONC REACTION BLOCK (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 14+38 o/s LT 27' INSTALL SMH #LOT2E
℄ WAI`ALE`ALE ST STA 15+70 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 18+50 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 18+33 o/s LT 19' INSTALL STATE TYPE "A1" CB #28A (SEE DET H-02A, SHT 32) INV OUT (18") = 107.00
℄ WAI`ALE`ALE ST STA 17+06 o/s LT 15' BEGIN 12" WATERLINE DEFLECTION 495' RADIUS CURVE
℄ WAI`ALE`ALE ST STA 19+00 o/s LT 15' ℄ KINIPOPO ST STA 9+85 o/s RT 13' INSTALL TEE AND VALVES 1 - 12" DI TEE (MJ) 3 - 12" GV (MJ) w/ VALVE BOX & COVER 3 - 12" DI NIPPLE (24" LONG) 1 - CONC REACTION BLOCK (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 20+17 o/s LT 15' INSTALL 8" SINGLE WATER CONNECTION STUBOUT (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 19+11 o/s LT 15.20' TO STA 19+59 o/s LT 15.07' INSTALL 8" COMBO METER ASSEMBLY SEE DET SHT 42
℄ WAI`ALE`ALE ST STA 18+82 o/s LT 27' INSTALL SMH #LOT2D
℄ WAI`ALE`ALE ST STA 20+06 o/s RT 5' INSTALL FORCE MAIN 1 - 12" CI 1/32 BEND (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 20+06 o/s RT 10' INSTALL SMH #17A
℄ WAI`ALE`ALE ST STA 19+55 o/s LT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #44 (SEE DET D-38, SHT 32) INV OUT (18") = 107.00
℄ WAI`ALE`ALE ST STA 19+55 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB #32 (SEE DET D-38, SHT 32) INV IN (18") = 106.50 INV IN (54") = 103.21 INV OUT (60") = 102.71
℄ WAI`ALE`ALE ST STA 19+04 o/s RT 47' INSTALL COUNTY TYPE "A" CB #32A (SEE DET D-1, SHT 32) INV OUT (18") = 110.98
℄ WAI`ALE`ALE ST STA 18+82 o/s RT 5' INSTALL FORCE MAIN 1 - 12" CI 1/16 BEND (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 18+33 o/s RT 19' INSTALL STATE TYPE "A1" CB #28 (SEE DET H-02A, SHT 32) INV IN (48") = 105.94 INV IN (30") = 105.94 INV OUT (54") = 104.94 INV IN (18") = 105.84
℄ WAI`ALE`ALE ST STA 16+85 o/s RT 5' INSTALL FORCE MAIN 1 - 12" CI 1/16 BEND (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 16+81 o/s RT 19' INSTALL COUNTY TYPE "A" CB #31 (SEE DET D-1, SHT 32) INV IN (48") = 108.90 INV OUT (48") = 108.80
℄ WAI`ALE`ALE ST STA 16+85 o/s RT 10' INSTALL SMH #9
℄ WAI`ALE`ALE ST STA 15+10 o/s RT 19' INSTALL COUNTY TYPE "A" CB #30 (SEE DET D-1, SHT 32) INV IN (48") = 110.88 INV OUT (48") = 110.78
℄ WAI`ALE`ALE ST STA 14+14 o/s RT 64' ℄ KINIPŌPŌ ST STA 10+66 o/s RT 19' INSTALL STATE TYPE "A1" CB #17 (SEE DET H-02A, SHT 32) INV IN (42") = 112.01 INV OUT (48") = 111.73
℄ WAI`ALE`ALE ST STA 14+38 o/s RT 10' ℄ KINIPŌPŌ ST STA 10+10 o/s LT 5' INSTALL SMH #8
℄ WAI`ALE`ALE ST STA 11+88 o/s RT 10' INSTALL SMH #8A
℄ WAI`ALE`ALE ST STA 11+50 o/s RT 10' INSTALL 18" SEWER STUBOUT w/ CAPPED END AND MARKER
WORK WITHIN KAPULE HWY RIGHT-OF-WAY WILL BE PERFORMED IN "AHUKINI MAKAI OFF-SITE" CONTRACT
47+01
15

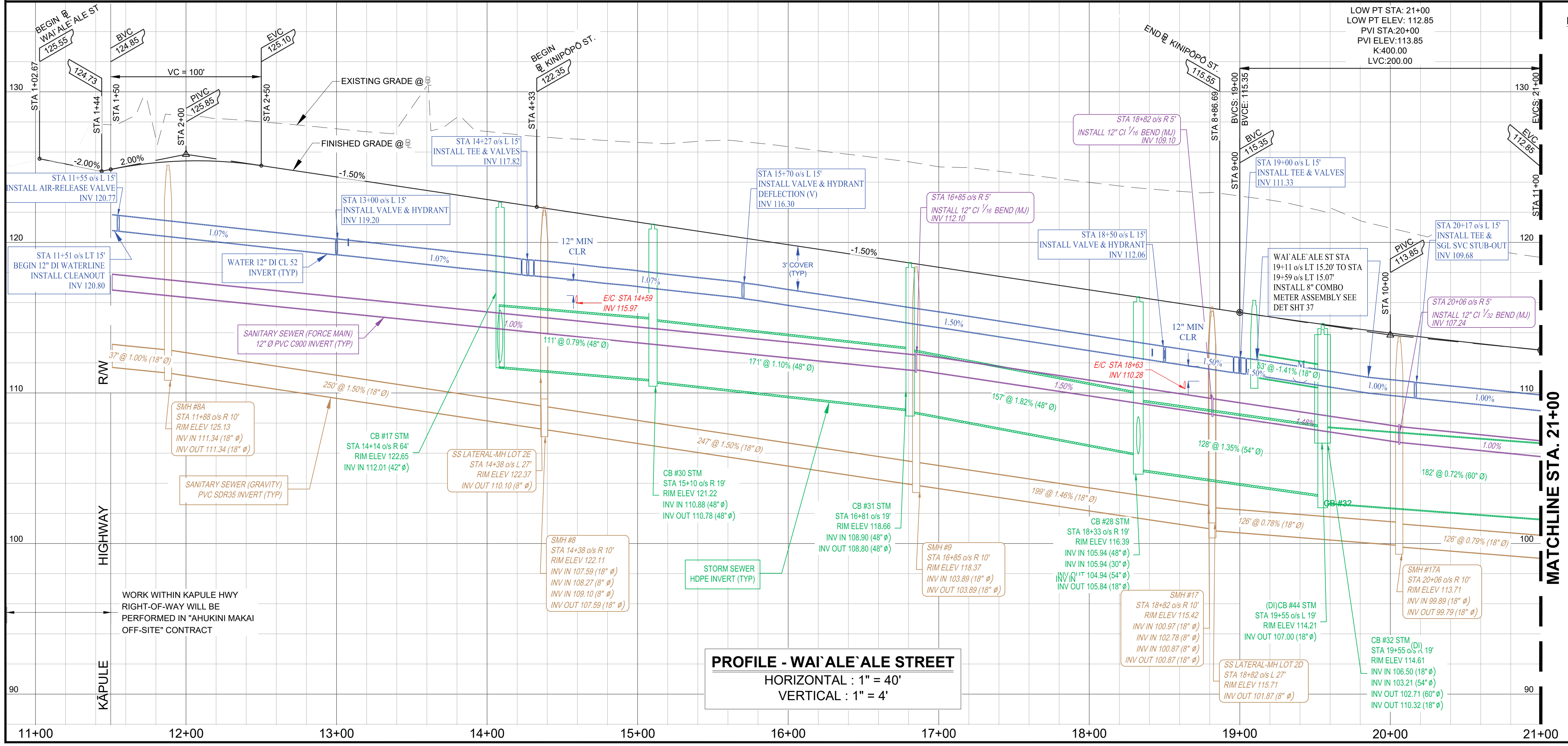
PLAN - WAI`ALE`ALE STREET

SCALE : 1" = 40'

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
	PROPERTY LINES
12" FM TXT →	SEWER FORCE MAIN
48" STM TXT →	STORM SEWER
8" SAN TXT →	SANITARY SEWER
12" W TXT →	WATER
ELEC TXT →	ELECTRIC AND COMMUNICATION




BEGIN ℄ WAI`ALE`ALE ST 125.55
BVC 124.85
EVC 125.10
124.73
VC = 100'
PIVC 125.85
STA 1+02.67
STA 1+44
STA 1+50
STA 2+00
STA 2+50
EXISTING GRADE @ ℄
FINISHED GRADE @ ℄
-2.00%
2.00%
-1.50%
BEGIN ℄ KINIPŌPŌ ST. 122.35
STA 4+33
END ℄ KINIPŌPŌ ST. 115.55
STA 8+86.69
STA 9+00
BVCS: 19+00
BVCE: 115.35
BVC 115.35
STA 10+00
STA 11+00
EVCS: 21+00
EVC 112.85
PIVC 113.85
LOW PT STA: 21+00
LOW PT ELEV: 112.85
PVI STA:20+00
PVI ELEV:113.85
K:400.00
LVC:200.00
STA 11+55 o/s L 15' INSTALL AIR-RELEASE VALVE INV 120.77
STA 11+51 o/s L 15' BEGIN 12" DI WATERLINE INSTALL CLEANOUT INV 120.80
STA 14+27 o/s L 15' INSTALL TEE & VALVES INV 117.82
STA 13+00 o/s L 15' INSTALL VALVE & HYDRANT INV 119.20
STA 15+70 o/s L 15' INSTALL VALVE & HYDRANT DEFLECTION (V) INV 116.30
STA 16+85 o/s R 5' INSTALL 12" CI 1/16 BEND (MJ) INV 112.10
STA 18+82 o/s R 5' INSTALL 12" CI 1/16 BEND (MJ) INV 109.10
STA 18+50 o/s L 15' INSTALL VALVE & HYDRANT INV 112.06
STA 19+00 o/s L 15' INSTALL TEE & VALVES INV 111.33
WAI`ALE`ALE ST STA 19+11 o/s LT 15.20' TO STA 19+59 o/s LT 15.07' INSTALL 8" COMBO METER ASSEMBLY SEE DET SHT 37
STA 20+17 o/s L 15' INSTALL TEE & SGL SVC STUB-OUT INV 109.68
STA 20+06 o/s R 5' INSTALL 12" CI 1/32 BEND (MJ) INV 107.24
WATER 12" DI CL 52 INVERT (TYP)
12" MIN CLR
3' COVER (TYP)
E/C STA 14+59 INV 115.97
E/C STA 18+63 INV 110.28
SANITARY SEWER (FORCE MAIN) 12" Ø PVC C900 INVERT (TYP)
SANITARY SEWER (GRAVITY) PVC SDR35 INVERT (TYP)
STORM SEWER HDPE INVERT (TYP)
1.07%
1.00%
1.50%
0.79%
111' @ 0.79% (48" Ø)
171' @ 1.10% (48" Ø)
157' @ 1.82% (48" Ø)
128' @ 1.35% (54" Ø)
53' @ -1.41% (18" Ø)
182' @ 0.72% (60" Ø)
37' @ 1.00% (18" Ø)
250' @ 1.50% (18" Ø)
247' @ 1.50% (18" Ø)
189' @ 1.46% (18" Ø)
126' @ 0.78% (18" Ø)
126' @ 0.79% (18" Ø)
SMH #8A STA 11+88 o/s R 10' RIM ELEV 125.13 INV IN 111.34 (18" Ø) INV OUT 111.34 (18" Ø)
CB #17 STM STA 14+14 o/s R 64' RIM ELEV 122.65 INV IN 112.01 (42" Ø)
SS LATERAL-MH LOT 2E STA 14+38 o/s L 27' RIM ELEV 122.37 INV OUT 110.10 (8" Ø)
SMH #8 STA 14+38 o/s R 10' RIM ELEV 122.11 INV IN 107.59 (18" Ø) INV IN 108.27 (8" Ø) INV IN 109.10 (8" Ø) INV OUT 107.59 (18" Ø)
CB #30 STM STA 15+10 o/s R 19' RIM ELEV 121.22 INV IN 110.88 (48" Ø) INV OUT 110.78 (48" Ø)
CB #31 STM STA 16+81 o/s 19' RIM ELEV 118.66 INV IN 108.90 (48" Ø) INV OUT 108.80 (48" Ø)
SMH #9 STA 16+85 o/s R 10' RIM ELEV 118.37 INV IN 103.89 (18" Ø) INV OUT 103.89 (18" Ø)
CB #28 STM STA 18+33 o/s R 19' RIM ELEV 116.39 INV IN 105.94 (48" Ø) INV IN 105.94 (30" Ø) INV OUT 104.94 (54" Ø) INV OUT 105.84 (18" Ø)
SMH #17 STA 18+82 o/s R 10' RIM ELEV 115.42 INV IN 100.97 (18" Ø) INV IN 102.78 (8" Ø) INV IN 100.87 (8" Ø) INV OUT 100.87 (18" Ø)
SS LATERAL-MH LOT 2D STA 18+82 o/s L 27' RIM ELEV 115.71 INV OUT 101.87 (8" Ø)
(DI)CB #44 STM STA 19+55 o/s L 19' RIM ELEV 114.21 INV OUT 107.00 (18" Ø)
CB #32 STM (DI) STA 19+55 o/s R 19' RIM ELEV 114.61 INV IN 106.50 (18" Ø) INV IN 103.21 (54" Ø) INV OUT 102.71 (60" Ø) INV OUT 110.32 (18" Ø)
SMH #17A STA 20+06 o/s R 10' RIM ELEV 113.71 INV IN 99.89 (18" Ø) INV OUT 99.79 (18" Ø)
CB #32
R/W
HIGHWAY
KĀPULE
WORK WITHIN KAPULE HWY RIGHT-OF-WAY WILL BE PERFORMED IN "AHUKINI MAKAI OFF-SITE" CONTRACT
130
120
110
100
90
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
MATCHLINE STA. 21+00

PROFILE - WAI`ALE`ALE STREET

HORIZONTAL : 1" = 40'
VERTICAL : 1" = 4'

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS TO THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 39 TO 51.
4. THE AHUKINI MAKAI ON-SITE WATERLINE AND THE AHUKINI MAKAI OFF-SITE WATERLINES MUST HAVE BEEN CLEANED, PRESSURE TESTED, CHLORINATED, FLUSHED AND SAMPLED IN ACCORDANCE WITH DIVISION 300, SECTIONS 302.27 TO 302.29 OF THE "WATER SYSTEM STANDARDS" WITH THE SEPARATE TEST FOR HETEROTROPHIC PLATE COUNT (LESS THAN 300 CFU/ML) PRIOR TO CONNECTING THE AHUKINI MAKAI OFF-SITE WATERLINE TO THE EXISTING WATERLINE AT AHUKINI ROAD AND TO THE AHUKINI MAKAI ON-SITE WATERLINE AT WAI`ALE`ALE STREET. THE DISINFECTION TEST RESULT DATES OF THE TESTING LABORATORY FOR BOTH THE AHUKINI MAKAI OFF-SITE AND THE AHUKINI MAKAI ON-SITE WATERLINES MUST BE WITHIN 14 DAYS OF WHEN THEY ARE CONNECTED AT AHUKINI ROAD AND WAI`ALE`ALE STREET. THE DEPARTMENT MAY REQUIRE THE CONTRACTOR TO REDO THE CLEANING, PRESSURE TESTING AND / OR DISINFECTION OF THE WATERLINES AT THE CONTRACTOR'S EXPENSE IF THE CONNECTIONS ARE NOT COMPLETED WITHIN THESE 14 DAYS.

APPROVED:

DESIGN ENGINEER DATE
HAWAIIAN TELCOM

DESIGN ENGINEER DATE
SPECTRUM

DISTRIBUTION ENGINEER DATE
KAUA`I ISLAND UTILITY COOPERATIVE

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE:
WAI`ALE`ALE STREET

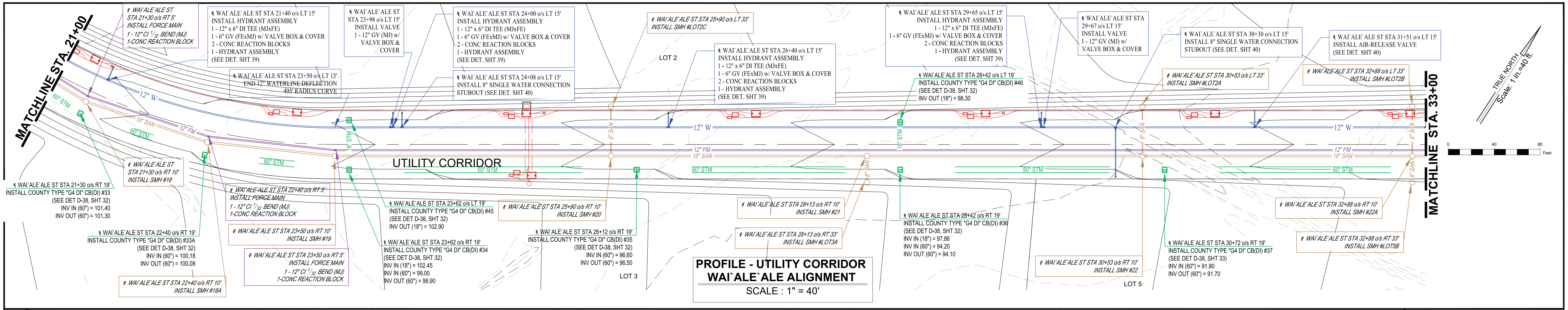
APPROVED:
COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

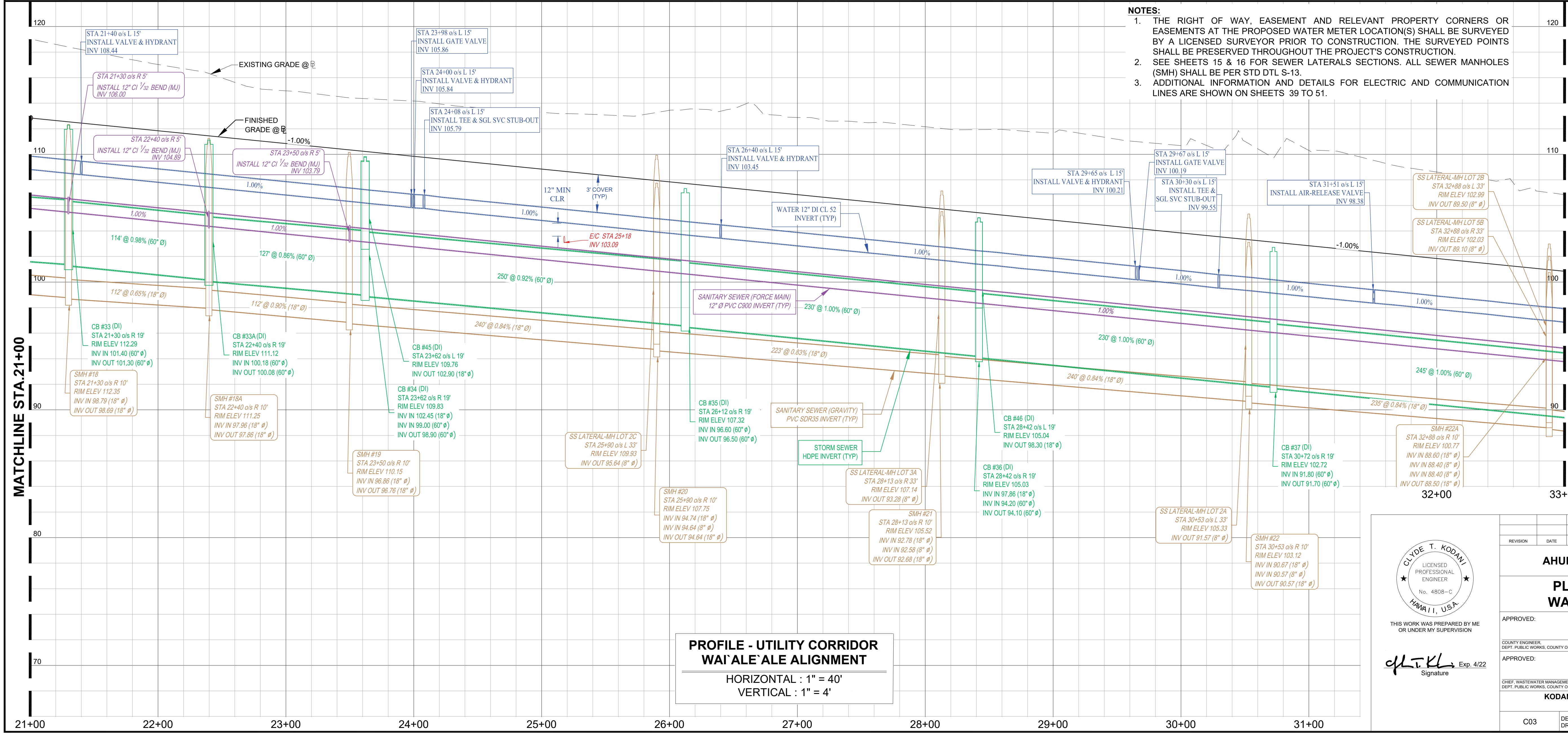
APPROVED:
MANAGER & CHIEF ENGINEER, DATE
DEPT. OF WATER, COUNTY OF KAUA`I

APPROVED:
CHIEF, WASTEWATER MANAGEMENT DIV. DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C02	DESIGNED BY: ATM DRAWN BY:TP☺	DATE: 2020-04-22	SHEET 8 OF 57 SHEETS


MATCHLINE STA. 21+00
℄ WAI`ALE`ALE ST STA 21+30 o/s RT 5' INSTALL FORCE MAIN 1 - 12" CI 1/32 BEND (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 21+40 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 23+98 o/s LT 15' INSTALL VALVE 1 - 12" GV (MJ) w/ VALVE BOX & COVER
℄ WAI`ALE`ALE ST STA 23+50 o/s LT 15' END 12" WATERLINE DEFLECTION 495' RADIUS CURVE
℄ WAI`ALE`ALE ST STA 24+00 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 24+08 o/s LT 15' INSTALL 8" SINGLE WATER CONNECTION STUBOUT (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 25+90 o/s LT 33' INSTALL SMH #LOT2C
LOT 2
℄ WAI`ALE`ALE ST STA 26+40 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 29+65 o/s LT 15' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 29+67 o/s LT 15' INSTALL VALVE 1 - 12" GV (MJ) w/ VALVE BOX & COVER
℄ WAI`ALE`ALE ST STA 30+30 o/s LT 15' INSTALL 8" SINGLE WATER CONNECTION STUBOUT (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 31+51 o/s LT 15' INSTALL AIR-RELEASE VALVE (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 28+42 o/s LT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #46 (SEE DET D-38, SHT 32) INV OUT (18") = 98.30
℄ WAI`ALE`ALE ST STA 30+53 o/s LT 33' INSTALL SMH #LOT2A
℄ WAI`ALE`ALE ST STA 32+88 o/s LT 33' INSTALL SMH #LOT2B
TRUE NORTH
Scale: 1 in.=40 ft.
0 40 80 Feet
MATCHLINE STA. 33+00
12" W
18" SAN
12" FM
60" STM
18" STM
8" SAN
UTILITY CORRIDOR
℄ WAI`ALE`ALE ST STA 21+30 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #33 (SEE DET D-38, SHT 32) INV IN (60") = 101.40 INV OUT (60") = 101.30
℄ WAI`ALE`ALE ST STA 21+30 o/s RT 10' INSTALL SMH #18
℄ WAI`ALE`ALE ST STA 22+40 o/s RT 5' INSTALL FORCE MAIN 1 - 12" CI 1/32 BEND (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 22+40 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #33A (SEE DET D-38, SHT 32) INV IN (60") = 100.18 INV OUT (60") = 100.08
℄ WAI`ALE`ALE ST STA 23+50 o/s RT 10' INSTALL SMH #19
℄ WAI`ALE`ALE ST STA 23+50 o/s RT 5' INSTALL FORCE MAIN 1 - 12" CI 1/32 BEND (MJ) 1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 22+40 o/s RT 10' INSTALL SMH #18A
℄ WAI`ALE`ALE ST STA 23+62 o/s LT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #45 (SEE DET D-38, SHT 32) INV OUT (18") = 102.90
℄ WAI`ALE`ALE ST STA 23+62 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #34 (SEE DET D-38, SHT 32) INV IN (18") = 102.45 INV IN (60") = 99.00 INV OUT (60") = 98.90
℄ WAI`ALE`ALE ST STA 25+90 o/s RT 10' INSTALL SMH #20
℄ WAI`ALE`ALE ST STA 26+12 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #35 (SEE DET D-38, SHT 32) INV IN (60") = 96.60 INV OUT (60") = 96.50
LOT 3
℄ WAI`ALE`ALE ST STA 28+13 o/s RT 10' INSTALL SMH #21
℄ WAI`ALE`ALE ST STA 28+13 o/s RT 33' INSTALL SMH #LOT3A
PROFILE - UTILITY CORRIDOR WAI`ALE`ALE ALIGNMENT SCALE : 1" = 40'
℄ WAI`ALE`ALE ST STA 28+42 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #36 (SEE DET D-38, SHT 32) INV IN (18") = 97.86 INV IN (60") = 94.20 INV OUT (60") = 94.10
℄ WAI`ALE`ALE ST STA 30+53 o/s RT 10' INSTALL SMH #22
LOT 5
℄ WAI`ALE`ALE ST STA 30+72 o/s RT 19' INSTALL COUNTY TYPE "G4 DI" CB(DI) #37 (SEE DET D-38, SHT 33) INV IN (60") = 91.80 INV OUT (60") = 91.70
℄ WAI`ALE`ALE ST STA 32+88 o/s RT 10' INSTALL SMH #22A
℄ WAI`ALE`ALE ST STA 32+88 o/s RT 33' INSTALL SMH #LOT5B


120
110
100
90
80
70
MATCHLINE STA.21+00
MATCHLINE STA.33+00
STA 21+40 o/s L 15' INSTALL VALVE & HYDRANT INV 108.44
EXISTING GRADE @ ℄
STA 21+30 o/s R 5' INSTALL 12" CI 1/32 BEND (MJ) INV 106.00
FINISHED GRADE @ ℄
-1.00%
STA 22+40 o/s R 5' INSTALL 12" CI 1/32 BEND (MJ) INV 104.89
STA 23+50 o/s R 5' INSTALL 12" CI 1/32 BEND (MJ) INV 103.79
STA 23+98 o/s L 15' INSTALL GATE VALVE INV 105.86
STA 24+00 o/s L 15' INSTALL VALVE & HYDRANT INV 105.84
STA 24+08 o/s L 15' INSTALL TEE & SGL SVC STUB-OUT INV 105.79
1.00%
114' @ 0.98% (60" Ø)
127' @ 0.86% (60" Ø)
250' @ 0.92% (60" Ø)
112' @ 0.65% (18" Ø)
112' @ 0.90% (18" Ø)
240' @ 0.84% (18" Ø)
12" MIN CLR
3' COVER (TYP)
E/C STA 25+18 INV 103.09
STA 26+40 o/s L 15' INSTALL VALVE & HYDRANT INV 103.45
WATER 12" DI CL 52 INVERT (TYP)
SANITARY SEWER (FORCE MAIN) 12" Ø PVC C900 INVERT (TYP)
230' @ 1.00% (60" Ø)
223' @ 0.83% (18" Ø)
CB #33 (DI) STA 21+30 o/s R 19' RIM ELEV 112.29 INV IN 101.40 (60" ø) INV OUT 101.30 (60" ø)
SMH #18 STA 21+30 o/s R 10' RIM ELEV 112.35 INV IN 98.79 (18" ø) INV OUT 98.69 (18" ø)
CB #33A (DI) STA 22+40 o/s R 19' RIM ELEV 111.12 INV IN 100.18 (60" ø) INV OUT 100.08 (60" ø)
SMH #18A STA 22+40 o/s R 10' RIM ELEV 111.25 INV IN 97.96 (18" ø) INV OUT 97.86 (18" ø)
CB #45 (DI) STA 23+62 o/s L 19' RIM ELEV 109.76 INV OUT 102.90 (18" ø)
CB #34 (DI) STA 23+62 o/s R 19' RIM ELEV 109.83 INV IN 102.45 (18" ø) INV IN 99.00 (60" ø) INV OUT 98.90 (60" ø)
SMH #19 STA 23+50 o/s R 10' RIM ELEV 110.15 INV IN 96.86 (18" ø) INV OUT 96.76 (18" ø)
SS LATERAL-MH LOT 2C STA 25+90 o/s L 33' RIM ELEV 109.93 INV OUT 95.64 (8" ø)
SMH #20 STA 25+90 o/s R 10' RIM ELEV 107.75 INV IN 94.74 (18" ø) INV IN 94.64 (8" ø) INV OUT 94.64 (18" ø)
CB #35 (DI) STA 26+12 o/s R 19' RIM ELEV 107.32 INV IN 96.60 (60" ø) INV OUT 96.50 (60" ø)
SANITARY SEWER (GRAVITY) PVC SDR35 INVERT (TYP)
STORM SEWER HDPE INVERT (TYP)
SS LATERAL-MH LOT 3A STA 28+13 o/s R 33' RIM ELEV 107.14 INV OUT 93.28 (8" ø)
SMH #21 STA 28+13 o/s R 10' RIM ELEV 105.52 INV IN 92.78 (18" ø) INV IN 92.58 (8" ø) INV OUT 92.68 (18" ø)
CB #46 (DI) STA 28+42 o/s L 19' RIM ELEV 105.04 INV OUT 98.30 (18" ø)
CB #36 (DI) STA 28+42 o/s R 19' RIM ELEV 105.03 INV IN 97.86 (18" ø) INV IN 94.20 (60" ø) INV OUT 94.10 (60" ø)
STA 29+65 o/s L 15' INSTALL VALVE & HYDRANT INV 100.21
STA 29+67 o/s L 15' INSTALL GATE VALVE INV 100.19
STA 30+30 o/s L 15' INSTALL TEE & SGL SVC STUB-OUT INV 99.55
STA 31+51 o/s L 15' INSTALL AIR-RELEASE VALVE INV 98.38
SS LATERAL-MH LOT 2B STA 32+88 o/s L 33' RIM ELEV 102.99 INV OUT 89.50 (8" ø)
SS LATERAL-MH LOT 5B STA 32+88 o/s R 33' RIM ELEV 102.03 INV OUT 89.10 (8" ø)
240' @ 0.84% (18" Ø)
245' @ 1.00% (60" Ø)
235' @ 0.84% (18" Ø)
CB #37 (DI) STA 30+72 o/s R 19' RIM ELEV 102.72 INV IN 91.80 (60" ø) INV OUT 91.70 (60" ø)
SS LATERAL-MH LOT 2A STA 30+53 o/s L 33' RIM ELEV 105.33 INV OUT 91.57 (8" ø)
SMH #22 STA 30+53 o/s R 10' RIM ELEV 103.12 INV IN 90.67 (18" ø) INV IN 90.57 (8" ø) INV OUT 90.57 (18" ø)
SMH #22A STA 32+88 o/s R 10' RIM ELEV 100.77 INV IN 88.60 (18" ø) INV IN 88.40 (8" ø) INV IN 88.40 (8" ø) INV OUT 88.50 (18" ø)
PROFILE - UTILITY CORRIDOR WAI`ALE`ALE ALIGNMENT HORIZONTAL : 1" = 40' VERTICAL : 1" = 4'
21+00
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
30+00
31+00
32+00
33+00

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS AT THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 39 TO 51.

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
	PROPERTY LINES
12" FM TXT →	SEWER FORCE MAIN
48" STM TXT →	STORM SEWER
8" SAN TXT →	SANITARY SEWER
12" W TXT →	WATER
ELEC TXT →	ELECTRIC AND COMMUNICATION

APPROVED:

DESIGN ENGINEER HAWAIIAN TELCOM — DATE

DESIGN ENGINEER SPECTRUM — DATE

DISTRIBUTION ENGINEER KAUA`I ISLAND UTILITY COOPERATIVE — DATE

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE:
WAI`ALE`ALE STREET

APPROVED:
COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

APPROVED:
N/A
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUA`I — DATE

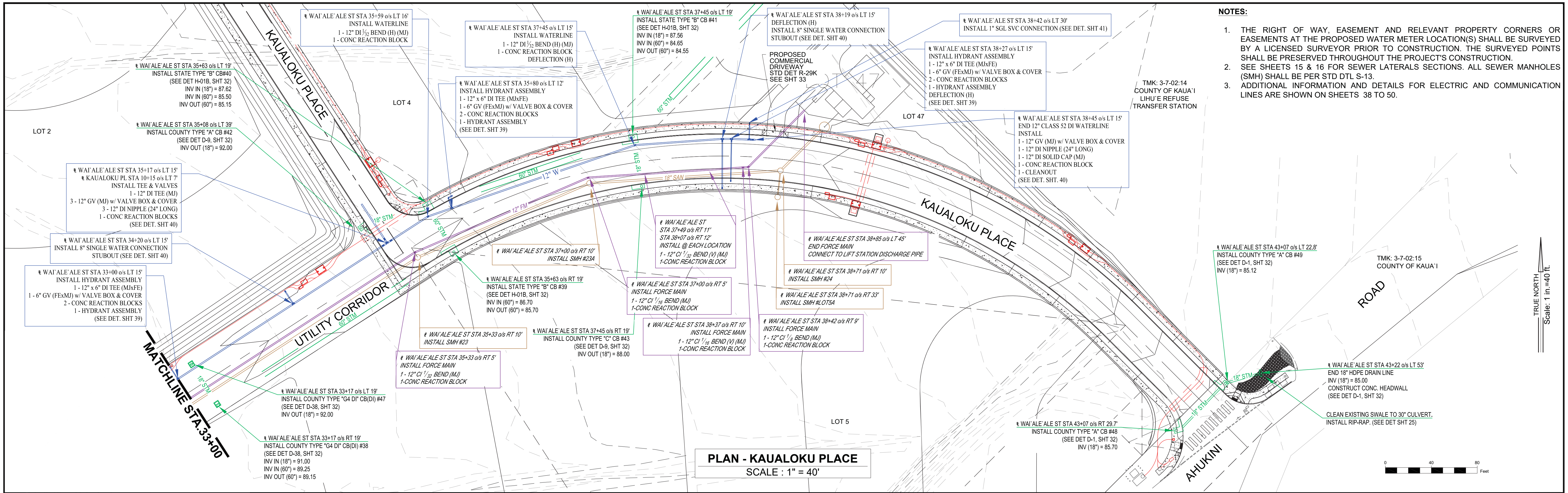
APPROVED:
CHIEF, WASTEWATER MANAGEMENT DIV. DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

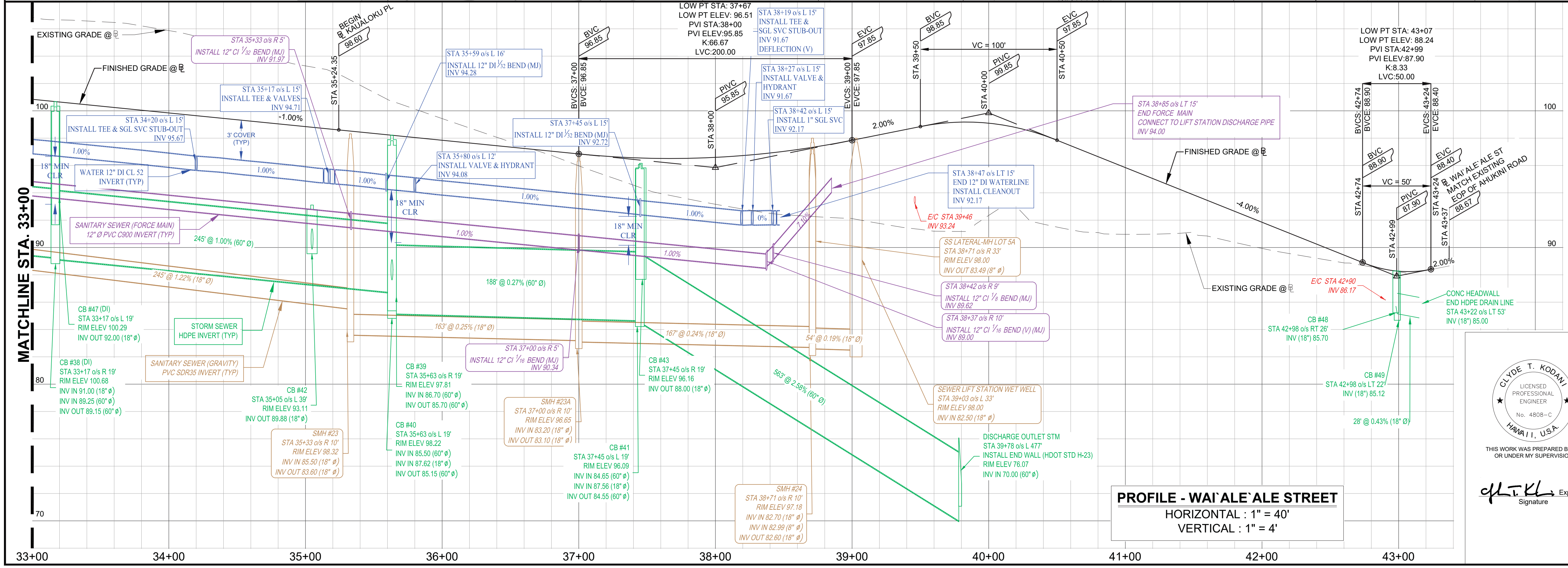
C03	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 9 OF 57 SHEETS

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS AT THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 38 TO 50.


℄ WAI`ALE`ALE ST STA 35+59 o/s LT 16'
INSTALL WATERLINE
1 - 12" DI 1/32 BEND (H) (MJ)
1 - CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 35+63 o/s LT 19'
INSTALL STATE TYPE "B" CB#40
(SEE DET H-01B, SHT 32)
INV IN (18") = 87.62
INV IN (60") = 85.50
INV OUT (60") = 85.15
℄ WAI`ALE`ALE ST STA 35+08 o/s LT 39'
INSTALL COUNTY TYPE "A" CB #42
(SEE DET D-9, SHT 32)
INV OUT (18") = 92.00
LOT 2
LOT 4
KAUALOKU PLACE
℄ WAI`ALE`ALE ST STA 35+17 o/s LT 15'
℄ KAUALOKU PL STA 10+15 o/s LT 7'
INSTALL TEE & VALVES
1 - 12" DI TEE (MJ)
3 - 12" GV (MJ) w/ VALVE BOX & COVER
3 - 12" DI NIPPLE (24" LONG)
1 - CONC REACTION BLOCKS
(SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 34+20 o/s LT 15'
INSTALL 8" SINGLE WATER CONNECTION
STUBOUT (SEE DET. SHT 40)
℄ WAI`ALE`ALE ST STA 33+00 o/s LT 15'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)
MATCHLINE STA.33+00
18" STM
60" STM
UTILITY CORRIDOR
60" STM
18" STM
℄ WAI`ALE`ALE ST STA 33+17 o/s LT 19'
INSTALL COUNTY TYPE "G4 DI" CB(DI) #47
(SEE DET D-38, SHT 32)
INV OUT (18") = 92.00
℄ WAI`ALE`ALE ST STA 33+17 o/s RT 19'
INSTALL COUNTY TYPE "G4 DI" CB(DI) #38
(SEE DET D-38, SHT 32)
INV IN (18") = 91.00
INV IN (60") = 89.25
INV OUT (60") = 89.15
℄ WAI`ALE`ALE ST STA 37+45 o/s LT 15'
INSTALL WATERLINE
1 - 12" DI 1/32 BEND (H) (MJ)
1 - CONC REACTION BLOCK
DEFLECTION (H)
℄ WAI`ALE`ALE ST STA 35+80 o/s LT 12'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)
℄ WAI`ALE`ALE ST STA 37+45 o/s LT 19'
INSTALL STATE TYPE "B" CB #41
(SEE DET H-01B, SHT 32)
INV IN (18") = 87.56
INV IN (60") = 84.65
INV OUT (60") = 84.55
℄ WAI`ALE`ALE ST STA 38+19 o/s LT 15'
DEFLECTION (H)
INSTALL 8" SINGLE WATER CONNECTION
STUBOUT (SEE DET. SHT 40)
PROPOSED
COMMERCIAL
DRIVEWAY
STD DET R-29K
SEE SHT 33
60" STM
60" STM
12" W
18" STM
18" SAN
12" FM
60" STM
LOT 47
℄ WAI`ALE`ALE ST STA 38+42 o/s LT 30'
INSTALL 1" SGL SVC CONNECTION (SEE DET. SHT 41)
℄ WAI`ALE`ALE ST STA 38+27 o/s LT 15'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
DEFLECTION (H)
(SEE DET. SHT 39)
TMK: 3-7-02:14
COUNTY OF KAUA`I
LIHU`E REFUSE
TRANSFER STATION
℄ WAI`ALE`ALE ST STA 38+45 o/s LT 15'
END 12" CLASS 52 DI WATERLINE
INSTALL
1 - 12" GV (MJ) w/ VALVE BOX & COVER
1 - 12" DI NIPPLE (24" LONG)
1 - 12" DI SOLID CAP (MJ)
1 - CONC REACTION BLOCK
1 - CLEANOUT
(SEE DET. SHT. 40)
KAUALOKU PLACE
℄ WAI`ALE`ALE ST
STA 37+49 o/s RT 11'
STA 38+07 o/s RT 12'
INSTALL @ EACH LOCATION
1 - 12" CI 1/32 BEND (V) (MJ)
1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 38+85 o/s LT 45'
END FORCE MAIN
CONNECT TO LIFT STATION DISCHARGE PIPE
℄ WAI`ALE`ALE ST STA 37+00 o/s RT 10'
INSTALL SMH #23A
℄ WAI`ALE`ALE ST STA 38+71 o/s RT 10'
INSTALL SMH #24
℄ WAI`ALE`ALE ST STA 35+63 o/s RT 19'
INSTALL STATE TYPE "B" CB #39
(SEE DET H-01B, SHT 32)
INV IN (60") = 86.70
INV OUT (60") = 85.70
℄ WAI`ALE`ALE ST STA 37+00 o/s RT 5'
INSTALL FORCE MAIN
1 - 12" CI 1/16 BEND (MJ)
1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 38+71 o/s RT 33'
INSTALL SMH #LOT5A
℄ WAI`ALE`ALE ST STA 35+33 o/s RT 10'
INSTALL SMH #23
℄ WAI`ALE`ALE ST STA 37+45 o/s RT 19'
INSTALL COUNTY TYPE "C" CB #43
(SEE DET D-9, SHT 32)
INV OUT (18") = 88.00
℄ WAI`ALE`ALE ST STA 38+37 o/s RT 10'
INSTALL FORCE MAIN
1 - 12" CI 1/16 BEND (V) (MJ)
1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 38+42 o/s RT 9'
INSTALL FORCE MAIN
1 - 12" CI 1/8 BEND (MJ)
1-CONC REACTION BLOCK
℄ WAI`ALE`ALE ST STA 35+33 o/s RT 5'
INSTALL FORCE MAIN
1 - 12" CI 1/32 BEND (MJ)
1-CONC REACTION BLOCK
LOT 5
℄ WAI`ALE`ALE ST STA 43+07 o/s LT 22.8'
INSTALL COUNTY TYPE "A" CB #49
(SEE DET D-1, SHT 32)
INV (18") = 85.12
TMK: 3-7-02:15
COUNTY OF KAUA`I
ROAD
TRUE NORTH
Scale: 1 in.=40 ft.
18" STM
18" STM
℄ WAI`ALE`ALE ST STA 43+22 o/s LT 53'
END 18" HDPE DRAIN LINE
INV (18") = 85.00
CONSTRUCT CONC. HEADWALL
(SEE DET D-1, SHT 32)
CLEAN EXISTING SWALE TO 30" CULVERT.
INSTALL RIP-RAP. (SEE DET SHT 25)
℄ WAI`ALE`ALE ST STA 43+07 o/s RT 29.7'
INSTALL COUNTY TYPE "A" CB #48
(SEE DET D-1, SHT 32)
INV (18") = 85.70
AHUKINI
0
40
80
Feet

PLAN - KAUALOKU PLACE
SCALE : 1" = 40'


MATCHLINE STA. 33+00
EXISTING GRADE @ ℄
FINISHED GRADE @ ℄
100
90
80
70
STA 35+33 o/s R 5'
INSTALL 12" CI 1/32 BEND (MJ)
INV 91.97
BEGIN ℄ KAUALOKU PL
98.60
STA 35+24.35
STA 35+17 o/s L 15'
INSTALL TEE & VALVES
INV 94.71
-1.00%
STA 34+20 o/s L 15'
INSTALL TEE & SGL SVC STUB-OUT
INV 95.67
3' COVER
(TYP)
1.00%
18" MIN
CLR
WATER 12" DI CL 52
INVERT (TYP)
1.00%
1.00%
SANITARY SEWER (FORCE MAIN)
12" Ø PVC C900 INVERT (TYP)
245' @ 1.00% (60" Ø)
245' @ 1.22% (18" Ø)
CB #47 (DI)
STA 33+17 o/s L 19'
RIM ELEV 100.29
INV OUT 92.00 (18" ø)
STORM SEWER
HDPE INVERT (TYP)
CB #38 (DI)
STA 33+17 o/s R 19'
RIM ELEV 100.68
INV IN 91.00 (18" ø)
INV IN 89.25 (60" ø)
INV OUT 89.15 (60" ø)
SANITARY SEWER (GRAVITY)
PVC SDR35 INVERT (TYP)
CB #42
STA 35+05 o/s L 39'
RIM ELEV 93.11
INV OUT 89.88 (18" ø)
SMH #23
STA 35+33 o/s R 10'
RIM ELEV 98.32
INV IN 85.50 (18" ø)
INV OUT 83.60 (18" ø)
STA 35+59 o/s L 16'
INSTALL 12" DI 1/32 BEND (MJ)
INV 94.28
STA 35+80 o/s L 12'
INSTALL VALVE & HYDRANT
INV 94.08
1.00%
18" MIN
CLR
1.00%
188' @ 0.27% (60" Ø)
163' @ 0.25% (18" Ø)
CB #39
STA 35+63 o/s R 19'
RIM ELEV 97.81
INV IN 86.70 (60" ø)
INV OUT 85.70 (60" ø)
CB #40
STA 35+63 o/s L 19'
RIM ELEV 98.22
INV IN 85.50 (60" ø)
INV IN 87.62 (18" ø)
INV OUT 85.15 (60" ø)
BVC
96.85
BVCS: 37+00
BVCE: 96.85
STA 37+45 o/s L 15'
INSTALL 12" DI 1/32 BEND (MJ)
INV 92.72
STA 37+00 o/s R 5'
INSTALL 12" CI 1/16 BEND (MJ)
INV 90.34
SMH #23A
STA 37+00 o/s R 10'
RIM ELEV 96.65
INV IN 83.20 (18" ø)
INV OUT 83.10 (18" ø)
LOW PT STA: 37+67
LOW PT ELEV: 96.51
PVI STA:38+00
PVI ELEV:95.85
K:66.67
LVC:200.00
STA 38+19 o/s L 15'
INSTALL TEE &
SGL SVC STUB-OUT
INV 91.67
DEFLECTION (V)
STA 38+27 o/s L 15'
INSTALL VALVE &
HYDRANT
INV 91.67
STA 38+42 o/s L 15'
INSTALL 1" SGL SVC
INV 92.17
PIVC
95.85
STA 38+00
1.00%
0%
7.10%
18" MIN
CLR
1.00%
167' @ 0.24% (18" Ø)
54' @ 0.19% (18" Ø)
563' @ 2.58% (60" Ø)
CB #43
STA 37+45 o/s R 19'
RIM ELEV 96.16
INV OUT 88.00 (18" ø)
CB #41
STA 37+45 o/s L 19'
RIM ELEV 96.09
INV IN 84.65 (60" ø)
INV IN 87.56 (18" ø)
INV OUT 84.55 (60" ø)
SMH #24
STA 38+71 o/s R 10'
RIM ELEV 97.18
INV IN 82.70 (18" ø)
INV IN 82.99 (8" ø)
INV OUT 82.60 (18" ø)
EVC
97.85
EVCS: 39+00
EVCE: 97.85
2.00%
BVC
98.85
STA 39+50
VC = 100'
PIVC
99.85
STA 40+00
EVC
97.85
STA 40+50
STA 38+85 o/s LT 15'
END FORCE MAIN
CONNECT TO LIFT STATION DISCHARGE PIPE
INV 94.00
FINISHED GRADE @ ℄
STA 38+47 o/s LT 15'
END 12" DI WATERLINE
INSTALL CLEANOUT
INV 92.17
E/C STA 39+46
INV 93.24
-4.00%
SS LATERAL-MH LOT 5A
STA 38+71 o/s R 33'
RIM ELEV 98.00
INV OUT 83.49 (8" ø)
STA 38+42 o/s R 9'
INSTALL 12" CI 1/8 BEND (MJ)
INV 89.62
STA 38+37 o/s R 10'
INSTALL 12" CI 1/16 BEND (V) (MJ)
INV 89.00
EXISTING GRADE @ ℄
SEWER LIFT STATION WET WELL
STA 39+03 o/s L 33'
RIM ELEV 98.00
INV IN 82.50 (18" ø)
DISCHARGE OUTLET STM
STA 39+78 o/s L 477'
INSTALL END WALL (HDOT STD H-23)
RIM ELEV 76.07
INV IN 70.00 (60" ø)
LOW PT STA: 43+07
LOW PT ELEV: 88.24
PVI STA:42+99
PVI ELEV:87.90
K:8.33
LVC:50.00
BVCS: 42+74
BVCE: 88.90
EVCS: 43+24
EVCE: 88.40
BVC
88.90
EVC
88.40
VC = 50'
PIVC
87.90
STA 42+74
STA 42+99
STA 43+24
STA 43+37
℄ WAI`ALE`ALE ST
MATCH EXISTING
EOP OF AHUKINI ROAD
88.67
2.00%
E/C STA 42+90
INV 86.17
CONC HEADWALL
END HDPE DRAIN LINE
STA 43+22 o/s LT 53'
INV (18") 85.00
CB #48
STA 42+98 o/s RT 26'
INV (18") 85.70
CB #49
STA 42+98 o/s LT 22'
INV (18") 85.12
28' @ 0.43% (18" Ø)
100
90
33+00
34+00
35+00
36+00
37+00
38+00
39+00
40+00
41+00
42+00
43+00

PROFILE - WAI`ALE`ALE STREET
HORIZONTAL : 1" = 40'
VERTICAL : 1" = 4'

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
—	PROPERTY LINES
12" FM / TXT →	SEWER FORCE MAIN
48" STM / TXT →	STORM SEWER
8" SAN / TXT →	SANITARY SEWER
12" W / TXT →	WATER
ELEC / TXT →	ELECTRIC AND COMMUNICATION

APPROVED:

DESIGN ENGINEER DATE
HAWAIIAN TELCOM

DESIGN ENGINEER DATE
SPECTRUM

DISTRIBUTION ENGINEER DATE
KAUA`I ISLAND UTILITY COOPERATIVE

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

CTK Exp. 4/22
Signature

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE: KAUALOKU PLACE

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

APPROVED:

N/A

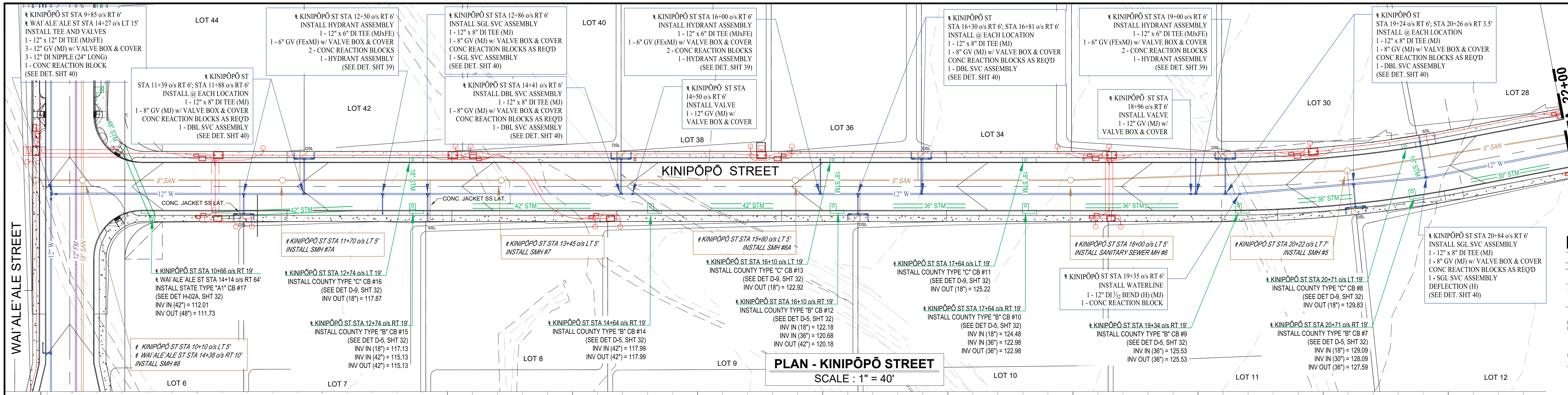
MANAGER & CHIEF ENGINEER, DATE
DEPT. OF WATER, COUNTY OF KAUA`I

APPROVED:

CHIEF, WASTEWATER MANAGEMENT DIV. DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C04	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 10 OF 57 SHEETS

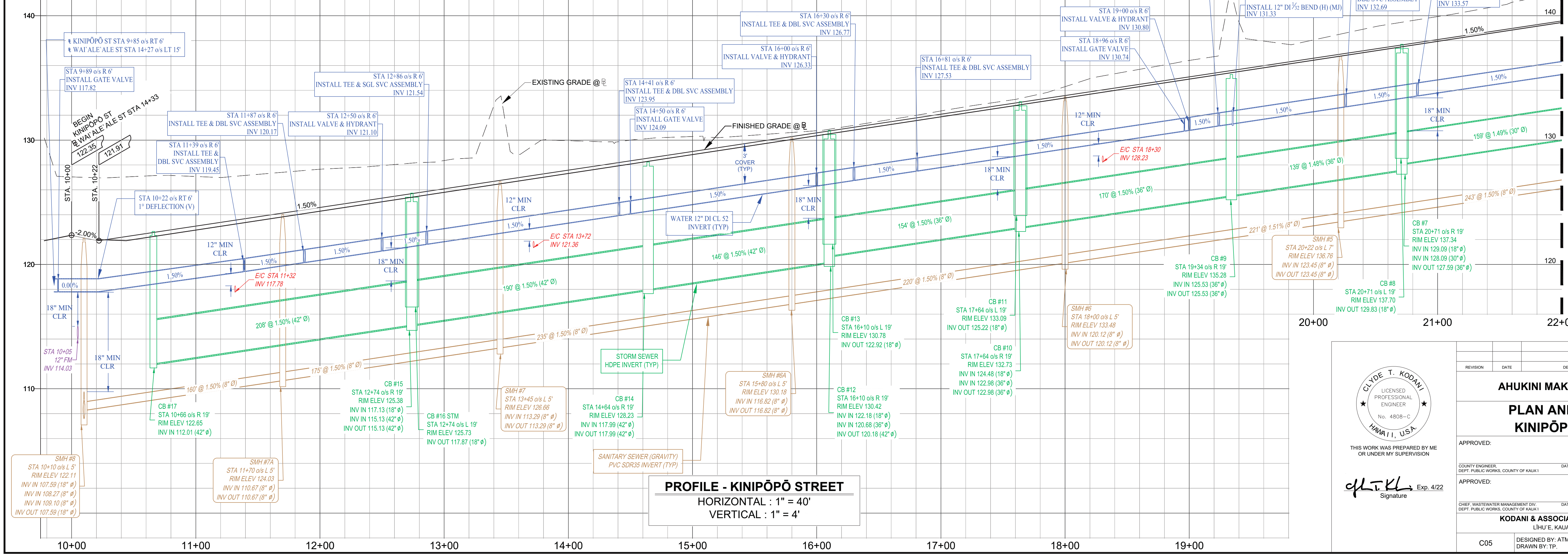

KINIPŌPŌ STREET
WAI`ALE`ALE STREET
MATCHLINE STA. 22+00
TRUE NORTH
Scale: 1 in.=40 ft.
LOT 44
LOT 42
LOT 40
LOT 38
LOT 36
LOT 34
LOT 30
LOT 28
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
8" SAN
12" W
42" STM
36" STM
30" STM
18" STM
48" STM
12" FM
18" SAN
CONC. JACKET SS LAT.
℄ KINIPŌPŌ ST STA 9+85 o/s RT 6'
℄ WAI`ALE`ALE ST STA 14+27 o/s LT 15'
INSTALL TEE AND VALVES
1 - 12" x 12" DI TEE (MJxFE)
3 - 12" GV (MJ) w/ VALVE BOX & COVER
3 - 12" DI NIPPLE (24" LONG)
1 - CONC REACTION BLOCK
(SEE DET. SHT 40)
℄ KINIPŌPŌ ST
STA 11+39 o/s RT 6'; STA 11+88 o/s RT 6'
INSTALL @ EACH LOCATION
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 12+50 o/s RT 6'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)
℄ KINIPŌPŌ ST STA 12+86 o/s RT 6'
INSTALL SGL SVC ASSEMBLY
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - SGL SVC ASSEMBLY
(SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 14+41 o/s RT 6'
INSTALL DBL SVC ASSEMBLY
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 16+00 o/s RT 6'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)
℄ KINIPŌPŌ ST STA
14+50 o/s RT 6'
INSTALL VALVE
1 - 12" GV (MJ) w/
VALVE BOX & COVER
℄ KINIPŌPŌ ST
STA 16+30 o/s RT 6'; STA 16+81 o/s RT 6'
INSTALL @ EACH LOCATION
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 19+00 o/s RT 6'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)
℄ KINIPŌPŌ ST STA
18+96 o/s RT 6'
INSTALL VALVE
1 - 12" GV (MJ) w/
VALVE BOX & COVER
℄ KINIPŌPŌ ST
STA 19+24 o/s RT 6'; STA 20+26 o/s RT 3.5'
INSTALL @ EACH LOCATION
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 10+66 o/s RT 19'
℄ WAI`ALE`ALE ST STA 14+14 o/s RT 64'
INSTALL STATE TYPE "A1" CB #17
(SEE DET H-02A, SHT 32)
INV IN (42") = 112.01
INV OUT (48") = 111.73
℄ KINIPŌPŌ ST STA 10+10 o/s LT 5'
℄ WAI`ALE`ALE ST STA 14+38 o/s RT 10'
INSTALL SMH #8
℄ KINIPŌPŌ ST STA 11+70 o/s LT 5'
INSTALL SMH #7A
℄ KINIPŌPŌ ST STA 12+74 o/s LT 19'
INSTALL COUNTY TYPE "C" CB #16
(SEE DET D-9, SHT 32)
INV OUT (18") = 117.87
℄ KINIPŌPŌ ST STA 12+74 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #15
(SEE DET D-5, SHT 32)
INV IN (18") = 117.13
INV IN (42") = 115.13
INV OUT (42") = 115.13
℄ KINIPŌPŌ ST STA 13+45 o/s LT 5'
INSTALL SMH #7
℄ KINIPŌPŌ ST STA 14+64 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #14
(SEE DET D-5, SHT 32)
INV IN (42") = 117.99
INV OUT (42") = 117.99
℄ KINIPŌPŌ ST STA 15+80 o/s LT 5'
INSTALL SMH #6A
℄ KINIPŌPŌ ST STA 16+10 o/s LT 19'
INSTALL COUNTY TYPE "C" CB #13
(SEE DET D-9, SHT 32)
INV OUT (18") = 122.92
℄ KINIPŌPŌ ST STA 16+10 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #12
(SEE DET D-5, SHT 32)
INV IN (18") = 122.18
INV IN (36") = 120.68
INV OUT (42") = 120.18
℄ KINIPŌPŌ ST STA 17+64 o/s LT 19'
INSTALL COUNTY TYPE "C" CB #11
(SEE DET D-9, SHT 32)
INV OUT (18") = 125.22
℄ KINIPŌPŌ ST STA 17+64 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #10
(SEE DET D-5, SHT 32)
INV IN (18") = 124.48
INV IN (36") = 122.98
INV OUT (36") = 122.98
℄ KINIPŌPŌ ST STA 18+00 o/s LT 5'
INSTALL SANITARY SEWER MH #6
℄ KINIPŌPŌ ST STA 19+35 o/s RT 6'
INSTALL WATERLINE
1 - 12" DI 1/32 BEND (H) (MJ)
1 - CONC REACTION BLOCK
℄ KINIPŌPŌ ST STA 19+34 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #9
(SEE DET D-5, SHT 32)
INV IN (36") = 125.53
INV OUT (36") = 125.53
℄ KINIPŌPŌ ST STA 20+22 o/s LT 7'
INSTALL SMH #5
℄ KINIPŌPŌ ST STA 20+71 o/s LT 19'
INSTALL COUNTY TYPE "C" CB #8
(SEE DET D-9, SHT 32)
INV OUT (18") = 129.83
℄ KINIPŌPŌ ST STA 20+71 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #7
(SEE DET D-5, SHT 32)
INV IN (18") = 129.09
INV IN (30") = 128.09
INV OUT (36") = 127.59
℄ KINIPŌPŌ ST STA 20+84 o/s RT 6'
INSTALL SGL SVC ASSEMBLY
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - SGL SVC ASSEMBLY
DEFLECTION (H)
(SEE DET. SHT 40)

PLAN - KINIPŌPŌ STREET

SCALE : 1" = 40'

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS AT THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 39 TO 51.


140
130
120
110
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
22+00
MATCHLINE STA. 22+00
EXISTING GRADE @ ℄
FINISHED GRADE @ ℄
BEGIN KINIPŌPŌ ST
℄ WAI`ALE`ALE ST STA 14+33
122.35
121.91
STA. 10+00
STA. 10+22
-2.00%
1.50%
0.00%
3' COVER (TYP)
WATER 12" DI CL 52 INVERT (TYP)
STORM SEWER HDPE INVERT (TYP)
SANITARY SEWER (GRAVITY) PVC SDR35 INVERT (TYP)
℄ KINIPŌPŌ ST STA 9+85 o/s RT 6'
℄ WAI`ALE`ALE ST STA 14+27 o/s LT 15'
STA 9+89 o/s R 6' INSTALL GATE VALVE INV 117.82
STA 10+22 o/s RT 6' 1° DEFLECTION (V)
STA 11+39 o/s R 6' INSTALL TEE & DBL SVC ASSEMBLY INV 119.45
STA 11+87 o/s R 6' INSTALL TEE & DBL SVC ASSEMBLY INV 120.17
STA 12+50 o/s R 6' INSTALL VALVE & HYDRANT INV 121.10
STA 12+86 o/s R 6' INSTALL TEE & SGL SVC ASSEMBLY INV 121.54
STA 14+41 o/s R 6' INSTALL TEE & DBL SVC ASSEMBLY INV 123.95
STA 14+50 o/s R 6' INSTALL GATE VALVE INV 124.09
STA 16+00 o/s R 6' INSTALL VALVE & HYDRANT INV 126.33
STA 16+30 o/s R 6' INSTALL TEE & DBL SVC ASSEMBLY INV 126.77
STA 16+81 o/s R 6' INSTALL TEE & DBL SVC ASSEMBLY INV 127.53
STA 18+96 o/s R 6' INSTALL GATE VALVE INV 130.74
STA 19+00 o/s R 6' INSTALL VALVE & HYDRANT INV 130.80
STA 19+24 o/s R 6' INSTALL TEE & DBL SVC ASSEMBLY INV 131.16
STA 19+35 o/s R 6' INSTALL 12" DI 1/32 BEND (H) (MJ) INV 131.33
STA 20+26 o/s R 4' INSTALL TEE & DBL SVC ASSEMBLY INV 132.69
STA 20+84 o/s R 6' INSTALL TEE & SGL SVC ASSEMBLY INV 133.57
12" MIN CLR
18" MIN CLR
E/C STA 11+32 INV 117.78
E/C STA 13+72 INV 121.36
E/C STA 18+30 INV 128.23
208' @ 1.50% (42" Ø)
190' @ 1.50% (42" Ø)
146' @ 1.50% (42" Ø)
154' @ 1.50% (36" Ø)
170' @ 1.50% (36" Ø)
139' @ 1.48% (36" Ø)
159' @ 1.49% (30" Ø)
160' @ 1.50% (8" Ø)
175' @ 1.50% (8" Ø)
235' @ 1.50% (8" Ø)
220' @ 1.50% (8" Ø)
221' @ 1.51% (8" Ø)
243' @ 1.50% (8" Ø)
STA 10+05 12" FM INV 114.03
SMH #8 STA 10+10 o/s L 5' RIM ELEV 122.11 INV IN 107.59 (18" ø) INV IN 108.27 (8" ø) INV IN 109.10 (8" ø) INV OUT 107.59 (18" ø)
SMH #7A STA 11+70 o/s L 5' RIM ELEV 124.03 INV IN 110.67 (8" ø) INV OUT 110.67 (8" ø)
SMH #7 STA 13+45 o/s L 5' RIM ELEV 126.86 INV IN 113.29 (8" ø) INV OUT 113.29 (8" ø)
SMH #6A STA 15+80 o/s L 5' RIM ELEV 130.18 INV IN 116.82 (8" ø) INV OUT 116.82 (8" ø)
SMH #6 STA 18+00 o/s L 5' RIM ELEV 133.48 INV IN 120.12 (8" ø) INV OUT 120.12 (8" ø)
SMH #5 STA 20+22 o/s L 7' RIM ELEV 136.76 INV IN 123.45 (8" ø) INV OUT 123.45 (8" ø)
CB #17 STA 10+66 o/s R 19' RIM ELEV 122.65 INV IN 112.01 (42" ø)
CB #15 STA 12+74 o/s R 19' RIM ELEV 125.38 INV IN 117.13 (18" ø) INV IN 115.13 (42" ø) INV OUT 115.13 (42" ø)
CB #16 STM STA 12+74 o/s L 19' RIM ELEV 125.73 INV OUT 117.87 (18" ø)
CB #14 STA 14+64 o/s R 19' RIM ELEV 128.23 INV IN 117.99 (42" ø) INV OUT 117.99 (42" ø)
CB #13 STA 16+10 o/s L 19' RIM ELEV 130.78 INV OUT 122.92 (18" ø)
CB #12 STA 16+10 o/s R 19' RIM ELEV 130.42 INV IN 122.18 (18" ø) INV IN 120.68 (36" ø) INV OUT 120.18 (42" ø)
CB #11 STA 17+64 o/s L 19' RIM ELEV 133.09 INV OUT 125.22 (18" ø)
CB #10 STA 17+64 o/s R 19' RIM ELEV 132.73 INV IN 124.48 (18" ø) INV IN 122.98 (36" ø) INV OUT 122.98 (36" ø)
CB #9 STA 19+34 o/s R 19' RIM ELEV 135.28 INV IN 125.53 (36" ø) INV OUT 125.53 (36" ø)
CB #8 STA 20+71 o/s L 19' RIM ELEV 137.70 INV OUT 129.83 (18" ø)
CB #7 STA 20+71 o/s R 19' RIM ELEV 137.34 INV IN 129.09 (18" ø) INV IN 128.09 (30" ø) INV OUT 127.59 (36" ø)

PROFILE - KINIPŌPŌ STREET

HORIZONTAL : 1" = 40'
VERTICAL : 1" = 4'

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
	PROPERTY LINES
12" FM TXT →	SEWER FORCE MAIN
48" STM TXT →	STORM SEWER
8" SAN TXT →	SANITARY SEWER
12" W TXT →	WATER
ELEC TXT →	ELECTRIC AND COMMUNICATION

0 40 80 Feet

APPROVED:

DESIGN ENGINEER HAWAIIAN TELCOM — DATE

DISTRIBUTION ENGINEER KAUA`I ISLAND UTILITY COOPERATIVE — DATE

DESIGN ENGINEER SPECTRUM — DATE

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAI`I, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE: KINIPŌPŌ STREET

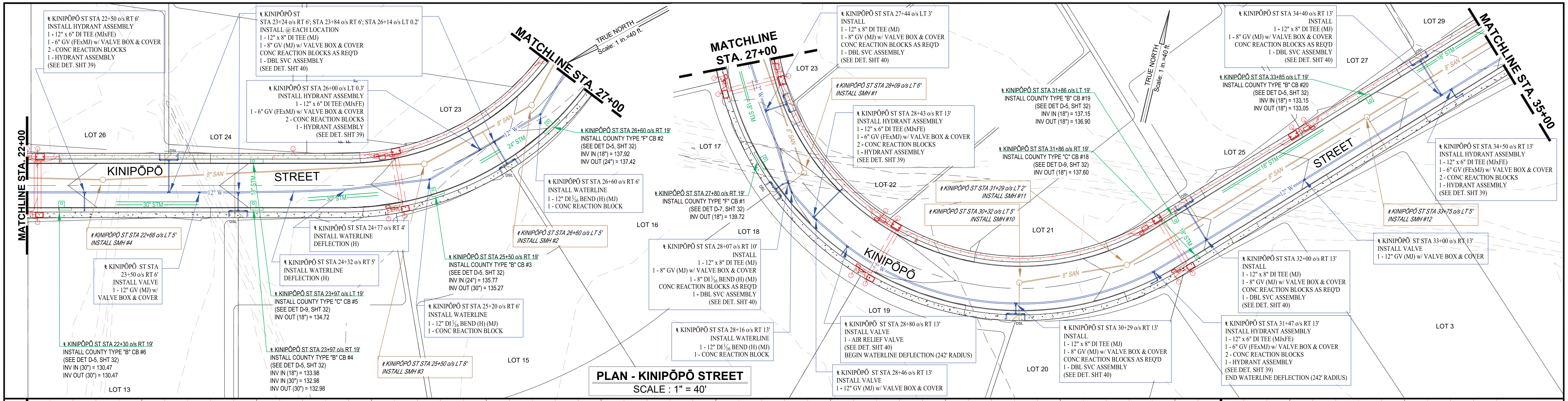
APPROVED:
COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

APPROVED:
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUA`I — DATE

APPROVED:
CHIEF, WASTEWATER MANAGEMENT DIV. DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C05	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 11 OF 57 SHEETS


MATCHLINE STA. 22+00
MATCHLINE STA. 27+00
MATCHLINE STA. 27+00
MATCHLINE STA. 35+00
TRUE NORTH
Scale: 1 in.=40 ft.
TRUE NORTH
Scale: 1 in.=40 ft.
KINIPŌPŌ
STREET
KINIPŌPŌ
STREET
LOT 26
LOT 24
LOT 23
LOT 13
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 20
LOT 21
LOT 22
LOT 23
LOT 25
LOT 27
LOT 29
LOT 3
8" SAN
12" W
30" STM
18" STM
24" STM
DSL

℄ KINIPŌPŌ ST STA 22+50 o/s RT 6'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)

℄ KINIPŌPŌ ST
STA 23+24 o/s RT 6'; STA 23+84 o/s RT 6'; STA 26+14 o/s LT 0.2'
INSTALL @ EACH LOCATION
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)

℄ KINIPŌPŌ ST STA 26+00 o/s LT 0.3'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)

℄ KINIPŌPŌ ST STA 26+60 o/s RT 19'
INSTALL COUNTY TYPE "F" CB #2
(SEE DET D-5, SHT 32)
INV IN (18") = 137.92
INV OUT (24") = 137.42

℄ KINIPŌPŌ ST STA 26+60 o/s RT 6'
INSTALL WATERLINE
1 - 12" DI $\frac{1}{16}$ BEND (H) (MJ)
1 - CONC REACTION BLOCK

℄ KINIPŌPŌ ST STA 22+66 o/s LT 5'
INSTALL SMH #4

℄ KINIPŌPŌ ST STA
23+50 o/s RT 6'
INSTALL VALVE
1 - 12" GV (MJ) w/
VALVE BOX & COVER

℄ KINIPŌPŌ ST STA 24+77 o/s RT 4'
INSTALL WATERLINE
DEFLECTION (H)

℄ KINIPŌPŌ ST STA 24+32 o/s RT 5'
INSTALL WATERLINE
DEFLECTION (H)

℄ KINIPŌPŌ ST STA 26+60 o/s LT 5'
INSTALL SMH #2

℄ KINIPŌPŌ ST STA 25+50 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #3
(SEE DET D-5, SHT 32)
INV IN (24") = 135.77
INV OUT (30") = 135.27

℄ KINIPŌPŌ ST STA 23+97 o/s LT 19'
INSTALL COUNTY TYPE "C" CB #5
(SEE DET D-9, SHT 32)
INV OUT (18") = 134.72

℄ KINIPŌPŌ ST STA 25+20 o/s RT 6'
INSTALL WATERLINE
1 - 12" DI $\frac{1}{16}$ BEND (H) (MJ)
1 - CONC REACTION BLOCK

℄ KINIPŌPŌ ST STA 22+30 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #6
(SEE DET D-5, SHT 32)
INV IN (30") = 130.47
INV OUT (30") = 130.47

℄ KINIPŌPŌ ST STA 23+97 o/s RT 19'
INSTALL COUNTY TYPE "B" CB #4
(SEE DET D-5, SHT 32)
INV IN (18") = 133.98
INV IN (30") = 132.98
INV OUT (30") = 132.98

℄ KINIPŌPŌ ST STA 25+50 o/s LT 8'
INSTALL SMH #3

℄ KINIPŌPŌ ST STA 27+44 o/s LT 3'
INSTALL
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)

℄ KINIPŌPŌ ST STA 28+09 o/s LT 6'
INSTALL SMH #1

℄ KINIPŌPŌ ST STA 28+43 o/s RT 13'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)

℄ KINIPŌPŌ ST STA 31+86 o/s LT 19'
INSTALL COUNTY TYPE "B" CB #19
(SEE DET D-5, SHT 32)
INV IN (18") = 137.15
INV OUT (18") = 136.90

℄ KINIPŌPŌ ST STA 31+86 o/s RT 19'
INSTALL COUNTY TYPE "C" CB #18
(SEE DET D-9, SHT 32)
INV OUT (18") = 137.60

℄ KINIPŌPŌ ST STA 31+29 o/s LT 2'
INSTALL SMH #11

℄ KINIPŌPŌ ST STA 30+32 o/s LT 5'
INSTALL SMH #10

℄ KINIPŌPŌ ST STA 27+80 o/s RT 19'
INSTALL COUNTY TYPE "F" CB #1
(SEE DET D-7, SHT 32)
INV OUT (18") = 139.72

℄ KINIPŌPŌ ST STA 28+07 o/s RT 10'
INSTALL
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
1 - 8" DI $\frac{1}{16}$ BEND (H) (MJ)
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)

℄ KINIPŌPŌ ST STA 28+16 o/s RT 13'
INSTALL WATERLINE
1 - 12" DI $\frac{1}{16}$ BEND (H) (MJ)
1 - CONC REACTION BLOCK

℄ KINIPŌPŌ ST STA 28+80 o/s RT 13'
INSTALL VALVE
1 - AIR RELIEF VALVE
(SEE DET. SHT 40)
BEGIN WATERLINE DEFLECTION (242' RADIUS)

℄ KINIPŌPŌ ST STA 28+46 o/s RT 13'
INSTALL VALVE
1 - 12" GV (MJ) w/ VALVE BOX & COVER

℄ KINIPŌPŌ ST STA 30+29 o/s RT 13'
INSTALL
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)

℄ KINIPŌPŌ ST STA 34+40 o/s RT 13'
INSTALL
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)

℄ KINIPŌPŌ ST STA 33+85 o/s LT 19'
INSTALL COUNTY TYPE "B" CB #20
(SEE DET D-5, SHT 32)
INV IN (18") = 133.15
INV OUT (18") = 133.05

℄ KINIPŌPŌ ST STA 34+50 o/s RT 13'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)

℄ KINIPŌPŌ ST STA 33+75 o/s LT 5'
INSTALL SMH #12

℄ KINIPŌPŌ ST STA 33+00 o/s RT 13'
INSTALL VALVE
1 - 12" GV (MJ) w/ VALVE BOX & COVER

℄ KINIPŌPŌ ST STA 32+00 o/s RT 13'
INSTALL
1 - 12" x 8" DI TEE (MJ)
1 - 8" GV (MJ) w/ VALVE BOX & COVER
CONC REACTION BLOCKS AS REQ'D
1 - DBL SVC ASSEMBLY
(SEE DET. SHT 40)

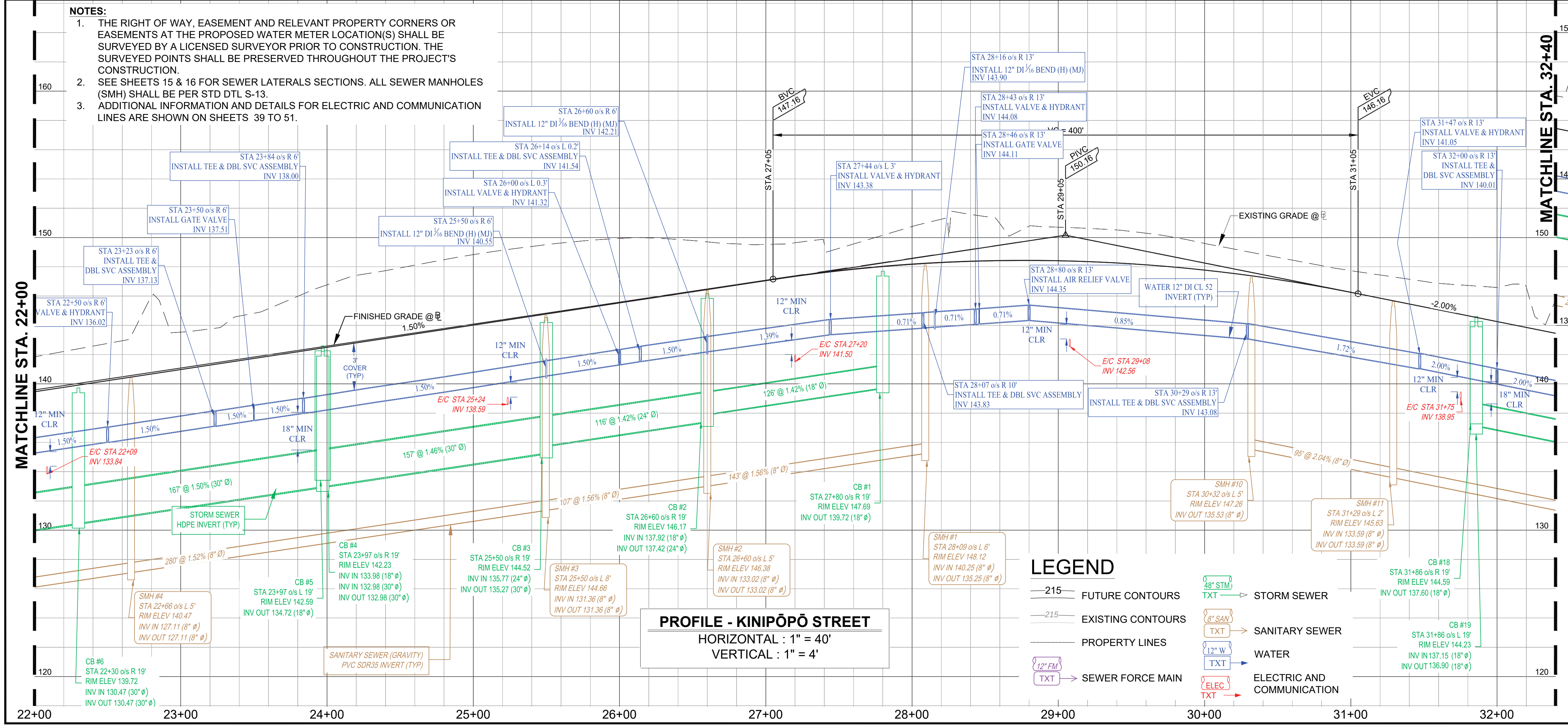
℄ KINIPŌPŌ ST STA 31+47 o/s RT 13'
INSTALL HYDRANT ASSEMBLY
1 - 12" x 6" DI TEE (MJxFE)
1 - 6" GV (FExMJ) w/ VALVE BOX & COVER
2 - CONC REACTION BLOCKS
1 - HYDRANT ASSEMBLY
(SEE DET. SHT 39)
END WATERLINE DEFLECTION (242' RADIUS)

PLAN - KINIPŌPŌ STREET

SCALE : 1" = 40'

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS AT THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 39 TO 51.


MATCHLINE STA. 22+00
MATCHLINE STA. 32+40
160
150
140
130
120
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
30+00
31+00
32+00
STA 27+05
STA 29+05
STA 31+05
BVC 147.16
EVC 146.16
PIVC 150.16
VC = 400'
FINISHED GRADE @ ℄
EXISTING GRADE @ ℄
1.50%
-2.00%
1.50%
1.39%
0.71%
0.71%
0.71%
0.85%
1.72%
2.00%
2.00%
12" MIN CLR
18" MIN CLR
3' COVER (TYP)
167' @ 1.50% (30" Ø)
157' @ 1.46% (30" Ø)
116' @ 1.42% (24" Ø)
126' @ 1.42% (18" Ø)
280' @ 1.52% (8" Ø)
107' @ 1.56% (8" Ø)
143' @ 1.56% (8" Ø)
95' @ 2.04% (8" Ø)
E/C STA 22+09
INV 133.84
E/C STA 25+24
INV 138.59
E/C STA 27+20
INV 141.50
E/C STA 29+08
INV 142.56
E/C STA 31+75
INV 138.95

STA 22+50 o/s R 6'
VALVE & HYDRANT
INV 136.02

STA 23+23 o/s R 6'
INSTALL TEE &
DBL SVC ASSEMBLY
INV 137.13

STA 23+50 o/s R 6'
INSTALL GATE VALVE
INV 137.51

STA 23+84 o/s R 6'
INSTALL TEE & DBL SVC ASSEMBLY
INV 138.00

STA 25+50 o/s R 6'
INSTALL 12" DI $\frac{1}{16}$ BEND (H) (MJ)
INV 140.55

STA 26+00 o/s L 0.3'
INSTALL VALVE & HYDRANT
INV 141.32

STA 26+14 o/s L 0.2'
INSTALL TEE & DBL SVC ASSEMBLY
INV 141.54

STA 26+60 o/s R 6'
INSTALL 12" DI $\frac{1}{16}$ BEND (H) (MJ)
INV 142.21

STA 27+44 o/s L 3'
INSTALL VALVE & HYDRANT
INV 143.38

STA 28+16 o/s R 13'
INSTALL 12" DI $\frac{1}{16}$ BEND (H) (MJ)
INV 143.90

STA 28+43 o/s R 13'
INSTALL VALVE & HYDRANT
INV 144.08

STA 28+46 o/s R 13'
INSTALL GATE VALVE
INV 144.11

STA 28+80 o/s R 13'
INSTALL AIR RELIEF VALVE
INV 144.35

WATER 12" DI CL 52
INVERT (TYP)

STA 28+07 o/s R 10'
INSTALL TEE & DBL SVC ASSEMBLY
INV 143.83

STA 30+29 o/s R 13'
INSTALL TEE & DBL SVC ASSEMBLY
INV 143.08

STA 31+47 o/s R 13'
INSTALL VALVE & HYDRANT
INV 141.05

STA 32+00 o/s R 13'
INSTALL TEE &
DBL SVC ASSEMBLY
INV 140.01

STORM SEWER
HDPE INVERT (TYP)

SANITARY SEWER (GRAVITY)
PVC SDR35 INVERT (TYP)

CB #6
STA 22+30 o/s R 19'
RIM ELEV 139.72
INV IN 130.47 (30" ø)
INV OUT 130.47 (30" ø)

SMH #4
STA 22+66 o/s L 5'
RIM ELEV 140.47
INV IN 127.11 (8" ø)
INV OUT 127.11 (8" ø)

CB #5
STA 23+97 o/s L 19'
RIM ELEV 142.59
INV OUT 134.72 (18" ø)

CB #4
STA 23+97 o/s R 19'
RIM ELEV 142.23
INV IN 133.98 (18" ø)
INV IN 132.98 (30" ø)
INV OUT 132.98 (30" ø)

CB #3
STA 25+50 o/s R 19'
RIM ELEV 144.52
INV IN 135.77 (24" ø)
INV OUT 135.27 (30" ø)

SMH #3
STA 25+50 o/s L 8'
RIM ELEV 144.66
INV IN 131.36 (8" ø)
INV OUT 131.36 (8" ø)

CB #2
STA 26+60 o/s R 19'
RIM ELEV 146.17
INV IN 137.92 (18" ø)
INV OUT 137.42 (24" ø)

SMH #2
STA 26+60 o/s L 5'
RIM ELEV 146.38
INV IN 133.02 (8" ø)
INV OUT 133.02 (8" ø)

CB #1
STA 27+80 o/s R 19'
RIM ELEV 147.69
INV OUT 139.72 (18" ø)

SMH #1
STA 28+09 o/s L 6'
RIM ELEV 148.12
INV IN 140.25 (8" ø)
INV OUT 135.25 (8" ø)

SMH #10
STA 30+32 o/s L 5'
RIM ELEV 147.26
INV OUT 135.53 (8" ø)

SMH #11
STA 31+29 o/s L 2'
RIM ELEV 145.63
INV IN 133.59 (8" ø)
INV OUT 133.59 (8" ø)

CB #18
STA 31+86 o/s R 19'
RIM ELEV 144.59
INV OUT 137.60 (18" ø)

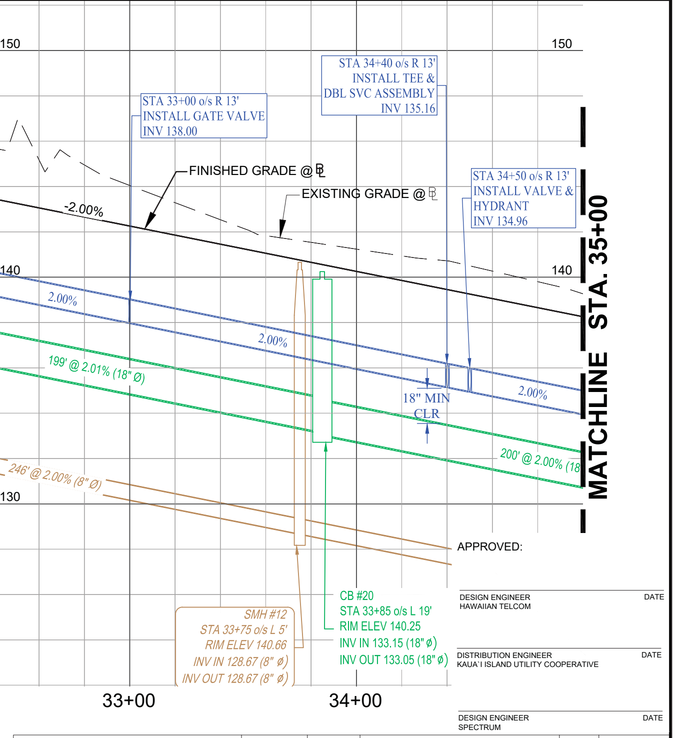
CB #19
STA 31+86 o/s L 19'
RIM ELEV 144.23
INV IN 137.15 (18" ø)
INV OUT 136.90 (18" ø)

PROFILE - KINIPŌPŌ STREET

HORIZONTAL : 1" = 40'
VERTICAL : 1" = 4'

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
	PROPERTY LINES
12" FM TXT	SEWER FORCE MAIN
48" STM TXT	STORM SEWER
8" SAN TXT	SANITARY SEWER
12" W TXT	WATER
ELEC TXT	ELECTRIC AND COMMUNICATION


MATCHLINE STA. 32+40
MATCHLINE STA. 35+00
150
140
130
33+00
34+00
FINISHED GRADE @ ℄
EXISTING GRADE @ ℄
-2.00%
2.00%
2.00%
2.00%
18" MIN CLR
199' @ 2.01% (18" Ø)
200' @ 2.00% (18
246' @ 2.00% (8" Ø)

STA 33+00 o/s R 13'
INSTALL GATE VALVE
INV 138.00

STA 34+40 o/s R 13'
INSTALL TEE &
DBL SVC ASSEMBLY
INV 135.16

STA 34+50 o/s R 13'
INSTALL VALVE &
HYDRANT
INV 134.96

SMH #12
STA 33+75 o/s L 5'
RIM ELEV 140.66
INV IN 128.67 (8" ø)
INV OUT 128.67 (8" ø)

CB #20
STA 33+85 o/s L 19'
RIM ELEV 140.25
INV IN 133.15 (18" ø)
INV OUT 133.05 (18" ø)

APPROVED:

DESIGN ENGINEER
HAWAIIAN TELCOM
DATE

DISTRIBUTION ENGINEER
KAUA`I ISLAND UTILITY COOPERATIVE
DATE

DESIGN ENGINEER
SPECTRUM
DATE

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE: KINIPŌPŌ STREET

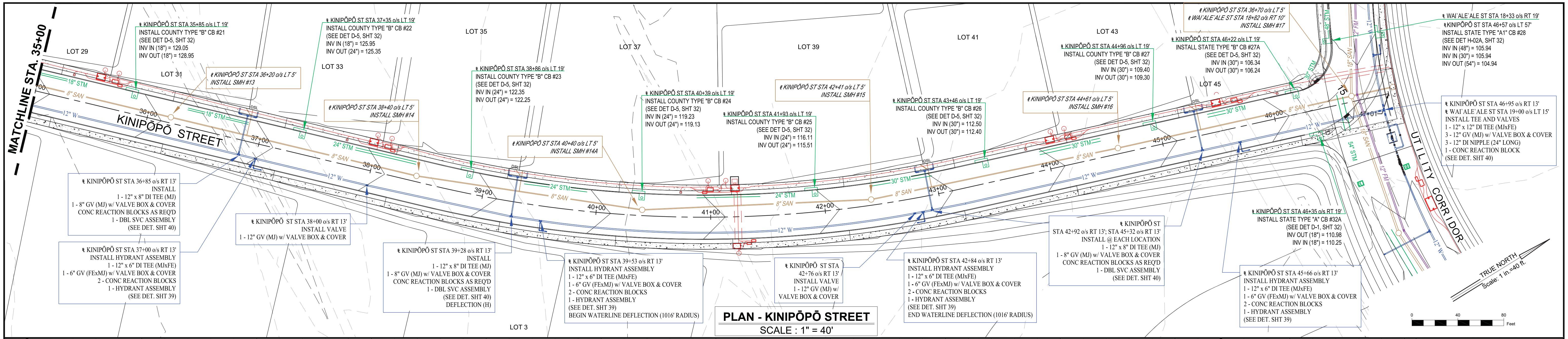
APPROVED:
COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

APPROVED:
MANAGER & CHIEF ENGINEER, DATE
DEPT. OF WATER, COUNTY OF KAUA`I

APPROVED:
CHIEF, WASTEWATER MANAGEMENT DIV. DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

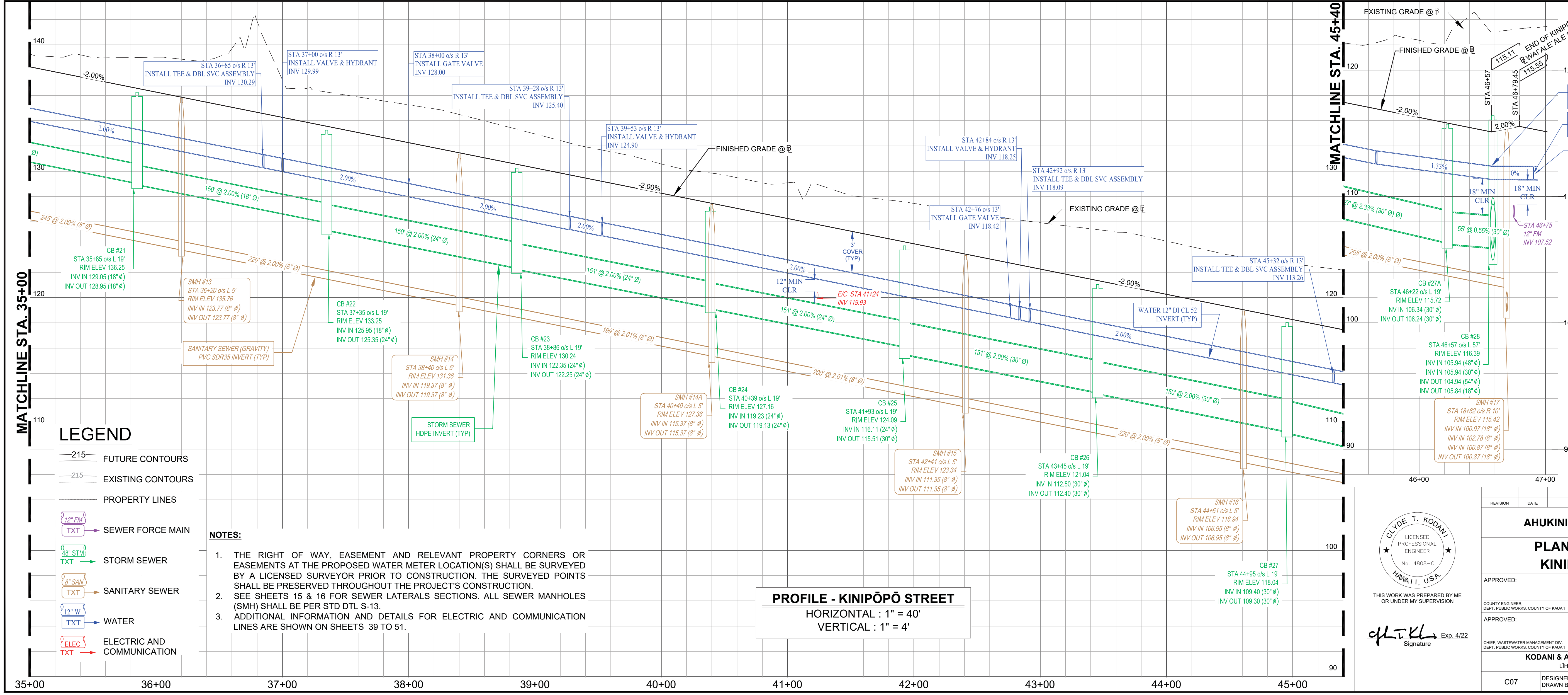
KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C06	DESIGNED BY: ATM DRAWN BY:TP.	DATE: 2020-4-22	SHEET 12 OF 57 SHEETS


MATCHLINE STA. 35+00
LOT 29
LOT 31
LOT 33
LOT 35
LOT 37
LOT 39
LOT 41
LOT 43
LOT 45
LOT 3
KINIPŌPŌ STREET
UTILITY CORRIDOR
18" STM
8" SAN
12" W
24" STM
30" STM
48" STM
54" STM
12" FM
18" SAN
DSL
36+00
37+00
38+00
39+00
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+01
℄ KINIPŌPŌ ST STA 35+85 o/s LT 19' INSTALL COUNTY TYPE "B" CB #21 (SEE DET D-5, SHT 32) INV IN (18") = 129.05 INV OUT (18") = 128.95
℄ KINIPŌPŌ ST STA 36+20 o/s LT 5' INSTALL SMH #13
℄ KINIPŌPŌ ST STA 37+35 o/s LT 19' INSTALL COUNTY TYPE "B" CB #22 (SEE DET D-5, SHT 32) INV IN (18") = 125.95 INV OUT (24") = 125.35
℄ KINIPŌPŌ ST STA 38+40 o/s LT 5' INSTALL SMH #14
℄ KINIPŌPŌ ST STA 38+86 o/s LT 19' INSTALL COUNTY TYPE "B" CB #23 (SEE DET D-5, SHT 32) INV IN (24") = 122.35 INV OUT (24") = 122.25
℄ KINIPŌPŌ ST STA 40+40 o/s LT 5' INSTALL SMH #14A
℄ KINIPŌPŌ ST STA 40+39 o/s LT 19' INSTALL COUNTY TYPE "B" CB #24 (SEE DET D-5, SHT 32) INV IN (24") = 119.23 INV OUT (24") = 119.13
℄ KINIPŌPŌ ST STA 41+93 o/s LT 19' INSTALL COUNTY TYPE "B" CB #25 (SEE DET D-5, SHT 32) INV IN (24") = 116.11 INV OUT (24") = 115.51
℄ KINIPŌPŌ ST STA 42+41 o/s LT 5' INSTALL SMH #15
℄ KINIPŌPŌ ST STA 43+46 o/s LT 19' INSTALL COUNTY TYPE "B" CB #26 (SEE DET D-5, SHT 32) INV IN (30") = 112.50 INV OUT (30") = 112.40
℄ KINIPŌPŌ ST STA 44+61 o/s LT 5' INSTALL SMH #16
℄ KINIPŌPŌ ST STA 44+96 o/s LT 19' INSTALL COUNTY TYPE "B" CB #27 (SEE DET D-5, SHT 32) INV IN (30") = 109.40 INV OUT (30") = 109.30
℄ KINIPŌPŌ ST STA 36+70 o/s LT 5' ℄ WAI`ALE`ALE ST STA 18+82 o/s RT 10' INSTALL SMH #17
℄ KINIPŌPŌ ST STA 46+22 o/s LT 19' INSTALL STATE TYPE "B" CB #27A (SEE DET D-5, SHT 32) INV IN (30") = 106.34 INV OUT (30") = 106.24
℄ WAI`ALE`ALE ST STA 18+33 o/s RT 19' ℄ KINIPŌPŌ ST STA 46+57 o/s LT 57' INSTALL STATE TYPE "A1" CB #28 (SEE DET H-02A, SHT 32) INV IN (48") = 105.94 INV IN (30") = 105.94 INV OUT (54") = 104.94
℄ KINIPŌPŌ ST STA 46+95 o/s RT 13' ℄ WAI`ALE`ALE ST STA 19+00 o/s LT 15' INSTALL TEE AND VALVES 1 - 12" x 12" DI TEE (MJxFE) 3 - 12" GV (MJ) w/ VALVE BOX & COVER 3 - 12" DI NIPPLE (24" LONG) 1 - CONC REACTION BLOCK (SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 46+35 o/s RT 19' INSTALL STATE TYPE "A" CB #32A (SEE DET D-1, SHT 32) INV OUT (18") = 110.98 INV IN (18") = 110.25
℄ KINIPŌPŌ ST STA 36+85 o/s RT 13' INSTALL 1 - 12" x 8" DI TEE (MJ) 1 - 8" GV (MJ) w/ VALVE BOX & COVER CONC REACTION BLOCKS AS REQ'D 1 - DBL SVC ASSEMBLY (SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 37+00 o/s RT 13' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
℄ KINIPŌPŌ ST STA 38+00 o/s RT 13' INSTALL VALVE 1 - 12" GV (MJ) w/ VALVE BOX & COVER
℄ KINIPŌPŌ ST STA 39+28 o/s RT 13' INSTALL 1 - 12" x 8" DI TEE (MJ) 1 - 8" GV (MJ) w/ VALVE BOX & COVER CONC REACTION BLOCKS AS REQ'D 1 - DBL SVC ASSEMBLY (SEE DET. SHT 40) DEFLECTION (H)
℄ KINIPŌPŌ ST STA 39+53 o/s RT 13' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39) BEGIN WATERLINE DEFLECTION (1016' RADIUS)
℄ KINIPŌPŌ ST STA 42+76 o/s RT 13' INSTALL VALVE 1 - 12" GV (MJ) w/ VALVE BOX & COVER
℄ KINIPŌPŌ ST STA 42+84 o/s RT 13' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39) END WATERLINE DEFLECTION (1016' RADIUS)
℄ KINIPŌPŌ ST STA 42+92 o/s RT 13'; STA 45+32 o/s RT 13' INSTALL @ EACH LOCATION 1 - 12" x 8" DI TEE (MJ) 1 - 8" GV (MJ) w/ VALVE BOX & COVER CONC REACTION BLOCKS AS REQ'D 1 - DBL SVC ASSEMBLY (SEE DET. SHT 40)
℄ KINIPŌPŌ ST STA 45+66 o/s RT 13' INSTALL HYDRANT ASSEMBLY 1 - 12" x 6" DI TEE (MJxFE) 1 - 6" GV (FExMJ) w/ VALVE BOX & COVER 2 - CONC REACTION BLOCKS 1 - HYDRANT ASSEMBLY (SEE DET. SHT 39)
TRUE NORTH
Scale: 1 in.=40 ft.
0
40
80
Feet

PLAN - KINIPŌPŌ STREET

SCALE : 1" = 40'


MATCHLINE STA. 35+00
MATCHLINE STA. 45+40
140
130
120
110
100
90
120.00
110.00
100.00
90.00
35+00
36+00
37+00
38+00
39+00
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+00
-2.00%
2.00%
1.33%
0%
FINISHED GRADE @ ℄
EXISTING GRADE @ ℄
3' COVER (TYP)
12" MIN CLR
18" MIN CLR
STA 36+85 o/s R 13' INSTALL TEE & DBL SVC ASSEMBLY INV 130.29
STA 37+00 o/s R 13' INSTALL VALVE & HYDRANT INV 129.99
STA 38+00 o/s R 13' INSTALL GATE VALVE INV 128.00
STA 39+28 o/s R 13' INSTALL TEE & DBL SVC ASSEMBLY INV 125.40
STA 39+53 o/s R 13' INSTALL VALVE & HYDRANT INV 124.90
STA 42+84 o/s R 13' INSTALL VALVE & HYDRANT INV 118.25
STA 42+92 o/s R 13' INSTALL TEE & DBL SVC ASSEMBLY INV 118.09
STA 42+76 o/s 13' INSTALL GATE VALVE INV 118.42
STA 45+32 o/s R 13' INSTALL TEE & DBL SVC ASSEMBLY INV 113.26
WATER 12" DI CL 52 INVERT (TYP)
E/C STA 41+24 INV 119.93
150' @ 2.00% (18" Ø)
150' @ 2.00% (24" Ø)
151' @ 2.00% (24" Ø)
151' @ 2.00% (30" Ø)
150' @ 2.00% (30" Ø)
27' @ 2.33% (30" Ø) Ø)
55' @ 0.55% (30" Ø)
245' @ 2.00% (8" Ø)
220' @ 2.00% (8" Ø)
199' @ 2.01% (8" Ø)
200' @ 2.01% (8" Ø)
220' @ 2.00% (8" Ø)
208' @ 2.00% (8" Ø)
CB #21 STA 35+85 o/s L 19' RIM ELEV 136.25 INV IN 129.05 (18" ø) INV OUT 128.95 (18" ø)
SMH #13 STA 36+20 o/s L 5' RIM ELEV 135.76 INV IN 123.77 (8" ø) INV OUT 123.77 (8" ø)
SANITARY SEWER (GRAVITY) PVC SDR35 INVERT (TYP)
CB #22 STA 37+35 o/s L 19' RIM ELEV 133.25 INV IN 125.95 (18" ø) INV OUT 125.35 (24" ø)
SMH #14 STA 38+40 o/s L 5' RIM ELEV 131.36 INV IN 119.37 (8" ø) INV OUT 119.37 (8" ø)
STORM SEWER HDPE INVERT (TYP)
CB #23 STA 38+86 o/s L 19' RIM ELEV 130.24 INV IN 122.35 (24" ø) INV OUT 122.25 (24" ø)
SMH #14A STA 40+40 o/s L 5' RIM ELEV 127.36 INV IN 115.37 (8" ø) INV OUT 115.37 (8" ø)
CB #24 STA 40+39 o/s L 19' RIM ELEV 127.16 INV IN 119.23 (24" ø) INV OUT 119.13 (24" ø)
CB #25 STA 41+93 o/s L 19' RIM ELEV 124.09 INV IN 116.11 (24" ø) INV OUT 115.51 (30" ø)
SMH #15 STA 42+41 o/s L 5' RIM ELEV 123.34 INV IN 111.35 (8" ø) INV OUT 111.35 (8" ø)
CB #26 STA 43+45 o/s L 19' RIM ELEV 121.04 INV IN 112.50 (30" ø) INV OUT 112.40 (30" ø)
SMH #16 STA 44+61 o/s L 5' RIM ELEV 118.94 INV IN 106.95 (8" ø) INV OUT 106.95 (8" ø)
CB #27 STA 44+95 o/s L 19' RIM ELEV 118.04 INV IN 109.40 (30" ø) INV OUT 109.30 (30" ø)
CB #27A STA 46+22 o/s L 19' RIM ELEV 115.72 INV IN 106.34 (30" ø) INV OUT 106.24 (30" ø)
CB #28 STA 46+57 o/s L 57' RIM ELEV 116.39 INV IN 105.94 (48" ø) INV IN 105.94 (30" ø) INV OUT 104.94 (54" ø) INV OUT 105.84 (18" ø)
SMH #17 STA 18+82 o/s R 10' RIM ELEV 115.42 INV IN 100.97 (18" ø) INV IN 102.78 (8" ø) INV IN 100.87 (8" ø) INV OUT 100.87 (18" ø)
STA 46+57
STA 46+79.45
115.11
115.55
END OF KINIPŌPŌ ST ℄ WAI`ALE`ALE ST STA 8+86.69
STA 46+58 o/s RT 13' DEFLECTION (V)
STA 46+91 o/s R 13' INSTALL GATE VALVE INV 111.35
℄ KINIPŌPŌ ST STA 46+95 o/s RT 13' ℄ WAI`ALE`ALE ST STA 19+00 o/s LT 15'
STA 46+75 12" FM INV 107.52

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
	PROPERTY LINES
12" FM TXT	SEWER FORCE MAIN
48" STM TXT	STORM SEWER
8" SAN TXT	SANITARY SEWER
12" W TXT	WATER
ELEC TXT	ELECTRIC AND COMMUNICATION

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS AT THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 39 TO 51.

PROFILE - KINIPŌPŌ STREET

HORIZONTAL : 1" = 40'
VERTICAL : 1" = 4'

APPROVED:

DESIGN ENGINEER HAWAIIAN TELCOM — DATE

DESIGN ENGINEER SPECTRUM — DATE

DISTRIBUTION ENGINEER KAUA`I ISLAND UTILITY COOPERATIVE — DATE

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAI I, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE:
KINIPŌPŌ STREET

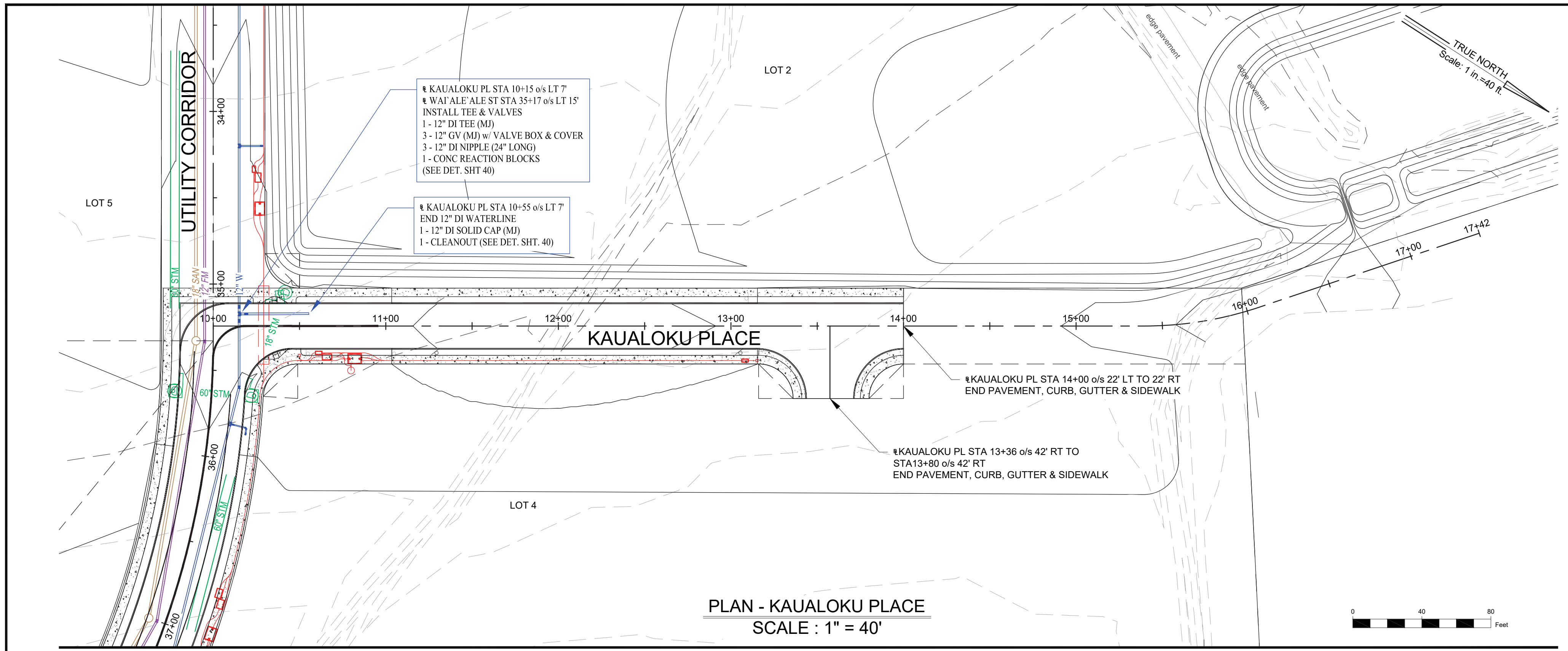
APPROVED:
COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

APPROVED:
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUA`I — DATE

APPROVED:
CHIEF, WASTEWATER MANAGEMENT DIV. DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

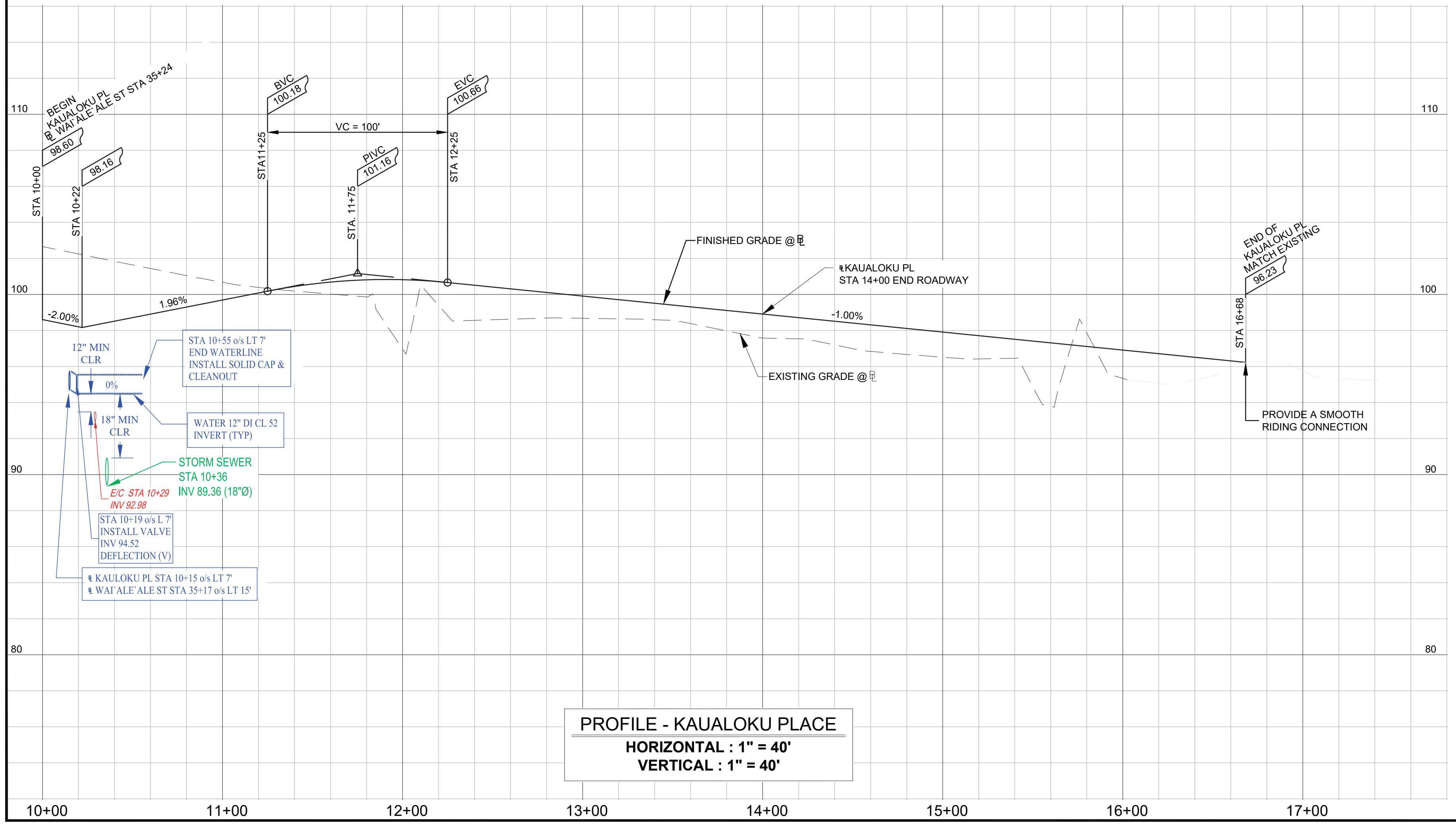
C07	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-4-22	SHEET 13 OF 57 SHEETS


UTILITY CORRIDOR
LOT 5
LOT 2
LOT 4
KAUALOKU PLACE
TRUE NORTH
Scale: 1 in.=40 ft.
edge pavement
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
17+42
34+00
35+00
36+00
37+00
60" STM
18" STM
8" SAN
12" FM
12" W
℄ KAUALOKU PL STA 10+15 o/s LT 7'
℄ WAI`ALE`ALE ST STA 35+17 o/s LT 15'
INSTALL TEE & VALVES
1 - 12" DI TEE (MJ)
3 - 12" GV (MJ) w/ VALVE BOX & COVER
3 - 12" DI NIPPLE (24" LONG)
1 - CONC REACTION BLOCKS
(SEE DET. SHT 40)
℄ KAUALOKU PL STA 10+55 o/s LT 7'
END 12" DI WATERLINE
1 - 12" DI SOLID CAP (MJ)
1 - CLEANOUT (SEE DET. SHT. 40)
℄KAUALOKU PL STA 14+00 o/s 22' LT TO 22' RT
END PAVEMENT, CURB, GUTTER & SIDEWALK
℄KAUALOKU PL STA 13+36 o/s 42' RT TO
STA13+80 o/s 42' RT
END PAVEMENT, CURB, GUTTER & SIDEWALK
0
40
80
Feet

PLAN - KAUALOKU PLACE
SCALE : 1" = 40'

LEGEND

215	FUTURE CONTOURS
215	EXISTING CONTOURS
	PROPERTY LINES
12" FM TXT →	SEWER FORCE MAIN
48" STM TXT →	STORM SEWER
8" SAN TXT →	SANITARY SEWER
12" W TXT →	WATER
ELEC TXT →	ELECTRIC AND COMMUNICATION


110
100
90
80
BEGIN
KAUALOKU PL
℄ WAI`ALE`ALE ST STA 35+24
98.60
STA 10+00
STA 10+22
98.16
-2.00%
1.96%
BVC
100.18
STA11+25
VC = 100'
PIVC
101.16
STA. 11+75
EVC
100.66
STA 12+25
FINISHED GRADE @ ℄
℄KAUALOKU PL
STA 14+00 END ROADWAY
-1.00%
EXISTING GRADE @ ℄
END OF
KAUALOKU PL
MATCH EXISTING
96.23
STA 16+68
PROVIDE A SMOOTH
RIDING CONNECTION
12" MIN
CLR
0%
STA 10+55 o/s LT 7'
END WATERLINE
INSTALL SOLID CAP &
CLEANOUT
18" MIN
CLR
WATER 12" DI CL 52
INVERT (TYP)
STORM SEWER
STA 10+36
INV 89.36 (18"Ø)
E/C STA 10+29
INV 92.98
STA 10+19 o/s L 7'
INSTALL VALVE
INV 94.52
DEFLECTION (V)
℄ KAULOKU PL STA 10+15 o/s LT 7'
℄ WAI`ALE`ALE ST STA 35+17 o/s LT 15'
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00

PROFILE - KAUALOKU PLACE
HORIZONTAL : 1" = 40'
VERTICAL : 1" = 40'

NOTES:

1. THE RIGHT OF WAY, EASEMENT AND RELEVANT PROPERTY CORNERS OR EASEMENTS AT THE PROPOSED WATER METER LOCATION(S) SHALL BE SURVEYED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. THE SURVEYED POINTS SHALL BE PRESERVED THROUGHOUT THE PROJECT'S CONSTRUCTION.
2. SEE SHEETS 15 & 16 FOR SEWER LATERALS SECTIONS. ALL SEWER MANHOLES (SMH) SHALL BE PER STD DTL S-13.
3. ADDITIONAL INFORMATION AND DETAILS FOR ELECTRIC AND COMMUNICATION LINES ARE SHOWN ON SHEETS 39 TO 51.

APPROVED:

DESIGN ENGINEER DATE
HAWAIIAN TELCOM

DESIGN ENGINEER DATE
SPECTRUM

DISTRIBUTION ENGINEER DATE
KAUA`I ISLAND UTILITY COOPERATIVE

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

PLAN AND PROFILE: KAUALOKU PLACE

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

APPROVED:

N/A

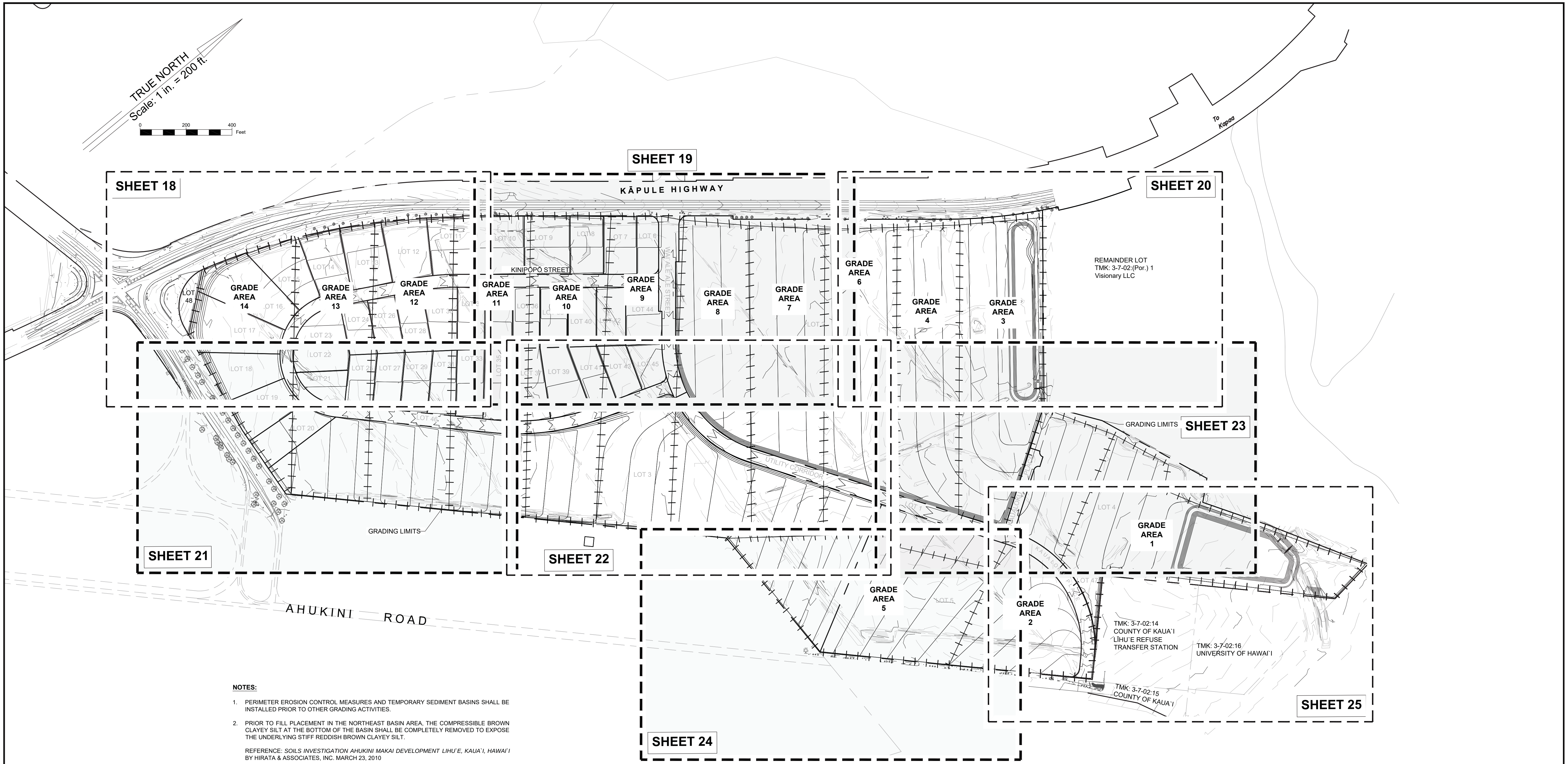
MANAGER & CHIEF ENGINEER, DATE
DEPT. OF WATER, COUNTY OF KAUA`I

APPROVED:

CHIEF, WASTEWATER MANAGEMENT DIV. DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C08	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-4-22	SHEET 14 OF 57 SHEETS


TRUE NORTH
Scale: 1 in. = 200 ft.
0
200
400
Feet
To Kapaa
SHEET 18
SHEET 19
SHEET 20
SHEET 21
SHEET 22
SHEET 23
SHEET 24
SHEET 25
KĀPULE HIGHWAY
KINIPOPO STREET
WAIALEALE STREET
GRADE AREA 1
GRADE AREA 2
GRADE AREA 3
GRADE AREA 4
GRADE AREA 5
GRADE AREA 6
GRADE AREA 7
GRADE AREA 8
GRADE AREA 9
GRADE AREA 10
GRADE AREA 11
GRADE AREA 12
GRADE AREA 13
GRADE AREA 14
LOT 48
LOT 16
LOT 17
LOT 14
LOT 15
LOT 12
LOT 11
LOT 23
LOT 22
LOT 21
LOT 18
LOT 19
LOT 20
LOT 26
LOT 27
LOT 28
LOT 29
LOT 10
LOT 9
LOT 8
LOT 7
LOT 6
LOT 44
LOT 40
LOT 39
LOT 46
LOT 3
LOT 4
LOT 5
REMAINDER LOT
TMK: 3-7-02:(Por.) 1
Visionary LLC
GRADING LIMITS
UTILITY CORRIDOR
AHUKINI ROAD
TMK: 3-7-02:14
COUNTY OF KAUA`I
LĪHU`E REFUSE
TRANSFER STATION
TMK: 3-7-02:16
UNIVERSITY OF HAWAI`I
TMK: 3-7-02:15
COUNTY OF KAUA`I

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

   REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

5. CONTRACTOR SHALL CONSTRUCT GRADING AREAS IN NUMERICAL ORDER.

6. NO GRADING SHALL OCCUR IN THE SUBSEQUENT INCREMENT UNTIL THE PRIOR INCREMENT HAS BEEN FULLY REVEGETATED TO PREVENT DUST AND EROSION PROBLEMS AND A MAINTENANCE PROGRAM IN PLACE TO ENSURE PLANT GROWTH IS FULLY ESTABLISHED.

LEGEND

162.00	FINISH GRADE ELEVATION
◄-0.5%	SLOPE
215	FINISH CONTOURS
-215-	EXISTING CONTOURS
—o—o—	SILT FENCE OR ERTEC S-FENCE
—o—o—	DUST SCREEN
—-—-—	PROPERTY LINE
┠──┨	GRADING AREA BOUNDARY

AREA GRADING SUMMARY

	Excavation (CY)	Embankment (CY)	Net (CY)	Area of Grading (Acres)
Area 1	47,194	19,351	-27,843	9.87
Area 2	4,631	26,797	22,166	9.93
Area 3	12,367	34,209	21,842	9.96
Area 4	21,906	9,339	-12,567	9.81
Area 5	3,110	21,041	17,932	9.89
Area 6	33,065	3,864	-29,201	9.62
Area 7	20,422	17,994	-2,428	9.61
Area 8	15,343	20,228	4,885	9.95
Area 9	38,613	23,797	-14,816	9.94
Area 10	18,003	21,803	3,799	9.97
Area 11	6,082	21,424	15,342	9.91
Area 12	8,715	18,019	9,304	9.99
Area 13	15,021	10,675	-4,345	9.01
Area 14	48,244	18	-48,226	7.19
Total	292,716	248,559	-44,157	134.7

CLYDE T. KODANI
No. 4808-C

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

GENERAL GRADING PLAN
SHEET REFERENCE MAP

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G01
DESIGNED BY: ATM
DRAWN BY: TP.
DATE: 2020-04-22
SHEET 17
OF 57 SHEETS

NOTES:

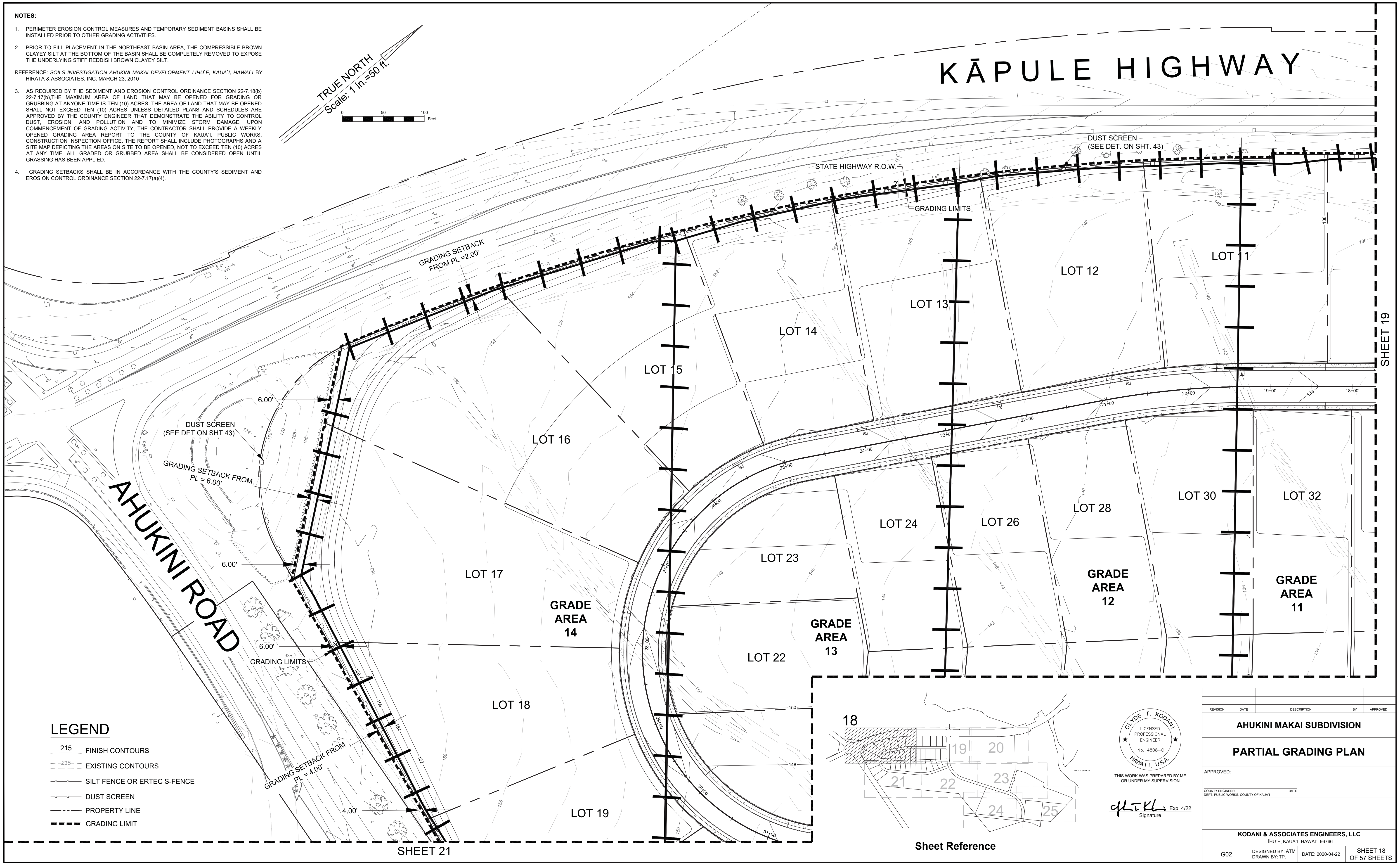
1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).


TRUE NORTH
Scale: 1 in.=50 ft.
0
50
100
Feet
KĀPULE HIGHWAY
AHUKINI ROAD
DUST SCREEN (SEE DET. ON SHT. 43)
STATE HIGHWAY R.O.W.
GRADING LIMITS
GRADING SETBACK FROM PL =2.00'
6.00'
DUST SCREEN (SEE DET ON SHT 43)
GRADING SETBACK FROM PL = 6.00'
6.00'
6.00'
GRADING LIMITS
GRADING SETBACK FROM PL = 4.00'
4.00'
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 22
LOT 23
LOT 24
LOT 26
LOT 28
LOT 30
LOT 32
GRADE AREA 14
GRADE AREA 13
GRADE AREA 12
GRADE AREA 11
SHEET 19
SHEET 21
18+00
19+00
20+00
21+00
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
30+00
31+00
18
19
20
21
22
23
24
25
HANAMĀ`ULU BAY

Sheet Reference

LEGEND

- 215 FINISH CONTOURS
- -215- EXISTING CONTOURS
- SILT FENCE OR ERTEC S-FENCE
- DUST SCREEN
- PROPERTY LINE
- GRADING LIMIT

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Exp. 4/22
Signature

AHUKINI MAKAI SUBDIVISION

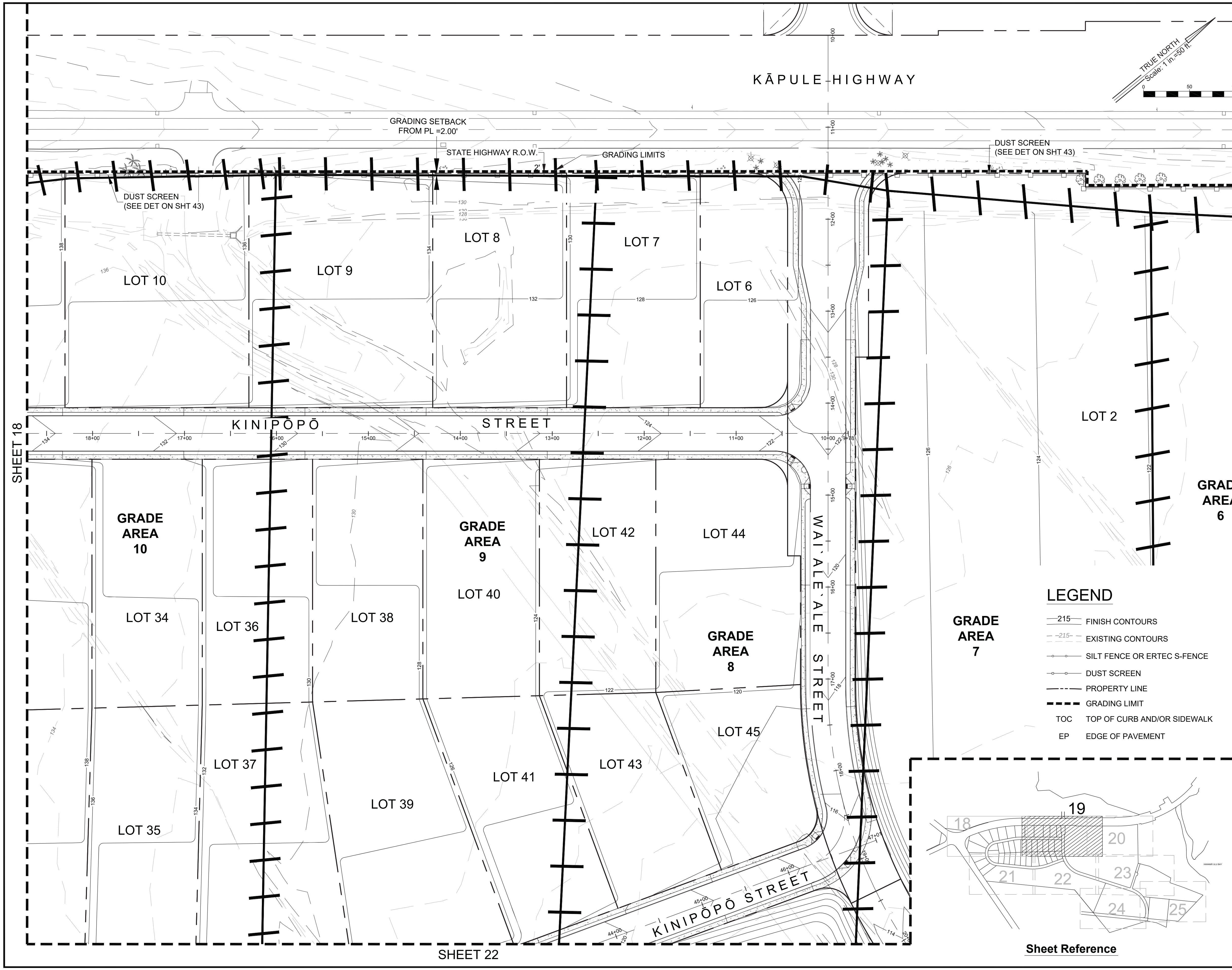
PARTIAL GRADING PLAN

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G02
DESIGNED BY: ATM
DRAWN BY: TP.
DATE: 2020-04-22
SHEET 18 OF 57 SHEETS


KĀPULE HIGHWAY
TRUE NORTH
Scale: 1 in.=50 ft.
0
50
100
Feet
GRADING SETBACK FROM PL =2.00'
STATE HIGHWAY R.O.W.
GRADING LIMITS
2'
DUST SCREEN (SEE DET ON SHT 43)
DUST SCREEN (SEE DET ON SHT 43)
LOT 10
LOT 9
LOT 8
LOT 7
LOT 6
LOT 2
KINIPŌPŌ STREET
WAI`ALE`ALE STREET
KINIPŌPŌ STREET
GRADE AREA 10
GRADE AREA 9
GRADE AREA 8
GRADE AREA 7
GRADE AREA 6
LOT 34
LOT 35
LOT 36
LOT 37
LOT 38
LOT 39
LOT 40
LOT 41
LOT 42
LOT 43
LOT 44
LOT 45
SHEET 18
SHEET 20
SHEET 22
LEGEND
215 FINISH CONTOURS
215 EXISTING CONTOURS
SILT FENCE OR ERTEC S-FENCE
DUST SCREEN
PROPERTY LINE
GRADING LIMIT
TOC TOP OF CURB AND/OR SIDEWALK
EP EDGE OF PAVEMENT
19
18
20
21
22
23
24
25
HANAMĀ`ULU BAY
Sheet Reference

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

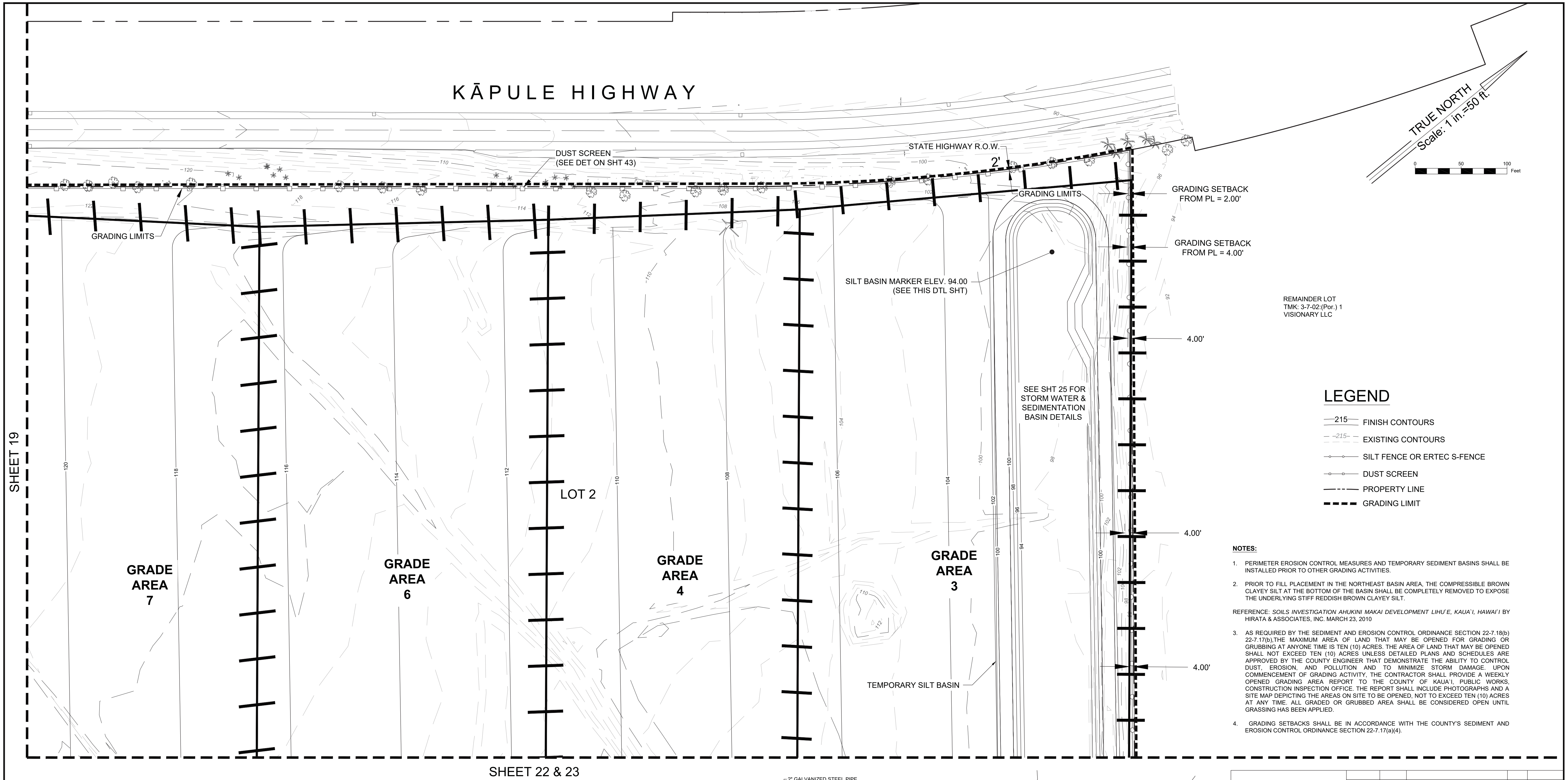
PARTIAL GRADING PLAN

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G03
DESIGNED BY: ATM
DRAWN BY: TP.
DATE: 2020-04-22
SHEET 19
OF 57 SHEETS


KĀPULE HIGHWAY
TRUE NORTH
Scale: 1 in.=50 ft.
0
50
100
Feet
DUST SCREEN
(SEE DET ON SHT 43)
STATE HIGHWAY R.O.W.
2'
GRADING LIMITS
GRADING LIMITS
GRADING SETBACK
FROM PL = 2.00'
GRADING SETBACK
FROM PL = 4.00'
SILT BASIN MARKER ELEV. 94.00
(SEE THIS DTL SHT)
REMAINDER LOT
TMK: 3-7-02:(Por.) 1
VISIONARY LLC
4.00'
SEE SHT 25 FOR
STORM WATER &
SEDIMENTATION
BASIN DETAILS
4.00'
4.00'
TEMPORARY SILT BASIN
SHEET 19
LOT 2
GRADE AREA 7
GRADE AREA 6
GRADE AREA 4
GRADE AREA 3
SHEET 22 & 23
120
118
116
114
112
110
108
106
104
102
100
98
96
94
92
90

LEGEND

- 215 FINISH CONTOURS
- 215 EXISTING CONTOURS
- SILT FENCE OR ERTEC S-FENCE
- DUST SCREEN
- PROPERTY LINE
- GRADING LIMIT

NOTES:

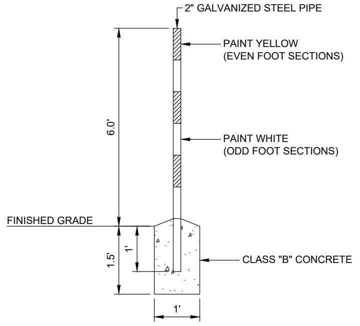
1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

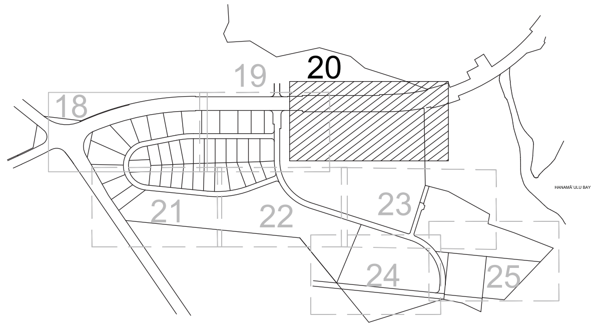
3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).


2" GALVANIZED STEEL PIPE
PAINT YELLOW
(EVEN FOOT SECTIONS)
PAINT WHITE
(ODD FOOT SECTIONS)
6.0'
FINISHED GRADE
1'
1.5'
CLASS "B" CONCRETE
1'

SILT BASIN MARKER DETAIL

N.T.S.


18
19
20
21
22
23
24
25
HANAMĀ`ULU BAY

Sheet Reference

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

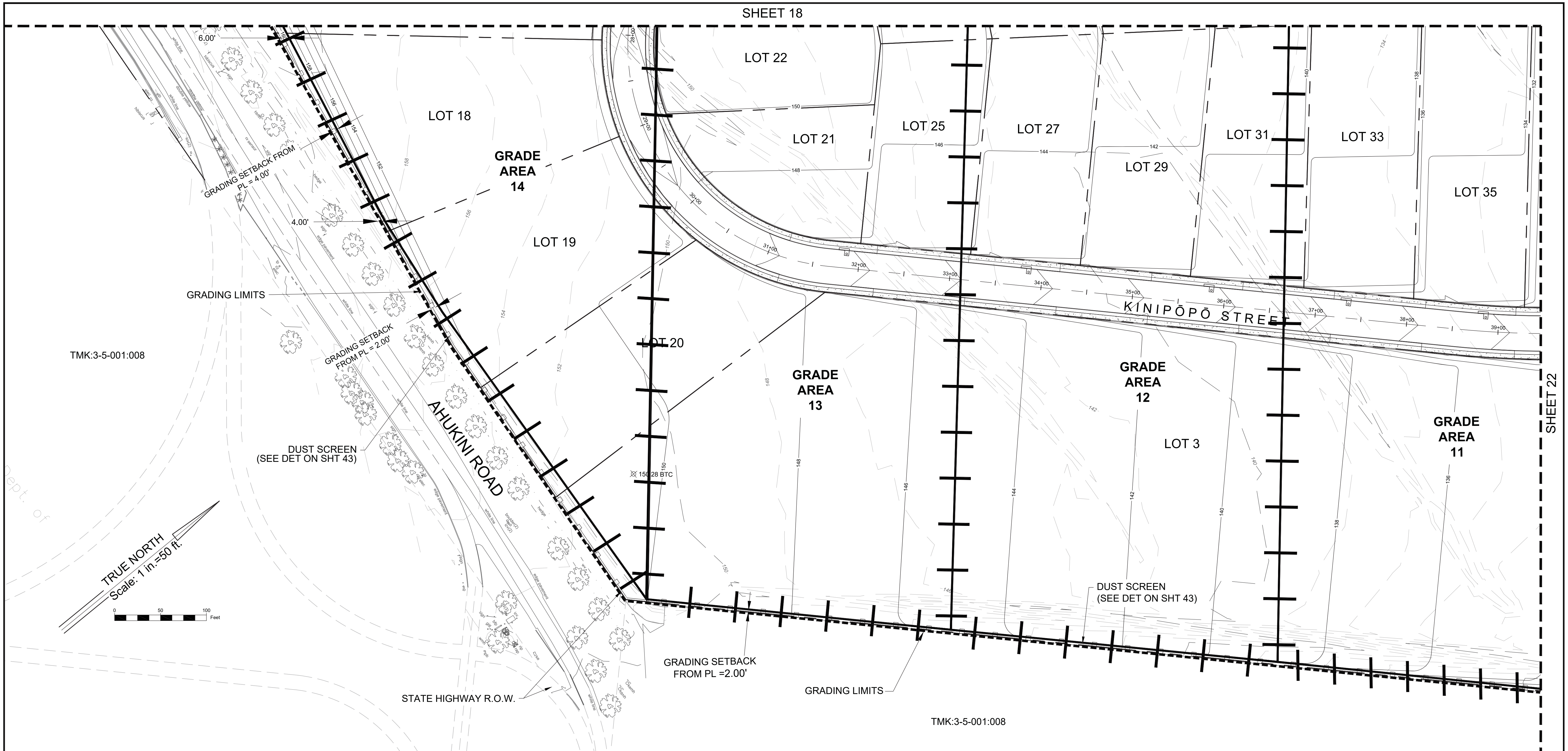
PARTIAL GRADING PLAN

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G04	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 20 OF 57 SHEETS


SHEET 18
SHEET 22
6.00'
4.00'
GRADING SETBACK FROM PL = 4.00'
GRADING LIMITS
GRADING SETBACK FROM PL = 2.00'
DUST SCREEN (SEE DET ON SHT 43)
TMK:3-5-001:008
AHUKINI ROAD
STATE HIGHWAY R.O.W.
TRUE NORTH
Scale: 1 in.=50 ft.
0
50
100
Feet
LOT 18
LOT 19
LOT 20
LOT 21
LOT 22
LOT 25
LOT 27
LOT 29
LOT 31
LOT 33
LOT 35
LOT 3
GRADE AREA 14
GRADE AREA 13
GRADE AREA 12
GRADE AREA 11
KINIPŌPŌ STREET
28+00
29+00
30+00
31+00
32+00
33+00
34+00
35+00
36+00
37+00
38+00
39+00
150.28 BTC
GRADING SETBACK FROM PL =2.00'
GRADING LIMITS
DUST SCREEN (SEE DET ON SHT 43)
TMK:3-5-001:008
158
156
154
152
150
148
146
144
142
140
138
136
134
132

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

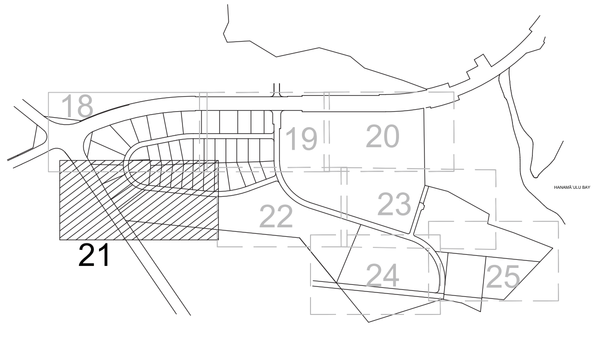
REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

LEGEND

- 215 FINISH CONTOURS
- –215– EXISTING CONTOURS
- SILT FENCE OR ERTEC S-FENCE
- DUST SCREEN
- PROPERTY LINE
- GRADING LIMIT


18
19
20
21
22
23
24
25
HANAMĀ`ULU BAY

Sheet Reference

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

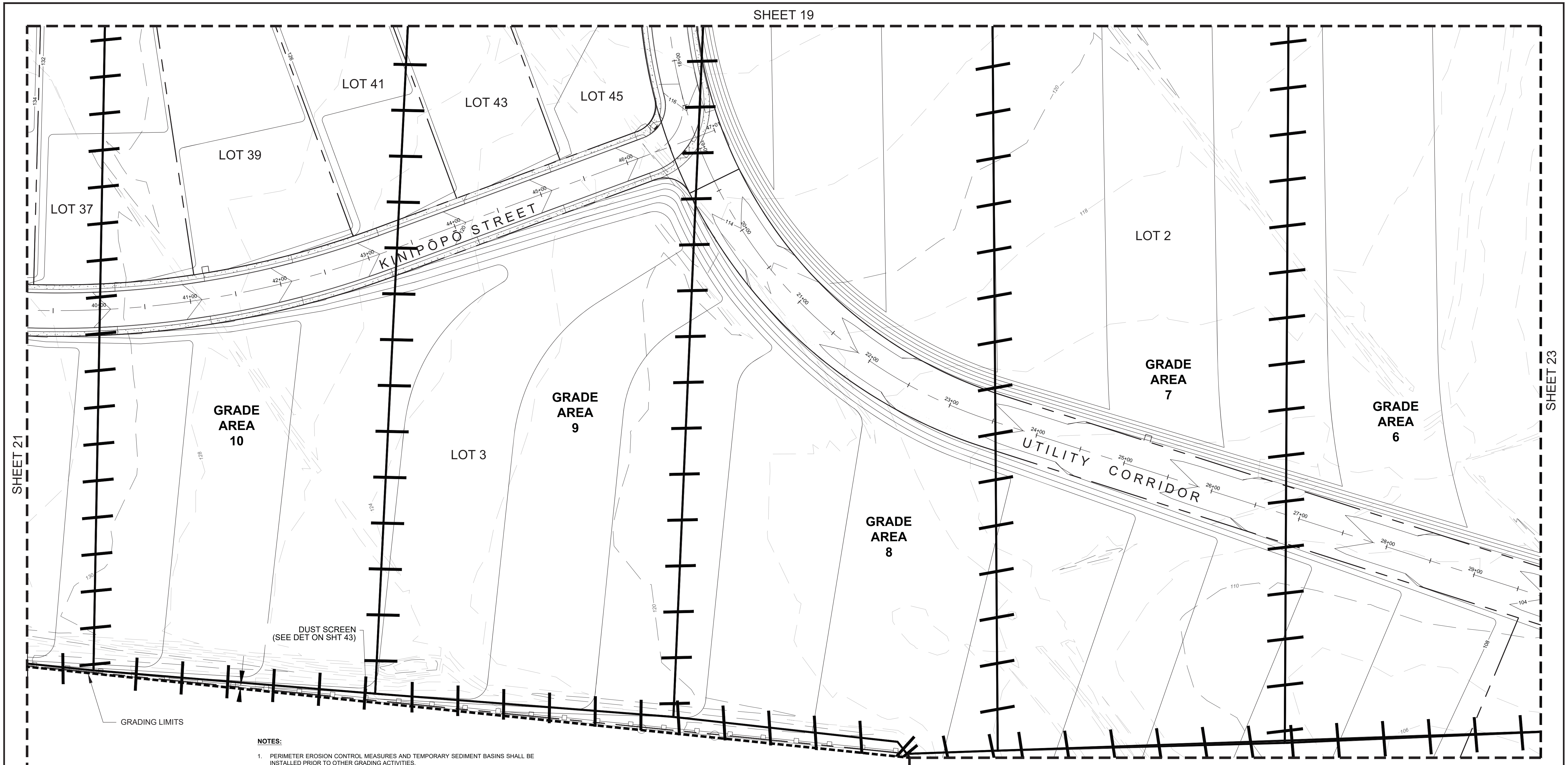
PARTIAL GRADING PLAN

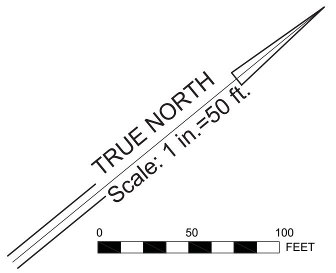
APPROVED:

COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I
DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G05	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 21 OF 57 SHEETS


SHEET 19
SHEET 21
SHEET 23
LOT 37
LOT 39
LOT 41
LOT 43
LOT 45
LOT 2
LOT 3
KINIPOPO STREET
UTILITY CORRIDOR
GRADE AREA 10
GRADE AREA 9
GRADE AREA 8
GRADE AREA 7
GRADE AREA 6
DUST SCREEN (SEE DET ON SHT 43)
GRADING LIMITS
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+00
18+00
20+00
21+00
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
104
106
108
110
114
116
118
120
124
128
130
132
134


TRUE NORTH
Scale: 1 in.=50 ft.
0
50
100
FEET

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

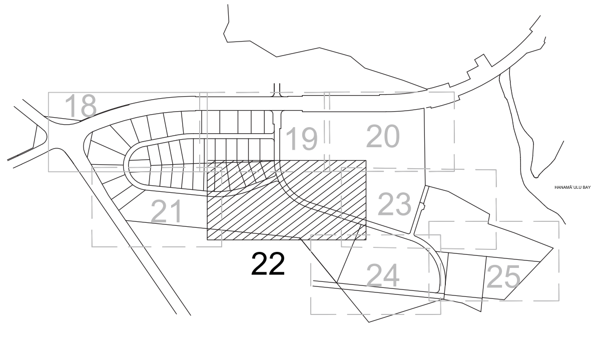
REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

LEGEND

──	FINISH CONTOURS
- 215 -	EXISTING CONTOURS
-○-215-	SILT FENCE OR ERTEC S-FENCE
-○-○-	DUST SCREEN
—·—·—	PROPERTY LINE
- - - -	GRADING LIMIT


18
19
20
21
22
23
24
25
HANAMĀ`ULU BAY

Sheet Reference

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

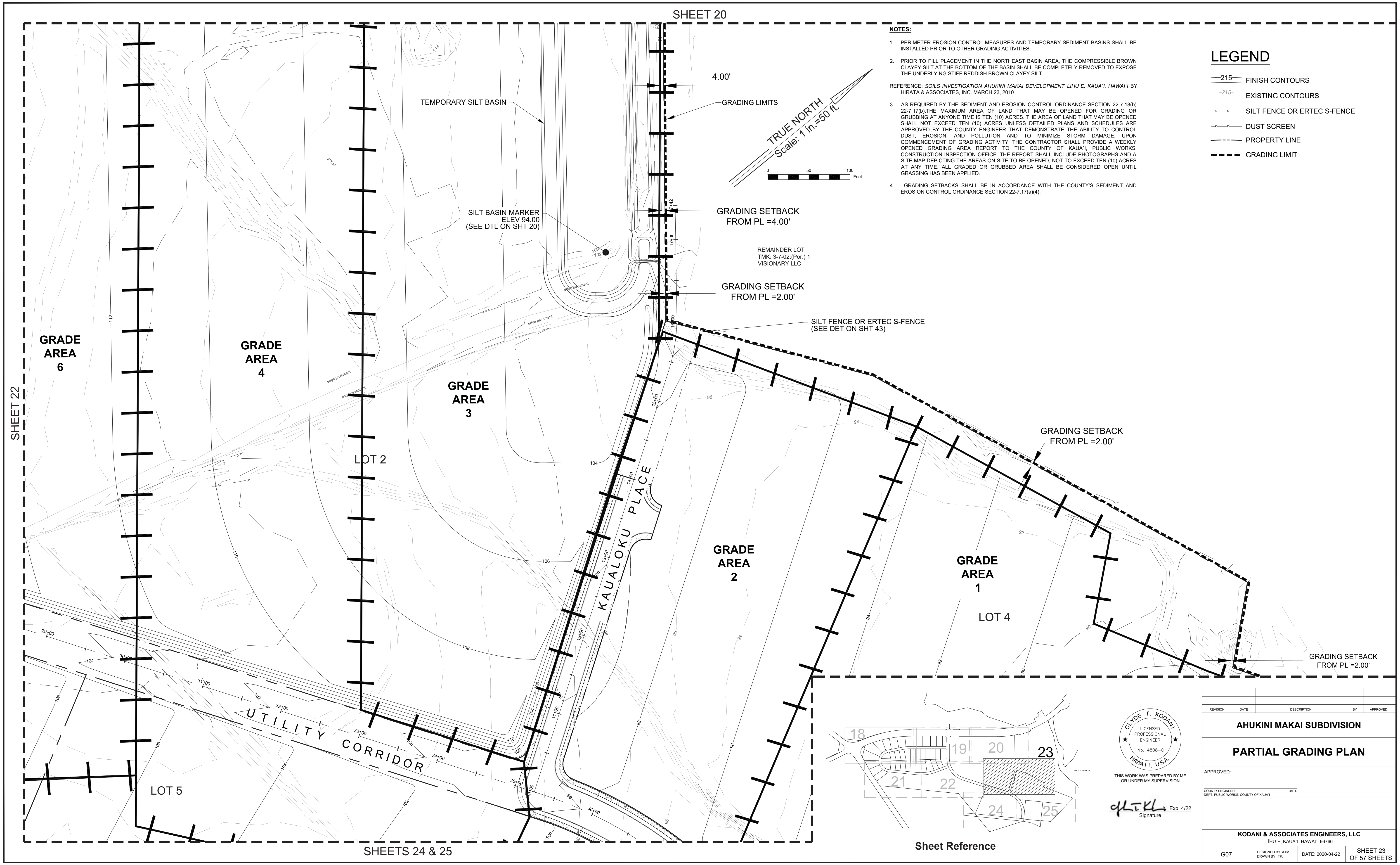
PARTIAL GRADING PLAN

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G06	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 22 OF 57 SHEETS


SHEET 20
SHEET 22
SHEETS 24 & 25
GRADE AREA 6
GRADE AREA 4
GRADE AREA 3
GRADE AREA 2
GRADE AREA 1
LOT 2
LOT 4
LOT 5
TEMPORARY SILT BASIN
SILT BASIN MARKER ELEV 94.00 (SEE DTL ON SHT 20)
4.00'
GRADING LIMITS
GRADING SETBACK FROM PL =4.00'
GRADING SETBACK FROM PL =2.00'
GRADING SETBACK FROM PL =2.00'
GRADING SETBACK FROM PL =2.00'
REMAINDER LOT TMK: 3-7-02:(Por.) 1 VISIONARY LLC
SILT FENCE OR ERTEC S-FENCE (SEE DET ON SHT 43)
TRUE NORTH
Scale: 1 in.=50 ft.
0 50 100 Feet
KAUALOKU PLACE
UTILITY CORRIDOR
edge pavement
gravel
104
106
108
110
112
Sheet Reference
18 19 20 21 22 23 24 25

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

LEGEND

215	FINISH CONTOURS
215	EXISTING CONTOURS
○	SILT FENCE OR ERTEC S-FENCE
○	DUST SCREEN
	PROPERTY LINE
	GRADING LIMIT

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

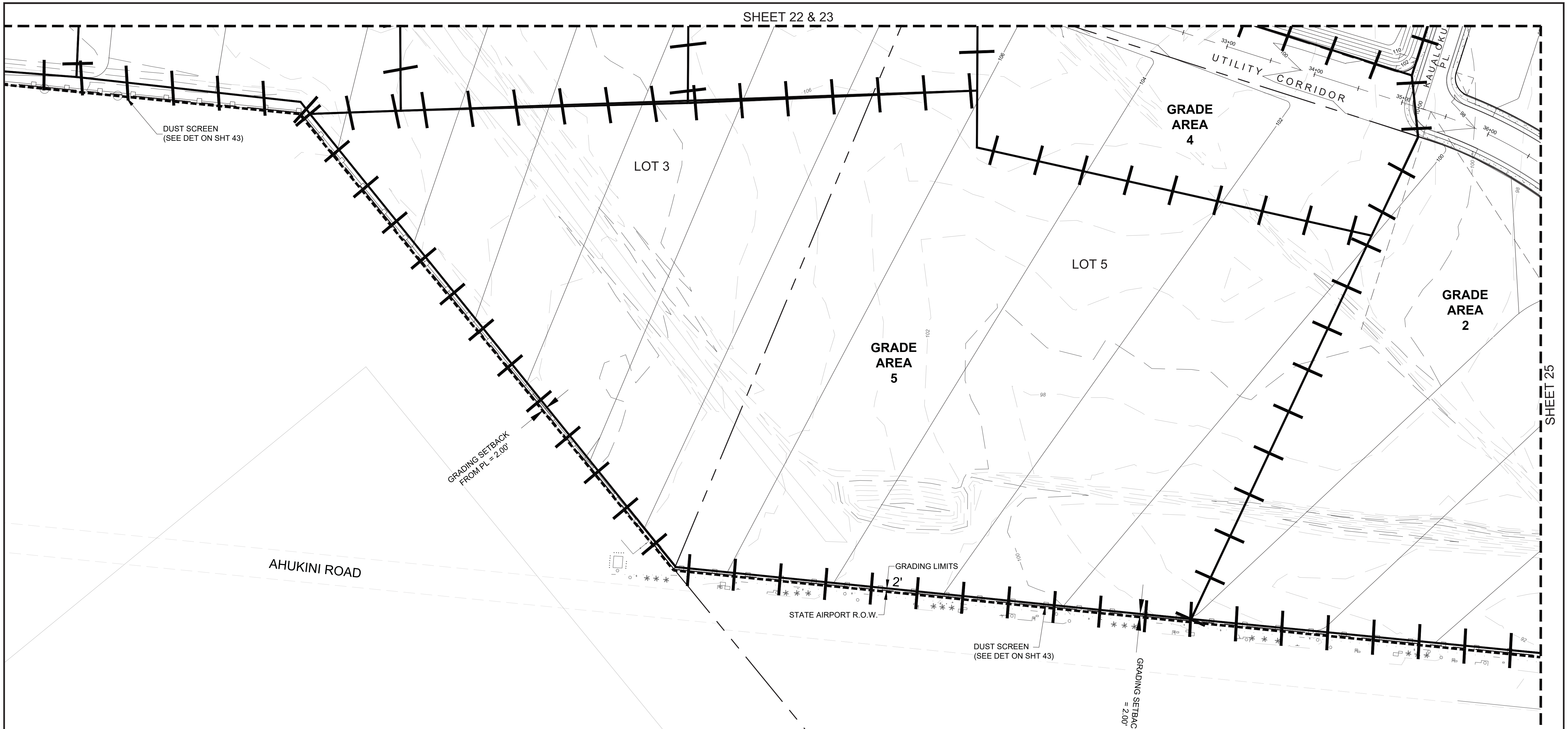
PARTIAL GRADING PLAN

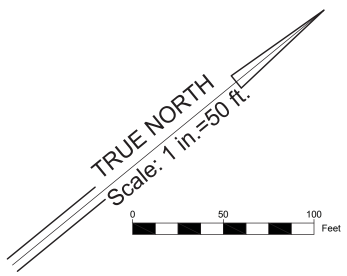
APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G07	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 23 OF 57 SHEETS


SHEET 22 & 23
SHEET 25
DUST SCREEN
(SEE DET ON SHT 43)
LOT 3
LOT 5
GRADE AREA 4
GRADE AREA 5
GRADE AREA 2
UTILITY CORRIDOR
KAUALOKU PL.
33+00
34+00
35+00
36+00
GRADING SETBACK FROM PL = 2.00'
AHUKINI ROAD
GRADING LIMITS
2'
STATE AIRPORT R.O.W.
DUST SCREEN
(SEE DET ON SHT 43)
GRADING SETBACK FROM = 2.00'
106
104
102
100
98
92


TRUE NORTH
Scale: 1 in.=50 ft.
0
50
100
Feet

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

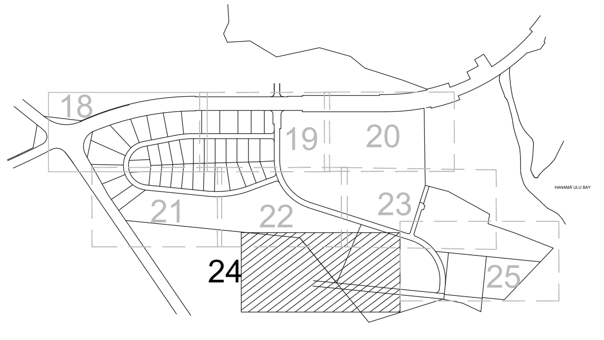
REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

LEGEND

- 215 FINISH CONTOURS
- 215 EXISTING CONTOURS
- SILT FENCE OR ERTEC S-FENCE
- DUST SCREEN
- PROPERTY LINE
- GRADING LIMIT


18
19
20
21
22
23
24
25
HANAMĀ`ULU BAY

Sheet Reference

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

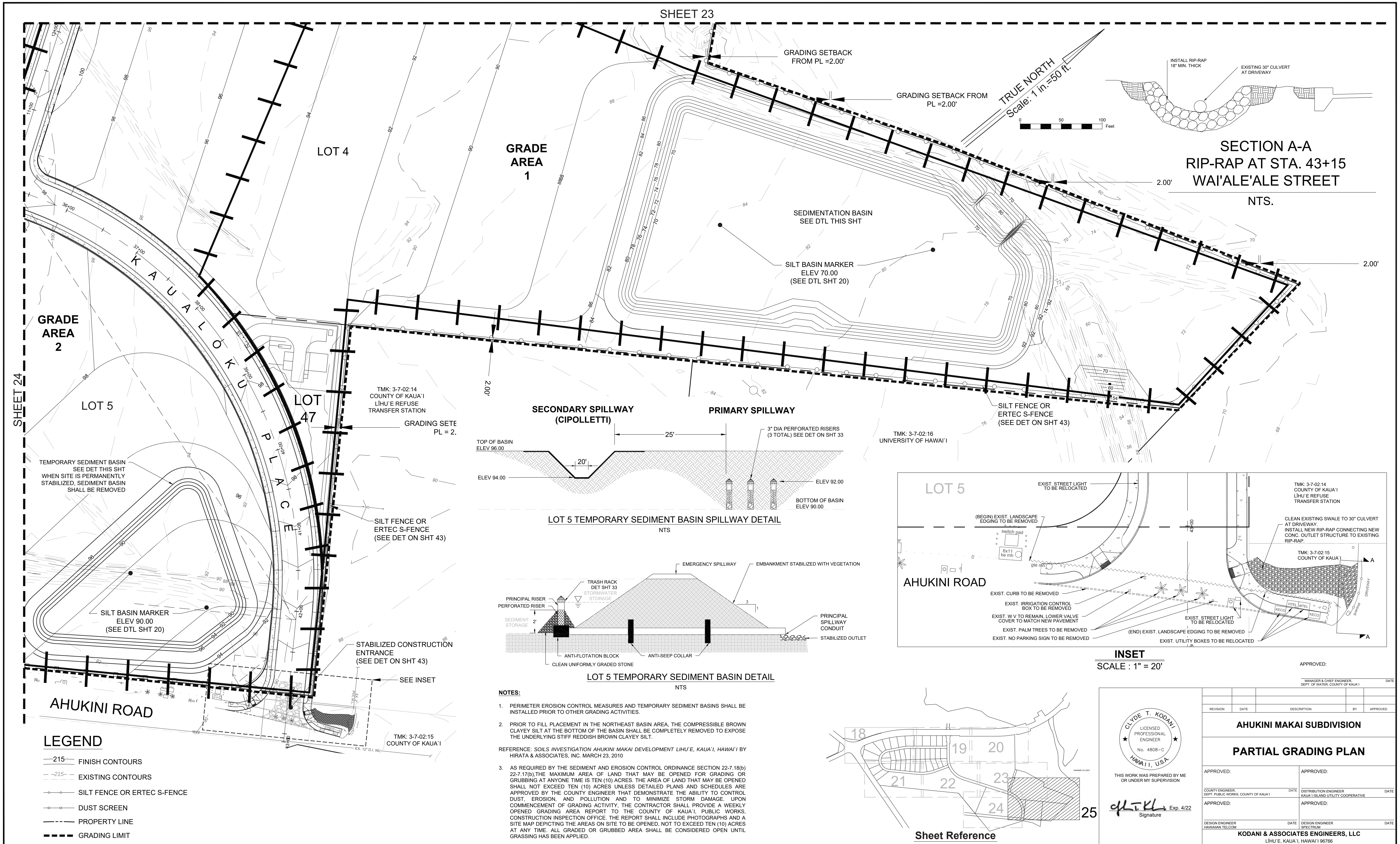
PARTIAL GRADING PLAN

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G09	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 24 OF 57 SHEETS


SHEET 23
SHEET 24
GRADING SETBACK FROM PL =2.00'
GRADING SETBACK FROM PL =2.00'
TRUE NORTH
Scale: 1 in.=50 ft.
0 50 100 Feet
LOT 4
GRADE AREA 1
GRADE AREA 2
LOT 5
LOT 47
KAUALOKU PLACE
SEDIMENTATION BASIN SEE DTL THIS SHT
SILT BASIN MARKER ELEV 70.00 (SEE DTL SHT 20)
2.00'
TMK: 3-7-02:14 COUNTY OF KAUA`I LĪHU`E REFUSE TRANSFER STATION
GRADING SETE PL = 2.
TMK: 3-7-02:16 UNIVERSITY OF HAWAI`I
SILT FENCE OR ERTEC S-FENCE (SEE DET ON SHT 43)
TEMPORARY SEDIMENT BASIN SEE DET THIS SHT WHEN SITE IS PERMANENTLY STABILIZED, SEDIMENT BASIN SHALL BE REMOVED
SILT BASIN MARKER ELEV 90.00 (SEE DTL SHT 20)
STABILIZED CONSTRUCTION ENTRANCE (SEE DET ON SHT 43)
SEE INSET
AHUKINI ROAD
TMK: 3-7-02:15 COUNTY OF KAUA`I
INSTALL RIP-RAP 18" MIN. THICK
EXISTING 30" CULVERT AT DRIVEWAY
SECTION A-A
RIP-RAP AT STA. 43+15
WAI'ALE'ALE STREET
NTS.
SECONDARY SPILLWAY (CIPOLLETTI)
PRIMARY SPILLWAY
25'
20'
TOP OF BASIN ELEV 96.00
ELEV 94.00
3" DIA PERFORATED RISERS (3 TOTAL) SEE DET ON SHT 33
ELEV 92.00
BOTTOM OF BASIN ELEV 90.00
LOT 5 TEMPORARY SEDIMENT BASIN SPILLWAY DETAIL
NTS
EMERGENCY SPILLWAY
EMBANKMENT STABILIZED WITH VEGETATION
TRASH RACK DET SHT 33
STORMWATER STORAGE
PRINCIPAL RISER
PERFORATED RISER
SEDIMENT STORAGE
2'
3
1
PRINCIPAL SPILLWAY CONDUIT
STABILIZED OUTLET
ANTI-FLOTATION BLOCK
ANTI-SEEP COLLAR
CLEAN UNIFORMLY GRADED STONE
LOT 5 TEMPORARY SEDIMENT BASIN DETAIL
NTS
LOT 5
EXIST. STREET LIGHT TO BE RELOCATED
(BEGIN) EXIST. LANDSCAPE EDGING TO BE REMOVED
switch pad
6x11 ke mh
gte mh
43+00
AHUKINI ROAD
EXIST. CURB TO BE REMOVED
EXIST. IRRIGATION CONTROL BOX TO BE REMOVED
EXIST. W V TO REMAIN, LOWER VALVE COVER TO MATCH NEW PAVEMENT
EXIST. PALM TREES TO BE REMOVED
EXIST. NO PARKING SIGN TO BE REMOVED
EXIST. STREET LIGHT TO BE RELOCATED
(END) EXIST. LANDSCAPE EDGING TO BE REMOVED
EXIST. UTILITY BOXES TO BE RELOCATED
TMK: 3-7-02:14 COUNTY OF KAUA`I LĪHU`E REFUSE TRANSFER STATION
CLEAN EXISTING SWALE TO 30" CULVERT AT DRIVEWAY. INSTALL NEW RIP-RAP CONNECTING NEW CONC. OUTLET STRUCTURE TO EXISTING RIP-RAP.
TMK: 3-7-02:15 COUNTY OF KAUA`I
HTEL
KECO
DRIVEWAY
guardrail
A
INSET
SCALE : 1" = 20'
18
19
20
21
22
23
24
25
HANAMĀ`ULU BAY
Sheet Reference

NOTES:

1. PERIMETER EROSION CONTROL MEASURES AND TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO OTHER GRADING ACTIVITIES.

2. PRIOR TO FILL PLACEMENT IN THE NORTHEAST BASIN AREA, THE COMPRESSIBLE BROWN CLAYEY SILT AT THE BOTTOM OF THE BASIN SHALL BE COMPLETELY REMOVED TO EXPOSE THE UNDERLYING STIFF REDDISH BROWN CLAYEY SILT.

REFERENCE: *SOILS INVESTIGATION AHUKINI MAKAI DEVELOPMENT LIHU`E, KAUA`I, HAWAI`I* BY HIRATA & ASSOCIATES, INC. MARCH 23, 2010

3. AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.18(b) 22-7.17(b),THE MAXIMUM AREA OF LAND THAT MAY BE OPENED FOR GRADING OR GRUBBING AT ANYONE TIME IS TEN (10) ACRES. THE AREA OF LAND THAT MAY BE OPENED SHALL NOT EXCEED TEN (10) ACRES UNLESS DETAILED PLANS AND SCHEDULES ARE APPROVED BY THE COUNTY ENGINEER THAT DEMONSTRATE THE ABILITY TO CONTROL DUST, EROSION, AND POLLUTION AND TO MINIMIZE STORM DAMAGE. UPON COMMENCEMENT OF GRADING ACTIVITY, THE CONTRACTOR SHALL PROVIDE A WEEKLY OPENED GRADING AREA REPORT TO THE COUNTY OF KAUA`I, PUBLIC WORKS, CONSTRUCTION INSPECTION OFFICE. THE REPORT SHALL INCLUDE PHOTOGRAPHS AND A SITE MAP DEPICTING THE AREAS ON SITE TO BE OPENED, NOT TO EXCEED TEN (10) ACRES AT ANY TIME. ALL GRADED OR GRUBBED AREA SHALL BE CONSIDERED OPEN UNTIL GRASSING HAS BEEN APPLIED.

4. GRADING SETBACKS SHALL BE IN ACCORDANCE WITH THE COUNTY'S SEDIMENT AND EROSION CONTROL ORDINANCE SECTION 22-7.17(a)(4).

LEGEND

—215—	FINISH CONTOURS
- -215- -	EXISTING CONTOURS
—o—o—	SILT FENCE OR ERTEC S-FENCE
—o—o—	DUST SCREEN
— - —	PROPERTY LINE
- - - -	GRADING LIMIT

APPROVED:

MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUA`I — DATE

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Exp. 4/22
Signature

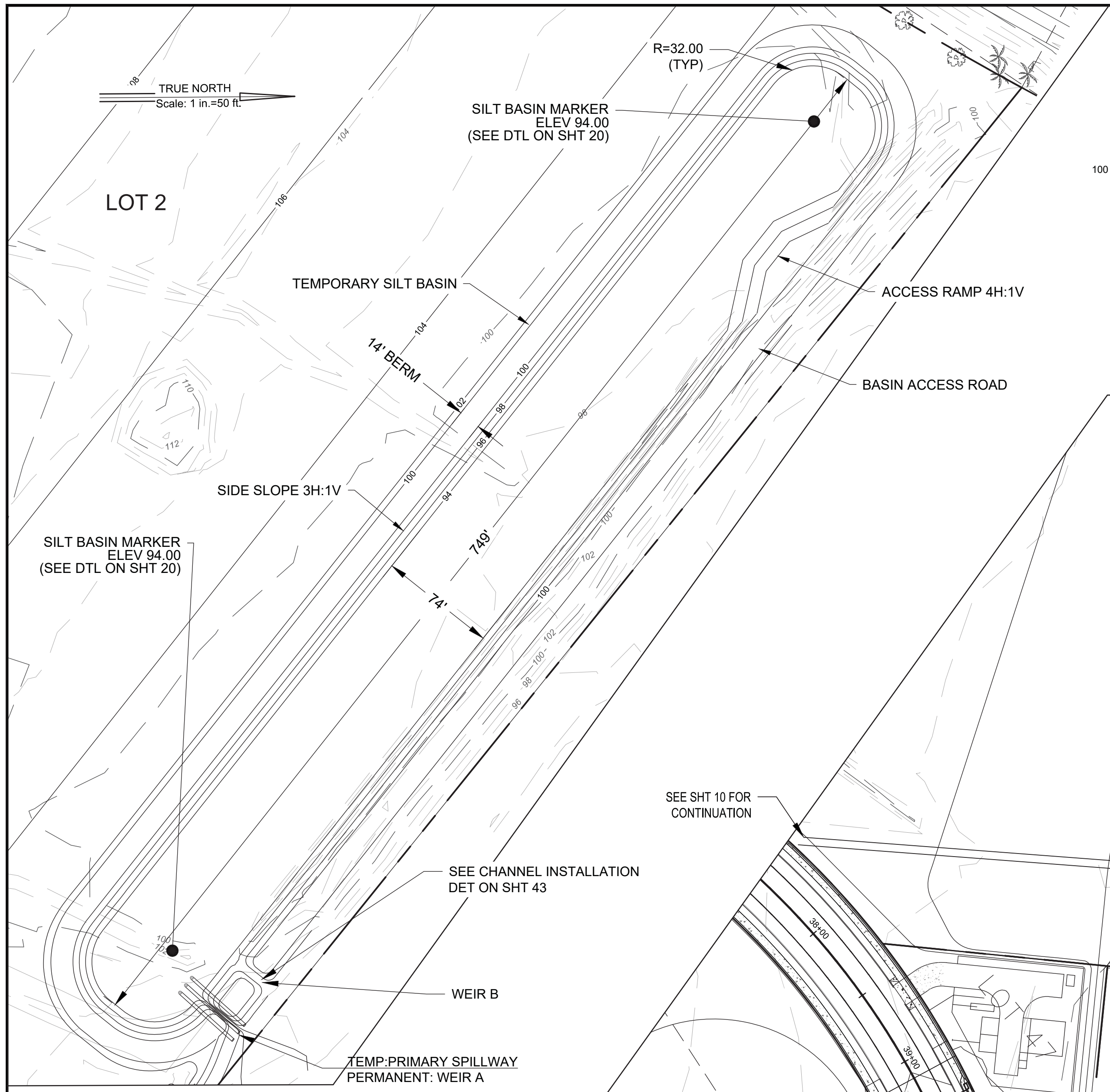
AHUKINI MAKAI SUBDIVISION

PARTIAL GRADING PLAN

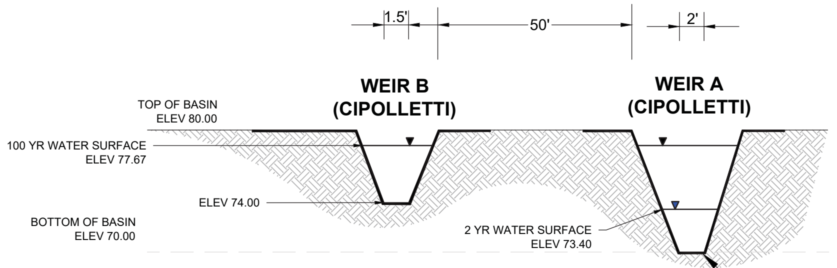
APPROVED: COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE	APPROVED: DISTRIBUTION ENGINEER, KAUA`I ISLAND UTILITY COOPERATIVE — DATE
APPROVED: DESIGN ENGINEER, HAWAIIAN TELCOM — DATE	APPROVED: DESIGN ENGINEER, SPECTRUM — DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G10	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 25 OF 57 SHEETS

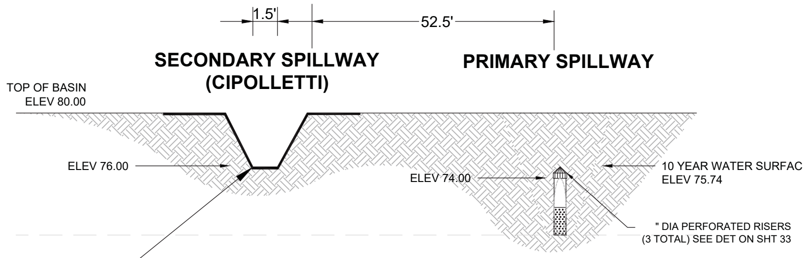

TRUE NORTH
Scale: 1 in.=50 ft.
LOT 2
R=32.00
(TYP)
SILT BASIN MARKER
ELEV 94.00
(SEE DTL ON SHT 20)
TEMPORARY SILT BASIN
ACCESS RAMP 4H:1V
14' BERM
BASIN ACCESS ROAD
SIDE SLOPE 3H:1V
749'
74'
SILT BASIN MARKER
ELEV 94.00
(SEE DTL ON SHT 20)
SEE CHANNEL INSTALLATION
DET ON SHT 43
WEIR B
TEMP:PRIMARY SPILLWAY
PERMANENT: WEIR A

LOT 2 STORMWATER MANAGEMENT BASIN - PLAN VIEW
SCALE: 1" =50'

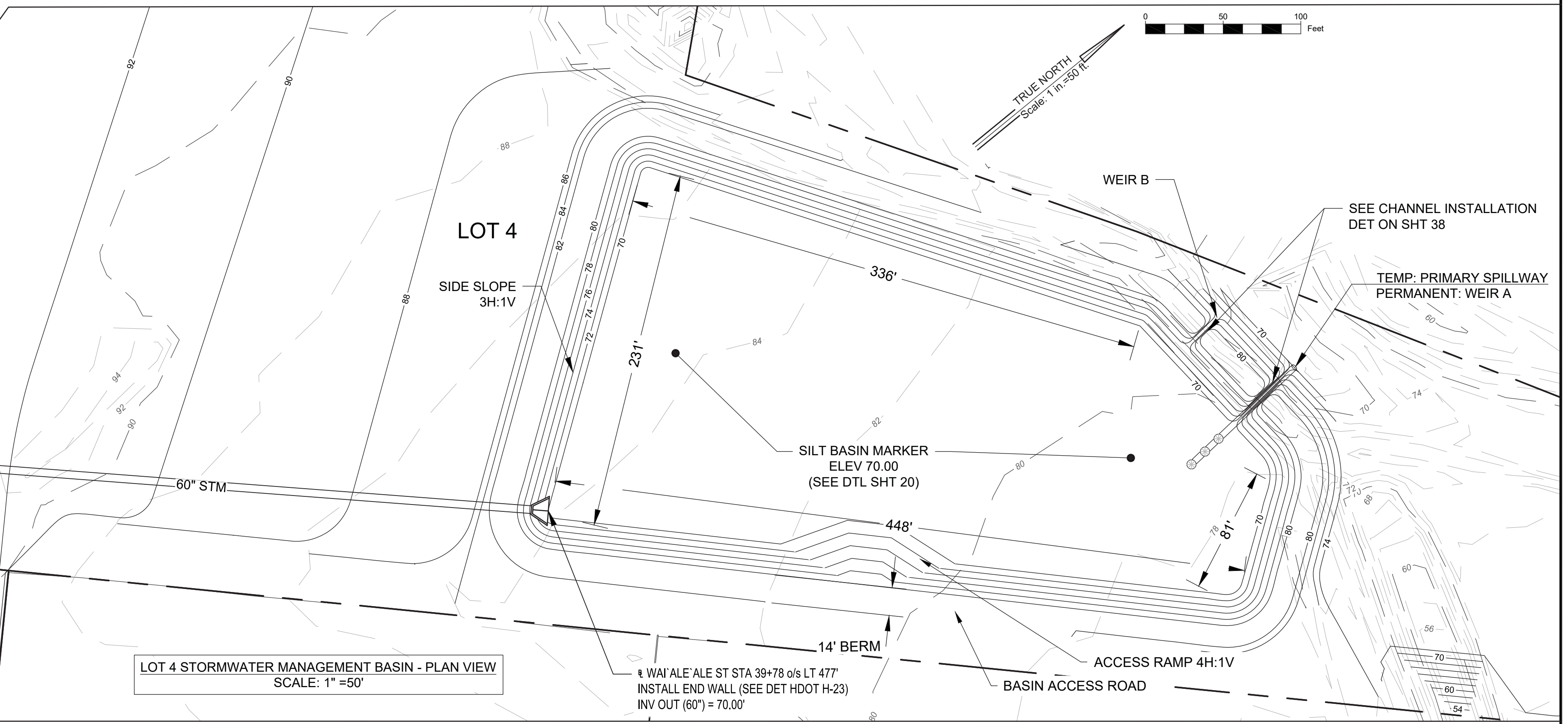

1.5'
50'
2'
WEIR B
(CIPOLLETTI)
WEIR A
(CIPOLLETTI)
TOP OF BASIN
ELEV 80.00
100 YR WATER SURFACE
ELEV 77.67
ELEV 74.00
BOTTOM OF BASIN
ELEV 70.00
2 YR WATER SURFACE
ELEV 73.40

LOT 4 PERMANENT STORMWATER SPILLWAY DETAIL
NTS

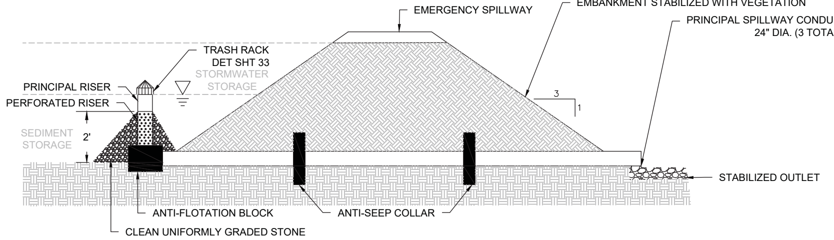
SEE CHANNEL INSTALLATION
DET ON SHT 43


1.5'
52.5'
SECONDARY SPILLWAY
(CIPOLLETTI)
PRIMARY SPILLWAY
TOP OF BASIN
ELEV 80.00
ELEV 76.00
ELEV 74.00
10 YEAR WATER SURFACE
ELEV 75.74
" DIA PERFORATED RISERS
(3 TOTAL) SEE DET ON SHT 33

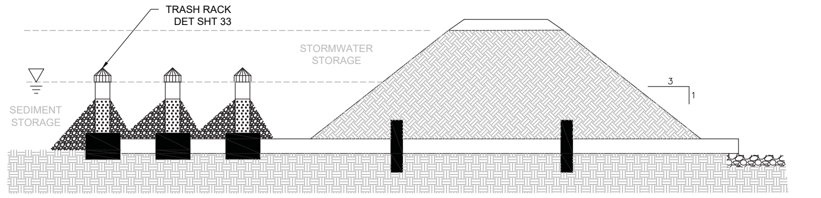
LOT 4 TEMPORARY SEDIMENT BASIN SPILLWAY DETAIL
NTS


0
50
100
Feet
TRUE NORTH
Scale: 1 in.=50 ft.
LOT 4
SIDE SLOPE
3H:1V
336'
231'
448'
81'
WEIR B
SEE CHANNEL INSTALLATION
DET ON SHT 38
TEMP: PRIMARY SPILLWAY
PERMANENT: WEIR A
SILT BASIN MARKER
ELEV 70.00
(SEE DTL SHT 20)
SEE SHT 10 FOR
CONTINUATION
60" STM
14' BERM
℄ WAI`ALE`ALE ST STA 39+78 o/s LT 477'
INSTALL END WALL (SEE DET HDOT H-23)
INV OUT (60") = 70.00'
ACCESS RAMP 4H:1V
BASIN ACCESS ROAD

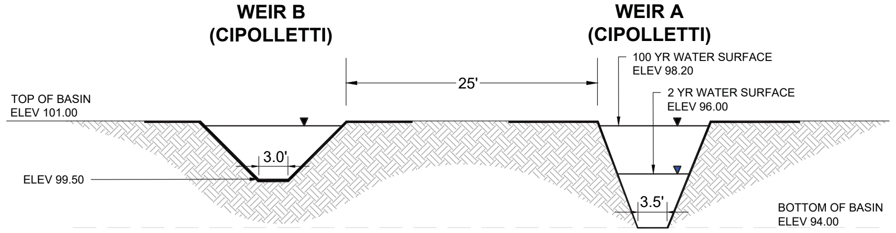
LOT 4 STORMWATER MANAGEMENT BASIN - PLAN VIEW
SCALE: 1" =50'


EMERGENCY SPILLWAY
EMBANKMENT STABILIZED WITH VEGETATION
PRINCIPAL SPILLWAY CONDUIT
24" DIA. (3 TOTAL)
TRASH RACK
DET SHT 33
STORMWATER
STORAGE
PRINCIPAL RISER
PERFORATED RISER
SEDIMENT
STORAGE
2'
3
1
STABILIZED OUTLET
ANTI-FLOTATION BLOCK
ANTI-SEEP COLLAR
CLEAN UNIFORMLY GRADED STONE

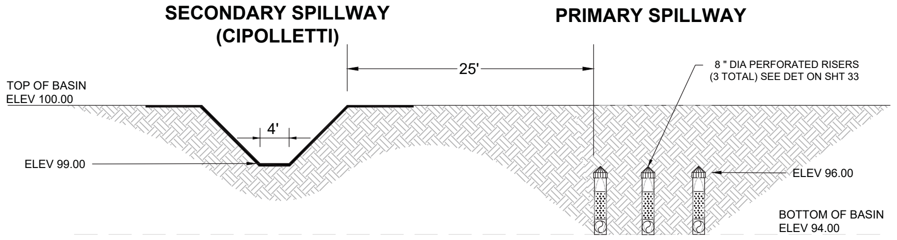
LOT 2 TEMPORARY SEDIMENT BASIN DETAIL
NTS


TRASH RACK
DET SHT 33
STORMWATER
STORAGE
SEDIMENT
STORAGE
3
1

LOT 4 TEMPORARY SEDIMENT BASIN DETAIL
NTS

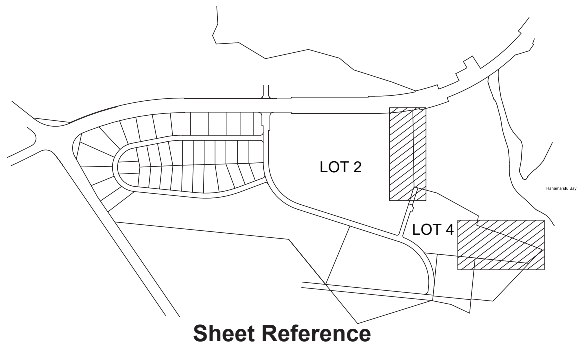

WEIR B
(CIPOLLETTI)
WEIR A
(CIPOLLETTI)
100 YR WATER SURFACE
ELEV 98.20
25'
2 YR WATER SURFACE
ELEV 96.00
TOP OF BASIN
ELEV 101.00
3.0'
ELEV 99.50
3.5'
BOTTOM OF BASIN
ELEV 94.00

LOT 2 PERMANENT STORMWATER SPILLWAY DETAIL
NTS


SECONDARY SPILLWAY
(CIPOLLETTI)
PRIMARY SPILLWAY
25'
8 " DIA PERFORATED RISERS
(3 TOTAL) SEE DET ON SHT 33
TOP OF BASIN
ELEV 100.00
4'
ELEV 99.00
ELEV 96.00
BOTTOM OF BASIN
ELEV 94.00

LOT 2 TEMPORARY SEDIMENT BASIN SPILLWAY DETAIL
NTS

SEE CHANNEL INSTALLATION
DET ON SHT 43


LOT 2
LOT 4
Hanamā`ulu Bay

Sheet Reference

LEGEND

- 215 FINISH CONTOURS
- 215 EXISTING CONTOURS
- PROPERTY LINE

APPROVED:

MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUA`I — DATE

REVISION	DATE	DESCRIPTION	BY	APPROVED

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

AHUKINI MAKAI SUBDIVISION

STORM WATER MANAGEMENT BASIN - PLANS & DETAILS

APPROVED:
COUNTY ENGINEER, DEPT. PUBLIC WORKS, COUNTY OF KAUA`I — DATE

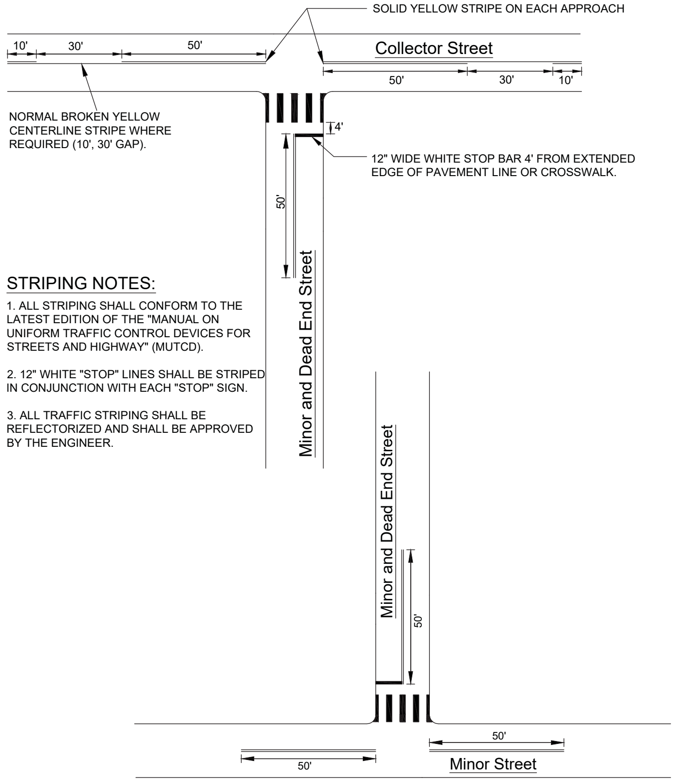
APPROVED:
DISTRIBUTION ENGINEER, KAUA`I ISLAND UTILITY COOPERATIVE — DATE

APPROVED:
DESIGN ENGINEER HAWAIIAN TELCOM — DATE

APPROVED:
DESIGN ENGINEER SPECTRUM — DATE

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

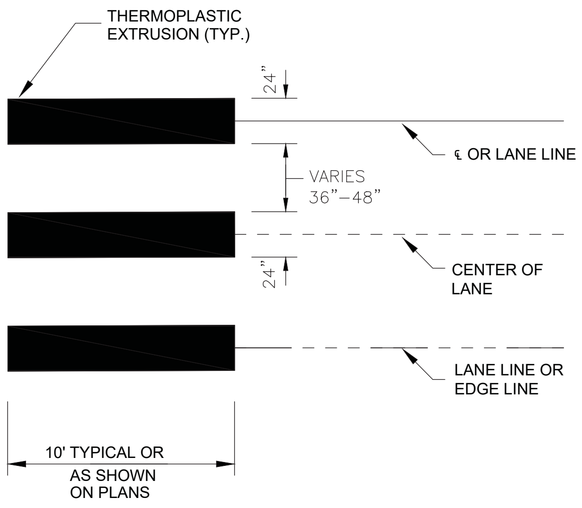
G10	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 31 OF 57 SHEETS


SOLID YELLOW STRIPE ON EACH APPROACH
10'
30'
50'
Collector Street
50'
30'
10'
NORMAL BROKEN YELLOW CENTERLINE STRIPE WHERE REQUIRED (10', 30' GAP).
4'
12" WIDE WHITE STOP BAR 4' FROM EXTENDED EDGE OF PAVEMENT LINE OR CROSSWALK.
50'
Minor and Dead End Street
Minor and Dead End Street
50'
50'
50'
Minor Street

STRIPING NOTES:

1. ALL STRIPING SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY" (MUTCD).
2. 12" WHITE "STOP" LINES SHALL BE STRIPED IN CONJUNCTION WITH EACH "STOP" SIGN.
3. ALL TRAFFIC STRIPING SHALL BE REFLECTORIZED AND SHALL BE APPROVED BY THE ENGINEER.

County of Kauai	TYPICAL INTERSECTION DETAIL FOR STRIPING	STANDARD DETAILS	T-9K
NOT TO SCALE	August 2015		

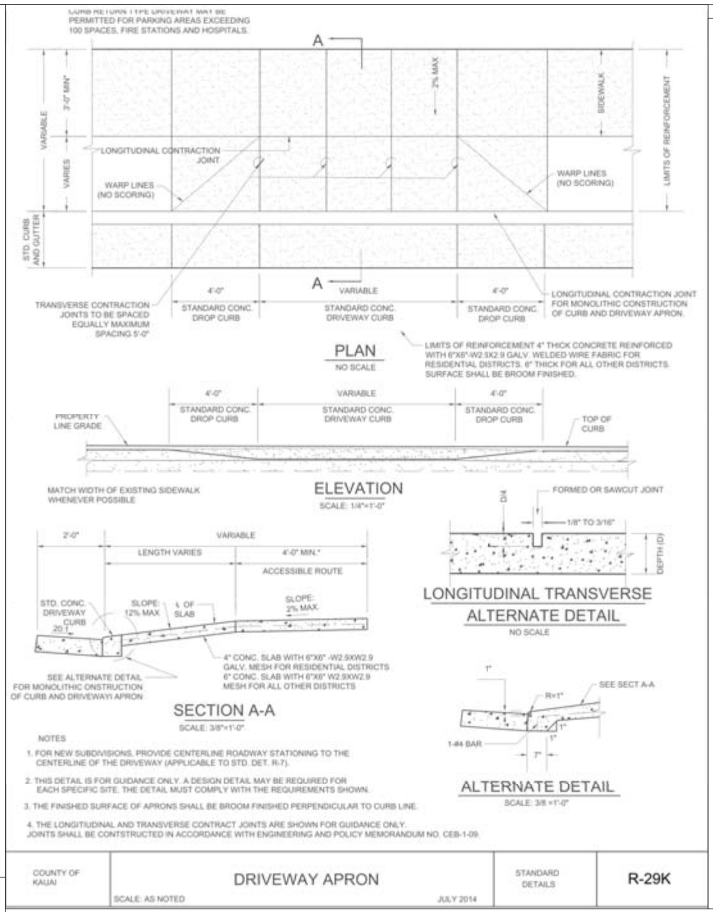

THERMOPLASTIC EXTRUSION (TYP.)
24"
℄ OR LANE LINE
VARIES 36"–48"
24"
CENTER OF LANE
LANE LINE OR EDGE LINE
10' TYPICAL OR AS SHOWN ON PLANS

CROSSWALK STRIPING DETAIL

SCALE: 1" = 4'-0"

NOTE:
CROSSWALK MARKINGS SHALL BE PARALLEL TO THE DIRECTION OF VEHICLE TRAVEL, EVEN IF THE CROSSWALK IS SKEWED TO ROADWAY.

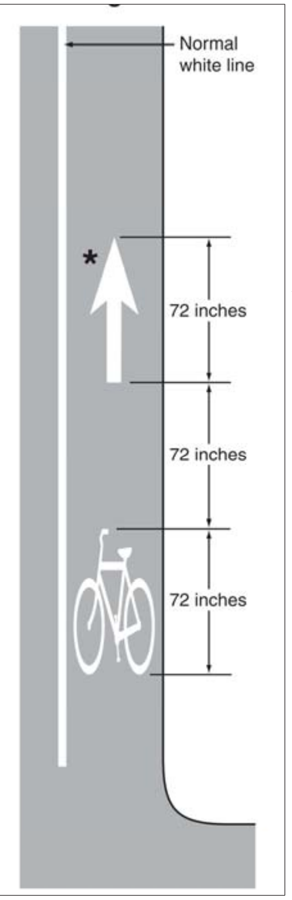
T-20K	STANDARD DETAILS	CROSSWALK STRIPING DETAIL	COUNTY OF KAUAI
		AUGUST 2015 NOT TO SCALE	


CURB RETURN TYPE DRIVEWAY MAY BE PERMITTED FOR PARKING AREAS EXCEEDING 100 SPACES, FIRE STATIONS AND HOSPITALS.
A
A
VARIABLE
3'-0" MIN*
VARIES
STD. CURB AND GUTTER
2% MAX
SIDEWALK
LIMITS OF REINFORCEMENT
LONGITUDINAL CONTRACTION JOINT
WARP LINES (NO SCORING)
WARP LINES (NO SCORING)
4'-0"
VARIABLE
4'-0"
TRANSVERSE CONTRACTION JOINTS TO BE SPACED EQUALLY MAXIMUM SPACING 5'-0"
STANDARD CONC. DROP CURB
STANDARD CONC. DRIVEWAY CURB
STANDARD CONC. DROP CURB
LONGITUDINAL CONTRACTION JOINT FOR MONOLITHIC CONSTRUCTION OF CURB AND DRIVEWAY APRON.
PLAN
NO SCALE
LIMITS OF REINFORCEMENT 4" THICK CONCRETE REINFORCED WITH 6"X6"-W2.9X2.9 GALV. WELDED WIRE FABRIC FOR RESIDENTIAL DISTRICTS. 6" THICK FOR ALL OTHER DISTRICTS. SURFACE SHALL BE BROOM FINISHED.
4'-0"
VARIABLE
4'-0"
PROPERTY LINE GRADE
STANDARD CONC. DROP CURB
STANDARD CONC. DRIVEWAY CURB
STANDARD CONC. DROP CURB
TOP OF CURB
MATCH WIDTH OF EXISTING SIDEWALK WHENEVER POSSIBLE
ELEVATION
SCALE: 1/4"=1'-0"
D/4
FORMED OR SAWCUT JOINT
1/8" TO 3/16"
DEPTH (D)
LONGITUDINAL TRANSVERSE ALTERNATE DETAIL
NO SCALE
2'-0"
VARIABLE
LENGTH VARIES
4'-0" MIN.*
ACCESSIBLE ROUTE
STD. CONC. DRIVEWAY CURB
20:1
SLOPE: 12% MAX
℄ OF SLAB
SLOPE: 2% MAX
4" CONC. SLAB WITH 6"X6" -W2.9XW2.9 GALV. MESH FOR RESIDENTIAL DISTRICTS 6" CONC. SLAB WITH 6"X6" W2.9XW2.9 MESH FOR ALL OTHER DISTRICTS
SEE ALTERNATE DETAIL FOR MONOLITHIC ONSTRUCTION OF CURB AND DRIVEWAYI APRON
SECTION A-A
SCALE: 3/8"=1'-0"
1"
R=1"
SEE SECT A-A
1"
1"
1-#4 BAR
7"
ALTERNATE DETAIL
SCALE: 3/8 =1'-0"

NOTES

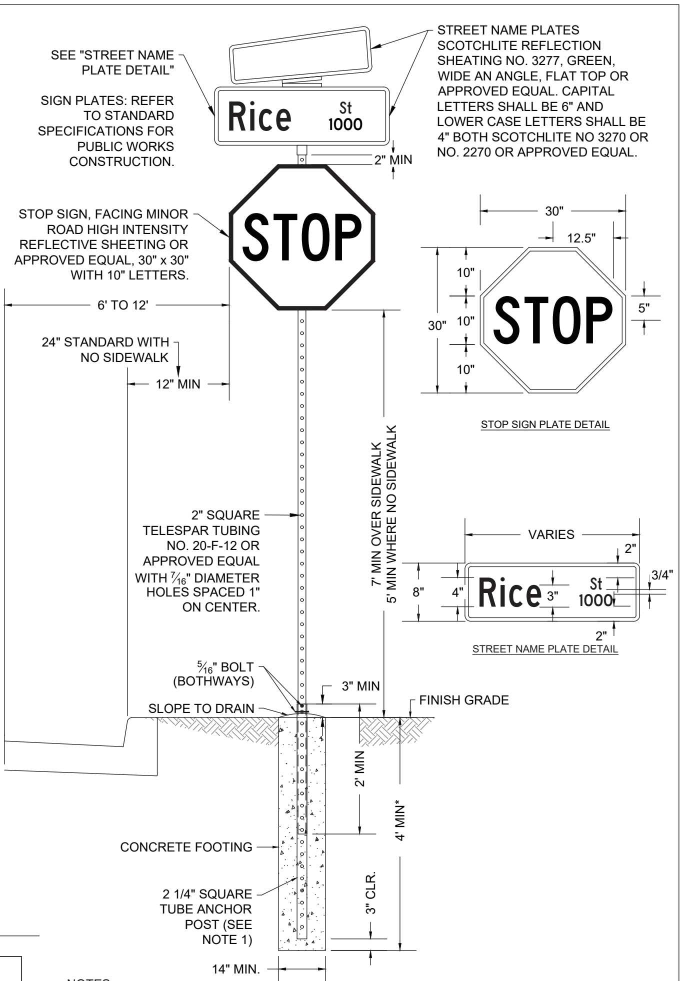
1. FOR NEW SUBDIVISIONS, PROVIDE CENTERLINE ROADWAY STATIONING TO THE CENTERLINE OF THE DRIVEWAY (APPLICABLE TO STD. DET. R-7).
2. THIS DETAIL IS FOR GUIDANCE ONLY. A DESIGN DETAIL MAY BE REQUIRED FOR EACH SPECIFIC SITE. THE DETAIL MUST COMPLY WITH THE REQUIREMENTS SHOWN.
3. THE FINISHED SURFACE OF APRONS SHALL BE BROOM FINISHED PERPENDICULAR TO CURB LINE.
4. THE LONGITUDINAL AND TRANSVERSE CONTRACT JOINTS ARE SHOWN FOR GUIDANCE ONLY. JOINTS SHALL BE CONTSTRUCTED IN ACCORDANCE WITH ENGINEERING AND POLICY MEMORANDUM NO. CEB-1-09.

COUNTY OF KAUAI	DRIVEWAY APRON	STANDARD DETAILS	R-29K
	SCALE: AS NOTED JULY 2014		


Normal white line
*
72 inches
72 inches
72 inches

BIKE LANE DETAIL

SCALE: N.T.S


SEE "STREET NAME PLATE DETAIL"
SIGN PLATES: REFER TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
Rice St 1000
2" MIN
STREET NAME PLATES SCOTCHLITE REFLECTION SHEATING NO. 3277, GREEN, WIDE AN ANGLE, FLAT TOP OR APPROVED EQUAL. CAPITAL LETTERS SHALL BE 6" AND LOWER CASE LETTERS SHALL BE 4" BOTH SCOTCHLITE NO 3270 OR NO. 2270 OR APPROVED EQUAL.
STOP
STOP SIGN, FACING MINOR ROAD HIGH INTENSITY REFLECTIVE SHEETING OR APPROVED EQUAL, 30" x 30" WITH 10" LETTERS.
6' TO 12'
24" STANDARD WITH NO SIDEWALK
12" MIN
30"
12.5"
10"
10"
10"
30"
5"
STOP
STOP SIGN PLATE DETAIL
7' MIN OVER SIDEWALK
5' MIN WHERE NO SIDEWALK
2" SQUARE TELESPAR TUBING NO. 20-F-12 OR APPROVED EQUAL WITH 7/16" DIAMETER HOLES SPACED 1" ON CENTER.
VARIES
2"
8"
4"
Rice
3"
St 1000
3/4"
2"
STREET NAME PLATE DETAIL
5/16" BOLT (BOTHWAYS)
3" MIN
SLOPE TO DRAIN
FINISH GRADE
2' MIN
4' MIN*
CONCRETE FOOTING
2 1/4" SQUARE TUBE ANCHOR POST (SEE NOTE 1)
3" CLR.
14" MIN.

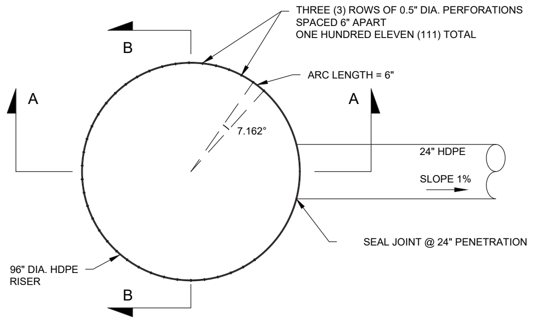
NOTES:

1. SQUARE TUBE POSTS SHALL BE TELESCOPING PERFORATED TELESPAR TUBNG OR APPROVED EQUAL.
2. THE EXACT SIGN LOCATION WILL BE DESIGNATED BY THE ENGINEER.
3. WHERE ANCHOR POST IS TO BE OMITTED, POST SHALL BE CURIED 2'-6" MIN AND CONCRETED AROUND IF NECESSARY.
4. 2" LETTERS SHALL BE USED FOR ST., DR, HWY., RD... ETC.
5. STREET NUMBER TO BE DESIGNATED BY THE DEPARTMNET OF PUBLIC WORKS.

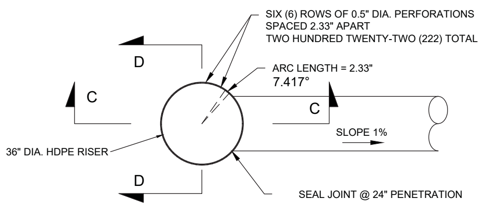
* ANCHOR POST CAN BE INSTALLED AT A MINIMUM DEPTH OF 24" IF ENCASED WITH A 14" SQUARE OR CIRCULAR SHAPED CLASS B CONCRETE ANCHOR.

STREET NAME AND STOP SIGN DETAIL

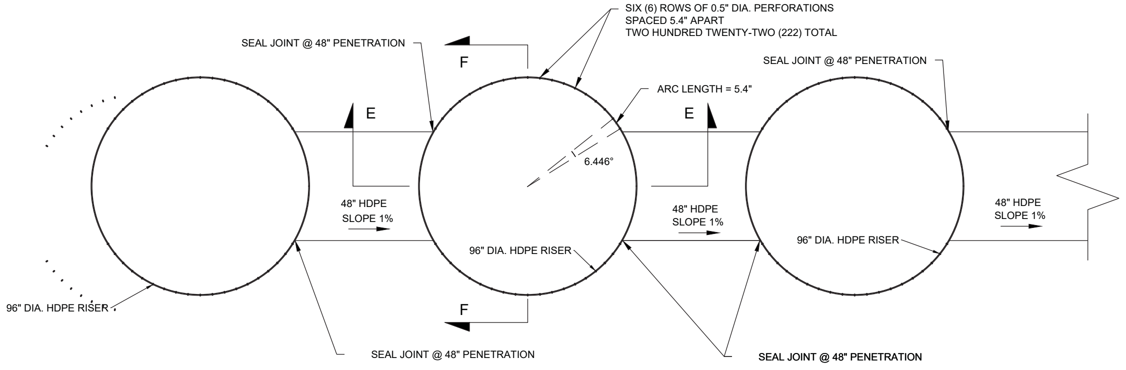
SCALE: N.T.S


THREE (3) ROWS OF 0.5" DIA. PERFORATIONS SPACED 6" APART ONE HUNDRED ELEVEN (111) TOTAL
B
A
A
ARC LENGTH = 6"
7.162°
24" HDPE
SLOPE 1%
SEAL JOINT @ 24" PENETRATION
96" DIA. HDPE RISER
B

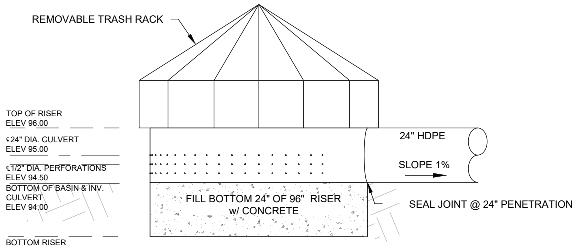
LOT 2 PLAN VIEW


SIX (6) ROWS OF 0.5" DIA. PERFORATIONS SPACED 2.33" APART TWO HUNDRED TWENTY-TWO (222) TOTAL
D
ARC LENGTH = 2.33"
7.417°
C
C
SLOPE 1%
36" DIA. HDPE RISER
D
SEAL JOINT @ 24" PENETRATION

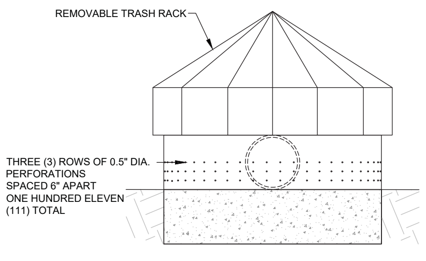
LOT 5 PLAN VIEW


SIX (6) ROWS OF 0.5" DIA. PERFORATIONS SPACED 5.4" APART TWO HUNDRED TWENTY-TWO (222) TOTAL
SEAL JOINT @ 48" PENETRATION
F
SEAL JOINT @ 48" PENETRATION
E
ARC LENGTH = 5.4"
E
6.446°
48" HDPE SLOPE 1%
48" HDPE SLOPE 1%
48" HDPE SLOPE 1%
96" DIA. HDPE RISER
96" DIA. HDPE RISER
96" DIA. HDPE RISER
F
SEAL JOINT @ 48" PENETRATION
SEAL JOINT @ 48" PENETRATION

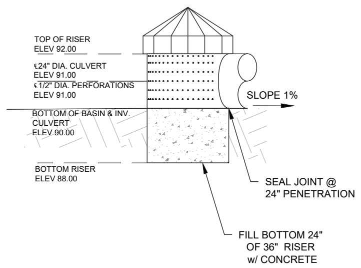
LOT 4 PLAN VIEW


REMOVABLE TRASH RACK
TOP OF RISER ELEV 96.00
℄24" DIA. CULVERT ELEV 95.00
℄1/2" DIA. PERFORATIONS ELEV 94.50
BOTTOM OF BASIN & INV. CULVERT ELEV 94.00
BOTTOM RISER ELEV 92.00
24" HDPE
SLOPE 1%
FILL BOTTOM 24" OF 96" RISER w/ CONCRETE
SEAL JOINT @ 24" PENETRATION

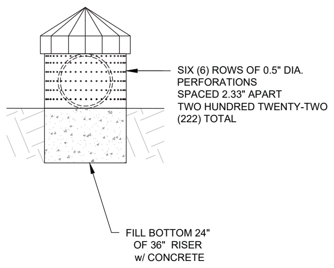
SECTION A-A


REMOVABLE TRASH RACK
THREE (3) ROWS OF 0.5" DIA. PERFORATIONS SPACED 6" APART ONE HUNDRED ELEVEN (111) TOTAL

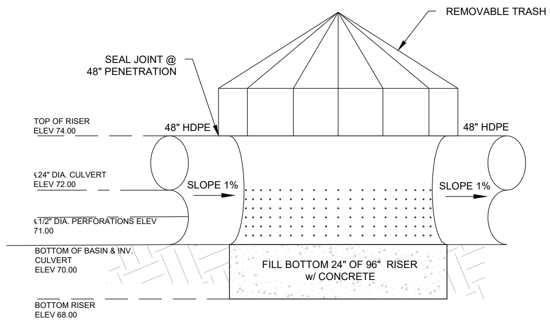
SECTION B-B


TOP OF RISER ELEV 92.00
℄24" DIA. CULVERT ELEV 91.00
℄1/2" DIA. PERFORATIONS ELEV 91.00
BOTTOM OF BASIN & INV. CULVERT ELEV 90.00
BOTTOM RISER ELEV 88.00
SLOPE 1%
SEAL JOINT @ 24" PENETRATION
FILL BOTTOM 24" OF 36" RISER w/ CONCRETE

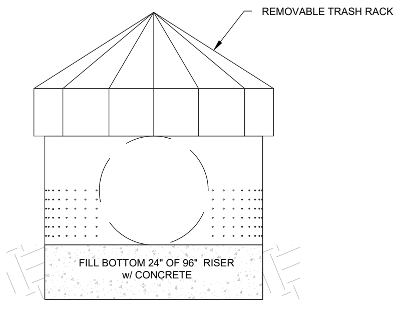
SECTION C-C


SIX (6) ROWS OF 0.5" DIA. PERFORATIONS SPACED 2.33" APART TWO HUNDRED TWENTY-TWO (222) TOTAL
FILL BOTTOM 24" OF 36" RISER w/ CONCRETE

SECTION D-D


REMOVABLE TRASH RACK
SEAL JOINT @ 48" PENETRATION
TOP OF RISER ELEV 74.00
48" HDPE
48" HDPE
℄24" DIA. CULVERT ELEV 72.00
SLOPE 1%
SLOPE 1%
℄1/2" DIA. PERFORATIONS ELEV 71.00
BOTTOM OF BASIN & INV. CULVERT ELEV 70.00
FILL BOTTOM 24" OF 96" RISER w/ CONCRETE
BOTTOM RISER ELEV 68.00

SECTION E-E


REMOVABLE TRASH RACK
FILL BOTTOM 24" OF 96" RISER w/ CONCRETE

SECTION F-F

TEMPORARY SEDIMENT & PERMANENT STORMWATER MANAGEMENT BASIN DETAILS

SCALE: 1" = 4'

CLYDE T. KODANI
LICENSED PROFESSIONAL ENGINEER
No. 4808–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

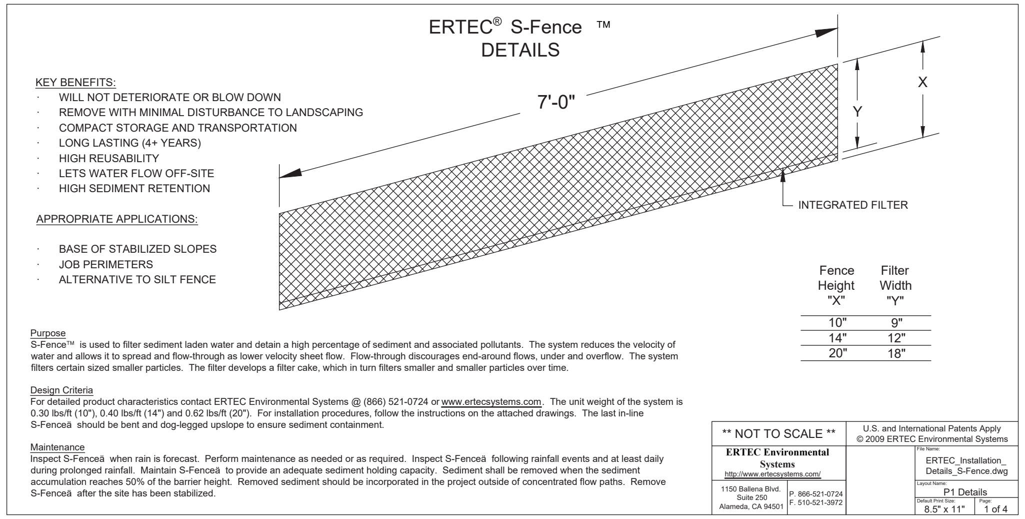
DETAILS

APPROVED: COUNTY ENGINEER, DATE DEPT. PUBLIC WORKS, COUNTY OF KAUA`I	APPROVED: N/A MANAGER & CHIEF ENGINEER, DATE DEPT. OF WATER, COUNTY OF KAUA`I
APPROVED: CHIEF, WASTEWATER MANAGEMENT DIV. DATE DEPT. PUBLIC WORKS, COUNTY OF KAUA`I	

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

C11	DESIGNED BY: ATM DRAWN BY: TP.	DATE: 2020-04-22	SHEET 33 OF 57 SHEETS

ERTEC® S-Fence ™
DETAILS


7'-0"
X
Y
INTEGRATED FILTER

KEY BENEFITS:
- WILL NOT DETERIORATE OR BLOW DOWN
- REMOVE WITH MINIMAL DISTURBANCE TO LANDSCAPING
- COMPACT STORAGE AND TRANSPORTATION
- LONG LASTING (4+ YEARS)
- HIGH REUSABILITY
- LETS WATER FLOW OFF-SITE
- HIGH SEDIMENT RETENTION

APPROPRIATE APPLICATIONS:

- BASE OF STABILIZED SLOPES
- JOB PERIMETERS
- ALTERNATIVE TO SILT FENCE

Fence Height "X"	Filter Width "Y"
10"	9"
14"	12"
20"	18"

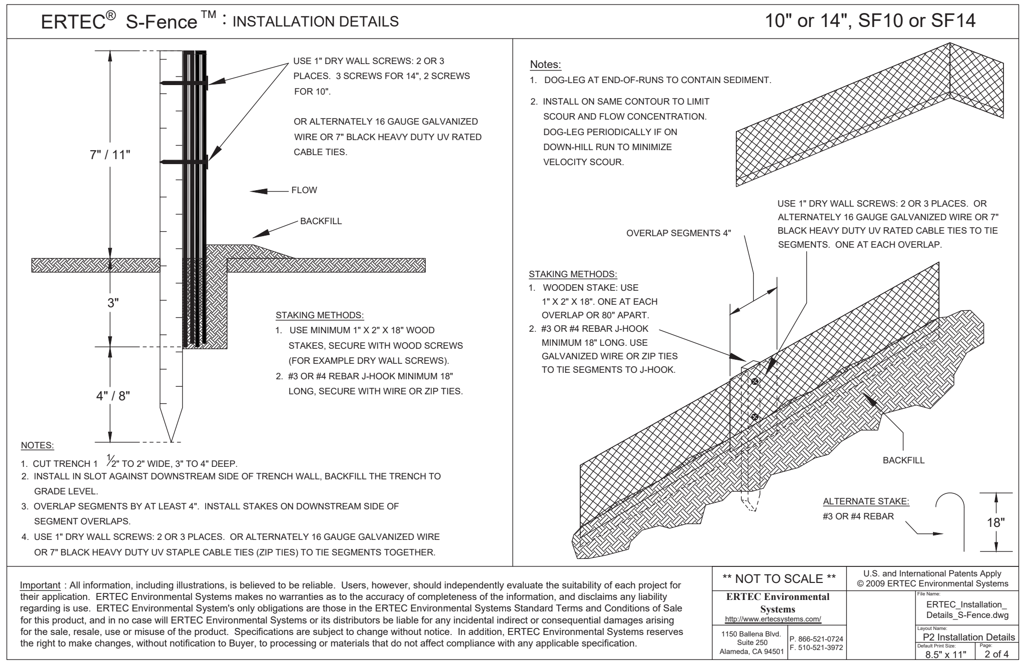
Purpose
S-Fence™ is used to filter sediment laden water and detain a high percentage of sediment and associated pollutants. The system reduces the velocity of water and allows it to spread and flow-through as lower velocity sheet flow. Flow-through discourages end-around flows, under and overflow. The system filters certain sized smaller particles. The filter develops a filter cake, which in turn filters smaller and smaller particles over time.

Design Criteria
For detailed product characteristics contact ERTEC Environmental Systems @ (866) 521-0724 or www.ertecsystems.com. The unit weight of the system is 0.30 lbs/ft (10"), 0.40 lbs/ft (14") and 0.62 lbs/ft (20"). For installation procedures, follow the instructions on the attached drawings. The last in-line S-Fenceä should be bent and dog-legged upslope to ensure sediment containment.

Maintenance
Inspect S-Fenceä when rain is forecast. Perform maintenance as needed or as required. Inspect S-Fenceä following rainfall events and at least daily during prolonged rainfall. Maintain S-Fenceä to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches 50% of the barrier height. Removed sediment should be incorporated in the project outside of concentrated flow paths. Remove S-Fenceä after the site has been stabilized.

** NOT TO SCALE **
U.S. and International Patents Apply
© 2009 ERTEC Environmental Systems
ERTEC Environmental Systems
http://www.ertecsystems.com/
1150 Ballena Blvd.
Suite 250
Alameda, CA 94501
P. 866-521-0724
F. 510-521-3972
File Name: ERTEC_Installation_ Details_S-Fence.dwg
Layout Name: P1 Details
Default Print Size: 8.5" x 11"
Page: 1 of 4

ERTEC® S-Fence ™ : INSTALLATION DETAILS
10" or 14", SF10 or SF14


USE 1" DRY WALL SCREWS: 2 OR 3 PLACES. 3 SCREWS FOR 14", 2 SCREWS FOR 10".
OR ALTERNATELY 16 GAUGE GALVANIZED WIRE OR 7" BLACK HEAVY DUTY UV RATED CABLE TIES.
7" / 11"
FLOW
BACKFILL
3"
4" / 8"
USE 1" DRY WALL SCREWS: 2 OR 3 PLACES. OR ALTERNATELY 16 GAUGE GALVANIZED WIRE OR 7" BLACK HEAVY DUTY UV RATED CABLE TIES TO TIE SEGMENTS. ONE AT EACH OVERLAP.
OVERLAP SEGMENTS 4"
BACKFILL
ALTERNATE STAKE:
#3 OR #4 REBAR
18"

STAKING METHODS:
1. USE MINIMUM 1" X 2" X 18" WOOD STAKES, SECURE WITH WOOD SCREWS (FOR EXAMPLE DRY WALL SCREWS).
2. #3 OR #4 REBAR J-HOOK MINIMUM 18" LONG, SECURE WITH WIRE OR ZIP TIES.

NOTES:
1. CUT TRENCH 1 ½" TO 2" WIDE, 3" TO 4" DEEP.
2. INSTALL IN SLOT AGAINST DOWNSTREAM SIDE OF TRENCH WALL, BACKFILL THE TRENCH TO GRADE LEVEL.
3. OVERLAP SEGMENTS BY AT LEAST 4". INSTALL STAKES ON DOWNSTREAM SIDE OF SEGMENT OVERLAPS.
4. USE 1" DRY WALL SCREWS: 2 OR 3 PLACES. OR ALTERNATELY 16 GAUGE GALVANIZED WIRE OR 7" BLACK HEAVY DUTY UV STAPLE CABLE TIES (ZIP TIES) TO TIE SEGMENTS TOGETHER.

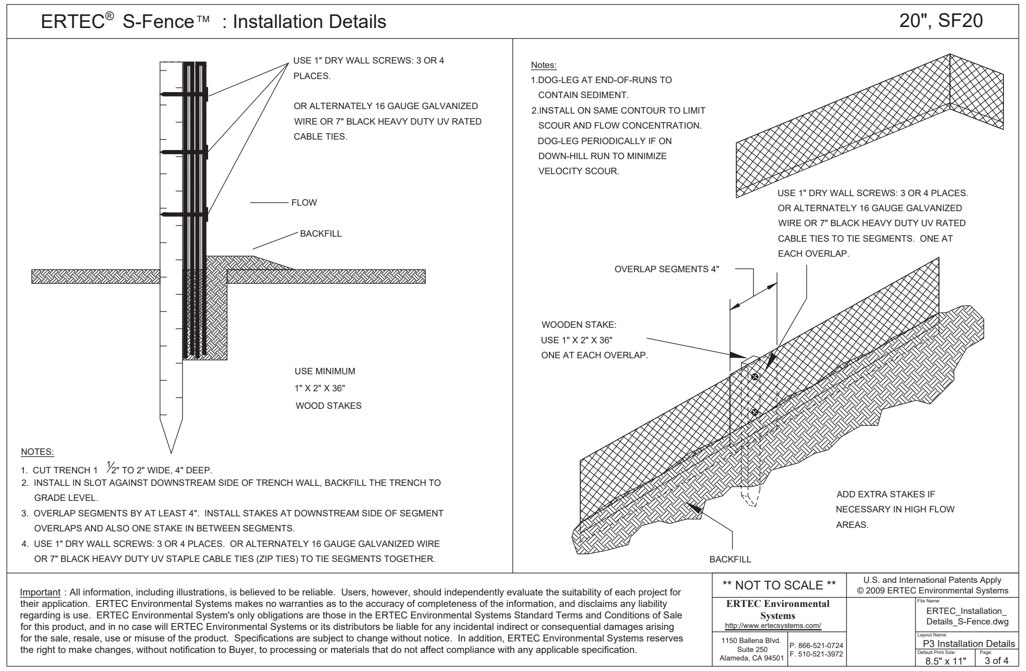
Notes:
1. DOG-LEG AT END-OF-RUNS TO CONTAIN SEDIMENT.
2. INSTALL ON SAME CONTOUR TO LIMIT SCOUR AND FLOW CONCENTRATION. DOG-LEG PERIODICALLY IF ON DOWN-HILL RUN TO MINIMIZE VELOCITY SCOUR.

STAKING METHODS:
1. WOODEN STAKE: USE 1" X 2" X 18". ONE AT EACH OVERLAP OR 80" APART.
2. #3 OR #4 REBAR J-HOOK MINIMUM 18" LONG. USE GALVANIZED WIRE OR ZIP TIES TO TIE SEGMENTS TO J-HOOK.

Important : All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each project for their application. ERTEC Environmental Systems makes no warranties as to the accuracy of completeness of the information, and disclaims any liability regarding is use. ERTEC Environmental System's only obligations are those in the ERTEC Environmental Systems Standard Terms and Conditions of Sale for this product, and in no case will ERTEC Environmental Systems or its distributors be liable for any incidental indirect or consequential damages arising for the sale, resale, use or misuse of the product. Specifications are subject to change without notice. In addition, ERTEC Environmental Systems reserves the right to make changes, without notification to Buyer, to processing or materials that do not affect compliance with any applicable specification.

** NOT TO SCALE **
U.S. and International Patents Apply
© 2009 ERTEC Environmental Systems
ERTEC Environmental Systems
http://www.ertecsystems.com/
1150 Ballena Blvd.
Suite 250
Alameda, CA 94501
P. 866-521-0724
F. 510-521-3972
File Name: ERTEC_Installation_ Details_S-Fence.dwg
Layout Name: P2 Installation Details
Default Print Size: 8.5" x 11"
Page: 2 of 4

ERTEC® S-Fence™ : Installation Details
20", SF20

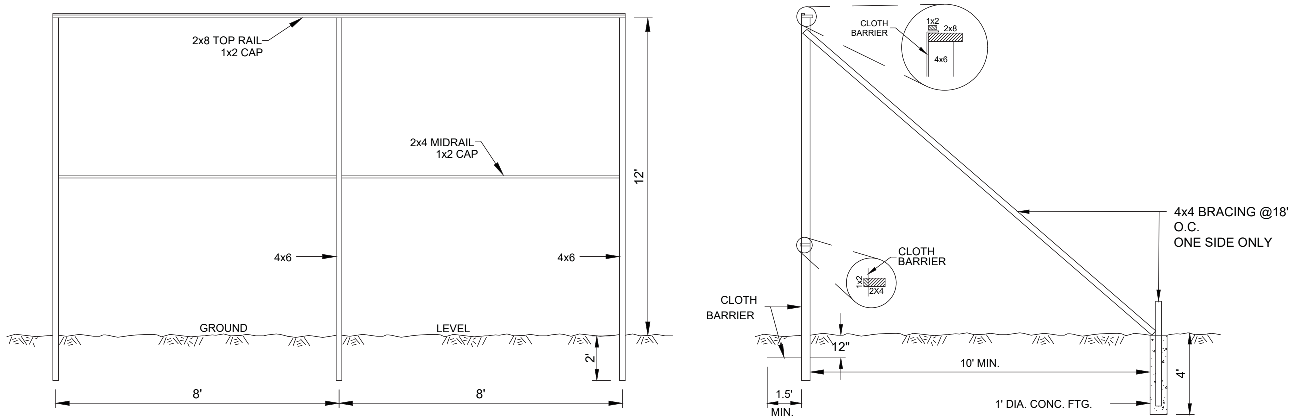

USE 1" DRY WALL SCREWS: 3 OR 4 PLACES.
OR ALTERNATELY 16 GAUGE GALVANIZED WIRE OR 7" BLACK HEAVY DUTY UV RATED CABLE TIES.
FLOW
BACKFILL
USE MINIMUM 1" X 2" X 36" WOOD STAKES
USE 1" DRY WALL SCREWS: 3 OR 4 PLACES. OR ALTERNATELY 16 GAUGE GALVANIZED WIRE OR 7" BLACK HEAVY DUTY UV RATED CABLE TIES TO TIE SEGMENTS. ONE AT EACH OVERLAP.
OVERLAP SEGMENTS 4"
WOODEN STAKE: USE 1" X 2" X 36" ONE AT EACH OVERLAP.
ADD EXTRA STAKES IF NECESSARY IN HIGH FLOW AREAS.
BACKFILL

NOTES:
1. CUT TRENCH 1 ½" TO 2" WIDE, 4" DEEP.
2. INSTALL IN SLOT AGAINST DOWNSTREAM SIDE OF TRENCH WALL, BACKFILL THE TRENCH TO GRADE LEVEL.
3. OVERLAP SEGMENTS BY AT LEAST 4". INSTALL STAKES AT DOWNSTREAM SIDE OF SEGMENT OVERLAPS AND ALSO ONE STAKE IN BETWEEN SEGMENTS.
4. USE 1" DRY WALL SCREWS: 3 OR 4 PLACES. OR ALTERNATELY 16 GAUGE GALVANIZED WIRE OR 7" BLACK HEAVY DUTY UV STAPLE CABLE TIES (ZIP TIES) TO TIE SEGMENTS TOGETHER.

Notes:
1. DOG-LEG AT END-OF-RUNS TO CONTAIN SEDIMENT.
2. INSTALL ON SAME CONTOUR TO LIMIT SCOUR AND FLOW CONCENTRATION. DOG-LEG PERIODICALLY IF ON DOWN-HILL RUN TO MINIMIZE VELOCITY SCOUR.

Important : All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each project for their application. ERTEC Environmental Systems makes no warranties as to the accuracy of completeness of the information, and disclaims any liability regarding is use. ERTEC Environmental System's only obligations are those in the ERTEC Environmental Systems Standard Terms and Conditions of Sale for this product, and in no case will ERTEC Environmental Systems or its distributors be liable for any incidental indirect or consequential damages arising for the sale, resale, use or misuse of the product. Specifications are subject to change without notice. In addition, ERTEC Environmental Systems reserves the right to make changes, without notification to Buyer, to processing or materials that do not affect compliance with any applicable specification.

** NOT TO SCALE **
U.S. and International Patents Apply
© 2009 ERTEC Environmental Systems
ERTEC Environmental Systems
http://www.ertecsystems.com/
1150 Ballena Blvd.
Suite 250
Alameda, CA 94501
P. 866-521-0724
F. 510-521-3972
File Name: ERTEC_Installation_ Details_S-Fence.dwg
Layout Name: P3 Installation Details
Default Print Size: 8.5" x 11"
Page: 3 of 4


2x8 TOP RAIL
1x2 CAP
2x4 MIDRAIL
1x2 CAP
4x6
4x6
12'
GROUND
LEVEL
2'
8'
8'
CLOTH BARRIER
1x2
2x8
4x6
CLOTH BARRIER
1x2
2X4
CLOTH BARRIER
4x4 BRACING @18' O.C.
ONE SIDE ONLY
12"
10' MIN.
1.5' MIN.
1' DIA. CONC. FTG.
4'

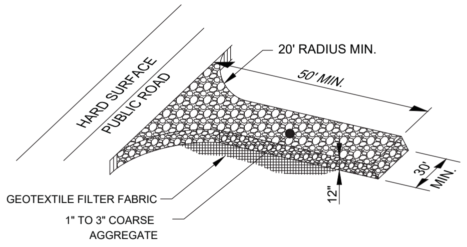
FRONT VIEW

SECTIONAL VIEW

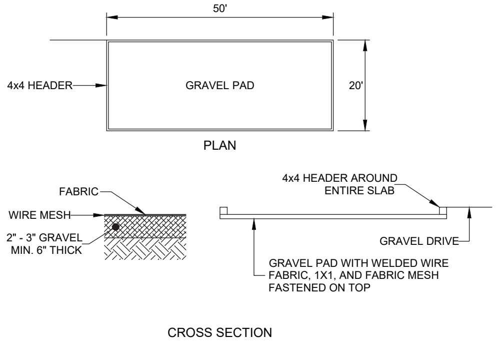
DUST SCREEN DETAIL
N.T.S.

DUST BARRIER NOTES

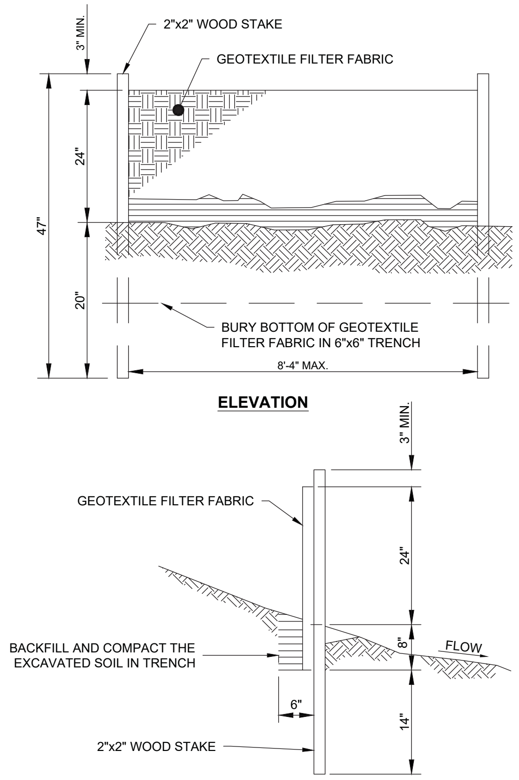
1. CLOTH BARRIER NOT SHOWN IN FRONT VIEW.
2. CLOTH BARRIER TO BE A "GEOTEXTILE" OR "NURSERY SHADE."
3. LUMBER SIZES ARE NOMINAL INCHES.
4. AS SHOWN, CLOTH TO BE BURIED AT BASE TO INDICATED DIMENSION.
5. 1x2 CLOTH BARRIER CAPS TO BE NAILED @ 12" O.C.
6. BURLAP IS NOT ACCEPTABLE AS THE CLOTH BARRIER.
7. CLOTH TOP HAVE NO HORIZONTAL SEAMS.
8. VERTICAL SEAMS TO BE MADE OVER UPRIGHTS ONLY.
9. ALL SEAMS TO BE CAPPED WITH MINIMUM OF 1x2.
10. ALL JOINTS TO BE SECURELY FASTENED BY MECHANICAL MEANS.
11. TREES SHALL BE TRIMMED, AS REQUIRED, TO INSTALL DUST BARRIER.
12. TREE TRIMMINGS SHALL BE DISPOSED OF OFFSITE.


HARD SURFACE
PUBLIC ROAD
20' RADIUS MIN.
50' MIN.
30' MIN.
12"
GEOTEXTILE FILTER FABRIC
1" TO 3" COARSE AGGREGATE

STABILIZED CONSTRUCTION ENTRANCE
N.T.S.


50'
4x4 HEADER
GRAVEL PAD
20'
PLAN
FABRIC
WIRE MESH
2" - 3" GRAVEL MIN. 6" THICK
4x4 HEADER AROUND ENTIRE SLAB
GRAVEL DRIVE
GRAVEL PAD WITH WELDED WIRE FABRIC, 1X1, AND FABRIC MESH FASTENED ON TOP
CROSS SECTION

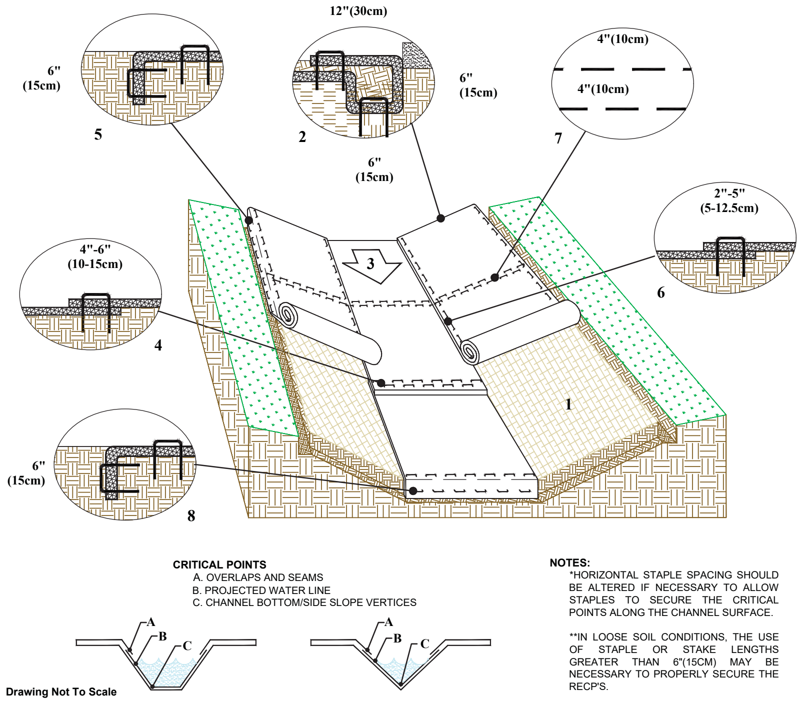
GRAVEL PAD DETAIL
N.T.S.


3" MIN.
2"x2" WOOD STAKE
GEOTEXTILE FILTER FABRIC
24"
47"
20"
BURY BOTTOM OF GEOTEXTILE FILTER FABRIC IN 6"x6" TRENCH
8'-4" MAX.
3" MIN.
GEOTEXTILE FILTER FABRIC
24"
8"
FLOW
14"
BACKFILL AND COMPACT THE EXCAVATED SOIL IN TRENCH
6"
2"x2" WOOD STAKE

ELEVATION

SECTION

SILT FENCE DETAIL
N.T.S.


12"(30cm)
6" (15cm)
5
6" (15cm)
2
4"(10cm)
4"(10cm)
7
6" (15cm)
2"-5" (5-12.5cm)
6
4"-6" (10-15cm)
4
3
1
6" (15cm)
8
A
B
C
A
B
C

CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTES:
*HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

**IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6"(15CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

Drawing Not To Scale

NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd.
Poseyville, IN 47633
PH: 800-722-2040
www.nagreen.com

Disclaimer:
THE INFORMATION PRESENTED HEREIN IS GENERAL DESIGN INFORMATION ONLY. FOR SPECIFIC APPLICATIONS, CONSULT AN INDEPENDENT PROFESSIONAL FOR FURTHER DESIGN GUIDANCE.

Drawn on: 5-4-17

CHANNEL INSTALLATION DETAIL

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPS IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH WITH APPROXIMATELY 12"(30CM) OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12"(30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12"(30CM) PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. PLACE CONSECUTIVE RECPS END-OVER-END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECPS.
5. FULL LENGTH EDGE OF RECPS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12"(30CM) APART IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECPS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5-12.5CM) (DEPENDING ON RECPS TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 -12M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4"(10CM) APART AND 4"(10CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECPS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

CLYDE T. KODANI
No. 4808-C

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Exp. 4/22
Signature

REVISION	DATE	DESCRIPTION	BY	APPROVED

AHUKINI MAKAI SUBDIVISION

EROSION CONTROL BMP DETAILS

APPROVED:

COUNTY ENGINEER, DATE
DEPT. PUBLIC WORKS, COUNTY OF KAUA`I

KODANI & ASSOCIATES ENGINEERS, LLC
LĪHU`E, KAUA`I, HAWAI`I 96766

G11
DESIGNED BY: ATM
DRAWN BY: TP.
DATE: 2020-04-22
SHEET 43
OF 57 SHEETS

END DOCUMENT

EXHIBIT 5

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

September 28, 2018

IN REPLY REFER TO:
Log No. 2017.02067
Doc No. 1809GC15
Archaeology

Paul Togioka
County of Kauai
Public Works, Engineering Division
4444 Rice Street, Suite 275
Lihue, HI 96766
ptogioka@kauai.gov

Dear Mr. Togioka:

SUBJECT: **Chapter 6E-42 Historic Preservation Review – REVISED COMMENTS**
Clearinghouse Application No. CL-2017-031
Ahukini Makai Subdivision (S-2005-41), PW 08.17.087
Hanamā'ulu Ahupua'a, Puna District, Island of Kaua'i
TMK: (4) 3-7-002:001

This letter provides the State Historic Preservation Division's (SHPD's) revised comments regarding the subject application. SHPD received the original application submittal on September 15, 2017 from the County of Kauai Department of Public Works. The submittal indicated that the owners, Visionary LLC, proposed to grade a 127.68-acre portion of the 171.9-acre parcel, including excavation of 239,626 cubic yards and an embankment of 122,419 cubic yards.

On March 28, 2018, SHPD requested an archaeological inventory survey (AIS) be conducted as SHPD had insufficient information to assess the potential for the proposed project to impact significant historic properties (Log No. 2017.02067, Doc No. 1803GC32).

On April 17, 2018, SHPD received supplemental information from Kodani & Associates Engineers, LLC, requesting reconsideration of SHPD's request for an AIS to be conducted. The supplemental information included a copy of a previous SHPD determination letter and an AIS titled *Additional Archaeological Inventory Survey Molokoa Lands Project Area, Lands of Hanamā'ulu and Kalapaki, Līhu'e District, Island of Kaua'i* (Franklin and Walker, 1994). The AIS covered 552.3 acres within Hanamā'ulu and Kalapaki, including the current project area. The Ahukini Makai parcel comprises 143.8 acres. Franklin and Walker (1994) indicated that due to extensive agricultural pursuits and land alterations it is unlikely that surface or subsurface historic properties will be encountered. No historic properties were documented during a pedestrian survey for this specific parcel. In a letter dated October 25, 1994, SHPD commented on the *Lihue Hanamaulu Master Plan, The Lihue Plantation Co Ltd. (AMFAC/JMB)* and indicated that that the project areas were adequately covered by the Walker and Franklin (1994) archaeological study. The SHPD determined that no significant sites occur in the project area and that the project will have no effect on significant historic properties (Log No. 12985, Doc. No. 9410NM17).

Based on the information provided, **SHPD's determination is no historic properties affected** for the subject application pursuant to HRS 6E; no significant historic properties have been identified within the current project area. Pursuant to HAR §13-284-7(e), "When the SHPD agrees that the action will not affect any significant historic properties, this is the SHPD's written concurrence and historic preservation review ends". The historic preservation review process is ended. The permit issuance may proceed.

Please contact Ka'āhiki Solis, SHPD Cultural Historian, at Sheleigh.Solis@hawaii.gov for any cultural resources concerns and Dr. Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov or at (808) 692-8019 for any questions regarding archaeological resources or this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy, State Historic Preservation Officer

cc: Chance Bukoski, cbukoski@kauai.gov
Kaina Hull, khull@kauai.gov
Andy Miles, Kodani & Associates Engineers, LLC, andy@kodani.com

EXHIBIT 6

ORDINANCE NO. PM-326-96 BILL NO. 1775, Draft 2

A BILL FOR AN ORDINANCE AMENDING CHAPTER 8, KAUAI COUNTY CODE 1987, RELATING TO ZONING DESIGNATION IN LIHUE-HANAMAULU, KAUAI

(Lihue Plantation Co. Ltd. & Amfac/JMB)

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAI, STATE OF HAWAII:

SECTION 1. Amend Section 10-5.3(b) of the Lihue Development Plan Ordinance to remove the Project District 1 designation from the project area.

SECTION 2. The zoning designation for that certain area in Lihue-Hanamaulu, Kauai, identified as TMKs: 3-6-02: 1 por., 4 por., and 17; 3-7-01: 1 por.; 3-7-02: 1 por., 12 por.; and 3-7-03: 20 por., as shown on Zoning Maps ZM LI 400, ZM NW 400, and ZM HM 400, which are incorporated herein as Exhibit ZA-96-2, is hereby amended from "Agriculture District (A)" to "Residential Districts (R-8, R-10, R-20)," "Commercial District (C-N, C-G)," "Industrial District (I-G, I-L)," and "Special Treatment District (C-G/ST-P)," subject to the following conditions:

1. The outright permitted uses allowed under the Commercial District (C-N) as prescribed in the Comprehensive Zoning Ordinance shall be allowed with the exception of "single family detached dwellings on lots or parcels of no less than 6,000 square feet, and to a density not to exceed six units per acre."

2. Prior to and/or concurrent with permitting, the applicant shall submit to the Planning Department for review and comments design criteria and possible standards for development of the Residential District (R-8) zone and the "Hanamaulu triangle" portion. The design criteria and standards shall be included in a master plan to address community-wide design including density allocations, open space systems, and infrastructure. These design criteria and standards may be amended by applicant, as necessary.

   The standards governing the development, construction and use of housing and dwelling facilities within the Residential District (R-8) zone shall be those as prescribed in Chapter 8, Article 3, KCC 1987 (Residential Districts). Residential District (R-8) shall permit a maximum of 8 dwelling units per acre as calculated in accordance with Sec. 8-3.8, KCC 1987.

   To ensure a proper blend of unit types along with view planes and open spaces to eliminate a congested appearance, project development standards for R-8 residential projects with densities greater than 6 dwelling units per acre shall be reviewed and approved through the Project Development Use Permit process.

   Applicable development standards are available in the CZO (Chapter 8, KCC 1987) for the respective types of unit development. In cases where standards are not available, the applicant will be afforded the opportunity to develop its own project standards through the Project Development Use Permit process.

3. The outright permitted uses allowed under the Industrial District (I-G) as prescribed in the Comprehensive Zoning Ordinance shall be allowed except that retail sales shall be allowed only as an accessory to a permitted use. Otherwise, retail sales shall require a use permit.

4. Should there be a surplus in Environmental Impact Assessment fee credits for elements which are eligible, the excess can be applied to future projects proposed by the applicant within the Lihue District only.

5. The applicant shall resolve with the County of Kauai the amount of area needed for acquisition along with the details for land acquisition for the development of a public facilities complex prior to and/or concurrent with permit applications. The following alternatives shall be available for resolution of land acquisition:

   a. Land be acquired in fee at Agriculture land values.

   b. Land be acquired through credits in fees.

   c. A combination of alternatives a and b.

   d. Land be exchanged for infrastructure costs; i.e. either government constructing the infrastructure or sharing in the cost of construction in exchange for land.

   e. A combination of all 4 or a number of the alternatives stated.

   f. Any other alternative(s) deemed feasible by both parties.

   Further, as agreed, the applicant shall assist government agencies and/or other occupants with their permits for their respective projects in this project area by authorizing the permit application(s) if the land is not yet conveyed. However, it is understood that an agreement to cover eventual conveyance must first be finalized if such action is ever needed.

6. The contents of Exhibit I entitled "Draft Urban Design Plan" of the August 1995 Petition for a Zoning Amendment, Lihue-Hanamaulu Master Plan are acceptable and shall apply to the project's respective zoning districts.

   Any amendments to the design criteria shall be subject to the review and approval of the Planning Commission throughout the duration of the project.

7. A park master plan for the project shall be approved by the Planning Commission prior to and/or concurrent with permitting to ensure that correct crediting and assessments are made. It would be to the benefit of the applicant and County that this matter be resolved early before any permits are applied for.

   The master plan shall cover the following:

   a. Location of parks.

   b. Design; i.e., fields versus passive parks, sizes, secondary function as detention basins.

   c. Credits for open space areas (inclusive of the "gateway"), bike paths, pedestrian paths, and other recreational amenities that may be developed within the project.

   d. Overall park requirement and overage of park space; i.e. how much is the actual requirement based on densities and how would the applicant like to be credited for the overage, if any.

8. The roadway system as shown on the applicant's petition shall be developed as proposed. Also, the applicant shall be bound to its representations within its petition on the resolution of condition 3 of the General Plan Amendment Ordinance No. PM-310-95 regarding the resolution of traffic concerns. Any modification to representations made regarding this matter shall be subject to County Council approval.

9. The applicant shall reserve a fifteen (15) acre site within the Ahukini Mauka portion of the project for a future school site for a one (1) year period from the date which the Zoning Amendment ordinance is adopted. The exact location and configuration shall be resolved with the applicant, County Planning Department and Department of Education during the 1 year period. The 1 year period is to enable the Planning Department to resolve with the DOE the development of school facilities within the Lihue District. The timeframe can extend over a year only upon the consent of the applicant, however such extension shall be not less than ninety (90) days and shall establish a deadline to resolve the matter as agreed to by the applicant. Also, should the DOE elect to acquire a site within the project, such acquisition shall require that the land be purchased through negotiations between the applicant and DOE, or be acquired through another means which is mutually acceptable to the County, Department of Education and the applicant.

10. The applicant shall establish a construction material disposal site for the project. Should the site be open to the public at reasonable rates, Environmental Impact Assessment fee (EIA) credit shall be provided. Details of crediting shall be resolved during the permitting process with the Planning Commission.

11. The applicant shall explore the possibility of establishing a solid waste landfill site with the Planning and Public Works Departments prior to permitting. Should a site be selected and receive permit approvals, the applicant shall then qualify for Environmental Impact Assessment fee credit. This extent of this credit shall be resolved with the Planning and Public Works Departments.

12. Intersection improvements at the Ahukini Rd./Kapule Hwy., Kapule Hwy./Rice St., and the Ahukini Rd./Kuhio Hwy. intersections, if built by the applicant shall qualify for Environmental Impact Assessment fee credit. The extent of credit shall be determined at the time of construction plan approval for these project(s). Likewise land dedication for right-of-way widening along with preparation of construction plans to facilitate improvement of government roads in the immediate area could qualify for fee credit pending review and approval of the Planning Commission during permitting.

13. The applicant shall provide for civil defense infrastructure such as sirens. Environmental Impact Assessment fee (EIA) credit shall be assigned to the improvements at the time permits are sought for these facilities.

14. The imposition of affordable housing requirements shall be reserved until the outcome of negotiations for the public facilities complex and affordable housing site are finalized. Also, the imposition of affordable housing requirements (if any) shall be allowed to be established at the permitting level with the input of the County Council.

15. The applicant shall prepare a master plan addressing the development of infrastructure for the entire project. This master plan shall cover timing, locations, costs, and alternatives for developing the infrastructure which includes (but not be limited to) drainage, water, sewer, and roads. Also, this master plan shall be submitted for the review and approval of the Planning Commission (in conjunction with the respective agencies whose infrastructure facilities are affected) prior to and/or concurrent with permitting.

16. The contents of Exhibit I entitled "Draft Urban Design Plan" of the August 1995 Petition for a Zoning Amendment, Lihue-Hanamaulu Master Plan regarding the "gateway" shall be followed for the design and development of this site. Should the State of Hawaii not be involved in the development of this "gateway", the applicant shall resolve with the County Planning Department the timing for the construction of this improvement prior to and/or concurrent with permitting.

17. The minimum density for the project shall be 1,400 units. The maximum density for the project shall be the units allowed by zoning should the applicant elect to develop beyond the 1,400 minimum amount. The applicant shall note that the maximum density can be exceeded if the housing project is for affordable units that are government funded.

18. There shall be a thirty (30) foot building setback along the Hanamaulu Valley from the edge of the bluff of TMK: 3-7-01:01 (1996) and 3-7-02:12 (1996) (referred to as Ahukini Mauka).

19. To help mitigate any adverse drainage and runoff impacts resulting from development, there shall be no buildings developed on the slopes between the zoned area and Hanamaulu Stream. This slope shall remain as a buffer.

20. Prior to development, lands shall be kept in agriculture or diversified agriculture (as defined in Sec. 8-1.5, KCC 1987) or otherwise maintained in a well-kept condition.

21. Each differently zoned area shall be developed in an orderly manner designed to avoid excessive buildup of unsold inventory and unsightly expanses of vacant lots. A status report shall be submitted to the Planning Department in five (5) year increments from the date of this ordinance until the project is 90% complete. The status report shall address (but not limited to the following): a) any project modification, b) progress of projects; c) compliance to conditions; and d) other items relating to project development.

22. The applicants shall comply with all applicable requirements of State, County and Federal agencies during project development and use. Any additional government agency conditions and requirements that may be imposed shall be the responsibility of the applicants to resolve with the respective agencies.

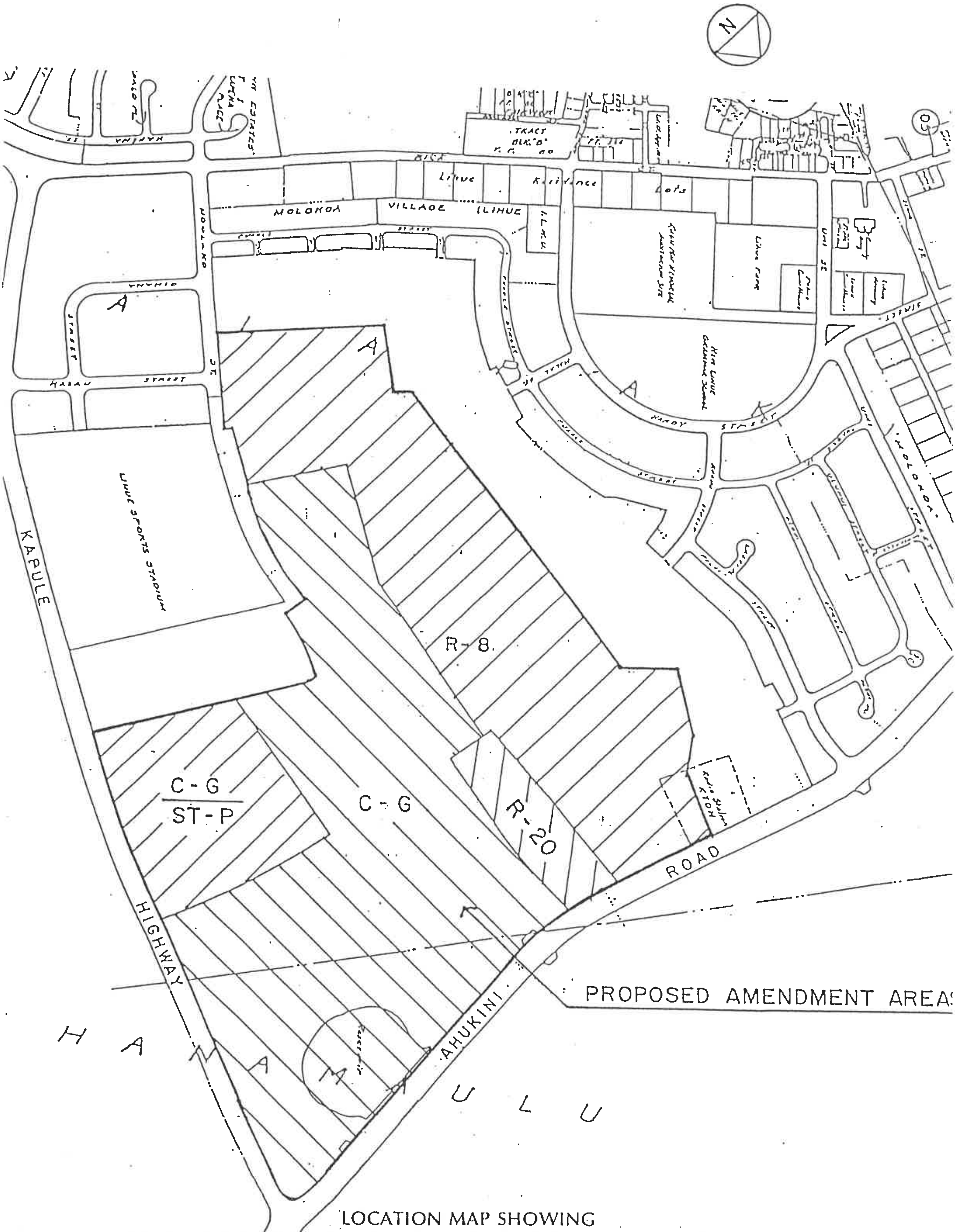
SECTION 3. The Planning Commission is directed to note the change on the official Zoning Maps ZM LI 400, ZM NW 400, and ZM HM 400 on file with the Commission. All applicable provisions of the Comprehensive Zoning Ordinance shall apply to the area rezoned herein.

SECTION 4. This ordinance shall take effect upon its approval.

INTRODUCED BY: /s/ RANDAL VALENCIANO
(By Request)

Date of Introduction:

February 28, 1996
Lihue, Kauai, Hawaii

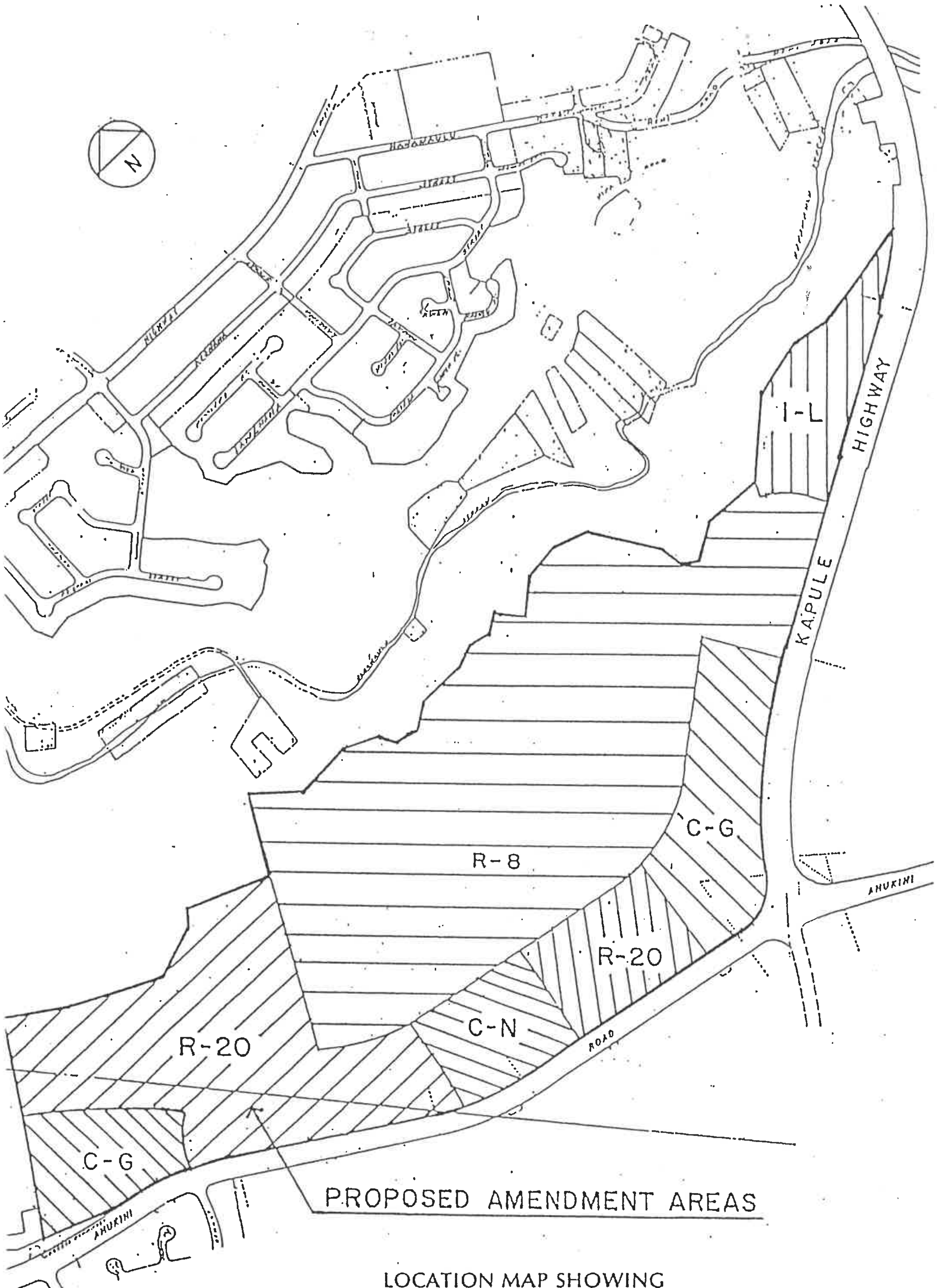


MOLOKOA VILLAGE (LIHUE
Lihue Residence Lots
LIHUE SPORTS STADIUM
KAPULE HIGHWAY
AHUKINI ROAD
A
R-8
R-20
C-G
C-G / ST-P
PROPOSED AMENDMENT AREAS
H A N A M A U L U
HARDY STREET
HALAU STREET

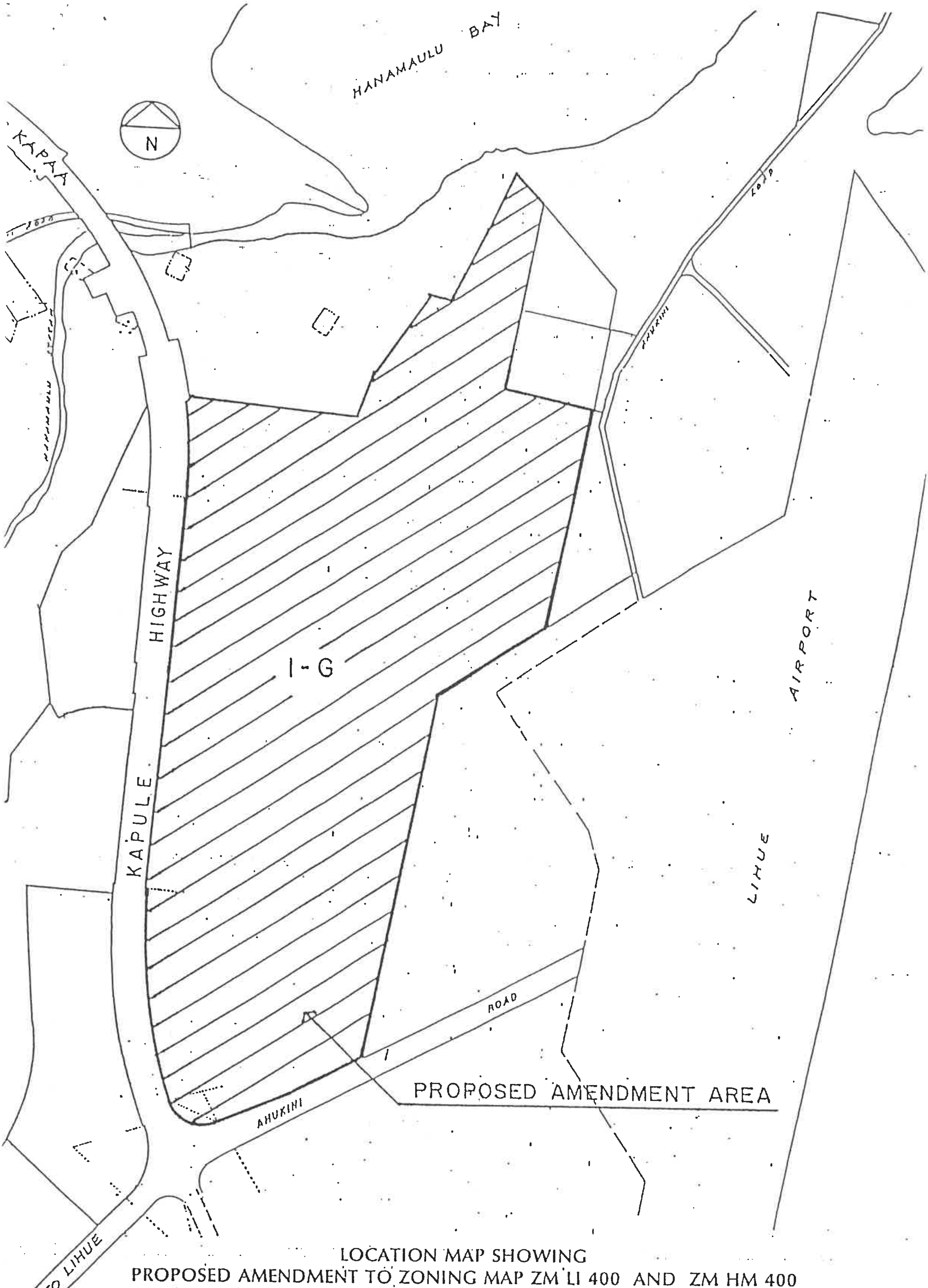
LOCATION MAP SHOWING
PROPOSED AMENDMENT TO ZONING MAPS ZM LI 400 AND ZM-NW 400
FROM
AGRICULTURE DISTRICT (A) TO RESIDENTIAL DISTRICT (R-8)
RESIDENTIAL DISTRICT (R-20), GENERAL COMMERCIAL (CG)
AND GENERAL COMMERCIAL/SPECIAL TREATMENT PUBLIC (C-G/ST-P)
TAX MAP KEY 3-6-02:01; 04, & 17
LIHUE, HANAMAULU, KAUAI, HAWAII

SHT 1 OF 4 SHTS

ZA-96-2


N
I-L
KAPULE HIGHWAY
C-G
R-8
R-20
C-N
ROAD
AHUKINI
R-20
C-G
AHUKINI
PROPOSED AMENDMENT AREAS

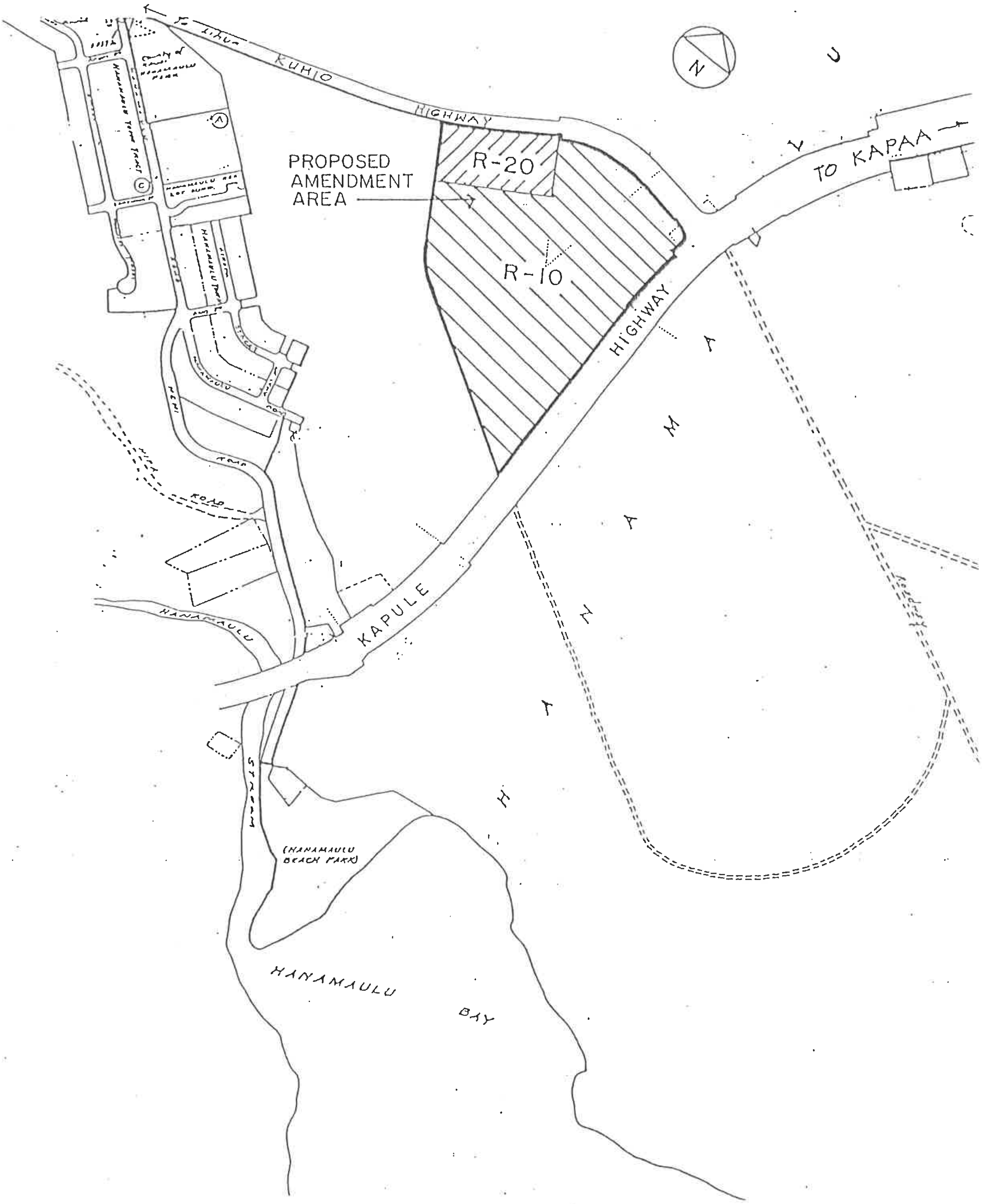
LOCATION MAP SHOWING
PROPOSED AMENDMENT TO ZONING MAPS ZM LI 400, ZM HM 400
AND ZM NW 400
FROM
AGRICULTURE DISTRICT (A) TO RESIDENTIAL DISTRICT (R-8)
RESIDENTIAL DISTRICT (R-20), NEIGHBORHOOD COMMERCIAL (C-N)
GENERAL COMMERCIAL (C-G), AND LIMITED INDUSTRIAL (I-L)
TAX MAP KEY 3-7-01: 01 AND 3-7-02:12
LIHUE, HANAMAULU, KAUAI, HAWAII


HANAMAULU BAY
N
KAPAA
KAPULE HIGHWAY
I-G
AHUKINI
ROAD
LOOP
AHUKINI
LIHUE AIRPORT
PROPOSED AMENDMENT AREA
TO LIHUE

LOCATION MAP SHOWING
PROPOSED AMENDMENT TO ZONING MAP ZM LI 400 AND ZM HM 400
FROM
AGRICULTURE DISTRICT (A) TO GENERAL INDUSTRIAL (I-G)
TAX MAP KEY 3-7-02: 01
LIHUE, HANAMAULU, KAUAI, HAWAII

ZA-96-2

SHT 3 OF 4 SHTS


LIHUE
KUHIO HIGHWAY
N
TO KAPAA
PROPOSED
AMENDMENT
AREA
R-20
R-10
HIGHWAY
KAPULE
HANAMAULU
STREAM
(HANAMAULU
BEACH PARK)
HANAMAULU
BAY
A
C

LOCATION MAP SHOWING
PROPOSED AMENDMENT TO ZONING MAP ZM HM 400
FROM
AGRICULTURE DISTRICT (A) TO RESIDENTIAL DISTRICT (R-10)
AND RESIDENTIAL DISTRICT (R-20)
TAX MAP KEY 3-7-03: 20
LIHUE, HANAMAULU, KAUAI, HAWAII

ZA-96-2

SHT 4 OF 4 SHTS

CERTIFICATE OF THE COUNTY CLERK

I hereby certify that heretofore attached is a true and correct copy of Bill No. 1775, Draft 2, which was passed on second and final reading by the Council of the County of Kauai at its meeting held on May 8, 1996, by the following vote:

FOR ADOPTION: Asing, Correa, Fukushima, Minatoya, Secretario, Valenciano, Kouchi TOTAL - 7,
AGAINST ADOPTION: None TOTAL - 0,
EXCUSED & NOT VOTING: None TOTAL - 0.

Lihue, Hawaii
May 8, 1996

C. Bunji Shimomura
Deputy County Clerk, County of Kauai

ATTEST:

Ronald Kouchi
Chairman & Presiding Officer

DATE OF TRANSMITTAL TO MAYOR:

May 9, 1996

Approved this 13th day of

May 1996.

Maryanne Kusaka

Maryanne W. Kusaka
Mayor
County of Kauai

EXHIBIT 7

PROJECT WINSTON

Lihu’e, Kaua’i, Hawai’i
Tax Map Key: 3-7-002:021 (4th Division)

Photo Log #2 of Existing Conditions

April 25, 2025

Prepared for:

BH DevCo
2425 E. Camelback Rd, Suite 220
Phoenix, AZ 85016

Prepared by:

Kodani & Associates Engineers, LLC
3126 Akahi Street Lihu`e, Kaua`i, Hawai`i
kodaniengineers.com 808.245.9591

Figure No. 1 - Map of Kauai

NTS

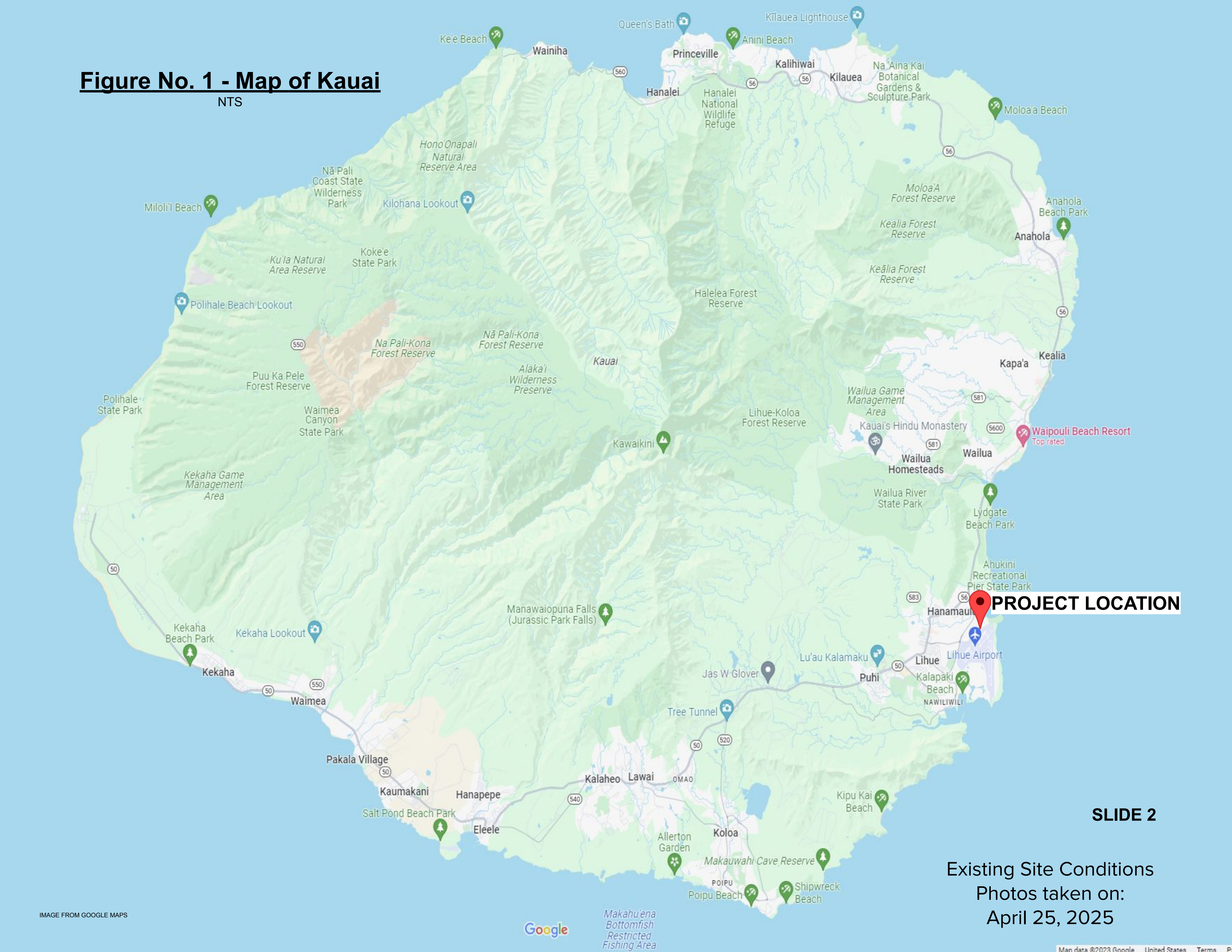
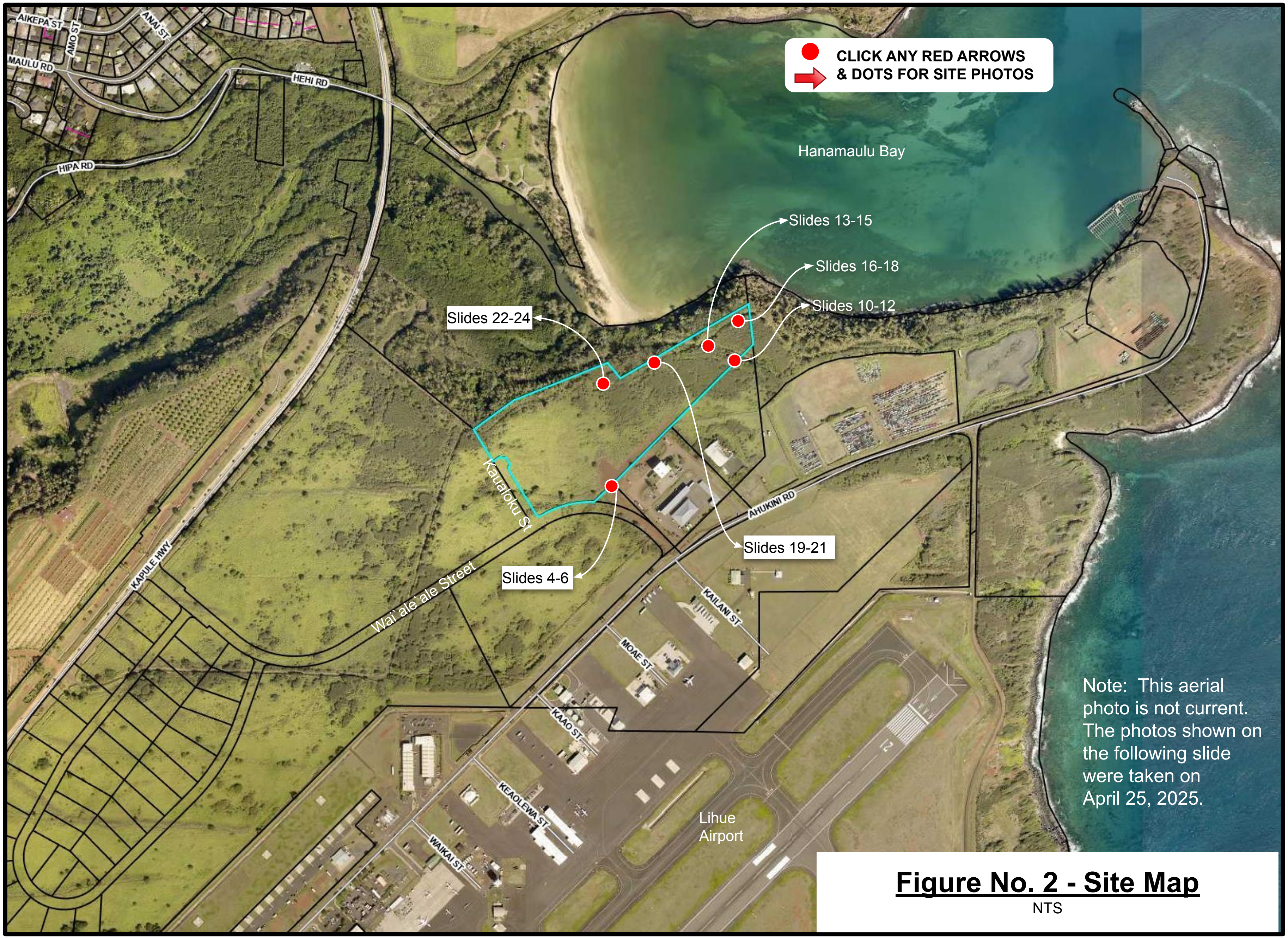

PROJECT LOCATION
Ke'e Beach
Wainiha
Queen's Bath
Princeville
Anini Beach
Kilauea Lighthouse
Kalihiwai
Kilauea
Hanalei
Hanalei National Wildlife Refuge
Na Aina Kai Botanical Gardens & Sculpture Park
Moloa'a Beach
Hono'Onapali Natural Reserve Area
Nā Pali Coast State Wilderness Park
Kilohana Lookout
Miloli'I Beach
Moloa'A Forest Reserve
Anahola Beach Park
Anahola
Kealia Forest Reserve
Keālia Forest Reserve
Ku'la Natural Area Reserve
Koke'e State Park
Polihale Beach Lookout
Halelea Forest Reserve
Na Pali-Kona Forest Reserve
Nā Pali-Kona Forest Reserve
Kauai
Alaka'i Wilderness Preserve
Puu Ka Pele Forest Reserve
Polihale State Park
Waimea Canyon State Park
Kapa'a
Kealia
Wailua Game Management Area
Lihue-Koloa Forest Reserve
Kauai's Hindu Monastery
Waipouli Beach Resort
Top rated
Kawaikini
Wailua Homesteads
Wailua
Kekaha Game Management Area
Wailua River State Park
Lydgate Beach Park
Ahukini Recreational Pier State Park
Hanamaulu
Manawaiopuna Falls (Jurassic Park Falls)
Kekaha Beach Park
Kekaha Lookout
Lihue Airport
Lu'au Kalamaku
Lihue
Jas W Glover
Puhi
Kalapaki Beach
NAWILIWILI
Kekaha
Waimea
Tree Tunnel
Pakala Village
Kaumakani
Hanapepe
Kalaheo
Lawai
OMAO
Salt Pond Beach Park
Eleele
Kipu Kai Beach
Allerton Garden
Koloa
Makauwahi Cave Reserve
POIPU
Poipu Beach
Shipwreck Beach
Makahu'ena Bottomfish Restricted Fishing Area
Google
Map data ©2023 Google United States Terms
560
56
550
581
5600
583
50
520
540

IMAGE FROM GOOGLE MAPS

Existing Site Conditions
Photos taken on:
April 25, 2025

Project Winston
Lihu’e, Kaua’i, Hawai’i



AIKEPA ST
AMO ST
ANAI ST
MAULU RD
HEHI RD
HIPA RD
KAPULE HWY
Hanamaulu Bay
Slides 13-15
Slides 16-18
Slides 10-12
Slides 22-24
Slides 19-21
Slides 4-6
Kaualoku St
Wai`ale`ale Street
AHUKINI RD
KAILANI ST
MOAE ST
KAAO ST
KEAOLEWA ST
WAIKAI ST
Lihue Airport

● CLICK ANY RED ARROWS & DOTS FOR SITE PHOTOS

Note: This aerial photo is not current. The photos shown on the following slide were taken on April 25, 2025.

Figure No. 2 - Site Map

NTS

Image from qPublic.net

KAUAI MAP

Project Winston
Lihu'e, Kaua'i, Hawai'i

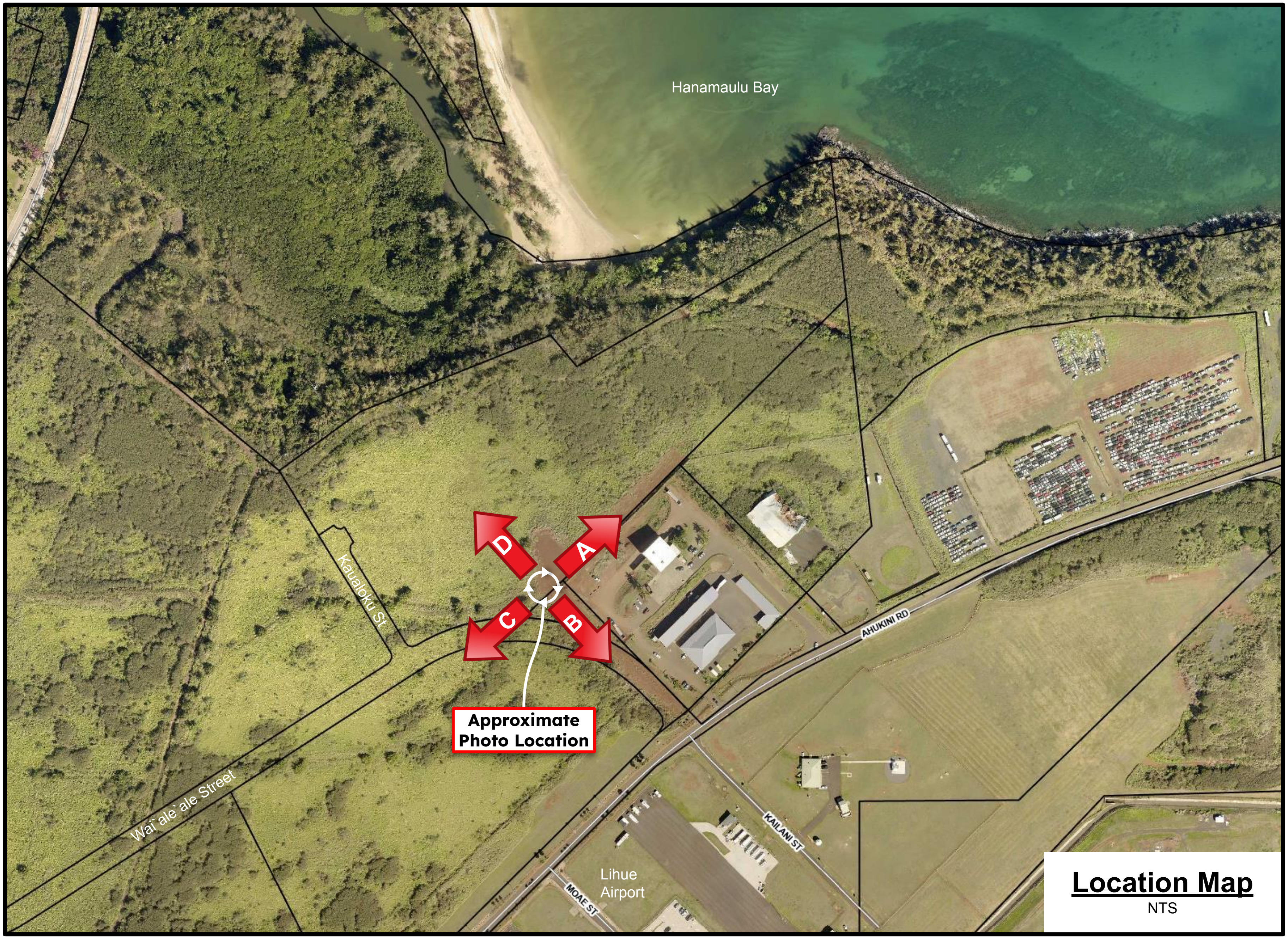
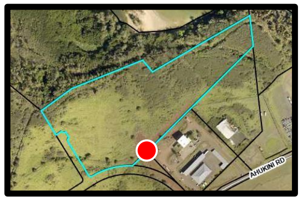

Hanamaulu Bay
Kaualoku St
Wai`ale`ale Street
AHUKINI RD
KAILANI ST
MOAE ST
Lihue Airport
A
B
C
D
Approximate Photo Location
Location Map
NTS

Image from qPublic.net

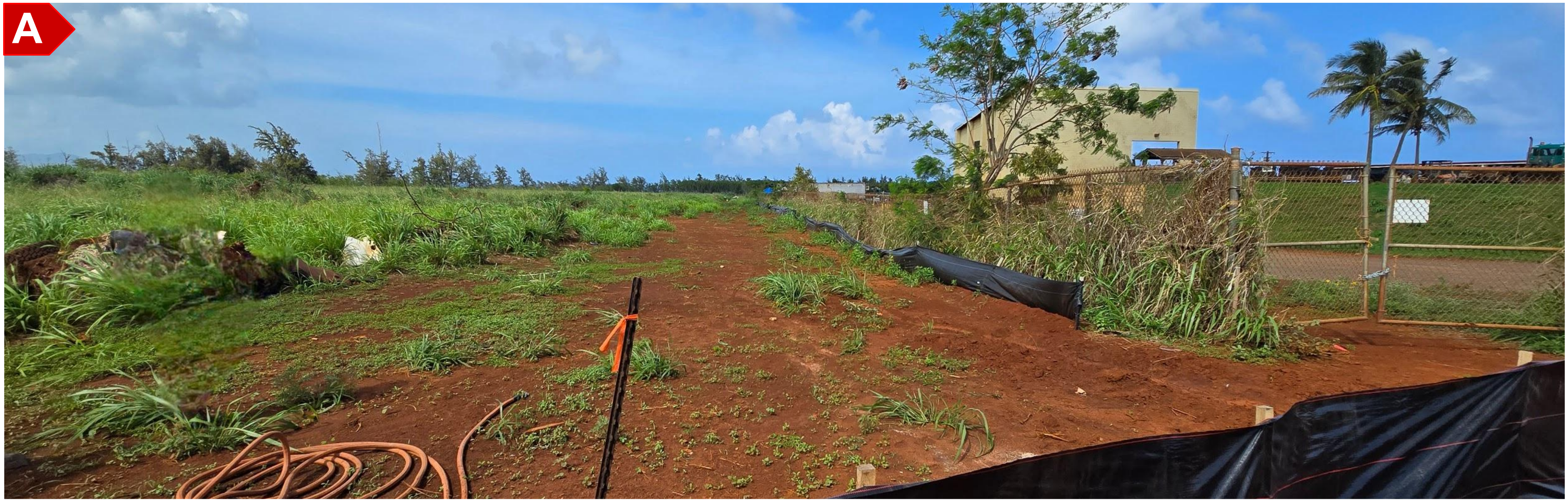
SITE MAP

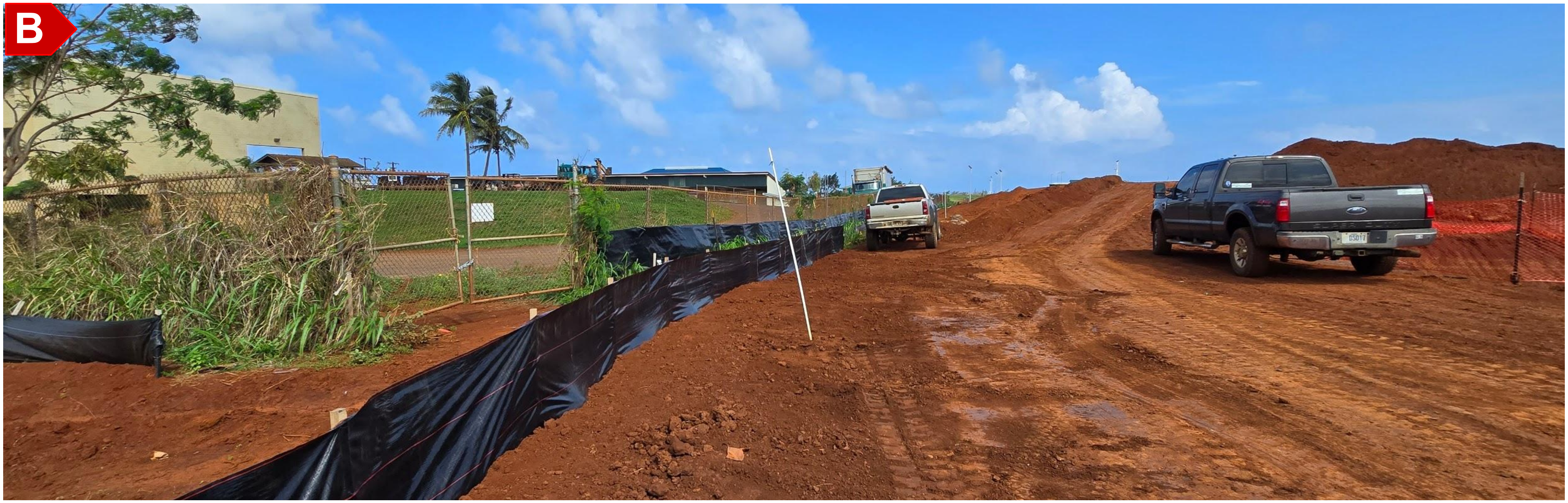
KAUAI MAP



Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

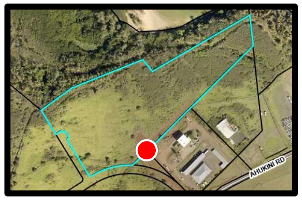




PHOTOS TAKEN ON MARCH 20 & 27,2025

SITE MAP

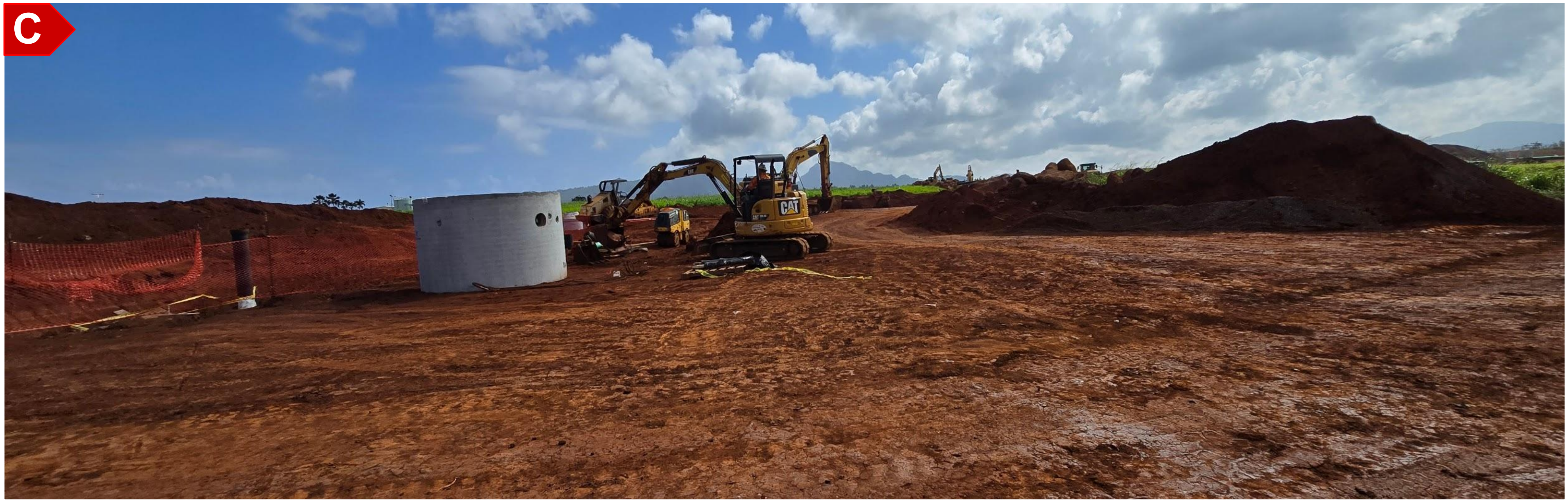
KAUAI MAP



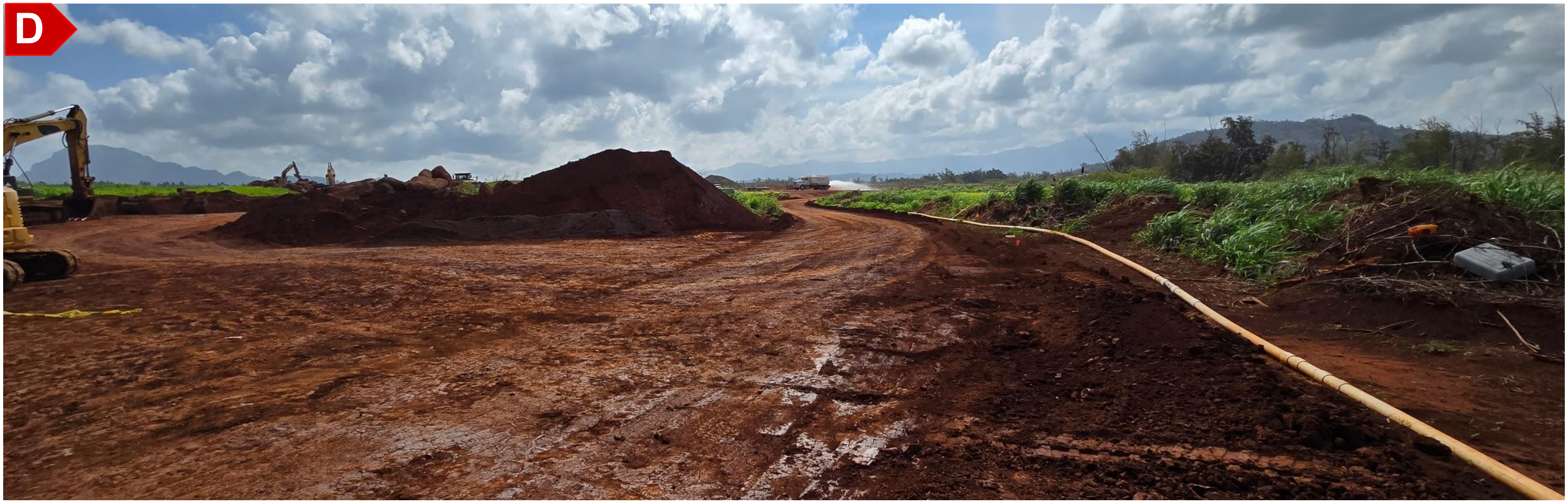
Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

C



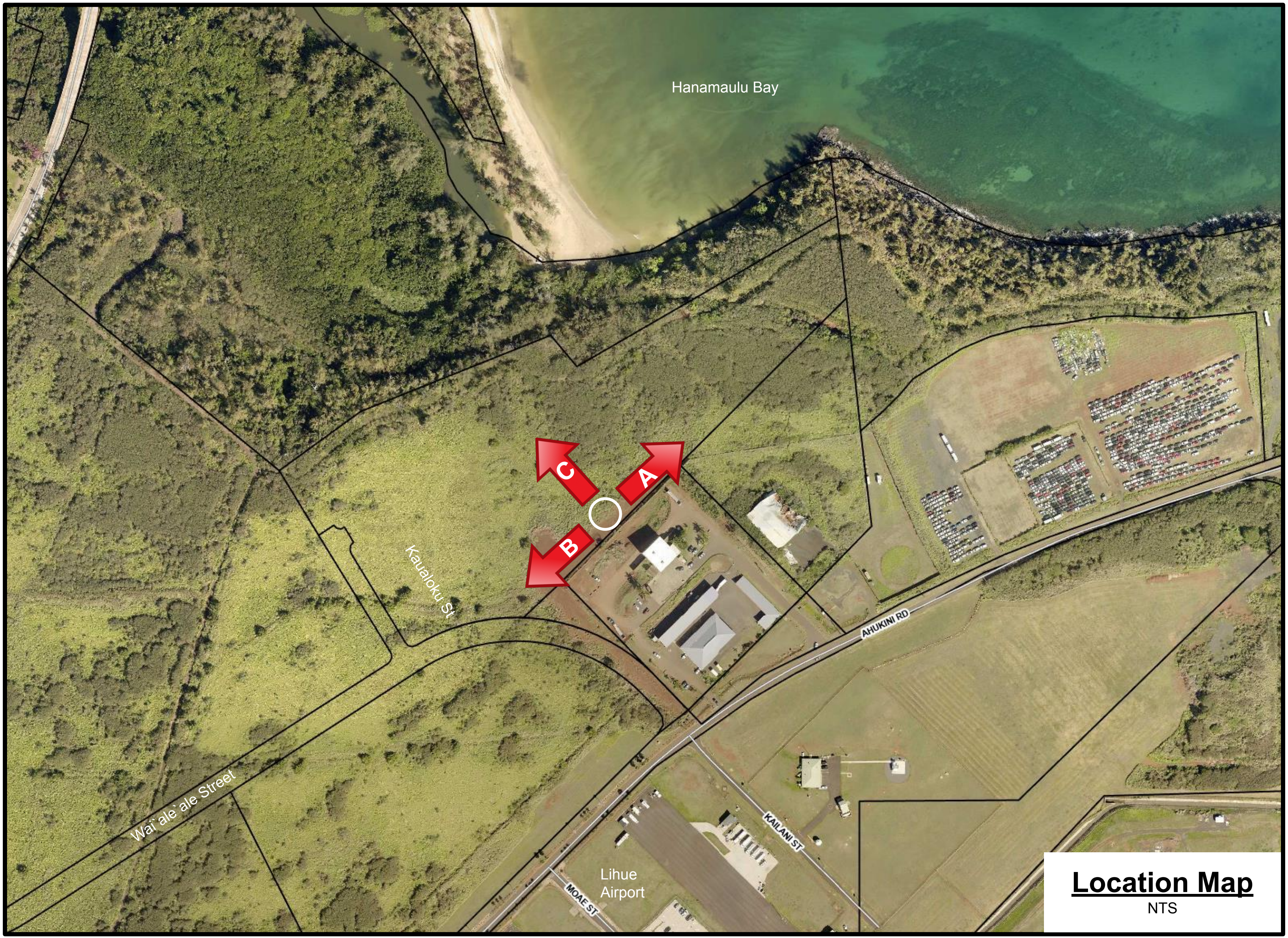
D



PHOTOS TAKEN ON MARCH 20 & 27,2025

KAUAI MAP

Project Winston
Lihu'e, Kaua'i, Hawai'i



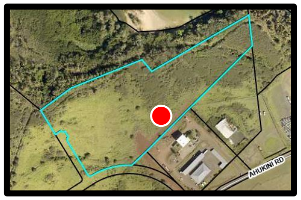
Hanamaulu Bay
C
A
B
Kaualoku St
Wai`ale`ale Street
AHUKINI RD
KAILANI ST
MOAE ST
Lihue Airport

Location Map
NTS

Image from qPublic.net

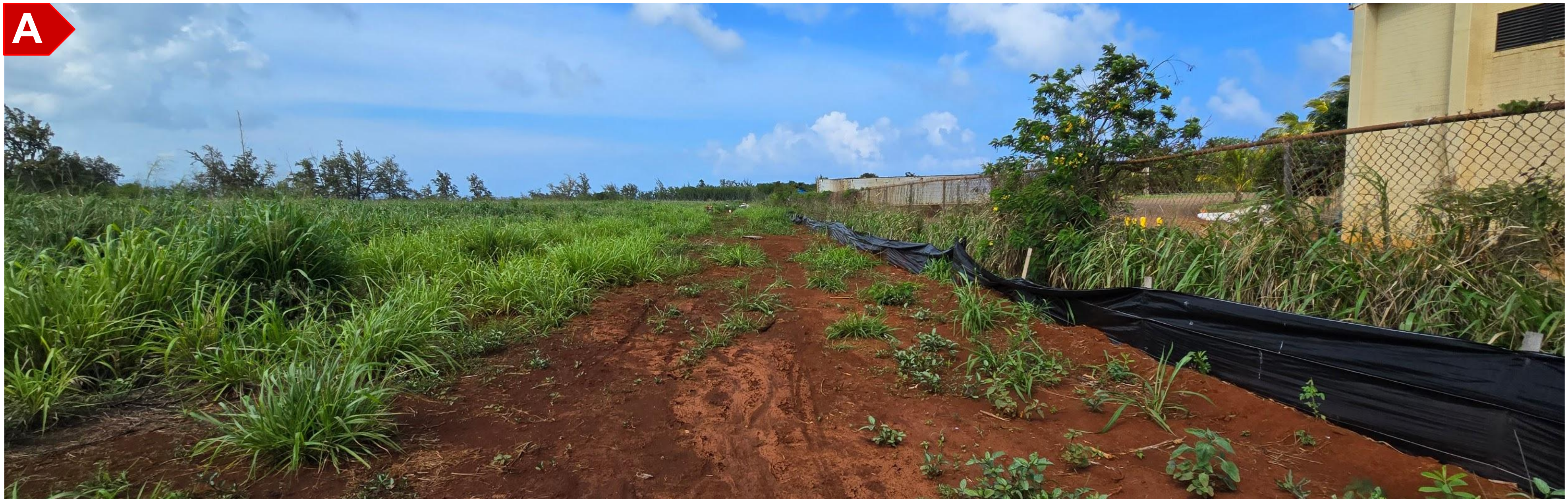
SITE MAP

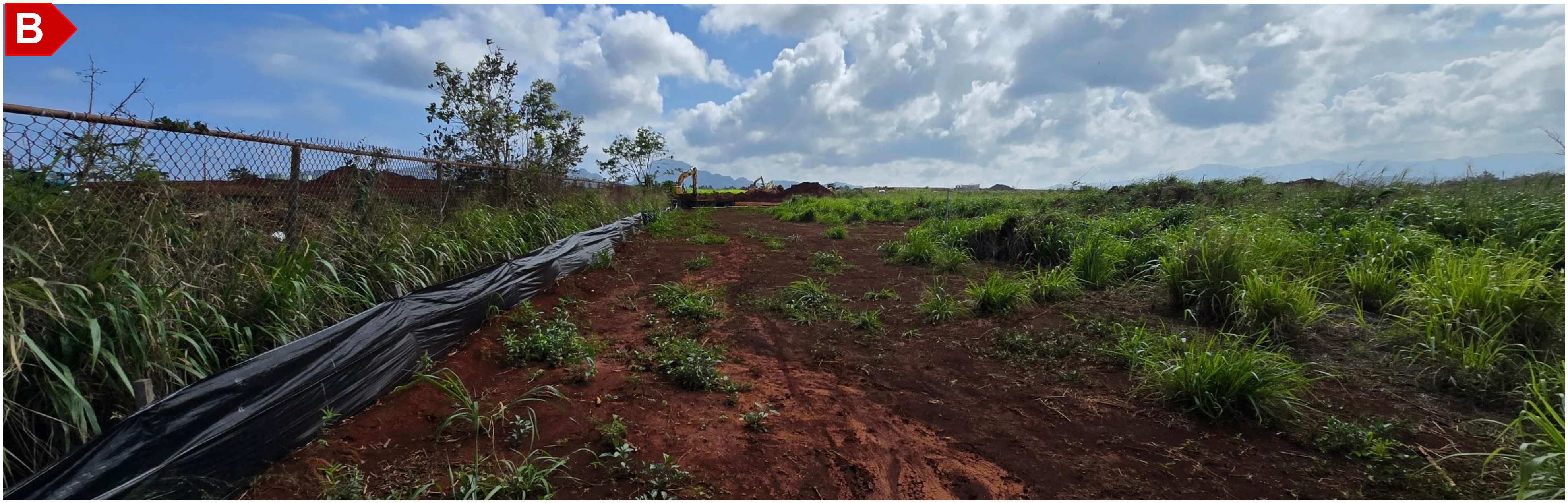
KAUAI MAP



Project Winston
Lihu’e, Kaua’i, Hawai’i

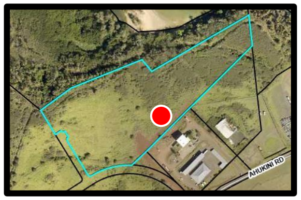
Photo Log #2
TMK: (4) 3-7-002:021





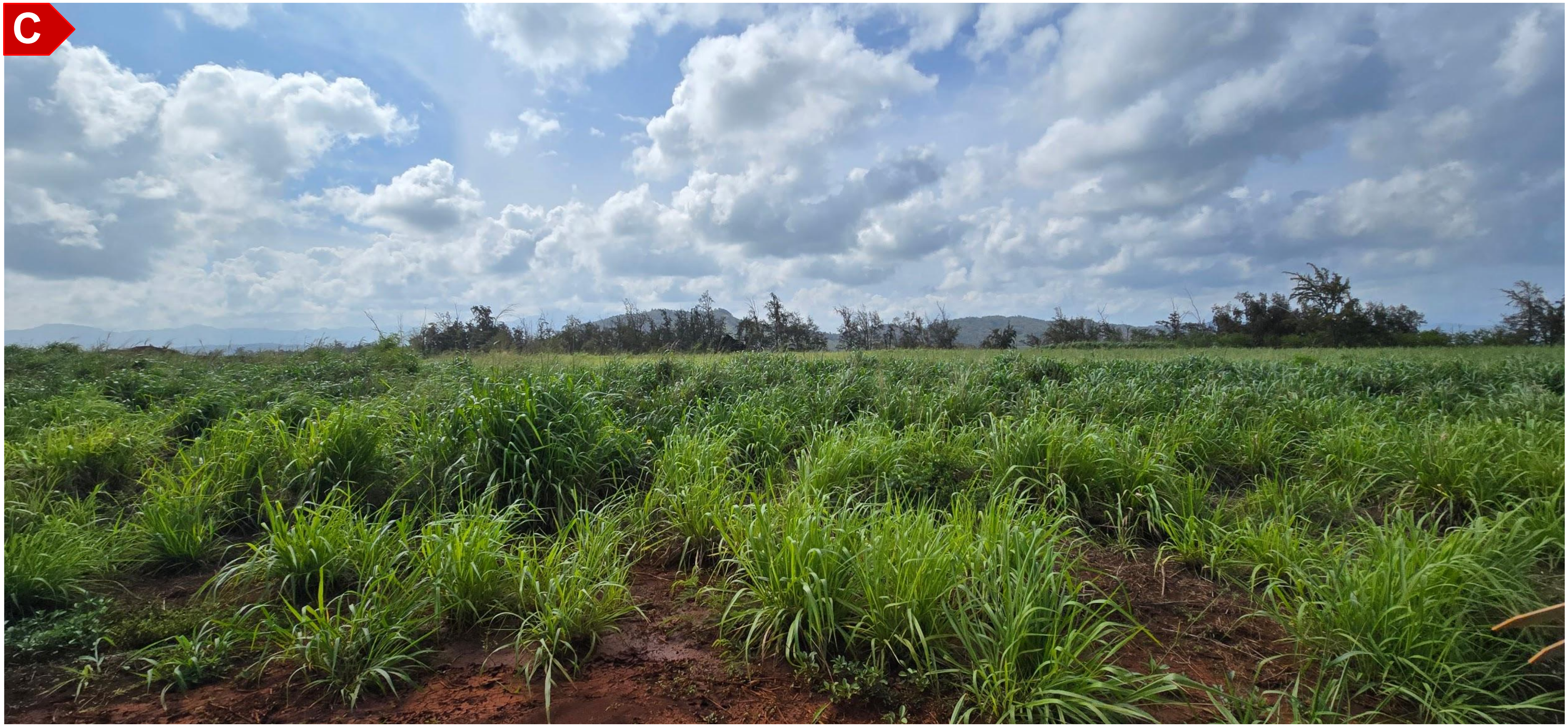
PHOTOS TAKEN ON MARCH 20,2025

SITE MAP
KAUAI MAP



Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021



PHOTOS TAKEN ON MARCH 20,2025

Project Winston

Lihu'e, Kaua'i, Hawai'i

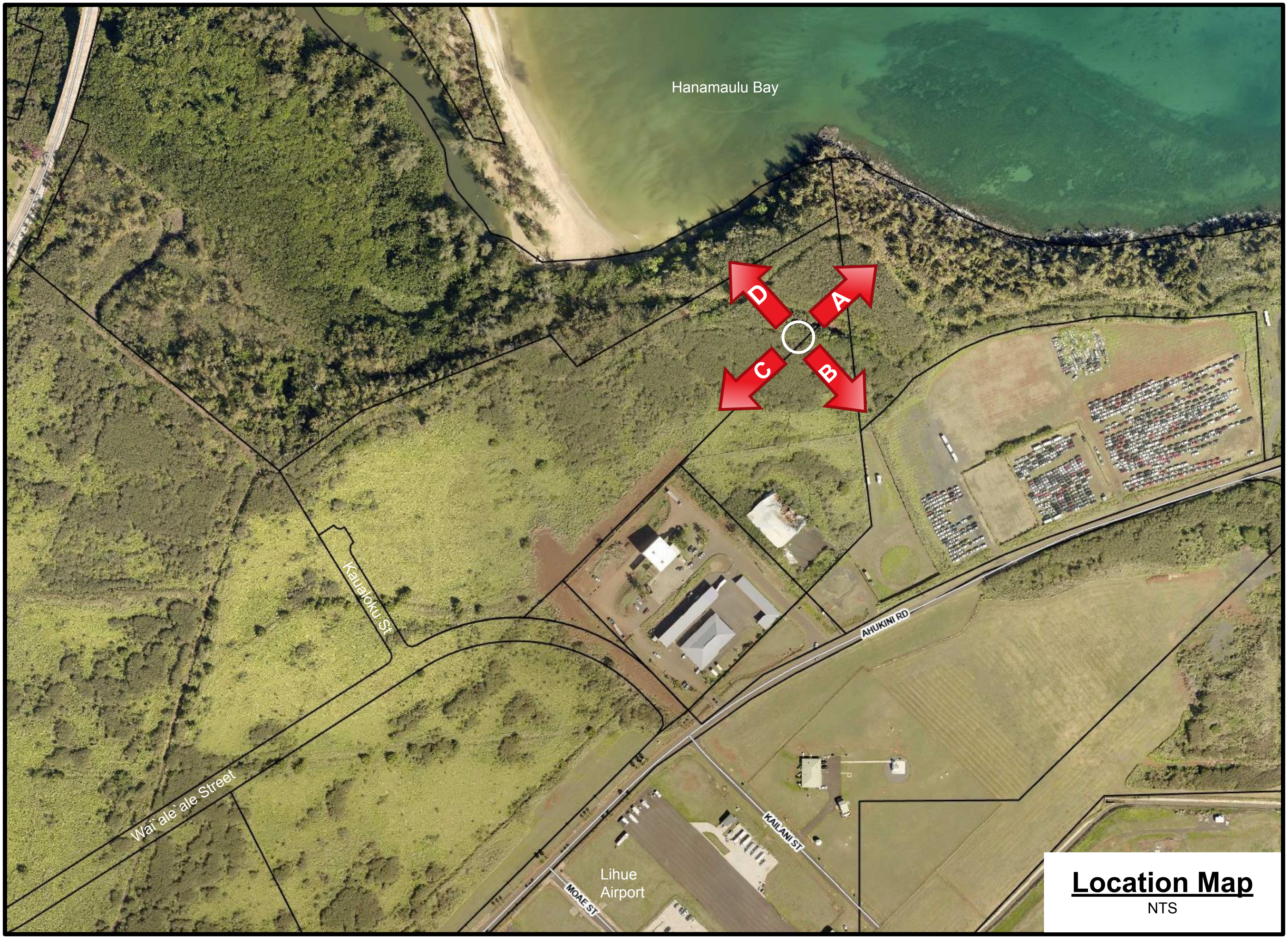
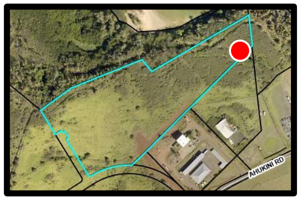

Hanamaulu Bay
A
B
C
D
Kaualoku St
Wai`ale`ale Street
AHUKINI RD
KAILANI ST
MOAE ST
Lihue Airport
Location Map
NTS

Image from qPublic.net

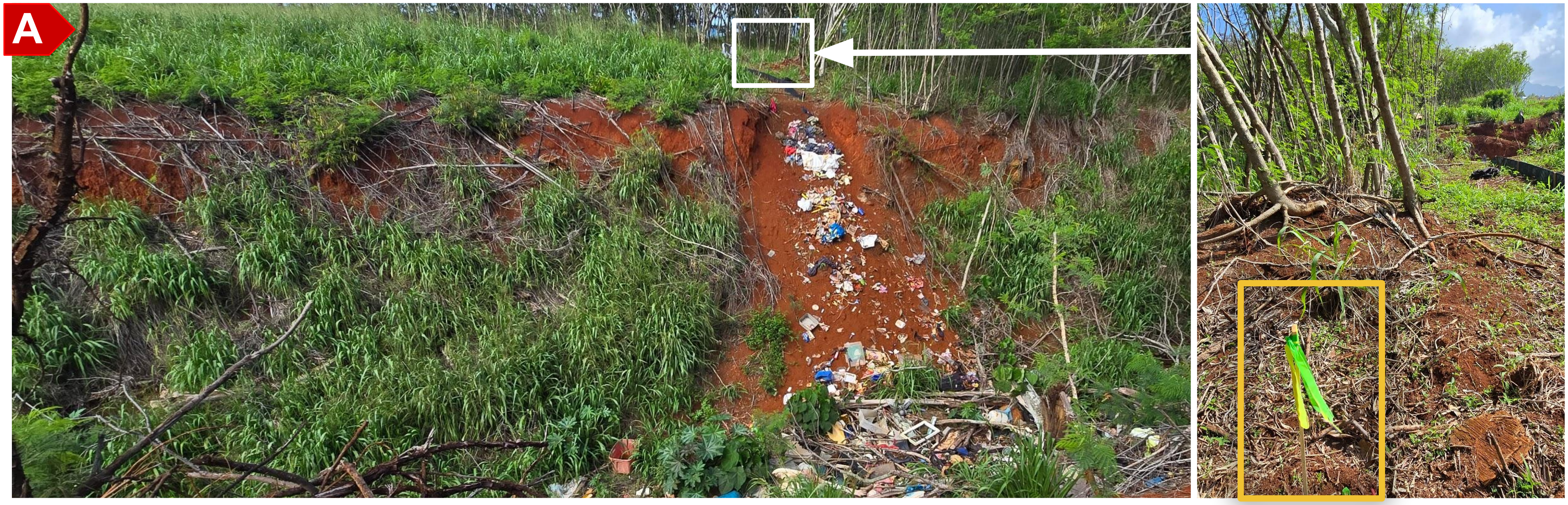
SITE MAP

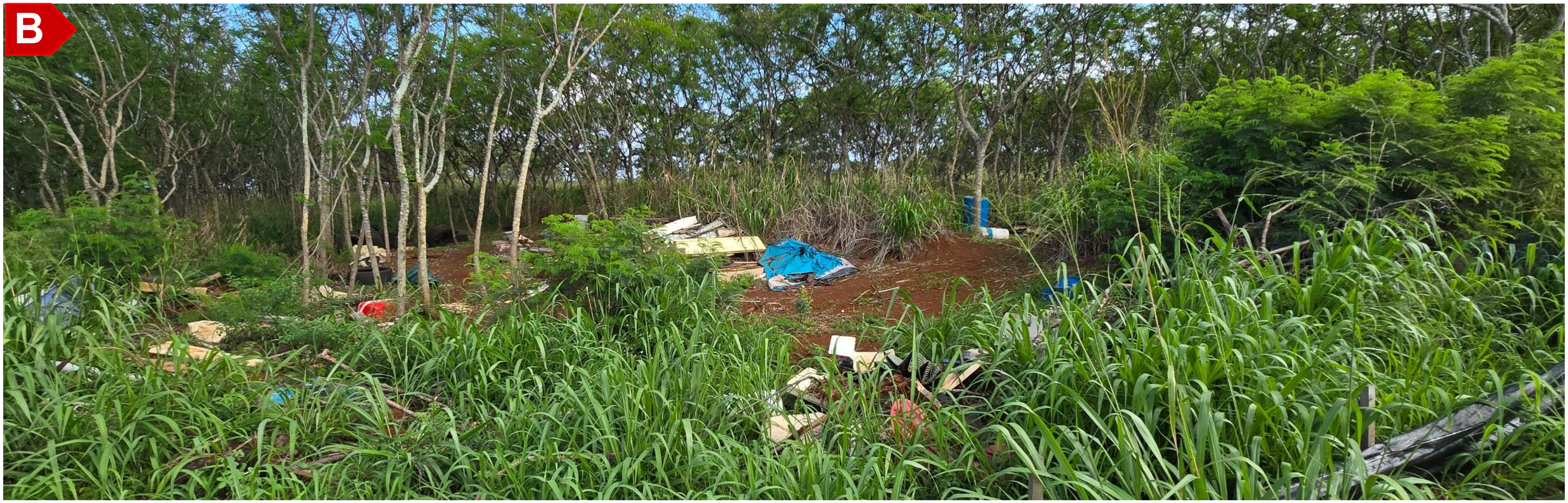
KAUAI MAP



Project Winston
Lihu'e, Kaua'i, Hawai'i

Photo Log #2
TMK: (4) 3-7-002:021

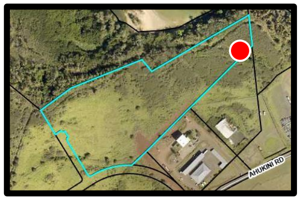




PHOTOS TAKEN ON MARCH 20 & 27,2025

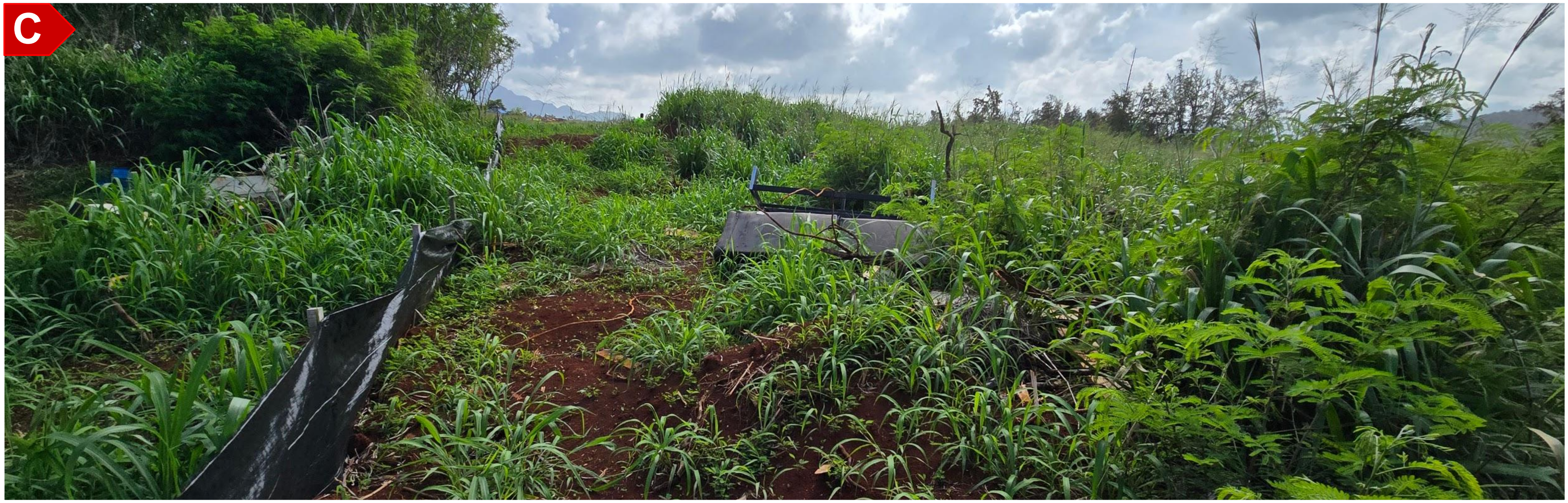
SITE MAP

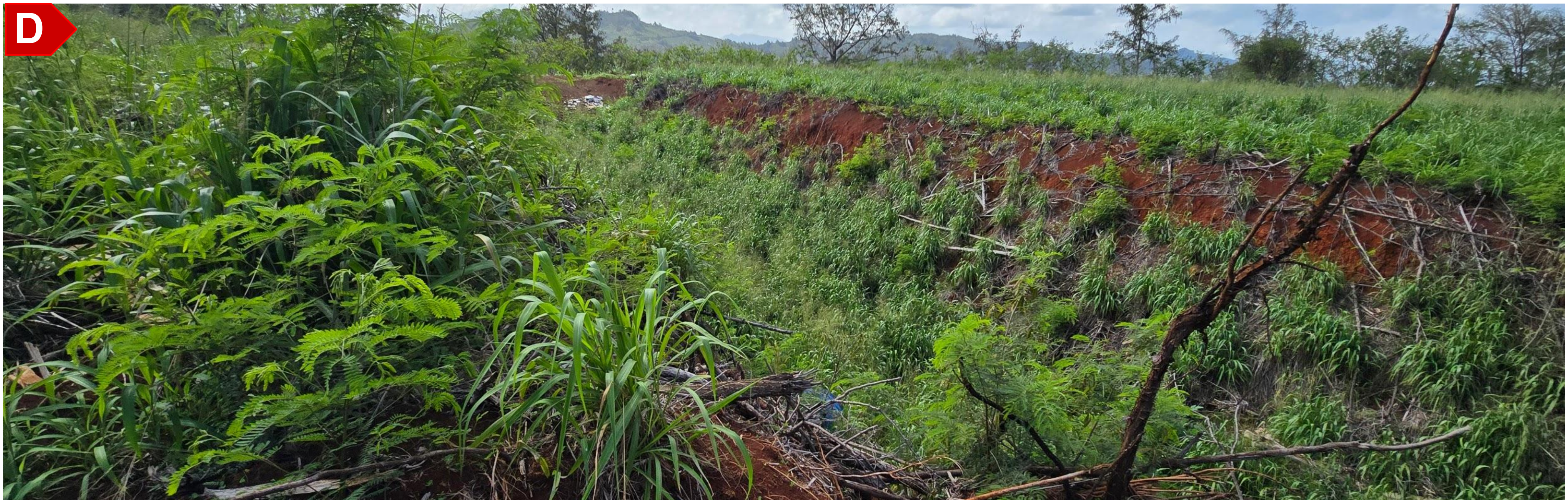
KAUAI MAP



Project Winston
Lihu'e, Kaua'i, Hawai'i

Photo Log #2
TMK: (4) 3-7-002:021





PHOTOS TAKEN ON MARCH 27,2025

KAUAI MAP

Project Winston
Lihu'e, Kaua'i, Hawai'i

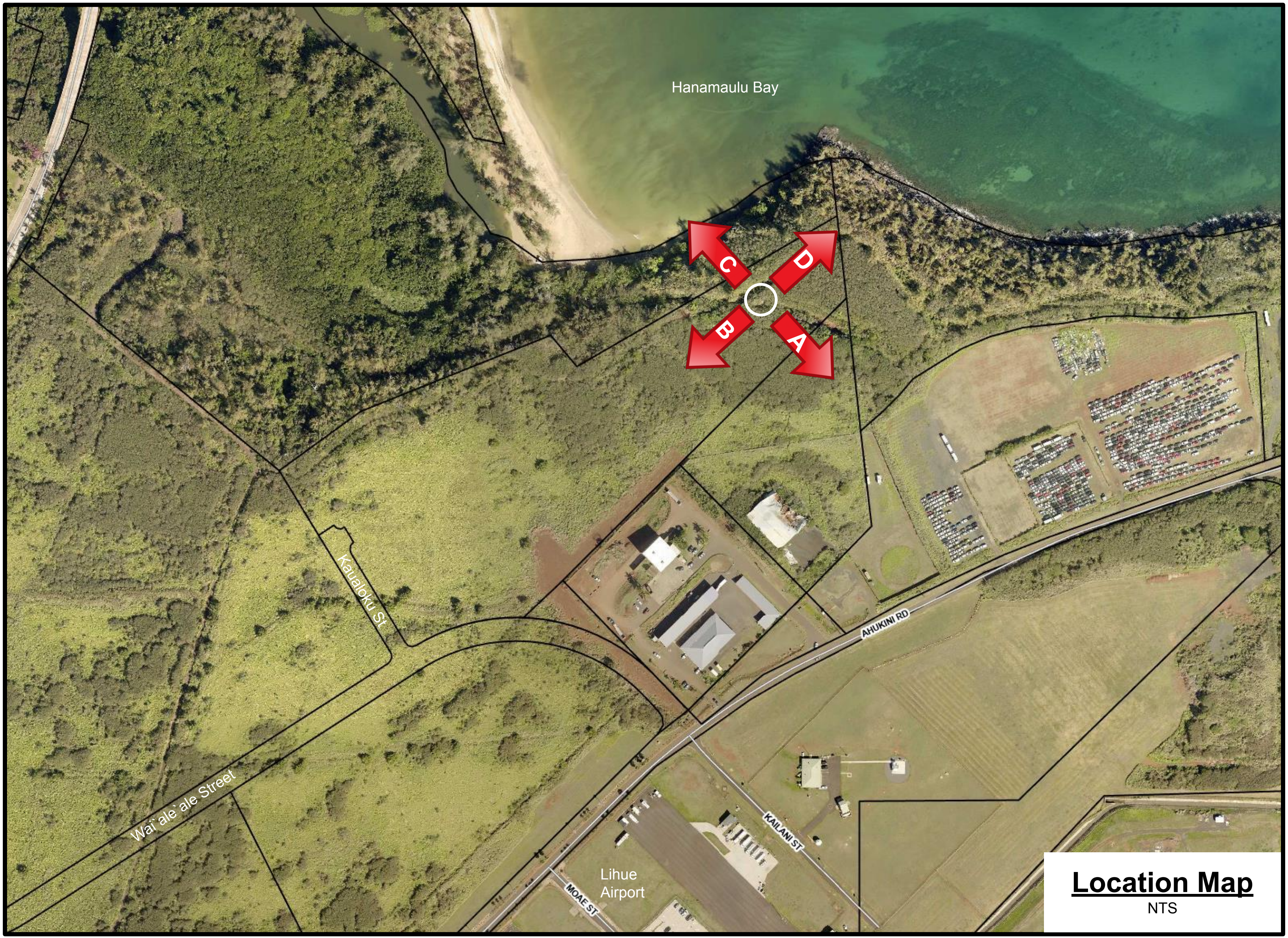
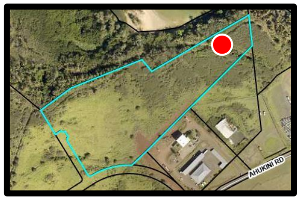

Hanamaulu Bay
C
D
B
A
Kaualoku St
AHUKINI RD
Wai`ale`ale Street
KAILANI ST
MOAE ST
Lihue Airport
Location Map
NTS

Image from qPublic.net

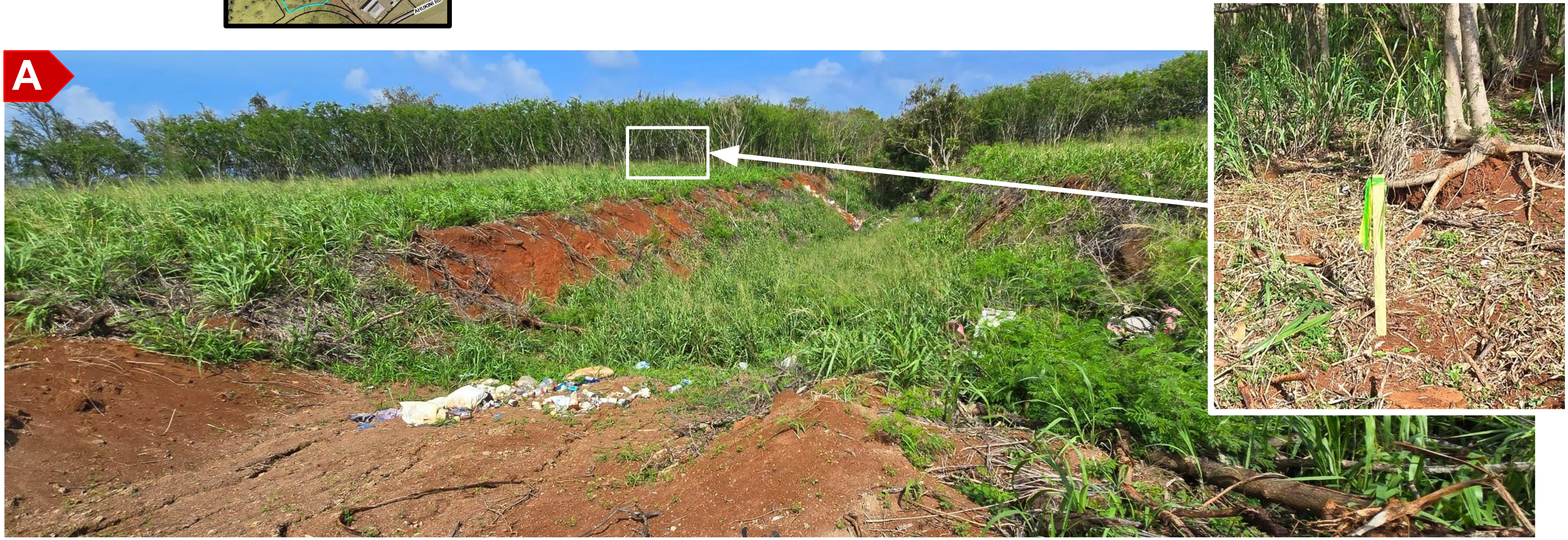
SITE MAP

KAUAI MAP



Project Winston
Lihu’e, Kaua’i, Hawai’i

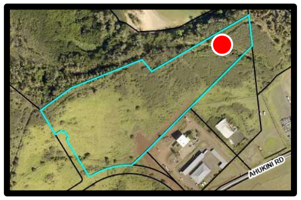
Photo Log #2
TMK: (4) 3-7-002:021



PHOTOS TAKEN ON MARCH 27,2025

SITE MAP

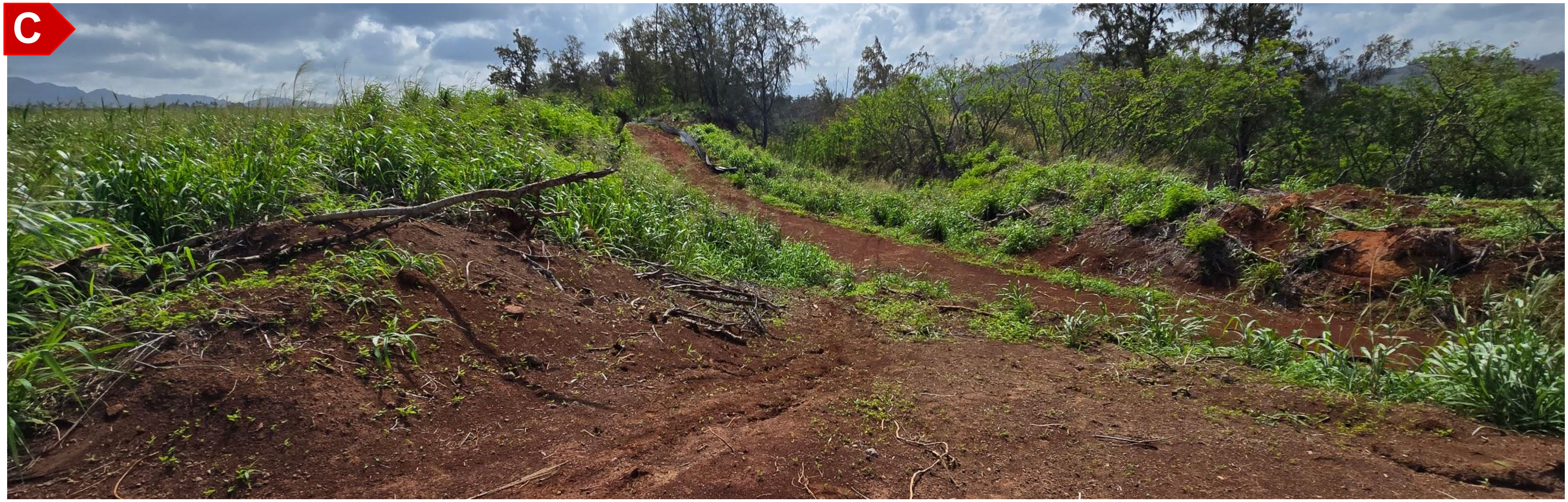
KAUAI MAP



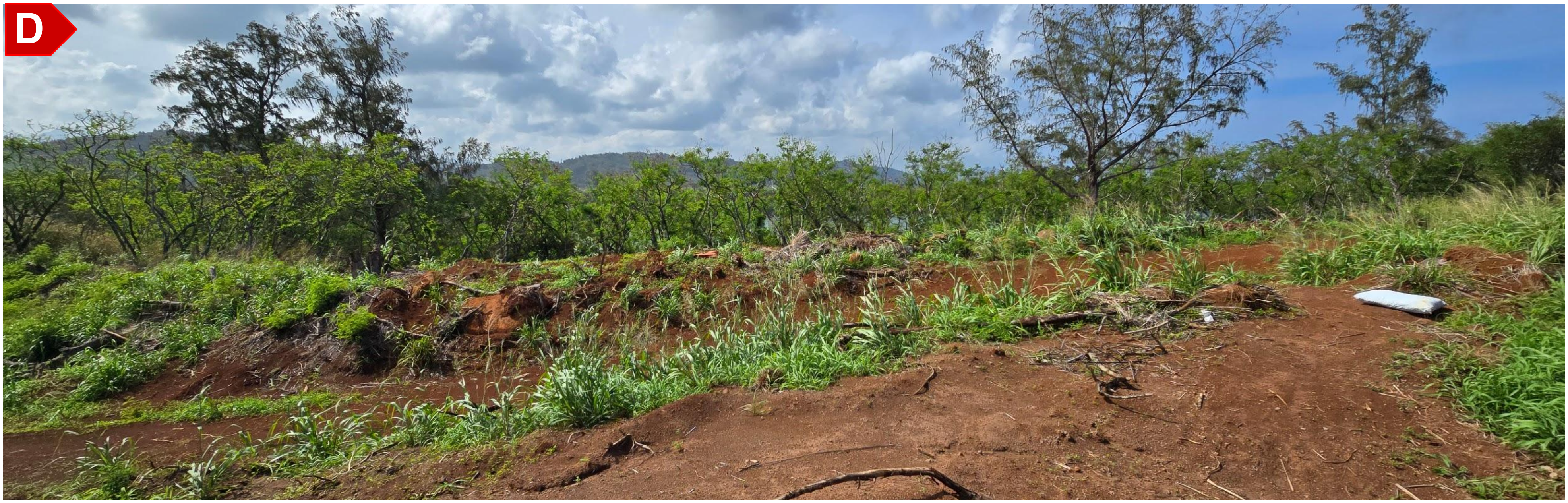
Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

C



D



PHOTOS TAKEN ON MARCH 20 & 27,2025

Project Winston
Lihu'e, Kaua'i, Hawai'i

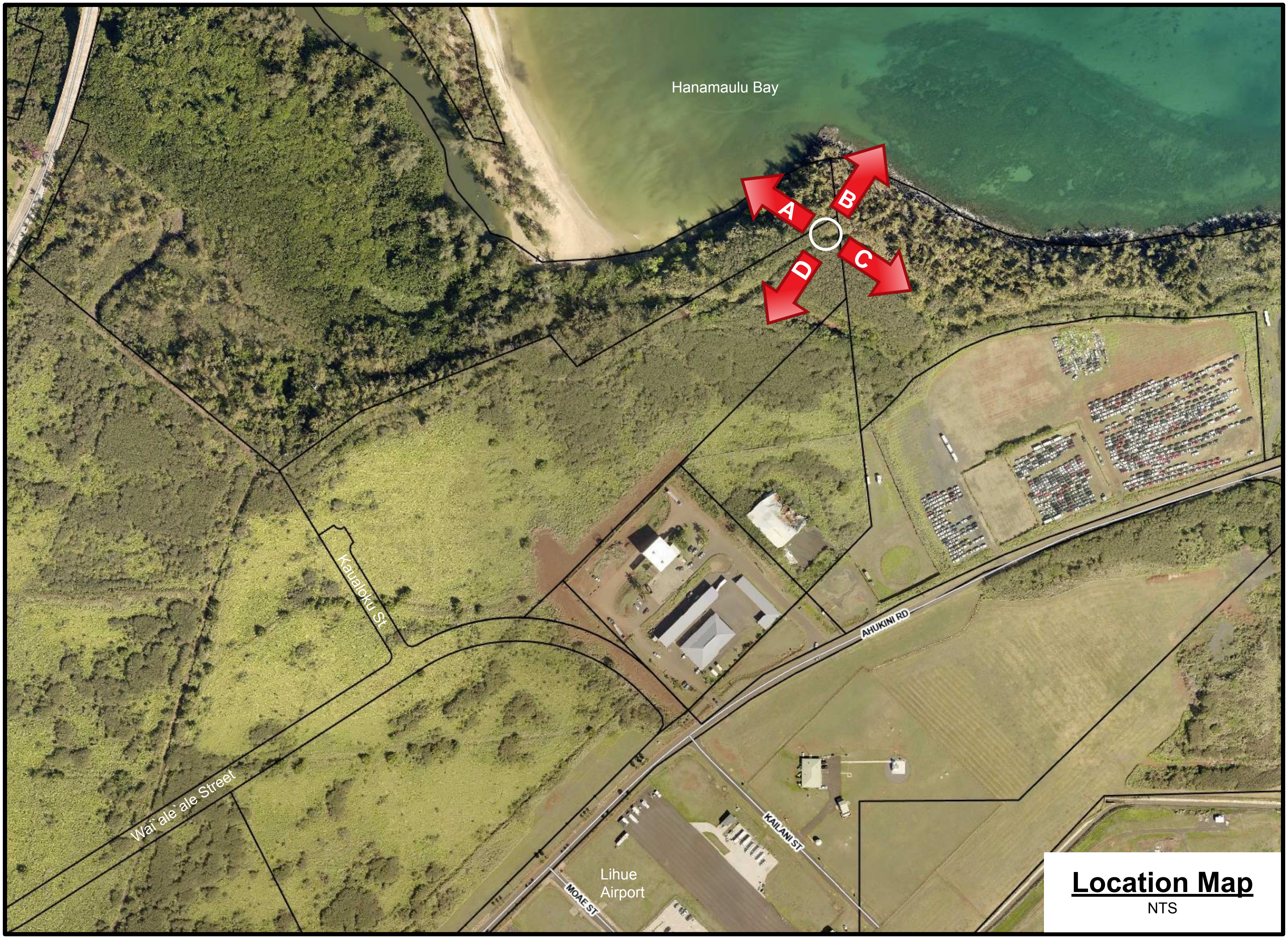
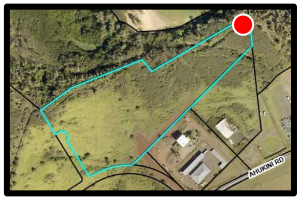

Hanamaulu Bay
A
B
C
D
Kualoku St
Wai`ale`ale Street
AHUKINI RD
KAILANI ST
MOAE ST
Lihue Airport
Location Map
NTS

Image from qPublic.net

Kodani & Associates Engineers, LLC

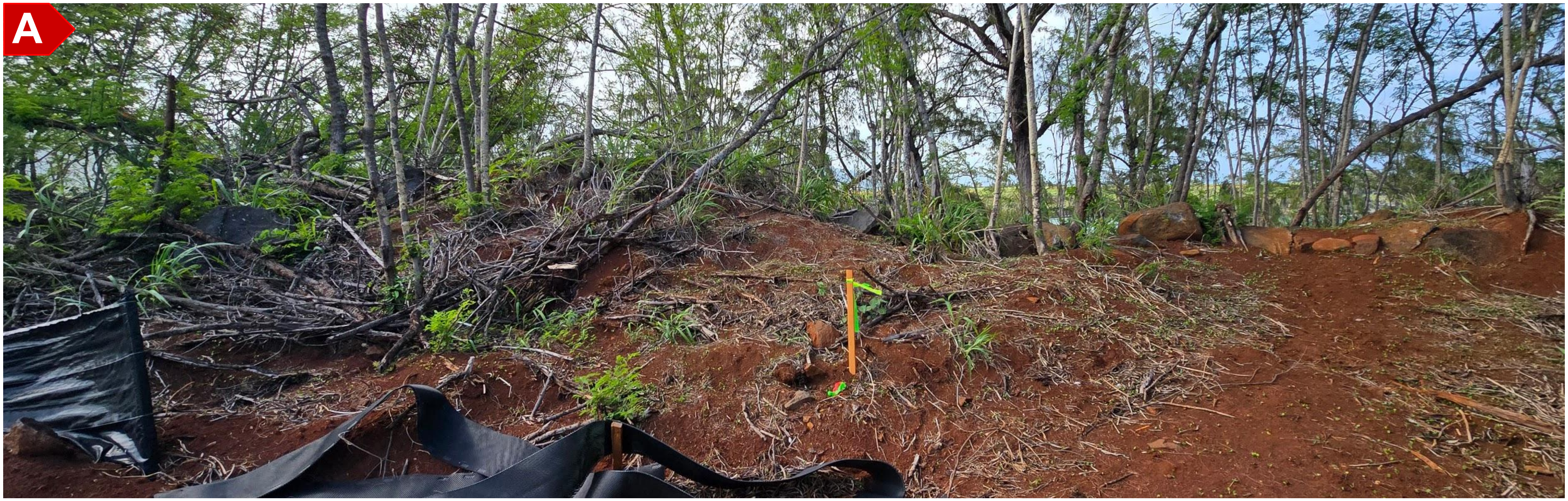
SITE MAP

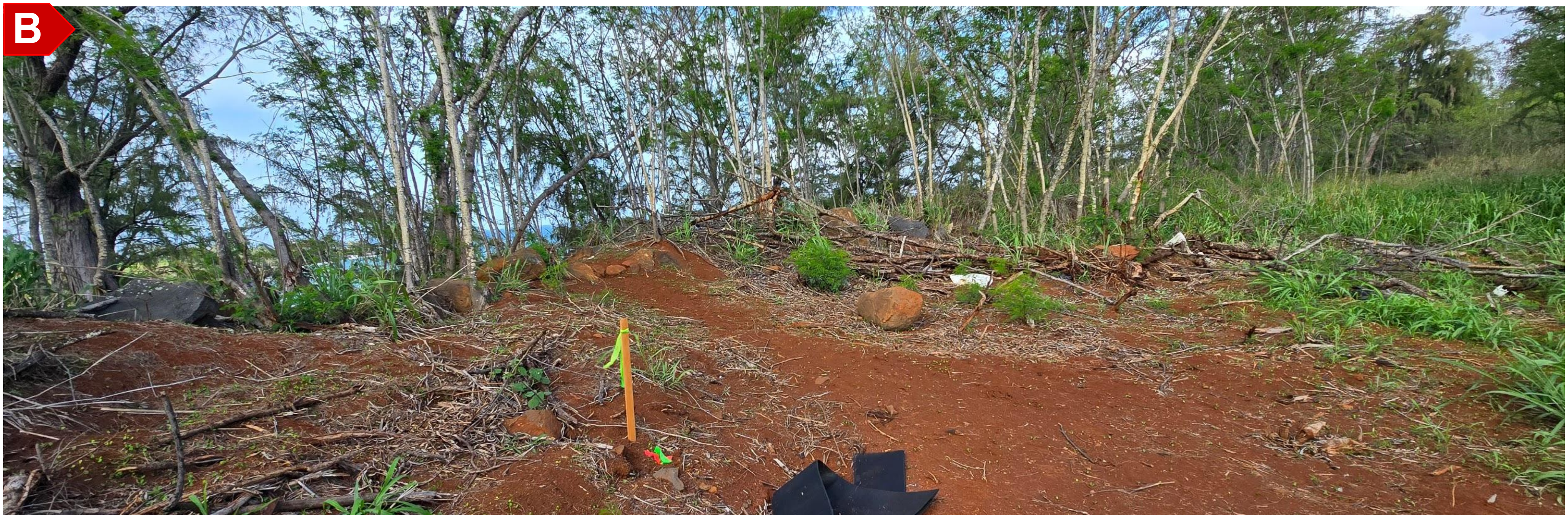
KAUAI MAP



Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

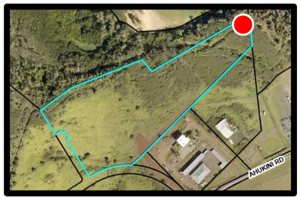

A


B

PHOTOS TAKEN ON MARCH 27,2025

SITE MAP

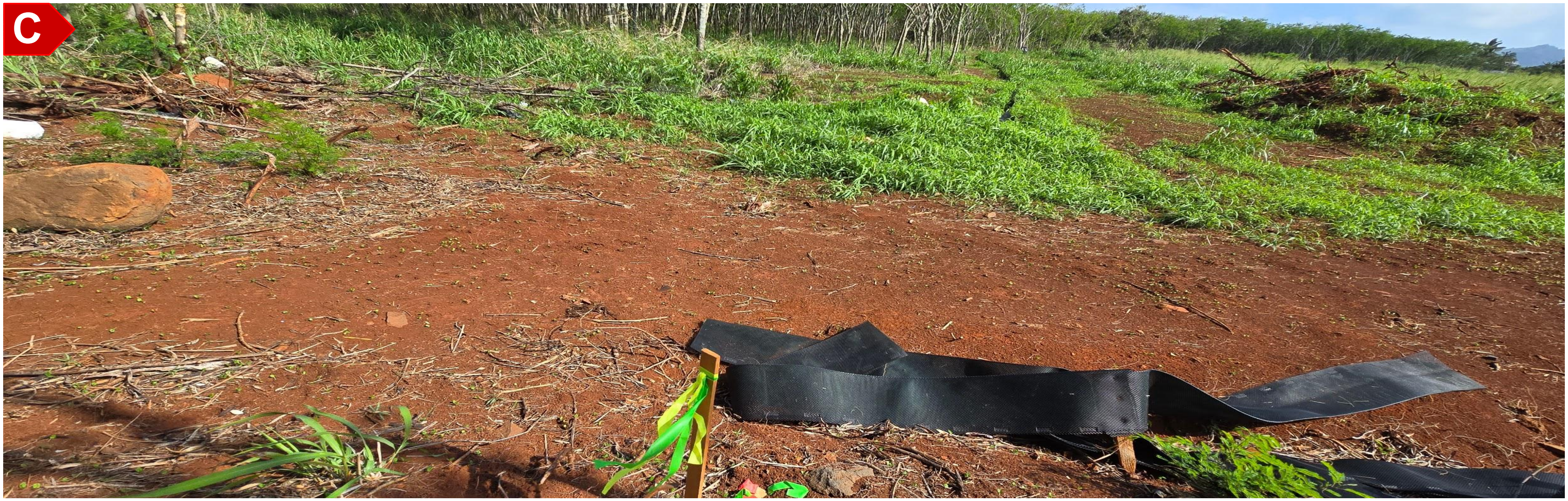
KAUAI MAP



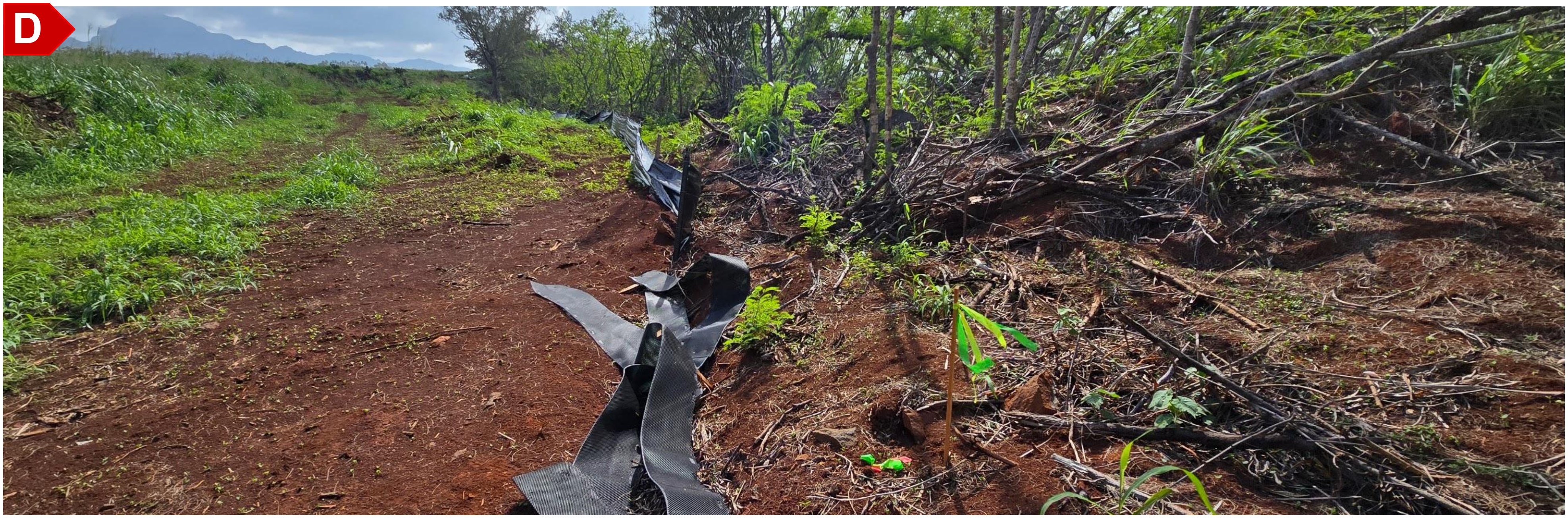
Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

C



D



PHOTOS TAKEN ON MARCH 27,2025

Project Winston
Lihu'e, Kaua'i, Hawai'i

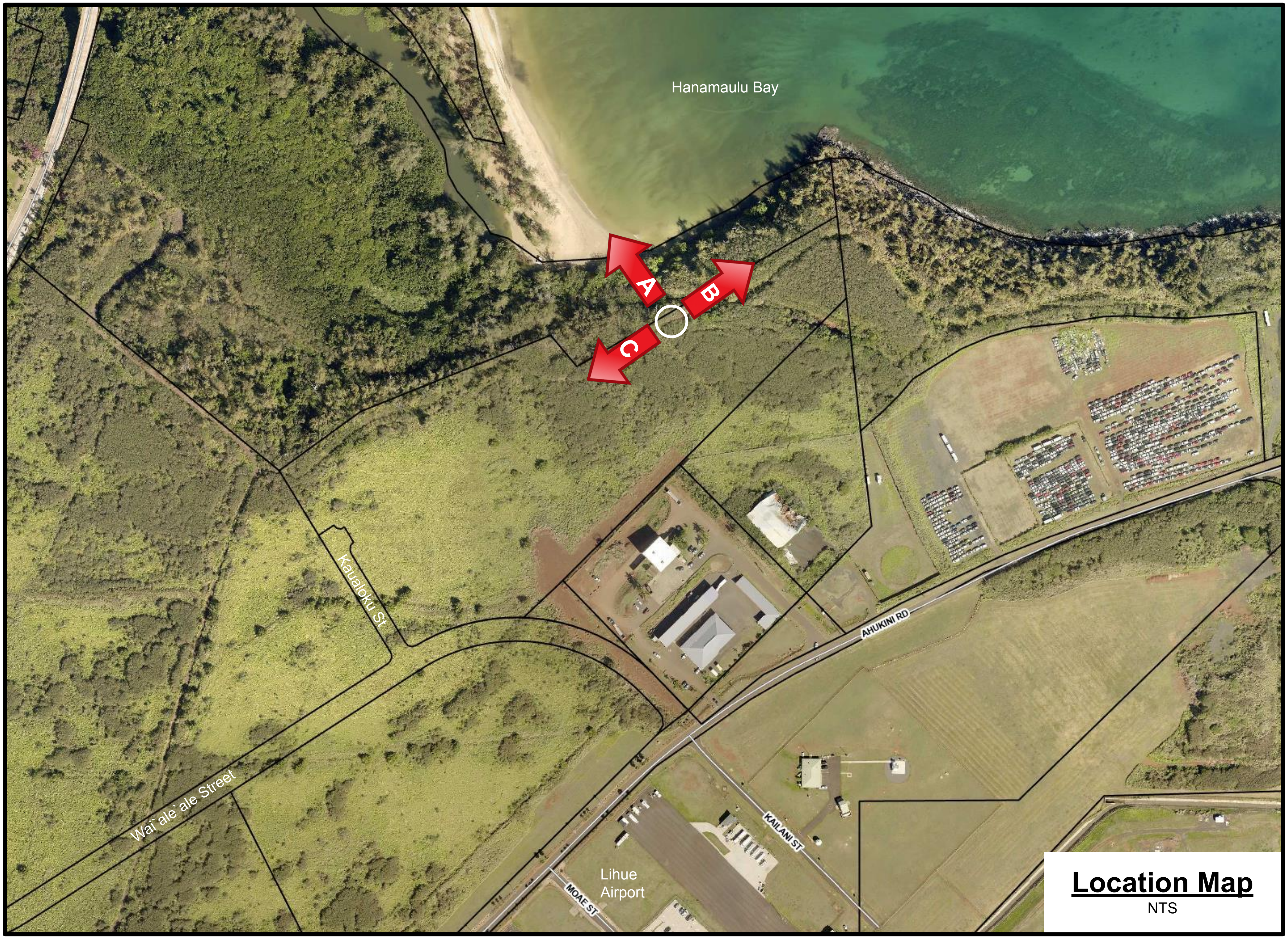
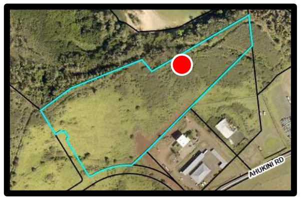

Hanamaulu Bay
A
B
C
Kaualoku St
Wai`ale`ale Street
AHUKINI RD
KAILANI ST
MOAE ST
Lihue Airport
Location Map
NTS

Image from qPublic.net

SITE MAP

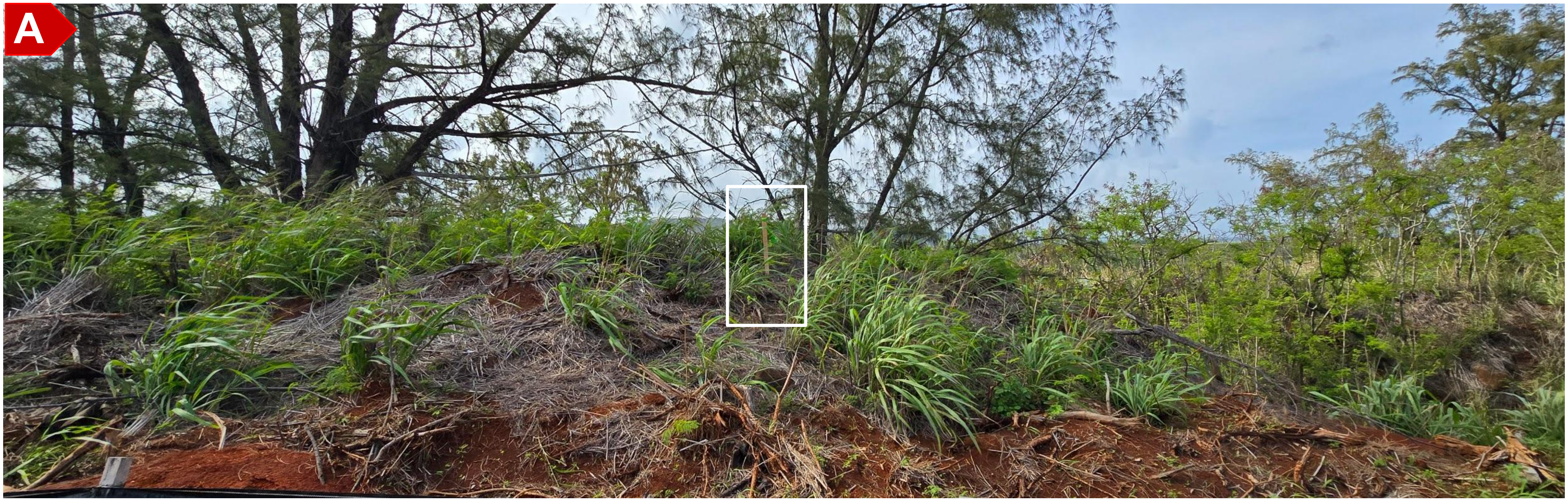
KAUAI MAP



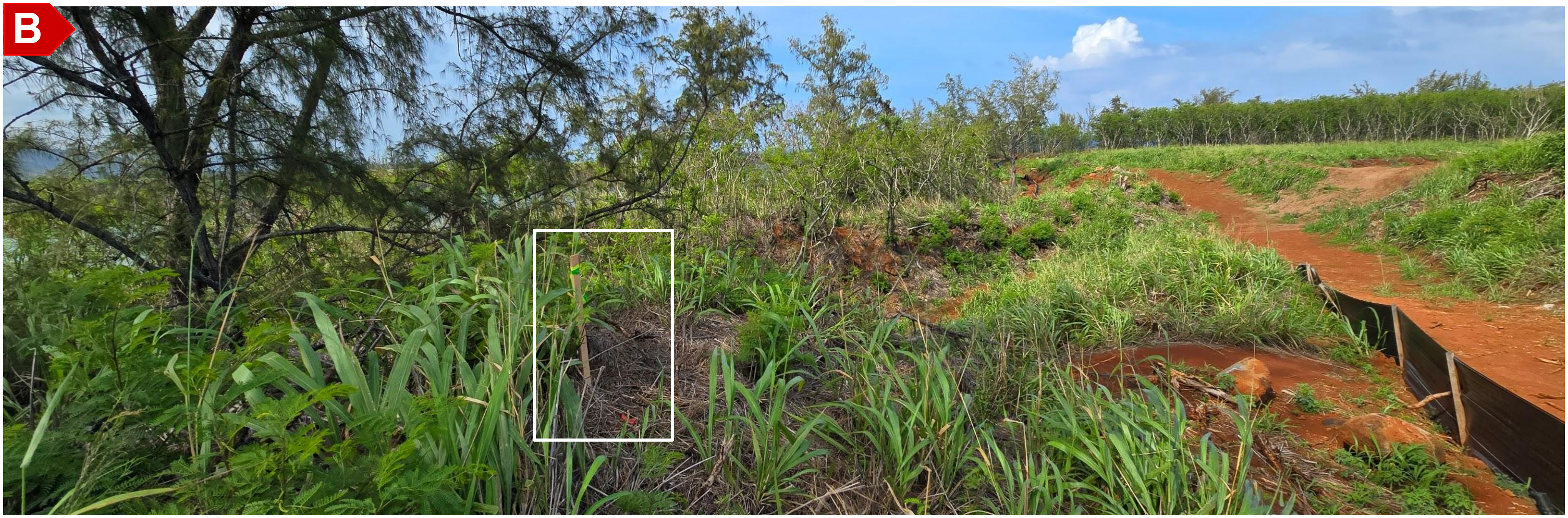
Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

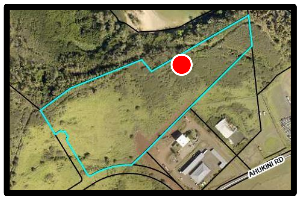
A



B

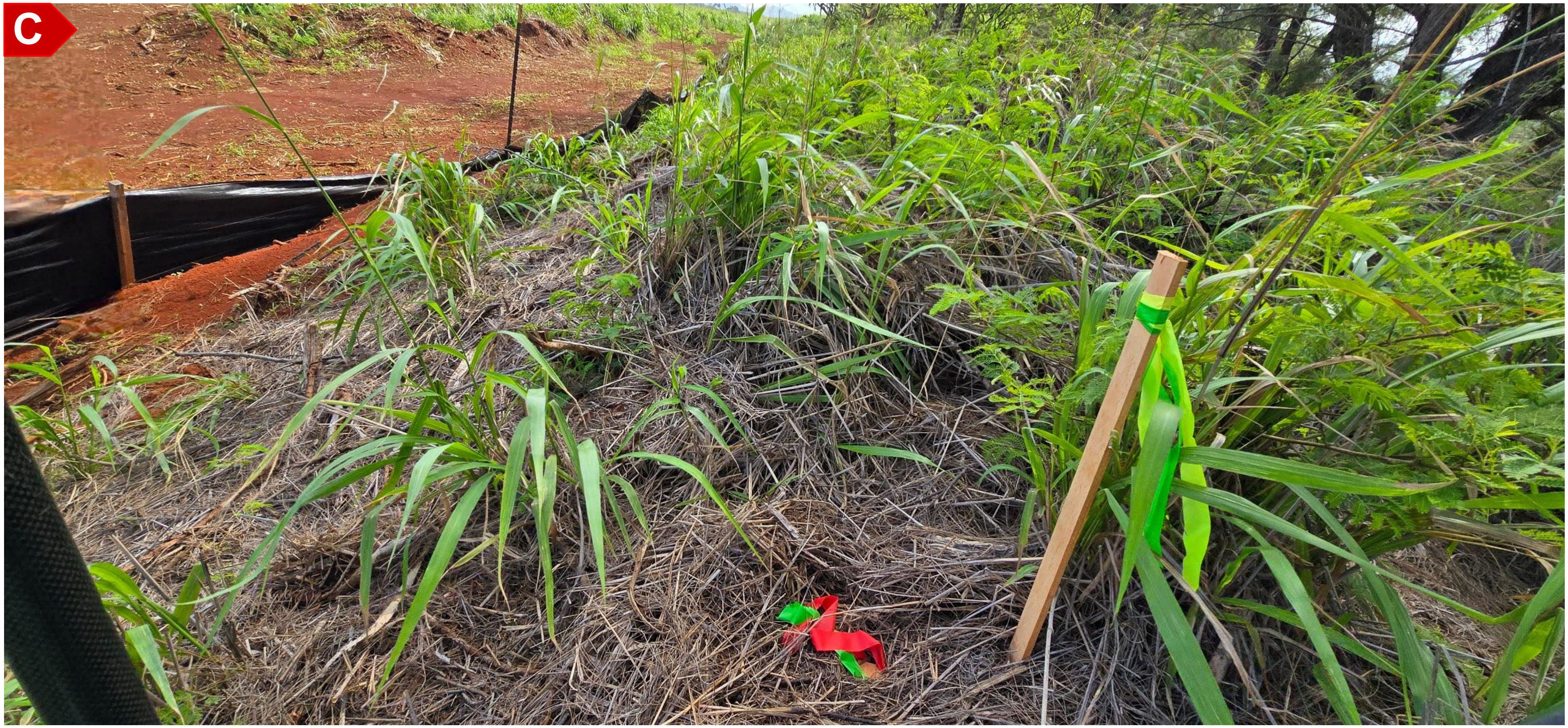


PHOTOS TAKEN ON MARCH 20,2025



Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021



Project Winston
Lihu’e, Kaua’i, Hawai’i

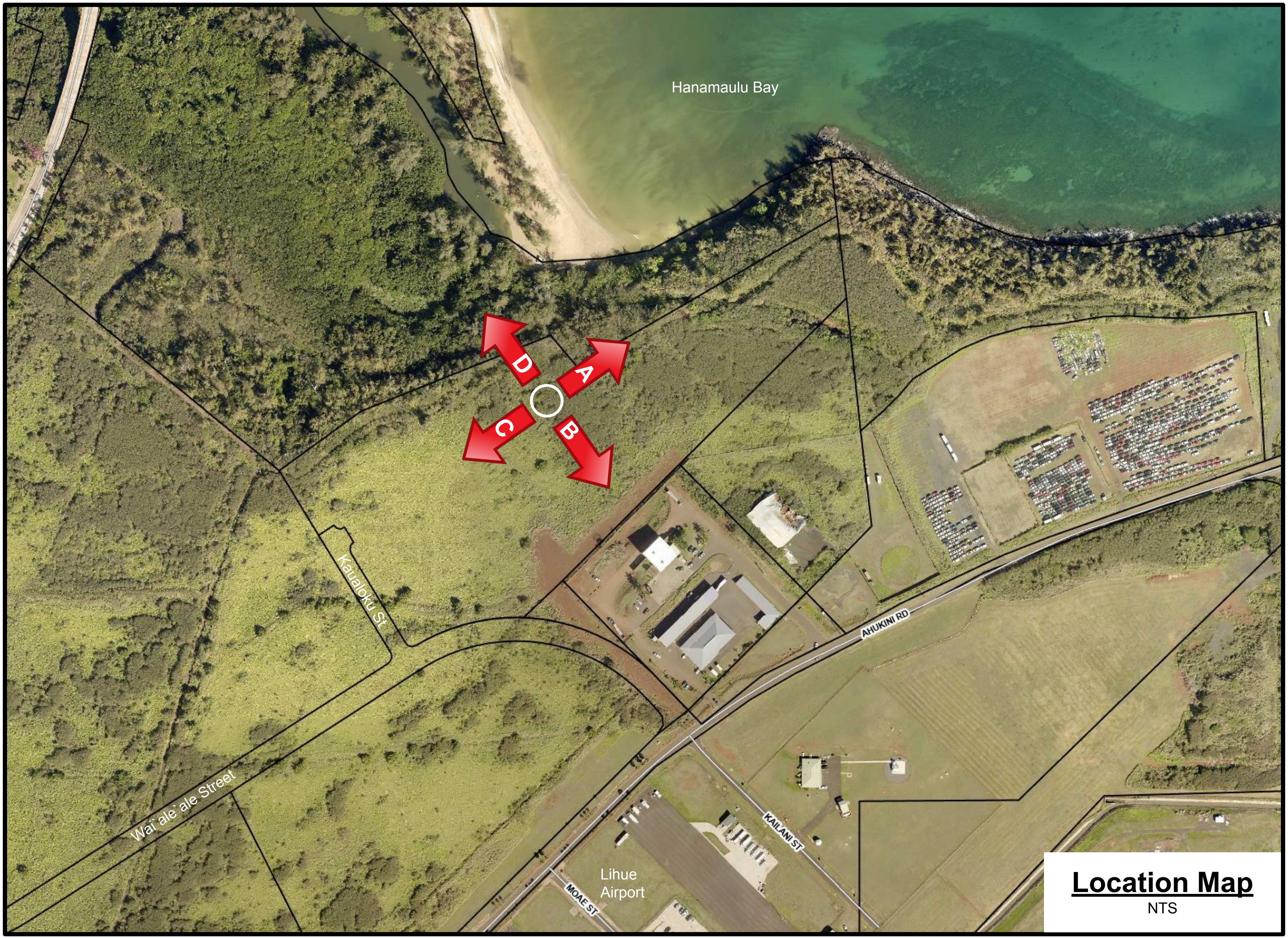
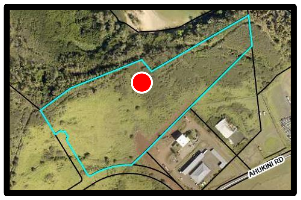

Hanamaulu Bay
D
A
C
B
Kaualoku St
AHUKINI RD
Wai`ale`ale Street
KAILANI ST
Lihue Airport
MOAE ST
Location Map
NTS

Image from qPublic.net

KODANI & ASSOCIATES ENGINEERS, LLC

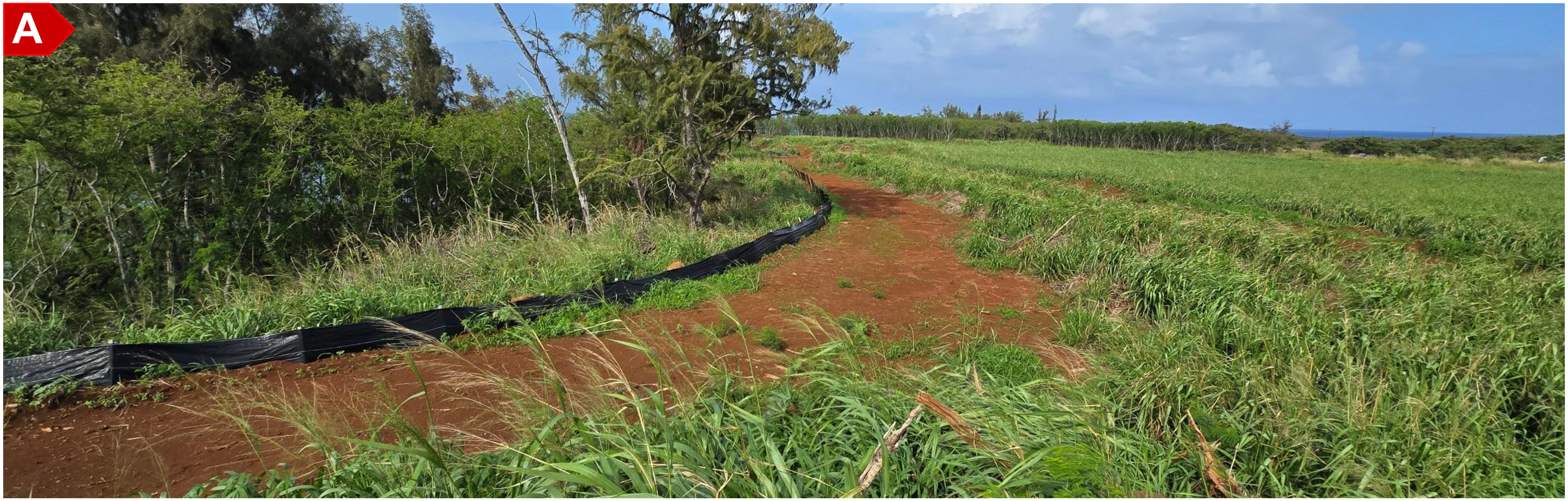
SITE MAP
KAUAI MAP



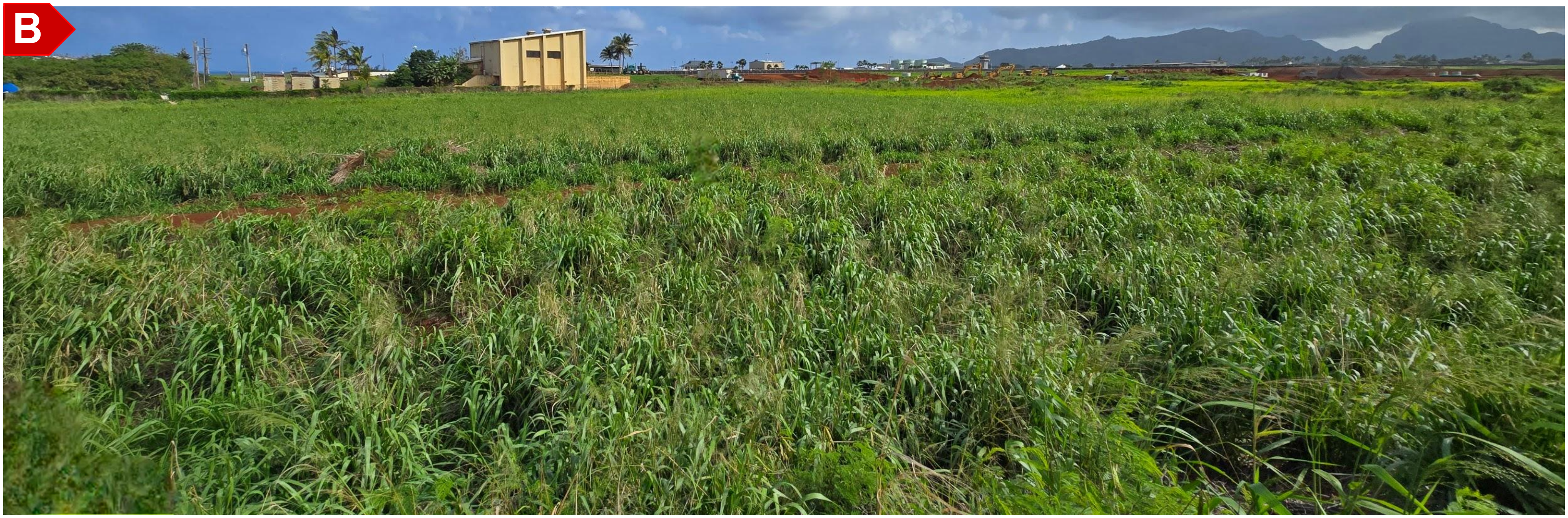
Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

A



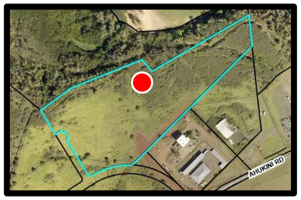
B



PHOTOS TAKEN ON MARCH 20,2025

SITE MAP

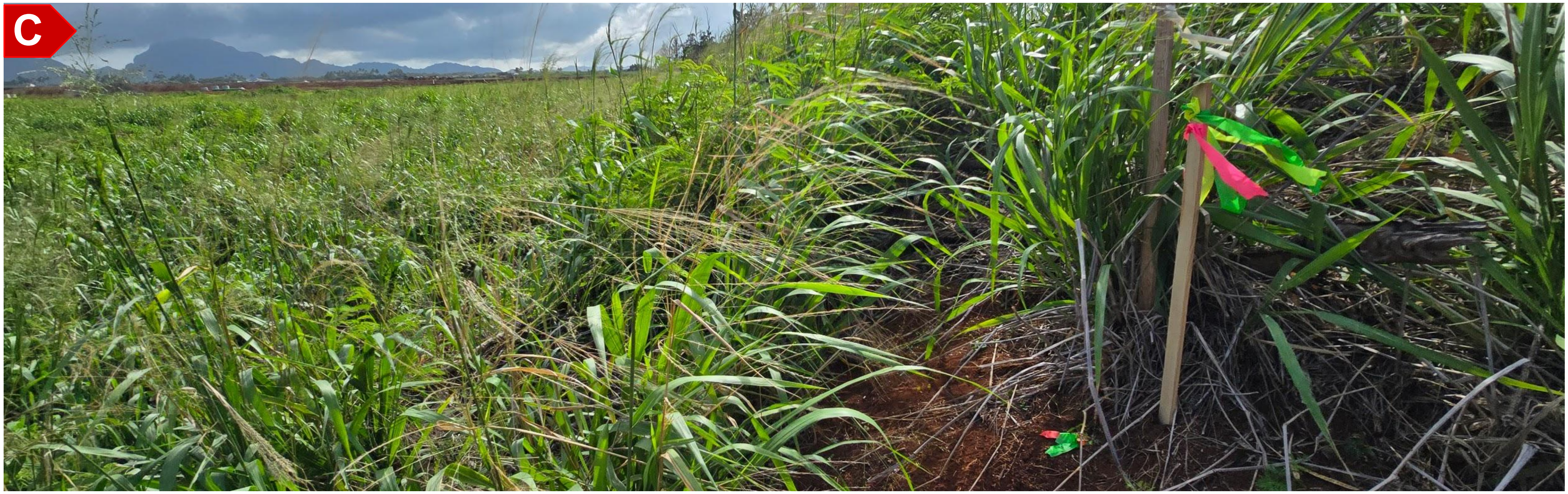
KAUAI MAP



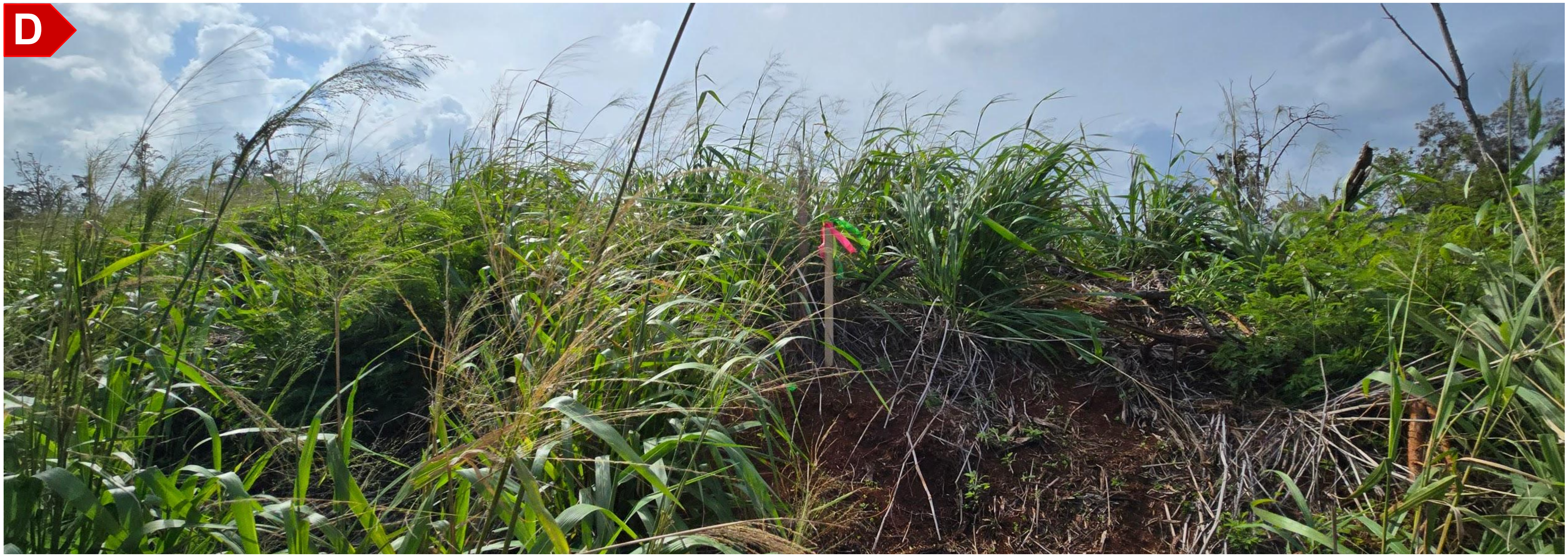
Project Winston
Lihu’e, Kaua’i, Hawai’i

Photo Log #2
TMK: (4) 3-7-002:021

C



D



PHOTOS TAKEN ON MARCH 27,2025

Kodani & Associates Engineers, LLC

THIS DOCUMENT WAS PRINTED ON PAPER CONTAINING ULTRAVIOLET FIBERS AND A WATERMARK - HOLD UP TO A LIGHT TO VIEW

Carlsmith Ball LLP
P.O. Box 656
Honolulu, Hawaii 96809-0656
Ph. (808) 523-2500

Bank of Hawaii
MAIN BRANCH
HONOLULU, HAWAII

59-102
1213

CHECK NO. 170979

DATE
06/26/25

*****One hundred and 00/100 DOLLARS***

AMOUNT
*****$100.00*****

VOID AFTER 90 DAYS

PAY TO THE ORDER OF:

County of Kauai
Department of Planning
4444 Rice Street, Suite A-473
Lihue, HI 96766

⑈00170979⑈ ⑆121301028⑆ 0001⑉006533⑈

Payee:	County of Kauai	Check #:	170979
Vendor ID:	12322	Check Date:	Jun 26, 2025

Invoice Date	Invoice Number	Customer ID Number		Amount
6/26/2025	250625PPT		Shoreline Setback Determination Processing Fee -- BHD Land Dev-3130 Ahukini Rd (072710-00001)	$100.00
				$100.00

DEPARTMENT OF PLANNING
KAʻĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

DIRECTOR'S REPORT

I. SUMMARY

Action Required by Planning Commission:	Consideration of a Class IV Zoning Permit to allow the construction of a warehouse/distribution facility and associated site improvements.
Permit Application Nos.	Class IV Zoning Permit Z-IV-2026-1
Name of Applicant(s)	BHD LAND DEVELOPMENT, LLC. Carlsmith Ball LLP., Authorized Agent

II. PERMIT INFORMATION

PERMITS REQUIRED	
☐ **Use Permit**	
☐ **Project Development Use Permit**	
☐ **Variance Permit**	
☐ **Special Permit**	
☒ **Zoning Permit Class** ☒ IV ☐ III	Pursuant to Section 8-7.4(a)(4) of the Kauaʻi County Code (KCC), 1987, as amended, a Class IV Zoning Permit is a procedural requirement for development in the General Industrial (I-G) zoning district on properties that are one (1) acre in size or greater.
☒ **Special Management Area Permit** ☐ Use ☒ Minor	Pursuant to Section 205A of the Hawaiʻi Revised Statutes (HRS) and Section 7.3(B) of the Special Management Area (SMA) Rules and Regulations of the County of Kauaʻi, an SMA Minor Permit is required where the Director finds that the proposal is considered "Development" as defined in Section 1.4F of the SMA Rules and Regulations, and the development is not in excess of $750,000 pursuant to Act 125, Session Laws of Hawaiʻi 2025, relating to Shoreline Management Areas, HRS Chapter 205A.
AMENDMENTS	
☐ **Zoning Amendment**	
☐ **General Plan Amendment**	
☐ **State Land Use District Amendment**	

~~H.2.a.1.~~

G.2.a.1.
Aug 26, 2025

AUG 12 2025

Date of Receipt of Completed Application:	July 8, 2025
Date of Director's Report:	August 1, 2025
Date of Public Hearing:	August 26, 2025
Deadline Date for PC to Take Action (60TH Day):	September 6, 2025

III. PROJECT DATA

PROJECT INFORMATION			
Parcel Location:	The project site is situated on Lot 4 of the Ahukini Makai Subdivision in Līhu'e, located on the *makai* side of Kapule Highway and immediately adjacent to the County of Kaua'i Ahukini Transfer Station.		
Tax Map Key(s):	(4) 3-7-002: 021	**Area:**	14.671 acres

ZONING & DEVELOPMENT STANDARDS	
Zoning:	General Industrial (I-G)
State Land Use District:	Urban
General Plan Designation:	Urban Center
Height Limit:	Fifty (50) feet
Max. Land Coverage:	Not specified
Parking Requirement:	One (1) stall for each three employees
Front Setback:	15'-0"
Rear Setback:	15'-0"
Side Setback:	The minimum distance of any building from a side property line when the adjacent Use District is industrial shall be zero. When the adjacent Use District is other than industrial, the minimum distance to the side property line shall be 15 feet.
Community Plan Area:	Līhu'e Community Plan
Community Plan Land Use Designation:	Urban Center
Deviations or Variances Requested:	N/A

IV. LEGAL REQUIREMENTS

Section 8-3.1(f), KCC:	This report is being transmitted to the Applicant and Planning Commission in order to satisfy the requirements of Section 8-3.1(f), relating to the provision of the Planning Director's report and recommendation on the subject proposal within sixty (60) days of the filing of a completed application. The application was received on July 8, 2025, and the Applicant, through its authorized

	agent, was notified accordingly of the Planning Department's intent to commence permit processing.
Public Hearing Date:	**August 26, 2025**

V. PROJECT DESCRIPTION AND USE

The Applicant proposes to construct and operate a warehouse and distribution facility, along with associated site improvements on Lot 4 of the Ahukini Makai Subdivision. The development will occupy a total area of approximately 8.8 acres of the 14.671-acre lot and will include a single-story building with a maximum height of 27 feet 8 inches, and an overall building footprint of approximately 42,000 square feet. Ancillary site improvements will include:

- 89 associate parking stalls, of which five stalls will be EV ready;
- Six trucking docks and one trailer parking space;
- A van loading dock with nine parking spaces for package distribution; and
- 46 van parking stalls to support the distribution operation.

As represented, the facility is planned to operate 24 hours a day, seven days a week, with the night-time operations focused on the intake, processing, and sorting of shipments, and day-time operations geared to the distribution and delivery of packages around the island. The operation will consist of 62 on-site employees and 25 van drivers. Additionally, the operation will employ up to 82 flex drivers that will use personal vehicles to support deliveries in concert with the standard van drivers.

VI. APPLICANT'S REASONS/JUSTIFICATION

Please refer to the Application.

VII. AGENCY COMMENTS

Comments from applicable government agencies are being sought and are expected at the time of the public hearing scheduled for AUGUST 26, 2025.

VIII. FINDINGS

1. Property Information/Background
The project site is situated on a 14.671-acre parcel, currently owned by Visionary, LLC. It is situated within the General Industrial (I-G) zoning district and the State Land Use Urban District. The subject property, identified as Lot 4, is currently a part of the larger development associated with the Ahukini Makai Subdivision, where construction is actively underway to complete the required subdivision improvements. Presently, Lot 4 is vacant and covered with tall vegetation.

   The subject property was created through Subdivision Application No. S-2005-41 (Ahukini Makai Subdivision) that received Final Subdivision Map Approval by the Kaua‘i

Planning Commission on January 9, 2024. The subdivision established a total of 49 lots consisting of 40 lots, four "bulk" lots that can be further developed, two roadway lots, one landscaping lot, one lot designated for a sewer pump station, and one remnant lot.

Prior to final subdivision approval, the applicant executed a Subdivision Agreement and bond with County of Kaua'i for the completion of the subdivision's infrastructure improvements after final subdivision approval. The infrastructure improvements include two phases of development: on-site subdivision improvements (first phase) consisting of the installation and construction of the necessary roads, water, drainage, electrical, and telephone utilities and facilities, and off-site subdivision improvements (second phase) which include improvements related to the off-site source, storage, and transmission improvements required by the Department of Water. Construction commenced for the on-site subdivision improvements in early 2025 and is actively underway.

2. Special Management Area Permit
   A portion of the proposed development is situated within the Special Management Area (SMA). As represented in the application, improvements within the SMA will include a segment of the internal roadway, a dumpster enclosure wall, sidewalk, approximately 750 linear feet of perimeter fencing, landscaping, a portion of a bioswale, and a retention pond. The estimated valuation of these project components within the SMA is $437,528.00.

   In accordance with Section 205A of the Hawai'i Revised Statutes (HRS) relating to Coastal Zone Management, and Section 1.4(F) of the Special Management Area (SMA) Rules and Regulations of the County of Kaua'i, which defines "Development," the Applicant has submitted a Special Management Area Minor Permit application. The SMA Minor Permit is being processed separately through SMA(M)-2026-1.

3. Shoreline Setback Determination
   A Shoreline Setback Application was submitted pursuant to Section 8-27 of the Kaua'i County Code (KCC), 1987, as amended. Shoreline Setback Determination No. SSD-2026-1 was posted on the Planning Department's website on July 18, 2025, and accepted by the Planning Commission on August 12, 2025. The proposed warehouse/distribution facility is situated on a high rocky cliff bluff, approximately 400 feet inland of the required 100-foot shoreline setback.

4. Surrounding Properties
   The project site will be situated within an industrial subdivision and in close proximity to the Līhu'e Heliport. Adjacent properties to the west and southwest of the project site are additional lots of the Ahukini Makai Subdivision, which are also situated within the General Industrial (I-G) zoning district and State Land Use Urban District.

   Immediately north (*makai*) of project site is a remnant lot created through the Ahukini Makai Subdivision that is situated within the State Land Use Conservation District. The lot is vacant and covered with tall vegetation. Further north sits Hanamā'ulu Bay.

Southeast of the project site and immediately adjacent is the County of Kaua'i Ahukini Transfer Station. Further south of the project site is the Līhu'e Airport facility.

5. Native Hawaiian Traditional and Cultural Rights

A Ka Pa'akai O Ka'aina Analysis was prepared by Cultural Surveys Hawai'i, Inc. for the Ahukini Makai Subdivision. The analysis describes the historic and traditional accounts associated with the Hanamā'ulu Ahupua'a as well as provides a summary of archaeological studies that have been conducted in the vicinity of the project area. The analysis also provides a detailed summary of the community outreach that was conducted including oral and written testimony of individuals that were contacted.

The consultation outreach involved attempting to contact Hawaiian organizations, agencies, and community members as well as cultural and lineal descendants in order to identify individuals with cultural expertise and/or knowledge of the project area and vicinity. Community outreach letters were sent to 37 individuals or groups by email and/or U.S. Postal Service with additional follow-up by text or phone. As represented in the analysis, Cultural Surveys Hawai'i completed the community consultation in July 2023 and ten (10) individuals had responded in which two provided written testimony, and two of these Kamā'aina and/or Kūpuna met with Cultural Surveys Hawai'i for more in-depth interviews.

Based on the information contained in the analysis and evaluating the historical information that was available to the department, the department finds that the proposed development at its designated location should have no impact on any known Hawaiian traditional or customary practices for the following reasons:

- There are no known traditional or customary practices of Native Hawaiians that are presently occurring at the project site.
- There are no known special gathering practices taking place or resources located at the project site or within the vicinity of the project site.
- The Project should not detrimentally inhibit access to any streams; access to the shoreline or other adjacent shoreline areas; gathering along any streams, the shoreline or in the ocean.
- There are no records of trails running through the Ahukini Makai Subdivision project area.
- There are no known religious practices taking place within the project site.
- There are no known pre-contact cultural or historic sites or resources located within the Project Site.
- There are no known burials within the Project Area.

The analysis also discussed concerns regarding the indirect adverse impacts to the 'āina, wai, and kai of Hanamā'ulu by project-related erosion or wastewater management. As discussed in the analysis, the County of Kaua'i has a drainage policy that applies to development projects. A drainage report was prepared for this project and approved by the County of Kaua'i. Based on the proposed grading and drainage improvement designs, the post-development drainage conditions will be less than the pre-development drainage conditions.

IX. PRELIMINARY EVALUATION

In evaluating the proposed development to construct a warehouse/distribution facility and associated site improvements, it is important to consider that the proposed use is a generally permitted use within the General Industrial (I-G) zoning district. The applicant has addressed the development standards in the industrial zoned district and the following should be considered:

1. Building Design/Layout — As represented, the proposed building does not exceed the maximum height limitation within the General Industrial zoning district of fifty (50) feet. The proposed building height measures 27 feet 8 inches at its highest point. There are no objections with the overall design of the structure and project site since it is based on the functional aspects of the operations associated with the warehouse and distribution facility. Additionally, the property is not situated within any special design control districts, such as Form Based Code or Special Planning Areas.

2. Lot Coverage — The proposed development meets the lot coverage requirement for the General Industrial zoning district, which is generally based on the requirements of Section 8-7.3(e)(2)(A) of the KCC relating to the parking pavement edge. Given that the proposed development will only occupy 8.8 acres of the 14.671-acre lot, there is adequate area to accommodate all site improvements, including off-street parking.

3. Setbacks — The proposed development complies with the setback requirements for the General Industrial zoning district. As shown on the site plan, the warehouse and distribution facility, along with the associated site improvements, are positioned well outside the building setback lines.

4. Access — The project site will include three vehicular access points, identified on the site plan as Driveways A, B, and C. Driveway A will function as the primary entry and exit for distribution operations, providing access for van and flex drivers to load packages for island-wide delivery. Driveway B will serve as the entry and exit for the 89-stall associate parking lot. Driveway C will be designated for truck access to support shipment deliveries.

   Access to the site will be provided via Wai'ale'ale Street and Kaualoku Place, both of which are internal roadways within the Ahukini Makai Subdivision and will be constructed as part of the subdivision's infrastructure improvements. Wai'ale'ale Street is classified as a major street with a 60-foot right-of-way width and serves as a through road connecting Ahukini Road to Kapule Highway. Kaualoku Place is classified as a minor street with a 44-foot right-of-way width and serves as a dead-end road providing access to Lots 2 and 4 of the subdivision.

5. Off-street Parking — The proposed development satisfies the off-street parking requirements for the General Industrial zoning district. In accordance with Section 8-7.3(e)(3)(A) of the KCC, one parking stall shall be provided for each three employees. As represented in the application, the project will generate approximately 169 permanent positions, resulting in a requirement of 56 parking stalls. The site plan

indicates 89 associate parking stalls will be provided, exceeding the minimum requirement. While the proposed number of stalls appears sufficient to accommodate the projected number of employees, the Applicant should ensure that adequate on-site parking is maintained to keep all equipment within the property boundaries to avoid congestion along the interior roadways of the subdivision.

6. Lighting — Based on the application submittal, it is uncertain as to whether the Applicant has made provisions for night illumination on the project site. In the event external lighting is to be used in connection with the proposed project, it should be designed to minimize interference with Newell's shearwater night flights. All external lighting should be downward facing and shielded.

7. Noise — As represented, the noise that will be generated from the project is not expected to operate above ambient noise levels in the area. However, the proposed development shall adhere to the noise level requirements of Title 11, Hawai'i Administrative Rules (HAR), Chapter 11-46, "Community Noise Control" of the State of Hawai'i, Department of Health (DOH).

8. Application of EIA Fee — The Applicant will be subject to the requirements of Section 11A-2.2 of the Kaua'i County Code, relating to the payment of an Environmental Impact Assessment (EIA) Fee per square foot of gross building area.

9. General Plan
   The Ahukini Makai Subdivision is situated within the Urban Center designation in the Kaua'i County 2018 General Plan. In evaluating the proposal, the General Plan outlines the following:

   a. Section 2.2 titled, "Land Use Designations", defines:

      "7. Urban Center
      The Urban Center designation has largely been replaced by Neighborhood Center and Neighborhood General. Urban Center is only applied in the Līhu'e District, which is expected to absorb approximately half of the island's future growth to 2035... **In this district, Urban Center is applied to urbanized areas that accommodate intensive urban uses and zoning such as general commercial and general industrial.**"

   b. Appendix E titled, "Land Ownership and Availability for Future Growth", states:

      "Supply of Industrial Lands
      Most of the island's industrial lands (81%) are within the Līhu'e District. That district is the location of the planned **Ahukini Makai development**, which will provide an additional 146 acres (approximately 6.4 million square feet) of industrial lands near Līhu'e airport..."

   As stated above, Urban Center designations are intended to accommodate intensive urban uses, including those uses within the General Industrial zoning district. The Kaua'i

General Plan also specifically identifies the Ahukini Makai development as a designated area for future industrial growth.

In considering the proposal, it aligns with the intended Urban Center designation of the Kauaʻi General Plan since warehouse facilities are a generally permitted use within the General Industrial zoning district. As such, the proposed use is consistent with the zoning and land use objectives outlined in the General Plan for the project area.

X. PRELIMINARY CONCLUSION

Based on the information contained in the Director's Report Findings and Evaluation, the Planning Department concludes the following:

1. The project conforms with the development standards within the General Industrial (I-G) zoning district of the Kauaʻi County Code;
2. The project aligns with the "Urban Center" designation outlined in the Kauaʻi County 2018 General Plan;
3. The overall nature of the project is compatible with the intended industrial use of the property and with the existing activities surrounding the project site. Currently, these activities include the County of Kauaʻi Ahukini Transfer Station and the Līhuʻe Airport facility; and
4. Through proper mitigation efforts, the proposed development is not expected to cause any significant adverse impacts to the surrounding properties.

The Applicant should institute the "Best Management Practices" to ensure that the development does not generate impacts that may affect the health, safety, and welfare of those in the surrounding area of the proposal.

XI. PRELMINARY RECOMMENDATION

Based on the foregoing evaluation and conclusion, it is hereby recommended Class IV Zoning Permit Z-IV-2026-1, be **APPROVED** subject to the following conditions:

1. The project shall be constructed as represented. Any changes to the operation and/or the respective structures shall be reviewed by the Planning Director to determine whether Planning Commission review and approval is warranted.
2. Prior to ground disturbance activities within the Special Management Area, the Applicant shall be subject to the applicable requirements of Special Management Area Minor Permit SMA(M)-2026-1.
3. At the time of building permit application, an Environmental Impact Assessment (EIA) fee shall be paid pursuant to Section 11A-2.2(g) of the Kauaʻi County Code.

4. Pursuant to Section 8-7.3(e)(3)(A) of the Kaua'i County Code, the Applicant shall provide a minimum of 56 off-street parking stalls and parking for all delivery vehicles. On-street parking shall be prohibited.

5. The Applicant shall resolve and comply with all agency requirements as recommended in the permit application review, including but not limited to the permit requirements for the County DPW-Engineering Division, water requirements for the County Department of Water, and regulations involving environmental concerns as administered by the State Department of Health.

6. The Applicant shall develop and utilize Best Management Practices (BMP's) to ensure that the development does not generate impacts that may affect the health, safety, and welfare of those in the surrounding area of the proposal.

7. In order to ensure that the project is compatible with its surroundings and to minimize the visual impact of the structures, the external color of the proposed building and landscape plan shall be of moderate to dark earth-tone color. The proposed color scheme should be submitted to the Planning Department for review and acceptance prior to building permit application.

8. The Applicant shall implement to the extent possible sustainable building techniques and operational methods for the project, such as Leadership in Energy and Environmental Design (L.E.E.D.) standards or another comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system, and strategies, which may include but is not limited to recycling, natural lighting, extensive landscaping, solar panels, low-energy fixtures, low energy lighting and other similar methods and techniques. All such proposals shall be reflected on the plans submitted for building permit review.

9. In order to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds, if external lighting is to be used in connection with the proposed project, all external lighting shall be only of the following type: downward-facing, shielded lights. Spotlights aimed upward or spotlighting of structures shall be prohibited.

10. To the extent possible within the confines of union requirements and applicable legal prohibitions against discrimination in employment, the Applicant shall seek to hire Kaua'i contractors as long as they are qualified and reasonably competitive with other contractors, and shall seek to employ residents of Kaua'i in temporary construction and permanent jobs. It is recognized that the Applicant may have to employ non-Kaua'i residents for particular skilled jobs where no qualified Kaua'i resident possesses such skills. For the purposes of this condition, the Commission shall relieve the Applicant of this requirement if the Applicant is subjected to anti- competitive restraints on trade or other monopolistic practices.

11. Should any archaeological or historical resources be discovered during ground disturbing/construction work, all work in the area of the archaeological/historical findings shall immediately cease and the Applicant shall contact the State Department

of Land and Natural Resources, Historic Preservation Division to determine mitigation measures.

12. The Applicant is advised that prior to construction and/or use, additional government agency conditions may be imposed. It shall be the Applicant's responsibility to resolve those conditions with the respective agency(ies).

13. The Planning Commission reserves the right to revise, modify, add or delete conditions of approval in order to address or mitigate unforeseen impacts this project may create, or revoke the permits through the proper procedures should conditions of approval be violated or adverse impacts be created that cannot be properly addressed.

The Planning Commission is further advised that this report does not represent the Planning Department's final recommendation in view of the forthcoming public hearing process scheduled for August 26, 2025, whereby the entire record should be considered prior to decision-making. The entire record should include but not be limited to:

a. Pending government agency comments;
b. Testimony from the general public and interested others; and
c. The Applicant's response to the staff's report and recommendation as provided herein.

By Kenneth A. Estes
KENNETH A. ESTES
Planner

Approved & Recommended to Commission:

By
KA'AINA S. HULL
Director of Planning

Date: 7/31/2025

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

COUNTY OF KAUA'I
STATE OF HAWAI'I

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

TRANSMITTAL OF AGENCY COMMENTS TO PLANNING COMMISSION

DATE: August 20, 2025

PERMIT NUMBER(S): CLASS IV ZONING PERMIT Z-IV-2026-1

APPLICANT(S): BHD LAND DEVELOPMENT LLC.

Attached for the Planning Commission's reference are agency comments for the permit referenced above.

G.2.a.2.

AUG 26 2025

JUL 31 '25 PM 1:52
PLANNING DEPT

County of Kaua'i
Planning Department
4444 Rice St., Suite A473 Lihue, HI 96766
(808) 241-4050

FROM: Kaaina S. Hull, Director

Planner: Kenneth Estes

7/1

SUBJECT: Zoning Class IV Z-IV-2026-1
Tax Map Key: 37002021
Applicant: BHD Land Development LLC (Carlsmith Ball LLP., Authorized Agent)
BHD Land Development LLC

TO:

☑ State Department of Transportation - STP
☑ State DOT - Highways, Kauai (info only)
☐ State DOT - Airports, Kauai (info only)
☐ State DOT - Harbors, Kauai (info only)
☑ State Department of Health
☐ State Department of Agriculture
☐ State Office of Planning
☐ State Dept. of Bus. & Econ. Dev. Tourism
☐ State Land Use Commission
☑ State Historic Preservation Division
☐ State DLNR - Land Management
☐ State DLNR - Forestry & Wildlife
☐ State DLNR - Aquatic Resources
☐ State DLNR - Conservation & Coastal Lands
☐ Office of Hawaiian Affairs

☑ County DPW - Engineering
☐ County DPW - Wastewater
☐ County DPW - Building
☐ County DPW - Solid Waste
☐ County Department of Parks & Recreation
☑ County Fire Department
☑ County Housing Agency
☐ County Economic Development
☑ County Water Department
☐ County Civil Defense
☑ County Transportation Agency
☐ KHPRC
☐ U.S. Postal Department
☐ UH Sea Grant
☐ Other:

FOR YOUR COMMENTS (pertaining to your department)

This matter is scheduled for a public hearing before the County of Kauai Planning Commission on 8/26/2025 at the Lihue Civic Ce
Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, at 9:00 am or soon thereafter. If we do not receive your
agency comments within one (1) month from the date of this request, we will assume that there are no objections to this permit requ
Mahalo!

JOSH GREEN M.D.
GOVERNOR OF HAWAII

KENNETH S. FINK, M.D., M.G.A., M.P.H
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
3040 Umi St. Lihue
Hawaii 96766

DATE: July 28, 2025

TO: To whom it may concern

FROM: Ellis Jones
District Environmental Health Program Chief

SUBJECT: RESPONSE_BHD Land Development LLC_Z-IV-2026-1

In most cases, the District Health Office will no longer provide individual comments to agencies or project owners to expedite the land use review and process.

Agencies, project owners, and their agents should apply Department of Health "Standard Comments" regarding land use to their standard project comments in their submittal. Standard comments can be found on the Land Use Planning Review section of the Department of Health website: https://health.hawaii.gov/epo/landuse/. Contact information for each Branch/Office is available on that website.

Note: Agencies and project owners are responsible for adhering to all applicable standard comments and obtaining proper and necessary permits before the commencement of any work.

General summary comments have been included for your convenience. However, these comments are not all-inclusive and do not substitute for review of and compliance with all applicable standard comments for the various DOH individual programs.

Clean Air Branch

1. All project activities shall comply with the Hawaii Administrative Rules (HAR), Chapters 11-59 and 11-60.1.
2. Control of Fugitive Dust: You must reasonably control the generation of all airborne, visible fugitive dust and comply with the fugitive dust provisions of HAR §11-60.1-33. Note that activities that occur near existing residences, businesses, public areas, and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne and visible fugitive dust and that buffer zones be established wherever possible.

3. Standard comments for the Clean Air Branch are at: https://health.hawaii.gov/epo/landuse/

Clean Water Branch

1. All project activities shall comply with the HAR, Chapters 11-53, 11-54, and 11-55. The following Clean Water Branch website contains information for agencies and/or project owners who are seeking comments regarding environmental compliance for their projects with HAR, Chapters 11-53, 11-54, and 11-55: https://health.hawaii.gov/cwb/clean-water-branch-home-page/cwb-standardcomments/.

Hazard Evaluation & Emergency Response Office

1. A Phase I Environmental Site Assessment (ESA) and Phase II Site Investigation should be conducted for projects wherever current or former activities on site may have resulted in releases of hazardous substances, including oil or chemicals. Areas of concern include current and former industrial areas, harbors, airports, and formerly and currently zoned agricultural lands used for growing sugar, pineapple or other agricultural products.
2. Standard comments for the Hazard Evaluation & Emergency Response Office are at: https://health.hawaii.gov/epo/landuse/.

Indoor and Radiological Health Branch

1. Project activities shall comply with HAR Chapters 11-39, 11-45, 11-46, 11-501, 11-502, 11-503, 11-504.
2. Construction/Demolition Involving Asbestos: If the proposed project includes renovation/demolition activities that may involve asbestos, the applicant should contact the Asbestos and Lead Section of the Branch at https://health.hawaii.gov/irhb/asbestos/.

Safe Drinking Water Branch

1. Agencies and/or project owners are responsible for ensuring environmental compliance for their projects in the areas of: 1) Public Water Systems; 2) Underground Injection Control; and 3) Groundwater and Source Water Protection in accordance with HAR Chapters 11-19, 11-20, 11-21, 11-23, 11-23A, and 11-25. They may be responsible for fulfilling additional requirements related the Safe Drinking Water program: https://health.hawaii.gov/sdwb/.
2. Standard comments for the Safe Drinking Water Branch can be found at: https://health.hawaii.gov/epo/landuse/.

Solid & Hazardous Waste Branch

1. Hazardous Waste Program - The state regulations for hazardous waste and used oil are in HAR Chapters 11-260.1 to 11-279.1. These rules apply to the identification, handling, transportation, storage, and disposal of regulated hazardous waste and used oil.
2. Solid Waste Programs - The laws and regulations are contained in HRS Chapters 339D, 342G, 342H and 342I, and HAR Chapters 11-58.1, and 11-282. Generators and handlers of solid waste shall ensure proper recycling or disposal at DOH-permitted solid waste management facilities. If possible, waste prevention, reuse and recycling are preferred options over disposal. The Office of Solid Waste Management also oversees the

electronic device recycling and recovery law, the glass advanced disposal fee program, and the deposit beverage container program.

3. Underground Storage Tank Program – The state regulations for underground storage tanks are in HAR Chapter 11-280.1. These rules apply to the design, operation, closure, and release response requirements for underground storage tank systems, including unknown underground tanks identified during construction.
4. Standard comments for the Solid & Hazardous Waste Branch can be found at: https://health.hawaii.gov/epo/landuse/.

Wastewater Branch

By Revised Statue 11-62-31.1 If the parcel is less than 10,000sq feet, an individual onsite waste-water unit may not be possible for future construction. Please contact DOH waste-water branch at 808-586-4288 for further information. For comments, please email the Wastewater Branch at doh.wwb@doh.hawaii.gov.

Sanitation / Local DOH Comments:

1. Noise may be generated during demolition and/or construction. The applicable maximum permissible sound levels, as stated in Title 11, HAR, Chapter 11-46, "Community Noise Control," shall not be exceeded unless a noise permit is obtained from the Department of Health.
2. According to HAR §11-26-35, No person, firm, or corporation shall demolish or clear any structure, place, or vacant lot without first ascertaining the presence or absence of rodents that may endanger public health by dispersal from such premises. Should any such inspection reveal the presence of rodents, the rodents shall be eradicated before demolishing or clearing the structure, site, or vacant lot. A demolition or land clearing permit is required prior to demolition or clearing.

Other

1. CDC - Healthy Places - Healthy Community Design Checklist Toolkit recommends that state and county planning departments, developers, planners, engineers, and other interested parties apply these principles when planning or reviewing new developments or redevelopment projects.
2. If new information is found or changes are made to your submittal, DOH reserves the right to implement appropriate environmental health restrictions as required. Should there be any questions on this matter, please contact the Department of Health, Kauai District Health Office at 808-241-3492.

Ellis Jones

Ellis Jones
District Environmental Health Program Chief
Office Phone: (808) 241-3326

AUG 1 '25 AM9:45
PLANNING DEPT

County of Kaua'i
Planning Department
4444 Rice St., Suite A473 Lihue, HI 96766
(808) 241-4050

FROM: Kaaina S. Hull, Director

Planner: Kenneth Estes

7/10/2025

SUBJECT: Zoning Class IV Z-IV-2026-1
Tax Map Key: 37002021
Applicant: BHD Land Development LLC (Carlsmith Ball LLP., Authorized Agent)
BHD Land Development LLC

TO:

☑ State Department of Transportation - STP
☑ State DOT - Highways, Kauai (info only)
☐ State DOT - Airports, Kauai (info only)
☐ State DOT - Harbors, Kauai (info only)
☑ State Department of Health
☐ State Department of Agriculture
☐ State Office of Planning
☐ State Dept. of Bus. & Econ. Dev. Tourism
☐ State Land Use Commission
☑ State Historic Preservation Division
☐ State DLNR - Land Management
☐ State DLNR - Forestry & Wildlife
☐ State DLNR - Aquatic Resources
☐ State DLNR - Conservation & Coastal Lands
☐ Office of Hawaiian Affairs
☑ County DPW - Engineering
☐ County DPW - Wastewater
☐ County DPW - Building
☐ County DPW - Solid Waste
☐ County Department of Parks & Recreation
☑ County Fire Department
☑ County Housing Agency
☐ County Economic Development
☑ County Water Department
☐ County Civil Defense
☑ County Transportation Agency
☐ KHPRC
☐ U.S. Postal Department
☐ UH Sea Grant
☐ Other:

FOR YOUR COMMENTS (pertaining to your department)

Fire has no comments

This matter is scheduled for a public hearing before the County of Kauai Planning Commission on 8/26/2025 at the Lihue Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, at 9:00 am or soon thereafter. If we do not receive your agency comments within one (1) month from the date of this request, we will assume that there are no objections to this permit request. Mahalo!

AUG 13 '25 AM8:48
PLANNING DEPT

JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA

EDWIN H. SNIFFEN
DIRECTOR
KA LUNA HO'OKELE

Deputy Directors
Nā Hope Luna Ho'okele
DREANALEE K. KALILI
TAMMY L. LEE
CURT T. OTAGURO
ROBIN K. SHISHIDO

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF TRANSPORTATION | KA ʻOIHANA ALAKAU
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

DIR0002219
STP 8.3953

August 8, 2025

VIA EMAIL: kestes@kauai.gov

Mr. Kaaina S. Hull, Director
County of Kauai
Planning Department
4444 Rice Street, Suite A473
Lihue, Hawaii 96766

Dear Mr. Hull:

Subject: Zoning Class IV Z-IV-2026-1
BHD Land Development LLC
Lihue, Kauai, Hawaii
Tax Map Key: (4) 3-7-002: 021

Thank you for your letter, dated July 10, 2025, requesting the Hawaii Department of Transportation's (HDOT) review and comments on the applicant, BHD Land Development LLC's proposed warehouse and distribution facility within the Ahukini Makai subdivision. HDOT understands that the proposed project will include an approximately 42,000 square foot facility and related improvements on an approximately 8.8-acre portion of a 14.671-acre property in Lihue, Kauai.

HDOT has the following comments:

1. The applicant shall comply with the terms and conditions outlined in the Memorandum of Agreement between the HDOT and Haili Moe, dated April 15, 2020.

2. The applicant shall implement the mitigation measure outlined on page 8 of the application during peak traffic hours.

3. Based on the information provided, the proposed project is not anticipated to significantly impact the state highway system. 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, and at no cost to the state.

4. The proposed warehouse project is directly adjacent to the property boundary of Lihue Airport (LIH). All projects within five miles of 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

5. The project site is approximately 1,901 feet from the end of Runway 21 at LIH. 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. Please provide a copy of the FAA response to the Part 77 analysis to the HDOT Airport Planning Section.

6. Due to the proximity to LIH, the applicant 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 are dependent on airport operations.

7. The project may have the potential to become a wildlife attractant, which can become a hazard to aircraft operations. The HDOT recommends the project incorporate measures to minimize hazardous attractants in compliance with the FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants On Or Near Airports. If the project results in a wildlife attractant, these hazards shall be immediately mitigated by the developer upon notification by the HDOT and/or FAA.

8. If a solar energy photovoltaic (PV) system is going to be installed, be aware that PV systems located in or near the approach path of aircrafts can create a hazardous condition for pilots due to possible glint and glare reflected from the PV panel 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 and/or FAA.

The FAA requires a glint and glare analysis for all solar energy PV systems near airports. The www.sandia.gov/glare website has information and guidance with the preparation of a glint and glare analysis. A separate FAA Form 7460-1 will be necessary for the solar energy PV system. After the FAA determination of the Form 7460-1 glint and glare analysis, a copy shall be provided to the HDOT Airport Planning Section by the owner of the solar energy PV system.

Solar energy 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 solar energy PV system shall be prepared to immediately mitigate the RFI hazard upon notification by the HDOT and/or FAA.

9. The HDOT encourages strategies to reduce carbon emissions from the project, if any. Suggestions include:

    a. Incorporate elements that encourage and enhance the use of multiple types of transportation to reduce carbon emissions.

    b. Implement energy-efficient technologies and practices, such as light-emitting diode lighting.

    c. Use sustainable, recycled, or low-emission materials in construction and manufacturing.

Please submit any subsequent land use entitlement-related requests for review or correspondence to the HDOT Land Use Intake email address at DOT.LandUse@hawaii.gov.

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

Sincerely,

EDWIN H. SNIFFEN
Director of Transportation

CHING YOUNG VILLAGE
WASTEWATER TREATMENT PLANT REPLACEMENT
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040

SPECIAL MANAGEMENT AREA (SMA)
PERMIT ASSESSMENT

Prepared For:
Ching Young Village
5-5190 Kuhio Highway,
Hanalei, HI 96714

Prepared By:

LAULEA
ENGINEERING, LLC
1127 11th Ave. #302
Honolulu, HI 96816

July 1, 2025

G.2.b.
Aug 26, 2025

~~H.2.b.~~
~~Aug 12, 2025~~

TABLE OF CONTENTS

A. PART A 1

A.1 APPLICANT INFORMATION 1

A.2 PROJECT INFORMATION 1

B. PART B 2

B.1 PROJECT, SITE, AND SURROUNDING AREAS 2

B.2 RECREATIONAL RESOURCES 8

B.3 HISTORICAL RESOURCES 9

B.4 SCENIC & OPEN SPACE RESOURCES 10

B.5 COASTAL ECOSYSTEMS 11

B.6 ECONOMIC USES 12

B.7 COASTAL HAZARDS 13

B.8 PROJECT ASSESSMENT 14

FIGURES

Figure 1 – Regional Location and Topographical Map

Figure 2 – Tax Map

Figure 3 – State Land Use Map

Figure 4 – County of Kauai Zoning Map

Figure 5 – Site Location Map

Figure 6 – Site Plan

Figure 7 – Flood Hazard Map

ATTACHMENTS

Attachment A – Cost Estimate

Attachment B – Engineering Plans

Attachment C – Basis of Design Engineering Report (without attachments)

Attachment D – Injection Well Construction Approval Letter

Attachment E – Kauai Department of Planning FEA and FONSI Letter

Attachment F – USFWS List of Threatened and Endangered Species

Attachment G – Wetlands Inventory Map

Attachment H – Letter of Authorization (submitted under separate cover)

Attachment I – Standard Zoning Permit Application

Attachment J – SMA Permit Assessment Form

A. PART A

A.1 APPLICANT INFORMATION

APPLICANT:	Laulea Engineering, LLC
ADDRESS:	1127 11th Ave #302 Honolulu, HI 96816
PHONE:	(808) 861-7463
APPLICANT STATUS:	Authorized Agent (See Attachment H - Letter of Authorization)
AUTHORIZED AGENT:	Laulea Engineering LLC
CONTACT PERSON:	Doug Williams, P.E. 1127 11th Ave. #302 Honolulu, HI 96816 Phone: (808) 470-8416 Email: doug@lauleallc.com

A.2 PROJECT INFORMATION

SITE ADDRESS:	5-5190 Kuhio Highway Hanalei, HI 96714
TAX MAP KEY:	(4) 5-5-002:040
LOT AREA:	2.818 acres
STATE LAND USE DISTRICT:	Urban
COUNTY ZONING:	(C-G) General Commercial
GENERAL PLAN DESIGNATION:	Kauai General Plan
NATURE OF DEVELOPMENT:	Improvements to existing wastewater treatment plant to ensure wastewater is adequately treated prior to discharge, thereby mitigating potential impacts to water quality.

PROJECT COSTS: $2,371,341 (see Attachment A)

DATE OF APPLICATION: February 20, 2025

B. PART B

B.1 PROJECT, SITE, AND SURROUNDING AREAS

1. Written Project Description:

Ching Young Village (CYV) is situated in Hanalei on the northern coast of the Island of Kauai. The facility is bordered by residential properties and undeveloped land to the north and another shopping mall, Hanalei Center, directly south across Kuhio Highway. The nearest side streets are Aku Road to the east and Malolo Road to the west. CYV contains nine (9) buildings (labeled alphabetically A-I), occupied by forty-four (44) commercial tenants within the buildings, which operate one (1) public-use restroom facility (one men's, one women's), and nine (9) tenant-use restroom facilities in each unit. Eleven (11) tenants operate restaurants offering either full-seating or takeout only. The existing wastewater treatment plant (WWTP) consists of an equalization basin, a Westech Corporation patented STM-Aerator, an extended aeration tank with MBBR media, and a final settling tank. Upstream of the WWTP is an operational wet-well lift station and three (3) commercially sized grease interceptors. Downstream of the WWTP are seven (7) existing DOH SDWB permitted underground injection control (UIC) wells for treated effluent disposal.

The existing WWTP is aged approximately at 40 years, which is beyond the 20-year industry standard useful service life. Due to the age of the system, it has been necessary to replace blowers within the past five years. No components of the existing WWTP will be reused, apart from repurposing blowers as standby units. Existing sewer mains and lift station will remain in operation during and following completion of WWTP replacement. The proposed WWTP will discharge treated effluent into three of the existing seven UIC wells, which will be reconstructed. A temporary, mobile WWTP will be installed in close proximity to the existing WWTP to ensure wastewater is properly treated throughout the duration of construction.

The proposed WWTP replacement will receive influent from the existing wet-well lift station, which is in good working condition and equipped with a duplex pump system. No excavation or ground disturbance associated with the lift station will be performed as it is existing and will continue to remain in operation. Proposed WWTP tanks and components will be installed above ground. Wastewater will be pumped from the existing lift station to a pre-loader (or equalization) tank. The pre-loader tank will be a fully enclosed tank with an approximate height of eight feet. As the preloader tank will be enclosed, it will aid in controlling odors and mitigate stormwater intrusion during heavy precipitation events. Furthermore, the new tank will be more resilient against buoyant forces from flood waters as it will be approximately four feet greater in height than the existing WWTP tanks and will be securely anchored to the proposed concrete pad.

Downstream of the pre-loader tank will be the moving bed biofilm reactor (MBBR), which will serve as the primary treatment system. The MBBR system will include the bioreactor, equalization tank, sludge holding tank, clarifier, blower system, and other appurtenances.

The MBBR system will be twelve feet in height and have minimal open surface area, which will aid in controlling odor and mitigate potential impacts from stormwater and flood waters.

The MBBR treatment system was designed to increase:

- Treatment efficiency,
- Hydraulic capacity,
- Resiliency,
- Process versatility,
- Process life span, and
- Secondary clarifier efficiency.

Additionally, the MBBR treatment system was designed to decrease:

- Odors,
- Energy use,
- Operating cost,
- Impacts from stormwater and flood waters,
- Reactor volume,
- Hydraulic retention time,
- Control complexity,
- Operator intervention, and
- Maintenance.

Following the treatment system, treated effluent will flow to an ultraviolet (UV) disinfection unit prior to discharge to UIC wells. Although not mandated by the Hawaii Department of Health, a UV disinfection unit was incorporated into the design to ensure appropriate disinfection of treated effluent prior to discharge to UIC wells; thereby reducing the potential for impacts to surface and coastal water resources.

No negative impacts to the community, the environment, cultural and historic resources, and surface or coastal waters are anticipated from the completion of the proposed WWTP replacement. In fact, the proposed WWTP was specifically selected and designed to provide only positive impacts to the environment, community, and surface and coastal water resources. The proposed WWTP is designed to exceed treatment requirements prescribed by Hawaii Administrative Rules (HAR) §11-62.

Refer to **Attachment B – Engineering Plans** for plans and details of the proposed project. For the **Basis of Design and Engineering Report**, refer to **Appendix C**. Refer to **Attachment D – Injection Well Approval to Construct** for information and the approval to reconstruct/modify three existing UIC wells.

2. Property does not abut a shoreline. Proposed project meets the 500-ft shoreline setback ordinance line.

3. A plot plan of the property, drawn to scale, is provided as **Figure 6 – Site Plan**.

4. A Final Environmental Assessment was approved and transmitted to the State by the Kauai Department of Planning. A Finding of No Significant Impact was issued and transmitted to the State. Refer to **Attachment E** for the transmittal letter prepared by the Kauai Department of Planning and submitted to the State.

5. Project Assessment:

   a. Description of the area and environment involved including flora and fauna, and other features:

      The Ching Young Village Shopping Center is located in a mixed-use area in Hanalei, Kauai. The immediate surroundings of the site consist of a combination of residential, commercial, conservation, and recreational properties. The shopping center is situated within close proximity to residential neighborhoods, including single-family homes and multi-unit buildings. Flora located in the area generally consists of landscaping and agriculture. Fauna in the area of the project site is typical of commercial and residential properties located on Kauai which may include, but may not be limited to doves, feral cats, dogs, pigs, goats, cattle, barn owls, wild boar, and rats (black, Polynesian, and Norwegian). A total of sixteen threatened or endangered species have been identified in areas surrounding the site (refer to **Attachment F**). For all threatened or endangered species listed, either critical habitats have not been designated, or project limits do not overlap critical habitats. The proposed project is not anticipated to impact threatened or endangered species as the project only consists of replacing existing WWTP components and does not include new development.

   b. Description of the existing land uses of the project site and surrounding areas:

      The property and surrounding land are zoned as an Urban district under State Land Use Designations. Refer to **Figure 3 – State Land Use Map**. The Property is occupied by the Ching Young Village Shopping Center, consisting of several retail stores, restaurants, a post office, and office space. The remaining areas of the property consist of landscaped areas and parking spaces. The area surrounding the Property is occupied by open space directly north, residential properties to the northeast and west, and commercial properties to the east. Agricultural land and additional commercial properties are located across Kuhio Highway to the south. The general area surrounding the property is developed with single-family residences, with an approximate density of four homes per acre. The project site is zoned as general commercial. Refer to **Figure 4 – County of Kauai Zoning Map**.

   c. Description of how the proposed project will affect the area involved and surrounding areas:

      i. The proposed project will not involve an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites, Special Treatment Districts as established by the County of Kauai Comprehensive Zoning Ordinance, view planes or scenic corridors as outlined in the Community Development Plans, and recreation areas and resources. The proposed WWTP will replace existing equipment, be installed in an area that has been previously disturbed by commercial development and located within the limits of the existing WWTP. The proposed project will not involve any losses to view planes and there are no known significant cultural or historic resources within the project area.

ii. The proposed project will not curtail the range of beneficial uses of the environment. The purpose of the project is to enhance beneficial use of the environment by improving wastewater treatment system performance, which will mitigate potential impacts to public health and surface and coastal water resources.

iii. The proposed project will not conflict with the County's or the State's long-term environmental policies or goals. The proposed WWTP upgrade aligns with the State and County's land use plans for the Hanalei area. It aims to improve the performance of the shopping center by upgrading and replacing aged wastewater treatment equipment with new efficient technology, which is in line with the County's goals of sustainable development and resource conservation. Existing blowers are planned to be reused as standby units for the proposed WWTP, and all other equipment will be removed and processed for recycling. New WWTP equipment, such as pumps and blowers, will be energy efficient and greatly reduce energy use compared to the existing system.

iv. The proposed project will not substantially affect the economics or social welfare and activities or the community, County or State in a negative manner. The proposed project is expected to have no adverse impacts on socio-economic resources. The project will not result in an increase in dwelling units or the population of the Hanalei area. Construction of the WWTW will generate short-term economic benefits through expenditures for construction materials and employment of workers. In addition, the increased treatment performance of the new system will ensure wastewater will be treated for customers of the shopping center.

v. The proposed project itself has no significant adverse effects and will not cumulatively have considerable effects long-term upon the environment or will involve a commitment for larger actions. Minimal potential short-term impacts such as construction noise and dust generation may result from construction activities. These impacts are short-term in nature and will not continue beyond the duration of construction. These impacts will be mitigated by adherence to State and County regulations for traffic, air, noise, and safety. The hours of construction will be limited to daylight hours. Construction will be appropriately noise-controlled, and fugitive dust emissions will be controlled by water application.

vi. The proposed project will not substantially affect a rare threatened, or endangered species of animal or plant, or its habitat. There are no known habitats for threatened or endangered species located on the project site. Threatened and endangered species are located in surrounding areas; however, no impacts are anticipated due to the nature of the proposed project (i.e., replacement of existing equipment and reconstruction of existing UIC wells with no new development). A list of threatened and endangered species provided by the U.S. Fish and Wildlife Service is provided as **Attachment F**. For all threatened or endangered species listed, either critical habitats have not been designated, or project limits do not overlap critical habitats. The proposed project is not anticipated to impact threatened or endangered species as the project only consists of replacing existing WWTP components and does not include new development.

vii. The proposed project will not detrimentally affect air or water quality or ambient noise levels following construction. The project may temporarily affect air or noise quality during construction, but BMPs will be implemented to minimize any impacts, and the project will adhere to all applicable County and State regulations. The hours of construction will be limited to daylight hours. Construction will be appropriately noise-controlled, and fugitive dust emissions will be controlled by water application. Permanent ambient noise levels will be significantly reduced, compared to existing, by new blowers located within a noise enclosure. The proposed WWTP has a reduced open surface area and has an increased height compared to the existing WWTP. These features will help minimize odor generation and increase the elevation of potential odor sources, thereby reducing noticeable odors by the public. Furthermore, the improved treatment performance of the proposed WWTP is anticipated to reduce odor generation.

viii. The proposed project will not affect an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal water. The proposed WWTP is located within the 100-year flood hazard area (Zone AE, refer to **Figure 7**) and in the County's Tsunami inundation evacuation zone. The proposed project consists of replacing existing equipment, which has exceeded its useful lifespan, with new equipment. No change to base flood elevations or impacts to the tsunami inundation evacuation zone are anticipated. Furthermore, the increased tank heights and reduced open surface areas compared to existing tanks reduce the risk of any adverse impacts or releases due to stormwater and flood waters.

ix. The proposed project will not have a major adverse effect on the quality of the environment or affect the economic or social welfare of the area. The proposed project will benefit the residents of Hanalei and visitors of Ching Young Village Shopping Center by providing an improved wastewater treatment system with enhanced treatment performance. The improved WWTP will have a positive effect on the quality of the environment by ensuring continued treatment of wastewater to meet discharge limits, thereby reducing the potential for negative impacts to groundwater and coastal water resources. The proposed WWTP is designed to exceed treatment requirements prescribed by Hawaii Administrative Rules (HAR) §11-62. In addition, UV disinfection has been incorporated in the design, although not required, to ensure treated effluent is disinfected prior to discharge to UIC wells thereby minimizing potential impacts to groundwater, surface water, and coastal water resources.

x. The proposed project will not be contrary to the policies and guidelines of the Rules and Regulations, the County's General Plan, Development Plans, and Zoning and Subdivision Ordinances. The proposed project is consistent with the County objective to address ageing infrastructure, specifically wastewater. The proposed project will aid in improving the physical environment of the County, and the health, safety, and general welfare of Kauai's people.

d. Evaluation of the proposed development relative to the objective and policies as contained in Chapter 205A, HRS; and Section 3.0 of the Special Management Area (SMA) Rules and Regulations:

Recreational resources evaluation is provided in Subsection B.2.

Historical resources evaluation is provided in Subsection B.3.

Scenic and open space resources evaluation is provided in Subsection B.4.

Coastal ecosystems evaluation is provided in Subsection B.5.

Economic uses evaluation is provided in Subsection B.6.

Coastal hazards evaluation is provided in Subsection B.7.

Evaluation of impacts and evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations are provided in Subsection B.8.

B.2 RECREATIONAL RESOURCES

1. The proposed project will not adversely affect coastal resources uniquely suited for recreational activities that cannot be provided in other areas. The proposed WWTP is not located in an area that will adversely affect coastal resources which are uniquely suited for recreational activities. The project will not conflict with the State's objective of providing coastal recreational opportunities that are accessible to the public. Rather, the proposed project will help to protect coastal resources from wastewater and other pollutants ensuring recreational activities are not adversely affected.

2. The project will not require the replacement of coastal resources having significant recreational value, including but not limited to surfing sites, sandy beaches and fishing areas, when such resources will be unavoidably damaged by the proposed development, or require reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable. The intent of the proposed project is to provide a benefit to the community by protecting water quality and thereby protecting safe access and recreation of the community's coastal resources.

3. The project site is not near a State or County Park. The project site is not in close proximity to, nor does it share boundaries with any State or County Park. Refer to **Figure 4**.

4. The proposed project will not affect existing public access to or along the shoreline. The proposed WWTP will replace the existing WWTP with no additional barriers that may restrict access. Furthermore, no existing public access to or along the shoreline is located on the project site.

5. The proposed project will not provide public access to and/or along the shoreline. Due to its location, the proposed WWTP upgrade project will not provide or restrict public access to and/or along the shoreline. Refer to **Figure 1**.

6. The proposed project will not directly encourage expanded recreational use of County, State, or Federal owned or controlled shoreline lands and waters having recreational value. The proposed project will only replace the existing WWTP and appurtenances, therefore, no improvements are proposed that may directly encourage expanded recreational use of shoreline lands and waters. However, the proposed project will help to ensure continued treatment of wastewater to meet discharge limits thereby minimizing the potential of negative impacts to coastal waters that may discourage recreational use.

7. The proposed project will not generate point or non-point sources of pollution that will affect recreation value of coastal areas. The proposed project will help to ensure continued treatment of wastewater to meet discharge limits thereby minimizing the potential of negative impacts to coastal waters that may discourage recreational use and impact recreational value.

B.3 HISTORICAL RESOURCES

1. The project site is not within a Federal, State and/or County designated historical/cultural district. According to the Hawaii Cultural Resource Information System (HICRIS) database (State Historic Preservation Division [SHPD], 2022), there are no records of historical properties on the site.

2. The project site is not listed on or nominated to the Hawaii or National Register of Historic Places. The nearest historic place is the Hanalei historic district in central Hanalei town, which is listed on the National Register of Historic Places.

3. The project site does include land which has not been previously surveyed by an archaeologist. According to the Hawaii Cultural Resource Information System (HICRIS) database (State Historic Preservation Division [SHPD], 2022), there are no records of archaeological assessments on the project site.

4. An archaeological survey has not been conducted for the project site. Consultation with SHPD was initiated to determine if historic, archaeological, or cultural resources would be impacted by the proposed project. SHPD requested submittal of the HRS §6E Form to formally begin their review process. The appropriate document was submitted to SHPD.

5. No site survey has revealed any information on historic or archaeological resources. The proposed project is not expected to result in adverse impacts on historical, archaeological, or cultural resources as the project is being constructed within the footprint of the existing wastewater treatment system. New WWTP components will be constructed aboveground, and the existing wet well/lift station will continue to operate. Existing UIC wells will be reconstructed and modified, and new discharge pipes will replace existing. A concrete pad will be constructed within the current limits of the existing WWTP. The existing main, from the existing lift station to the proposed WWTP, will remain in service. The existing lift station will remain in operation and no excavation or ground disturbance associated with the lift station will be performed. Refer to **Attachment B – Engineering Plans**.

6. The project site is not within or near a Hawaiian fishpond. Refer to **Figure 1 – Location Map** and **Figure 4 – Zoning Map**.

7. The project is not located within or near a historic settlement area. According to the Hawaii Cultural Resource Information System (HICRIS) database (State Historic Preservation Division [SHPD], 2022), there are no records of historical properties or archaeological assessments on or adjacent to the project site.

B.4 SCENIC & OPEN SPACE RESOURCES

1. The project site does not abut or affect a valued scenic resource or landmark within the SMA. The proposed project will be located within the project site boundaries and will not affect or abut any valued scenic resource. The WWTP will be constructed within the existing 8-foot-high concrete masonry unit (CMU) enclosure, which serves to screen the WWTP from public view. The visual and aesthetic appeal of the area will be maintained. Therefore, the proposed project is not anticipated to cause impacts to visual and aesthetic resources, or landmarks within the SMA.

2. The proposed project will not affect existing shoreline open space and scenic resources. The proposed project will not interrupt or affect the existing shoreline, open space, or intermittent visual continuity and rural character of the area. The proposed WWTP is not in conflict with the State's objective of protecting, preserving, restoring, or improving the quality of the open space resources.

3. The proposed project will not involve alteration to natural landforms and existing public views to and along the shoreline. The proposed project will replace existing equipment and appurtenances and does not involve any alterations to natural landforms and existing public views to and along the shoreline.

4. The proposed project will be compatible with the visual environment. The proposed treatment system will be in the same location as the existing system, which is in a parking lot and entirely within a CMU wall enclosure and is not anticipated to be directly visible to the public.

5. The proposed project does not involve the construction of structures visible between the nearest coastal roadway and the shoreline. The proposed project will replace the existing WWTP, which is located in a parking lot and entirely within a CMU wall enclosure and will not be directly visible to the public.

6. The project site is not within the Shoreline Setback Area. The project is located approximately 0.25 miles from the nearest shoreline and outside the 500-ft shoreline setback ordinance line as defined by the Kauai Department of Planning.

B.5 COASTAL ECOSYSTEMS

1. The project site is not a known habitat for endangered species of flora and fauna. A list of threatened and endangered species was obtained from the U.S. Fish and Wildlife Service (**Attachment F**), and no impacts to habitats of threatened and endangered species are anticipated. A total of sixteen threatened or endangered species have been identified in areas surrounding the site (refer to **Attachment F**). For all threatened or endangered species listed, either critical habitats have not been designated or project limits do not overlap critical habitats. The proposed project is not anticipated to impact habitats of threatened or endangered species as the project only consists of replacing existing WWTP components, does not include new development, and the project area does not overlap nor contain critical habitats.

2. The proposed project will not adversely affect valuable coastal ecosystems of significant biological or economic importance. The proposed WWTP will replace the existing WWTP, ensuring that treated wastewater will continue to meet discharge limits thereby minimizing the potential for adverse impacts to valuable coastal waters and ecosystems.

3. The proposed project will not involve disruption or degradation of coastal water ecosystems through stream diversions, channelization, and similar land and water uses. The proposed project will consist of replacing existing WWTP equipment and reconstruction of existing UIC wells, but will not include stream diversions, channelization, or any other similar land and water uses.

4. The proposed project will include the construction of special waste treatment facilities. Refer to **Attachment B – Engineering Plans**. An approval to reconstruct and modify existing UIC wells was received (**Attachment D**). The proposed WWTP will replace the existing WWTP, ensuring that treated wastewater will continue to meet discharge limits thereby minimizing potential impacts to groundwater and coastal water resources.

5. There are no wetlands located on the project site. Refer to **Attachment G - Wetlands Inventory Map**.

6. The project site is not situated in or abutting a Natural Area Reserve or Wildlife Refuge or Sanctuary. The Ching Young Village Shopping Center is a commercial establishment within a developed area. Refer to **Figure 4 – Zoning Map**.

B.6 ECONOMIC USES

1. The proposed project does not involve a harbor or port. Refer to **Figure 1 – Location Map**.

2. The proposed project is not related to or near to an existing major hotel, multi-family, or condominium project. Refer to **Figure 4 – Zoning Map**.

3. The project site does not include agricultural lands designated for such use. The Ching Young Village Shopping Center is a commercial facility providing goods and services to the general community and its visitors. No agriculturally designated lands exist within the site boundaries. Refer to **Figure 3 – State Land Use Map**.

4. The proposed project is not related to commercial fishing or seafood production. The project site is the location of a shopping center with no commercial fishing or seafood production facilities.

B.7 COASTAL HAZARDS

1. The project site is located within a tsunami evacuation zone. The *Civil Defense Tsunami Evacuation Maps* identify the project site to be within the tsunami inundation evacuation zone. The proposed project will only consist of replacing existing WWTP equipment and appurtenances, therefore, the proposed project is not anticipated to increase potential hazards to life and property. Furthermore, the proposed project will not impact or impede tsunami evacuation routes.

2. The project site is located within a potential flood inundation area with the flood zone designation AE (refer to **Figure 7**). The proposed project will replace existing WWTP equipment and appurtenances, therefore the proposed project will not increase potential hazards to life and property by altering base flood elevations.

   The proposed WWTP will include a pre-loader tank and MBBR treatment tanks. The pre-loader tank will be enclosed and will be eight feet in height, which is approximately four feet higher than the existing tanks. Due to the pre-loader tank being fully enclosed, stormwater intrusion during heavy precipitation events and inflow from flood waters are not anticipated. Furthermore, the new tank will be more resilient against buoyant forces from flood waters as it will be approximately four feet greater in height than the existing WWTP tanks and will be securely anchored to the proposed concrete pad.

   The MBBR system will be twelve feet in height and have minimal open surface area, which will aid to mitigate potential impacts from stormwater and flood waters. The MBBR system will be securely anchored to the proposed concrete pad. Due to the height of the system, the level of contents within, and secure anchoring to the proposed concrete pad – impacts from buoyant forces of flood waters are not anticipated.

3. The proposed project will comply with the requirements of the Federal Flood Insurance Program. As the proposed project will only replace existing equipment within an existing CMU wall, no changes to base flood elevations are anticipated.

4. The project site or nearby shoreline areas have not experienced shoreline erosion. The project site is not located on the shoreline. The nearby Hanalei Bay Beach experiences little erosion and appears to be relatively stable according to the *USGS Geologic Investigation Series I-2761, Kauai.*

5. No seawalls/revetments/etc. have been constructed or exist in the immediate vicinity of the project site. The project site is located approximately 0.25 miles from the shore and does not directly abut surface water bodies. Refer to **Figure 1 – Location Map**.

B.8 PROJECT ASSESSMENT

a. Evaluation of the impacts which cannot be avoided and mitigating measures proposed to minimize the impact:

No adverse long-term impacts will result from the proposed project. Long-term impacts only consist of positive improvements in terms of noise, energy efficiency, odor control, stormwater and flood water resiliency, treatment performance, and ease of maintenance and operations. Minimal short-term impacts such as construction noise and fugitive dust may result from construction activities. These impacts will be mitigated by best management practices and adherence to State and County regulations for traffic, air, noise, and safety.

b. Evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations in accordance with the following aspects:

ii. Substantial adverse environmental or ecological effects.

No substantial adverse environmental or ecological effects are anticipated due to the proposed WWTP replacement project. The proposed project will ensure continued treatment of wastewater to meet discharge limits and mitigate the potential for adverse environmental or ecological effects. Furthermore, the proposed WWTP is designed to exceed treatment requirements prescribed by HAR §11-62.

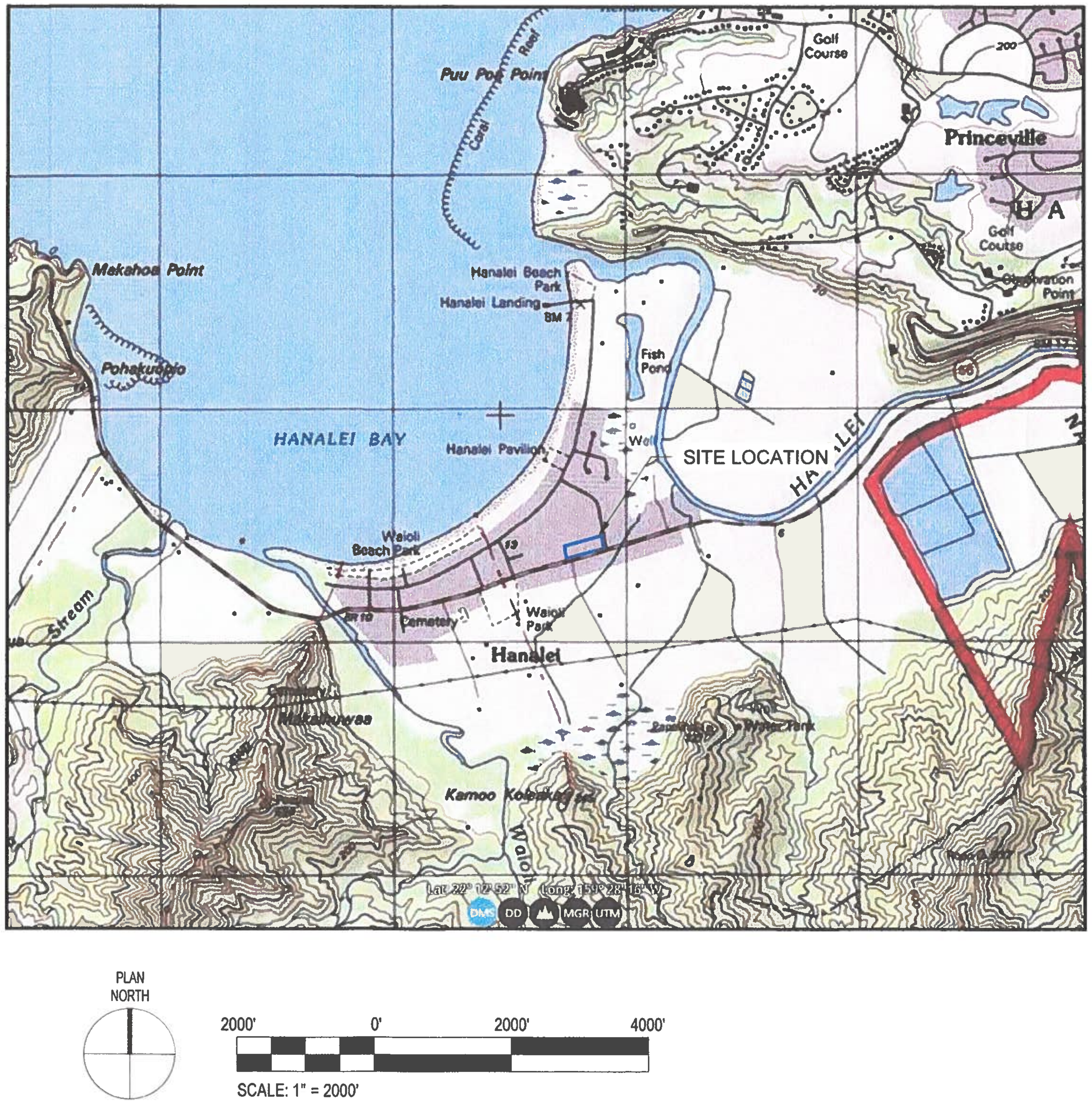
iii. Consistency or compliance of the proposed development relative to the goals and objectives of Chapter 205A, HRS; and Section 3.0 of the SMA Rules and Regulations.

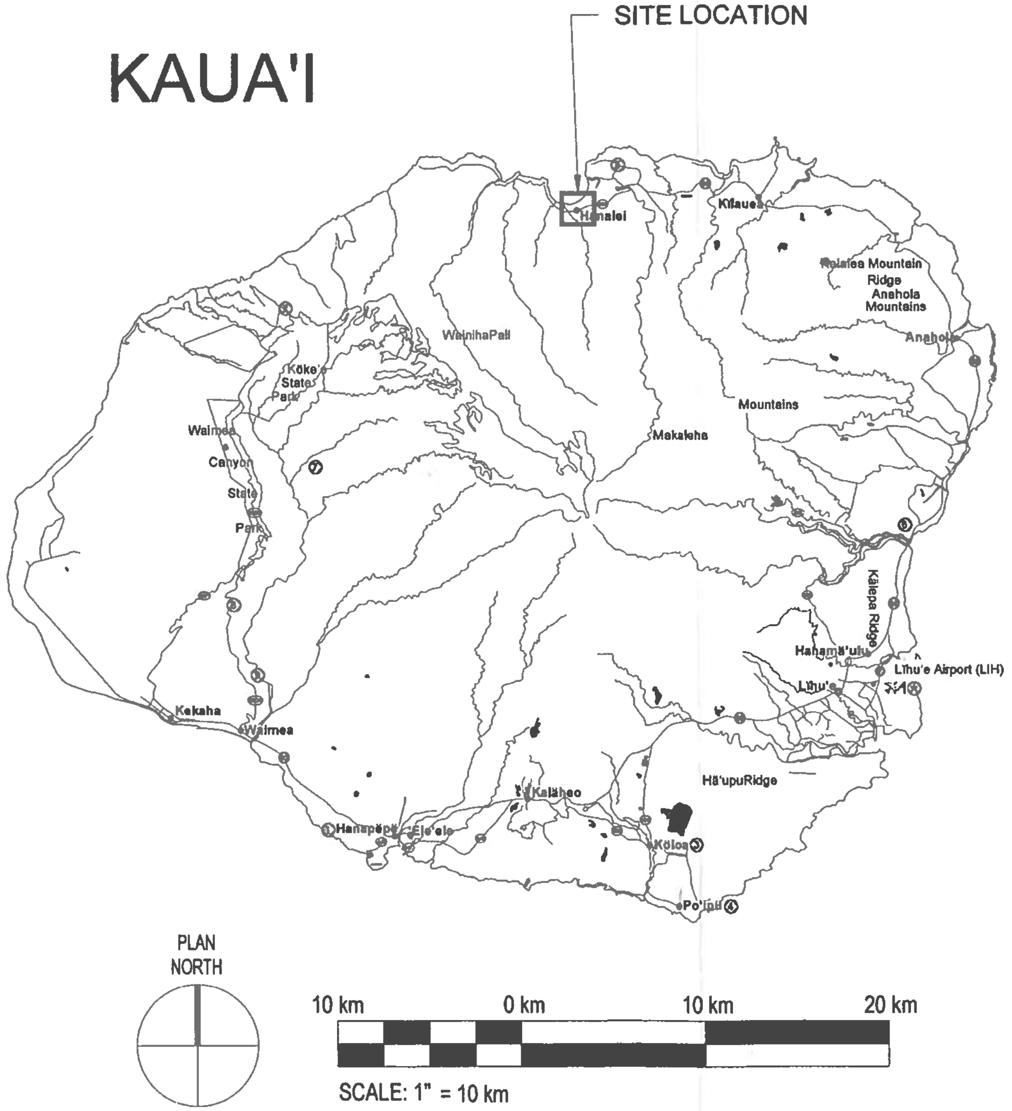
The proposed project is consistent with the objectives, policies, and purposes of HRS Chapter 205A and Section 3.0 of the SMA Rules and Regulations. The proposed project will not cause permanent losses of valuable resources and the foreclosure of management options and will not modify or impede access to public owned or used beaches, recreation areas, and natural reserves. The proposed project will aid in the preservation and protection of natural resources of the coastal zone of Hawaii.

iv. Consistency or compliance of the proposed development relative to the County General Plan, Development Plan, and Zoning Ordinances.

The proposed project is consistent with the goals of the Kauai General Plan, Development Plan, and Zoning Ordinances. The proposed project is consistent with the County objective to address ageing infrastructure, specifically wastewater. The proposed project will aid in improving the physical environment of the County, and the health, safety, and general welfare of Kauai's people. The proposed project will not include new development therefore the shopping center will remain in compliance with County zoning ordinances.

Figures


Puu Poa Point
Coral Reef
Golf Course
Princeville
Golf Course
Makahoa Point
Pohakupio
HANALEI BAY
Hanalei Beach Park
Hanalei Landing
BM 7
Fish Pond
Hanalei Pavilion
SITE LOCATION
HANALEI
Waioli Beach Park
Cemetery
Waioli Park
Hanalei
Stream
Makahuwaa
Kamoo Koleaka
Waioli
56
Lat 22° 12' 52" N Long 159° 29' 16" W
DMS DD MGR UTM
PLAN NORTH
2000'
0'
2000'
4000'
SCALE: 1" = 2000'


KAUA'I
SITE LOCATION
Hanalei
Kilauea
Kalalea Mountain Ridge
Anahola Mountains
Anahola
WainihaPali
Koke'e State Park
Waimea Canyon State Park
Makaleha
Mountains
Kalepa Ridge
Hanama'ulu
Lihu'e
Lihu'e Airport (LIH)
Kekaha
Waimea
Hanapepe
Ele'ele
Kalaheo
Ha'upuRidge
Koloa
Po'ipu
PLAN NORTH
10 km
0 km
10 km
20 km
SCALE: 1" = 10 km

LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

▭	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

SOURCES

https://www.gohawaii.com/islands/kauai/travel-info/maps

https://apps.nationalmap.gov/downloader/#/maps

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

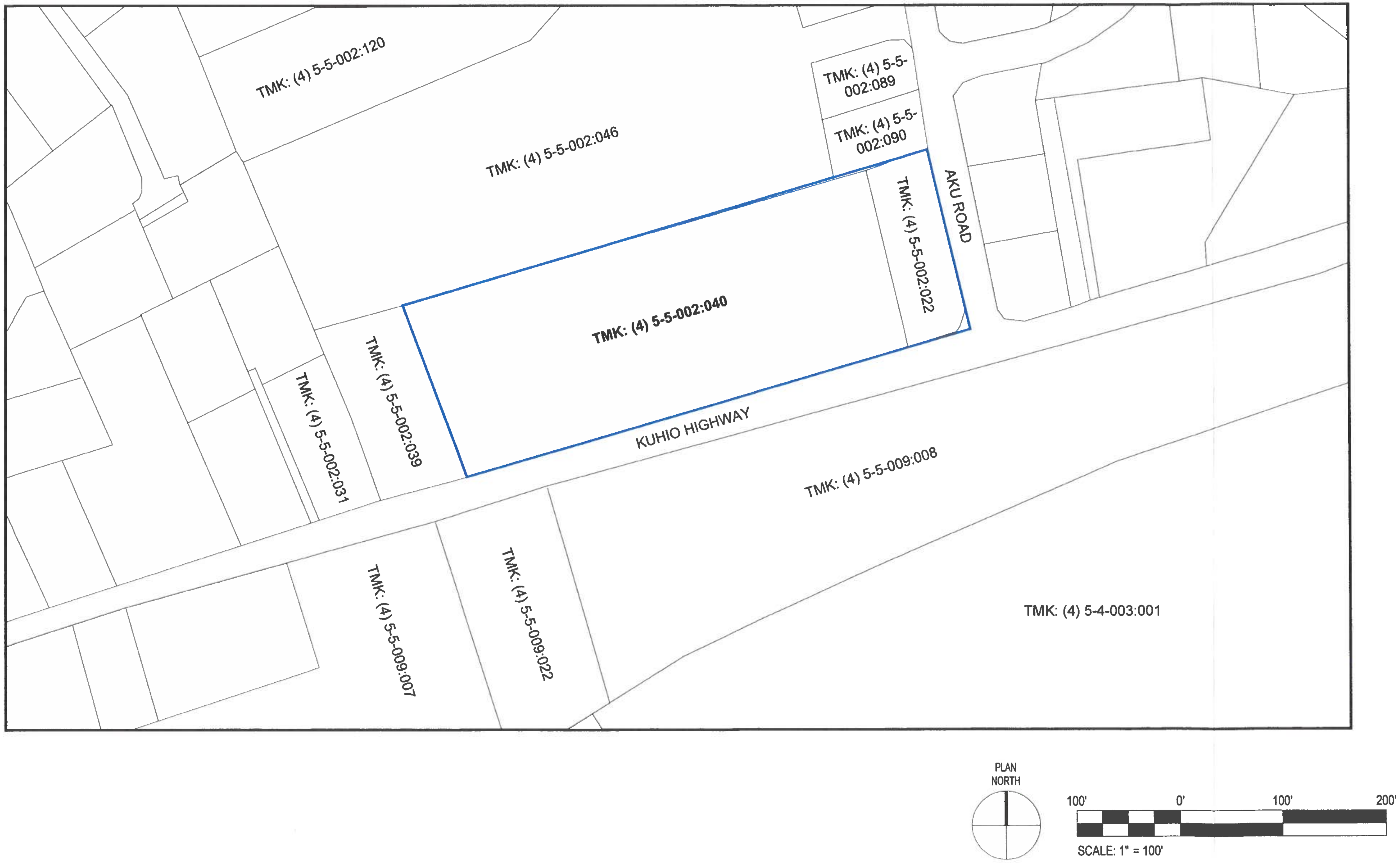
SHEET TITLE
FIGURE 1
REGIONAL LOCATION & TOPOGRAPHIC MAP

WWW.LAULEALLC.COM

SCALE: SEE DETAILS

PROJECT NO. 22034_22053

SHEET NO. 1


TMK: (4) 5-5-002:120
TMK: (4) 5-5-002:046
TMK: (4) 5-5-002:089
TMK: (4) 5-5-002:090
TMK: (4) 5-5-002:040
TMK: (4) 5-5-002:022
TMK: (4) 5-5-002:039
TMK: (4) 5-5-002:031
AKU ROAD
KUHIO HIGHWAY
TMK: (4) 5-5-009:008
TMK: (4) 5-5-009:007
TMK: (4) 5-5-009:022
TMK: (4) 5-4-003:001
PLAN NORTH
100'
0'
100'
200'
SCALE: 1" = 100'

LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

▭	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022
—	TMK BOUNDARIES

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

PROPOSED WWTP WILL BE LOCATED ON TMK (4) 5-5-002:040. BLUE OUTLINE DEPICTS LIMITS OF SHOPPING CENTER.

SOURCES

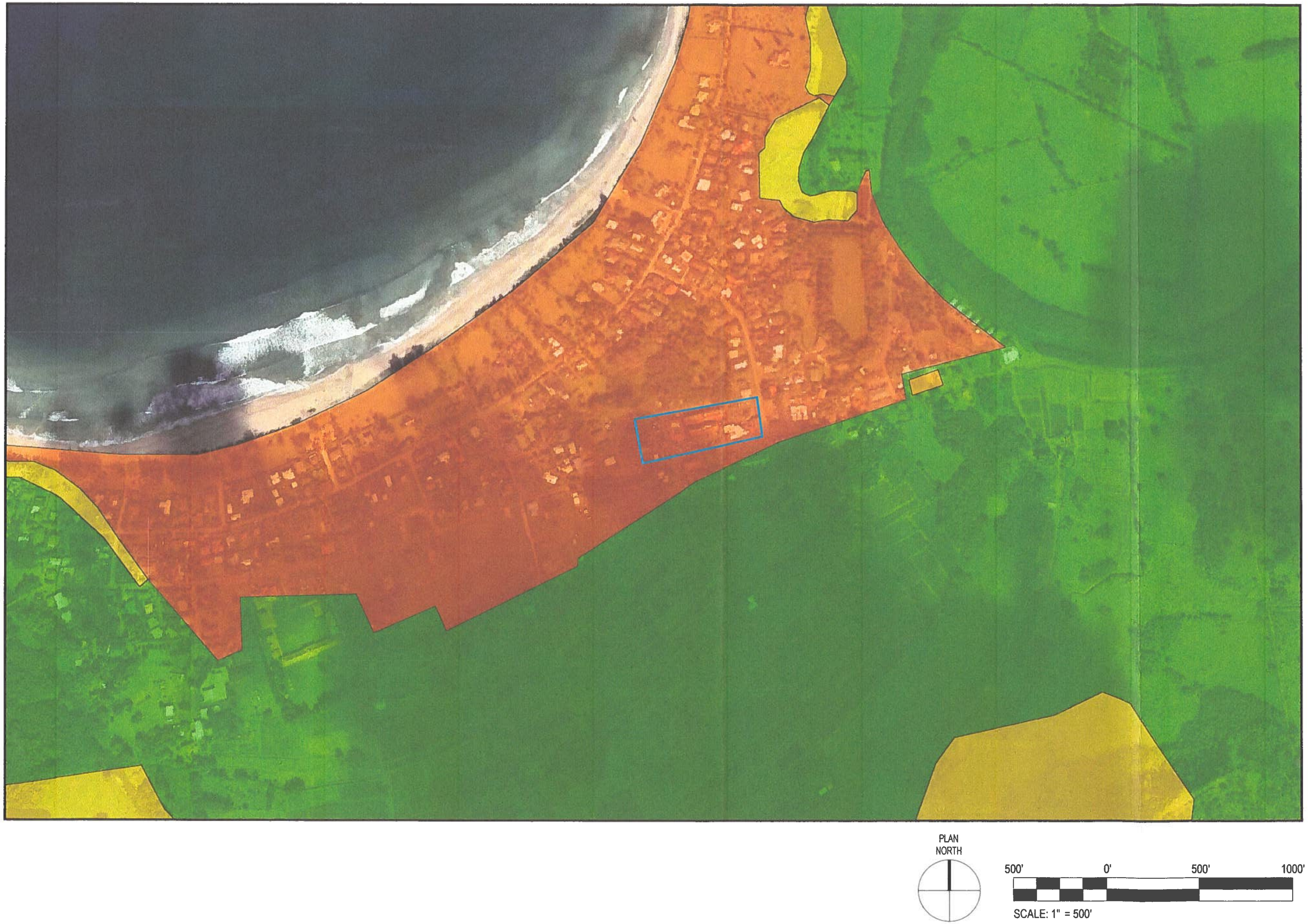
qpublic.schneidercorp.com

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

SHEET TITLE
FIGURE 2
TAX MAP

WWW.LAULEALLC.COM

SCALE: 1" = 100'
PROJECT NO. 22034_22053
SHEET NO. 2



LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

▭	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022

STATE LAND USE DISTRICT BOUNDARY CODE

🟧	URBAN
🟨	CONSERVATION
🟩	AGRICULTURE

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

SOURCES

Aerial Map, 22°12'11"N 159°29'36"W. Google Earth. May 17, 2023.

Hawaii Statewide GIS Program, State Land Use Districts. Decemebr 2020.

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

SHEET TITLE

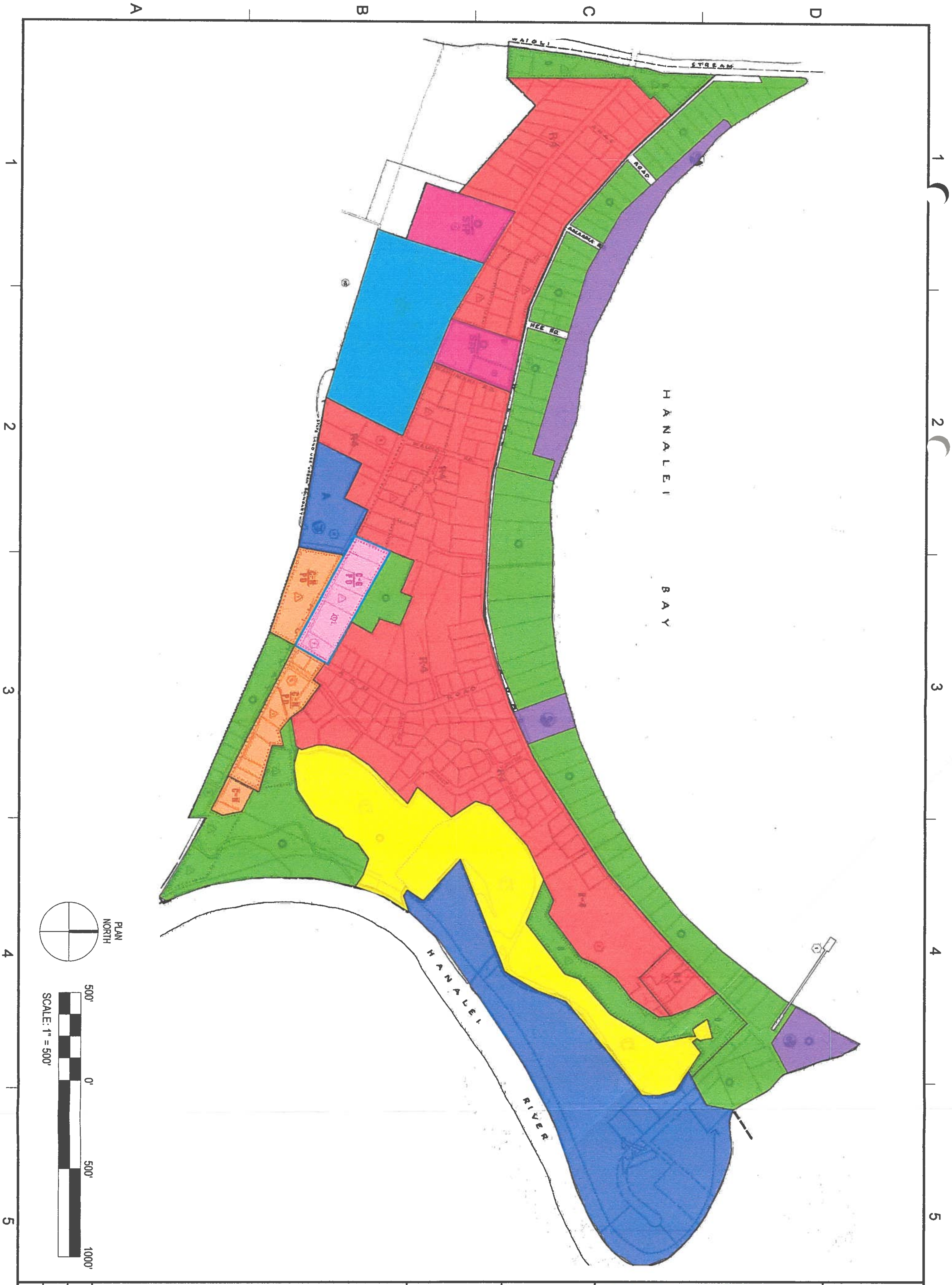
FIGURE 3
STATE LAND USE MAP

WWW.LAULEALLC.COM

SCALE: 1" = 500'

PROJECT NO. 22034_22053

SHEET NO. 3



LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

☐	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022

CITY & COUNTY OF KAUA'I LAND USE ORDINANCE (LUO) ZONING CODE

🟥	RESIDENTIAL
🟧	NEIGHBORHOOD COMMERCIAL
🟨	NATURE CONSERVATION
🟩	OPEN DISTRICT
🟦	AGRICULTURAL DISTRICT
🟪	EXISTING PARK
🟥	SPECIAL TREATMENT - PUBLIC
🟦	SPECIAL TREATMENT - CULTURAL, HISTORIC
▨	GENERAL COMMERCIAL

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

SOURCES

County of Kaua'o Zoning Maps, "HANALEI-Z", February 1, 2021.

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

SHEET TITLE

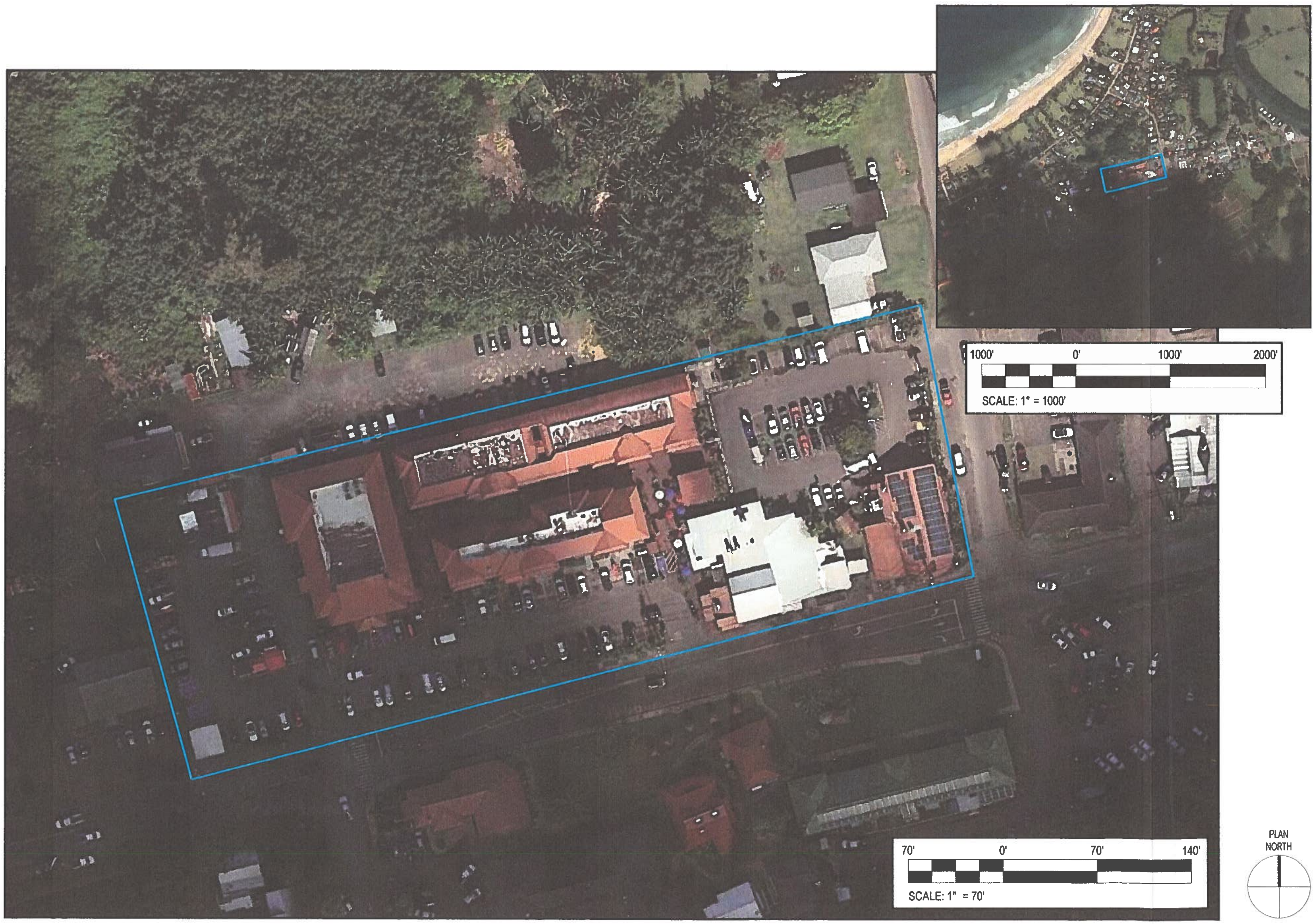
FIGURE 4
COUNTY OF KAUA'I ZONING MAP

WWW.LAULEALLC.COM

SCALE: 1" = 500'

PROJECT NO. 22034_22053

SHEET NO. 4



LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE. #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

▭	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

SOURCES

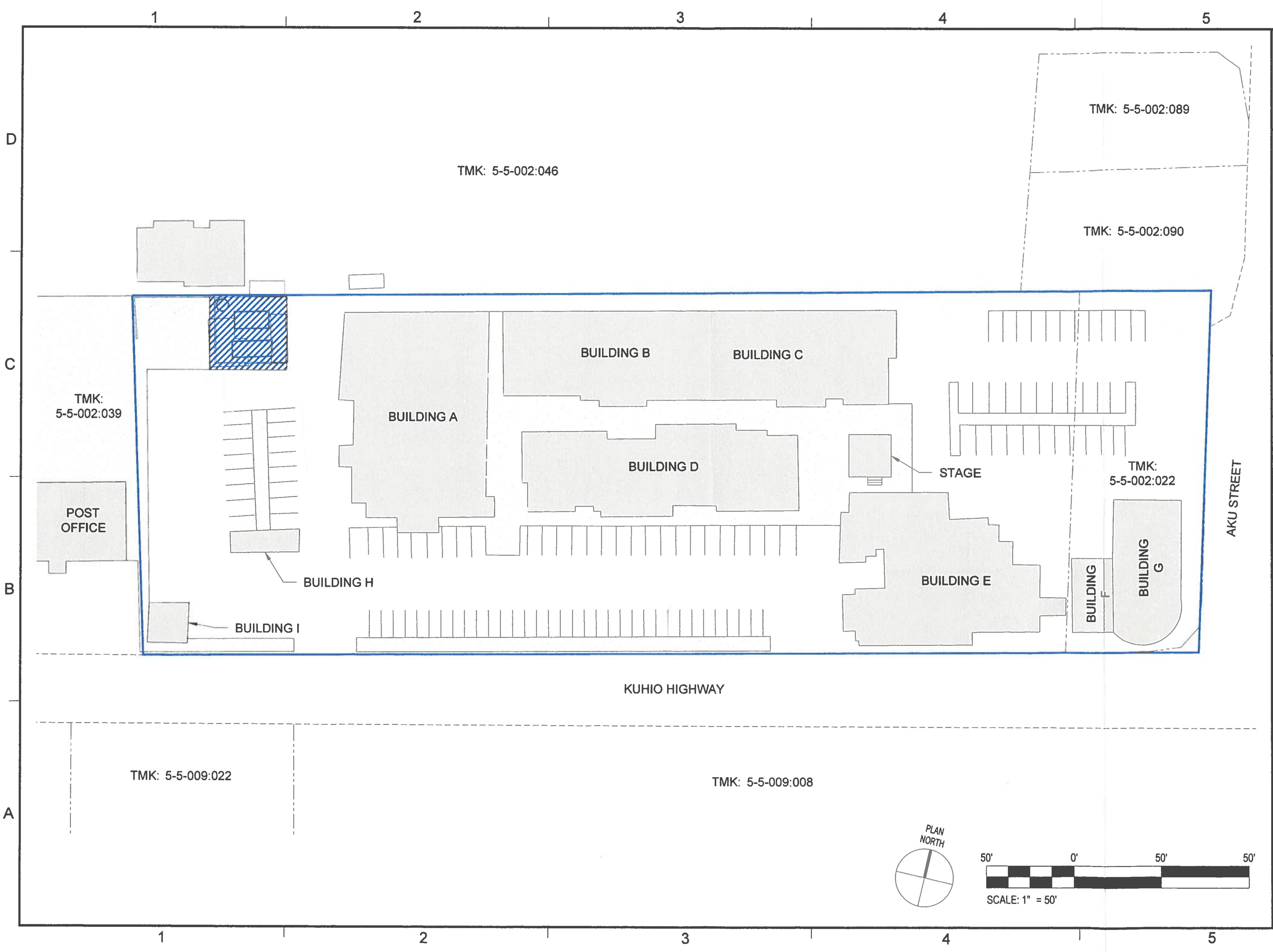
Aerial Map, 22°12'11"N 159°29'36"W, Google Earth, May 17, 2023.

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

SHEET TITLE
FIGURE 5
SITE LOCATION

WWW.LAULEALLC.COM

SCALE: SEE DETAILS
PROJECT NO. 22034_22053
SHEET NO. 5


1
2
3
4
5
A
B
C
D
TMK: 5-5-002:046
TMK: 5-5-002:089
TMK: 5-5-002:090
TMK: 5-5-002:039
POST OFFICE
BUILDING A
BUILDING B
BUILDING C
BUILDING D
BUILDING E
BUILDING F
BUILDING G
BUILDING H
BUILDING I
STAGE
TMK: 5-5-002:022
AKU STREET
KUHIO HIGHWAY
TMK: 5-5-009:022
TMK: 5-5-009:008
PLAN NORTH
50'
0'
50'
50'
SCALE: 1" = 50'

LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

▭	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022
- - - - -	ROAD
— - - —	PROPERTY LINES
▭	BUILDING/STRUCTURE
▭	CONCRETE
▭	GRASS
▨	AREA OF NEW WWTP SYSTEM

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

SOURCES

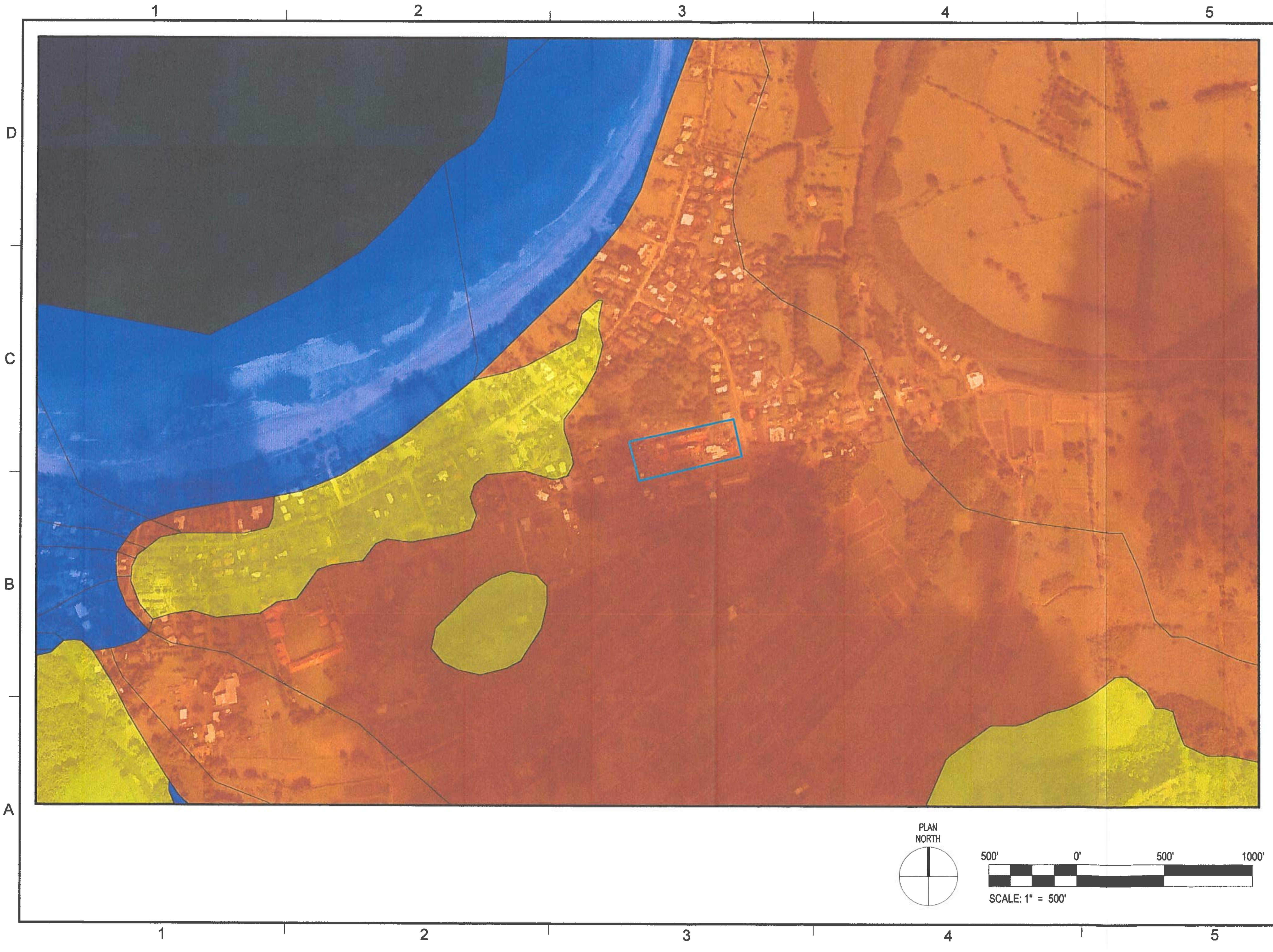
C-100 General Site Plan, Ching Young Village WWTP Replacement. Laulea Engineering, LLC., 2023.

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

SHEET TITLE
FIGURE 6
SITE PLAN

WWW.LAULEALLC.COM

SCALE: 1" = 50'
PROJECT NO. 22034_22053
SHEET NO. 6



LAULEA
ENGINEERING, LLC

LAULEA ENGINEERING, LLC
1127 11TH AVE #302
HONOLULU, HI 96816
WWW.LAULEALLC.COM

LEGEND

□	CHING YOUNG VILLAGE TMK: (4) 5-5-002:040, 022

SPECIAL FLOOD HAZARD AREA

Special Flood Hazard Areas [SFHA] are defined as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual chance flood is also referred to as the base flood or 100-year flood.

🟧	Zone AE: Area subject to inundation by the 1%-annual-chance flood event for which Base Flood Elevations (BFEs) have been determined.
🟦	Zone VE: Area inundated by the 1%-annual-chance flood event with Velocity Hazard (wave action) for which BFEs have been determined.
🟨	Zone X: Area of moderate risk within the 0.2%-annual-chance flooding.

NOTES

THE ACCURACY OF THIS DOCUMENT IS LIMITED TO THE QUALITY AND SCALE OF THE SOURCE INFORMATION. THIS DOCUMENT IS NOT A LEGAL REPRESENTATION OF AN ENGINEERED SURVEY.

SOURCES

Aerial Map, 22°12'11"N 159°29'36"W. Google Earth. May 17, 2023.

Hawaii Statewide GIS Program, Flood Hazard Areas (DFIRM) - Kauai County. September 17, 2021. https://hub.arcgis.com/datasets/HiStateGIS::flood-hazard-areas-dfirm-kauai-county/explore?location=22.201487%2C-159.498341%2C15.41

CHING YOUNG VILLAGE WWTP
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040, 022

SHEET TITLE
FIGURE 7
FLOOD HAZARD MAP

WWW.LAULEALLC.COM

SCALE: 1" = 500'
PROJECT NO. 22034_22053
SHEET NO. 7

Attachment A- Cost Estimate

TASK NO.	SOW DESCRIPTION	ROM COST ESTIMATE
1	Injection Wells (3 EA) Modification (Drilling & Installation)	$233,626
2*	Well Vaults (3) GC Installation	$162,673
3*	Preloader/Equalization (external to WWTP) FRP Tank (+S&H)	$150,000
4*	WWTP MBBR Package System (+S&H)	$663,600
5*	WWTP Installation and Plumbing (General Contractor)	$728,088
6*	Electrical Work (including Backup Generator)	$268,808
7*	Structural Work (Concrete Slab)	$45,000
8*	Rebuild CMU Rock Wall security around WWTP	$119,547
9		
10		
11		
12		
13		
14		
	TOTAL ROM COST ESTIMATE:	**$2,371,341**

*NOTE: SOME VALUES USED ARE FROM FORMAL GC PRICING FOR A SIMILAR WWTP INSTALLED IN 2023, CONSERVATIVELY INCREASED BY 2-YR 4% INFLATION EACH YR (reference from HI rate of 3.6% for C&CH Construction Index in 4Q 2024 Report referenced from State HI DBEDT

Attachment B- Engineering Plans

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

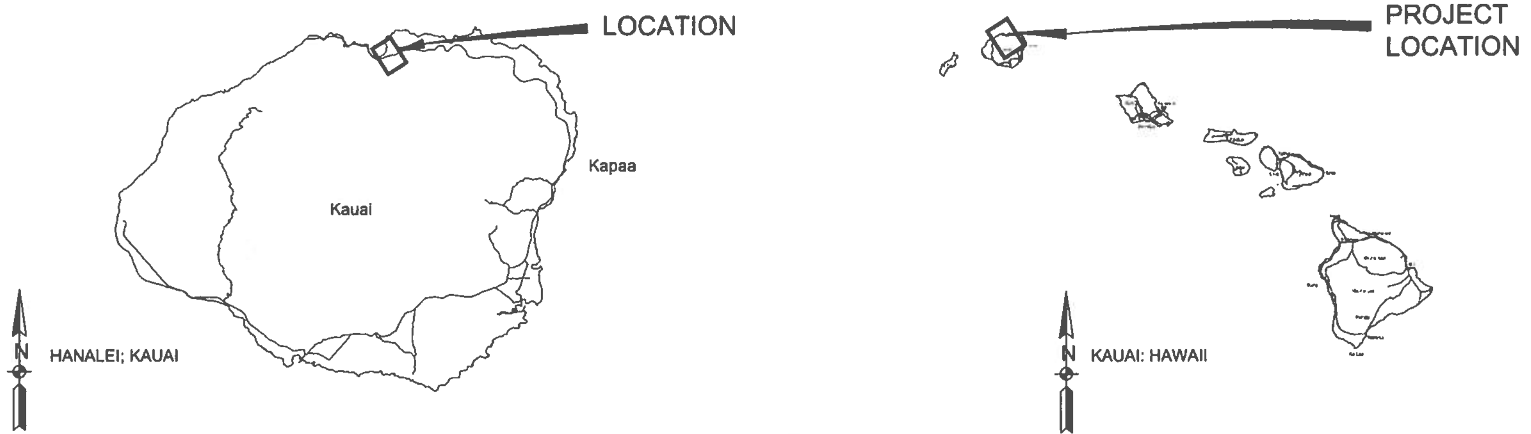
CHING YOUNG VILLAGE WWTP REPLACEMENT

**DRAFT
NOT FOR
CONSTRUCTION**

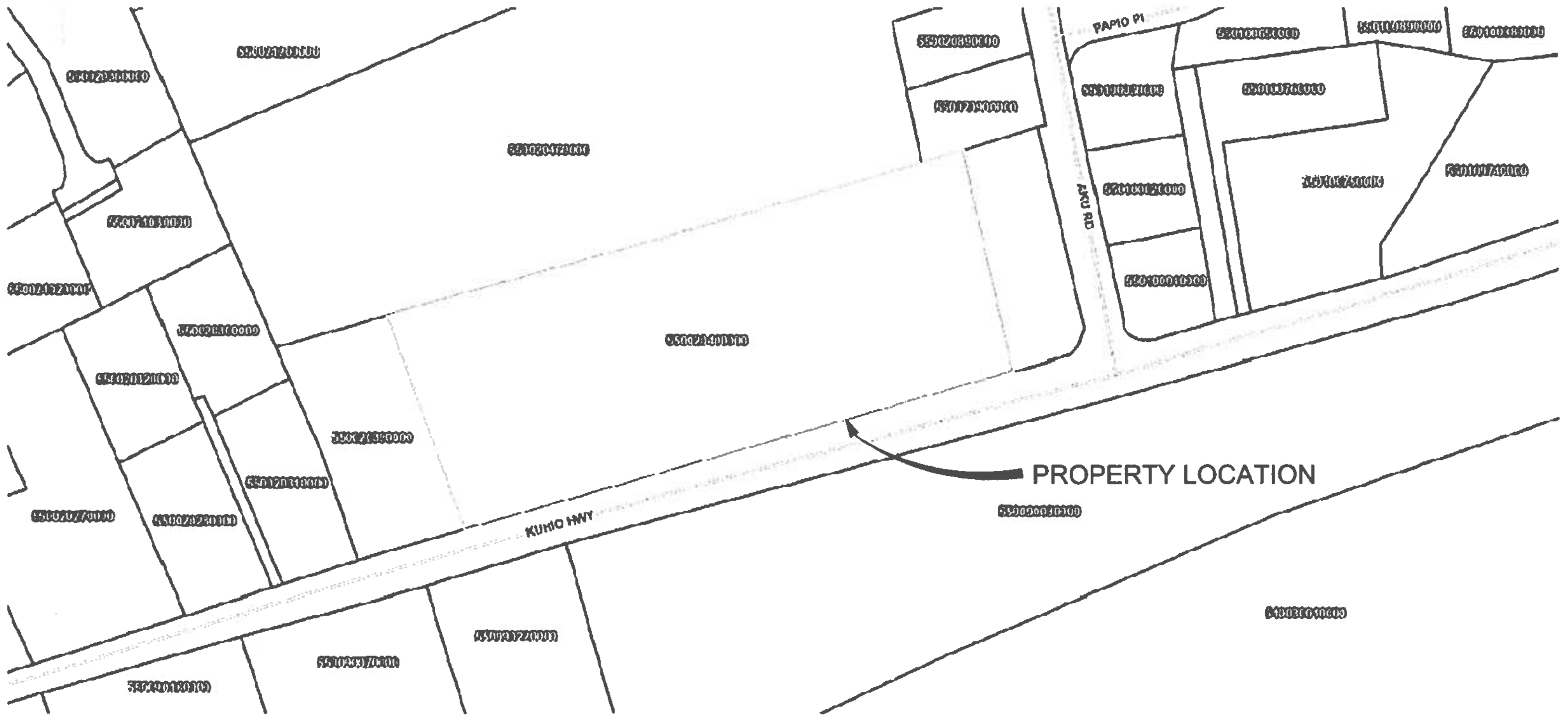
PROJECT LOCATION:
HANALEI, KAUAI
TMK: (4) 5-5-002:040

PREPARED FOR:
CHING YOUNG VILLAGE
5-5190 KUHIO HIGHWAY
HANALEI, KAUAI, HI 96714

PREPARED BY:
LAULEA ENGINEERING, LLC.
1127 11TH AVE #302
HONOLULU, HI 96816



VICINITY MAP



TMK MAP

SHEET INDEX

T-001	TITLE SHEET
G-101	GENERAL NOTES
G-102	SYMBOLS & ABBREVIATIONS
G-103	DESIGN DATA AND FLOW DIAGRAMS
C-101	EXISTING SITE PLAN
C-102	DEMOLITION PLAN
C-201	GENERAL SITE PLAN
C-202	ENLARGED PLANS
C-203	WWTP BOTTOM LAYOUT WITH AERATION
C-204	WWTP TOP PLAN VIEW
C-205	STAIR ELEVATION
C-206	SECTION DETAILS
C-301	PROCESS AND INSTRUMENTATION DIAGRAM
EC-101	EROSION AND SEDIMENT CONTROL PLAN
CD-101	WWTP DETAILS 1
CD-102	WWTP DETAILS 2
CD-103	WWTP DETAILS 3
S-101	STRUCTURAL PLAN
S-102	STRUCTURAL NOTES
S-103	STRUCTURAL DETAILS
E-101	ELECTRICAL PLAN
E-102	ELECTRICAL NOTES
E-103	ELECTRICAL DETAILS

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT
5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714
TMK: (4) 5-5-002:040

DRAWING TITLE
TITLE SHEET

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
T-001
SHEET NO. 1 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

CONSTRUCTION NOTES:

1. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY & COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, NAUI, AND HAWAII.

2. VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ALL CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.

3. THE UNDERGROUND PIPES, CABLES OR DUCTING LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED OF THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA, WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.

4. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY OR STATE DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL," AS WELL AS ORDINANCE NO. 808 OF THE KAUAI COUNTY CODE, GRADING, GRUBBING, AND STOCKPILING, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.

6. CONFINED SPACE

   FOR ENTRY BY STATE PERSONNEL, INCLUDING INSPECTORS AND REPRESENTATIVES, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(B), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVIDING:

   I. ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

      a. FULL BODY HARNESSES FOR UP TO TWO PERSONNEL
      b. LIFELINE AND ASSOCIATED CLIPS
      c. INGRESS/EGRESS AND FULL PROTECTION EQUIPMENT
      d. TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT,
      e. EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
      f. CELLULAR TELEPHONE TO CALL FOR EMERGENCE ASSISTANCE.
      g. CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20 FEET AWAY).
      h. PERSOANL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.

   II. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.

   III. ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).

   IV. ALL SAFETY EQUIPMENT SHALL COMPLY WITH THE STANDARDS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND ALL APPLICABLE FEDERAL, STATE, AND CITY LAWS AND REGULATIONS RELATING TO SAFETY.

8. ALL EXISTING UTILITIES TO REMAIN IN USE, WHETHER OR NOT SHOWN ON THE PLANS BY THE CONTRATOR DURING CONSTRUCTION. ALL DAMGES TO EXISTING UTILITIES SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.

9. WHEN TRENCH EXCAVATION IS CLOSE TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING, SHORING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDER-PINNING TO FULLY PROTECT THEM FROM DAMAGE.

10. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL. DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE INCIDENTAL AND INCLUDED WITHIN THE AMOUNT PAID FOR UNCLASSIFIED TRENCH EXCAVATION.

11. ALL CONCRETE AND A.C. PAVEMENT TO BE TRENCHED OR RECONSTRUCTED SHALL BE SAW-CUT TO THE REQUIRED WIDTH PRIOR TO THE CONSTRUCTION.

12. PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE KAUAI POLICE DEPARTMENT AND THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CITY DEPARTMENT OF PLANNING PERMITTING, CIVIL ENGINEERING BRANCH.

13. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY; AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

14. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.

15. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES.

SEWER NOTES: (PRIVATE)

1. ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPT. 1985, THE COUNTY OF KAUAI PUBLIC WORKS STANDARD DETAILS, SEPT. 1984, AND THE DESIGN STANDARDS OF THE KAUAI DEPARTMENT OF WASTEWATER MANAGEMENT, VOL. 1, JULY 1985. CRUSHED ROCK CRADLE IS PERMITTED WHERE SOIL IS STABLE. IN AREAS OF UNSTABLE SOIL, THE DESIGNER OF RECORD AND THE CONTRACTING OFFICER WILL DETERMINE THE PIPE SUPPORT REQUIRED.

2. THE UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE FACILITIES, INCLUDING AND AFFECTING SEWER LINES, IN THE PRESENCE OF THE WASTEWATER INSPECTOR AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGED UTILITIES.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP OF ANY SEWAGE SPILLS CAUSED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER AND STATE DEPARTMENT OF HEALTH AND UTILIZE APPROPRIATE SAMPLING AND ANALYZING PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC NOTIFICATIONS AND PRESS RELEASES.

5. THE CONTRACTOR SHALL INSTALL "RAINSTOPPER" MANHOLE INSERTS IN ALL NEW SEWER MANHOLES WITH TYPE "SA" FRAME AND COVER.

6. GEOTEXTILE FABRIC SHALL ENVELOP THE PIPE CRADLE AND PIPE FOR ALL SEWER LINES.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF THE PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.

2. THE CONTRACTOR, AT HIS OWN EXPENSE SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE CITY MAY REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.

3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION ACTIVITY SO AS TO CAUSE FALLING ROCK, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.

4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL APPLY FOR A CONSTRUCTION PERMIT WITH A NOISE POLLUTION CONTROL PLAN IF NECESSARY.

EXCAVATION NOTES

1. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CONTACT HAWAII ONE CALL FOR VERIFICATION OF UNDERGROUND LINES, THE CONTRACTOR SHALL CALL THE HAWAII ONE CALL CENTER AT 866-423-7287 MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE.

EROSION CONTROL AND BMP NOTES:

1. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY DEMOLITION OR EARTH MOVING WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

2. INSTALL PERIMETER PROTECTION (SILT FENCE) AS SHOWN ON THE EROSION CONTROL PLAN.

3. CONSTRUCT TEMPORARY STABILIZED CONSTRUCTION ENTRANCE/EXIT AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. ALL VEHICLES EXITING THE SITE ARE TO SUFFICIENTLY CLEANED OFF SO THAT DIRT OR DEBRIS IS NOT TRACKED OFF THE CONSTRUCTION SITE.

4. LOCATE STOCKPILES, INCLUDING WASTE AND SOIL, AWAY FROM CONCENTRATED DRAINAGE FLOWS, DRAINAGE SWALES AND INLETS. INSTALL PERIMETER PROTECTION (SILT FENCE), BERMS OR TRENCHES AROUND ERODIBLE MATERIAL STOCKPILES.

5. ALL EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY, FOR EXAMPLE, WEEKLY IN DRY PERIODS AND WITHIN 24-HOURS AFTER ANY RAINFALL OF 0.5 INCHES OR GREATER WITHIN A 24-HOUR PERIOD. DURING PROLONGED RAINFALL, DAILY CHECKING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.

6. IF HEAVY RAINS ARE PREDICTED DURING A WORKDAY, ALL CONTROL MEASURES SHALL BE INSPECTED IMMEDIATELY AND REINFORCED AS NECESSARY.

7. CLEARING AND GRADING SHALL BE HELD TO THE MINIMUM NECESSARY. GRADING SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF THE CLEARED SURFACE AREA.

8. DUST CONTROL WITH WATER SPRAY (BY TRUCK OR TEMPORARY SPRINKLERS) SHALL BE APPLIED AS NEEDED. DO NOT OVERWATER.

9. A SPECIFIC INDIVIDUAL SHALL BE DESIGNATED TO BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE.

10. GOOD HOUSE KEEPING BEST MANAGEMENT PRACTICES:

   10.1. MATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT AS IS REQUIRED TO DO THE JOB.
   10.2. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND IF POSSIBLE, UNDER COVER OR IN AN ENCLOSURE.
   10.3. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
   10.4. WHENEVER POSSIBLE, THE ENTIRE CONTAINER CONTENTS WILL BE USED UP PRIOR TO DISPOSAL OF THE CONTAINER.
   10.5. ALL HAZARDOUS MATERIALS, FUEL, OIL AND CHEMICAL SPILLS SHALL BE STOPPED AND CLEANED UP WITH PROPER ABSORBENT MATERIALS. ABSORBENT MATERIAL SPILL KITS SHALL BE MAINTAINED ON-SITE.
   10.6. THE CONTRACTOR SHALL CONDUCT A DAILY INSPECTION TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
   10.7. CONCRETE TRUCK CHUTE WASH WATER SHALL BE DISCHARGED TO A DESIGNATED AREA WHERE COMMINGLING WITH STORM WATER WILL BE PREVENTED BY LOCATING OUTSIDE OF DRAINAGEWAYS, CUT-OFF DITCH OR PERIMETER BERM. WATER SHALL NOT BE DISCHARGED INTO DRAINAGE SYSTEMS OR WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL CLEAN THE DISPOSAL SITE AS REQUIRED.

11. SANITARY AND SEPTIC WASTES SHALL BE COLLECTED FROM ON-SITE FACILITIES ON A REGULAR BASIS BY A LICENSED HAULER. SANITARY AND SEPTIC FACILITIES SHALL NOT BE LOCATED IN OR NEAR WATERCOURSES.

12. VEHICLE AND EQUIPMENT MAINTENANCE AND FUELING SHALL BE DONE OFF-SITE (WHERE AT ALL POSSIBLE)

13. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE TRAINED ON THE BEST MANAGEMENT PRACTICES.

14. PERIMETER PROTECTION (FILTER SOCK) SHALL BE CLEARED OF SILT IMMEDIATELY FOLLOWING THE END OF ANY RAINFALL THAT CAUSES SILT BUILDUP OR WHEN DEPTH REACHES 1/3 OF PERIMETER PROTECTION HEIGHT.

15. STABILIZATION SHALL BE ACCOMPLISHED BY PERMANENTLY PROTECTING THE DISTURBED SOIL SURFACE FROM RAINFALL IMPACTS AND RUNOFF WITH GRASSING. FOR STABILIZATION WITH GRASSING, TEMPORARY IRRIGATION SHALL BE INSTALLED TO FACILITATE GROWTH. DO NOT OVER WATER.

16. FERTILIZER AND PESTICIDE APPLICATION SHALL NOT OCCUR IF HEAVY RAINS ARE ANTICIPATED DURING THE WORKDAY, OR DURING HEAVY RAINS.

17. EROSION CONTROL MEASURES MAY BE REMOVED IN AREAS THAT ARE STABILIZED AND COMPLETED.

18. EROSION CONTROL AND BMPS ARE THE MINIMUM REQUIREMENTS FOR THE PROJECT. CONTRACTOR MAY INSTALL AND IMPLEMENT NEW/BETTER PRODUCTS TO CONTROL AND PREVENT EROSION AND POLLUTANTS FROM THE SITE.

19. CONTRACTOR SHALL NOT STOCKPILE MATERIALS IN COUNTY ROW.

**DRAFT
NOT FOR
CONSTRUCTION**

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
GENERAL NOTES

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
G-101

SHEET NO. 2 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

ABBREVIATIONS:

Ø	DIAMETER
A	AIR
A.C.A.	ASPHALT CONCRETE
A/C	AIR CONDITIONING
APPROX.	APPROXIMATE
APT.	APARTMENT
ARV	AIR RELEASE VALVE
AVG.	AVERAGE
AVE.	AVENUE
B	BYPASS
BC	BOTTOM CURB
BFP	BACK FLOW PREVENTER
BLDG.	BUILDING
B.O.D.	BIOCHEMICAL OXYGEN DEMAND
BOT	BOTTOM
BW	BOTTOM WALL
BWS	BOARD OF WATER SUPPLY
	CENTERLINE
C.L.	CHAIN-LINK
CMU	CONCRETE MASONRY UNIT
C.O.	CLEAN OUT
COL.	COLUMN
COMM.	COMMUNICATION
C/CONC.	CONCRETE
CONT.	CONTINUATION
C.Y.	CUBIC YARD
D	DIAMETER OR DRAIN
DET.	DETAIL
D.I.	DRAIN INLET
D-BOX	DISTRIBUTION BOX
DPW	DEPARTMENT OF PUBLIC WORKS
DWG.	DRAWING
E	EAST
E/ELEC.	ELECTRIC
ELEV/EL	ELEVATION
EMH	ELECTRIC MANHOLE
EP	ELECTRIC POLE
EXIST.	EXISTING
FG	FINISH GRADE
FM	FORCE MAIN
FRP	FIBERGLASS REINFORCE PLASTIC
FT	FEET
G	GAS
GAL.	GALLONS
GND.	GROUND
G.P.	GUY POLE/GATE POST
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GV	GATE VALVE
G.W.	GUY WIRE
HAR	HAWAII ADMINISTRATIVE RULES
H/HT.	HEIGHT
H.B.	HOSE BUB
HECO	HAWAIIAN ELECTRIC COMPANY
HDPE	HIGH-DENSITY POLYETHYLENE
HP	HORSEPOWER
HPHA	HAWAII PUBLIC HOUSING AUTHORITY

HTCo.	HAWAIIAN TELEPHONE COMPANY
ICV	IRRIGATION CONTROL VALVE
I.D.	INNER DIAMETER
INV.	INVERT
IRR	IRRIGATION
L	LENGTH
LAT	LATERAL
LB	POUND
LF	LINEAR FOOT
LP.	LIGHT/LAMP POLE
MAX.	MAXIMUM
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MIN.	MINIMUM/MINUTE
MON.	MONUMENT
N	NORH
O/H	OVERHEAD ELECTRIC LINE
O.C.	ON CENTER
P/PAVT.	PAVEMENT
P	PROPERTY LINE
PSI	POUND PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
Qo	PIPE CAPACITY
Qr	DESIGN PEAK FLOW
RCP	REINFORCED CONCRETE PIPE
S	SEWER
SDWB	SAFE DRINKING WATER BRANCH
SF	SQUARE FEET
SHT.	SHEET
S.L.	SEWERLINE/STREETLIGHT
SMH	SEWER MANHOLE
ST.M.	STREET
STA.	STATION
STD.	STANDARD
S.T.P.	SEWAGE TREATMENT PLANT
S/W	SIDEWALK
STRUCT.	STRUCTURAL
SYM.	SYMMETRICAL
TC	TOP CURB
TDH	TOTAL DYNAMIC HEAD
T/TEL.	TELEPHONE
TEMP.	TEMPORARY
TMK	TAX MAP KEY
TMH	TELEPHONE MANHOLE
TP	TOP PIPE
TS	TOP STEM
T.S.S.	TOTSL SUSPENDED SOLIDS
TV	TOP VALVE
TW	TOP WALL
TYP.	TYPICAL
U.P.	UTILITY POLE
U.P./S.L.	UTILITY POLE W/ STREET LIGHT
VFD	VARIABLE FREQUENCY DRIVE
W	WATER/WIDTH
WL	WATERLINE
WM	WATER METER
WV	WATER VALVE BOX

SYMBOLS:

EXISTING	PROPOSED	
—S_6—	—S_8—	SEWER LINE W/ SIZE
—◎—	—◎—	SEWER MANHOLE
—⫽—		ABANDON OR REMOVE EXISTING SEWER
	— — — —	VENT LINE
----D_{18}----		DRAIN LINE W/ SIZE
— G_2 —	—··—G_2—··—	GAS LINE W/ SIZE
—E—		ELECTRICAL LINE
—W—		WATER LINE
——-·-——		PROPERTY LINE AND/OR RIGHT-OF-WAY

SHEET NUMBERING NOMENCLATURE

ALL SHEET WILL BE NUMBERED BEGINNING W/ A LETTER FOLLOWED BY DASH "-" AND TWO NUMBERS AS FOLLOWS:

C-8
└─ SHEET NUMBER
└─ DISCIPLINE LETTER

T - TITLE
C - CIVIL
S - STRUCTURAL
E - ELECTRICAL

**DRAFT
NOT FOR
CONSTRUCTION**

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME

CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
SYMBOLS &
ABBREVIATIONS

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
G-102
SHEET NO. 3 OF 23

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

DESIGN DATA:

INFLUENT FLOWS

Q_{AVG} DAY:	0.015 MGD
Q_{PEAK} DAY:	0.030 MGD

SLUDGE HOLDING TANK

NUMBER OF TANK:	1
WIDTH:	12 FT
LENGTH:	10.5 FT
SIDE WATER DEPTH:	10.5 FT
VOLUME:	1,323 CF
HOLDING TIME:	8 DAYS
TOTAL NO. OF RACKS:	1
MBBR FULL FINE BUBBLE AERATION:	1 (12 TOTAL DIFFUSERS)
SLUDGE HOLDING BLOWERS:	3 EA (2 DUTY, 1 STANDBY)
HP:	2 HP VFD

INFLUENT WASTEWATER CHARACTERISTICS

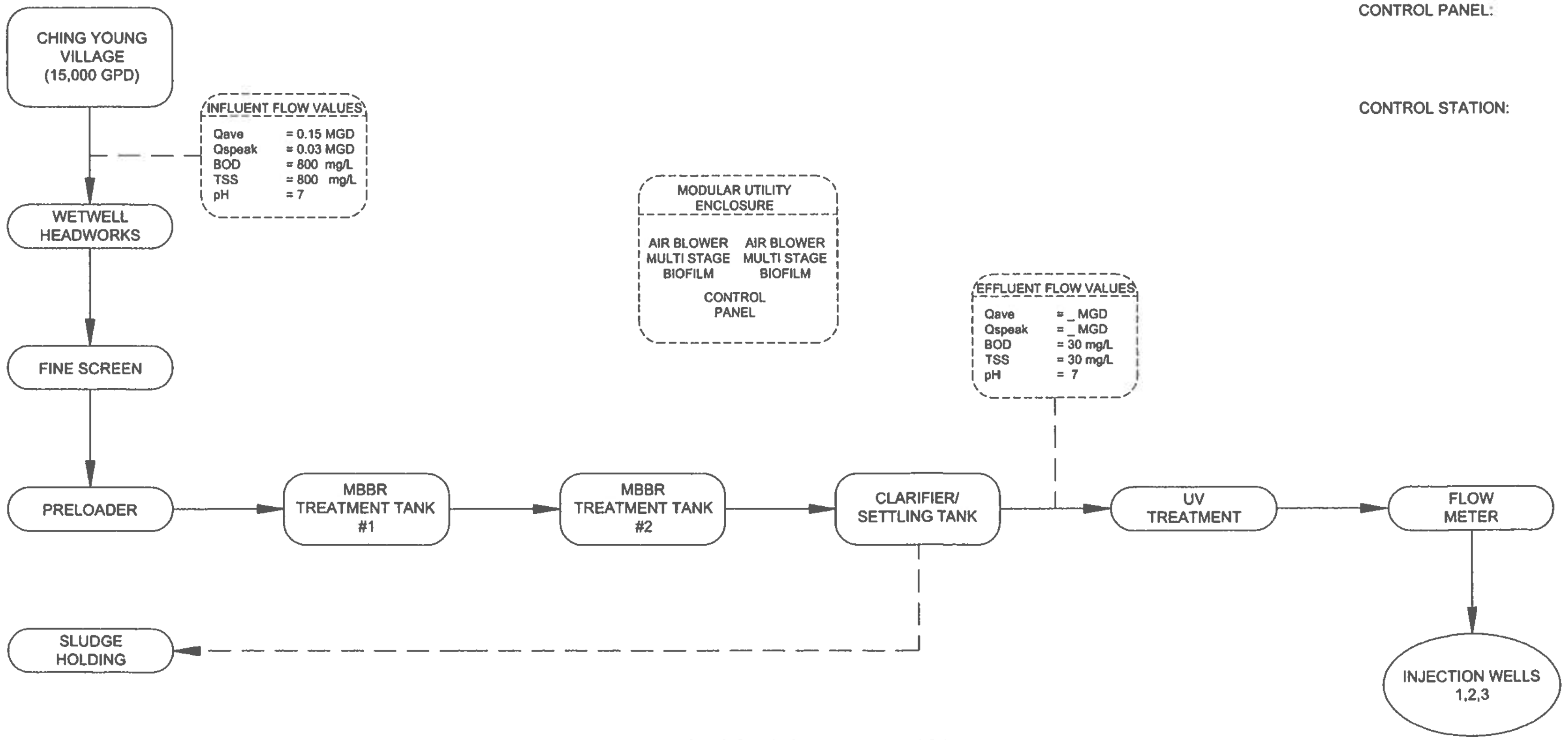
AVERAGE BOD (5 DAY) :	800 mg/L
AVERAGE TSS:	800 mg/L
AVERAGE NH3:	42 mg/L
MINIMUM TEMPERATURE:	77°F
MAXIMUM TEMPERATURE:	77°F

PRELIMINARY EFFLUENT LIMITATIONS

AVERAGE BOD (5 DAY) mg/L:	<30 mg/L
AVERAGE TSS mg/L:	<30 mg/L
AVERAGE NH3:	28 mg/L

SSI EEVolved™ MBBR

HYDRAULIC RETENTION TIME:	9.05HR
ORGANIC LOADING:	20.64 lb/1000ft3/day
BOD MEDIA LOADING RATE:	1.6 lb/1000ft3/day
VOLUME PER BASIN:	756 CF 5,655 gal
# OF BASINS:	1 EA
SIDE WATER DEPTH:	10.5 FT
STAGES PER BASIN:	6
CLARIFIER:	1
CLARIFIER WIDTH:	12 FT
CLARIFIER LENGTH:	3.5 FT
TANK MATERIAL:	STEEL
TOTAL NO. OF RACKS:	4 (1 PER BASIN/1 PER STAGE)
AERATION GRIDS:	3
BLOWERS:	2 EA (1 DUTY, 1 STANDBY)
RATE/PRESSURE:	CFM @ 4.9 PSIG
HP:	3 HP VFD
CONTROL PANEL:	230V, SINGLE PHASE POWER CONTROL PANEL WITH NEMA 4X ENCLOSURE, INDICATOR LIGHTS, AND AUTODIALER
CONTROL STATION:	2 COMBINATION STARTERS WITH 120V CONTROL AND AND-OFF-AUTO SWITCHES


CHING YOUNG VILLAGE (15,000 GPD)
INFLUENT FLOW VALUES
Qave = 0.15 MGD
Qspeak = 0.03 MGD
BOD = 800 mg/L
TSS = 800 mg/L
pH = 7
WETWELL HEADWORKS
FINE SCREEN
PRELOADER
MBBR TREATMENT TANK #1
MBBR TREATMENT TANK #2
MODULAR UTILITY ENCLOSURE
AIR BLOWER MULTI STAGE BIOFILM
AIR BLOWER MULTI STAGE BIOFILM
CONTROL PANEL
EFFLUENT FLOW VALUES
Qave = _ MGD
Qspeak = _ MGD
BOD = 30 mg/L
TSS = 30 mg/L
pH = 7
CLARIFIER/ SETTLING TANK
UV TREATMENT
FLOW METER
INJECTION WELLS 1,2,3
SLUDGE HOLDING

PROCESS FLOW DIAGRAM

NOTE

1. APPROXIMATE SIZE LOCATION, AND PIPING OF THE EXIST WWTP IS SHOWN BASED ON RECORD DRAWINGS AND INFORMATION PROVIDED BY SITE MAINTENANCE PERSONNEL. CONTRACTOR SHALL VERIFY THE LOCATION, PIPING, AND INVERTS OF THE EXISTING WWTP.

**DRAFT
NOT FOR
CONSTRUCTION**

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT
5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714
TMK: (4) 5-5-002:040

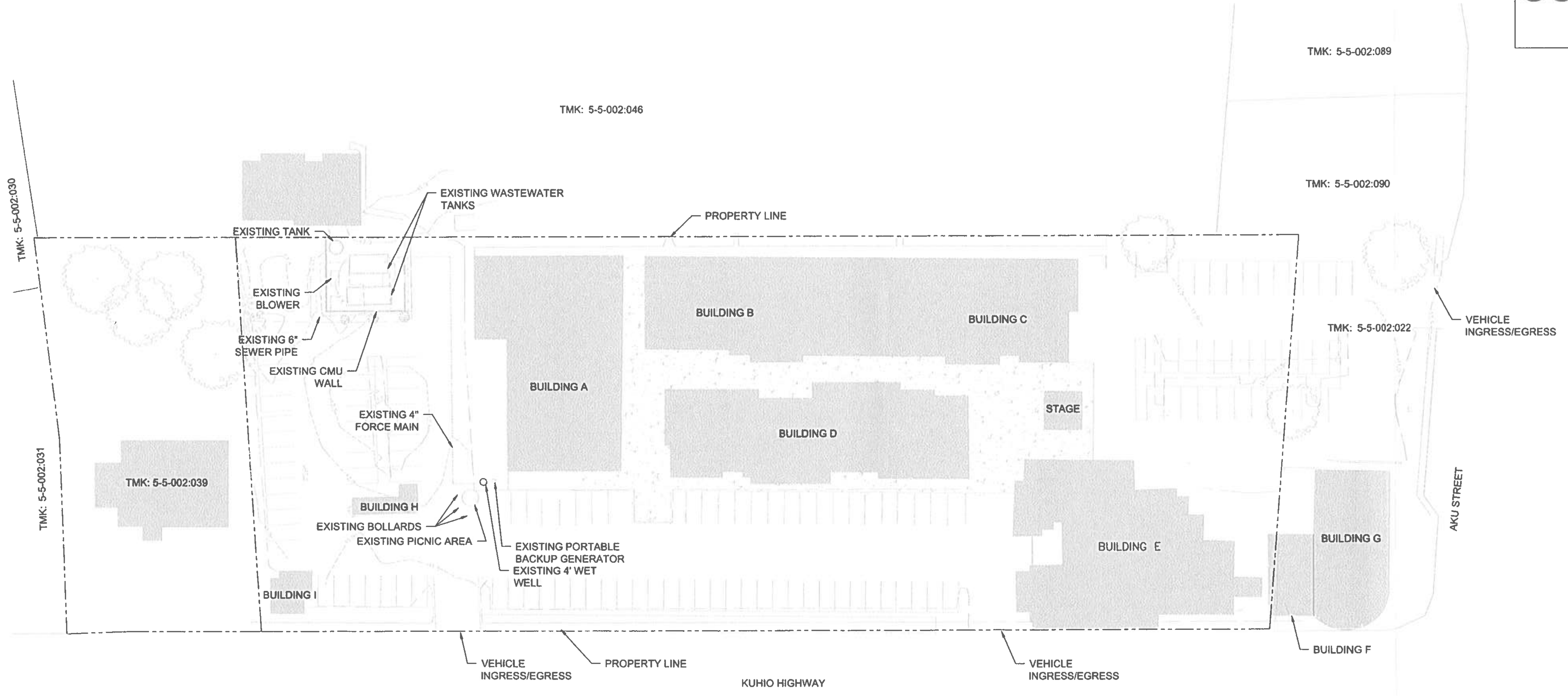
DRAWING TITLE
DESIGN DATA AND
FLOW DIAGRAMS

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
G-103
SHEET NO. 4 OF 23

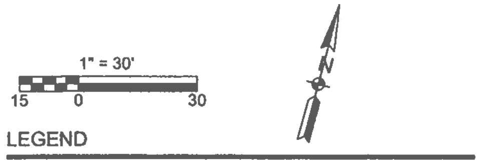
NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


1
2
3
4
5
A
B
C
D
TMK: 5-5-002:030
TMK: 5-5-002:031
TMK: 5-5-002:039
TMK: 5-5-002:046
TMK: 5-5-002:089
TMK: 5-5-002:090
TMK: 5-5-002:022
EXISTING WASTEWATER TANKS
EXISTING TANK
EXISTING BLOWER
EXISTING 6" SEWER PIPE
EXISTING CMU WALL
EXISTING 4" FORCE MAIN
BUILDING A
BUILDING B
BUILDING C
BUILDING D
BUILDING E
BUILDING F
BUILDING G
BUILDING H
BUILDING I
STAGE
EXISTING BOLLARDS
EXISTING PICNIC AREA
EXISTING PORTABLE BACKUP GENERATOR
EXISTING 4' WET WELL
PROPERTY LINE
PROPERTY LINE
VEHICLE INGRESS/EGRESS
VEHICLE INGRESS/EGRESS
VEHICLE INGRESS/EGRESS
KUHIO HIGHWAY
AKU STREET

EXISTING SITE PLAN

SCALE 1" = 30'



LEGEND

▭	EXISTING SEWER PIPE
12.0	ELEVATION CONTOUR
▭	CONCRETE
▨	EXISTING BUILDING
— - —	PROPERTY LINE

DRAFT NOT FOR CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME

CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE

EXISTING SITE PLAN

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER

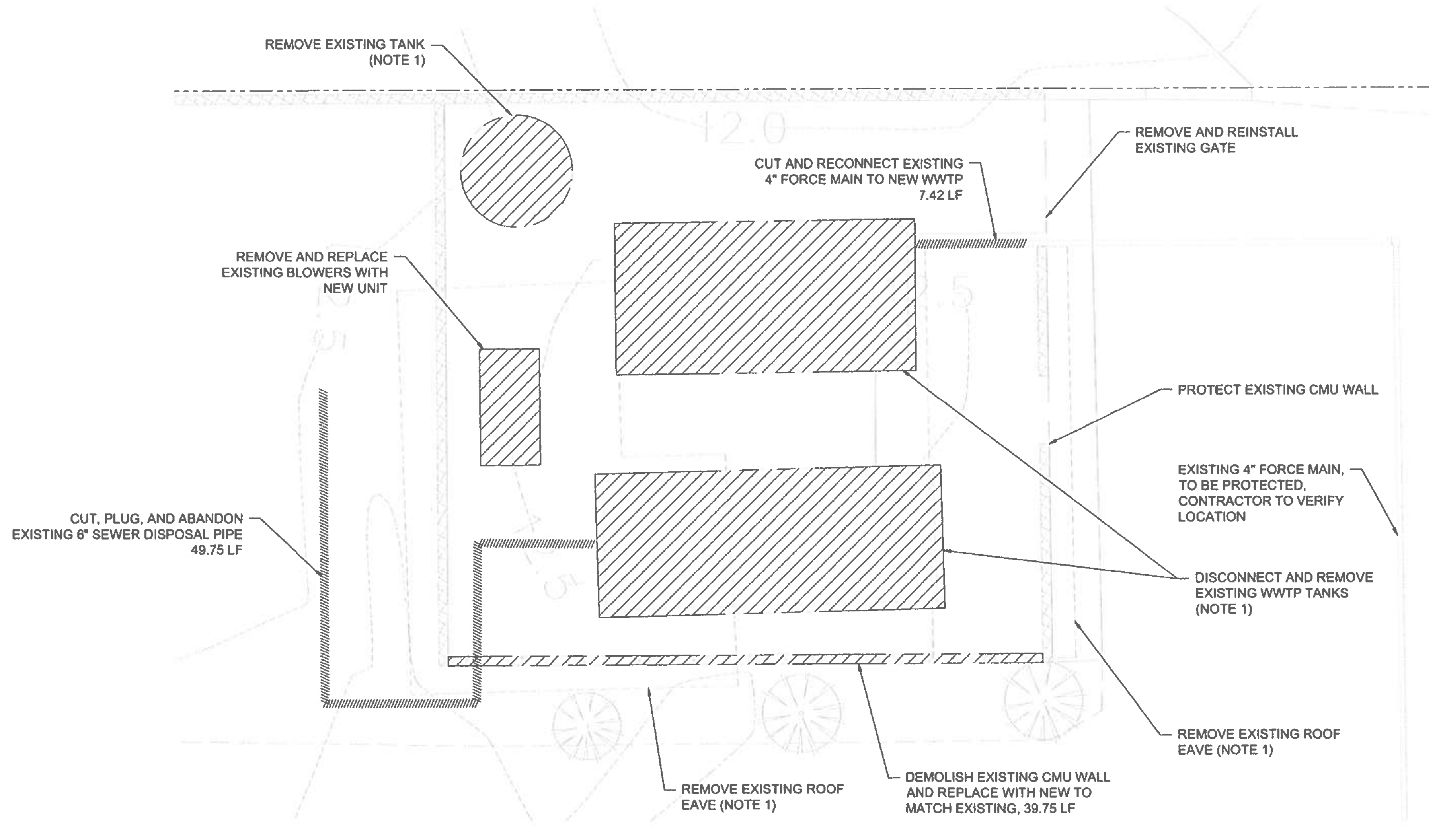
C-101

SHEET NO. 5 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

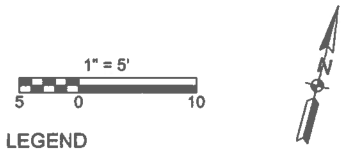
© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

DRAFT NOT FOR CONSTRUCTION


REMOVE EXISTING TANK (NOTE 1)
REMOVE AND REINSTALL EXISTING GATE
CUT AND RECONNECT EXISTING 4" FORCE MAIN TO NEW WWTP 7.42 LF
REMOVE AND REPLACE EXISTING BLOWERS WITH NEW UNIT
PROTECT EXISTING CMU WALL
EXISTING 4" FORCE MAIN, TO BE PROTECTED, CONTRACTOR TO VERIFY LOCATION
CUT, PLUG, AND ABANDON EXISTING 6" SEWER DISPOSAL PIPE 49.75 LF
DISCONNECT AND REMOVE EXISTING WWTP TANKS (NOTE 1)
REMOVE EXISTING ROOF EAVE (NOTE 1)
REMOVE EXISTING ROOF EAVE (NOTE 1)
DEMOLISH EXISTING CMU WALL AND REPLACE WITH NEW TO MATCH EXISTING, 39.75 LF
12.0

DEMOLITION PLAN

SCALE 1" = 5'



LEGEND

┈┈	EXISTING SEWER PIPE
— 12.0 —	ELEVATION CONTOUR
▒	CMU WALL
— - — - —	PROPERTY LINE
▨	DEMOLISH
▨	ABANDON PIPE

NOTE

1. STORE AT DESIGNATED RECYCLING AREA APPROVED BY OWNER.

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME

CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE

DEMOLITION PLAN

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER

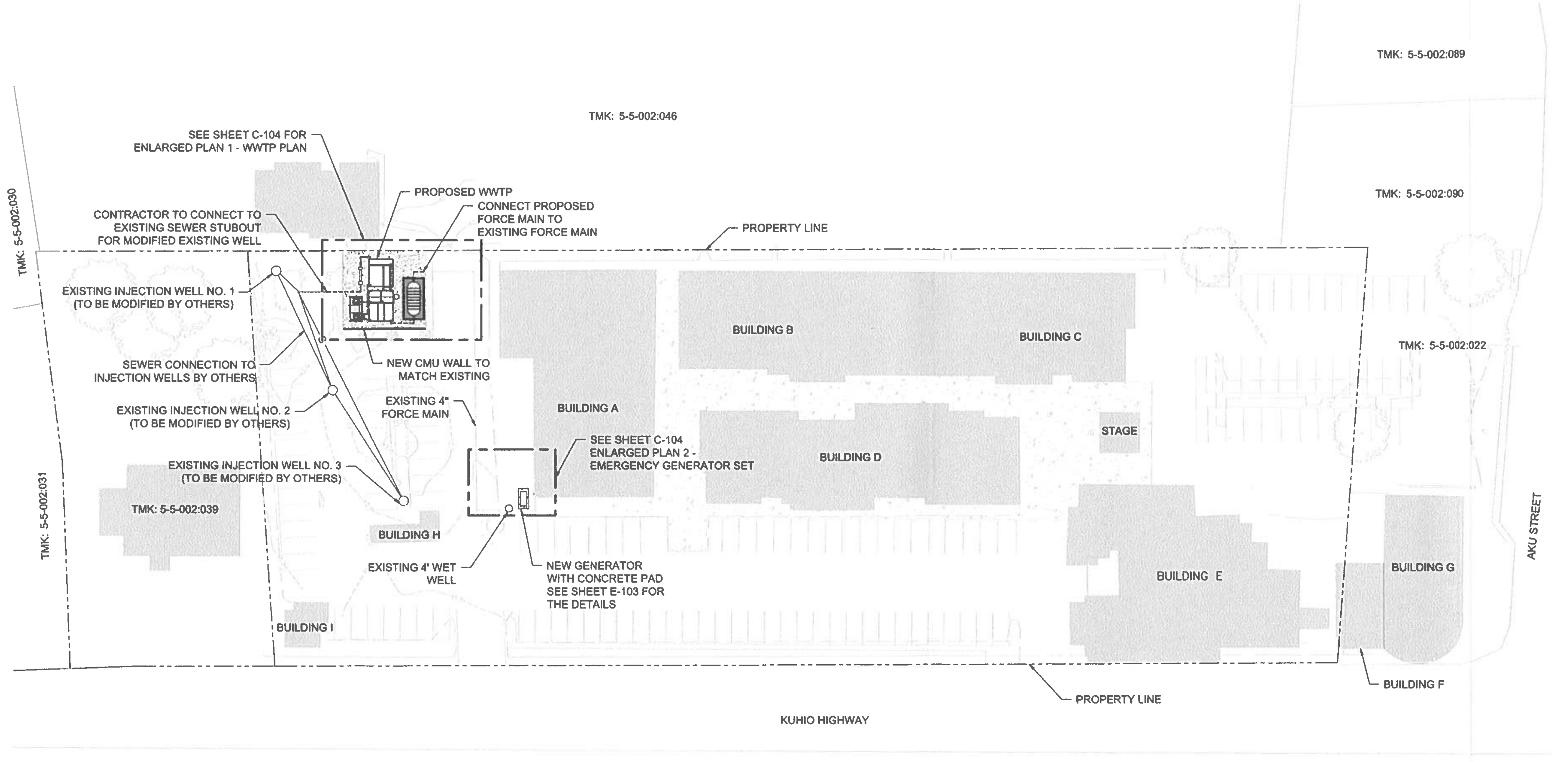
C-102

SHEET NO. 6 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

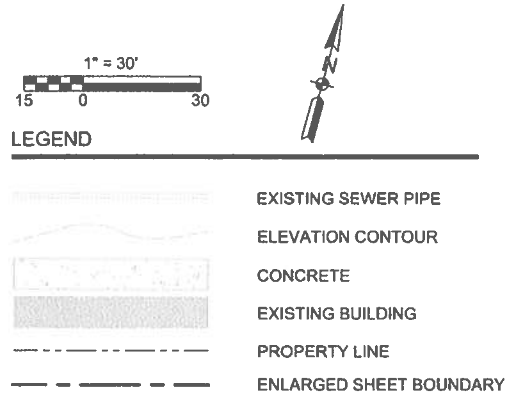
© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

DRAFT
NOT FOR
CONSTRUCTION


TMK: 5-5-002:046
TMK: 5-5-002:089
TMK: 5-5-002:090
TMK: 5-5-002:022
TMK: 5-5-002:030
TMK: 5-5-002:031
TMK: 5-5-002:039
SEE SHEET C-104 FOR ENLARGED PLAN 1 - WWTP PLAN
PROPOSED WWTP
CONNECT PROPOSED FORCE MAIN TO EXISTING FORCE MAIN
CONTRACTOR TO CONNECT TO EXISTING SEWER STUBOUT FOR MODIFIED EXISTING WELL
PROPERTY LINE
EXISTING INJECTION WELL NO. 1 (TO BE MODIFIED BY OTHERS)
SEWER CONNECTION TO INJECTION WELLS BY OTHERS
NEW CMU WALL TO MATCH EXISTING
EXISTING INJECTION WELL NO. 2 (TO BE MODIFIED BY OTHERS)
EXISTING 4" FORCE MAIN
EXISTING INJECTION WELL NO. 3 (TO BE MODIFIED BY OTHERS)
SEE SHEET C-104 ENLARGED PLAN 2 - EMERGENCY GENERATOR SET
BUILDING A
BUILDING B
BUILDING C
BUILDING D
BUILDING E
BUILDING F
BUILDING G
BUILDING H
BUILDING I
STAGE
EXISTING 4' WET WELL
NEW GENERATOR WITH CONCRETE PAD SEE SHEET E-103 FOR THE DETAILS
AKU STREET
PROPERTY LINE
KUHIO HIGHWAY

GENERAL SITE PLAN

SCALE 1" = 30'


1" = 30'
15
0
30
LEGEND
EXISTING SEWER PIPE
ELEVATION CONTOUR
CONCRETE
EXISTING BUILDING
PROPERTY LINE
ENLARGED SHEET BOUNDARY

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
GENERAL SITE PLAN

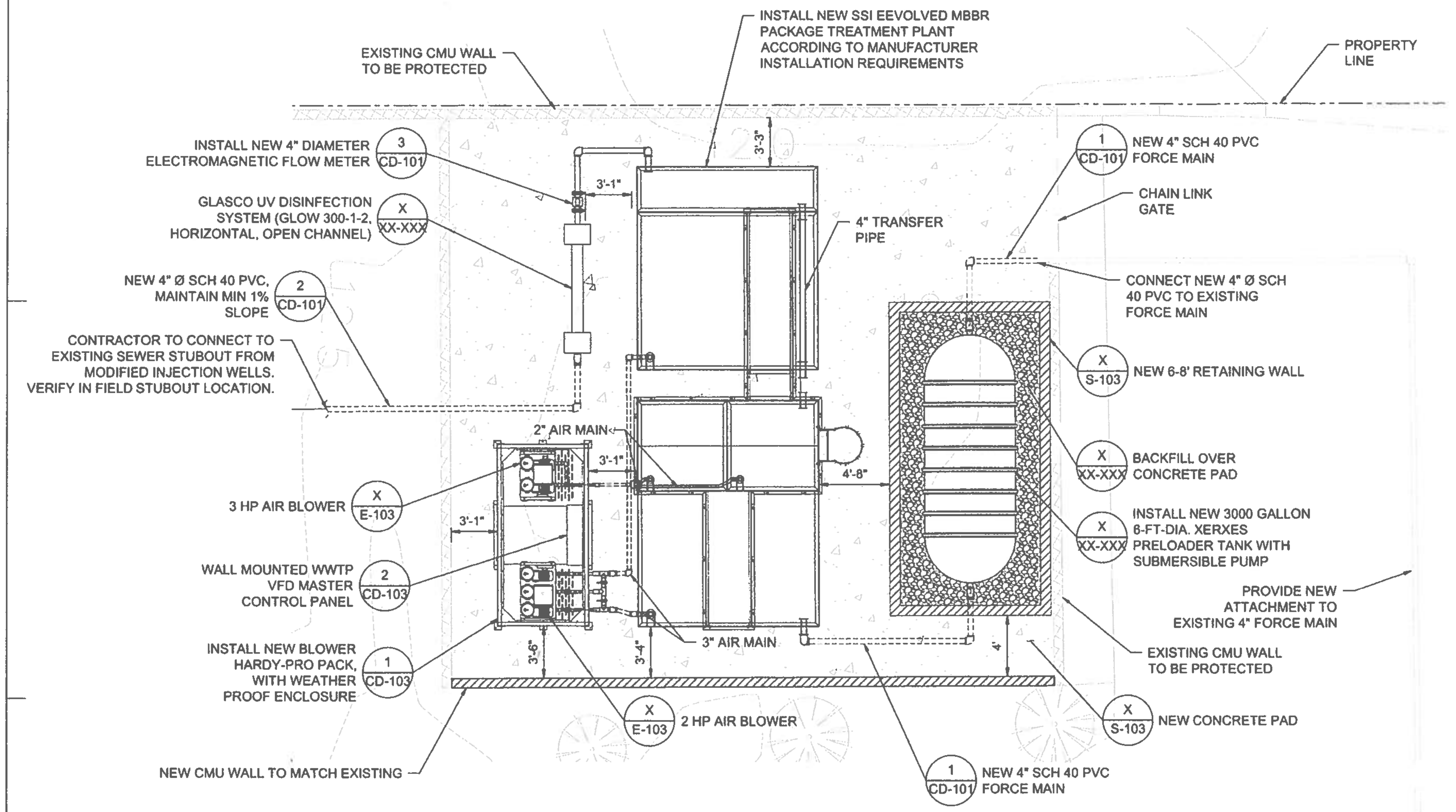
PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
C-201

SHEET NO. 7 OF 23

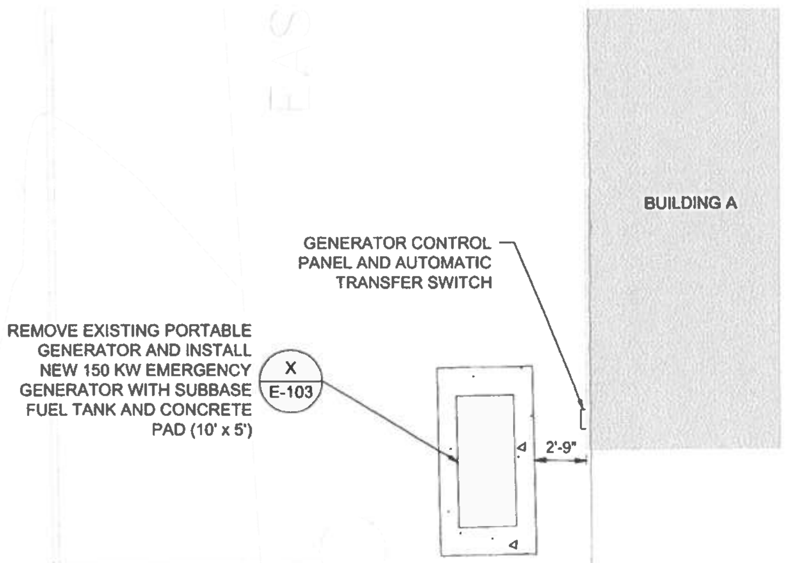
NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


EXISTING CMU WALL TO BE PROTECTED
INSTALL NEW SSI EEVOLVED MBBR PACKAGE TREATMENT PLANT ACCORDING TO MANUFACTURER INSTALLATION REQUIREMENTS
PROPERTY LINE
INSTALL NEW 4" DIAMETER ELECTROMAGNETIC FLOW METER 3 CD-101
GLASCO UV DISINFECTION SYSTEM (GLOW 300-1-2, HORIZONTAL, OPEN CHANNEL) X XX-XXX
NEW 4" Ø SCH 40 PVC, MAINTAIN MIN 1% SLOPE 2 CD-101
CONTRACTOR TO CONNECT TO EXISTING SEWER STUBOUT FROM MODIFIED INJECTION WELLS. VERIFY IN FIELD STUBOUT LOCATION.
3'-1"
3'-3"
4" TRANSFER PIPE
2" AIR MAIN
3'-1"
4'-8"
3 HP AIR BLOWER X E-103
3'-1"
WALL MOUNTED WWTP VFD MASTER CONTROL PANEL 2 CD-103
INSTALL NEW BLOWER HARDY-PRO PACK, WITH WEATHER PROOF ENCLOSURE 1 CD-103
3'-6"
3'-4"
3" AIR MAIN
4'
X E-103 2 HP AIR BLOWER
NEW CMU WALL TO MATCH EXISTING
1 CD-101 NEW 4" SCH 40 PVC FORCE MAIN
1 CD-101 NEW 4" SCH 40 PVC FORCE MAIN
CHAIN LINK GATE
CONNECT NEW 4" Ø SCH 40 PVC TO EXISTING FORCE MAIN
X S-103 NEW 6-8' RETAINING WALL
X XX-XXX BACKFILL OVER CONCRETE PAD
X XX-XXX INSTALL NEW 3000 GALLON 6-FT-DIA. XERXES PRELOADER TANK WITH SUBMERSIBLE PUMP
PROVIDE NEW ATTACHMENT TO EXISTING 4" FORCE MAIN
EXISTING CMU WALL TO BE PROTECTED
X S-103 NEW CONCRETE PAD

ENLARGED PLAN 1 - WWTP PLAN

SCALE 1" = 5'


GENERATOR CONTROL PANEL AND AUTOMATIC TRANSFER SWITCH
REMOVE EXISTING PORTABLE GENERATOR AND INSTALL NEW 150 KW EMERGENCY GENERATOR WITH SUBBASE FUEL TANK AND CONCRETE PAD (10' x 5') X E-103
2'-9"
BUILDING A

ENLARGED PLAN 2 - EMERGENCY GENERATOR INSET

SCALE 1" = 5'

1" = 5'
5 0 10

LEGEND

	EXISTING SEWER PIPE
12.0	ELEVATION CONTOUR
▨	CONCRETE
▨	EXISTING BUILDING
— · — · —	PROPERTY LINE
▨	CMU WALL

DRAFT NOT FOR CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME

CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE

ENLARGED PLANS

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

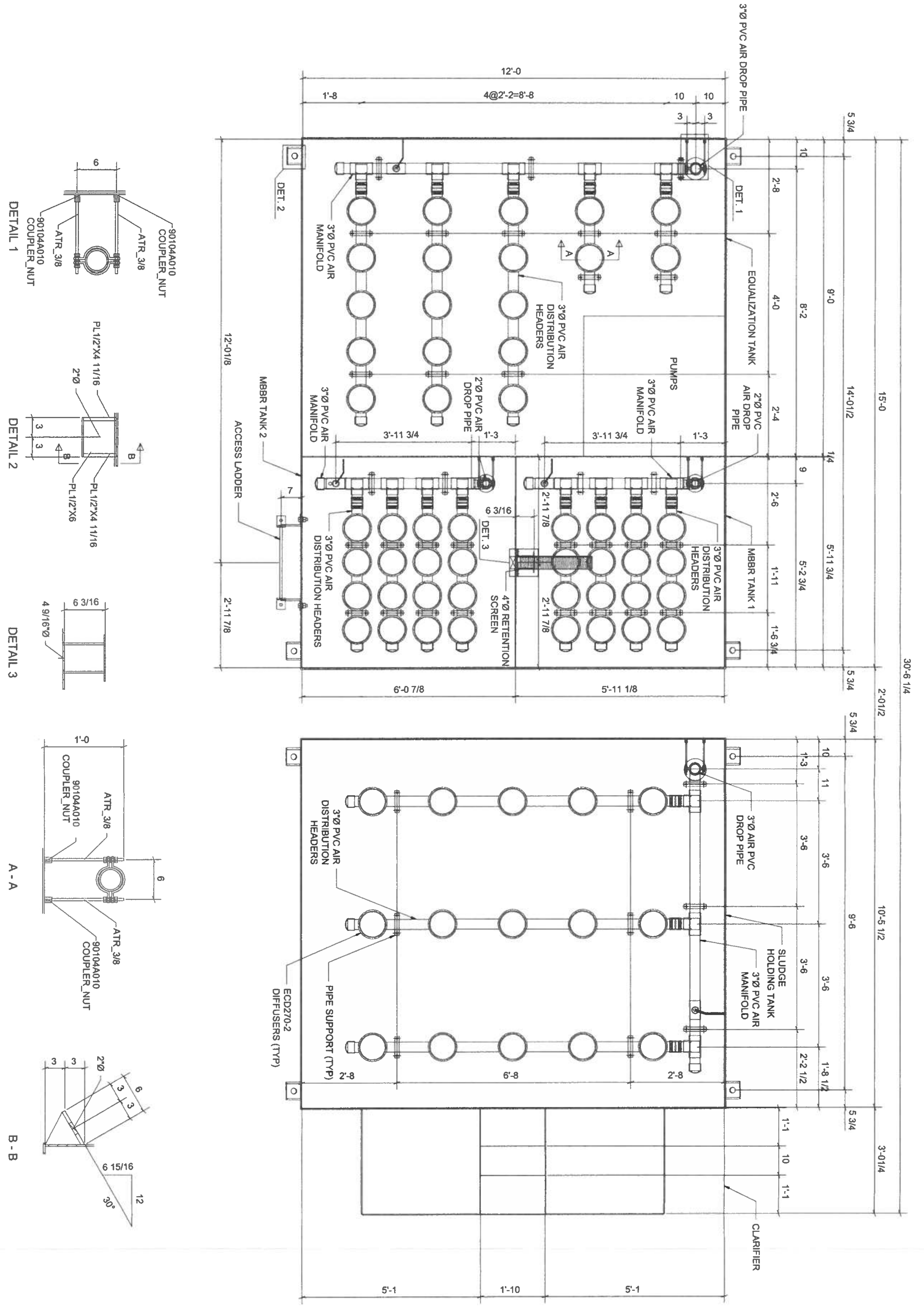
DRAWING NUMBER

C-202

SHEET NO. 8 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.



12'-0
1'-8
4@2'-2=8'-8
10
10
3
3
3'Ø PVC AIR DROP PIPE
DET. 1
DET. 2
DET. 3
3'Ø PVC AIR MANIFOLD
3'Ø PVC AIR DISTRIBUTION HEADERS
EQUALIZATION TANK
PUMPS
3'Ø PVC AIR MANIFOLD
2'Ø PVC AIR DROP PIPE
MBBR TANK 1
MBBR TANK 2
ACCESS LADDER
4'Ø RETENTION SCREEN
3'Ø PVC AIR DISTRIBUTION HEADERS
12'-01/8
2'-11 7/8
3'-11 3/4
1'-3
6 3/16
7
6'-0 7/8
5'-11 1/8
5 3/4
2'-8
4'-0
2'-4
2'-6
1'-11
1'-6 3/4
8'-2
9'-0
14'-01/2
15'-0
5'-2 3/4
5'-11 3/4
1/4
9
30'-6 1/4
2'-01/2
3'Ø AIR PVC DROP PIPE
SLUDGE HOLDING TANK
3'Ø PVC AIR MANIFOLD
PIPE SUPPORT (TYP)
ECD270-2 DIFFUSERS (TYP)
2'-8
6'-8
1'-3
11
3'-6
9'-6
10'-5 1/2
2'-2 1/2
1'-8 1/2
1'-1
3'-01/4
CLARIFIER
5'-1
1'-10
DETAIL 1
6
90104A010 COUPLER_NUT
ATR_3/8
DETAIL 2
PL1/2"X4 11/16
2'Ø
PL1/2"X6
DETAIL 3
6 3/16
4 9/16"Ø
A - A
1'-0
B - B
6 15/16
12
30°

WWTP BOTTOM LAYOUT WITH AERATION

NOT TO SCALE

DRAFT
NOT FOR
CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME

CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
WWTP BOTTOM LAYOUT
WITH AERATION

PROJECT NUMBER	DATE
22027_22038	JANUARY 28, 2024

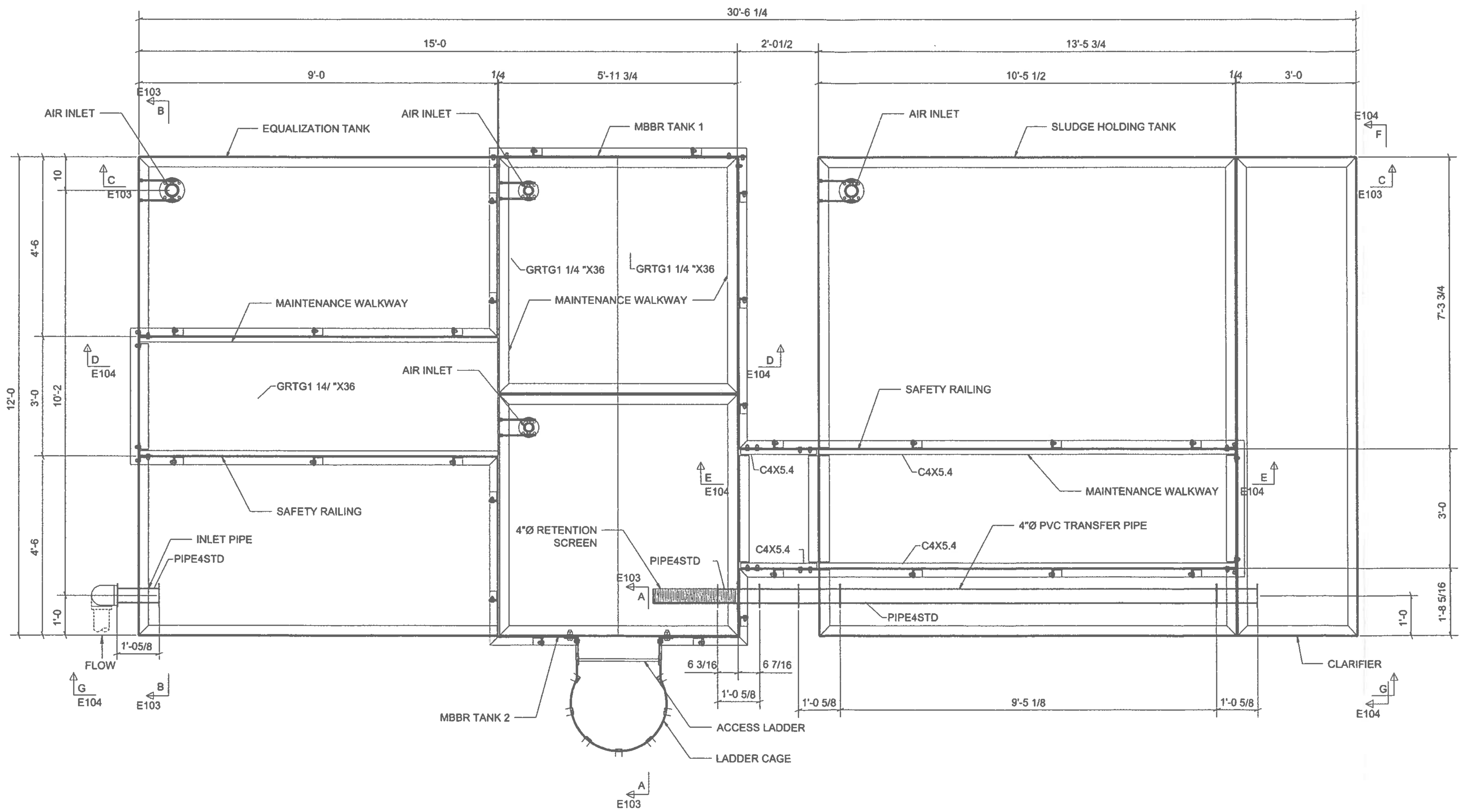
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
C-203

SHEET NO. 9 OF 23

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

DRAFT NOT FOR CONSTRUCTION


30'-6 1/4
15'-0
2'-01/2
13'-5 3/4
9'-0
1/4
5'-11 3/4
10'-5 1/2
1/4
3'-0
E103 B
AIR INLET
EQUALIZATION TANK
AIR INLET
MBBR TANK 1
AIR INLET
SLUDGE HOLDING TANK
E104 F
C E103
C E103
10
4'-6
12'-0
3'-0
10'-2
4'-6
1'-0
GRTG1 1/4 "X36
GRTG1 1/4 "X36
MAINTENANCE WALKWAY
MAINTENANCE WALKWAY
7'-3 3/4
D E104
GRTG1 14/ "X36
AIR INLET
D E104
SAFETY RAILING
C4X5.4
C4X5.4
MAINTENANCE WALKWAY
E E104
E E104
SAFETY RAILING
3'-0
4"Ø RETENTION SCREEN
4"Ø PVC TRANSFER PIPE
INLET PIPE
PIPE4STD
PIPE4STD
C4X5.4
C4X5.4
E103 A
PIPE4STD
1'-0
1'-8 5/16
1'-05/8
FLOW
6 3/16
6 7/16
CLARIFIER
1'-0 5/8
1'-0 5/8
9'-5 1/8
1'-0 5/8
G E104
B E103
MBBR TANK 2
ACCESS LADDER
G E104
LADDER CAGE
A E103

WWTP TOP PLAN VIEW

NOT TO SCALE

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

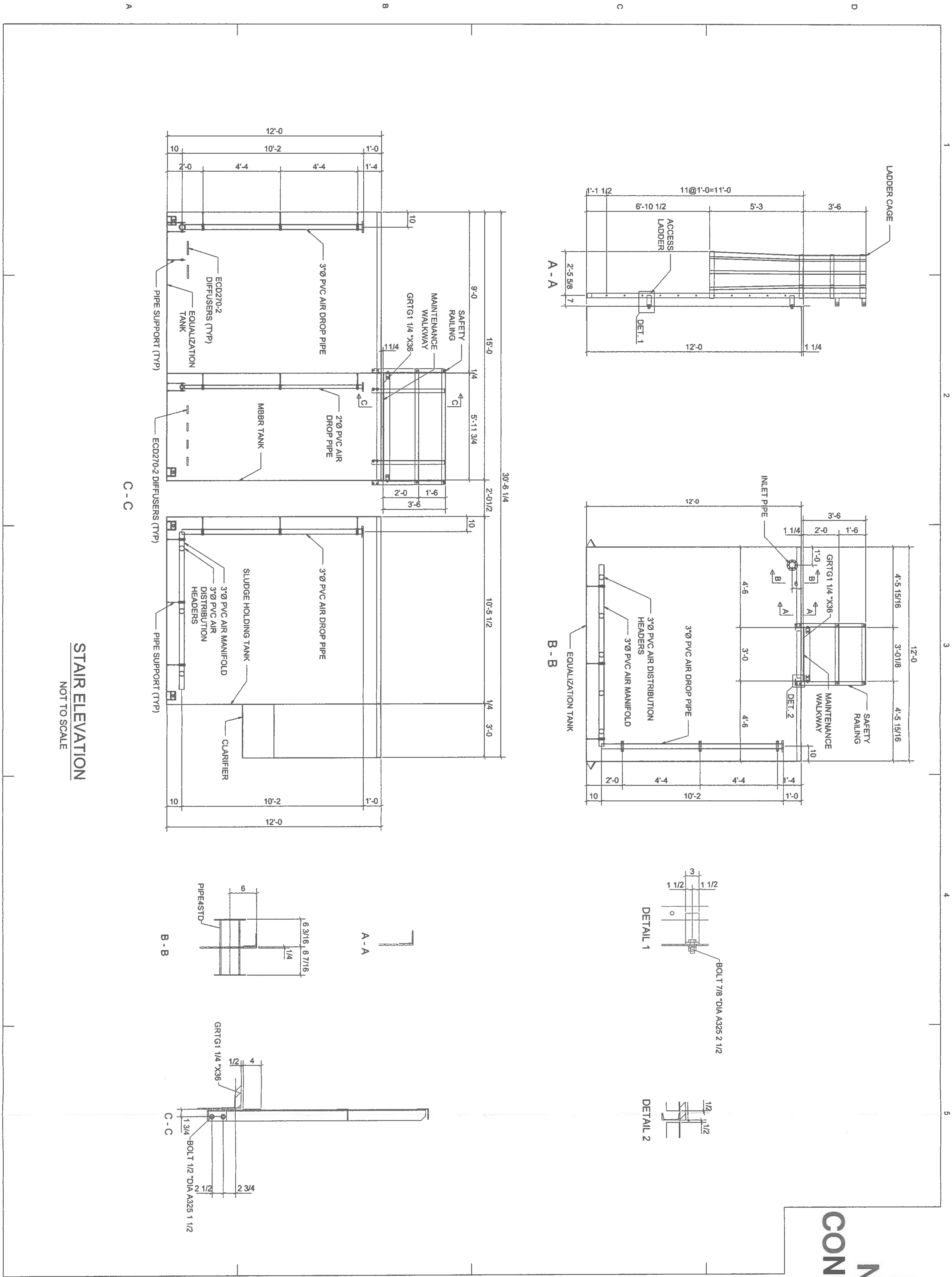
DRAWING TITLE
WWTP TOP PLAN VIEW

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
C-204
SHEET NO. 10 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


A
B
C
D
1
2
3
4
5
C - C
12'-0
10
10'-2
1'-0
2'-0
4'-4
4'-4
1'-4
10
9'-0
15'-0
1/4
5'-11 3/4
30'-6 1/4
2'-0 1/2
10
10'-5 1/2
1/4
3'-0
3"Ø PVC AIR DROP PIPE
ECD270-2 DIFFUSERS (TYP)
EQUALIZATION TANK
PIPE SUPPORT (TYP)
SAFETY RAILING
MAINTENANCE WALKWAY
GRTG1 1/4 "X36
1 1/4
2"Ø PVC AIR DROP PIPE
MBBR TANK
ECD270-2 DIFFUSERS (TYP)
C
C
2'-0
1'-6
3'-6
3"Ø PVC AIR DROP PIPE
SLUDGE HOLDING TANK
3"Ø PVC AIR MANIFOLD
3"Ø PVC AIR DISTRIBUTION HEADERS
PIPE SUPPORT (TYP)
CLARIFIER
10
10'-2
1'-0
12'-0
STAIR ELEVATION
NOT TO SCALE
A - A
1'-1 1/2
11@1'-0=11'-0
6'-10 1/2
5'-3
3'-6
LADDER CAGE
ACCESS LADDER
2'-5 5/8
7
DET. 1
12'-0
1 1/4
B - B
INLET PIPE
12'-0
3'-6
1 1/4
2'-0
1'-6
1'-0
6
B
B
A
A
GRTG1 1/4 "X36
4'-5 15/16
3'-0 1/8
12'-0
4'-5 15/16
4'-6
3'-0
4'-6
3"Ø PVC AIR DISTRIBUTION HEADERS
3"Ø PVC AIR MANIFOLD
3"Ø PVC AIR DROP PIPE
EQUALIZATION TANK
DET. 2
MAINTENANCE WALKWAY
SAFETY RAILING
10
2'-0
4'-4
4'-4
1'-4
10
10'-2
1'-0
PIPE4STD
6
6 3/16
6 7/16
1/4
B - B
A - A
3
1 1/2
1 1/2
DETAIL 1
BOLT 7/8 "DIA A325 2 1/2
GRTG1 1/4 "X36
1/2
4
C - C
1 3/4
BOLT 1/2 "DIA A325 1 1/2
2 1/2
2 3/4
DETAIL 2
1/2
1/2

DRAFT
NOT FOR
CONSTRUCTION

DRAWING NUMBER
C-205
SHEET NO. 11 OF 23

DRAWN | CHECKED | APPROVED

PROJECT NUMBER 2207_2038
DATE JANUARY 28, 2024

DRAWING TITLE
STAIR ELEVATION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

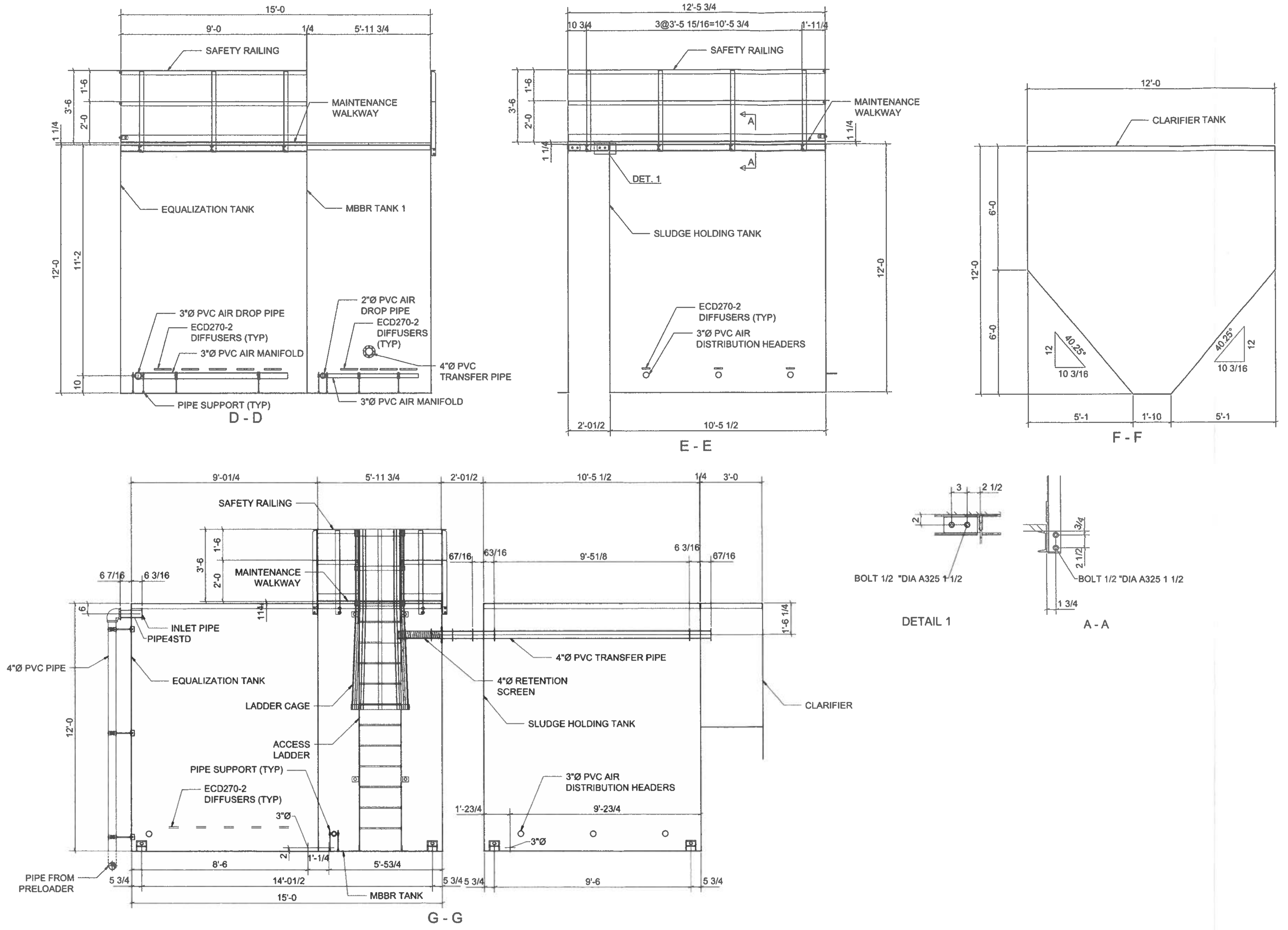
TMK: (4) 5-5-002:040

REVISION NUMBER/DESCRIPTION

LAULEA
ENGINEERING, LLC

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


15'-0
9'-0
1/4
5'-11 3/4
SAFETY RAILING
MAINTENANCE WALKWAY
EQUALIZATION TANK
MBBR TANK 1
3'-6
1'-6
2'-0
1 1/4
12'-0
11'-2
10
3"Ø PVC AIR DROP PIPE
ECD270-2 DIFFUSERS (TYP)
3"Ø PVC AIR MANIFOLD
2"Ø PVC AIR DROP PIPE
ECD270-2 DIFFUSERS (TYP)
4"Ø PVC TRANSFER PIPE
PIPE SUPPORT (TYP)
3"Ø PVC AIR MANIFOLD
D - D
12'-5 3/4
10 3/4
3@3'-5 15/16=10'-5 3/4
1'-11/4
DET. 1
SLUDGE HOLDING TANK
A
ECD270-2 DIFFUSERS (TYP)
3"Ø PVC AIR DISTRIBUTION HEADERS
2'-01/2
10'-5 1/2
E - E
12'-0
CLARIFIER TANK
6'-0
40.25°
12
10 3/16
5'-1
1'-10
F - F
9'-01/4
5'-11 3/4
2'-01/2
10'-5 1/2
3'-0
6 7/16
6 3/16
6
INLET PIPE
PIPE4STD
4"Ø PVC PIPE
114
67/16
63/16
9'-51/8
6 3/16
1'-6 1/4
4"Ø PVC TRANSFER PIPE
4"Ø RETENTION SCREEN
LADDER CAGE
ACCESS LADDER
PIPE SUPPORT (TYP)
CLARIFIER
3"Ø PVC AIR DISTRIBUTION HEADERS
1'-23/4
9'-23/4
3"Ø
2
1'-1/4
8'-6
14'-01/2
5'-53/4
5 3/4
9'-6
PIPE FROM PRELOADER
MBBR TANK
G - G
3
2 1/2
2
BOLT 1/2 "DIA A325 1 1/2
DETAIL 1
3/4
1 3/4
A - A

SECTION DETAILS
NOT TO SCALE

**DRAFT
NOT FOR
CONSTRUCTION**

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
SECTION DETAILS

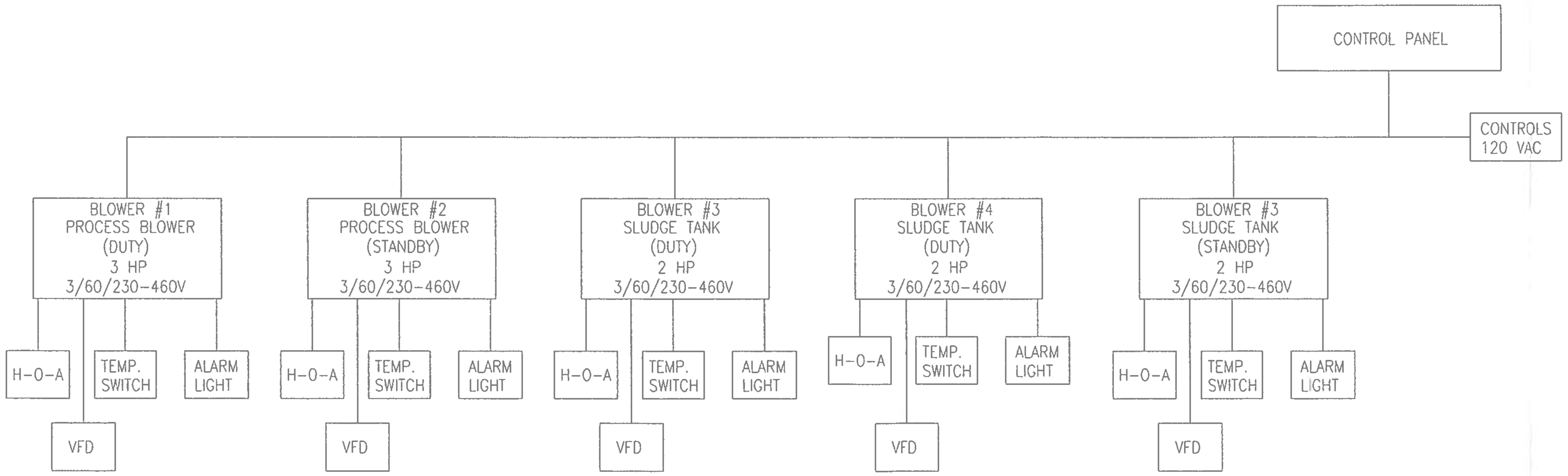
PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
C-206

SHEET NO. 12 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


CONTROL PANEL
CONTROLS 120 VAC
BLOWER #1 PROCESS BLOWER (DUTY) 3 HP 3/60/230-460V
BLOWER #2 PROCESS BLOWER (STANDBY) 3 HP 3/60/230-460V
BLOWER #3 SLUDGE TANK (DUTY) 2 HP 3/60/230-460V
BLOWER #4 SLUDGE TANK (DUTY) 2 HP 3/60/230-460V
BLOWER #3 SLUDGE TANK (STANDBY) 2 HP 3/60/230-460V
H-O-A
TEMP. SWITCH
ALARM LIGHT
VFD

NOTE:
VERIFY ALL ELECTRICAL WORK COMPLIES
WITH NEC, AND SPECIFICALLY NEC 110.11

PROCESS AND INSTRUMENTATION DIAGRAM

NOT TO SCALE

**DRAFT
NOT FOR
CONSTRUCTION**

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

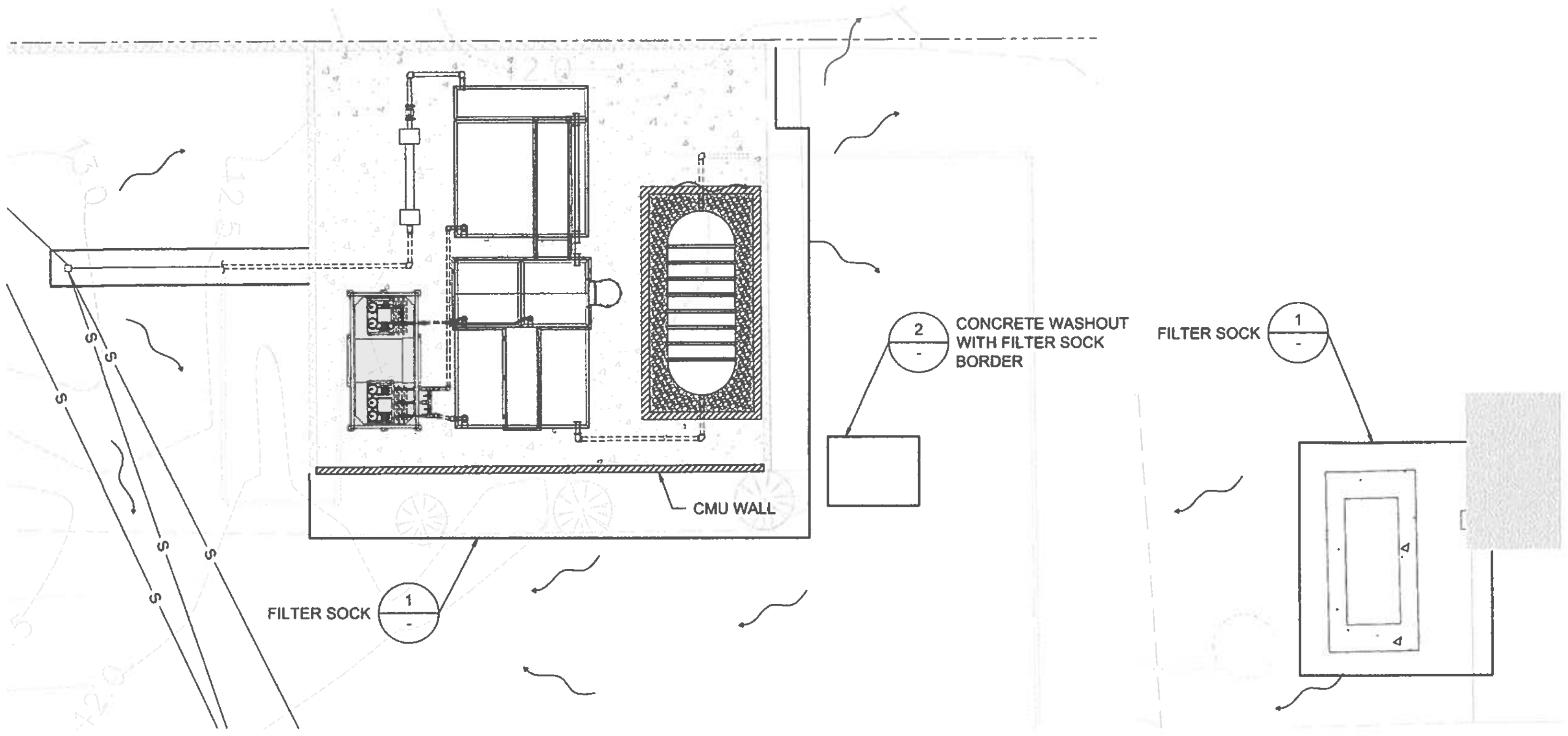
DRAWING TITLE
PROCESS AND INSTRUMENTATION DIAGRAM

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
C-301
SHEET NO. 13 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

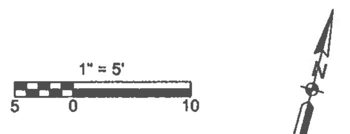

CONCRETE WASHOUT WITH FILTER SOCK BORDER
2
-
FILTER SOCK
1
-
CMU WALL
S
FILTER SOCK
1
-

WWTP SITE PLAN

EMERGENCY GENERATOR INSET

EROSION AND SEDIMENT CONTROL PLAN

1" = 5'



LEGEND

EXISTING SEWER PIPE

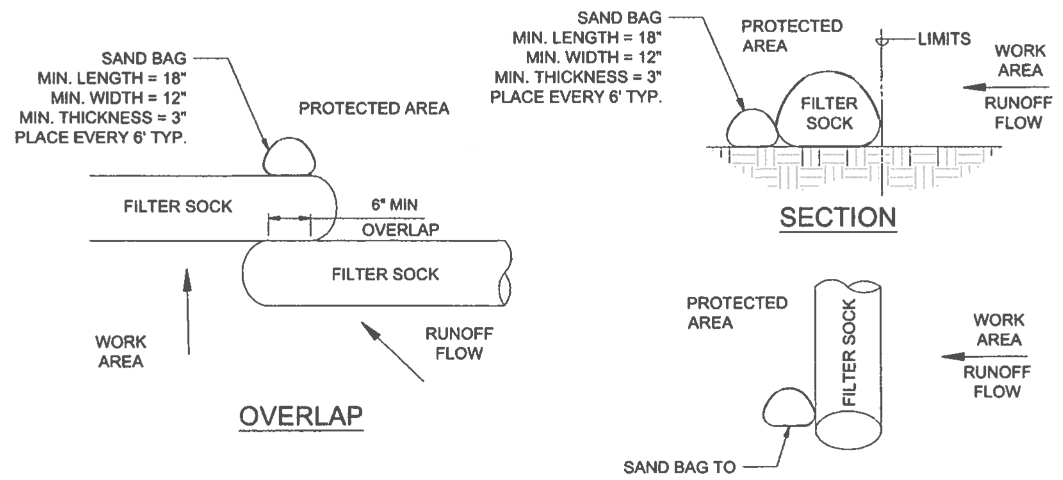
ELEVATION CONTOUR

▭ CONCRETE

∿ EXISTING SURFACE FLOW

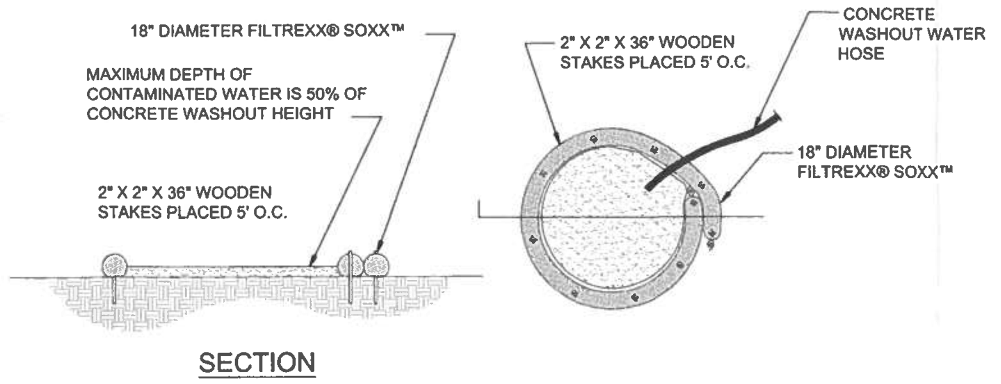
— COMPOST FILTER SOCK

-·-·- PROPERTY LINE


SAND BAG
MIN. LENGTH = 18"
MIN. WIDTH = 12"
MIN. THICKNESS = 3"
PLACE EVERY 6' TYP.
PROTECTED AREA
FILTER SOCK
6" MIN
OVERLAP
FILTER SOCK
WORK AREA
RUNOFF FLOW
OVERLAP
SAND BAG
MIN. LENGTH = 18"
MIN. WIDTH = 12"
MIN. THICKNESS = 3"
PLACE EVERY 6' TYP.
PROTECTED AREA
LIMITS
FILTER SOCK
WORK AREA
RUNOFF FLOW
SECTION
PROTECTED AREA
FILTER SOCK
WORK AREA
RUNOFF FLOW
SAND BAG TO SECURE EACH END
PLAN

FILTER SOCK (1 / EC-101)

1" = 5'


18" DIAMETER FILTREXX® SOXX™
MAXIMUM DEPTH OF CONTAMINATED WATER IS 50% OF CONCRETE WASHOUT HEIGHT
2" X 2" X 36" WOODEN STAKES PLACED 5' O.C.
SECTION
2" X 2" X 36" WOODEN STAKES PLACED 5' O.C.
CONCRETE WASHOUT WATER HOSE
18" DIAMETER FILTREXX® SOXX™

NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATIOJ FOR ADDED HEIGHT AND STABILITY
3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION

CONCRETE WASHOUT (2 / EC-101)

1" = 5'

EROSION & TEMPORARY DUST CONTROL & NOTES:

1. DURING CONSTRUCTION, PREVENTATIVE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
2. FUGITIVE DUST AND SOLID WASTE DISPOSAL DURING GRUBBING AND GRADING ACTIVITIES SHALL MEET REQUIREMENTS OR ADMINISTRATIVE RULES, TITLE I, CHAPTER 60, AIR POLLUTION CONTROL AND CHAPTER 58, SOLID WASTE MANAGEMENT CONTROL.
3. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
4. ALL EXPOSED AREAS TO BE LEFT EXPOSED FOR LONGER THAN SIX (6) WEEKS SHALL BE HYDROMULCH SEEDED WITH RYE GRASS.
5. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR MULCHED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED.

BEST MANAGEMENT PRACTICES NOTES:

1. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
2. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY.
3. GRASSING TO BE DONE AS FINISH GRADES ARE ESTABLISHED.
4. DIVERSION OF STORM RUNOFF AWAY FROM FILL SLOPED UNTIL GRASSING ON FILL SLOPES ARE ESTABLISHED.
5. PROVIDE STABILIZED CONSTRUCTION ENTRANCE.
6. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY THE CONTRACTOR AFTER COMPLETION OF THE PROJECT PRIOR TO FINAL ACCEPTANCE OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

NOTES:

1. STABILIZED CONSTRUCTED ENTRANCE SHALL BE MAINTAINED AT THE EGRESS AND INGRESS TO THE SITE.
2. DUST CONTROL SHOULD BE APPLIED TO REDUCE DUST EMISSIONS. CONTRACTOR SHALL WATER DURING CONSTRUCTION TO CONTROL DUST.
3. ALL NEW & EXISTING STORM DRAIN INLETS ON SITE AND THOSE OFFSITE WHICH MAY RECEIVE RUNOFF FROM THE SITE SHALL USE AN INLET PROTECTION DEVICE, THE CONTRACTOR SHALL REGULARLY INSPECT ALL CATCH BASINS/INLETS AND REMOVE ACCUMULATED SILT AND DEBRIS, FLUSHING IS PROHIBITED.

DRAFT
NOT FOR
CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
EROSION AND SEDIMENT CONTROL PLAN

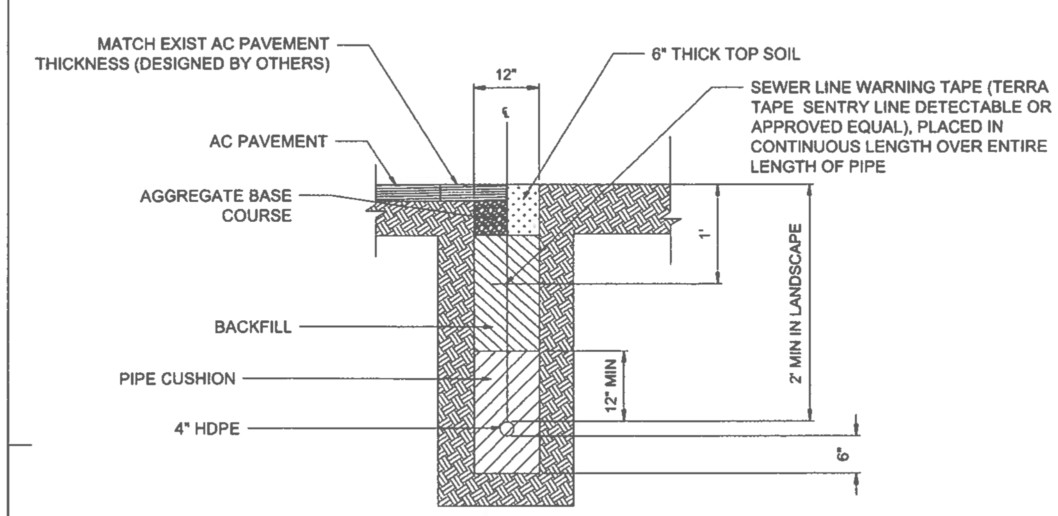
PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
EC-101

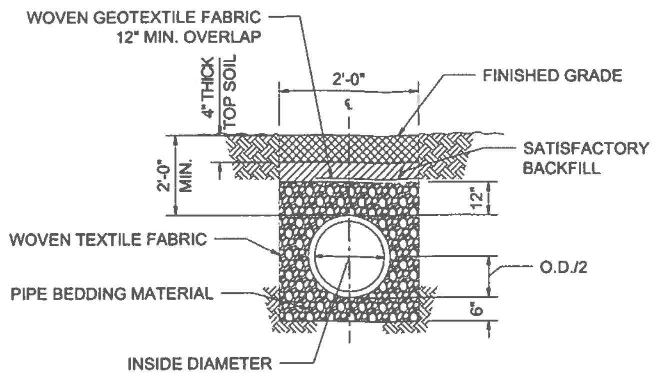
SHEET NO. 14 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

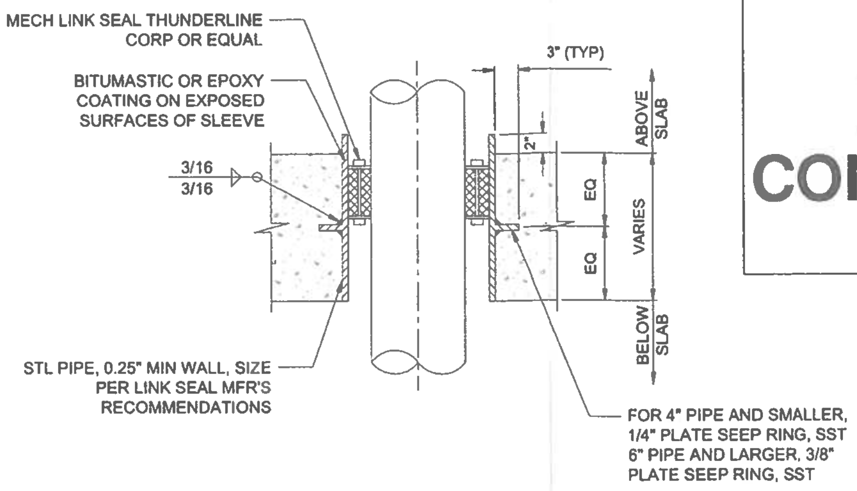
© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


MATCH EXIST AC PAVEMENT THICKNESS (DESIGNED BY OTHERS)
AC PAVEMENT
AGGREGATE BASE COURSE
BACKFILL
PIPE CUSHION
4" HDPE
12"
℄
6" THICK TOP SOIL
SEWER LINE WARNING TAPE (TERRA TAPE SENTRY LINE DETECTABLE OR APPROVED EQUAL), PLACED IN CONTINUOUS LENGTH OVER ENTIRE LENGTH OF PIPE
1'
2' MIN IN LANDSCAPE
12" MIN
6"

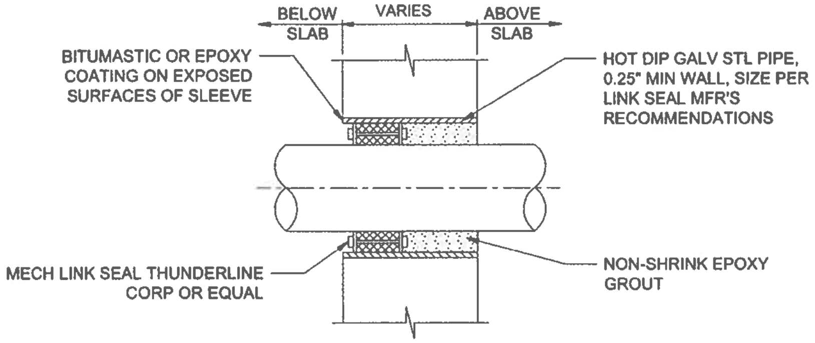
FORCE MAIN TRENCH DETAILS ① CD-101
NOT TO SCALE


WOVEN GEOTEXTILE FABRIC 12" MIN. OVERLAP
4" THICK TOP SOIL
2'-0"
℄
FINISHED GRADE
SATISFACTORY BACKFILL
2'-0" MIN.
12"
WOVEN TEXTILE FABRIC
O.D./2
PIPE BEDDING MATERIAL
6"
INSIDE DIAMETER

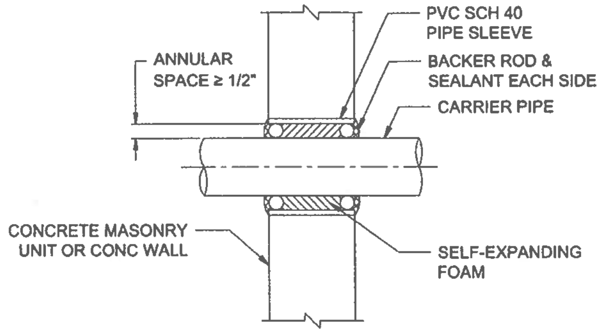
GRAVITY SEWER LINE TRENCH DETAIL ② CD-101
NOT TO SCALE


MECH LINK SEAL THUNDERLINE CORP OR EQUAL
BITUMASTIC OR EPOXY COATING ON EXPOSED SURFACES OF SLEEVE
3/16
3/16
3" (TYP)
2"
EQ
EQ
ABOVE SLAB
VARIES
BELOW SLAB
STL PIPE, 0.25" MIN WALL, SIZE PER LINK SEAL MFR'S RECOMMENDATIONS
FOR 4" PIPE AND SMALLER, 1/4" PLATE SEEP RING, SST 6" PIPE AND LARGER, 3/8" PLATE SEEP RING, SST

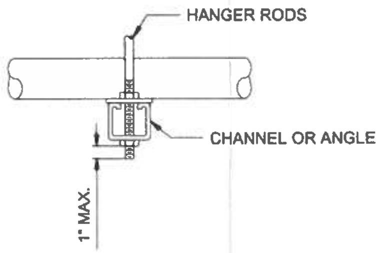
TYPICAL PIPE SLEEVE - NEW FLOOR SLAB ③ CD-101
NOT TO SCALE


BELOW SLAB
VARIES
ABOVE SLAB
BITUMASTIC OR EPOXY COATING ON EXPOSED SURFACES OF SLEEVE
HOT DIP GALV STL PIPE, 0.25" MIN WALL, SIZE PER LINK SEAL MFR'S RECOMMENDATIONS
MECH LINK SEAL THUNDERLINE CORP OR EQUAL
NON-SHRINK EPOXY GROUT

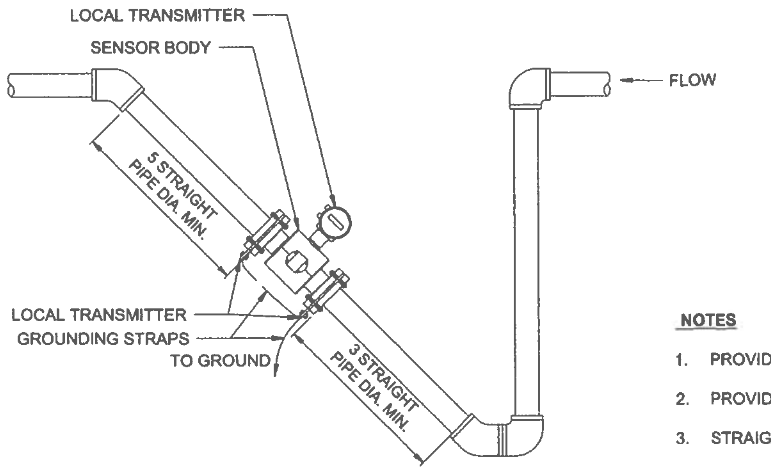
TYPICAL PIPE SLEEVE - CONCRETE MASONRY UNIT WALL ④ CD-101
NOT TO SCALE


ANNULAR SPACE ≥ 1/2"
PVC SCH 40 PIPE SLEEVE
BACKER ROD & SEALANT EACH SIDE
CARRIER PIPE
CONCRETE MASONRY UNIT OR CONC WALL
SELF-EXPANDING FOAM

TYPICAL SMALL PIPING PENETRATION - ORDINARY ⑤ CD-101
NOT TO SCALE


HANGER RODS
CHANNEL OR ANGLE
1" MAX.

HORIZONTAL PIPE SUPPORT DETAIL ⑥ CD-101
NOT TO SCALE


LOCAL TRANSMITTER
SENSOR BODY
FLOW
5 STRAIGHT PIPE DIA. MIN.
LOCAL TRANSMITTER GROUNDING STRAPS TO GROUND
3 STRAIGHT PIPE DIA. MIN.

NOTES

1. PROVIDE GROUNDING RING(S) AS RECOMMENDED BY MANUFACTURER.
2. PROVIDE SENSOR LINING TO PREVENT BUILDUP ON METER.
3. STRAIGHT PIPE DIAMETERS SHOWN UNLESS OTHERWISE ON THE DRAWINGS.

MAGNETIC FLOW METER ⑦ CD-101
NOT TO SCALE

DRAFT
NOT FOR
CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

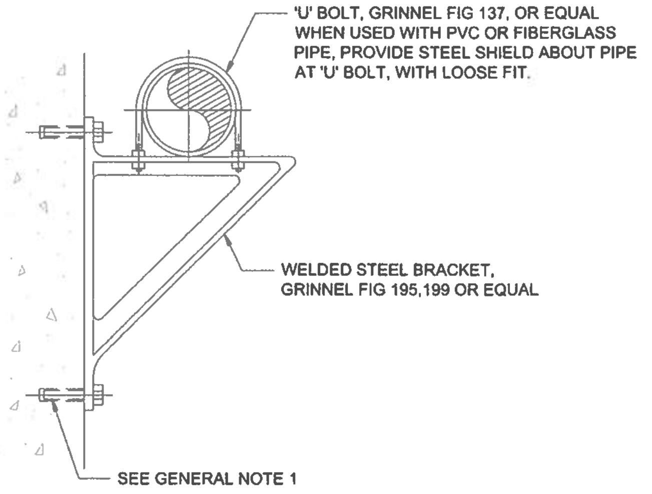
DRAWING TITLE
WWTP DETAILS 1

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
CD-101
SHEET NO. 15 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

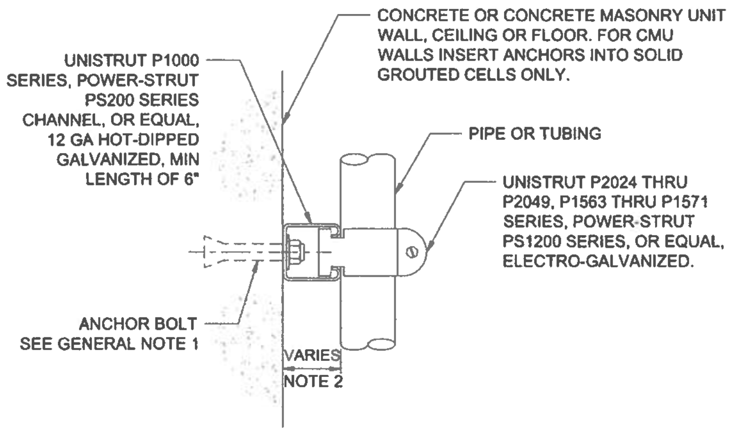
© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.


'U' BOLT, GRINNEL FIG 137, OR EQUAL WHEN USED WITH PVC OR FIBERGLASS PIPE, PROVIDE STEEL SHIELD ABOUT PIPE AT 'U' BOLT, WITH LOOSE FIT.
WELDED STEEL BRACKET, GRINNEL FIG 195,199 OR EQUAL
SEE GENERAL NOTE 1

NOTE

1. GALVANIZE ALL PARTS AFTER FABRICATION WHERE SUBMERGED OR LOCATED OVER WATER, STEEL SHIELDS, BRACKETS, 'U' BOLTS, AND BOLTS ARE TO BE TYPE 316 STAINLESS STEEL.

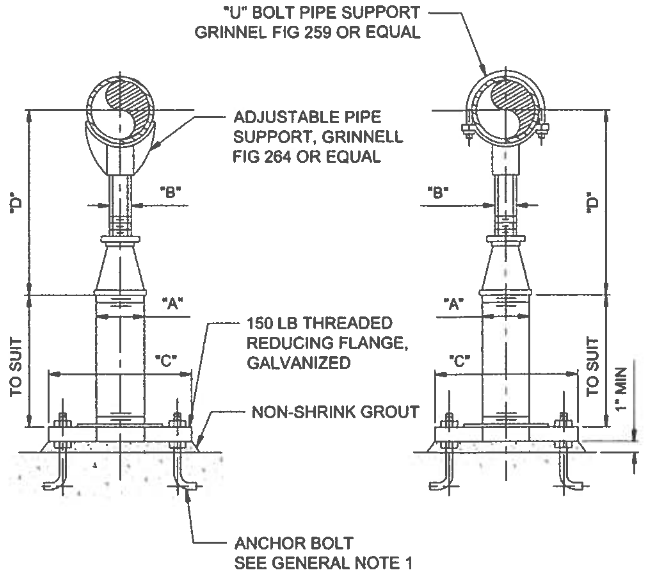
TYPICAL PIPE BRACKET (1 / CD-102)
NOT TO SCALE


CONCRETE OR CONCRETE MASONRY UNIT WALL, CEILING OR FLOOR. FOR CMU WALLS INSERT ANCHORS INTO SOLID GROUTED CELLS ONLY.
UNISTRUT P1000 SERIES, POWER-STRUT PS200 SERIES CHANNEL, OR EQUAL, 12 GA HOT-DIPPED GALVANIZED, MIN LENGTH OF 6"
PIPE OR TUBING
UNISTRUT P2024 THRU P2049, P1563 THRU P1571 SERIES, POWER-STRUT PS1200 SERIES, OR EQUAL, ELECTRO-GALVANIZED.
ANCHOR BOLT SEE GENERAL NOTE 1
VARIES
NOTE 2

NOTES

1. MIN. OF 1 CLAMP WITHIN 6" OF EACH FITTING AND VALVE.
2. CHANNEL HEIGHT AND/OR MULTIPLE CHANNEL CONFIGURATIONS AS REQUIRED FOR INSTALLATION CLEARANCES. REVISE ANCHORAGE LENGTH TO ACHIEVE MIN EMBEDMENT SHOWN ABOVE.
3. REMOVE BURRS AND SMOOTH ALL CUT EDGES OF FRAMING SUPPORTS. PROVIDE END CAPS.

TYPICAL METALLIC SMALL PIPING SUPPORT (2 / CD-102)
NOT TO SCALE


"U" BOLT PIPE SUPPORT GRINNEL FIG 259 OR EQUAL
ADJUSTABLE PIPE SUPPORT, GRINNELL FIG 264 OR EQUAL
150 LB THREADED REDUCING FLANGE, GALVANIZED
NON-SHRINK GROUT
ANCHOR BOLT SEE GENERAL NOTE 1
"D"
"B"
"A"
"C"
TO SUIT
1" MIN

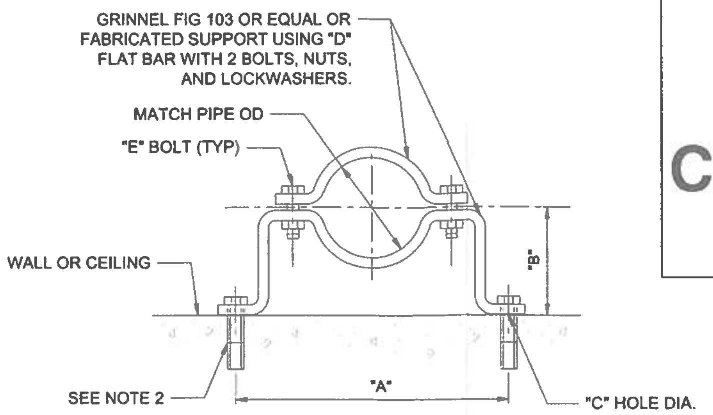
NOTE

1. UNDER VALVES, METERS OR OTHER SPECIAL APPURTENANCES A FABRICATED SUPPORT PIECE MAY BE UTILIZED IF CONSTRUCTED TO EQUIVALENT DIMENSIONS.

ADJUSTABLE PIPE SUPPORT
APPROX. DIMENSIONS IN INCHES

PIPE DIA	"A"	"B"	"C"	"D" MIN	"D" MAX
2-1/2	2-1/2	1	9	8	11-1/2
3	2-1/2	1	9	8-1/4	11-3/4
4	3	2-1/2	9	10-1/4	14

TYPICAL ADJUSTABLE PIPE SUPPORT (3 / CD-102)
NOT TO SCALE


GRINNEL FIG 103 OR EQUAL OR FABRICATED SUPPORT USING "D" FLAT BAR WITH 2 BOLTS, NUTS, AND LOCKWASHERS.
MATCH PIPE OD
"E" BOLT (TYP)
WALL OR CEILING
SEE NOTE 2
"A"
"B"
"C" HOLE DIA.

NOTES

1. PIPE SUPPORT SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION; BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED OR ELECTRO-GALVANIZED OR CADMIUM PLATED.
2. ON CEILINGS OR WALLS, USE APPROPRIATE INSERTS. FASTEN SUPPORTS TO INSERT WITH BOLTS AND NUTS AS FOLLOWS:

PIPING DIAMETER	BOLT DIAMETER
3/4" TO 1-1/2"	3/8"
2" TO 4"	1/2"
5" TO 8"	5/8"

ALTERNATELY, 1/2" DIA CAST-IN-PLACE ANCHOR BOLTS MAY BE USED FOR PIPING DIAMETERS 2" TO 4", 5/8" DIA CAST-IN-PLACE ANCHOR BOLTS FOR PIPING DIAMETERS 5" TO 8". MINIMUM ANCHOR EMBEDMENT IS 6". CONCRETE INSERTS SHALL BE ONE-PIECE WITH LENGTH A MINIMUM OF 6" LONGER THAN DIMENSION "A", UNISTRUT P 3253 TO P 3270, POWER-STRUT PS 349 SERIES, OR EQUAL.

SEE GENERAL NOTE 1.

3. WHEN SUPPORTING PLASTIC OR FIBERGLASS PIPE, PROVIDE 28 GA GALVANIZED STEEL SHEET METAL SHIELD (LENGTH = 3 TIMES PIPE DIAMETER) AROUND PIPE AT CLAMP. COPPER AND BRASS TUBING AND PIPING TO HAVE 2" WIDE STRIP OF 1/8" THICK EPDM RUBBER SHEETING SEPARATING PIPING FROM CLAMP.

			DIMENSIONS IN INCHES			
PIPE DIA	"A"	"B"	"C" HOLE DIA	"D" FLAT BAR SIZE CARBON STEEL	"E" BOLT SIZE	MAX LOAD RATING LBS
2	8-5/16	3-1/2	9/16	1/4 X 1-1/4	1/2 X 1-1/2	400
3	9-1/8	4-1/16	9/16	1/4 X 1-1/4	1/2 X 1-1/2	400
4	10-9/16	4-9/16	9/16	1/4 X 1-1/4	1/2 X 1-1/2	600

TYPICAL PIPE CLAMP FOR INDIVIDUAL PIPES (4 / CD-102)
NOT TO SCALE

GENERAL NOTES

1. ALL POST INSTALLED ANCHORS SHALL HAVE A CURRENT ICC EVALUATION REPORT AND SHALL COMPLY WITH THE REQUIREMENTS OF THE 2006 IBC. FOR CONCRETE HILTI KWIK BOLT TZ EXPANSION ANCHORS, HIT-RE 500-SD ADHESIVE ANCHOR SYSTEM, OR EQUAL, SHALL BE USED. FOR MASONRY HILTI KWIK III EXPANSION ANCHOR, HIT-HY 150 ADHESIVE ANCHOR SYSTEM, OR EQUAL, SHALL BE USED.

DRAFT NOT FOR CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT

5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714

TMK: (4) 5-5-002:040

DRAWING TITLE
WWTP DETAILS 2

PROJECT NUMBER: 22027_22038
DATE: JANUARY 28, 2024
DRAWN:
CHECKED:
APPROVED:

DRAWING NUMBER
CD-102
SHEET NO. 16 OF 23

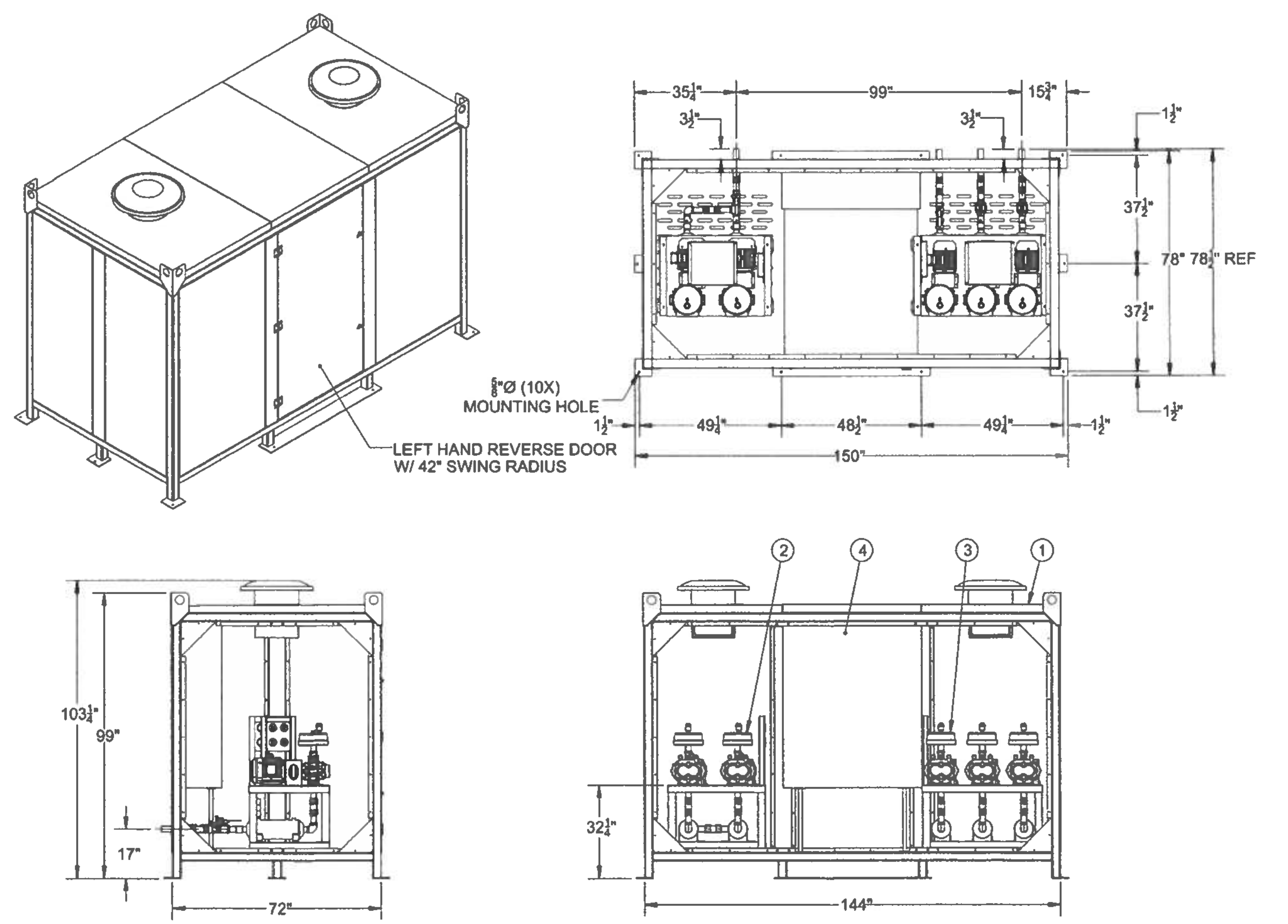
NOT FOR CONSTRUCTION: 60% DESIGN SET

© 2025 LAULEA ENGINEERING, LLC ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF LAULEA ENGINEERING, LLC AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAULEA ENGINEERING, LLC.

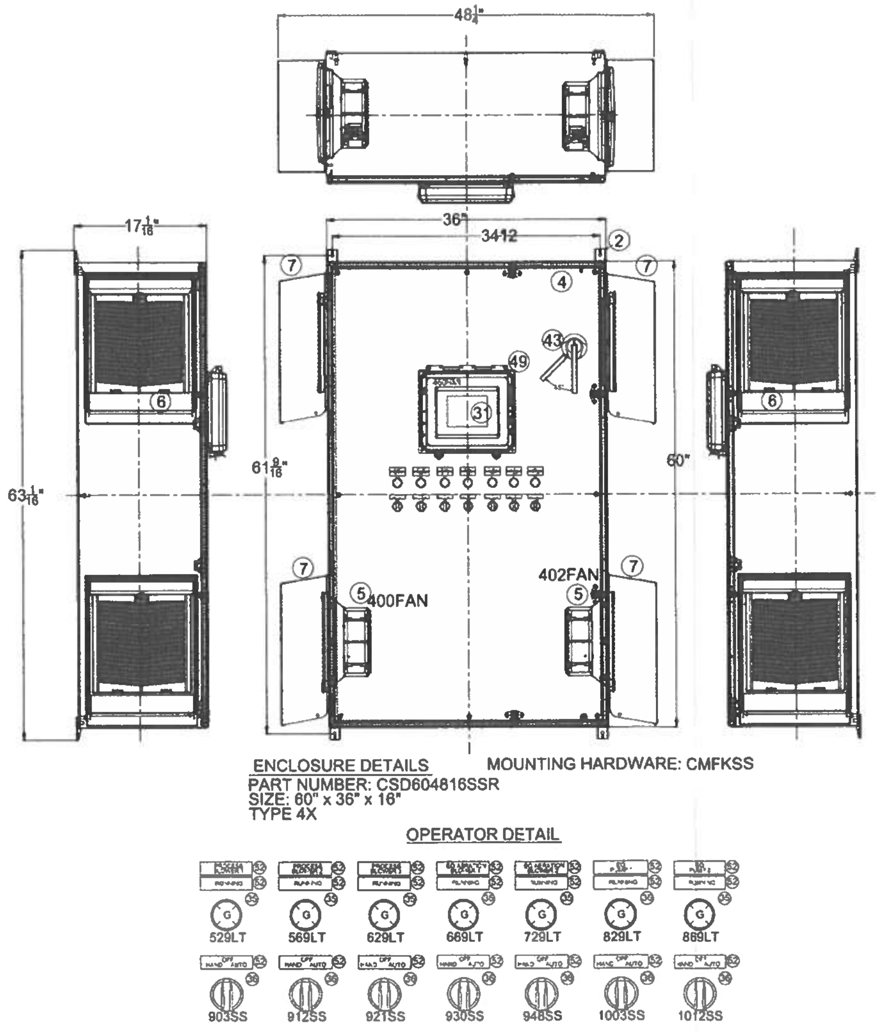
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	PC144X72X95	SOUND ENCLOSURE - GALVANEALED PANEL, CARBON STEEL STRUCTURE, INTERIOR LIGHTING W/ SWITCH & 120V OUTLETS	1
2	39094-1	PROCESS BLOWER - HPP-MD3002-3HP-1.5-1.5	1
3	39094-2	SOLID HOLDING & EQ TANK BLOWERS - HPP-MD3002-2HP-1.5-1.5	1
4	SUPPLIED BY ENHANCE AUTOMATION	VFD CONTROL PANEL, NEMA 3R ENCLOSURE, 208 VAC CIRCUIT BREAKER DISCONNECT VFD DRIVE PACKAGE	1

NOTES

1. ITEMS MARKED * ARE SHIPPED LOOSE FOR FIELD MOUNTING
2. ALL PIPING ATTACHED TO THIS ASSEMBLY MUST BE INDEPENDENTLY SUPPORTED AND PROPERLY ISOLATED. FAILURE TODO SO COULD RESULT IN DAMAGE TO THE BLOWER PACKAGE.
3. ANCHOR BOLTS & HARDWARE FOR CONNECTING SHIP LOOSE ITEMS IS TO BE SUPPLIED BY INSTALLING CONTRACTOR
4. OIL SUPPLIED WITH THE BLOWER IS FOR STORAGE PROTECTION AND START-UP SERVICE ONLY AND SHOULD BE REPLACED WITH AN APPROVED SYNTHETIC OIL. PLEASE REFER TO THE PACKAGE IOM FOR FURTHER DETAIL.
5. FOR A BLOWER PACKAGE IN STORAGE, STORE INDOORS AND ROTATE THE SHAFT FOUR REVOLUTIONS EVERY TWO 5. WEEKS.
6. PANEL CONSTRUCTION IS CARBON STEEL LINED WITH 2" SOUND FOAM BOLTED CONSTRUCTION
7. ENCLOSURE FINISH IS TO BE POWDER COATED AZURE BLUE
8. THERMOSTAT AND CONDUIT BOX LOCATED INSIDE ENCLOSURE. CUSTOMER TO SUPPLY 120 VOLTS A/C.


35¾"
99"
15¾"
3½"
3½"
1½"
37½"
78" 78¼" REF
37½"
1½"
⅝"Ø (10X)
MOUNTING HOLE
1½"
49¼"
48½"
49¼"
1½"
150"
LEFT HAND REVERSE DOOR
W/ 42" SWING RADIUS
2
4
3
1
103¾"
99"
17"
72"
32¼"
144"

BLOWER ENCLOSURE DETAIL
NOT TO SCALE
1
CD-103


48¼"
17 1/16"
63 1/16"
36"
3412
2
4
7
43
49
31
6
61 9/16"
60"
5
400FAN
402FAN
ENCLOSURE DETAILS
PART NUMBER: CSD604816SSR
SIZE: 60" x 36" x 16"
TYPE 4X
MOUNTING HARDWARE: CMFKSS
OPERATOR DETAIL
529LT
569LT
629LT
669LT
729LT
829LT
869LT
903SS
912SS
921SS
930SS
948SS
1003SS
1012SS

ENHANCED AUTOMATION CONTROL PANEL DETAIL
NOT TO SCALE
2
CD-103

DRAFT
NOT FOR
CONSTRUCTION

LAULEA
ENGINEERING, LLC

REVISION NUMBER/DESCRIPTION

PROJECT NAME
CHING YOUNG VILLAGE
WWTP REPLACEMENT
5-5190 KUHIO HIGHWAY,
HANALEI, KAUAI, HAWAII 96714
TMK: (4) 5-5-002:040

DRAWING TITLE
WWTP DETAILS 3

PROJECT NUMBER	DATE	
22027_22038	JANUARY 28, 2024	
DRAWN	CHECKED	APPROVED

DRAWING NUMBER
CD-103
SHEET NO. 17 OF 23

NOT FOR CONSTRUCTION: 60% DESIGN SET

Attachment C- Basis of Design and Engineering Report (without attachments)

Basis of Design Engineering Report

CHING YOUNG VILLAGE

WASTEWATER TREATMENT PLANT REPLACEMENT
5-5190 KUHIO HIGHWAY, HANALEI, HI 96714
TMK: (4) 5-5-002:040

Prepared For:
Ching Young Village, Ltd.
5-5190 Kuhio Highway
Hanalei, Hawaii 96714

Prepared By:
LAULEA
ENGINEERING, LLC
1127 11th Avenue #302
Honolulu, Hawaii 96816

March 9, 2025

TABLE OF CONTENTS

1. PROJECT BACKGROUND 1
2. DESIGN CRITERIA 1
3. GENERAL WASTEWATER TREATMENT SYSTEM DESCRIPTION 2
  3.1 Existing Wet Well/Lift Station 2
  3.2 Preloader and Headworks 2
  3.3 Treatment System: SSI EEVolved^{TM} MBBR 2
  3.4 Utility Enclosure and WWTP Perimeter Fencing/Wall 3
  3.5 Sludge Holding Tank 3
  3.6 Electromagnetic Flowmeter 3
4. PROCESS PARAMETERS 3
  4.1 Process Mass Balance 4
5. ELECTRICAL AND EMERGENCY POWER 5
6. UV DISINFECTION 5
7. EXISTING WASTEWATER EFFLUENT DISPOSAL AND SAMPLING 5
8. SCUM, FOG AND SLUDGE MANAGEMENT PLAN 5
9. CONTROLS AND INSTRUMENTATION 5
10. OPERATIONS AND MAINTENANCE (O&M) 5
11. ESTIMATED PROCUREMENT AND CONSTRUCTION SCHEDULE 6
12. ESTIMATED EQUIPMENT PROCUREMENT ROM COSTS 6
13. REFERENCES 6

ATTACHMENTS

Attachment A- Preliminary Design Plans
Attachment B- SSI Aeration Treatment Package Design/Equipment Summary
Attachment C- Influent Laboratory Report
Attachment D- BWS Billing and Consumption data
Attachment E- Tenant Flow Data

ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

BOD5	Biochemical Oxygen Demand, 5-day
CMU	Concrete Masonry Unit
COD	Chemical Oxygen Demand
COTG	Clean-Out to Grade
CYV	Ching Young Village
DOH WWB	State of Hawaii Department of Health Wastewater Branch
DOH SDWB	State of Hawaii Department of Health Safe Drinking Water Branch
EPA	United States Environmental Protection Agency
F/M	Food to microorganism ratio
FOG	Fats, Oils, and/or Grease
ft^2	Square foot or square feet
GI	Grease Interceptor
gpd	Gallon per day
HAR 11-62	Hawaii Administrative Rules Title 11 Chapter 62
L	Liter
lb	Pounds
mg	Milligrams
mg/L	Milligrams per liter
mpi	Minutes per inch
OSHA	Occupational Safety and Health Administration
Owner	Subject property owner, which may be Owner(s), Trustee(s), Executor(s), etc.
pH	Potential of hydrogen; quantitative measure of the acidity or alkalinity of a solution
SMA	Special Management Area
TMK	Tax Map Key
WWTP	Wastewater Treatment Plant

1. PROJECT BACKGROUND

The project involves property with the following information:

Tax Map Keys ("TMK"): (4) 5-5-002:040
Project Address: 5-5190 Kuhio Highway, Hanalei, HI 96714
Total Land Area: 2.485 acres
Property Class: *CG General Commercial*

Ching Young Village (CYV) is situated in Hanalei on the northern coast of the island of Kauai. The facility is bordered by residential properties and undeveloped land to the north and another shopping mall, Hanalei Center, directly south across Kuhio Hhighway. The nearest side streets are Aku Road to the east and Malolo Road to the west. There areCYV contains nine (9) buildings (lLabeled alphabetically A-I), occupied by and forty-four (44) commercial businessestenants within the buildings, which operate properties. There are one (1)2 public-use restroom facilitys (one men's, one women's), and nine (9) tenant-use restroom facilities in each units., Elevenand (11) tenants operate restaurants offering either full-seating or takeout onlyorders. The current existing WWTP wasis designed for 15,000 GPD with an actual capacity of 7,000 GPD, and presently it consists of an equalization basin, a Westech Corporation patented STM-Aerator, an extended aeration tank with MBBR moving mmedia, and a final settling tank. There is a sufficient aoperating functioning wetwell lift station, three (3) commercially sized grease interceptors, and seven (7) existing seepage pitsDOH SDWB permitted injection wells for treated effluent disposal. The existing WWTP is aged approximately at 40 years, whichsystem is beyond the 20-year typical industry standard useful service life , and has had itsof 40 years, the blowers were replaced within the last 5 years. No components of the original existing WWTP will be reused.

CYV and this WWTP replacement project is located within the State designated special management area (SMA) which requires an SMA Permit. During the replacement WWTP construction, a bypass mobile temporary WWTP will need to be used for the duration of construction, and removed upon completion of the replacement WWTP. The new 15,000 GPD replacement WWTP will dispose of its treated effluent into three (3) injection wells to be modified, out of the presently seven (7) existing injection wells, which is currently an active permit issued by DOH SDWB with approval to construct received on 11/3/2023.

2. DESIGN CRITERIA

The present daily average design flow was provided by the licensed wastewater operator servicing CYV, and enclosed in Attachment E) Tenant Flow Data.

Based on the present-day tenant flow data generated from the existing 9 buildings onsite, an average design flow of 11,750 GPD was calculated per HAR 11-62, Appendix D, Table 1. The new replacement WWTP is designed for a 15,000 GPD capacity (similar with the existing WWTP) to handle CYV's existing flows and includes a 30% safety factor for increasing climate/storm conditions. Influent BOD5 and TSS concentrations of 800 mg/L were used based on influent lab data (enclosed in Attachment C) Influent Laboratory Report) and designed for treated effluent results to be 30 mg/L for both BOD5 and TSS, prior to its disposal into the permitted modified 3 injection wells. DOH WWB and HAR 11-62 regulates that treated effluent limits for disposal are set at 60 mg/L [references HAR 11-62-26(b)(1)(D) & HAR 11-62-26(b)(2)(D)].

3. GENERAL WASTEWATER TREATMENT SYSTEM DESCRIPTION

The proposed WWTP will consist of the following:

- Existing Wet Well/Lift Station
- 3,000-gallon FRP Preloader/Equalization Tank
- Primary Bioreactor Treatment (MBBR) Tank
    - 8,000-gallon EQ Tank Section
    - Integrated Clarifier Tank Section
    - Integrated Sludge Holding Tank Section
    - Electromagnetic Flowmeter
- Ultraviolet (UV) Disinfection System, optional
- Permitted Modified Injection Well Disposal System (1-Primary and 2-100% backup injection wells for DOH WWB & HAR 11-62 compliance)

3.1 Existing Wet Well/Lift Station

The existing wet well at CYV is a concrete 4-ft diameter, 15-ft deep. There are two (2) Liberty Omnivore Grinder Pumps (Lead/Lag Setup), each of them 1-Phase 2HP, 208/230V. There is no current need for refurbishing as the existing wet well lift station is operationally adequate and in satisfactory condition. Wastewater flows will then be conveyed from the wet well lift station to a new above-ground FRP preloader tank via 4-in force main before entering the package WWTP.

3.2 Preloader and Headworks

Influent wastewater flows will pass through a new bar screen prior to entering the 3,000-gallon fiberglass reinforced plastic (FRP) preloader. The preloader (Xerxes brand or approved equal) dimensions are 6' diameter, 16'-5" length. To install the preloader above ground (avoiding any excavation to install it below ground), a 6' to 8' height CMU retaining wall with an attached additional chain link fence for increased height and security, will enclose the tank and contain gravel backfill, to be installed around the tank to provide structural support above ground.

The new barscreen for the WWTP headworks (SSI supplied or approved equal) will be used to remove any inorganics and suspended solids that may pass through uncaptured in the preloader. The proposed bar screen will have a width of 12-in and a pore size of 5mm; the barscreen ditch dimensions are 60" x 16" x 40". A control cabinet and liquid sensor will also be provided.

3.3 Treatment System: SSI EEVolved™ MBBR

The secondary treatment-level replacement WWTP MBBR tank (main treatment process) shall include: 1) 8000-gallon volume EQ basin, 2) moving media process treatment basin, 3) clarifier/settling basin, 4) hopper bottom settling basin, and 5) solids/sludge holding basin. The outside total dimensions will be as follows: 30.52' L x 12' W x 12' H.

The MBBR tank combines the usage of advanced multilayer fine bubble aeration with SSI biofilm carriers (moving media), through air conveyed via a modular separate blower enclosure housing three (3) 2HP blowers (2 active, 1 standby), and two (2) 3HP blowers (1 active, 1 standby). Effluent retention screens reduce head loss between systems, and optimize movement of water and media through the tanks.

The SSI MBBR WWTP meets the requirements stated in HAR 11-62, Subchapter 2 and DOH WWB compliance. Effluent will be ultimately treated to a maximum limit of both 30 mg/L BOD5 and 30 mg/L TSS.

3.4 Utility Enclosure and WWTP Perimeter Fencing/Wall

The existing perimeter is a CMU built wall that surrounds both the existing WWTP and the utility (blowers and MCC) enclosures. This existing dedicated enclosed area will be reused for the new WWTP siting. The south facing CMU wall will need to be removed for construction of the new WWTP, and will be rebuilt similar to the existing wall thereafter.

Per the HAR, Title 11, Chapter 46, Community Noise Control Document, noise level is to be controlled at the neighboring property lines, thus, noise generating equipment (i.e., blowers and pumps) will therefore all be housed in the utility enclosure. The blowers will be installed inside Hardy Pro-Closure Sound Stadium™ to comply with the noise level requirement.

3.5 Sludge Holding Tank

The SSI WWTP will include a sludge holding tank at the end of the treatment process, outlet end of the package plant, to store the sludge wasting after the treatment process, at an 8-day sludge holding time. Fine bubble aeration diffusers will also be used to aerate the sludge tank. Close monitoring of the capacity and sludge hauling will be necessary for the first 12-months.

3.6 Electromagnetic Flowmeter

A new MagFlux 7200 Sensor 4" flowmeter, or approved equivalent, will be installed.

4. PROCESS PARAMETERS

The new wastewater treatment plant design BOD5 and TSS loading is based on an influent sample taken on 6/19/2023 showing BOD5 at 820 mg/L and TSS at 624 mg/L. The wastewater is expected to contain relatively low levels of fat, oils and grease due to the existence of three (3) grease interceptors that receive restaurant flows before they travel to the WWTP.

WWTP Design Daily Flow	=	15,000 gallons/day
Design Influent BOD5	=	800 mg/L
Design Influent TSS	=	800 mg/L
Design Grease (after wetwell)	=	45 mg/L
Wetwell/Lift Station Tank	=	4-ft diameter *(Existing)*
Overall Tank Dimensions	=	30.52 feet

2 MBBR Treatment Stages = 6 feet each

Settling Tank = 3 feet

Sludge Holding Tank = 10.5 feet

MBBR Dimensions = 6'L x 6'W x 10.5'H

MBBR Operating Volume = 5,655 gallons/day

Settling Tank Dimensions = 3'L x 12'W x 10.5'H

Settling Tank Operating Volume = 5,655 gallons/day

Sludge Holding Dimensions = 10.5'L x 12'W x 10.5'H

Daily Sludge Generation = 63 lbs/day

Sludge Retention Time = 8 days

Sludge Holding Capacity = 9,896 Gallons

Clarifier Tank Length = 12 feet

Effluent BOD5/TSS = <30 mg/L

4.1 Process Mass Balance

Design Flow = 15,000 GPD

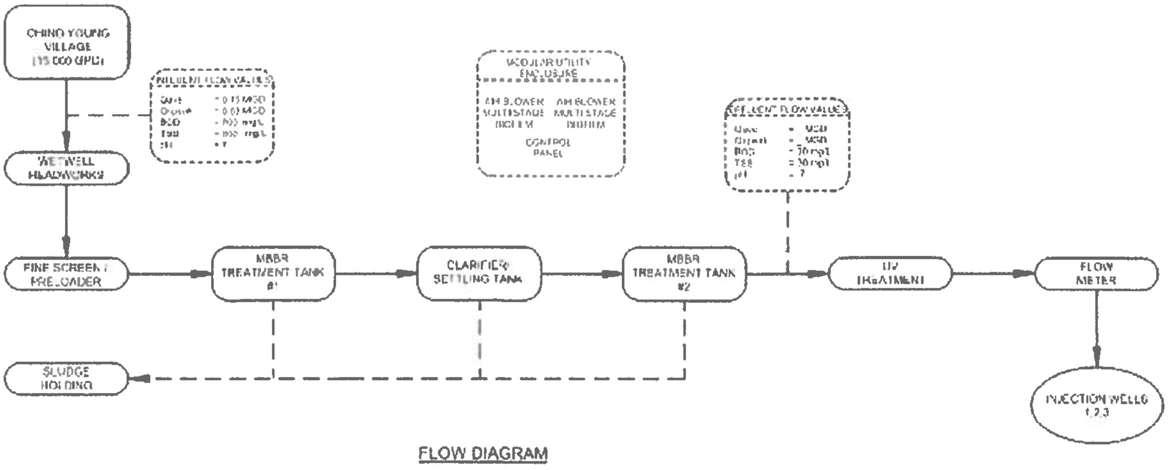

CHING YOUNG VILLAGE (15,000 GPD)
INFLUENT FLOW VALUES
MODULAR UTILITY ENCLOSURE
AIR BLOWER MULTISTAGE
AIR BLOWER MULTISTAGE
CONTROL PANEL
EFFLUENT FLOW VALUES
BOD = 30 mg/l
TSS = 30 mg/l
pH = 7
WETWELL HEADWORKS
FINE SCREEN / PRELOADER
MBBR TREATMENT TANK #1
CLARIFIER/ SETTLING TANK
MBBR TREATMENT TANK #2
UV TREATMENT
FLOW METER
SLUDGE HOLDING
INJECTION WELLS 1,2,3
FLOW DIAGRAM

Figure 4.1- Process Flow Diagram (Hydraulic Loading and Organic Capacities Shown)

% BOD5 Reduction from WWTP = 96.3%

% TSS Reduction from WWTP = 96.3%

5. ELECTRICAL AND EMERGENCY POWER

Power is supplied by Hawaiian Electric Company. There are two electrical feeds to the WWTP, one that is a 125 Amp, 3 Phase, 120/208 Volt Panel and the other that is a 225 Amp, 3 Phase, 120/208 Volt Panel.

There is not currently any permanent emergency power to the WWTP or lift station, there is a portable generator that is used during power outages. A new permanant emergency generator with automatic changeover will be installed near the existing wet well.

6. UV DISINFECTION

UV is not required for this project as treated effluent will be disposed via injection well, but the owner has opted to include UV treatment to ensure effluent is treated to higher standards before being disposed of. The Glow 300 is the chosen UV treatment method, it has high output lamps and can disinfect flows up to 50,000 GPD.

7. EXISTING WASTEWATER EFFLUENT DISPOSAL AND SAMPLING

Ching Young Village contains seven (7) seepage pits that receive treated wastewater effluent. These injection wells have a permit to operate capacity of 8,550 GPD and are currently the primary method of disposal. The Ching Young Village Shopping Center was granted an approval to construct by DOH SDWB on 11/3/2023 for modification of three (3) of the seven (7) existing injection wells for treated effluent disposal of the replacement WWTP. The remaining four (4) injection wells will be closed out in accordance with the DOH SDWB UIC program requirements and HAR 11-23. These three injection wells will be designed for higher capacity effluent disposal, with one (1) well for primary disposal, and the other two (2) for 100% backup disposal of 15,000 GPD.

8. SCUM, FOG AND SLUDGE MANAGEMENT PLAN

Sludge, scum, FOG, and rubbish from the Wet Well/Lift Station and SSI MBBR will be pumped and hauled to the nearest approved disposal facility on a weekly schedule.

Ching Young Village will contract local pumper companies to extract and haul away sludge from the sludge holding tank to the nearest municipal wastewater treatment plant retention availability yet to be determined.

9. CONTROLS AND INSTRUMENTATION

The SSI supplier shall furnish a control system. One N4z VFD Master control panel will be provided. The system shall include *local control stations, motor starters, control switches, relays, and pilot lights.* Control Panels shall be mounted in the Hardy Pro-Air Modular Package Enclosure. Motor starters shall be 208V/3Ph/60Hz power shall be provided.

10. OPERATIONS AND MAINTENANCE (O&M)

O&M and electronic O&M manuals shall be furnished during start-up. The manuals shall include installation, operation and maintenance instructions for all equipment provided. For WWTP startup, field personnel from SSI Aeration will perform a functional check of each item furnished and start-up of the process. During this time, the field representative will provide operation training, which shall include familiarization with the MBBR process, and review of the O&M manuals. The SSI Aeration supplier to assist with the start-up process.

11. ESTIMATED PROCUREMENT AND CONSTRUCTION SCHEDULE

- Equipment Procurement (*Estimated 8 months*)
  - SSI Aeration System and Utility Enclosure
- Mobilization of General Contractor (1 month)
- WWTP Construction (*Estimated 8 months*)
  - Three (3) Phases:
    - Installation of temporary WWT system, Demolition of Existing WWTP
    - Concrete pad for WWTP, utility building, UV system and generator, install preloader, install package WWTP, electrical conduits/wiring, fencing, trenching, etc...
    - Seeding of newly installed WWTP, commissioning of new system, demolition of temporary WWT system
- DOH Approval to Operate (2 months)

12. ESTIMATED EQUIPMENT PROCUREMENT ROM COSTS

- Screen ($6,000)
- SSI Aeration Package Treatment System (approx. $590,600)
- UV Disinfection System (approx. $15,000)
- Utility Enclosure (*included with package system*)
- SSI Aeration Equipment Startup (*pending*)
- SSI Aeration Freight ($50,000)
- Well Refurbishment (approx. $180,000)
- Emergency Generator (estimated $35,000)

Note: excludes construction costs and additional design/permitting fees

13. REFERENCES

"Hawaii Administrative Rules", Department of Health, Chapter 62 of Title 11, Wastewater Systems, State of Hawaii, dated March 21, 2016 (hereafter called "HAR 11-62").

"Onsite Wastewater Treatment Systems Manual", Office of Water, Office of Research and Development, U.S. Environmental Protection Agency, dated February 2002 (hereafter called "EPA OWTSM").

Attachment D- Injection Well Construction Approval Letter

JOSH GREEN, M.D.
GOVERNOR OF HAWAIʻI
KE KIAʻĀINA O KA MOKU ʻĀINA ʻO HAWAIʻI

KENNETH S. FINK, MD, MGA, MPH
DIRECTOR OF HEALTH
KA LUNA HOʻOKELE

STATE OF HAWAIʻI
DEPARTMENT OF HEALTH
KA ʻOIHANA OLAKINO
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
File: SDWB
2232Nov01ATC

November 3, 2023

Mr. Michael Ching
General Manager
Ching Young Village Shopping Center
5-5190 Kuhio Highway,
Hanalei, Hawaii 96714
[via mching@hawaiian.net only]

Dear Ching:

SUBJECT: **CHING YOUNG VILLAGE SHOPPING CENTER**
UNDERGROUND INJECTION CONTROL (UIC)
UIC APPLICATION NO. UK-2232
GRANTED CONDITIONAL APPROVAL-TO-CONSTRUCT (ATC)
THREE (3) INJECTION WELLS

The Safe Drinking Water Branch (SDWB) UIC Program has reviewed your application for a UIC permit. Your application has been assigned the number listed above. Please list this number in all future correspondence.

This ATC is hereby granted to you, the applicant, strictly based on the following twenty-one (21) conditions. These conditions, unless identified as a recommendation, are enforceable under Hawaii Administrative Rules (HAR), Sections 11-23-07(c) and (d). Enforcement may include, and not be limited to, monetary penalties and corrective action paid by the applicant.

1. No injection well shall be constructed before the Special Management Area (SMA) permit from the County of Kauai for this project has been issued. UIC well construction and proposed disposal in the UIC permit application shall be in agreement with the SMA permit;

2. Only applicable are the information, specifications, and plans that were provided in the revised UIC application received on September 5, 2023. All other types or forms of information/materials are not applicable unless acknowledged and approved by this ATC;

3. The injection well amount per the application is three (3).

   The approximate diameter and depth below ground surface of the injection wells are:

Well No.	Diameter (inches)	Depth (feet)
1	8.9	95
2	8.9	95
3	8.9	95

   The proposed injectant is generally categorized as treated sewage wastewater;

4. Any modification or revision to the injection well's particulars, including the facility and application, shall not occur unless such proposals are first submitted to the UIC program for review, concurrence, and written approval under this ATC. Any modification, revision, or construction involving the injection wells done without written authorization will constitute a violation of HAR, Chapter 11-23;

5. A geologist shall be involved from the start of injection well construction to monitor the drilling on a daily basis, either directly or by detailed field reporting to the geologist;

6. Weekly reports, on a day basis, shall be made to the UIC program throughout the duration of active injection well drilling. The reports shall include, but not be limited to, current well diameter and depth, major or significant geologic or hydrogeologic conditions encountered by the drilling, and preliminary injection test findings. Reports shall be concise, professionally prepared or reviewed, organized consistently, and purposeful. Reports shall be transmitted via email to sdwb@doh.hawaii.gov on Mondays following every work week. Enclosed is a suggested weekly reporting format;

7. We recommend that the entire well bore length be properly cased, i.e., no open hole, in order to eliminate sidewall collapse which may not be recoverable without redrilling;

8. The applicant is responsible to identify all drinking water sources around the injection wells in order to prevent injection well siting within one-quarter mile of any existing drinking water source. Identifying water sources may require field activities as well as records research. Noncompliance with this requirement may result in improper injection well siting needing corrective action by the applicant which includes proper backfilling and abandonment of the injection well;

9. Comply with applicable conditions stipulated in HAR, Section 11-23-10, such as the requirement of at least a fifty-foot buffer zone between the bottom of the injection well and the top of the volcanic aquifer when establishing an injection well in the caprock formation;

10. Regarding deep injection, injection into a basalt formation shall not be into or adversely affecting an artesian aquifer;

11. If an artesian groundwater condition is encountered during the injection well drilling/construction, drilling shall immediately stop and not proceed until the artesian condition is assessed by the Department of Health (DOH). The applicant is required to promptly notify the DOH for an assessment. An artesian groundwater condition may warrant a redesign of the injection well in order to protect the artesian aquifer as an underground source of drinking water. For reference, artesian aquifer requirements and restrictions are described under HAR, Section 11-23-10;

12. If a void, such as a lava tube or solution cavity, 3 feet or more in diameter or vertical measurement is encountered during injection well drilling/construction, drilling shall immediately stop and not proceed until the void is assessed by the DOH. The applicant is required to promptly notify the DOH for an assessment. A void may warrant a redesign of the injection well in order to prevent unacceptable migration of the injectant or to prevent direct injection into the void. For reference, voids are described under HAR, Section 11-23-09 (f);

13. Once the injection depth, for a shallow or deep injection well, is established and injection well construction is completed, a minimum 12-hour continuous injection test at design rates shall be conducted for the injection well. During injection well construction, preliminary injection testing over extended durations before the injection well is fully built is recommended, if practicable. Preliminary injection test results may provide a progressive estimate of injection capacities which tend to diminish with the installation of the well casing and the annular backfill;

14. If groundwater within the influence of the injection well is used for injection testing, the effects of groundwater withdrawal on the injection well's capacity should be addressed in the injection test results. The injection well's capacity should not include influences due to groundwater withdrawal for injection testing;

15. Operation of the injection well is not automatically authorized by this ATC. Furthermore, construction and testing of the injection well does not guarantee that the injection well will be authorized for operation under a UIC permit. Depending on the information obtained during and from construction and testing, a UIC permit may or may not be issued;

16. The fully constructed injection well must demonstrate satisfactory performance. A UIC permit may not be issued for an injection well that cannot successfully support the proposed discharge quantity;

17. The injection well shall be constructed to allow for the following continuous or periodic, permit-required activities related to operating and maintaining an injection well: injection well access, injection well depth and diameter measurement, injectant flow measurement (quantity) metering, injectant pressure measurement when applicable (metering), and injection performance testing;

18. Pursuant to HAR, Section 11-23-13, submit the final report for the enclosed outline: "Final Report Format For New or Modified Injection Well." This report shall be made and signed by a geologist and a professional engineer, including the P.E. stamp. The engineer and geologist shall be responsible for monitoring the proper construction of the injection wells and for obtaining the information needed to complete the final report;

19. The final report is due by **November 2, 2025**. The final report shall be fully complete and satisfactory. Unless the final report is submitted by the due-date, this ATC automatically expires and is void. A late final report may subject the applicant to an enforcement action/penalty or corrective measures, including a permit reapplication. If more time beyond the due-date is needed to complete the final report, a written request with reasons for a time extension must be submitted at least 60 days before the due-date. Time extensions are not guaranteed, and if granted, may contain restrictive conditions;

20. Backfilling and abandonment of an injection well, should such an activity become necessary, whether during construction or after full well completion, may only occur under the instructions from the DOH. An abandonment application must first be submitted, and specific abandonment instructions will be issued by the DOH. Drilling contractors under their own discretion should not backfill and abandon an injection well; and

21. You are required to notify Mr. W. Mark Frazier by email at sdwb@doh.hawaii.gov one week prior to the injection well testing. You will be informed if DOH personnel will be present to witness the injection well testing. If you conduct the injection well test without notifying the DOH, you will be required to redo the injection well test under proper witnessing. Injection well testing for the purpose of the final report shall be valid only when such testing is performed on the fully completed injection well.

If you have any questions about the final report, or the processing of your application, please contact Mr. W. Mark Frazier of the SDWB UIC Program at (808) 586-4258 or by email at sdwb@doh.hawaii.gov.

Sincerely,

Gaudencio C. Lopez

For JOANNA L. SETO, P.E., CHIEF
Environmental Management Division

MF:bbe

Enclosures: Final Report Format For New or Modified Injection Well
Weekly Report Format
Signatory and Certification Statement

c: Mr. Kevin Gooding, INTERA, Inc., (w/encls.)
[via kgooding@intera.com only]

FINAL REPORT FORMAT FOR
NEW OR MODIFIED INJECTION WELL
UNDERGROUND INJECTION CONTROL (UIC)
UIC APPLICATION NO. UK-2232

For Office Use

1. General Information:
   a. Facility Name:
   b. Address:
   c. Applicant (Permittee):
2. Physical Characteristics of the Area:
   a. Location and accessibility:
   b. Climate:
   c. Topography:
   d. Geologic and foundation conditions:
   e. Earthquake considerations:
   f. Flood potential including tsunami inundation zones:
   g. Conformance with local land-use planning and zoning regulations:
   h. Sensitive environments: natural or community-related:
3. Injection Well System:
   a. Actual number of injection wells constructed or modified:
   b. Date of construction or modification:
   c. Security from unauthorized access (As-built drawing of the modified injection well):
   d. Site plan (drawn to scale) showing location of constructed or modified injection wells:
   e. Description of any changes from the permit application:
4. Hydrogeologic Characteristics:
   a. Well log (geologic profile) by geologist for each injection well drilled:
      i. General formations: e.g., organic, fill, soil, saprolite, decomposed rock, sedimentary, lagoonal, marine, alluvial, coral, dune, beach, pyroclastic, ash, pahoehoe, \`a\`a, ponded lava, tuff, etc.
      ii. Physical and structural characteristics of the formations encountered. The following characteristics shall be used in the descriptions: color, hardness (competency), degree of weathering, qualitative degree of fracturing or consolidation, qualitative degree of vesiculation or porosity, unified soil classification for soils, volcanic series or lithologic formation for rock, petrologic terminologies for rock and cinder, lava type, and the differentiation between soil and rock units;
   b. Injection testing:
      i. Minimum 12 hours of continuous injection testing for wells No. 1, 2 and 3. The flow should be at the desired maximum flow. It is recommended a step test be done at the beginning of the constant 12-hour flow test.
      ii. Complete results of injection testing including maximum injection capacity of each well and hydraulic conductivity of the injection formation. Injection test results shall be shown graphically with the related data.

c. Groundwater characteristics: (if encountered)

   i. Initial water level, and subsequent water level as fluctuations occur (below ground surface and corresponding elevation per msl):

   ii. Tidal fluctuations and tidal efficiency:

   iii. Continuous profile of total dissolved solids and salinity (maximum 5-foot sample intervals if done with discrete sampler) for all wells obtained before the introduction of any foreign fluids. The profiling shall represent stabilized conditions without influence or restriction from any well casing and shall extend to the bottom of the boring. Profiling within solid casing strings are typically not acceptable;

   iv. Water samples collected from each distinct zone of significantly different total dissolved solids or salinity concentration levels.

   Water samples shall be analyzed using EPA or EPA equivalent standards and methods for the following parameters:

Parameter	EPA Method
chlorides	325
conductivity (specific conductance)	120
dissolved oxygen	360
Fecal Coliform	MF or MPN
field pH	150
field temperature	170
nitrate+nitrite as (N)	353
Total Dissolved Solids	160

5. Special considerations to be addressed by this report: (None)

6. Attach an original Signatory and Certification Statement sheet signed and dated by the permittee or legal representative.

7. Preparers' signature: The final report shall be signed by the geologist and licensed engineer and shall bear the engineer's stamp.

8. Submit the final report by mail to Uluakupu Building 4, 2385 Waimano Home Road, Suite 110, Pearl City, Hawaii 96782-1400 and email at sdwb@doh.hawaii.gov.

INJECTION WELL CONSTRUCTION WEEKLY REPORT FORM

(Send to: Safe Drinking Water Branch email: sdwb@doh.hawaii.gov)

: ____________________

: ____________________

____

Project Name: ____________________

UIC No.: ____________________

Injection Well No.: __________

	Depths Drilled (feet bgs)	Diameter (inches)	Casing Depth (feet)	Remarks*
	from: to:			
	from: to:			
	from: to:			
	from: to:			
	from: to:			
	from: to:			

ıould include formation & materials encountered, anomalies, injection considerations and indications

SIGNATORY AND CERTIFICATION STATEMENT
FOR UNDERGROUND INJECTION CONTROL (UIC) SUBMITTALS

Submitted Statement shall bear an original signature and date.
Photocopy signatures are unsatisfactory.

Facility Name: ______________________________
e-Permitting Submission No. (if applicable) ______________________________
UIC No. (if assigned): ______________________________

Please check one:

☐ I certify that for a municipality, I am a principal executive officer or ranking elected official.

☐ I certify that for a state, non-federal or other public agency, I am a principal executive officer or ranking elected official.

☐ I certify that for a federal agency, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

☐ I certify that I am a general partner for a partnership.

☐ I certify that I am the proprietor for a sole proprietorship.

☐ I certify that I am a trustee for a trust.

☐ I certify that for a corporation/association of apartment owners/home owners association, I am the President, Vice President, Secretary or Treasurer of the corporation/association of apartment owners/home owners association and in charge of a principal business function, or I perform similar policy or decision making functions for the corporation/association of apartment owners/home owners association.

☐ I certify that for a corporation, I am the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.

☐ I certify that for a limited liability company (LLC), I am the Manager or a Member authorized to make management decisions for the LLC and am in charge of a principal business function, or I perform similar policy or decision making functions for the LLC.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: ______________________________ Date: ____________
Name (Print): ______________________ Title: ______________________
Company Name: ______________________________
Address: ______________________________
____
Phone Number: ____________________ Fax Number: ____________________
Email: ______________________________

Attachment E- Kauai Department of Planning Final Environmental Assessment and Finding of No Significant Impact Letter

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

October 25, 2024

Mary Alice Evans, Interim Director
Environmental Review Program
Office of Planning and Sustainable Development
State of Hawaii, Department of Business, Economic
Development And Tourism,
235 South Beretania Street, Room 702
Honolulu, Hawai'i 96813

Subject: **Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI)**
for: Ching Young Village Waste Water Treatment Plant
Kaua'i Tax Map Key Nos. (4) 5-5-002:040 and 022
Hanalei, Kaua'i, Hawai'i

Dear Director Mary Alice Evans,

The County of Kaua'i Department of Planning hereby transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI) for the subject property located as Kaua'i Tax Map Key Nos. (4) 5-5-002:040 and 022 on the Island of Kaua'i, for publication in the next available publication of The Environmental Notice.

Ching Young Village proposes to replace the existing wastewater treatment and effluent disposal system with a new wastewater treatment plant within the limits of the existing system.

The Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) was published in the OEQC's June 23, 2024 issue of The Environmental Notice. The FEA received no comments during the 30-day comment period.

As stated in the findings of Table 7.1 of the FEA, the Department of Planning has determined that the project will not have a "significant effect" or "significant impact" on the quality of the environment and issues a FONSI.

If there are any questions, please contact Romio Idica at (808)241-4056 or ridica@kauai.gov.

Me Ke Aloha Pumehana,

KA'AINA S. HULL
Director of Planning

4444 Rice Street, Suite A473 • Līhu'e, Hawai'i 96766 • (808) 241-4050 (b) • (808) 241-6699 (f)
An Equal Opportunity Employer

Attachment F- United States Fish and Wildlife Service List of Threatened and Endangered Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish And Wildlife Office
300 Ala Moana Boulevard, Box 50088
Honolulu, HI 96850-5000
Phone: (808) 792-9400 Fax: (808) 792-9580

In Reply Refer To: 02/09/2025 19:40:37 UTC
Project Code: 2025-0053807
Project Name: Ching Young Village Shopping Center WWTP

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened and endangered species, as well as designated critical habitat that may occur within the boundary of your proposed project and that may be affected by project related actions. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Please contact the Service's Pacific Islands Fish and Wildlife Office (PIFWO) at 808-792-9400 if you have any questions regarding your IPaC species list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may adversely affect threatened and endangered species and/or designated critical habitat.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a Biological

Evaluation, similar to a Biological Assessment, be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment or Biological Evaluation are described at 50 CFR 402.12.

Due to the significant number of listed species found on each island within PIFWO's regulatory jurisdiction, and the difficulty in accurately mapping ranges for species that we have limited information about, your species list may include more species than if you obtained the list directly from a Service biologist. We recommend you use the species links in IPaC to view the life history, habitat descriptions, and recommended avoidance and minimization measures to assist with your initial determination of whether the species or its habitat may occur within your project area. If appropriate habitat is present for a listed species, we recommend surveys be conducted to determine whether the species is also present. If no surveys are conducted, we err on the side of the species, by regulation, and assume the habitat is occupied. Updated avoidance and minimization measures for plants and animals, best management practices for work in or near aquatic environments, and invasive species biosecurity protocols can be found on the PIFWO website at: https://www.fws.gov/office/pacific-islands-fish-and-wildlife/library.

If a Federal agency determines, based on the Biological Assessment or Biological Evaluation, that a listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/index.

Non-federal entities can also use the IPaC generated species list to develop Habitat Conservation Plans (HCP) in accordance with section 10(a)(1)(B) of the Act. We recommend HCP applicants coordinate with the Service early during the HCP development process. For additional information on HCPs, the Habitat Conservation Planning handbook can be found at https://www.fws.gov/sites/default/files/documents/habitat-conservation-planning-handbook-entire.pdf.

Please be aware that wind energy projects should follow the Service's wind energy guidelines (http://www.fws.gov/windenergy) for minimizing impacts to migratory birds. Listed birds and the Hawaiian hoary bat may also be affected by wind energy development and we recommend development of a Habitat Conservation Plan for those species, as described above. Guidance for minimizing impacts to migratory birds for projects including communications towers can be found at:

- http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers
- http://www.towerkill.com
- http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation actions that benefit threatened and endangered species into their project planning to further the purposes of the Act in accordance with section 7(a)(1). Please include the Consultation Tracking Number associated with your IPaC species list in any request for consultation or correspondence about your project that you submit to our office. Please feel free to contact us at PIFWO_admin@fws.gov or 808-792-9400 if you need more current information or assistance regarding the potential impacts to federally listed species and federally designated critical habitat.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

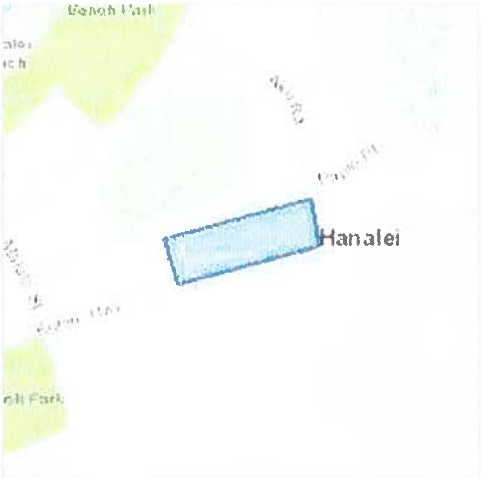
This species list is provided by:

Pacific Islands Fish And Wildlife Office
300 Ala Moana Boulevard, Box 50088
Honolulu, HI 96850-5000
(808) 792-9400

PROJECT SUMMARY

Project Code: 2025-0053807
Project Name: Ching Young Village Shopping Center WWTP
Project Type: Wastewater Facility - Maintenance / Modification
Project Description: Replacement of existing wastewater treatment plant equipment with new equipment to increase capacity and performance. Replacement is necessary due to age of existing equipment.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@22.20319485,-159.49676746668612,14z



Counties: Kauai County, Hawaii

ENDANGERED SPECIES ACT SPECIES

There is a total of 16 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Hawaiian Hoary Bat *Lasiurus cinereus semotus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/770 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6477.pdf	Endangered

BIRDS

NAME	STATUS
Band-rumped Storm-petrel *Hydrobates castro* Population: USA (HI) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1226 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6939.pdf	Endangered
Hawaiian Common Gallinule *Gallinula galeata sandvicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6612 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6934.pdf	Endangered
Hawaiian Coot (alae Ke`oke`o) *Fulica alai* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7233 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6934.pdf	Endangered
Hawaiian Duck *Anas wyvilliana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7712 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6934.pdf	Endangered
Hawaiian Goose *Branta (=Nesochen) sandvicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1627 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6925.pdf	Threatened
Hawaiian Petrel *Pterodroma sandwichensis* No critical habitat has been designated for this species.	Endangered

NAME	STATUS
Species profile: https://ecos.fws.gov/ecp/species/6746 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6939.pdf	
Hawaiian Stilt *Himantopus mexicanus knudseni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2082 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6934.pdf	Endangered
Newell"s Shearwater *Puffinus newelli* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2048 General project design guidelines: https://ipac.ecosphere.fws.gov/project/UCE6ALEFHFERXOIDOOC6VWZ3GQ/documents/generated/6939.pdf	Threatened

REPTILES

NAME	STATUS
Hawksbill Sea Turtle *Eretmochelys imbricata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3656	Endangered

FLOWERING PLANTS

NAME	STATUS
Carter's Panicgrass *Panicum fauriei var. carteri* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5578	Endangered
Cyperus pennatiformis There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6868	Endangered
Hilo Ischaemum *Ischaemum byrone* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3903	Endangered
Makou *Peucedanum sandwicense* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5579	Threatened
Santalum involutum No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9609	Endangered

FERNS AND ALLIES

NAME	STATUS
Microlepia strigosa var. mauiensis No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4737	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
'apapane *Himatione sanguinea* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/9659	Breeds Dec 1 to Jul 31
Anianiau *Magumma parva* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/9621	Breeds Mar 1 to Aug 15
Black Noddy *Anous minutus melanogenys* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/10559	Breeds Apr 1 to Nov 30
Black-footed Albatross *Phoebastria nigripes* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/8033	Breeds Apr 1 to Aug 31
Bulwer's Petrel *Bulweria bulwerii* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/10579	Breeds May 1 to Sep 30
Kaua'i 'amakihi *Chlorodrepanis stejnegeri* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/9654	Breeds Mar 15 to Aug 15
Laysan Albatross *Phoebastria immutabilis* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/11959	Breeds Nov 15 to Jun 15
Red-tailed Tropicbird *Phaethon rubricauda melanorhynchos* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/10563	Breeds Dec 15 to Oct 15

NAME	BREEDING SEASON
Wandering Tattler *Tringa incana* This is a Bird of Conservation Concern (BCC) throughout its range in Hawaii and the Pacific Islands. https://ecos.fws.gov/ecp/species/11941	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

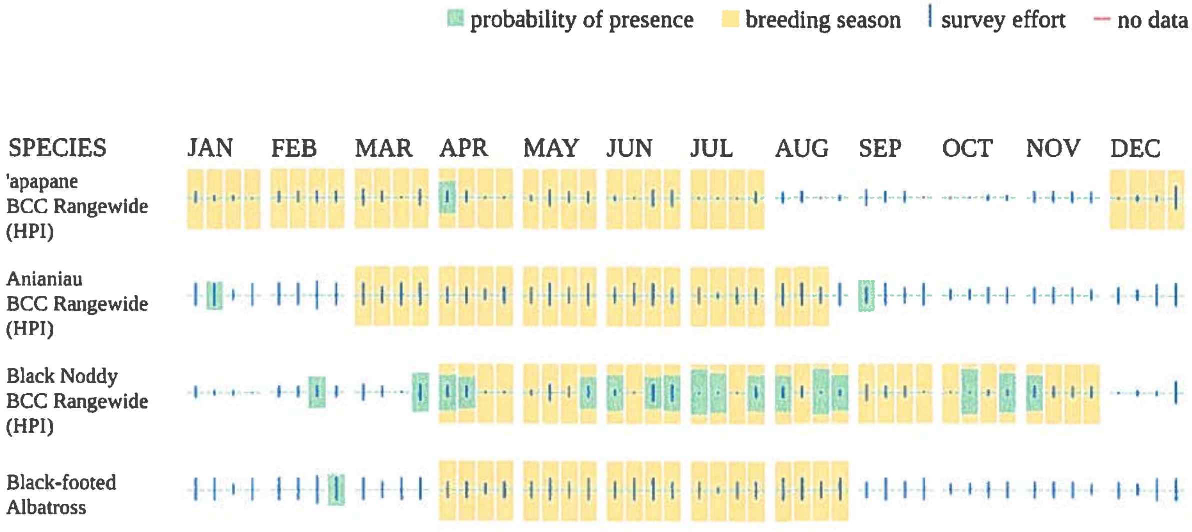
Probability of Presence (🟩)

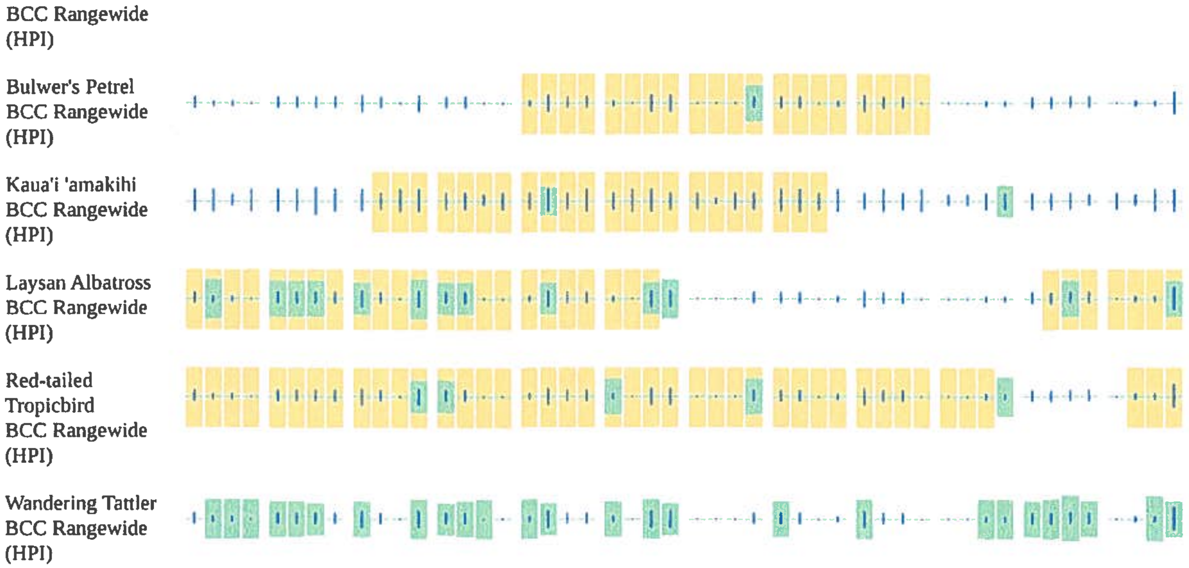
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (🟨)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (−)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

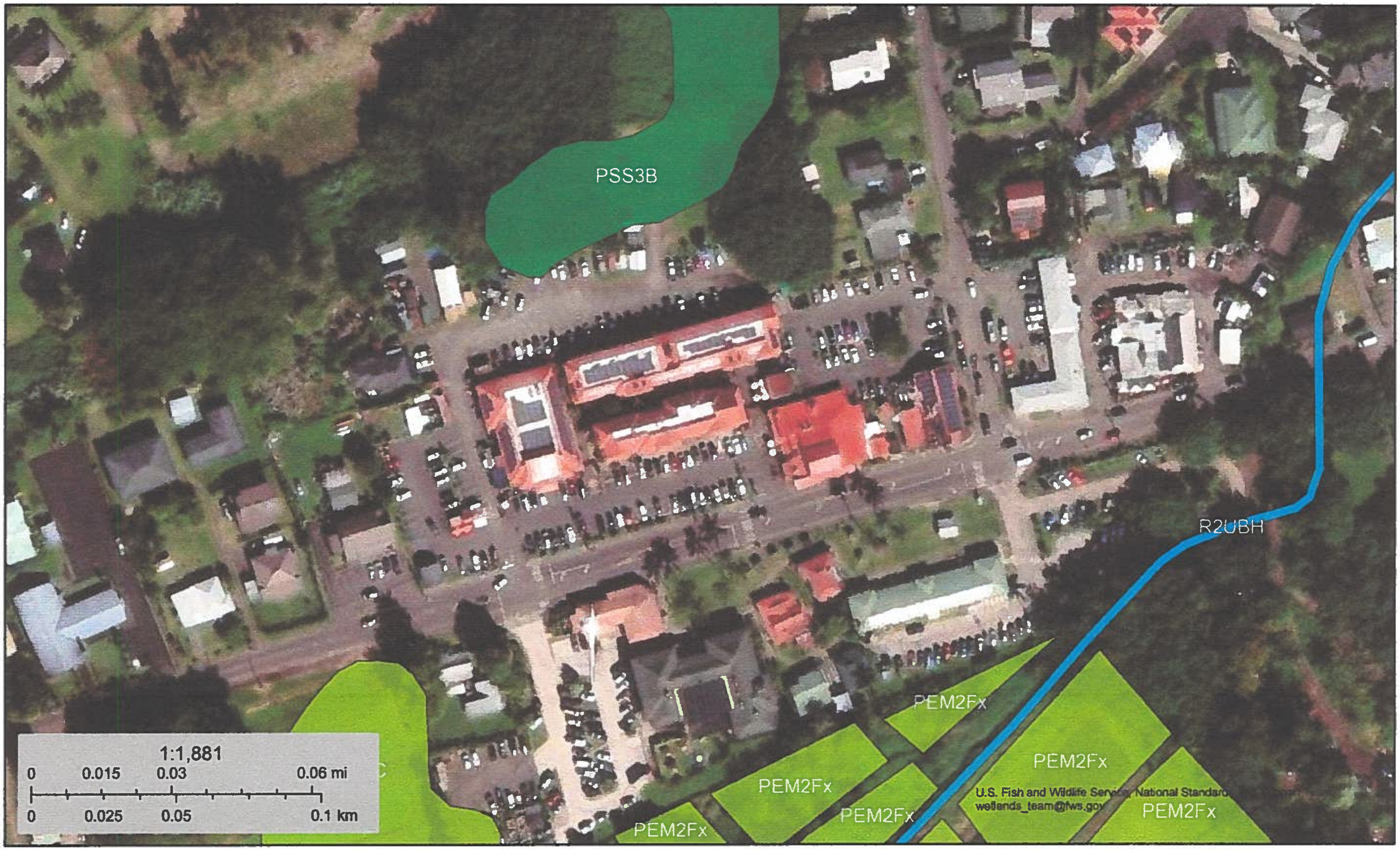
Agency:	Private Entity
Name:	Doug Williams
Address:	1127 11th Ave #302
City:	Honolulu
State:	HI
Zip:	96816
Email	doug@lauleallc.com
Phone:	8086995865

Attachment G- Wetlands Inventory Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

Ching Young Village Shopping Center


PSS3B
R2UBH
PEM2Fx
PEM2Fx
PEM2Fx
PEM2Fx
PEM2Fx
PEM2Fx
U.S. Fish and Wildlife Service, National Standards
wetlands_team@fws.gov
1:1,881
0
0.015
0.03
0.06 mi
0
0.025
0.05
0.1 km

February 9, 2025

Wetlands

- 🟦 Estuarine and Marine Deepwater
- 🟦 Estuarine and Marine Wetland
- 🟩 Freshwater Emergent Wetland
- 🟩 Freshwater Forested/Shrub Wetland
- 🟦 Freshwater Pond
- 🟦 Lake
- 🟧 Other
- 🟦 Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Attachment H- Authorization Letter

(Submitted Under Separate Cover)

Attachment I – Standard Zoning Permit Application

DEPARTMENT OF PLANNING

STANDARD ZONING PERMIT APPLICATION

Fees vary based on permits required.

This application shall be filled out by all seeking Class I, II, and III Zoning permits pursuant to the Kauai County Code, Hawai'i Revised Statutes Chapter 205A and all relevant rules and regulations of the Planning Commission and Department.

DEPARTMENT USE ONLY			
Zoning			Intake By:
Use			
Variance			Intake Date:
SMA			
PDU			Acceptance Date By:
TOTAL FEE:			
Additional Fees:			
Receipt Number			
Building Permit No.			

Permitting fees may be made via cash, check or online payment. All checks shall be made out to: **"Director of Finance"**

Complete Information Below			
Tax Map Key Number	(4) 5-5-002:040	**Condominium Number**	N/A
Property Owner Name(s)	Ching Young Village LTD		
Property Owner Mailing Address	P.O. Box 298, Hanalei, HI 96714		
Property Owner Email	mching@hawaiian.net	**Property Owner Phone**	(808)826-7222

If you are an authorized agent for the property owner, complete the following:			
Authorized Agent Name(s)	Laulea Engineering, LLC		
Authorized Agent Mailing Address	1127 11th Ave. #302, Honolulu, HI 96816		
Authorized Agent Email	environmental@lauleallc.com	**Authorized Agent Phone**	(808)861-7463

What is the proposed construction and/or intended use of the structure or parcel (may attach additional info)?

No change to use; proposed project is replacement of wastewater treatment plant.

Applicant Declarations (incorrect responses may slow your permit review)

Please place an "X" under Yes or No under the following:

		YES	NO	Staff Verification
1	Is there a structure on the property that is 50 years old or older?		X	
2	Is this a permit for an after-the-fact construction or activity?		X	
3	Are there known burials on the site?		X	
4	Will the project involve ground disturbance?	X		
5	Is this a conversion of a legally existing single-family dwelling unit into a multi-family two dwelling unit?		X	

Submittal Checklist

Please **INITIAL** under "Yes" or not applicable "N/A" regarding each of the statements:

		YES	NA	Staff Verification
1	All plot plans I have submitted are drawn to scale.	X		
2	I have ensured all TMK numbers are visible on all plan sheets.	X		
3	Any plans I have submitted clearly show all structures	X		

Acknowledgements - Please INITIAL next to each of the statements:

I UNDERSTAND:	Initial Here
Additional fees and/or the submittal of other application forms may be necessary to complete this application for acceptance and processing.	DW
Tender of fees by the County does not imply acceptance of this application.	DW
Errors in self-declaration or missing or incomplete information will delay acceptance and processing of your application.	DW
Any purposeful misrepresentations in this application may result in delay, denial, permit revocation, violations, fines and even criminal prosecution.	DW

The owner and/or authorized representative is hereby made aware that the construction, work, use or activity approved in this permit shall be subject to inspection by the Planning Department personnel. The applicant is advised that inspection may occur prior to or during construction and use to ascertain the activity is conducted in compliance with the law. Further, I am a duly authorized agent or have 100% ownership rights.

WARNING: if you are a property owner of a Unit within a Condominium Property Regime (CPR), you are obligated to acknowledge and understand your rights and duties under the documents governing your CPR. The Kaua'i County Planning Department (Department) has no duty or obligation to enforce CPR Documents. By submitting this application [or, authorization for], you hereby indemnify and hold harmless the Department from any and all liability arising from disputes or actions resulting from the interpretation or enforcement of your CPR documents.

OWNER/AGENT SIGNATURE: Doug Williams DATE: 03/10/2025

FOR PLANNING DEPARTMENT USE ONLY (THIS CONSTITUTES PERMIT IF FILLED OUT BY DEPT.):

APPROVED ☐ DENIED ☐ BY: ____________ DATE: ____________

DIRECTOR'S CONDITIONS OF APPROVAL (staff to **initial** next to applicable conditions):

This permit shall expire if no building permit is issued within one (1) year after the approval date and/or if construction does not start within one (1) year of building permit issuance.	
Should any archaeological or historic resources be discovered during ground disturbing/construction work, all work in the area of the find shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures.	
Additional Conditions (State):	

Attachment J – Special Management Area Permit Assessment Form

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

I. Part A

APPLICANT INFORMATION

Applicant: Laulea Engineering, LLC
Address: 1127 11th Ave. #302
Honolulu, HI 96816
Phone: (808) 861-7463

Applicant's Status: (Check one)

☐ Owner of the Property	(Holder of at least 100% of the equitable and legal title)
☐ Lessee of the Property	Lessee must have an **unexpired and recorded** lease of five (5) years or more from the date of filing of this application. If not, Owner(s) must provide a Letter of Authorization.
☑ Authorized Agent	Attach Letter of Authorization

Contact Person: Doug Williams, P.E.
Phone: (808)470-8416
Email: doug@lauleallc.com
Address: 1127 11th Ave. #302
Honolulu, HI 96816

PROJECT INFORMATION
(attach additional sheets if necessary)

Site Address: 5-5190 Kuhio Hwy.
Hanalei, HI 96714
Tax Map Key: (4) 5-5-002:040
Lot Area: 2.818 acres
State Land Use District: Urban
County Zoning: (C-G) General Commercial
General Plan Designation: Kauai General Plan
Nature of Development: Improvements to existing wastewater treatment plant to ensure wastewater is adequately treated prior to discharge, thereby mitigating potential impacts to water quality.

* **NOTE**: An Environmental Assessment in accordance with HRS Chapter 343 is required for actions requiring a Shoreline Setback Variance (SSV). Please contact the Planning Department for further information.

Valuation of Development: $2,371,341
(Estimate Attached)

Date of Application: March 10, 2025

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

II. Part B

The petitioner shall be responsible for filing the following required information with the department before an application is considered complete:

1. A **written** description of the proposed project, location and a statement of reasons/justification for project. *Refer to Part B.1.1.*
2. If property abuts a shoreline, a certified shoreline survey conducted by a registered land surveyor within 6 months of an application shall be submitted, when required by the Planning Agency. *Refer to Part B.1.2.*
3. A plot plan of the property, drawn to scale, with all proposed and existing structures and other pertinent information. Also, preliminary building sketch plans are to be submitted. *Refer to Figures.*
4. Any other plans or information requirements by the Director.

   Note: An Environmental Assessment or Environmental Impact Statement that has been declared adequate under the National Environmental Policy Act (NEPA) or under Chapter 343, HRS, may constitute a valid filing under this section. *Refer to Figures.*
5. Project Assessment:

   a. Description of the area and environment involved including flora and fauna, and other features;

   Refer to Paragraph B.1.5.a on page 4.

   b. Description of the existing land uses of the project site and surrounding areas;

   Refer to Paragraph B.1.5.b on page 4.

   c. Description of how the proposed project will affect the area involved and surrounding areas. Specifically the assessment should evaluate if the proposal:

		YES	NO
i.	Involves an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites, Special Treatment Districts as established by the County of Kauai Comprehensive Zoning ordinance, view planes or scenic corridors as outlined in the Community Development Plans, and recreation areas and resources;	☐	☑

Discussion:

Refer to Paragraph B.1.5.c.i on pages 4 and 5.

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

ii. Curtails the range of beneficial uses of the environment; YES ☐ NO ☑

Discussion:

Refer to Paragraph B.1.5.c.ii on page 5.

iii. Conflicts with the County's or the State's long-term environmental policies or goals; YES ☐ NO ☑

Discussion:

Refer to Paragraph B.1.5.c.iii on page 5.

iv. Substantially affects the economics or social welfare and activities or the community, County or State; YES ☐ NO ☑

Discussion:

Refer to Paragraph B.1.5.c.iv on page 5.

v. In itself has no significant adverse effect but cumulatively has considerable effect upon the environment or involves a commitment for larger actions; YES ☐ NO ☑

Discussion:

Refer to Paragraph B.1.5.c.v on page 5.

vi. Substantially affect a rare threatened, or endangered species of animal or plant, or its habitat; YES ☐ NO ☑

Discussion:

Refer to Paragraph B.1.5.c.vi on page 6.

vii. Detrimentally affects air or water quality or ambient noise levels; or YES ☐ NO ☑

Discussion:

Refer to Paragraph B.1.5.c.vii on page 6.

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

		YES	NO
viii.	Affects an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal water;	☐	☑

Discussion:

Refer to Paragraph B.1.5.c.viii on page 6.

		YES	NO
ix.	May have a major effect on the quality of the environment or affect the economic or social welfare of the area; and	☐	☑

Discussion:

Refer to Paragraph B.1.5.c.ix on pages 6 and 7.

		YES	NO
x.	Would possibly be contrary to the policies and guidelines of the Rules and Regulations, the County's General Plan, Development Plans, and Zoning and Subdivision Ordinances.	☐	☑

Discussion:

Refer to Paragraph B.1.5.c.x on page 7.

d. Evaluation of the proposed development relative to the objective and policies as contained in Chapter 205A, HRS; and Section 3.0 of the Special Management Area (SMA) Rules and Regulations: (complete following questionnaire)

RECREATIONAL RESOURCES:	Objective Provide coastal recreation opportunities accessible to the public.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

		YES	NO
1.	Will the proposed development adversely affect coastal resources uniquely suited for recreational activities that cannot be provided in other areas?	☐	☑

Discussion:

Refer to Part B.2.1 on page 8.

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA)
PERMIT ASSESSMENT

2. Will the project require replacement of coastal resources having significant recreational value, including but not limited to surfing sites, sandy beaches and fishing areas, when such resources will be unavoidably damaged by the proposed development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable?

YES ☐ NO ☑

Discussion:

Refer to Part B.2.2 on page 8.

3. Is the project site near a State or County Park?

YES ☐ NO ☑

Discussion:

Refer to Part B.2.3 on page 8.

4. Will the proposed development affect an existing public access to or along the shoreline?

YES ☐ NO ☑

Discussion:

Refer to Part B.2.4 on page 8.

5. Will the proposed development provide public access to and/or along the shoreline?

YES ☐ NO ☑

Discussion:

Refer to Part B.2.5 on page 8.

6. Will the proposed development encourage expanded recreational use of County, State, or federally owned or controlled shoreline lands and waters having recreational value?

YES ☐ NO ☑

Discussion:

Refer to Part B.2.6 on page 8.

		YES	NO
7.	Will the development generate point or non-point sources of pollution that will affect recreation value of coastal area?	☐	☑

Discussion:

Refer to Part B.2.7 on page 8.

HISTORICAL RESOURCES:	Objective Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the Special Management Area that are significant in Hawaiian and American history and culture.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

		YES	NO
1.	Is the project site within a Federal, State and/or County designated historical/cultural district?	☐	☑

Discussion:

Refer to Part B.3.1 on page 9.

		YES	NO
2.	Is the project site listed on or nominated to the Hawaii or National Register of Historic Places?	☐	☑

Discussion:

Refer to Part B.3.2 on page 9.

		YES	NO
3.	Does the project site include land(s) which have not been previously surveyed by an archaeologist?	☐	☑

Discussion:

Refer to Part B.3.3 on page 9.

		YES	NO
4.	If an archeological survey has been conducted for the project site, has the survey been submitted to the State Historic Preservation Office for review and recommendations?	☐	☑

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

Discussion:

Refer to Part B.3.4 on page 9.

		YES	NO
5.	Has any site survey revealed any information on historic or archaeological resources? (Please provide a copy or reference of survey)	☐	☑

Discussion:

Refer to Part B.3.5 on page 9.

		YES	NO
6.	Is the project site within or near a Hawaiian fishpond?	☐	☑

Discussion:

Refer to Part B.3.6 on page 9.

		YES	NO
7.	Is the project located within or near a historic settlement area? (Cemeteries, burials, heiaus, etc.)	☐	☑

Discussion:

Refer to Part B.3.7 on page 9.

SCENIC & OPEN SPACE RESOURCES:	Objective Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

		YES	NO
1.	Does the project site abut or affect a valued scenic resources or landmark within the SMA?	☐	☑

Discussion:

Refer to Part B.4.1 on page 10.

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

		YES	NO
2.	Does the proposed development affect existing shoreline open space and scenic resources?	☐	☑

Discussion:

Refer to Part B.4.2 on page 10.

		YES	NO
3.	Does the proposed development involve alteration to natural landforms and existing public views to and along the shoreline?	☐	☑

Discussion:

Refer to Part B.4.3 on page 10.

		YES	NO
4.	Is the project compatible with the visual environment?	☑	☐

Discussion:

Refer to Part B.4.4 on page 10.

		YES	NO
5.	Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline?	☐	☑

Discussion:

Refer to Part B.4.5 on page 10.

		YES	NO
6.	Is the project site within the Shoreline Setback Area (20 or 40 feet inland from the shoreline)?	☐	☑

Discussion:

Refer to Part B.4.6 on page 10.

COASTAL ECOSYSTEMS:	Objective Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

1. Is the project site a habitat for endangered species of flora and fauna? YES ☐ NO ☑

Discussion:

Refer to Part B.5.1 on page 11.

2. Will the proposed development adversely affect valuable coastal ecosystems of significant biological or economic importance? YES ☐ NO ☑

Discussion:

Refer to Part B.5.2 on page 11.

3. Will the proposed involve disruption or degradation of coastal water ecosystems through stream diversions, channelization, and similar land and water uses? YES ☐ NO ☑

Discussion:

Refer to Part B.5.3 on page 11.

4. Will the proposed development include the construction of special waste treatment facilities, such as injection wells, discharge pipes, septic tank systems or cesspools? YES ☑ NO ☐

Discussion:

Refer to Part B.5.4 on page 11.

5. Is there a wetland on the project site? YES ☐ NO ☑

Discussion:

Refer to Part B.5.5 on page 11.

6. Is the project site situated in or abutting a Natural Area Reserve or Wildlife Refuge or Sanctuary? YES ☐ NO ☑

Discussion:

Refer to Part B.5.6 on page 11.

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

ECONOMIC USES:	Objective Provide public or private facilities and improvements important to the State's economy in suitable locations.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Does the project involve a harbor or port? YES ☐ NO ☑

Discussion:

Refer to Part B.6.1 on page 12.

2. Is the proposed development related to or near to an existing major hotel, multi-family, or condominium project? YES ☐ NO ☑

Discussion:

Refer to Part B.6.2 on page 12.

3. Does the project site include agricultural lands designated for such use? YES ☐ NO ☑

Discussion:

Refer to Part B.6.3 on page 12.

4. Does the proposed development relate to commercial fishing or seafood production? YES ☐ NO ☑

Discussion:

Refer to Part B.6.4 on page 12.

COASTAL HAZARDS:	Objective Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

		YES	NO
1.	Is the project site within a potential tsunami inundated area as depicted on the National Flood Insurance Rate maps (FIRM)?	☑	☐

Discussion:

Refer to Part B.7.1 on page 13.

		YES	NO
2.	Is the project site within a potential flood inundation area according to a FIRM?	☑	☐

Discussion:

Refer to Part B.7.2 on page 13.

		YES	NO
3.	Does the project comply with the requirements of the Federal Flood Insurance Program?	☑	☐

Discussion:

Refer to Part B.7.3 on page 13.

		YES	NO
4.	Has the project site or nearby shoreline areas experienced shoreline erosion?	☐	☑

Discussion:

Refer to Part B.7.4 on page 13.

		YES	NO
5.	Have any seawalls/revetments/etc. been constructed or exist in the immediate vicinity?	☐	☑

Discussion:

Refer to Part B.7.5 on page 13.

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

PROJECT ASSESSMENT:	

e. Evaluation of the impacts which cannot be avoided and mitigating measures proposed to minimize that impact:

Discussion:

Refer to Part B.8.a on page 14.

f. Evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations in accordance with the following aspects:

i. Substantial adverse environmental or ecological effects;

Discussion:

Refer to Paragraph B.8.b.i on page 14.

ii. Consistency or compliance of the proposed development relative to the goals and objectives of Chapter 205A, HRS; and Section 3.0 of the SMA Rules and Regulations; and

Discussion:

Refer to Paragraph B.8.b.ii on page 14.

iii. Consistency or compliance of the proposed development relative to the County General Plan, Development Plan, and Zoning Ordinances.

Discussion:

Refer to Paragraph B.8.b.iii on pages 14 and 15.

Doug Williams, P.E., Director Doug Williams
[name], [title]

03/10/2025
Date

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

COUNTY OF KAUA'I
STATE OF HAWAI'I

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

DIRECTOR'S REPORT

I. SUMMARY

Action Required by Planning Commission:	Consideration of Proposed Development involving improvements to the existing Wastewater Treatment Plant (WWTP) facility at Ching Young Village in Hanalei Town.
Permit Application Nos.	Special Management Area Use Permit SMA(U)-2026-1 Class IV Zoning Permit Z-IV-2026-2 Use Permit U-2026-1
Name of Applicant(s)	MICHAEL G. CHING ET.AL. (CHING YOUNG VILLAGE) Laulea Engineering LLC., Authorized Agent

II. PERMIT INFORMATION

PERMITS REQUIRED	
☒ **Use Permit**	A *USE PERMIT* is required as the proposed improvements to the private utility facility are not generally permitted within the General Commercial (CG) Zoning District.
☐ **Project Development Use Permit**	
☐ **Variance Permit**	
☐ **Special Permit**	
☒ **Zoning Permit Class** ☒ IV ☐ III	Pursuant to Section 8-8.4 of the KCC, 1987, as amended, a *CLASS IV ZONING PERMIT* is necessary since it is a procedural requirement involving a Use Permit.
☐ **Special Management Area Permit** ☒ Use ☐ Minor	A *SPECIAL MANAGEMENT AREA USE PERMIT* is required since the proposed development is situated within the Special Management Area (SMA) and the cost of the development is more than $750,000.00
AMENDMENTS	
☐ **Zoning Amendment**	
☐ **General Plan Amendment**	
☐ **State Land Use District Amendment**	

Date of Receipt of Completed Application: April 23, 2025

G.2.b.1.
Aug 26, 2025

~~H.2.b.1.~~
~~AUG 12 2025~~

Date of Director's Report:	June 10, 2025
Date of Public Hearing:	August 26, 2025
Deadline Date for PC to Take Action (60TH Day):	October 25, 2025

III. PROJECT DATA

PROJECT INFORAMTION			
Parcel Location:	Hanalei Town. Along the makai (seaward) side of Kūhiō Highway, located immediately adjacent and east of the Hanalei Post Office, approximately 600 feet west of the Aku Road/Kuhio Highway intersection.		
Tax Map Key(s):	(4) 5-5-002:040	**Area:**	2.485 acres

ZONING & DEVELOPMENT STANDARDS	
Zoning:	General Commercial (CG)
State Land Use District:	Urban
General Plan Designation:	Neighborhood General
Height Limit:	Twenty-Five (25) feet Max.
Max. Land Coverage:	Ninety Percent of Parcel Area (90%)
Parking Requirement:	Not Applicable
Front Setback:	5 feet minimum OR 15 feet (if building is entered from side with motor vehicle traffic)
Rear Setback:	0 feet or ½ Wall Plate Height
Side Setback:	0 feet or ½ Wall Plate Height
Community Plan Area:	North Shore Development Plan (NSDP)
Community Plan Land Use Designation:	Not Applicable
Deviations or Variances Requested:	Not Applicable

IV. LEGAL REQUIREMENTS

Section 8-3.1(f), KCC:	This report is being transmitted to the Applicant and Planning Commission in order to satisfy the requirements of Section 8-3.1 (f), relating to the provision of the Planning Director's report and recommendation on the subject proposal within sixty (60) days of the filing of a completed application. The application was received on July 21, 2025 and the Applicant, through its authorized agent, was notified accordingly of the Planning Department's intent to commence permit processing.
Public Hearing Date:	**AUGUST 26, 2025**

V. BACKGROUND

The Ching Young Village (CYV) commercial shopping complex was originally approved by the Planning Commission on October 11, 1978 through Special Management Area Use Permit SMA(U)-1978-19, and Class IV Zoning Permit Z-IV-1978-55. As part of the construction which began in the early 1980's, it included a private wastewater treatment facility.

The existing system consists of an equalization basin, aerator, an extended aeration tank, and final setting tank. The facility is located at the back northwestern portion of the property, away from Kuhio Highway.

VI. PROJECT DESCRIPTION AND USE

The proposed improvements through this application are to accommodate improvements at the existing wastewater treatment plant (WWTP). As represented, no components of the existing WWTP will be reused, aside from the repurposing blowers as standby units. The existing sewer mains and lift system will remain in operation during and following completion of the WWTP replacement.

The proposed improvements will involve minimal ground disturbance/excavation since installation will be primarily above ground.

1. **Ching Young Village WWTP Improvements** – The extent of the project consists of the following components:

   a. Existing Wet Well/Lift Station;
   b. 3,000-gallon FRP Preloader/Equalization Tank;
   c. Primary Bioreactor Treatment (MBBR) Tank;
      1) 8,000-gallon EQ Tank Section
      2) Integrated Clarifier Tank Section
      3) Integrated Sludge Holding Tank Section
      4) Electromagnetic Flowmeter
   d. Ultraviolet (UV) Disinfection System;
   e. Permitted Modified Injection Well Disposal System (1-Primary and 2-100% backup injection wells for DOH WWB & HAR 11-62 compliance); and
   f. Electrical upgrades

VII. APPLICANT'S REASONS/JUSTIFICATION

Refer to Applicant's SMA Assessment Form (See Section B. Part B of the Application) for further justification.

VIII. ADDITIONAL FINDINGS

1. Site Information/Characteristics

The subject parcel is designated as *"Neighborhood General"* under the Kaua'i General Plan and the project site is situated within the State Urban Land Use District. As indicated on the County's zoning maps, the project area as well as properties on both sides of Kuhio Highway in Hanalei Town are situated within the Commercial zoning district.

The general topography of the project site is relatively flat, containing a gentle slope moving from south to north, in the makai (seaward) direction away from Kuhio Highway. The CYV WWTP is located at an elevation approximately 12.5 feet MSL. The Federal Emergency Management Agency (FEMA) Flood Insurance Map shows the project site is situated within the flood zone identified as Zone '**AE**'. FEMA has identified those areas within the Zone "AE" as inundated by 1% annual chance of flooding for which Base Flood Elevations are determined. It is noted that the parcel is within the Tsunami Evacuation Zone, but it is outside of the County of Kaua'i Sea Level Rise Constraint District.

2. Surroundings
   The subject parcel is surrounded primarily by commercial/retail activity being in the heart of Hanalei Town. The nearest residential development is situated approximately 300 feet west of the project site.

3. Access
   The primary access to the project site is along Kuhio Highway, which is a State-owned/managed roadway that is wide enough to accommodate two-way vehicular traffic. Access to the project site is through an improved driveway.

4. Use Permit
   Pursuant to Article 3 of the Comprehensive Zoning Ordinance (CZO), Chapter 8 of the Kauai county Code (1987), the purpose of the Use Permit Procedure is to assure the proper integration into the community of uses which may be suitable only in specific locations of a district, or only under certain conditions, or only if the uses are designed, arranged or conducted in a particular manner, and to prohibit the uses if proper integration cannot be assured. Section 8-3.2 of the CZO specifies a Use Permit may be granted only if the Planning Commission finds that the use meets the following criteria:

   a. The use must be a compatible use;
   b. The use must not be detrimental to persons or property in the area;
   c. The use must not cause substantial environmental consequences; and
   d. The use must not be inconsistent with the intent of the Comprehensive Zoning Ordinance (CZO) and General Plan.

5. Special Management Area (SMA)
   In addressing the issues of the Special Management Area and its objectives and policies, the following aspects will be considered and evaluated:

   a. Recreational Resources
   b. Cultural/Historic Resources
   c. Scenic Resources
   d. Coastal Hazard

e. Coastal Ecosystem

Furthermore, the proposal does not:

- Involve dredging, filling or otherwise altering any bay, salt marsh, river mouth, slough or lagoon;
- Reduce the size of any beach or other area usable for public recreation;
- Reduce or impose restrictions upon public access to tidal and submerged lands, beaches, rivers, and streams within the SMA; and
- Adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, estuarine sanctuaries, potential or existing agricultural uses of land.

IX. PRELIMINARY EVALUATION

1. **Special Management Area (SMA)**

The County of Kaua'i Special Management Area (SMA) Rules and Regulations contain objectives, policies and guidelines designed to protect coastal resources. Within the SMA, special consideration is given to recreational opportunities, cultural and historic resources, scenic qualities and open space, coastal ecosystems, and coastal hazards. In evaluating the proposed development relative to the goals and objects of the SMA Rules and Regulations, the following aspects are considered:

a. Public Access and Coastal Recreation – The project site is not directly adjacent to the shoreline and is surrounded by similar commercial/retail development. Furthermore, there are no opportunities for public access to coastal recreational areas in connection with the proposed project because there are existing parcels and a roadway situated between the project site and the coastline.

b. Cultural/Historical Resources – The subject property has been developed with a wastewater treatment plant since the early 1980's. While the project involves some additions to the facility and necessary site work, the permit application has been sent to the State Department of Land & Natural Resources (DLNR), Historic Preservation Division (SHPD) for their review and comment. Any requirements shall be conditioned as part of this permit. Additionally, should any historical artifacts, shell or charcoal deposits, burials and stone pavings are discovered during construction within the petitioned area, the petitioner shall stop work in the immediate area and contact the SHPD.

c. Coastal Hazards – The subject property is located within the Coastal High Hazard (Tsunami) AE Zone as identified on the Federal Flood Insurance Rate Maps (FIRM). The proposed development would be designed to be in compliance with the flood standards as administered by the County Department of Public (DPW).

d. Coastal Ecosystems – The subject property has been extensively disturbed for use as a wastewater treatment plant, and the site is immediately adjacent to a public park. Pursuant to the Final EA, the U.S. Department if the Interior, Fish and Wildlife Service have confirmed that there is no federally designated critical habitat in the project area. As such, there are no expected adverse impacts on coastal ecosystems.

e. Scenic and Open Space Resources – The proposed project will not be readily visible from the shoreline, and therefore, no adverse impacts on scenic and open space characteristics are expected.

2. **General Plan**

Sector IV of the General Plan, entitled "Critical Infrastructure," Subsection 2. addresses the need to maintain and expand regional wastewater treatment through a combination of County and private systems. At this time, the County's wastewater treatment plants are limited to certain towns on Kauai (Waimea, Ele'ele, Līhu'e, and Wailua) and there are no immediate plans for such a facility within the Northshore Planning Area. As such, it would be necessary to update existing private systems to ensure that treatment complies with current environmental standards, and that it has the capacity for growth. As proposed, the project appears to be consistent with the overall policies, long range goals, and objectives found in the County's General Plan.

3. **Use Permit**

Pursuant to Article 20 of the Comprehensive Zoning Ordinance (CZO), Chapter 8 of the Kaua'i County Code (1987), the purpose of the Use Permit procedure is to assure the proper integration into the community of uses which may be suitable only in specific location of a district, or only under certain conditions, or only if the uses are designed, arranged or conducted in a particular manner, and to prohibit the uses if proper integration cannot be assured. Section 8-20.5 of the CZO specifies a Use Permit may be granted only if the Planning Commission finds that the use meets the following criteria:

- the use must be a compatible use;
- the use must not be detrimental to persons or property in the area;
- the use must not cause substantial environmental consequences; and
- the use must not be inconsistent with the intent of the Comprehensive Zoning Ordinance (CZO) and General Plan.

Based on the foregoing, the following aspects are taken into consideration:

a. The proposed improvements to the wastewater treatment facility remain consistent and compatible with the operation of the existing commercial shopping complex. These improvements are not likely to be detrimental to persons or property in the surrounding area since they've been in coexistence from the early 1980's;

b. In addressing the potential visual impact of the facility, it is noted that the existing WWTP is located at the back northwest portion and away from Kuhio Highway. There are retail stands and improvements that screen the WWTP facility from the public along Kuhio Highway;

c. Like before, the project would be designed to comply with the requirements of the State of Hawai'i, Department of Health and as a result, no substantial environmental consequences are anticipated;

d. The project site has been previously developed, and it is unlikely that rare, threatened, or endangered species, or sensitive habitats would be affected by the proposed use. Due to the extensive ground disturbance as a result of intensive agricultural activities in the past, it is unlikely that cultural resources or historic sites will be impacted by the project; and

e. The proposed development should not be detrimental to the health, safety, peace, morals, comfort, and general welfare of people residing or working in the surrounding community, and should not cause substantial harmful environmental consequences.

In consideration of this project, it should be noted that private/public utility facilities are identified as a permissible use within the General Commercial (CG) zoning district through the Use Permit process, as prescribed by the Comprehensive Zoning Ordinance (CZO).

To further ensure that the project is compatible with its surroundings and to minimize the visual impact of the structure, the external colors of structures should be of a moderate to dark earth-tone color.

X. CONCLUSION

Based on the foregoing, it is concluded that through proper mitigative measures, the proposed development can be considered since it would comply with the policies and guidelines of the Special Management Area Rules and Regulations in that:

1. The development will not have any substantial adverse environmental or ecological effect. Any adverse environmental or ecological effect that may result will be minimized to the extent practicable and is clearly outweighed by public health, safety and welfare, and other compelling public interest.

2. The development is consistent with the County General Plan, the Comprehensive Zoning Ordinance, and other applicable ordinances.

3. The proposed improvements to the wastewater treatment facility remain consistent and compatible with the existing WWTP and the commercial shopping complex, and conform with the requirements for issuance of a Use Permit and Class IV Zoning Permit.

The Applicant should institute the "Best Management Practices" during the subdivision of these properties in order to insure that the proposed development does not generate impacts that may affect the health, safety, and welfare of those in the surrounding area of the proposal.

The Applicant should implement to the extent possible sustainable building techniques and operational methods for the project.

XI. PRELMINARY RECOMMENDATION

Based on the foregoing, it is recommended that Special Management Area Use Permit SMA(U)-2026-2, Class IV Zoning Permit Z-IV-2026-2, and Use Permit U-2026-1 be **APPROVED** subject to the following conditions.

1. The proposed improvements to the wastewater treatment facility shall be constructed as represented. Any changes to said structures and/or facilities shall be reviewed by the Planning Department to determine whether Planning Commission review and approval is warranted.

2. In order to further ensure that the project is compatible with its surroundings and to minimize the visual impact of the structure, the external color of structures shall be of a moderate to dark earth-tone color, and the Applicant should retain as much of the existing vegetation.

3. In order to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds, if external lighting is to be used in connection with the proposed project, all external lighting shall be only of the following types: downward facing shielded lights. Spotlights aimed upward or spotlighting of structures shall be prohibited.

4. The Applicant shall resolve and comply with the applicable standards and requirements set forth by the State Health Department, and the County Departments of Public Works, Fire & Water.

5. The Applicant shall develop and utilize Best Management Practices (BMP's) during all phases of development in order to minimize erosion, dust, and sedimentation impacts of the project to abutting properties.

6. Should any archaeological or historical resources be discovered during ground disturbing/construction work, all work in the area of the archaeological/historical findings shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources – Historic Preservation Division and the Planning Department.

7. The Applicant is advised that additional government agency conditions may be imposed. It shall be the applicant's responsibility to resolve those conditions with the respective agency(ies).

8. The Planning Commission reserves the right to add or delete conditions of approval in order to address or mitigate unforeseen impacts this project may create, or revoke the permits through the proper procedures should conditions of approval be violated or adverse impacts be created that cannot be properly addressed.

The Planning Commission is advised that this report does not represent the Planning Department's final recommendation in view of the forthcoming public hearing process scheduled on August 26, 2025, whereby the entire record should also be included as part of the decision-making process. The entire record should include, but not be limited to:

  - pending government agency comments;
  - testimony from the general public and interested others; and
  - the Applicant's response to staff's report and recommendation as provided herein.

By ______________________
DALE A. CUA
Planner

Approved & Recommended to Commission:

By ______________________
KA'ĀINA S. HULL
Director of Planning

Date: 7/21/2025

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

COUNTY OF KAUA'I
STATE OF HAWAI'I

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

TRANSMITTAL OF AGENCY COMMENTS TO PLANNING COMMISSION

DATE: August 20, 2025

PERMIT NUMBER(S): SMA(U)-2026-1), Z-IV-2026-2, and U-2026-1

APPLICANT(S): MICHAEL G. CHING, ET AL.

Attached for the Planning Commission's reference are agency comments for the permit referenced above.

G.2.b.2.

AUG 26 2025

AUG 18 '25 PM3:40
PLANNING DEPT

County of Kaua'i
Planning Department
4444 Rice St., Suite A473 Lihue, HI 96766
(808) 241-4050

FROM: Kaaina S. Hull, Director   Planner: Dale Cua   7/22/2025

SUBJECT:
Zoning Class IV Z-IV-2026-2
Use Permit U-2026-1
Special Mgt Area Permit SMA(U)-2026-1
Tax Map Key: (4)5-5-002:040
Applicant: Michael G. Ching Et Al (Laulea Engineering LLC, Agent)
Ching Young Village Wastewater Treatment Plant Replacement

TO:

☑ State Department of Transportation - STP
☑ State DOT - Highways, Kauai (info only)
☐ State DOT - Airports, Kauai (info only)
☐ State DOT - Harbors, Kauai (info only)
☑ State Department of Health
☐ State Department of Agriculture
☐ State Office of Planning
☐ State Dept. of Bus. & Econ. Dev. Tourism
☐ State Land Use Commission
☑ State Historic Preservation Division
☐ State DLNR - Land Management
☐ State DLNR - Forestry & Wildlife
☐ State DLNR - Aquatic Resources
☐ State DLNR - Conservation & Coastal Lands
☐ Office of Hawaiian Affairs

☑ County DPW - Engineering
☐ County DPW - Wastewater
☐ County DPW - Building
☐ County DPW - Solid Waste
☐ County Department of Parks & Recreation
☑ County Fire Department
☑ County Housing Agency
☐ County Economic Development
☑ County Water Department
☐ County Civil Defense
☑ County Transportation Agency
☐ KHPRC
☐ U.S. Postal Department
☐ UH Sea Grant
☐ Other:

FOR YOUR COMMENTS (pertaining to your department)

8·13·2025

CTA HAS NO FURTHER COMMENT ON THIS PROJECT.

MAHALO!

This matter is scheduled for a public hearing before the County of Kauai Planning Commission on 8/26/2025 at the Lihue Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, at 9:00 am or soon thereafter. If we do not receive your agency comments within one (1) month from the date of this request, we will assume that there are no objections to this permit request. Mahalo!

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

DIRECTOR'S REPORT

I. SUMMARY

Action Required by Planning Commission:	Consideration for an Ordinance to amend Chapter 8, Article 27 Kaua'i County Code 1987, as amended, relating to Shoreline Setback and Coastal Protection
Permit Application No.:	Zoning Amendment ZA-2026-1
Name of Applicant(s):	COUNTY OF KAUA'I, PLANNING DEPARTMENT

II. PERMIT INFORMATION

AMENDMENTS	
☒ **Zoning Amendment**	Pursuant to KCC Section 8-3.4(a), as amended, a Zoning Amendment is necessary because it involves the changing of legislation text whenever the public necessity and convenience and the general welfare require an amendment.
☐ **General Plan Amendment**	
☐ **Community Plan Amendment**	
☐ **State Land Use District Amendment**	

III. LEGAL REQUIREMENTS

KCC Section 8-3.4	
Public Hearing Date:	August 26, 2025
Date of Publication:	July 25, 2025
Date of Director's Report:	August 18, 2025

G.4.a.1.

AUG 26 2025

IV. DESCRIPTION OF THE AMENDMENT

The proposed bill (see attached Exhibit A), amends the Shoreline Setback and Coastal Protection Ordinance as outlined in Chapter 8, Article 27 of the Kauaʻi County Code. The purpose of this amendment is to strengthen the existing shoreline setback regulations in order to more effectively mitigate the adverse impacts associated with the improper siting, renovation, or improvement of structures located within shoreline setback areas that are vulnerable to coastal hazards. This amendment is being introduced in recognition of the increasing variety and intensity of natural hazards- including, but not limited to, tsunamis, high surf, coastal flooding and erosion associated with sea level rise, and other climate-related impacts- which pose significant threats to public health, safety, and property. As these threats continue to escalate, it is the County's responsibility to take proactive measures to protect life and property, reduce exposure to coastal hazards, and preserve Hawaii's critical coastal and beach resources. This amendment is being proposed as a direct action to fulfill that responsibility.

To effectuate these changes, the proposed bill includes the following amendments:

- **New and Revised Definitions**: Introduces and updates definitions to improve clarity and consistency. New definitions include "*Beach*," "*Beach Processes*," "*Primary Coastal Dune*," "*Sea Level Rise Exposure Area (SLR-XA)*," and "*Seawall*." Existing definitions, including "*Coastal Hazard*," "*Minor structure*" "*Repair*," "*Revetment*," and "*Substantial Construction*" are revised.
- **Shoreline Setback Line Calculation:** Includes an additional 20-foot safety buffer in the average lot depth calculation and certain existing standard setback requirements to account for storm surge and sea level rise risks.
- **Updated Requirements for the Repair of Existing Structures:** Establishes updated requirements for shoreline property owners seeking to repair lawfully existing structures to better ensure such work does not qualify as a substantial improvement.
- **Shoreline Survey Requirement:** Requires a certified state shoreline survey for any repair project with estimated costs exceeding $125,000.
- **Retreat Agreement:** Requires the applicant to enter into an agreement to retreat, relocate, or remove proposed or existing structures before or when the shoreline reaches the structure(s). This requirement applies to lots identified as being threatened by sea level rise-related or historical coastal erosion
- **Construction Timeline Modification:** Reduces the time allowed to initiate and complete substantial construction within the shoreline setback area.
- **Adjustment to Minimum Buildable Footprint for Rebuilding:** Reduces the minimum buildable footprint for rebuilding a dwelling unit that cannot be sited mauka of the shoreline setback.
- **Clarification of Hardship Criteria:** Specifies that small lot size does not qualify as an economic hardship for the purposes of obtaining a hardship variance.
- **Enforcement of Removal for Improvements to Existing Structures:** Enables the enforcement of removal of improvements to existing structures, ensuring consistent implementation of related repair provisions.

Please refer to attached (Exhibit A) proposed draft bill language for further details.

V. AMENDMENT JUSTIFICATION

Hawaii's beaches are vital socio-ecological habitats that provide a wide range of benefits, including natural coastal protection from storms, support for tourism and food production, and the sustenance of diverse ways of life- such as subsistence practices, recreational activities, historical heritage, and spaces for social connection and spirituality- that are integral to the identity and well-being of local communities.[1] Recognizing the significant benefits of natural resources and the deep-rooted relationships that communities maintain with beaches and coastlines, the Hawaiʻi State Constitution affirms the obligation of the State and counties to preserve and protect these resources, stating that "*the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resource.*"[2]

In addition to the constitutional mandate, additional rules and regulations at the county, state, and federal levels have been enacted to preserve and protect Hawaii's coastal zones. At the county level, two primary mechanisms regulate coastal development: the Special Management Area (SMA) Rules and Regulations and the Shoreline Setback and Coastal Protection Policy. The SMA Rules and Regulations, adopted in 1975, establish special controls on development within designated shoreline areas. In 2008, the County of Kauaʻi adopted its first Shoreline Setback and Coastal Protection Ordinance, creating a development prohibition zone along the island's shoreline.

However, despite the constitutional directive and the implementation of regulations to manage coastal development, studies of historical shoreline change have found that approximately 71% of Kauai's beaches are eroding, with shorelines retreating by an average of 36 feet over the past century and nearly four miles of beach having been completely lost.[3] Climate change further exacerbates these challenges, posing a serious threat to beaches and coastal dune systems, which are highly vulnerable to its impacts. Projections indicate that by 2050, average shoreline recession may be nearly double that estimated through historical trends, and nearly 2.5 times by 2100.[4] In light of these impacts and projections, it is evident that current regulatory frameworks are inadequate in effectively preventing long-term coastal erosion and the loss of beach resources. Research highlights persistent regulatory challenges, including the use of allowances for the maintenance and renovation of non-conforming structures, which can further entrench vulnerability to coastal hazards and accelerate shoreline degradation.[5]

---

[1] Bremer, L. L., Coffman, M., Summers, A., Kelley, L. C., & Kinney, W. (2022). Managing for diverse coastal uses and values under sea level rise: Perspectives from Oʻahu, Hawaiʻi. *Ocean & Coastal Management, 225*, 106151. https://doi.org/10.1016/j.ocecoaman.2022.106151

[2] HAW. CONST. art. XI, § 1.

[3] Fletcher, C.H., Romine, B.M., Genz, A.S., Barbee, M.M., Dyer, Matthew, Anderson, T.R., Lim, S.C., Vitousek, Sean, Bochicchio, Christopher, and Richmond, B.M., 2012, National assessment of shoreline change: Historical shoreline change in the Hawaiian Islands: U.S. Geological Survey Open-File Report 2011–1051, 55 p. (Also available at http://pubs.usgs.gov/of/2011/1051.)

[4] Anderson, T.R., Fletcher, C.H., Barbee, M.M. et al. (2015). Doubling of coastal erosion under rising sea level by mid-century in Hawaii. Nat Hazards 78, 75–103 https://doi.org/10.1007/s11069-015-1698-6

In response to the growing threat of climate change, Kaua'i County has taken a leadership role in strengthening its planning and regulatory framework to address climate impacts. To address chronic coastal erosion driven by sea level rise, the County amended its Shoreline Setback and Coastal Protection Policy in 2014, implementing an erosion rate-based setback calculated from historical shoreline change. Following this, Kaua'i County adopted its 2035 General Plan in 2018, which called for integrating climate change risks into future land use, development, and infrastructure planning, as well as periodically updating the Shoreline Setback and Coastal Protection provisions of the Comprehensive Zoning Ordinance to reflect the best available sea level rise data. In 2022, the County further advanced climate resilience by adopting the Sea Level Rise Constraint District, which established climate-resilient design standards, including elevation requirements informed by spatial and depth projections for sea level rise.

This proposed bill builds upon these efforts by introducing targeted amendments to the Comprehensive Zoning Ordinance's Shoreline Setback and Coastal Protection policy, aimed at strengthening shoreline protections, preserving the island's beach resources, reducing long-term risk, enhancing regulatory implementation, and safeguarding public and environmental interests. The objectives and justifications for these amendments are outlined below:

- *To enhance consistency and enforceability*, the bill adds and clarifies key definitions, thereby reducing ambiguity in regulatory interpretation and streamlining the permitting process.
- *To ensure permitted development decisions account for future climate change risks,* additional sea level rise considerations are incorporated into shoreline setback calculations, providing a more accurate and forward-looking buffer from the shoreline.
- *To prevent development from circumventing shoreline regulations through repairs,* the bill includes additional requirements for repairs to lawfully existing structures, ensuring such work does not qualify as a substantial improvement that would trigger stricter standards.
- *To safeguard public trust resources and maintain lateral beach access,* the bill requires certified shoreline surveys for repair projects exceeding $125,000, providing clear delineation between public trust lands and private property to help prevent disputes.
- *To minimize reliance on reactive emergency responses that may threaten public safety and coastal resources,* property owners seeking a permit in high-risk areas must enter into agreements to retreat, relocate, or remove structures once they are threatened by shoreline erosion.
- *To promote risk-informed and timely development*, the timeframe to initiate and complete substantial construction is shortened.

---

[5] Summers, A., Fletcher, C. H., Spirandelli, D., McDonald, K., Over, J.-S., Anderson, T., Barbee, M., & Romine, B. M. (2018). Failure to protect beaches under slowly rising sea level. *Climatic Change, 151*(3–4), 427–443.

- *To limit the scale of a rebuild in hazardous areas,* the bill reduces the minimum buildable footprint for rebuilding a dwelling that cannot be sited mauka of the setback, ensuring that only smaller structures are constructed, thereby minimizing risks to property, public safety ,and coastal ecosystems.
- *To ensure the appropriate application of hardship variances,* the bill specifies that small lot size does not constitute an economic hardship, thereby preventing it from being used as the justification for development in hazardous coastal areas.

Please refer to the following Preliminary Evaluation for further discussion.

VI. AGENCY COMMENTS

Attached through separate transmittal.

VII. PRELIMINARY EVALUATION

In evaluating the proposed zoning amendment, the following aspects should be taken into consideration:

The County of Kauai's Shoreline Setback and Coastal Protection policy, outlined in Article 27, regulates the location and type of development near the shoreline with the following intention:

> ...to protect life and property, provide access to and along the shoreline, protect and preserve Native Hawaiian cultural resources and communities threatened by sea level rise, ensure the longevity and integrity of Kaua'i's coastal and beach resources along Kaua'i's shoreline and to strengthen shoreline setback requirements in this Article by incorporating science-based erosion rates established in the Kaua'i Coastal Erosion Study and current coastal hazard mitigation best practices and strategies. (Ord. No. 979, December 5, 2014; Ord. No. 1088, February 4, 2021)

Building on this foundation, the proposed bill aims to further strengthen shoreline setback requirements by integrating the latest coastal hazard mitigation strategies and best practices. These updates are intended to enhance the County's ability to protect life and property, mitigate risks posed by coastal hazards such as erosion exacerbated by sea level rise, and preserve critical coastal resources.

The specific mechanisms by which the proposed bill intends to achieve these goals— along with their policy implications and potential impacts— are further examined below.

CZO Amendment

Amendment of Sec. 8-27.2 (Definitions)

The proposed bill amends Section 8-27.2 by introducing new and revised definitions. Below are a each listed amendments pertaining to Section 8-27.2 with their respective justifications:

1) **"Beach"** means a coastal landform primarily composed of sand from eroded rock, coral, or shell material, or any combination thereof, that is established and shaped by wave action or tidal processes. Beach includes sand deposit in nearshore submerged areas, or coastal dunes or upland beach deposits landward of the shoreline that provide benefits for public use and recreation, for coastal ecosystems, and as a natural buffer against coastal hazards.

   - This new definition is being proposed to enhance clarity and consistency in the application of Article 27. Although the term "beach" is referenced throughout the existing Shoreline Setback and Coastal Protection policy—as well as within several newly proposed definitions in the bill—it is not currently defined. Establishing a clear and specific definition is essential to ensure consistent regulatory interpretation and effective implementation.

2) **"Beach processes"** means the dynamic interactions between waves, currents, and sediment along coastal shorelines, influencing the formation and evolution of beaches.

   - The new definition is being proposed because it is frequently referenced throughout Article 27; however, it currently lacks any definition. For example, when considering variance approvals, a common criterion requires that the proposed structure "not adversely affect beach processes". Therefore, establishing a clear and precise definition of "beach processes" is essential to promote consistent regulatory interpretation. This is particularly important for agency personnel, who typically do not possess scientific training in coastal dynamics.

     However, it should be noted that this definition could be further strengthened by:
     1. Incorporating additional key interactions, such as those involving wind and water levels;
     2. Clarifying that the interaction occurs with sediment mobility, not merely the presence of sediment; and
     3. Specifying that these interactions shape beach formation and evolution through erosion, transportation, and deposition of sediment.

3) **"Coastal hazard"** means [natural processes in the coastal zone that are generated by geologic, oceanographic, and/or meteorological processes that place people and/or improvements at risk for injury and/or damage] elevated risk to public health or safety, property, and the environment in coastal areas resulting from physical phenomena, including but not limited to high waves, storm surge, tsunami, sea level rise, coastal erosion, and other hazards.

   - This amendment is necessary to improve the functionality and relevance of the definition for use in regulatory contexts. For instance, it replaces the vague term "natural processes" with a more specific list of identifiable coastal hazards—such as high waves, storm surge, sea level rise, tsunami, and coastal erosion—offering clearer guidance for regulators and applicants. By explicitly naming climate-driven hazards, the revised definition addresses previous omissions related to anthropogenic climate change. It also adopts a risk-based framing, shifting focus from the origin of hazards to their impacts on public health and safety, property, and the environment. Additionally, the scope of identified risks is expanded beyond just "people and improvements" to include broader considerations aligned with the purpose of Article 27, which is to protect life, property, and natural resources.

It should be noted that Hawai'i Revised Statutes Chapter 205A defines "Coastal Hazards" as "*any tsunami, hurricane, wind, wave, storm surges, high tide, flooding, erosion, sea level rise, subsidence, or point and nonpoint source pollution.*" While this definition expressly includes point and nonpoint source pollution and subsidence, the revised definition in this proposed amendment does not emphasize these hazards. This is because the primary purpose of the shoreline setback is to anticipate and mitigate risks arising from physical phenomena by siting structures farther inland from areas deemed more vulnerable. Pollution, however, is not necessarily a physical phenomenon. Instead, the Special Management Area Rules and Regulations—another mechanism for implementing Chapter 205A—serve as a mitigative permitting process that addresses development-related impacts, including those from hazards such as point and nonpoint source pollution and subsidence. Accordingly, for the purposes of this Article, it is appropriate to highlight hazards that result from physical processes rather than those stemming primarily from development-driven contamination.

To further strengthen this definition and better align it with the broader objectives of Article 27, this term could explicitly incorporate recognition of risks to shoreline access and Native Hawaiian cultural resources, thereby ensuring a more comprehensive approach to assessing vulnerability in project review and permitting.

4) **"Minor structure,"** means [:
   (1) a structure that costs less than $125,000 and provides temporary emergency protective measures for a legally habitable structure that is imminently threatened by coastal hazards provided that the protective measure has received approval in accordance with the Special Management Area Rules of the Kaua'i Planning Commission and/or the State Department of Land and Natural Resources (as may be the case), relocation of the endangered structure has been considered and is not reasonable given the nature of the emergency, the protective measure is removed within 180 days of its installation, and given the significance of the emergency, the protection is the best management alternative with respect to beach, shoreline, and/or coastal resource conservation, or

   (2)] a structure that:
      (A) costs less than $125,000; and

(B) does not adversely affect beach processes, does not artificially fix the shoreline, and does not interfere with public access or public views to and along the shoreline; and
(C) does not impede the natural processes and/or movement of the shoreline and/or sand dunes, and does not alter the grade of the shoreline setback area; and
(D) is consistent with the purposes of this Article and HRS Chapter 205A, as amended; and
(E) includes, but is not limited to, lighting in conformance with HRS Chapter 205A, landscape features, barbeques, picnic tables, benches, chairs, borders, wooden trellis, bird feeders, signs, safety improvements, lifesaving devices, movable lifeguard stands, outdoor showers and water faucets, public utility lines, utility poles and accessory structures along existing corridors, temporary tents for special events not exceeding 14 consecutive days in duration during any three-month period, walls and fences that are located more than 40 feet from the shoreline, landscape planting and irrigation systems provided that they are located more than 40 feet away from the shoreline and do not artificially extend the shoreline or shoreline setback area seaward, public park facilities (excluding restrooms, wastewater systems, and shoreline armoring structures or improvements), portable or removable walkways for public access, or, as determined by the director, a structure primarily benefitting the public that will not impact or be impacted by coastal erosion processes; and
(F) excludes, but is not limited to, any in-ground swimming pools or spas, garages, carports, concrete walkways that are reinforced, concrete walkways that are not saw-cut at a minimum of three foot intervals, and concrete steps.

- This amendment is necessary as it removes redundancy in the definition of a 'Minor Structure' related to the cost threshold of $125,000. Additionally, by eliminating subsection (1), the proposed amendment clarifies that temporary emergency protective measures, such as sandbags, for imminently threatened, legally habitable structures are no longer classified as 'Minor Structures.' While Article 27's current regulations permit these measures within the shoreline setback, the proposed bill would reclassify them as structures. As a result, they would now require a variance, including Planning Commission approval-thereby establishing a more rigorous permitting process that further supports the preservation of beaches and coastal resources.

  It is important to note that temporary shoreline emergency protective measures are also currently subject to Special Management Area (SMA) Rules and Regulations. However, such measures could qualify as an SMA Minor Permit, which does not require a public hearing or action by the Planning Commission. Therefore, this amendment would ensure a public hearing process as part of obtaining a variance.

5) **"Primary Coastal Dune"** means the first dune encountered mauka of the beach.

- This new definition is being added because in the current Shoreline Setback and Coastal Protection policy, this term was inadvertently included at the end of the definition of "Plan." The proposed bill corrects this by removing the definition from the term "Plan" and establishing "Primary Coastal Dune" as a distinct and clearly defined term.

However, this definition can be further refined to specify that the primary coastal dune is positioned so that it may be reached by storm waves, seasonal high waves, and elevated water levels, enabling the release of sand to the beach or offshore waters. Including this in the definition recognizes the primary coastal dune as the dune closest to the ocean-typically the most exposed and, therefore, the most vulnerable to coastal hazards (e.g., storm waves, seasonal high waves, elevated water levels). This distinction differentiates it from the broader coastal dune system, where secondary and tertiary dunes are generally located farther inland, often at higher elevations, and are less directly affected by storm waves and seasonal high waves.

Based on this distinction, it could also be appropriate to revise the definition of "Coastal Dune," which could read:

> "Coastal dune" means one of possibly several continuous or nearly continuous mounds or ridges of unconsolidated sand on the landward side of a beach that is contiguous and approximately parallel to the beach, [situated so that it may be accessible to storm waves and seasonal high waves for release to the beach or offshore waters] formed as wind and occasionally high waves deposit sand in a sheltered area that is typically stabilized with dune-adapted plant species, leading to accumulation and formation of a dune.

This revised definition clarifies the location of the dune system without implying uniform vulnerability to storm waves or seasonal high waves, as accessibility and exposure vary among dunes. It also specifies dune formation and stabilization processes.

6) **"Repair"** means the [reconstruction or renewal] rehabilitation or renovation of any part of a lawfully existing structure, but not the entire structure, solely for the purpose of its maintenance and does not result in an addition to, or enlargement or expansion of, the lawfully existing structure, such as alterations of floors, roofs, walls, or the supporting structure of a building or the rearrangement of any of its component parts. A "substantial improvement" as defined herein shall not be considered a repair. [Repair shall be consistent with the definition of "repair" under Sec. 8-1.5, Kaua'i County Code 1987, as amended.]

   - This amendment is necessary because the terms 'reconstruction' and 'renewal' generally imply extensive work, often involving rebuilding or significant upgrades. Moreover, the definition of "Rebuilding" explicitly states that it "means reconstruction," further reinforcing the association with more substantial construction activity. In contrast, the terms 'rehabilitation' and 'renovation' more accurately describe less intensive work focused on the maintenance and improvement of existing structures, rather than complete rebuilding.

Additionally, the proposed bill removes the reference to consistency with the definition of "repair" under Sec. 8-1.5 to eliminate the need for agency staff, applicants, and the public to cross-reference definitions. Instead, the term will be explicitly defined within the Shoreline Setback and Coastal Protection Policy section for clarity and ease of use.

7) **"Revetment"** shall mean a facing of stone, concrete, blocks, or other [similar] materials built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.

   - This amendment is necessary because revetments can be constructed from a variety of materials beyond stone, concrete, or blocks, such as geotextile tubes or bags. To accurately encompass these structures, the definition should not limit materials to those explicitly listed or those of a similar nature.

     It is also important to distinguish revetments from seawalls: revetments are characterized by a sloped surface, whereas seawalls are vertical structures. The definition should be revised to clearly reflect this distinction. Additionally, Hawai'i Administrative Rules Title 13, Chapter 222 (Shoreline Certifications) defines "Revetment" as "*a sloping face of stone, concrete, blocks or other similar material built to protect the enbankment or shore against erosion by wave action or current.*" The proposed definition should align with this existing definition by including the inclusion of the term "sloping."

8) **"Sea Level Rise Exposure Area (SLR-XA)"** means the sea level rise exposure area delineated in the Hawai'i Climate Change Mitigation and Adaptation Commission's Hawai'i Sea Level Rise Vier, or its successors.

   - As this term does not appear in the existing language of Article 27 or in the proposed amendments, it may be appropriate to remove its definition from the proposed bill.

9) **"Seawall"** means a shoreline hardening structure built of stone, concrete, blocks or other materials to protect a scarp, embankment, or structure against erosion or damage by wave action or currents and has a vertical face on its makai side.

   - This new definition is being added because the term "Seawall" is included within the definition of "Shoreline hardening" but is not explicitly defined, whereas the term "Revetment" is currently defined. Providing a definition for "Seawall" will clarify what constitutes a seawall and how it differs from a revetment.

     It should be noted that Hawai'i Administrative Rules Title 13, Chapter 222 (Shoreline Certifications) defines "Seawall" as "*a structure with a vertical face* *separating land and water areas, primarily designed to prevent erosion and other damage due to wave action.*" Given the close coordination required between the County Planning Department's Special Management Area regulatory personnel and the Department of Land and Natural Resources Office of Conservation and Coastal Lands—who administer the Shoreline Certifications policy—maintaining consistency with the Hawai'i Administrative Rules is advantageous.

While the Hawai'i Administrative Rules' definition is somewhat more general than the proposed one, there are no significant differences that would exclude structures identified as seawalls under the proposed amendment. Therefore, it is advisable to amend the definition of "Seawall" to align with the definition provided in Hawai'i Administrative Rules Title 13, Chapter 222 (Shoreline Certifications).

10) **"Substantial construction"** means that 100% of the foundation has been laid[, or that 100% of the foundation of the active phase of a project has been laid where the project is being done in phases].

    - This amendment is necessary to ensure completion within the substantial construction timeframe, which the bill proposes to shorten from three years to two. Further details on this change are provided later in the report.

Amendment of Sec. 8-27.3 (Shoreline Setback Determination: Establishment of the Shoreline Setback Line)

The shoreline setback line reflects the projected inland retreat of the shoreline over the expected lifespan of a building. Since the adoption of the Shoreline Setback and Coastal Protection Policy in 2008, setback calculations have been refined to incorporate the best available data, updated coastal management practices, and an improved understanding of development's impacts on coastal processes.

When first adopted in 2008, an erosion rate–based calculation was applied only to lots with an average depth greater than 160 feet, with a minimum setback distance ranging from 40 feet up to 100 feet for all other lot depths. However, this approach preceded the completion of coastal erosion hazard maps and was therefore implemented without the benefit of comprehensive data. In 2010, the University of Hawai'i Coastal Geology Group completed the Kaua'i Coastal Erosion Study, which mapped historical shoreline positions and calculated shoreline change rates along most of the island's sandy coastlines. Incorporating this data, the policy was amended in 2014 to apply erosion rate–based setbacks to all lots included in the coastal erosion hazard study. The formula of the erosion-based shoreline setback calculation is: 40 feet + (70 X annual coastal erosion rate) + 20 feet. In breaking down the formula, the 40 feet represents the State's minimum setback, in accordance to the State's Coastal Zone Management Act, HRS §§ 205A. The 70-year multiplier reflects the minimum expected lifespan of a structure. The added 20 feet is an additional safety buffer for the variability in the erosion rate data, storm surge, high surf, and the risk of sea level rise.

The average lot depth setback calculation was included based on the rationale that larger lots should be subject to greater setback requirements. The average lot depth formula also includes the State's minimum setback (40 feet). Accordingly, the shoreline setback would be determined using the greater of the two calculations: the erosion-rate-based setback or the average lot depth-based setback.

The proposed bill revises the methodology for determining the shoreline setback line by incorporating an additional 20-foot safety buffer into the average lot depth calculation, accounting for storm surge and sea level rise risks. It also adds a 20-foot buffer to the existing 100-foot setback requirement for lots with a depth greater than 220 feet. Furthermore, the bill establishes a maximum setback of 120 feet for lots not included in the Kaua'i Coastal Erosion Study. **Table 1** provides a summary of the current setback provisions and the proposed amendments.

Table 1: Summary of Original Shoreline Setback Determination Calculations and Proposed Amendments

Lot Category	**Average Lot Depth**	**Original Setback Calculations**	**Proposed Amendments**
Lots *included* in the Kaua'i Coastal Erosion Study	Less than 140 feet	40 feet plus 70 times the annual coastal erosion rate, plus a 20-foot buffer	No changes proposed
	140 to 220 feet	Greater of: • 40 feet plus 70 times the annual coastal erosion rate, plus a 20-foot buffer • *(Average Lot Depth − 100 feet) ÷ 2* + 40 feet	Greater of: • 40 feet plus 70 times the annual coastal erosion rate, plus a 20-foot buffer • *(Average Lot Depth − 100 feet) ÷ 2* + **60 feet** **Note:** Increases the base from 40 feet to 60 feet (adds 20 feet)
	Greater than 220 feet	Greater of: • 40 feet plus 70 times the annual coastal erosion rate, plus a 20-foot buffer • 100 feet from the certified shoreline	Greater of: • 40 feet plus 70 times the annual coastal erosion rate, plus a 20-foot buffer • **120 feet** from the certified shoreline **Note:** Increases the setback from 100 feet to 120 feet (adds 20 feet)
Lots *not included* in	N/A	*(Average Lot Depth − 100) ÷ 2* + 40 feet	*(Average Lot Depth − 100) ÷ 2* + **60 feet**

the Kaua'i Coastal Erosion Study			**Note:** Increases the base from 40 feet to 60 feet (adds 20 feet)
		Maximum setback that can be required: 100 feet	Maximum setback that can be required: **120 feet** **Note:** Increases maximum by 20 feet

Currently, erosion rate-based setbacks are the only shoreline setback calculations that account for climate change-related hazards, including sea level rise and storm surge variability. By incorporating a 20-foot safety buffer into the other setback methods—such as the average lot depth formula, the 100-foot setback for lots over 220 feet in depth, and the maximum setback for lots not included in the Kaua'i Coastal Erosion Study—the proposed bill ensures that all setback determinations address a broader range of coastal hazards, including high surf, coastal flooding, and erosion associated with climate change.

Amendment of Sec. 8-27.6 (Prohibited Activities in the Shoreline Setback Area)

The proposed bill amends Section 8-27.6, Prohibited Activities in the Shoreline Setback Area, by revising the language of the third provision of Section 8-27.6(c), which specifies certain activities prohibited within the shoreline setback area:

> (3) [Shoreline hardening unless it is approved by the State of Hawai'i's Office of Conservation and Coastal Lands] Private shoreline hardening structures, including seawalls and revetments, at sites subject to the Kaua'i Coastal Erosion Study and at sites where shoreline hardening structures interfere with existing recreational and waterline activities.

This amendment aligns with the language of the State's Coastal Zone Management Act, HRS §§ 205A, which establishes a policy to "*prohibit construction of private shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities.*" Given that this is a State directive, and that the State of Hawai'i's Office of Conservation and Coastal Lands must comply with this policy, adopting the language from HRS §§ 205A simplifies and strengthens this provision.

The primary distinction in the proposed amendment is the specific identification of sites subject to the Kaua'i Coastal Erosion Study, rather than generally referencing sites with sand beaches. This distinction is important for two reasons: (1) the Kaua'i Coastal Erosion Study encompasses all sandy beaches, thereby ensuring comprehensive coverage of sites having sand beaches; and (2) it accounts for the potential loss of sandy beaches over time due to climate change or significant storm surge events, thereby including sites where sandy beaches currently exist but may be diminished or lost in the future under changing environmental conditions.

While this amendment may ultimately extend beyond existing sandy beaches, it encourages the retreat of structures built on dune systems to facilitate beach restoration. Furthermore, because shoreline hardening accelerates erosion on adjacent properties—a phenomenon known as "flanking," where erosion accelerates on lands near hardened structures—it is prudent to prohibit private shoreline hardening structures outright to prevent further disruption of sand transport within the littoral system.

Amendment of Sec. 8-27.7 (Permitted structures within the shoreline setback area)

Section 8-27.7 of the Shoreline Setback and Coastal Protection Policy specifies the types of structures permitted within the shoreline setback area. Any structures or landscaping not listed in this section are prohibited unless authorized through a variance.

Repairs to lawfully existing structures, including nonconforming structures, are allowed provided that they:

1. Do not enlarge or expand the structure;
2. Do not constitute a substantial improvement;
3. Comply with all applicable laws and regulations (e.g., Building Code, Floodplain Management Regulations, Special Management Area requirements); and
4. Meet the definition of "repair" as set forth in **Section 8-27.2** (Definitions).

Under the ordinance, a "repair" is distinct from a "substantial improvement." A substantial improvement is defined as a cumulative series of repairs, reconstructions, improvements, or additions to a structure within a 10-year period, where the total cost equals or exceeds 50% of the structure's market value prior to the first improvement in that period. The County currently determines whether a project constitutes a substantial improvement through a letter from the Department of Public Works (DPW) to the Planning Department, which includes a calculated ratio and percentage of proposed improvement costs relative to market value. If the percentage is 50% or more, the project is classified as a substantial improvement and requires a variance.

However, accurately distinguishing between repairs and substantial improvements can be difficult in practice due to several factors, including:

- Project costs are estimated prior to construction, yet these estimates are inherently uncertain and often fluctuate due to inflation, supply chain disruptions, or unforeseen conditions encountered during construction.
- Variability in market value arises from differing appraisal methodologies as well as changes in property values between the appraisal date and the construction period.
- Incomplete or inaccurate cost reporting may occur, potentially resulting in underreported expenditures.
- Unreported changes in project scope during construction may increase overall project costs beyond the original estimate.

- Tracking repair costs for projects completed in incremental phases can be difficult, as the cumulative costs of multiple phases may exceed the threshold for classification as a substantial improvement.

To address these challenges, the proposed bill aims to formalize and enhance provisions to ensure that projects classified as repairs do not, in fact, constitute substantial improvements by requiring the following:

1. An appraisal of the structure;
2. A cost breakdown estimate for the proposed project using a "Non-Substantial Improvement Job Cost Breakdown Worksheet" that includes all project costs;
3. A signed declaration from the applicant acknowledging understanding and agreement with the estimated repair exemption cost figures;
4. Notification to the Planning Department of the project's completion date, along with disclosure of any additional construction materials, labor, or associated costs incurred;
5. Within 60 days of notification of completion—or while the project is still ongoing—the Director may require submission of receipts for each improvement listed in the "Non-Substantial Improvement Job Cost Breakdown Worksheet"; and
6. If the receipts show that expenditures meet the definition of a substantial improvement rather than a repair, the Director shall initiate enforcement actions in accordance with applicable standards.

The proposed amendments are both appropriate and necessary to accurately verify repair projects, thereby preventing potential misuse of repair classifications, ensuring consistent and effective enforcement of the ordinance, and safeguarding coastal resources from inappropriate development. While the Planning Department currently employs a process—including the use of an internal "Substantial Improvement Job Cost Breakdown" worksheet—to track and verify project costs, the proposed bill introduces additional requirements, such as mandating an appraisal of the structure, which would further strengthen the verification process. Moreover, it is important to note that the existing process is not codified within the Shoreline Setback and Coastal Protection Policy and is therefore considered an informal practice conducted as a matter of due diligence. Given that informal procedures may vary with changes in personnel, codifying this process is essential to ensure its consistent application over time.

It should be noted that the Planning Department typically employs its internal "Substantial Improvement Job Cost Breakdown" worksheet to verify project costs only when the calculated ratio and percentage of proposed improvement costs provided by the Department of Public Works fall within the 30% to 49% range. While there may be concerns that applying these measures to all repair projects could be time-consuming, the complexities associated with tracking repair costs—particularly for projects completed in incremental phases or through multiple repairs—underscore the importance of implementing these measures universally for all repairs.

Additionally, the proposed bill amends Sec. 8-27.7 by requiring that any repairs exceeding $125,000 will be required to include a certified state shoreline survey in their application for a shoreline setback determination. The State-certified shoreline survey identifies the designated shoreline—defined as the highest wash of the waves during the highest annual tide—and is officially approved by the State of Hawai'i Board of Land and Natural Resources. Currently, a certified state shoreline survey is required for any new structures or uses proposed within the shoreline setback, with the survey remaining valid for one year. The certified shoreline is used to determine where the setback's development prohibition zone extends to. It also is used to identify what land is held in public trust versus what is private property.

Uncertainty regarding the boundary between public beach areas and private property often leads to conflict, particularly as coastal development continues to intensify. In the absence of a valid State-certified shoreline, property owners typically benefit from greater flexibility in asserting boundary claims. However, a state-certified shoreline provides a definitive demarcation, clarifying which lands are held in the public trust and which are privately owned.

Given the increasing value and vulnerability of coastal properties, requiring a certified shoreline survey for higher-value repair projects is considered a prudent measure to prevent disputes, protect public trust resources and lateral beach access, and ensure regulatory consistency. The proposed amendment represents a meaningful step toward addressing these long-standing challenges.

The final amendment proposed in Section 8-27.7 introduces a new provision requiring that applicants for any new structure or substantial improvement within the shoreline setback area—where the lot is subject to sea level rise erosion or historic erosion—must agree to retreat, relocate, or remove both the proposed and any existing structures at their own expense when the shoreline reaches those structures.

This amendment is necessary to address the escalating threat of structures collapsing into the ocean as coastal erosion intensifies with sea level rise. Several locations across the state have already experienced such incidents. Currently, the State's approach to private lands relies on a reactive retreat program, in which action is taken only after a structure has fallen onto the beach. Such a reactive approach poses serious risks to public safety, including injuries from falling debris and hazards created by debris accumulating on beaches or in the ocean, endangering swimmers and beach users. It also results in environmental degradation through the release of toxic substances, pollution from building materials, and physical damage to sensitive coastal and marine ecosystems. This issue is particularly urgent for Kaua'i, where an ongoing study estimates that property acquisition and deconstruction of residential, hotel and resort, and commercial development could cost as much as $1.1 billion.[6] Residential properties alone represent a substantial portion of this cost—estimated at roughly half a billion dollars. As sea level rise continues to accelerate erosion, the need for proactive removal of imminently threatened structures—and ensuring that property owners bear the associated costs—will become increasingly critical. Requiring applicants for new structures to commit to retreating, relocating, or removing proposed and existing structures at their own expense reduces reliance on emergency responses, enhances protection of public safety and coastal ecosystems, and ensures that the financial responsibility for retreat rests with the property owner. As specified in the CZO, this agreement shall run with the land and be recorded by the applicant with the Bureau of Conveyances or the Land Court, thereby ensuring that the obligations associated with the structure(s) remain enforceable regardless of any change in ownership.

---

[6] Tavares, K., Setter, R., Dreizin, T., Summers, A., Clinton, A., Coffman., M. (2025) [Report in preparation]. University of Hawai'i

Amendment of Sec. 8-27.8 (Procedures for Obtaining Shoreline Setback Determinations)

The proposed bill includes language in Section 8-27.8 establishing that all shoreline setback determination applications are subject to a 30-day public comment period. Currently, these applications are posted on the Planning Commission's agenda and made available for a 30-day comment period; however, this amendment formalizes and codifies that requirement, thereby improving transparency and helping to ensure the public is aware of and able to participate in the process.

Additionally, the proposed bill reduces the timeframe for substantial construction to commence following shoreline setback approval from three years to two years and shortens the completion deadline from four years to three years. These changes promote timely project execution, minimize the likelihood of stalled projects within the shoreline setback area, and support more risk-informed development decisions. If construction is not completed within the three-year deadline, the Planning Commission will have the opportunity to reassess shoreline stability, enabling a review of evolving shoreline conditions and the continued appropriateness of the development.

Amendment of Sec. 8-27.9 (Variance application)

The proposed bill also removes the provision that permits the Planning Commission to waive a public hearing for a variance application that protects a legal structure costing more than $20,000, provided that the structure is at risk of immediate damage from shoreline erosion.

This amendment is necessary to align with the State Coastal Zone Management Act, HRS § 205A, which prohibits the construction of private shoreline hardening structures at sites with sand beaches or where such structures would interfere with existing recreational and waterline activities, while also enhancing public transparency and advancing the preservation of beaches and coastal resources.

Amendment of Sec. 8-27.10 (Criteria for approval of a variance)

The proposed bill seeks to amend Sec. 8-27.10 by reducing the minimum buildable footprint for rebuilding a dwelling unit that cannot be sited mauka of the setback from the previous threshold of 1,000 square feet (or the existing house footprint) down to 500 square feet.

This amendment helps limit the scale of rebuilding in hazardous areas, consistent with the intent of the Shoreline Setback and Coastal Protection Policy to reduce coastal hazard risk through best practices in hazard mitigation, which include restricting development in areas identified as highly vulnerable.

Additionally, the proposed bill clarifies that hardship does not include economic difficulties arising from small lot sizes. This amendment prevents small lot size from being used as a justification for constructing developments exceeding 500 square feet in hazardous coastal areas.

Amendment of Sec. 8-27.11 (Enforcement)

The proposed bill seeks to amend Section 8-27.11 to include language enabling the enforcement of removal of improvements to an existing structure. This amendment is necessary to ensure consistent implementation of related provisions, whereby enforcement actions are triggered if expenditures documented for a repair project indicate that the work constitutes a substantial improvement rather than a repair.

Finally, the proposed bill removes language allowing the Director or the Commission to forgo ordering the removal of an unpermitted structure or improvements to an existing structure if it is determined that removal would cause greater harm to the ecosystem or public improvements than allowing the structure to remain.

Eliminating this provision is appropriate because enforcement actions can include mitigation measures to address any potential impacts of removal on the ecosystem or public improvements.

General Plan

The proposed bill is in alignment with the following goals and policies of the General Plan, which emphasize resiliency, safety, and preparing for climate change:

A. Section 1.3, entitled "Visions and Goals"

   1) **Goal #1: "A Sustainable Island"-** Goal #1 of the County of Kaua'i General Plan promotes sustainable growth that meets the needs of current and future generations without depleting vital natural resources. It emphasizes that sustainable development must not compromise the natural systems that support life.

      Development situated too close to eroding shorelines threatens critical coastal ecosystems—including beach, nearshore, and estuarine habitats—that serve as essential areas for feeding, breeding, nursery functions, and migration for various species. The proposed bill supports the intent of this goal by strengthening the Shoreline Setback and Coastal Protection policy through several mechanisms that limit development in vulnerable coastal areas; thereby, minimizing further harm to these sensitive environments. These policy updates reflect a proactive approach to managing coastal development in a manner consistent with Kaua'i's long-term sustainability vision.

Goal #2: "A Unique and Beautiful Place"- Goal #2 of the General Plan emphasizes the "*stewardship and protection of the natural, cultural, social, and built environment assets that are of value to the community.*" This goal also cites the Hawai'i State Constitutional mandate, which declares: "*For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawai'i's natural beauty and all natural resources.*" The proposed bill advances these guiding principles through targeted amendments that support the long-term preservation of Hawai'i's natural beach systems. For example, one amendment includes a requirement for applicants to enter into retreat agreements, which obligate property owners to relocate, retreat, or remove structures once they become threatened by coastal erosion. By incorporating a trigger-based adaptive approach, the bill establishes proactive safeguards to prevent reactive responses—such as the emergency removal of collapsed structures from the ocean—thereby not only reducing public safety risks, but also minimizing environmental degradation and supporting the long-term preservation of beach ecosystems for future generations.

2) **Goal #3: "A Healthy and Resilient People"**- The General Plan's GOAL #3 aims to "*increase the resilience and vitality of Kaua'i's communities and promote better health outcomes through improving the natural, built, and social environment and responding to the impacts from climate change.*" The proposed bill supports this goal by strengthening shoreline setback regulatory measures to better mitigate the impacts of coastal hazards, including coastal erosion associated with sea level rise, on Kaua'i's built environment. In doing so, it enhances community resilience by reducing the risks posed by structures situated too close to the eroding and vulnerable shoreline.

B. Section 1.4, entitled "Policies to Guide Growth"

1) **Policy #12: "Protect Our Watersheds"**- Policy #12 of the General Plan acknowledges the interconnectedness of ecological systems and emphasizes the importance of integrated resource protection by calling to "*restore and protect our watershed from mauka to makai.*" It further affirms that safeguarding these systems is essential to sustaining a healthy community.

The proposed bill supports this policy by reinforcing shoreline setback regulations aimed at preserving and protecting coastal and beach ecosystems—key components of the broader watershed system. It does so by implementing stricter controls to prevent inappropriate development that could further increase risks to these vulnerable coastal resources.

2) **Policy #14: "Prepare for Climate Change"**- The General Plan's Policy #14 acknowledges that "*climate change and resulting sea level rise (SLR) are evidenced and documented on global, national, as well as local levels*" and affirms the government's kūleana (responsibility) to "*provide direction to prepare our island for increased coastal hazards and their impacts to businesses, homes, roadways, drinking water, and ultimately health and safety*." While recognizing some uncertainty in forecast data, the policy emphasizes the need to rely on "*the best available science for our island.*"

   In alignment with this guidance, the proposed bill takes a proactive approach to climate change adaptation by strengthening Shoreline Setback and Coastal Protection regulations. Key measures include: (1) revising and expanding definitions to explicitly recognize climate change-related impacts as coastal hazards; (2) incorporating sea level rise projections into the shoreline setback calculations; and (3) requiring property owners to enter retreat agreements when structures become threatened by erosion—an adaptive strategy that reduces reliance on emergency responses and helps protect public safety and coastal ecosystems.

Additionally, the General Plan specifies actions that are tied to the overarching goals and policies outlined above. Some of the key policies associated with "Permitting and Code Changes" are summarized in the text below:

A. Section 3.0, entitled "Actions by Sector"

   1) **Sector I. The Watershed: "Kahakai- Coastal Areas and Shorelines"**
      a. The General Plan calls for the action to "*minimize coastal hazard risks through planning and development standards that: a) ensure the safety of individuals, families, and communities within coastal hazards areas... b) discourage development or redevelopment within hazardous areas...*" and "*d) ensure property owners assume the risks associated with new development in hazardous areas.*" The proposed bill advances this directive by reinforcing Shoreline Setback and Coastal Protection policies to more effectively reduce coastal hazard risks and enhance public safety. For instance, the bill discourages development in hazardous areas by updating the criteria for repair projects to prevent substantial improvements from proceeding under the guise of minor repairs, and it reduces the minimum buildable footprint for rebuilds on parcels that cannot meet setback standards, thereby limiting the scale of redevelopment in vulnerable coastal zones. Furthermore, by requiring

applicants in high-risk areas to enter into a formal retreat agreement—the bill directly supports the General Plan's policy directive that property owners bear the risks and responsibilities of development in hazardous areas.

2) **Sector IX. Public Safety & Hazards Resiliency: "Hazards Resiliency"**
   a. The General plan includes an action to "*minimize coastal development in areas of high risk of erosion, flooding, tsunami inundation, and sea level rise.*" The proposed bill advances this objective through several key provisions, including the implementation of assurance measures to accurately distinguish between repair projects and substantial improvements to better ensure inappropriate development does not occur in vulnerable areas. Additionally, it reduces the minimum buildable footprint for rebuilding dwellings that cannot be relocated mauka of the coastal setback, thereby further limiting development in high-risk coastal areas.

3) **Sector IX. Public Safety & Hazards Resiliency: "Global Warming and Climate Change Adaptation"**
   a. The General Plan states an action to "*periodicaly update the Shoreline Setback and Coastal Protection article of the Comprehensive Zoning Ordinance to allow for adjustments in the setback calculations based on best-available sea level rise data.*" The proposed bill aligns with this action by incorporating an additional 20-foot sea level rise buffer into shoreline setback calculations that do not currently account for sea level rise, including the setback calculations based on average lot depth.

   b. The proposed bill is in direct alignment with the General Plan's identified an action to "*encourage strategic retreat and relocation to safer areas…*" by requiring applicants to enter into a retreat agreement. Under this agreement, property owners commit to relocating, retreating, or removing structures once they are threatened by coastal erosion.

Community Development Plans

The Community Development Plans, which further builds upon the direction set forth in the General Plan, also details region-specific policies, objectives, goals, and actions that support the provisions detailed in the proposed bill. For instance, the 2018 West Kaua'i Community Plan (WKCP), highlights climate change and resiliency:

A. Section 2.0, entitled "Regional Policies"

   1) **Resiliency: "Value Statement"**- The WKCP emphasizes that "*West Kaua'i must prepare for climate change, such as higher temperatures,*

SLR, and changing precipitation patterns. These impacts threaten residents by affecting housing, infrastructure, jobs, and arable land. Through proactive measures and solutions grounded in resiliency, sustainability, and the Hawaiian concept of ʻāina aloha (beloved homeland), West Kauaʻi's people can strengthen their ability to withstand and recover from hazards and the impacts of climate change." The proposed bill will provide proactive measures to help the West Kauaʻi District prepare for erosion impacts that are exacerbated due to climate change through various measures, such as the changes in setback calculations and retreat agreements.

2) **Resiliency Policy # 1: "Adapt West Kauaʻi's lowlying neighborhoods for climate change impacts and lay the groundwork for managed retreat."**- In order to adapt West Kauaʻi's low-lying neighborhoods for climate change impacts, the WKCP states that "*improved development standards and managed retreat strategies should be employed. Identify areas that are highly vulnerable to coastal hazards, including but not limited to SLR, coastal erosion, high wave run-up, passive flooding, and an increased frequency and intensity of storms. Ensure that if development occurs within these areas, the development is constructed in a manner that safely mitigates those impacts.*" The proposed bill supports this policy by strengthening the Shoreline Setback and Coastal Protection policy to better ensure that development within vulnerable coastal areas undergo comprehensive reviewal and are setback appropriately in acknowledgement of the increased intensity and frequency of coastal hazards associated with climate change.

The 2015 Līhuʻe Community Plan also contains policies and guidelines which support the amendments included in the proposed bill:

A. Section 5.0, entitled "Policies and Guidelines"

1) **Climate change Polices**- The Līhuʻe Community Plan includes several policies that align with the proposed bill, including: (1) minimizing development within coastal hazard areas, and (2) incorporating climate change impacts into land use, development, and planning decisions. The proposed bill further strengthens Article 27 by reinforcing these objectives, including measures such as integrating sea level rise considerations into shoreline setback calculations and reducing the minimum buildable footprint for rebuilding dwelling units that cannot be sited mauka of the setback.

VIII. PRELIMINARY CONCLUSION

Based on the foregoing findings and evaluation, it is concluded that the proposal is reasonable and appropriate.

IX. PRELIMINARY RECOMMENDATION

Based on the foregoing evaluation and conclusion of the final proposed bill, it is recommended that the subject request to amend Chapter 8 (Comprehensive Zoning Ordinance) Article 27 (Shoreline Setback and Coastal Protection) of the Kauaʻi County Code (1987), as amended, be **APPROVED** subject to the following revisions:

1. Expand the definition of "Beach processes" to include the following: 1) incorporate additional key interactions, such as those involving wind and water levels; 2) clarify that the interaction occurs with sediment mobility; and 3) specify that these interactions shape beach formation and evolution through erosion, transportation, and deposition of sediment.

2. Explicitly include the risks to shoreline access and Native Hawaiian cultural resources in the definition for "Coastal hazard" to ensure a more comprehensive approach to assessing vulnerability in project review and permitting.

3. Expand the definition of "Primary Coastal Dune" to specify that the primary coastal dune is positioned so that it may be more readily reached by storm waves, seasonal high waves, and elevated water levels, enabling the release of sand to the beach or offshore waters. This distinction differentiates it from the broader coastal dune system, where secondary and tertiary dunes are generally less directly affected by storm waves and seasonal high waves compared to the primary coastal dune.

4. Include an amendment to the definition of "Coastal dune" to include the following: 1) clarify the location of the dune system without implying uniform vulnerability to storm waves or seasonal high waves; and 2) specify dune formation and stabilization processes.

5. Include in the definition of "Revetment" that revetments are characterized by a sloped suface.

6. Remove the definition of the "Sea Level Rise Exposure Area (SLR-XA)" given that this term does not appear in the existing language of Article 27 or in the proposed amendments.

7. Revise the definition of "Seawall" to mirror the definition of "Seawall" in Hawaiʻi Administrative Rules Title 13, Chapter 222 (Shoreline Certifications).

By ____________________
Alisha Summers
Planner

Approved & Recommended to Commission:

By ______________________________
KA'ĀINA S. HULL
Director of Planning

Date: 8-18-2025

Exhibit A:

Original proposed bill

COUNTY COUNCIL
Mel Rapozo, Chair
KipuKai Kuali'i, Vice Chair
Addison Bulosan
Bernard P. Carvalho, Jr.
Felicia Cowden
Fern Holland
Arryl Kaneshiro

OFFICE OF THE COUNTY CLERK

Jade K. Fountain-Tanigawa, County Clerk
Lyndon M. Yoshioka, Deputy County Clerk

Telephone: (808) 241-4188
Facsimile: (808) 241-6349
Email: cokcouncil@kauai.gov

Council Services Division
4396 Rice Street, Suite 209
Līhu'e, Kaua'i, Hawai'i 96766

July 17, 2025

Francis DeGracia, Chair
and Members of the Planning Commission
c/o County of Kaua'i Planning Department
Via Email Only: planningdepartment@kauai.gov

Dear Chair DeGracia and Members of the Planning Commission:

RE: REFERRAL OF PROPOSED DRAFT BILL (NO. 2969) RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION

The Kaua'i County Council, at its meeting on July 16, 2025, referred the following measure to the Planning Commission for review and recommendation:

"Proposed Draft Bill (No. 2969) – A BILL FOR AN ORDINANCE AMENDING CHAPTER 8, ARTICLE 27, KAUA'I COUNTY CODE 1987, AS AMENDED, RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION"

Thank you for your continued assistance in these planning matters. Should you have any questions, please feel free to contact me at (808) 241-4188.

Sincerely,

JADE K. FOUNTAIN-TANIGAWA
County Clerk, County of Kaua'i

RM:sf
Enclosure

AN EQUAL OPPORTUNITY EMPLOYER

ORDINANCE NO. __________ BILL NO. (2969)

A BILL FOR AN ORDINANCE AMENDING CHAPTER 8, ARTICLE 27, KAUAʻI COUNTY CODE 1987, AS AMENDED, RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAʻI, STATE OF HAWAIʻI:

SECTION 1. The Council finds that Kauaʻi's coastline is subject to an increasing variety of natural hazards such as tsunamis, high surf, sea level rise, climate change, hurricanes, coastal flooding, and coastal erosion, all of which pose severe dangers to people and properties located near the shoreline. Therefore, proper siting of structures and regulation of improvements to structures along Kauaʻi's shoreline areas are critical to protecting life and property, mitigating coastal hazards, and preserving coastal resources, which are culturally important to the people of Hawaiʻi. To accomplish this, the Council finds it necessary to strengthen Kauaʻi's Shoreline Setback Ordinance adopted in 2008 by updating Chapter 8, Article 27, Kauaʻi County Code 1987, as amended, to include added definitions for clarity and revised requirements for shoreline property owners seeking to repair existing structures.

The purpose of this Ordinance is to amend the Shoreline Setback Ordinance articulated in Chapter 8, Article 27, Kauaʻi County Code 1987, as amended, by adding safeguards that protect life and property and ensure the longevity and integrity of Kauaʻi's coastal and beach resources along the shoreline.

SECTION 2. Section 8-27.2, Article 27 of Chapter 8, Kauaʻi County Code 1987, as amended, is hereby amended to read as follows:

"**Sec. 8-27.2 Definitions.**

For purposes of this Article, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein shall be defined as follows:

"Adversely affect beach processes" means to pose a potential immediate or future adverse effect on beach processes as a result of a structure and/or landscaping located within the coastal erosion hazard zone, or to create an immediate or future need to artificially fix the shoreline.

"Annual coastal erosion rate" means the long-term average annual rate of coastal erosion calculated by following the methodology outlined in the National Assessment of Shoreline Change: Historical Shoreline Changes in the Hawaiian Islands (Fletcher, et al., 2012). Annual coastal erosion rates are available for all lots on Kauaʻi fronted by a sandy beach from the Kauaʻi Planning Department. These rates were calculated by the University of Hawaiʻi's Coastal Geology Group for the Kauaʻi Coastal Erosion Study, and it was last updated in 2018. The Planning Director may designate a qualified professional to review and, subject to the Planning Director's approval, update annual coastal erosion rates.

"Average lot depth" means the measurement obtained by adding the lengths of the two sides of a lot which are at or near right angles with the shoreline, or the seaward boundary of the lot that runs roughly parallel to the shoreline if the property is not abutting the shoreline, to the length of a line obtained by drawing a line from a point in the center of the makai side of the lot to a point in the center of the mauka side of the lot and dividing the resulting sum by three. For irregularly shaped lots including flag lots, triangular parcels, lots on peninsulas, and/or lots having ocean on two or more sides of the lot, the average lot depth will be determined by the Director.

"Beach" means a coastal landform primarily composed of sand from eroded rock, coral, or shell material, or any combination thereof, that is established and shaped by wave action or tidal processes. Beach includes sand deposit in nearshore submerged areas, or coastal dunes or upland beach deposits landward of the shoreline that provide benefits for public use and recreation, for coastal ecosystems, and as a natural buffer against coastal hazards.

"Beach processes" means the dynamic interactions between waves, currents, and sediment along coastal shorelines, influencing the formation and evolution of beaches.

"Board" shall mean the Board of Land and Natural Resources, State of Hawaiʻi.

"Building footprint" shall mean all parts of a main building (excluding roof overhangs) that rest, directly or indirectly, on the ground, including those portions of the building that are supported by posts, piers, or columns. Building footprint also includes attached garages, covered carports, bay windows with floor space, lanais, decks, cantilevered decks, spas, and in ground swimming pools.

"Certified shoreline" means the shoreline established by Board pursuant to HRS 205A-42, as amended.

"Coastal dune" means one of possibly several continuous or nearly continuous mounds or ridges of unconsolidated sand contiguous and parallel to the beach, situated so that it may be accessible to storm waves and seasonal high waves for release to the beach or offshore waters.

"Coastal erosion" means the natural loss of coastal lands, usually by wave attack, tidal or littoral currents, or wind. Coastal erosion is synonymous with shoreline retreat.

"Coastal erosion hazard zone" shall include all of the land between the shoreline and the shoreline setback line.

"Coastal hazard" means [natural processes in the coastal zone that are generated by geologic, oceanographic, and/or meteorological processes that place people and/or improvements at risk for injury and/or damage] elevated risk to public health or safety, property, and the environment in coastal areas resulting from physical phenomena, including but not limited to high waves, storm surge, tsunami, sea level rise, coastal erosion, and other hazards.

"Coastal hazard disclosure statement" means a statement prescribed by the department disclosing the potential for coastal hazards and the potential for further restrictions and limitations on development of the respective property in the future. This statement is an addendum to the shoreline setback determination application, and it must be signed by the property owner prior to acceptance of the determination application.

"Commission" means the Planning Commission of the County of Kaua'i.

"Department" means the Planning Department of the County of Kaua'i.

"Director" means the Planning Director of the Planning Department of the County of Kaua'i.

"Dwelling unit" means any building or any portion thereof which is designed or intended for occupancy by one family or persons living together or by a person living alone, and provides complete living facilities within the unit for sleeping, recreation, eating and sanitary facilities, including installed equipment for only one kitchen.

"FEMA" means the Federal Emergency Management Agency.

"FIRM" means the Flood Insurance Rate Map.

"Hazard assessment" means assessment for erosion, wave, flood, and inland zone following the standards in Section 4.3 of the Hawai'i Coastal Mitigation Guidebook, (January 2005), which was prepared for the State of Hawai'i, Department of Land and Natural Resources, Coastal Zone Management Program, University of Hawai'i Sea Grant College Program and the Pacific Services Center and Coastal Services Center of the National Oceanic and Atmospheric Administration.

"Kaua'i coastal erosion study" means the quantitative study of Kaua'i and Ni'ihau's historical shoreline behavior utilizing orthorectified aerial photographs or other imagery to carry out high-resolution mapping of historical shoreline positions to obtain a statistically valid annual erosion rate of the Shoreline Change Reference Feature (SCRF). The study was conducted by the University of Hawai'i's Coastal Geology Group for the County of Kaua'i, and it was last updated in 2018. The shoreline change data and shoreline change posters produced by this study are on file with the Kaua'i Planning Department. The study followed procedures described in the National

Assessment of Shoreline Change: Historic Shoreline Changes in the Hawaiian Islands (Fletcher, et al., 2010) available from the Kaua'i Planning Department.

"Landscaping" means the modification of landscape for an aesthetic or functional purpose that includes the planting of vegetation; the installation of irrigation, rock or water features; grading or grubbing.

"Makai" means seaward or in a seaward direction.

"Mauka" means landward or in a landward direction.

"Minimum buildable footprint" means a building footprint of 1,500 square feet.

"Minor structure" means[:

(1) a structure that costs less than $125,000 and provides temporary emergency protective measures for a legally habitable structure that is imminently threatened by coastal hazards provided that the protective measure has received approval in accordance with the Special Management Area Rules of the Kaua'i Planning Commission and/or the State Department of Land and Natural Resources (as may be the case), relocation of the endangered structure has been considered and is not reasonable given the nature of the emergency, the protective measure is removed within 180 days of its installation, and given the significance of the emergency, the protection is the best management alternative with respect to beach, shoreline, and/or coastal resource conservation, or

(2)] a structure that:

(A) costs less than $125,000; and

(B) does not adversely affect beach processes, does not artificially fix the shoreline, and does not interfere with public access or public views to and along the shoreline; and

(C) does not impede the natural processes and/or movement of the shoreline and/or sand dunes, and does not alter the grade of the shoreline setback area; and

(D) is consistent with the purposes of this Article and HRS Chapter 205A, as amended; and

(E) includes, but is not limited to, lighting in conformance with HRS Chapter 205A, landscape features, barbeques, picnic tables, benches, chairs, borders, wooden trellis, bird feeders, signs, safety improvements, lifesaving devices, movable lifeguard stands, outdoor showers and water faucets, public utility lines, utility poles and accessory structures along existing corridors, temporary tents for special events not exceeding 14 consecutive days in duration during any three-month period, walls and fences that are located more than 40 feet from the shoreline, landscape planting and irrigation systems provided that they are located more than 40 feet away from the shoreline and do not artificially extend the shoreline or shoreline setback area seaward, public park facilities (excluding restrooms, wastewater systems, and shoreline armoring structures or improvements), portable or removable walkways for public access, or, as determined by the director, a structure primarily benefitting the public that will not impact or be impacted by coastal erosion processes; and

(F) excludes, but is not limited to, any in-ground swimming pools or spas, garages, carports, concrete walkways that are reinforced, concrete walkways that are not saw-cut at a minimum of three foot intervals, and concrete steps.

"Natural catastrophe" is a natural disaster qualifying for a governor's declaration of emergency pursuant to Hawai'i Revised Statutes Chapter 128, or a presidential declaration of emergency of a major disaster pursuant to 42 USC 5170, including those caused by episodic coastal hazards such as tsunamis and hurricanes, and not the result of other coastal hazards or processes such as erosion or sea level rise.

"Nonconforming structure or activity" means a structure or activity which is lawfully existing within the shoreline setback area because it:

(1) Was completely built, in its present form, prior to June 22, 1970; or

(2) Received either a building permit, board approval, or shoreline setback area variance prior to June 16, 1989; or

(3) Was outside the shoreline setback area when it received either a building permit or board approval[; or].

"Plan" or "site plan" means a detailed construction plan drawn to scale of 1" = 20' 0" that shows the design of a structure proposed to be built within the shoreline setback area. The plan shall be based on an accurate instrument by a surveyor licensed in the State of [Hawaii] Hawai'i and shall consist of data including but not limited to:

(1) Property boundaries;

(2) Natural features such as large trees, rock outcroppings, and any primary or secondary coastal dunes;

(3) Topography in and around the proposed construction;

(4) Any and all shoreline hardening;

(5) Flood zones, where applicable;

(6) Existing and proposed structures and their proximity to the shoreline and shoreline setback area;

(7) Fences, walls, and any other structures in the shoreline setback area and any potential hindrances to lateral access along the shoreline;

(8) A geo-referenced survey of the site; and

(9) Any other information which identifies the existing condition of the subject parcel of land. ["Primary Coastal Dune" means the first dune encountered mauka of the beach.]

"Primary Coastal Dune" means the first dune encountered mauka of the beach.

"Prohibited activities" means those activities prohibited in the shoreline setback area as provided in Section 8-27.6 of this Article. All other activities shall be regulated by the Special Management Area Rules and Regulations of the County of Kaua'i and the requirements of HRS Chapter 343-5 regarding environmental assessments for any proposed uses within a shoreline area as defined in Section 205A-41.

"Public park facilities" means recreational facilities owned and operated by state or county park agencies for the benefit and use of the general public.

"Qualified consultant" means a coastal scientist with a master of science degree or doctorate in geology, geography, or other appropriate physical science relating to coastal processes, or an engineer licensed in the State of Hawai'i that has experience in coastal processes. If a dune restoration project is proposed, the qualified consultant shall have experience and expertise with dune restoration.

"Qualified demolition" means the demolition of a structure or structures where such demolition:

(1) Will not adversely affect beach processes;

(2) Will not artificially fix the shoreline;

(3) Will not interfere with public access, except for public safety reasons during demolition operations;

(4) Will not interfere with public views to and along the shoreline, except during demolition operations;

(5) Will be consistent with the intent of open space enhancement as reflected in these rules and HRS 205A; and

(6) Will comply with applicable County Codes.

"Rebuilding" means reconstruction of a lawfully existing dwelling unit when the reconstruction is valued by a licensed professional engineer, or architect at 50% or more of the current replacement cost of the structure.

"Repair" means the [reconstruction or renewal] rehabilitation or renovation of any part of a lawfully existing structure, but not the entire structure, solely for the purpose of its maintenance and does not result in an addition to, or enlargement or expansion of, the lawfully existing structure, such as alterations of floors, roofs, walls, or the supporting structure of a building or the rearrangement of any of its component parts. A "substantial improvement" as defined herein shall not be considered a repair. [Repair shall be consistent with the definition of "repair" under Sec. 8-1.5, Kaua'i County Code 1987, as amended.]

"Revetment" shall mean a facing of stone, concrete, blocks, or other [similar] materials built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.

"Rocky shoreline" means a shoreline segment acting as the primary interface between marine dominated processes and terrestrial dominated processes that is composed of hard, non-dynamic, non-erodible material such as basalt, fossil limestone, beach rock, or other natural non-dynamic material, not to include cobble or gravel beaches that are dynamic in nature, or erodible cliffed shorelines composed dominantly of dirt or clay.

"Sea Level Rise Exposure Area (SLR-XA)" means the sea level rise exposure area delineated in the Hawai'i Climate Change Mitigation and Adaptation Commission's Hawai'i Sea Level Rise Viewer, or its successors.

"Seawall" means a shoreline hardening structure built of stone, concrete, blocks or other materials to protect a scarp, embankment, or structure against erosion or damage by wave action or currents and has a vertical face on its makai side.

"Shoreline" is as defined in Section 205A-1, Hawai'i Revised Statutes, as amended, and as established pursuant to Section 205A-42, Hawai'i Revised Statutes, as amended.

"Shoreline certification" means a signed statement by the chairperson of the Board of Land and Natural Resources that the shoreline is as located and shown on the map as of a certain date.

"Shoreline change reference feature (SCRF)" means a morphologic feature commonly referred to as the "toe" of the beach, which represents the base of the foreshore or approximating the Mean Lower Low Water (MLLW).

"Shoreline hardening" means the process of fortifying the shoreline or shoreline setback area with hard structures including, but not limited to, seawall and revetments.

"Shoreline setback area" means "shoreline area" as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

"Shoreline setback line" means that inland line established by Section 8-27.3 that runs parallel to the shoreline.

"Storm buffer zone" is the first 40 feet of the shoreline setback area as measured from the shoreline.

"Structure" is as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

"Substantial construction" means that 100% of the foundation has been laid[, or that 100% of the foundation of the active phase of a project has been laid where the project is being done in phases].

"Substantial improvement" means any cumulative series of repairs, reconstruction, improvements, or additions to a structure over a 10 year period, where the cumulative cost equals or exceeds 50% of the market value of the structure before the start of construction of the first improvement during that 10 year period. For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The value of any substantial improvement shall be determined by the County Engineer or his/ her authorized representative. The term does not, however, include either: (1) any project for improvement of a structure to correct existing violations of a State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

"Temporary structures" means structures that will exist for no longer than six months and will not irreversibly and adversely affect beach processes, public access, or public views nor artificially fix the shoreline in an irreversible way, and from which there will be a public benefit.

"Use" means the purpose for which land or building is arranged, designed, or intended, or for which either land or building is or may be occupied or maintained."

SECTION 3. Section 8-27.3, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

“Sec. 8-27.3. Shoreline Setback Determination: Establishment of the Shoreline Setback Line.

Shoreline setback determinations shall be issued based on the following procedures:

(a) A shoreline setback determination shall be required for all structures and subdivisions proposed on lands covered by this Article, except in the following two cases:

(1) As permitted in Section 8-27.7;

(2) Where the applicant can demonstrate to the satisfaction of the Planning Director that the applicant’s proposed structure or subdivision will not affect beach processes, impact public beach access, or be affected by or contribute to coastal erosion or hazards, excluding natural disasters. Factors to be considered shall include, but not be limited to, proximity to the shoreline, topography, properties between the shoreline and applicant’s property, elevation, and the history of coastal hazards in the area.

(b) Unless otherwise provided in subsection (a) above, no shoreline setback line shall be established for any lot subject to this Article unless the application for a shoreline setback line includes a certified shoreline issued within 12 months prior to submission of the application.

(c) Lots Included in the Kaua‘i Coastal Erosion Study. For all structures on lots subject to the Kaua‘i Coastal Erosion Study, the setback shall be calculated as follows:

(1) For lots with an average lot depth of less than 140 feet, the setback line shall be 40 feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, for all applicable lots subject to the Kaua‘i Coastal Erosion Study a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards.

(2) For lots with an average lot depth of 140 feet to 220 feet, the greater setback of the following shall apply:

(A) Forty feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, for all applicable lots subject to the Kaua‘i Coastal Erosion Study a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards; or

(B) A shoreline setback determined by taking the average lot depth, subtracting 100 feet, dividing by two and adding [40] 60 feet.

(3) For all lots with an average lot depth of over 220 feet, the greater setback of the following shall apply:

(A) Forty feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, for all applicable lots subject to the Kaua'i Coastal Erosion Study a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards; or

(B) A shoreline setback line of [100] 120 feet from the certified shoreline.

Table 1

(This table is included for illustrative purposes only.) Lots Included in the Kaua'i Coastal Erosion Study. The distance in feet of the shoreline setback line as measured from the certified shoreline based on the average lot depth in feet.

Average Lot Depth	**Setback Line**
Less than 140 feet	40 feet plus (70 X annual coastal erosion rate) plus 20 feet
140 feet to 220 feet	Greater of: 40 feet plus (70 X annual coastal erosion rate) plus 20 feet -or- (Average Lot Depth minus 100 feet) ÷ by 2 plus [40] 60 feet
Greater than 220 feet	Greater of: 40 feet plus (70 X annual coastal erosion rate) plus 20 feet -or- [100] 120 feet from the certified shoreline

(d) Lots Not Included in the Kaua'i Coastal Erosion Study. For all structures on lots that were not included in the Kaua'i Coastal Erosion Study, the setback shall be calculated by the following formula, (Average Lot Depth - 100)/2 +[40] 60), subject to the following:

(1) For all lots, the shoreline setback line shall be no less than 60 feet.

(2) The maximum setback that can be required shall be [100] 120 feet.

(e) Non-abutting Lots. If an applicant is unable to secure permission from the abutting owner to complete a certified shoreline for a non-abutting lot within approximately 500 feet of the shoreline, the Planning Director may, pursuant to Sec. 8-4.3, impose conditions to zoning permits to increase setbacks where evidence exists that a proposed structure may be affected by coastal hazards or erosion.

(f) No subdivision which involves a lot, or any portion of a lot that would be subject to this Article, shall be approved without a coastal erosion study, a certified shoreline, and a shoreline setback line established in accordance with this Article, unless the subdivision is initiated by the County.

(g) Any subdivision with lots abutting the shoreline approved pursuant to Chapter 9 of the Kaua'i County Code, 1987, as amended, after the adoption of this Ordinance shall have a shoreline setback line of 40 feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards.

(h) Each lot abutting the shoreline in a subdivision approved after the effective date of this ordinance shall be designed to achieve a building footprint of 5,000 square feet of buildable area *mauka* of the shoreline setback line established in accordance with subsections (f) and (g), above.

(i) Prior to commencement of grubbing, grading, or construction activities, the shoreline and shoreline setback line shall be identified on the ground and posted with markers, posts, or other appropriate reference marks by a surveyor licensed in the State of Hawai'i.

(j) The application of Section 8-27.3 by itself shall not make a dwelling unit nonconforming."

SECTION 4. Section 8-27.6, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.6 Prohibited Activities in the Shoreline Setback Area.

(a) Pursuant to HRS 205A-44, as amended, the mining or taking of sand, dead coral or coral rubble, rocks, soils, or other beach or marine deposits from the shoreline setback area is prohibited with the following exceptions:

(1) The inadvertent taking from the shoreline setback area of the materials, such as those inadvertently carried away on the body, and on clothes, toys, recreational equipment, and bags;

(2) Where the mining or taking is authorized by a variance pursuant to Section 205A-46 of the Hawai'i Revised Statutes;

(3) The clearing of these materials from existing drainage pipes and canals and from the mouths of streams, including clearing for the purposes under HRS Section 46-11.5; provided that, the sand removed shall be placed on adjacent areas unless such placement would result in significant turbidity;

(4) The cleaning of the shoreline setback area for state or county maintenance purposes, including the clearing of seaweed, limu, and debris under HRS Section 46-12; provided that, the sand removed

shall be placed on adjacent areas unless the placement would result in significant turbidity;

(5) The taking of driftwood, shells, beach glass, glass floats, or seaweed;

(6) The exercise of traditional cultural practices as authorized by law or as permitted by the department pursuant to Article XII, Section 7, of the Hawai'i State Constitution; or

(7) For the response to a public emergency or a state or local disaster.

(b) Any primary coastal dune, which lies wholly or partially in the shoreline setback area, shall not be altered, graded, or filled in any way except for the addition of sand of compatible quality and character unless the application of this section renders the build-out of allowable density unfeasible. In such case, modifications, alterations, grading, or filling may be allowed through a variance, but only for that portion of the primary dune located mauka (landward) of the shoreline setback area, and only to the extent necessary to construct on a minimum building footprint. This exception shall apply only to lots in existence prior to December 2, 2009.

(c) The following are prohibited in the shoreline setback area:

(1) Individual wastewater system or subsurface improvement unless the applicant demonstrates to the satisfaction of the Director that no feasible alternative exists, including a redesign of the improvement or structure to accommodate the system outside of the setback line, and the system or improvement complies with all statutory and Department of Health requirements.

(2) Landscaping that artificially fixes the shoreline.

(3) [Shoreline hardening unless it is approved by the State of Hawai'i's Office of Conservation and Coastal Lands] Private shoreline hardening structures, including seawalls and revetments, at sites subject to the Kaua'i Coastal Erosion Study and at sites where shoreline hardening structures interfere with existing recreational and waterline activities.

(4) Expansion of the footprint of a non-conforming structure, unless otherwise provided by law."

SECTION 5. Section 8-27.7, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"**Sec. 8-27.7 Permitted structures within the shoreline setback area.**

(a) The following structures are permitted in the shoreline setback area. All structures and/or landscaping not specifically permitted in this section are prohibited without a variance.

(1) Existing conforming or legally nonconforming structures.

(2) Structure that received a shoreline variance or administrative approval prior to February 26, 2008.

(3) A structure that is necessary for, or ancillary to, continuation of agriculture or aquaculture existing in the shoreline setback area on June 16, 1989.

(4) "Temporary structures" as defined in Section 8-27.2. To ensure that there will be no irreversible or long term adverse effects, the Director shall require as a condition of a permit the restoration of the site to its original condition or better, and the Director may require a bond to ensure such restoration.

(5) A structure that consists of maintenance, repair, reconstruction, and minor additions or alterations that results in no interference with natural beach processes and is ancillary or associated with one of the following sites:

(A) A Hawaiian fish pond;

(B) A publicly owned and legal boating, maritime, or water sports recreational facility.

(6) Repairs to a lawfully existing structure, including nonconforming structures, provided that:

(A) The repairs do not enlarge, add to or expand the structure; increase the size or degree of nonconformity; or intensify the use of the structure or its impact on coastal processes;

(B) The repairs do not constitute a substantial improvement of the structure;

(C) The repairs are permitted by the Comprehensive Zoning Ordinance, Development Plans, building code, floodplain management regulations, special management area requirements under HRS Chapter 205A and any other applicable rule or law; and

(D) The Planning Director determines that the proposal complies with the definition of "repair" under Sec. 8-27.2, Kaua'i County Code 1987, as amended.

(E) To ensure that proposed repairs under Sec. 8-27.2, Kaua'i County

Code 1987, as amended, do not constitute a substantial improvement, the Director shall require the applicant to provide the following:

(1) Appraisal of the structure.

(2) A cost breakdown estimate of the proposed repair project through a "Non-Substantial Improvement Job Cost Breakdown Worksheet." The worksheet is to be submitted to and maintained by the Director and shall include all costs of the subject repair project, including but not limited to costs associated with site work, masonry, plumbing, electrical work, carpentry (framing and finish work), drywall, glass and glazing, painting, flooring, appliances, cabinetry, and all labor.

(3) The applicant shall submit a signed declaration acknowledging understanding and agreeing the repair exemption cost figures estimated in the "Non-Substantial Improvement Job Cost Breakdown Worksheet" are subject to review after the completion of the proposed repairs for consistency with the actual and proposed repairs.

(4) The applicant shall inform the Planning Department of the date of completion of the repair project and any additional construction materials, labor and associated costs incurred during the repair. In the absence of any notification of completion, the Department shall consider this repair project still ongoing.

(5) Within 60 days of the notification of completion or while the repair project is still ongoing, the Director may require the applicant to submit receipts for each of the improvements listed on the "Non-Substantial Improvement Job Cost Breakdown Worksheet" and any other construction materials, labor and associated costs necessitated by the repairs that have been completed. If the applicant cannot provide receipts, the Director may establish the fair market cost for each of the improvements for which receipts cannot be provided.

(6) Should the expenditures on the receipts provided demonstrate that the project is not a repair and is in fact considered a substantial improvement pursuant to Section 8-27.2, Kaua'i County Code 1987, as amended, the Director shall follow the enforcement standards in Section 8-27.11, Kaua'i County Code 1987, as amended.

(F) A certified state shoreline survey is required for any repairs exceeding $125,000 and must be included in the application for a shoreline setback determination.

(7) Beach nourishment or dune restoration projects approved by all applicable governmental agencies.

(8) A structure approved by the Director as a minor structure.

(9) Qualified demolition of existing structures.

(10) Unmanned civil defense facilities installed for the primary purposes of: (i) warning the public of emergencies and disasters; or (ii) measuring and/or monitoring geological, meteorological and other events.

(11) Scientific studies and surveys, including archaeological surveys.

(12) Structures built by a governmental agency to address an emergency as declared by the Governor of the State of Hawai'i, the Mayor of the County of Kaua'i or any other public official authorized by law to declare an emergency.

(13) Structures relating to film productions that have received a County Revocable Film Permit. Structures undertaken for film productions must be removed within 30 days following the completion of the film production.

(14) Structures required for remedial and removal actions undertaken pursuant to Chapter 128D of the Hawai'i Revised Statutes.

(15) Repair and/or rebuilding of existing public park facilities, excluding shoreline armoring structures or improvements.

(b) The following conditions shall apply to any new structure or any substantial improvement permitted in the shoreline setback area:

(1) All new structures shall be constructed in accordance with the standards for development in Chapter 15, Article 1, Flood Plain Management, Kaua'i County Code 1987, as amended, relating to coastal high hazard districts and FEMA guidelines regarding construction in areas mapped on Flood Insurance Rate Maps as flood hazard areas.

(2) The applicant shall agree in writing that the applicant, its successors, and permitted assigns shall defend, indemnify, and hold the County of Kaua'i harmless from and against any and all loss, liability, claim or demand arising out of damages to said structures from any coastal natural hazard and coastal erosion.

(3) The applicant shall agree in writing for itself, its successors and assigns that the construction of any erosion control or shoreline

hardening structure and/or landscaping shall not be allowed to protect the permitted structure during its life, with the exception of approved beach or dune nourishment fill activities, and landscape planting and irrigation located more than 40 feet from the shoreline.

(4) Unless otherwise provided, all new structures and/or landscaping shall not (i) adversely affect beach processes, (ii) artificially fix the shoreline, (iii) interfere with public access or public views to and along the shoreline, (iv) impede the natural processes and/or movement of the shoreline and/or sand dunes, (v) adversely impact neighboring property, or (vi) alter the grade of the shoreline setback area.

(5) All new structures shall be consistent with the purposes of this Article and HRS Chapter 205A, as amended, and shall be designed and located to minimize the alteration of natural landforms and existing public views to and along the shoreline.

(6) The requirements of this Subsection (b) shall run with the land and shall be set forth in a unilateral agreement recorded by the applicant with the Bureau of Conveyances or the Land Court, whichever is applicable, no later than 30 days after the date of final shoreline approval of the structure under Section 8-27.8. A copy of the recorded unilateral agreement shall be filed with the Director and the County Engineer no later than 45 days after the date of the final shoreline determination and approval of the structure and the filing of such with the Director shall be a prerequisite to the issuance of any related building permit.

(7) On lots threatened by sea level rise erosion or historic coastal erosion, before approval of an additional structure, the applicant must agree to retreat, relocate, or remove the proposed and existing structure(s) before or when the shoreline reaches the structure(s) at the respective property owner's expense."

SECTION 6. Section 8-27.8, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"**Sec. 8-27.8 Procedures for Obtaining Shoreline Setback Determinations.**

(a) Unless as otherwise provided in this Article, any structure proposed within 500 feet of the shoreline shall first obtain a shoreline setback determination from the Director in accordance with this Article.

(b) A proposed structure in the shoreline setback area or within 500 feet of the shoreline shall not be allowed by the Director unless it is consistent with this Article and HRS Chapter 205A, as amended.

(c) Procedure.

(1) A request for determination for a proposed structure within the shoreline setback area or within 500 feet of the shoreline shall be submitted to the Department on a form prescribed by the Director.

(2) For public structures whose valuation does not exceed $500,000 and repairs to lawfully existing private structures as delineated in Section 8-27.7(a), the request shall include construction and site plans, and written text addressing compliance with the criteria set forth in this Article. The Director may also require additional information, including, but not limited to a current shoreline setback determination or a current certified shoreline survey or shoreline survey stamped by a licensed surveyor, registered in the State of Hawai'i and coastal erosion information, a list of proposed plants and their growth, existing and final contours, photographs, and an environmental assessment.

(3) For public structures whose valuation exceeds five hundred thousand dollars ($500,000.00) and private structures unless delineated in Sec. 8-27.7(a), the request shall include relevant information, which shall include, but is not limited to, a current shoreline setback determination as set forth in Sec. 8-27.3 or a current certified shoreline survey and coastal erosion information, construction and site plans, existing and final contours, photographs, and a written text addressing compliance with the criteria set forth in this Article. The Director may also require a hazard assessment.

(4) Within 60 days from the day the application is deemed complete by the Director, the Director shall make a decision in accordance with the criteria set forth in this Article that the proposed structure is:

(A) Permitted under Section 8-27.7;

(B) Permitted under Section 8-27.7 and subject to conditions;

(C) Not permitted under Section 8-27.7;

(D) Outside of the shoreline setback area; or

(E) Not subject to Section 8-27.3.

(5) A list of applications for a shoreline setback determination or determination of exemption deemed complete by the Director shall be posted within 10 working days to a publicized website maintained by the Department. All applications are subject to a 30-day comment period.

(6) The Director shall notify the Commission at the Commission's next regularly scheduled meeting of the following:

(A) any shoreline setback determinations for approval of a structure proposed within the shoreline setback area or within 500 feet of the shoreline;

(B) any approvals or denials by the Director of structures and the reasons therefore, including, but not limited to, the name of the applicant, the location and purpose of the structure, and a discussion of the factors considered in making the decisions; and

(C) any decision by the Director to not require a shoreline setback determination pursuant to Section 8-27.3.

(7) All shoreline setback determinations made by the Director shall include, but are not limited to, the name of the applicant, the average lot depth calculations, the location of any proposed structures depicted on a plan drawn to scale, the purpose of the proposed structures, the current certified shoreline (if required), the setback calculations and setback line drawn on the plan, and copies of a coastal erosion study, if applicable. If the Director, pursuant to Section 8-27.3, make a determination of exemption, the Director shall state the justification in writing.

(8) The Director's decisions pursuant to Section 8-27.8(c)(4) shall not be final until posted on the Commission's agenda. Notwithstanding the posting of the decision, if there is an appeal from the Director's decision, the decision shall not be final until the Commission completes its [decisionmaking] decision-making on the appeal.

(9) Minor structures shall be completed within one year from the final shoreline approval or within one year from the date of approval of the last discretionary permit, whichever comes later.

(10) For any non-minor structures allowed within the shoreline setback area and any structures outside the shoreline setback area based on the shoreline setback line, substantial construction of the structure shall be achieved within [three] two years from the date of final shoreline setback determination and approval, and construction thereof shall be completed (as evidenced by a certificate of occupancy in the case of buildings for habitation) within [four] three years from said date.

(A) An extension of no more than one year may be granted by the Director to the deadline for substantial construction only for properties with a stable shoreline such as rocky or accreting shorelines or shorelines exhibiting no coastal erosion per shoreline change rates as provided in the Kauaʻi Coastal Erosion Study. In all other cases where substantial construction has not occurred by the deadline, a new certified shoreline and setback determination shall be required.

(B) In case of failure to complete construction by the [four-year] three-year deadline, the Planning Commission shall determine a remedy based on a review of the specific circumstances, including but not limited to, the stability of the shoreline, the extent of the completion and the reason for delay.

(C) These requirements for substantial construction and completion shall run with the land and shall be written in a unilateral agreement that is recorded in the Bureau of Conveyances or Land Court, as applicable, prior to application for a building permit. A copy of the recorded unilateral agreement shall be submitted to the Planning Department prior to application for a building permit.

(11) All applications for Shoreline Setback Determinations shall include a Coastal Hazard Disclosure Statement signed by the property owner.

(d) Nothing in this section shall be deemed to amend, modify or supersede any provision of the Special Management Area Rules and Regulations of the County of Kaua'i, HRS Chapter 205A, as amended, or HRS Chapter 343-5, as amended.

(e) Fees. A nonrefundable processing fee of $100 shall accompany a request for determination."

SECTION 7. Section 8-27.9, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"**Sec. 8-27.9 Variance application.**

(a) A written application for variance shall be made in a form prescribed by the Director and shall be filed with the Director. The application shall include plans, site plans, photographs, and any other plans, drawings, maps, or data determined by the Director to be necessary to evaluate the application. The application shall also include:

(1) A non-refundable administrative application fee of $300[.];

(2) Certification from the owner or lessee of the lot which authorizes the application for variance;

(3) An environmental assessment prepared in accordance with HRS Chapter 343, and the environmental impact statement rules and applicable guidelines of the State of Hawai'i;

(4) The names, addresses, and the tax map key identification of owners of real property situated adjacent to and abutting the boundaries of the land on which the proposed structure and/or landscaping is to be located;

(5) A site plan of the shoreline setback area, drawn to scale, showing:

(A) Existing natural and man-made features and conditions within;

(B) Existing natural and man-made features and conditions along properties immediately adjacent to the shoreline setback area and proposed improvements;

(C) The certified shoreline and the shoreline setback line;

(D) Contours at a minimum interval of two feet unless waived by the director; and

(E) Proposed development and improvements showing new conditions with a typical section (if a structure), and the proposed development's impacts to neighboring properties.

(6) A copy of the certified shoreline survey map of the property;

(7) Detailed justification of the proposed project, which addresses the purpose and intent of these rules and the criteria for approval of a variance;

(8) Analysis and report of coastal erosion rates and coastal processes; and

(9) Any other information required by the Director.

(b) Upon a determination by the Director that the application is complete and in compliance with HRS Chapter 205A, part II and this Article, the Director shall submit the application to the Commission. If the application is determined to be incomplete by the Director, the Director shall return the application to the applicant with a written description identifying the portions of the application determined to be incomplete. The Director shall submit a written report, a copy of the application, and all other documents submitted on the application to the Commission prior to the matter appearing on an agenda of the Commission.

(c) Except as otherwise provided in this section, all applications for variances shall be heard, noticed, and processed as public hearing matters. Not less than 30 calendar days before the public hearing date, the applicant for a variance shall mail notices of public hearing by certified or registered mail, postage prepaid, to all owners of real property within 300 feet of the parcel that is the subject of the application. Not less than 30 days prior to the public hearing date, the Director shall publish a notice of hearing once in a newspaper that is printed and issued at least twice weekly in the County and which is generally circulated throughout the County. The notice shall state the nature of the proposed development, the date, time, and place of the hearing, and all other matters required by law.

(d) Exceptions. Prior to action on a variance application, the Commission may waive a public hearing on the application for:

(1) Stabilization of shoreline erosion by the moving of sand entirely on public lands;

[(2) Protection of a legal structure costing more than $20,000; provided that, the structure is at risk of immediate damage from shoreline erosion;]

[(3)](2) Other structures or activities; provided that, no person or agency has requested a public hearing within 25 calendar days after public notice of the application. For the purposes of this section "public notice of the application" shall be publication of a notice of the application in a newspaper which is printed and issued at least twice weekly in the County of Kaua'i, which informs the public of the subject matter of the application and which identifies the date and time by which a written request for a public hearing must be received by the Commission; or

[(4)](3) Maintenance, repair, reconstruction, and minor additions or alterations of legal boating, maritime or water sports recreational facilities, which result in little or no interference with natural shoreline processes."

SECTION 8. Section 8-27.10, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"**Sec. 8-27.10 Criteria for approval of a variance.**

(a) A shoreline setback variance may be considered for a structure otherwise prohibited by this Article, if the Commission finds in writing, based on the record presented, that the proposed structure meets those standards established under Section 8-3.3 and is necessary for or ancillary to:

(1) Cultivation of crops;

(2) Aquaculture;

(3) Landscaping; provided that, the Commission finds that the proposed structure will not adversely affect beach processes, public access or public views and will not artificially fix the shoreline and is in compliance with HRS Section 115-5;

(4) Drainage;

(5) Boating, maritime, or water sports recreational facilities;

(6) Structures by public agencies or public utilities regulated under HRS Chapter 269;

(7) Private and public structures that are clearly in the public interest;

(8) Private and public structures that will neither adversely affect beach processes nor artificially fix the shoreline; provided that, the Commission also finds that hardship will result to the applicant if the facilities or improvements are not allowed within the shoreline setback area;

(9) Private and public structures that may artificially fix the shoreline but not adversely affect beach processes; provided that, the Commission also finds that shoreline erosion is likely to cause severe hardship to the applicant if the facilities or improvements are not allowed within the shoreline setback area and all alternative erosion control measures, including retreat, have been considered;

(10) The Commission may consider granting a variance for the protection of a dwelling unit or public infrastructure; provided that, the structure is at imminent risk of damage from coastal erosion, such damage poses a danger to the health, safety, and welfare of the public, and the proposed protection is the best shoreline management option in accordance with relevant state policy on shoreline hardening.

(11) Construction of a new dwelling unit. In the case where the minimum buildable footprint does not allow for a setback in accordance with this Article, the Commission may consider granting a variance under the following guidelines:

(A) The front yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(B) The side yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(C) If the foregoing approaches are done to the maximum extent practicable and a dwelling cannot be sited mauka of the shoreline setback, the minimum buildable footprint shall be reduced to no less than [1,000] 500 square feet.

(D) If the foregoing approaches in subsections (A), (B) and (C) are done to the maximum extent practicable, the calculated shoreline setback may be reduced to the minimum extent required to permit the construction of a house within the reduced footprint, provided that a qualified consultant must certify that the property is not subject to undue risk from erosion, high wave action, or flooding. Under no circumstance shall the shoreline setback line be less than 40 feet.

(12) Rebuilding of an existing dwelling unit.

(A) Rebuilding of a lawfully existing dwelling unit under this section shall only be allowed if the rebuilding is not prohibited by Article 13, Chapter 8, Kaua'i County Code 1987, as amended and does not:

(i) enlarge the structure beyond its previous building footprint, and

(ii) intensify the use of the structure or its impacts on coastal processes.

(B) In the case where the minimum buildable footprint does not allow for a setback of 60 feet, the Commission may consider granting a variance under the following guidelines only:

(i) The front yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(ii) The side yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(iii) If the foregoing approaches are done to the maximum extent practicable and a dwelling cannot be sited mauka of the shoreline setback, the minimum buildable footprint may be reduced to the lesser of [1,000] 500 square feet or the actual footprint of the house.

(b) A structure may be considered for a variance upon grounds of hardship if:

(1) The applicant would be deprived of all reasonable use of the land if required to fully comply with the provisions of the provisions of this Article;

(2) The applicant's proposal is due to unique circumstances and does not draw into question the reasonableness of the provisions of this Article; and

(3) The proposal is the best practicable alternative which best conforms to the purpose of the provisions of this Article.

(c) Before granting a hardship variance, the Commission shall find that the applicant's proposal is a reasonable use of the land. Because of the dynamic nature of the shoreline environment, inappropriate development may easily pose a risk to individuals or to the public health and safety or to the coastal zone management and resources. The Commission shall consider factors such as coastal hazards, shoreline conditions, erosion, surf inundation, flood conditions and the geography of the lot in determining whether the proposal is a reasonable use of the applicant's land. The Commission shall give due consideration to the long-term average annual rate of coastal erosion calculated by following the methodology outlined in the National Assessment of Shoreline Change: Historical Shoreline Changes in the Hawaiian Islands (Fletcher, et al., 2012) and any amendments thereto, or Section 4.1 of the Hawai'i Coastal Hazard Mitigation Guidebook (Hwang, 2005), and any subsequent amendments thereto.

(d) For purposes of this section, hardship shall not include economic hardship to the applicant resulting from: (1) county zoning or setback changes, planned development permits, cluster permits, or subdivision approvals after June 16, 1989; (2) any other permit or approval which may have been issued by the commission, [or] (3) actions by the applicant, or (4) small lot size.

(e) No variance shall be granted unless appropriate conditions are imposed:

(1) To maintain and require safe lateral access to and along the shoreline for public use or adequately compensate for its loss;

(2) To minimize and mitigate risk of adverse impacts on beach processes and neighboring properties;

(3) To minimize and mitigate risk of structures failing and becoming loose rocks or rubble on public property;

(4) To minimize adverse impacts on public views to, from, and along the shoreline; and

(5) To comply with County Code provisions relating to flood plain management, Chapter 15, Article 1, Kaua'i County Code 1987, as amended, and Drainage, Chapter 22, Article 16, Kaua'i County Code 1987, as amended, respectively.

(f) Any structure approved within the shoreline setback area by variance shall not be eligible for protection by shoreline hardening during the life of the structure, and this limitation and the fact that the structure does not meet setback requirements under Section 8-27.3 and could be subject to coastal erosion and high wave action shall be written into a unilateral agreement that is recorded by the Bureau of Conveyances of Land Court, as the case may be. A copy of the unilateral agreement shall be submitted to the Planning Department prior to the issuance of the required zoning and/or shoreline setback variance. Failure of the grantor to record these deed restrictions shall constitute a violation of this section and the grantor shall be subject to the penalties set forth in this Article.

(g) For any structure approved within the shoreline setback area by variance, the applicant shall agree in writing that the applicant, its successors, and permitted assigns shall defend, indemnify and hold the County of Kaua'i harmless from and against any and all loss, liability, claim, or demand arising out of damages to said structure and this indemnification shall be included in the unilateral agreement required above.

(h) The applicant may apply to the department for an amendment to the variance in a manner consistent with the procedures of the special management area rules of the Kaua'i Planning Commission.

(i) No variance shall be granted for structures within the shoreline setback area that are unpermitted, unless the Commission determines that a structure is necessary to protect public health and safety, and/or that removal of the structure would cause a greater public harm.

(j) In no case shall the Commission grant a shoreline setback variance for structures constructed without valid permits."

SECTION 9. Section 8-27.11, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.11 **Enforcement.**

(a) The Director shall enforce this Article in accordance with Article 24 of the County of Kaua'i Comprehensive [zoning] Zoning Ordinance[.], HRS Chapter 205A, and the rules of Practice and Procedure of the County of Kaua'i Planning Commission.

(b) Removal of an unpermitted structure or improvement(s) to an existing structure.

(1) In determining the disposition of [a] an unpermitted structure or improvement(s) to an existing structure, the Director shall follow the procedures outlined in Chapter 12 of the Rules of Practice and Procedure of the County of Kaua'i Planning Commission based on the nature of the unpermitted structure. If the structure would have required Class I, II, or III permits as well as shoreline setback determination and approval or variance, the procedure shall be that required under Section 1-12-4 of said rules. If a Class IV permit would have been required, the procedure would be that outlined in Sections 1-12-5 through 1-12-8 of said rules.

(2) Following the relevant procedures described in Sec. 8-27.11(b)(1), the Director or the Commission, as the case may be, shall order the removal of an unpermitted structure or improvement(s) to an

existing structure [unless it is determined that removal shall cause a greater harm to the ecosystem and/or public improvements than allowing the structure to remain].

(3) If the Director or Commission determines that removal would be inappropriate, the property owner or perpetrator shall obtain a variance under Sec. 8-27.10 and shall pay penalties as specified in Section 8-27.12.

(c) Judicial Enforcement of Order. The Director may institute a civil action in any court of competent jurisdiction for the enforcement of any order issued pursuant to this section.

Where the civil action has been instituted to enforce the civil fine imposed by such order, the Director need only show that a notice of violation and order was served, a hearing was held or the time allowed for requesting a hearing had expired without such a request, that a civil fine was imposed and that the fine imposed has not been paid.

The Director may institute a civil action in any court of competent jurisdiction for injunctive relief to prevent violation of any provision of this Chapter, any rule adopted there under, any permit issued pursuant thereto or any condition of any shoreline setback approval in addition to any other remedy provided for under this Chapter.

(d) Nonexclusiveness of Remedies. The remedies provided in this chapter for enforcement of the provisions of this chapter, or any rule adopted thereunder, shall be in addition to any other remedy as may be provided by law.

(e) Appeal in Accordance with Statute. If any person is aggrieved by the order issued by the director pursuant to this section, the person may appeal the order in the manner provided in HRS Chapter 91, provided that no provision of such order shall be stayed on appeal unless specifically ordered by a court of competent jurisdiction.

(f) The Director shall enforce this Article in accordance with Article 24 of the County of Kaua'i Comprehensive Zoning Ordinance and HRS Chapter 205A."

SECTION 10. If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity does not affect other provisions or application of the Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable.

SECTION 11. Ordinance material to be repealed is bracketed. New ordinance material is underscored. When revising, compiling, or printing this ordinance for inclusion in the Kaua'i County Code 1987, as amended, the brackets, bracketed material, and underscoring shall not be included.

SECTION 12. This ordinance shall take effect upon its approval. These amendments shall be applied to any pending application, determination, or permits.

Introduced by:

MEL RAPOZO

BERNARD P. CARVALHO, JR.

DATE OF INTRODUCTION:

Līhu'e, Kaua'i, Hawai'i
V:\BILLS\2024-2026 TERM\2025-292.1 Shoreline Setback Coastal Protection bill MR_BC_RM_mn.docx

Exhibit B:

Revised proposed bill

ORDINANCE NO. __________ BILL NO. __________

A BILL FOR AN ORDINANCE AMENDING CHAPTER 8, ARTICLE 27, KAUAʻI COUNTY CODE 1987, AS AMENDED, RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAʻI, STATE OF HAWAIʻI:

SECTION 1. The Council finds that Kauaʻi's coastline is subject to an increasing variety of natural hazards such as tsunamis, high surf, sea level rise, climate change, hurricanes, coastal flooding, and coastal erosion, all of which pose severe dangers to people and properties located near the shoreline. Therefore, proper siting of structures and regulation of improvements to structures along Kauaʻi's shoreline areas are critical to protecting life and property, mitigating coastal hazards, and preserving coastal resources, which are culturally important to the people of Hawaiʻi. To accomplish this, the Council finds it necessary to strengthen Kauaʻi's Shoreline Setback Ordinance adopted in 2008 by updating Chapter 8, Article 27, Kauaʻi County Code 1987, as amended, to include added definitions for clarity and revised requirements for shoreline property owners seeking to repair existing structures.

The purpose of this Ordinance is to amend the Shoreline Setback Ordinance articulated in Chapter 8, Article 27, Kauaʻi County Code 1987, as amended, by adding safeguards that protect life and property and ensure the longevity and integrity of Kauaʻi's coastal and beach resources along the shoreline.

SECTION 2. Section 8-27.2, Article 27 of Chapter 8, Kauaʻi County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.2 Definitions.

For purposes of this Article, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein shall be defined as follows:

"Adversely affect beach processes" means to pose a potential immediate or future adverse effect on beach processes as a result of a structure and/or landscaping located within the coastal erosion hazard zone, or to create an immediate or future need to artificially fix the shoreline.

"Annual coastal erosion rate" means the long-term average annual rate of coastal erosion calculated by following the methodology outlined in the National Assessment of Shoreline Change: Historical Shoreline Changes in the Hawaiian Islands (Fletcher, et al., 2012). Annual coastal erosion rates are available for all lots on Kauaʻi fronted by a sandy beach from the Kauaʻi Planning Department. These rates were calculated by the University of Hawaiʻi's Coastal Geology Group for the Kauaʻi Coastal Erosion Study, and it was last updated in 2018. The Planning Director may designate a qualified professional to review and, subject to the Planning Director's approval, update annual coastal erosion rates.

"Average lot depth" means the measurement obtained by adding the lengths of the two sides of a lot which are at or near right angles with the shoreline, or the seaward boundary of the lot that runs roughly parallel to the shoreline if the property is not abutting the shoreline, to the length of a line obtained by drawing a line from a point in the center of the makai side of the lot to a point in the center of the mauka side of the lot and dividing the resulting sum by three. For irregularly shaped lots including flag lots, triangular parcels, lots on peninsulas, and/or lots having ocean on two or more sides of the lot, the average lot depth will be determined by the Director.

"Beach" means a coastal landform primarily composed of sand from eroded rock, coral, or shell material, or any combination thereof, that is established and shaped by wave action or tidal processes. Beach includes sand deposit in nearshore submerged areas, or coastal dunes or upland beach deposits landward of the shoreline that provide benefits for public use and recreation, for coastal ecosystems, and as a natural buffer against coastal hazards.

"Beach processes" means the dynamic interactions between waves, currents, water levels, winds, and sediment mobility along coastal shorelines, influencing the formation and evolution of beaches through erosion, transportation, and deposition of sediment.

"Board" shall mean the Board of Land and Natural Resources, State of Hawai'i.

"Building footprint" shall mean all parts of a main building (excluding roof overhangs) that rest, directly or indirectly, on the ground, including those portions of the building that are supported by posts, piers, or columns. Building footprint also includes attached garages, covered carports, bay windows with floor space, lanais, decks, cantilevered decks, spas, and in ground swimming pools.

"Certified shoreline" means the shoreline established by Board pursuant to HRS 205A-42, as amended.

"Coastal dune" means one of possibly several continuous or nearly continuous mounds or ridges of unconsolidated sand on the landward side of a beach that is contiguous and approximately parallel to the beach, [situated so that it may be accessible to storm waves and seasonal high waves for release to the beach or offshore waters]formed as wind and occasionally high waves deposit sand in a sheltered area that is typically stabilized with dune-adapted plant species, leading to accumulation and formation of a dune.

"Coastal erosion" means the natural loss of coastal lands, usually by wave attack, tidal or littoral currents, or wind. Coastal erosion is synonymous with shoreline retreat.

"Coastal erosion hazard zone" shall include all of the land between the shoreline and the shoreline setback line.

"Coastal hazard" means [natural processes in the coastal zone that are generated by geologic, oceanographic, and/or meteorological processes that place people and/or improvements at risk for injury and/or damage] elevated risk to public health or safety, property, access to and along the shoreline, Native Hawaiian cultural resources, and the environment in coastal areas resulting from physical phenomena, including but not limited to high waves, storm surge, tsunami, sea level rise, coastal erosion, and other hazards.

"Coastal hazard disclosure statement" means a statement prescribed by the department disclosing the potential for coastal hazards and the potential for further restrictions and limitations on development of the respective property in the future. This statement is an addendum to the shoreline setback determination application, and it must be signed by the property owner prior to acceptance of the determination application.

"Commission" means the Planning Commission of the County of Kaua'i.

"Department" means the Planning Department of the County of Kaua'i.

"Director" means the Planning Director of the Planning Department of the County of Kaua'i.

"Dwelling unit" means any building or any portion thereof which is designed or intended for occupancy by one family or persons living together or by a person living alone, and provides complete living facilities within the unit for sleeping, recreation, eating and sanitary facilities, including installed equipment for only one kitchen.

"FEMA" means the Federal Emergency Management Agency.

"FIRM" means the Flood Insurance Rate Map.

"Hazard assessment" means assessment for erosion, wave, flood, and inland zone following the standards in Section 4.3 of the Hawai'i Coastal Mitigation Guidebook, (January 2005), which was prepared for the State of Hawai'i, Department of Land and Natural Resources, Coastal Zone Management Program, University of Hawai'i Sea Grant College Program and the Pacific Services Center and Coastal Services Center of the National Oceanic and Atmospheric Administration.

"Kaua'i coastal erosion study" means the quantitative study of Kaua'i and Ni'ihau's historical shoreline behavior utilizing orthorectified aerial photographs or other imagery to carry out high-resolution mapping of historical shoreline positions to obtain a statistically valid annual erosion rate of the Shoreline Change Reference Feature (SCRF). The study was conducted by the University of Hawaiʻi's Coastal Geology Group for the County of Kauaʻi, and it was last updated in 2018. The shoreline change data and shoreline change posters produced by this study are on file with the Kauaʻi Planning Department. The study followed procedures described in the National Assessment of Shoreline Change: Historic Shoreline Changes in the Hawaiian Islands (Fletcher, et al., 2010) available from the Kauaʻi Planning Department.

"Landscaping" means the modification of landscape for an aesthetic or functional purpose that includes the planting of vegetation; the installation of irrigation, rock or water features; grading or grubbing.

"Makai" means seaward or in a seaward direction.

"Mauka" means landward or in a landward direction.

"Minimum buildable footprint" means a building footprint of 1,500 square feet.

"Minor structure" means[:

(1) a structure that costs less than $125,000 and provides temporary emergency protective measures for a legally habitable structure that is imminently threatened by coastal hazards provided that the protective measure has received approval in accordance with the Special Management Area Rules of the Kaua'i Planning Commission and/or the State Department of Land and Natural Resources (as may be the case), relocation of the endangered structure has been considered and is not reasonable given the nature of the emergency, the protective measure is removed within 180 days of its installation, and given the significance of the emergency, the protection is the best management alternative with respect to beach, shoreline, and/or coastal resource conservation, or

(2)] a structure that:

(A) costs less than $125,000; and

(B) does not adversely affect beach processes, does not artificially fix the shoreline, and does not interfere with public access or public views to and along the shoreline; and

(C) does not impede the natural processes and/or movement of the shoreline and/or sand dunes, and does not alter the grade of the shoreline setback area; and

(D) is consistent with the purposes of this Article and HRS Chapter 205A, as amended; and

(E) includes, but is not limited to, lighting in conformance with HRS Chapter 205A, landscape features, barbeques, picnic tables, benches, chairs, borders, wooden trellis, bird feeders, signs, safety improvements, lifesaving devices, movable lifeguard stands, outdoor showers and water faucets, public utility lines, utility poles and accessory structures along existing corridors, temporary tents for special events not exceeding 14 consecutive days in duration during any three-month period, walls and fences that are located more than 40 feet from the shoreline, landscape planting and irrigation systems provided that they are located more than 40 feet away from the shoreline and do not artificially extend the shoreline or shoreline setback area seaward, public park facilities (excluding restrooms, wastewater systems, and shoreline armoring structures or improvements), portable or removable walkways for public access, or, as determined by the director, a structure primarily benefitting the public that will not impact or be impacted by coastal erosion processes; and

(F) excludes, but is not limited to, any in-ground swimming pools or spas, garages, carports, concrete walkways that are reinforced, concrete walkways that are not saw-cut at a minimum of three foot intervals, and concrete steps.

"Natural catastrophe" is a natural disaster qualifying for a governor's declaration of emergency pursuant to Hawai'i Revised Statutes Chapter 128, or a presidential declaration of emergency of a major disaster pursuant to 42 USC 5170, including those caused by episodic coastal hazards such as tsunamis and hurricanes, and not the result of other coastal hazards or processes such as erosion or sea level rise.

"Nonconforming structure or activity" means a structure or activity which is lawfully existing within the shoreline setback area because it:

(1) Was completely built, in its present form, prior to June 22, 1970; or

(2) Received either a building permit, board approval, or shoreline setback area variance prior to June 16, 1989; or

(3) Was outside the shoreline setback area when it received either a building permit or board approval[; or].

"Plan" or "site plan" means a detailed construction plan drawn to scale of 1″ = 20′ 0″ that shows the design of a structure proposed to be built within the shoreline setback area. The plan shall be based on an accurate instrument by a surveyor licensed in the State of [Hawaii] Hawai'i and shall consist of data including but not limited to:

(1) Property boundaries;

(2) Natural features such as large trees, rock outcroppings, and any primary or secondary coastal dunes;

(3) Topography in and around the proposed construction;

(4) Any and all shoreline hardening;

(5) Flood zones, where applicable;

(6) Existing and proposed structures and their proximity to the shoreline and shoreline setback area;

(7) Fences, walls, and any other structures in the shoreline setback area and any potential hindrances to lateral access along the shoreline;

(8) A geo-referenced survey of the site; and

(9) Any other information which identifies the existing condition of the subject parcel of land. ["Primary Coastal Dune" means the first dune encountered mauka of the beach.]

"Primary Coastal Dune" means the first coastal dune encountered mauka of the beach, situated so that it may be accessible to storm waves, seasonal high waves, and high water levels to release sand to the beach or offshore waters.

"Prohibited activities" means those activities prohibited in the shoreline setback area as provided in Section 8-27.6 of this Article. All other activities shall be regulated by the Special Management Area Rules and Regulations of the County of Kauaʻi and the requirements of HRS Chapter 343-5 regarding environmental assessments for any proposed uses within a shoreline area as defined in Section 205A-41.

"Public park facilities" means recreational facilities owned and operated by state or county park agencies for the benefit and use of the general public.

"Qualified consultant" means a coastal scientist with a master of science degree or doctorate in geology, geography, or other appropriate physical science relating to coastal processes, or an engineer licensed in the State of Hawaiʻi that has experience in coastal processes. If a dune restoration project is proposed, the qualified consultant shall have experience and expertise with dune restoration.

"Qualified demolition" means the demolition of a structure or structures where such demolition:

(1) Will not adversely affect beach processes;

(2) Will not artificially fix the shoreline;

(3) Will not interfere with public access, except for public safety reasons during demolition operations;

(4) Will not interfere with public views to and along the shoreline, except during demolition operations;

(5) Will be consistent with the intent of open space enhancement as reflected in these rules and HRS 205A; and

(6) Will comply with applicable County Codes.

“Rebuilding” means reconstruction of a lawfully existing dwelling unit when the reconstruction is valued by a licensed professional engineer, or architect at 50% or more of the current replacement cost of the structure.

“Repair” means the [reconstruction or renewal] rehabilitation or renovation of any part of a lawfully existing structure, but not the entire structure, solely for the purpose of its maintenance and does not result in an addition to, or enlargement or expansion of, the lawfully existing structure, such as alterations of floors, roofs, walls, or the supporting structure of a building or the rearrangement of any of its component parts. A “substantial improvement” as defined herein shall not be considered a repair. [Repair shall be consistent with the definition of “repair” under Sec. 8-1.5, Kaua‘i County Code 1987, as amended.]

“Revetment” shall mean a sloping facing of stone, concrete, blocks, or other [similar] materials built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.

“Rocky shoreline” means a shoreline segment acting as the primary interface between marine dominated processes and terrestrial dominated processes that is composed of hard, non-dynamic, non-erodible material such as basalt, fossil limestone, beach rock, or other natural non-dynamic material, not to include cobble or gravel beaches that are dynamic in nature, or erodible cliffed shorelines composed dominantly of dirt or clay.

~~“Sea Level Rise Exposure Area (SLR-XA)” means the sea level rise exposure area delineated in the Hawai‘i Climate Change Mitigation and Adaptation Commission’s Hawai‘i Sea Level Rise Viewer, or its successors.~~

“Seawall” means a structure with a vertical face separating land and water areas, primarily designed to prevent erosion and other damage due to wave action.~~shoreline hardening structure built of stone, concrete, blocks or other materials to protect a scarp, embankment, or structure against erosion or damage by wave action or currents and has a vertical face on its makai side.~~

“Shoreline” is as defined in Section 205A-1, Hawai‘i Revised Statutes, as amended, and as established pursuant to Section 205A-42, Hawai‘i Revised Statutes, as amended.

"Shoreline certification" means a signed statement by the chairperson of the Board of Land and Natural Resources that the shoreline is as located and shown on the map as of a certain date.

"Shoreline change reference feature (SCRF)" means a morphologic feature commonly referred to as the "toe" of the beach, which represents the base of the foreshore or approximating the Mean Lower Low Water (MLLW).

"Shoreline hardening" means the process of fortifying the shoreline or shoreline setback area with hard structures including, but not limited to, seawall and revetments.

"Shoreline setback area" means "shoreline area" as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

"Shoreline setback line" means that inland line established by Section 8-27.3 that runs parallel to the shoreline.

"Storm buffer zone" is the first 40 feet of the shoreline setback area as measured from the shoreline.

"Structure" is as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

"Substantial construction" means that 100% of the foundation has been laid[, or that 100% of the foundation of the active phase of a project has been laid where the project is being done in phases].

"Substantial improvement" means any cumulative series of repairs, reconstruction, improvements, or additions to a structure over a 10 year period, where the cumulative cost equals or exceeds 50% of the market value of the structure before the start of construction of the first improvement during that 10 year period. For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The value of any substantial improvement shall be determined by the County Engineer or his/ her authorized representative. The term does not, however, include either: (1) any project for improvement of a structure to correct existing violations of a State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

"Temporary structures" means structures that will exist for no longer than six months and will not irreversibly and adversely affect beach processes, public access, or public views nor artificially fix the shoreline in an irreversible way, and from which there will be a public benefit.

"Use" means the purpose for which land or building is arranged, designed, or intended, or for which either land or building is or may be occupied or maintained."

SECTION 3. Section 8-27.3, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.3. Shoreline Setback Determination: Establishment of the Shoreline Setback Line.

Shoreline setback determinations shall be issued based on the following procedures:

(a) A shoreline setback determination shall be required for all structures and subdivisions proposed on lands covered by this Article, except in the following two cases:

(1) As permitted in Section 8-27.7;

(2) Where the applicant can demonstrate to the satisfaction of the Planning Director that the applicant's proposed structure or subdivision will not affect beach processes, impact public beach access, or be affected by or contribute to coastal erosion or hazards, excluding natural disasters. Factors to be considered shall include, but not be limited to, proximity to the shoreline, topography, properties between the shoreline and applicant's property, elevation, and the history of coastal hazards in the area.

(b) Unless otherwise provided in subsection (a) above, no shoreline setback line shall be established for any lot subject to this Article unless the application for a shoreline setback line includes a certified shoreline issued within 12 months prior to submission of the application.

(c) Lots Included in the Kaua'i Coastal Erosion Study. For all structures on lots subject to the Kaua'i Coastal Erosion Study, the setback shall be calculated as follows:

(1) For lots with an average lot depth of less than 140 feet, the setback line shall be 40 feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, for all applicable lots subject to the Kaua'i Coastal Erosion Study a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards.

(2) For lots with an average lot depth of 140 feet to 220 feet, the greater setback of the following shall apply:

(A) Forty feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, for all applicable lots subject to the Kauaʻi Coastal Erosion Study a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards; or

(B) A shoreline setback determined by taking the average lot depth, subtracting 100 feet, dividing by two and adding [40] 60 feet.

(3) For all lots with an average lot depth of over 220 feet, the greater setback of the following shall apply:

(A) Forty feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, for all applicable lots subject to the Kauaʻi Coastal Erosion Study a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards; or

(B) A shoreline setback line of [100] 120 feet from the certified shoreline.

Table 1

(This table is included for illustrative purposes only.) Lots Included in the Kauaʻi Coastal Erosion Study. The distance in feet of the shoreline setback line as measured from the certified shoreline based on the average lot depth in feet.

Average Lot Depth	**Setback Line**
Less than 140 feet	40 feet plus (70 X annual coastal erosion rate) plus 20 feet
140 feet to 220 feet	Greater of: 40 feet plus (70 X annual coastal erosion rate) plus 20 feet -or- (Average Lot Depth minus 100 feet) ÷ by 2 plus [40] 60 feet
Greater than 220 feet	Greater of: 40 feet plus (70 X annual coastal erosion rate) plus 20 feet -or- [100] 120 feet from the certified shoreline

(d) Lots Not Included in the Kauaʻi Coastal Erosion Study. For all structures on lots that were not included in the Kauaʻi Coastal Erosion Study, the setback shall be calculated by the following formula, (Average Lot Depth - 100)/2 +[40] 60), subject to the following:

(1) For all lots, the shoreline setback line shall be no less than 60 feet.

(2) The maximum setback that can be required shall be [100] 120 feet.

(e) Non-abutting Lots. If an applicant is unable to secure permission from the abutting owner to complete a certified shoreline for a non-abutting lot within approximately 500 feet of the shoreline, the Planning Director may, pursuant to Sec. 8-4.3, impose conditions to zoning permits to increase setbacks where evidence exists that a proposed structure may be affected by coastal hazards or erosion.

(f) No subdivision which involves a lot, or any portion of a lot that would be subject to this Article, shall be approved without a coastal erosion study, a certified shoreline, and a shoreline setback line established in accordance with this Article, unless the subdivision is initiated by the County.

(g) Any subdivision with lots abutting the shoreline approved pursuant to Chapter 9 of the Kaua'i County Code, 1987, as amended, after the adoption of this Ordinance shall have a shoreline setback line of 40 feet plus 70 times the annual coastal erosion rate as measured from the certified shoreline. In addition to the shoreline setback calculations above, a mandatory 20 foot additional safety buffer shall be added to the setback area for episodic coastal events, sea level rise and other hazards.

(h) Each lot abutting the shoreline in a subdivision approved after the effective date of this ordinance shall be designed to achieve a building footprint of 5,000 square feet of buildable area *mauka* of the shoreline setback line established in accordance with subsections (f) and (g), above.

(i) Prior to commencement of grubbing, grading, or construction activities, the shoreline and shoreline setback line shall be identified on the ground and posted with markers, posts, or other appropriate reference marks by a surveyor licensed in the State of Hawai'i.

(j) The application of Section 8-27.3 by itself shall not make a dwelling unit nonconforming."

SECTION 4. Section 8-27.6, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.6 Prohibited Activities in the Shoreline Setback Area.

(a) Pursuant to HRS 205A-44, as amended, the mining or taking of sand, dead coral or coral rubble, rocks, soils, or other beach or marine deposits from the shoreline setback area is prohibited with the following exceptions:

(1) The inadvertent taking from the shoreline setback area of the materials, such as those inadvertently carried away on the body, and on clothes, toys, recreational equipment, and bags;

(2) Where the mining or taking is authorized by a variance pursuant to Section 205A-46 of the Hawai'i Revised Statutes;

(3) The clearing of these materials from existing drainage pipes and canals and from the mouths of streams, including clearing for the

purposes under HRS Section 46-11.5; provided that, the sand removed shall be placed on adjacent areas unless such placement would result in significant turbidity;

(4) The cleaning of the shoreline setback area for state or county maintenance purposes, including the clearing of seaweed, limu, and debris under HRS Section 46-12; provided that, the sand removed shall be placed on adjacent areas unless the placement would result in significant turbidity;

(5) The taking of driftwood, shells, beach glass, glass floats, or seaweed;

(6) The exercise of traditional cultural practices as authorized by law or as permitted by the department pursuant to Article XII, Section 7, of the Hawai‘i State Constitution; or

(7) For the response to a public emergency or a state or local disaster.

(b) Any primary coastal dune, which lies wholly or partially in the shoreline setback area, shall not be altered, graded, or filled in any way except for the addition of sand of compatible quality and character unless the application of this section renders the build-out of allowable density unfeasible. In such case, modifications, alterations, grading, or filling may be allowed through a variance, but only for that portion of the primary dune located mauka (landward) of the shoreline setback area, and only to the extent necessary to construct on a minimum building footprint. This exception shall apply only to lots in existence prior to December 2, 2009.

(c) The following are prohibited in the shoreline setback area:

(1) Individual wastewater system or subsurface improvement unless the applicant demonstrates to the satisfaction of the Director that no feasible alternative exists, including a redesign of the improvement or structure to accommodate the system outside of the setback line, and the system or improvement complies with all statutory and Department of Health requirements.

(2) Landscaping that artificially fixes the shoreline.

(3) [Shoreline hardening unless it is approved by the State of Hawai‘i's Office of Conservation and Coastal Lands] Private shoreline hardening structures, including seawalls and revetments, at sites subject to the Kaua‘i Coastal Erosion Study and at sites where shoreline hardening structures interfere with existing recreational and waterline activities.

(4) Expansion of the footprint of a non-conforming structure, unless otherwise provided by law."

SECTION 5. Section 8-27.7, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.7 Permitted structures within the shoreline setback area.

(a) The following structures are permitted in the shoreline setback area. All structures and/or landscaping not specifically permitted in this section are prohibited without a variance.

(1) Existing conforming or legally nonconforming structures.

(2) Structure that received a shoreline variance or administrative approval prior to February 26, 2008.

(3) A structure that is necessary for, or ancillary to, continuation of agriculture or aquaculture existing in the shoreline setback area on June 16, 1989.

(4) "Temporary structures" as defined in Section 8-27.2. To ensure that there will be no irreversible or long term adverse effects, the Director shall require as a condition of a permit the restoration of the site to its original condition or better, and the Director may require a bond to ensure such restoration.

(5) A structure that consists of maintenance, repair, reconstruction, and minor additions or alterations that results in no interference with natural beach processes and is ancillary or associated with one of the following sites:

(A) A Hawaiian fish pond;

(B) A publicly owned and legal boating, maritime, or water sports recreational facility.

(6) Repairs to a lawfully existing structure, including nonconforming structures, provided that:

(A) The repairs do not enlarge, add to or expand the structure; increase the size or degree of nonconformity; or intensify the use of the structure or its impact on coastal processes;

(B) The repairs do not constitute a substantial improvement of the structure;

(C) The repairs are permitted by the Comprehensive Zoning Ordinance, Development Plans, building code, floodplain management regulations, special management area requirements under HRS Chapter 205A and any other applicable rule or law; and

(D) The Planning Director determines that the proposal complies with the definition of "repair" under Sec. 8-27.2, Kaua'i County Code 1987, as amended.

(E) To ensure that proposed repairs under Sec. 8-27.2, Kaua'i County Code 1987, as amended, do not constitute a substantial improvement, the Director shall require the applicant to provide the following:

(1) Appraisal of the structure.

(2) A cost breakdown estimate of the proposed repair project through a "Non-Substantial Improvement Job Cost Breakdown Worksheet." The worksheet is to be submitted to and maintained by the Director and shall include all costs of the subject repair project, including but not limited to costs associated with site work, masonry, plumbing, electrical work, carpentry (framing and finish work), drywall, glass and glazing, painting, flooring, appliances, cabinetry, and all labor.

(3) The applicant shall submit a signed declaration acknowledging understanding and agreeing the repair exemption cost figures estimated in the "Non-Substantial Improvement Job Cost Breakdown Worksheet" are subject to review after the completion of the proposed repairs for consistency with the actual and proposed repairs.

(4) The applicant shall inform the Planning Department of the date of completion of the repair project and any additional construction materials, labor and associated costs incurred during the repair. In the absence of any notification of completion, the Department shall consider this repair project still ongoing.

(5) Within 60 days of the notification of completion or while the repair project is still ongoing, the Director may require the applicant to submit receipts for each of the improvements listed on the "Non-Substantial Improvement Job Cost Breakdown Worksheet" and any other construction materials, labor and associated costs necessitated by the repairs that have been completed. If the applicant cannot provide receipts, the Director may establish the fair market cost for each of the improvements for which receipts cannot be provided.

(6) Should the expenditures on the receipts provided demonstrate that the project is not a repair and is in fact considered a substantial improvement pursuant to Section 8-27.2, Kaua'i County Code 1987, as amended, the Director shall follow the

enforcement standards in Section 8-27.11, Kaua'i County Code 1987, as amended.

(F) A certified state shoreline survey is required for any repairs exceeding $125,000 and must be included in the application for a shoreline setback determination.

(7) Beach nourishment or dune restoration projects approved by all applicable governmental agencies.

(8) A structure approved by the Director as a minor structure.

(9) Qualified demolition of existing structures.

(10) Unmanned civil defense facilities installed for the primary purposes of: (i) warning the public of emergencies and disasters; or (ii) measuring and/or monitoring geological, meteorological and other events.

(11) Scientific studies and surveys, including archaeological surveys.

(12) Structures built by a governmental agency to address an emergency as declared by the Governor of the State of Hawai'i, the Mayor of the County of Kaua'i or any other public official authorized by law to declare an emergency.

(13) Structures relating to film productions that have received a County Revocable Film Permit. Structures undertaken for film productions must be removed within 30 days following the completion of the film production.

(14) Structures required for remedial and removal actions undertaken pursuant to Chapter 128D of the Hawai'i Revised Statutes.

(15) Repair and/or rebuilding of existing public park facilities, excluding shoreline armoring structures or improvements.

(b) The following conditions shall apply to any new structure or any substantial improvement permitted in the shoreline setback area:

(1) All new structures shall be constructed in accordance with the standards for development in Chapter 15, Article 1, Flood Plain Management, Kaua'i County Code 1987, as amended, relating to coastal high hazard districts and FEMA guidelines regarding construction in areas mapped on Flood Insurance Rate Maps as flood hazard areas.

(2) The applicant shall agree in writing that the applicant, its successors, and permitted assigns shall defend, indemnify, and hold

the County of Kaua'i harmless from and against any and all loss, liability, claim or demand arising out of damages to said structures from any coastal natural hazard and coastal erosion.

(3) The applicant shall agree in writing for itself, its successors and assigns that the construction of any erosion control or shoreline hardening structure and/or landscaping shall not be allowed to protect the permitted structure during its life, with the exception of approved beach or dune nourishment fill activities, and landscape planting and irrigation located more than 40 feet from the shoreline.

(4) Unless otherwise provided, all new structures and/or landscaping shall not (i) adversely affect beach processes, (ii) artificially fix the shoreline, (iii) interfere with public access or public views to and along the shoreline, (iv) impede the natural processes and/or movement of the shoreline and/or sand dunes, (v) adversely impact neighboring property, or (vi) alter the grade of the shoreline setback area.

(5) All new structures shall be consistent with the purposes of this Article and HRS Chapter 205A, as amended, and shall be designed and located to minimize the alteration of natural landforms and existing public views to and along the shoreline.

(6) On lots threatened by sea level rise erosion or historic coastal erosion, before approval of an additional structure, the applicant must agree to retreat, relocate, or remove the proposed and existing structure(s) before or when the shoreline reaches the structure(s) at the respective property owner's expense.

[(6)](7) The requirements of this Subsection (b) shall run with the land and shall be set forth in a unilateral agreement recorded by the applicant with the Bureau of Conveyances or the Land Court, whichever is applicable, no later than 30 days after the date of final shoreline approval of the structure under Section 8-27.8. A copy of the recorded unilateral agreement shall be filed with the Director and the County Engineer no later than 45 days after the date of the final shoreline determination and approval of the structure and the filing of such with the Director shall be a prerequisite to the issuance of any related building permit.

~~(6) On lots threatened by sea level rise erosion or historic coastal erosion, before approval of an additional structure, the applicant must agree to retreat, relocate, or remove the proposed and existing structure(s) before or when the shoreline reaches the structure(s) at the respective property owner's expense.~~

SECTION 6. Section 8-27.8, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.8 Procedures for Obtaining Shoreline Setback Determinations.

(a) Unless as otherwise provided in this Article, any structure proposed within 500 feet of the shoreline shall first obtain a shoreline setback determination from the Director in accordance with this Article.

(b) A proposed structure in the shoreline setback area or within 500 feet of the shoreline shall not be allowed by the Director unless it is consistent with this Article and HRS Chapter 205A, as amended.

(c) Procedure.

(1) A request for determination for a proposed structure within the shoreline setback area or within 500 feet of the shoreline shall be submitted to the Department on a form prescribed by the Director.

(2) For public structures whose valuation does not exceed $500,000 and repairs to lawfully existing private structures as delineated in Section 8-27.7(a), the request shall include construction and site plans, and written text addressing compliance with the criteria set forth in this Article. The Director may also require additional information, including, but not limited to a current shoreline setback determination or a current certified shoreline survey or shoreline survey stamped by a licensed surveyor, registered in the State of Hawai'i and coastal erosion information, a list of proposed plants and their growth, existing and final contours, photographs, and an environmental assessment.

(3) For public structures whose valuation exceeds five hundred thousand dollars ($500,000.00) and private structures unless delineated in Sec. 8-27.7(a), the request shall include relevant information, which shall include, but is not limited to, a current shoreline setback determination as set forth in Sec. 8-27.3 or a current certified shoreline survey and coastal erosion information, construction and site plans, existing and final contours, photographs, and a written text addressing compliance with the criteria set forth in this Article. The Director may also require a hazard assessment.

(4) Within 60 days from the day the application is deemed complete by the Director, the Director shall make a decision in accordance with the criteria set forth in this Article that the proposed structure is:

(A) Permitted under Section 8-27.7;

(B) Permitted under Section 8-27.7 and subject to conditions;

(C) Not permitted under Section 8-27.7;

(D) Outside of the shoreline setback area; or

(E) Not subject to Section 8-27.3.

(5) A list of applications for a shoreline setback determination or determination of exemption deemed complete by the Director shall be posted within 10 working days to a publicized website maintained by the Department. All applications are subject to a 30-day comment period.

(6) The Director shall notify the Commission at the Commission's next regularly scheduled meeting of the following:

(A) any shoreline setback determinations for approval of a structure proposed within the shoreline setback area or within 500 feet of the shoreline;

(B) any approvals or denials by the Director of structures and the reasons therefore, including, but not limited to, the name of the applicant, the location and purpose of the structure, and a discussion of the factors considered in making the decisions; and

(C) any decision by the Director to not require a shoreline setback determination pursuant to Section 8-27.3.

(7) All shoreline setback determinations made by the Director shall include, but are not limited to, the name of the applicant, the average lot depth calculations, the location of any proposed structures depicted on a plan drawn to scale, the purpose of the proposed structures, the current certified shoreline (if required), the setback calculations and setback line drawn on the plan, and copies of a coastal erosion study, if applicable. If the Director, pursuant to Section 8-27.3, make a determination of exemption, the Director shall state the justification in writing.

(8) The Director's decisions pursuant to Section 8-27.8(c)(4) shall not be final until posted on the Commission's agenda. Notwithstanding the posting of the decision, if there is an appeal from the Director's decision, the decision shall not be final until the Commission completes its [decisionmaking] decision-making on the appeal.

(9) Minor structures shall be completed within one year from the final shoreline approval or within one year from the date of approval of the last discretionary permit, whichever comes later.

(10) For any non-minor structures allowed within the shoreline setback area and any structures outside the shoreline setback area based on the shoreline setback line, substantial construction of the structure shall be achieved within [three] two years from the date of

final shoreline setback determination and approval, and construction thereof shall be completed (as evidenced by a certificate of occupancy in the case of buildings for habitation) within [four] three years from said date.

(A) An extension of no more than one year may be granted by the Director to the deadline for substantial construction only for properties with a stable shoreline such as rocky or accreting shorelines or shorelines exhibiting no coastal erosion per shoreline change rates as provided in the Kauaʻi Coastal Erosion Study. In all other cases where substantial construction has not occurred by the deadline, a new certified shoreline and setback determination shall be required.

(B) In case of failure to complete construction by the [four-year] three-year deadline, the Planning Commission shall determine a remedy based on a review of the specific circumstances, including but not limited to, the stability of the shoreline, the extent of the completion and the reason for delay.

(C) These requirements for substantial construction and completion shall run with the land and shall be written in a unilateral agreement that is recorded in the Bureau of Conveyances or Land Court, as applicable, prior to application for a building permit. A copy of the recorded unilateral agreement shall be submitted to the Planning Department prior to application for a building permit.

(11) All applications for Shoreline Setback Determinations shall include a Coastal Hazard Disclosure Statement signed by the property owner.

(d) Nothing in this section shall be deemed to amend, modify or supersede any provision of the Special Management Area Rules and Regulations of the County of Kauaʻi, HRS Chapter 205A, as amended, or HRS Chapter 343-5, as amended.

(e) Fees. A nonrefundable processing fee of $100 shall accompany a request for determination.”

SECTION 7. Section 8-27.9, Article 27 of Chapter 8, Kauaʻi County Code 1987, as amended, is hereby amended to read as follows:

“**Sec. 8-27.9 Variance application.**

(a) A written application for variance shall be made in a form prescribed by the Director and shall be filed with the Director. The application shall include plans, site plans, photographs, and any other plans, drawings, maps, or data determined by the Director to be necessary to evaluate the application. The application shall also include:

(1) A non-refundable administrative application fee of $300[.];

(2) Certification from the owner or lessee of the lot which authorizes the application for variance;

(3) An environmental assessment prepared in accordance with HRS Chapter 343, and the environmental impact statement rules and applicable guidelines of the State of Hawai‘i;

(4) The names, addresses, and the tax map key identification of owners of real property situated adjacent to and abutting the boundaries of the land on which the proposed structure and/or landscaping is to be located;

(5) A site plan of the shoreline setback area, drawn to scale, showing:

  (A) Existing natural and man-made features and conditions within;

  (B) Existing natural and man-made features and conditions along properties immediately adjacent to the shoreline setback area and proposed improvements;

  (C) The certified shoreline and the shoreline setback line;

  (D) Contours at a minimum interval of two feet unless waived by the director; and

  (E) Proposed development and improvements showing new conditions with a typical section (if a structure), and the proposed development's impacts to neighboring properties.

(6) A copy of the certified shoreline survey map of the property;

(7) Detailed justification of the proposed project, which addresses the purpose and intent of these rules and the criteria for approval of a variance;

(8) Analysis and report of coastal erosion rates and coastal processes; and

(9) Any other information required by the Director.

(b) Upon a determination by the Director that the application is complete and in compliance with HRS Chapter 205A, part II and this Article, the Director shall submit the application to the Commission. If the application is determined to be incomplete by the Director, the Director shall return the application to the applicant with a written description identifying the portions of the application determined to be incomplete. The Director shall submit a written report, a copy of the application, and all other documents submitted on the application to the Commission prior to the matter appearing on an agenda of the Commission.

(c) Except as otherwise provided in this section, all applications for variances shall be heard, noticed, and processed as public hearing matters. Not less than 30 calendar days before the public hearing date, the applicant for a variance shall mail notices of public hearing by certified or registered mail, postage prepaid, to all owners of real property within 300 feet of the parcel that is the subject of the application. Not less than 30 days prior to the public hearing date, the Director shall publish a notice of hearing once in a newspaper that is printed and issued at least twice weekly in the County and which is generally circulated throughout the County. The notice shall state the nature of the proposed development, the date, time, and place of the hearing, and all other matters required by law.

(d) Exceptions. Prior to action on a variance application, the Commission may waive a public hearing on the application for:

(1) Stabilization of shoreline erosion by the moving of sand entirely on public lands;

[(2) Protection of a legal structure costing more than $20,000; provided that, the structure is at risk of immediate damage from shoreline erosion;]

[(3)](2) Other structures or activities; provided that, no person or agency has requested a public hearing within 25 calendar days after public notice of the application. For the purposes of this section "public notice of the application" shall be publication of a notice of the application in a newspaper which is printed and issued at least twice weekly in the County of Kaua'i, which informs the public of the subject matter of the application and which identifies the date and time by which a written request for a public hearing must be received by the Commission; or

[(4)](3) Maintenance, repair, reconstruction, and minor additions or alterations of legal boating, maritime or water sports recreational facilities, which result in little or no interference with natural shoreline processes."

SECTION 8. Section 8-27.10, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.10 Criteria for approval of a variance.

(a) A shoreline setback variance may be considered for a structure otherwise prohibited by this Article, if the Commission finds in writing, based on the record presented, that the proposed structure meets those standards established under Section 8-3.3 and is necessary for or ancillary to:

(1) Cultivation of crops;

(2) Aquaculture;

(3) Landscaping; provided that, the Commission finds that the proposed structure will not adversely affect beach processes, public access or public views and will not artificially fix the shoreline and is in compliance with HRS Section 115-5;

(4) Drainage;

(5) Boating, maritime, or water sports recreational facilities;

(6) Structures by public agencies or public utilities regulated under HRS Chapter 269;

(7) Private and public structures that are clearly in the public interest;

(8) Private and public structures that will neither adversely affect beach processes nor artificially fix the shoreline; provided that, the Commission also finds that hardship will result to the applicant if the facilities or improvements are not allowed within the shoreline setback area;

(9) Private and public structures that may artificially fix the shoreline but not adversely affect beach processes; provided that, the Commission also finds that shoreline erosion is likely to cause severe hardship to the applicant if the facilities or improvements are not allowed within the shoreline setback area and all alternative erosion control measures, including retreat, have been considered;

(10) The Commission may consider granting a variance for the protection of a dwelling unit or public infrastructure; provided that, the structure is at imminent risk of damage from coastal erosion, such damage poses a danger to the health, safety, and welfare of the public, and the proposed protection is the best shoreline management option in accordance with relevant state policy on shoreline hardening.

(11) Construction of a new dwelling unit. In the case where the minimum buildable footprint does not allow for a setback in accordance with this Article, the Commission may consider granting a variance under the following guidelines:

  (A) The front yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(B) The side yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(C) If the foregoing approaches are done to the maximum extent practicable and a dwelling cannot be sited mauka of the shoreline setback, the minimum buildable footprint shall be reduced to no less than [1,000] 500 square feet.

(D) If the foregoing approaches in subsections (A), (B) and (C) are done to the maximum extent practicable, the calculated shoreline setback may be reduced to the minimum extent required to permit the construction of a house within the reduced footprint, provided that a qualified consultant must certify that the property is not subject to undue risk from erosion, high wave action, or flooding. Under no circumstance shall the shoreline setback line be less than 40 feet.

(12) Rebuilding of an existing dwelling unit.

(A) Rebuilding of a lawfully existing dwelling unit under this section shall only be allowed if the rebuilding is not prohibited by Article 13, Chapter 8, Kaua'i County Code 1987, as amended and does not:

(i) enlarge the structure beyond its previous building footprint, and

(ii) intensify the use of the structure or its impacts on coastal processes.

(B) In the case where the minimum buildable footprint does not allow for a setback of 60 feet, the Commission may consider granting a variance under the following guidelines only:

(i) The front yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(ii) The side yard setback may be reduced where feasible to allow for the minimum buildable footprint;

(iii) If the foregoing approaches are done to the maximum extent practicable and a dwelling cannot be sited mauka of the shoreline setback, the minimum buildable footprint may be reduced to the lesser of [1,000] 500 square feet or the actual footprint of the house.

(b) A structure may be considered for a variance upon grounds of hardship if:

(1) The applicant would be deprived of all reasonable use of the land if

required to fully comply with the provisions of the provisions of this Article;

(2) The applicant's proposal is due to unique circumstances and does not draw into question the reasonableness of the provisions of this Article; and

(3) The proposal is the best practicable alternative which best conforms to the purpose of the provisions of this Article.

(c) Before granting a hardship variance, the Commission shall find that the applicant's proposal is a reasonable use of the land. Because of the dynamic nature of the shoreline environment, inappropriate development may easily pose a risk to individuals or to the public health and safety or to the coastal zone management and resources. The Commission shall consider factors such as coastal hazards, shoreline conditions, erosion, surf inundation, flood conditions and the geography of the lot in determining whether the proposal is a reasonable use of the applicant's land. The Commission shall give due consideration to the long-term average annual rate of coastal erosion calculated by following the methodology outlined in the National Assessment of Shoreline Change: Historical Shoreline Changes in the Hawaiian Islands (Fletcher, et al., 2012) and any amendments thereto, or Section 4.1 of the Hawai'i Coastal Hazard Mitigation Guidebook (Hwang, 2005), and any subsequent amendments thereto.

(d) For purposes of this section, hardship shall not include economic hardship to the applicant resulting from: (1) county zoning or setback changes, planned development permits, cluster permits, or subdivision approvals after June 16, 1989; (2) any other permit or approval which may have been issued by the commission, [or] (3) actions by the applicant, or (4) small lot size.

(e) No variance shall be granted unless appropriate conditions are imposed:

(1) To maintain and require safe lateral access to and along the shoreline for public use or adequately compensate for its loss;

(2) To minimize and mitigate risk of adverse impacts on beach processes and neighboring properties;

(3) To minimize and mitigate risk of structures failing and becoming loose rocks or rubble on public property;

(4) To minimize adverse impacts on public views to, from, and along the shoreline; and

(5) To comply with County Code provisions relating to flood plain management, Chapter 15, Article 1, Kaua'i County Code 1987, as

amended, and Drainage, Chapter 22, Article 16, Kaua'i County Code 1987, as amended, respectively.

(f) Any structure approved within the shoreline setback area by variance shall not be eligible for protection by shoreline hardening during the life of the structure, and this limitation and the fact that the structure does not meet setback requirements under Section 8-27.3 and could be subject to coastal erosion and high wave action shall be written into a unilateral agreement that is recorded by the Bureau of Conveyances of Land Court, as the case may be. A copy of the unilateral agreement shall be submitted to the Planning Department prior to the issuance of the required zoning and/or shoreline setback variance. Failure of the grantor to record these deed restrictions shall constitute a violation of this section and the grantor shall be subject to the penalties set forth in this Article.

(g) For any structure approved within the shoreline setback area by variance, the applicant shall agree in writing that the applicant, its successors, and permitted assigns shall defend, indemnify and hold the County of Kaua'i harmless from and against any and all loss, liability, claim, or demand arising out of damages to said structure and this indemnification shall be included in the unilateral agreement required above.

(h) The applicant may apply to the department for an amendment to the variance in a manner consistent with the procedures of the special management area rules of the Kaua'i Planning Commission.

(i) No variance shall be granted for structures within the shoreline setback area that are unpermitted, unless the Commission determines that a structure is necessary to protect public health and safety, and/or that removal of the structure would cause a greater public harm.

(j) In no case shall the Commission grant a shoreline setback variance for structures constructed without valid permits."

SECTION 9. Section 8-27.11, Article 27 of Chapter 8, Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 8-27.11 Enforcement.

(a) The Director shall enforce this Article in accordance with Article 24 of the County of Kaua'i Comprehensive [zoning] Zoning Ordinance[.], HRS Chapter 205A, and the rules of Practice and Procedure of the County of Kaua'i Planning Commission.

(b) Removal of an unpermitted structure or improvement(s) to an existing structure.

(1) In determining the disposition of [a] an unpermitted structure or improvement(s) to an existing structure, the Director shall follow the

procedures outlined in Chapter 12 of the Rules of Practice and Procedure of the County of Kaua'i Planning Commission based on the nature of the unpermitted structure. If the structure would have required Class I, II, or III permits as well as shoreline setback determination and approval or variance, the procedure shall be that required under Section 1-12-4 of said rules. If a Class IV permit would have been required, the procedure would be that outlined in Sections 1-12-5 through 1-12-8 of said rules.

(2) Following the relevant procedures described in Sec. 8-27.11(b)(1), the Director or the Commission, as the case may be, shall order the removal of an unpermitted structure or improvement(s) to an existing structure [unless it is determined that removal shall cause a greater harm to the ecosystem and/or public improvements than allowing the structure to remain].

(3) If the Director or Commission determines that removal would be inappropriate, the property owner or perpetrator shall obtain a variance under Sec. 8-27.10 and shall pay penalties as specified in Section 8-27.12.

(c) Judicial Enforcement of Order. The Director may institute a civil action in any court of competent jurisdiction for the enforcement of any order issued pursuant to this section.

Where the civil action has been instituted to enforce the civil fine imposed by such order, the Director need only show that a notice of violation and order was served, a hearing was held or the time allowed for requesting a hearing had expired without such a request, that a civil fine was imposed and that the fine imposed has not been paid.

The Director may institute a civil action in any court of competent jurisdiction for injunctive relief to prevent violation of any provision of this Chapter, any rule adopted there under, any permit issued pursuant thereto or any condition of any shoreline setback approval in addition to any other remedy provided for under this Chapter.

(d) Nonexclusiveness of Remedies. The remedies provided in this chapter for enforcement of the provisions of this chapter, or any rule adopted thereunder, shall be in addition to any other remedy as may be provided by law.

(e) Appeal in Accordance with Statute. If any person is aggrieved by the order issued by the director pursuant to this section, the person may appeal the order in the manner provided in HRS Chapter 91, provided that no provision of such order shall be stayed on appeal unless specifically ordered by a court of competent jurisdiction.

(f) The Director shall enforce this Article in accordance with Article 24 of the County of Kaua'i Comprehensive Zoning Ordinance and HRS Chapter 205A."

SECTION 10. If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity does not affect other provisions or application of the Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable.

SECTION 11. Ordinance material to be repealed is bracketed. New ordinance material is underscored. When revising, compiling, or printing this ordinance for inclusion in the Kaua'i County Code 1987, as amended, the brackets, bracketed material, and underscoring shall not be included.

SECTION 12. This ordinance shall take effect upon its approval. These amendments shall be applied to any pending application, determination, or permits.

Introduced by:

MEL RAPOZO

BERNARD P. CARVALHO, JR.

DATE OF INTRODUCTION:

Līhu'e, Kaua'i, Hawai'i
V:\BILLS\2024-2026 TERM\2025-292.1 Shoreline Setback Coastal Protection bill MR_BC_RM_mn.docx

DEPARTMENT OF PLANNING
KA'ĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

TRANSMITTAL OF AGENCY COMMENTS TO PLANNING COMMISSION

DATE: August 20, 2025

PERMIT NUMBER(S): ZA-2026-1: A bill (2969)

APPLICANT(S): KAUAI COUNTY COUNCIL

Attached for the Planning Commission's reference are agency comments for the permit referenced above.

G. 4.a.2.

AUG 26 2025

AUG 1 '25 PM1:09
PLANNING DEPT

County of Kaua'i
Planning Department
4444 Rice St., Suite A473 Lihue, HI 96766
(808) 241-4050

FROM: Kaaina S. Hull, Director   Planner: Alisha Summers   7/22/2025

SUBJECT: Zoning Amendment ZA-2026-1

Applicant: Kauai County Council
Proposed Draft Bill (No. 2969) - A BILL FOR AN ORDINANCE AMENDING CHAPTER 8, ARTICLE 27, KAUA'I COUNTY CODE 1987, AS AMENDED, RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION

TO:

- ☑ State Department of Transportation - STP
- ☑ State DOT - Highways, Kauai (info only)
- ☐ State DOT - Airports, Kauai (info only)
- ☐ State DOT - Harbors, Kauai (info only)
- ☑ State Department of Health
- ☐ State Department of Agriculture
- ☐ State Office of Planning
- ☐ State Dept. of Bus. & Econ. Dev. Tourism
- ☐ State Land Use Commission
- ☑ State Historic Preservation Division
- ☐ State DLNR - Land Management
- ☐ State DLNR - Forestry & Wildlife
- ☐ State DLNR - Aquatic Resources
- ☐ State DLNR - Conservation & Coastal Lands
- ☐ Office of Hawaiian Affairs
- ☑ County DPW - Engineering
- ☐ County DPW - Wastewater
- ☐ County DPW - Building
- ☐ County DPW - Solid Waste
- ☐ County Department of Parks & Recreation
- ☑ County Fire Department
- ☑ County Housing Agency
- ☐ County Economic Development
- ☑ County Water Department
- ☐ County Civil Defense
- ☑ County Transportation Agency
- ☐ KHPRC
- ☐ U.S. Postal Department
- ☑ UH Sea Grant
- ☐ Other:

FOR YOUR COMMENTS (pertaining to your department)

This matter is scheduled for a public hearing before the County of Kauai Planning Commission on 8/26/2025 at the Lihue Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, at 9:00 am or soon thereafter. If we do not receive your agency comments within one (1) month from the date of this request, we will assume that there are no objections to this permit request. Mahalo!

JOSH GREEN M.D.
GOVERNOR OF HAWAII

KENNETH S. FINK, M.D., M.G.A., M.P.H
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
3040 Umi St. Lihue
Hawaii 96766

DATE: July 29, 2025

TO: To whom it may concern

FROM: Ellis Jones
District Environmental Health Program Chief

SUBJECT: RESPONSE_Kauai County Council_ZA-2026-1

In most cases, the District Health Office will no longer provide individual comments to agencies or project owners to expedite the land use review and process.

Agencies, project owners, and their agents should apply Department of Health "Standard Comments" regarding land use to their standard project comments in their submittal. Standard comments can be found on the Land Use Planning Review section of the Department of Health website: https://health.hawaii.gov/epo/landuse/. Contact information for each Branch/Office is available on that website.

Note: Agencies and project owners are responsible for adhering to all applicable standard comments and obtaining proper and necessary permits before the commencement of any work.

General summary comments have been included for your convenience. However, these comments are not all-inclusive and do not substitute for review of and compliance with all applicable standard comments for the various DOH individual programs.

Clean Air Branch

1. All project activities shall comply with the Hawaii Administrative Rules (HAR), Chapters 11-59 and 11-60.1.
2. Control of Fugitive Dust: You must reasonably control the generation of all airborne, visible fugitive dust and comply with the fugitive dust provisions of HAR §11-60.1-33. Note that activities that occur near existing residences, businesses, public areas, and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne and visible fugitive dust and that buffer zones be established wherever possible.

3. Standard comments for the Clean Air Branch are at: https://health.hawaii.gov/epo/landuse/

Clean Water Branch

1. All project activities shall comply with the HAR, Chapters 11-53, 11-54, and 11-55. The following Clean Water Branch website contains information for agencies and/or project owners who are seeking comments regarding environmental compliance for their projects with HAR, Chapters 11-53, 11-54, and 11-55: https://health.hawaii.gov/cwb/clean-water-branch-home-page/cwb-standardcomments/.

Hazard Evaluation & Emergency Response Office

1. A Phase I Environmental Site Assessment (ESA) and Phase II Site Investigation should be conducted for projects wherever current or former activities on site may have resulted in releases of hazardous substances, including oil or chemicals. Areas of concern include current and former industrial areas, harbors, airports, and formerly and currently zoned agricultural lands used for growing sugar, pineapple or other agricultural products.
2. Standard comments for the Hazard Evaluation & Emergency Response Office are at: https://health.hawaii.gov/epo/landuse/.

Indoor and Radiological Health Branch

1. Project activities shall comply with HAR Chapters 11-39, 11-45, 11-46, 11-501, 11-502, 11-503, 11-504.
2. Construction/Demolition Involving Asbestos: If the proposed project includes renovation/demolition activities that may involve asbestos, the applicant should contact the Asbestos and Lead Section of the Branch at https://health.hawaii.gov/irhb/asbestos/.

Safe Drinking Water Branch

1. Agencies and/or project owners are responsible for ensuring environmental compliance for their projects in the areas of: 1) Public Water Systems; 2) Underground Injection Control; and 3) Groundwater and Source Water Protection in accordance with HAR Chapters 11-19, 11-20, 11-21, 11-23, 11-23A, and 11-25. They may be responsible for fulfilling additional requirements related the Safe Drinking Water program: https://health.hawaii.gov/sdwb/.
2. Standard comments for the Safe Drinking Water Branch can be found at: https://health.hawaii.gov/epo/landuse/.

Solid & Hazardous Waste Branch

1. Hazardous Waste Program - The state regulations for hazardous waste and used oil are in HAR Chapters 11-260.1 to 11-279.1. These rules apply to the identification, handling, transportation, storage, and disposal of regulated hazardous waste and used oil.
2. Solid Waste Programs - The laws and regulations are contained in HRS Chapters 339D, 342G, 342H and 342I, and HAR Chapters 11-58.1, and 11-282. Generators and handlers of solid waste shall ensure proper recycling or disposal at DOH-permitted solid waste management facilities. If possible, waste prevention, reuse and recycling are preferred options over disposal. The Office of Solid Waste Management also oversees the

electronic device recycling and recovery law, the glass advanced disposal fee program, and the deposit beverage container program.

3. Underground Storage Tank Program – The state regulations for underground storage tanks are in HAR Chapter 11-280.1. These rules apply to the design, operation, closure, and release response requirements for underground storage tank systems, including unknown underground tanks identified during construction.
4. Standard comments for the Solid & Hazardous Waste Branch can be found at: https://health.hawaii.gov/epo/landuse/.

Wastewater Branch

By Revised Statue 11-62-31.1 If the parcel is less than 10,000sq feet, an individual onsite waste-water unit may not be possible for future construction. Please contact DOH waste-water branch at 808-586-4288 for further information. For comments, please email the Wastewater Branch at doh.wwb@doh.hawaii.gov.

Sanitation / Local DOH Comments:

1. Noise may be generated during demolition and/or construction. The applicable maximum permissible sound levels, as stated in Title 11, HAR, Chapter 11-46, "Community Noise Control," shall not be exceeded unless a noise permit is obtained from the Department of Health.
2. According to HAR §11-26-35, No person, firm, or corporation shall demolish or clear any structure, place, or vacant lot without first ascertaining the presence or absence of rodents that may endanger public health by dispersal from such premises. Should any such inspection reveal the presence of rodents, the rodents shall be eradicated before demolishing or clearing the structure, site, or vacant lot. A demolition or land clearing permit is required prior to demolition or clearing.

Other

1. CDC - Healthy Places - Healthy Community Design Checklist Toolkit recommends that state and county planning departments, developers, planners, engineers, and other interested parties apply these principles when planning or reviewing new developments or redevelopment projects.
2. If new information is found or changes are made to your submittal, DOH reserves the right to implement appropriate environmental health restrictions as required. Should there be any questions on this matter, please contact the Department of Health, Kauai District Health Office at 808-241-3492.

Ellis Jones

Ellis Jones
District Environmental Health Program Chief
Office Phone: (808) 241-3326

AUG 18 '25 AM8:40
PLANNING DEPT

County of Kaua'i
Planning Department
4444 Rice St., Suite A473 Lihue, HI 96766
(808) 241-4050

FROM: Kaaina S. Hull, Director

Planner: Alisha Summers

7/22/2025

SUBJECT: Zoning Amendment ZA-2026-1

Applicant: Kauai County Council
Proposed Draft Bill (No. 2969) - A BILL FOR AN ORDINANCE AMENDING CHAPTER 8, ARTICLE 27, KAUA'I COUNTY CODE 1987, AS AMENDED, RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION

TO:

☑ State Department of Transportation - STP
☑ State DOT - Highways, Kauai (info only)
☐ State DOT - Airports, Kauai (info only)
☐ State DOT - Harbors, Kauai (info only)
☑ State Department of Health
☐ State Department of Agriculture
☐ State Office of Planning
☐ State Dept. of Bus. & Econ. Dev. Tourism
☐ State Land Use Commission
☑ State Historic Preservation Division
☐ State DLNR - Land Management
☐ State DLNR - Forestry & Wildlife
☐ State DLNR - Aquatic Resources
☐ State DLNR - Conservation & Coastal Lands
☐ Office of Hawaiian Affairs
☑ County DPW - Engineering
☐ County DPW - Wastewater
☐ County DPW - Building
☐ County DPW - Solid Waste
☐ County Department of Parks & Recreation
☑ County Fire Department
☑ County Housing Agency
☐ County Economic Development
☑ County Water Department
☐ County Civil Defense
☑ County Transportation Agency
☐ KHPRC
☐ U.S. Postal Department
☑ UH Sea Grant
☐ Other:

FOR YOUR COMMENTS (pertaining to your department)

8·13·2025

CTA HAS NO FURTHER COMMENT ON THIS ACTION.

MAHALO!

This matter is scheduled for a public hearing before the County of Kauai Planning Commission on 8/26/2025 at the Lihue Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, at 9:00 am or soon thereafter. If we do not receive your agency comments within one (1) month from the date of this request, we will assume that there are no objections to this permit request. Mahalo!

JUL 9 '25 PM3:01
PLANNING DEPT

TO: COUNTY OF KAUAI

FROM: CAROLINE NEAL

RE: AUTHORIZATION TO SUBMIT PERMITS FOR 5-2-004:088

DATE: June 20, 2025

Aloha, please consider this as my authorization for the law firm of McCorriston Miller Mukai MacKinnon to submit land-use applications for the permitting of a farm dwelling and accessory structures on the above-referenced lot.

CAROLINE NEAL

ORIGINAL

DEPARTMENT OF PLANNING
STANDARD ZONING PERMIT APPLICATION

One (1) original; If providing plans, five (5) sets, including original, required.
Fees vary based on permits required and range from $30 to over $1000.
Proof of 75% fee ownership rights or authorized agent must be attached.

This application shall be filled out by all seeking Zoning, Use, Variance, SMA Use or PDU permits pursuant to the Kauai County Code, Hawai'i Revised Statutes Chapter 205A and all relevant rules and regulations of the Planning Commission and Department. Supplemental information may be attached to form. SMA applications may also require additional SMA assessment forms.

DEPARTMENT USE ONLY				
Zoning				Intake By:
Use				
Variance				Intake Date:
SMA				
PDU				Acceptance Date/By:
TOTAL FEE:				
Additional Fees:				
Receipt Number				
Building Permit No.				
Associated Permits (e.g. SSD)				

Complete Information Below			
Tax Map Key Number	5-2-004:088	Condominium Number	Lot 15
Applicant Name(s)	Caroline Neal		
Property Address	Makana Ano Place, Kilauea		
Mailing Address	c/o Laurel Loo 4463 Pahe'e St #207, Lihue, HI 96766		
Parcel Area	5.11 ac	Contact Phone	(808) 977-8015
Zoning Designation	Open/ST-R	Contact Email (if applicable)	LL@M4law.com

Applicant Declarations (incorrect responses may slow your permit review)

Please place an "X" under Yes or No under the following:

		YES	NO	Staff Verification
1	Is this property located in the Special Management Area (SMA)?	X		
2	Is this property part of a Condominium Property Regime (CPR)?		X	
3	Is this property within 550 feet of the shoreline?		X	
4	Is this property within the Agriculture Zoning District?		X	
5	Is there a structure on the property that is 50 years old or older?		X	
6	Do you have an Additional Dwelling Unit Certificate?		X	
7	Is this a permit for an after-the-fact construction or activity?		X	
8	I hold at least a 75% property interest in the property.	X		
9	Are you an agent for the property owner?	X		
10	Has a similar application been previously denied?		X	
11	Is this an application for an agriculture structure under 200 square feet		X	
12	Are there known burials on the site?	X		
13	Are you using water not provided by a domestic water system?		X	
14	Does existing grade under building footprint change by 2' or more in any direction?		X	
15	The proposed residential unit is a Multi-Family Dwelling Unit?		X	
16	Is this a conversion of a legally existing single-family dwelling unit into a multi-family two dwelling unit?		X	
17	Is this structure a guest house?	X		
18	Does guest house contain a kitchen?		X	

1. What is the proposed construction and/or intended use of the structure or parcel (may attach additional info)? One farm dwelling, guest house, and barn
2. If this is not the first dwelling unit on the subject property identified on this application, please state how many dwelling units presently exist: n/a

Submittal Checklist

Please **INITIAL** under "Yes" or not applicable "N/A" regarding each of the statements:

		YES	NA	Staff Verification
1	All plot plans I have submitted are drawn to scale.	x		
2	I have ensured all TMK numbers are visible on all plan sheets.	x		
3	Any plans I have submitted clearly show all structures and setback dimensions.	X		
4	My plans provide lot coverage calculations	x		
5	I have ensured kitchens are marked with the 8' radii required by the Planning Department's Administrative Rules.	X		
6	Because this application involves a CPR, the plot plan shows all existing structures.		X	
7	Building plate does not exceed 20 feet from the finished grade at entry.	x		

Acknowledgements - Please **INITIAL** next to each of the statements:

I UNDERSTAND:	Initial Here
Additional fees and/or the submittal of other application forms may be necessary to complete this application for acceptance and processing.	LL
Tender of fees by the County does not imply acceptance of this application.	LL
Errors in self-declaration or missing or incomplete information will delay acceptance and processing of your application.	LL
Any purposeful misrepresentations in this application may result in delay, denial, permit revocation, violations, fines and even criminal prosecution.	LL

The owner and/or authorized representative is hereby made aware that the construction, work, use or activity approved in this permit shall be subject to inspection by Planning Department personnel. The applicant is advised that inspection may occur prior to or during construction and use to ascertain the activity is conducted in compliance with the law. Further, I am a duly authorized agent or have 75% ownership rights.

OWNER/AGENT SIGNATURE: Laurel Loo/Agent Laurel Loo DATE: July 9, 2025

FOR PLANNING DEPARTMENT USE ONLY (THIS CONSTITUTES PERMIT IF FILLED OUT BY DEPT.):

APPROVED ☐ DENIED ☐ BY: ____________ DATE: ____________

DIRECTOR'S CONDITIONS OF APPROVAL (staff to **initial** next to applicable conditions):

This permit shall expire if no building is issued within one (1) year after the approval date and/or if construction does not start within one (1) year of building permit issuance.	
Director's standard conditions for non-residential agricultural structures (attach)	
Should any archaeological or historic resources be discovered during ground disturbing/construction work, all work in the area of the find shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures.	
Additional Conditions (State):	

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

ORIGINAL

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

I. Part A

APPLICANT INFORMATION			
Applicant:	Caroline Neal		
Address:	c/o Laurel Loo 4463 Pahee St. #207, Lihue, HI 96766	Phone:	(808) 977-8015

Applicant's Status: (Check one)	
☑ Owner of the Property	(Holder of at least 75% of the equitable and legal title)
☐ Lessee of the Property	Lessee must have an **unexpired and recorded** lease of five (5) years or more from the date of filing of this application. If not, Owner(s) must provide a Letter of Authorization.
☐ Authorized Agent	Attach Letter of Authorization

Contact Person:	Laurel Loo	Address:	4463 Pahee St. #207 Lihue, HI 96766
Phone:	(808) 977-8015		
Email:	ll@m4law.com		

PROJECT INFORMATION (attach additional sheets if necessary)			
Site Address:	Lot 15 Makana Ano Place, Kilauea, HI 96754	Tax Map Key:	5-2-04-088
		Lot Area:	5.11 acres
State Land Use District:	Open/ST-R	County Zoning:	Agricultural
General Plan Designation:			
Nature of Development:	The project involves the construction of an approximate 3300 sf single-family, single-story farm dwelling unit; 500 sf quest house and a 2000 sf barn		

* **NOTE**: An Environmental Assessment in accordance with HRS Chapter 343 is required for actions requiring a Shoreline Setback Variance (SSV). Please contact the Planning Department for further information.

Valuation of Development: 5,169,639.30
(Estimate Attached)

Date of Application: July 9, 2025

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA)
PERMIT ASSESSMENT

II. Part B

The petitioner shall be responsible for filing the following required information with the department before an application is considered complete:

1. A **written** description of the proposed project, location and a statement of reasons/justification for project.
2. If property abuts a shoreline, a certified shoreline survey conducted by a registered land surveyor within 6 months of an application shall be submitted, when required by the Planning Agency.
3. A plot plan of the property, drawn to scale, with all proposed and existing structures and other pertinent information. Also, preliminary building sketch plans are to be submitted.
4. Any other plans or information requirements by the Director.

   Note: An Environmental Assessment or Environmental Impact Statement that has been declared adequate under the National Environmental Policy Act (NEPA) or under Chapter 343, HRS, may constitute a valid filing under this section.
5. Project Assessment:

   a. Description of the area and environment involved including flora and fauna, and other features;

   The property is cleared, undeveloped land (with an existing water meter on-site), within the 48-lot Seacliff Plantation subdivision covered with non-native grasses (mainly Guinea grass)

   b. Description of the existing land uses of the project site and surrounding areas;

   Property is vacant, cleared land. Adjacent properties are also vacant land.

   c. Description of how the proposed project will affect the area involved and surrounding areas. Specifically the assessment should evaluate if the proposal:

		YES	NO
i.	Involves an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites, Special Treatment Districts as established by the County of Kauai Comprehensive Zoning ordinance, view planes or scenic corridors as outlined in the Community Development Plans, and recreation areas and resources;	☐	☑

Discussion:

No loss or destruction of any natural or cultural resources are expected.

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

ii. Curtails the range of beneficial uses of the environment; YES ☐ NO ☑

Discussion:

None expected. If anything, removal of non-native grasses and reestablishment of native plants should improve the beneficial uses of the

iii. Conflicts with the County's or the State's long-term environmental policies or goals; YES ☐ NO ☑

Discussion:

Project is within an approved subdivision with conforming development plans.

iv. Substantially affects the economics or social welfare and activities or the community, County or State; YES ☐ NO ☑

Discussion:

None expected. If anything, removal of non-native grasses and reestablishment of native plants should improve the beneficial uses of the

v. In itself has no significant adverse effect but cumulatively has considerable effect upon the environment or involves a commitment for larger actions; YES ☐ NO ☑

Discussion:

Project should enhance tax revenues that support the economics and social welfare of the community, County and State.

vi. Substantially affect a rare threatened, or endangered species of animal or plant, or its habitat; YES ☐ NO ☑

Discussion:

Project has low-impact on the environment and removal of non-native species should enhance the environment

vii. Detrimentally affects air or water quality or ambient noise levels; or YES ☐ NO ☑

Discussion:

No effect expected. If anything, the reintroduction of native plants should enhance the environment.

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

viii. Affects an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal water; YES ☐ NO ☑

Discussion:

None expected

ix. May have a major effect on the quality of the environment or affect the economic or social welfare of the area; and YES ☐ NO ☑

Discussion:

Project does not involve any environmentally sensitive areas.

x. Would possibly be contrary to the policies and guidelines of the Rules and Regulations, the County's General Plan, Development Plans, and Zoning and Subdivision Ordinances. YES ☐ NO ☑

Discussion:

Project should enhance tax revenues that support the economics and social welfare of the community, County and State.

d. Evaluation of the proposed development relative to the objective and policies as contained in Chapter 205A, HRS; and Section 3.0 of the Special Management Area (SMA) Rules and Regulations: (complete following questionnaire)

RECREATIONAL RESOURCES:	Objective Provide coastal recreation opportunities accessible to the public.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Will the proposed development adversely affect coastal resources uniquely suited for recreational activities that cannot be provided in other areas? YES ☐ NO ☑

Discussion:

The project is well away from coastal resources that affect recreational activities

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

2. Will the project require replacement of coastal resources having significant recreational value, including but not limited to surfing sites, sandy beaches and fishing areas, when such resources will be unavoidably damaged by the proposed development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable? YES ☐ NO ☑

Discussion:

This project is well away from coastal resources that affect recreational activities

3. Is the project site near a State or County Park? YES ☐ NO ☑

Discussion:

No State or County Parks within several miles

4. Will the proposed development affect an existing public access to or along the shoreline? YES ☐ NO ☑

Discussion:

The project should not affect any public access to or along the shoreline

5. Will the proposed development provide public access to and/or along the shoreline? YES ☐ NO ☑

Discussion:

The project is not near the shoreline and has no near-by public access

6. Will the proposed development encourage expanded recreational use of County, State, or federally owned or controlled shoreline lands and waters having recreational value? YES ☐ NO ☑

Discussion:

The project should not have any impact on shoreline lands or waters

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

		YES	NO
7.	Will the development generate point or non-point sources of pollution that will affect recreation value of coastal area?	☐	☑

Discussion:

No sources of pollution are expected. A permitted septic system has been designed. Runoff will be controlled and directed to existing drainage structures

HISTORICAL RESOURCES:	Objective Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the Special Management Area that are significant in Hawaiian and American history and culture.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

		YES	NO
1.	Is the project site within a Federal, State and/or County designated historical/cultural district?	☐	☑

Discussion:

No, the project is not within a historical/cultural district

		YES	NO
2.	Is the project site listed on or nominated to the Hawaii or National Register of Historic Places?	☐	☑

Discussion:

No the project is not listed or nominated to an Register of Historic Places

		YES	NO
3.	Does the project site include land(s) which have not been previously surveyed by an archaeologist?	☐	☑

Discussion:

The project has an Archaeological Field report prepared by Nancy McMahon of Exploration Associates.

		YES	NO
4.	If an archeological survey has been conducted for the project site, has the survey been submitted to the State Historic Preservation Office for review and recommendations?	☑	☐

Discussion:

The Archaeological Field report was requested by the SHPD and will be submitted when finalized (expected ______)

		YES	NO
5.	Has any site survey revealed any information on historic or archaeological resources? (Please provide a copy or reference of survey)	☐	☑

Discussion:

None discovered. Finalized report not yet available

		YES	NO
6.	Is the project site within or near a Hawaiian fishpond?	☐	☑

Discussion:

Not within or near a Hawaiian fishpond

		YES	NO
7.	Is the project located within or near a historic settlement area? (Cemeteries, burials, heiaus, etc.)	☐	☑

Discussion:

Kilauea Japanese Cemetary is approximately 1/2 mile away from the project site.

SCENIC & OPEN SPACE RESOURCES:	Objective Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

		YES	NO
1.	Does the project site abut or affect a valued scenic resources or landmark within the SMA?	☑	☐

Discussion:

Abuts the Kilauea Point National Wildlife Refuge

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

2. Does the proposed development affect existing shoreline open space and scenic resources? YES ☐ NO ☑

Discussion:

No, the nearest shoreline is approximately 875' away, but Crater Hill rises above the project hiding the project from view

3. Does the proposed development involve alteration to natural landforms and existing public views to and along the shoreline? YES ☐ NO ☑

Discussion:

Nearest shoreline view is approximately 2500' in the distance and there will be little-to-no impact to public views.

4. Is the project compatible with the visual environment? YES ☑ NO ☐

Discussion:

The dwelling is single-story using natural materials that weather and seamlessly blend into the natural environment.

5. Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline? YES ☐ NO ☑

Discussion:

No, the dwelling is shielded from view by Crater Hill.

6. Is the project site within the Shoreline Setback Area (20 or 40 feet inland from the shoreline)? YES ☐ NO ☑

Discussion:

The property is not within the 20-40' of the Shoreline Setback Area; the dwelling is approximately 975' from the Shoreline

COASTAL ECOSYSTEMS:	Objective Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

Check either “Yes” or “No” for each of the following questions. If your answer below is “**Yes**” or “**No**” it is necessary to elaborate by providing comments in the “Discussion” section below the question.

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

1. Is the project site a habitat for endangered species of flora and fauna? YES ☐ NO ☑

Discussion:

No, project site is not a habitat for endangered species of flora or fauna.

2. Will the proposed development adversely affect valuable coastal ecosystems of significant biological or economic importance? YES ☐ NO ☑

Discussion:

The property is currently overrun with non-native grasses and has no significant biologic or economic importance.

3. Will the proposed involve disruption or degradation of coastal water ecosystems through stream diversions, channelization, and similar land and water uses? YES ☐ NO ☑

Discussion:

No disruption or degradation of coastal water ecosystems will occur from the proposed dwelling.

4. Will the proposed development include the construction of special waste treatment facilities, such as injection wells, discharge pipes, septic tank systems or cesspools? YES ☑ NO ☐

Discussion:

A septic system will be submitted for approval by the State of Hawaii Department of Health

5. Is there a wetland on the project site? YES ☐ NO ☑

Discussion:

No wetlands on the project site - the site is a gently sloping lot

6. Is the project site situated in or abutting a Natural Area Reserve or Wildlife Refuge or Sanctuary? YES ☑ NO ☐

Discussion:

The project abuts the Kilauea Point National Wildlife Reserve

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

ECONOMIC USES:	Objective Provide public or private facilities and improvements important to the State's economy in suitable locations.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Does the project involve a harbor or port? YES ☐ NO ☑

Discussion:

The project does not involve a harbor or port.

2. Is the proposed development related to or near to an existing major hotel, multi-family, or condominium project? YES ☐ NO ☑

Discussion:

No, the project is not related to or near major hotels, multi-family or condominium projects.

3. Does the project site include agricultural lands designated for such use? YES ☑ NO ☐

Discussion:

The project is zoned agricultural.

4. Does the proposed development relate to commercial fishing or seafood production? YES ☐ NO ☑

Discussion:

The project does not relate to commercial fishing or seafood production.

COASTAL HAZARDS:	Objective Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

1. Is the project site within a potential tsunami inundated area as depicted on the National Flood Insurance Rate maps (FIRM)? YES ☐ NO ☑

Discussion:

The project is not within a potential tsunami inundated area.

2. Is the project site within a potential flood inundation area according to a FIRM? YES ☐ NO ☑

Discussion:

The project site is not within a potential flood inundation area.

3. Does the project comply with the requirements of the Federal Flood Insurance Program? YES ☐ NO ☑

Discussion:

Not applicable

4. Has the project site or nearby shoreline areas experienced shoreline erosion? YES ☐ NO ☑

Discussion:

Project is not near any shoreline areas experiencing erosion.

5. Have any seawalls/revetments/etc. been constructed or exist in the immediate vicinity? YES ☐ NO ☑

Discussion:

The project is not near any seawalls/revetments

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

PROJECT ASSESSMENT:	

e. Evaluation of the impacts which cannot be avoided and mitigating measures proposed to minimize that impact:

Discussion:

The project cannot avoid adding hardscaping. However, carefully designed drainage and runoff systems have been provided.

f. Evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations in accordance with the following aspects:

i. Substantial adverse environmental or ecological effects;

Discussion:

No substantial adverse environmental or ecological effects are anticipated. To the contrary, removal of existing non-native grasses and reintroduction of native plants should improve the environment and generate positive ecological effects

ii. Consistency or compliance of the proposed development relative to the goals and objectives of Chapter 205A, HRS; and Section 3.0 of the SMA Rules and Regulations; and

Discussion:

The project is fully consistent with Chapter 205A HRA and Section 3.0 of the SMA Rules and Regulations.

iii. Consistency or compliance of the proposed development relative to the County General Plan, Development Plan, and Zoning Ordinances.

Discussion:

Project is consistent relative to the County General Plan, Development Plan and Zoning Ordinances. No variances are requested.

Laurel Loo, Agent Laurel Loo

[name], [title]

July 9, 2025

Date

Mike Eytchison Construction, LLC
2215 Liliuokalani St.
Kilauea, HI 96754
808.651.3885

General Contractor BC-38077
mikeeytch44@gmail.com
Office 808.635.7671

Project: Hazen & Neal - Barn
Owner: Chase and Caroline Hazen
Mailing: 7703 Koolau Road Kilauea HI, 96754
Location: Lot 15 Seacliff Plantation, Kilauea , Hawaii 96754
TMK: (4) 5 - 2 – 04 - 88: 0015

COST ESTIMATE - JULY 8, 2025	
1400 Utility Connections and wastewater system 50%	$54,031.39
2000 Excavation	$15,078.53
2200 Waterproofing	$8,795.81
2300 Termite Protection	$1,960.21
3100 Framing	$278,952.77
3400 Concrete	$113,088.96
3600 Rough Plumbing	$15,078.53
3700 Rough Electrical	$22,617.80
4000 Roofing	$84,007.51
4100 Masonry	$115,602.05
4500 Windows and Doors	$94,115.15
4700 Insulation	$35,183.23
4800 Exterior Finishes	$61,570.66
5000 Drywall	$18,848.16
5100 Flooring	$25,130.88
5200 Interior Trim	$30,157.06
5400 Cabinets	$8,167.54
5600 Finish Plumbing	$3,141.36
5700 Finish Electrical	$5,654.45
5900 Interior Wall Coverings	$37,696.32
6000 Clean up and refuse removal	$11,937.17
6300 Exterior Structures Lanai Decking	$37,319.36
Totals	$1,078,134.90

Subtotal for above listed work (includes direct costs, overhead & profit)	**$ 1,078,134.90**
GE TAX	**$ 50,801.72**
TOTAL AMOUNT OF BUDGET ESTIMATE	**$ 1,128,936.62**

Mike Eytchison Construction, LLC
2215 Liliuokalani St.
Kilauea, HI 96754
808.651.3885

General Contractor BC-38077
mikeeytch44@gmail.com
Office 808.635.7671

Project: Hazen & Neal - Guest House
Owner: Chase and Caroline Hazen
Mailing: 7703 Koolau Road Kilauea HI, 96754
Location: Lot 15 Seacliff Plantation, Kilauea , Hawaii 96754
TMK: (4) 5 - 2 – 04 - 88: 0015

COST ESTIMATE - JULY 8, 2025	
1400 Utility Connections	$51,600.00
2000 Excavation	$26,400.00
2200 Waterproofing	$9,600.00
2300 Termite Protection	$2,400.00
3100 Framing Labor & Materials	$232,800.00
3400 Concrete Foundation	$110,400.00
3600 Rough Plumbing	$38,400.00
3700 Rough Electrical	$31,200.00
4000 Roofing	$85,200.00
4100 Masonry	$103,200.00
4500 Windows and Doors	$87,000.00
4700 Insulation	$19,200.00
4800 Exterior Finishes	$44,400.00
5000 Drywall	$21,600.00
5100 Flooring	$24,072.00
5200 Interior Trim	$16,800.00
5300 Ceramic Tile	$16,560.00
5400 Cabinets	$58,152.00
5500 Appliances	$10,348.80
5600 Finish Plumbing	$11,760.00
5700 Finish Electrical	$5,400.00
5900 Interior Wall Coverings	$21,600.00
6000 Clean up and Refuse Removal	$17,280.00
6300 Exterior Structures patio	$9,600.00
Totals	$1,054,972.80

Subtotal for above listed work (includes direct costs, overhead & profit)	**$ 1,054,972.80**
GE TAX	**$ 49,710.31**
TOTAL AMOUNT OF BUDGET ESTIMATE	**$ 1,104,683.11**

Mike Eytchison Construction, LLC
2215 Liliuokalani St.
Kilauea, HI 96754
808.651.3885

General Contractor BC-38077
mikeeytch44@gmail.com
Office 808.635.7671

Project: Hazen & Neal Residence
Owner: Chase and Caroline Hazen
Mailing: 7703 Koolau Road Kilauea HI, 96754
Location: Lot 15 Seacliff Plantation, Kilauea , Hawaii 96754
TMK: (4) 5 - 2 – 04 - 88: 0015

COST ESTIMATE - July 8, 2025	
1400 Utility Connections and Wastewater system	$131,760.00
2000 Excavation and Grading permit	$468,133.20
2100 Footing and Foundation	$549,654.00
2200 Waterproofing	$4,200.00
2300 Termite Protection	$1,440.00
3100 Framing	$507,067.20
3400 Pool	$144,000.00
3600 Rough Plumbing	$86,400.00
3700 Rough Electrical	$101,077.20
3800 Rough HVAC	$10,014.00
4000 Roofing Specifications and Gutters	$139,742.40
4500 Windows and Doors	$115,862.40
4700 Insulation	$22,743.60
4800 Exterior Finishes	$206,253.60
5000 Drywall	$41,335.20
5100 Flooring	$96,408.00
5200 Interior Trim	$70,515.60
5300 Ceramic Tile	$22,668.00
5400 Cabinets	$166,819.20
5500 Appliances	$41,448.00
5600 Finish Plumbing	$27,870.00
5700 Finish Electrical	$29,400.00
5800 Finish HVAC	$3,600.00
5900 Interior Wall Coverings	$20,400.00
6000 Clean up and Refuse Removal	$22,320.00
6200 Driveway	$5,400.00
Totals	$3,036,531.60

Subtotal for above listed work (includes direct costs, overhead & profit)	**$ 3,036,531.60**
GE TAX	**$ 143,081.37**
TOTAL AMOUNT OF BUDGET ESTIMATE	**$ 3,179,612.97**

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

I. Part A

APPLICANT INFORMATION

Applicant: Caroline Neal
Address: c/o Laurel Loo
4463 Pahee St. #207, Lihue, HI 96766
Phone: (808) 977-8015

Applicant's Status: (Check one)

☑ Owner of the Property	(Holder of at least 75% of the equitable and legal title)
☐ Lessee of the Property	Lessee must have an **unexpired and recorded** lease of five (5) years or more from the date of filing of this application. If not, Owner(s) must provide a Letter of Authorization.
☐ Authorized Agent	Attach Letter of Authorization

Contact Person: Laurel Loo
Phone: (808) 977-8015
Email: ll@m4law.com
Address: 4463 Pahee St. #207
Lihue, HI 96766

PROJECT INFORMATION (attach additional sheets if necessary)

Site Address: Lot 15 Makana Ano Place, Kilauea, HI 96754
Tax Map Key: 5-2-04-088
Lot Area: 5.11 acres
State Land Use District: Open/ST-R
County Zoning: Agricultural
General Plan Designation:
Nature of Development: The project involves the construction of an approximate 3300 sf single-family, single-story farm dwelling unit; 500 sf quest house and a 2000 sf barn

* **NOTE**: An Environmental Assessment in accordance with HRS Chapter 343 is required for actions requiring a Shoreline Setback Variance (SSV). Please contact the Planning Department for further information.

Valuation of Development: 5,169,639.30
(Estimate Attached)

Date of Application: July 9, 2025

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

II. Part B

The petitioner shall be responsible for filing the following required information with the department before an application is considered complete:

1. A **written** description of the proposed project, location and a statement of reasons/justification for project.
2. If property abuts a shoreline, a certified shoreline survey conducted by a registered land surveyor within 6 months of an application shall be submitted, when required by the Planning Agency.
3. A plot plan of the property, drawn to scale, with all proposed and existing structures and other pertinent information. Also, preliminary building sketch plans are to be submitted.
4. Any other plans or information requirements by the Director.

   Note: An Environmental Assessment or Environmental Impact Statement that has been declared adequate under the National Environmental Policy Act (NEPA) or under Chapter 343, HRS, may constitute a valid filing under this section.
5. Project Assessment:

   a. Description of the area and environment involved including flora and fauna, and other features;

   The property is cleared, undeveloped land (with an existing water meter on-site), within the 48-lot Seacliff Plantation subdivision covered with non-native grasses (mainly Guinea grass)

   b. Description of the existing land uses of the project site and surrounding areas;

   Property is vacant, cleared land. Adjacent properties are also vacant land.

   c. Description of how the proposed project will affect the area involved and surrounding areas. Specifically the assessment should evaluate if the proposal:

	YES	NO
i. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites, Special Treatment Districts as established by the County of Kauai Comprehensive Zoning ordinance, view planes or scenic corridors as outlined in the Community Development Plans, and recreation areas and resources;	☐	☑

Discussion:

No loss or destruction of any natural or cultural resources are expected.

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

		YES	NO
ii.	Curtails the range of beneficial uses of the environment;	☐	☑

Discussion:

None expected. If anything, removal of non-native grasses and reestablishment of native plants should improve the beneficial uses of the

		YES	NO
iii.	Conflicts with the County's or the State's long-term environmental policies or goals;	☐	☑

Discussion:

Project is within an approved subdivision with conforming development plans.

		YES	NO
iv.	Substantially affects the economics or social welfare and activities or the community, County or State;	☐	☑

Discussion:

None expected. If anything, removal of non-native grasses and reestablishment of native plants should improve the beneficial uses of the

		YES	NO
v.	In itself has no significant adverse effect but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;	☐	☑

Discussion:

Project should enhance tax revenues that support the economics and social welfare of the community, County and State.

		YES	NO
vi.	Substantially affect a rare threatened, or endangered species of animal or plant, or its habitat;	☐	☑

Discussion:

Project has low-impact on the environment and removal of non-native species should enhance the environment

		YES	NO
vii.	Detrimentally affects air or water quality or ambient noise levels; or	☐	☑

Discussion:

No effect expected. If anything, the reintroduction of native plants should enhance the environment.

viii. Affects an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal water;

YES ☐ NO ☑

Discussion:

None expected

ix. May have a major effect on the quality of the environment or affect the economic or social welfare of the area; and

YES ☐ NO ☑

Discussion:

Project does not involve any environmentally sensitive areas.

x. Would possibly be contrary to the policies and guidelines of the Rules and Regulations, the County's General Plan, Development Plans, and Zoning and Subdivision Ordinances.

YES ☐ NO ☑

Discussion:

Project should enhance tax revenues that support the economics and social welfare of the community, County and State.

d. Evaluation of the proposed development relative to the objective and policies as contained in Chapter 205A, HRS; and Section 3.0 of the Special Management Area (SMA) Rules and Regulations: (complete following questionnaire)

RECREATIONAL RESOURCES:	Objective Provide coastal recreation opportunities accessible to the public.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Will the proposed development adversely affect coastal resources uniquely suited for recreational activities that cannot be provided in other areas?

YES ☐ NO ☑

Discussion:

The project is well away from coastal resources that affect recreational activities

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

2. Will the project require replacement of coastal resources having significant recreational value, including but not limited to surfing sites, sandy beaches and fishing areas, when such resources will be unavoidably damaged by the proposed development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable? YES ☐ NO ☑

Discussion:

This project is well away from coastal resources that affect recreational activities

3. Is the project site near a State or County Park? YES ☐ NO ☑

Discussion:

No State or County Parks within several miles

4. Will the proposed development affect an existing public access to or along the shoreline? YES ☐ NO ☑

Discussion:

The project should not affect any public access to or along the shoreline

5. Will the proposed development provide public access to and/or along the shoreline? YES ☐ NO ☑

Discussion:

The project is not near the shoreline and has no near-by public access

6. Will the proposed development encourage expanded recreational use of County, State, or federally owned or controlled shoreline lands and waters having recreational value? YES ☐ NO ☑

Discussion:

The project should not have any impact on shoreline lands or waters

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

7. Will the development generate point or non-point sources of pollution that will affect recreation value of coastal area? YES ☐ NO ☑

Discussion:

No sources of pollution are expected. A permitted septic system has been designed. Runoff will be controlled and directed to existing drainage structures

HISTORICAL RESOURCES:	Objective Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the Special Management Area that are significant in Hawaiian and American history and culture.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Is the project site within a Federal, State and/or County designated historical/cultural district? YES ☐ NO ☑

Discussion:

No, the project is not within a historical/cultural district

2. Is the project site listed on or nominated to the Hawaii or National Register of Historic Places? YES ☐ NO ☑

Discussion:

No the project is not listed or nominated to an Register of Historic Places

3. Does the project site include land(s) which have not been previously surveyed by an archaeologist? YES ☐ NO ☑

Discussion:

The project has an Archaeological Field report prepared by Nancy McMahon of Exploration Associates.

4. If an archeological survey has been conducted for the project site, has the survey been submitted to the State Historic Preservation Office for review and recommendations? YES ☑ NO ☐

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

Discussion:

The Archaeological Field report was requested by the SHPD and will be submitted when finalized (expected ______)

5. Has any site survey revealed any information on historic or archaeological resources? (Please provide a copy or reference of survey) YES ☐ NO ☑

Discussion:

None discovered. Finalized report not yet available

6. Is the project site within or near a Hawaiian fishpond? YES ☐ NO ☑

Discussion:

Not within or near a Hawaiian fishpond

7. Is the project located within or near a historic settlement area? (Cemeteries, burials, heiaus, etc.) YES ☐ NO ☑

Discussion:

Kilauea Japanese Cemetary is approximately 1/2 mile away from the project site.

SCENIC & OPEN SPACE RESOURCES:	Objective Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Does the project site abut or affect a valued scenic resources or landmark within the SMA? YES ☑ NO ☐

Discussion:

Abuts the Kilauea Point National Wildlife Refuge

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

2. Does the proposed development affect existing shoreline open space and scenic resources? YES ☐ NO ☑

Discussion:

No, the nearest shoreline is approximately 875' away, but Crater Hill rises above the project hiding the project from view

3. Does the proposed development involve alteration to natural landforms and existing public views to and along the shoreline? YES ☐ NO ☑

Discussion:

Nearest shoreline view is approximately 2500' in the distance and there will be little-to-no impact to public views.

4. Is the project compatible with the visual environment? YES ☑ NO ☐

Discussion:

The dwelling is single-story using natural materials that weather and seamlessly blend into the natural environment.

5. Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline? YES ☐ NO ☑

Discussion:

No, the dwelling is shielded from view by Crater Hill.

6. Is the project site within the Shoreline Setback Area (20 or 40 feet inland from the shoreline)? YES ☐ NO ☑

Discussion:

The property is not within the 20-40' of the Shoreline Setback Area; the dwelling is approximately 975' from the Shoreline

COASTAL ECOSYSTEMS:	Objective Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

COUNTY OF KAUA'I
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

1. Is the project site a habitat for endangered species of flora and fauna? YES ☐ NO ☑

Discussion:

No, project site is not a habitat for endangered species of flora or fauna.

2. Will the proposed development adversely affect valuable coastal ecosystems of significant biological or economic importance? YES ☐ NO ☑

Discussion:

The property is currently overrun with non-native grasses and has no significant biologic or economic importance.

3. Will the proposed involve disruption or degradation of coastal water ecosystems through stream diversions, channelization, and similar land and water uses? YES ☐ NO ☑

Discussion:

No disruption or degradation of coastal water ecosystems will occur from the proposed dwelling.

4. Will the proposed development include the construction of special waste treatment facilities, such as injection wells, discharge pipes, septic tank systems or cesspools? YES ☑ NO ☐

Discussion:

A septic system will be submitted for approval by the State of Hawaii Department of Health

5. Is there a wetland on the project site? YES ☐ NO ☑

Discussion:

No wetlands on the project site - the site is a gently sloping lot

6. Is the project site situated in or abutting a Natural Area Reserve or Wildlife Refuge or Sanctuary? YES ☑ NO ☐

Discussion:

The project abuts the Kilauea Point National Wildlife Reserve

COUNTY OF KAUAʻI
DEPARTMENT OF PLANNING

SPECIAL MANAGEMENT AREA (SMA)
PERMIT ASSESSMENT

ECONOMIC USES:	Objective Provide public or private facilities and improvements important to the State's economy in suitable locations.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

1. Does the project involve a harbor or port? YES ☐ NO ☑

Discussion:

The project does not involve a harbor or port.

2. Is the proposed development related to or near to an existing major hotel, multi-family, or condominium project? YES ☐ NO ☑

Discussion:

No, the project is not related to or near major hotels, multi-family or condominium projects.

3. Does the project site include agricultural lands designated for such use? YES ☑ NO ☐

Discussion:

The project is zoned agricultural.

4. Does the proposed development relate to commercial fishing or seafood production? YES ☐ NO ☑

Discussion:

The project does not relate to commercial fishing or seafood production.

COASTAL HAZARDS:	Objective Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence.

Check either "Yes" or "No" for each of the following questions. If your answer below is "**Yes**" or "**No**" it is necessary to elaborate by providing comments in the "Discussion" section below the question.

SPECIAL MANAGEMENT AREA (SMA) PERMIT ASSESSMENT

PROJECT ASSESSMENT:	

e. Evaluation of the impacts which cannot be avoided and mitigating measures proposed to minimize that impact:

Discussion:

The project cannot avoid adding hardscaping. However, carefully designed drainage and runoff systems have been provided.

f. Evaluation of the proposed development relative to Section 4.0 of the SMA Rules and Regulations in accordance with the following aspects:

i. Substantial adverse environmental or ecological effects;

Discussion:

No substantial adverse environmental or ecological effects are anticipated. To the contrary, removal of existing non-native grasses and reintroduction of native plants should improve the environment and generate positive ecological effects

ii. Consistency or compliance of the proposed development relative to the goals and objectives of Chapter 205A, HRS; and Section 3.0 of the SMA Rules and Regulations; and

Discussion:

The project is fully consistent with Chapter 205A HRA and Section 3.0 of the SMA Rules and Regulations.

iii. Consistency or compliance of the proposed development relative to the County General Plan, Development Plan, and Zoning Ordinances.

Discussion:

Project is consistent relative to the County General Plan, Development Plan and Zoning Ordinances. No variances are requested.

Laurel Loo, Agent Laurel Loo
[name], [title]

July 9, 2025
Date

Mike Eytchison Construction, LLC
2215 Liliuokalani St.
Kilauea, HI 96754
808.651.3885

General Contractor BC-38077
mikeeytch44@gmail.com
Office 808.635.7671

Project: Hazen & Neal - Barn
Owner: Chase and Caroline Hazen
Mailing: 7703 Koolau Road Kilauea HI, 96754
Location: Lot 15 Seacliff Plantation, Kilauea , Hawaii 96754
TMK: (4) 5 - 2 – 04 - 88: 0015

COST ESTIMATE - JULY 8, 2025	
1400 Utility Connections and wastewater system 50%	$54,031.39
2000 Excavation	$15,078.53
2200 Waterproofing	$8,795.81
2300 Termite Protection	$1,960.21
3100 Framing	$278,952.77
3400 Concrete	$113,088.96
3600 Rough Plumbing	$15,078.53
3700 Rough Electrical	$22,617.80
4000 Roofing	$84,007.51
4100 Masonry	$115,602.05
4500 Windows and Doors	$94,115.15
4700 Insulation	$35,183.23
4800 Exterior Finishes	$61,570.66
5000 Drywall	$18,848.16
5100 Flooring	$25,130.88
5200 Interior Trim	$30,157.06
5400 Cabinets	$8,167.54
5600 Finish Plumbing	$3,141.36
5700 Finish Electrical	$5,654.45
5900 Interior Wall Coverings	$37,696.32
6000 Clean up and refuse removal	$11,937.17
6300 Exterior Structures Lanai Decking	$37,319.36
Totals	$1,078,134.90

Subtotal for above listed work (includes direct costs, overhead & profit)	**$ 1,078,134.90**
GE TAX	**$ 50,801.72**
TOTAL AMOUNT OF BUDGET ESTIMATE	**$ 1,128,936.62**

Mike Eytchison Construction, LLC
2215 Liliuokalani St.
Kilauea, HI 96754
808.651.3885

General Contractor BC-38077
mikeeytch44@gmail.com
Office 808.635.7671

Project: Hazen & Neal - Guest House
Owner: Chase and Caroline Hazen
Mailing: 7703 Koolau Road Kilauea HI, 96754
Location: Lot 15 Seacliff Plantation, Kilauea , Hawaii 96754
TMK: (4) 5 - 2 – 04 - 88: 0015

COST ESTIMATE - JULY 8, 2025	
1400 Utility Connections	$51,600.00
2000 Excavation	$26,400.00
2200 Waterproofing	$9,600.00
2300 Termite Protection	$2,400.00
3100 Framing Labor & Materials	$232,800.00
3400 Concrete Foundation	$110,400.00
3600 Rough Plumbing	$38,400.00
3700 Rough Electrical	$31,200.00
4000 Roofing	$85,200.00
4100 Masonry	$103,200.00
4500 Windows and Doors	$87,000.00
4700 Insulation	$19,200.00
4800 Exterior Finishes	$44,400.00
5000 Drywall	$21,600.00
5100 Flooring	$24,072.00
5200 Interior Trim	$16,800.00
5300 Ceramic Tile	$16,560.00
5400 Cabinets	$58,152.00
5500 Appliances	$10,348.80
5600 Finish Plumbing	$11,760.00
5700 Finish Electrical	$5,400.00
5900 Interior Wall Coverings	$21,600.00
6000 Clean up and Refuse Removal	$17,280.00
6300 Exterior Structures patio	$9,600.00
Totals	$1,054,972.80

Subtotal for above listed work (includes direct costs, overhead & profit)	$ 1,054,972.80
GE TAX	$ 49,710.31
TOTAL AMOUNT OF BUDGET ESTIMATE	**$ 1,104,683.11**

Mike Eytchison Construction, LLC
2215 Liliuokalani St.
Kilauea, HI 96754
808.651.3885

General Contractor BC-38077
mikeeytch44@gmail.com
Office 808.635.7671

Project: Hazen & Neal Residence
Owner: Chase and Caroline Hazen
Mailing: 7703 Koolau Road Kilauea HI, 96754
Location: Lot 15 Seacliff Plantation, Kilauea , Hawaii 96754
TMK: (4) 5 - 2 – 04 - 88: 0015

COST ESTIMATE - July 8, 2025	
1400 Utility Connections and Wastewater system	$131,760.00
2000 Excavation and Grading permit	$468,133.20
2100 Footing and Foundation	$549,654.00
2200 Waterproofing	$4,200.00
2300 Termite Protection	$1,440.00
3100 Framing	$507,067.20
3400 Pool	$144,000.00
3600 Rough Plumbing	$86,400.00
3700 Rough Electrical	$101,077.20
3800 Rough HVAC	$10,014.00
4000 Roofing Specifications and Gutters	$139,742.40
4500 Windows and Doors	$115,862.40
4700 Insulation	$22,743.60
4800 Exterior Finishes	$206,253.60
5000 Drywall	$41,335.20
5100 Flooring	$96,408.00
5200 Interior Trim	$70,515.60
5300 Ceramic Tile	$22,668.00
5400 Cabinets	$166,819.20
5500 Appliances	$41,448.00
5600 Finish Plumbing	$27,870.00
5700 Finish Electrical	$29,400.00
5800 Finish HVAC	$3,600.00
5900 Interior Wall Coverings	$20,400.00
6000 Clean up and Refuse Removal	$22,320.00
6200 Driveway	$5,400.00
Totals	$3,036,531.60

Subtotal for above listed work (includes direct costs, overhead & profit)	**$ 3,036,531.60**
GE TAX	**$ 143,081.37**
TOTAL AMOUNT OF BUDGET ESTIMATE	**$ 3,179,612.97**

DEPARTMENT OF PLANNING
STANDARD ZONING PERMIT APPLICATION

One (1) original; If providing plans, five (5) sets, including original, required.
Fees vary based on permits required and range from $30 to over $1000.
Proof of 75% fee ownership rights or authorized agent must be attached.

This application shall be filled out by all seeking Zoning, Use, Variance, SMA Use or PDU permits pursuant to the Kauai County Code, Hawai'i Revised Statutes Chapter 205A and all relevant rules and regulations of the Planning Commission and Department. Supplemental information may be attached to form. SMA applications may also require additional SMA assessment forms.

DEPARTMENT USE ONLY			
Zoning			Intake By:
Use			
Variance			Intake Date:
SMA			
PDU			Acceptance Date By:
TOTAL FEE:			
Additional Fees:			
Receipt Number			
Building Permit No.			
Associated Permits (e.g. SSD)			

Complete Information Below			
Tax Map Key Number	5-2-004:088	Condominium Number	Lot 15
Applicant Name(s)	Caroline Neal		
Property Address	Makana Ano Place, Kilauea		
Mailing Address	c/o Laurel Loo 4463 Pahe'e St #207, Lihue, HI 96766		
Parcel Area	5.11 ac	Contact Phone	(808) 977-8015
Zoning Designation	Open/ST-R	Contact Email (if applicable)	LL@M4law.com

Applicant Declarations (incorrect responses may slow your permit review)

Please place an "X" under Yes or No under the following:

		YES	NO	Staff Verification
1	Is this property located in the Special Management Area (SMA)?	X		
2	Is this property part of a Condominium Property Regime (CPR)?		X	
3	Is this property within 550 feet of the shoreline?		X	
4	Is this property within the Agriculture Zoning District?		X	
5	Is there a structure on the property that is 50 years old or older?		X	
6	Do you have an Additional Dwelling Unit Certificate?		X	
7	Is this a permit for an after-the-fact construction or activity?		X	
8	I hold at least a 75% property interest in the property.	X		
9	Are you an agent for the property owner?	X		
10	Has a similar application been previously denied?		X	
11	Is this an application for an agriculture structure under 200 square feet		X	
12	Are there known burials on the site?	X		
13	Are you using water not provided by a domestic water system?		X	
14	Does existing grade under building footprint change by 2' or more in any direction?		X	
15	The proposed residential unit is a Multi-Family Dwelling Unit?		X	
16	Is this a conversion of a legally existing single-family dwelling unit into a multi-family two dwelling unit?		X	
17	Is this structure a guest house?	X		
18	Does guest house contain a kitchen?		X	

1. What is the proposed construction and/or intended use of the structure or parcel (may attach additional info)? One farm dwelling, guest house, and barn
2. If this is not the first dwelling unit on the subject property identified on this application, please state how many dwelling units presently exist: n/a

Submittal Checklist

Please **INITIAL** under "Yes" or not applicable "N/A" regarding each of the statements:

		YES	NA	Staff Verification
1	All plot plans I have submitted are drawn to scale.	X		
2	I have ensured all TMK numbers are visible on all plan sheets.	X		
3	Any plans I have submitted clearly show all structures and setback dimensions.	X		
4	My plans provide lot coverage calculations	X		
5	I have ensured kitchens are marked with the 8' radii required by the Planning Department's Administrative Rules.	X		
6	Because this application involves a CPR, the plot plan shows all existing structures.		X	
7	Building plate does not exceed 20 feet from the finished grade at entry.	X		

Acknowledgements - Please **INITIAL** next to each of the statements:

I UNDERSTAND:	**Initial Here**
Additional fees and/or the submittal of other application forms may be necessary to complete this application for acceptance and processing.	LL
Tender of fees by the County does not imply acceptance of this application.	LL
Errors in self-declaration or missing or incomplete information will delay acceptance and processing of your application.	LL
Any purposeful misrepresentations in this application may result in delay, denial, permit revocation, violations, fines and even criminal prosecution.	LL

The owner and/or authorized representative is hereby made aware that the construction, work, use or activity approved in this permit shall be subject to inspection by Planning Department personnel. The applicant is advised that inspection may occur prior to or during construction and use to ascertain the activity is conducted in compliance with the law. Further, I am a duly authorized agent or have 75% ownership rights.

OWNER/AGENT SIGNATURE: Laurel Loo/Agent DATE: July 9, 2025

FOR PLANNING DEPARTMENT USE ONLY (THIS CONSTITUTES PERMIT IF FILLED OUT BY DEPT.):

APPROVED ☐ DENIED ☐ BY: DATE:

DIRECTOR'S CONDITIONS OF APPROVAL (staff to **initial** next to applicable conditions):

This permit shall expire if no building is issued within one (1) year after the approval date and/or if construction does not start within one (1) year of building permit issuance.	
Director's standard conditions for non-residential agricultural structures (attach)	
Should any archaeological or historic resources be discovered during ground disturbing/construction work, all work in the area of the find shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures.	
Additional Conditions (State):	

MCCORRISTON MILLER MUKAI MACKINNON LLP

LAUREL LOO 4806
MICHAEL SCARBO 10250
4463 Pahe'e Street, Suite 207
Lihu`e, Kaua`i, Hawai`i 96766
Telephone No.: (808) 632-2267
Facsimile No.: (808) 524-8293

Attorneys for Applicant
CAROLINE NEAL

BEFORE THE PLANNING COMMISSION

OF THE

COUNTY OF KAUA`I

In the Matter of the Application Of CAROLINE NEAL, affecting real property at Kilauea, Island and County of Kaua`i, State of Hawai`i, more particularly Identified as Tax Map Key No. (4) 5-2-004:088, containing an Area of 5.11 acres, more or less.	APPLICATION FOR SPECIAL MANAGEMENT AREA PERMIT SMA ______________________; CLASS IV ZONING PERMIT ____________________; USE PERMIT _________________; EXHIBITS "A" – "E"

APPLICATION FOR SPECIAL MANAGEMENT AREA USE PERMIT CLASS IV ZONING PERMIT AND USE PERMIT

I. APPLICANT AND OVERVIEW

A.. Applicants: The Applicant is CAROLINE NEAL, who has authorized Laurel Loo and Michael D. Scarbo of McCorriston Miller Mukai MacKinnon, LLC, to file this Application.

B. Property: The Property is located at 2174-D Makana'ano Place, Kilauea, Kauai, Hawaii, and is more particularly identified as Tax Map Key (4) 5-2-004:088. A legal description of the Property is described in the Deed to the Property, attached hereto as Exhibit "A". A site plan attached as Exhibit "B."

C. Overview of Application: The Applicants are proposing to develop a farm dwelling with pool, a guest house and barn. The floor plans and elevations for the proposed structures are enclosed as Exhibit "C". Total lot coverage for this unit is 8.65 percent, or 19,420 square feet of hardscape which includes the dwelling, guest house, barn, driveway, and all hard surfaces. The total lot size is 222,592 square feet. The Property will be landscaped with native plants.

II. LAND USE DESIGNATIONS AND DESCRIPTIONS

A. SLUC: The State Land Use is designated Agricultural.

B. County zoning: County zoning is Agriculture and Open, and also contains a portion of Special Treatment/R ("OST/R") zoning.

C. The General Plan Designation: The General Plan designation is Agricultural.

D. Special Management Area: The Property is in the Special Management Area.

E. Flood: The Property is designated flood zone X, which zone corresponds to areas outside the one percent annual chance floodplain and areas protected from the one percent annual chance flood by levees. Flood insurance is not required in this zone.

III. COMPREHENSIVE ZONING ORDINANCE

A. Agricultural. The purpose of this district, pursuant to Sec. 8-8.1 of the Comprehensive Zoning Ordinance is it:

> establishes means by which land needs for existing and potential agriculture can be both protected and accommodated, while providing the opportunity for a wider range of the population to become involved in agriculture by allowing the creation of a reasonable supply of various sized parcels .. (a) To protect the agriculture potential of lands within the County of Kaua'i to insure a resource base adequate to meet the needs and activities of the present and future. (b) To assure a reasonable relationship between the availability of agriculture lands for various agriculture uses and the feasibility of those uses. (c) To limit and control the dispersal of residential and urban use within agriculture lands.

B. Open. The Property is also designated as Open zoning. Pursuant to Section 8-9.1 of the CZO:

> The Open District is established and regulated to create and maintain an adequate and functional amount of predominantly open land to provide for the recreational and aesthetic needs of the community or to provide for the effective functioning of land, air, water, plant and animal systems or communities.

(a) To preserve, maintain or improve the essential characteristics of land and water areas that are:

(1) of significant value to the public as scenic or recreational resources;
(2) important to the overall structure and organization of urban areas and which provide accessible and usable open areas for recreational and aesthetic purposes;
(3) necessary to insulate or buffer the public and places of residence from undesirable environmental factors caused by, or related to,

> particular uses such as noise, dust, and visually offensive elements.
>
> (b) To preserve, maintain or improve the essential functions of physical and ecological systems, forms or forces which significantly affect the general health, safety and welfare.
>
> (c) To define and regulate use and development within areas which may be potentially hazardous.
>
> (d) To include areas indicated on the County General Plan as open or as parks. . . .
>
> (f) To provide for other areas which because of more detailed analysis, or because of changing settlement characteristics, are determined to be of significant value to the public.

C. Open-ST-R. The CZO at section 8-11.2 describes this special treatment as "Scenic/Ecologic Resources. . . Land and water areas which have unique natural forms, biologic systems, or aesthetic characteristics which are of particular significance and value to the general public.

IV. <u>COASTAL ZONE MANAGEMENT ACT AND SPECIAL MANAGEMENT AREA RULES AND REGULATIONS</u>

The Special Management Area Rules and Regulations of the County of Kaua`i state:

No development shall be approved unless the Director or the Planning Commission has found that:

> 1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, and welfare, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;
>
> 2) The development is consistent with the objectives and policies, as enumerated in HRS Chapter 205A and as referred to in Section 3.0 above, and the Special Management Area guidelines set forth in these Rules and Regulations; and

> 3) The development is consistent with the county general plan and zoning ordinances. Such a finding of consistency does not preclude concurrent processing where a general plan or zoning amendment may also be required.

Chapter 205A of the Hawai`i Revised Statutes lists as its objectives: recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection, marine resources, recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection and marine resources.

The development on this unit – a farm dwelling, a guest house, a barn, and native landscaping -- are in keeping with the general characteristics of the surrounding area of Seacliff Estates. Therefore, the proposed development will not have any substantial or adverse environmental or ecological impact; and is in keeping with the surrounding neighborhood. As such, the development is consistent with the objectives and policies of HRS Chapter 205A and the SMA guidelines adopted by the County.

The applicant and their design team have met on several occasions in 2024 with the Kilauea Neighborhood Association ("KNA") as well as interested persons in the community as to how the placement of the dwelling and development will be placed on the property. As recently as May and June of 2024 there have been formal presentations to the KNA with positive verbal feedback because the applicant has decided to place the dwelling below building lines that have been commonly referred to in other applications nearby as the "lower setback line." This leaves the development closer to the road and less visible to the community. A prior application by a prior owner was approved by the Planning Commission in December 14, 2020, in SMA (U)-2021-5, Class IV-2021-6 and U-2021-5, which had a more elevated placement of the farm dwelling.

V. NATIVE HAWAIIAN AND CULTURAL USES

The Ka Pa'akai analysis is attached hereto as Exhibit "D". It was prepared by Exploration Associates Ltd., which in September 2019 prepared a similar analysis for the previous owner, Paul Barker, who applied for and received an SMA permit in December 2020 to build a farm dwelling on the property. The approved plan for the Barker dwelling is attached as Exhibit "E." It is generally in the location where the proposed dwelling will be, although the proposed dwelling is going to be located lower in elevation and closer to the street than the previously approved Barker residence.

The 2019 Ka Pa'akai analysis is a thorough description of the parcel and the region. The analysis states:

> The Kilauea-Ko'olau region, which includes the area proposed for the . . . residence, is a place of prehistoric and historic significance in the Hawaiian civilization. Oral histories and written records tell of the continuing traditions, beliefs, and cultural practices of the region. However, none of the background research, nor interviews conducted in the preparation of this Ka Pa'akai analysis indicates that the cultural practices., resources or beliefs are tied to the proposed project site. The absence of cultural properties and resources in a region maybe (sic) due to rapid change that sugar cultivation brought to Kilauea.

VI. OTHER LAND FEATURES

A. Threatened and Endangered Species. According to the University of Hawaii Rare Species database, there are no known or reported threatened and endangered species within or adjacent to the Property.

B. Soils. The majority of the property is LhE2 (Lihue silty clay 25-40% slopes, eroded.) Approximately 10% of the unit is LdD (Lihue silty clay, 15-25% slopes). About 30 percent of the property is classified as LdD – Lihue silty clay, 15-35%, slopes.

C. Tsunami: The Property is not in the Tsunami Evacuation Zone.

VII. IMPACT OF THIS DEVELOPMENT/MEETING WITH THE COMMUNITY

As stated in sections IV and V above, there are no known negative historic or ecologic impacts this proposed use would bring. Traffic and noise may be impacted by construction of the dwelling, but Applicants will be practicing Best Practices during construction.

The Applicant's agent Santo Giorgio has presented several options to the Kilauea Neighborhood Board at its regular meetings in 2024. After revising the plan to further lower the dwelling in response to community concerns, the Applicant received no opposition at a June 2024 board meeting.

VIII. CLASS IV PERMIT

Pursuant to Sec. 8-6.4 of the CZO, a Class IV Permit is required for development on a parcel one acre or more.

IX. USE PERMIT

Pursuant to Sec. 8-3.2 (e) of the CZO:

> A Use Permit may be granted only if the Planning Commission finds that the establishment, maintenance, or operation of the construction, development, activity or use in the particular case is a compatible use and is not detrimental to health, safety, peace, morals, comfort and the general welfare of persons residing or working in the neighborhood of the proposed use, or detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the community, and will not cause any substantial harmful environmental consequences on the land of the applicant or on other lands or waters, and will not be inconsistent with the intent of this Chapter and the General Plan.

The Applicant's proposed use is compatible for the area and will not cause negative impacts on the lands or waters. It is similar to all uses previously granted in the same subdivision.

X. CONCLUSION

Applicant respectfully requests the granting of a SMA permit, Class IV zoning permit and Use Permit to allow the construction of a farm dwelling, guest house and barn, as depicted in the attached exhibits.

DATED: Lihu`e, Kaua`i, Hawai`i, ________________________.

Respectfully submitted,

Laurel Loo
Mike Scarbo
Attorneys for Applicant
CAROLINE NEAL

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
October 9, 2023 8:01 AM
Doc No(s) A - 86820468

Doc 1 of 1
Pkg 12272708 KEO

/s/ LESLIE T KOBATA
REGISTRAR

Conveyance Tax: $7,000.00

LAND COURT SYSTEM	REGULAR SYSTEM

After Recordation, Return by Mail:
CAROLINE NEAL
4066 ALOALII DR
PRINCEVILLE HI 96722

TG: 7311435777**A** **RS**
TGE: 2427322384618
Glenda Matsushima

TYPE OF DOCUMENT:

WARRANTY DEED

PARTIES TO DOCUMENT:

GRANTOR: ALEJANDRO LUIS DE CASTRO and CARLY ELIZABETH DE CASTRO, husband and wife

GRANTEE: CAROLINE NEAL, unmarried
4066 Aloalii Drive
Princeville, Hawaii 96722

TAX MAP KEY FOR PROPERTY:

(4) 5-2-004-088

Exhibit "A"

WARRANTY DEED

KNOW ALL PEOPLE BY THESE PRESENTS:

ALEJANDRO LUIS DE CASTRO and CARLY ELIZABETH DE CASTRO, husband and wife, whose mailing address is 558 E. Channel Road, Santa Monica, California 90402, hereinafter called the "Grantor", in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration to the Grantor paid by CAROLINE NEAL, unmarried, whose mailing address is 4066 Aloalii Drive, Princeville, Hawaii 96722, hereinafter called the "Grantee", the receipt of which is hereby acknowledged, do hereby grant and convey unto the Grantee, as a tenant in severalty, her heirs and assigns, the property described in Exhibit "A" attached hereto and incorporated herein by reference.

AND the reversions, remainders, rents, issues, and profits thereof, and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto.

TO HAVE AND TO HOLD the same, together with the improvements thereon and all rights, easements, privileges and appurtenances thereunto belonging or appertaining or held and enjoyed therewith, unto the Grantee, according to the tenancy herein set forth, forever.

The Grantor hereby covenants with the Grantee that the Grantor is lawfully seised in fee simple of the premises described herein and has good right to sell and convey the same; that the same are free and clear of all encumbrances except as set forth herein and except for the lien of real property taxes not yet required by law to be paid; and that the Grantor will WARRANT AND DEFEND the same unto the Grantee against the lawful claims and demands of all persons, except as aforesaid.

This conveyance and the respective covenants of the Grantor and the Grantee shall be binding on and inure to the benefit of the Grantor and the Grantee, respectively. The terms "Grantor" and "Grantee" as and when used herein, or any pronouns used in place thereof, shall mean and include the singular or plural number, individuals, partnerships, trustees and corporations, and each of their respective heirs, personal representatives, successors and assigns. All covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed herein.

This Warranty Deed may be executed in counterparts. Each counterpart shall be executed by one or more of the parties hereinbefore named and the several counterparts shall constitute one instrument to the same effect as though the signatures of all the parties are upon the same document.

IN WITNESS WHEREOF, the Grantor has caused these presents to be duly executed on this 21st day of September, 20 23.

(SIGNATURES CONTINUED ON NEXT PAGE)

GRANTOR:

ALEJANDRO LUIS DE CASTRO

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES)

On September 21st, 20 23, before me, Noppawan Jantarintu, Notary Public, personally appeared ALEJANDRO LUIS DE CASTRO, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

NOPPAWAN JANTARINTU
Notary Public - California
Los Angeles County
Commission # 2441733
My Comm. Expires Apr 16, 2027

Notary Public

GRANTOR:

CARLY ELIZABETH DE CASTRO

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES)

On September 21st, 2023, before me, Noppawan Jantarintu, Notary Public, personally appeared CARLY ELIZABETH DE CASTRO, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

NOPPAWAN JANTARINTU
Notary Public - California
Los Angeles County
Commission # 2441733
My Comm. Expires Apr 16, 2027

Notary Public

EXHIBIT "A"

All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Royal Patent Grant Number 2896 to Charles Titcomb) situate, lying between Lots 28 (roadway) and the remainder of Lot 9, and being at Kilauea, Island and County of Kauai, State of Hawaii, being LOT 15, of the "SEACLIFF PLANTATION AT KILAUEA BAY", same being a portion of the subdivision of Lot 9, and thus bounded and described:

Beginning at the southwest corner of this parcel of land, being also the southeast corner of Lot 14, Seacliff Plantation at Kilauea Bay, the coordinates of said point of beginning referred to Government Survey Triangulation Station KILAUEA being 1,008.53 feet south and 447.43 feet east, thence running by azimuths measured clockwise from true South:

1. 191° 50' 30" 367.32 feet along Lot 14, Seacliff Plantation at Kilauea Bay;
2. 285° 40' 76.00 feet along the remainder of Lot 9, Seacliff Plantation at Kilauea Bay;
3. 280° 07' 482.49 feet along same;
4. 333° 54' 275.00 feet along same;
5. 49° 35' 99.97 feet along Lot 16, Seacliff Plantation at Kilauea Bay;
6. 92° 18' 445.51 feet along same;

Thence along Lot 28 (roadway) Seacliff Plantation at Kilauea Bay, on a curve to the left having a radius of 60.00 feet, the chord azimuth and distance being:

7. 104° 17' 03.6" 89.20 feet;

Thence along same on a curve to the right having a radius of 40.00 feet, the chord azimuth and distance being:

8. 79° 03' 18.6" 30.98 feet;
9. 101° 50' 30" 8.59 feet;

Thence along same on a curve to the right having a radius of 4,180.00 feet the chord azimuth and distance being;

10. 102° 31' 46.9" 100.30 feet to the point of beginning and containing an area of 5.110 acres, more or less

Together with a nonexclusive easement appurtenant to said Lot to use Roadway Lots 27, 28 and 29 of the Seacliff Plantation at Kilauea Bay Community for ingress and egress purposes, said Roadway Lots being more particularly in Instrument dated June 2, 1994, recorded as Document No. 94-108675, reserving, however, unto Roberson/Larson Partners, and its successors and assigns, the right from time to time to convey said Roadway Lots 27, 28 and/or 29 to a community organization or such other entity for the care and maintenance of the same, or to convey said Roadway Lots 27, 28 and/or 29 to the County of Kauai as a public road, in which latter event, the said easements shall be automatically extinguished and subject to the terms and provisions contained therein.

Together also with a non-exclusive easement for ingress and egress for beach access and parking of vehicles over and across Easement "Q-1", known as Kahili Quarry Road, as granted by Easement Deed for Access and Parking dated March 1, 1988, recorded in Liber 21703 at Page 797, being more particularly therein and subject to the terms and provisions contained therein.

Together further with a non-exclusive easement for roadway and utility purposes, as set forth in that certain Declaration of Easement for Roadway and Utility Purposes dated February 23, 1989, recorded in Liber 23119 at Page 21; and subject to the terms and provisions contained therein.

Being the same premises conveyed to ALEJANDRO LUIS DE CASTRO and CARLY ELIZABETH DE CASTRO, husband and wife, as Tenants by the Entirety, by WARRANTY DEED dated February 17, 2022, recorded as Document No. A-80950185.

SUBJECT, HOWEVER, to the following:

1. Mineral and water rights of any nature.

2. Easement "D-1" (15' wide) for drainage purposes, as referenced on Tax Map and more particularly described in Instrument dated June 2, 1994, recorded as Document No. 94-108675.

3. SETBACK for building purposes, as referenced on survey map prepared by Ceasar C. Portugal, Land Surveyor, dated July, 1983, approved August 15, 1983 by the Planning Commission, County of Kauai.

4. The terms and provisions contained in the following:

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS OF THE SEACLIFF PLANTATION AT KILAUEA BAY COMMUNITY dated August 31, 1983, recorded in Liber 17405 at Page 411.

Said Declaration was amended by instruments dated --- (acknowledged March 1, 2, 3 and 7, 1988), recorded in Liber 21704 at Page 1, dated September 9, 1988, recorded in Liber 22367 at Page 21, dated December 28, 1988, recorded in Liber 22766 at Page 559, and dated June 3, 2002, recorded as Document No. 2002-105319.

The foregoing includes, but is not limited to, matters relating to reservations, use restrictions, construction requirements for drainage, elevation agreement.

5. Easement "ET-1" (20 feet wide) for equestrian trail purposes, as referenced on Tax Map, more particularly described in Instrument dated February 29, 1988, recorded in Liber 21704 at Page 34.

6. Easement "PT-1" (20 feet wide) for pedestrian trail purposes, as referenced on Tax Map, more particularly described in Instrument dated February 29, 1988, recorded in Liber 21704 at Page 34.

7. Conservation Easement "TR-2" for access purposes, as referenced on Tax Map, more particularly described in Instrument dated February 29, 1988, recorded in Liber 21704 at Page 54.

8. GRANT to THE TRUST FOR PUBLIC LAND, a nonprofit California public benefit corporation, dated March 1, 1988, recorded in Liber 21704 at Page 12, granting a conservation easement over Easement "TR-2".

9. GRANT to DORN L. SCHMIDT and CARLA B. SCHMIDT, husband and wife, et al., dated February 29, 1988, recorded in Liber 21704 at Page 34, granting a non-exclusive easement for ingress and egress over and across Easement "PT-1" and a non-exclusive easement for ingress and egress over and across Easement "ET-1".

10. GRANT to UNITED STATES OF AMERICA dated February 29, 1988, recorded in Liber 21704 at Page 54, granting a conservation easement over and across Easement TR-2.

Said above Grant was re-recorded in Liber 22638 at Page 314.

11. The terms and provisions contained in the DECLARATION RE ELECTRICAL USE dated July 25, 1988, recorded in Liber 22226 at Page 340.

12. RIGHT-OF-ENTRY to CITIZENS UTILITIES COMPANY, now known as CITIZENS COMMUNICATIONS COMPANY, whose interest is now held by KAUAI ISLAND UTILITY COOPERATIVE and HAWAIIAN TELEPHONE COMPANY INCORPORATED, now known as HAWAIIAN TELCOM, INC., dated October 12, 1988, recorded in Liber 22768 at Page 454, granting a right-of-entry and easement over and across Parcels 74 through 99, inclusive, and Parcel 101 for the purposes of building pole and wife lines, electricity and communications.

13. GRANT to UNITED STATES OF AMERICA, Acting By and Through The Fish and Wildlife Services, et al., dated December 17, 2002, recorded as Document No. 2003-003808, granting a non-exclusive easement for pedestrian and vehicular purposes as a roadway over and across Easement A, more particularly described therein.

14. The terms and provisions contained in the ELEVATION AGREEMENT FOR TMK: (4) 5-2-004-088 dated January 18, 2007, recorded as Document No. 2007-027125, by and between SCHLESSINGER & SCHLESSINGER COMPANY, a Nebraska general partnership and DEPARTMENT OF WATER FOR THE COUNTY OF KAUAI, regarding elevation agreement for water supply.

15. Claims arising out of customary and traditional rights and practices, including without limitation those exercised for subsistence, cultural, religious, access or gathering purposes, as provided for in the Hawaii Constitution or the Hawaii Revised Statutes.

16. The terms and provisions contained in the DECLARATION INCORPORATING CONDITIONS OF APPROVAL INTO INSTRUMENTS OF CONVEYANCE dated --- (acknowledged on February 3, 2022), recorded as Document No. A-80760604.

LEAVE AREA CLEAR
COUNTY STAMP LOCATION

LOT 15
5.110 ACRES
LOT 14
A
AS103
B
AS103
EXISTING CONTOURS
PROPERTY LINE
5' SIDE COUNTY SETBACK
30' DEVELOPER SETBACK
5' - 0"
30' - 0"
RETAINING WALL
RETAINING WALL
RETAINING WALL
RETAINING BOULDER WALL
BUILDING SETBACK
MAIN ENTRY
DN
FIN. GRADE = 270'-0"
FINISH SLAB = 270' - 6"
FIN. GRADE = 270'-0"
FINISH SLAB = 270' - 6"
FIN. GRADE = 270'-0"
FINISH SLAB = 270' - 6"
BASEMENT/ GARAGE BELOW
FIN. GRADE = 260'-6"
FINISH SLAB = 261'-1"
DRIVEWAY
FIN. DECK = 267'-8"
POOL
FIN. DECK = 267'-8"
DN
DN
FIN. DECK = 270'-0"
30' DEVELOPER SETBACK
PROPOSED IWS LOCATION
101' - 1"
HOUSE TO NEAREST HYDRANT
EASEMENT "D-1"
CONCRETE SWALE
10' COUNTY FRONT SETBACK
EXISTING BACK FLOW PREVENTER
EXISTING WATER METER
PROPERTY LINE
HYDRANT STAND PIPE
UTILITY VAULT
EXISTING STONE BOULDER WALL
30' DEVELOPER SETBACK
10' COUNTY FRONT SETBACK
PROPERTY LINE
MAKANA'ANO PLACE
EDGE OF PAVEMENT
UTILITY VAULTS
EXISTING CONC. DRIVEWAY
EXISTING CRUSHED CORAL DRIVE
290
290
285
280
275
270
265
260
255
250
245
240
235
285
280
275
270
265
260
255
250
245
240
DRAINAGE LEGEND
DIRECTION OF DRAINAGE FLOW
SWALE AROUND THE HOUSE
0
5.3'
10.7'
21.3'
0
2"
3/32" = 1'-0"

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

PRINT DATE:
3/31/2025 11:54:08 AM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-26

ERIC M. EINSTEIN
LICENSED PROFESSIONAL ARCHITECT
No. 20438
HAWAII, U.S.A.

DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

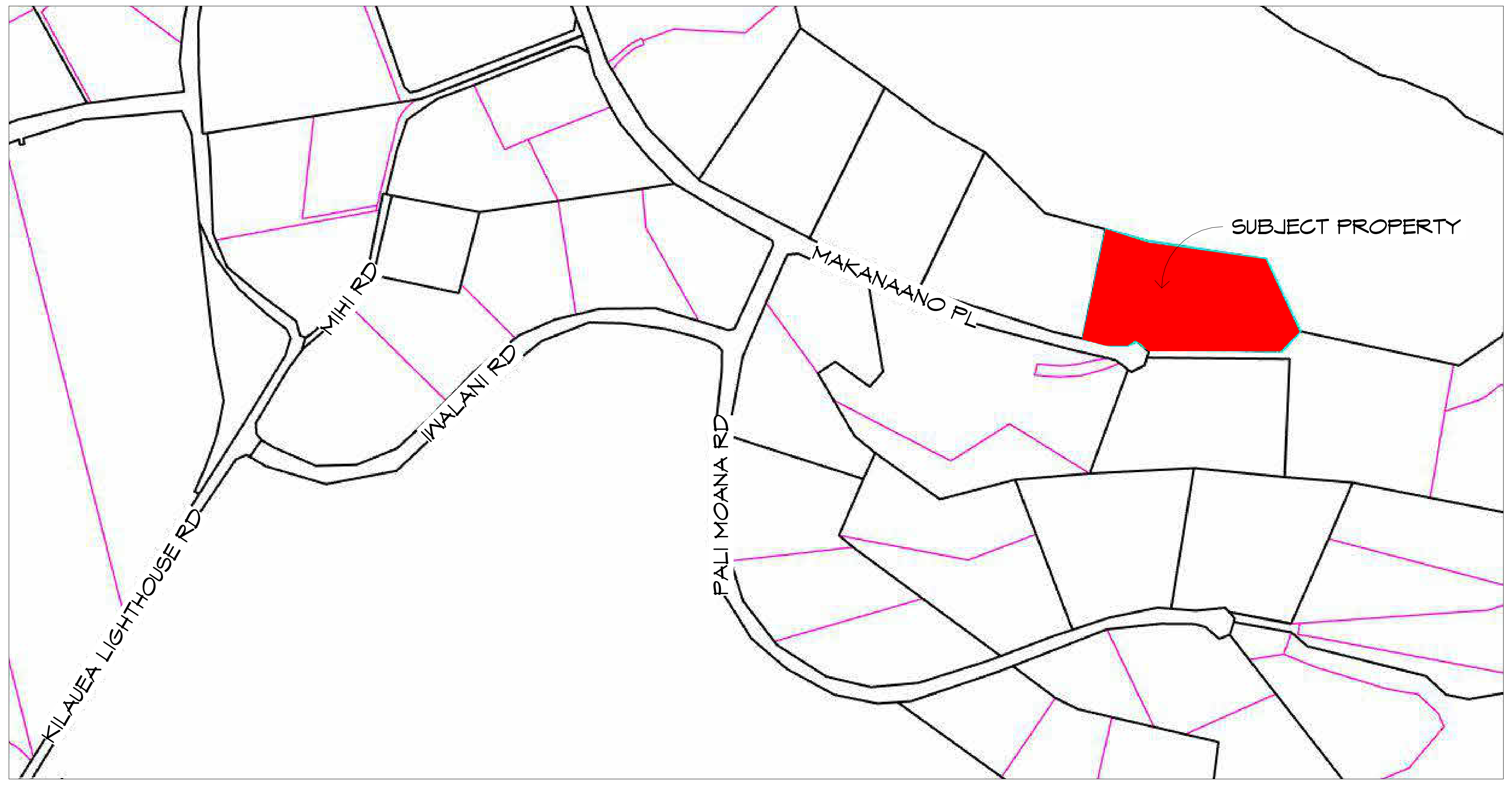
NEAL & HAZEN RESIDENCE

TMK # (4) 5-2-04-88:0015

DESIGN CONCEPTS

SHEET:
AS102

Exhibit "B"


SUBJECT PROPERTY
MAKANAANO PL
MIHI RD
WALANI RD
PALI MOANA RD
KILAUEA LIGHTHOUSE RD

VICINITY MAP
N.T.S.

COUNTY OF KAUA'I
CHAPTER 12, KAUA'I COUNTY BUILDING CODE KAUA'I COUNTY CODE 1987, AS AMENDED
ARTICLE 6 - ENERGY CODE CONSERVATION CODE

To the best of my knowlage, this project's design substantially conforms to the Residential Provisions of:
Section 12-6.3 Adoption of the International Energy Conservation Code (IECC)
Section 12-6.4 Local Amendments to the IECC

COMPLIANCE METHOD

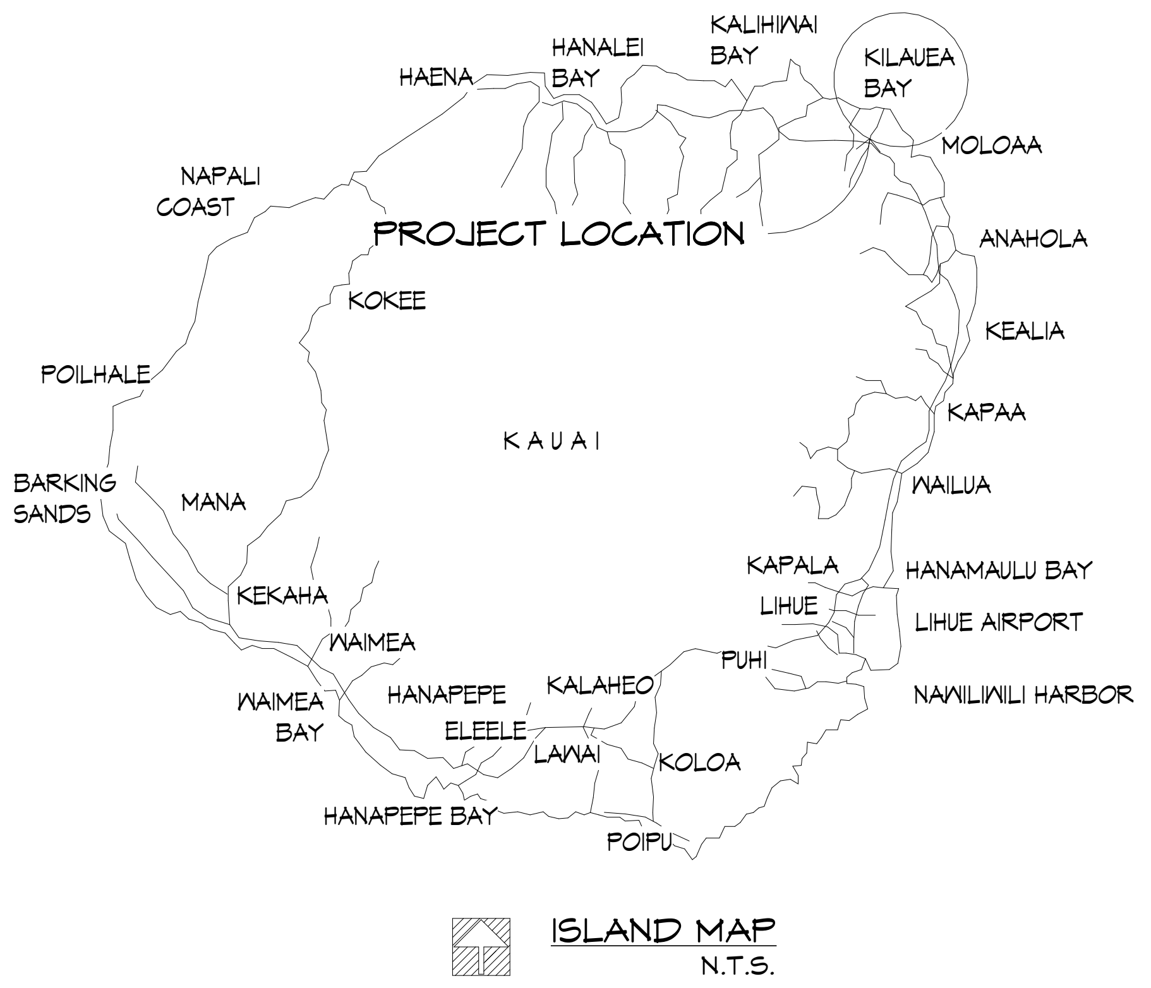
- ☒ Tropical Zone, R401.2.1
- ☐ Prescriptive, R402
  - Roof and Wall
    - ☐ Insulation R-value R401.1.2
    - ☐ Construction U-factor, Table R402.1.4
    - ☐ Total UA, R402.1.5
    - ☐ Points Options, R407
- ☐ Simulated Permormance Alternative, R405
- ☐ Energy Rating Index Compliance Alternative, R406

INFORMATION CONSTRUCTION DOCUMENTS	YES	N/A
Envelope		
Roof Insulation R-value	☒	☐
Roof Insulation type and location	☒	☐
Roof membrane solar reflectance and thermal emittance	☒	☐
Wall insulation R-value	☒	☐
Wall insulation type and location	☒	☐
Window and skylight SHGC	☐	☒
Air leakage testing requirements	☐	☒
Air Conditioning		
Air Conditioning equipment capacity and efficiency	☒	☐
Programmable thermostat	☒	☐
Insulation R-value	☒	☐
Duct leakage testing equipment	☐	☒
Electrical		
Lighting fixture locations	☒	☐
Lamp type	☒	☐
Ceiling fans	☒	☐
Whole-house fan	☐	☒

NOTES

SIGNATURE: Eric M Einstein
DATE: 03/25/25

NAME: ERIC M. EINSTEIN
TITLE: ARCHITECT
LICENSE NO.: 20438


HAENA
HANALEI BAY
KALIHIWAI BAY
KILAUEA BAY
MOLOAA
NAPALI COAST
PROJECT LOCATION
ANAHOLA
KOKEE
KEALIA
POILHALE
KAPAA
KAUAI
BARKING SANDS
MANA
WAILUA
KAPALA
HANAMAULU BAY
LIHUE
LIHUE AIRPORT
KEKAHA
WAIMEA
PUHI
NAWILIWILI HARBOR
WAIMEA BAY
HANAPEPE
KALAHEO
ELEELE
LAWAI
KOLOA
HANAPEPE BAY
POIPU

ISLAND MAP
N.T.S.

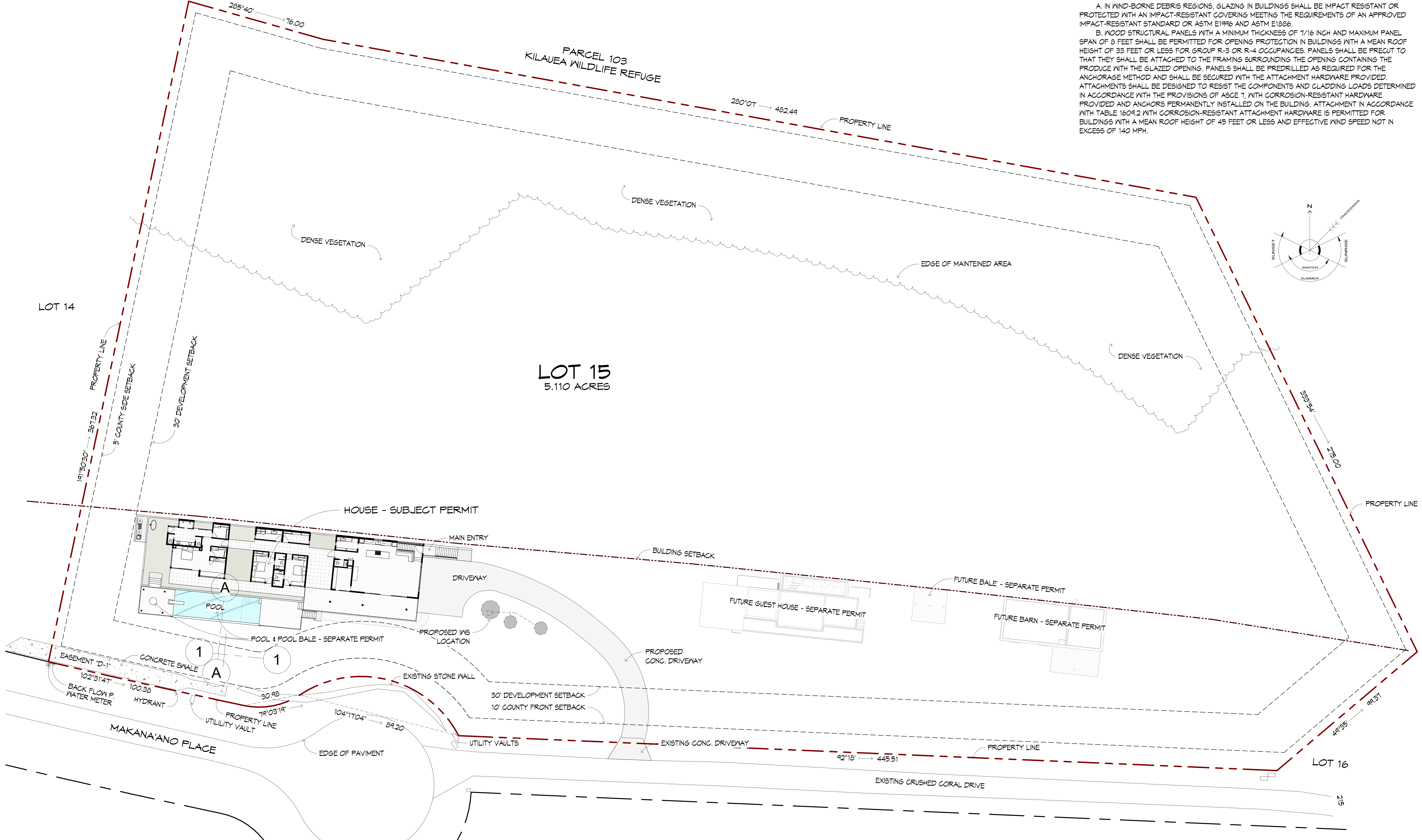
LEAVE AREA CLEAR
COUNTY STAMP LOCATION

WIND SPEED NOTE:

THIS IS REQUIRED FOR AREAS ON KAUAI WHERE THE BASIC DESIGN WIND SPEED IS 130 MPH OR GREATER.

A. IN WIND-BORNE DEBRIS REGIONS, GLAZING IN BUILDINGS SHALL BE IMPACT RESISTANT OR PROTECTED WITH AN IMPACT-RESISTANT COVERING MEETING THE REQUIREMENTS OF AN APPROVED IMPACT-RESISTANT STANDARD OR ASTM E1996 AND ASTM E1886.

B. WOOD STRUCTURAL PANELS WITH A MINIMUM THICKNESS OF 7/16 INCH AND MAXIMUM PANEL SPAN OF 8 FEET SHALL BE PERMITTED FOR OPENING PROTECTION IN BUILDINGS WITH A MEAN ROOF HEIGHT OF 33 FEET OR LESS FOR GROUP R-3 OR R-4 OCCUPANCIES. PANELS SHALL BE PRECUT TO THAT THEY SHALL BE ATTACHED TO THE FRAMING SURROUNDING THE OPENING CONTAINING THE PRODUCE WITH THE GLAZED OPENING. PANELS SHALL BE PREDRILLED AS REQUIRED FOR THE ANCHORAGE METHOD AND SHALL BE SECURED WITH THE ATTACHMENT HARDWARE PROVIDED. ATTACHMENTS SHALL BE DESIGNED TO RESIST THE COMPONENTS AND CLADDING LOADS DETERMINED IN ACCORDANCE WITH THE PROVISIONS OF ASCE 7, WITH CORROSION-RESISTANT HARDWARE PROVIDED AND ANCHORS PERMANENTLY INSTALLED ON THE BUILDING. ATTACHMENT IN ACCORDANCE WITH TABLE 1609.2 WITH CORROSION-RESISTANT ATTACHMENT HARDWARE IS PERMITTED FOR BUILDINGS WITH A MEAN ROOF HEIGHT OF 45 FEET OR LESS AND EFFECTIVE WIND SPEED NOT IN EXCESS OF 140 MPH.


285°40'
76.00
PARCEL 103
KILAUEA WILDLIFE REFUGE
280°07'
482.49
PROPERTY LINE
DENSE VEGETATION
DENSE VEGETATION
EDGE OF MAINTENED AREA
DENSE VEGETATION
N
SUNSET
SUNRISE
WINTER
SUMMER
LOT 14
PROPERTY LINE
5' COUNTY SIDE SETBACK
30' DEVELOPMENT SETBACK
367.32
191°50'30"
LOT 15
5.110 ACRES
339.54
278.00
PROPERTY LINE
HOUSE - SUBJECT PERMIT
MAIN ENTRY
BUILDING SETBACK
DRIVEWAY
POOL
A
A
1
1
FUTURE GUEST HOUSE - SEPARATE PERMIT
FUTURE BALE' - SEPARATE PERMIT
FUTURE BARN - SEPARATE PERMIT
POOL & POOL BALE - SEPARATE PERMIT
PROPOSED IWS LOCATION
PROPOSED CONC. DRIVEWAY
EASEMENT "D-1"
CONCRETE SWALE
102°31'47"
100.38
BACK FLOW P. WATER METER
HYDRANT
30.98
79°03'19"
PROPERTY LINE
UTILITY VAULT
104°17'04"
89.20
EXISTING STONE WALL
30' DEVELOPMENT SETBACK
10' COUNTY FRONT SETBACK
MAKANA'ANO PLACE
EDGE OF PAVIMENT
UTILITY VAULTS
EXISTING CONC. DRIVEWAY
92°18'
445.51
PROPERTY LINE
49°35'
99.37
LOT 16
EXISTING CRUSHED CORAL DRIVE
215

DRAWING INDEX - RESIDENCE

SHEET #	SHEET NAME	SCALE
AS101	PLOT PLAN	1" = 30'-0"
AS102	SITE PLAN	3/32" = 1'-0"
AS103	SITE SECTIONS	1/8" = 1'-0"
AS-102.	AG PLAN	
G001	GENERAL NOTES	N/A
A-101	FLOOR PLAN	3/16" = 1'-0"
A-102	ROOF PLAN & KEY TO SECTIONS	3/16" = 1'-0"
A-103	REFLECTED CEILING PLAN	3/16" = 1'-0"
A-104	MATEIRLAS PLAN	3/16" = 1"-0"
A-201	PERSPECTIVE ELEVATIONS	NOT TO SCALE
A-202	EXTERIOR ELEVATIONS	3/16" = 1"-0"
A-203	EXTERIOR ELEVATIONS	3/16" = 1'-0"
A-301	BUILDING SECTION	1/2" = 1'-0"
A-302	BUILDING SECTION	1/2" = 1'-0"
A-303	BUILDING SECTION	1/2" = 1'-0"
A-304	BUILDING SECTION	1/2" = 1'-0"
A-305	BUILDING SECTION	1/2" = 1'-0"
A-401	INTERIOR ELEVATIONS - KITCHEN & LIVING	1/2" = 1'-0"
A-402	KITCHEN & LIVING PERSPECTIVES	NOT TO SCALE
A-403	INTERIOR ELEVATIONS - LIBRARY & PANTRY	1/2" = 1'-0"
A-404	INTERIOR ELEVATIONS - LAUNDRY & STOTAGE AREA	1/2" = 1'-0"
A-405	INTERIOR ELEVATIONS - BEDROOM & BATHROOM 2	1/2" = 1'-0"
A-406	INTERIOR ELEVATIONS - BEDROOM & BATHROOM 3	1/2" = 1'-0"
A-407	INTERIOR ELEVATIONS = BADROOM 1	1/2" = 1'-0"
A-408	INTERIOR ELEVATIONS - BATHROOM 1 AND CLOSETS	1/2" = 1'-0"
A-409	BATHROOM 1 & HER CLOSET PERSPECTIVES	NOT TO SCALE
A-410	INTERIOR ELEVATIONS - GARAGE & MUDROOM	1/2" = 1'-0"
A-411	GARAGE & MUDROOM PERSPECTIVES	NOT TO SCALE
A-501	ARCHITECTURAL DETAILS	3/16" = 1'-0"
A-511	DOOR DETAILS	3/16" = 1'-0"
A-521	WINDOW DETAILS	3/16" = 1'-0"
A-531	BUILT-IN DETAILS	3/16" = 1'-0"
A-601	DOOR AND WINDOW SCHEDULE	1/4" = 1'-0"
E-101	ELECTRICAL PLAN	3/16" = 1'-0"
M101	MECHANICAL PLAN	3/16" = 1'-0"
S-101	FOUNDATION PLAN	3/16" = 1'-0"
S-102	FOUNDATION & FRAMING PLAN	3/16" = 1'-0"
S-103	ROOF FRAMING PLAN	3/16" = 1'-0"
S-501	FOUNDATION DETAILS	3/16" = 1'-0"
S-502	FOUNDATION DETAILS	3/16" = 1'-0"
S-503	FRAMING DETAILS	3/16" = 1'-0"
S-504	FRAMING DETAILS	AS NOTED
S-505	FRAMING DETAILS	AS NOTED

PARCEL INFORMATION

PARCEL NAME

PARCEL NUMBER:	(4) 5-2-04-88: UNIT 15
LOCATION ADDRESS:	LOT 15 SEACLIFF PLANTATION AT KILAUEA BAY KILAUEA, HI 96754
ZONING:	AG
LAND AREA (ACRES):	5.11
LAND AREA (SQ.FT.):	222,592
FLOOD ZONE:	X
WIND EXPOSURE:	C

SQUARE FOOTAGE BREAKDOWN

MAIN HOUSE	
ENCLOSED	
GROUND FLOOR	3006 S.F
GARAGE (BASEMENT)	940 S.F.
COVERED WALKWAY/LANAI	1992 S.F.
POOL, POOL DECK AND BALE	1383 S.F.
M.H. TOTAL LOT COVERAGE	*6479 S.F.*
GUEST HOUSE	
ENCLOSED	800 S.F.
COVERED BBQ	300 S.F.
COVERED WALKWAY/LANAI	800 S.F.
CARPORT	400 S.F.
G.H. TOTAL LOT COVERAGE	*2300 S.F.*
AG BUILDING	
ENCLOSED	
GROUND FLOOR	1351 S.F.
LOFT	462 S.F.
COVERED WALKWAY/LANAI	
GROUND FLOOR	617 S.F.
LOFT LEVEL	121 S.F.
AG. TOTAL LOT COVERAGE	*1968 S.F.*
EXERCISE PAVILION	
COVERED WALKWAY/LANAI	324 S.F.
TOTAL INTERIOR LIVING SPACE	3806 S.F.
COVERED WALKWAY/LANAI	3530 S.F.
TOTAL BUILDING COVERAGE	10700 S.F.
TOTAL LOT SIZE	222,592 S.F.
BUILDING COVERAGE PERCENTAGE	4.81 %
DRIVEWAY	10,865 S.F.
TOTAL LOT COVERAGE	19,420 S.F.
TOTAL COVERAGE PERCENTAGE	9.68 %

0 15' 30' 60'
0 2"
1" = 30'-0"

PLOT PLAN
1" = 30'-0"

Exhibit "B-2"

PRINT DATE:
4/8/2025 3:57:03 PM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-26

ERIC M. EINSTEIN
No. 20438

DESIGN CONCEPTS 2484 KENEKE ST. SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

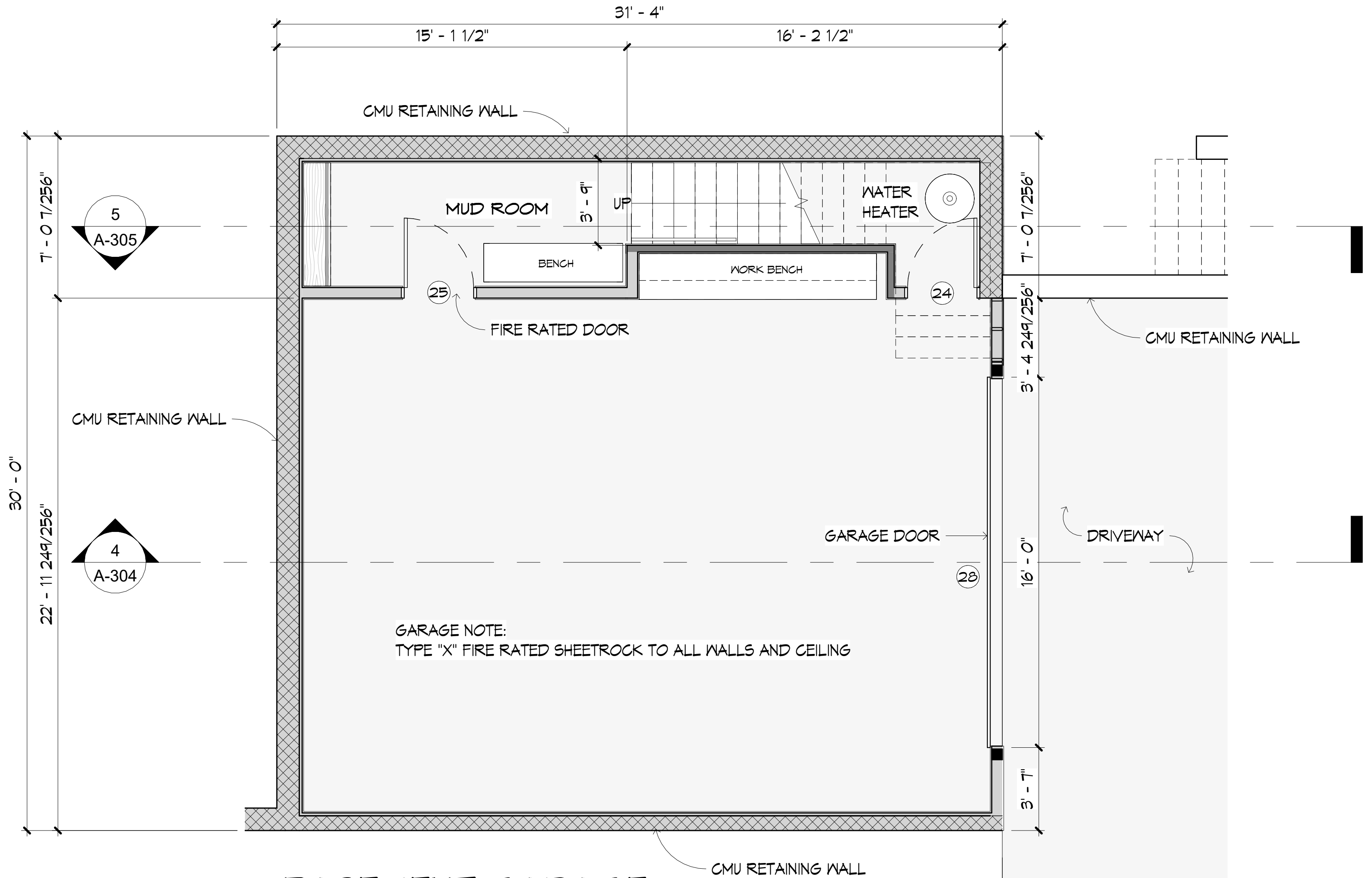
NEAL & HAZEN RESIDENCE
TMK # (4) 5-2-04-88:0015

Exhibit "B-2"

SHEET:
AS101

LEAVE AREA CLEAR
COUNTY STAMP LOCATION

151' - 0"
ROOF LINE
8" CMU WALL
DRYER TO VENT TO EXTERIOR
POOL EQUIPMENT
PLANTER
HER
HIS
BATH 1
W.C.1
W.C. 2
BEDROOM 1
TOP OF SLAB 270.5'
WINDOW SEAT
WRAPPED 6x6 POST TYP.
LAUNDRY
STORAGE
BEDROOM 2
165 SF
BEDROOM 3
165 SF
BATH 2
BATH 3
TOP OF SLAB 270.5'
LOUNGE + BBQ
PANTRY
DISH WASHER
REF.
OVEN
KITCHEN
DISPOSAL
DRAFT VENT
BREAKFAST NOOK
MAIN ENTRY
RAILING
RETAINING WALL BELOW
HALL
PWDR
LIBRARY
FIRE PLACE
DINING
SOFFIT ABOVE
DRIVEWAY BELOW
6x6 POST TYP.
COVERED LANAI
DN
BALE'
POOL
8' DEEP
POOL WALL BELOW
13" DEEP
POOL DECK
GATE
RAILING
ROOF LINE
GRAVEL WALKWAY BELOW
A-303
A-301
A-302
A-305
A-304
P301


31' - 4"
15' - 1 1/2"
16' - 2 1/2"
CMU RETAINING WALL
MUD ROOM
UP
WATER HEATER
BENCH
WORK BENCH
FIRE RATED DOOR
CMU RETAINING WALL
GARAGE DOOR
DRIVEWAY
GARAGE NOTE:
TYPE "X" FIRE RATED SHEETROCK TO ALL WALLS AND CEILING
CMU RETAINING WALL
A-305
A-304

BASEMENT GARAGE

NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS AT SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BEFORE PROCEEDING WITH ANY WORK INVOLVED.
3. EXTERIOR DIMENSIONS TO BUILDING LINE/SLAB EDGE. SEE FOUNDATION PLAN FOR COLUMN DIMENSIONS AND ADDITIONAL DIMENSIONS.

WALL TYPE LEGEND

▬ = 2x4 STUD WALL
▬ = 2x6 STUD WALL
▨ = CMU WALL W/ 2x FURRING

FLOOR PLAN
3/16" = 1'-0"

Exhibit "C"

PRINT DATE:
3/31/2025 11:54:16 AM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 4-30-26

ERIC M. EINSTEIN
LICENSED PROFESSIONAL ARCHITECT
No. 20438
HAWAII, U.S.A.

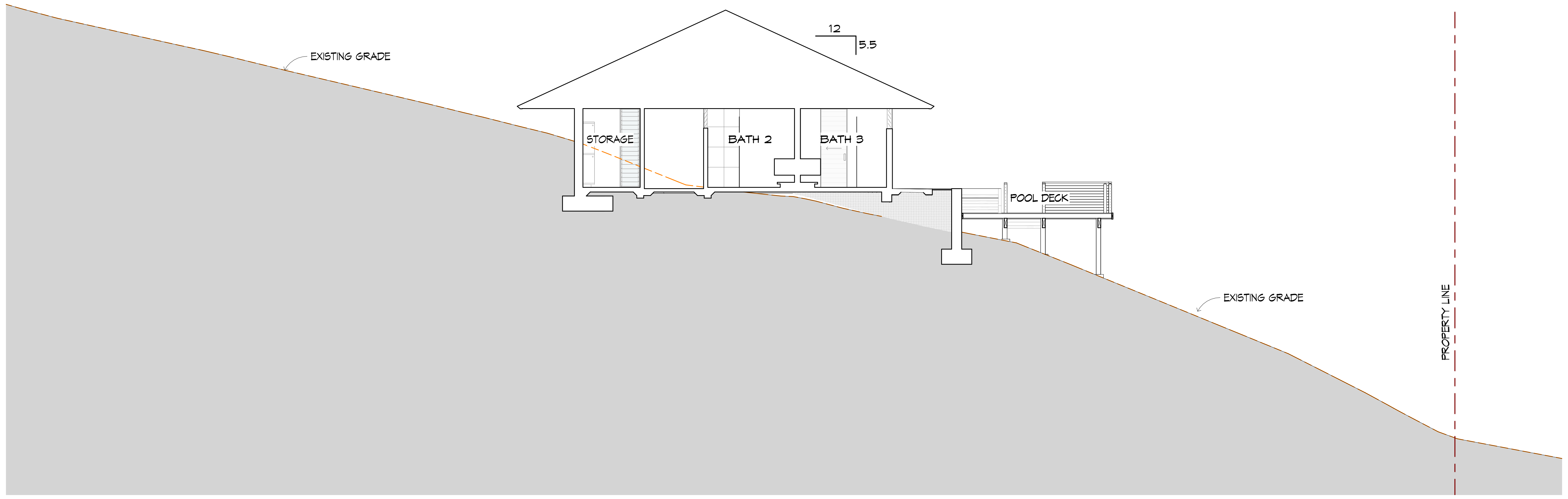
DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

NEAL & HAZEN RESIDENCE

TMK # (4) 5-2-04-88:0015

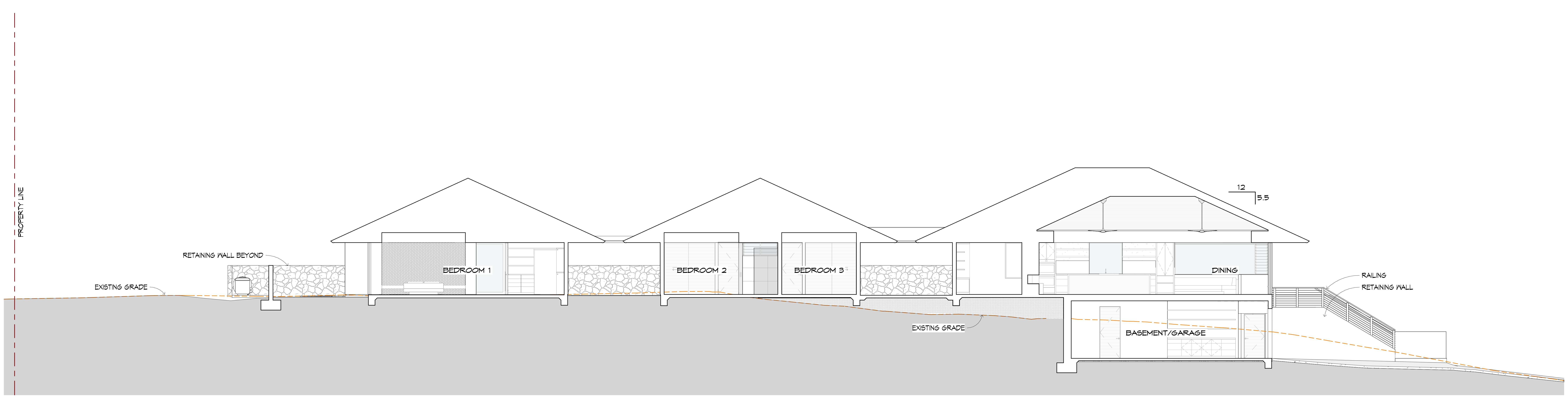
SHEET:
A-101

LEAVE AREA CLEAR
COUNTY STAMP LOCATION



EXISTING GRADE
12
5.5
STORAGE
BATH 2
BATH 3
POOL DECK
EXISTING GRADE
PROPERTY LINE

Ⓐ SHORT SECTION THRU BATH 2 & 3
1/8" = 1'-0"



PROPERTY LINE
RETAINING WALL BEYOND
EXISTING GRADE
BEDROOM 1
BEDROOM 2
BEDROOM 3
DINING
12
5.5
RAILING
RETAINING WALL
EXISTING GRADE
BASEMENT/GARAGE

Ⓑ LONG SECTION THRU BEDROOMS AND LIVING ROOM
1/8" = 1'-0"

Exhibit "C-2"

SITE SECTIONS
1/8" = 1'-0"

PRINT DATE:
3/31/2025 11:54:10 AM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-26

ERIC M. EINSTEIN
No. 20438

DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

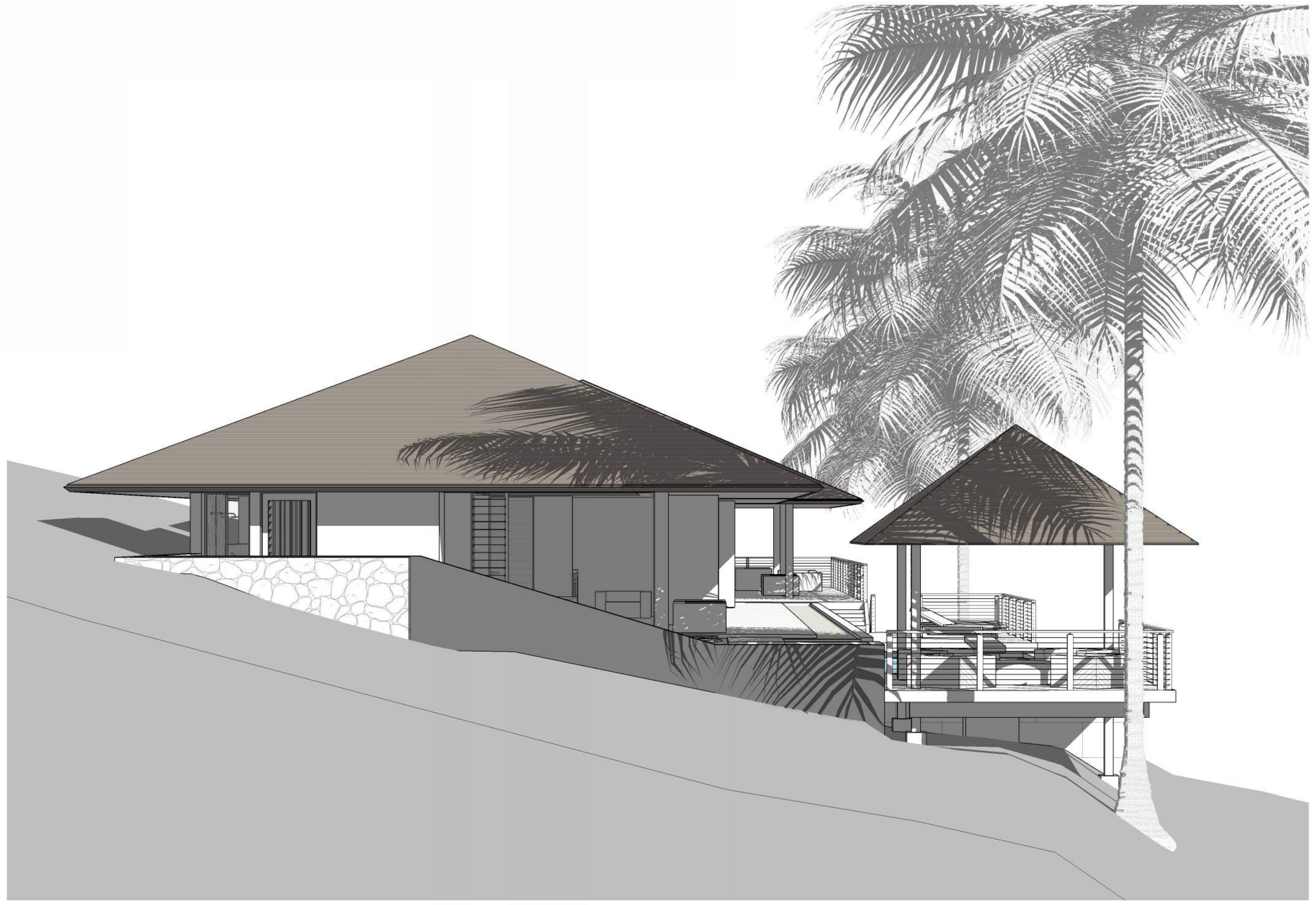
NEAL & HAZEN RESIDENCE

TMK # (4) 5-2-04-88:0015

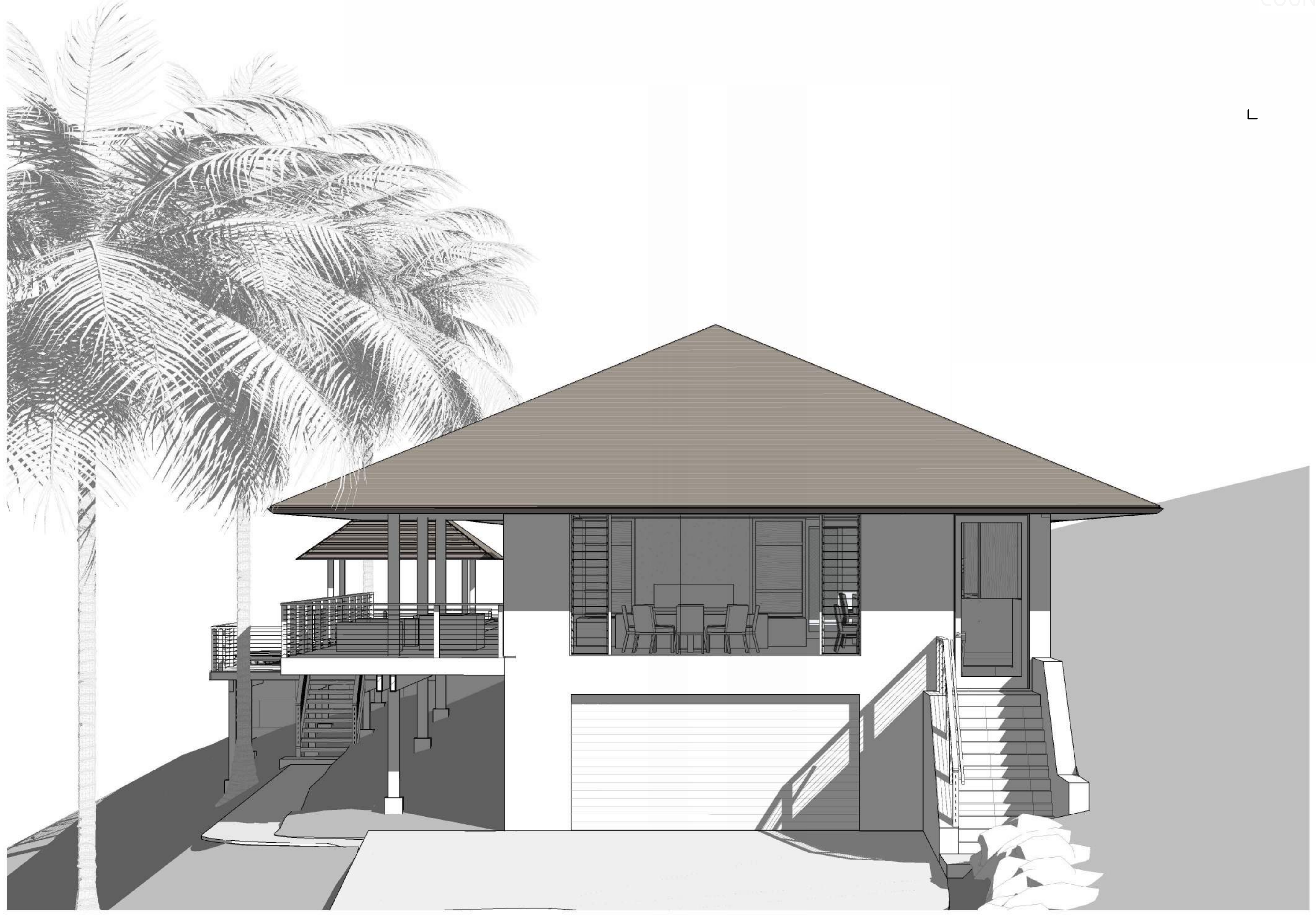
Exhibit "C-2"

SHEET:
AS103

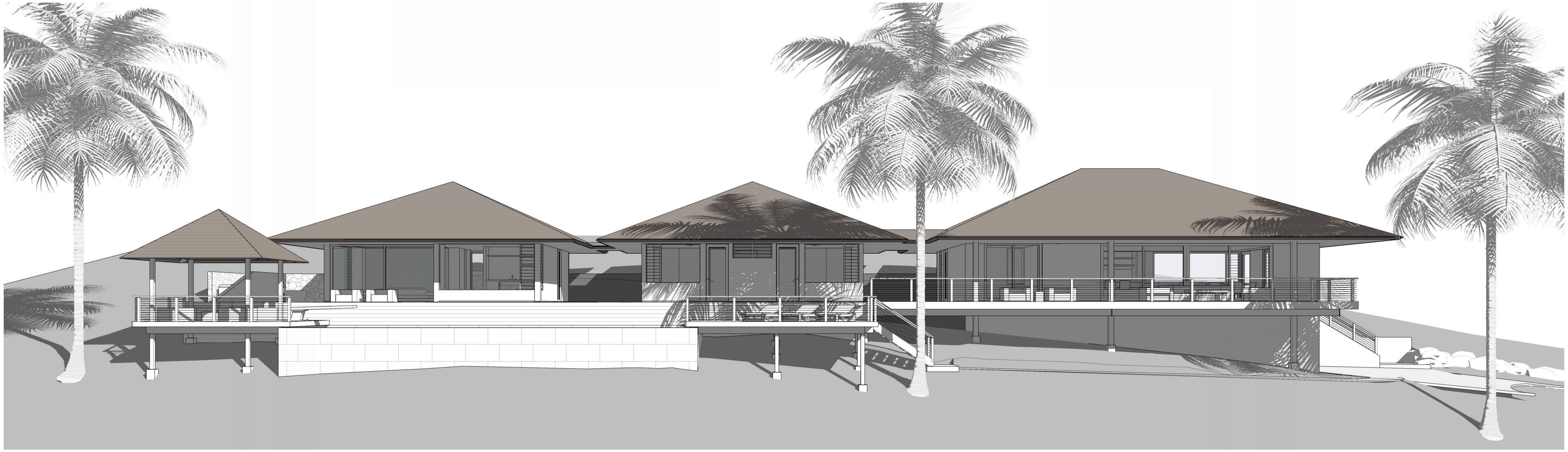
LEAVE AREA CLEAR
COUNTY STAMP LOCATION



WEST



EAST



SOUTH

Exhibit "C-3"

PERSPECTIVE ELEVATIONS
NOT TO SCALE

PRINT DATE:
3/31/2025 11:54:45 AM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-26

ERIC M. EINSTEIN
LICENSED PROFESSIONAL ARCHITECT
No. 20438

DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

NEAL & HAZEN RESIDENCE

TMK # (4) 5-2-04-88:0015

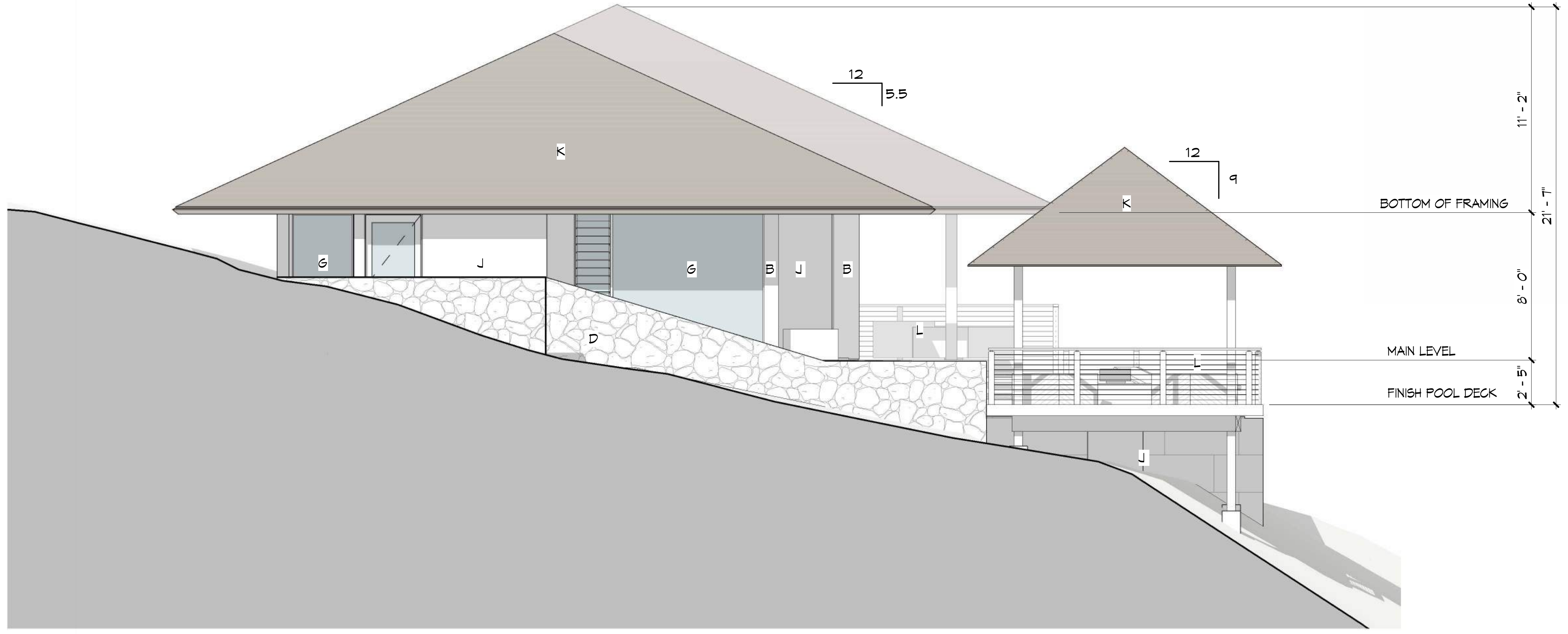
Exhibit "C-3"

SHEET:
A-201

LEAVE AREA CLEAR
COUNTY STAMP LOCATION

12
5.5
12
5.5
12
5.5
12
9
K
J
D
J
B
G
G
B
J
D
G
B
J
B
G
J
D
J
G
J
G
G
J
L
L
J
J
J
J
E
TOP OF RIDGE
BOTTOM OF FRAMING
MAIN LEVEL
GRADE AT ENTRY
BASEMENT LEVEL
11' - 3"
21' - 1"
7' - 11"
9' - 10"
1' - 11"
7' - 8"

SOUTH


12
5.5
12
9
K
K
G
J
G
B
J
B
D
L
L
J
TOP OF RIDGE
BOTTOM OF FRAMING
MAIN LEVEL
FINISH POOL DECK
11' - 2"
21' - 7"
8' - 0"
2' - 5"

WEST

MATERIAL SCHEDULE

A	PAINTED SMOOTH SHEETROCK
B	WOOD VENEER
C	WOOD T&G
D	STONE
E	TILE
F	EXTERIOACCENT WALL TBD
G	GLASS
H	MIRROR
J	EXTERIOR FINISH: DRYVIT
K	CEDAR SHAKES
L	S.STEEL CABLE RAILING

Exhibit "C-4"

EXTERIOR ELEVATIONS
3/16" = 1"-0"

PRINT DATE:
3/31/2025 11:54:58 AM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-26

ERIC M. EINSTEIN
LICENSED PROFESSIONAL ARCHITECT
No. 20438
HAWAII, U.S.A.

DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

NEAL & HAZEN RESIDENCE

TMK # (4) 5-2-04-88:0015

Exhibit "C-4"

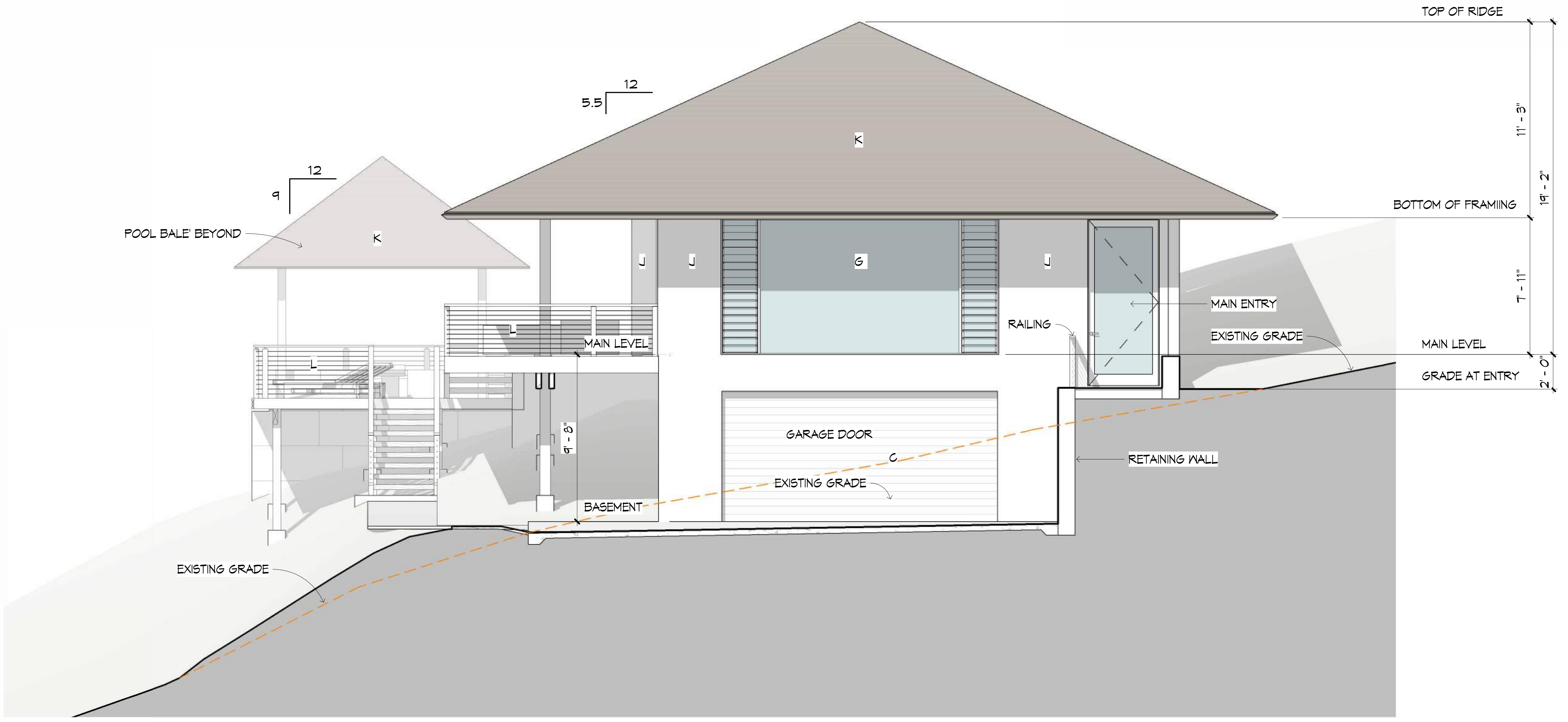
DESIGN CONCEPTS

SHEET:
A-202

LEAVE AREA CLEAR
COUNTY STAMP LOCATION

TOP OF RIDGE
BOTTOM OF FRAMING
MAIN LEVEL
GRADE AT ENTRY
11' - 3"
21' - 2"
7' - 11"
2' - 0"
RAILING
EXISTING GRADE
PROPOSED GRADE
5.5
12
B
G
J
K
POOL BALE' BEYOND
9

NORTH


TOP OF RIDGE
BOTTOM OF FRAMING
MAIN LEVEL
GRADE AT ENTRY
11' - 3"
19' - 2"
7' - 11"
2' - 0"
5.5
12
9
K
G
J
L
C
POOL BALE' BEYOND
MAIN LEVEL
9' - 8"
BASEMENT
GARAGE DOOR
EXISTING GRADE
RAILING
MAIN ENTRY
RETAINING WALL

MAIN EAST

MATERIAL SCHEDULE

A	PAINTED SMOOTH SHEETROCK
B	WOOD VENEER
C	WOOD T&G
D	STONE
E	TILE
F	EXTERIOACCENT WALL TBD
G	GLASS
H	MIRROR
J	EXTERIOR FINISH: DRYVIT
K	CEDAR SHAKES
L	S.STEEL CABLE RAILING

Exhibit "C-5"

EXTERIOR ELEVATIONS
3/16" = 1'-0"

PRINT DATE:
3/31/2025 11:55:08 AM

ERIC M. EINSTEIN
No. 20438

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-26

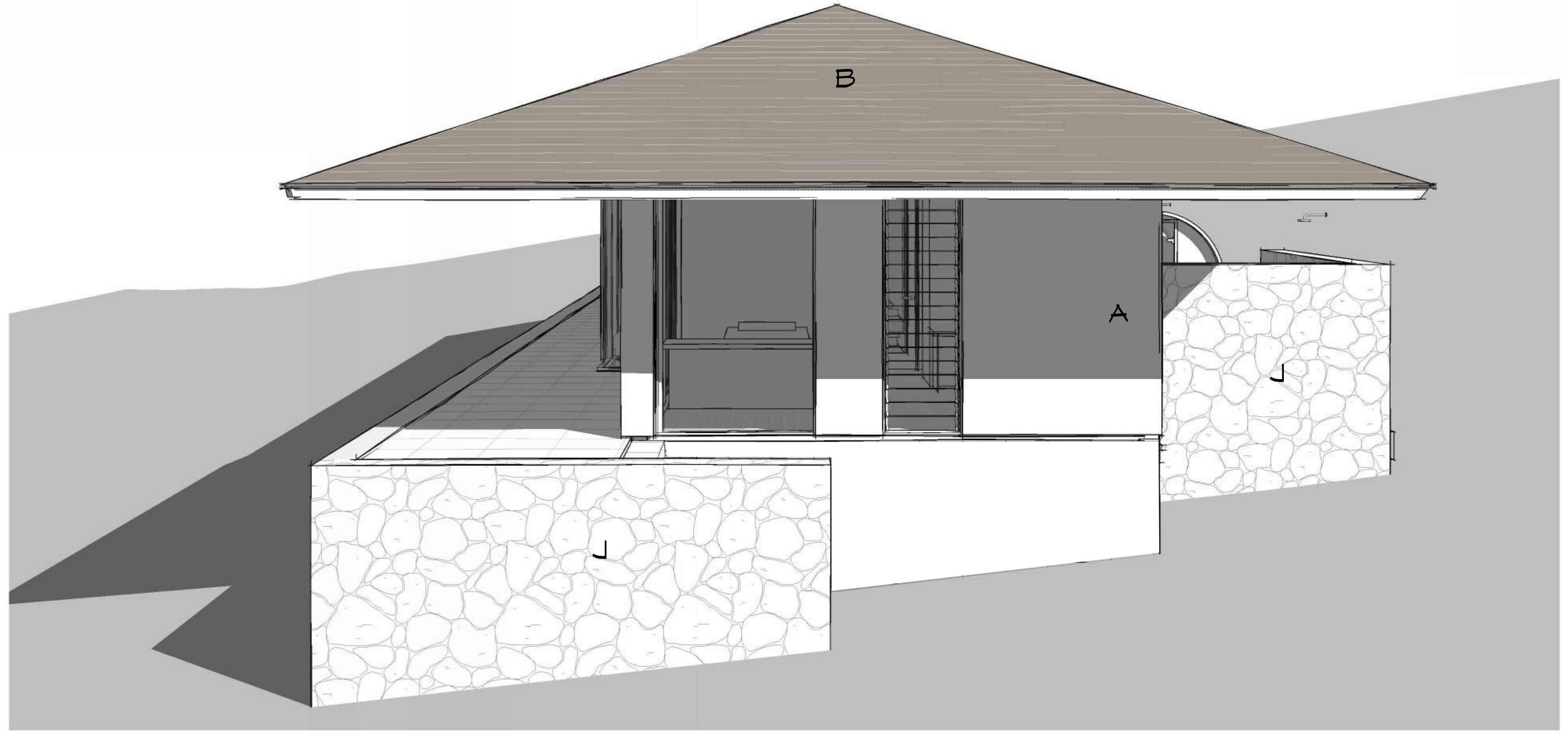
DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

NEAL & HAZEN RESIDENCE
TMK # (4) 5-2-04-88:0015
Exhibit "C-5"

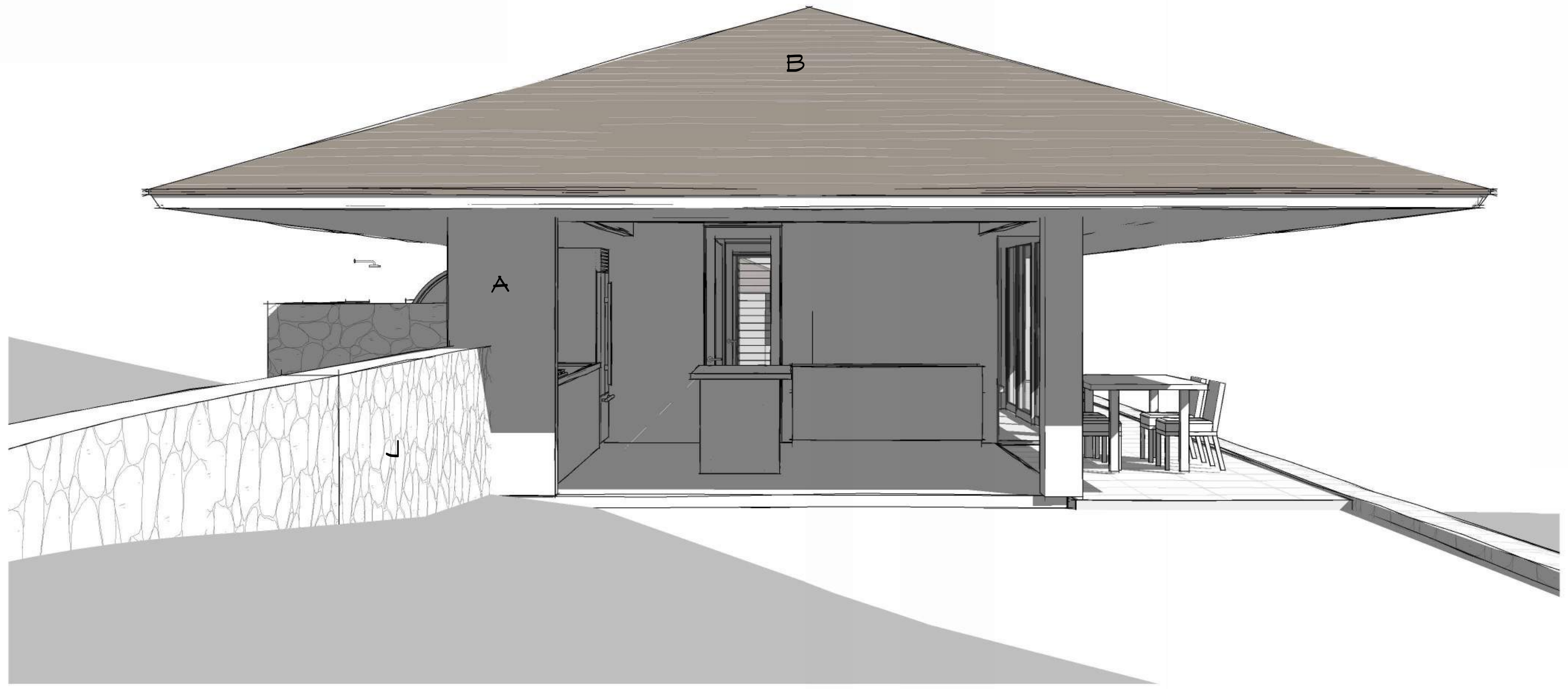
SHEET:
A-203

MATERIAL SCHEDULE

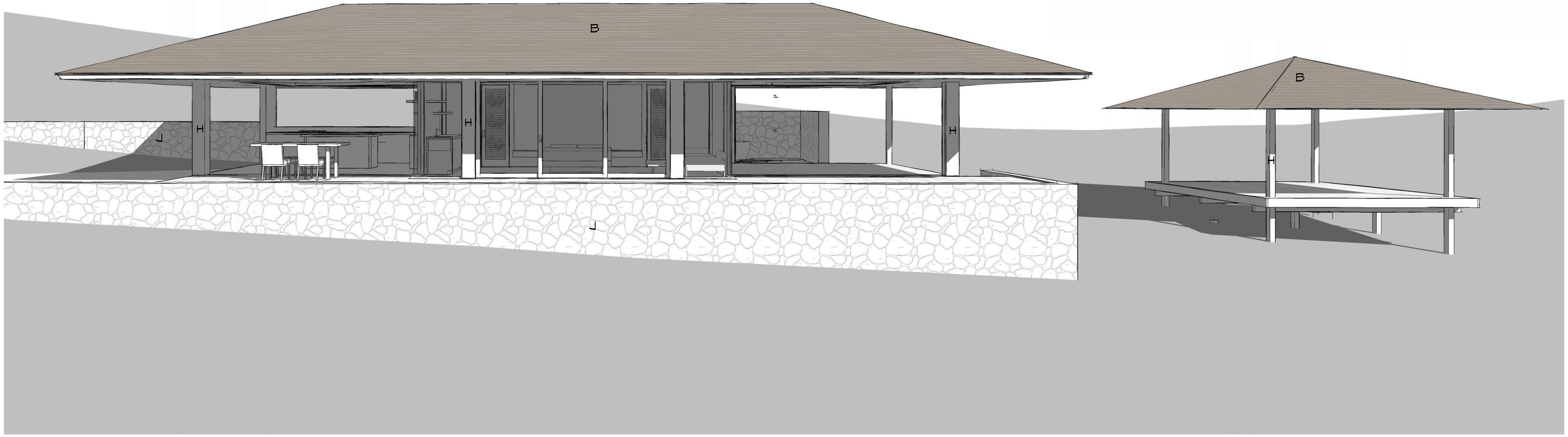
MATERIAL	DESCRIPTION
A	DRYVIT PLASTER - COLOR TBD
B	ROOF - CEDAR SHAKE
C	FLEETWOOD SLIDING DOOR - NON REFLECTIVE GLASS
D	GUTTER - SEMI CIRCULAR PROFILE - ANTUQIE BRONZE COLOR TO MATCH WINDOW
E	STAINLESS STEEL CABLE RAILING SYSTEM
F	COPPER CRICKET
G	BREEZEWAY JALOUSIE WINDOW - ANTIQUE BRONZE FRAME COLOR
H	TIMBER COLUMN
J	POOKA LAVA RETAINING WALL
K	WINDOW - ANTIQUE BRONZE FRAME (MATCH FLEETWOOD DOOR FRAME COLOR)
L	CEDAR CLAD GARAGE DOOR
M	T 1-11 BOARD AND BATTEN SIDING
N	BARN DOOR



GH WEST



GH EAST



GH SOUTH

Exhibit "C-6"

PERSPECTIVE ELEVATIONS

PRINT DATE:
1/7/2025 8:53:16 AM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXPIRES 8-30-24

ERIC M. EINSTEIN
No. 20438

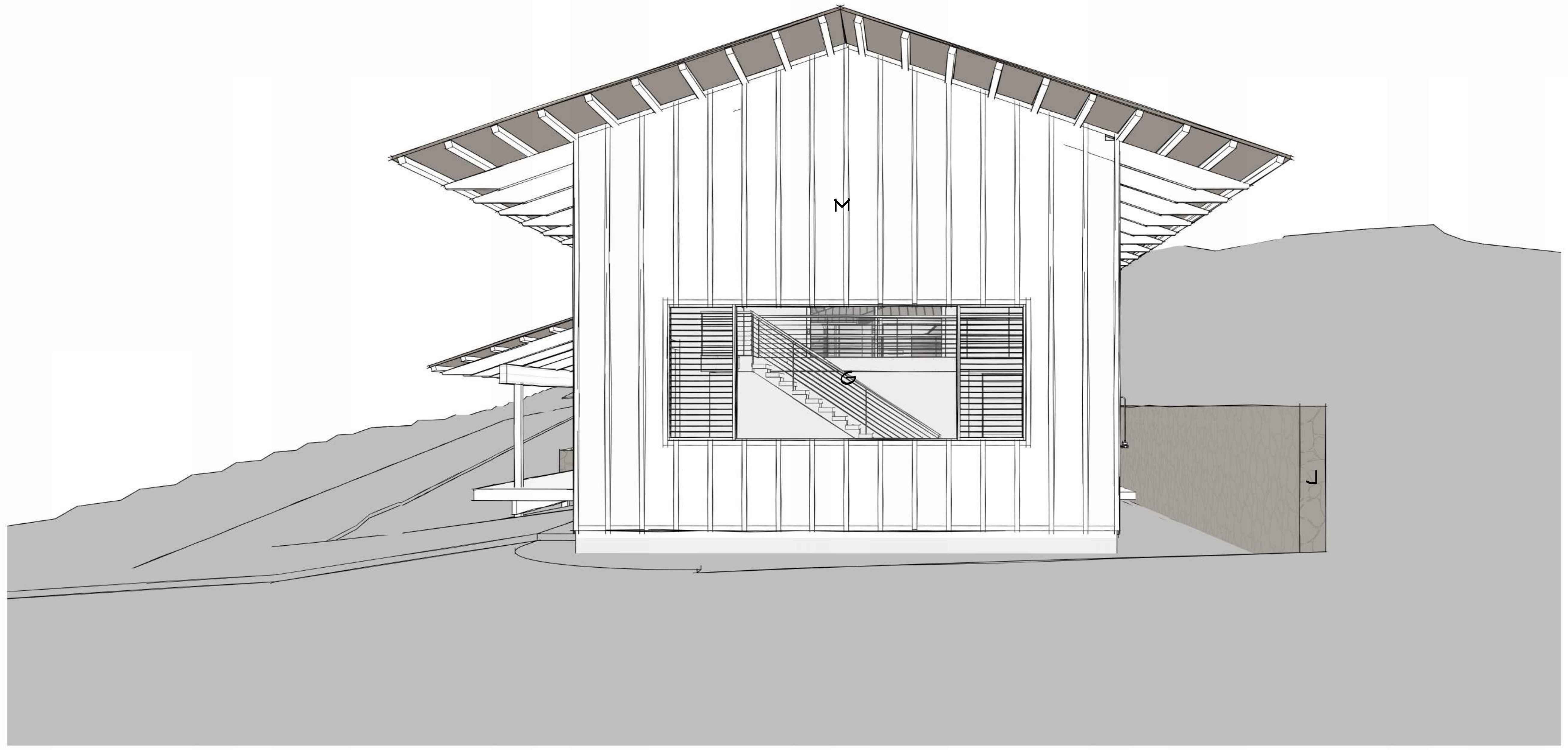
DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

NEAL & HAZEN GUEST HOUSE

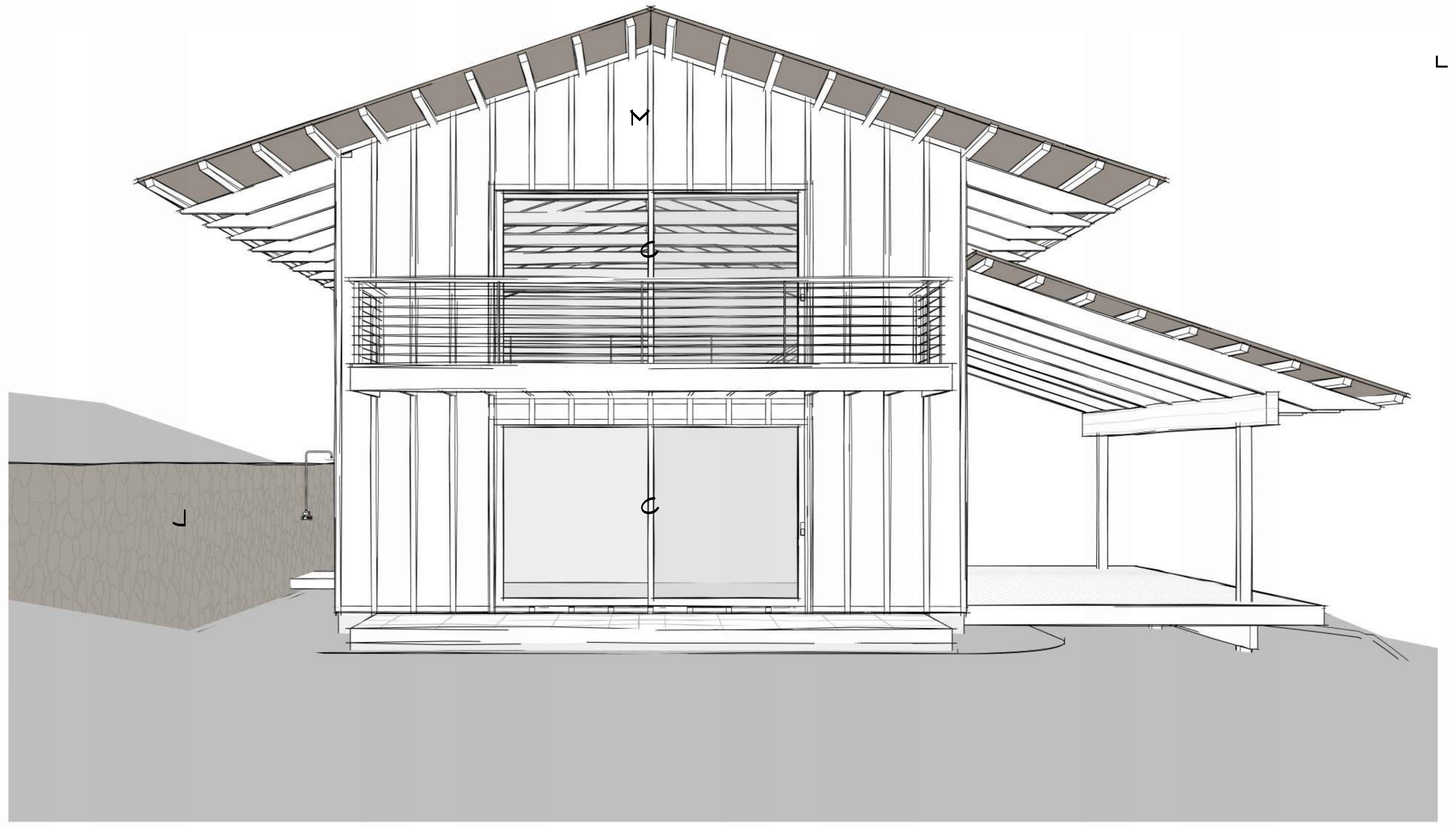
TMK # (4) 5-2-04-88:0015

Exhibit "C-6"

SHEET:
A7



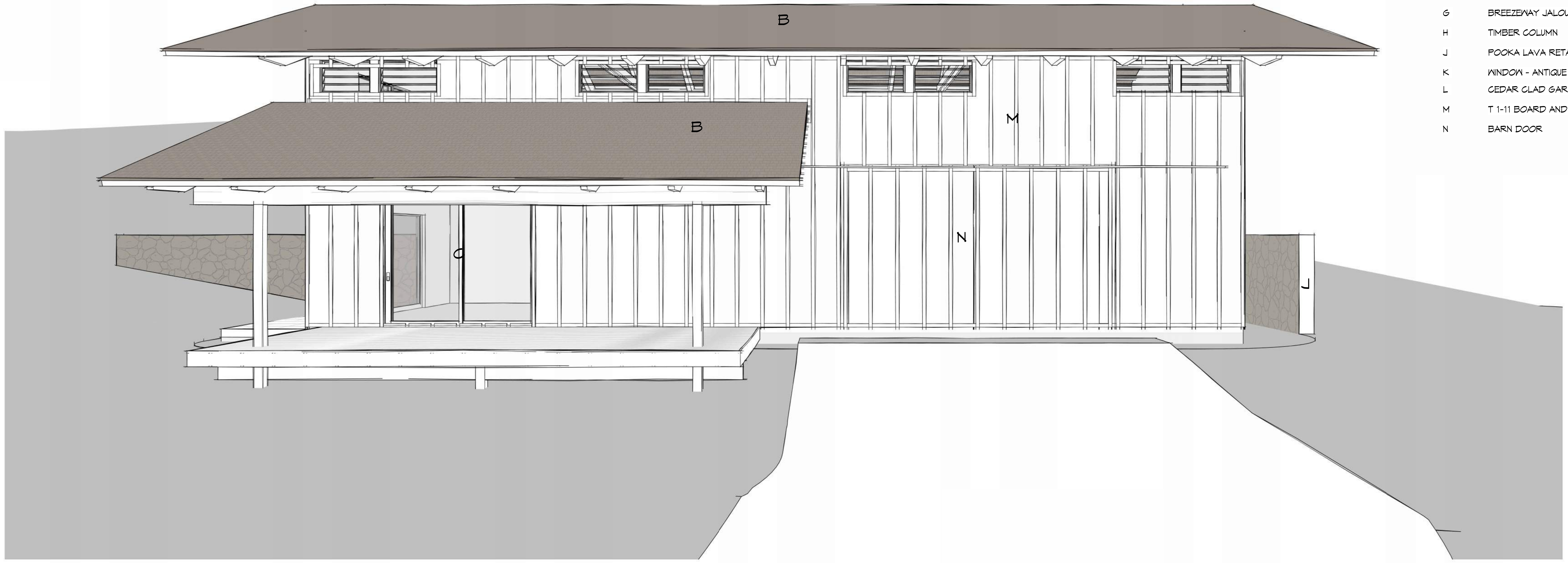
EAST



WEST

MATERIAL SCHEDULE

MATERIAL	DESCRIPTION
A	DRYVIT PLASTER - COLOR TBD
B	ROOF - CEDAR SHAKE
C	FLEETWOOD SLIDING DOOR - NON REFLECTIVE GLASS
D	GUTTER - SEMI CIRCULAR PROFILE - ANTUQIE BRONZE COLOR TO MATCH WINDOW
E	STAINLESS STEEL CABLE RAILING SYSTEM
F	COPPER CRICKET
G	BREEZEWAY JALOUSIE WINDOW - ANTIQUE BRONZE FRAME COLOR
H	TIMBER COLUMN
J	POOKA LAVA RETAINING WALL
K	WINDOW - ANTIQUE BRONZE FRAME (MATCH FLEETWOOD DOOR FRAME COLOR)
L	CEDAR CLAD GARAGE DOOR
M	T 1-11 BOARD AND BATTEN SIDING
N	BARN DOOR



SOUTH

Exhibit "C-7"

BARN PERSPECTIVE ELEVATIONS

PRINT DATE:
1/7/2025 9:00:50 AM

No. 20438
LICENSED PROFESSIONAL ARCHITECT

DESIGN CONCEPTS 2484 KENEKE ST. SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM

NEAL & HAZEN AG. BUILDING
TMK # (4) 5-2-04-88:0015

Exhibit "C-7"

SHEET:
A11

Ka Pa‘akai Analysis

Native Hawaiian Traditions, Customary Practices and Perspectives of
Kilauea Ahupua`a Moku o Ko’olau,
Kaua`i Island
for
TMK (4) 5-2-004: 088

Prepared for

Caroline Neal and Chase Hazen

Prepared by
Exploration Associates Ltd.

September 2019

Updated

February 2025

Exhibit "D"

Table of Contents

Introduction 2

Methodology 2

Scope of Work 3

Environmental Setting 3

Cultural Overview 9

Wahi Pana 11

Mo`olelo: Storied Origins & Traditional Places 13

Ancient Chants that Extol the Land & Environment as Relations 15

Hawaiian Religious & Cultural Practices, Gathering Rights in the Kilauea Ahupua`a 17

Ahupua`a Place Names, Descriptions, etc. 19

A Connection and Understanding of Place 19

Traditional Wisdom & Knowledge 20

Kilauea Place Names 20

Land Commission Award Claims Kilauea Ahupua`a and Associated Knowledge 20

The History of Kilauea Plantation 24

Consultation Methodology & Results 28

Selection of Interview Subjects 29

Ethnographic-Oral History Methodology 29

Historical & Archival Research 29

Cultural Resources & Practices Identified 30

Analysis of Impacts 30

Closing 31

References 34

Introduction

At the request of Caroline Neal and Chase Hazen, Exploration Associates (EAL) conducted a Ka Pa'akai analysis of a 5.11-acre parcel (TMK (4) 5-2-004: 088 (Lot 15) which is in the Kilauea Ahupua`a, Ko`olau District on Kaua`i Island (Figures 1 - 4). Hereinafter referred to as "*project area and/or the subject property*". The subject property is located the Seacliffs Plantation development on makai side of Road in Kilauea, Island of Kaua`i, Hawai`i.

Caroline Neal and Chase Hazen are planning to develop a new single-family residence (3 bedrooms) plus garage (4860 sq.ft.), pool, guest house, pavillion and barn on Lot 15. The County Planning Department now requires all land use permits address the proposed project's effects on traditional Hawaiian practices, customs and beliefs. This Ka Pa`akai analysis provides information pertinent to the evaluation of the proposed project's cultural impacts.

Methodology

Methodologies guided by indigenous Hawaiian cultural perspectives and intellect were used to conduct this study. It is always imperative that traditional values of *aloha* and *hō`ihi* (sincerity, love and respect) are ever present in the actions of the research and investigative team that engages with the natural environments, resources, people and communities from which/whom information will be gathered for this work. Special focus and attention is given to the examination of the land, water and atmospheric features that are applicable to the study project area and all lands and environments associated with it.

At the onset of this project, EAL entered this work with much enthusiasm and confidence of already "knowing" this place. Even with a limited window of time to conform to, EAL knew that only a little had been documented to bring forth the values and depth of traditional Hawaiian knowledge and customary practices of Kilauea's ancient past. Information and personal experiences that EAL possessed provided an advantage to accomplish the task of completing this Ka Pa`akai analysis.

Much of the effort in conducting studies such as this is to review and evaluate the land allocated for the project area and any possible adverse influences and consequences relating to indigenous Hawaiian beliefs and practices. Over the years, much has changed as the population has grown and the number of homes developed in Kilauea has quadrupled. Kilauea is still a town community descended from a rich and vibrant Native Hawaiian culture and ancestors who knew this land these islands so intimately. The relationships they held with the natural world as divine and godly, influenced levels of consciousness that dictated every aspect of native Hawaiian life ways and cultural practices.

Scope of Work

(1) The identity and scope of valued cultural, historical, or natural resources that are found within the proposed project area and relevant areas within the ahupua'a of Kilauea, including the extent to which traditional and customary Native Hawaiian rights are exercised.

(2) The extent to which those resources – including traditional and customary Native Hawaiian rights – will be affected or impaired by the proposed action.

(3) The feasible action, if any, to be taken by the agency to reasonablyprotect Native Hawaiian rights if they are found to exist. (Ka Paʻakai, 94 Haw. at 19, 7 P.3d at 1084.)

Environmental Setting

Kauaʻi is the oldest of the Hawaiian Islands. Geologically, the original volcano, located in the middle of the island went through a period of weathering and erosion. There were voluminous rejuvenated stage lavas which represent the later eruptive stages of the volcano. The primary basaltic rocks from the original volcano are the Waimea Canyon series. The innumerable lava flows are divided into three major geologic formations: the Napali formation, the Olokele formation, and the Makaweli formation. The Napali formation of the Waimea Canyon series is the most permeable of the three.

Subsequent to the original flows, the Kōloa volcanic series covered most of the eastern part of the island. The Kōloa series are less permeable than the Napali formation lavas. The Kōloa series of flows were deposited in relatively flat layers compared to the Napali flows. The Olokele and Makaweli formations are also relatively flat but more permeable than the Kōloa series.

The Project area includes mostly relatively flat tableland at about 300 ft. elevation (varying from about 308 ft. to 281 ft. Most of the Project area, however, is Lihue Silty Clay (LhD) with Lihue Gravelly Silty Clay (LIB) in the southwest corner. Soils of the Lihue Series are described as "well-drained soils on uplands ... developed in material weathered from basic igneous rock" (Foote et al. 1972). These are well drained soils on the uplands of Kauaʻi. Līhuʻe silty clay, 0 to 8 percent slopes (LhB) and Līhuʻe gravelly silty clay, 0 to 8 percent slopes (LIB) are the specific soil types withinthe project site.

Līhuʻe silty clay, 0 to 8 percent slopes is generally located on the tops of interfluves in the uplands. In a representative profile, the surface layer is dusky-red silty clay about 12 inches thick. The subsoil, more than 48 inches thick, is dark-red and dark reddish-brown, compact silty clay that has a subangular blocky structure. The substratum is soft, weathered rock. The surface layer is strongly acid. The subsoil is slightly acid to neutral. Permeability is moderately rapid; runoff is slow and erosion hazard is no more than slight.

Līhuʻe gravelly silty clay, 0 to 8 percent slopes is similar to the Līhuʻe silty clay, 0 to 8 percent slopes soil series, except that it contains ironstone-gibbsite pebbles and has brighter colors in the subsoil horizon.

The dominant grass in open areas on the property is Guinea grass (*Urochloa maxima*), with some areas having an abundance of California or para grass (*U. mutica*).

The Project area is indicated to receive approximately 1500-1800 mm (60-70 in.) of annual rainfall, with increased rainfall at higher elevations (Giambelluca et al. 1986). The climate in Kīlauea is characterized as semi-tropical and is influenced by Hawaiʻi's geographic location, southwest of the Pacific High or anticyclone region. The outstanding features of the climate are the equable temperatures from day to day and season to season, the persistent northeasterly trade winds and the marked variation in rainfall from the wet to the dry season, and from place to place.

The 10-year average rainfall (between 1999 and 2008) at the site is approximately 62 inches per year. The wettest month during the 10-year period was March with an average of 8.66 inches of rainfall. September was the driest month averaging 3.51 inches of rainfall during the 10-year period. The highest monthly rainfall total was March 2006 at 36.44 inches. The lowest monthly total was May 2000 at 0.71 inch.

The 10-year annual average air temperature at the site is 74.2 degrees Fahrenheit (F). Prevailing wind direction is east-northeast with average wind speed of 10 to 20 miles per hour (Oda/Development Strategies LLC, 2010).

Most of the project area is comprised of former sugarcane land previously cultivated by Kīlauea Sugar Company from 1880 to 1971. Since the closure of Kīlauea Sugar Company, the land has remained undeveloped. The surrounding area is primarily rural, dominated by agricultural and large house lot development of the Seacliff Plantation.

The parcel and project area sits within the Kilauea Ahupuaʻa, which is in the traditional district of Koʻolau and the judicial district of Kawaihau. The project area is located on the northeastern side of the island, more than half of which is covered by lava from the Koloa Series that is circa 1.5 million years old (Macdonald et al. 1970: 451-461). Kilauea ahupua\`a, consisting of 3016 acres, originated in the mountains, at the ridge that separates the modern tax districts of Hanalei and Kawaihau, and extended into the ocean at Kilauea Bay. Along the shoreline includes Kilauea Bay and Mokolea Point with a narrow but continuous coral reef. Mokolea Peninsula, at the opening of the Kilauea Stream, had originally been part of the ahupua\`a of Kahili. The ahupua\`a extends mauka across undulating terrain of ridges and short, irregular valleys, to the ridge at an elevation of around 2,000 ft. above sea level. In mid-section are level tablelands and slopes that would have been suitable for kula agriculture and small, wet gulches and ravines appropriate for other cultivation. Kilauea Stream extends from the mountain zone, though, tablelands, into the lower valley terrain of small waterfalls and broader alluvial flatlands. The Kilauea Stream becomes part of the boundary between the ahupua\`a of Kahili to the east and Kilauea in its lower regions. The major fresh waterway in the area, Kilauea Stream, is not entirely included within an ahupua\`a.

The ahupua\`a, although it has a typical "pie-slice" shape, encompasses a width of land from stream to ridge, rather than the more common pattern of ridge to ridge. The water sources and the associated watered lands of the two tributary streams were probably more important as traditional subsistence resources than Kilauea Stream itself. This is certainly bore out in the location of the Land Commission Awards (LCAS) which cluster along the lower reaches of these tributaries in the ahupua\`a of Kahili. There are no LCA for Kilauea.

The generalization and clustering of traditional places to common districts (i.e. Anahola, Kapa\`a, Līhu\`e, etc.) has become acceptable, widespread practice in the western framework of identifying and relating to places on Kaua\`i. Therein lays an example of how easily a traditional Hawaiian land area or division can be incorrectly identified, misunderstood and misinterpreted as a significant place of its own.

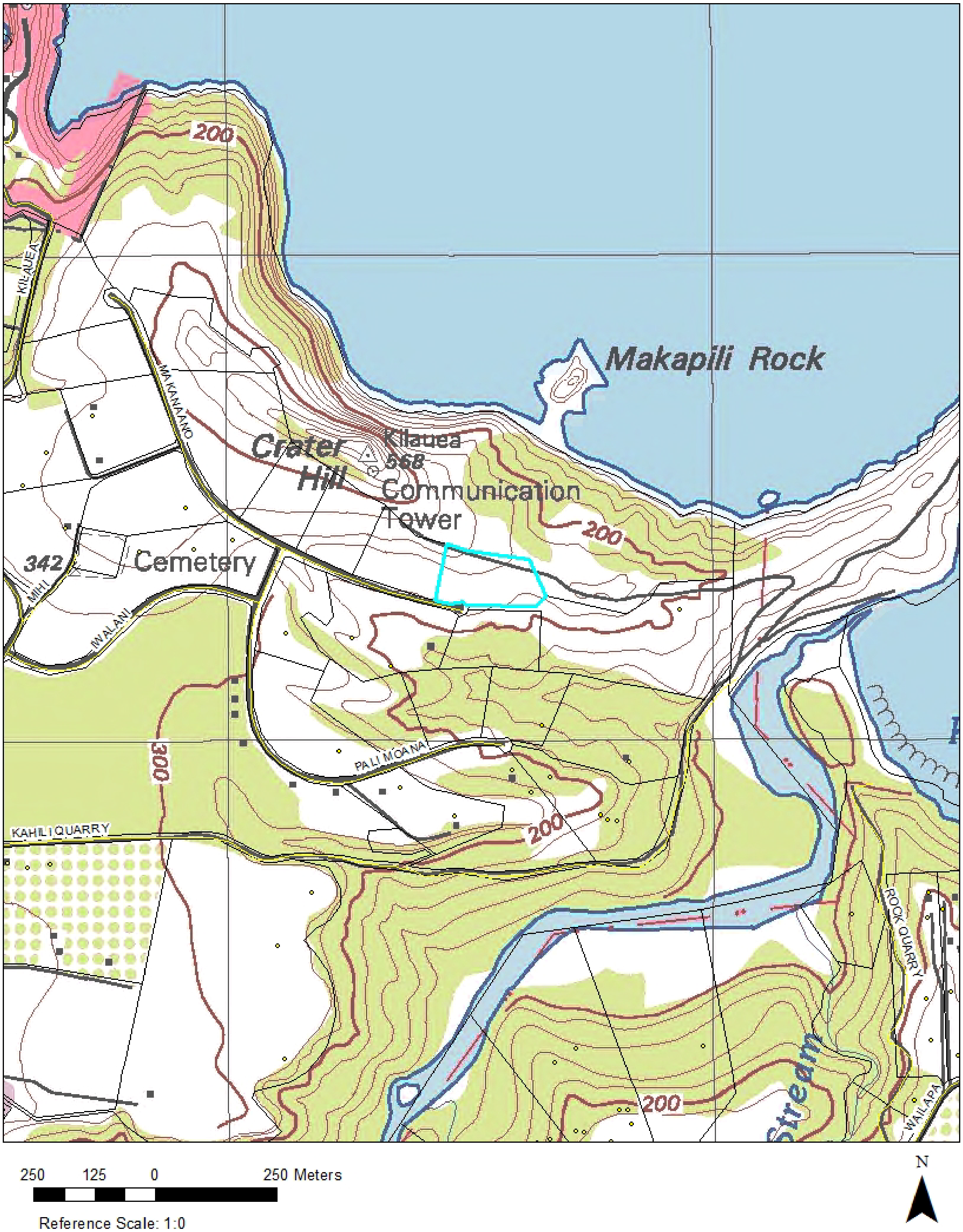

Makapili Rock
200
Crater Hill
Kilauea
568
Communication Tower
Cemetery
342
KILAUEA
MAKANAANO
MIHI
IWALANI
PALI MOANA
KAHILI QUARRY
300
ROCK QUARRY
WAILAPA
Stream
250 125 0 250 Meters
Reference Scale: 1:0
N

Figure 1. USGS Map of the Project Area Highlighted in Blue.

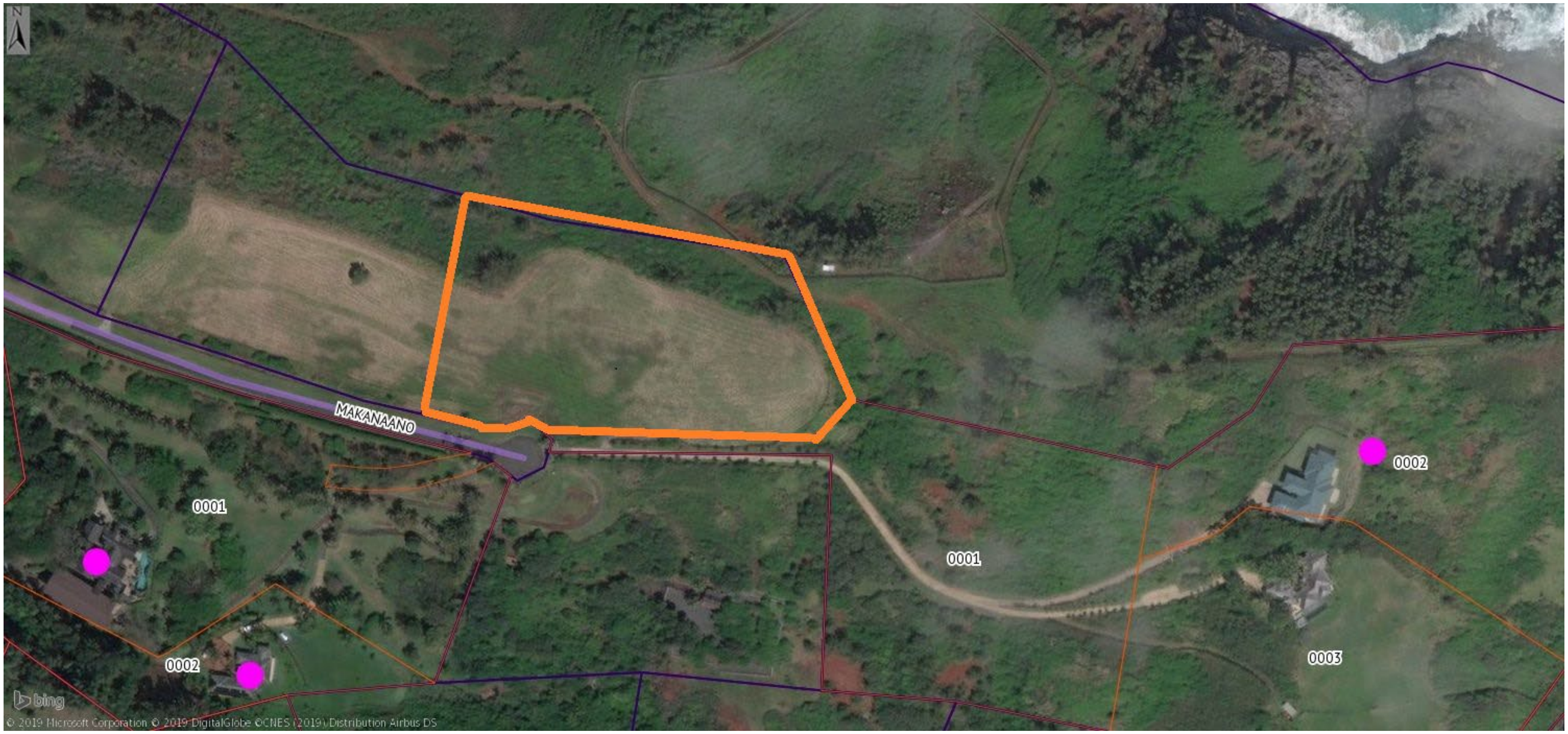

N
MAKANAANO
0001
0002
0001
0002
0003
bing
© 2019 Microsoft Corporation © 2019 DigitalGlobe ©CNES (2019) Distribution Airbus DS

Figure 2. Aerial image indicating location of project area.

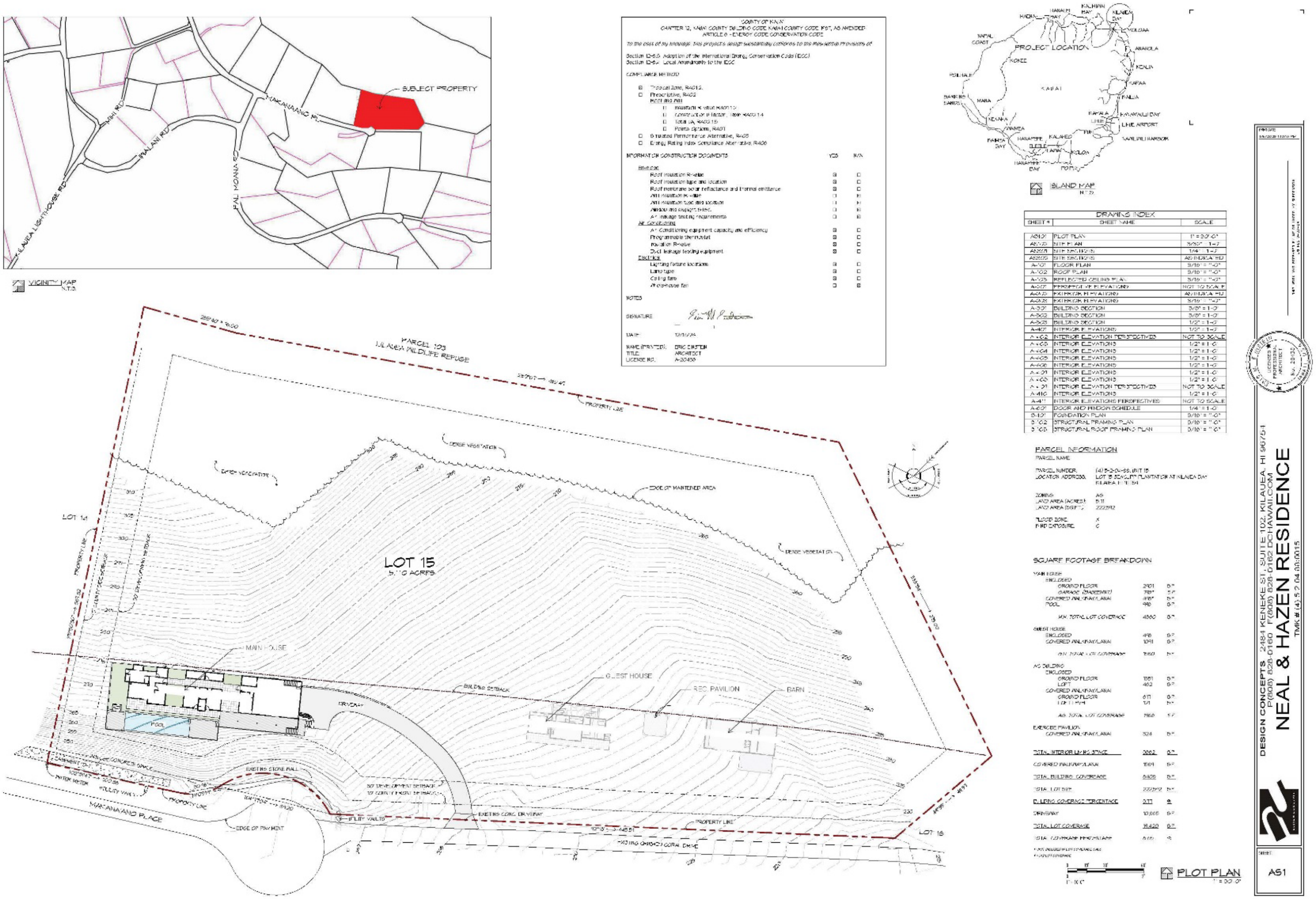

SUBJECT PROPERTY
VICINITY MAP
N.T.S.
KILAUEA LIGHTHOUSE RD
KAI MOANA RD
COUNTY OF KAUAI
CHAPTER 12, KAUAI COUNTY BUILDING CODE KAUAI COUNTY CODE 1987, AS AMENDED
ARTICLE 6 - ENERGY CODE CONSERVATION CODE
COMPLIANCE METHOD
INFORMATION CONSTRUCTION DOCUMENTS
YES
N/A
NOTES
SIGNATURE
DATE
NAME (PRINTED): ERIC EINSTEIN
TITLE: ARCHITECT
LICENSE NO. A-20450
PROJECT LOCATION
KAUAI
ISLAND MAP
N.T.S.
DRAWING INDEX
SHEET #
SHEET NAME
SCALE
PLOT PLAN
SITE PLAN
SITE SECTIONS
FLOOR PLAN
ROOF PLAN
REFLECTED CEILING PLAN
PERSPECTIVE ELEVATIONS
EXTERIOR ELEVATIONS
BUILDING SECTION
INTERIOR ELEVATIONS
INTERIOR ELEVATION PERSPECTIVES
DOOR AND WINDOW SCHEDULE
FOUNDATION PLAN
STRUCTURAL FRAMING PLAN
STRUCTURAL ROOF FRAMING PLAN
PARCEL INFORMATION
PARCEL NAME
PARCEL NUMBER
LOCATION ADDRESS
ZONING
LAND AREA (ACRES)
LAND AREA (SQ.FT.)
FLOOD ZONE
WIND EXPOSURE
SQUARE FOOTAGE BREAKDOWN
MAIN HOUSE
GUEST HOUSE
AG BUILDING
EXERCISE PAVILION
TOTAL INTERIOR LIVING SPACE
COVERED WALKWAY/LANAI
TOTAL BUILDING COVERAGE
TOTAL LOT SIZE
BUILDING COVERAGE PERCENTAGE
DRIVEWAY
TOTAL LOT COVERAGE
PARCEL 103
KILAUEA WILDLIFE REFUGE
PROPERTY LINE
DENSE VEGETATION
EDGE OF MAINTAINED AREA
LOT 14
LOT 15
LOT 16
MAIN HOUSE
POOL
BUILDING SETBACK
DRIVEWAY
GUEST HOUSE
REC. PAVILION
BARN
EXISTING STONE WALL
UTILITY VAULT
WATER METER
EDGE OF PAVEMENT
MAKANA'ANO PLACE
PLOT PLAN
DESIGN CONCEPTS 2484 KENEKE ST, SUITE 102, KILAUEA, HI 96754
P(808) 828-0160 F(808) 828-0162 DCHAWAII.COM
NEAL & HAZEN RESIDENCE
SHEET
AS1

Figure 3. TMK Highlighted parcel and plot plan.

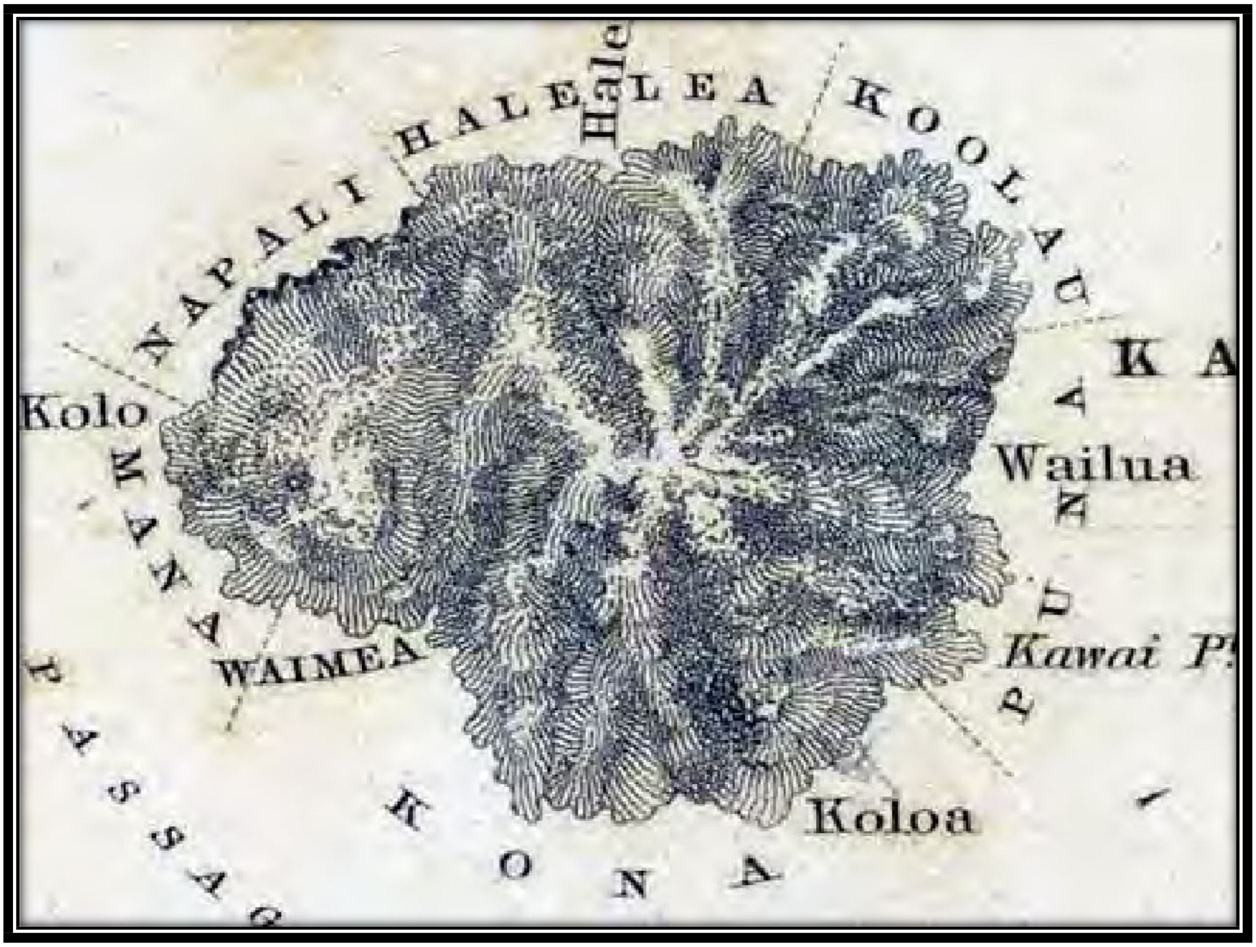


Figure 4. 1845 Map of Kaua`i by Charles Wilkes for U.S. Mapping Expedition. Note that it shows 6 moku or districts including Ko`olau, Halele`a, Nā Pali, Kona and Mānā. Typically, Kaua`i is dividied into 5 moku. Mānā is usually considered as part of the Kona moku.

Geologically, Kaua`i is the oldest of the main inhabited islands in the chain. It is also the northwestern-most island, with O`ahu as its closest volcanic sibling separated by the tempestuous Ka`ie`ie Channel which is more than 72 miles long. In centuries past, Kaua`i's isolation from the other islands kept it safe from outside invasion and unwarranted conflict.

Cultural Overview

Poetically the island is called, "*Manōkalanipō*", or "*Kaua`i a Manō*" after the ancient chief who was largely responsible for elevating Kaua`i's ancient society to sophisticated heights of advancement and productivity. For centuries, from the time of Manōkalanipō's reign, through Kamehameha's unsuccessful attempts to invade Kaua`i in 1796 and 1804, Kaua`i remained free from warfare.

In 1810, Kaumuali`i accepted Kamehameha as the supreme ali`i by peacefully ceding Kaua`i to the newly United Kingdom of Hawai`i. With honor, Kaumuali`i was encouraged to return to rule on Kaua`i as its tributary chief under Kamehameha I.

In accordance with the ancient land division system, an entire island is referred to as a *mokupuni*. While the word, moku by itself can also mean island, it is a term that is more specifically used to identify a district. Puni means, *controlled, surrounded, to gain control of*. It comes from the word, *aupuni* which is used to describe a government, kingdom, dominion, nation, or population that is governed or under the leadership of a ruler. In ancient times, a mokupuni could include an entire island as well as multiple islands that was ruled by an Ali`i Nui or paramount chief. Historically, the mokupuni of Kaua`i has included the islands of Ni`ihau as well as Lehua.

Kaua`i Island has traditionally been divided into 5 moku including: Ko`olau, Halele`a, Nā Pali, Kona and Puna. The ali`i nui appointed *ali`i `ai moku* or district chiefs to manage the various moku.

Common district names that are universally used across of the Hawaiian archipelago include "Ko`olau" marking the windward sides of the islands; "Kona" - the leeward sides of the islands; and "Puna" - indicating regions where springs and fresh water abound.

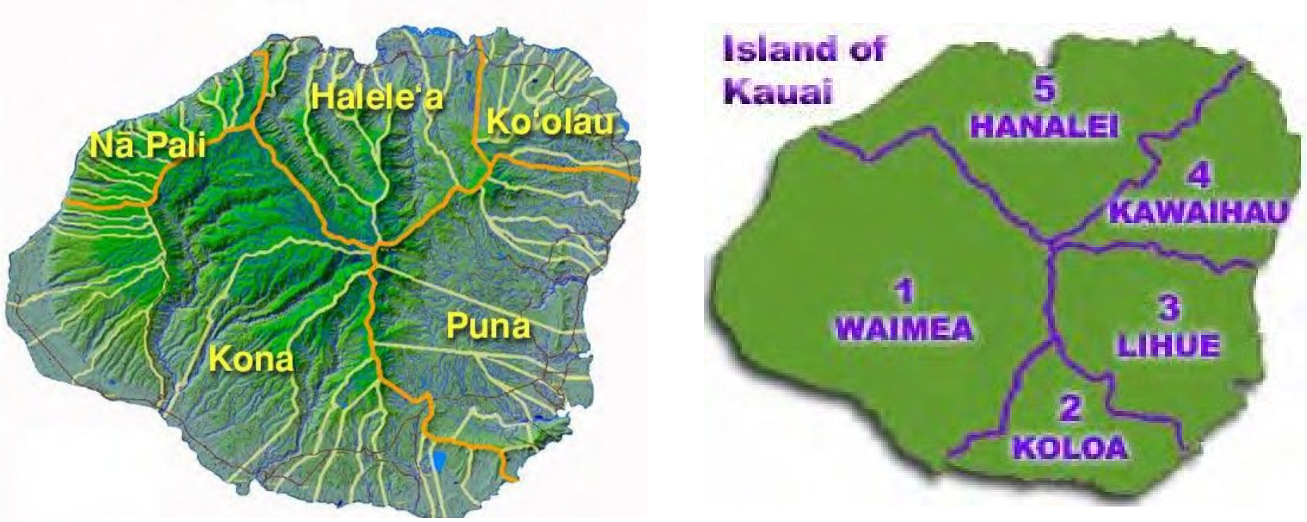


Figure 5 & 6 show Kaua`i Island Districts and Boundaries. Fig 4 on the left show the original moku of Ko`olau, Halele`a, Nā Pali, Kona and Puna. Fig 6 on the right show the revised boundaries and judicial land districts of Kawaihau, Hanalei, Waimea, Kōloa and Līhu`e.

The boundaries of the five moku on Kaua`i were changed in the late 1800s to reflect the present-day judicial land districts. The Project Area is in the Ko`olau district upon land within the Kilauea ahupua`a.

Traditionally, the districts were further divided into smaller land divisions known as, *ahupua`a* which included the abundance of land and resources from the mountain to the sea. Under the direction of the ali`i `ai moku, the *ali`i `ai ahupua`a* or land division chief was put in charge of governing the ahupua`a. The ali`i `ai ahupua`a appointed *konohiki* who served as the headman of the ahupua`a land division, and was solely responsible for the management of land, water and fishing rights. An ingenious concept, the ancient design of the ahupua`a system continues to be an excellent model for sustainability and land and natural resource management today. The common description that ahupua`a are "pie-shaped" is inaccurate. However, it is a general practice to apply triangulation of the 3-main boundary points of the ahupua`a when identifying its respective division lines. Additionally, ahupua`a do not terminate at the ocean ward boundary points. The boundary lines are purposely extended into the ocean so that it also includes the resources and minerals of the reef and ocean as well.

A major element of focus for this Ka Pa`akai analysis is based on the `āina or land that is the project area, as well as surrounding lands and natural resources that are linked to the project area. It is important to readers of this Ka Pa`akai analysis to have a basic understanding of the ancient land division system and the various words, terms and idioms associated with Hawaiian land designation and Hawaiian land use. This is especially helpful in identifying and relating to specific locations and place names that are pertinent to this study.

Wahi Pana

Wahi pana are celebrated and storied places that illuminate generations of reciprocal connection and relationships between indigenous Hawaiians and the land and seascapes and natural resources that supported their existence. For well over two thousand years, native Hawaiians have held intimate bonds with their islands and special places upon them. Wahi pana continue to be integral, living components of a Hawaiian world view today.

Literally, the word "*wahi*" simple means, "*place or location*". *Pana* is defined as "*celebrated and storied*". Another definition of the word, pana is, "*heartbeat or* *pulse*".

The latter, elevates and distinguishes a place as a wahi pana from any other ordinary location. Nature's forces, combined with the intangible spiritual energy source known to indigenous Hawaiians as mana are prevalent at many wahi pana throughout Hawai`i. Additionally, these wahi have specific stories, purpose and function that have influenced the lives of `ōiwi kānaka or Hawai`i's native people for myriad generations. Transmitted orally from generation to generation, their experiences have been preserved through mo`olelo (legends and stories), mele oli (chants), mele hula (dances) and `oihana Hawai`i (practices), maintaining memory and knowledge of places that should be honored and respected. Wahi pana are excellent teaching tools that continue to be extremely valuable today in its capacity to inform and demonstrate the cultural traditions, practices, values and beliefs of Hawai`i's ancestors and people.

Wahi pana vary. They include but are not limited to sacred sites such as heiau, and ancient burial caves and burial grounds. Alluvial valley floors which were cleared for the construction of elaborate irrigated systems of lo`i terraces, as well as fishing grounds and surf sites in the ocean are wahi pana as well.
Mountain peaks, cliffs, valleys, rivers and streams too, have emerged over time as places of cultural importance.

All discernible features in every land division, district and island were given specific names that inspired life and meaning to these places as wahi pana. Every stream, spring, beach, fishing hole, reef, promontory, winds and rains, etc. all have names. These elements of nature provided the foundation for the creative and productive industries of the ancient Hawaiians.

The perpetuation of cultural practices and experiences held in close attachment to wahi pana and the reoccurring elemental phenomena specific to places illustrate the unique relationships of stewardship and kinship by native Hawaiians and the natural environment.

As successive generations of Hawaiians empowered these islands and their sacred and storied places with their prayers, ceremonies and labor, they left their indelible and enduring mark on the landscape; both seen and unseen. Tangible and indefinable sources of mana or spiritual power and energy unique to different places are also a result of generations of relationships that were nurtured between mankind and these special wahi or storied places. These are the multi-faceted qualities that have elevated wahi pana to the realms of Hawaiian consciousness. The land, the sea, the atmosphere and all the natural resources and phenomena that were held within each of its boundaries were considered as akua, divine and sacred. All of it was godly. The proverb below, explains the concept that Hawaiians value of the reciprocal relationships of land, environment and man.

E mālama pono i ka ʻāina; nānā mai ke ola.
Take good care of the land; it grants you life.

Mo`olelo: Storied Origins & Traditional Places

Mo`o Ōlelo is the succession of talk; or the continuation and perpetuation of oral histories and traditions that were passed on in story and chant forms. It is from this that the word mo`olelo is derived - stories, tales, myths, legends and chronicles; records of information that was storied in the memories of Hawai`i's ancient people. Another term that is used is kā`ao - oral traditions and myths that represent the cultural truths, wisdom and experiences of kūpuna.

Throughout the Ka Paakai analysis, examples of traditional Hawaiian mo`olelo are presented to link the reader with traditional places, beliefs and practices associated with the ancestral worldview of Hawai`i's indigenous Hawaiian people. Mo`olelo and kā`ao are not viewed as fanciful fairy tales or fictional stories woven to entertain. Laden with skillful use of metaphors and poetic expressions, they are invaluable sources of information that have preserved a sense of consciousness and inner connection of the *kānaka `ōiwi* with his multidimensional world.

It is estimated that the Hawaiian island chain was first settled upon more than 2000 years ago by Polynesians who arrived from Nukuhiwa (also pronounced Nu`uhiwa) or the Marquesas Islands. Early migration chants and oral traditions provide insight to the discovery and settling upon these islands. One story tells of a man named Hawai`iloa who is credited with first discovering Hawai`i when he set out from a land called, "Ka `āina kai melemele a Kāne, (*The land of the yellow sea of Kāne)* on a long fishing expedition. He sails back to his homeland and returns with his wife and followers, including eight navigators. Because his wife is the only female on this return journey, it is said that all Hawaiians are descended from him. The largest island in the chain - Hawai`i, is named in his honor, while the additional islands of Kaua`i, Maui and O`ahu are named after his children.

From Hawai`iloa, the heritage of long, distant voyaging, non-instrument navigation and way finding is established using phenomenal skills of keen observation and comprehension of stars and constellations in the heavens. He is the primal ancestor of the Hawaiian people who also introduces the astronomical wisdom of the atmosphere and its phenomena, including the weather and climate. He is also an expert of the ancient sciences associated with the physical, geological and biological features of the oceans.

From the union of Papahānaumoku and Wākea - preeminent mākua or parents of the Hawaiian universe is born Hāloa...our very connection to kalo, the sacred staple that has fed and nourished the Hawaiian people since time immemorial.

The genealogical ko`ihonua of Hawai`i's ancestral Earth Mother and Sky Father bring forth the paradigm that bind generations of Native Hawaiian families to this storied progenitor. Through the traditions of Papa and Wākea, the energy of the Hawaiian family system that includes both nuclear and extended `ohana is born. From this legacy comes the skills and intelligence of the mahi`ai - the native planter that tends to Hāloa, the taro plant and elder brother that continues to sustain families today. Indigenous agriculture and cultivation practices are dependent on acquiring intimate knowledge of water cycles, moon phases and weather phenomena. There is a constant nurturing of familial relationships to land, environment and elements of the Hawaiian universe.

The epic saga of Pelehonuamea describe in detail, the journey of the fire clan aboard the mythical wa`a (canoe) named Honuaiākea. Their quest is to search for a new fire source and a home from which to generate sources of life. It too, is a story of genealogy and migration, establishing cyclical movements of life upon these lands. The sun is a fundamental and reoccurring theme of substance that is essential to physical, spiritual and intellectual wellbeing.

The chants of the mo`olelo of Pele and Hi`iaka provide detailed accounts that speak to the importance of relationships that the indigenous Hawaiian hold in high esteem with `ohana or familial relationships; not just with mankind, but with their environment as well as with that of the atmosphere and the elements. This is a profound expression of connection that taps into the inner sources of life and healing. Through this ancient oral tradition, we are provided with formulas and procedures of Hawaiian protocols and ceremonies that are still applicable for the native Hawaiian in the 21st century.

These are just a few examples of the incalculable volumes of "unwritten literature" - primal sources of Hawaiian chants and the impressive accounts within them chronicle centuries of Hawai`i's fascinating history and culture. Embedded in the narratives of these ancient traditions are valuable details that provide us with a deeper understanding and a closer look at the worldview, life ways and experiences of Hawai`i's people prior to the turbulent changes that unfolded in post-contact times.

The significance and merit of mo`o `ōlelo - what an ingenious tradition of transmitting wisdom, knowledge, history and more through the succession of the voice conveyed through the telling of stories and the perpetuation of the art form of chants and the oral traditions that inspire the essence of indigenous Hawaiian cultural practices and beliefs.

The legend of *Kauakahialiʻi*, an ancient chief, mentions a trail through Nihokū. In this story, Kauakahialiʻi observes fishermen near *Mokuʻ Liʻu* from a trail and calls upon a bird to save them from a shark attack. This suggests that trails in the Nihokū area were used for fishing and navigation.

Ancient Chants that Extol the Land & Environment as Relations

References and examples of chants from Hawai`i's ancient repository of oral and literary traditions have been included in this Ka Pa`akai analysis to elaborate upon the traditional beliefs and cultural practices of native Hawaiians. These practices continue to this day. Mele oli, mele pule, mele hula and mo`olelo provide authentic examples of this continuing practices. They also speak to the relationships held between *nā kānaka* - mankind, their environment and their gods.

The ancients viewed facets of nature such as the heavens and earth as a godly and divine pairing of male and female procreative energies. Wākea - the broad, wide expanse of the atmosphere is male. The moisture that gathers and collects in the clouds and sky produces rain, which is also a male force. The earth is female, and is known to Hawaiians as Papahānaumoku, or literally, *Papa that gives birth to islands.*

Adapted from Hawaiian Antiquities by David Malo (p.243) the mele ko`ihonua or genealogical chant on the following page speaks to the birthing of the Hawaiian Islands. Wākea - the male, is embodied in the expanse of the atmosphere and the heavens. Papahānaumoku - the female is Papa who gives birth (hānau) to islands. This ancient chant was revived into modern day cultural practice as a means of expressing native Hawaiians' familial relationship with the natural world and the `āina or land. Papa and Wākea - Sky Father and Earth Mother, along with their offspring, Ho`ohōkūlani are the divine characters and procreative forces that are also revered for the gift and traditions of the sacred kalo or taro plant. They are viewed and respected as ancestral progenitors of native Hawaiians.

`O Wākea noho ia Papahānaumoku

Hānau ʻo Hawaiʼi, he moku
Hānau ʻo Maui, he moku

Hoʼi hou ʻo Wākea noho ia Hoʼohōkūkalani

Hānau ʻo Molokaʼi, he moku
Hānau ʻo Lānaʼi, Ka ʼula, he moku

Līlī \`ōpū punalua ʻo Papa iā Hoʼohōkūlani
hoʼi hou ʻo Papa noho iā Wākea

Hānau ʻo Oʼahu, he moku
Hānau ʻo Kauaʼi, he moku
Hānau ʻo Niʼihau, he moku
He ʻula aʼo Kahoʼolawe!

Translation:

Wākea lived with Papa, begetter of islands

Begotten was Hawaiʼi, an island
Begotten was Maui, an island

Wakea made a new departure
And lived with Hoʼohōkūkalani

Begotten was Molokaʼi, an island
Begotten was Lānaʼi, an island

The womb of Papa became jealous at its partnership with Hoʼohōkūkalani
Papa returned and lived with Wākea

Begotten was Oʼahu, an island
Begotten was Kauaʼi, an island
Begotten was Niʼihau, an island
A red rock was Kahoʼolawe!

The significance and understanding of *mana* as physical, mental and spiritual nourishment is preeminent in the customs of old Hawai\`i. It is essential to the health and wellbeing of the family system and community.

Every fragment of Hawaiian history and culture was documented to memory and orally transmitted from one generation to the next via chants. The births of gods, mankind, celebrated chiefs and more were often the subjects of lengthy, detailed chants.

Amongst them were *mele mo`okū`auhau* or genealogy chants, which are still considered to be one of the most prized family possessions of the native Hawaiian people. Kūpuna or elders were careful to designate individuals in the following generations of their families to be groomed as stewards of the `ohana's genealogy. All knowledge was committed to memory, which included the names, unions and offspring in the family's ancestors. Mo`okū`auhau hold us accountable to our ancestors. It strengthens our cultural identity and inspires the mana of our being.

However, mo`okū`auhau were not limited to families of humans only. Literary accounts of mo`okū`auhau also included family lines of many other nature forms as well. This included, mountains, sharks, water sources and elements of the natural world.

Hawaiian Religious & Cultural Practices, Gathering Rights in the Kilauea Ahupua`a

Field investigations of the project area resulted in no evidence or findings of significant plants or natural resources that are associated with Hawaiian gathering rights for subsistence, cultural or religious practices. The project area has non-native vegetation.

Informant that were interviewed for this study indicated that access has been limited for Native Hawaiians. There has been the long history of large-scale commercial cultivation, roads, rail lines and clusters of homes that could easily have obliterated any cultural or religious sites that may have previously existed in the area.

Perhaps it is appropriate to study the origin of the Hawaiian language as it relates to place names. Because of the obeisance that these ancient people had for the awesome, primeval forces of nature, we are the beneficiaries of a fabulous collection of beautiful and imaginative names wherever we go in modern Hawaii. Through the modernization of these islands, some of the lore of this language escapes our grasp because the origins have faded into antiquity.

An exhaustive search of Hawaiian legends and myths in print produced four references to Kilauea or other places in the *ahupua`a*. Dole (1892) relates a somewhat vague account that at Kīlauea there were the remains of three, long, ancient, parallel irrigation ditches attributed by the Hawaiians to the claw marks of a *moʻo*. "The lizard had been ordered by [the famous ruling chief] Mano-ka-lani-pō to open Kīlauea's upper regions for agriculture" (Wichman 1998:102). In context the *moʻo* is associated with the "brave lizard" Ka-moʻo-koa after whom a ridge of the Makaleha Mountains is named.

Wichman (1998:102) relates an account, (that may have originated in a 1939 story contest - Juliette Ferreira's "Pele the Goddess of Fire" for the Martha W. Beckwith prize, Kamehameha School for Girls), that near the top of a volcanic cone open to the ocean:

> …once stood three huge stones that have since been moved, with great difficulty, to make room for sugarcane. These three stone sisters of great beauty, were a warning that Pele, the volcano goddess, was not to be trifled with….Pele [seeking to establish a home for herself and her Kauaʻi lover Lohiau] caused an eruption here, but it was soon extinguished when the sea goddess [Nā-maka-o-kahaʻi] broke down the walls of the crater, drowning the fire with the ocean. The laughter of the three beautiful sisters enraged Pele. They had seen Pele defeated and shamed. Their scorn was not to be endured. "What are your names?" Pele asked. And one replied "I am Kalama, this is Pua, and this is Lāhela." Pele repeated their names, touching them with her staff as she did so, turning them to stone. They were a mute and visible warning not to laugh at or ridicule Pele. (Wichman 1998:103)

In a slight variant of the story Pele is motivated by jealousy of the three girls' beauty and fear they will make Lohiau fall in love with them and thus she turns them to stone to protect her love interest.

A third mythological account of Kīlauea related by Rice (1923:38, see also Wichman 1998:104) concerns the creation of a swath of awash boulders lying between the islet of Mokuʻaeʻae and Kīlauea crater:

> Traveling on the Menehune moved a big stone to Kahili, below Kilauea, which they used to dive from. At Mokuaeae, the island off the present Kilauea lighthouse, they began to fill in the channel between the island and the mainland. They were just able to touch the bottom with a paddle when morning dawned, and their task was left unfinished.

In the Story of Lonomakahiki (Fornander 1917: Vol IV, Part II: 358-359) is a passing reference to the ruling chief Lonoikamakahiki traveling with a companion at

Kīlauea and Kalihi (Kalihiwai, Kalihikai) Kauaʻi. The account makes reference to “days of hunger” in which their hunger was appeased by eating the ripe flowers (or possibly fruit) of pandanus trees (*hele aku a ai i ka pua pala o ka hala, hala ia la poloi o ka ua ilaila, e ka hoa, he hoa i ka nahele lauhala loloa, mai Kilauea a Kalihi la*). The account emphasizes the great *lauhala* tracts and “…the heavy and wind-blown rain, the ceaseless and general rain…” The “ae-kai” is said to be the name of a wind specific to the vicinity of Mokuʻaeʻae Island and “the Wai-mio is the wind of Kilauea” (Aikin 1988:7). The wind name for the Koʻolau District of Kauaʻi between Moloaʻa and Kalihikai was the “Kiukainui” (Nakuina 1990:54).

Ahupua`a Place Names, Descriptions, etc.

We will attempt to translate "*Kilauea*". Literally translated it means "rising smoke cloud" when referring to Hawaii's (the Big Island) world-famous volcanic crater. But how can we account for its aptness to a town on the north shore of Kauai where no volcanic activity has occurred for 15,000 years. When we look at the word syllable "*ea*" it translates to "vapor or breath," and so in this instance we may substitute "vapor cloud" for "smoke cloud." With certain confidence, we may deduce that the ancient Kauaians named Kilauea for the fog-like clouds of sea mists that appeared in the area when storm-driven waves tossed high spray as it dashed upon the rugged lava bluffs of the north shore.

In 1847, the Kingdom of Hawai`i conducted a census of the population of northern Kaua`i. Although demographers still argue about its reliability to this day, the census reported 240 individuals living in the Kahili-Kilauea area, third in size only to Hanalei to the west with 637, and Anahola to the east with 280 (Schmitt 1969).

The Hawaiian Legislature created the Office of Commissioner of Boundaries in 1862 to determine exact boundaries of previously un-surveyed *ahupua`a*. Most of the information concerning land use and settlement of this area can be gathered from examining the mid-19th century records of the Board of Commissioners to Quiet Land Titles, commonly referred to as the Land Commission. The commission was created as part of the Great Mahele of 1848, a portion of its responsibility being the awarding for the first time, private title of lands to native Hawaiian commoners. In the 1874 Boundary Decision which describes the official government recognized boundary of the *ahupua`a* of Kilauea, several individuals *lo`i* and *kalo* growing areas are named along western border of the land division.

A Connection and Understanding of Place

Traditional Wisdom & Knowledge

Kilauea Place Names

Over the years, residents have lost touch with the place names and their meanings for this mountain range. The habit of identifying traditional landmarks whether they are mountains, beaches, etc. by generalization is common. A greater misfortune is the more popular trend and use of nicknames created by recent generations of transient and kama`āina residents. Disappointedly, this has resulted in the greater loss of knowledge and awareness of traditional Hawaiian places and wahi pana.

Knowledge of wahi pana and their place names for both subject ahupua`a of this Ka Pa`akai analysis are on the verge of being forgotten and lost altogether. There is a sense of urgency to bring this to the forefront of our collective attention and create learning opportunities for the native Hawaiian community.

Hawaiian name of Kilauea Point as Cape Wowoni, due to the feeling one gets when standing at the point where the waves roar and bellow and one feels it at the core; the origin of the name Nihokū (known as Crater Hill), where the profile of the hill is like a standing or upright tooth and hence the meaning of the name; the name of a nearby hill, beach and wind called "Kauapea," which he interprets as the "sail filling rain." Several map sources referenced for clarification of place names and peaks produced conflicting information and statistical data as well. Further research, including examination of oral histories and other sources for accurate identification is of great importance and priority.

Land Commission Award Claims Kilauea Ahupua`a and Associated Knowledge

Land Commission Awards and Mahele Awards are Sources of Title adjudicated by the Land Commissioners to claimants. Mahele Awards are Sources of Title specifically issued to those chiefs who received their lands from the king but failed to present their claims before the Land Commission and thus received titles to their lands from the Minister of the Interior. Kamehameha Deeds are Sources of Title to Crown Lands that Kamehameha III, IV and V conveyed. Minister of Interior Deeds were Sources of Titles that conveyed lands from the government to private individuals by the Minister of the Interior during the Kingdom of the Monarchy. Patents - both Royal and Land were issued on the awards as evidence that the Government's right to commutation therein was satisfied. An award together with a patent perfected the awardee's title to the property. Grants by Royal Patent and Land Patent were Sources of Title deriving from the sales of government lands. The term "Royal" indicates that the document was issued during the Hawaiian Monarchy (up to 1893). The Land Patent or Land Patent Grant thus means the document was issued subsequent to the monarchy.

The Kuleana Act of 1850 allowed makaʻāinana (Native Hawaiian commoners), in principle, to own land parcels at which they were currently and actively cultivating and/or residing. As a result of the Māhele in the records for Land Court Awards, there are no entries associated with ahupua`a Kilauea. In the great land division or Mahele of 1848, KIlauea Ahupua'a was retained as Government Lands. It is unknown why there were no commoner *kuleana* land holdings within KIlauea Ahupua'a at the time of the Mahele (1848) and the following Kuleana Act.

Contours in that area indicated on USGS quadrangle (7.5) Anahola indicate a low, wide terrace next to the stream evidently well watered and well suited for maintenance of taro *lo'i*. A similar terrace is situated on the opposite bank and downstream to the north in ahupua'a of Kilauea. Cultivation of taro at an earlier time may well have of occurred in this area as well. Handy and Handy (1972) believed the area had a wealth of good *kula* land for sweet potato growing but was a comparatively small producer of *kalo*. In the uplands, the tributaries of Kilauea Stream travel in very steep, narrow gorges, making dispersal of these waters for irrigation purposes difficult. Because of this, *kalo*-growing areas on the Kilauea Stream existed only in the last mile of its course to the seashore where the waterway and its floodplain broadens. Even then, irrigation water was not taken from Kilauea Stream itself, but rather from its tributaries, most of the old pond fields existing in the areas where these tributaries entered the mainstream.

Even though uncommon geographic conditions such as steep narrow stream valleys and hilly terrain limited native wetland agricultural development to the makai areas bordering Kilauea Stream at the confluence of two tributaries, the *ahupua`a* of Kilauea was probably a comparatively important population and farming area in ancient Hawai`i. Most of the native population of the ahupua`a probably lived in this coastal area from prehistoric times through the late 19th century. It is interesting to note here that what is called Kilauea Stream or River today, was known as Kahili River back in the mid-1800s, possibly denoting a placement of higher contemporary importance of Kahili over Kilauea as an agricultural and settlement area. Kilauea would gain more importance only near the turn of the century with the development of a sugar plantation there.

Not much is known about the original inhabitants of Kilauea, although some research work is being done by historical groups. There are, however, vestiges of this ancient civilization if one is inclined to search. On the east bank of the Kilauea Stream, slightly "*mauka*" (inland) from the mouth of the stream, is Kipapa *Heiau*. Heiau's were pre-Christian places of worship, some were elaborately constructed stone platforms, and others were simple earth terraces. There were various types of heiaus, the description of some follow: "*Heiau ho'ola*" - Heiau for treating the sick. "*Heiau ho'oulu'ai*" - *Heiau* where first fruits were offered to insure further growth. "*Heiau ho'oulu i'a*" - *Heiau* where fish were offered to insure good fishing. "*Heiau polo kanaka*" - *Heiau* where human sacrifices were offered. "*Heiau waikaua*" - *Heiau* used for services to bring success in war. We can only surmise the use of Kipapa *Heiau*.

Several sources speak generally about the habit of the Hawaiians of hunting sea birds for their flesh and feathers. it is very possible that the area could have been used temporarily for these purposes. Also, the areas at the base of the cliffs might have been used temporarily as canoe landings. Such an area *(pae waa*) is identified at Puu Poa to the west of Kilauea (Aikin 1988: 10).

Evidence of a complete village still exists on the coast beyond the eastern tip of Kilauea Bay and in the area of Pohaku Malumalu. In the dense jungle is a large stone platform and terracing. A spring still feeds various pools used by the Hawaiians in their daily activities. Upper pools were used for drawing drinking water. As the pools descended, their uses changed accordingly until the last one which was used for bathing.

The prehistoric inhabitants of Kilauea maintained a strip of permanent residences along the coast fronting Kilauea Bay. Limited land for development of *lo`i* along the makai western boundary of the *ahupua`a* was in the floodplain of Kilauea Stream at the confluence of two tributaries, Wailapa and Kaluamakua Streams. These two tributaries were used as water sources, and the level lands at their mouth were intensively developed into *lo`i* systems. Both systems were in use into the mid 19th century as documented by Land Commission Awards (LCAs), the Wailapa one being more extensive, with numerous *lo`i* (as well as *noni* and *wauke* patches), and three houselots. Although limited lands for irrigation may have been available upstream from these tributaries and up Kilauea Stream, they would be severely restricted by narrow floodplains, and susceptible to flooding. On the other hand, large regions of the uplands, would have been available for growing sweet potatoes and other dryland crops. This *kula* land would have been adequately by rainfall of around 5 inches per month. Only temporary habitation would be expected with these scattered *kula* plots. As for their archaeological remains, heiau would be expected along prominent bluffs and knolls overlooking the coast, such as Kipapa Heiau (now destroyed). Burial sites would occur in backshore sand deposits in the mixed sand deposits around Kilauea Stream.

The settlement pattern or Hawaiian use of the lower part of Kilauea that seems most likely would include temporary camp and processing sites related to the hunting of seabirds for their flesh and feathers. This activity would probably have occurred very near the coastal cliffs on which the birds have long nested and are today protected

Other activity may have included some sweet potato growing and harvesting on the high-level ground *mauka* or south of Crater Hill back toward the town of Kilauea. Any evidence of what must have been dispersed and discontinuous farming in this area would have been lost to the development of sugar in the late nineteenth century. The most probable area of concentrated population and industry would have been along Kilauea Stream near its issue into Kilauea Bay where the stream could more readily be accessed for irrigation. The absence of Land Commission awards in that area of Kilauea ahupua'a suggests those terraces were less suitable in later years or that no one of an associated lineage was living along or working that part of the river at the time of the Great Mahele.

Post-Mahele land use was for the cultivation of sugar on the flat lands above the valley. Ranching also occurred in some areas of Kilauea *ahupua`a*. The *lo`i* was converted in rice along the floodplain of the Kilauea Gulch. This is can be verified by an 1892 map drawn by M.D. Monsarrat.

According to Ross R. Aikin, "Kilauea Point Lighthouse: The Landfall Beacon on the Orient Run", shore parties were responsible for maintaining signal fires to mark harbor locations for retuning fishing parties and long-distance voyagers. Nightwatch parties tended to the kukui ahi, which were fire lamps made from the kukui nut to guide returning ocean going canoes during the early morning hours. It is believed that Kilauea Point location was used as Kukui o Lono (light of Lono), look out position used by kukui ahi caretakers who carried out their activities under the guidance of Lono, the god of wind, cloud, sea and agriculture. According to Aikin, Kilauea can be translated to mean "the rising smoke cloud" and as vapor or breath" possibly describing the vapor sea mist and the smoke from fire lamps blending with the ocean mists.

There is little evidence that Kilauea was a place of habitation and having significant farming activity. The most likely concentration of people would have been along Kilauea Stream and Kilauea Bay. The report indicates that the lower portion of Kilauea was used for hunting seabirds for food and feathers. There is some indication that sweet potato cultivation may have occurred on the higher-level lands, located on the mauka slopes of Crater Hill. The property has been extensively developed and cane cultivation also probably destroyed any evidence of the Hawaiian use of the area.

The History of Kilauea Plantation

In January 1863, a former American whaler named Charles Titcomb purchased the entire ahupua 'a of Kilauea amounting to approximately 3,016 acres from Kamehameha IV for $2,500 (Grant 2896). This land grant included the present Project area. By this time, Charles Titcomb was already a veteran of several enterprises at Koloa, Hanalei, and Kilauea, Kaua'i, including efforts to cultivate silkworms, coffee, tobacco, sugarcane and cattle. He expanded his holdings to the west through further purchases within the next couple of years. The area was used as cattle grazing ground before being planted with sugar. The Kilauea Plantation, begun in 1863 by Mr. Titcomb, became a sugar estate in 1877 when Captain John Ross and E. P. Adams, in partnership with Titcomb, purchased much of the land and leased another substantial tract (Aikin 1988:19). Titcomb and his family continued to be involved in the plantation. He, his Hawaiian wife, and two of his eight children are buried in a family plot near his former home behind the Kilauea Elementary School.

The Kilauea Plantation "was one of the smallest plantations in the Hawaiian Islands operating its own sugar mill" (Conde and Best 1973: 159). In 1881, a railway was begun and Princess Lydia Kamakaeha (Lili'uokalani) drove in the first spikes for the railroad bed. The plantation infrastructure grew over the next twenty years:

> Transportation system consists of 12 and a half miles of permanent track, five miles of portable track, 200 cane cars, six sugar cars and four locomotives. Kilauea is situated three miles from the landing at Kahili, with which it is connected by the railway system. Sugar is delivered to the steamers by means of a cable device at the rate of from 600 to 800 bags an hour. Mr. J. R. Meyers was the plantation manager. (*San Francisco Chronicle,* July 18, 1910, in Conde and Best1974:152)

The plantation employed Chinese and Portuguese workers. In the 1880s, Kilauea Sugar Company began major modification of water resources in the uplands with dams, reservoirs, ditches and flumes (Joesting 1984). This may have had a major damaging effect on *lo 'i kalo* downstream and possibly signaled the end of large-scale native agricultural practices in Kilauea and vicinity. The Kilauea Plantation Company started to be managed by C. Brewer and Company in 1910 and C. Brewer took over the controlling interest in 1948. The Kilauea Plantation Company continued to operate until 1971.

The railroad, begun in 1881, and the Ko'olau Ditch are shown running from the mill at Kilauea as far as the east side of East Waiakalua, terminating near the Government Road well mauka of the present Project area. Part of this Kilauea Plantation Company rail system passed by Kahili Quarry on the way to an off-loading station at Mokolea Point, where raw sugar was cabled down to transport ships (Site 50-30-04-1811). Kahili Quarry was located on Kilauea Bay at the mouth of Kilauea Stream, about a kilometer northeast of the Project area. Rock from the quarry was hauled by rail car and later by truck through the plantation fields where it was used to reinforce the field roads (Fredericksen and Fredericksen 1989:8).

The road to the landing ("Quarry Road") running toward Mokolea Point formed the west boundary by 1892. In 1938, trucks were employed to transport harvested cane, and by 1942, the rail system was abandoned entirely (Conde and Best 1974). Sugar continued as a crop until 1971 when Kilauea Sugar Co. was terminated (Custodial Chronology of the Sandy Saemann Property, Kilauea, Kaua'i 1989). A 1910 U.S. Geological Survey Map, Kilauea Quadrangle shows the plantation infrastructure and other development in the vicinity at that time. The spur railroad line running down to Mokolea Point ran along the road on the south side of the present Project area but then curved into the present Project area along the west and north sides of the tributary gulch. A second unimproved road out to Mokolea Point ran along the west side of the Project area. A cemetery is shown north of the present Project area.

A 1930 map (of the Kilauea Plantation (Conde and Best 1974:159) shows the plantation's sugar cane fields and associated infrastructure. The map indicates that sugar was cultivated in most of the Project area. The map also shows the plantation rail line heading from Kilauea Town to the landing at Mokolea Point in the east portion of the present Project area.

The 1963 U.S. Geological Survey map indicate unimproved road extending down to the Kahili Quarry, bordering the southeastern portion of the Project area. The 1963 map also indicates Kipapa Heiau (temple), located on the sandy shoreline of Kilauea Bay, near the mouth of Kilauea Stream a kilometer east of the present Project area.

After the end of sugar in 1971, sorghum, corn, prawns and guavas were attempted to be grown in the plantation.

Native Hawaiian Cultural Consultation

It is the policy of the State of Hawaii under Chapter 343, HRS, to alert developers and decision makers, through the environmental assessment process, about significant environmental effects which may result from the implementation of certain actions. An assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by actions subject to Chapter 343, and promotes responsible decision making. Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. Chapter 343 also requires an assessment of cultural resources, in determining the significance of a proposed project.

One of the most important parts of conducting a cultural assessment and study is to hold consultation with Native Hawaiian kūpuna or elders, Hawaiian cultural organizations, cultural practitioners and individuals from the community who potentially have knowledge of traditional Hawaiian sites, resources and cultural practices that are related to the project area as well as to the adjacent and extended land areas of the Kilauea ahupua`a. Ultimately, the goal as preparers of this Ka Pa`akai Analysis is to produce a document that can be used to protect and preserve the valuable knowledge and traditional practices of nā `ōiwi kānaka, the Native Hawaiian people of these places.

EAL's goal was to meet with and interview a cross-section of indigenous Hawaiian people from the community; first and foremost, with kūpuna or elders that have memories and personal experiences of the project area and the surrounding lands in Kilauea ahupua`a. In addition, EAL was hopeful to receive their `ike or insight and knowledge about customary practices and traditional places associated with or relating to the project area.

EAL also aimed to seek out and speak with those of the mākua or parent generation who had potential knowledge, ties and experiences linked to the project area and Kilauea. In this endeavor to "interview" Native Hawaiians, EAL chose to do so in a Hawaiian manner of kukākukā or through "talk-story". In speaking with interviewees without being nīele or as a prying meddler by being annoyingly inquisitive was the approach. While there are specific points of interest for questions that lead the discussions, it is important that with each person engage in a manner that is respectful and without imposing pressure. To the Native Hawaiian, a nīele person will never get anywhere by being bold, blunt and direct. However, he or she can be successful by leading up to a subject through indirection and a more `olu`olu or gracious approach. Every attempt to avoid being maha`oi or presumptuous, brazen and insensitively forward was used. In the traditional Hawaiian household that was led by kūpuna and mākua who were adamant that the values of aloha (love), ha`aha`a (humility), ahonui (patience) and hō`ihi (respect) apply to the way that one behaves and interact with others. This is especially so when talking and meeting with kūpuna, for with the slightest tone of pejorative stance or speech, they will cease to share their valuable insight and experiences. It helps tremendously to have some sort of association with individuals as well, for more is shared when there is a level of comfort, trust and familiarity.

The interviewees that EAL engaged with for this Ka Pa`akai analysis are:

1.	Jim O’Conner	Kilauea Resident
2.	Beryl Blaich	Kilauea Resident
3.	Gary Smith	Kilauea Resident
4.	Jack Gushiken	Kilauea Resident
5.	Jennifer Waipa	Hanalei Resident

All interviews were conducted by EAL in August and September 2019. Subsequently, EAL found that just about most of the interviewees were interested in learning about the project itself but no that concerned except for a few informants. Gary’s father was the plantation manager. Many in the community describe “Uncle Gary” as the unofficial historian of Kilauea. The author had interviewed him, Beryl and Jack several times in the past.

The Fish and Wildlife Service also partners with local native Hawaiian organizations such as Kaipuwai Foundation and Na Kia’i Nihokū, that “perform Native Hawaiian cultural practices and ceremonies at Nihokū summit on the summer and winter solstice and the spring and fall equinox” (Fish and Wildlife Service n.d.). The subject property is located at the slopes of Nihokū.

Nihokū holds profound cultural significance due to its deep connections with moʻolelo (traditional stories), celestial navigation (kilo), and the expressive arts of hula and oli. It also serves as a key visual landmark and is intricately linked with practices such as fishing, hunting, the Makahiki trail, and other cultural traditions.

Trials were one of the concerns brought up in another study that trails were historically used by ahupuaʻa tenants and neighboring communities for subsistence, religious, and cultural activities. The moʻolelo (oral traditions) about Nihokū suggest that ancient Hawaiians traveled through this area for various purposes, including gathering resources, fishing, and honoring Pele. Nihokū is considered a significant cultural and spiritual landmark, with people traveling there to honor Pele, practice kilo (celestial observations), and engage in hula and oli (chanting). Trails provided access for these practices and facilitated movement between coastal and upland areas.

Unlike in *Bremer v. Weeks (2004)*, where a 1908 survey map confirmed the existence of an ancient trail, no such records have been found for the applicant's property. There are no maps or documents showing the presence of historic trails on the property. Some would claim there are trails, while others, including longtime local residents and fishermen, state that they are unaware of any historic trails crossing the property.

Gary Smith, an experienced fisherman and hunter interviewed in the review, did not recall any trails on the project parcel but trails were along the coastal areas.

There is no historical or cartographic evidence of such trails and that existing access is already available elsewhere. The disagreement hinges on whether oral histories and moʻolelo alone are sufficient to establish traditional trail usage in the absence of physical or documented proof.

Mahalo a nui loa iā \`oukou for your generous support to contribute and collaborate to this success of this Ka Pa\`akai analysis.

Consultation Methodology & Results

As with the composition of the Ka Pa\`akai analysis document, EAL employed interview methods consistent with indigenous Hawaiian values. Specific values and methods applied to the interview process included:

<u>*Kukākukā*</u>, also known among locals as "talking story", is a quintessentially Hawaiian approach to sharing information intended to avoid being seen as *nīele* (i.e., nosy or meddling) and instead being perceived as *ʻoluʻolu*—gracious—in conduct. By approaching the specific interview topics in an indirect manner, EAL interviewers communicated a level of sincerity and respect for the interviewee and subject matter and so avoided their curiosity being interpreted as *mahaʻoi*, i.e., brazen and forward.

<u>*Aloha*</u>, or love and abiding regard for the Hawaiian landscape and culture formed the basis for the interview process, communicating deep affection for the subject matter and individuals involved.

<u>*Haʻahaʻa*</u>, or a sense of humility, particularly when speaking with *kūpuna*, where

a single pejorative act or statement could create a sense of offense in the interview subject which would lead them to withhold their insight and experience.

Ahonui, or patience, and a measured tempo to the contact and interview process which allows for a sense of comfort, familiarity, and trust to emerge.

Hōʻihi, respect, both for the interviewee and for the subject matter were kept at the very heart of the interview process and shaped the methods employed by EAL.

To these ends, the use of recording devices and a standardized questionnaire were not employed unless requested to do so. Interviews were conducted in individual and small-group settings in homes and back yards. Conversations could flow toward, and at times away from, the specific subject of the project as the interview subjects deemed appropriate.

Selection of Interview Subjects

An assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by land use decisions. In the preparation of this Ka Pa`akai analysis, representatives of EAL identified certain criteria which guided the process of identifying individual's familiar with cultural practices and features in, or near, Kilauea ahupua'a. Was the candidate a *mākua*, or member of the parent generation, with potential knowledge, ties, or experiences of the project area and the Kilauea or Ko`olau region?

- Was the candidate familiar with, or possessing insight into, the customary practices and traditional places in or near to the project area?

In the timeframe available for the preparation of the Ka Pa`akai analysis, representatives of EAL spoke with 5 community members all with personal ties to Kilauea; and possessed of unique knowledge relevant to the assessment. Most interviewees were residents of Kilauea.

Ethnographic-Oral History Methodology
Historical & Archival Research

Primary research references used in this study include, but are not limited to—land use records, including those obtained from an extensive review of Hawaiian Land Commission Awards (LCA) records from the 1848 Great Māhele, territorial land patent grants, oral history interviews preserved in the Bishop Museum Archive, and an extensive review of historical texts authored or compiled by D. Malo (1951), M.K. Pukui (1972), and Handy and Handy with Pukui (1972). Other sources examined and incorporated include regional planning documents, modern English language newspapers, and travel writers 'familiar with the Kilauea region, and important testimony of elder kamaʻāina of the lands of the Kilauea-Ko`olau region.

Researchers also took full advantage of historical and archival resources from the collections of the Bishop Museum, Kaua`i Museum, and Kaua`i Historical Society. Research of published and unpublished written literature, as well as Hawaiian language documents, maps and photographs found in public and private collections for references and other relevant information were explored. Additionally, the examination of indigenous Hawaiian chants and interviews conducted with kūpuna or Native Hawaiian elders were extraordinarily revealing and valuable to producing this cultural study.

Cultural Resources & Practices Identified

Neither the literature sources consulted, nor the interviews conducted identified any ongoing native Hawaiian cultural resources or practices located on the project. As indicated by background research and many of the interviewees, the broad Ko`olau ei region has a rich history replete with *mo`olelo* (legends) and *wahi pana* (traditional place names and their stories) however none of these have any significant direct or indirect connection to the project site. In addition, the long history of ranching and some cultivation in this area has likely destroyed any cultural materials and since the land has been overgrown and private prevented in cultural practices which might have been present in the past.

One informant reported that on the USWFS property it has been reported that Native Hawaiian did seabird gathering and perhaps canoe landing below the cliff, not necessarily on this property.

Another informant thought there was a dairy and a railroad to Mokuleia Pt. where sugar was slung to ships and freight hauled up for residents and plantation, near this parcel. Cattle did graze in this area and the dairy in modern times did pasture dairy cows in the Kilauea valley (author personal knowledge from the former dairy manager).

Analysis of Impacts

The Kilauea-Ko`olau region, which includes the area proposed for the single-family residence, is a place of prehistoric and historic significance in the Hawaiian civilization. Oral histories and written records tell of the continuing traditions, beliefs, and cultural practices of the region. However, none of the background research, nor interviews conducted in the preparation of this Ka Pa`akai analysis indicates that the cultural practices, resources, or beliefs are tied to the proposed project site. The absence of cultural properties and resources in a region maybe due to rapid change that sugar cultivation brought to Kilauea.

Traditional Hawaiian uses of the lands in the Kilauea ahupua'a are known from prehistoric times. Such uses, including habitation, agriculture, and gathering continues throughout the region, but none is known to exist within the project area. Access to sensitive *wahi pana*, streams, the shoreline, or the mountains will not be compromised by this project.

Native Hawaiian beliefs and traditions associated with the Kilauea *ahupua'a* persist but these are general associations not specific to the project site. No *kūpuna* (elders) or *mākua* (parents) could be located that had knowledge of traditional beliefs or practices specific to the project site.

There are no known cultural resources or practices with the potential to be negatively impacted because of the proposed project.

The Seacliff Plantation subdivision is seen as a collective force that has already, and will continue to, undermine the cultural landscape of Nihokū and erode their traditional native Hawaiian rights. They contend that while any single project might seem inconsequential, the overall impact of the entire subdivision has disrupted cultural practices, rights, and resources. Consequently, cultural descendants, particularly kupuna, have lost access to vital traditions such as fishing, bird hunting, practicing kilo (celestial navigation), preserving Nihokū's visual corridor, climbing Nihokū, and walking the annual Makahiki trail through Kilauea.

Closing

Cultural impacts upon Native Hawaiian people, customary practices and religious beliefs have infiltrated the history of Hawai`i Nei for more than 200 years since the arrival of Captain James Cook in 1778. Within a period of 40 short years, the Kapu system was abolished by Kamehameha II - Alexander Liholiho and the Queen Regent, Ka`ahumanu bringing an end to the strength of the closely-knit Hawaiian religion and political system of Hawai`i. With the arrival of Calvinist missionaries in 1820 came a new god and religion which leveraged the beginnings of severing the native Hawaiians' veneration of the natural world.

By the 1890s, subsistence lifestyles, agriculture and rural communalism had entirely been replaced by commercialism, urbanization and individualism as key features of life in the Hawaiian Islands. Foreign sugar plantation moguls usurped control of Hawai`i's prime agricultural lands and fresh water sources to sustain their crops. Miles and miles of irrigation ditches were engineered to redirect the natural flow of water out of the ahupua`a; forever changing the balance of environments and lifestyles of generations of native Hawaiian families.

By and large, the issues of cultural impacts in Hawai`i are rooted in the loss of access and use of Hawai`i's land and natural resources as formerly practiced in pre-contact Hawai`i. It is a deep-seated dilemma caused by the intrusion of forced principles brought on by Westernization and the rise of a monetary economy.

Included are in this Ka Pa`akai analysis are the kūpuna's names and descriptions of their kuleana land claims presented to the Land Commission following the Great Mahele in 1848. Many of these families still exist and inhabit the lands of Kilauea today.

However, the lasting affects upon native Hawaiian people that have resulted in their disconnect to traditional practices, beliefs and knowledge of place goes back further to the introduction of Christian tenets that prohibits veneration and expression of nature or ancestor worship in any way, shape or form. There is great anxiety amongst contemporary Hawaiians to embrace the values and ideologies of their ancient ancestors out of fear instilled by the doctrines of the dominant western religion which most have adopted. This alone, largely contributed to the depreciation of interest to learn and maintain family genealogies, enroll to formal training in cultural practices that engage in ceremony and spiritual processes, etc.

All forms of traditional Hawaiian cultural practice included religious and spiritual processes of protocols, ceremonies, prayers and prescribed tabus and restrictions. The removal of this crucial part of Hawaiian cultural expression separated and dissolved the sacred and profound of the practice itself. It also eliminates the individual's conscious connection to the environment which is also considered as a sacred and profound aspect of the practice itself.

This analysis does not foresee potential impacts of the proposed single-family residence on Native Hawaiian or other ethnic groups' cultural practices customarily and traditionally exercised for subsistence, cultural or religious purposes. Although the Project area is outside the vicinity of Kīlauea Point National Wildlife Refuge, its proximity to the refuge may mean that occasional endangered birds may be found in or around the project area. Care must be taken to ensure that these birds such as the *nēnē*, shearwaters and Laysan albatross or *mōlī* be unharmed and returned to the Refuge.

Members of the Kilauea community and descendants have voiced concerns that while the proposed project might not, on its own, affect traditional and customary practices, the overall impact of past and planned developments—including the project at Seacliff Plantation—has and will continue to undermine the traditional practices, rights, and resources of Native Hawaiians linked to the cultural landscapes of Nihokū and Kilauea. In alignment with Article XII, Section 7, which strives to balance the protection of traditional native Hawaiian rights with the property rights of landowners. These concerns include ensuring reasonable access to the ocean, especially for kupuna, for hunting pigs, fishing, gathering subsistence resources, and conducting educational programs and ceremonies such as Makahiki, solstice and equinox observances, and kilo events.

References

Alexander, William Patterson,
1991 “*Tour of Kauai in 1849, Private Journal of William Dewitt Alexander*” in The Kauai Papers, Kauai Historical Society, Honolulu.

Belcher, Edward
1843 *Narrative of a Voyage round the World, Performed in Her Majesty's Ship Sulphur, during the Years 1836-1842.* London: H. Colburn.

Bingham, Hiram
1847 *A Residence of Twenty-One Years in the Sandwich Islands*, Huntington, Hartford CN., Convers, N.Y.

Bird, Isabella L.
1890 *Six Months in the Sandwich Islands*, First Edition, 1890 by John Murray, London

Chun, M. N.,
2011 *No Nā Mamo Traditional and Contemporary Hawaiian Beliefs and Practices,* University of Hawai`i Press, Honolulu, HI

Damon, Ethel M.,
1931 *Koamalu, A Story of Pioneers on Kauai and of What They Built in That Island Garden,* Honolulu Star-Bulletin Press, Honolulu.

Fitzpatrick, Gary L.
1986 *The Early Mapping of Hawaiʻi* Palapalaʻaina, Editions Limited, Honolulu, HI.

Fornander, Abraham and Thomas G. Thrum
1919 *Fornander Collection of Hawaiian Antiquities and Folklore, T.G. Thrum edit., Memoirs of the Bernice Pauahi Bishop Museum (Vol. VI, Part I)*, Bishop Museum Press, Honolulu, HI.

Glick, Clarence E.
1980 *Sojourners and Settlers: Chinese Migrants in Hawaii.* Hawaii Chinese History Center and the University Press of Hawaii, Honolulu, HI.

Handy, E.S. Craighill
1940 *The Hawaiian Planter*. Honolulu: Bernice P. Bishop Museum.

Handy, E.S. Craighill and Elizabeth G. Handy
1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*, B.P. Bishop Museum Bulletin 233, B.P. Bishop Museum, Honolulu, HI.

Hawaiian Language Texts.
1861 Legends of Hawai`i and Kaua`i. Hawaiian Language Newspaper - Nupepa Kuokoa, Honolulu, HI.

http://ulukau.org/

Joesting, Edward
1984 *Kaua‘i: The Separate Kingdom*, University of Hawaii Press and Kauai Museum Association, Ltd., Honolulu, HI.

Kent, NJ.
1993 *Hawai`i Islands Under the Influence.* University of Hawai`i Press. Honolulu HI.

Knudsen, Eric A.
1956 *Teller of Hawaiian Tales, Foreward by A. Grove Day*, Mutual Publishing Paperback Series, Honolulu, HI.

1991 "*A Trip Around Kauai and Some Personal Experiences on the Na Pali Coast, 1895*" in The Kauai Papers. Lihue: Kauai Historical Society. Paperback Series, Honolulu, HI.

Kuykendall, Ralph S.
1938 *The Hawaiian Kingdom*, Volume 1, University of Hawaii. Press, Honolulu, HI.

Lydgate, Helen Elwell,
1991 "*A Visit to Kauai in 1865, Journal of William T. Brigham*" in The Kauai Papers, Kauai Historical Society, Honolulu.

Macdonald, G. A., *et al.*
1960 *Geology and Ground-Water Resources of the Island of Kaua‘i, Hawai‘i*, United States Geological Survey Bulletin 13.

Malo, David K.
1951 *Hawaiian Antiquities - Mo`olelo Hawai`i,* Bishop Museum. Honolulu, HI

Manu, Moses
1884 *Ka Mo`olelo O Keaomelemele*. Ka Nupepa Ku`oko`a.

Manu, Moses, Mary K. Puku`I and Puakea Nogelmeier
2002. *Keaomelemele,* Bishop Museum Press. Honolulu, HI

Pukui, Mary Kawena
1951 *The Water of Kane*. Kamehameha Schools Press, Honolulu

1983 ‘*Olelo No‘eau: Hawaiian Proverbs and Poetical Sayings*, Bishop Museum Special Publication No.71, Bishop Museum Press, Honolulu, HI.

Pukui, Mary K., and Alfons L. Korn
1973 *The Echo of Our Song - Chants & Poems of the Hawaiians,* The University Press of Hawai`i. Honolulu, HI

Pukui, Mary Kawena and Samuel H. Elbert
1986 Hawaiian Dictionary, 2nd Edition, University of Hawaii Press, Honolulu, HI.

Pukui, Mary K. and E.S. Craighill Handy
1998 *The Polynesian Family System in Ka`u, Hawai`I,* Mutual Publishing. Honolulu, HI

Pukui, Mary Kawena; E.W. Haertig, and Catherine A. Lee
1972 *Nānā I Ke Kumu: Look to the Sourc*e. Hui Hānai, Queen Lili`uokalani Children's Center, Lili`uokalani Trust. Van Nuys, CA.

Schmitt, Robert C.
1973 *The Missionary Censuses of Hawaii*, Pacific Anthropological Records, 20, Honolulu.

Skinner, Charles M.
1900 *Myths and Legends of Our New Possessions & Protectorate*. The Resurrection of Kaha. Gryphon Books, Ann Arbor.

Thomas, Mifflin
1983 *Schooner from Windward: Two Centuries of Hawaiian Interisland Shipping*, University of Hawaii Press, Honolulu, HI.

Valeri, Valerio
1985 *Kingship and Sacrifice - Ritual and Society in Ancient Hawai`i*. University of Chicago Press. Chicago and London.

Westervelt, William D.
1915 *Legends of Gods and Ghosts*, Boston, MA.

Wichman, Frederick B.
1998 *Kauaʻi Ancient Place-Names and Their Stories*, University of Hawai`i Press, Honolulu, HI.

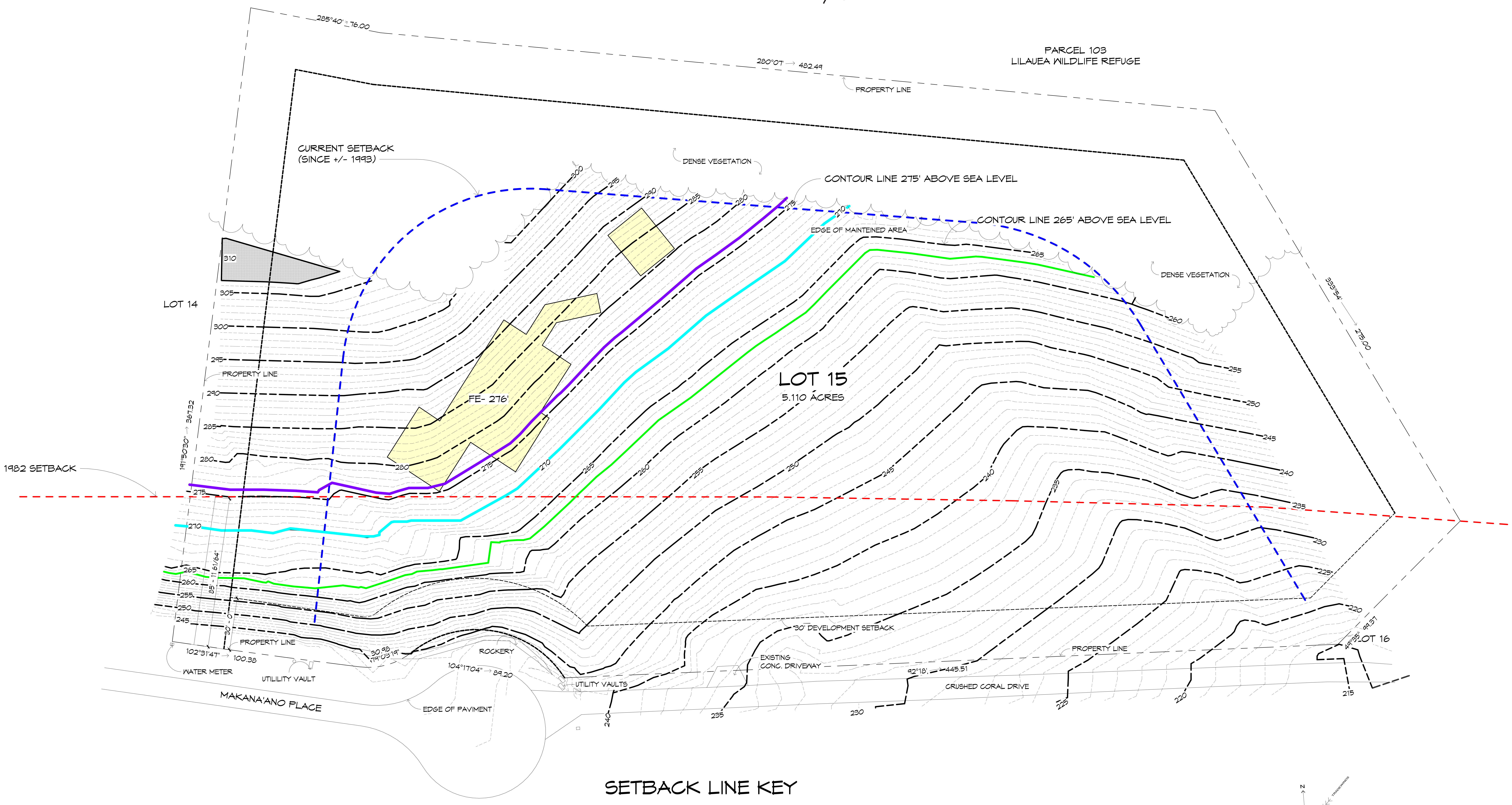
Wong, Helen and A. Rayson
1997 *Hawai`i's Royal History.* Bess Press.

PREVIOUS HOUSE DESIGN

DESIGN APPROVED BY KAUAI PLANNING COMMISION 12/2020 &

BUILDING PERMIT ISSUED 2021, RENEWED 2023

FFE 276'


285°40' → 76.00
280°07' → 482.49
PROPERTY LINE
PARCEL 103
LILAUEA WILDLIFE REFUGE
CURRENT SETBACK
(SINCE +/- 1993)
DENSE VEGETATION
CONTOUR LINE 275' ABOVE SEA LEVEL
CONTOUR LINE 265' ABOVE SEA LEVEL
EDGE OF MAINTEINED AREA
DENSE VEGETATION
333°54' → 275.00
310
305
LOT 14
300
295
PROPERTY LINE
290
285
280
275
270
265
260
255
250
245
191°50'30" → 367.32
1982 SETBACK
85' - 11 61/64"
30' - 0"
FE- 276'
300
295
290
285
280
275
270
265
260
255
250
245
240
235
230
225
220
215
LOT 15
5.110 ACRES
30' DEVELOPMENT SETBACK
PROPERTY LINE
102°31'47" → 100.38
30.98
179°03'19"
WATER METER
UTILITY VAULT
ROCKERY
104°17'04" → 89.20
MAKANA'ANO PLACE
EDGE OF PAVIMENT
UTILITY VAULTS
EXISTING
CONC. DRIVEWAY
92°18' → 445.51
CRUSHED CORAL DRIVE
PROPERTY LINE
49°35' 99.37
LOT 16

SETBACK LINE KEY

╌╌ CURRENT SETBACK (SINCE +/- 1993)

╌╌ 1982 SETBACK

━━ TOPOGRAPHIC LINE 276' ABOVE SEA LEVEL

━━ TOPOGRAPHIC LINE 270' ABOVE SEA LEVEL

━━ TOPOGRAPHIC LINE 263' ABOVE SEA LEVEL

▭ PROPOSED HOUSE POSITION WITH NEW SETBACK - FINISH GRADE = 270'

▭ PROPOSED HOUSE POSITION IN ORIGINAL SETBACK - FINISH GRADE 262'

▭ PREVIOUS HOUSE DESIGN - DESIGN APPROVED BY KAUAI PLANNING COMMISION 12/2020 & BUILDING PERMIT ISSUED 2021, RENEWED 2023

▭ GUEST HOUSE

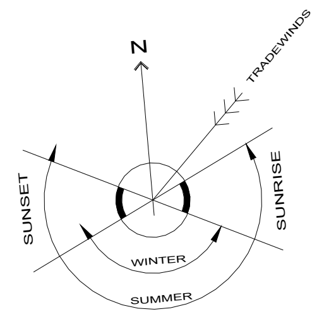

N
TRADEWINDS
SUNSET
SUNRISE
WINTER
SUMMER

Exhibit "E"

DEPARTMENT OF PLANNING

KAʻĀINA HULL, DIRECTOR
JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR

DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

DIRECTOR'S REPORT

I. SUMMARY

Action Required by Planning Commission:	Consideration of a Class IV Zoning Permit, Use Permit, and Special Management Area Use Permit to allow the construction of a three-bedroom, 3,364 square foot farm dwelling with garage, detached guest house, agricultural building, exercise pavilion, and swimming pool.
Permit Application Nos.	Class IV Zoning Permit Z-IV-2026-3 Use Permit U-2026-2 Special Management Area Use Permit SMA(U)-2026-2
Name of Applicant(s)	CAROLINE NEAL

II. PERMIT INFORMATION

PERMITS REQUIRED	
☒ **Use Permit**	Pursuant to Article 11, Section 8-11.3 of the K.C.C. 1987 as amended, a Use Permit is required to allow any development, structures, or uses.
☐ **Project Development Use Permit**	
☐ **Variance Permit**	
☐ **Special Permit**	
☒ **Zoning Permit Class** ☒ IV ☐ III	Pursuant to Section 8-3.1 of the KCC, 1987 as amended, a Class IV Zoning Permit is a procedural requirement in applying for a Use Permit.
☐ **Special Management Area Permit** ☒ Use ☐ Minor	Pursuant to Section 205A of the Hawaiʻi Revised Statues (HRS) and the Special Management Area (SMA) Rules and Regulations of the County of Kauaʻi, a SMA Use Permit is required as defined in Section 7.3(C) of the SMA Rules and Regulations where the Director finds that the proposal (1) is "Development" as defined in Section 1.4F; and is (2) in excess of $750,000.
AMENDMENTS	
☐ **Zoning Amendment**	
☐ **General Plan Amendment**	

H.2.a.1.

AUG 26 2025

☐ **State Land Use District Amendment**	

Date of Receipt of Completed Application: July 21, 2025

Date of Director's Report: August 13, 2025

Date of Public Hearing: September 9, 2025

Deadline Date for PC to Take Action (60TH Day): September 19, 2025

III. PROJECT DATA

PROJECT INFORAMTION			
Parcel Location:	The project site is located at Seacliff Plantation as Kīlauea Bay Subdivision approximately 1 mile east of Kīlauea Lighthouse on the Makai side of Makana Ano Place approximately 500 feet of its intersection with Pali Moana Place.		
Tax Map Key(s):	(4) 5-2-004:088	**Area:**	5.11 acres

ZONING & DEVELOPMENT STANDARDS	
Zoning:	Open (O)/ Special Treatment Resource (ST-R)
State Land Use District:	Agriculture
General Plan Designation:	Natural
Height Limit:	25 feet or Base Flood Elevation (B.F.E.) plus fifteen, whichever is greater at the site
Max. Land Coverage:	10% or 3,000 s.f. max
Parking Requirement:	Two (2) for dwelling, one (1) for guest house
Front Setback:	Ten (10) feet
Rear Setback:	5' or ½ the wall plate height whichever is greater
Side Setback:	5' or ½ the wall plate height whichever is greater
Community Plan Area:	North Shore Development Plan
Community Plan Land Use Designation:	N/A
Deviations or Variances Requested:	N/A

IV. LEGAL REQUIREMENTS

Section 8-3.1(e), KCC and Section 8.0, 9.0, and 10.0 of the Special Management Area Rules and Regulations:	This report is being transmitted to the Applicant and Planning Commission in order to satisfy the requirements of Section 8-3.1(e) of the KCC and Section 8.0, 9.0, and 10.0 of the Special Management Rules, relating to the provision of

	the Planning Director's report and recommendation on the subject proposal within sixty (60) days of the filing of a completed application. The application was received on July 21, 2025, and the Applicant, through its authorized agent, was notified accordingly of the Planning Department's intent to commence permit processing.
Public Hearing Date:	September 9, 2025

V. PROJECT DESCRIPTION AND USE

The subject site is situated within the Seacliff Plantation at Kilauea Bay Subdivision, identified as Tax Map Key (5-2-004:088), consisting of a total of 5.11 acres (222,592 square feet). The subject site is County zoned Open (O) / Special Treatment Resource (ST-R) District.

The Applicant proposes construction of a farm dwelling with a swimming pool, a detached guest house with lanai, an agriculture building with loft, and an open-air exercise pavilion. Detailed floor plans and building elevations are provided in Exhibit "C to C-7." Altogether, the improvements will occupy roughly 8.65 percent of the parcel, equating to 19,420 square feet of hard surfaces, including structures, driveway, and other paved areas. The overall property spans 222,592 square feet. Landscaping will feature native plant species consistent with the rural character of the area.

VI. APPLICANT'S REASONS/JUSTIFICATION

Please refer to the application.

VII. ADDITIONAL FINDINGS

1. The proposed project site will be subject to a building setback that was originally established through the SMA Use Permit for the Seacliff Plantation Subdivision, as referenced by the survey map prepared by Ceasar C. Portugal Land Surveyor, dated July 1983. The permit was approved on August 15, 1983 by the Planning Commission, County of Kaua'i (See Exhibit "B-2" site plan).

2. The State Land Use District (SLUD) designation for this parcel is "Agricultural" which allows for agricultural related activities. The General Plan designation of subject parcel is "Natural" and not located within the Visitor Destination Area (VDA).

3. The subject property has been previously disturbed due to some grading and grubbing from the previous owner permitted through Z-IV-2021-6, U-2021-5, and SMA(U)-2021-6.

4. The proposed development is in FEMA Flood Zone 'X,' which means it's outside the area considered at risk for the 0.2% annual chance of flood. It's set far enough inland that it's not threatened by coastal erosion or likely to impact coastal waters.

5. The proposed development is located more than 550 feet inland from the shoreline, which puts it outside the required shoreline setback area, as outlined in Chapter 8, Article 27 of the Kaua'i County Code (1987), as amended.

6. The Applicant proposes to establish an orchard tree garden on site. The planting plan includes 18 breadfruit ('ulu) trees, 16 coconut (niu) trees, 15 orange trees, 30 banana trees, 17 tangerine trees, 15 mango trees, 14 gliricidia trees, and 14 macadamia trees. The orchard will support small-scale agriculture, increase local food resources, and maintain the rural character of the property in a manner consistent with the surrounding area.

7. The project site slopes upward from the southeast corner to its highest point along the northwest edge of the parcel. Grading plans have been submitted by the Applicant, and the proposed work is not expected to cause any negative drainage impacts to the surrounding area.

8. **North Shore Development Plan**
   The property is situated within the North Shore Planning Area and will be subject to the objectives and goals of the North Shore Development Plan (NSDP), that includes the following goals:

   a. To preserve the unique natural beauty of the North Shore Planning area.

   b. To preserve the special rural charm of the North Shore Planning area.

   c. To provide for the safety and welfare of the people, of their property of the North Shore Planning Area.

   d. To provide for economic development of the North Shore Planning Area.

   e. To preserve the wildlife and flora and the North Shore, recognizing man's dependence upon this preservation for his own health and welfare.

   f. To insure the preservation of historic-archaeological sites in the North Shore Planning area.

   g. To create a development for evolutionary growth that depends upon a planning process whereby conflicts can be resolved through the establishment of priorities and community participation.

   h. To provide for recreational opportunities that are compatible with the unique qualities and natural features of the North.

9. **Special Management Area (SMA)**
   In addressing the issues of the Special Management Area and its objectives and policies, the following aspects will be considered and evaluated:

a. Recreational Resources

b. Cultural/ Historic Resources

c. Scenic Resources

d. Coastal Hazards

e. Coastal Ecosystems

Furthermore, the proposal does not:

a. Involve dredging, filling or otherwise altering any bay, salt marsh, river mouth, slough, or lagoon;

b. Reduce the size of any beach or other area usable for public recreation;

c. Reduce or impose restrictions upon public access to tidal and submerged lands, beaches, rivers, and streams within the SMA; and

d. Adversely affect water quality, existing areas open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, estuarine sanctuaries, potential or exiting agriculture uses of land.

10. **Use Permit**

Pursuant to Article 3 of the Comprehensive Zoning Ordinance (CZO), Chapter 8 of the Kauai county Code (1987), the purpose of the Use Permit Procedure is to assure the proper integration into the community of uses which may be suitable only in specific locations of a district, or only under certain conditions, or only if the uses are designed, arranged or conducted in a particular manner, and to prohibit the uses if proper integration cannot be assured. Section 8-3.2 of the CZO specifies a Use Permit may be granted only if the Planning Commission finds that the use meets the following criteria:

- The use must be a compatible use;
- The use must not be detrimental to persons or property in the area;
- The use must not cause substantial environmental consequences; and
- The use must not be inconsistent with the intent of the Comprehensive Zoning Ordinance (CZO) and General Plan.

11. **Comprehensive Zoning Ordinance (CZO) Development Standards**

The proposed development is subject to the standards prescribed in Sections 8-4.3, 8-4.5, and 8-9.2 of the KCC 1987 as amened Comprehensive Zoning Ordinance (CZO):

a. Setback Requirements: Front property line setbacks are ten (10) feet with a side, and rear property line setback of five (5) feet OR half the distance of the plate height whichever is greater. The minimum distance between structures shall be 10 feet.

b. Land/ Lot Coverage: The amount of land coverage created, including buildings and pavement, shall not exceed 10% of the lot or parcel area.

c. Height Requirements The North Shore Development Plan (NSDP) pursuant to Sec.10-2.4(e)(l) allows structures to be no higher than twenty-five (25) feet, except as provided under Ordinance No. 416 (Flood Hazard Areas) Section 15-l.5(c)(4)(A) which allows a structure to be no higher than 25 feet from ground level or base flood elevation plus fifteen (15) feet, whichever is greater at the site. As stated earlier this parcel is Zone "X" and is outside of the 0.2% floodplain.

d. Parking Requirements: A minimum of two off-street parking spaces per dwelling unit shall be provided. For Guest Houses, one off-street parking space per Guest House shall be provided in addition to the required off-street parking for the primary dwelling unit.

VIII. AGENCY COMMENTS

Attached through separate transmittal.

IX. PRELIMINARY EVALUATION

In evaluating the Applicant's request to allow the construction of the proposed development, the following should be considered:

1. **General Plan**

The proposed development was evaluated through the following policies of the General Plan, as taken from Sections 1.4 and 3.0:

a. Section 1.4, entitled "POLICIES TO GUIDE GROWTH"

i. Policy #1: "Manage Growth to Preserve Rural Character"- The proposed development is within the Seacliff Plantation subdivision. The subdivision is within County Zone Open/ Special Treatment Resource (O/ST-R) and offers low density development and is consistent with preserving rural character.

ii. Policy #3: "Recognize the Identity of Kaua'i's Individual Town and Districts"- The proposed site was once a portion of Kilauea Sugar Plantation and is compatible with preserving the open space within the area.

iii. Policy #4: "Design Healthy and Complete Neighborhoods"- The proposed site area is located close to Kilauea's Town Center offering shopping, medical, commercial, and recreation opportunities as well as access to public transportation.

- iv. Policy #8: "Protect Kaua'i's Scenic Beauty"- As shown in the Applicant's renderings provided in Section C of the application, the proposed structures will use moderate to dark earth-tone colors to help reduce visual impacts on the surrounding area. Additionally, the subdivision has implemented a building setback line that keeps the development situated closer to Makana Ana Place, helping to preserve the view plane and reduce the overall visual presence from surrounding vantage points."

- v. Policy #15: "Respect Native Hawaiian Rights and Wahi Pana"- An updated Ka Pa'akai analysis was prepared in September 2019 and updated in February 2025 by Exploration Associates LTD. (EAL) reflects the intent of this policy through both the methods used to gather information and the criteria applied in selecting interview participants. In keeping with Hawaiian values and practices, interviews were conducted using *kukākukā*, or "talking story," a conversational approach intended to share information in a gracious and non-intrusive way. This method, along with the guiding values of *aloha*, *ha'aha'a*, *ahonui*, and *hō'ihi*, established trust and mutual respect between interviewers and community members, especially kūpuna, and ensured that cultural knowledge was shared in a manner that honored the interviewees and the subject matter.

  The interview process applied by EAL demonstrates how culturally rooted engagement methods can effectively meet the objectives of Policy 15. By ensuring that cultural knowledge is gathered with sincerity, respect, and patience, the process safeguards the authenticity of the information and promotes its acceptance within the community. Incorporating the findings into planning decisions will help preserve significant heritage resources, guide appropriate land use near cultural sites, and reinforce the County's commitment to protecting the cultural identity of Kaua'i. Continued application of these methods in future cultural impact assessments will strengthen the role of community voices in shaping policies that balance growth with the stewardship of the island's cultural and historic treasures.

- vi. Policy #16- "Protect Access to Kaua'i's Treasured Places"- An equestrian and pedestrian trail runs east to west along the northeast portion of the property, adjacent to lands owned by the U.S. Fish and Wildlife Service as part of the Kīlauea Wildlife Refuge. Building setbacks established during subdivision approval locate the proposed development closer to Makana Ano Place Road, away from the trail corridor.

b. Section 3.0, Actions by Sector, Subsection Sector I, entitled "Watershed"-Chapter 4. Threatened and Endangered Species states for permitting:

- i. Avoid development of land use intensification on critical habitats and in areas that are essential to the health, safety, and life of vulnerable native species.

Upon subdivision approval, a building setback line was established that located the building envelope closer to Makana Ano Place Road and away from the Federal Wildlife Reserve, which provides habitat for endangered bird species.

2. **North Shore Development Plan Standards**
The proposed residential development is consistent with the goals of the North Shore Development Plan. Its location within an existing subdivision ensures that no undisturbed natural areas are altered, thereby preserving the rural character of the North Shore. Safety and welfare are supported through adherence to all County codes and the provision of appropriate infrastructure and access for emergency services. While the project is primarily residential, it contributes to the local economy through construction-related employment and the support of area businesses. No impacts to wildlife, native vegetation, or historic-archaeological resources are anticipated, as the property is already developed for residential use.

3. **Native Hawaiian Traditional Cultural Rights**
Exploration Associates, LTD. prepared a Ka Pa'akai O Ka 'Āina Analysis in September 2019 and updated in February 2025. Historical and archival research, along with a consultation methodology, were used to assess whether any Native Hawaiian traditional or cultural practices exist within the project area. A list of community members with cultural knowledge of the area is included in the application (see page 27 of the Ka Pa'akai Analysis). The consultant concluded that the proposed development is not anticipated to impact any ongoing traditional Native Hawaiian cultural or religious practices or resources, demonstrating compliance with heritage resource protection policies.

4. **SMA Rules and Regulations**
The County of Kaua'i (CoK) Special Management Area (SMA) Rules and Regulations include objectives, policies, and guidelines intended to protect coastal resources. Within the SMA, special consideration is given to recreational opportunities, cultural and historic resources, scenic quality and open space, coastal ecosystems, and coastal hazards. In evaluating the proposed development in relation to the goals and objectives of the SMA Rules and Regulations, the following aspects are considered:

   a. Public Access and Coastal Recreation – Since the project site is located approximately 1,100 to 1,130 feet from the shoreline and there is an existing lot (Kilauea Wildlife Refuge) between the site and shoreline, there is no direct public shoreline access. Existing equestrian and pedestrian trails run east to west along the northeast portion of the property, adjacent to the Kīlauea Wildlife Refuge. The proposed development is located away from this trail corridor and would not impede or alter existing public access routes or coastal recreation opportunities.

   b. Cultural/ Historic Resources - Prior to this permit submittal, the original owner received a letter dated February 11, 2020, from the State Historic Preservation Division of the Department of Land and Natural Resources under permit numbers Z-IV-2021-6, U-2021-5, and SMA(U)-2021-6 requesting that a field inspection be conducted on the subject parcel. An archaeological field inspection was completed on February 28, 2020, by

Exploration Associates, LTD. The inspection concluded that no historic properties were identified on this parcel and that no nearby historic properties would be affected.

c. Scenic and Open Space Resources - The subject parcel is located at the northernmost edge of the subdivision. The proposed dwelling would not be visible as viewed from the Kilauea Town Center, entry of Sea Cliff Plantation, or the shoreline. No view planes/ scenic and open space resources would be negatively impacted.

d. Coastal Hazards – The project area/site is not located within the extreme tsunami evacuation area. It is located within Zone "X", as shown on Federal Insurance Rate Maps (FIRM 150002-0060E). The project would not be impacted by any coastal hazards.

e. Coastal Ecosystem - As previously noted, the project site abuts the Kilauea Wildlife Refuge, U.S. Fish and Wildlife Service. The project site has been cleared of vegetation and now guinea grass dominates the area. Occasionally, endangered birds such as Nēnē, shearwaters, and the Laysan albatross or Mōlī may be found around the project area.

5. **Use Permit**

Pursuant to Article 3 of the Comprehensive Zoning Ordinance (CZO), Chapter 8 of the Kauai county Code (1987), the purpose of the Use Permit Procedure is to assure the proper integration into the community of uses which may be suitable only in specific locations of a district, or only under certain conditions, or only if the uses are designed, arranged or conducted in a particular manner, and to prohibit the uses if proper integration cannot be assured. Section 8-3.2 of the CZO specifies a Use Permit may be granted only if the Planning Commission finds that the use meets the following criteria:

- The use must be a compatible use;
- The use must not be detrimental to persons or property in the area;
- The use must not cause substantial environmental consequences; and
- The use must not be inconsistent with the intent of the Comprehensive Zoning Ordinance (CZO) and General Plan.

a. Based on the foregoing, the following aspects are considered:

i. **Compatible Use** – The proposed development is located within an established residential subdivision and is consistent in character and function with the surrounding neighborhood. The design aligns with the subdivision's existing architectural and site layout, ensuring compatibility with adjacent residential uses. The project would comply with all applicable building, fire, and safety regulations, and is not expected to create noise, traffic, or other impacts beyond what is typical for a residential setting.

6. **CZO Development Standards**

As proposed, the project complies with the building height, setback, off-street parking, and land coverage requirements for development within the Open (O) zoning district, as specified in Sections 8-4.3, 8-4.5 and 8-9.2(a).

X. PRELIMINARY CONCLUSION

Based on the foregoing, it is concluded that, with proper mitigation measures, the proposed development may be considered and is not expected to result in any significant adverse impacts to the environment or the surrounding neighborhood. It is further concluded that the proposed development complies with the policies of the County General Plan, the North Shore Development Plan, the Kauaʻi County Code Comprehensive Zoning Ordinance, and the policies and guidelines of the Special Management Area, in that:

1. The development will not have any substantial adverse environmental or ecological effect.
2. The development is consistent with the objectives/goals/ policies of the County General Plan, the North Shore Development Plan, the Comprehensive Zoning Ordinance, and other applicable ordinances.

Furthermore, the proposal does not:

a. Involve dredging, filling, or otherwise altering any bay, estuary, salt marsh, river mouth, slough, or lagoon;

b. reduce the size of any beach or other area usable for public recreation;

c. reduce or impose restrictions upon public access to tidal and submerged lands, beaches, rivers, or streams, within the Special Management Area; and

d. adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, estuarine sanctuaries or existing agricultural uses of land.

The proposed development meets the criteria for the granting of a Special Management Area Use Permit. The applicant should implement Best Management Practices to ensure the use does not negatively impact the health, safety, and welfare of the surrounding area. Sustainable building techniques and operational methods should also be incorporated to the extent possible.

XI. PRELMINARY RECOMMENDATION

Based on the foregoing evaluation and conclusion it is hereby recommended that proposed development involving the construction of a three-bedroom, farm dwelling with garage, detached guest house, agricultural building, exercise pavilion, and swimming pool through Class IV Zoning Permit Z-IV-2026-3, Use Permit U-2026-2, and Specia management Area Use Permit SMA(U)-2026-2 be **approved** subject to the following conditions:

1. The proposed development shall be constructed as represented. Any changes to the development shall be reviewed by the Planning Director to determine whether Planning Commission review and approval is required.

2. The Applicant is advised that prior to construction; additional government agency conditions may be imposed. It shall be the applicant's responsibility to resolve those conditions with the respective agency(ies).

3. The Applicant shall resolve and comply with the applicable standards and requirements set forth by the State Health Department, State Historic Preservation Division-DLNR, Office of Hawaiian Affairs, and the County Departments of Public Works, Fire & Water.

4. The Applicant shall develop and utilize Best Management Practices (BMP's) during all phases of development in order to minimize erosion, dust, and sedimentation impacts of the project to abutting properties.

5. The Applicant must receive a letter from DLNR, SHPD, prior to the installation of BMP's (dust fence) or any ground disturbing activities or grubbing.

6. In order to ensure that the project is compatible with its surroundings and to minimize the visual impact of the structures, the external color of the proposed farm dwelling, guest house, and agriculture building shall be of moderate to dark earth- tone color. The proposed color scheme and a landscape plan should be submitted to the Planning Department for review and acceptance prior to building permit application

7. The proposed dwelling and guest house shall not be utilized for any transient accommodation purposes. It shall not be used as a transient vacation rental (TVR) or as a homestay. This restriction shall be incorporated into the deed restrictions of the subject parcel in the event the property is sold to another party, draft copies of which shall be submitted to the Planning Department prior to building permit application approval.

8. Should any archaeological or historical resources be discovered during ground disturbing/construction work, all work in the area of the archeological/ historical findings shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources - Historic Preservation Division and the County of Kaua'i, Department of Planning to determine mitigation measures.

9. In order to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds, all external lighting shall be only of the following type: downward facing shielded lights. Spotlights aimed upward or spotlighting of structures or physical features shall be prohibited.

10. To the extent possible within the confines of union requirements and applicable legal prohibitions against discrimination in employment, the Applicant shall seek to hire Kaua'i contractors as long as they are qualified and reasonably competitive with other contractors

and shall seek to employ residents of Kauaʻi in temporary construction and permanent resort-related jobs. It is recognized that the Applicant may have to employ non- Kauai residents for particular skilled jobs where no qualified Kauaʻi residents possesses such skills. For the purposes of this condition, the Commission shall relieve the Applicant of this requirement if the Applicant is subjected to anti-competitive restraints on trade or other monopolistic practices.

11. The Applicant shall implement to the extent possible sustainable building techniques and operational methods for the project, such as Leadership in Energy and Environmental Design (L.E.E.D.) standards or another comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system, and strategies, which may include but is not limited to recycling, natural lighting, extensive landscaping, solar panels, low-energy fixtures, low energy lighting and other similar methods and techniques. All such proposals shall be reflected on the plans submitted for building permit review.

12. The applicant must make substantial progress, as determined by the Director, regarding the development or activity by September 9, 2027, or the permit shall be deemed to have lapsed and no longer be in effect.

13. The Planning Commission reserves the right to revise, add, or delete conditions of approval in order to address or mitigate unforeseen impacts that the project may, create, or to revoke the permits through the proper procedures should conditions of approval not be complied with or violated.

The Planning Commission is further advised that this report does not represent the Planning Department's final recommendation in view of the forthcoming public hearing process scheduled for September 9, 2025, whereby the entire record should be considered prior to decision making. The entire record should include but not be limited to:

a. Pending government agency comments;

b. Testimony from the general public and interested others; and

c. The Applicant's response to staff's report and recommendation as provided herein.

By Romio ______________________

ROMIO IDICA
Planner

Approved & Recommended to Commission:

By ____________________
KAʻĀINA S. HULL
Director of Planning

Date: 8/13/2025