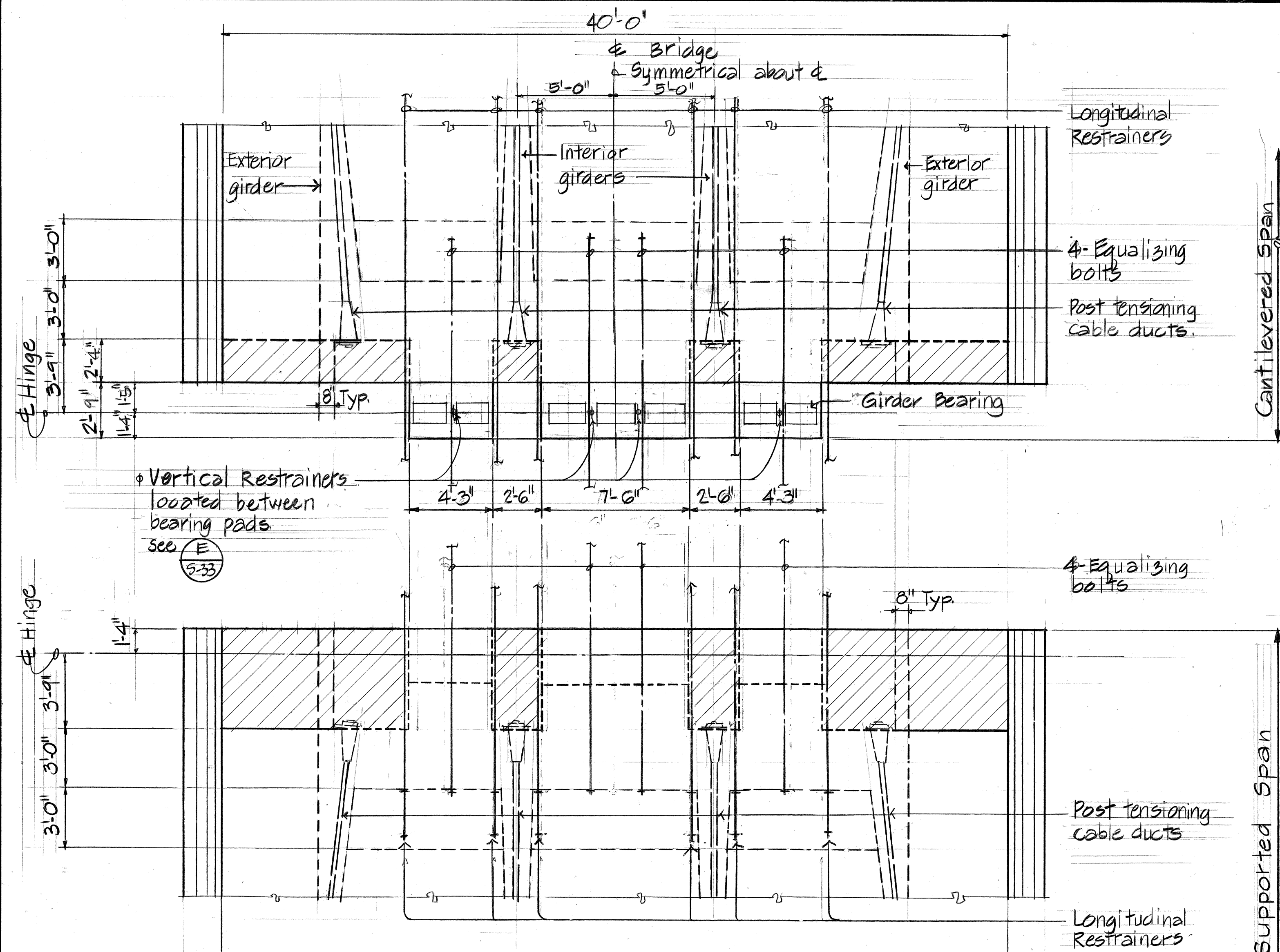
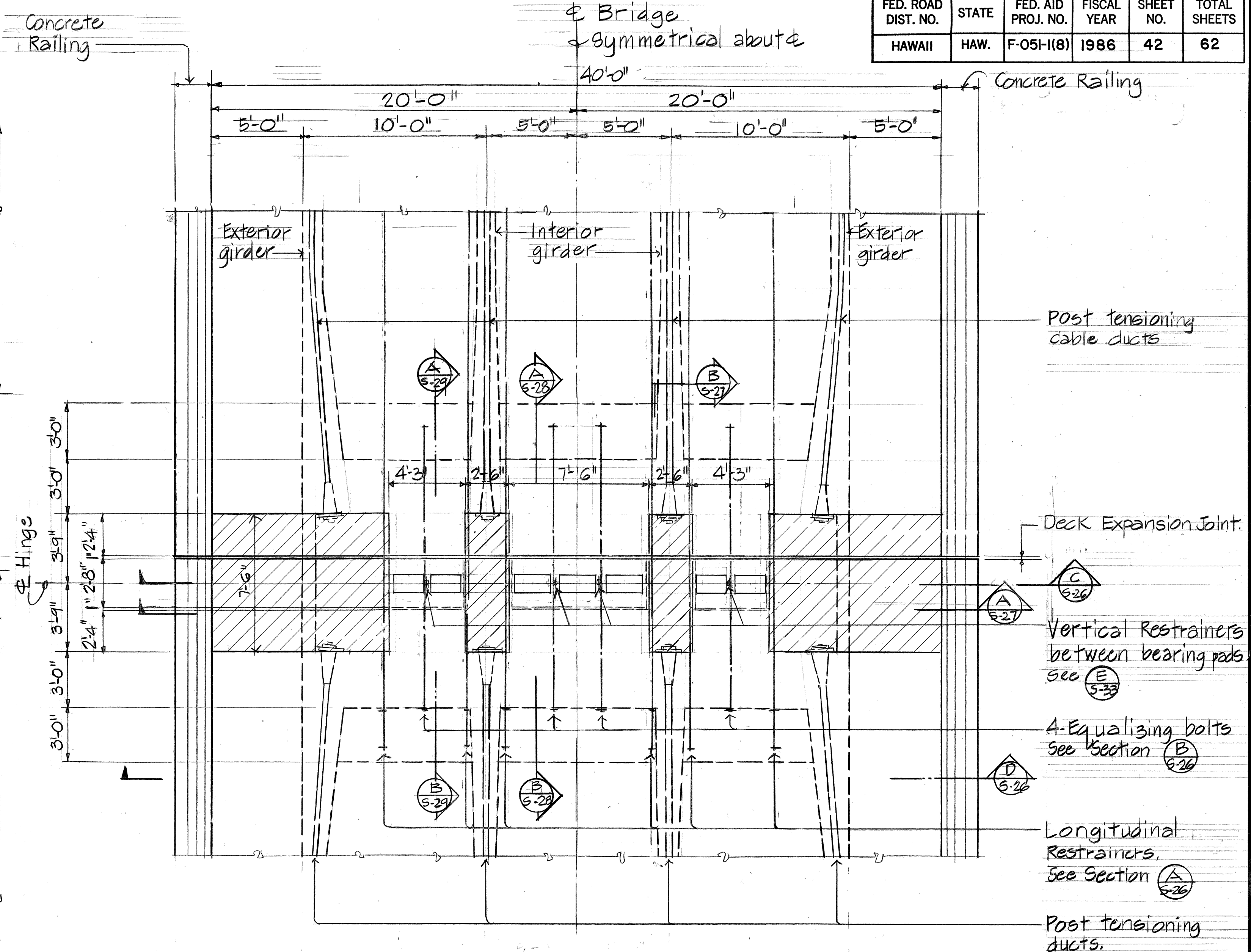


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-051-1(8)	1986	42	62



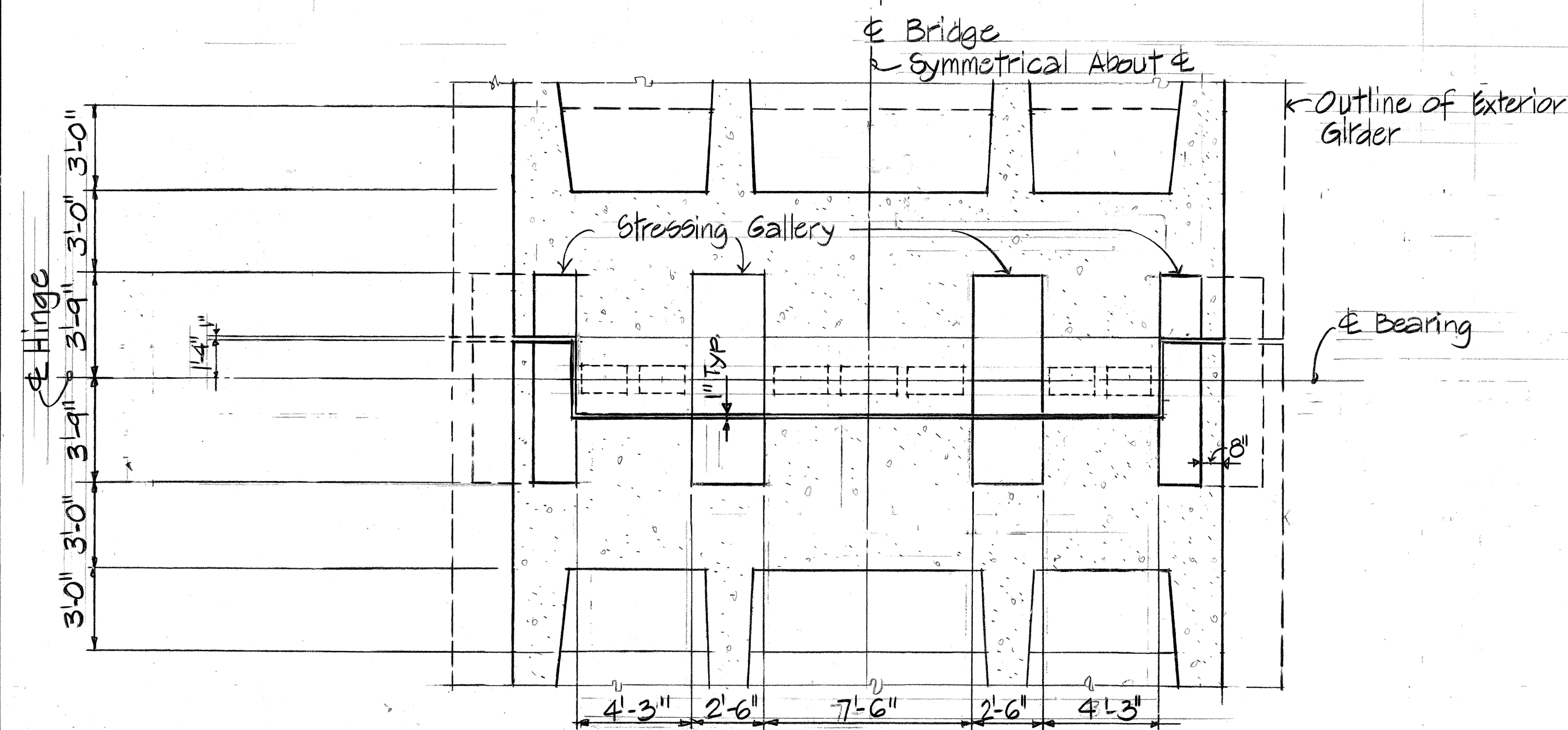
BRIDGE DECK AT HINGE - PLAN
Scale: 1/4" = 1'-0" (shown separated)



Note: Cover over post-tensioning anchorage and creep block not indicated for clarity.

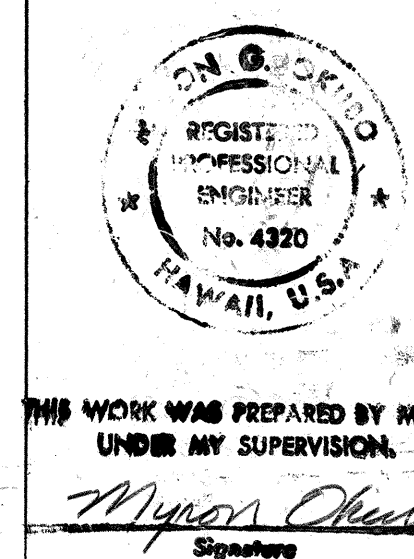
Hatched area denotes closure concrete at bridge deck.

TYPICAL HINGE PLAN
Scale: 1/4" = 1'-0"



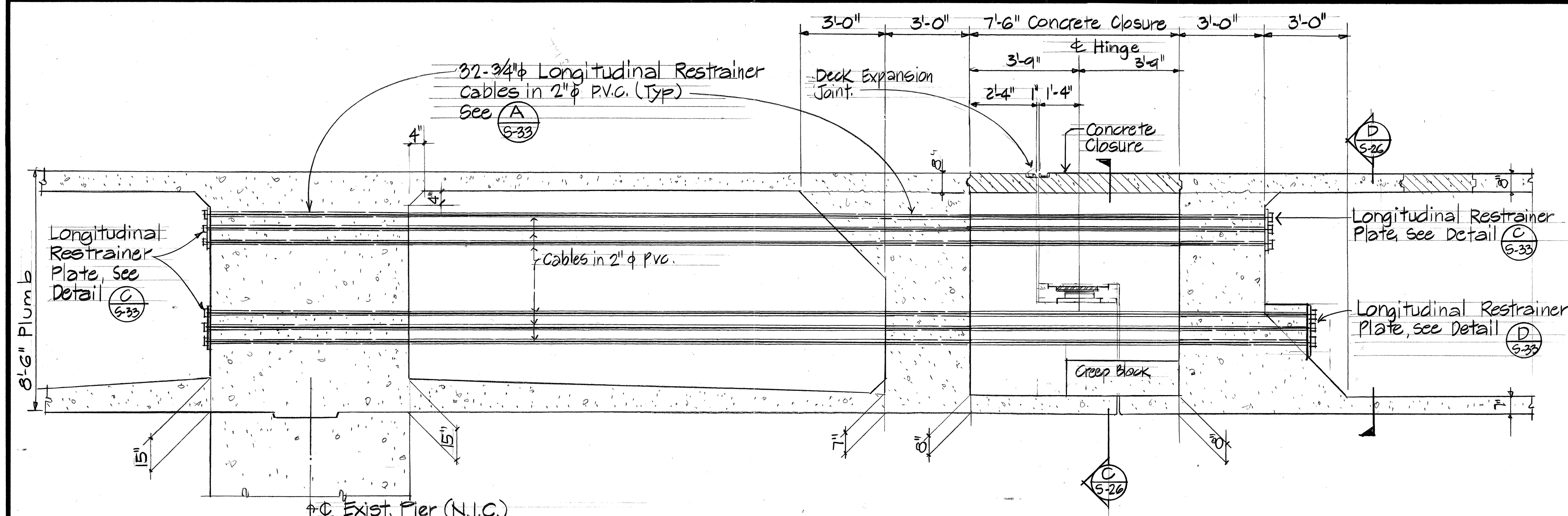
STRESSING GALLERY - PLAN
Scale: 1/4" = 1'-0"

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
NOTES BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
NO.	_____

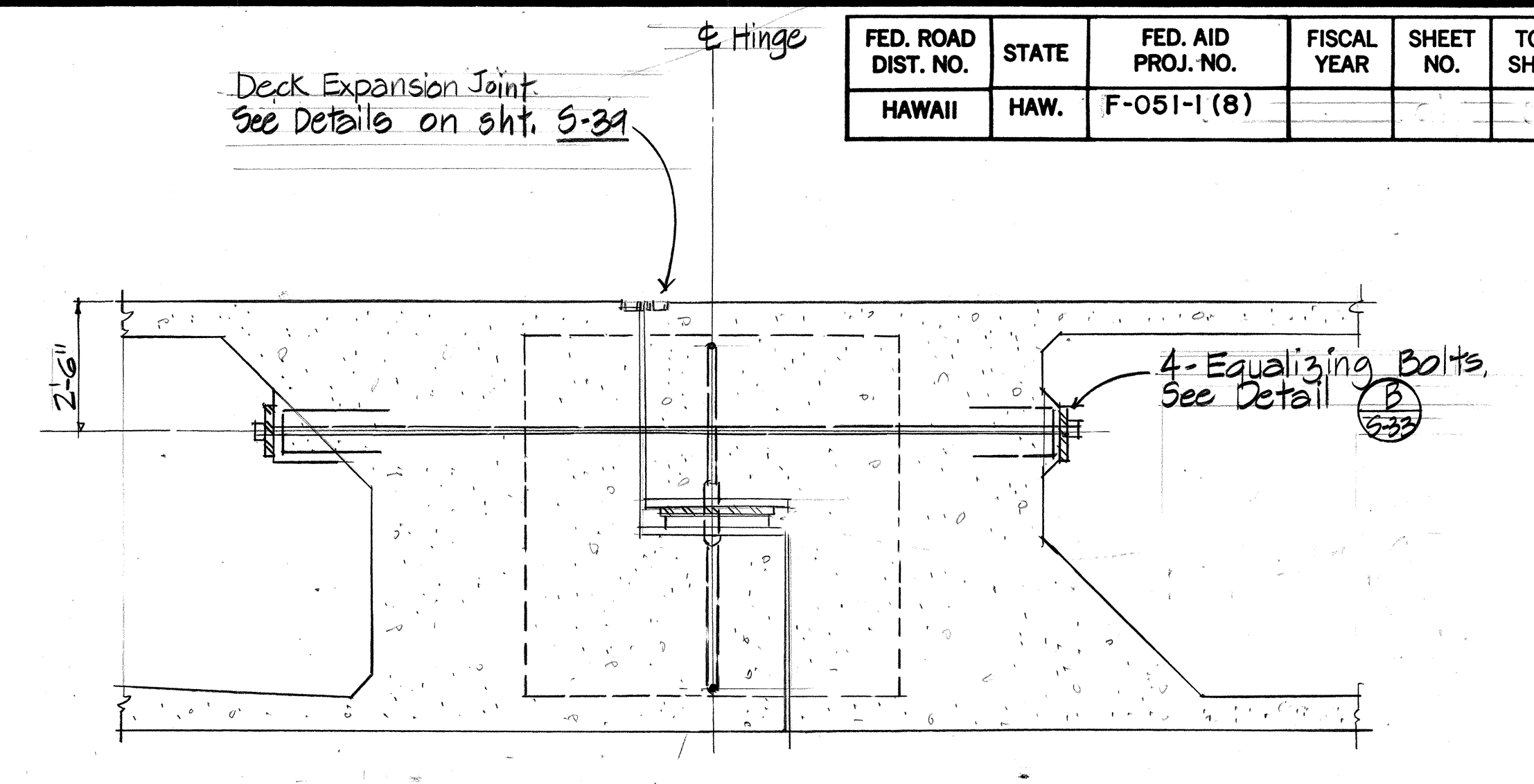


DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION LAND TRANSPORTATION FACILITIES DIVISION HINGE - PLANS AND SECTIONS HANAMAULU VIADUCT HANAMAULU-AHUKINI CUTOFF ROAD Ahukini Road to Kauai Hardwoods PROJECT NO. F-051-1(8) SCALE: 1/4" = 1'-0" DATE: JULY 1985 SHEET NO. S-25 OF S-39 SHEETS	

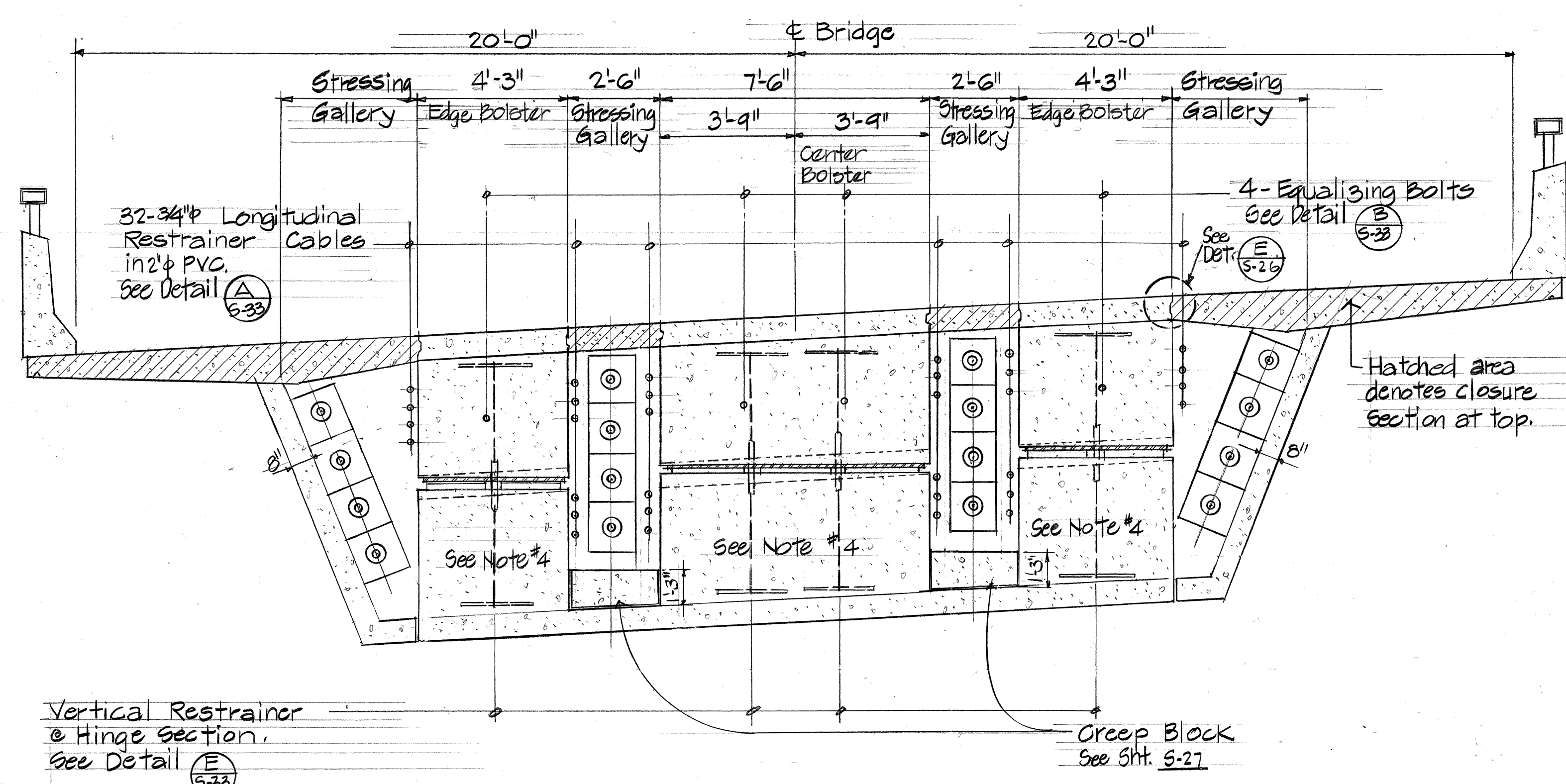
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-051-1(8)			



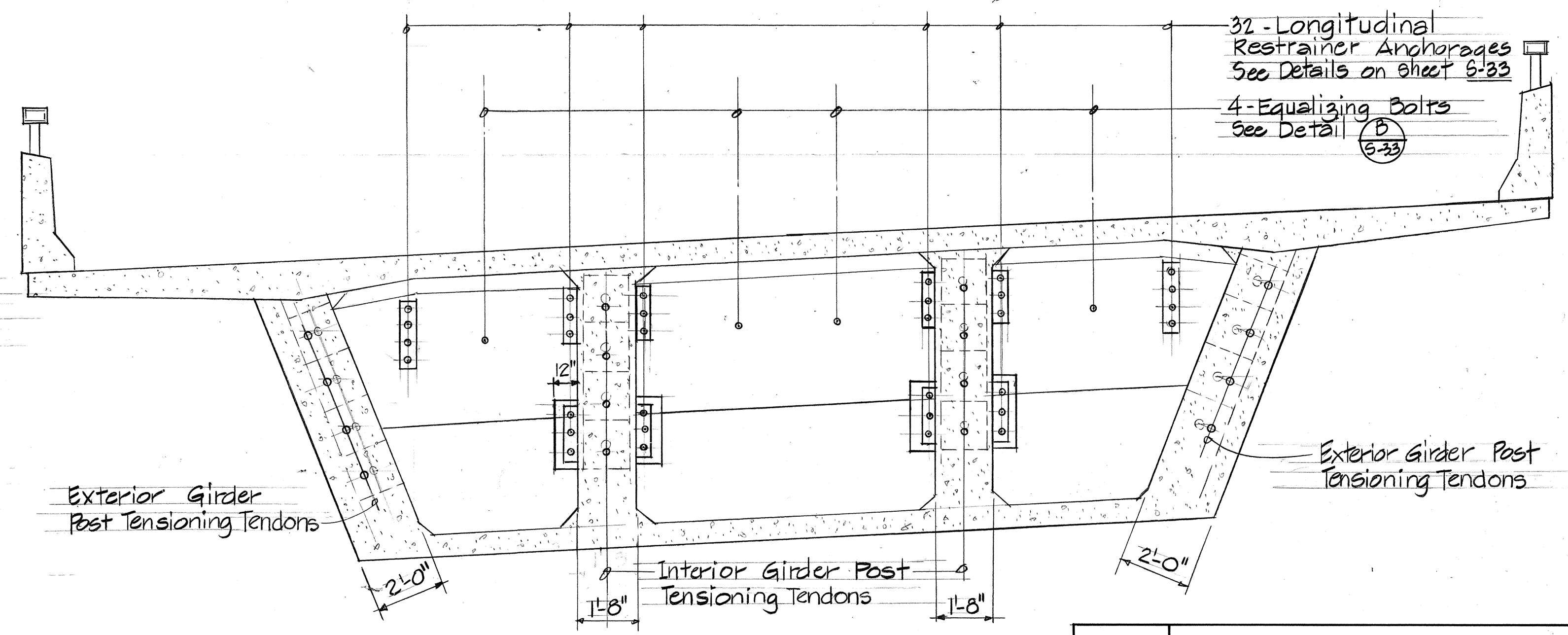
TYPICAL LONGITUDINAL RESTRAINERS - SECTION A
Scale: 3/8" = 1'-0"
S-26



TYPICAL EQUALIZING BOLTS AT HINGE - SECTION B
Scale: 3/8" = 1'-0"
S-26

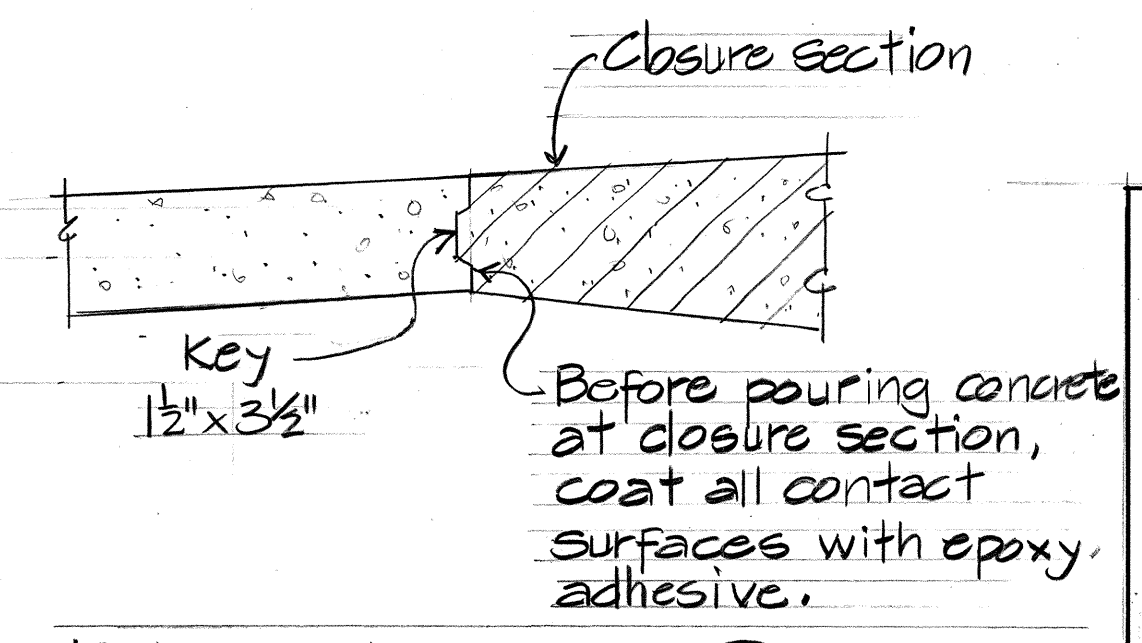


SECTION C
Scale: 3/8" = 1'-0"
S-26



SECTION D
Scale: 3/8" = 1'-0"
S-26

- Notes:**
1. Actual position of the Longitudinal Hinge Restrainers and Equalizing Bolts to be determined by the Contractor, subject to approval by the Engineer.
 2. Contractor to submit shop drawings of Restrainer Units to the Engineer for approval prior to installation.
 3. Post Tensioning Anchorages indicated are for Schematic purposes only. Exact number, location and details to be determined by the Contractor.
 4. For reinforcing at Hinge Bolster sections, see Details and sections on sheet S-31.



DETAIL E
N.T.S.
S-26

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	

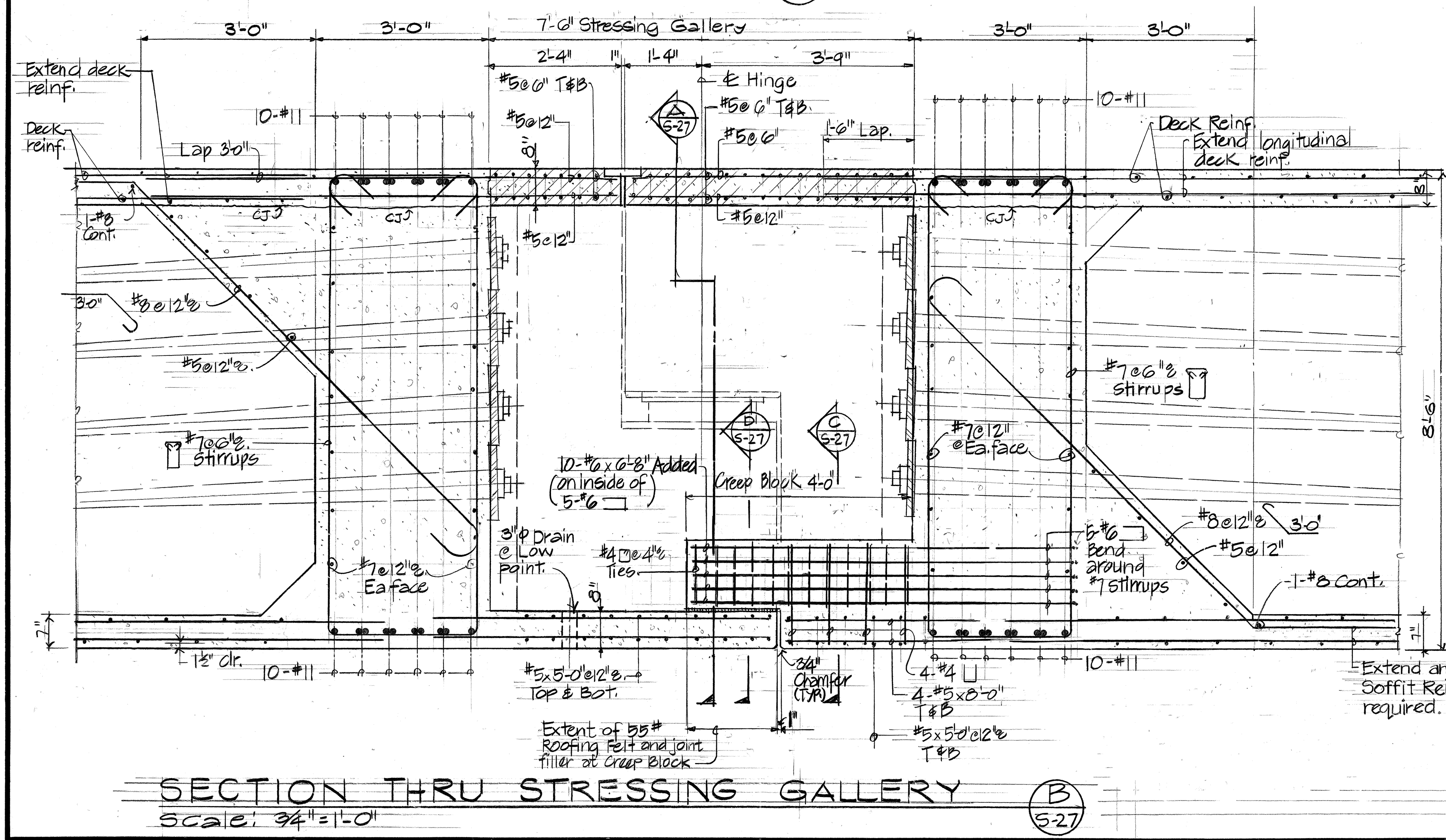
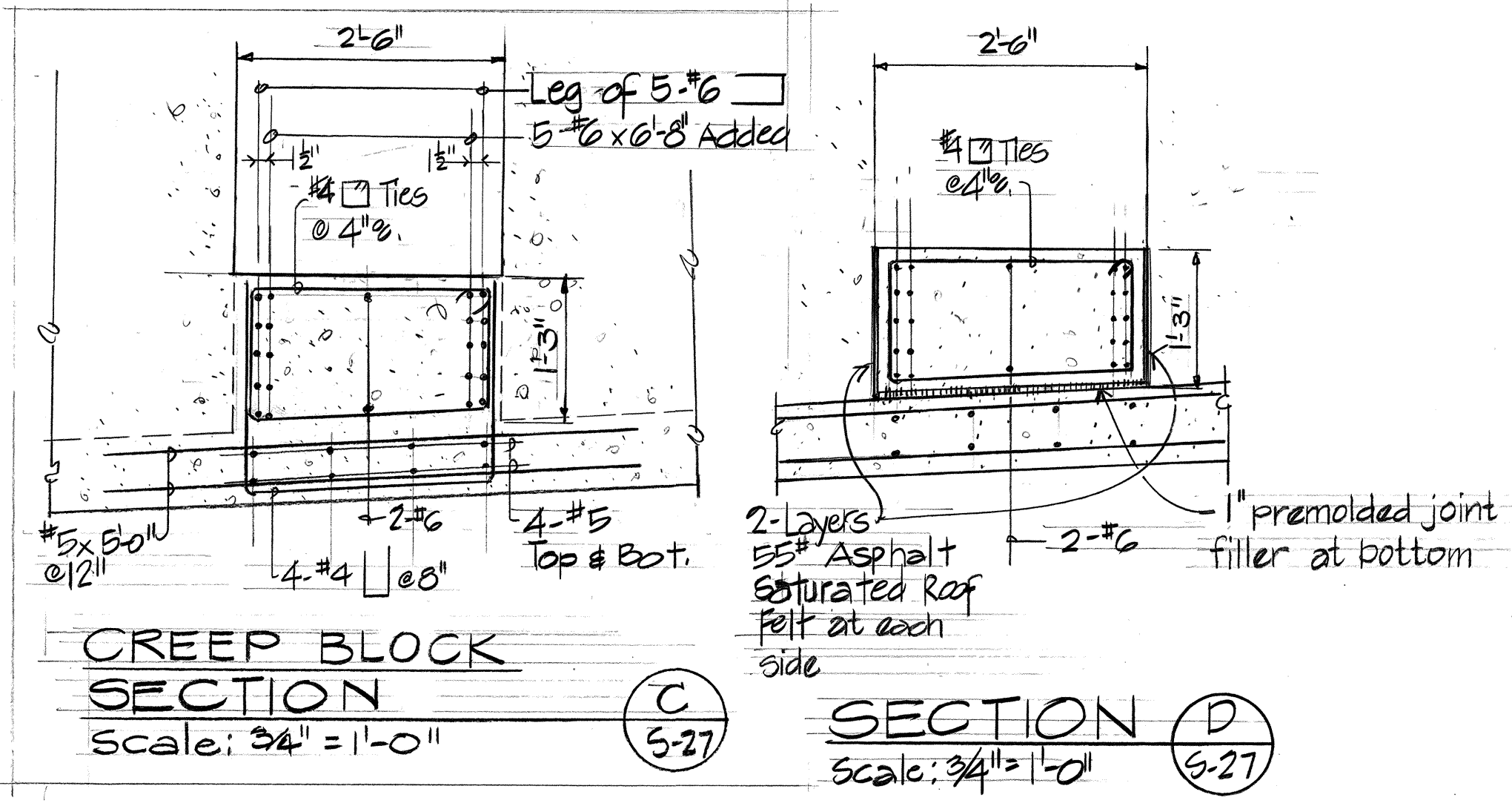
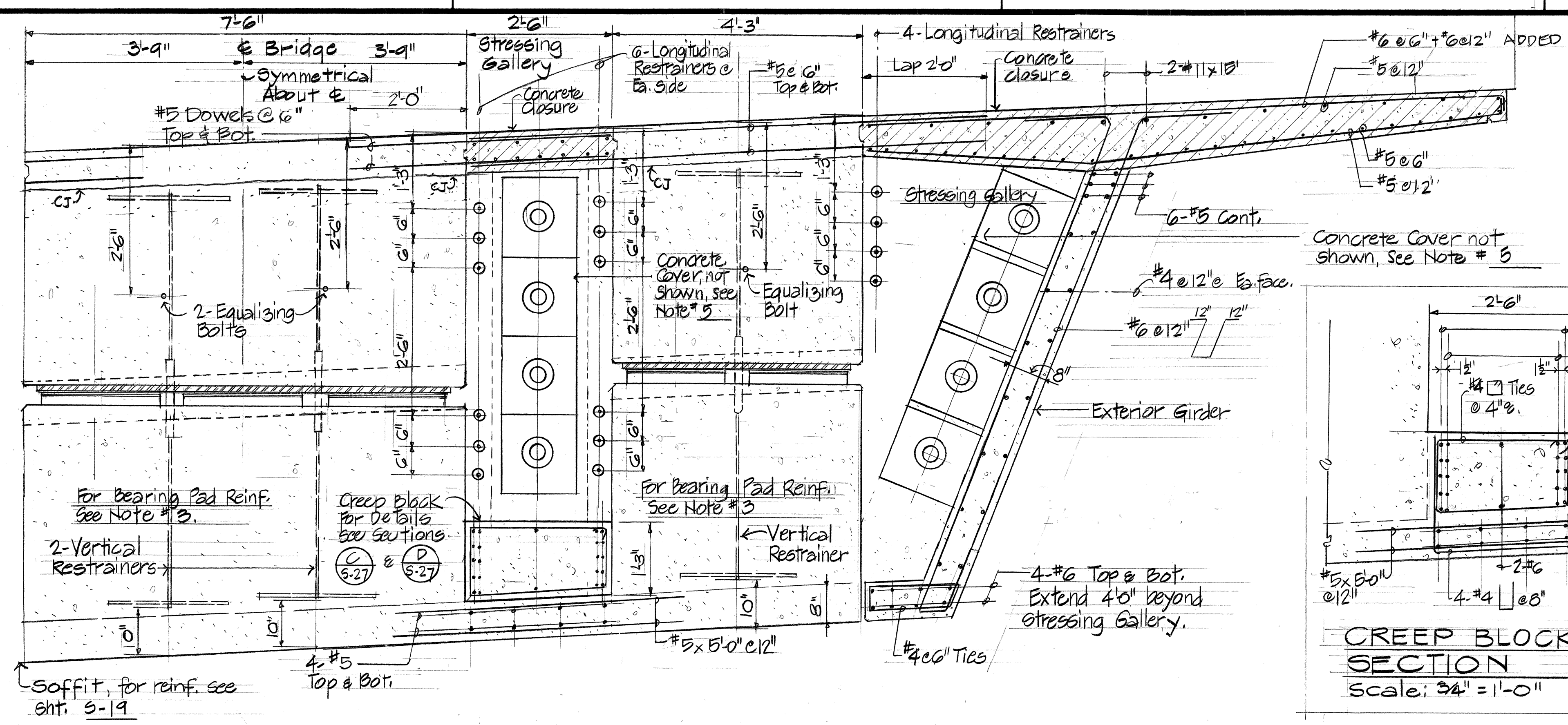
MYRON G. OKURO
REGISTERED PROFESSIONAL ENGINEER
No. 4320-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Myron Okuro
Signature

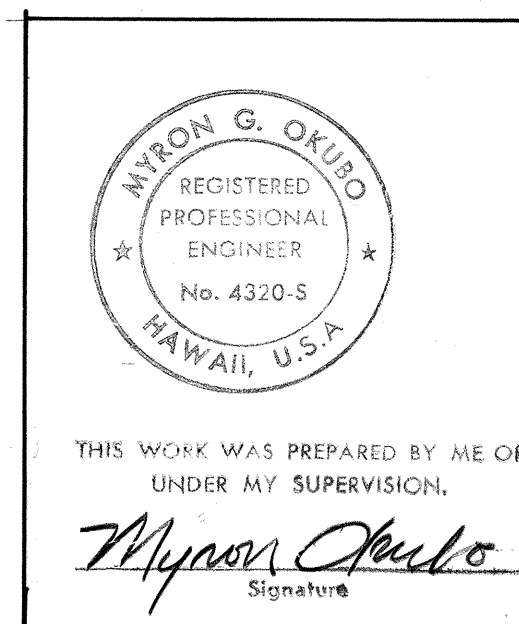
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HINGE-SECTIONS AND DETAILS	
HANAMAULU VIADUCT HANAMAULU-AHUKINI CUTOFF ROAD Ahukini Road to Kauai Hardwoods PROJECT NO. F-051-1(8)	
SCALE: AS SHOWN	DATE: JULY 1985
SHEET NO. S-26 OF S-39 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-051-1(8)			



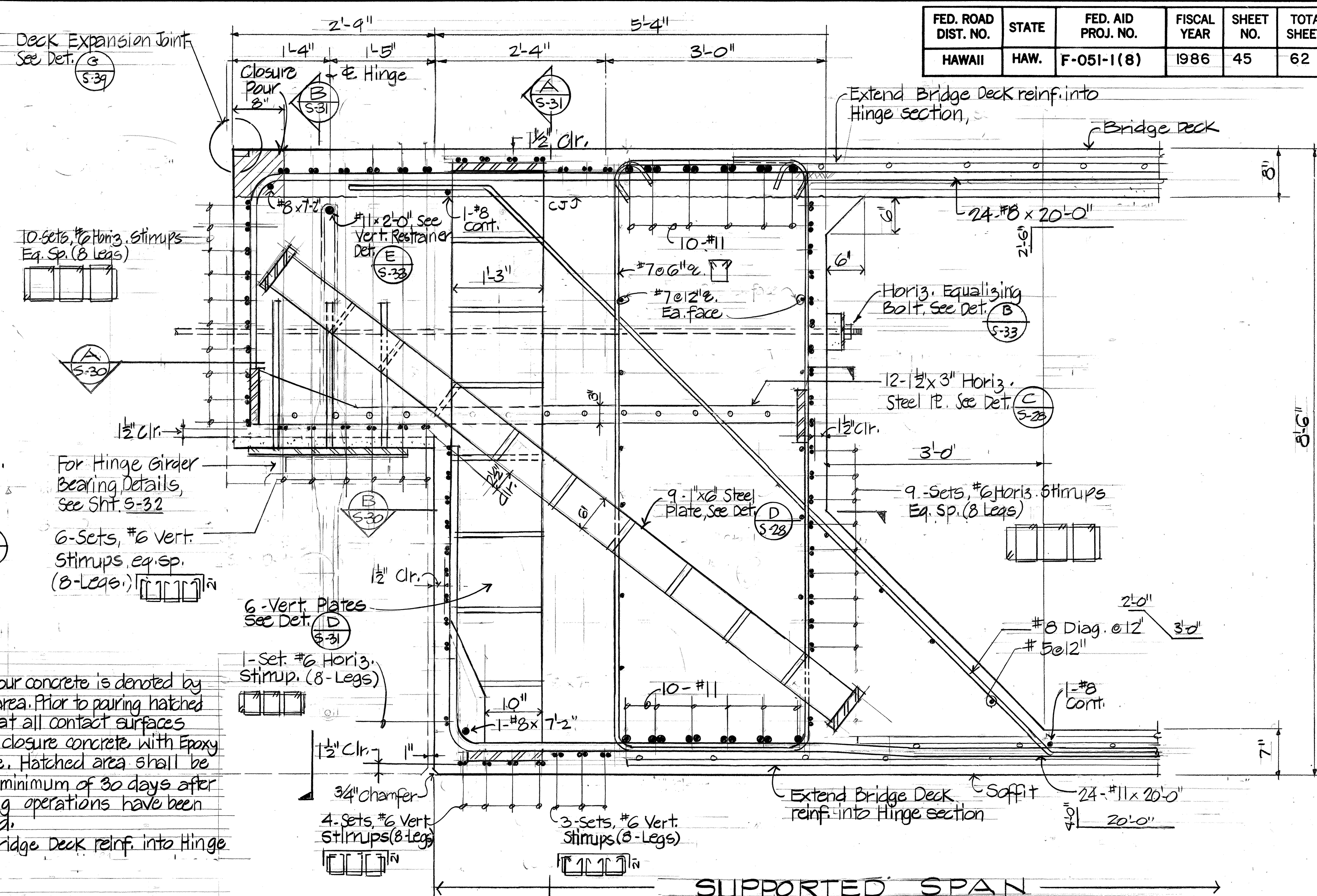
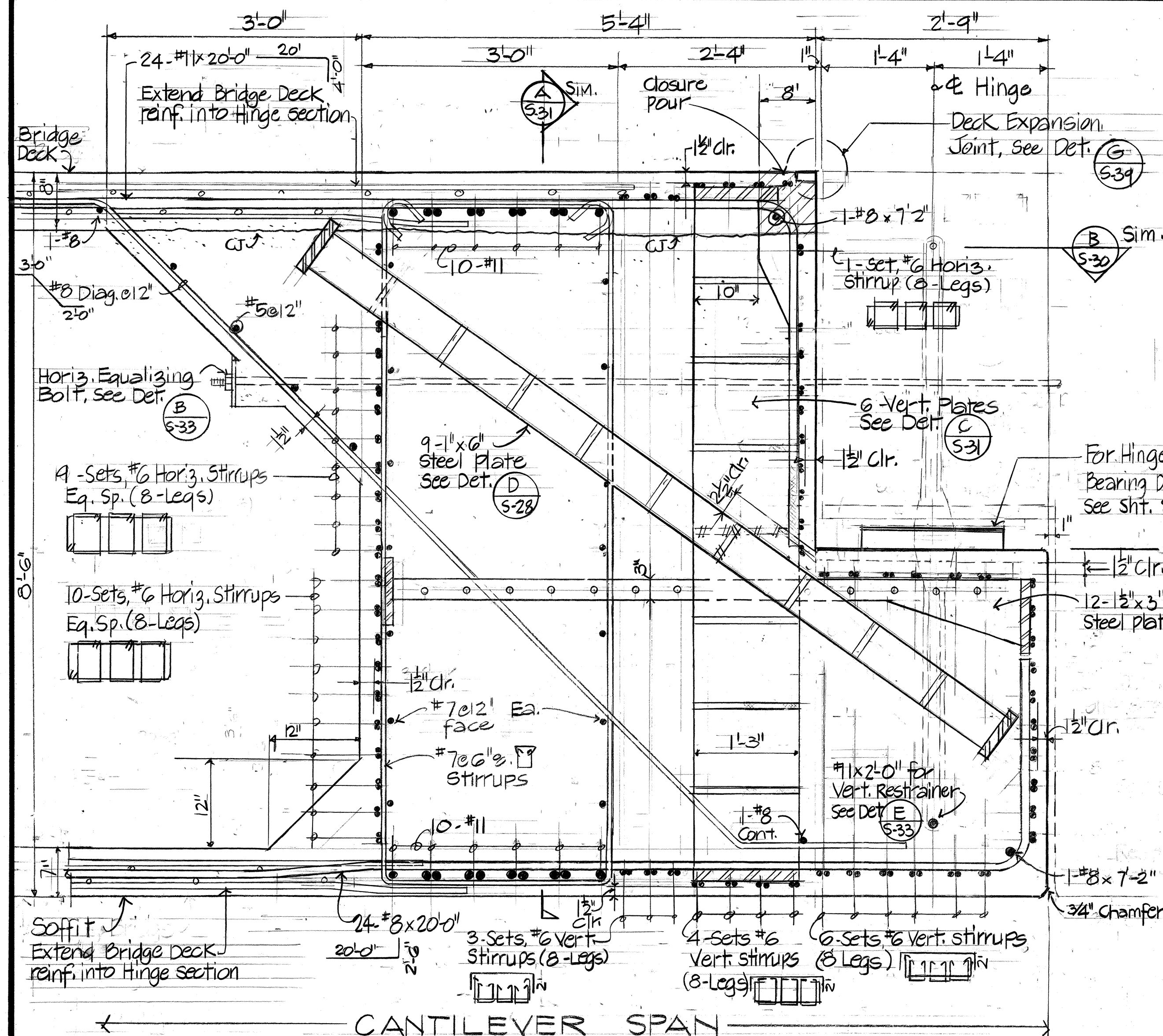
- Notes:
1. For Bridge reinf. see sheet S-19.
 2. Creep Block to be poured monolithically with support span section. 2-layers of 55# Asphalt saturated Roofing felt to be placed at each side and 1" premolded joint filler at bottom of Creep Block at cantilever span.
 3. For Bearing Pad reinf. see sht. S-31.
 4. For Post Tensioning Anchorage Details, see sht. S-24.
 5. Concrete Cover over Post Tensioning Anchorage to be constructed after completion of all Post Tensioning operation.

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____

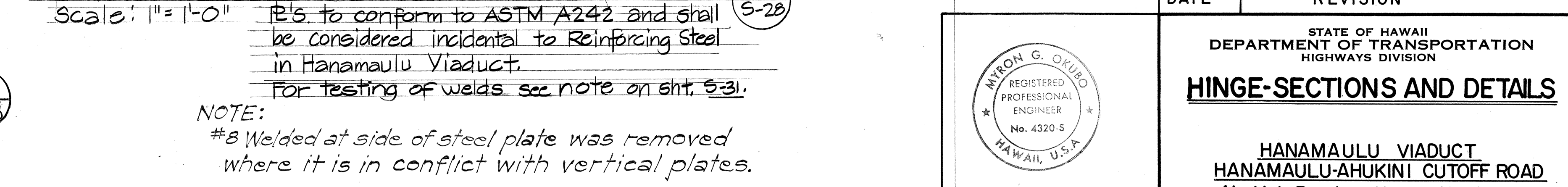
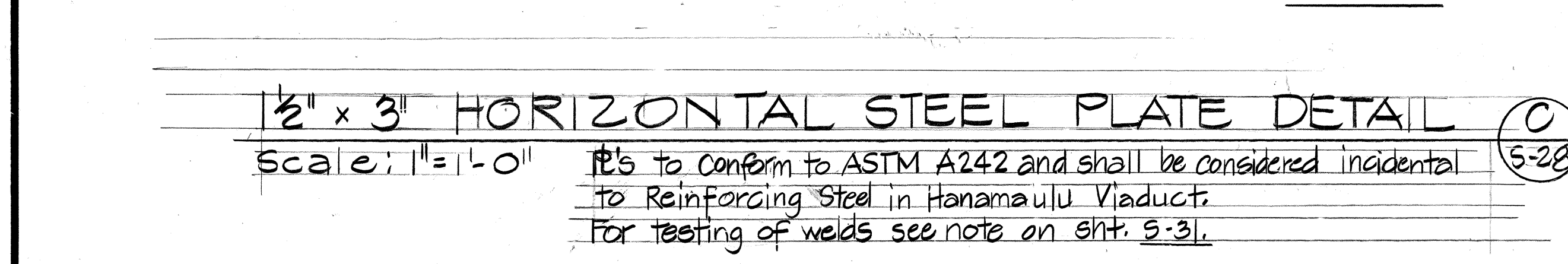
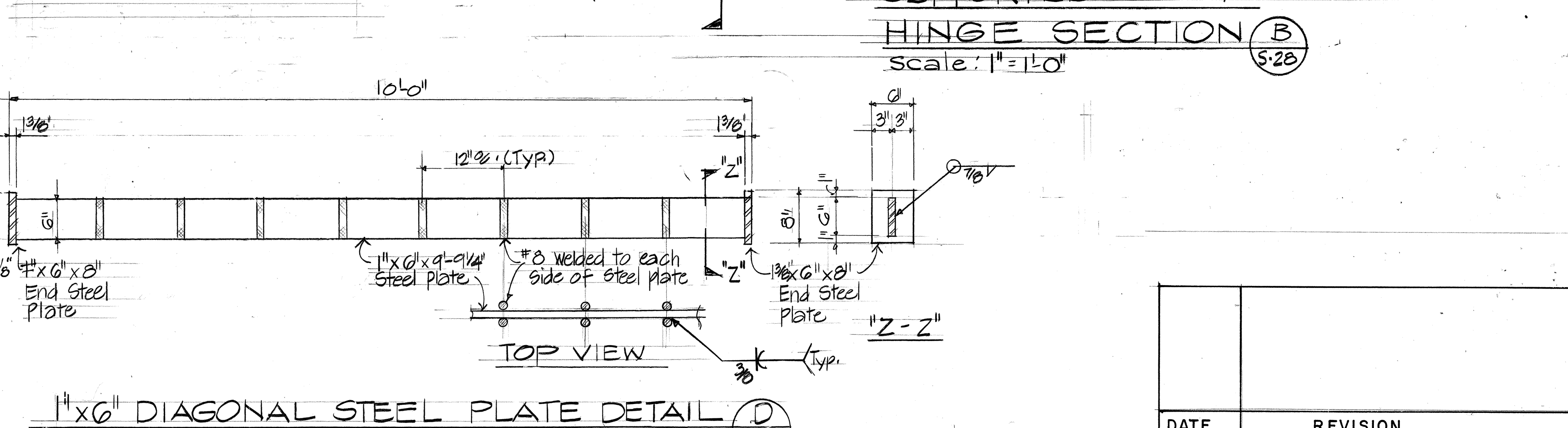
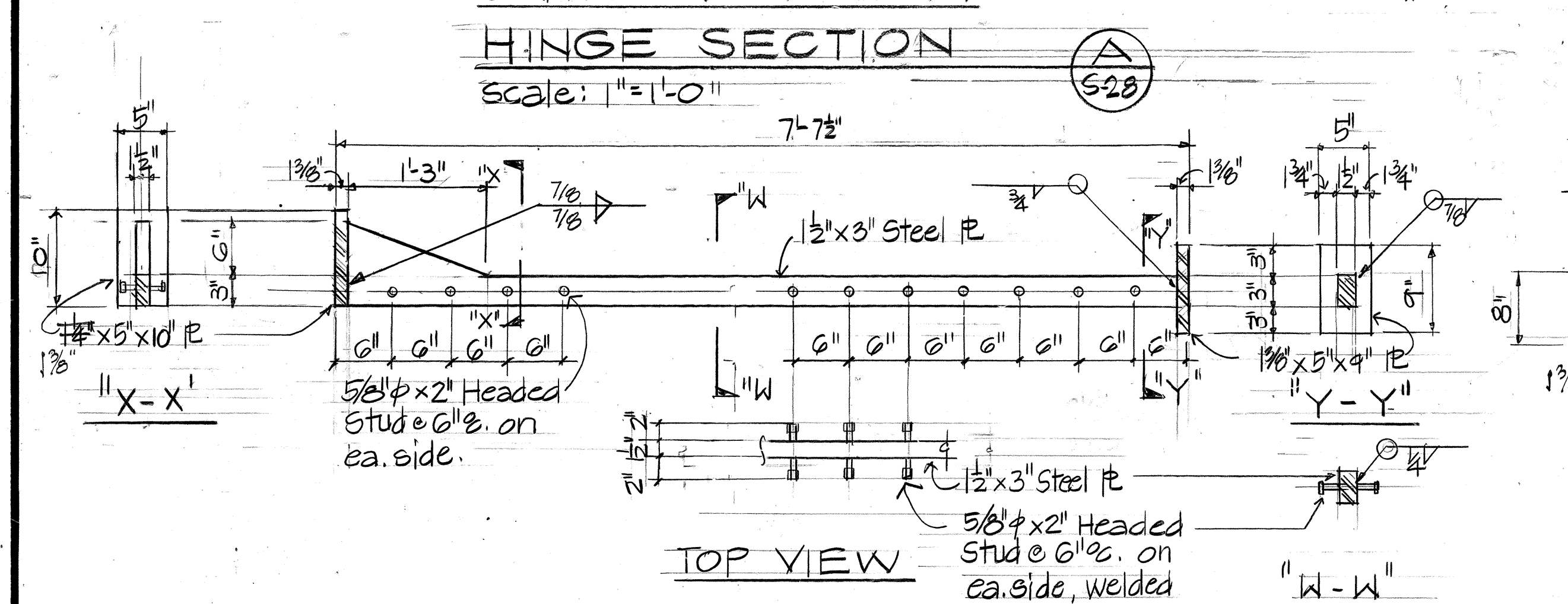


DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HINGE-SECTIONS AND DETAILS	
HANAMAULU VIADUCT HANAMAULU-AHUKINI CUTOFF ROAD Ahukini Road to Kauai Hardwoods PROJECT NO. F-051-1(8)	
SCALE: AS SHOWN	DATE: JULY 1985
SHEET NO. S-27 OF S-39 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-051-1(8)	1986	45	62



Notes:
 1. Closure pour concrete is denoted by hatched area. Prior to pouring hatched areas, coat all contact surfaces receiving closure concrete with Epoxy Adhesive. Hatched area shall be poured a minimum of 30 days after tensioning operations have been completed.
 2. Extend Bridge Deck reinf. into Hinge section.



NOTE:
 #8 Welded at side of steel plate was removed where it is in conflict with vertical plates.

DATE: _____

REVISION: _____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

HINGE SECTIONS AND DETAILS

HANAMAULU VIADUCT
 HANAMAULU-AHUKINI CUTOFF ROAD
 Ahukini Road to Kauai Hardwoods
 PROJECT NO. F-051-1(8)

SCALE: AS SHOWN DATE: JULY 1985

SHEET NO. S-28 OF S-39 SHEETS

1956 47 60

2- Vert. Restrainers See Det. (E 5-33)

24-#8 Top reinf. 20'-0" C & Hinge

6-1" Vert. steel Pl. See Det. (D 5-28) (D 5-31)

#7 @ 12" 12-1/2" x 3" Pl. See Det. (C 5-26)

#7 @ 12"

1/2" Clr.

3'-9" 7'-6" Bridge 3'-9" 2'-6"

1-Vert. Restrainer See Det. (E 5-33)

6-Sets, Vert. Stirrups, Eq. Sp. (8 Legs)

4-Sets #6 Vert. Stirrups (8-Legs)

3-Sets #6 Vert. Stirrups (8-Legs)

10-Sets #6 Horiz. Stirrups (4-Legs)

10-Sets #6 Horiz. Stirrups (8-Legs)

#7 Vert. Stirrups @ 6" (Max. Sp.)

9-1/2" x 6" Diag. Pl. See Det. (E 5-29) (D 5-28)

2'-1/2" 4'-3" 2'-1/2"

1/2" Clr.

12-#8 Top reinf. 20'-0" C & Hinge

6-Sets, #6 Vert. Stirrups, Eq. Sp. (4 Legs)

4-Sets #6 Vert. Stirrups (4-Legs)

3-1" Vert. steel plate, See Detail (D 5-28) (D 5-31)

3-Sets #6 Vert. Stirrups (4-Legs)

#7 @ 12" 1/2" Clr.

6-1/2" x 3" Steel Pl. See Det. (C 5-26)

#7 @ 12"

#7 Vert. Stirrups @ 6" Max. Spacing (Typ)

5-1/2" x 6" Diag. Pl. See Det. (E 5-29) (D 5-28)

Note: #8 Diag. @ 12" not shown for clarity.

PLAN SECTION

Scale: 1" = 1'-0"

(A 5-30)

[illegible]

DATE	REVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

HINGE-SECTIONS AND DETAILS

HANAMAULU VIADUCT
HANAMAULU-AHUKINI CUTOFF ROAD
Ahukini Road to Kauai Hardwoods
PROJECT NO. F-051-1(8)

SCALE: AS SHOWN
DATE: JULY 1985

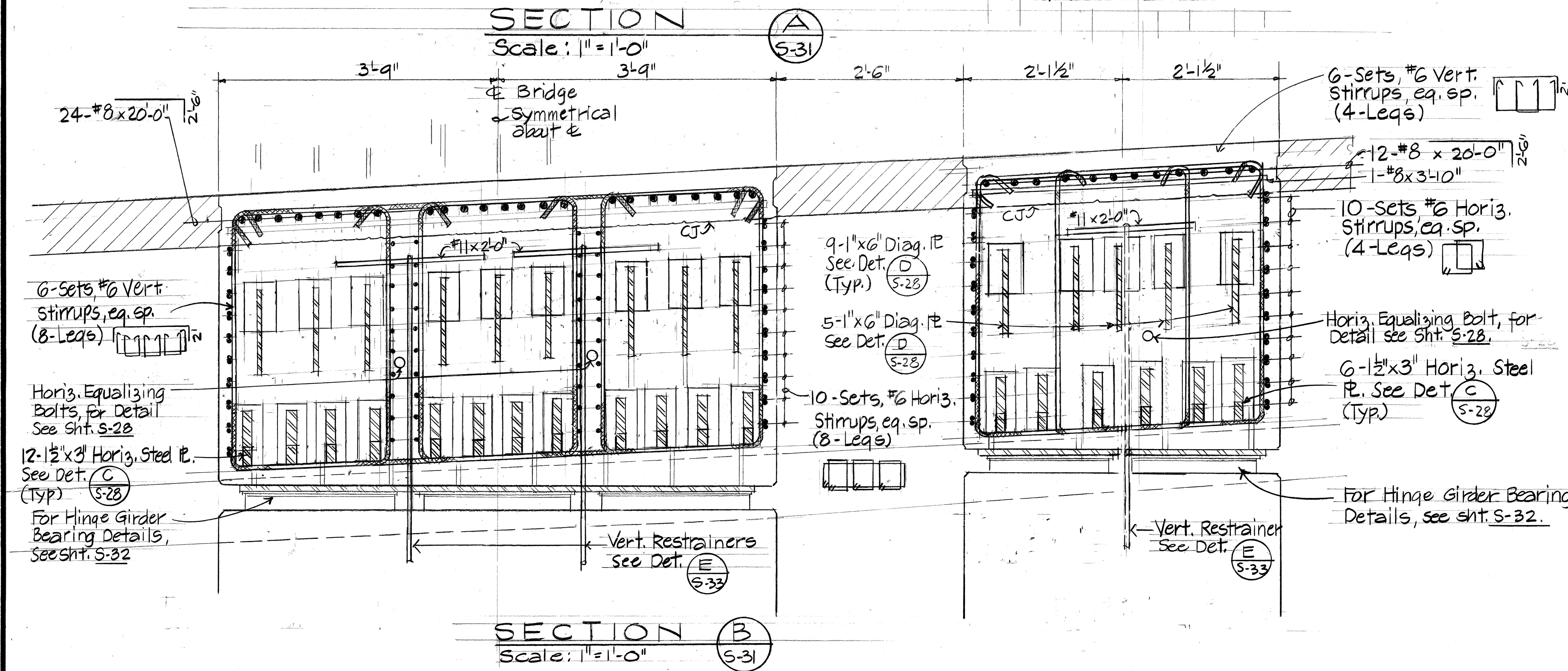
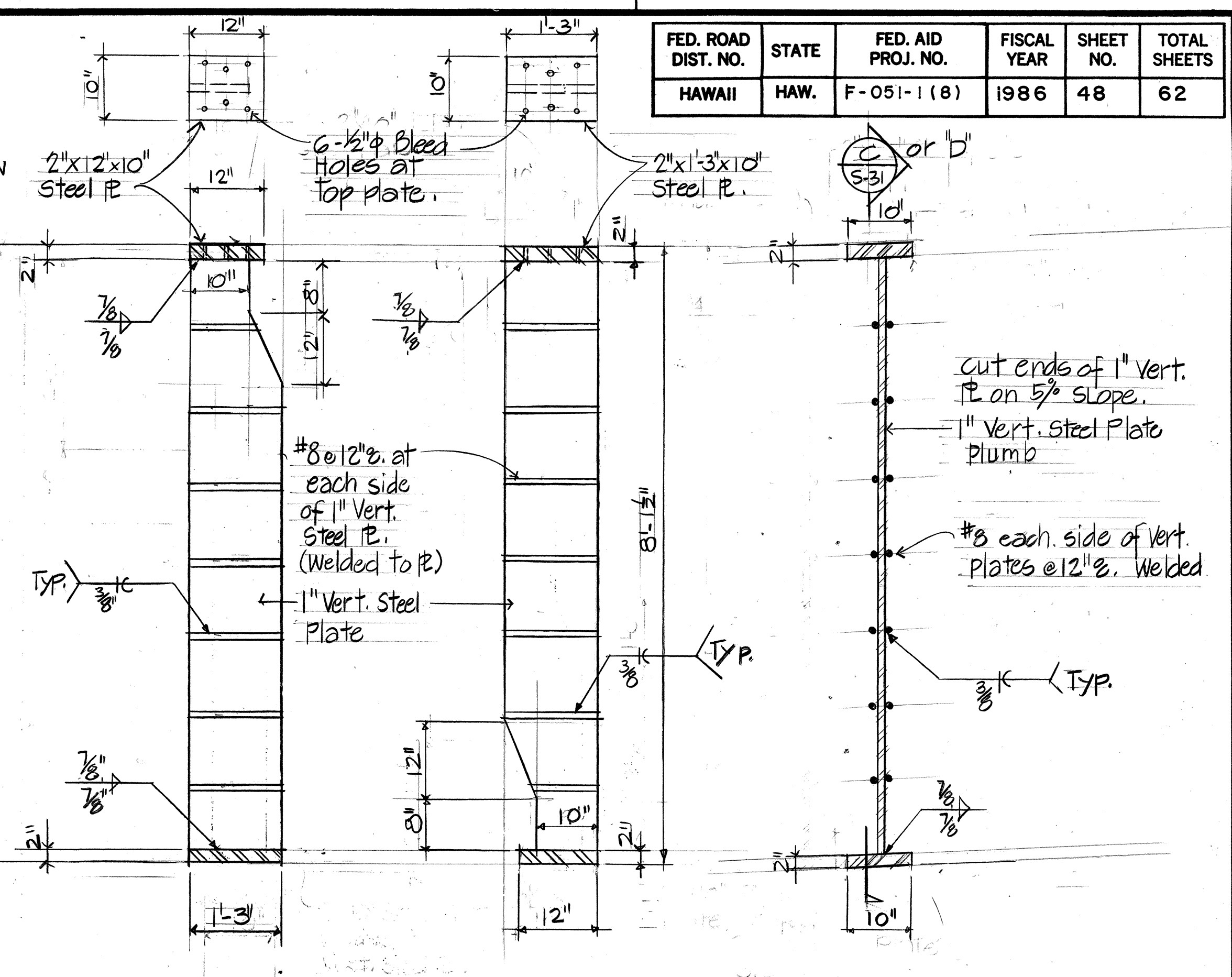
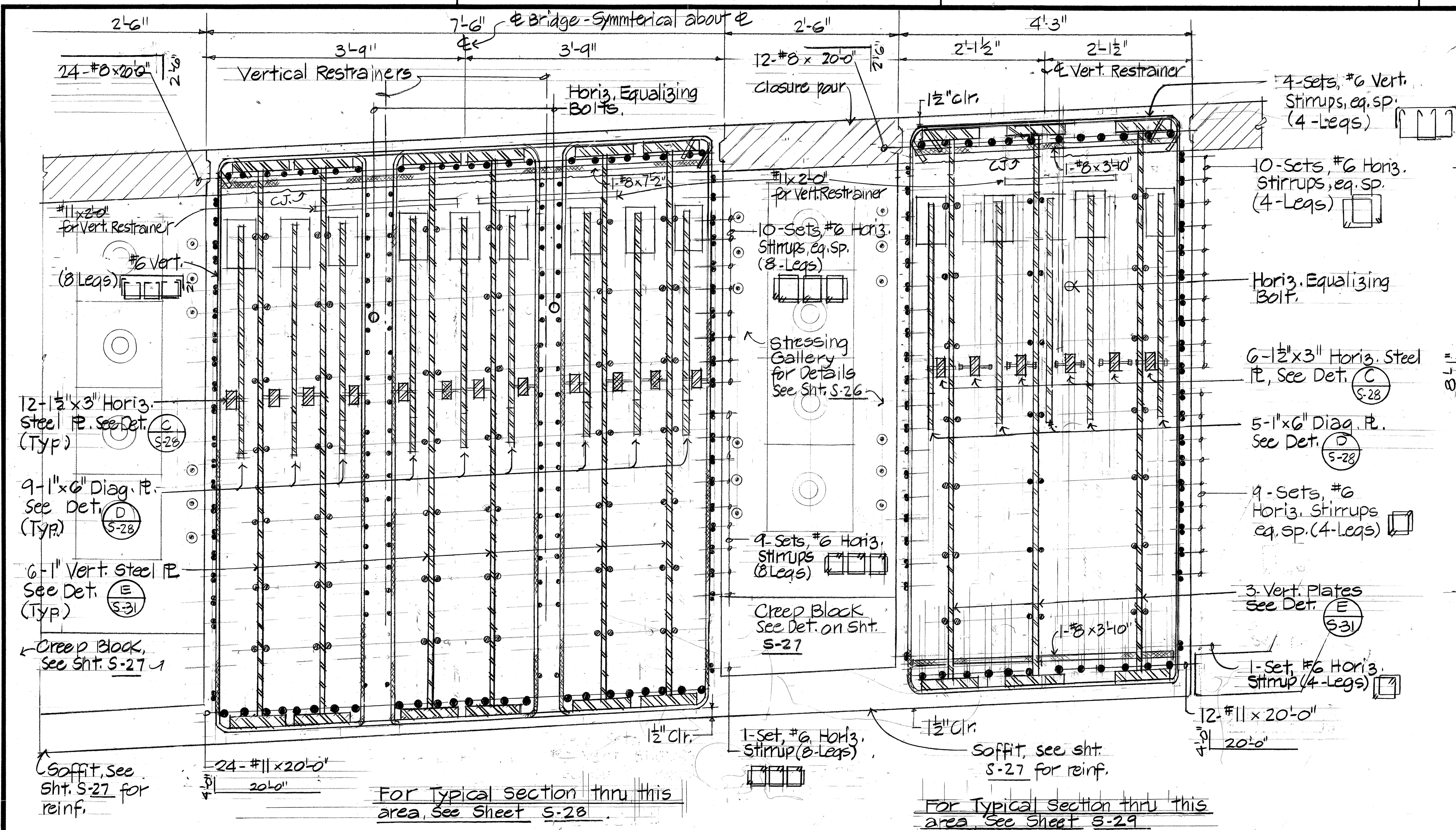
SHEET No.S-30OF S-39 SHEETS



THIS WORK WAS PREPARED BY ME OR
UNDER MY SUPERVISION

Signature Myron Opus

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-051-1 (8)	1986	48	62



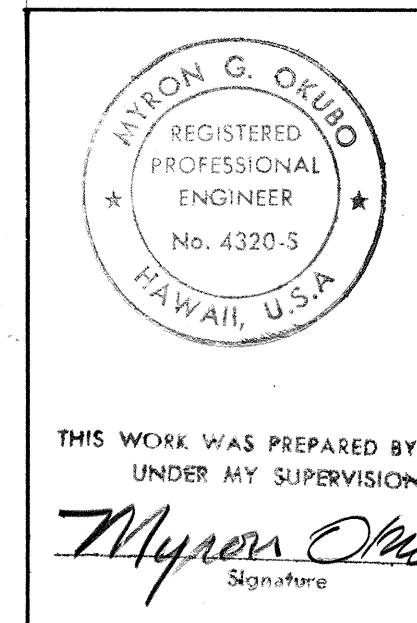
AT CANTILEVER SPAN DETAIL C
Scale: 3/4" = 1'-0"

AT SUPPORTED SPAN DETAIL D
Scale: 3/4" = 1'-0"

DETAIL E
Scale: 3/4" = 1'-0"

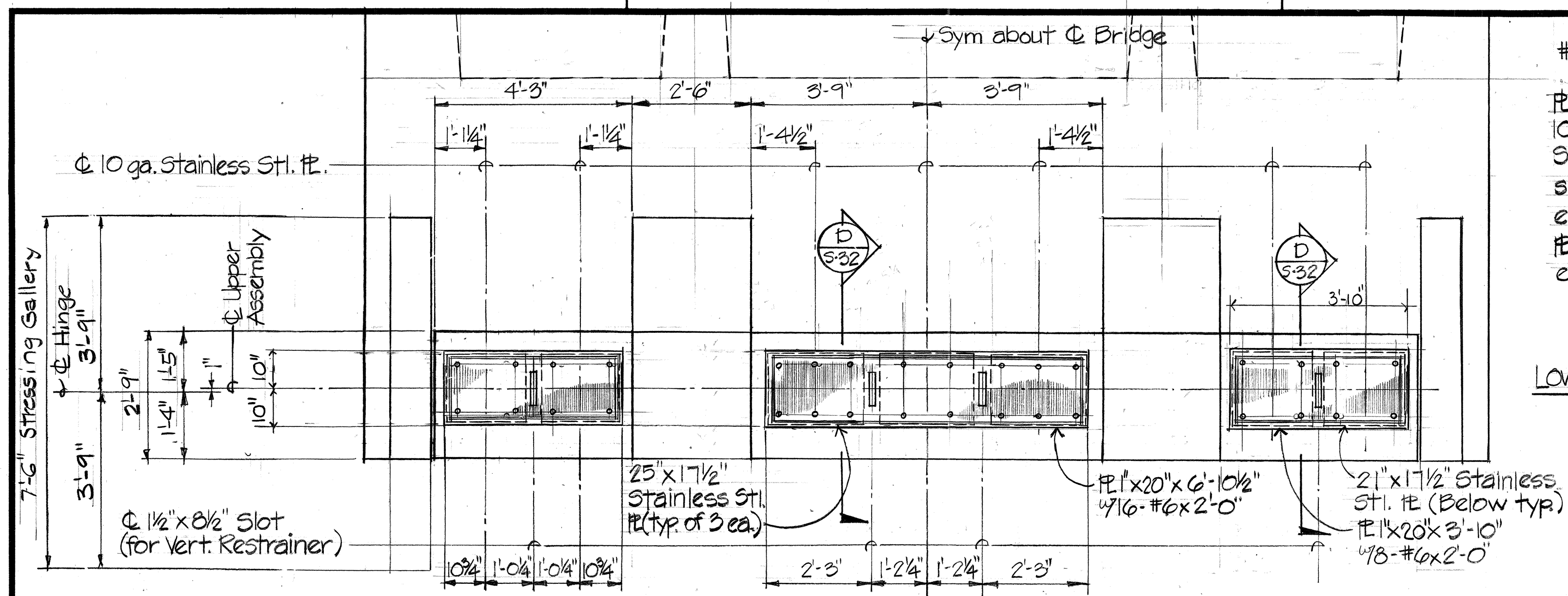
Note: Plates to conform to ASTM A242 and shall be considered incidental to Reinforcing Steel in Hanamaulu Viaduct. All welding is to be performed by certified welders and as required by AWS D2.0. The Contractor shall furnish the Engineer the results of radiographic tests performed by a qualified inspector on the completed fillet welds. Welds found deficient shall be connected as directed by the Engineer. The inspection of the welds shall conform to the procedures required by AWS D1.1. Inspection of the welds shall be considered incidental to Reinforcing Steel in Hanamaulu Viaduct.

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____

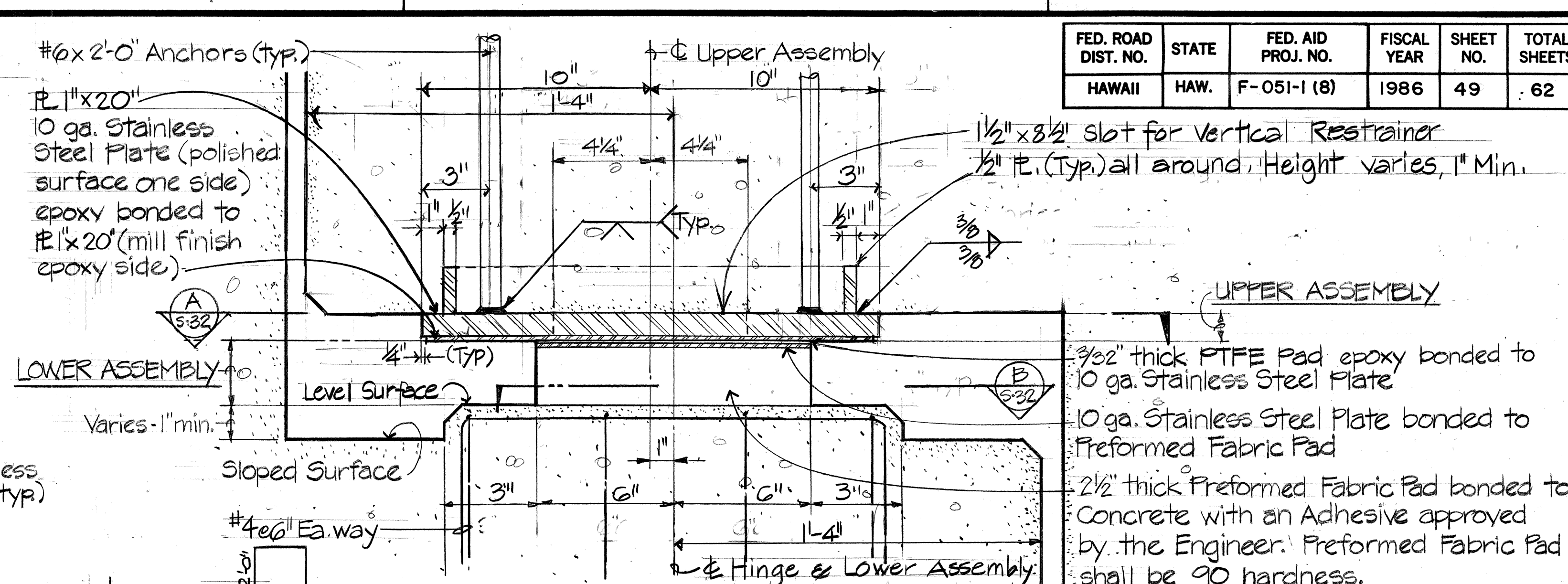


DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HINGE-SECTIONS AND DETAILS	
HANAMAULU VIADUCT HANAMAULU-AHUKINI CUTOFF ROAD Ahukini Road to Kauai Hardwoods PROJECT NO. F-051-1 (8)	
SCALE: AS SHOWN	DATE: JULY 1985
SHEET NO. S-31 OF S-39 SHEETS	

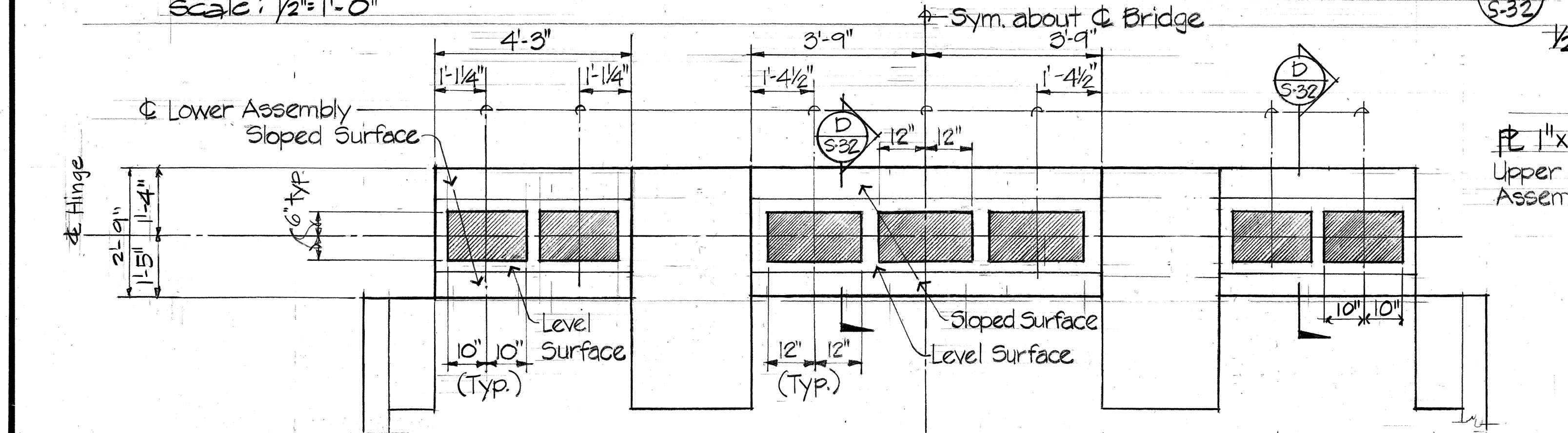
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-051-1 (8)	1986	49	62



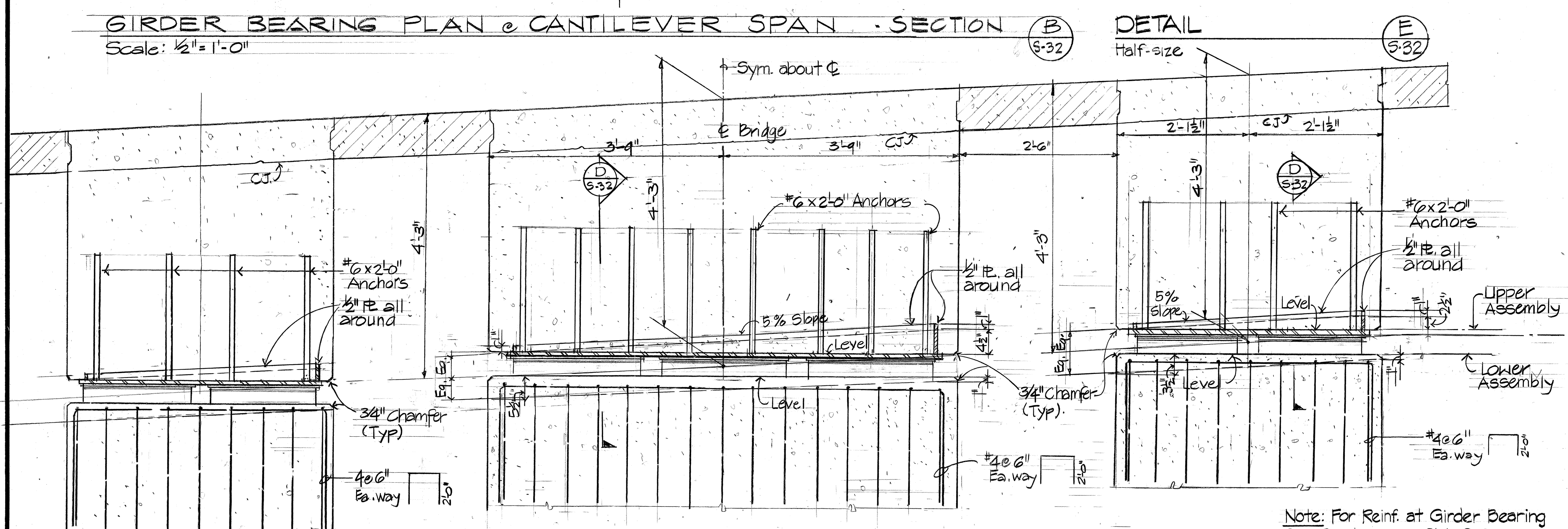
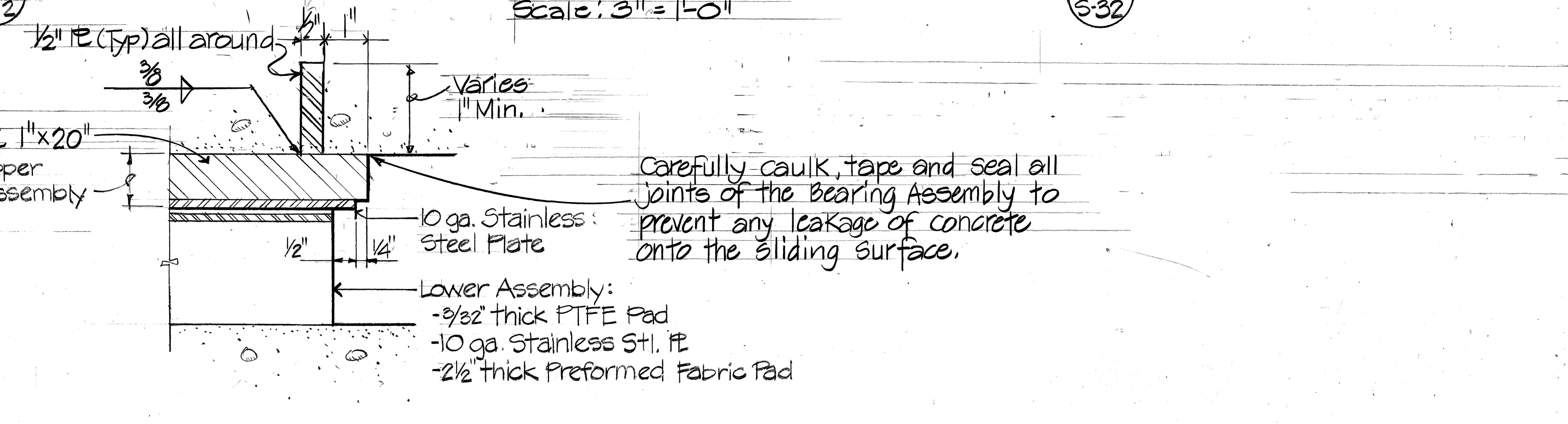
GIRDER BEARING PLAN - SUPPORTED SPAN - SECTION
Scale: 1/2" = 1'-0"



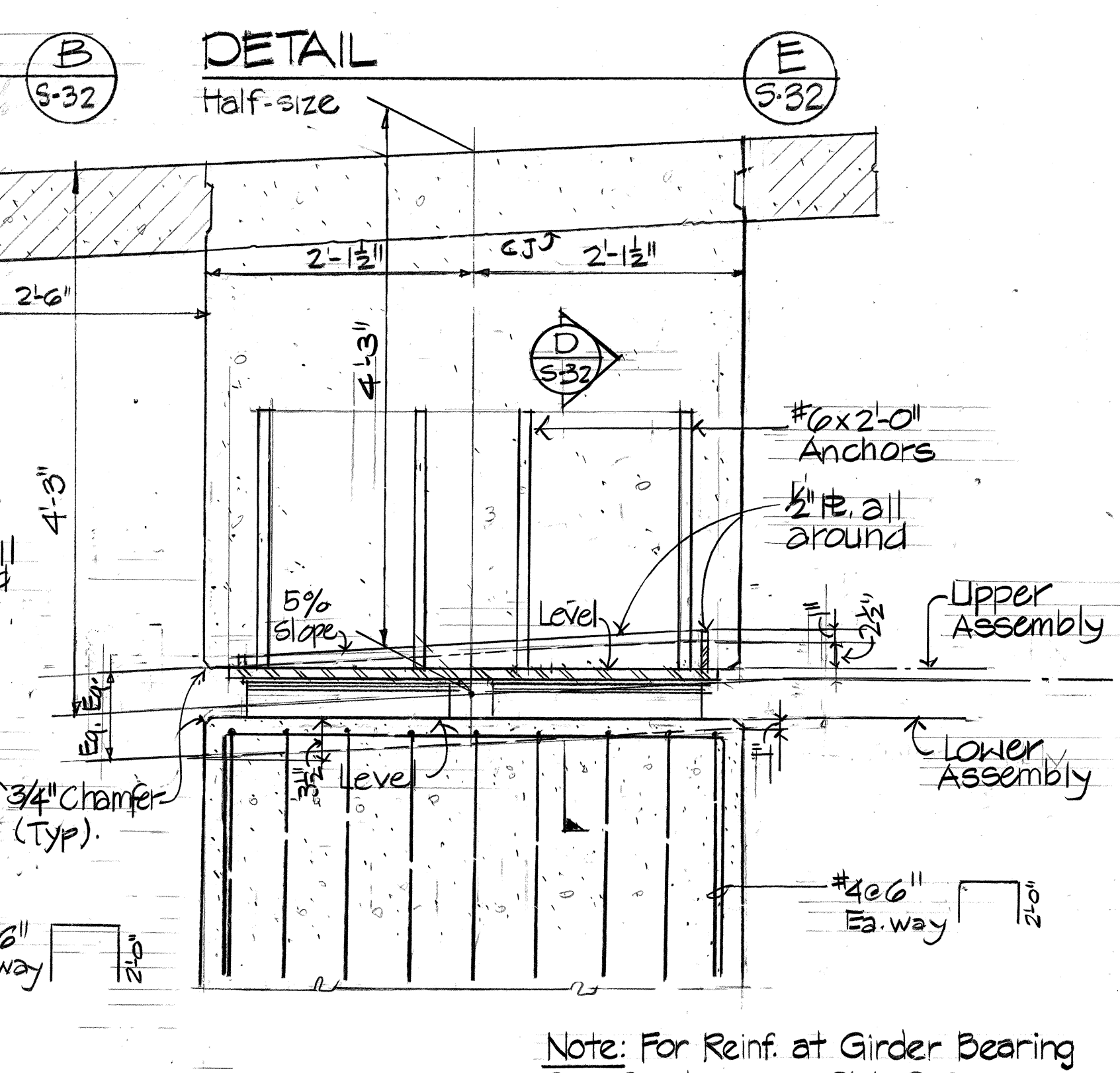
TYPICAL - SECTION
Scale: 3/8" = 1'-0"



GIRDER BEARING PLAN - CANTILEVER SPAN - SECTION
Scale: 1/2" = 1'-0"



HINGE - GIRDER BEARING SECTION
Scale: 1" = 1'-0"



DETAIL
Half-size

Note: For Reinf. at Girder Bearing See Sections on Sht. 3-31.

DATE	...
SURVEY PLOTTED BY	...
DRAWN BY	...
DESIGNED BY	...
NOTED BY	...
CHECKED BY	...

MYRON G. OKUBO
REGISTERED PROFESSIONAL ENGINEER
No. 4320-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Myron G. Okubo
Signature

DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION HINGE - DETAILS HANAMAULU VIADUCT HANAMAULU-AHUKINI CUTOFF ROAD Ahukini Road to Kauai Hardwoods PROJECT NO. F-051-1 (8) SCALE: AS SHOWN DATE: JULY 1985 SHEET NO. S-32 OF S-39 SHEETS	