

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
1151 Punchbowl Street, Room 221  
Honolulu, Hawaii 96813

**ADDENDUM NO. 1**

TO

Job No. F70C616H  
Sand Island State Recreation Area Improvements, Ph. VI  
Honolulu, Oahu, Hawaii

May 6, 2026

This addendum as issued shall become part of the Contract Documents for the subject project. The bid documents, plans, and specifications shall be amended as follows:

**GENERAL INFORMATION**

1. A voluntary pre-bid conference and site visit was held on April 27, 2026 at 10:00 A.M. at the Project Site located at Sand Island SRA Park. The pre-bid conference agenda and sign-in sheet are attached for information only.
2. Extended the Question Due Date to **May 8, 2026 at 4:30 P.M.**, and Answer Publish Date to **May 12, 2026 at 4:30 P.M.**
3. Extended the Offer Due Date to **May 19, 2026 at 2:00 P.M.**

**SPECIFICATIONS**

1. Table of Contents: **DELETE** in its entirety and **REPLACE** with the attached revised Table of Contents.
  - a. Deleted Section 01210 Allowances from specifications.
2. Proposal: **DELETE** in its entirety and **REPLACE** with the attached revised Proposal.
  - a. Revised bid proposal form on pages P-2 to P-3.
3. Section 01110 – Summary of Work: **DELETE** in its entirety and **REPLACE** with the attached revised Section 01110.
  - a. Subsection 1.04(A)(1) – Deleted “Structure 6: Asphalt Beach Walkway”, which is already covered under Bid Additive #4.

Job No. F70C616H  
Sand Island SRA Improvements, Ph. VI  
Honolulu, Oahu, Hawaii

- b. Subsection 1.04(B)(1)(a) – Included State Park hours.
- 4. Section 01230 – Additive Bid Items: **DELETE** in its entirety and **REPLACE** with the attached revised Section 01230.
  - a. Subsection Section 3.1 – Revised Schedule of Additive Bid Items.
- 5. Section 01359 – Historic Treatment Procedures: **DELETE** in its entirety and **REPLACE** with the attached revised Section 01359.
  - a. Subsection 1.01(C) – Deleted reference to Section 02429.
  - b. Subsection 1.04(A)(1) – Deleted reference to “wood doors and windows, paint and wall coverings”, and replaced with “steel structures, doors, and paint”.
- 6. Section 01581 – Project Sign: **DELETE** in its entirety and **REPLACE** with the attached revised Section 01581.
  - a. Revised project sign and added sign details.
- 7. Section 02070 – Selective Demolition: **DELETE** in its entirety and **REPLACE** with the attached revised Section 02070.
  - a. Subsection 1.03(C) – Deleted reference to Section 01310.
  - b. Subsection 1.04(E) – Revised ADAAG reference to the current 2010 ADA Standards.
  - c. Subsection 2.01(C) – Deleted Part C with reference to Section 02429.
- 8. Section 08110 – Steel Doors and Frames: **DELETE** in its entirety and **REPLACE** with the attached revised Section 08110.
  - a. Subsection 1.01(B) – Deleted reference to Section 08710.

## **PLANS**

- 1. Sheets #2-29 – Added project title and number in title block.
- 2. Sheet G002 – Revised Index to include Sheets A001, S-003, S2-501, and S3-501.
- 3. Sheet C002 – Deleted callouts to protect trees during construction.
- 4. Sheet C004 – Added Details 6 and 7 to remove trees and roots during construction.
- 5. Sheet A001 – Revised the location of the new walkway connection to existing paved walkway.
- 6. Sheet A2-101:
  - a. Revised callout for trash receptacles.
  - b. Added callout for concrete structures to be repainted to match raw concrete.

7. Sheet A2-102:
  - a. Revised note in Detail 5 regarding the unit price for variable quantities of wood panel replacement items.
  - b. Added callout for concrete columns to be painted.
8. Sheet A3-101 – Added callouts to repaint entire structure and “Sand Island” lettering under Bid Additive #2.
9. Sheet A3-102 – Added callouts to return handrails at extensions.
10. Sheet A4-102 – Added a callout to stack large angular boulders in Detail 1.
11. Sheet D5-101 – Added a callout to remove and dispose interior debris in Detail 1.
12. Sheet A6-101 – Added a callout to remove and dispose interior debris in Detail 1.

Engineering Division



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Dina U. Lau  
Acting Chief Engineer

## Agenda

### Pre-Bid Conference

#### **JOB NO. F70C616H SAND ISLAND STATE RECREATION AREA IMPROVEMENTS PH. VI HONOLULU, OAHU, HAWAII**

Date: April 27, 2026 @ 10:00 am.

Location: Sand Island SRA Park (1499 Sand Island Pkwy, Honolulu, Oahu)

#### **1. Introductions**

#### **2. Description of Project Scope**

##### **1. Base Bid:**

###### *Anti-aircraft gun emplacement tower*

- Repair concrete spalling
- Remove, repair connections, and reinstall wood panels
- Improvements to roof drainage and install TPO roof membrane
- Add gravel around tower base, including new railing
- Repaint entire structure

###### *Harbor Entrance Control Tower*

- Structural repairs on platform level as shown in the plans

###### *Air Raid Shelter (Train Station)*

- Remove & dispose non-historic wood & concrete elements and interior debris
- Apply coating for entire structure
- Install new access panel

###### *Cable Hut (Train)*

- Remove & dispose non-historic wood & concrete elements, including handrails
- Apply coating for entire structure
- Install new fencing

###### *Plotting Room*

- Remove & dispose interior debris
- Remove, repair, and reinstall existing metal doors & replace locks
- Exhaust vent to be capped
- Regrade & stabilize near entryway

##### **2. Additive #1:**

###### *Anti-aircraft gun emplacement tower*

- Install new benches and trash receptacles

##### **3. Additive #2:**

###### *Harbor Entrance Control Tower*

- Non-priority structural repairs on upper deck levels as shown in the plans
- Repaint entire structure

4. Additive #3:

*Harbor Entrance Control Tower*

- Repair rock wall / stairs and install railing
- Repair concrete slab

5. Additive #4:

*Coastal Walkway*

- Remove portion of paved walkway and relocate 75-ft inland
- Regrading and landscape stabilization

All work shall be completed during the park hours between 7:00 am to 7:45 pm during summer and 7:00 am to 6:45 pm during winter (starts day after Labor Day).

Bid Opening is on May 15, 2026 at 2:00 p.m. Bids shall be uploaded to HiePRO.

Last day to submit Questions is May 4, 2026 at 4:30 p.m.

Meeting agenda and sign-up sheet will be posted on HiePRO in an Addendum.

**3. Questions**

Note: All answers and comments are unofficial, the official answers will be uploaded to HiePRO in an Addendum.

**4. Walk Through of Project Area.**

**SIGN-IN SHEET**  
**PRE-BID SITE MEETING**

Job Title: Sand Island State Recreation Area Improvements, Phase VI, Honolulu, Oahu, Hawaii

Job Number: F70C616H

Date: April 27, 2026

Time: 10:00 A.M.

	NAME	AGENCY/COMPANY	PHONE NO.	EMAIL ADDRESS
1	Frances Constantino	DLNR-ENG	808-587-0279	Frances.Constantino@hawaii.gov FC
2	Valerie Suzuki	DLNR-ENG	808-587-0275	Valerie.S.Suzuki@hawaii.gov <i>vs</i>
3	Carl Shelton	DLNR-DSS	(808) 636-8432	carl.shelton@hawaii.gov
4	Glenn Keohohoho Jr.	Society Contracting LLC.	(808) 495-8151	bids@societycontracting.com
5	Kennedy Freeman	CAF	(808) 265-6320	kfreemanpabc@gmail.com
6	Mea Morison	Boston Inc	(808) 481-5052	mlf@kenovations.org
7	Leon Miguel	MEI Corp	808 763 8525	leon@muelcorparten.net
8	JIM Stone	G70	808-301-2700	jstone@g70.dssgn
9	KAUAI CHING	G70	—	kaui@ccg70.dssgn
10	Les Serenidad	DLNR S.P.	808 281-0182	lesie.b.jeremichal@hawaii.gov
11	REGGIE ACIARAF	SOCIETY CONTRACT	(808) 455-8157	ibids@societycontract.com
12	LYLE CAPDEN	MARTIN CHUCK CAPDEN	(808) 521-4573	lcaden@erwinichuckaden.com
13				
14				
15				
16				

## **TABLE OF CONTENTS**

### **DIVISION 0 - INTRODUCTORY, BIDDING AND CONTRACTING REQUIREMENTS**

Title Page  
Table of Contents  
Notice to Bidders  
Instructions to Bidders  
Proposal  
Special Provisions

### **DIVISION 1 - GENERAL REQUIREMENTS**

Section 01019 General Specs  
Section 01090 Standard References  
Section 01100 Archaeological Protection  
Section 01110 Summary of Work  
Section 01230 Additive Bid Item  
Section 01270 Variable Quantities Unit Prices  
Section 01300 Submittals  
Section 01359 Historic Treatment Procedures  
Section 01505 Mobilization Demobilization  
Section 01530 Barricades  
Section 01567 Pollution Control  
Section 01570 Soil Erosion Control  
Section 01581 Project Sign  
Section 01715 Existing Conditions - Asbestos / Lead / Hazardous  
Material Survey  
Attachment Limited Hazardous Material Survey  
Sand Island State Recreation Area

### **DIVISION 2 - SITE CONSTRUCTION**

Section 02070 Selective Demolition  
Section 02370 Erosion Control  
Section 02740 Asphalt Concrete Paving  
Section 02770 Concrete Curbs, Sidewalks and Driveways

### **DIVISION 3 - CONCRETE**

Section 03300 Cast-in-Place Concrete  
Section 03930 Concrete Rehabilitation

### **DIVISION 4 – MASONRY – Not Used**

### **DIVISION 5 - METALS**

Section 05120 Structural Steel  
Section 05720 Railing and Handrails

### **DIVISION 6 - WOOD AND PLASTICS– Not Used**

**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

- Section 07541 TPO Membrane Roofing
- Section 07600 Flashing and Sheet Metal
- Section 07910 Exterior Wall Joint Sealants

**DIVISION 8 - DOORS AND WINDOWS**

- Section 08031 Historic Treatment of Metal Doors
- Section 08110 Steel Doors and Frames

**DIVISION 9 - FINISHES**

- Section 09900 Painting
- Section 09905 High Performance Wall Coatings

**DIVISION 10 - SPECIALTIES – Not Used**

**DIVISION 11 - EQUIPMENT – Not Used**

**DIVISION 12 – FURNISHING – Not Used**

**DIVISION 13 - SPECIAL CONSTRUCTION**

- Section 13282 Lead-Paint Control Measures

**DIVISION 14 - CONVEYING SYSTEMS – Not Used**

**DIVISION 15 – MECHANICAL – Not Used**

**DIVISION 16 – ELECTRICAL – Not Used**

P R O P O S A L

FOR

DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
State of Hawaii

JOB NO. F70C616H  
Sand Island State Recreation Area Improvements Ph. VI  
Honolulu, Oahu, Hawaii

\_\_\_\_\_, 2026

Chief Engineer  
Engineering Division  
Department of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

Dear Sir:

The undersigned, having carefully examined the local conditions and all available records and information covering conditions which may affect the cost of the work to be performed, and having carefully examined the Plans and Specifications, and other contract documents, hereby proposes to furnish and pay for all materials, tools, equipment, labor and other incidental work necessary to the rehabilitation and stabilization of existing historic structures at Sand Island, including selective demolition, repair and preservation treatments. Work also includes modifications to site circulation, including relocation of portions of the existing walkway, and associated site improvements in accordance with project drawings and applicable regulations, as required or called for in this Proposal, all according to the true intent and meaning of the Notice to Bidders, Information and Instructions to Bidders, Proposal, Detailed Specifications, Interim General Conditions, Plans, and any and all addenda for:

JOB NO. F70C616H  
Sand Island State Recreation Area Improvements Ph. VI  
Honolulu, Oahu, Hawaii

on file in the office of the Engineering Division for the TOTAL BASE BID (Items 1 to 10) of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

and will fully complete all work under this contract within 360 (approx.) consecutive calendar days from the date of written notice to proceed, including date of said order, said total sum being itemized on the following pages.

**PROPOSAL**

Item No.	Quantity	Unit	Description	Unit Price	Total
<b><u>BASE BID</u></b>					
1.		LS	Structure 1: Anti-Aircraft Gun Emplacement Tower		\$
2.		LS	Structure 2: Harbor Entrance Control Tower		\$
3.		LS	Structure 3: Cable Hut (Train)		\$
4.		LS	Structure 4: Air Raid Shelter (Train station)		\$
5.		LS	Structure 5: Plotting Room		\$
<b>Variable Quantities Unit Prices</b>					
6.	35	EA	Structure 1 – Wood Panel/Trellis Replacement of 2x6x4 wood members	\$	\$
7.	130	LF	Structure 1 – Wood Panel/Trellis Replacement of 4x10 wood members Lengths vary from 18” to 166”	\$	\$
8.		LS	Project Sign, in place complete.		\$
9.	Allowance		Field Office		\$ 10,000.00
<b>Subtotal Base Bid (Items 1-9)</b>					\$
10.		LS	Mobilization and Demobilization (not to exceed 10% of the Subtotal Base Bid)		\$
<b>Total Base Bid (Items 1-10)</b>					\$
<b><u>ADDITIVE NO. 1: Structure 1 Benches and park elements per drawings</u></b>					
11.	3	EA	Benches and installation	\$	\$
12.	2	EA	Trash receptacles: Outdoorsiness CD-SL45B-BLK	\$	\$
<b>Total Sum Additive No. 1 (Items 11 &amp; 12)</b>					\$
<b><u>ADDITIVE NO. 2: Structure 2 Non-priority structural repairs</u></b>					
13.		LS	Additional non-priority structural repairs as noted in drawings		\$
14.		LS	Repainting of metal structure in its entirety		\$
<b>Total Sum Additive No. 2 (Items 13 &amp; 14)</b>					\$

	<b><u>ADDITIVE NO. 3: Structure 2 Repair rock wall stairs and stair handrails</u></b>			
15.		LS	Rock Wall Masonry repair	\$
16.		LS	Slab Hole Repair	\$
17.		LS	Handrail fabrication and installation	\$
<b>Total Sum Additive No. 3 (Items 15-17)</b>				\$
	<b><u>ADDITIVE NO. 4: Asphalt Beach Walkway</u></b>			
18.		LS	Existing walkway demo, replacement AC walkway and associated work per drawings, including not limited to landscape stabilization and temporary BMPs	\$
<b>Total Sum Additive No. 4 (Item 18)</b>				\$

RECYCLED PRODUCTS PREFERENCE

This project allows a 10% price preference for recycled products in accordance with HRS 103D-1005. Please indicate your selection of recycled or non-recycled product by indicating its cost FOB jobsite unloaded in the schedule below, including applicable General Excise & Use Taxes.

<u>DESCRIPTION</u>	<u>RECYCLED PRODUCT COST</u>	<u>NONRECYCLED PRODUCT COST</u>
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

The bidder requesting a recycled product preference shall also complete and submit the form "CERTIFICATION OF RECYCLED CONTENT" as shown in the Interim General Conditions and provide all supporting information with this proposal. Additional information may be requested to qualify a product.

The following definitions are applicable to the CERTIFICATION OF RECYCLED CONTENT form:

"Post-consumer recovered material" means any product used by a consumer, including a business that purchases the material, that has served its intended end use, and that has been separated or diverted from the solid waste stream for the purpose of use, reuse, or recycling.

"Product" includes materials, manufactures, supplies, merchandise, goods, wares, and foodstuffs.

"Recovered material" means waste material and by-products that have been separated, diverted, or removed from the solid waste stream after a manufacturing process for the purpose of use, reuse, or recycling. Recovered material does not include those materials and by-products that are generated and normally reused on-site or within original manufacturing processes (such as mill broke, in the case of paper products).

"Recycled content" means the percentage of a product composed of recovered material, or post-consumer recovered material, or both.

"Recycled product" means a product containing recovered material, or post-consumer recovered material, or both.

The bidder agrees that preference for recycled products shall be taken into consideration to determine the low bidder in accordance with said Section and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive any preference.

## APPRENTICESHIP AGREEMENT PREFERENCE

1. If applicable to this project, any bidder seeking the preference must be a party to an apprenticeship agreement registered with the State Department of Labor and Industrial Relations (DLIR) at the time the bid is submitted for each apprenticeable trade the bidder will employ to construct the project. “Employ” means the employment of a person in an employer-employee relationship.
  - a. The apprenticeship agreement shall be registered with the DLIR and conform to the requirements of Hawaii Revised Statutes Chapter 372.
  - b. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain preference.
  - c. The bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.
2. A bidder seeking the preference must state the apprenticeable trade the bidder will employ for each trade to be employed to perform the work by submitting a completed signed original Certification Form 1 verifying participation in an apprenticeship program registered with DLIR. “Apprenticeable trade” shall have the same meaning as “apprenticeable occupation” pursuant to Hawaii Administrative Rules (HAR) §12-30-5.
  - a. The *Certification Form 1* shall be authorized by an apprenticeship sponsor listed on the DLIR list of registered apprenticeship programs. “Sponsor” means an operator of an apprenticeship program and in whose name the program is approved and registered with the DLIR pursuant to HAR §12-30-1.
  - b. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor.
  - c. The completed signed original Certification Form 1 for each trade must be submitted with the bid. Previous certifications shall not apply.
  - d. When filling out the *Certification Form 1*, the name of Apprenticeable Trade and Apprenticeship Sponsor must be the same as recorded in the List of Construction Trades in Registered Apprenticeship Programs that is posted on the DLIR website. “Registered apprenticeship program” means a construction trade program approved by the DLIR pursuant to HAR §12-301 and §12-30-4.
  - e. The *Certificate Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: <http://hawaii.gov/labor/wdd>.
3. Upon receiving the *Certification Form 1*, the Procurement Officer will verify that the apprenticeship program is on the List of Construction Trades in Registered Apprenticeship Programs and that the form is signed by an authorized official of the Apprenticeship Program Sponsor. If the programs and signature are not confirmed by the DLIR, the bidder will not qualify for the preference.
4. If the bidder is certified to participate in an apprenticeship program for each trade which will be

employed by the bidder for the project, a preference will be applied to decrease the bidder's bid amount by five percent (5%) for evaluation purposes.

5. Should the bidder qualify for other preferences, all applicable preferences shall be applied to the bid price.

CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS PROHIBITED

Contractors are hereby notified of the applicability of Section 11-355, HRS, which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body.

### CONDITION OF AWARD

It is understood that the award of the contract will be made on the basis of the lowest responsible Total Base Bid and Additive bids in accordance with the "Information and Instruction to Bidders", Items K and L, and as selected by the Board of Land and Natural Resources.

It is understood and agreed that the Board of Land and Natural Resources reserves the right to reject any and/or all bids and waive any defects when, in the Board's opinion, such rejection or waiver will be for the best interest of the State of Hawaii.

In the event all bids exceed available funds certified by the appropriate fiscal officer, the head of the purchasing agency responsible for the procurement in question is authorized in situations where time or economic considerations preclude resolicitation of work of a reduced scope to negotiate an adjustment of the bid price, including changes in the bid requirements, with the low responsible and responsive bidder, in order to bring the bid within the amount of available funds. It is understood and agreed upon that the head of the purchasing agency may delete a portion or all of any item(s) in the proposal at the stated unit or lump sum price as necessary to stay within the available funding. The bidder is responsible to make an earnest effort to represent the actual cost of each item, including all materials, labor, equipment, overhead and profit in their bid proposal to preclude claims of anticipated profit or loss of profit because of an unbalanced bid proposal.

It is also understood that if a mutually agreeable cost for the reduced scope of work necessitated by a lack of available funds cannot be agreed upon between the bidder and the head of the purchasing agency within 14 calendar days after the bid opening, then the bid may be rejected in the best interest of the purchasing agency, and the head of the purchasing agency may negotiate in progressive order (lowest to highest) with the next lowest responsible and responsive bidder.

It is also understood and agreed that the award of the contract shall be conditioned upon funds being made available for this project and further upon the right of the Board of Land and Natural Resources to hold all bids received for a period of one hundred eighty (180) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn.

It is also understood that Notice to Proceed may be delayed up to eighteen (18) months after the bid opening date, and that no additional compensation will be provided for any claim for escalation or delay for issuance of Notice to Proceed on or before that date.

It is also understood and agreed that the quantities given herewith are approximate only and are subject to increase or decrease, and that the undersigned will perform all quantities of work as either increased or decreased, in accordance with the provisions of the Contract Specifications.

It is also understood and agreed that the estimated quantities shown for the items for which a UNIT PRICE is asked in this Proposal are only for the purpose of comparing on a uniform basis, bids offered for the work under this contract, and the undersigned agrees that he is satisfied with and will at no time, dispute said estimated quantities as a means of claims for anticipated profit or loss of profit, because of a difference between the quantities of the various classes of work done or the materials and equipment installed, and the said estimated quantities. On UNIT PRICE bids, payment will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.

After the HIEPRO bid due date and time, the figures will be extended and/or totaled in accordance with the bid prices of the acceptable proposals and the totals will be compared. In the comparison of bids, words written in the proposal shall govern over figures and unit prices will govern over totals. Until

the award of the contract, however, the right will be reserved to reject any and all proposals and to waive any defects or technicalities as may be deemed best for the interest of the State.

It is also understood and agreed that liquidated damages in the amount of FIVE HUNDRED AND NO/100 DOLLARS (\$500.00) for each and every calendar day in excess thereof prior to completion of the contract shall be withheld from payments due to the Contractor.

It is also understood and agreed that if this bid is accepted, the successful bidder must enter into and execute a contract with the Board of Land and Natural Resources and furnish a Performance and Payment Bond, as required by law. These bonds shall conform to provisions of Section 103D-324 and 325, Hawaii Revised Statutes and any law applicable hereto.

It is also understood and agreed that the successful bidder will provide all necessary labor, materials, tools, equipment, and other incidentals necessary to do all the work and furnish all the materials specified in the contract in the manner and time herein prescribed, and according to the requirements of the Engineer as therein set forth.

It is understood that by submitting this proposal, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past two years.

It is understood that by submitting this proposal in accordance with HAR 3-122-192, the undersigned is declaring that the price submitted is independently arrived without collusion.

It is also understood that by submitting this proposal, a Certification for Safety and Health Programs for bids in excess of \$100,000 (in accordance with HRS 396-18), the undersigned certifies that his organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational, Safety and Health Division (HIOSH).

It is further understood and agreed that the successful bidder shall comply with paragraph 3.1.a "SUBCONTRACTING" of the General Provisions which requires that the contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than twenty percent (20%) of the value of all work embraced in the Contract, except that certain contract items of work, if specifically referred to in the special provisions, will be exempted from said twenty percent requirement.

Compliance with §103-310 HRS. As a condition of award all bidders shall comply with all laws governing entities doing business in the State, including Chapter 237 HRS (general excise tax); Chapter 383 HRS (employment security – unemployment insurance); Chapter 386 HRS (workers compensation); Chapter 392 HRS (temporary disability insurance); and Chapter 393 HRS (pre-paid health care), and shall produce all documents to the State (DLNR, Engineering Division) required to demonstrate compliance with these subsections. Any bidder making a false affirmation or certification under this subsection shall be suspended and may be debarred from further offerings or awards pursuant to §103D-702 HRS.

**RECEIPT OF ADDENDA**

The bidder also acknowledges receipt of any and all addenda issued by the Engineering Division, by recording the date of receipt of the respective addenda in the space provided below:

<u>Addendum</u>	<u>Date Received</u>	<u>Addendum</u>	<u>Date Received</u>
No. 1	_____	No. 5	_____
No. 2	_____	No. 6	_____
No. 3	_____	No. 7	_____
No. 4	_____	No. 8	_____

It is understood that failure to receive any such addendum shall not relieve the Contractor from any obligation under this Proposal as submitted.

It is also understood and agreed that if this Proposal is accepted and the undersigned should fail or neglect to contract as aforesaid, the Board may determine that the bidder has abandoned the Contract, and thereupon, forfeiture of the security accompanying his proposal shall operate and the same shall become the property of the Board.

JOINT CONTRACTORS OR SUBCONTRACTORS  
TO BE ENGAGED ON THIS PROJECT

The Bidder agrees that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes (HRS), who will be engaged by the Bidder on this project to perform the required work indicated pursuant to Section 103D-302, HRS. It is the sole responsibility of the contractor to review the requirements of this Project and determine the appropriate licenses that are required to complete the Project. The Bidder certifies that the completed listing of joint contractors or subcontractors fulfills the requirements for the project and the Bidder, together with the listed subcontractors or joint contractors have all the specialty contractor's licenses to complete the work, except as provided for in HRS §103D-302(b). Failure of the Bidder to comply with this requirement may be just cause for rejection of the bid.

“A” General Engineering Contractors and “B” General Building Contractors are reminded that due to the Hawaii Supreme Court’s January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area in which the general contractor has no license. Although the “A” and “B” contractor may still bid on and act as the “prime” contractor on an “A” or “B” project (See, HRS §444-7 for the definitions of an “A” and “B” project.), respectively, the “A” and “B” contractor may only perform work in the areas in which they have the appropriate contractor’s license (*An “A” or “B” contractor obtains “C” specialty contractor’s licenses either on its own, or automatically under HAR § 16-77-32*). The remaining work must be performed by appropriately licensed entities.

General Engineering “A” Contractors automatically have these “C” specialty contractor’s licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-49, C-56, C-57a, C-57b and C-61.

General Building “B” Contractors automatically have these “C” specialty contractor’s licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-32a, C-42a and C-42b.

In completing the Joint Contractors or Subcontractors List, describe the specialty contractor’s nature and scope of work to be performed for this project and provide the complete firm name of the joint contractor or subcontractor in the respective columns. If the Bidder is a general contractor and providing the work of the required specialty contractor, fill in the Bidder’s (general contractor’s) name and nature and scope of work to be performed on this project.

List only one joint contractor or subcontractor per required specialty contractor’s classification, unless within the same specialty, the work of each joint contractor or subcontractor can be described so that there is no overlap in work descriptions.

If a contractor’s license is required by law for the performance of the work which is called for in this bid, the bidder and all subcontractors must have the required license before the submission of the bidder’s proposal in the case of a non-federal aid project, and for federal-aid projects, the bidder must have the required license prior to the award of the project and all subcontractors prior to the start of the subcontracted work.

**BASE BID**

<b>COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR</b>	<b>NATURE AND SCOPE OF WORK TO BE PERFORMED</b>

JOINT CONTRACTORS OR SUBCONTRACTORS LIST FOR THE ADDITIVE(S):

Bidder agrees that for projects with additives(s), the Bidder, joint contractor or subcontractor listed in the completed “Joint Contractors or Subcontractors List for the Additives(s)” will perform work for the respective additives.

Additive 1

<b>COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR</b>	<b>NATURE AND SCOPE OF WORK TO BE PERFORMED</b>

Additive 2

<b>COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR</b>	<b>NATURE AND SCOPE OF WORK TO BE PERFORMED</b>

Additive 3

<b>COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR</b>	<b>NATURE AND SCOPE OF WORK TO BE PERFORMED</b>

Additive 4

<b>COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR</b>	<b>NATURE AND SCOPE OF WORK TO BE PERFORMED</b>

Enclosed herewith is a:

- 1. Surety Bond (\*1) )
- 2. Legal Tender (\*2) )
- 3. Cashier's Check (\*3) )
- 4. Certificate of Deposit (\*3) ) in the
- 5. Certified Check (\*3) ) amount
- 6. Official Check (\*3) ) of
- 7. Share Certificate (\*3) )
- 8. Teller's Check (\*3) )
- 9. Treasurer's Check (\*3) )

(Cross Out Those Not Applicable)

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

as required by law.

Exact Legal Name of Company, Joint Venture or Partnership

Company is:

Sole Proprietor    Partnership    Corporation    Joint Venture    Other \_\_\_\_\_

Contractor's License No.: \_\_\_\_\_

Federal I.D. No.: \_\_\_\_\_

Hawaii General Excise Tax License I.D. No.: \_\_\_\_\_

Payment address (other than street address below): \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Business Address (street address): \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Respectfully submitted,

By \_\_\_\_\_  
 Authorized (Original) Signature (\*4)

Title: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;
2. Legal tender; or
3. A certificate of deposit; share certificate; or cashier's, treasurer's, teller's, or official check drawn by, or a certified check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration.
  - A. These instruments may be utilized only to a maximum of \$100,000.
  - B. If the required security or bond amount totals over \$100,000, more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be accepted.
4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company and also the names and residence addresses of all officers of the Company.
5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT, MISSING PAGES MAY INVALIDATE YOUR BID.

**End of Proposal**

## **SECTION 01110 - SUMMARY OF WORK**

### **PART 1 - GENERAL**

#### **1.01 SUMMARY**

- A. This section is for the convenience of the Contractor only and shall not be construed as a complete accounting of all work to be performed. The extent of the Work is indicated on the drawings and by the requirements of each Specification Section.
- B. Drawings, Specification Sections, and general provisions of the Contract, including General and Supplementary Conditions and all other Division Specification Sections apply to this Section.

#### **1.02 LOCATION OF WORK**

- A. Project Name: Sand Island SRA Park Improvements Ph.VI  
Address: 1499 Sand Island Pkwy, Honolulu, HI 96819  
Owner: State of Hawaii  
Architect: Group 70 International 111 S King St Suite 170  
Honolulu, HI 96813

#### **1.03 SITE INVESTIGATION**

- A. The Contractor shall examine the site and shall be responsible for verifying existing construction and conditions. Any failure by the Contractor to acquaint themselves with all the available information concerning existing conditions will not relieve them from responsibility for properly estimating the difficulty or cost of successfully performing the work. No extra payment will be considered for work additional to that shown or noted, if such work would have been apparent in an inspection of the premises.

#### **1.04 WORK UNDER THIS CONTRACT**

- A. GENERAL REQUIREMENTS:
  - 1. BASE BID:
    - a. Structure 1: Anti-Aircraft Gun Emplacement Tower
      - i Structural stabilization of existing structure including spall repair and reconstruction.
      - ii Panels removed, anchor bolts and connections to be replaced per structural drawings, panels to be stained and reinstalled.
      - iii Seal existing roof penetrations, reslope roof to wall scuppers, new roof construction complete to manufacturer specifications
      - iv Exterior to receive coating

- v Railings installed and large aggregate gravel to raise grade on 2 sides
- b. Structure 2: Harbor Entrance Control Tower
  - i Structural stabilization of the existing structure including replacement of steel members and rust repair
- c. Structure 3: Cable Hut (Train)
  - i Complete demolition and removal of stairs/railings, wheels, smokestack, train additive elements, paint stripped to original masonry
  - ii Added fencing per drawings
- d. Structure 4: Air Raid Shelter (Train station)
  - i Complete demolition and removal of wood slats and paint stripping down to masonry
  - ii New metal door for maintenance access, G90 coating, multicam lockset
  - iii Debris removal of the interior
- e. Structure 5: Plotting Room
  - i Regrade entry and stabilize the slope
  - ii Replace door frame, rehab door, add lockset
  - iii Cap cover to existing chimney hatch
  - iv Debris removal of the interior
- f. BID ALTERNATES
  - i Bid alt 1: Structure 1 Benches and park elements per drawings
  - ii Bid alt 2: Structure 2 Non-priority structural repairs and repaint entire structure.
  - iii Bid alt 3: Structure 2 Repair rock wall stairs and stair handrails
  - iv Bid alt 4: Re-route asphalt beach walkway 60ft in-board of existing walkway, AC paving on grade.  
 Demo portion of existing walkway and stabilize shoreline with landscaping,
- 2. The work shall include the furnishing of all labor, tools, materials, equipment, transportation, etc., and the performance of all operations required to provide construction as specified herein and shall include the cleanup and removal from site, all debris resulting from the operations performed. It shall also be the Contractor's responsibility to take all necessary safety precautions and to furnish safety measures as required.
- 3. Take responsibility for all scope items. Contractor is responsible for complying with the requirements of these documents. All work shall conform to the requirements of current building code and as described herein.

4. General requirements and specific recommendations of the material manufacturers are included as part of these specifications. The manufacturers' specifications are the minimum standards required for the completed systems. Specific items listed herein (contract documents) may improve the standards required by the manufacturer and will take precedence where their compliance will not affect the manufacturers' warranty provisions.
5. No changes involving additional cost may be started without prior approval of the Owner.
6. Any damage including but not limited to landscaping, asphalt, concrete, etc. damaged by the Contractor will be repaired at the Contractor's expense. Contractor must notify the Owner of any damaged areas prior to the start of each project.
7. Staging areas including necessary BMPs as identified by owner's representative, to be fenced and kept secure at all times.
8. Facility rules and policies must be followed by all persons at all times at the project site, including but not limited to drug and alcohol policy, weapon and firearm policy, safety and security policy, cell phone and electronics policy. Contractor and employees shall not interact with patrons in any manner.
9. Contractor shall provide own utilities including water, electricity, Port-O-John, etc. Access to the interior of the facility shall not be provided without an escort.
10. Owner shall provide internal access to the roof for roofing personnel only. Supplies, equipment, and debris shall be loaded/unloaded externally.
11. In the event unanticipated asbestos bearing materials are discovered to be present in the Work, Contractor is to stop all work in the affected area, notify the Owner and provide temporary protection as required. Cost incurred, if any, due to the presence of hidden or unanticipated asbestos containing material will be authorized by the Owner by Change Order to this Contract.

#### B. SCHEDULE

1. The Contractor will note that time is of the essence. The Contractor shall work closely with the Owner in coordinating and performing the work. Work hours shall be coordinated with the Owner. Unless approved otherwise by the Owner, work hours shall be as follows:
  - a. Park Hours., Monday through Friday between 7:00 A.M. to 7:45 P.M. during summer and 7:00 A.M. to 6:45 P.M. during winter (starts the day after Labor Day).
  - b. Saturdays, Sundays, and Holidays – Require prior approval of the Owner.
  - c. Work may be restricted in certain areas at certain times due to special events and/or testing.

#### C. CODE COMPLIANCE– State of Hawaii

The completed Work shall comply with the following requirements:

1. Building Code: 2012 International Building Code (IBC).
2. Mechanical Code: 2012 Uniform Mechanical Code (UMC).
3. Plumbing Code: 2012 Uniform Plumbing Code (UPC).

4. Electrical Code: 2011 National Electrical Code (NEC)
5. Fire Code: 2012 International Fire Code (IFC)
  - a. NFPA Standards as referenced in the 2012 IFC and IBC.
6. Energy Code: 2012 International Energy Conservation Code (IECC).
7. Existing Building Code: 2012 International Existing Building Code (IBEC).
8. In the event that test methods or standards used to verify or document compliance with specified codes/standards **change** for any reason during the duration of the Work, the newly implemented test methods or standards shall take precedence unless specifically accepted otherwise in writing by Owner or Consultant.

#### **1.05 WORK UNDER SEPARATE CONTRACT**

- A. Separate Contract: No other work under other contracts is anticipated at the project site during the estimated construction duration. However, the Owner may award a separate contract for performance of certain construction operations at the Project site.
- B. Contractor shall fully cooperate with separate contractors so work on those contracts may be carried out smoothly, without interfering or delaying Work under this Contract.

### **PART 2- PRODUCTS**

#### **2.01 NO PRODUCTS ARE REQUIRED IN THIS SECTION**

### **PART 3 - EXECUTION**

#### **3.01 SUBMITTAL PROCEDURE**

- A. Provide complete set of submittals in accordance with Section 01300 Submittals fully coordinated with the submittal section of each Section.

#### **3.02 WARRANTIES**

- A. Provide specified warranties in accordance with the warranty section of each Section.

#### **3.03 DEMOLITION AND PREPARATION**

- A. Coordinate all aspects of demolition work with Owner. Confirm demolition scope and intent prior to beginning work with the Owner.
- B. Provide protective measures in and around the building to protect the building and adjacent surfaces from being soiled or damaged and as directed by the Owner.
- C. Prior to tear-off, verify that all soil pipes, flues, steel members, and other similar penetrations are secured to the building structure. Coordinate removal or securement of all unsecured penetrations prior to the start of demolition.

- D. The bidders shall recognize that existing conditions may not allow for a minimum of 8" base flashing heights at all areas among other existing conditions. These conditions shall not be excluded from the manufacturer's or installers warranties.
- E. Remove existing overburden (to be saved for re-installation as possible) at exterior observation deck, remove existing waterproofing, repair existing deck, install new waterproofing, re-install overburden.
- F. Repair exterior wall finish. Install new wall coating over exterior wall.
- G. Repair and seal existing door(s) in concert with exterior wall work.
- H. Install new exterior sealants.
- I. Remove debris from roof area and properly dispose of all materials off site. At the end of each day, clean site.
- J. The structures shall be sealed at the end of each work day.

**3.04 ROOFING / WATERPROOFING DECK REPAIR & EXTERIOR WALL (A2 Anti-Aircraft Gun Emplacement Tower)**

- A. Replace/repair deteriorated concrete roof to match existing as required.
- B. Properly prepare roof/substrate for installation of new roof / waterproofing system.
- C. Repair exterior wall in concert with exterior wall finish / coating system installation.

**3.05 NAILERS**

- A. Install replacement nailers where deteriorated components were removed.

**3.06 BUILDING ENVELOPE SYSTEMS**

- A. Install New Tapered Insulation and TPO Roofing on existing concrete roof decks as shown on plans.
- B. Exterior Walls: Repairs as specified
- C. Exterior Glazing: Repairs as specified

**3.07 SHEET METAL**

- A. Install roofing / waterproofing related sheet metal components as per drawings and specifications.
- B. Provide all necessary sealant primers, sealant, sealant tapes, solder/weld joints, and fasteners to ensure a watertight installation.

**3.08 MECHANICAL/ELECTRICAL WORK**

- A. Disconnect, reconnect and rebalance, units as required for lifting.

- B. Extend ducts as required for raising curbs to finished elevations.
- C. Raise, move and / or relocate any electrical conduits that do not allow for the proper and recommended installation of related flashings.

**3.09 MISCELLANEOUS**

- A. Coordinate the work throughout the duration of the project as to minimize disruption of facility operations.
- B. Contractor shall test all roof drains at beginning and upon completion of roof project. Test for proper functionality including leaks and proper drainage.
- C. Upon completion of roof work, Contractor shall clean/wash roof prior to final acceptance.
- D. Work includes painting finishes as called for in specifications and plans.

END OF SECTION

## SECTION 01230

### ADDITIVE BID ITEMS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for additive bid items.
- B. The description of additive bid items is not intended to give a detailed description of all additional work required by the additive bid item(s), as only the principal features of such additional work are listed.
- C. Should anyone or all of the additive bid items become a part of the contract, the cost of all additional work required by the additive bid item(s), even though not specifically mentioned herein, are included in the lump sum bid price.

##### 1.2 DEFINITIONS

- A. **Additive Bid Item:** An amount proposed by Bidders (Offerors) and stated on the Proposal Form for certain work defined in the Bidding Requirements that may be added to the Total Lump Sum Base Bid Price amount if State decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

The cost for each additive bid item is the net addition to the Contract Sum to incorporate additive bid item into the Work. No other adjustments are made to the Total Lump Sum Base Bid Price.

##### 1.3 PROCEDURES

- A. **Coordination:** Modify or adjust affected adjacent work as necessary to completely integrate work of the additive bid item into the Project.  
  
Include as part of each additive bid item, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of additive bid item.
- B. **Notification:** Immediately following award of the Contract, notify each party involved, in writing, of the status of each additive bid item. Indicate if additive bid items have been accepted, rejected, or deferred for later consideration.
- C. **Execute accepted additive bid items under the same conditions as other work of the Contract.**
- D. **Schedule:** A Schedule of Additive Bid Items is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each additive bid item.

PART 2 – GENERAL (Not Used)

PART 3 – EXECUTION

3.1 SCHEDULE OF ADDITIVE BID ITEMS

- A. ADDITIVE NO. 1: Structure 1 Benches and park elements per drawings
- B. ADDITIVE NO. 2: Structure 2 Non-priority structural repairs
- C. ADDITIVE NO. 3: Structure 2 Repair rock wall stairs and stair handrails
- D. ADDITIVE NO. 4: Asphalt Beach Walkway

END OF SECTION

## **SECTION 01359 – HISTORIC TREATMENT PROCEDURES**

### **PART 1 - GENERAL**

#### **1.01 SUMMARY**

- A. The five structures define in the drawings are Historic Buildings from the World War II era:
  - 1. Anti-Aircraft Gun Emplacement Tower,
  - 2. Air Raid Shelter (Train Station),
  - 3. Cable Hut (Train),
  - 4. Harbor Entrance Control Post Tower,
  - 5. Underground Plotting Room
  
- B. Work Includes:
  - 1. Repairing, replacing, and refurbishing historic material and components.
  - 2. Using historically accurate materials and techniques wherever possible.
  - 3. Coordinating all aspects of historical preservation.
  
- C. Related Sections:
  - 1. SECTION 02070 – SELECTIVE DEMOLITION.
  - 2. SECTION 08031 – HISTORIC TREATMENT OF METAL DOORS.

#### **1.02 REFERENCES**

The Publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designations only.

- A. U.S. National Archives and Records Administration (NARA)
  - 29 CFR 1926 Safety and Health Regulations for Construction
  - 36 CFR Part 65 The Secretary of Interior's Standards for the Treatment of Historic Properties
  
- B. National Parks Services (NPS)
  - NPS-28 Cultural Resource Management Guidelines

#### **1.03 DEFINITIONS**

- A. Consolidate: To strengthen loose or deteriorated materials in place.
  
- B. Dismantle: To disassemble and detach items by hand from existing construction to the limits indicated, using small hand tools and small one-hand power tools, to protect nearby historic surfaces; and legally dispose of dismantled items off-site, unless indicated to be salvaged or reinstalled.
  
- C. Existing to Remain: Existing Items that are not to be removed or dismantled.
  
- D. Historic: Spaces, areas, rooms, surfaces, materials, finishes, character-defining features and overall appearance that are important to the successful preservation,

and which are noted in the National Register of Historic Places Historic Nomination Form.

- E. Match: To blend with adjacent construction and manifest no apparent differences in material type, species, cut, form, detail, color, grain, texture, or finish; as approved.
- F. Preservation: The act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.
- G. Reconstruct: To remove the existing item, replicate damaged or missing components, and reinstall in original position. The act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials, and features rather than extensive replacement and new construction.
- H. Refinish: To remove existing finishes to base materials and apply new finish to match original, or as otherwise indicated.
- I. Refurbish: Clean, repair, lubricate and make other adjustments to components to ensure working operation.
- J. Reinstall: To protect removed or dismantled item, repair and clean it as indicated for reuse, and reinstall it in original position, or where indicated.
- K. Remove: Detach an item from existing construction to the limits indicated, using hand tools and hand operated power equipment, and legally dispose of it off-site, unless indicated otherwise.
- L. Repair: To correct damage and defects, retain existing materials, features, and finishes while employing as little new material as possible. Includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- M. Replace: To remove, duplicate, and reinstall the entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- N. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- O. Reproduce: To fabricate a new item, accurate in detail to the original, and in either the same or a similar material as the original, unless otherwise indicated.
- P. Restoration: The act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods of its history and reconstruction of missing features from the restoration period.
- Q. Restore: To consolidate, replicate, reproduce, repair, and refinish as required to achieve the indicated results.
- R. Retain: To keep existing items that are not to be removed or dismantled.
- S. Reversible: New construction work, treatments, or processes that can be removed or undone in the future without damaging historic materials unless otherwise indicated.

- T. Salvage: To protect removed or dismantled items and return to State. Salvaged items shall be stored on premise as determined by the State.
- U. Stabilize: To provide structural reinforcement of unsafe or deteriorated items while maintaining the essential form as it exists at present; also, to reestablish a weather resistant enclosure.
- V. Strip: To remove existing finish down to base material unless otherwise indicated.

#### **1.04 SUBMITTALS**

- A. Submit the following:
  - 1. Qualifications: Resume of all qualified personnel working on this project with a minimum of 5 years of experience with historic structures, and conservation work for steel structures, doors and paint. Provide applicable projects completed or in construction within the last 10 years and a current point-of-contact for identified references.
    - a. Historic Steel Structure and Door Treatment Specialist: A qualified historic door specialist, with 5 years of experience in repairing steel structures and doors. Experience only in fabricating Steel structures and installing doors is insufficient.
    - b. Historic-Painting: Provide qualified workers experienced in the preparation for painting of concrete and metal surfaces in historic structures. Submit documentation of 5 years of work of this type and a statement certified by the Contractor attesting that the experience and qualifications of the workers (journeymen) comply with the specifications.

#### **1.05 QUALITY ASSURANCE**

Qualified personnel are required to work on historical structures with essential competencies for Historical Craftsperson (Mason, Carpenter, Painter, etc.) of the Full Performance Level as outlined in the documents from the National Park Service, Training and Development Division.

- A. Work Procedures:

Contractor and personnel performing work are to be familiar with and perform work in accordance with 36 CFR Part 68 and NPS-28, Cultural Resource Management Guidelines.
- B. Regulatory Requirements:

Comply with notification regulations of authorities having jurisdiction before beginning removal and dismantling work. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Pre-Construction Conference:

Conduct conference on-site to review and coordinate all aspects of historical preservation.
- D. Removal and Dismantling:

Inspect and discuss the condition of construction to be removed or dismantled.

Review requirements of other work that relies on substrates exposed by removal and dismantling.

E. General:

Review methods and procedures related to historic restoration including, but not limited to, the following:

1. Review construction schedule: verify availability of materials, equipment, and facilities needed to make progress and avoid delays.
2. Review the qualifications of personnel assigned to the work and assign duties.
3. Review areas where existing construction is to remain and require protection.
4. Review areas where existing historic artifacts and furnishings are to remain and require protection.

**1.06 DELIVERY, STORAGE AND HANDLING**

A. Existing Conditions:

Do not proceed with removal or dismantling work if there are discrepancies between existing conditions and Drawings. Notify Engineer.

B. Hazardous Materials:

1. Hazardous materials may be present in construction affected by work.
2. Comply with 29 CFR 1926 and state and local regulations.

**PART 2 – PRODUCTS**

Not Used.

**PART 3 – EXECUTION**

**3.01 PROTECTION**

Comply with each product manufacturer's written instructions for protection and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.

A. Temporary Protection of Historic Materials:

1. Protect existing historical materials with temporary protection and construction. Do not deface or remove existing materials.
2. Do not attach temporary protection to historic surfaces except as approved by the Engineer.

B. Fire Protection:

1. General: Follow fire-prevention plan and the following.
  - c. Remove and keep areas free of combustibles including rubbish, paper, waste, rags, and chemicals, except to the degree necessary for the immediate work.
  - d. Prohibit smoking by all personnel within the project area.

- C. Protection During application of Chemicals:
1. Protect motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm or damage resulting from applications of chemicals cleaners and paint remover.
  2. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
  3. Neutralize and collect alkaline and acid waste and legally dispose of off State's property.
  4. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

### **3.02 HISTORIC TREATMENT**

- A. Historic Treatment Objectives:
1. Halt the process of deterioration and stabilize conditions unless otherwise indicated.
  2. Retain as much existing material as possible; repair and consolidate rather than replace.
  3. Use historically accurate repair and replacement materials and techniques unless otherwise indicated.
  4. Use reversible processes wherever possible.
  5. New work should be distinguishable to the trained eye, on close inspection, from the old.
- B. Historic Treatment Procedures:
- Follow the procedures in subparagraphs below in historic treatment program:
1. Contractor shall ensure coordination of all aspects of historical preservation with the Engineer.
  2. Record existing work before each procedure (preconstruction) and progress during the work with digital documentation photographs.
  3. Notify Engineer to consult with the Architectural Historian on physical changes in the integrity of materials or components whether due to environmental causes including biological attack, UV degradation, or due to structural defects including cracks, movement, or distortion. Do not proceed with the work in question until directed.
  4. Use the least abrasive cleaning method to remove dirt, paint buildup and corrosion. Do not use high-pressure abrasive techniques, including sandblasting, other media blasting, or high-pressure power-washing.
  5. Where missing features are indicated to be repaired or replaced, provide features whose designs are based on accurate duplications rather than on conjectural designs, subject to approval.

6. Where work requires existing features to be removed or dismantled and reinstalled, perform these operations without damage to the material itself, to adjacent materials, or to the substrates.
7. Identify new and replacement materials and features with permanent mark hidden in the completed work to distinguish them from original materials. Record a legend of identification marks and the locations of the items on record Drawings.
8. Do not proceed with the use of products, under conditions which do not comply with the manufacturer's requirements without approval.

END OF SECTION

## SECTION 01581

### PROJECT SIGN

#### PART 1 - GENERAL

##### 1.1 GENERAL REQUIREMENTS

Furnish all labor, materials and equipment necessary to construct and install all project sign as specified hereinafter.

##### 1.2 SUBMITTAL

The contractor shall provide the Engineer with six (6) shop drawings of the project sign for review and approval by the Engineer prior to ordering the sign.

##### 1.3 LETTER STYLE

Copy is centered and set in Adobe Type Futura Heavy. If this specific type is not available, Futura Demi Bold may be substituted. Copy should be set and spaced by a professional typesetter and enlarged photographically for photo stencil screen process.

##### 1.4 ART WORK

Constant elements of the sign layout - frame, outline, stripe, and official state information - may be duplicated following drawing measurements, or be reproduced and enlarged photographically using a layout template if provided. The "STATE OF HAWAII" masthead should be reproduced and enlarged as specified, using the artwork provided.

##### 1.5 TITLES

The specific major work of the project under construction is emphasized by using 3-3/4" type, all capitals. Secondary information such as location or buildings uses 2-1/4" type, all capitals. Other related information of lesser importance uses letter heights as indicated on 01581-3, upper / lower case letters.

Design should follow the example on page 01581-3.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

#### A. LUMBER

1. Panel is 3/4" exterior grade high density overlaid plywood, with resin-bonded surfaces on both sides.
2. 4"x4" sign posts shall be Douglas Fir No. 1 or better.

#### B. PAINTS & INKS

Screen print inks are matte finish. Paints are satin finish, exterior grade. References to Ameritone Color Key Paint are for color match only.

COLOR:	1.	1BL10A	Bohemian Blue
	2.	2H16P	Softly (White)
	3.	2VR2A	Hot Tango (Red)
	4.	1M52E	Tokay (Gray)

#### C. CONCRETE

Concrete shall be class B with a 2,500 psi 28-day compressive strength.

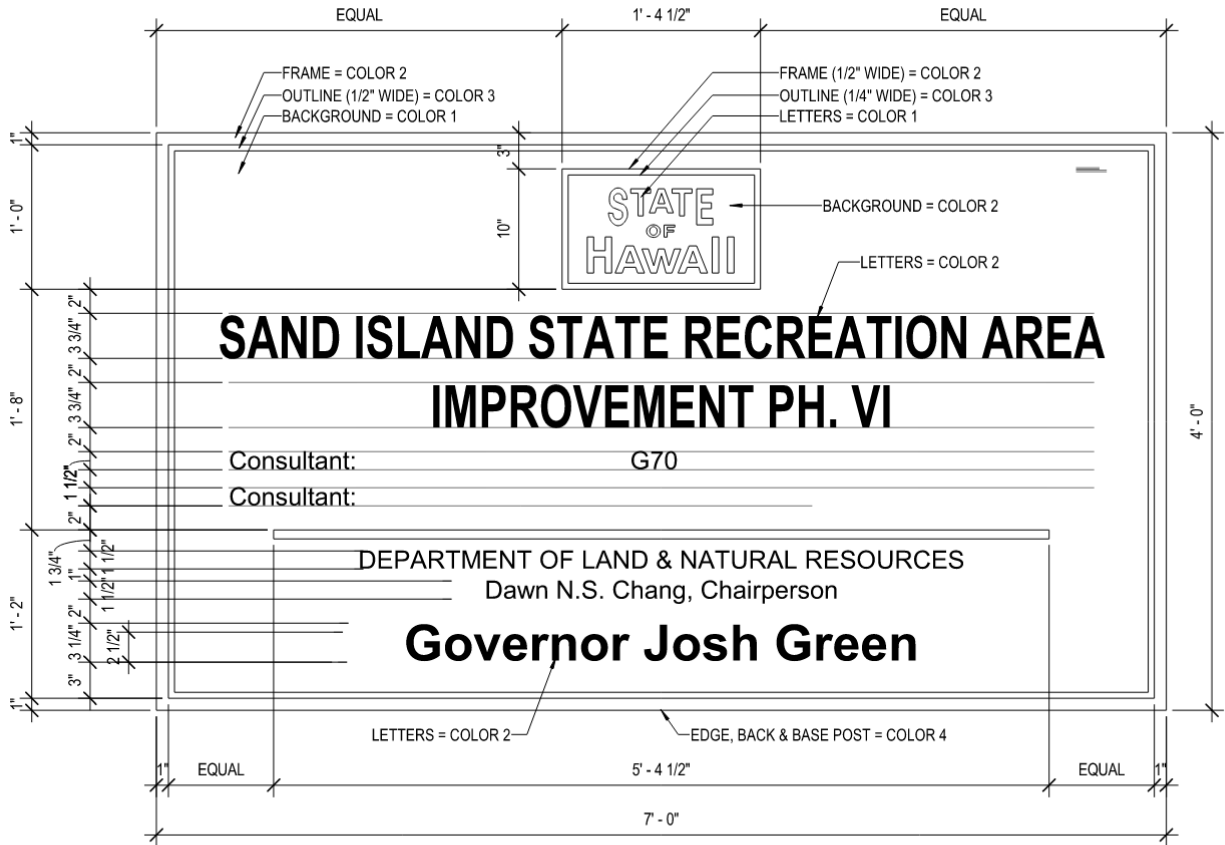
## PART 3 - EXECUTION

### 3.1 GENERAL

- A. The Project Sign shall be constructed with new materials as specified above.
- B. The Project sign shall be installed at the location indicated on the drawings or as designated by the Engineer. The project sign shall be erected upon commencement of work.

### 3.2 MEASUREMENTS AND PAYMENT

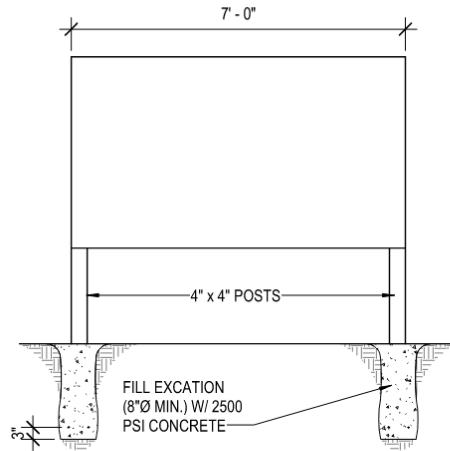
The construction of the project sign, including all equipment, labor and material necessary to furnish and install the project sign will be paid for under the "Project Sign" proposal item.



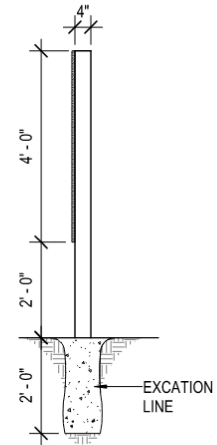
**1 SIGNAGE**  
 SCALE: 1 1/2" = 1'-0"



**PLAN**



**FRONT  
 ELEVATION**



**SIDE  
 ELEVATION**

**2** SIGN DETAIL  
 SCALE: 1/2" = 1'-0"

END OF SECTION

## **DIVISION 2 – SITE CONSTRUCTION**

### **SECTION 02070 – SELECTIVE DEMOLITION**

#### **PART 1 - GENERAL**

##### **1.01 SUMMARY**

- A. Work Includes but is not limited to:
  - 1. Demolition and removal of portion of designated historic structures, Anti-Aircraft Gun Emplacement Tower, Air Raid Shelter (Train Station), Cable Hut (Train), Harbor Entrance Control Post Tower, Underground Plotting Room, to include but not limited to roofing, non-historic additions,, flooring, ceilings, soffits, , and finishes as indicated on the Drawings
  - 2. Salvage designated items, to include but not limited to . Aircraft Gun Emplacement Tower – Wood Panel Trellis, access panel at Air Raid Shelter and Historic Doors at Plotting Room
- B. Related Work Described Elsewhere
  - 1. Section 01100 – ARCHAEOLOGICAL PROTECTION
  - 2. Section 01359 – HISTORIC TREATMENT PROCEDURES
  - 3. Section 01715 – EXISTING CONDITIONS – ASBESTOS/LEAD/HAZARDOUS MATERIAL SURVEY
  - 4. Section 08031 HISTORIC TREATMENT OF METAL DOORS
  - 5. Section 13282 – LEAD-PAINT CONTROL MEASURES
- C. The extent of selective demolition work is indicated on the demolition plan and other drawings.
- D. It is the responsibility of the Contractor to examine the project site and determine the existing conditions for themselves.
- E. Selective demolition work includes but is not limited to removal and subsequent disposal of all non-hazardous materials indicated or required to be removed.
- F. Execute all work in an orderly and careful manner with due consideration for all items or work to remain.
- G. Clearly obvious conditions requiring selective demolition, which exist at the site, will be accepted as part of the work, even though they may not be clearly indicated on the Drawings and/or described herein, or may vary therefrom.
- H. All debris of any kind accumulated from the work of this Section must be disposed of off the site, unless noted otherwise.
- I. Permits, Notice, Etc.:
  - 1. The Contractor must procure and pay for all necessary permits or certificates that may be required in connection of this work.
  - 2. The Contractor must serve proper notice and consult with Engineer regarding any temporary barricades that are required, or for disconnections of electrical or other utility lines in the area which may interfere with the removal work.

All such lines, where necessary, must be properly disconnected or relocated prior to commencing with demolition work.

## **1.02 SUBMITTALS**

- A. Meet requirements of Section 01300 – SUBMITTALS
- B. Proposed Protection Measures: Submit informational report, including drawings, that indicates the measures proposed for protecting individuals and property, for dust control and for noise control. Indicate proposed locations and construction of barriers.
  - 1. Adjacent Portions of Structure: Portions of the structure adjacent to the areas to be demolished are considered to have historical significance as determined by the State Historic Preservation Division of the State of Hawaii Department of Land and Natural Resources. The demolition to take place in these areas is to be performed with the utmost care to avoid damage to the adjacent portions of the building. Submit detailed special measures proposed to protect adjacent portions of the building to remain.
- C. Schedule of Demolition Activities: Indicate the following:
  - 1. Detailed sequence of demolition work, with starting and ending dates for each activity.
  - 2. Temporary interruption of utility services.
  - 3. Shutoff of utility services.
- D. Demolition Plans: Drawings indicating the following:
  - 1. General site, building(s) and structures and other features to be removed and disposed of.
- E. Pre-demolition Photographs: Show existing conditions of adjoining construction, including finish surfaces that might be misconstrued as damage caused by demolition operations. Submit before the Work begins.

## **1.03 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled tradespeople who are thoroughly trained and experienced in the necessary crafts.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Pre-demolition Conference: Conduct conference at Project site to review methods and procedures related to building demolition including, but not limited to, the following:
  - 1. Inspect and discuss condition of construction to be demolished.
  - 2. Review and finalize demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 3. Review and finalize protection requirements.
  - 4. Review procedures for noise control, and dust control.

5. Review items to be salvaged and returned to the State.
6. Review procedures for protection of adjacent, occupied structures or buildings.
7. Review schedule of work hours and facility rules.

#### **1.04 PROJECT CONDITIONS**

- A. Existing conditions: The State assumes no responsibility for actual condition of items to be demolished.
- B. Conditions existing at time of commencement of contract will be maintained by the State insofar as practical.
- C. Occupancy: Building areas subject to demolition will be vacated and temporarily discontinued in use by the State prior to start of work.
- D. Do not interfere with use of adjacent building areas. Maintain free and safe passage to and from occupied spaces.
- E. Provide accessibility around temporary structures in accordance with the 2010 ADA Standards for Accessible Design, including Section 201.3 (Temporary and Permanent Structures) and Section 206 (Accessible Routes), ensuring that all construction-related activities maintain continuous, accessible pedestrian paths and do not impede required accessible access.
- F. Prevent movement or settlement of structures. Provide and place bracing or shoring and be responsible for safety and support of adjacent structures. Assume liability for such movement, settlement, damage, or injury. Cease operations and notify the Engineer immediately, if safety of structure appears to be endangered. Take precautions to properly support structure. Do not resume operations until safety is restored.
- G. Traffic: Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close, block, or otherwise obstruct streets, walks or other occupied or used facilities without written permission from the Engineer. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations, as directed by the Project Manager.
- H. Dust Control:
  1. Keep dust within acceptable levels at all times, including non-working hours, weekends and holidays as specified in Section 01567 POLLUTION CONTROL.
  2. Mechanical dry sweeping is not permitted. Vacuuming, wet mopping, approved limited dry hand, wet or damp sweeping is acceptable.
  3. During loading operations, water down debris and waste materials to allay dust.
  4. The method of dust control and all costs incurred thereof will be the responsibility of the Contractor.
- I. Fire Safety: Fire safety during demolition must comply with Section 16 of the 2012 NFPA 1 - Fire Code, as amended and NFPA 241.

## **1.05 SCOPE VERIFICATION:**

- A. The demolition drawings and specifications indicate the general limits, scope, and conditions of the selective demolition work. As a requirement of the bid proposal submission, the Contractor shall visit the site and verify existing conditions and the extent of demolition required. The Contractor shall include in the bid proposal all labor, materials, equipment, and incidental work necessary to complete the demolition required to achieve the finished work and design intent indicated in the Contract Documents, regardless of whether every element of demolition is explicitly shown or described.

## **1.06 EXISTING UTILITY SERVICES**

- A. Only the Harbor Entrance Control Post Tower was observed to have an existing aircraft warning light, which may not be operational; however, this observation is not intended to limit the potential presence of other existing utilities. Out of an abundance of caution, the following requirements shall apply in the event any utility is discovered during the demolition process, including electrical, plumbing, communication, or other concealed service lines.
- B. Do not abandon or otherwise alter utility services or drainage lines which would impair service to existing building areas.
- C. Maintain utilities in service, protect, and reconstruct if damaged, all in-service utility pipes or conduits, except services to the structures to be dismantled. Reconstruct in-service utility pipes or conduits if damaged at no additional cost to the State.
- D. Report damage, however slight, immediately. Do not repair or reconstruct any utility pipe, conduit, or installation without authorization; however, except perform emergency repairs immediately.

## **1.07 HAZARDOUS MATERIALS**

- A. Comply with the requirements specified in Sections:
  - 1. Section 01715 – EXISTING CONDITIONS – ASBESTOS/LEAD/HAZARDOUS MATERIAL SURVEY
  - 2. Section 13282 – LEAD PAINT CONTROL MEASURES

## **1.08 COORDINATION**

- A. Arrange demolition schedule so as not to interfere with the user's on-site operations and operations of adjacent occupied buildings and areas.
  - 1. At the end of each work period areas are required to be cleaned and readied for occupants. The condition of the areas must be such that there is no interference with the typical work activities performed by the occupants and that the occupant's safety is not compromised.

## **PART 2 - PRODUCTS**

### **2.01 SALVAGE MATERIALS**

- A. Removed materials not indicated for reuse or salvage for the State will become Contractor's property. Remove from site and dispose of at Contractor's option.
  - 1. Items to be salvaged are included in a list at the end of this Section.
- B. Items of salvageable value not indicated for reuse may be removed from structure as work progresses. Salvaged items must be transported from site as they are removed. Storage or sale of removed items on site will not be permitted.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Examine the conditions under which work of this section will be performed. Do not proceed until unsatisfactory conditions detrimental to timely and proper completion of the work have been corrected.
- B. Verify that utilities have been disconnected and capped before starting demolition operations.
- C. Inventory and record the condition of items to be removed and salvaged. Photograph existing conditions of structure surfaces, equipment or to surrounding properties which could be misconstrued as damage resulting from selective demolition work. File with Engineer prior to starting work.
- D. If hazardous materials are found to exist, beyond those identified in Section 01715 Existing Conditions - Asbestos / Lead / Hazardous Material Survey, notify government representative that hazardous materials have been discovered before proceeding with building demolition operations.

### **3.02 PREPARATION**

- A. Maintain exit requirements throughout construction period.
- B. Erect and maintain temporary barricades complying with the requirements of Section 01530 BARRICADES. On completion, remove barricades and repair damaged surfaces to match adjacent surfaces.
- C. Existing Utilities: Locate, identify, disconnect, and remove indicated utilities serving portions of the building to be demolished.
  - 1. If removal, relocation, or abandonment of utility services will affect adjacent occupied areas and buildings, then provide temporary utilities that bypass the portions of the building to be demolished and that maintain continuity of service to other buildings and adjacent areas.
  - 2. Cut off pipe or conduit and cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
- D. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of demolition.

### **3.03 DEMOLITION**

- A. Demolition Work: Conform to State of Hawaii, Occupational Safety and Health Standards; Subtitle 8, Division of Occupational Safety and Health; Part 3, Construction Standards; Chapter 131.1, Demolition.
- B. Pollution controls: Provide temporary enclosures and use suitable methods to limit dust and dirt to the lowest practical level. Comply with governing regulations pertaining to environmental protection.
- C. Explosives: Use of explosives will not be permitted.
- D. Selective Demolition
  - 1. Extent of demolition and removal as shown are minimum requirements. Contractor will be responsible for the extent of work required to properly accommodate the methods of construction required for the new work. Additional work required to accommodate construction will be considered incidental to the new work and must be done at no additional cost to the State. Contractor, as part of the bid proposal to review the demolition scope along with the new work and conduct site visit(s) to understand the extent of the scope and provide as part of its bid proposal, to include all work to accomplish the final work.
  - 2. Conduct demolition of designated items and components as indicated on the Drawings and site investigation(s) in an orderly and careful manner as required to accommodate new work, including that required for connection to the existing building. Protect existing supporting structural members.
  - 3. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  - 4. Use the utmost care to avoid damage to the items being removed and designated for reuse.
  - 5. Disconnect, remove, cap and seal designated utilities as indicated on the Drawings.
  - 6. Use methods required to complete the Work within limitations of governing regulations.
  - 7. Locate demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 8. Cease operations and notify Engineer immediately if safety of adjacent structure appears to be endangered. Do not resume operations until safety is restored.
  - 9. Remove contaminated, vermin infested, or dangerous materials encountered and dispose of by safe means.
  - 10. Do not demolish, chip or penetrate any portion of existing structural members not designated for such without the expressed approval of the Engineer and Engineer.
  - 11. Repair excess demolition to match adjacent surfaces.
- E. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

#### **3.04 DISPOSAL OF DEMOLISHED AND DESIGNATED MATERIALS**

- A. Remove debris, rubbish, and other materials resulting from demolition operations from the site. Transport materials removed from demolished structures and legally dispose of offsite.
- B. Do not allow demolished materials to accumulate on-site.
- C. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- D. Burning of removed materials from demolished structures will not be permitted on site.

#### **3.05 CLEANUP AND REPAIR**

- A. Repair damage to adjacent structure and improvements resulting from this work at no cost to the State.
- B. Clean adjacent areas, structures and improvements of dust, dirt, and debris caused by demolition operations, as directed by Engineer or governing authorities. Return adjacent areas to condition existing prior to start of work.

END OF SECTION

## **DIVISION 08- DOORS AND WINDOWS**

### **SECTION 08110 - STEEL DOORS AND FRAMES**

#### **PART 1 - GENERAL**

##### **1.01 SUMMARY**

- A. Section Includes:
  - 1. Standard steel frames and steel doors as indicated and scheduled on drawings as access panels.
- B. Related Work Described Elsewhere:
  - 1. Field applied painting is specified in Section 09900 - PAINTING.

##### **1.02 QUALITY ASSURANCE**

- A. Provide doors and frames complying with ANSI/SDI 100 "Recommended Specifications for Standard Steel Doors and Frames" and as herein specified.

##### **1.03 SUBMITTALS**

- A. Submit under the provisions of Section 01300 – SUBMITTALS.
- B. Manufacturer's Data: Submit manufacturer's technical product data substantiating that products comply with requirements.
- C. Shop Drawings: Submit for fabrication and installation of steel doors and frames. Include details of each frame type, conditions at openings, details of construction, location and installation requirements of finish hardware and reinforcements, and details of joints and connections, gauges, and finishes. Show anchorage and accessory items.
- D. Manufacturer's recommended installation procedures which, when approved by the Engineer, will become the basis for accepting or rejecting actual installation procedures used on the work.
- E. Schedule: Provide schedule of doors and frames using same reference numbers for details and openings as those on contract drawings.
- F. Label Construction Certification: For assemblies required to be and exceeding sizes of tested assemblies, submit manufacturer's certification for that each frame assembly has been constructed to conform to design, materials and construction equivalent to requirements for labeled construction.

##### **1.04 DELIVERY, STORAGE AND HANDLING**

- A. Deliver hollow metal work cartoned or crated to provide protection during transit and job storage. Strap knock-down frames in bundles. Provide temporary steel spreaders securely fastened to the bottom of each welded frame.
- B. Inspect hollow metal work upon delivery for damage. Minor damages may be repaired provided refinished items are equal in all respects to new work and

acceptable to the Engineer; otherwise, remove and replace damaged items as directed.

- C. Store doors and frames at building site under cover in a dry, secure place. Place units on minimum 4-inch high wood blocking. Avoid use of non-vented plastic or canvas shelters which could create humidity chambers.

## **1.05 COORDINATION**

- A. Coordinate Work with other directly affected sections involving manufacture or fabrication of internal cutouts and reinforcement for door hardware, electric devices and recessed items.
- B. Coordinate work with frame opening construction, door and hardware installation.
- C. Sequence installation to accommodate required door hardware.
- D. Hardware Mounting Heights: The Contractor shall be responsible to coordinate all mounting heights of various finish hardware with all project requirements.
- E. Coordinate door hardware with frames.
- F. Verify field dimensions for factory assembled frames prior to fabrication.

## **PART 2 - PRODUCTS**

### **2.01 MATERIALS**

- A. Galvanized Steel Sheets: Zinc coated commercial quality carbon steel. Comply with ASTM A 653 coating designation G90 at all doors and frames.
- B. Sheet Steel:
  - 1. Cold-rolled, commercial quality carbon steel, Type B; suitable for exposed applications, complying with ASTM A 1008.
  - 2. Hot-rolled, commercial quality carbon steel, Type B; free of scale, pitting, or surface defects, pickled and oiled, complying with ASTM A 1011.
- C. Supports and Anchors: Fabricate of not less than 18-gauge galvanized sheet steel.
- D. Frame Anchors:
  - 1. Concrete/Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.
  - 2. Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
    - a. Stud Wall Type: Provide three anchors per jamb up to 60-inches in height and four anchors for jambs 60 to 90 inches in height.
    - b. Compression Type: Not less than two anchor for each jamb.
    - c. Masonry Type: Provide two anchors per jamb up to 60-inches in height and three anchors for jambs 60 to 90 inches in height.

3. Floor Anchors: Angle clip type:
  - a. 16 gauge minimum.
  - b. To receive 2 fasteners per anchor.
  - c. Welded to the bottom of each jamb.
- E. Inserts, Bolts and Fasteners: Manufacturer's standard units, except hot-dip galvanize, complying with ASTM A 153/A 153M "Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware", Class C or D as applicable.
- F. Factory Applied Primer Paint: Rust-inhibitive enamel paint, either air-drying or baking, suitable as a base for specified finish paints conforming to ANSI A250.10 "Test Procedures and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames". Primers shall be free from asbestos, lead, mercury, chromate, and cadmium.

## **2.02 MANUFACTURERS**

- A. Standard Steel Door and Frame Manufacturers: Subject to compliance with requirements of this section, provide products from one of the following:
  1. Amweld Building Products, Inc.
  2. Ceco Door, Assa Abloy
  3. Curries Co.
  4. Steelcraft
  5. Or approved equal.

## **2.03 FABRICATION, GENERAL**

- A. Fabricate steel doors and frame units to be rigid, neat in appearance and free from defects, warp or buckle.
- B. Fabricate frames, concealed stiffeners, reinforcement, edge channels, and moldings from either cold-rolled or hot-rolled steel (at fabricator's option).
- C. Fabricate all doors and frames from galvanized sheet steel.
- D. Tolerances: Comply with SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames.
- E. Exposed Fasteners: Unless otherwise indicated, provide countersunk flat Phillips heads for exposed screws and bolts.
- F. Finish Hardware Preparation: Prepare doors and frames to receive mortised and concealed finish hardware in accordance with final Finish Hardware Schedule and templates provided by hardware supplier. Comply with applicable requirements of ANSI/SDI A250.6 series specifications for frame preparation for hardware.
  1. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be done at project site. Provide minimum gauge hardware reinforcing for mortise or surface applied hardware as follows:

- a. Mortised Hinges: 10 gauge.
  - b. Surface Closers: 14 gauge.
2. Locate finish hardware as indicated on final shop drawings or, if not indicated, in accordance with DHI-05 "Recommended Locations for Builder's Hardware for Standard Steel Doors and Frames" and the 2010 ADA Standards for Accessible Design Section 404.2.7.
- G. Factory Painting:
1. Clean, phosphatize, and prime paint exposed surfaces of steel doors and frame units, including galvanized surfaces.
  2. Clean steel surfaces of mill scale, rust, oil, grease, dirt, and other foreign materials before application of paint.
  3. Apply factory coat of prime paint to an even consistency to provide a uniformly finished surface ready to receive finish paint.

## **2.04 STEEL DOORS**

- A. Flush Steel Doors:
1. Provide doors complying with the requirements indicated below by referencing ANSI 250.8 for level and model and ANSI A250.4 for physical-endurance level:
  2. Exterior Doors: Level 4 (14 gauge), Physical Performance Level A (Extra Heavy Duty), Model 2 (Seamless)
  3. Construction: Doors shall be of the types and sizes indicated on the approved shop drawings and shall be 1-3/4 inches thick, fabricated with flush, smooth cold-rolled steel face sheets over an internal stiffened core, with continuous vertical edge channels and internal reinforcement as required by the door manufacturer. Glazed Lites: Factory cut openings in doors.
  4. Factory Finish: Clean, phosphatize, and apply manufacturer's stain absorbing prime coat, stain and clear UV inhibiting top coat.
    - a. Custom Color: As scheduled

## **2.05 STANDARD STEEL FRAMES**

- A. Provide metal frames for doors of type and style as shown on drawings and schedules. Conceal fastenings, unless otherwise indicated. Fabricate frames of minimum 16 gauge cold-rolled furniture steel.
1. Fabricate frames with mitered corners in the following type construction:
    - a. Exterior Door Frames: Welded construction.
    - b. Interior Door Frames: Knock-down (mechanical interlock joint) construction with hairline seam.
  2. Form all frames of hot dip galvanized steel.

3. Frames shall comply with ANSI A250.4 "Performance Test Procedures for Steel Door Frames and Frame Anchors", Level A, one million cycle swing test performance for a 4070-door frame.
  4. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
  5. Transom Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.
- B. Door Silencers: Except on weather-stripped frames, drill stops to receive 3 silencers on strike jambs of single-swing frames and 2 silencers on heads of double-swing frames.
- C. Plaster Guards: Provide 26-gauge steel plaster guards or mortar boxes, welded to frame, at back of finish hardware cutouts where mortar or other materials might obstruct hardware operation and to close off interior of openings.
- D. Template Hardware: Factory cut doors and frames for all template hardware including hinges, bolts, etc.
- E. Factory Finish: Clean, phosphatize, and apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat, complying with SDI A250.3.
1. Color and Gloss: As scheduled.

## **2.06 ASSEMBLIES**

- A. Assemblies shall bear the listing identification label of the Underwriters Laboratories, Inc. (UL), Factory Mutual Engineering Corp. (FM), Warnock Hersey International (WHI), or a nationally recognized testing laboratory qualified to perform tests of fire assemblies in accordance with ANSI/UL 10C and NFPA 252 and having a listing for the tested assemblies. Listing identification labels shall be constructed and permanently applied by a method which results in their destruction should they be removed. Labels shall be metal with raised letters and shall bear the name and file number of the frame manufacturer. Labels shall not be painted.

## **2.07 DOOR HARDWARE**

- A. Provide door hardware for exterior steel doors as part of this Section. All exposed hardware shall be Type 316 stainless steel, suitable for exterior and marine environments.
- B. Provide the following hardware at each exterior door:
1. Hinges: Three (3) heavy-duty hinges per door with non-removable security pins.
  2. Deadbolt: Heavy-duty deadbolt lockset with keyed cylinder on exterior and thumb-turn on interior.
  3. Pull: Stainless steel loop pull handle at exterior face of door.

4. Threshold: Extruded aluminum threshold with integral weather dam. Install with continuous silicone sealant at floor interface.
5. Weather Seals: Continuous weather seals at head and jambs mounted with aluminum retainers.
6. Rain Drip: Polymer drip cap installed at door head to shed water away from door opening.
7. Fasteners: Provide stainless steel fasteners for all hardware and accessory installation, compatible with the hardware and substrates. Fasteners shall be corrosion-resistant and suitable for exterior and marine environments.

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION**

- A. General: Install standard steel doors and frames and fixed acoustical windows in accordance with final shop drawings, manufacturer's data, and as herein specified.
- B. Placing Frames: Comply with provisions of SDI-105 "Recommended Erection Instructions for Steel Frames", unless otherwise indicated.
  1. Anchors: Provide sufficient anchorage to attach to wall in accordance with ANSI A250.4 Test compliance Level A of one million cycles, or anchorage as detailed on drawings to specific wall conditions.
  2. Except for frames located at in-place concrete and masonry installations, place frames prior to construction of enclosing walls and ceilings. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders leaving surfaces smooth and undamaged.
  3. Install frames in accordance with NFPA 80.
  4. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
  5. Door and frames in acoustic rated walls: Pack frames with mineral wool fiber.
- C. Door Installation: Fit hollow-metal accurately in frames, with clearances specified in ANSI/SDI 100.
  1. Doors: Install doors with clearances according to NFPA 80.

### **3.02 TOLERANCES**

- A. Installation Tolerances: Adjust hollow-metal door frames for squareness, alignment, twist, and plumb to the following tolerances:
  1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.

2. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
3. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
4. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

### **3.03 ADJUST AND CLEAN**

- A. Factory Coat Touch-up: Immediately after erection, sand smooth any rusted or damaged areas of factory coating and apply touch-up of matching air-drying coating.
- B. Final Adjustments: Check and readjust operating finish hardware items, leaving steel frames undamaged and in complete and proper operating conditions.

END OF SECTION

## GENERAL NOTES

- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", DATED 2005; THE COUNTY OF HONOLULU DEPARTMENT OF PUBLIC WORKS "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", DATED 1986 AND "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION", DATED 1987 (REVISED 2000) WHERE APPLICABLE AND THE APPLICABLE STATE BUILDING CODES AS ADOPTED BY THE COUNTY CODE OF HONOLULU THE 2018 INTERNATIONAL BUILDING CODE (IBC) INCLUDING ALL AMENDMENTS AND AMERICANS WITH DISABILITIES ACT & ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES (ADAAG), FIRE DEPARTMENT REGULATIONS, UTILITY COMPANY REQUIREMENTS AND THE BEST TRADE PRACTICES.
- ALL WORK SHALL CONFORM TO SEISMIC REQUIREMENTS AS REQUIRED BY APPLICABLE BUILDING CODES.
- ALL EQUIPMENT AND SUPPORTS SHALL BE SECURELY FASTENED TO MEET WIND LOAD REQUIREMENTS PER BUILDING CODE.
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL FOR DIRECTION.
- DURING THE PERFORMANCE PERIOD OF THIS CONTRACT, THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE CONTROL AND RESPONSIBILITY OF THE JOBSITE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE SITE SAFETY CONDITIONS FOR ALL PERSONS ENTERING THE JOBSITE, THE CONDITION OF THE SITE AND ALL EXISTING IMPROVEMENTS, AND FOR ALL MATERIAL AND EQUIPMENT STORED AT THE PROJECT SITE.
- BLASTING IS NOT ALLOWED.
- IN THE EVENT HISTORIC REMAINS, SUCH AS ARTIFACTS, BURIALS, OR CONCENTRATIONS OF SHELL OR CHARCOAL ARE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY CEASE IN THE VICINITY OF THE ENCOUNTER. NOTIFY THE STATE HISTORIC PRESERVATION DIVISION AT (808) 692-8015, FOR AN ASSESSMENT OF THE ENCOUNTER AND RECOMMENDATIONS ON MITIGATION MEASURES.
- CONSTRUCT TEMPORARY BARRICADES DURING CONSTRUCTION, FOR SAFETY AND THE PROTECTION OF LIFE AND PROPERTY.
- THE SAND ISLAND STATE RECREATION AREA SHALL REMAIN OPEN DURING THE CONSTRUCTION PERIOD. PROVIDE TEMPORARY BARRICADES AND WARNING SIGNS FOR THE SAFETY AND PROTECTION OF THE PUBLIC AND MAINTAIN SAFE PEDESTRIAN AND VEHICLE ACCESS TO THE FACILITY AS REQUIRED. PROVIDE AND MAINTAIN ALL NECESSARY SIGNS AND PROTECTIVE FACILITIES AND TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC. CONTRACTOR TO PROVIDE PARKS MAINTENANCE OPERATIONS WITH A KEY TO ALL CONSTRUCTION BARRICADE DOORS ON PREMISES.
- EXISTING PEDESTRIAN WALKWAYS SHALL BE MAINTAINED IN A PASSABLE CONDITION OR PROVIDE FOR ALTERNATE/TEMPORARY ACCESSIBLE PEDESTRIAN ACCESS ROUTES AND FACILITIES PER THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 2, ADAAG 201.3, AND ADAAG 206.1.
- DO NOT PERFORM ANY CONSTRUCTION ACTIVITIES THAT CAUSE ROCKS, SOIL, OR DEBRIS IN ANY FORM TO FALL, SLIDE, OR FLOW ONTO ADJOINING PROPERTIES, STREETS, OR NATURAL WATER COURSES. FINES DUE TO VIOLATIONS AND ANY NECESSARY REMEDIAL ACTIONS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- AS APPLICABLE, COORDINATE CONSTRUCTION ACTIVITIES WITH ADJACENT CONSTRUCTION SITE(S), AVOID CAUSING ANY DELAYS OR HINDRANCE OF WORK OR PERFORMANCE TO THE ADJACENT CONSTRUCTION SITE(S).
- THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA.
- COORDINATE ALL SITE UTILITY WORK WITH "THE ONE CALL CENTER" AT (866) 423-7287 AT LEAST 5 WORKING DAYS PRIOR TO THE START OF EXCAVATION OR TRENCHING.
- VERIFY AND COORDINATE THE ACTUAL LOCATION OF ALL SITE UTILITIES WITH THE RELATED AGENCIES AND UTILITY COMPANIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
- IF WATER, SEWAGE OR ELECTRICAL SERVICES ARE PLANNED TO BE INTERRUPTED FOR MORE THAN 1 HOUR, PROVIDE FOR TEMPORARY WATER, SEWAGE, AND ELECTRICAL SERVICES DURING THE INTERRUPTION AT NO ADDITIONAL COST TO THE STATE.
- MAKE ARRANGEMENTS FOR TEMPORARY CONSTRUCTION SITE UTILITIES SUCH AS ELECTRICITY, WATER, ETC. AT NO ADDITIONAL COST TO THE STATE.
- ALL EXISTING UTILITIES, SHOWN ON THE PLANS OR UNCOVERED, SHALL BE PROTECTED AT ALL TIMES DURING CONSTRUCTION.
- ANY DAMAGED UTILITIES, AS A RESULT OF CONTRACTOR OPERATIONS, SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE STATE.
- THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR ALL STRUCTURAL OR REMOVAL TASKS. ALL ELEMENTS/ITEMS DAMAGED AS A RESULT OF THE CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO COST TO THE STATE. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE EXECUTION OF THE WORK.
- ADJUST MANHOLE AND /OR VALVE BOX FRAMES AND COVERS AS REQUIRED BY THE UTILITY COMPANIES AND AGENCIES.
- CONFORM WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, HAWAII ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH.
- PLAN, CONSTRUCT AND UTILIZE ALL BEST MANAGEMENT PRACTICES (BMP) AS REQUIRED TO COMPLY WITH THE LAWS, STANDARDS, RULES, AND /OR POLICIES OF THE COUNTY, STATE, OR FEDERAL REGULATORY AGENCIES.
- OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNMENT AGENCIES.
- THE CONTRACTOR SHALL PROVIDE THE SERVICES OF AN ESCP (EROSION AND SEDIMENT CONTROL PLAN) COORDINATOR. THE DESIGNEE SHALL HOLD A CURRENT ESCP COORDINATOR CERTIFICATE FROM THE CITY'S DEPARTMENT OF PLANNING AND PERMITTING.
- RESTORE ALL AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES, TO EQUAL OR BETTER CONDITION(S), INCLUDING BUT NOT LIMITED TO VEGETATION, PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALKWAYS, FENCES, ETC. UNLESS SPECIFICALLY NOTED OTHERWISE
- PROVIDE THEFT-RESISTANT FASTENERS FOR ALL MOUNTING ACCESSORIES.
- PROVIDE STAINLESS STEEL, THEFT-RESISTANT FASTENERS IN ALL PUBLICLY EXPOSED AREAS.
- PROVIDE ALL INCIDENTAL AND NECESSARY MATERIALS AND LABOR TO COMPLETE THE PROJECT.
- THE JOB SITE SHALL BE LEFT IN A SAFE AND SECURE CONDITION AT THE END OF EACH WORKDAY. CLEAN UP AND REMOVE ALL RUBBISH FROM THE JOB SITE ON A DAILY BASIS. MAINTAIN THE WORK AREA AND PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.
- PRIOR TO ACCEPTANCE OF THE PROJECT BY THE STATE, CLEAN UP AND REMOVE ALL RUBBISH AND DEBRIS FROM THE ENTIRE JOB SITE.
- TAKE ALL MEASURES TO MINIMIZE DISTURBING OR DAMAGING EXISTING NATIVE PLANT SPECIES DURING CONSTRUCTION.
- PRIOR TO ENTERING THE JOB SITE, ALL EQUIPMENT AND FOOTWEAR SHALL BE WASHED WITH POTABLE WATER TO PREVENT EXOTIC PLANTS AND SEEDS FROM BEING INTRODUCED TO THE JOB SITE/AREA.
- NIGHT WORK REQUIRING OUTDOOR LIGHTING SHOULD BE AVOIDED DURING THE SEABIRD FLEDGING SEASON FROM SEPTEMBER 15 THROUGH DECEMBER 15. ARTIFICIAL LIGHTING DISORIENTS SEABIRDS RESULTING IN COLLISION WITH MANMADE ARTIFACTS OR CAUSE GROUNDING. PROVIDE FULLY SHIELDED LIGHTS FOR ANY REQUIRED NIGHT WORK.
- INSPECT AND CLEAN ALL EQUIPMENT, GEAR, AND VEHICLES (PERSONAL AND PROJECT) THAT ENTER OR EXIT THE JOB SITE.
- ENSURE THAT ALL EQUIPMENT, GEAR, AND VEHICLES ARE FREE OF ANY PLANT, ANIMAL, OR EARTHEN MATERIALS PRIOR TO ENTERING THE JOB SITE. ALL EQUIPMENT, GEAR, AND VEHICLES SHALL BE INSPECTED AND CLEANED BEFORE ENTERING THE JOB SITE, AND BEFORE LEAVING ANY WEED INFECTED/CONTAMINATED AREA TO PREVENT TRACKING IN HARMFUL ORGANISMS (E.G.: WEEDS, INSECTS, PESTS) AND PREVENT SPREAD TO PRISTINE AND HEALTHY FOREST AREAS. EQUIPMENT TO INSPECT AND CLEAN INCLUDE BUT IS NOT LIMITED TO:
  - VOLCANIC CINDER ON CLOTHES & FOOTWEAR (TREADS, LACES, BOOT TONGUES), SOCKS, PANT LEGS, POCKETS, JACKETS, RAIN GEAR (POCKETS AND CUFFS)
  - ROACHES, ANTS AND OTHER PESTS ON EQUIPMENT & SUPPLIES-TOOLS, TOOL BAGS, BACKPACKS & BAGS (FOLDS, POCKETS, VELCRO), WOOD AND BUILDING MATERIALS, FENCING MATERIALS, BOTTOMS OF PLASTIC BUCKETS, CARDBOARD BOXES, OPEN FOOD AND WATER CONTAINERS, TENTS, HAMMOCKS, TARPS, HELICOPTER SLING NETS, CHAINSAW BLADES.
  - VEHICLES - THE INSIDE OF THE VEHICLES SHOULD BE VACUUMED AND THE TRUCK BEDS SWEEPED OUT REGULARLY, ESPECIALLY IF USED OFF-ROAD. CLEAN PLACES SUCH AS THE INSIDE LIP OF BUMPERS, SEATS, FLOORS, DASHBOARDS, DOOR JAMBS, TIRES (ESPECIALLY TIRE TREADS), AND THE UNDERCARRIAGE.
  - HEAVY EQUIPMENT, TRUCKS, ALL TYPES OF EARTHMOVING CONSTRUCTION EQUIPMENT AND GENERAL CONSTRUCTION EQUIPMENT AND SUPPLIES.
  - OTHER- ENSURE SOIL IS STERILE AND FREE OF INSECTS, WEEDS, AND PATHOGENS. ANYTHING SUSPICIOUS SHOULD NOT BE TAKEN ONTO THE JOB SITE.
- ON A DAILY BASIS, PACK AND REMOVE ALL TRASH, INCLUDING ANY DISCARDED FOOD, FROM THE JOB SITE TO PREVENT NEGATIVELY AFFECTING THE FLORA AND FAUNA AT THE FIELD SITE. (DISCARDED FOOD MAY CONTAIN UNSEEN INSECTS, FUNGUS, BACTERIA, AND PARASITES, AND IS AN ATTRACTANT FOR INVASIVE INSECTS).
- CLEAN AND DISINFECT EQUIPMENT PRIOR TO MOBILIZATION TO JOB SITE.
- BEFORE COMMENCING WORK, CONTRACTOR TO VERIFY EXTENT OF DEMOLITION WITH THE STATE
- MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED IN THE DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL LAYOUT HIS OWN WORK, AND SHALL PROVIDE ALL DIMENSIONS REQUIRED FOR OTHER TRADES
- WHERE DETAILS ARE NOT CALLED OUT BUT ARE NOTABLY SIMILAR IN CHARACTER/DESIGN INTENT TO THOSE THAT ARE CALLED OUT WITH A DETAIL/DIMENSION, UTILIZE SIMILAR DETAILS. WHERE CHARACTER/DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE STATE AND DESIGN PROFESSIONAL BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONAL AND THE STATE OF ANY DAMAGE DISCOVERED TO STRUCTURAL SUPPORTS, METAL DECKING OR SUBSTRATES.
- CONTRACTOR IS RESPONSIBLE TO INSPECT SUBSTRATE FOR ANY WATER DAMAGE & INVESTIGATE EXTENT OF MOISTURE INFILTRATION.
- PROVIDE WEATHER PROTECTION FOR ANY AREAS WHERE REMOVAL OF MATERIAL MAY CAUSE WATER INFILTRATION.

## GENERAL DEMOLITION NOTES

- A. THE INTENT OF THE DEMOLITION PLANS IS TO SHOW THE GENERAL NATURE OF THE DEMOLITION SCOPE. THE DRAWINGS REPRESENT EXISTING FIELD CONDITIONS THAT HAVE NOT BEEN FIELD VERIFIED BY AS-BUILT DOCUMENTATION. THE CONTRACTOR AND SUBCONTRACTOR(S) ARE RESPONSIBLE TO BECOME FAMILIAR WITH ALL EXISTING FIELD CONDITIONS AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES. VERIFY EXISTING CONDITIONS AND CONSTRAINTS UNDER WHICH THE WORK IS TO BE PERFORMED. NO CLAIM FOR EXTRA COST WILL BE ALLOWED BECAUSE OF LACK OF EXAMINATION OR KNOWLEDGE OF EXISTING CONDITIONS. SUBMITTAL OF BID IMPLIES THAT CONTRACTOR AND HIS SUBCONTRACTORS HAVE MADE SUCH EXAMINATIONS AND ARE FAMILIAR WITH SITE CONDITIONS. COORDINATE AND VERIFY WITH THE OWNER ALL ITEMS TO BE SALVAGED PRIOR TO DEMOLITION.
- B. USE ALL MEANS NECESSARY TO PREVENT THE SPREAD OF DUST TO ADJACENT AREAS.
- C. CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH STREETS, TRAFFIC, WALKWAYS, SIDEWALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. COMPLY WITH LOCAL JURISDICTION REQUIREMENTS FOR RECYCLING AND TREATMENT OF ITEMS TO BE RECYCLED.
- D. DISPOSE OF ALL DEMOLISHED OR REMOVED MATERIALS LEGALLY OFF THE SITE. COMPLY WITH ALL LOCAL HAULING AND DISPOSAL REQUIREMENTS.
- E. IMMEDIATELY ISOLATE THE AFFECTED AREA IF ASBESTOS OR OTHER HAZARDOUS MATERIAL ARE DISCOVERED DURING CONSTRUCTION. NOTIFY OWNER FOR FURTHER INSTRUCTION BEFORE PROCEEDING WITH WORK. THE ARCHITECT HAS NO KNOWLEDGE OF AND SHALL NOT BE HELD LIABLE FOR ANY ASBESTOS OR OTHER HAZARDOUS MATERIALS ON THE PROJECT/JOBSITE.
- F. EXISTING UTILITIES TO REMAIN IN SERVICE. PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS.
- G. SCHEDULE ANY SHUT DOWNS WITH OWNER, PROJECT MANAGER AND PROPERTY MANAGER AS SOON AS POSSIBLE OR A MINIMUM OF ONE (1) WEEK PRIOR AND NOTIFY PROPERTY MANAGER AND AFFECTED TENANTS AT LEAST ONE (1) DAY PRIOR TO SCHEDULED SERVICE SHUT DOWN(S) FOR UTILITIES AND ALL OTHER SERVICES.
- H. REMOVE ALL NON-STRUCTURAL ITEMS THAT PROTRUDE ABOVE THE CONCRETE FLOOR SURFACE.
- I. REMOVE MISCELLANEOUS ANCHORS, CLIPS, BOLTS, ETC EXCEPT WHERE THEY ARE SUPPORTING ALL SERVICES, SYSTEMS, OR OTHER ELEMENTS INDICATED TO REMAIN.
- J. UPON COMPLETION, CLEAN AREA OF DEMOLITION TO A TIDY, UNIFORM CONDITION REMOVING ALL DEBRIS. DUST ALL REMAINING AREAS AFFECTED BY DEMOLITION. CLEAN ALL AREAS IMPACTED BY THE DEMOLITION, INCLUDING BUT NOT LIMITED TO, ADJACENT OCCUPIED AREAS AND AREAS NOT WITHIN THE SCOPE OF WORK.
- K. ABANDONING ITEMS OR UNUSED UTILITIES IN PLACE IS PROHIBITED UNLESS SPECIFICALLY PERMITTED BY THE OWNER.
- L. COMPLY WITH ALL STANDARD LOCAL, NATIONAL, STATE AND FEDERAL SAFETY REQUIREMENTS FOR DEMOLITION
- M. CONFIRM WITH OWNER LOCATION OF ALL SALVAGED MATERIALS FOR STORAGE.
- N. PROVIDE TEMPORARY, DECORATIVE AND NONCOMBUSTIBLE CONSTRUCTION BARRICADES AS APPROVED BY OWNER.

## INDEX TO DRAWINGS

### COMMON SHEETS

SHEET NO.	SHEET NAME
G001	TITLE SHEET
G002	INDEX TO DRAWINGS, GENERAL NOTES
G003	SITE PLAN
C001	EROSION AND SEDIMENT CONTROL NOTES
C002	EROSION CONTROL - OVERALL PLAN BID ALT 4
C003	EROSION CONTROL DETAILS
C004	BID ALT 4 SITE DETAILS
A001	ENLARGED SITE PLAN AT PROPOSED WALKWAY - BID ADDITIVE 4

### ARCHITECTURAL

SHEET NO.	SHEET NAME
A2 -	ANTI AIRCRAFT
D2-101	ANTI-AIRCRAFT GUN EMPLACEMENT TOWER DEMOLITION SCOPE
A2-101	ANTI-AIRCRAFT GUN EMPLACEMENT TOWER PLANS AND ELEVATIONS
A2-102	ANTI-AIRCRAFT GUN EMPLACEMENT TOWER PLANS, ELEVATIONS AND SECTIONS

A3 -	HARBOR ENTRANCE
A3-101	HARBOR ENTRANCE CONTROL POST TOWER POST PLAN AND ELEVATIONS
A3-102	HARBOR ENTRANCE CONTROL POST TOWER STAIR - BID ALT 3
A3-103	ANTI-AIRCRAFT GUN EMPLACEMENT TOWER PERSPECTIVE VIEWS


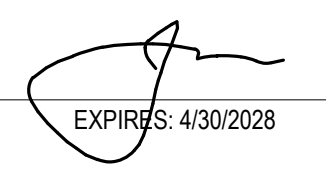
A4 -	CABLE HUT
D4-101	CABLE HUT (TRAIN) DEMOLITION SCOPE
A4-101	CABLE HUT FLOOR PLAN AND ELEVATIONS
A4-102	CABLE HUT PERSPECTIVE VIEWS

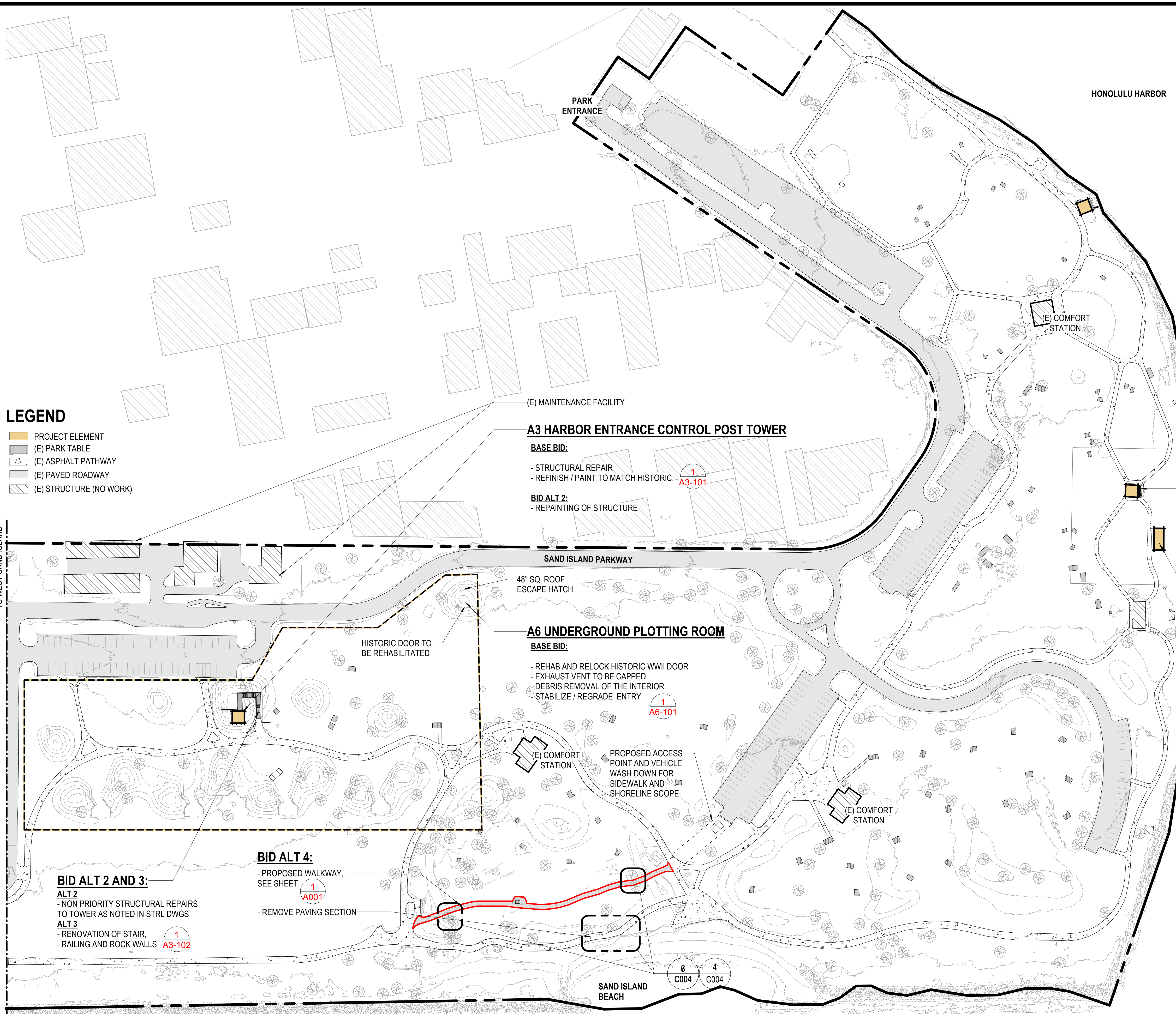
A5 -	AIR RAID
D5-101	EXISTING AIR RAID SHELTER (TRAIN STATION) DEMOLITION SCOPE
A5-101	AIR RAID SHELTER PLANS AND ELEVATIONS
A5-102	AIR RAID SHELTER PERSPECTIVE VIEWS

A6 -	UNDERGROUND PLOTTING ROOM
A6-101	UNDERGROUND PLOTTING ROOM - PLAN

### STRUCTURAL

SHEET NO.	SHEET NAME
S-001	GENERAL NOTES
S-002	TYPICAL REPAIR DETAILS
S-003	STRUCTURAL INSPECTIONS
S2-101	ANTI-AIRCRAFT GUN EMPLACEMENT TOWER FRAMING PLANS
S2-501	CONCRETE REPAIR DETAILS
S3-101	HARBOR ENTRANCE CONTROL TOWER FRAMING PLANS
S3-102	HARBOR ENTRANCE CONTROL TOWER FRAMING ELEVATIONS
S3-501	STEEL REPAIR DETAILS

1	1	Addendum No. 1		04/30/2026	
REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED:
			2 OF 29		
					
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>INDEX TO DRAWINGS, GENERAL NOTES</b>					
DESIGNED: JS					
DRAWN: G70			SUBMITTED: <b>BID SUBMITTAL</b>		
CHECKED: KC			DATE: 04/13/2026		
APPROVED: -			SCALE: AS NOTED		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION CHIEF ENGINEER			Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer		
 EXPIRES: 4/30/2028					
<b>G002</b>					



**LEGEND**

- PROJECT ELEMENT
- (E) PARK TABLE
- (E) ASPHALT PATHWAY
- (E) PAVED ROADWAY
- (E) STRUCTURE (NO WORK)

**A2 ANTI-AIRCRAFT GUN EMPLACEMENT TOWER** 1  
A2-101

- BASE BID:**
- REPAIR AND REINSTALL WOOD TRELLIS
  - REPAIR SPALLING
  - ADDITION OF SCUPPERS AND ROOFING MEMBRANE
  - RESTORE TO HISTORIC FINISH/PAINT
  - ADDED GRADE FILL
  - ADDED RAILING
  - REPAINTING OF STRUCTURE
- BID ALT #1:**
- PARK ELEMENTS: BENCHES, TRASH CAN
  - (E) RIPRAP TYP

**A3 HARBOR ENTRANCE CONTROL POST TOWER** 1  
A3-101

- BASE BID:**
- STRUCTURAL REPAIR
  - REFINISH / PAINT TO MATCH HISTORIC
- BID ALT 2:**
- REPAINTING OF STRUCTURE

**A5 AIR RAID SHELTER (TRAIN STATION)** 1  
A5-101

- BASE BID:**
- DEMOLISH NON-HISTORIC WOOD AND CONCRETE EXTERIOR
  - RESTORE TO HISTORIC QUONSET HUT
  - ADDED HOLLOW METAL PREFINISHED ACCESS PANEL
  - DEBRIS REMOVAL OF THE INTERIOR

**A4 CABLE HUT (TRAIN)** 2  
A4-101

- BASE BID:**
- DEMOLISH NON-HISTORIC WOOD AND CONCRETE, INCLUDING RAILINGS, STAIRS, AND ROOF
  - DETERRENT FENCE

**A6 UNDERGROUND PLOTTING ROOM** 1  
A6-101

- BASE BID:**
- REHAB AND RELOCK HISTORIC WWII DOOR
  - EXHAUST VENT TO BE CAPPED
  - DEBRIS REMOVAL OF THE INTERIOR
  - STABILIZE / REGRADE ENTRY

**BID ALT 4:**

- PROPOSED WALKWAY, SEE SHEET 1  
A001
- REMOVE PAVING SECTION

**BID ALT 2 AND 3:**

- ALT 2**
- NON PRIORITY STRUCTURAL REPAIRS TO TOWER AS NOTED IN STRL DWGS
- ALT 3**
- RENOVATION OF STAIR, 1  
A3-102
  - RAILING AND ROCK WALLS



1	1	Addendum No. 1	SHT 3 OF 29	DATE 04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION			
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
<b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006					
<b>SITE PLAN</b>					
DESIGNED: JS	SUBMITTED: BID SUBMITTAL				
DRAWN: G70	DATE: 04/13/2026				
CHECKED: KC	SCALE: AS NOTED				
APPROVED: -					
EXPIRES: 4/30/2028					
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION					
Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer		<b>G003</b>			
JOB NO. F70C616H			3 OF 29		

SCALE: 1" = 80' - 0" @ 22x34  
1" = 40' - 0" @ 11x17

HONOLULU CHANNEL

# NON-STRUCTURAL BEST MANAGEMENT PRACTICES:

NON-STRUCTURAL BEST MANAGEMENT PRACTICES:

**1. WASTE DISPOSAL**

**a. WASTE MATERIALS**

ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A LEAKPROOF METAL DUMPSTER. ALL DUMPSTERS AT THE PROJECT SITE SHALL BE EMPTIED A MINIMUM OF ONCE PER WEEK, AND MORE OFTEN, IF NECESSARY. NO CONSTRUCTION MATERIALS SHALL BE BURIED ON-SITE. THE CONTRACTOR, AT HIS EXPENSE, SHALL TRAIN SUPERVISORY PERSONNEL IN THE CORRECT PROCEDURES FOR WASTE DISPOSAL.

**b. HAZARDOUS WASTE**

ALL HAZARDOUS WASTE MATERIAL SHALL BE DISPOSED OF IN A MANNER PERMITTED BY LOCAL, STATE OR FEDERAL REGULATIONS.

**c. SANITARY WASTE**

ALL SANITARY WASTE SHALL BE COLLECTED FROM PORTABLE RESTROOM FACILITIES A MINIMUM OF ONCE PER WEEK, AND MORE OFTEN, IF NECESSARY.

**2. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES**

**a.** ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY PRIOR TO AND AFTER EACH WEEK'S CONSTRUCTION, ESPECIALLY DURING HEAVY RAINFALL. CONTRACTOR SHALL ALSO ENSURE DRAINAGE THROUGH FILTER MATERIAL IS MAINTAINED.

**b.** ALL CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF THE PROBLEM BEING DISCOVERED.

**c.** THE FINAL LIFT OF EACH DAY'S WORK SHALL BE COMPACTED TO PREVENT EROSION OF FILL MATERIAL.

**d.** ENSURE PROTECTION OF ROADWAYS FROM MUD, DIRT, AND DEBRIS.

**e.** ENSURE THAT ALL TIRES OF CONSTRUCTION VEHICLES ARE SUFFICIENTLY CLEANED OFF SO THAT DIRT OR DEBRIS IS NOT TRACKED OFF THE CONSTRUCTION SITE. WASHING OFF TIRES WITH WATER WILL NOT BE ACCEPTABLE UNLESS THE RUNOFF IS COMPLETELY CONTAINED AND DOES NOT ENTER THE STORM DRAIN SYSTEM OR ONTO THE STATE'S RIGHT OF WAY.

**f.** AT THE END OF GRADING OPERATIONS AND AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL INSPECT ALL DRAINAGE STRUCTURES SURROUNDING THE PROJECT SITE. ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE DRAINAGE STRUCTURES SHALL BE REMOVED.

**g.** ANY DIRT OR GRASSSED AREA DISTURBED SHALL BE RESTORED BY RE-GRASSING THE AREA OR BY SEEDING HYDROMULCH. THE GRASS SHALL BE FULLY ESTABLISHED AT COMPLETION OF PROJECT.

**3. SPILL PREVENTION**

**a.** THE FOLLOWING MATERIAL MANAGEMENT PRACTICES SHALL BE FOLLOWED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIAL AND SUBSTANCES TO STORMWATER RUNOFF AND DISCHARGE.

**b. - GOOD HOUSEKEEPING**

- STORE ONLY ENOUGH PRODUCTS AND MATERIAL REQUIRED TO PERFORM THE JOB.

- MATERIALS THAT MAY BECOME POTENTIAL POLLUTANTS THAT ARE STORED OUTSIDE SHALL BE STORED IN A NEAT AND ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS, AND IF POSSIBLE, COVERED OR ENCLOSED.

- PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS, WITH THE ORIGINAL MANUFACTURER'S LABELING.

- PRODUCTS SHALL NOT BE MIXED, EXCEPT AS RECOMMENDED OR ALLOWED BY THE MANUFACTURERS.

- APPROPRIATE PRODUCTS SHALL HAVE SECONDARY CONTAINMENT.

- WHENEVER POSSIBLE, USE ALL OF A PRODUCT PRIOR TO DISPOSING OF THE CONTAINER.

- THE MANUFACTURER'S DIRECTIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.

- MATERIAL SHALL BE DISPOSED OF IN A MANNER PERMITTED BY LOCAL, STATE OR FEDERAL REGULATIONS.

- CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS TO ENSURE PROPER USE AND DISPOSAL OF MATERIAL.

- LITTER SHALL BE PICKED-UP ON A DAILY BASIS AND DISPOSED OF PROPERLY.

- DUST SHALL BE CONTROLLED BY WETTING OR BY THE APPLICATION OF A SOIL BINDER.

**c. - HAZARDOUS PRODUCTS**

- PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS, WITH THE ORIGINAL MANUFACTURER'S LABELING.

- SAFETY DATA SHEETS (SDS) SHALL BE RETAINED AND AVAILABLE FOR REVIEW BY USERS.

- THE MANUFACTURER'S DIRECTIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.

- ALL HAZARDOUS WASTE MATERIAL SHALL BE DISPOSED OF IN A MANNER PERMITTED BY LOCAL, STATE OR FEDERAL REGULATIONS.

**4. PRODUCT SPECIFIC PRACTICES**

THE FOLLOWING PRACTICES SHALL BE FOLLOWED ON-SITE:

**a. - VEHICLES**

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND SHALL BE SUBJECT TO REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKS OCCURRING. LEAKS THAT CANNOT BE REPAIRED IMMEDIATELY SHALL BE CONTAINED IN SPILL PANS OR OTHER APPROPRIATE CONTAINERS.

**b. - PETROLEUM PRODUCTS**

PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS THAT SHALL BE CLEARLY LABELED.

ASPHALT—CONTAINING MATERIALS (SUCH AS TACK AND PRIME COATS) USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S DIRECTIONS.

**c. - CONCRETE TRUCKS**

CONCRETE TRUCKS SHALL DISCHARGE DRUM WASH WATER ONLY AT DESIGNATED SITES. WASH WATER SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THE CONTRACTOR SHALL CONTAIN THE DISCHARGED DRUM WASH WATER AT THE DESIGNATED SITE AND SHALL REMOVE CONCRETE AND OTHER RESIDUE AS REQUIRED BY THE ENGINEER.

**d. - SPILL CONTROL PRACTICES**

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES, THE FOLLOWING SPILL PREVENTION AND CLEANUP PRACTICES SHALL BE OBSERVED:

**e. - MANUFACTURERS' RECOMMENDATIONS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED, AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND LOCATION OF CLEANUP SUPPLIES.**

**f. - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE.**

**g. - ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.**

**h. - ALL SPILL AREAS SHALL BE KEPT WELL VENTILATED, AND CLEANUP PERSONNEL SHALL WEAR APPROPRIATE CLOTHING AND EQUIPMENT.**

**i. - HAZARDOUS MATERIALS SPILLS, REGARDLESS OF SIZE, SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. A REPORT SHALL BE PREPARED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL IN THE FUTURE, AND HOW TO CLEANUP SUCH A SPILL. A DESCRIPTION OF THE SPILL, THE CAUSE, AND THE CLEANUP MEASURE UNDERTAKEN SHALL ALSO BE INCLUDED IN THE REPORT.**

**j. - THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPILL PREVENTION AND CLEANUP. HE SHALL DESIGNATE AT LEAST ONE ON-SITE PERSONNEL TO RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THE CONTRACTOR, AT HIS EXPENSE, SHALL DO TRAINING. THE NAME OF THIS PERSON SHALL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE ON-SITE OFFICE TRAILER.**

**k. - WHERE A LEAK, SPILL, OR OTHER RELEASE CONTAINING A HAZARDOUS SUBSTANCE OR OIL IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR PART 110, 40 CFR PART 117, OR 40 CFR PART 302, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS THE CONTRACTOR HAS KNOWLEDGE OF THE DISCHARGE. NOTE THAT THE REPORTABLE QUANTITY FOR OIL AND FUEL PRODUCTS IS A SPILL OF 25 GALLONS OR MORE, A SPILL NOT CLEANED WITHIN 72 HOURS, OR A SPILL THAT THREATENS GROUND OR SURFACE WATERS. THE ENGINEER WILL NOTIFY THE NATIONAL RESPONSE CENTER (NRC) AT (800) 424-8802, THE DOH CLEAN WATER BRANCH AT (808) 586-4309, THE DOH CLEAN WATER BRANCH VIA EMAIL AT cleanwaterbranch@doh.hawaii.gov (DURING NON-BUSINESS HOURS), THE DOH HAZARD EVALUATION AND EMERGENCY RESPONSE OFFICE AT (808) 586-4249, THE U.S. COAST GUARD MAUI STATION OFFICE AT (808) 986-0023, AND THE LOCAL EMERGENCY PLANNING COMMITTEE AT (808) 720-7285. THE CONTRACTOR SHALL ALSO PROVIDE TO THE ENGINEER WITHIN 1 CALENDAR DAY OF KNOWLEDGE OF THE RELEASE, THE CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF THE RELEASE. THE ENGINEER WILL PROVIDE INFORMATION TO THE NRC AS REQUIRED.**

# EROSION CONTROL AND BMP NOTES FOR WORK

1. THE CONTRACTOR SHALL INSTALL DEVICES AND UTILIZE BEST MANAGEMENT PRACTICES (BMPS) APPROPRIATE FOR THE PROJECT. THE CONTRACTOR SHALL REFERENCE THE STATE OF HAWAII'S CONSTRUCTION BEST MANAGEMENT PRACTICES FIELD MANUAL.

A COPY OF THIS DOCUMENT SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES AND SHALL BE PRODUCED UPON REQUEST OF THE DISTRICT ENGINEER OR HIS DESIGNATED REPRESENTATIVE. THESE DOCUMENTS SHALL SERVE AS GUIDELINES ONLY, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SAFETY RELATIVE TO TRAFFIC, PONDING PROBLEMS, ETC. ARE CONSIDERED AND ADDRESSED. THIS WORK SHALL BE CONSIDERED PART OF THE PROJECT AND WILL NOT BE PAID FOR BY THE STATE.

2. THE CONTRACTOR SHALL CONSIDER AND INSTALL BMP MEASURES WHICH TAKE INTO ACCOUNT HIGH INTENSITY AND PROLONGED RAINFALL, AND TO ADDRESS THE POTENTIAL PROBLEMS THAT MAY RESULT.

3. ALL AREAS USED IN SUPPORT OF CONSTRUCTION ACTIVITIES DISTURBED OR DAMAGED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO, STAGING AREAS, CONSTRUCTION ENTRANCE/EXIT, AND TRAVEL ROUTES, SHALL BE TEMPORARILY STABILIZED DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 209 OF THE 2005 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THESE AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER AFTER THE COMPLETION OF CONSTRUCTION. DISTURBED AND EXPOSED AREAS SHALL BE PERMANENTLY STABILIZED USING VEGETATIVE COVER, PAVEMENT, OR EQUIVALENT TO MATCH PRE-EXISTING OR BETTER CONDITION AS APPROVED BY THE STATE.

4. FINAL STABILIZATION AND RESTORATION OF DISTURBED OR DAMAGED AREAS SHALL BEGIN IMMEDIATELY AS SOON AS CONSTRUCTION IS COMPLETED AND THE CONSTRUCTION SUPPORT AREAS ARE NO LONGER USED.

5. THE CONTRACTOR SHALL DESIGNATE AT LEAST ONE (1) PERSON WHO WILL BE RESPONSIBLE FOR INSPECTION, MAINTENANCE, AND REPAIR ACTIVITIES.

6. DISCHARGES INTO STATE WATERS DUE TO DEWATERING AND/OR HYDROTESTING ACTIVITIES REQUIRE SEPARATE NPDES PERMIT(S) FROM THE STATE DEPARTMENT OF HEALTH (DOH). IF THE CONTRACTOR CHOOSES TO DISCHARGE DEWATERING AND/OR HYDROTESTING EFFLUENT INTO STATE WATERS, HE SHALL OBTAIN THE NECESSARY PERMIT(S) FROM THE DOH AND SHALL SUBMIT A COMPLETE SET OF THE PERMIT TO THE DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, COUNTY OF HAWAII DISTRICT (HWY-M) PRIOR TO COMMENCING THE PERMITTED ACTIVITY. NO DEWATERING AND/OR HYDROTESTING ACTIVITIES WILL BE AUTHORIZED UNTIL THE RECEIPT OF THE NPDES PERMIT(S) FROM THE DOH.

7. THE CONTRACTOR MAY DISCUSS THE PROPOSED AND IMPLEMENTED BMP MEASURES AND THE ADEQUACY OF THEM, WITH THE DISTRICT ENGINEER.

# STRUCTURAL BEST MANAGEMENT PRACTICES:

STRUCTURAL BEST MANAGEMENT PRACTICES:

EXAMPLES OF STRUCTURAL BMPS INCLUDE, BUT ARE NOT LIMITED TO:

- SILT FENCES
- COVERINGS
- FILTER BERMS
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- VEGETATIVE STABILIZATION
- SEDIMENT TRAPS
- INLET PROTECTION
- SEDIMENT BASINS

1. INSPECT BMPS PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED RAIN EVENTS, ONCE EVERY 7 CALENDAR DAYS, AND WITHIN 24 HOURS AFTER A STORM EVENT OF 0.25 INCHES OR GREATER.

2. IF REPAIRS TO OR MAINTENANCE OF THE CONTRACTOR'S EROSION CONTROL MEASURES ARE NECESSARY, THE CONTRACTOR SHALL INITIATE THE REPAIRS OR MAINTENANCE WITHIN 24 HOURS AFTER INSPECTION AND NOTING OF THE DEFICIENCY.

REPAIRS AND MAINTENANCE MAY INCLUDE THE FOLLOWING:

**a.** REPLACING SILT FENCE FABRIC WHEN TEARS ARE FOUND AND ENSURING THAT THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS AND FIRMLY IN THE GROUND.

**b.** REMOVING AND DISPOSING OF SEDIMENT MATERIAL WHEN SEDIMENT BUILD-UP REACHES ONE-THIRD (1/3) THE HEIGHT OF THE SEDIMENT CONTROL MEASURE.

**c.** REMOVING AND DISPOSING OF SEDIMENT MATERIAL WHEN THE DEPTH IN THE INSTALLED EROSION CONTROL MEASURES REACHES TEN PERCENT (10%) OF THE DESIGN CAPACITY.

**d.** RESTORING BARE SPOTS AND WASHOUTS AND ENSURING HEALTHY PLANT GROWTH IN BOTH TEMPORARY AND PERMANENT SEEDED AND PLANTED AREAS.

3. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO INSTALL STRUCTURAL BMPS AS NEAR THE POLLUTANT SOURCE AS PRACTICABLE. INLET PROTECTION SHALL SERVE AS THE LAST MEASURE TO PREVENT POLLUTANTS FROM ENTERING THE STORM DRAIN SYSTEM.

# DUST CONTROL

1. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE MEASURES IT WILL TAKE FOR THE CONTROL OF FUGITIVE DUST FROM THE WORK SITE THE MEASURES MAY INCLUDE BUT NOT BE LIMITED TO THE INSTALLATION OF DUST SCREENS, WATERING OF THE SITE, FILL MATERIAL BEING PLACED, AND DELAYING WORK IN THE WEEK THAT PREVAILING WIND DIRECTION SHOULD SHIFT.

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# DUST CONTROL

NOTES:  
1. WHEN JOINING TWO SECTIONS OF FILTER SOCK, A MINIMUM OF 2 FEET SHOULD BE MADE SO THAT FILTER SOCK SIT SIDE BY SIDE

2. CONTRACTOR SHALL REMOVE ANY DEBRIS IN PATH OF FILTER SOCK TO ENSURE GOOD GROUND CONTACT.

3. COMPOST SHALL NOT CONTAIN BIOSOLIDS AND SHOULD BE CONSISTENT WITH EPA GUIDELINES.

4. SHOULD THE FILTER FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE FILTER SOCK STILL BE NECESSARY, THE FILTER SOCK SHALL BE REPLACED PROMPTLY.

5. CONTRACTOR TO PROVIDE 4' MINIMUM CLEARANCE AT ALL SIDEWALKS.

# EROSION CONTROL/SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE CITY AND COUNTY OF HONOLULU'S "RULES RELATING TO WATER QUALITY"

2. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY CONSTRUCTIONS IS INITIATED.

3. SLOPE PROTECTION IS REQUIRED ON AREAS WITH SLOPES GREATER THAN 15% AND ON AREAS OF MODERATE SLOPE THAT AREA PRONE TO EROSION UNLESS THEY ARE BEING ACTIVELY WORKED. USE DIVERSION UPSTREAM OF SLOPE (DIKES, SWALES SLOPE DRAINS) TO DIVERT WATER AROUND THE SLOPE. PROVIDE A 10-FT BUFFER ZONE AT THE TOE OF SLOPE. ONLY 5 ACRES MAY BE DISTURBED AT ANYTIME ON SLOPE GREATER THAN 15%.

4. TEMPORARY STABILIZATION: TEMPORARY STABILIZATION IS REQUIRED ON DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHEN THE DISTURBED AREA WILL NOT BE WORKED FOR 14 CONSECUTIVE DAYS OR MORE.

5. PERMANENT STABILIZATION: ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED USING VEGETATIVE COVERING, PAVEMENT, OR EQUIVALENT. PRIOR TO REMOVING EROSION AND SEDIMENT MEASURES, TRAPPED SEDIMENT AND AREAS OF DISTURBED SOIL WHICH RESULT FROM THE REMOVAL OF THE TEMPORARY MEASURES SHALL BE IMMEDIATELY AND PERMANENTLY STABILIZED.

6. PRESERVE EXISTING VEGETATION: CLEARLY MARK THE AREAS TO BE PRESERVED WITH FLAGS OR TEMPORARY FENCING. WHERE TEMPORARY FENCING IS USED, FENCING MUST BE ADEQUATELY SUPPORTED BY POSTS AND MAINTAINED IN AN UPRIGHT POSITION.

7. AREAS WHERE FINAL STABILIZATION OR INFILTRATION PRACTICES WILL BE INSTALLED SHALL BE PROTECTED FROM EXCESSIVE COMPACTION DURING CONSTRUCTION. VEHICLE AND EQUIPMENT USE SHALL BE RESTRICTED OR TECHNIQUES TO CONDITION THE SOIL TO SUPPORT VEGETATION SHALL BE IMPLEMENTED IN THE AREAS. CLEARLY MARK THE AREAS TO BE AVOIDED WITH FLAGS OR TEMPORARY FENCING. WHERE TEMPORARY FENCING IS USED, FENCING MUST BE ADEQUATELY SUPPORTED BY POSTS AND MAINTAINED IN AN UPRIGHT POSITION.

8. PERIMETER CONTROLS: PERIMETER CONTROLS ARE REQUIRED DOWNSLOPE OF ALL DISTURBED AREAS. MAINTAIN DOWNSTREAM VEGETATED BUFFER AREAS.

9. INLET PROTECTION:  
- ALL STORM DRAIN INLETS ONSITE AND THOSE OFFSITE WHICH MAY RECEIVE RUNOFF FROM THE SITE SHALL USE AN INLET PROTECTION DEVICE UNLESS THEY ARE DIRECTED TO SEDIMENT BASIN.

- SEDIMENTS LEVELS MAY NOT EXCEED ONE THIRD OF THE HEIGHT OF A SEDIMENT BARRIER OR INLET PROTECTION DEVICE AT ANY POINT ALONG THE LENGTH OF THE SEDIMENT BARRIER OR THE INLET PROTECTION DEVICE.

- SEDIMENT BARRIERS AND INLET PROTECTION DEVICES MUST BE UNCLOGGED AND CLEANED WHEN PERFORMANCE IS COMPROMISED

- TORN, WEATHERED OR SAGGING SEDIMENT BARRIERS OR INLET PROTECTION DEVICES MUST BE REPAIRED OR REPLACED IMMEDIATELY.

10. TRACKING CONTROL

- MINIMIZE SEDIMENT TRACK-OUT ONTO OFF-SITE STREETS, OTHER PAVED AREAS, AND SIDEWALKS FROM VEHICLES EXITING THE CONSTRUCTION SITE BY RESTRICTING VEHICLE TRAFFIC TO PROPERLY DESIGNATED AREAS AND USING ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM VEHICLE TIRES PRIOR TO EXITING THE SITE.

- VEHICULAR PARKING AND MOVEMENTS ON PROJECT SITES MUST BE CONFINED TO PAVED SURFACES OR PREDEFINED PARKING AREAS AND VEHICLE PATHS, WHICH SHALL BE MARKED WITH FLAGS OR BOUNDARY FENCING.

- ALL POLLUTANTS AND MATERIALS THAT ARE DROPPED, WASHED, TRACKED, SPILLED, OR OTHERWISE DISCHARGED FROM A PROJECT SITE TO OFF-SITE STREETS, OTHER PAVED AREAS, SIDEWALKS OR THE MS4 MUST BE CLEANED USING DRY METHODS SUCH AS SWEEPING OR VACUUMING.

11. BEST MANAGEMENT PRACTICES (BMPS) SHALL NOT BE REMOVED UNTIL FINAL STABILIZATION IS COMPLETE FOR THE PHASE.

12. REFER TO CITY AND COUNTY OF HONOLULU BEST MANAGEMENT PRACTICES MANUAL - CONSTRUCTION, FOR MORE INFORMATION ON BMPS.

13. BMP AND SITE MAINTENANCE.

- REGULARLY INSPECT AND MAINTAIN REQUIRED EROSION AND SEDIMENT CONTROL MEASURES TO ENSURE CONTINUED PERFORMANCE.

- THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE CONTRACTOR AND ESP COORDINATOR. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.

- STORM WATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES. THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR AND ESCP COORDINATOR PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY CITY OFFICIALS.

- ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTIES SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.

- ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.

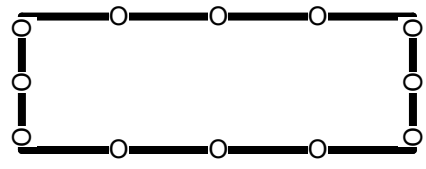
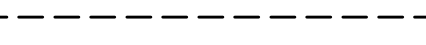



- EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITES AT ALL TIMES

- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.

- ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

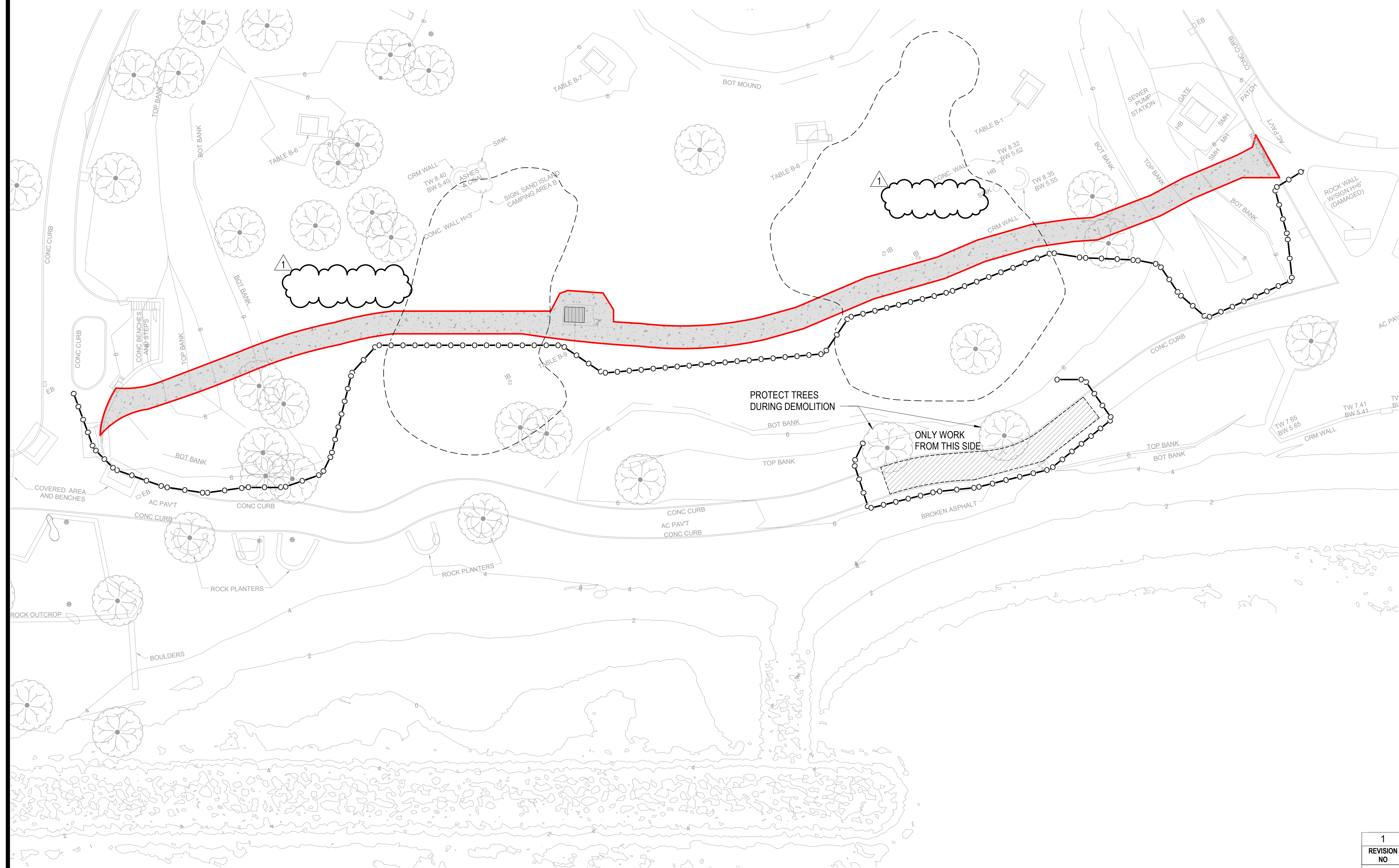
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REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED:	
			4 OF 29			
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>EROSION AND SEDIMENT CONTROL NOTES</b>						
DESIGNED: JS						
DRAWN: G70		SUBMITTED: BID SUBMITTAL				
CHECKED: KC		DATE: 04/13/2026				
APPROVED: -		SCALE: AS NOTED				
EXPIRES: 4/30/2028						
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION			Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer			
					<b>C001</b>	
			4 OF 29			

**LEGEND:**


-  FILTER SOCK PERIMETER CONTROL, FOR DETAIL SEE SHEET C003
-  APPROXIMATE LIMITS OF PONDING AREA
-  (E) PARK TABLE
-  (E) ASPHALT PATHWAY
-  SIDEWALK SECTION REMOVAL

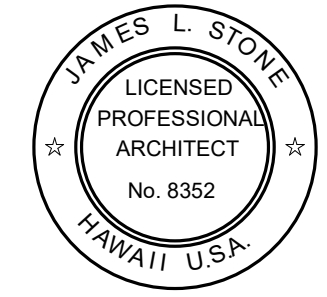
**PRE/DURING/POST CONSTRUCTION BMPs:**

- PRE-CONSTRUCTION BMPs INCLUDE THE FOLLOWING:
1. STABILIZED CONSTRUCTION INGRESS/EGRESS
  2. SEDIMENT FILTER FOR DRAIN INLETS
  3. FILTER SOCK
  4. DUST CONTROL
- DURING CONSTRUCTION BMPs INCLUDE THE FOLLOWING:
1. TEMPORARY SLOPE PROTECTION
  2. TEMPORARY STABILIZATION
  3. TEMPORARY SEDIMENT FILTER FOR PROPOSED INLETS
- POST CONSTRUCTION BMPs INCLUDE THE FOLLOWING:
1. PERMANENT STABILIZATION



**1** EROSION CONTROL PLAN - BID ALT 4  
 SCALE: 1" = 20'-0"  


1	1	Addendum No. 1	SHT 5 OF 29	DATE 04/30/2026	APPROVED: 
REVISION NO	SYM	DESCRIPTION			



EXPIRES: 4/30/2028

STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
 TAX MAP KEY: 1-5-041:006

**EROSION CONTROL - OVERALL PLAN BID ALT 4**

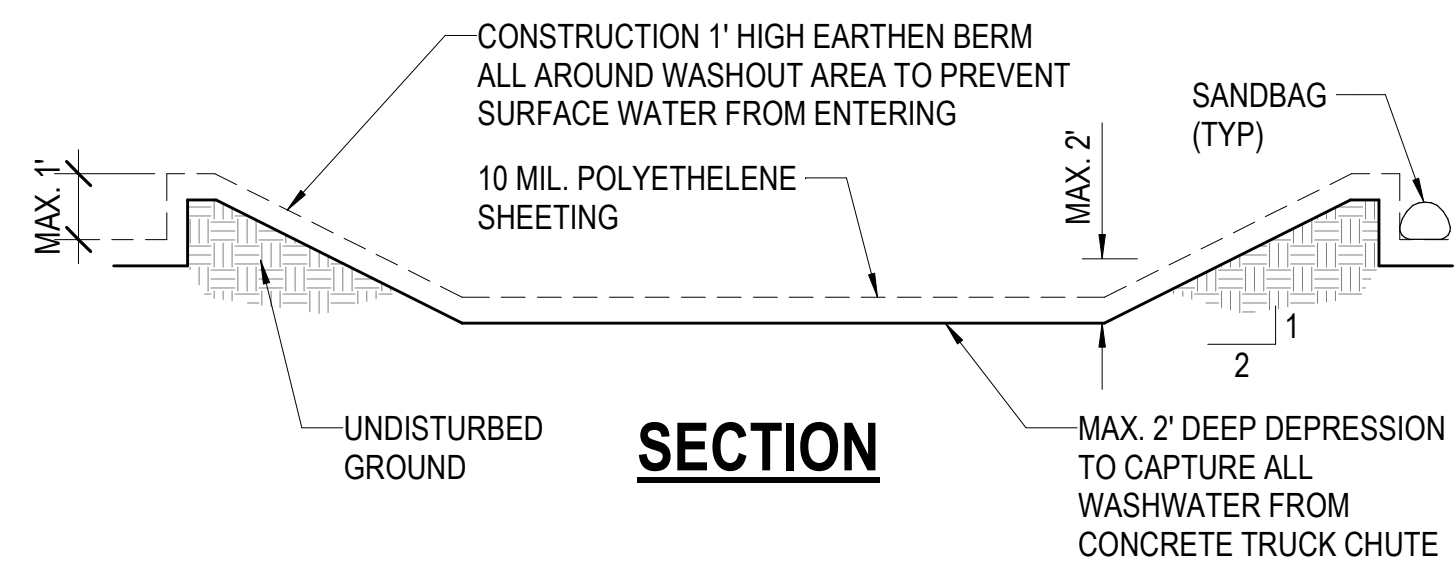
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SUBMITTED: BID SUBMITTAL  
 DATE: 04/13/2026  
 SCALE: AS NOTED

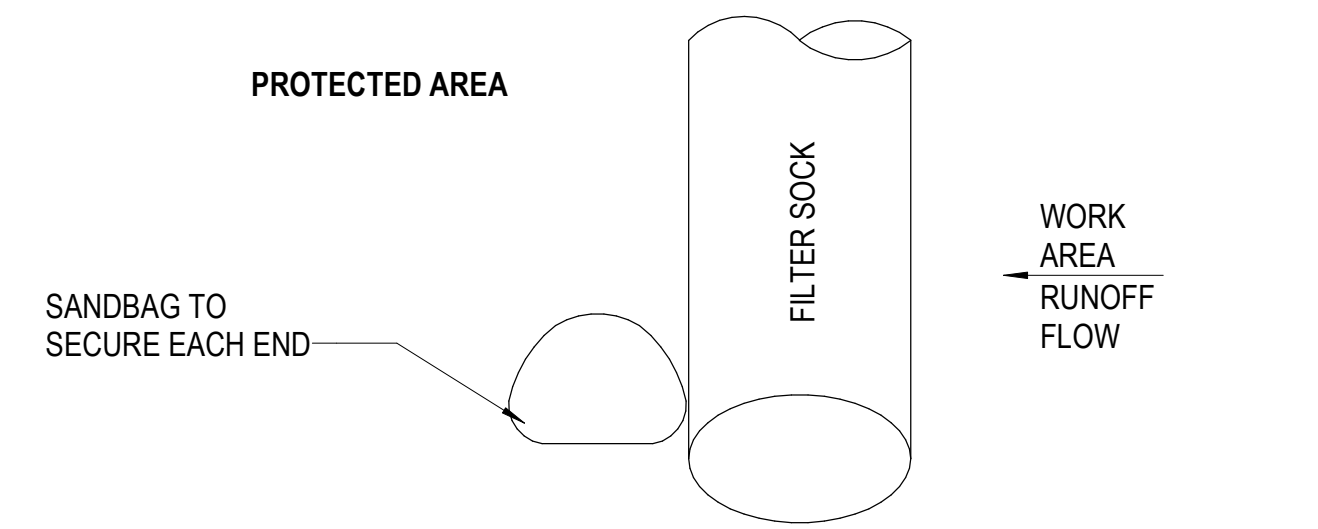
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 dina.u.lau@hawaii.gov  
 State of Hawaii  
 Civil Engineer

C002



**3 CONCRETE WASHOUT**  
SCALE: 1/2" = 1'-0"

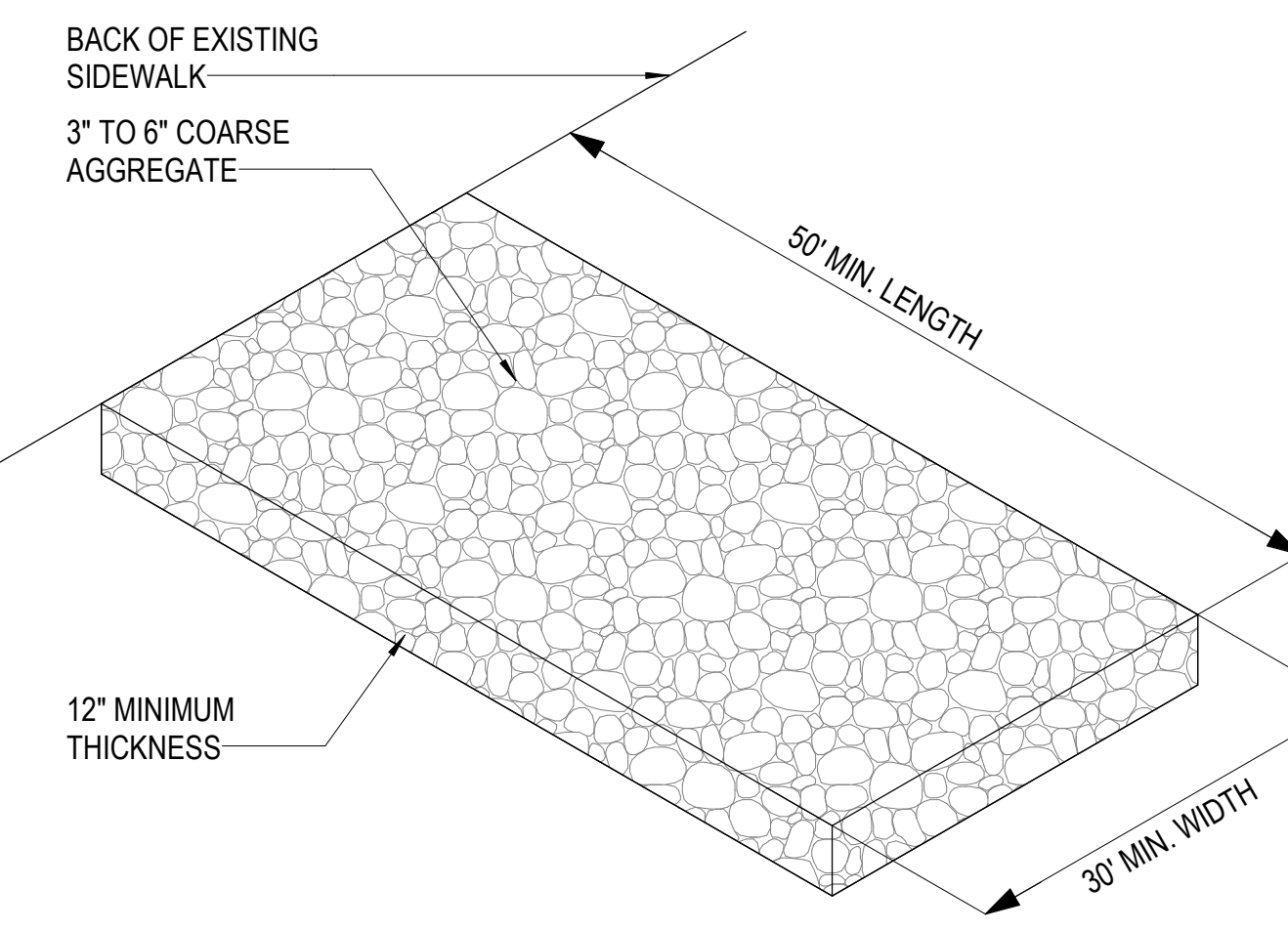


**PLAN**  
SANDBAG MIN. LENGTH = 18"  
MIN. WIDTH = 12"  
MIN. THICKNESS = 3"  
PLACE EVERY 6' TYP



**SECTION**  
FILTER SOCK  
24" MIN. OVERLAP  
WORK AREA  
RUNOFF FLOW

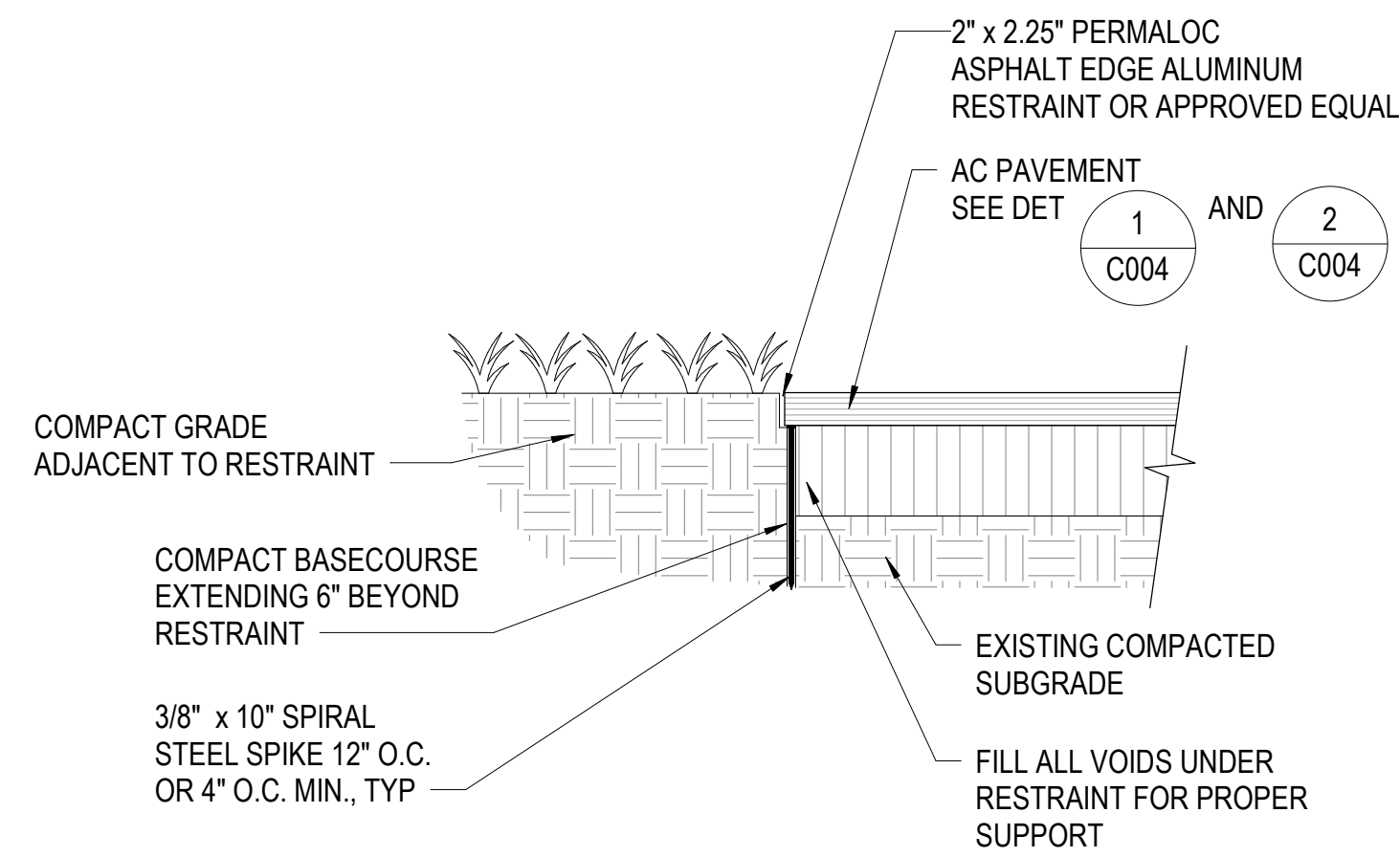
**1 FILTER SOCK**  
SCALE: 1/2" = 1'-0"



LOCATE AT CONSTRUCTION ACCESS POINTS ADJACENT TO WATER SUPPLY TO REMOVE SEDIMENT FROM TIRES AND UNDER CARRIAGES TO PREVENT SEDIMENT FROM BEING TRANSPORTED. ANY SEDIMENT CARRIED FROM THE SITE ONTO THE STREET SHALL BE CLEANED UP IMMEDIATELY.

**2 GRAVEL CONTRCTR ENTRY/TIRE WASH STATION**  
SCALE: NOT TO SCALE

1	1	Addendum No. 1	SHT. 6 OF 29	04/30/2026	APPROVED: [Signature]
REVISION NO	SYM	DESCRIPTION	DATE	APPROVED:	
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
<b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006					
<b>EROSION CONTROL DETAILS</b>					
DESIGNED: JS		SUBMITTED: BID SUBMITTAL			
DRAWN: G70		DATE: 04/13/2026			
CHECKED: KC		SCALE: AS NOTED			
APPROVED: -					
 EXPIRES: 4/30/2028		THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer			
		<b>C003</b>			

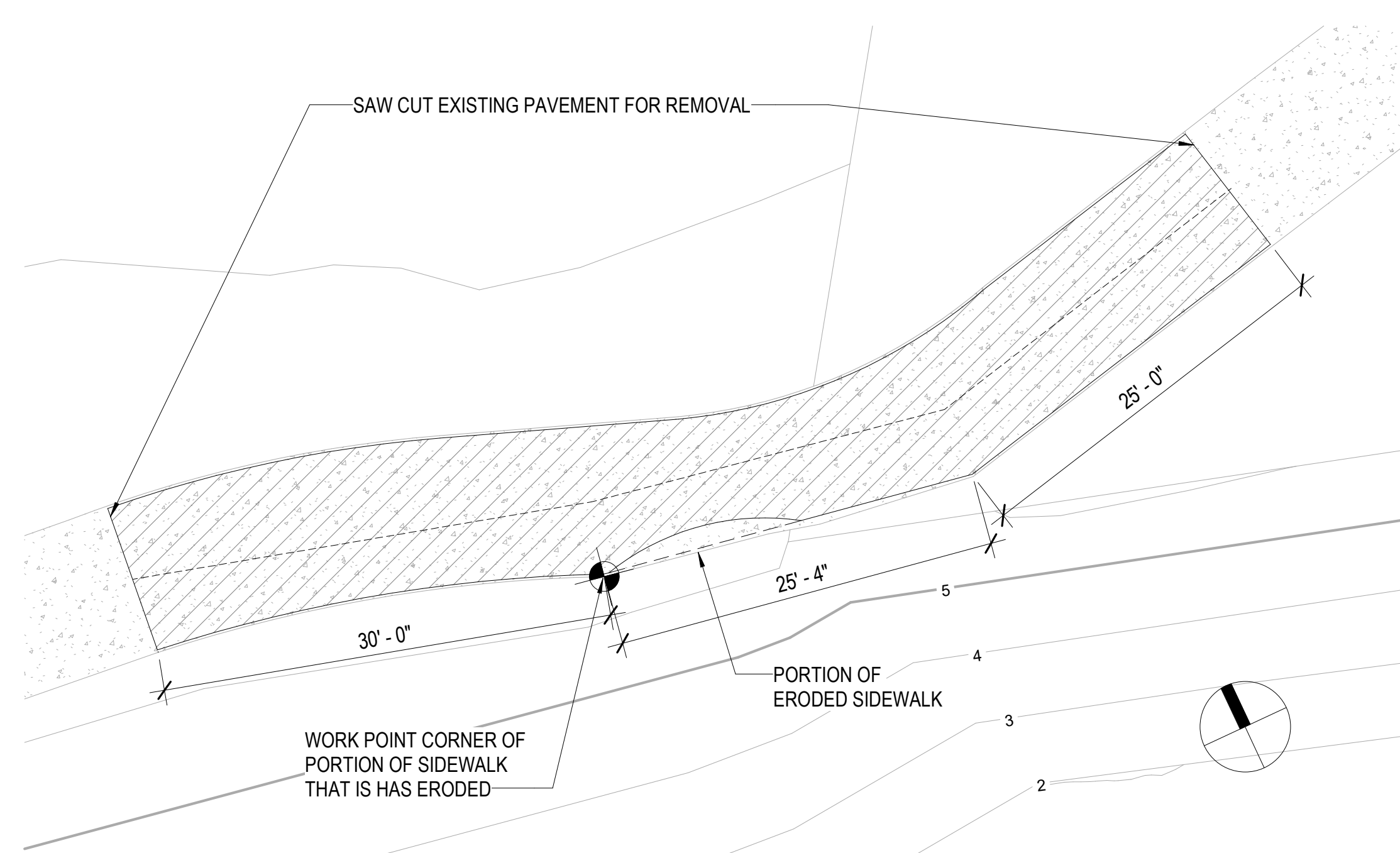


**NOTES:**

1. INSTALL PER MANUFACTURER'S INSTALLATION GUIDELINES.
2. 8'-0" SECTIONS CONNECTED WITH 4" SLIDING CONNECTOR.
3. MAINTAIN 3/8" GAP BETWEEN SECTIONS TO ALLOW FOR PRODUCT EXPANSION IN EXTREME TEMPERATURES.
4. CORNERS: NOTCH BASE ONLY AND FORM A CONTINUOUS CORNER.

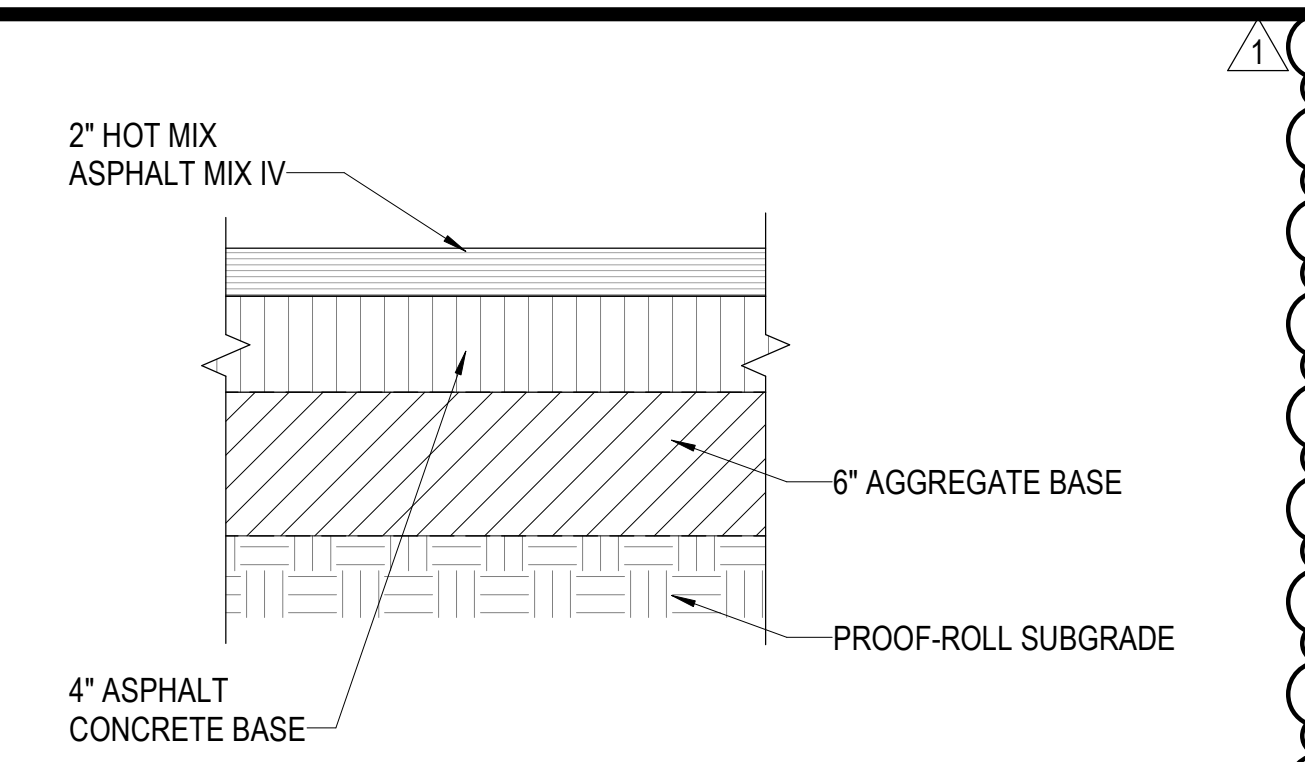
**5 PERMALOC ASPHALT EDGE DETAIL**

SCALE: NOT TO SCALE



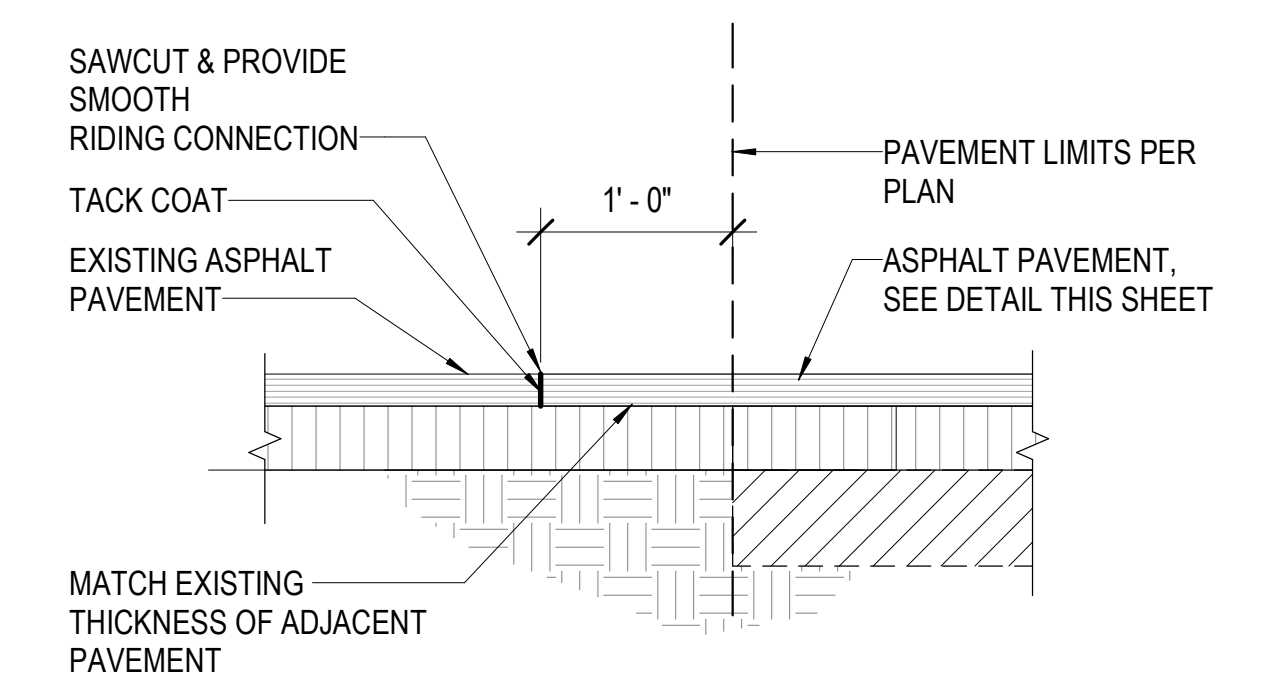
**3 SIDEWALK SECTION REMOVAL - PLAN**

SCALE: 1/8" = 1'-0"



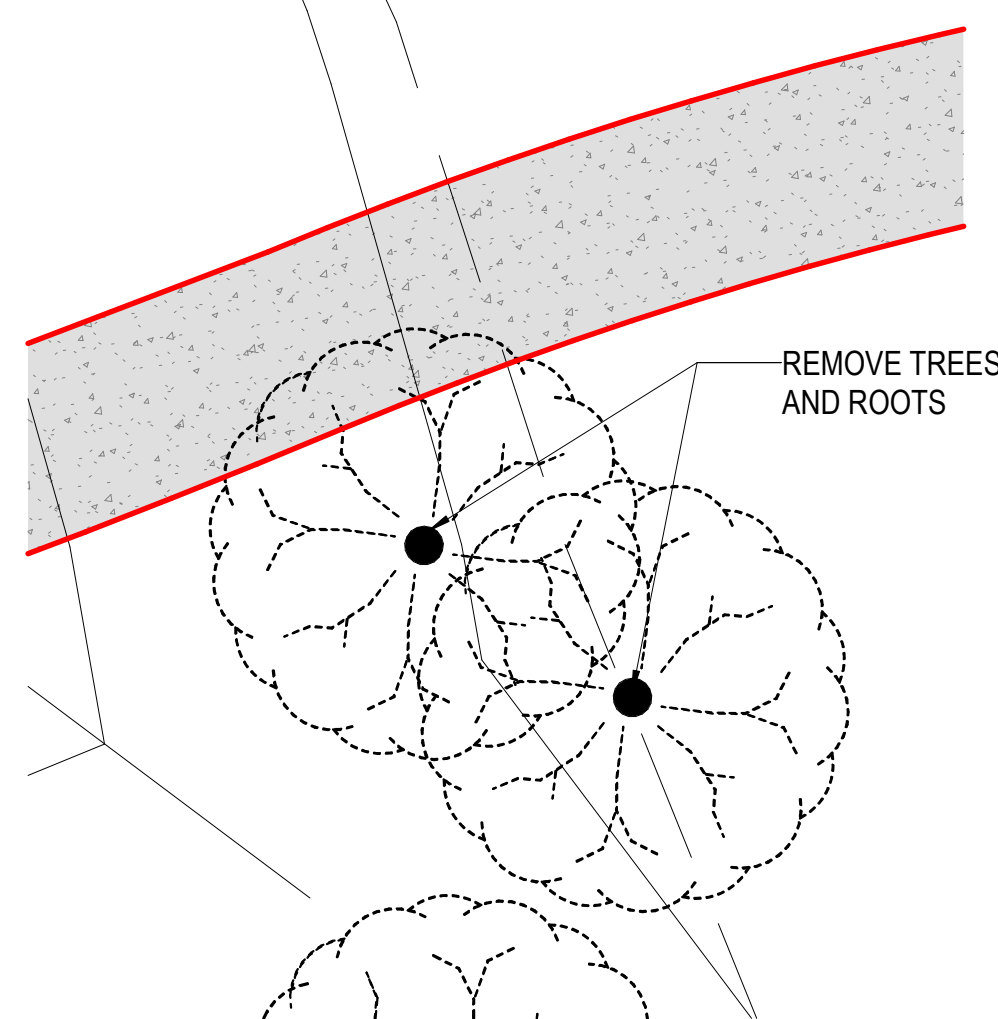
**1 ASPHALT CONCRETE PAVEMENT**

SCALE: 1 1/2" = 1'-0"



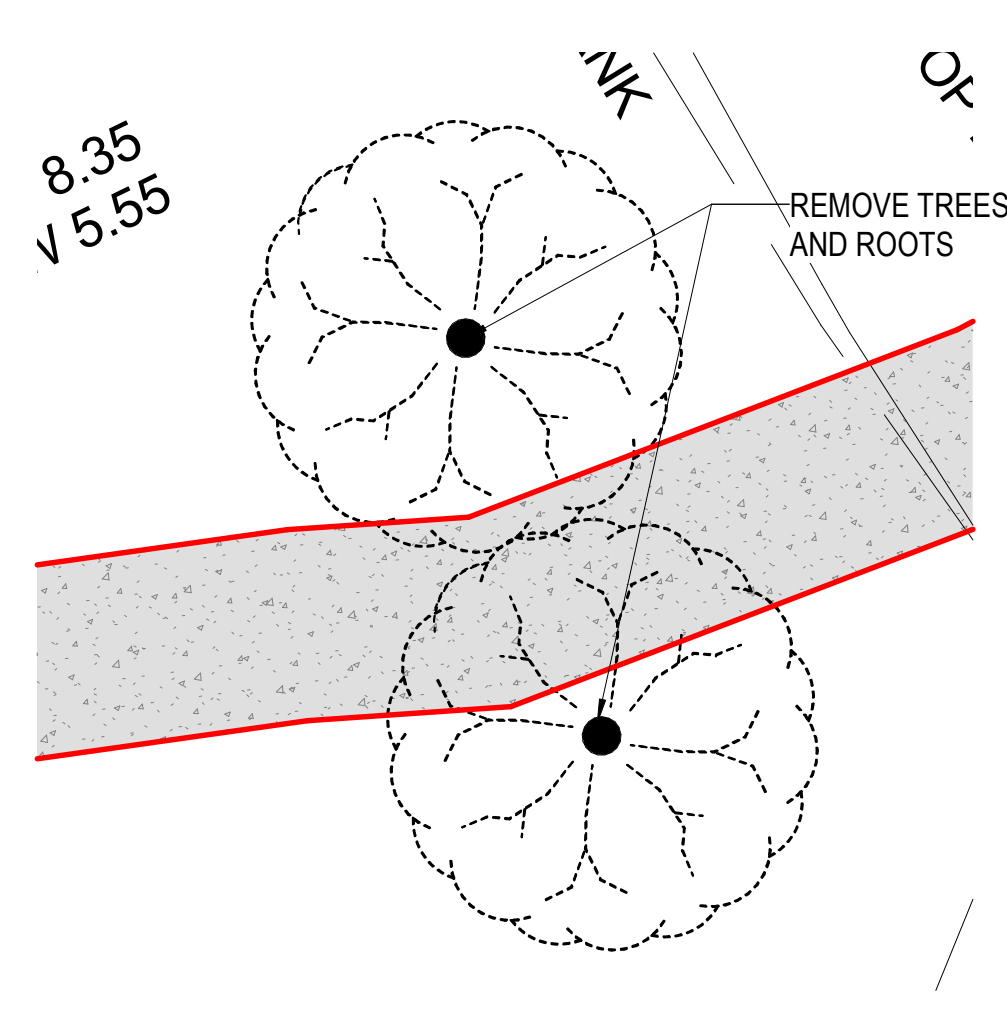
**2 ASPHALT PAVEMENT CONNECTION**

SCALE: 1" = 1'-0"



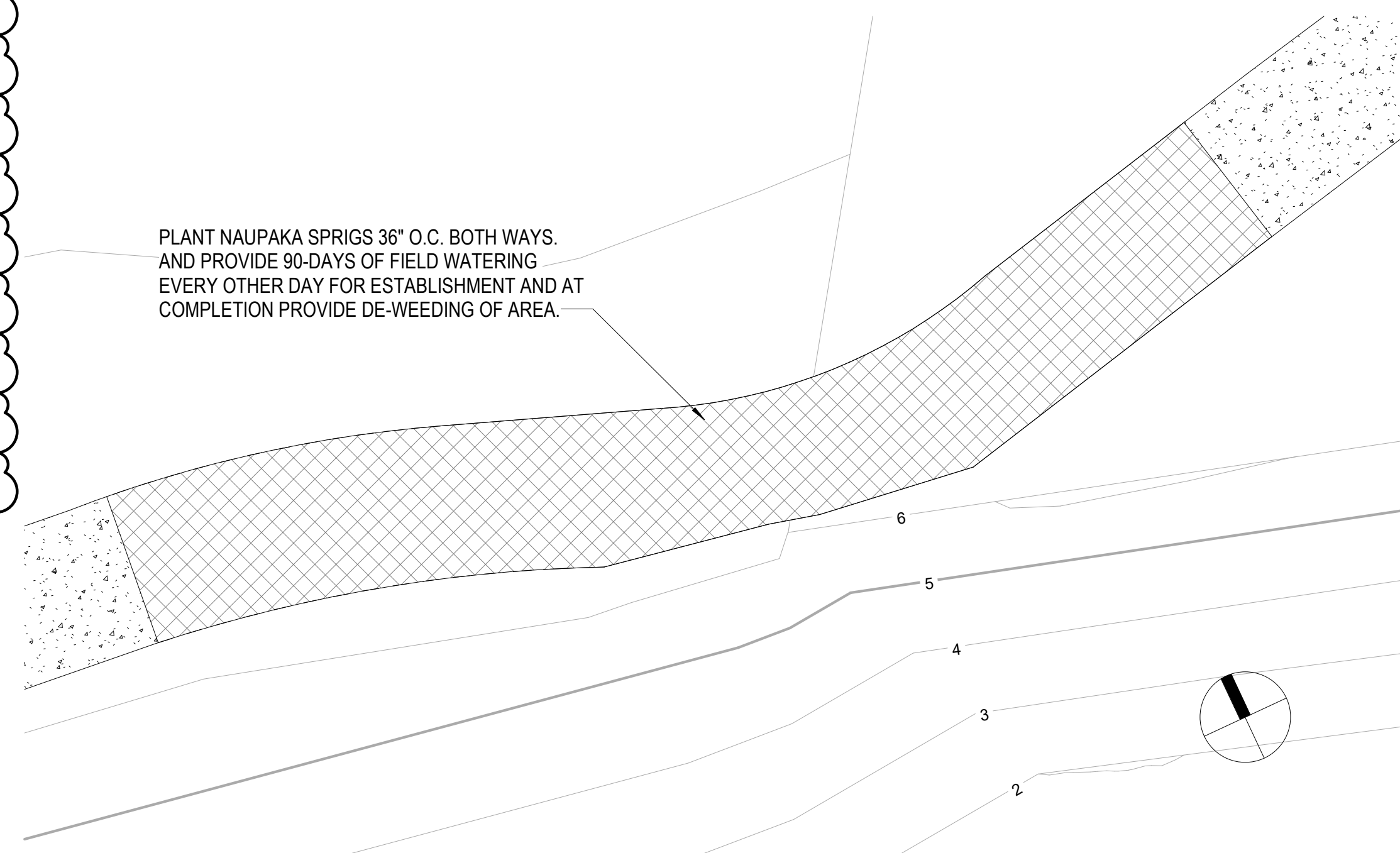
**6 TREE REMOVAL - PLAN 1**

SCALE: 1/8" = 1'-0"



**7 TREE REMOVAL - PLAN 2**

SCALE: 1/8" = 1'-0"



**4 SIDEWALK SECTION RE-VEGETATION**

SCALE: 1/8" = 1'-0"

1	ADDENDUM NO. 1	04/30/2026
REVISION NO.	DESCRIPTION	DATE
SYM		



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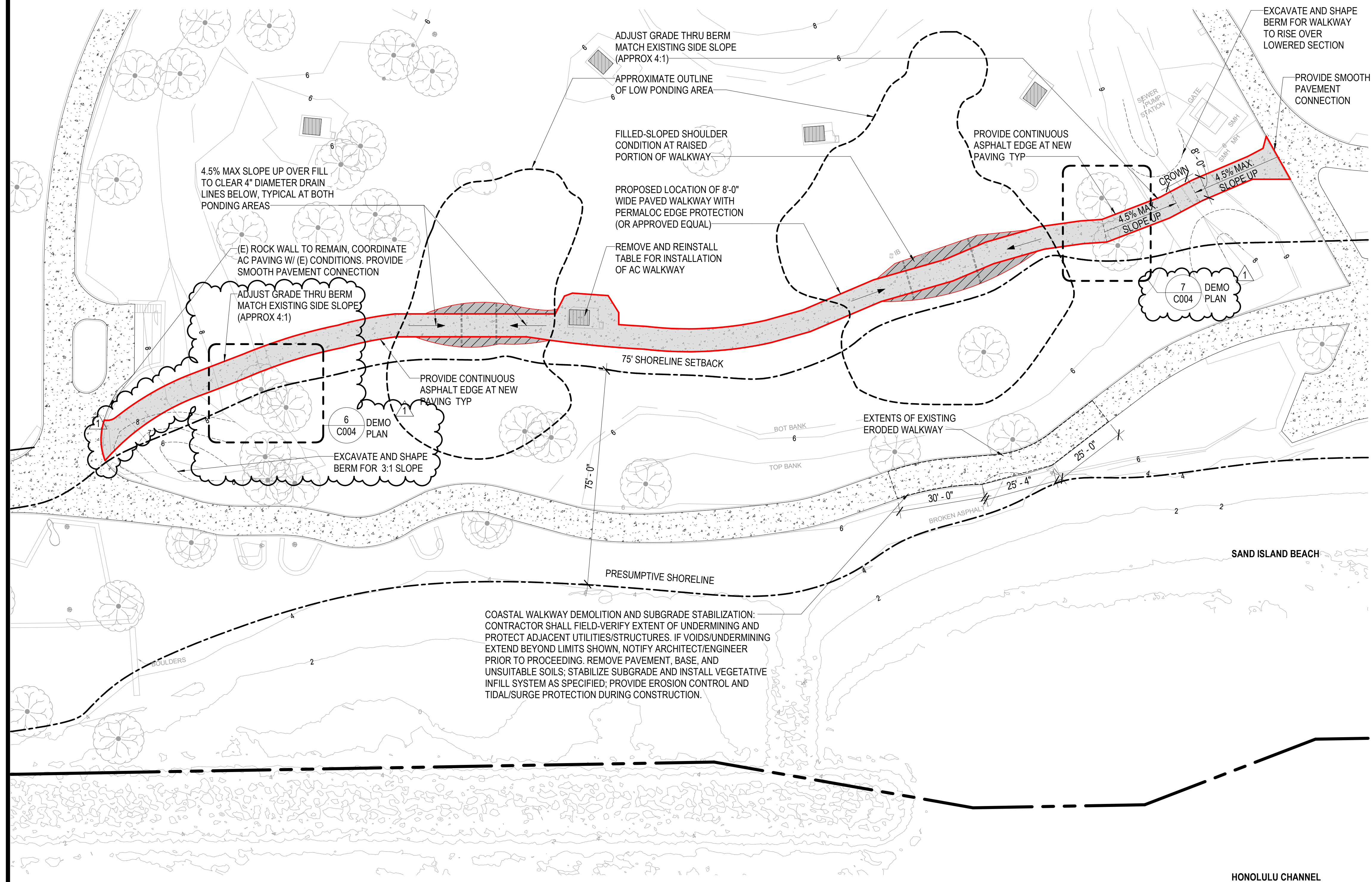
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**BID ALT 4 SITE DETAILS**

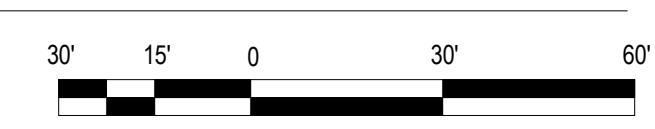
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CHECKED: KC	SCALE: AS NOTED
APPROVED: -	

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E-signed 2026-05-06 09:09AM HST  
dina.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

**C004**



**1 SITE PLAN - PROPOSED WALKWAY - BID ALT 4**  
SCALE: 1" = 20'-0"



**2 KEY PLAN - PROPOSED WALKWAY**  
SCALE: 1" = 300'-0"

- LEGEND**
- PROJECT ELEMENT
  - (E) PARK TABLE
  - (E) ASPHALT PATHWAY
  - (E) PAVED ROADWAY
  - (E) STRUCTURE (NO WORK)

1	1	Addendum No. 1	SHT. 8	04/30/2026	
REVISION NO.	SYM.	DESCRIPTION	OF 29	DATE	APPROVED:

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

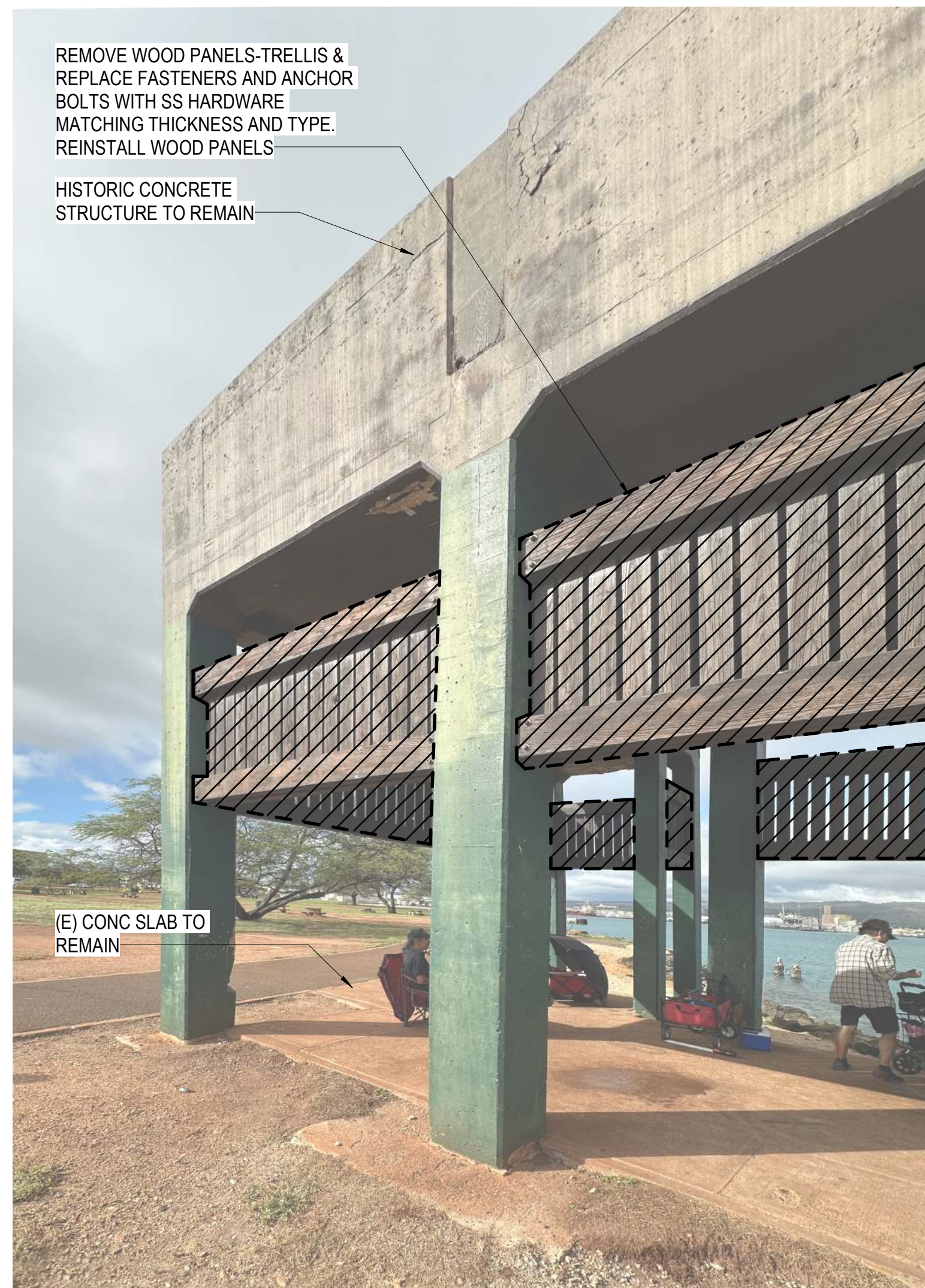
**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006  
**ENLARGED SITE PLAN AT PROPOSED WALKWAY - BID ADDITIVE 4**

**A001**

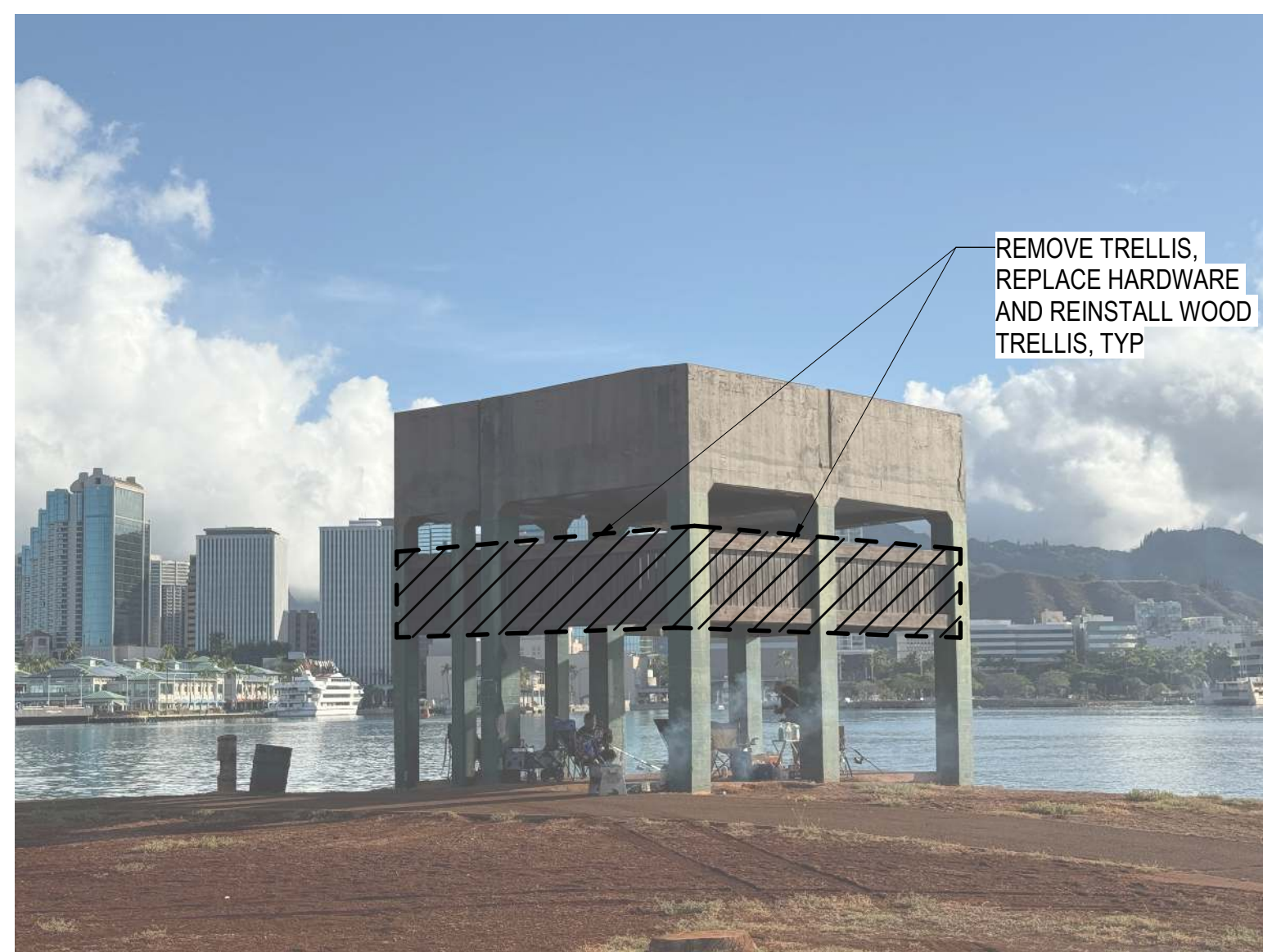
DESIGNED: JS	SUBMITTED: BID SUBMITTAL
DRAWN: G70	DATE: 04/13/2026
CHECKED: KC	SCALE: AS NOTED
APPROVED: -	

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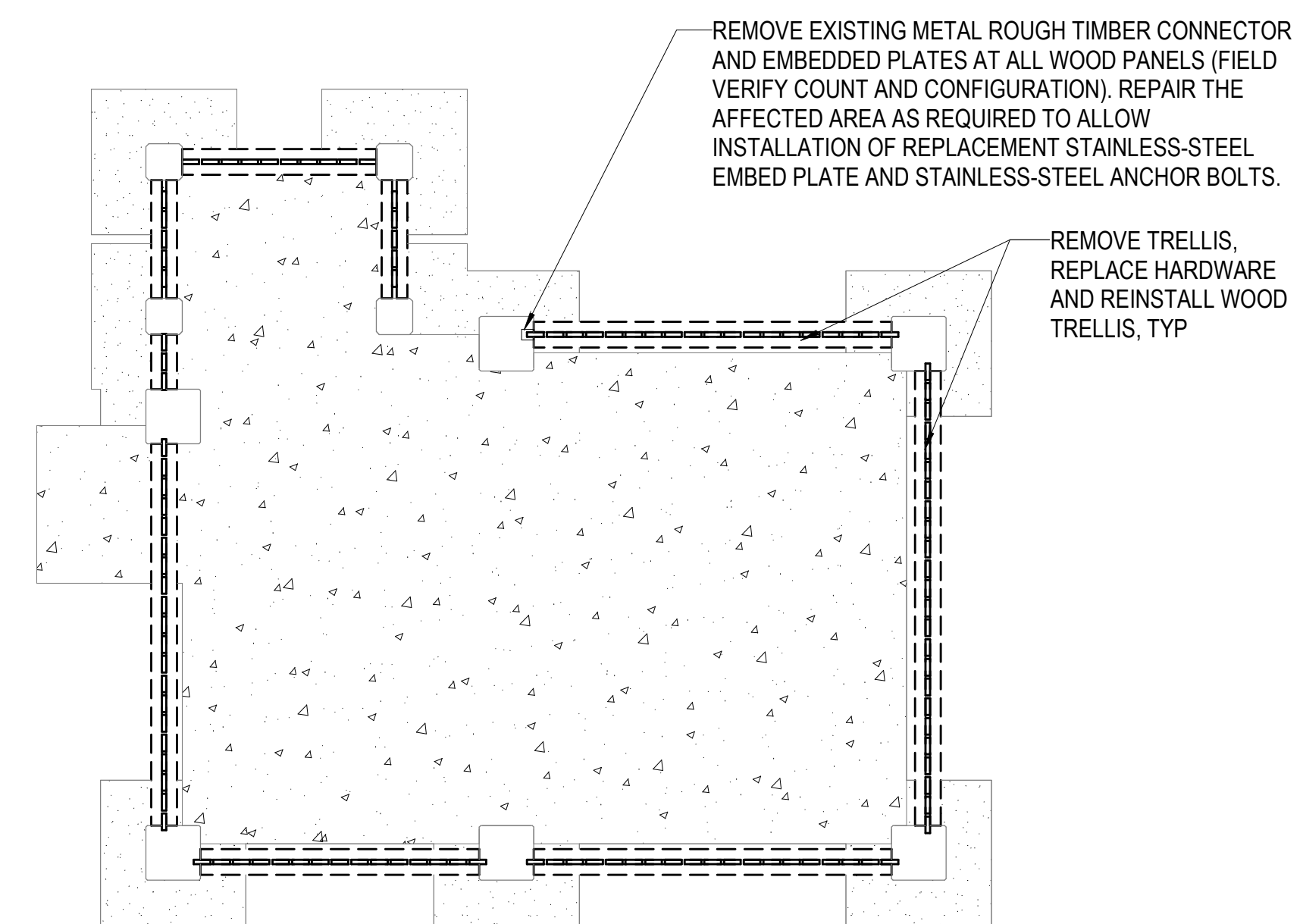
Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer



**2 ANTI-AIRCRAFT GUN EMPLACEMENT TOWER EAST (PHOTO)**  
SCALE: 3" = 1'-0"



**3 ANTI-AIRCRAFT GUN EMPLACEMENT TOWER SOUTH (PHOTO)**  
SCALE: 3" = 1'-0"



**1 EXISTING / DEMOLITION FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

DEMOLITION / HISTORIC PRESERVATION NOTE:  
SELECTIVE DEMOLITION SHALL BE UNDERTAKEN IN A MANNER THAT PRESERVES AND PROTECTS THE EXISTING HISTORIC CONCRETE STRUCTURE AND ITS CHARACTER-DEFINING FORM AND DETAILING. REMOVE ONLY NON-HISTORIC ELEMENTS AND LATER ALTERATIONS INDICATED FOR REMOVAL. METHODS SHALL BE NON-DESTRUCTIVE TO THE MAXIMUM EXTENT PRACTICABLE AND SHALL NOT IMPAIR THE ORIGINAL CONCRETE MASSING, GEOMETRY, EDGES, REVEALS, OR SURFACE EXPRESSION. ALL EXPOSED EDGES RESULTING FROM SELECTIVE DEMOLITION SHALL BE NEATLY CUT, FINISHED, AND FREE OF JAGGED OR SHARP EDGES. CONTRACTOR SHALL ENSURE THAT NO HAZARDOUS CONDITIONS ARE CREATED DURING OR AFTER DEMOLITION, AND ALL SURFACES SHALL BE LEFT IN A SAFE, STABLE, AND WORKMANLIKE CONDITION. UPON COMPLETION OF REMOVALS, PREPARE THE EXPOSED HISTORIC CONCRETE TO RECEIVE SPECIFIED CEMENT WASH AND PAINT FINISH TO RESTORE THE VISUAL INTEGRITY AND HISTORIC READING OF THE ORIGINAL CONCRETE CONSTRUCTION. PATCH, REPAIR, OR REPLACEMENT OF DAMAGED HISTORIC CONCRETE CAUSED BY DEMOLITION OPERATIONS WILL NOT BE PERMITTED WITHOUT ARCHITECT REVIEW AND APPROVAL. SEE ADDITIONAL REQUIREMENT IN PROJECT SPECIFICATION.

REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED:
1	1	Addendum No. 1	9 OF 29	04/30/2026	



EXPIRES: 4/30/2028

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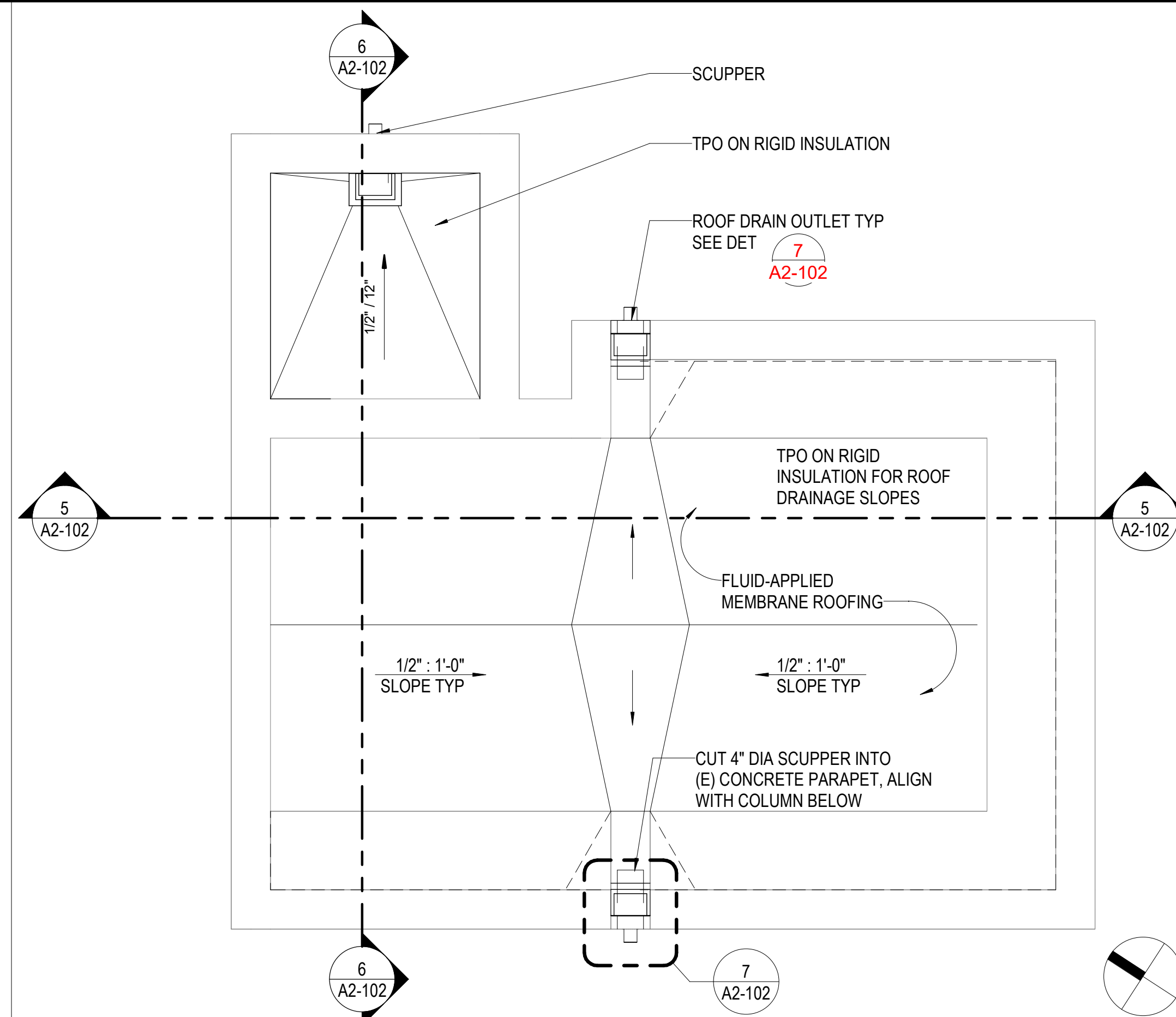
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006  
**ANTI-AIRCRAFT GUN EMPLACEMENT TOWER DEMOLITION SCOPE**

DESIGNED: JS  
DRAWN: G70  
CHECKED: KC  
APPROVED:

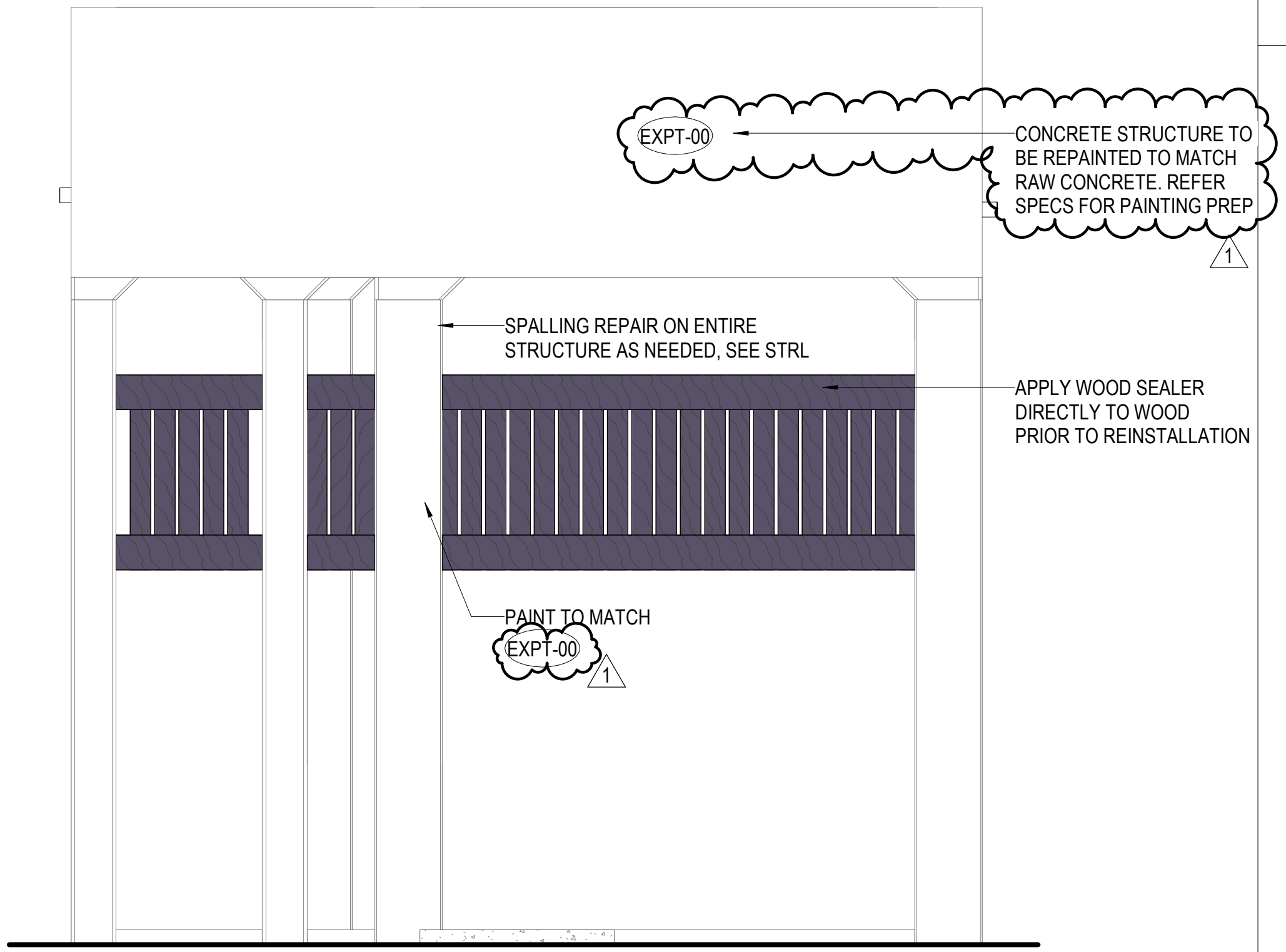
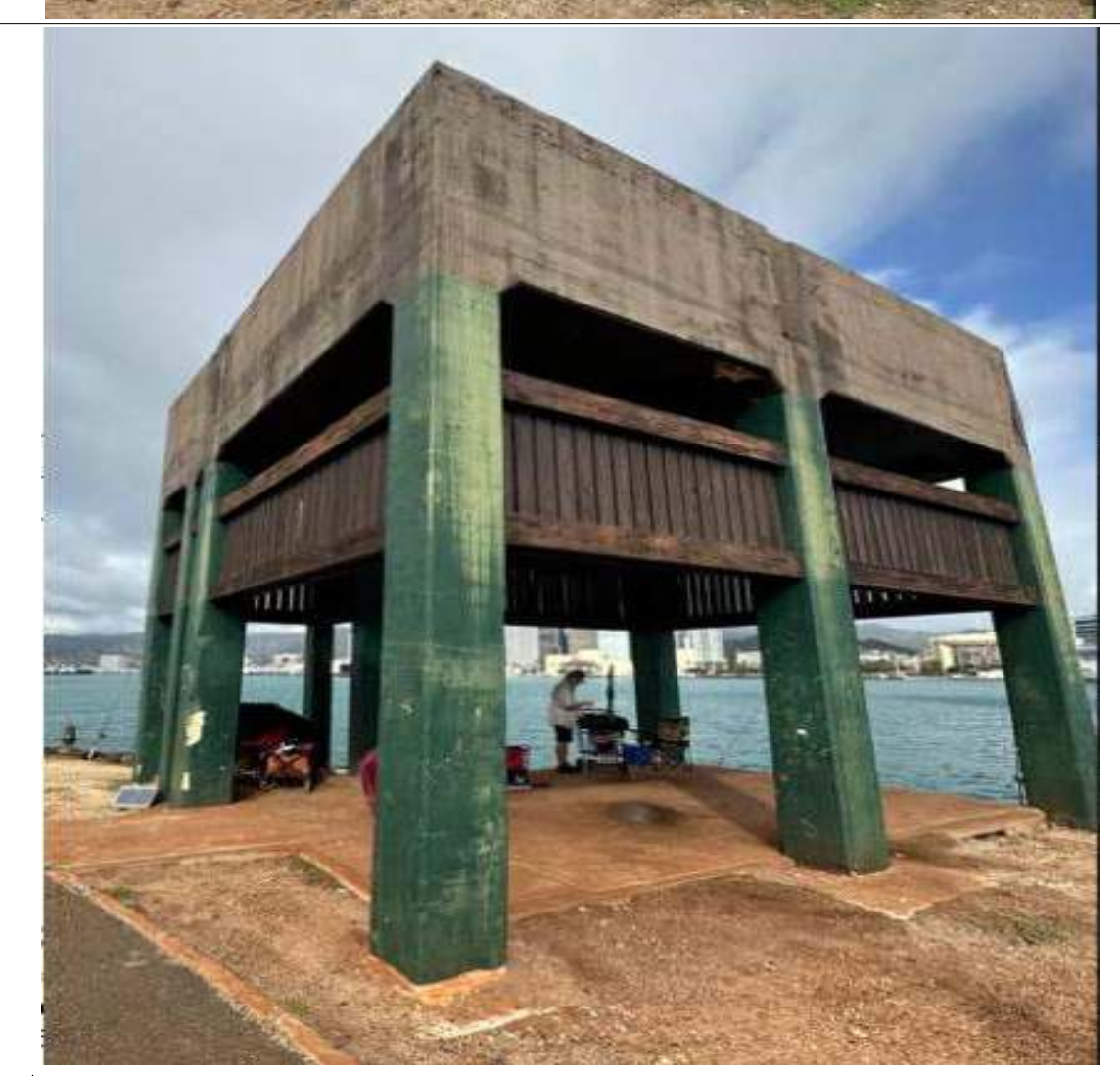
SUBMITTED: BID SUBMITTAL  
DATE: 04/13/2026  
SCALE: AS NOTED

Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

D2-101



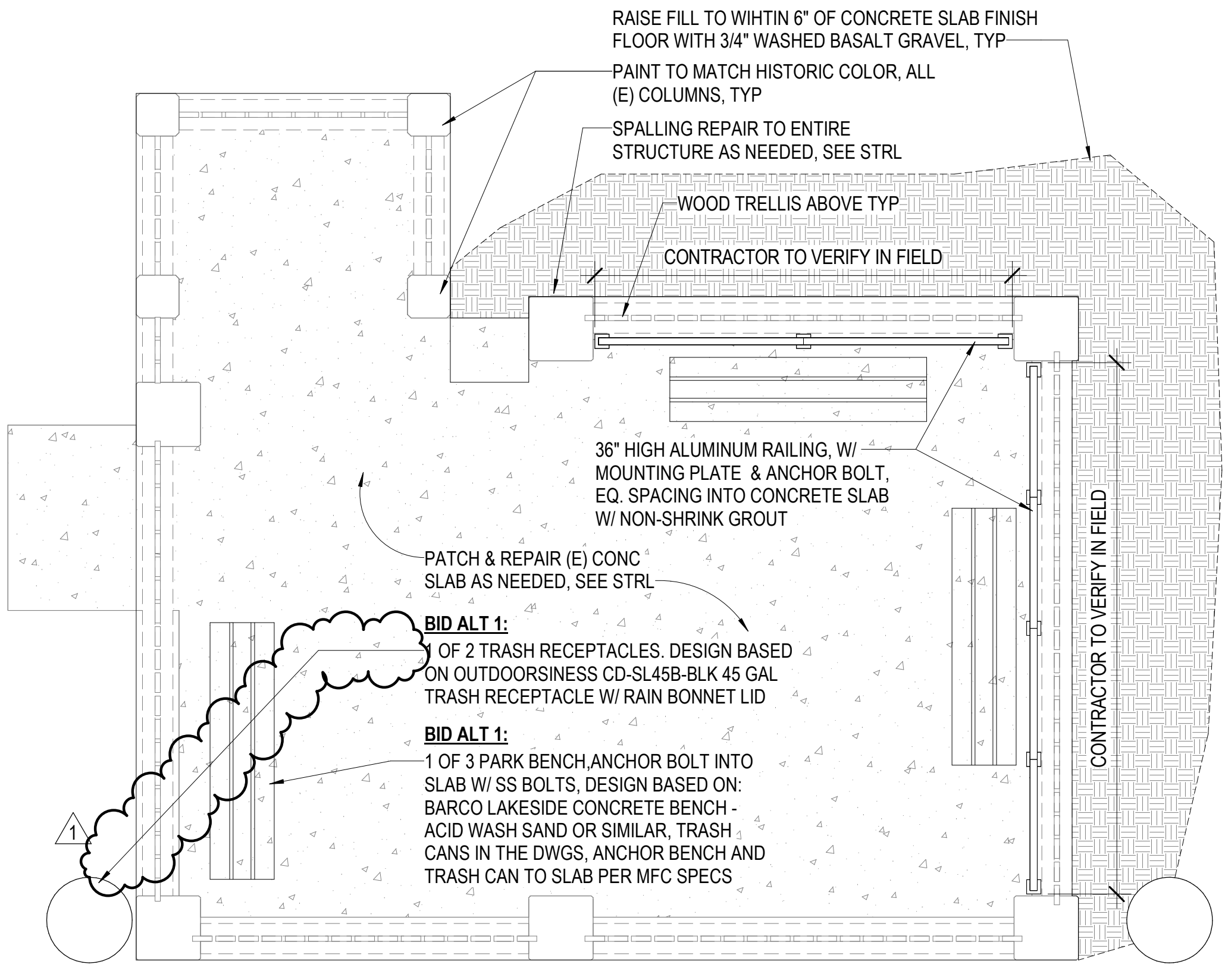
**2 ANTI-AIRCRAFT ROOF PLAN**  
SCALE: 3/8" = 1'-0"



REMOVE-SALVAGE WOOD PANELS-TRELLIS & REPLACE FASTENERS AND ANCHOR BOLTS WITH SS HARDWARE MATCHING THICKNESS AND TYPE.

**LEGEND:**  
EXPT-00 PRIME AND EGGSHELL PAINT

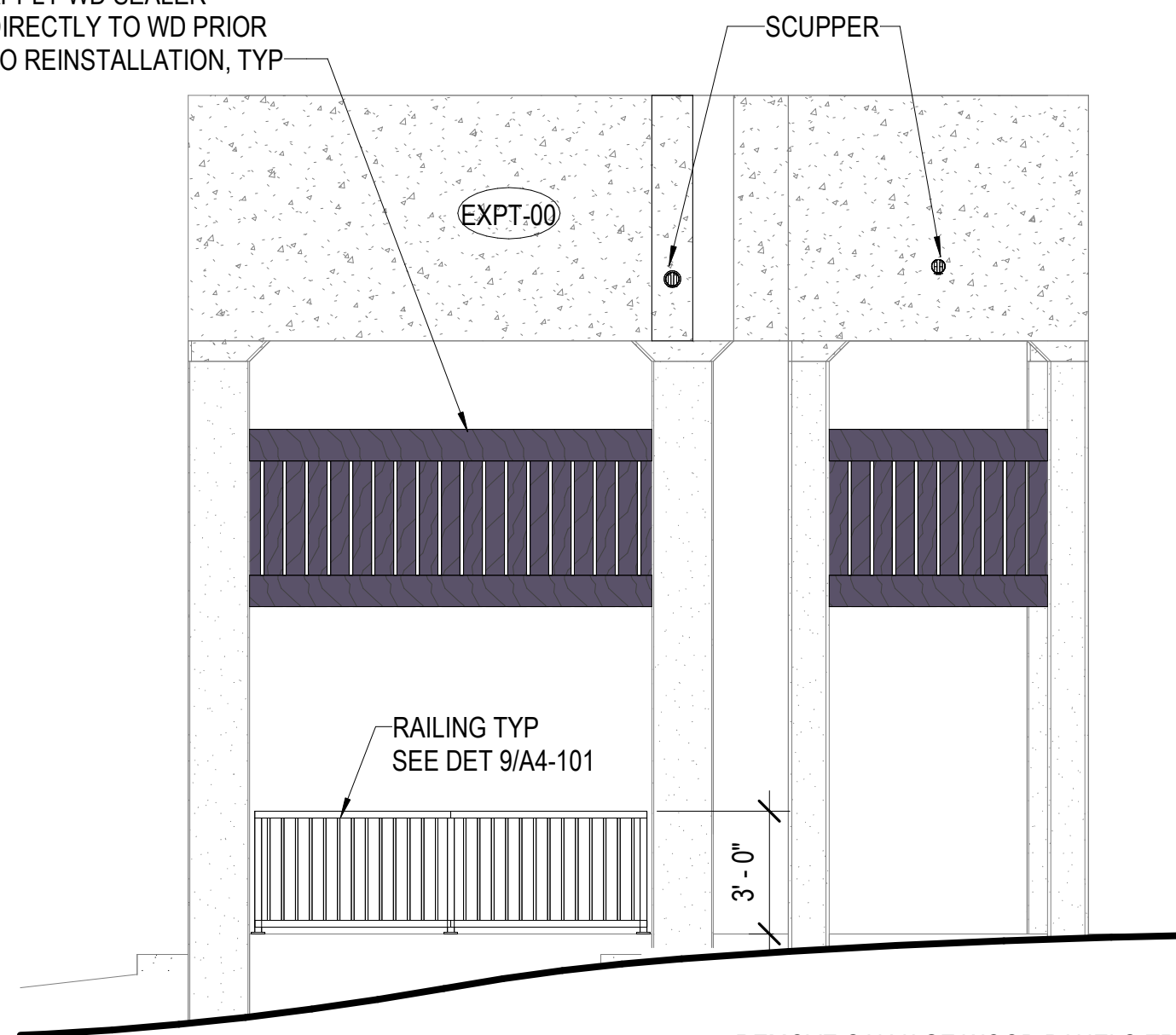
**3 ANTI-AIRCRAFT GUN EMPLACEMENT TOWER TYPICAL SITE ELEVATION**  
SCALE: 3/8" = 1'-0"



**1 ANTI-AIRCRAFT GUN EMPLACEMENT TOWER FLOOR PLAN BID ALT 1**  
SCALE: 3/8" = 1'-0"

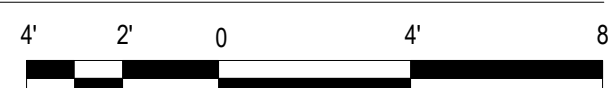
1	1	Addendum No. 1	SHT 10 OF 29	04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION	DATE	APPROVED:	
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>ANTI-AIRCRAFT GUN EMPLACEMENT TOWER PLANS AND ELEVATIONS</b>					
DESIGNED:	JS	SUBMITTED:	BID SUBMITTAL		
DRAWN:	G70	DATE:	04/13/2026		
CHECKED:	KC	SCALE:	AS NOTED		
APPROVED:					
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer			

APPLY WD SEALER DIRECTLY TO WD PRIOR TO REINSTALLATION, TYP

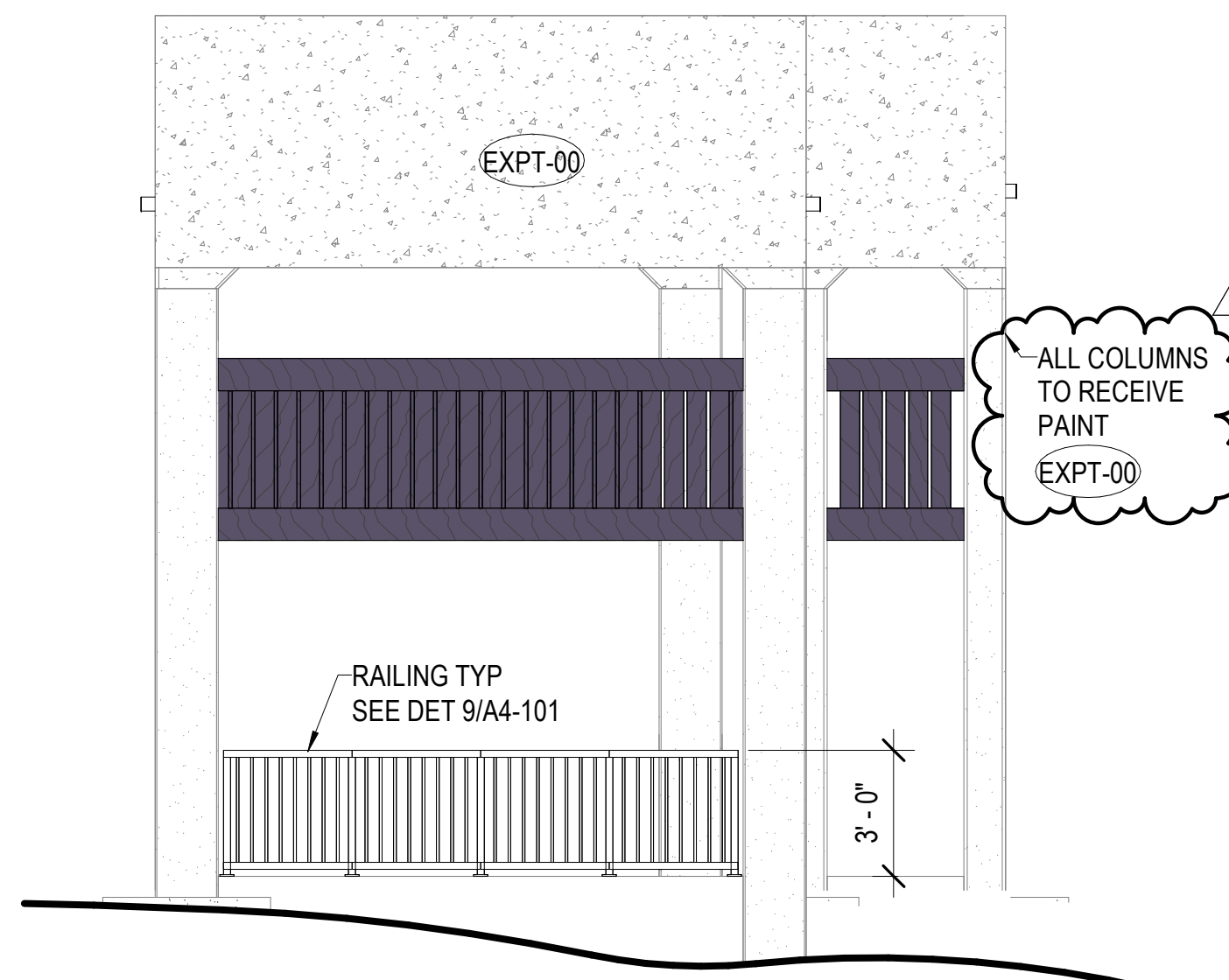


**1 PLAN NORTH ELEVATION**

SCALE: 1/4" = 1'-0"

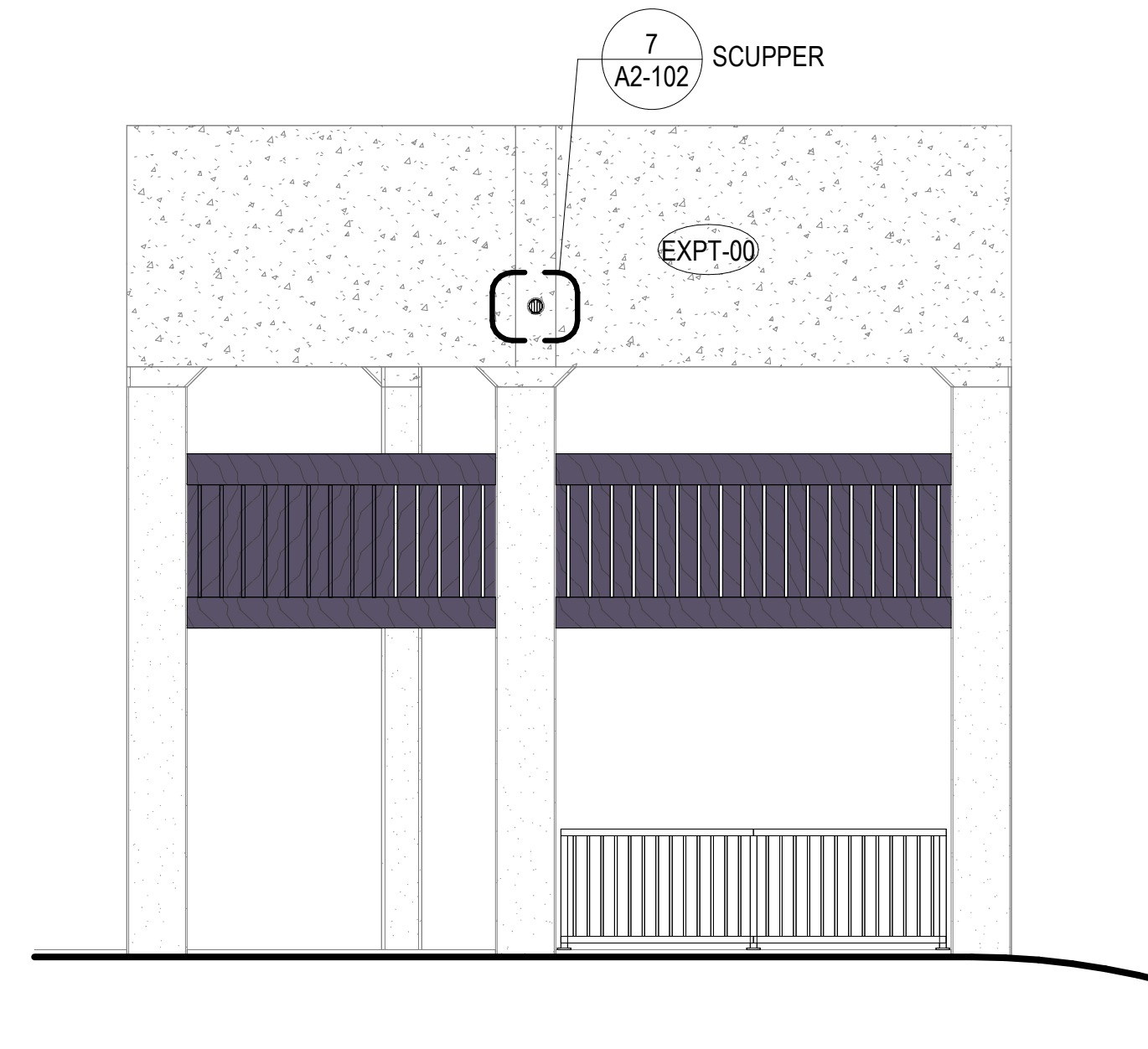
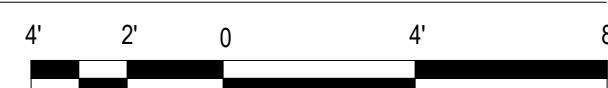


REMOVE SALVAGE WOOD PANELS-TRELLIS & REPLACE FASTENERS AND ANCHOR BOLTS WITH SS HARDWARE MATCHING THICKNESS AND TYPE.



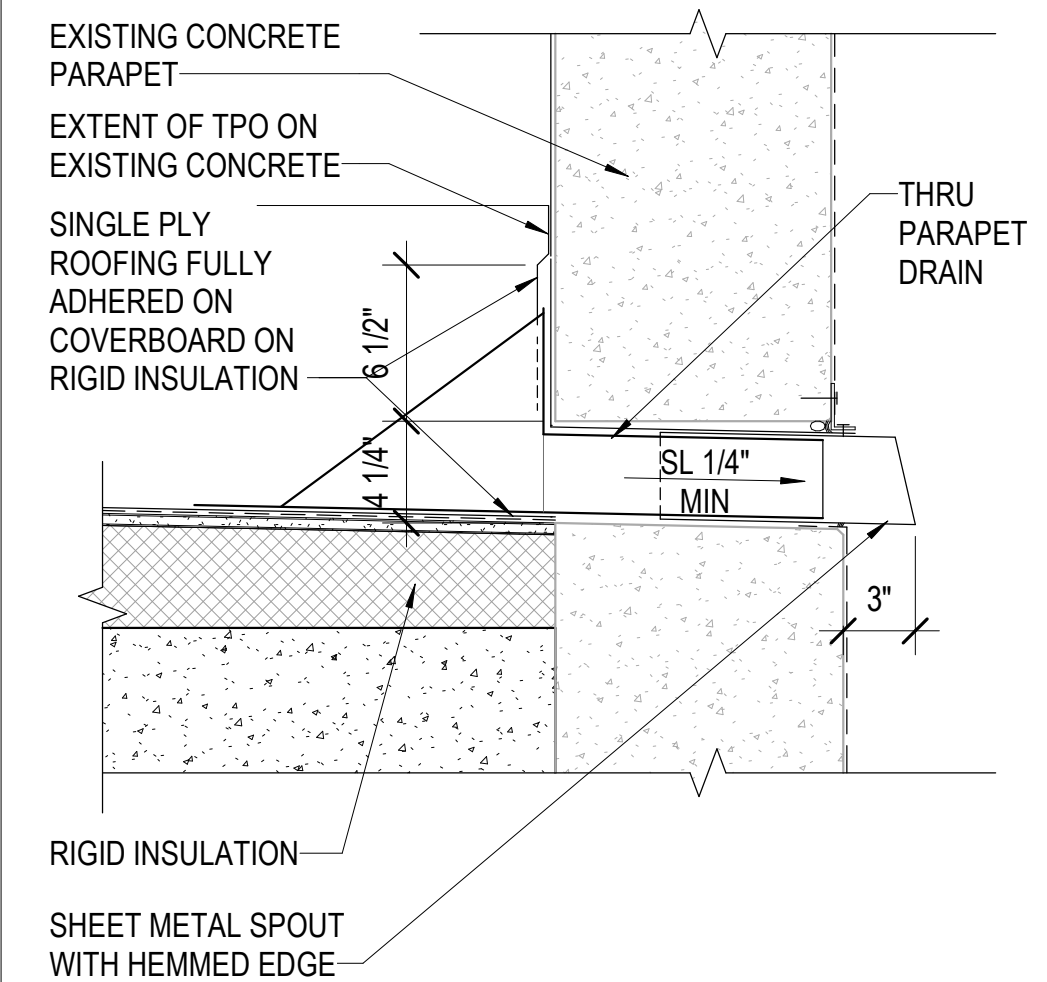
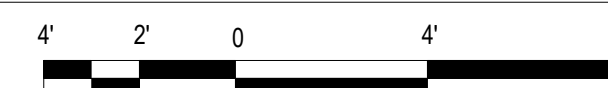
**2 PLAN EAST ELEVATION**

SCALE: 1/4" = 1'-0"



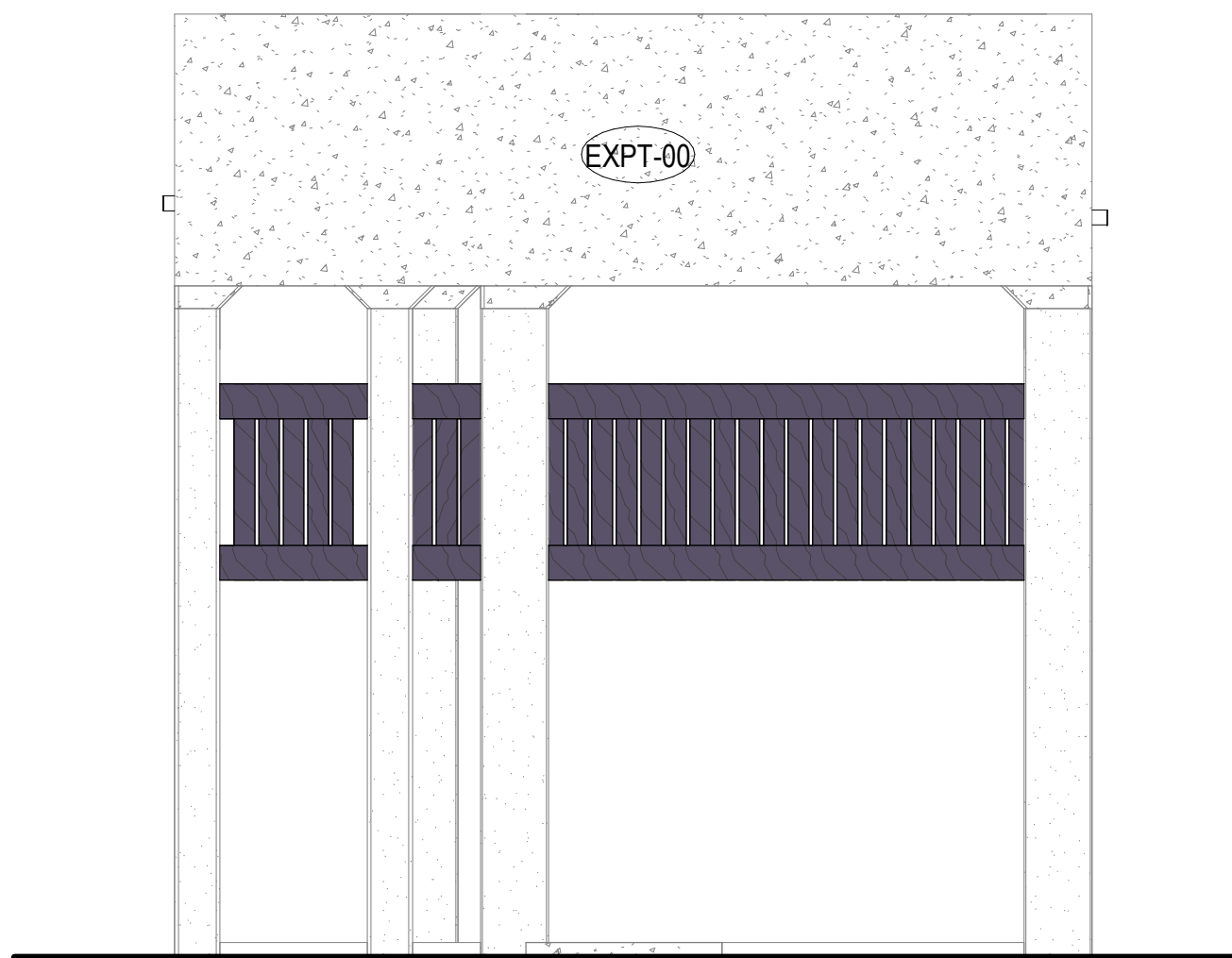
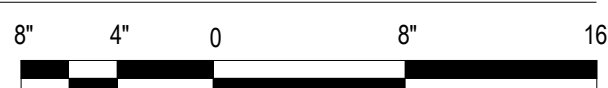
**3 PLAN SOUTH ELEVATION**

SCALE: 1/4" = 1'-0"



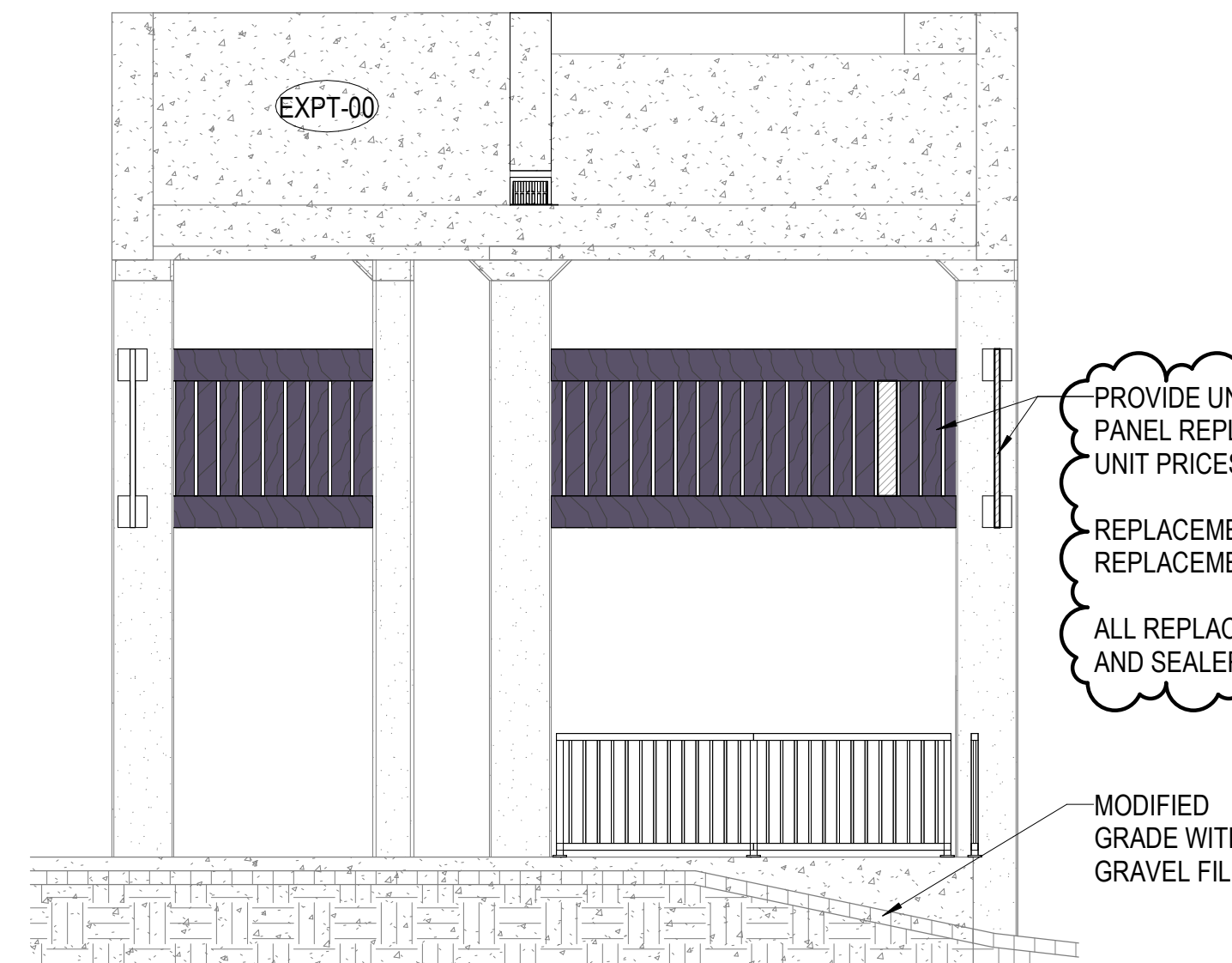
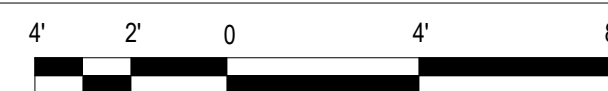
**7 OVERFLOW OUTLET**

SCALE: 1 1/2" = 1'-0"



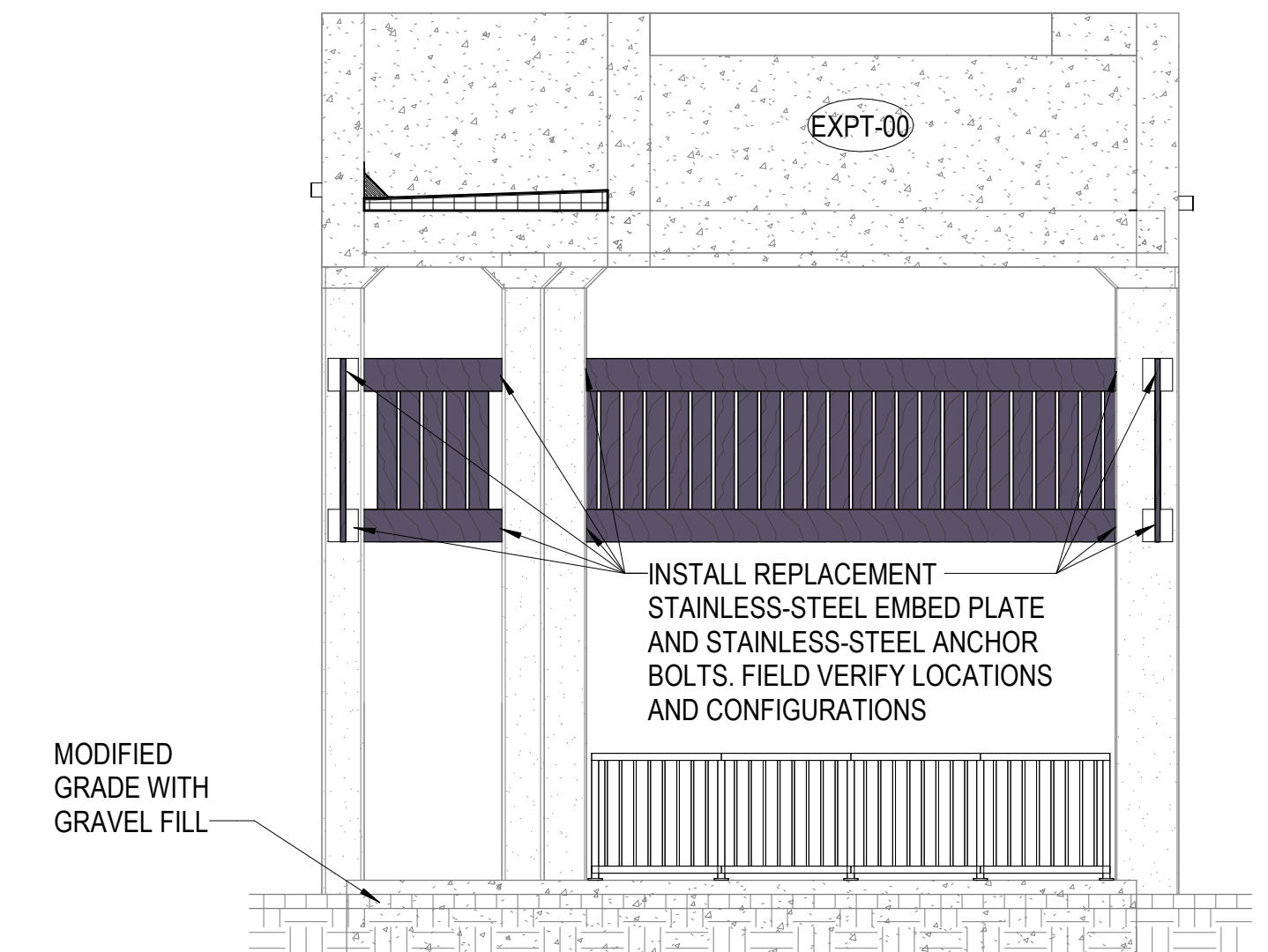
**4 PLAN WEST ELEVATION**

SCALE: 1/4" = 1'-0"



**5 ANTI-AIRCRAFT GUN EMPLACEMENT CROSS SECTION**

SCALE: 1/4" = 1'-0"



**6 ANTI-AIRCRAFT GUN EMPLACEMENT LONGITUDINAL SECTION**

SCALE: 1/4" = 1'-0"



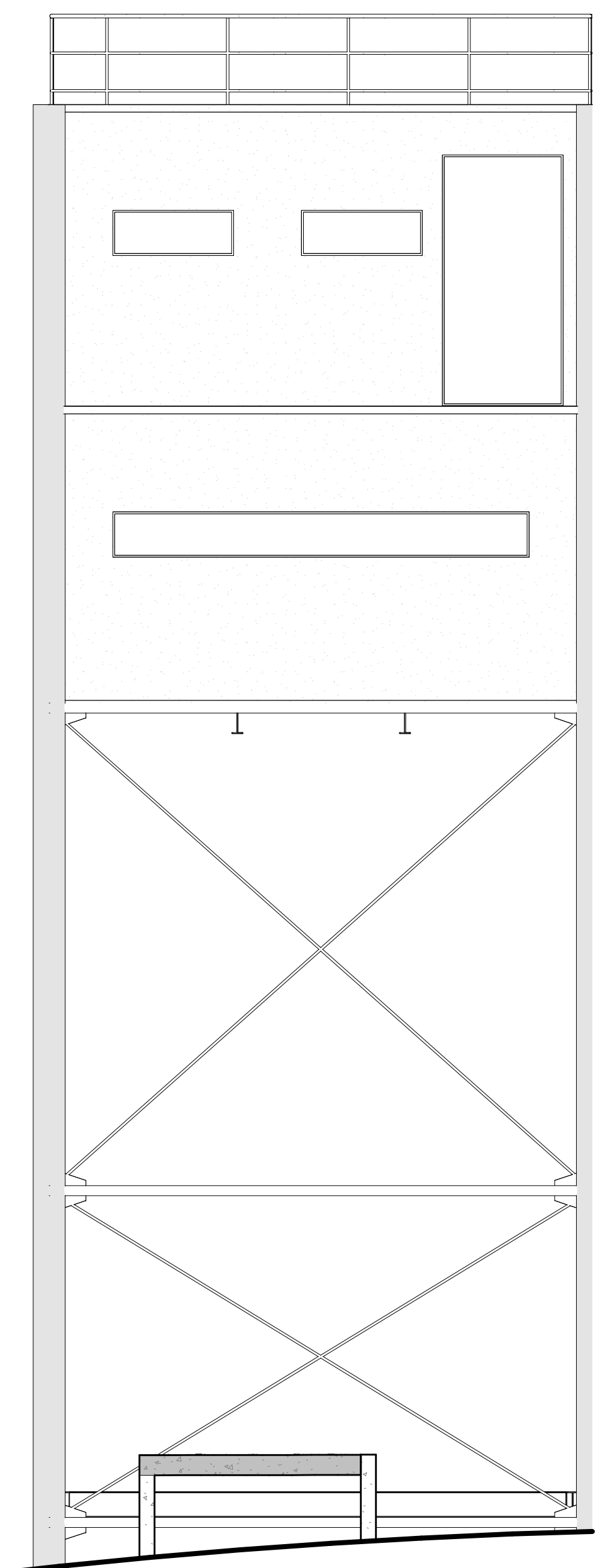
1	1	Addendum No. 1		04/30/2026	
REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED:
			11 OF 29		
<p>STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION</p> <p><b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>ANTI-AIRCRAFT GUN EMPLACEMENT TOWER PLANS, ELEVATIONS AND SECTIONS</b></p>					
DESIGNED: JS		SUBMITTED: BID SUBMITTAL			
DRAWN: G70		DATE: 04/13/2026			
CHECKED: KC		SCALE: AS NOTED			
APPROVED:					
		<p>Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer</p>			
<p>EXPIRES: 4/30/2028</p> <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</p>		<p><b>A2-102</b></p>			

REFER TO STRUCTURAL DRAWINGS FOR BID ALTERNATES 2 AND 3, PRIORITY AND NON-PRIORITY STRUCTURAL WORK

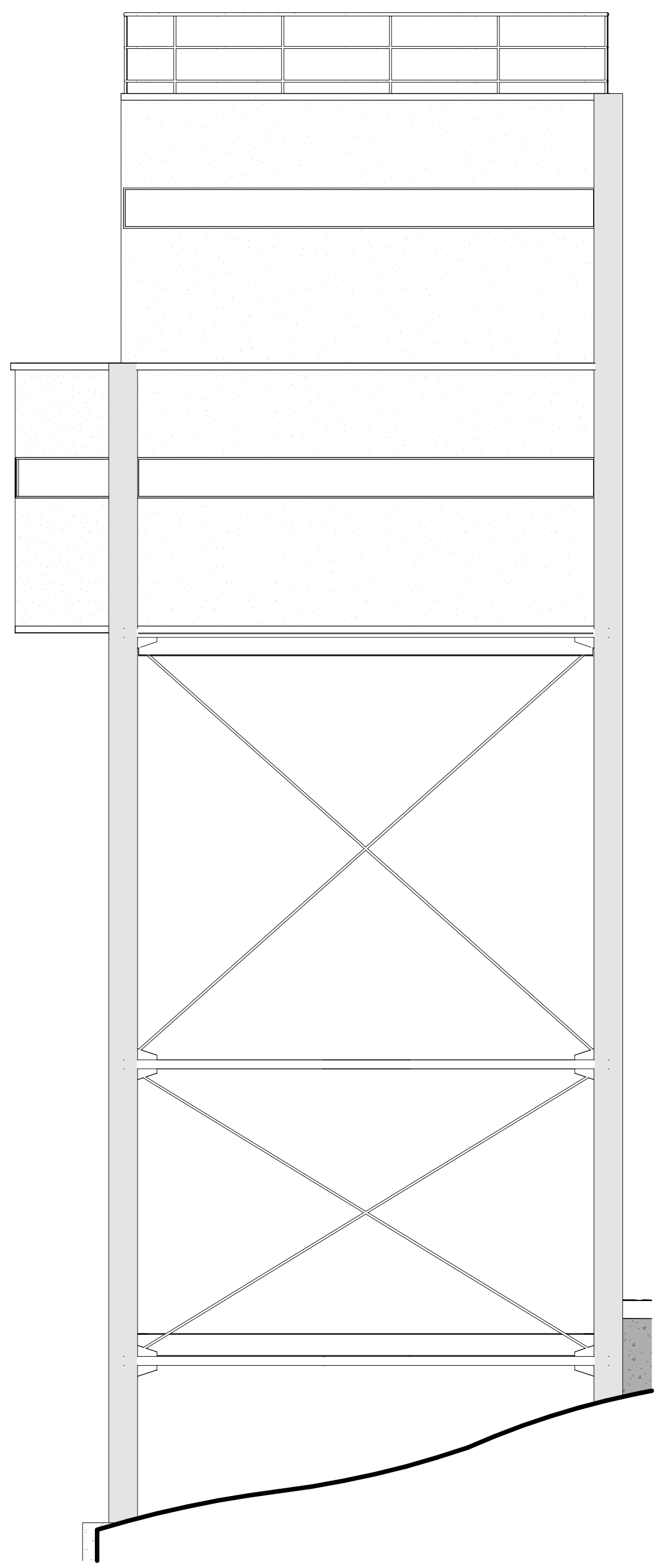
BID ALT 2: REPAINT EXISTING STRUCTURE EXPT-01

BID ALT 2: REPAINT EXISTING SAND ISLAND LETTERING EXPT-02

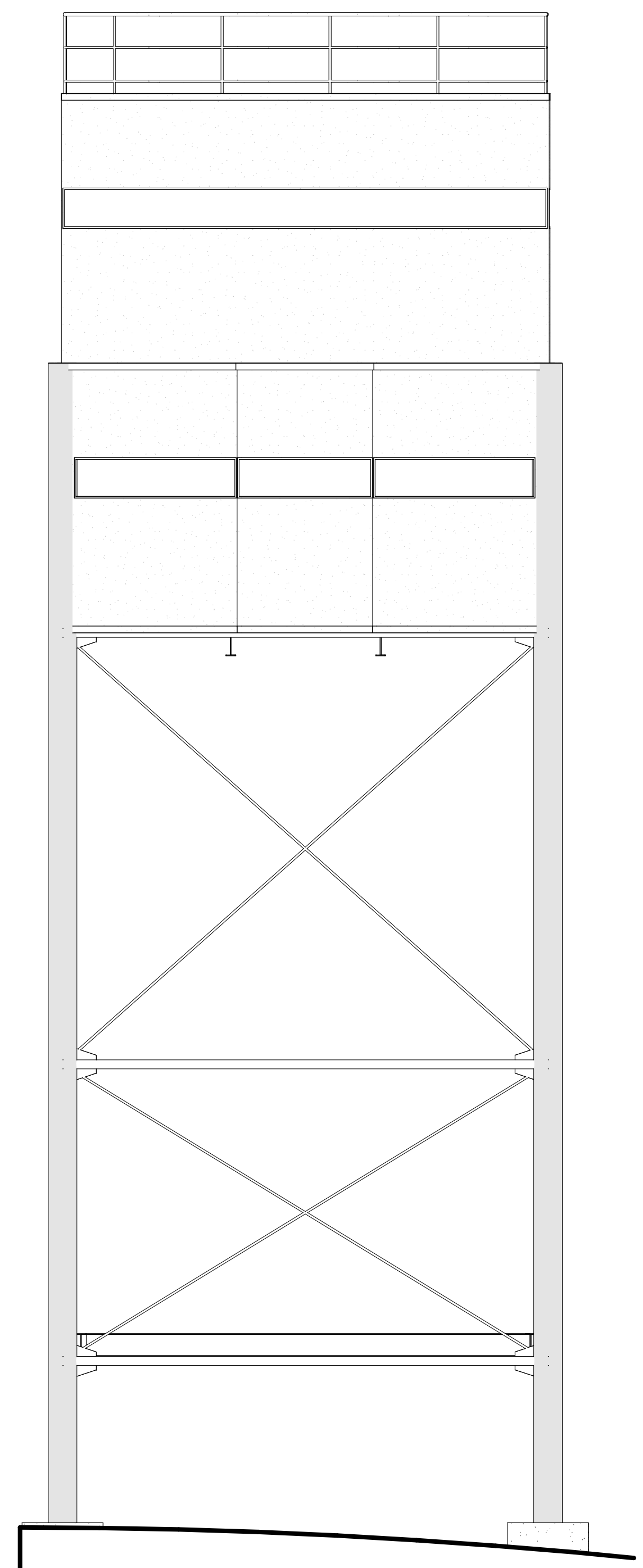
Sand Island



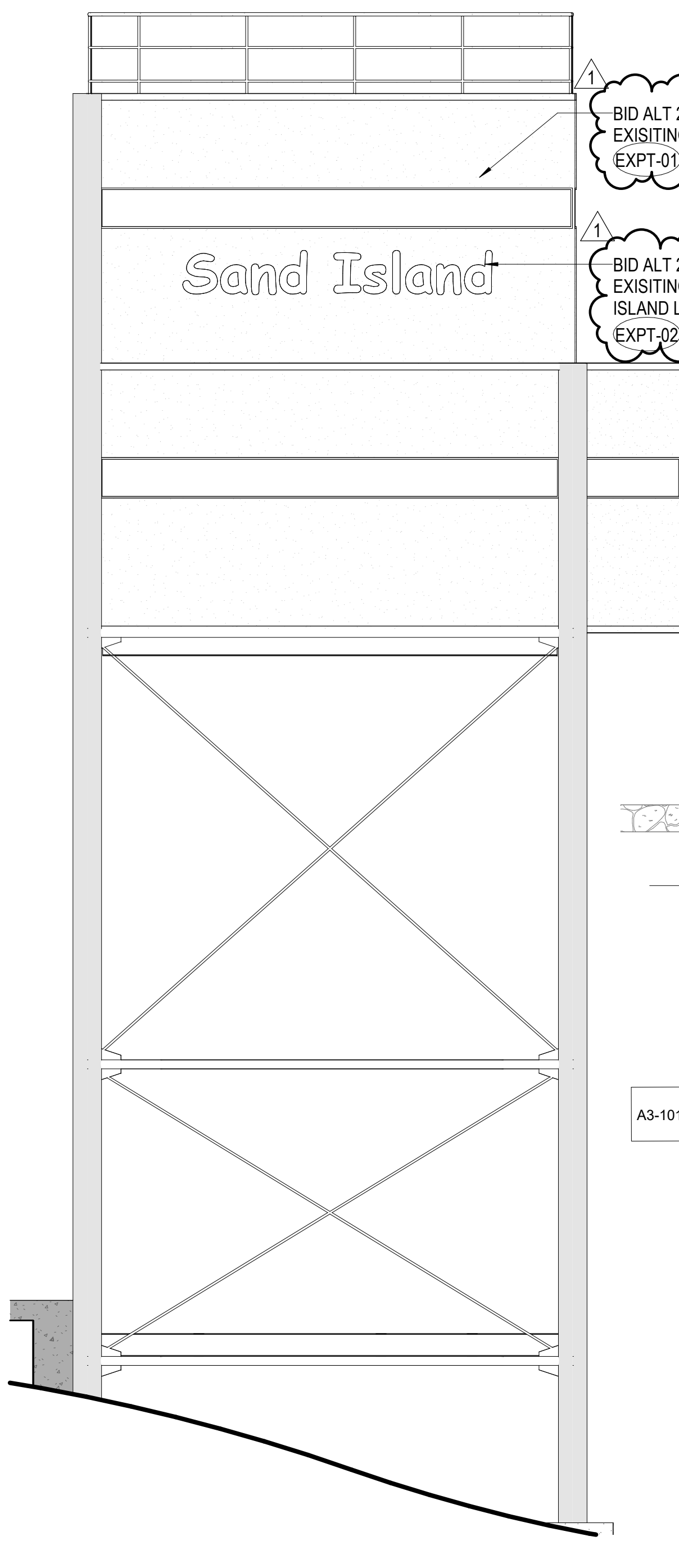
**5** CONTROL POST TOWER EAST  
SCALE: 1/4" = 1'-0"



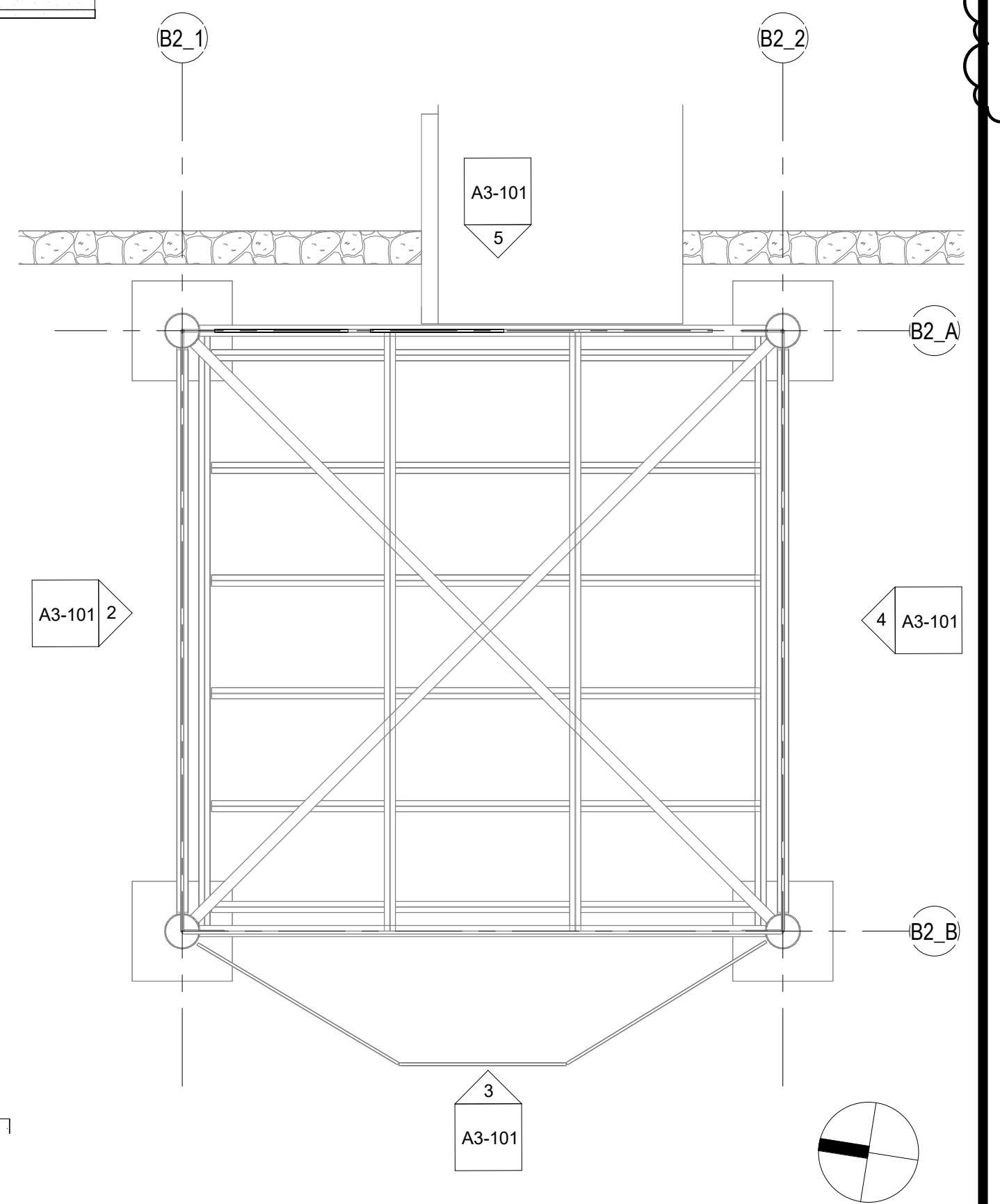
**4** CONTROL POST TOWER SOUTH  
SCALE: 1/4" = 1'-0"



**3** CONTROL POST TOWER WEST  
SCALE: 1/4" = 1'-0"



**2** CONTROL POST TOWER NORTH  
SCALE: 1/4" = 1'-0"



**1** CONTROL POST TOWER FLOOR PLAN  
SCALE: 1/4" = 1'-0"

1	1	Addendum No. 1	04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION	SHT OF	DATE
			12 OF 29	

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006  
**HARBOR ENTRANCE CONTROL POST TOWER POST PLAN AND ELEVATIONS**

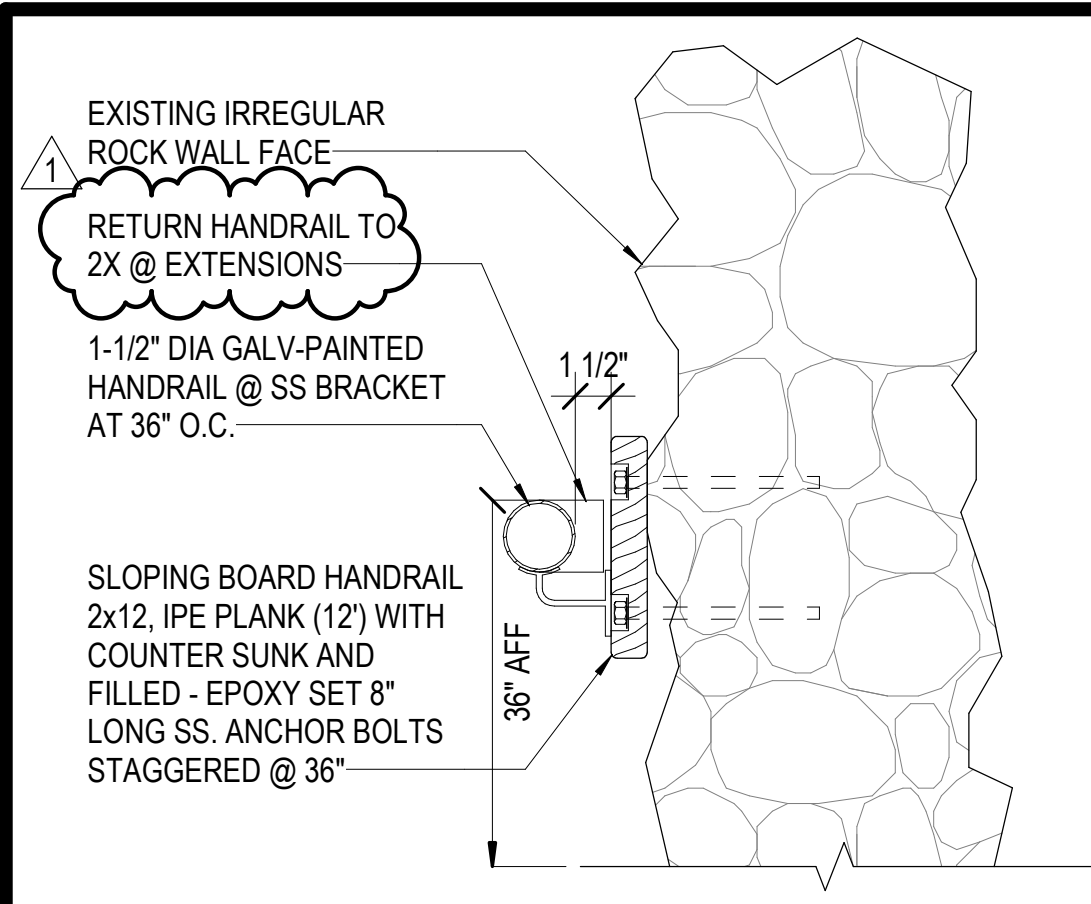
DESIGNED: JS  
DRAWN: G70  
CHECKED: KC  
APPROVED: -

SUBMITTED: BID SUBMITTAL  
DATE: 04/13/2026  
SCALE: AS NOTED

**A3-101**

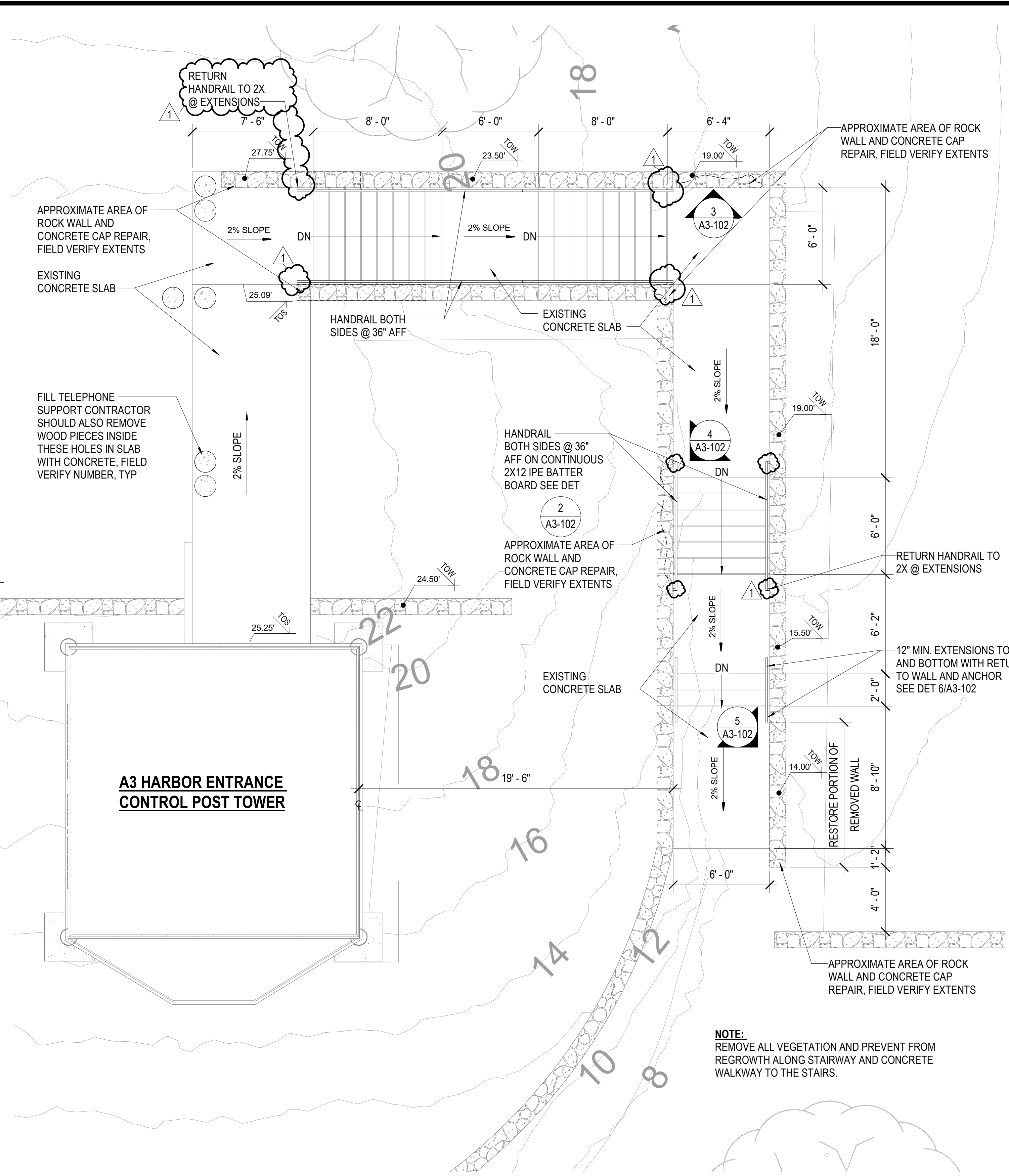
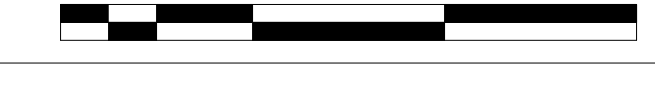
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer



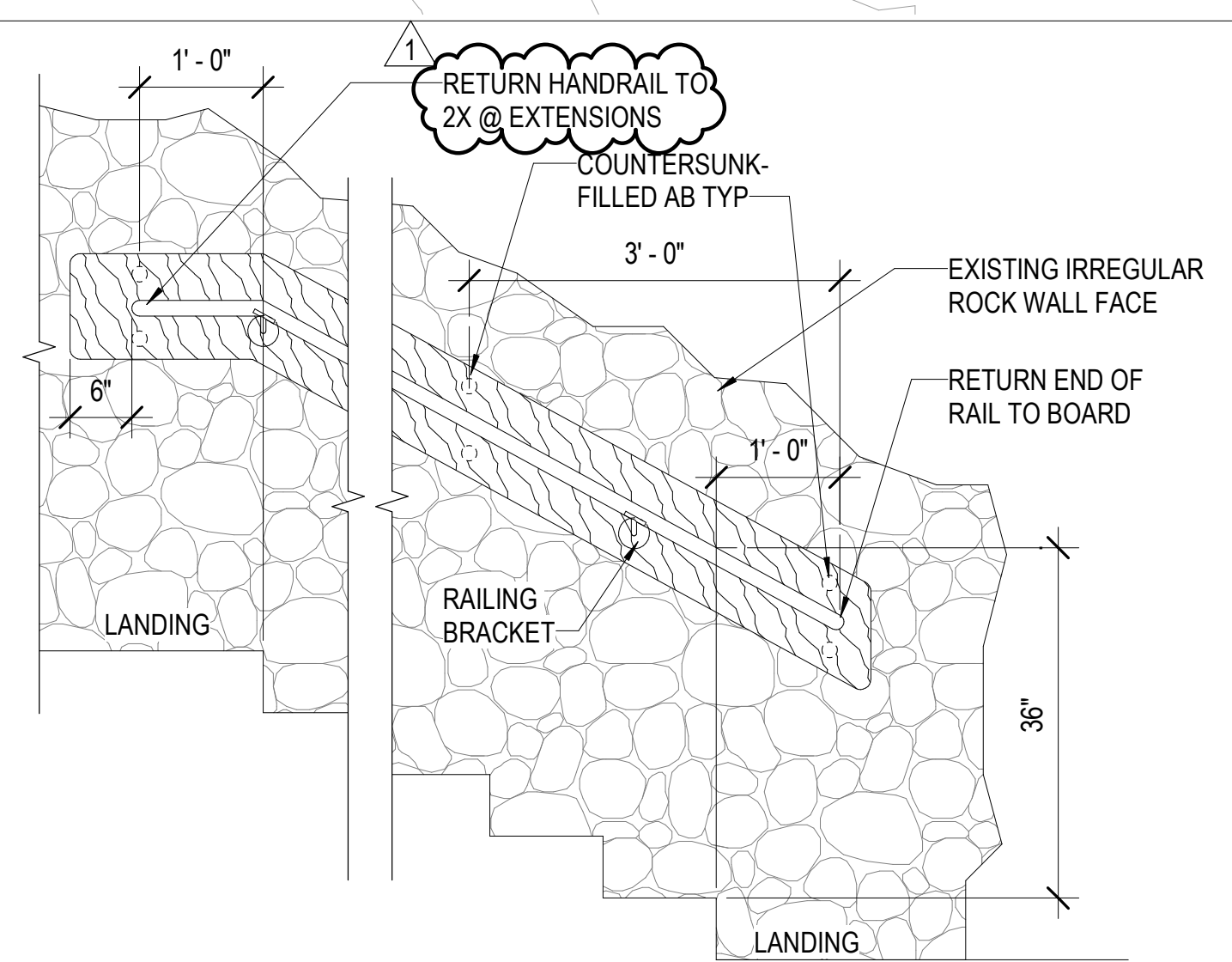
**2 TYP HANDRAIL DETAIL**

SCALE: 1 1/2" = 1'-0"



**1 HARBOR ENTRANCE STAIR PLAN - BID ALT 3**

SCALE: 1/4" = 1'-0"



**6 TYP. HANDRAIL ELEVATION DETAIL**

SCALE: 3/4" = 1'-0"



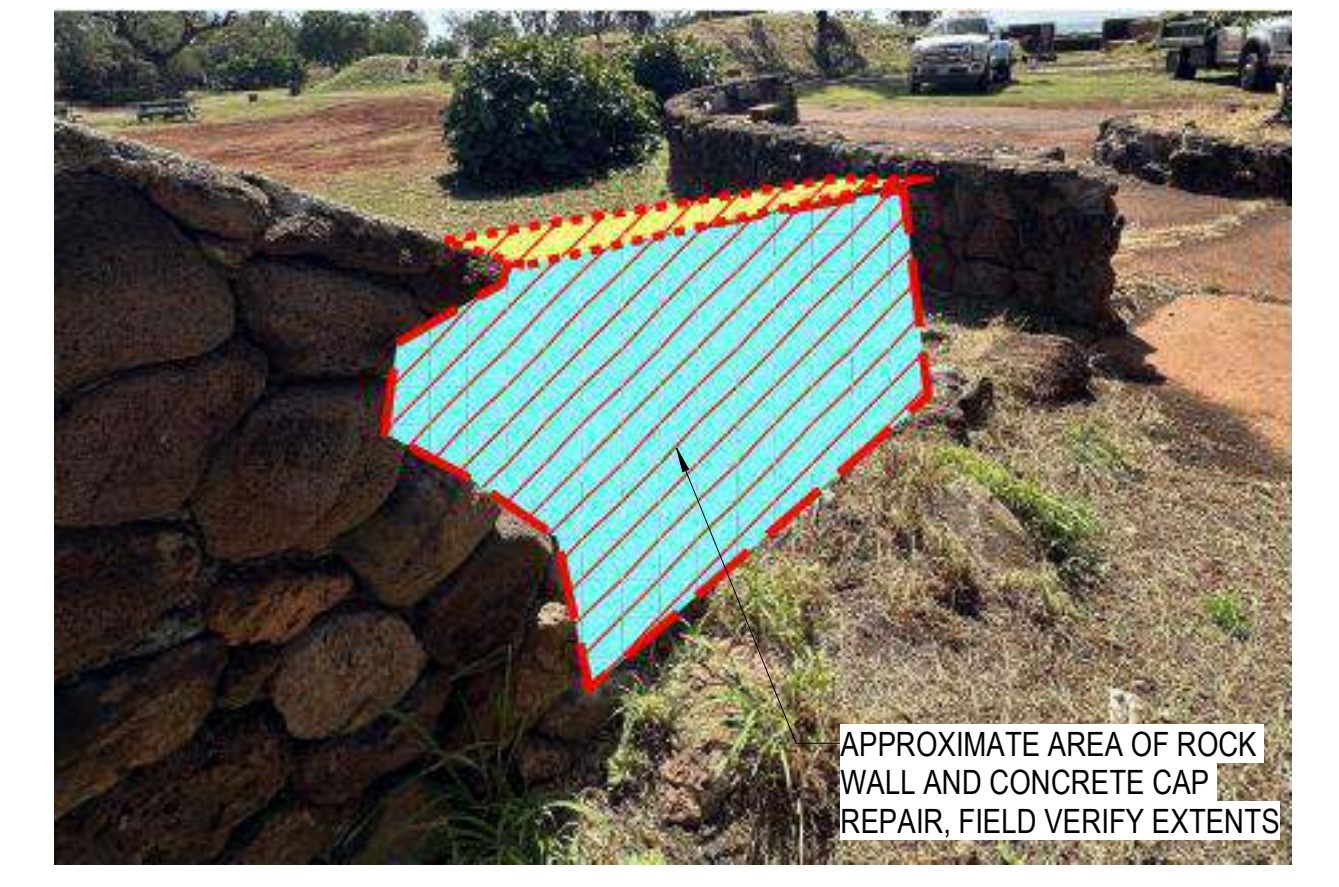
**3 ROCK WALL REPAIR**

SCALE: NTS



**4 ROCK WALL REPAIR**

SCALE: NTS

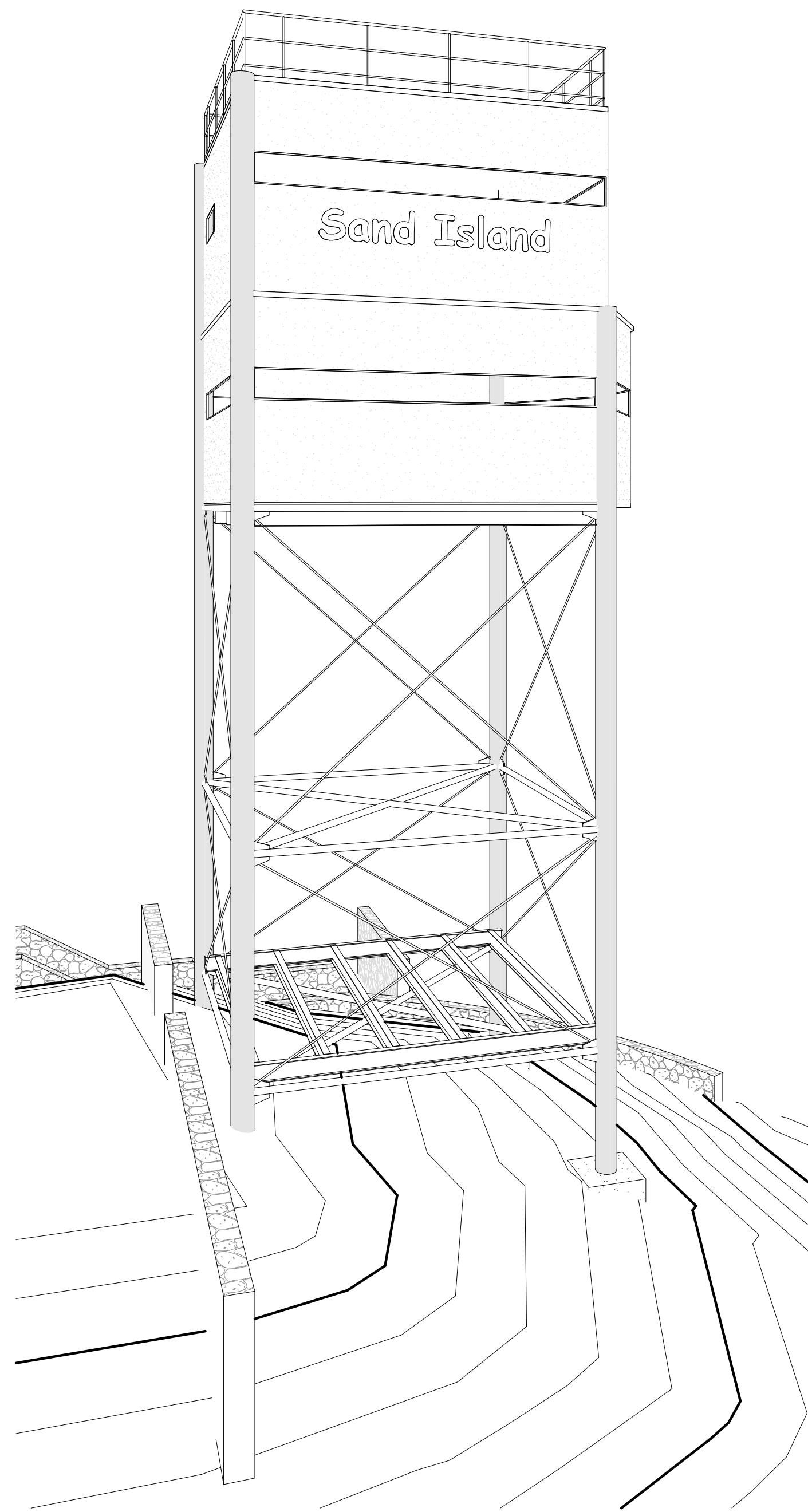


**5 ROCK WALL REPAIR**

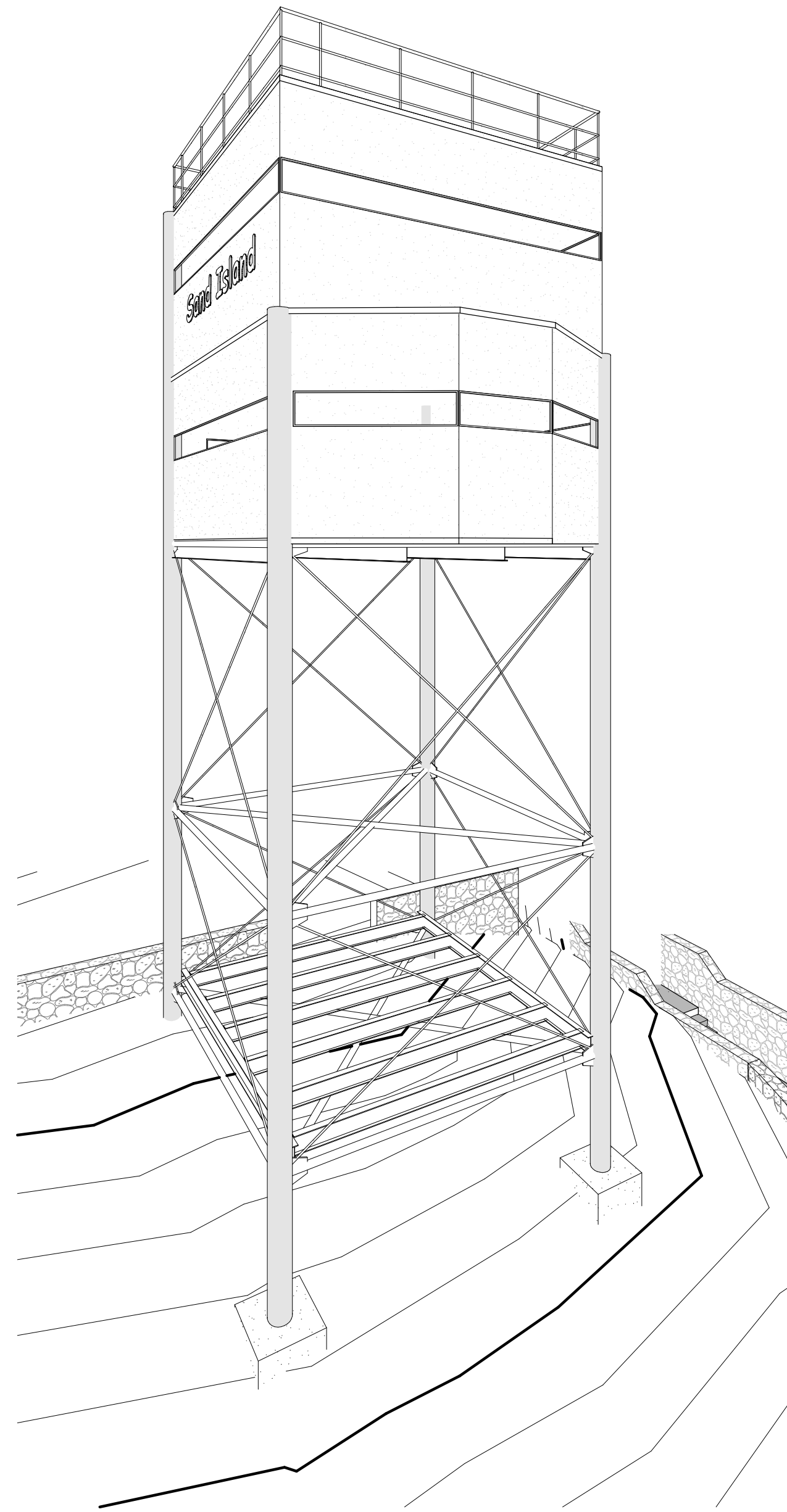
SCALE: NTS

1	1	Addendum No. 1	SHT 13 OF 29	DATE 04/30/2026	APPROVED: [Signature]
REVISION NO	SYM	DESCRIPTION			
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
<b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b>					
TAX MAP KEY: 1-5-041:006					
<b>HARBOR ENTRANCE CONTROL POST TOWER STAIR - BID ALT 3</b>					
DESIGNED: JS	SUBMITTED: BID SUBMITTAL				
DRAWN: G70	DATE: 04/13/2026				
CHECKED: KC	SCALE: AS NOTED				
APPROVED: -					
		Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer			
EXPIRES: 4/30/2028		<b>A3-102</b>			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION					
JOB NO. F70C616H			13 OF 29		

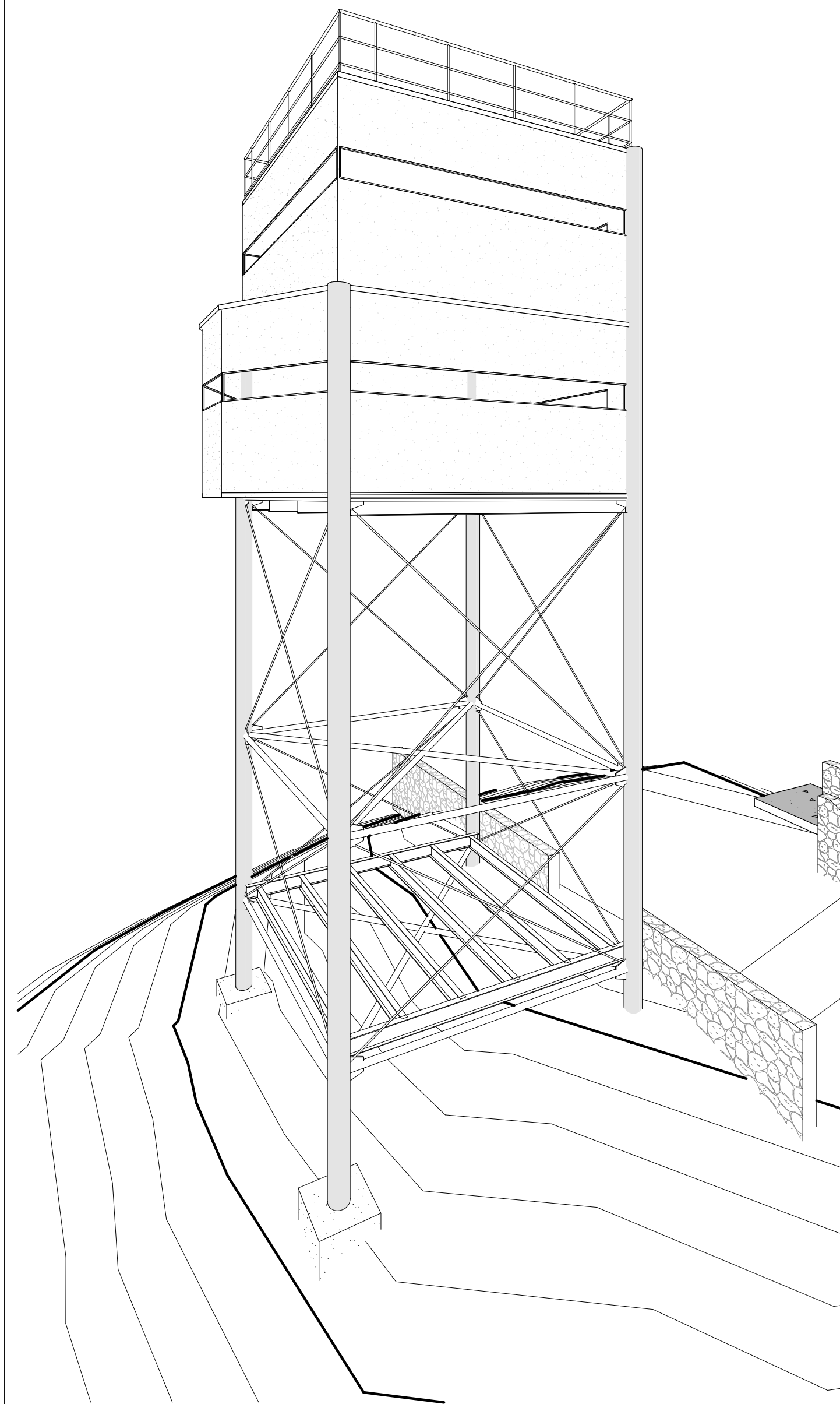
F70C616H SAND ISLAND STATE RECREATION AREA PARK IMPROVEMENTS PHASE VI 5/4/2026 7:32:10 PM



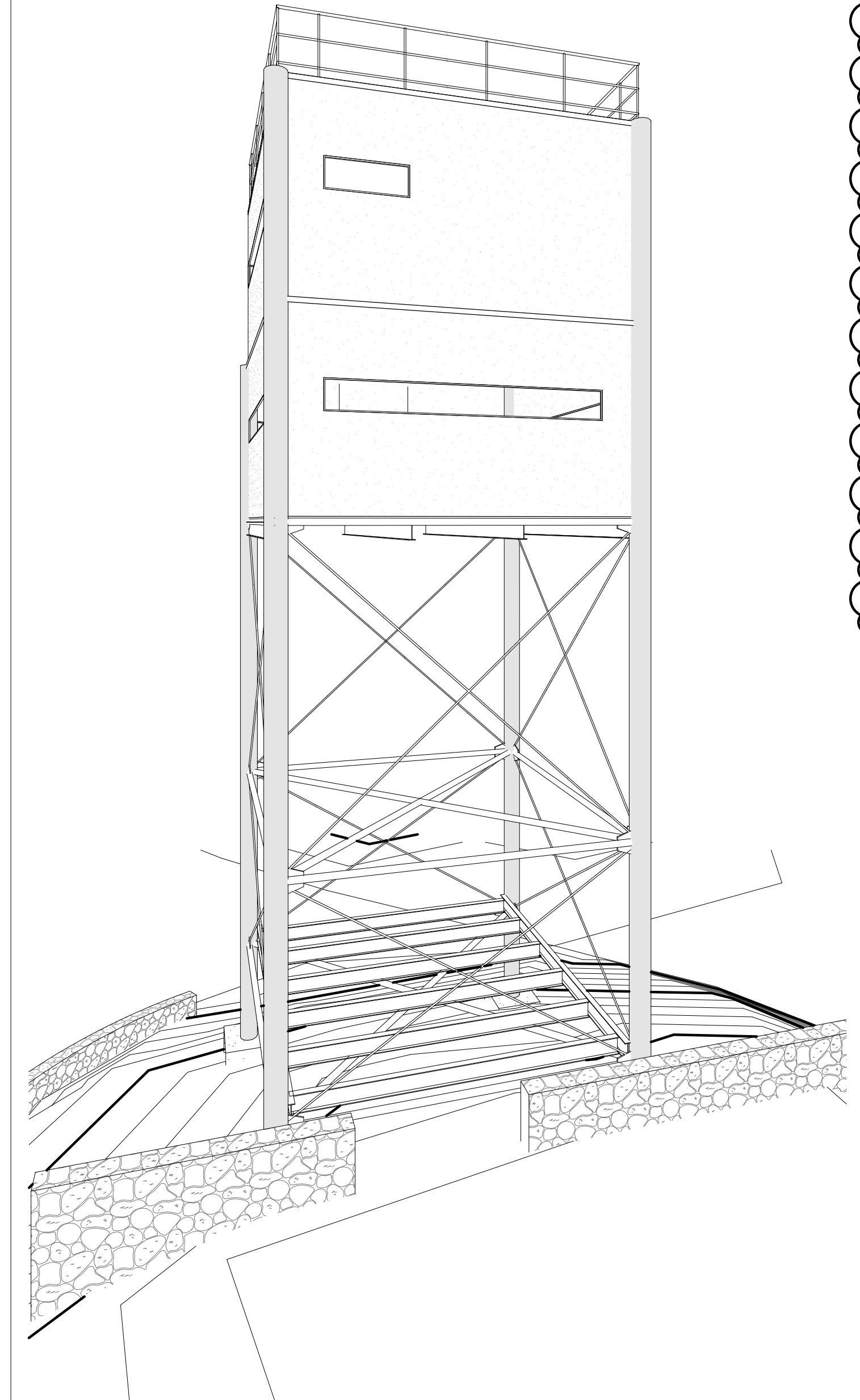
**1 ANTI-AIRCRAFT PERSPECTIVE**  
SCALE: NTS



**2 ANTI-AIRCRAFT PERSPECTIVE**  
SCALE: NTS



**3 ANTI-AIRCRAFT PERSPECTIVE**  
SCALE: NTS



**4 ANTI-AIRCRAFT PERSPECTIVE**  
SCALE: NTS

NOT TO SCALE. PERSPECTIVE DRAWINGS ARE REPRESENTATIVE OF THE INTENDED HISTORICALLY RESTORED STRUCTURE. DO NOT SCALE FROM THIS DRAWING. REFER TO PLAN, ELEVATION, AND DETAIL DRAWINGS FOR DIMENSIONS AND CONSTRUCTION REQUIREMENTS. MATERIALS, FINISHES, AND SPECIFIC EXTERIOR TREATMENTS SHALL BE AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.

1	1	Addendum No. 1		SHT 14 OF 29	DATE	04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION					
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>ANTI-AIRCRAFT GUN EMPLACEMENT TOWER</b> <b>PERSPECTIVE VIEWS</b>							
DESIGNED: JS		SUBMITTED: BID SUBMITTAL					
DRAWN: G70		DATE: 04/13/2026					
CHECKED: KC		SCALE: AS NOTED					
APPROVED: -							
 EXPIRES: 4/30/2028		Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer					

**GENERAL NOTES**

**NOTE:**  
THE CONTRACTOR SHALL CLEARLY MARK ALL NON-HISTORIC ELEMENTS IDENTIFIED FOR REMOVAL AND REVIEW THE PROPOSED DEMOLITION LIMITS WITH THE ENGINEER PRIOR TO COMMENCING ANY DEMOLITION WORK.

**DEMOLITION / HISTORIC PRESERVATION NOTE:**  
SELECTIVE DEMOLITION SHALL BE UNDERTAKEN IN A MANNER THAT PRESERVES AND PROTECTS THE EXISTING HISTORIC CONCRETE STRUCTURE AND ITS CHARACTER-DEFINING FORM AND DETAILING. REMOVE ONLY NON-HISTORIC ELEMENTS AND LATER ALTERATIONS INDICATED FOR REMOVAL. METHODS SHALL BE NON-DESTRUCTIVE TO THE MAXIMUM EXTENT PRACTICABLE AND SHALL NOT IMPAIR THE ORIGINAL CONCRETE MASSING, GEOMETRY, EDGES, REVEALS, OR SURFACE EXPRESSION. ALL EXPOSED EDGES RESULTING FROM SELECTIVE DEMOLITION SHALL BE NEATLY CUT, FINISHED, AND FREE OF JAGGED OR SHARP EDGES. CONTRACTOR SHALL ENSURE THAT NO HAZARDOUS CONDITIONS ARE CREATED DURING OR AFTER DEMOLITION, AND ALL SURFACES SHALL BE LEFT IN A SAFE, STABLE, AND WORKMANLIKE CONDITION. UPON COMPLETION OF REMOVALS, PREPARE THE EXPOSED HISTORIC CONCRETE TO RECEIVE SPECIFIED CEMENT WASH AND PAINT FINISH TO RESTORE THE VISUAL INTEGRITY AND HISTORIC READING OF THE ORIGINAL CONCRETE CONSTRUCTION. PATCH, REPAIR, OR REPLACEMENT OF DAMAGED HISTORIC CONCRETE CAUSED BY DEMOLITION OPERATIONS WILL NOT BE PERMITTED WITHOUT ARCHITECT REVIEW AND APPROVAL. SEE ADDITIONAL REQUIREMENT IN PROJECT SPECIFICATION.

1	1	Addendum No. 1		04/30/2026	
REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED:
			15 OF 29		



EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

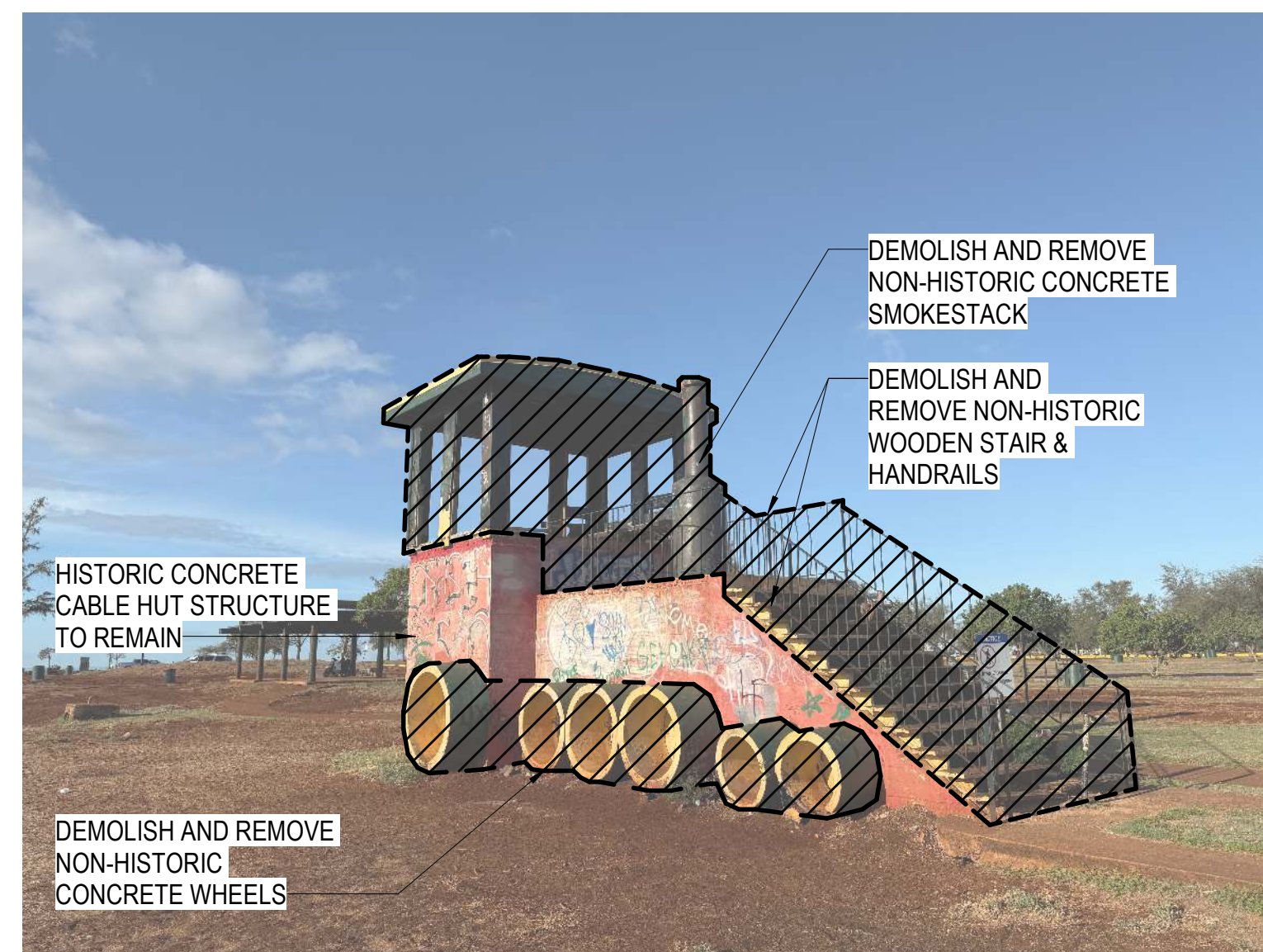
**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**CABLE HUT (TRAIN) DEMOLITION SCOPE**

DESIGNED: JS	SUBMITTED: BID SUBMITTAL
DRAWN: G70	DATE: 04/13/2026
CHECKED: KC	SCALE: AS NOTED
APPROVED: -	

CHIEF ENGINEER: Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

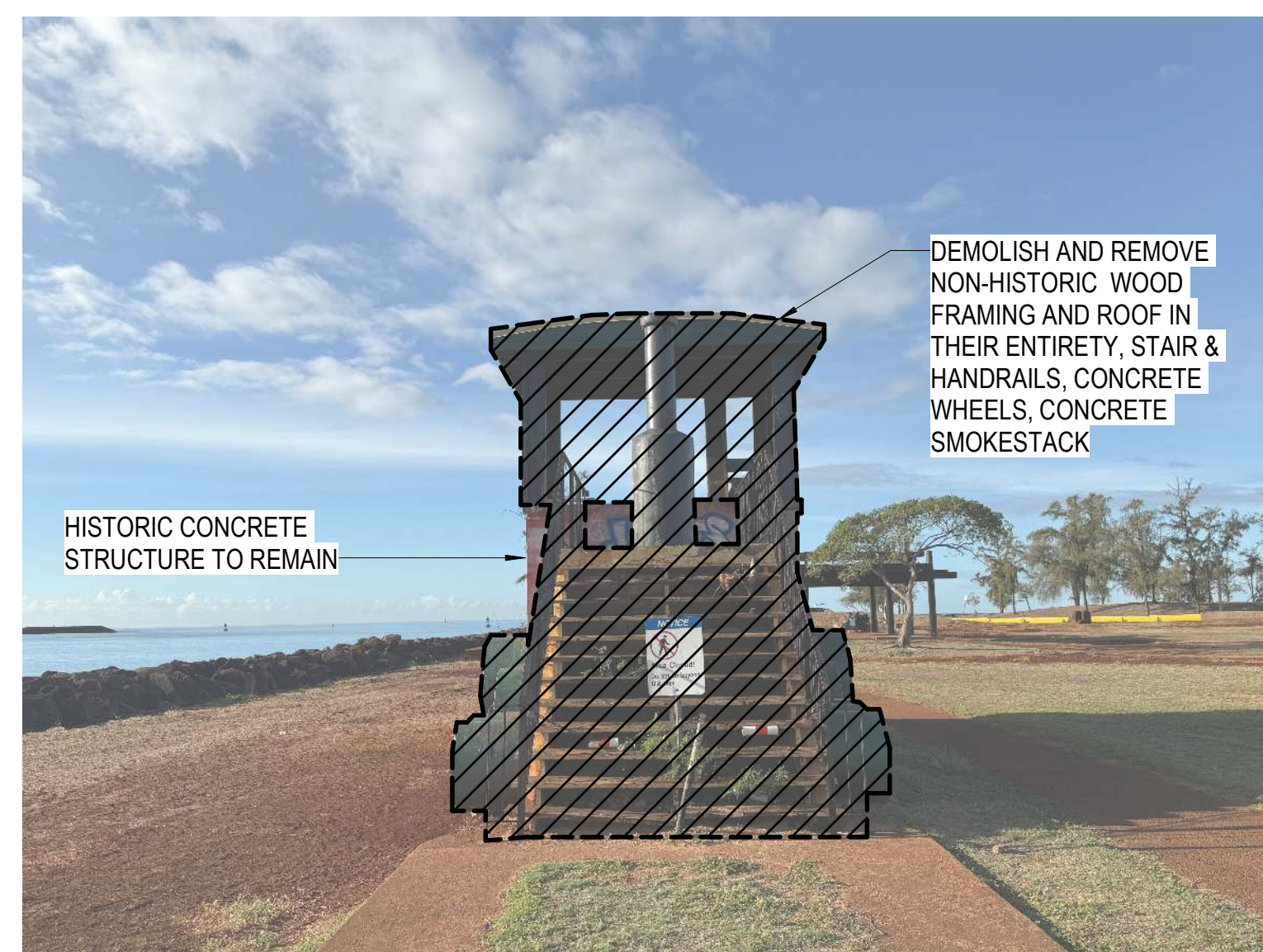
**D4-101**



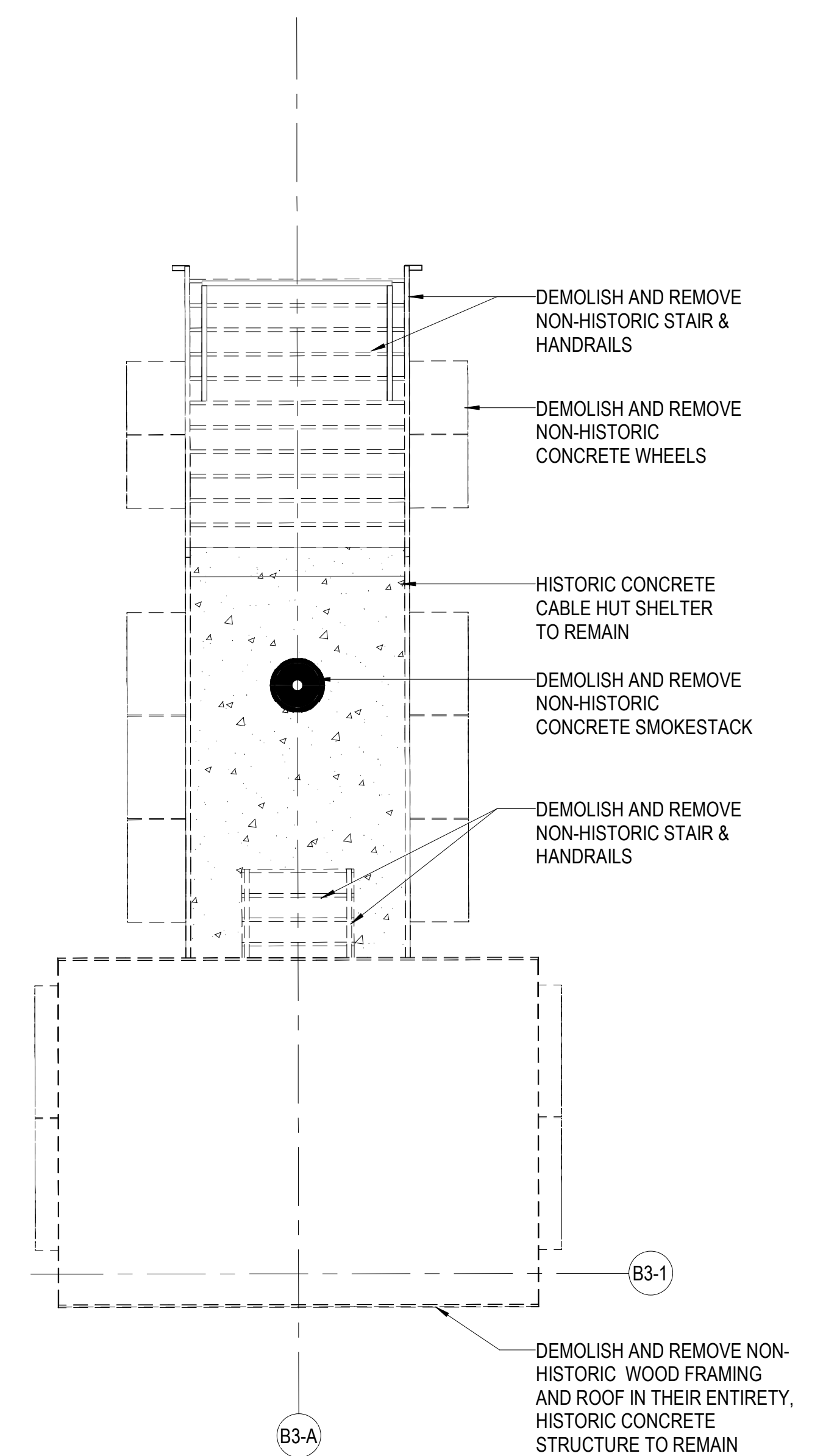
**2 CABLE HUT (TRAIN)\_EAST ELEVATION (PHOTO)**  
SCALE: 3" = 1'-0"



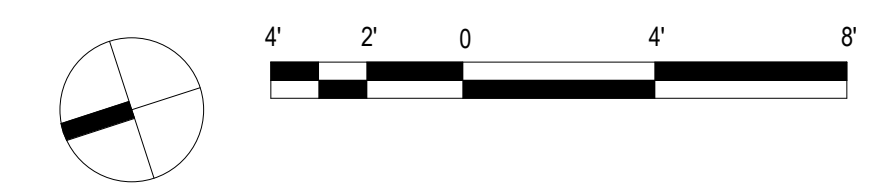
**3 CABLE HUT (TRAIN)\_SOUTH ELEVATION (PHOTO)**  
SCALE: 3" = 1'-0"

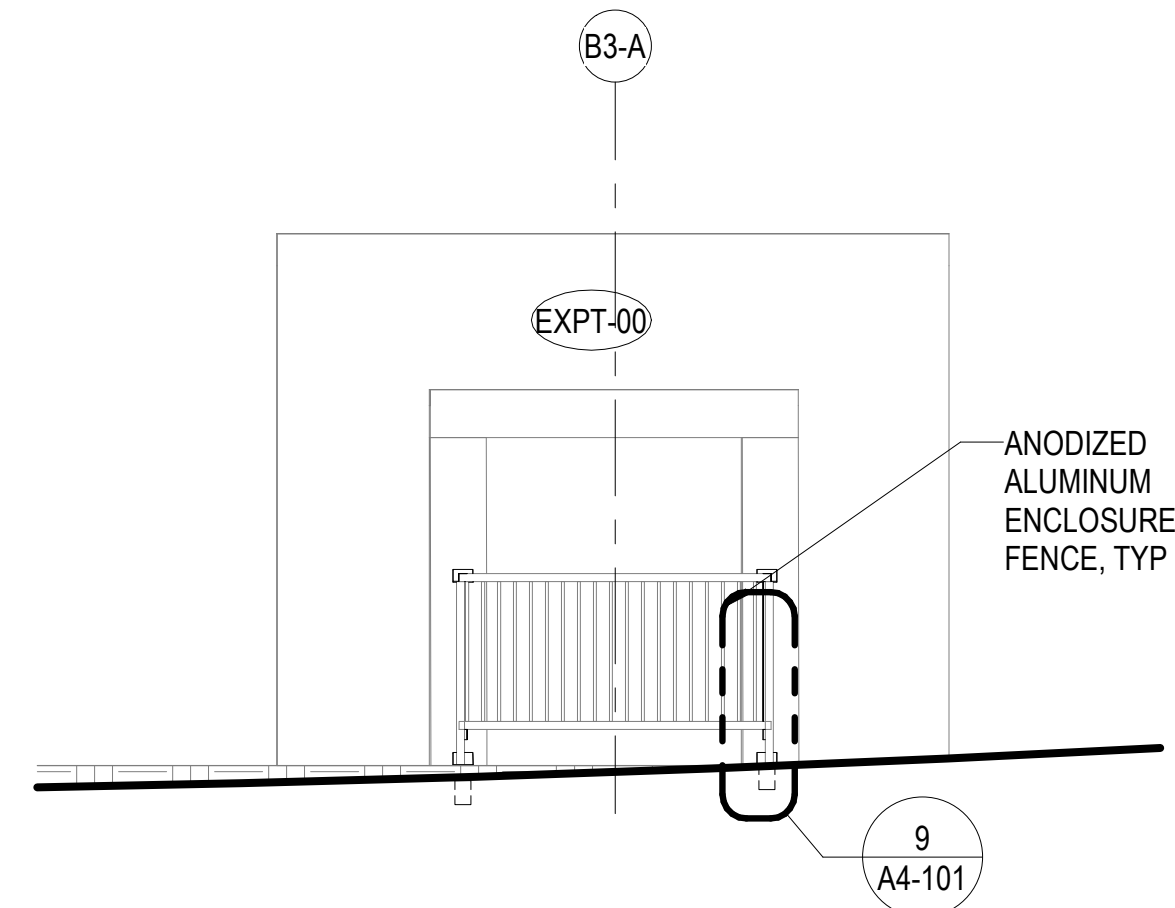


**4 CABLE HUT (TRAIN)\_NORTH ELEVATION (PHOTO)**  
SCALE: 3" = 1'-0"

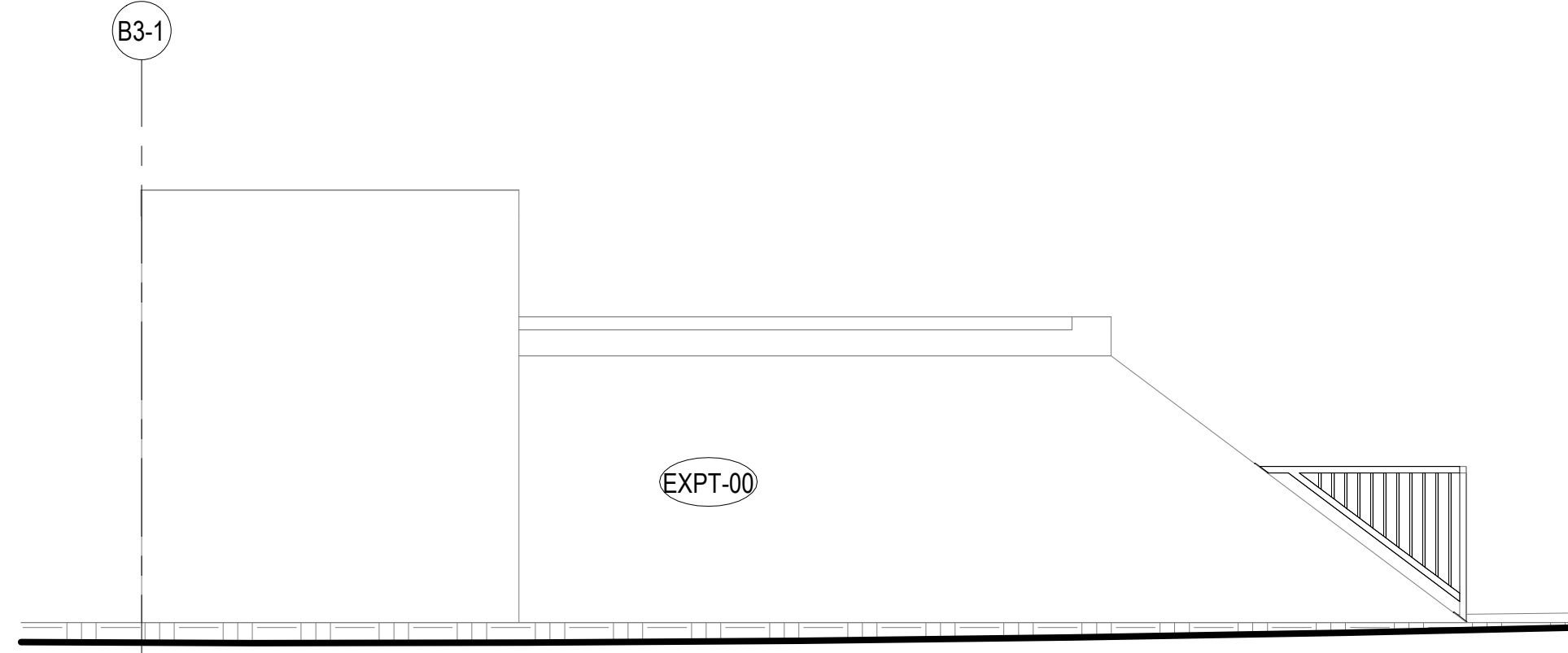


**1 EXISTING / DEMOLITION FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

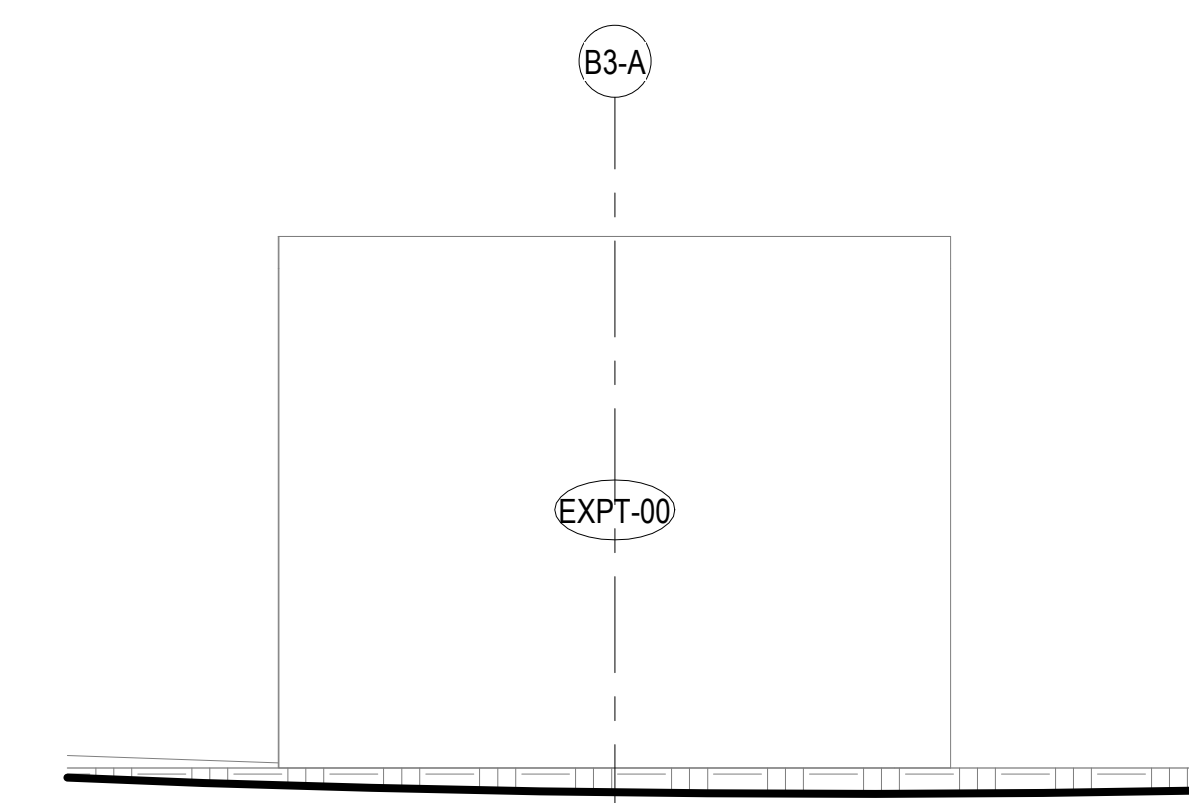




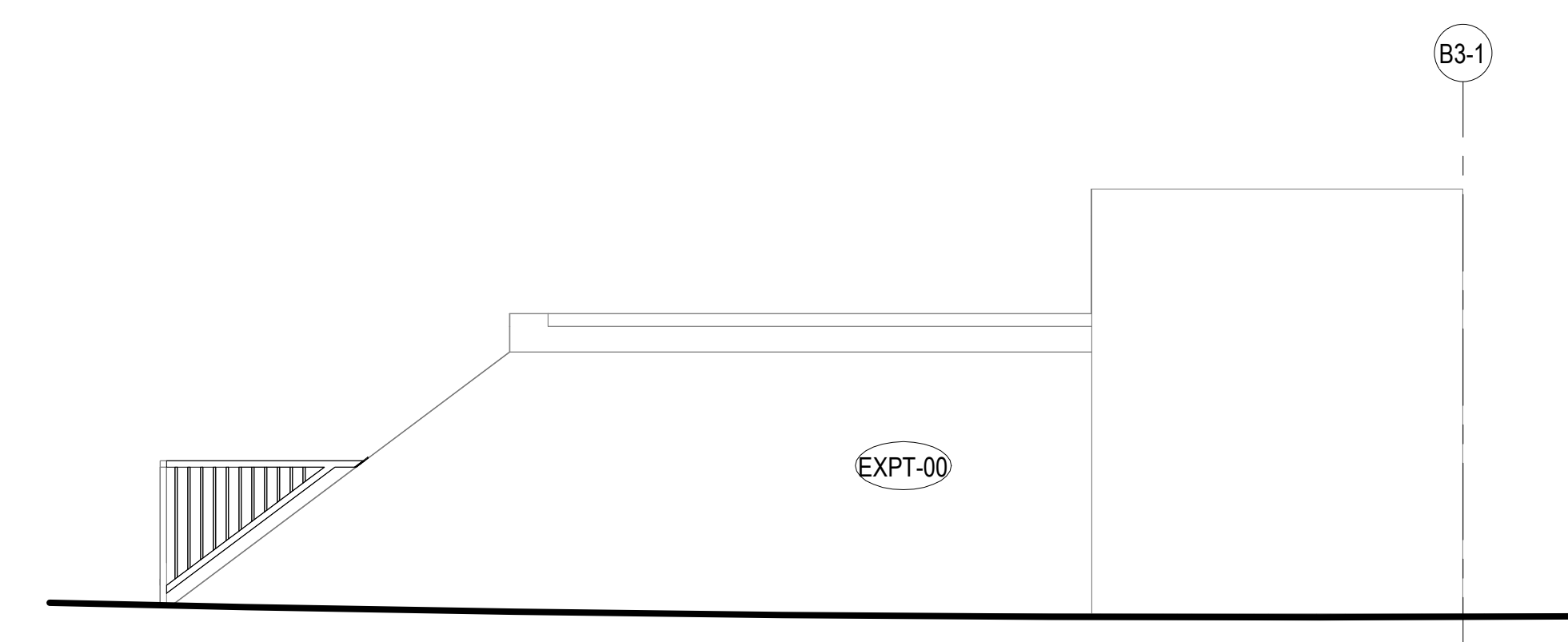
**3** CABLE HUT NORTH SITE ELEVATION  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'



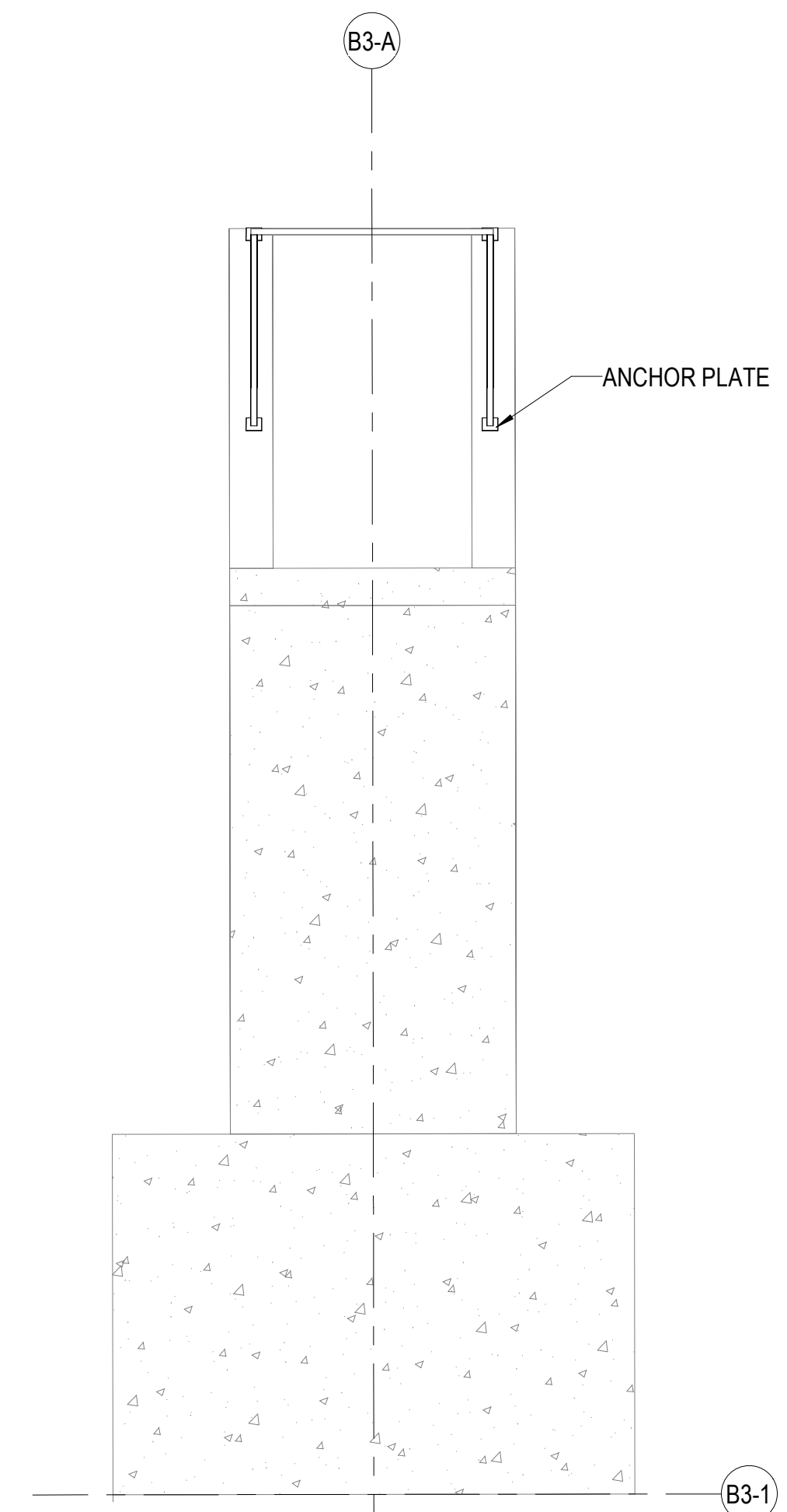
**4** CABLE HUT EAST SITE ELEVATION  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'



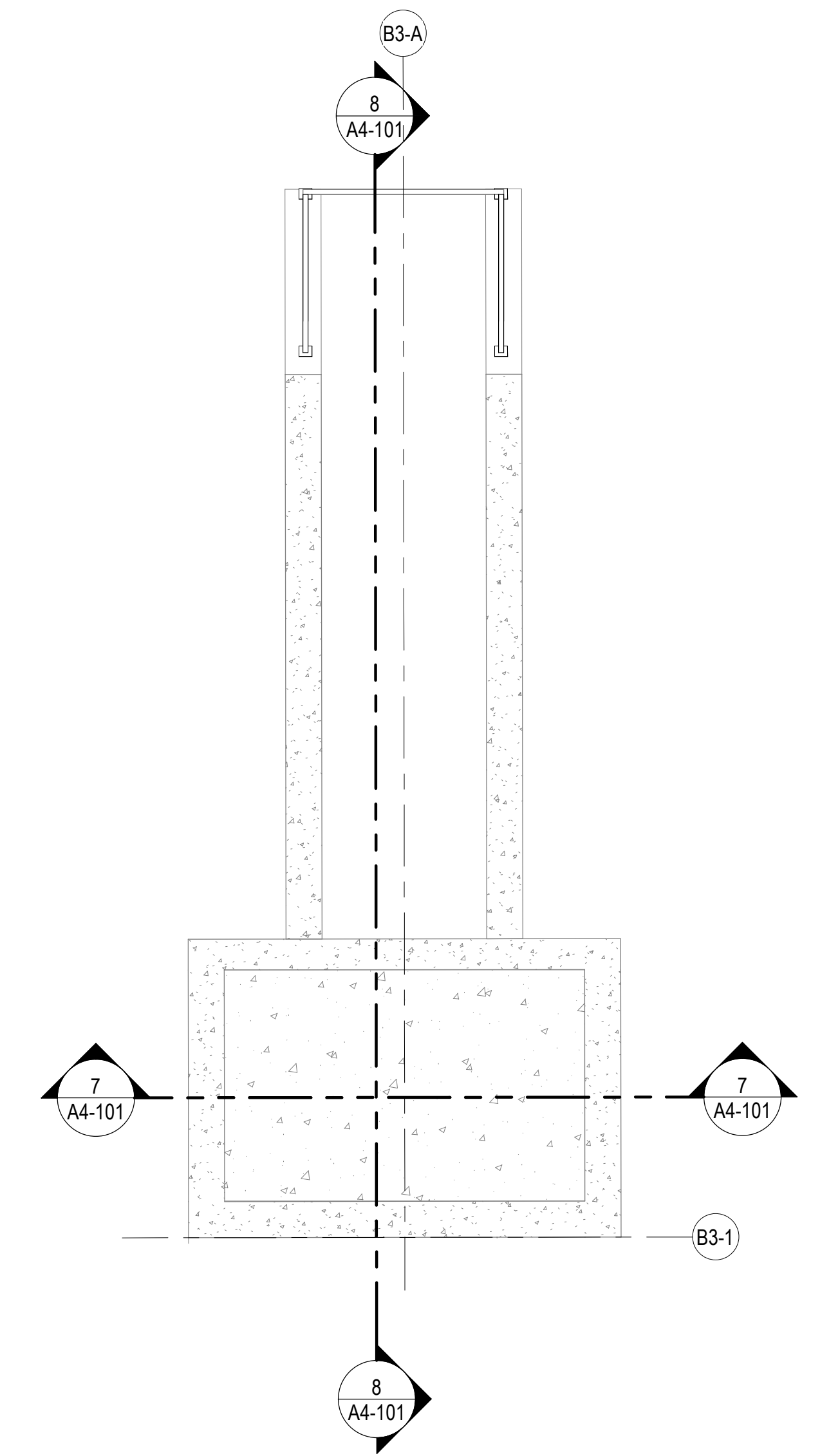
**5** CABLE HUT SOUTH SITE ELEVATION  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'



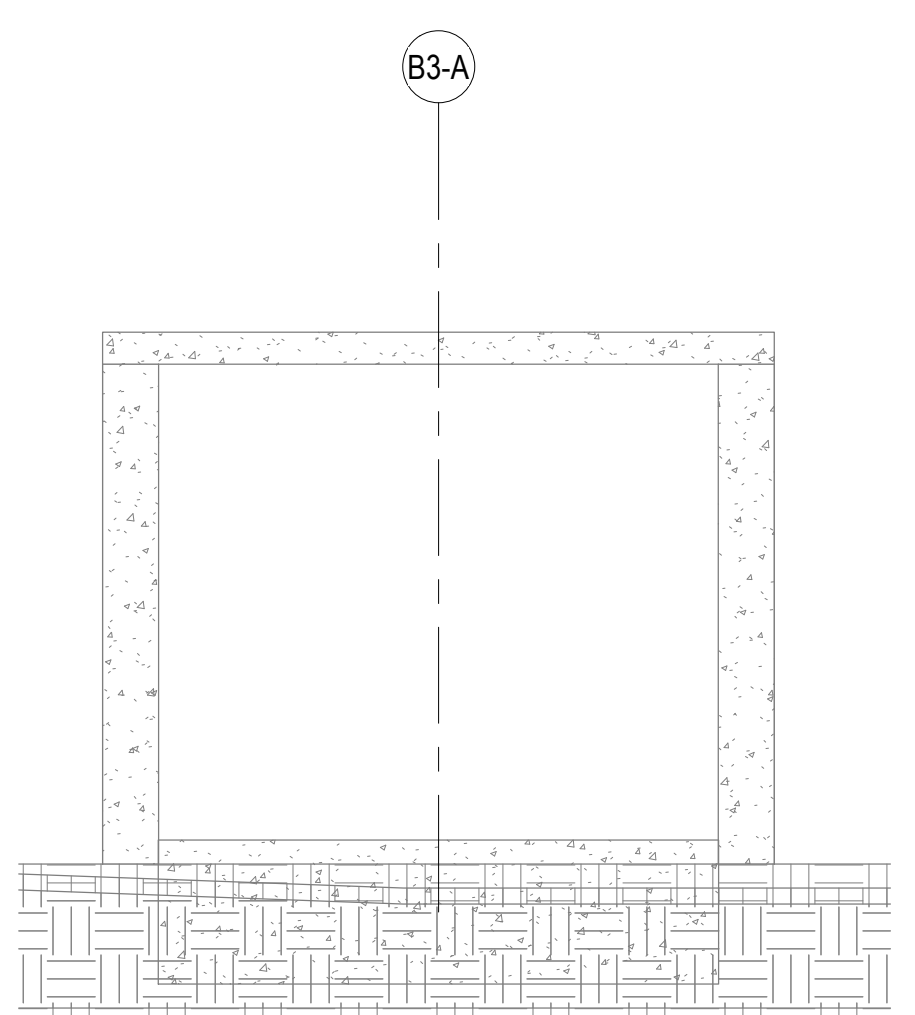
**6** CABLE HUT WEST SITE ELEVATION  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'



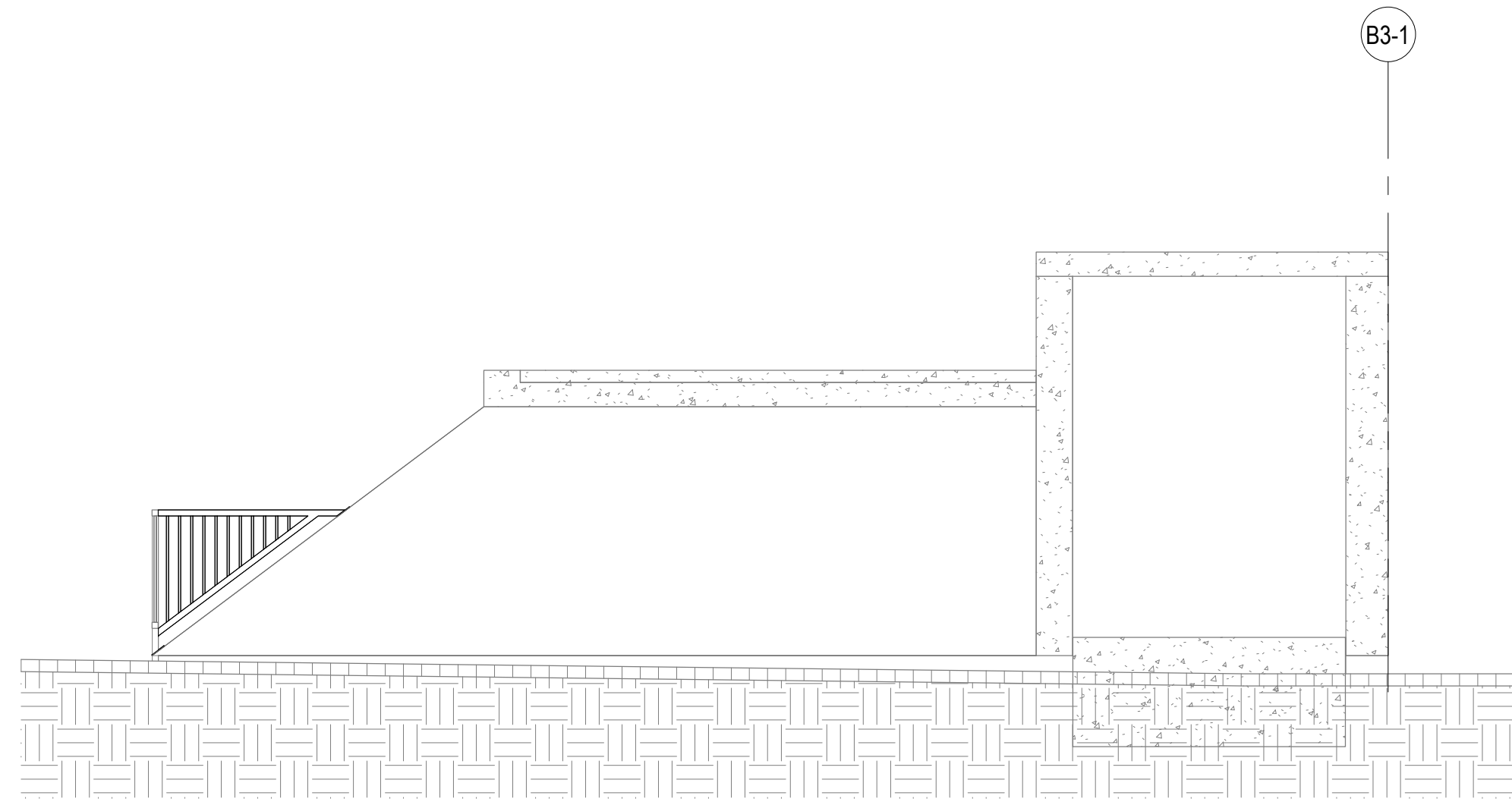
**2** CABLE HUT ROOF PLAN  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'



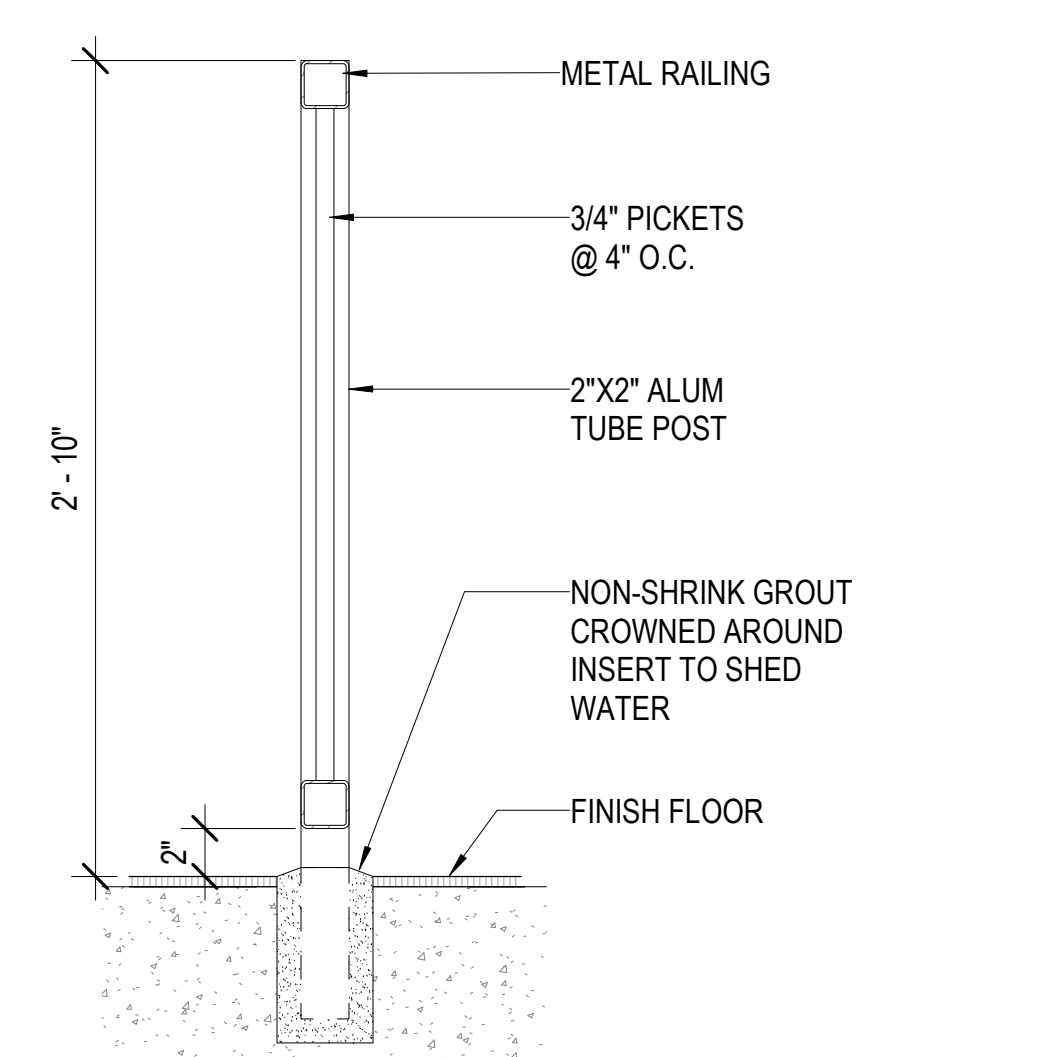
**1** CABLE HUT FLOOR PLAN  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'



**7** CABLE HUT (TRAIN)\_CROSS SECTION  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'

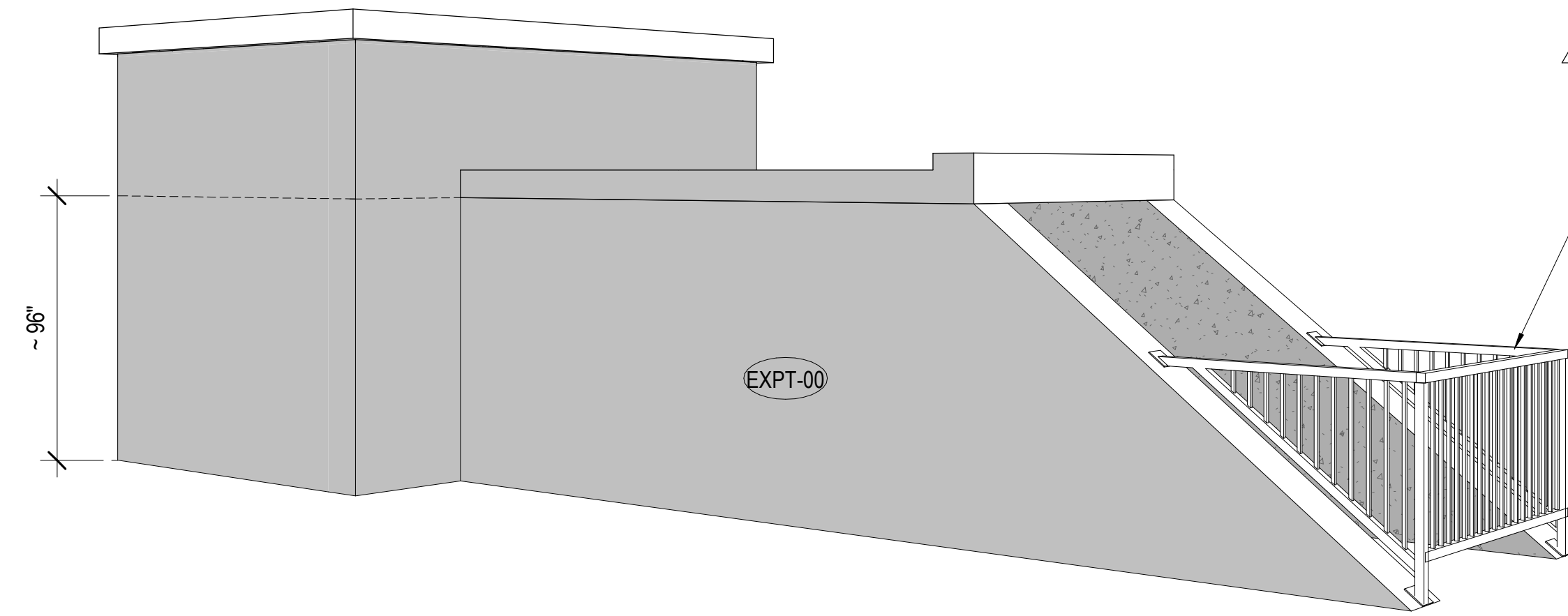


**8** CABLE HUT (TRAIN)\_LONGITUDINAL SECTION  
SCALE: 1/4" = 1'-0"  
4' 2' 0' 4' 8'

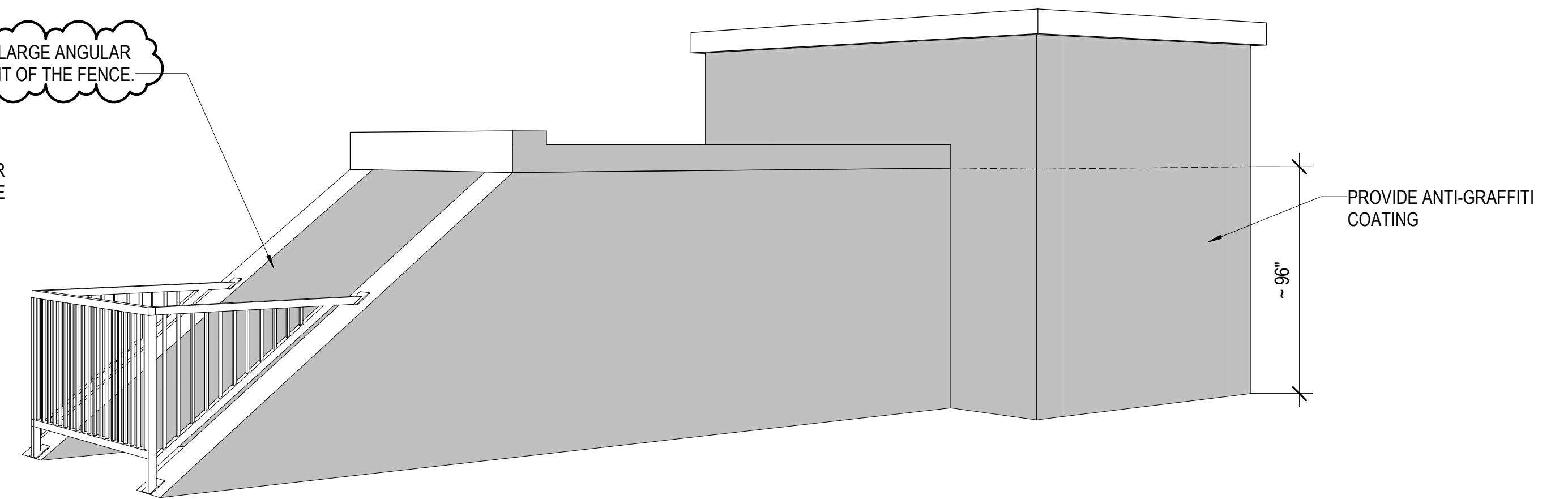


**9** HANDRAIL POST DETAIL  
SCALE: 1 1/2" = 1'-0"  
8' 4' 0' 8' 16'

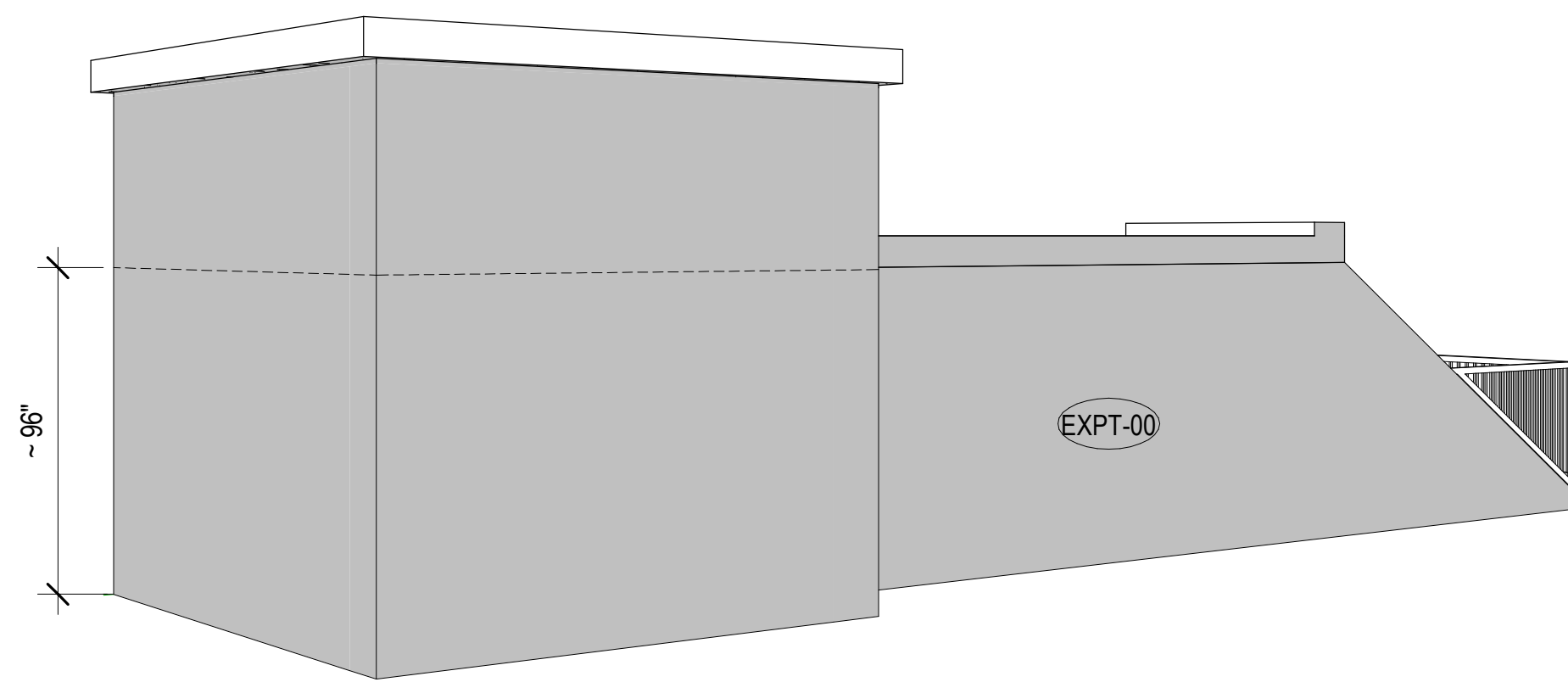
1	ADDENDUM	Addendum No. 1	SHT 16 OF 29	DATE	04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION				
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>CABLE HUT FLOOR PLAN AND ELEVATIONS</b>						
DESIGNED:	G70	SUBMITTED:	BID SUBMITTAL	DATE:	04/13/2026	SCALE:
CHECKED:	G70	APPROVED:				
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION			Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer			



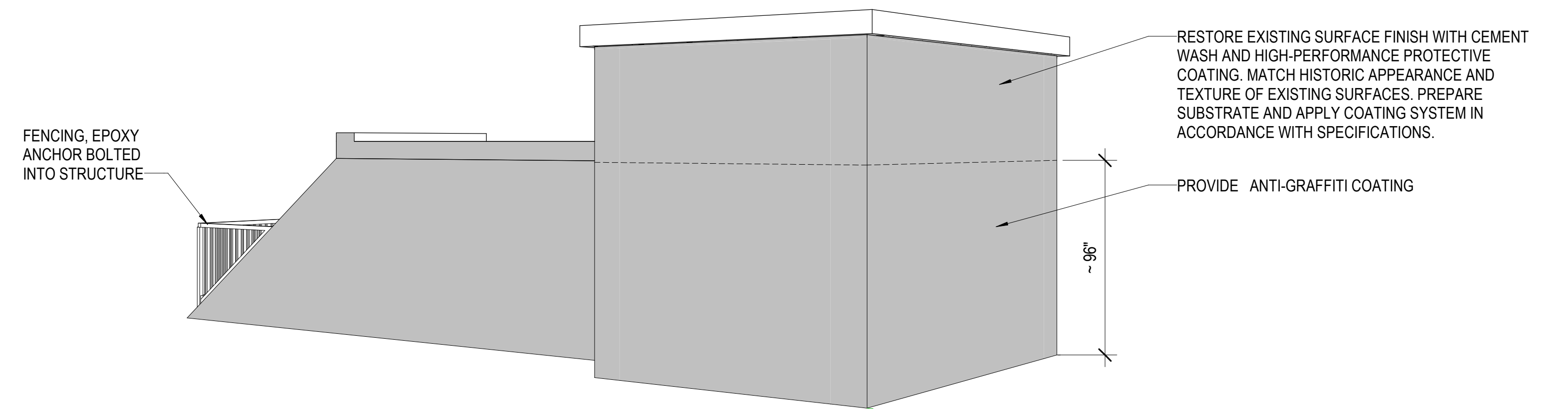
**2** CABLE HUT PERSPECTIVE  
SCALE:



**1** CABLE HUT PERSPECTIVE  
SCALE:



**4** CABLE HUT PERSPECTIVE  
SCALE:



**3** CABLE HUT PERSPECTIVE  
SCALE:

NOT TO SCALE. PERSPECTIVE DRAWINGS ARE REPRESENTATIVE OF THE INTENDED HISTORICALLY RESTORED STRUCTURE. DO NOT SCALE FROM THIS DRAWING. REFER TO PLAN, ELEVATION, AND DETAIL DRAWINGS FOR DIMENSIONS AND CONSTRUCTION REQUIREMENTS. MATERIALS, FINISHES, AND SPECIFIC EXTERIOR TREATMENTS SHALL BE AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.

1	1	Addendum No. 1		04/30/2026	
REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED:
			17 OF 29		

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**CABLE HUT PERSPECTIVE VIEWS**

DESIGNED: JS  
DRAWN: G70  
CHECKED: KC  
APPROVED:

SUBMITTED: **BID SUBMITTAL**  
DATE: 04/13/2026  
SCALE: AS NOTED

**A4-102**

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

**Dina Lau**  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

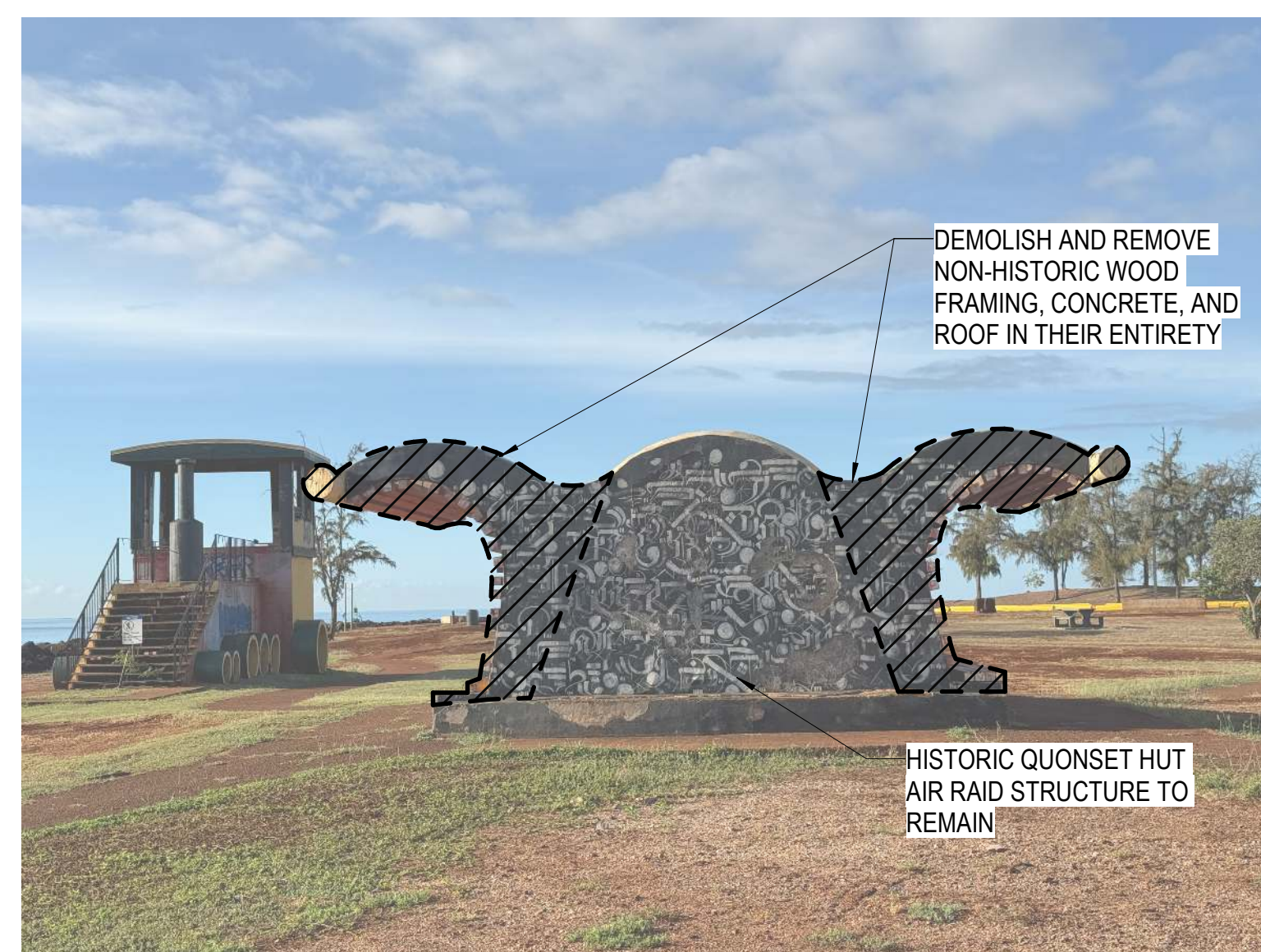
**GENERAL NOTES**

**NOTE:**  
THE CONTRACTOR SHALL CLEARLY MARK ALL NON-HISTORIC ELEMENTS IDENTIFIED FOR REMOVAL AND REVIEW THE PROPOSED DEMOLITION LIMITS WITH THE ENGINEER PRIOR TO COMMENCING ANY DEMOLITION WORK.

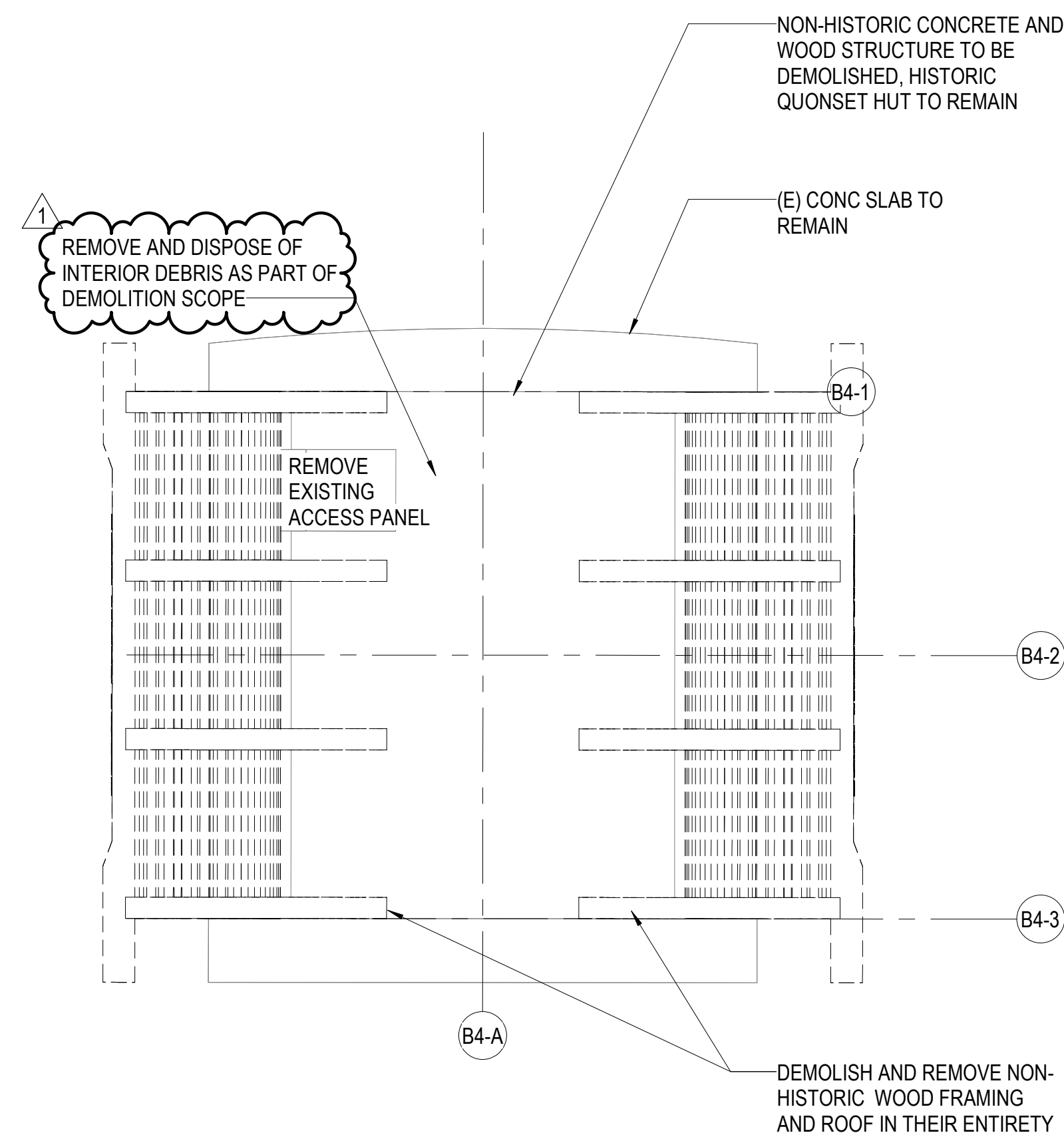
**DEMOLITION / HISTORIC PRESERVATION NOTE:**  
SELECTIVE DEMOLITION SHALL BE UNDERTAKEN IN A MANNER THAT PRESERVES AND PROTECTS THE EXISTING HISTORIC CONCRETE STRUCTURE AND ITS CHARACTER-DEFINING FORM AND DETAILING. REMOVE ONLY NON-HISTORIC ELEMENTS AND LATER ALTERATIONS INDICATED FOR REMOVAL. METHODS SHALL BE NON-DESTRUCTIVE TO THE MAXIMUM EXTENT PRACTICABLE AND SHALL NOT IMPAIR THE ORIGINAL CONCRETE MASSING, GEOMETRY, EDGES, REVEALS, OR SURFACE EXPRESSION. ALL EXPOSED EDGES RESULTING FROM SELECTIVE DEMOLITION SHALL BE NEATLY CUT, FINISHED, AND FREE OF JAGGED OR SHARP EDGES. CONTRACTOR SHALL ENSURE THAT NO HAZARDOUS CONDITIONS ARE CREATED DURING OR AFTER DEMOLITION, AND ALL SURFACES SHALL BE LEFT IN A SAFE, STABLE, AND WORKMANLIKE CONDITION. UPON COMPLETION OF REMOVALS, PREPARE THE EXPOSED HISTORIC CONCRETE TO RECEIVE SPECIFIED CEMENT WASH AND PAINT FINISH TO RESTORE THE VISUAL INTEGRITY AND HISTORIC READING OF THE ORIGINAL CONCRETE CONSTRUCTION. PATCH, REPAIR, OR REPLACEMENT OF DAMAGED HISTORIC CONCRETE CAUSED BY DEMOLITION OPERATIONS WILL NOT BE PERMITTED WITHOUT ARCHITECT REVIEW AND APPROVAL. SEE ADDITIONAL REQUIREMENT IN PROJECT SPECIFICATION.



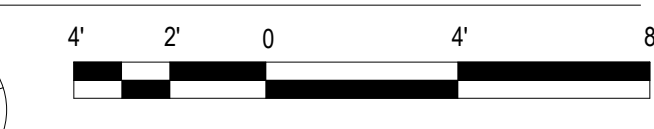
**2 AIR RAID TRAIN STATION EAST ELEVATION (PHOTO)**  
SCALE: 3" = 1'-0"



**3 AIR RAID TRAIN STATION SOUTH ELEVATION (PHOTO)**  
SCALE: 3" = 1'-0"



**1 EXISTING / DEMOLITION FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



1	1	Addendum No. 1	SHT 18 OF 29	04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION	DATE	APPROVED:	



EXPIRES: 4/30/2028

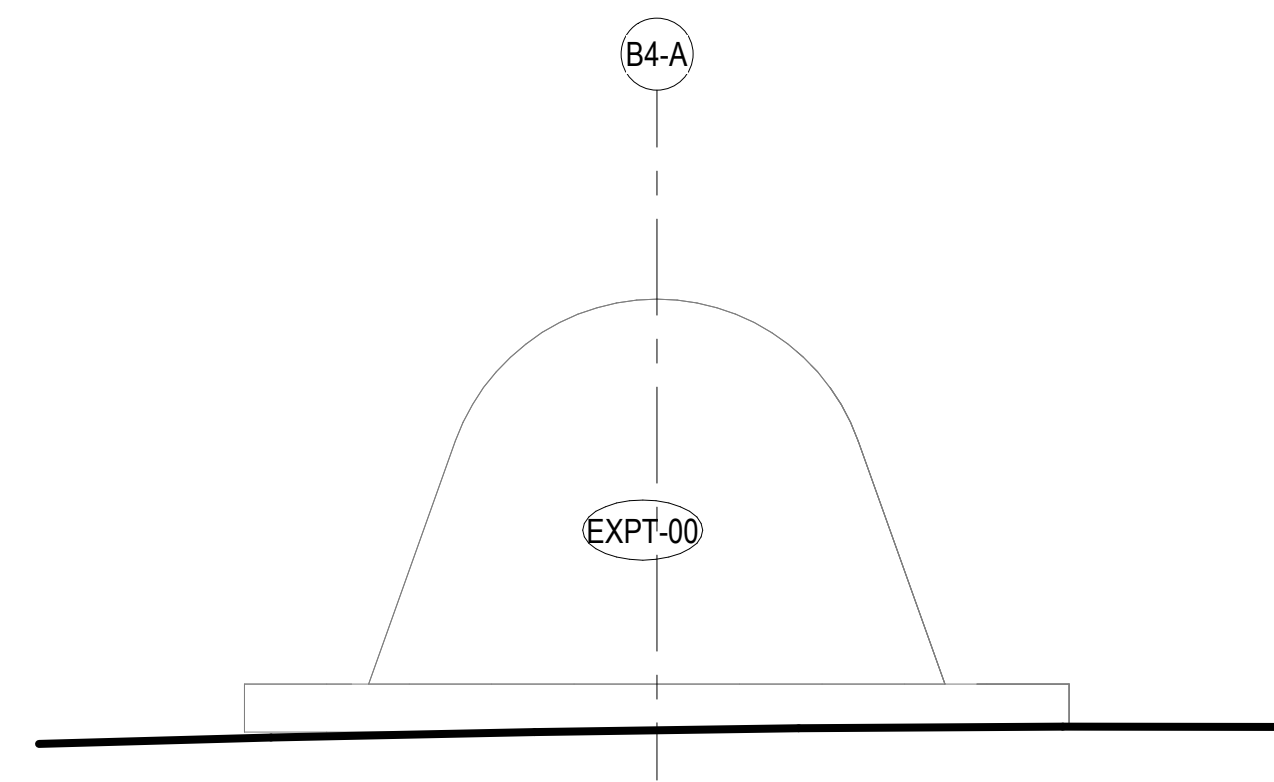
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006  
**EXISTING AIR RAID SHELTER (TRAIN STATION)  
DEMOLITION SCOPE**

DESIGNED: JS  
DRAWN: G70  
CHECKED: KC  
APPROVED: -  
SUBMITTED: BID SUBMITTAL  
DATE: 04/13/2026  
SCALE: AS NOTED

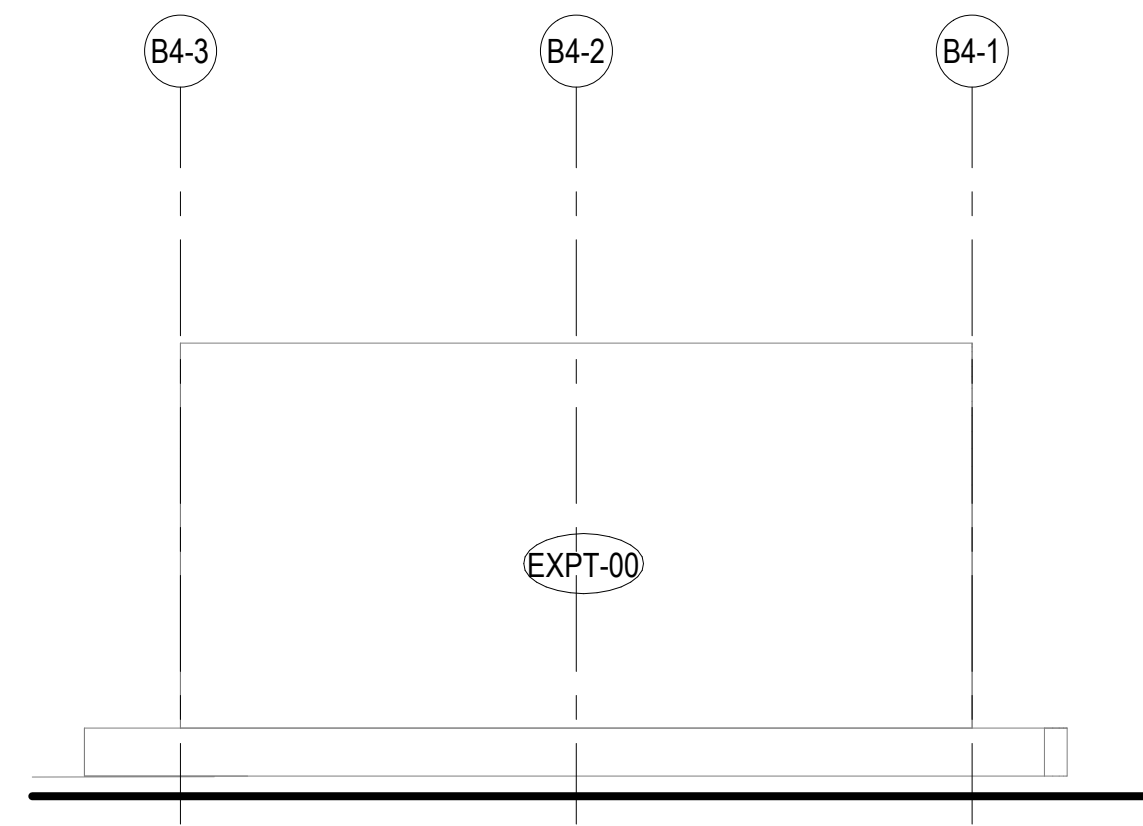
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

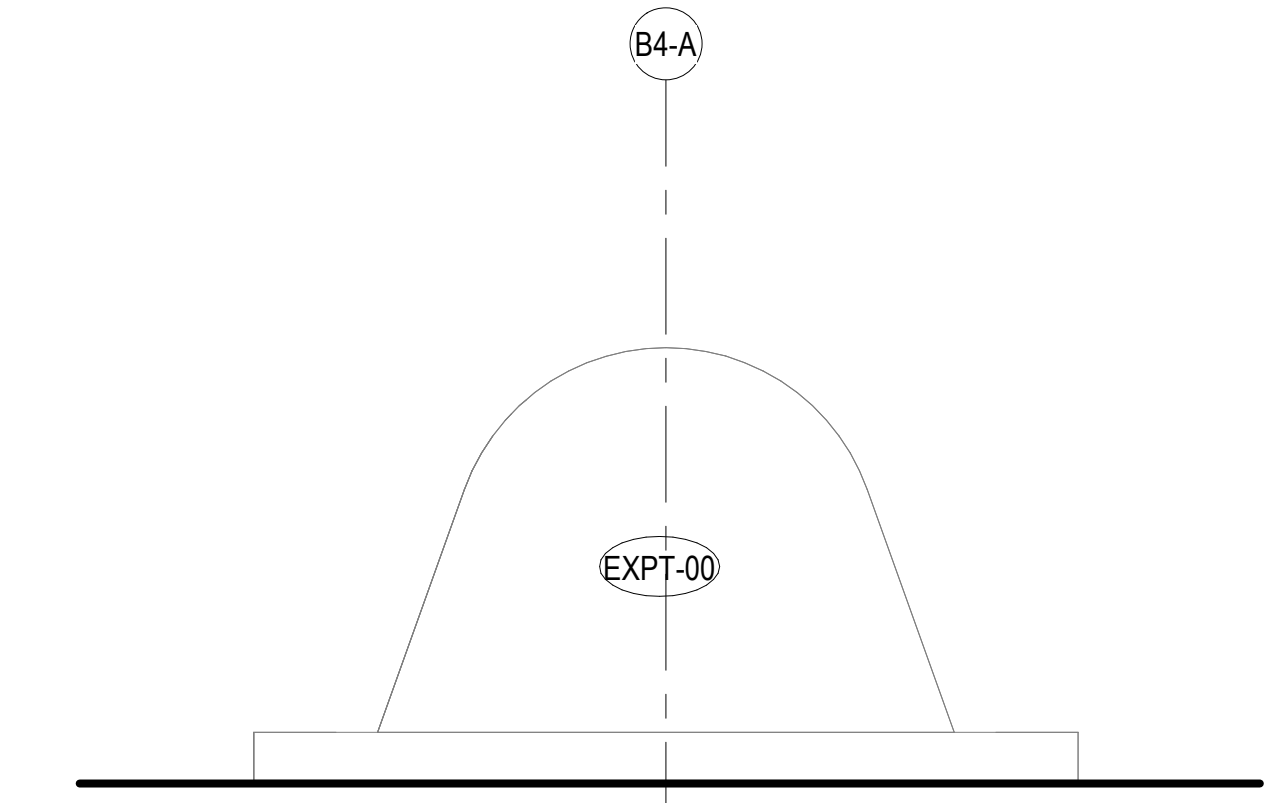
**D5-101**



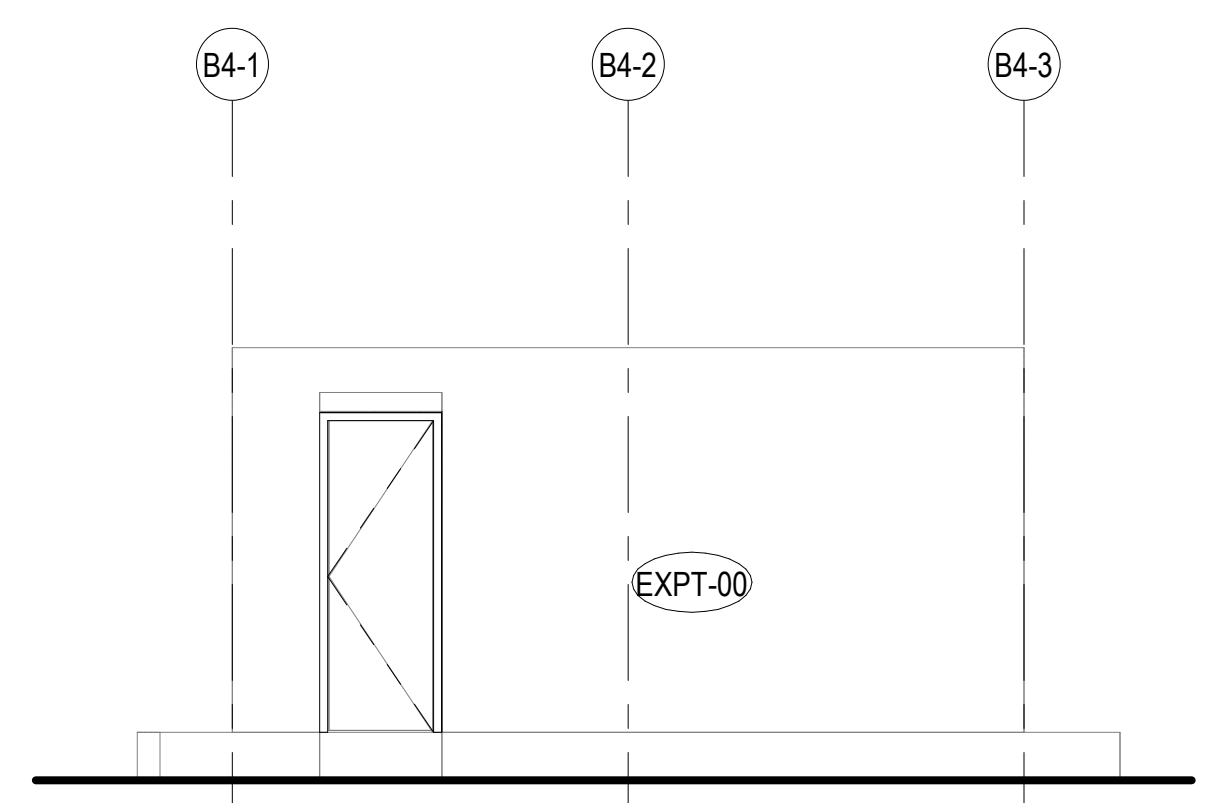
**3 AIR RAID SHELTER NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"



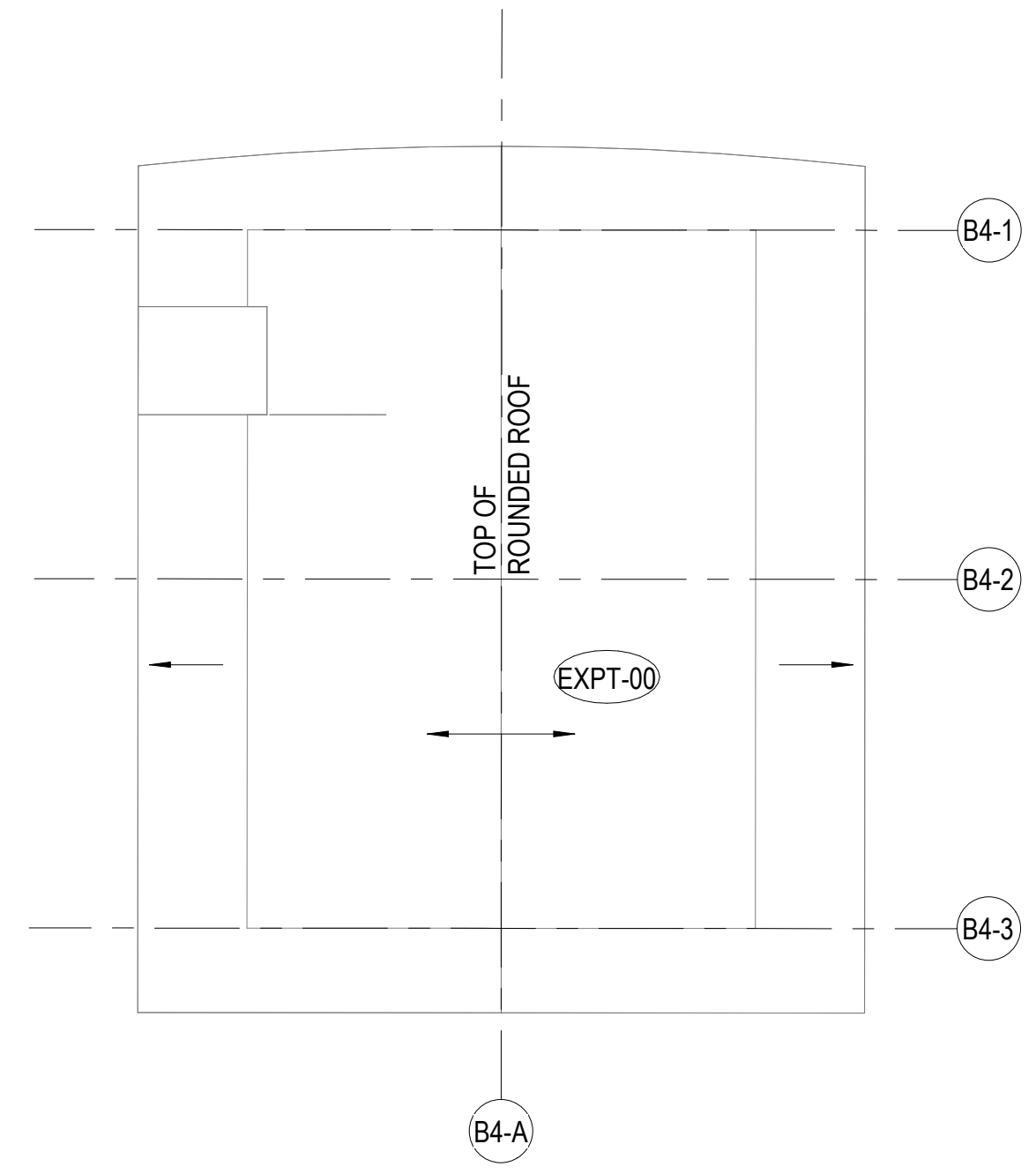
**4 AIR RAID SHELTER EAST ELEVATION**  
SCALE: 1/4" = 1'-0"



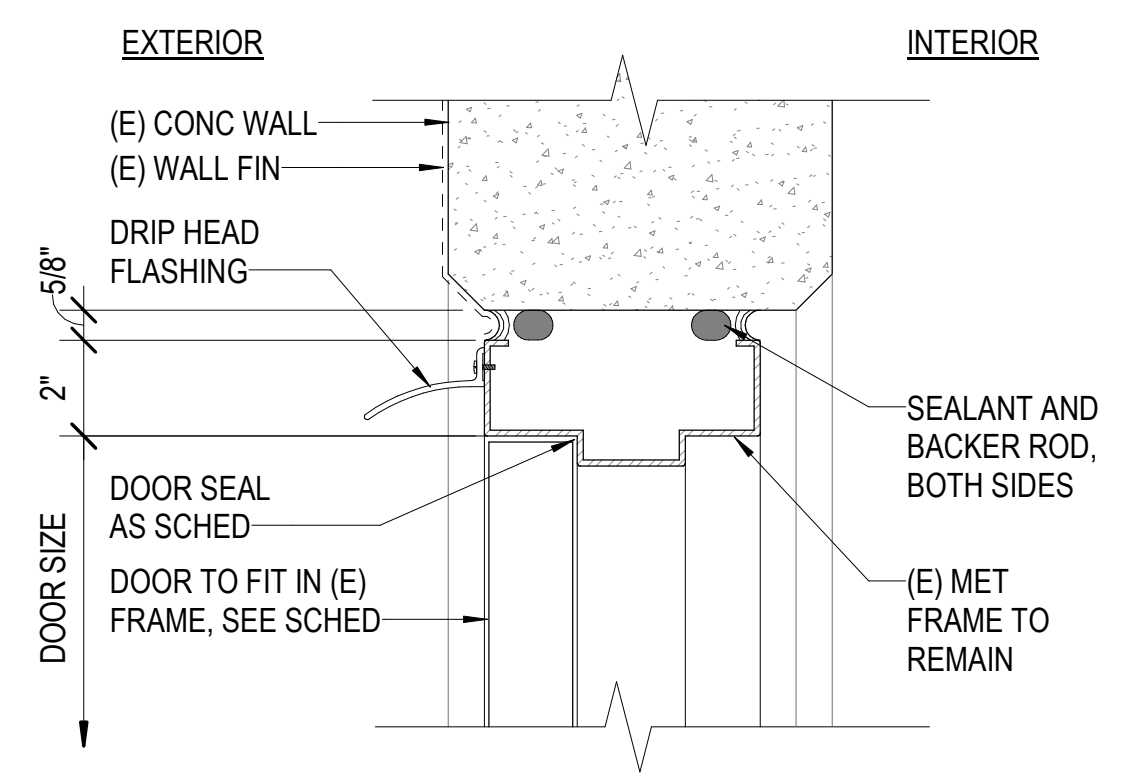
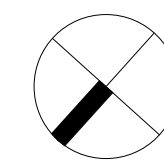
**5 AIR RAID SHELTER SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"



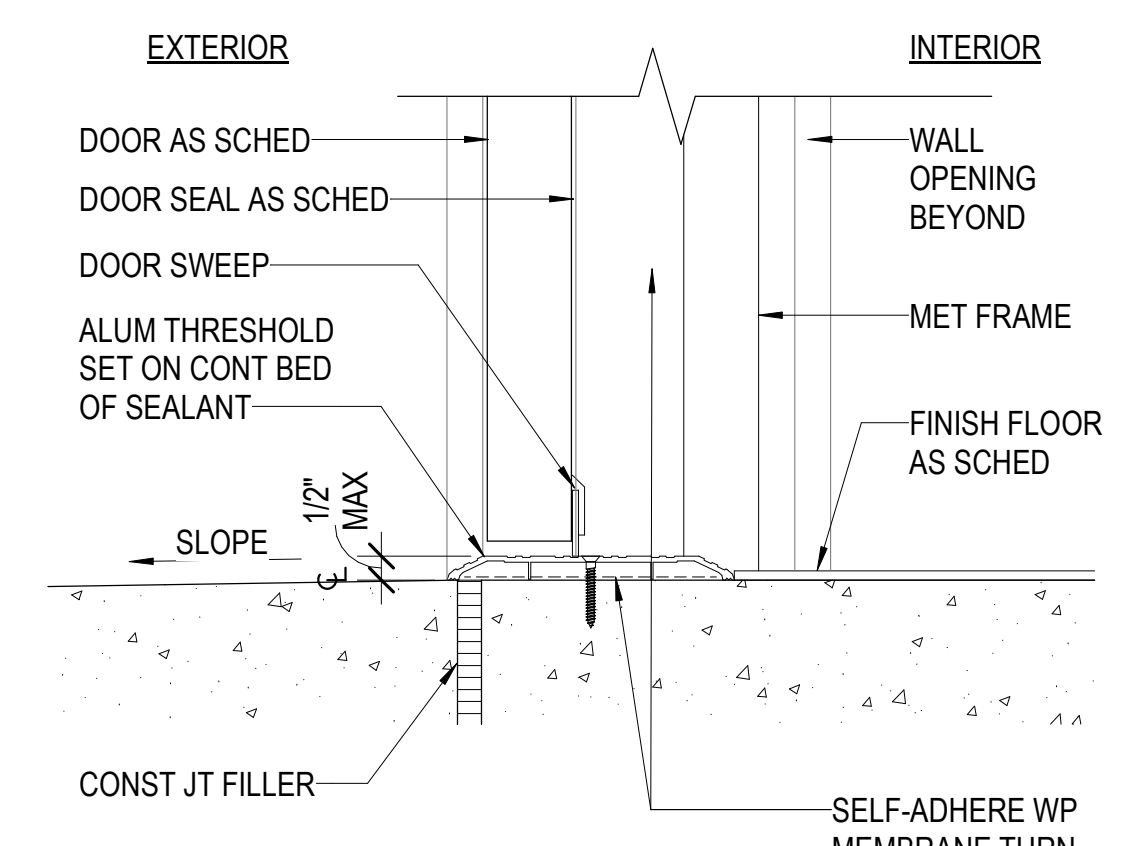
**6 AIR RAID SHELTER WEST ELEVATION**  
SCALE: 1/4" = 1'-0"



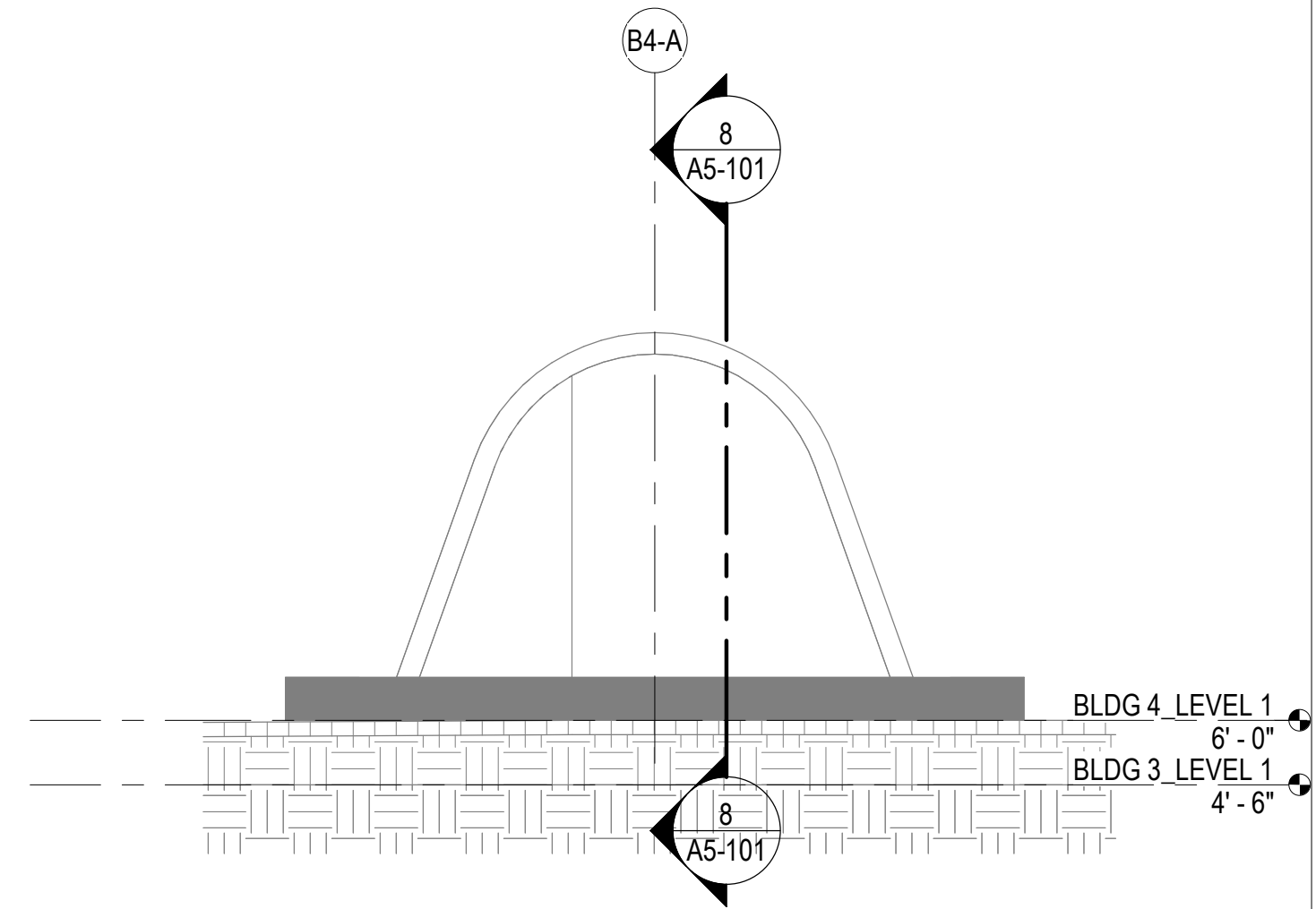
**1 AIR RAID SHELTER ROOF PLAN**  
SCALE: 1/4" = 1'-0"



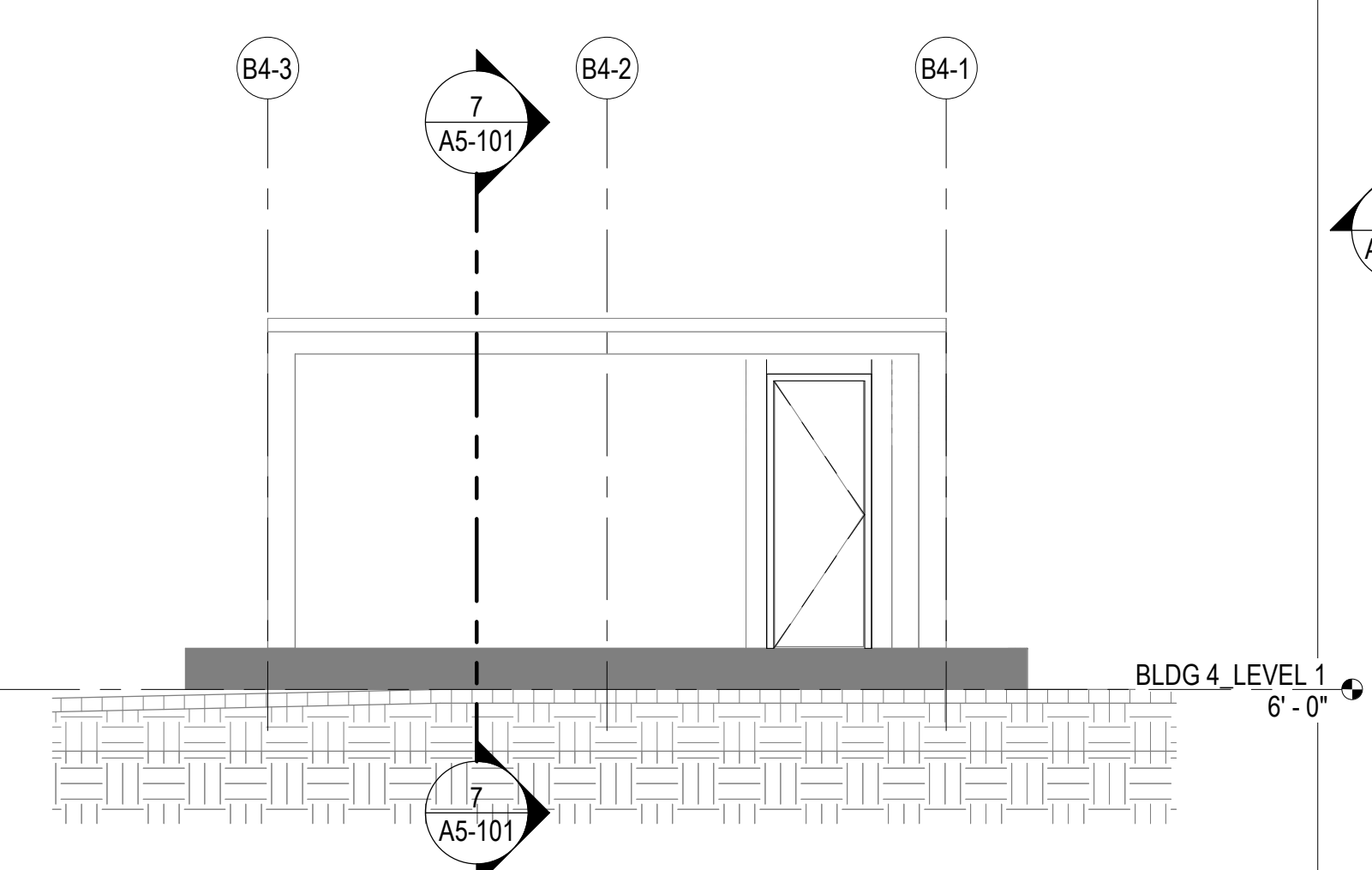
**9 (E) FRAME DR HEAD (JAMB SIM)**  
SCALE: 3" = 1'-0"



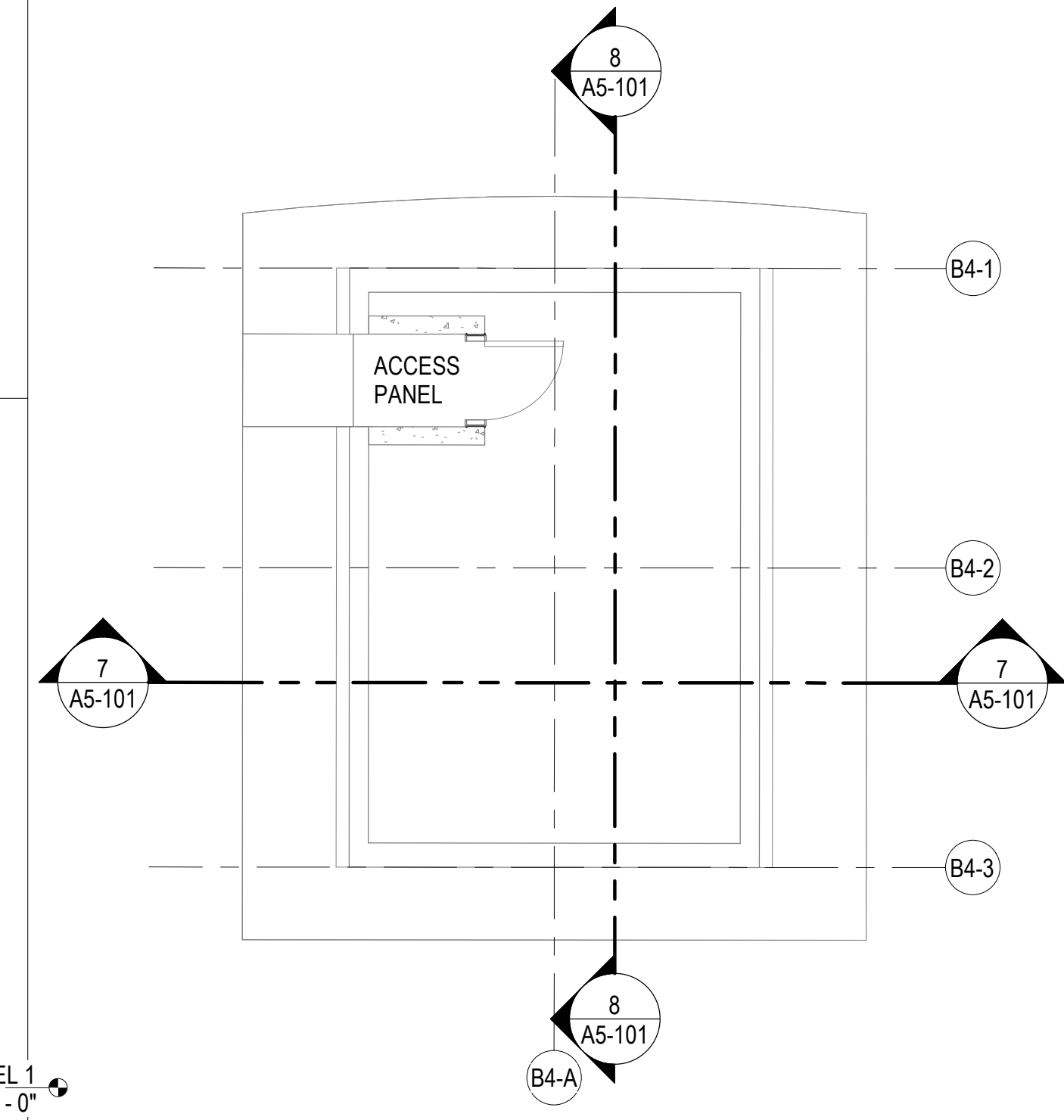
**10 EXT DR THRESHOLD**  
SCALE: 3" = 1'-0"



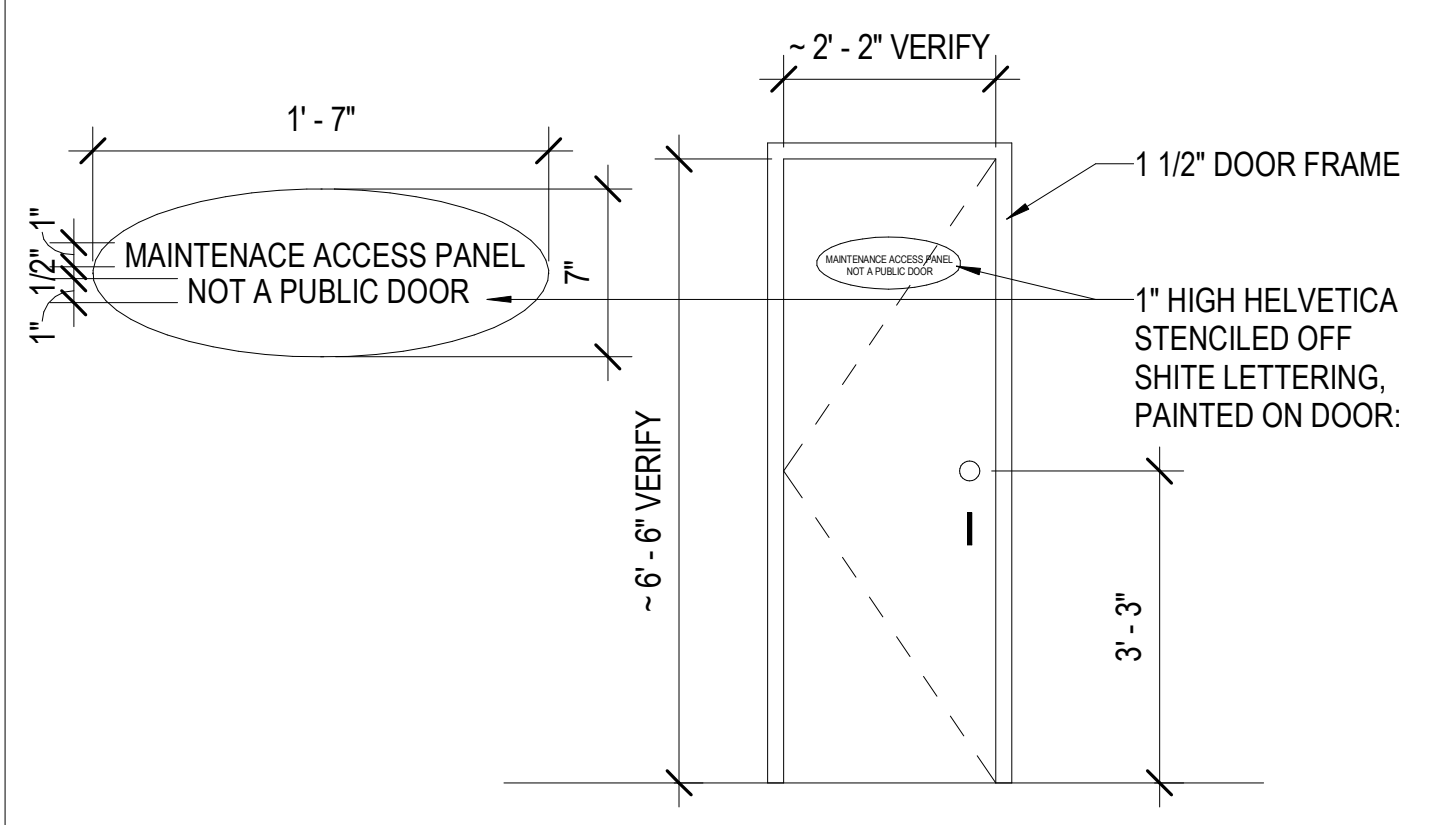
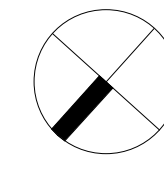
**7 AIR RAID SHELTER CROSS SECTION**  
SCALE: 1/4" = 1'-0"



**8 AIR RAID SHELTER LONGITUDINAL SECTION**  
SCALE: 1/4" = 1'-0"



**2 AIR RAID SHELTER FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**11 ACCESS PANEL**  
SCALE: 1/2" = 1'-0"



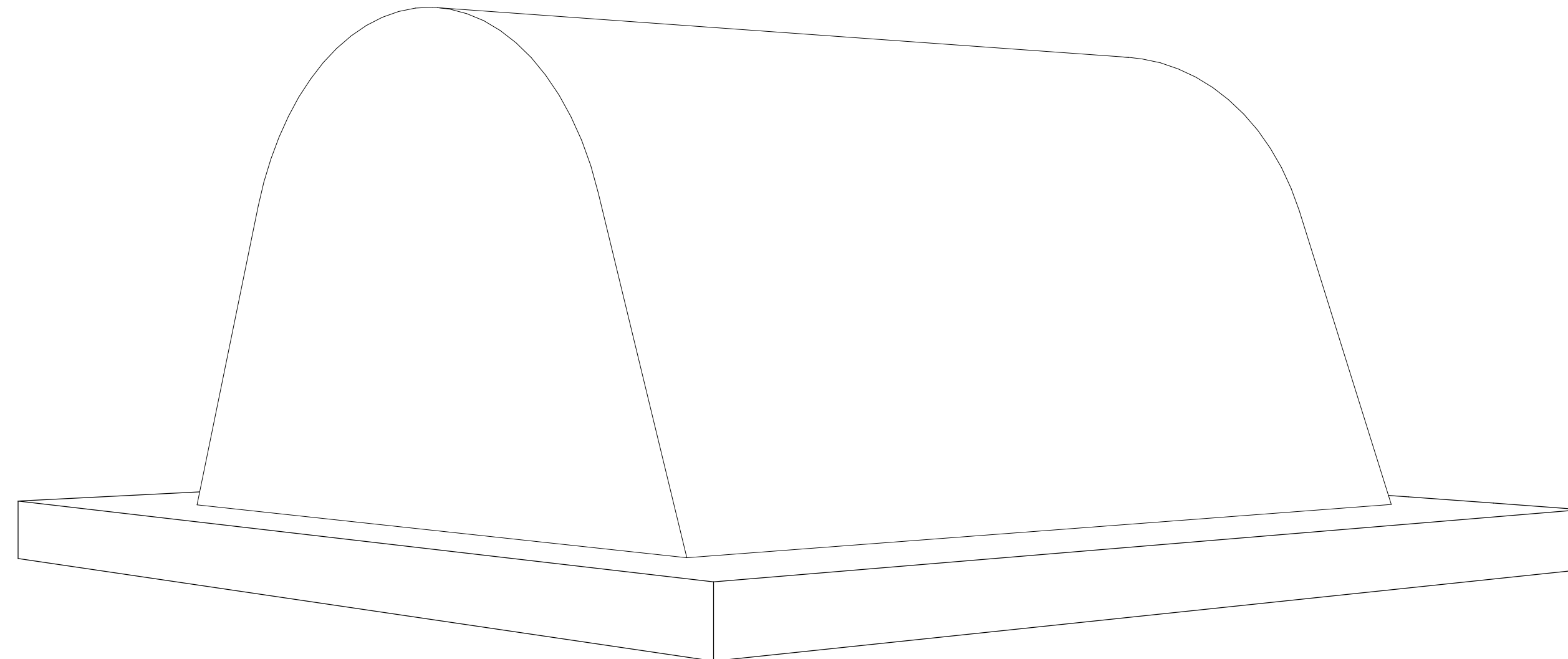
1	ADDENDUM NO. 1	04/30/2026	APPROVED:
REVISION NO	SYM	DESCRIPTION	DATE

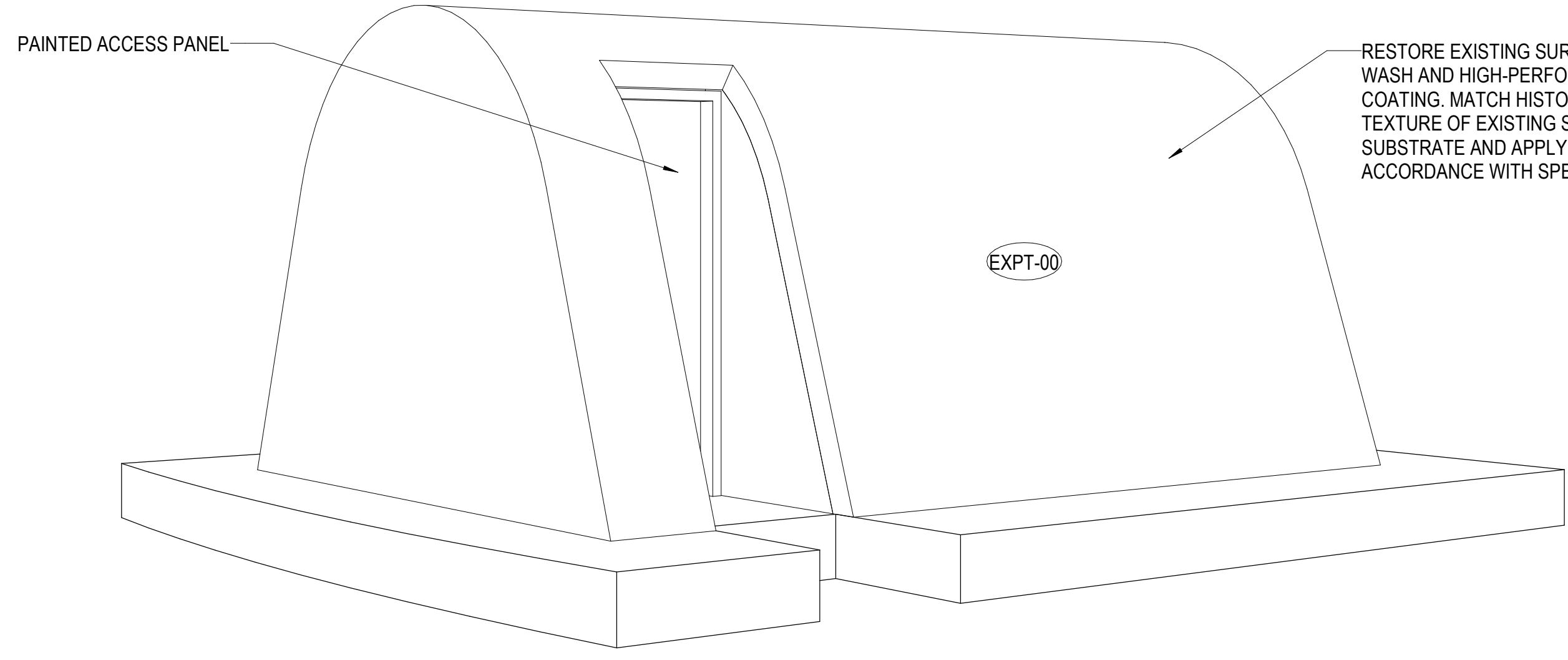
		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>AIR RAID SHELTER PLANS AND ELEVATIONS</b>	
DESIGNED: JS		SUBMITTED: BID SUBMITTAL	
DRAWN: G70		DATE: 04/13/2026	
CHECKED: KC		SCALE: AS NOTED	
APPROVED: -			

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. Dina Lau E-signed 2026-05-06 09:09AM HST dina.lau@hawaii.gov State of Hawaii Civil Engineer	<b>A5-101</b>
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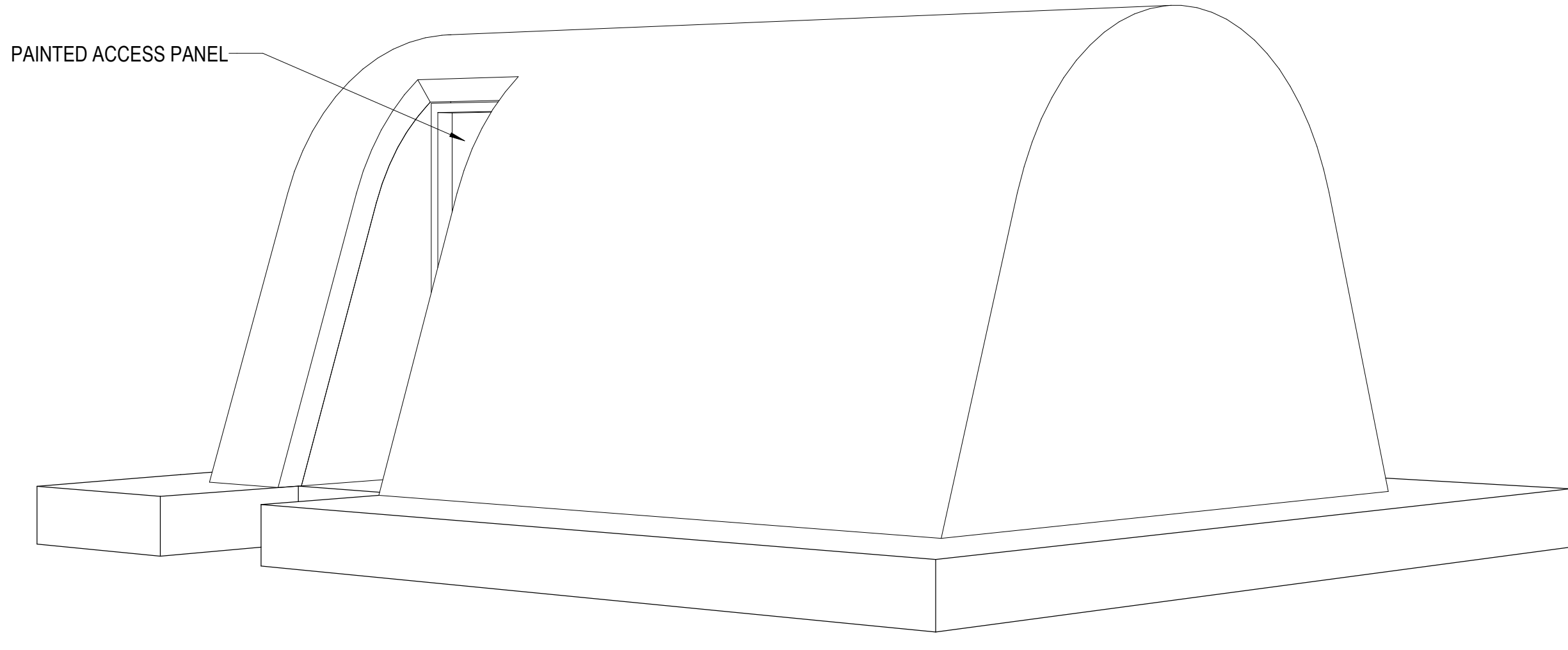
**2** AIR RAID SHELTER PERSPECTIVE  
SCALE:



**1** AIR RAID SHELTER PERSPECTIVE  
SCALE:



**3** AIR RAID SHELTER PERSPECTIVE  
SCALE:



**4** AIR RAID SHELTER PERSPECTIVE  
SCALE:

NOT TO SCALE. PERSPECTIVE DRAWINGS ARE REPRESENTATIVE OF THE INTENDED HISTORICALLY RESTORED STRUCTURE. DO NOT SCALE FROM THIS DRAWING. REFER TO PLAN, ELEVATION, AND DETAIL DRAWINGS FOR DIMENSIONS AND CONSTRUCTION REQUIREMENTS. MATERIALS, FINISHES, AND SPECIFIC EXTERIOR TREATMENTS SHALL BE AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.

1	1	Addendum No. 1	04/30/2026
REVISION NO	SYM	DESCRIPTION	DATE
			APPROVED:

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**AIR RAID SHELTER PERSPECTIVE VIEWS**

DESIGNED: JS

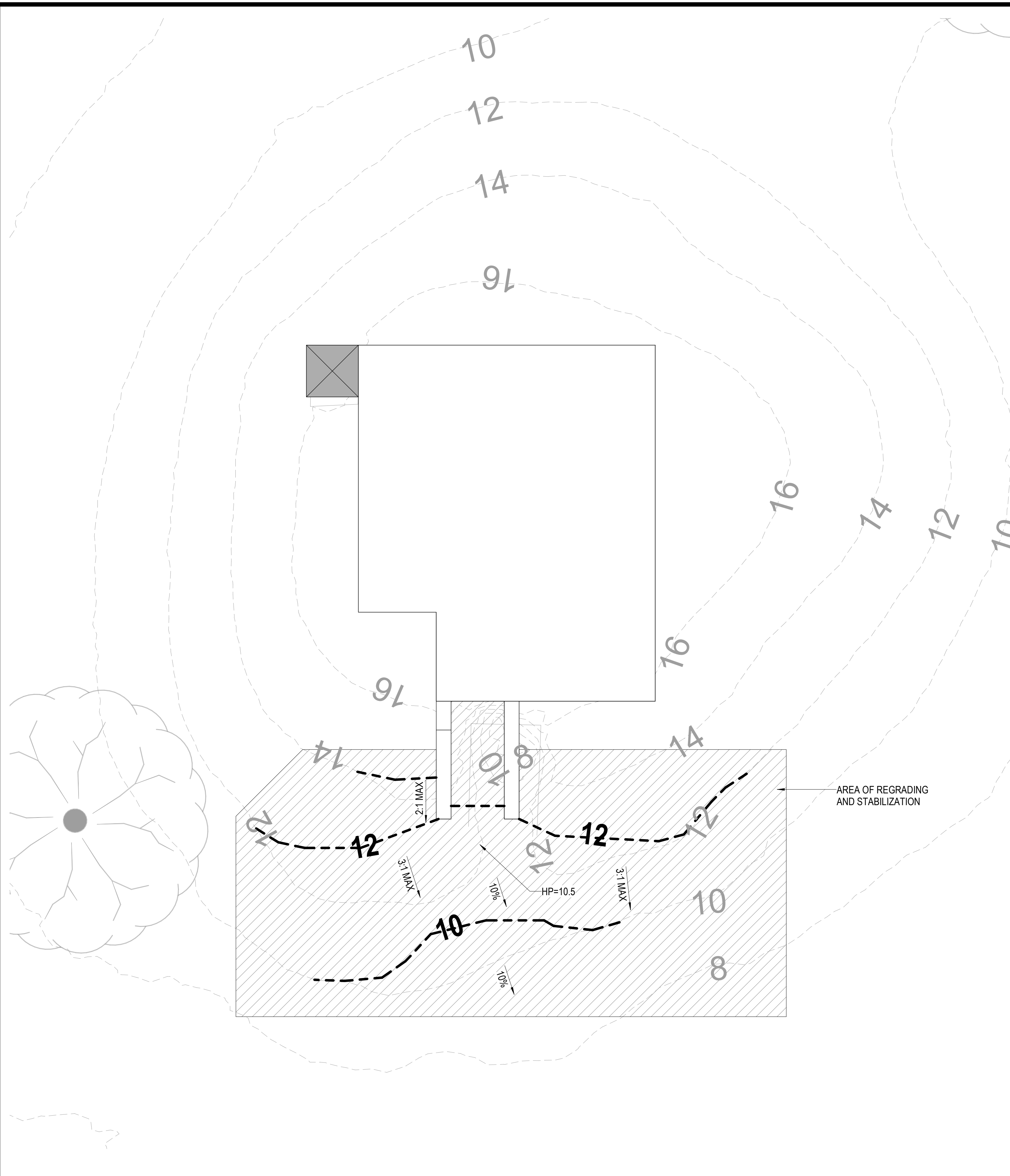
DRAWN: G70  
CHECKED: KC  
APPROVED:

SUBMITTED: **BID SUBMITTAL**  
DATE: 04/13/2026  
SCALE: AS NOTED

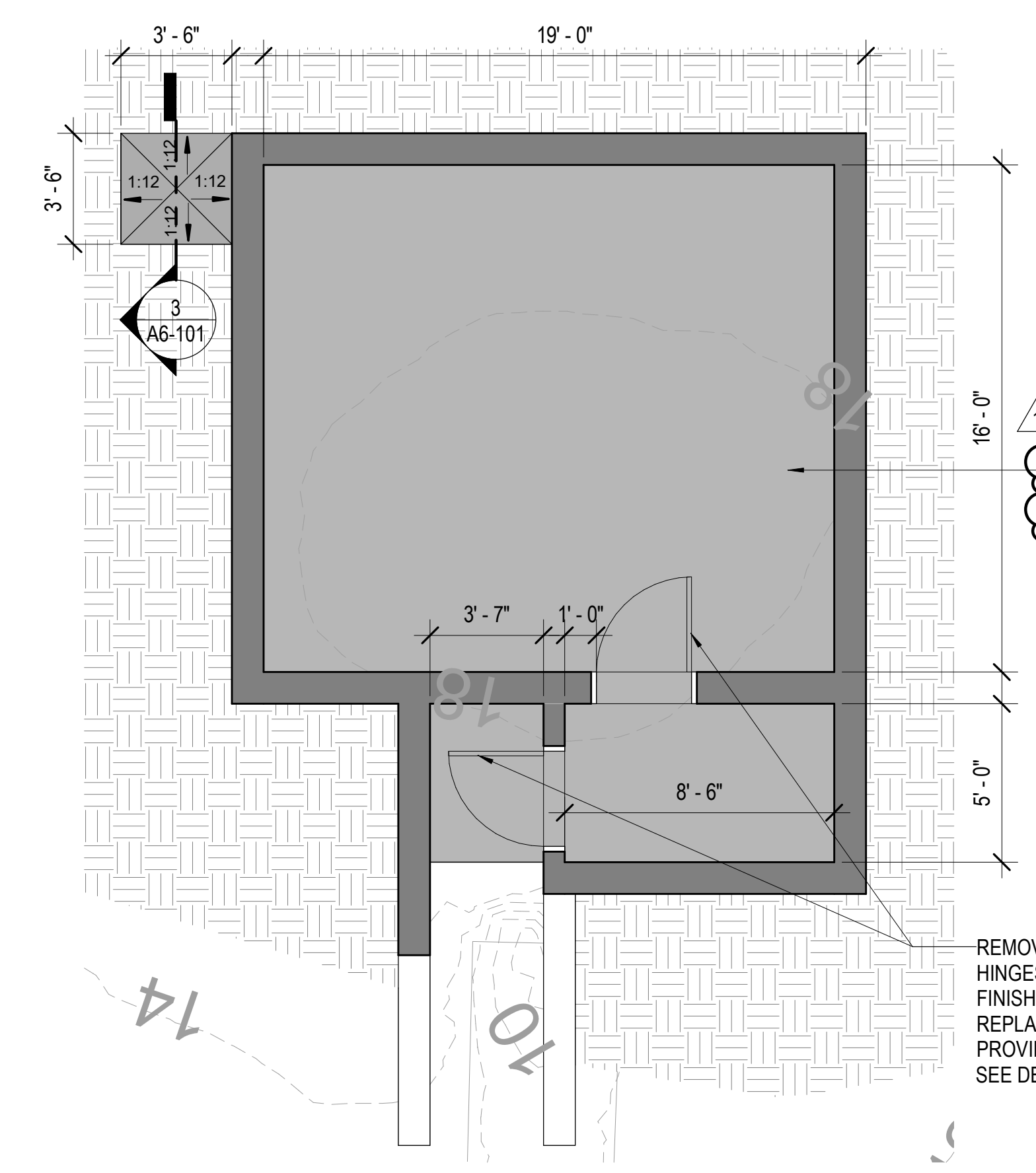
Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

**A5-102**

JOB NO. F70C616H 20 OF 29



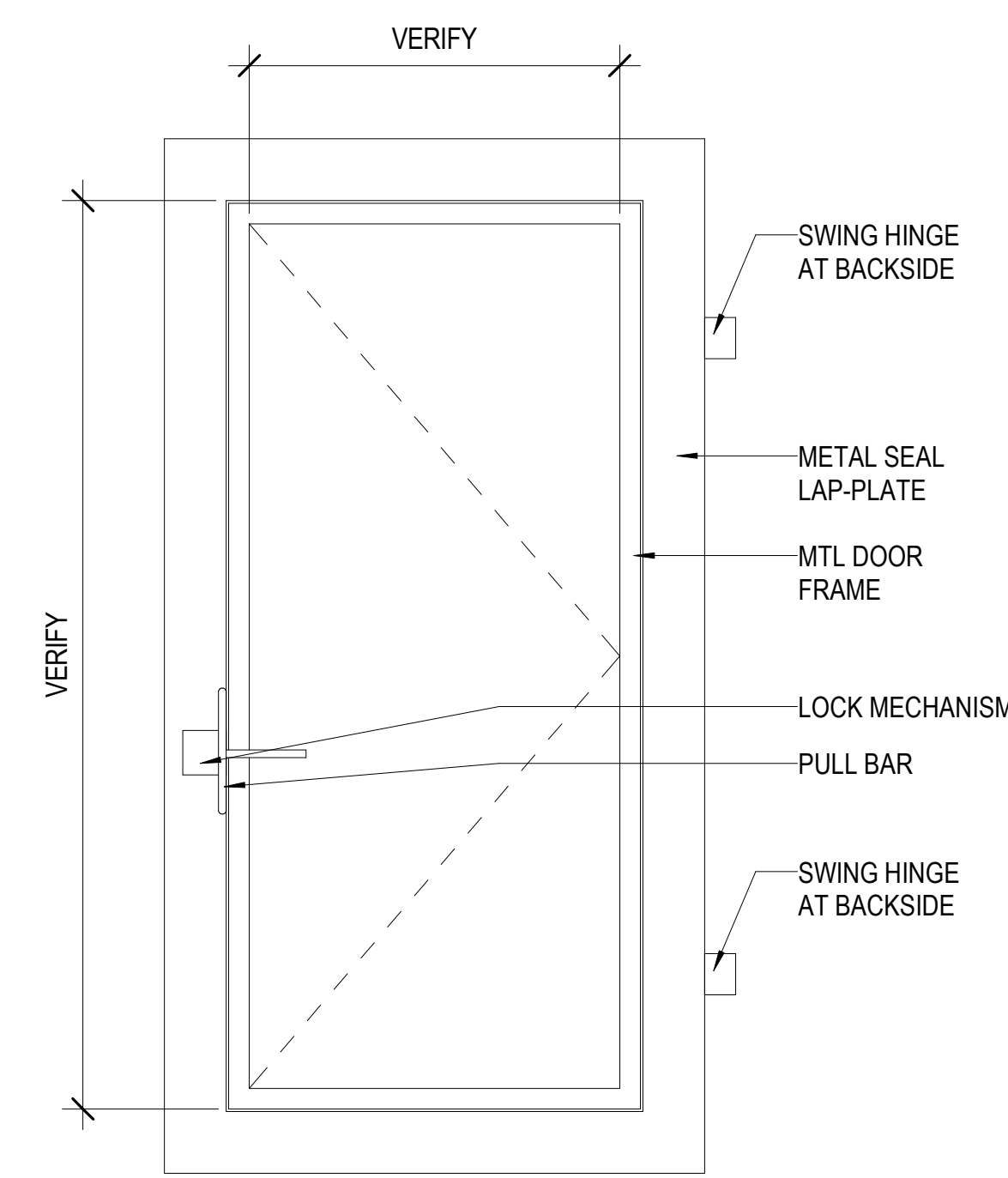
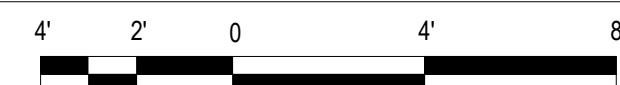
**2 UNDERGROUND PLOTTING ROOM - ROOF PLAN**  
SCALE: 1/4" = 1'-0"



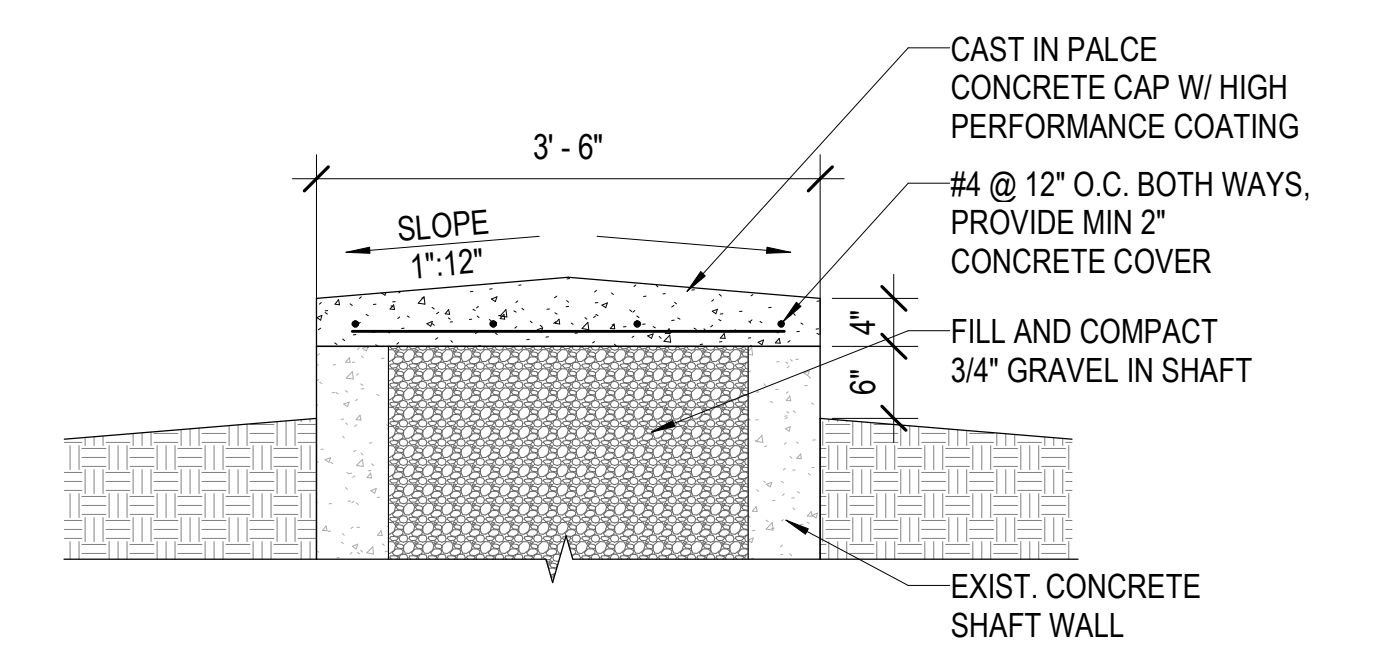
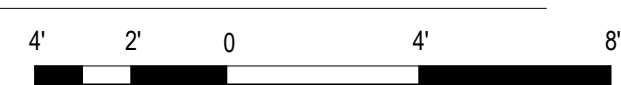
REMOVE AND DISPOSE OF INTERIOR DEBRIS AS PART OF DEMOLITION SCOPE

REMOVE EXISTING HISTORIC STEEL DOORS AND HINGES; FULLY REHABILITATE, REPAIR, AND RE-FINISH; REINSTALL IN OPERABLE CONDITION. REPLACE LOCK CORE AND DOOR STRIKE TO PROVIDE FUNCTIONAL LOCKING. SEE DET 4/A6-101 THIS SHEET

**1 UNDERGROUND PLOTTING ROOM - FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**4 REHABILITATE HISTORIC DOOR**  
SCALE: 3/4" = 1'-0"



**3 ROOF HATCH-VENT SECTION**  
SCALE: 3/4" = 1'-0"



1	ADDENDUM NO. 1	SHT. 21 OF 29	DATE: 04/30/2026	APPROVED:
REVISION NO.	SYM.	DESCRIPTION		
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION				
<b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006				
<b>UNDERGROUND PLOTTING ROOM - PLAN</b>				
DESIGNED:	JS	SUBMITTED:	BID SUBMITTAL	
DRAWN:	G70	DATE:	04/13/2026	
CHECKED:	KC	SCALE:	AS NOTED	
APPROVED:				
 EXPIRES: 4/30/2028		Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer		
		<b>A6-101</b>		

**GENERAL**

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS.
- THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, WIND, SEISMIC, ETC.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. EXISTING CONDITIONS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH FIELD CONDITIONS IN ORDER TO PROPERLY BID THIS PROJECT AND EXECUTE THE WORK REQUIRED BY THESE CONSTRUCTION / BID DOCUMENTS.
- THE CONTRACTOR SHALL REVIEW ALL EXISTING CONDITIONS TO DETERMINE ALL SERVICES AFFECTED BY THE WORK AND MAKE ANY NECESSARY TEMPORARY OR PERMANENT CONNECTIONS TO MAINTAIN THESE SERVICES. THE CONTRACTOR SHALL SUBMIT THE METHODS AND SCHEDULE OF THESE CONNECTIONS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL INSPECT THE EXISTING BUILDING TO SURVEY THE EXISTING CONDITIONS BEFORE STARTING ANY WORK. ANY DAMAGE CAUSED BY THE CONTRACTOR AS A RESULT OF WORK PERFORMED IN THIS PROJECT SHALL BE REPAIRED OR REPLACED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR. AREAS OF EXISTING SURFACES NEWLY EXPOSED AS THE RESULT OF THE WORK SHALL BE PATCHED AND FINISHED TO MATCH EXISTING ADJACENT FINISHED SURFACES.
- DRAWINGS INDICATE TYPICAL AND SPECIFIC DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF SIMILAR CHARACTER TO THE DETAILS SHOWN, SIMILAR CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE ARCHITECT. THE CONTRACTOR SHALL SUBMIT A WRITTEN CLARIFICATION WITH AN ACCURATE SKETCH DEPICTING THESE CONDITIONS AND OBTAIN A WRITTEN RESPONSE FROM THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. THIS SHALL NOT CONSTITUTE A BASIS OF EXTRA WORK.
- CONTRACTOR SHALL NOT CUT OR DRILL THROUGH REINFORCING WHILE WORKING ON ANY EXISTING CONCRETE COLUMNS OR WALLS. CONTRACTOR SHALL LOCATE EXISTING REBAR PRIOR TO DRILLING, CORING, OR SAWCUTTING ANY CONCRETE ELEMENTS.
- DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.
- SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL FLOOR AND WALL OPENINGS, FLOOR FINISHES, ETC.
- SPECIAL NOTE: ARCHITECTURAL PLANS ARE CONSIDERED A PART OF THE STRUCTURAL DESIGN DRAWINGS AND ARE TO BE USED TO DEFINE DETAIL CONFIGURATION INCLUDING, BUT NOT LIMITED TO, RELATIVE LOCATION OF MEMBERS, ELEVATIONS, LOCATIONS OF ALL OPENINGS, DEPRESSIONS, SLOPES, JOINTS, DIMENSIONS, ETC.**
- DESIGN CRITERIA:**
  - BUILDING CODES  
IBC-2018 WITH STATE OF HAWAII AMENDMENTS

**STRUCTURAL ABBREVIATIONS**

APPROX.	APPROXIMATE	MIN.	MINIMUM
ARCH.	ARCHITECTURAL	MISC.	MISCELLANEOUS
BM.	BEAM	(N)	NEW
BOT., (B)	BOTTOM	N.T.S.	NOT TO SCALE
BTWN	BETWEEN	Ø	DIAMETER
C.J.	CONSTRUCTION JOINT	O.C., oc	ON CENTER
C.I.P.	CAST-IN-PLACE	O.H.	OPPOSITE HAND
CL.	CENTERLINE	OPG.	OPENING
CLR.	CLEAR(ANCE)	PL., PL	PLATE
COL.	COLUMN	REINF.	REINFORCEMENT
CONC.	CONCRETE	REQ'D	REQUIRED
CONN.	CONNECTION	SCHED.	SCHEDULE
CONSTR.	CONSTRUCTION	SECT.	SECTION
CONT.	CONTINUOUS	SHT.	SHEET
DET.	DETAIL	SIM.	SIMILAR
DIM.	DIMENSION	SL.	SLOPE
DWG.	DRAWING	SQ.	SQUARE
(E), EXIST.	EXISTING	STD.	STANDARD
EA.	EACH	STIFF.	STIFFENER
EQ.	EQUAL	STRUCT.	STRUCTURAL
E.S.	EACH SIDE	(T)	TOP (REINFORCEMENT)
EXT., EXTER.	EXTERIOR	T&B	TOP & BOTTOM
FL., FLR.	FLOOR	THRU	THROUGH
FIN.	FINISH	T.O.S.	TOP OF SLAB
GALV.	GALVANIZED	TYP.	TYPICAL
(H), HORIZ.	HORIZONTAL	U.O.N.	UNLESS OTHERWISE NOTED
INFO	INFORMATION	VERT., (V)	VERTICAL
JT.	JOINT	V.I.F.	VERIFY IN FIELD
MAX.	MAXIMUM	W/	WITH
MECH.	MECHANICAL		

**CONCRETE**

- ALL CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED.
- ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, WITH MODIFICATIONS AS NOTED IN THE CONTRACT DOCUMENTS.
- CONCRETE MIXING OPERATION, ETC., SHALL CONFORM TO C-94.
- PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 304 AND CONTRACT DOCUMENTS.
- ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 PSI WITH A MAXIMUM WATER CEMENT RATIO OF 0.4, U.O.N. FOUNDATION CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 4000 PSI WITH A MAXIMUM WATER CEMENT RATIO OF 0.5
- PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR TYPE II, LOW ALKALI.
- CONCRETE MIXES SHALL BE DESIGNED BY AN APPROVED LABORATORY. ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE NOT ALLOWED.
- NORMAL WEIGHT CONCRETE AGGREGATES SHALL CONFORM TO ASTM C-33.
- NON-SHRINK CEMENT GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 7000 PSI. USE SIKA GROUT 212" OR "MASTERFLOW 928".
- THOROUGHLY CLEAN AND ROUGHEN ALL EXISTING CONCRETE, CONCRETE PREVIOUSLY POURED AND HARDENED AND MASONRY SURFACES TO RECEIVE NEW CONCRETE. INTERFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 1/4" UNLESS NOTED OTHERWISE.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT PLACED IN CAST-IN-PLACE CONCRETE:
  - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
  - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
    - #5 BAR, W31 OR D31 WIRE, AND SMALLER 1 1/2"
    - #6 THROUGH # 18 BARS 2"
  - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
    - SLABS, WALLS AND JOISTS:
      - #14 AND #18 BARS 1 1/2"
      - #11 BAR AND SMALLER 1"
    - BEAMS, COLUMNS AND WALL JAMBS:
      - PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS:
        - #3 THROUGH #11 1 1/2"
        - #14 AND #18 BARS 2 1/2"
- ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
- PROJECTING CORNERS OF BEAMS, WALLS, COLUMNS, ETC., SHALL BE FORMED WITH A 3/4 IN. CHAMFER, UNLESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS.
- CURING COMPOUNDS USED ON CONCRETE TO RECEIVE A FINISH SHALL BE APPROVED BY THE FINISH APPLICATOR BEFORE USE.
- ALL STRUCTURAL CONCRETE SHALL HAVE A MAXIMUM WATER-TO-CEMENTITIOUS MATERIALS RATIO OF 0.50
- COORDINATE SIZE OF ROUGH OPENINGS FOR WINDOWS AND DOORS IN CONCRETE WALLS WITH ARCHITECTURAL DRAWINGS.

**REINFORCING STEEL**

- ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE' (ACI 318) AND THE 'MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION' BY THE C.R.S.I. AND THE W.C.R.S.I., OR AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
- ALL NEW REINFORCING STEEL SHALL BE CHROMX 4100 W/ COATED TIE WIRE.
- WELDING OF REINFORCEMENT IS NOT PERMITTED DUE TO UNKNOWN PROPERTIES OF EXISTING REINFORCING.
- DRAWINGS SHOW TYPICAL REINFORCING CONDITIONS. CONTRACTOR SHALL PREPARE DETAILED PLACEMENT DRAWINGS OF ALL CONDITIONS SHOWING QUANTITY, SPACING, SIZE, CLEARANCES, LAPS, INTERSECTIONS AND COVERAGE REQUIRED BY STRUCTURAL DETAILS, APPLICABLE CODE AND TRADE STANDARDS. CONTRACTOR SHALL NOTIFY REINFORCING DEPUTY INSPECTOR OF ANY ADJUSTMENTS FROM TYPICAL CONDITIONS THAT ARE PROPOSED IN PLACEMENT DRAWINGS TO FACILITATE FIELD PLACEMENT OF REINFORCING STEEL AND CONCRETE.
- ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
- REINFORCING SPLICES SHALL ONLY BE MADE AS INDICATED ON THE DRAWINGS.
- DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE VERTICAL REINFORCING, RESPECTIVELY, UNLESS NOTED OTHERWISE.
- DOWELS BETWEEN SLABS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE VERTICAL REINFORCING, RESPECTIVELY, UNLESS NOTED OTHERWISE.
- ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.

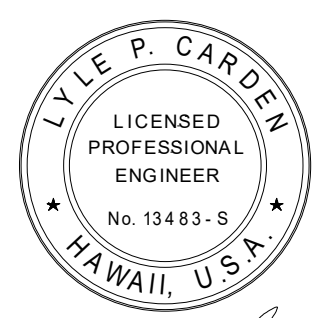
**STRUCTURAL STEEL, METAL DECK, AND MISC. METAL**

- ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- GENERAL CONTRACTOR TO DETERMINE SCOPE OF WORK FOR BOTH STRUCTURAL STEEL AND MISCELLANEOUS METAL SUBCONTRACTORS (IF MULTIPLE SUBCONTRACTORS ARE USED). THE COMBINED SCOPE OF WORK FOR ALL SUBCONTRACTORS SHALL INCLUDE ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK SHOWN ON THE CONTRACT DRAWINGS.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW UNLESS NOTED OTHERWISE:
 

ALL WIDE FLANGE AND WT SHAPES	A992, GRADE 50
HSS (RECTANGULAR, SQUARE OR ROUND)	A500, GRADE B
STEEL PIPE (NOT LABELED AS HSS)	A53, GRADE B
ALL OTHER STRUCTURAL SECTIONS	A572, GRADE 50
BEAM SHEAR PLATES, STIFFENER PLATES ALL OTHER PLATES	A572, GRADE 50
HIGH STRENGTH BOLTS	F3125 GR. A325N
NUTS	A563
HARDENED WASHERS	F436
STAINLESS STEEL BOLTS NUTS AND WASHERS	F593, GRADE 316
- HIGH STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AISC SPECIFICATIONS FOR STRUCTURAL JOINTS.
- HOT DIP GALVANIZE IN ACCORDANCE WITH ASTM A123 AND ASTM A153 STRUCTURAL STEEL, MISCELLANEOUS METAL AND FASTENERS THAT ARE EXPOSED TO THE WEATHER. REPAIR GALVANIZING AFTER WELDING IN ACCORDANCE WITH ASTM A780.
- WHEN FABRICATING BEAMS, PLACE NATURAL CAMBER UP. PROVIDE UPWARD CAMBER TO ALL MEMBERS SHOWN TO HAVE CAMBER. AMOUNT MEASURED IN THE FIELD PRIOR TO ERECTION SHALL NOT DEVIATE BY MORE THAN ALLOWED BY THE AISC SPECIFICATIONS.
- SPLICE MEMBERS ONLY WHERE INDICATED.
- THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS FOR THE ENGINEER'S REVIEW BEFORE FABRICATION. SUBMITTALS SHALL BE IN SIZES COMMENSURATE WITH A TWO WEEK TURNAROUND TIME. A MAXIMUM OF 250 SHOP DRAWINGS EVERY TWO WEEKS IS PERMITTED UNLESS WRITTEN AUTHORIZATION IS PROVIDED BY THE ARCHITECT TO CHANGE THIS LIMIT.
- AFTER FABRICATION, ALL STEEL SHALL BE CLEANED FREE OF RUST, LOOSE MILL SCALE AND OIL.
- BOLT HOLES IN STEEL SHALL BE STANDARD HOLES, 1/16 INCH LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES IN BASE PLATES MAY BE OVERSIZED PER AISC TABLE 14-2 IF WASHERS ARE PROVIDED IN ACCORDANCE WITH THIS TABLE.
- BOLTS SHALL BE SPACED AT 3" O.C. UNLESS NOTED OTHERWISE. THE DISTANCE FROM THE EDGE OF A STANDARDS HOLE TO THE EDGE OF A CONNECTING PART IN ANY DIRECTION SHALL NOT BE LESS THAN 1 1/2" U.N.O. THE EDGE DISTANCE MAYBE 1 1/4" AT THE ENDS OF BEAM CONNECTION ANGLES AND SHEAR END PLATES. THE DISTANCE FROM CENTER OF AN OVERSIZED OR SLOTTED HOLE TO THE EDGE OF A CONNECTING PART SHALL NOT BE LESS THAN THAT REQUIRED FOR A STANDARD HOLE TO THE EDGE OF A CONNECTED PART PLUS THE APPLICABLE INCREMENT C/2 FROM AISC TABLE J3.5.
- ALL STRUCTURAL STEEL SURFACES TO BE WELDED OR HIGH-STRENGTH BOLTED, TO BE ENCASED IN CONCRETE OR TO RECEIVE SPRAY-APPLIED FIREPROOFING SHALL BE LEFT UNPAINTED.

**STEEL WELDING**

- ALL WELDING SHALL BE IN STRICT CONFORMANCE WITH THE LATEST EDITION OF AWS D1.1. ALL WELDED JOINTS SHALL BE PRE-QUALIFIED PER THE LATEST EDITION OF AWS D1.1. ALL NON PRE- QUALIFIED WELDED JOINTS SHALL BE QUALIFIED BY TEST & PROCEDURE QUALIFICATION TEST RECORD INCLUDED PER THE LATEST EDITION OF AWS D1.1.
- WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WELD SIZE SHALL BE AISC MINIMUM UNLESS A LARGER SIZE IS NOTED. WHERE LENGTH OF WELD IS NOT SHOWN IT SHALL BE FULL LENGTH OF JOINT. ALL BUTT AND GROOVE WELDS SHALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE.
- ALL WELDING ELECTRODES AND ELECTRODE FLUX COMBINATIONS (FILLER METAL) SHALL BEE 7XTX, E7XTXX OR E70XXX (MINIMUM 70 KSI), UNLESS NOTED OTHERWISE, AND SHALL MEET THE REQUIREMENTS FOR H16 PER AISC SEISMIC PROVISIONS.
- 5ALL WELDS SHALL HAVE A FILLER METAL WITH CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AVERAGE AT MINUS TWENTY DEGREES FAHRENHEIT AND 40FT-LBS AT SEVENTY DEGREES FAHRENHEIT. CERTIFY CONFORMANCE TO CHARPY V-NOTCH TOUGHNESS REQUIREMENTS WITH TESTS BY AN INDEPENDENT TESTING LABORATORY.
- WHERE WELDING IS NOTED, THE DESIGNATION IS GIVEN AS A SUGGESTED CONSTRUCTION PROCEDURE ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IDENTIFYING THE METHOD OF FABRICATION.
- ALL SHOP WELDS SHALL BE PERFORMED BY A FABRICATOR LICENSED BY THE LOCAL JURISDICTION.
- ALL WELDERS SHALL BE QUALIFIED FOR THE WORK THEY WILL BE PERFORMING AND SHALL HAVE CURRENT VALID CERTIFICATIONS ISSUED BY AWS AND THE GOVERNING JURISDICTION.
- FACES OF FILLET WELDS EXPOSED TO VIEW SHALL HAVE AS-WELDED SURFACES THAT ARE REASONABLY SMOOTH AND UNIFORM. NO FINISHING OR GRINDING SHALL BE REQUIRED, EXCEPT WHERE CLEARANCES OR FIT OF OTHER ITEMS MAY SO NECESSITATE.
- CLEAN GROOVE PREPARATION THERMAL CUTS BY GRINDING.
- WELDS SHALL BE TERMINATED AT THE END OF A JOINT IN A MANNER THAT WILL ENSURE SOUND WELDS. WHENEVER NECESSARY THIS SHALL BE DONE BY USE OF EXTENSION BARS AND RUN OFF TABS.
- A WRITTEN "WELDING PROCEDURE SPECIFICATION" (WPS), PER AWS D1.1, SHALL BE DEVELOPED BY THE FABRICATOR/ERECTOR, AND REVIEWED BY THE ENGINEER. THE WPS SHALL CONTAIN ALL THE NECESSARY INFORMATION REQUIRED BY THE CODE, THE SPECIFICATIONS, AND ANY OTHER INFORMATION NECESSARY TO PRODUCE WELDS THAT ARE IN COMPLIANCE WITH THESE REQUIREMENTS. THE WPS SHALL INCLUDE THE WELDING PARAMETERS RECOMMENDED BY THE ELECTRODE MANUFACTURER. ALL WELDERS AND INSPECTORS SHALL ADHERE TO THE WPS AND SHALL RETAIN A COPY.

1	▲	Addendum No. 1	04/30/2026	
REVISION NO.	SYM.	DESCRIPTION	SHT. 22 OF 29	DATE
		APPROVED:		
		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006		
<b>GENERAL NOTES</b>				
DESIGNED: LC				
DRAWN: MCC	SUBMITTED: BID SUBMITTAL			
CHECKED: LC	DATE: 04/13/2026			
APPROVED: LC	SCALE: As indicated			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Chief Engineer		
		<b>S-001</b>		

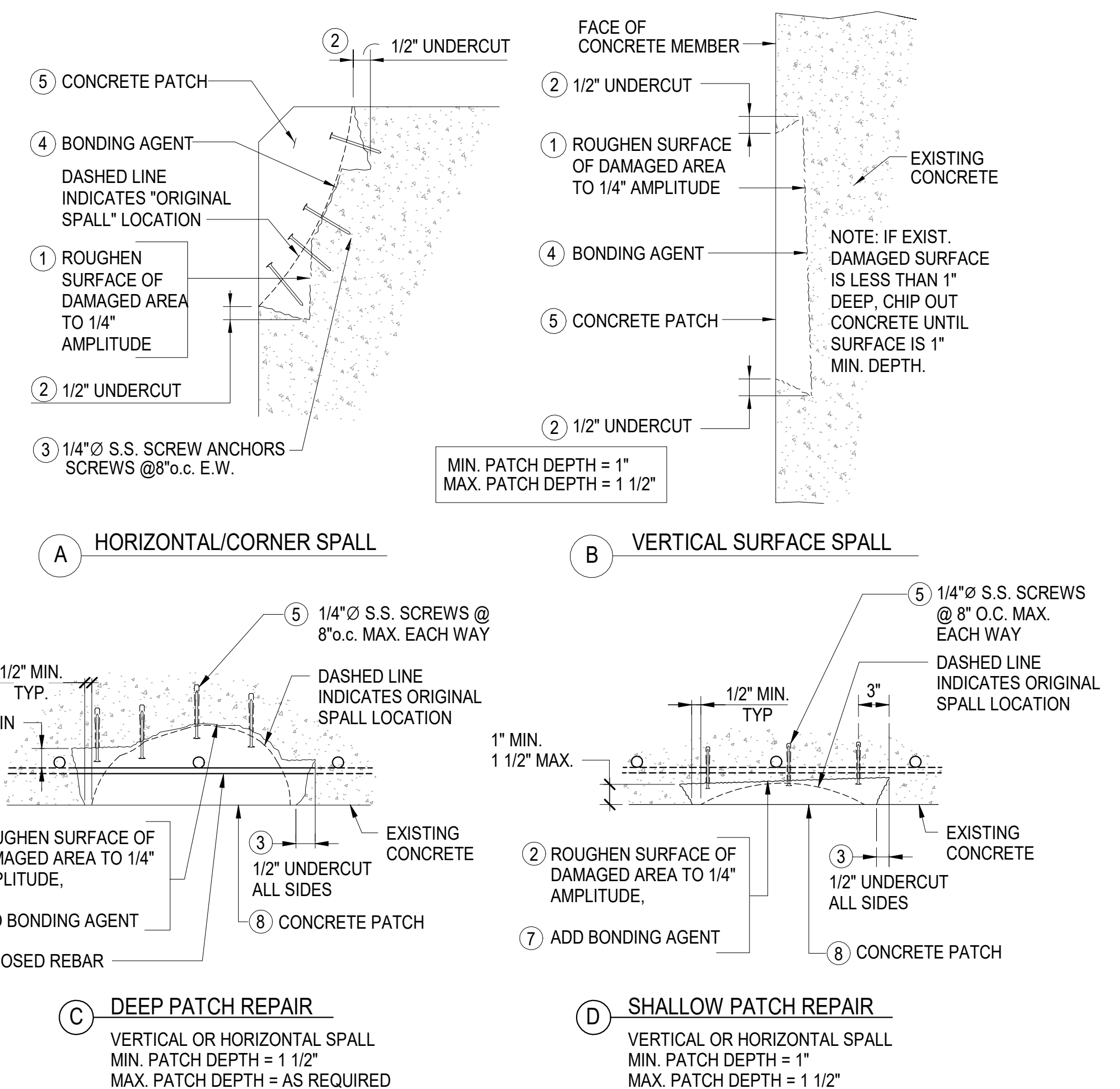
**CONCRETE REPAIR NOTES**

- ALL CONCRETE UNLESS OTHERWISE NOTED SHALL BE REGULAR WEIGHT HARD ROCK TYPE (150#/CU.FT.).
- PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE II.
- AGGREGATE FOR HARD ROCK CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS.
- CONCRETE MIXING OPERATION, ETC. SHALL CONFORM TO ASTM C-94.
- PLACEMENT OF CONCRETE SHALL CONFORM TO ACI STANDARD 301 AND PROJECT SPECIFICATIONS.
- CONCRETE ADMIXTURES CONTAINING CHLORIDE OR CHLORIDE SALTS SHALL NOT BE USED.
- ALL REPAIRS SHALL REESTABLISH ADEQUATE CLEAR COVER TO REINFORCING STEEL. EXISTING STEEL WITHOUT ADEQUATE COVER SHALL BE EXCAVATED UNTIL ADEQUATE COVER IS ACHIEVED.
- PRIOR TO PLACEMENT OF PATCH MATERIAL, THE EXPOSED CONCRETE SHALL BE SATURATED SURFACE DRY WITH NO WATER ACCUMULATION.
- THE SURFACE FINISH SHALL MATCH ADJACENT CONDITIONS.
- FORMS SHALL BE REMOVED AFTER FIVE DAYS OF CURING. PATCHES SHALL BE INSPECTED FOR IMPROPER CONSOLIDATION OR CRACKING AROUND THE PERIMETER OR IN THE PATCH. IF THESE CONDITIONS EXIST, NOTIFY THE ENGINEER FOR POSSIBLE REMEDIAL ACTION.
- CONCRETE WORK SHALL CONFORM TO THE FOLLOWING CODES AND STANDARDS:
  - ACI 301 "SPECIFICATION FOR STRUCTURAL CONCRETE IN BUILDINGS"
  - ACI 304 "GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE"
  - ACI 304.2 "PLACING CONCRETE BY PUMPING METHODS"
  - ACI 305 "HOT WEATHER CONCRETING"
  - ACI 309 "STANDARD PRACTICE FOR CONSOLIDATION OF CONCRETE"
  - ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCING"
  - ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
  - ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
- MINIMUM CONCRETE COVER OF REINFORCING STEEL FOR "PATCHES," REPAIRS, ETC., SHALL BE 1" UNLESS OTHERWISE NOTED ON DRAWINGS.
- EXCAVATE ALL LOOSE FRACTURED CONCRETE AROUND SPALL. IN GENERAL, EXTEND LIMITS OF EXCAVATION UNTIL SOUND CONCRETE IS ENCOUNTERED OR AS SHOWN ON THE DRAWINGS. LIMIT CHIPPING GUN TO 15 LB.
- CLEAN ALL EXISTING REBAR OF ALL LOOSE RUST BY SANDBLAST OR NEEDLE GUN.
- ROUGHEN SURFACE TO 1/4" AMPLITUDE AT ALL INTERFACE CONTACT WITH EXISTING CONCRETE SUBSTRATE. PROVIDE UNDERCUT AT PERIMETER OF CONCRETE PATCH AS SHOWN ON DETAILS.
- CLEAN ALL EXCAVATED CONCRETE SURFACES OF DEBRIS, DUST, GREASE, OIL, ETC.
- IN GENERAL, THE FOLLOWING APPLIES TO REPLACING/SUPPLEMENTING CORRODED REBAR:
  - IF CROSS SECTIONAL LOSS OF BAR IS LESS THAN 10% AFTER REMOVING ALL CORROSION PRODUCT, THE BAR DOES NOT REQUIRE REPLACEMENT/SUPPLEMENT.
  - IF CROSS SECTIONAL LOSS OF BAR IS 10% TO 20% AFTER REMOVING ALL CORROSION PRODUCT, CONTACT ENGINEER FOR EVALUATION AND DIRECTION.
  - IF CROSS SECTIONAL LOSS OF BAR IS GREATER THAN 20% AFTER REMOVING ALL CORROSION PRODUCT, REPLACE OR SUPPLEMENT WITH SPLICED BARS.
- ALL REPLACEMENT REINFORCING STEEL SHALL CONFORM TO ASTM A706 GRADE 60 UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ANCHOR BOLTS, DOWELS AND OTHER EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED.
- ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
- ALL REPLACEMENT REINFORCING STEEL SHALL BE LAP SPLICED PER DETAILS SHOWN ON THE DRAWINGS. SPLICES SHALL BE LOCATED AS DETAILED. WHERE LAP OR SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, SPLICES SHALL BE STAGGERED.
- IN GENERAL, CONCRETE REPAIRS AND RELATED WORK SHALL CONFORM TO THE FOLLOWING ICRI (INTERNATIONAL CONCRETE REPAIR INSTITUTE) TECHNICAL GUIDELINES, UNLESS OTHERWISE INDICATED ON THE DRAWINGS:
  - GUIDELINE NO. 03730 "GUIDELINE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION" (1995)
  - GUIDELINE NO. 03731 "GUIDE FOR SELECTING APPLICATION METHODS FOR THE REPAIR OF CONCRETE SURFACES" (1996)
  - GUIDELINE NO. 03733 "GUIDE FOR SELECTING AND SPECIFYING MATERIALS FOR REPAIR OF CONCRETE SURFACES" (1997)
- PRODUCT MANUFACTURERS' REPRESENTATIVES SHALL BE PRESENT AT THE JOB SITE TO SUPERVISE AND INSPECT ALL SAMPLE/PROTOTYPE REPAIRS, AND SHALL PERIODICALLY VISIT THE JOB SITE TO INSPECT REPAIRS FOR CORRECT PRODUCT USAGE.
- CONTRACTOR SHALL SUBMIT DESIGNS FOR ALL CONCRETE MIXES AS REQUIRED BY THE PROJECT SPECIFICATIONS.
- WHERE REINFORCING STEEL IS TO BE ADDED, IT SHALL BE LAP SPLICED FOR A LENGTH OF 48 BAR DIAMETERS. IN LIEU OF LAPPED REBAR, NEW REINFORCING MAY BE CONNECTED TO EXISTING REINFORCING WITH A MECHANICAL COUPLER. SEE TYPICAL DETAIL A3 / THIS SHEET.

**SUMMARY OF ACCEPTABLE CONCRETE REPAIR PRODUCTS**

- THE CONTRACTOR SHALL VERIFY WITH THE MATERIAL SUPPLIERS, THE COMPATIBILITY OF ALL PRODUCTS AND PROCEDURES UTILIZED FOR REPAIRS, BEFORE START OF WORK. IF ANY MODIFICATIONS NEED TO BE MADE, THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER PRIOR TO THE START OF ANY WORK.
- THE FOLLOWING ARE ACCEPTABLE ALTERNATIVES UTILIZED IN THE REPAIR DETAILS.

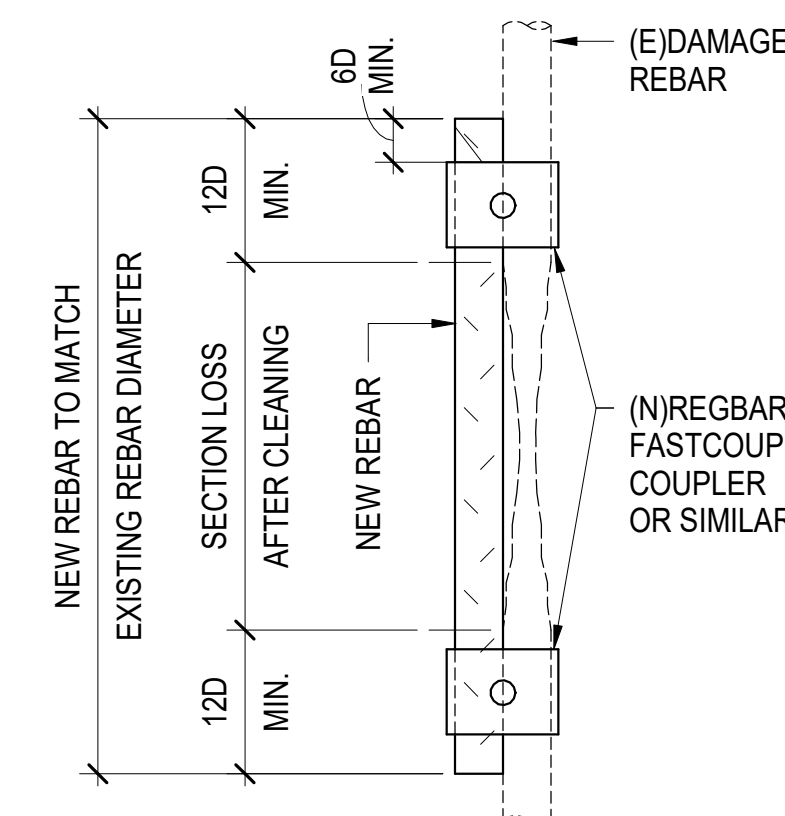
PRODUCT DESCRIPTION	ACCEPTABLE ALTERNATIVE PRODUCTS
A. CEMENTITIOUS MATERIAL FOR HORIZONTAL (TOP) SHALLOW PATCH REPAIRS	<ul style="list-style-type: none"> <li>SIKAQUICK 1000</li> <li>EMACO T430, BASF.</li> <li>MASTERFLOW 713, BASF.</li> <li>QUIKRETE FAST SET REPAIR MORTAR (NO. 1241)</li> <li>THORITE GENERAL PURPOSE CONCRETE RESTORATION, BASF</li> </ul>
B. CEMENTITIOUS MATERIAL FOR OVERHEAD & VERTICAL SHALLOW PATCH REPAIRS	<ul style="list-style-type: none"> <li>SIKAREPAIR 223, SIKA CORPORATION</li> <li>THORITE RAPID VERTICAL, THORO SYSTEMS</li> <li>SONNEBORN SONOPATCH 200</li> <li>EUCO VERTICOAT, EUCLID CHEMICAL COMPANY</li> </ul>
C. POLYMER MODIFIED CAST-IN-PLACE CONCRETE FOR ALL DEEP PATCH REPAIRS AND NEW CONCRETE ELEMENTS WITHOUT ZINC ANODES	<ul style="list-style-type: none"> <li>CONCRETE PROPERTIES:                             <ul style="list-style-type: none"> <li>28-DAY STRENGTH = 5000 PSI</li> <li>MAX. WATER TO CEMENT RATIO = 0.50</li> <li>3/8" DIAMETER PEA GRAVEL</li> <li>CALCIUM NITRIDE ADMIXTURE</li> <li>HIGH RANGE WATER REDUCER (MAX. 6-1/2" SLUMP)</li> <li>SHRINKAGE COMPENSATING ADMIXTURE</li> <li>LATEX (POLYMER) ADMIXTURE MUST BE INCLUDED, SEE MANUFACTURER FOR PROPORTIONS OF EITHER DILUTED OR UN-DILUTED MIX</li> <li>FIBER REINF. - FORTO FERRO @ 7.5 lb/cy WHERE NOT CONVENTIONALLY REINFORCED OR OTHERWISE NOTED</li> </ul> </li> <li>NOTE: PRE-MIXED BAGGED CONCRETE SUCH AS QUIKRETE (5000 PSI) MIX OR SIKAGROUT 212 WITH PEA GRAVEL (25#/55# BAG OF DRY MIX BUT NOT EXCEEDING 25% BY VOLUME) MAY BE USED W/ THE ABOVE ADMIXTURES.</li> </ul>
D. SHRINKAGE REDUCING ADMIXTURE	<ul style="list-style-type: none"> <li>GRACE ECLIPSE, 2% BY WEIGHT OF CEMENT; 1.5 GALS. PER YD.</li> <li>SIKA CONTROL 40, 30 FL. OZ. PER 100 LB. OF CEMENT.</li> <li>BASF MASTERLIFE SRA 20, 1.5 GALS. PER YD.</li> </ul>
E. STEEL ANCHORS	<ul style="list-style-type: none"> <li>1/4"Ø S.S. REDHEAD TAPCON IN 1 1/4" DEEP HOLE DRILLED WITH MATCHING DRILL BIT (TYPE 316 OR 410 S.S.)</li> <li>1/4"Ø S.S. SIMPSON TITEN HD IN 1 1/4" DEEP HOLE DRILLED WITH MATCHING DRILL BIT (TYPE 316 OR 410 S.S.)</li> </ul>
F. BONDING AGENT	<ul style="list-style-type: none"> <li>SIKA ARMATEC 110</li> <li>THORO ACRYL 60</li> <li>QUIKRETE BONDING ADHESIVE</li> </ul>
G. JOINT SEALER	<ul style="list-style-type: none"> <li>SIKAFLEX - 15 LM, SIKA CORP.</li> <li>SONNEBORN NP1, CHEMREX</li> </ul>
H. EPOXY PASTE TO SEAL CRACKS AROUND PORTS FOR PRESSURE INJECTION OF EPOXY RESIN	<ul style="list-style-type: none"> <li>SIKADUR 31 HI-MOD GEL, SIKA CORP.</li> <li>SONNEBORN EPOGEL, CHEMREX</li> <li>DENEPOX GEL 50, DE NEEF</li> </ul>
I. EPOXY RESIN FOR PRESSURE INJECTION OF CRACKS (PRESSURE GROUTING EPOXY)	<ul style="list-style-type: none"> <li>SIKADUR 35 HI-MOD LV LPL, SIKA CORP.</li> <li>SONNEBORN EPOFIL, CHEMREX</li> <li>DENEPOX I-150, DE NEEF</li> </ul>
J. NON-SHRINK GROUT	<ul style="list-style-type: none"> <li>SIKA GROUT 212, SIKA CORP.</li> <li>MASTERFLOW 928, MASTER BUILDERS</li> <li>SIKADUR 31 HI-MOD GEL, SIKA CORP.</li> </ul>
K. ADHESIVE TO FOR POST-INSTALLED REINFORCING DOWELS	<ul style="list-style-type: none"> <li>HILTI HIT-RE 500-V3 EPOXY ADHESIVE</li> <li>SIMPSON SET-XP EPOXY-TIE ADHESIVE</li> <li>DEWALT PURE 110+</li> </ul>
L. POLYURETHANE FOR CRACK INJECTION	<ul style="list-style-type: none"> <li>SEE PROJECT SPECIFICATIONS.</li> </ul>



**REPAIR PROCEDURE**

- CHIP OUT ALL LOOSE AND FRACTURED CONCRETE AROUND SPALL. EXTEND LIMITS OF EXCAVATION UNTIL SOUND CONCRETE IS ENCOUNTERED.
- ROUGHEN SURFACE TO 1/4" MINIMUM AMPLITUDE.
- CREATE 1/2" UNDERCUTS CUT AT PERIMETER.
- CLEAN ALL EXPOSED REBAR TO BRIGHT STEEL CONDITION. REPLACE CORRODED BARS WHICH HAVE LOST MORE THAN 20% OF CROSS-SECTION AND / OR AS DIRECTED BY THE ENGINEER (SEE DETAIL A3/S-002 & CONC. REPAIR NOTES).
- INSTALL 1/4"Ø S.S. SCREWS @ 8" O.C. MAX. EACH WAY. SEE ITEM "E" ON TABLE OF ACCEPTABLE CONCRETE REPAIR PRODUCTS ON SHEET S-001. PROVIDE 1 1/4" MIN. EMBEDMENT INTO SOUND CONCRETE. PROVIDE 3/4" MIN. CLEAR COVER TO HEAD OF SCREW AFTER PATCH INSTALLATION.
- PROVIDE SHADE ABOVE WORK AREA OF PATCHES IF CONCRETE MEMBER IS EXPOSED TO DIRECT SUNLIGHT DURING CURING.
- APPLY BONDING AGENT TO CONCRETE SURFACE. SEE ITEM "F" ON THE TABLE OF ACCEPTABLE CONCRETE REPAIR PRODUCTS ON SHEET S-001
- INSTALL PATCH MATERIAL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SEE ITEMS "A" THROUGH "C" ON THE TABLE OF ACCEPTABLE CONCRETE REPAIR PRODUCTS ON SHEET S-001.
- FINISH AND CURE AS REQUIRED.

**B4 TYPICAL CONCRETE REPAIR DETAIL AT SLABS, BEAMS, WALLS, AND COLUMNS**  
SCALE: NO SCALE



- SEE CONCRETE REPAIR NOTES 14, 17, 21, & 25 FOR GENERAL REPLACEMENT/SUPPLEMENT OF (E) REINFORCING.
- NEW REBAR FOR SPLICE SHALL BE ASTM A706, GRADE 60.
- COUPLER SHALL BE RATED FOR 125% OF TENSION YIELD STRENGTH OF REINFORCING BAR.
- ENSURE MINIMUM COVER TO BARS AND COUPLER.

**A3 TYPICAL REINFORCING LAP SPLICE REPAIR**  
SCALE: NOT TO SCALE

1	REVISION NO.	SYMBOL	Addendum No. 1	DESCRIPTION	SHEET 23 OF 29	DATE 04/30/2026	APPROVED:
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b> TAX MAP KEY: 1-5-041:006 <b>TYPICAL REPAIR DETAILS</b>							
DESIGNED: LC							
DRAWN: MCC				SUBMITTED: BID SUBMITTAL			
CHECKED: LC				DATE: 04/13/2026			
APPROVED: GC				SCALE: As indicated			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION CHIEF ENGINEER: <b>Dina Lau</b> E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer							
<b>S-002</b> 23 OF 29 SHEETS.							

**INSPECTION / TESTING**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SPECIAL INSPECTIONS BY HIRING AN INDEPENDENT THIRD PARTY TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE BUILDING CODE AT THE APPROPRIATE TIME AT NO ADDITIONAL COST TO THE STATE. FREQUENCY OF INSPECTIONS IS DEFINED IN THE IBC, SECTION 1704 TABLES, AS AMENDED BY THE COUNTY. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE STATE AND PAY FOR RE-INSPECTION AS REQUIRED.
2. PROVIDE CONTINUOUS OR PERIODIC SPECIAL INSPECTION FOR ITEMS NOTED IN "TEST AND INSPECTION LIST", AS REQUIRED PER THE CHAPTER 17 OF THE IBC AND ALL APPLICABLE AMENDMENTS:
3. SPECIAL INSPECTIONS MAY NOT BE REQUIRED WHEN THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED BY THE ENGINEER OR GOVERNING AGENCY HAVING JURISDICTION OVER THE PROJECT TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.
4. TEST BY CALIBRATED TORQUE WRENCH A MINIMUM OF 10% OF HIGH STRENGTH BOLTS (MINIMUM ONE (1) BOLT) AT EACH SHEAR CONNECTION.
5. APPROVAL BY THE INSPECTOR OF MATTERS NOT SPECIFICALLY CONSTRUCTED PER THE APPROVED DRAWINGS DOES NOT MEAN THE FAILURE TO COMPLY WITH THE CONSTRUCTION DOCUMENTS HAS BEEN ACCEPTED. ANY DETAIL THAT FAILS TO BE CLEAR OR IS AMBIGUOUS MUST BE REFERRED TO THE STRUCTURAL ENGINEER FOR INTERPRETATION OR CLARIFICATION.
6. INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER WITHIN SEVEN DAYS OF WHEN THE INSPECTION WAS MADE OR WHEN THE TESTING WAS PERFORMED.
7. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY INSPECTION OR TESTING WHICH DOES NOT COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

**STRUCTURAL OBSERVATION**

1. PERIODIC STRUCTURAL OBSERVATION WILL BE PROVIDED BY MARTIN, CHOCK & CARDEN INC., STRUCTURAL ENGINEERS, PER THE HAWAII STATE BUILDING CODE FOR THE WORK INDICATED BELOW. CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS BEFORE REQUIRED OBSERVATIONS. DELINQUENT NOTIFICATION MAY REQUIRE DEMOLITION OF COVERING MATERIAL TO FACILITATE OBSERVATION.  
 PLACING OF CONCRETE  
 PLACING OF REINFORCING  
 PLACING OF STRUCTURAL STEEL  
 PLACING OF ANCHOR BOLTS  
 PLACING OF MECHANICAL AND ADHESIVE ANCHORS
2. STRUCTURAL OBSERVATIONS PERFORMED BY MARTIN, CHOCK & CARDEN CONSIST ON THE VISUAL OBSERVATION OF THE MAJOR ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES AND THE COMPLETED STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL OBSERVATION DOES NOT WAIVE THE REQUIREMENT/ RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE BUILDING INSPECTOR OR THE SPECIAL INSPECTOR.

**TEST AND INSPECTION LIST**

STRUCTURAL STEEL					
X	REVIEW MILL CERTIFICATE, TEST REPORTS AND MATERIAL IDENTIFICATION DELIVERED TO THE SITE				
X	REVIEW WELDING PROCEDURE SPECIFICATION & WELDER CERTIFICATION				
P	INSTALLATION OF NON-SLIP CRITICAL HIGH-STRENGTH BOLTS & WASHERS (PROVIDE CONTINUOUS INSPECTION IF INSTALLATION IS PERFORMED WITH CALIBRATED WRENCH)				
P	FIELD ERECTION INSPECTION				
X	FABRICATION INSPECTION	P	SHOP	P	FIELD
X	WELDING INSPECTION	P	SHOP	P	FIELD
X	BOLTING INSPECTION	P	SHOP	P	FIELD
-	INSTALLATION OF ANCHOR BOLTS BEFORE & DURING CONCRETE POUR				

REINFORCING STEEL					
X	REVIEW MILL CERTIFICATES & TEST REPORTS				
X	SAMPLE & TEST	X	REINFORCING BARS		WELDED WIRE FABRIC
P	PLACEMENT INSPECTION				
C	WELDING INSPECTION				
P	TEST REINFORCING FOR WELDABILITY OTHER THAN ASTM A706				

CONCRETE, SHOTCRETE, CMU, GROUT & MORTAR					
CONCRETE	SHOTCRETE	CMU	GROUT	MORTAR	
X					MIX DESIGN REVIEW
X					VERIFICATION OF CORRECT MIX DESIGN USED DURING POUR
					PREPARATION OF SAMPLES FOR TESTING PURPOSES
X					BATCH PLANT INSPECTIONS
C					CAST, PICK-UP, AND COMPRESSION TEST SAMPLES
C					SLUMP, ENTRAINED AIR, & TEMPERATURE TEST
X					SHRINKAGE TEST
C					PLACEMENT INSPECTION
P					CURING TEMPERATURE AND TECHNIQUES
P					FORMWORK INSPECTION

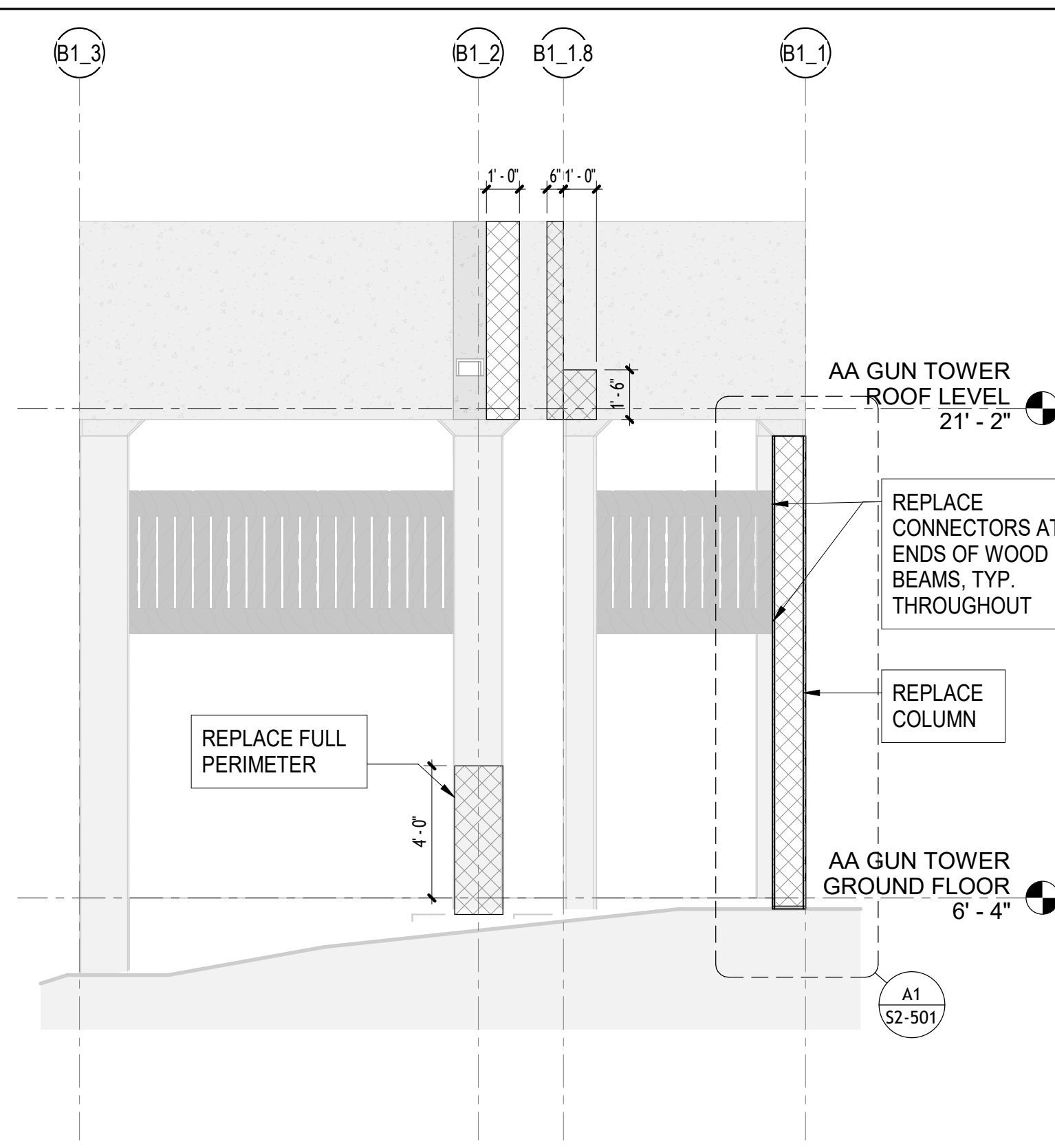
MISCELLANEOUS	
C	MECHANICAL ANCHORS
C	ADHESIVE OR GROUTED ANCHORS AND DOWELS
-	BOLTS CAST IN CONCRETE OR MASONRY

**NOTES:**  
 C: INDICATES CONTINUOUS INSPECTION  
 P: INDICATES PERIODIC INSPECTION  
 X: INDICATES REQUIRED INSPECTION  
 - OR BLANK: SPECIAL INSPECTION NOT ANTICIPATED

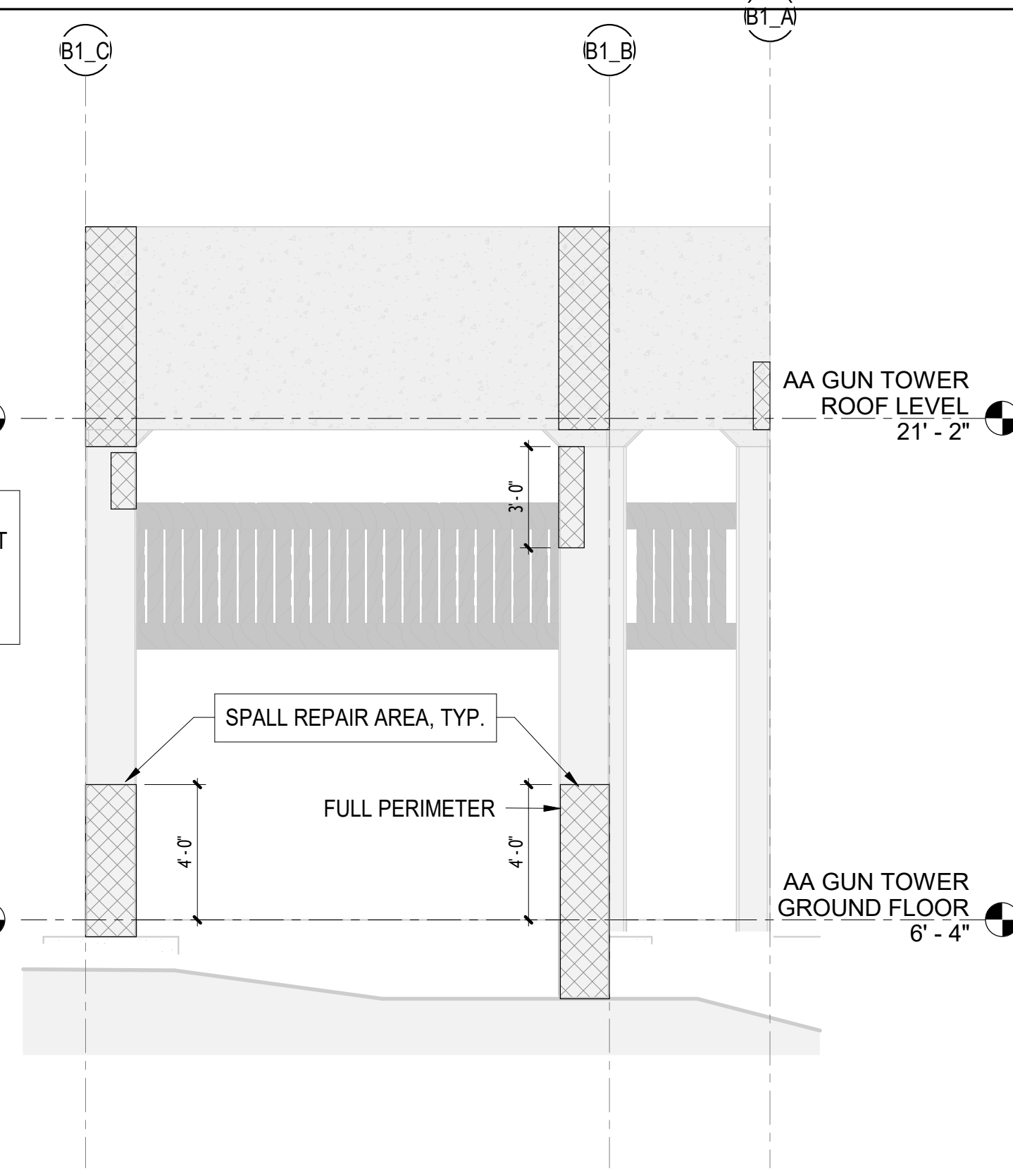
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REVISION NO.	SYM.	DESCRIPTION	DATE	DATE	APPROVED:

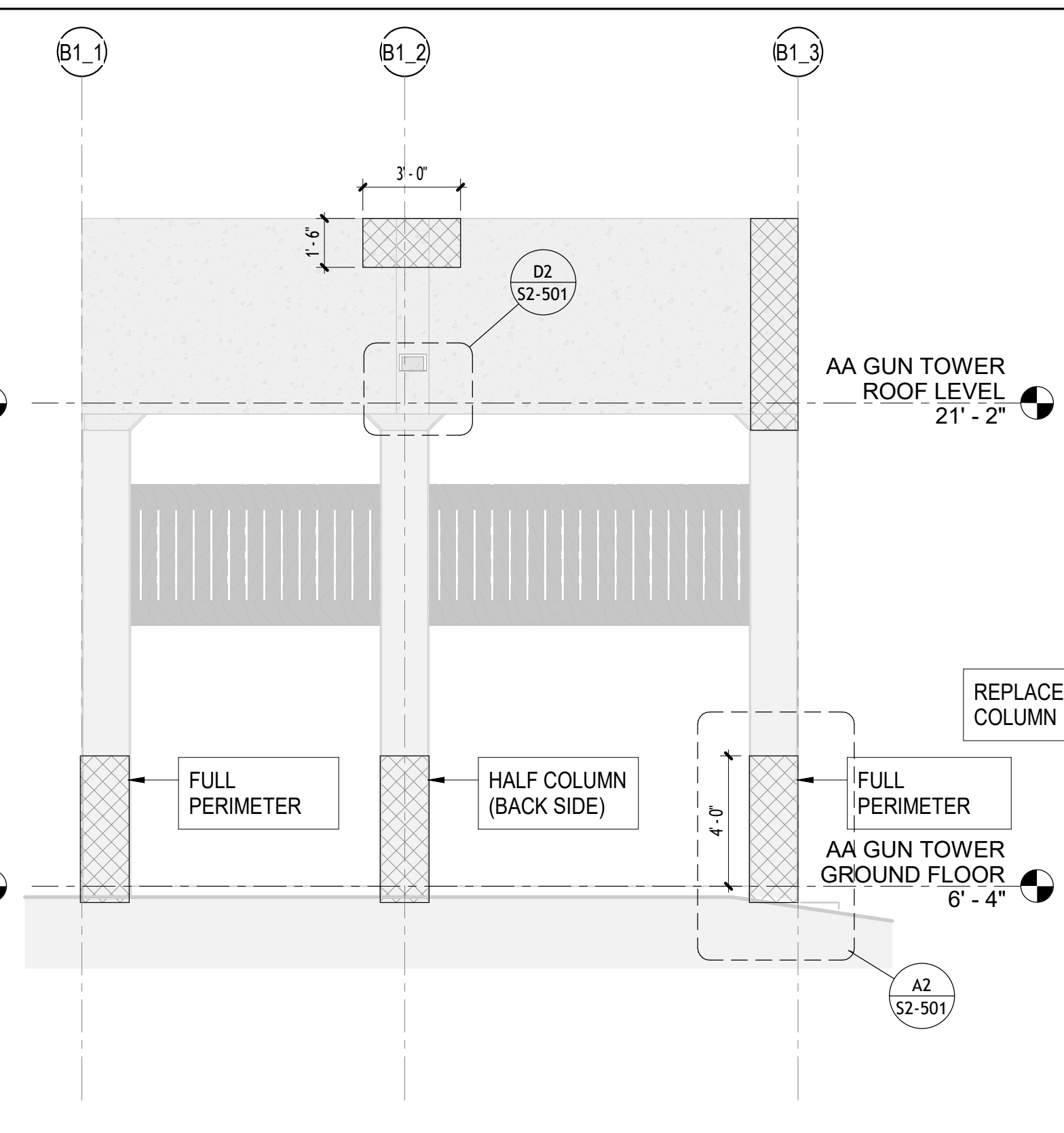
		STATE OF HAWAII	
		DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
		<b>SAND ISLAND SRA PARK IMPROVEMENTS PH. VI</b>	
		TAX MAP KEY: 1-5-041:006	
EXPIRES: 4/30/2028  THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		<b>STRUCTURAL INSPECTIONS</b>	
		DESIGNED: LC	SUBMITTED: BID SUBMITTAL
DRAWN: MCC	CHECKED: LC	DATE: 04/13/2026	SCALE: 3/4" = 1'-0"
APPROVED: GC	Dina Lau E-signed 2026-05-06 09:09AM HST dina.u.lau@hawaii.gov State of Hawaii Civil Engineer		



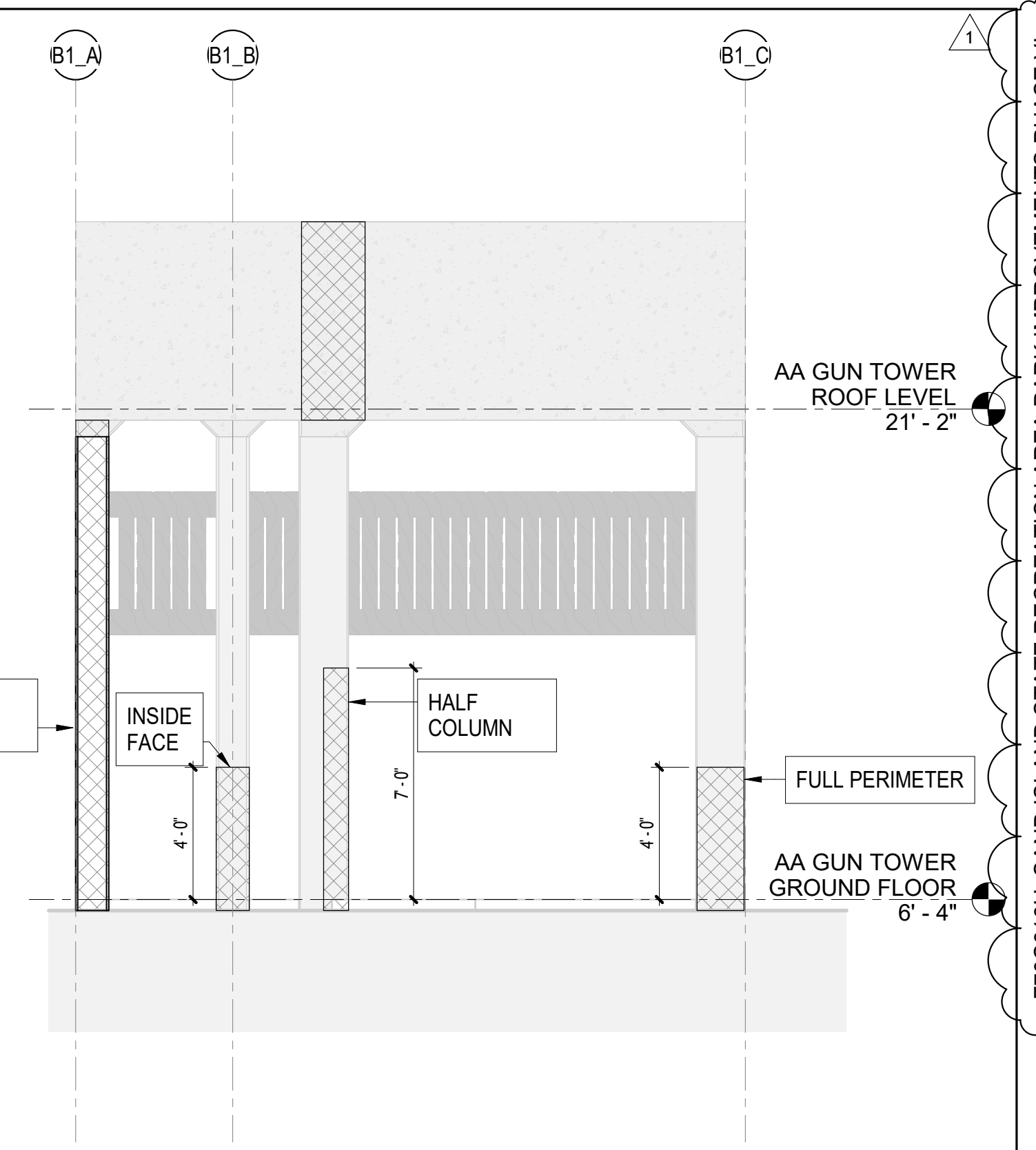
**3 AA TOWER NORTH FRAMING ELEVATION**  
SCALE: 1/4" = 1'-0"



**4 AA TOWER EAST FRAMING ELEVATION**  
SCALE: 1/4" = 1'-0"

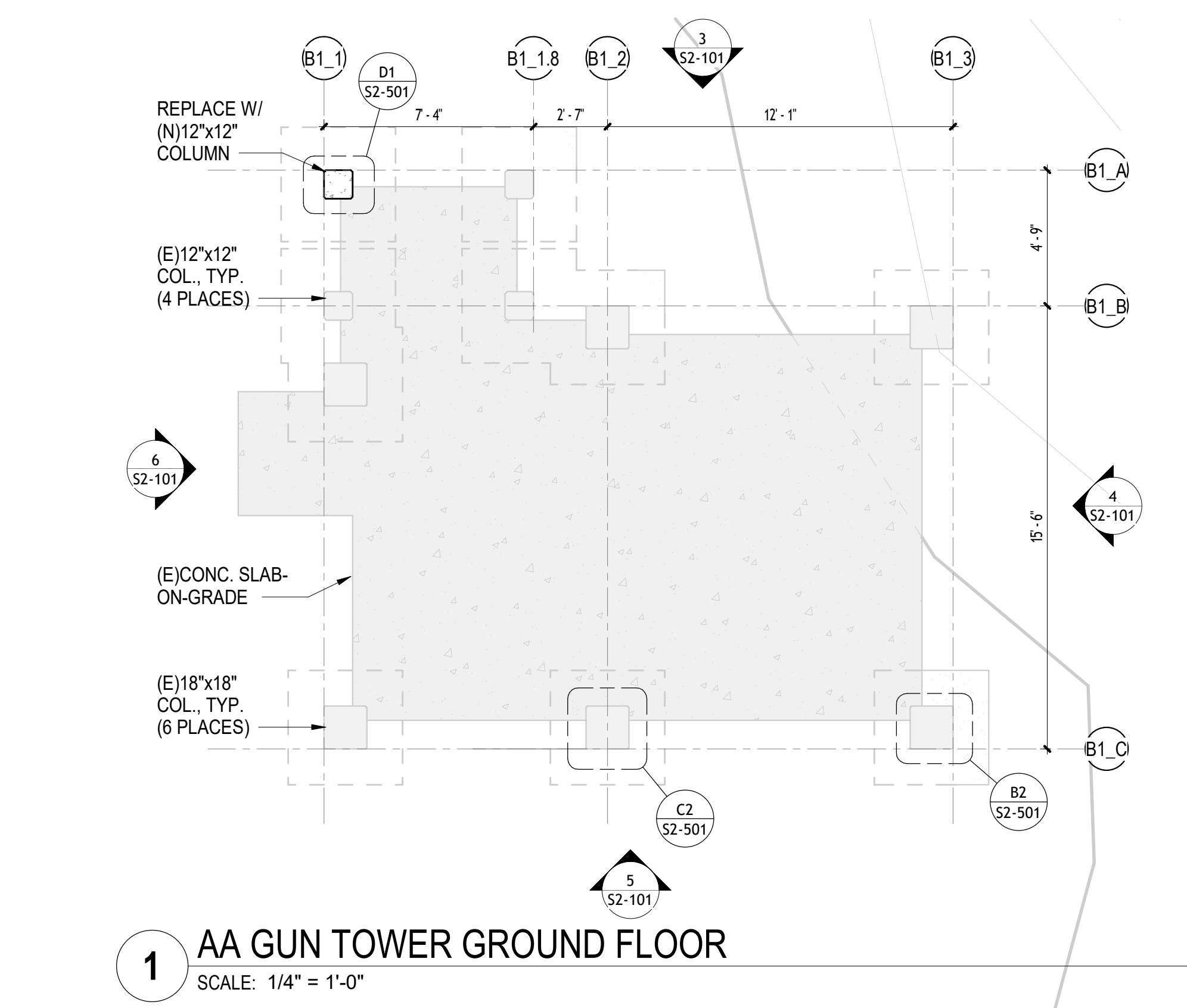


**5 AA TOWER SOUTH FRAMING ELEVATION**  
SCALE: 1/4" = 1'-0"

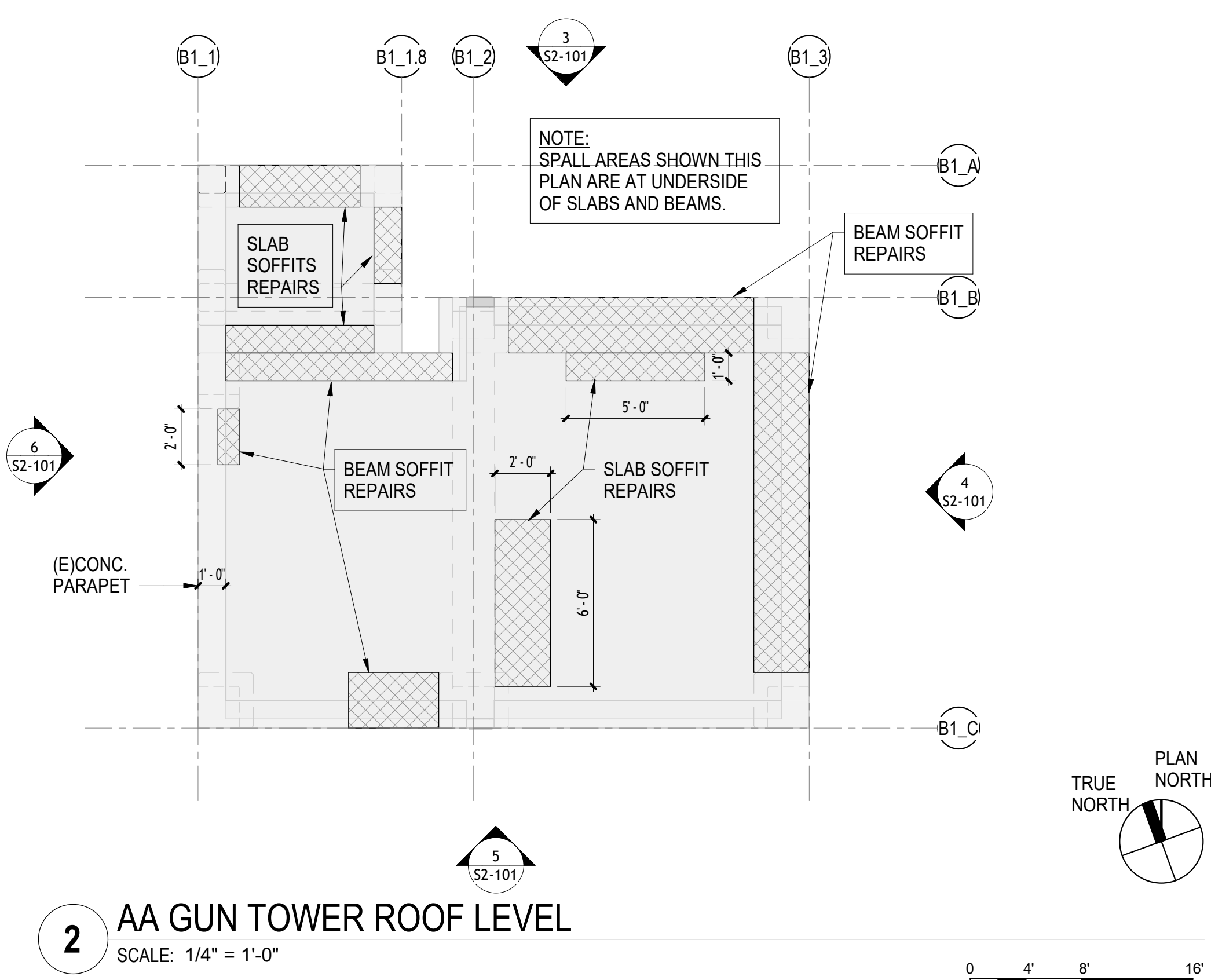


**6 AA TOWER WEST FRAMING ELEVATION**  
SCALE: 1/4" = 1'-0"

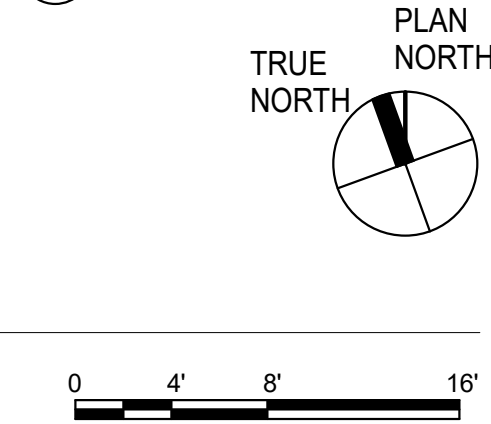
- NOTES:**
- ALL FRAMING IS EXISTING UNLESS OTHERWISE NOTED AS NEW (N)
  - TYPICAL CONCRETE REPAIRS ARE 4" DEEP UNLESS OTHERWISE NOTED.
  - CONCRETE REPAIRS SHALL INCORPORATE THE USE OF GALVANIC ANODES (APPROX 1 PER SQUARE FOOT) TO EXTEND LIFE OF RESTORED CONCRETE SECTIONS.
  - FILL EXISTING DRAIN HOLES IN THE ROOF AND RESLOPE TO SCUPPERS PER ARCH DRAWINGS.
  - TEMPORARILY REMOVE THE WOOD SHADES, REPLACE CONNECTION HARDWARE WITH STAINLESS STEEL CONNECTORS AND REPLACE SHADES.
  - SEE S-002 FOR TYPICAL CONCRETE REPAIR NOTES AND DETAILS.
  - SEE S2-501 FOR SPECIFIC CONCRETE REPAIR DETAILS.



**1 AA GUN TOWER GROUND FLOOR**  
SCALE: 1/4" = 1'-0"



**2 AA GUN TOWER ROOF LEVEL**  
SCALE: 1/4" = 1'-0"



1	△	Addendum No. 1	04/30/2026	25 OF 29	APPROVED:
REVISION NO.	SYM.	DESCRIPTION	DATE	SHT.	APPROVED:

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006  
**ANTI-AIRCRAFT GUN EMPLACEMENT TOWER FRAMING PLANS**

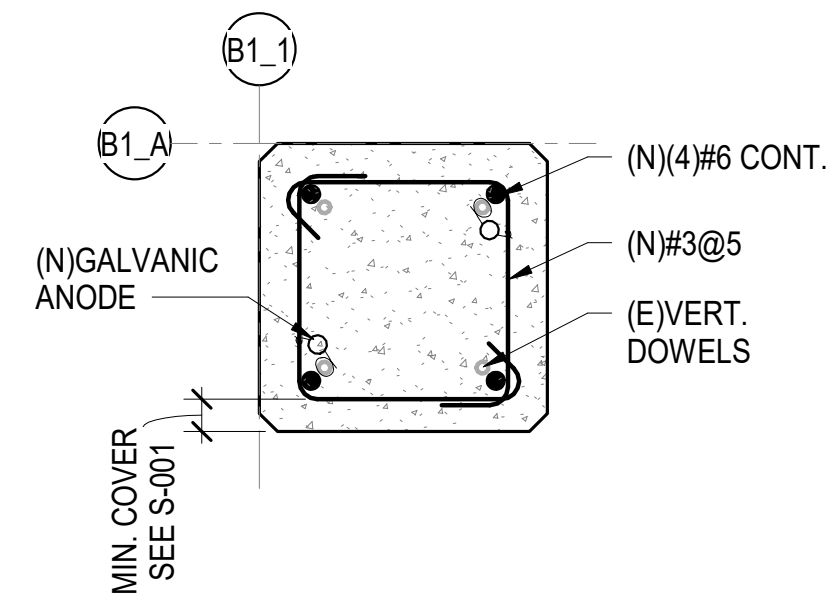
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DRAWN: MCC  
CHECKED: LC  
APPROVED: GC

SUBMITTED: BID SUBMITTAL  
DATE: 04/13/2026  
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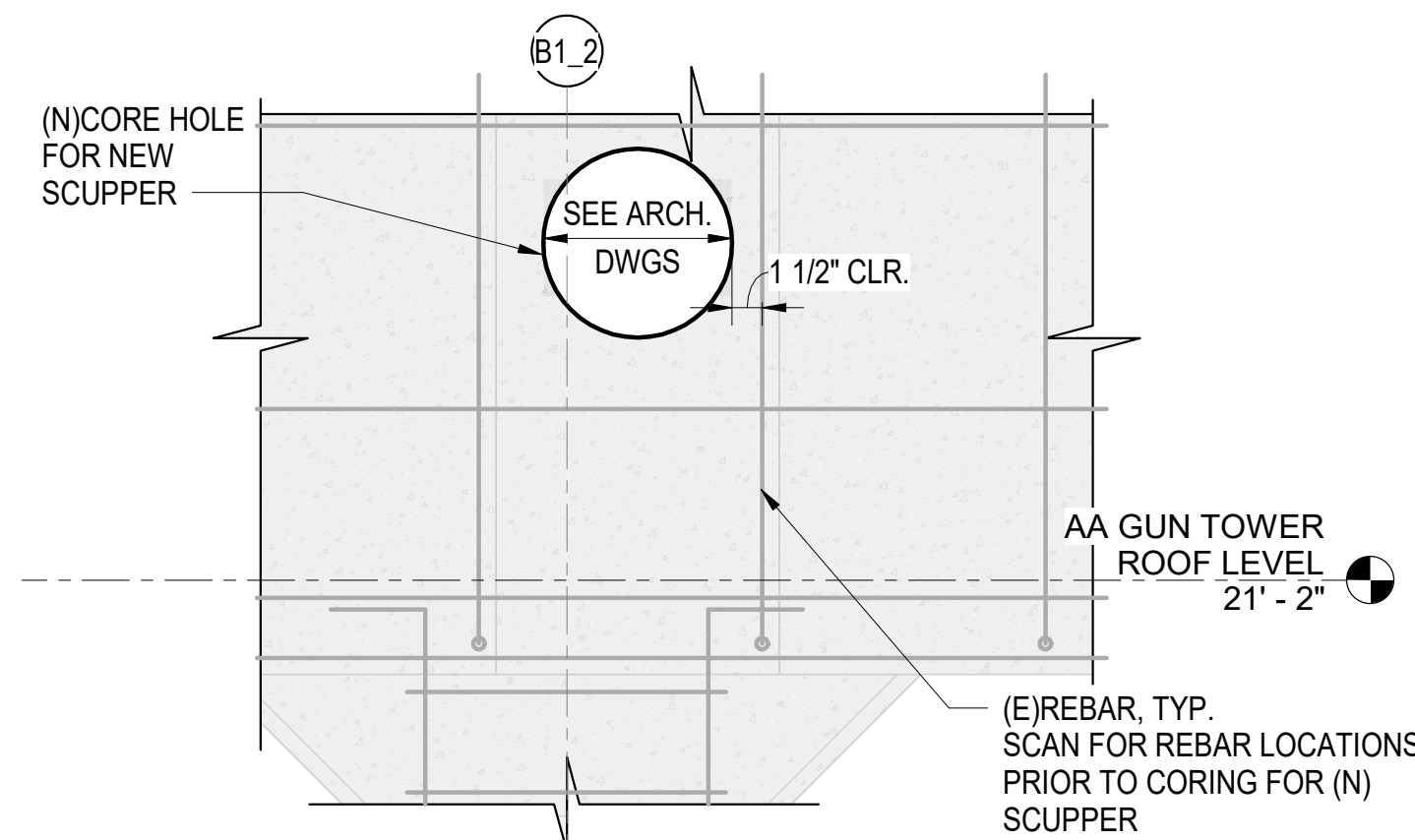
**S2-101**

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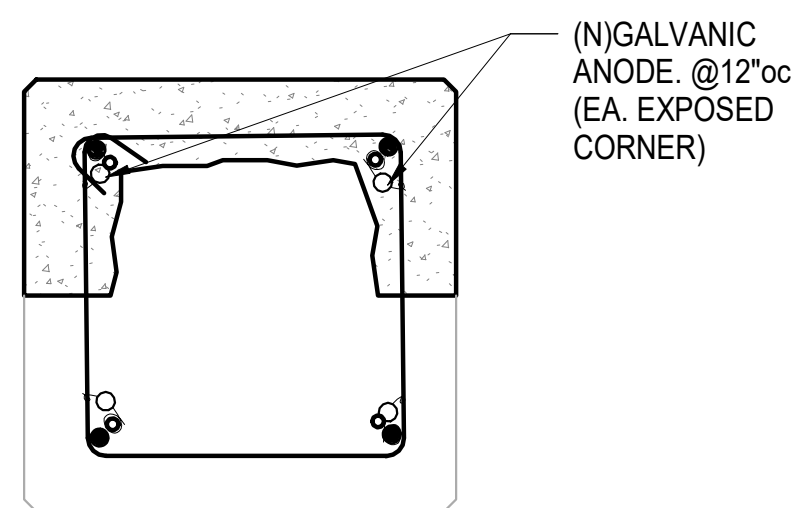
Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer



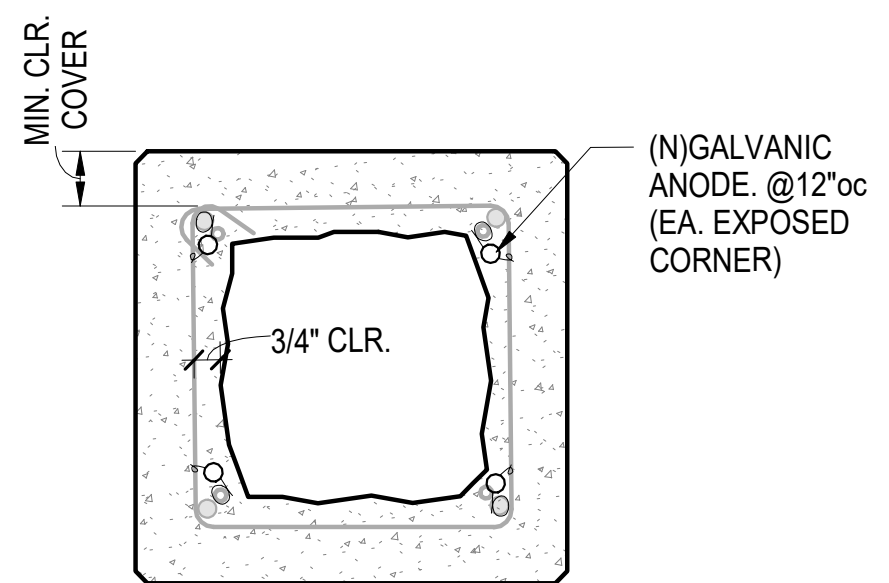
**D1 NEW COLUMN (PLAN SECTION)**  
SCALE: 1 1/2" = 1'-0"



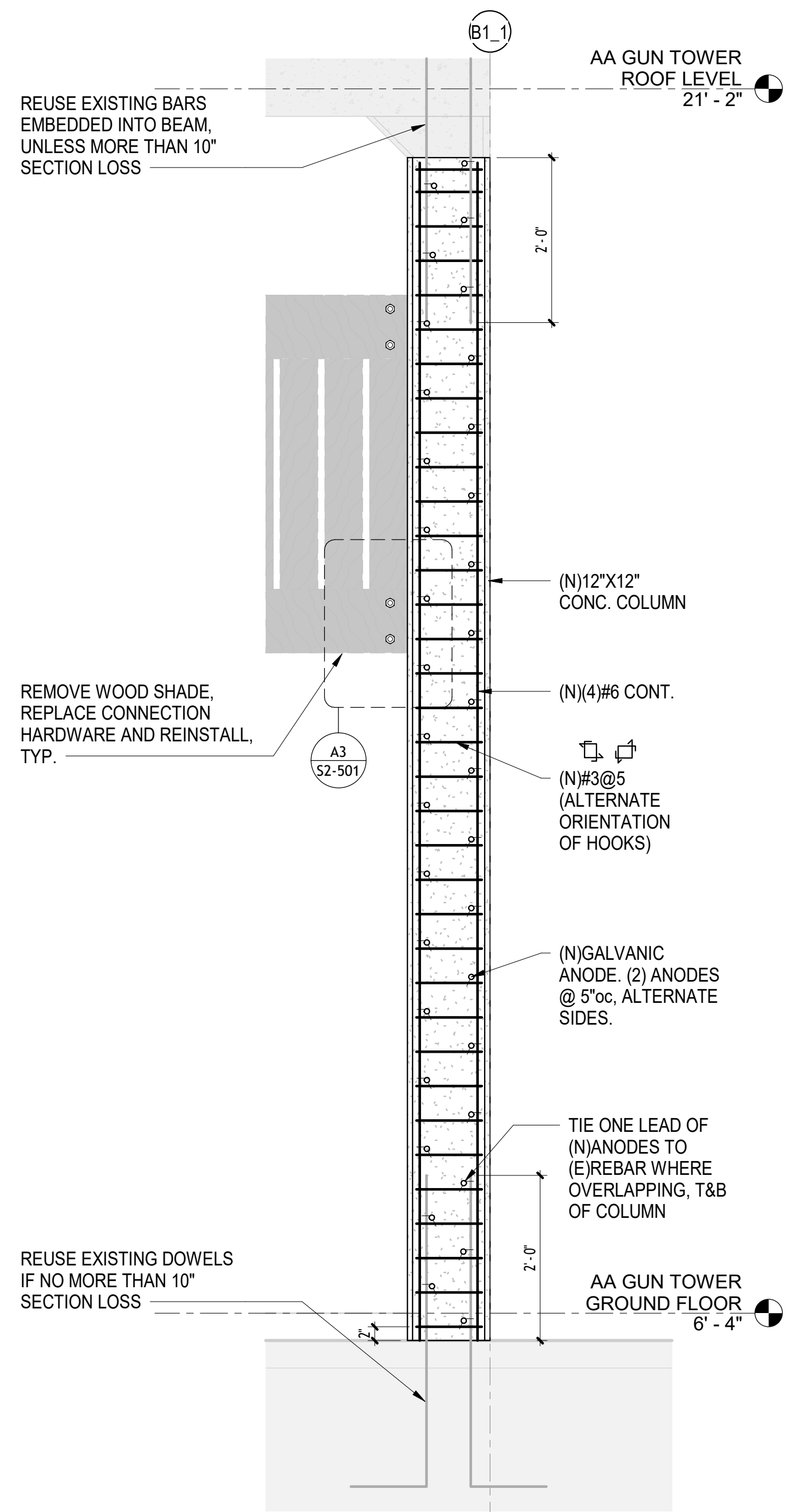
**D2 SCUPPER DETAIL**  
SCALE: 1 1/2" = 1'-0"



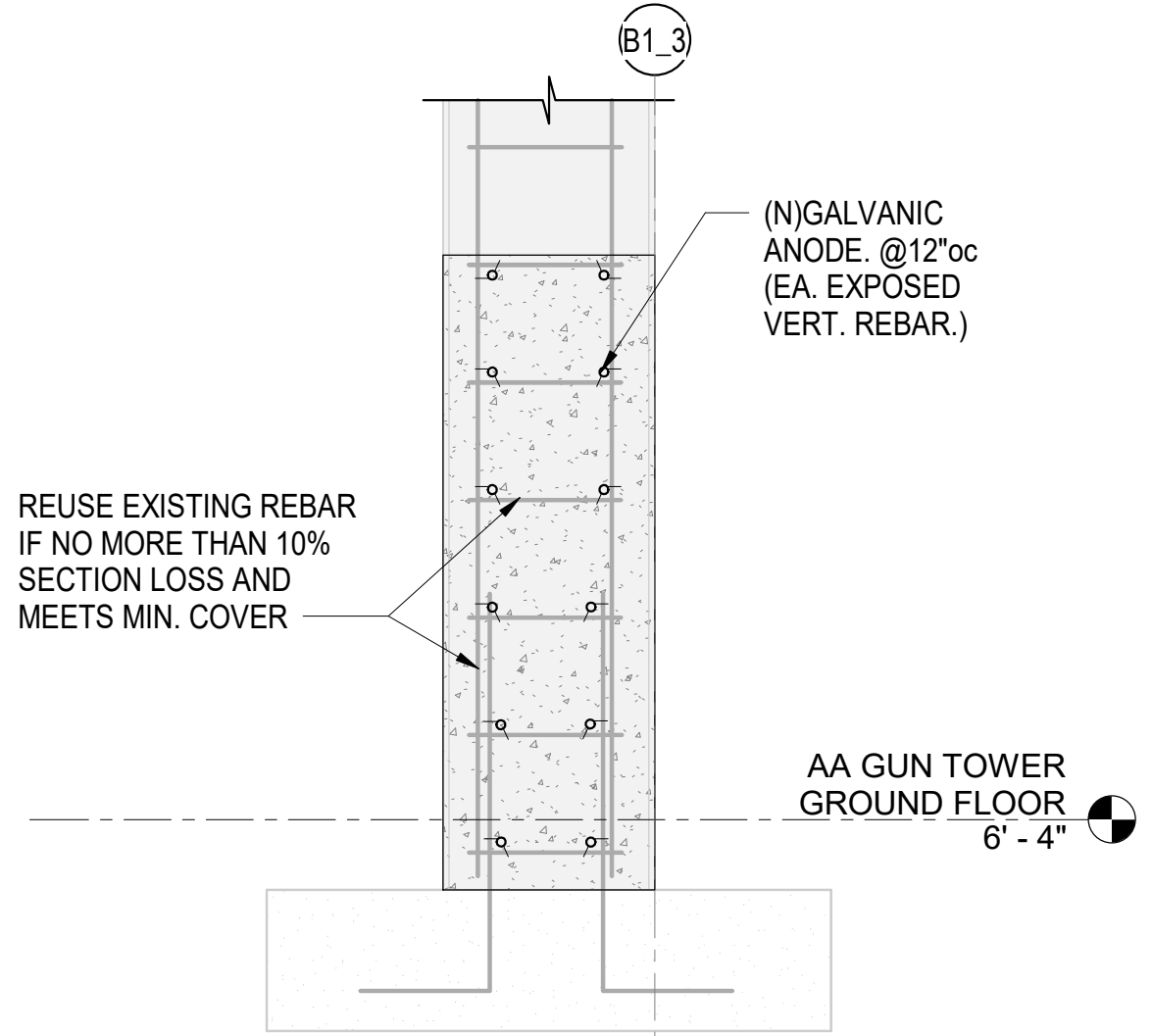
**C2 PLAN SECTION (1/2 PERIMETER REPAIR)**  
SCALE: 1 1/2" = 1'-0"



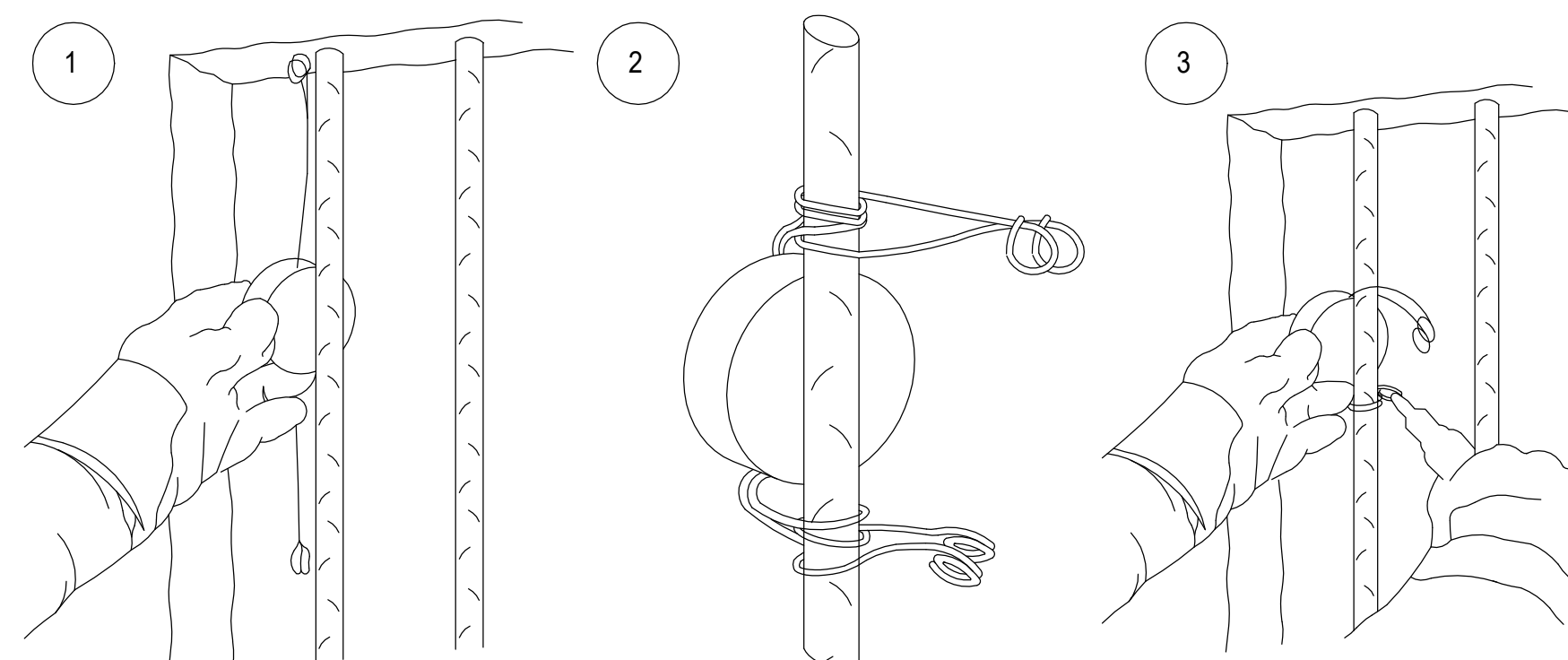
**B2 PLAN SECTION (FULL PERIMETER REPAIR)**  
SCALE: 1 1/2" = 1'-0"



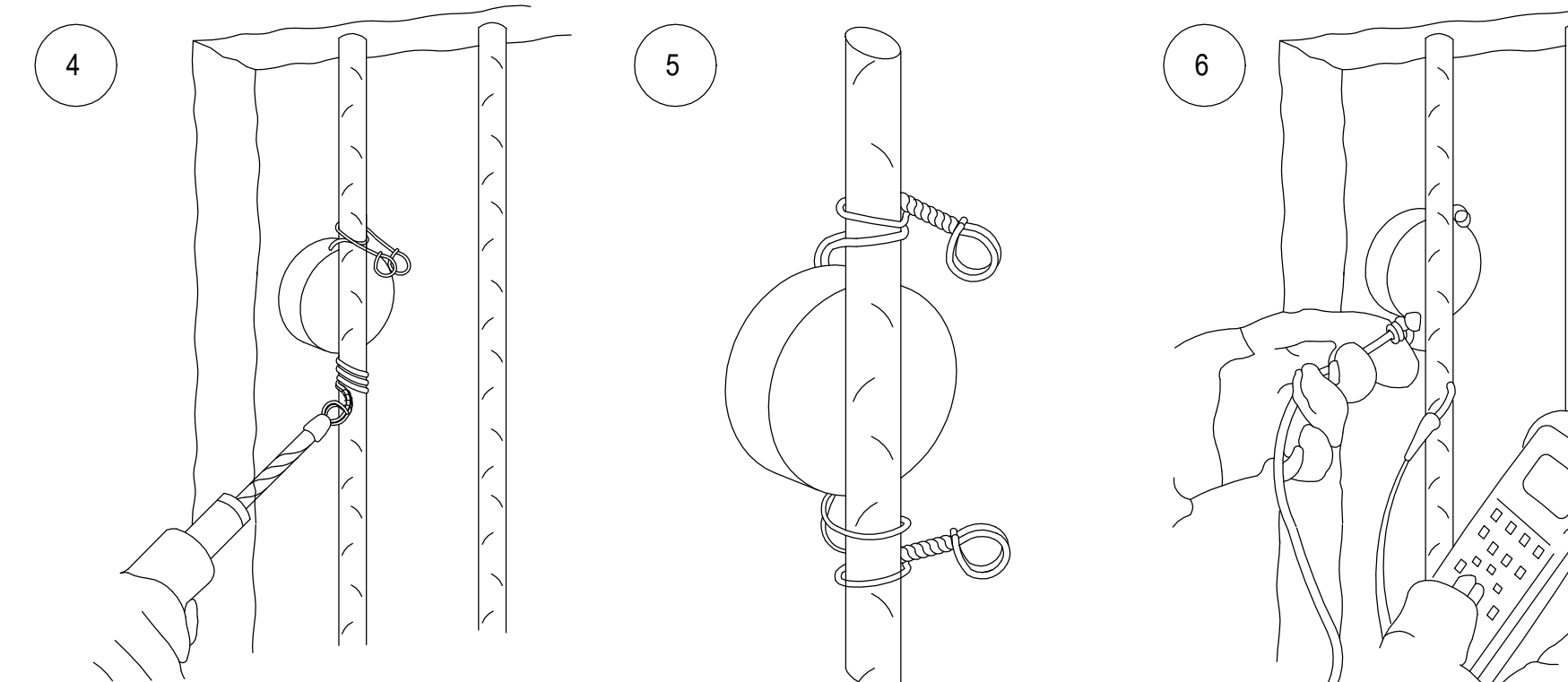
**A1 AA TOWER COLUMN REPLACEMENT**  
SCALE: 3/4" = 1'-0"



**A2 AA TOWER BASE COLUMN REPAIR**  
SCALE: 3/4" = 1'-0"

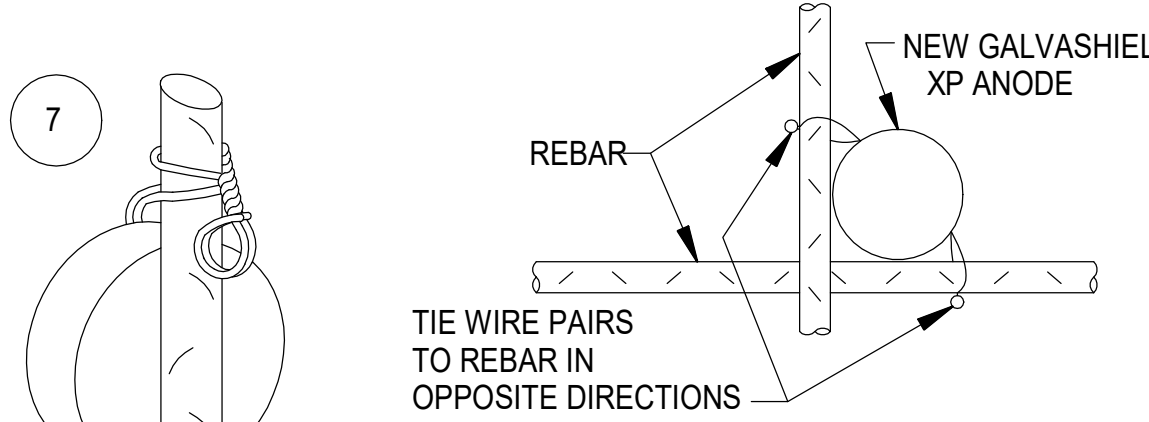


**C3 GALVANIC ANODE INSTALLATION PROCEDURE**  
SCALE: 3/4" = 1'-0"



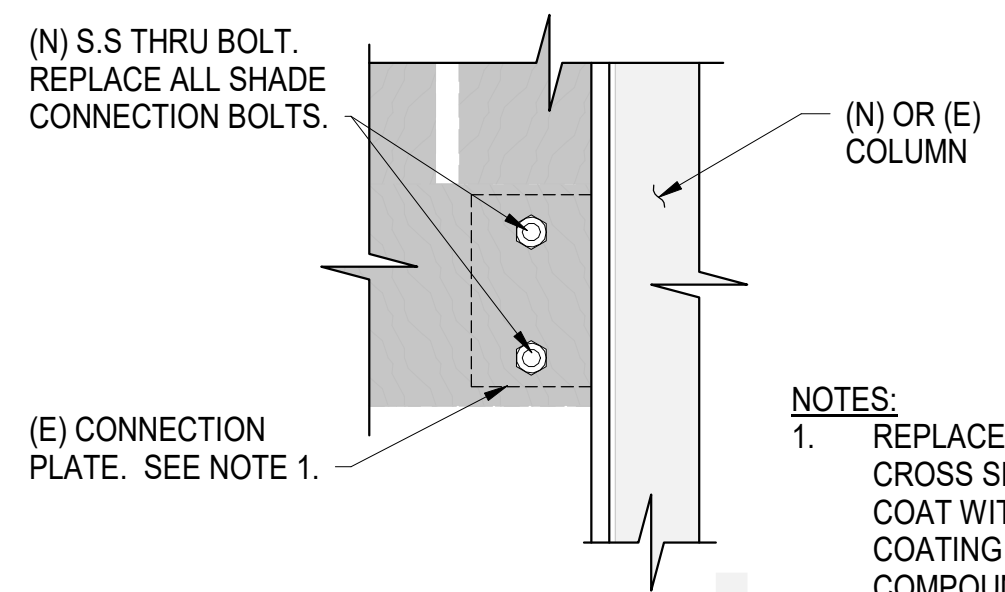
**C3 GALVANIC ANODE INSTALLATION PROCEDURE**  
SCALE: 3/4" = 1'-0"

- GALVANIC ANODE INSTALLATION PROCEDURE**
- ALL OLD/LOOSE CONCRETE SHOULD BE REMOVED FROM AROUND AND BEHIND THE STEEL REINFORCEMENT INSIDE THE REPAIR AREA. PROVIDE SUFFICIENT CLEARANCE BETWEEN ANODE AND SUBSTRATE CONCRETE (MINIMUM OF 3/4 IN.)
  - THE EXPOSED REBAR IN THE REPAIR AREA SHALL BE THOROUGHLY CLEANED TO BRIGHT METAL TO FACILITATE A GOOD ELECTRICAL CONNECTION WHERE ANODES WILL BE ATTACHED. PRIOR TO INSTALLATION, ELECTRICAL CONTINUITY OF THE REBAR WITHIN THE REPAIR AREA SHOULD BE CONFIRMED WITH THE USE OF AN APPROPRIATE METER. NOTE: WHEN CHECKING ELECTRICAL CONTINUITY, DC RESISTANCE OF 1 OHM OR LESS IS ACCEPTABLE. DISCONTINUITIES CAN BE CORRECTED BY WIRING THE "UNCONNECTED" BAR TO ADJACENT BARS USING STANDARD STEEL WIRE.
  - SECURELY FASTEN ANODE IN PLACE WITH ATTACHED TIE WIRES. IF THE ANODE IS TO BE TIED ONTO A SINGLE BAR, OR IF LESS THAN 1 INCH OF CONCRETE COVER EXISTS, PLACE ANODE BENEATH BAR (AWAY FROM THE SURFACE OF THE CONCRETE). IF SUFFICIENT COVER EXISTS, THE ANODE MAY BE PLACED AT THE INTERSECTION BETWEEN TWO BARS AND SECURED TO EACH CLEAN BAR.
  - ONCE INSTALLED, ELECTRICAL CONTINUITY BETWEEN THE ANODE TIE WIRES AND THE REBAR SHOULD BE CONFIRMED USING AN APPROPRIATE METER; MAXIMUM DC RESISTANCE OF 1 OHM.
  - COMPLETE REPAIR FOLLOWING NORMAL CONCRETE REPAIR PROCEDURES, TAKING CARE NOT TO CREATE VOIDS AROUND THE ANODE.



**TYPICAL INSTALLATION @ INTERSECTION**

RECOMMENDED SUPPLIER (OR APPROVED EQUAL):  
VECTOR CORROSION TECHNOLOGIES  
474 DOVERCOURT DR.  
WINNIPEG, MANITOBA  
CANADA R3Y 1G4  
USA PHONE: (813)830-7566



**A3 TYPICAL SHADE CONNECTION**  
SCALE: 1 1/2" = 1'-0"

- NOTES:**
- REPLACE PLATE IF LOST 10" OF CROSS SECTION OTHERWISE COAT WITH GALVANIC COATING (ZRC COLD GALV COMPOUND OR SIMILAR)

1	SYMBOL	Addendum No. 1	DATE	04/30/2026
REVISION NO.	SYMBOL	DESCRIPTION	SHEET 26 OF 29	DATE

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**CONCRETE REPAIR DETAILS**

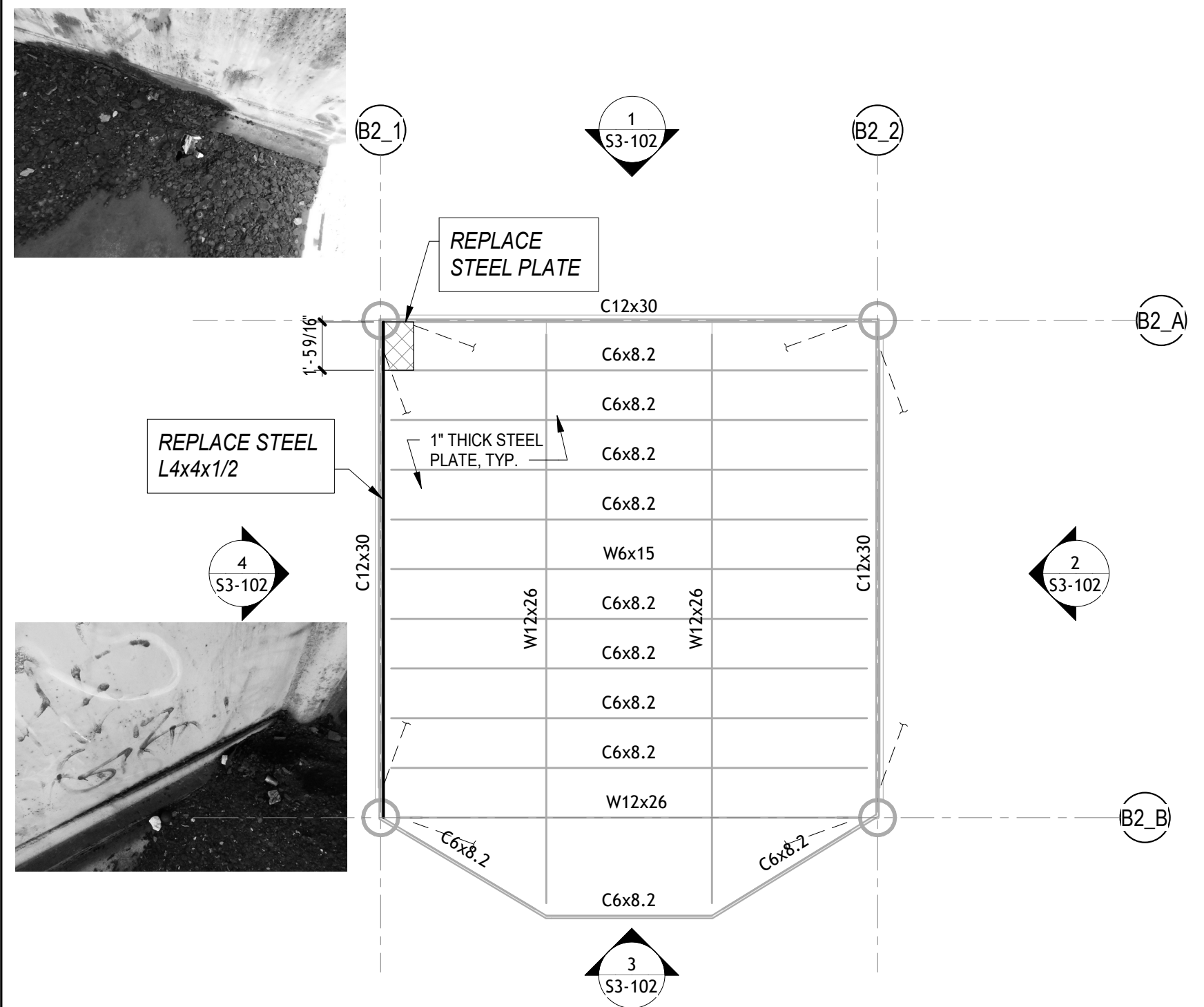
DESIGNED: Designer  
DRAWN: Author  
CHECKED: Checker  
APPROVED: Approver

Submitted: BID SUBMITTAL  
DATE: 04/13/2026  
SCALE: As indicated

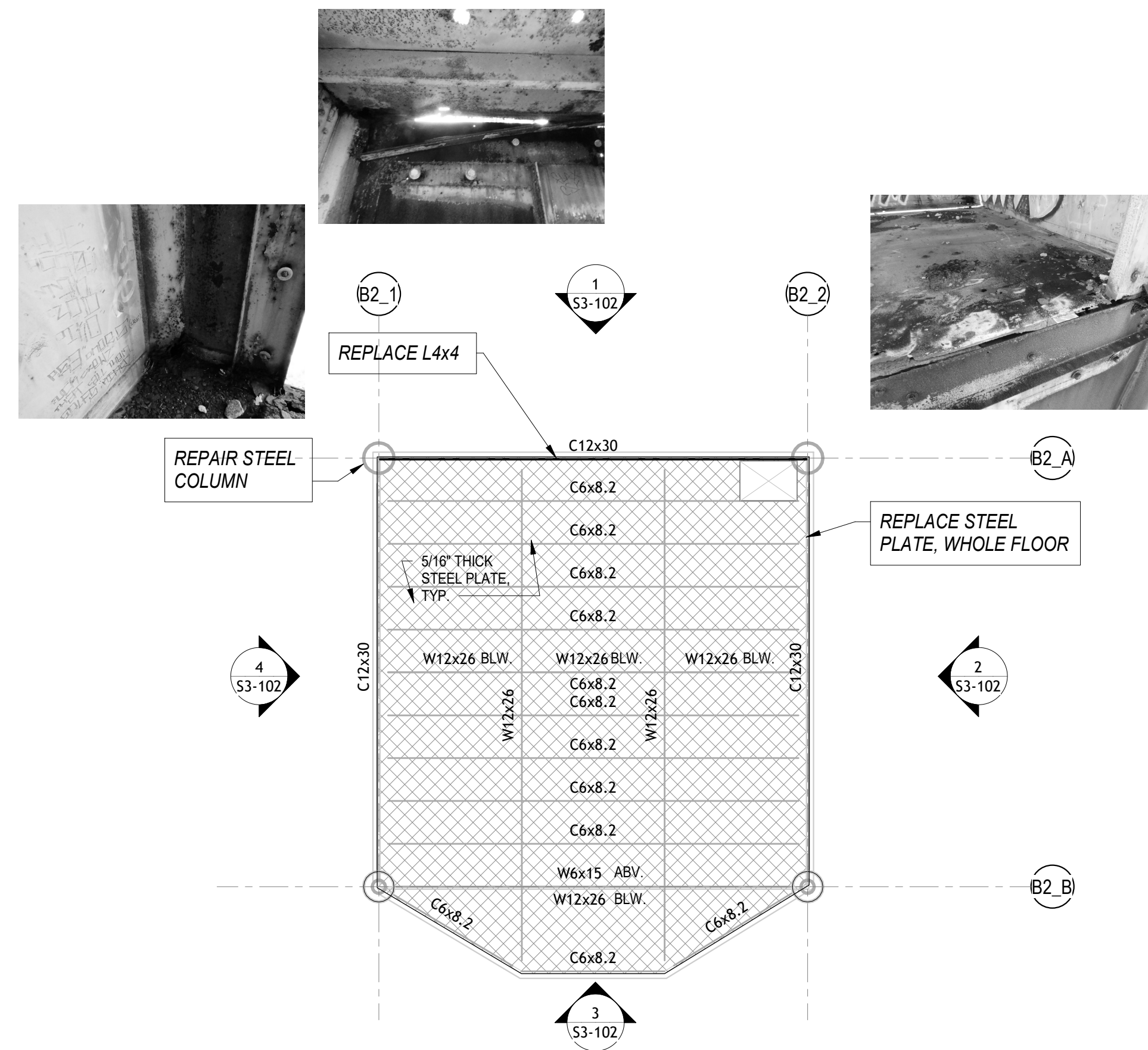
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

CHIEF ENGINEER: Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

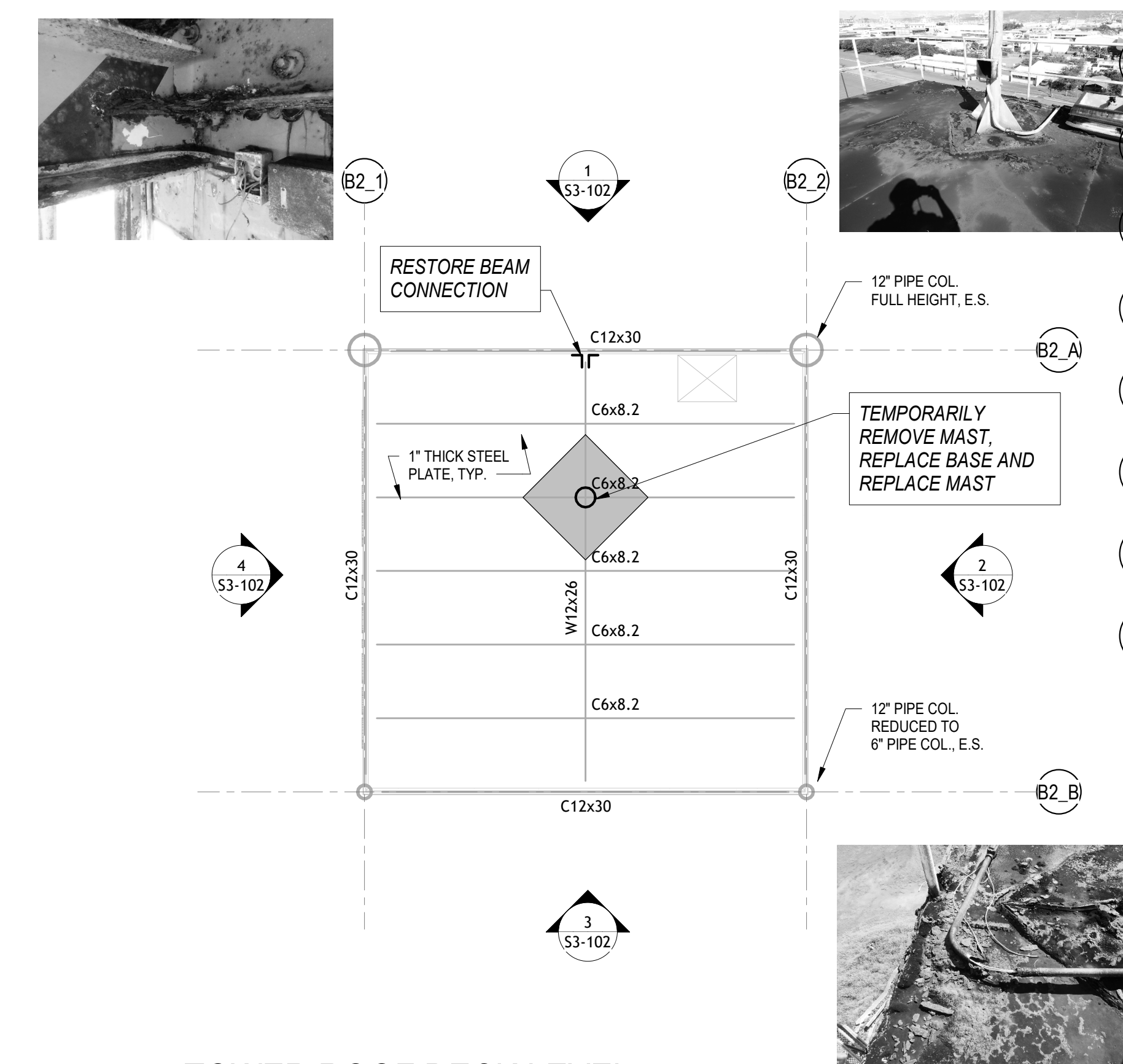
**S2-501**



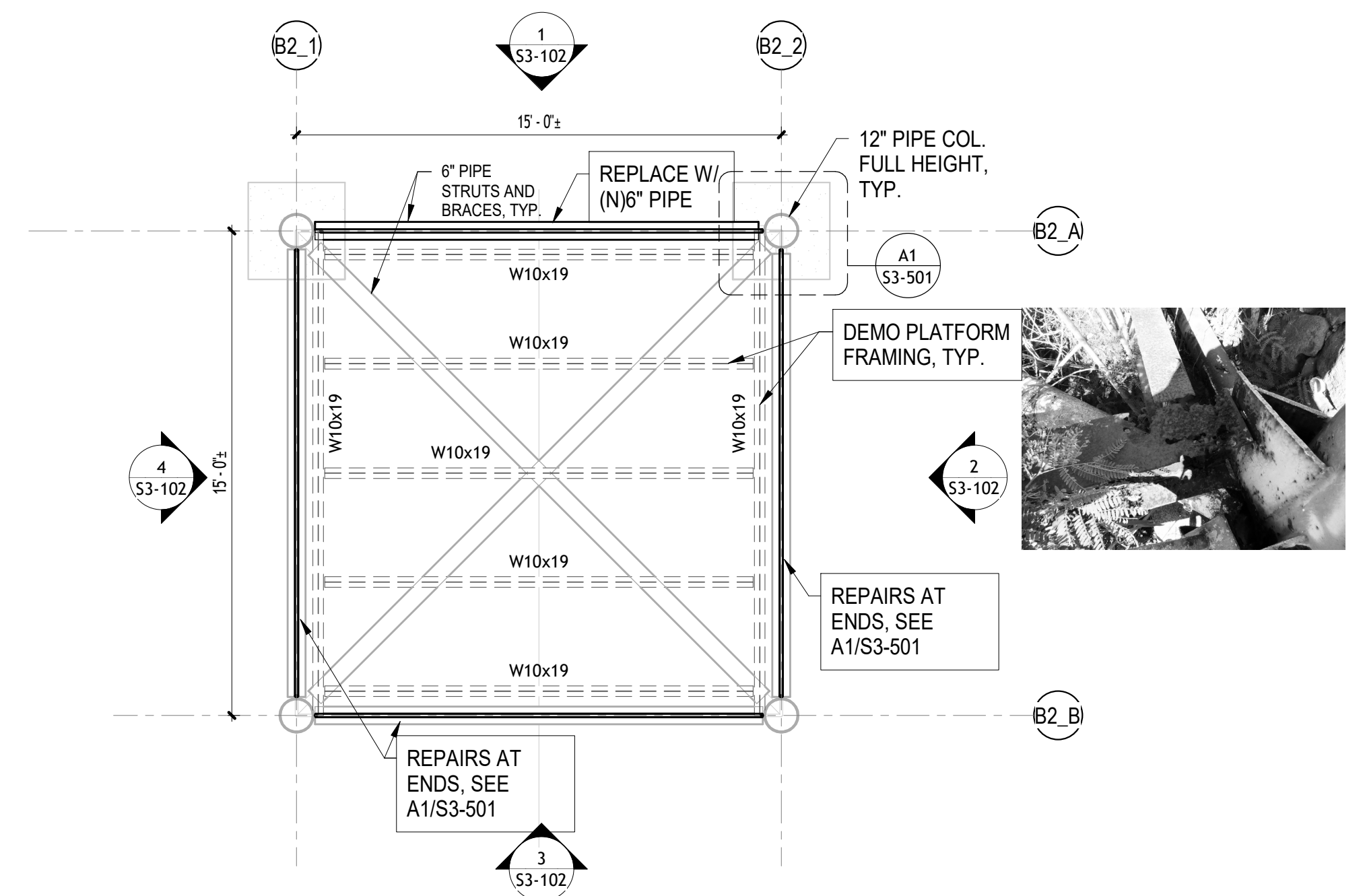
**3 LOWER TOWER DECK LEVEL**  
SCALE: 1/4" = 1'-0"



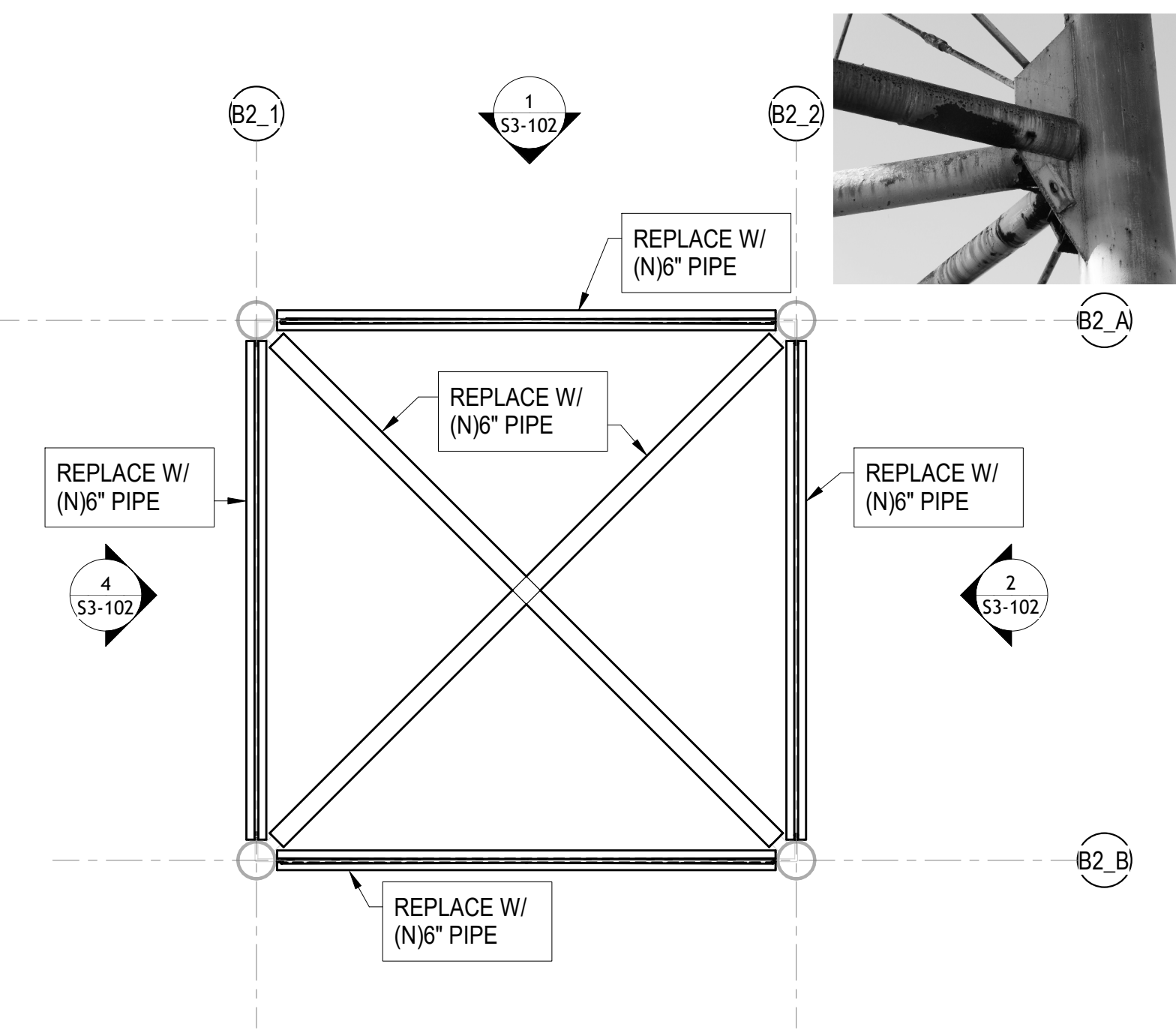
**4 INTERMEDIATE TOWER DECK LEVEL**  
SCALE: 1/4" = 1'-0"



**5 TOWER ROOF DECK LEVEL**  
SCALE: 1/4" = 1'-0"

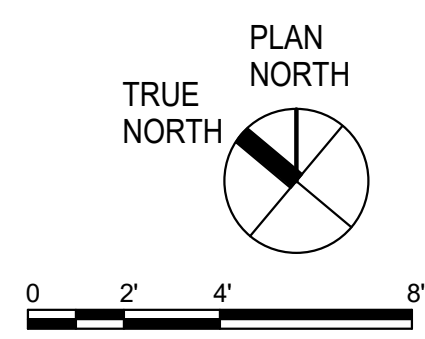


**1 LOWER PLATFORM LEVEL**  
SCALE: 1/4" = 1'-0"



**2 INTERMEDIATE BRACE PLATFORM LEVEL**  
SCALE: 1/4" = 1'-0"

- NOTES:**
- NEW WORK NOTED IN PLAIN TEXT IS BASE BID. WORK NOTED IN *ITALICS* IS BID ALTERNATE NO 2.
  - ALL FRAMING IS EXISTING UNLESS OTHERWISE NOTED AS NEW (N)
  - SEAL ENDS OF ALL 6" PIPE STRUTS AND BRACES TO PREVENT WATER INFILTRATION TO INSIDE OF BRACES.
  - ALL STEEL FRAMING SHALL BE MACHINE TOOL CLEANED, LOOSE RUST REMOVED AND REPAINTED AFTER REPAIRS AND REPLACEMENTS ARE COMPLETED.



1	▲	Addendum No. 1	04/30/2026	27 of 29	APPROVED:
REVISION NO.	SYM.	DESCRIPTION	DATE	SHT.	APPROVED:

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**HARBOR ENTRANCE CONTROL TOWER FRAMING PLANS**

DESIGNED: LC  
DRAWN: MCC  
CHECKED: LC  
APPROVED: GC

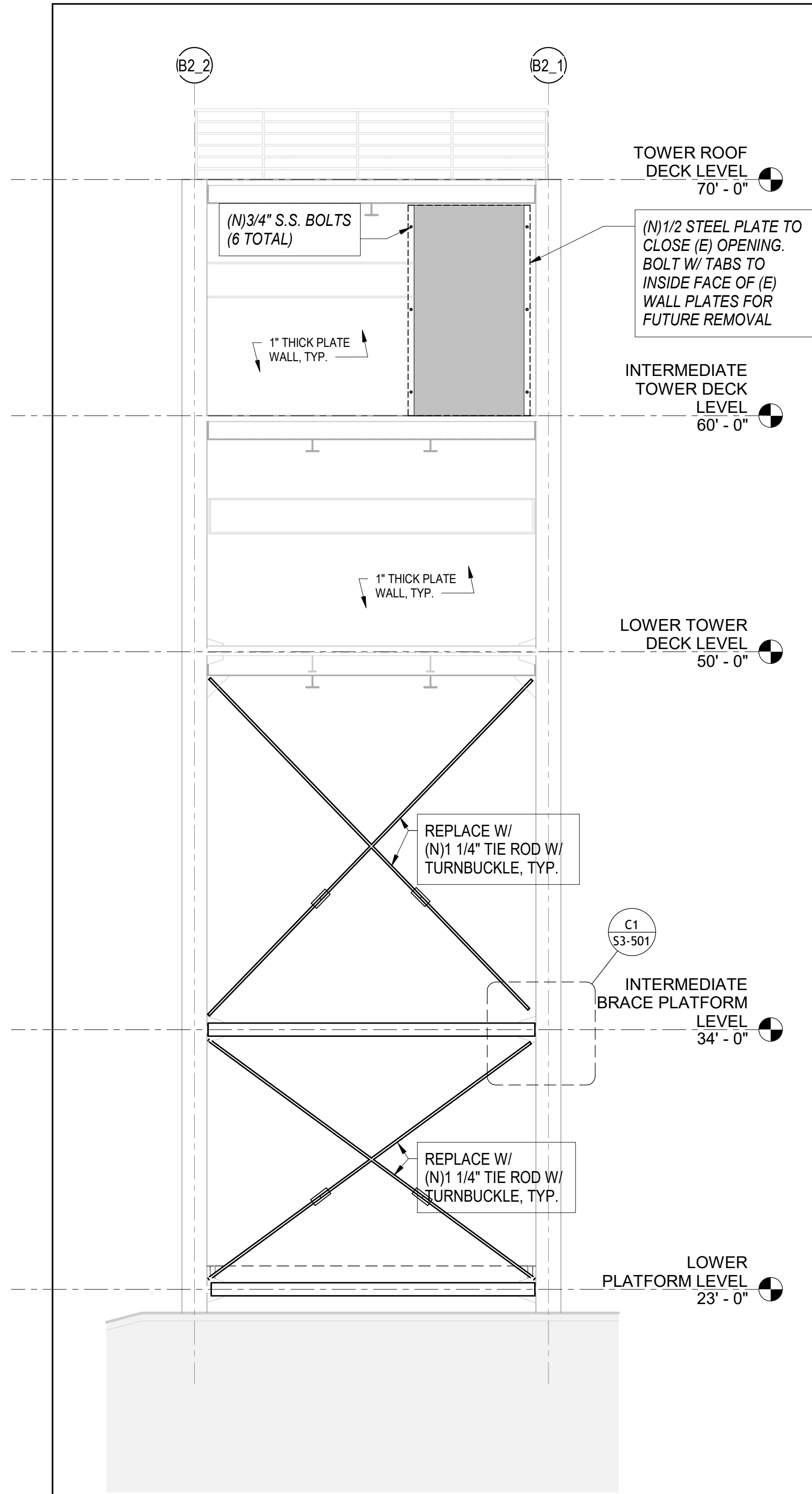
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DATE: 04/13/2026  
SCALE: 1/4" = 1'-0"

**S3-101**

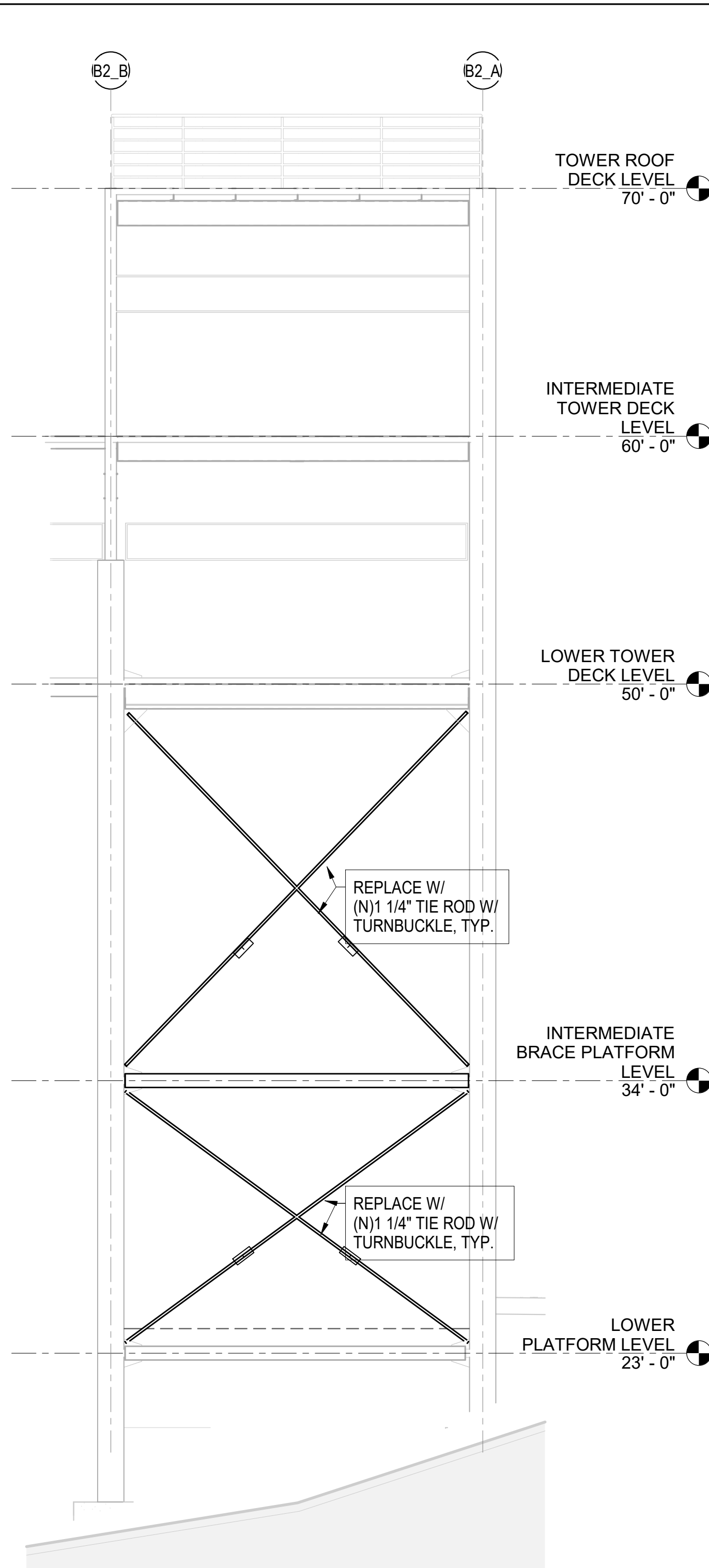
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

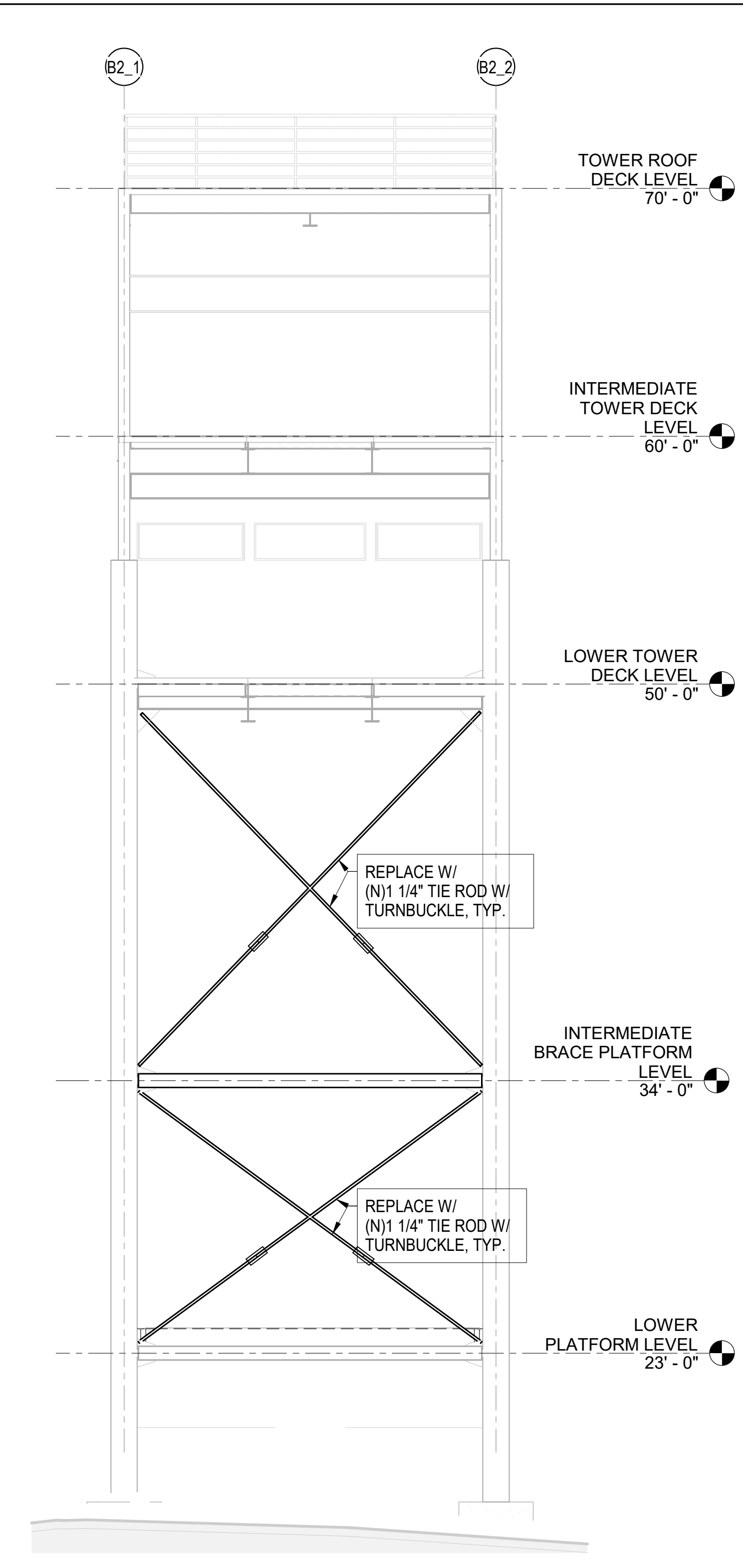
JOB NO. F70C616H 27 OF 29 SHEETS.



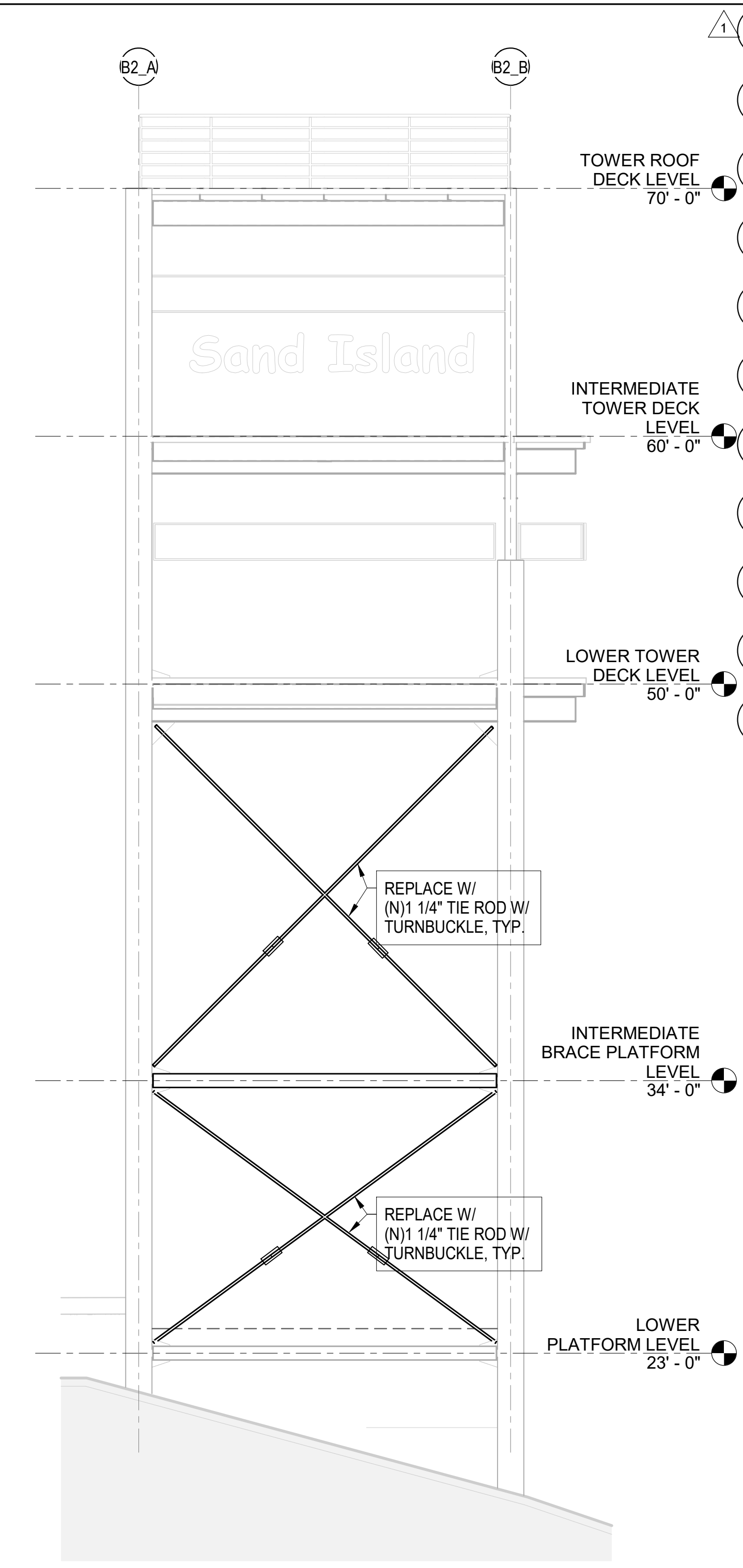
**1** NORTH FRAMING ELEVATION  
SCALE: 1/4" = 1'-0"



**2** EAST FRAMING ELEVATION  
SCALE: 1/4" = 1'-0"



**3** SOUTH FRAMING ELEVATION  
SCALE: 1/4" = 1'-0"



**4** WEST FRAMING ELEVATION  
SCALE: 1/4" = 1'-0"

- NOTES:**
- NEW WORK NOTED IN PLAIN TEXT IS BASE BID. WORK NOTED IN *ITALICS* IS BID ALTERNATE NO 2.
  - ALL FRAMING IS EXISTING UNLESS OTHERWISE NOTED AS NEW (N)
  - REPLACE ALL TIE RODS AND TURNBUCKLES



1	△	Addendum No. 1	04/30/2026	APPROVED:
REVISION NO.	SYM.	DESCRIPTION	SHT. 28 OF 29	DATE

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

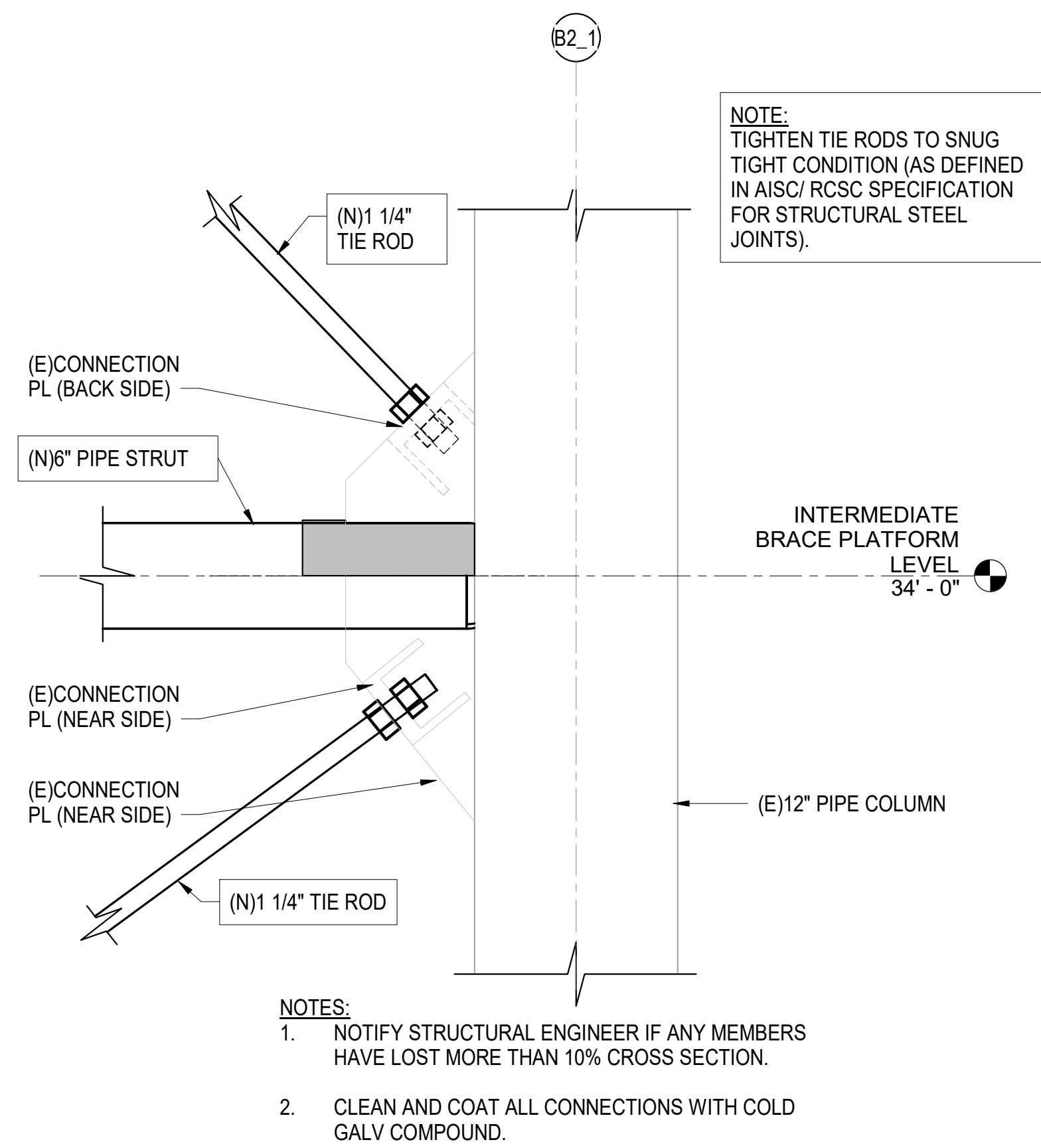
**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006  
**HARBOR ENTRANCE CONTROL TOWER FRAMING ELEVATIONS**

DESIGNED: LC  
DRAWN: MCC  
CHECKED: LC  
APPROVED: GC

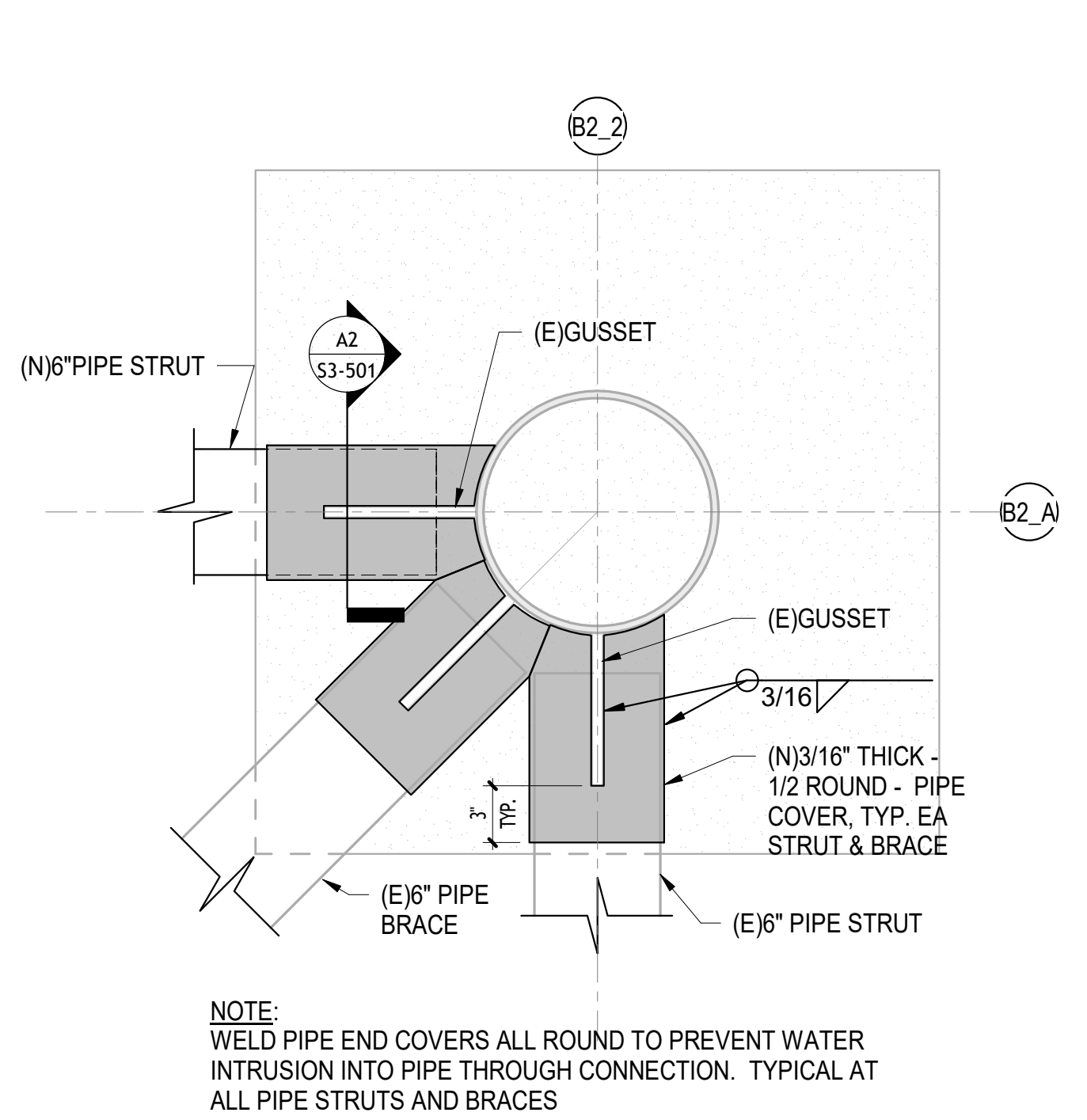
Submitted: BID SUBMITTAL  
DATE: 04/13/2026  
SCALE: 1/4" = 1'-0"

Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

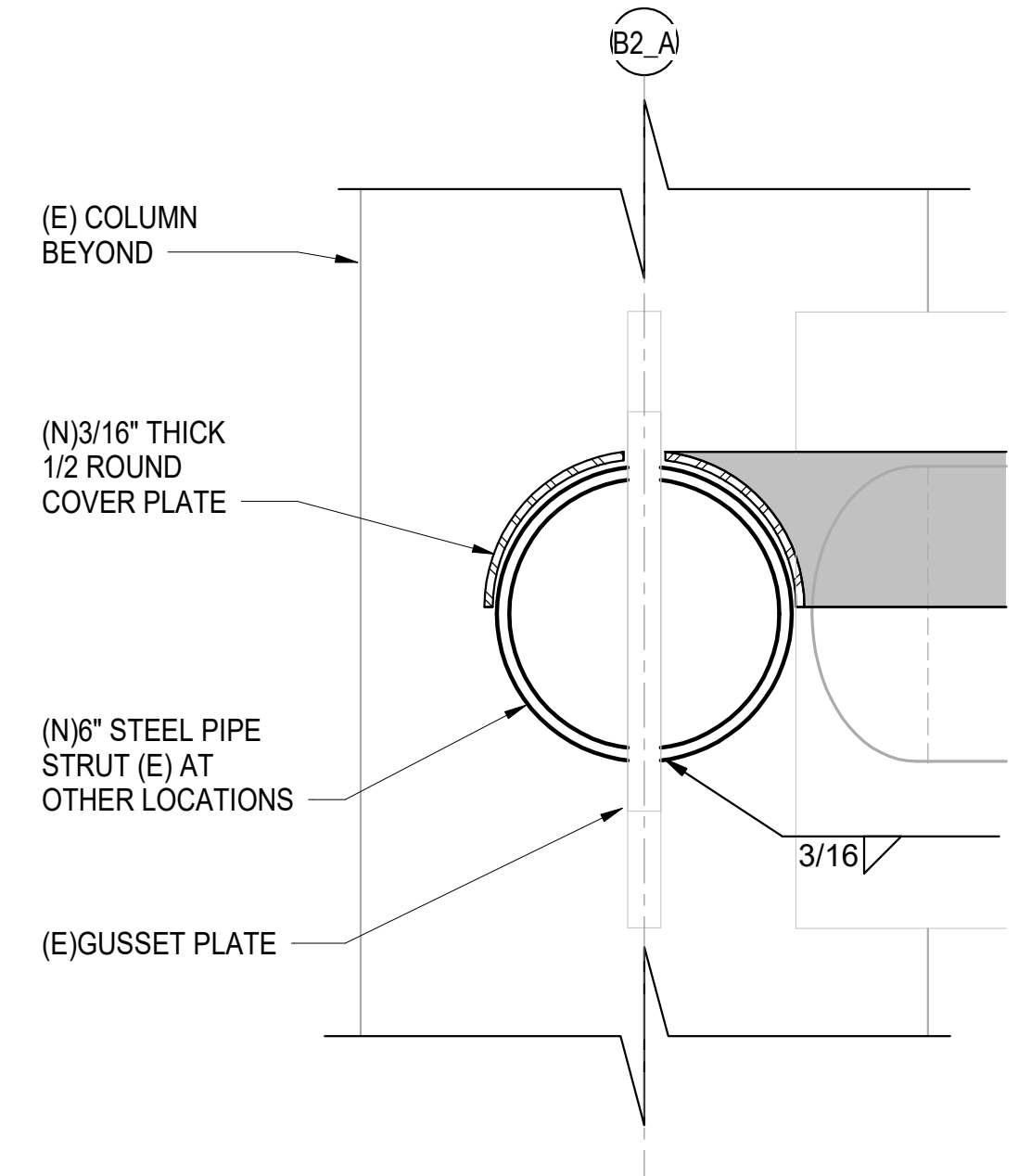
**S3-102**



**C1** TYP. TIE ROD CONNECTIONS  
SCALE: 1 1/2" = 1'-0"



**A1** PARTIAL PLAN - STRUT REPLACEMENT DETAIL AND REPAIRS  
SCALE: 1 1/2" = 1'-0"



**A2** PIPE STRUT & BRACE END COVERS  
SCALE: 3" = 1'-0"

1	▲	Addendum No. 1	04/30/2026	29 OF 29	APPROVED:
REVISION NO.	SYM.	DESCRIPTION	DATE	SHT. OF	APPROVED:

EXPIRES: 4/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**SAND ISLAND SRA PARK IMPROVEMENTS PH. VI**  
TAX MAP KEY: 1-5-041:006

**STEEL REPAIR DETAILS**

DESIGNED: Designer  
DRAWN: Author  
CHECKED: Checker  
APPROVED: Approver

Submitted: BID SUBMITTAL  
DATE: 04/13/2026  
SCALE: As indicated

**S3-501**

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

Dina Lau  
E-signed 2026-05-06 09:09AM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer