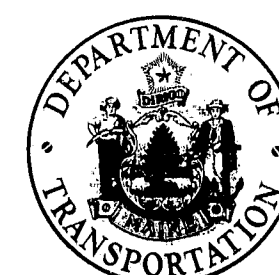


F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-000S(17)	1	25

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



BUREAU OF HIGHWAYS

LINSCOTT BRIDGE

OVER

MOUSAM RIVER

IN THE TOWN OF

SANFORD

YORK COUNTY

PROJECT NO. BR-000S 1171

PROJECT LENGTH: 0.152 MILES

SPECIFICATIONS

DESIGN: AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES 1977, AND INTERIM SPECIFICATIONS 1978 AND 1979.

CONTRACT: STATE OF MAINE, STATE HIGHWAY COMMISSION, STANDARD SPECIFICATIONS, HIGHWAYS AND BRIDGES, REVISION OF JUNE 1968.

DESIGN LOADING

LIVE LOAD ----- HS25

MATERIALS

CONCRETE ----- CLASS "A"

REINFORCING STEEL ----- ASTM A615, GRADE 60

STRUCTURAL STEEL:

ALL STEEL ----- ASTM A588 (UNPAINTED) EXCEPT AS NOTED
HIGH STRENGTH BOLTS ----- ASTM 325

BASIC ALLOWABLE STRESSES

CONCRETE ----- $f_c = 1200$ psi; $n = 9$

REINFORCING STEEL ----- $f_s = 24,000$ psi

STRUCTURAL STEEL:

ASTM A588 ----- $f_s = 27,000$ psi

ASTM A36 ----- $f_s = 20,000$ psi

ASTM A325 ----- $f_v = 25,000$ psi

HYDROLOGIC DATA

DRAINAGE AREA ----- 47.5 SQUARE MILES

DESIGN DISCHARGE (Q50) ----- 1500 cfs

CHECK DISCHARGE (Q100) ----- 1800 cfs

HEADWATER ELEVATION (Q50) ----- 216.7

HEADWATER ELEVATION (Q100) ----- 217.0

DISCHARGE VELOCITY (Q50) ----- 3.2 fps

DISCHARGE VELOCITY (Q100) ----- 3.7 fps

NOTE

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS (REVISION OF JUNE 1968) AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

TRAFFIC DATA

A.A.D.T. 1979 = 550

A.A.D.T. 1999 = 800

D.H.V. 104

T. (%) 7

D. (%) 60

V. 45

P.S.D. (%)

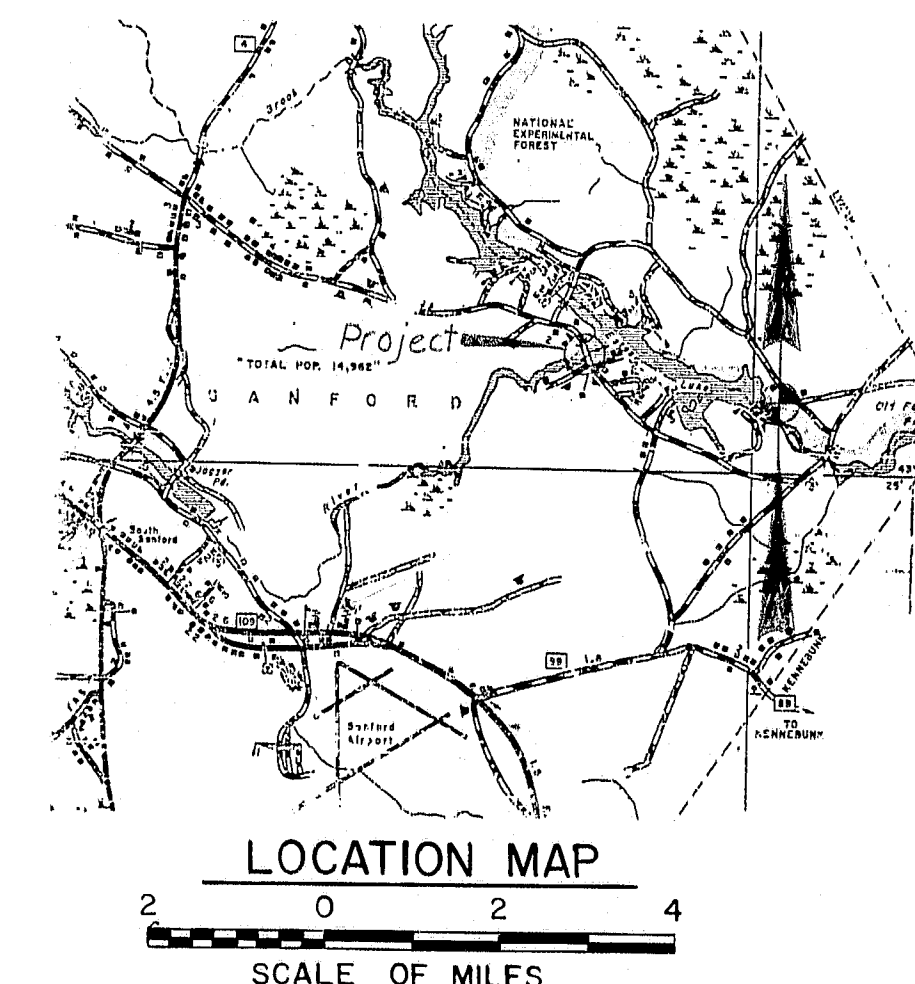
18 KIPS 16

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APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
ACTING COMMISSIONER

DATE

BUREAU DIRECTOR AND CHIEF ENGINEER

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

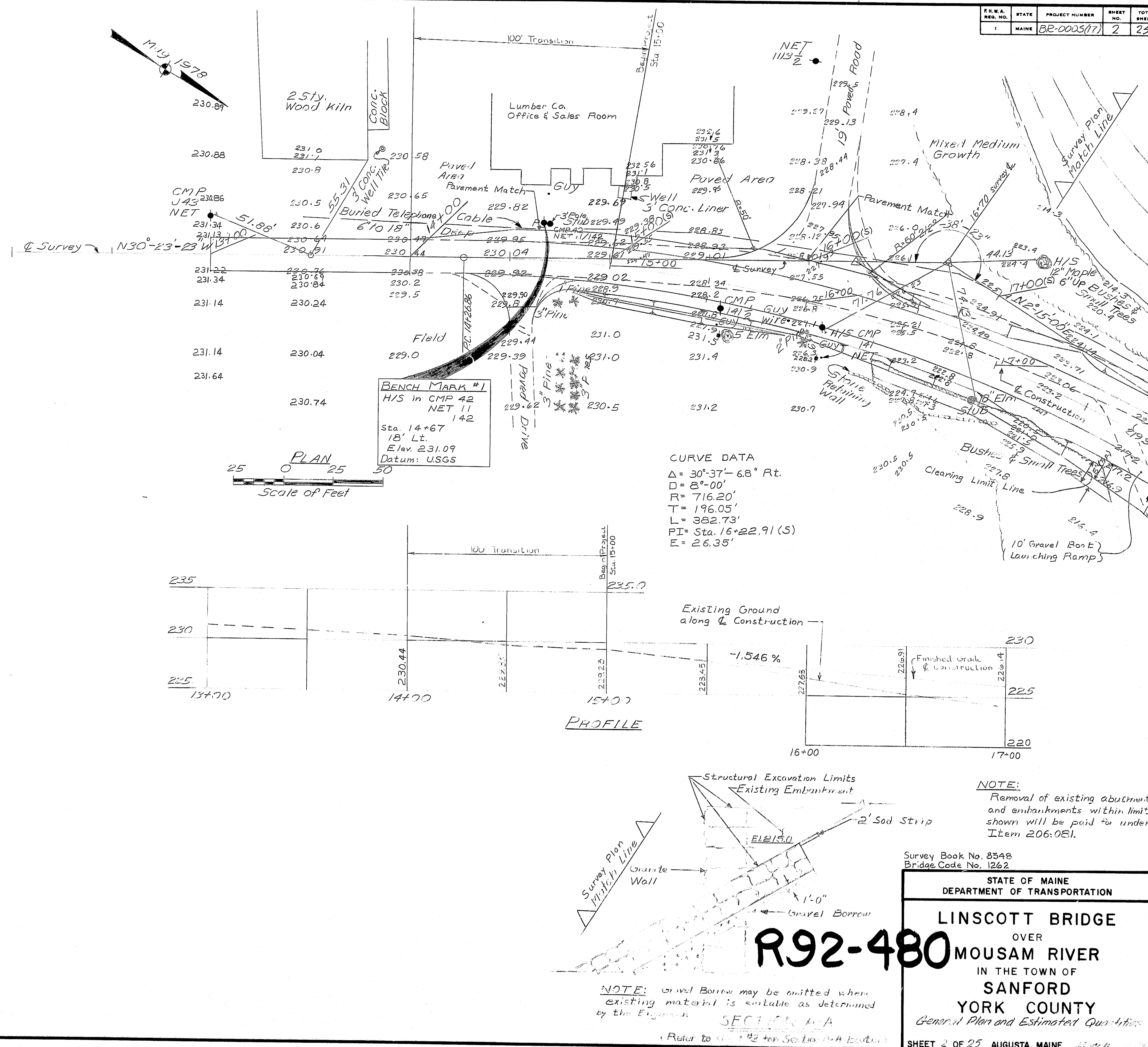
APPROVED:

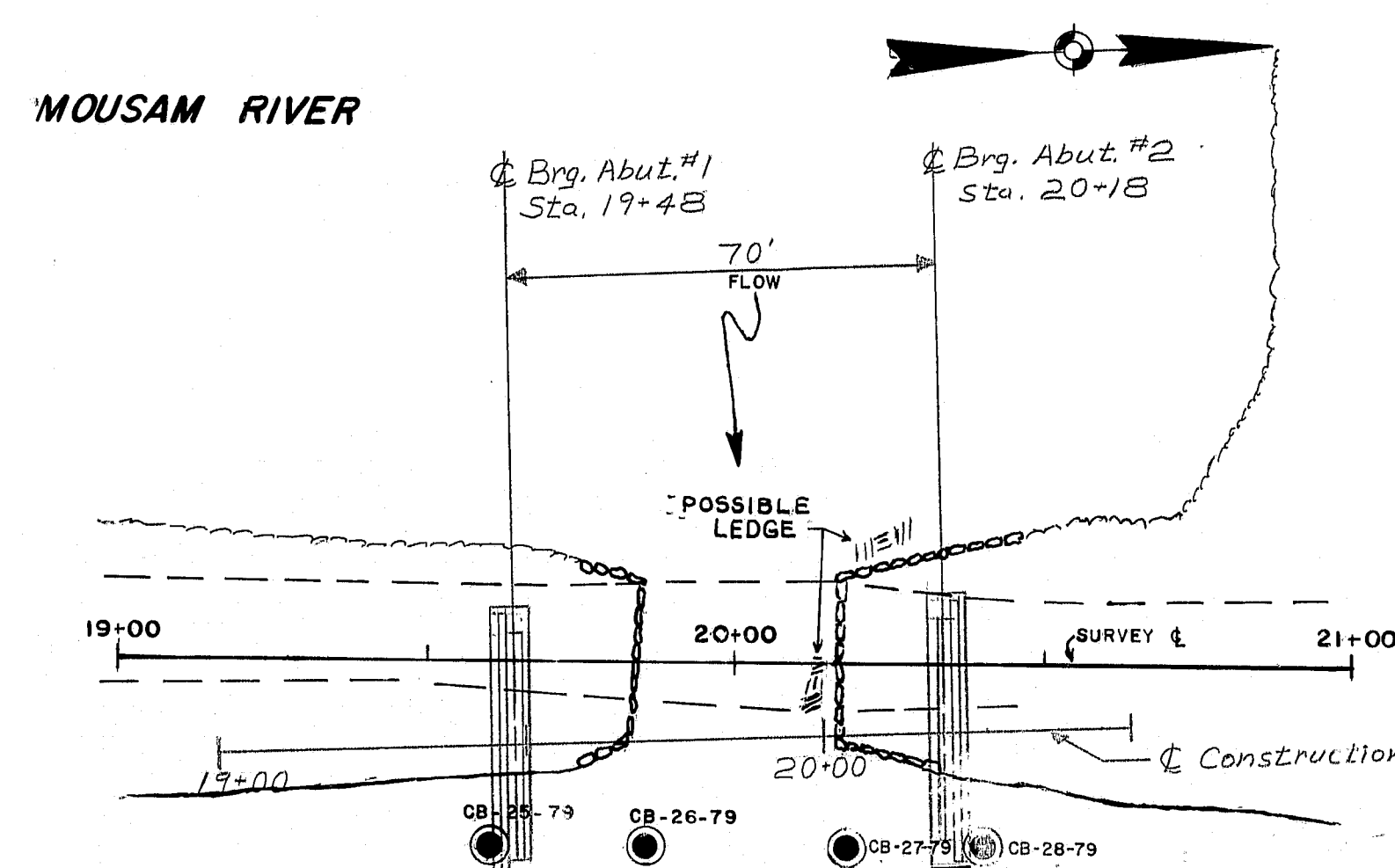
DIVISION ADMINISTRATOR DATE

R92-479

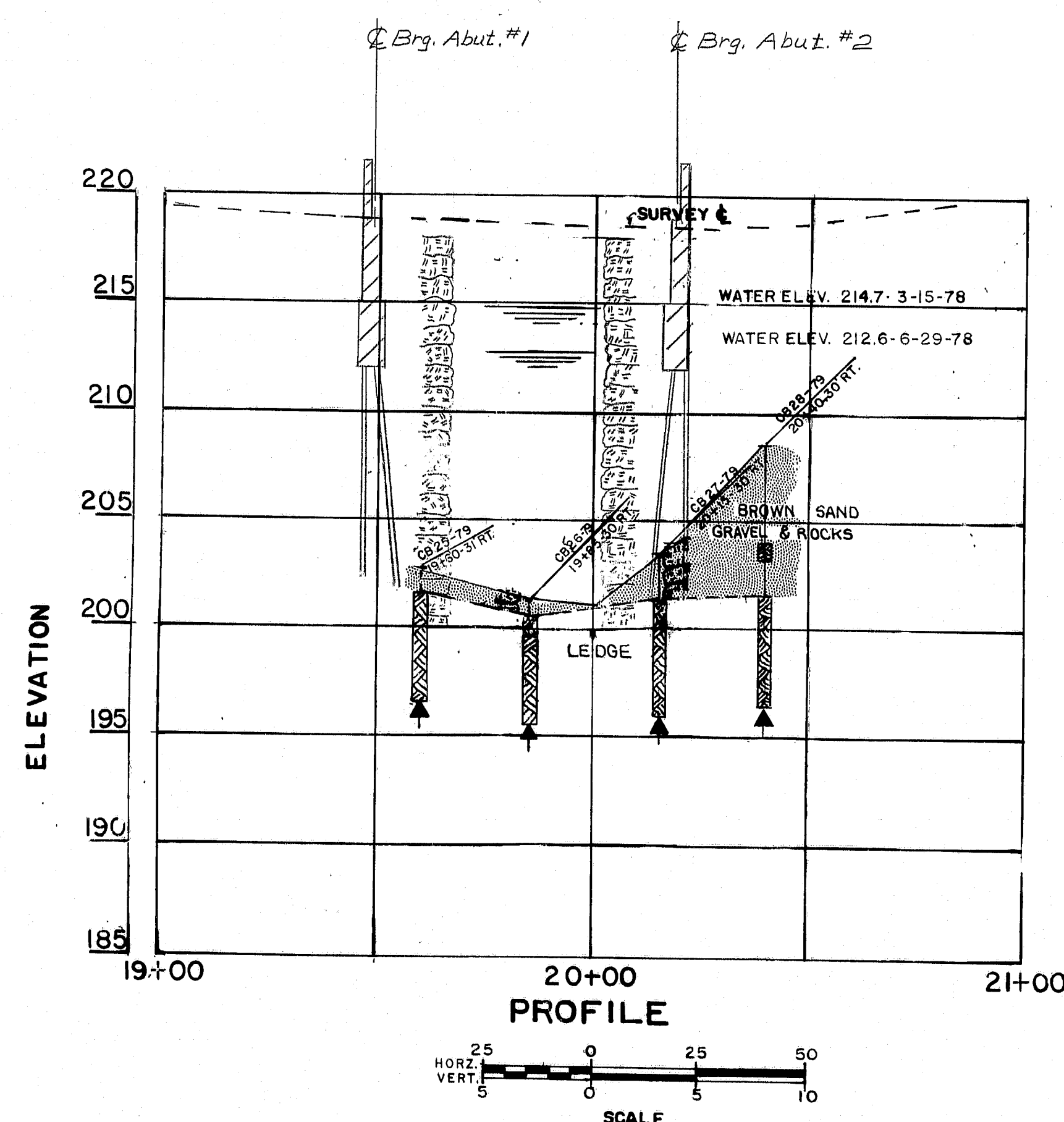
Survey Plotted
BY DATE
PROJECT ENGINEER
DESIGN - DETAILED
CHECKED
REVISIONS
PLANS
FIELD CHANGES

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.13	Removing Single Trees, 9" to 24" Tops Only	2	Each
202.10	Removal of Existing Superstructure (Property of Contractor)	1	L.S.
203.20	Common Excavation	375	C.Y.
203.24	Common Borrow	2455	C.Y.
203.25	Granular Borrow	1180	C.Y.
203.26	Gravel Borrow	990	C.Y.
206.081	Structural Earth Excavation - Abutments, Retaining Walls, Box Culverts and Structural Plate Units	250	C.Y.
304.10	Aggregate Subbase Course - Gravel	1740	C.Y.
410.161	Cover Coat Material, Sand (Leveling)	25	C.Y.
460.22	Hot Bituminous Pavement	270	Ton
501.214	Steel H-Beam Piles 53 Lbs./Ft.	260	L.F.
502.21	Structural Concrete, Abutts. & Retaining Walls	110	C.Y.
502.26	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	1	L.S.
503.12	Reinforcing Steel, Fab. & Delivered	24300	Lb.
503.13	Reinforcing Steel, Placing	24300	Lb.
504.70	Structural Steel, Fab. & Delivered	1	L.S.
504.71	Structural Steel, Erection	1	L.S.
505.08	Shear Connectors	1	L.S.
507.08	Bridge Railing	129	L.F.
511.010	Cofferdams	1	L.S.
511.012	Cofferdams	1	L.S.
512.07	French Drains (Stones Only)	13	Each
514.06	Curing Box for Concrete Cylinders	1	Each
515.20	Protective Coating for Concrete Surfaces	355	S.Y.
526.30	Temporary Concrete Barrier Type I	170	L.F.
526.40	Resetting Temporary Concrete Barrier Type I	170	L.F.
603.16	15 Inch Culvert Pipe, Option I	26	L.F.
606.152	Guard Rail, Type 3ab - Single Rail	675	L.F.
606.202	Guard Rail, Type 3ab - Circular - Greater than 15 foot Radius	30	L.F.
606.266	Terminal Ends - Single Rail - Corrosion Resistant Steel	4	Each
606.28	Single Post 1a	2	Each
606.35	Guard Rail Delineator Posts	4	Each
610.08	Plain Riprap	1225	C.Y.
613.07	Loam	80	C.Y.
616.08	Sodding	80	S.Y.
618.14	Seeding, Method Number 2	17	Unit
618.15	Temporary Seeding	10	Lb.
619.12	Mulch	17	Unit
623.06	Right of Way Monuments	4	Each
623.07	Survey Monuments	2	Each
629.05	Hand Labor, Straight Time	20	M.H.
631.12	All Purpose Excavator (Including Operator)	10	Hr.
631.132	Small Bulldozer (Including Operator)	10	Hr.
631.14	Grader (Inc. Operator)	10	Hr.
631.171	Truck - Small (Inc. Operator)	10	Hr.
631.18	Chain Saw Rental (Inc. Operator)	10	Hr.
631.22	Front End Loader (Inc. Operator)	10	Hr.
632.05	Warning Lights	2	Gr.
637.07	Sprinkling	34	M.G.
637.08	Calcium Chloride	9	Ton
637.10	Field Office, Type C	1	Each
652.31	Type I Barricades	15	Each
652.33	Drums	5	Each
652.34	Cones	20	Each
652.35	Construction Signs	300	S.F.
652.36	Maintenance of Traffic Control Devices	150	C.D.
656.50	Baled Hay, in Place	3	Each
656.51	Sandbags, in Place	3	Each
657.201	Steel and Application, Method A	17	Unit
659.10	Mobilization	1	L.S.
EST. QUANTITIES for LUMP SUM ITEMS			
502.26	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	94	C.Y.
504.70	Structural Steel, Fab. & Delivered	56,900	Lb.
504.71	Structural Steel, Erection	56,900	Lb.
505.08	Shear Connectors	970	Lb.





PLAN
ESTES LAKE
SCALE
25 0 25 50



PROFILE
SCALE
25 0 25 50
5 10

BORING CB-25-79 STATION 19+60 3' RT.

ELEVATION	DRIVING RESISTANCE				
	Blows/Ft.				
205	20	40	60	80	100
200	BROWN SAND AND GRAVEL				
	LEDGE ELEV. 201.5				
195	100%	LEDGE: GABBRO TO BASALT DIKE			

BORING CB-26-79 STATION 19+85 30' RT.

ELEVATION	DRIVING RESISTANCE				
	Blows/Ft.				
205	20	40	60	80	100
200	BROWN SAND AND GRAVEL				
	LEDGE ELEV. 200.5				
195	97%	LEDGE: GABBRO			

BORING CB-28-79 STATION 20+40 30' RT.

ELEVATION	DRIVING RESISTANCE				
	Blows/Ft.				
205	20	40	60	80	100
200	BROWN SAND AND GRAVEL				
	LEDGE ELEV. 201.5				
195	80%	LEDGE: GABBRO			

BORING CB-27-79 STATION 20+15 30' RT.

ELEVATION	DRIVING RESISTANCE				
	Blows/Ft.				
205	20	40	60	80	100
200	BROWN SAND AND GRAVEL				
	LEDGE ELEV. 201.0				
195	90%	LEDGE: GABBRO			

BORING NOTES

- 2-1/2" Casing
- Bottom of boring (may not be ledge)
- Locations cored by diamond bit and per cent recovery of rock
- Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

LINSCOTT BRIDGE
OVER
MOUSAM RIVER
IN THE TOWN OF
SANFORD
YORK COUNTY
Foundation Survey

SHEET 4 OF 25 AUGUSTA, MAINE June 1979

R92-482

[illegible]

1. In excavation areas Gravel Borrow under the footings may be omitted if the existing material is suitable in the opinion of the Engineer.
2. The abutment bridge seats and breastwork shall be protected from rust staining by lead. Forms temporarily or by covering the concrete after removal of Forms. Polyethylene sheets or other approved material, shall be placed on and around the abutment bearing areas prior to setting of concrete pedestals, and shall extend underneath the massive water seats so that water will run off the pedestals onto the sheets. Protective Covering of either Forms or polyethylene sheeting shall remain in place at least until concrete placement for the Structural Concrete Slab has been completed, and as long after that time as the Contractor determines. In any case the Contractor shall obtain approval of the Engineer prior to removal of the protective covering. Payment will be considered incidental to Item 302.21 Structural Concrete Abutment and Retaining Walls.
3. Chaffer all exposed edges of concrete a consistent distance between 1/4" and 3/4" inclusive, unless otherwise indicated.
4. Reinforcing steel shall have 2 inches cover unless otherwise indicated.
5. Place reinforcing steel in bridge seats to clear anchor bolts.
6. Break bond at vertical contraction joints by method approved by the Engineer.
7. Polyvinylchloride Waterstops as shown on Standard Details BD 104 shall be placed in all vertical contraction joints.
8. Waterstops are not required in horizontal construction joints.
9. Place 4" diameter drains in breastwall and wings at 60 feet maximum spacing. Exact location to be determined by the Engineer in the field.
10. Protective Coating for concrete surfaces shall be applied to the top of abutment parapets.

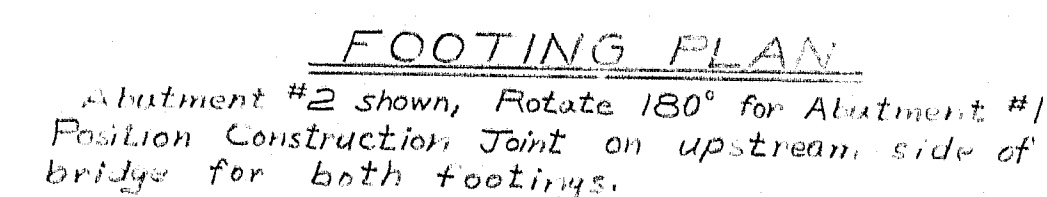
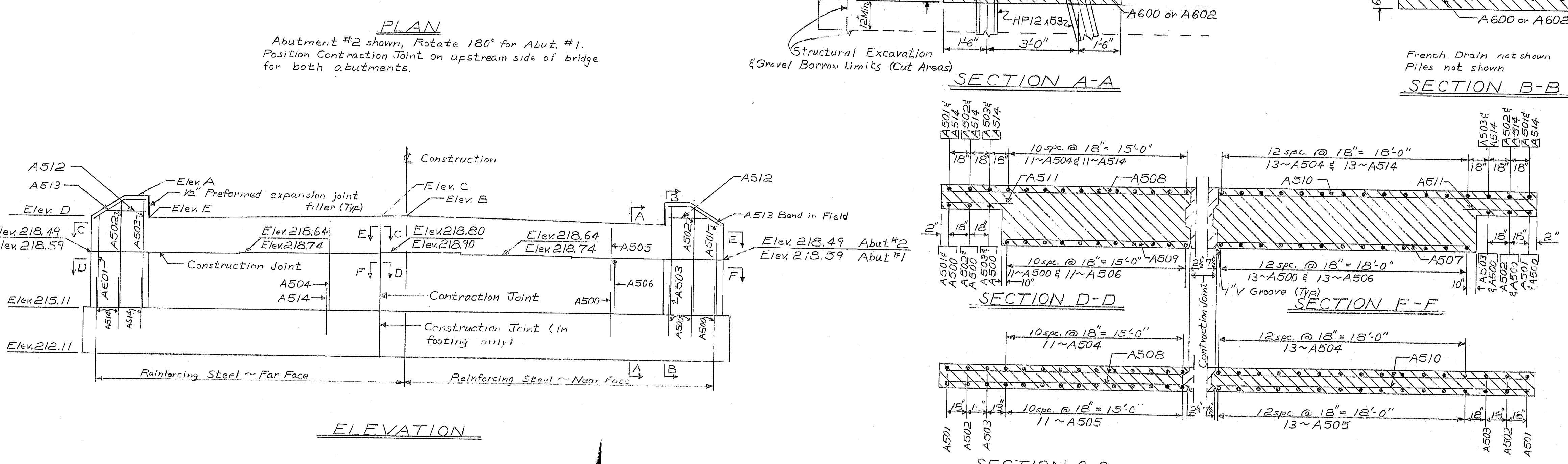
1. Piles shall be driven to ledge or practical refusal.
2. All piles shall have Pointed Reinforced
Pile Tips as shown in Attached Detail
BD 104.
3. Alternative types of Pointed Reinforced
Pile Tips may be used if they have at
least the same section of the
Pointed Reinforced Pile Tip shown on the
plans and are approved by the Engineer.
4. Estimated driven length of piles are
determined from available soils information,
with an allowance for uncertain pile penetration.
5. Embedment of pile in bearing may vary
between 14" and 24" and the actual embed-
ment length, up to a maximum of 16" will
be included in the measurement for payment.
6. Piles with a maximum diameter of 24 inches
shall be driven to a maximum of 24 inches
per foot in the direction of the pile.
7. Maximum allowable pile loads: 70 long ton
point bearing.
8. Following are pile locations, number of piles required,
size of pile and estimated driven length:
Abutment #1 10" HP16X43 on 13'
Abutment #2 10" HP16X43 on 13'

<u>Standard Details</u>	
Construction Joint -	BD 104-77
Polyvinylethylene Waterstop	BD 104-82
Poured Concrete Cold Joint	BD 104-79
Construction Joint -	BD 104-77

Note:
Abutment is symmetrical about vertical centerline

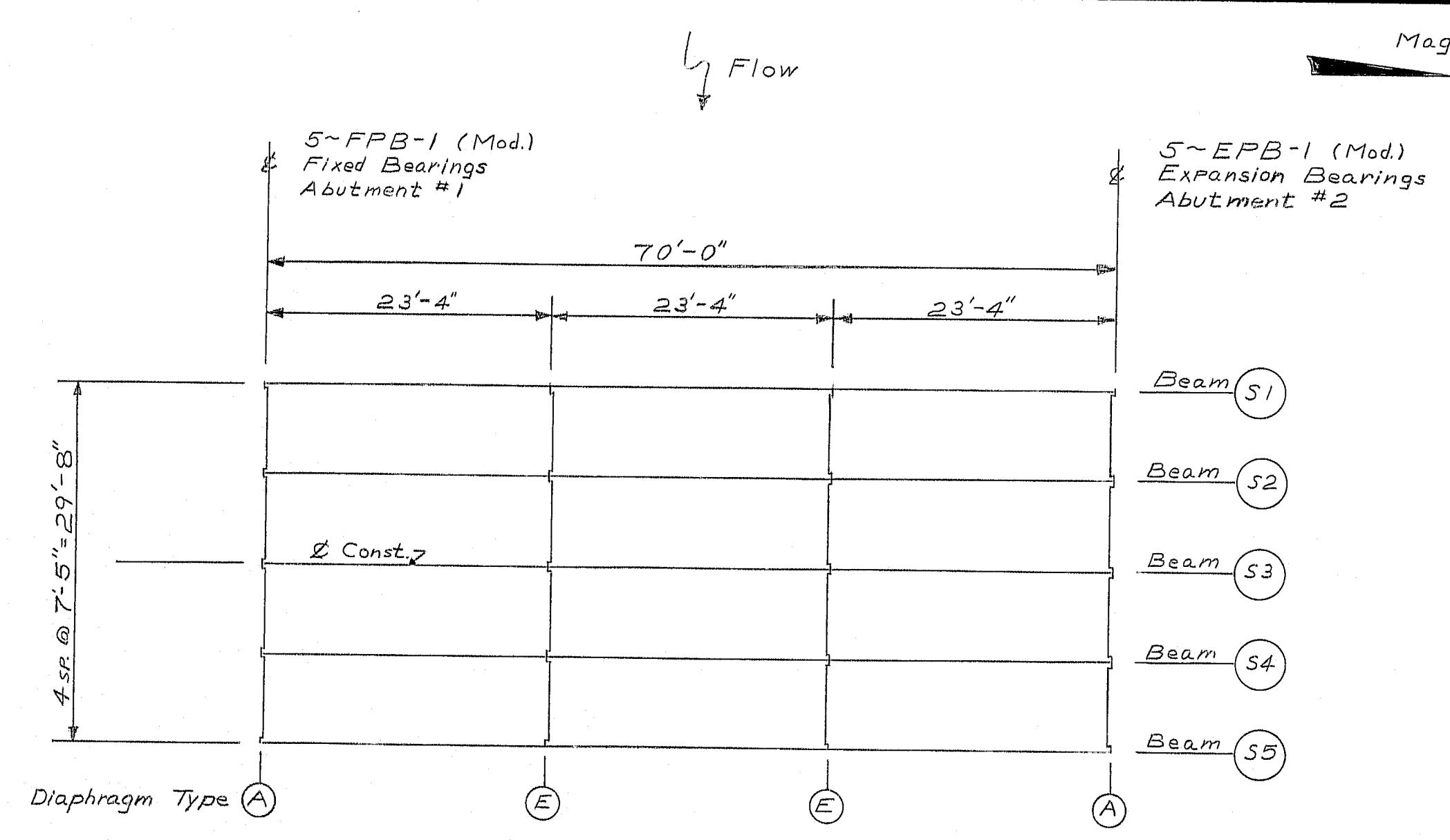
OVER
MOUSAM RIVER
IN THE TOWN OF
SANFORD
YORK COUNTY
ABUTMENTS

202-1 2006

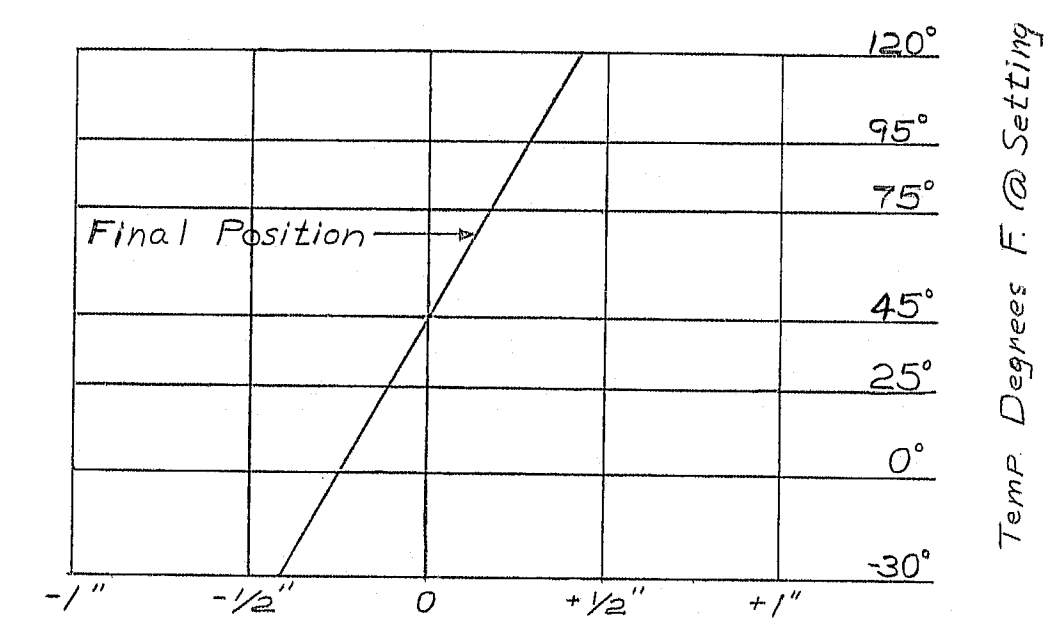


PLANS	PROJECT DESIGN ENGINEER		BY	DATE
	DESIGN - DETAILED	BAS	BAS	12/10/80
	CHECKED		FINLEY	11/16/80
	REVISIONS			
	ELECT. ROOM			

JANUARY 1991



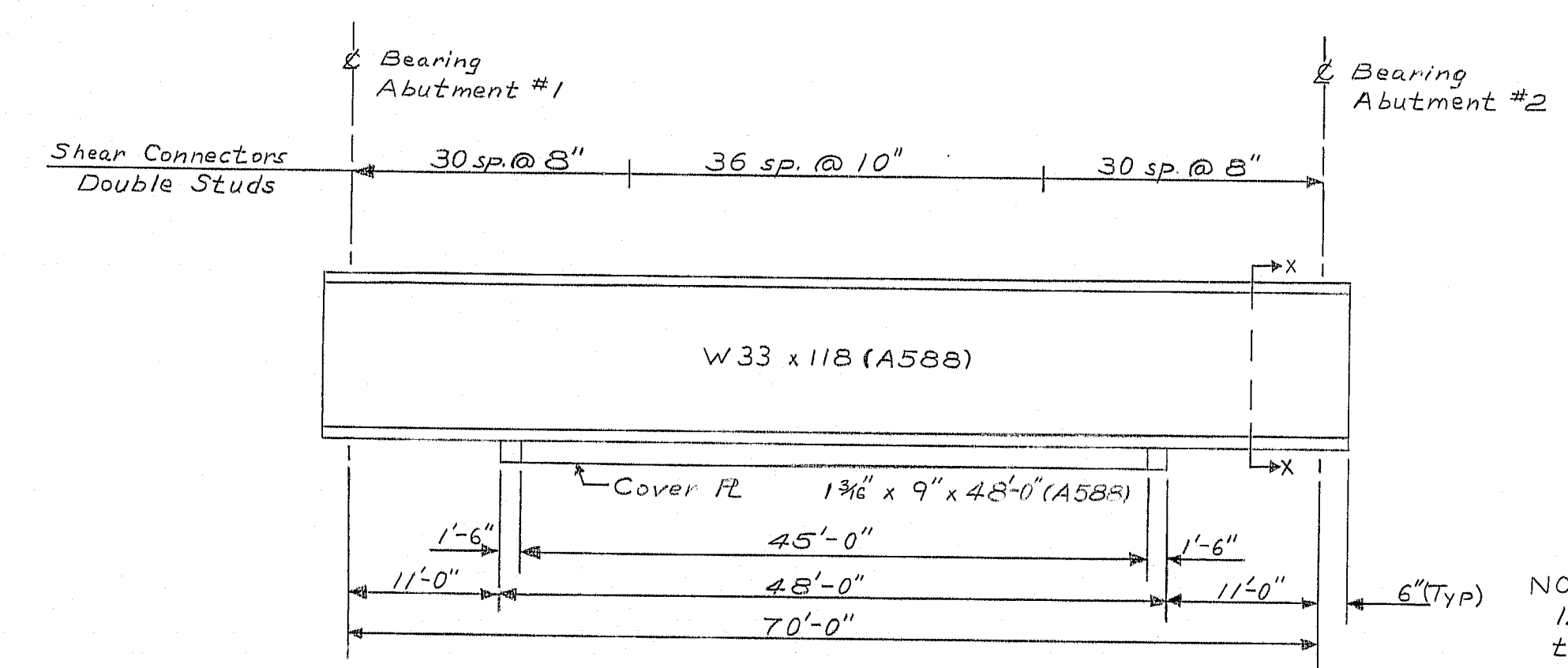
FRAMING PLAN
NOTE: Diaphragm connection plates may be either plumb or normal to the top flange.



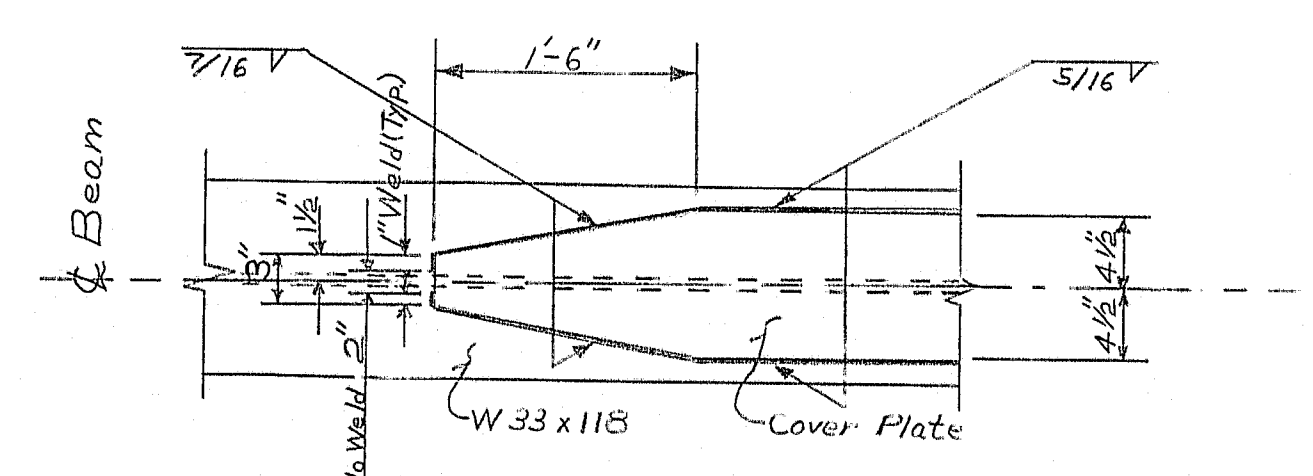
(-) Minus dimensions indicate position change toward Abutment #1.

ROCKER BEARING SETTING
This table of bearing settings compensates for longitudinal movement due to temperature changes only.

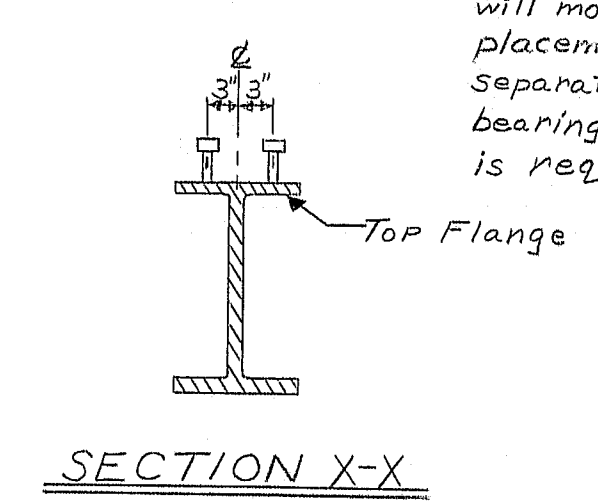
NOTES: 1. Rocker setting data as shown shall be used as a guide only. No extra payment will be made for resetting of the rocker bearing, subsequent to the original setting made by the contractor as required by the Engineer to make the rocker setting conform with paragraph four (4) of Subsection 504.5B.
2. It is anticipated that the bearings at abutment #2 will move $\frac{3}{8}$ " towards the Backwall due to the placement of the Superstructure Concrete. No separate payment will be made for resetting bearings to the final position if an adjustment is required.



BEAM ELEVATION 1 THRU 5
NOTES:
1. See Framing Plan for location of connection plates not shown.
2. Place natural camber up before welding cover plate to beam.

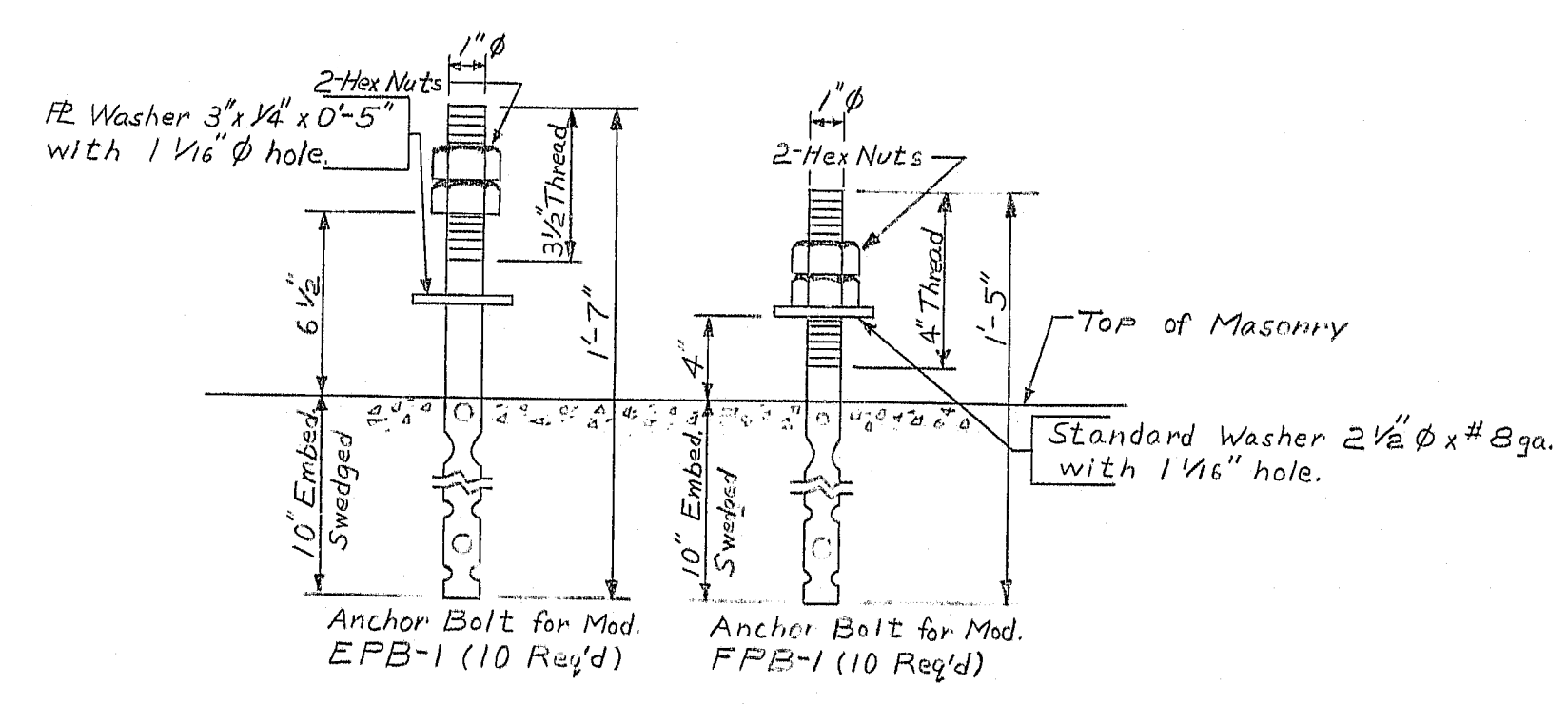


COVER PLATE DETAIL

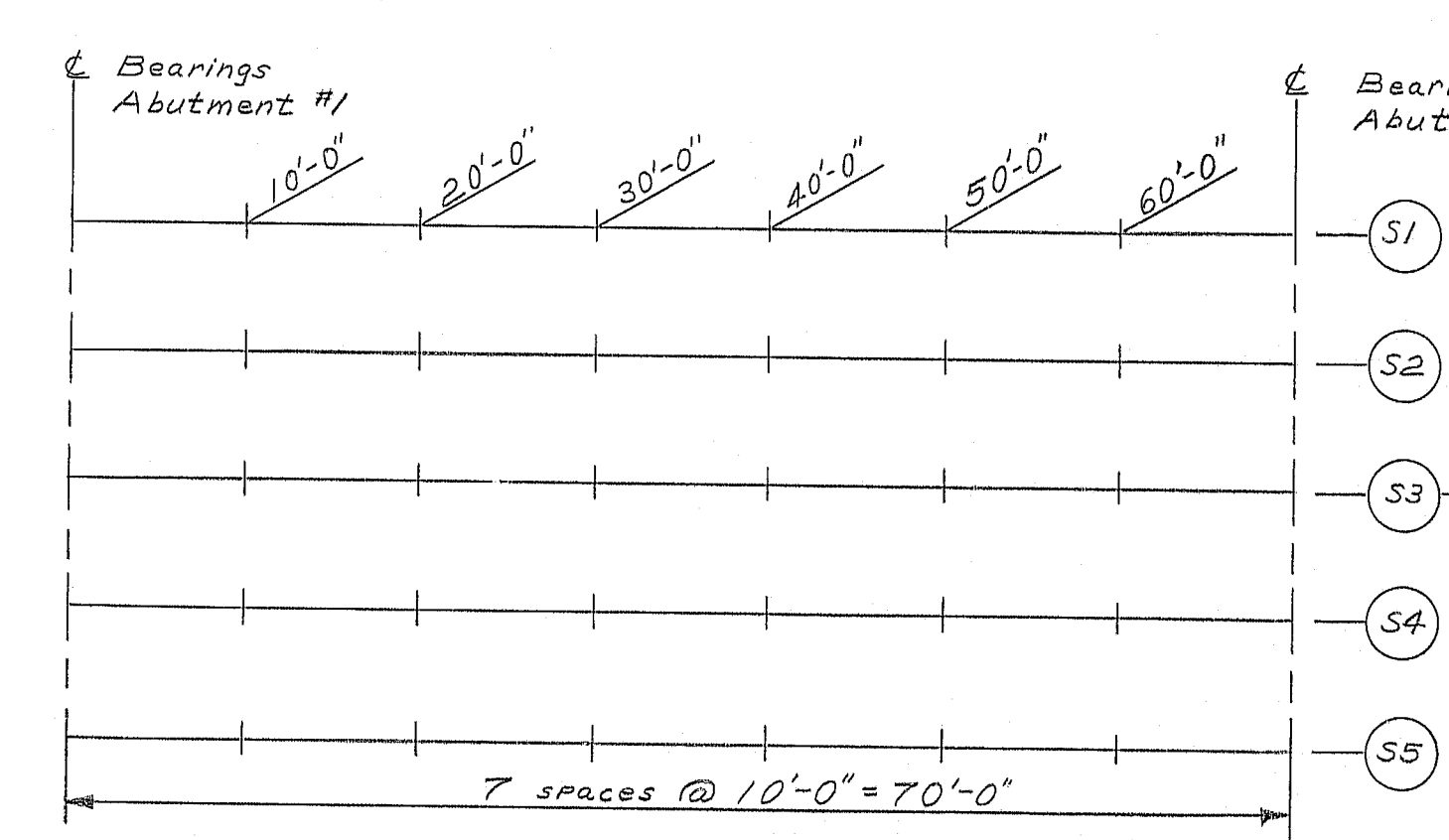


SECTION X-X

NOTES:
1. Double studs placed normal to beam.
2. 970 Studs @ 770 Lbs.



ANCHOR BOLT MODIFICATIONS



BLOCKING PLAN

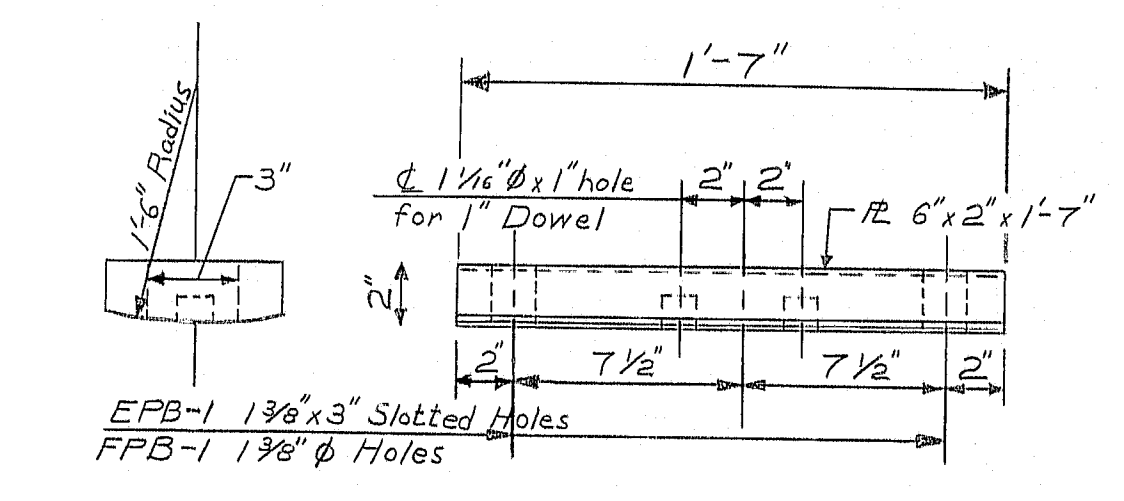
BOTTOM OF SLAB ELEVATIONS								
Point	10'-0"	20'-0"	30'-0"	40'-0"	50'-0"	60'-0"	68'-0"	70'-0"
S1	221.79	221.85	221.89	221.92	221.93	221.92	221.89	221.85
S2	221.95	222.00	222.05	222.08	222.08	222.07	222.04	222.01
S3	222.10	222.16	222.20	222.23	222.24	222.23	222.20	222.16
S4	221.95	222.00	222.05	222.08	222.08	222.07	222.04	222.01
S5	221.79	221.85	221.89	221.92	221.93	221.92	221.89	221.85

NOTE: Bottom of slab elevations are adjusted to compensate for concrete (fluid & superimposed) dead load deflections and vertical profile; use in conformance with subsection 502.10 (a).

BLOCKING DETAIL
Do not use to set forms.

BASIC ALLOWABLE STRESSES
STRUCTURAL STEEL
ASTM A588 $f_y = 27,000$ psi
ASTM A325 $f_y = 25,000$ psi

MATERIALS
STRUCTURAL STEEL
All Steel ASTM A588 (unpainted) except as noted
High Strength Bolts ASTM A325



ROCKER PL For EPB-1 (Mod) & FPB-1 (Mod)
(For details see sheet BD10-74 except as shown)

REFERENCES:
Standard Details
Bearing Pedestal - BD 101-74
Shear Connectors - BD 104-77
Diaphragms - BD 113-78

R92-484

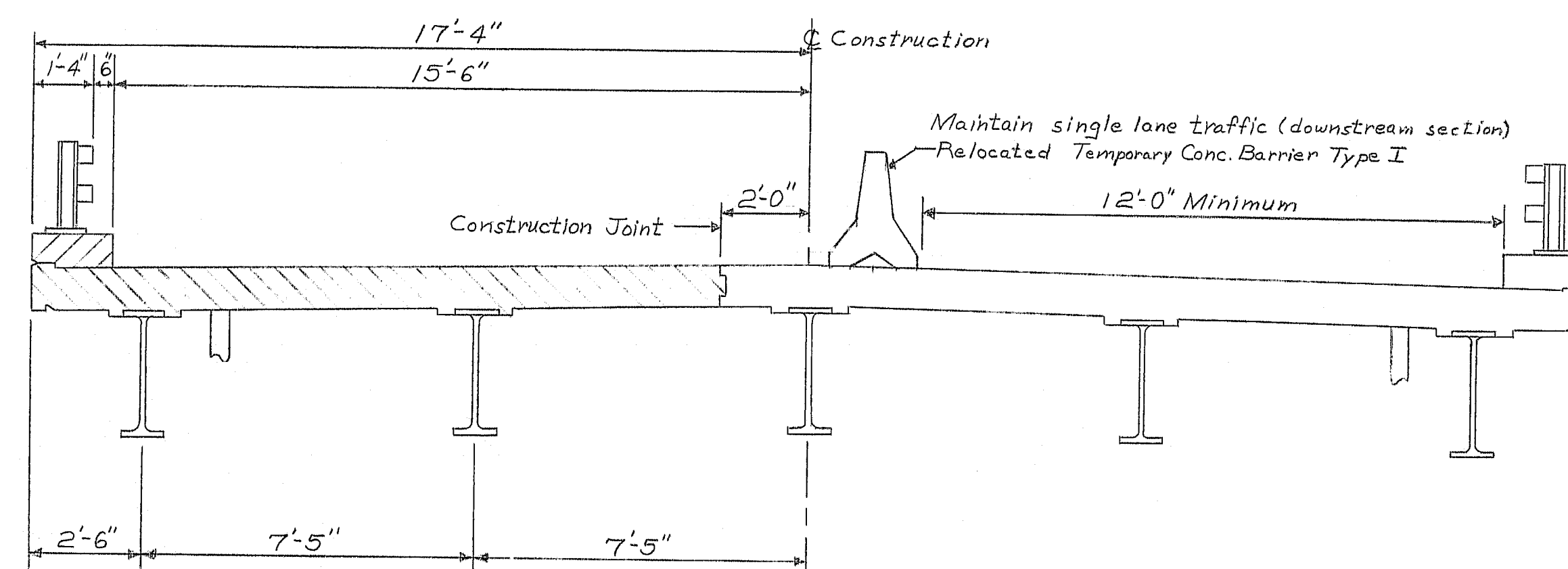
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

LINSCOTT BRIDGE
OVER
MOUSAM RIVER
IN THE TOWN OF
SANFORD
YORK COUNTY
STRUCTURAL STEEL

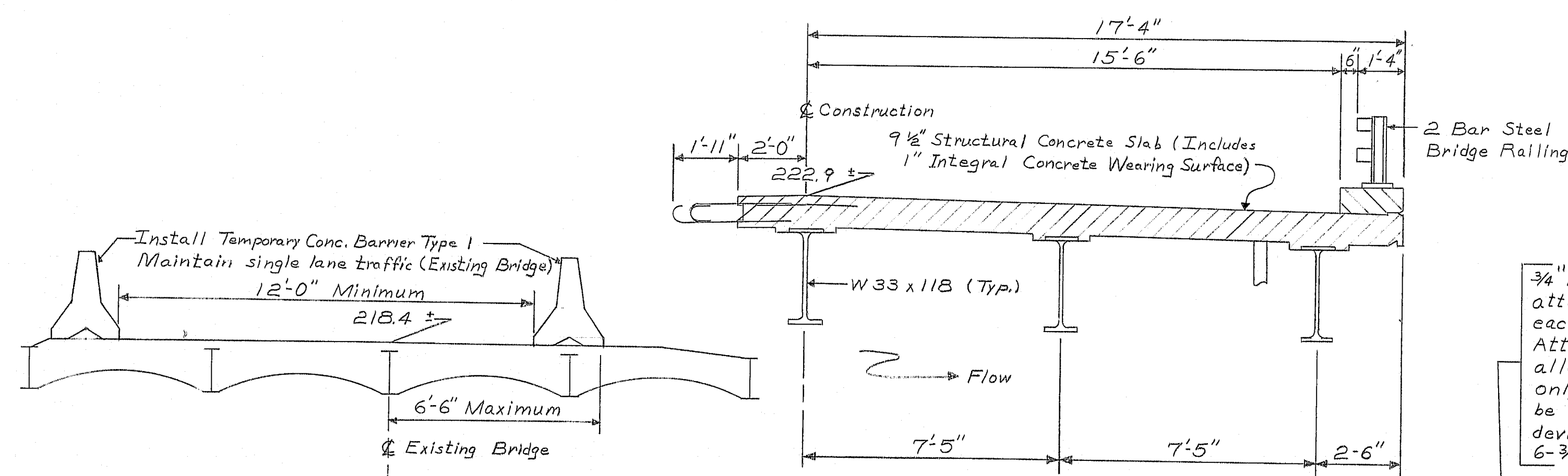
SHEET 6 OF 25 AUGUSTA, MAINE Oct 1980

PROJECT DESIGN ENGINEER	DATE
BY BAS	11-16-77
DESIGN - DETAILED	
CHECKED	12-1-77
REVISIONS	
FIELD CHANGES	
PLANS	

F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(17)	7	25



TRANSVERSE SECTION ~ STAGE 2



TRANSVERSE SECTION ~ STAGE 1

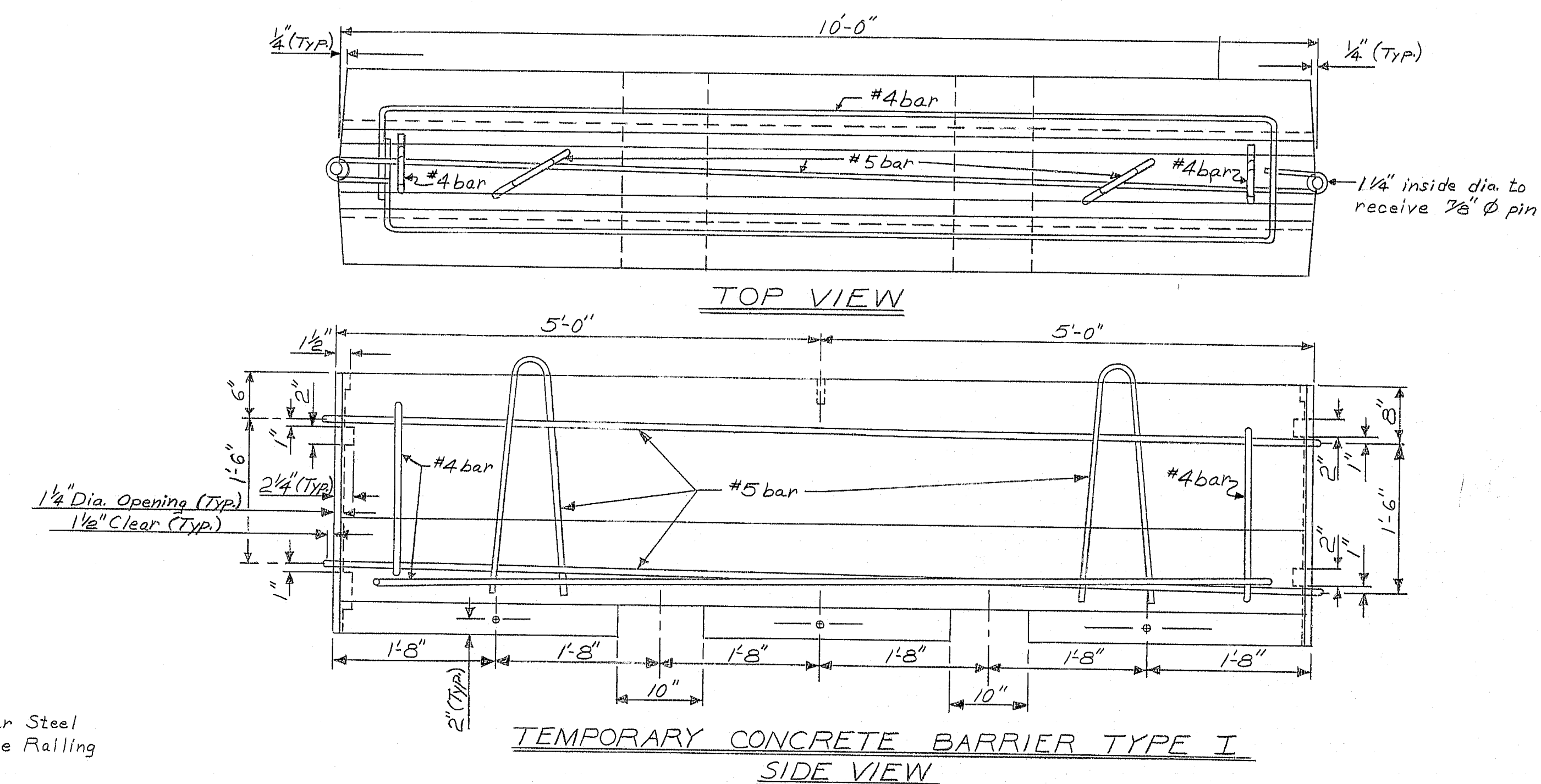
MAINTENANCE OF TRAFFIC AND SEQUENCE OF CONSTRUCTION

Construction shall conform to the following sequence in order to maintain traffic at all times:

STAGE 1 ~ Remove present bridge railings from the existing bridge. Install Temporary Barrier on both sides of existing bridge. Maintain one lane of traffic on the existing bridge. Construct downstream section of abutments, structural steel, superstructure slab, curb, and permanent bridge railing as shown on plans.

STAGE 2 ~ Remove Temporary Barrier from existing bridge and reset on completed downstream section of the proposed bridge as shown on plans. Route single lane traffic onto the completed bridge section. Remove existing bridge and complete construction of new bridge as shown on plans. Remove Temporary Barrier from completed structure.

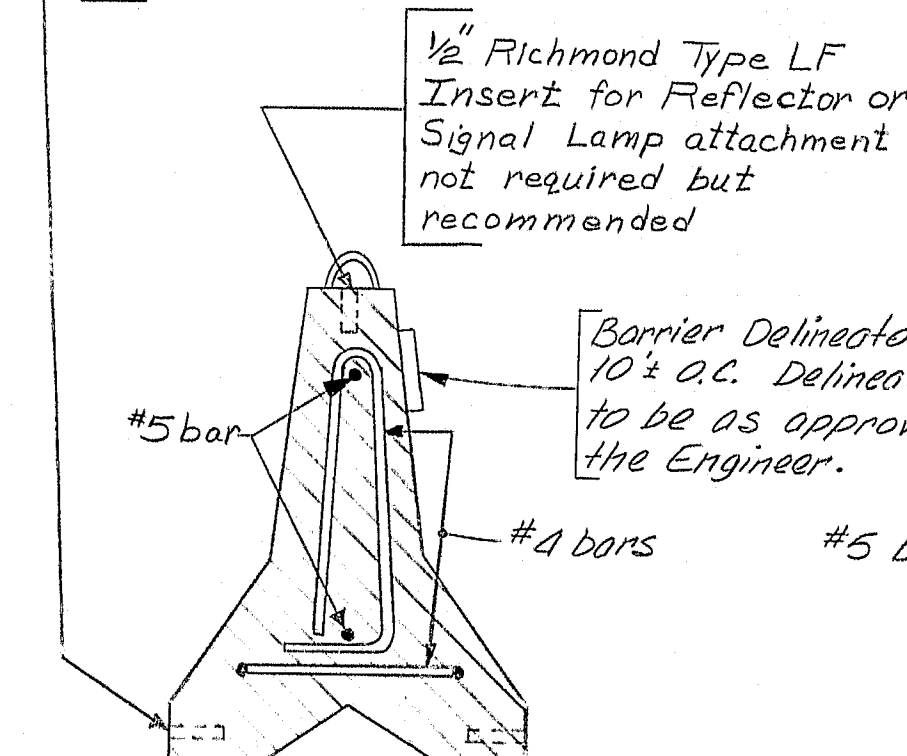
Note:
Sequence of construction may be altered as directed by the Engineer to facilitate ease of construction.



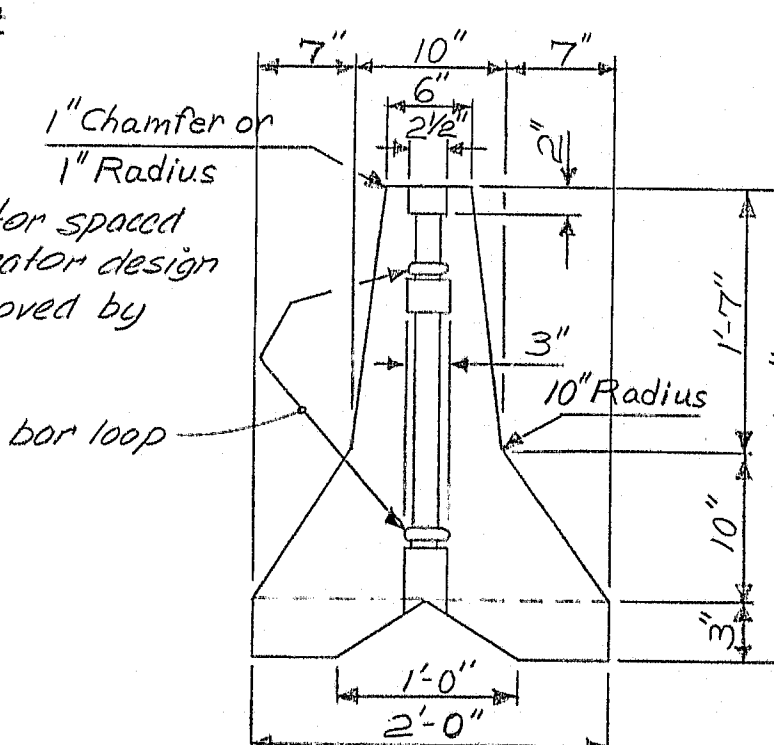
TEMPORARY CONCRETE BARRIER TYPE I

Other reinforcing arrangements and section connection arrangements may be used, if approved by the Engineer, for Temporary Concrete Barrier Type I.

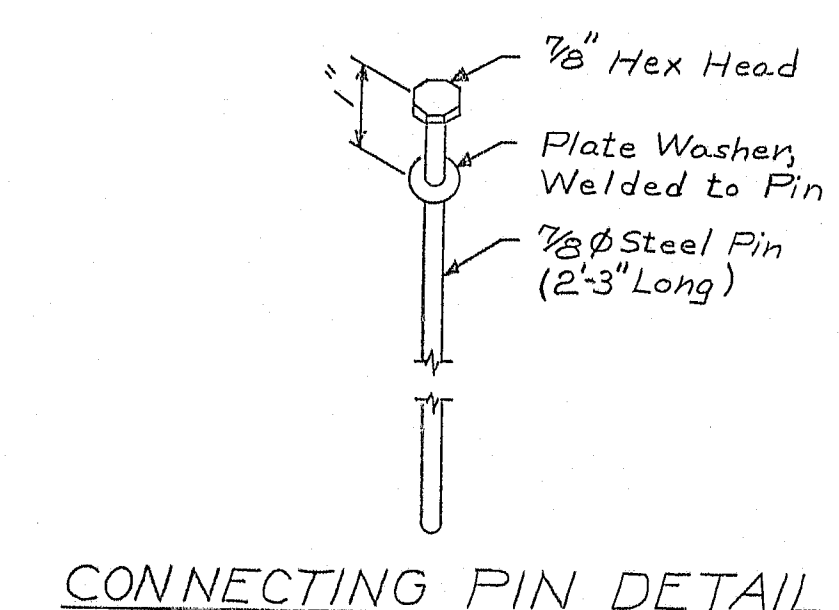
3/4" Richmond Type EC-2F Insert for attaching units to bridge decks. 3 each side of unit (6 per unit). Attachment to bridge deck will be allowed on traffic side of barrier only. An attachment assembly shall be approved by the Engineer to develop the strength of these 6-3/4" Richmond EC-2F Inserts.



TYPICAL SECTION



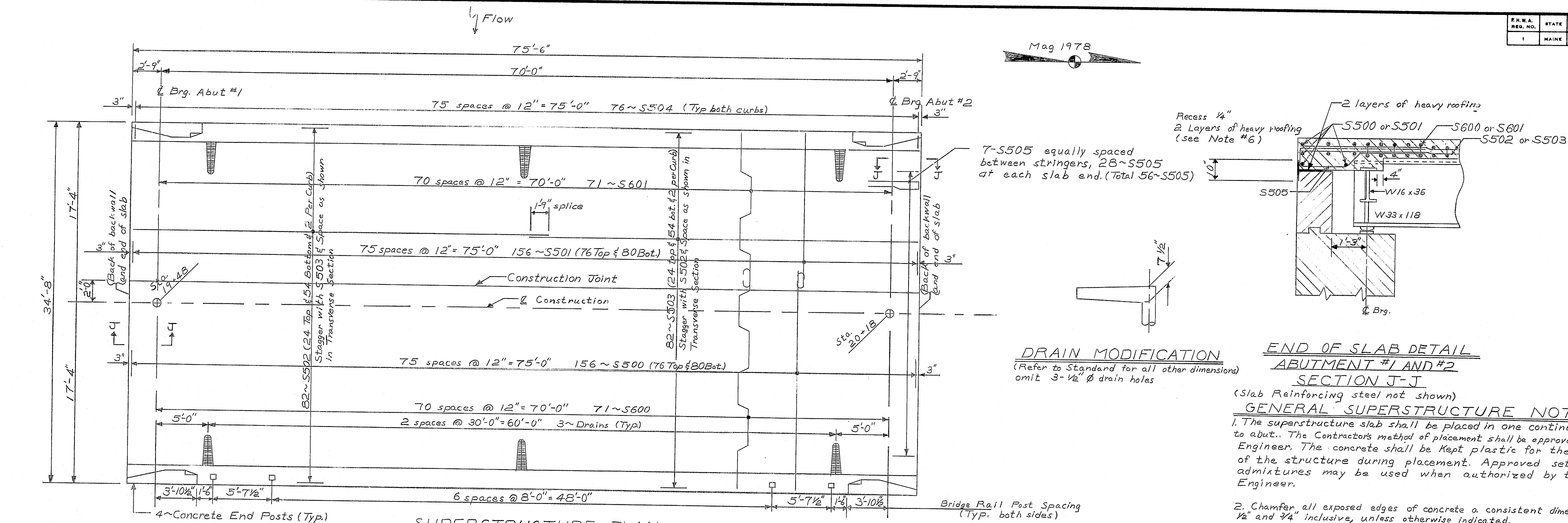
TYPICAL END VIEW



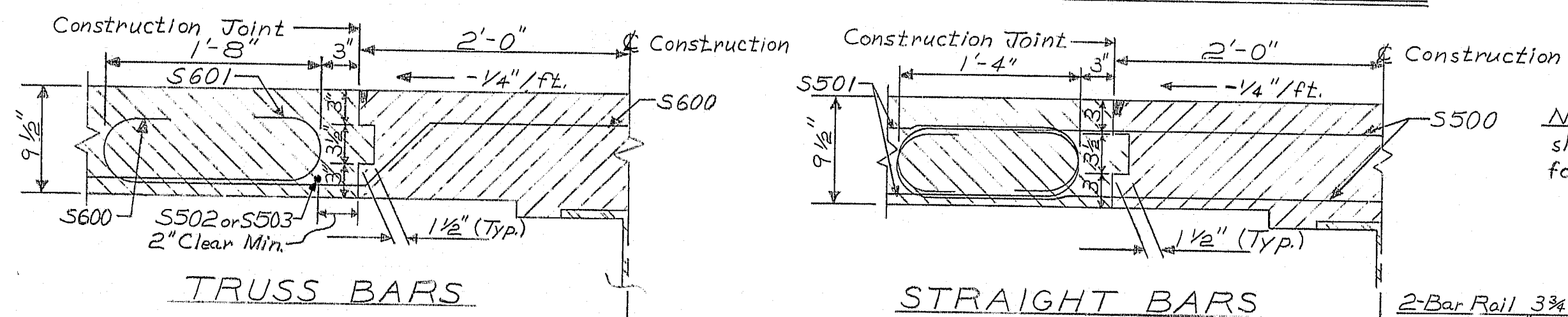
CONNECTING PIN DETAIL

R92-485

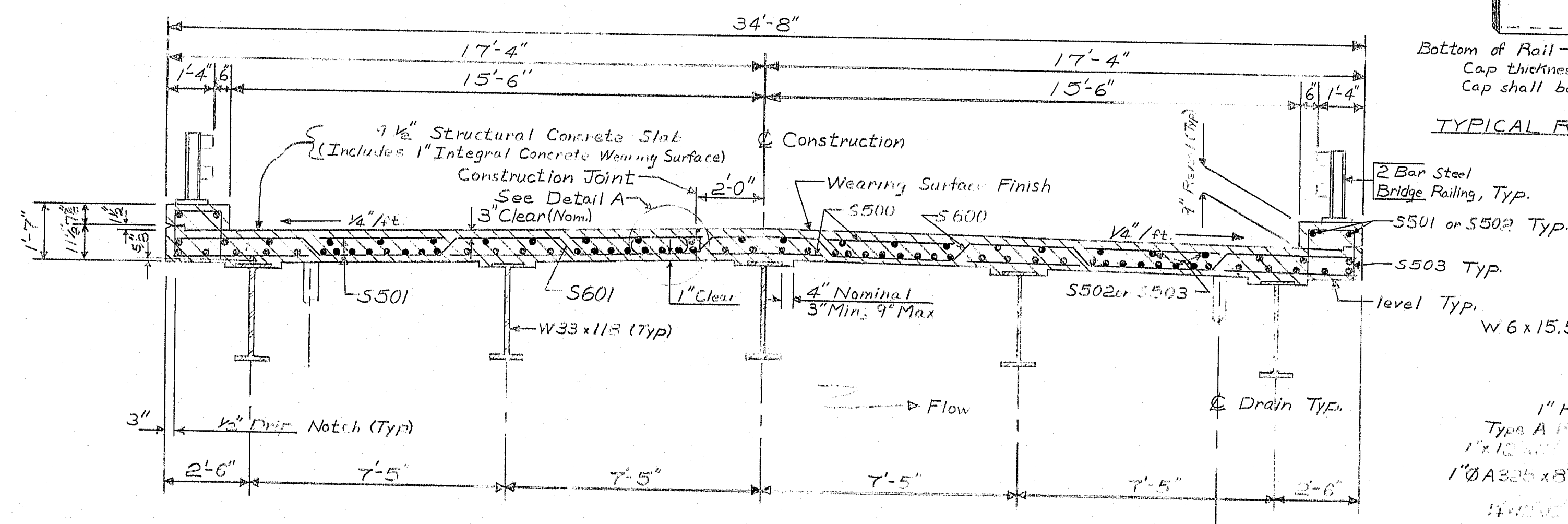
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
LINS-COTT BRIDGE
OVER
MOUSAM RIVER
IN THE TOWN OF
SANFORD
YORK COUNTY
Sequence of Slab Construction
SHEET 7 OF 25 AUGUSTA, MAINE Oct 1980



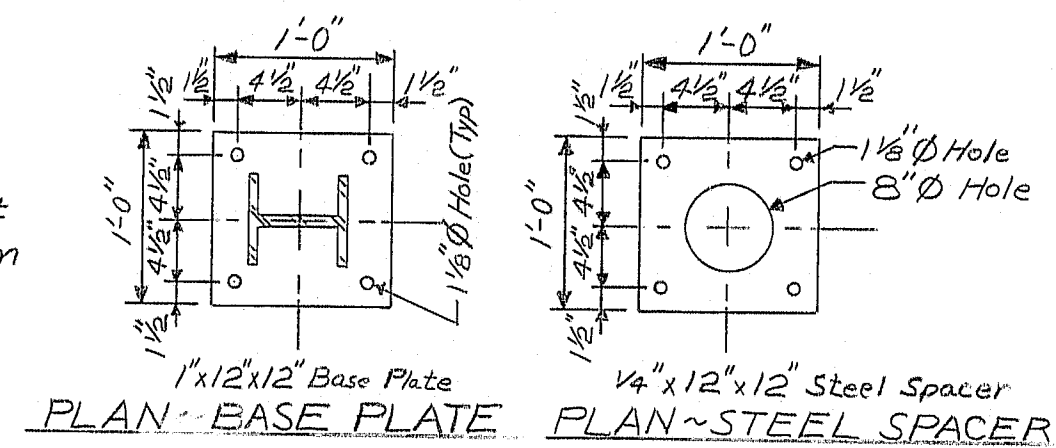
SUPERSTRUCTURE PLAN



DETAIL A

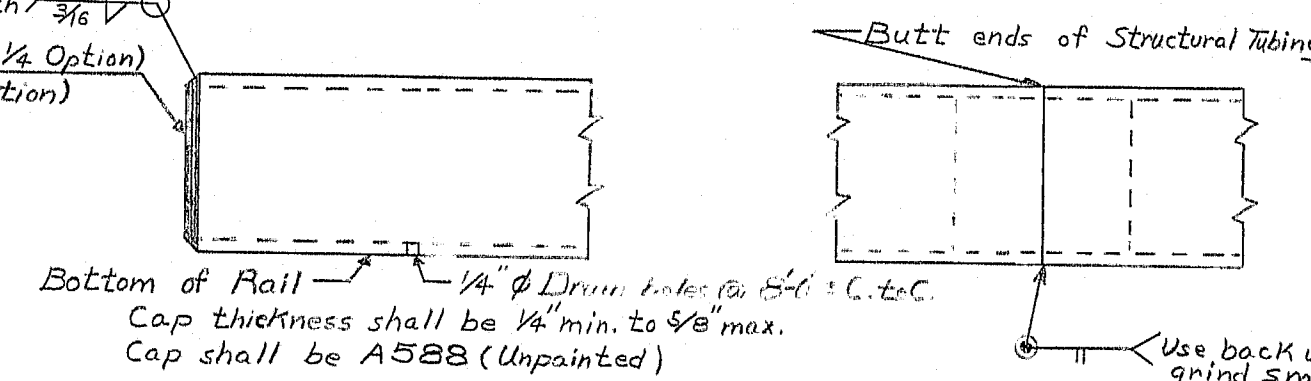


TRANSVERSE SECTION



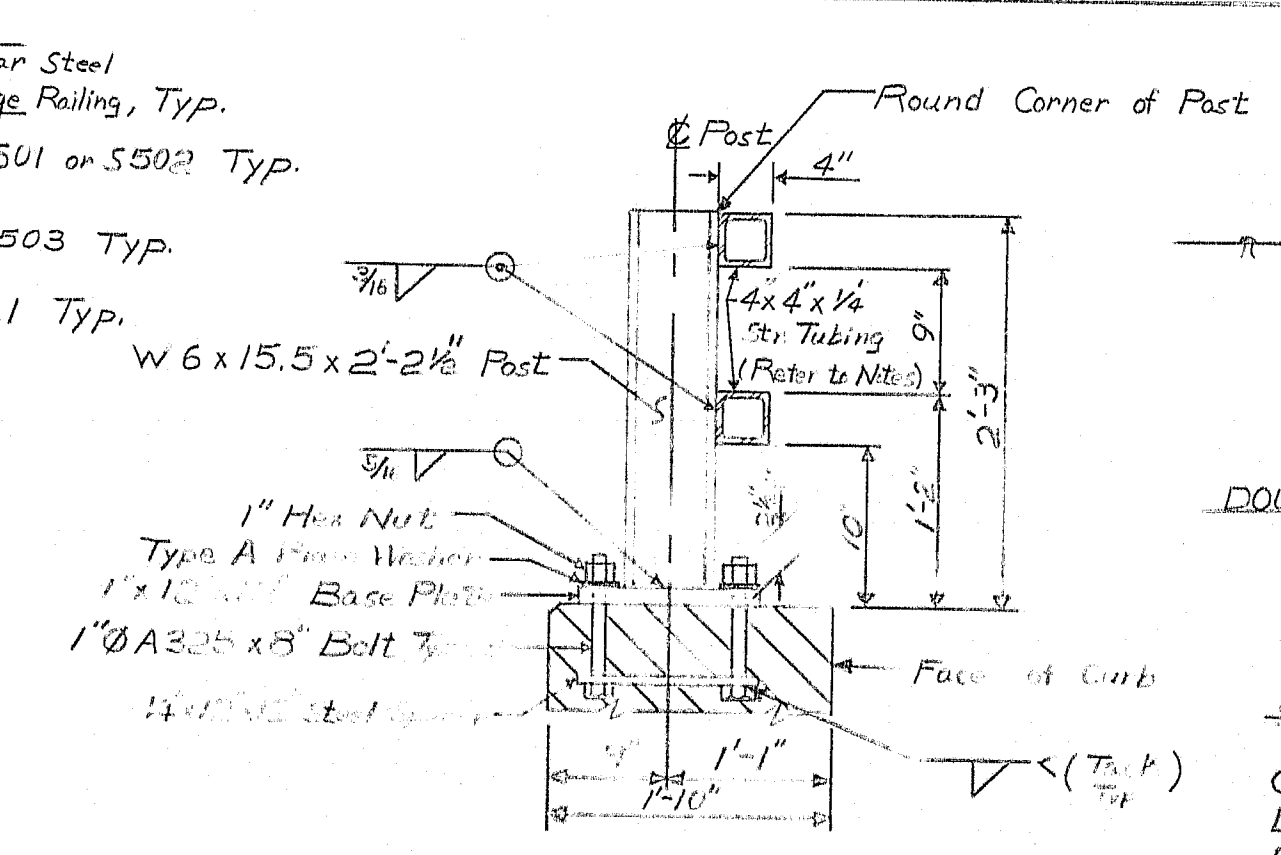
PLAN - BASE PLATE

PLAN~STEEL SPACER



TYPICAL RAIL ENDS

RAIL SPLICE DETAIL



DOUBLE ANGLE OPTION

BRIDGE RAIL NOTES

1. Bridge Rail shall be $TS\ 4\frac{1}{2} \times 4\frac{1}{2} \times \frac{1}{2}$ Structural Square Tubing or $2\text{--}L\ 4\frac{1}{2} \times 4\frac{1}{2} \times \frac{1}{2}$ Angles continuously welded to form structural tubing.
2. The fabrication, handling, and erection of Bridge Rail shall be in accordance with sections 504 and 713, except no impact tests will be required.
3. Top edges of rail posts shall be rounded and free of burrs.
4. All base plates, rail posts, and bridge rail shall be A57M, A588 (unpainted).
5. Steel spacers may be either A57M, A588 or A36 unpainted. All nuts and washers shall be A57M, A325 Type 3.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

**LINSCOTT BRIDGE
OVER
MOUSAM RIVER
IN THE TOWN OF
SANFORD
YORK COUNTY
SUPERSTRUCTURE**

SHEET 8 OF 25 AUGUSTA, MAINE Oct. 1980

R92-486

[illegible]

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: ASTM A615 Grade 60

1. First digit(s) following the letter of the Mark indicates size of reinforcement bar.
Mark (A 502) bar size = #5
Mark (P 1001) bar size = #10
Mark (S 603) bar size = #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

LINSCOTT BRIDGE
OVER
MOUSAM RIVER
IN THE TOWN OF
SANFORD
YORK COUNTY
REINFORCING STEEL SCHEDULE

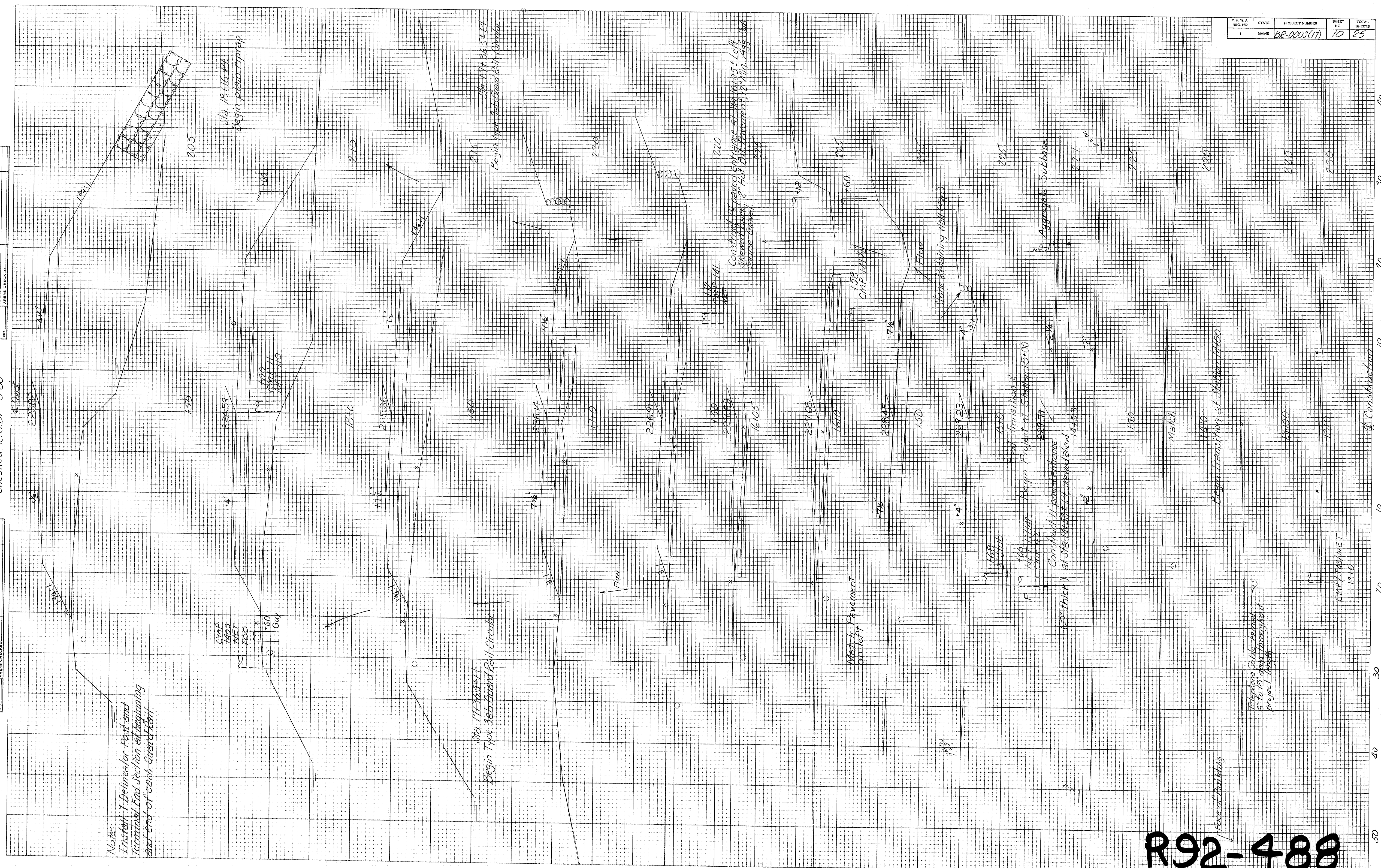
SHEET 9 OF 25 AUGUSTA, MAINE Oct. 1980

R92-487

PLANS	BY		DATE
	DESIGN - DETAIL	BAS BAS	
	CHECKED	PJM & RB	
REVISIONS			

FINAL SURVEY	BY _____		DATE _____
	SURVEYED _____		
	PLOTTED _____		
	TEMPLATE _____		
NOTE BOOK	AREAS _____		

Note: Final 1 Delinquent Post and
terminal End Section at beginning
and end of each Guard Rail.

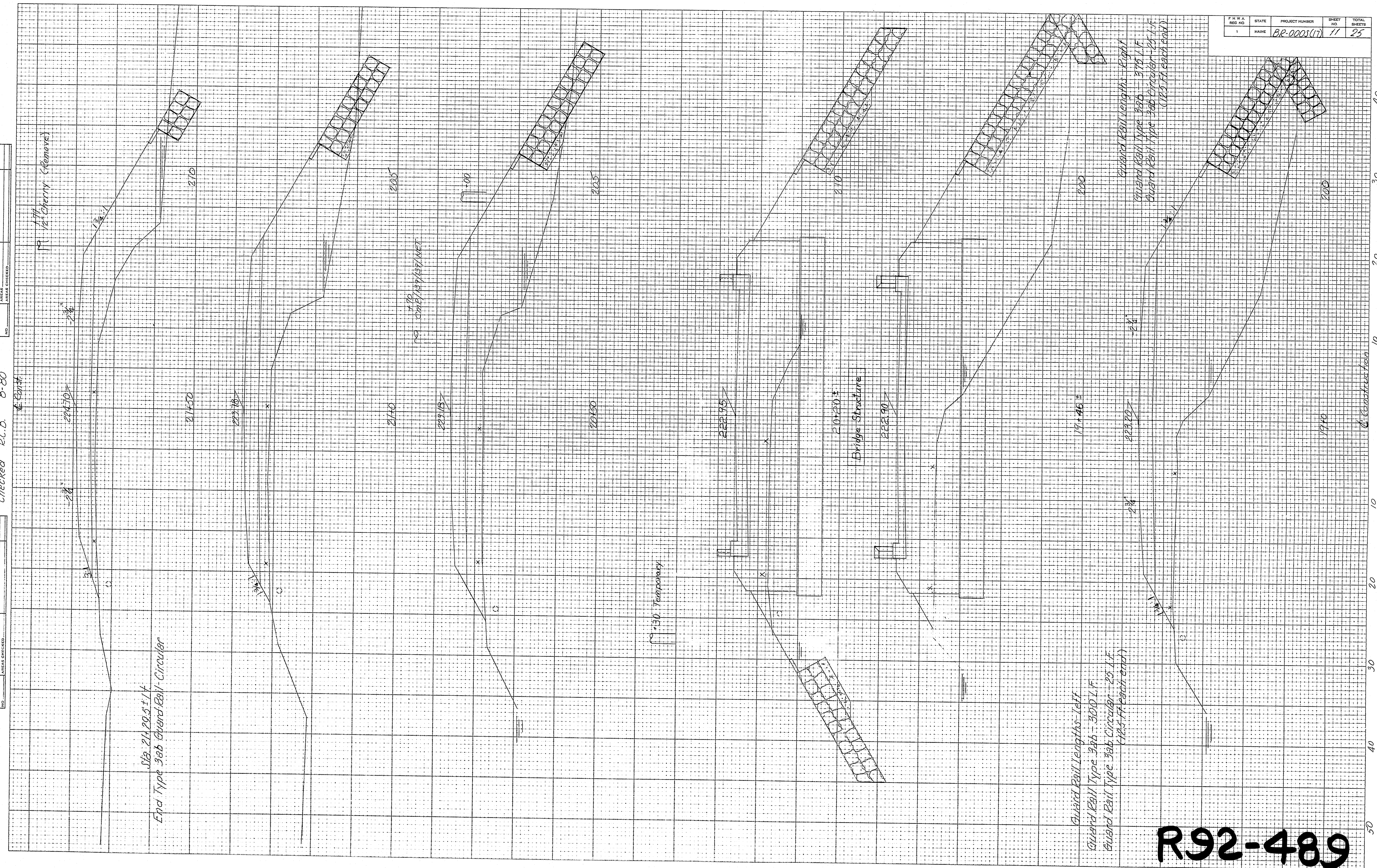


R92-488

FINAL SURVEY	DATE
NO. _____	BY _____
NOTED	DATE
NO. _____	BY _____
NOTED	DATE
NO. _____	BY _____

ORIGINAL SURVEY	DATE
NO. _____	BY _____
NOTED	DATE
NO. _____	BY _____
NOTED	DATE
NO. _____	BY _____

Plotted R.M.M. 7-80
Checked D.C.B. 8-80



F.H.W.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0008(17)	11	25

R92-489

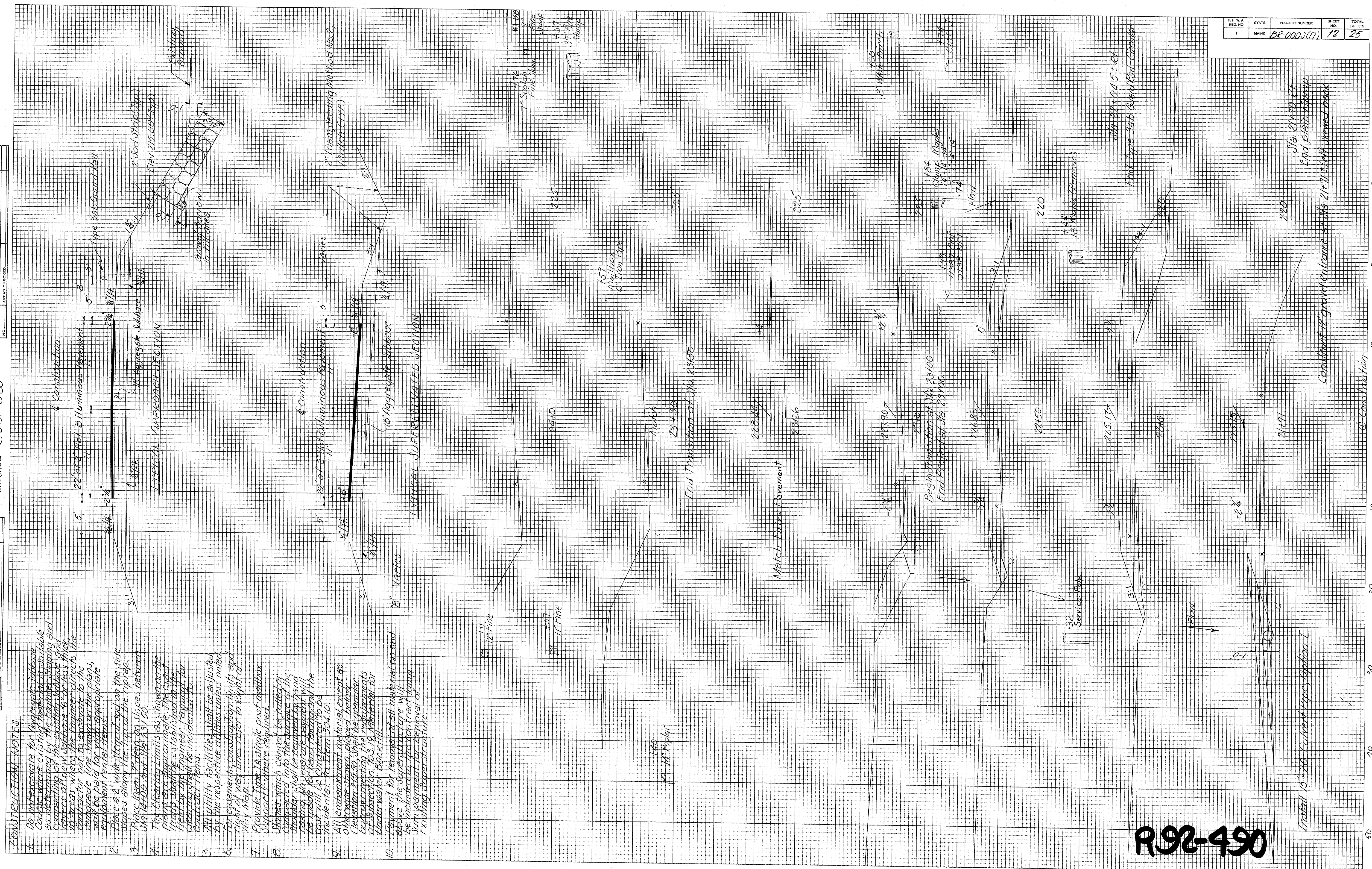
LINSCOTT BRIDGE, SANFORD, YORK COUNTY

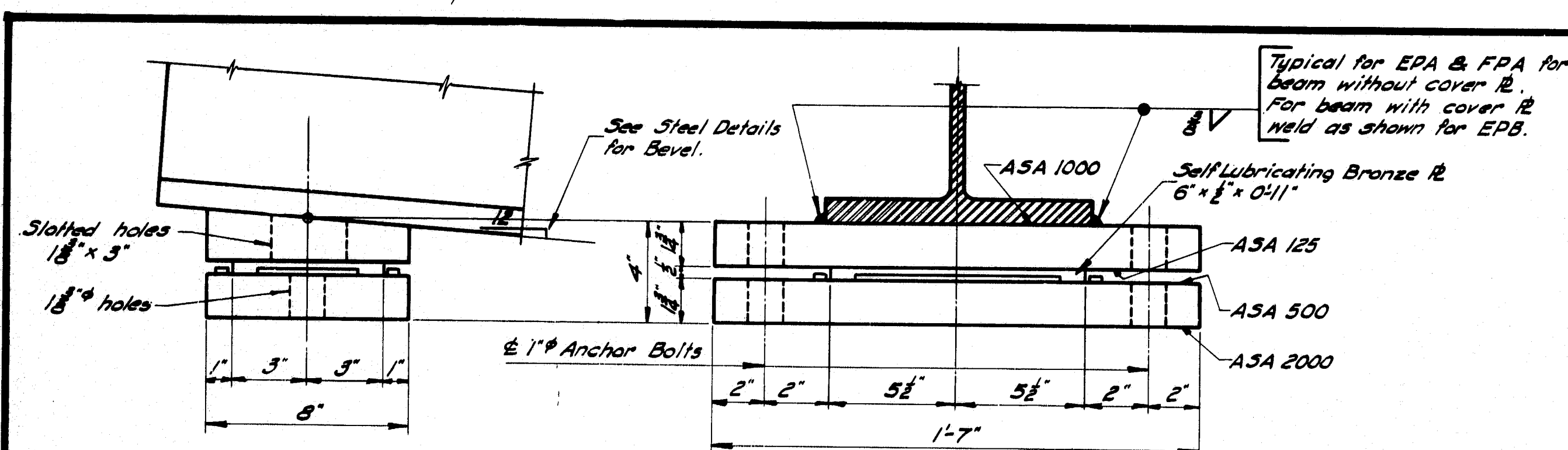
Sh' 11 of 25

FINAL SURVEY	BY _____	DATE _____
NOTE BOOK	SURVEYED _____	
	PLOTTED _____	
	TEMPLATE _____	
	AREAS _____	

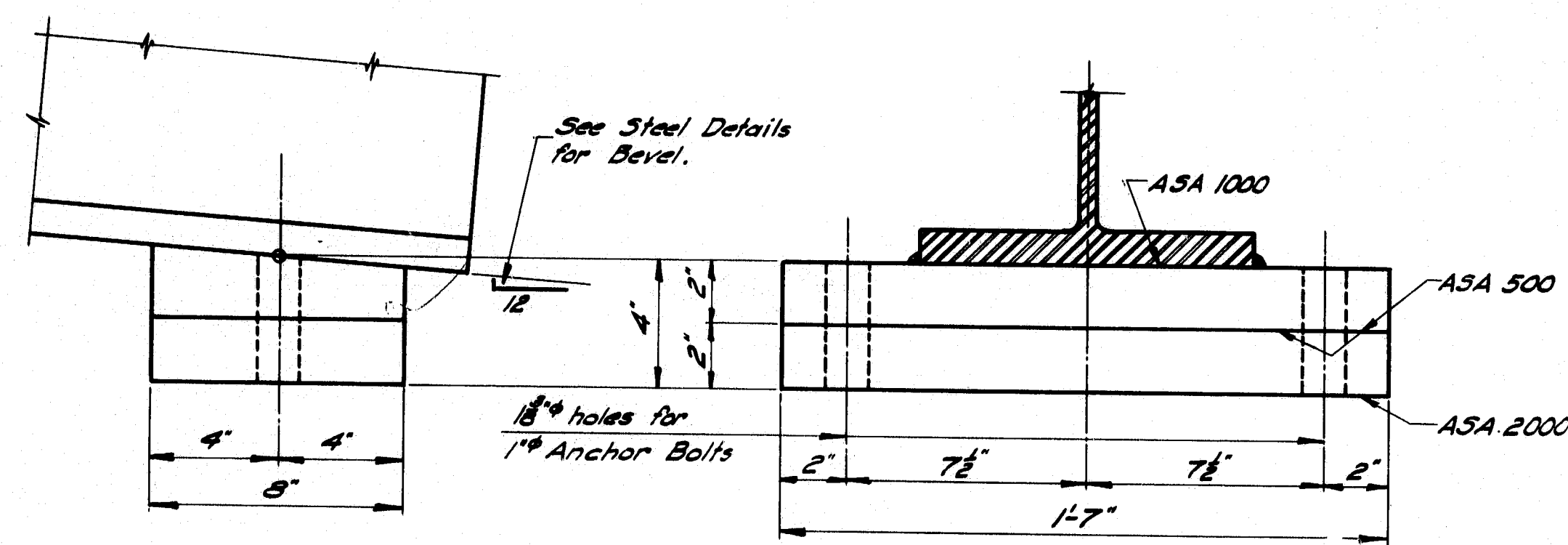
R92-490

Sh. # 12 of 25

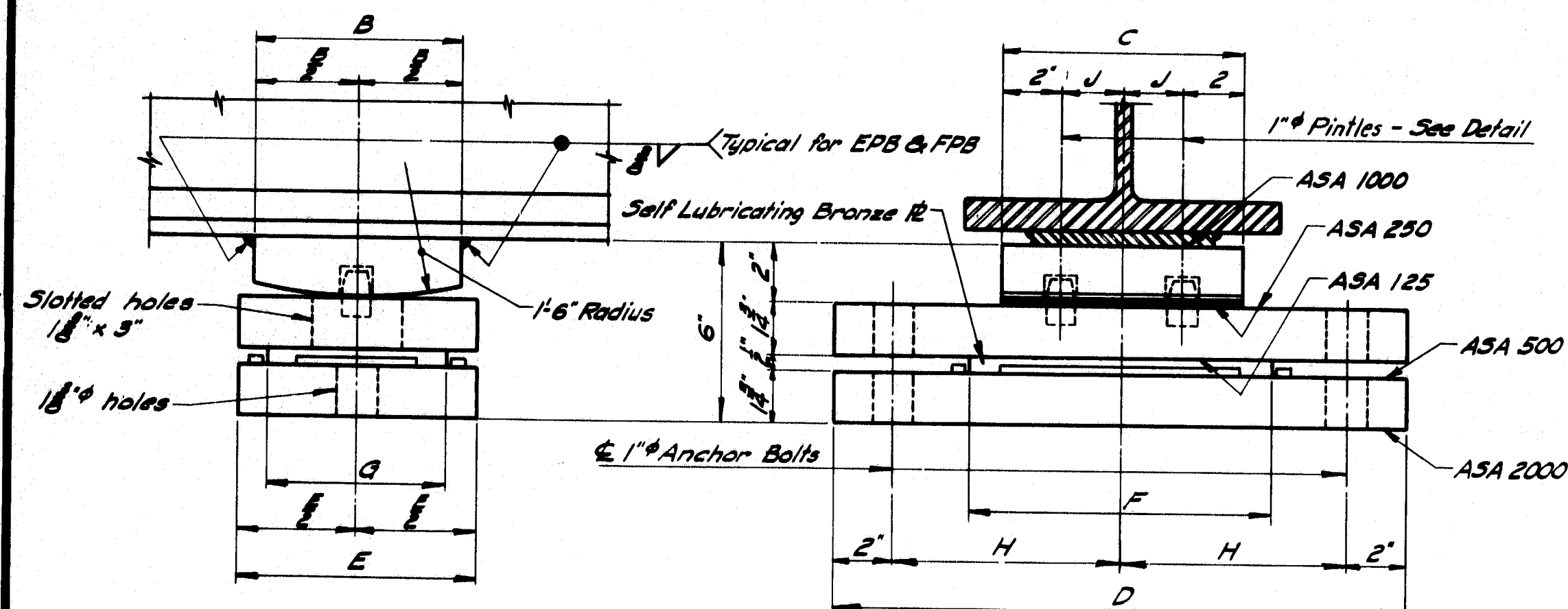




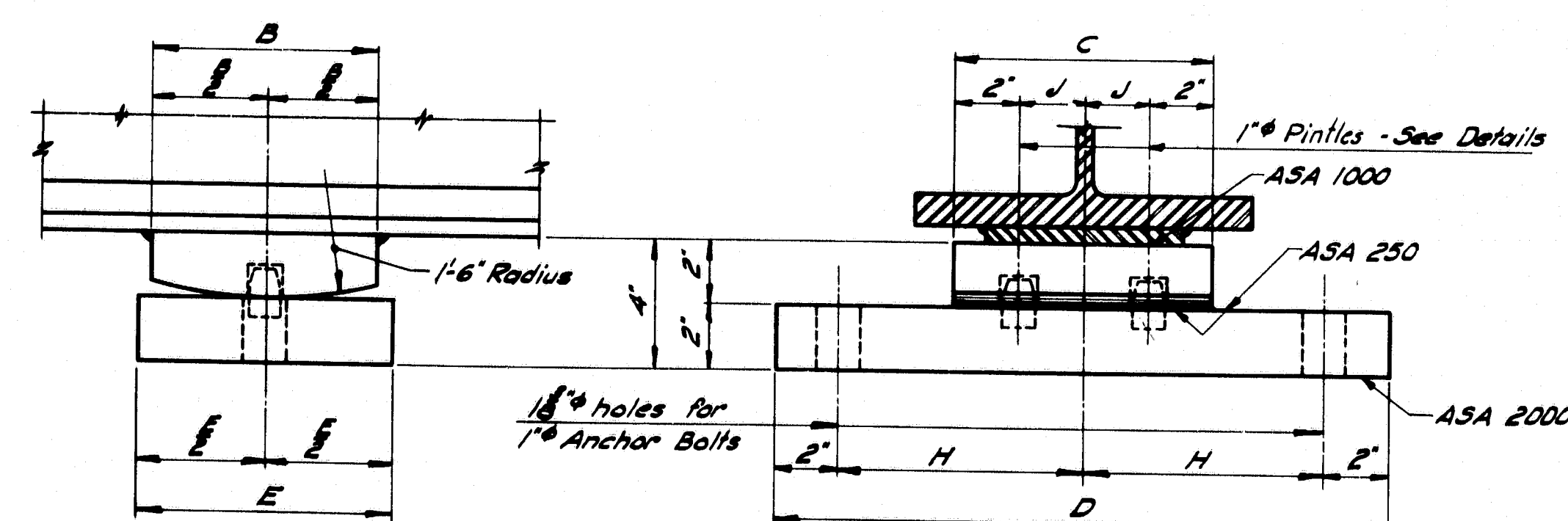
EXPANSION PEDESTAL - EPA



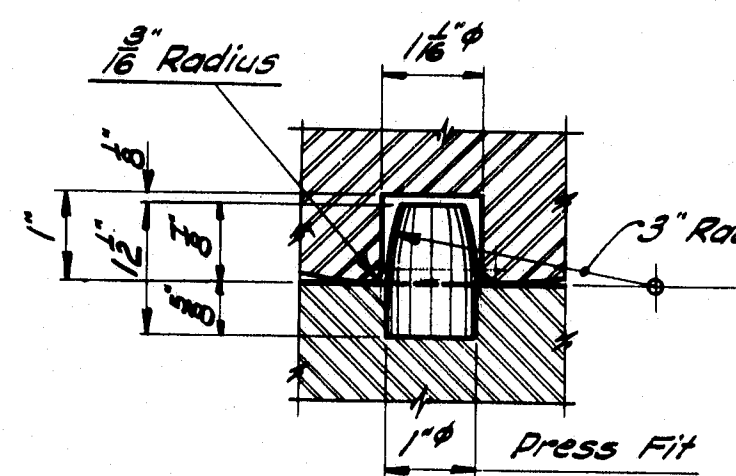
FIXED PEDESTAL - FPA



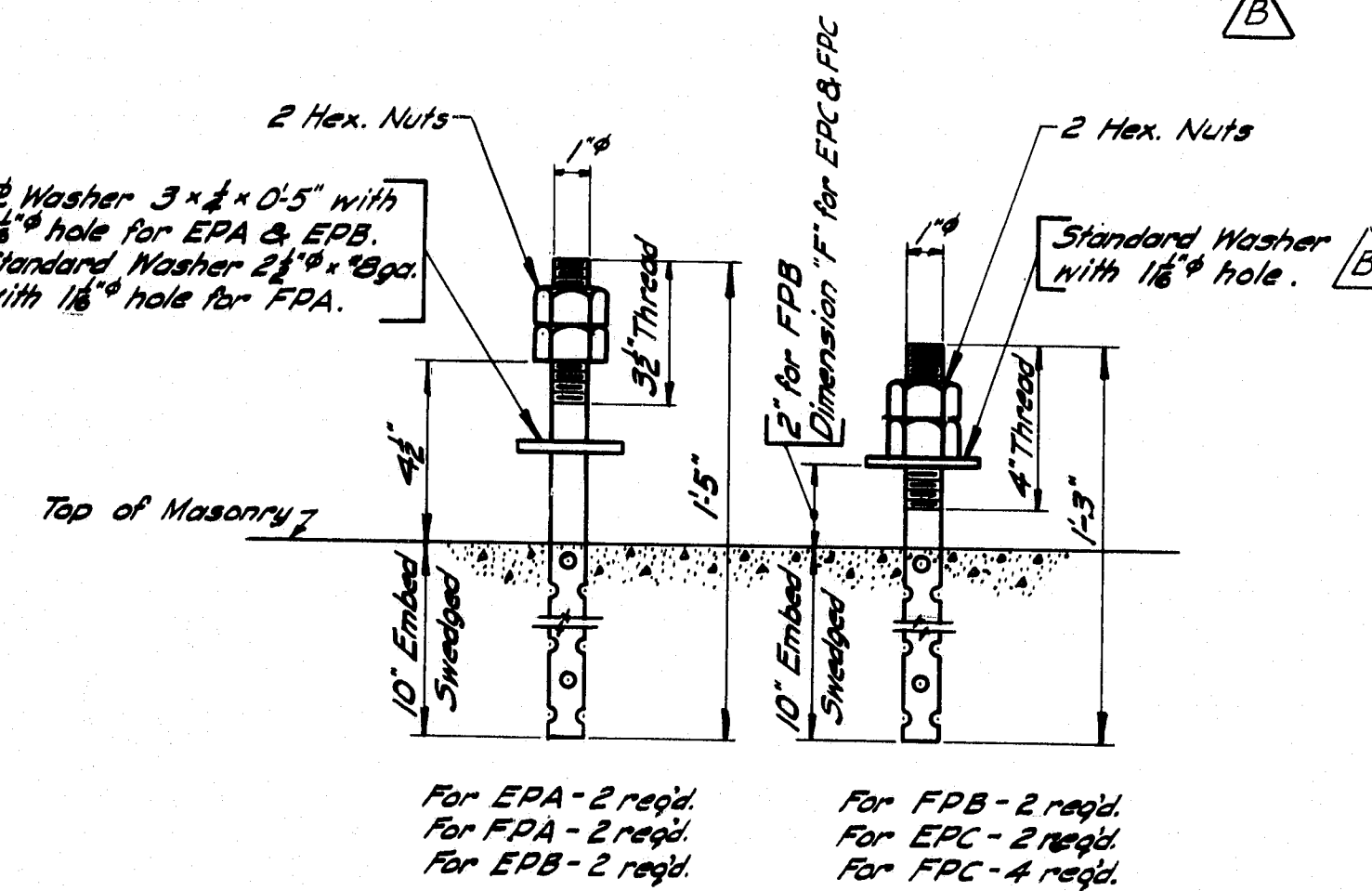
EXPANSION PEDESTAL - EPB



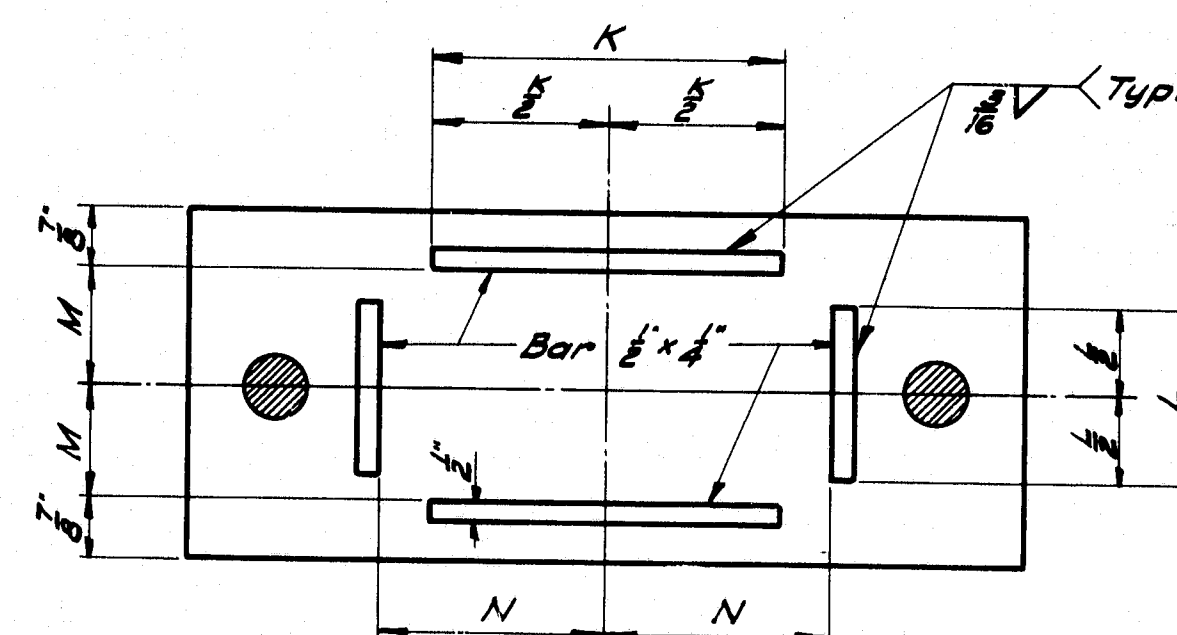
FIXED PEDESTAL - FPB



PINTLE DETAIL

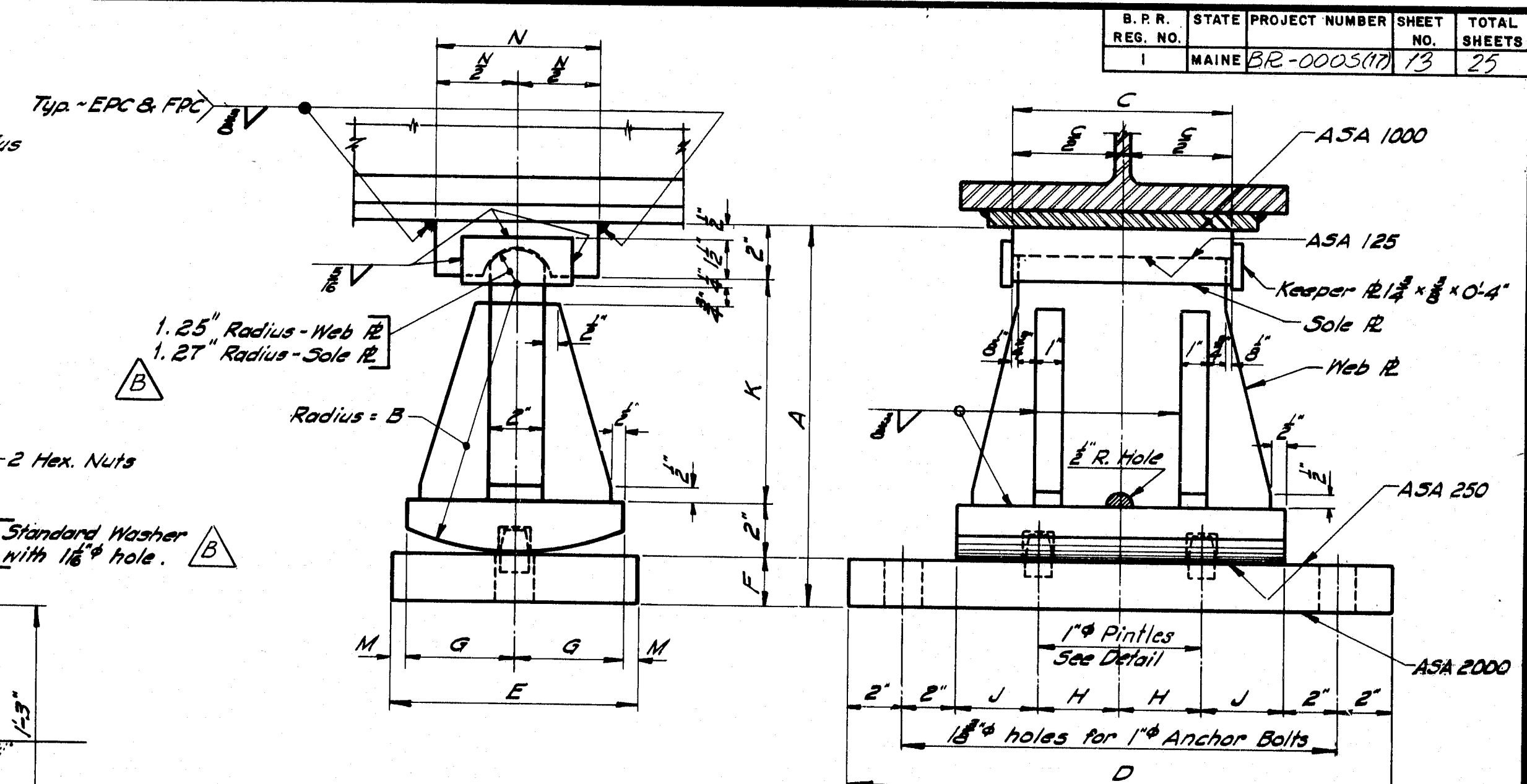


ANCHOR BOLT DETAIL

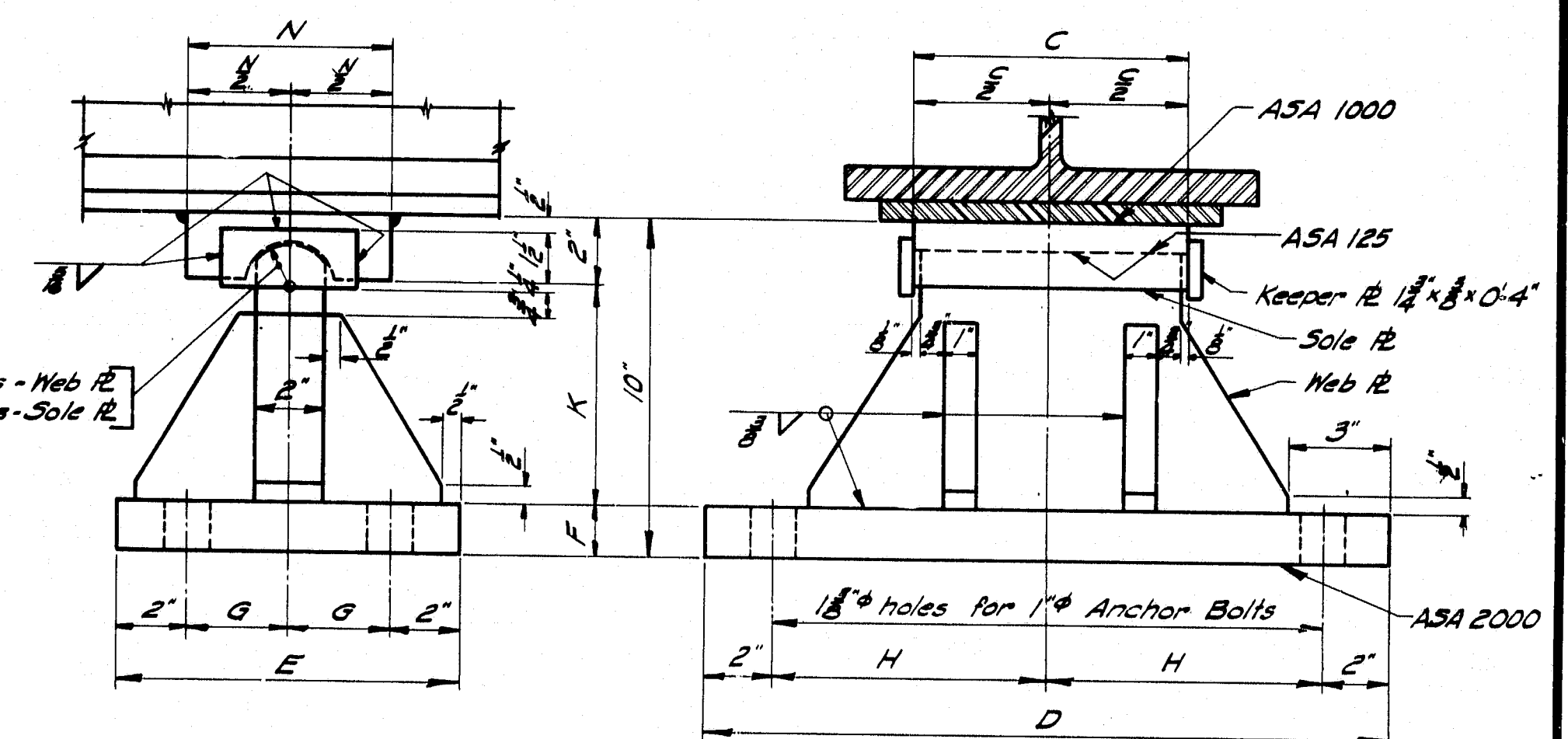


For EPA & EPB
MASONRY PLATE

PEDESTALS —		ALLOWABLE LOADS & DIMENSIONS													
<i> pedestal</i>	<i>Load</i>	A	B	C	D	E	F	G	H	J	K	L	M	N	
EPA	132 ^k	—	—	—	—	—	—	—	—	—	8"	4"	3 1/2"	5 1/2"	
FPA	150 ^k	—	—	—	—	—	—	—	—	—	8"	4"	3 1/2"	5 1/2"	
EPB-1	120 ^k	—	6"	8"	1 1/2"	8"	10"	6"	7 1/2"	2"	8"	4"	3 1/2"	5 1/2"	
EPB-2	165 ^k	—	7"	10"	1 1/2"	9"	10"	7"	8"	3"	10"	5"	3 1/2"	5 1/2"	
EPB-3	224 ^k	—	8"	1 1/4"	20"	10"	1 1/4"	8"	10"	4 1/2"	1 1/2"	5"	4 1/2"	2 1/2"	
FPB-1	120 ^k	—	6"	8"	1 1/2"	8"	—	—	7 1/2"	2"	—	—	—	—	
FPB-2	165 ^k	—	7"	10"	1 1/2"	9"	—	—	8"	3"	—	—	—	—	
FPB-3	224 ^k	—	8"	1 1/2"	20"	10"	—	—	10"	5"	—	—	—	—	
EPC-1	70 ^k	3 1/2"	6"	8"	1 1/2"	8"	1 1/2"	3 1/2"	3"	3"	4 1/2"	—	1"	6"	
EPC-2	100 ^k	1 1/4"	8"	8"	1 1/2"	8"	1 1/2"	3 1/2"	3"	3"	6 1/2"	—	1"	6"	
EPC-3	130 ^k	1 1/2"	10"	8"	1 1/2"	9"	1 1/2"	4"	3"	3"	8 1/2"	—	1"	7"	
EPC-4	160 ^k	1 1/2"	10"	8"	1 1/2"	9"	1 1/2"	4"	3"	3"	8 1/2"	—	1"	7"	
EPC-5	190 ^k	1 1/2"	10"	9"	2 1/2"	10"	2"	4 1/2"	5"	3"	8 1/2"	—	1"	8"	
EPC-6	220 ^k	1 1/2"	10"	10"	2 1/2"	10"	2 1/2"	5"	5"	3"	10 1/2"	—	1"	8"	
EPG-7	250 ^k	1 1/2"	1 1/2"	10"	2 1/2"	10"	2 1/2"	5"	5"	4"	10 1/2"	—	1"	8"	
FPC-1	100 ^k	—	—	8"	1 1/2"	9"	1 1/2"	2 1/2"	8"	—	6 1/2"	—	—	6"	
FPC-2	160 ^k	—	—	8"	1 1/2"	10"	1 1/2"	3"	8"	—	6 1/2"	—	—	7"	
FPC-3	190 ^k	—	—	9"	2 1/2"	10"	2 1/2"	3"	10"	—	6 1/2"	—	—	8"	
FPC-4	220 ^k	—	—	10"	2 1/2"	10"	2 1/2"	4"	10"	—	6 1/2"	—	—	8"	
FPC-5	250 ^k	—	—	1 1/2"	2 1/2"	10"	2 1/2"	4"	10"	—	6 1/2"	—	—	8"	



EXPANSION PEDESTAL - EPC



FIXED PEDESTAL - FPC

NOTE: At the location of bearing pedestals the concrete bridge seats shall be dressed one inch larger all around than size of masonry plates and to exact elevations shown on the plans. If dressed areas are below the surface of the surrounding bridge seat a small channel shall be cut to the edge of the bridge seat for drainage where required by the Engineer. Channels shall have a min. width of 6" and min. slope of 1 inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

DESIGN SPECIFICATIONS

AASHTO, Standard Specifications for Highway Bridges 1973, Interims thru 1977

A.S.T.M. STEEL CLASSIFICATION

(When structural steel is specified to be unpainted)
All structural steel including anchor bolts shall be A588 unpainted.

(When structural steel is specified to be painted)
All structural steel including anchor bolts shall be A36.

R92-491

	Delete Std. Washer size & change radius	6-14-76
	Change Specifications & Steel Classification	3-1-77
REVISIONS		DATE

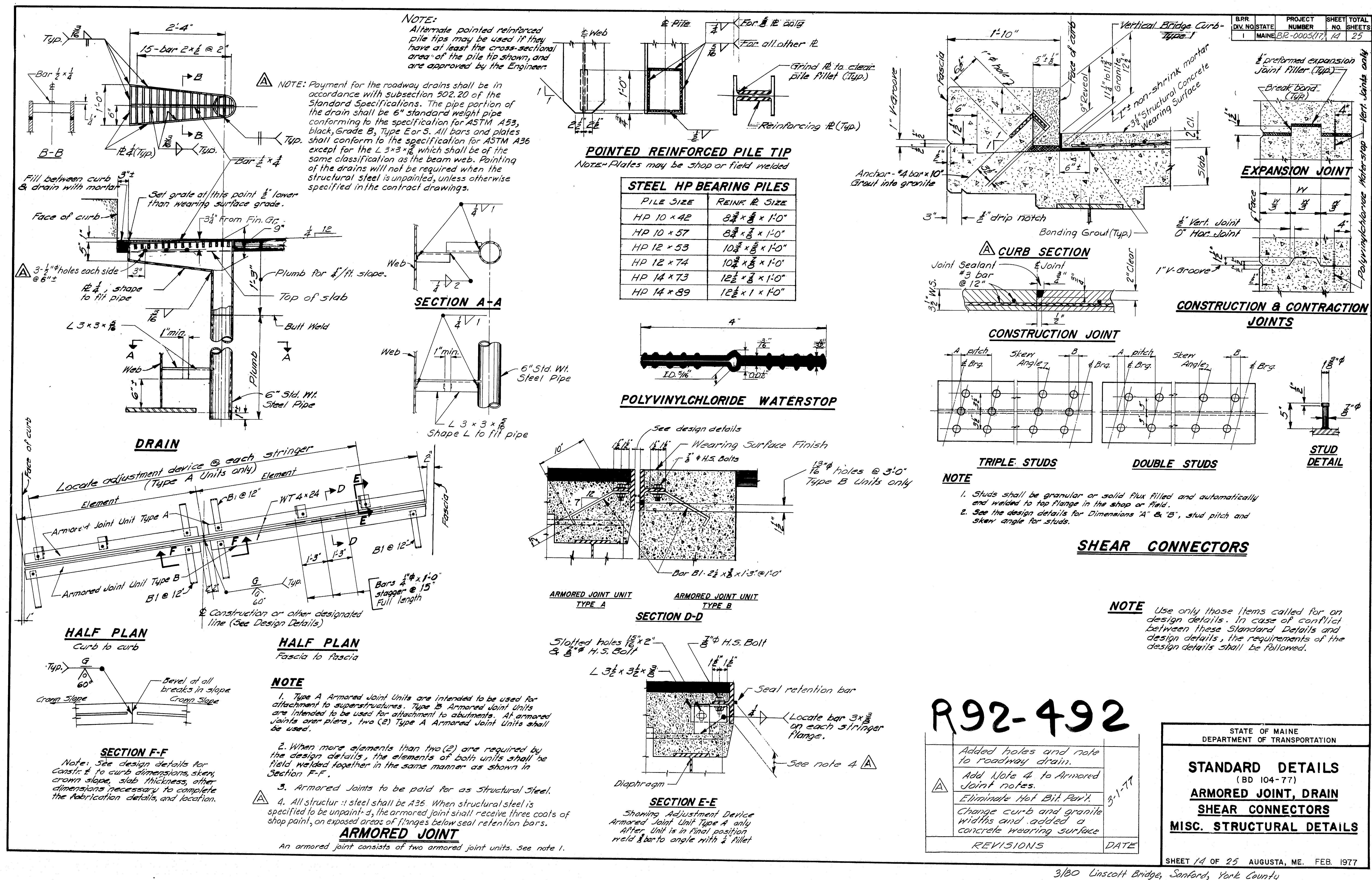
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

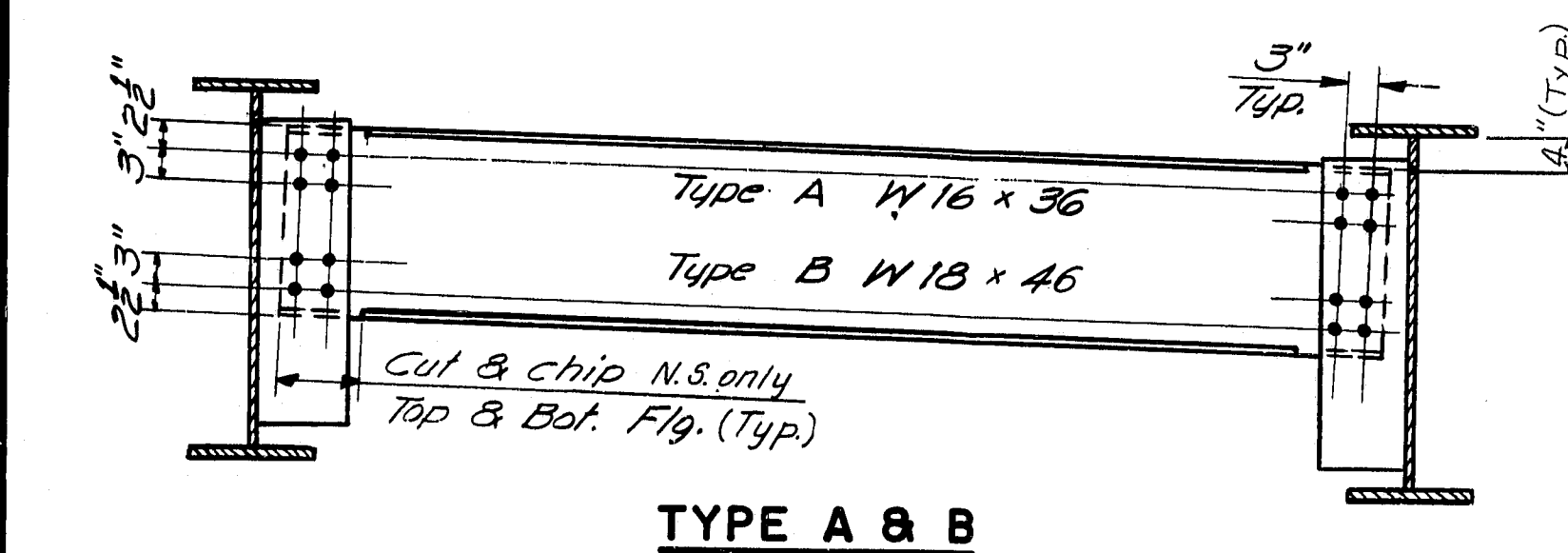
(BD 101 -74)

BEARING PEDESTALS

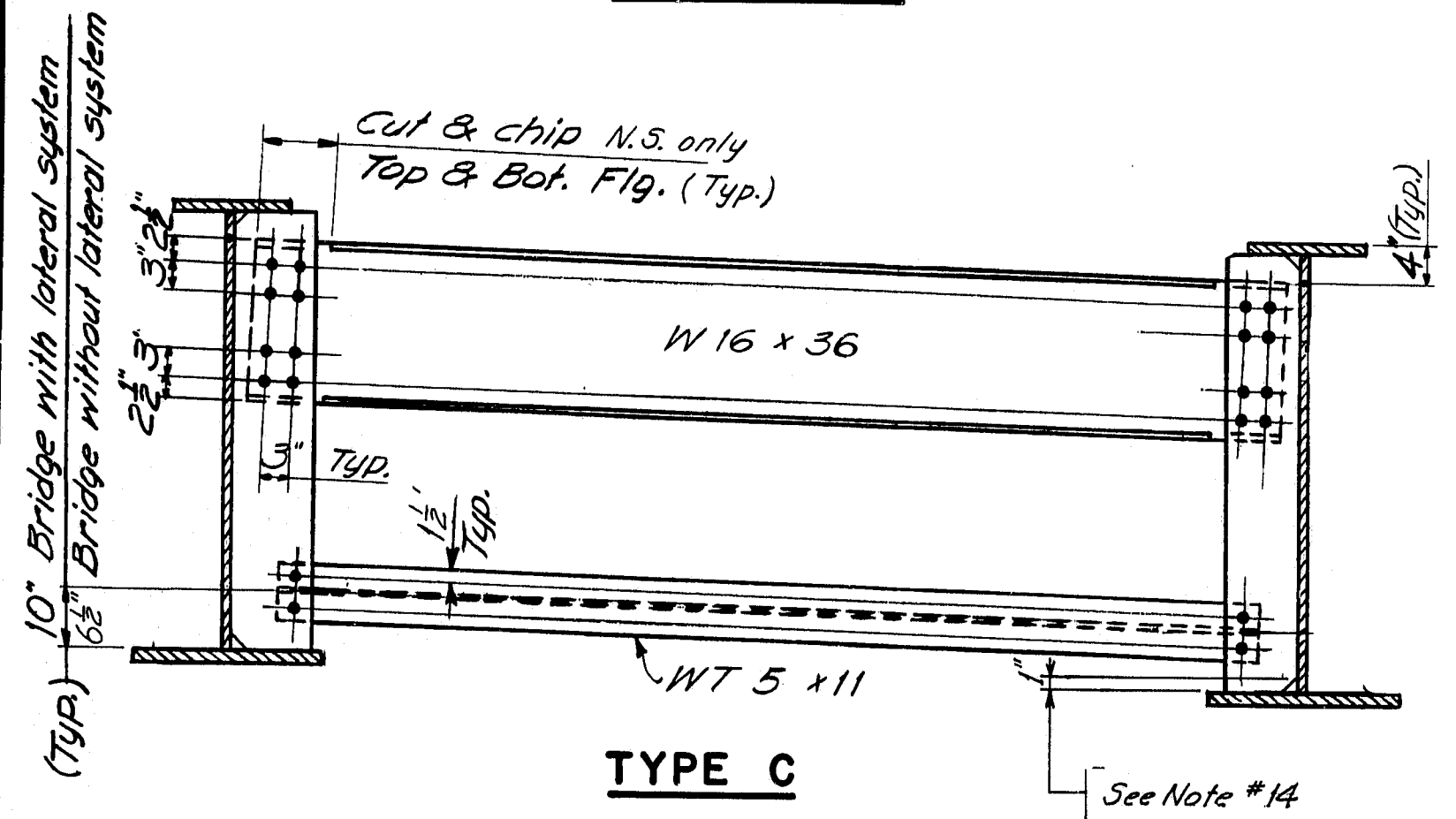
SHEET 13 OF 25 AUGUSTA, ME. APRIL, 1974



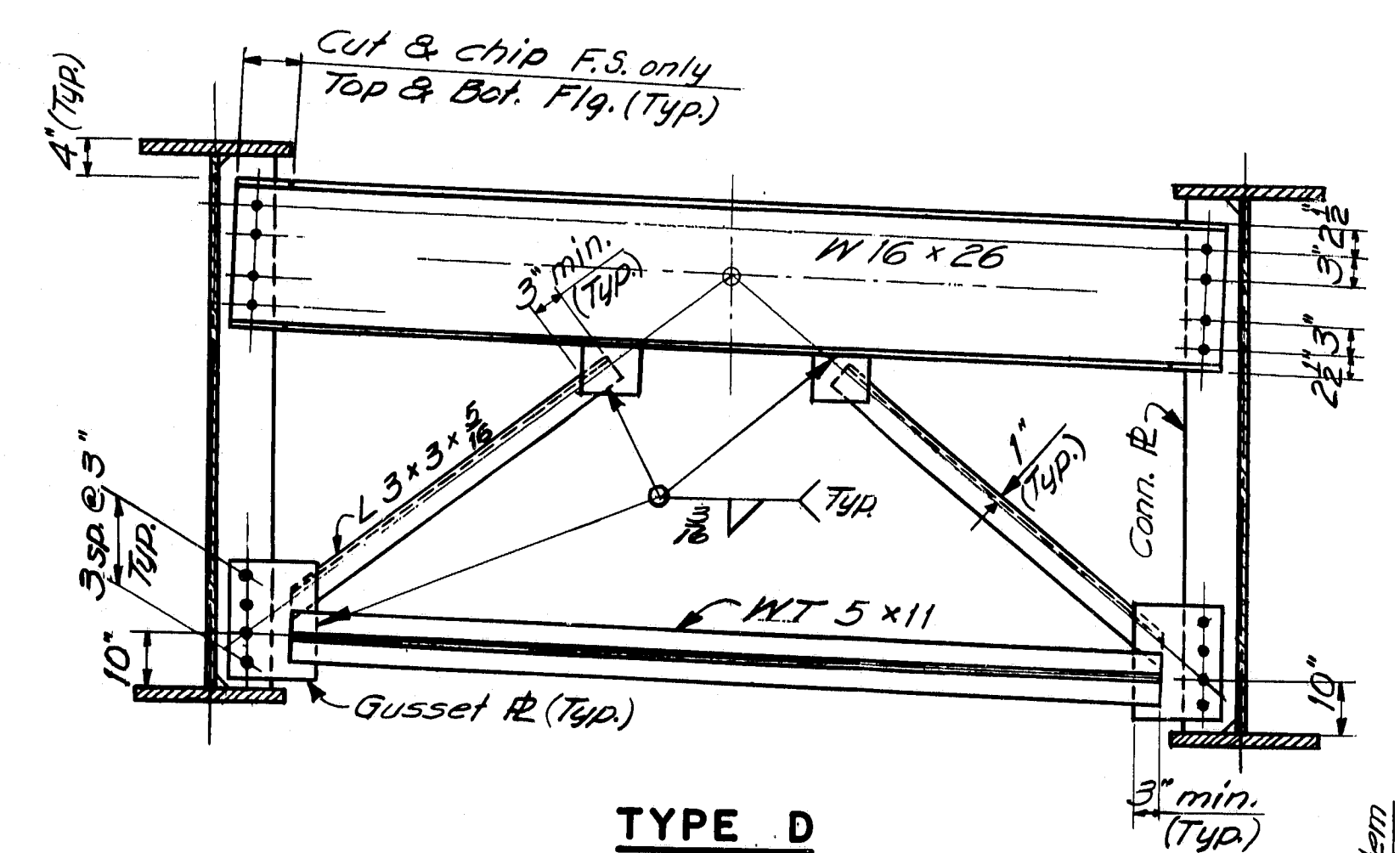
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	BR-0005(17)	15	25



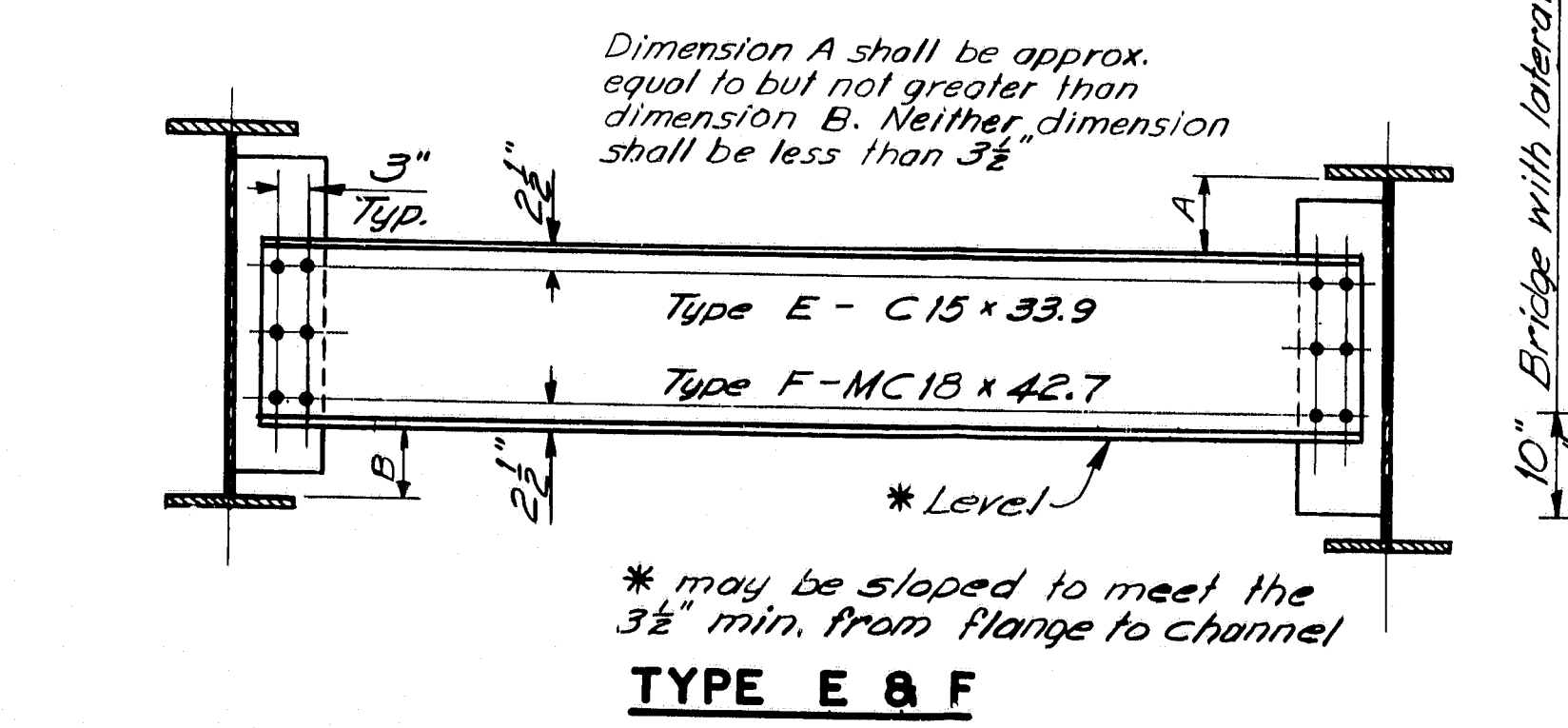
TYPE A & B



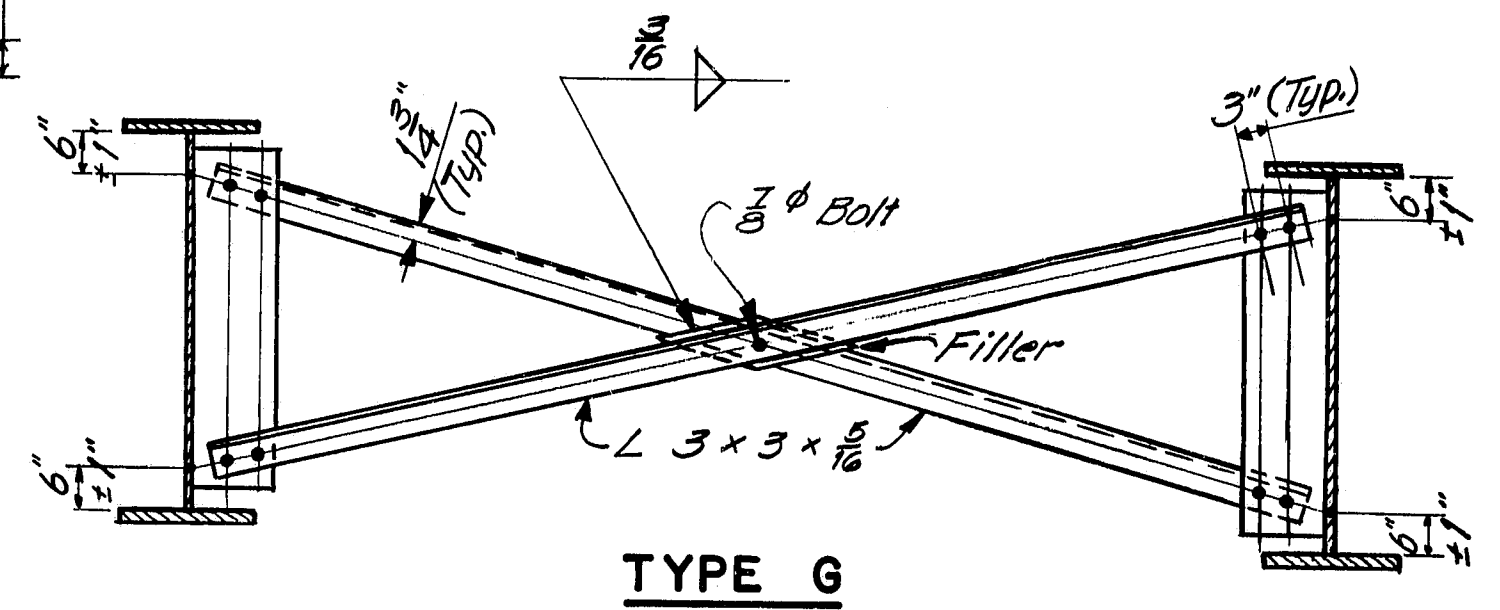
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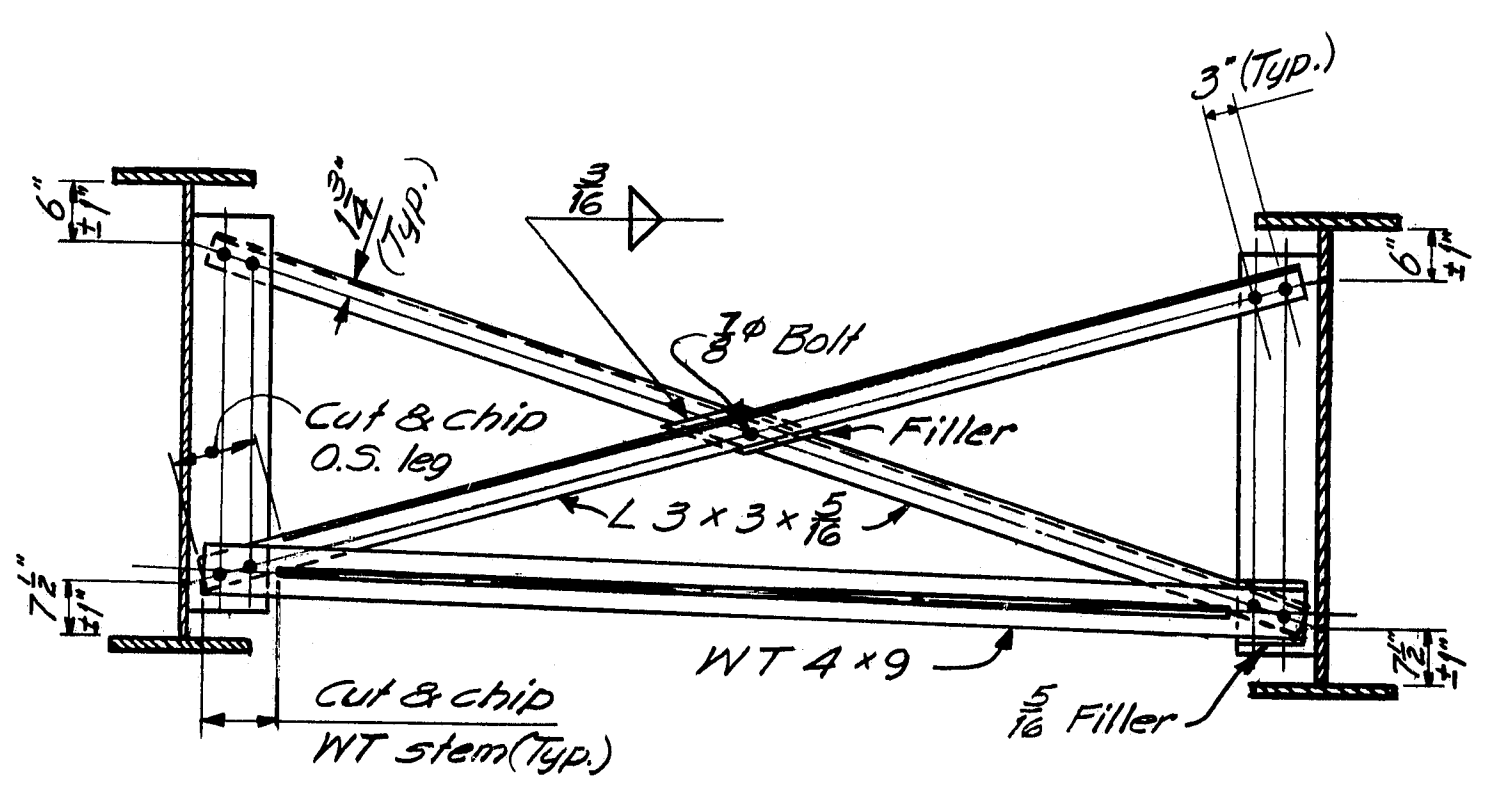
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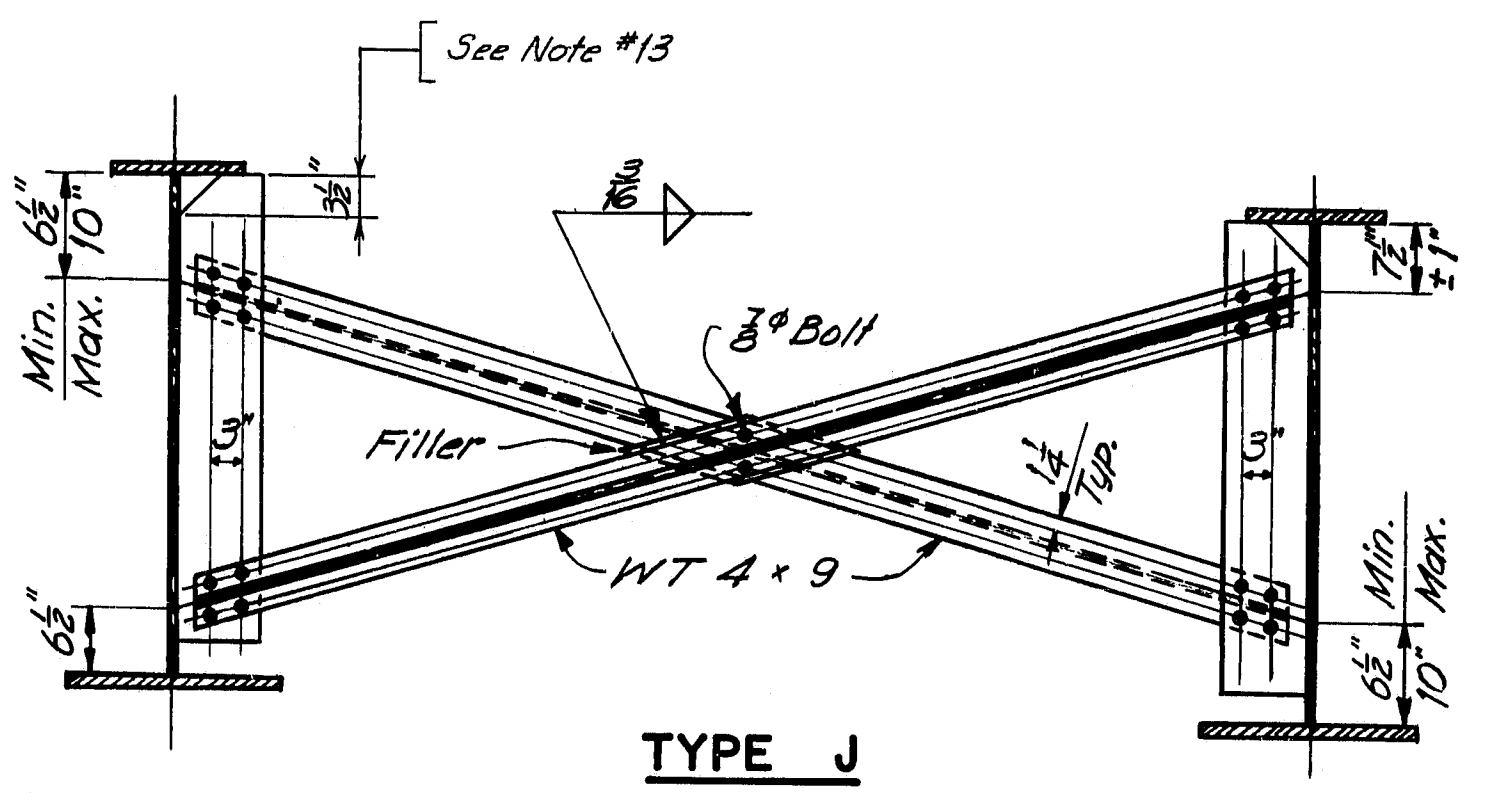
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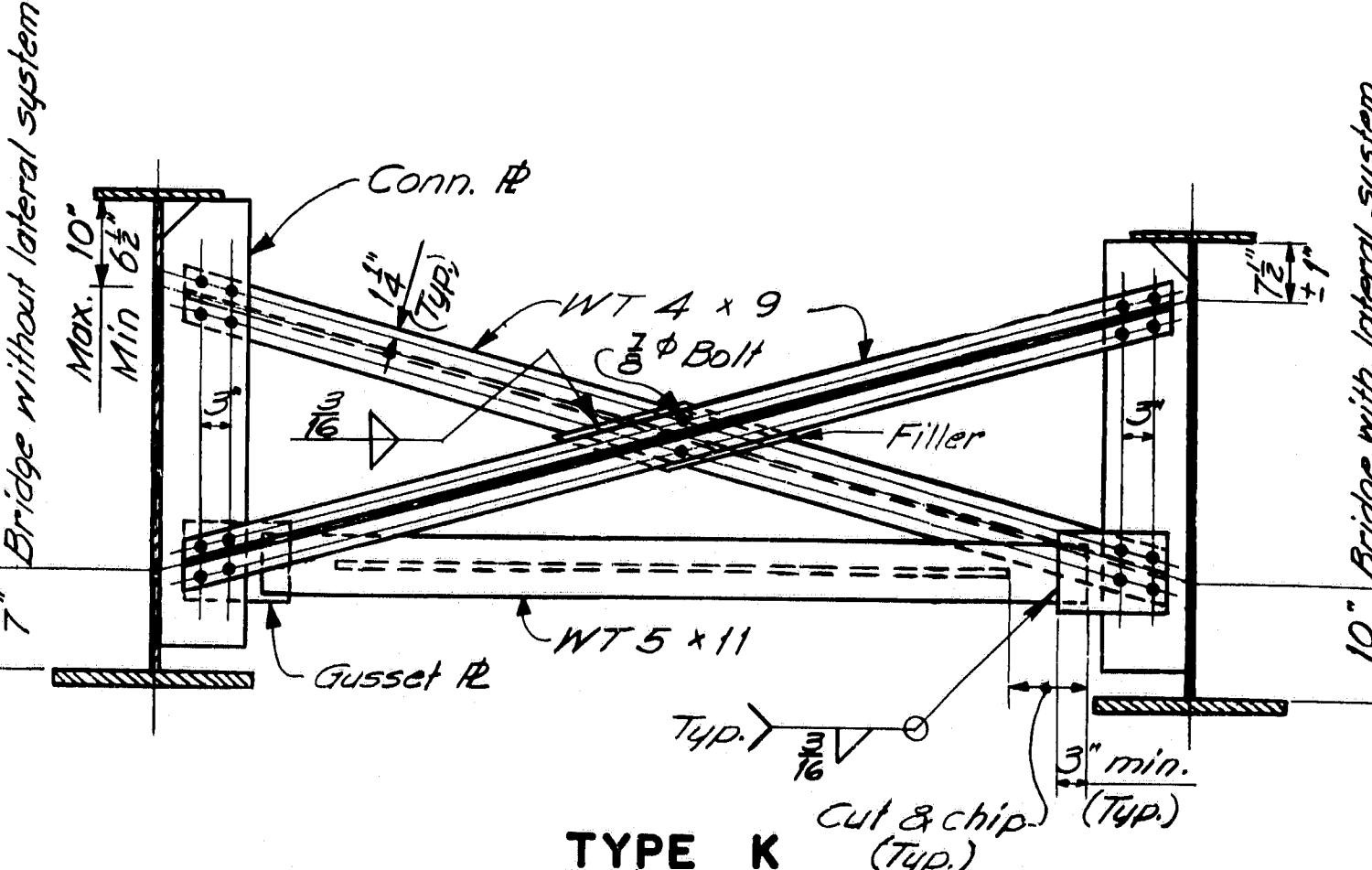
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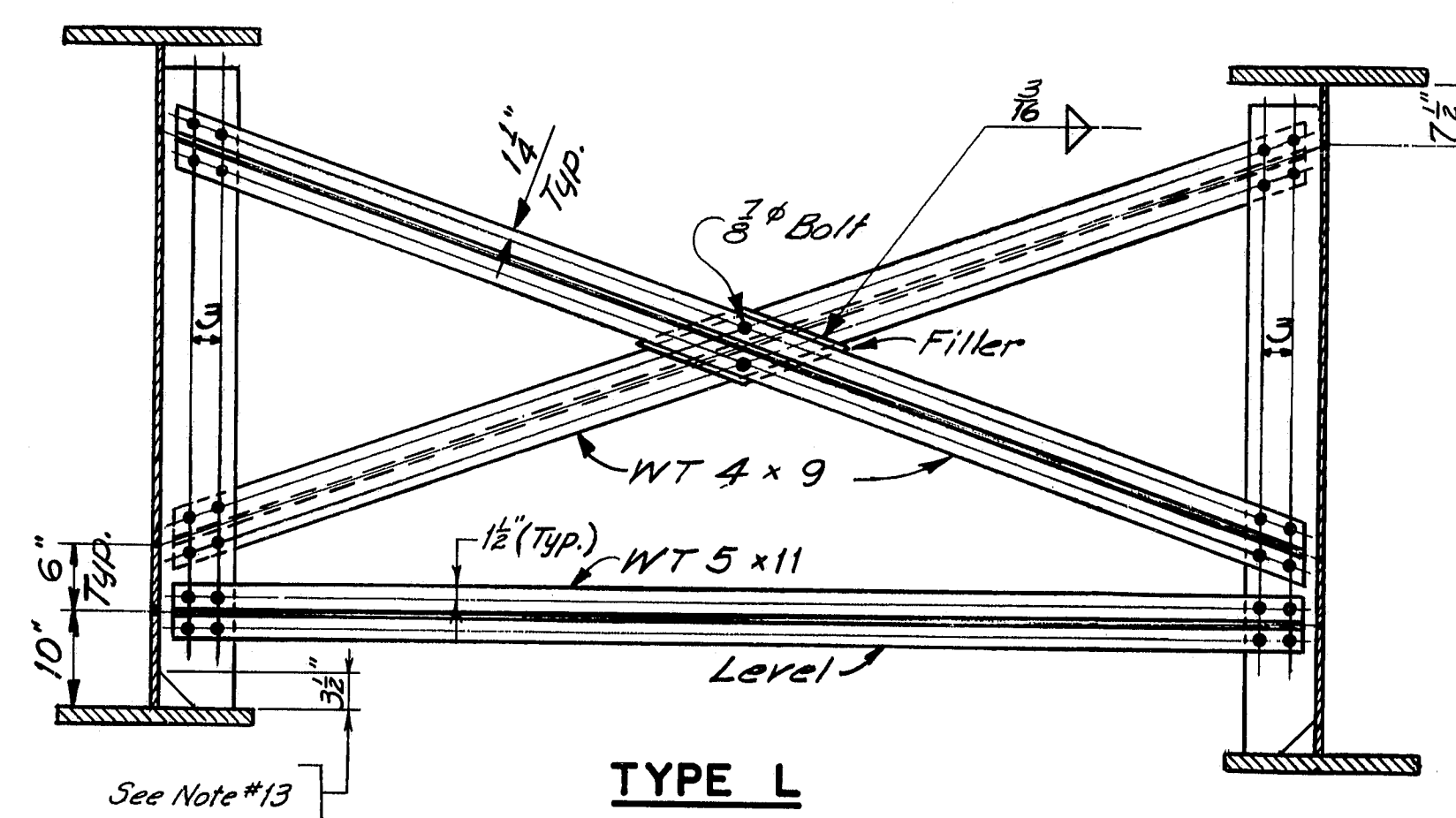
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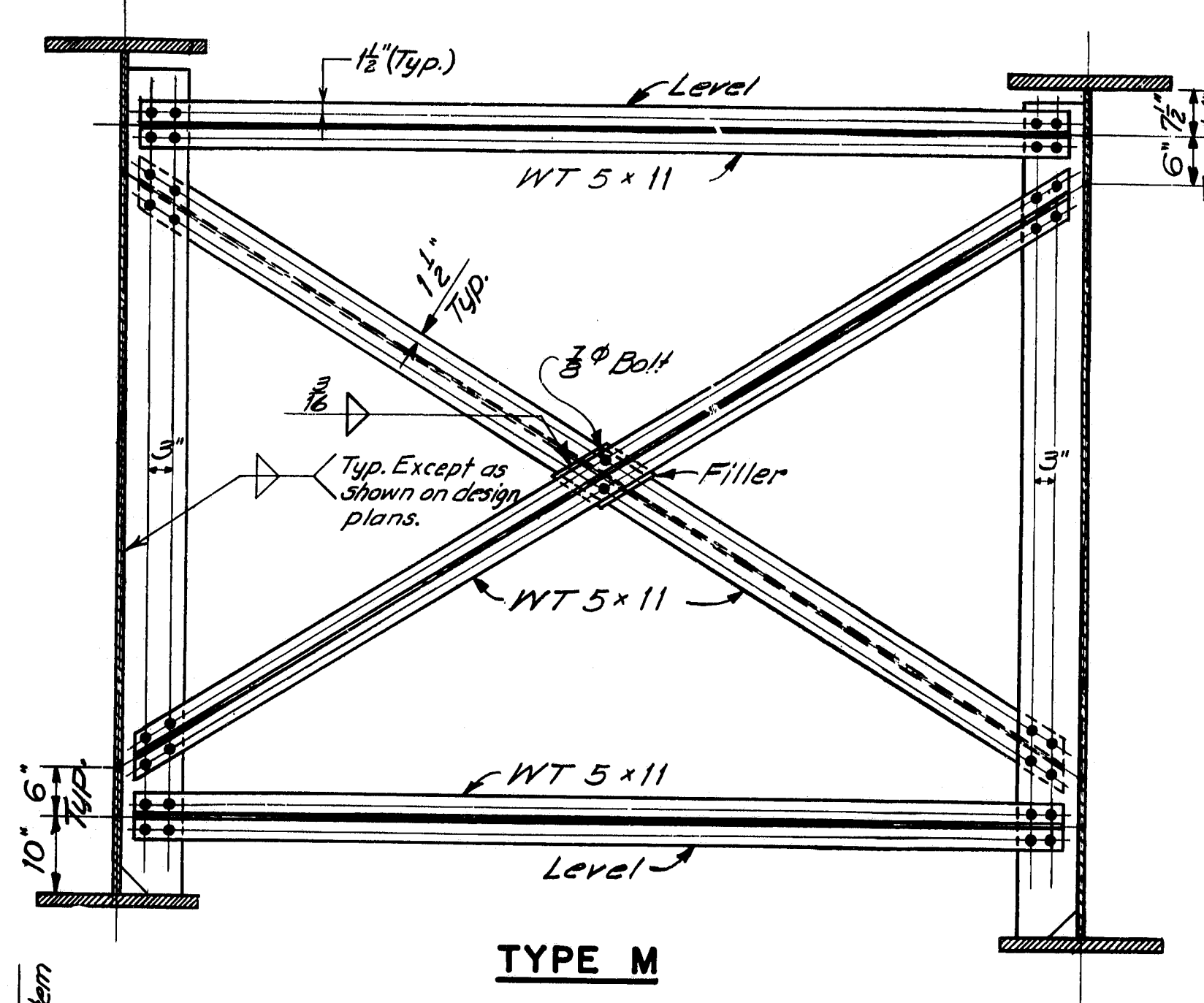
TYPE J



TYPE K



TYPE L



TYPE M

FABRICATION NOTES

- 1.) All bolts shall be 3/4" H.S. Bolts. Holes for bolts shall be 1/8" and edge-distances shall be 1/2" min. unless otherwise shown.
- 2.) Connection Plates and gusset plates shall have a minimum thickness of 3/8" and shall have sufficient width to provide erection clearances. For bearing stiffeners or intermediate stiffeners and for bent connection plates the plate size will be given on the design details.
- 3.) Connection Plates shall be fastened to web plates by fillet welds as shown. All fillet welds shall be the minimum size as specified in A.A.S.H.T.O. Standard Specifications for Highway Bridges, Art. 1.7.2.1, unless otherwise shown on design plans.
- 4.) Connection Plates shall be 3/8" clear from flanges, except as indicated by notes 5 & 6.
- 5.) Connection Plates on welded beams and girders shall extend to the top flange in areas where the top flange is always in compression.
- 6.) Connection Plates shall extend to the bottom flange at points where lateral bracing is attached and on welded beams and girders in areas where the bottom flange is always in compression.
- 7.) When a connection plate is extended to a flange it shall fit within 1/8" except if the design details show it is to be welded.
- 8.) Bearing Stiffeners at end bearings shall extend to both top and bottom flanges and shall be welded to both flanges. Weld at bottom flange shall be a full penetration weld. Weld at top flange shall be a fillet weld both sides (see Note 3).
- 9.) Bearing Stiffeners at other than end bearings shall extend to both top and bottom flanges, shall be welded to the bottom flange with a full penetration weld and shall fit within 1/8" at top flange.
- 10.) Intermediate Stiffeners shall extend to both top and bottom flanges, shall be welded to the compression flange with a fillet weld on both sides (see Note 3) and shall fit within 1/8" at the tension flange.
- 11.) Use only those items called for on the design details. In case of conflict between these standard details and design details, the design details shall be followed.
- 12.) All dimensions shown as " ± 1/8" are variable in order to allow a series of crossframes to have the same slopes and/or dimensions.
- 13.) All connection plates and stiffeners that are extended to a flange shall be clipped 3/8", except as indicated by note 14.
- 14.) Bearing stiffeners at end bearings shall be clipped 1" at top and bottom. Bearing stiffeners at all other bearings and intermediate stiffeners shall be clipped 1" at the compression flange.
- 15.) For unpainted applications all steel for diaphragms and crossframes shall be A.S.T.M. - A588. For bridges specified to be painted the steel for diaphragms and connection plates shall be A.S.T.M. - A36, except other steel classifications may be used subject to the approval of the Engineer.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STANDARD DETAILS
(BD 113 - 78)
DIAPHRAGMS & CROSSFRAMES

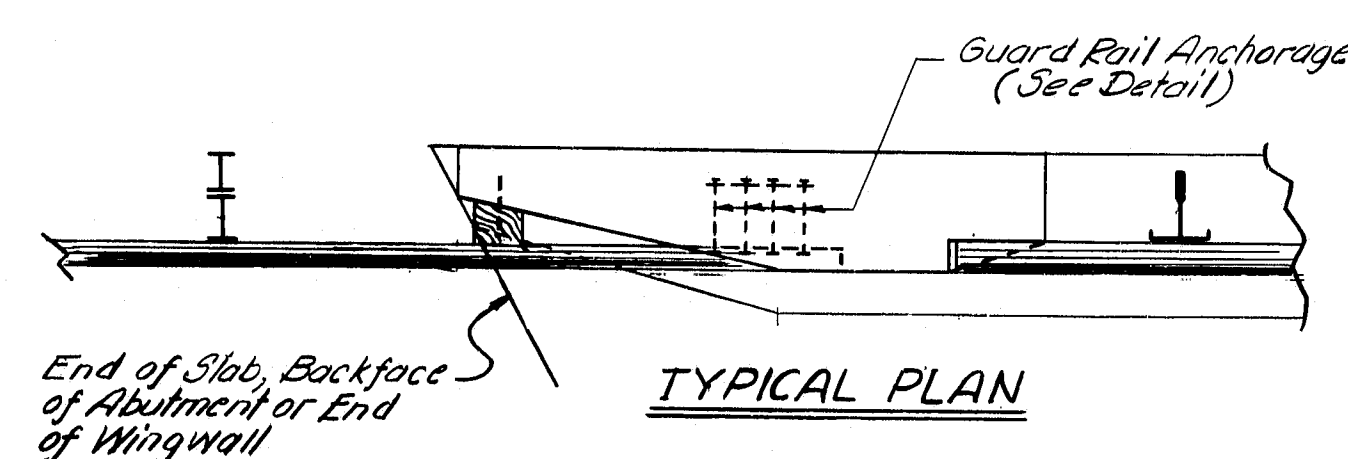
R92-493

ELIMINATED - A242 G.R.W. 5-24-79

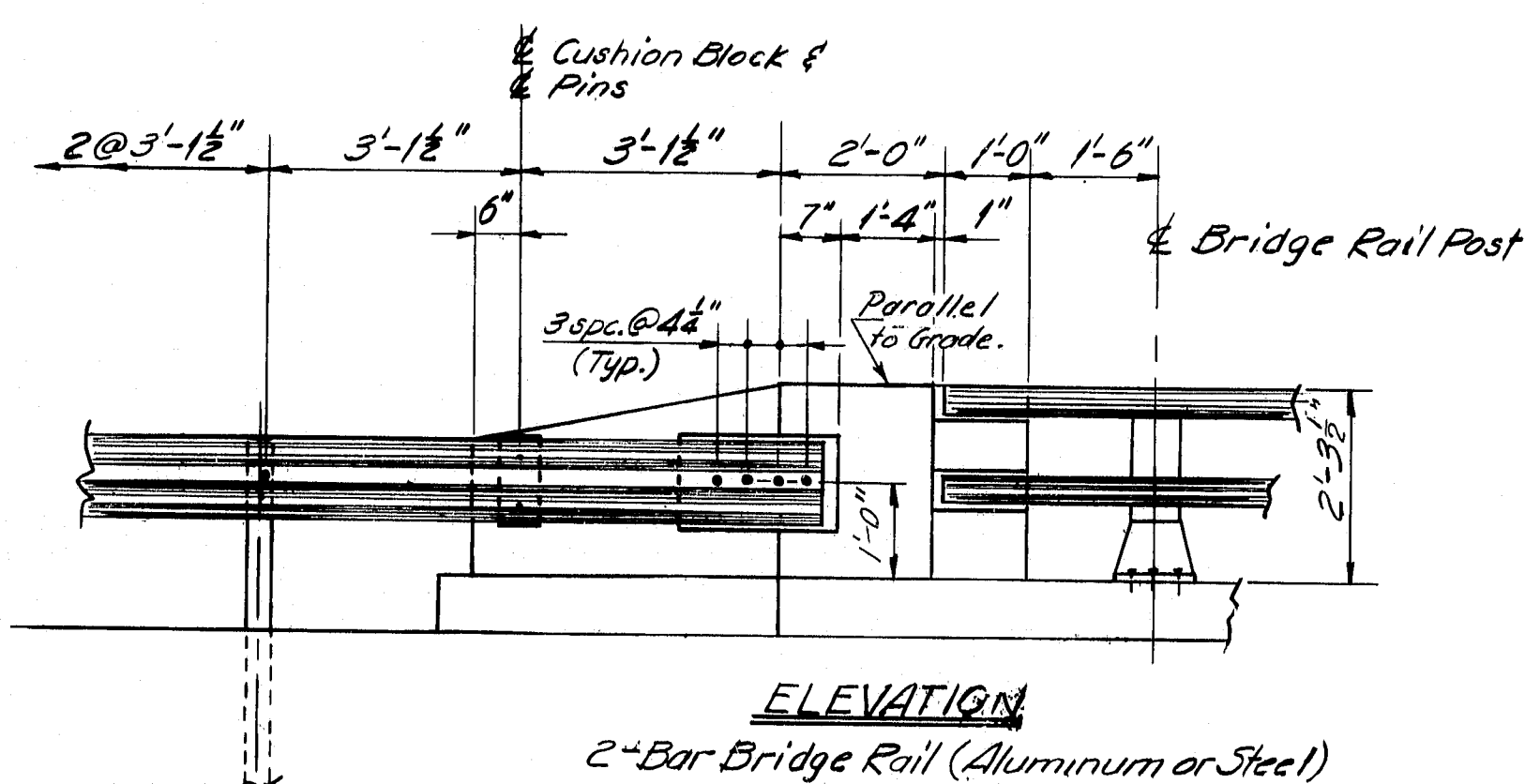
SHEET 15 OF 25 AUGUSTA, MAINE June 1978

3/80 Linscott Bridge, Sanford, York County

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	BR-0005(17)	16	25

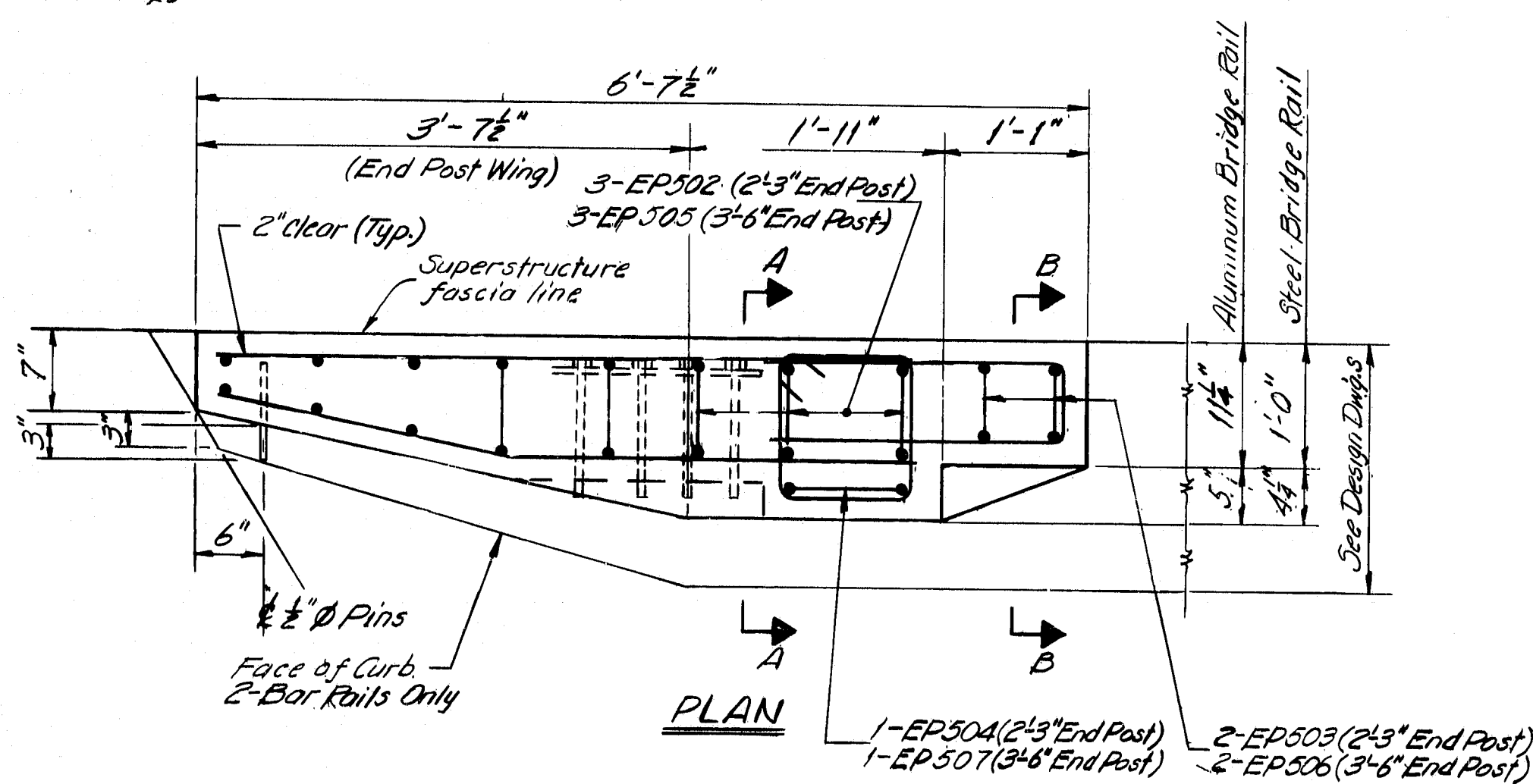


TYPICAL PLAN

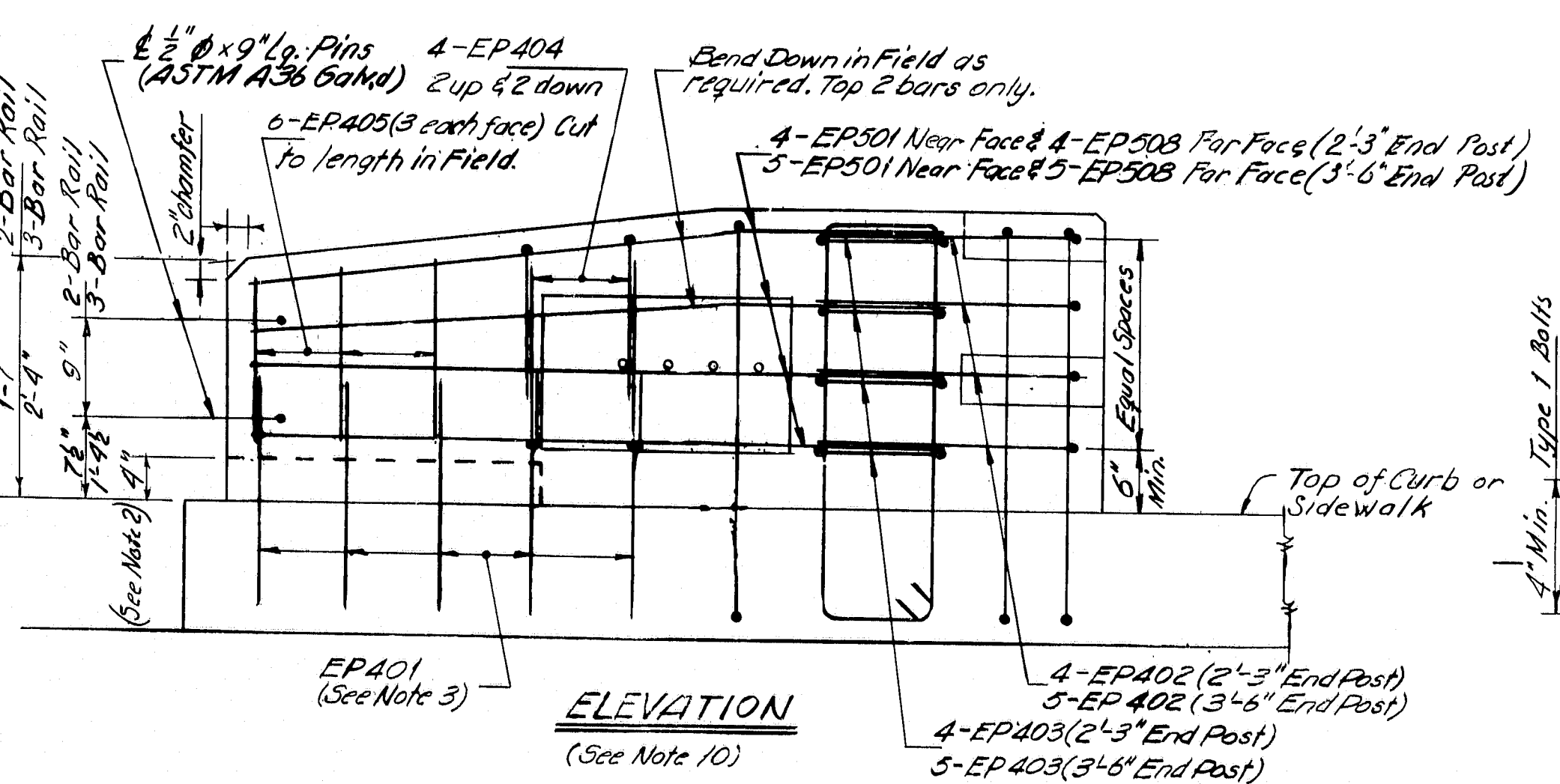


ELEVATION

2-Bar Bridge Rail (Aluminum or Steel)

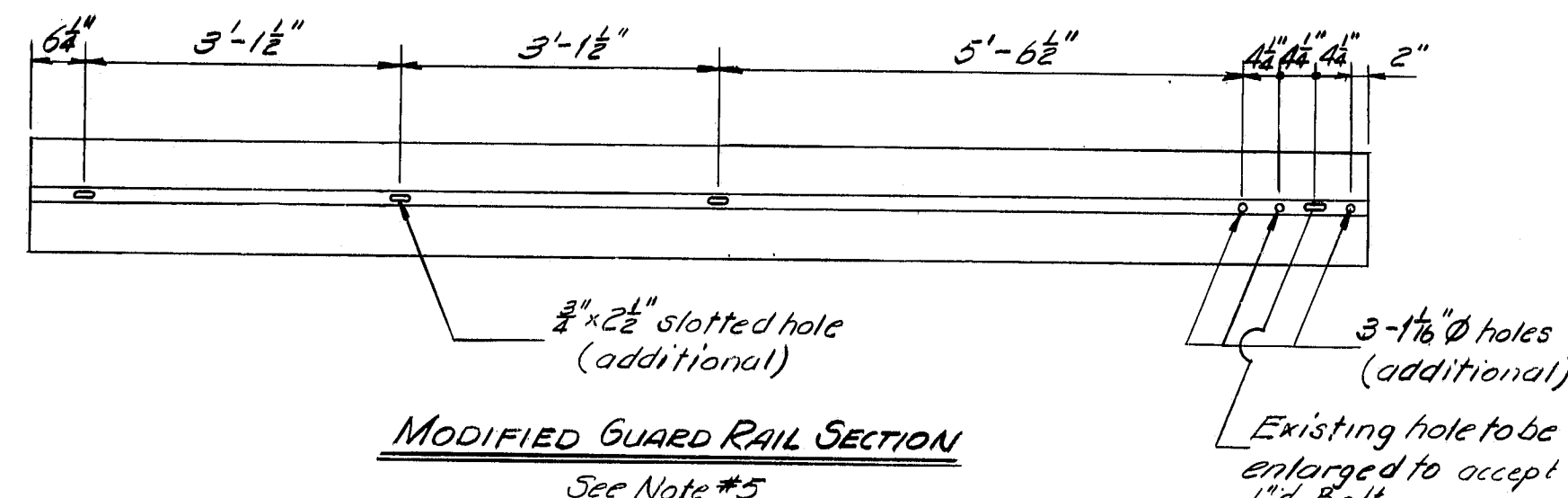


PLAN



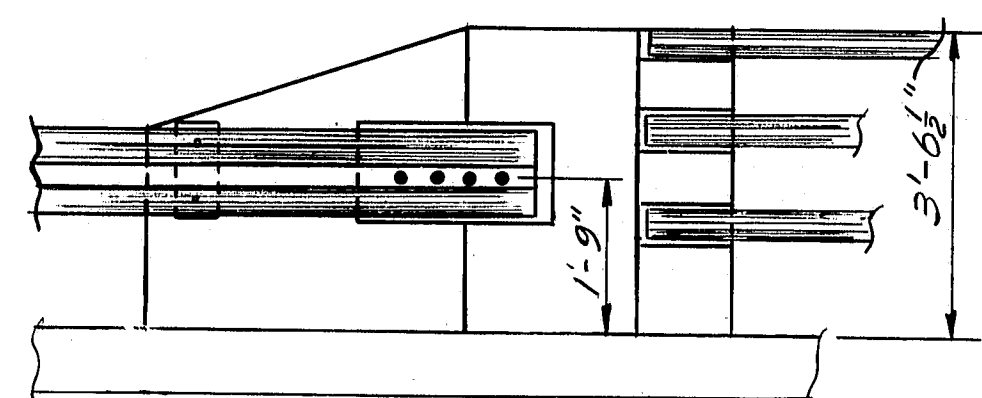
ELEVATION

(See Note 10)



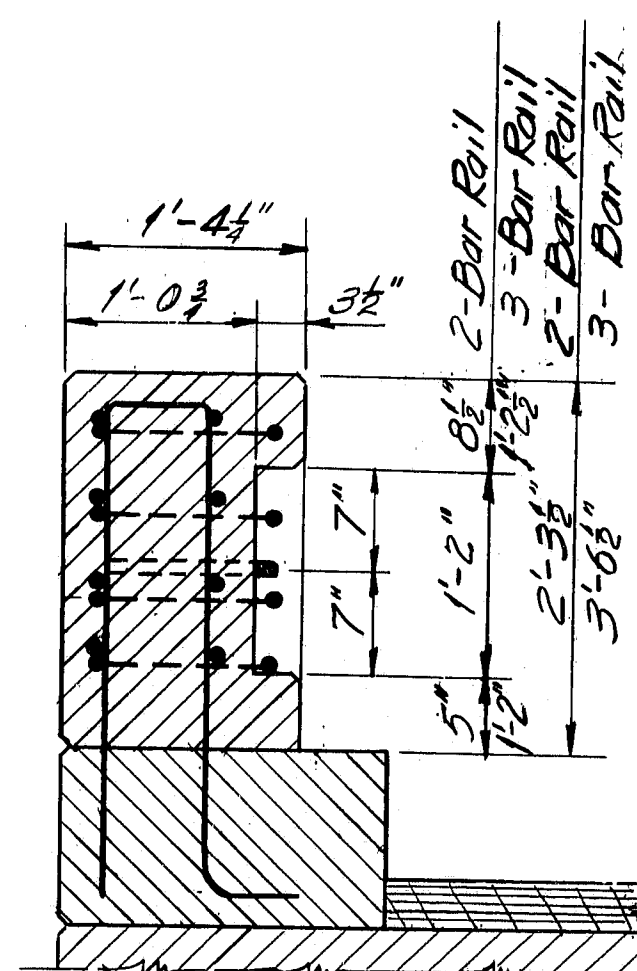
MODIFIED GUARD RAIL SECTION

See Note #5

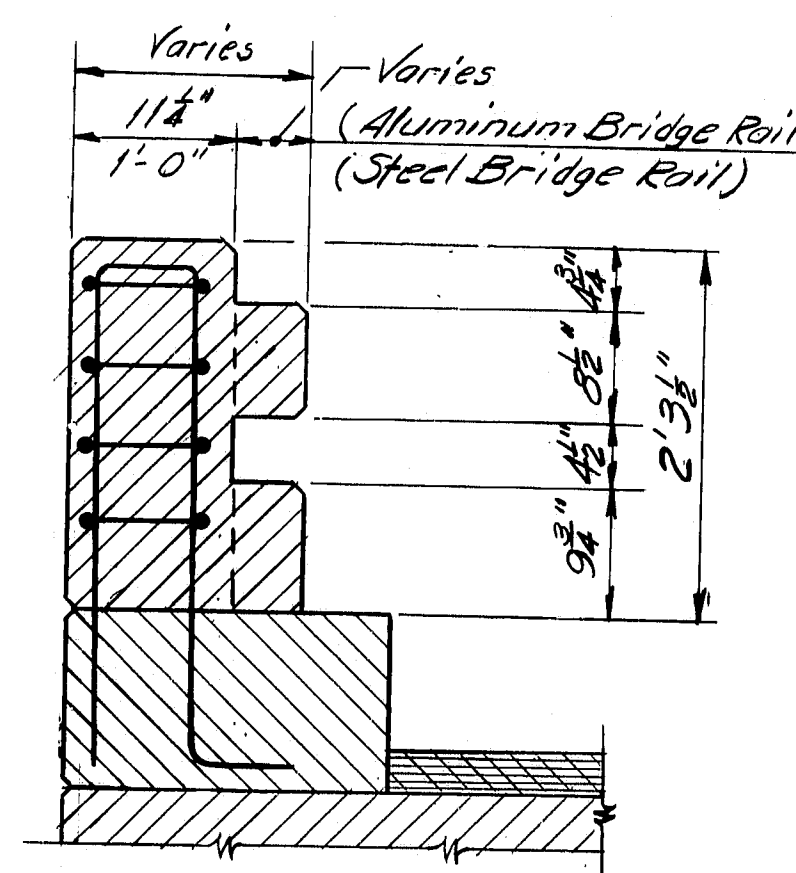


ELEVATION

3-Bar Bridge Rail (Aluminum or Steel)

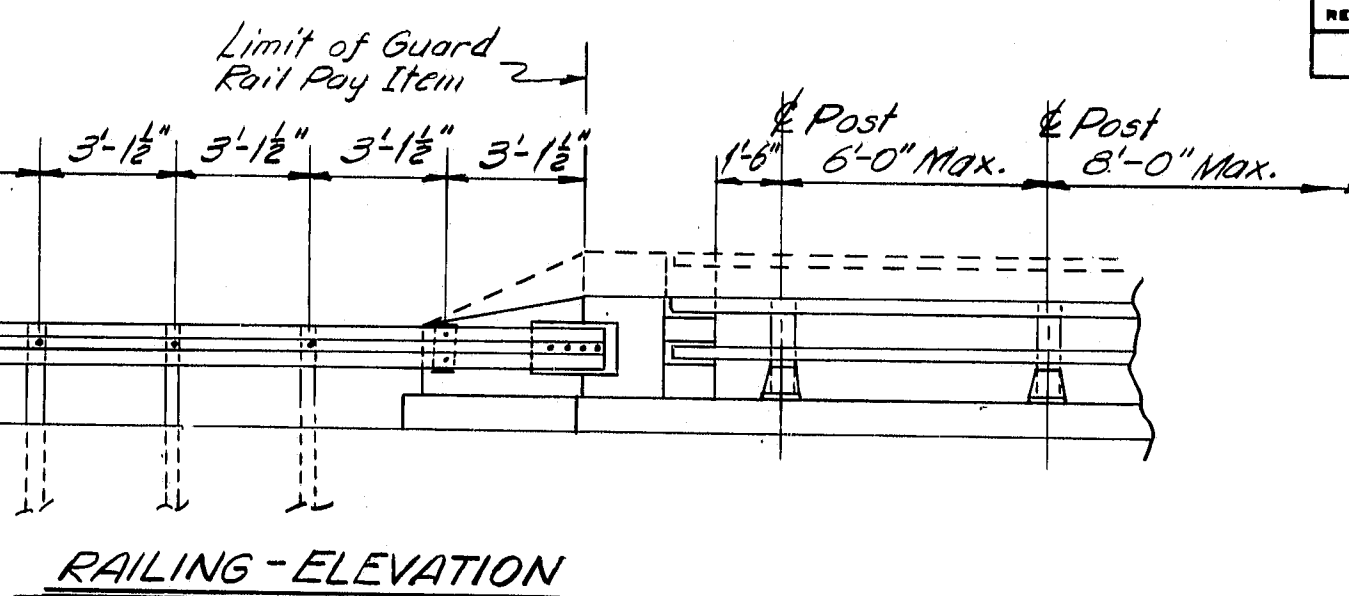


SECTION A-A

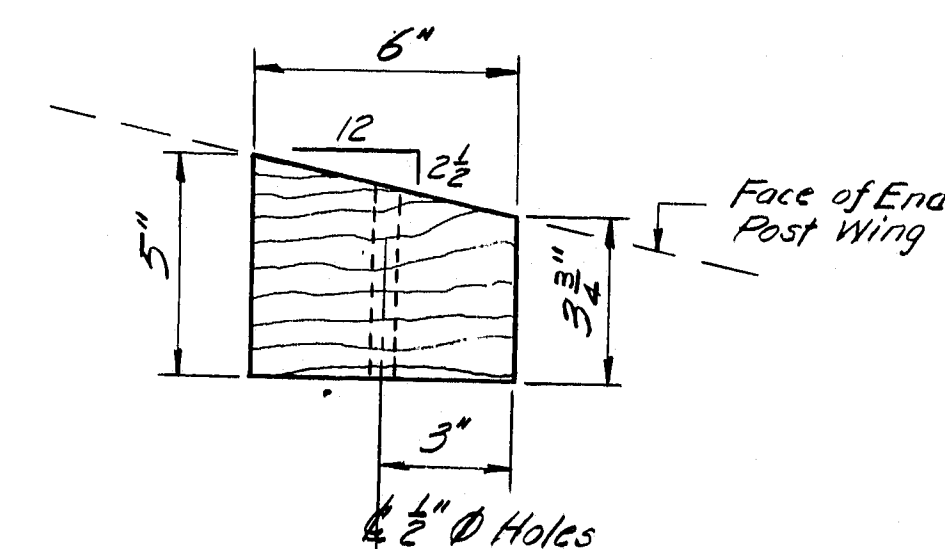


SECTION B-B

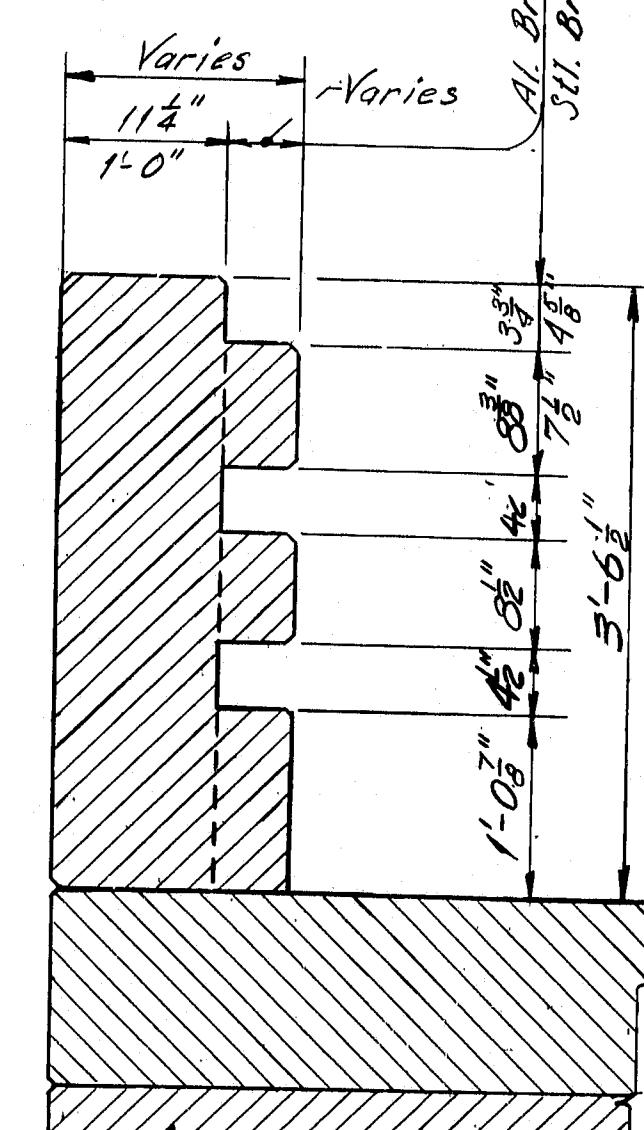
2-Bar Rail (Aluminum or Steel)



RAILING - ELEVATION

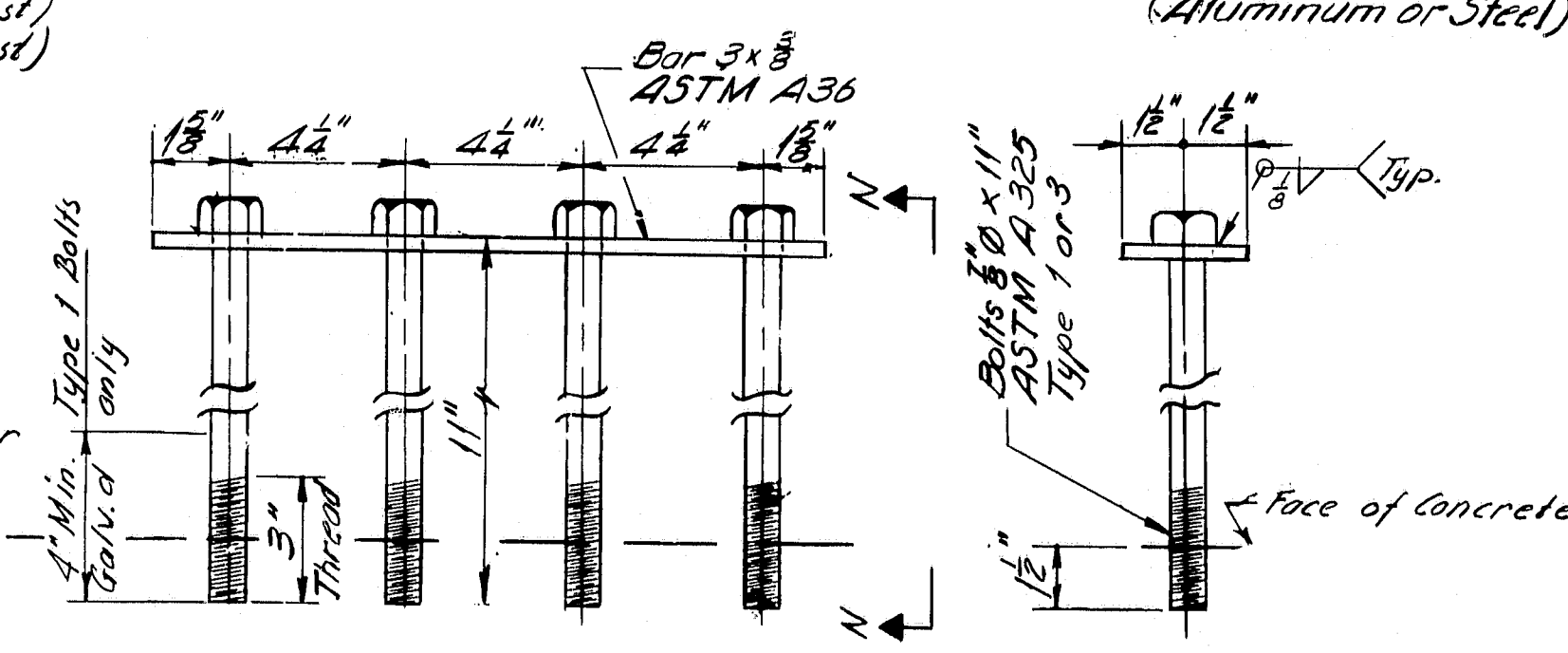


SECTION M-M



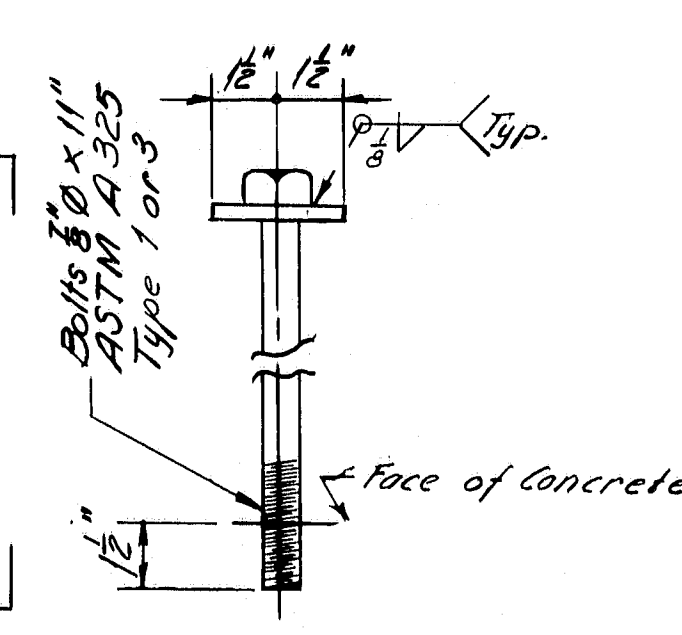
SECTION B-B

3-Bar Rail (Aluminum or Steel)



DETAIL

GUARD RAIL ANCHORAGE



VIEW N-N

NOTES

- 1.) For locations of the end posts on the structure see design drawings.
- 2.) At times an End Post Wing may be cantilevered for all or part of its length. For details see design drawings.
- 3.) If End Post Wings cantilevered bars EP 401 to be omitted as needed in cantilevered section.
- 4.) Nuts for 3/8" anchor bolts to be incidental to guard rail pay items. Nuts shall conform to A.S.T.M.-A563, Grade DH, galvanized in accordance with A.S.T.M. A153, or Grade C3, plain.
- 5.) Additional holes in the Modified Guard Rail Section shall be made by drilling, punching, or any other method that produces a neat, clean hole of the required size. Burning of holes will not be allowed.
- 6.) Cushion Block material shall be as specified in subsection 710.07, paragraph b&c and treated in accordance with the provisions of subsection 606.03(b) of the standard specifications. Payment to be incidental to Guard Rail pay item.
- 7.) After installation of guard rail is complete upset the thread on the anchor bolts in three places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool.
- 8.) Guard Rail Anchorage to be incidental to the applicable concrete pay item.
- 9.) End Posts to be constructed normal to grade, unless otherwise shown on the plans.
- 10.) When End Post Wing is cantilevered more than 2'-0" all number 5 bars shall be replaced with number 7 bars.

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	1/1/79
DESIGN - CHECKED	1/1/79
DESIGN - REVIEWED	1/1/79
FIELD CHANGES	

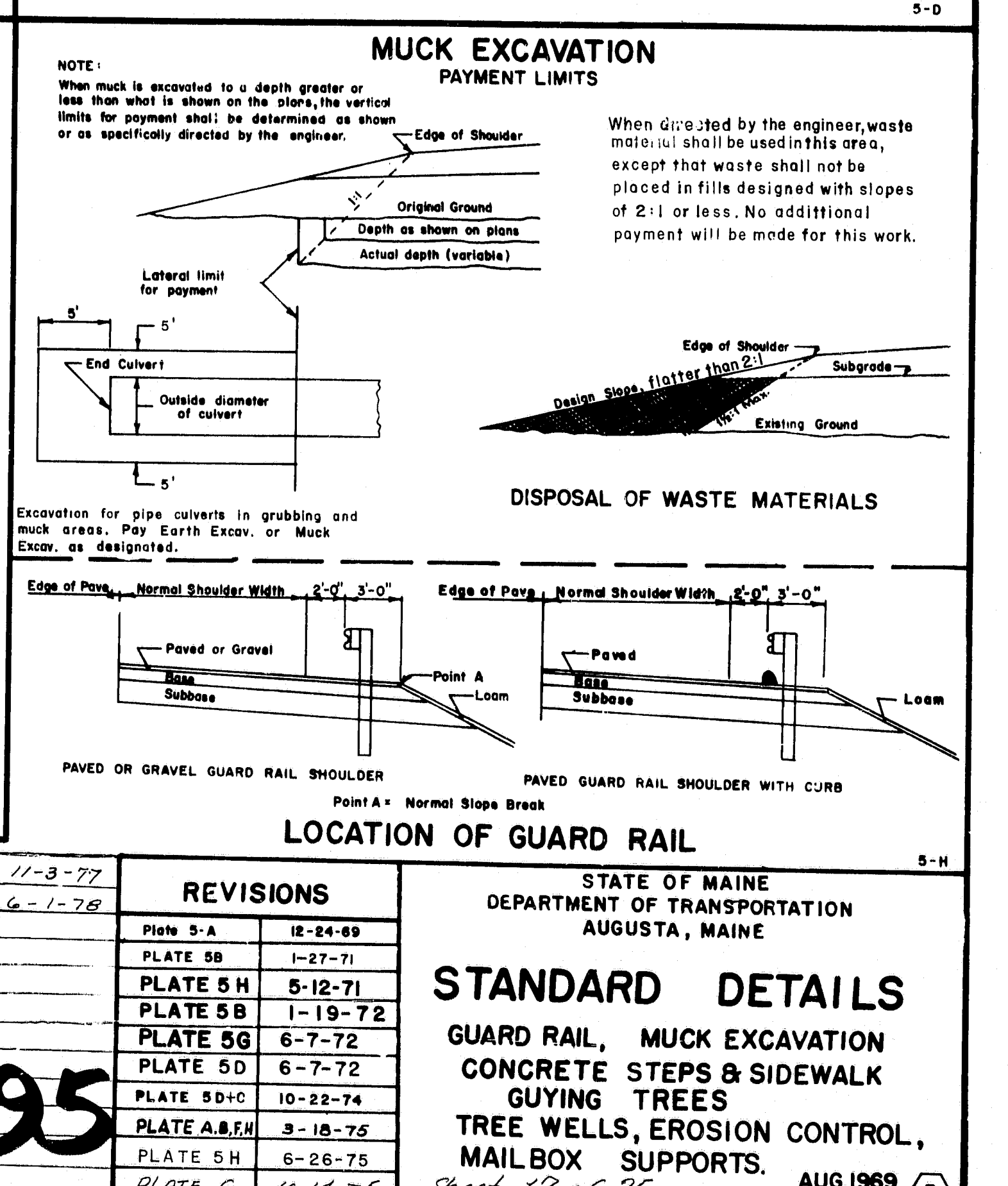
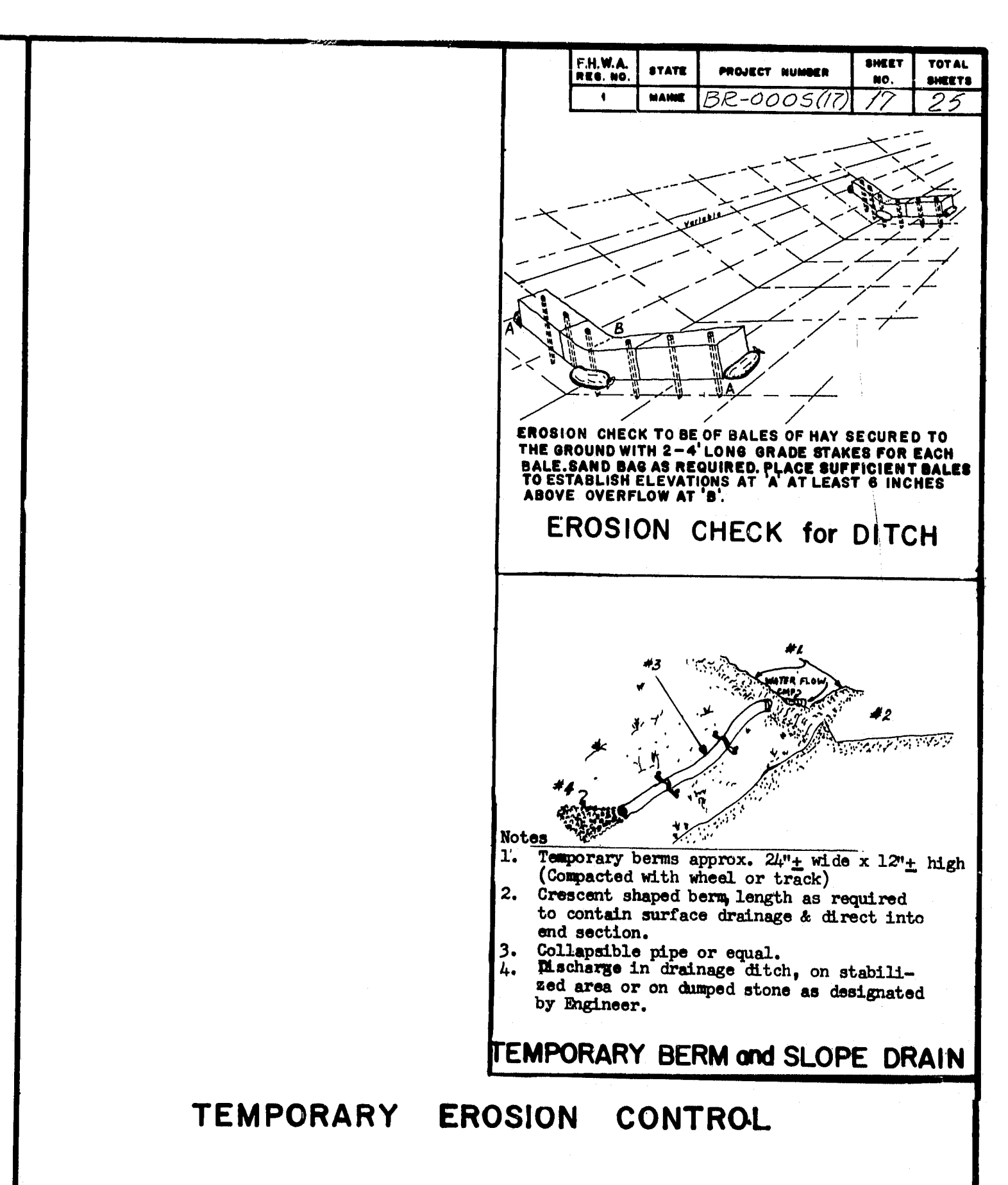
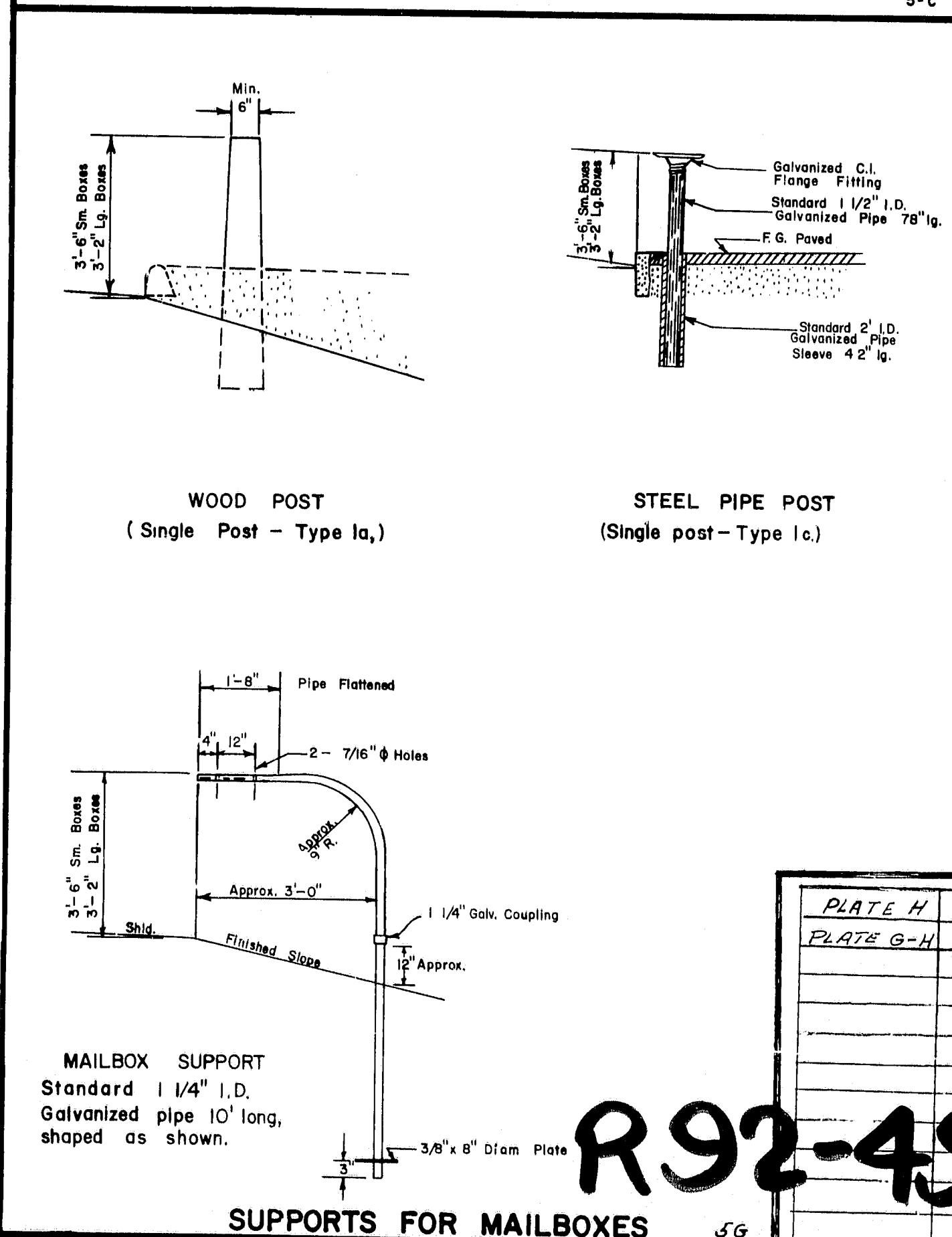
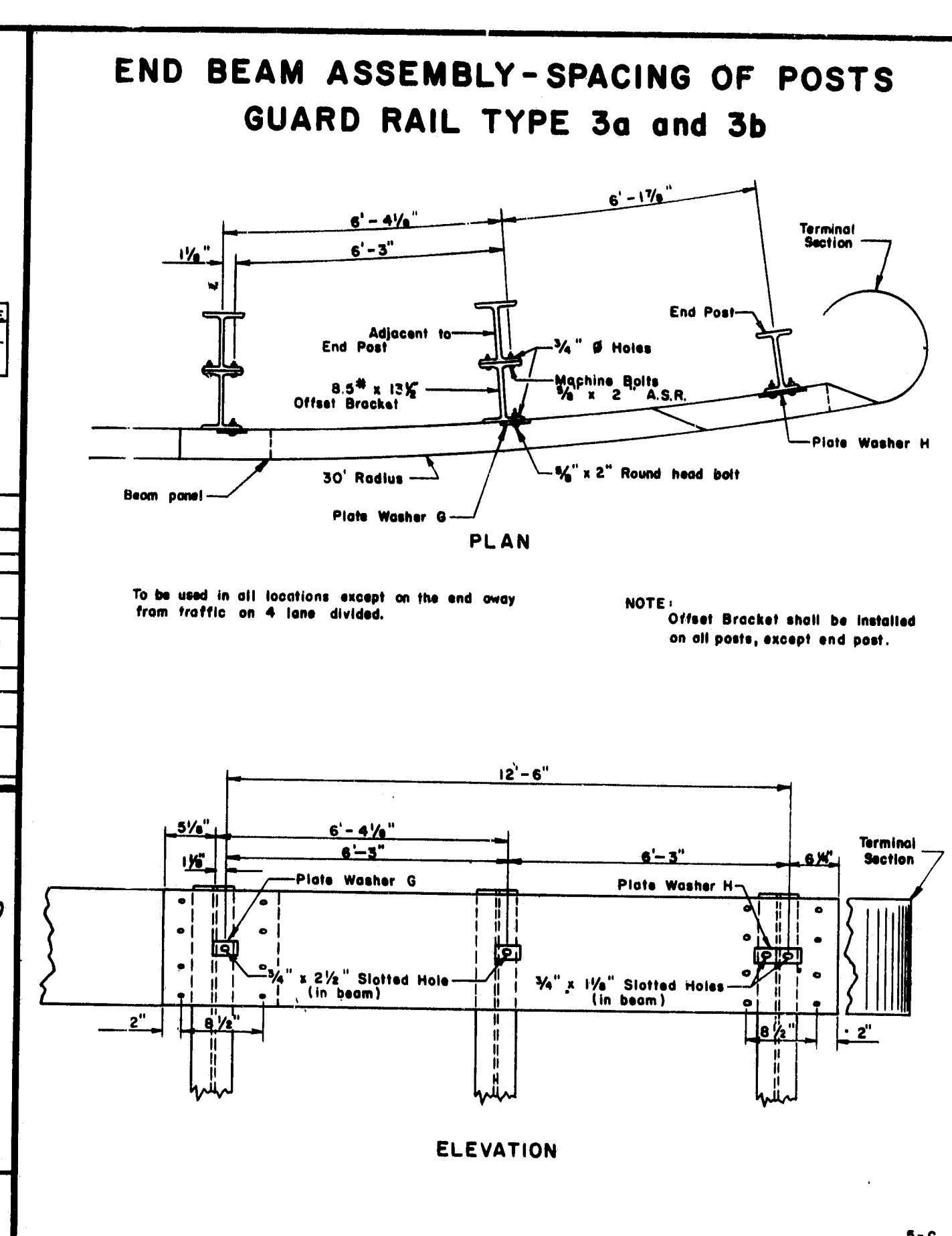
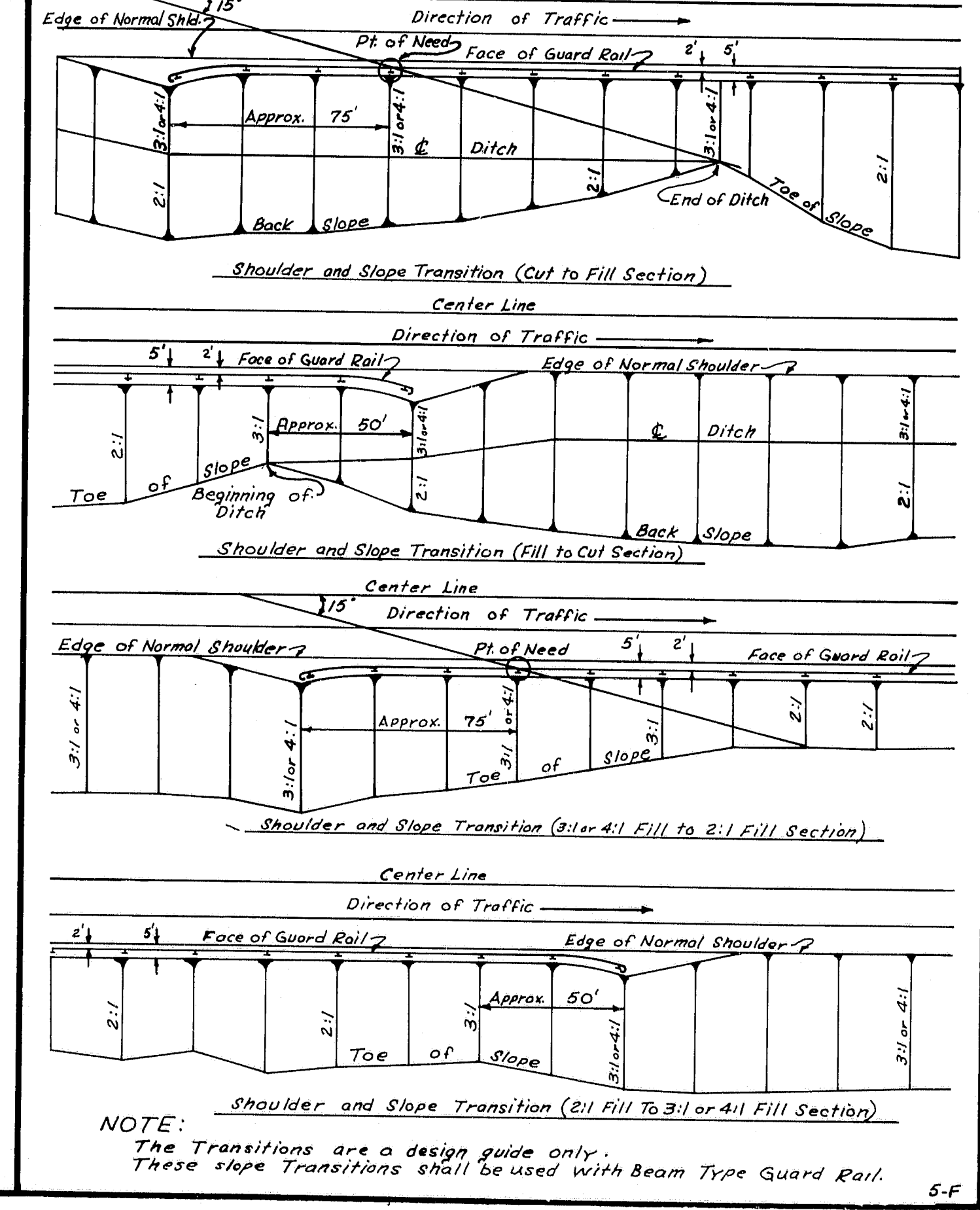
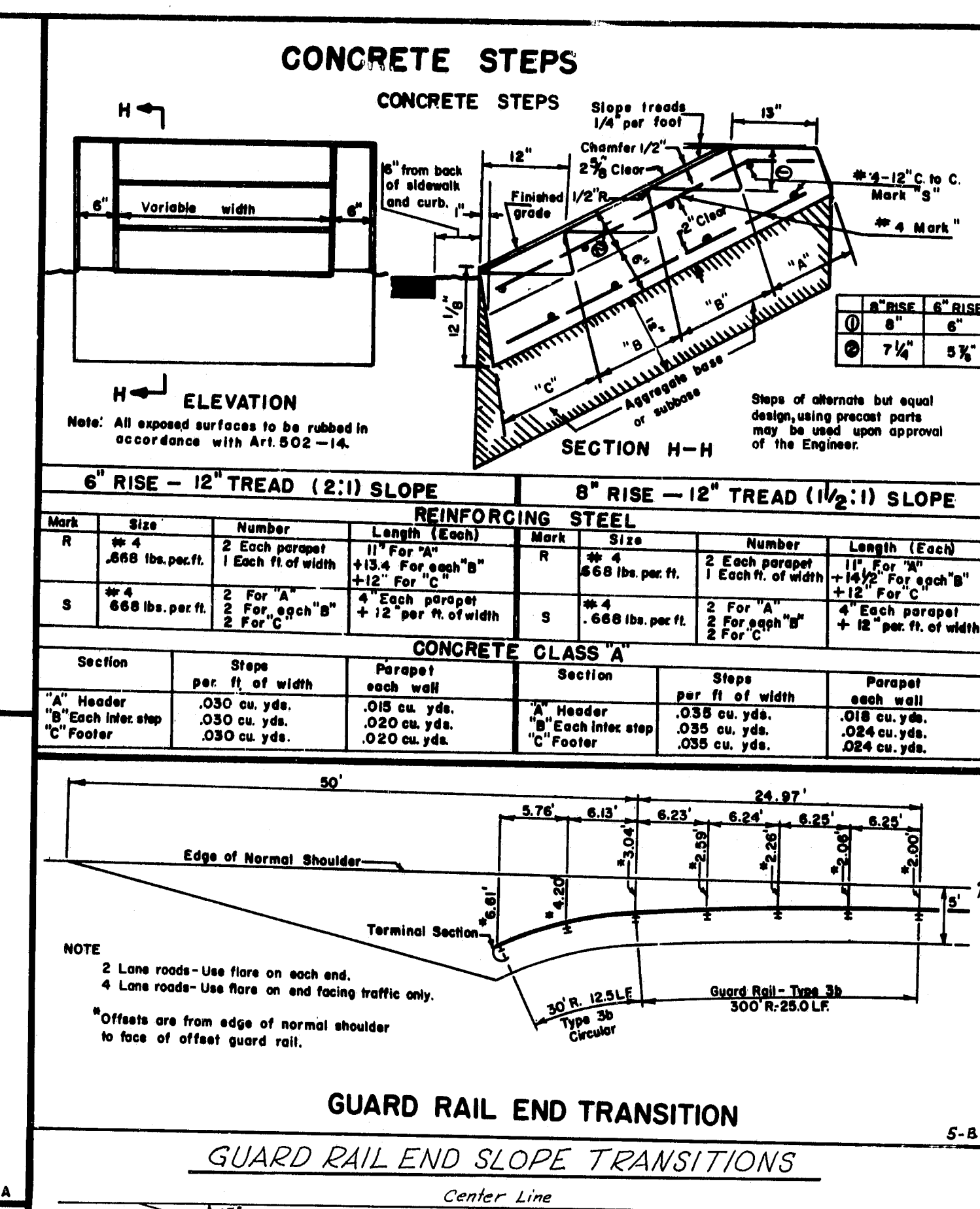
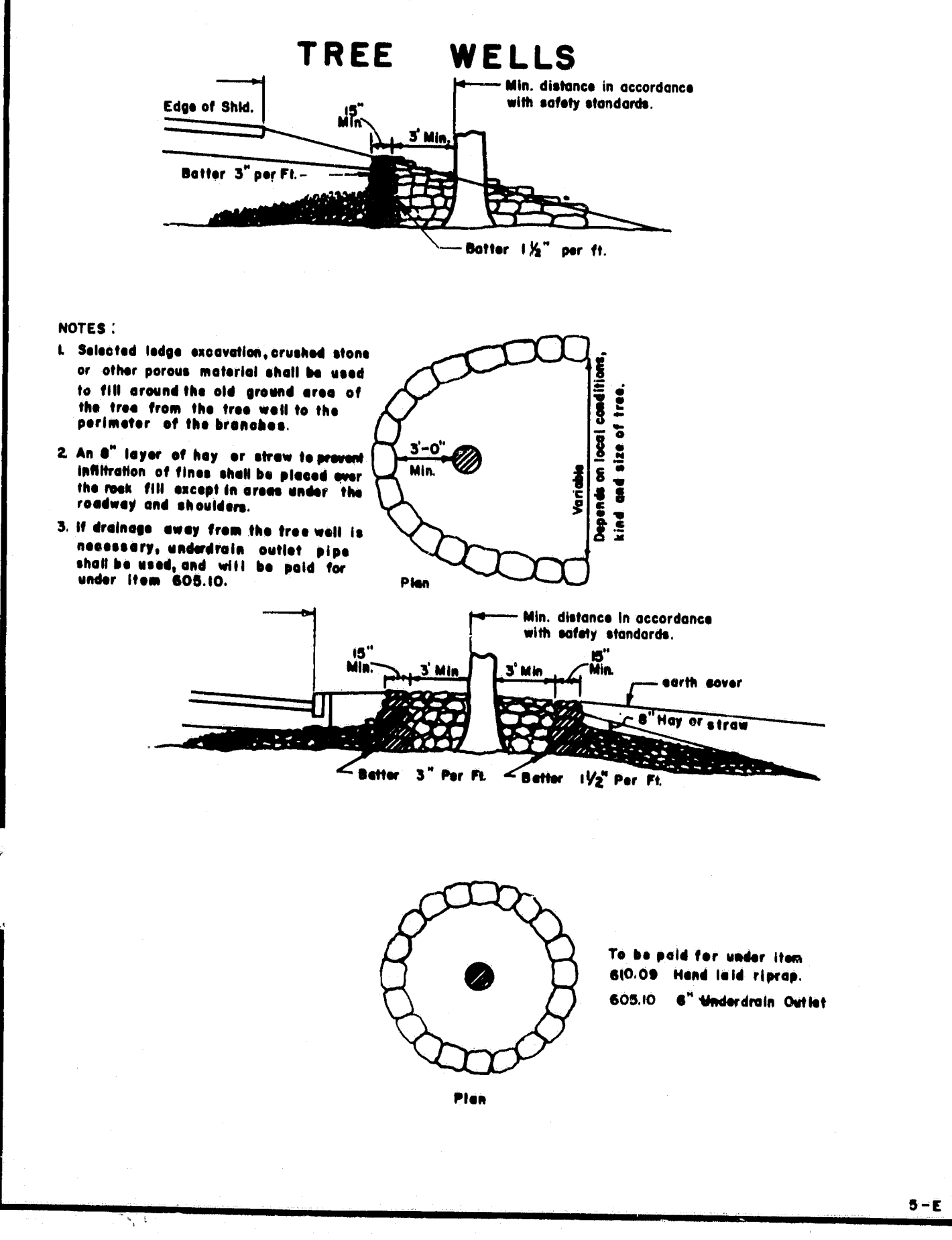
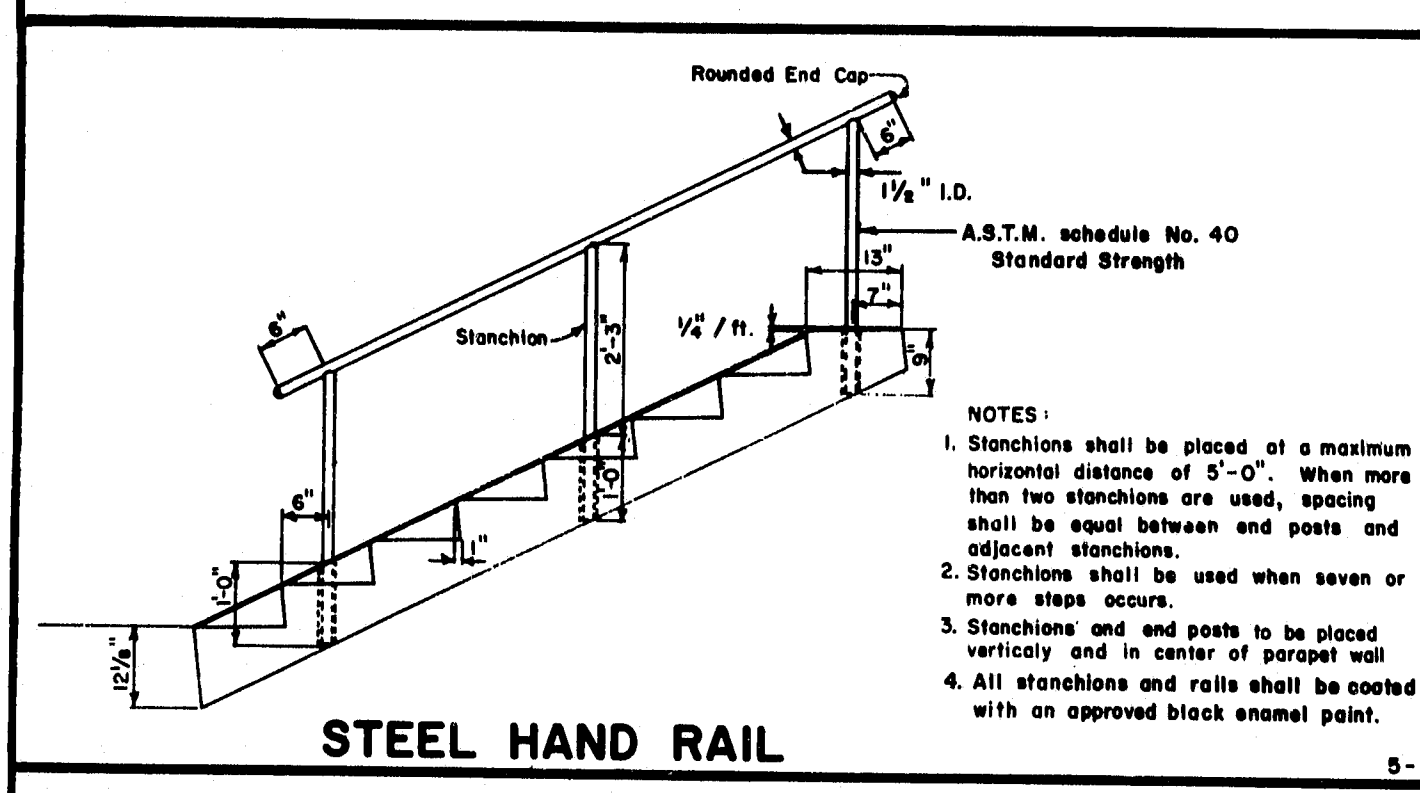
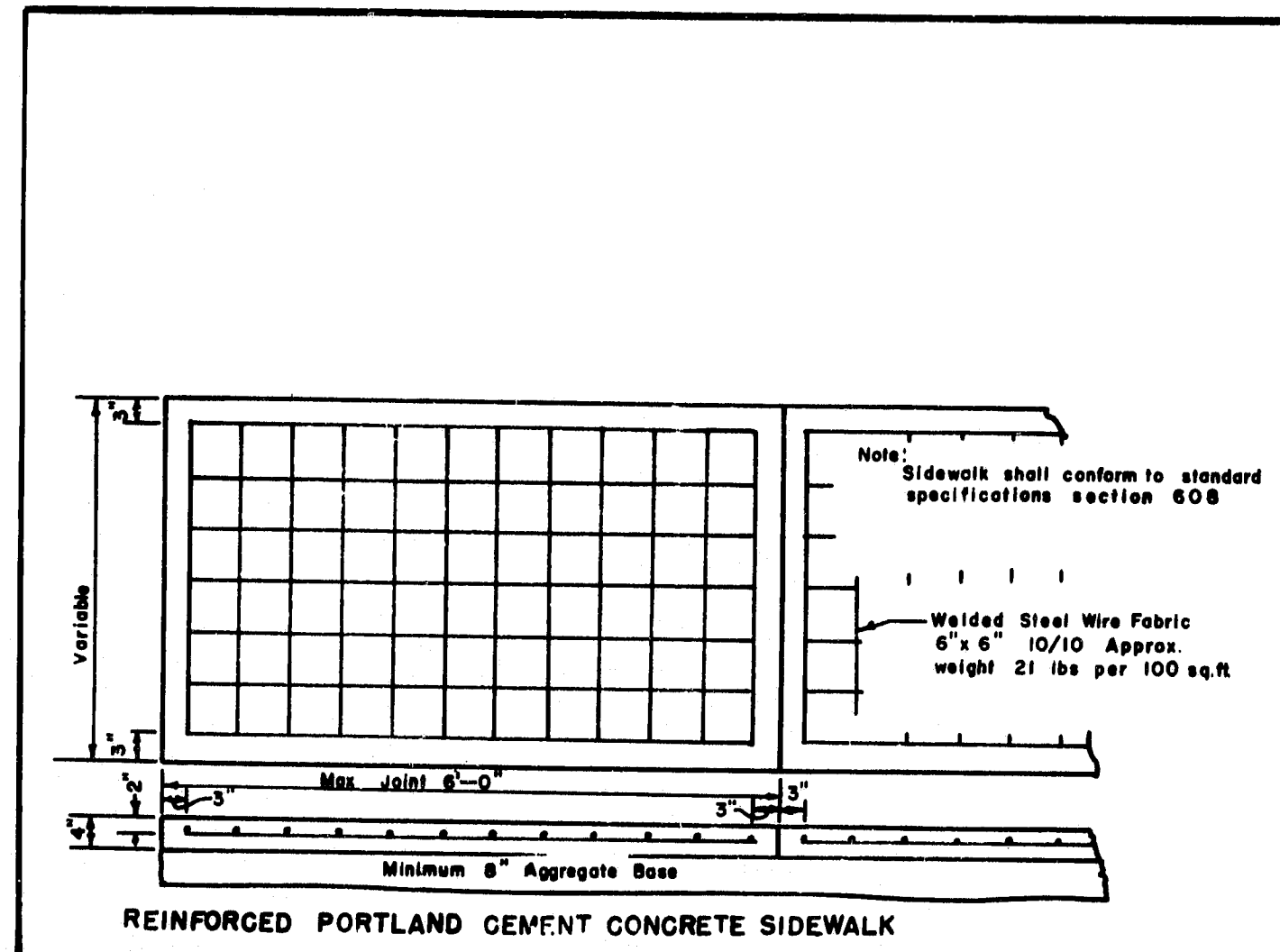
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 120-79)
CONCRETE END POSTS

R92-494

SHEET 16 OF 25 AUGUSTA, MAINE FEB. 1979

3/80 Linscott Bridge, Sanford, York County



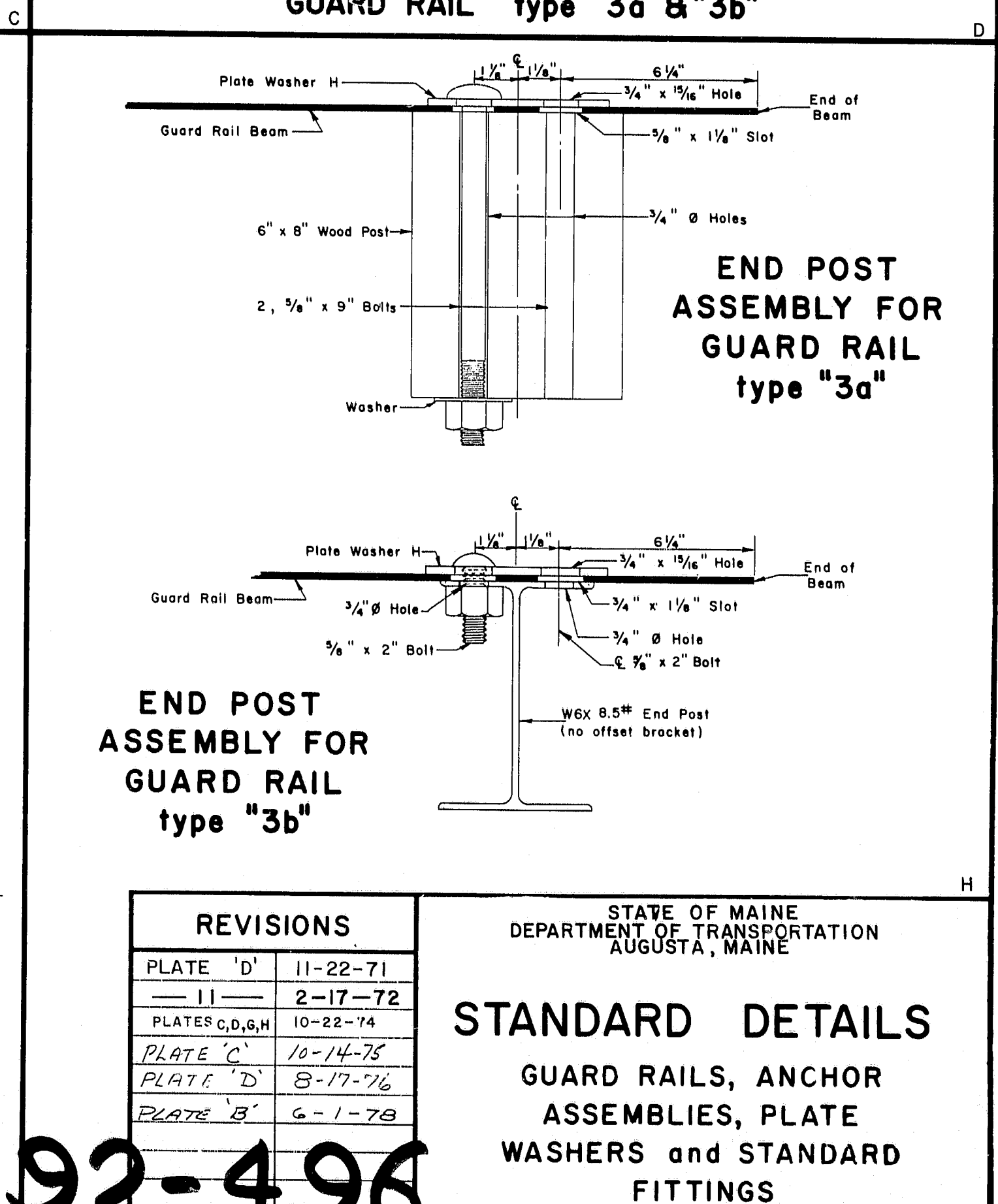
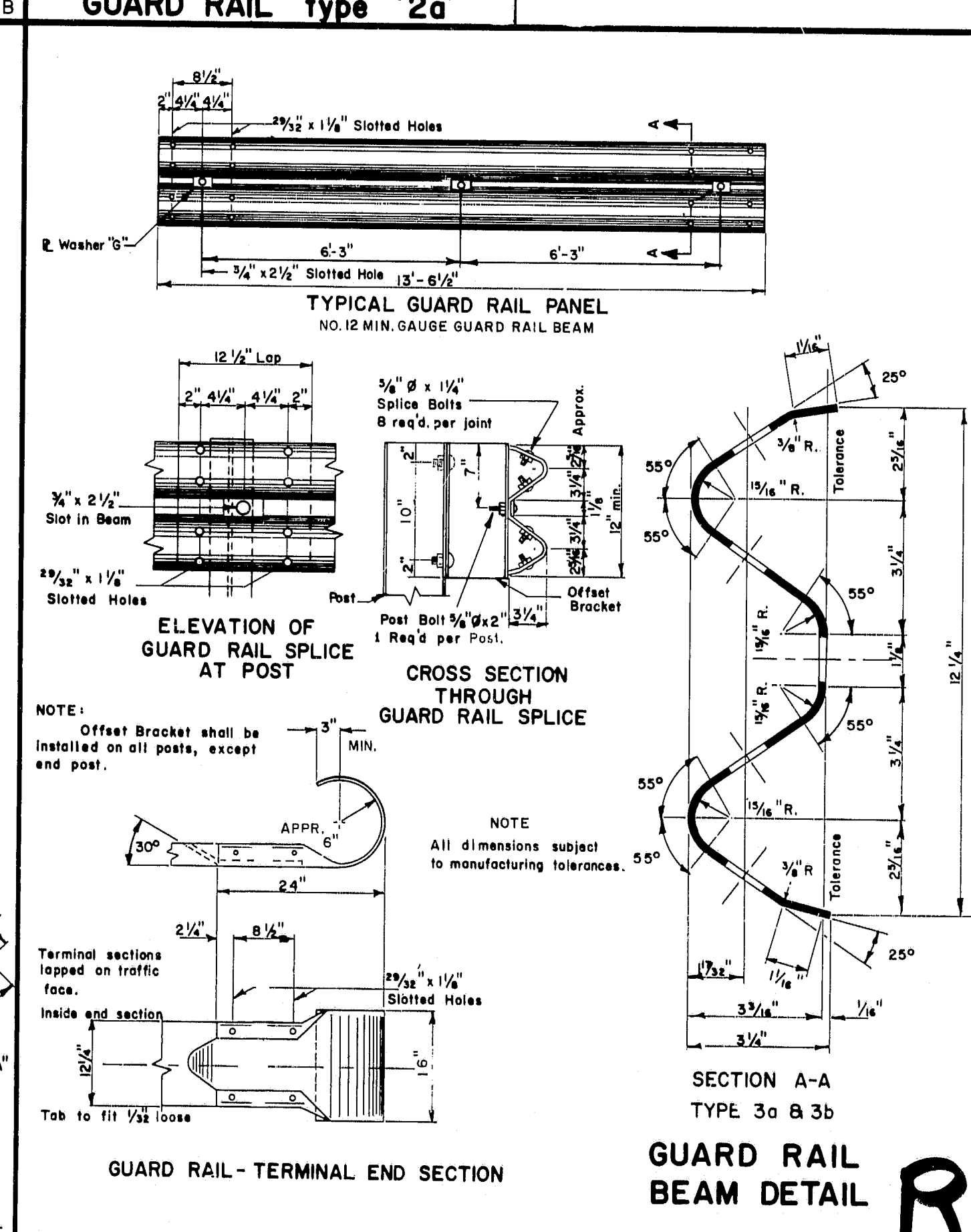
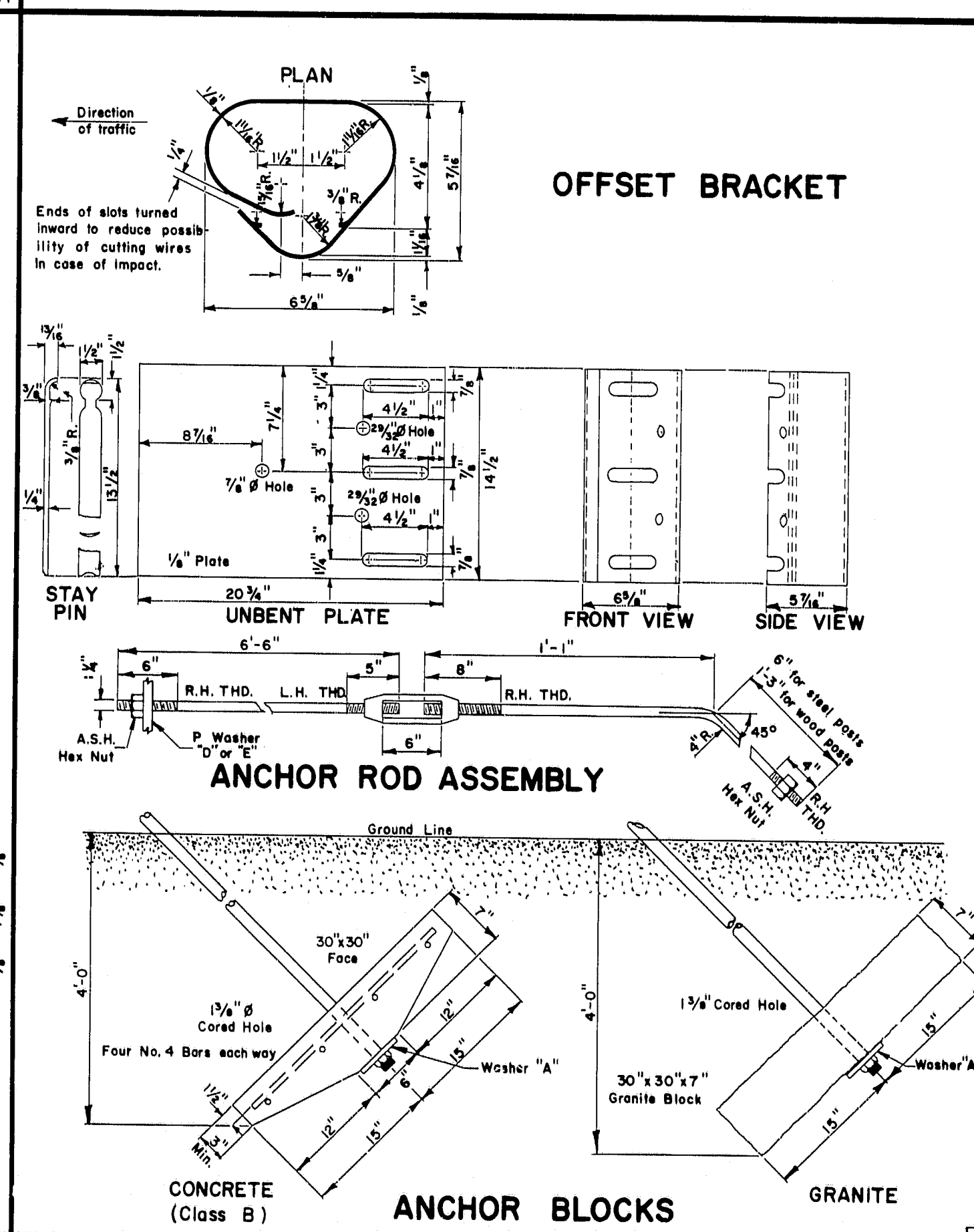
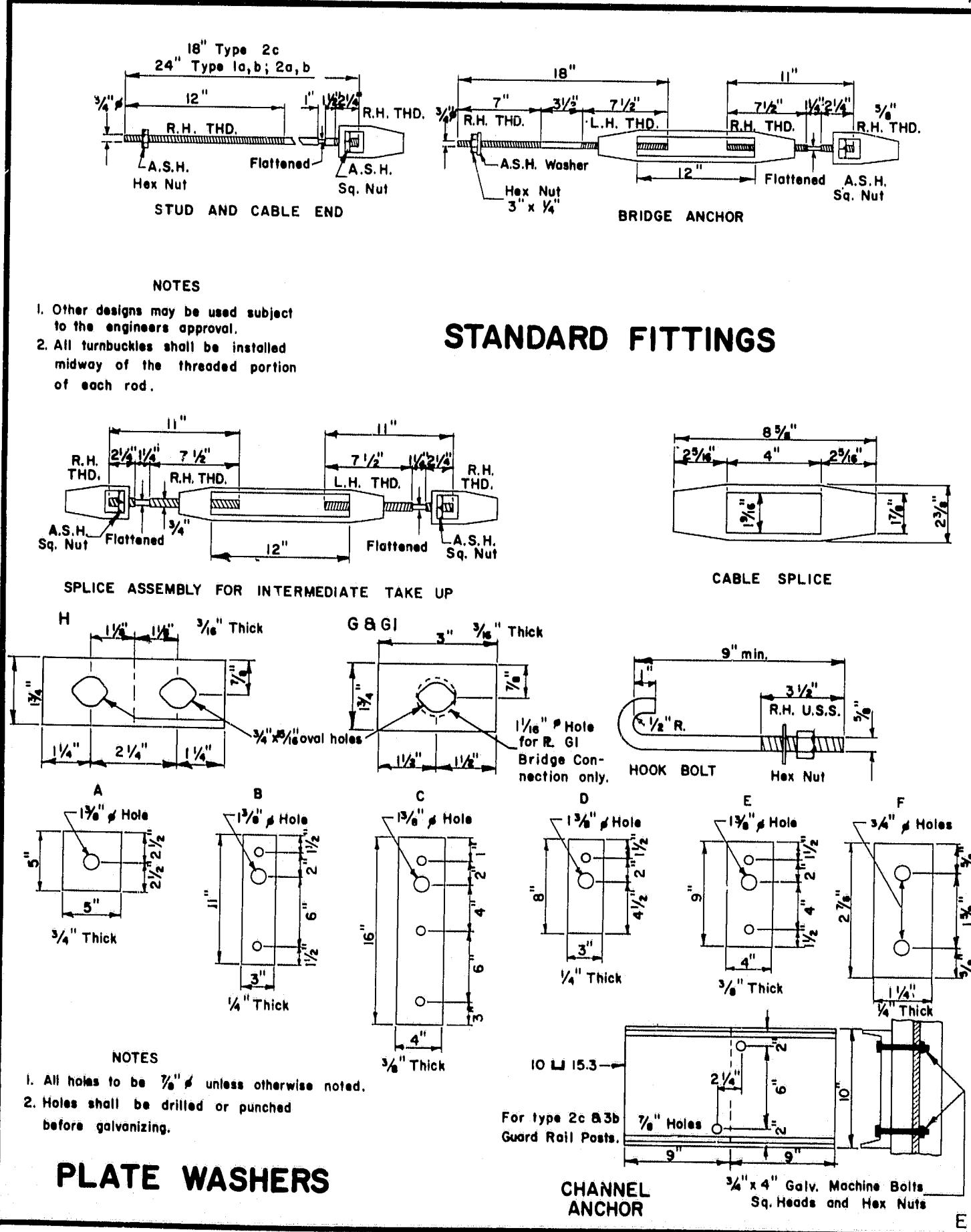
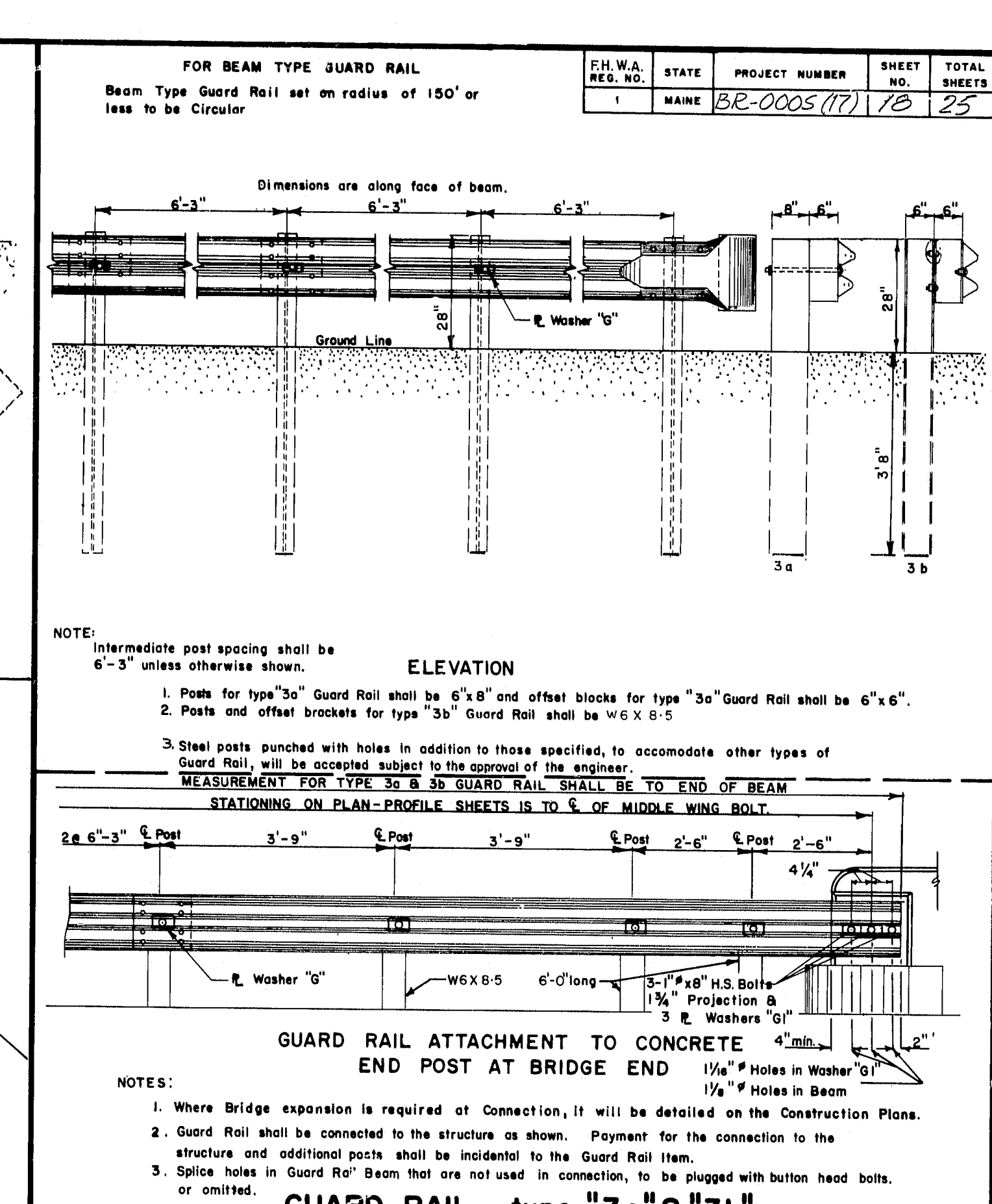
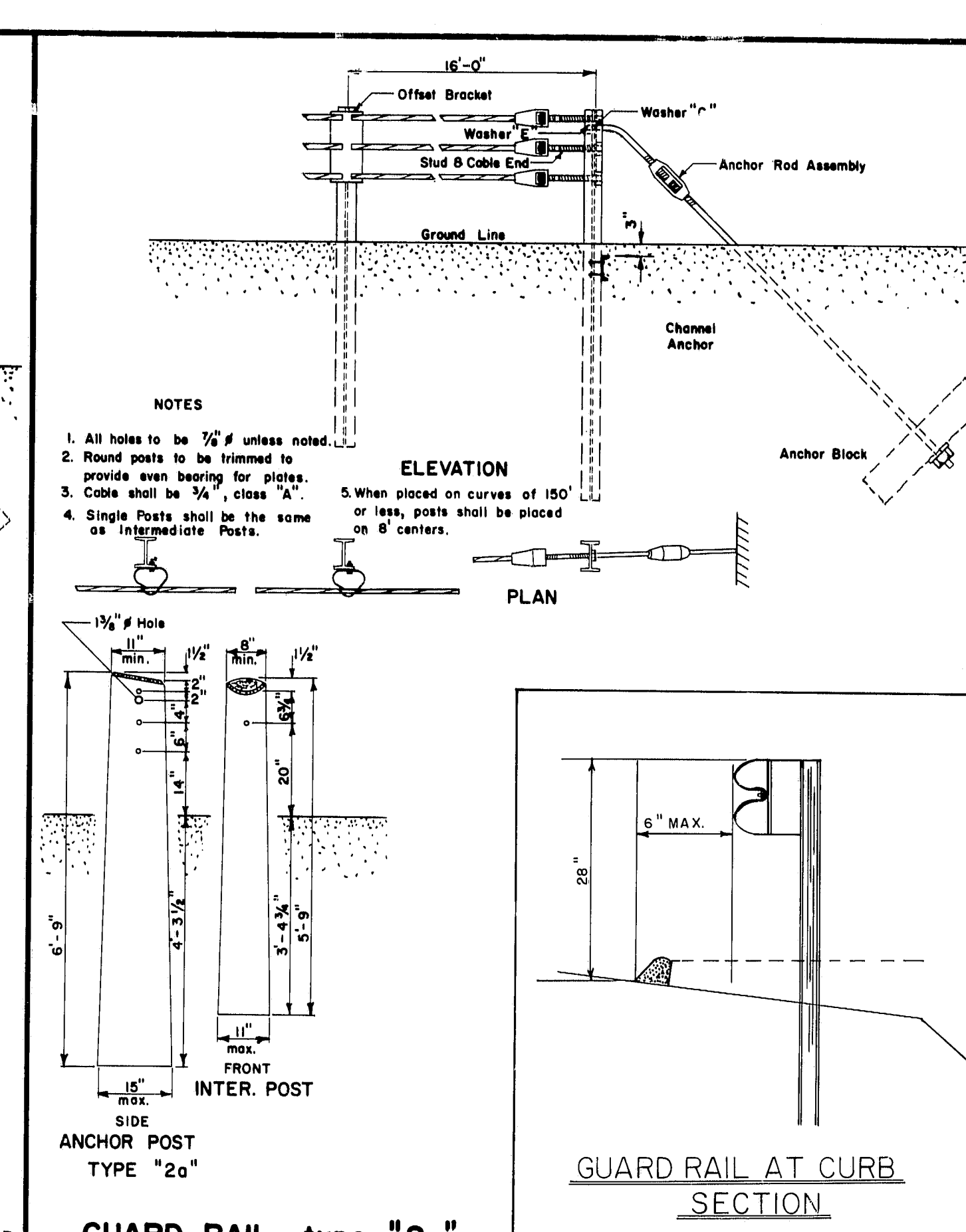
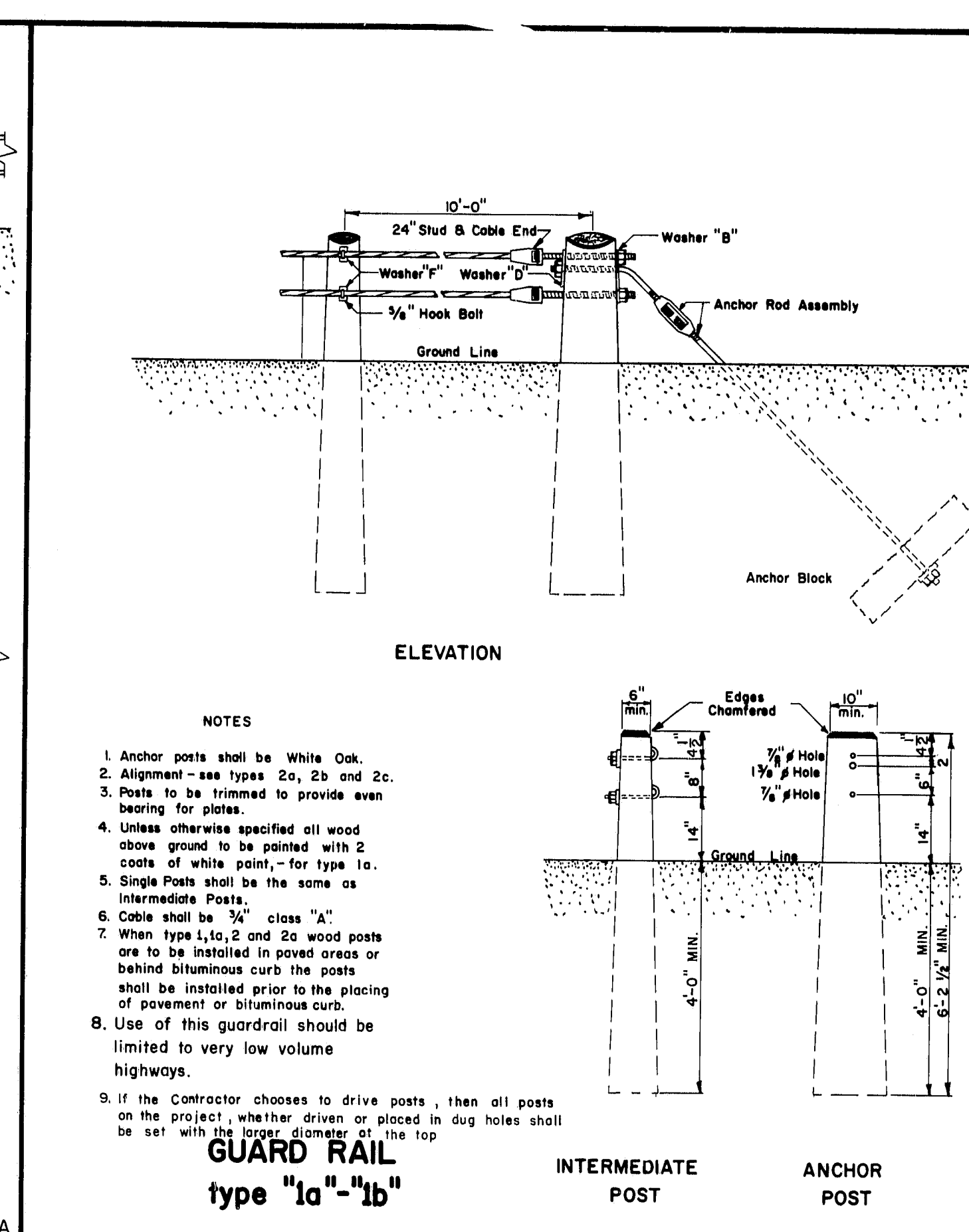
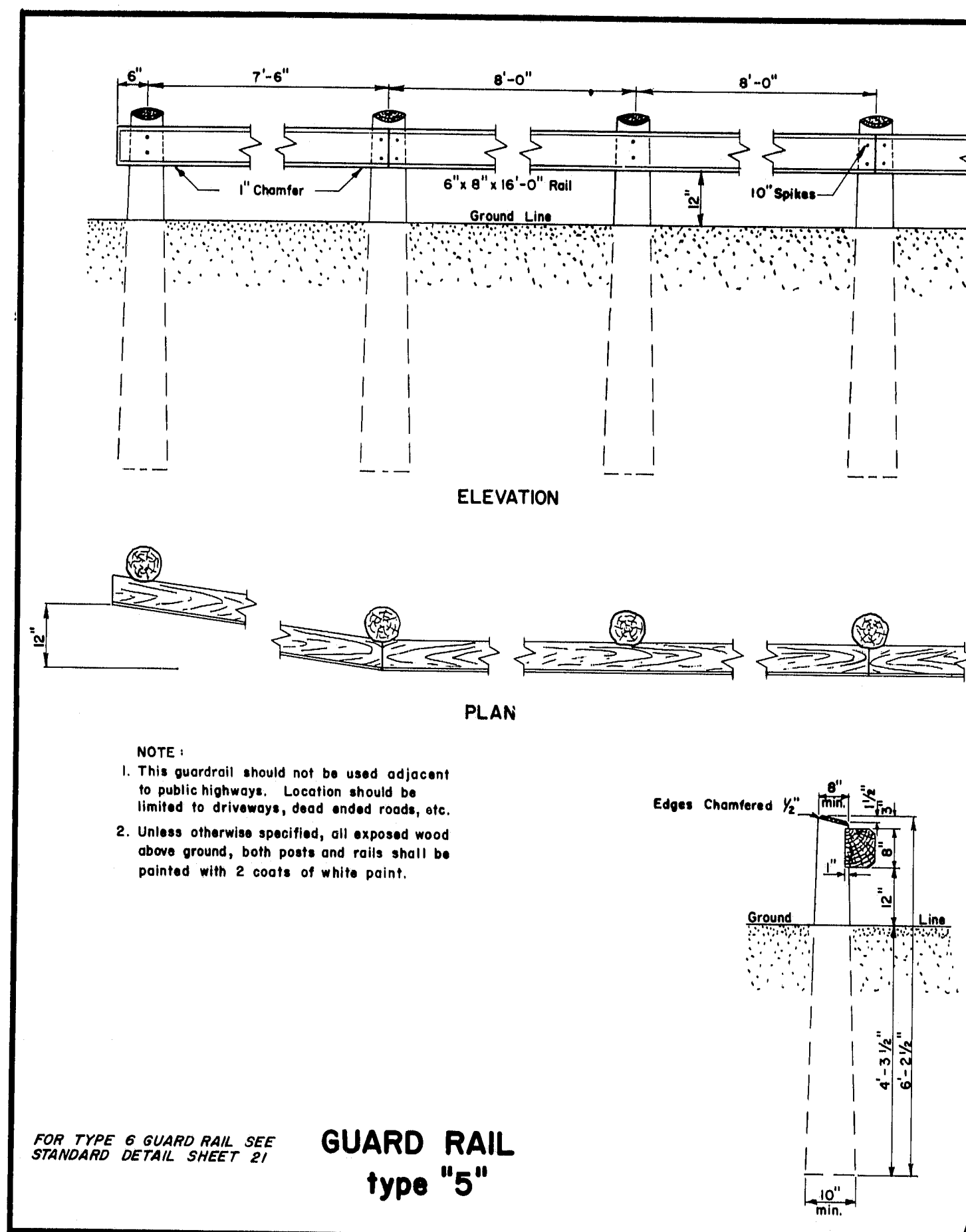
R92-495

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS
GUARD RAIL, MUCK EXCAVATION
CONCRETE STEPS & SIDEWALK
GUYING TREES
TREE WELLS, EROSION CONTROL,
MAILBOX SUPPORTS.

Sheet 17 of 25
AUG. 1969

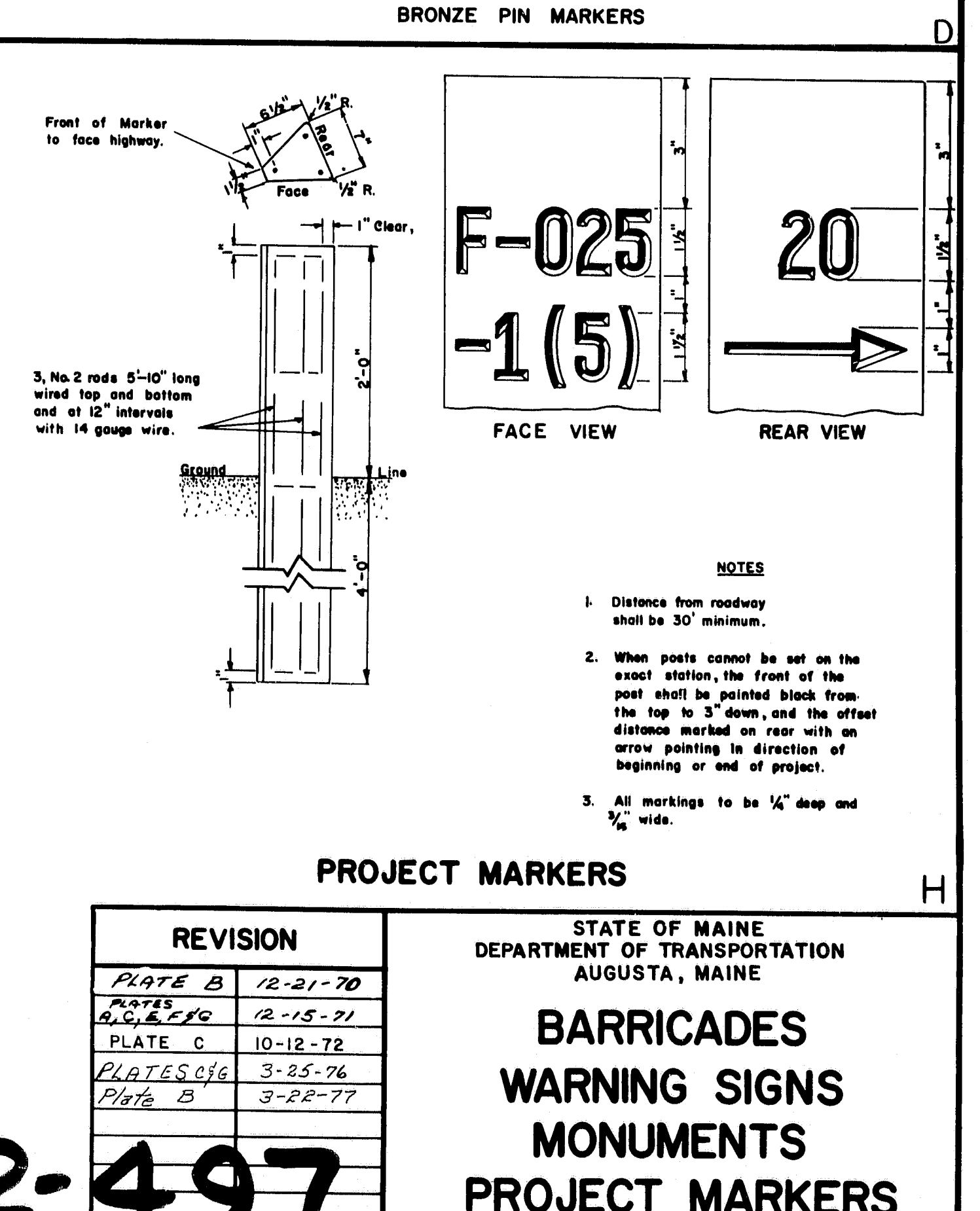
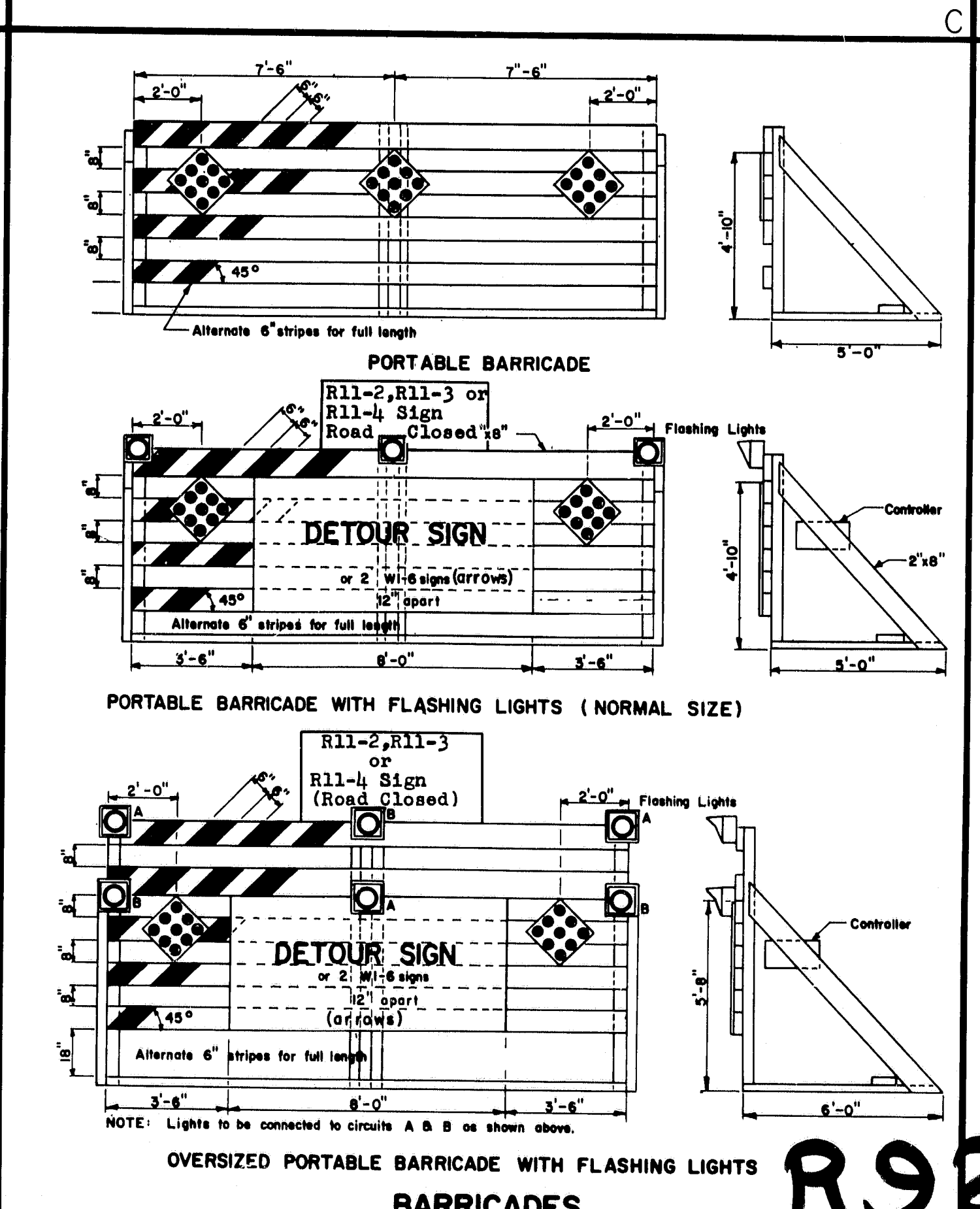
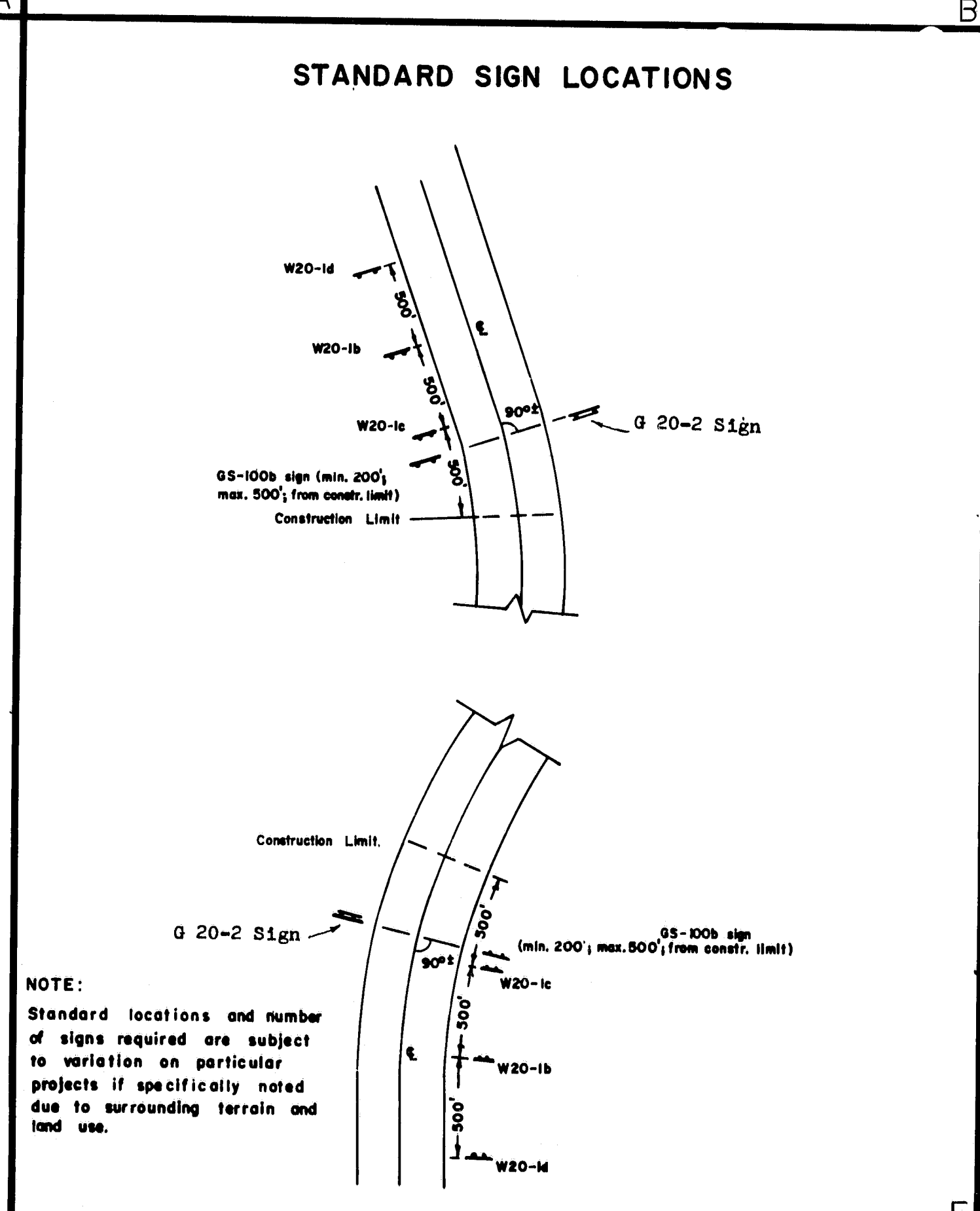
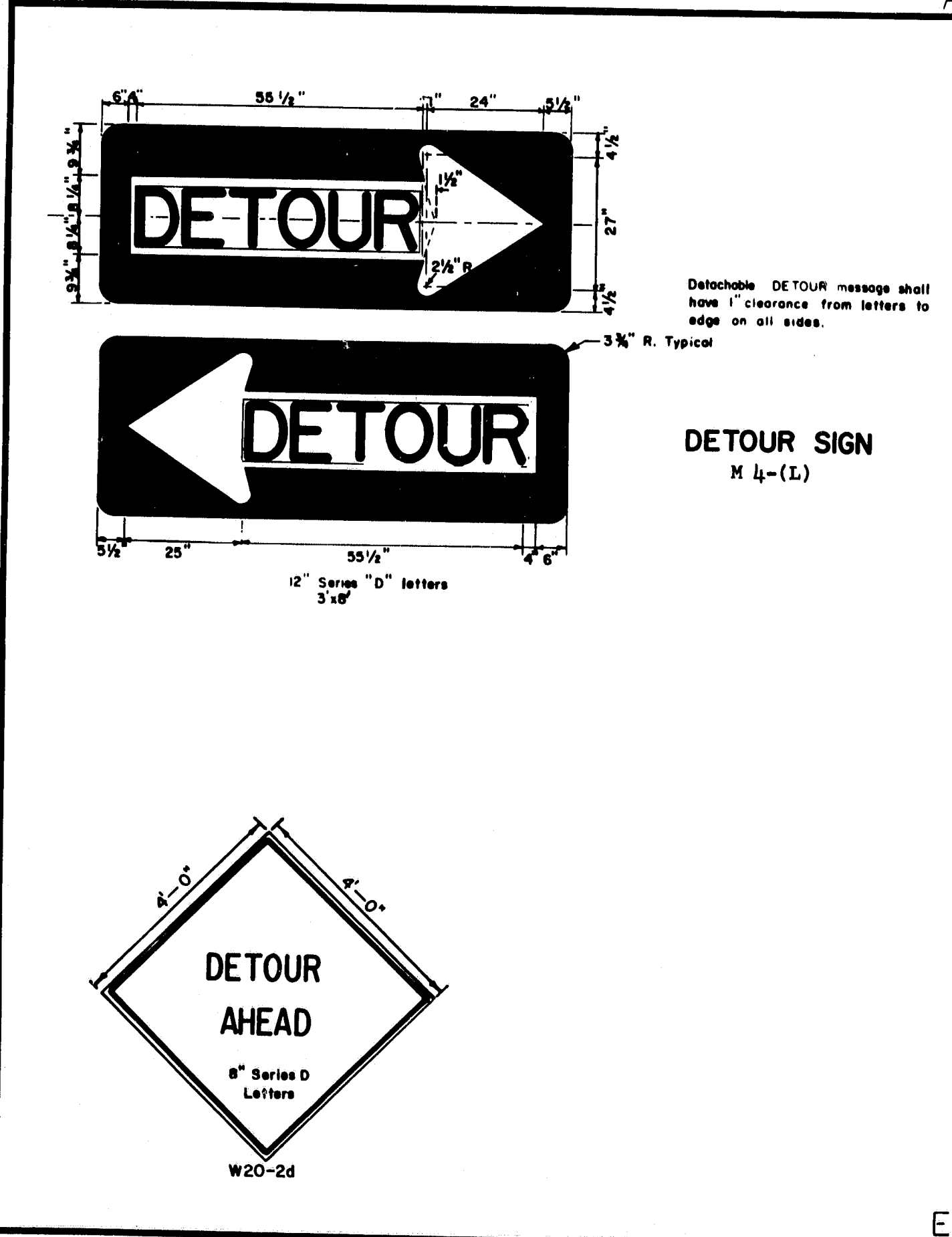
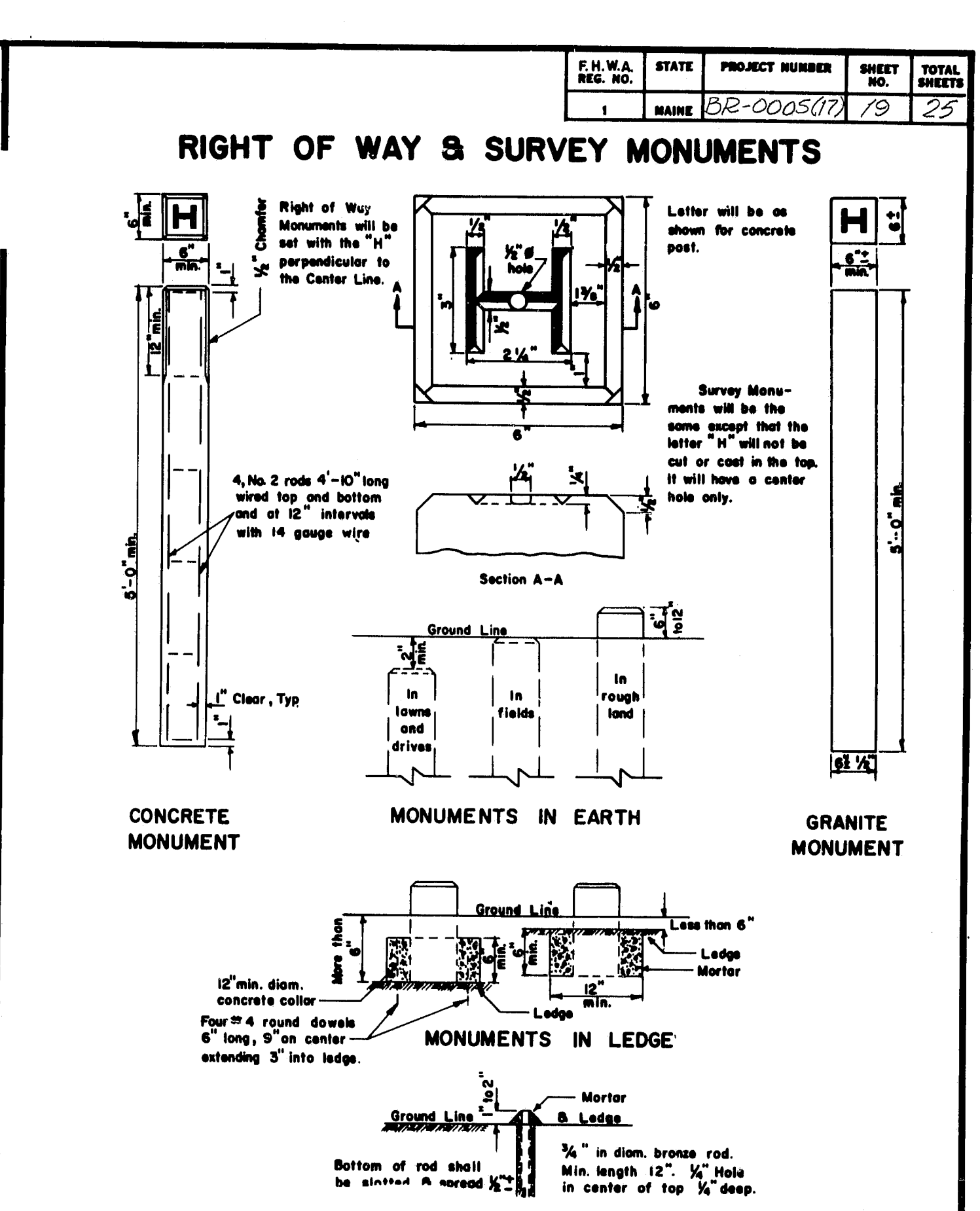
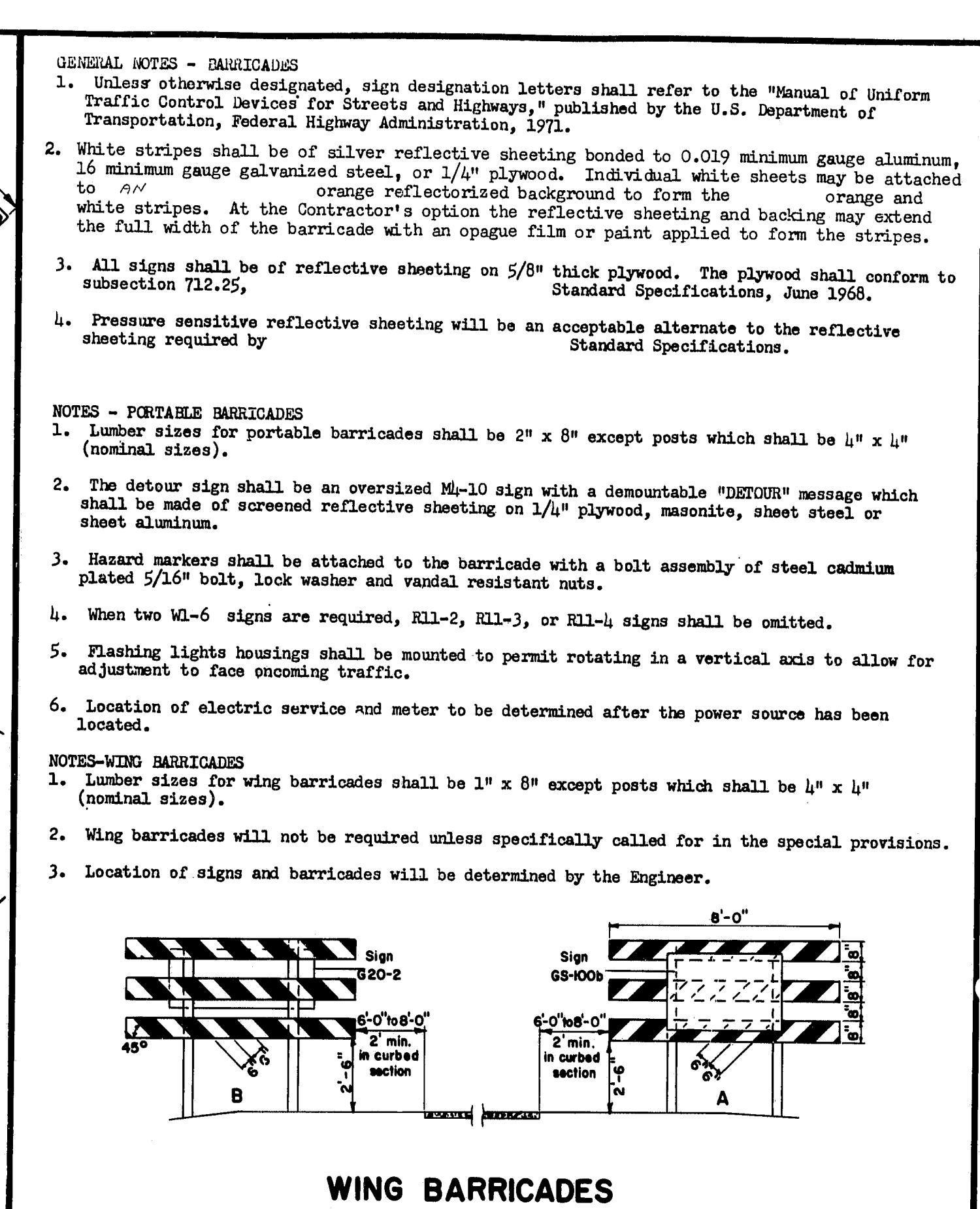
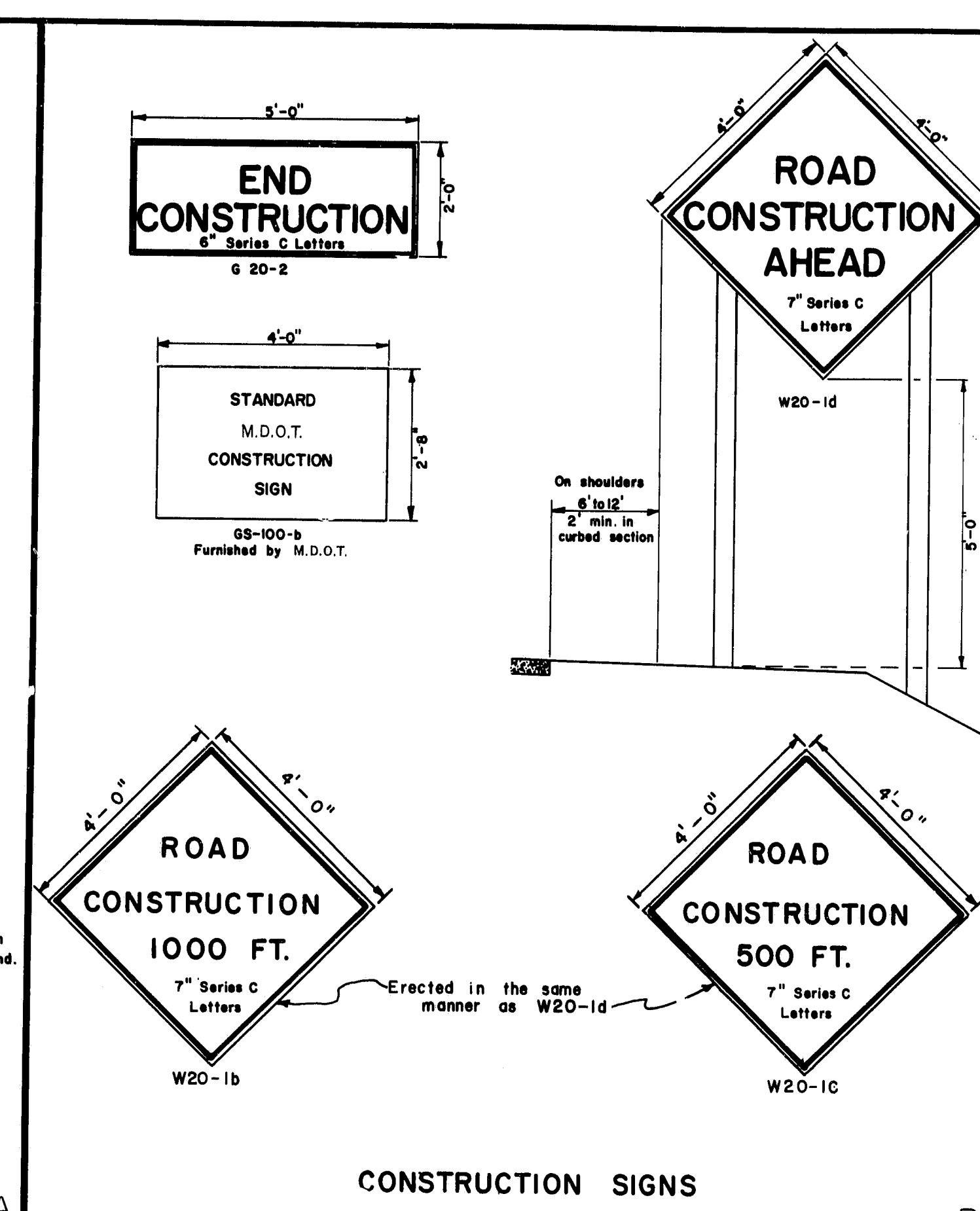
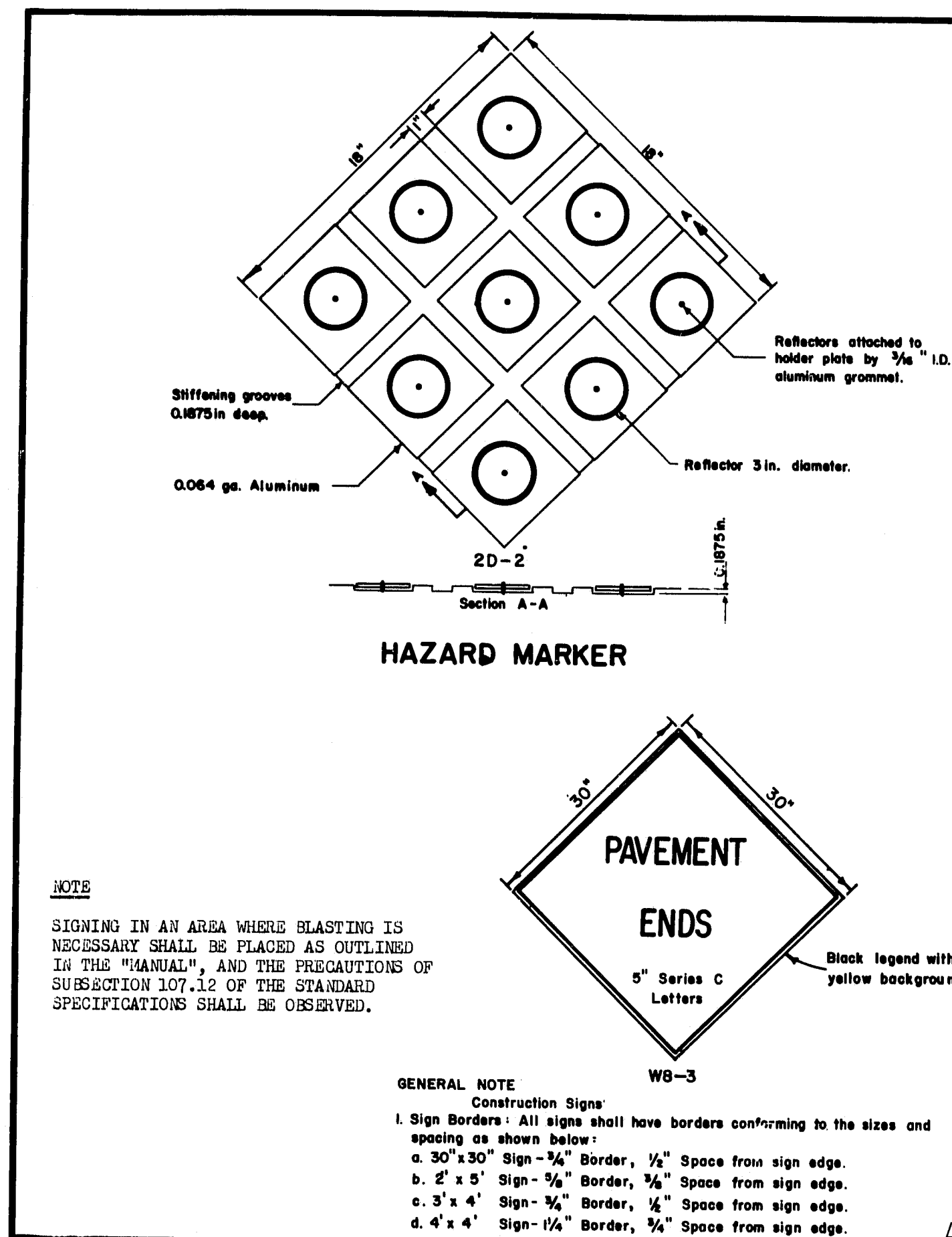
PLATE	NO.	DATE
PLATE 5-A	12-24-69	
PLATE 5B	1-27-71	
PLATE 5H	5-12-71	
PLATE 5B	1-19-72	
PLATE 5G	6-7-72	
PLATE 5D	6-7-72	
PLATE 5D+D	10-22-72	
PLATE A.B.F.H.	3-18-75	
PLATE 5H	6-26-75	
PLATE G	10-14-75	



REVISIONS		STATE OF MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	
PLATE 'D'	11-22-71	STANDARD DETAILS GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS AND STANDARD FITTINGS	Sheet 18 of 25 AUG. 1969
PLATE 'C,D,G,H'	2-17-72		
PLATE 'C'	10-22-74		
PLATE 'D'	10-14-75		
PLATE 'B'	8-17-76		

R92-496

3/80 Linscott Bridge, Sanford, York County



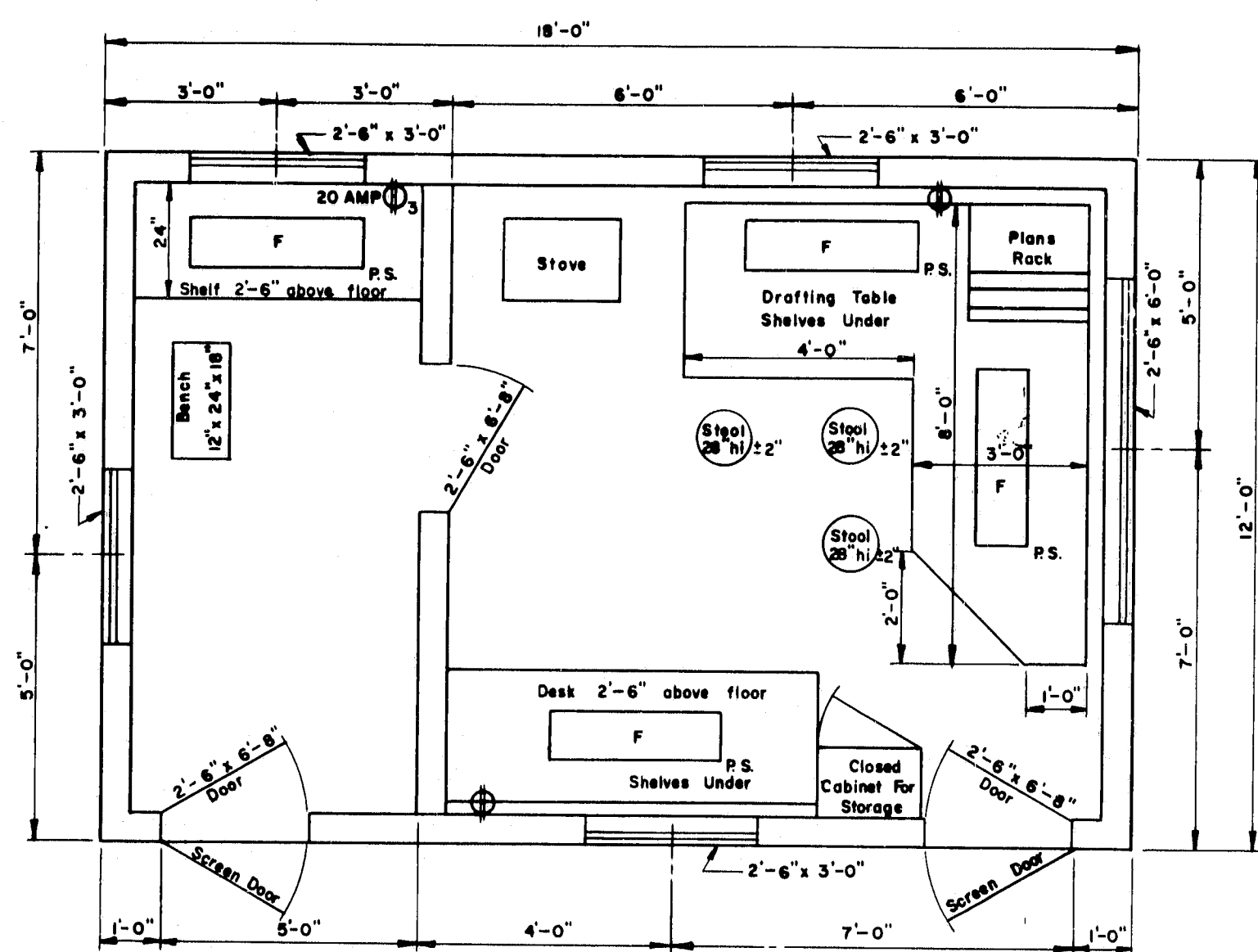
REVISION		STATE OF MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	
PLATE B	12-21-70	BARRICADES WARNING SIGNS MONUMENTS PROJECT MARKERS	
PLATE C	12-15-71		
PLATE D	10-12-72		
PLATE E	3-25-76		
PLATE F	3-22-77		

Sheet 19 of 25

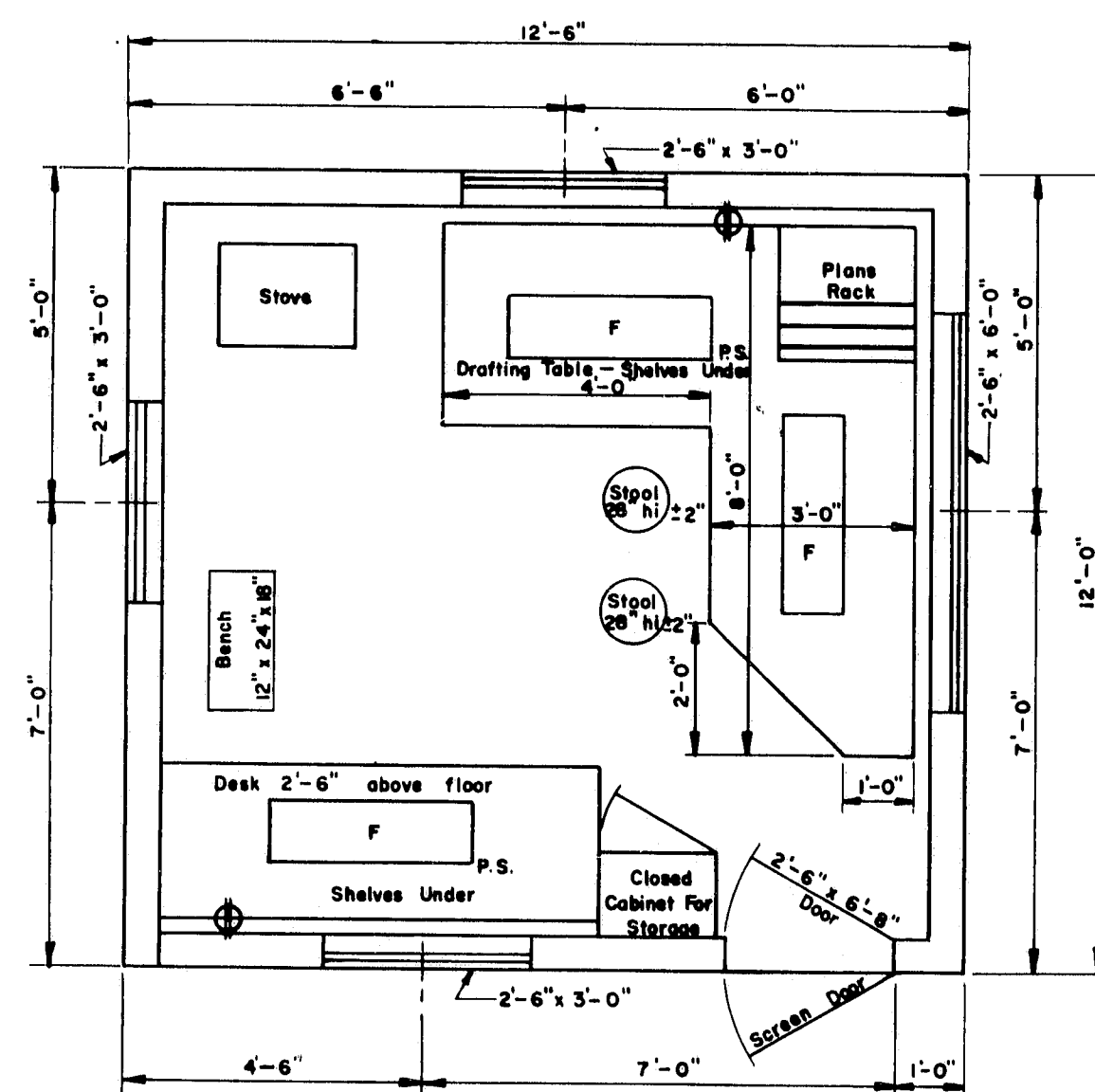
AUG. 1969

R92-497

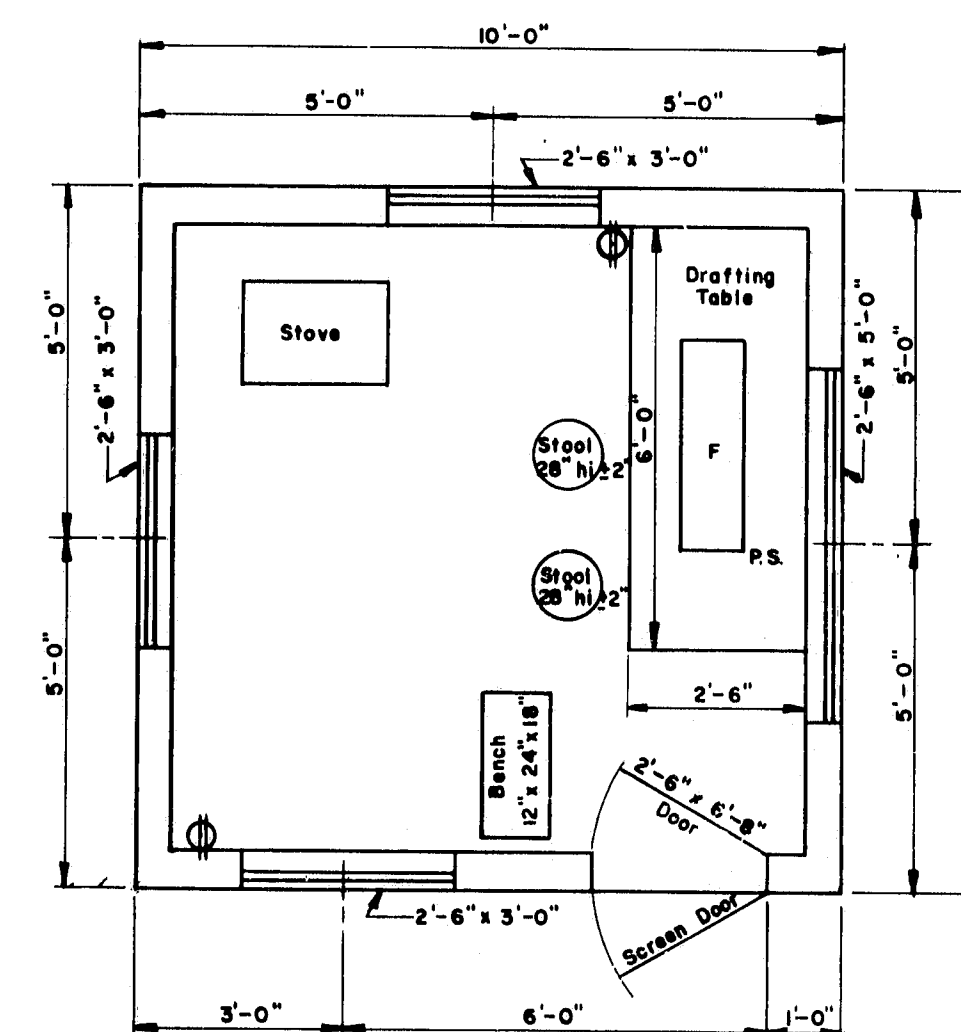
3/80 Linscott Bridge, Sanford, York County



FLOOR PLAN
TYPE "A"

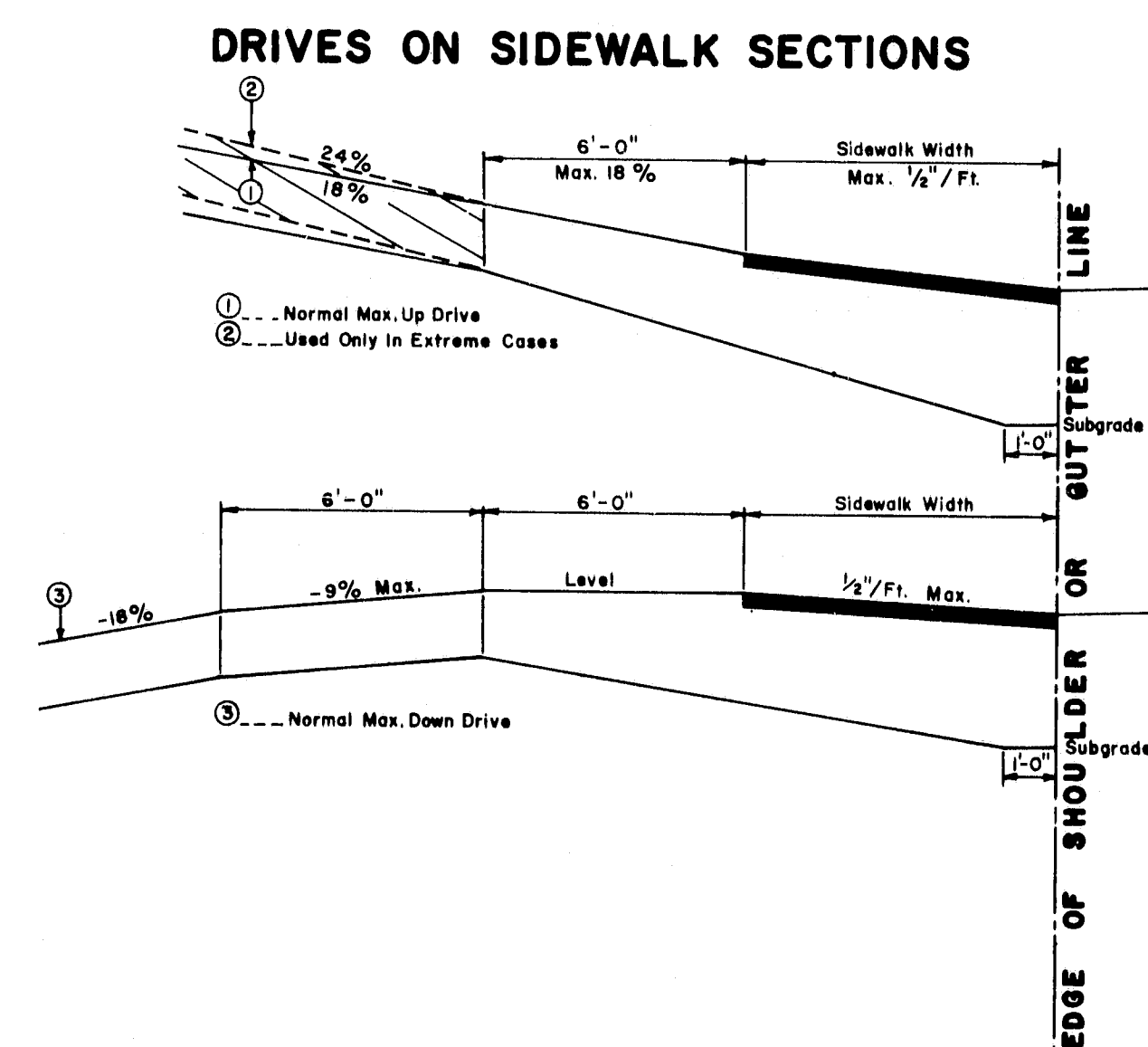


FLOOR PLAN
TYPE "B"

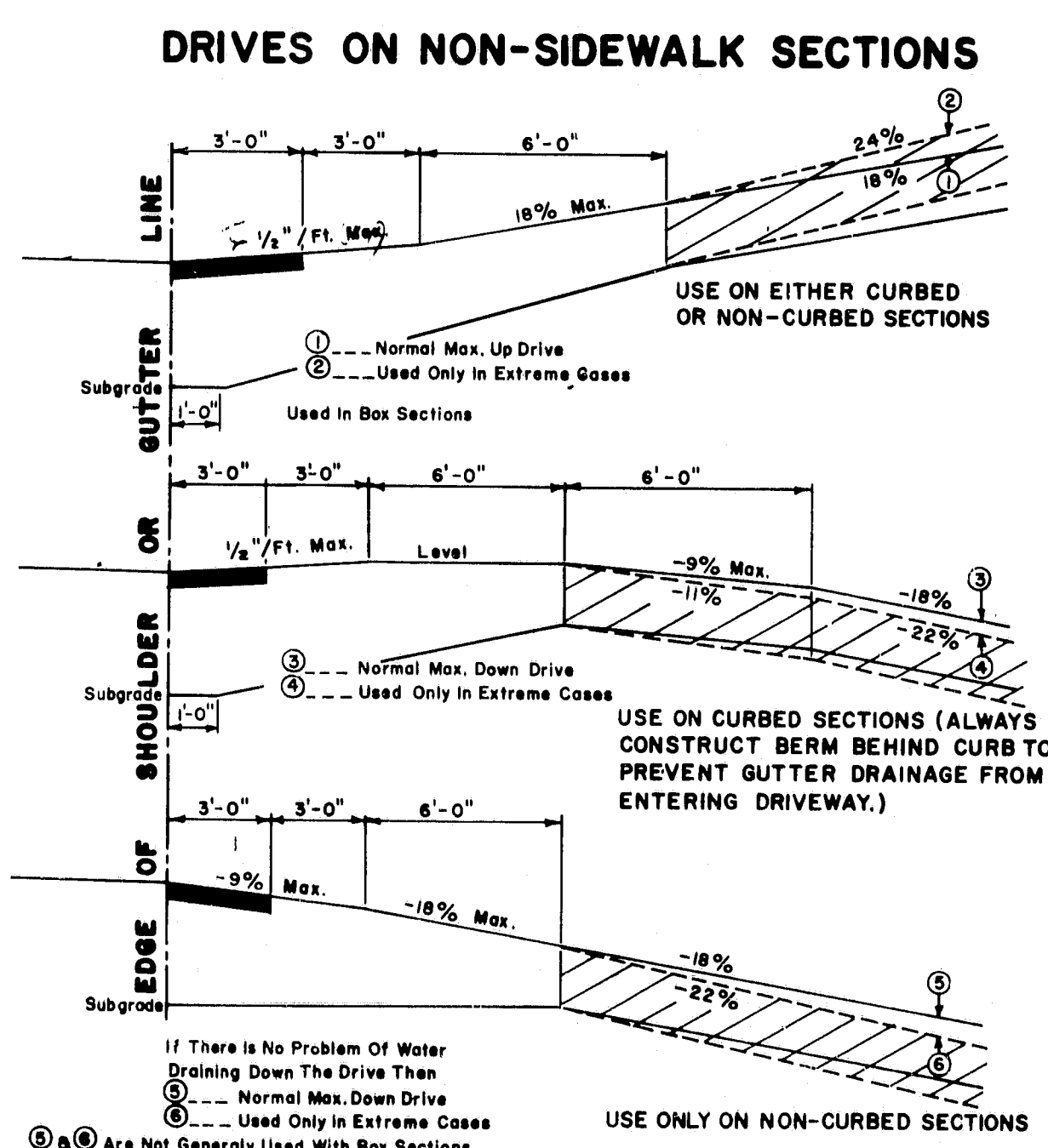


FLOOR PLAN
TYPE "C"

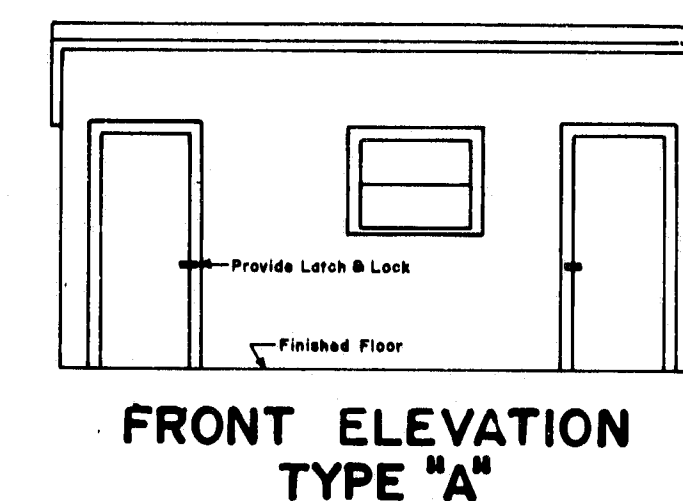
- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
 - Shelves under desk shall be constructed to receive 1 1/2" x 14" x 25" transfiles.
 - Windows shall be double hung.
 - Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 6" of fireproof material.
 - Continuous 110 volt 60 cycle electric service shall be supplied.
 - The engineer may rearrange the items shown on the plan views during construction of the field office.
 - FURNISHINGS TO BE SUPPLIED:**
 - 2 Straight back chairs for types A and B
 - 1 Bench for types A, B & C
 - 3 Stool for type A
 - 2 Stools for types B & C
 - SYMBOLS:**
 - F Fluorescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
 - P.S. Pull switch
 - ⊕ Duplex wall outlet—15 amp unless otherwise noted.
 - ⊕ Triplex Wall Outlet
 - For the Type "A" Field Office one clean 55 gal. drum shall be supplied, installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furnished with water at all times.



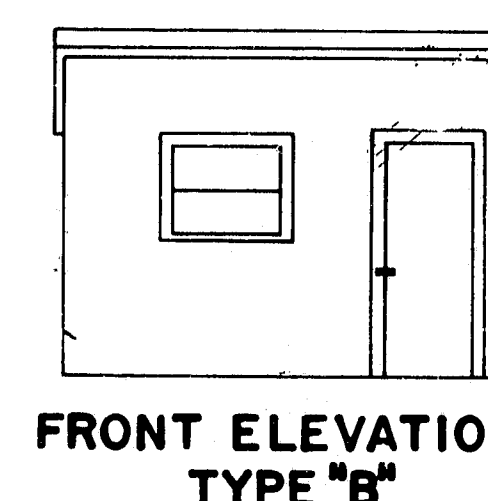
- GENERAL NOTES**
- The sidewalk width shall be paved in all cases.
 - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
 - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
 - When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.



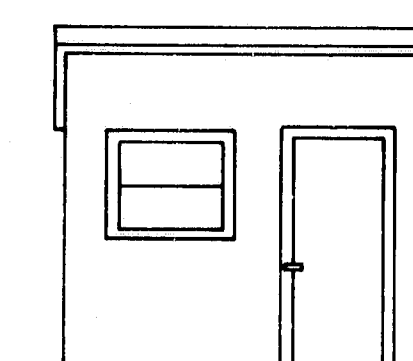
- GENERAL NOTES**
- The first 'S' shown as pavement shall be paved only when abutting a paved area.
 - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
 - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
 - When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.



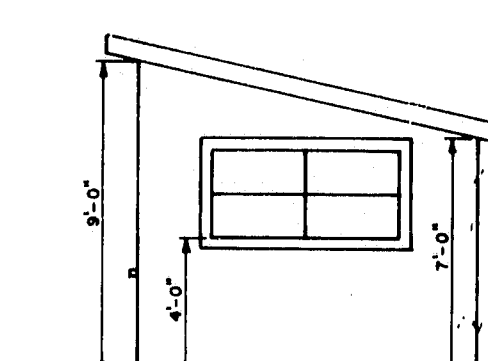
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



FRONT ELEVATION
TYPE "C"



SIDE ELEVATION
TYPES "A", "B", & "C"

REVISIONS		
PLATE	DE	3-16-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

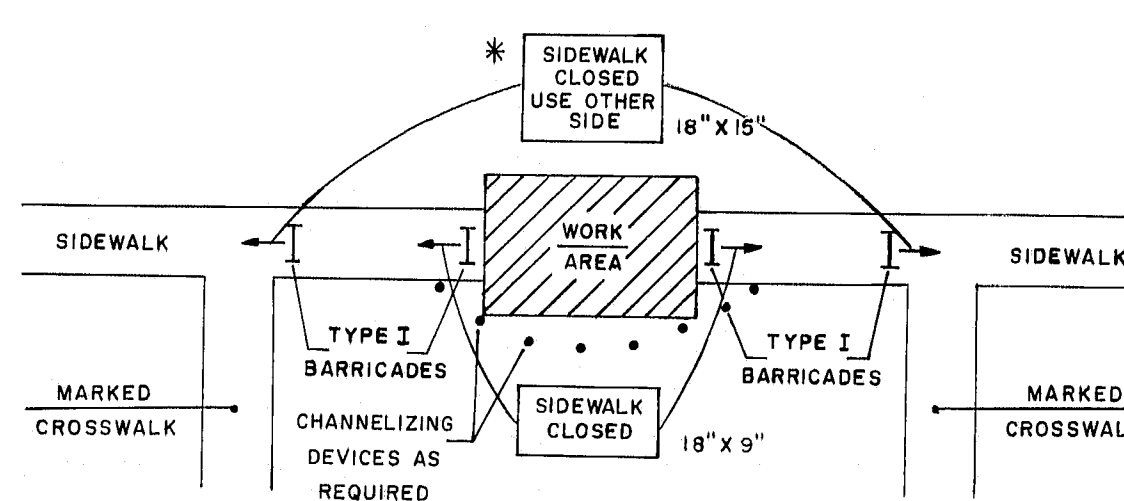
R92-498

Sheet 20 of 25 AUG. 1969

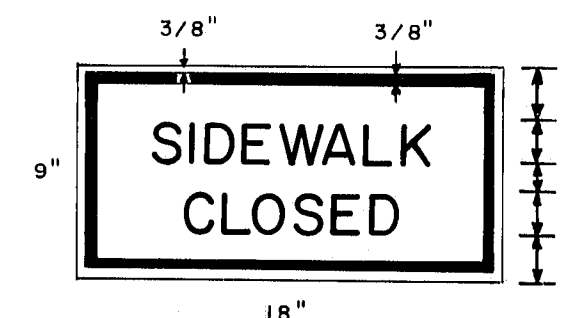
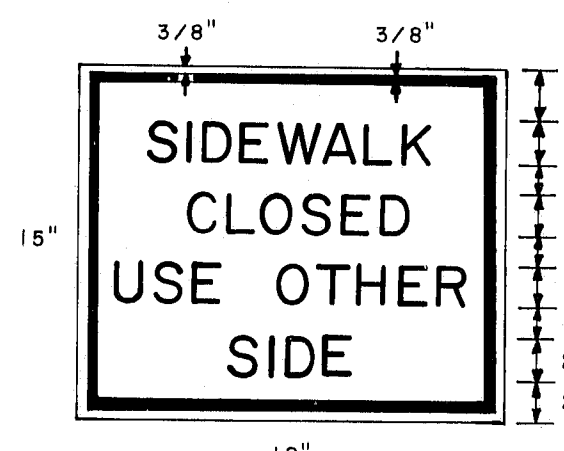
3/50 Linscott Bridge, Sanford, York County

F.R.E.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(17)	21	25

* NON-REFLECTORIZED WHITE BACKGROUND, BLACK TEXT
AND BORDER-2" SERIES "C" UPPER CASE LETTERS

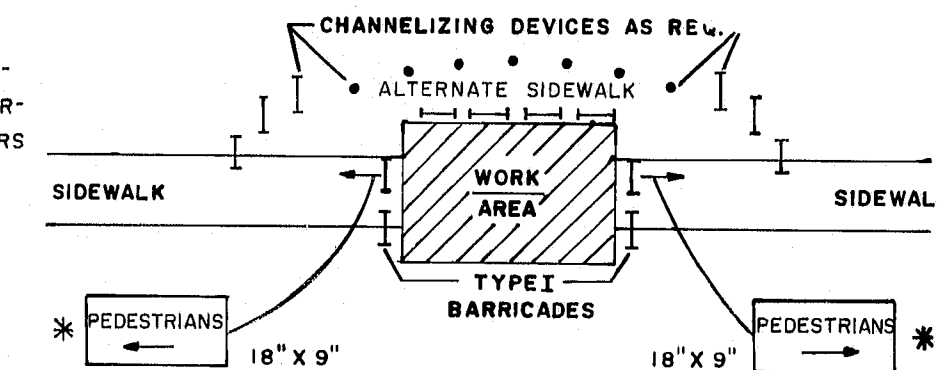


**SIDEWALK CLOSURE
WITHOUT ALTERNATE SIDEWALK**

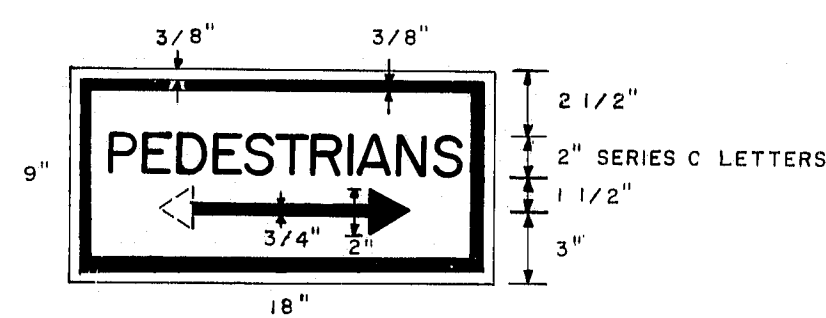


A

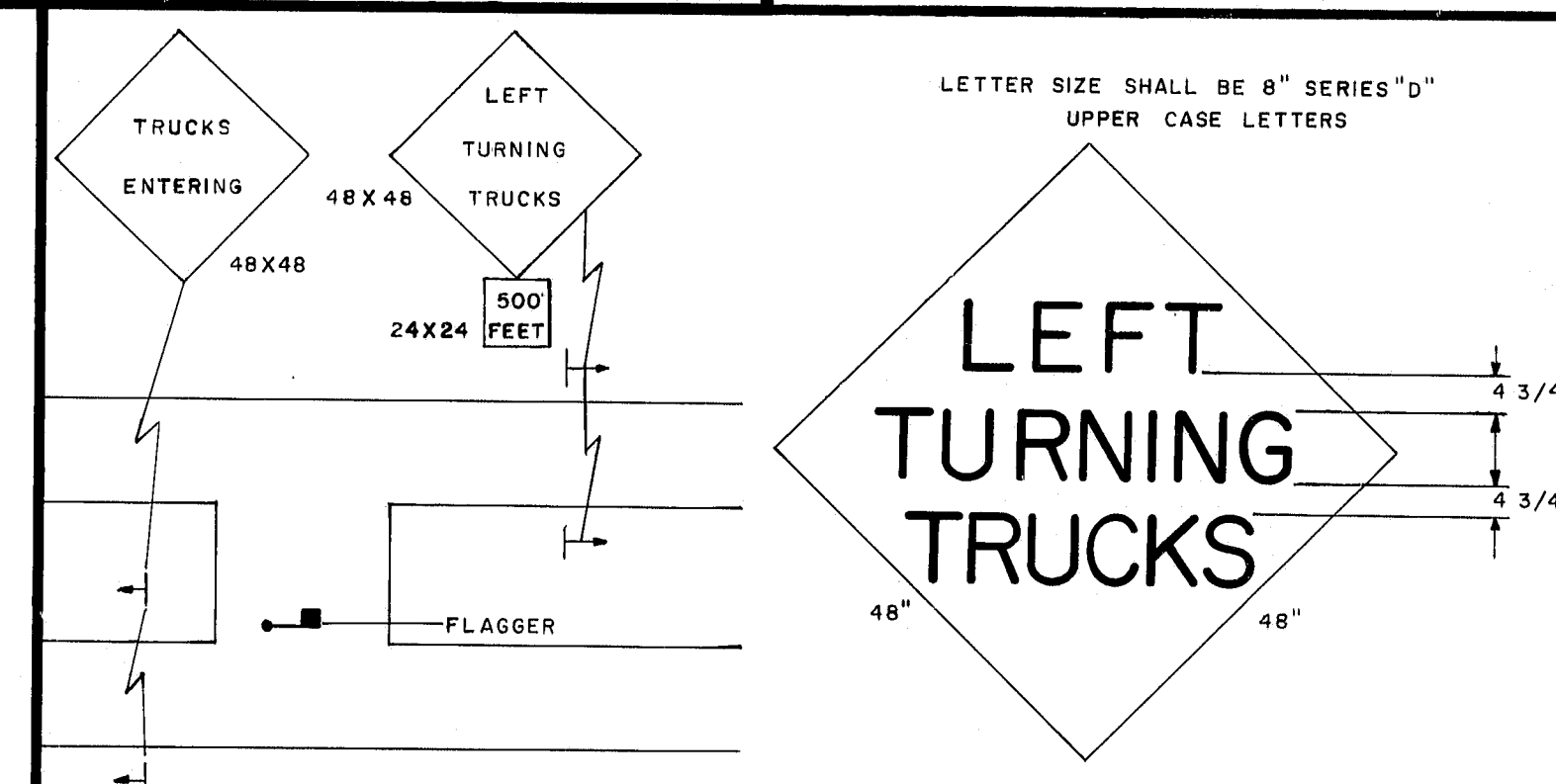
* NON-REFLECTORIZED WHITE BACK-
GROUND, BLACK TEXT AND BORDER-
2" SERIES "C" UPPER CASE LETTERS



**SIDEWALK CLOSURE
WITH ALTERNATE SIDEWALK**



B



MEDIAN CROSSOVER

GENERAL NOTES

- Distances shown for sign placement are nominal, exact locations shall be determined by the Engineer.
- Grades on temporary roadways through the construction zone used by the public shall not exceed 10 percent.
- Advisory speed consistent with prevailing conditions shall be as determined by the Engineer.
- Use shaded signs when specified in the Special Provisions.
- The length of tapers shall be determined from the following formulae:

$$\text{If } S \text{ is equal to or less than } 40 \text{ MPH} \\ L = (W \times S \times S) / 60$$

$$\text{If } S \text{ is equal to or greater than } 45 \text{ MPH} \\ L = WS$$

Where:

L = taper length in feet
S = operating speed in MPH
W = width of roadway to be closed in feet

Taper lengths shall be rounded to the nearest five feet.

It may be required to extend lane closure tapers to provide a smooth transition where geometric alignment reduces sight distance.

- The maximum longitudinal spacing of channelizing devices shall conform to the following:
 - 50 feet through work areas
 - 200 feet between tapers in multiple lane closures and along extended lane closures
 - A distance in tapers equal to the numerical value of the operating speed, i.e., 45 MPH = 45 feet

The maximum transverse spacing in tapers shall be determined from the following formula:

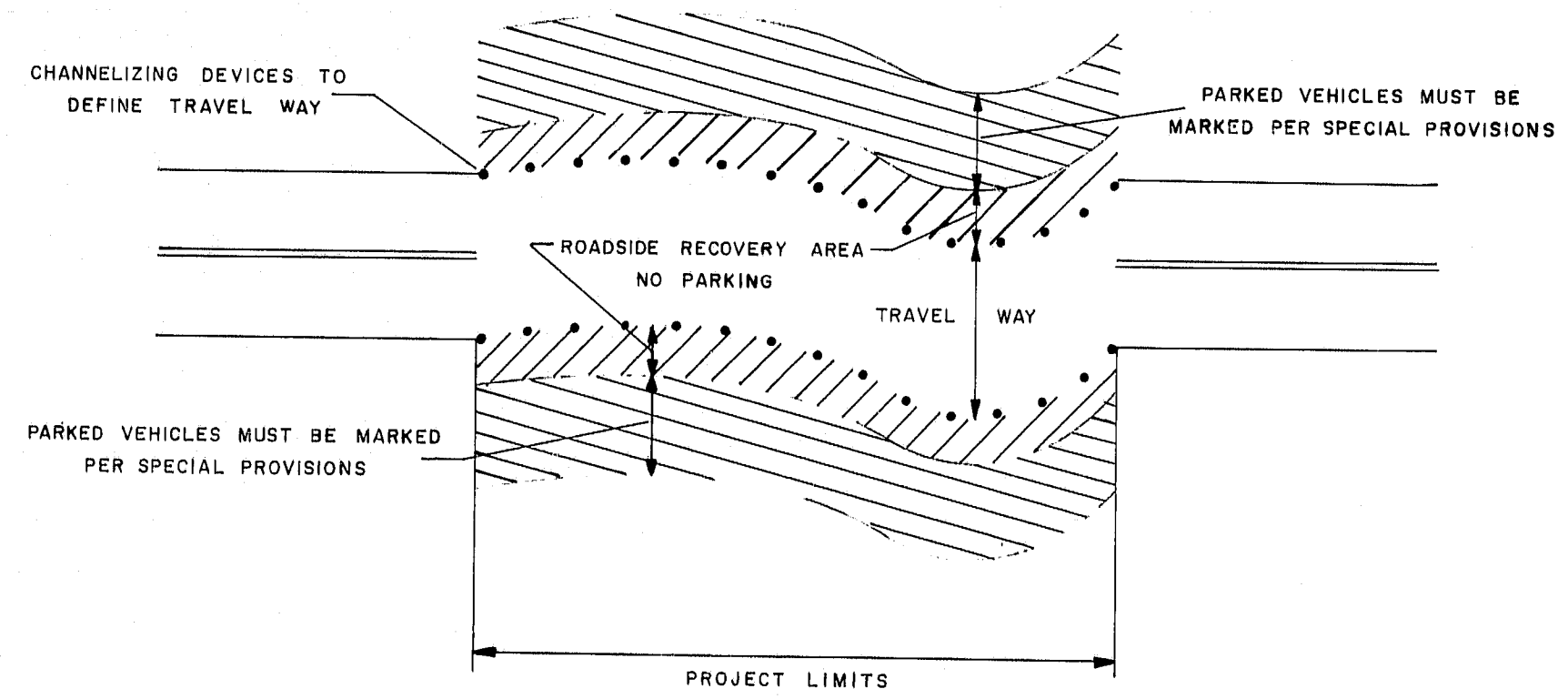
$$D = (W \times S) / L$$

Where:

D = transverse spacing in feet
W = width of roadway to be closed in feet
L = taper length in feet
S = operating speed in MPH

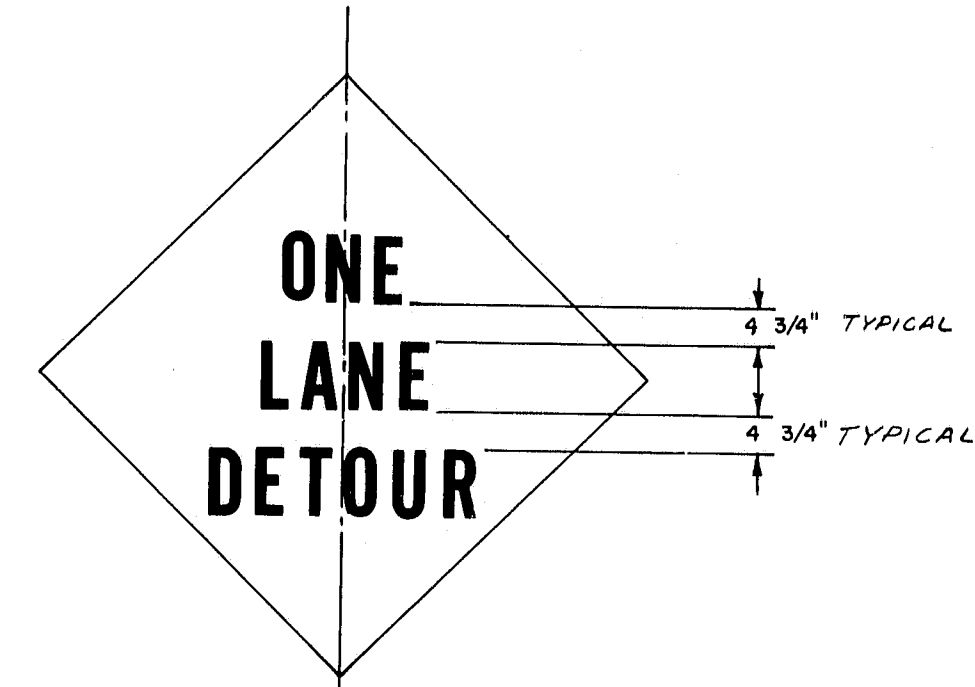
- BORDER DIMENSIONS AND LEGEND DESIGN SHALL CONFORM TO THE STANDARD HIGHWAY SIGNS BOOKLET.

ALL DIMENSIONS AND OTHER REQUIREMENTS AS
SPECIFIED IN THE SPECIAL PROVISIONS



ROADSIDE RECOVERY AREA

CONSTRUCTION WARNING SIGN DETAIL



- Letter size shall be 8" Series "D".
- Border dimensions and legend design shall conform to "Standard Highway Signs".

C

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	
CHECKED	
FIELD CHANGES	
PLANS	

R92-499

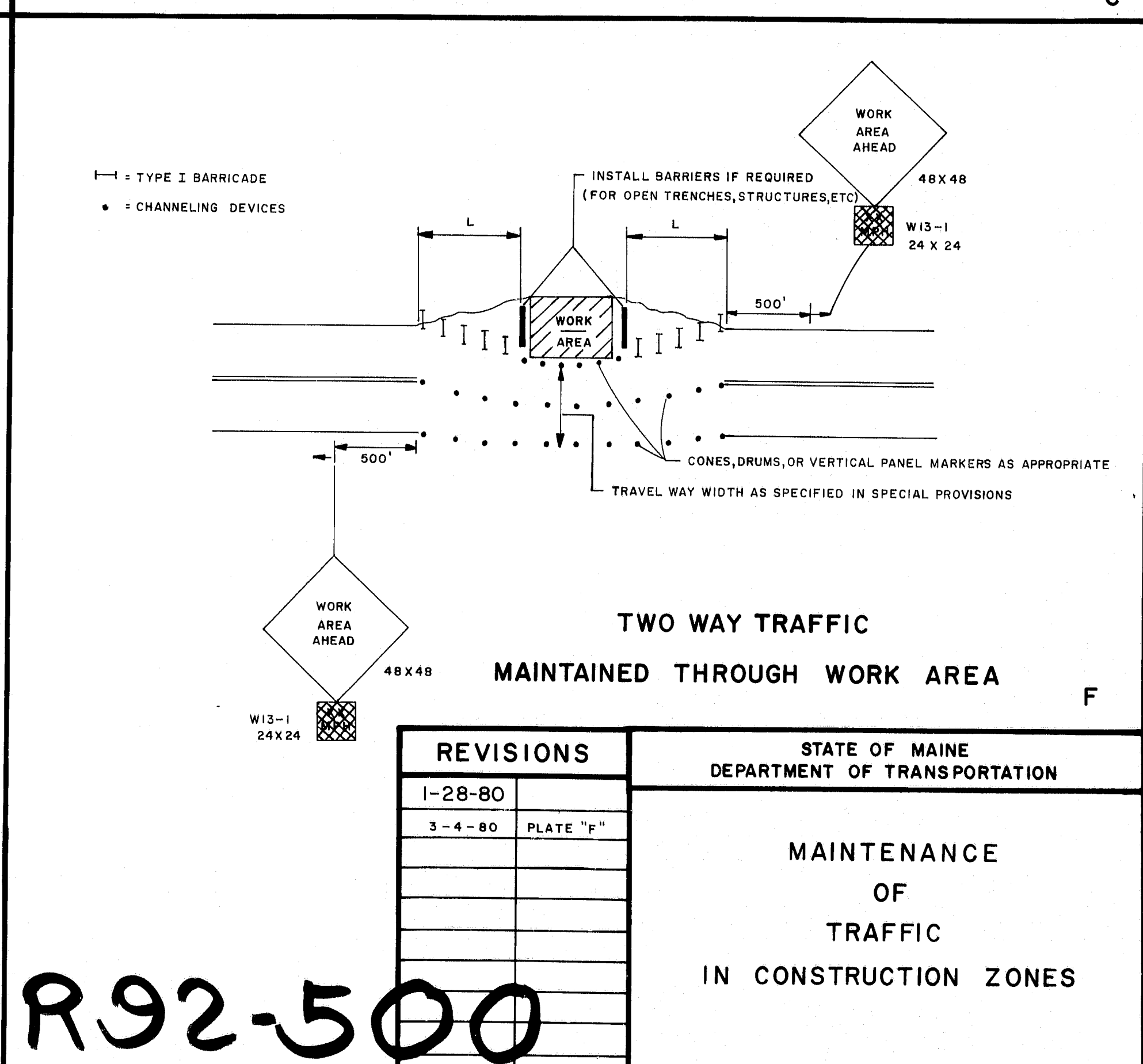
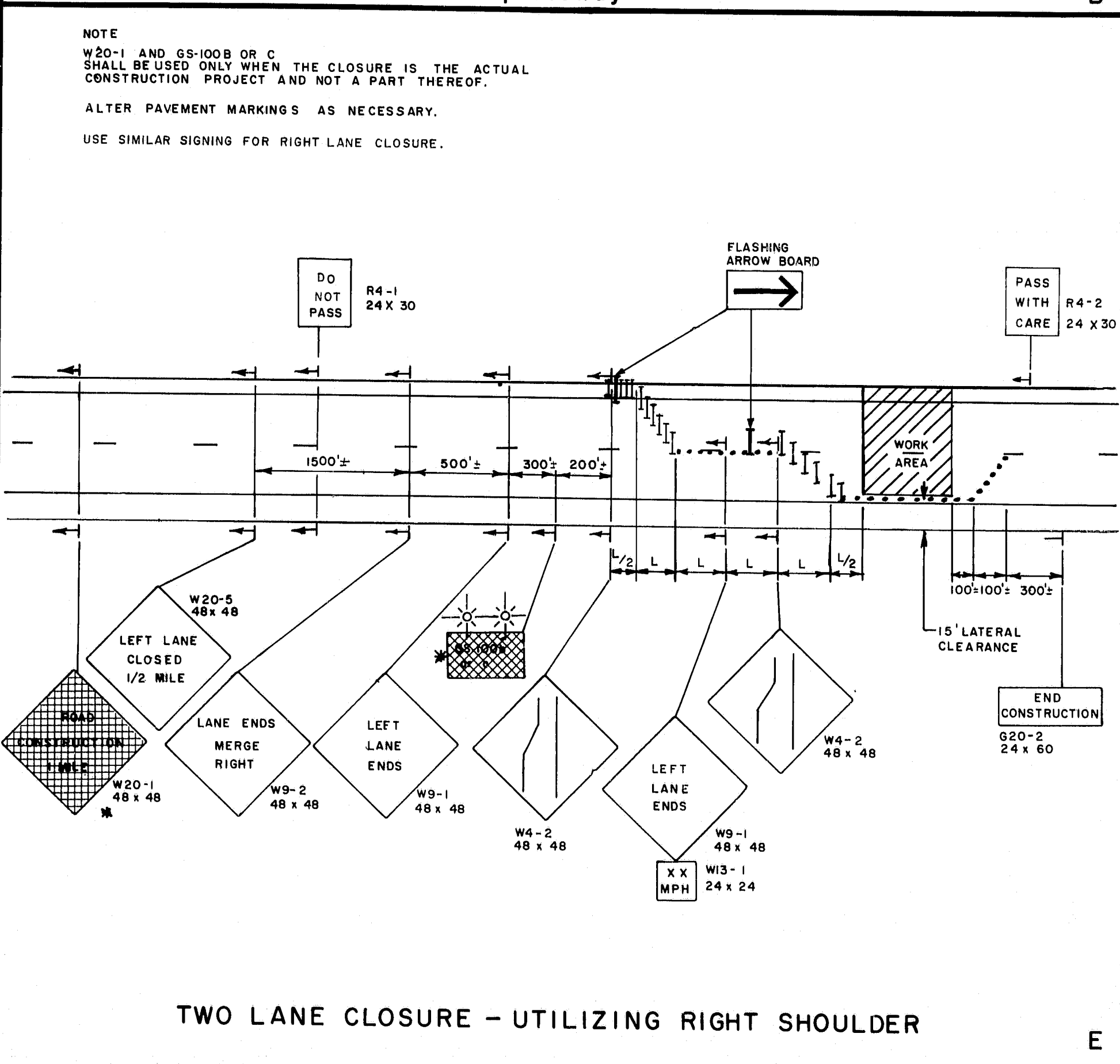
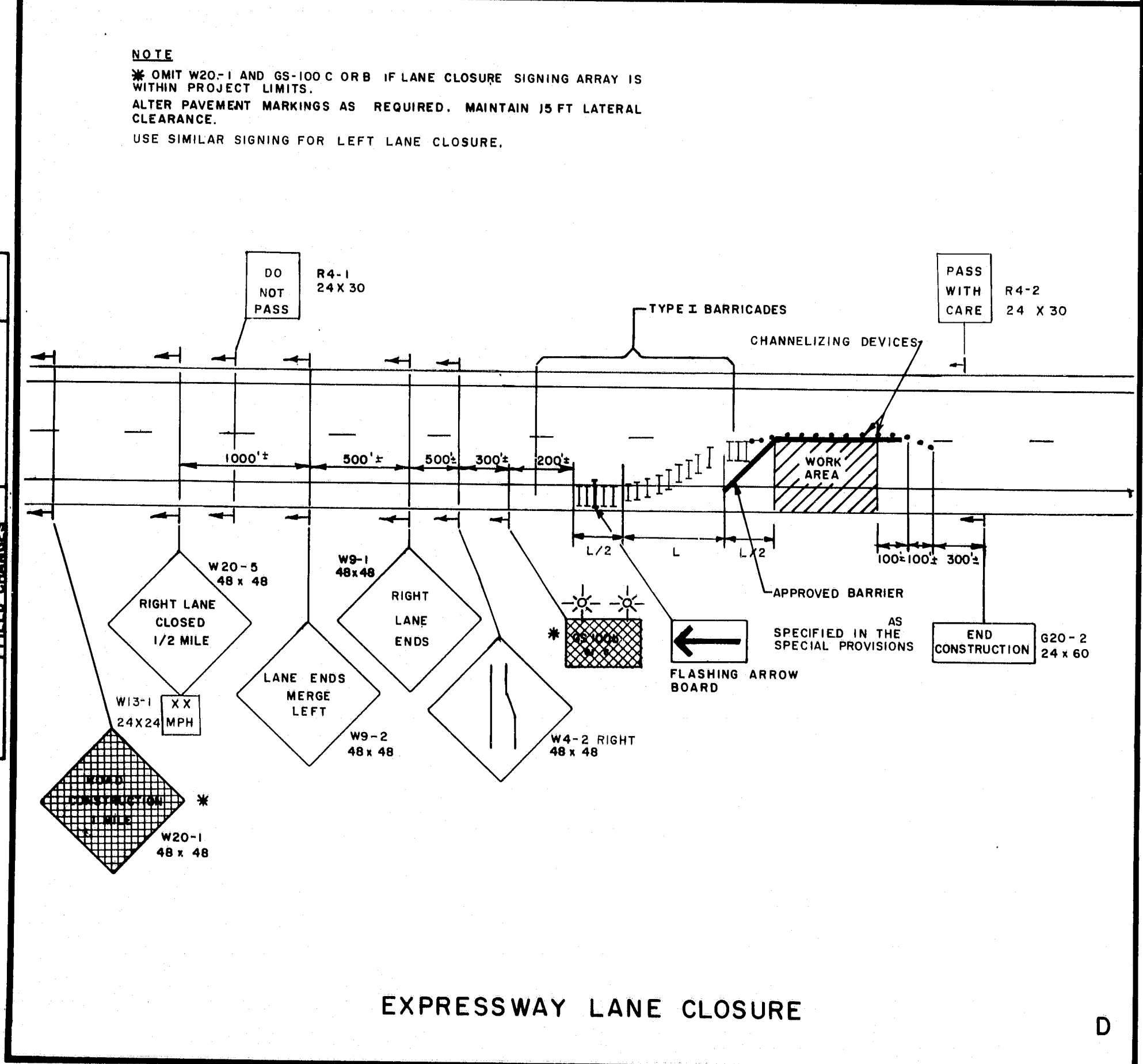
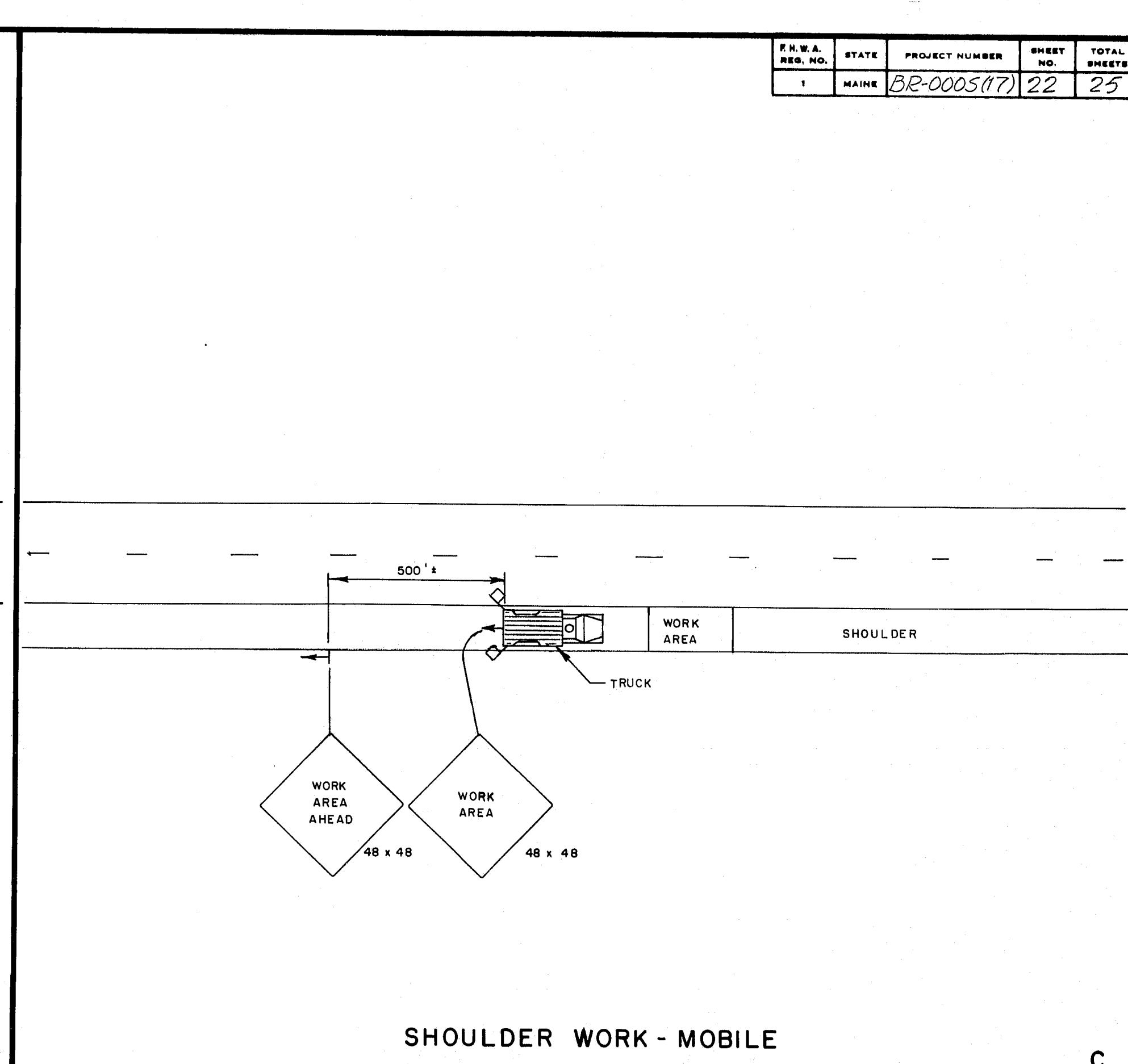
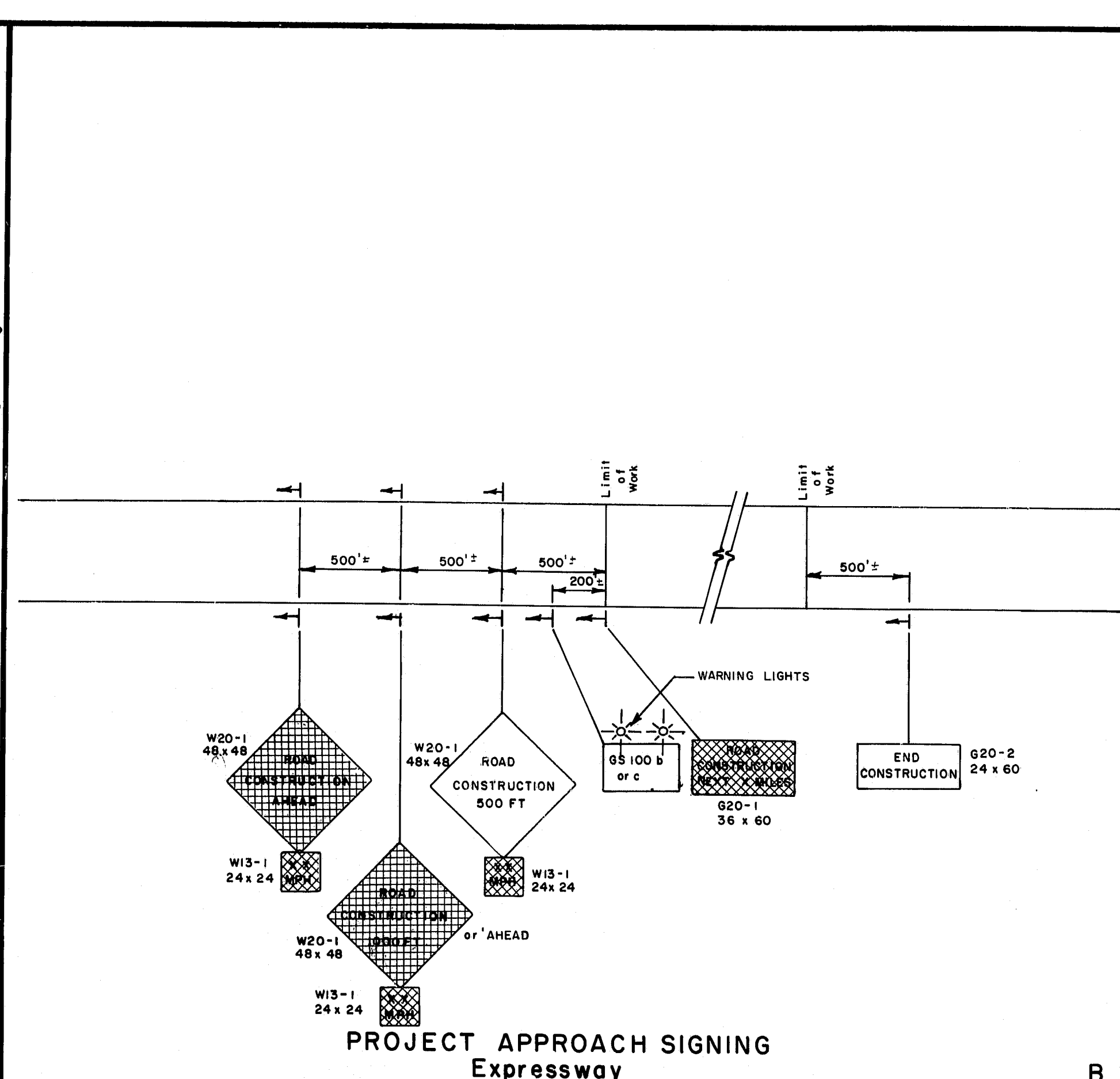
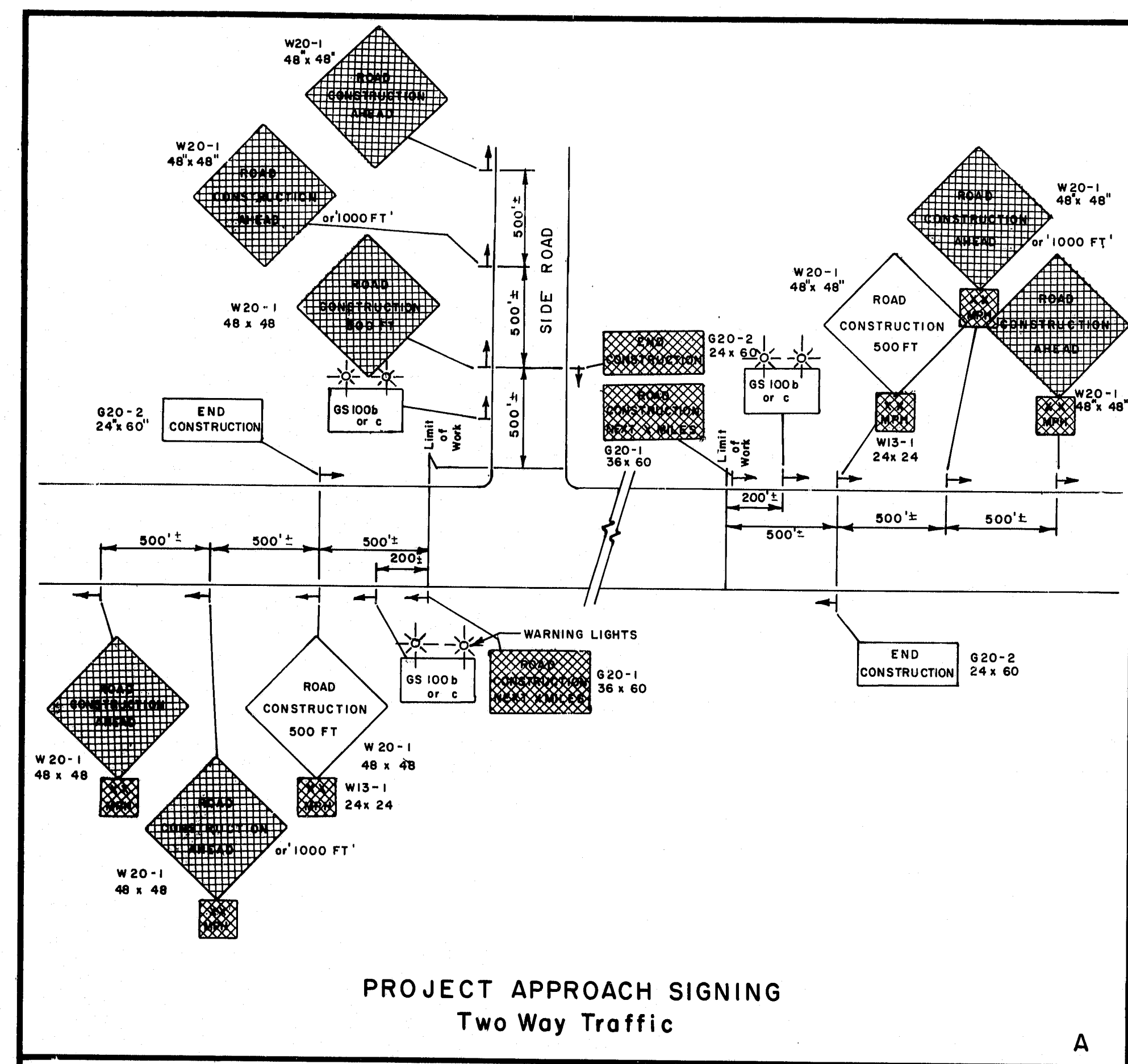
REVISIONS

NO.	DESCRIPTION
3-4-80	GENERAL NOTES

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(17)	22	25



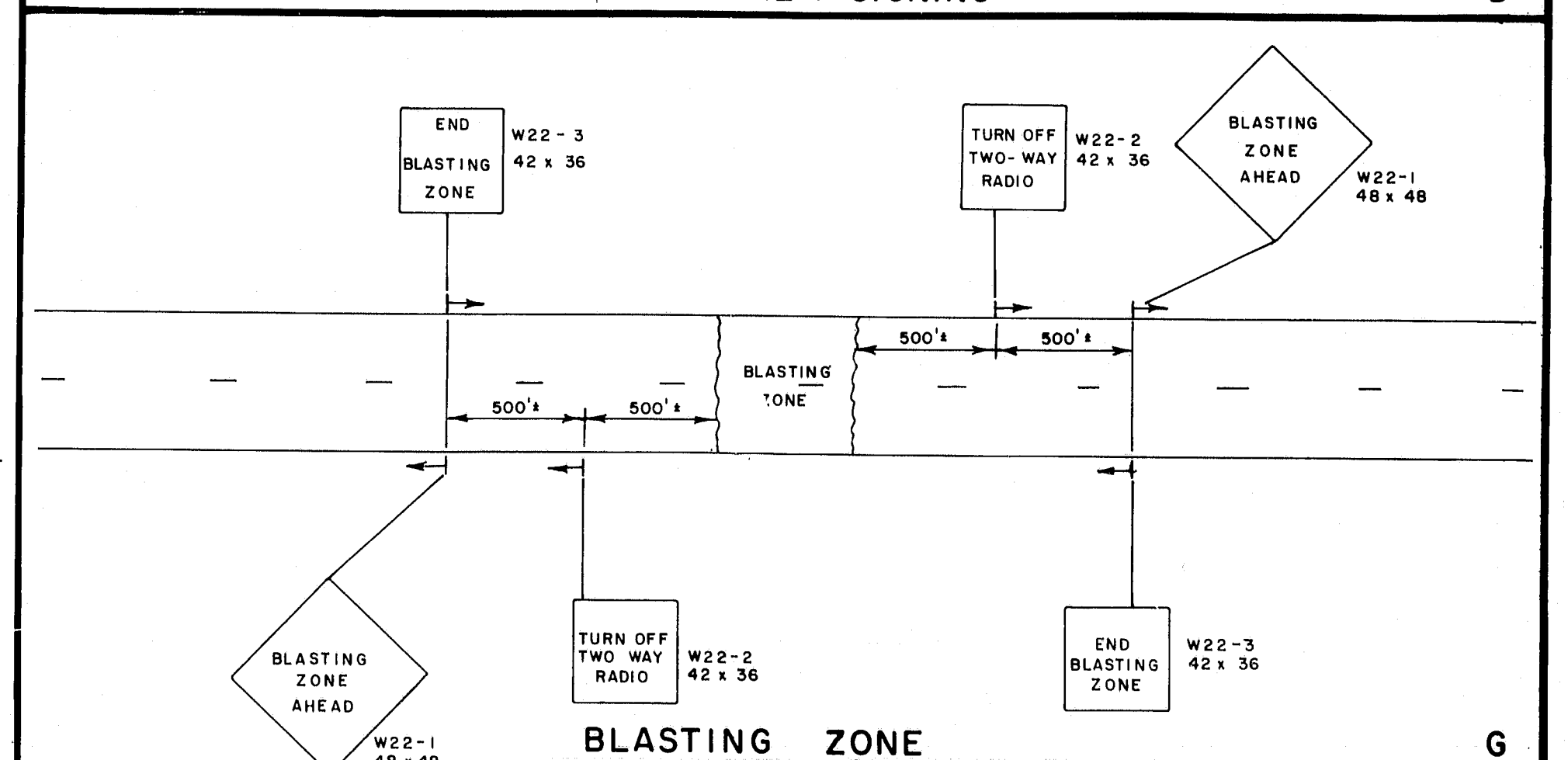
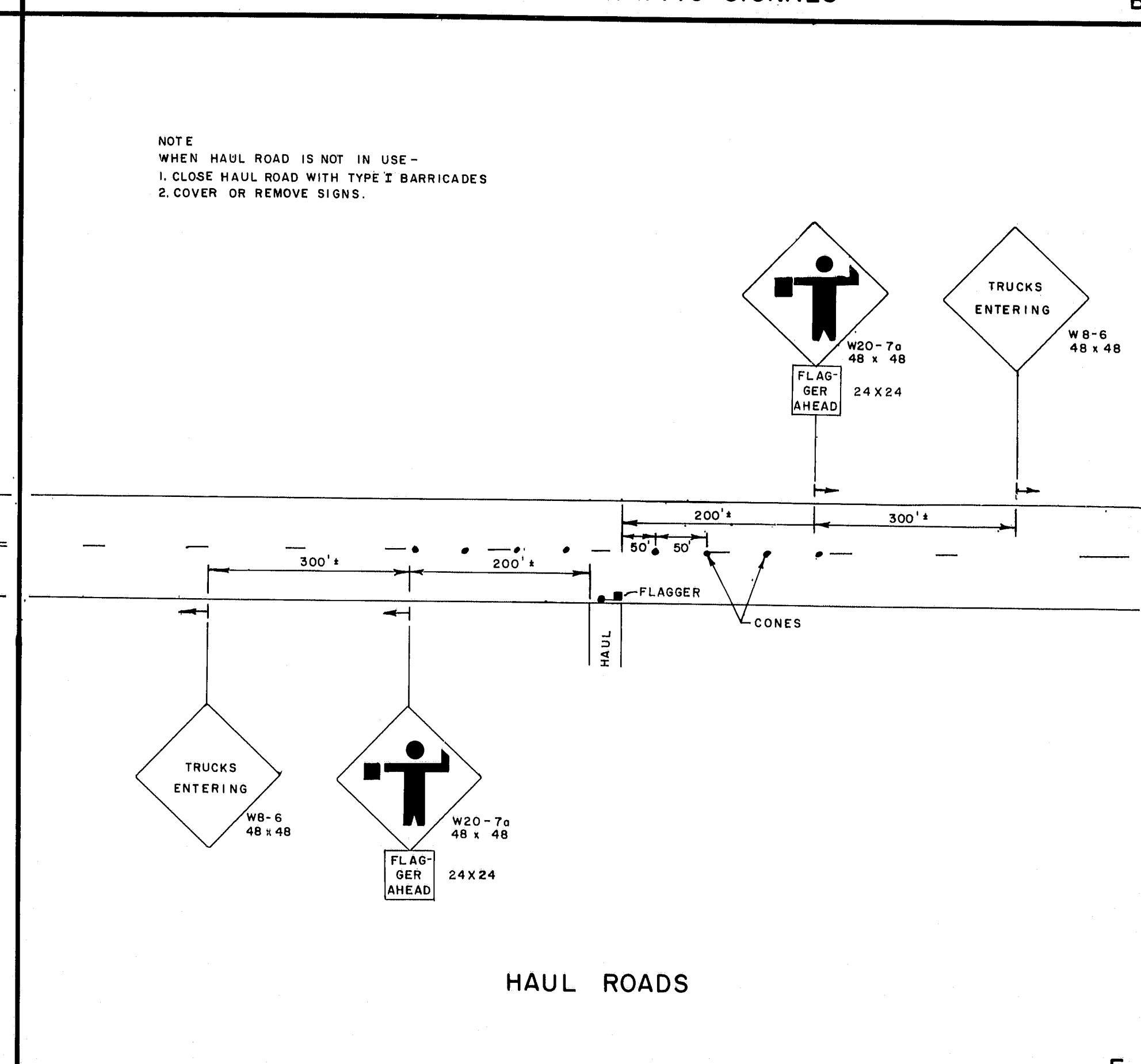
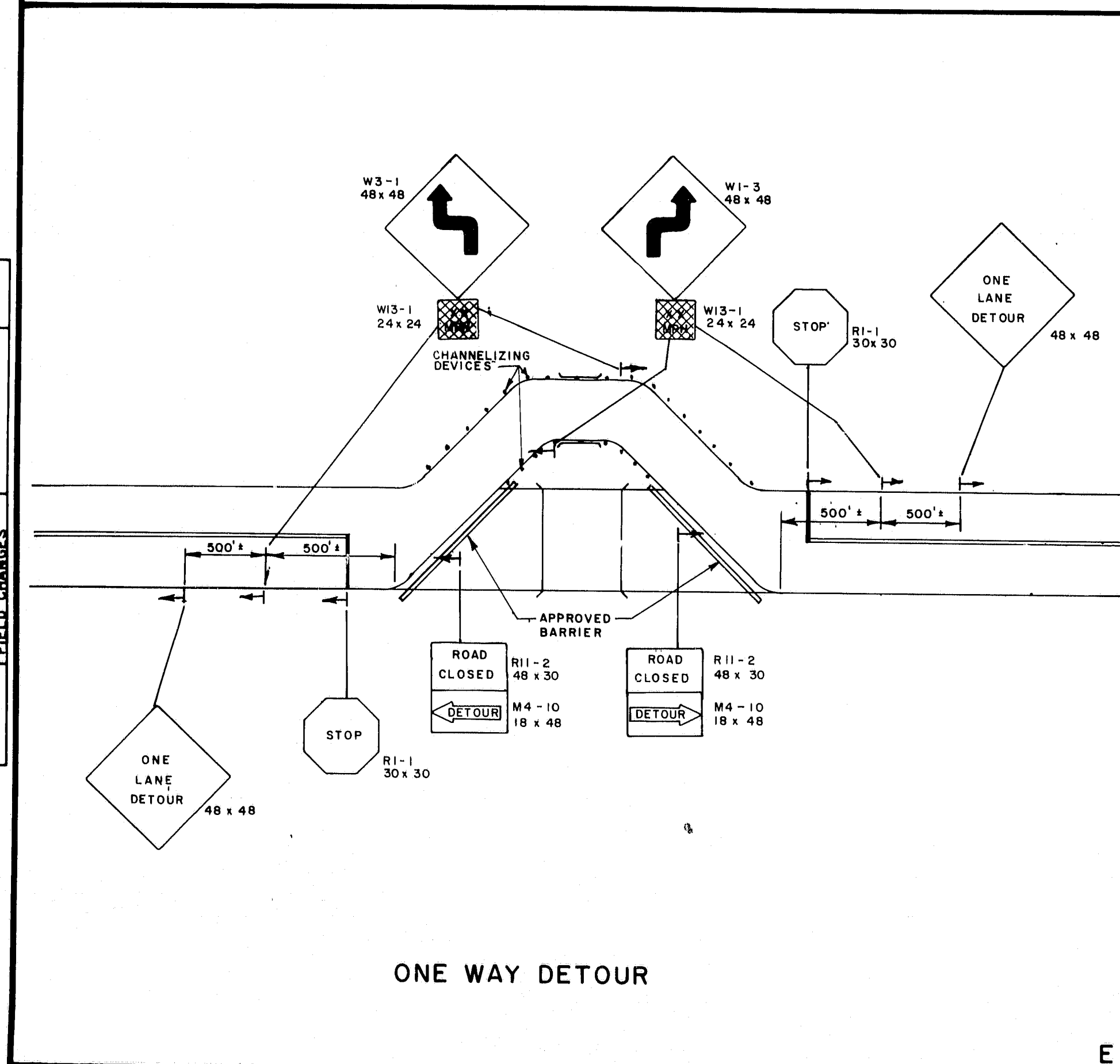
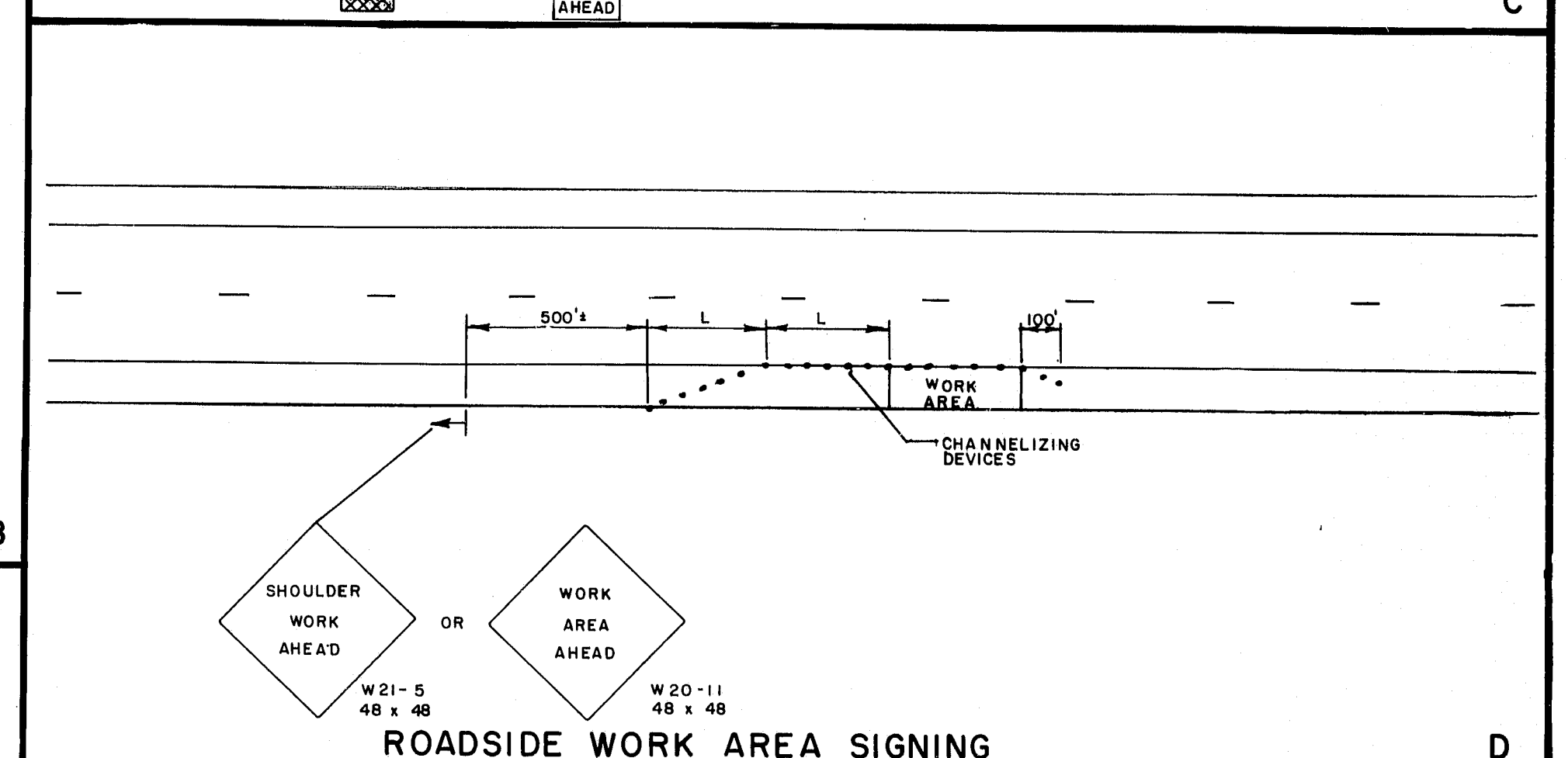
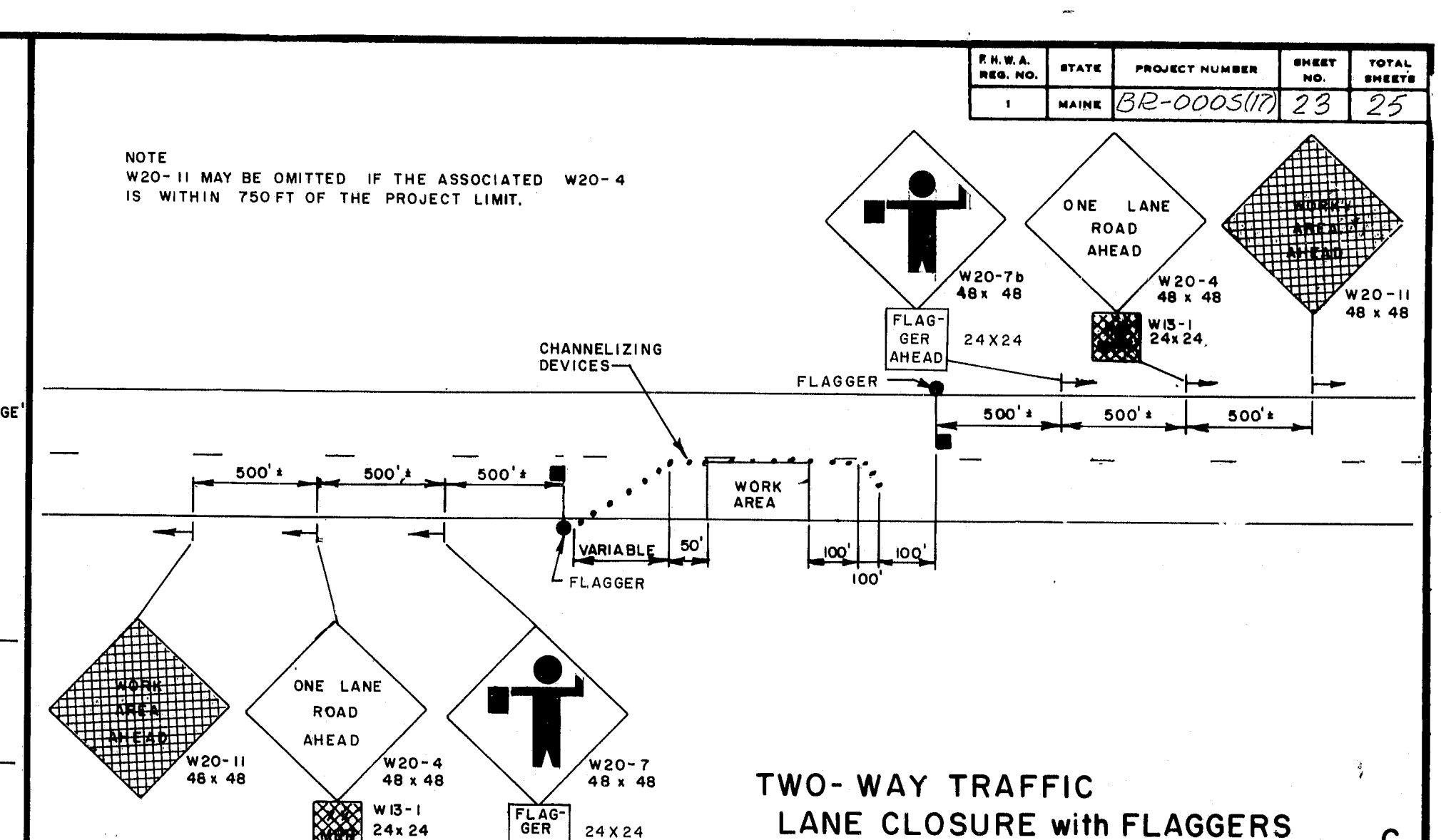
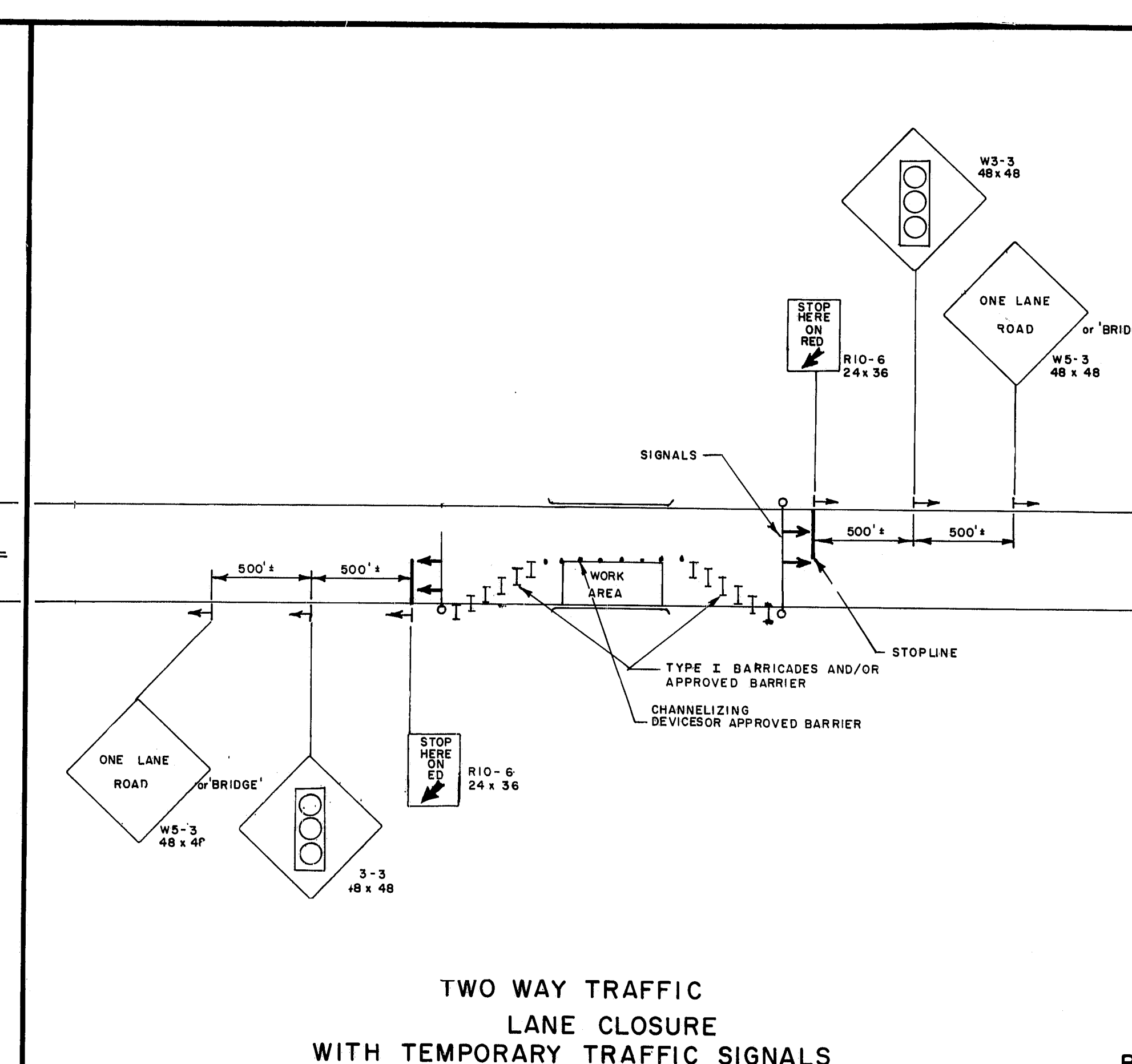
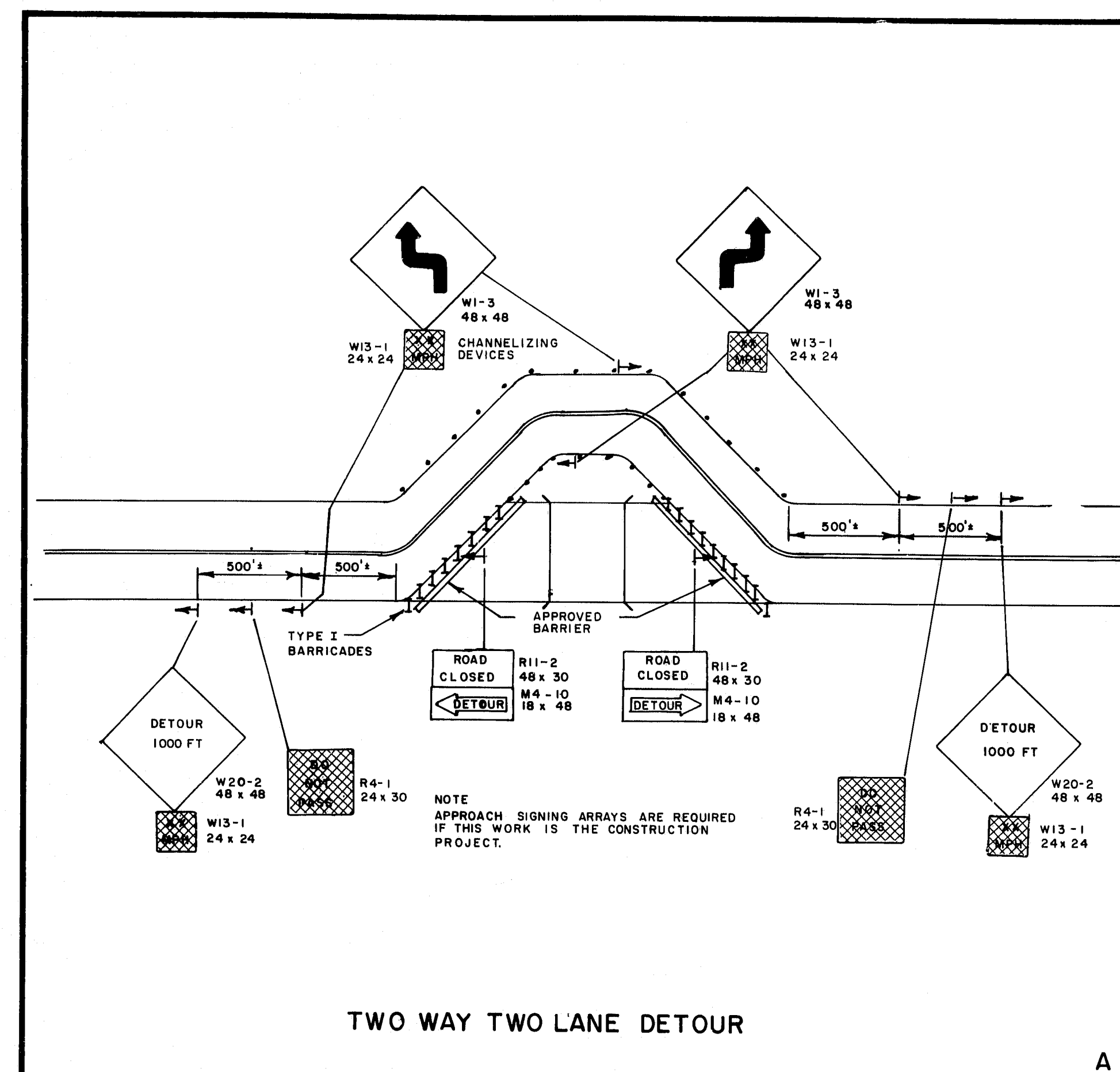
PROJECT DESIGN ENGINEER	DATE
BY	
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	
PLANS	

REVISIONS
1-28-80
3-4-80 PLATE "F"

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES
SHEET 22 OF 25 AUGUSTA, MAINE JULY, 1979

R92-500

3/80 Linscott Bridge, Sanford, York County



REVISIONS	

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

R92-501

SHEET 23 OF 25 AUGUSTA, MAINE JULY, 1979

3/80 Linscott Bridge, Sanford, York County

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED		
	CHECKED		
	REVISIONS		
	FIELD CHANGES		