

WAIAWA INTERCHANGE

STRUCTURE 15

10

For details, see Sht. #136

NAME & DATE OF STRUCTURE

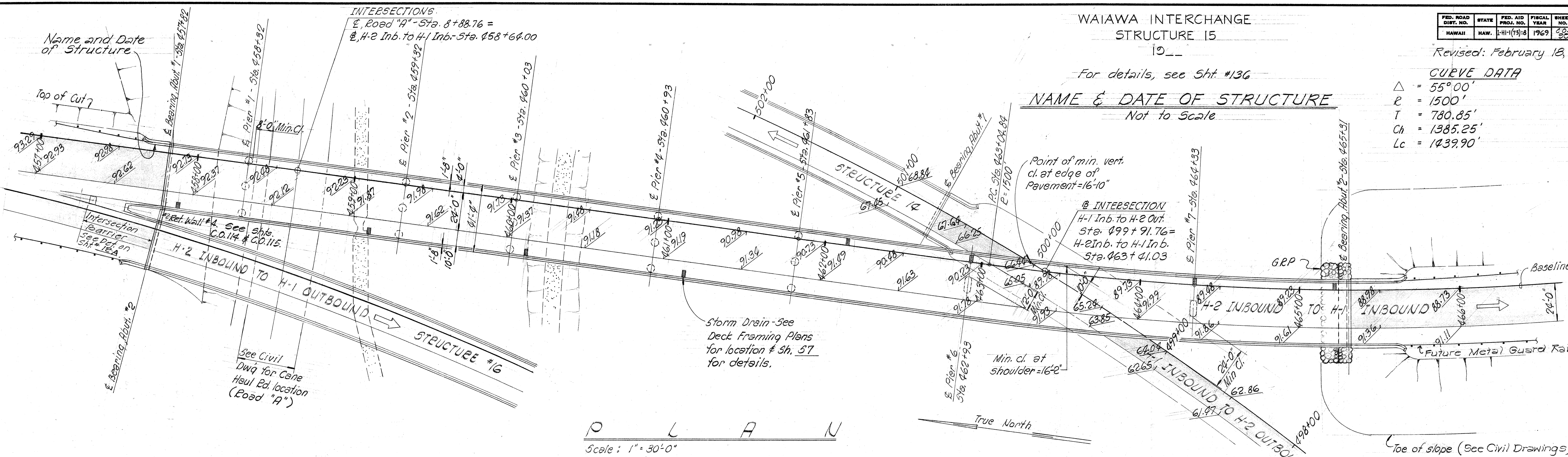
Not to Scale

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(75):18	1969	20	181

Revised: February 18, 1970

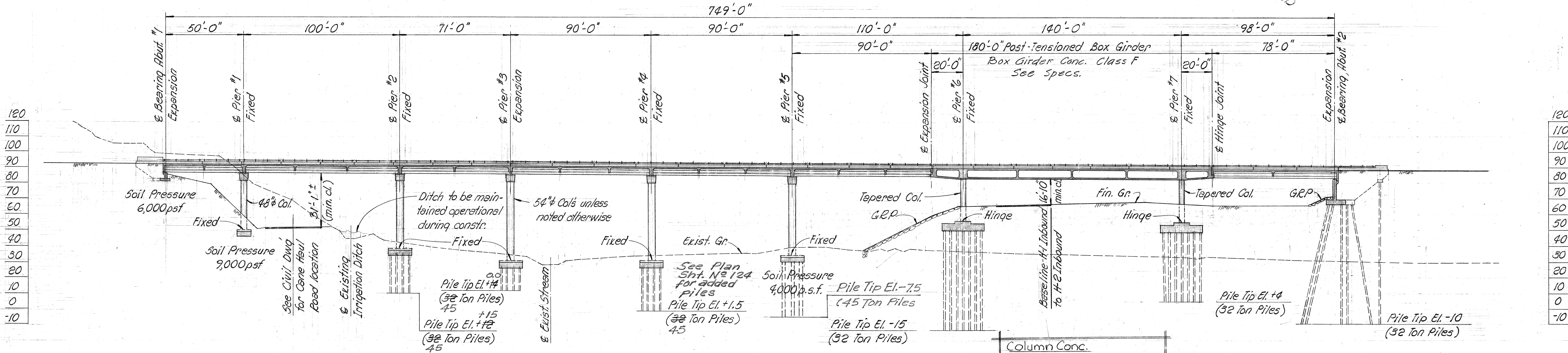
CURVE DATA

$\Delta = 55^{\circ}00'$
 $R = 1500'$
 $T = 780.85'$
 $Ch = 1385.25'$
 $Lc = 1439.90'$



PLAN

Scale: 1" = 30'-0"

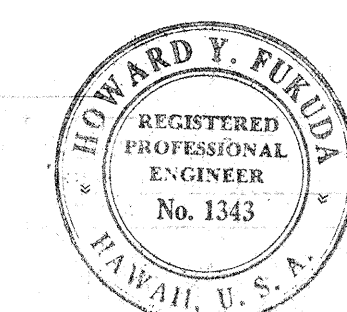


LONGITUDINAL SECTION ALONG BASELINE OF STRUCTURE

Scale: 1" = 30'-0"

THIS SHEET SUPERSEDES SHEET NO. 20 & ADD. 20

SHIMAZU SHIMABUKURO & FUKUDA, INC.
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 1210 Ward Ave., Honolulu, HI 96814



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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STRUCTURE No. 15

LAYOUT PLAN & LONGITUDINAL SECTION

WAIAWA INTERCHANGE

F.A.I. Proj. No. I-HI-1(75):18

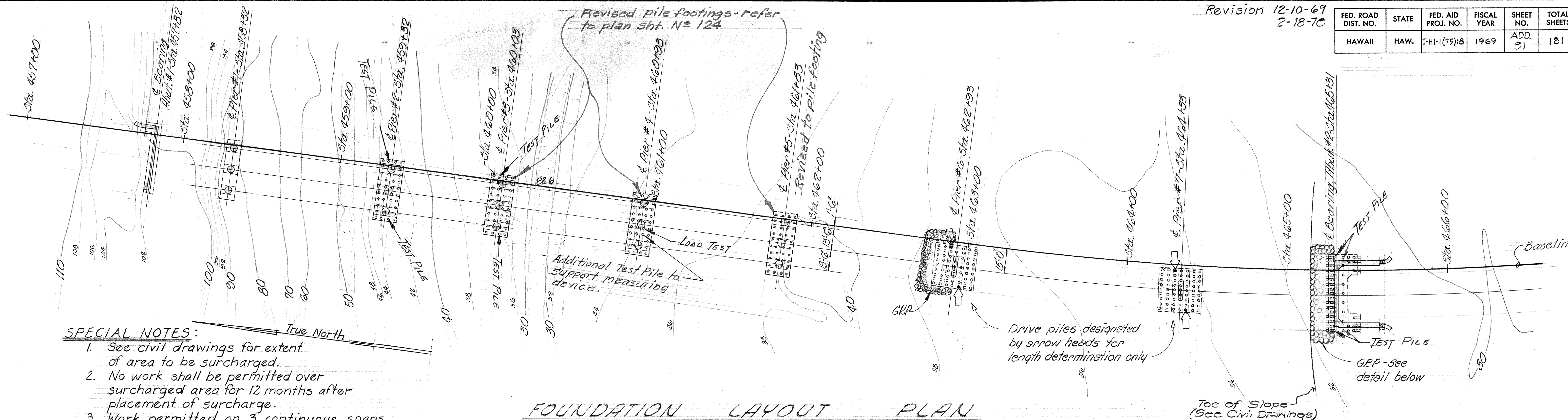
Scale: As Shown Date: June 6, 1969

SHEET No. 1 OF 20 SHEETS

JUNE 24, 1971 (C) (D) 90

Revision 12-10-69
2-18-70

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75):8	1969	ADD. 91	181



SPECIAL NOTES:

1. See civil drawings for extent of area to be surcharged.
2. No work shall be permitted over surcharged area for 12 months after placement of surcharge.
3. Work permitted on 3 continuous spans adjacent to surcharged area shall not include placing deck slab during period of surcharge application.
4. Work on all other 3 continuous spans shall be permitted.

NOTES:

1. Load test one pile each on Pier #4 (As directed by the Engineer) for 45 ton capacity before driving balance of pile. If load test show that 45 ton piles should be used foundation for Pier #4 will be redesigned. (See Specs.)

2. Test piles for load carrying capability and for length determination shall be driven before casting balance of piles.

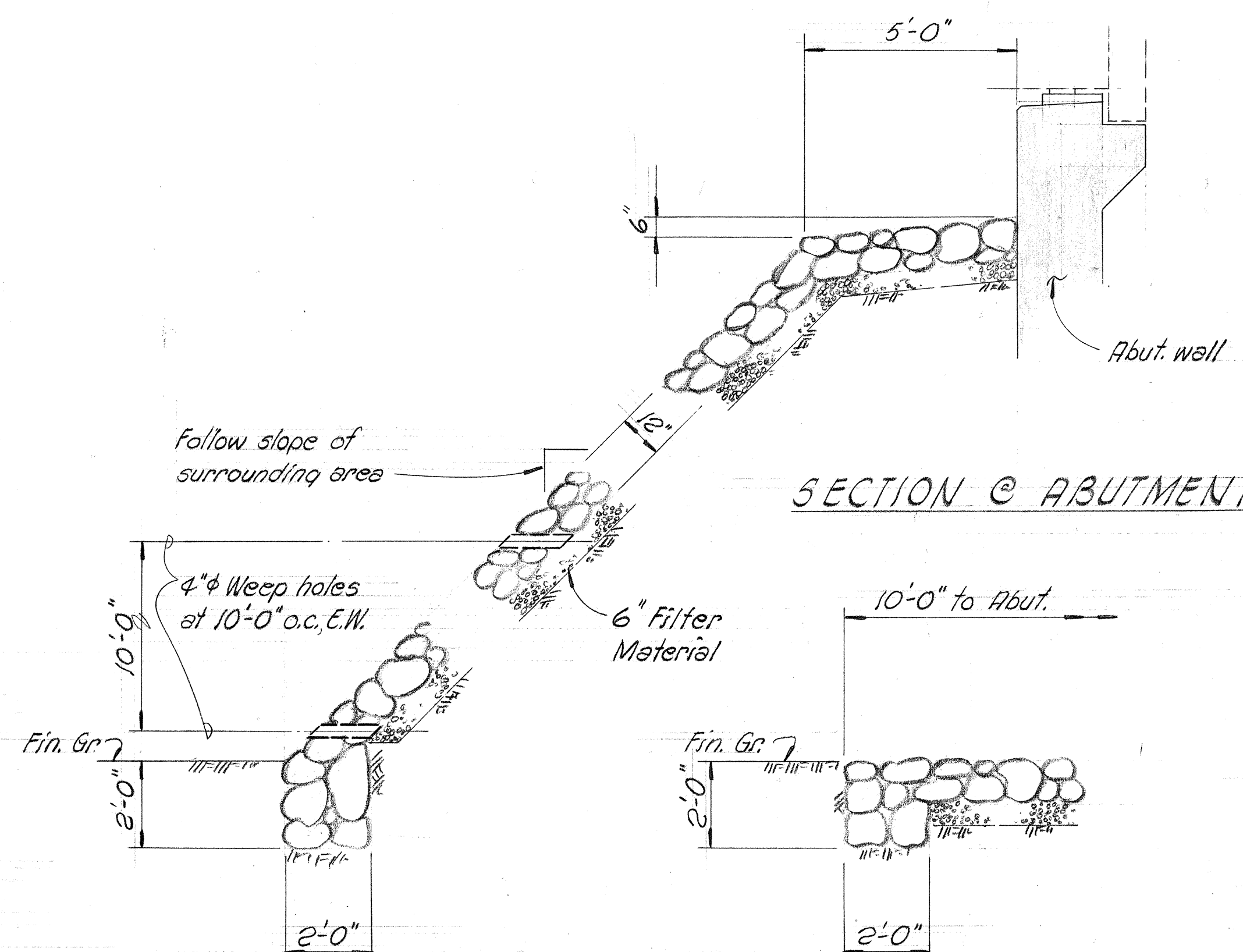
* Excluding Footings and Box Girder Section.
** Box Girder Section

BRIDGE QUANTITY ESTIMATES

ITEM#	ITEM	UNIT	QUANTITY
14.60	Structure Excavation for Bridges	C.Y.	2014
*46.065	Concrete in Structure #15 (Including all Col.)	L.S.	1407 C.Y.
46.066	Concrete in Footings for Structure #15	L.S.	812 C.Y.
46P.17	Type II Prestressed Concrete Girders for Structure #15	L.S.	3905 L.F.
46P.40	Post-Tensioning Operation for Cast-In-Place Structures	L.S.	42,278 LBS.
*46P.50	Concrete for Prestressed Cast-In-Place Structure	L.S.	681 C.Y.
48.63	Reinforcing Steel in Structure #15	L.S.	793,560 LBS.
51.05	Pile Load Test for Structure #15	ea.	1 (ONE)
51.96	Furnishing Conc. Piles for Structure #15	L.F.	14,364
51.97	Driving " " " " " "	L.F.	12,905
52.10	Filter Material for Structures	C.Y.	149
55.10	Metal Bridge Rail	L.F.	1556
55.50	Concrete Bridge Parapet, Including End Post	L.F.	1598
65.04	Grouted Rubble Paving for Bridges.	C.Y.	171
51.07	Driving Test Piles for Structure #15	L.F.	483

FOUNDATION LAYOUT PLAN

Scale: 1" = 30'-0"



SECTION @ TOE OF SLOPE

SECTION @ GRP EDGE

TYPICAL GRP DETAIL

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

THIS SHEET SUPERSEDES
SHEET NO. 91

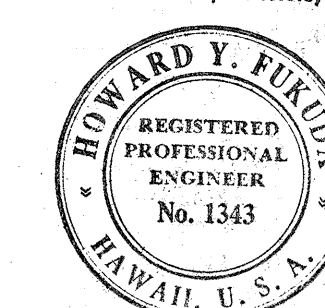
REFERENCE DRAWINGS

- 1- Abutment #1 Foundation Sh. 3
- 2- Abutment #2 Foundation Sh. 5
- 3- Pier Foundations Sh. 9 & 52
- 4- Pier Columns Sh. 31
- 5- General Notes Sh. 59

DESIGN CRITERIA

- A. Loads = H520-44 or Interstate Loading
- B. Specifications = Standard Specifications for Highway Bridges, AASHTO, 9th Edition.
- C. Design Stresses
 1. Reinforced Concrete Beams & Slabs (See, also, AASHTO Specifications & Special Provisions.
 - a) $f_c' = 3,000$ p.s.i. Concrete unless otherwise noted.
 - b) $f_s = 20,000$ p.s.i. Reinforcing steel.
 2. Prestressed Girders, See Sh. 58.
 3. Pile Capacity, See Longitudinal Section, Sh. 1.
 4. Allowable Foundation Pressure, See Longitudinal Section, Sh. 1.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURE NO. 15
FOUNDATION LAYOUT PLAN
& GRP DETAILS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

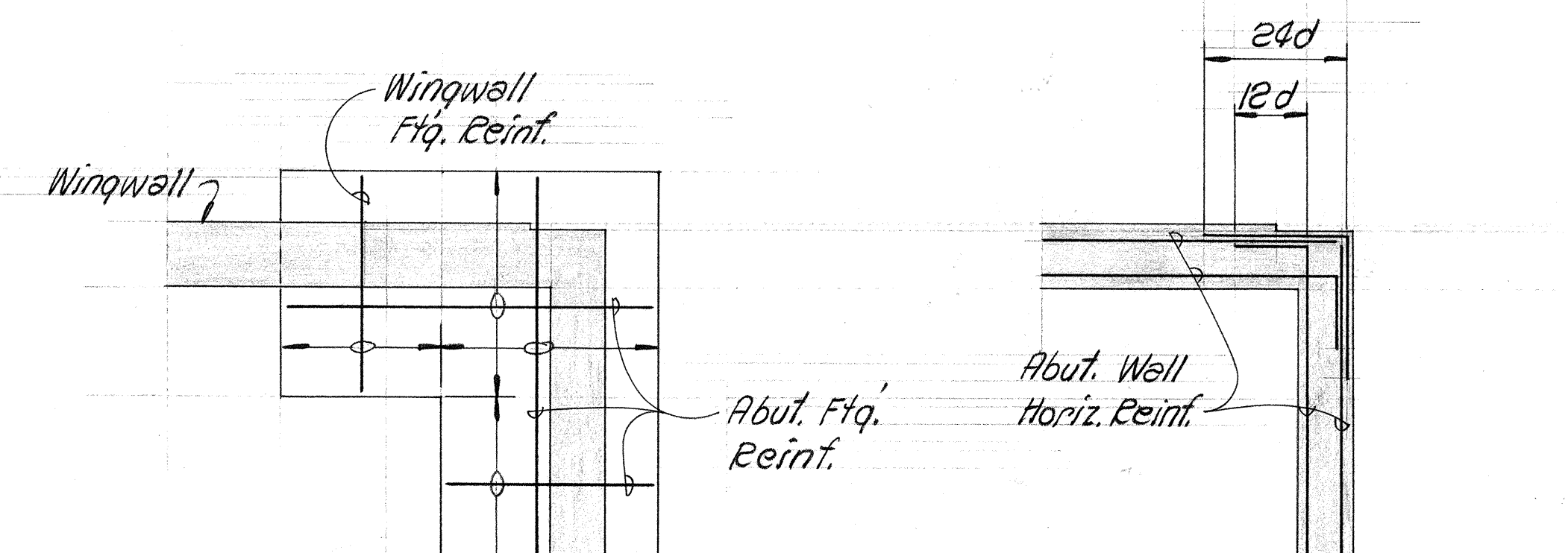
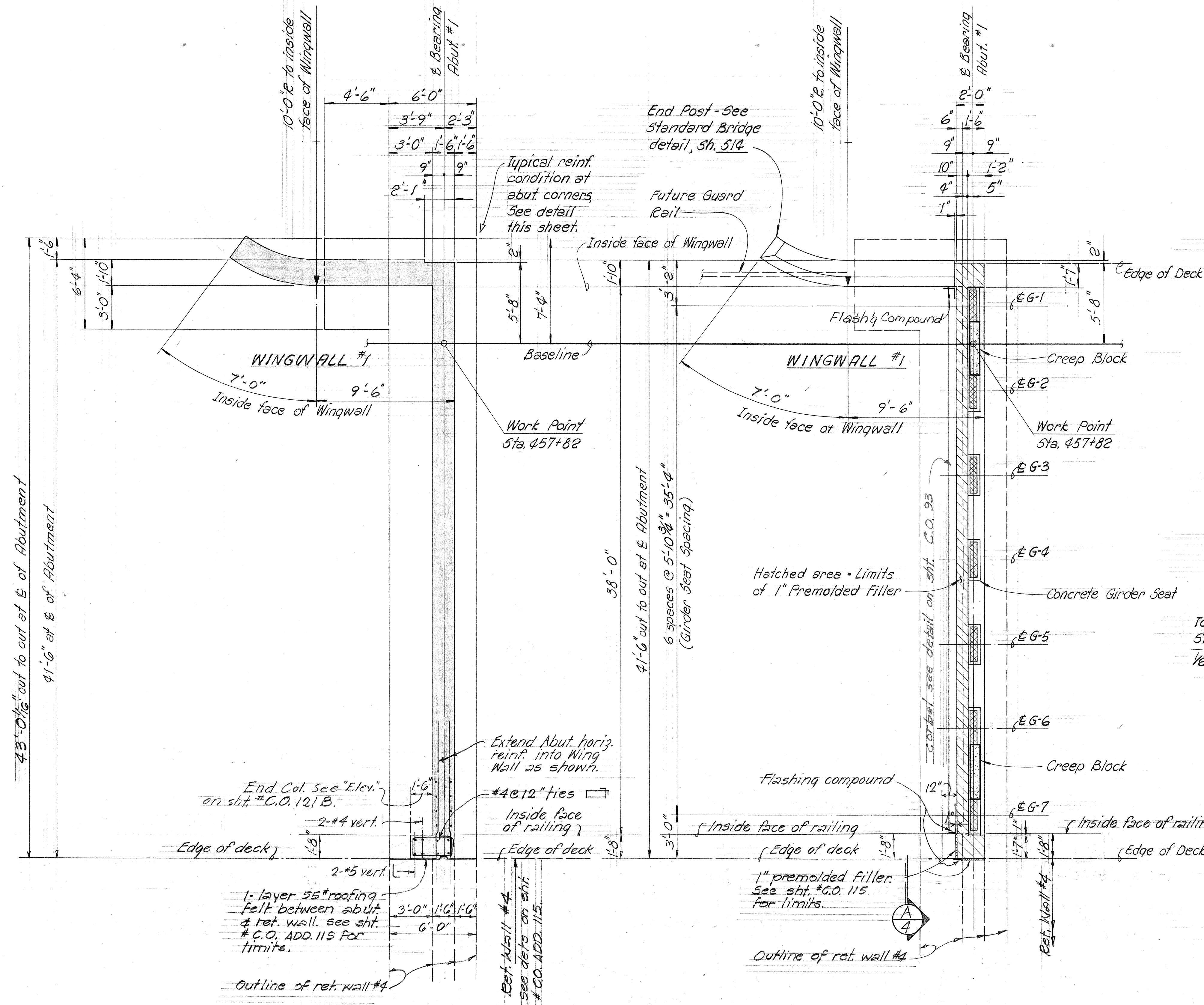
Scale: As shown Date: JUNE, 1969

SHEET NO. 2 OF 20 SHEETS

ADD. 91

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75):8	1969	CO. 92	181

Revised: February 18, 1970



FOOTING WALL
TYPICAL REINF. LAYOUT AT ABUT. CORNERS
N.T.S.

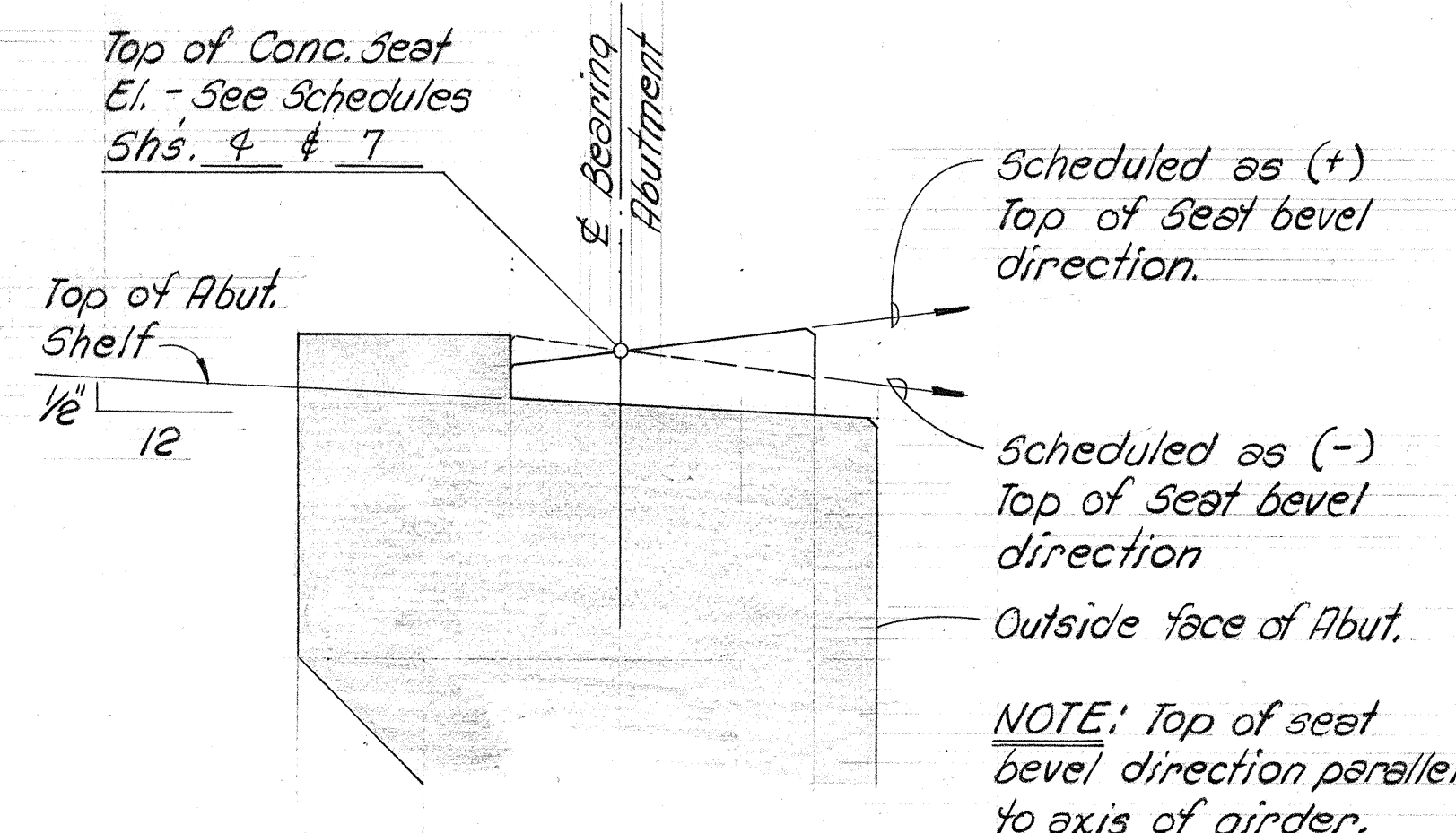


DIAGRAM SHOWING
CONC. SEAT BEVEL DIRECTION
N.T.S.

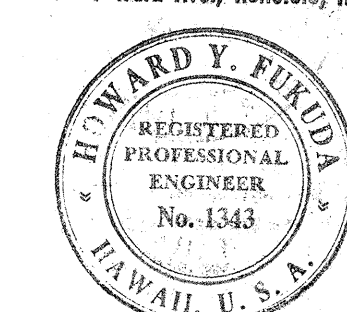
FOUNDATION PLAN

PLAN AT GIRDER SEATS

ABUTMENT #1 PLANS

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

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STRUCTURE No. 13
ABUTMENT #1 PLANS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

Scale: As shown Date: JUNE, 1969

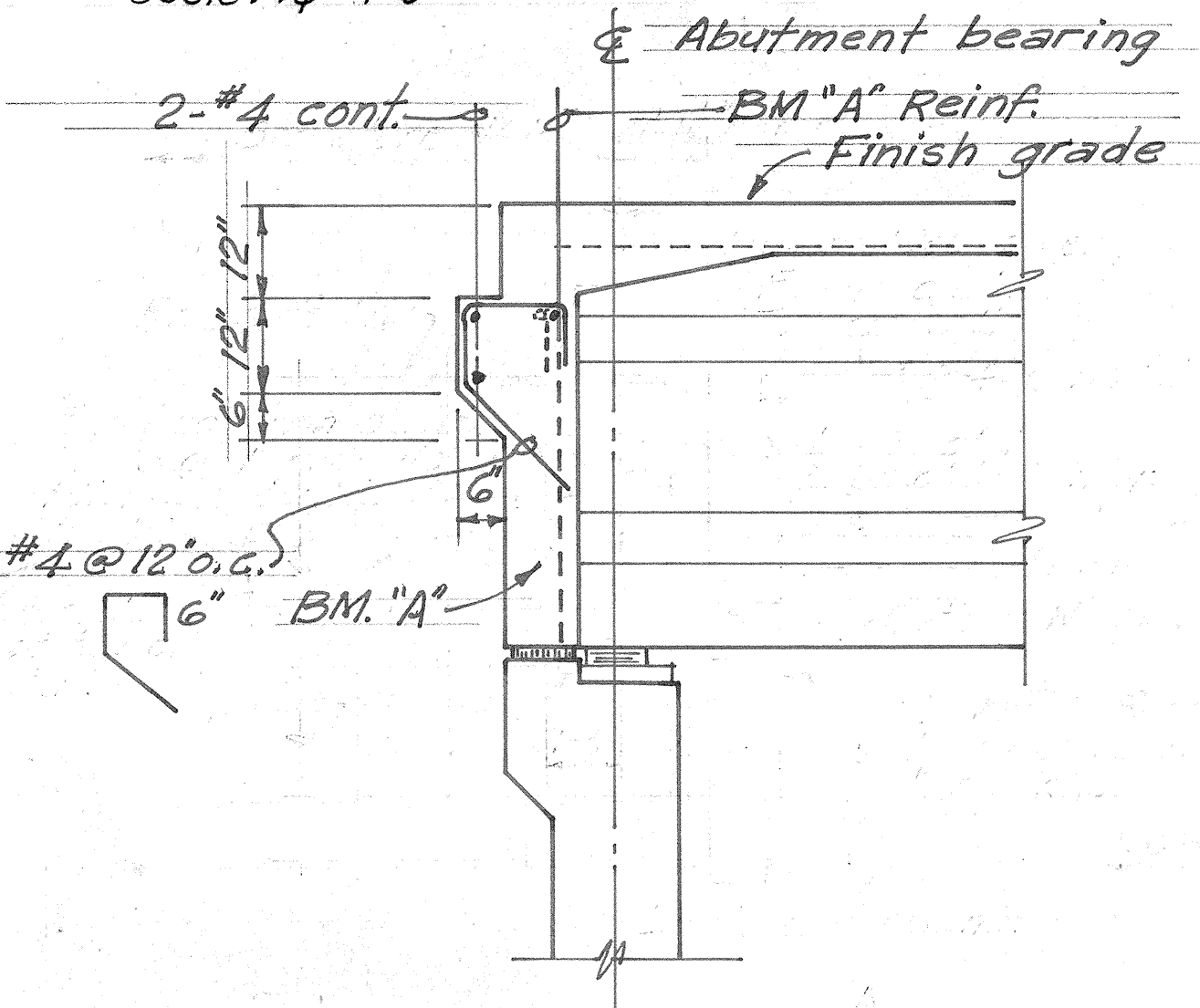
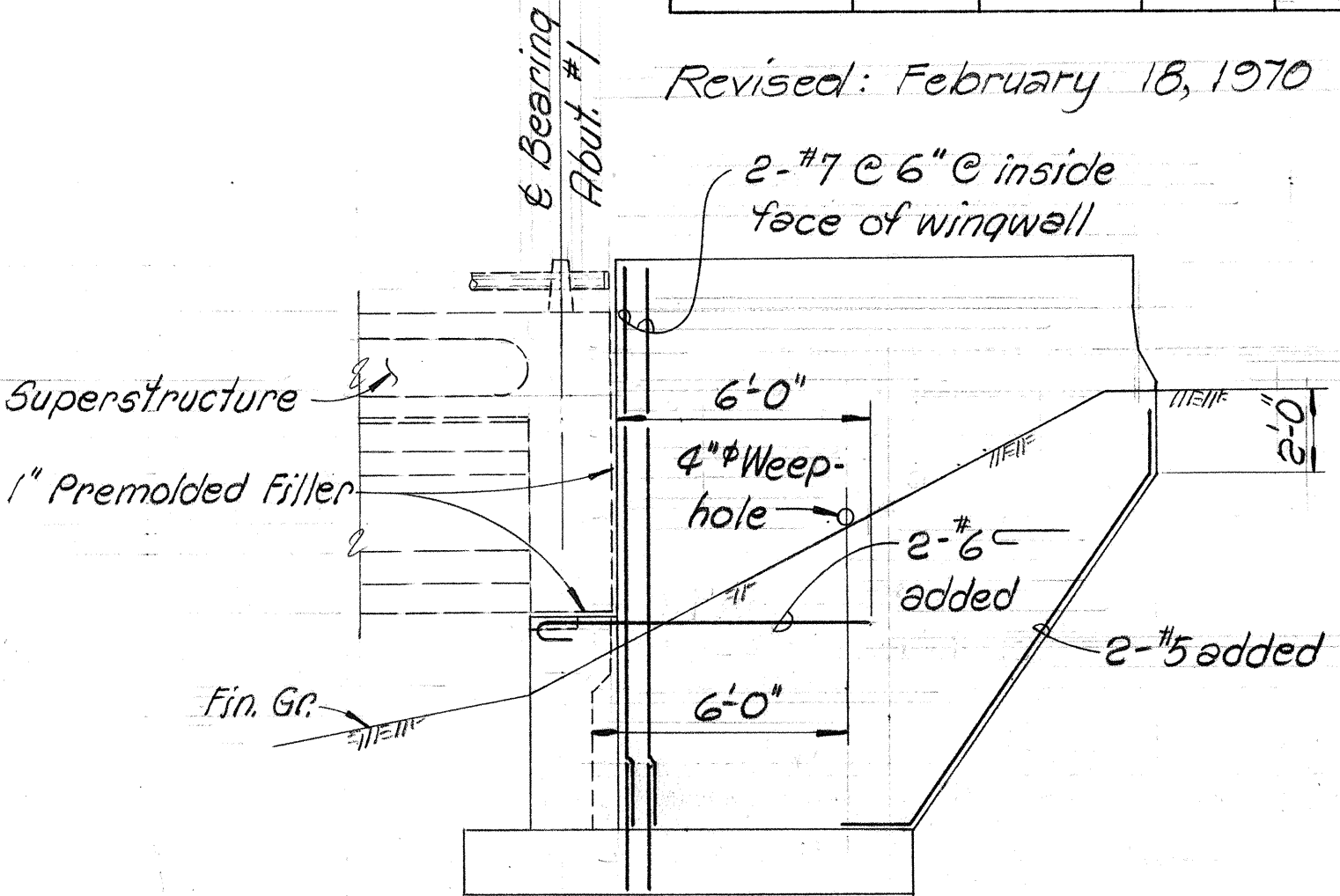
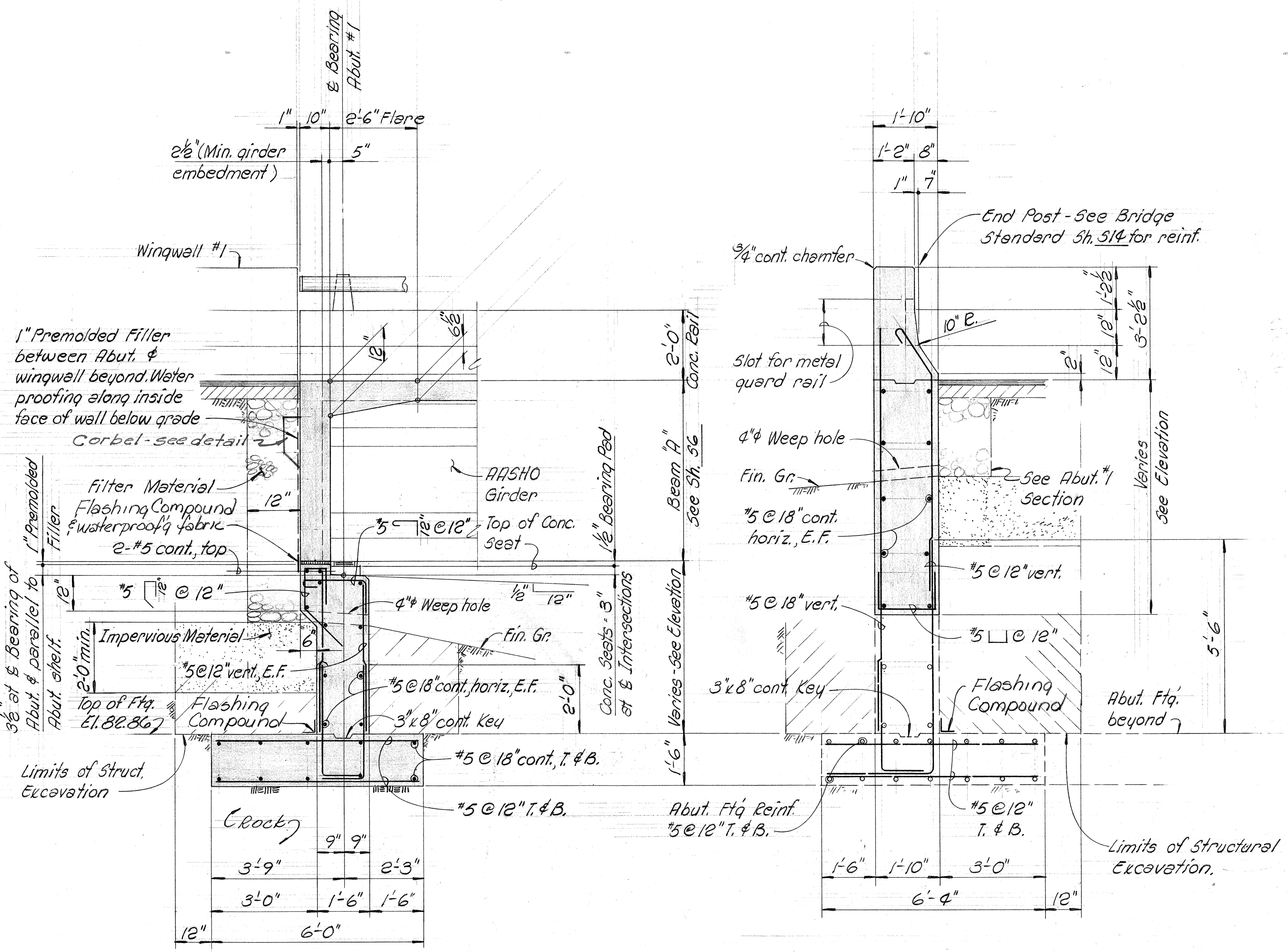
SHEET NO. 3 OF 20 SHEETS

JUNE 24, 1971

CO. 92

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73):8	1969	60.93	181

Revised: February 18, 1970



- NOTES:**
1. Corbel at end beams are to extend from inside face of wingwall to inside face of end column.
 2. Place two layers of 55# roofing paper between corbel and wingwall and between corbel and end column.
 3. For details not shown see contract plans.

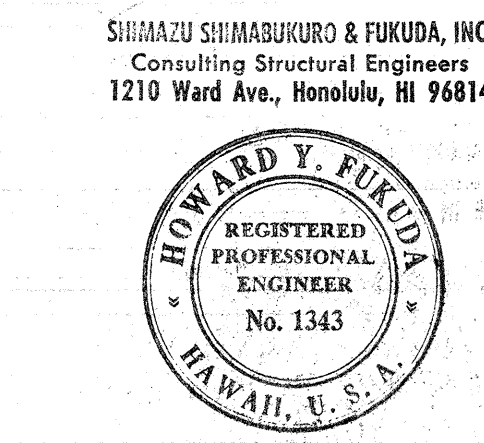
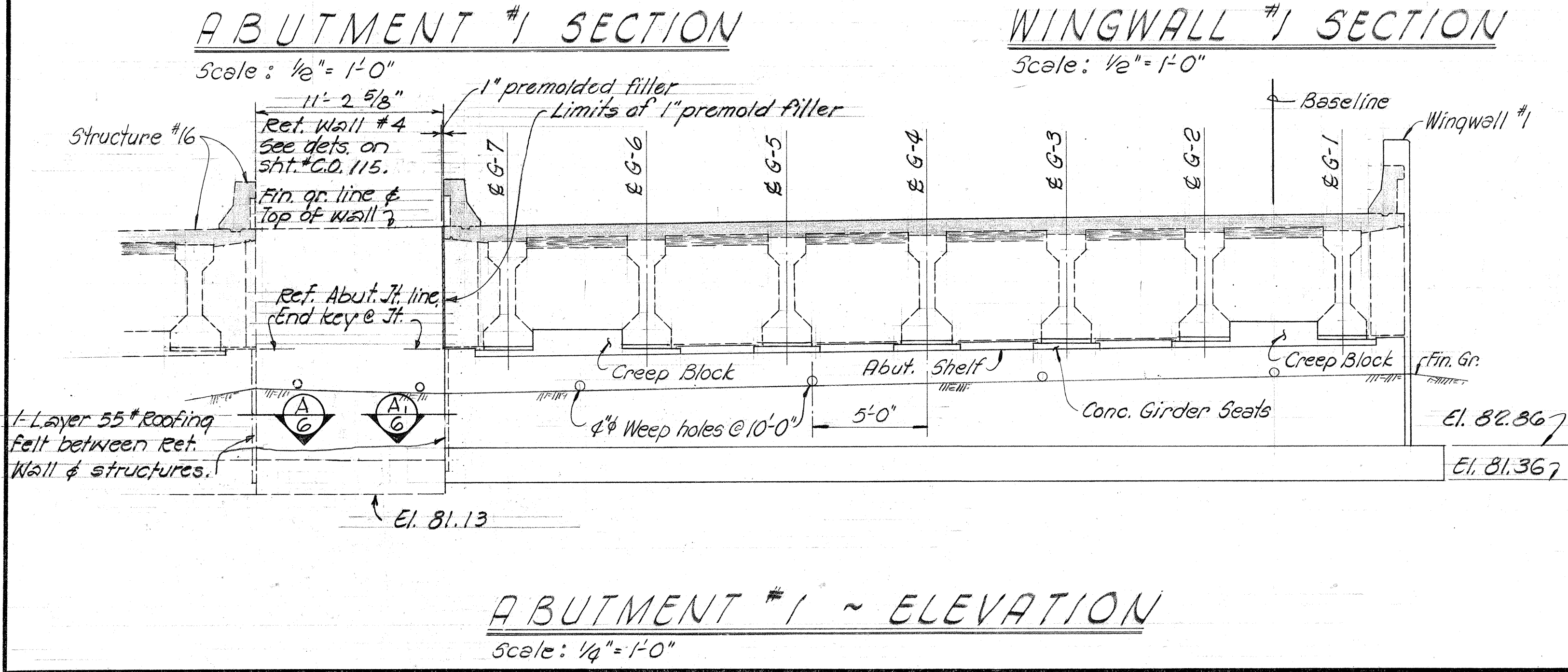
THIS SHEET SUPERSEDES SHEET NO. 93 & ADD. 93

ABUT. #1 SCHEDULE OF ELEVATIONS & SEAT BEVELS

Girders	Top of Slab Elevation	Bot. of Girder Elevation	Top of Seat Elevation	Seat Bevels
G-1	92.86	87.49	87.36	-3/2:12
G-2	92.77	87.40	87.27	-3/2:12
G-3	92.68	87.31	87.18	-3/2:12
G-4	92.59	87.22	87.10	-3/2:12
G-5	92.51	87.13	87.01	-3/2:12
G-6	92.42	87.04	86.92	-3/2:12
G-7	92.33	86.96	86.83	-3/2:12

Elevations given are at & intersections.
For Conc. Seat Bevel directions - See diagram, Sh. 3

DATE: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NOTE BOOK: _____



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

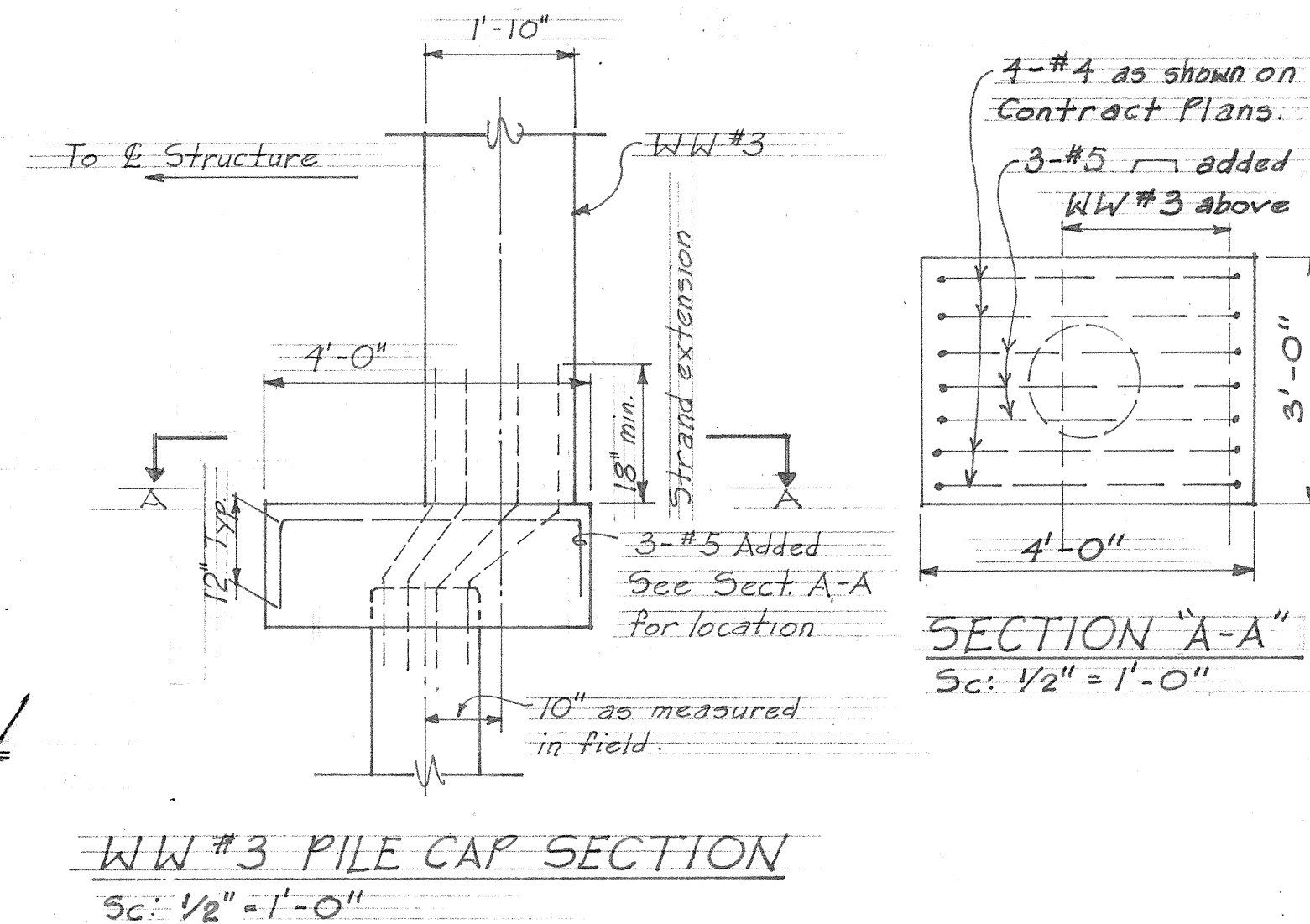
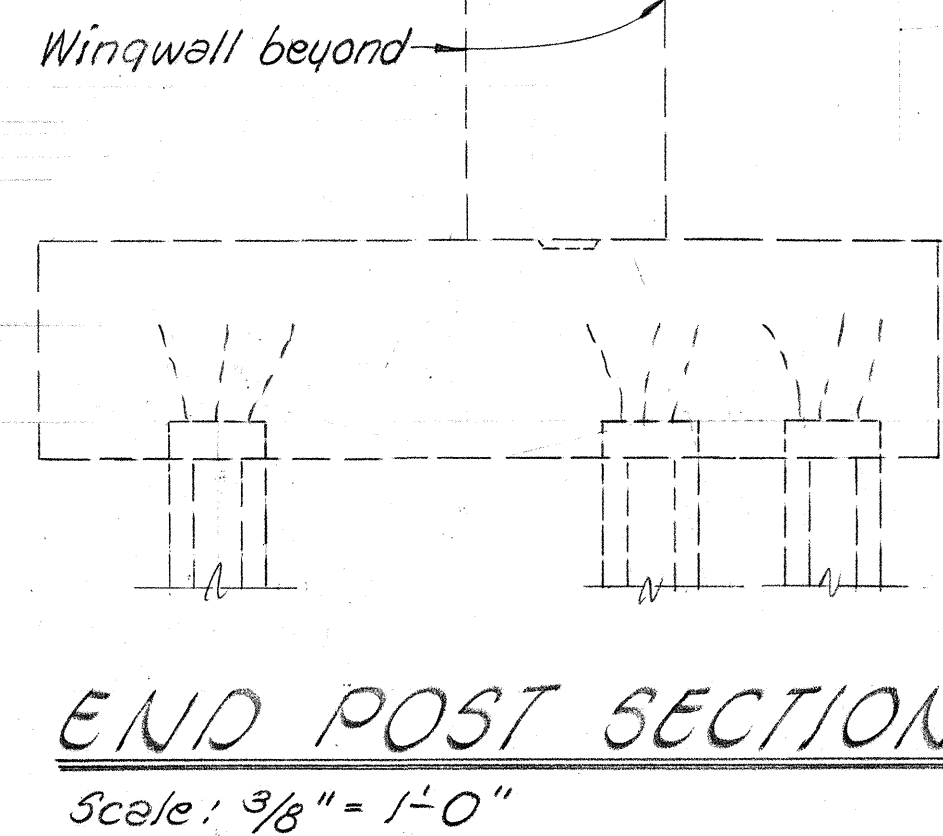
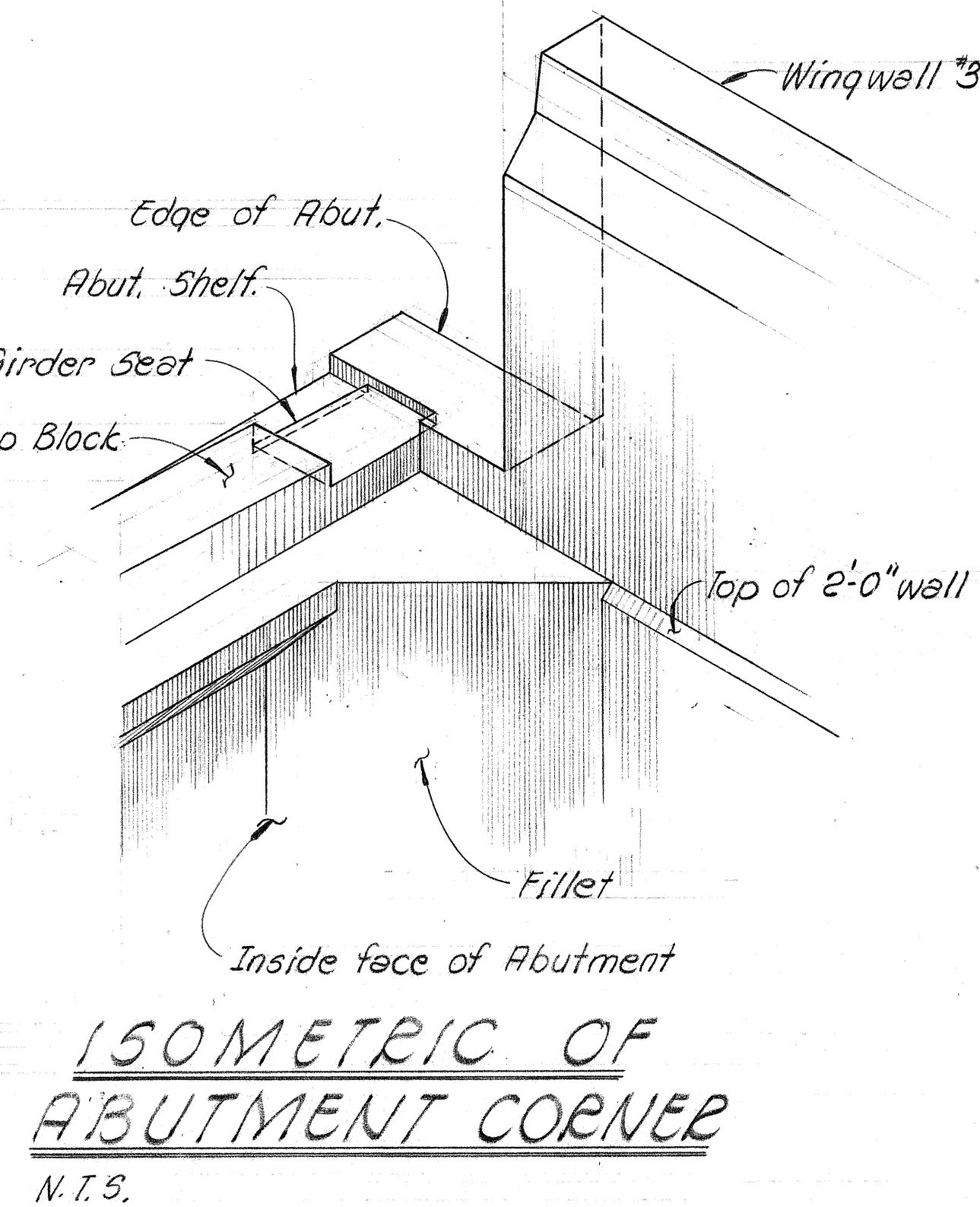
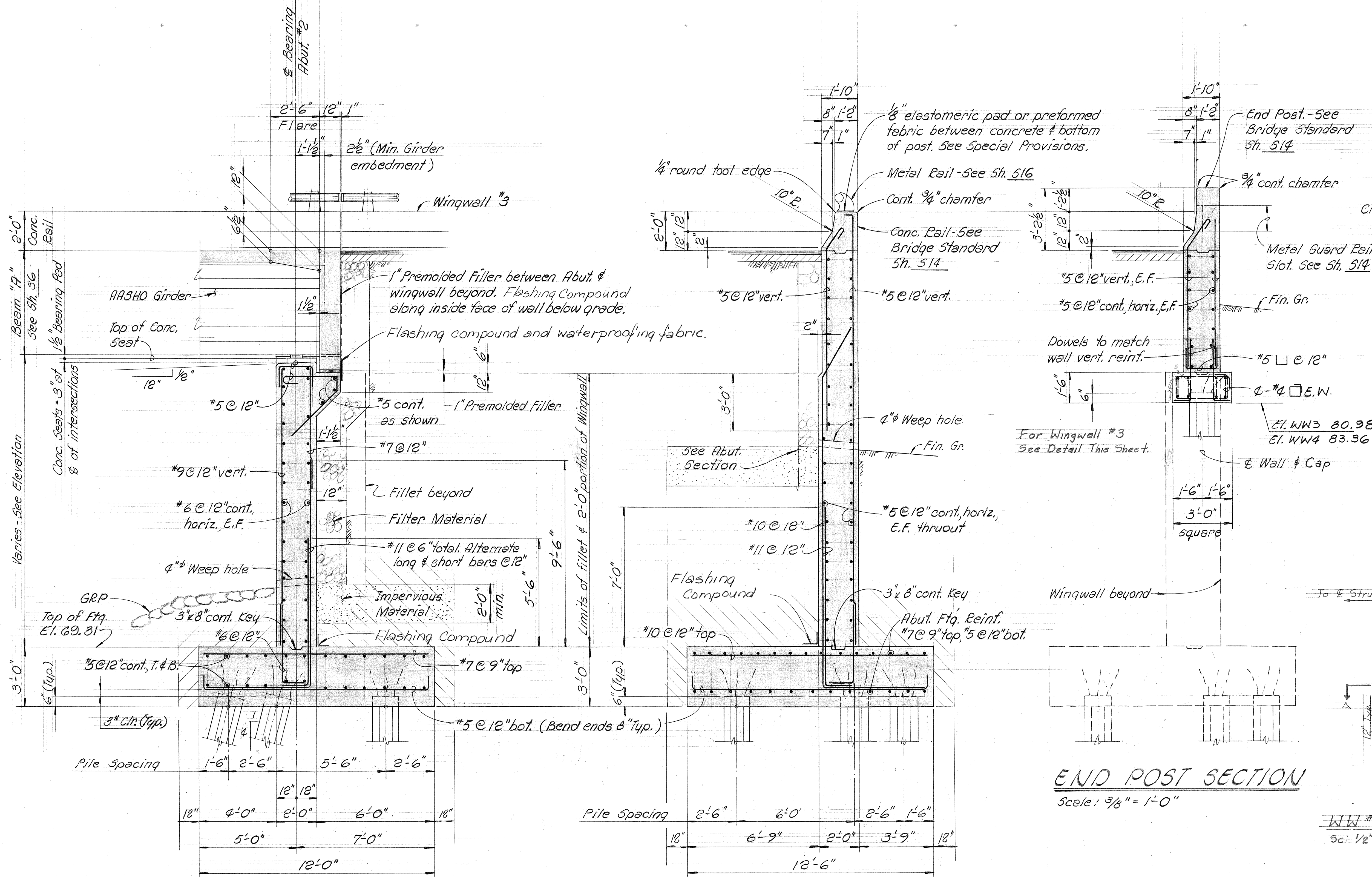
STRUCTURE NO. 15
ABUTMENT #1 & WINGWALLS #1 & #2
SECTIONS & ELEVATIONS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(73):8

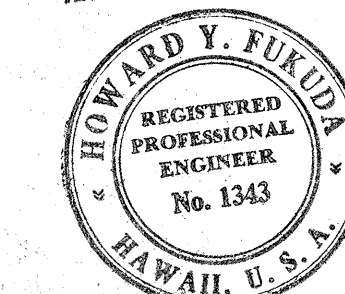
Scale: As shown Date: June, 1969
SHEET NO. 4 OF 20 SHEETS

JUNE 24, 1971 (C) (D) . 93

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(75):8	1969	95	181



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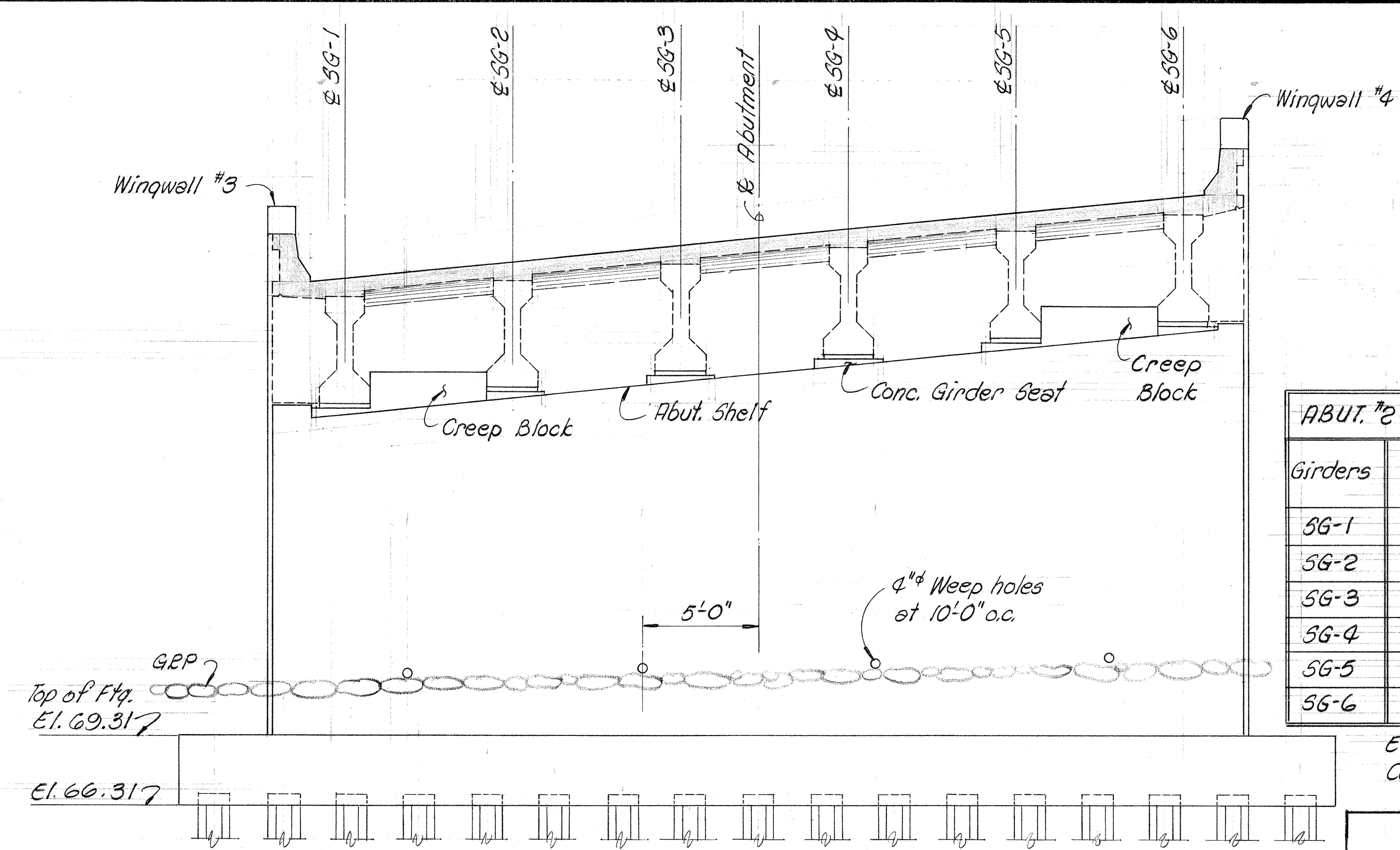
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURE No. 15
ABUTMENT #2
& WINGWALLS #3 & #4 SECTIONS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

Scale: As shown Date: JUNE, 1969
SHEET No. 6 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75):3	1969	ADD. 96	181

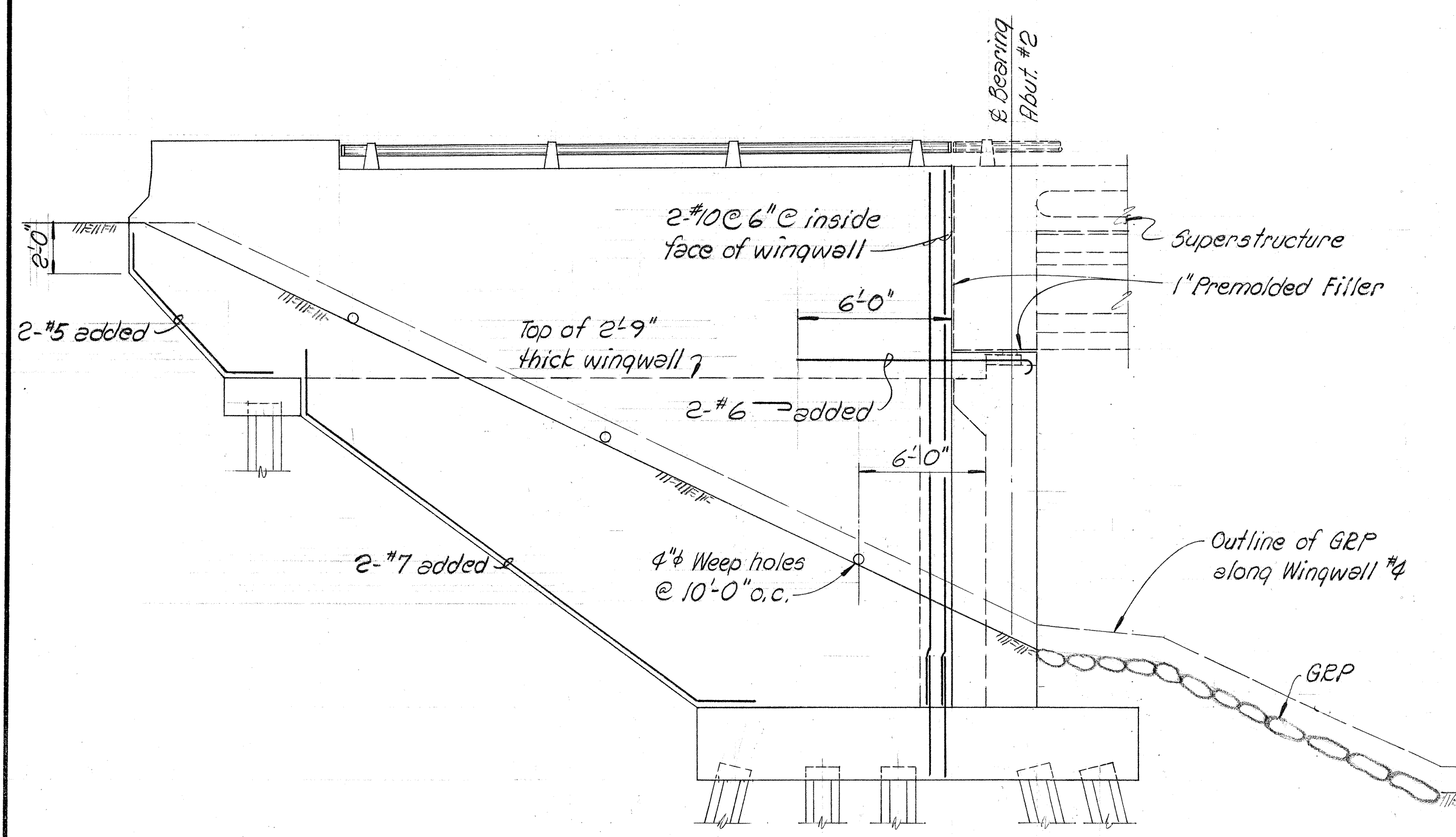


ABUTMENT #2 ELEVATION
Scale: 1/4" = 1'-0"

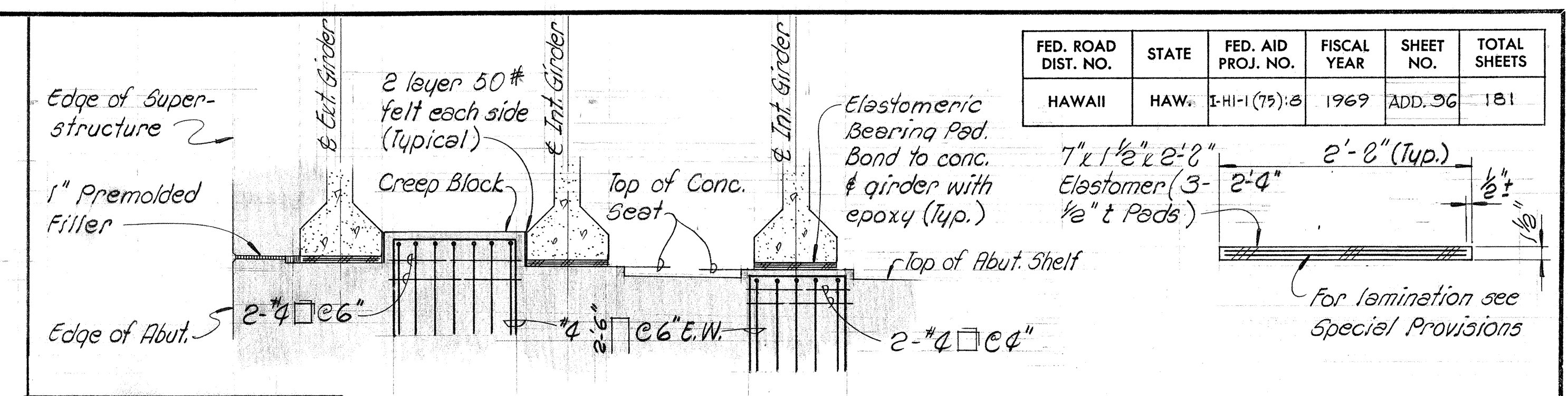
ABUT. #2 SCHEDULE OF ELEVATIONS & SEAT BEVELS

Girders	Top of Slab Elevation	Bot. of Girder Elevation	Top of Seat Elevation	Seat Bevels
SG-1	88.81	83.44	83.31	-3/8":12
SG-2	89.51	84.14	84.01	-3/8":12
SG-3	90.21	84.84	84.71	-3/8":12
SG-4	90.91	85.54	85.41	-3/8":12
SG-5	91.61	86.24	86.11	-3/8":12
SG-6	92.31	86.94	86.81	-3/8":12

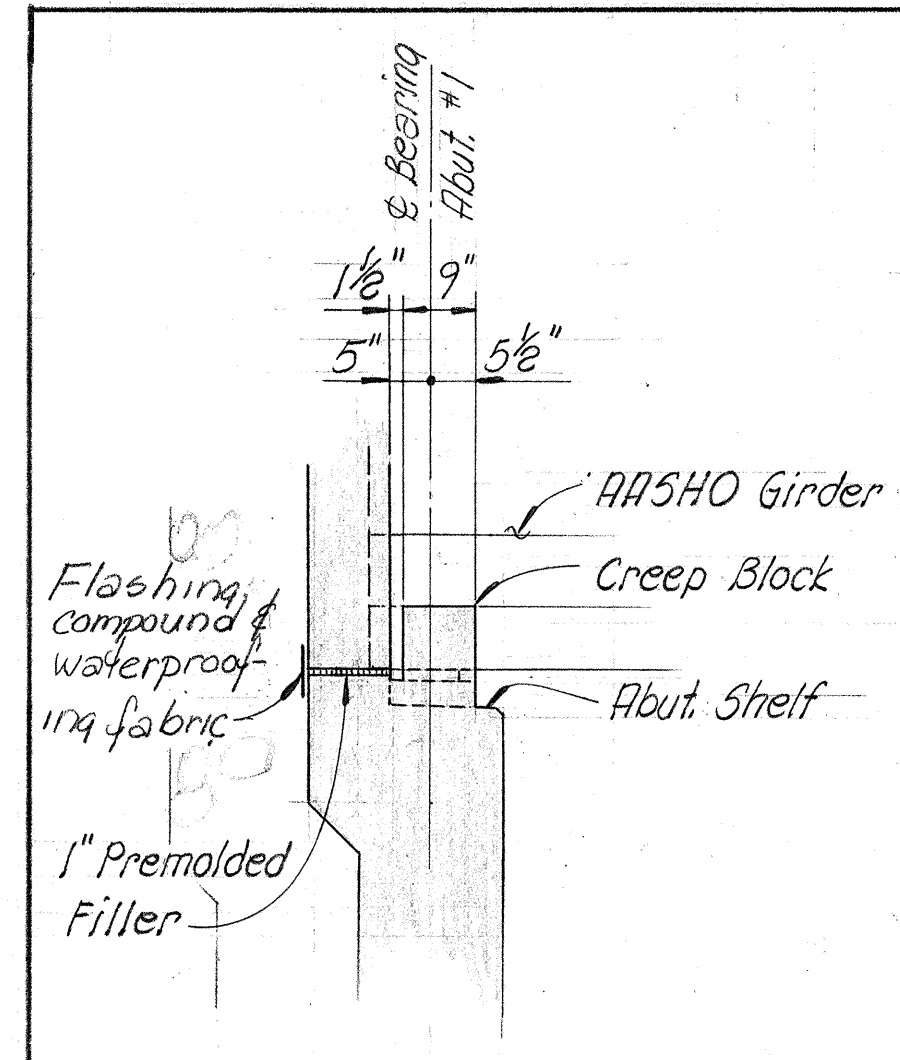
Elevations given are at & intersections.
Conc. Seat Bevel direction - See diagram, Sh. 3



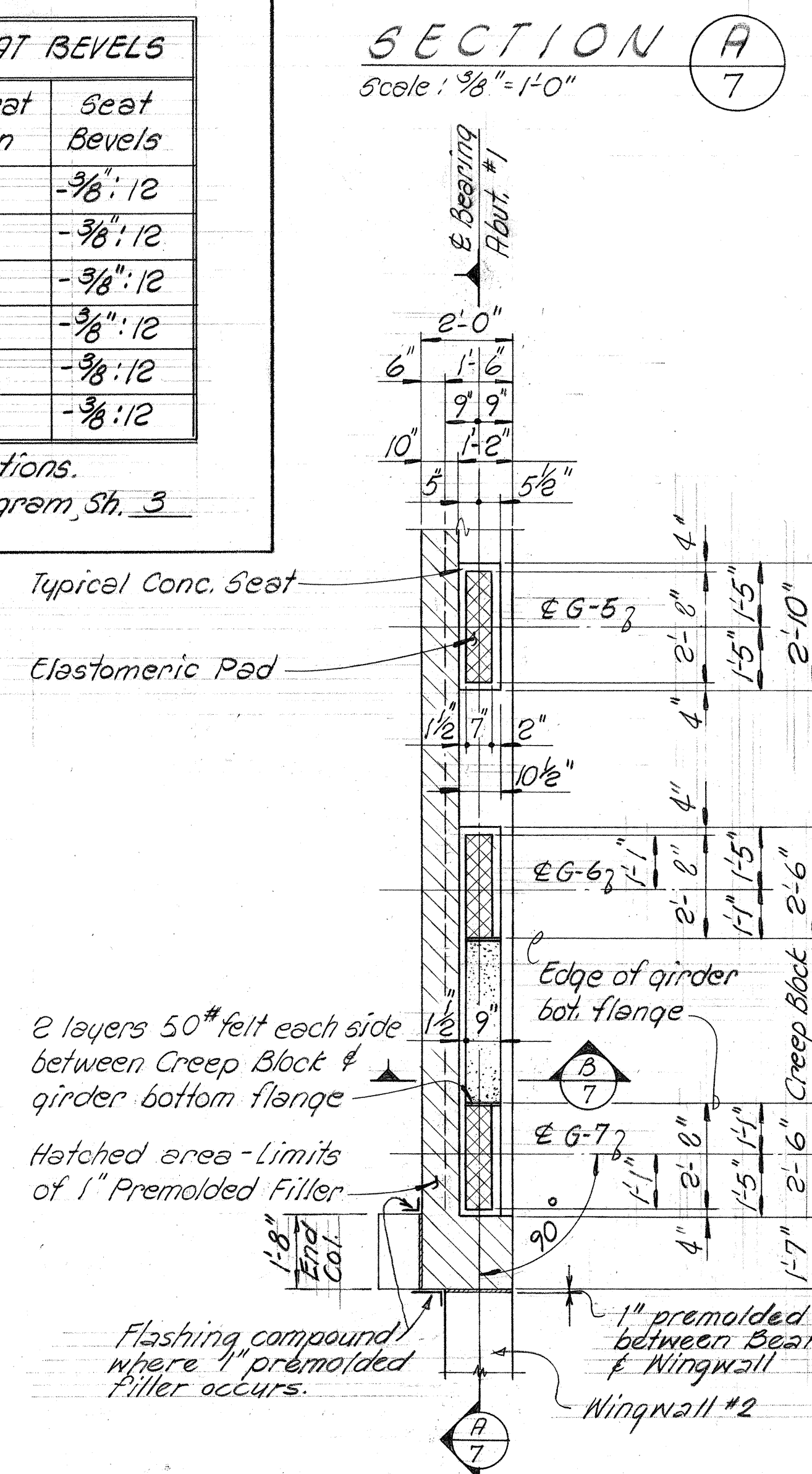
WINGWALL #3 ELEVATION
Scale: 1/4" = 1'-0" (Wingwall #4 similar)



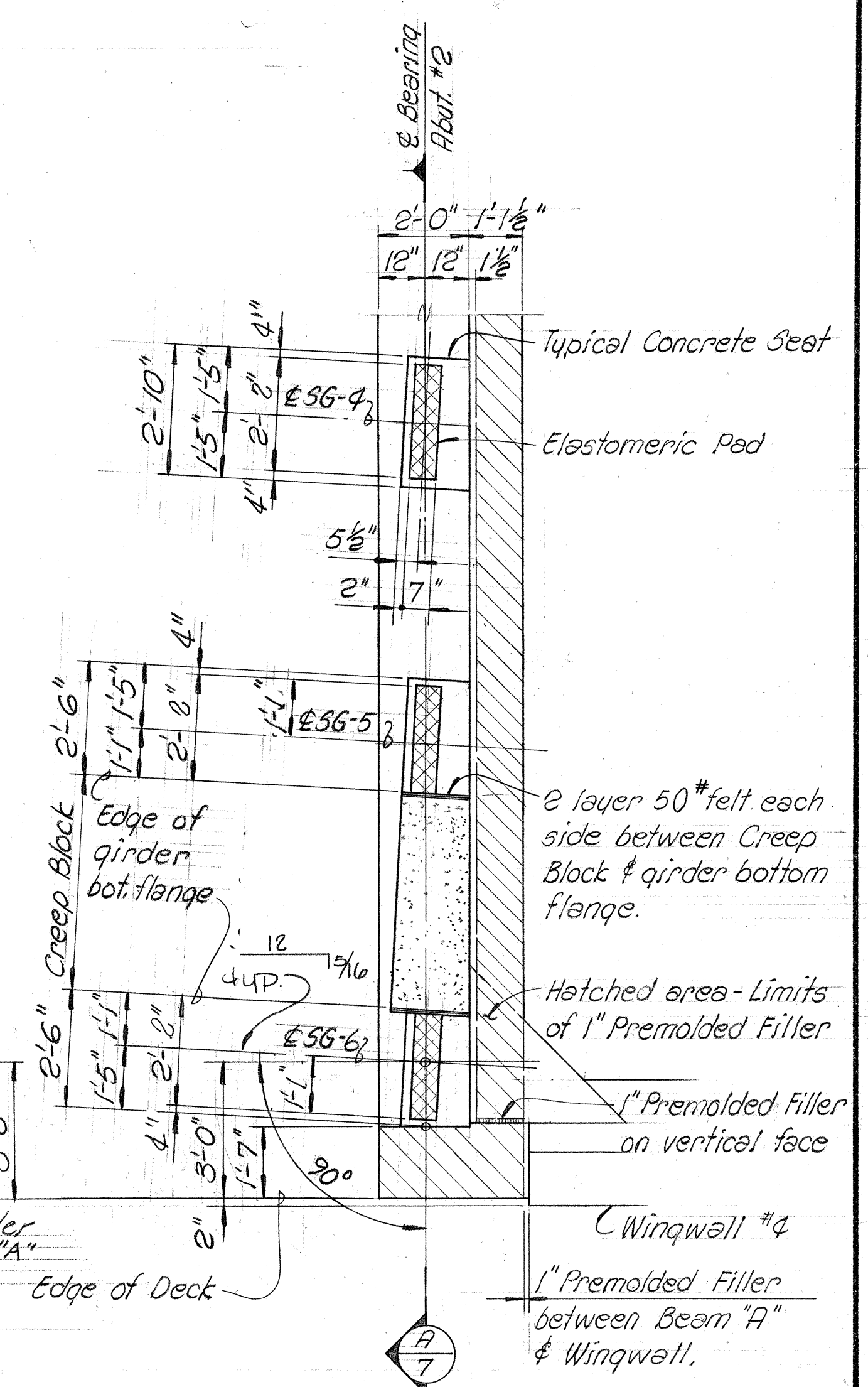
ELASTOMERIC BEARING PAD DETAIL
Scale: 1" = 1'-0"



SECTION B
Scale: 1/2" = 1'-0"

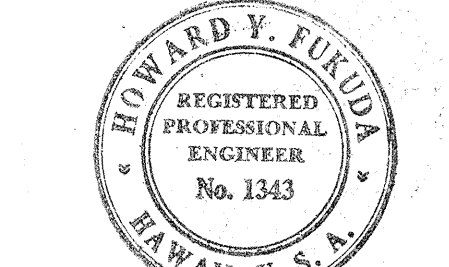


ABUTMENT #1 PART PLAN
CONCRETE SEAT & CREEP BLOCK DETAILS
Scale: 3/8" = 1'-0"



ABUTMENT #2 PART PLAN
CONCRETE SEAT & CREEP BLOCK DETAILS
Scale: 3/8" = 1'-0"

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURE NO. 13

ABUTMENT #2 & WINGWALLS #3 & #4 ELEVATIONS
& ABUT. #1 & #2 CONC. SEAT & CREEP BLOCK DET.

WAI'AWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):3

Scale: As shown Date: JUNE, 1969

SHEET NO. 7 OF 20 SHEETS

Revised: February 18, 1970

THIS SHEET SUPERSEDES
SHEET NO. 96.

[illegible]

The diagram illustrates a pile foundation system. The upper portion is a side elevation of a structure, showing a sloped profile with six piles labeled PG_1 through PG_6 . Three internal piles are numbered 1, 2, and 3. The lower portion is a plan view showing the horizontal arrangement of the piles, with a horizontal line labeled "Piles" indicating the foundation line.

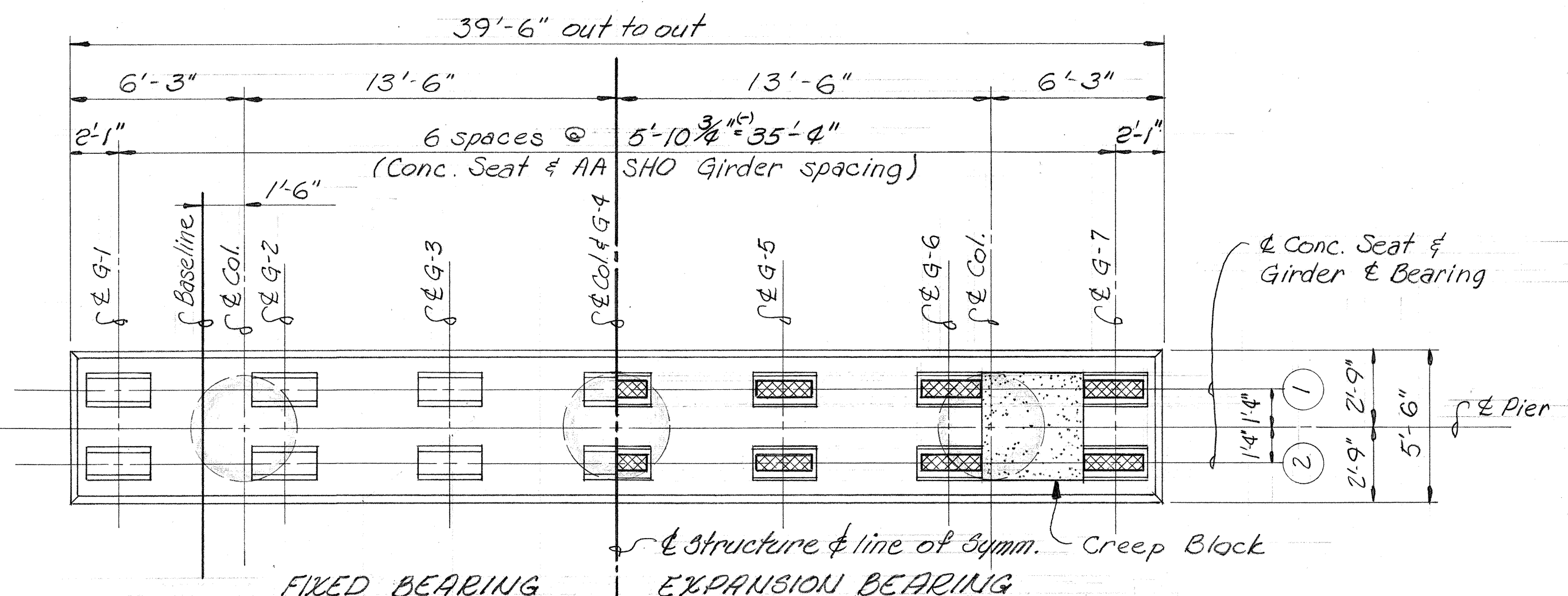
Diagram illustrating the elevation of the bottom of the girder and the top of the column. The diagram shows a cross-section of a T-junction with labels: "Elev. bott. of girder & top of column", "Elev. top of slab", and "Pier".

TYPICAL SECTIONS - PIERS #6 & #7

[illegible]

(For Pier #6 & #17)

TYPICAL PIER SECTIONS & SCHEDULE OF ELEVATIONS



FIXED BEARING EXPANSION BEARING

TOP OF PIER CAP PLAN

$\frac{1}{8}" = 1'0"$

REFERENCE DRAWINGS

1. Piers #1 thru #5
details ----- Shs 52 & 53

2. Piers #6 & #7
details ----- Shs 9 & 10

3. Girder Seats &
Creep Block ----- Sh. 54

Pier	1		2		3		4		5	
Seat Girder	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
G-1	$-\frac{1}{32}:12$	$-\frac{1}{16}:12$	$-\frac{1}{16}:12$	$-\frac{3}{32}:12$	$-\frac{3}{32}:12$	$-\frac{1}{16}:12$	$-\frac{1}{16}:12$	$-\frac{1}{16}:12$	$-\frac{1}{16}:12$	$\frac{3}{16}:12$
G-2	↑	↑	↑	↑	↑	$-\frac{1}{32}:12$	$-\frac{1}{32}:12$	$-\frac{1}{16}:12$	$-\frac{1}{16}:12$	$\frac{3}{32}:12$
G-3						$-\frac{1}{32}:12$	$-\frac{1}{32}:12$	$-\frac{1}{32}:12$	$-\frac{1}{32}:12$	$\frac{1}{4}:12$
G-4						$-\frac{1}{32}:12$	$-\frac{1}{32}:12$	$0:12$	$0:12$	$\frac{1}{4}:12$
G-5						$0:12$	$0:12$	$\frac{1}{32}:12$	$\frac{1}{32}:12$	$\frac{3}{32}:12$
G-6						$0:12$	$0:12$	$\frac{1}{32}:12$	$\frac{1}{32}:12$	$\frac{5}{16}:12$
G-7	$-\frac{1}{32}:12$	$-\frac{1}{16}:12$	$-\frac{1}{16}:12$	$-\frac{3}{32}:12$	$-\frac{3}{32}:12$	$0:12$	$0:12$	$\frac{1}{16}:12$	$\frac{1}{16}:12$	$\frac{1}{32}:12$

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2



2

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURE NO. 15

TYPICAL PIER SECTIONS, PIER SCHEDULE OF
ELEVATIONS & PIER CAP GIRDER SEAT SPACING

WAI'AWA INTERCHANGE
F.A.I. Proj. No. I - HI - 1 (75):B

Scale: As shown Date: JUNE, 1969

SHEET No. 8 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1 (75):8	1969	78	181

Note: No lapping of #18 bars will be permitted. Contractor may use welded splices as per Special Provisions.

All reinforcing bars and dowels other than #18 shall conform to ASTM Designation A-615, Grade 40.

Material Properties (Col. & Ftg.)

Concrete:

Column - Class F-1 Conc.

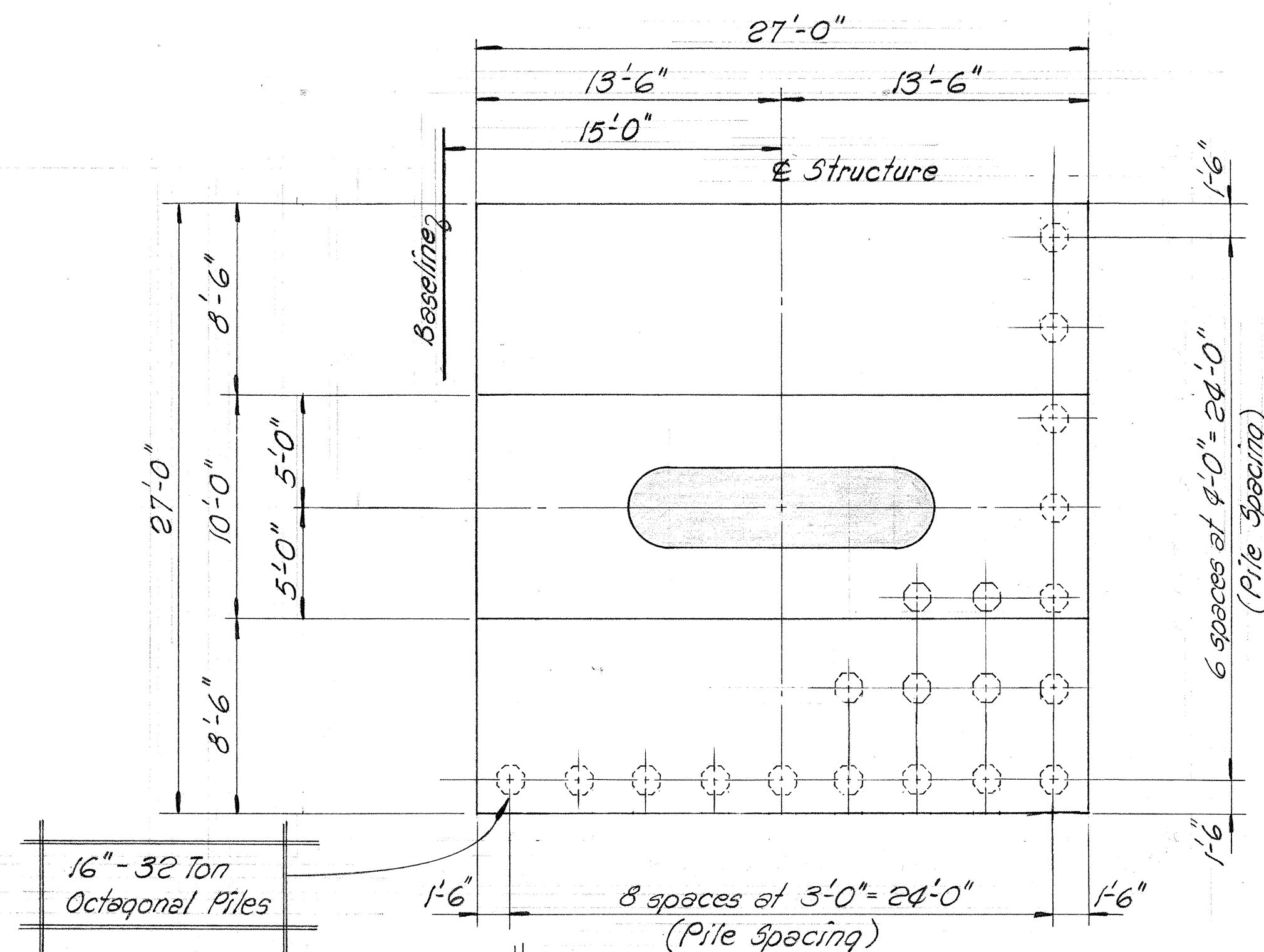
Footing - Class A-1 Conc.

Reinforcing Steel:

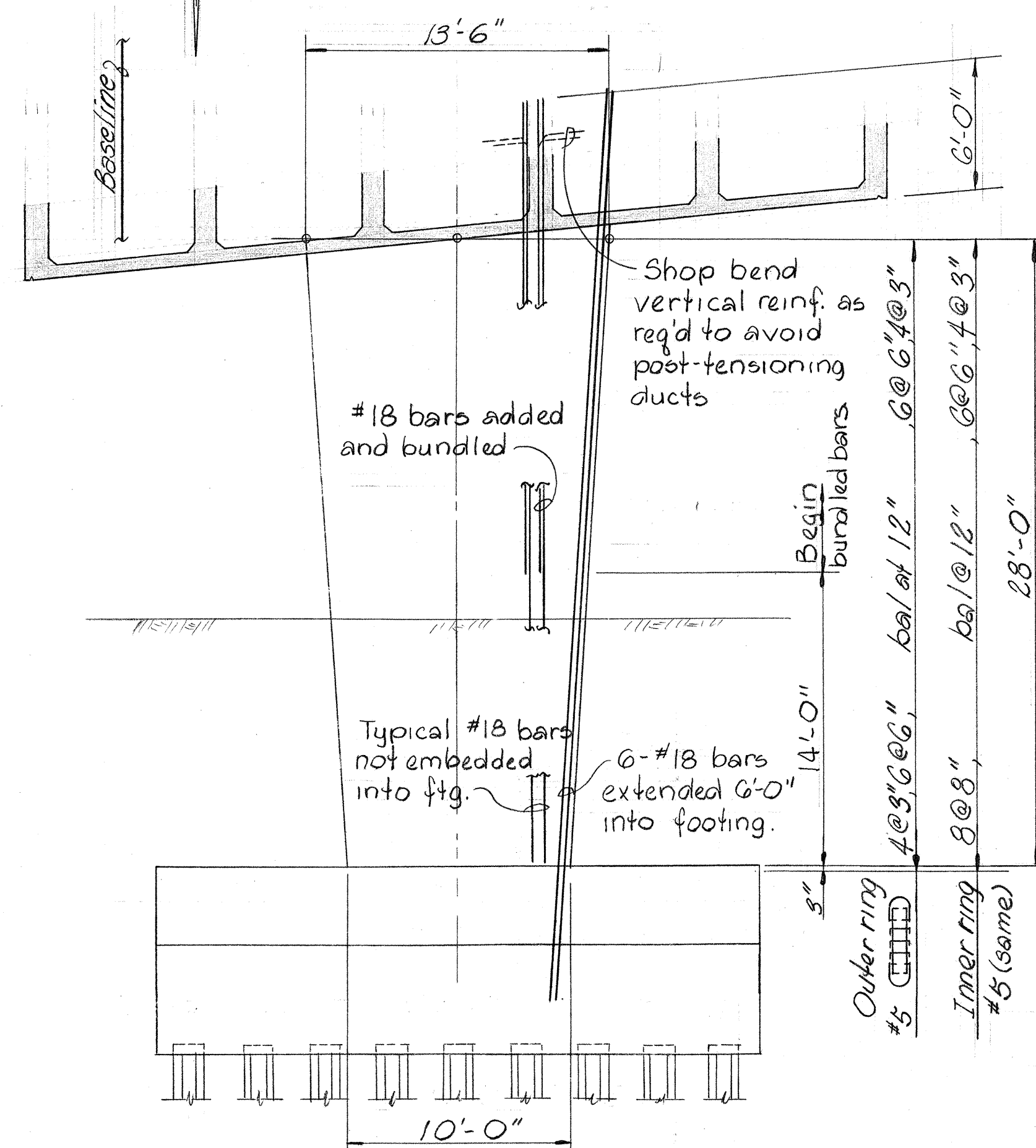
Column (#18) - $f_y = 50,000$ psi (min)

" (ties) - ASTM A-615 Grade 40

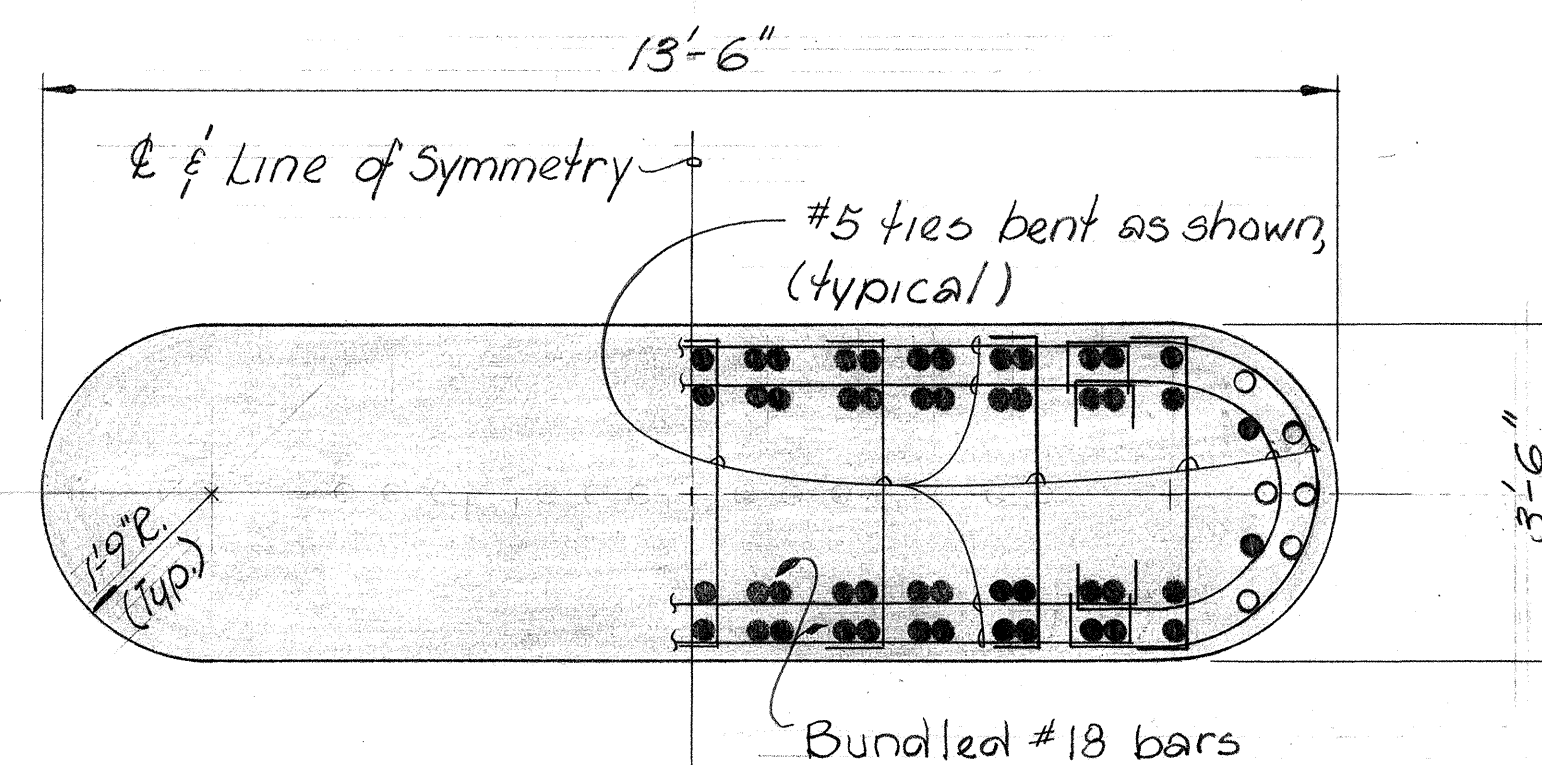
Footing - ASTM A-615 Grade 40



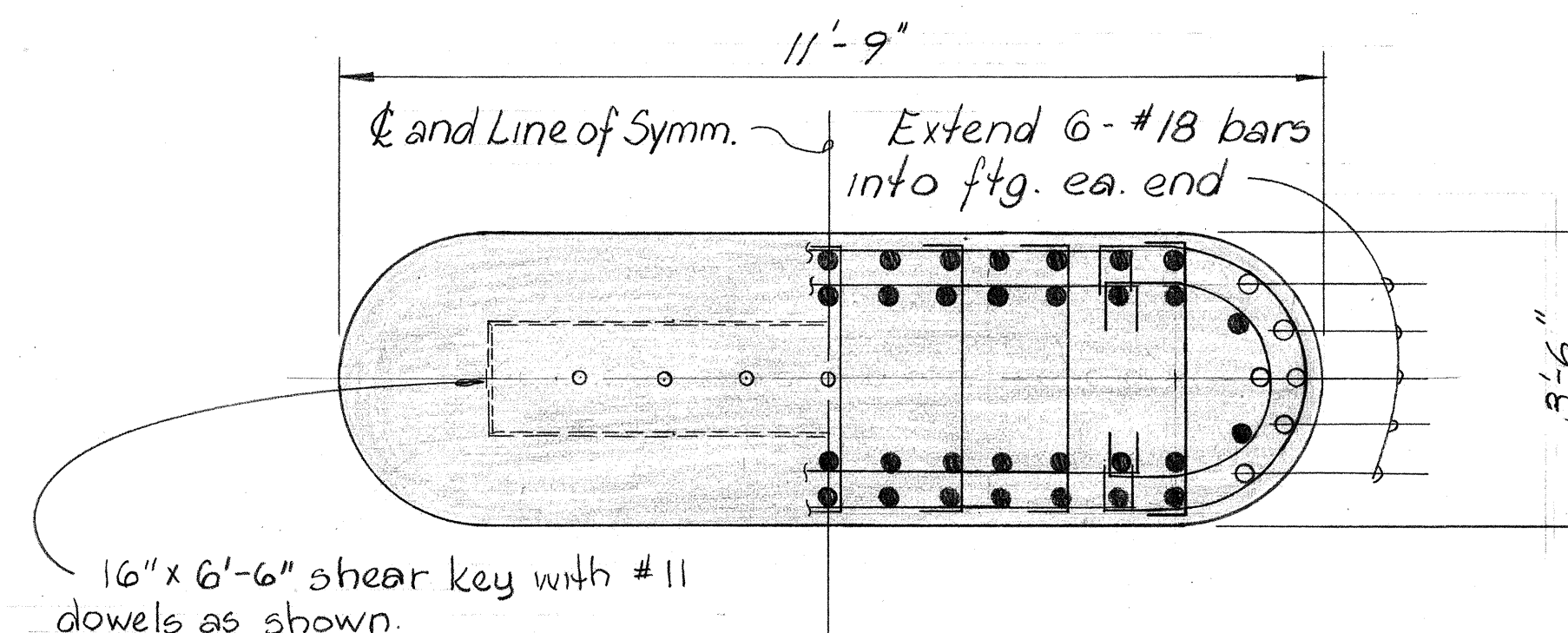
PLAN
Scale: $\frac{3}{16}'' = 1'-0''$



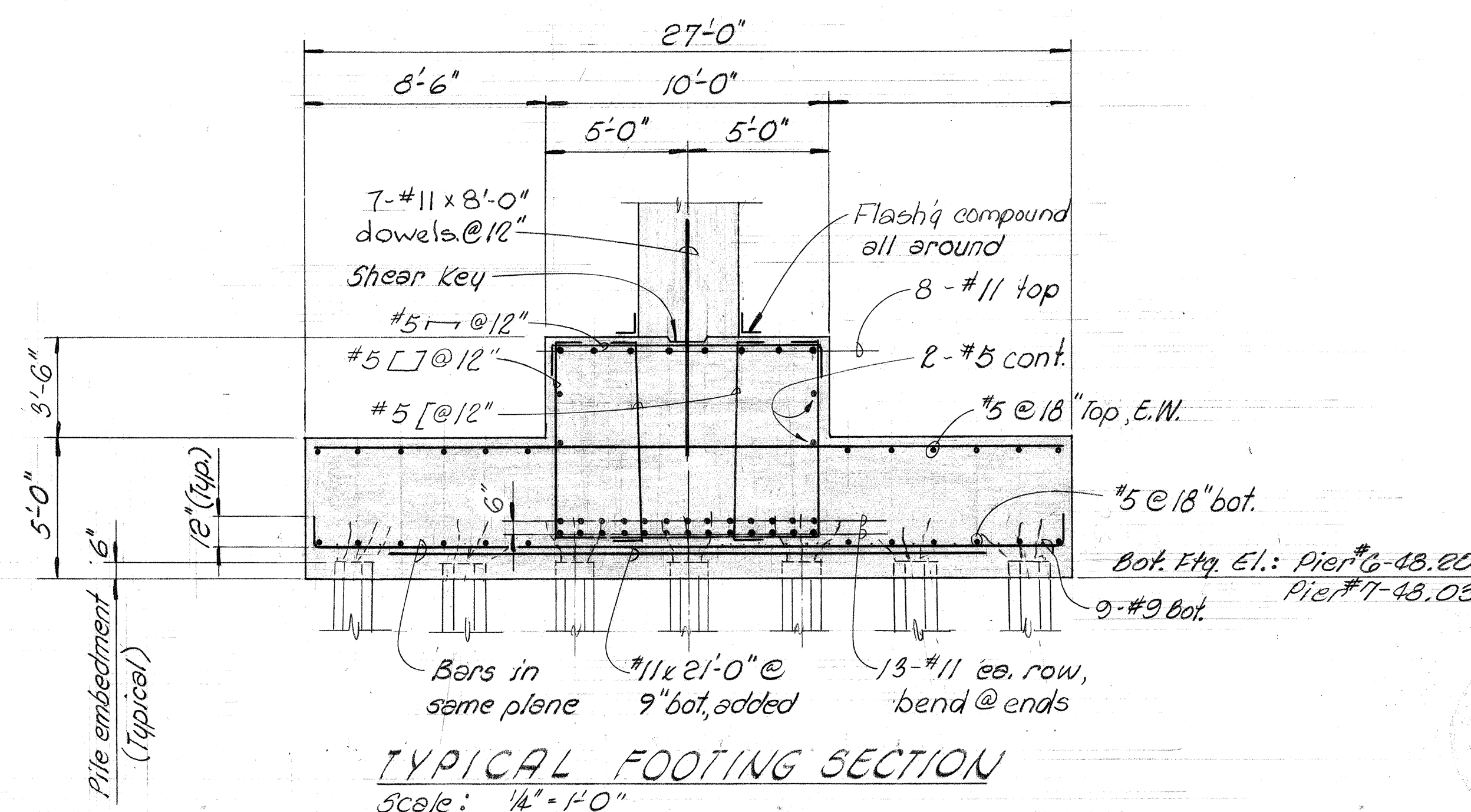
ELEVATION
Scale: $\frac{3}{16}'' = 1'-0''$



COLUMN SECTION AT CAP
Scale: $\frac{1}{2}'' = 1'-0''$



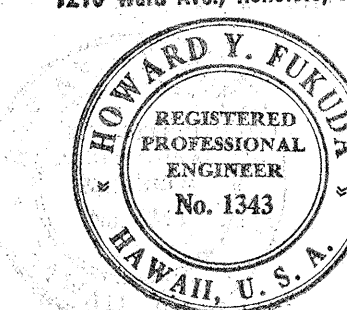
COLUMN SECTION AT MID-HEIGHT
Scale: $\frac{1}{2}'' = 1'-0''$



TYPICAL FOOTING SECTION
Scale: $\frac{1}{4}'' = 1'-0''$

PIERS #6 & #7 FOOTING & COLUMN DETAILS

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STRUCTURE NO. 15

PIERS #6 & #7
FOOTINGS & COLUMNS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1 (75):8

Scale: As shown Date: JUNE, 1969

SHEET NO. 9 OF 20 SHEETS

Revised: Dec. 10, 1969



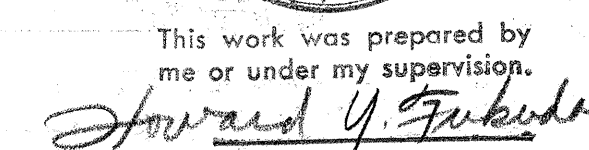
1. See contract plans for details not shown.
2. Reinf. shown are added bars only.
3. The corner fillets are to extend the depth of the box girder.
4. Felocate 4" ϕ drain holes are required.



1. All strands are to be placed after concrete is poured.
See Specs.
2. Maximum anchorage seating loss shall be $\frac{1}{2}$ "
3. All strands shall be post-tensioned simultaneously from both ends.
4. Effective force per duct (after all losses) shall be 325.18 kips at face of tapered column.
5. Pockets for post-tensioning ducts to be perpendicular to ducts.
6. For post-tensioning sequence, See Sh. 17.
7. Anchorage recess to be capped with a minimum 2" of concrete after post-tensioning operation is finished.



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Scale: As shown Date: JUNE, 1969

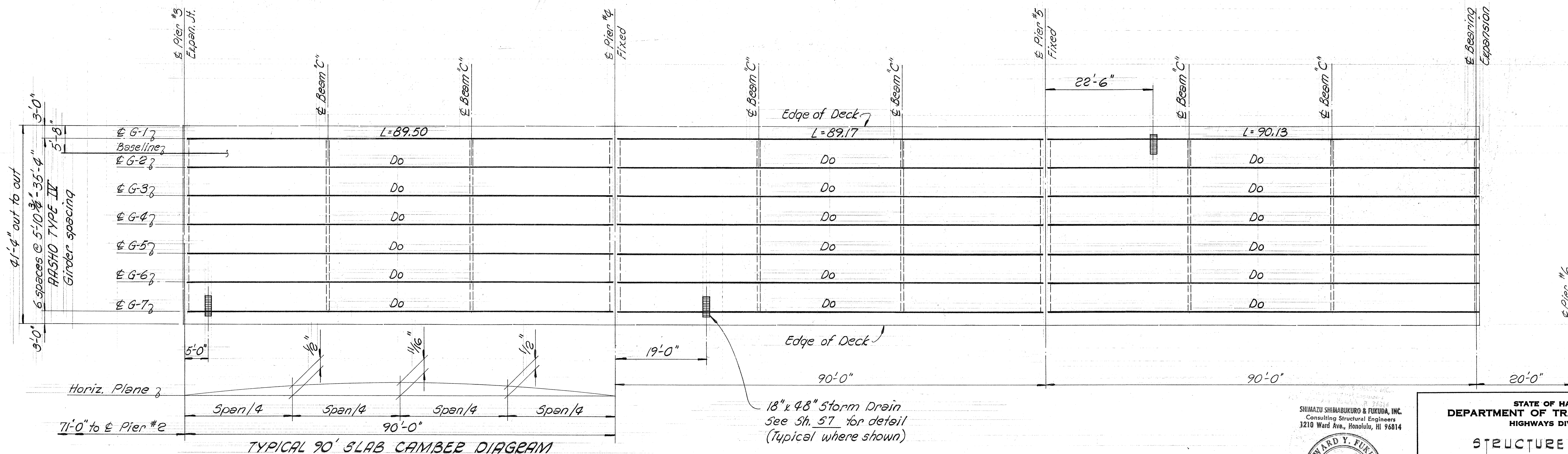
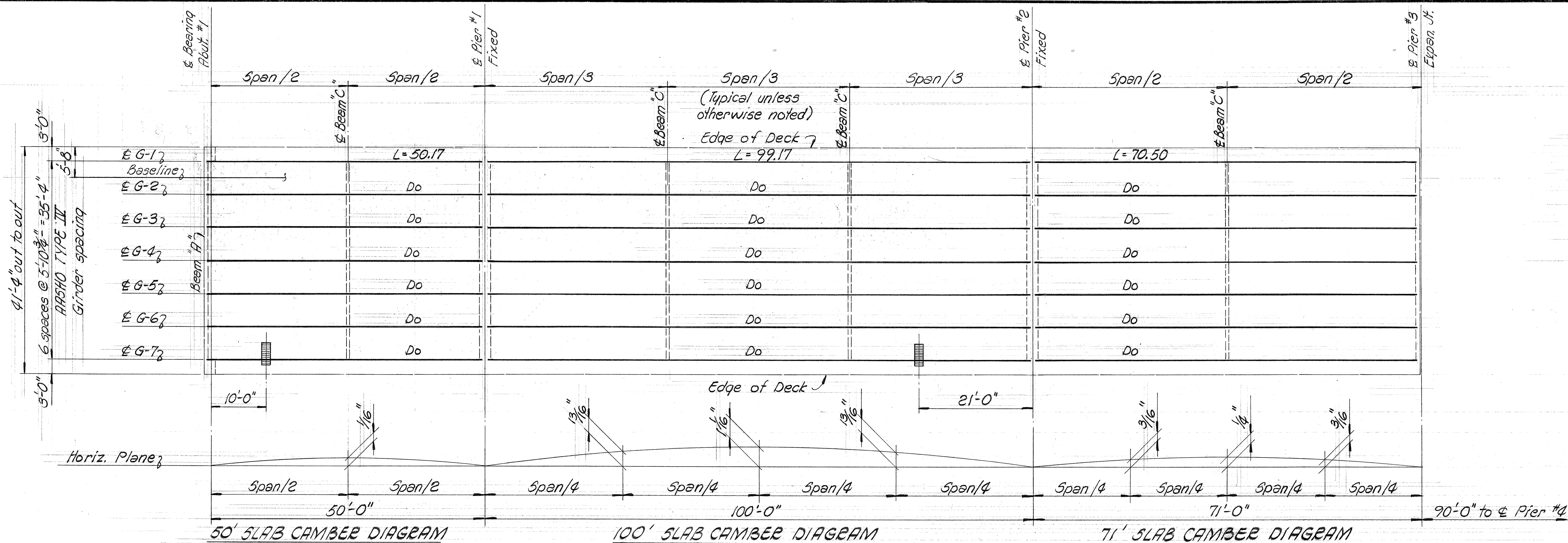
SHEET No. 10 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(75):8	1969	100	181

REFERENCE DRAWINGS

1. Beam "A" ----- Sh. 56
2. Beam "C" ----- Sh. 56
3. Beam over Fixed & Expansion Pier Supports--Sh. 55
4. & Bearing (Expansion)--Sh. 18

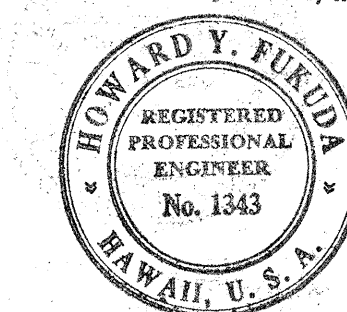
NOTE:
Girder casting lengths ("L") given on this sheet are measured at girder & and horizontally out to out.



DECK FRAMING PLANS

Scale: 3/32" = 1'-0"

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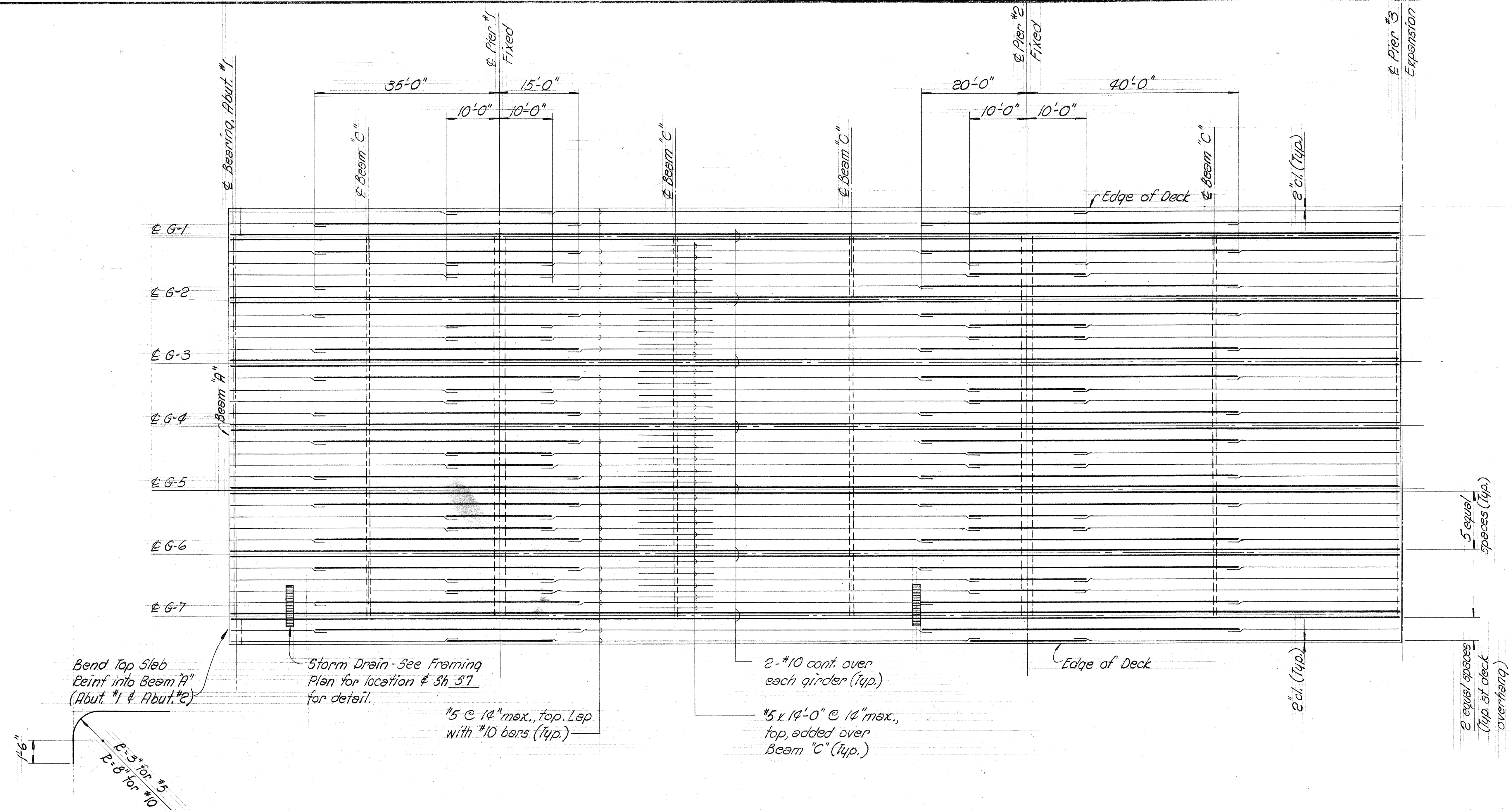
STATE OF HAWAII
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HIGHWAYS DIVISION

STRUCTURE No. 15
DECK FRAMING PLAN
ABUTMENT #1 TO PIER #6

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-H-1(75):8

Scale: As shown Date: June, 1969
SHEET No. 11 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75):8	1969	102	181



ABUTMENT #1 TO PIER #3

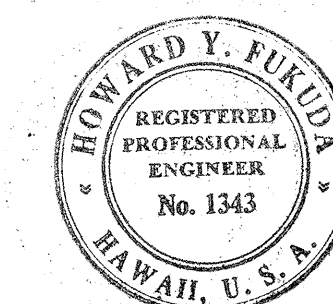
DECK SLAB REINFORCING PLACEMENT PLAN

Scale: Horiz. = 3/32" = 1'-0", Vert. = 3/16" = 1'-0"

NOTES

- Except as otherwise noted all slab bars to be #10 bars.
- All #5 bars at 14" max. spacing shall be extended & lapped a min. of 2'-6" with adjacent #10 bars as shown.
- Transverse bars not shown, See Typical Deck Section, Sh. 15.
- Longitudinal deck reinforcing along edge of deck to follow curvature of deck edge where applicable.
- All vertical dimensions are measured plumb.

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURE NO. 13

DECK SLAB REINFORCING PLACEMENT PLAN
ABUTMENT #1 TO PIER #3

WAIANA INTERCHANGE
F.A.I. Proj. No. I-HI-1 (75):8

Scale: As shown Date: JUNE, 1969

SHEET No. 13 OF 20 SHEETS

The drawing shows a cross-section of a bridge deck with the following details:

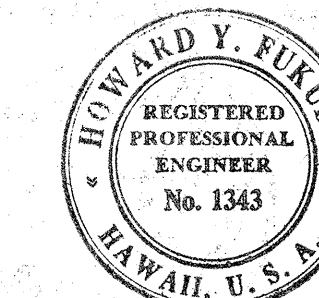
- Beams and Piers:** Beams are labeled "C" and "D". Piers are labeled "Pier #3", "Pier #4", and "Pier #5".
- Reinforcement:**
 - Top reinforcement: #5 @ 14" max. spacing, top-lap with #10 bars (typical).
 - Bottom reinforcement: #5 @ 14'-0" @ 14" max., top added over Beam "C" (typical).
 - Long Steel: #10 cont. over ea. girder (typ).
 - Added reinf. over Pier #4 only.
- Dimensions:**
 - Overall width: 35'-0" and 40'-0".
 - Beam "C" width: 20'-0" and 20'-0".
 - Beam "D" width: 10'-0" and 10'-0".
 - Edge of Deck.
- Other Features:**
 - Storm Drain.
 - Line of Symm. unless noted otherwise.
 - Diaphragm Steel.

NOTES

- DECK SLAB REINFORCING PLACEMENT PLAN

Scale: Horiz. $\frac{3}{32}'' = 1'-0''$, Vert. $\frac{3}{16}'' = 1'-0''$

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STRUCTURE No. 15
DECK SLAB REINFORCING PLACEMENT PLAN
PIER #3 TO PIER #6

WAIAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1 (75):8

Scale: As shown Date: JUNE, 1969

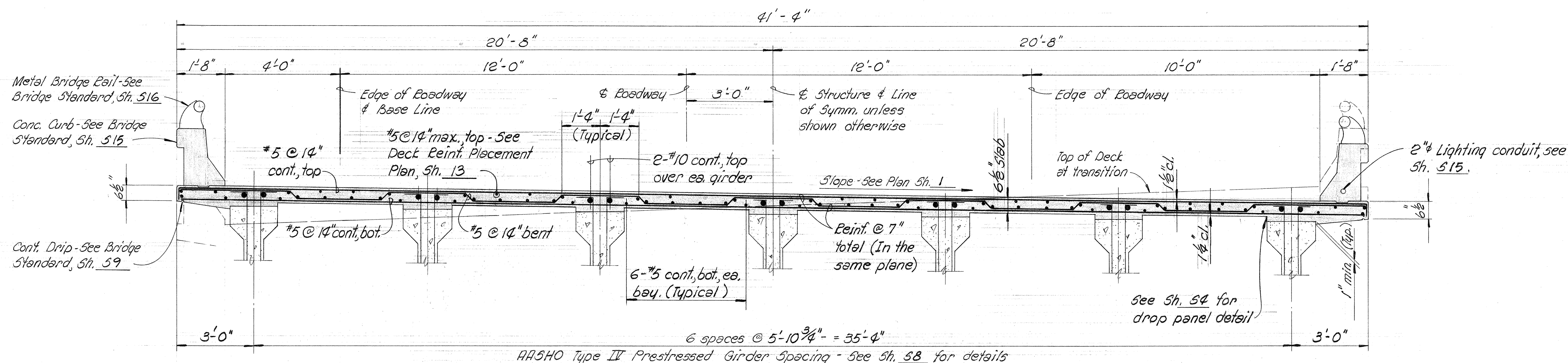
SHEET No. 14 OF 20 SHEETS

103

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

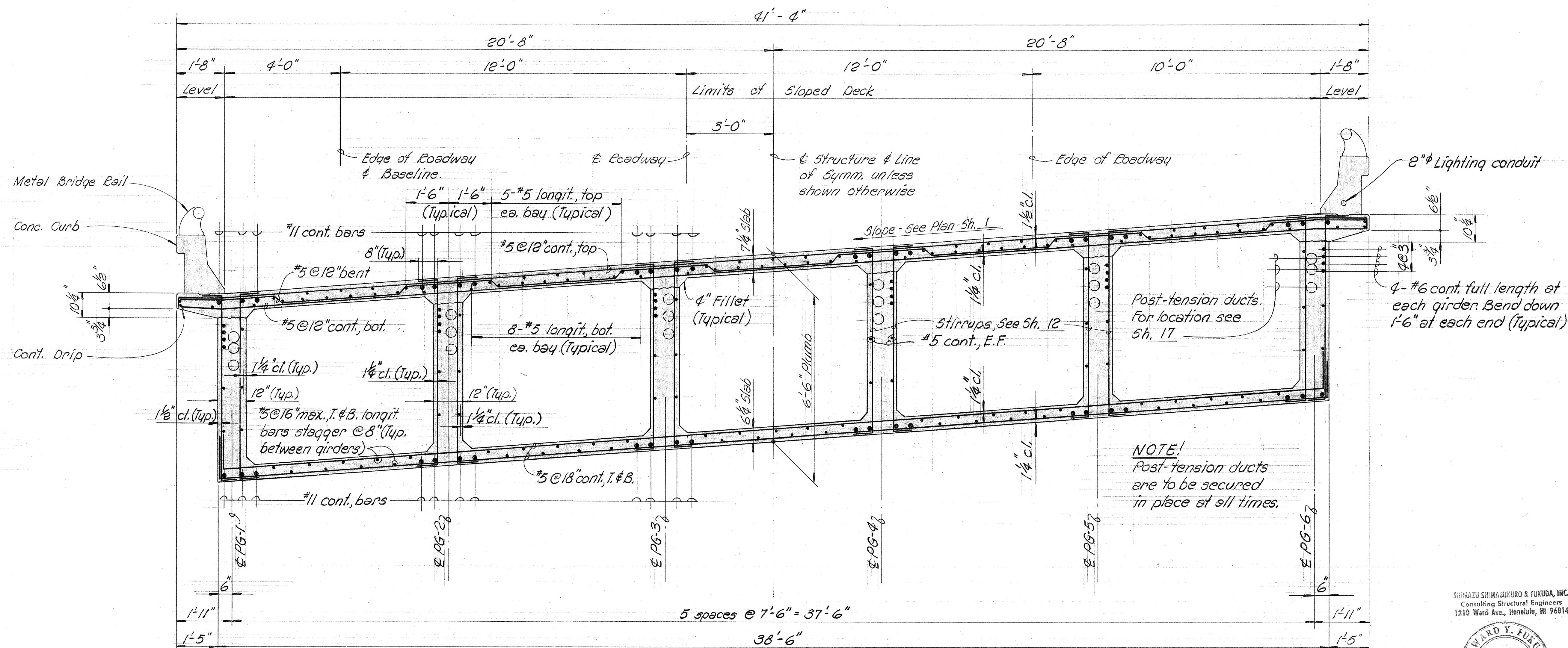
PRINTED ON NO. 1000M CLEARBRIN

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HI-1(75):8	1969	104	181



TYPICAL PRESTRESSED GIRDER DECK SECTION

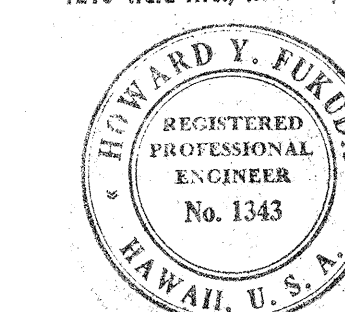
Scale: 1/2" = 1'-0" (Dimensions shown are at right angles to Baseline) (Sta. 457+32 to Sta. 462+73)



TYPICAL POST-TENSIONED BOX GIRDER DECK SECTION

Scale: 1/2" = 1'-0" (Dimensions shown are at right angles to Baseline)

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STRUCTURE No. 15

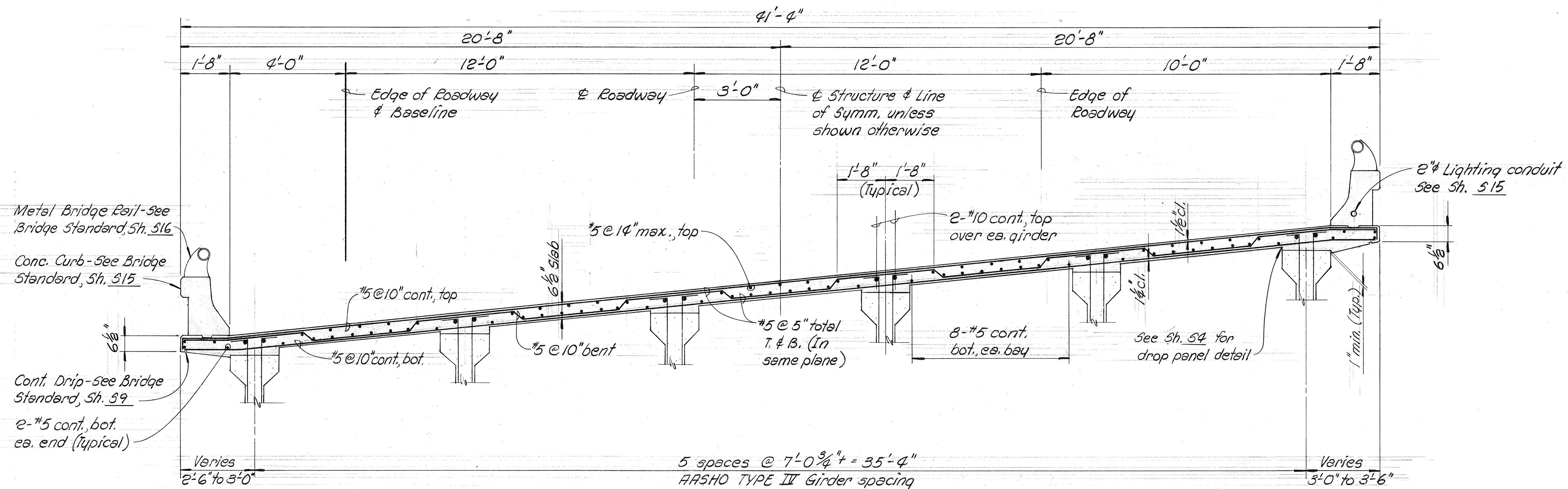
DECK SECTIONS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1 (75):8

Scale: As shown Date: JUNE, 1969

SHEET No. 15 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75):8	1969	105	181

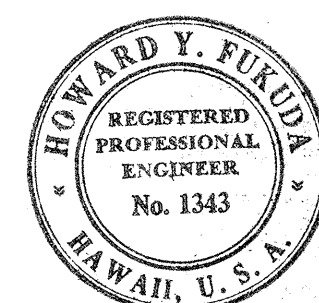


SIMPLE SPAN PRESTRESSED GIRDER DECK SECTION

Scale: 1/2" = 1'-0" (Sta. 464+53 to Sta. 465+31) (Dimensions shown are at right angles to Baseline)

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

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STRUCTURE No. 15

DECK SECTION

WAIAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

Scale: As shown Date: JUNE, 1969

SHEET No. 16 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75)B	1969	106	181

POST-TENSIONING SEQUENCE

- Pier cap over Pier #6. See Sht. 10 for duct identification.
Post-tension all strands in ducts #2 & #3, #6 & #7, #5 & #8, & #1 & #4 in that order. Strands shall be post-tensioned simultaneously from both ends.
- Pier cap over Pier #7. Total number of ducts, 1/2" & 270^k strands, & post-tensioning sequence same as pier cap over Pier #6.
- Post-tensioned Box Girders. See this sheet for duct identification.

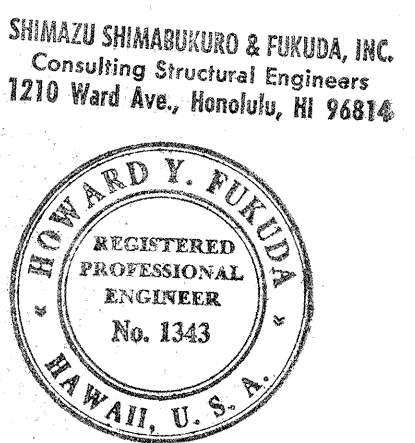
Post-tension, in the same day, all strands in ducts #3 in PG-4, PG-3, PG-5, PG-2, PG-1, & PG-6 in that order. Then post-tension all strands in ducts #2 in the same order & length of time as ducts #3.

Finally post-tension, in one day, all strands in ducts #1 in PG-6, PG-5, PG-4, PG-3, PG-2, & PG-1, in that order. Strands shall be post-tensioned simultaneously from both ends.

- NOTE:
- Clean out ducts before placing strands and grout ducts after stressings in accordance with specs.
 - After grouting, clean pockets, spread epoxy on concrete surface and post-tensioning hardware, then grout pockets.
 - Anchorage recesses to be capped with a min. 2" of concrete after post-tensioning operation.

REFERENCE DRAWINGS

- AASHTO Prestressed Girder — Sht. 58
- Elastomeric Bearing Pad — Sht. 54
- Cont. Precompressed Sealer — Sht. 56



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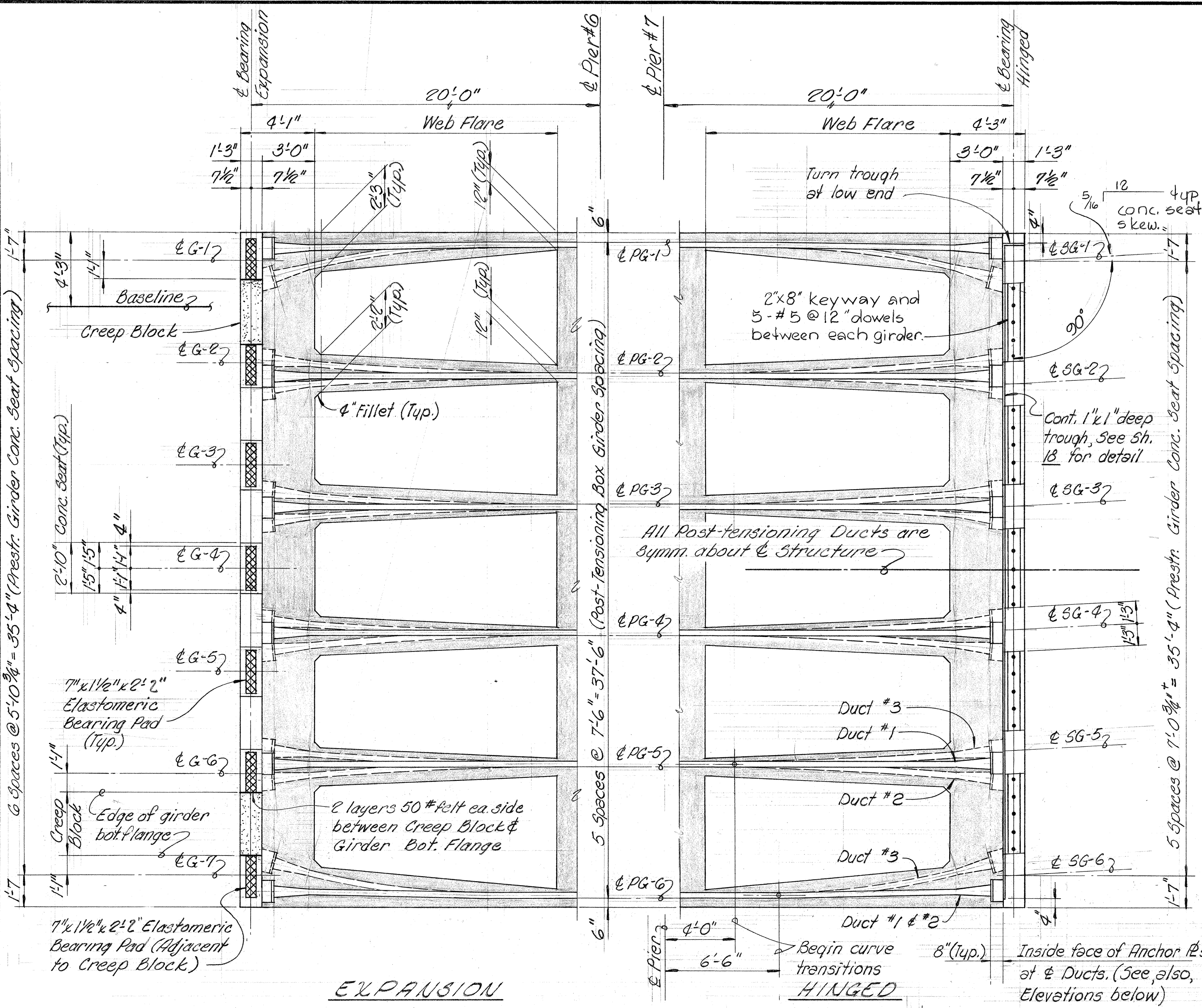
STRUCTURE NO. 15
BOX GIRDER CANTILEVER, POST-TENSIONING
SEQUENCE & SCHEDULE OF ELEVATIONS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75)B
Scale: As shown Date: JUNE, 1969
SHEET No. 17 OF 20 SHEETS

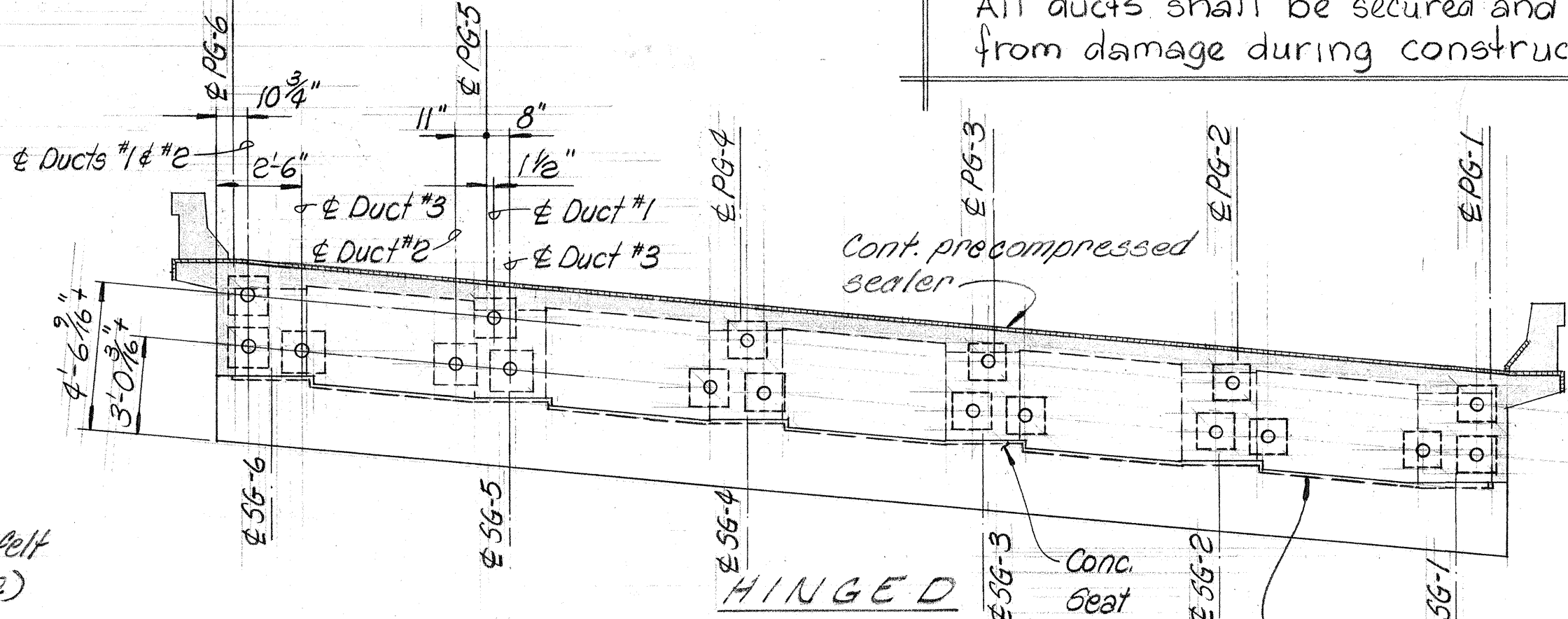
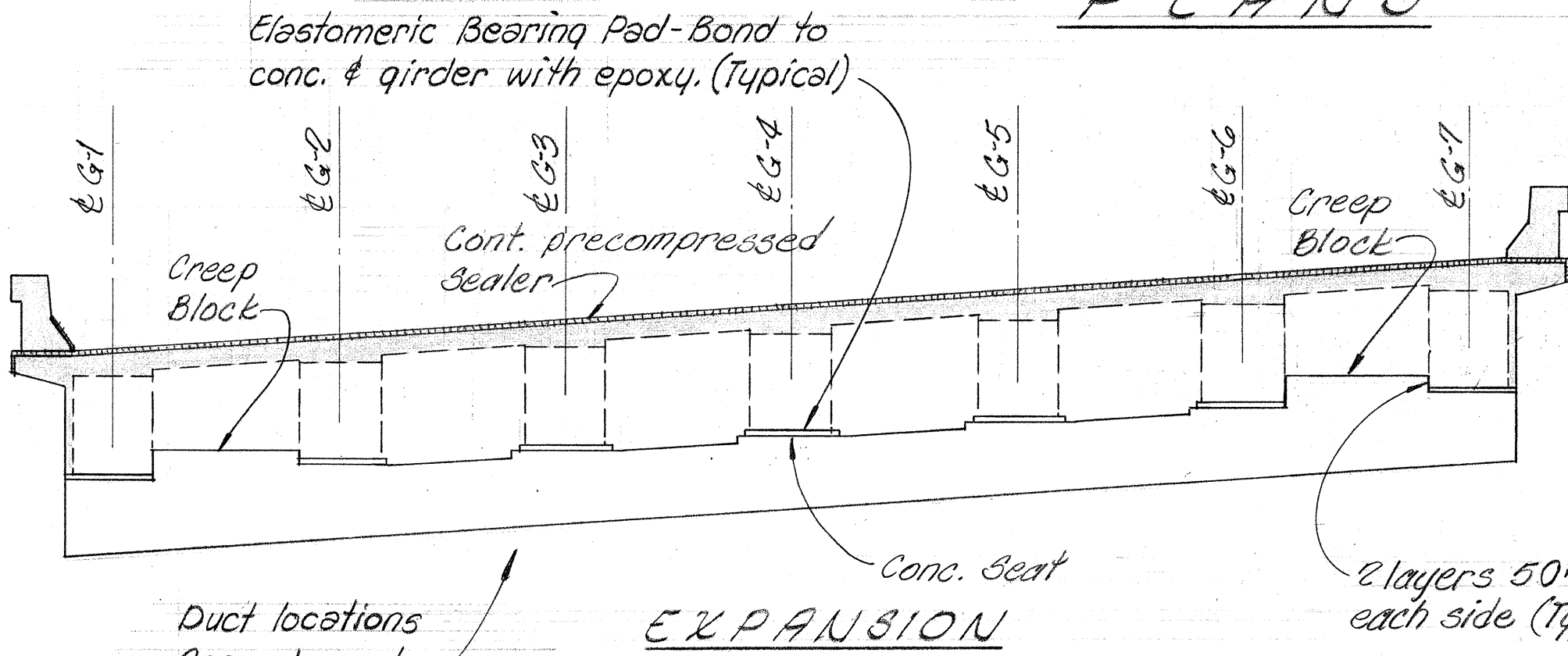
ELEVATIONS & BEVELS @ JOINTS					
	Girder	ELEVATIONS			BEVELS
		Top of Slab	Bot. of Girder	Top of Seat	
Expansion Joint	Box Girders				
	PG-1	90.16	84.66	—	—
	PG-2	90.57	85.07	—	—
	PG-3	90.99	85.49	—	—
	PG-4	91.41	85.91	—	—
	PG-5	91.82	86.32	—	—
	PG-6	92.24	86.74	—	—
Expansion Joint	AASHTO Type II Girders				
	G-1	90.22	86.84	86.72	1/16" : 12
	G-2	90.54	87.17	87.04	1/32" : 12
	G-3	90.87	87.50	87.37	1/4" : 12
	G-4	91.20	87.82	87.70	1/8" : 12
	G-5	91.53	88.15	88.03	1/32" : 12
	G-6	91.86	88.48	88.35	1/32" : 12
Hinged Joint	Box Girders				
	PG-1	89.09	83.59	—	—
	PG-2	89.84	84.34	—	—
	PG-3	90.58	85.08	—	—
	PG-4	91.32	85.82	—	—
	PG-5	92.07	86.57	—	—
	PG-6	92.81	87.31	—	—
Hinged Joint	AASHTO Type II Girders				
	SG-1	89.20	85.83	85.81	1/8" : 12
	SG-2	89.90	86.53	86.53	—
	SG-3	90.60	87.23	87.23	—
	SG-4	91.30	87.93	87.93	—
	SG-5	92.00	88.63	88.63	—
Hinged Joint	SG-6	92.70	89.33	89.33	1/8" : 12

Note! See Plans this sheet for seat details.

Note: All #2 & #3 ducts for box girder shown this sheet shall be placed in a smooth horizontal curve as shown. All ducts shall be secured and protected from damage during construction.



EXPANSION PLANS



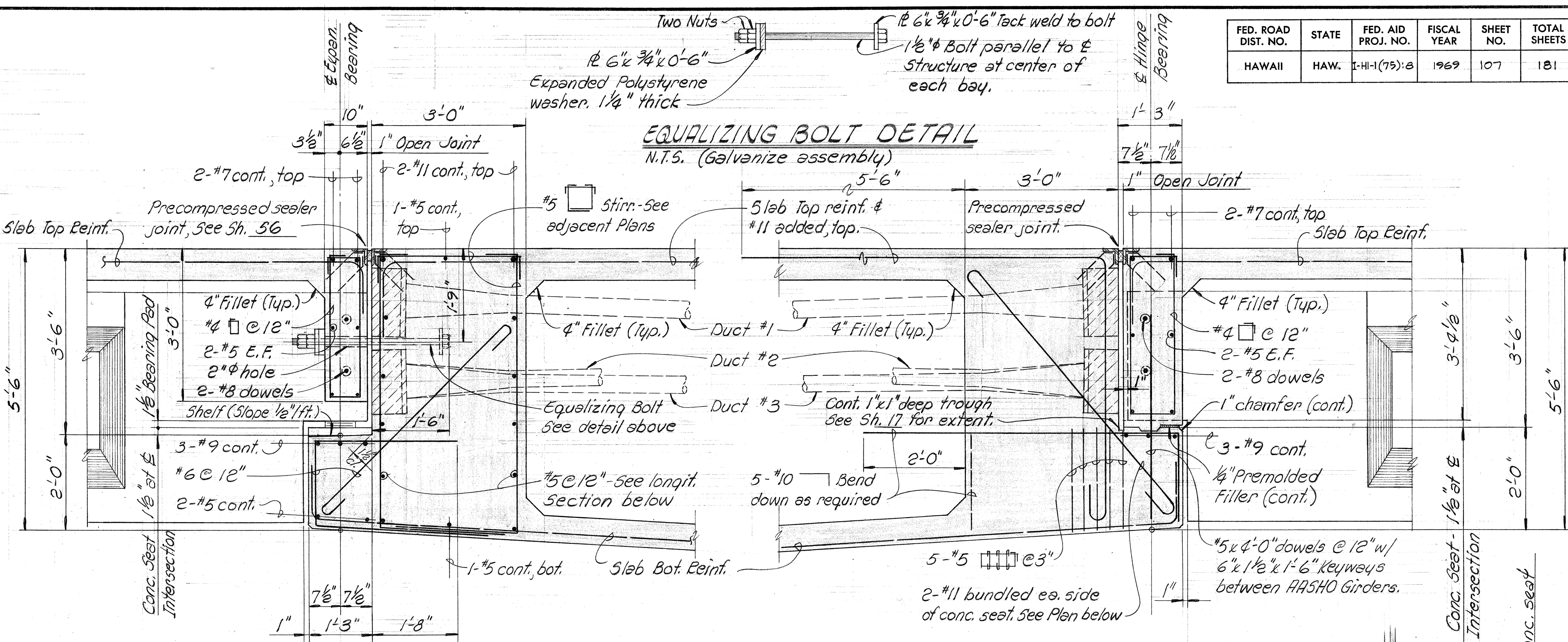
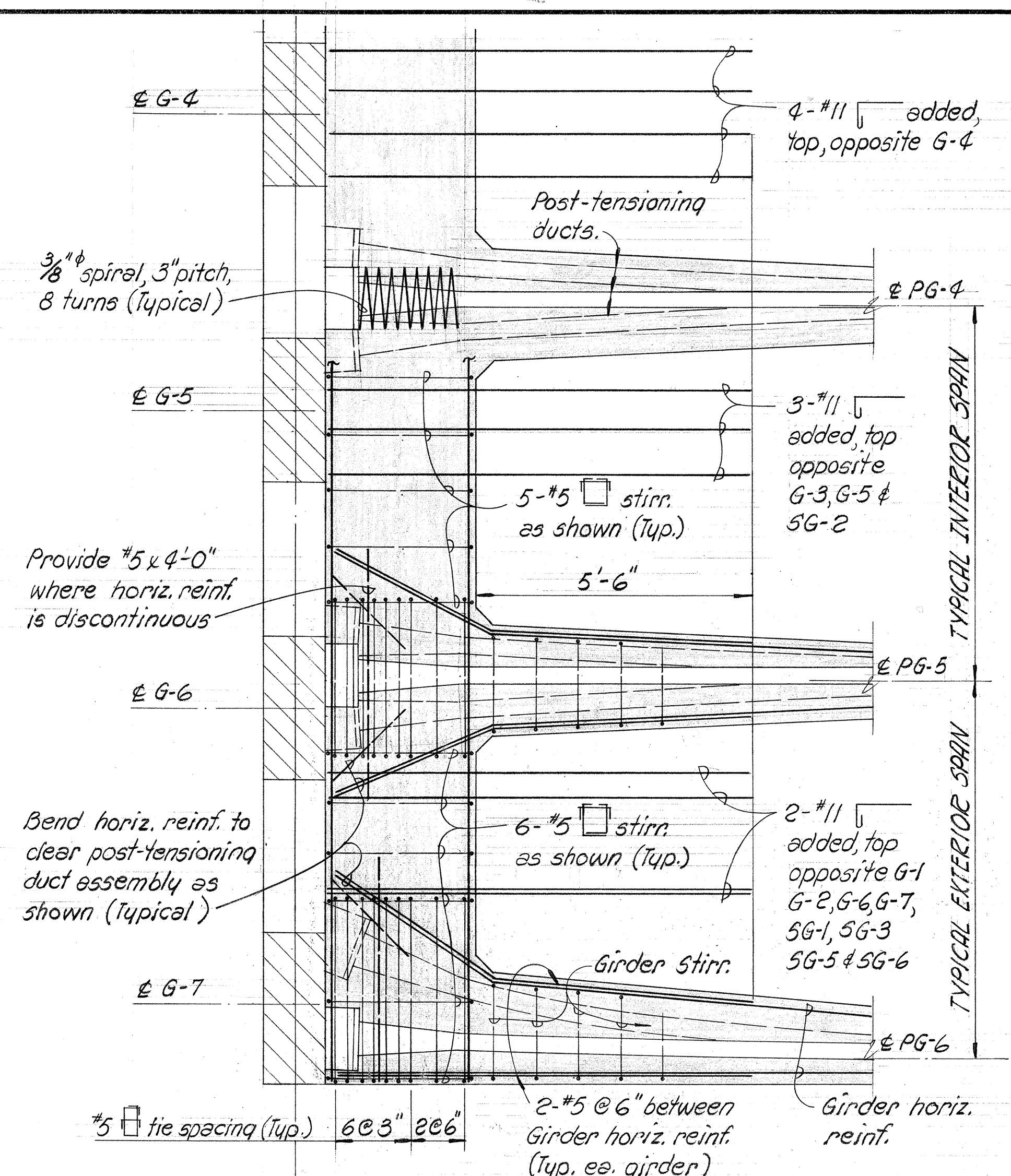
POST-TENSIONED BOX GIRDER DECK TO PRESTR. GIRDER DECK CONN.

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

NOTE: Dimensions given are at inside face of Anchor 12's at Ducts.

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

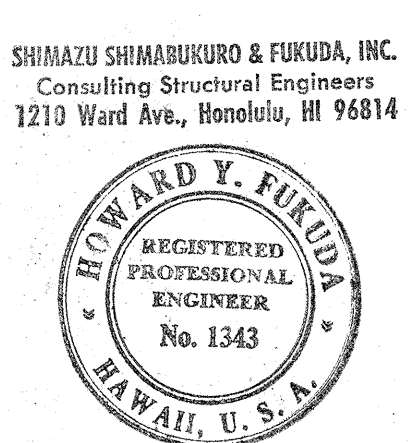
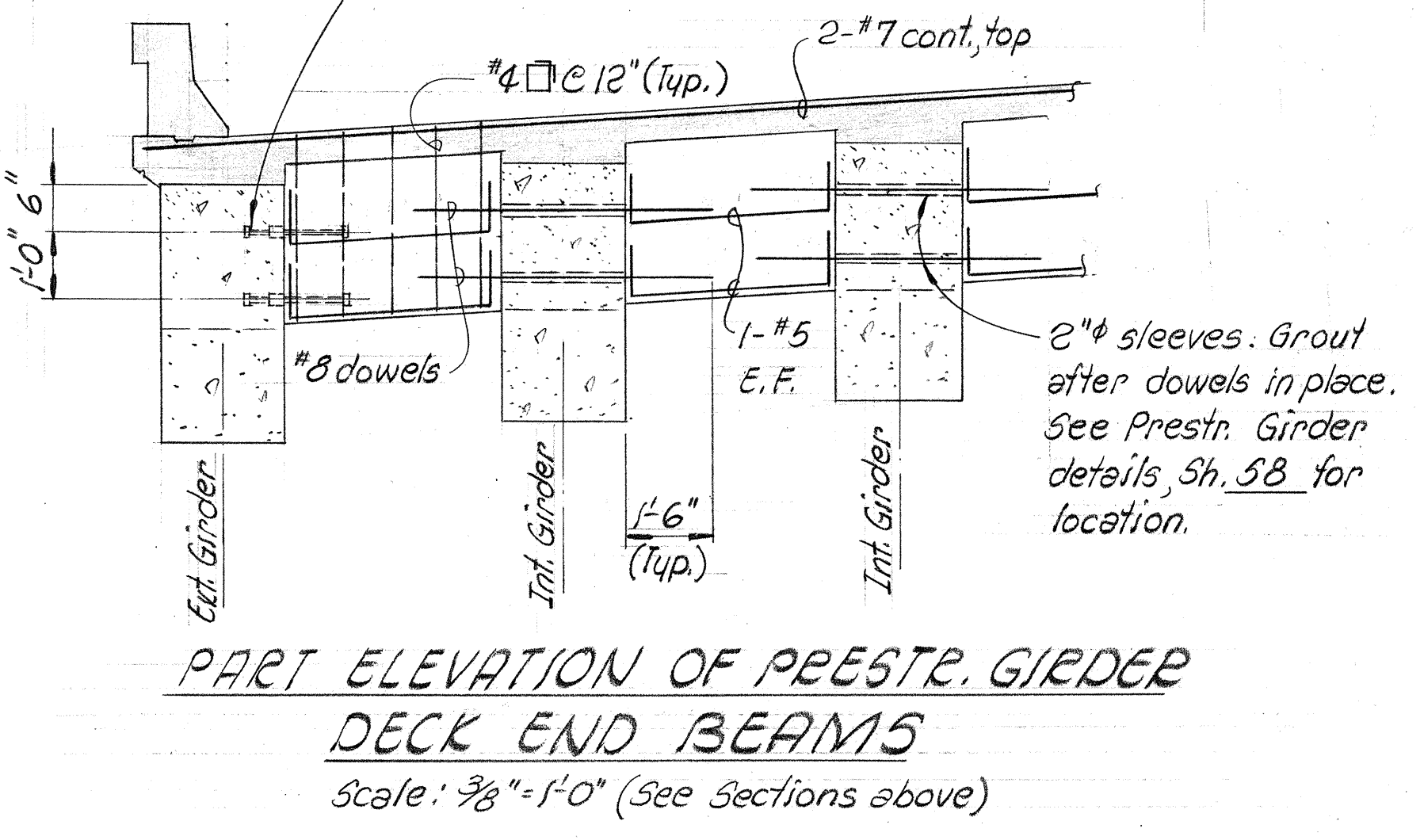
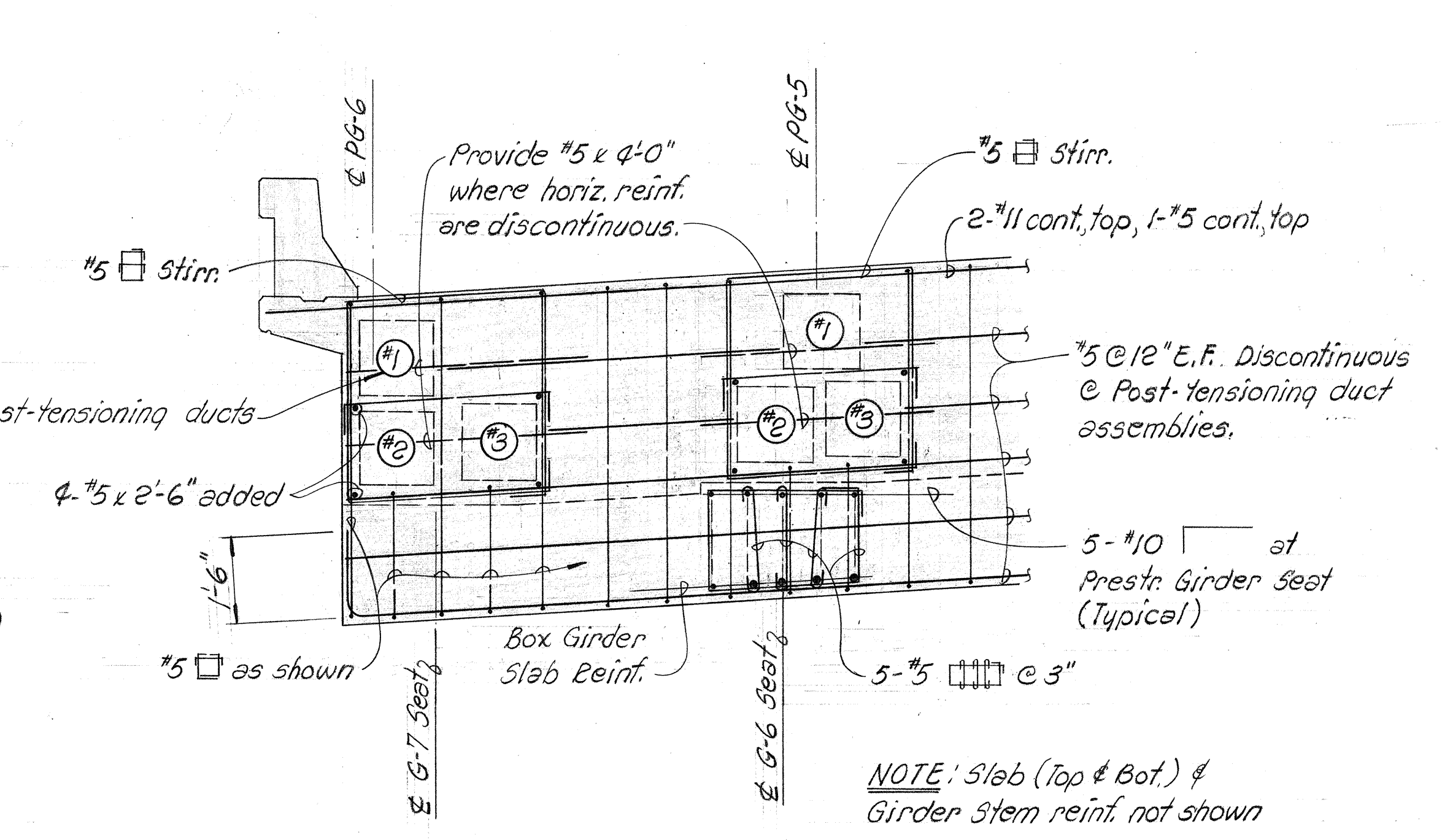
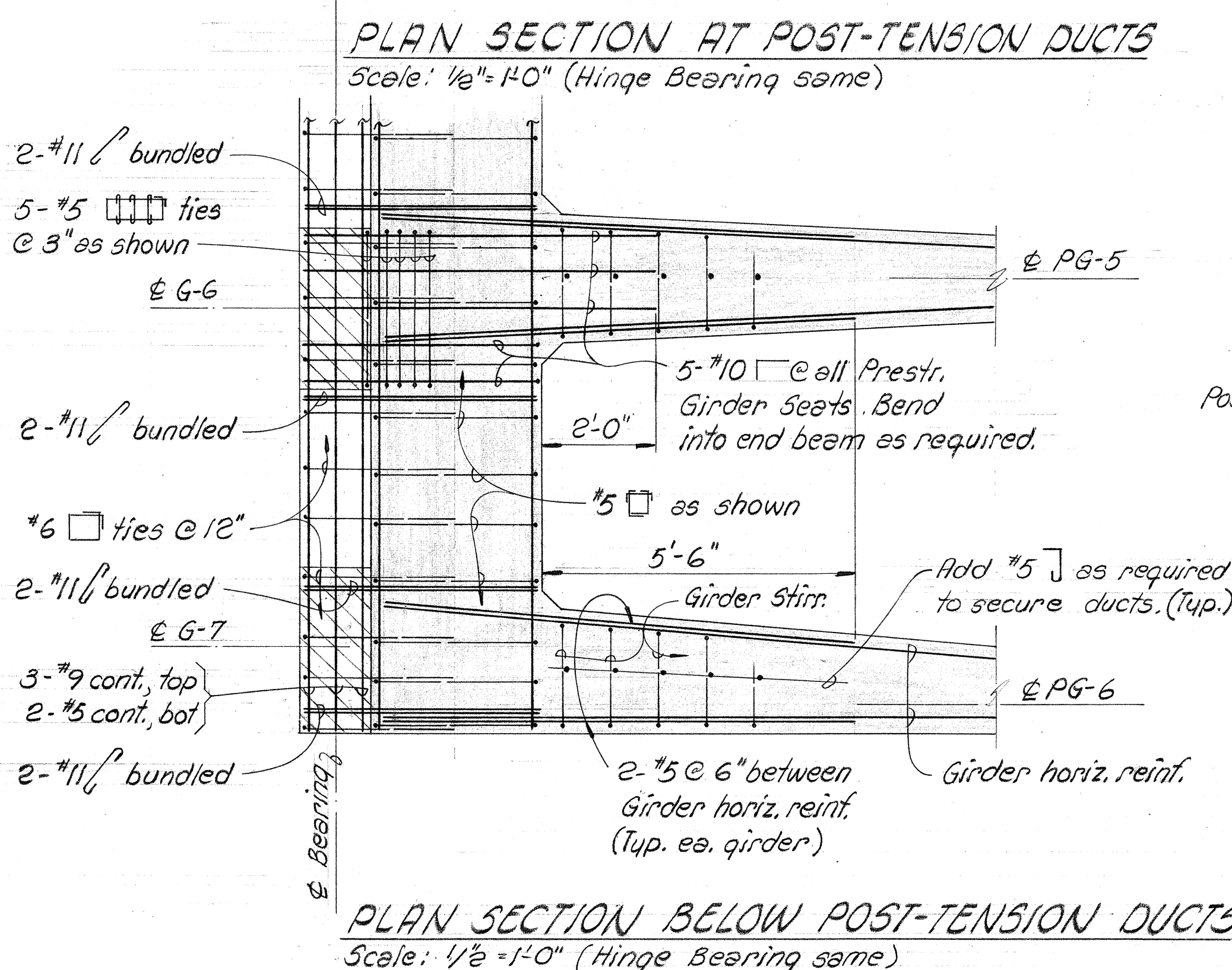
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(75):8	1969	107	181



SECTION AT EXPANSION BEARING
Scale: 3/4" = 1'-0"

SECTION AT HINGE BEARING
Scale: 3/4" = 1'-0"

SECTION AT CONC. SEAT
1" = 1'-0"



STATE OF HAWAII
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STRUCTURE NO. 13
POST-TENSIONED BOX GIRDER DECK TO PRESTR. GIRDER DECK CONNECTIONS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

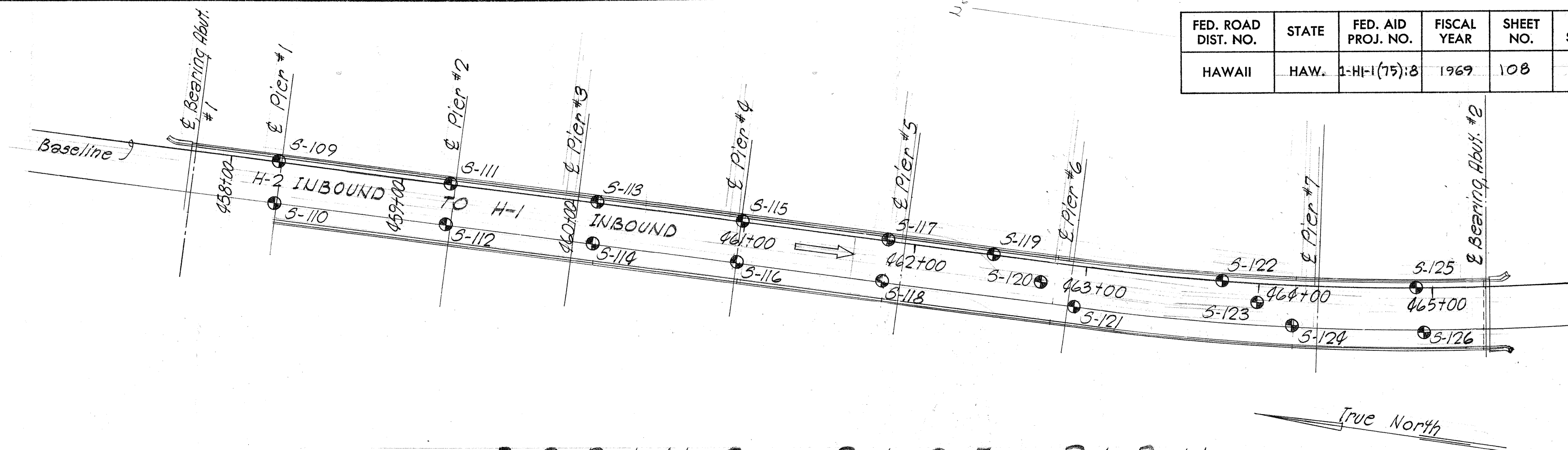
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SHEET No. 18 OF 20 SHEETS

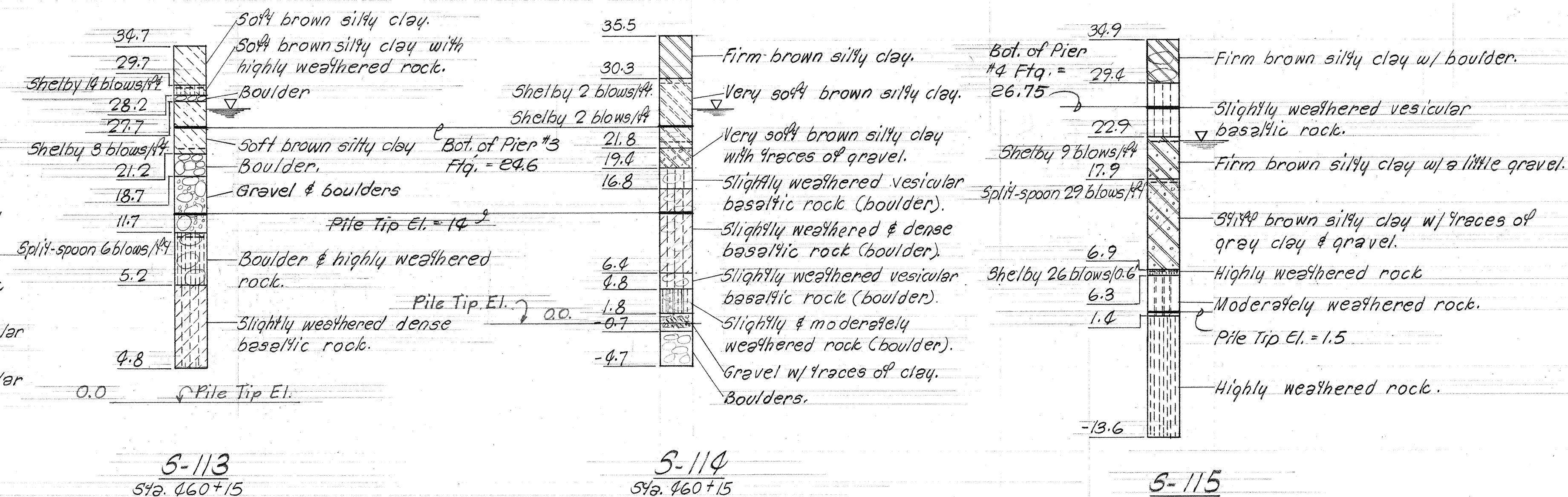
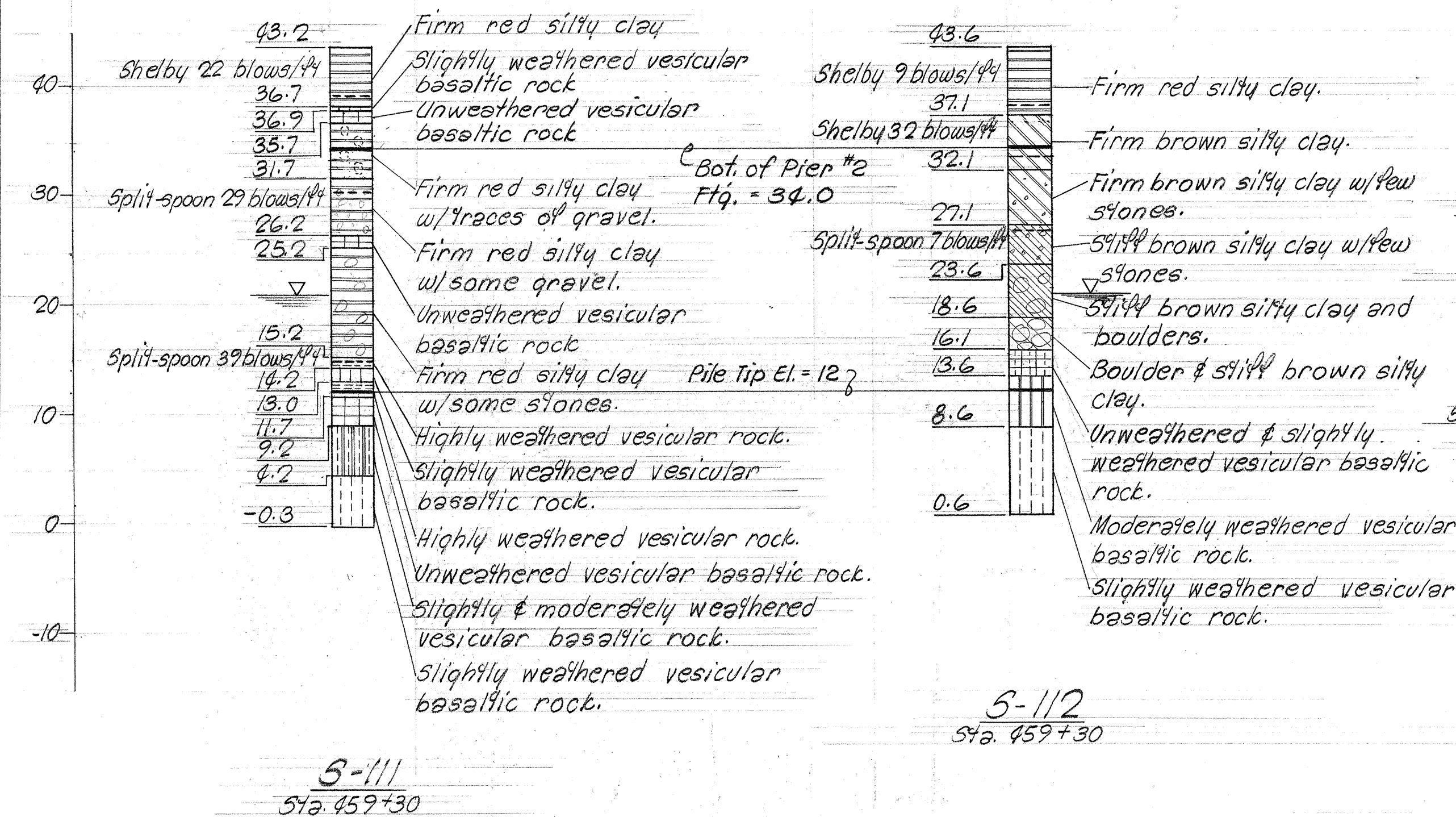
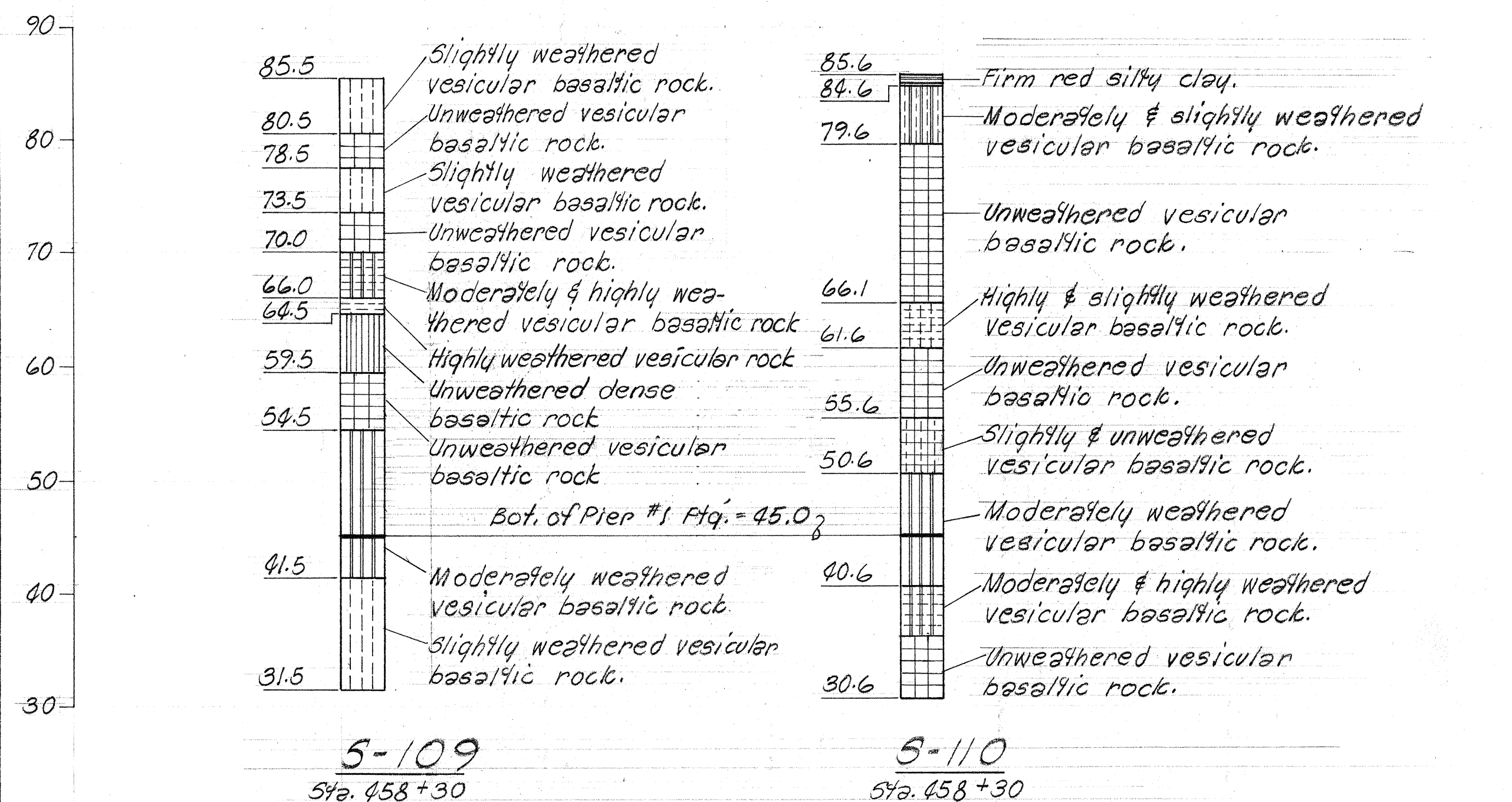
DATE: _____
SURVEYED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NOTE BOOK: _____
No. _____

POST-TENSIONED BOX GIRDER DECK TO PRESTR. GIRDER DECK CONNECTIONS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(75):8	1969	108	181

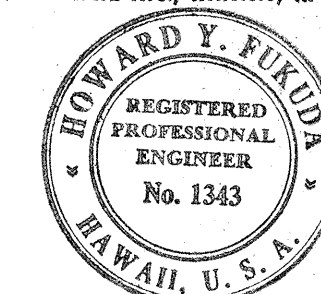


BORING PLOT PLAN
Scale: 1" = 50'-0"



BORING LOGS FOR STRUCTURE 15

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STRUCTURE No. 15

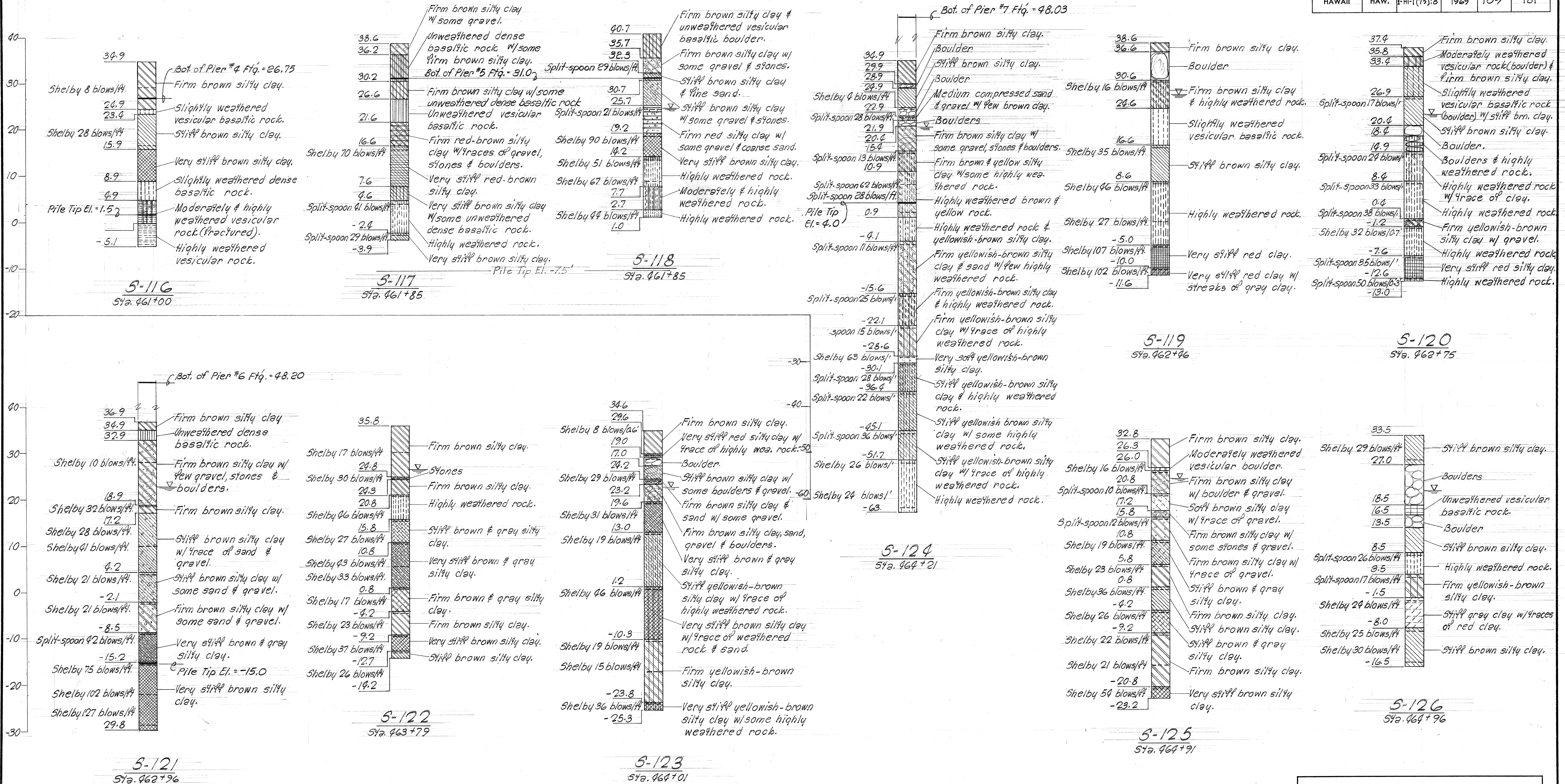
BORING LOGS

WAI'ANA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

Scale: As shown Date: JUNE, 1969

SHEET No. 19 OF 20 SHEETS

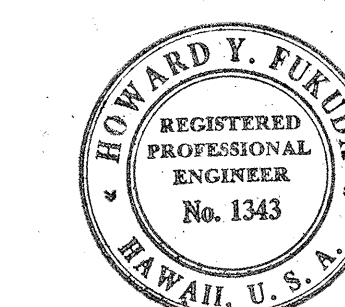
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FH-1(75):8	1969	109	181



BORING LOGS FOR STRUCTURE 15

See Sh. 19 for Boring Plot Plan.

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STRUCTURE NO. 15

BORING LOGS

WAIKAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(75):8

Scale: As shown Date: JUNE, 1969

SHEET NO. 20 OF 20 SHEETS