

STATE OF MAINE
STATE HIGHWAY COMMISSION



DRUMMOND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY
IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY

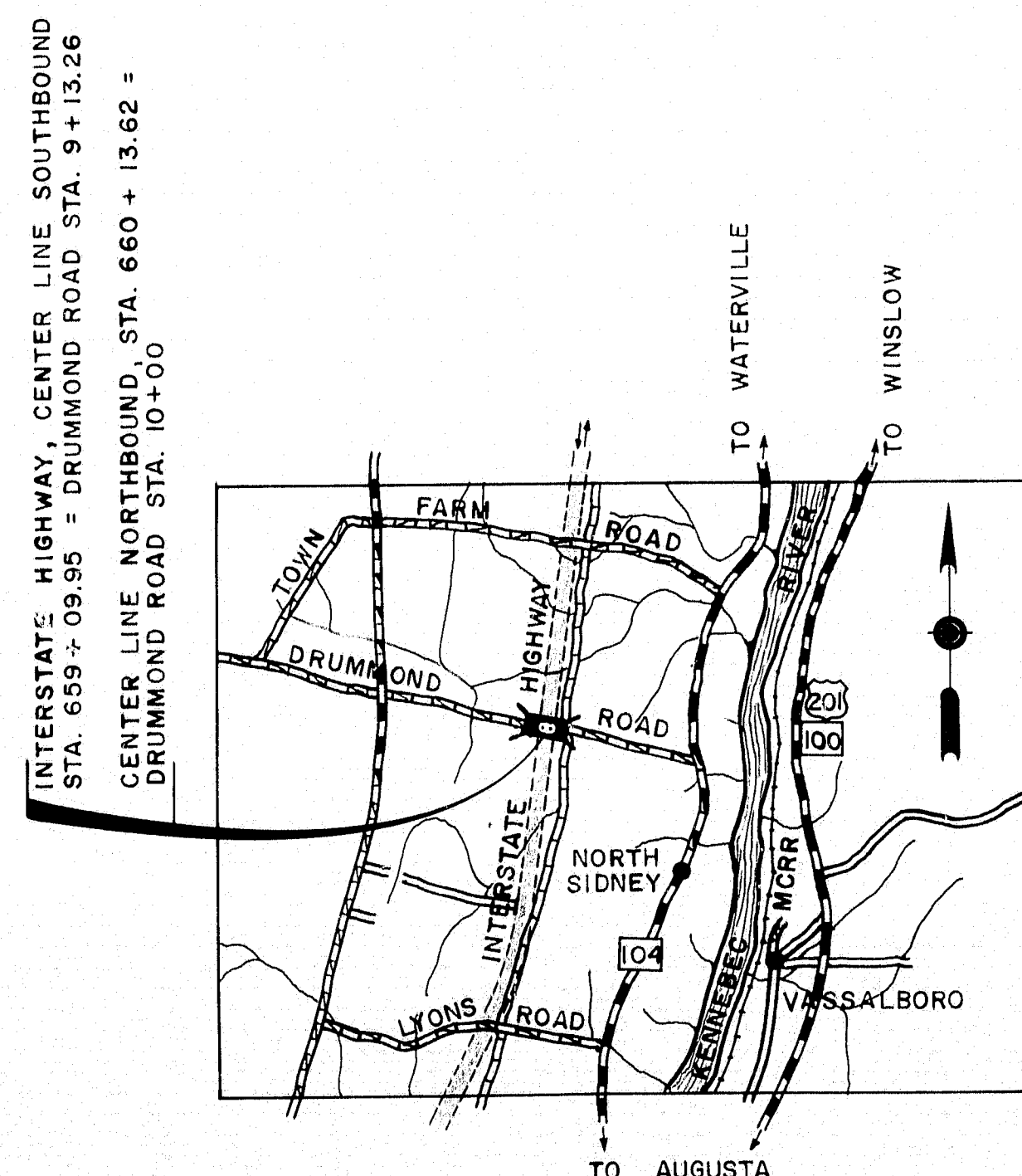
FEDERAL AID PROJECT NO. I-95-6(14)116

INDEX OF SHEETS

1	TITLE
2-3-4	SURVEY
5	FOUNDATION SURVEY
6	GENERAL PLAN & ELEVATION
7-8-9	CROSS SECTIONS
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15	BLOCKING DIAGRAM, DRAINS & PEDESTALS
16	SUPERSTRUCTURE
17	REINFORCING STEEL & RAIL
18	STANDARD DETAILS

TRAFFIC

A. D. T.	1960	= 50
A. D. T.	1980	= 70
D. H. V.		= 10
T		= 10 %
D		= 60 %
V		= 35 mph.



LOCATION MAP
SCALE - 1 INCH = 1 MILE

APPROVED:
MAINE STATE HIGHWAY COMMISSION

David H. Huns
CHAIRMAN

Robert A. Huns

R. Leon Williams

Raymond J. Gault
CHIEF ENGINEER

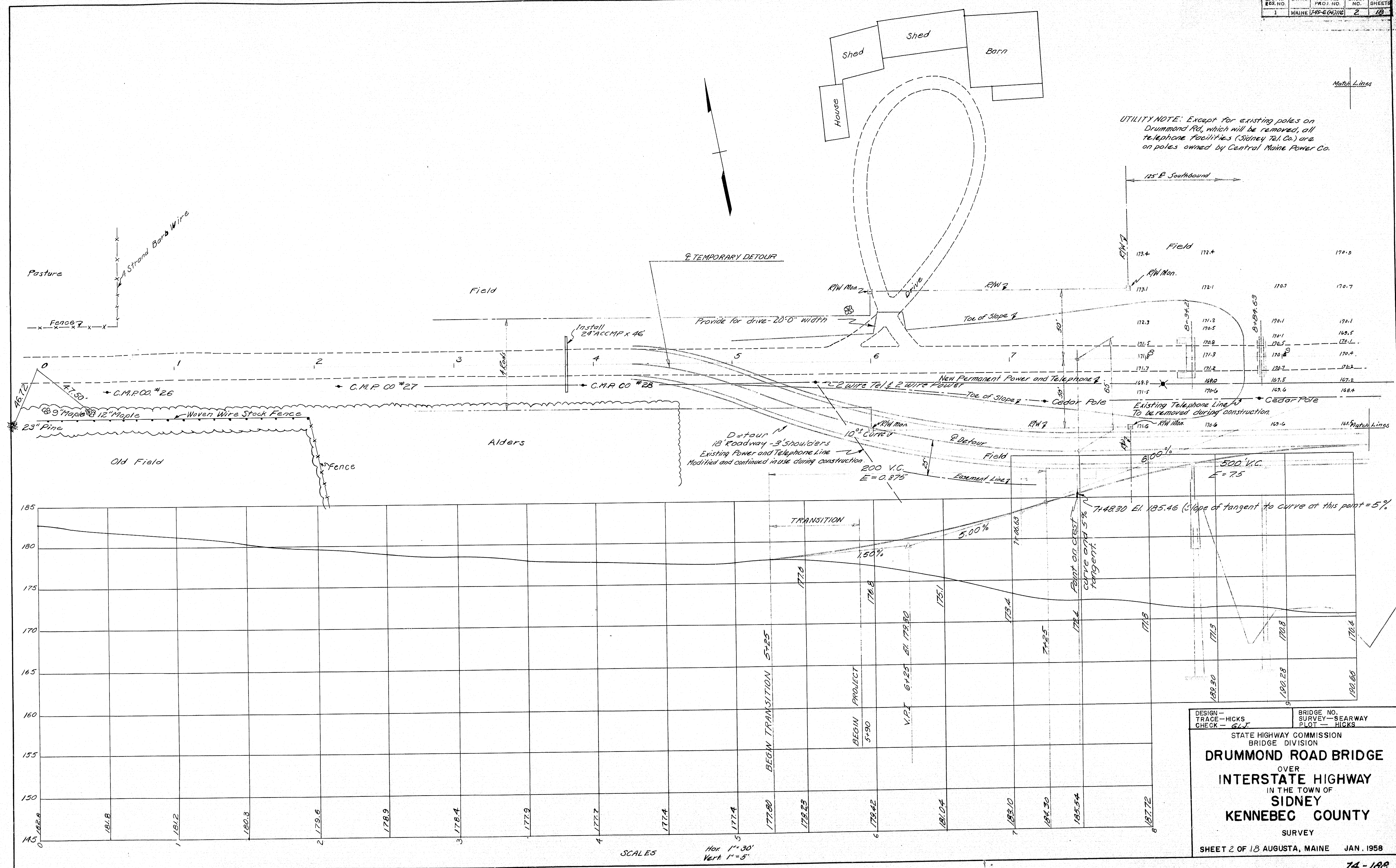
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION I

APPROVED:

DIVISION ENGINEER DATE

Match Lines

UTILITY NOTE: Except for existing poles on Drummond Rd, which will be removed, all telephone facilities (Sidney Tel. Co.) are on poles owned by Central Maine Power Co.



DESIGN - HICKS
TRACE - HICKS
CHECK - GAT

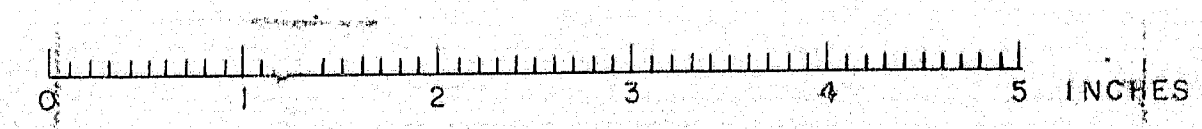
BRIDGE NO. 647
SURVEY - SEARWAY
PLOT - HICKS

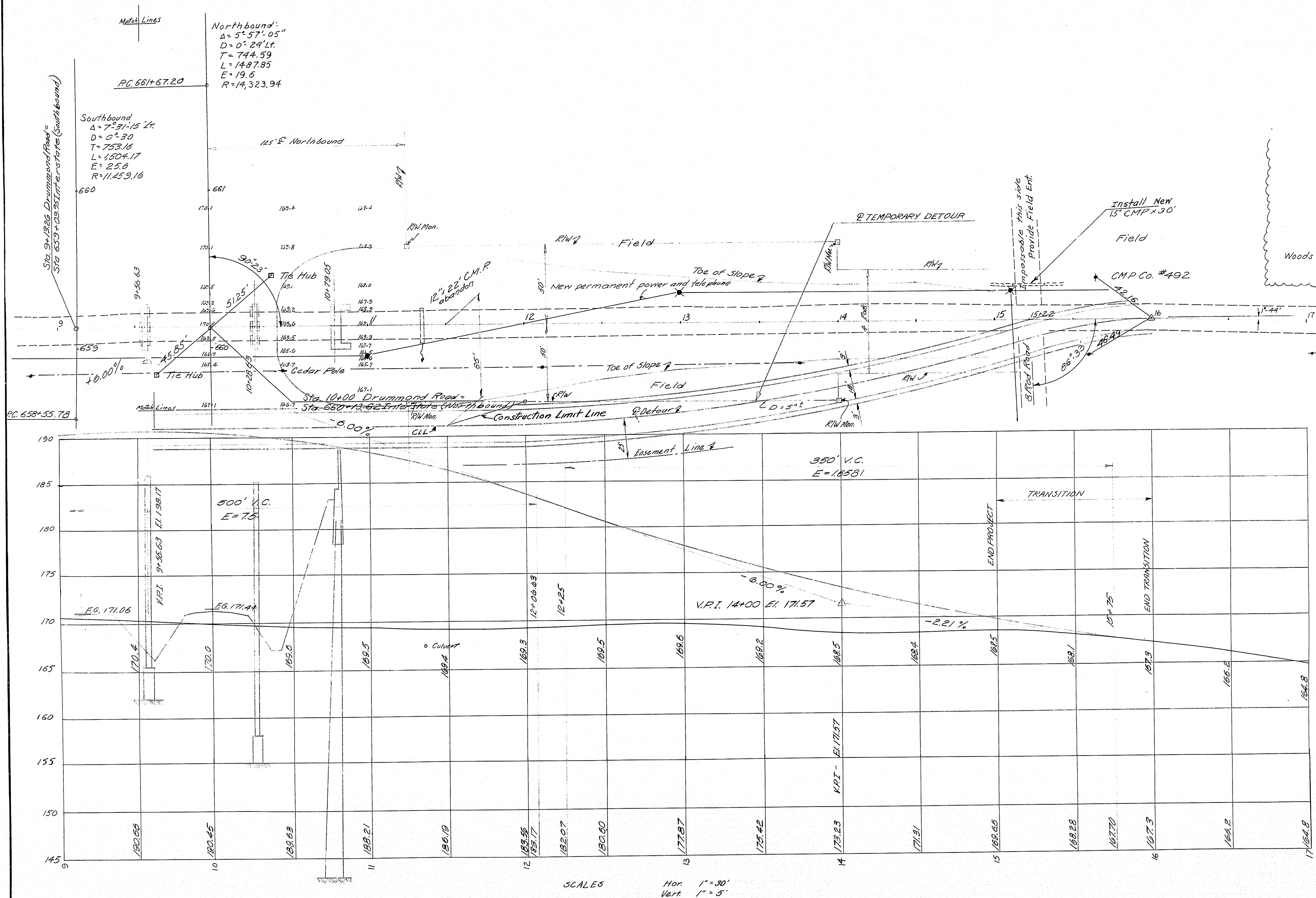
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

DRUMMOND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY
IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY
SURVEY

SHEET 2 OF 18 AUGUSTA, MAINE JAN. 1958

SCALES
Hor. 1" = 30'
Vert. 1" = 5'





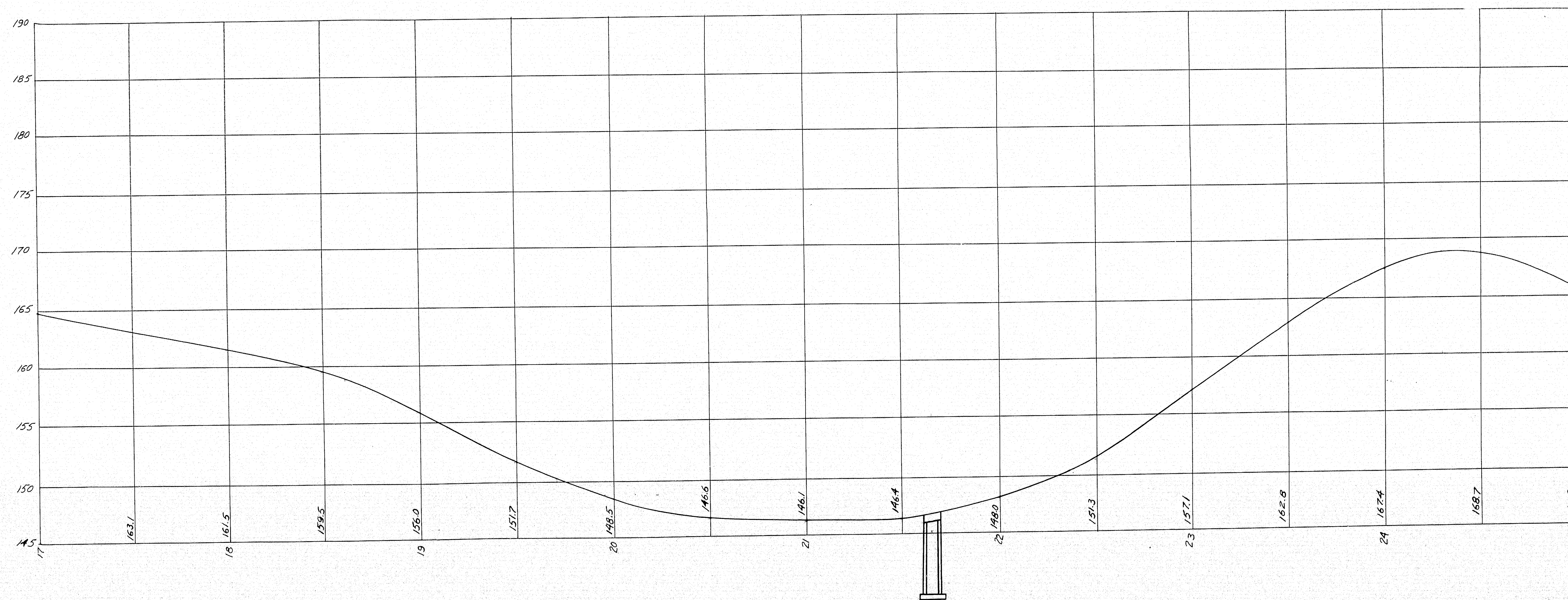
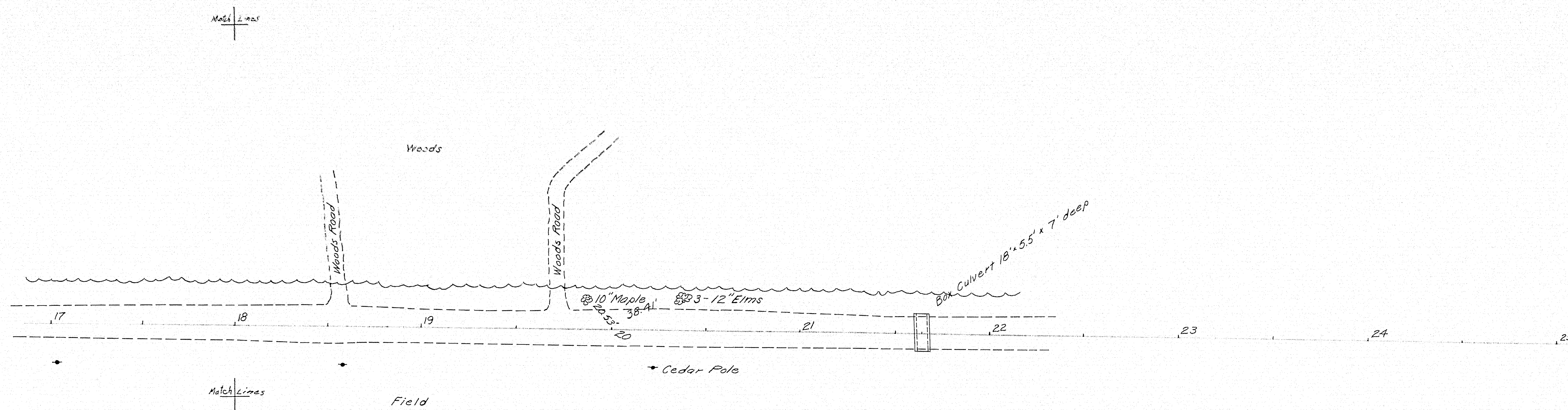
DESIGN - HICKS
 CHECK - HICKS

BRIDGE NO. SEARWAY
 PLOT - HICKS

STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
DRUMMOND ROAD BRIDGE
 OVER
INTERSTATE HIGHWAY
 IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY
 SURVEY

SHEET 3 OF 18 AUGUSTA, MAINE JAN. 1958

D.P.R. REG. NO.	STATE	PROJECT NO.	SHEET TOTAL NO. SHEETS
1	MAINE	1-95-6(4)116	4 / 18



DESIGN - HICKS
TRACE - HICKS
CHECK -

BRIDGE NO. 1
SURVEY - HICKS

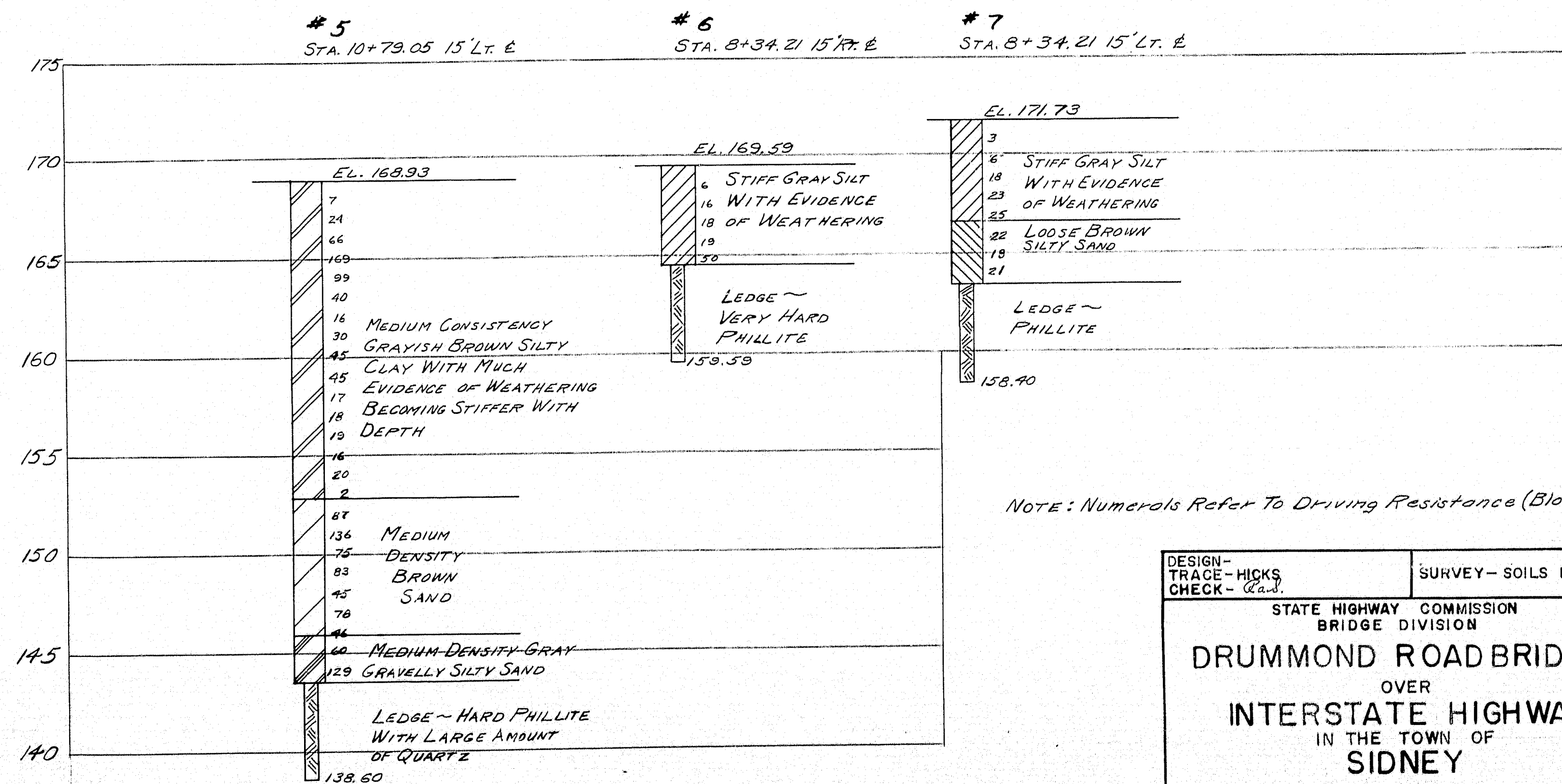
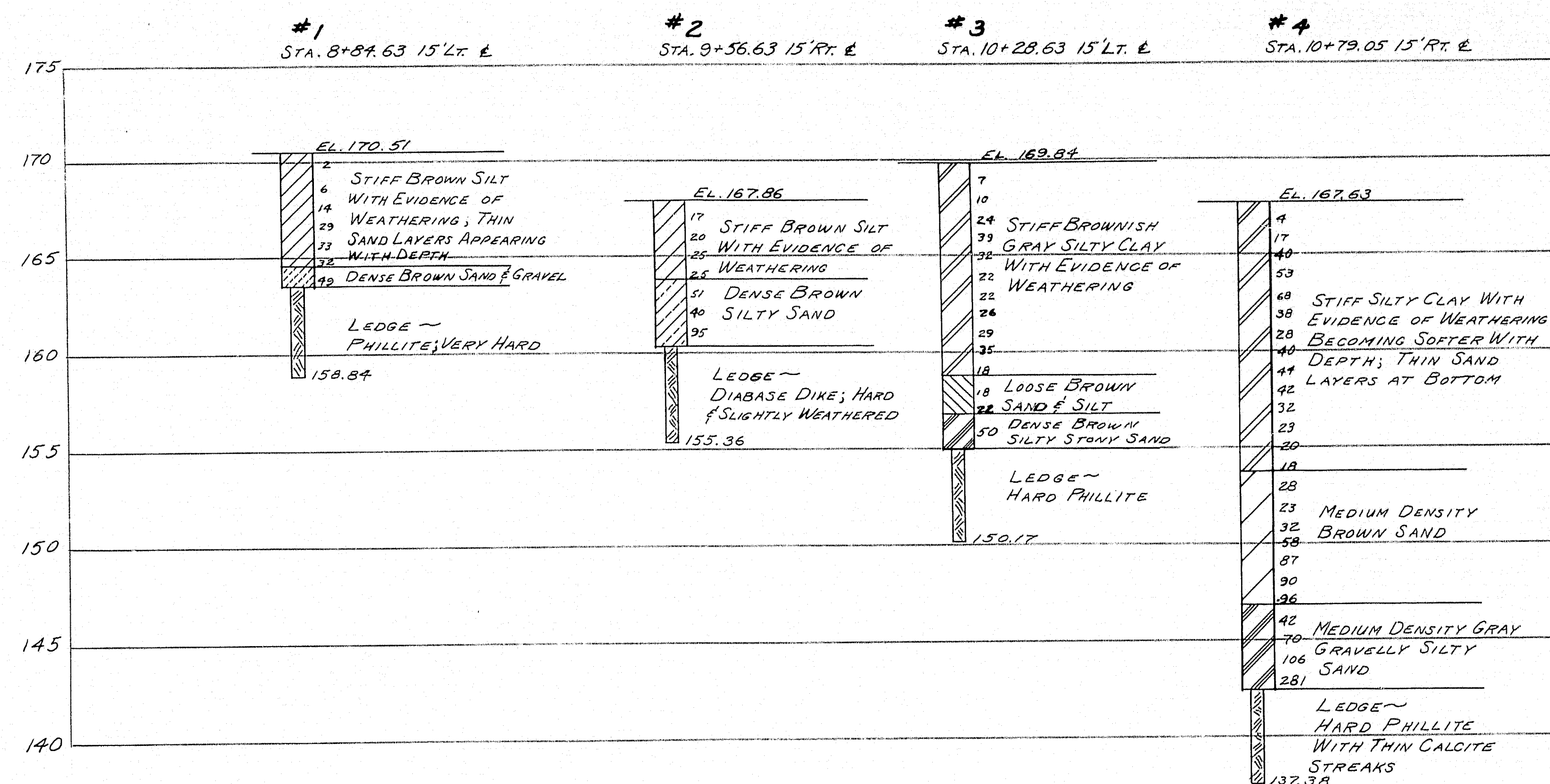
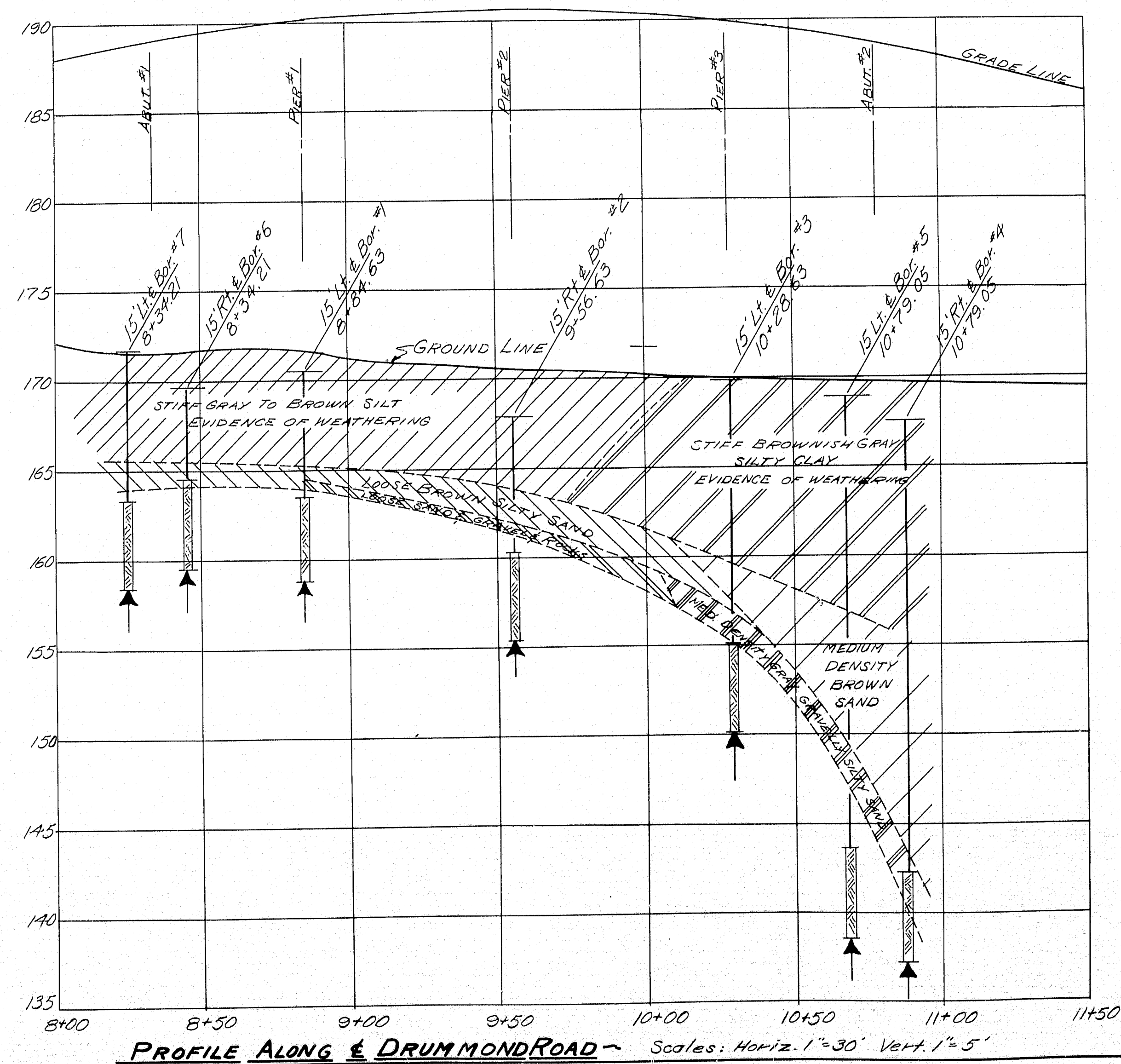
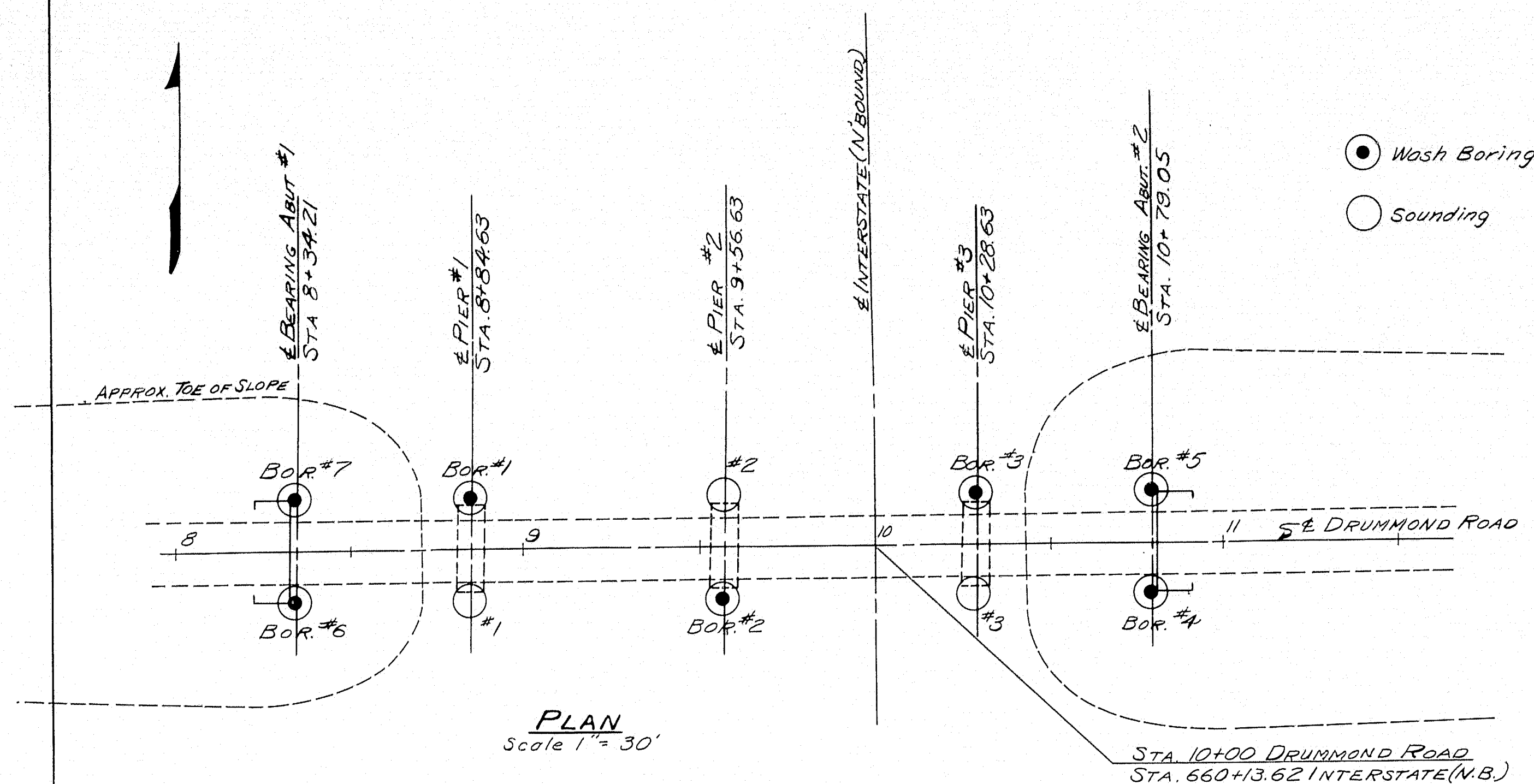
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

DRUMMOND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY
IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY
SURVEY

SHEET 4 OF 18 AUGUSTA, MAINE JAN. 1958

74-190

0 1 2 3 4 5 INCHES



NOTE: Numerals Refer To Driving Resistance (Blows/Ft.)

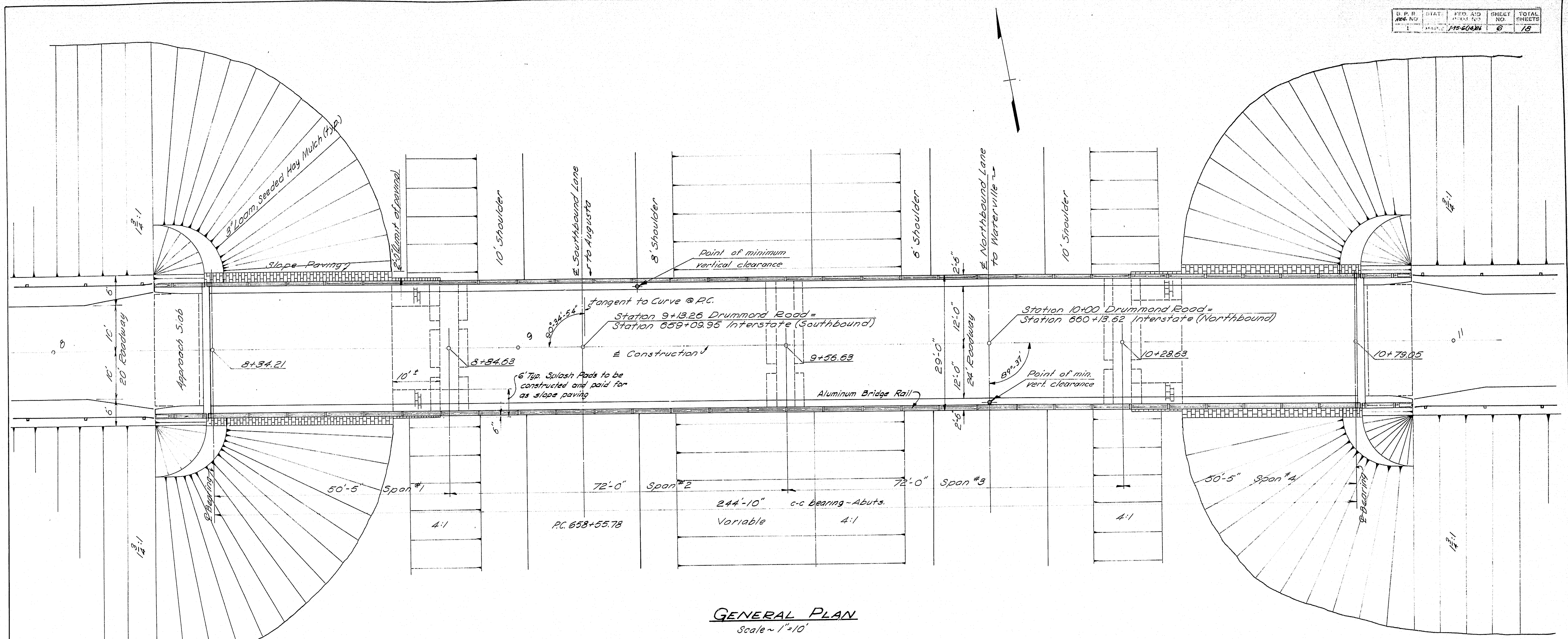
DESIGN - HICKS
TRACE - G.A.
CHECK - G.A.

SURVEY - SOILS LAB

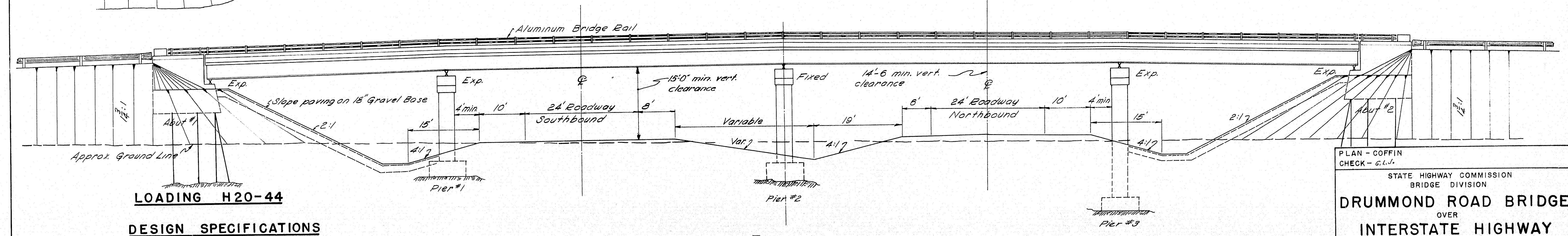
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

DRUMMOND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY
IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY
FOUNDATION SURVEY

SHEET 5 OF 18 AUGUSTA, MAINE APRIL 1958



GENERAL PLAN
Scale ~ 1"=10'



ELEVATION
Scale ~ 1"=10'

LOADING H20-44

DESIGN SPECIFICATIONS

A.A.S.H.O. STANDARD SPECIFICATIONS FOR
HIGHWAY BRIDGES 1953.

CONTRACT SPECIFICATIONS

STATE OF MAINE, STATE HIGHWAY COMMISSION
STANDARD SPECIFICATIONS, REVISION OF JAN. 1956.

Notes: Payment for excavation for toe of Slope Paving to be made under Item 204-14, Structural Earth Excavation-Piers. The 18" Gravel Base under Slope Paving may be reduced or omitted if in the opinion of the Engineer the fill is suitable.

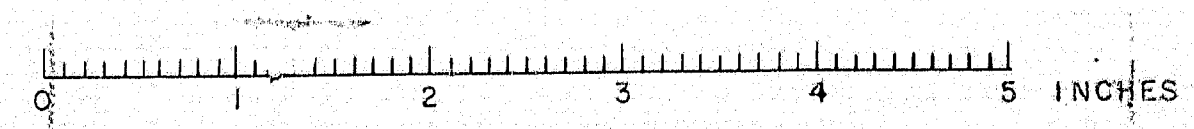
CONCRETE CLASSIFICATION

PIERS, SUPERSTRUCTURE & APPROACH SLABS.....CLASS A
ABUTMENTS (EXCEPT AS NOTED).....CLASS B

PLAN - COFFIN
CHECK - G.W.

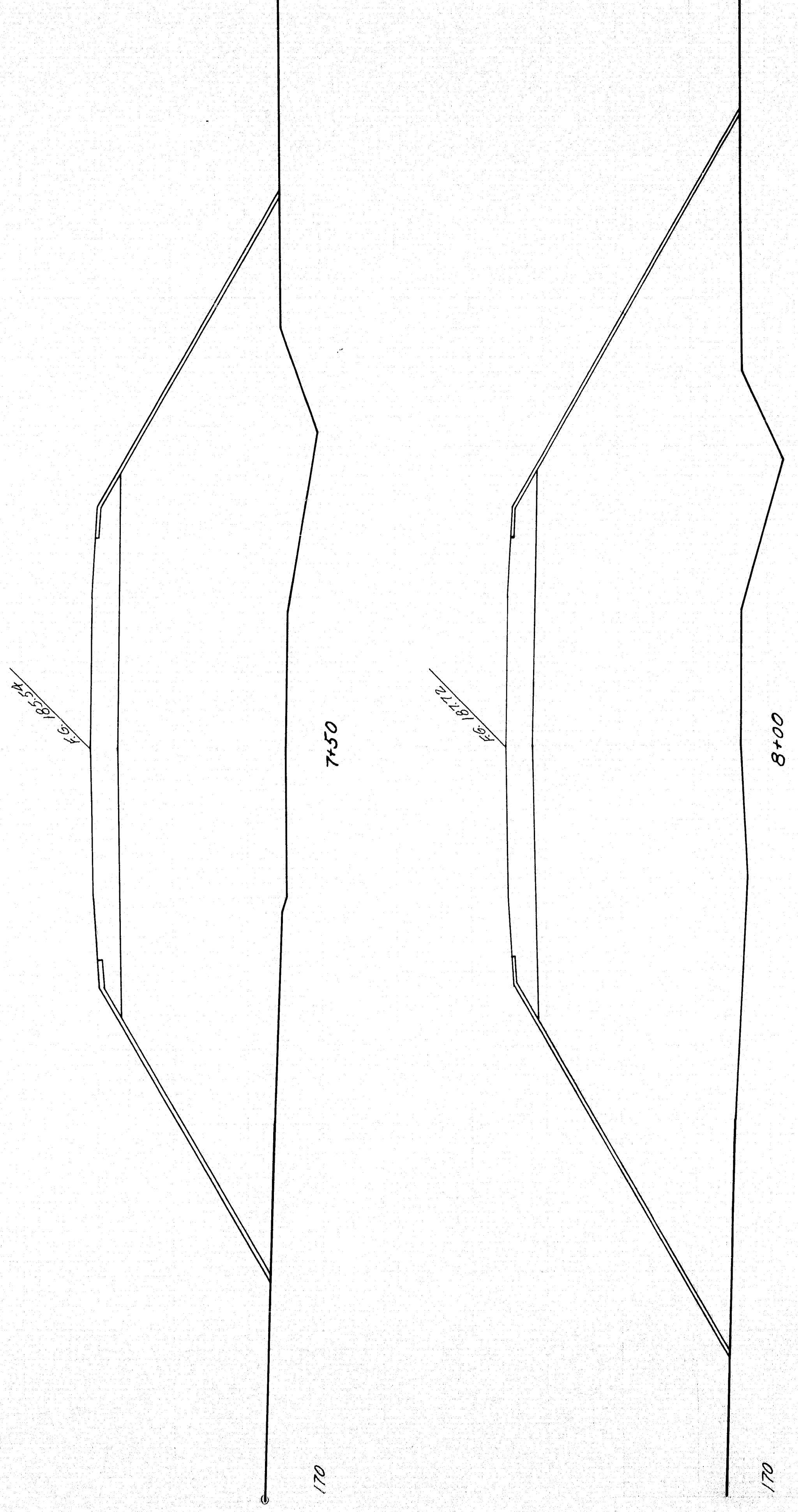
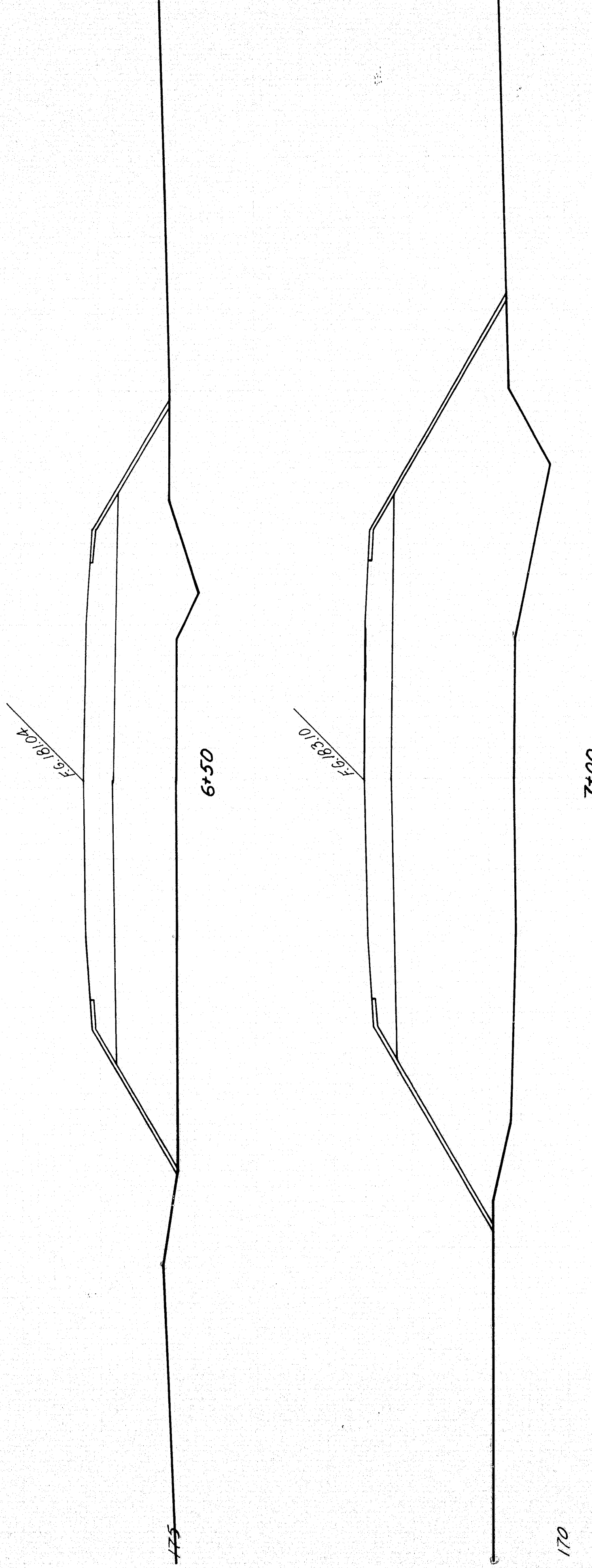
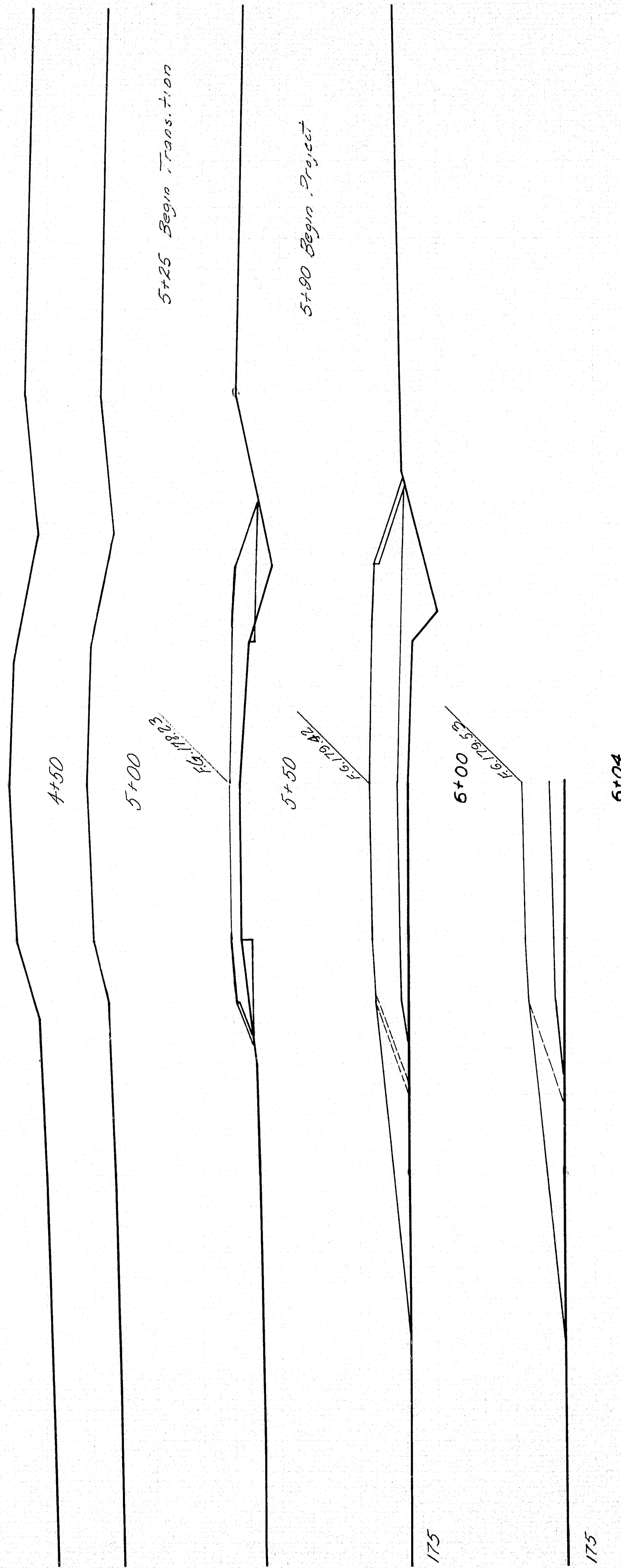
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
DRUMMOND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY
IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION
SHEET 6 OF 18 AUGUSTA, MAINE APR. 1958



B. P. R. SHEET NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	2-55-6 (142) 116	7	18

Construction Survey



Construction Survey

Bridge

DESIGN - TRACE - HICKS CHECK - G.L.V.	BRIDGE NO. SURVEY - PLOT - COFFIN
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE OVER INTERSTATE HIGHWAY IN THE TOWN OF SIDNEY KENNEBEC COUNTY CROSS SECTIONS	
SHEET 7 OF 18 AUGUSTA, MAINE April 1958	

74-193

0 1 2 3 4 5 INCHES

R. P. R.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	J-95-6 (14) 116	8	18

Bridge
± Construction, ± Survey

F. & 188.82

170

11+00

F. & 186.13

170

11+50

F. & 183.56

165

12+00

F. & 180.80

165

12+50

F. & 177.82

165

13+00

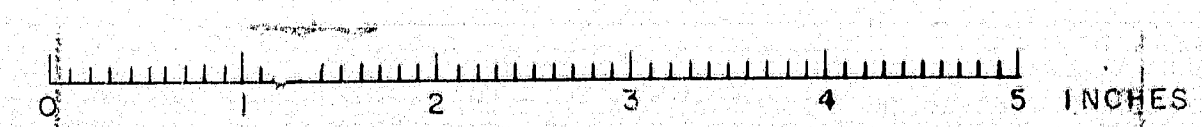
F. & 175.46

165

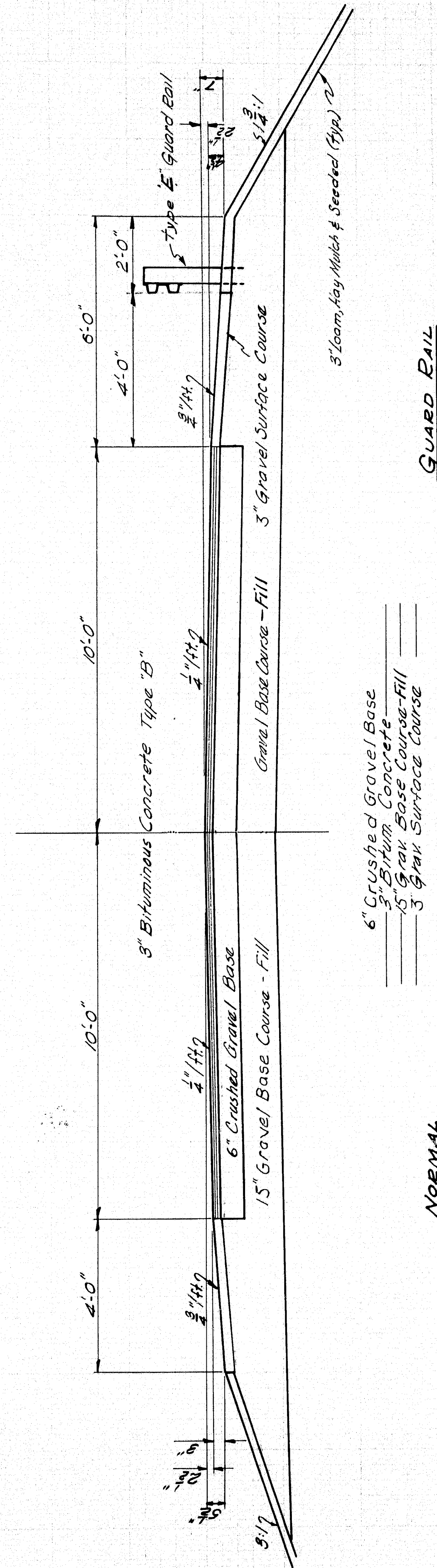
13+50

DESIGN- TRACE-HICKS CHECK-GLJ	BRIDGE NO. SURVEY - PLOT - COFFIN
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE OVER INTERSTATE HIGHWAY IN THE TOWN OF SIDNEY KENNEBEC COUNTY	
CROSS SECTIONS	
SHEET 8 OF 18 AUGUSTA, MAINE April 1958	

74-194

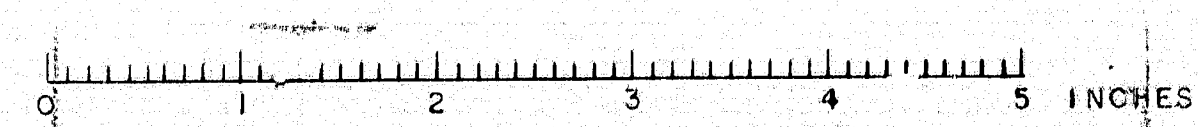


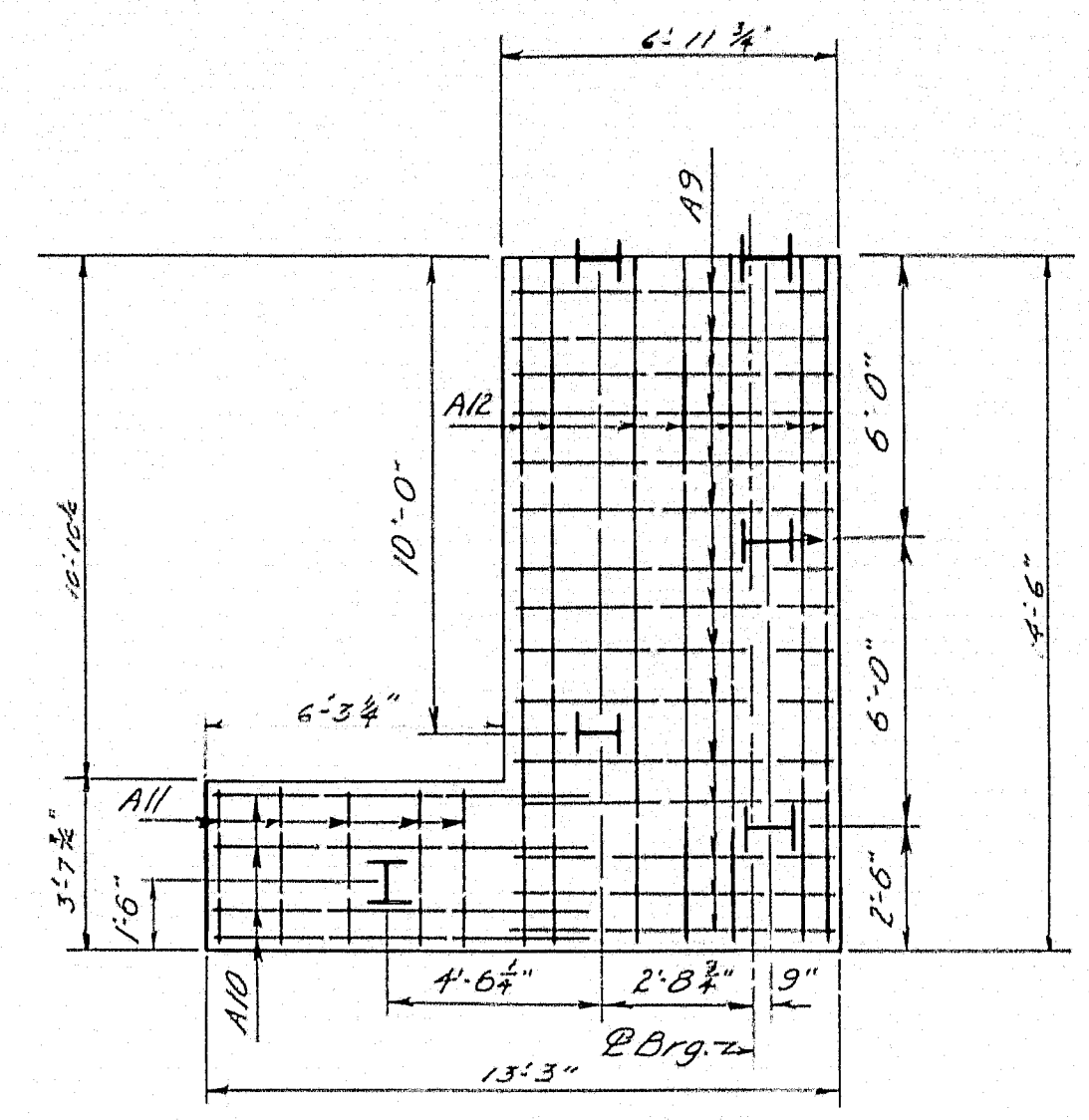
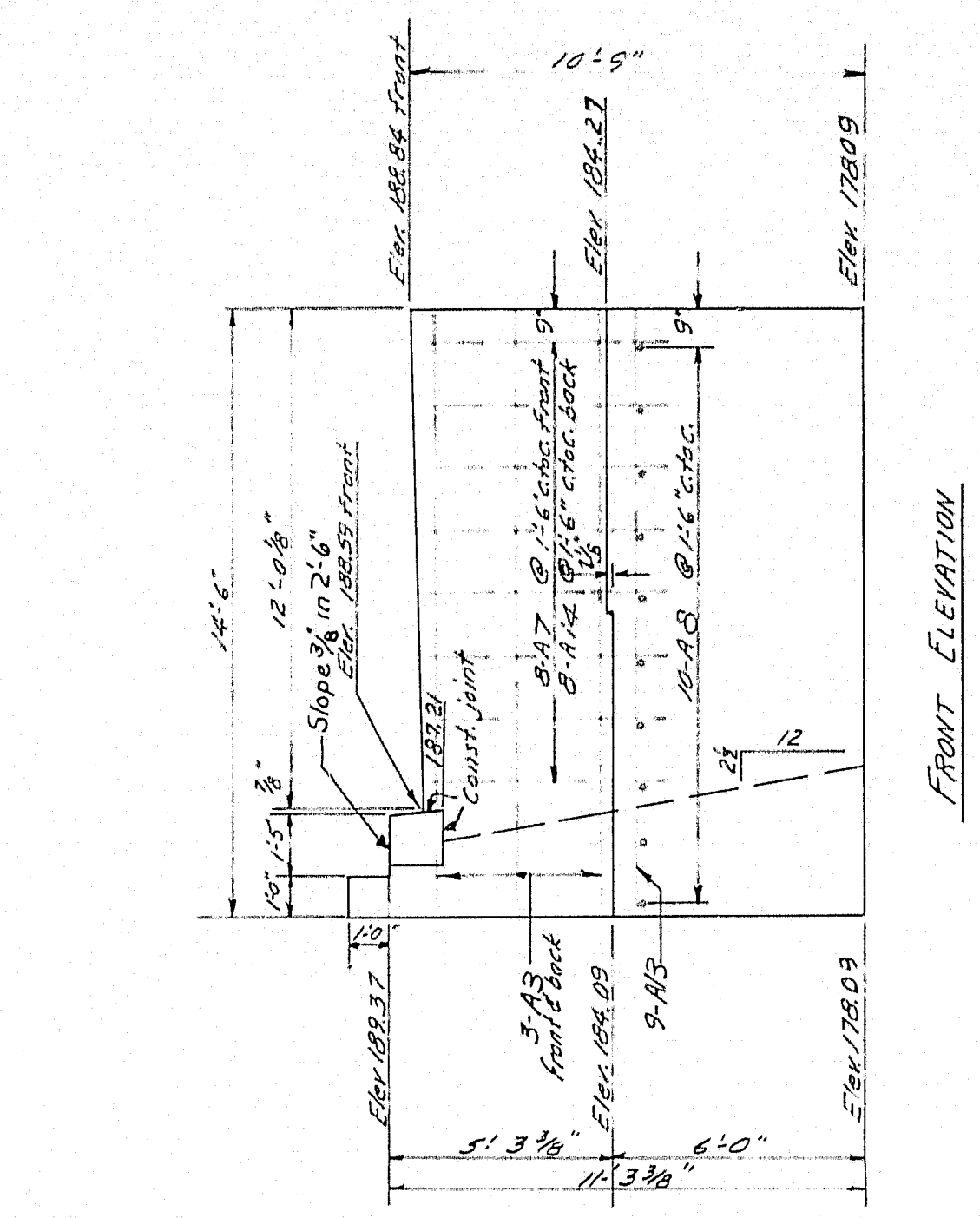
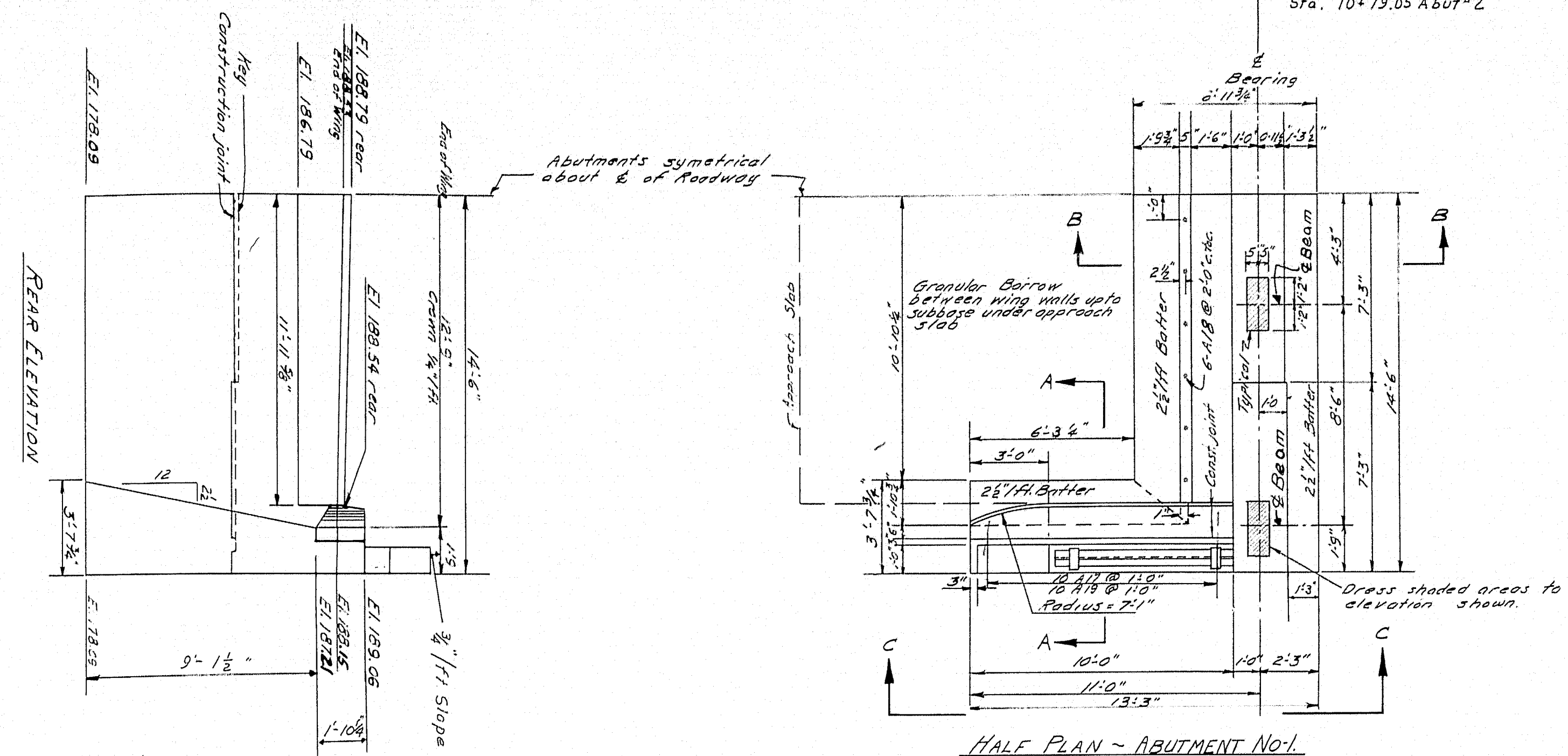
R. P. R.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	1-15-6 (12) 116	9	10



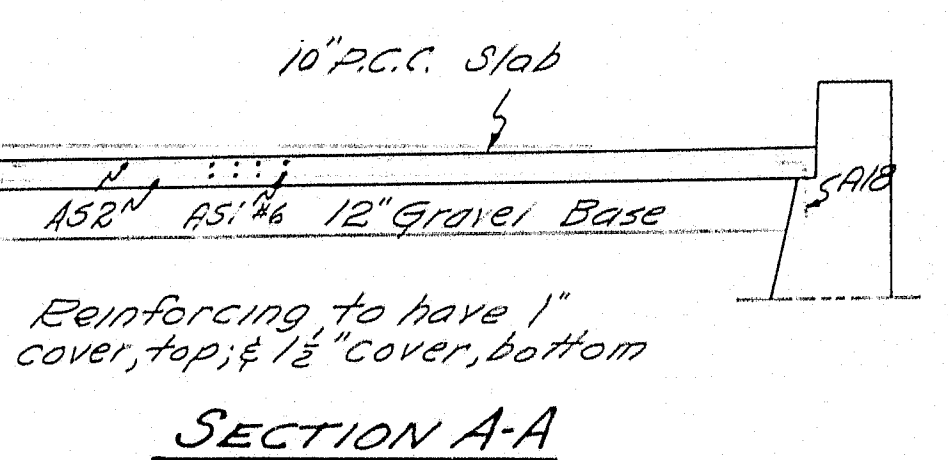
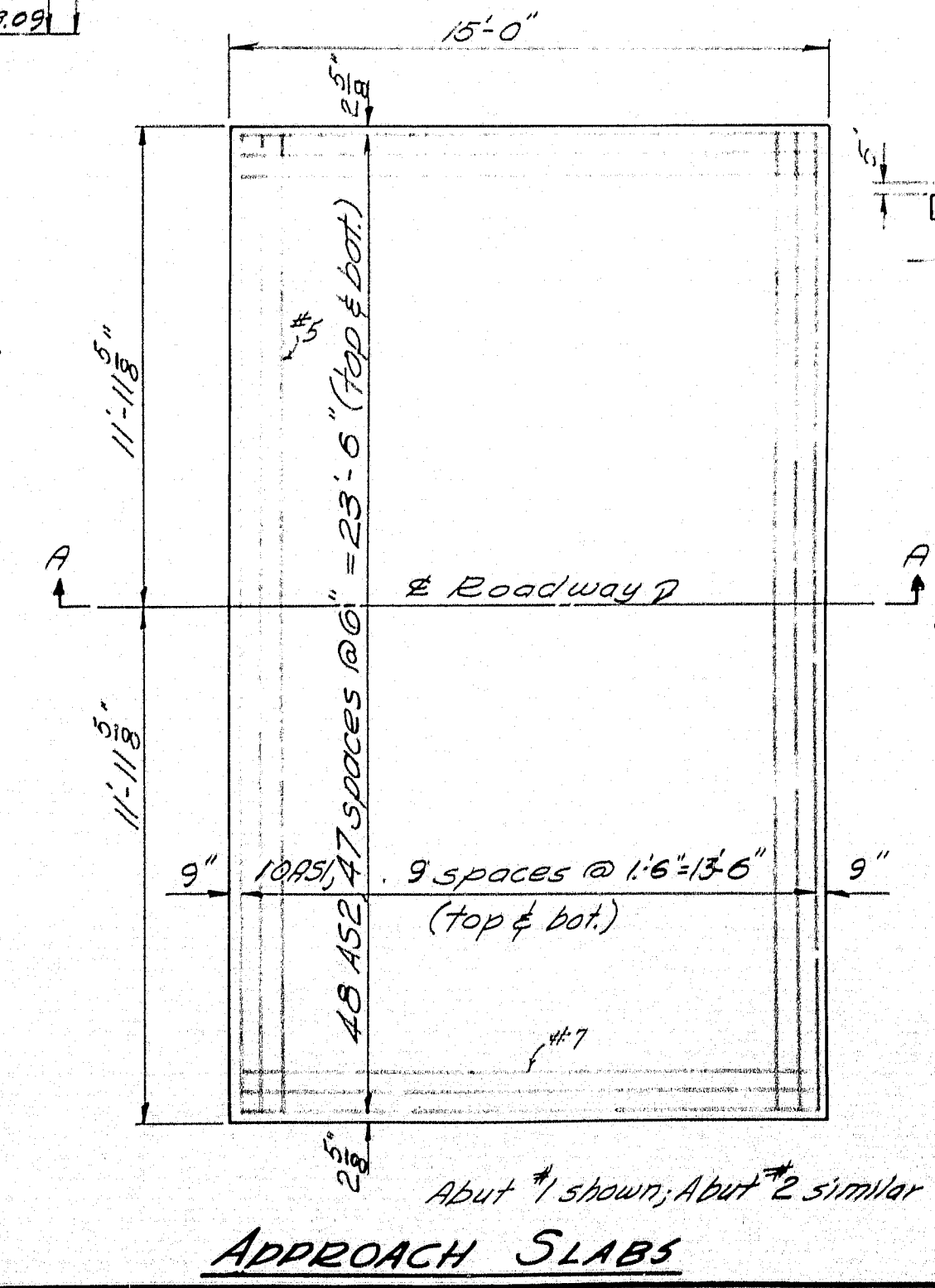
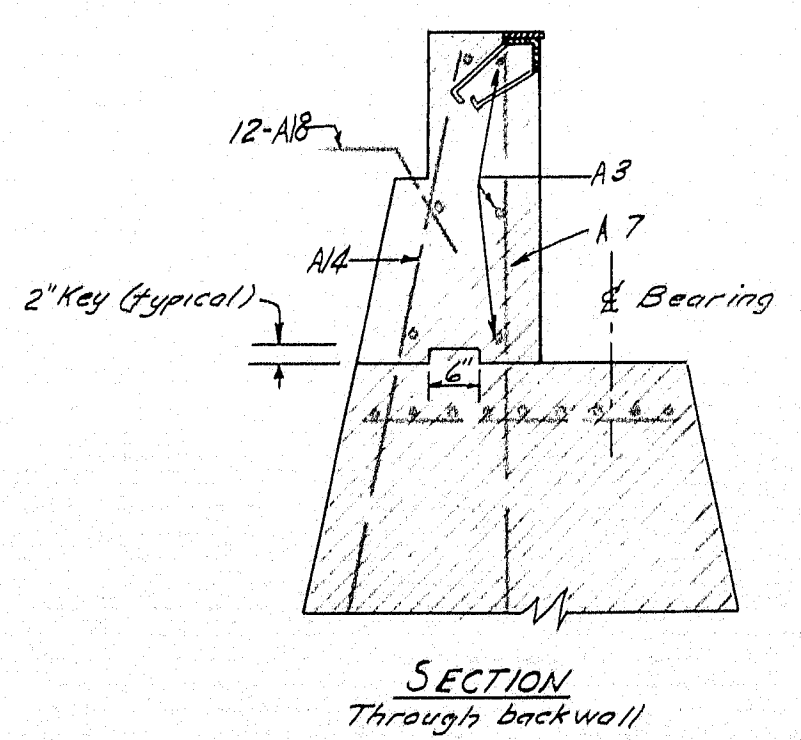
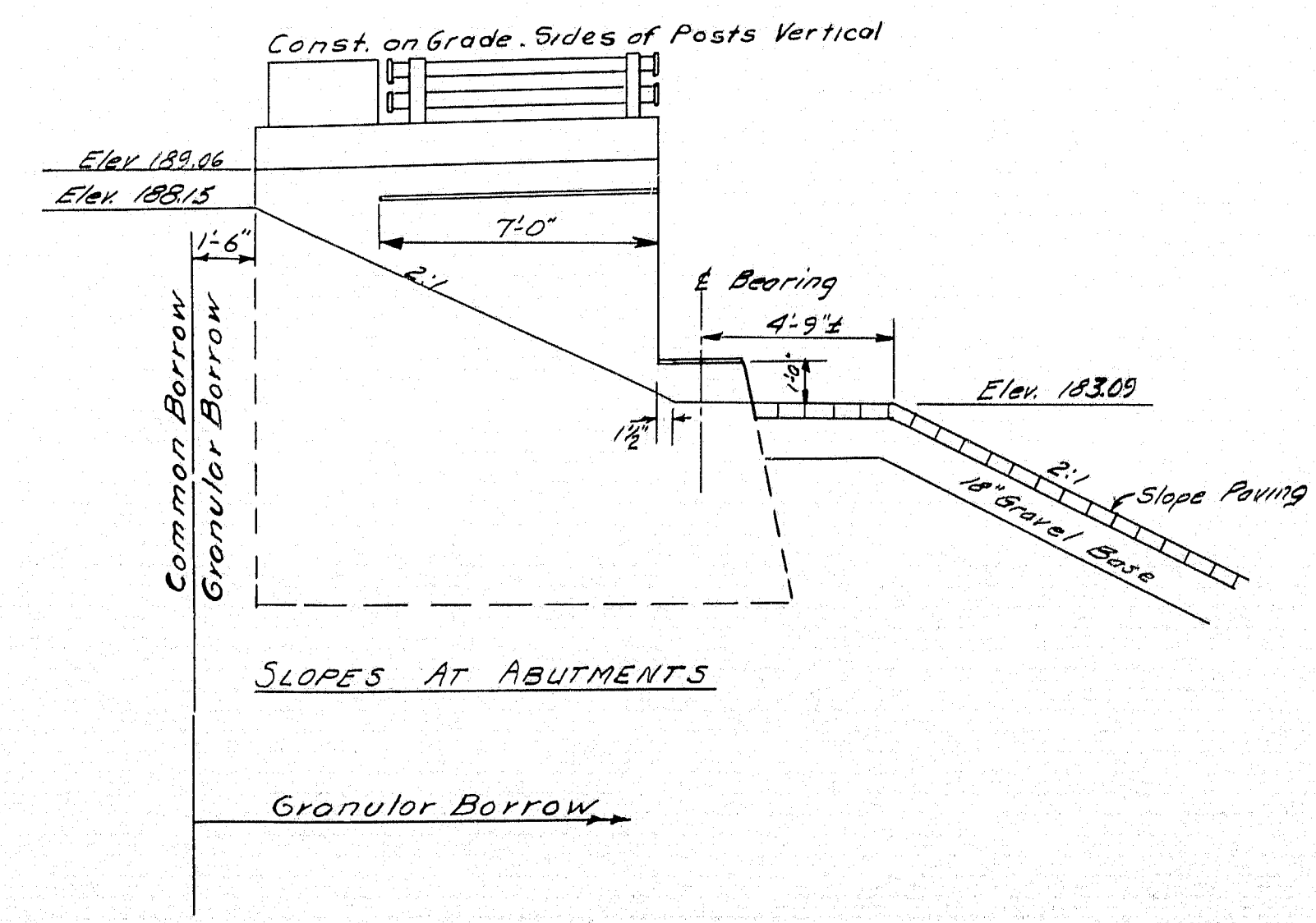
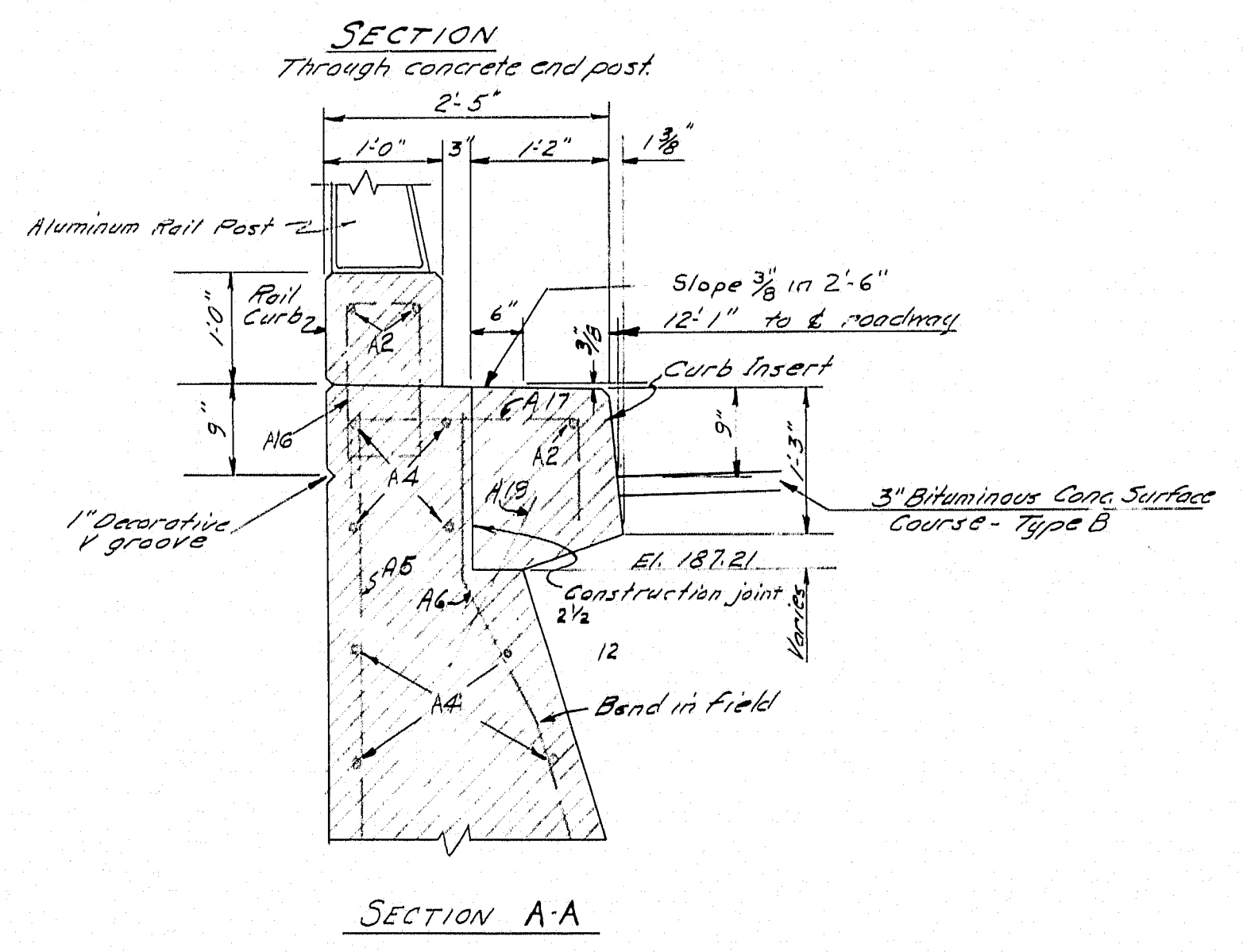
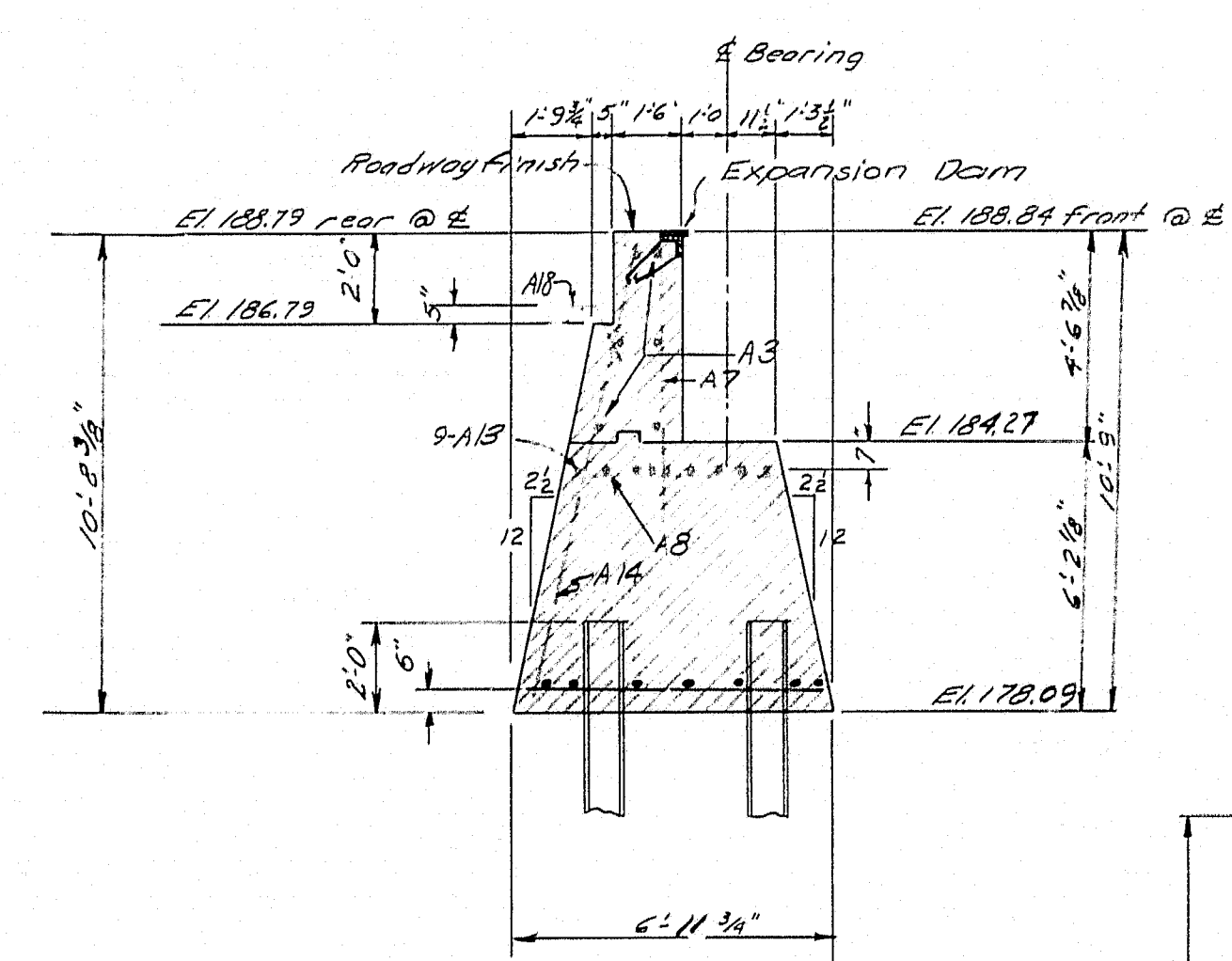
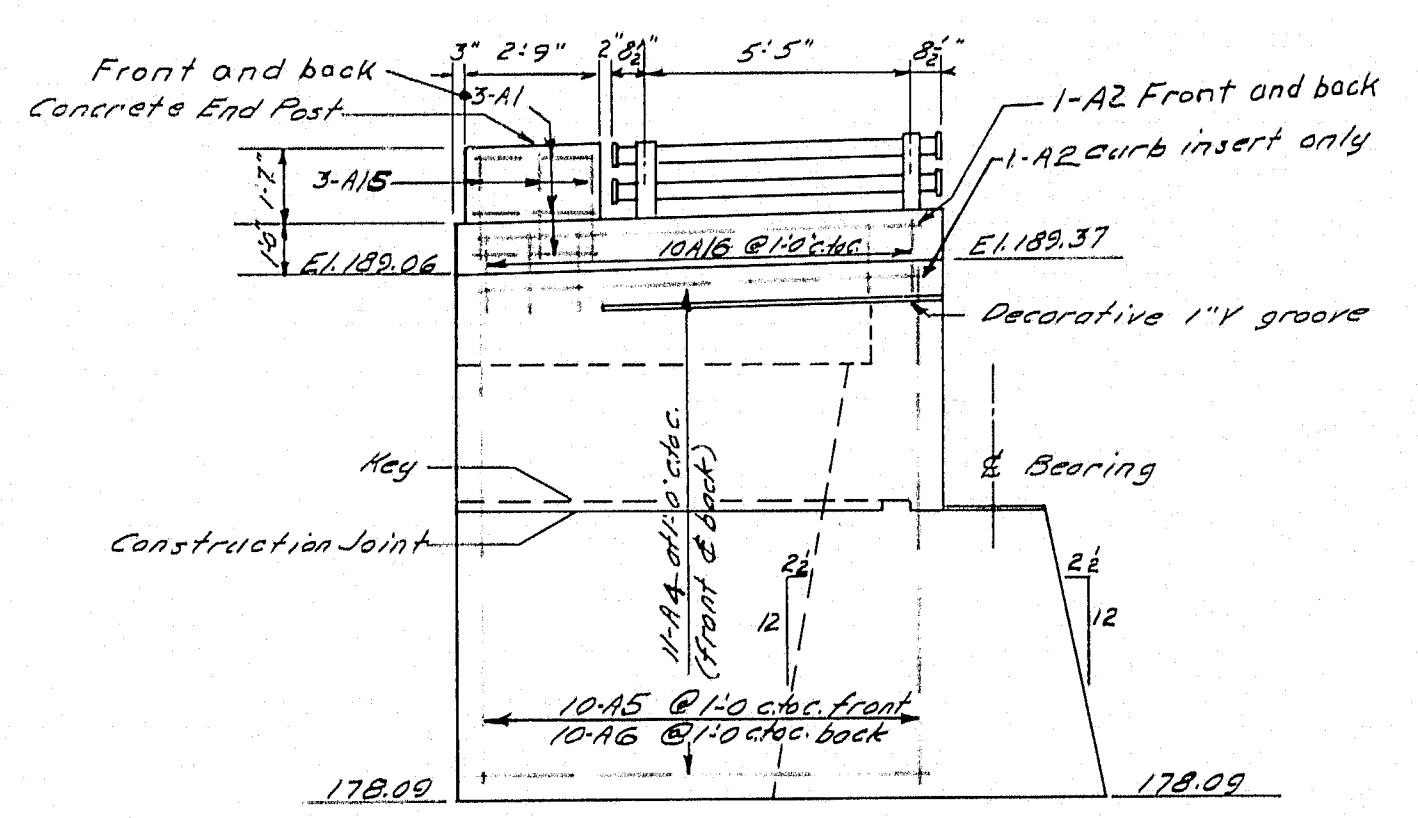
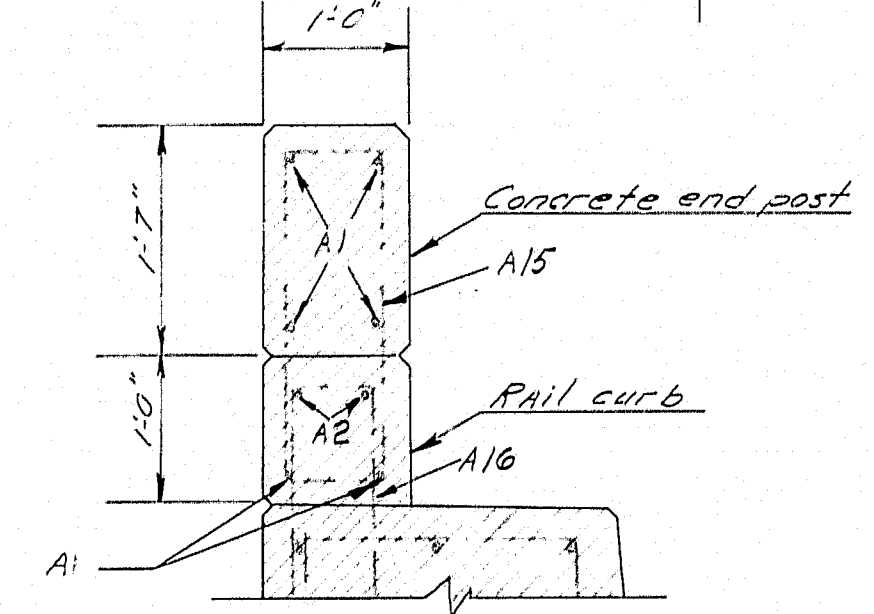
TYPICAL SECTIONS

DESIGN- TRACE-HICKS CHECK- S.L.V.	BRIDGE NO. SURVEY- PLOT-COFFIN
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE OVER INTERSTATE HIGHWAY IN THE TOWN OF SIDNEY KENNEBEC COUNTY	
CROSS SECTIONS	
SHEET 9 OF 10 AUGUSTA, MAINE April, 1958	



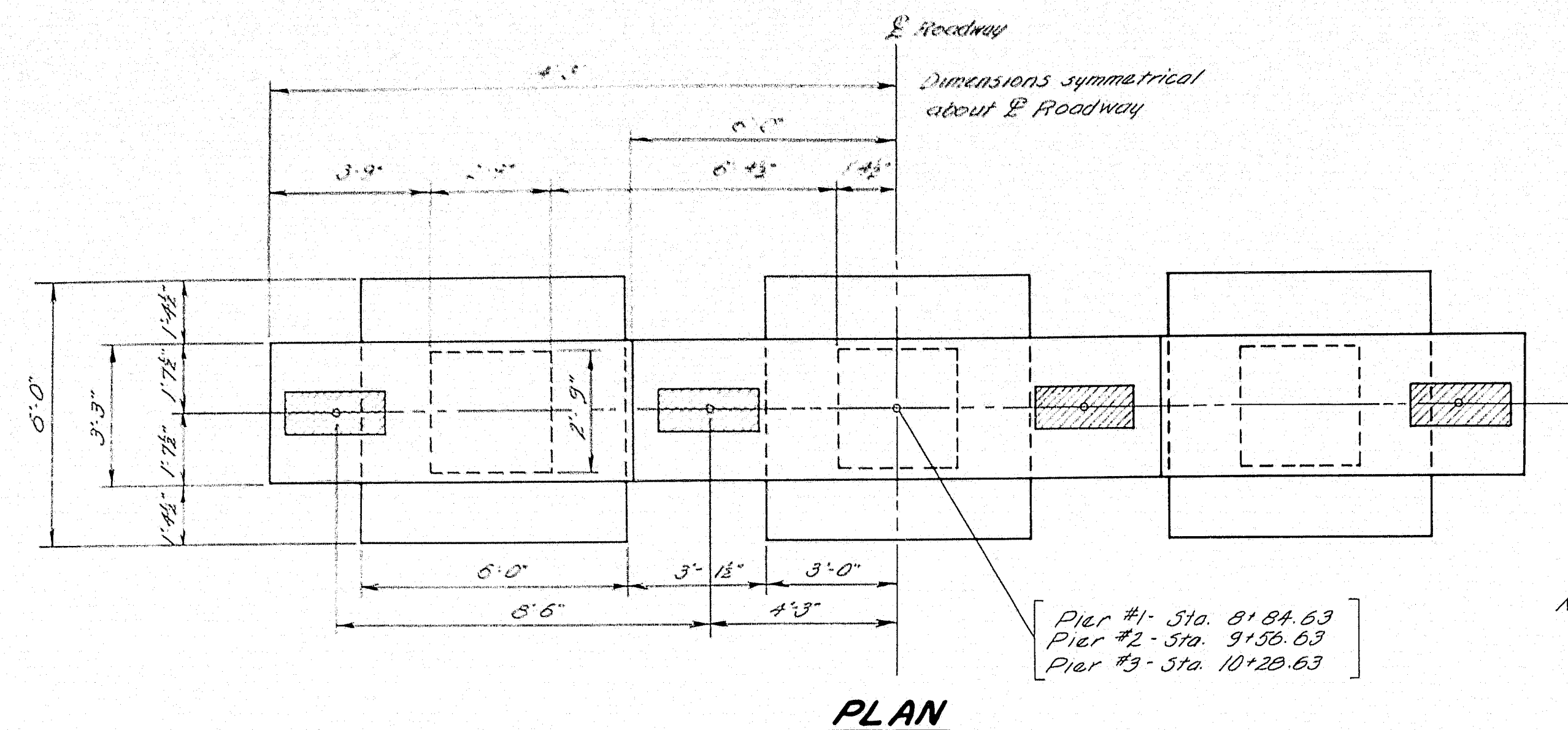


10" x 10" x 42" Steel H Piles. All piles driven to refusal.
Maximum Pile Load = 30 Ton.
Piles marked thus: H+ batter 2 1/2" in direction of arrow.
Abutment #1 10 piles Estimated Length = 20'
Abutment #2 10 piles Estimated Length = 42'
Pile Cut Off Elevation = 180.09

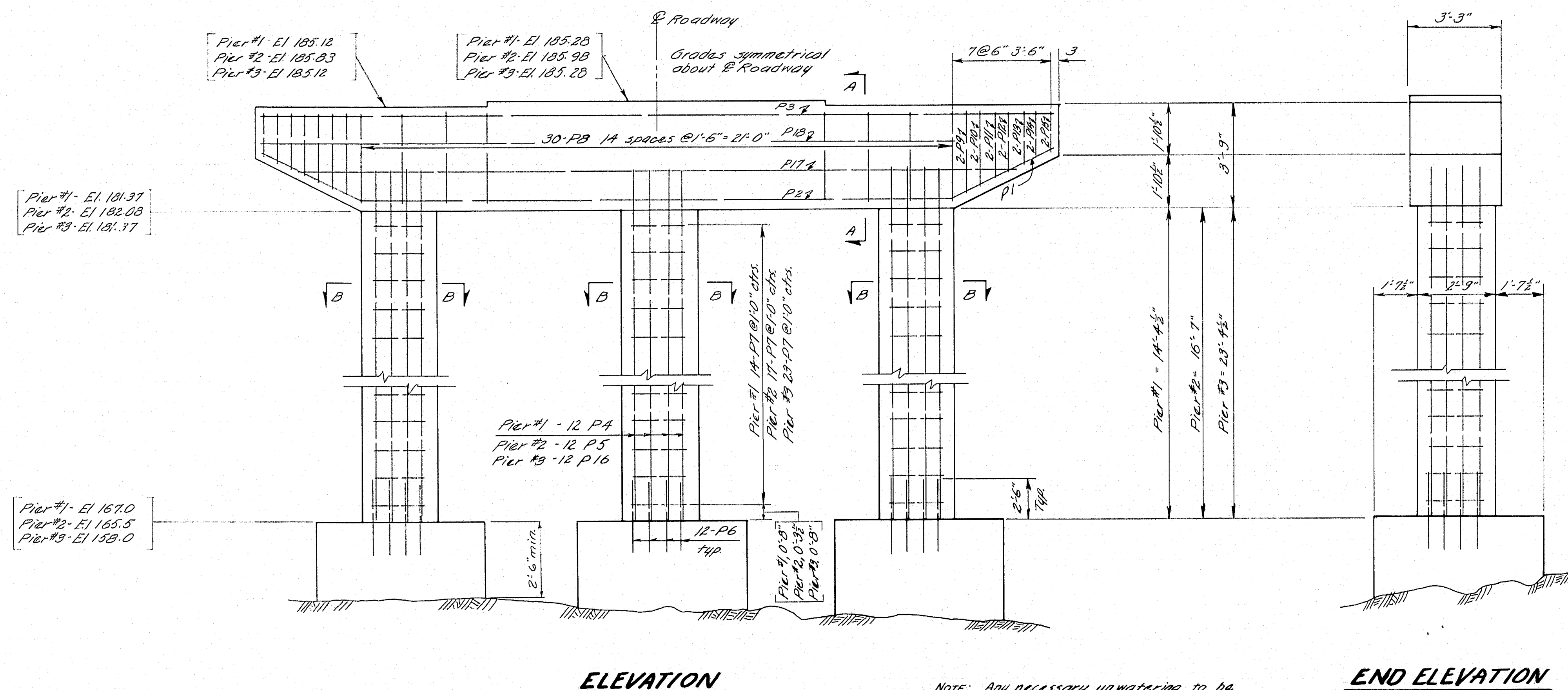
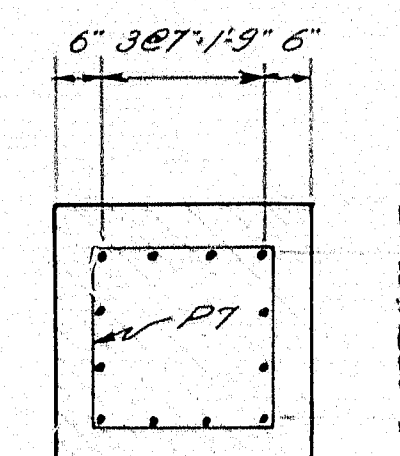
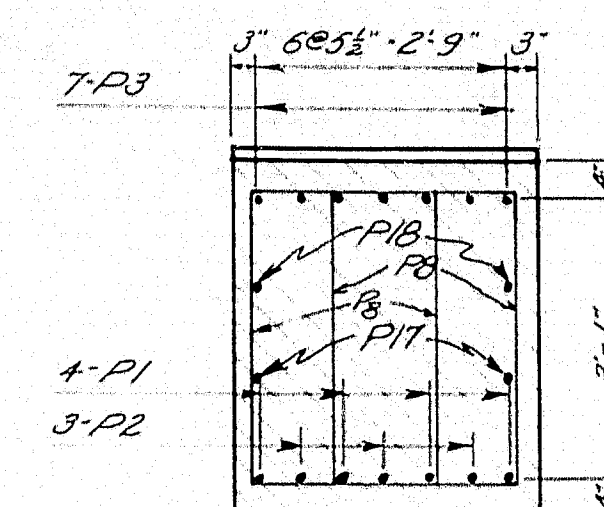


General Notes:
Concrete and posts, rail curbs, and curb inserts to be Class A Conc. to be paid for under Item 701-33, Portland Cement Concrete, Abutments and retaining walls.
All channels to be 1/2" in for otherwise noted. V grooves to be 1".
Place reinforcing steel in bridge seats to clear anchor bolts.
Back wall to be placed after structural steel is erected.
Wing steel to have 3" cover.
See sheet 14 for detail of expansion dams.

DES. BY Barnes	BRIDGE NO.
CHECKED BY G. L. V. Ales, R. B. R.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE	
OVER	
INTERSTATE HIGHWAY	
IN THE TOWN OF	
SIDNEY	
KENNEBEC COUNTY	
ABUTMENTS AND APPROACH SLABS	
SHEET 10 OF 18 AUGUSTA MAINE April 58	



NOTE: Dress bearing areas 1" larger all around than size of bearing plate and to exact elevation shown. Place reinforcing steel in cap beam to clear anchor bolts.

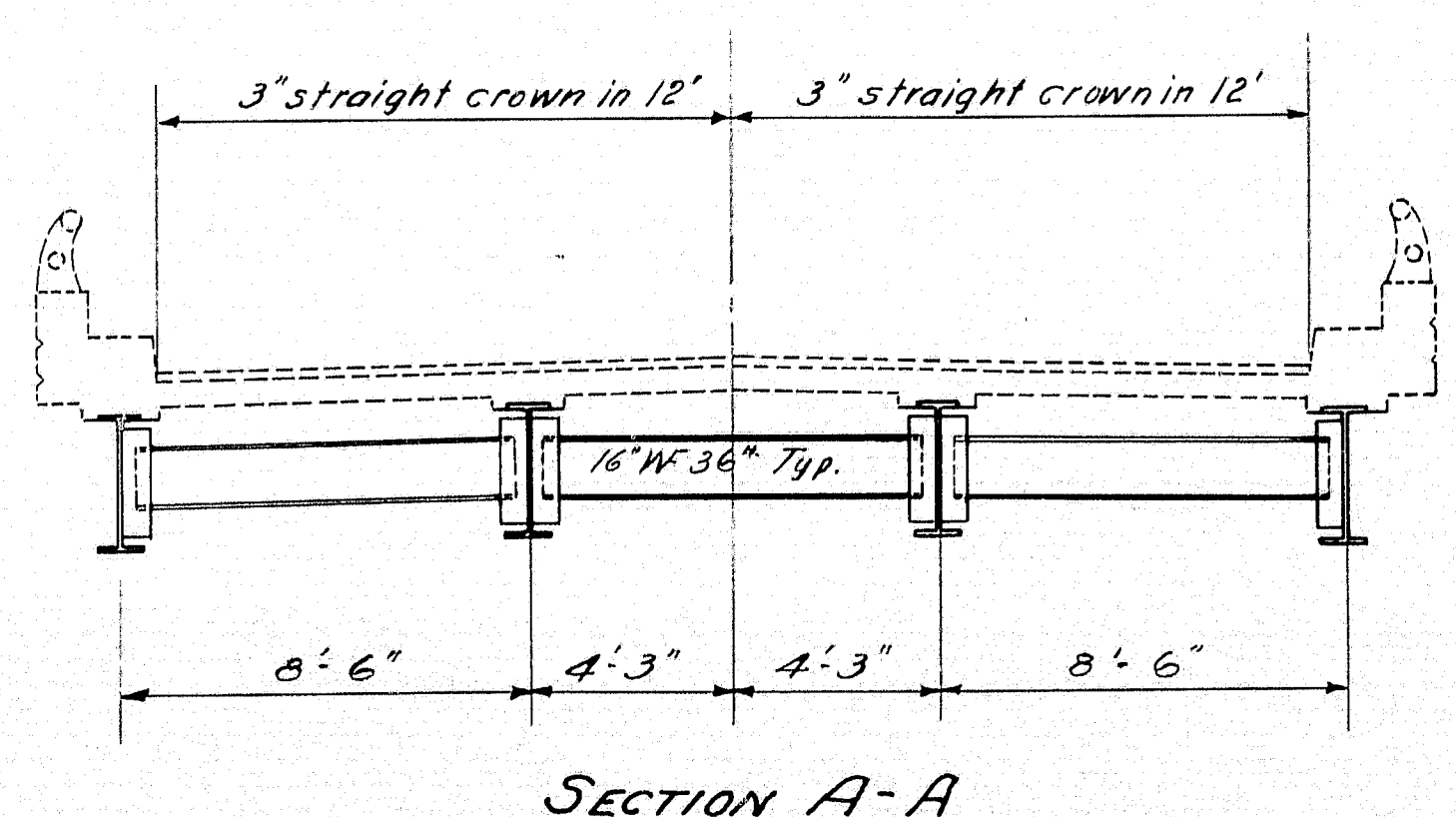
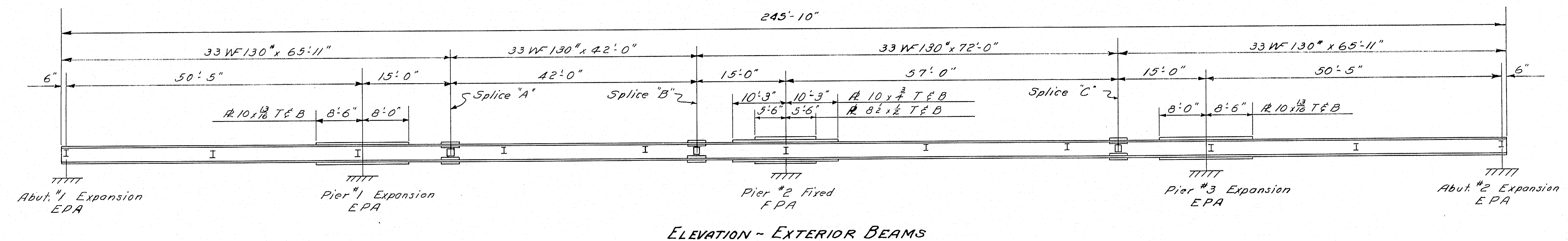
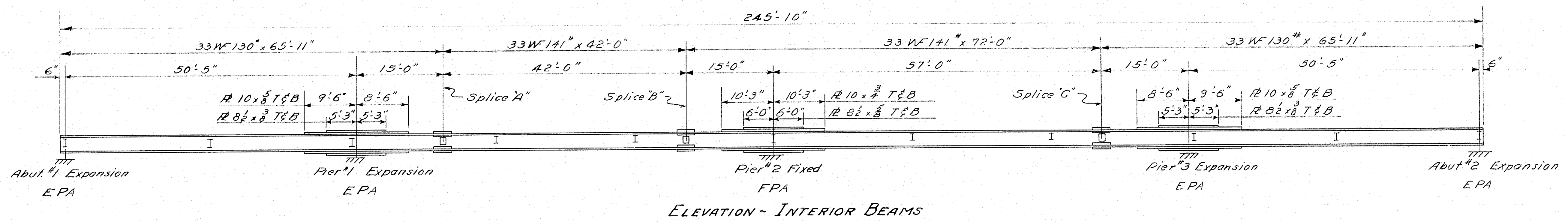
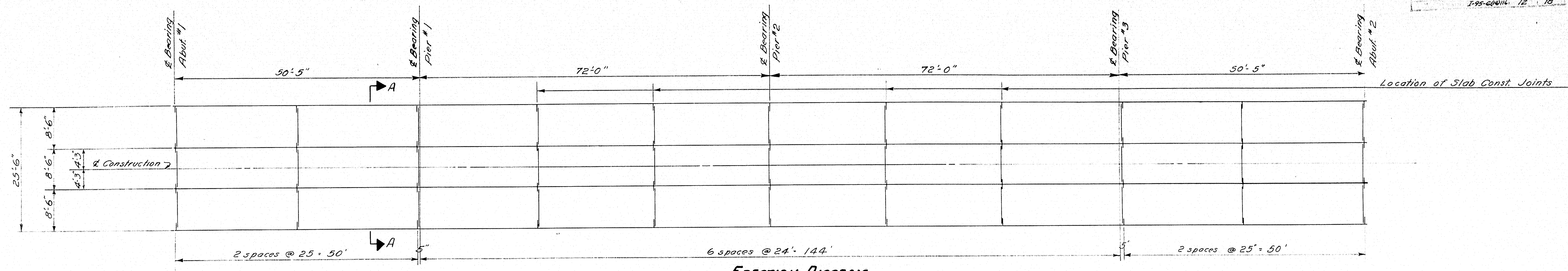


PLAN - SHAILER
CHECK - A.B.P.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

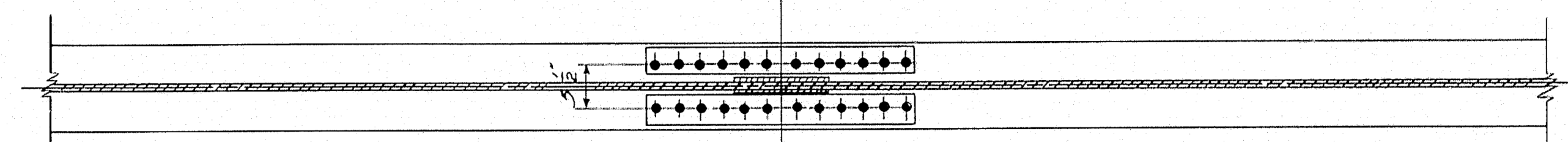
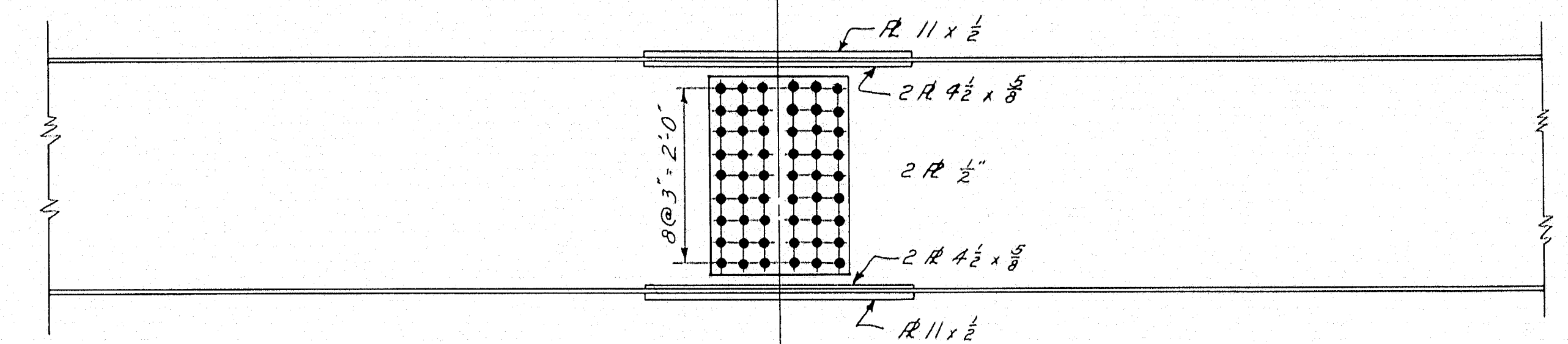
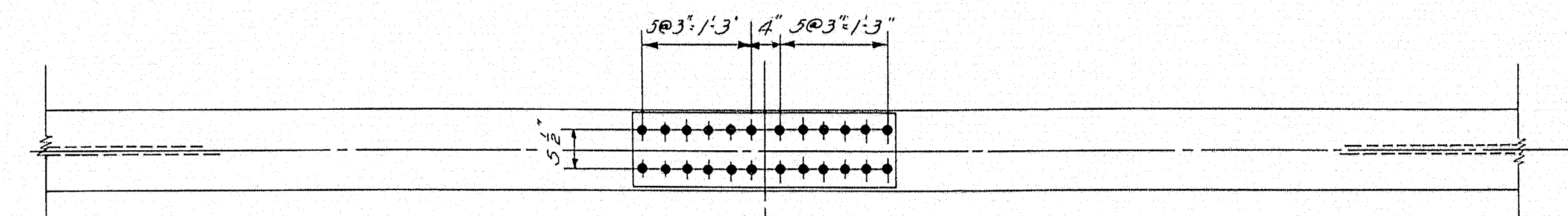
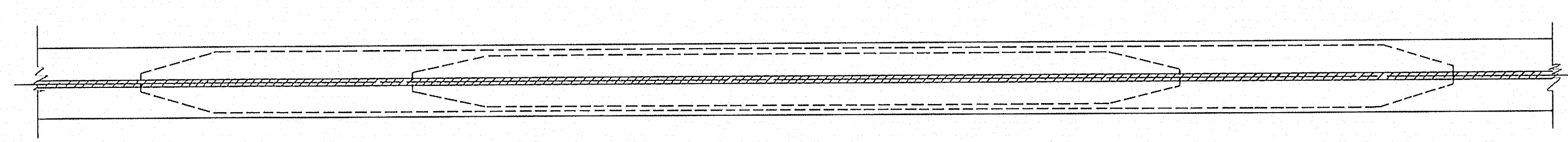
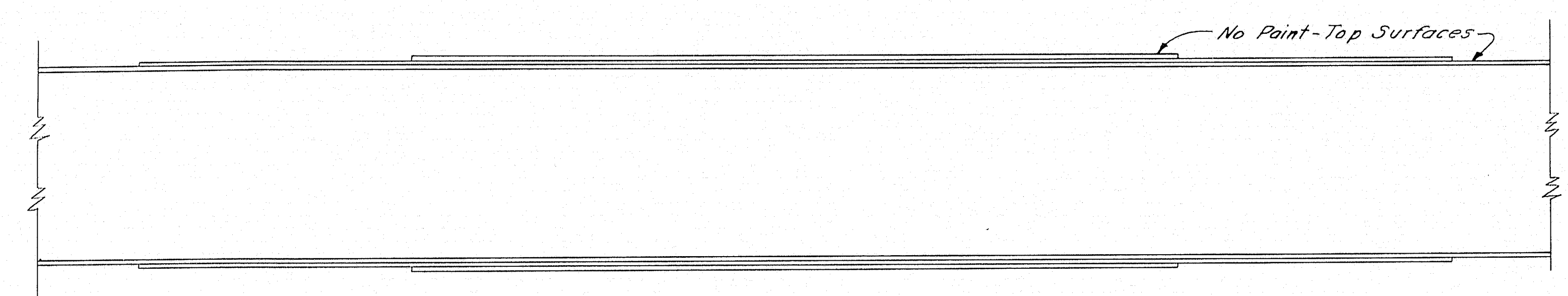
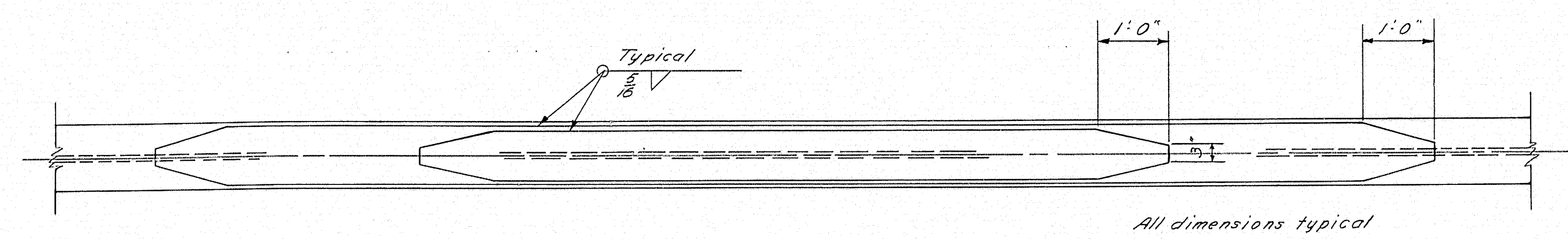
DRUMMOND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY
IN THE TOWN OF
SIDNEY
KENNEBEC COUNTY
PIERS

SHEET 11 OF 18 AUGUSTA, MAINE April 1958



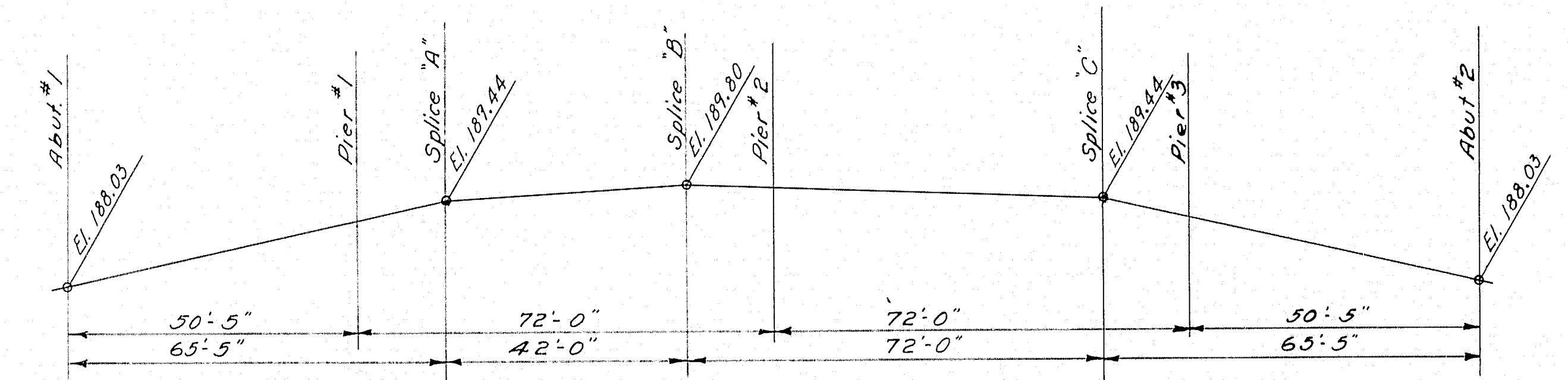
SPECIFICATIONS
 Design and Detail: AASHO 1953
 Fabrication and Erection: State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of January 1955.
 Loadings: H20 - 44
 Field Connections: Unless otherwise indicated, 15/16" ϕ holes, 7/8" ϕ rivets or high tensile strength bolts.
 Girders and Cover Plates: To be structural weldable steel, A.S.T.M. designation A-373

DESIGN-SHAVER TRACE-SAVAGE CHECK- <i>A.B.P.</i>	BRIDGE NO.
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE	
OVER	
INTERSTATE HIGHWAY	
IN THE TOWN OF	
SIDNEY	
KENNEBEC COUNTY	
STRUCTURAL STEEL	
ERECTION DIAGRAM	
SHEET 12 OF 18 AUGUSTA, MAINE. April, 1958.	

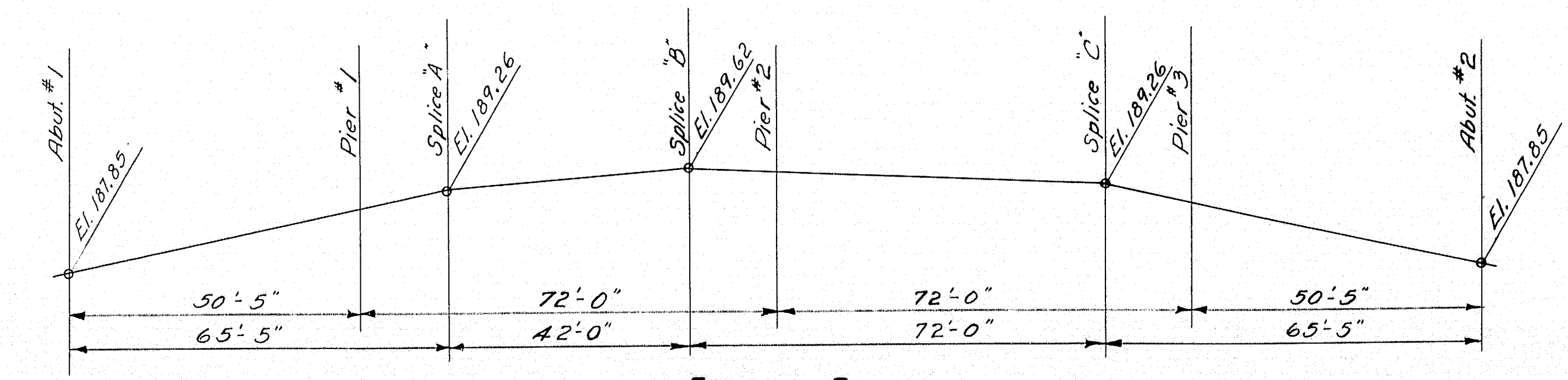


Splice as located on Erection Diagram

BEAM DETAILS



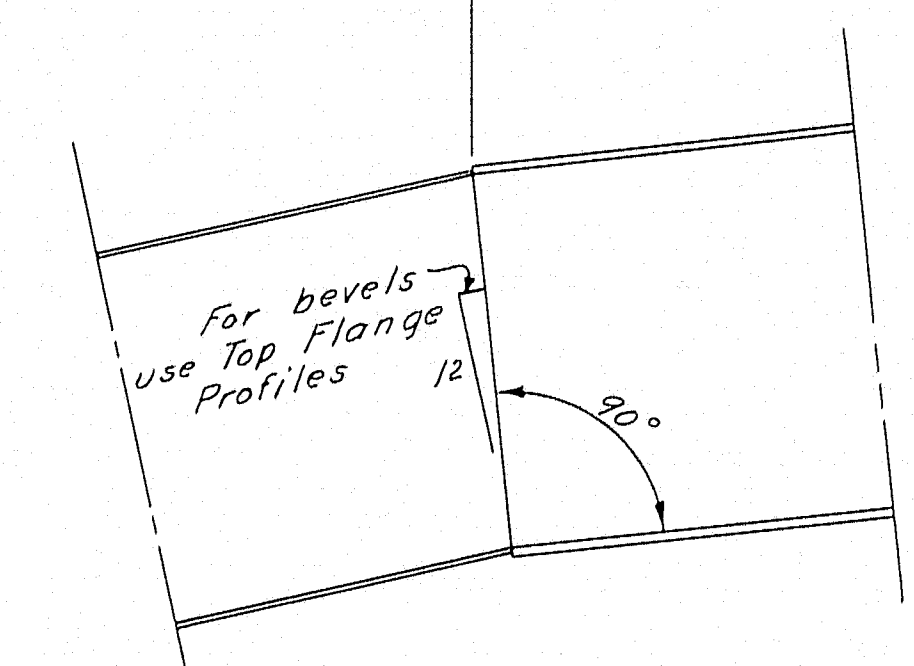
INTERIOR BEAMS



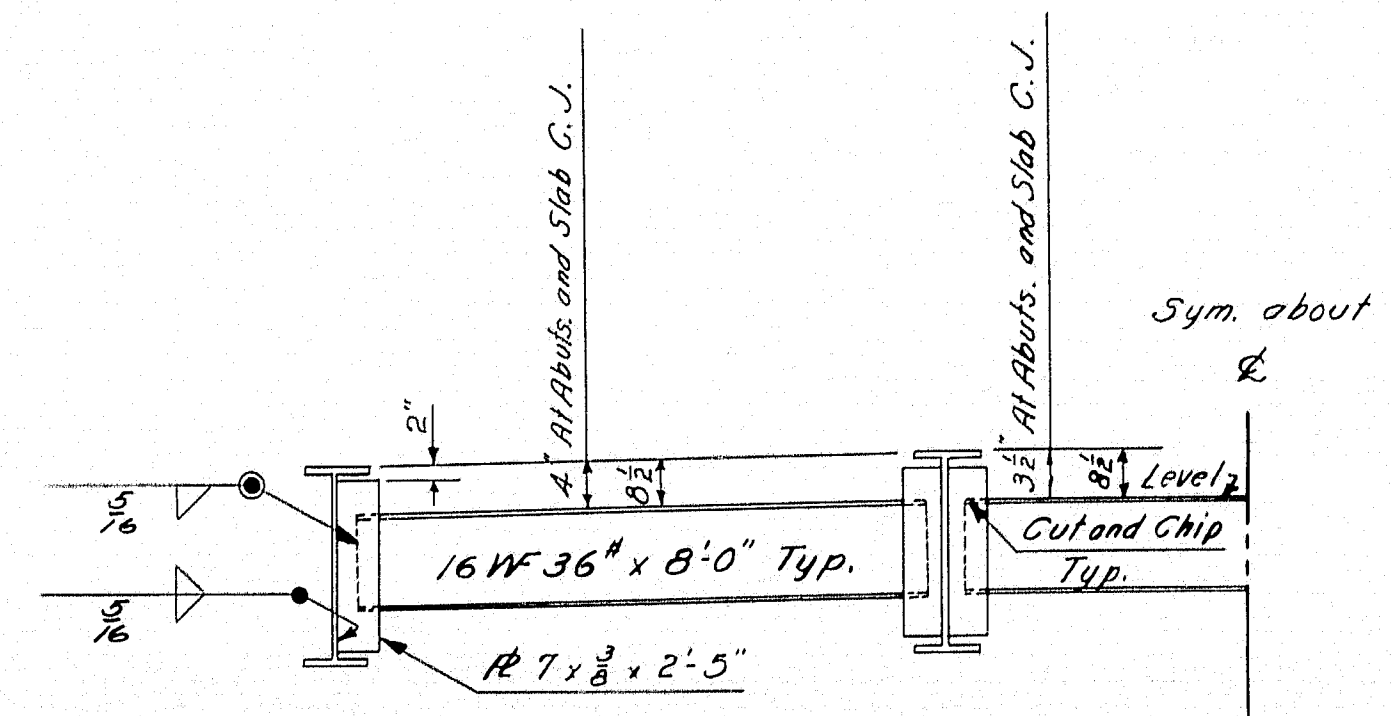
EXTERIOR BEAMS

TOP FLANGE PROFILES

The working points of the top flange profiles are set 9" below the finished grades along the center lines of the stringers.

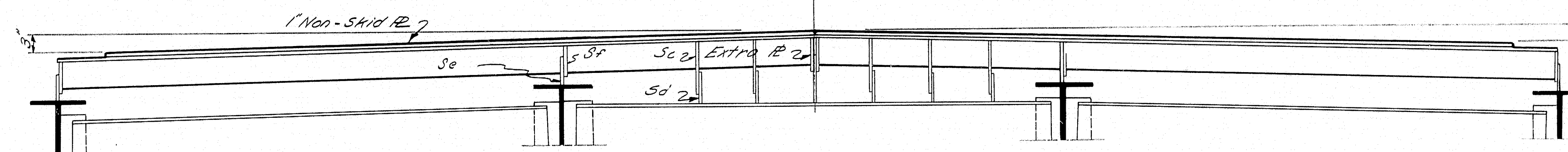
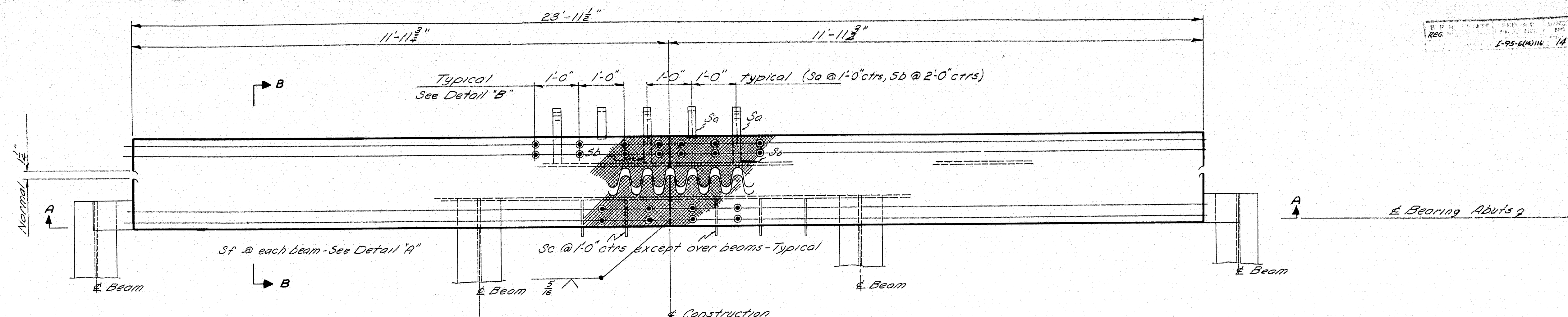


SPLICE BEVEL

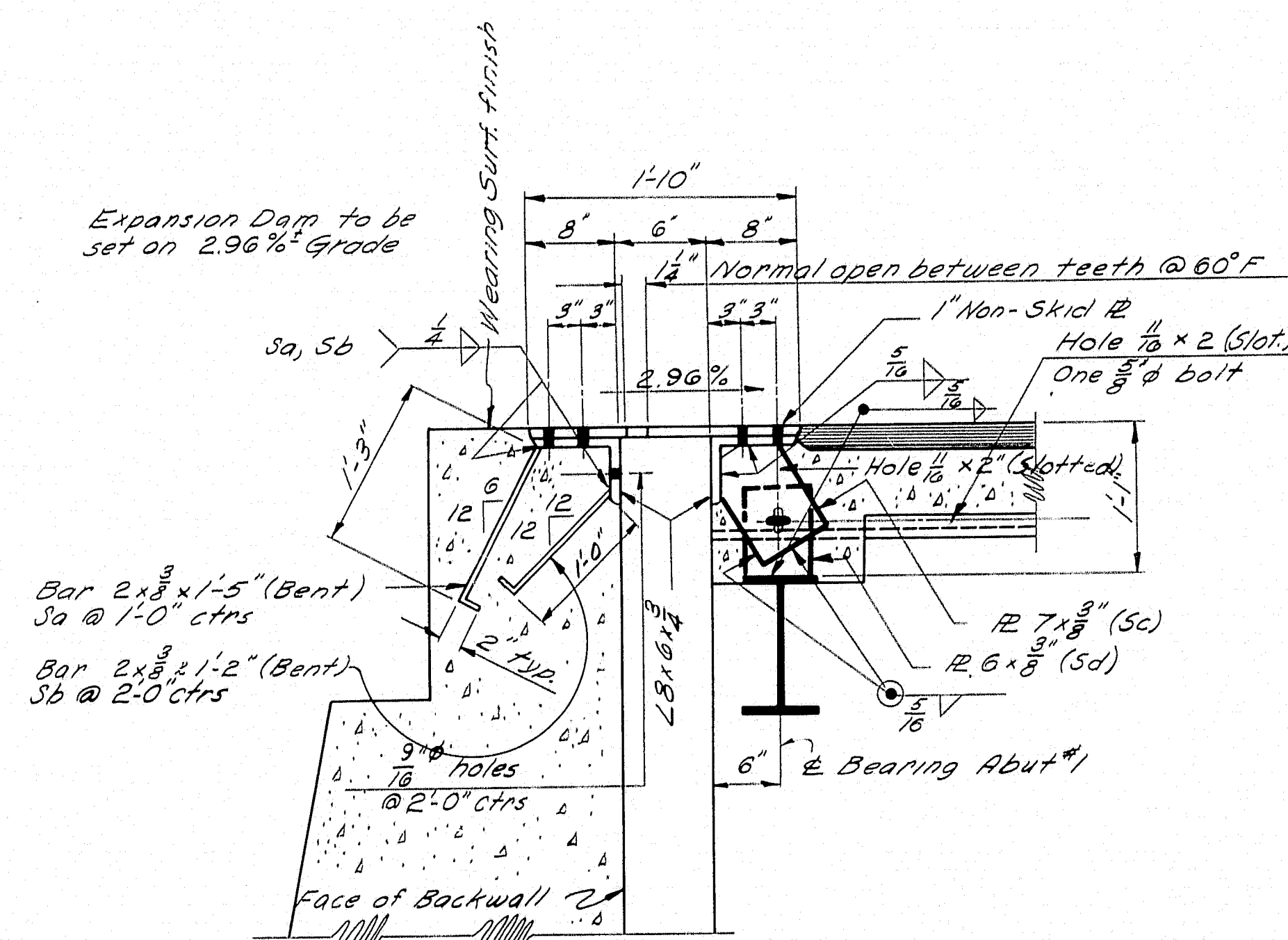


DIAPHRAGMS

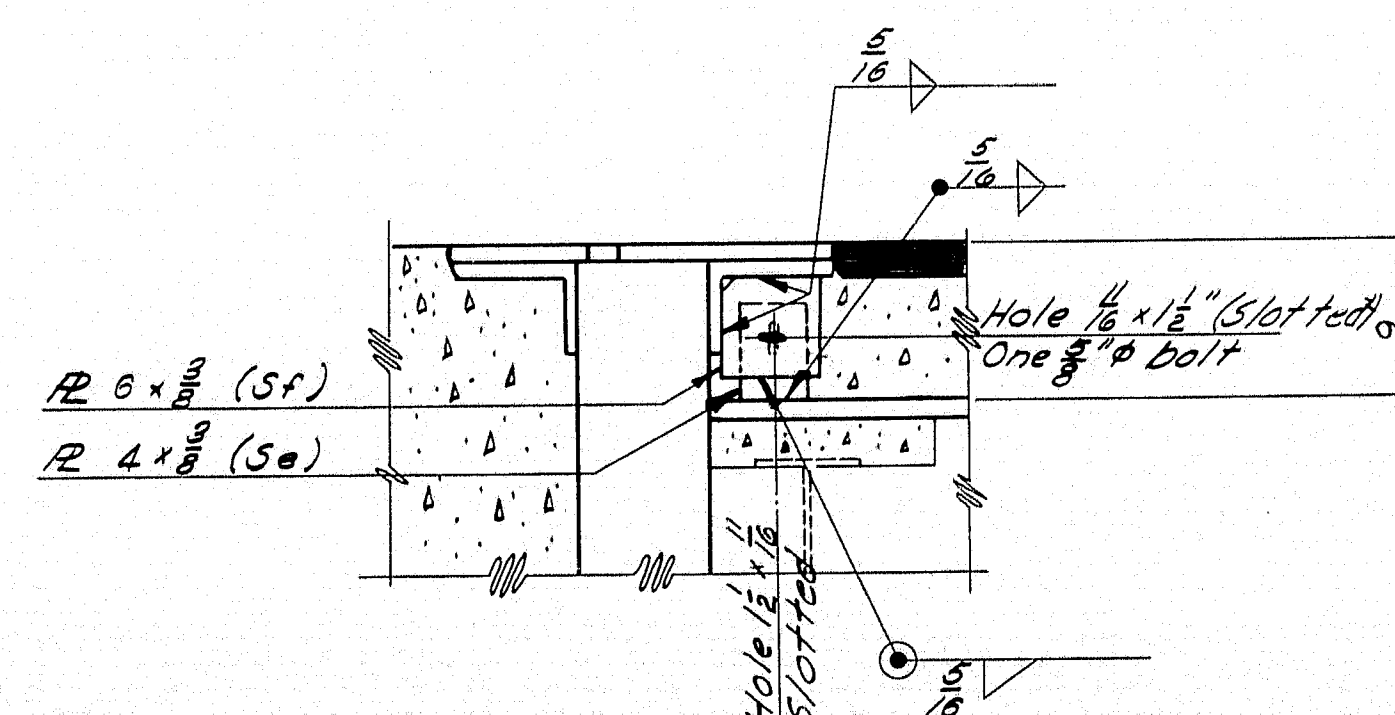
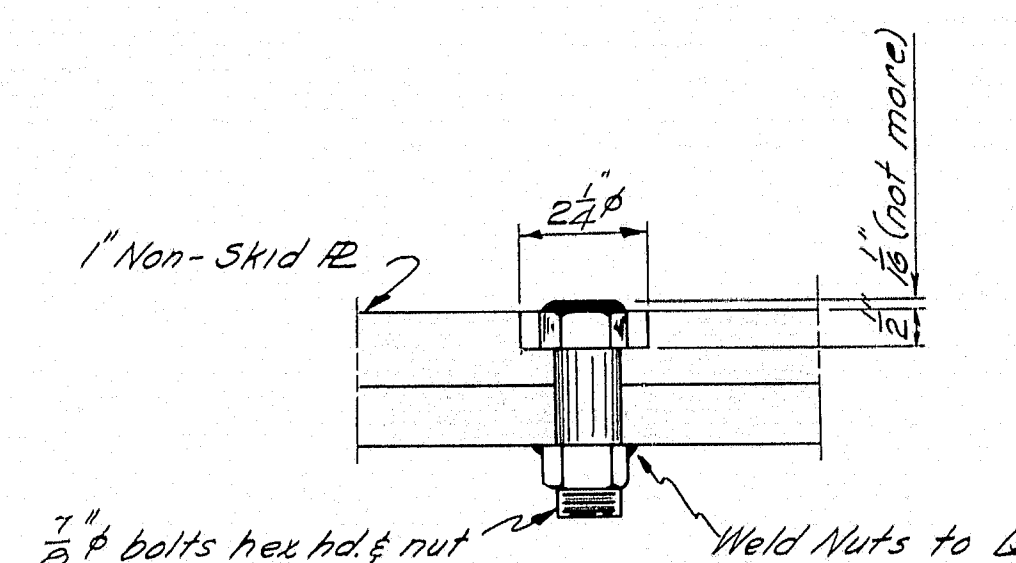
DESIGN-SHAILEY TRACE-SAVAGE CHECK-GLJ ABP	BRIDGE NO.
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE	
OVER	
INTERSTATE HIGHWAY	
IN THE TOWN OF	
SIDNEY	
KENNEBEC COUNTY	
STRUCTURAL STEEL DETAILS	
SHEET 13 OF 18 AUGUSTA, MAINE, April 1958.	



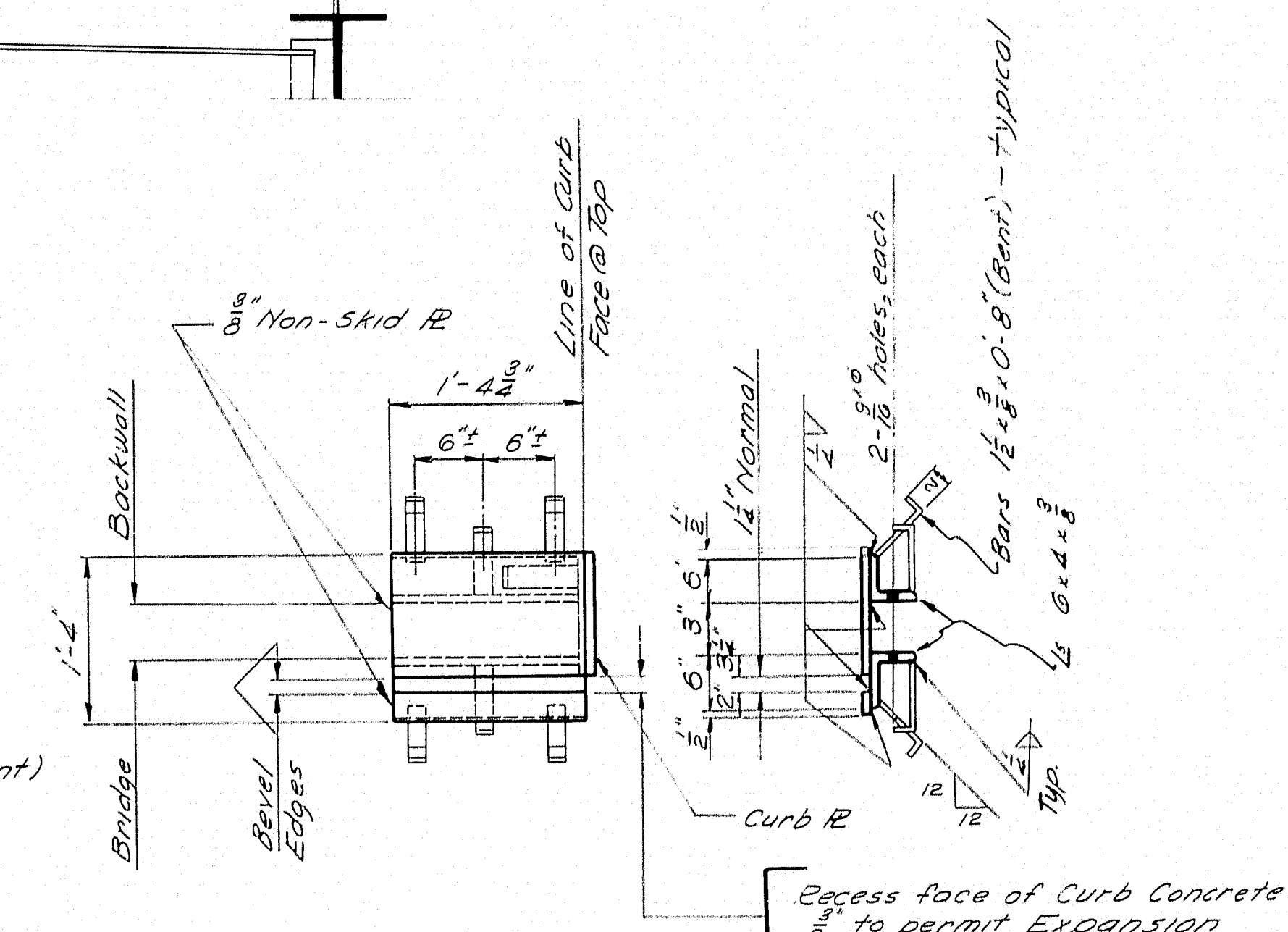
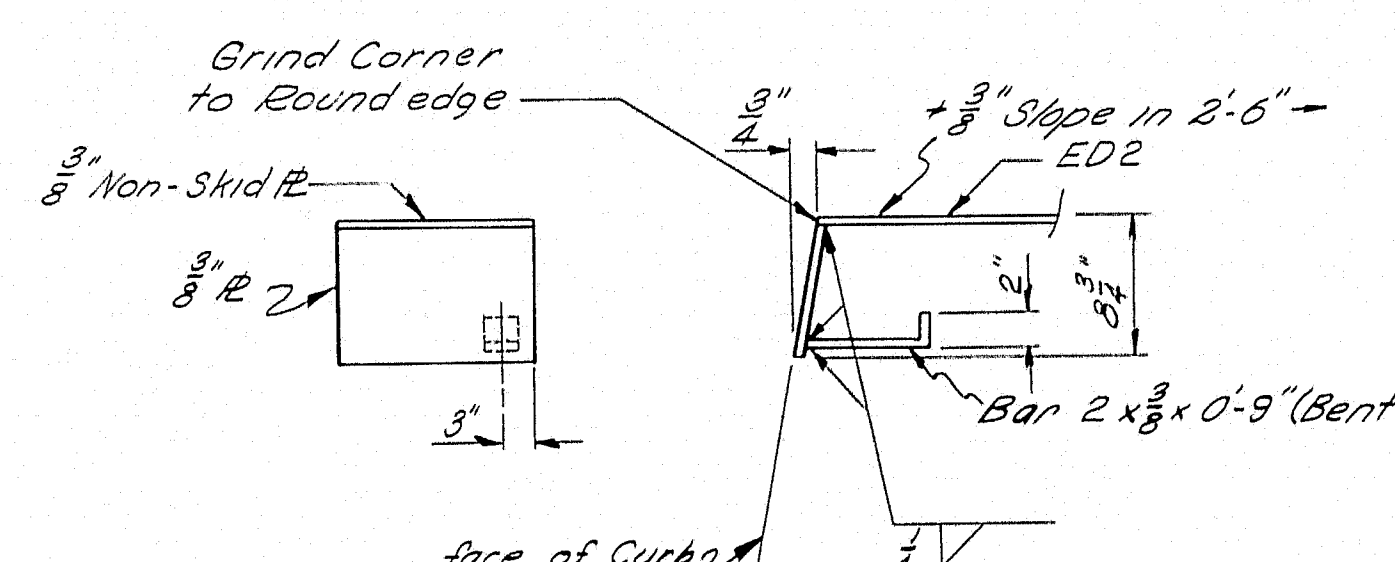
SECTION A-A
ROADWAY EXPANSION DAMS
ED1 - 2 reg'd



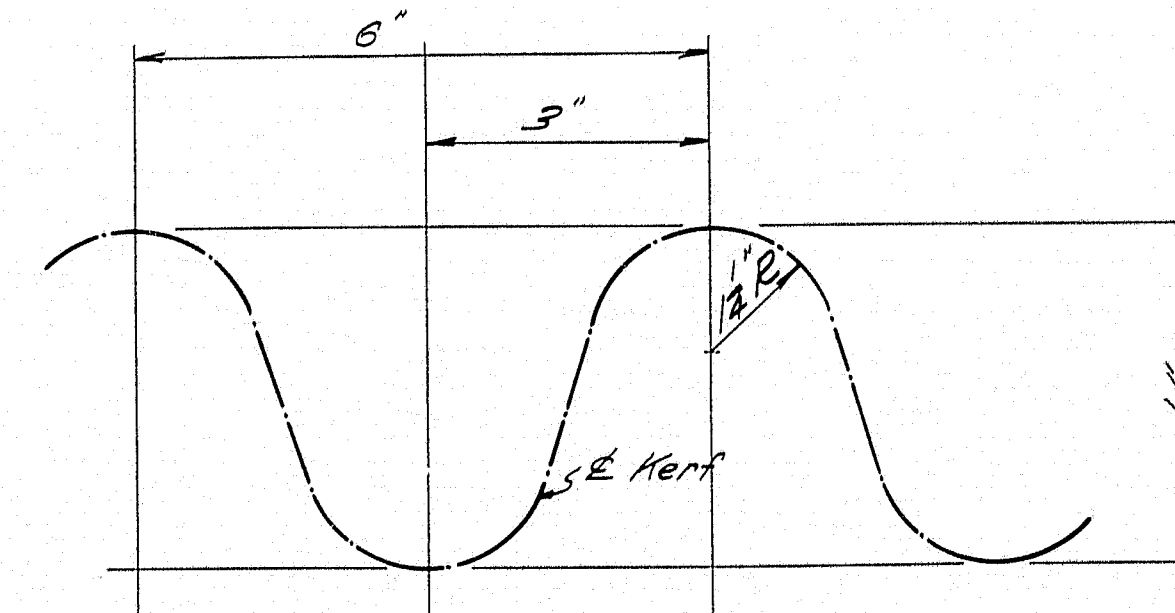
SECTION B-B
Rs Sc & Sd to be welded together after Expansion Dams have been set.



DETAIL A
Rs Sf & Se to be welded together after Expansion Dams have been set.



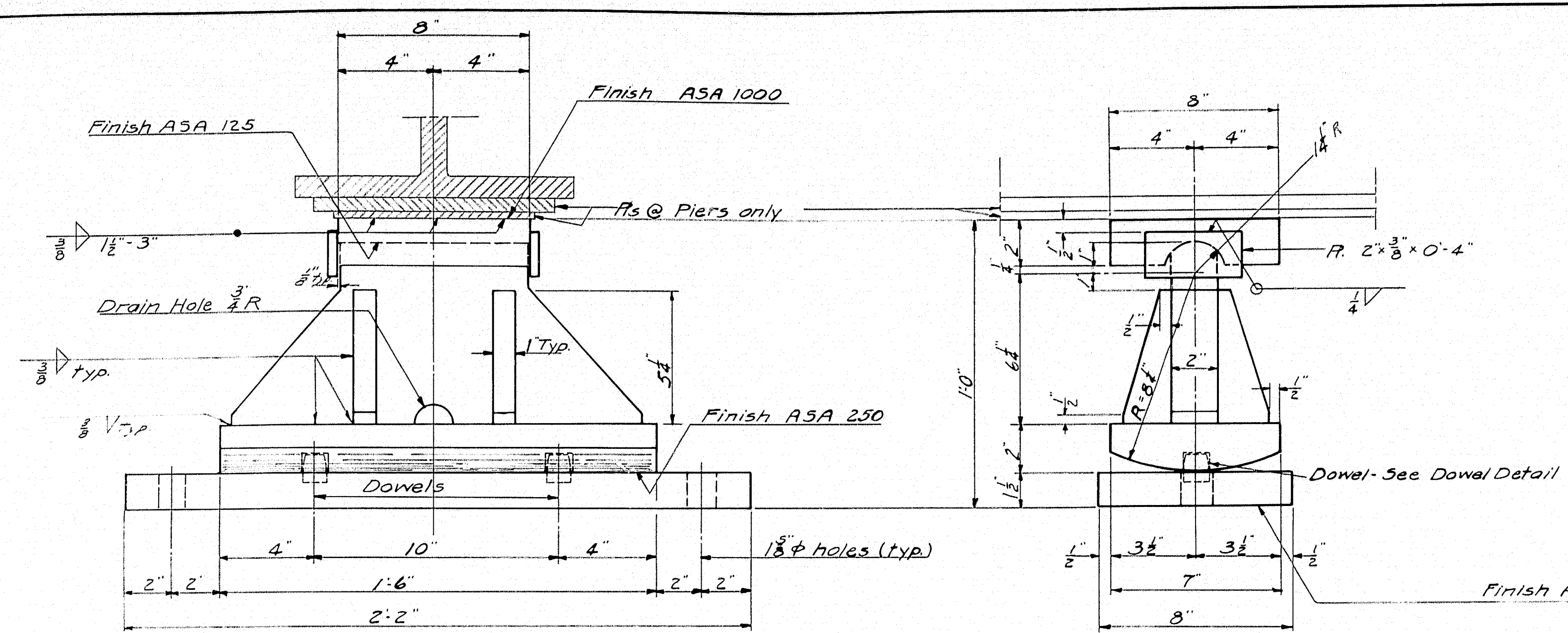
CURB EXPANSION DAM
ED-2 - As shown - 2 Reg'd
ED-3 - Opp. hand - 2 Reg'd



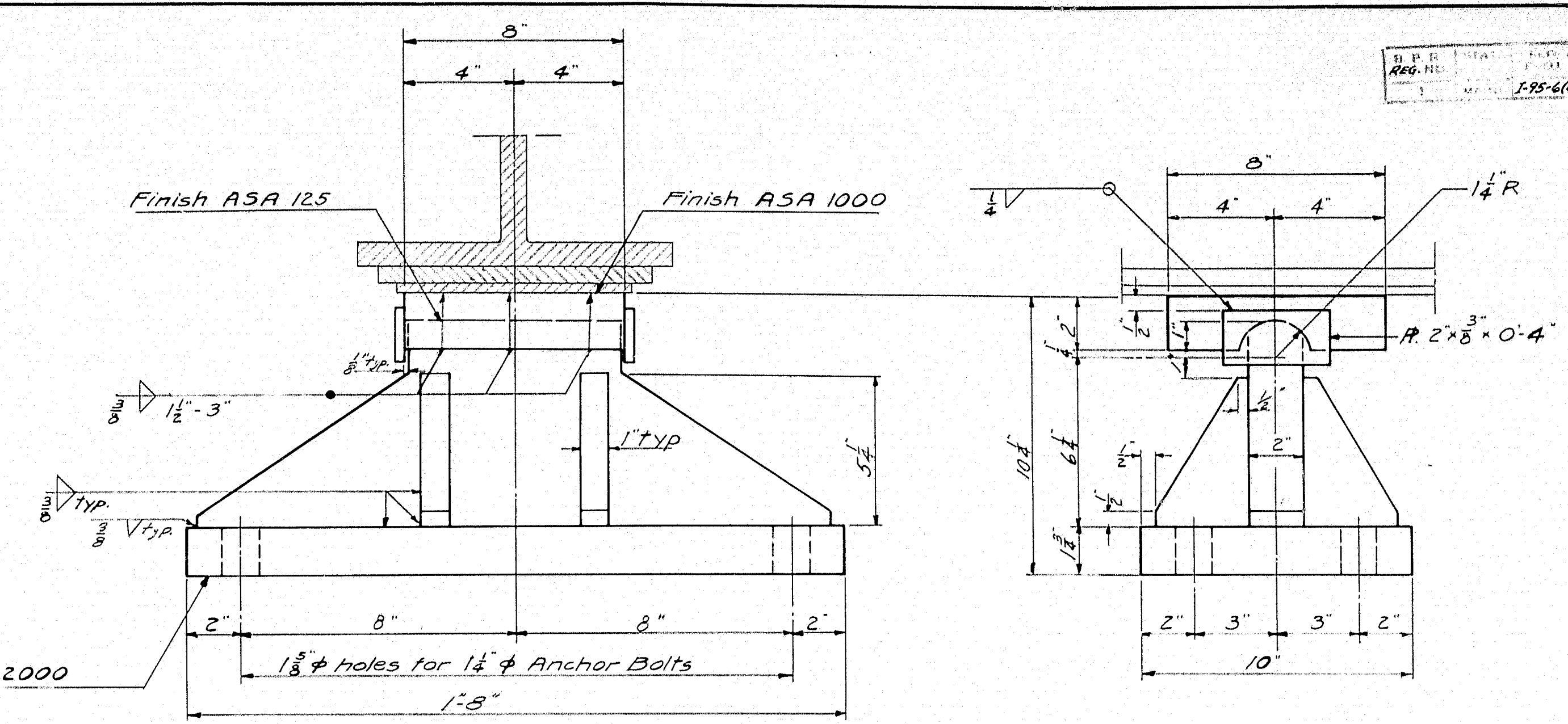
FINGER CUTTING DETAIL
Cut Finger Rs from I plate and match mark.

NOTE: No point in contact with conc. ED1, ED2, ED3.

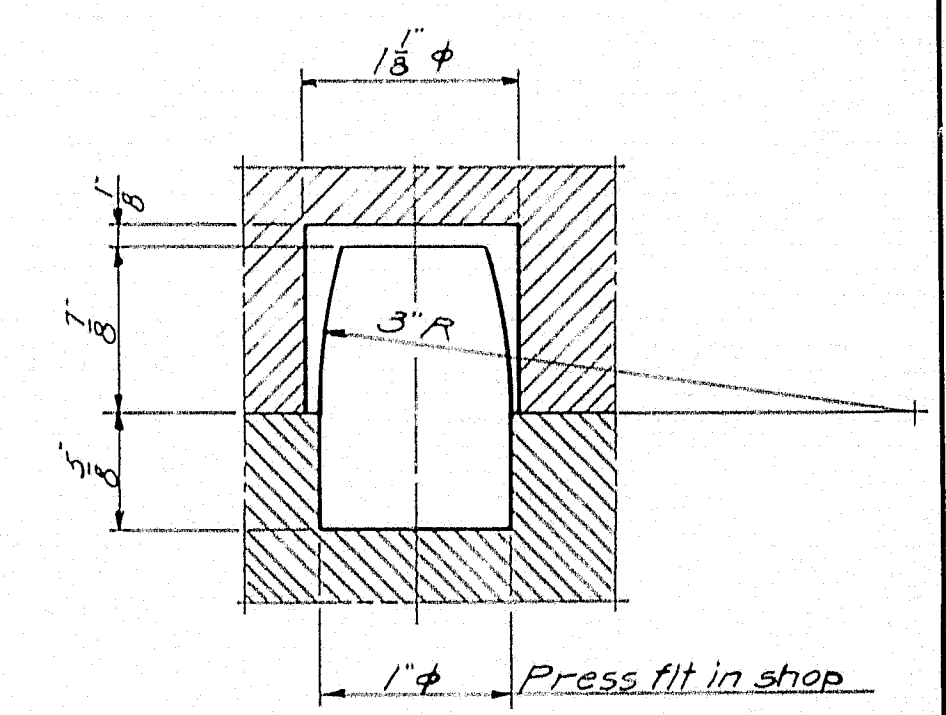
DES. SHA/LEE TRACE GUY CHECK GUY	BRIDGE
STATE HIGHWAY COMMISSION BRIDGE DIVISION DRUMMOND ROAD BRIDGE OVER INTERSTATE HIGHWAY IN THE TOWN OF SIDNEY KENNEBEC COUNTY EXPANSION DAMS SHEET 140F18 AUGUSTA MAINE April 1958	



EXPANSION PEDESTAL - EPA
 16 Req'd.
 Abutments, Piers 1 & 3



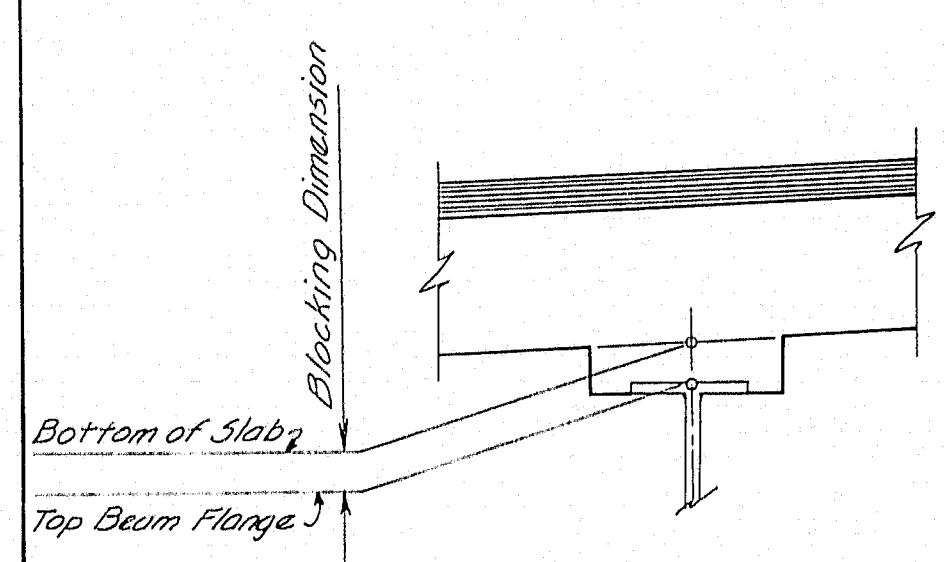
FIXED PEDESTAL - FPA
 4 Req'd.
 Pier #2



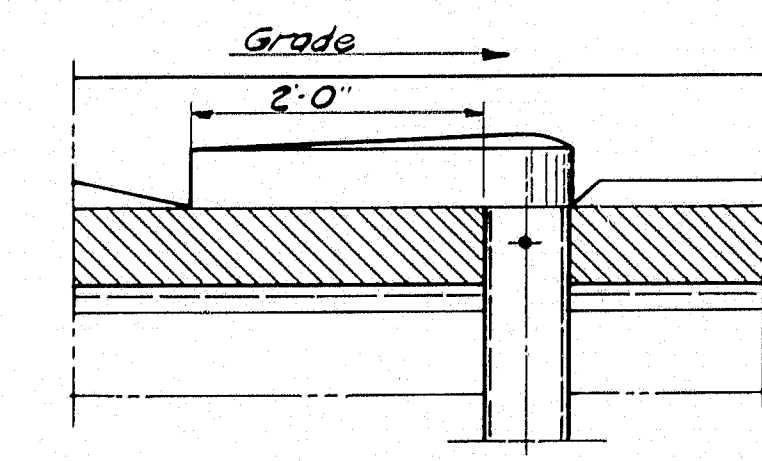
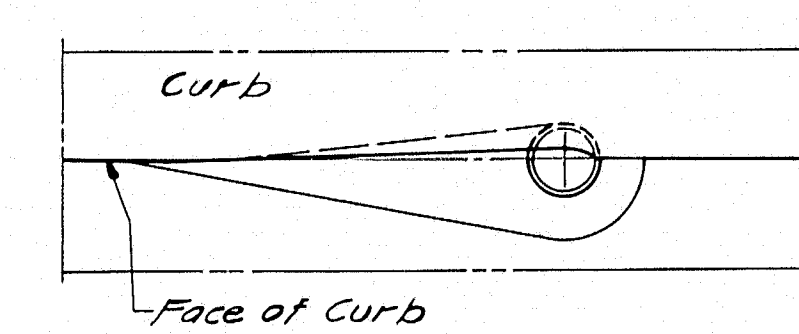
DOWEL DETAIL

ELEVATIONS
Bottom of Roadway Slab

Stations	Int. Bm.	Ext. Bm.
8+34.21	10+79.05	188.12
8+44.63	10+88.63	188.42
8+54.63	10+98.63	188.68
8+64.63	10+108.63	188.91
8+74.63	10+118.63	189.11
8+84.63	10+128.63	189.29
8+94.63	10+138.63	189.46
9+04.63	10+148.63	189.61
9+14.63	9+98.63	189.74
9+24.63	9+108.63	189.83
9+34.63	9+118.63	189.88
9+44.63	9+128.63	189.90
9+54.63	9+138.63	189.91

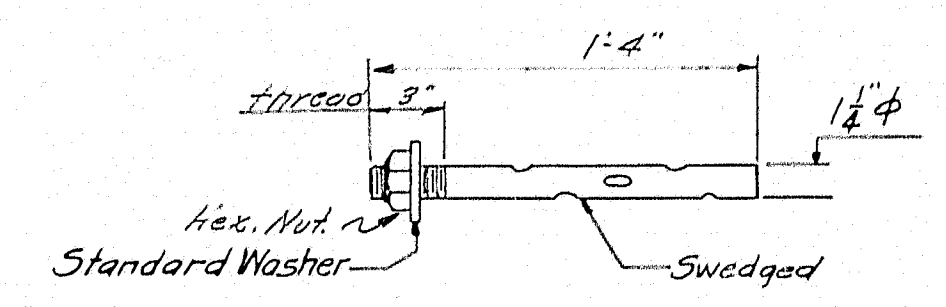


NOTE: To compensate for dead load deflections as well as inequalities in rolling steel, the following procedure will be used. Before any slab forms are constructed, elevations are to be taken on the top of the beam flanges at the stations indicated and subtracted from "Elevations - Bottom of Roadway Slab". The result is the blocking to be used in formwork.

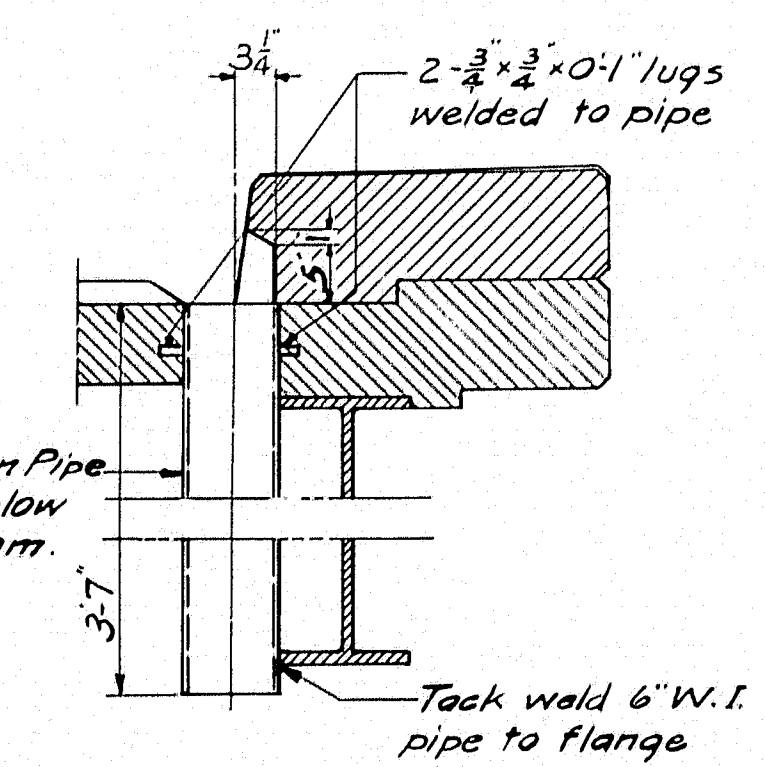


NOTES:
 Adjust reinforcing steel to clear drains.
 Furnishing & Erection of 16 Wrought Iron Pipe Drains to be paid for as "Structural Steel" under Items 702-103 & 702-104.

DRAIN DETAILS
 16 Required.
 Refer to 5h. #16 for placing of drains.



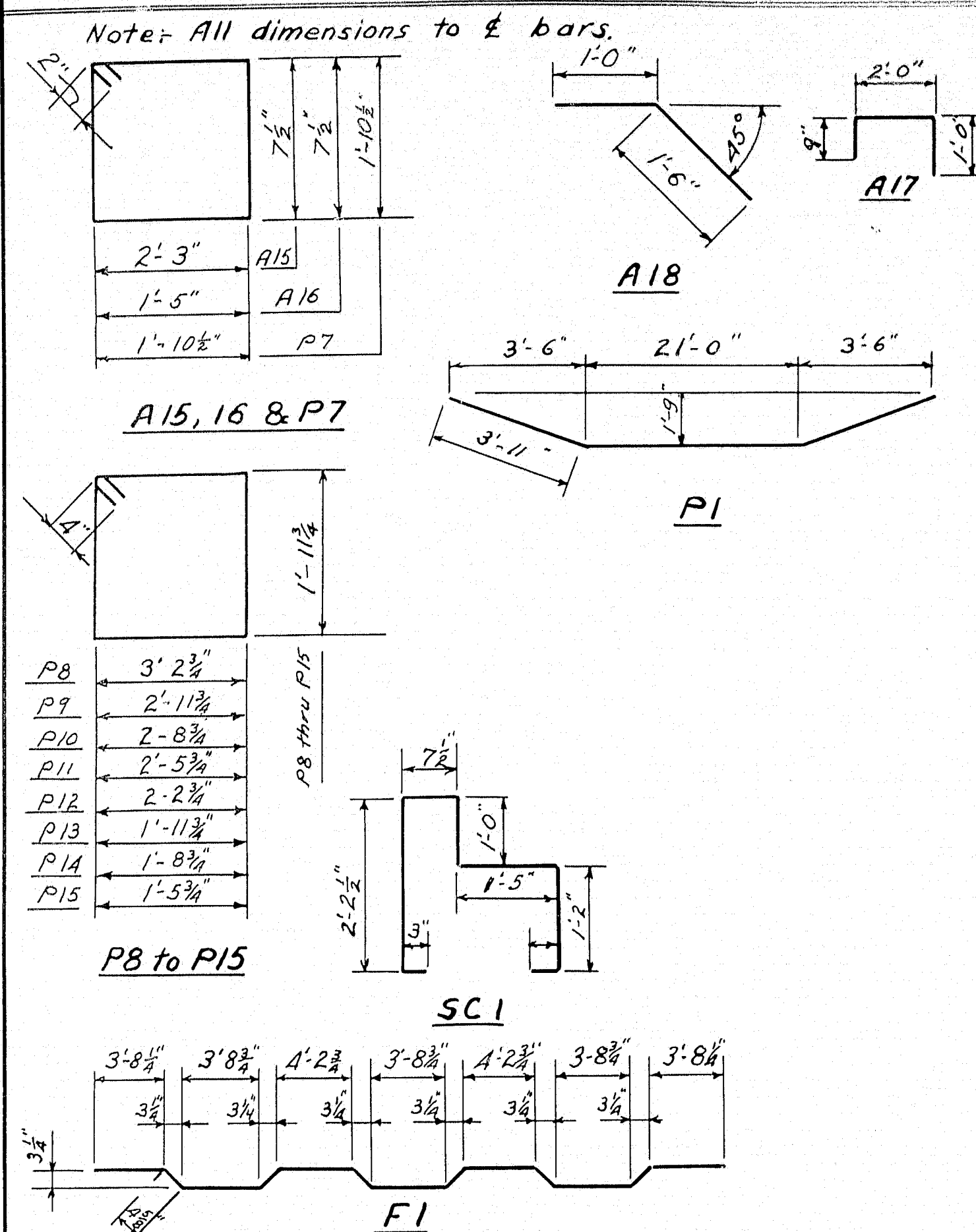
ANCHOR BOLT
 AB-1 - 4B Required.



DES. DET. - COFFIN	BRIDGE NO.
TRACE - JONES	
CHECK - A.B.P.	
STATE HIGHWAY COMMISSION	
BRIDGE DIVISION	
DRUMMOND ROAD BRIDGE	
OVER	
INTERSTATE HIGHWAY	
IN THE TOWN OF	
SIDNEY	
KENNEBEC COUNTY	
BLOCKING DIAGRAM, DRAINS	
PEDESTALS	
SHEET 15 OF 18	AUGUSTA, MAINE April 1958

REINFORCING STEEL SCHEDULE

BENT BARS



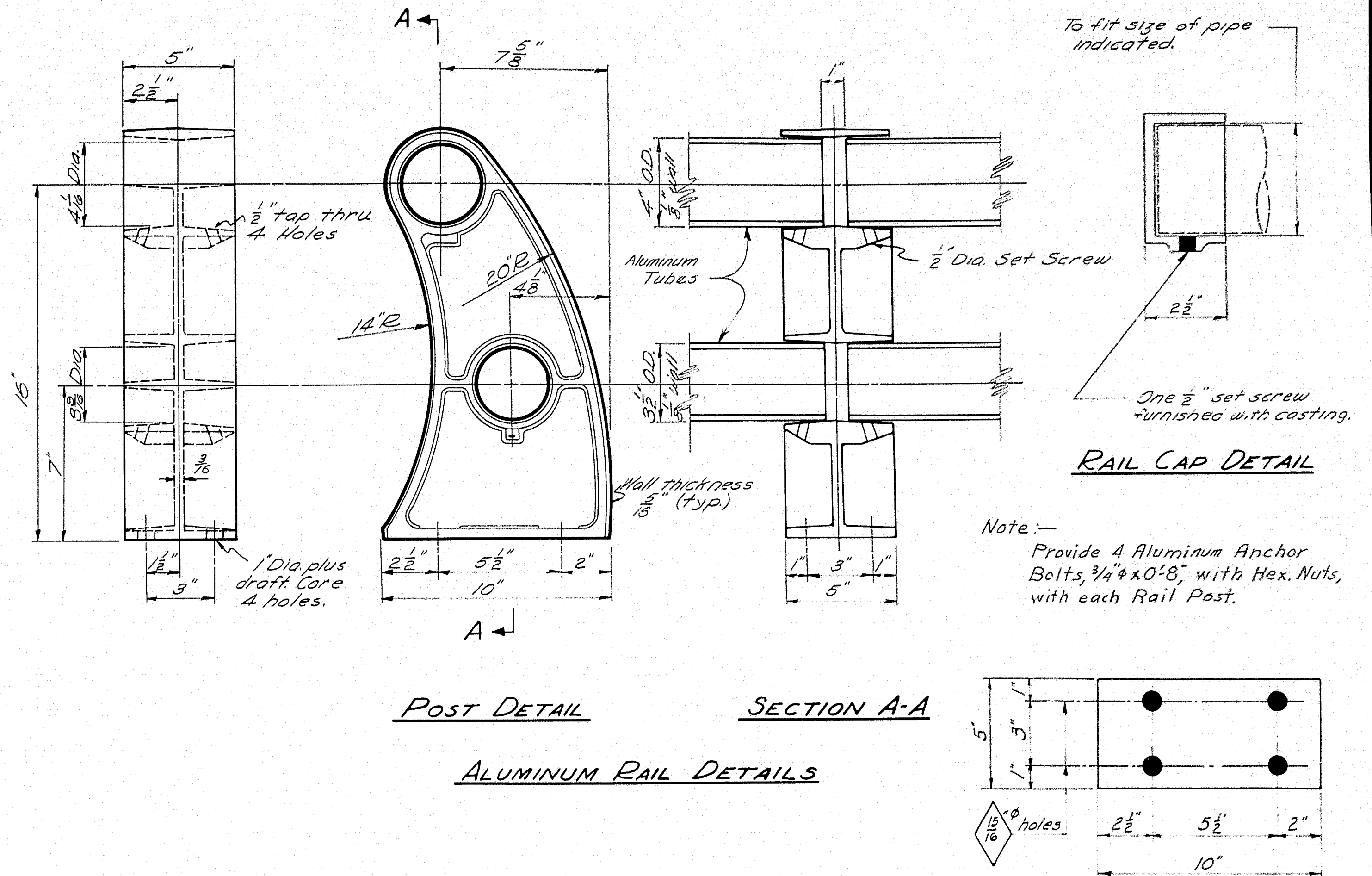
STRAIGHT BARS

Mark	No.	Size	Length	Location
A1	24	#4	2'-5"	Abutment-End Posts & Rail Curb
A2	12	#4	4'-4"	Rail Curb & Curb Inserts
A3	12	#4	28'-6"	Abutment Backwall Horizontal both faces
A4	88	#5	9'-5"	do Wings do do do
A5	40	#5	10'-2"	do do Vertical front face
A6	40	#5	10'-5"	do do do back face
A7	32	#5	5'-3"	do Backwall front face
A8	40	#5	4'-1"	do Bridge seat
A9	60	#6	6'-3"	do
A10	16	#6	7'-9"	do
A11	20	#6	3'-0"	do
A12	14	#6	28'-6"	do
A13	18	#6	28'-6"	Abutment Bridge seat
A14	32	#6	10'-0"	do Breastwall back face

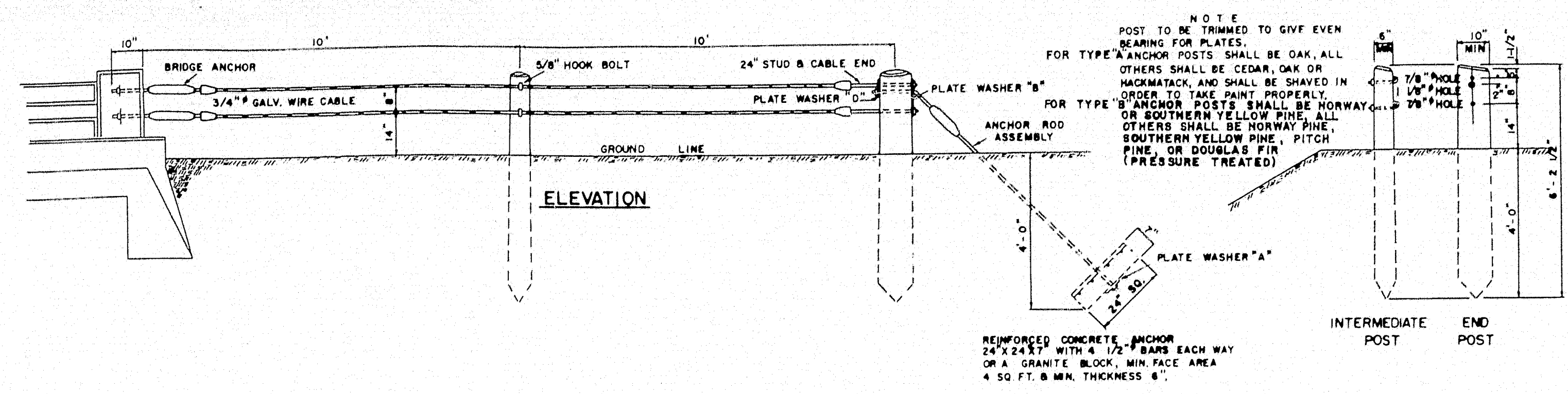
AS1	40	#5	23'-6"	Approach Slabs
AS2	192	#7	14'-8"	do do
P2	9	#7	21'-0"	Pier Caps
P3	21	#9	28'-0"	do do
P4	36	#9	17'-0"	Pier Columns Piers #1
P5	36	#9	19'-3"	do do Pier #2
P6	108	#8	5'-0"	do Footings for Columns
P16	36	#9	26'-0"	Pier Columns Pier #3
P17	6	#6	25'-0"	Pier Caps
P18	6	#6	28'-0"	do do

Mark	No.	Size	Length	Location
A15	12	#4	6'-1"	Abutment End Posts
A16	40	#4	4'-5"	do Rail Curbs
A17	40	#4	3'-9"	do Curb Insert
A18	24	#6	2'-6"	do Approach Slab dowels
P1	12	#7	28'-10"	Pier Cap
P7	162	#4	7'-10"	Pier Columns
P8	90	#5	11'-1"	Pier Cap
P9	12	#5	10'-7"	do do
P10	12	#5	10'-1"	do do
P11	12	#5	9'-7"	do do
P12	12	#5	9'-1"	do do
P13	12	#5	8'-7"	do do
P14	12	#5	8'-1"	do do
P15	12	#5	7'-7"	do do
F1	291	#5	29'-4"	Superstructure Slab
SC1	394	#4	6'-11"	Superstructure Curb & Rail Curb

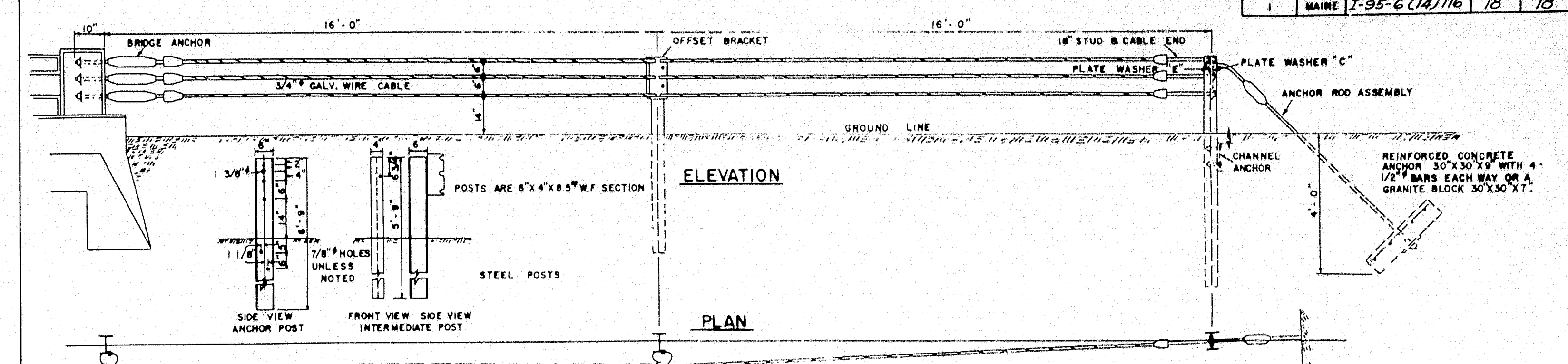
F2	592	#5	28'-8"	Superstr. Slab (Transverse)
F3	118	#4	32'-6"	Superstr. Slab (Longitudinal) Panel 2
F4	118	#4	43'-0"	do do do do
F5	118	#4	23'-6"	do do do Panel 1
F6	59	#4	47'-6"	do do do Panel 3
F7	102	#4	22'-0"	do do do Top at Piers
C1	20	#4	26'-6"	Superstr. Curb
C2	20	#4	23'-8"	do do
C3	60	#4	23'-6"	do do



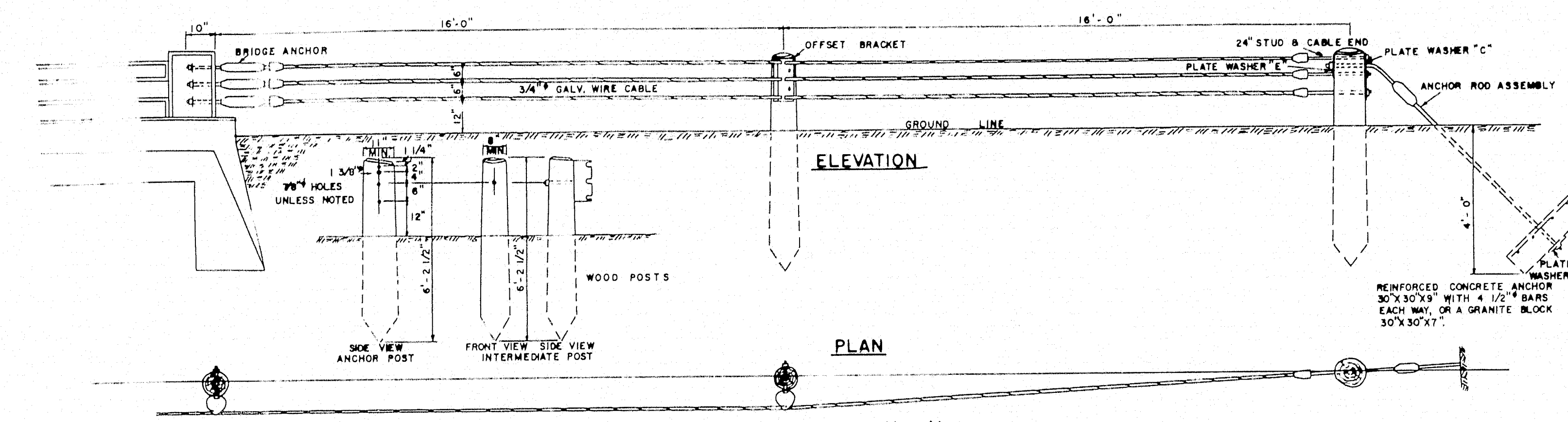
DESIGN - TRACE - CHECK -	GLJ A.B.P.	BRIDGE NO. - SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
DRUMMOND ROAD BRIDGE OVER INTERSTATE HIGHWAY IN THE TOWN OF SIDNEY KENNEBEC COUNTY		
REINFORCING STEEL & RAIL SHEET 17 OF 18 AUGUSTA, MAINE APRIL 1958		



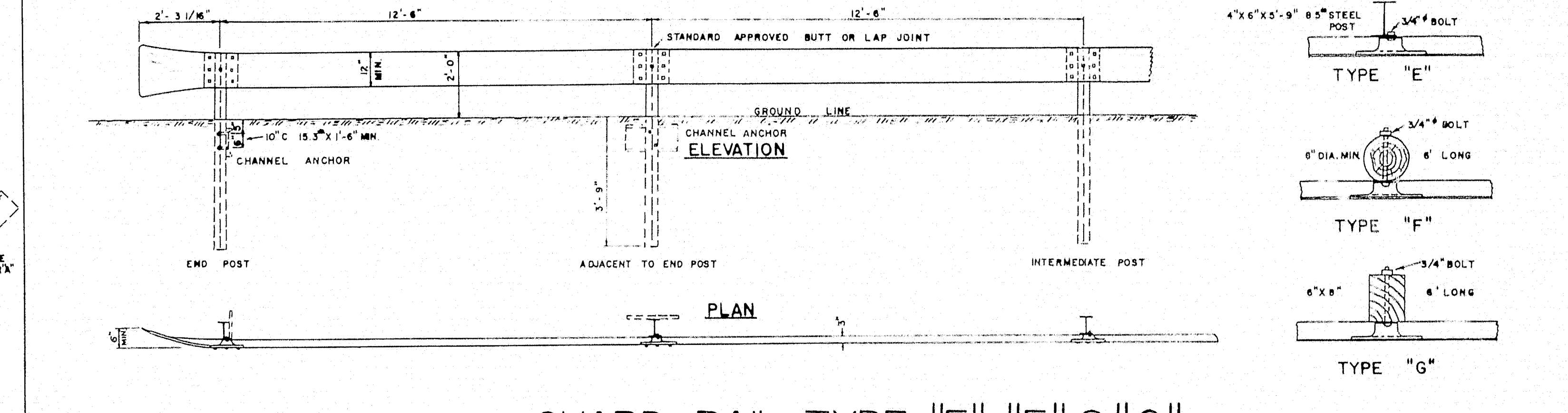
GUARD RAIL TYPE "A" & "B"



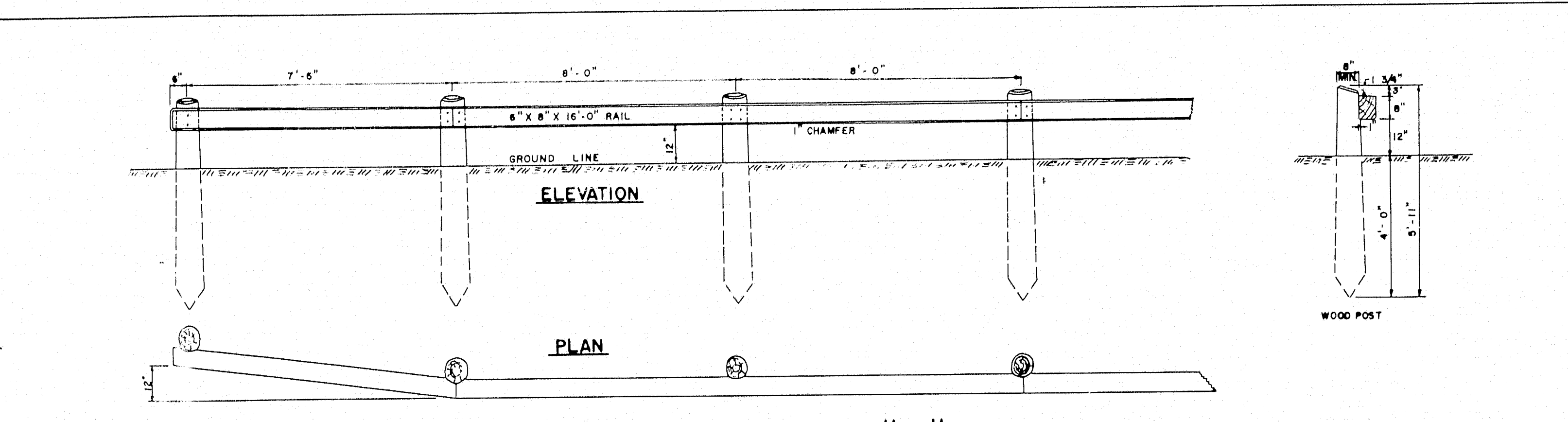
GUARD RAIL TYPE "C"



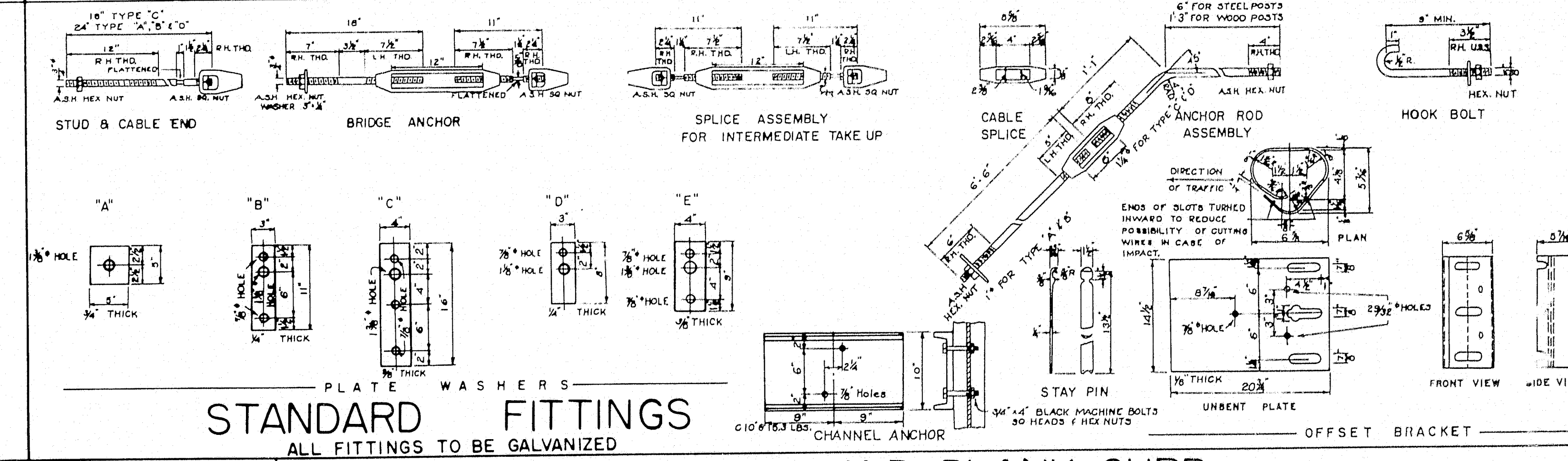
GUARD RAIL TYPE "D"



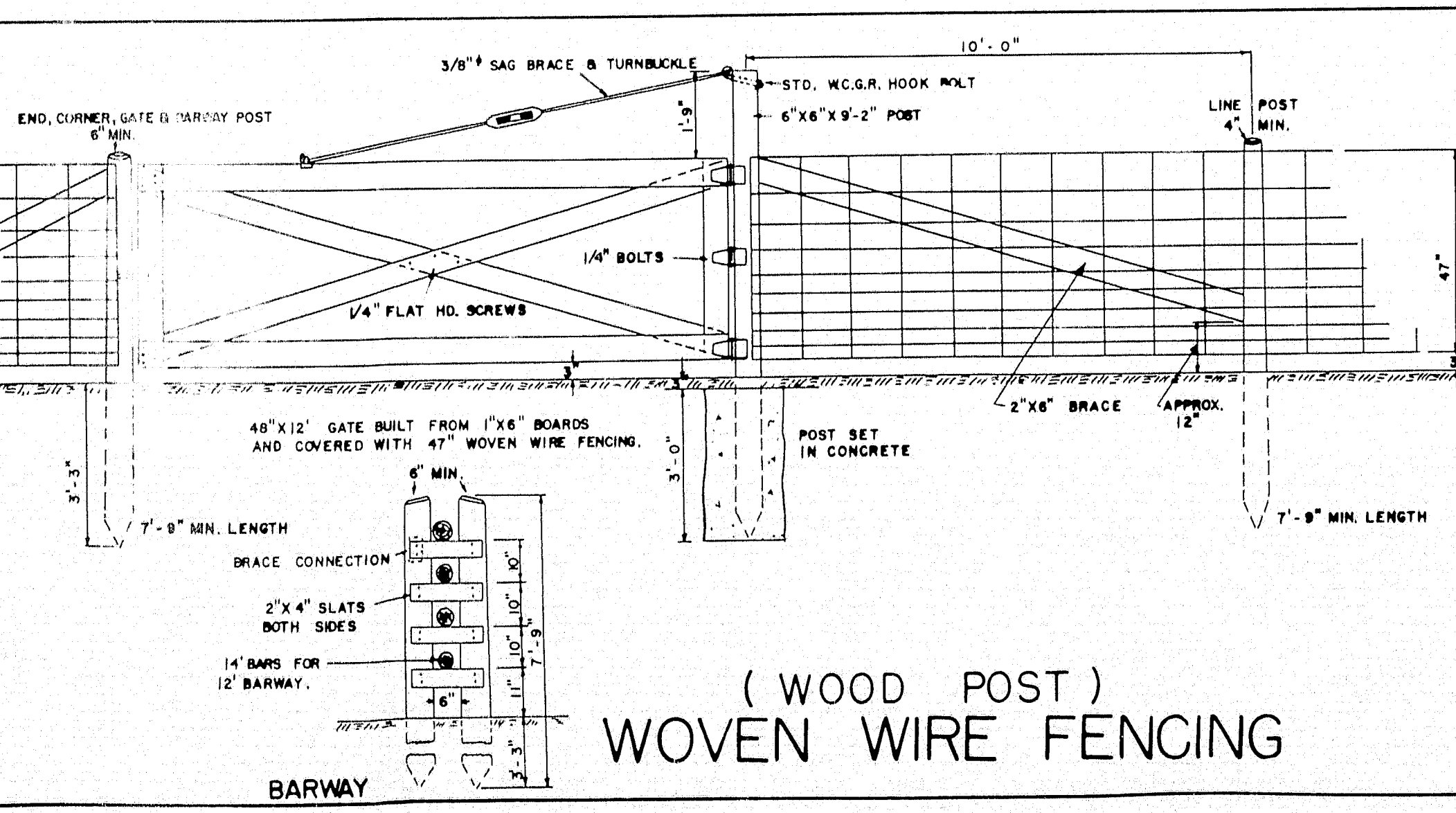
GUARD RAIL TYPE "E", "F" & "G"



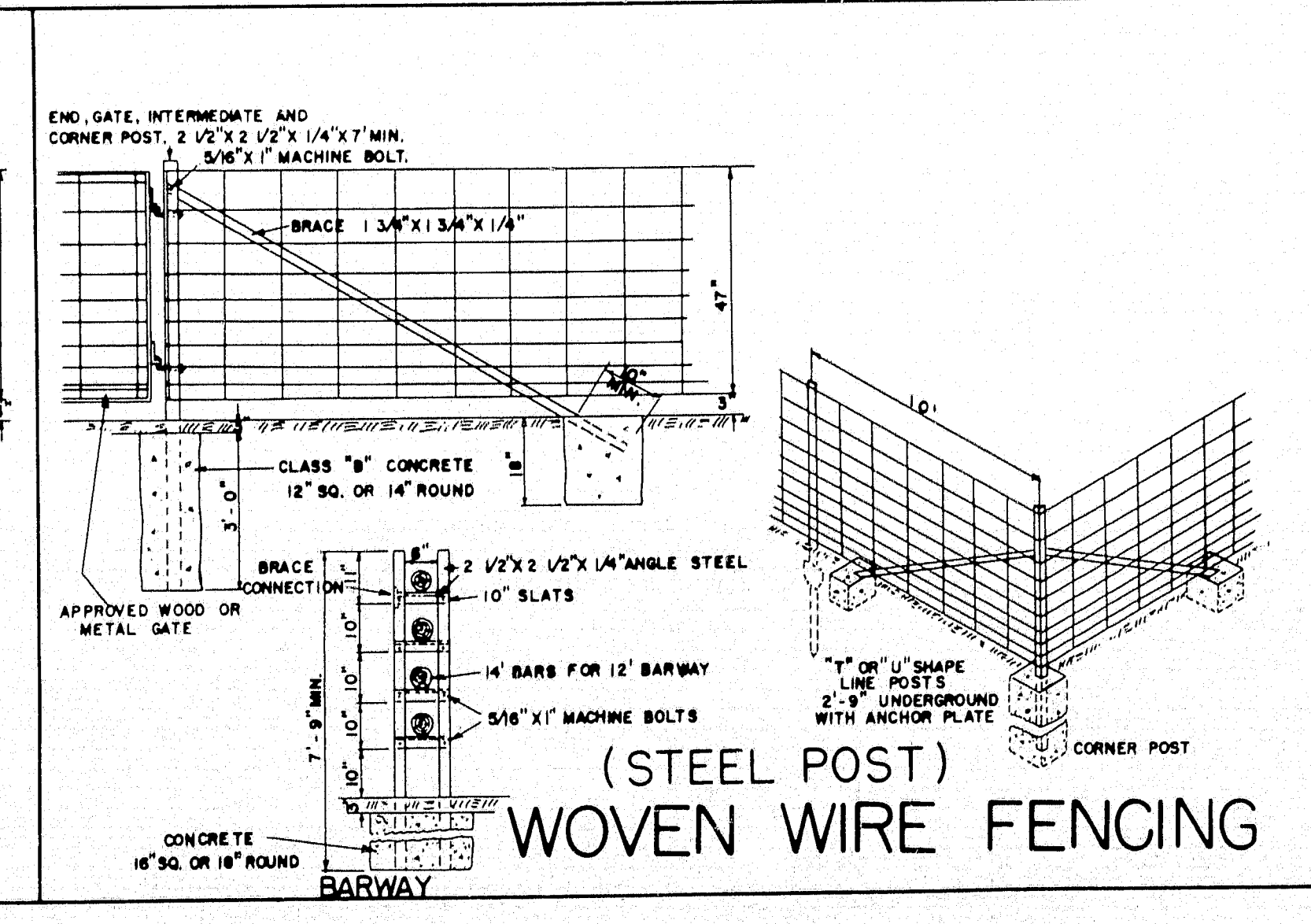
GUARD RAIL TYPE "H"



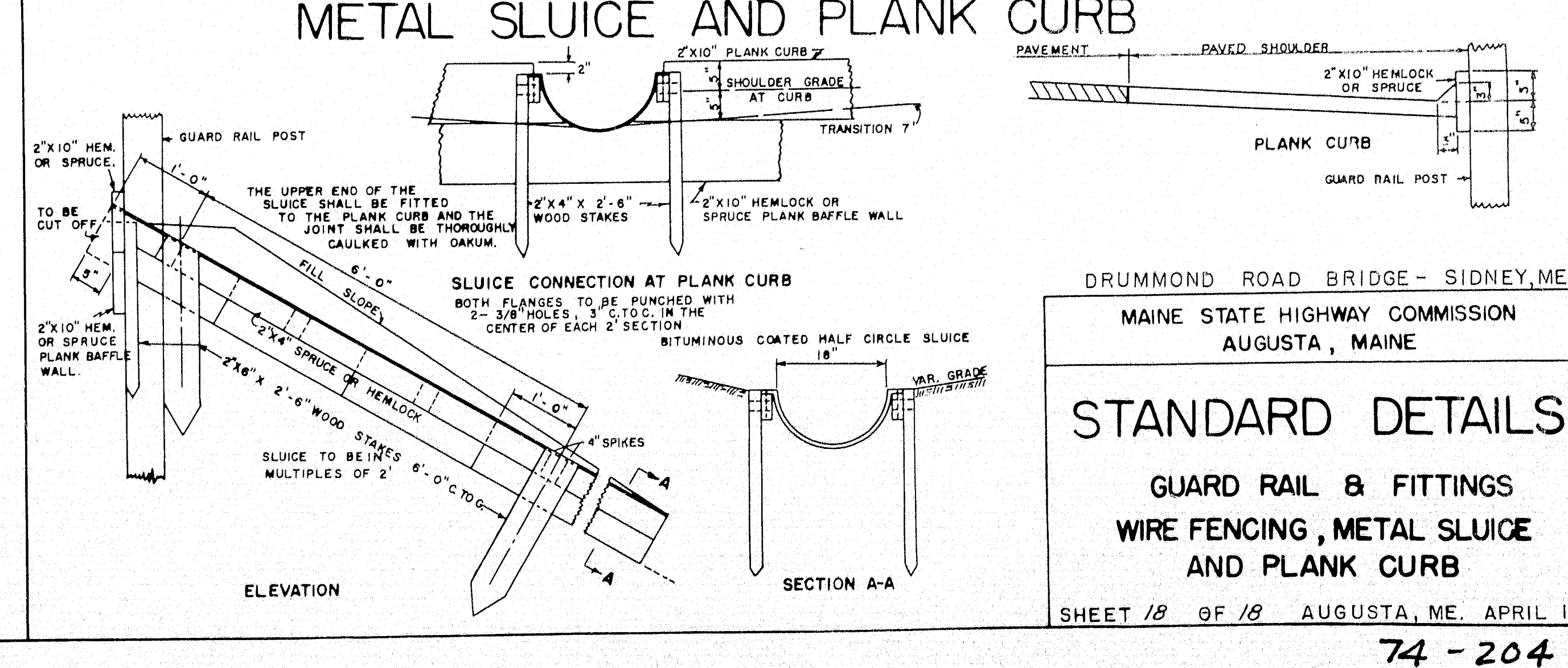
STANDARD FITTINGS
ALL FITTINGS TO BE GALVANIZED



(WOOD POST)
WOVEN WIRE FENCING



(STEEL POST)
WOVEN WIRE FENCING



METAL SLUICE AND PLANK CURB

DRUMMOND ROAD BRIDGE - SIDNEY, ME.
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

GUARD RAIL & FITTINGS
WIRE FENCING, METAL SLUICE
AND PLANK CURB

SHEET 18 OF 18 AUGUSTA, ME. APRIL 1958