

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	49	73

GENERAL NOTES

1.

All materials shall conform to the drawings, Hawaii Standard Specifications for Road, Bridge and Public Works Construction (2005 Edition) and Special Provisions for Federal Aid Project No. NH-0300(175) Freeway Management System Phase 3A.
2.

The Contractor shall verify the location of all existing utility lines and notify the respective owners before commencing with work.
3.

Standard detail drawings refer to structures in general except for modifications as may be required for special conditions. For such modifications refer to corresponding detailed drawings.
4.

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 be equipment, winds, seismic, etc.
5.

The Contractor shall be solely responsible for all excavation and dewatering procedures including lagging, shoring and protection of streets and utilities, including treatment and discharge of pumped water.
6.

The Contractor shall be solely responsible for coordinating the work of all trades and shall check all dimensions. All discrepancies shall be called to the attention of the Engineer and be resolved before proceeding with the work.
7.

Shop drawings required by the standard specifications and special provisions shall be submitted to the Engineer for review prior to fabrication or ordering of materials. Shop drawings shall not be reproduction of contract drawings.
8.

Notes and details on drawings shall take precedence over General Notes unless stricter requirements are noted in General Notes. Special provisions shall take precedence over Standard Specifications.
9.

Except as otherwise noted, all vertical dimensions are measured plumb.
10.

Design Criteria

A.

Codes:

AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals, 2015, 1st Edition with 2017 Interim Revisions and AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014

Design Criteria for Bridges and Structures, August 8 2014 State of Hawaii Department of Transportation Highways Division w/ changes dated January 9, 2018

4.

All Steel items shall be galvanized as follows:

All Nuts, Bolts and Washers

AASHTO M232
(ASTM F2329)
5.

Except for Anchor Bolts, all bolt hole diameters shall be equal to the bolt diameter plus 1/16 ", prior to galvanizing. Hole diameters for Anchor Bolts shall not exceed the bolt diameter plus 1/4 ".
6.

All holes including bolt holes and drainage holes shall be pre-punched before coating steel.
7.

All anchor bolts, threaded rods and other hardware, including nuts and washers, which connect steel to concrete shall conform to ASTM F1554 Grade 55 as noted and shall be hot dip galvanized.
8.

Paint per Special Provisions Section 708. Epoxy primer and intermediate coat with Fluorourethane top coats "Dark Green". Repair existing areas damaged due to new work as required.
9.

Stainless steel surfaces in contact with galvanized structural steel shall be isolated with neoprene material pre-reviewed by the Engineer or coated with epoxy. Aluminum shall be isolated from dissimilar metals per Standard Specification Section 715.02
10.

All threaded rods shall be cut off clean between 3 and 6 threads past the nut and ground smooth. Threads shall be spoiled and all terminations shall be neat and consistent.
11.

Anchor bolts shall be installed with misalignments of less than 1 : 40 from vertical. After installation, firm contact shall exist between the anchor bolt nuts, washers, and base plate on any bolt installed in a misaligned position.

GENERAL NOTES FOR EPOXY GROUTED ANCHOR BOLTS

1.

See Special Provisions Section 503 Concrete Structures and Standard Specifications Section 656 for reinforcing steel dowels.
2.

Contractor shall locate existing reinforcing prior to drilling holes for new epoxy grouted reinforcing steel dowels and steel anchor bolts. Do not damage existing reinforcing.
3.

Epoxy grout for steel anchor bolts shall conform to Standards Specifications Section 712.04(B).
4.

Clean holes of all dust and residue before filling holes with epoxy grout. The hole shall be prepared, cleaned, drilled at a diameter in accordance with the epoxy manufacturer's recommendations.
5.

Where noted on drawings, installation of epoxy grout and steel anchor bolts shall be inspected by the Engineer.
6.

Epoxy grouted steel anchor bolts shall be incidental to Section 501 Steel Structures and will not be paid for separately.
7.

All drilled holes shall be cleaned, filled with epoxy, and anchor bolts installed prior to end of work day.

STRUCTURAL STEEL

1.

All structural steel shall be detailed, fabricated and erected in accordance with the AASHTO LRFD Bridge Design Specifications.
2.

Structure Materials shall be as follows:

Anchor Bolts

AASHTO M-314, Grade 55 ksi
(ASTM F1554, Grade 55 ksi)

Nuts for Anchor Bolts

AASHTO M292
(ASTM A563, Grade A)

Washers for Anchor Bolts

AASHTO M293
(ASTM F436, Type 1)

Stainless Steel Screws

AISI, Type 316
3.

All welding shall conform to American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). Electrodes shall be E70.

ORIGINAL PLAN

DATE

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NOTE BOOK

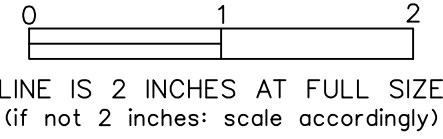
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af aty l APRIL 30, 2024
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURAL GENERAL NOTES

FREEWAY MANAGEMENT SYSTEM

Phase 3A

Federal Aid Project No. NH-0300(175)

Scale: As Noted Date: October 15, 2021

SHEET No. S0-1 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	50	73

EXISTING & DEMOLITION GENERAL NOTES

1. Demolition work shall be coordinated with construction of new work. Contractor shall submit proposed schedule and sequence of demolition work for Engineer's review prior to commencing with demolition work.
2. Known existing conditions are shown on the drawings. Dimensions and member sizes where shown on the drawings are based on available as-built plans. Existing dimensions shown may not be exact and are provided for information only. Contractor shall field verify all existing dimensions prior to construction. All discrepancies shall be promptly called to the attention of the Engineer and shall be resolved prior to proceeding with the demolition work.
3. As-built plans are available for review from the State of Hawaii Department of Transportation, Highways Division, Design Branch, Kakuhihewa Building Room 609, 601 Kamokila Boulevard, Kapolei, Hawaii 96707, Phone no. 808-692-7585.
4. Protect from damage existing structures to remain.

ABBREVIATIONS

Bm	Beam	Jt	Joint
Bot	Bottom	Manu	Manufacturer
CC	Center to Center	Max	Maximum
Clr	Clear	MAC	Media Access Controls
Col	Column	Min	Minimum
Conc	Concrete	(N)	New
Cont	Continuous	NIC	Not In Contract
Dia	Diameter	Open'g	Opening
Diag	Diagonal	SS	Stainless Steel
DO	Ditto	Std	Standard
EI	Elevation	T&B	Top and Bottom
(E), exist	Existing	Thk	Thick
ES	Each Side	Typ	Typical
Flr	Floor	UON	Unless Otherwise Noted
Ga	Gauge	Vert	Vertical
H	Height	W	Width
Horiz	Horizontal	W/	With

INSPECTION REQUIREMENTS

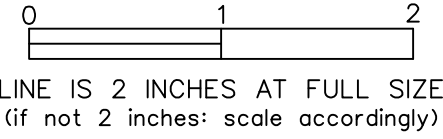
1. Contractor shall refer to Standard Specifications Section 105.11 - "Inspection of the Work and Materials."
2. The work items that will require inspection by the Engineer shall be, but not be limited to, the following items:

A. Epoxy grouted steel anchor bolts

Contractor shall notify the Engineer at least 7 working days prior to the above inspections

ORIGINAL PLAN No.	SURVEY PLOTTED BY	DATE
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	NOTE BOOK	
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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

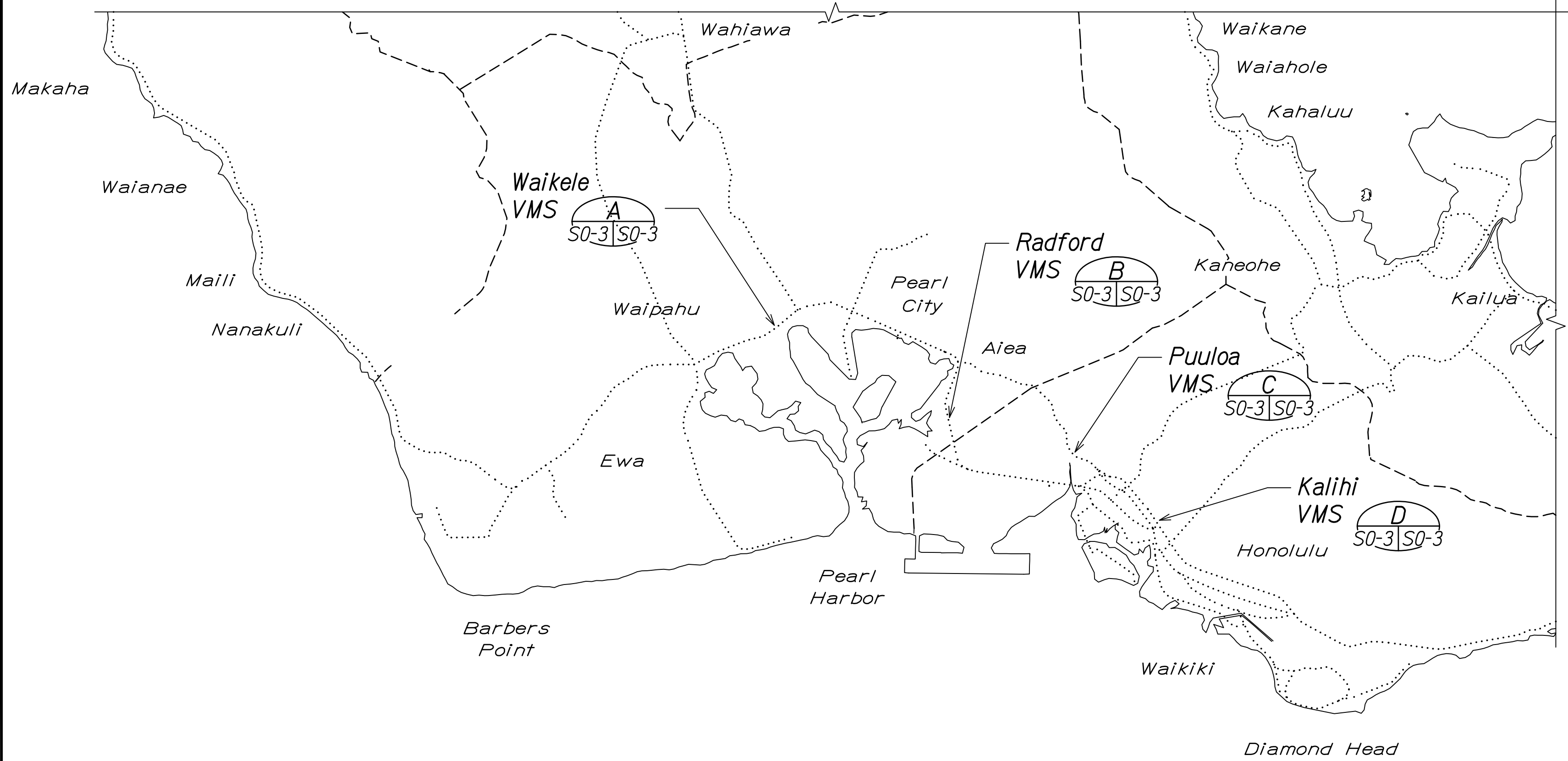
STRUCTURAL GENERAL NOTES

FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

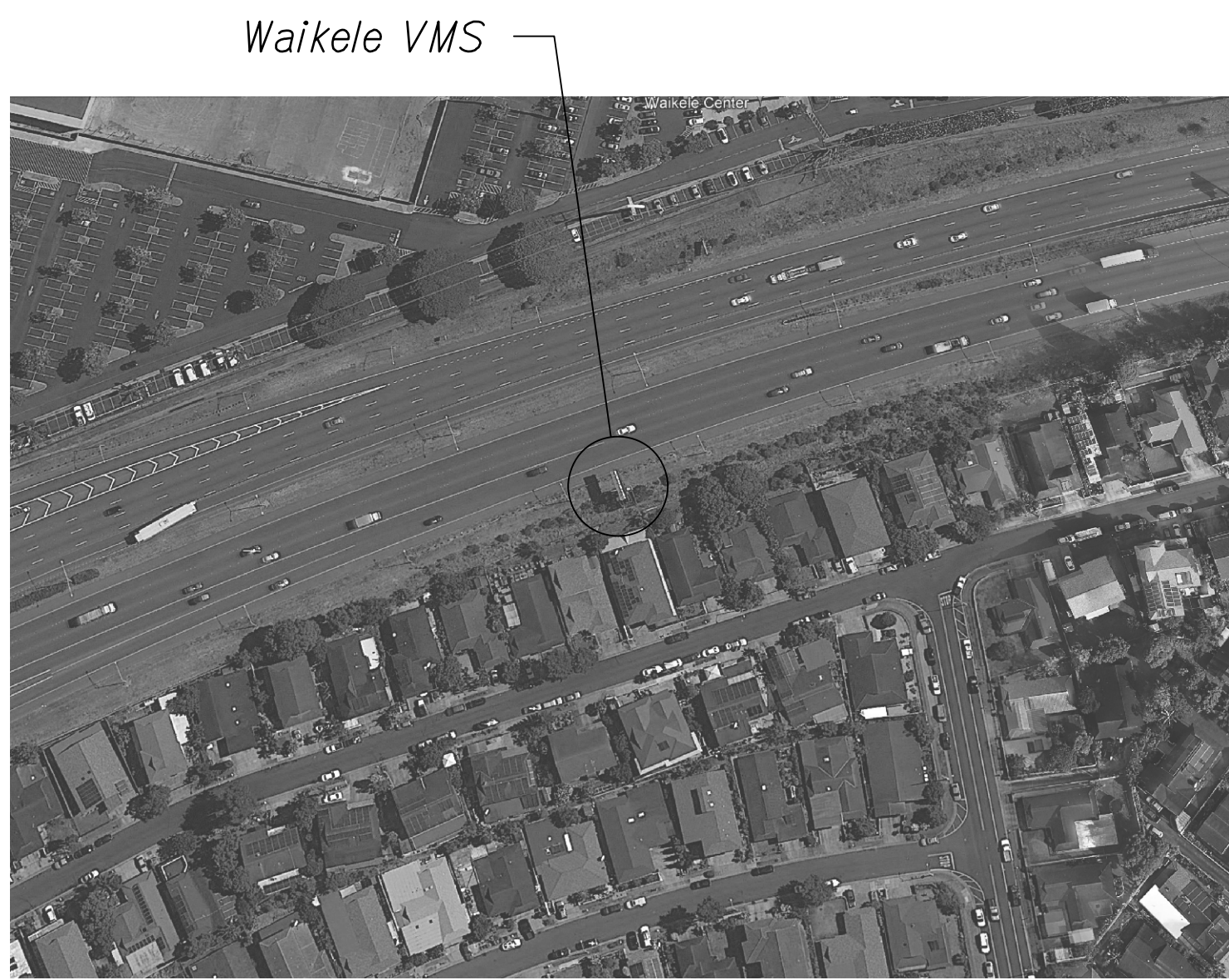
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SHEET No. *SO-2* OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	51	73



D KALIHI VMS LOCATION MAP 



A WAIKELE VMS LOCATION MAP 



B RADFORD VMS LOCATION MAP 

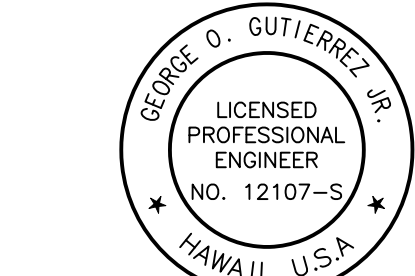


C PUULOA VMS LOCATION MAP 

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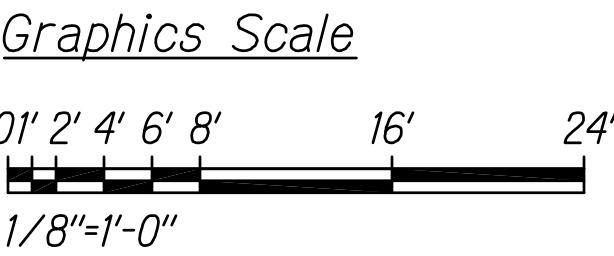
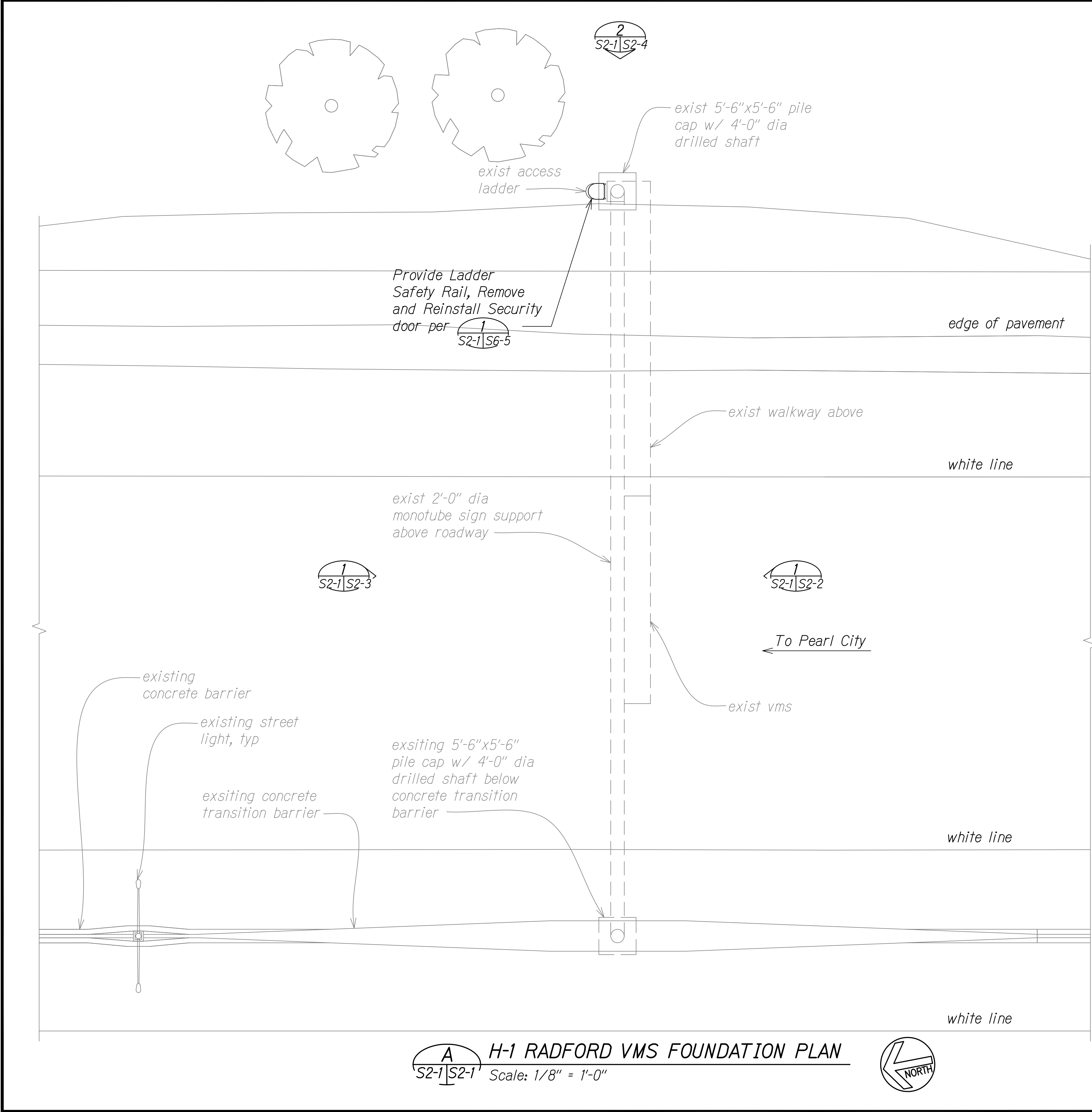
GENERAL SITE MAP
FREWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

Scale: As Noted Date: October 15, 2021

SHEET No. *SO-3* OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	52	73

- NOTES:**
1. Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
 2. Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**H-1 RADFORD VMS
FOUNDATION PLAN**

Freeway Management System
Phase 3A
Federal Aid Project No. NH-0300(175)

Scale: As Noted Date: October 15, 2021

SHEET No. S2-1 OF 73 SHEETS



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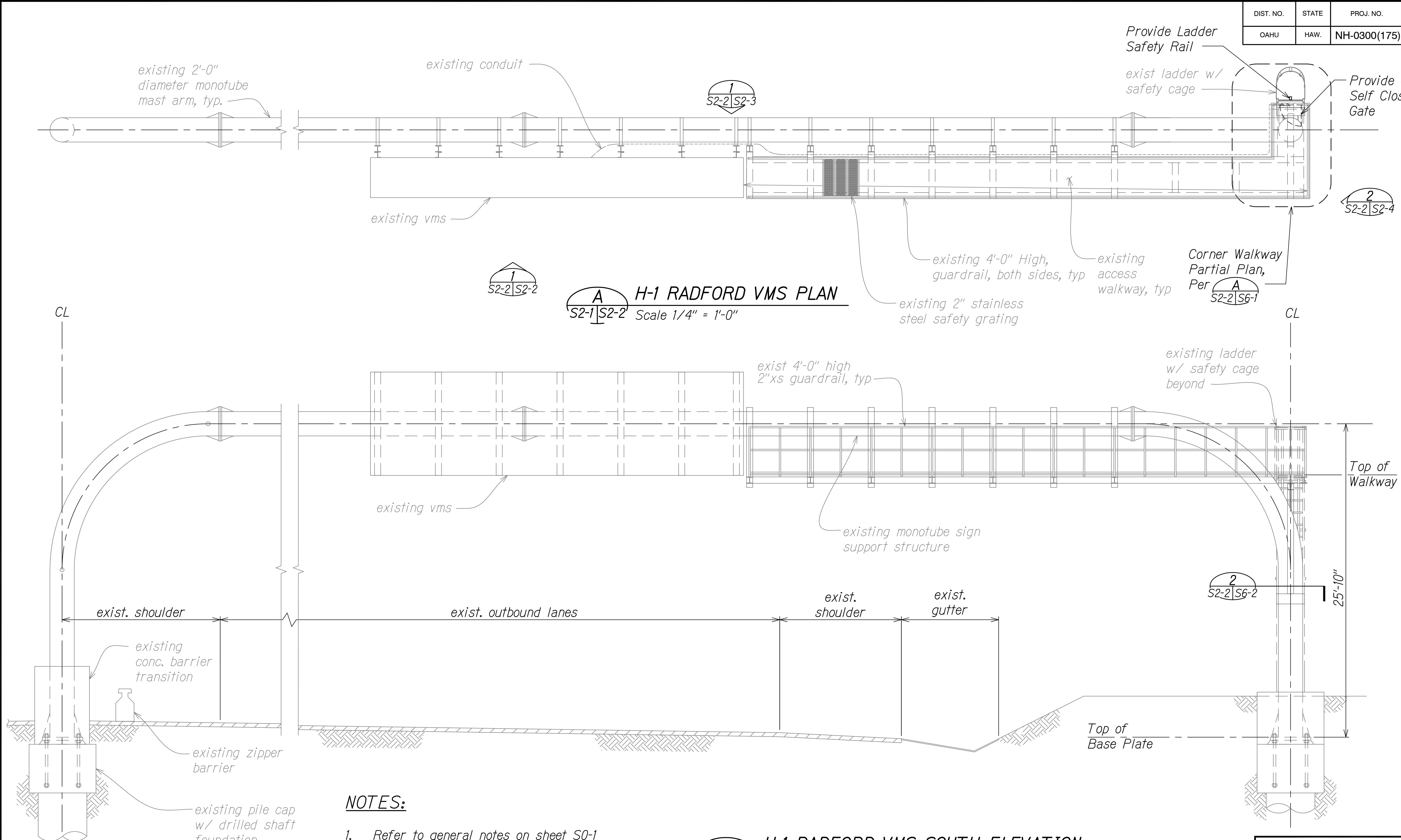


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S2-1/S2-1 **H-1 RADFORD VMS FOUNDATION PLAN**
Scale: 1/8" = 1'-0"

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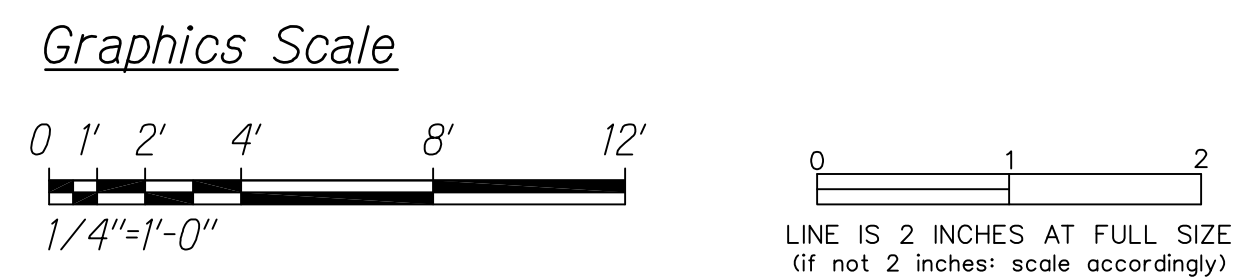
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DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	53	73



- NOTES:**
1. Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
 2. Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.

H-1 RADFORD VMS SOUTH ELEVATION
S2-1, S2-2/S2-2 Scale: 1/4" = 1'-0"



GEORGE O. GUTIERREZ JR.
LICENSED PROFESSIONAL ENGINEER
NO. 12107-S
HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**H-1 RADFORD VMS TOP PLAN
AND SOUTH ELEVATION**

FREEWAY MANAGEMENT SYSTEM

Phase 3A
Federal Aid Project No. NH-0300(175)

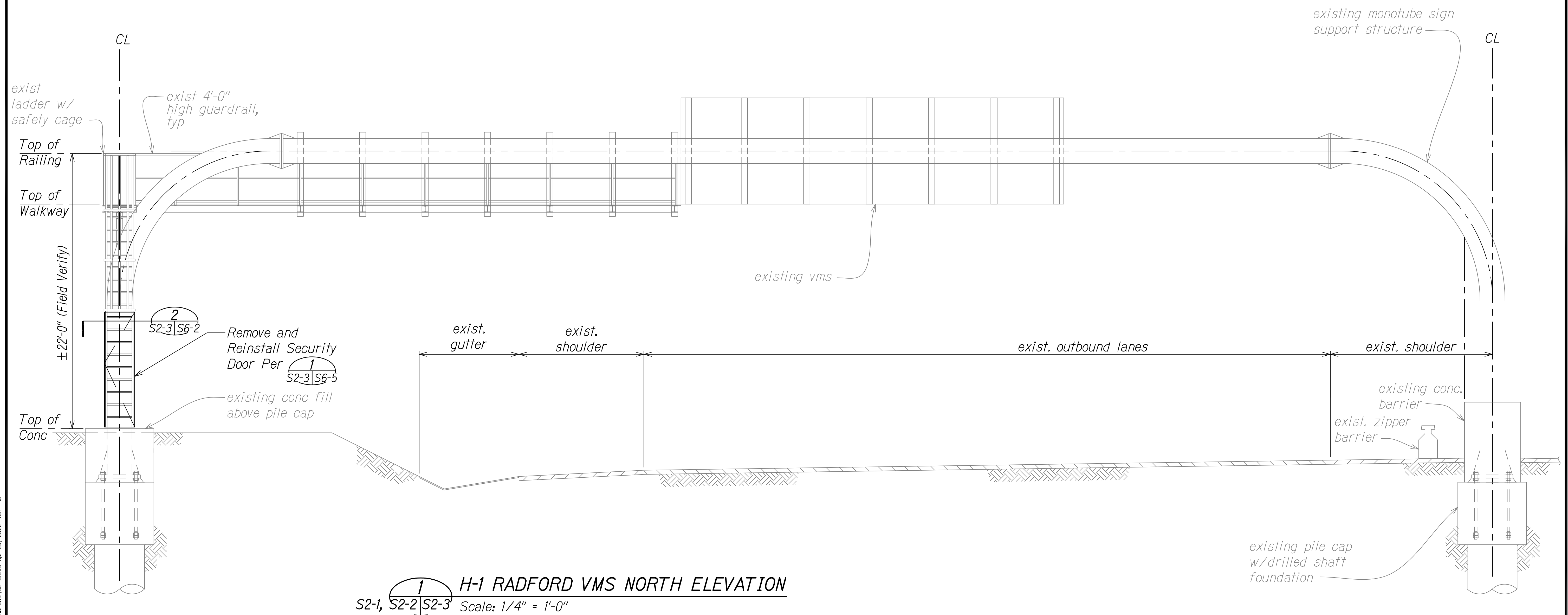
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SHEET No. S2-2 OF 73 SHEETS

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OAHU	HAW.	NH-0300(175)	2021	54	73

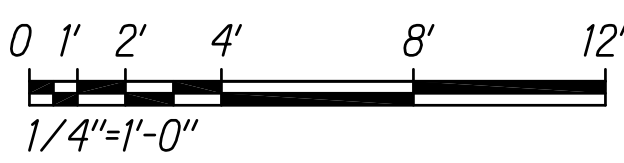


H-1 RADFORD VMS NORTH ELEVATION
S2-1, S2-2, S2-3 Scale: 1/4" = 1'-0"

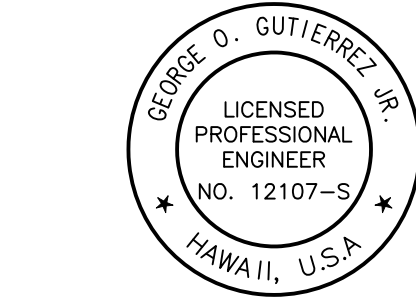
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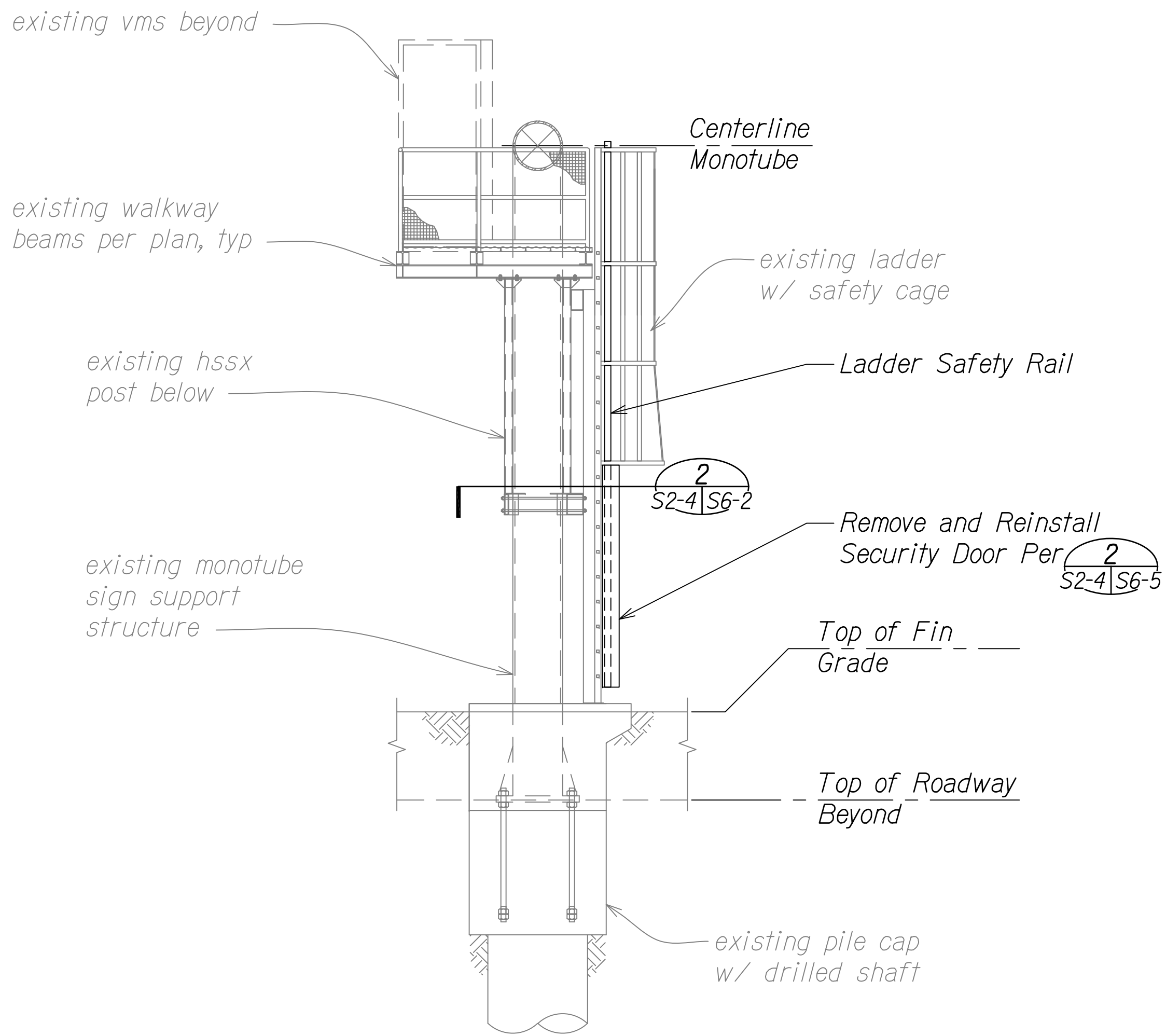


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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
H-1 RADFORD VMS
NORTH ELEVATION
FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S2-3 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	55	73

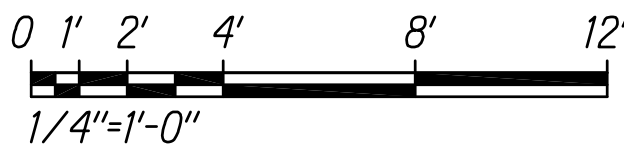


H-1 RADFORD EAST ELEVATION
S2-1, S2-2, S2-4 Scale: 1/4" = 1'-0"

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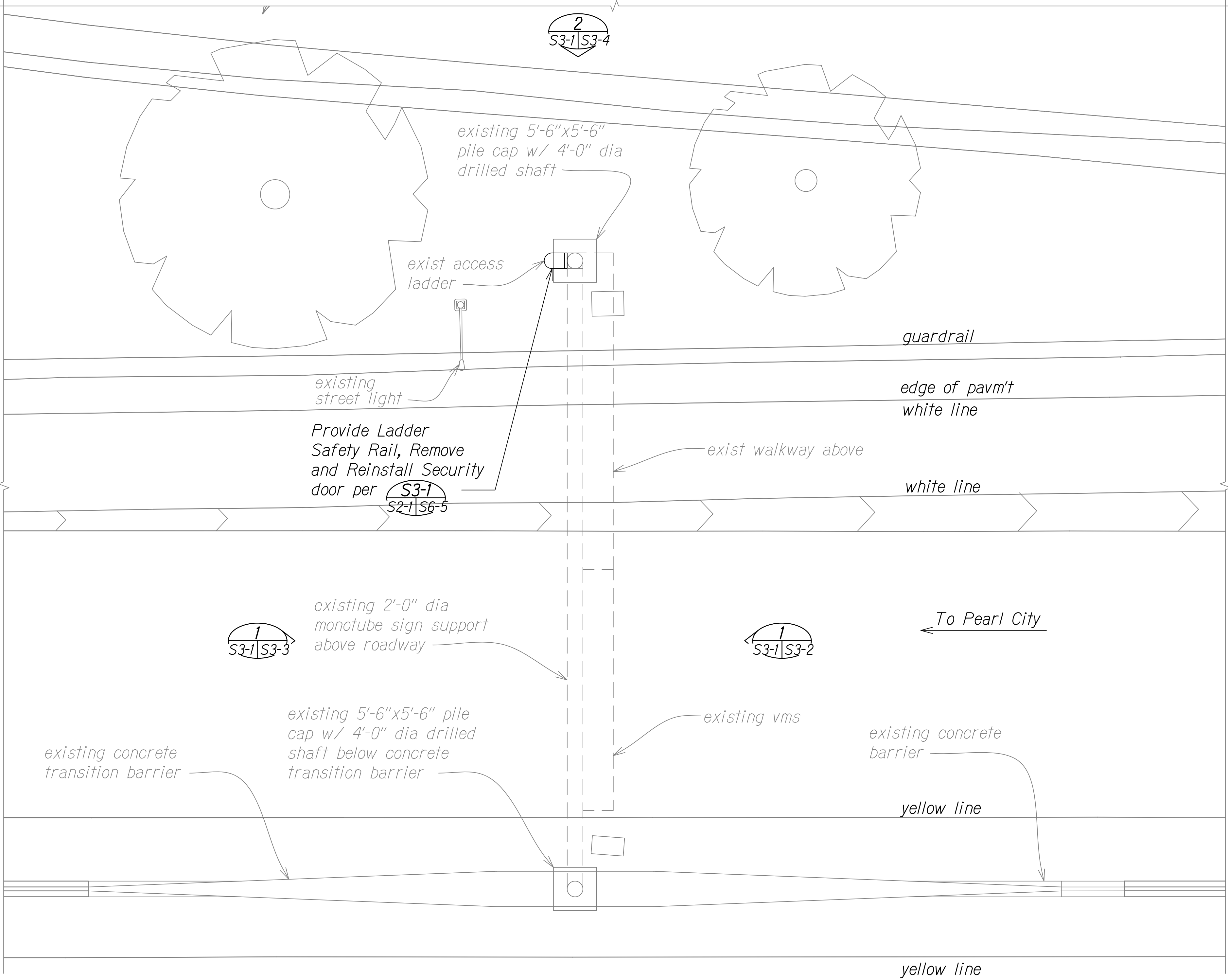
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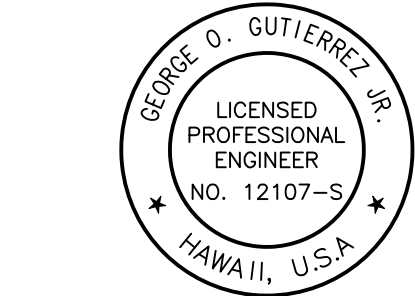
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
H-1 RADFORD VMS
EAST ELEVATION
FREeway MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S2-4 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	56	73

- NOTES:
- Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
 - Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.



A
S3-1/S3-1 **H-201 PUULOA VMS FOUNDATION PLAN**
Scale: 1/8" = 1'-0"

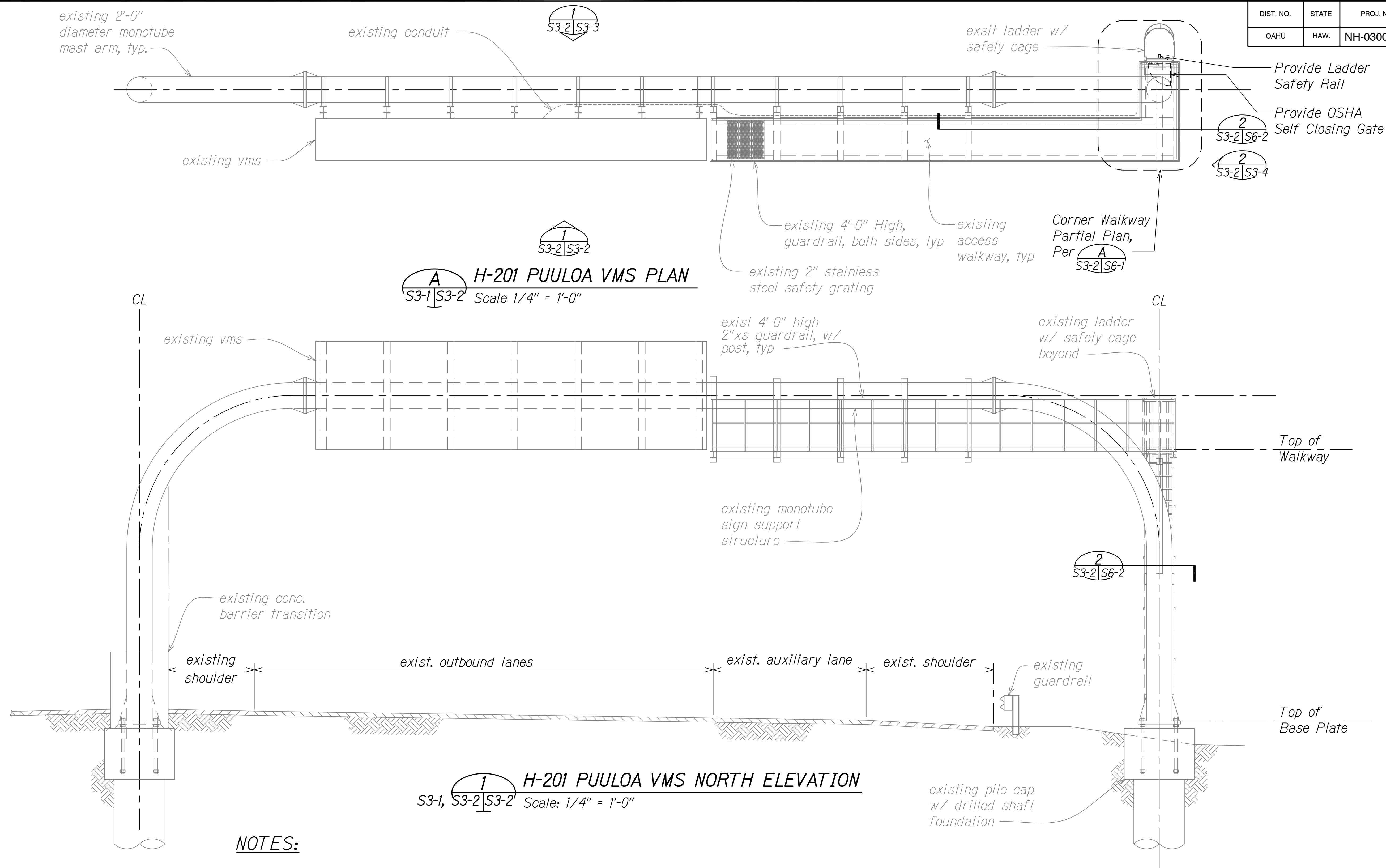


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APRIL 30, 2024
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-201 PUULOA VMS
FOUNDATION PLAN**
FREeway MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S3-1 OF 73 SHEETS

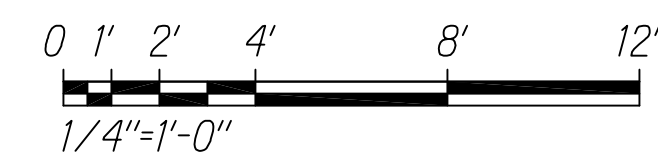
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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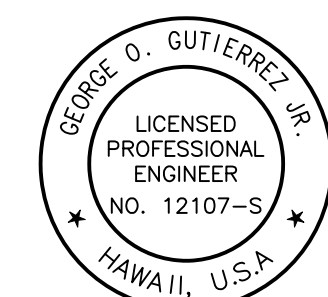
NOTES:

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Graphics Scale



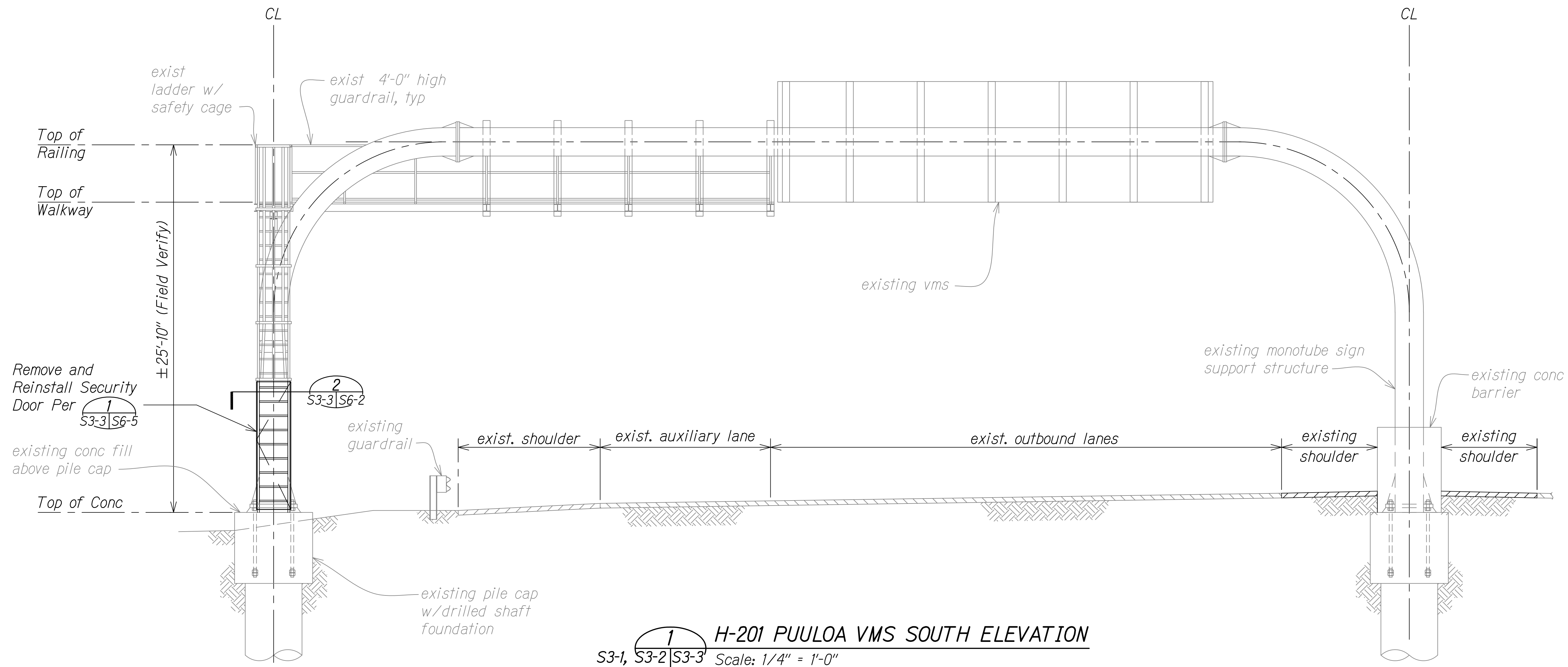
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STATE OF HAWAII
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HIGHWAYS DIVISION
**H-201 PUULOA VMS TOP PLAN
AND SOUTH ELEVATION**
FREeway MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S3-2 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	58	73

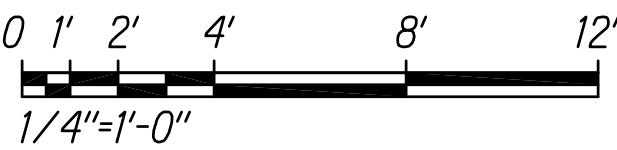


H-201 PUULOA VMS SOUTH ELEVATION
S3-1, S3-2, S3-3 Scale: 1/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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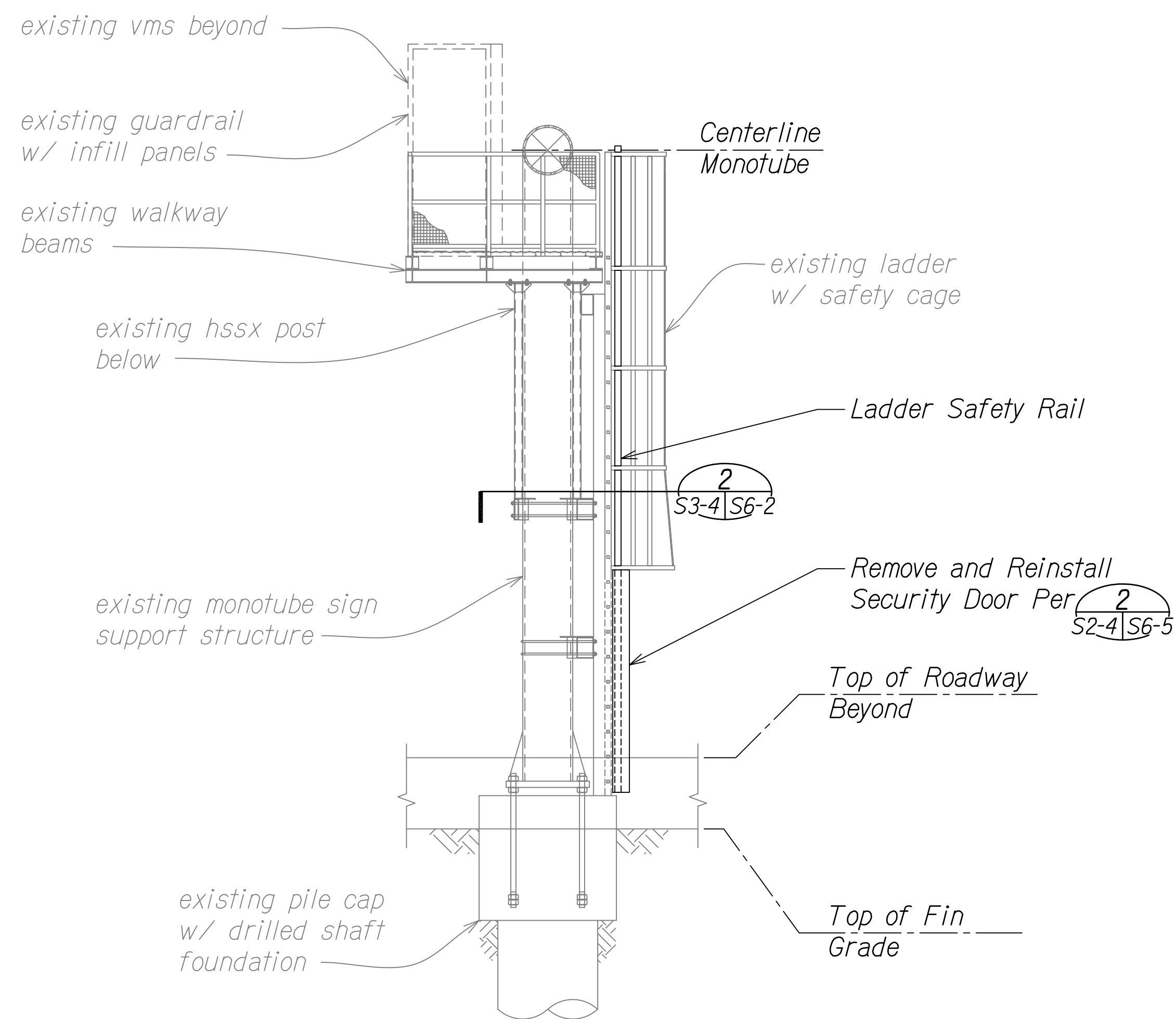


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FREEWAY MANAGEMENT SYSTEM
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SHEET No. S3-3 OF 73 SHEETS

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OAHU	HAW.	NH-0300(175)	2021	59	73

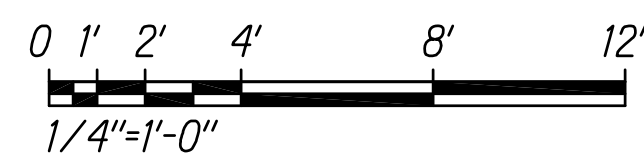


H-201 PUULOA EAST ELEVATION
S3-1, S3-2, S3-4 Scale: 1/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
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Graphics Scale



0 1 2
LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)



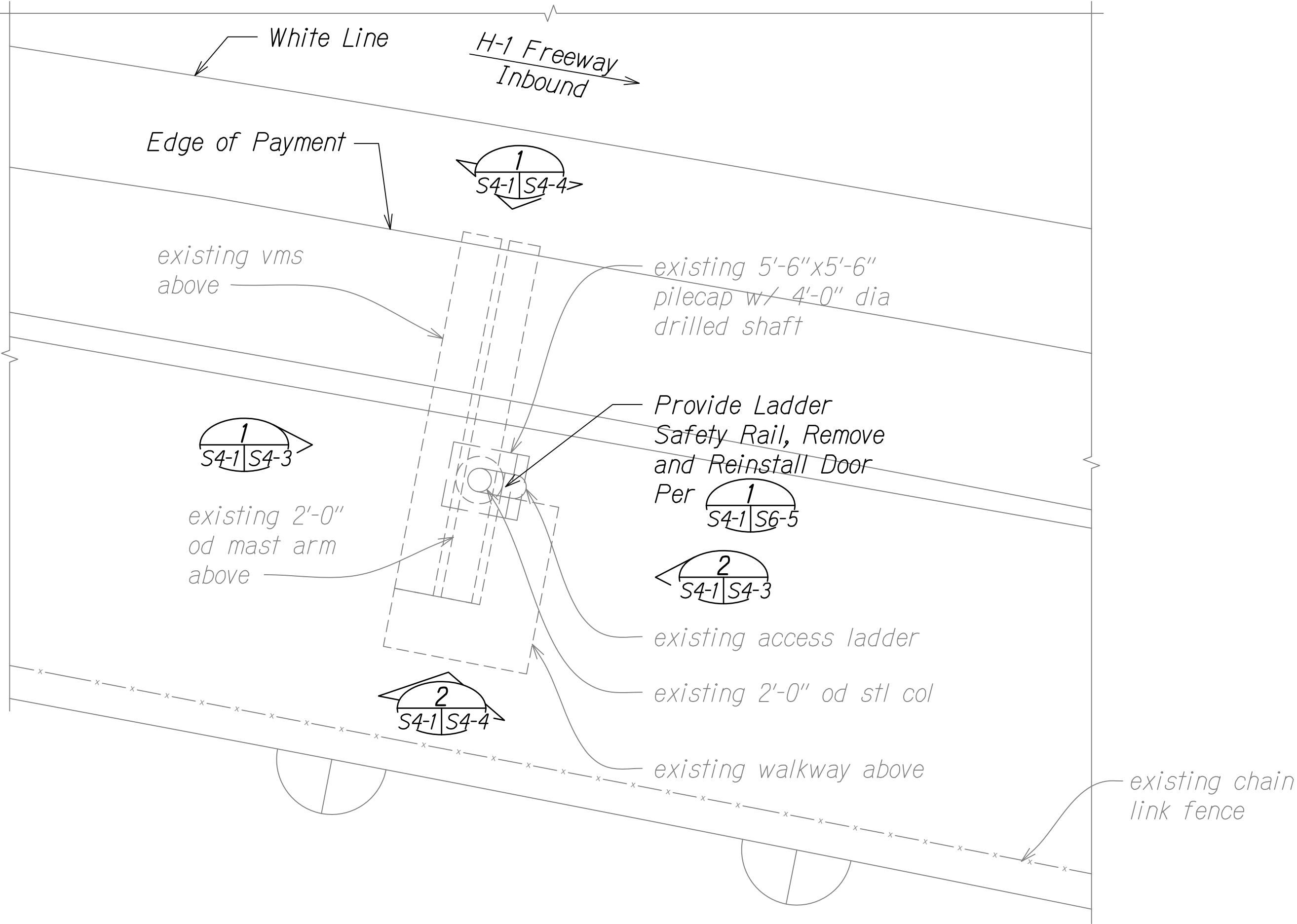
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af aty l APRIL 30, 2024
LIC. EXP. DATE

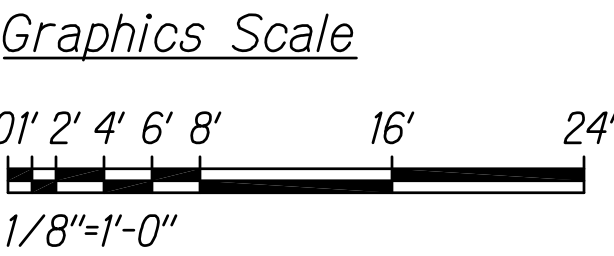
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
H-201 PUULOA VMS
EAST AND WEST ELEVATION
FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S3-4 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	60	73

- NOTES:
1. Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
 2. Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.

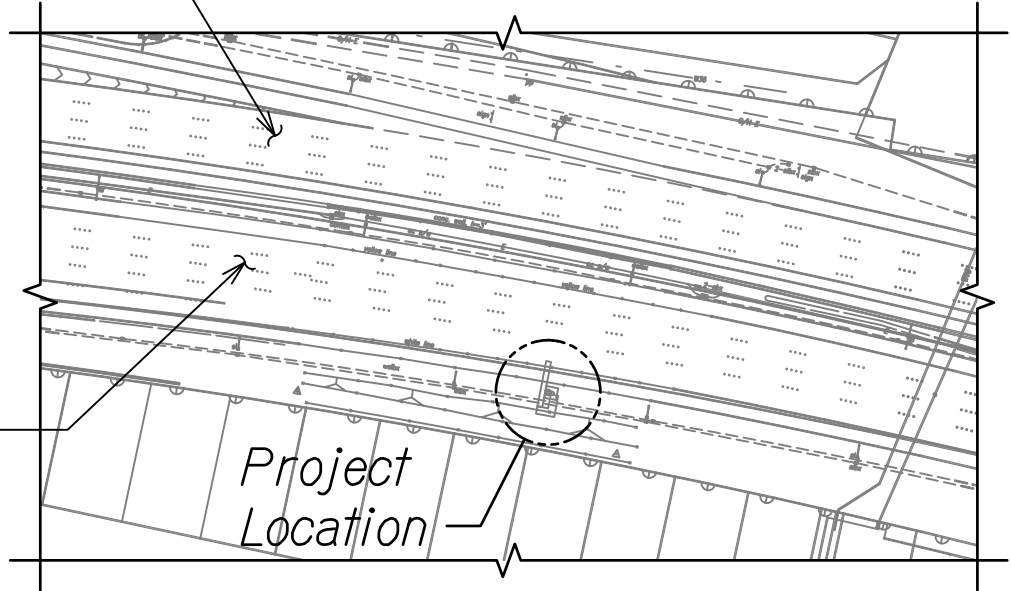


A
S4-1/S4-1 **H-1 WAIKELE VMS - FOUNDATION PLAN**
Scale: 1/8" = 1'-0"



INTERSTATE HIGHWAY
(F.A.P. NO. I-HI-1 (22) To Honolulu

INTERSTATE HIGHWAY
(F.A.P. NO. I-HI-1 (22) To Ewa



Keyplan



0 1 2
LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)



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af aty l APRIL 30, 2024
LIC. EXP. DATE

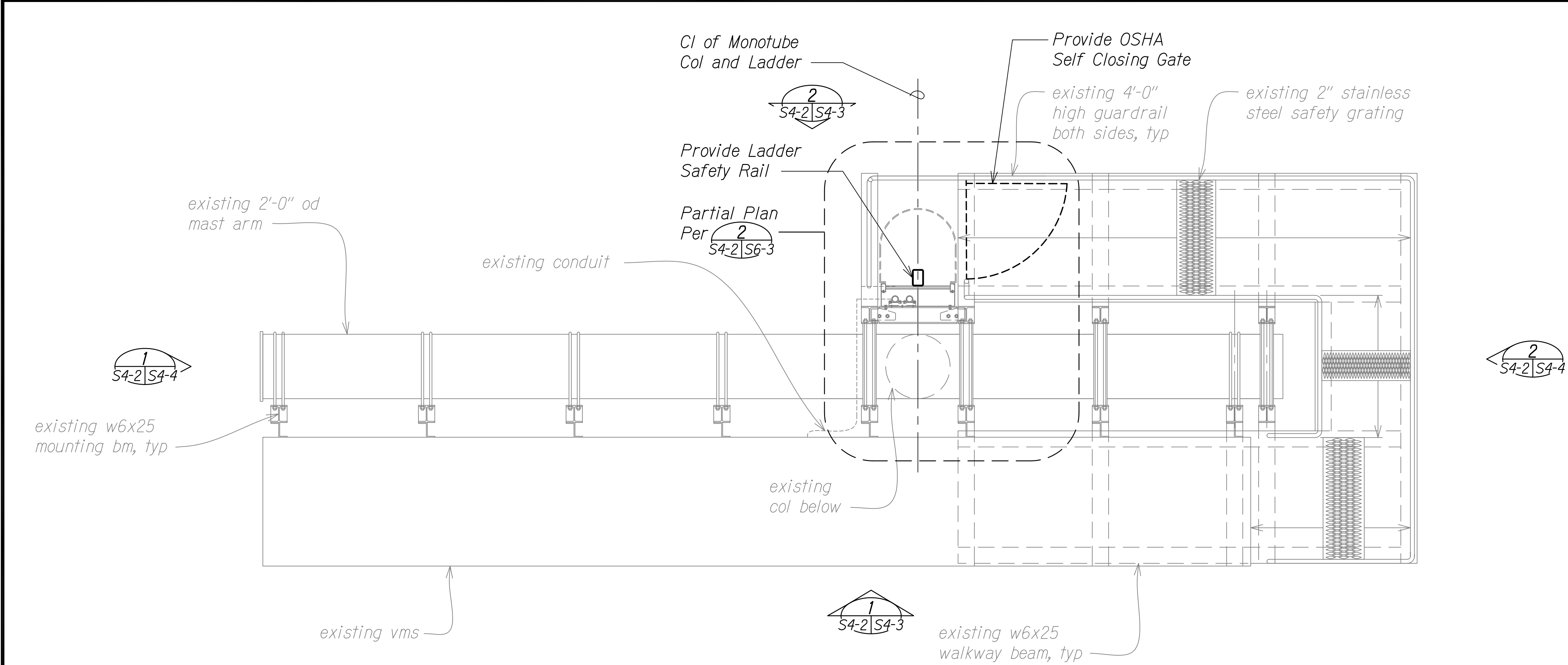
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-1 WAIKELE VMS -
FOUNDATION PLAN**
FREeway MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S4-1 OF 73 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

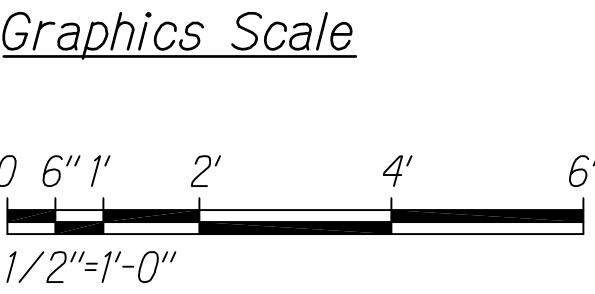
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DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	61	73

- NOTES:**
- Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
 - Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.



H-1 WAIKELE VMS - WALKWAY FRAMING PLAN
Scale: 1/2" = 1'-0"



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

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LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)

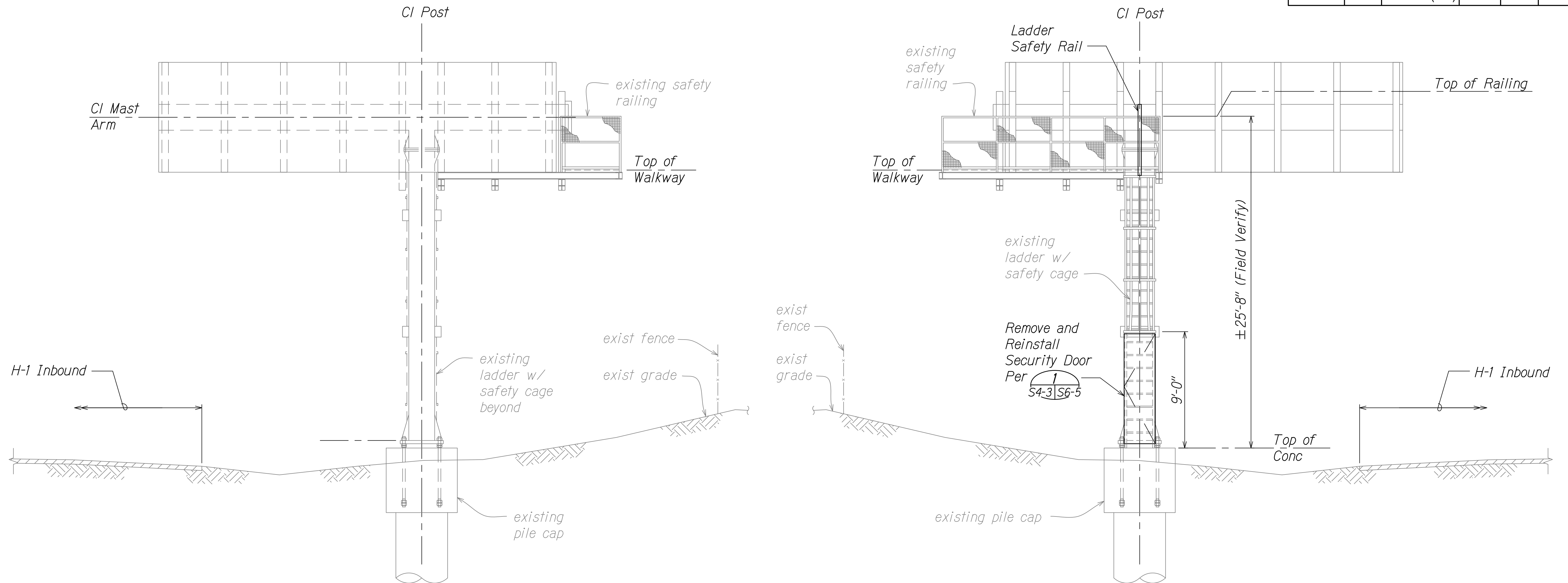


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af aty l APRIL 30, 2024
LIC. EXP. DATE

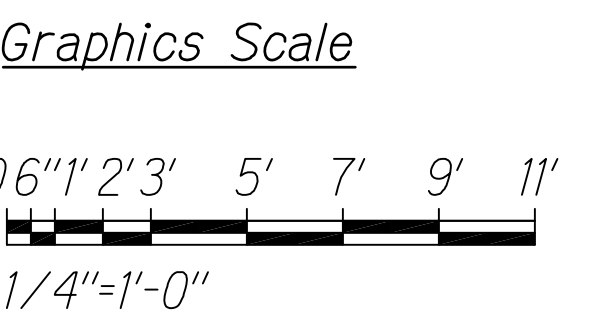
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-1 WAIKELE VMS -
WALKWAY PLAN**
FREeway MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S4-2 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	62	73



1 H-1 WAIKELE VMS - WEST ELEAVATION
S4-1, S4-2, S4-3 Scale: 1/4" = 1'-0"

2 H-1 WAIKELE VMS - EAST ELEAVATION
S4-1, S4-2, S4-3 Scale: 1/4" = 1'-0"



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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af aty l APRIL 30, 2024
L.C. EXP. DATE

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

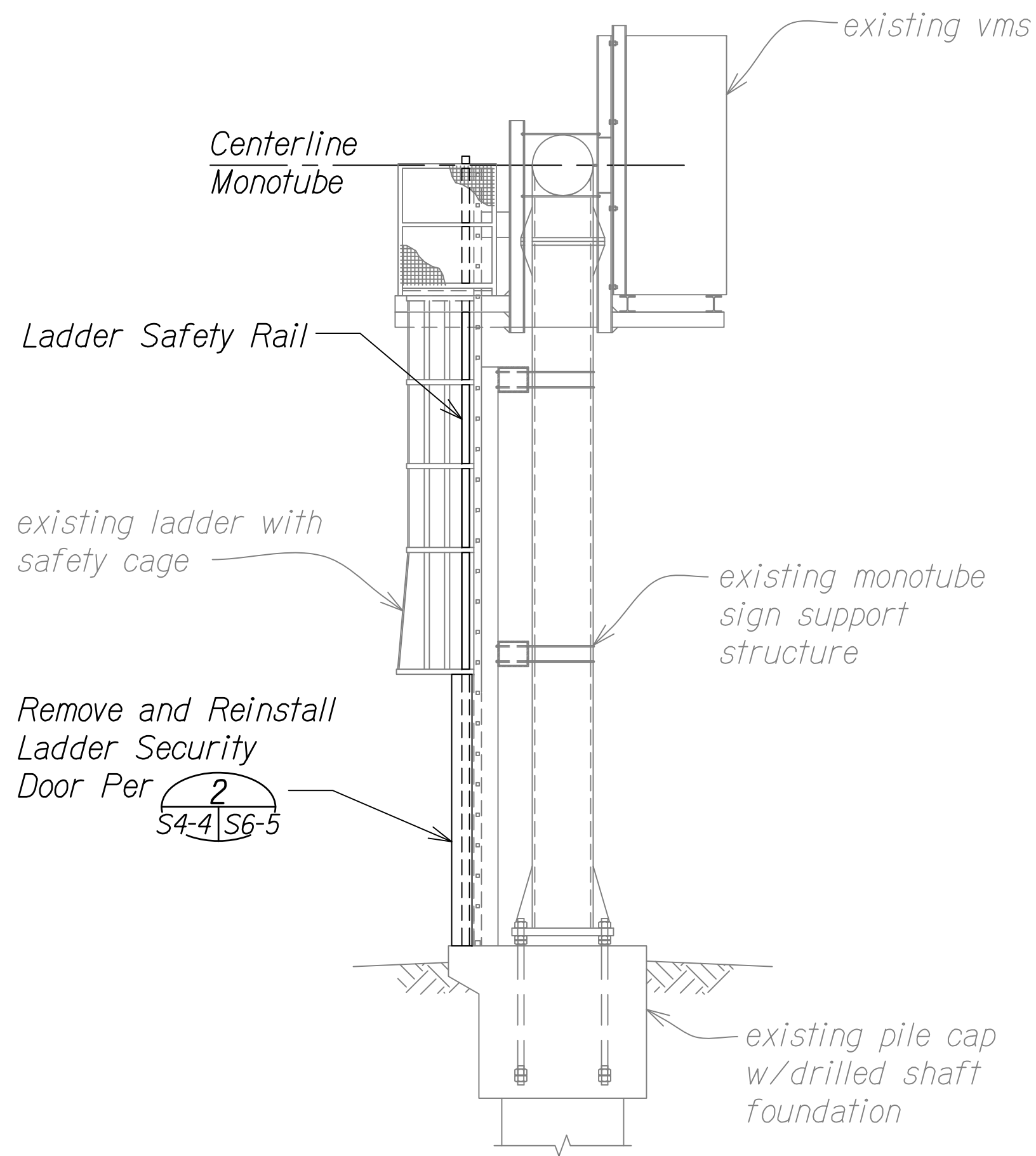
**H-1 WAIKELE VMS -
EAST AND WEST ELEAVATION**

FREWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

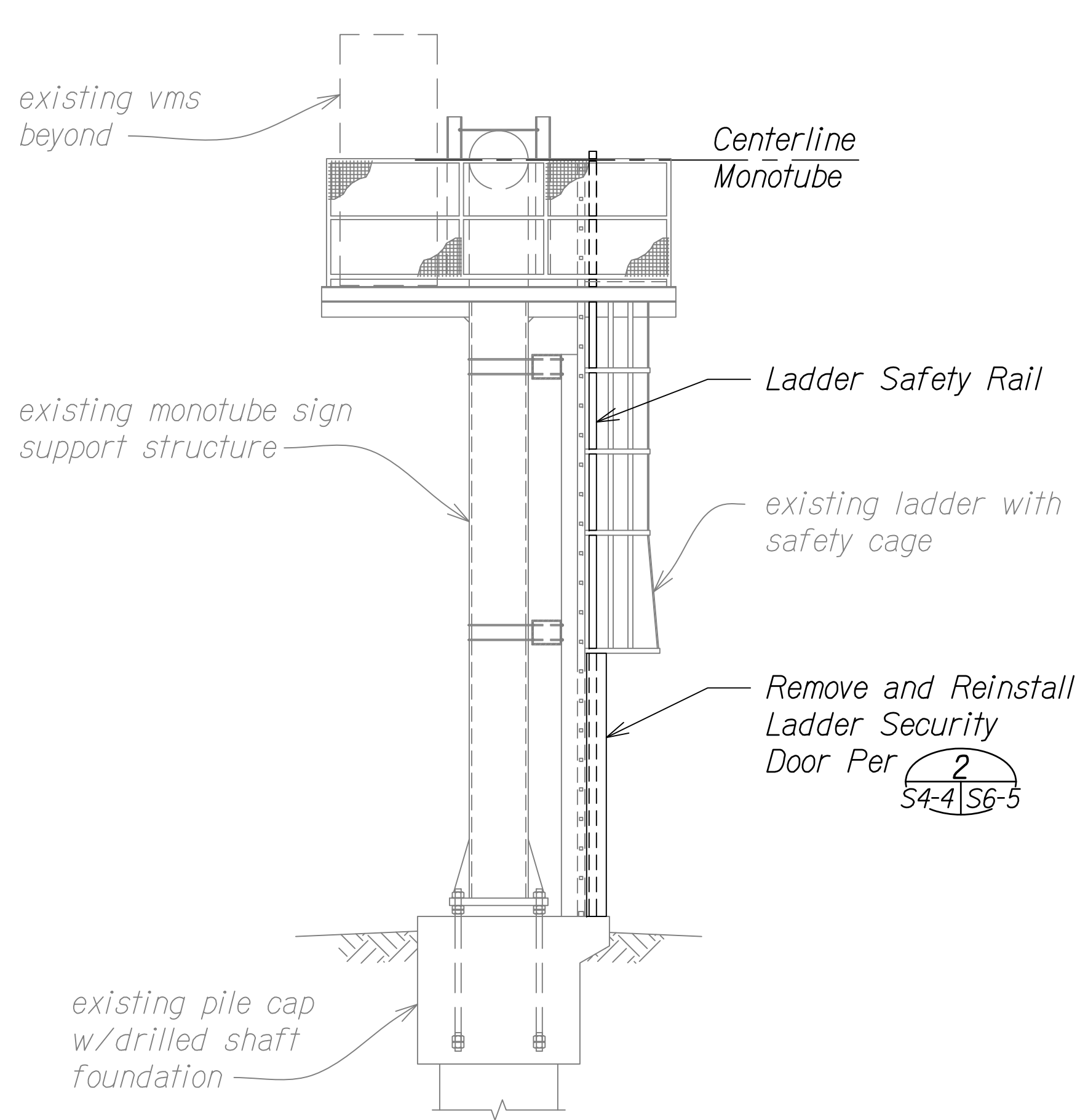
Scale: As Noted Date: October 15, 2021

SHEET No. S4-3 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	63	73

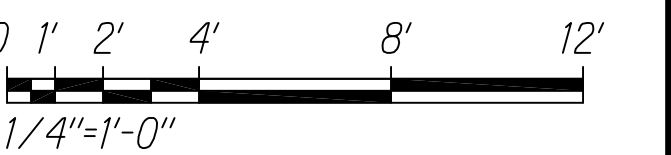


1 H-1 WAIKELE VMS - NORTH ELEVATION
S4-1, S4-2, S4-4 Scale: 1/4" = 1'-0"



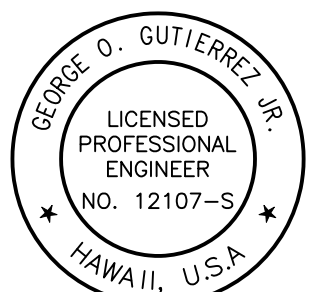
2 H-1 WAIKELE VMS - SOUTH ELEVATION
S4-1, S4-2, S4-4 Scale: 1/4" = 1'-0"

Graphics Scale



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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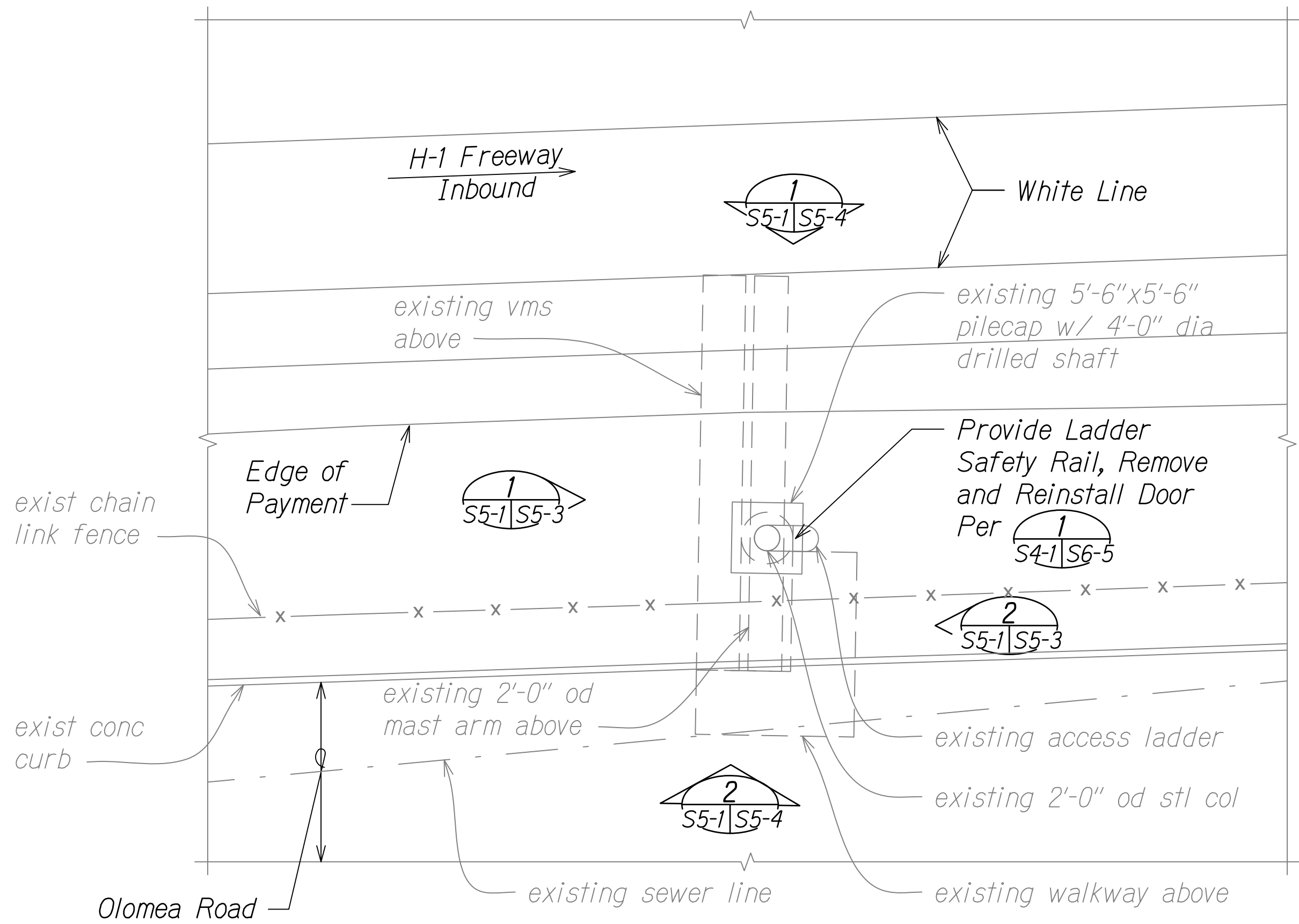
af aty l APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-1 WAIKELE VMS -
NORTH AND SOUTH ELEVATION**
FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S4-4 OF 73 SHEETS

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	64	73

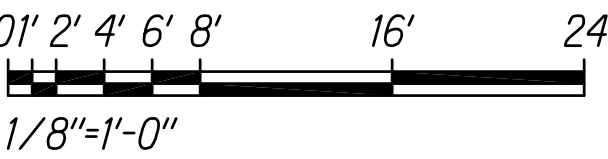
- NOTES:
- Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
 - Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.



A H-1 KALIHI VMS - FOUNDATION PLAN
S5-1/S5-1 Scale: 1/8" = 1'-0"

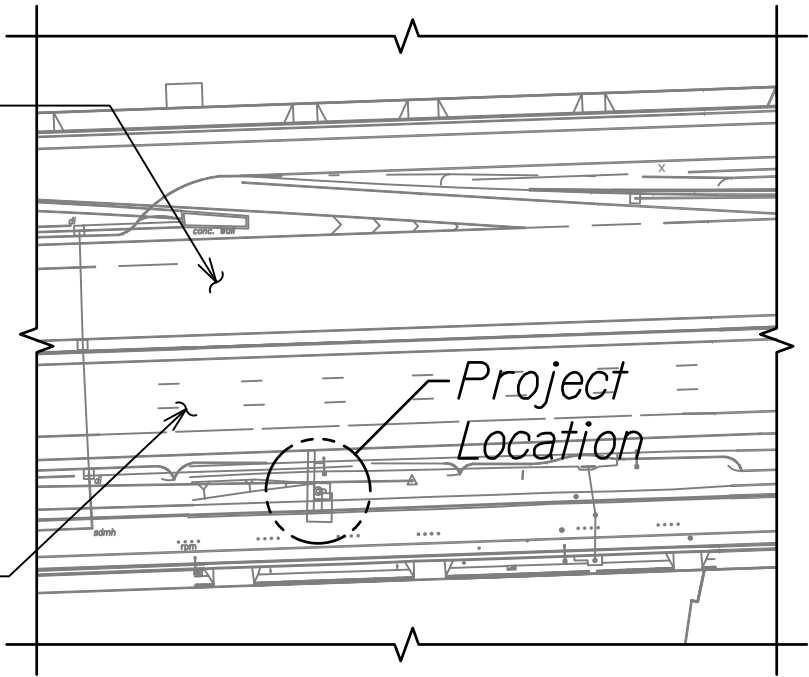


Graphics Scale



INTERSTATE HIGHWAY
(F.A.P. NO. I-HI-1 (22) To Honolulu

INTERSTATE HIGHWAY
(F.A.P. NO. I-HI-1 (22) To Ewa



Keyplan



0 1 2
LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)



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APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-1 KALIHI VMS -
FOUNDATION PLAN**
FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S5-1 OF 73 SHEETS

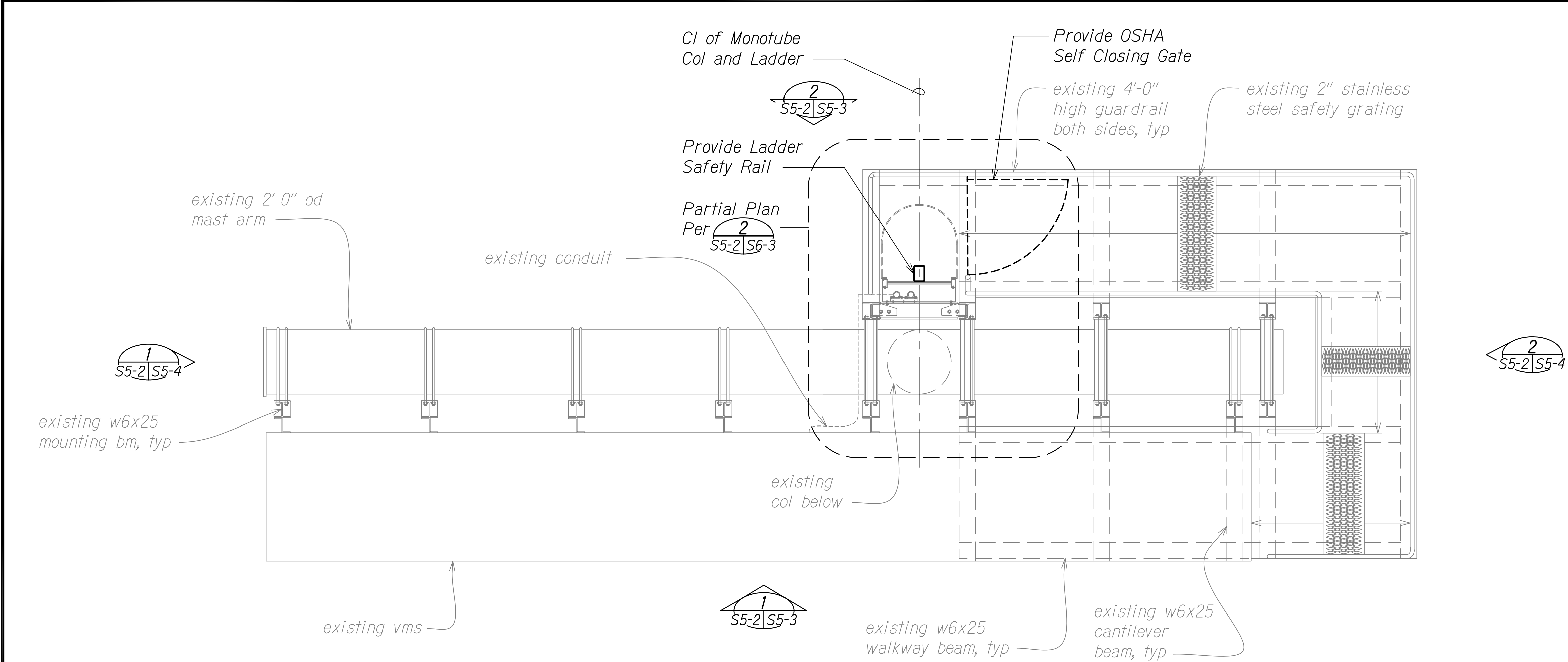
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	65	73

NOTES:

- Refer to general notes on sheet S0-1 and S0-2 and typical detail sheets S6-1 through S6-6 for additional information.
- Contractor shall field verify all existing dimensions and clearances. Any discrepancies shall be brought to the attention of the engineer prior to fabrication.



H-1 KALIHI VMS - WALKWAY FRAMING PLAN
Scale: 1/2" = 1'-0"

Graphics Scale



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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af aty l APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

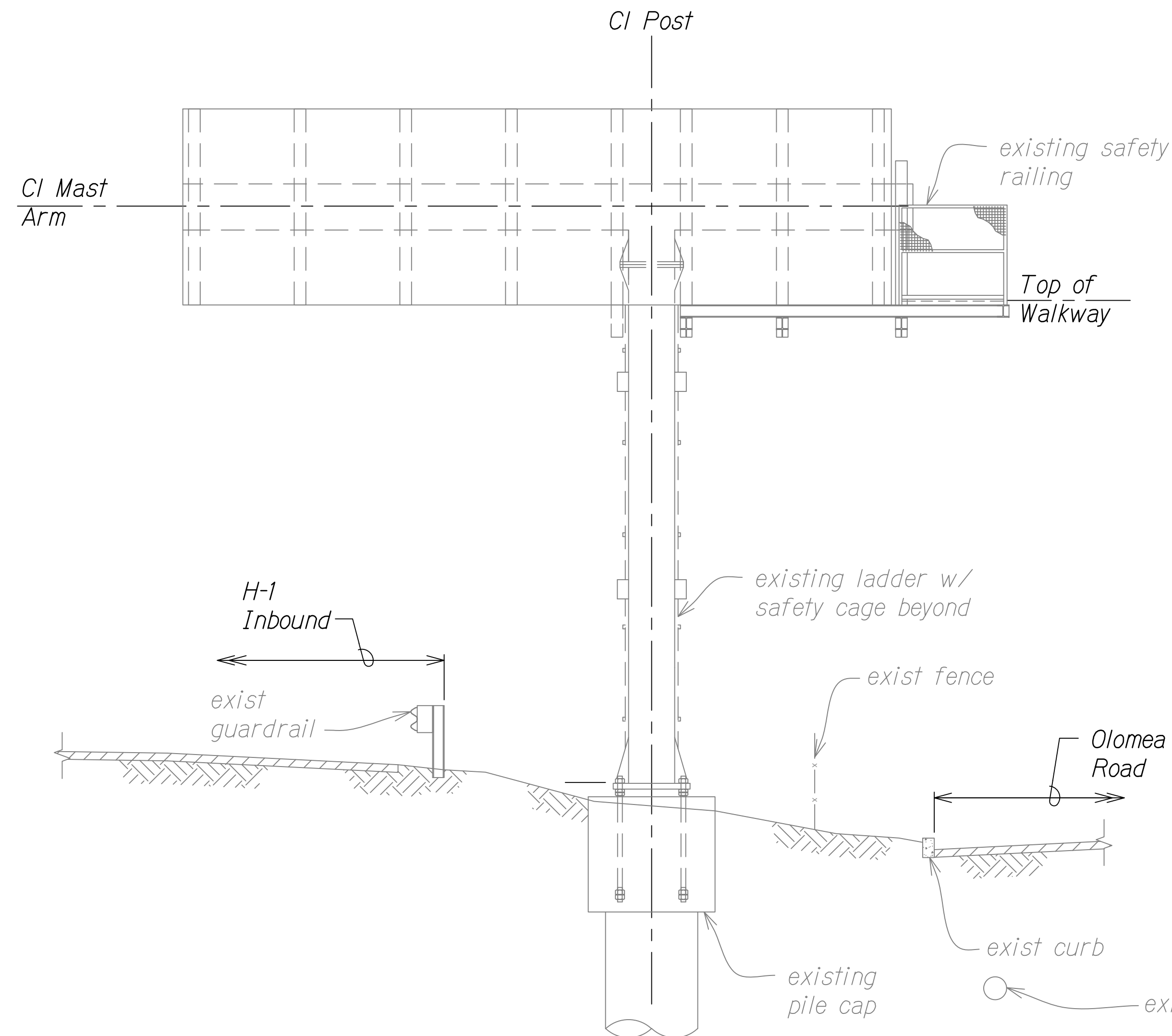
**H-1 KALIHI VMS - EAST ELEVATION
AND WALKWAY FRAMING PLAN**

FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

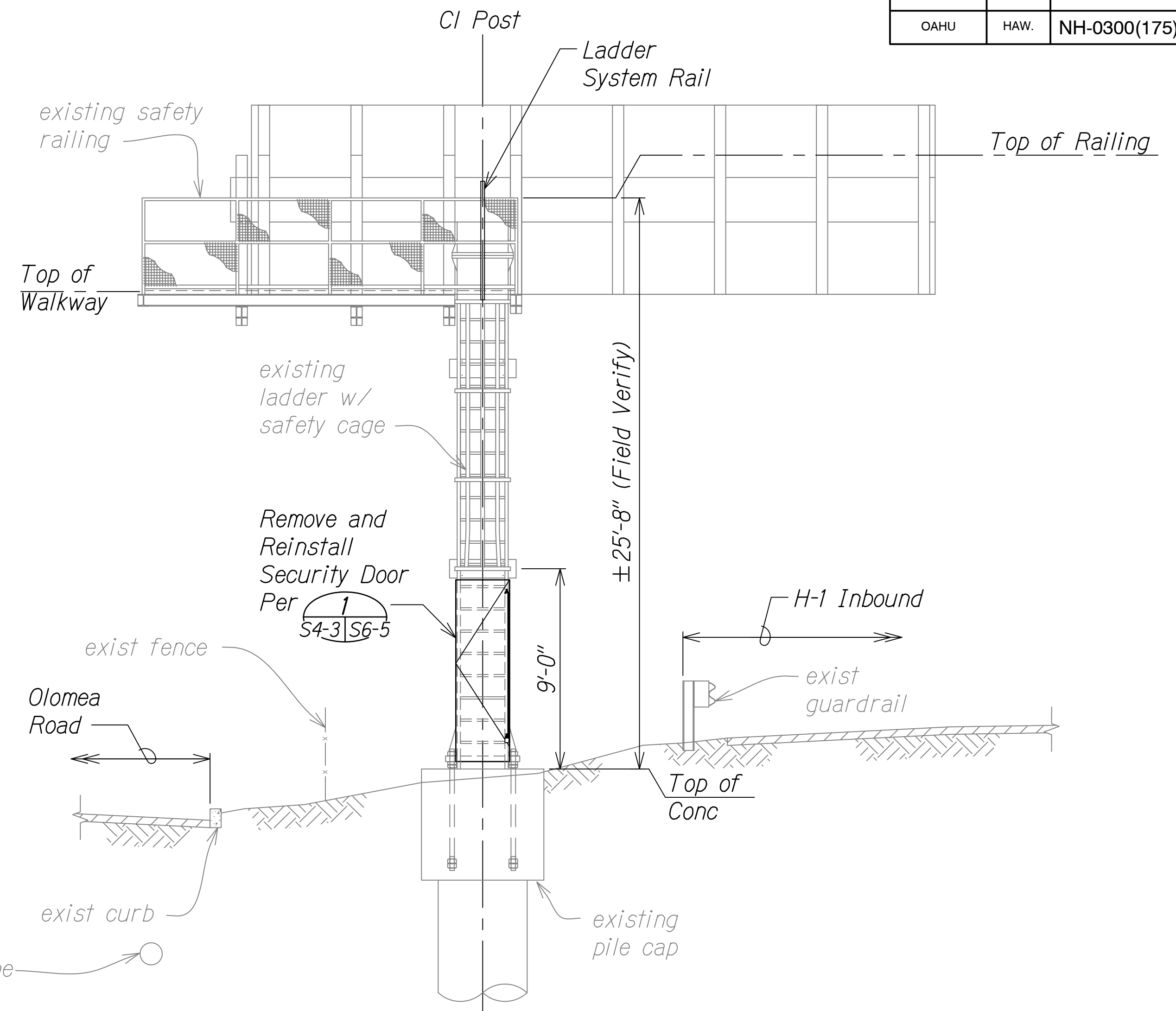
Scale: As Noted Date: October 15, 2021

SHEET No. S5-2 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	66	73

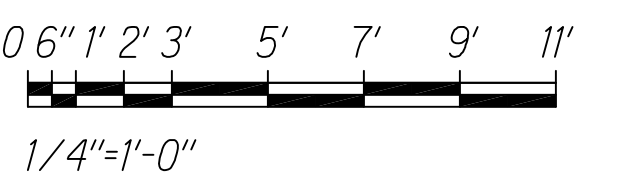


1 H-1 KALIHI VMS - EAST ELEAVATION
S5-1, S5-2, S5-3 Scale: 1/4" = 1'-0"



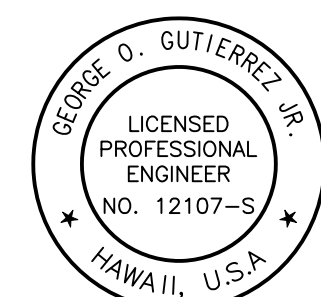
2 H-1 KALIHI VMS - WEST ELEVATION
S5-1, S5-2, S5-3 Scale: 1/4" = 1'-0"

Graphics Scale



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
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	CHECKED BY	

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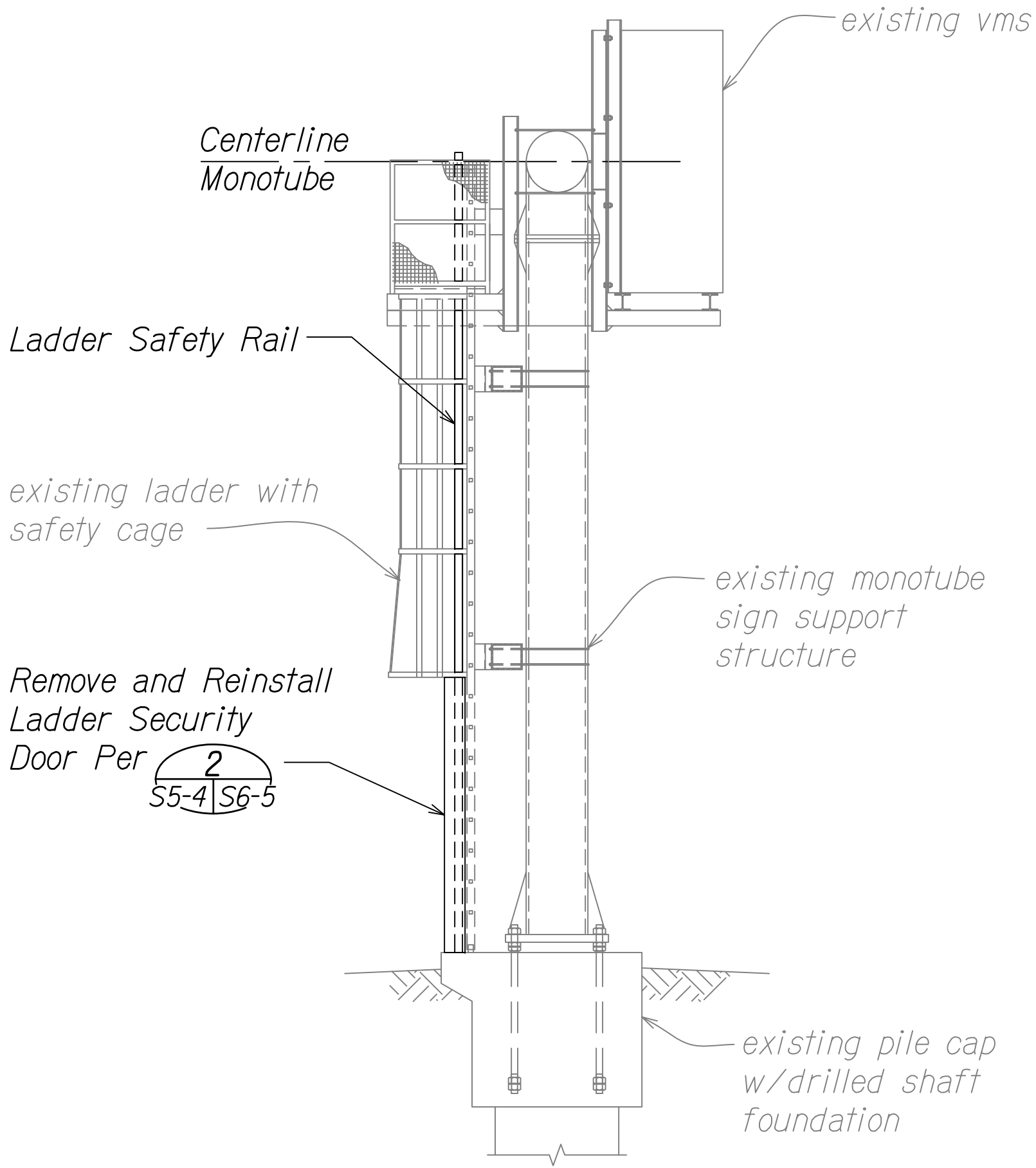
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af aty l APRIL 30, 2024
L.C. EXP. DATE

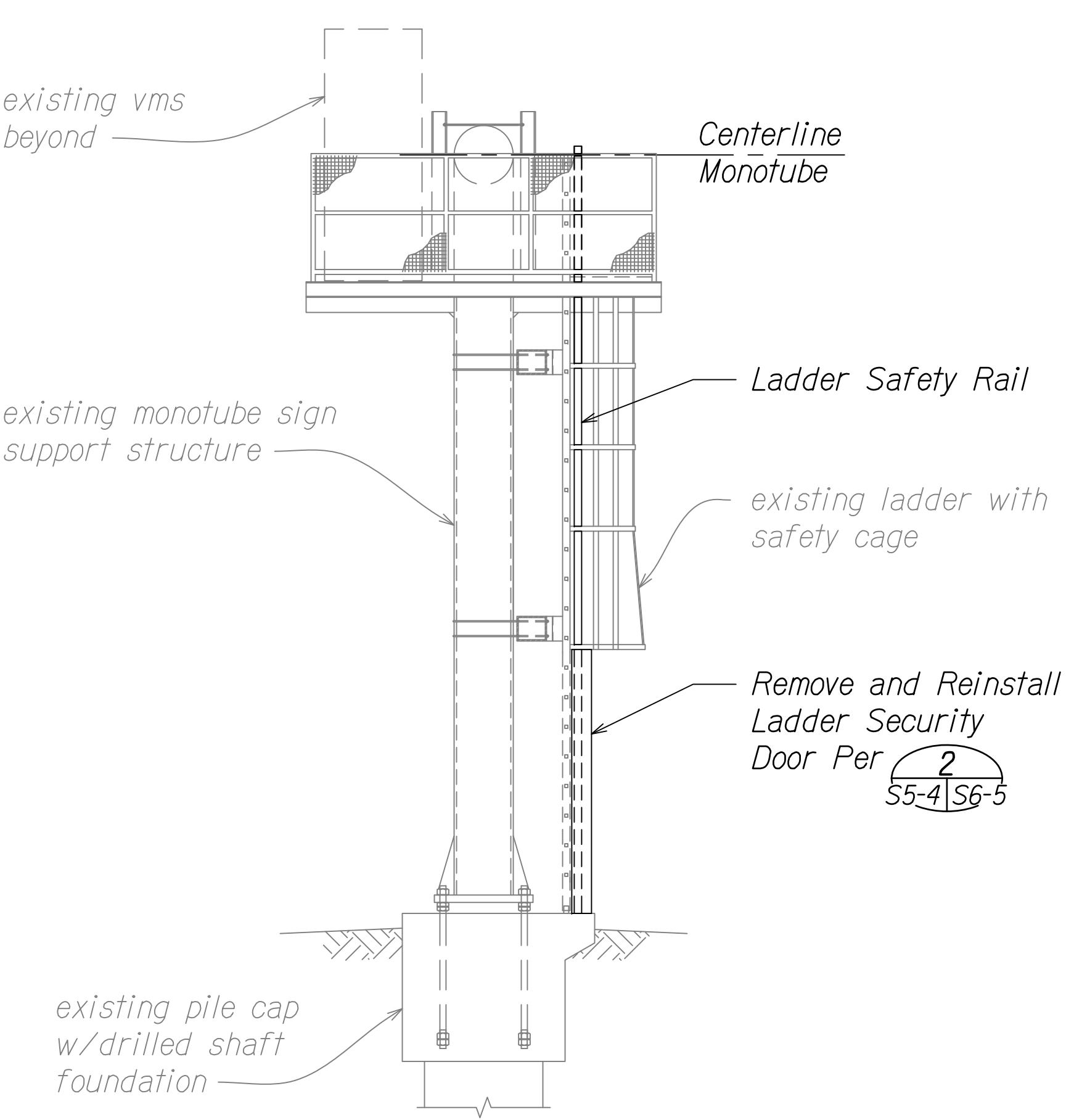
0 1 2
LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-1 KALIHI VMS -
EAST AND WEST ELEVATION**
FREeway MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S5-3 OF 73 SHEETS

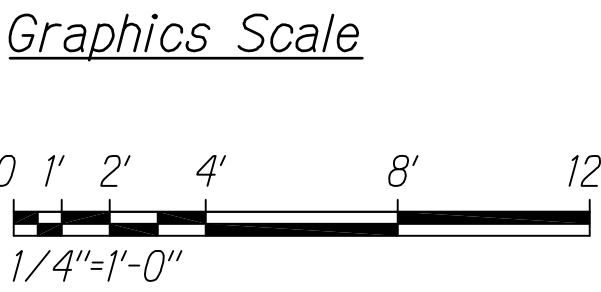
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	67	73



1 H-1 KALIHI VMS - NORTH ELEVATION
S5-1, S5-2, S5-4 Scale: 1/4" = 1'-0"



2 H-1 KALIHI VMS - SOUTH ELEVATION
S5-1, S5-2, S5-4 Scale: 1/4" = 1'-0"



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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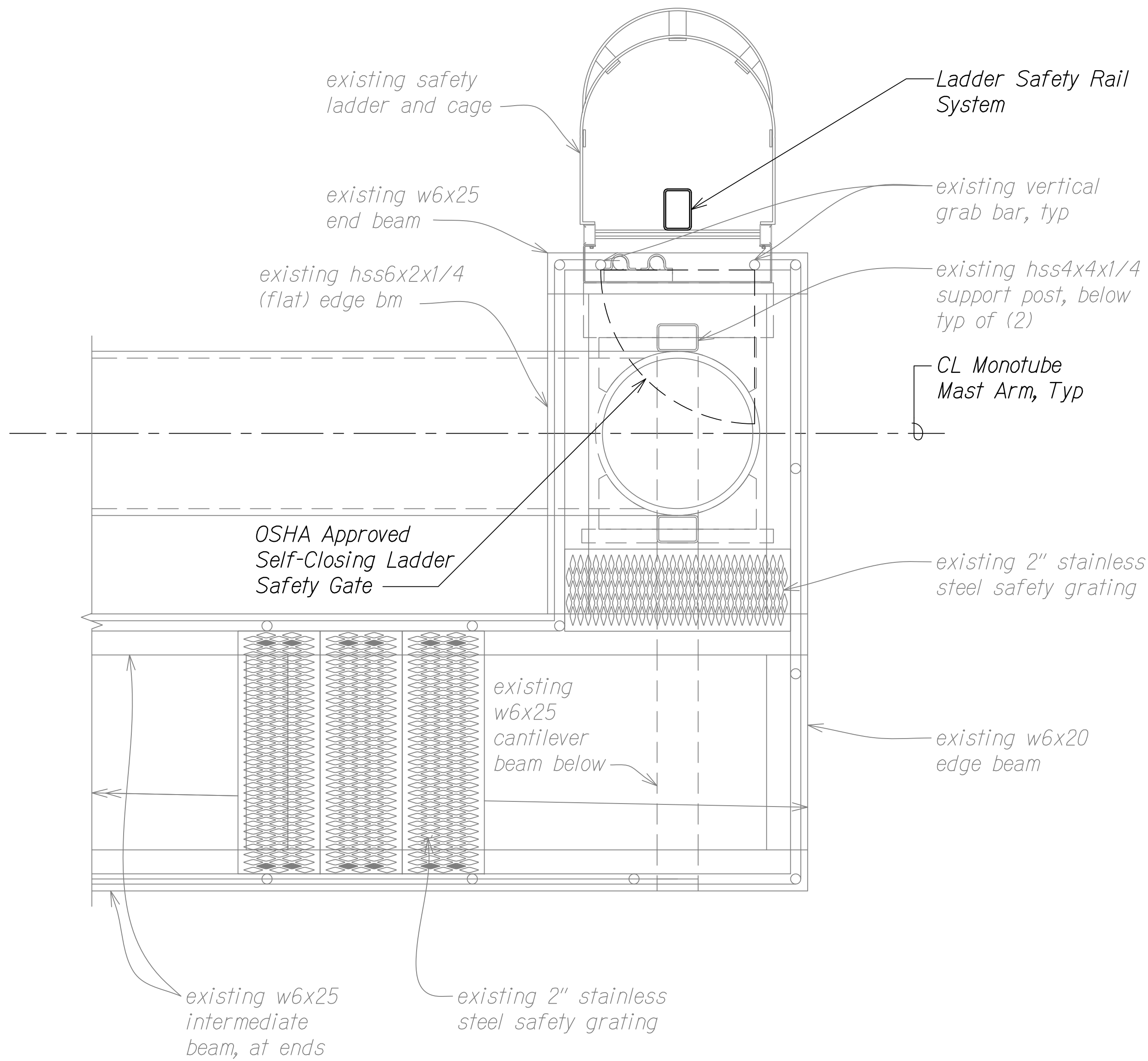


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af aty l APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**H-1 KALIHI VMS -
NORTH AND SOUTH ELEVATION**
FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)
Scale: As Noted Date: October 15, 2021
SHEET No. S5-4 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	68	73

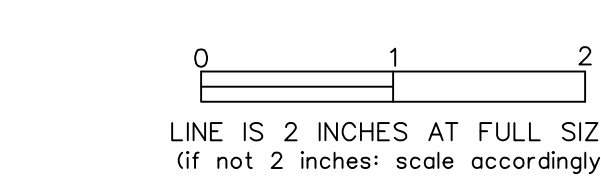


A PARTIAL PLAN - WALKWAY AT ENDS
S2-2, S3-2, S6-1 Scale: 1" = 1'-0"

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

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Graphics Scale



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

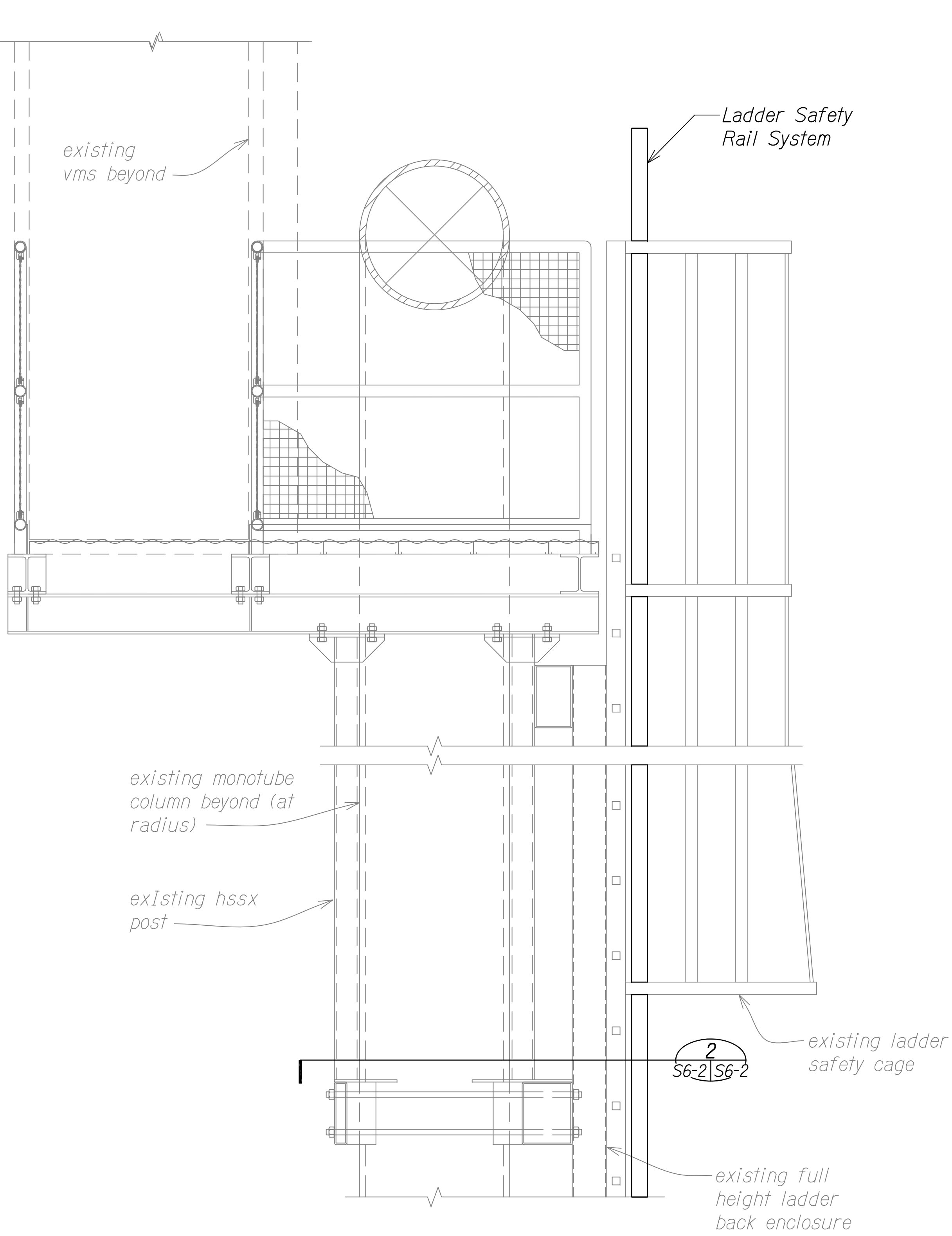
WALKWAY DETAILS

FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

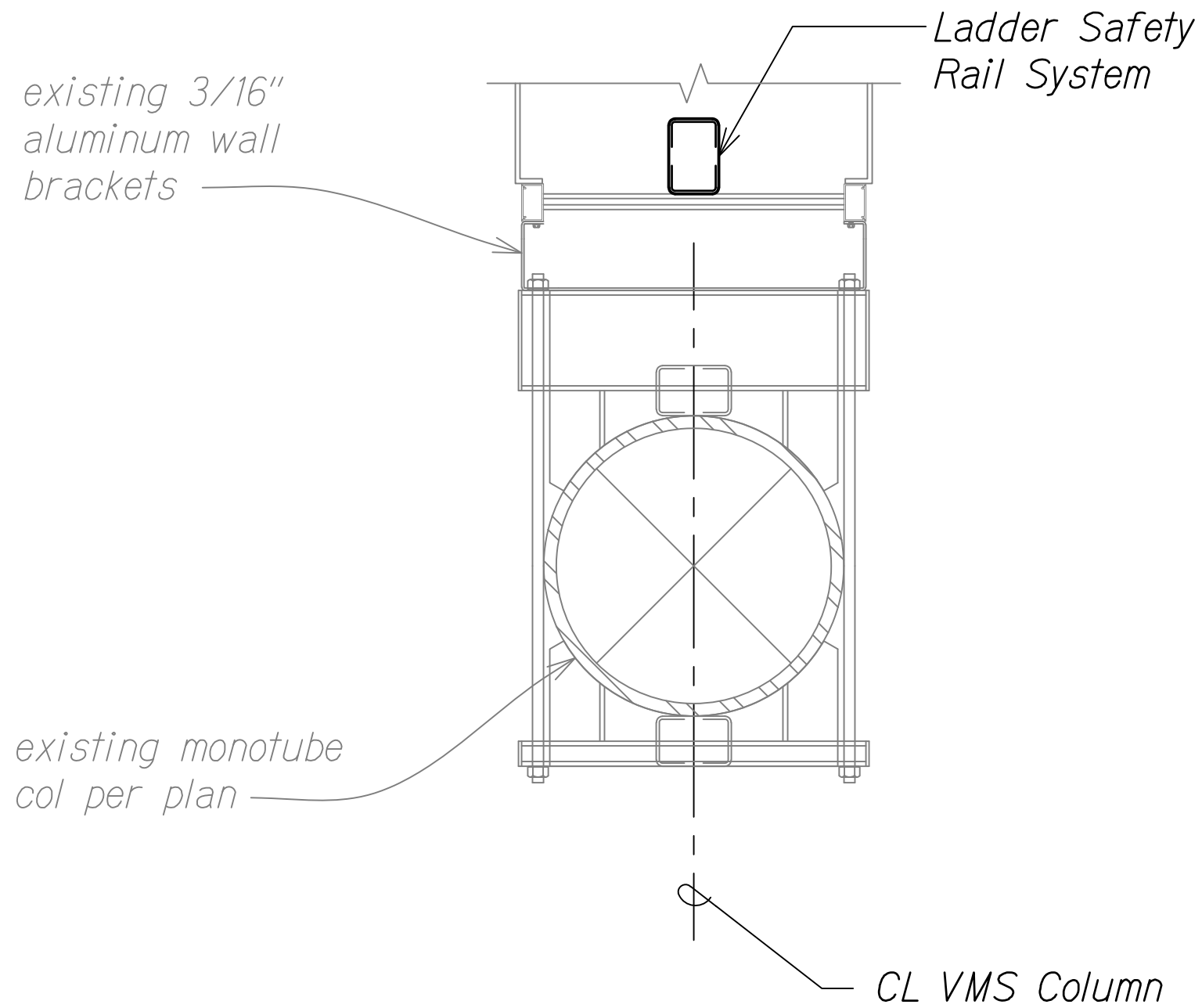
Scale: As Noted Date: October 15, 2021

SHEET No. S6-1 OF 73 SHEETS

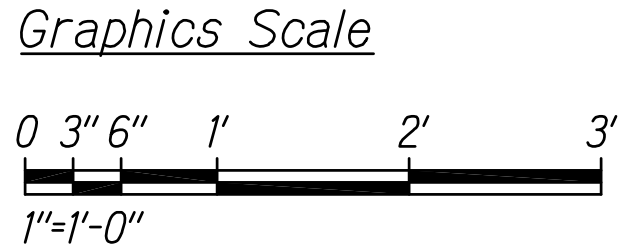
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	69	73



1 SECTION - MONOTUBE WALKWAY ABOVE RADIUS
S2-2, S2-4, S6-2 Scale: 1" = 1'-0"
S3-2, S3-4



2 DETAIL - CONNECTION AT RADIUS
S2-2, S2-3, S2-4, S6-2 Scale: 1" = 1'-0"
S3-2, S3-3, S3-4, S6-2



LINE IS 2 INCHES AT FULL SIZE
(if not 2 inches: scale accordingly)

GEORGE O. GUTIERREZ, JR.
LICENSED PROFESSIONAL ENGINEER
NO. 12107-S
HAWAII, U.S.A.

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APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WALKWAY DETAILS

FREWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

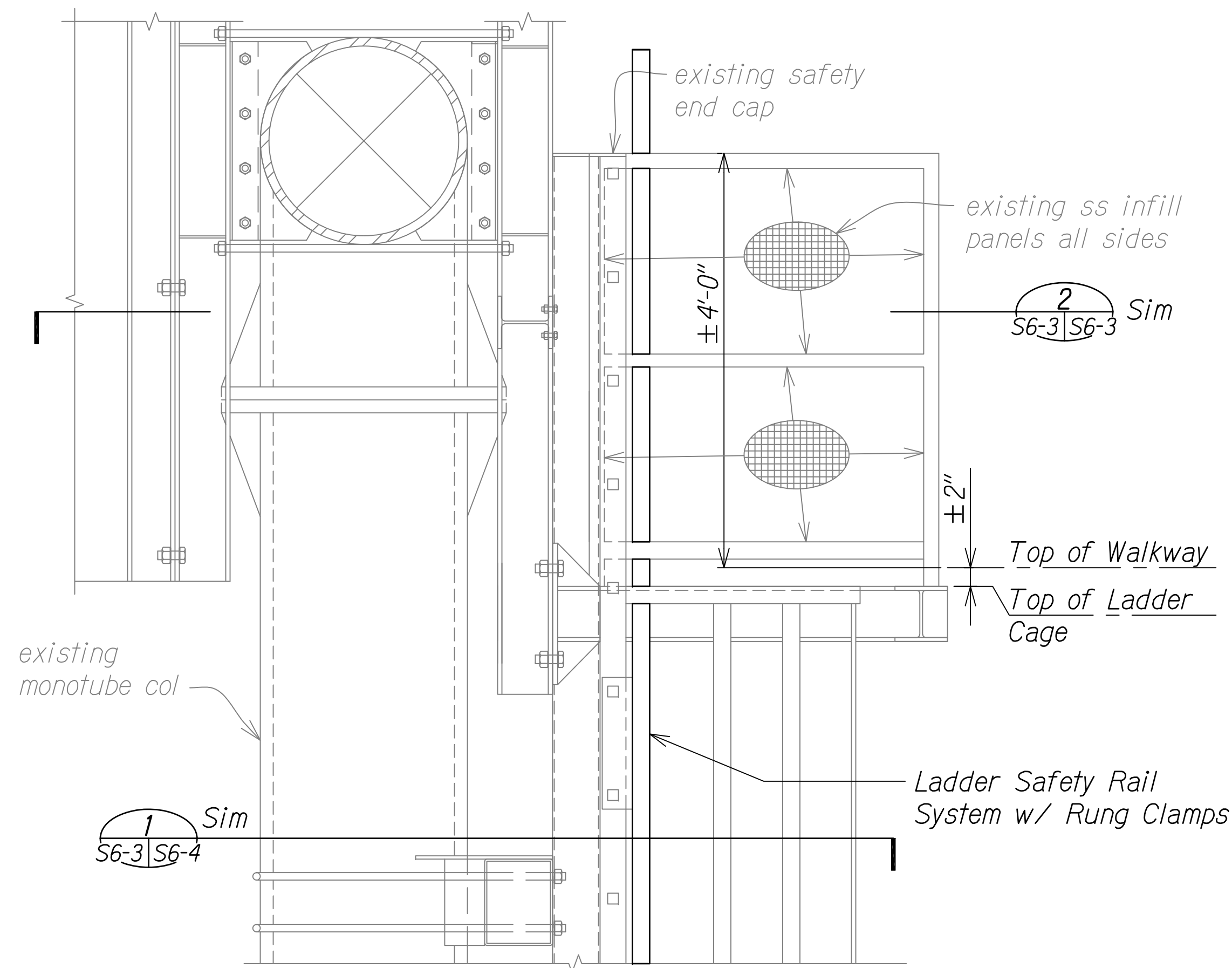
Scale: As Noted Date: October 15, 2021

SHEET No. S6-2 OF 73 SHEETS

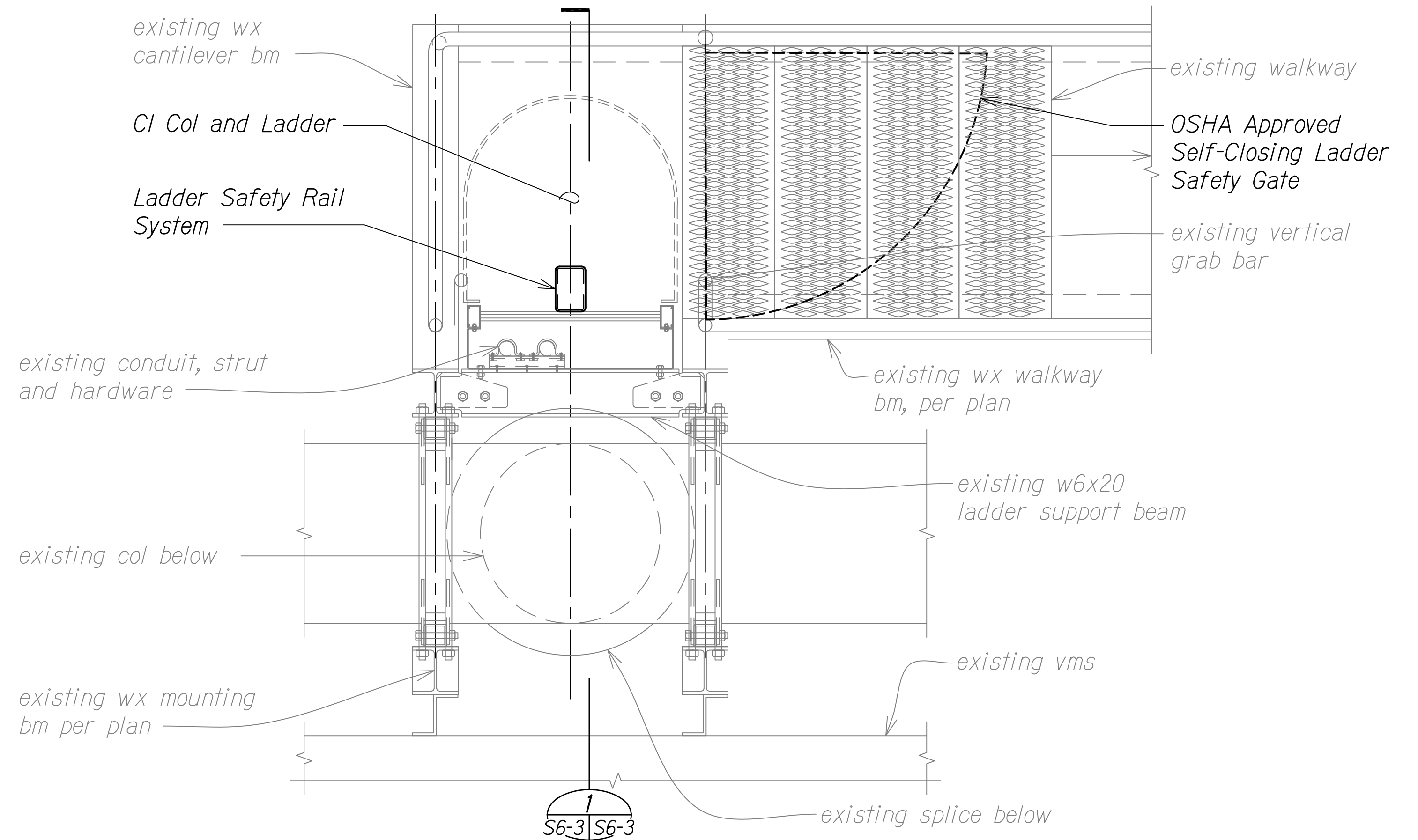
SURVEY PLOTTED BY	DATE
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TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
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DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	70	73



1 WALKWAY LADDER DETAIL
S6-3 | S6-3 Scale: 1" = 1'-0"

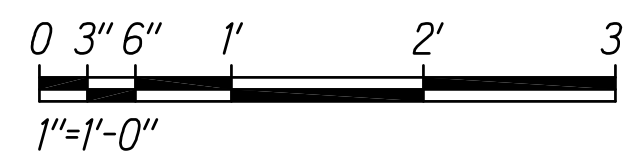


2 PLAN - SECTION AT TOP
S3-2, S4-2, S5-2, S6-3 | S6-3 Scale: 1" = 1'-0"

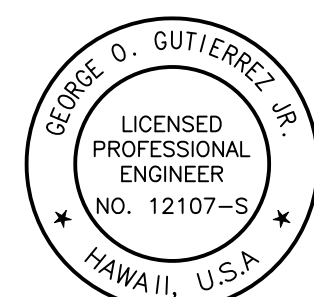
ORIGINAL PLAN No.	SURVEY PLOTTED BY	DATE
	DESIGNED BY	
	NOTED BY	
	CHECKED BY	

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Graphics Scale



LINE IS 2 INCHES AT FULL SIZE
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ay aty l APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LADDER DETAILS

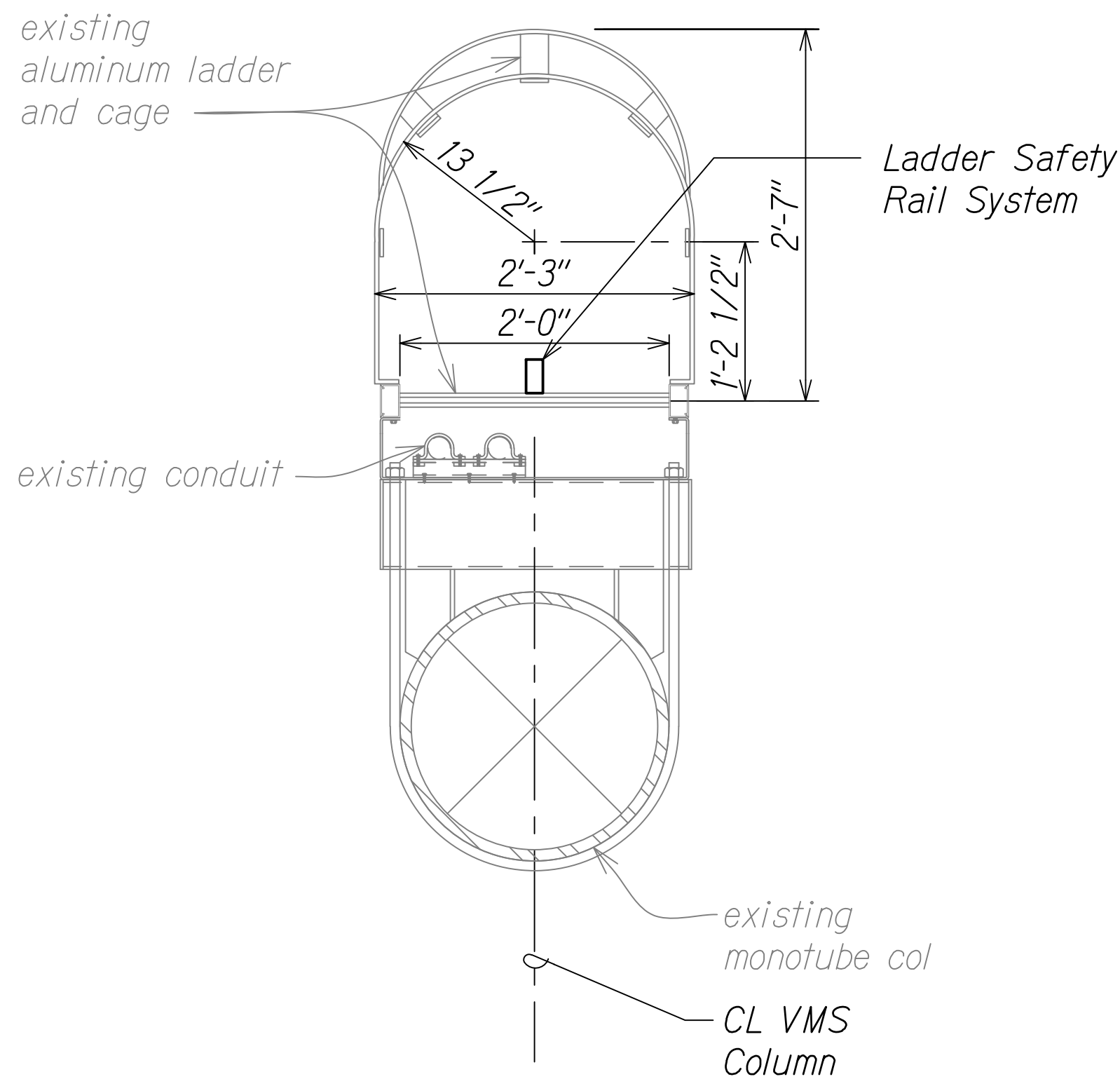
*FREEWAY MANAGEMENT SYSTEM
Phase 3A*

Federal Aid Project No. NH-0300(175)

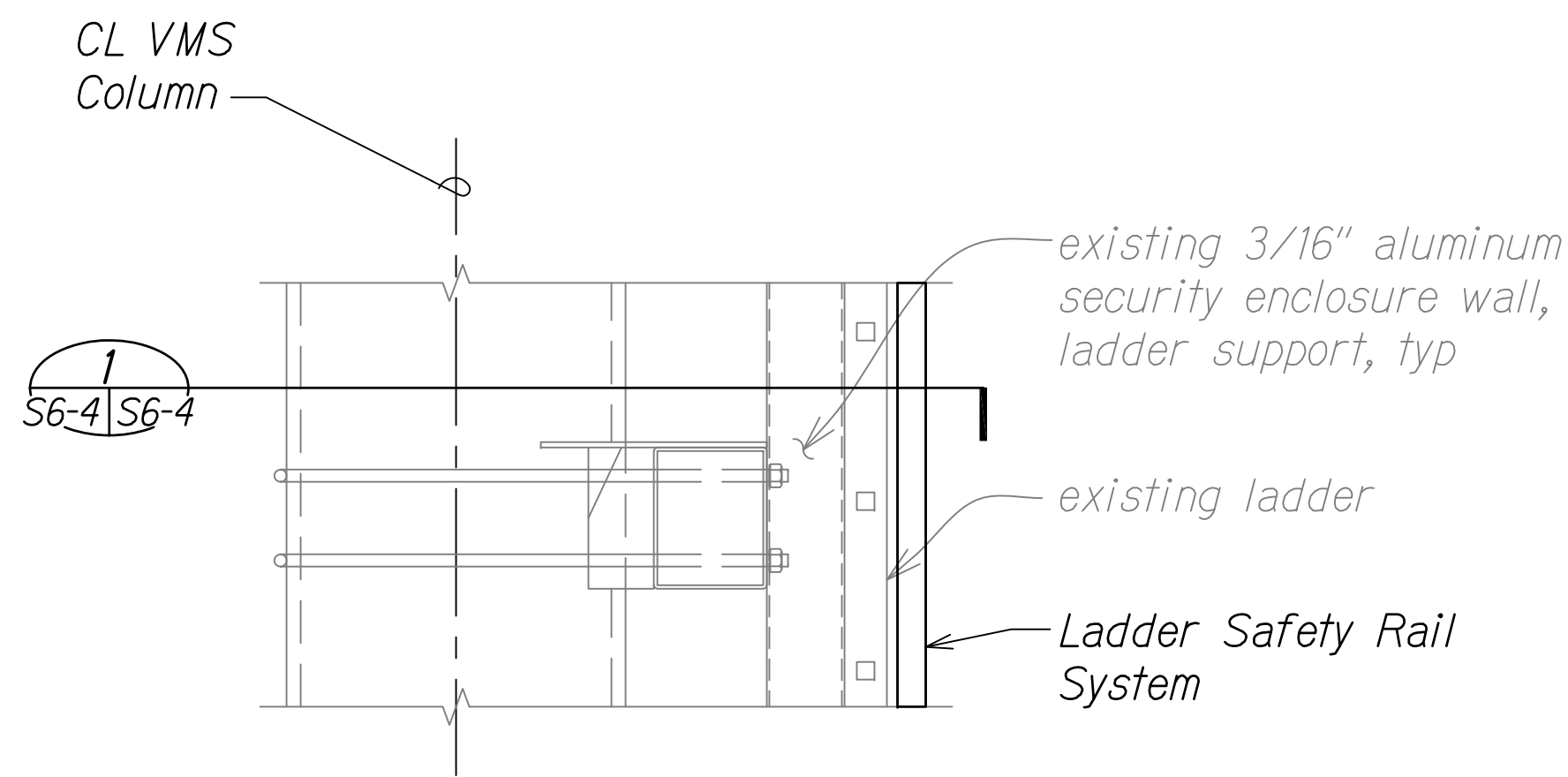
Scale: As Noted Date: October 15, 2021

SHEET No. S6-3 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	71	73



1 MONOTUBE LADDER CONN DETAIL
S6-3 | S6-4 Scale: 1" = 1'-0"

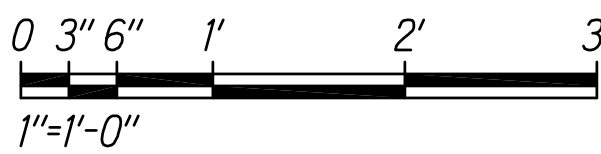


2 MONOTUBE LADDER CONN DETAIL
S6-4 | S6-4 Scale: 1" = 1'-0"

LADDER SAFETY RAIL NOTES:

1. Safety rail system shall be Miller Saf-T-Climb Ladder System or Pre-Reviewed equal, compatible with existing Okeeffe's Aluminum Ladder System.

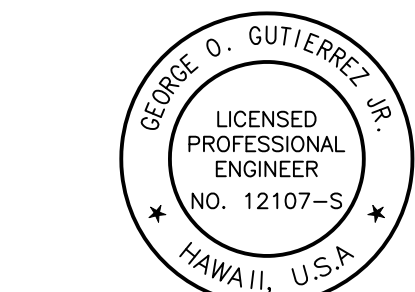
Graphics Scale



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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STATE OF HAWAII
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HIGHWAYS DIVISION

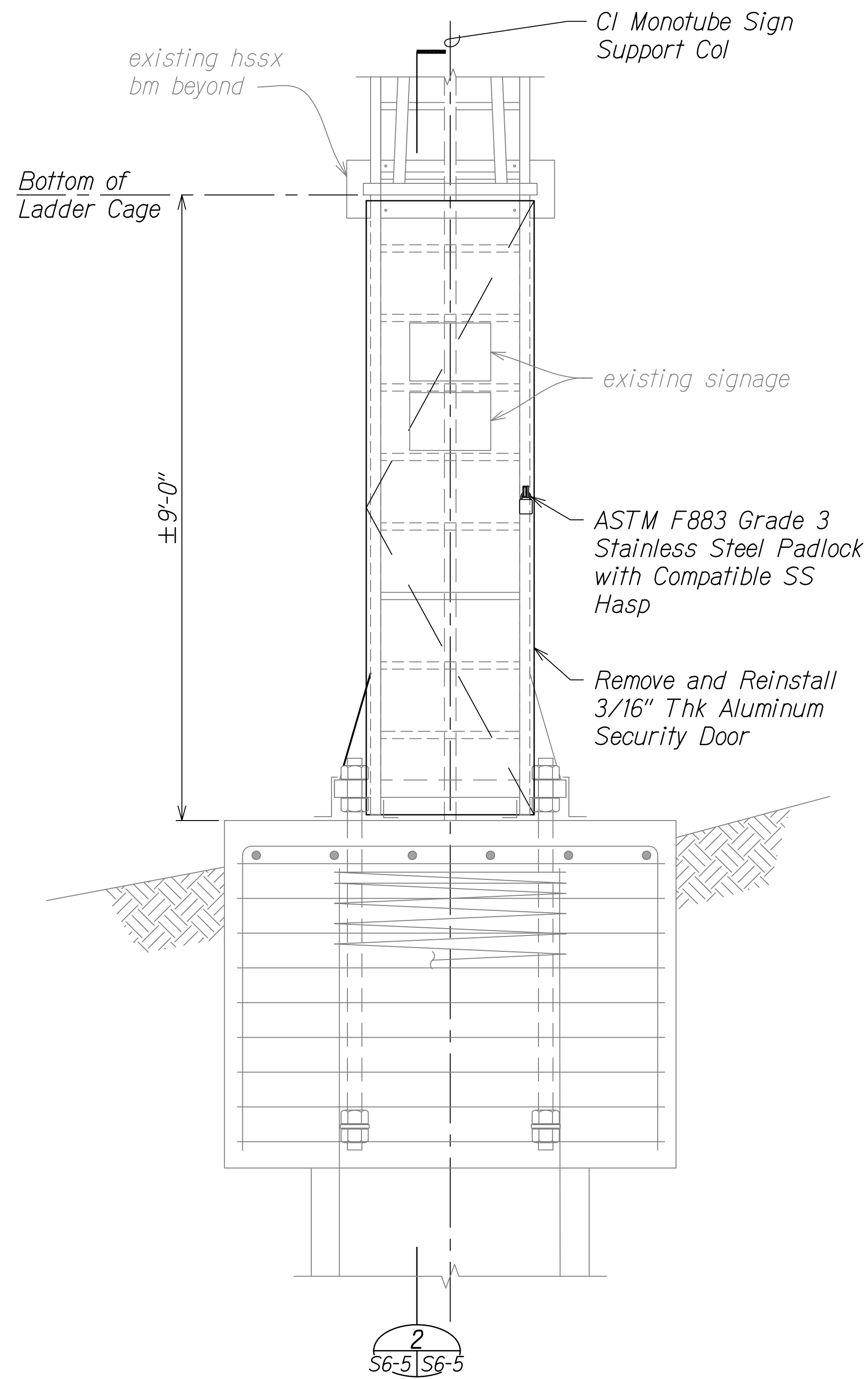
LADDER DETAILS

FREEWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

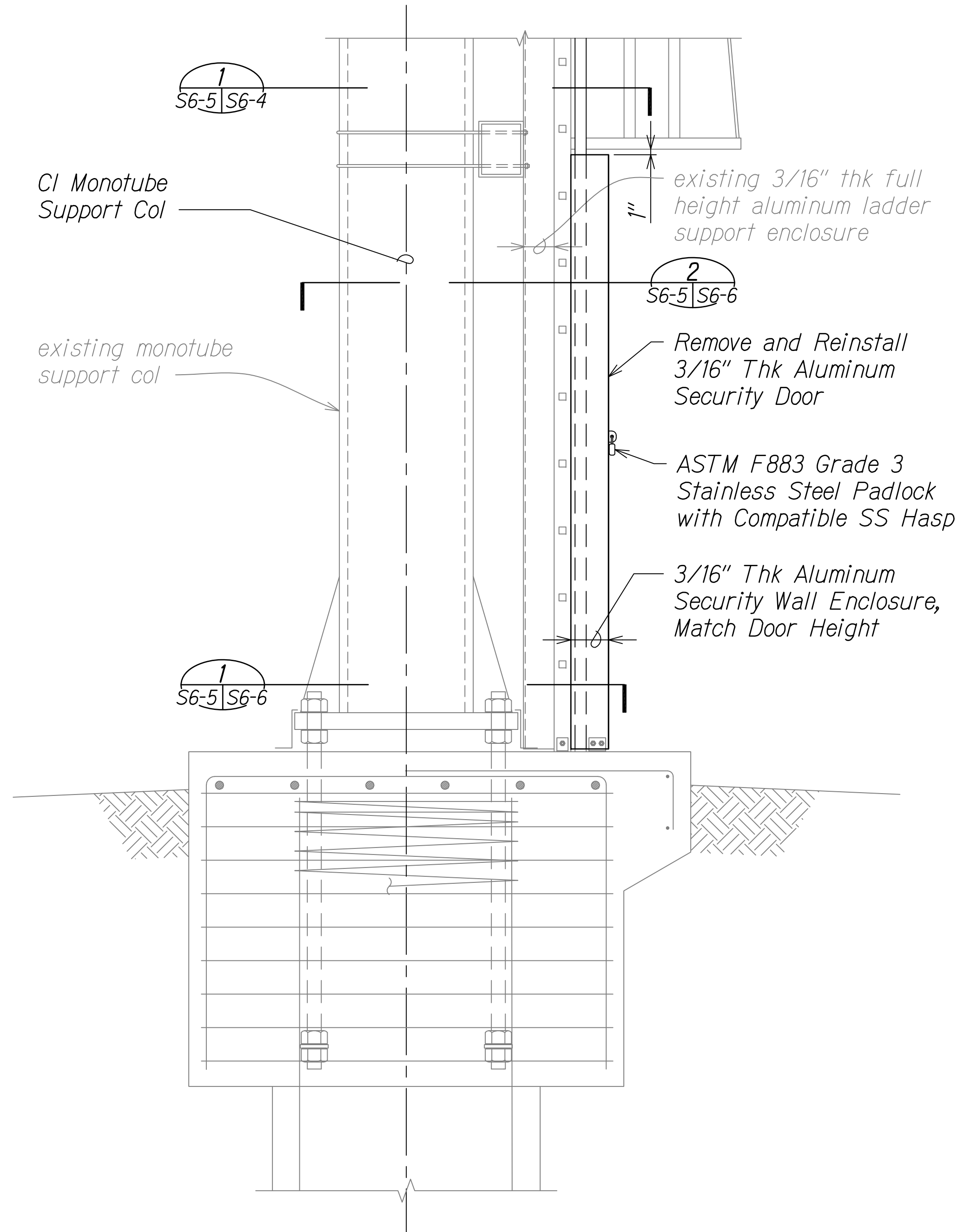
Scale: As Noted Date: October 15, 2021

SHEET No. S6-4 OF 73 SHEETS

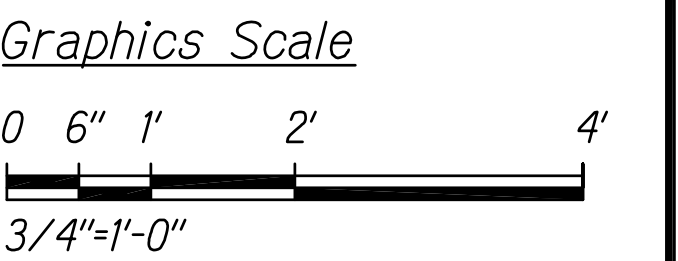
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	72	73



1 SECURITY DOOR ELEVATION
S2-1, S2-3, S6-5 Scale: 3/4" = 1'-0"
S3-1, S3-3,
S4-1, S4-3,
S5-1, S5-3



2 SECURITY DOOR SECTION
S2-4, S3-4, S6-5 Scale: 3/4" = 1'-0"
S4-4, S5-4



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
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af aty l APRIL 30, 2024
L.C. EXP. DATE

0 1 2
LINE IS 2 INCHES AT FULL SIZE
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

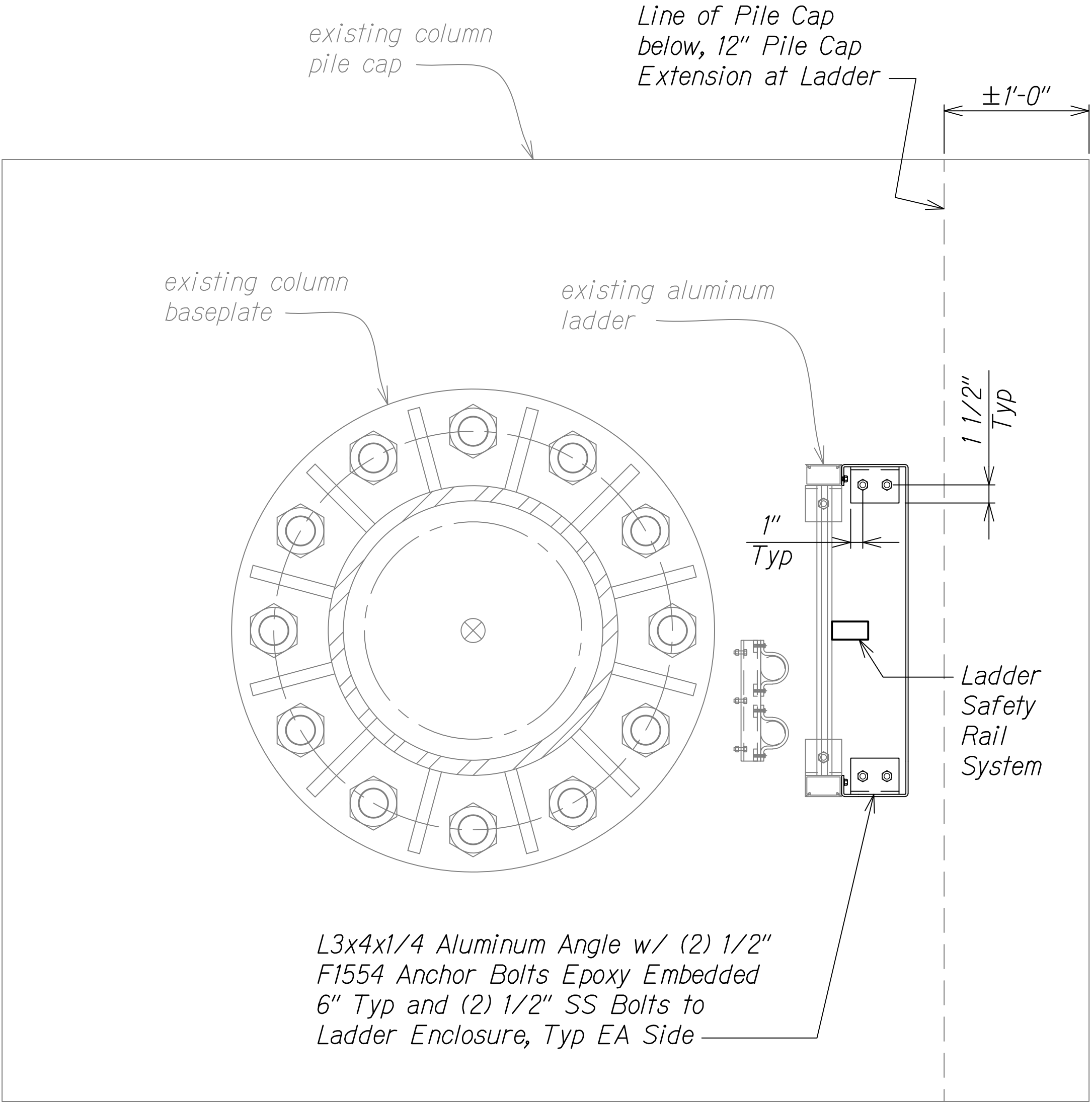
LADDER DETAILS

FREWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

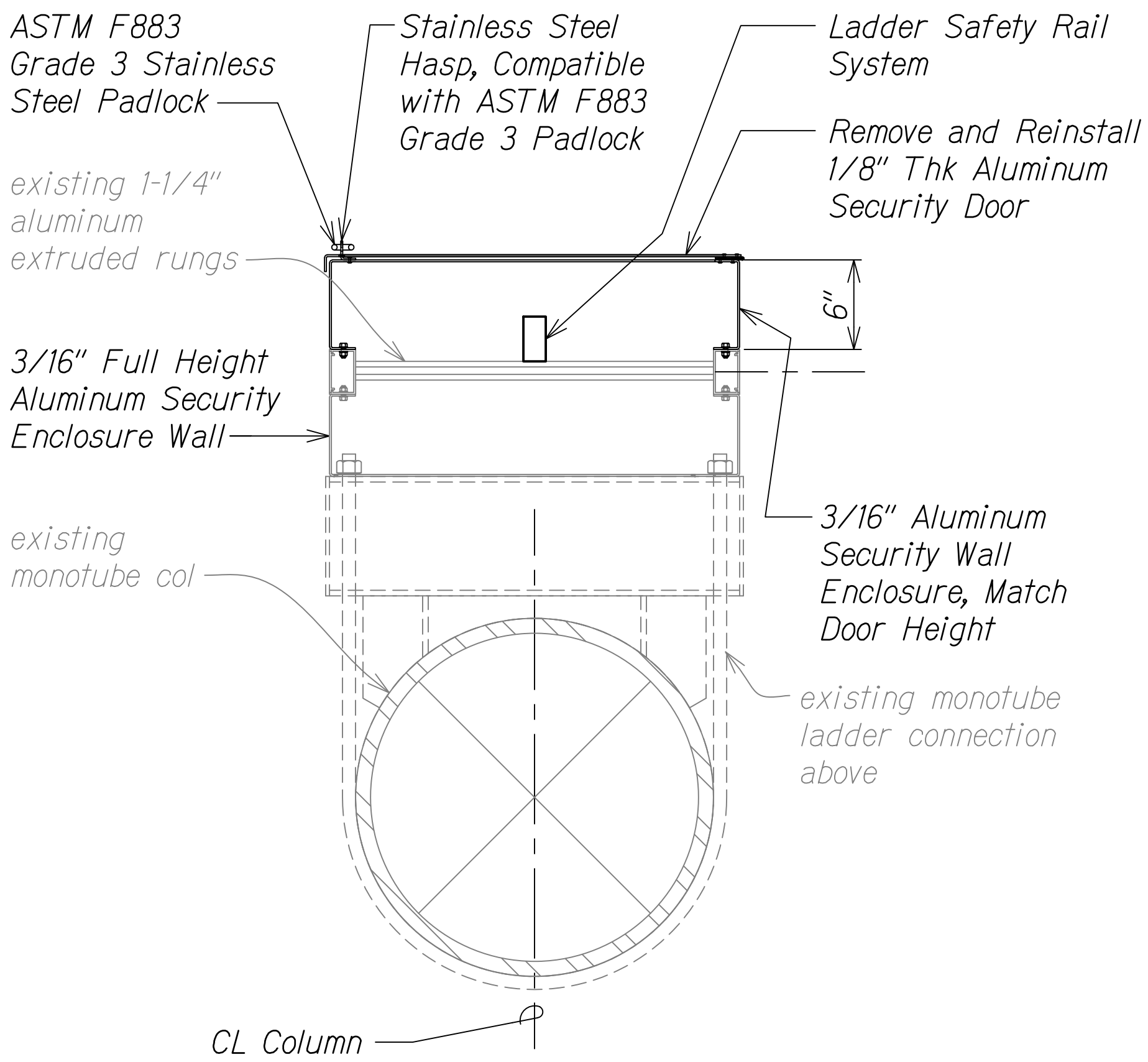
Scale: As Noted Date: October 15, 2021

SHEET No. S6-5 OF 73 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	73	73

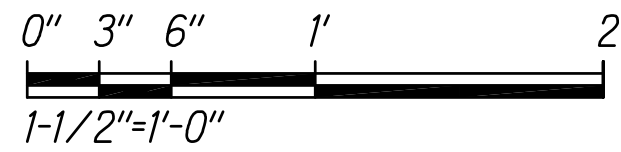


1 PLAN - TOP OF PILE CAP
S6-5 | S6-6 Scale: 1-1/2" = 1'-0"



2 LADDER SECURITY DOOR
S6-5 | S6-6 Scale: 1-1/2" = 1'-0"

Graphics Scale



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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HIGHWAYS DIVISION

LADDER DETAILS

FREWAY MANAGEMENT SYSTEM
Phase 3A
Federal Aid Project No. NH-0300(175)

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SHEET No. S6-6 OF 73 SHEETS