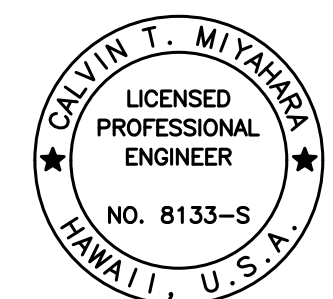
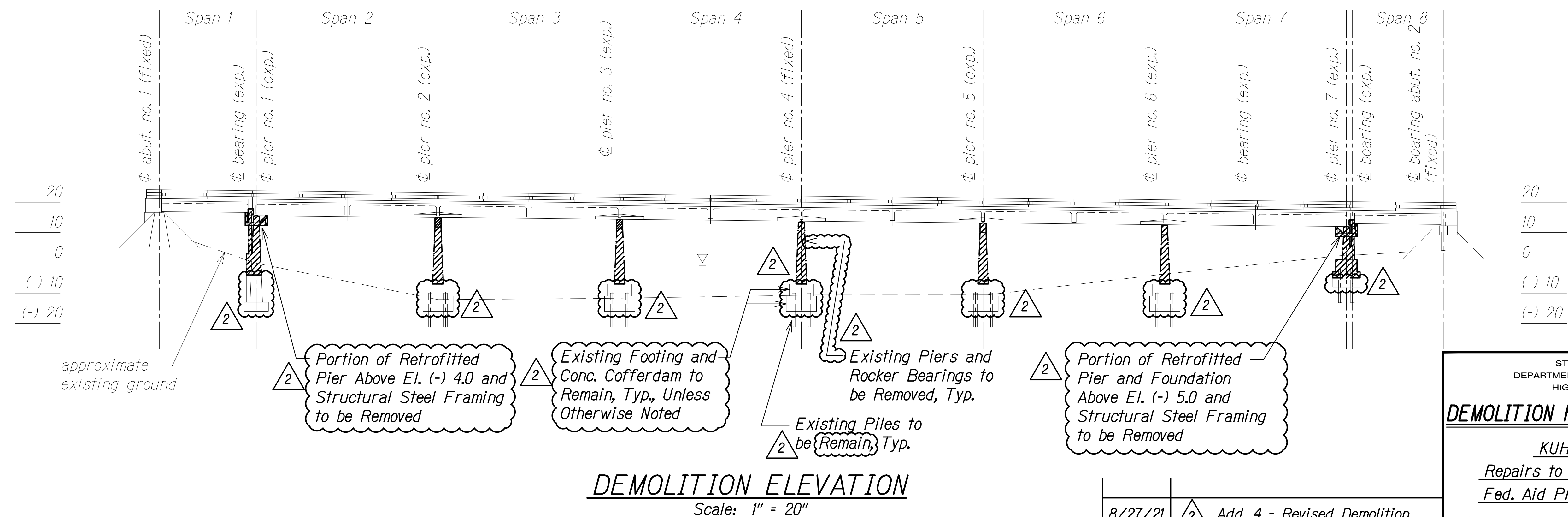
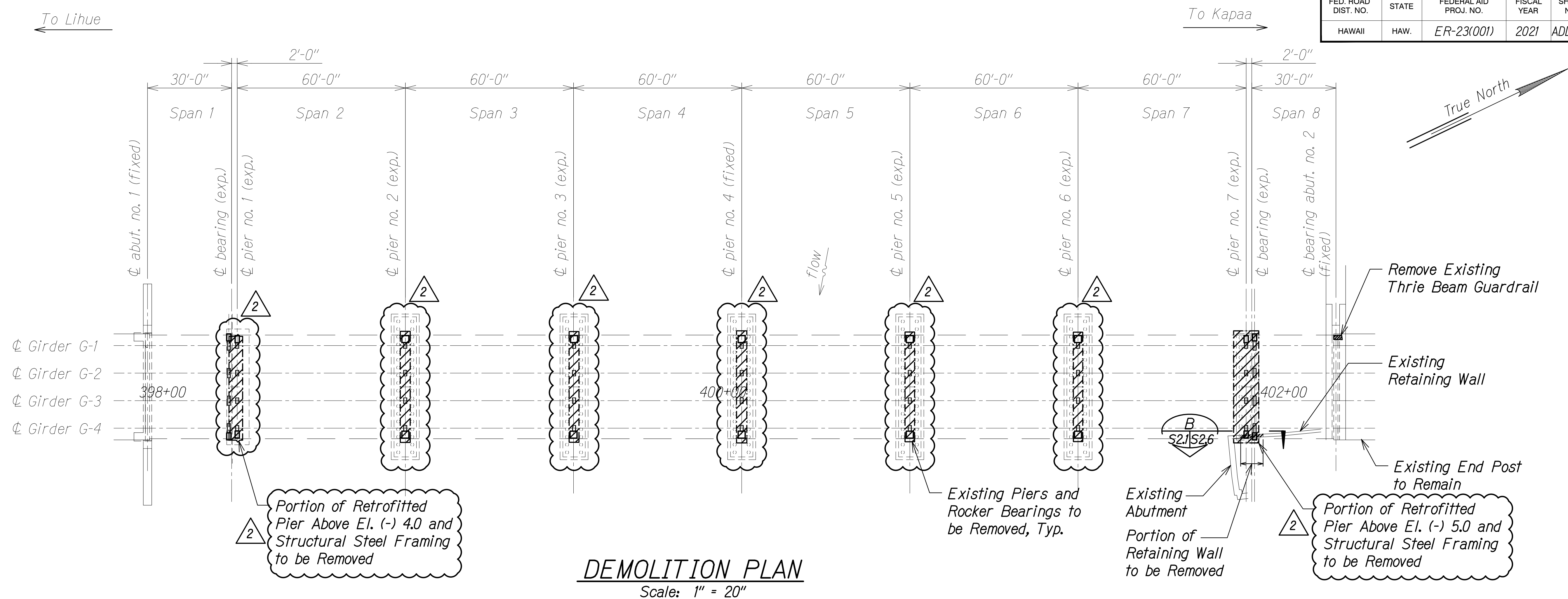


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 44	109



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *Calvin T. Miyahara* EXPIRATION DATE OF THE LICENSE: 4-30-22

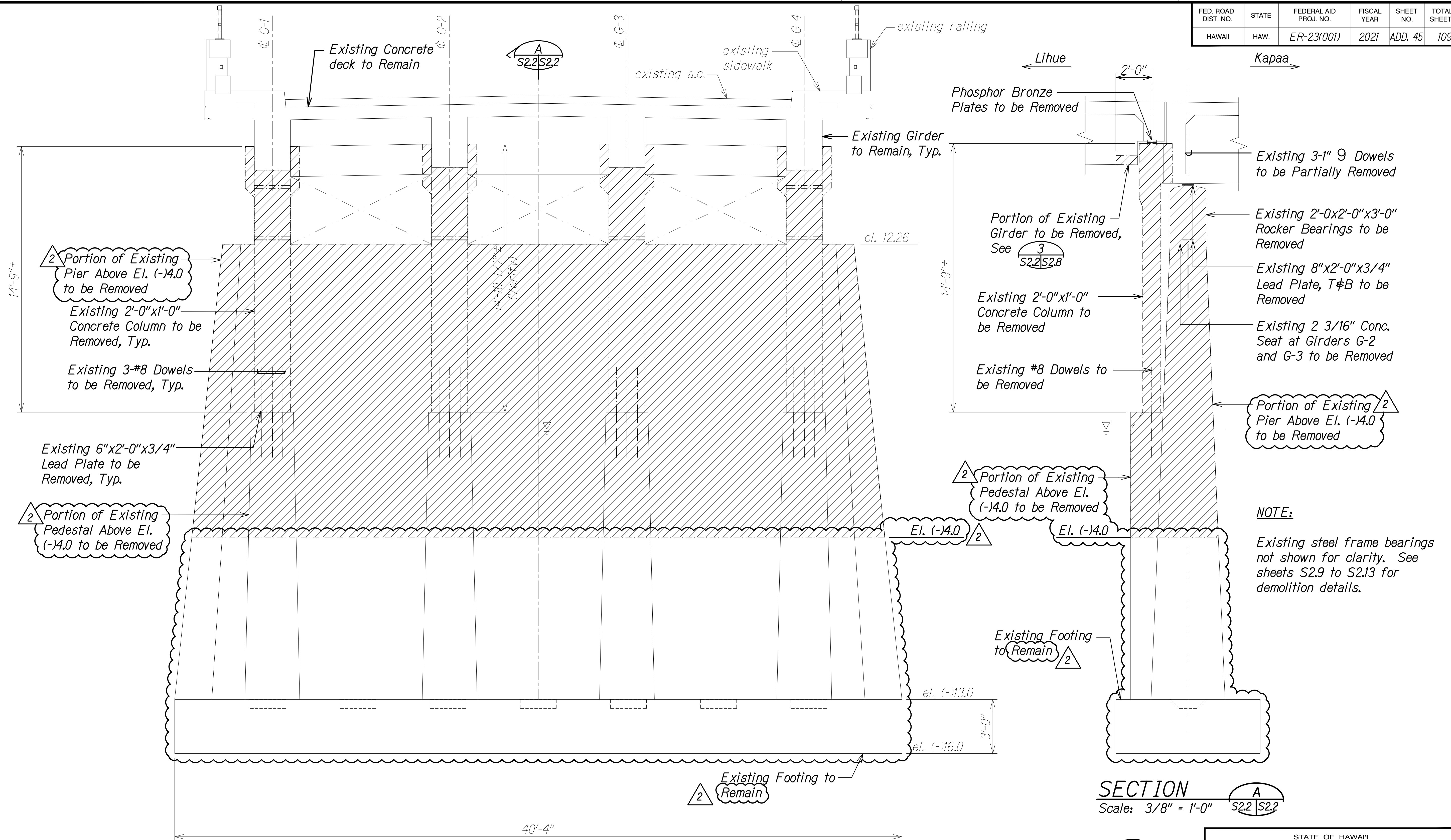
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DEMOLITION PLAN AND ELEVATION	
KUHIO HIGHWAY	
Repairs to Wailua River Bridge	
Fed. Aid Project No. ER-23(001)	
Scale: As Noted	Date: Apr. 2021
SHEET No. S21 OF 13 SHEETS	

8/27/21	2	ADD. 4 - Revised Demolition
DATE		REVISION

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

DRAWING NAME: Z:\00 ONGOING\20-016-WAILUA RVR BR SCOUR-DOIT\01 CAD\08-27-21\ADD4 DEMO PLAN-ELEV ADD4.DWG PLOT TIME: 08-27-21, 11:05 AM

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 45	109



ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

DRAWING NAME: Z:\00 ONGOING\20-016-WALLUA RVR BR SCOUR-001\01 CAD\08-27-21\ADD4 DEMO P1-P7 ADD4.DWG PLOT TIME: 08-27-21 11:05 AM

8/27/21	2	ADD. 4 - Revised Demolition
DATE		

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Calvin T. Miyahara

SIGNATURE

EXPIRATION DATE OF THE LICENSE 4-30-22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION AT PIER NO. 1 (LIHUE SIDE)

KUHIO HIGHWAY
Repairs to Wailua River Bridge
Fed. Aid Project No. ER-23(001)

Scale: As Noted Date: Apr. 2021

SHEET No. S2.2 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 46	109

DRAWING NAME: Z:\00 ONGOING\20-016-WAILUA RVR BR SCOUR-DOO\01 CAD\08-27-21\ADD4 DELTA\WBS-50202 DEMO P1-P7 ADD4.DWG PLOT TIME: 08-27-21 11:05 AM

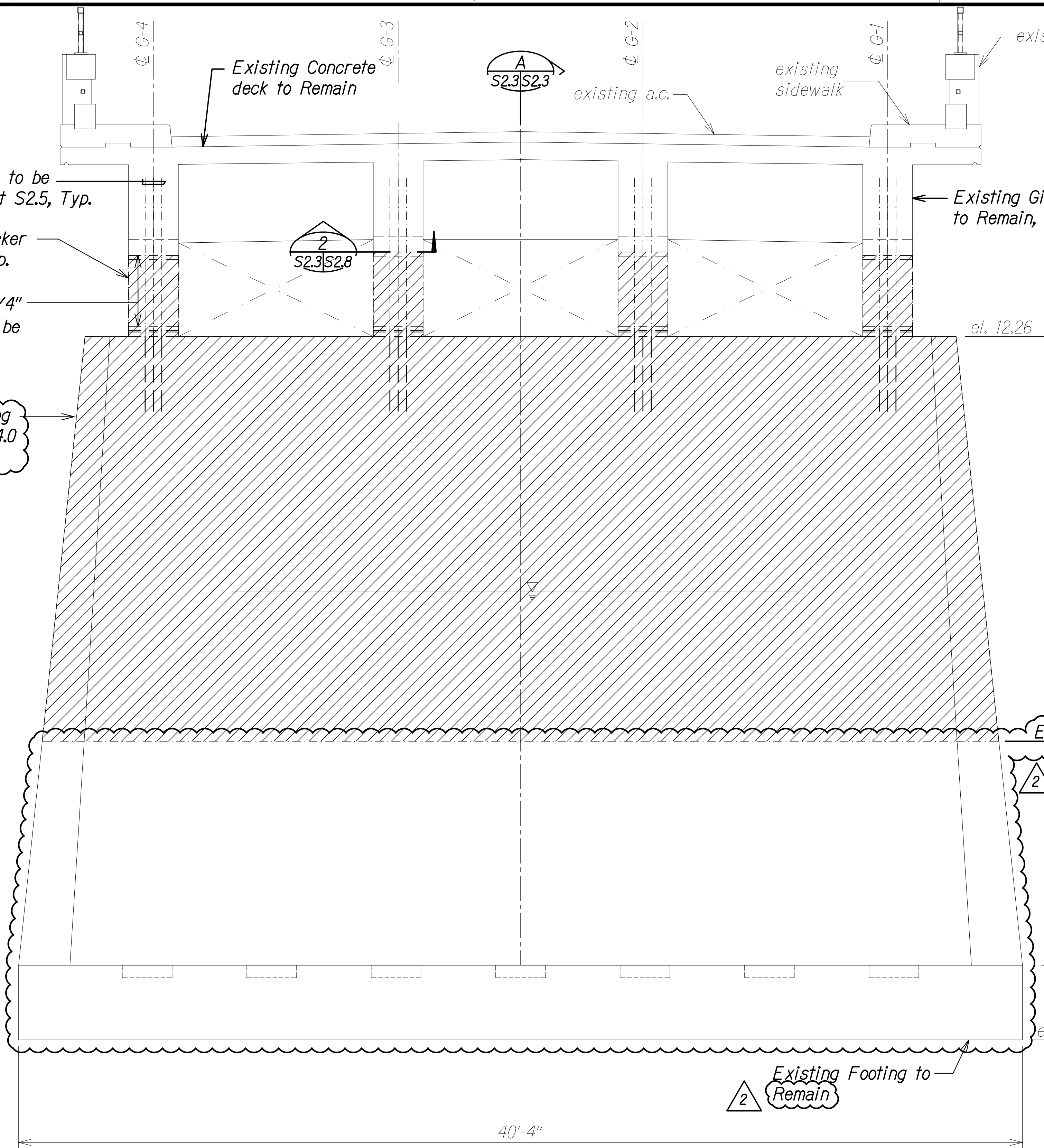
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

Existing 3-1" Square Dowels to be Partially Removed, See Sheet S2.5, Typ.

Existing 2'-0x2'-0"x3'-0" Rocker Bearings to be Removed, Typ.

Existing 8"x2'-0"x3/4" Lead Plate, T&B to be Removed, Typ.

2 Portion of Existing Pier Above El. (-)4.0 to be Removed



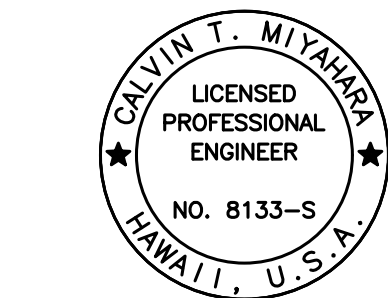
LEGEND:

Extent of Demolition

ELEVATION - PIER NO. 1 (KAPAA SIDE)

Scale: 3/8" = 1'-0"

8/27/21	2 Add. 4 - Revised Demolition
DATE	



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Calvin Miyajima

SIGNATURE EXPIRATION DATE OF THE LICENSE 4-30-22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

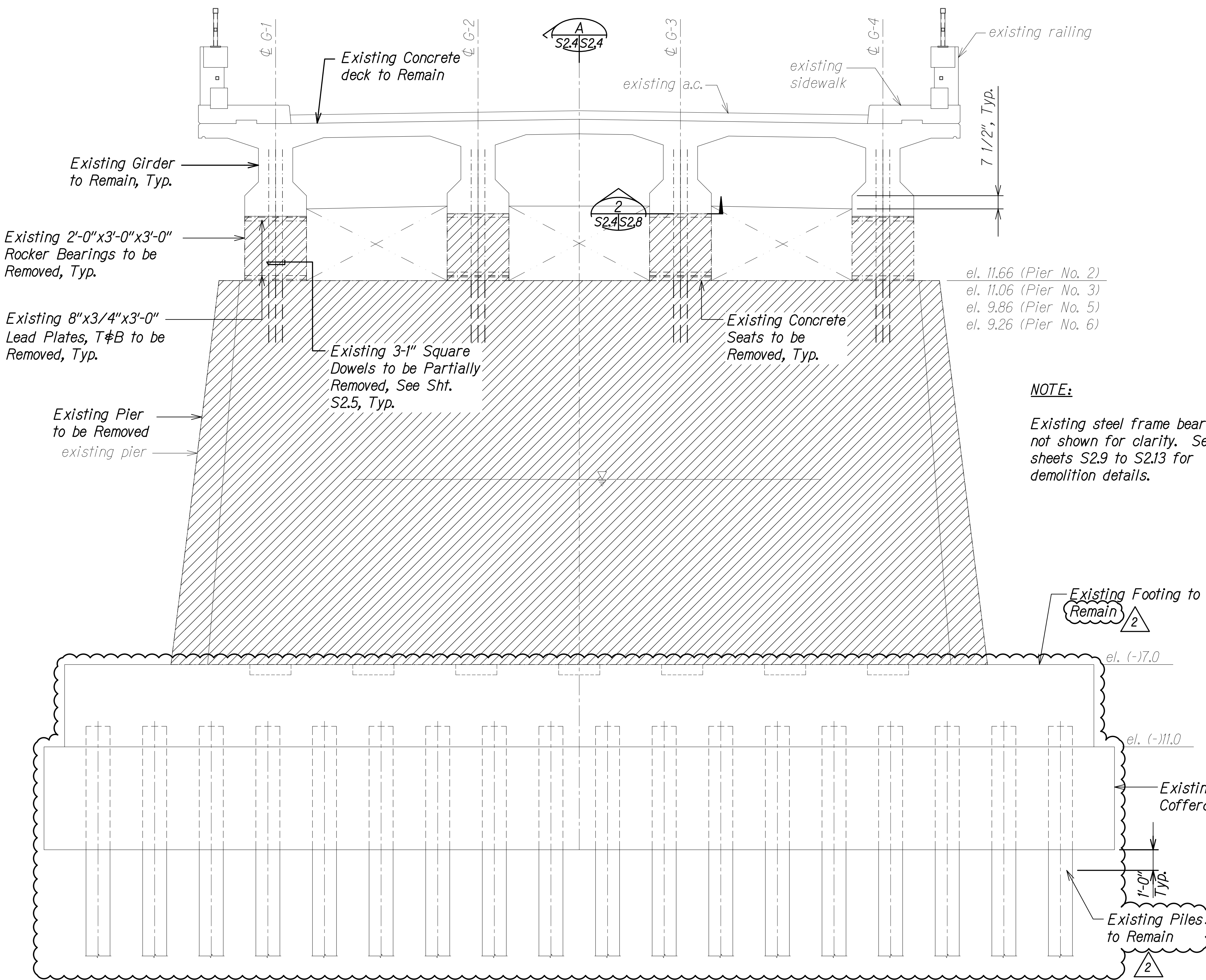
DEMOLITION AT PIER NO. 1 (KAPAA SIDE)

KUHIO HIGHWAY
Repairs to Wailua River Bridge
Fed. Aid Project No. ER-23(001)

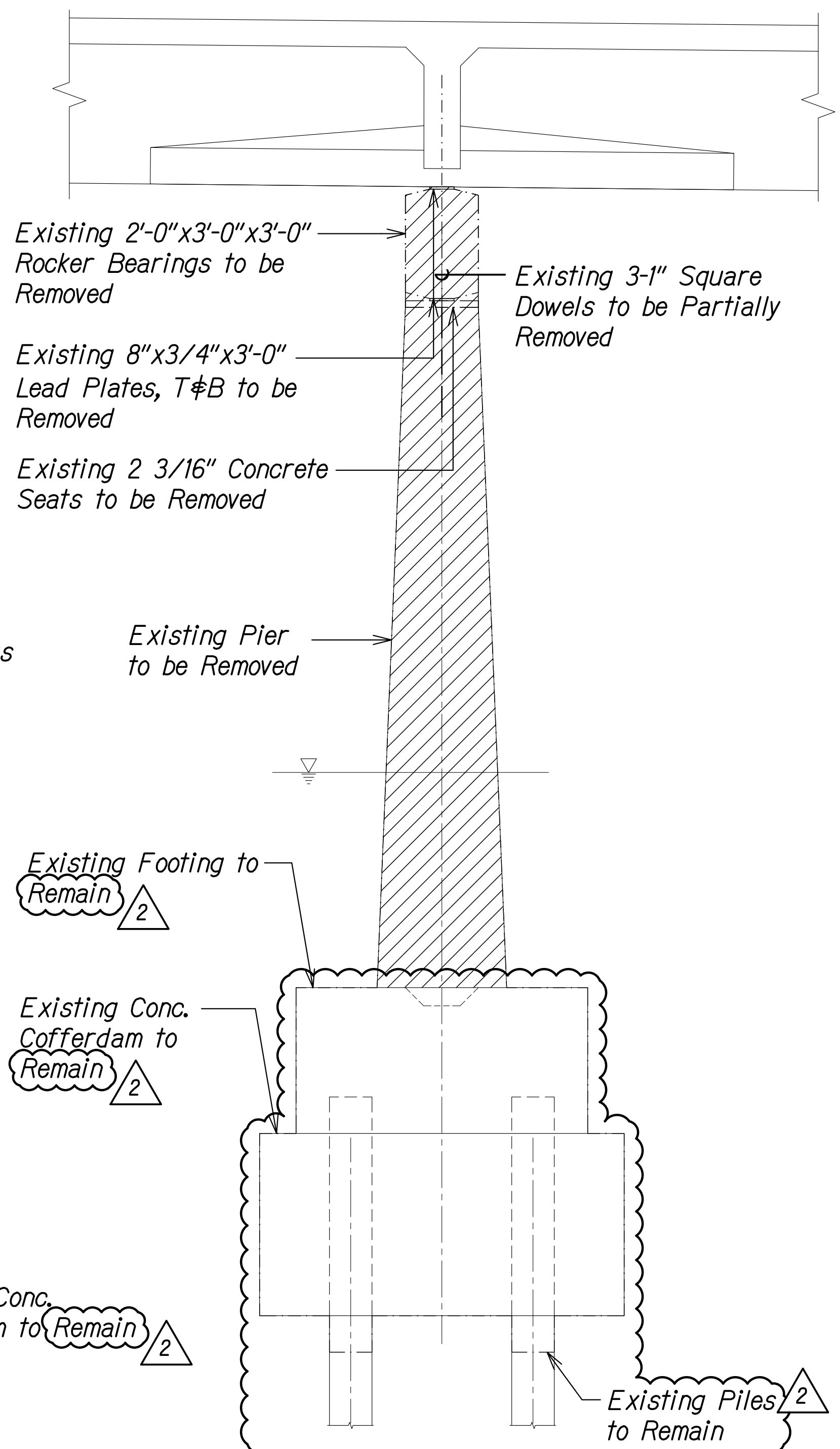
Scale: As Noted Date: Apr. 2021
SHEET No. S2.3 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 47	109

DRAWING NAME: Z:\00 ONGOING\20-016-WAILUA RVR BR SCOUR-DO\01 CAD\08-27-21\404 DELTA\WBS-50202 DEMO P1-P7 ADD4.DWG PLOT TIME: 08-27-21 11:05 AM



NOTE:
Existing steel frame bearings not shown for clarity. See sheets S2.9 to S2.13 for demolition details.



LEGEND:
 Extent of Demolition

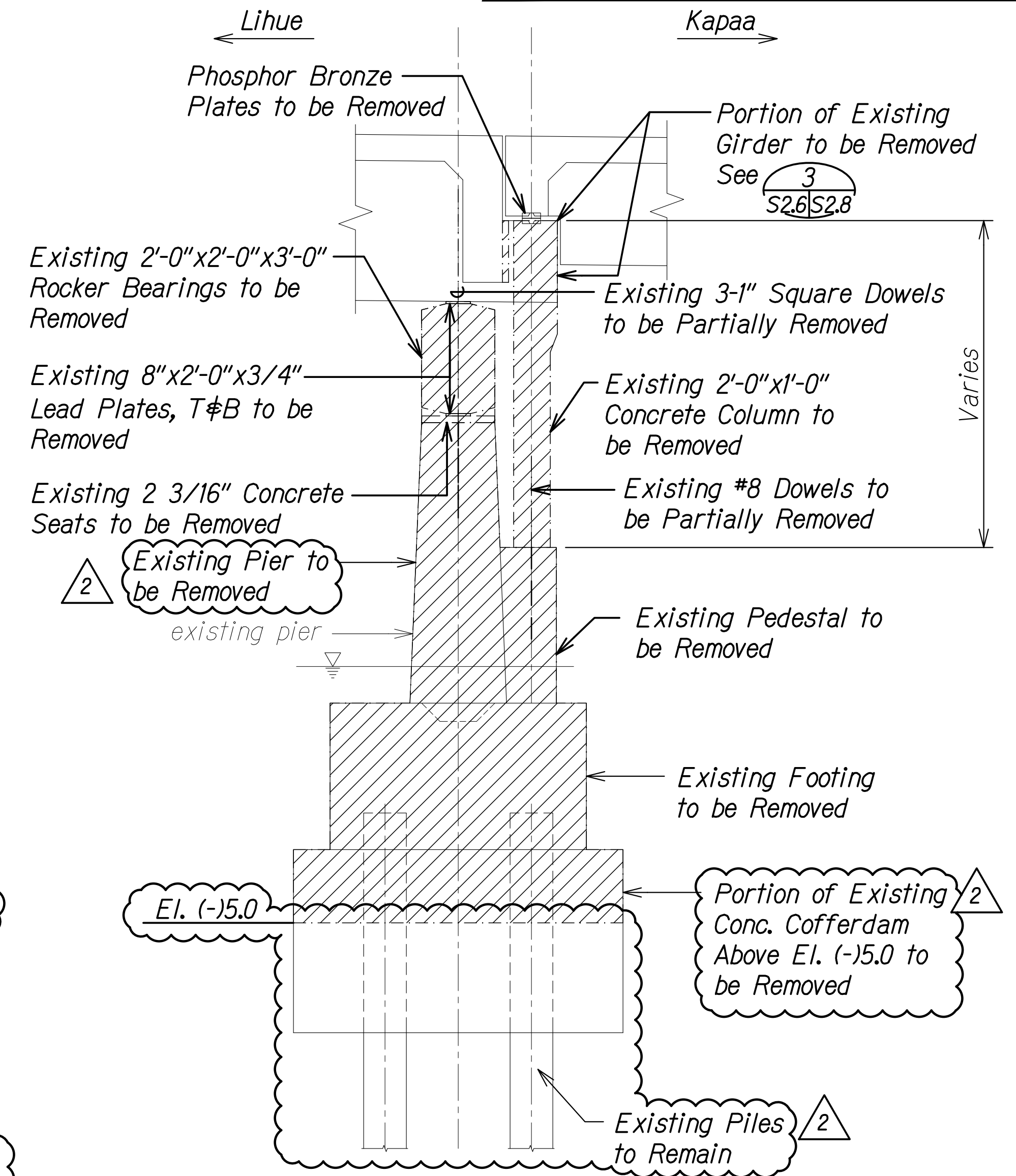
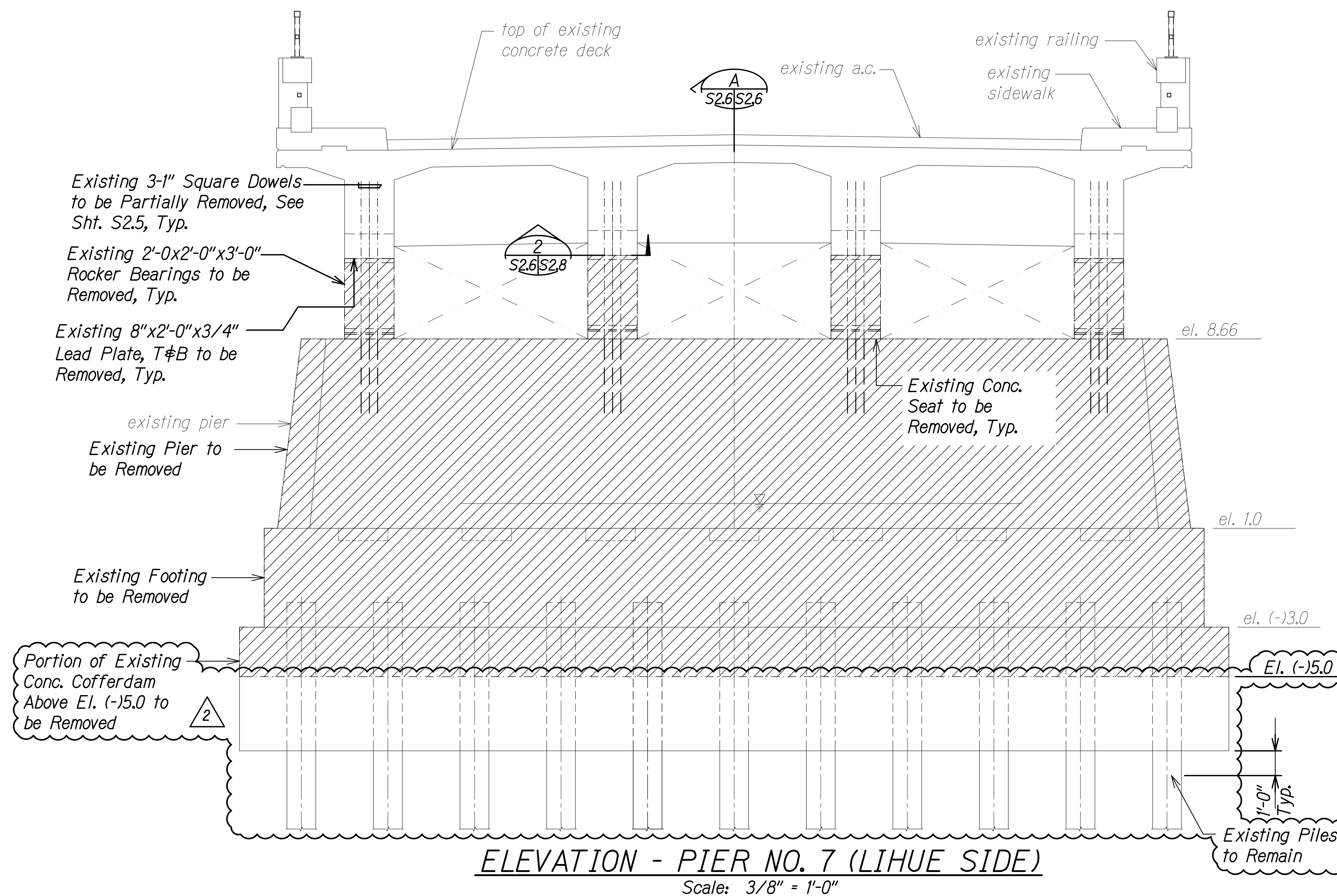
ELEVATION - PIER NO. 2
(PIER NOS. 3, 5 AND 6 SIMILAR)
Scale: 3/8" = 1'-0"

8/27/21	2	ADD. 4 - Revised Demolition
DATE		

CALVIN T. MIYAKAWA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature: Calvin Miyakawa
EXPIRATION DATE OF THE LICENSE: 4-30-22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DEMOLITION AT PIER NO. 2
(PIER NOS. 3, 5, & 6 SIM.)
KUHIO HIGHWAY
Repairs to Wailua River Bridge
Fed. Aid Project No. ER-23(001)
Scale: As Noted Date: Apr. 2021
SHEET No. S2.4 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 49	109

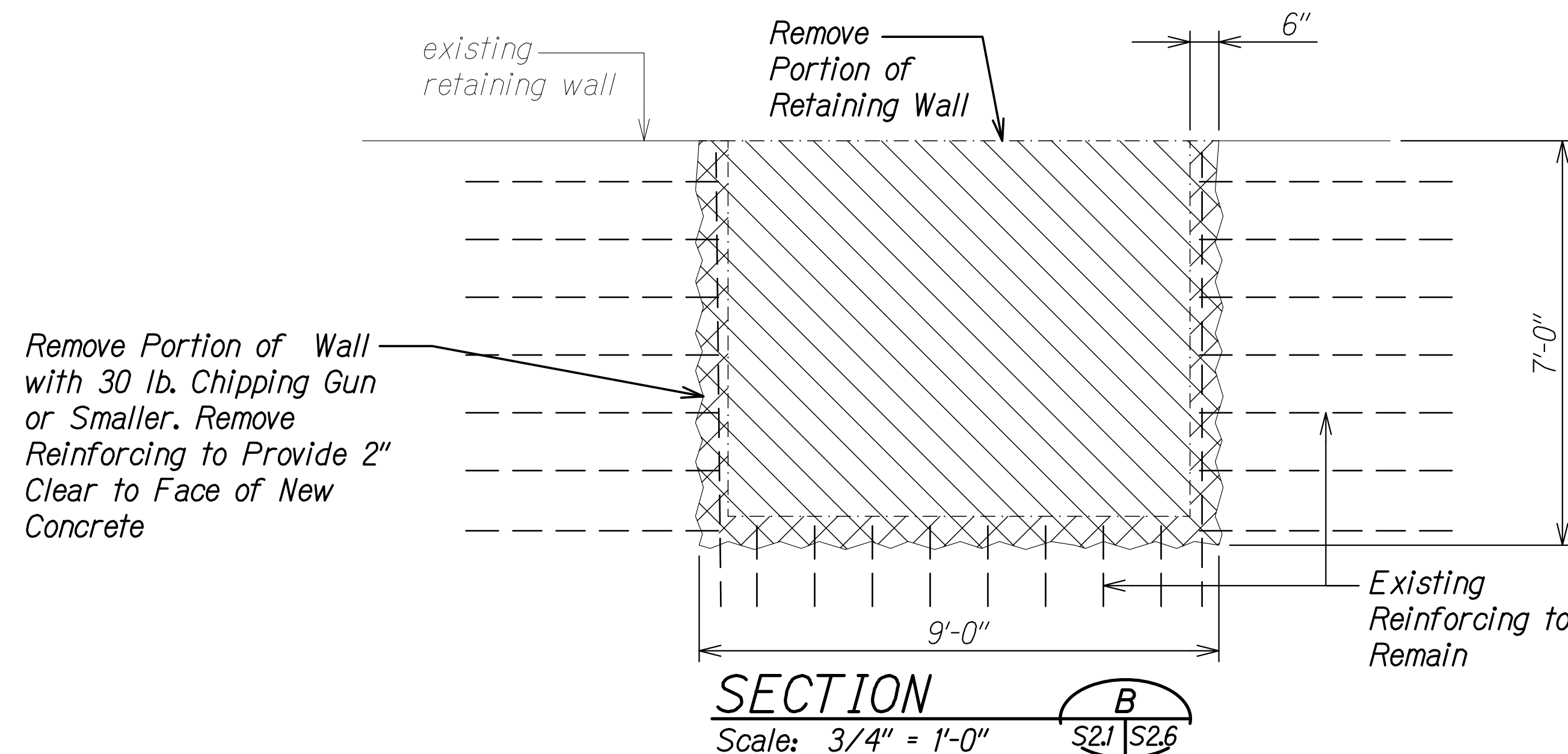


NOTE:

Existing steel frame bearings not shown for clarity. See sheet S2.12 for demolition details.

LEGEND:

Extent of Demolition



8/27/21	2	ADD. 4 - Revised Demolition
DATE		

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Calvin T. Miyahara
SIGNATURE EXPIRATION DATE OF THE LICENSE 4-30-22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

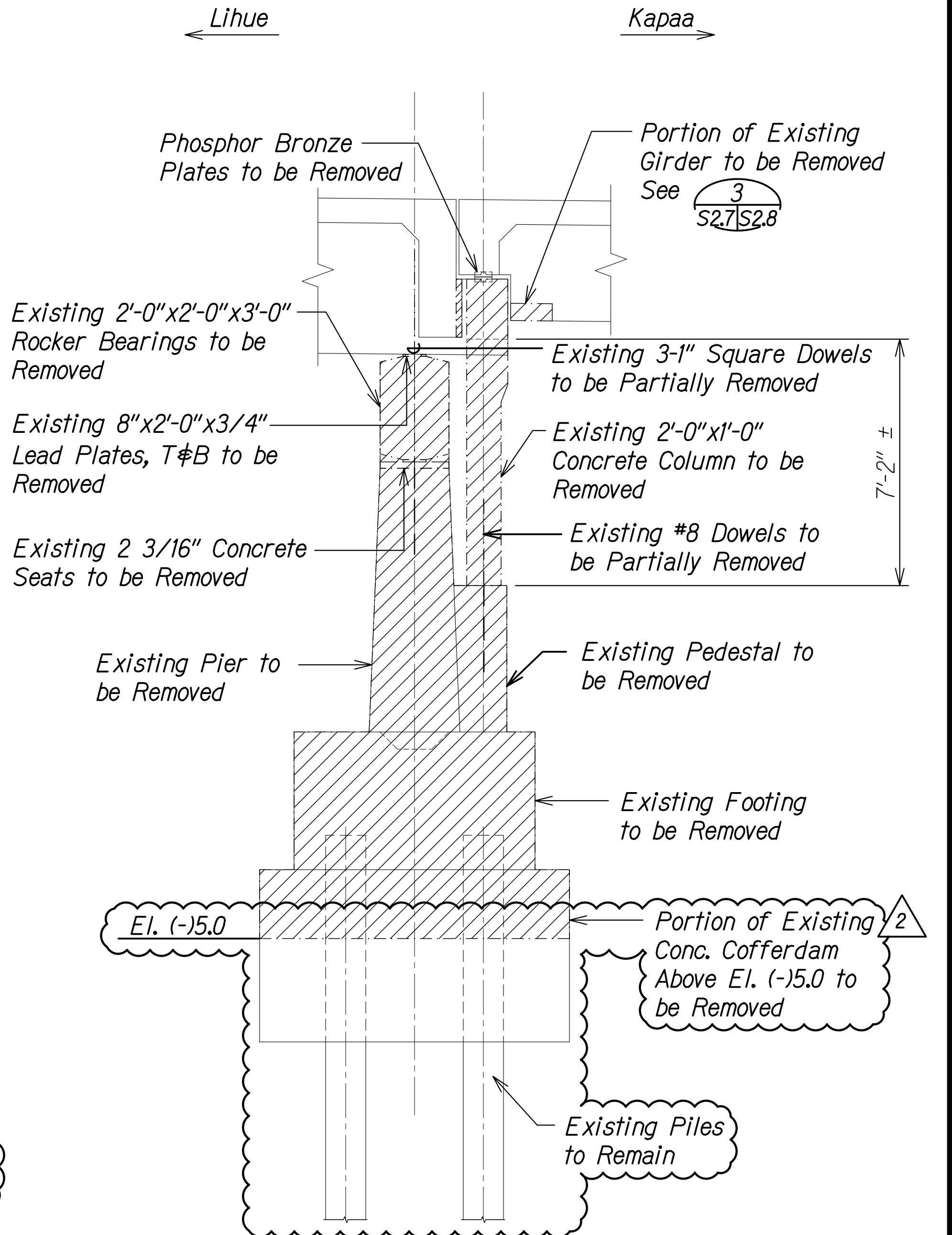
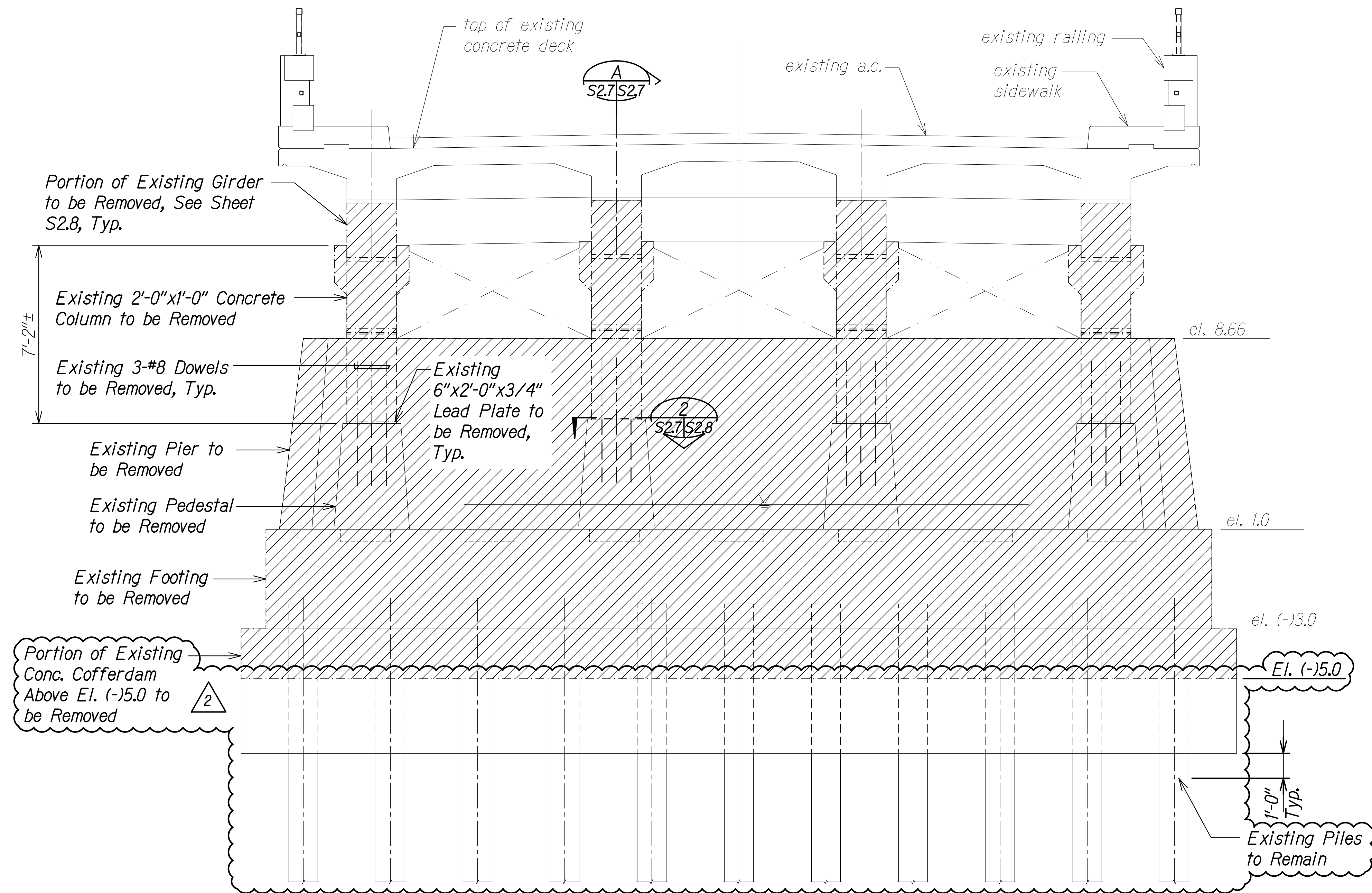
DEMOLITION AT PIER NO. 7 (LIHUE SIDE)

KUHIO HIGHWAY
Repairs to Wailua River Bridge
Fed. Aid Project No. ER-23(001)

Scale: As Noted Date: Apr. 2021

SHEET No. S2.6 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 50	109



NOTE:

Existing steel frame bearings not shown for clarity. See sheet S2.12 for demolition details.

LEGEND:

Extent of Demolition

SECTION A
Scale: 3/8" = 1'-0"

ELEVATION - PIER NO. 7 (KAPAA SIDE)
Scale: 3/8" = 1'-0"

8/27/21	△ Add. 4 - Revised Demolition
DATE	

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Calvin T. Miyahara
SIGNATURE EXPIRATION DATE OF THE LICENSE 4-30-22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION AT PIER NO. 7 (KAPAA SIDE)

KUHIO HIGHWAY
Repairs to Wailua River Bridge
Fed. Aid Project No. ER-23(001)

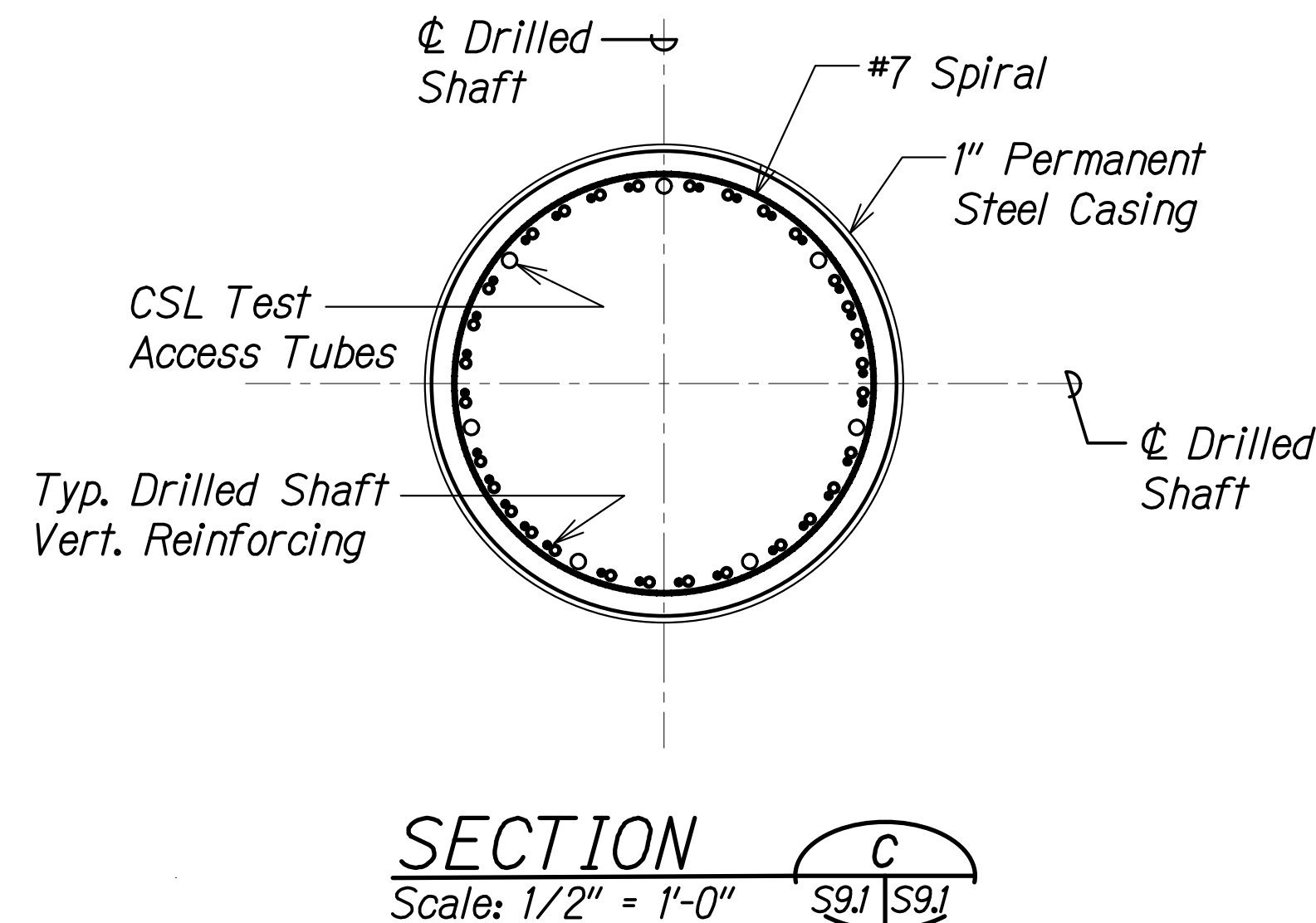
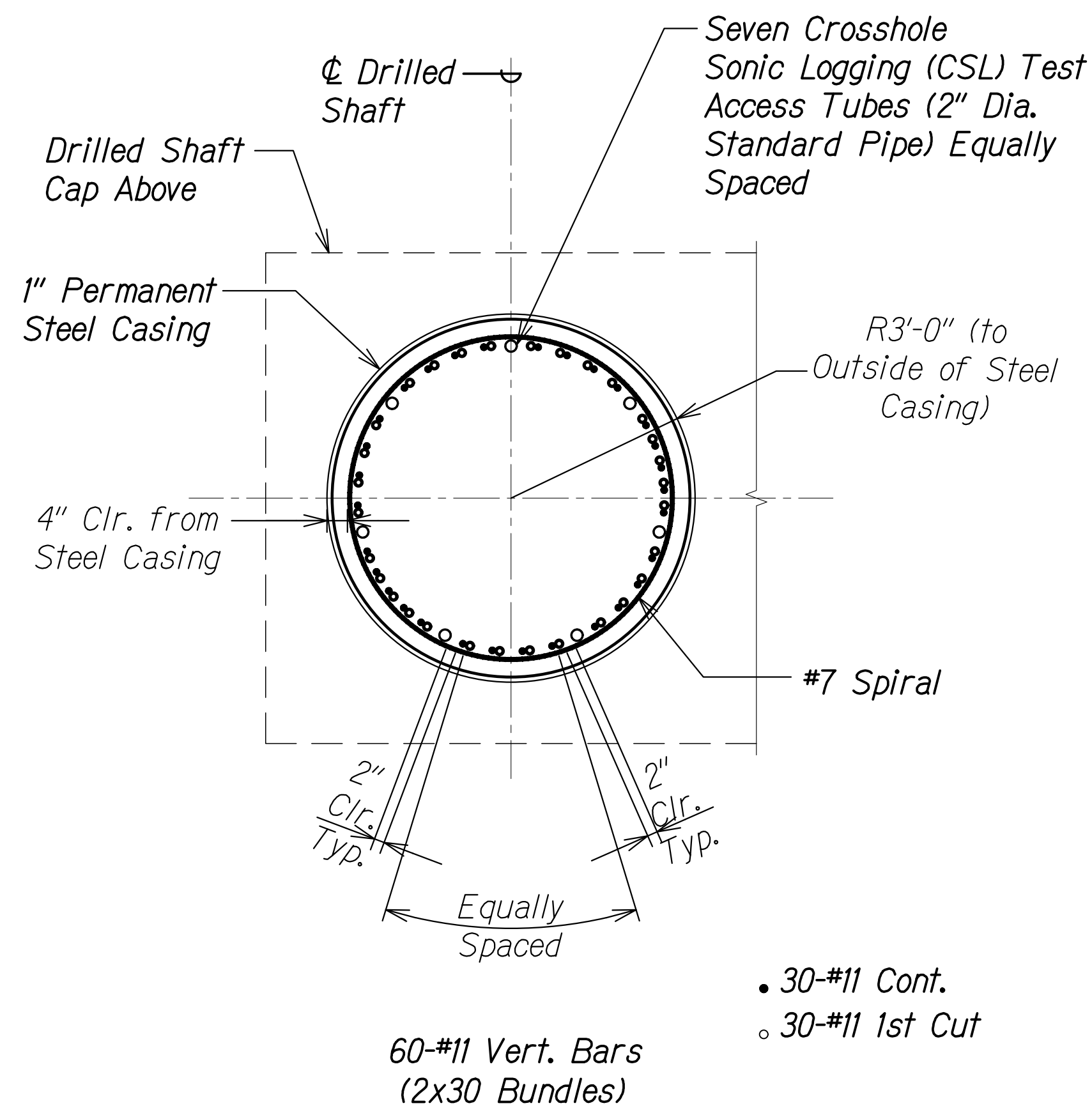
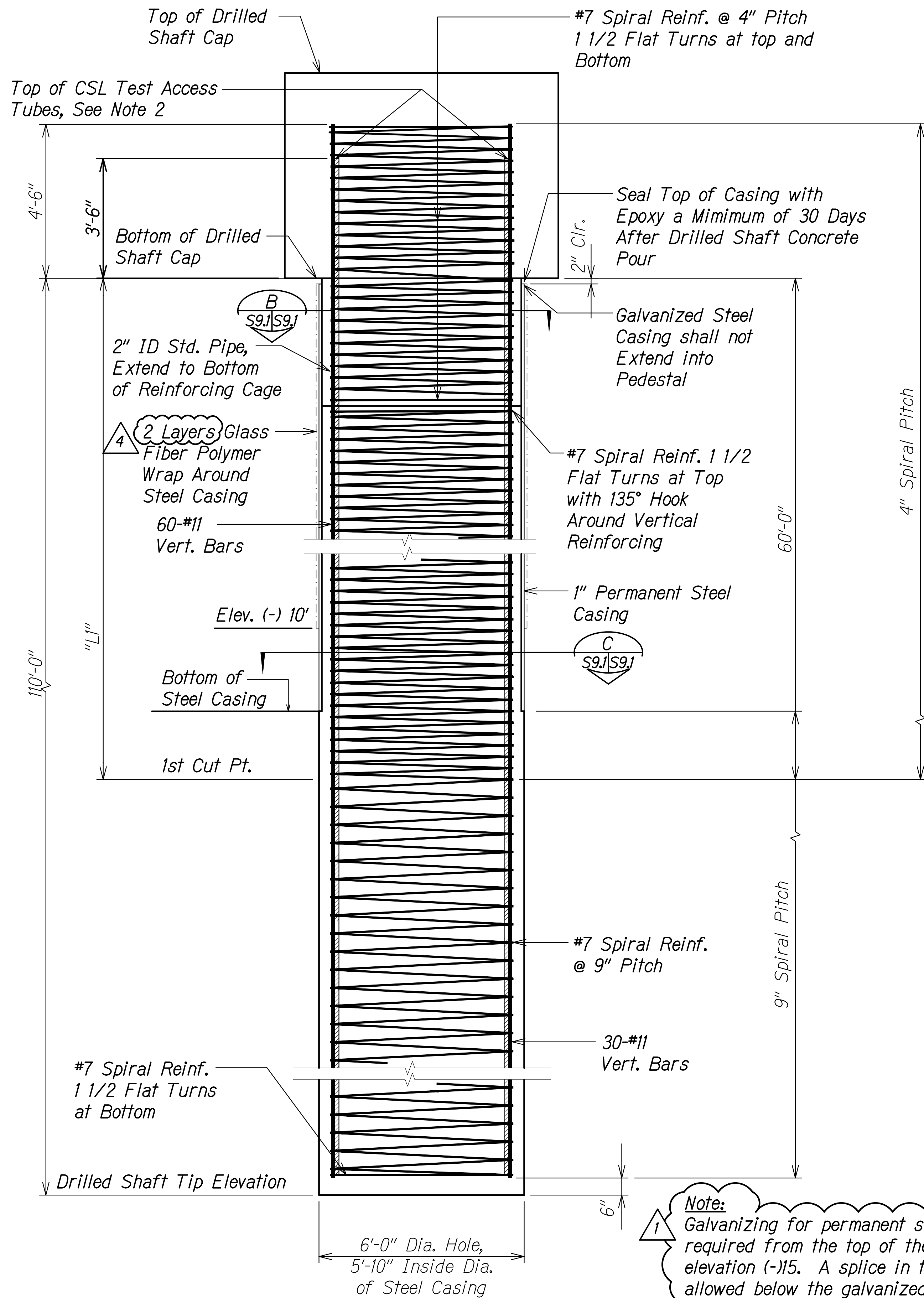
Scale: As Noted Date: Apr. 2021

SHEET No. S2.7 OF 13 SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	
NO.	

DRAWING NAME: Z:\00 ONGOING\20-016-WAILUA RVR BR SCOUR-DO\01 CAD\08-27-21\ADD4.DWG PLOT TIME: 08-27-21 11:06 AM

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	ADD. 81	109



NOTES:

1. Crosshole Sonic Logging (CSL) testing shall be performed on every drilled shaft. Shafts indicating irregular CSL readings may be subjected to additional testing.
2. After CSL testing, a portion of the CSL test access tubes shall be removed to one inch above top of the drilled shaft elevation. Tubes shall be completely filled with non-shrink, non-metallic, cementitious grout of at least equal strength as drilled shaft prior to pouring the transition zone. See Specifications for additional grout requirements.
3. Lap splice length for #11 vert. bar shall be 8'-0". No lap splices of vert. bars are allowed in the upper 35'-0" of the drilled shaft.
4. Lapped splices shall have a minimum of 2'-0" vertically between splice points.
5. Staggered splice points for longitudinal reinforcing shall not be more than 50% of the total at any section normal to the axis of the shaft.
6. Lap splice length for #7 spirals shall be 4'-0" min. with a 135° hook bend at each end.
7. Each end of the spiral shall have 1 1/2 extra turns with a 135° hook around a vertical reinforcing bar.
8. Concrete or other non-corrosive spacing devices shall be used to maintain the reinforcement cage in position within the shaft.
9. Finish coating on FRP shall be touched up above elevation 0.00 after drilled shaft cap is complete. FRP manufacturer's recommendations shall be followed.

Note:
Galvanizing for permanent steel casing is only required from the top of the steel casing to elevation (-)15. A splice in the casing will be allowed below the galvanized portion of the casing.

DRILLED SHAFT ELEVATION AT PIERS
Scale: 1/2" = 1'-0"

8/27/21	2	Add. 4 - Revised & Added Notes
8/10/21	1	Add. 2 - Added Note
DATE	REVISION	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PRODUCTION DRILLED SHAFT
AT PIERS**

KUHIO HIGHWAY

Repairs to Wailua River Bridge

Fed. Aid Project No. ER-23(001)

Scale: As Noted Date: Apr. 2021

SHEET No. S91 OF 3 SHEETS