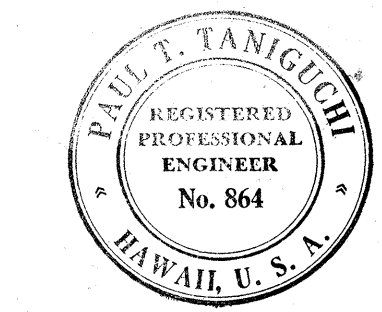
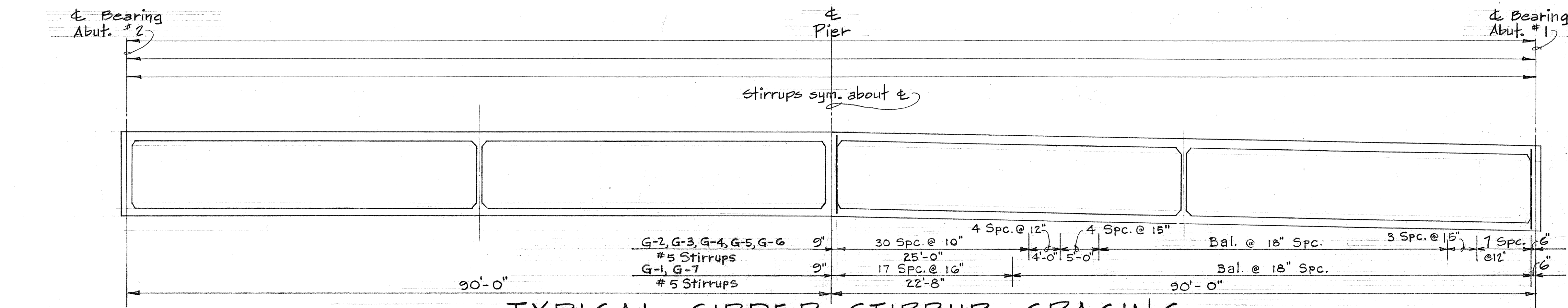
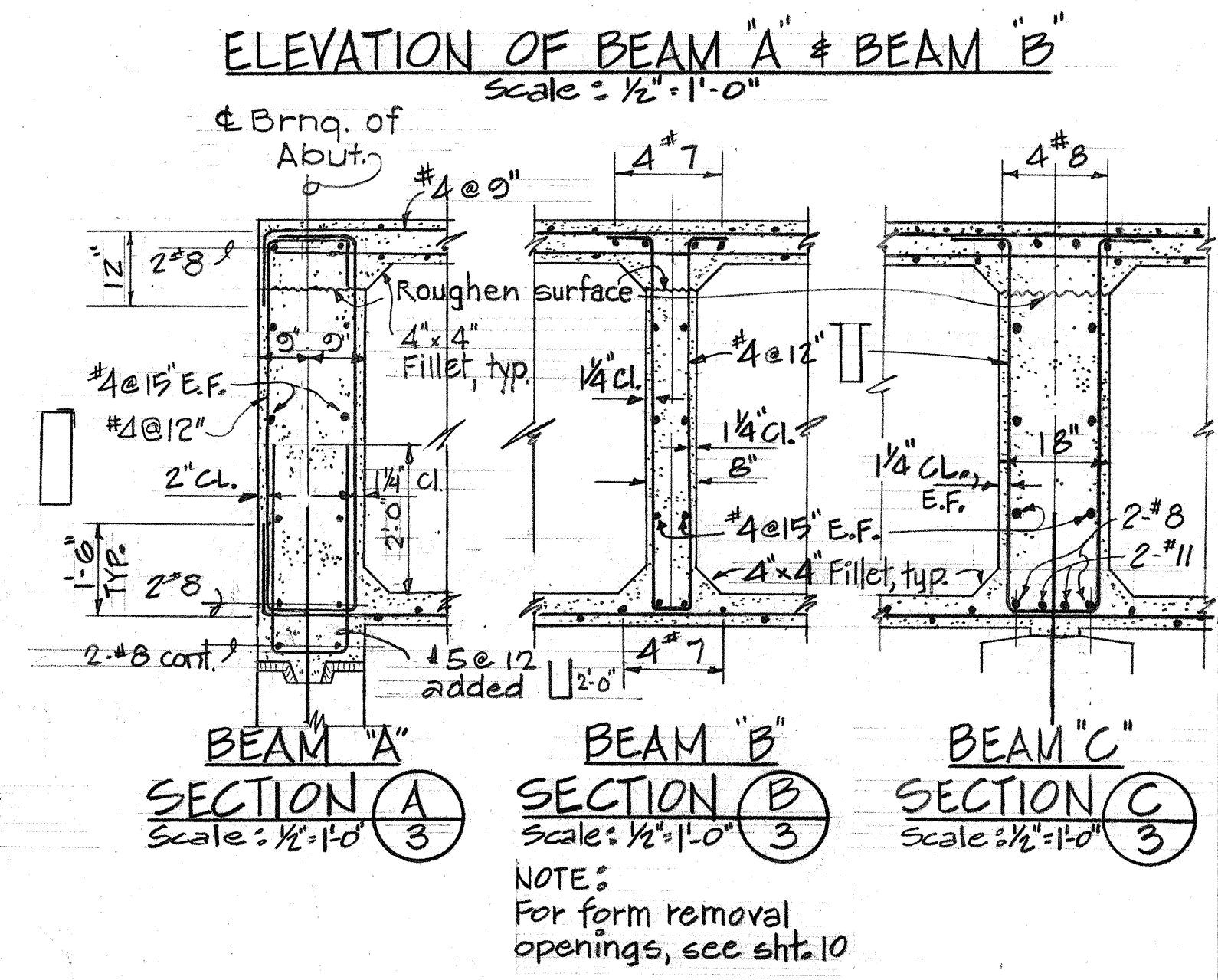
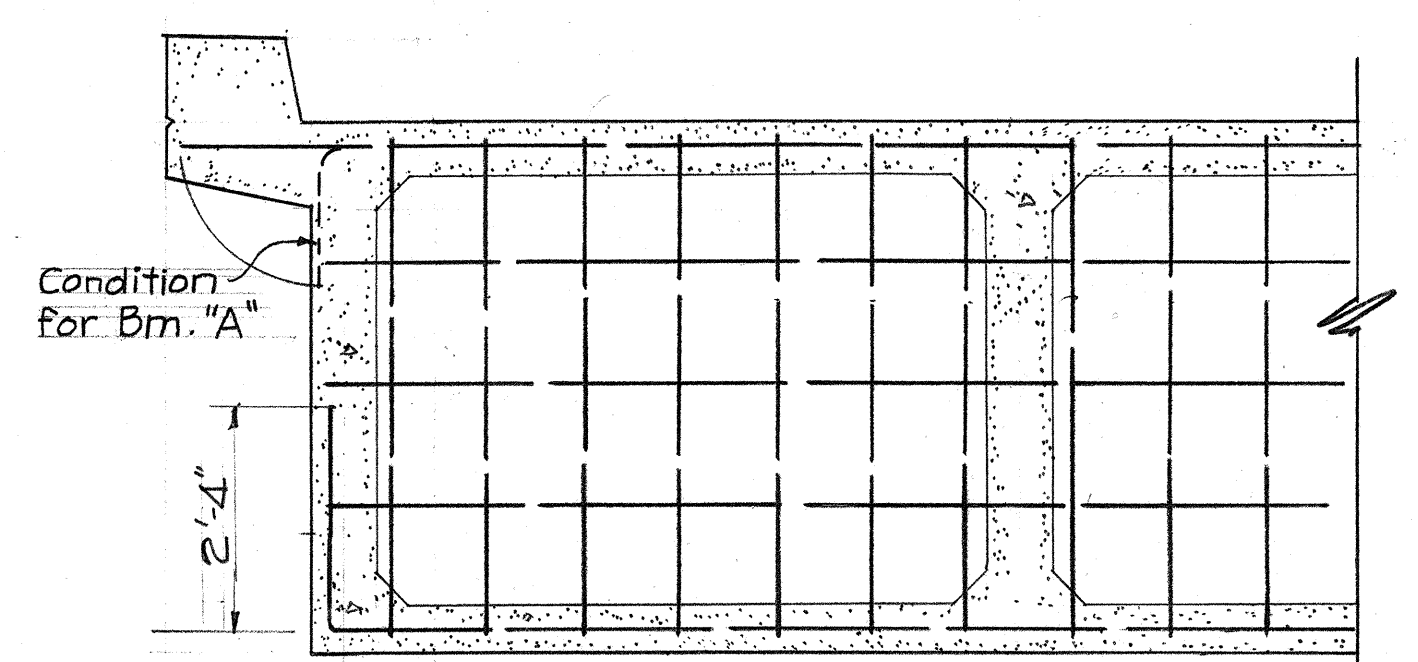
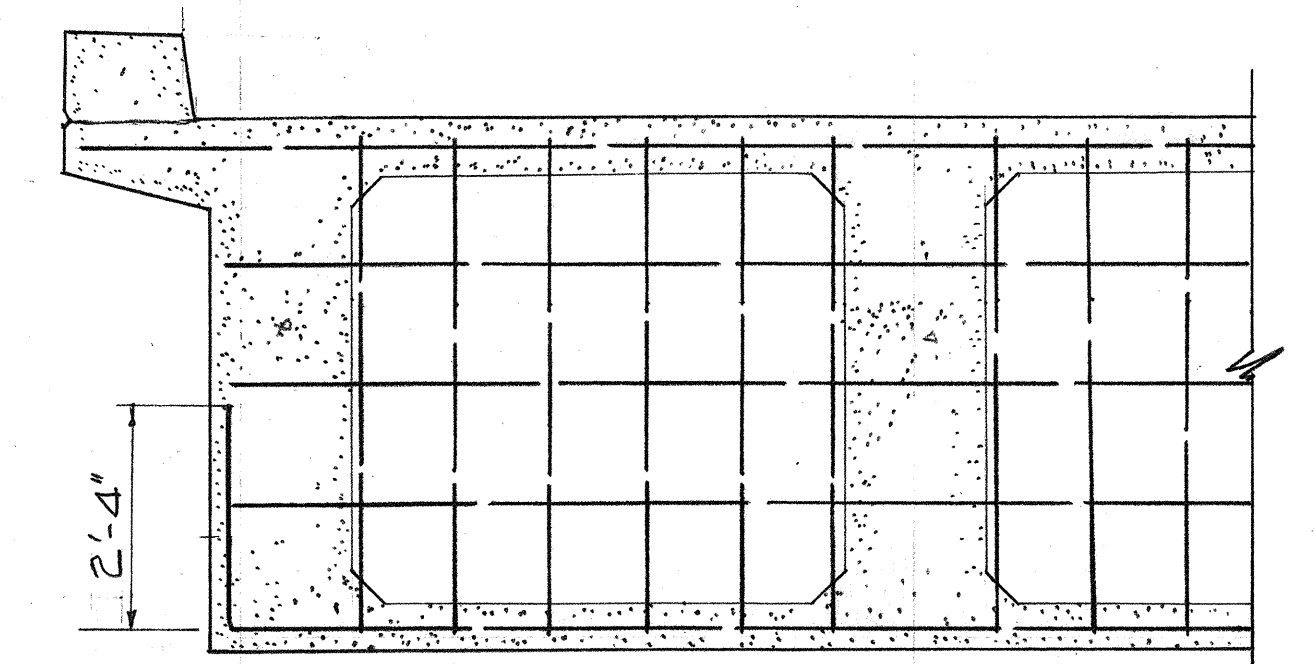
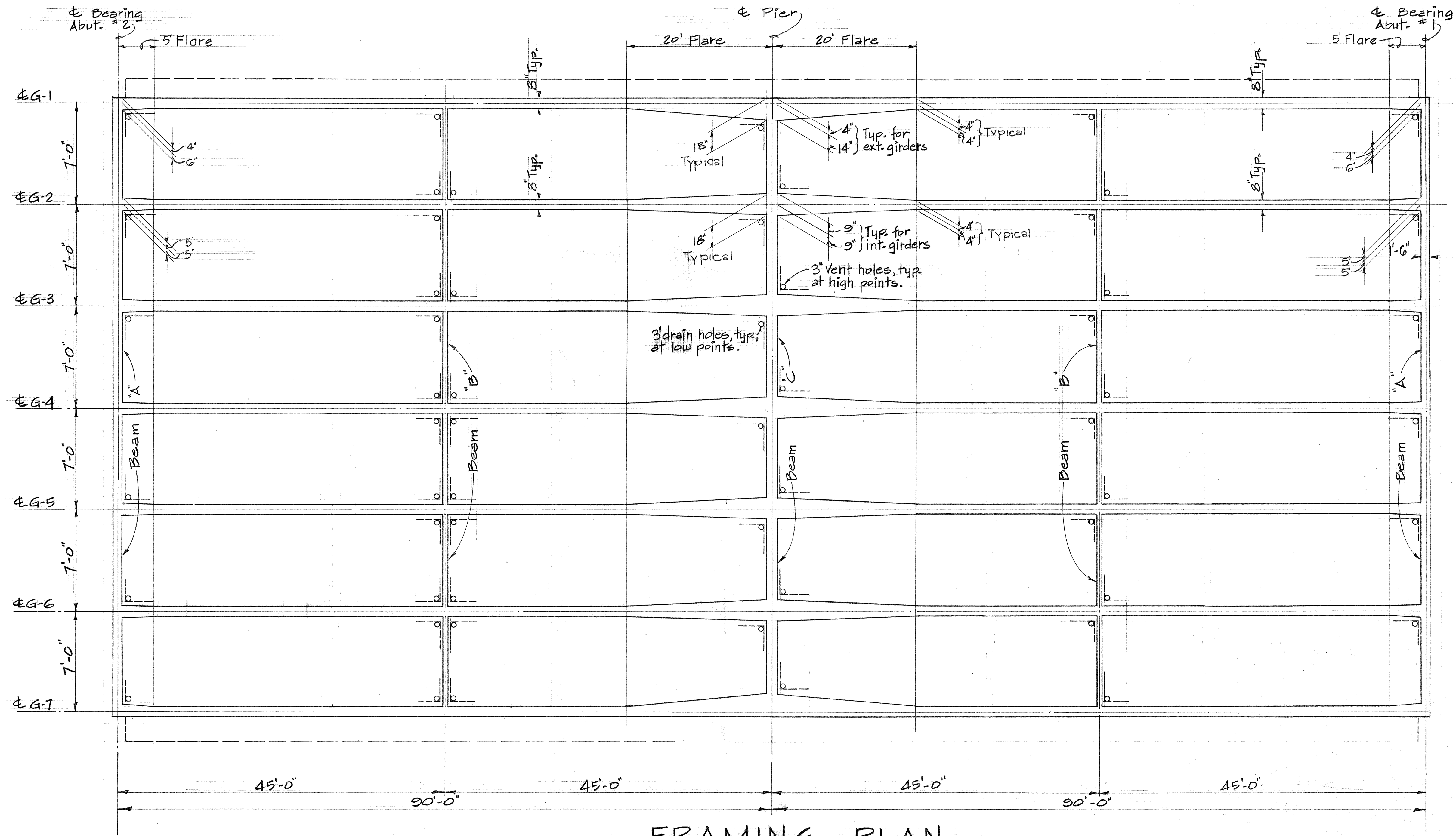


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(5)	1970	54	130



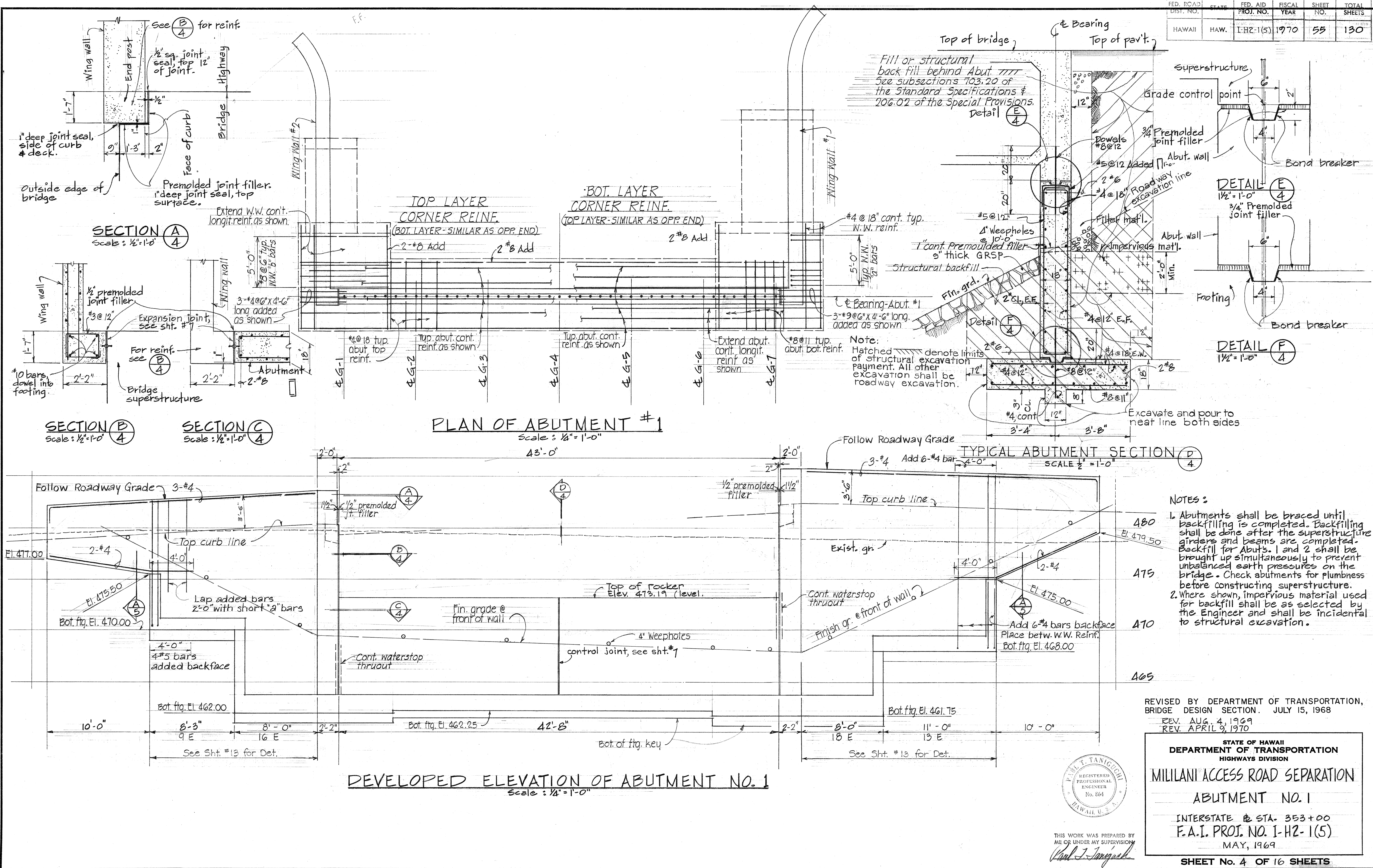
REV. AUG. 4, 1969 REV. APRIL 9, 1970
REVISED BY DEPARTMENT OF TRANSPORTATION,
BRIDGE DESIGN SECTION. JULY 15, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
MILILANI ACCESS ROAD SEPARATION
GIRDER & BEAM DETAILS
INTERSTATE @ STA. 353+00
F.A.I. PROJ. NO. I-H2-1(5)
MAY, 1969
SHEET No. 3 OF 16 SHEETS

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
Paul T. Taniguchi

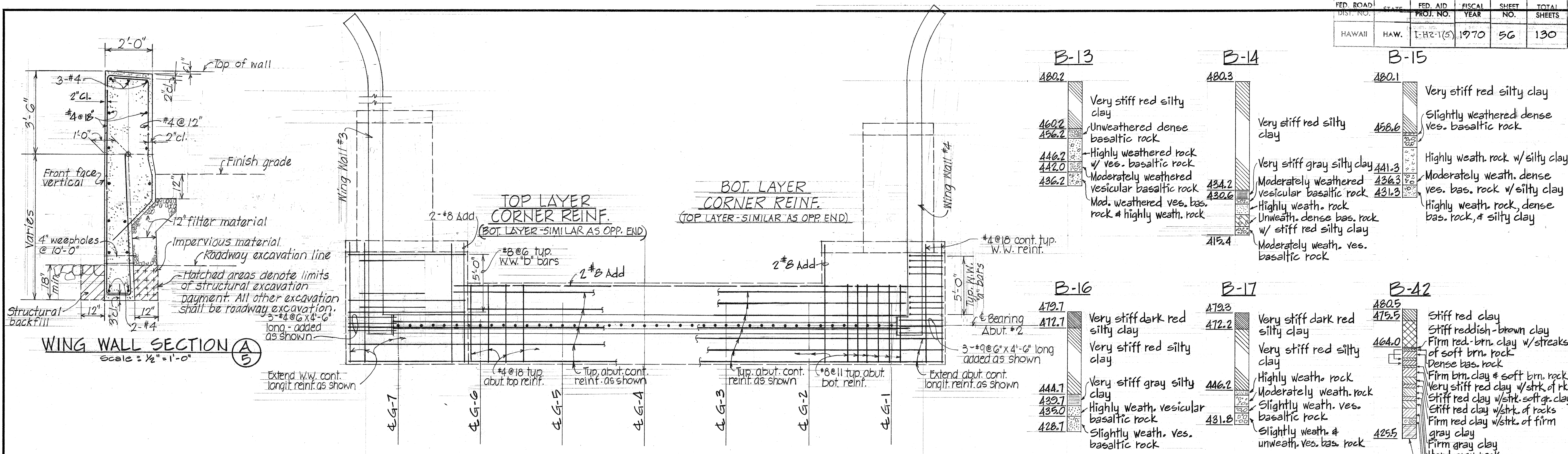
DATE	
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL	
PLAN	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HZ-1(5)	1970	55	130

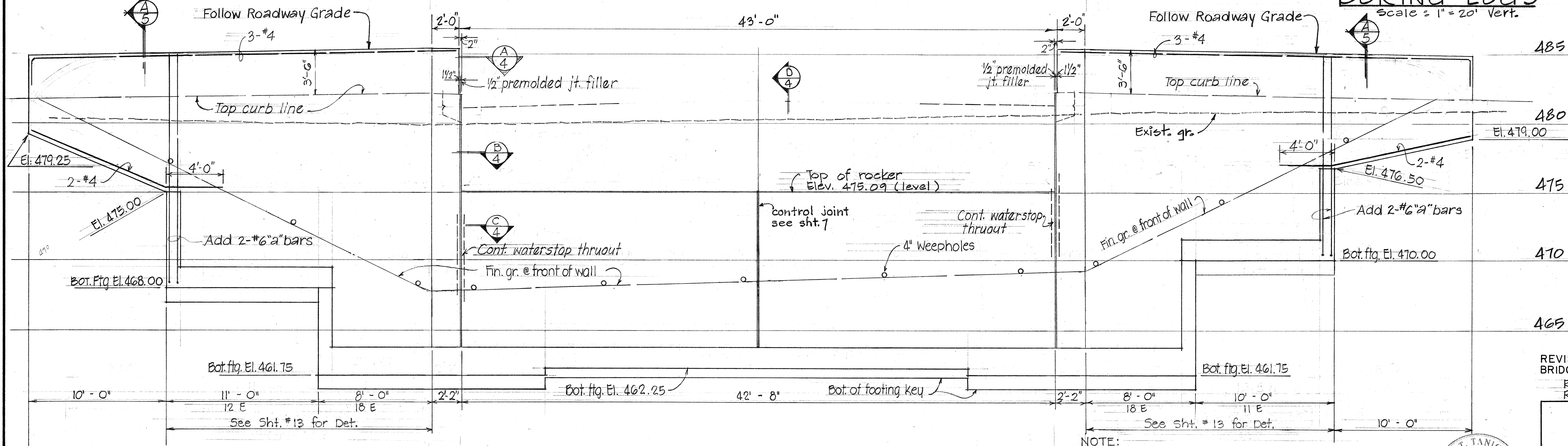


SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

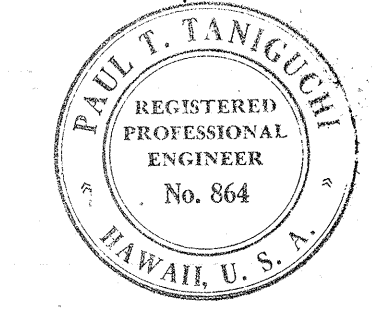
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(5)	1970	56	130



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



NOTE:
1. Notes on sheet #4 shall also apply to Abutment #2



REVISED BY DEPARTMENT OF TRANSPORTATION, BRIDGE DESIGN SECTION. JULY 13, 1968
REV. AUG. 4, 1969
REV. APRIL 9, 1970

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MILILANI ACCESS ROAD SEPARATION

ABUTMENT NO. 2

INTERSTATE STA. 353+00
F.A.I. PROJ. NO. I-H2-1(5)
MAY, 1969

SHEET No. 5 OF 16 SHEETS

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
NOTED BY	_____
CHECKED BY	_____
NO.	_____

Technical drawing of a rectangular structure, likely a bridge or pier, showing a top view. The structure is 45'-0" long and 4'-0" wide. It is divided into seven vertical sections labeled G-1 through G-7. The drawing includes a central longitudinal line, a dashed line, and a series of dots. Dimensions are provided for the width (4'-0"), length (45'-0"), and offsets (8" and 4") at the ends. A 4" offset is also shown at the bottom right corner.

Smooth finish coat of bond breaking material between box girder & concrete seat.

HAWAII HAW. I-H2-1(S) 1970 57 130

3 1/4" Varies 3 1/4" 3 1/4" Set of 3-#4 Ties 20 #11 Vertical Bars 20 #11 Dowels.

Level

20" 1 1/2' Cl. 2" 10" 2" 6" #11 @ 12" 2-#11 Top & Bottom. Elev. control point Beam "C" Bottom slab of superstructure #8 @ 6" 4#B Elev. control point #4 Cl. ties @ 12"

SECTION A

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

[illegible]

able #5 stirrup
cing
v. 475.32
v. 474.90

4'-0"

Level Line

Detail (B)

2'-0"

6'-6"

3" (typ)

3 sets of extr ties @ 3" o.c.

3/4

12

3/4

12

12" typ

4'-0"

1 1/2" x flash all

Front & Sect. (A)

Top seat to receive a hard trowel finish thruout.

4'-0"

3"

8 #11

4 #4

4 #4

Double #5 stirrups

4 #11

6'-6"

3 Equal Spaces

3"

Varies

3"

4'-0"

14 #11

Double #5 stirrups

4 #4, Cont.

4 #4, Cont.

Hand-drawn cross-section diagram of a pile cap. The cap is 14'-0" wide and 3'-0" high. It contains 26 #11 top bars and 13 #4 bottom bars. The bottom bars are spaced at 2'-0", 3'-0", 5'-0", and 2'-0" from the left edge. A note indicates #4 bars on each side of the cap pile.

SECTION F
6



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

Paul J. Tancig, Jr.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-12-1(5)	1970	58	130

REVISION

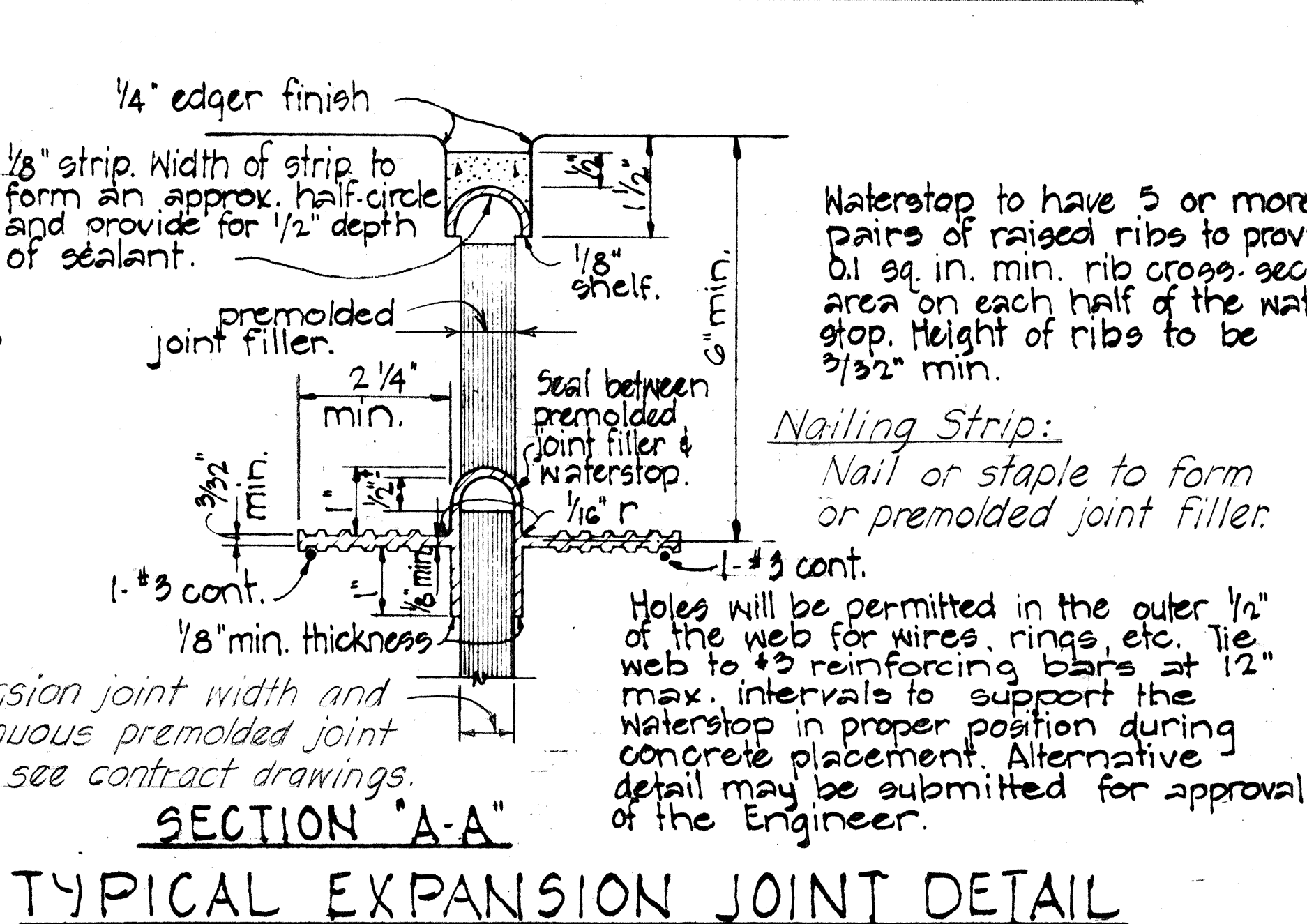
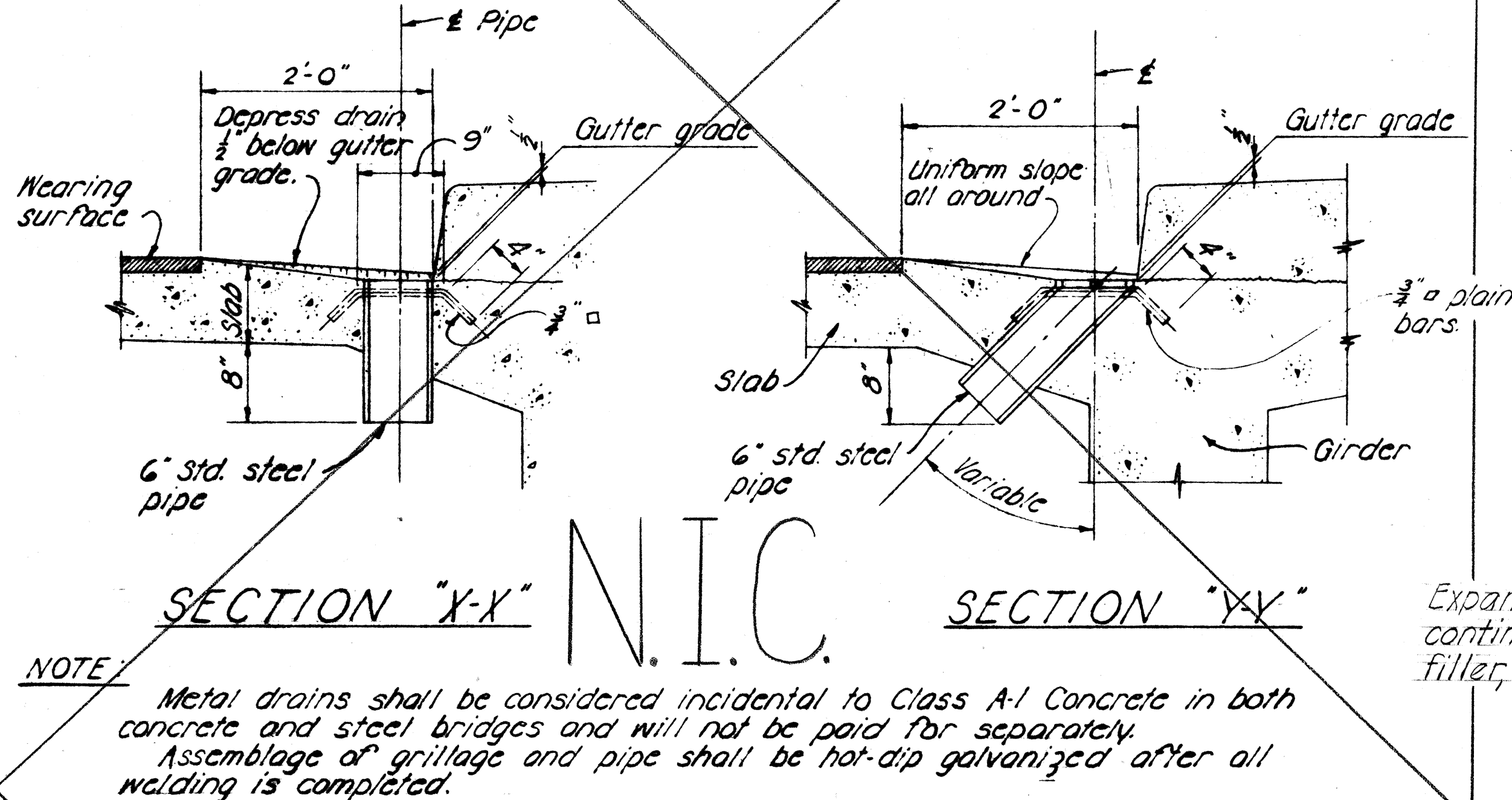
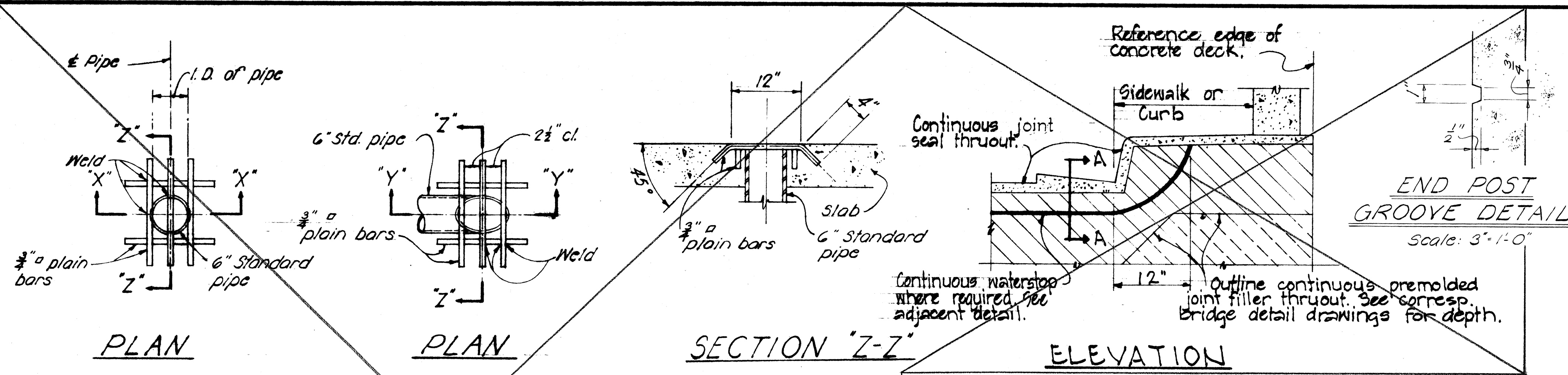
Jan. '67
Feb. '67
Apr. '67
June '68
Apr. '69
May '69

GENERAL NOTES

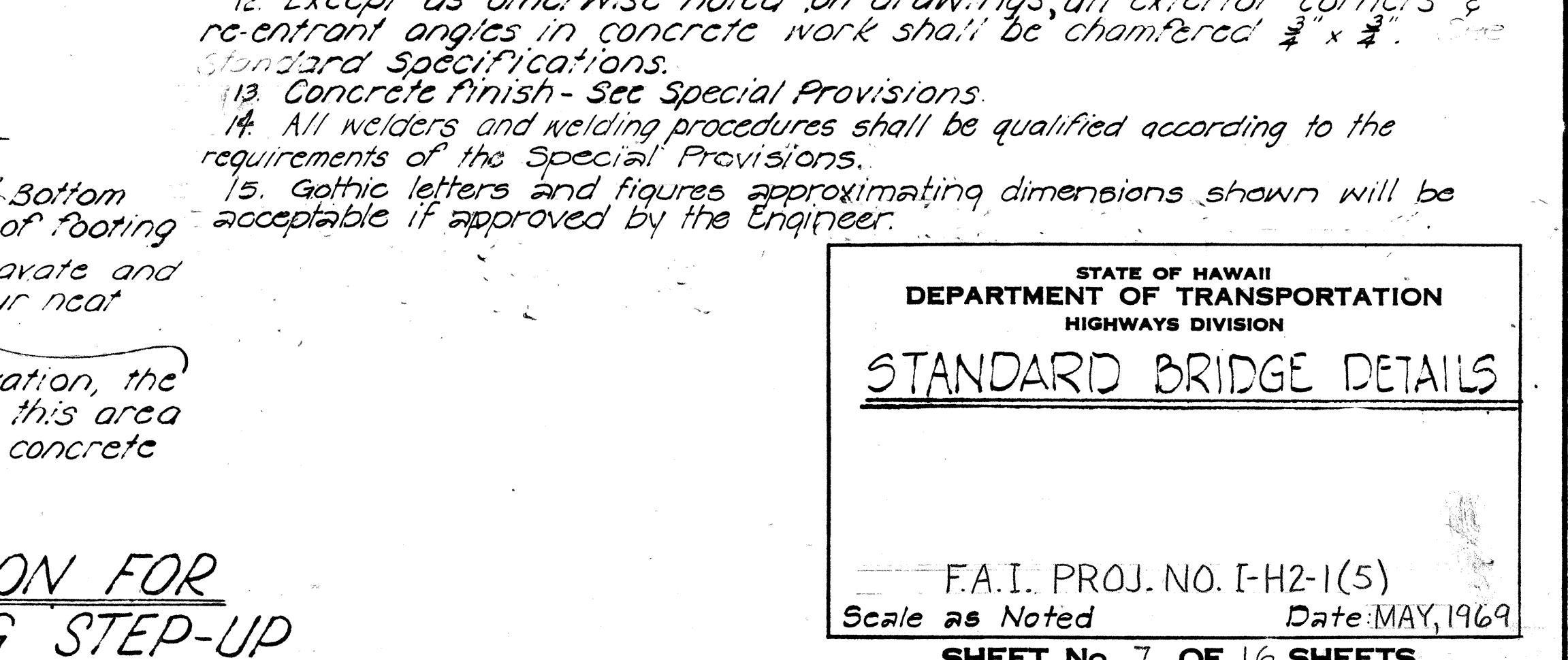
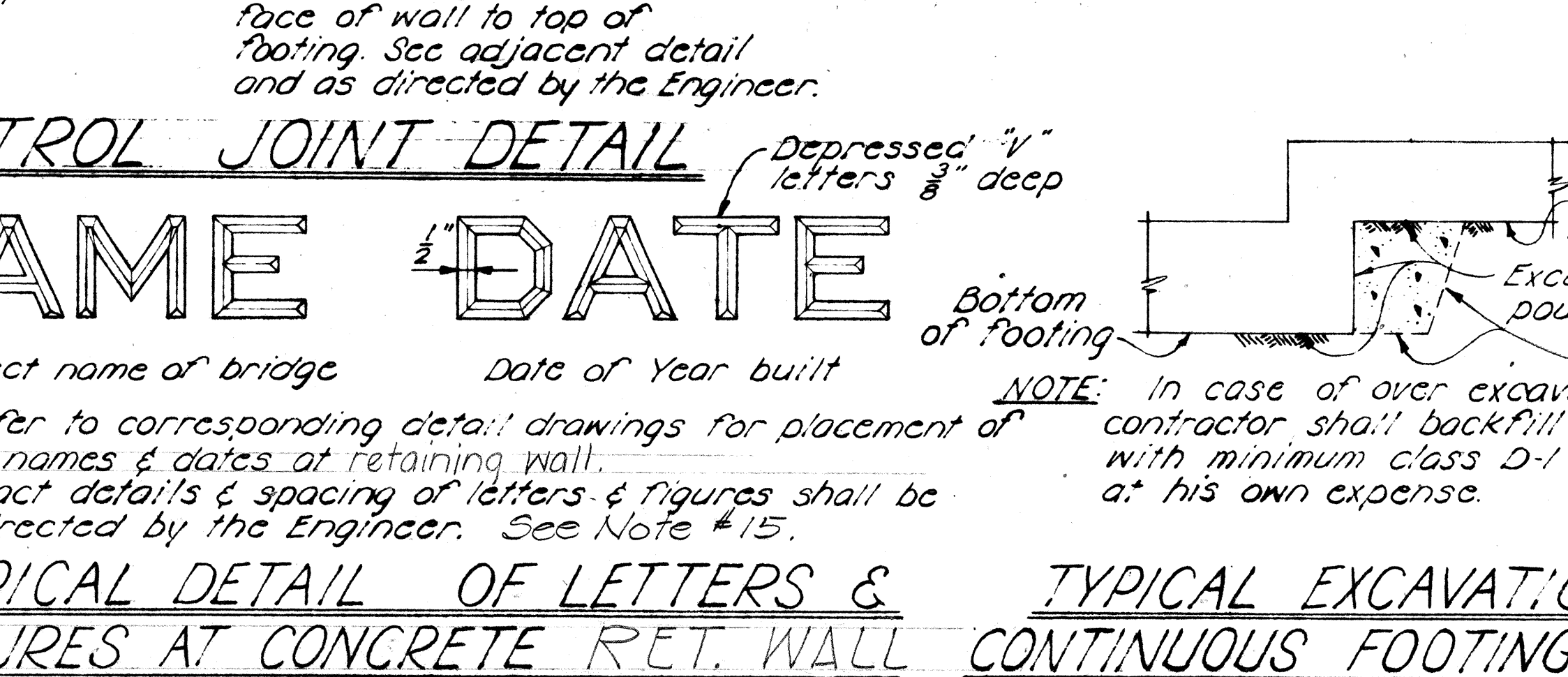
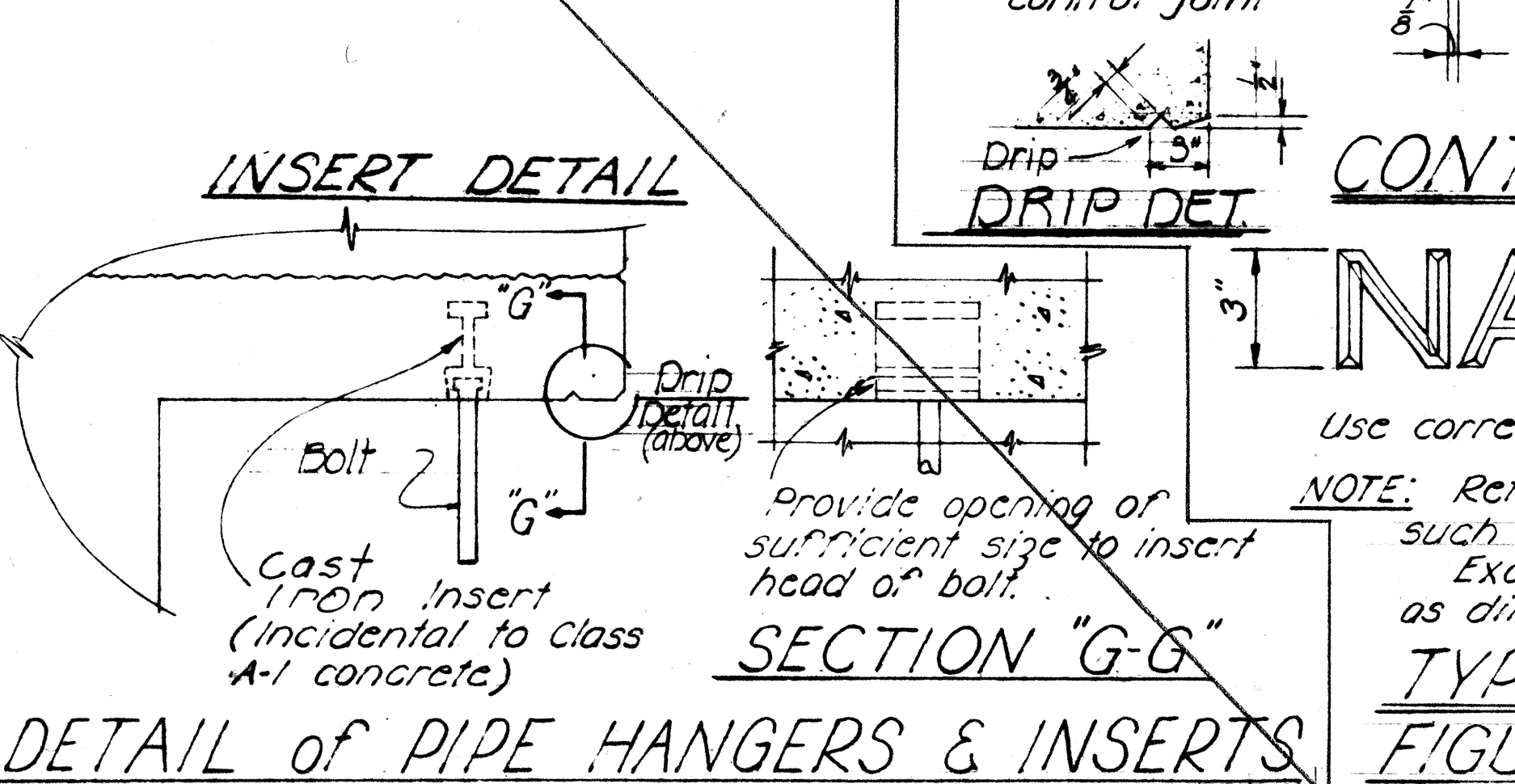
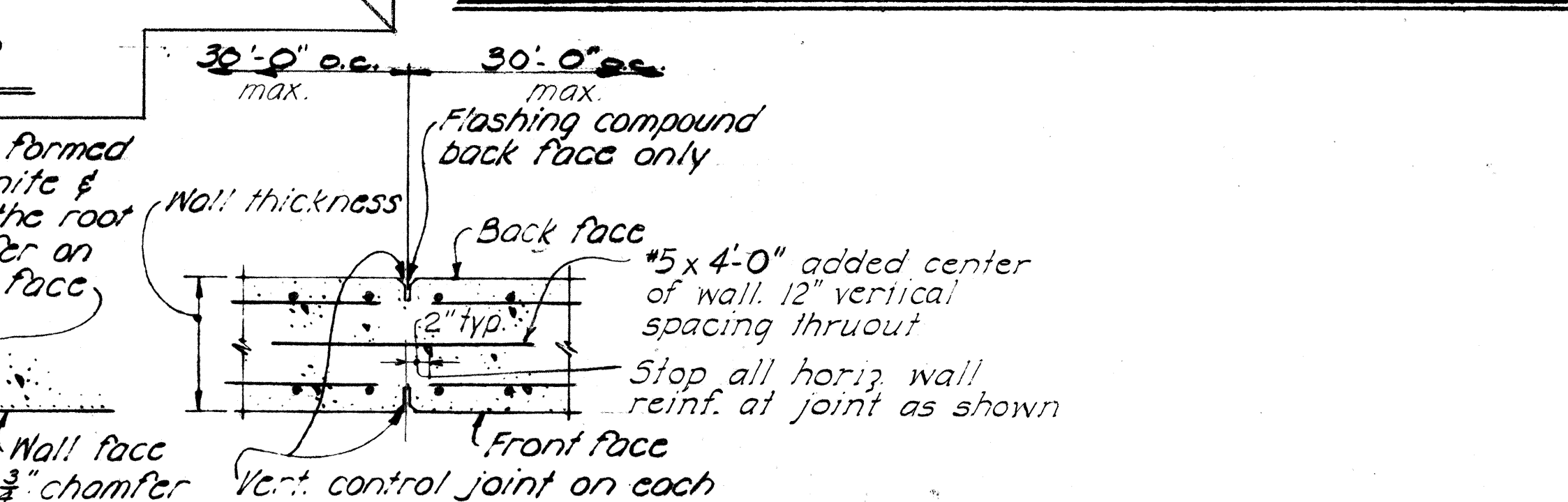
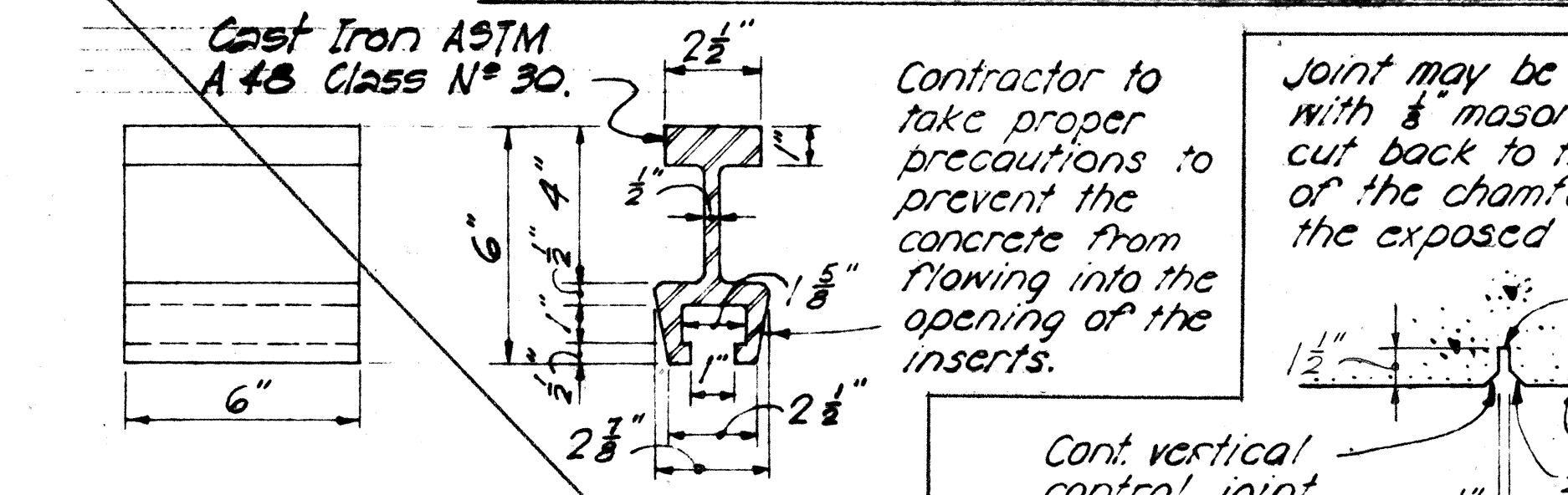
Elastometric Pads: Top & bottom of bridge bearing pads shall be secured against displacement with adhesives approved by the Engineer. Pads shall be incidental to concrete and will not be paid for separately.

- The Contractor shall verify the location of all existing utility lines and notify the respective owners before commencing work of excavation.
- All concrete shall be Class A unless otherwise noted.
- Clearance for reinforcing bars shall be as follows, unless otherwise noted:
 - 1" For stirrups of beams & pier caps.
 - 2" For ties of columns.
 - 2" For formed walls.
 - 3" For footings.
- Concrete seats receiving steel plates, lead plates or neoprene pads shall be poured monolithically with supporting structures & top surfaces of the concrete seats shall be finished with a steel trowel to a smooth level at the elevation shown on the plans.
- Reinforcing shall be detailed in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Highway Structures unless otherwise noted.
- Reinforcing bars shall be securely tied at all intersections & lap splices & shall be held in place during pouring to maintain their proper locations as shown on plans.
- Splices of reinforcing - See Special Provisions.

- Minimum spacing between parallel bars shall be $2\frac{1}{2}$ times the diameter of bars, but in no case shall the clear distance between the bars be less than $\frac{1}{2}$ times the maximum size of the coarse aggregate.
- All dimensions relating to reinforcing are to centers of bars unless otherwise noted.
- Forms for all exposed surfaces of separation structures and surfaces of retaining walls visible from a traveled way or from a populated area shall be plywood except that metal forms may be permitted provided a surface finish satisfactory to the Engineer can be obtained and the use of such forms is approved in writing by the Engineer. Forms for round columns shall be made of materials that will give a smooth finish and true dimensions as given in the plans. Forms for prestressed concrete members shall be either metal or plywood.
- Vertical column bars shall be arranged in such a manner as to miss pier cap bars above as directed by the Engineer.
- Except as otherwise noted on drawings, all exterior corners & re-entrant angles in concrete work shall be chamfered $\frac{3}{4} \times \frac{3}{4}$.
- Concrete Finish - See Special Provisions.
- All welders and welding procedures shall be qualified according to the requirements of the Special Provisions.
- Gothic letters and figures approximating dimensions shown will be acceptable if approved by the Engineer.



TYPICAL DRAINAGE DETAILS



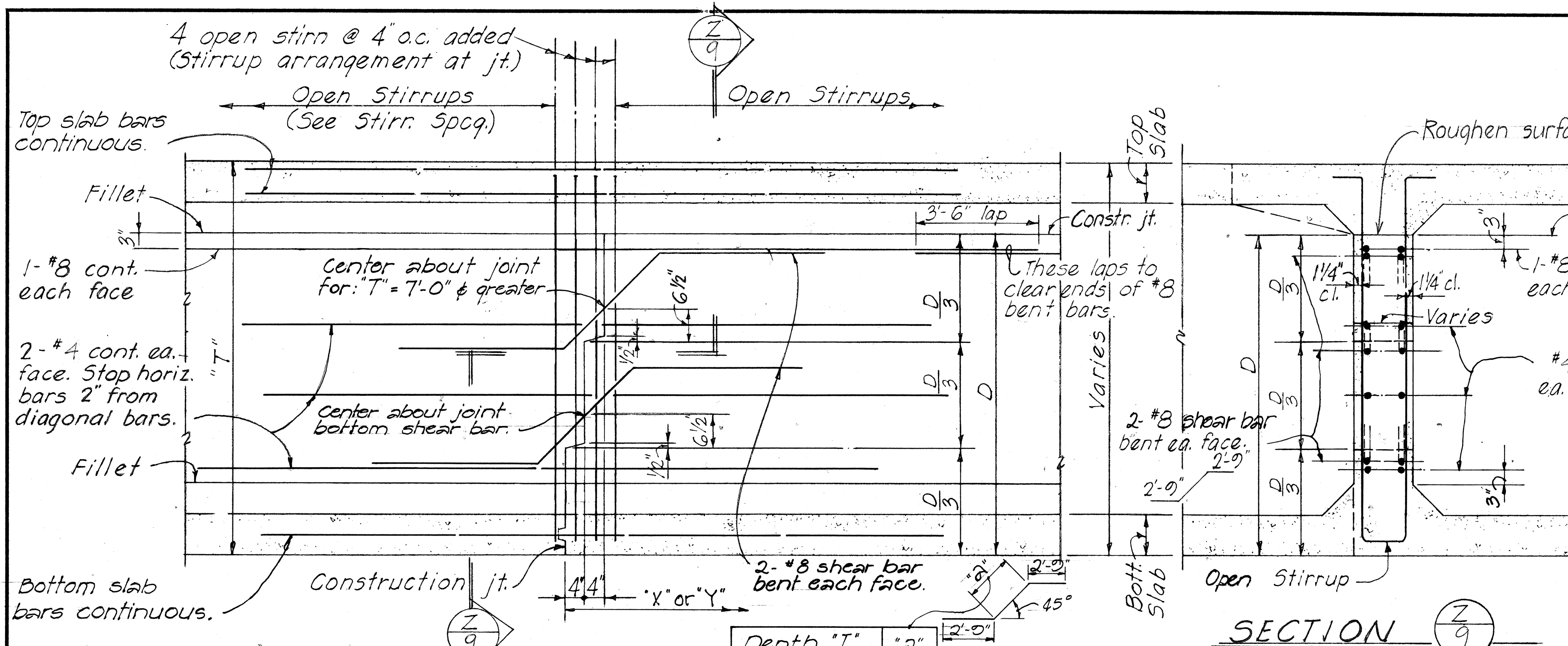
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD BRIDGE DETAILS

F.A.I. PROJ. NO. I-12-1(5)
Scale as Noted Date: MAY, 1969
SHEET No. 7 OF 16 SHEETS

REVISION
27 MAR 67
June 67

July 1967

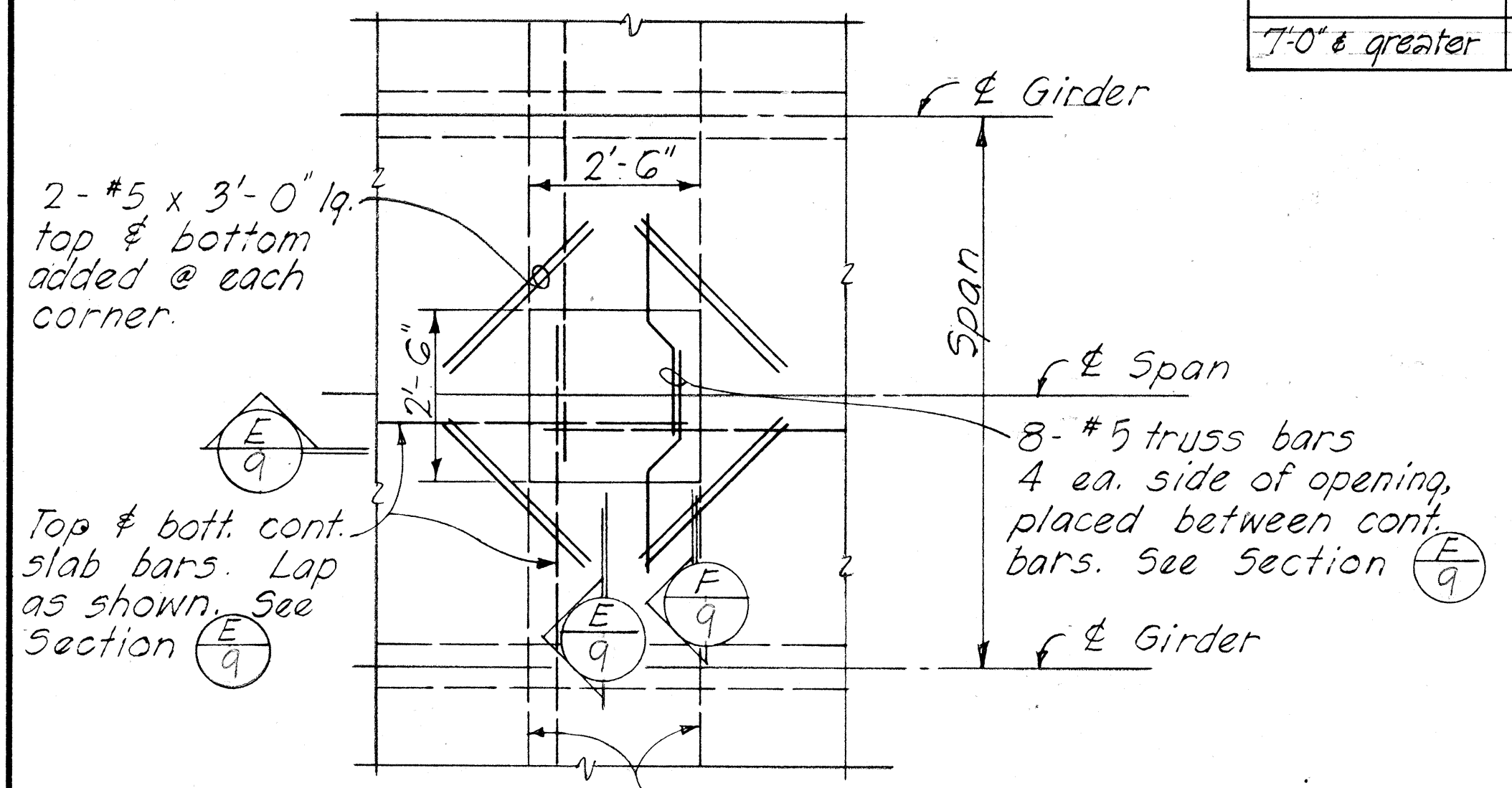


NOTE:
 D = Depth of girder stem to bottom of slab.
 S = Distance between top & bott. cont. girder stem longitudinal bars.
 For additional details see Normal Section of the Plans.

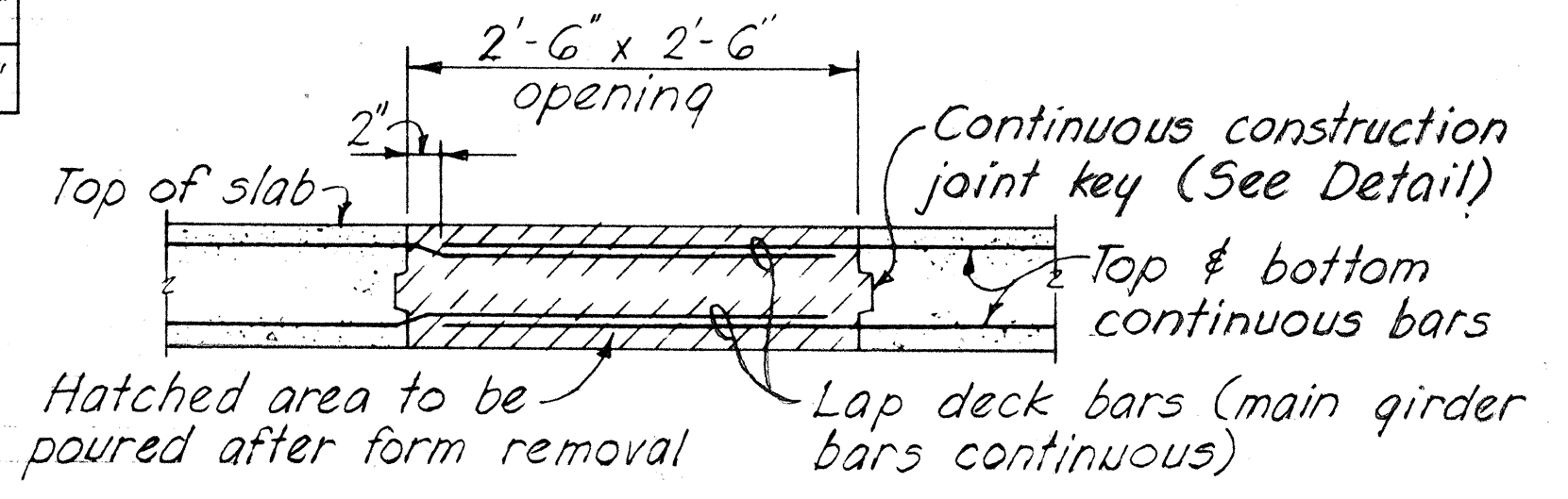
GIRDER STEM CONSTRUCTION JOINT

Depth "T"	"a"
4'-11" & smaller	1'-0"
5'-0" to 5'-11"	2'-0"
6'-0" to 6'-11"	2'-3"
7'-0" & greater	3'-0"

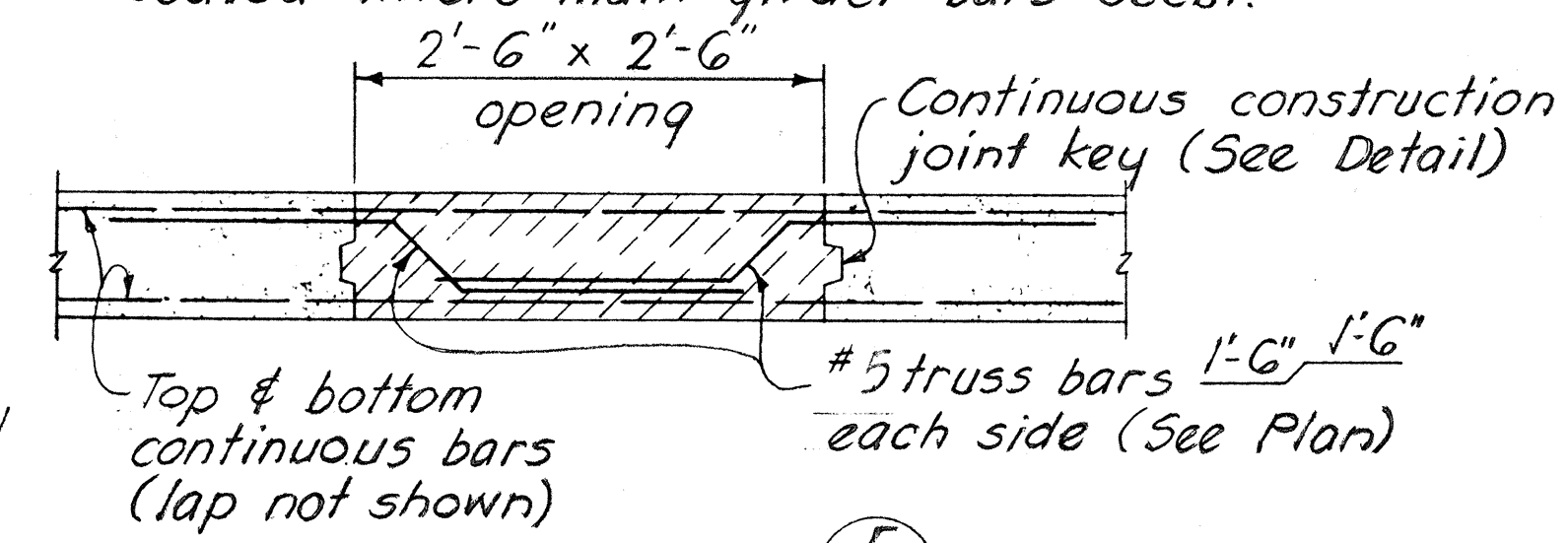
NOTE: D = Depth of girder stem to bott. of slab.



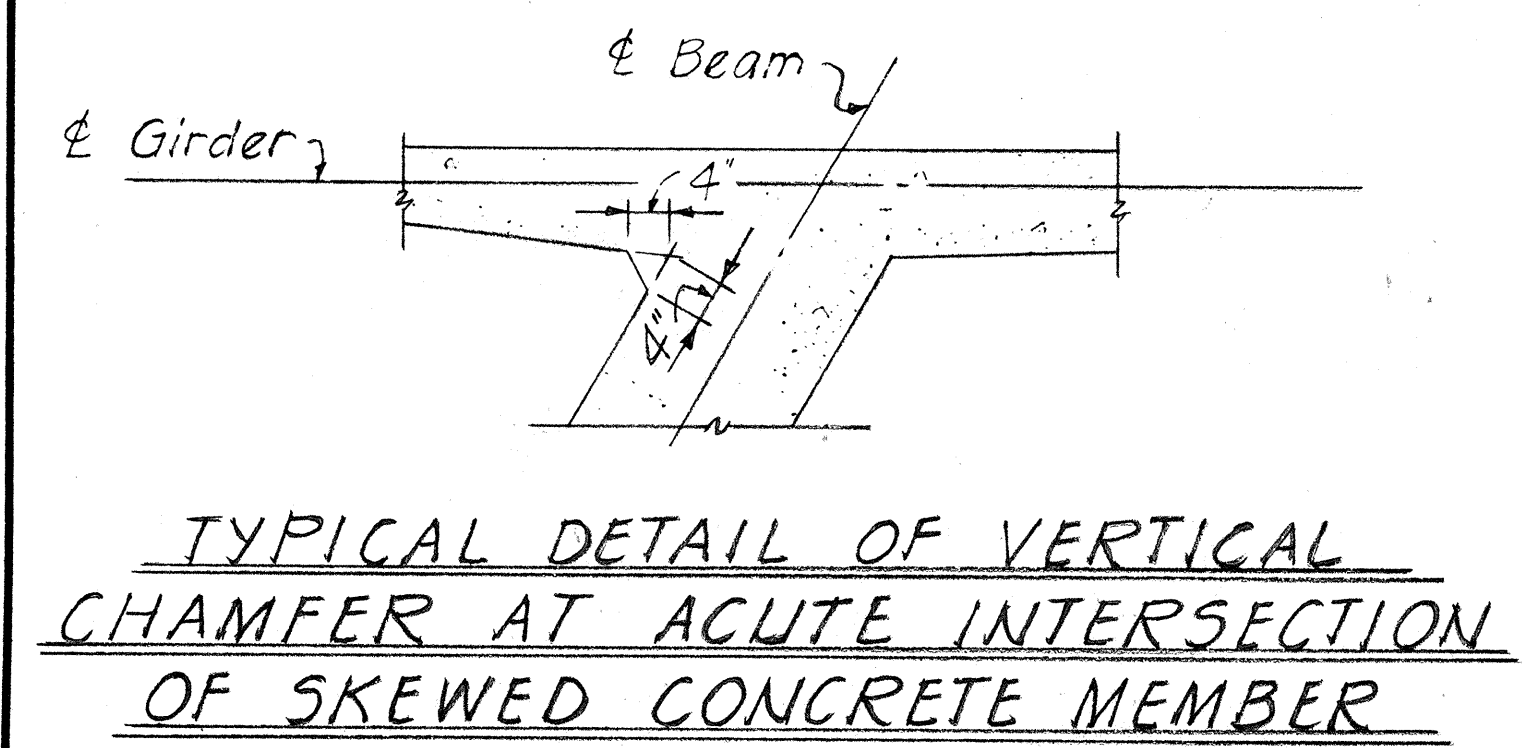
Note: Final location of opening shall be determined by the Engineer. Form removal opening may extend from edge of deck to edge of deck with approval of the Engineer. Lap small longitudinal deck bars as shown on Section E-9.



Note: Form removal opening at top slab shall not be located where main girder bars occur.



**PART PLAN - DECK
 SHOWING FORM REMOVAL OPENING**



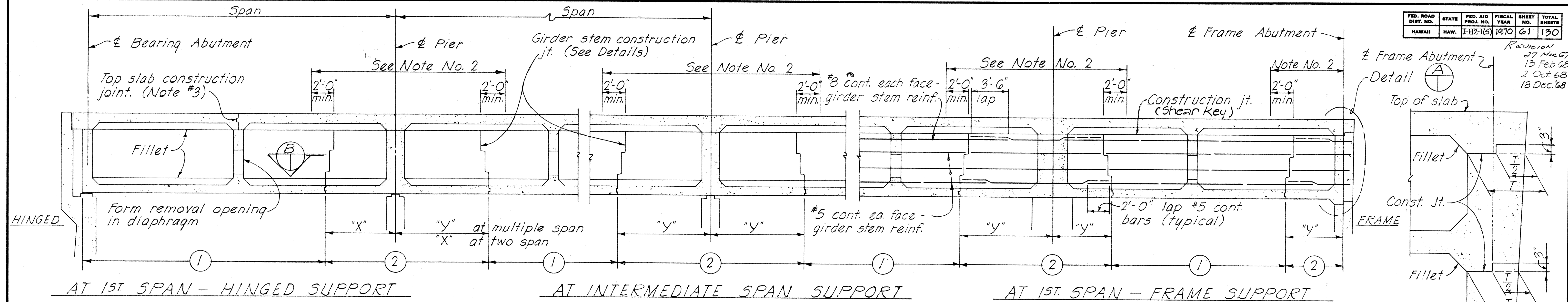
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**STANDARD DETAILS
 CONCRETE BOX GIRDER**

FA.I PROJ. NO. I-H2-1(5)
 SCALE AS NOTED DATE: MAY 1969
 SHEET No. 9 OF 16 SHEETS

DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 ORIGINAL PLAN: _____
 NOTE BOOK: _____

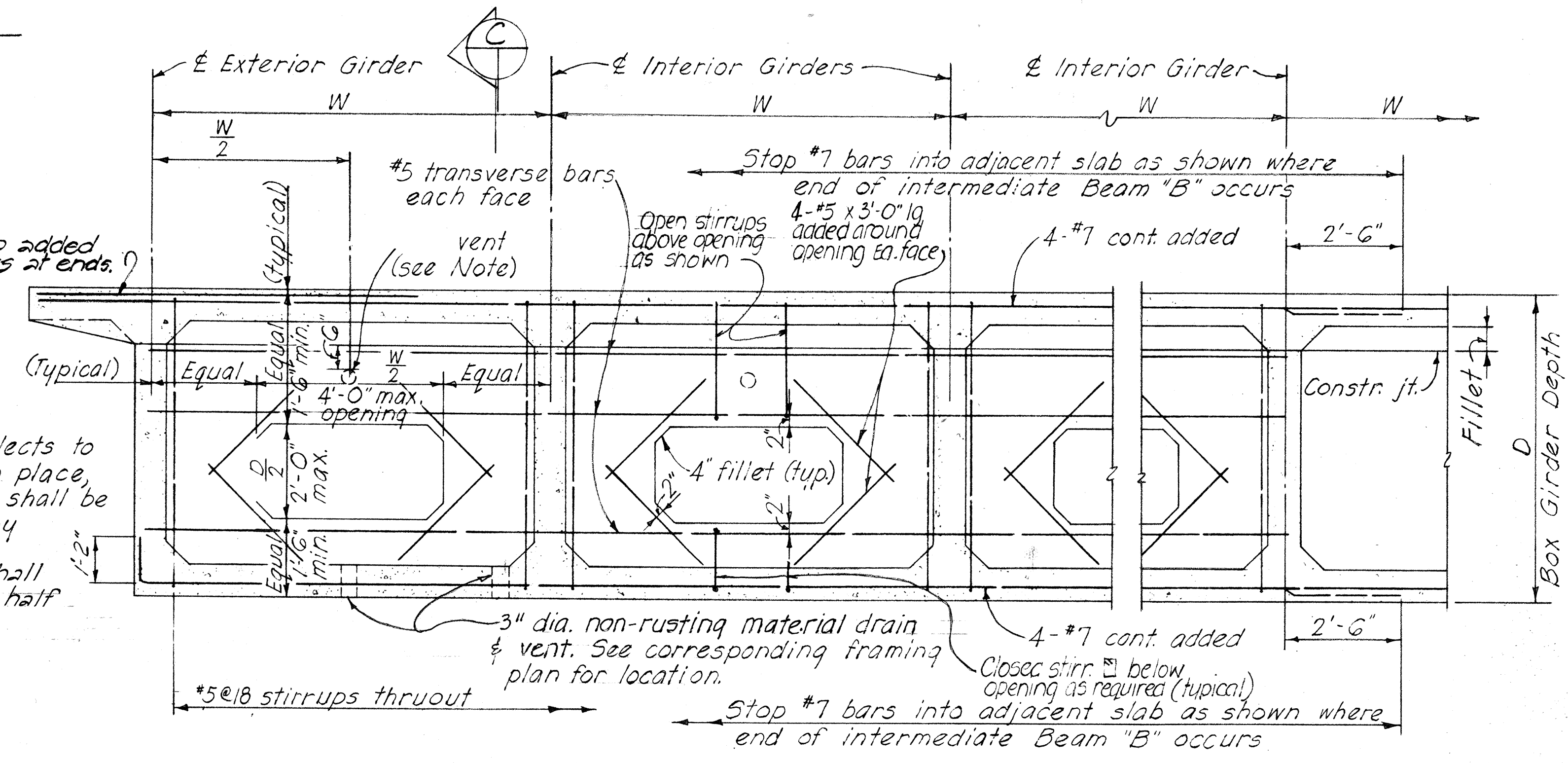
Revision:
27 Mar 67
13 Feb 68
2 Oct 68
18 Dec 68



NOTE:

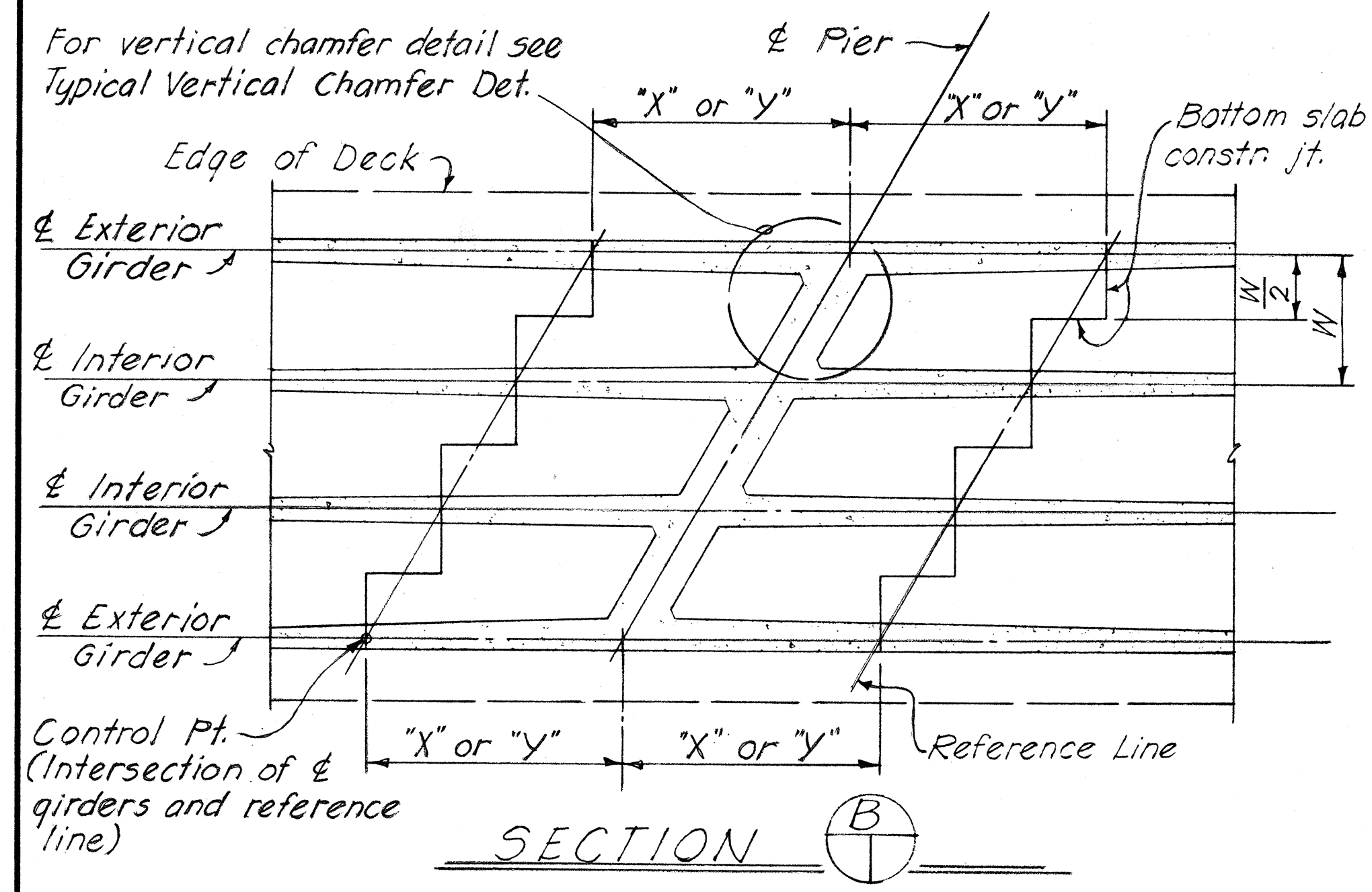
- No. 1 - Numbers ① & ② indicate sequence of placing bottom slab & girder stem concrete. ② may be placed with ① when approved by the Engineer provided that the ① sections adjoining the ② sections are placed in this pour. For any deviation from the above the Contractor shall submit a diagram to the Engineer for approval.
- No. 2 - No top slab construction joint or form removal opening shall be located in the region over the piers as noted, nor in the supporting section of a hinged span.
- No. 3 - When top slab is not poured continuously, and top slab forms are not removed, construction joint in top slab shall be located over an intermediate diaphragm.
- No. 4 - Top slab concrete shall be placed separately from the stem. Top slab concrete may be placed continuously or in parts as approved by the Engineer, providing pour is not in conflict with the above notes.
- No. 5 - Dimension "X" = 1/4 span. "Y" = 1/5 span.
- No. 6 - No lapping of main bars shall be permitted at construction joints.

PLACING DIAGRAM FOR SUPERSTRUCTURE CONCRETE

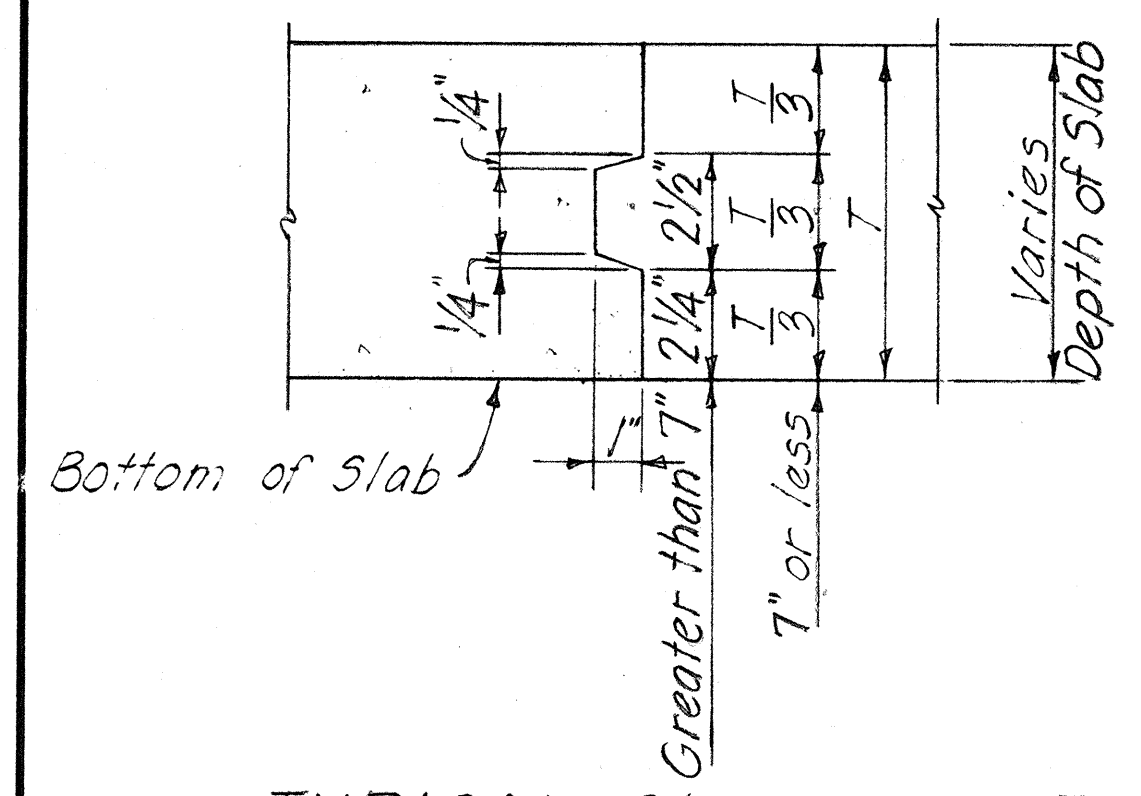


NOTE:

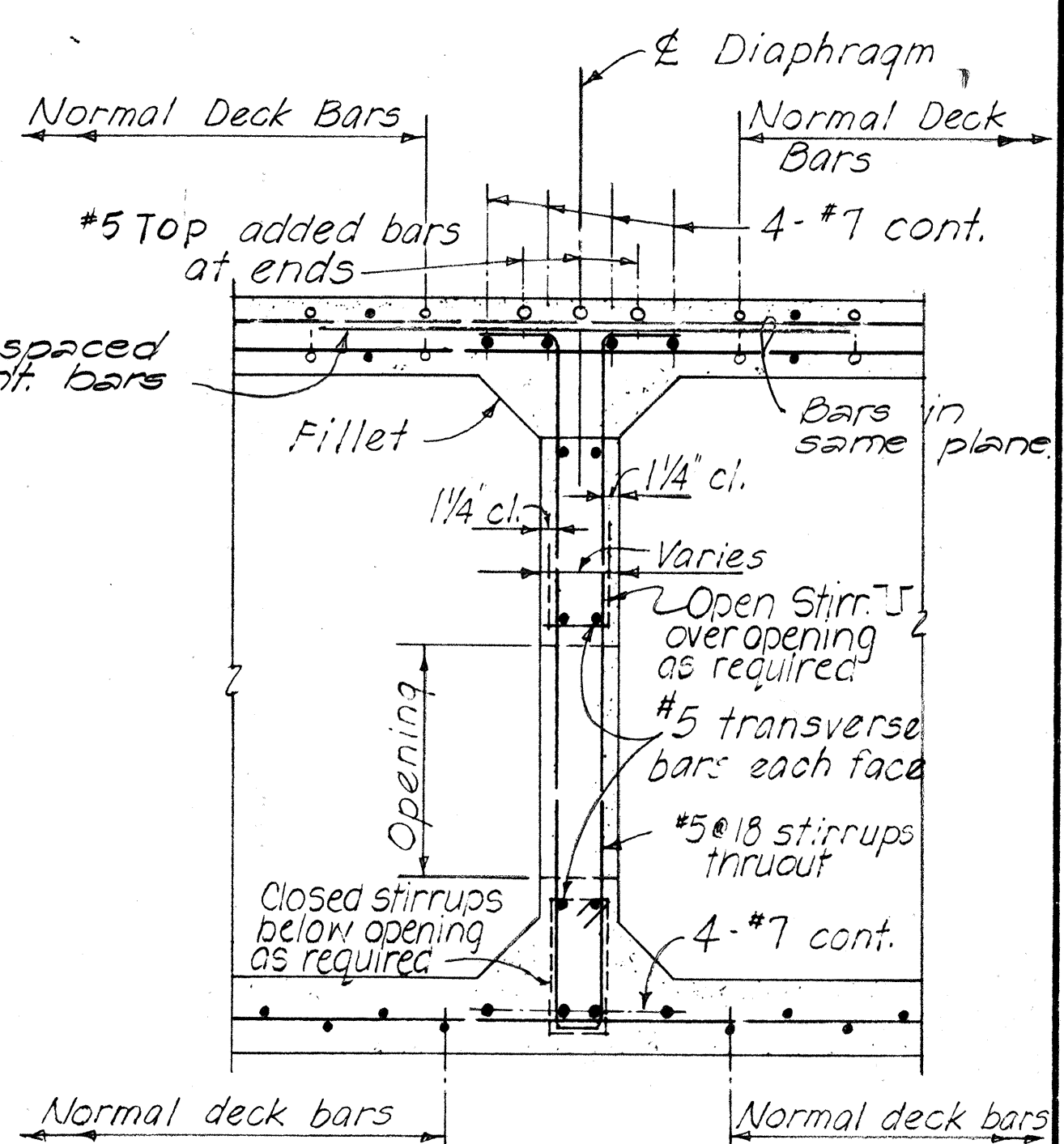
If the Contractor elects to leave top slab forms in place, form removal opening shall be omitted and replaced by 3" vent.
No vertical shoring shall be placed in the center half of top slab span W.



TREATMENT OF CONSTRUCTION JOINT BRIDGES ON SKEW



TYPICAL SLAB CONSTRUCTION JOINT DETAIL



SECTION C

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

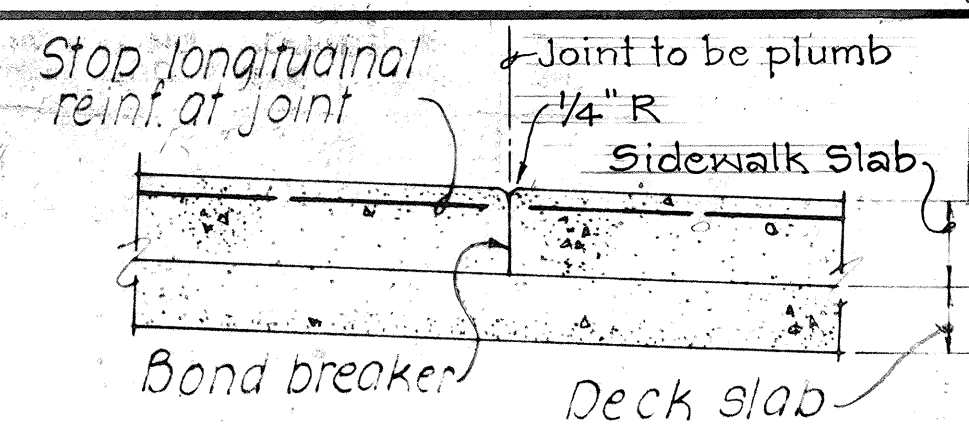
STANDARD DETAILS
CONCRETE BOX GIRDER

F.A.I. PROJ. NO. FH2-1(5)
SCALE AS NOTED DATE: MAY 1969
SHEET No. 10 OF 16 SHEETS

DATE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____
NOTED BY: _____
ORIGINAL PLAN: _____
NOTE BOOK: _____

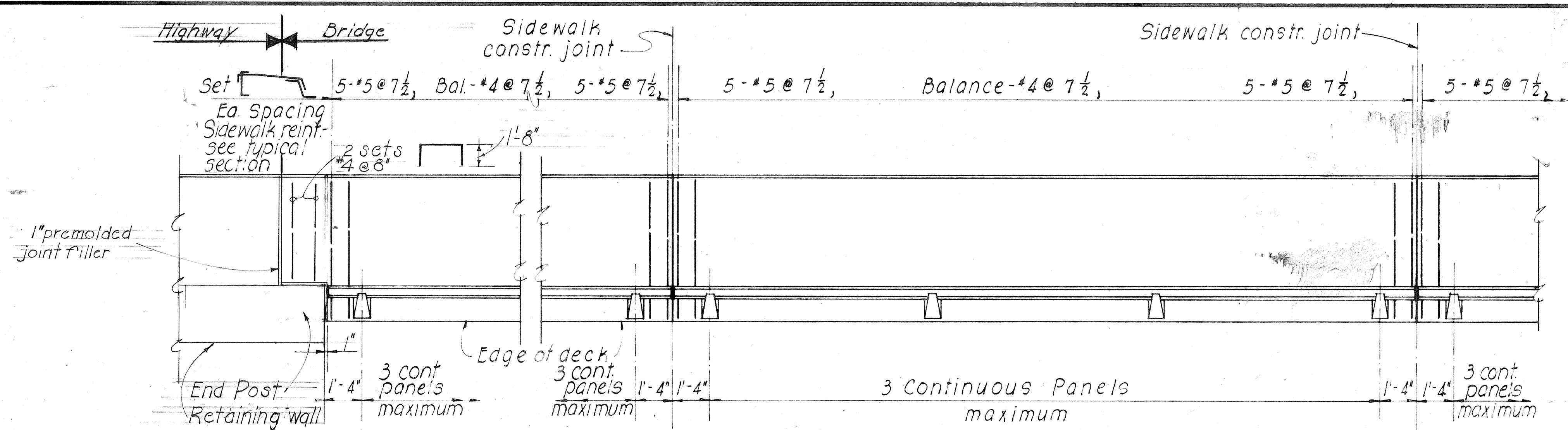
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(5)	1970	62	130

NOTE: Details shown on this sheet are standard details except for modifications as may be required for special conditions. For such conditions refer to corresponding details shown on the plans.



SIDEWALK CONSTR. JT. DETAIL

SCALE: $\frac{1}{2}" = 1'-0"$



INTERMEDIATE RAILING PLAN

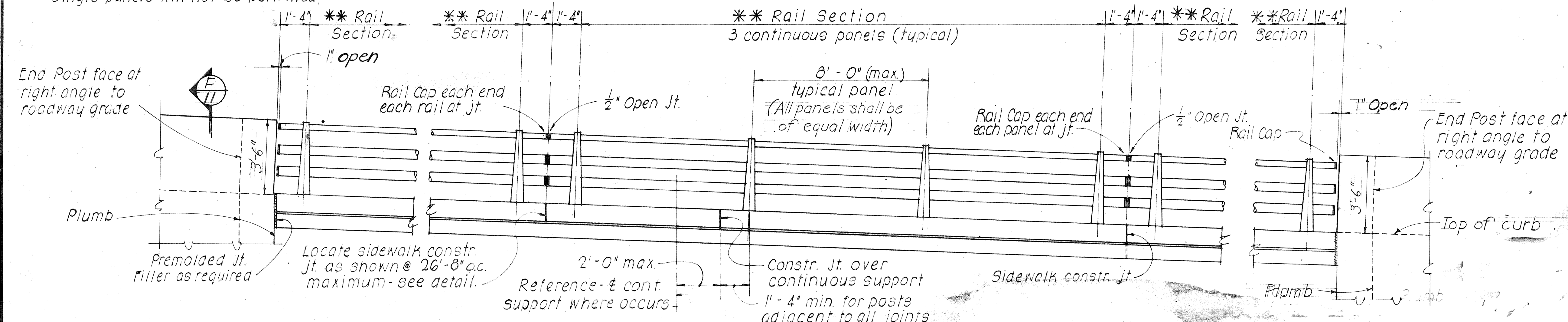
SCALE: $\frac{3}{8}" = 1'-0"$

****NOTE!!**

The contractor shall layout the railing to provide 3 continuous panels whenever possible. 2 or 4 continuous panels will be permitted to complete the layout when 3 continuous panels cannot be made. Single panels will not be permitted.

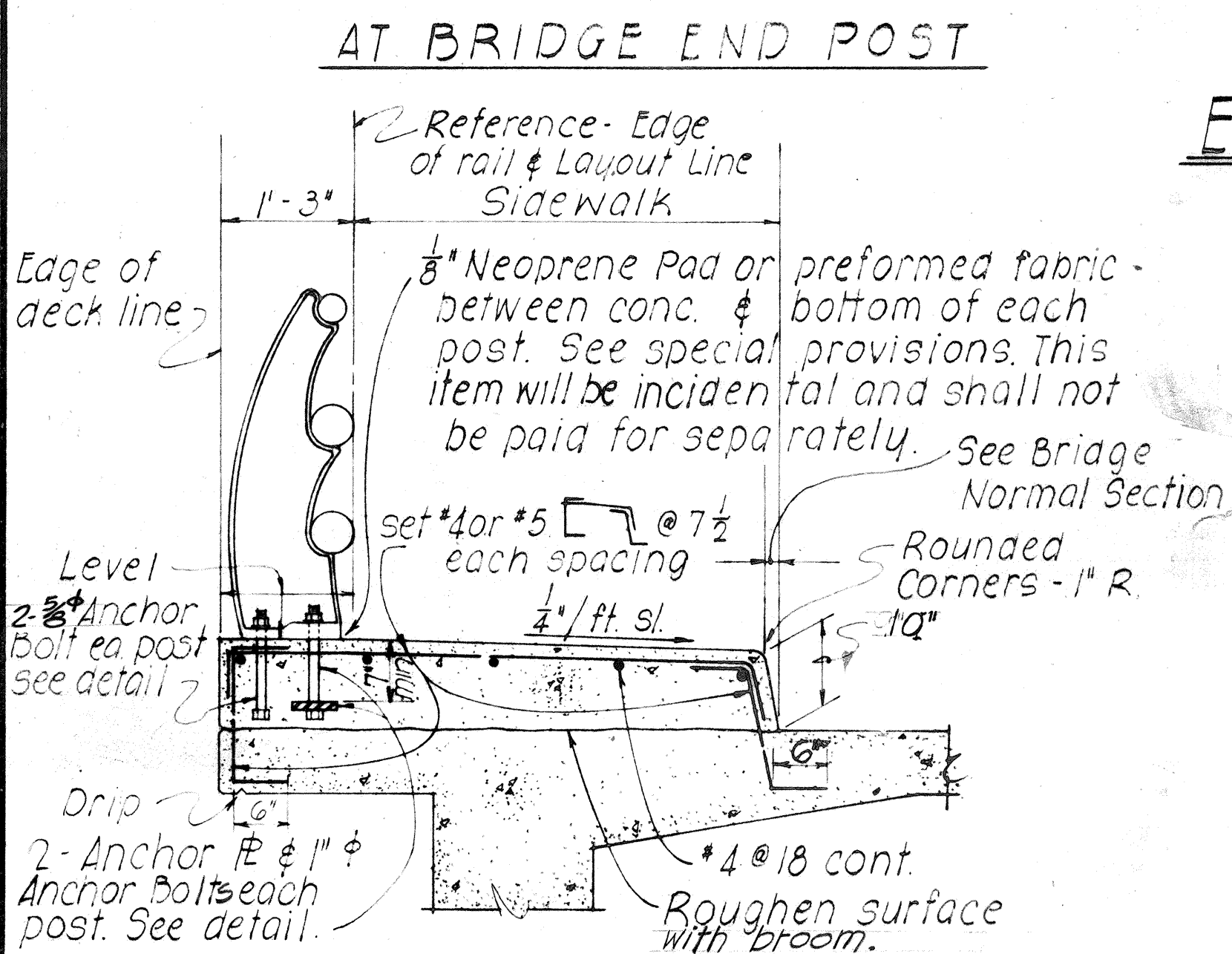
NOTES!!

1. Rail Posts shall be normal to grade.



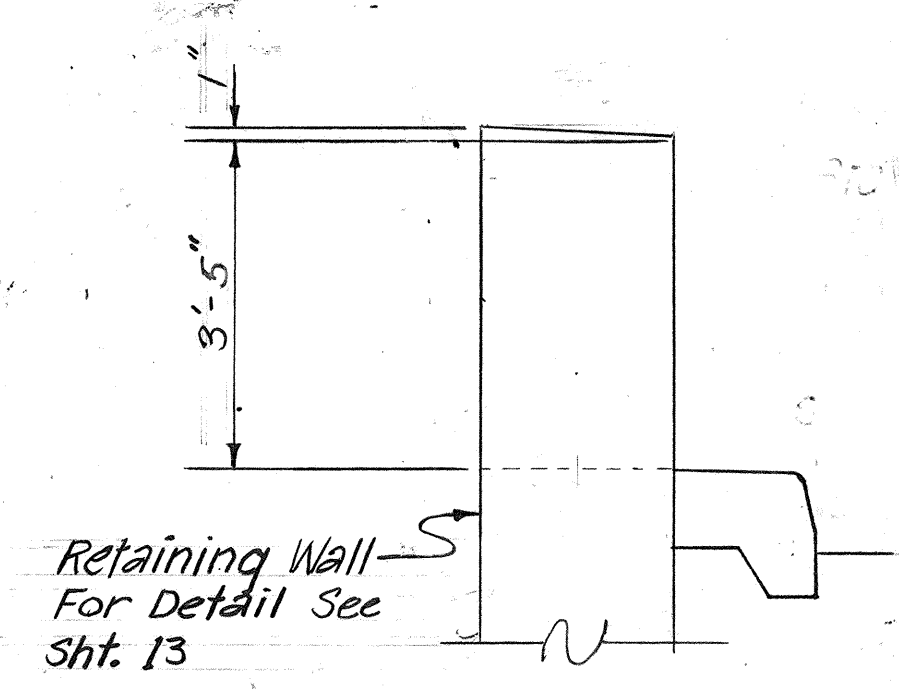
INTERMEDIATE EXTERIOR RAILING ELEVATION

SCALE: $\frac{3}{8}" = 1'-0"$



TYPICAL SECTION

SCALE: $\frac{3}{4}" = 1'-0"$



SECTION F

SCALE: $\frac{1}{2}" = 1'-0"$

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

STANDARD DETAILS

METAL BRIDGE RAILING

THREE RAIL COMBINATION TYPE

F.A.I. PROJ. NO. I-H2-1(5)

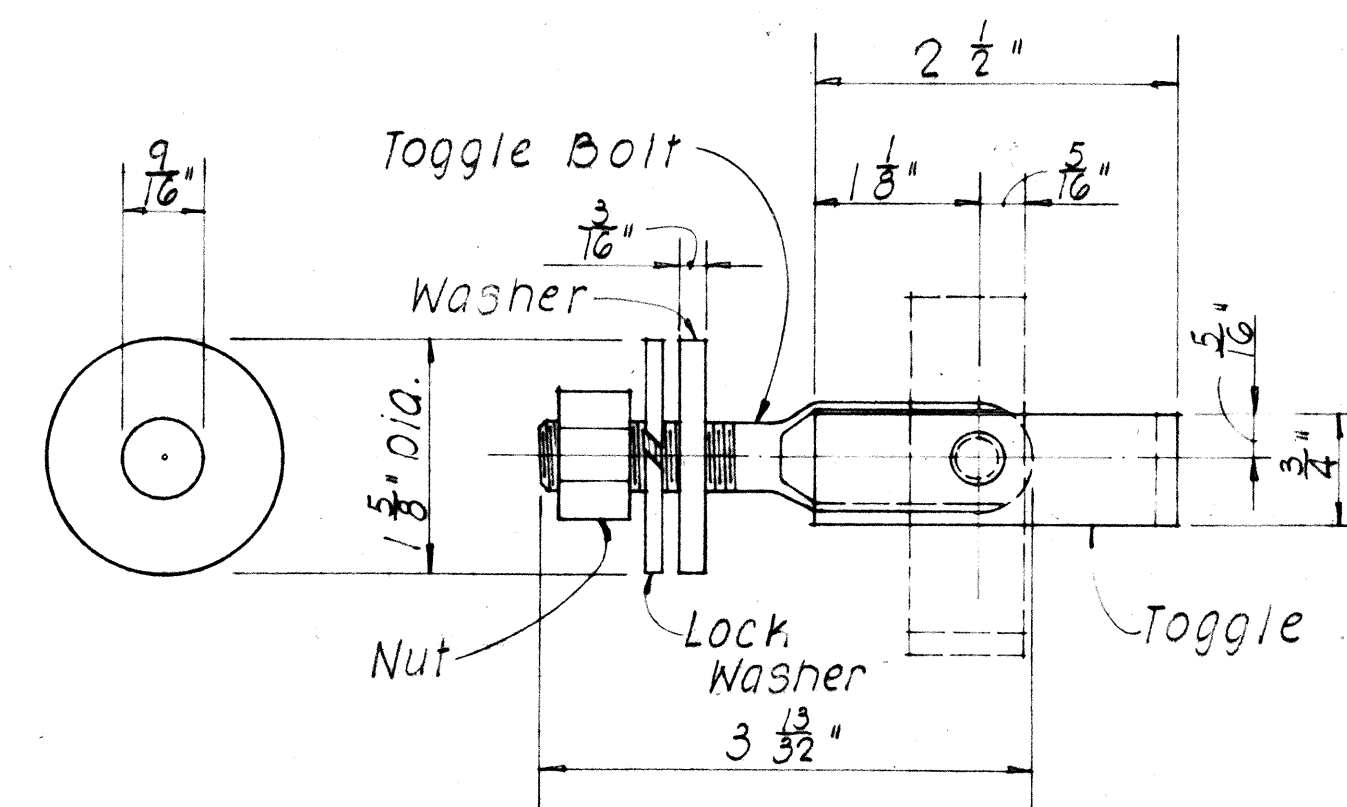
MAY 1969

SHEET NO. 71 OF 16 SHEETS

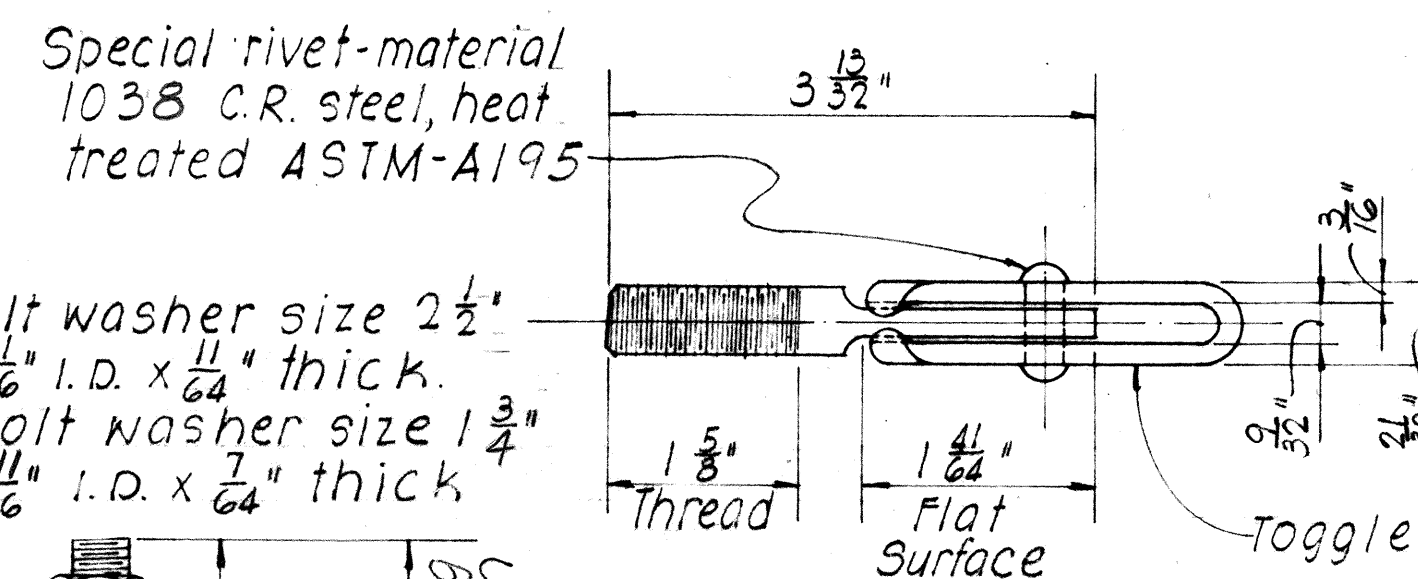
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(5)	1970	63	130

NOTE!!

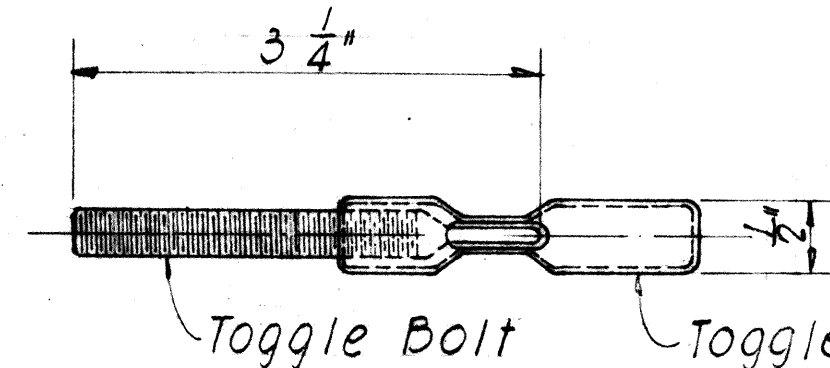
Toggle Bolt Material - $\frac{1}{2}$ " - 13 N.C. 1335 C.R. - Steel heat treated R.C. 32 - 38 ASTM-A354
 Toggle Material - 1015 H.R. steel pickled and oiled. Round edges ASTM-A303.
 Washer Material - SAE 1020 H.R. steel plates. ASTM-A7 Break sharp edges.
 Nut - $\frac{1}{2}$ " - 13 Amer. hex. nut - Heavy Mat'l. 1035 C.R. Stl. - Heat treated ASTM A325
 Cadmium plating on steel - Type N.S. .0005 thick ASTM-A165. (All parts)
 For cast post specifications, see special provisions.



WASHER SIDE ELEVATION ASSEMBLAGE



TOP PLAN
 $\frac{1}{2}$ " ϕ TOGGLE BOLT DETAIL
 SCALE:

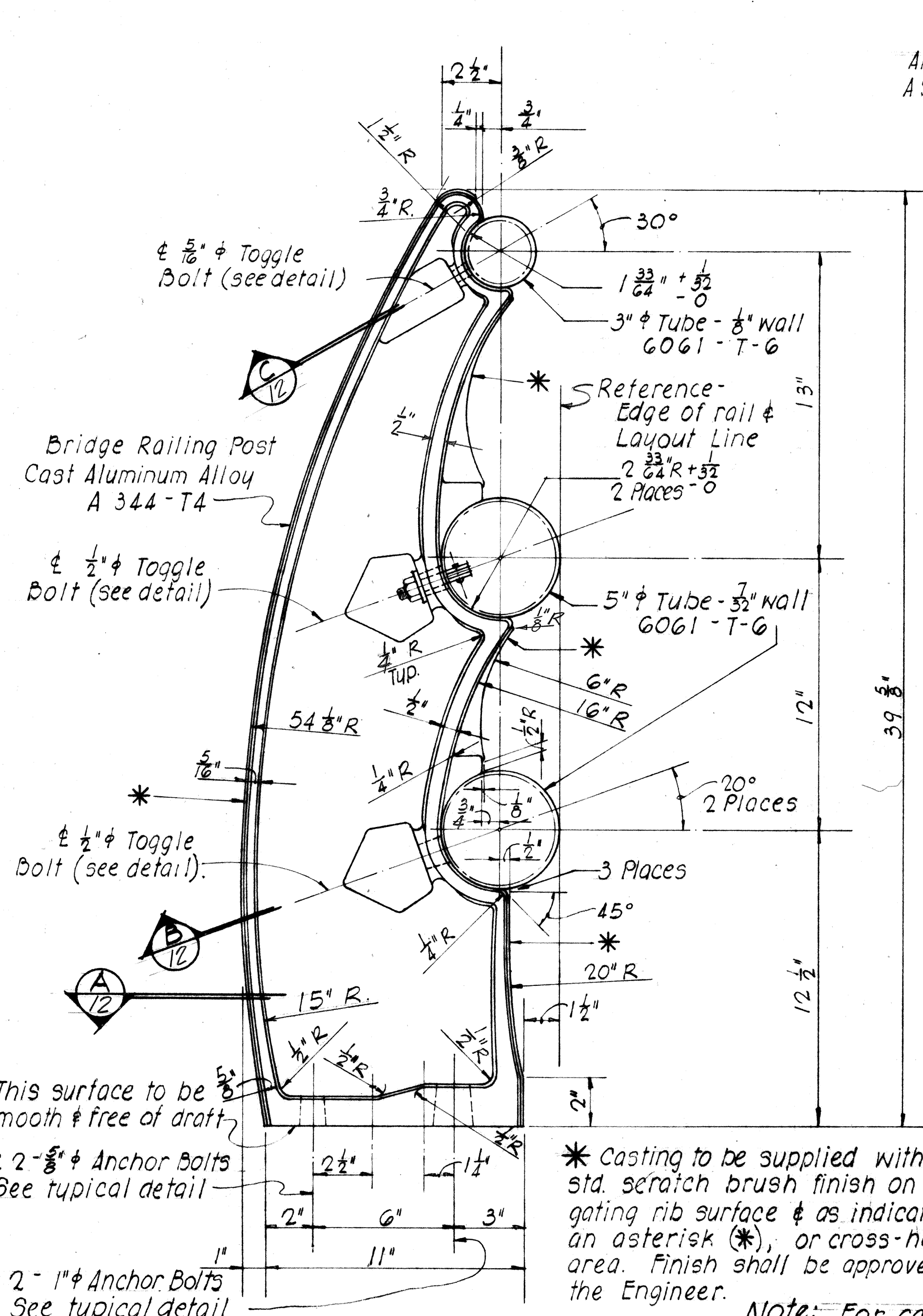


NOTE!!

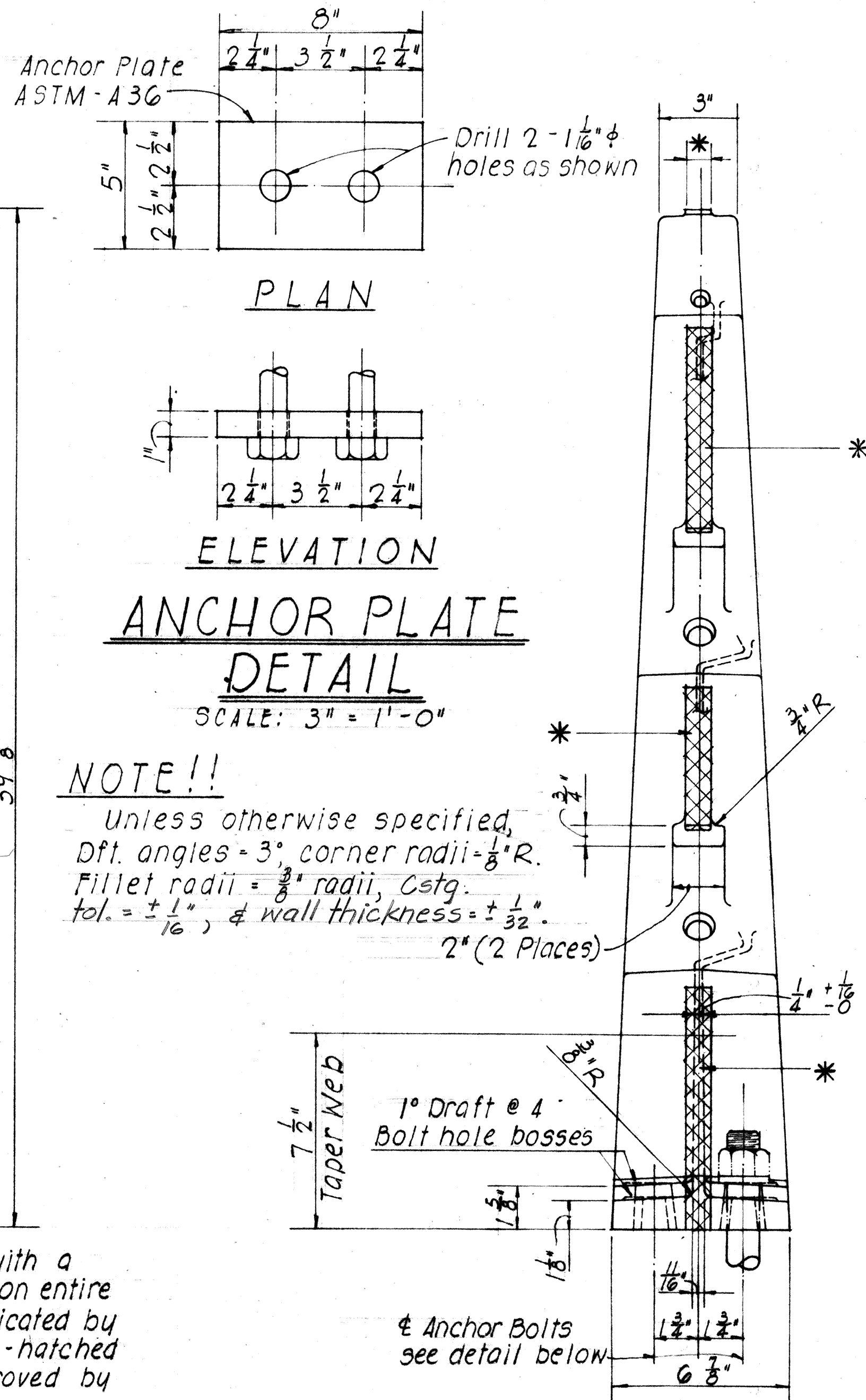
Toggle Bolt Mat'l. - $\frac{5}{16}$ " - 18 N.C. SAE 1020 C.R. Steel unannealed after forming
 Toggle Mat'l. - H.R. steel pickled and oiled
 Washer Mat'l. - C.R. steel (1020)
 Nut Mat'l. - $\frac{5}{16}$ " - 18 N.C. Amer. std. hex. nut cold punched (1020 stl.)
 Cadmium plating on steel. Type N.S. .0005 thick - ASTM-A165. (All parts)

General Note: Metal bridge railing shown is for aluminum bridge railing. See special provisions for alternate railing in steel.

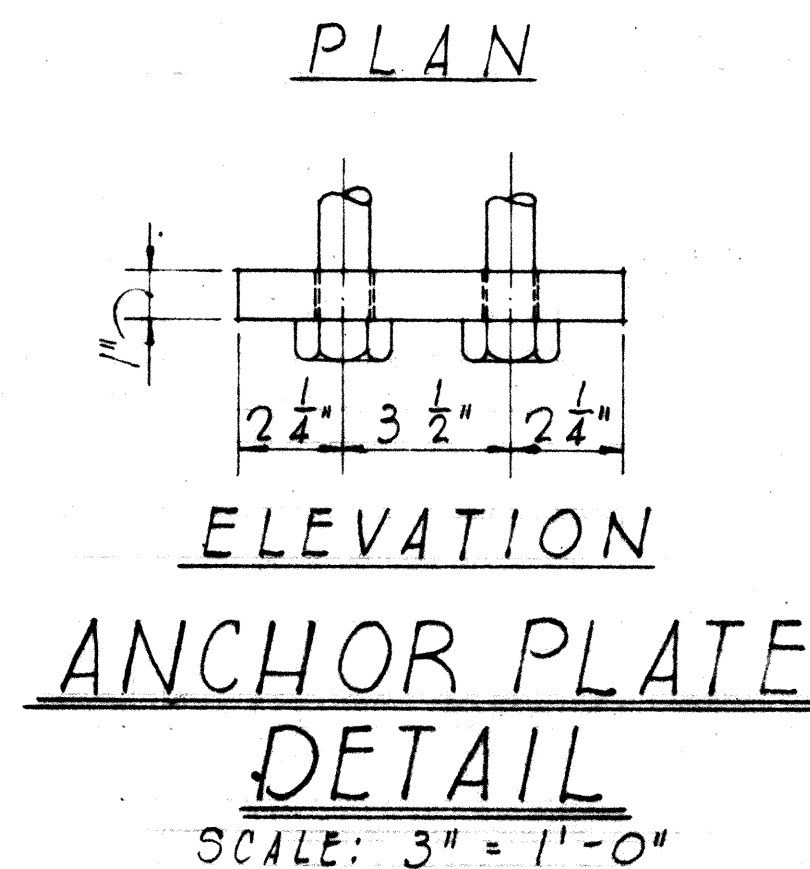
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
STANDARD DETAILS
METAL BRIDGE RAILING
THREE RAIL COMBINATION TYPE
 E.A.I. PROJ. NO. I-H2-1(5)
 MAY 1969
 SHEET No. 12 OF 16 SHEETS



SIDE ELEVATION

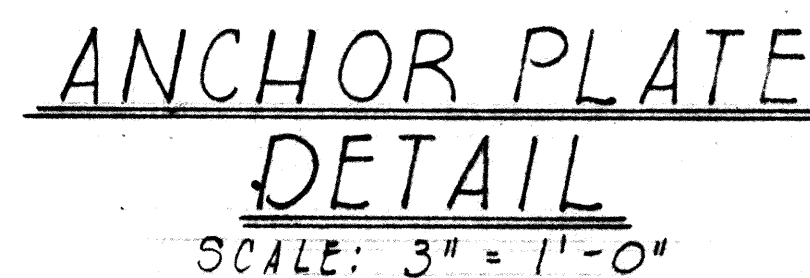


END ELEVATION

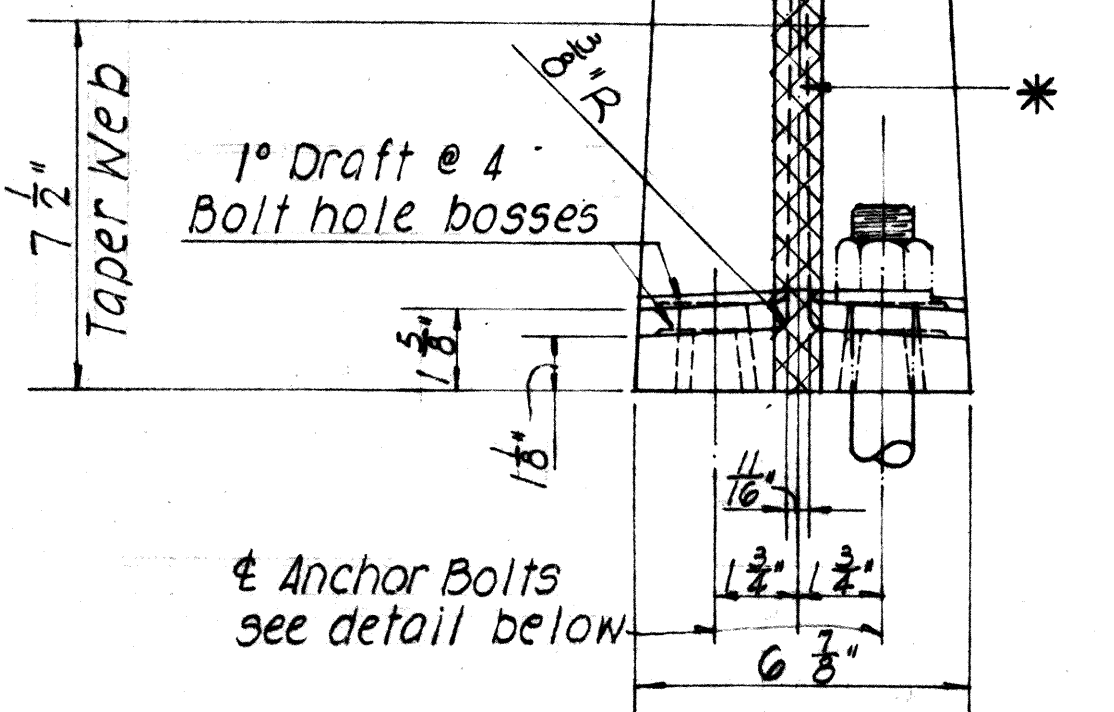


PLAN

ELEVATION



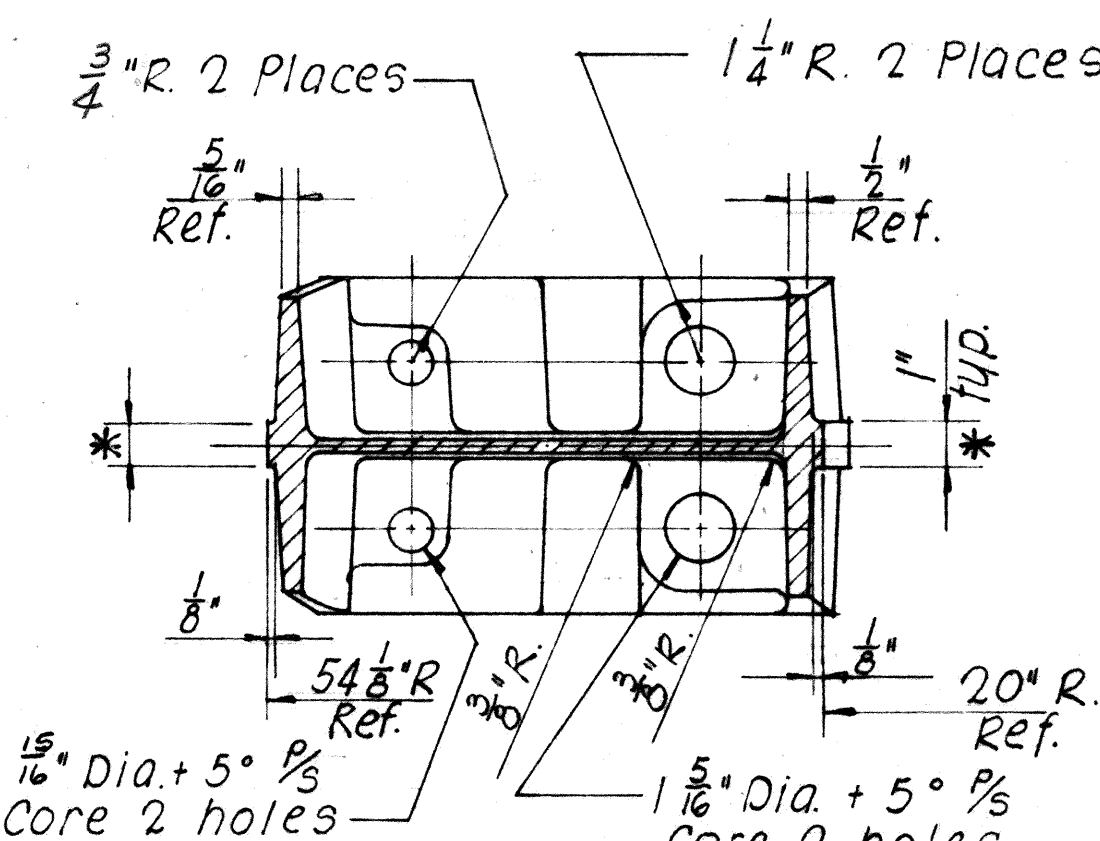
NOTE!!
 Unless otherwise specified, Dft. angles - 3°, corner radii - $\frac{1}{8}$ " R. Fillet radii - $\frac{3}{8}$ " radii, Castg. tol. = $\pm \frac{1}{16}$ ", & wall thickness = $\pm \frac{1}{32}$ ".
 2" (2 Places)



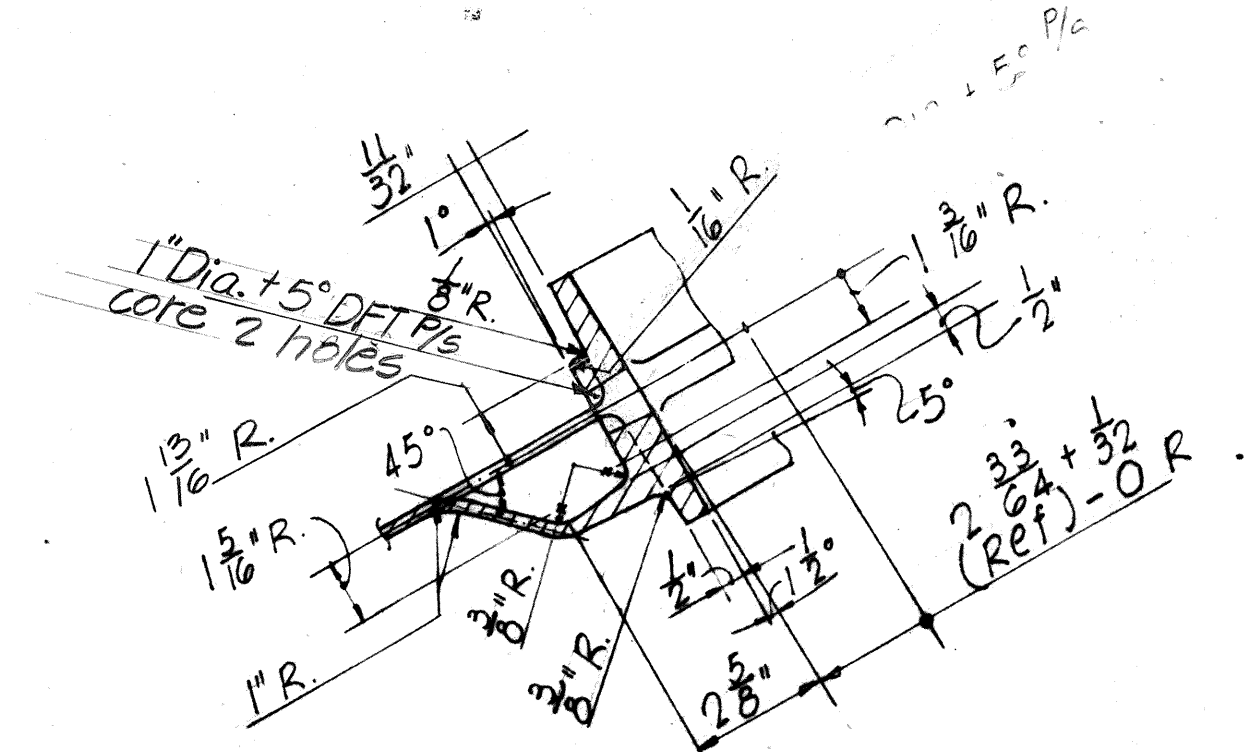
& Anchor Bolts see detail below

TYPICAL RAIL POST DETAILS

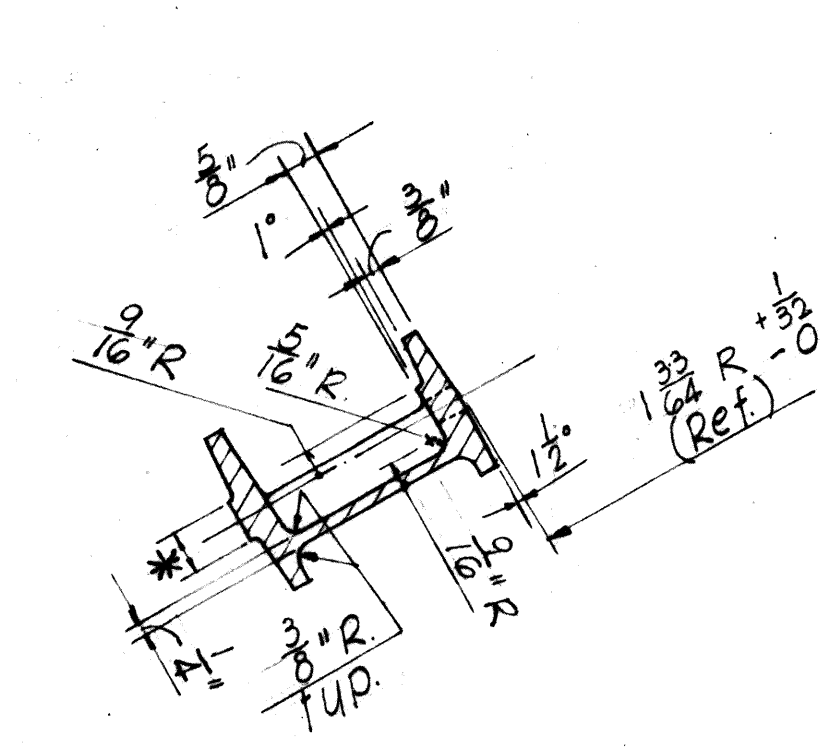
SCALE: 3" = 1'-0"



SECTION A
 SCALE: 3" = 1'-0"



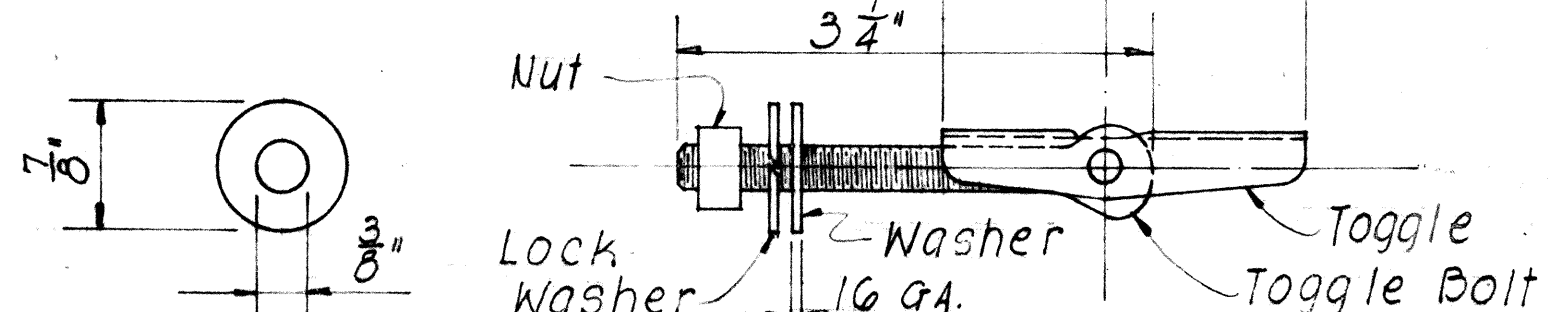
SECTION B
 SCALE: 3" = 1'-0"



SECTION C
 SCALE: 3" = 1'-0"

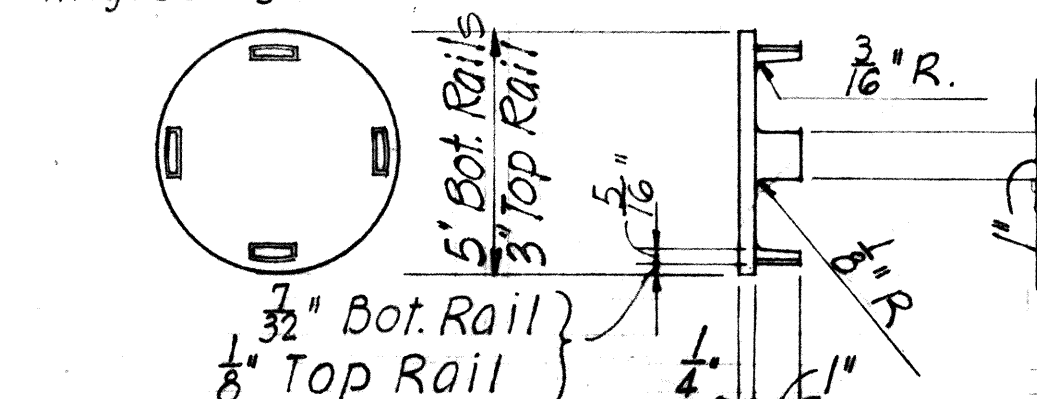
TYPICAL ANCHOR BOLT DETAIL

SCALE: 3" = 1'-0"



WASHER SIDE ELEVATION ASSEMBLAGE
 $\frac{5}{16}$ " ϕ TOGGLE BOLT DETAIL

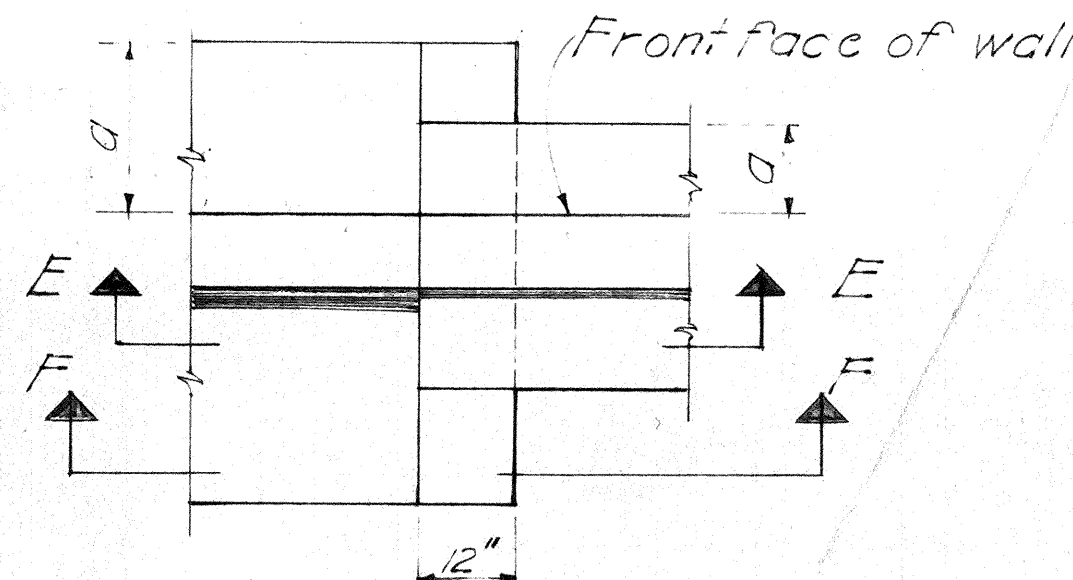
All Draft Angles - 3°



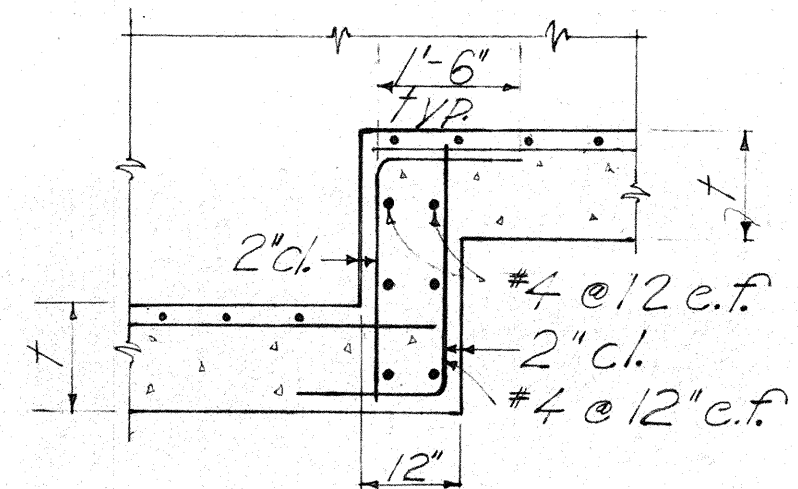
RAIL CAP DETAIL
 SCALE: 3" = 1'-0"

All draft angles - 3°

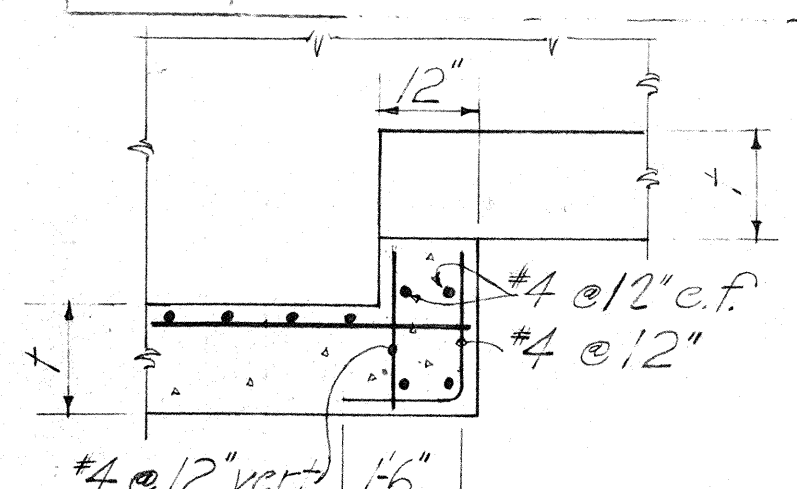
DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
QUANTITIES BY	_____
NOTE BOOK	_____
ORIGINAL PLAN	_____



PLAN



SECTION E-E



SECTION F-F

FOOTING STEP-UP DETAILS

SCHEDULE OF DIMENSIONS AND REINFORCING STEEL

SCHEDULE OF DIMENSIONS AND REINFORCING STEEL																									
Maximum "MK"	4E	5E	6E	7E	8E	9E	10E	11E	12E	13E	14E	15E	16E	17E	18E	19E	20E	21E	22E	23E	24E	26E	28E	30E	
a						12"		12"	12"	12"			21"		24"										
t						14"		18"	18"	18"			21"		24"										
L						50'		60'	65'	70'			90'		105'										
"a" bars						#6@7"		#6@6"	#6@5"	#7@6"			#8@6"		#9@6"										
"b" bars						#4@7"		#5@6"	#5@5"	#7@9"			#8@6"		#8@6"										
"c" bars								#5	#5	#5			#5		#5										
"d" bars						#4@15"		#4@12"	#4@11"	#4@9"			#5@10"		#5@9"										

NOTE:

Hatched areas denote limits of structural excavation pay line. All other excavation shall be roadway excavation except as otherwise noted.

Fill or structural backfill behind wingwalls similar to backfill behind abutments.

4" tile drain 10'-0" o.c.

Finish Grade

2'-0" min. impervious material as selected by the Engineer, incidental to structural excavation.

12" Filter material cont. horiz.

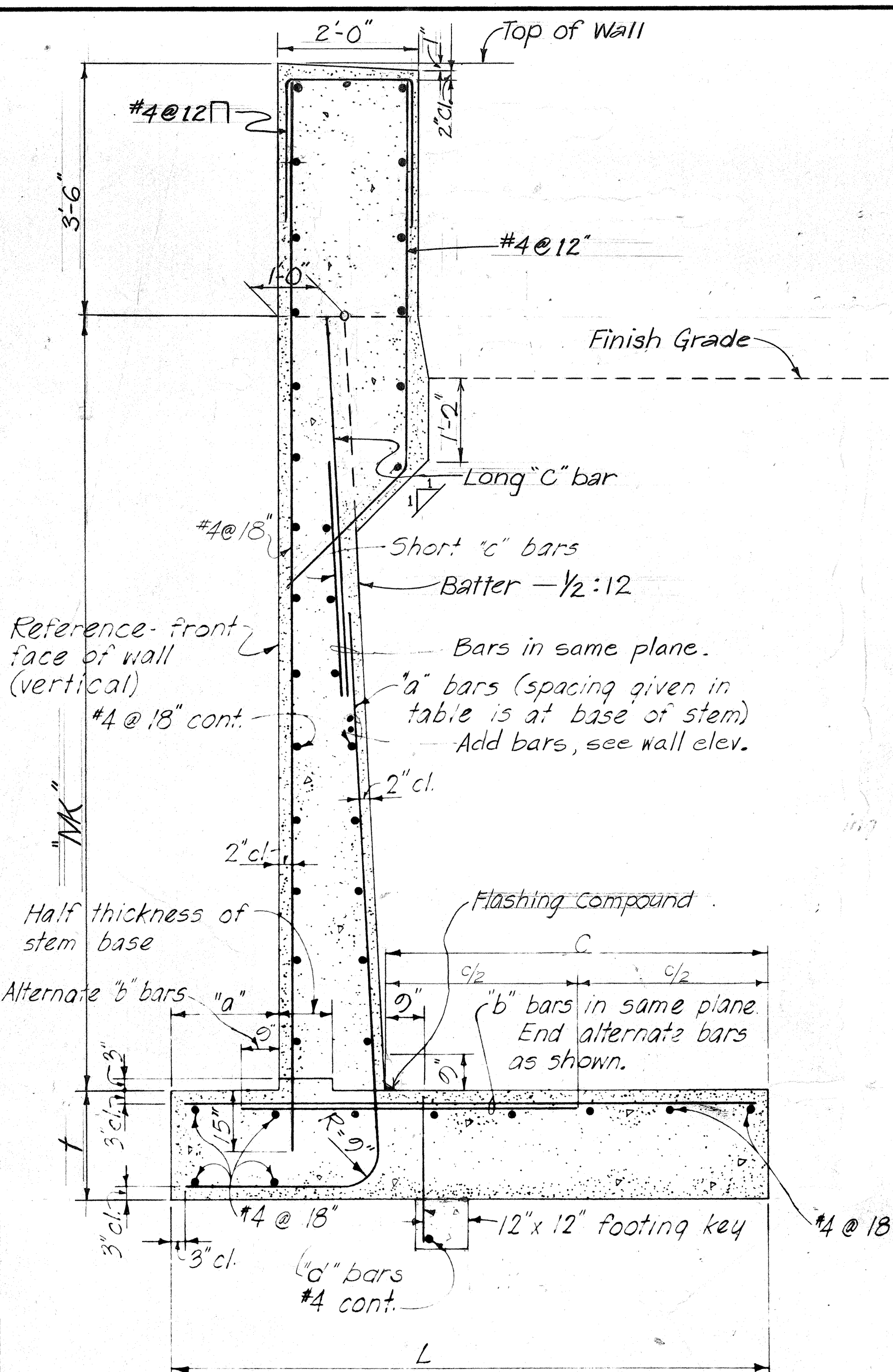
Existing groundline or roadway cut line

Long "c" bars
Structural backfill
Short "c" bars
12"
Footing on earth excavate and pour to neat line
Footing key - excavate and pour to neat line

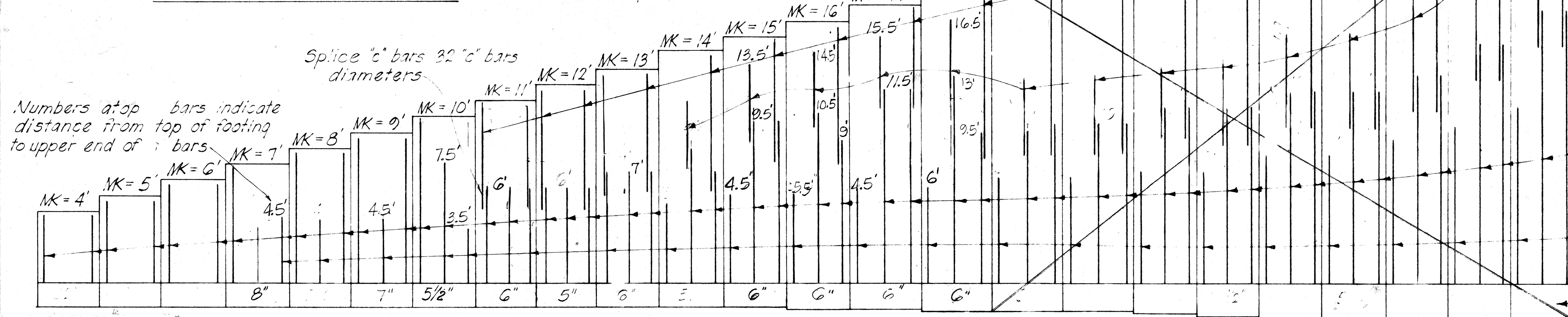
STRUCTURAL EXCAVATION AND DRAINAGE DETAILS

REV. APRIL 9, 1970

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
MILILANI ACCESS ROAD SEPARATION
RETAINING WALL
INTERSTATE STA. 353+00
F.A.I. PROJ. NO. 1-12-1(5)
MAY 1969
SHEET No. 13 OF 16 SHEETS



WALL SECTION



VERTICAL REINFORCING STEEL ARRANGEMENT

Not to Scale

Numbers at top bars indicate distance from top of footing to upper end of bars

Splice "c" bars 32" c" bars diameters

Long "a" bars

Short "a" bars

"a" bar spacing at base of stem

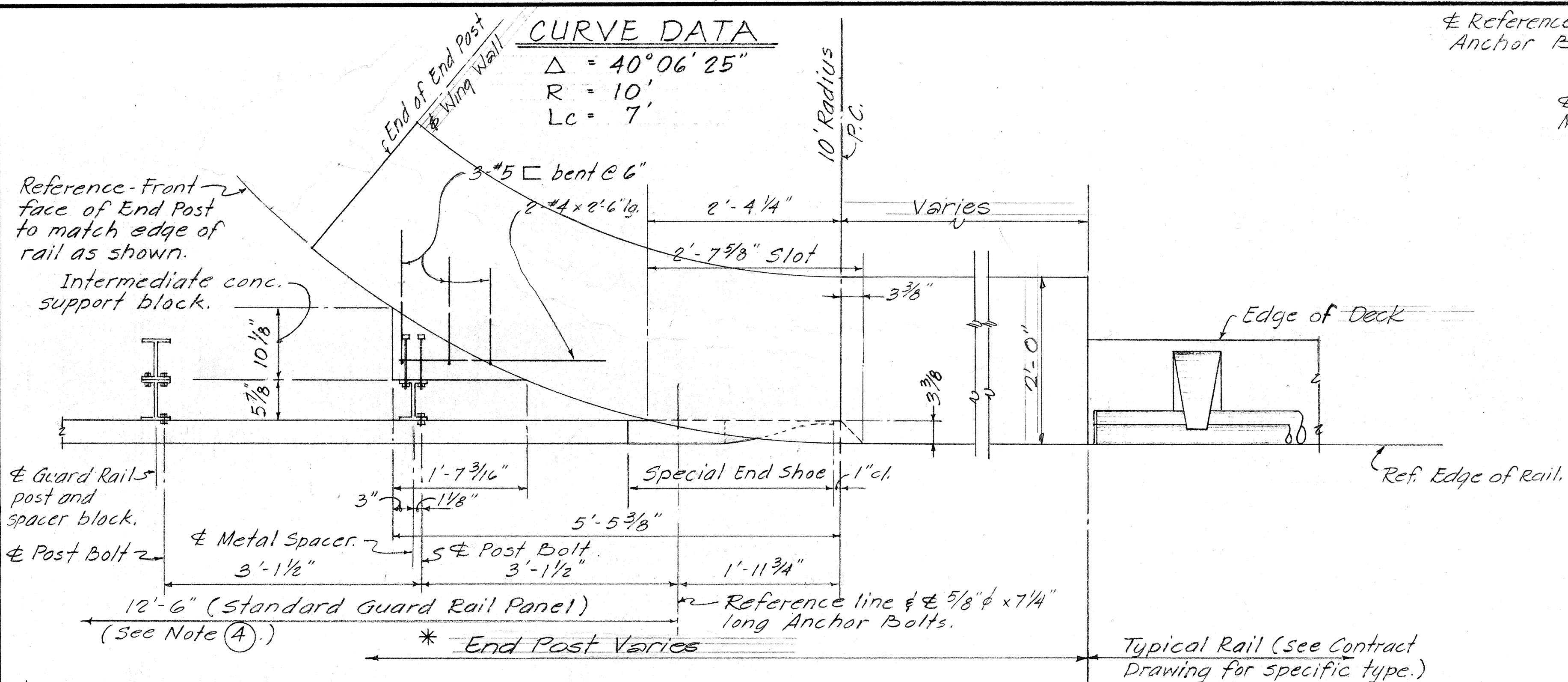
DATE
DESIGNED BY
CHECKED BY
NOTED BY
QUANTITIES BY
PRINTED BY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-(5)	1970	65	130

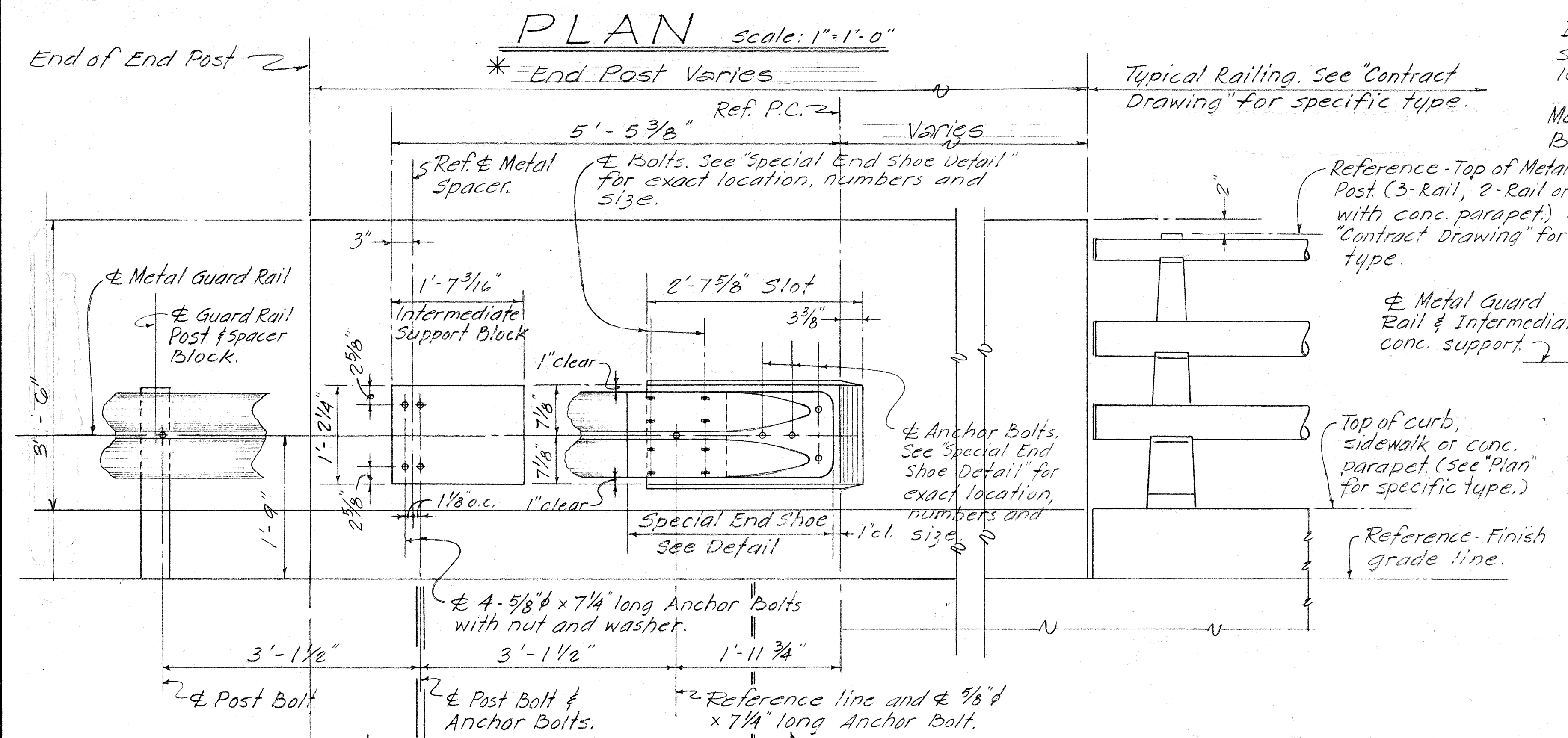
Reference line and $\frac{3}{4} \times 2\frac{1}{2}$ bolt slot for $\frac{5}{8} \phi \times 7\frac{1}{4}$ long Anchor Bolt.

$\frac{29}{32} \times 3$ slots. See "Standard Details Metal Guard Rail" for bolt dimensions.

$\frac{1}{2} \phi$ holes for $\frac{7}{8} \phi \times 7\frac{1}{4}$ long Anchor Bolts.

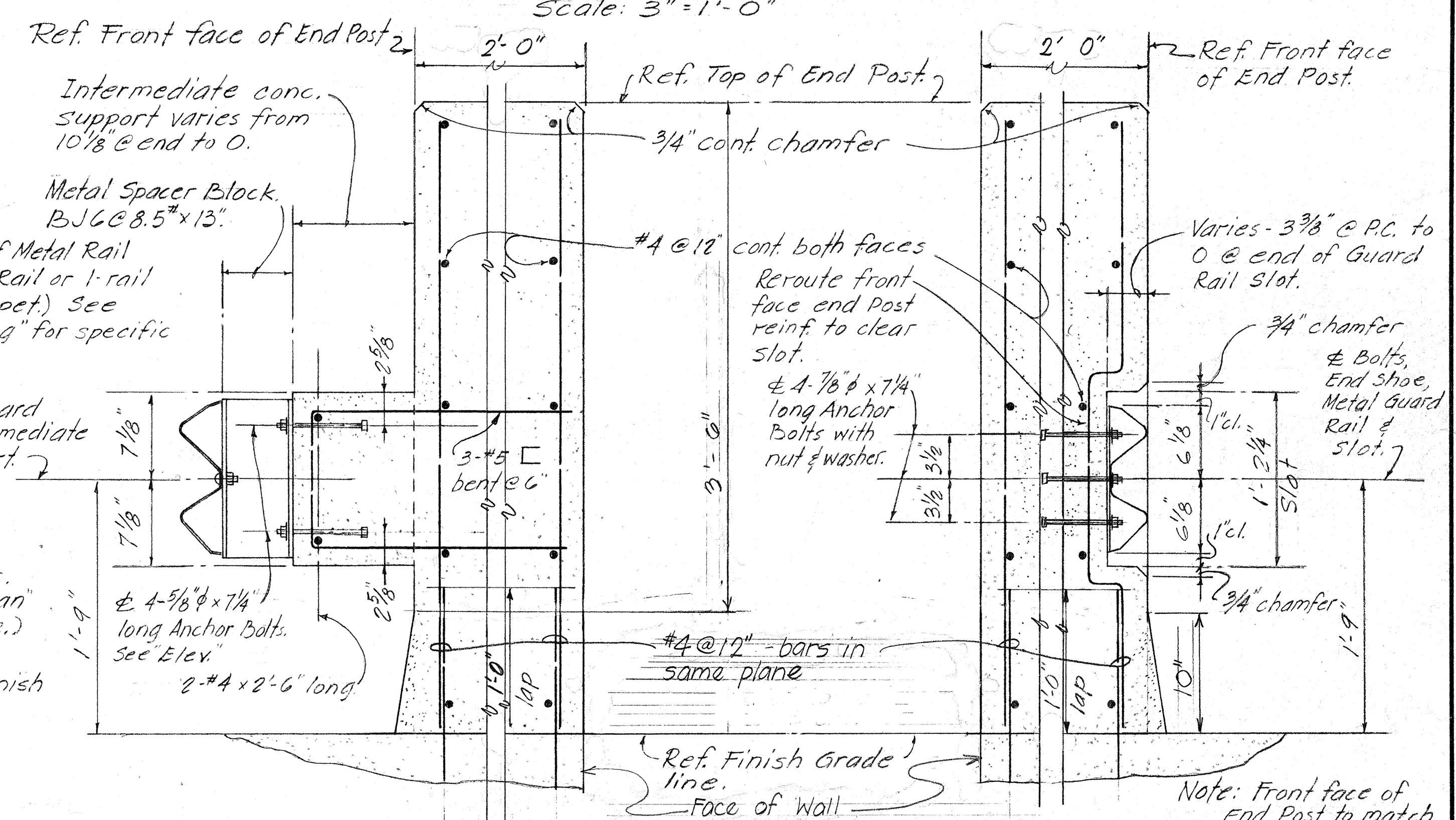


* Length given along front face of End Post.



SECTION C ELEVATION SPECIAL END SHOE DETAILS

Scale: 3" = 1'-0"



NOTES

- ① All Anchor Bolts shall be High strength bolts conforming to the requirements of ASTM A-325.
- ② All shoe assembly, including anchor bolts, nuts and washers, shall be galvanized.
- ③ Special End Shoe shall be fabricated from 10 gage steel conforming to the requirements of AASHTO 180.
- ④ First Guard Rail Panel adjoining "Special End Shoe" shall be of galvanized steel. See Special Provisions for requirements.
- ⑤ Anchor Bolt length given under bolt head.
- ⑥ These details are applicable for connections to Retaining Walls also.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

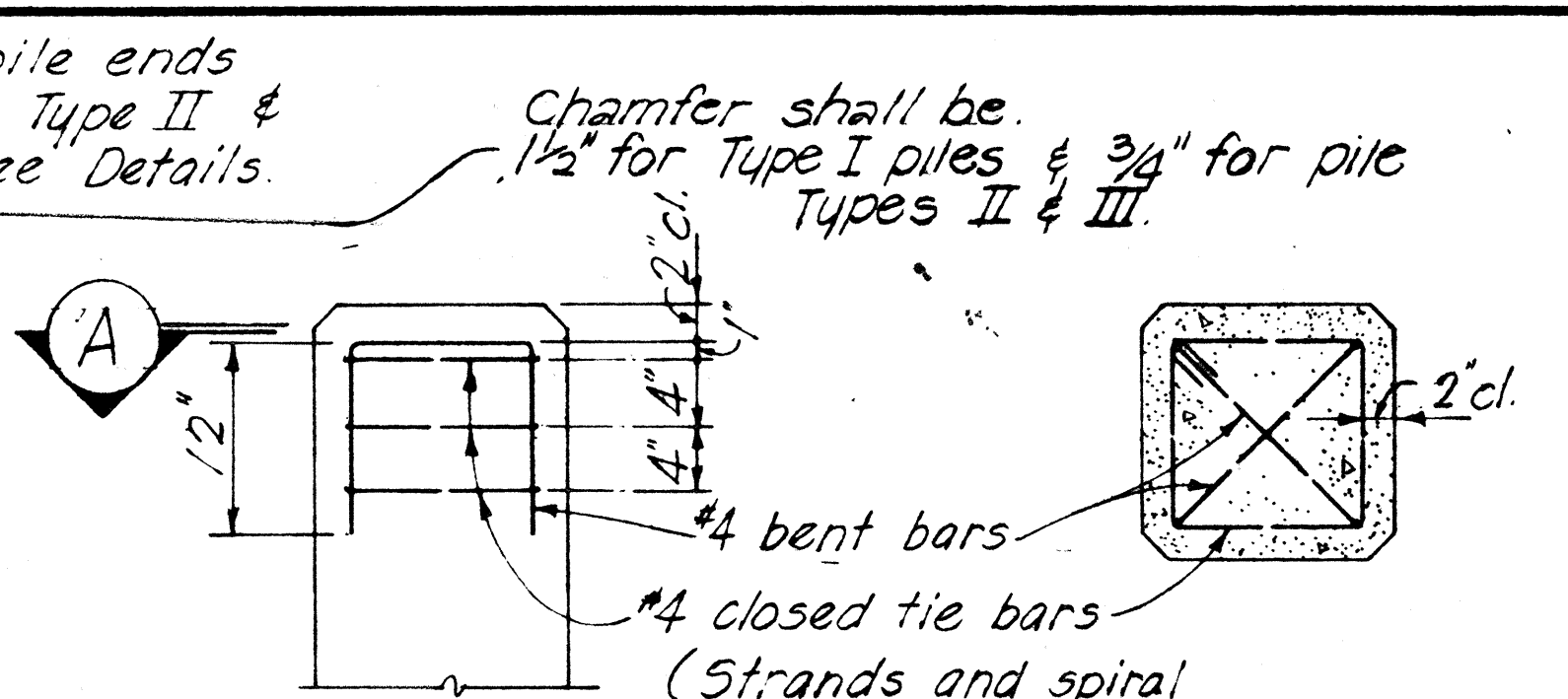
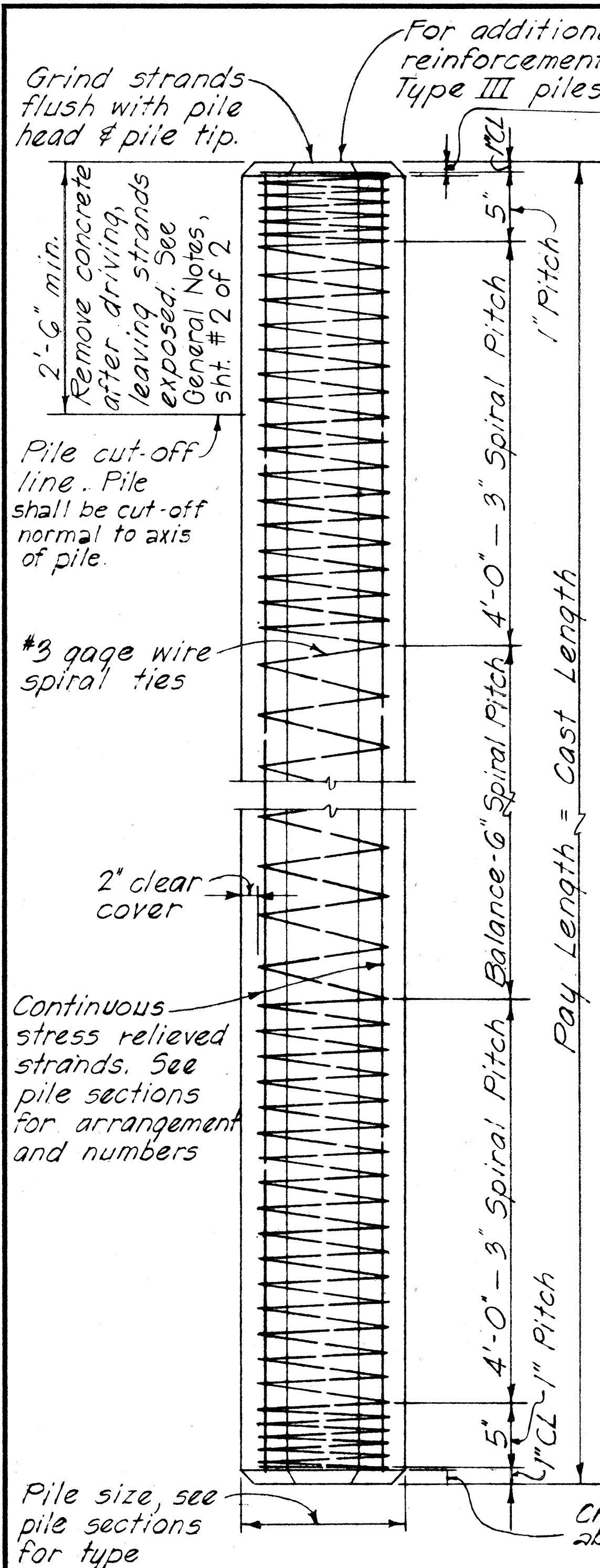
CONNECTION DETAIL OF
METAL GUARD RAIL TO
VERTICAL FACED END POST

SCALE AS SHOWN
DATE: MAY, 1969

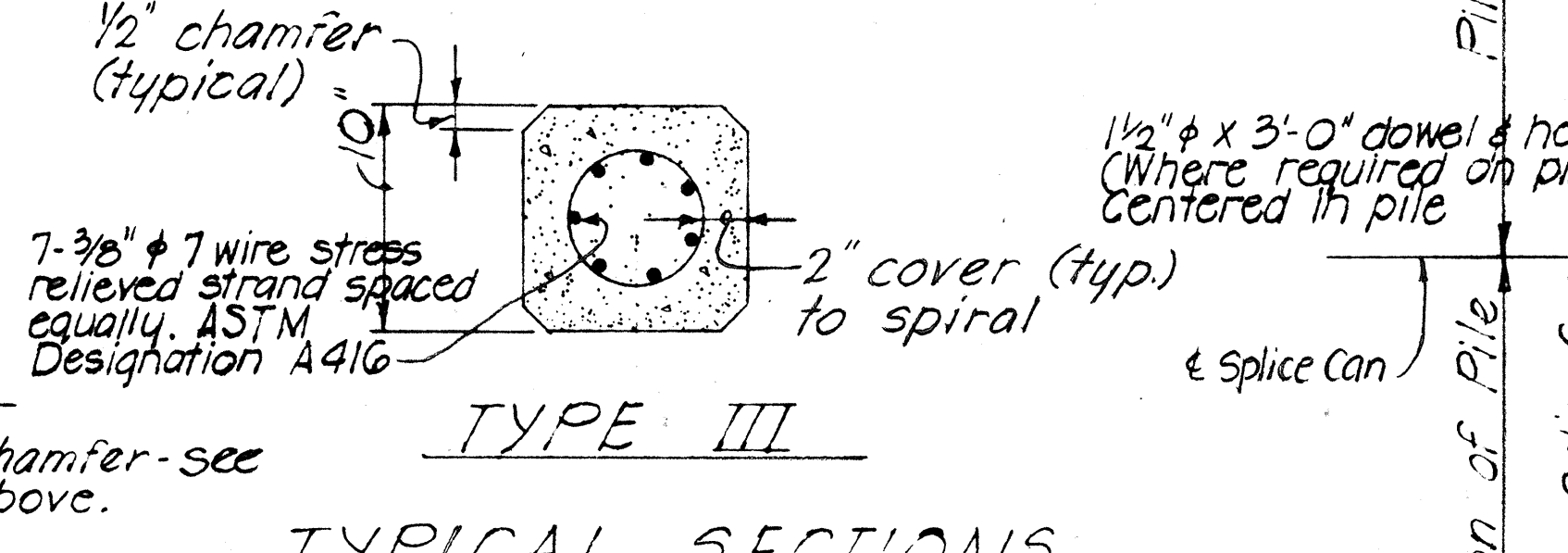
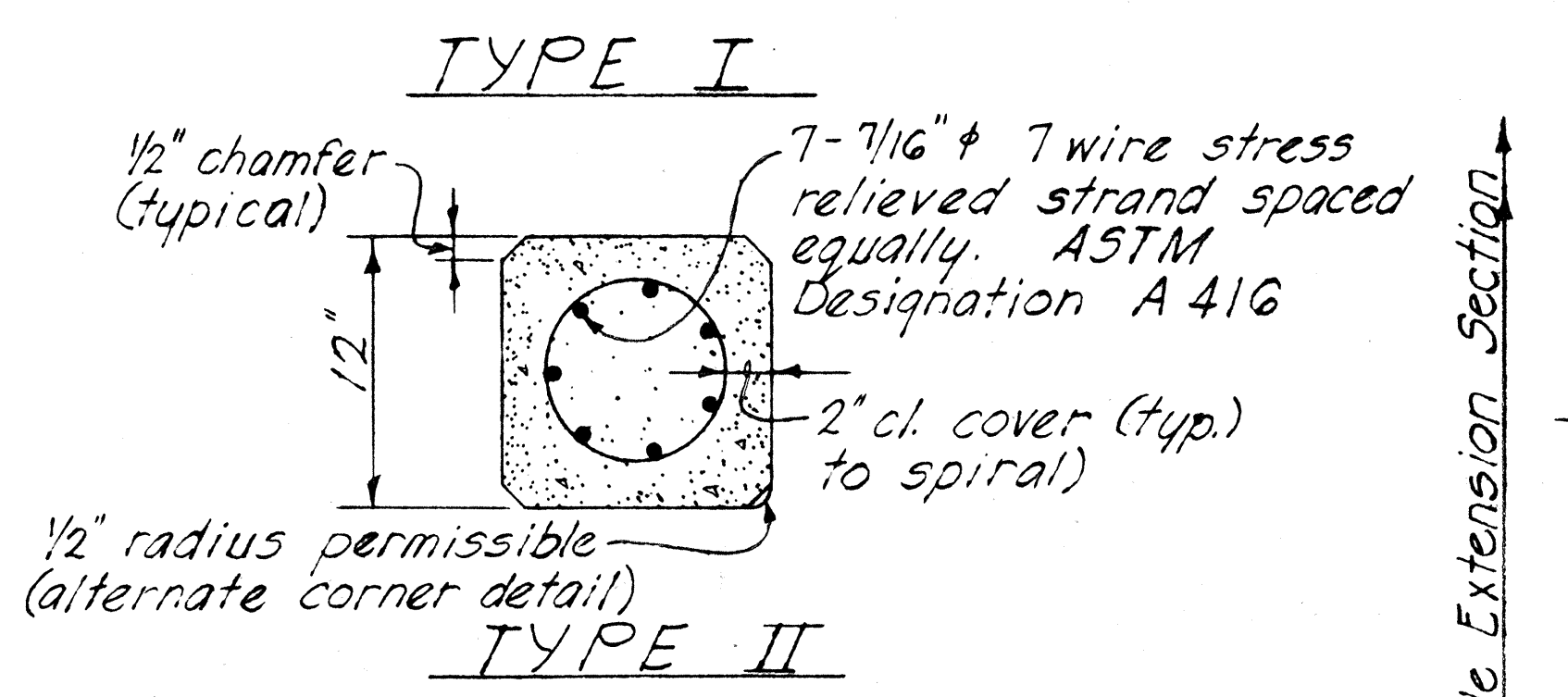
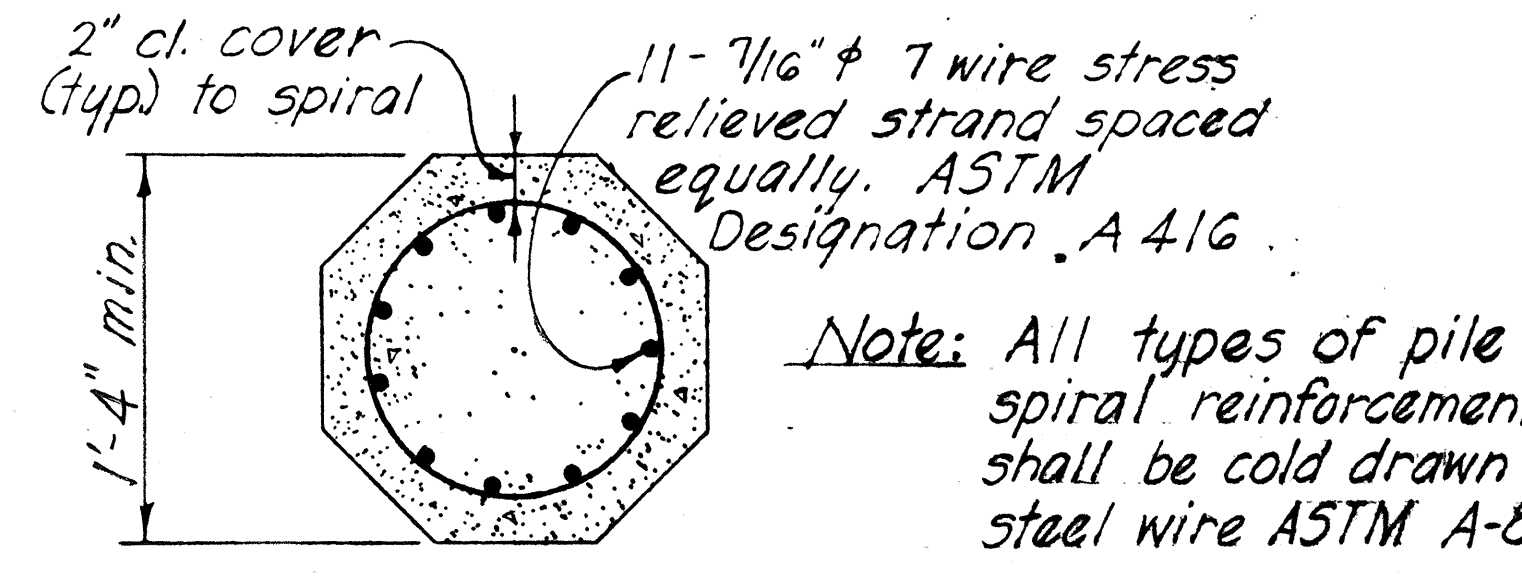
SHEET No. 14 OF 16 SHEETS

DATE
SURVEY PLOTTED BY
DRAWN BY
CHECKED BY
NOTE BOOK
No.

Revision: Feb. 67, Mar. 67
 Jan. 68, June 68
 Aug. 68, Oct. 68
 Apr. 69, May 69



**TYPICAL ADDED REINFORCEMENT
 PILE ENDS - TYPE II & III ONLY**



**TYPICAL SECTIONS
 THRU PILES**

Max. Length "L"*	Max. Length "L"*	Length "L"*
Type I "L" = 53'-0"	Type I "L" = 75'-0"	Type I "L" over 75'-0"
12" Type II "L" = 50'-0"	12" Type II "L" = 72'-0"	12" Type II "L" over 72'-0"
10" Type III "L" = 46'-0"	10" Type III "L" = 66'-0"	10" Type III "L" over 66'-0"
0.30L 0.70L	0.21L 0.58L 0.21L	0.15L 0.35L 0.35L 0.15L

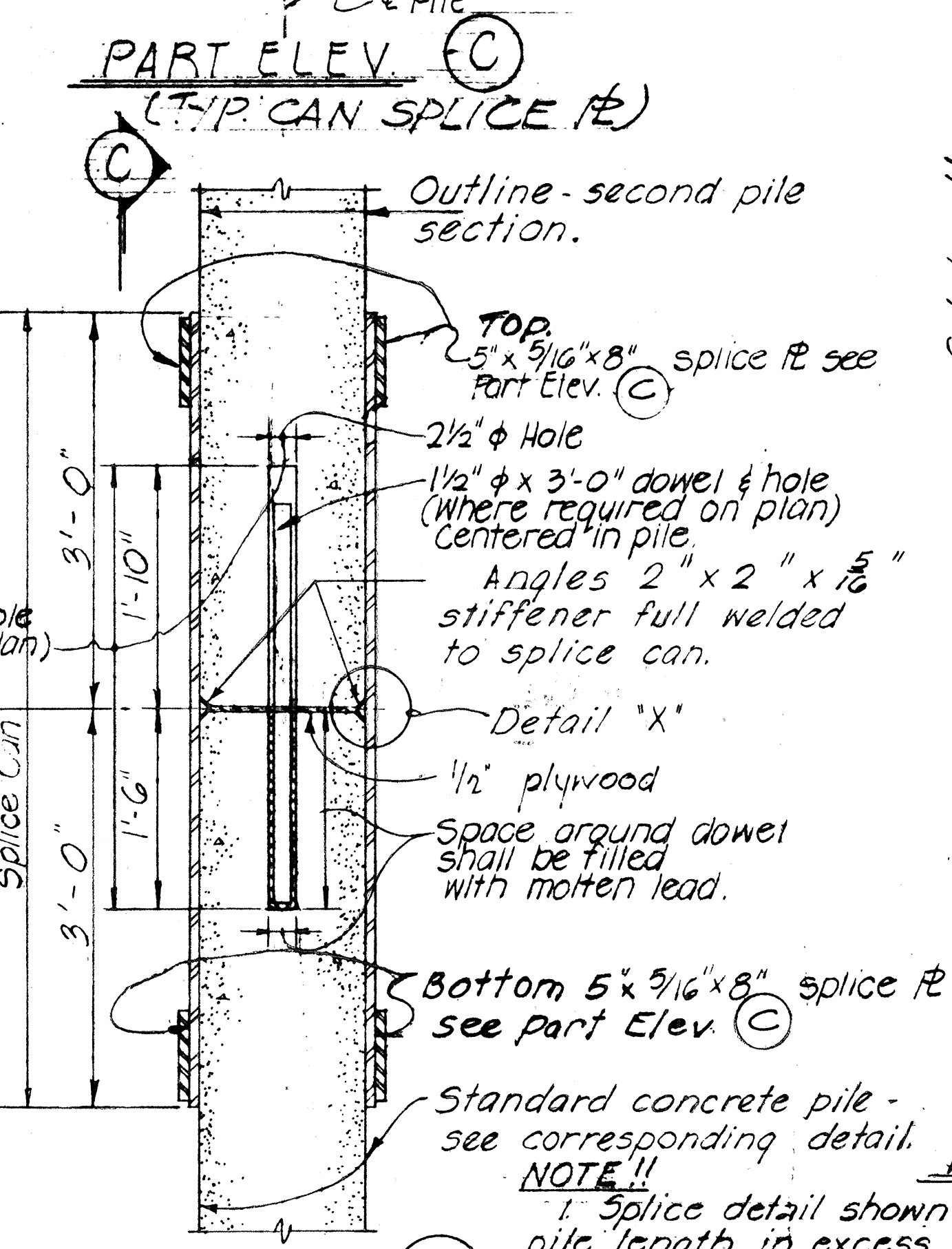
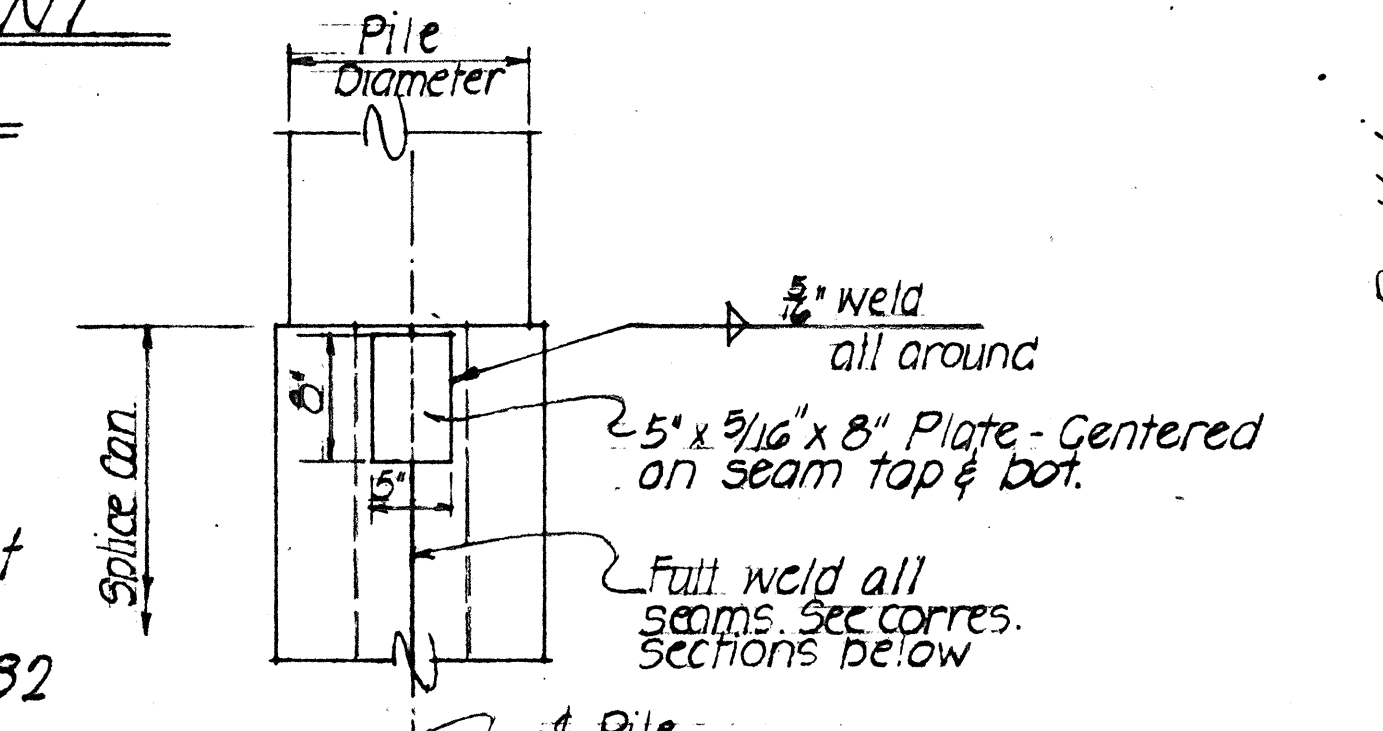
*The length "L" is the distance end to end of pile.

1 POINT PICK-UP 2 POINT PICK-UP 3 POINT PICK-UP

NOTE: Unless special lifting devices are attached for pick-up points, pick-up points shall be plainly marked on all piles after removal of the forms and all lifting shall be done at these points. The use of special embedded or attached lifting devices, the employment of other pick-up points or any other method of pick-up shall be subject to approval by the Engineer.

2'-6" min. unless otherwise directed by the Engineer. Remove concrete after driving, leaving reinf. exposed.

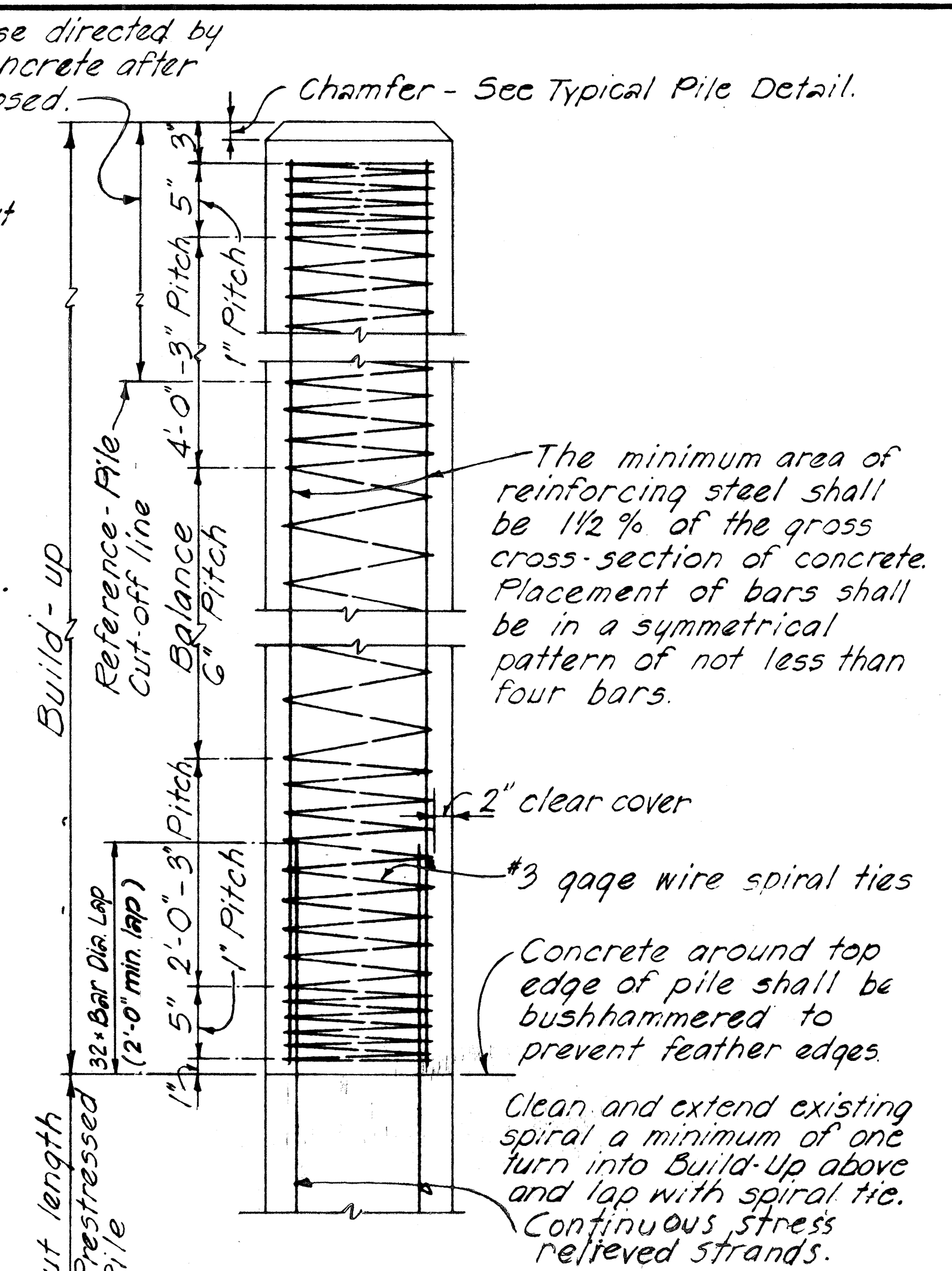
NOTE: Concrete in pile build-ups without driving shall be Class A Concrete. Concrete in pile build-ups with driving shall have a minimum compressive cylinder strength f'_c of 5000 p.s.i. at 28 days. Build-ups may be driven if the specimen of concrete from which the piles were poured develops a strength of at least 3500 p.s.i. but not earlier than 7 days.



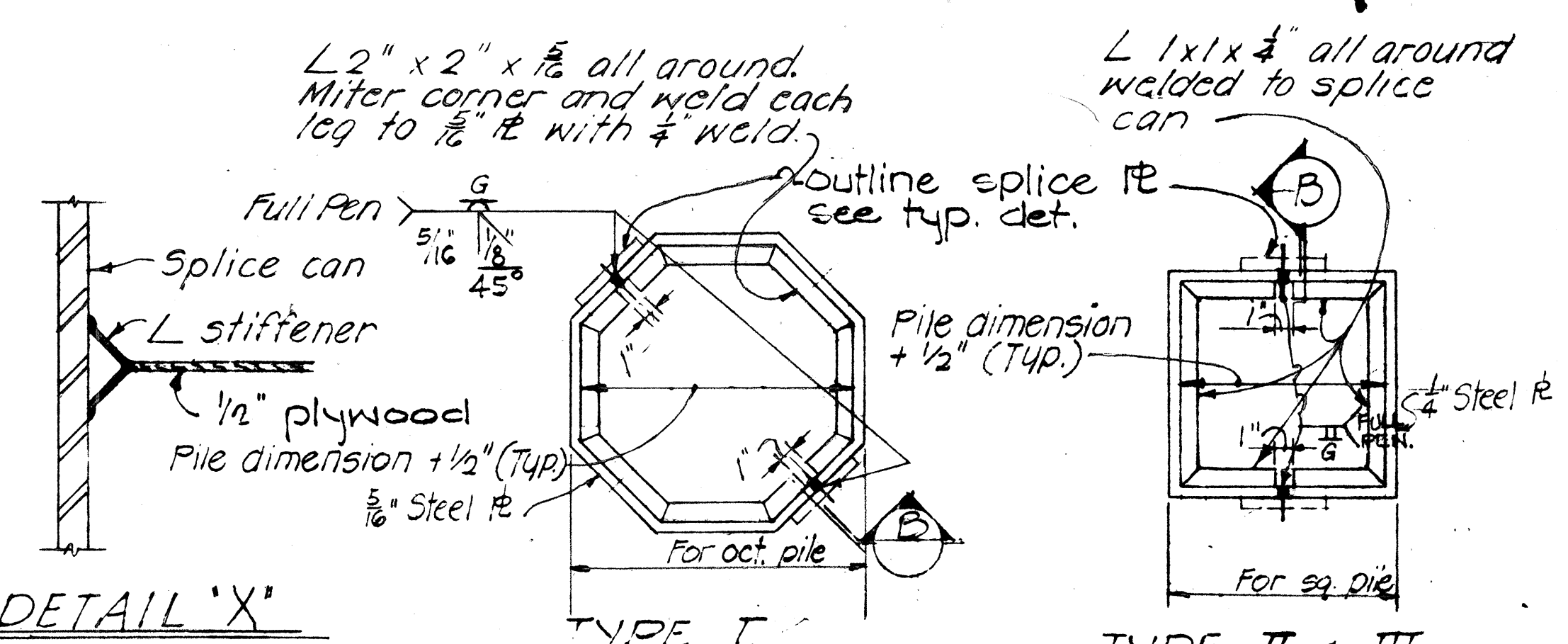
SECTION (B)

**TYPICAL PILE SPLICE DETAILS
 (FOR PRESTRESSED CONCRETE PILES
 WHEN CAST IN TWO OR MORE SECTIONS)**

NOTE: 1. Splice detail shown above shall not be used except for pile length in excess of 100'-0" long. (See Specifications)
 2. Structural steel for splice can shall be ASTM A-36.



**WITH DRIVING
 TYPICAL PILE BUILD-UP DETAIL**

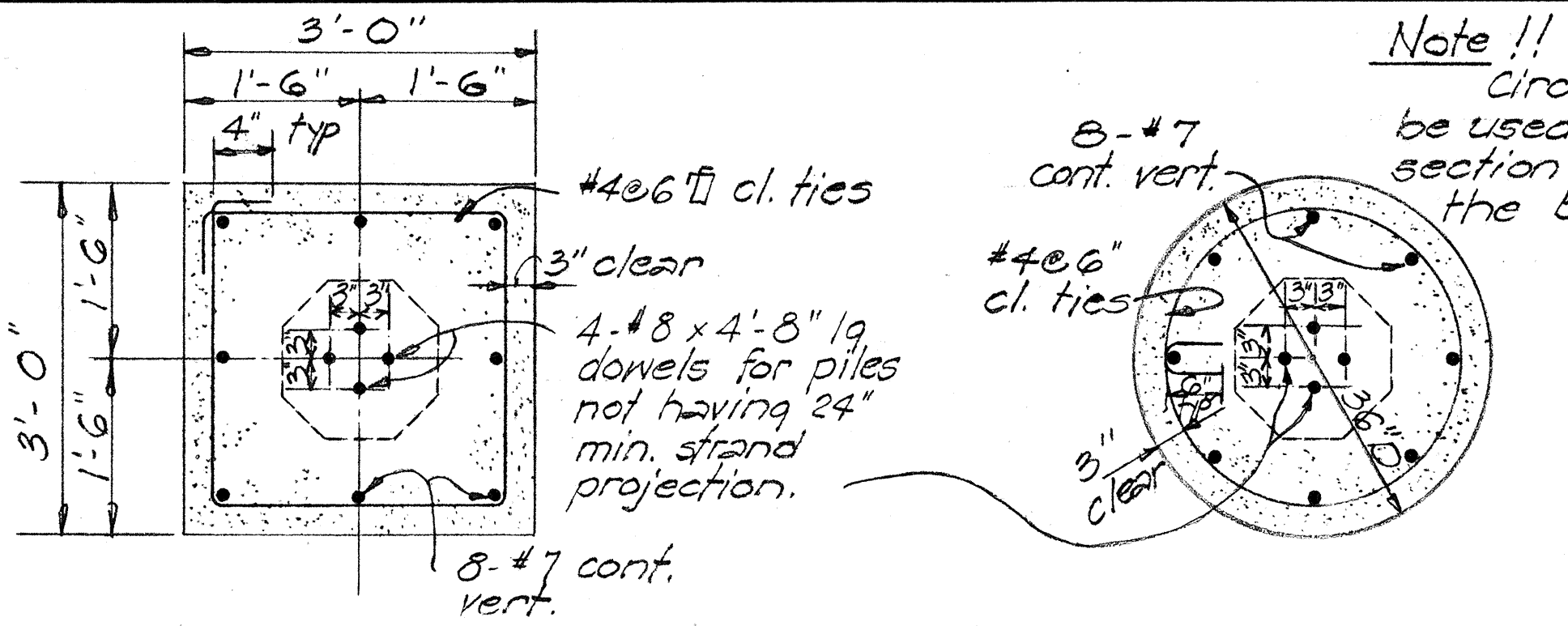


STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
STANDARD DETAILS
 PRESTRESSED CONCRETE PILES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-42-1(5)	1970	67	130

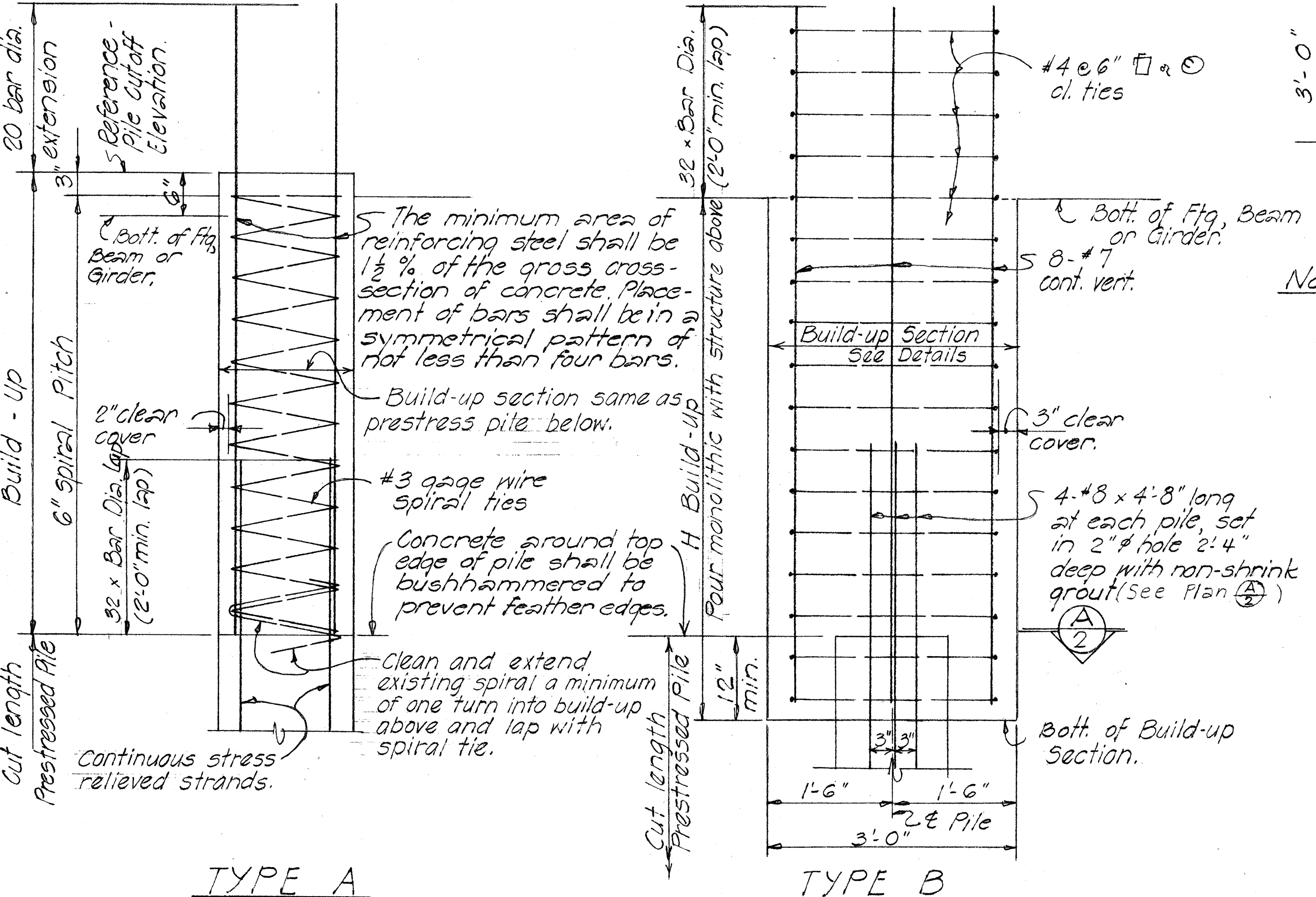
Revision: Apr. 69

Note !!
Circular section may be used instead of square section if approved by the Engineer.



SQUARE BUILD-UP SECTION (A) 2

- Notes:
1. Portion of pile embedded into footing shall be of sound concrete. Damaged portions shall be removed and pile cut-off elev. lowered as required by the Engineer.
 2. When height of depressed portion of footing (H) exceeds 4', the depressed section shall be poured separately from the main body of the footing.
 3. Depressed portion of footing may be omitted for pile heads embedded at least 4" into footing provided at least 90% of the piles in each footing have the minimum embedment into footing as shown in contract plans.



TYPE A

TYPE B

WITHOUT DRIVING - TYPICAL PILE BUILD-UP DETAILS

NOTE: Selection of pile build-up type without driving to be determined by the Engineer.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
PRESTRESSED CONCRETE PILES

Oct. 1968
SHEET No. 16 OF 16 SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
NO.	