

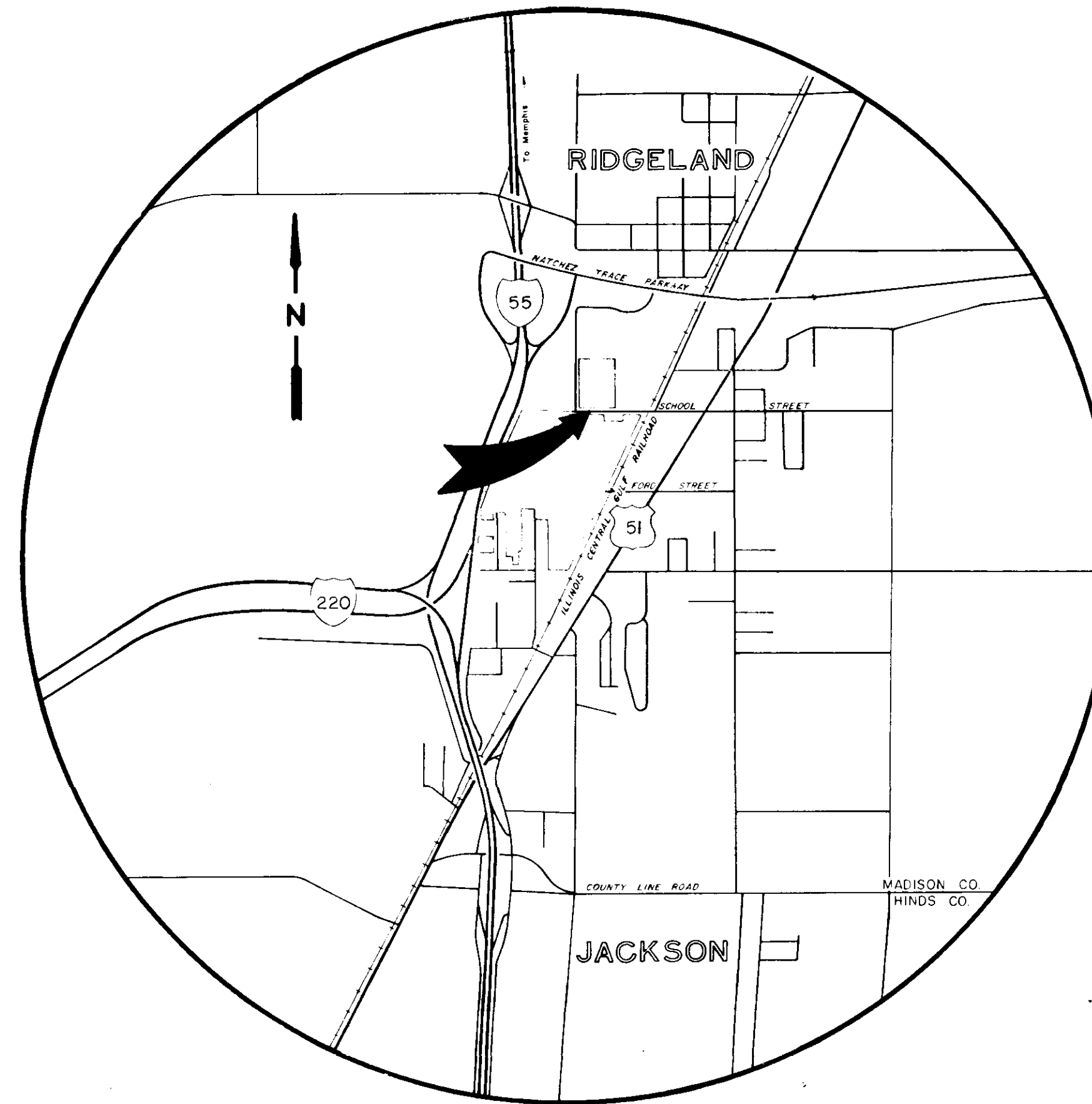
NATCHEZ TRACE COMMERCIAL PARK

SITUATED IN BLOCK 20, HIGHLAND COLONY,
RIDGELAND, MADISON COUNTY, MISSISSIPPI

a development by:

I-55 NORTH COMMERCIAL PARK, LTD.

P.O. Box 16587
Jackson, MS 39206

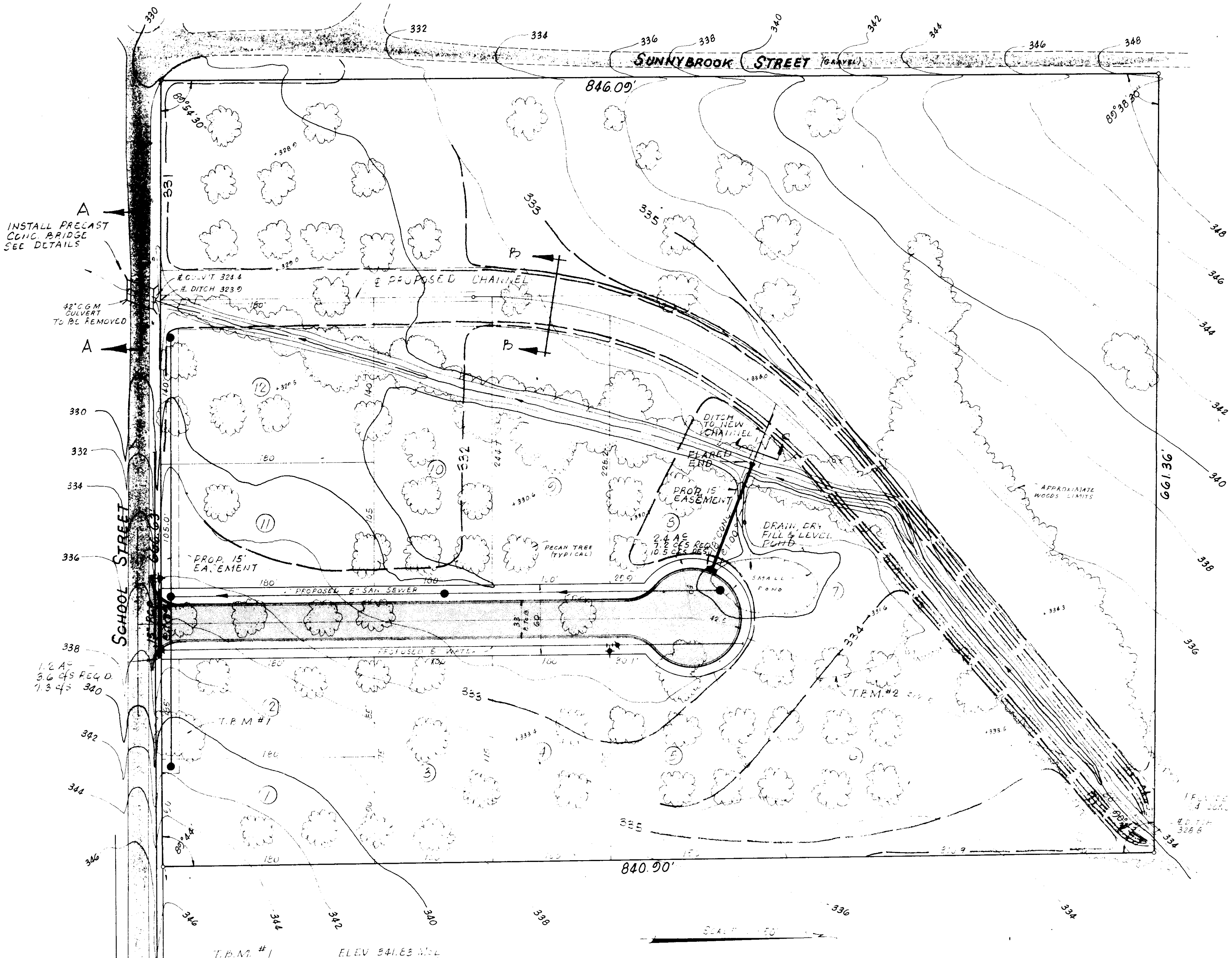


prepared by:
CASE & ASSOCIATES, INC.
&
CONTINENTAL CONSULTANTS, INC.
Jackson, Mississippi

PWP-01400

Natchez Trace Comm
Park - Proposed

OK



A
INSTALL PRECAST
CONC. BRIDGE
SEE DETAILS

42" O.D.M.
CULVERT
TO BE REMOVED

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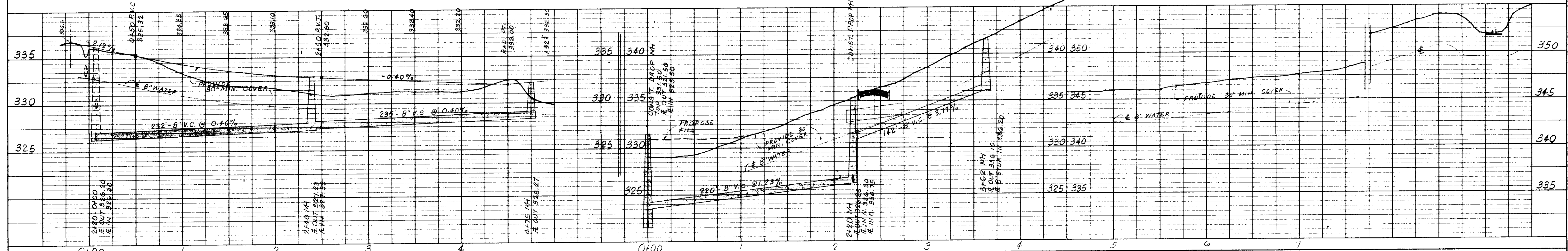
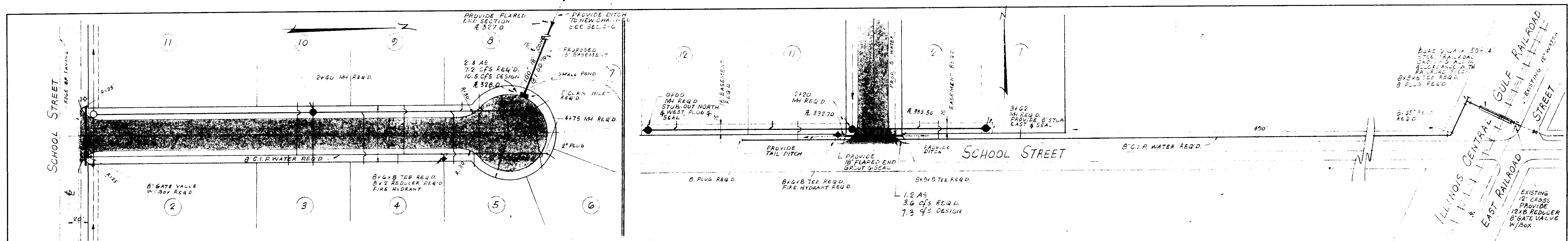
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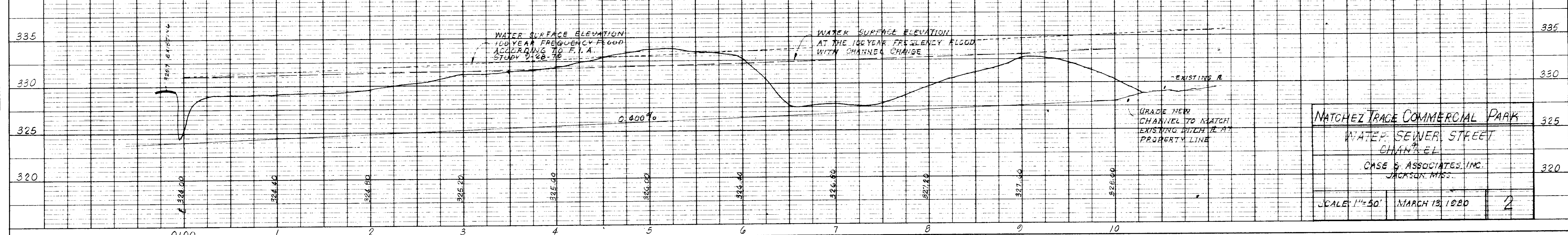
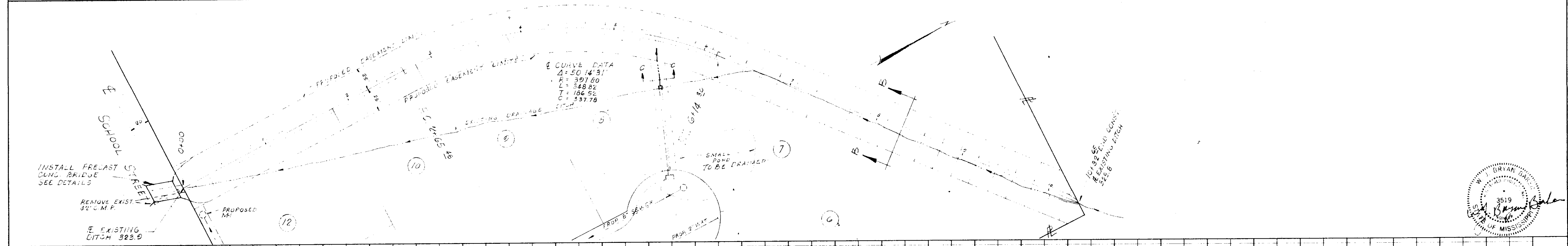
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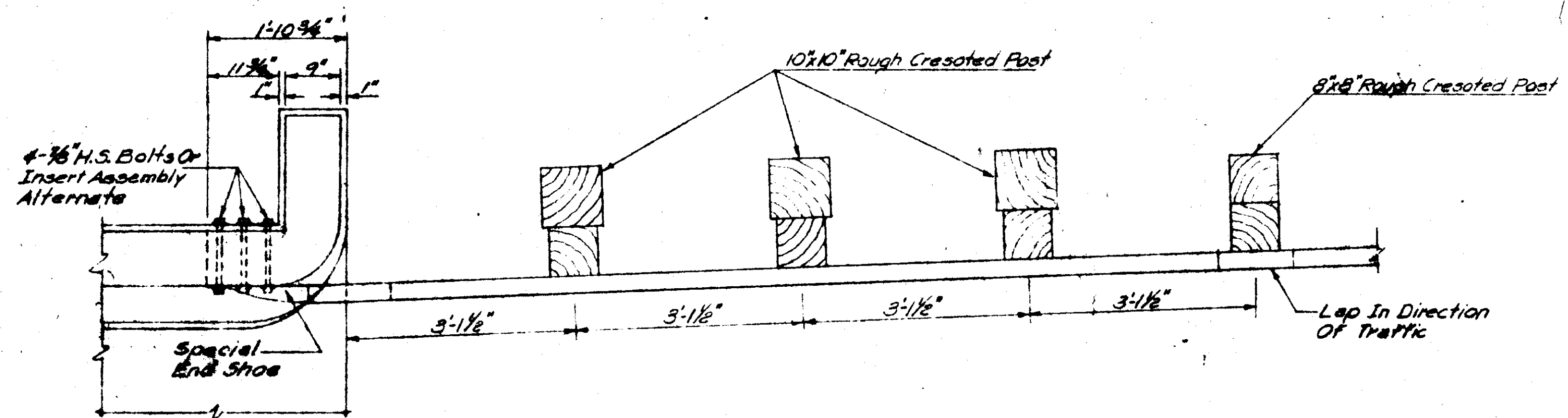
DATE	
BY	
REVIEWED	
ALIGNMENT CHECKED	
NOTE BOOK	
NO.	



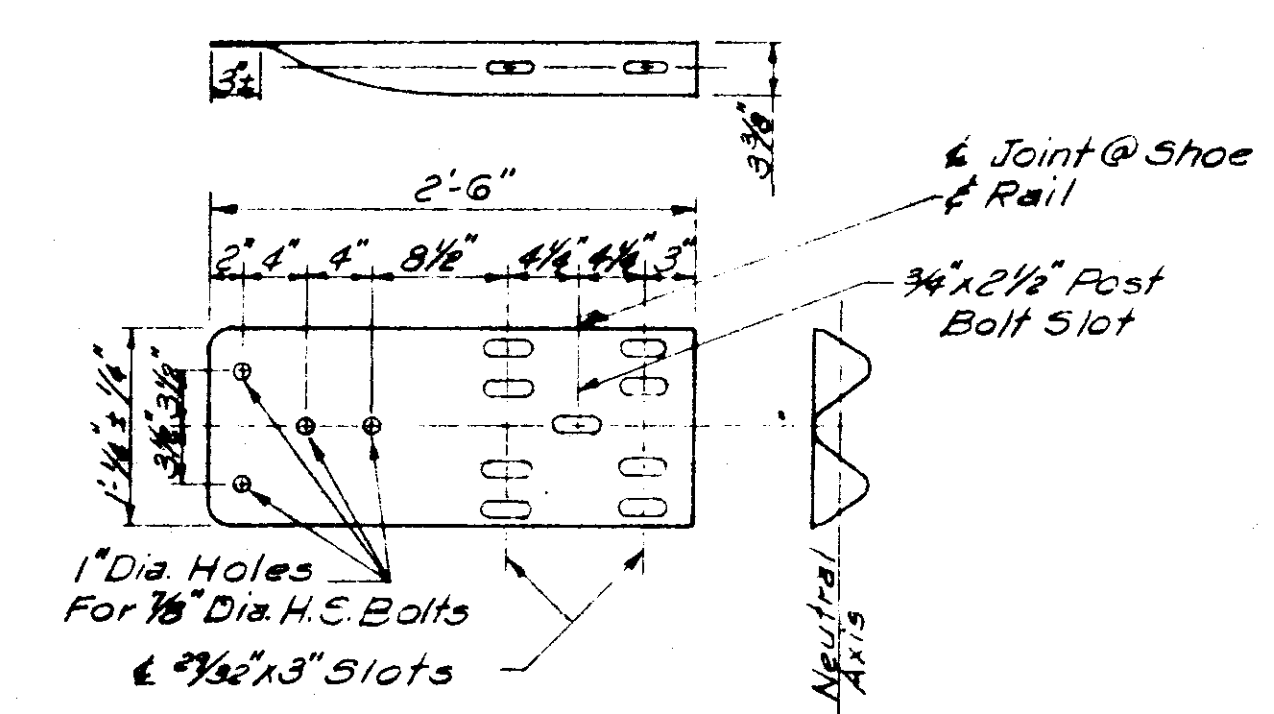
DATE	
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NOTE BOOK	
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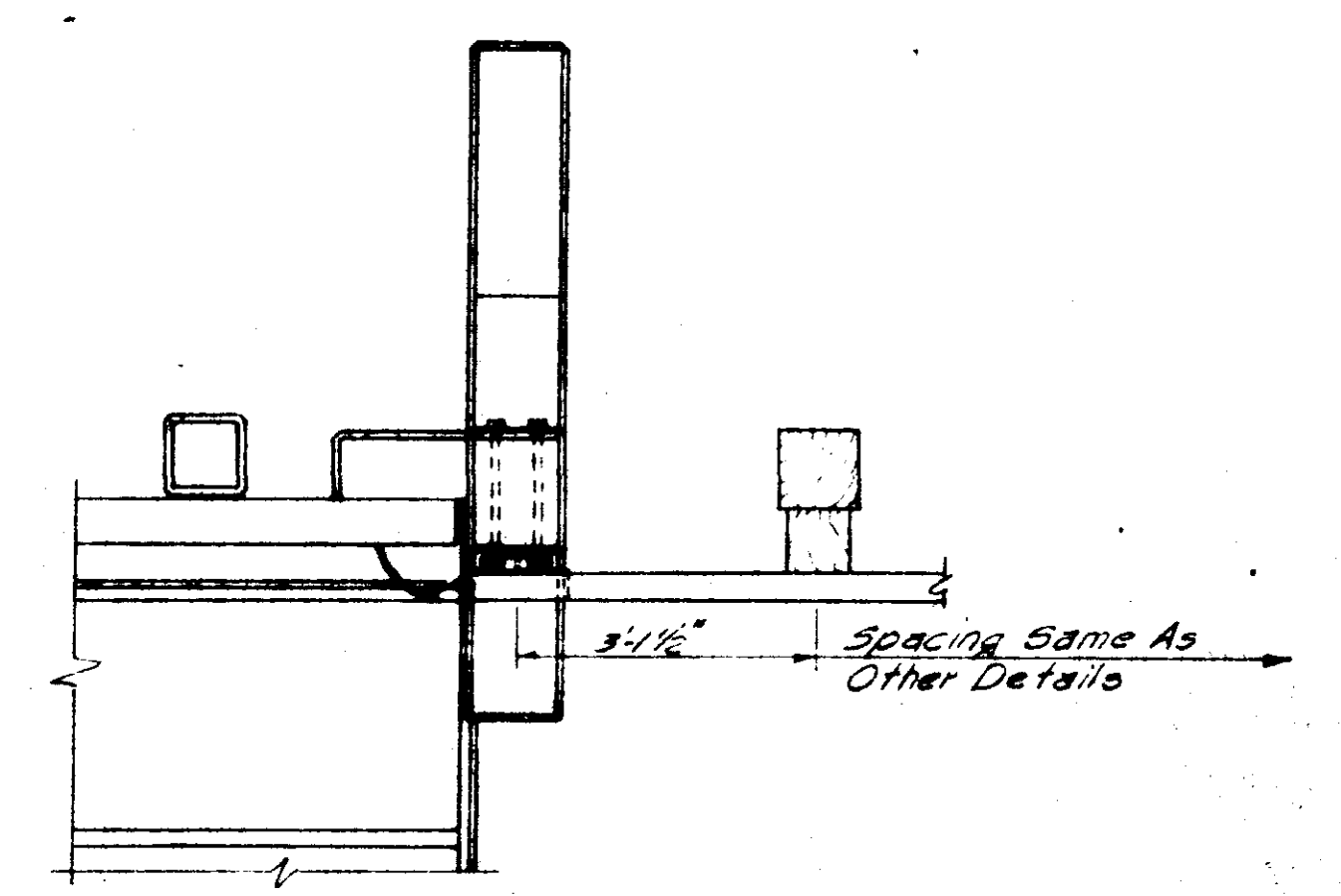
NATCHEZ TRACE COMMERCIAL PARK
WATER SEWER STREET
CHANNEL
CASE & ASSOCIATES, INC.
JACKSON, MISS.
SCALE 1"=50' MARCH 13, 1980 2



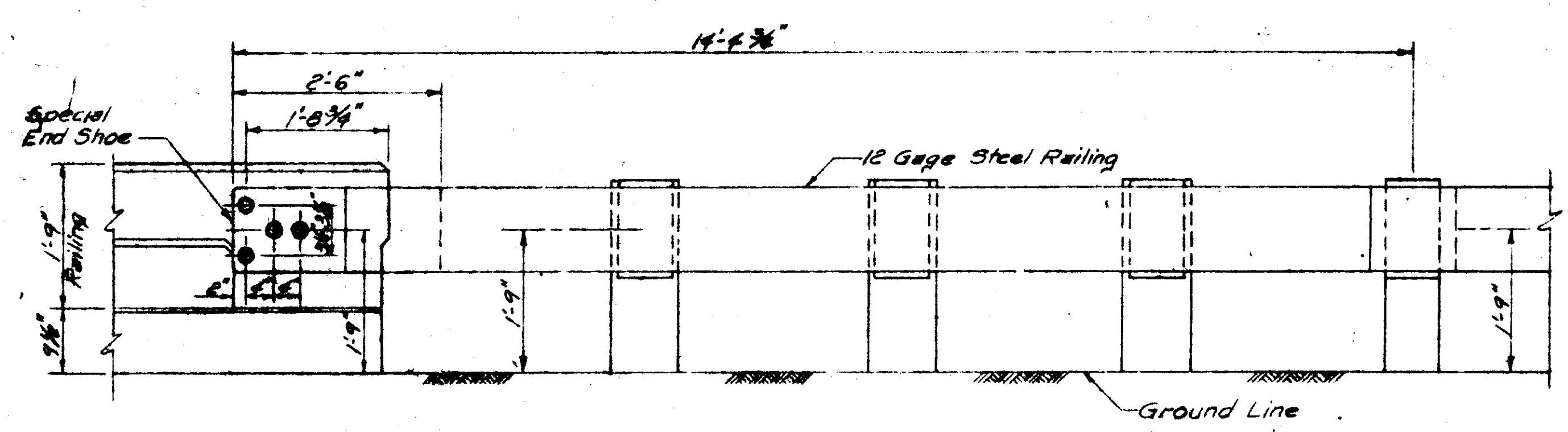
PLAN OF SHOE ATTACHMENT
(TYPE MS)



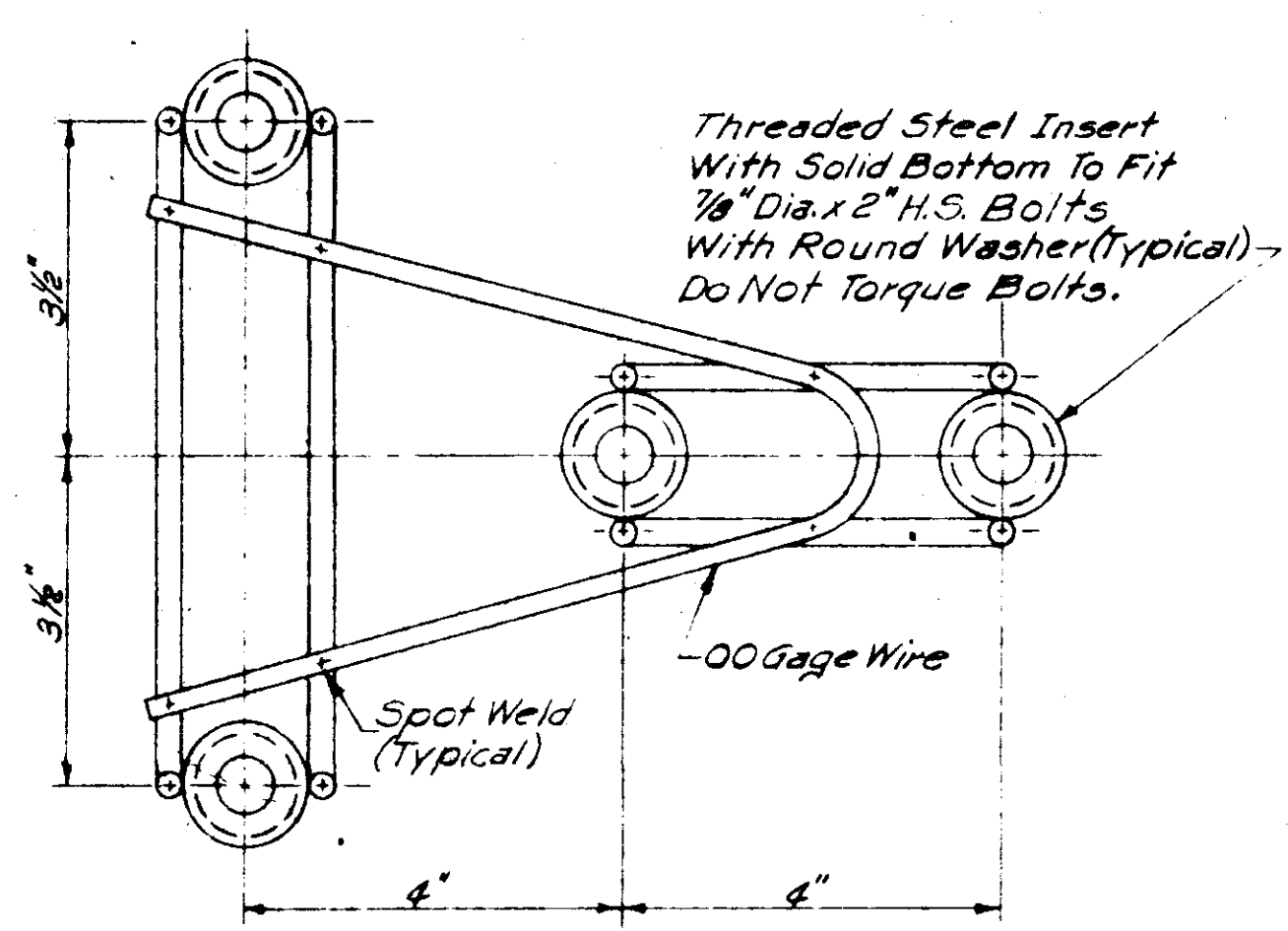
SPECIAL END SHOE
Special End Shoe Shall Be 10 Gage Steel And Galvanized In Accordance With ASTM Designation: A93 Or A123 With Coating Class 2.50



PART PLAN OF BRIDGE END SECTION FOR PRECAST SPAN



ELEVATION OF SHOE ATTACHMENT
(TYPE MS)



INSERT ASSEMBLY
(FOR ALTERNATE)

GENERAL NOTES
Specifications: Mississippi Standard Specifications For State Aid Road And Bridge Construction, 1971 Edition. Posts May Be Rough Or S&S No. 1 Sou. Pine In Accordance With Southern Pine Association Grading Rules And Shall Be Given 12 Lb. Creosote Treatment Per Section 715.

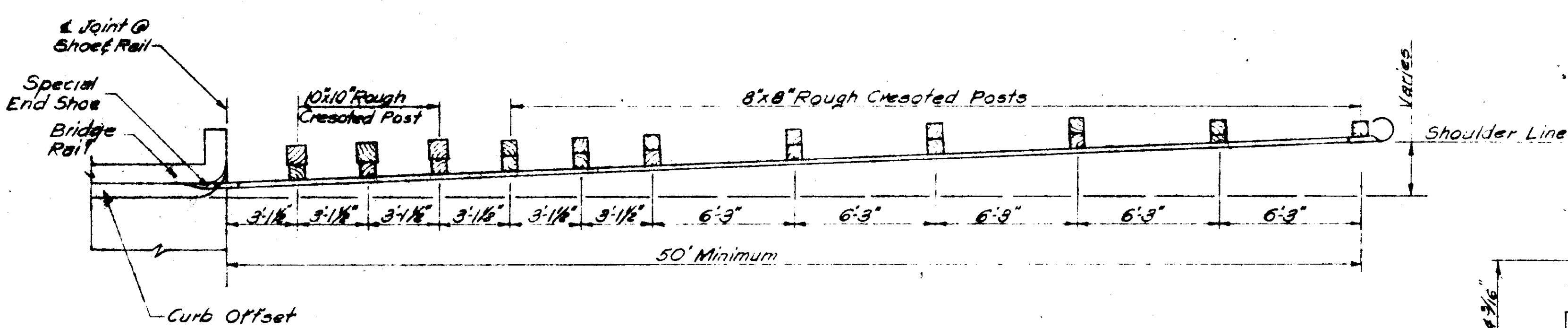
Bolt Holes In Posts May Be Bored In Field But Shall Be Pressure Treated With Hot Creosote Oil. See Section 820.

All Hardware Shall Be Galvanized To Conform To ASTM Specifications A153.

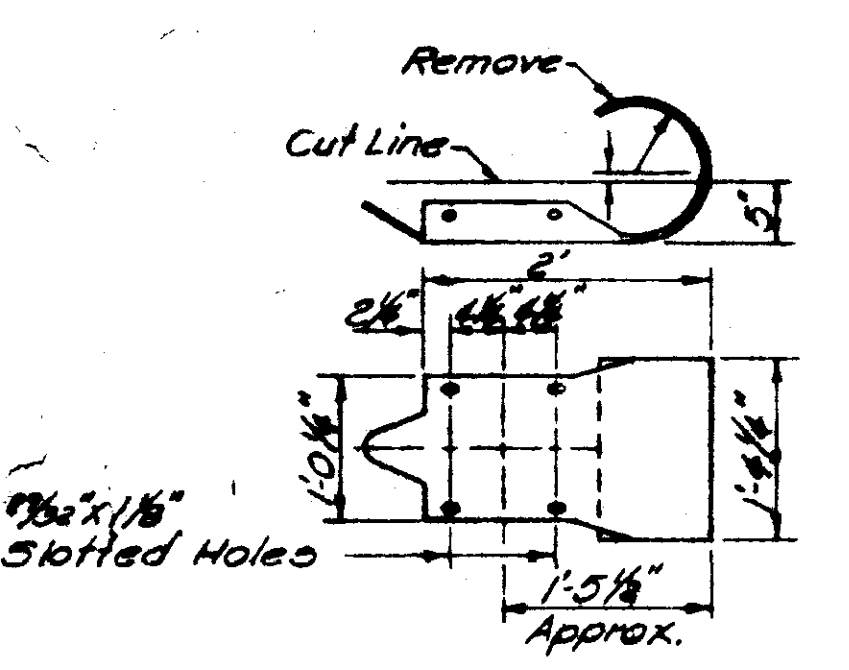
Guard Rail Members Shall Be Galvanized After Fabrication (2 1/2 Ounces Per Sq. Ft. - ASTM A-93).

Guard Rail Shall Be Erected True To Alignment And Grade As Established By The Engineer.

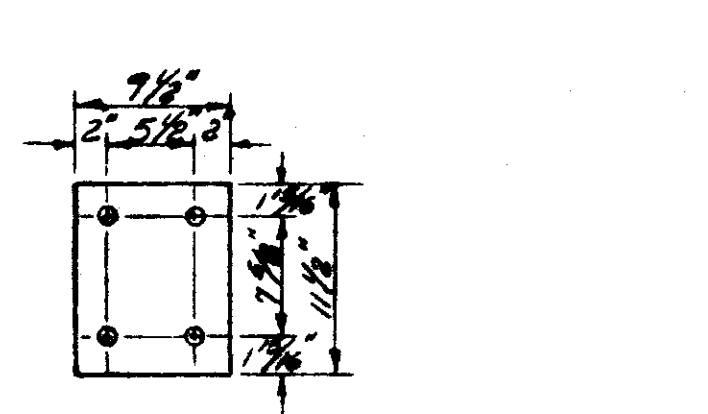
Guard Rail Shall Conform To AASHTO M 190-65 Except As Modified Above.



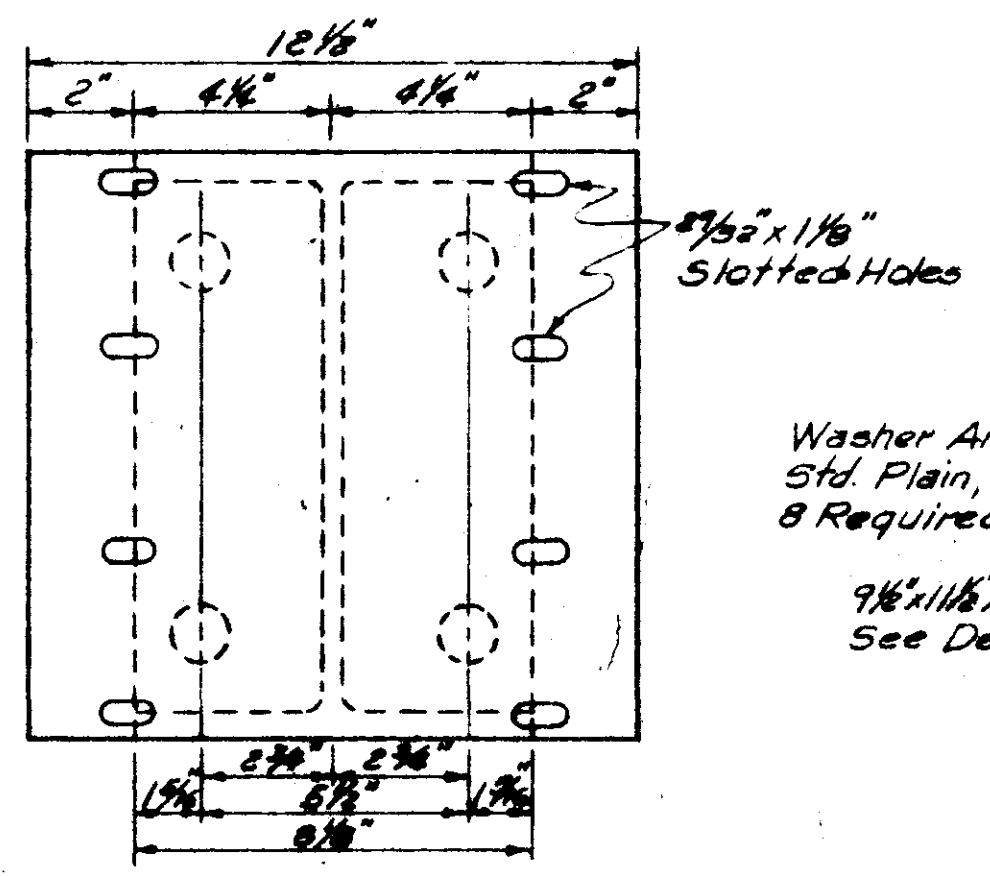
FLARE DETAIL
(BOTH ENDS EACH SIDE)



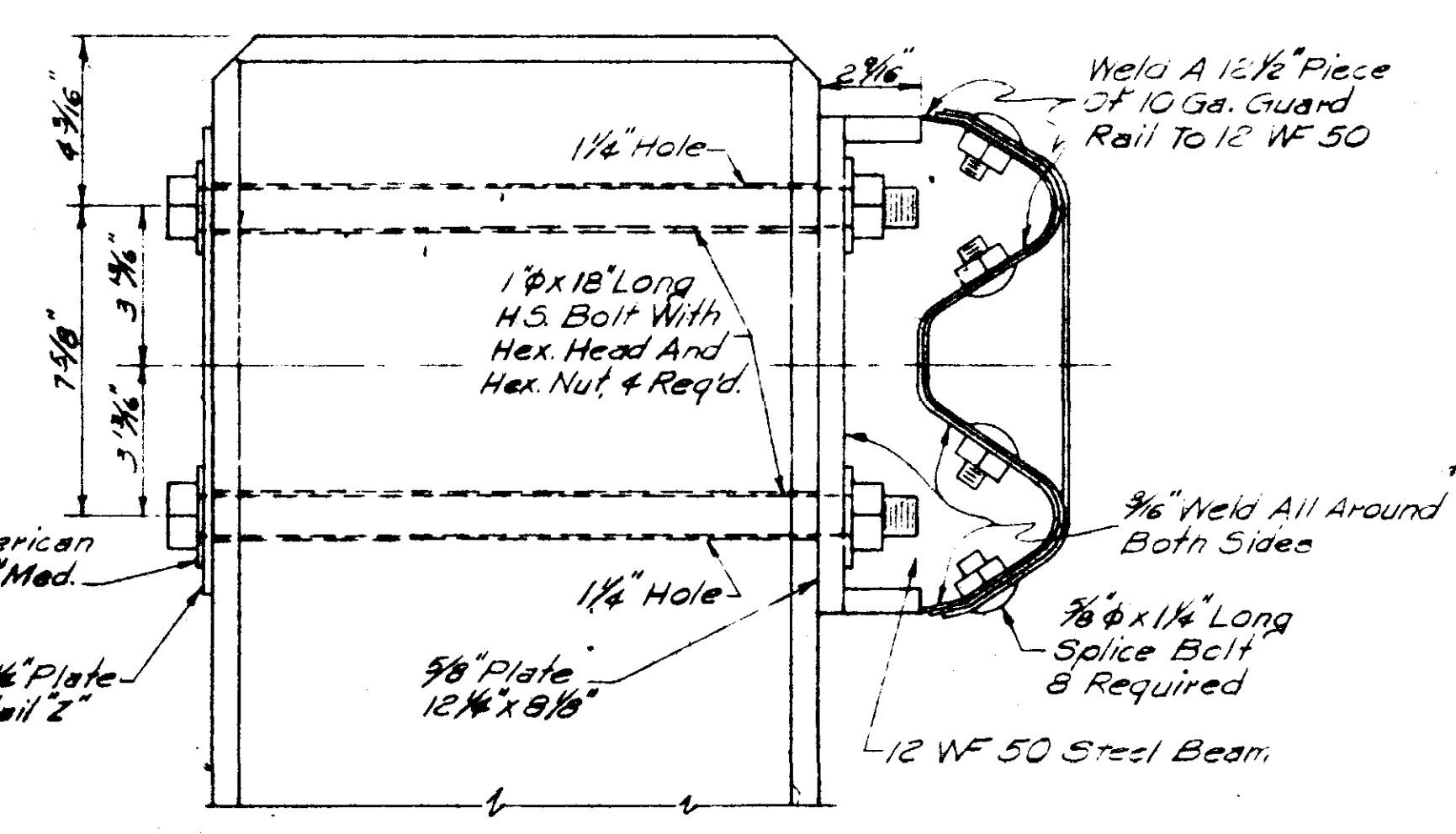
TERMINAL SECTION FOR TYPE C CONNECTION



SPECIAL DESIGN STEEL PLATE DETAIL "Z"



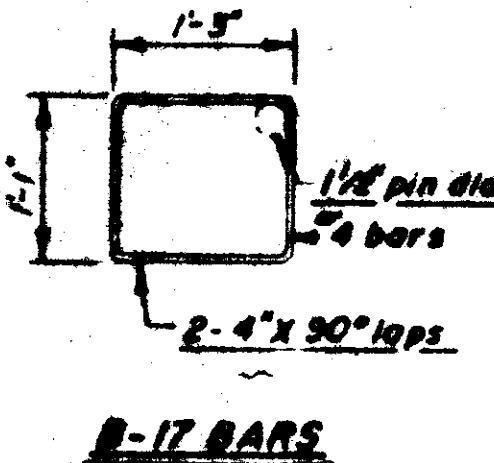
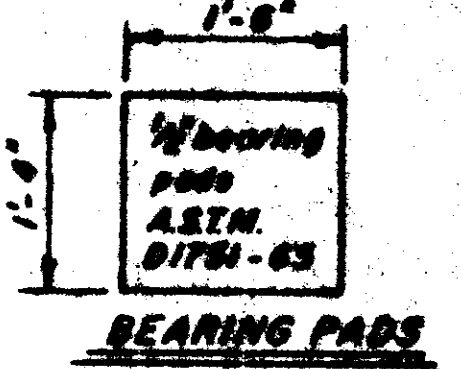
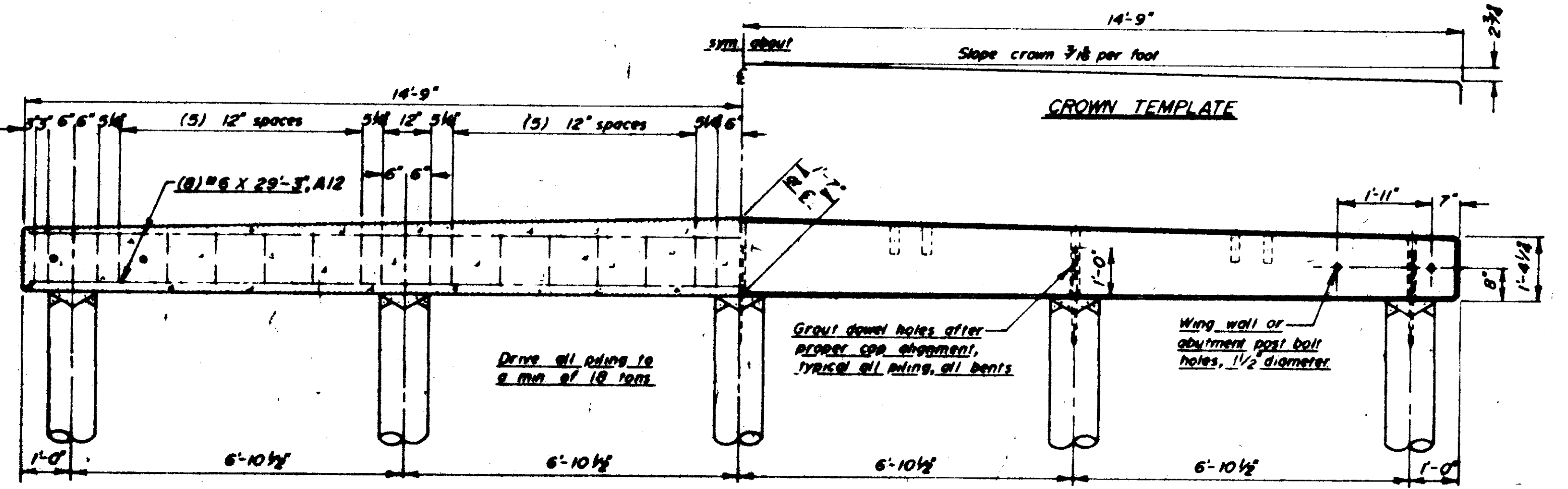
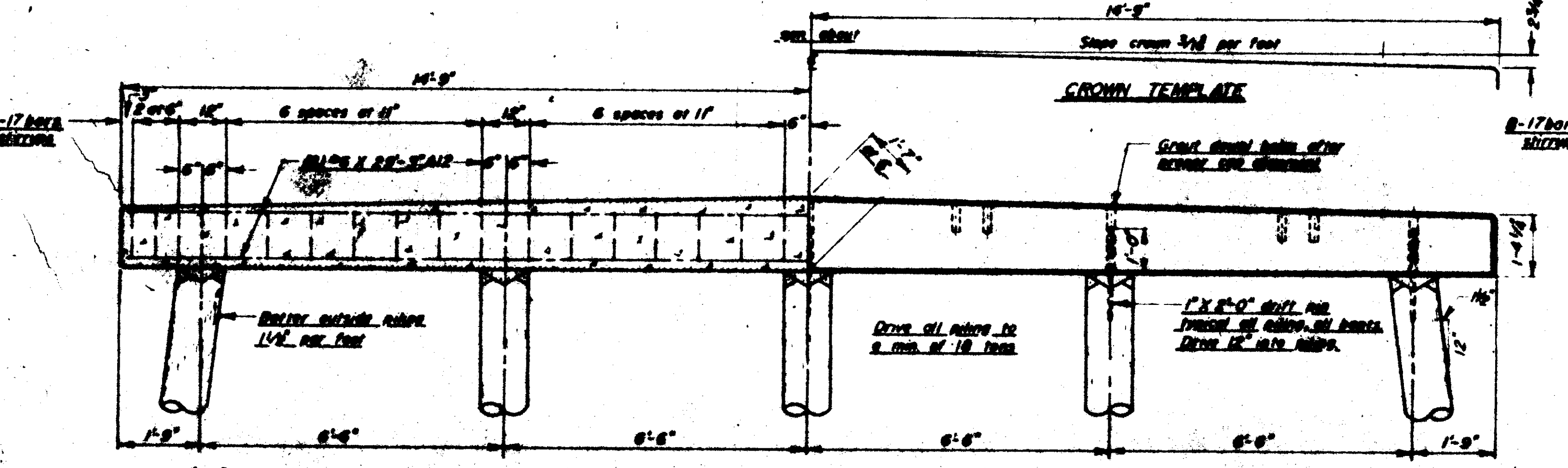
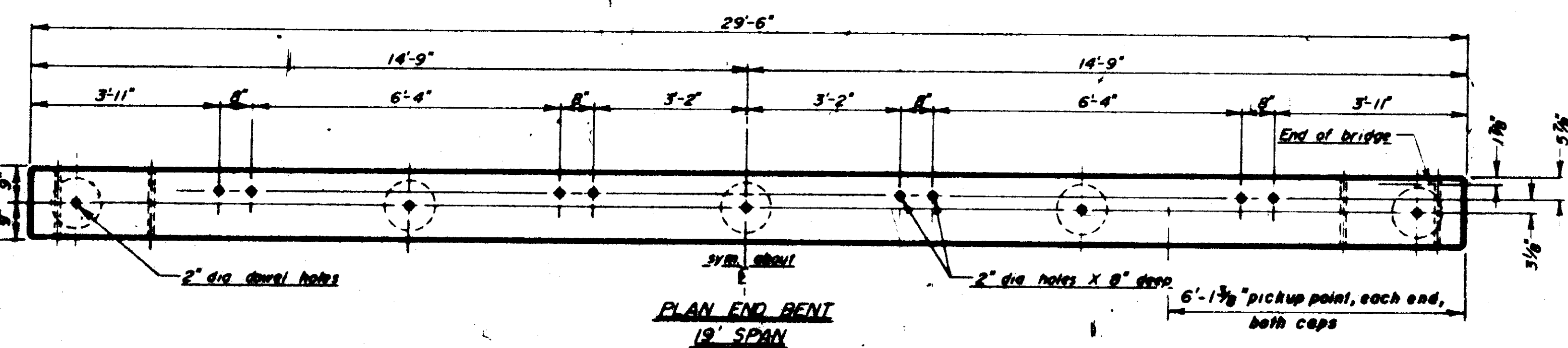
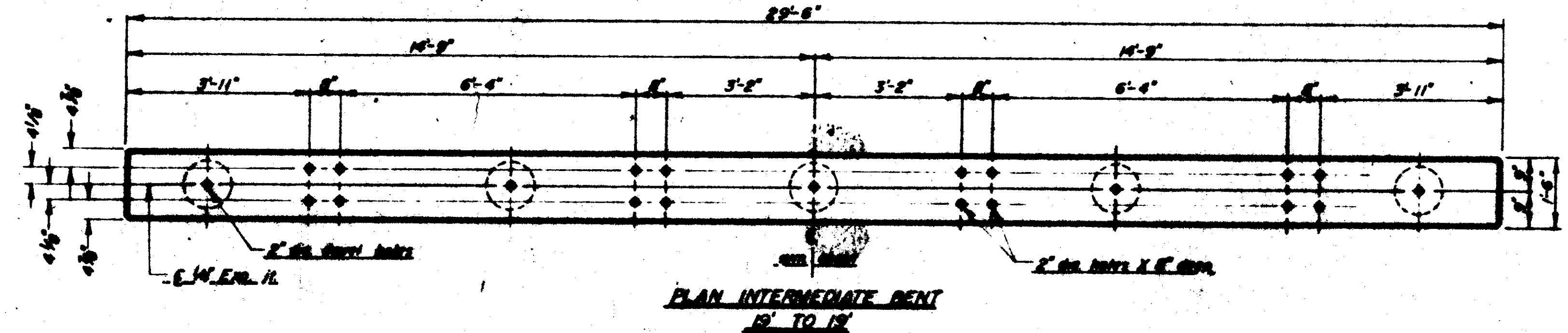
ELEVATION SHOWING 10 GA. GUARD RAIL CONNECTION TO 12 WF 50



END POST CONNECTION FOR PRECAST SPAN (TYPE "C")

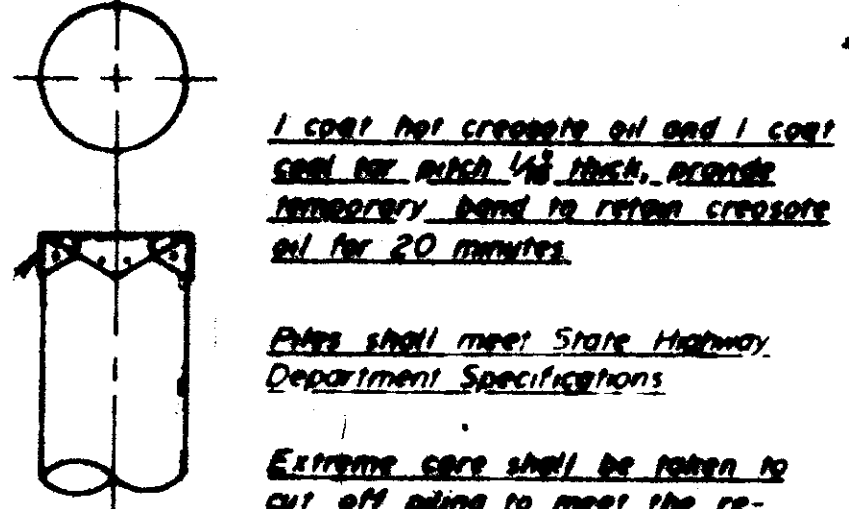
Pay Item: S-606-A Standard Rail Type (Complete In Place) Per Linear Ft.

STATE AID DIVISION		MISSISSIPPI STATE HIGHWAY DEPARTMENT	
BEAM TYPE GUARD RAIL DETAILS			
DATE	TRACED	CHECKED	DATE
	R.S.R.	M.S.	5-19-71
SA-GR-4			SH. 2 OF 2



Score cross at E of pile on pile cap, slope crown with E of crown hole before drawing and concrete placed concrete same.

Cover tops of all piles with 26 oz. poly. iron, red 20" X 20" sheet to pile with roofing nails, min. length 1 1/2" or show, if pile or cutoff is larger than 1 1/2" diameter, increase sheet size as required.



GENERAL NOTES

Specifications Division of State Aid Road Construction Mississippi State Highway Department

Concrete All concrete shall be Class "B" with a minimum ultimate compressive strength of 3,000 p.s.i. at 28 days.

Concrete shall reach a strength of 2500 p.s.i. before caps may be lifted from forms.

All exposed edges shall have 3/4" X 45° chamfer unless otherwise noted.

Piling All piling shall meet State Highway Department Specifications.

Steel Bracing All timber shall conform to A.A.S.H.O. M168-65.

All timber shall be dressed S-4-S.

Hardware Hardware shall be either black mild steel or wrought iron.

Reinforcing All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire supports.

Reinforcing steel shall be deformed bars conforming to A.S.T.M. A615.

Reinforcing dimensions are to the E of bars unless otherwise noted.

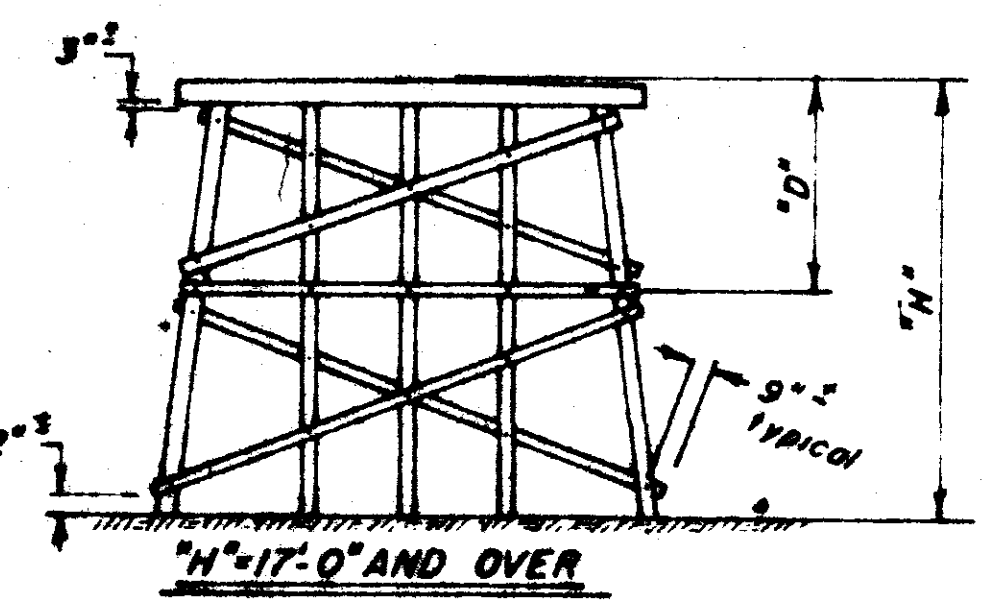
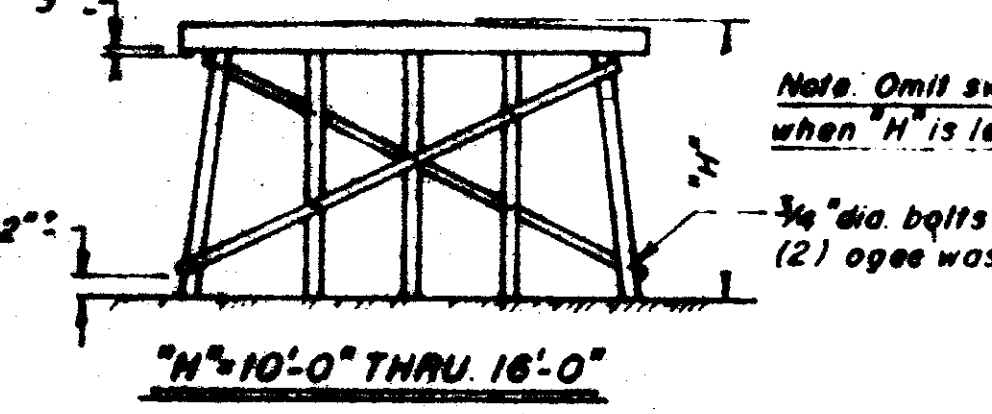
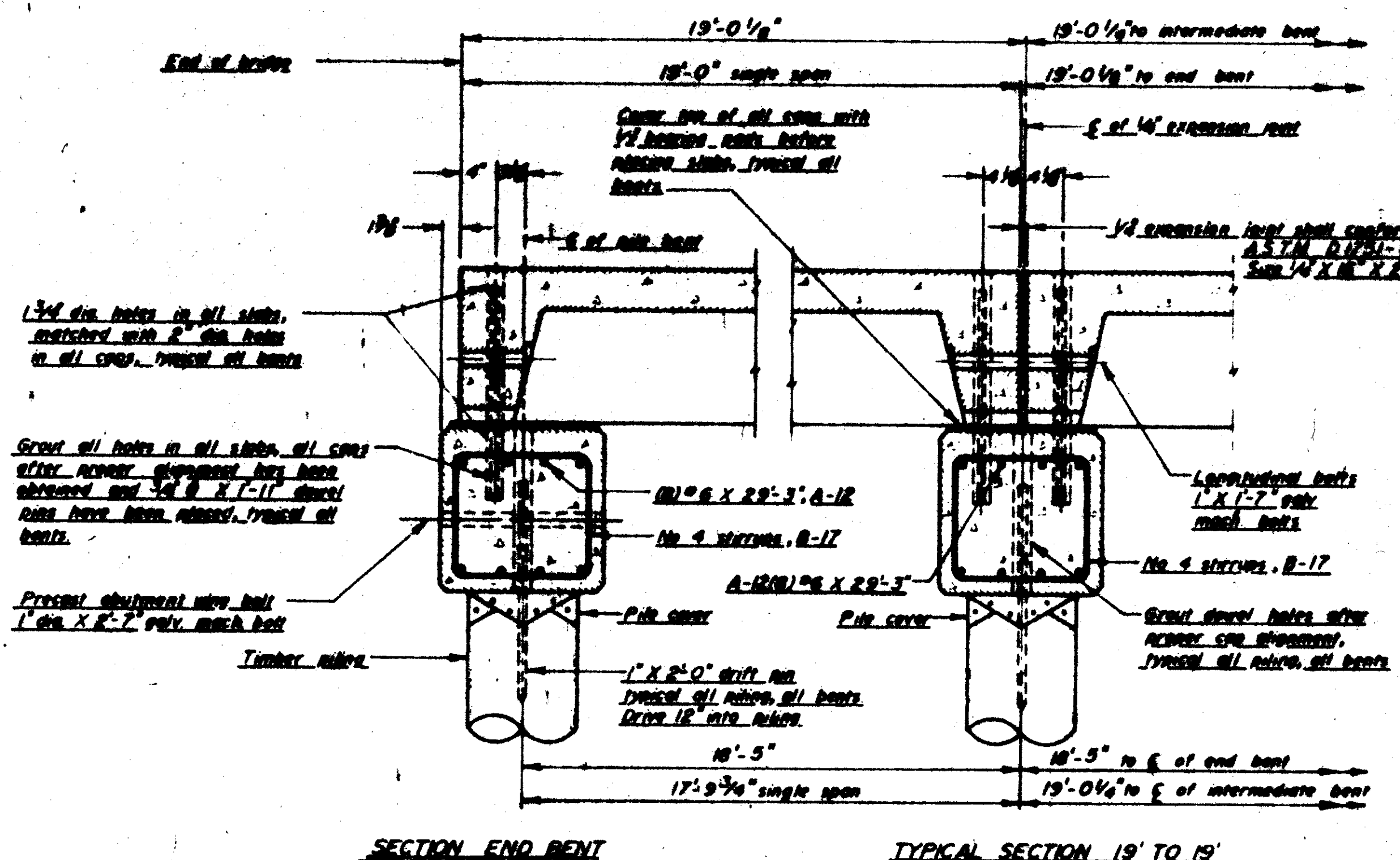
All work for which no pay items are provided in the proposal will not be paid for directly and compensation therefor will be considered included in the prices and payments for bid items.

A variation of more than 1/4" in dimensions will be cause for rejection of the unit.

DESIGN DATA

Specifications A.A.S.H.O. 1969 H 15 Loading

$f_s = 20,000$ p.s.i. $f_c = 1,200$ p.s.i. $n = 10$



"H" IN FEET	"D" IN FEET	SASH 3" X 8"	SWAY BRACES		M. B. M.
			UPPER 3" X 8"	LOWER 3" X 8"	
10'-0"			(2) at 29'-2"		117
12'-0"			(2) at 29'-4"		120
14'-0"			(2) at 30'-9"		123
16'-0"			(2) at 31'-8"		127
18'-0"	8'-6"	(2) at 29'-3"	(2) at 28'-10"	(2) at 31'-3"	358
20'-0"	8'-6"	(2) at 29'-3"	(2) at 28'-10"	(2) at 32'-0"	361
22'-0"	11'-6"	(2) at 30'-0"	(2) at 29'-11"	(2) at 32'-4"	369
24'-0"	11'-6"	(2) at 30'-0"	(2) at 29'-11"	(2) at 33'-1"	372

STATE AID ENGINEER
FRANK T. MOORE

BRIDGE ENGINEER
WILLIAM P. STEVENSON

STATE AID DIVISION
MISSISSIPPI STATE HIGHWAY DEPARTMENT

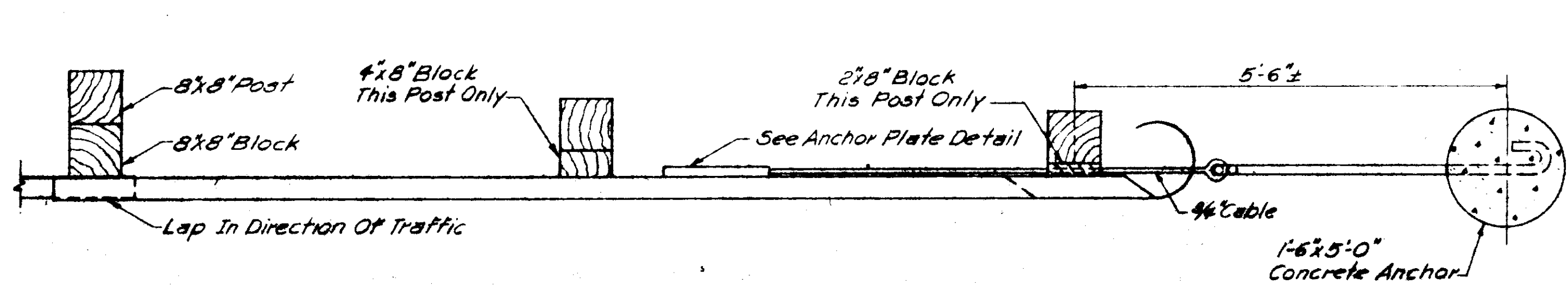
PRECAST CONCRETE CAPS
FOR USE WITH 19 FT. PRECAST
CONCRETE SPAN
26'-6" CLEAR ROADWAY WITH TIMBER PILING
FOR STATE AID PROJECTS ONLY

DRAWN BY J.D.B.
CHECKED BY W.P.S.

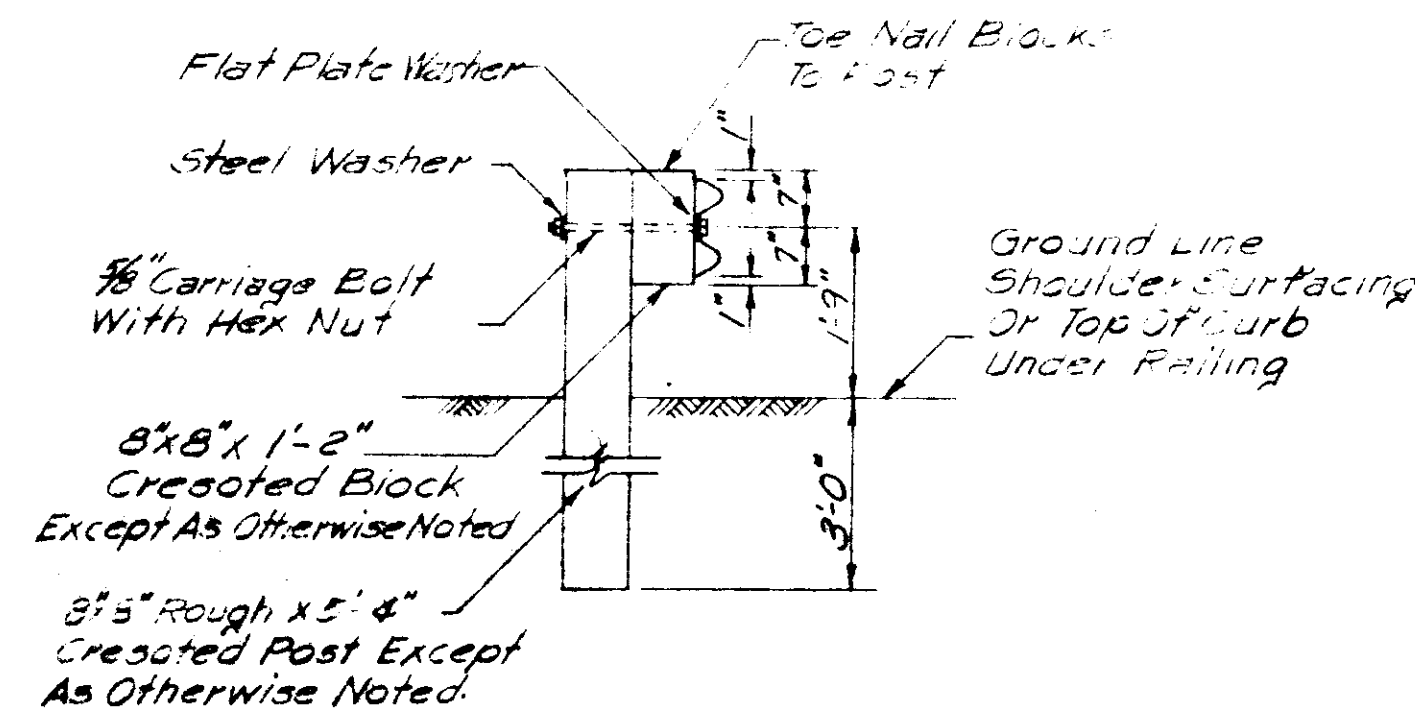
ISSUED W.P.S.
DATE 1 July 1971

DRAWING NUMBER
PC-1924 (B)

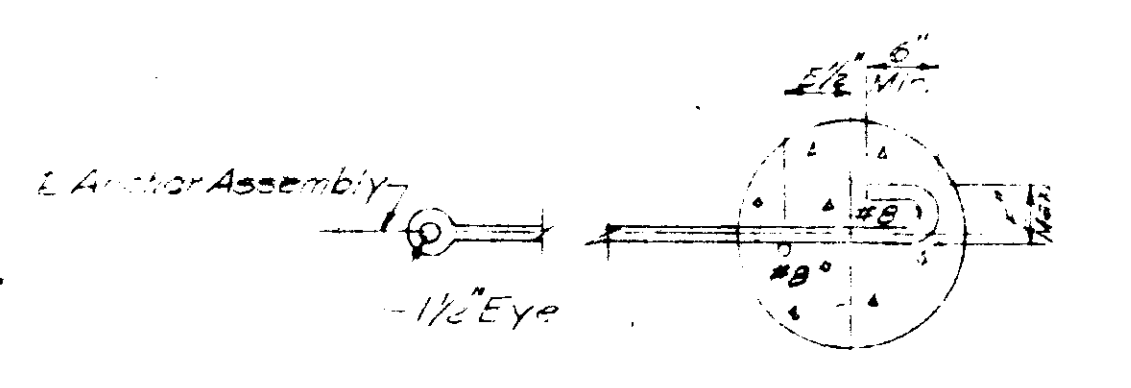
Revised July 1, 1971 W.P.S.



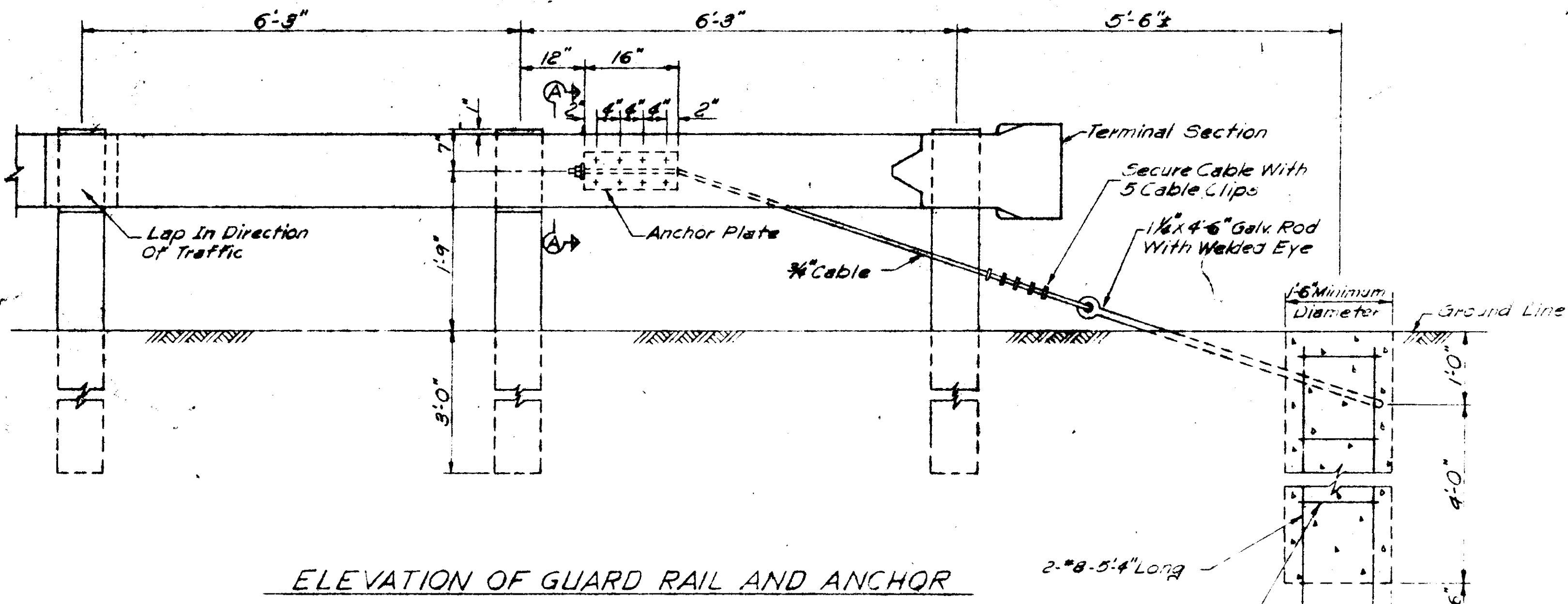
PLAN OF GUARD RAIL AND ANCHOR



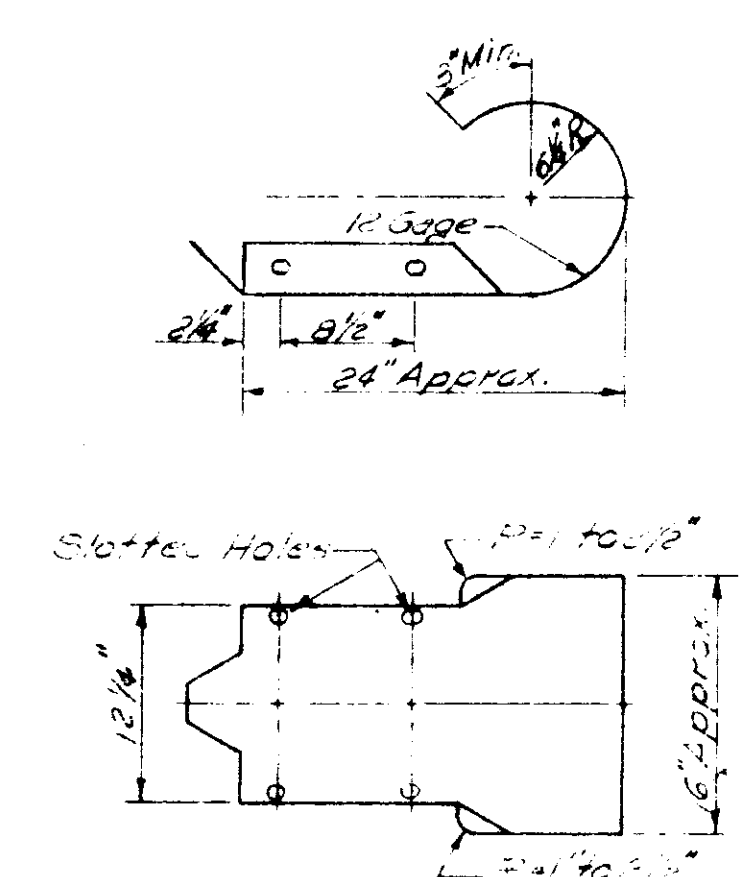
TYPICAL POST DETAIL



GUARD RAIL ANCHOR



ELEVATION OF GUARD RAIL AND ANCHOR



TERMINAL SECTION

GENERAL NOTES

Guard rail anchorage hardware shall meet the requirements of subsection 5-110.08 of the Mississippi Standard Specifications for State Aid Road And Bridge Construction, 1971 Edition.

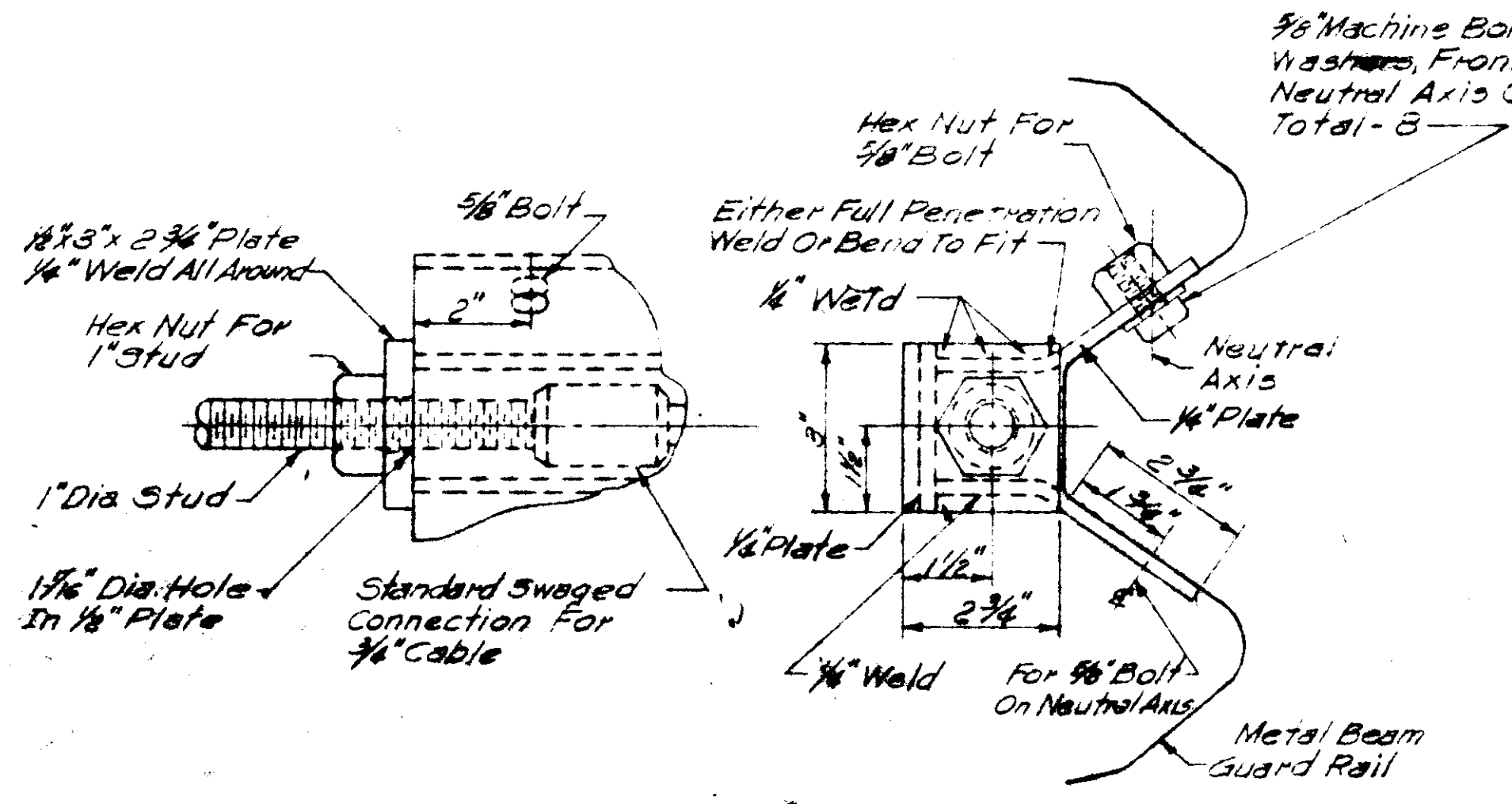
The anchor rod shall be fabricated of steel conforming to the specifications of ASTM Designation A107 Grade 1020. The eye may be drop forged or formed with a full penetration weld. The eye shall develop 100 percent of the rod strength. The anchor rod shall be galvanized after fabrication.

Anchor cable shall be 3/8 inch preformed 6x19 wire strand core or independent wire rope core (IWRC) galvanized right regular lay, manufactured of improved plow steel with a minimum breaking strength of 24 tons. Two certified copies of mill test reports of each manufacturer's length of cable used shall be furnished to the Engineer.

The swaged fitting and stud assembly shall be of steel conforming to the requirements of American Iron and Steel Institute Designation S1035 and shall be annealed galvanized suitable for cold swaging. The swaged fitting and stud assembly shall develop 100 percent of the breaking strength of the cable. Two certified copies of the manufacturer's certificate attesting to the strength of the swage fittings is required.

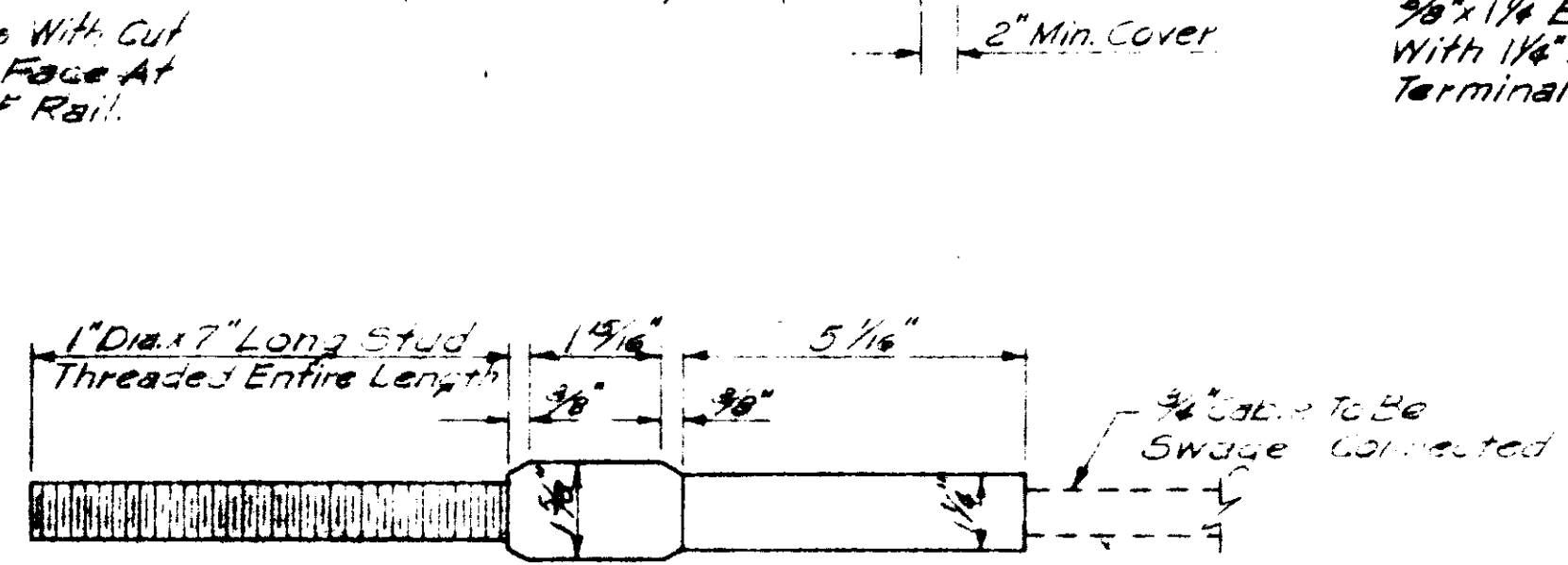
Pay items for guard rail shall include all guard rail posts (with reflector buttons when specified), anchorages, and for all equipment, tools, labor and incidentals necessary to complete the work.

Pay Item 5-606-A Guard Rail (Type) (Complete In Place) Per Linear Ft.

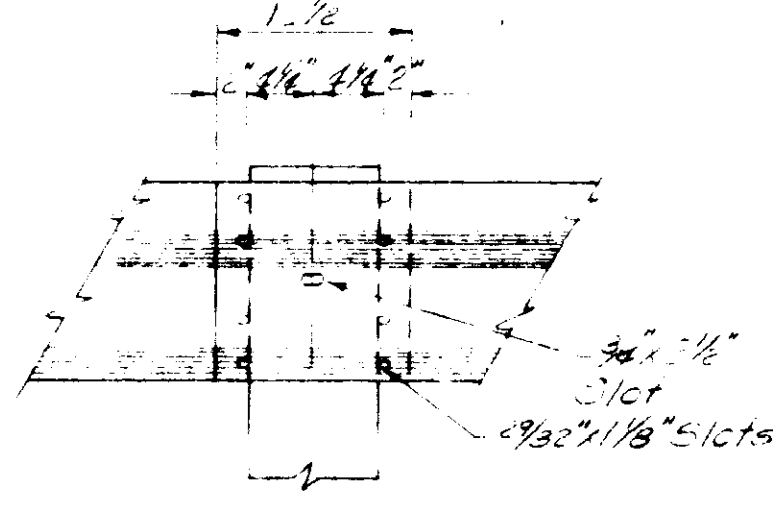


SECTION AA

ANCHOR PLATE DETAILS

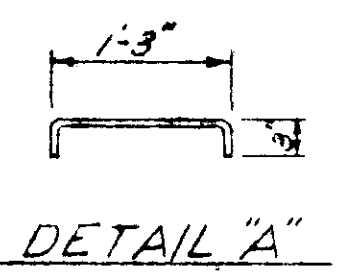


SWAGED FITTING AND STUD

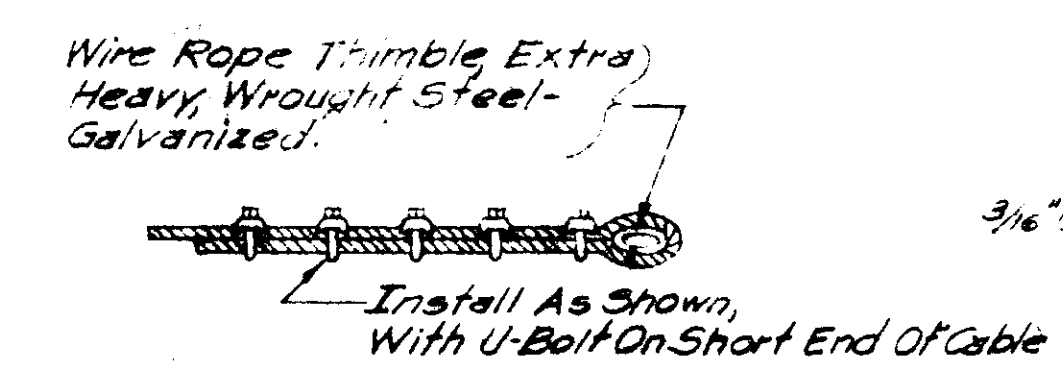


RAIL SPlice

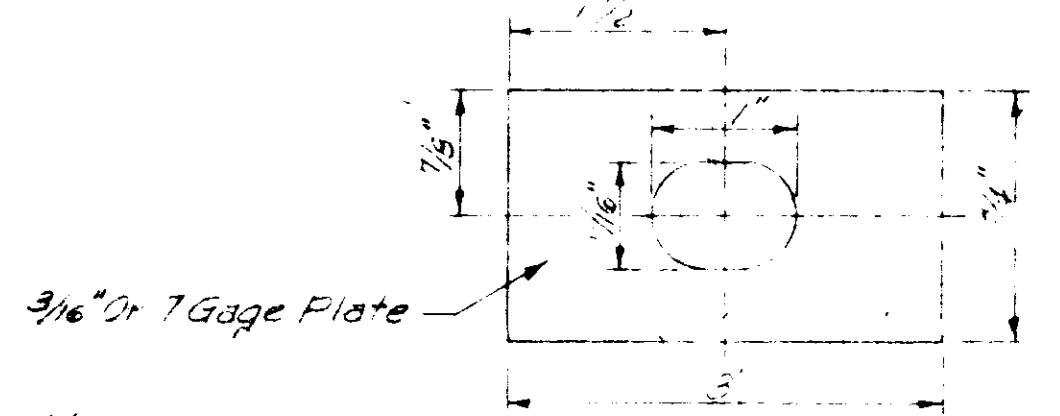
3/8 x 1/4 Button Head Oval Shoulder Bolts With 1/4 Recessed Hex Nuts, Total-4 Per Splice.



DETAIL 'A'

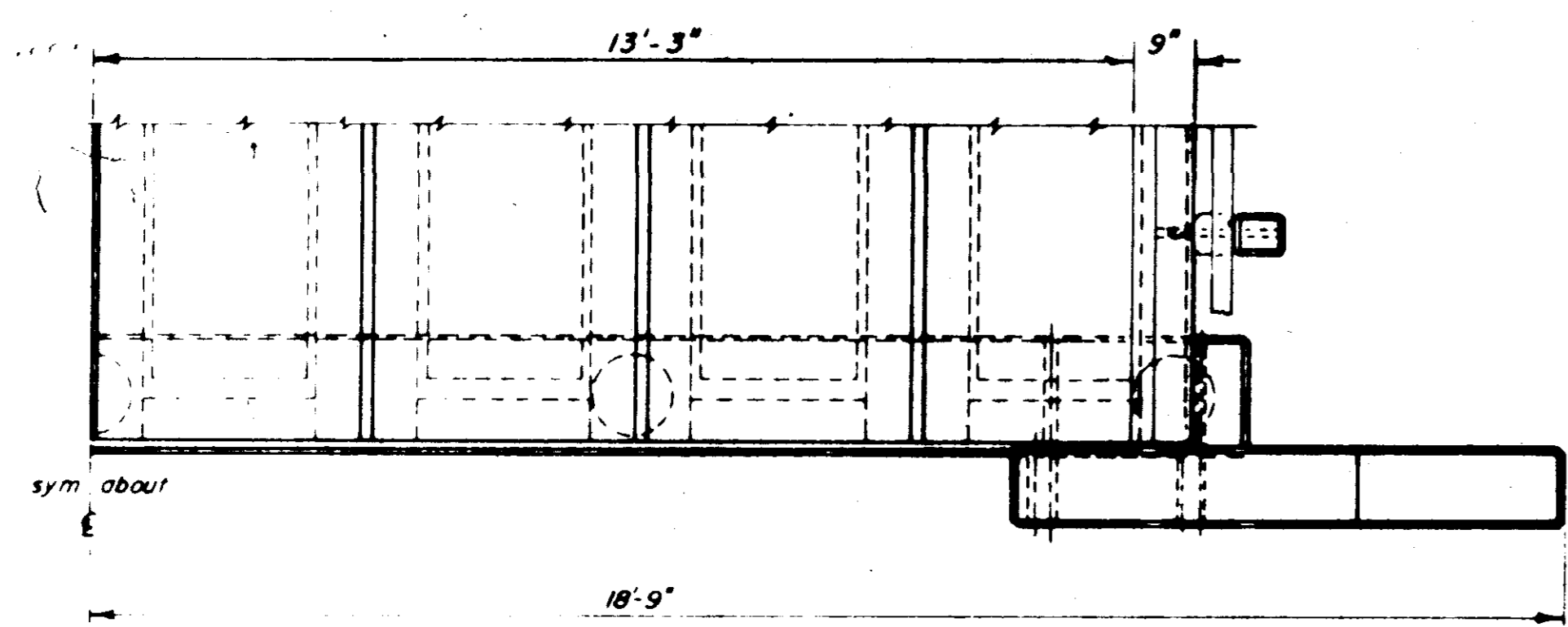


CABLE CLIP INSTALLATION

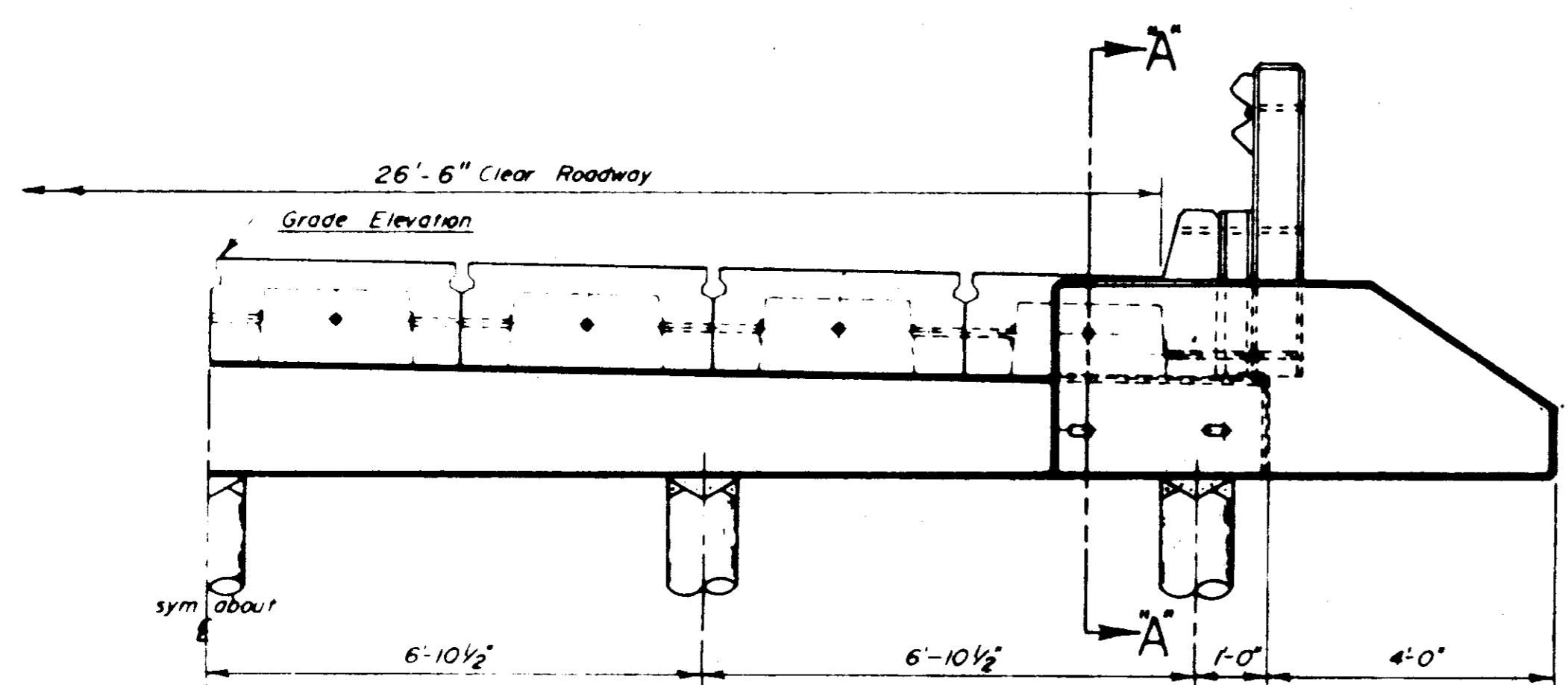


FLAT PLATE WASHER

STATE AID DIVISION		MISSISSIPPI STATE HIGHWAY DEPARTMENT	
BEAM TYPE GUARD RAIL DETAILS			
DATE	TRACED	CHECKED	DATE
11-24	A.S.R.	W.P.S.	2-19-71
SA-GR-4			SH. 1 OF 2

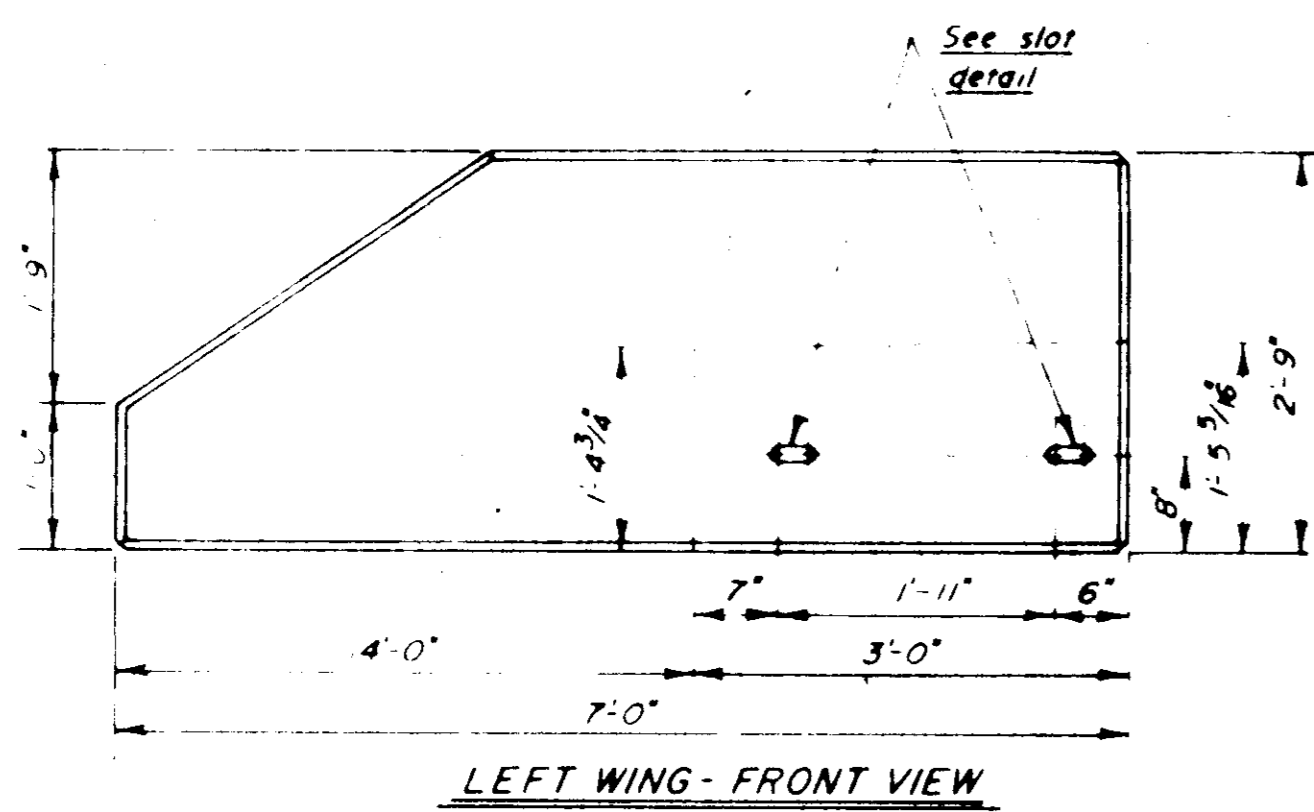


HALF PLAN

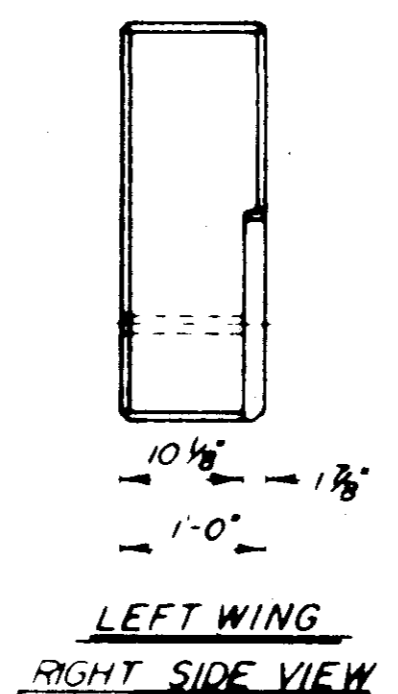


HALF ELEVATION

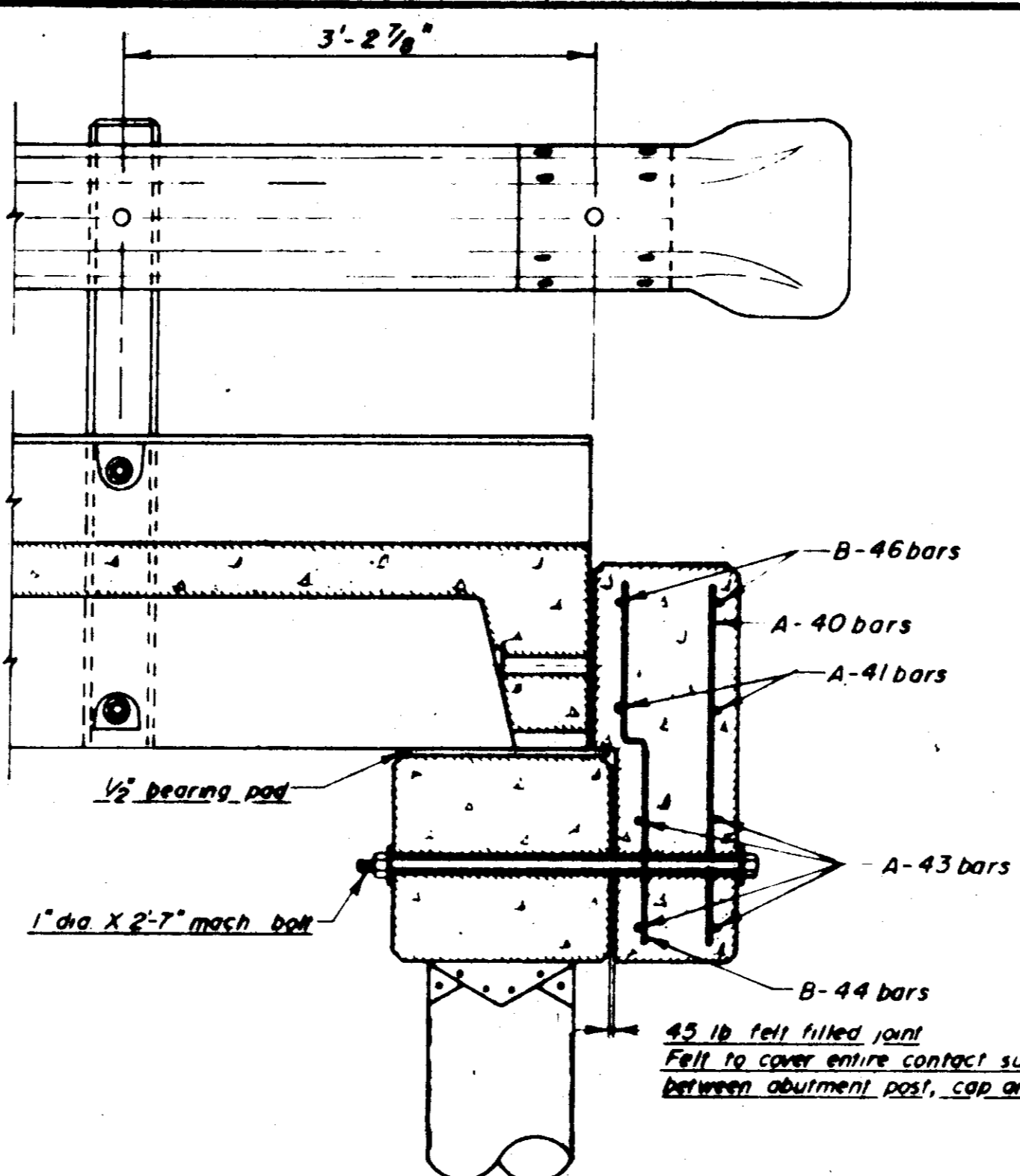
Note
Left and right wing
dimensions are same



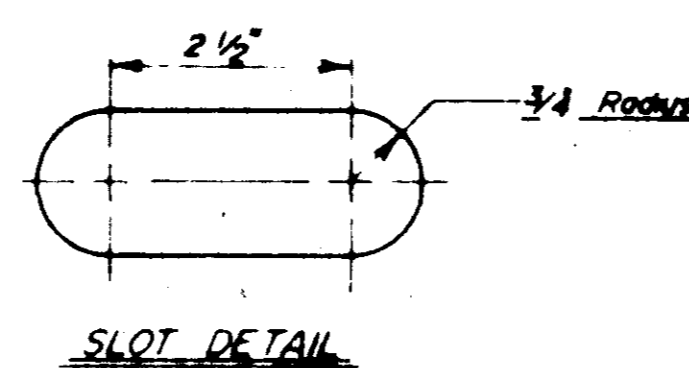
LEFT WING - FRONT VIEW



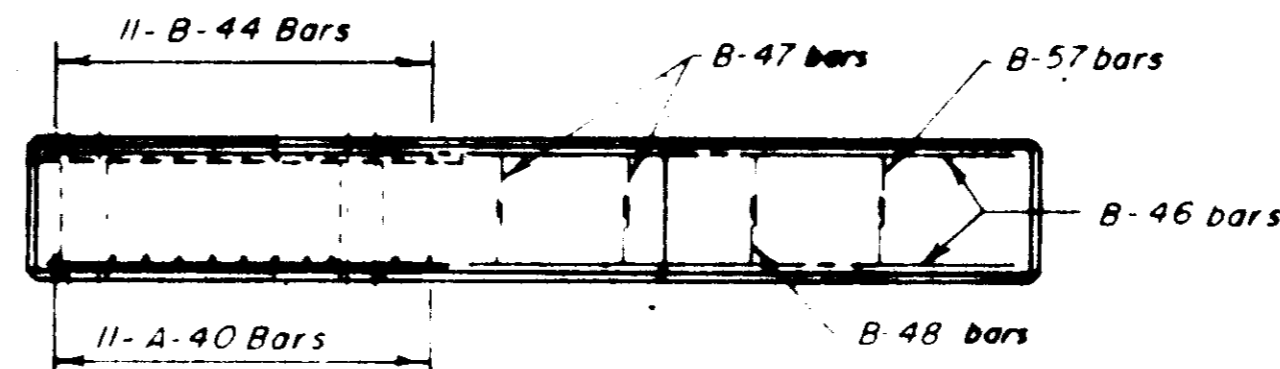
LEFT WING
RIGHT SIDE VIEW



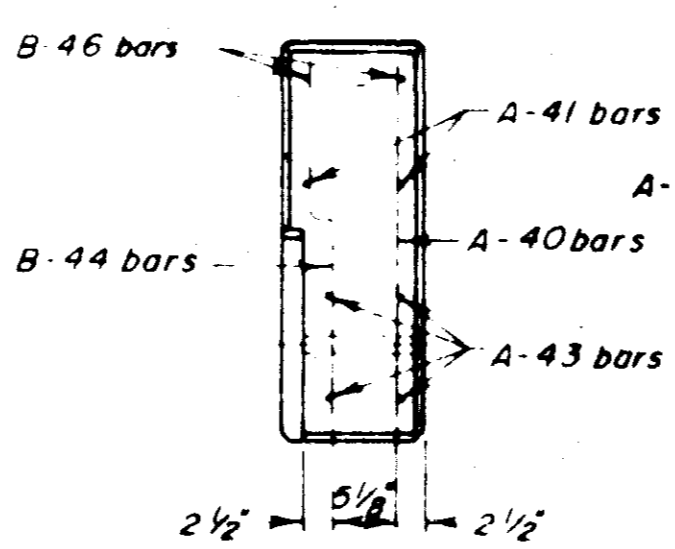
SECTION 'A' TO 'A'



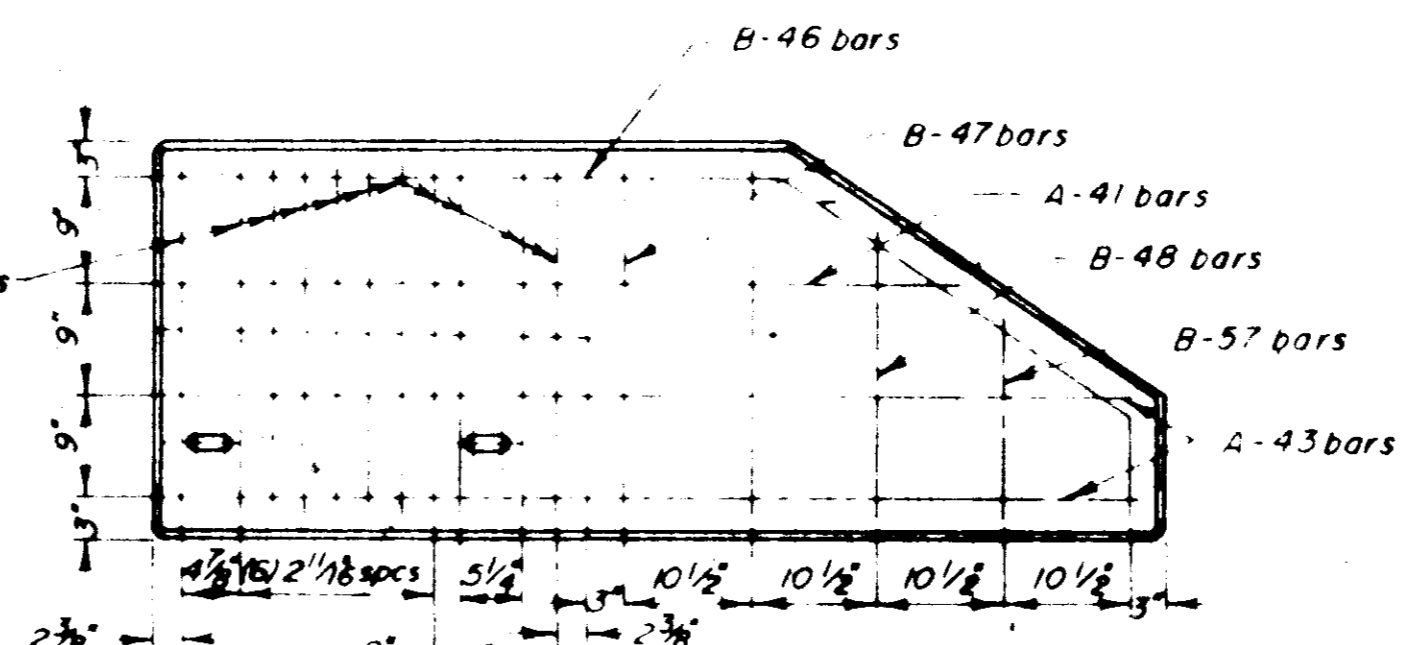
SLOT DETAIL



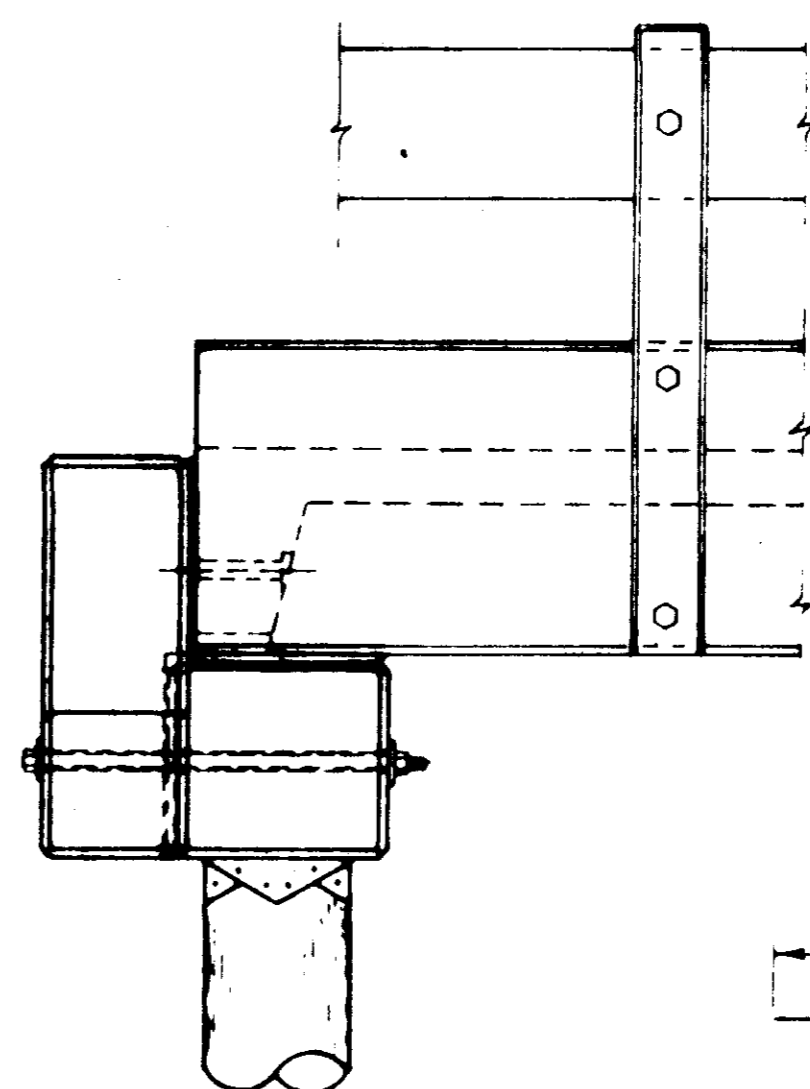
RIGHT WING - TOP VIEW



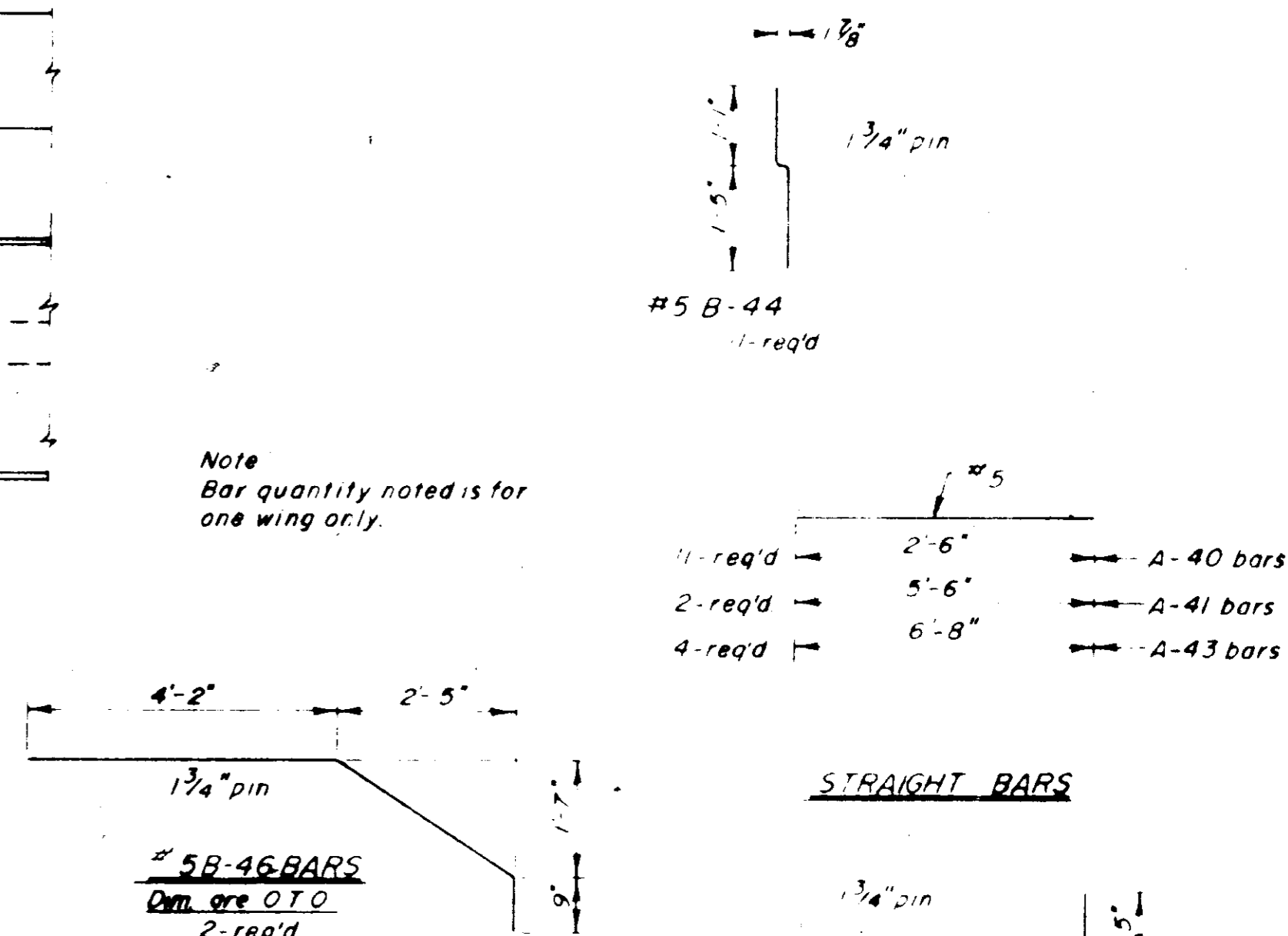
RIGHT WING
LEFT SIDE VIEW



RIGHT WING - FRONT VIEW



SIDE END ELEVATION



Note
Bar quantity noted is for
one wing only.

Note
Reinforcing steel details shall conform to
A CI Manual of Standard Practice For
Detailing Reinforced Concrete Structures

GENERAL NOTES

Specifications
Division of State Aid Road Construction
Mississippi State Highway Department

Concrete
All concrete shall be class 35 with a minimum ultimate compressive
strength of 3,000 p.s.i. at 28 days.
All exposed concrete corners shall be chamfered 3/4" x 45° unless
otherwise noted.

Reinforcing
All reinforcing steel shall be of the best quality obtainable in the form and
firmly held in place by chairs or steel wire supports.
Reinforcing steel shall be galvanized bars conforming to ASTM A615.
Reinforcing dimensions are to the center of bars unless otherwise noted.
The above steel will not be used for strength, but will be considered as
subsidiary to the form of concrete wing abutment post unit.

Hardware
All machine bolts connecting winged abutment post to caps shall be
considered subsidiary to the bid item.
All bolts shall be galvanized.

Blading
For blading purposes one left wing and one right and one left
precast wing.

Specifications
AASHTO 1957
14.1, 200 p.s.i., 14.2, 200 p.s.i.

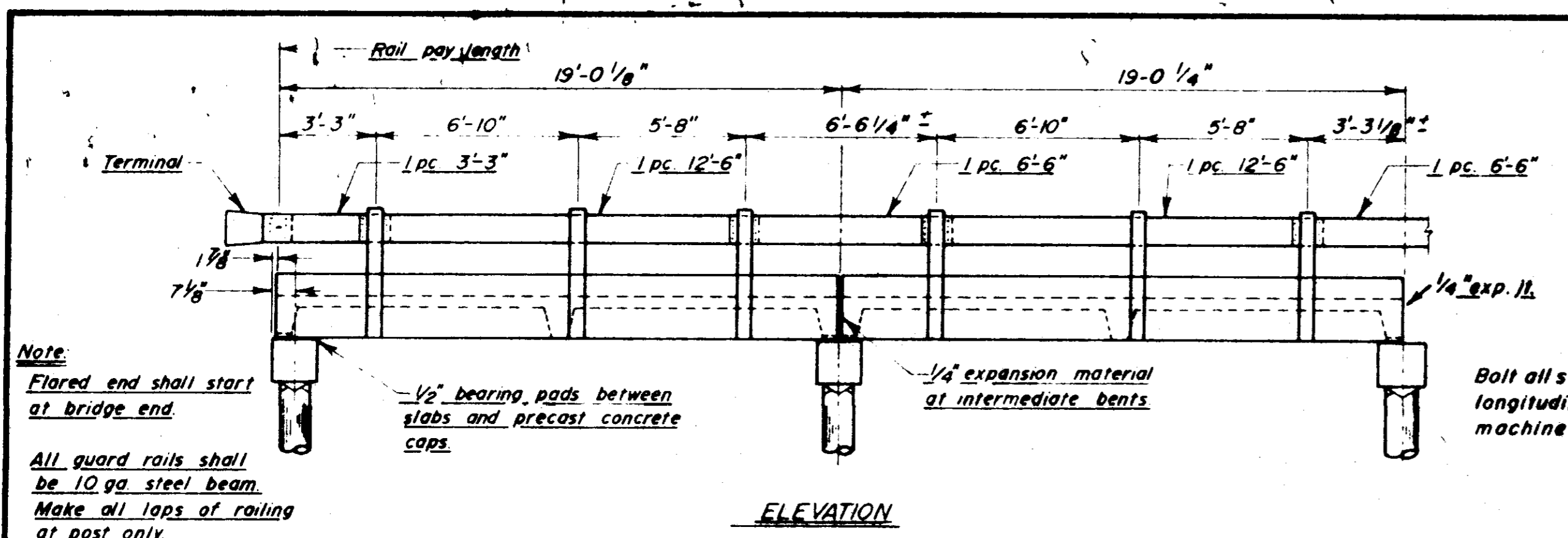
ENGINEER
FRANK T. MOORE
PROJECT ENGINEER
WILLIAM P. STEVENSON

Revised July 1, 1971 WPS

STATE AID DIVISION
MISSISSIPPI STATE HIGHWAY DEPARTMENT
PRECAST CONCRETE WINGS
FOR USE WITH 19 FT PRECAST
CONCRETE SPAN
26'-6" CLEAR ROADWAY
FOR STATE AID PROJECTS ONLY

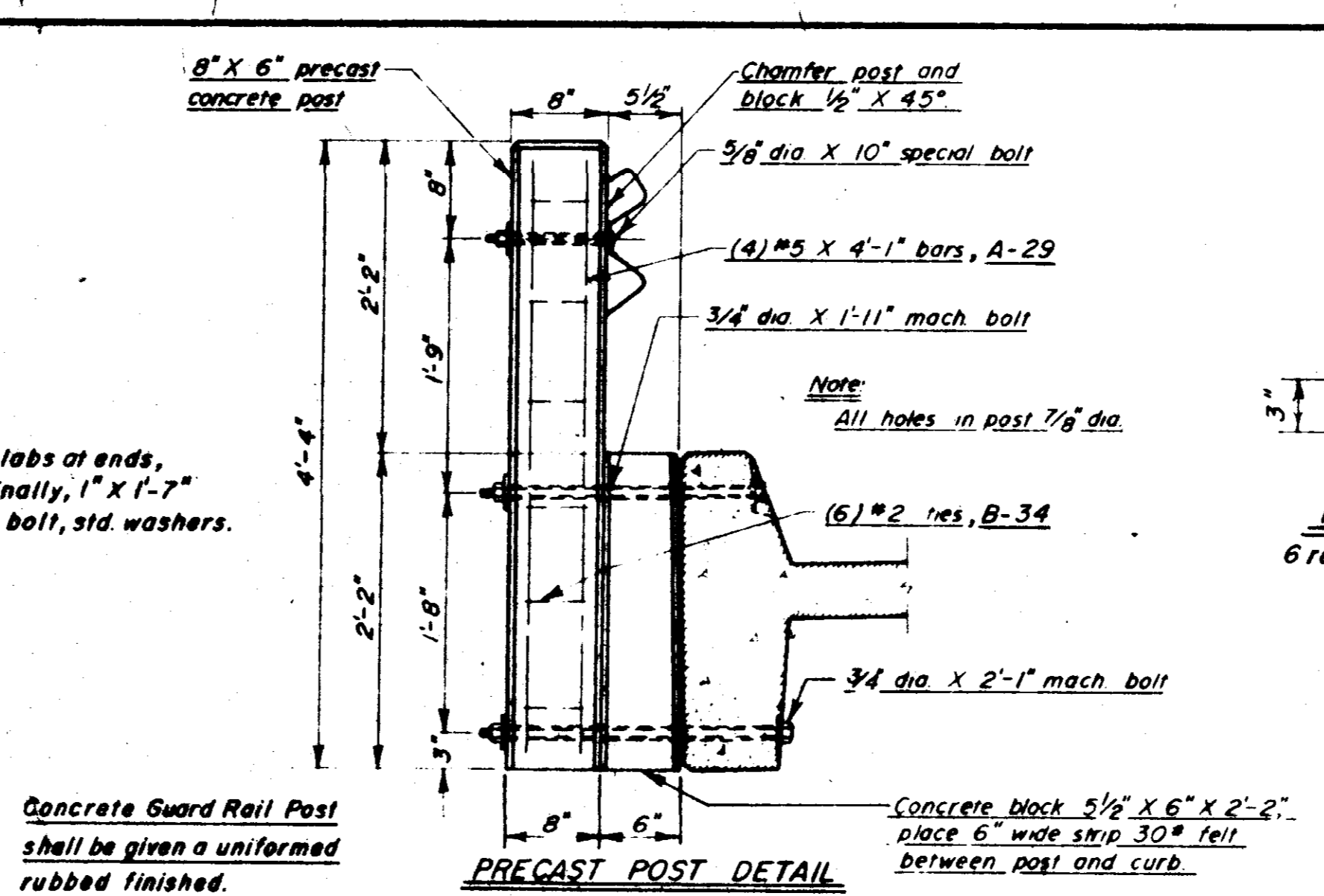
DATE	BY	NO.
JUL 1 1971	WPS	1
DATE	BY	NO.
JUL 1 1971	WPS	1

PC-1924 (F)

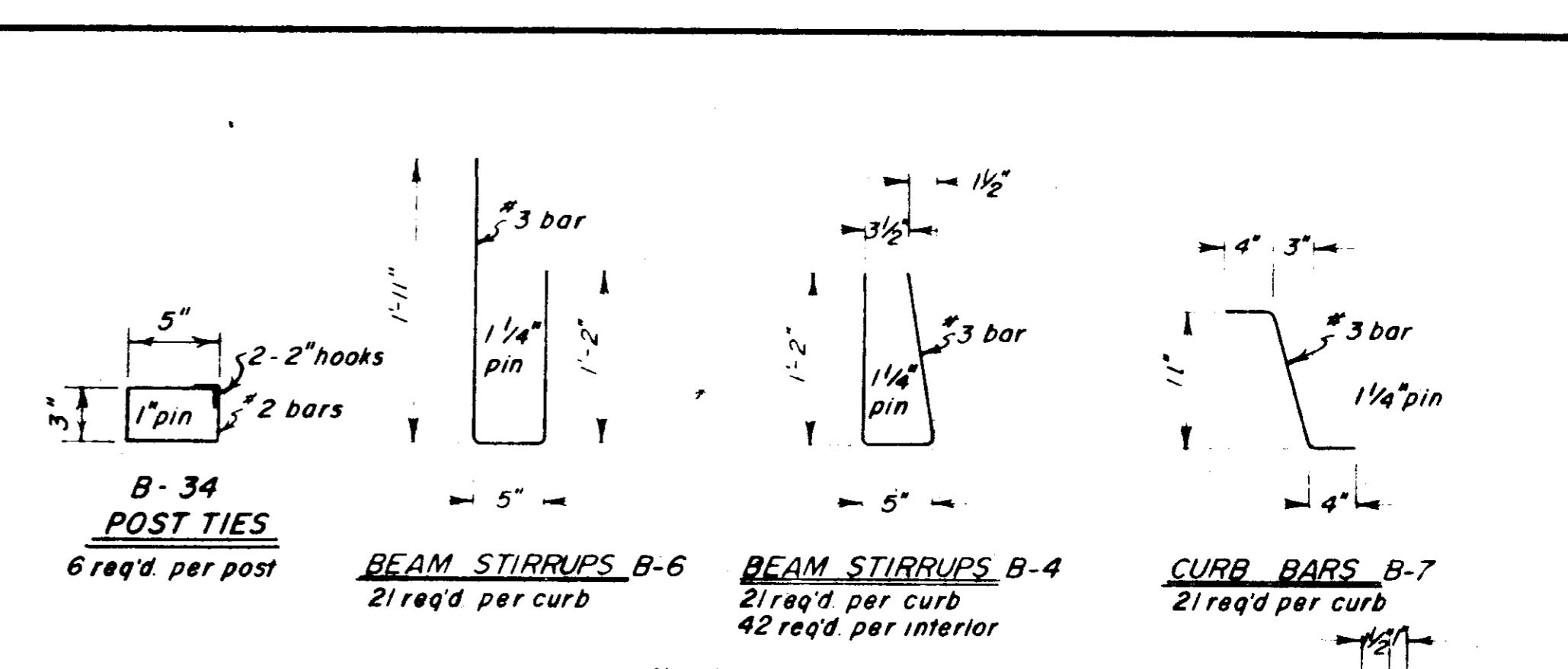


Note:
Flared end shall start at bridge end.
All guard rails shall be 10 ga steel beam. Make all laps of railing at post only.

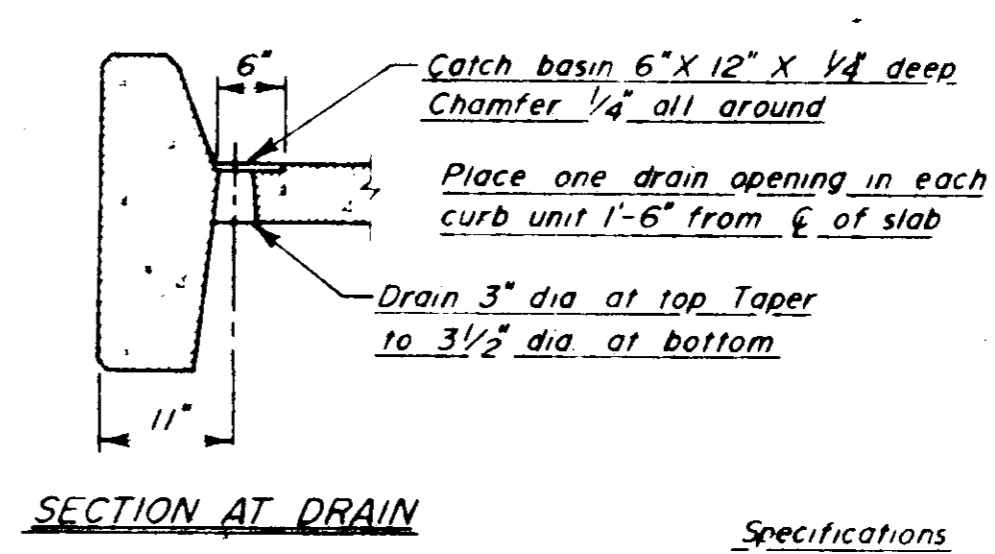
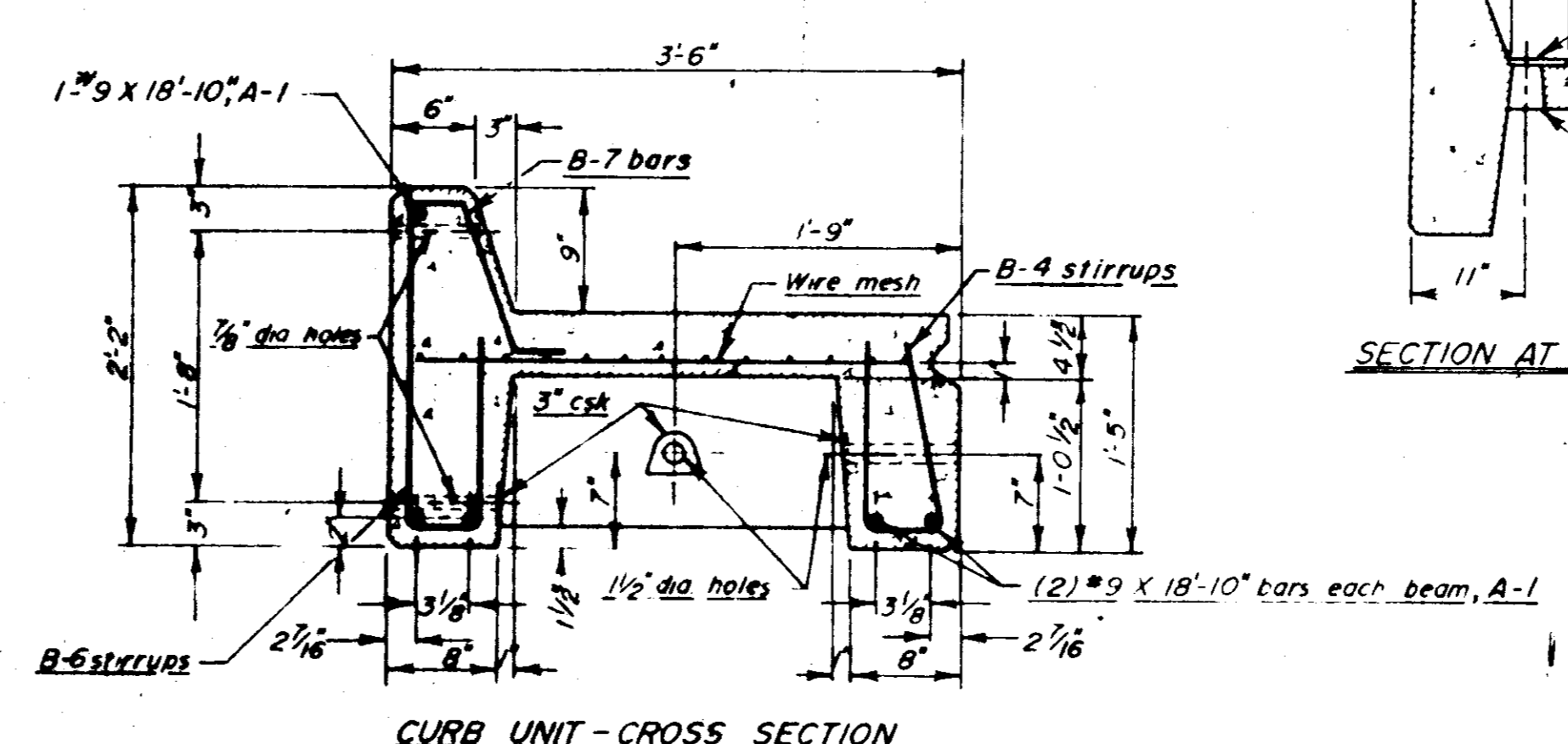
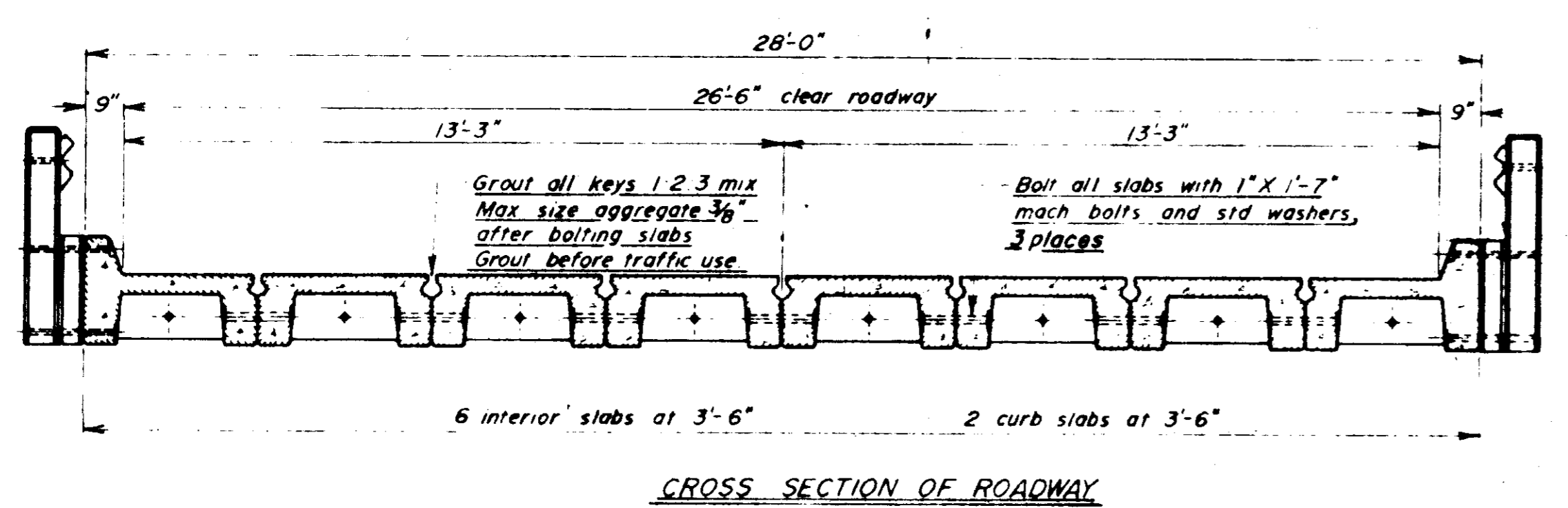
Bolt all slabs at ends, longitudinally, 1" X 1-7" machine bolt, std. washers.



Concrete Guard Rail Post shall be given a uniform rubbed finished.



Note:
Dimensions are out to out. Reinforcing steel details shall be in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Structures.



GENERAL NOTES

Specifications
Division of State Aid Road Construction
Mississippi State Highway Department

Design Loading
A.S.H.O. H15-44

Concrete
All concrete shall be Class "B" bridge concrete with a minimum compressive strength of 3,000 p.s.i. at 28 days. All exposed corners to be chamfered 3/4" X 45" unless otherwise noted. All other corners rounded to a 1/4" radius. Concrete will not be paid for directly, but will be considered subsidiary to the item of precast slab unit.

Reinforcing
All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire supports. Reinforcing steel shall be deformed bars conforming to A.S.T.M. A615. Reinforcing dimensions are to the center of bars unless otherwise noted. The above steel will not be paid for directly, but will be considered as subsidiary to the item of precast slab unit.

Wire Mesh
Wire mesh shall conform to the specifications for welded steel wire fabric, for concrete reinforcement of A.S.H.O. specifications, for highway materials, designation M55-60 (A.S.T.M. designation A185-58T). Wire mesh will not be paid for directly, but will be considered as subsidiary to the item of precast slab unit.

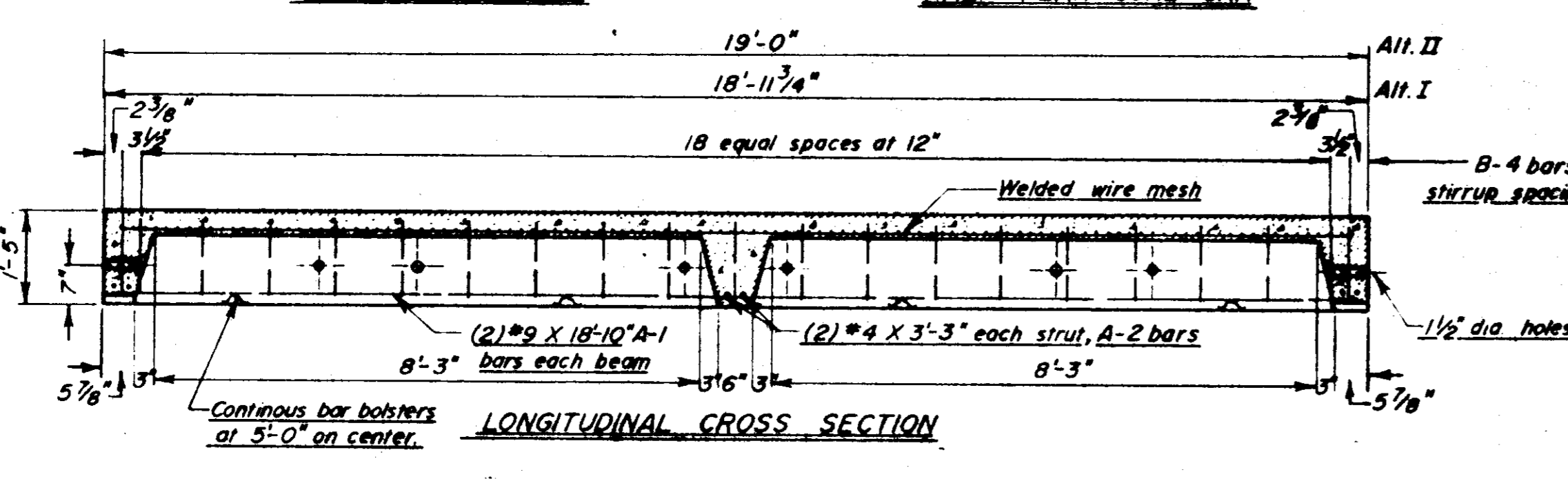
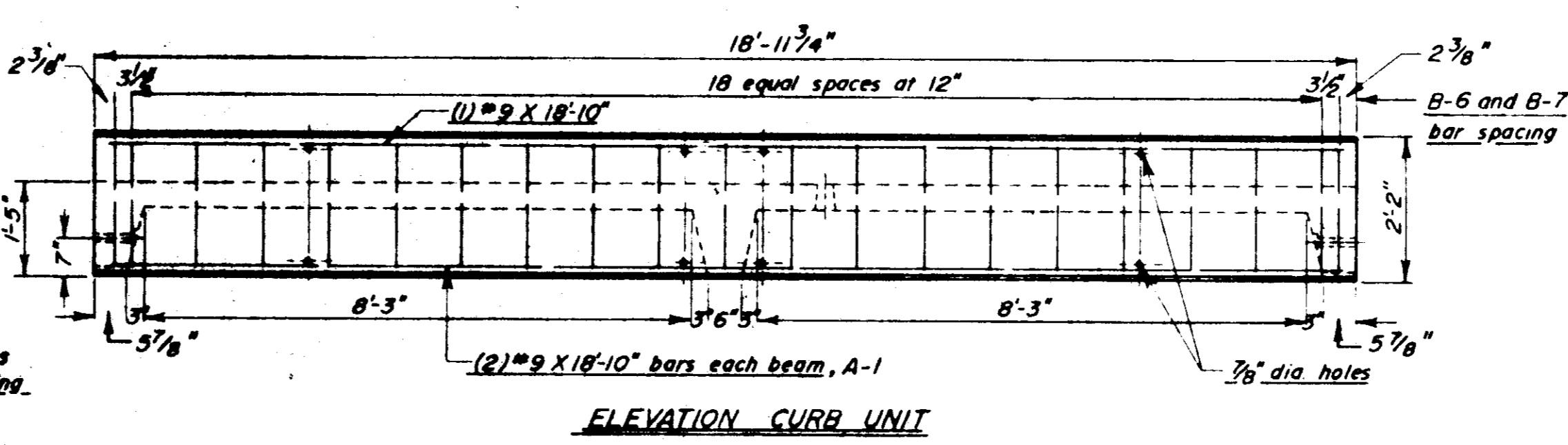
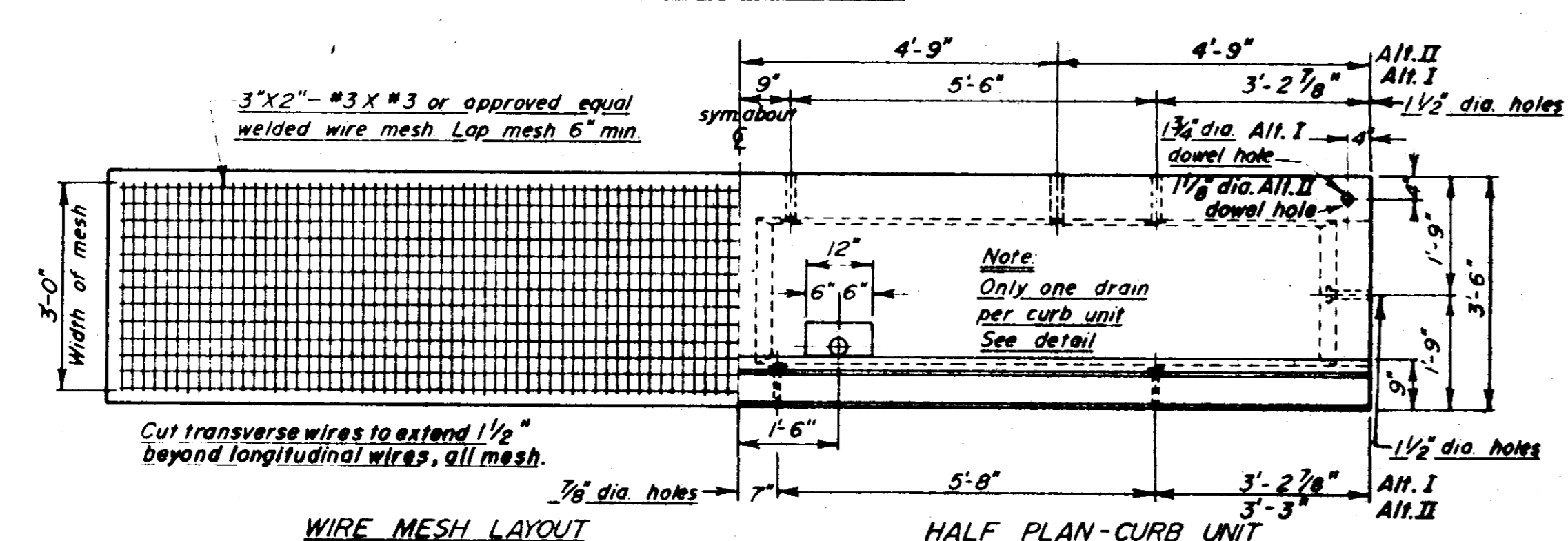
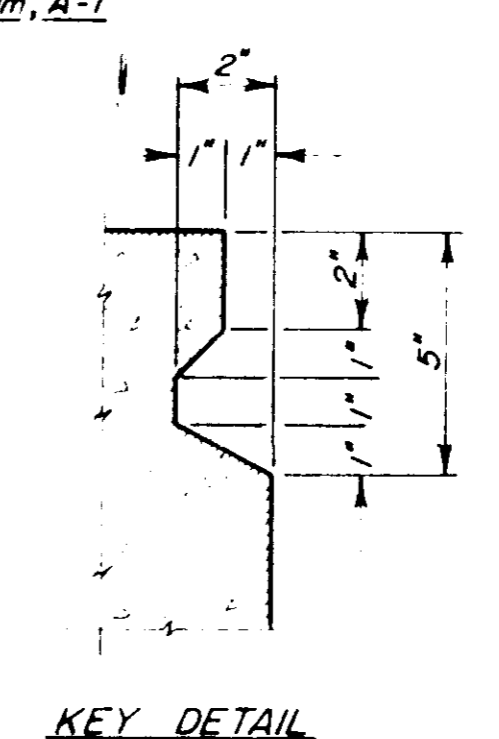
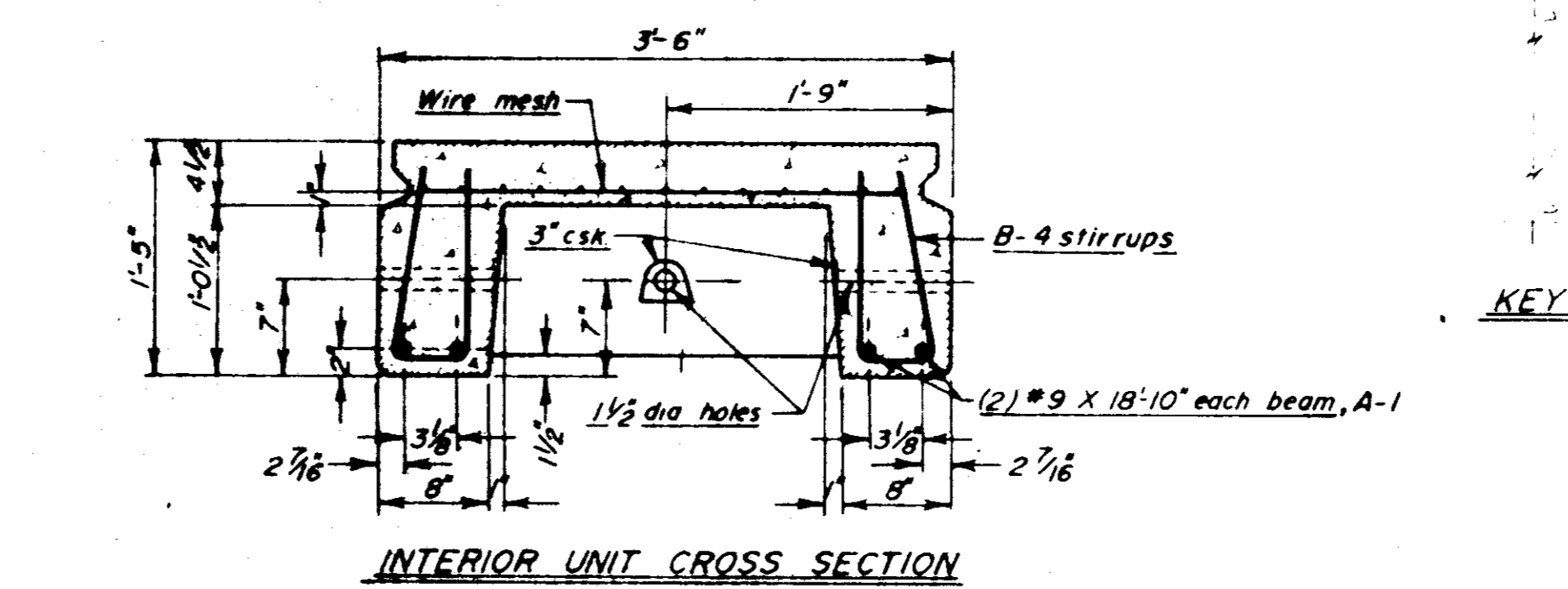
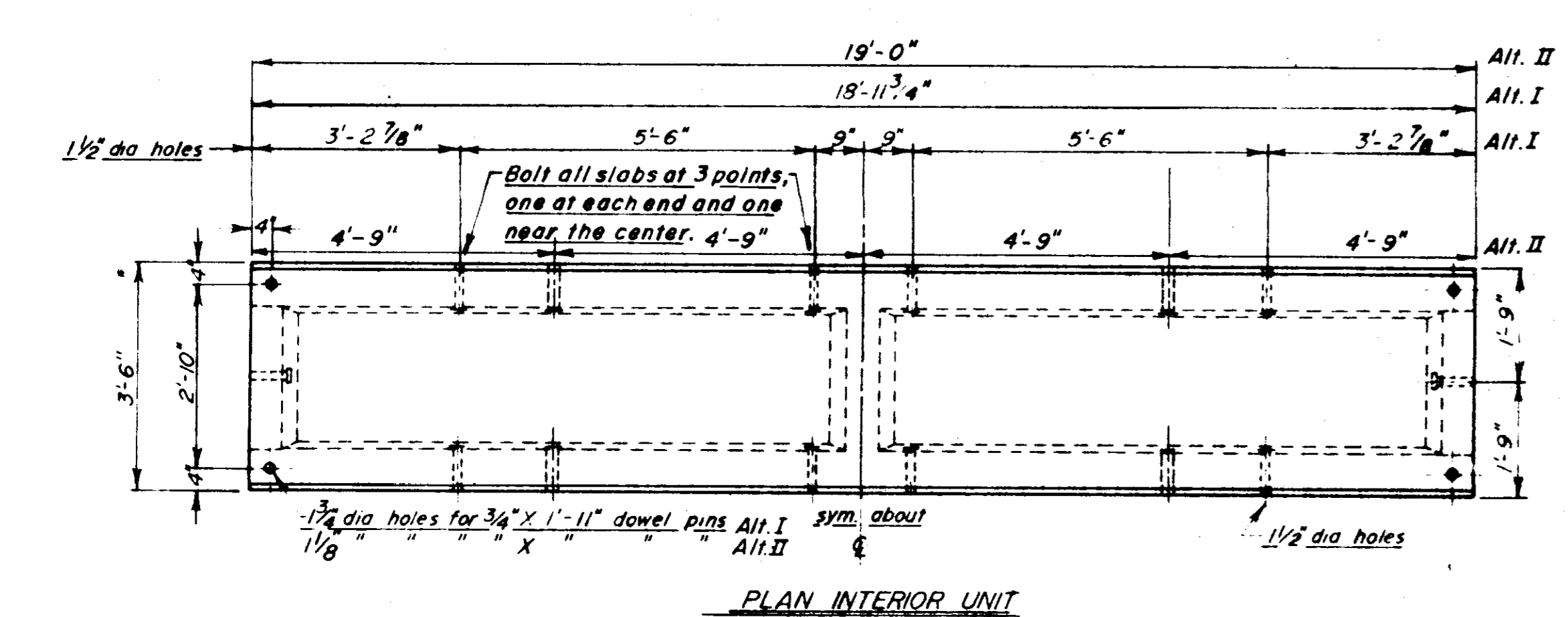
Hardware
All machine bolts connecting slab units will not be paid for directly but will be considered as subsidiary to the item of precast slab unit. All bolts, washers, and nuts shall be galvanized or cadmium plated.

Grouting of Keyways
Grout all keyways with 1-2-3 mix, maximum size aggregate 3/8". Material and labor for mixing and placing will not be paid for directly, but will be considered subsidiary to the item of precast slab unit.

Tolerances
A deviation of more than 1/4" in dimensions will be cause for rejection of the unit.

Bid Items for Precast Slab Units
Precast slab curb unit; Precast slab interior unit.

Design Data
Spec. A.S.H.O. 1969, fm=30,000 psi; fs=20,000 psi; fc=1,200 psi; n=10, H15-44



STATE AID ENGINEER:
FRANK T. MOORE
CHECKED BY:
WILLIAM P. STEVENSON

STATE AID DIVISION MISSISSIPPI STATE HIGHWAY DEPARTMENT		
19 FT. PRECAST CONCRETE SPAN 26'-6" CLEAR ROADWAY FOR STATE AID PROJECTS ONLY		
DESIGNED BY: J.D.B.	ISSUED BY: W.P.S.	DRAWING NUMBER: PC-1924 (A)
CHECKED BY: W.P.S.	DATE: 1 July 1971	