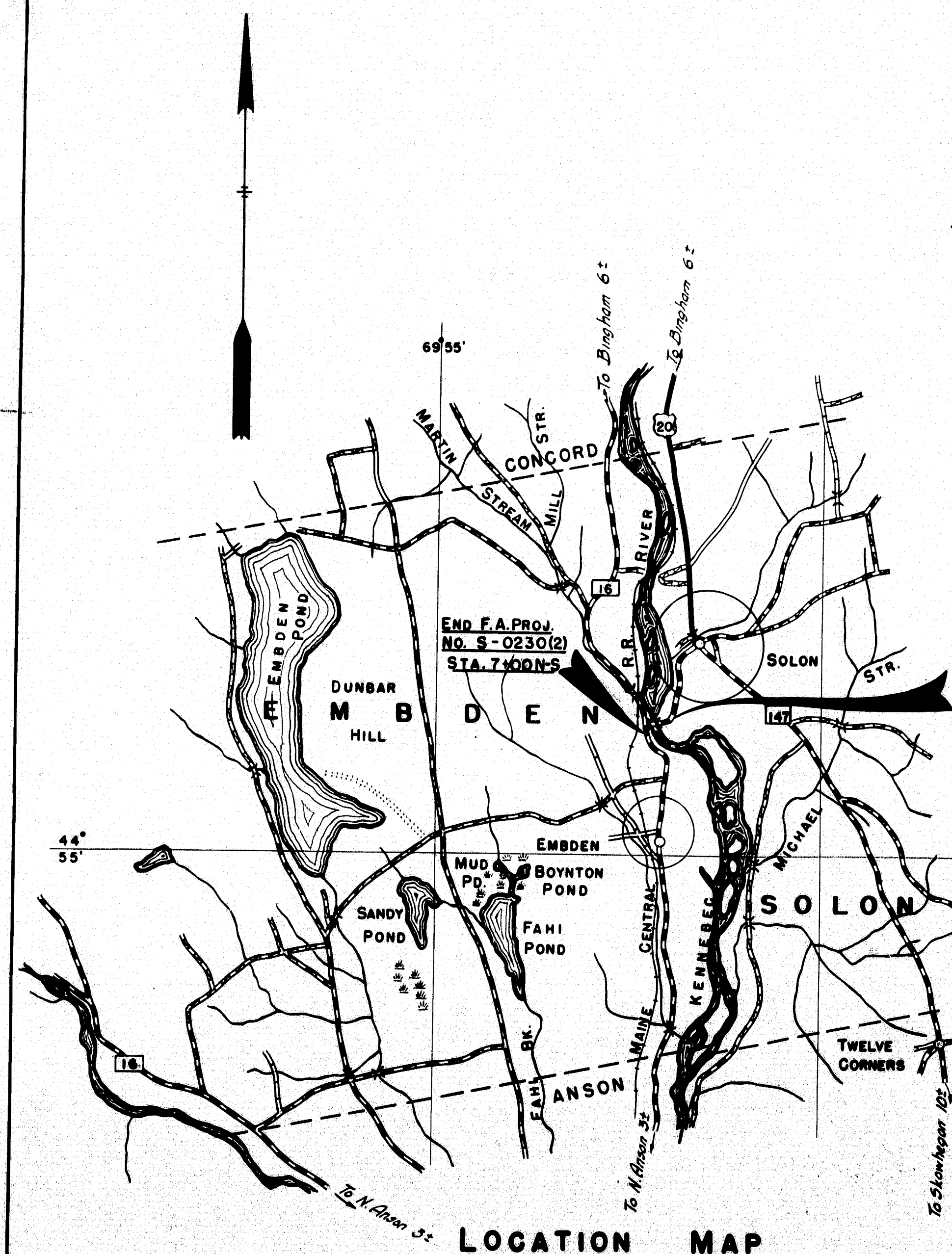


STATE OF MAINE
STATE HIGHWAY COMMISSION



EMBDEN - SOLON BRIDGE
OVER THE
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY

FEDERAL AID PROJECT NO. S-0230 (2)
LENGTH OF PROJECT 0.239 MILE



LOCATION MAP

CONTRACT SPECIFICATIONS

STATE OF MAINE, STATE HIGHWAY COMMISSION, STANDARD SPECIFICATIONS, REVISION OF MAY, 1953, EXCEPT AS MODIFIED ON THESE PLANS AND IN THE SUPPLEMENTAL SPECIFICATIONS.

DESIGN

A.A.S.H.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES - 1948.

LOADING - H20-44
R = 18,000 psi
F = 12,000 psi
n = 10

CONCRETE CLASSIFICATION

SUPERSTRUCTURE (T-BEAMS & SLABS) CLASS A
ABUTMENTS & PIERS (UNWATERED FORMS) CLASS B
PIERS (UNDER WATER) CLASS C
RAIL BARS & RAIL POSTS CLASS Y

INDEX OF SHEETS

1	TITLE
2	STANDARDS
3-5	SURVEY
6	PLAN & STRATIGRAPHIC PROFILE
7	BORING LOGS
8	GENERAL PLAN & ELEVATION
9	TYPICAL CROSS SECTIONS
10	WEST APPROACH PLAN
11	LAYOUT & ISLAND DETAILS - W APPROACH
12-17	CROSS SECTIONS
18	ABUTMENTS
19	PIERS 1 & 2
20	PIERS 3, 4 & 5
21	SUPERSTRUCTURE - SPAN 1
22-24	SUPERSTRUCTURE - SPAN 6
25	MISC. DETAILS - SPANS 1 & 6
26	GENERAL SLAB PLAN & RAIL DETAILS
27	SUPERSTRUCTURE - SPANS 2, 3, 4 & 5
28	REINFORCING STEEL
29	ERECTION DIAGRAM
30-31	STRUCTURAL STEEL DETAILS
32	PEDESTAL & EXPANSION DETAILS

APPROVED:
MAINE STATE HIGHWAY COMMISSION

Harley D. Welch CHAIRMAN
Harold P. Emery
Lucas S. Emery CHIEF ENGINEER

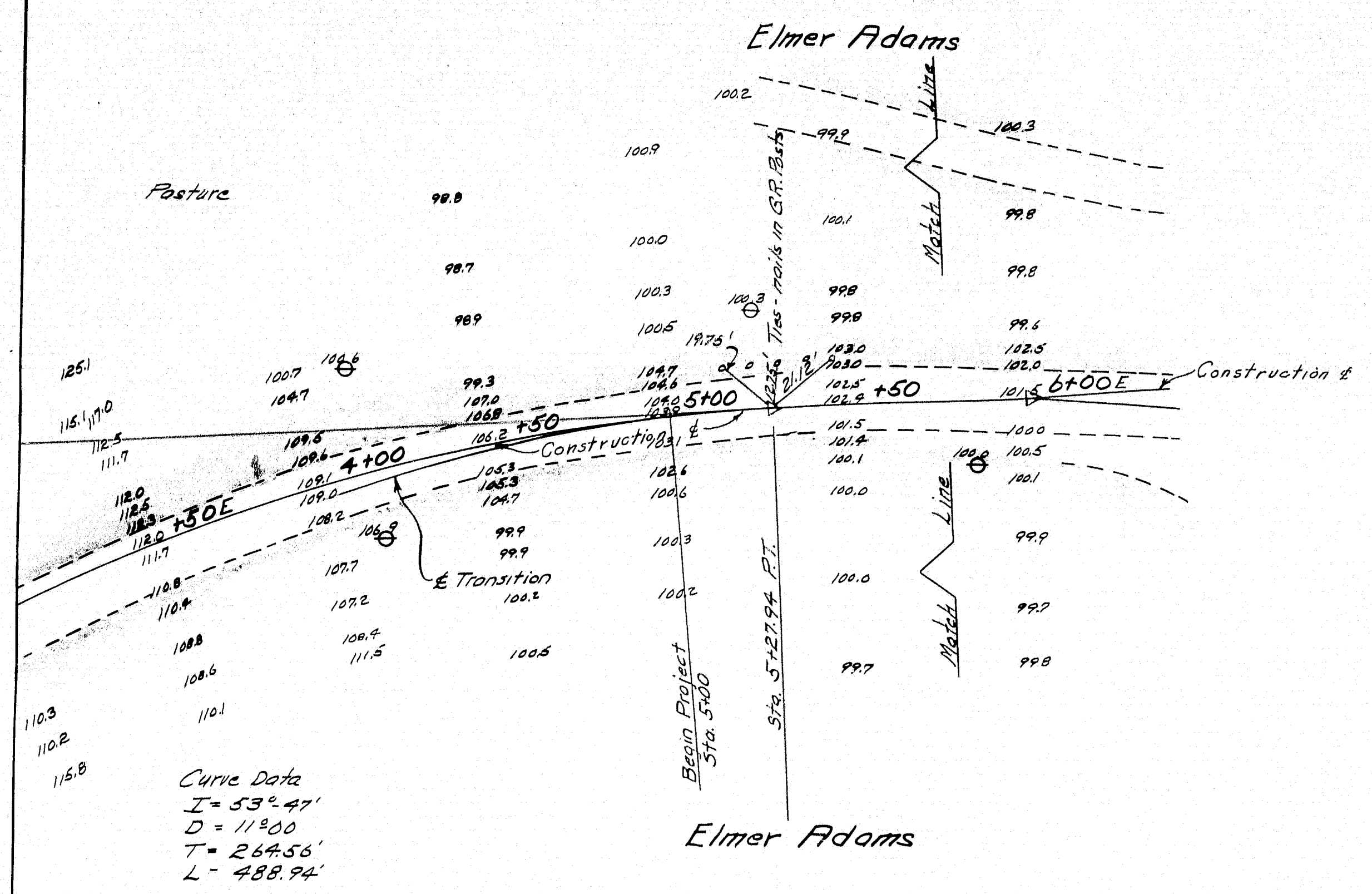
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL:

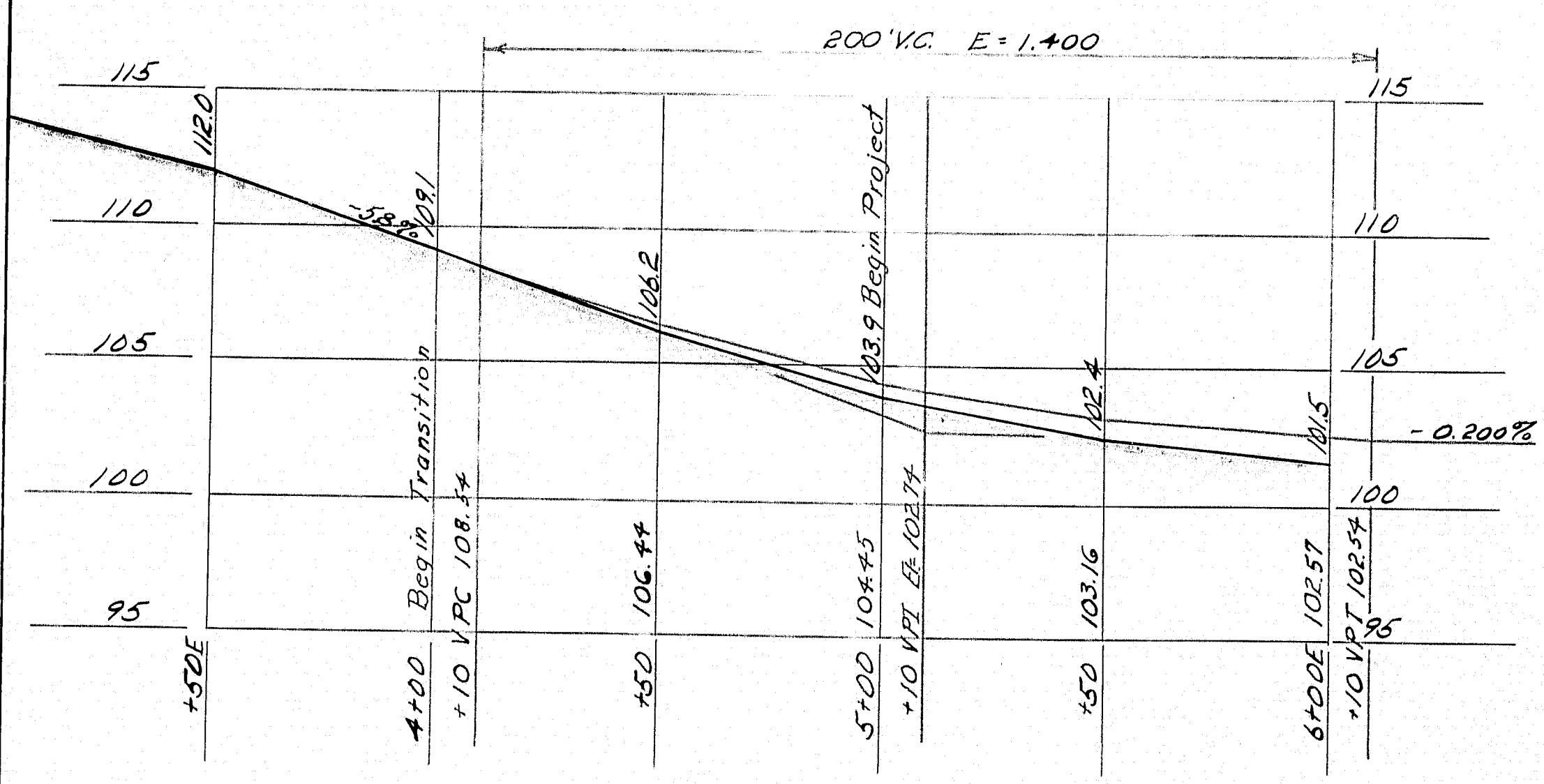
DISTRICT ENGINEER DATE

APPROVED:

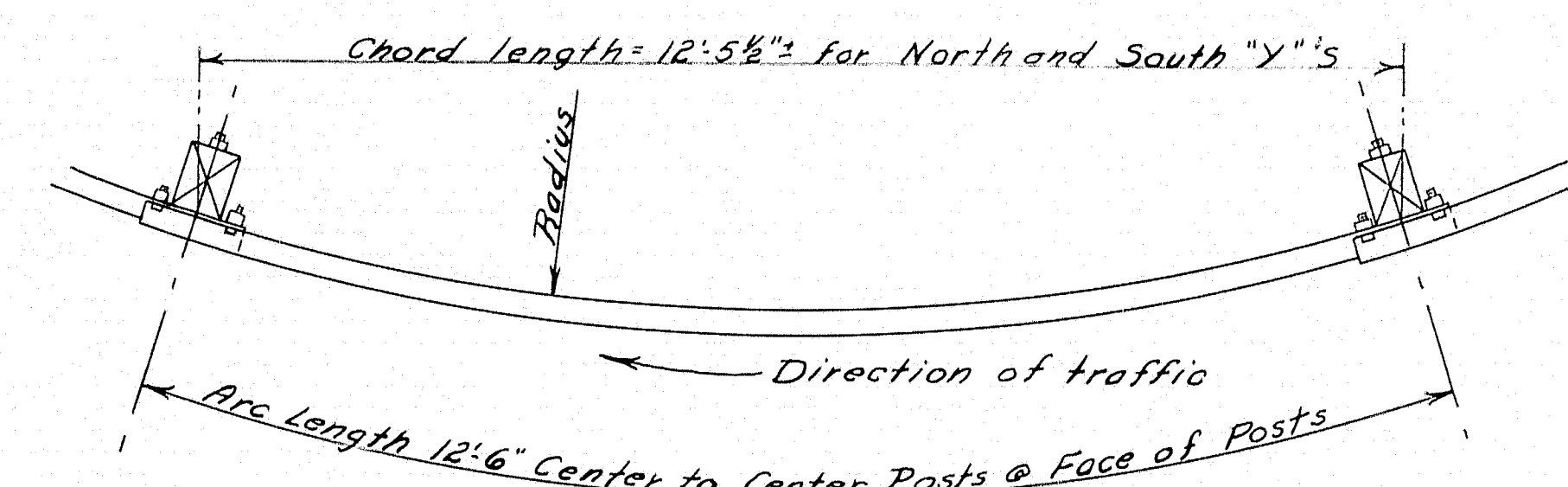
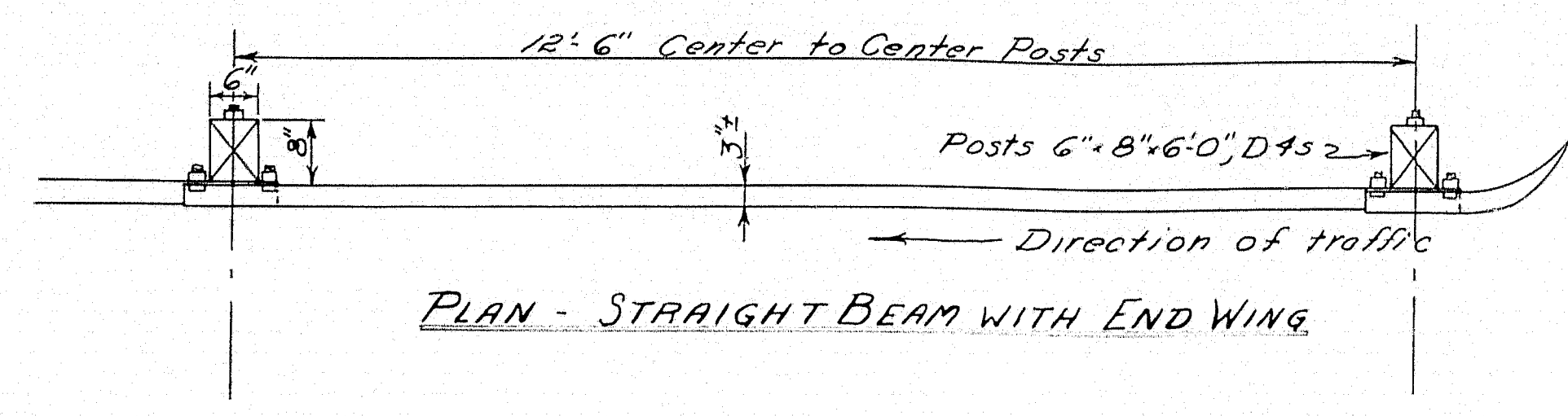
DIVISION ENGINEER DATE



-PLAN-
Scale 1/4" = 30 ft



-PROFILE-
Scale: Horiz. 1/4" = 30'
Vert. 1" = 5'



SCHEDULE		BEAM TYPE		GUARDRAIL			
From Sta.	To Sta.	Length Str. Beam	True Radius	Use Radius	Length Curv. Beam	End Wings	Left or Right
7+43.5'E	9+06'E	162.5					Left
8+93.5'E	9+06'E	12.5					Right
14+47'N	15+33.24'N		85.03'	80'	86.0 ±		Right
14+47'N	15+22'S		74.93'	80'	72.5		Left
0+50'N	2+79.4'N	220.0 ±					Left
4+59.5'N	6+22'N	162.5					Left
@ 7+43.5'E						1	Left
@ 8+93.5'E						1	Right
@ 9+06'E						2	Left
@ 14+47'N						1	Right
@ 14+47'S						1	Left
@ 0+50'N						1	Left
@ 6+22'N						1	Left
TOTALS		5575.11			158.5 ± 1.1	8	

-NOTES-

Substructure: - Abutments No. 1 and 2. - Breastwall dressed, mortar masonry. Wings split granite random courses laid in mortar. All in good condition. Pier No. 1 - Dressed mortar masonry. - The nose settled 6" in 1936. Same rip-rap placed in front of nose. Pier No. 2 - Dressed mortar masonry in good condition.

Superstructure: - Two thru pin connected trusses and one pony truss. Floor, 4" plank with 1" Asphalt plank. Floor in very poor condition.

Approaches: - Surface treated gravel.

Foundation: - River gravel. Sounding No. 1 on old E Sta. 9+43, easy penetration 4' below water. 1/2" per blow to 14' below water. - Sounding stopped there due to lack of equipment. See sheets 6 & 7 for subsurface information by Soils Engineer.

Stream: - Extreme high water, U.S.G.S. Flood mark March 20, 1936 Elev. 91.43. High water 1940 from driftage El. 86.4.

GUARD RAIL DETAILS (TYPE "G")
See "Standards" sh. 2

Federal Aid Project, No. 5-0230 (2)

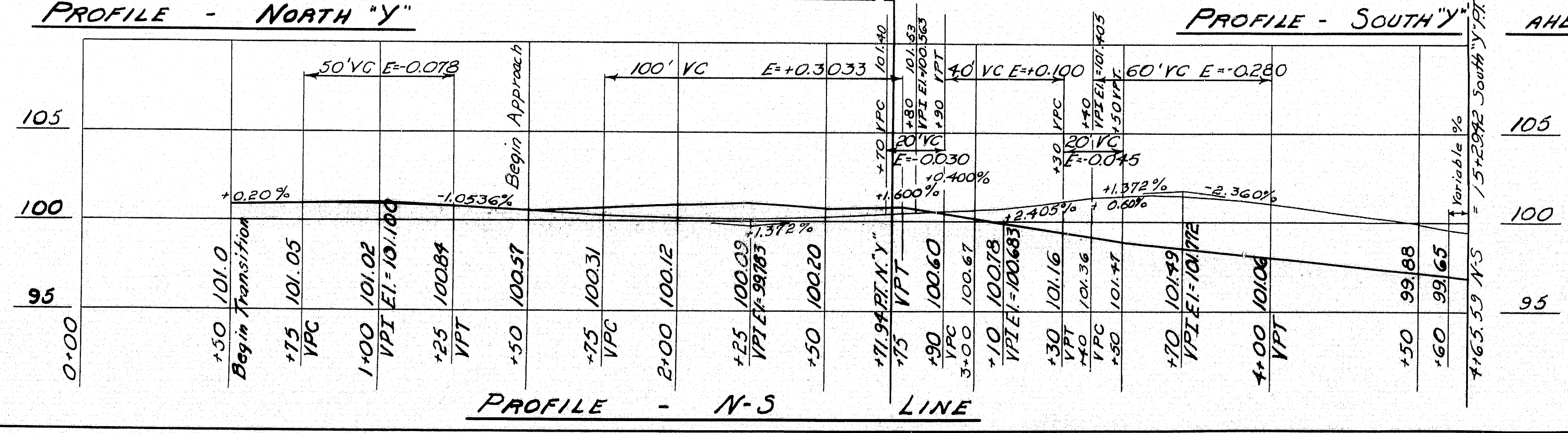
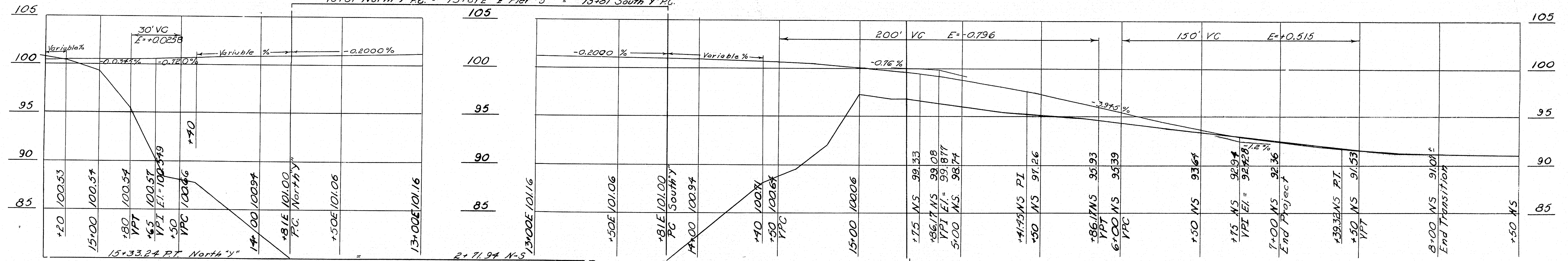
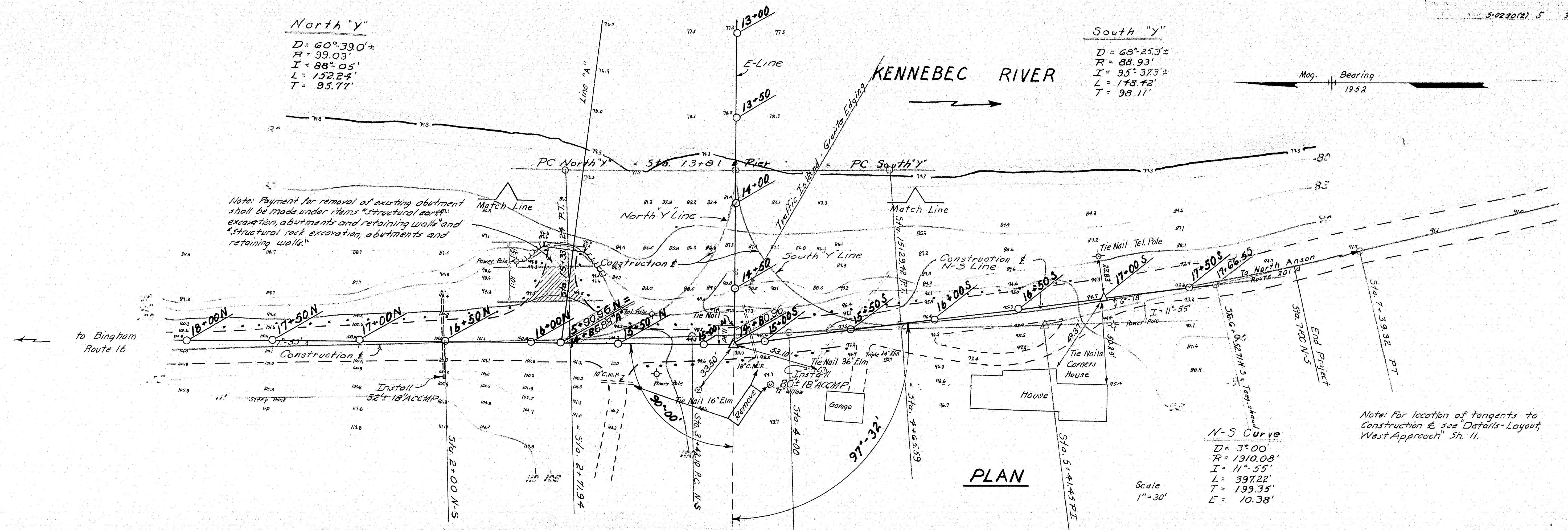
SURVEY - TOWNE
RETRACE - BACHELDER

BRIDGE - 2267

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

EMBDEN-SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY

SURVEY - GUARD RAIL DETAILS
SHEET 3 OF 32 AUGUSTA, MAINE FEB. 1953



SURVEY - BLAKE
 PLAN - MOLLICONE
 PROFILE - VERRILL

BRIDGE - 2267

STATE HIGHWAY COMMISSION
 BRIDGE DIVISION

EMBDEN-SOLON BRIDGE

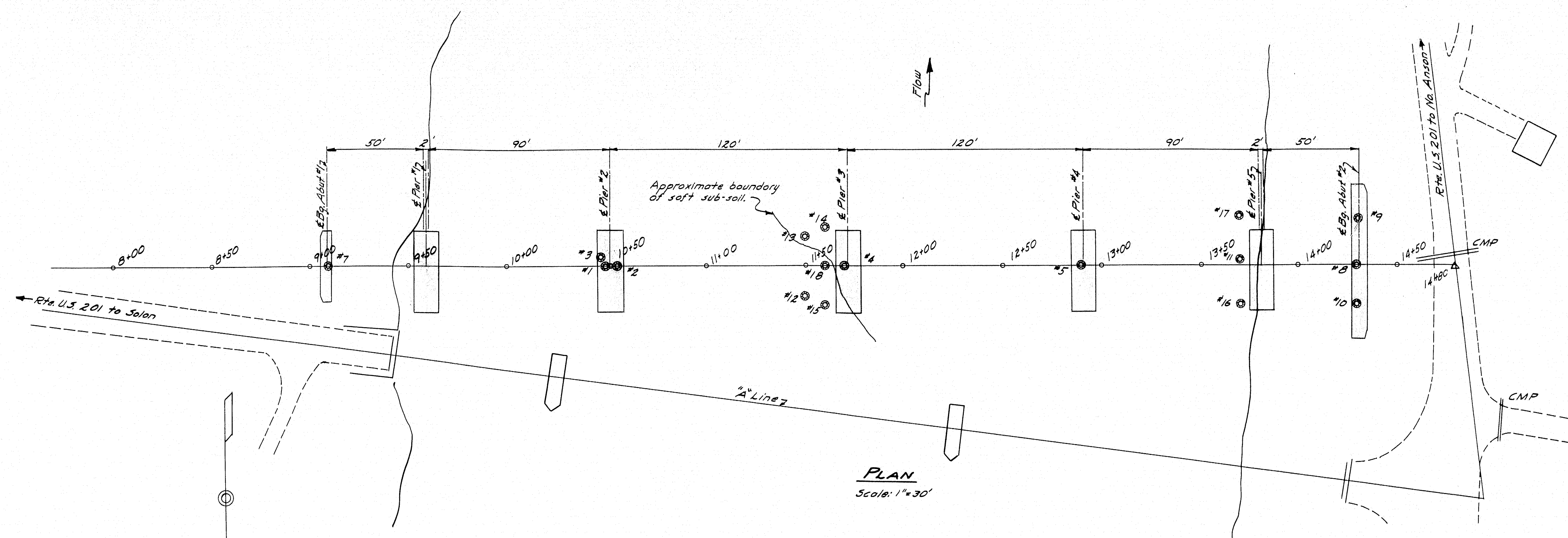
OVER
KENNEBEC RIVER

BETWEEN THE TOWNS OF
EMBDEN & SOLON

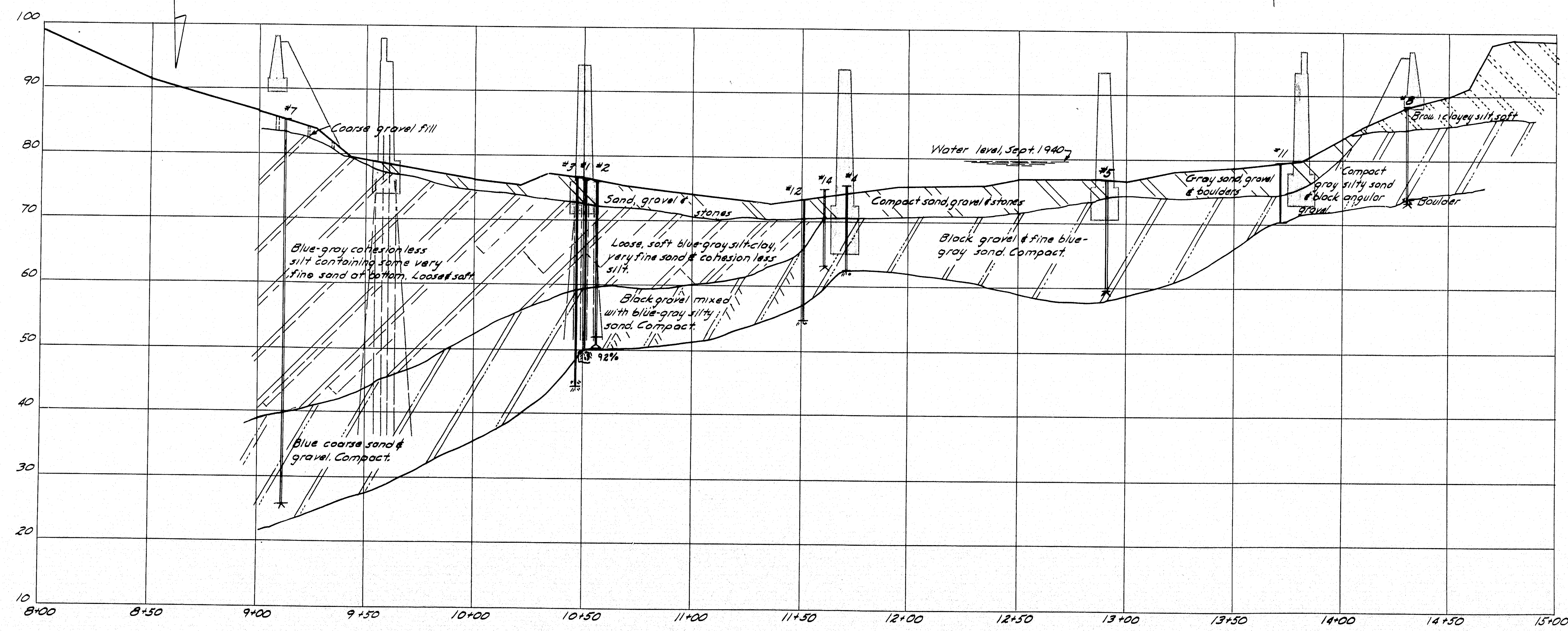
SOMERSET COUNTY

SURVEY

SHEET 5 OF 22 AUGUSTA, MAINE APR. 1953



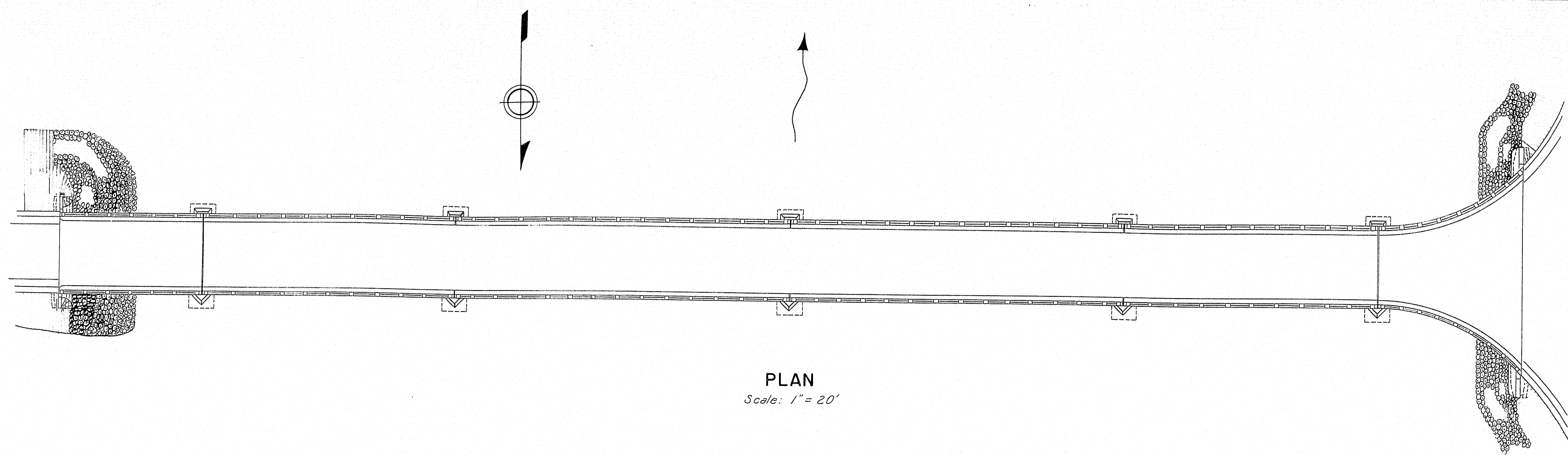
Note: Location of borings shown by (B)



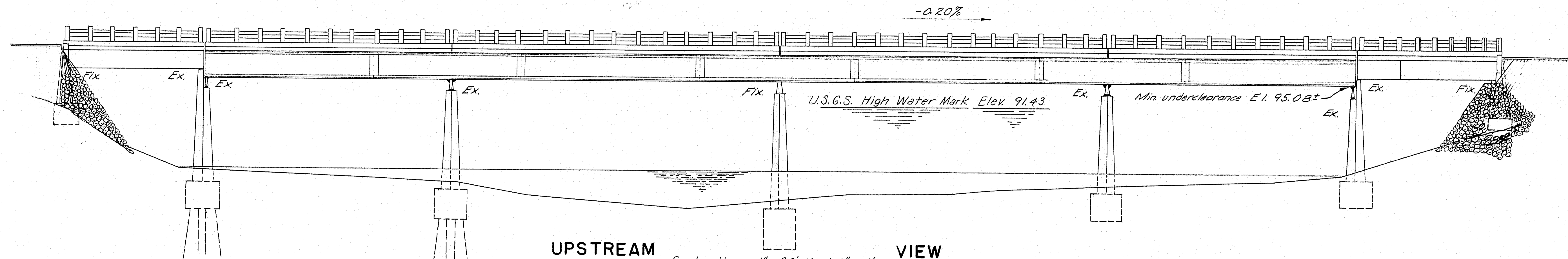
SOILS ENGINEER- H. GRAY
 TRACE- RISSEL
 BRIDGE- 2267
 STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
EMBDEN-SOLON BRIDGE
 OVER
KENNEBEC RIVER
 BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
 PLAN & STRATIGRAPHIC PROFILE
 SHEET 6 OF 32 AUGUSTA, MAINE AUG., 1953

Abut #1 revised December 8, 1953.

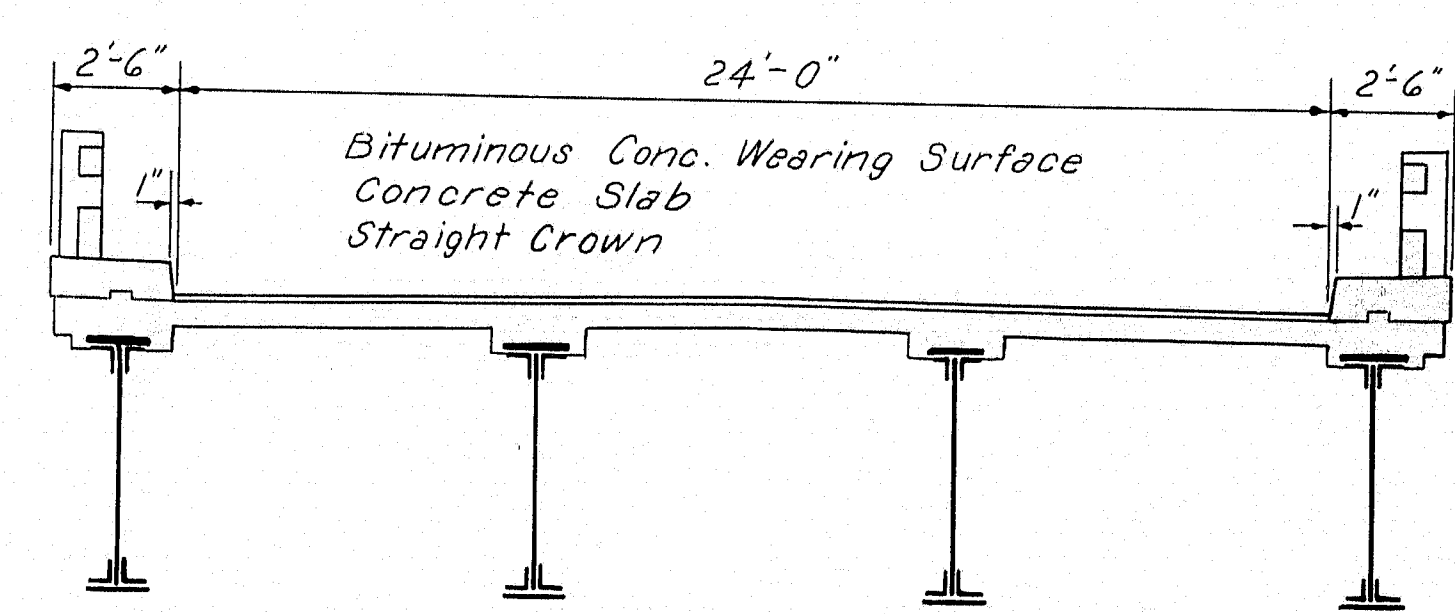
63-5



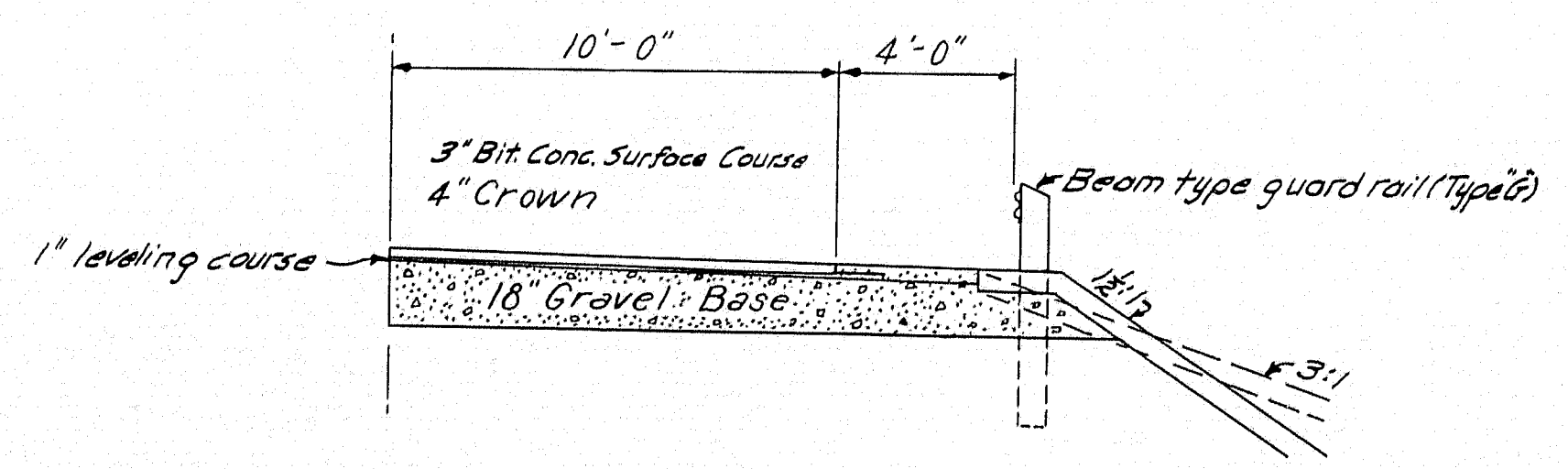
PLAN
Scale: 1" = 20'



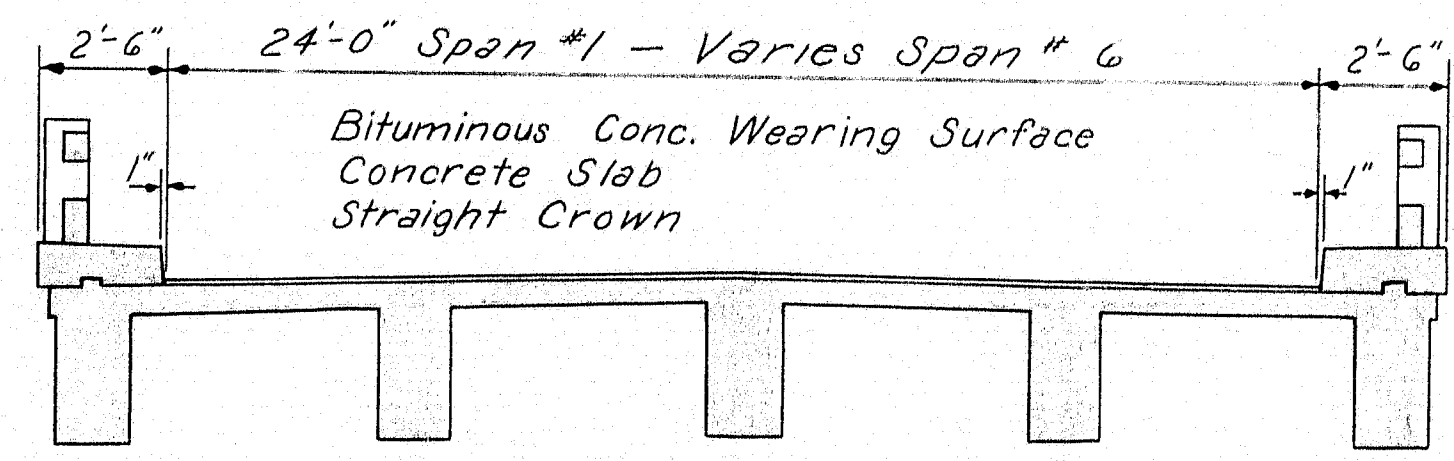
UPSTREAM VIEW
Scale: Horz. 1" = 20' Vert. 1" = 10'



SECTION INTERMEDIATE SPANS



HALF APPROACH SECTION



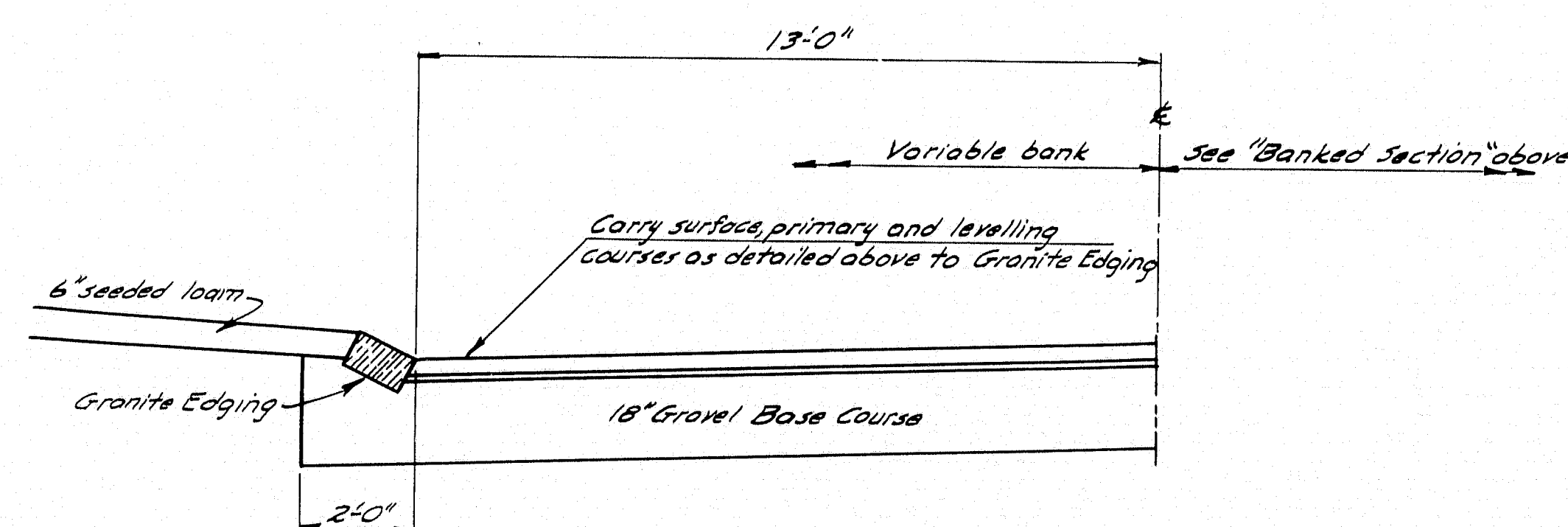
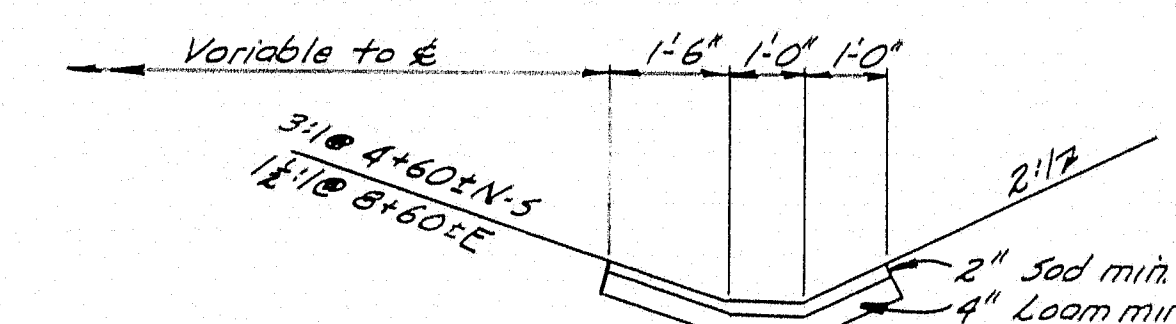
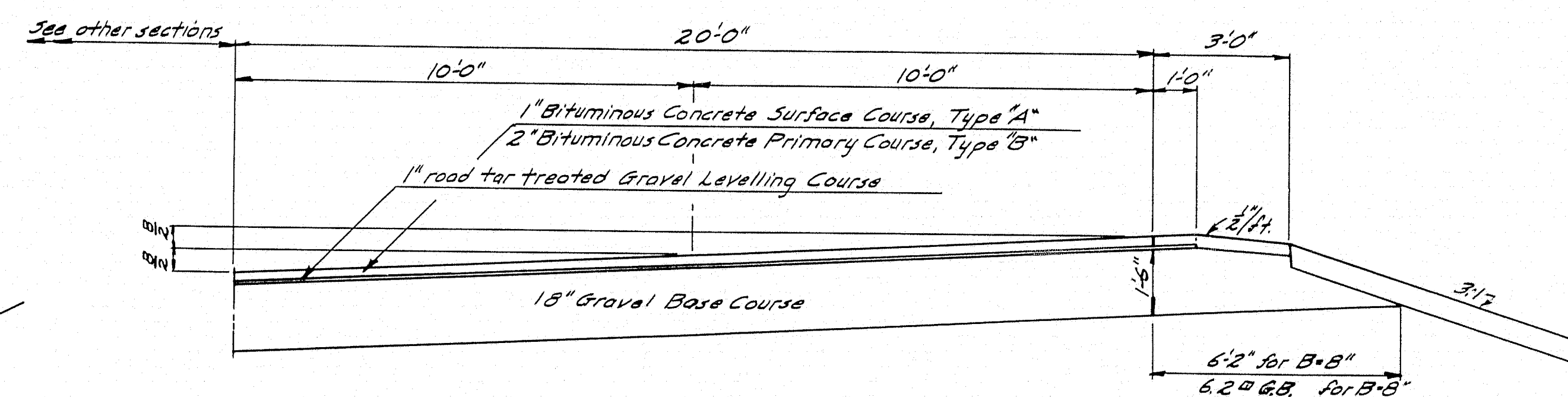
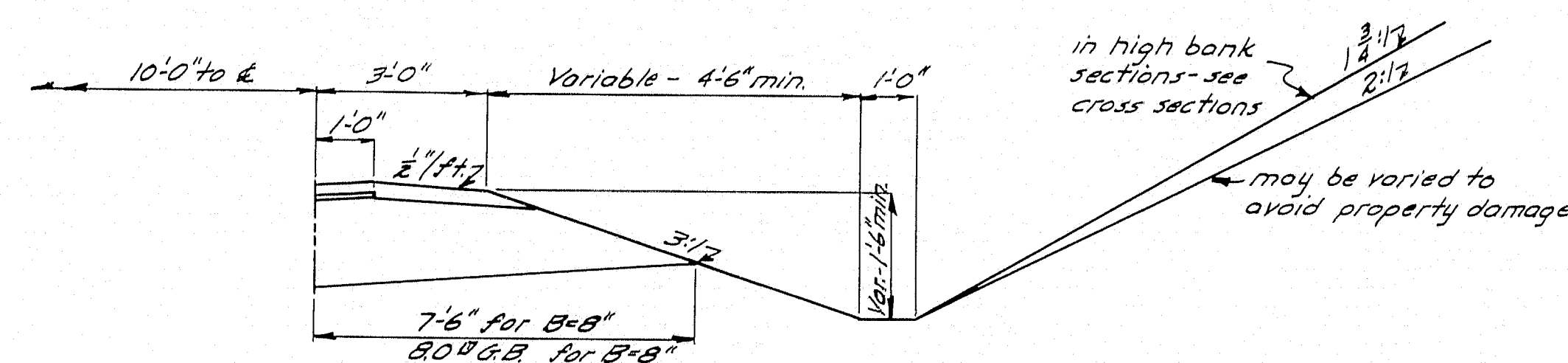
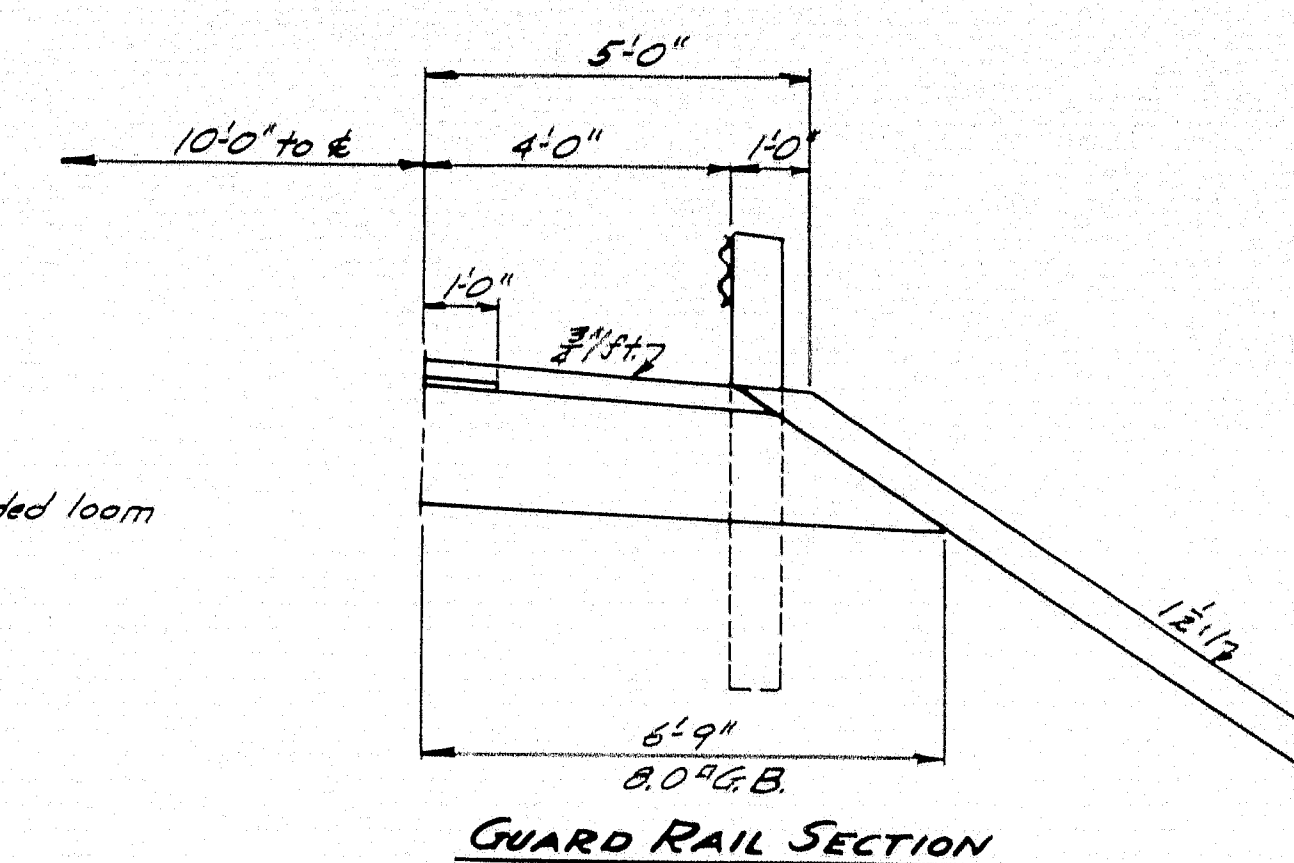
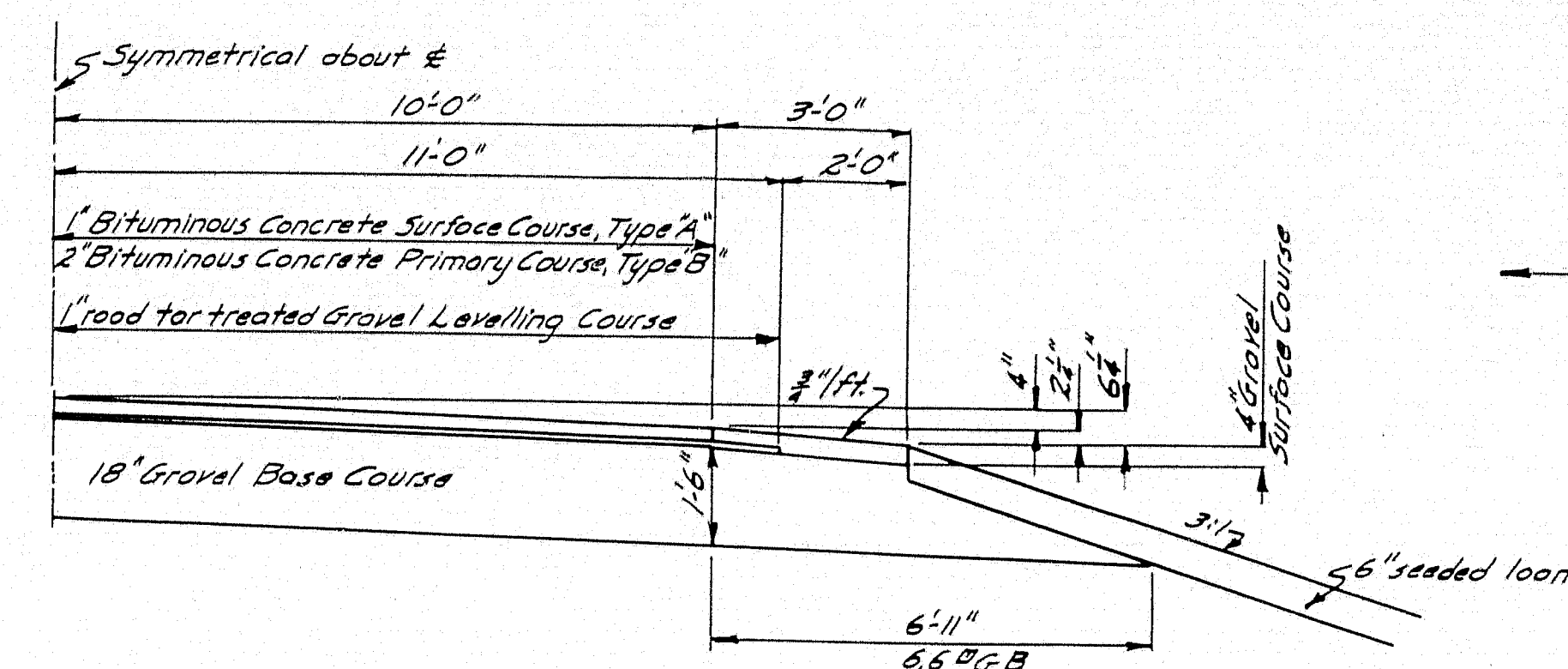
SECTION END SPANS

Revised rip-rap Dec. 8 '53 CAP / gaa.

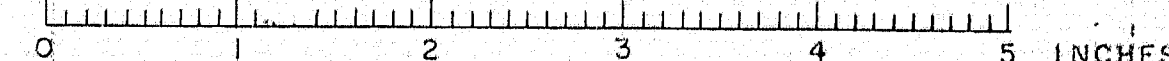
Federal Aid Project No. S-0230 (2)

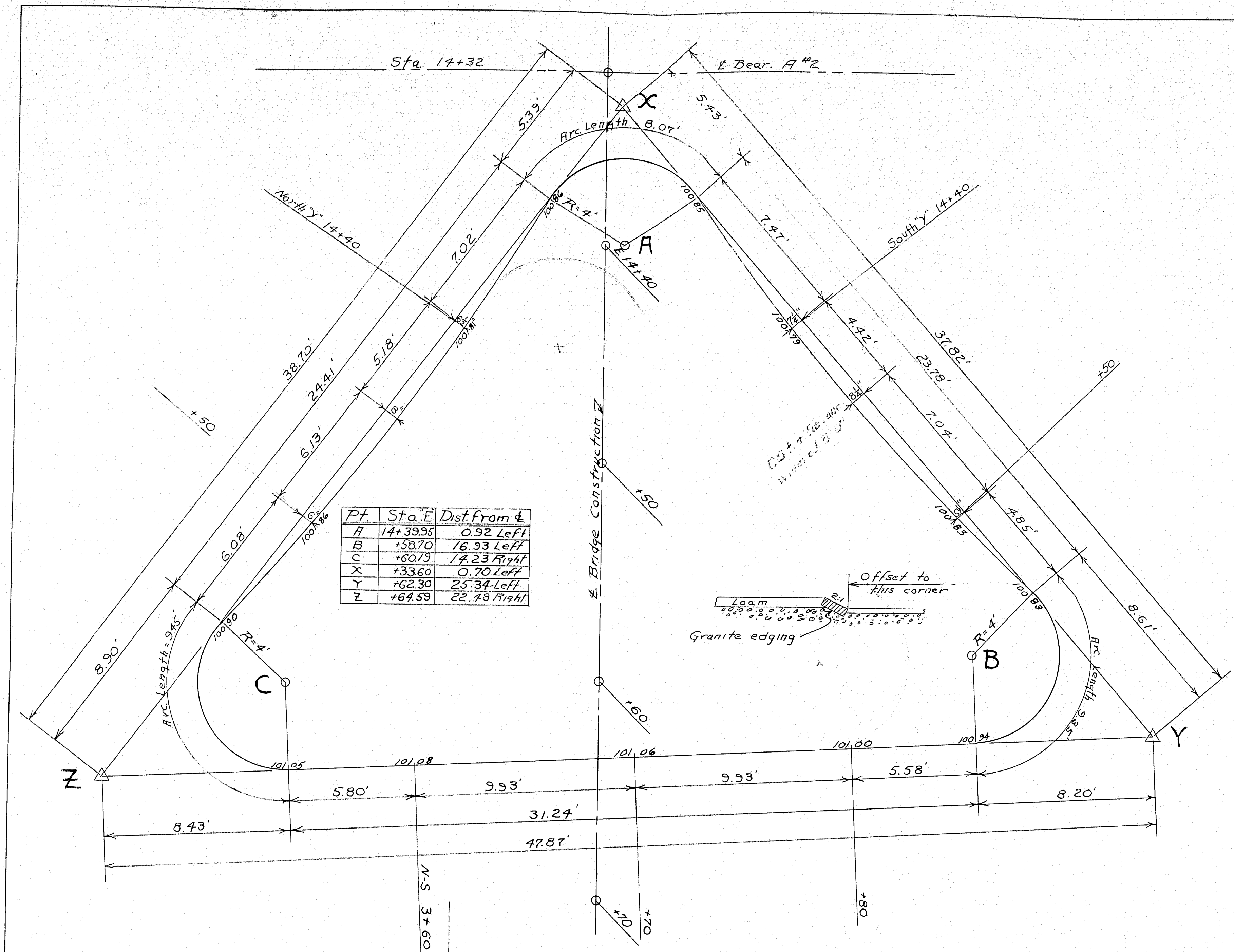
DESIGN & TRACED-MCDUGAL	BRIDGE - 2267
CHECKED - #14 V.	

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDEN - SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
GENERAL PLAN & ELEVATION
SHEET 5 OF 22 AUGUSTA, MAINE FEB. 1953



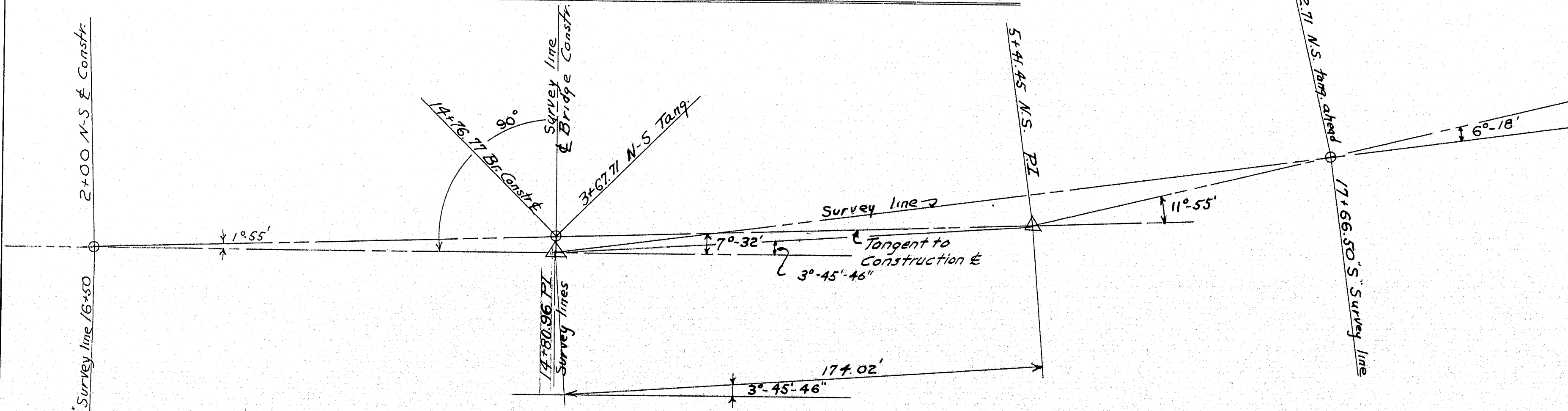
Note: Do not excavate for Gravel Base Course when the existing material is suitable if a minimum depth of 1'-0" of new base can be provided. Otherwise excavate for full depth of 18" of Gravel Base Course.





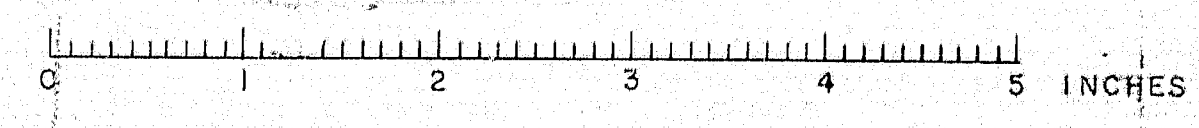
Note: Granite edging for the three curves of 4 ft. radius shall be made of 4 stones of equal length for each curve with the ends cut on approximately radial lines.

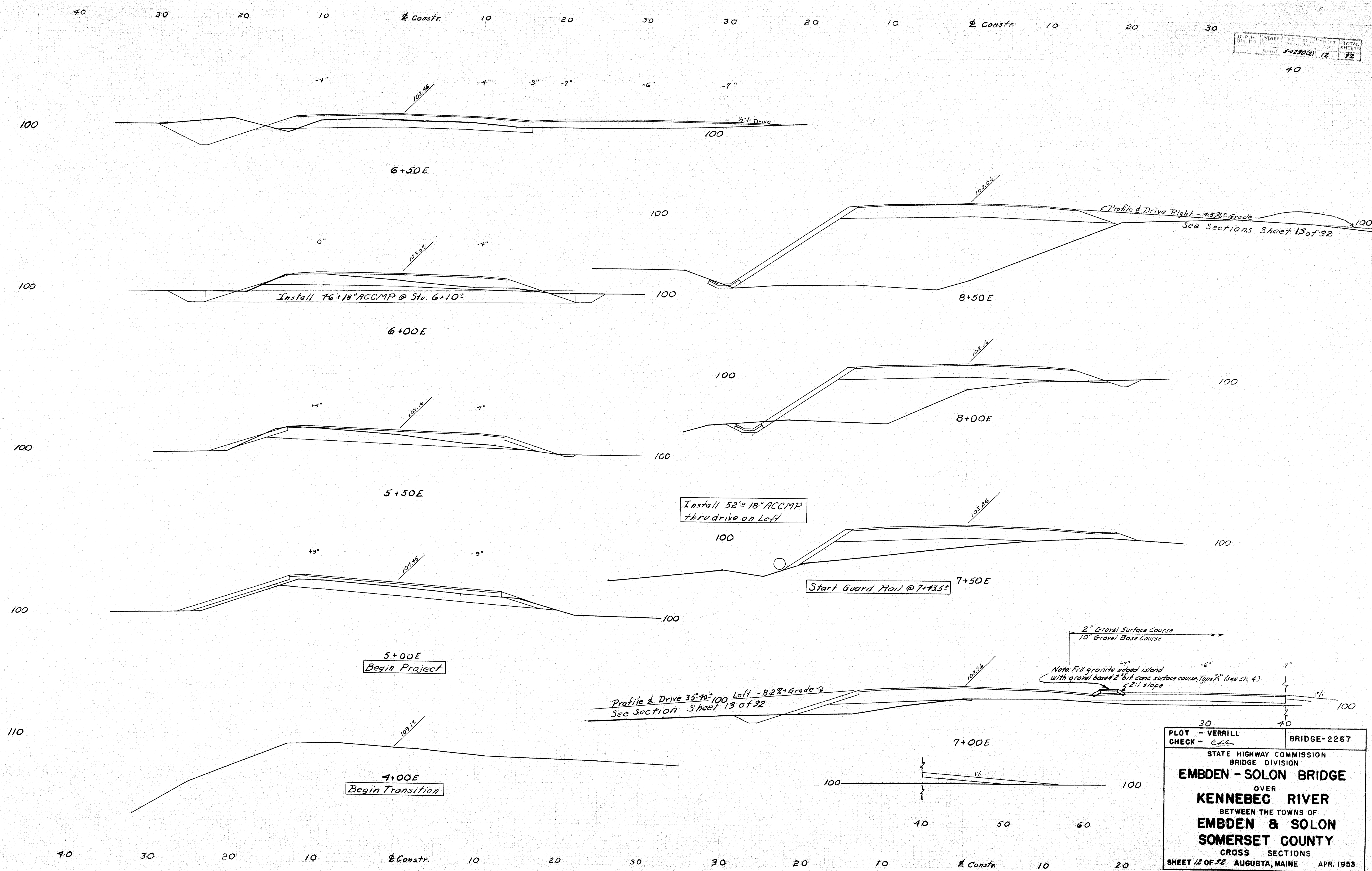
DETAILS - TRAFFIC ISLAND WEST APPROACH



DETAILS - LAYOUT, WEST APPROACH

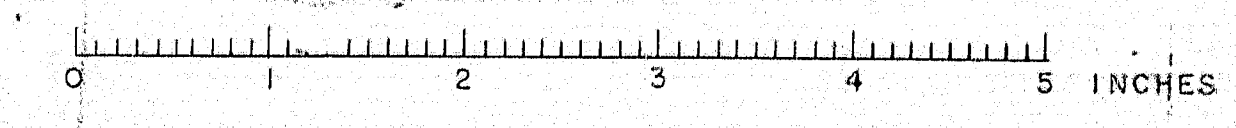
DESIGN & DETAIL - VERRILL
TRACED - GORMLEY
CHECKED - *WMA*
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDEN - SOLON - BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
LAYOUT & ISLAND DETAILS - W. APPROACH
SHEET 11 OF 22
AUGUSTA, MAINE
MAR. 1953





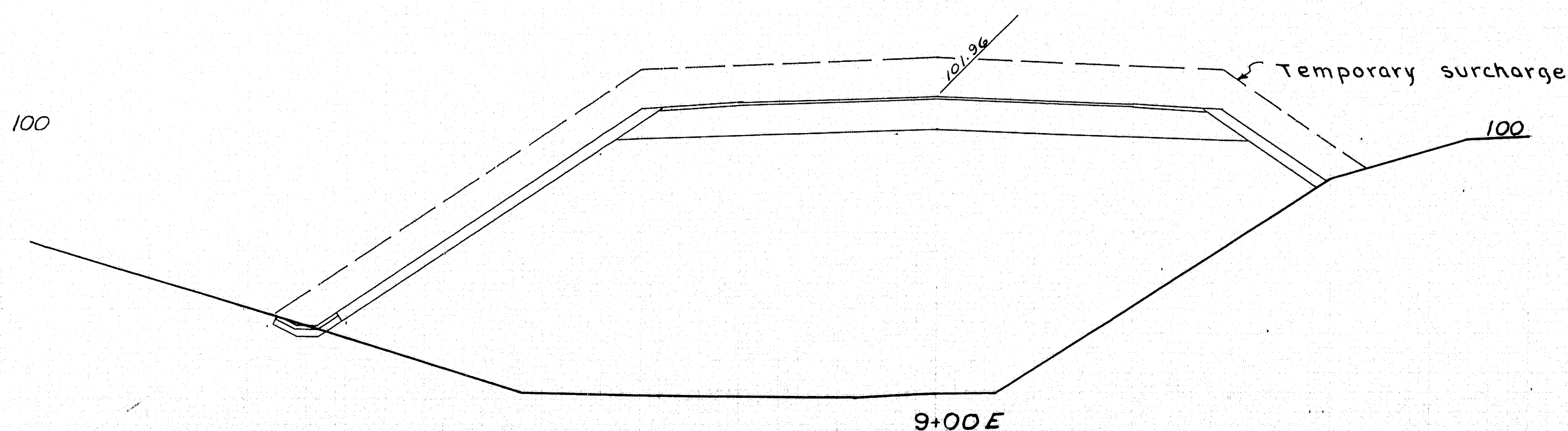
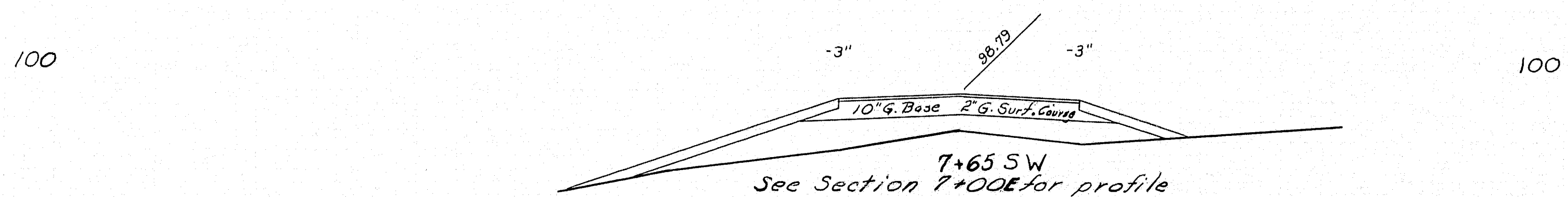
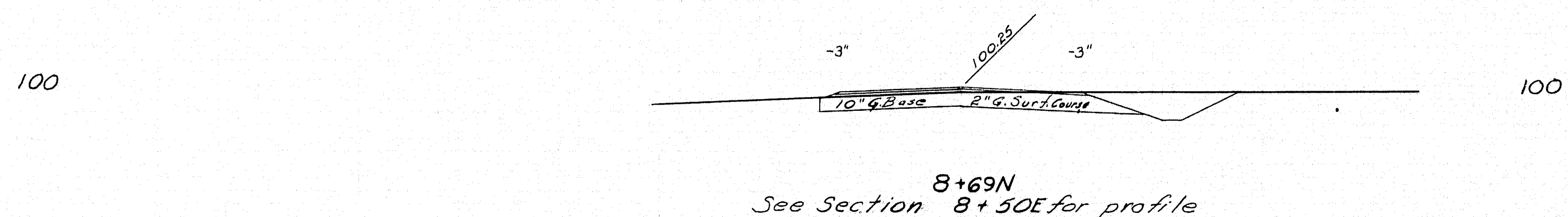
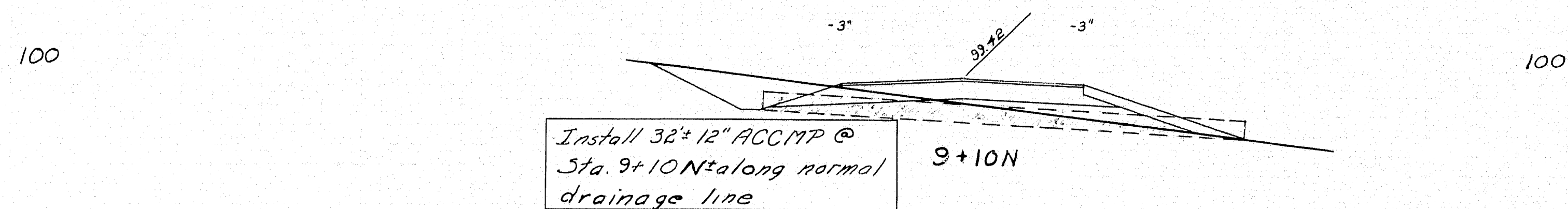
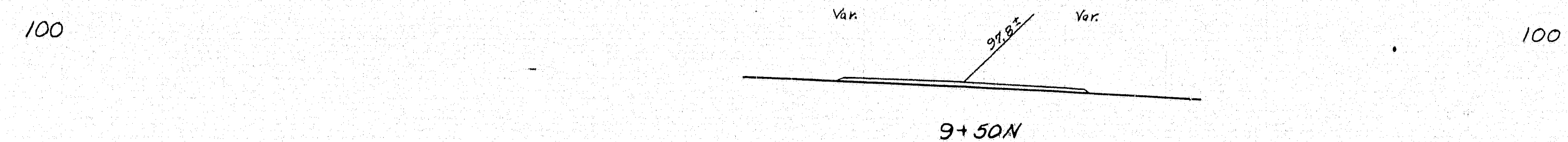
PLOT - VERRILL	BRIDGE-2267
CHECK - <i>Ellis</i>	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
EMBDEN - SOLON BRIDGE	
OVER	
KENNEBEC RIVER	
BETWEEN THE TOWNS OF	
EMBDEN & SOLON	
SOMERSET COUNTY	
CROSS SECTIONS	
SHEET 12 OF 12	AUGUSTA, MAINE APR. 1953

63-11



40 30 20 10 10 20 30

B. P. R.	STATS	FED. AID	SHEET	TOTAL
DIV. NO.	MAINE	PROJ. NO.	NO.	SHEETS
1		5-0220(2)	12	22



40 30 20 10 10 20 30

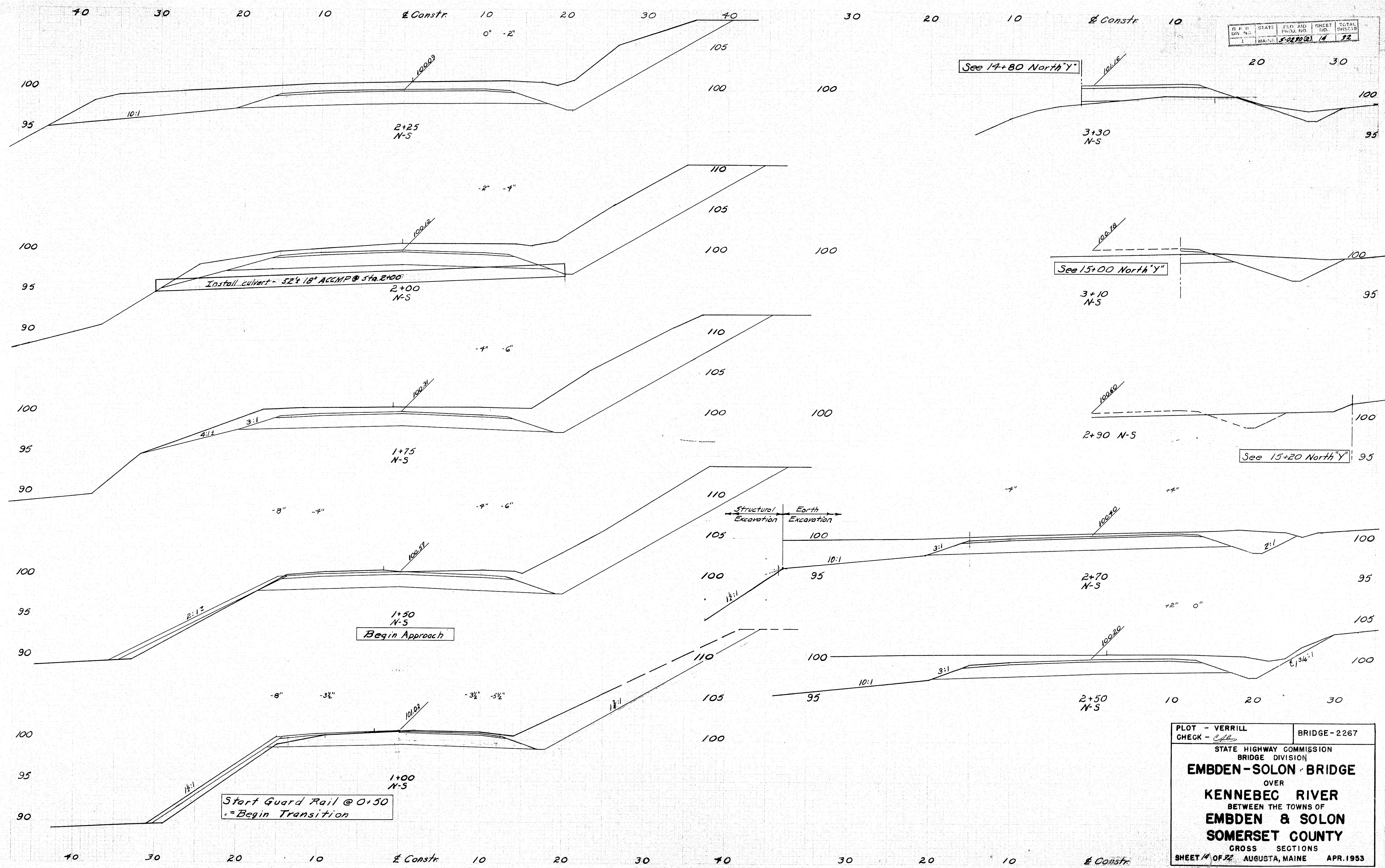
Added surcharge. Dec. 8 '53 *cas. gld.*

PLOT - VERRILL	BRIDGE - 2267
CHECK - <i>cel</i>	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
EMBDEN - SOLON BRIDGE	
OVER	
KENNEBEC RIVER	
BETWEEN THE TOWNS OF	
EMBDEN & SOLON	
SOMERSET COUNTY	
CROSS SECTIONS	
SHEET 11 OF 22 AUGUSTA, MAINE APR. 1953	

63-12

0 1 2 3 4 5 INCHES

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
MAINE	5-0212(2)	14	22



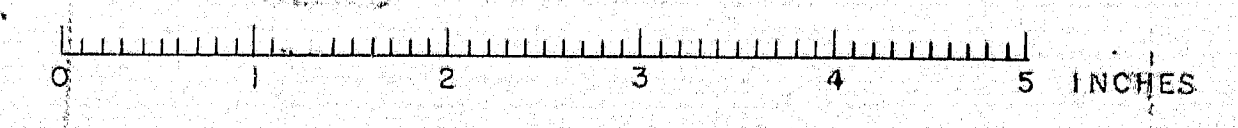
See 14+80 North "Y"

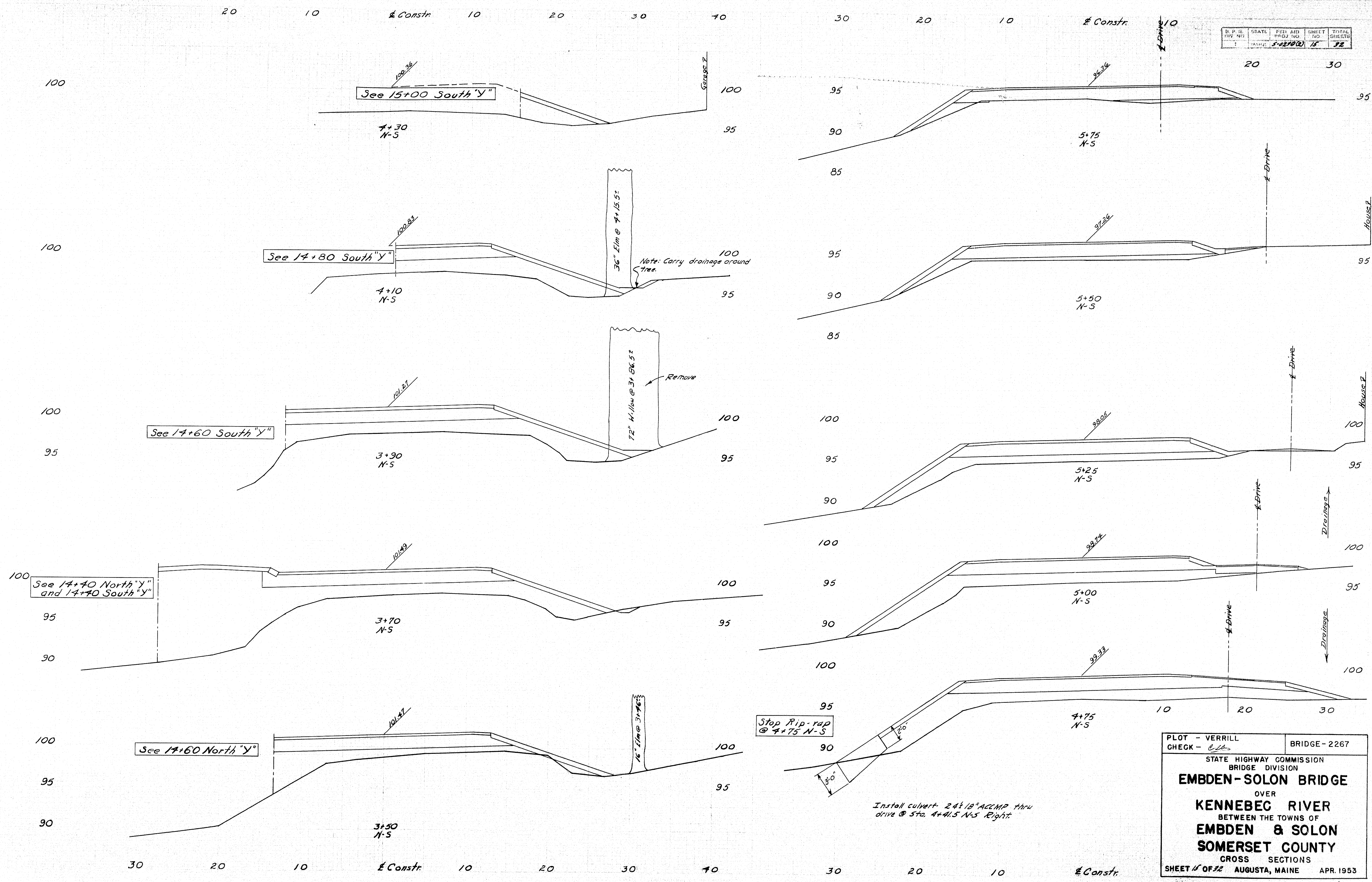
See 15+00 North "Y"

See 15+20 North "Y"

PLOT - VERRILL		BRIDGE-2267
CHECK - <i>[Signature]</i>		
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
EMBDEN-SOLON BRIDGE		
OVER		
KENNEBEC RIVER		
BETWEEN THE TOWNS OF		
EMBDEN & SOLON		
SOMERSET COUNTY		
CROSS SECTIONS		
SHEET 14 OF 22	AUGUSTA, MAINE	APR. 1953

63-13

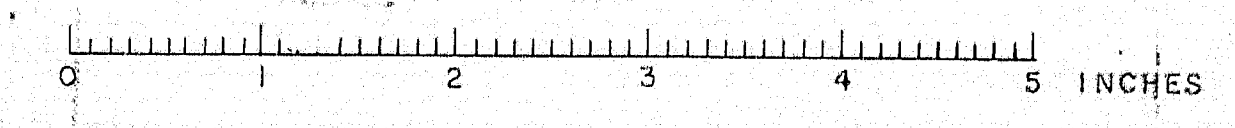




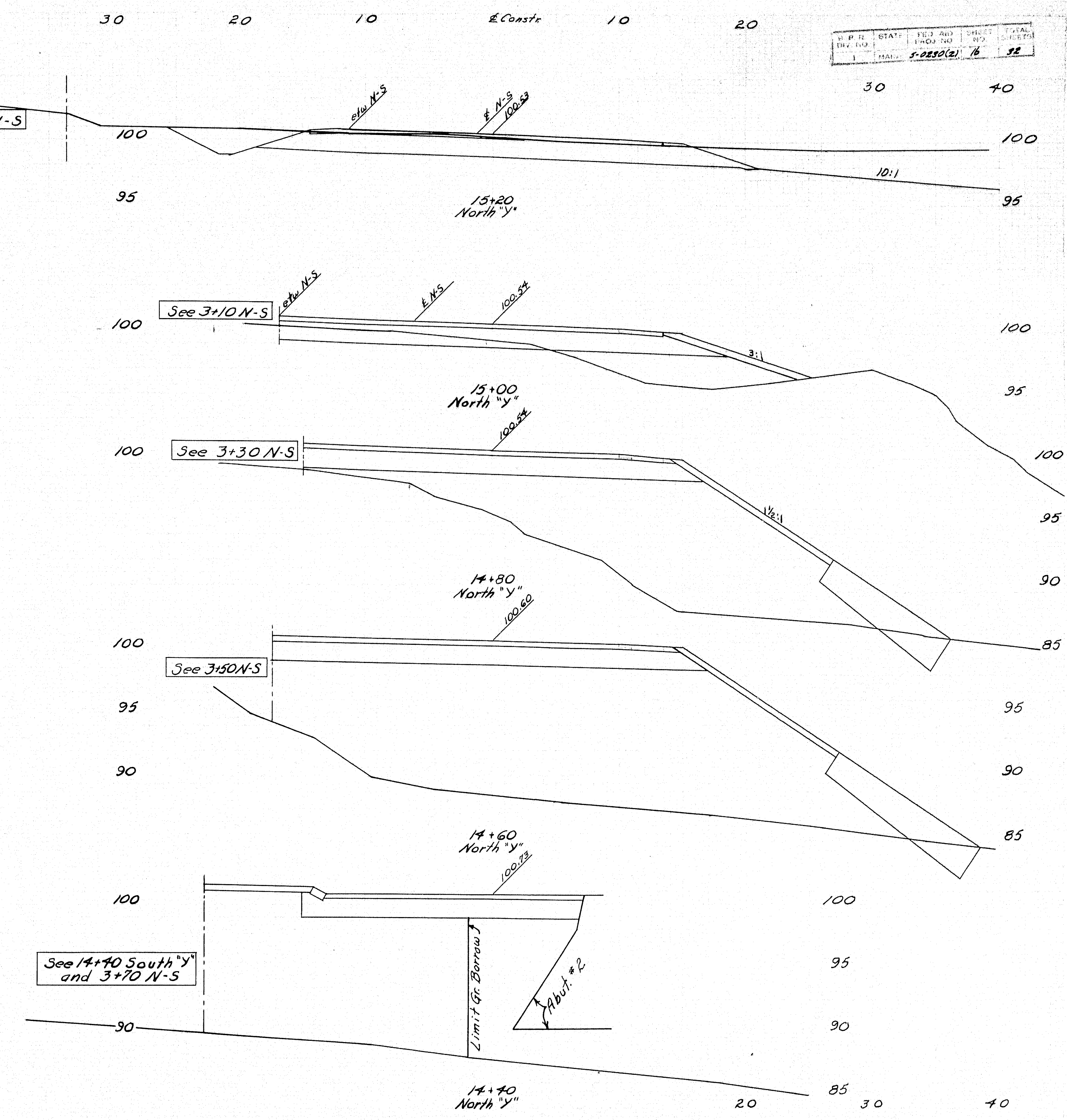
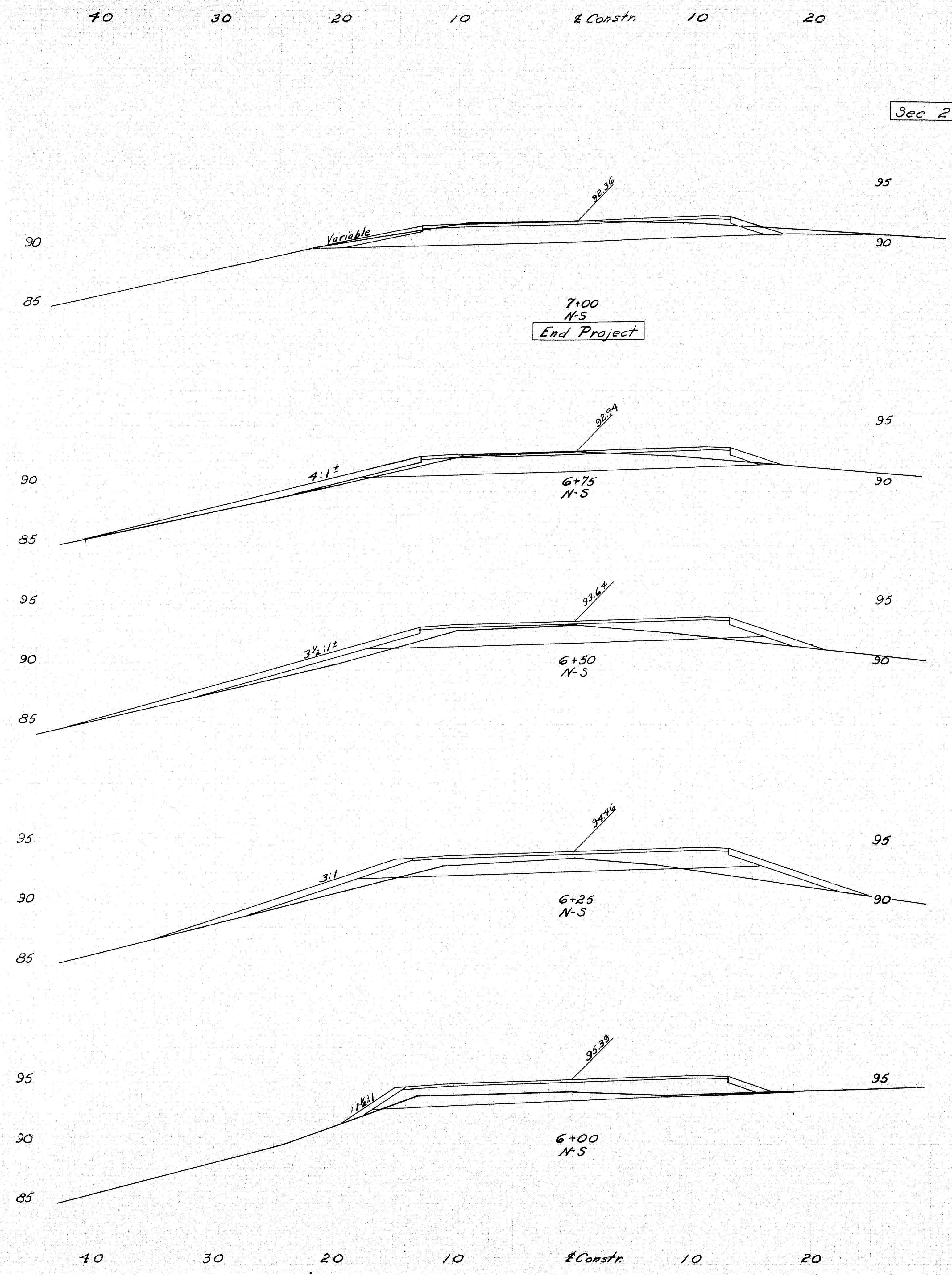
B. P. E.	STATE	FED. AID	SHEET	TOTAL
NO.	NO.	NO.	NO.	SHEETS
1	5-22200	15	72	

PLOT - VERRILL		BRIDGE-2267
CHECK - <i>CL</i>		
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
EMBDEN-SOLON BRIDGE		
OVER		
KENNEBEC RIVER		
BETWEEN THE TOWNS OF		
EMBDEN & SOLON		
SOMERSET COUNTY		
CROSS SECTIONS		
SHEET 11 OF 12 AUGUSTA, MAINE APR. 1953		

63-14

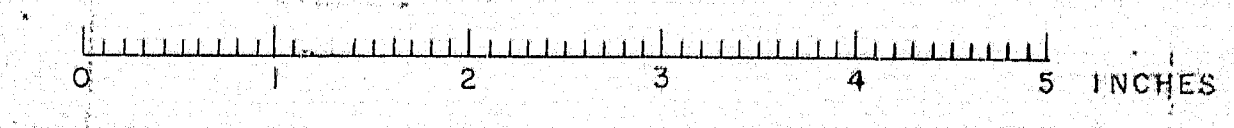


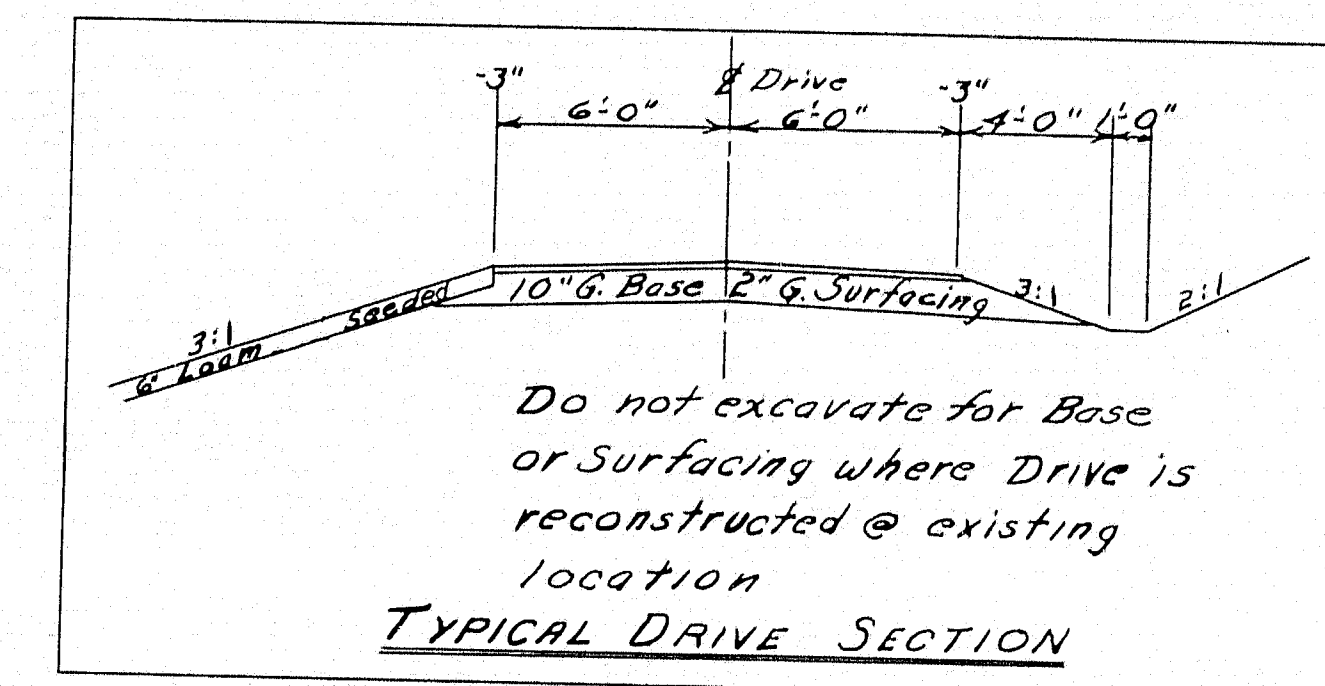
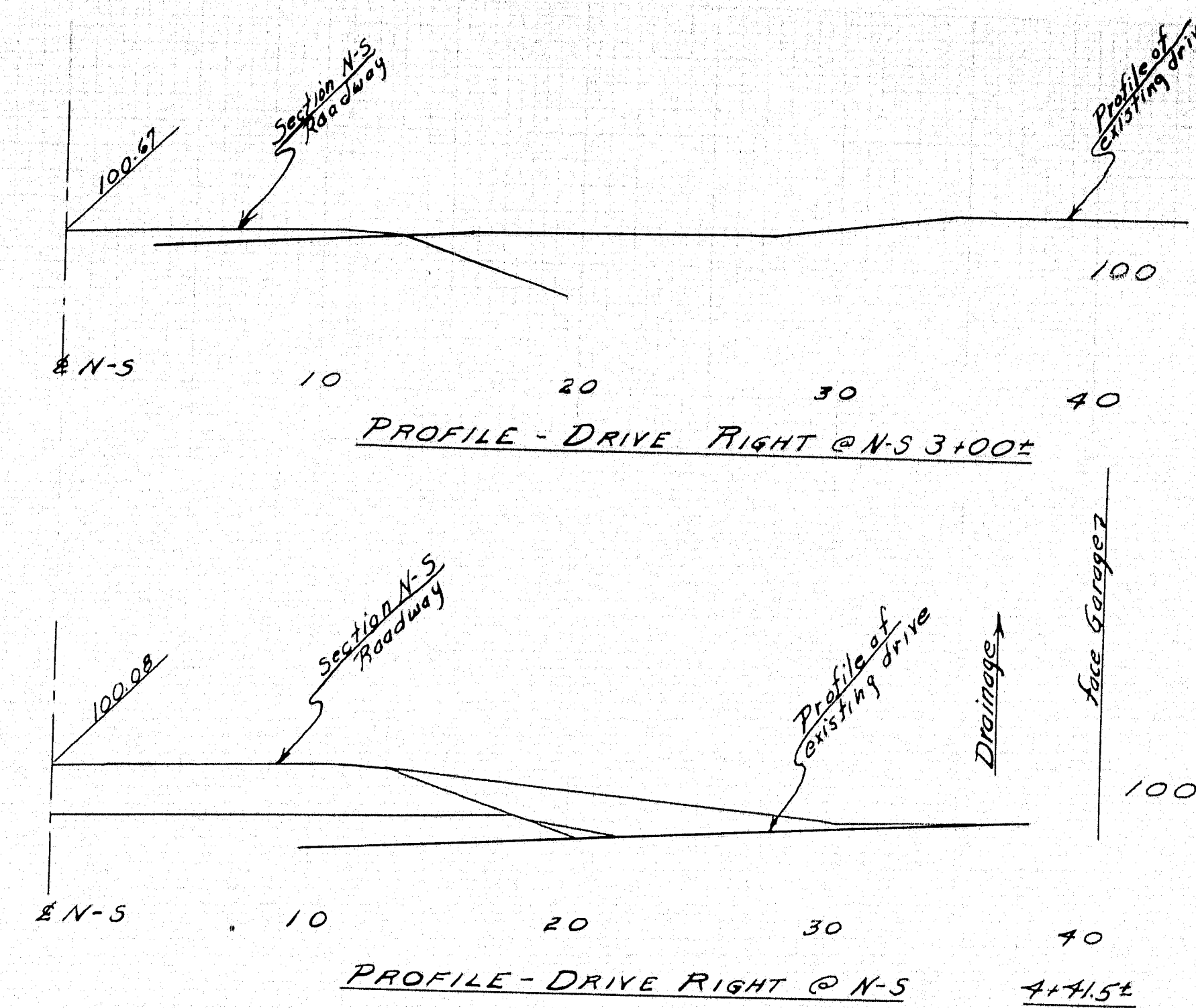
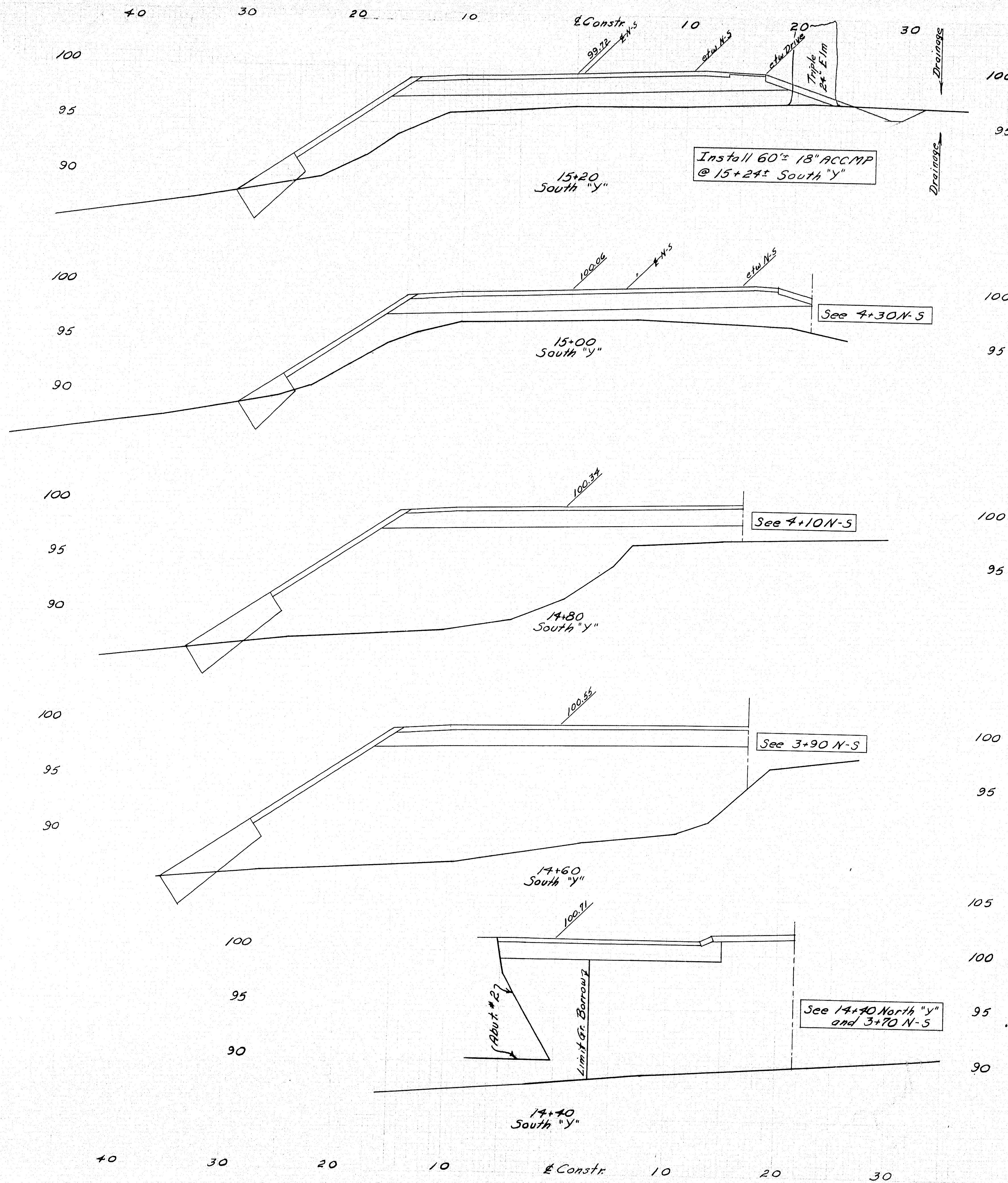
DATE	STATE	FILE NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	5-2850(2)	16	32



PLOT - VERRILL CHECK - (initials)	BRIDGE - 2267 STATE HIGHWAY COMMISSION BRIDGE DIVISION EMBDEN-SOLON BRIDGE OVER KENNEBEC RIVER BETWEEN THE TOWNS OF EMBDEN & SOLON SOMERSET COUNTY CROSS SECTIONS SHEET 16 OF 32 AUGUSTA, MAINE APR. 1953
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63-15



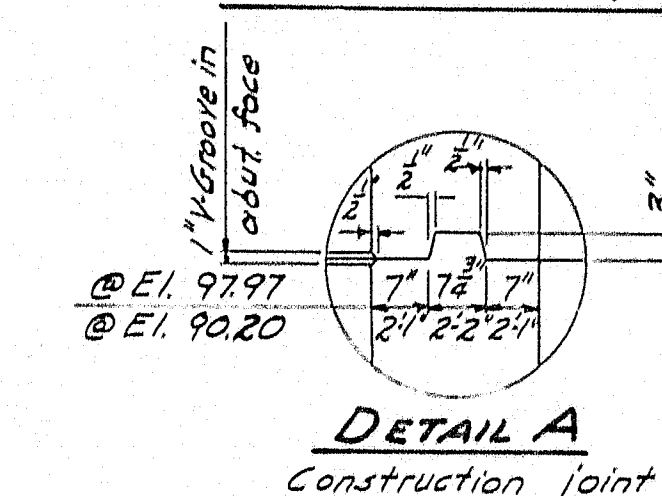
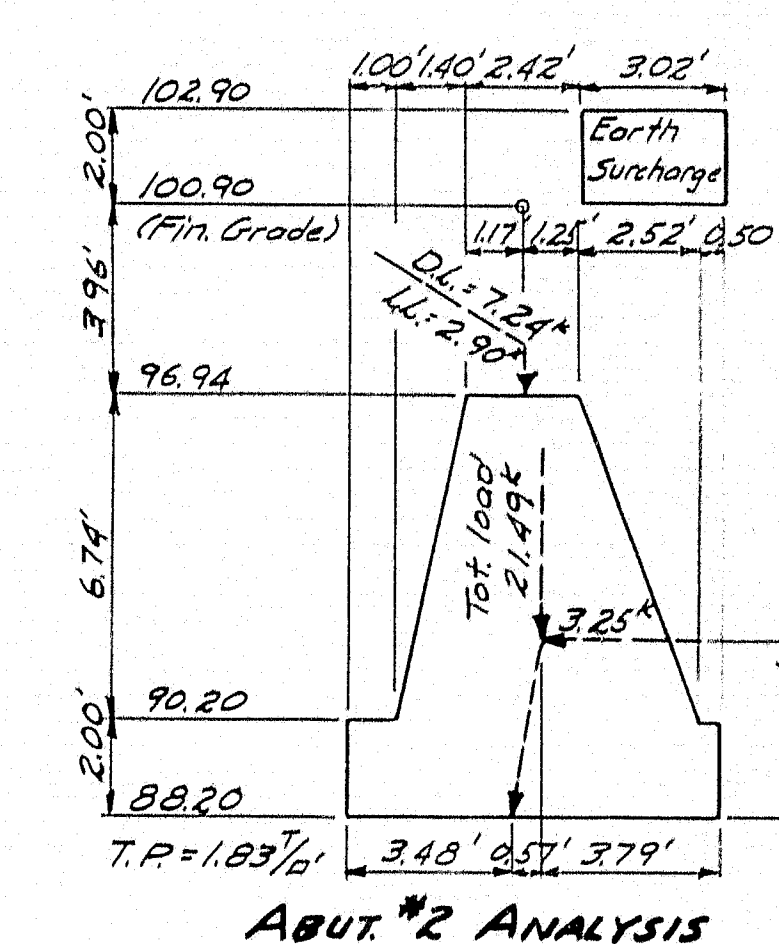
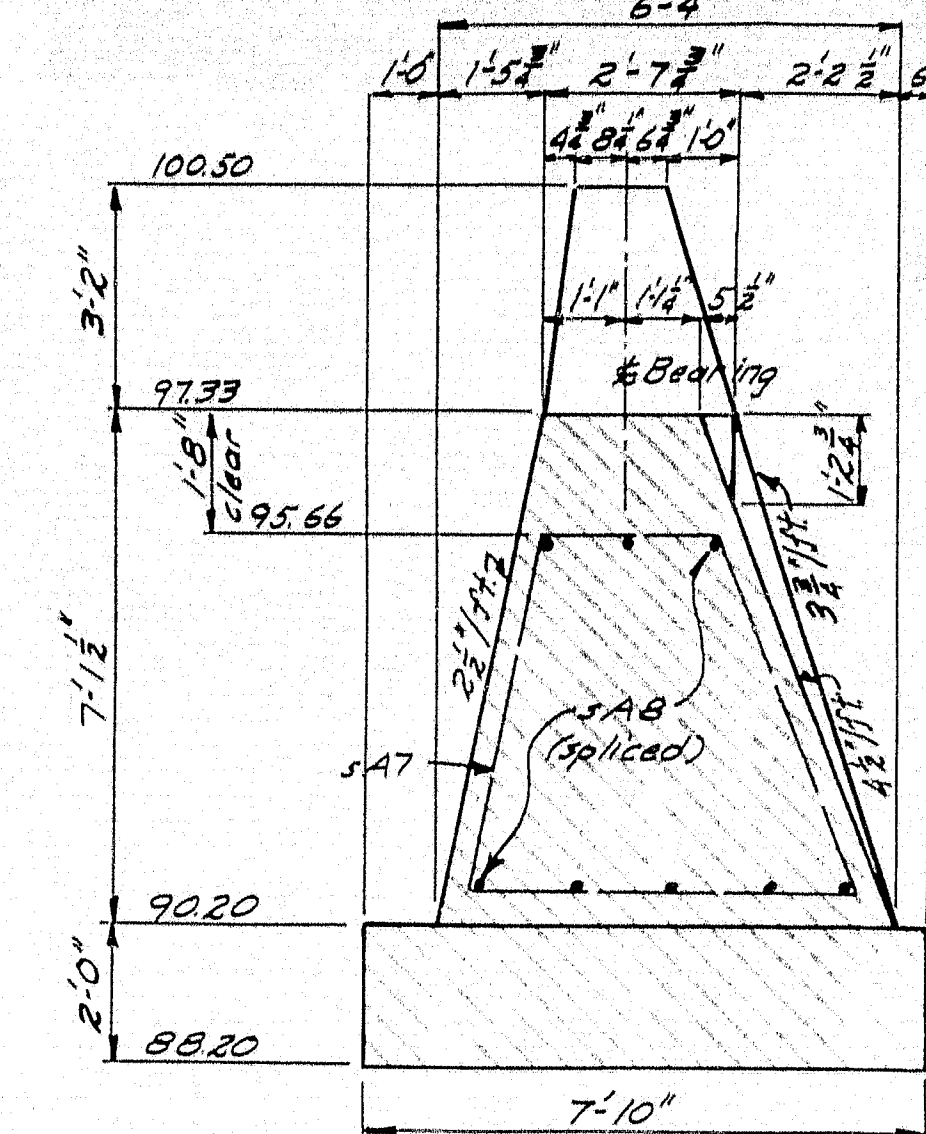
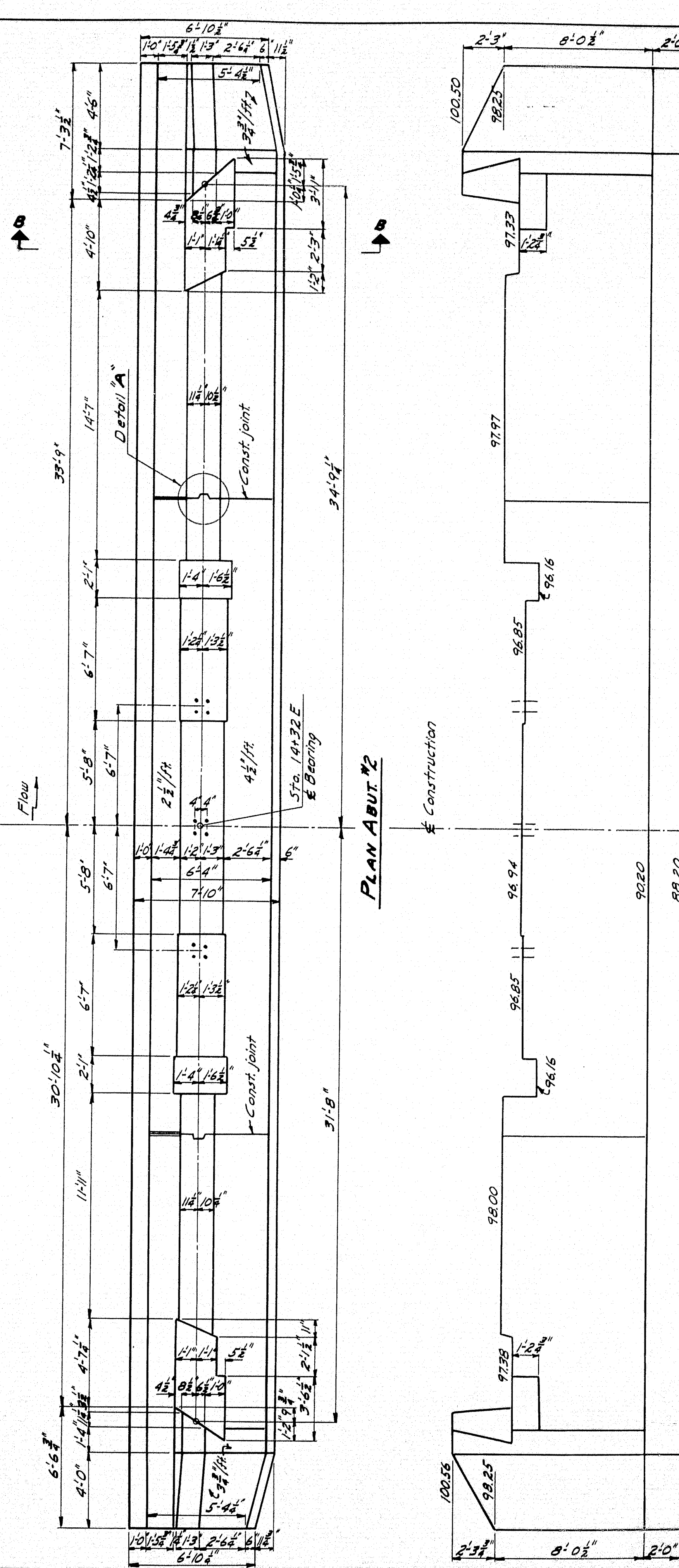
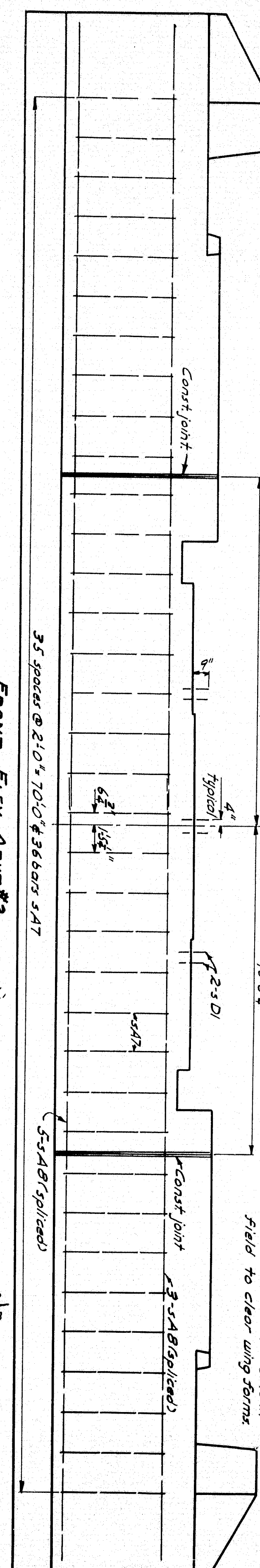
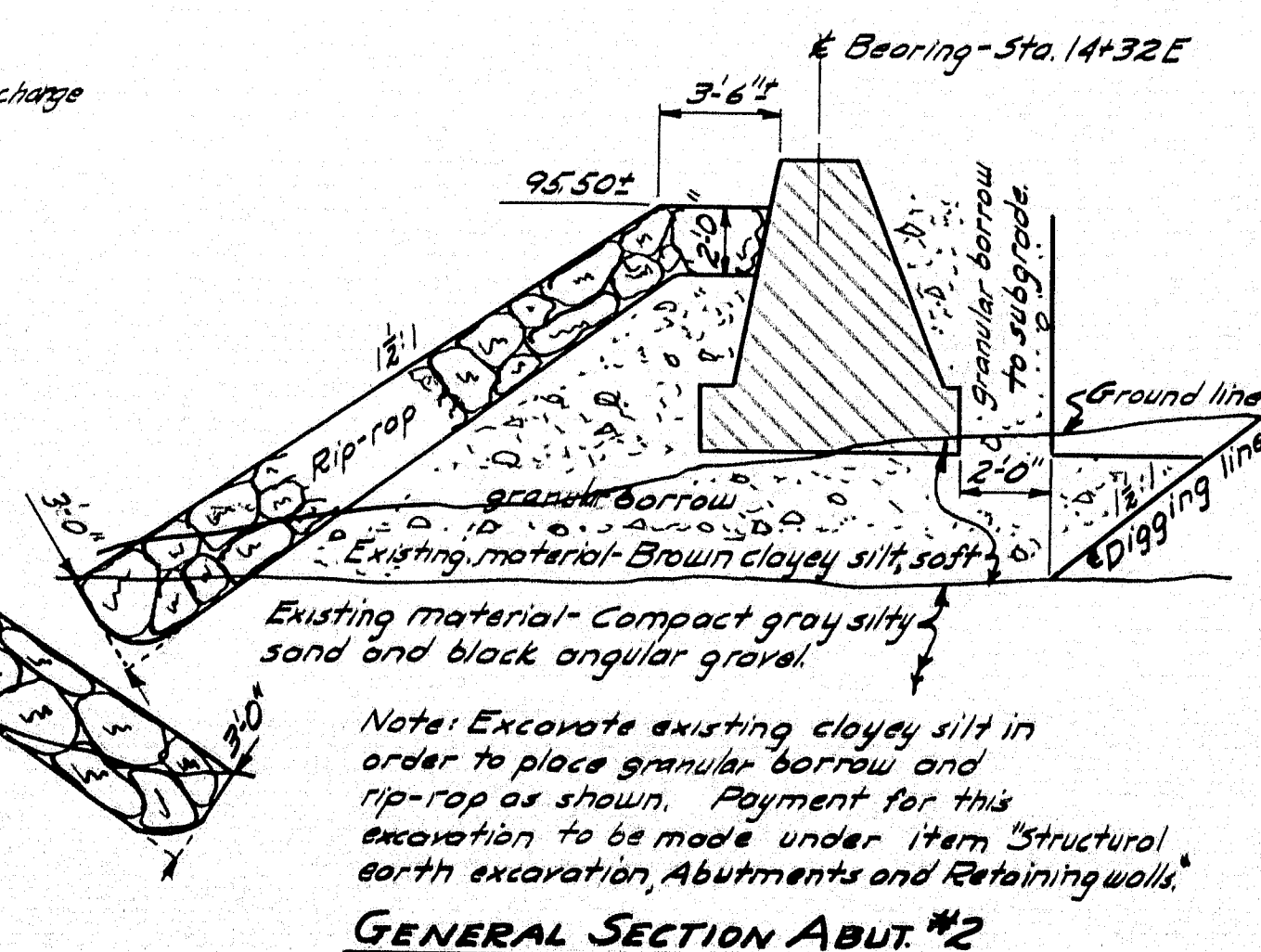
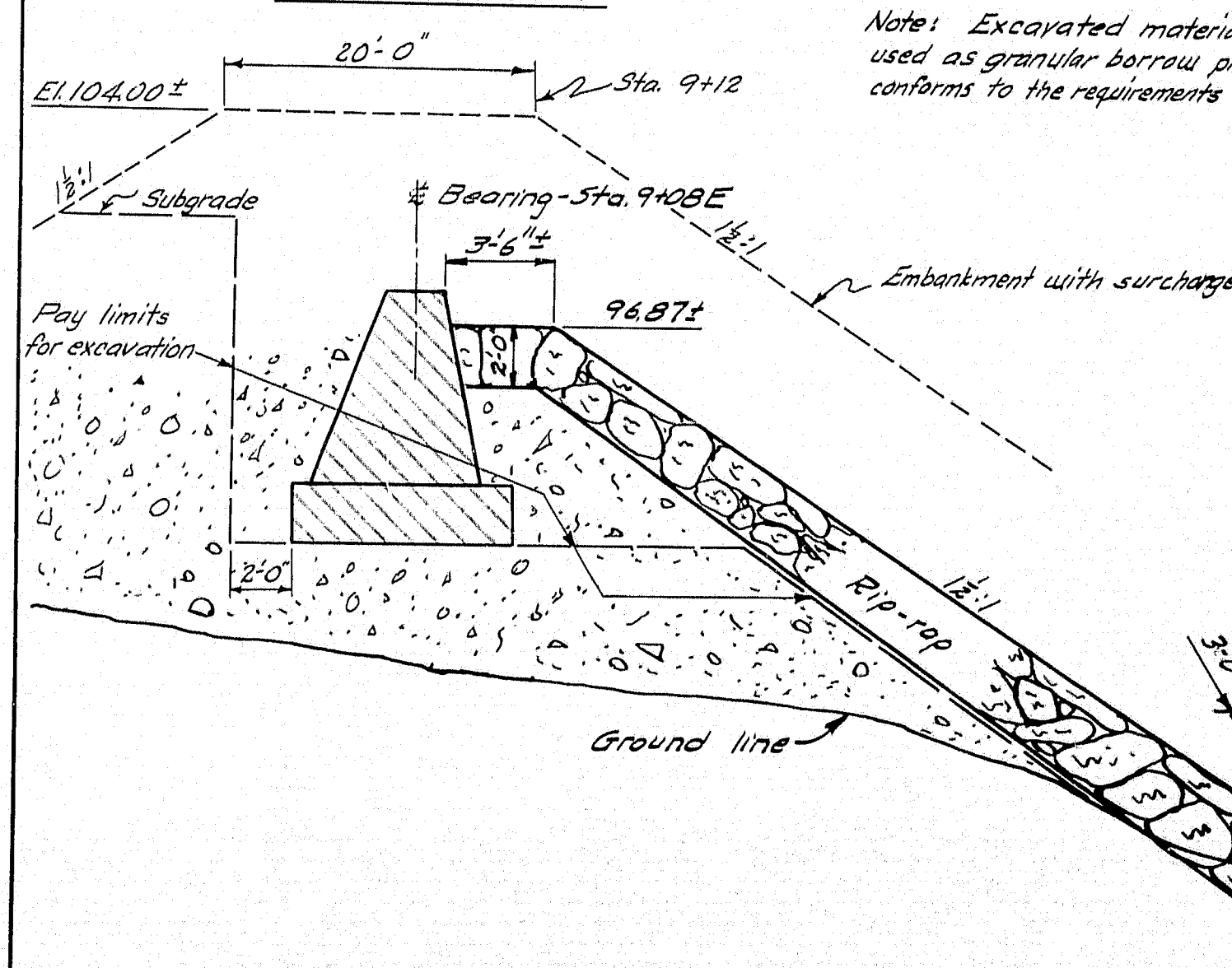
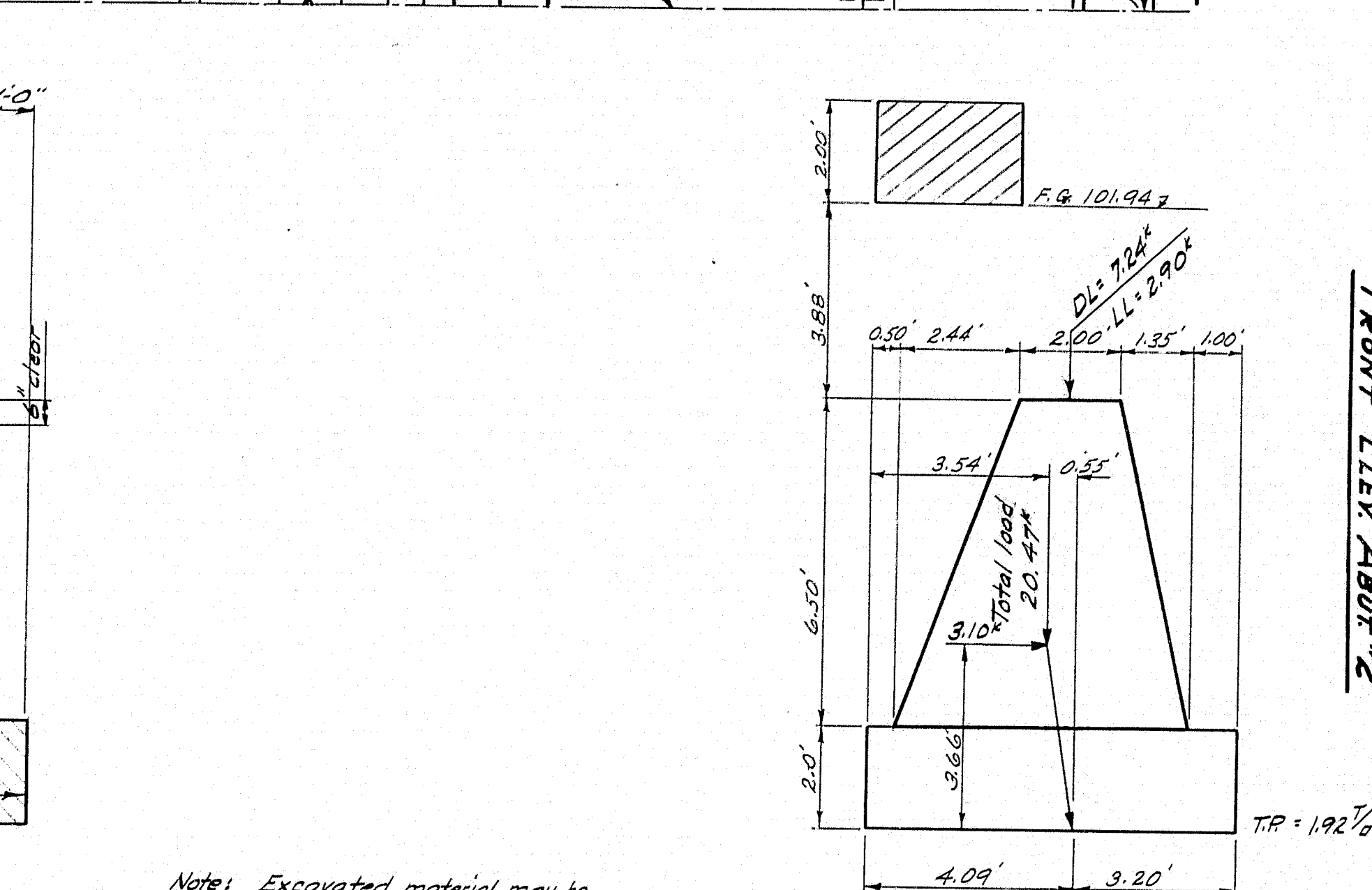
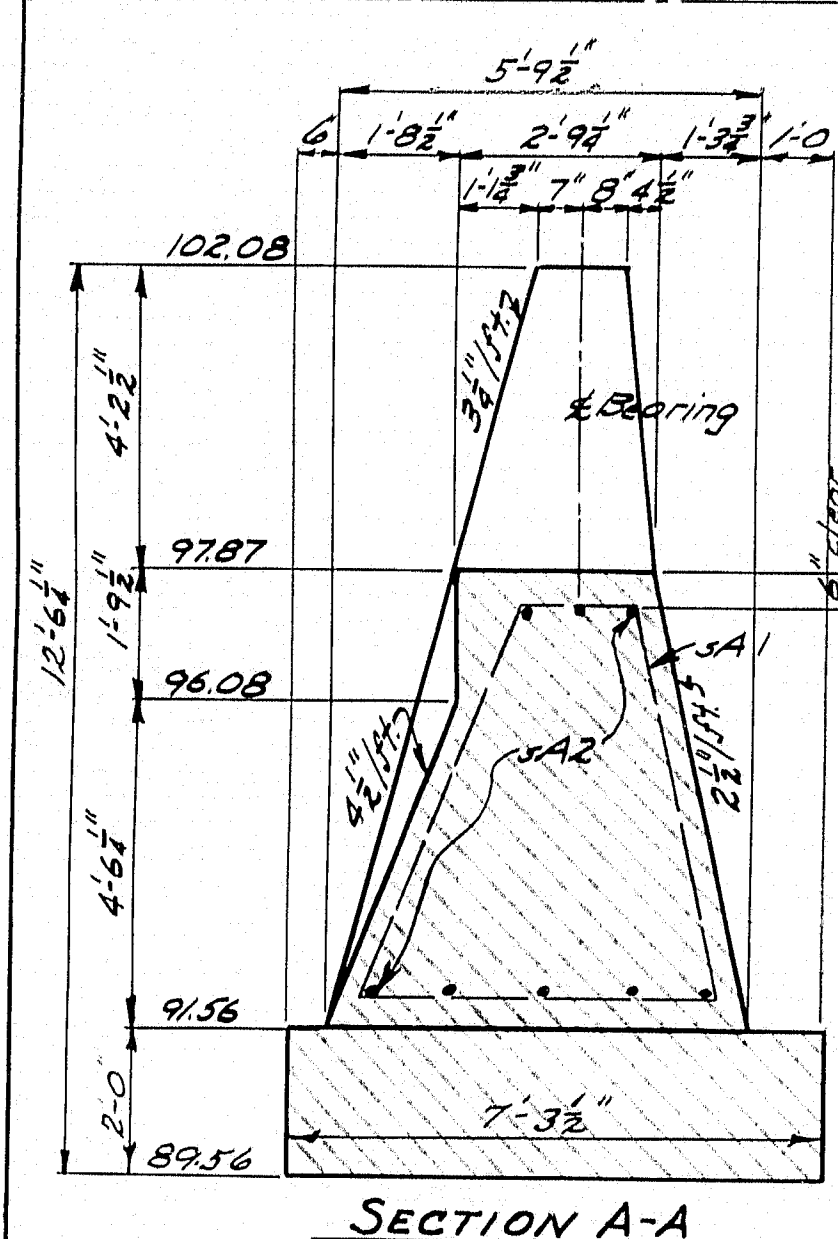
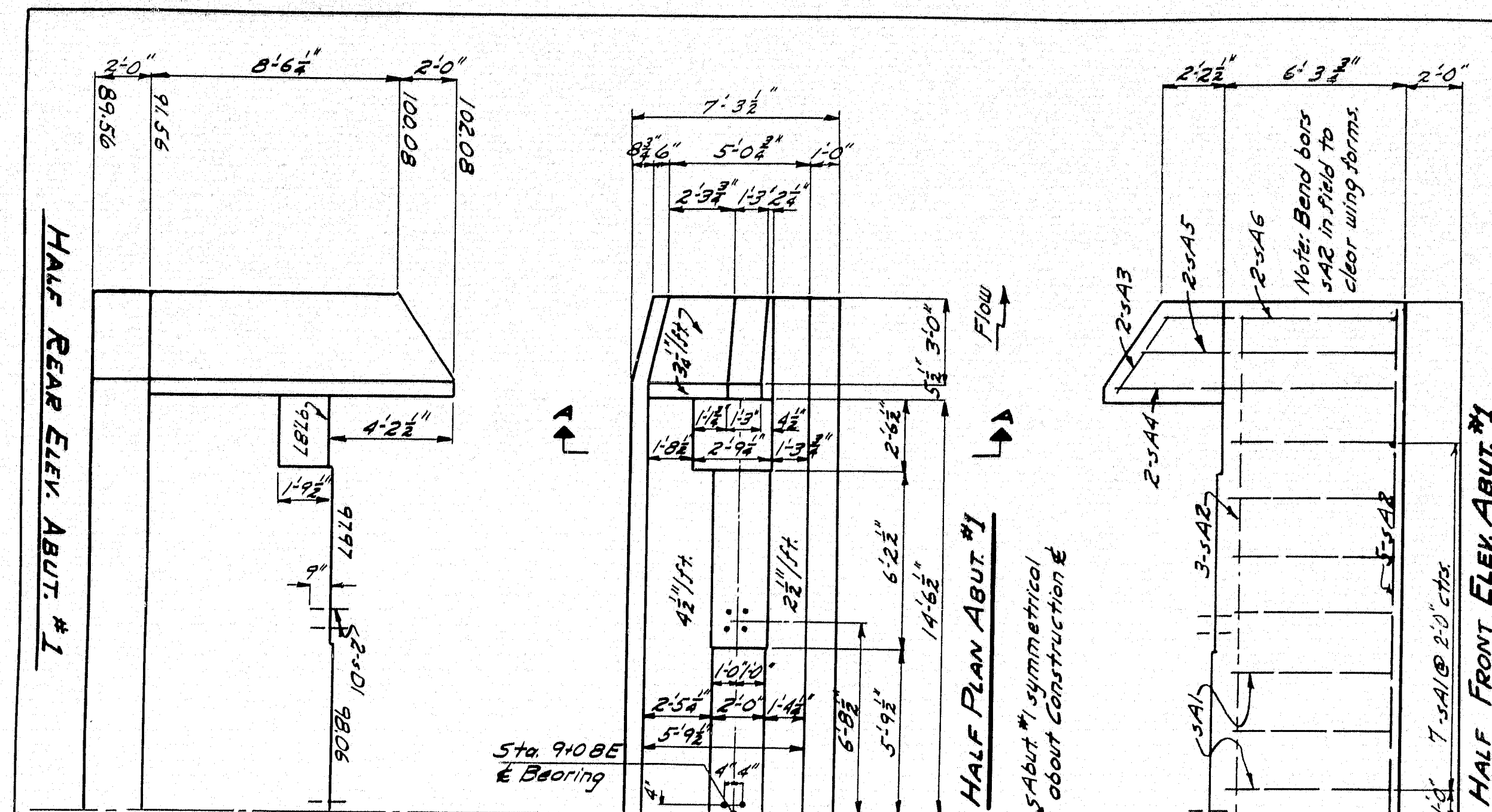


STATE	FED. AID	SHEET	TOTAL
MAINE	5-08-10-17	17	22

PLOT - VERRILL	BRIDGE-2267
CHECK - <i>ell</i>	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
EMBDEN-SOLON BRIDGE	
OVER	
KENNEBEC RIVER	
BETWEEN THE TOWNS OF	
EMBDEN & SOLON	
SOMERSET COUNTY	
CROSS SECTIONS	
SHEET 17 OF 22 AUGUSTA, MAINE APR. 1953	

63-16

0 1 2 3 4 5 INCHES



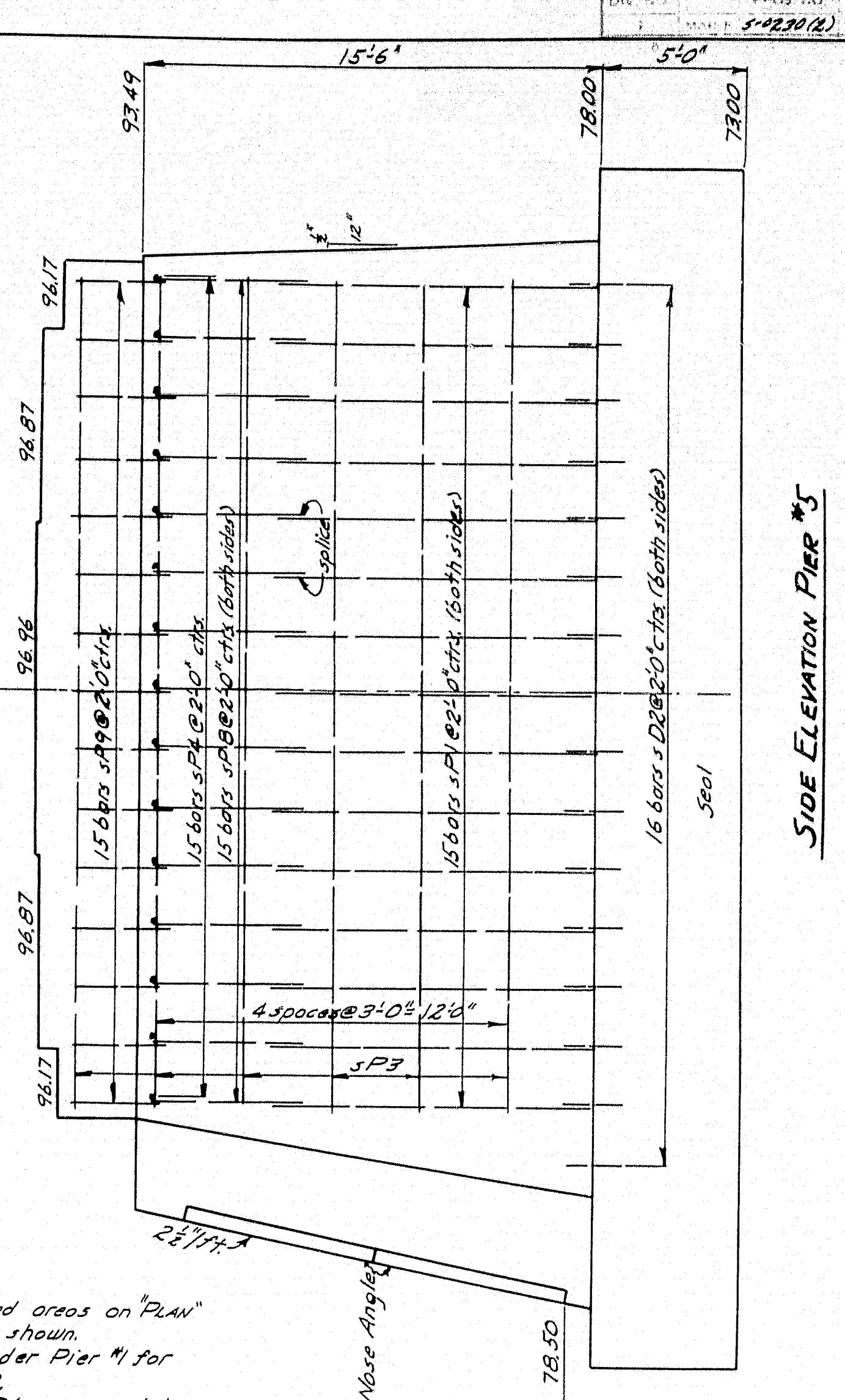
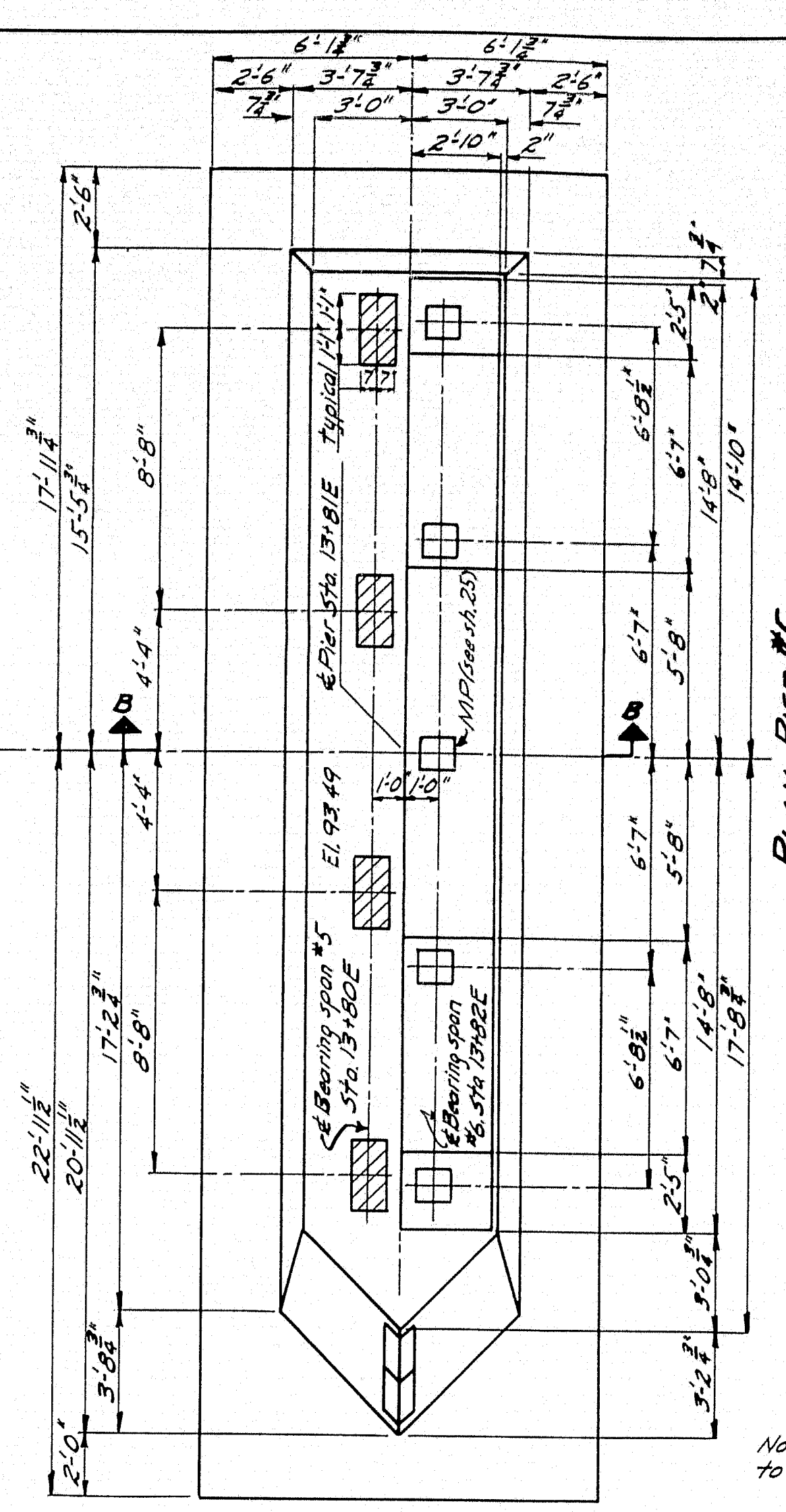
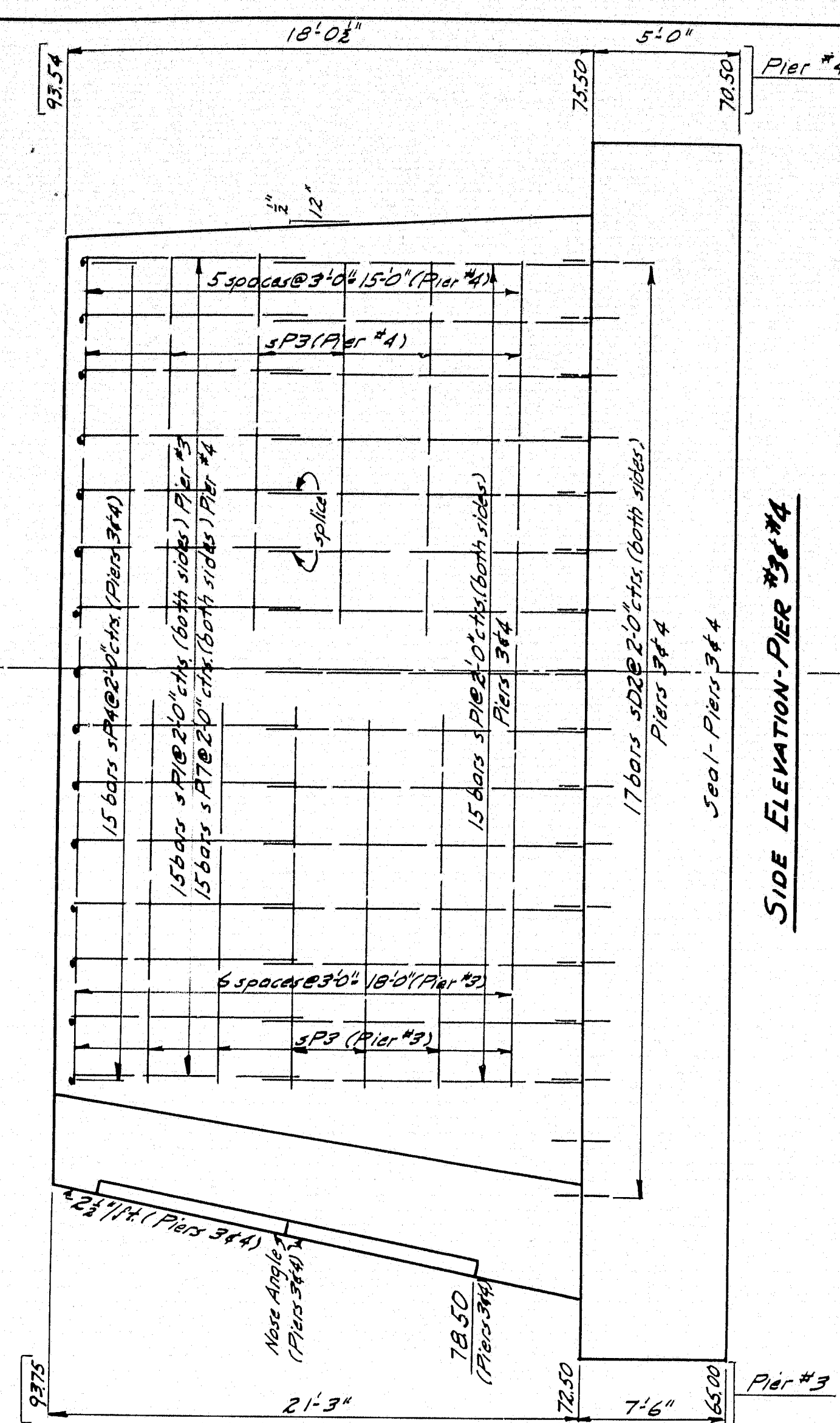
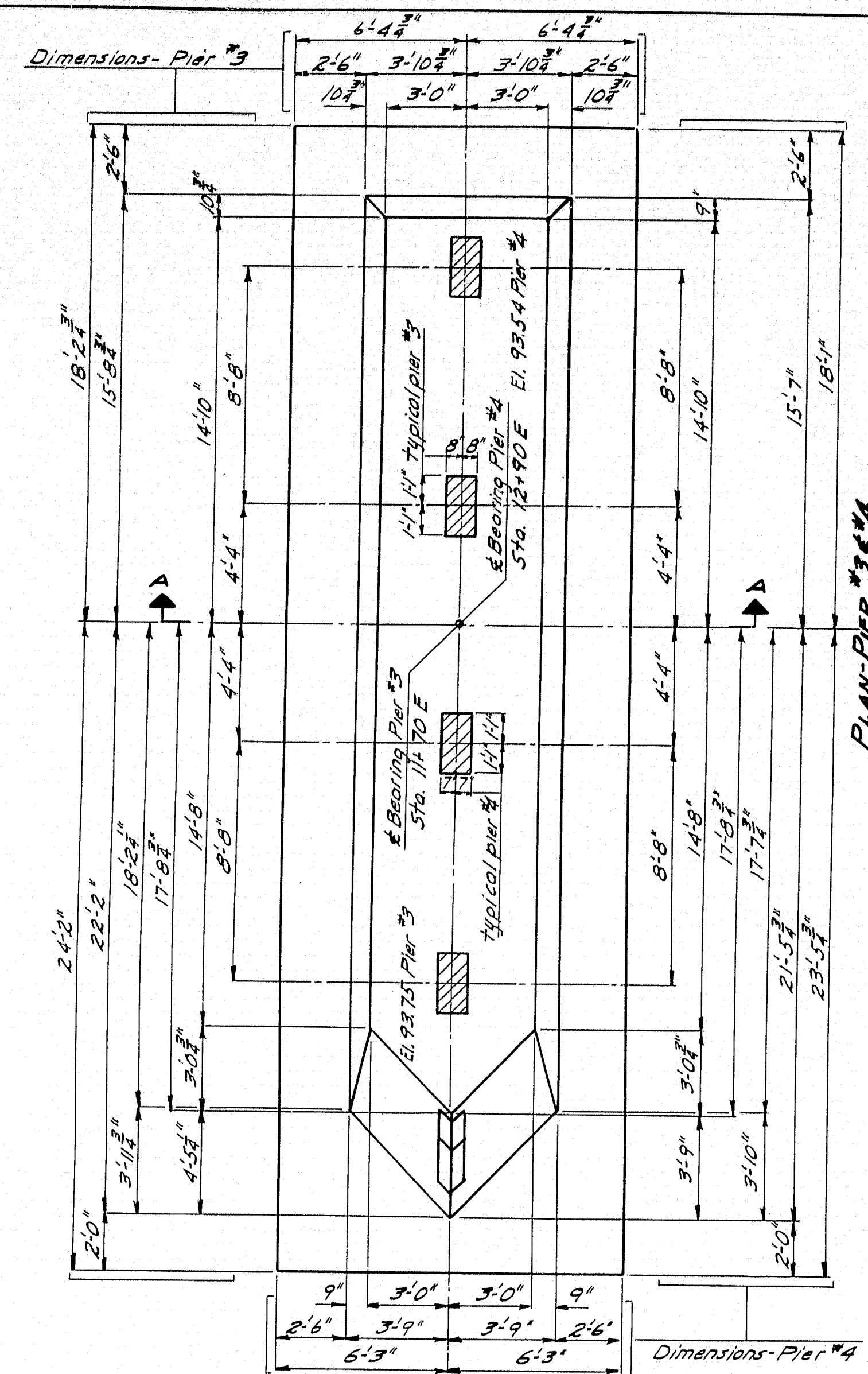
Note: Paint the construction joints with one coat of asphalt paint.

Cover the back of the construction joints and $\frac{1}{2}$ " slots between curbs and parapets with two layers of heavy roofing 10' wide. Coat the surface of the concrete to be covered and the contact surfaces of each layer of roofing as applied with a suitable grade of roofing cement.

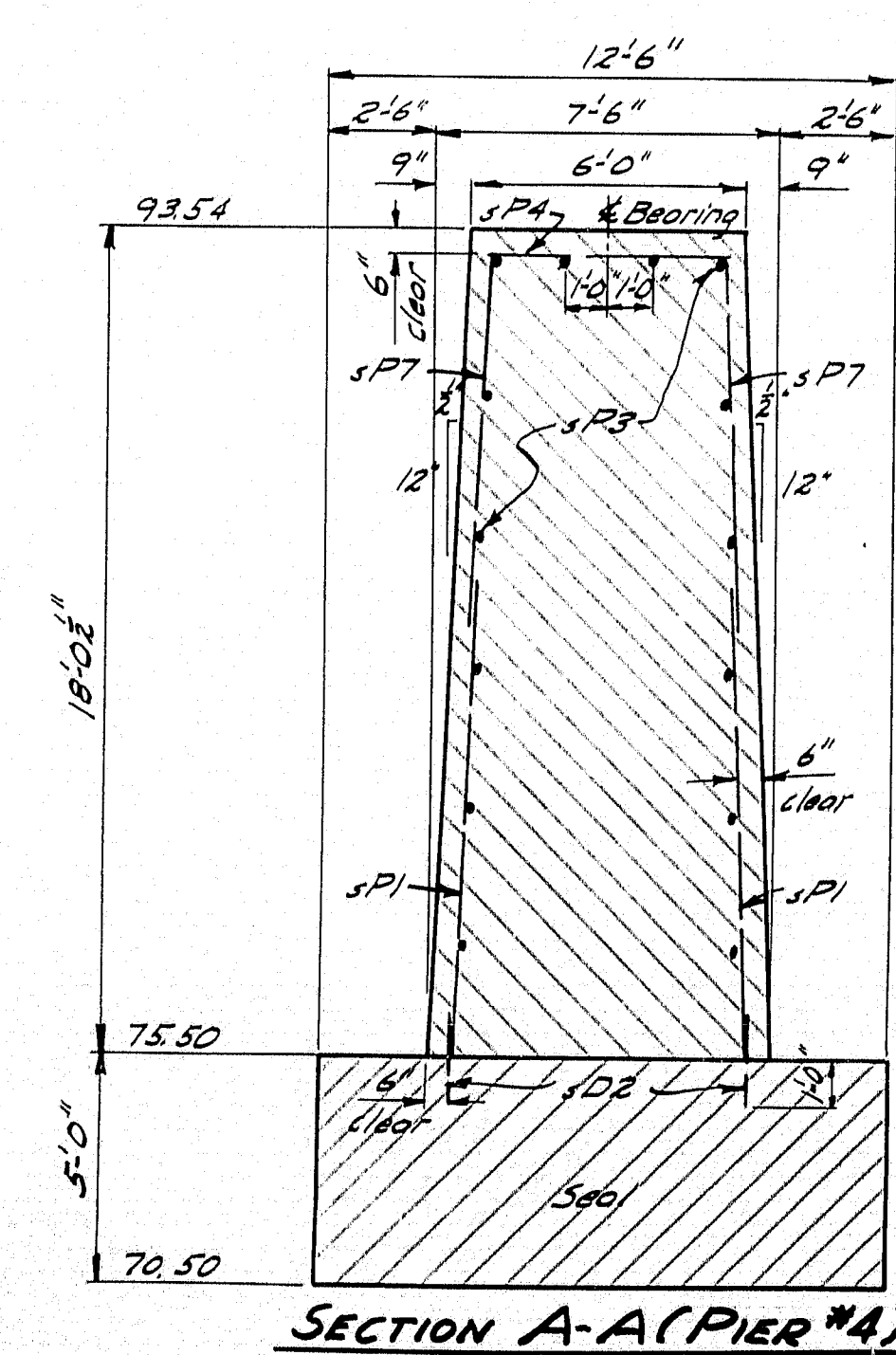
Recess areas to be covered $\frac{1}{4}$ "

Cover back of 2" opening at eaves in same manner as $\frac{1}{2}$ " slots and construction joints.

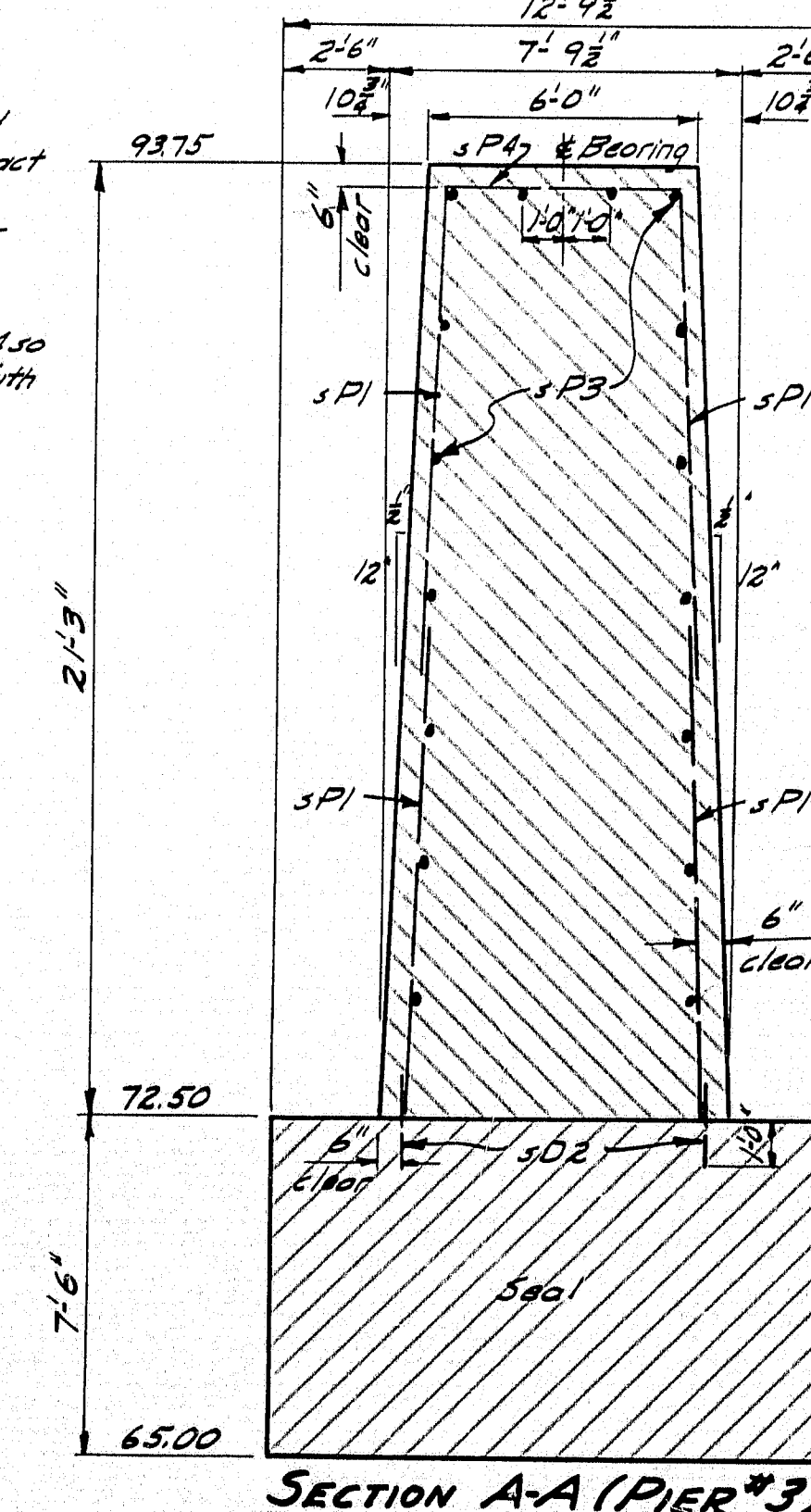
DESIGN & TRACE - RISSEL	
CHECK <i>CH.</i>	BRIDGE: 2267
STATE HIGHWAY COMMISSION	
BRIDGE DIVISION	
EMBDEN- SOLON BRIDGE	
OVER	
KENNEBEC RIVER	
BETWEEN THE TOWNS OF	
EMBDEN & SOLON	
SOMERSET COUNTY	
ABUTMENTS	
SHEET 18 OF 32	AUGUSTA, MAINE
	AUG. 1953



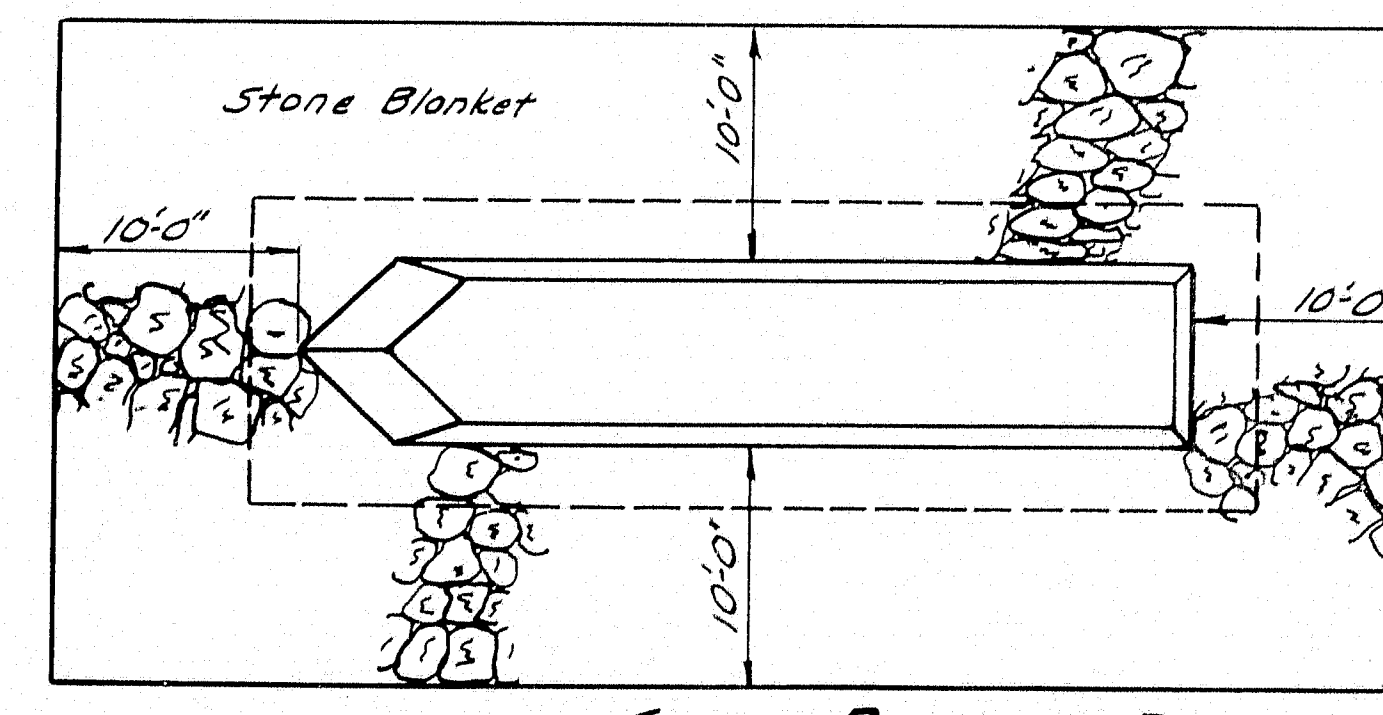
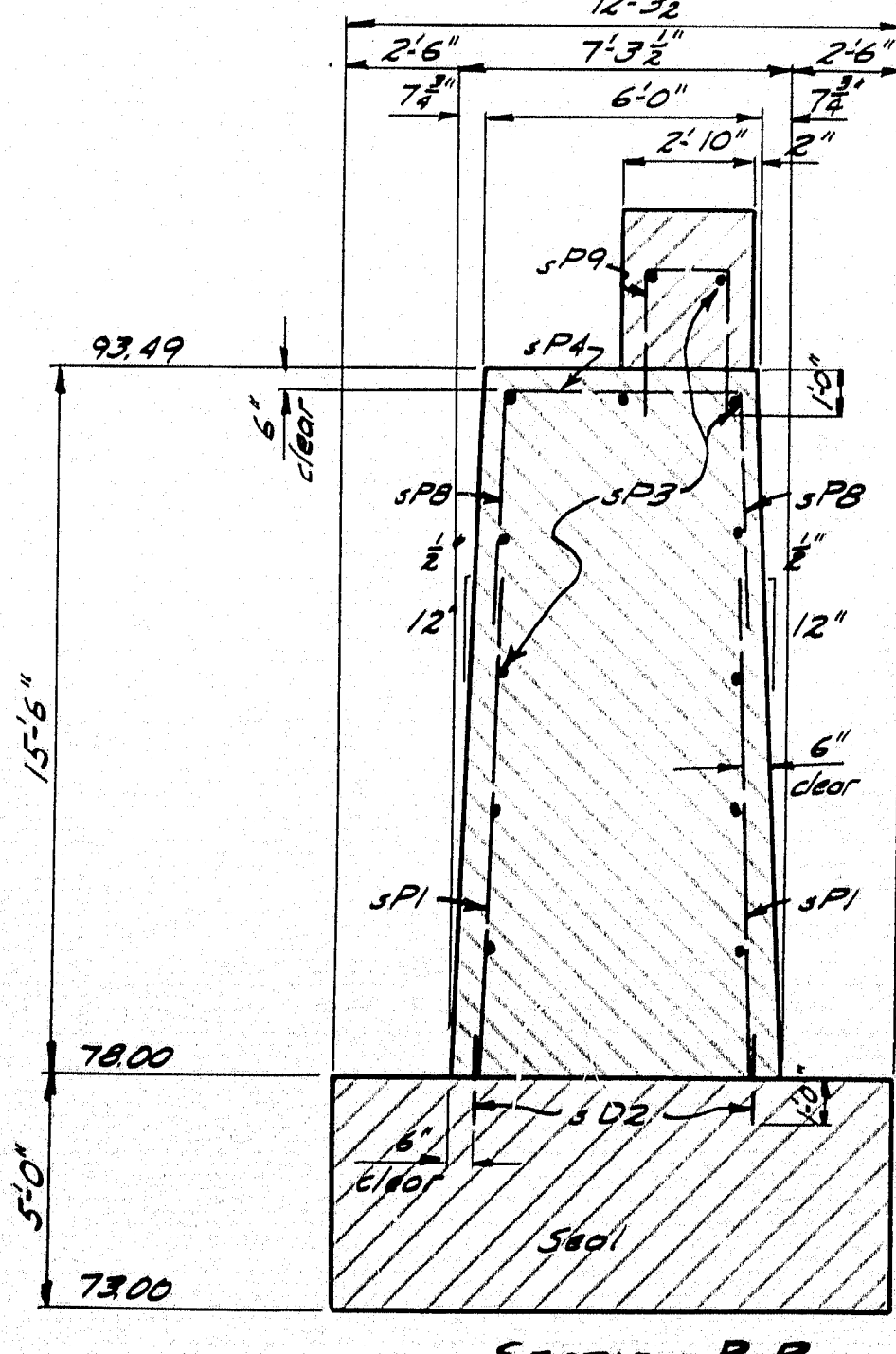
Note: Dress shaded areas on "PLAN" to exact elevation shown.
See note under Pier #1 for placing bars sD2.
Place bars sP4 so as not to interfere with anchor bolts.
Place bars sP9 before concrete at elevation 9349 has attained initial set.



Note: Dress shaded areas on "PLAN" to exact elevations shown.
See note under Pier #1 for placing bars SD2.
Place bars sP4s as not to interfere with anchor bolts.



Note: If, when excavating for Pier #3, soft material (described as loose, soft blue gray silt-clay on "Stratigraphic Profile") is encountered at El. 65.00, continue excavation until firm material is reached, and calculate new depth of soil.



Note: Seal for all piers calculated with water El. assumed to be 82.50. 5'-0" set as minimum depth of seal.
See sh. 29 for detail of nose angle.
Two required per pier.

DESIGN & TRACE-RISSEL
CHECK - *C. L. L.* BRIDGE - 2267

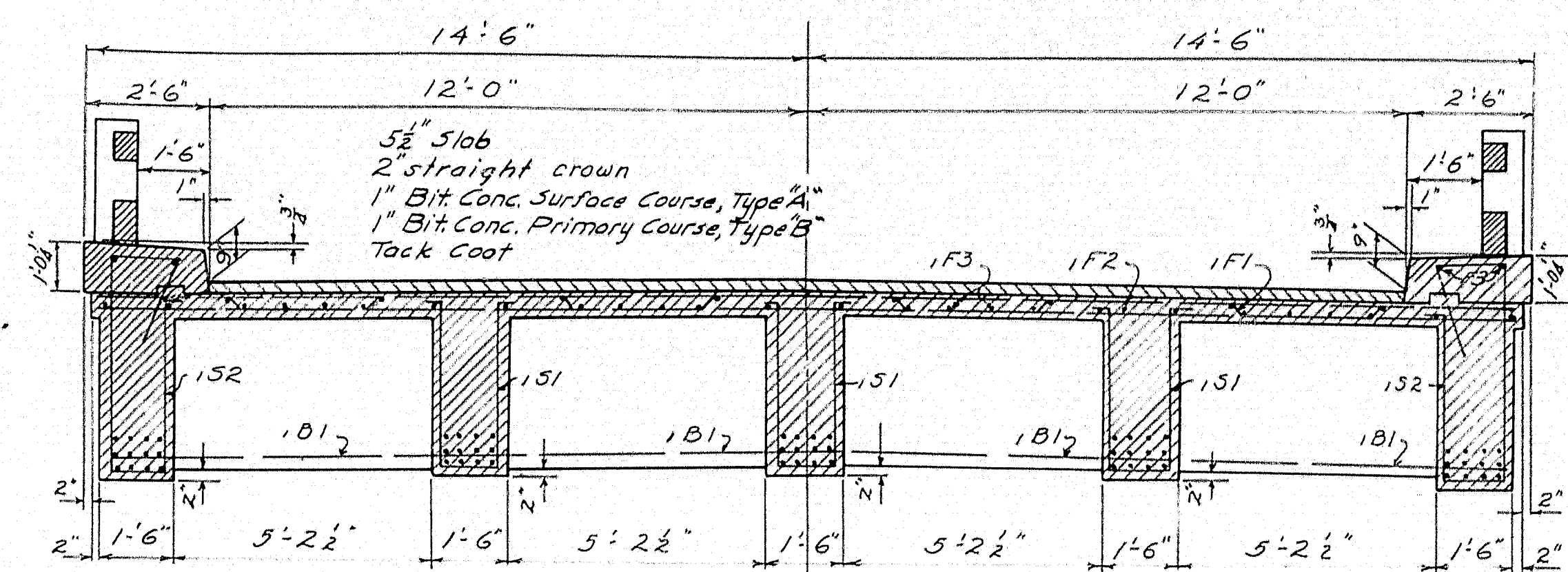
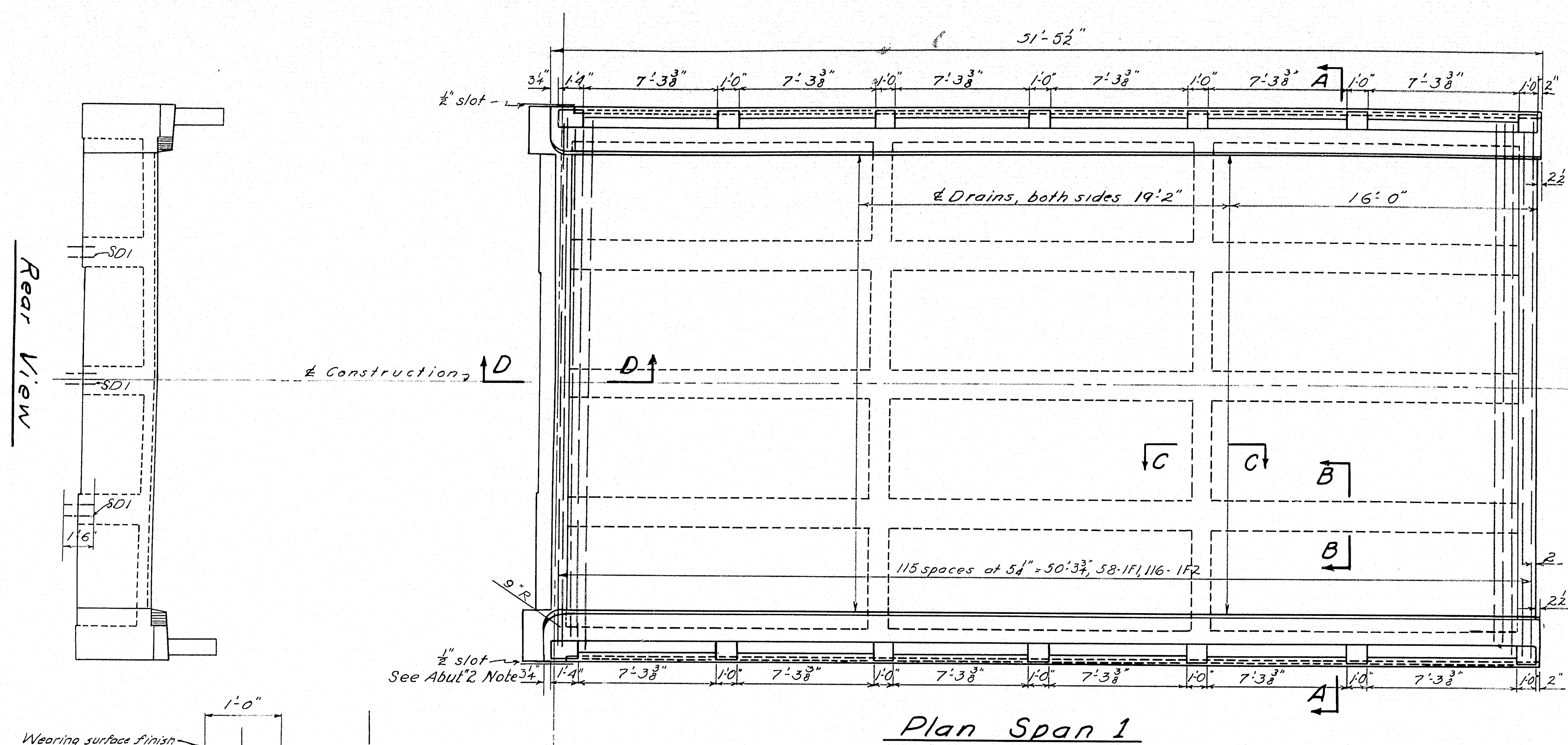
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

EMBDEN-SOLON BRIDGE

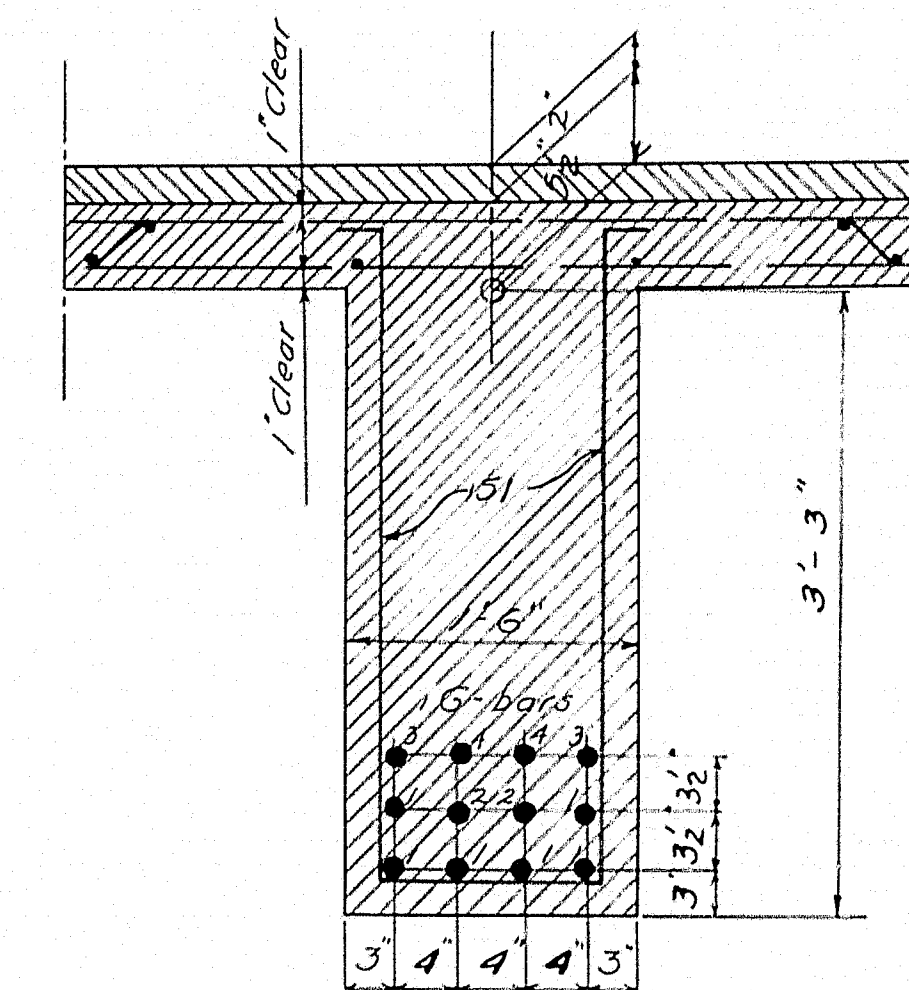
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY

PIERS 3, 4 & 5

SHEET 200 OF 32 AUGUSTA, MAINE AUG. 1953

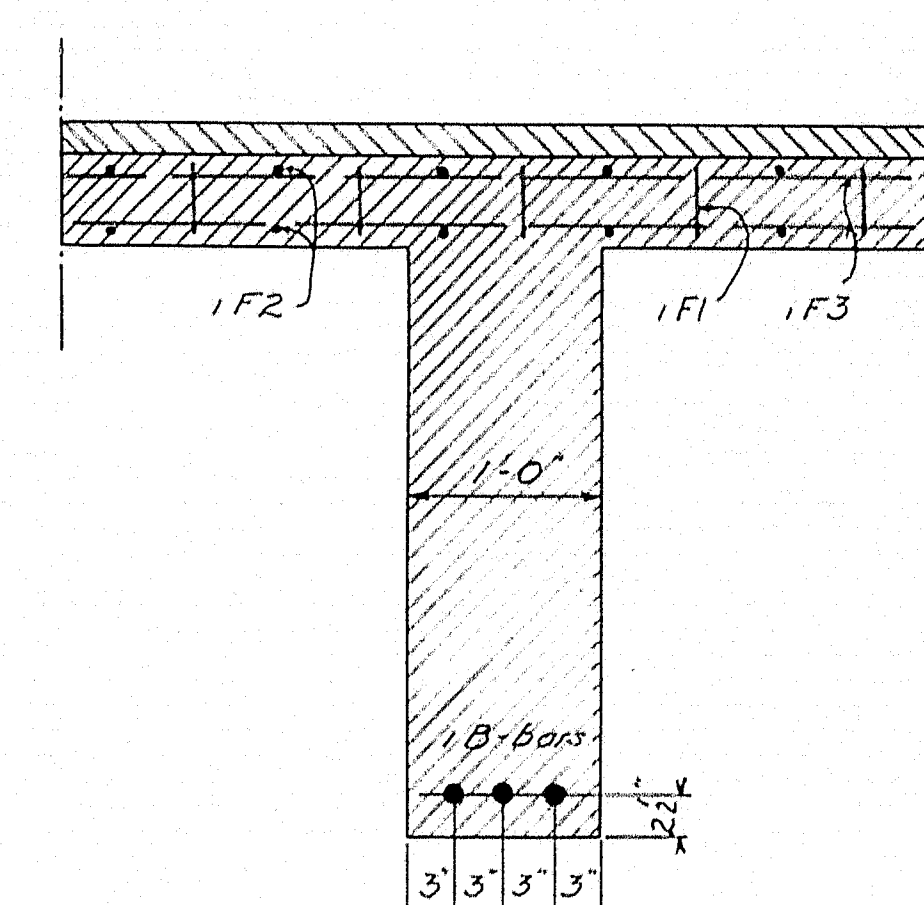


Section A-A

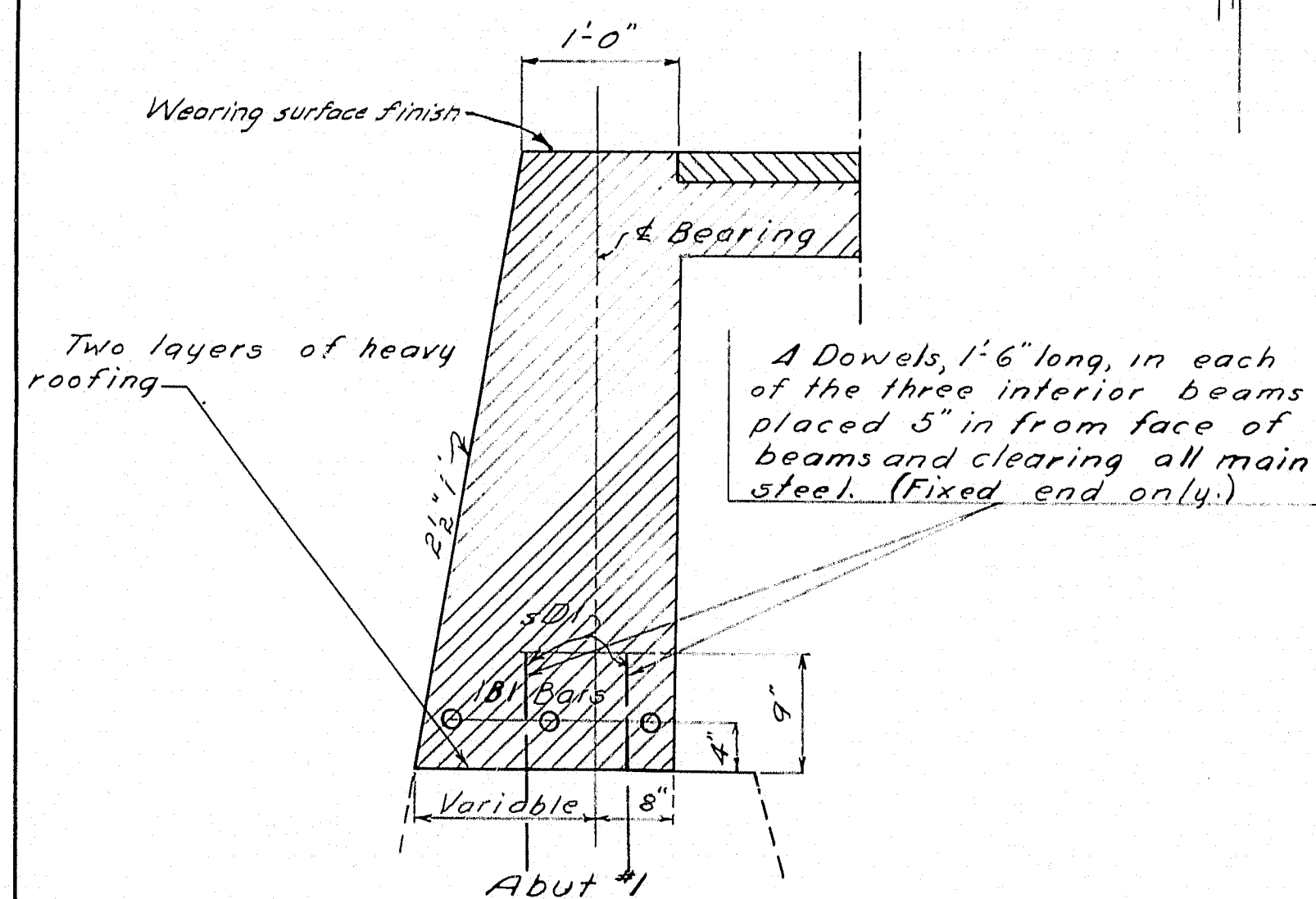


Section B-B

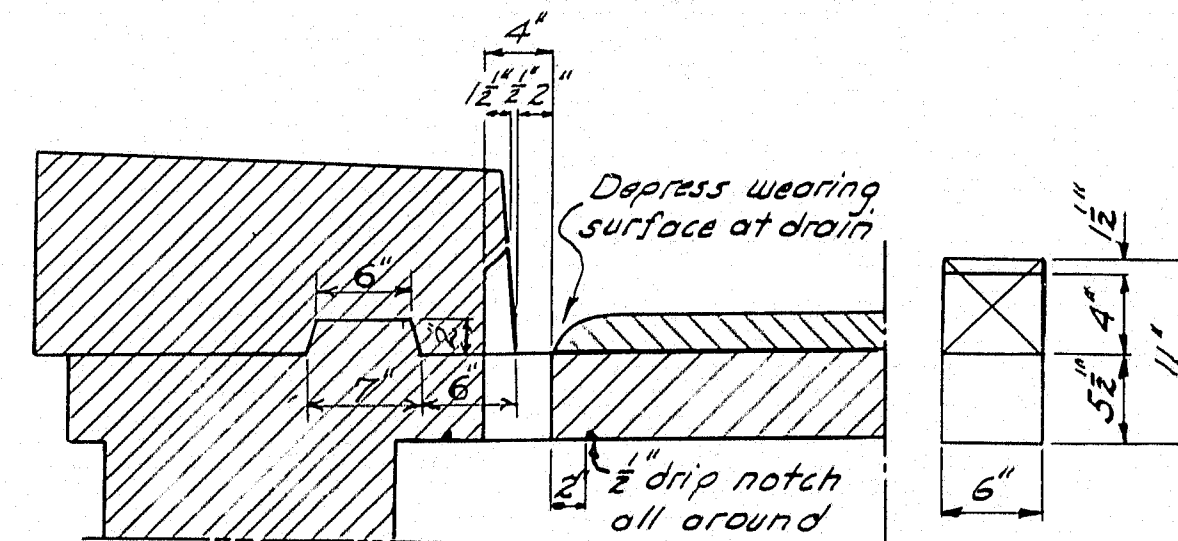
G-bars are the same in all beams.



Section C-C

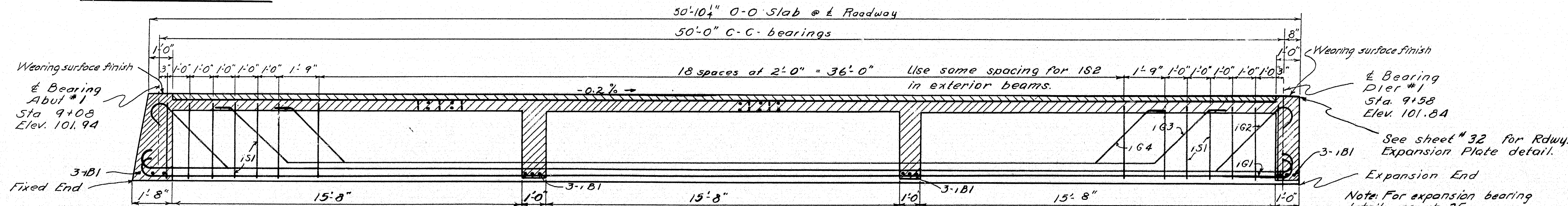


Section D-D



Drain Detail

Construct drain forms of 24 gage galv iron - 4 req'd.



Longitudinal Section

Federal Aid Project No. S-0230 (2)

DESIGN R.F. Dennis
DETAIL DENNIS
TRACE C.F.S. ✓

BRIDGE- 2267

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

EMBDEN-SOLON BRIDGE

OVER
KENNEBEC RIVER

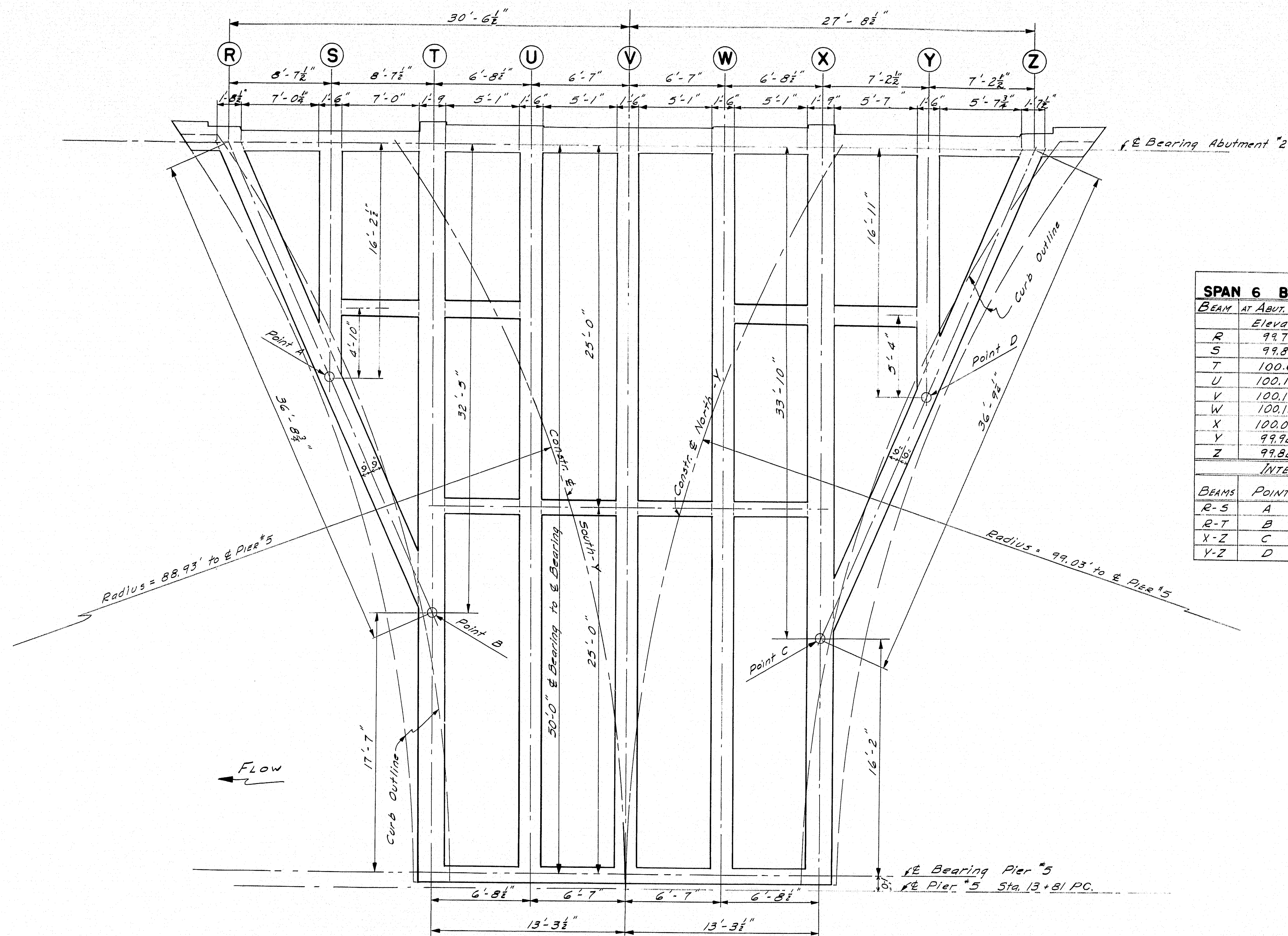
BETWEEN THE TOWNS OF

EMBDEN & SOLON

SOMERSET COUNTY

SUPERSTRUCTURE SPAN I

SHEET 21 OF 22 AUGUSTA, MAINE, FEB. 1953.

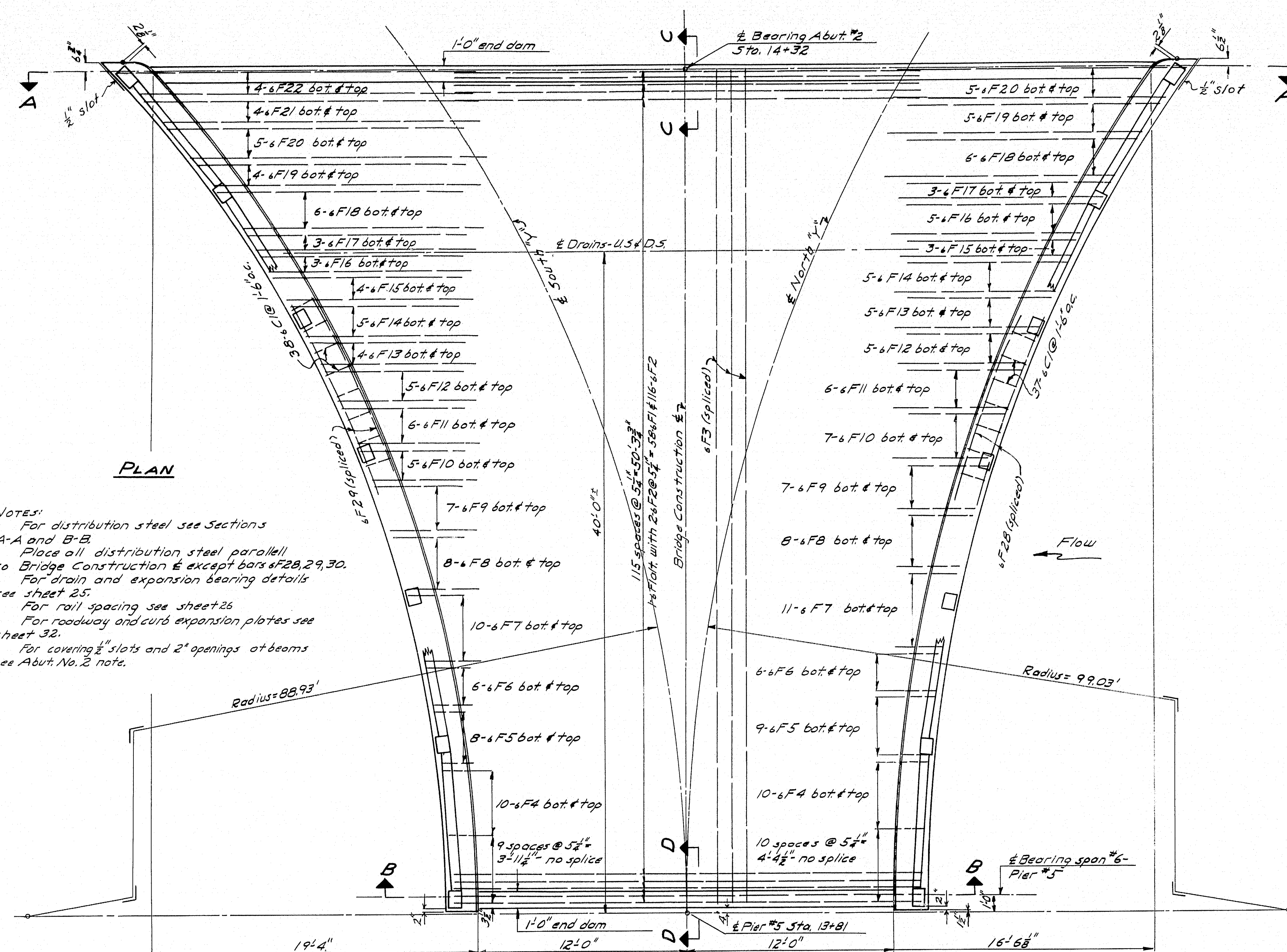


SPAN 6 BEAM ELEVATIONS			
BEAM	AT ABUT. 2	AT PIER 5	
Elevations at top of stem			
R	99.77		
S	99.89		
T	100.01	100.10	
U	100.10	100.20	
V	100.19	100.29	
W	100.10	100.20	
X	100.01	100.10	
Y	99.92		
Z	99.82		
INTERSECTING BEAMS			
BEAMS	POINT	Elev. Top of Stem	Elev. Bottom of Beam
R-S	A	99.91	(S) 97.99 (R) 97.47
R-T	B	100.07	(R) 97.63 (T) 96.22
X-Z	C	100.07	(Z) 97.63 (X) 96.22
Y-Z	D	99.95	(Y) 98.03 (Z) 97.51

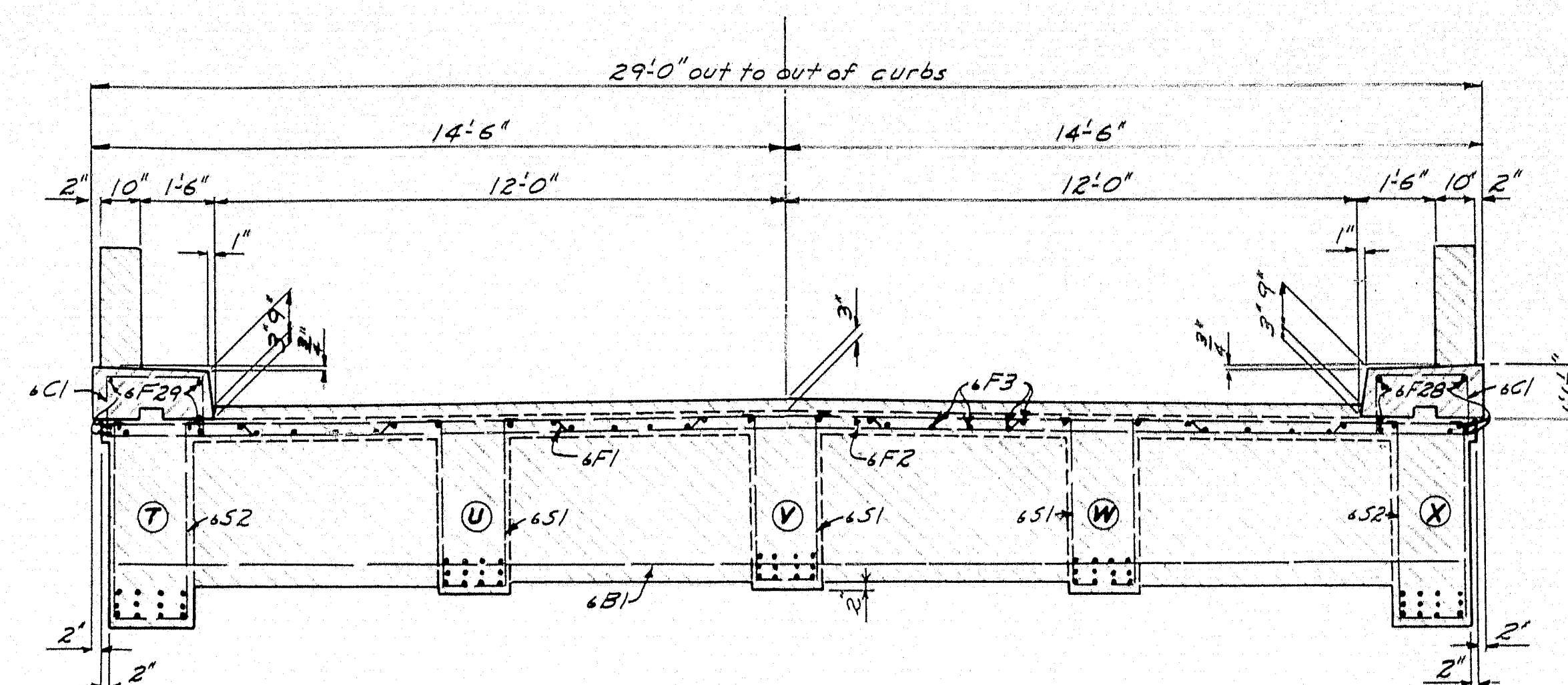
PLAN

Slab and Curbs not shown.

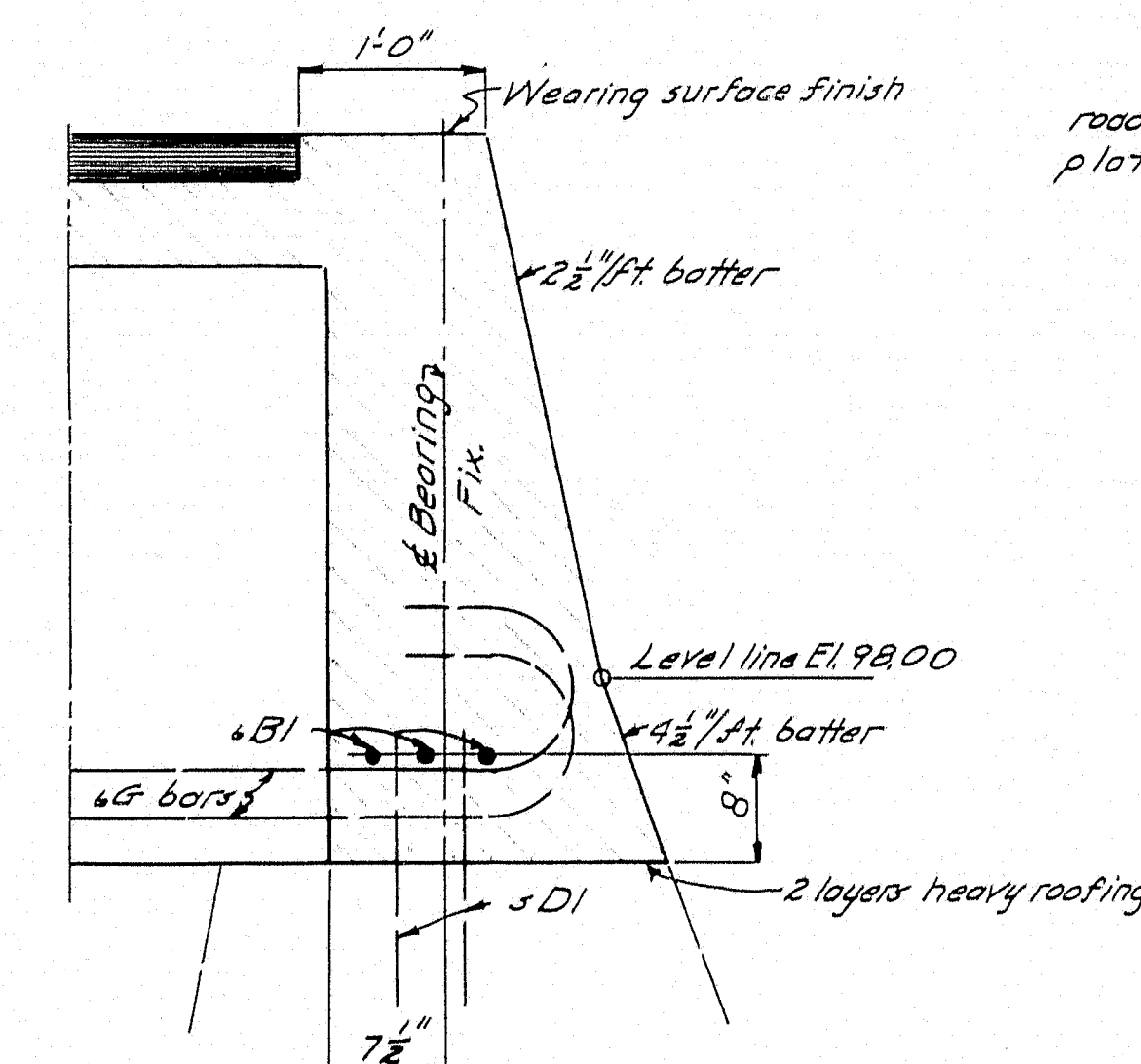
DESIGN-DENNIS
TRACE-MAZEIKO CHECK-*gls* BRIDGE-2267
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDEN-SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
BEAM LAYOUT SPAN 6
SHEET 22 OF 22 AUGUSTA, MAINE MAY 1953



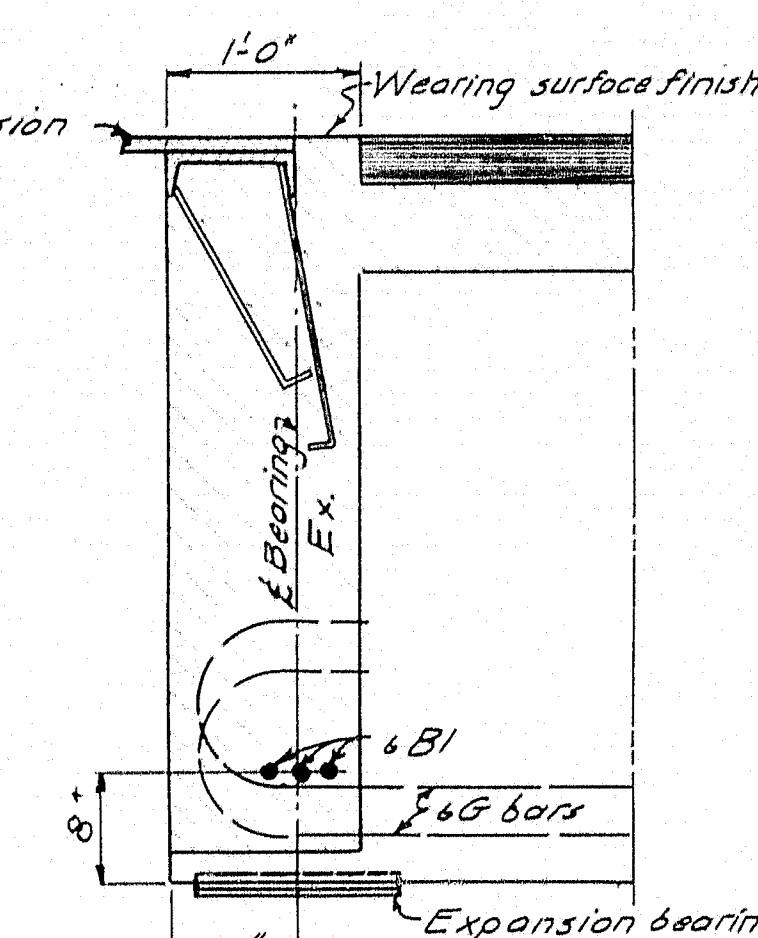
NOTES:
For distribution steel see Sections A-A and B-B.
Place all distribution steel parallel to Bridge Construction & except bars #F20, 29, 30.
For drain and expansion bearing details see sheet 25.
For rail spacing see sheet 26.
For roadway and curb expansion plates see sheet 32.
For covering 1/2" slots and 2" openings at beams see Abut. No. 2 note.



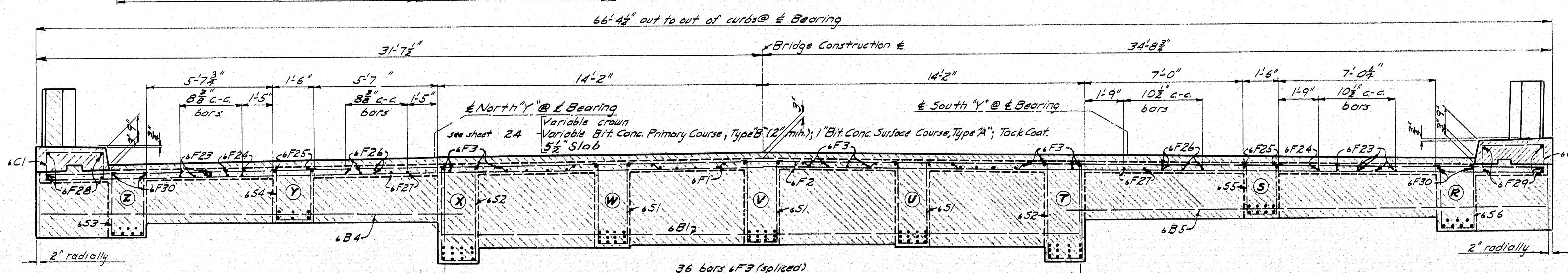
SECTION B-B
@ Bearing Pier #5, Span #6



SECTION C-C

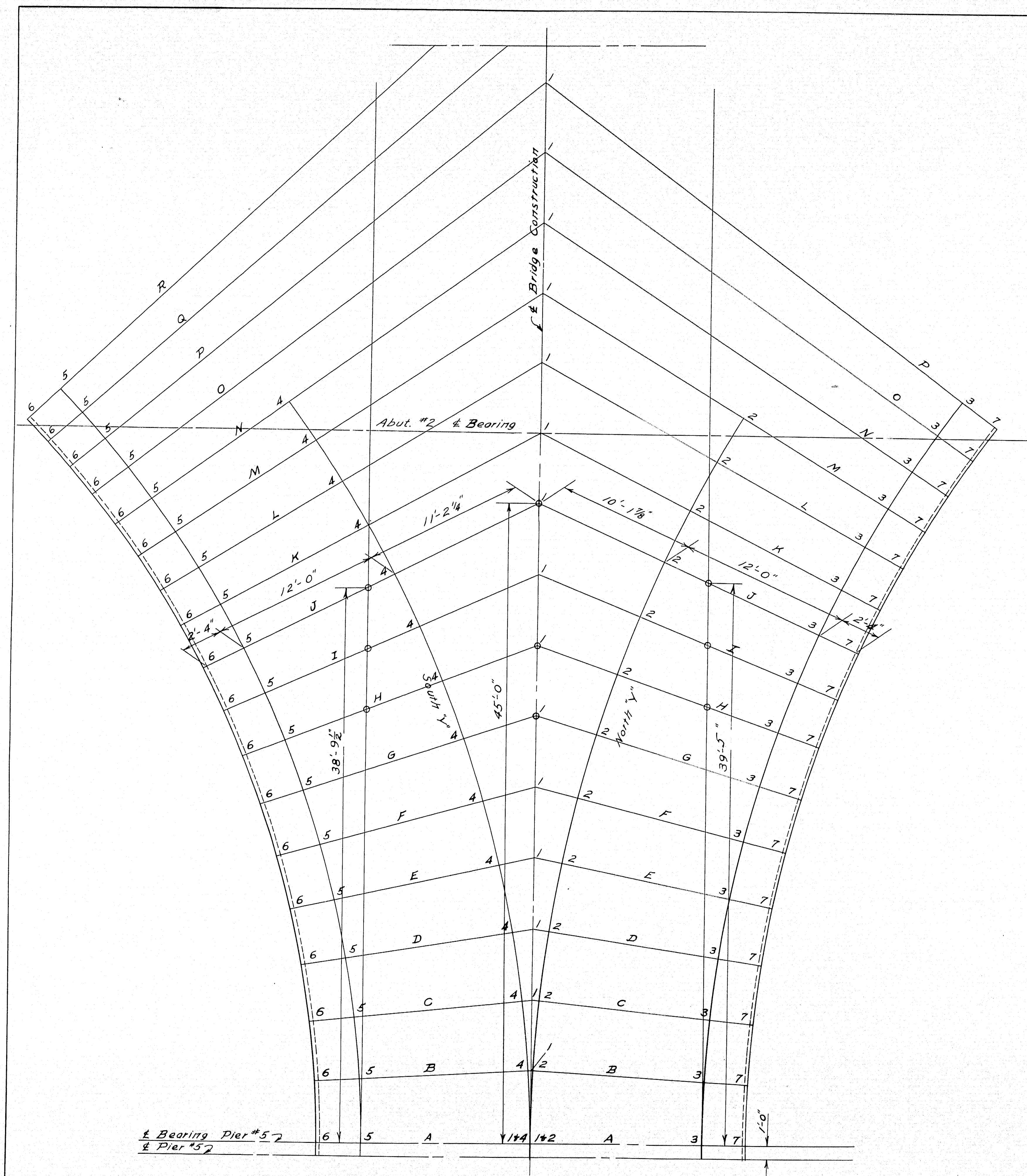


SECTION D-D



SECTION A-A
@ Bearing Abutment #2

DESIGN - DENNIS VERRILL
DETAIL - VERRILL
TRACE - RISSEL
CHECK - *[initials]*
BRIDGE - 2267
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDEN - SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
DETAILS SPAN NO. 6
SHEET 23 OF 52 AUGUSTA, MAINE MAY 1953



Layout Data					
Distances measured from & Bearing Pier #5 for Span #6					
Line	Dist. along & Bridge line 12'-0" left	Dist. along parallel line 12'-0" right	Dist. to & South Y along Radius line 12'-0" right	Dist. to & North Y along Radius line 12'-0" right	Dist. to & North Y along Radius line 12'-0" right
A	0'	0'-0"	0'-0"	0'-0"	0'-0"
B	5'	4'-2 1/2"	0'-2 3/8"	4'-3 1/2"	0'-2 3/8"
C	10'	8'-6 1/2"	0'-8 3/8"	8'-8"	0'-7 3/8"
D	15'	12'-10 1/8"	1'-5 3/8"	13'-0 3/8"	1'-3 3/8"
E	20'	17'-2"	2'-5 3/8"	17'-5 1/2"	2'-2 3/8"
F	25'	21'-5 3/8"	3'-8 3/8"	21'-10 1/2"	3'-4 3/8"
G	30'	25'-9 1/2"	5'-3"	26'-2 3/8"	4'-8 3/8"
H	35'	30'-1 1/2"	7'-0 3/8"	30'-7 3/8"	6'-4 3/8"
I	40'	34'-5 3/8"	9'-0"	35'-0 3/8"	8'-1 3/8"
J	45'	38'-9 3/8"	11'-2 3/8"	39'-5"	10'-1 3/8"
K	50'	43'-1 1/2"	13'-7 3/8"	43'-9 3/8"	12'-4 3/8"
L	55'	47'-5 1/2"	16'-1 1/8"	48'-2 3/8"	14'-8 3/8"
M	60'	51'-9 3/8"	18'-11"	52'-7 1/2"	17'-3 3/8"
N	65'	56'-1 1/8"	21'-9 3/8"	57'-0"	19'-11 3/8"
O	70'	60'-5"	24'-10 1/2"	61'-4 3/8"	22'-9 3/8"
P	75'	64'-8 3/8"	28'-1 1/8"	65'-9 1/2"	25'-7 3/8"
Q	80'	69'-0 3/8"	31'-4 3/8"		
R	85'	73'-4 3/8"	34'-9 3/8"		

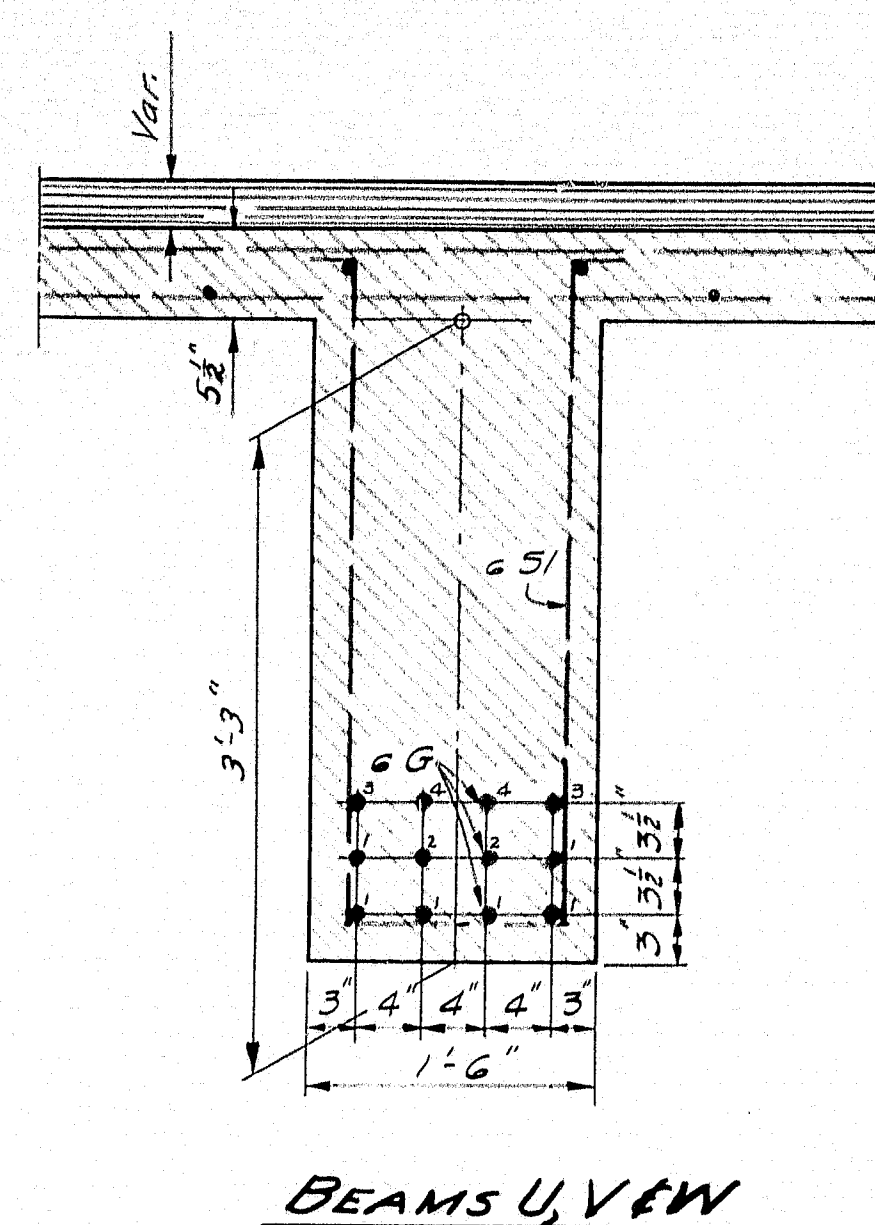
Note
Distance from 2 to 3 North and 4 to 5 South is 12'-0" in all cases. Similarly 3 to 7 and 5 to 6 is 2'-4" to outside edge of slab.

Typical dimensioning is shown for line J

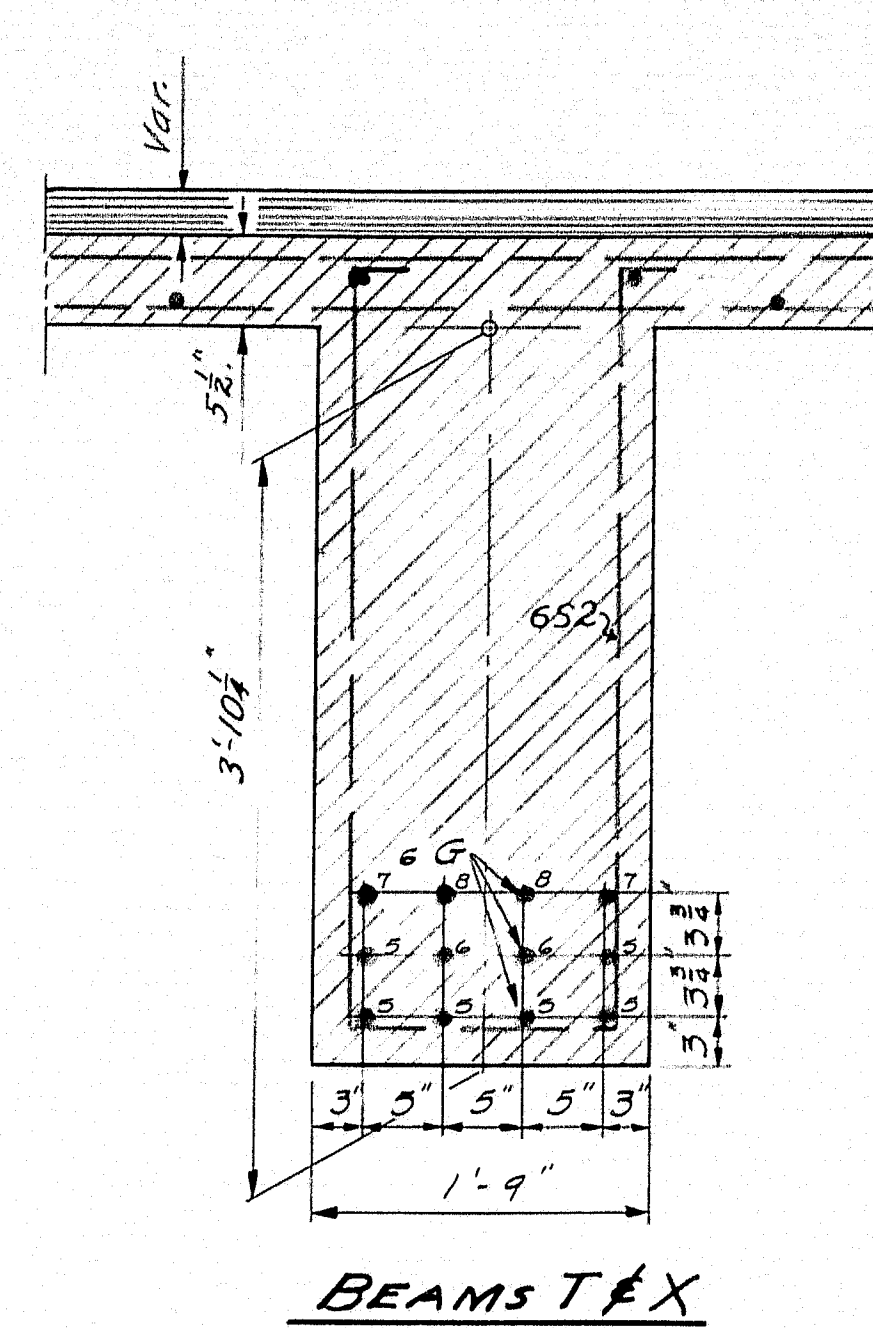
Elevations								
Line	1		2		3		4	
	F.G.	Top Slab	F.G.	Top Slab	F.G.	Top Slab	F.G.	Top Slab
A	101.00	100.75	101.00	100.83	100.55	101.00	100.83	100.55
B	100.99	.74	100.98	.82	.54	100.98	.82	.54
C	100.98	.73	.97	.80	.53	.97	.80	.52
D	.97	.72	.95	.79	.51	.95	.79	.50
E	.96	.71	.94	.77	.49	.93	.77	.48
F	.95	.70	.92	.75	.47	.91	.75	.46
G	.94	.69	.89	.73	.43	.89	.72	.43
H	.93	.68	.87	.70	.41	.87	.70	.41
I	.92	.67	.85	.68	.39	.84	.67	.39
J	.91	.66	.82	.65	.37	.81	.65	.36
K	100.90	100.65	.79	.63	.34	.79	.62	.33
L			.77	.60	.31	.76	.59	.30
M			.74	.57	.28	.73	.57	.27
N			.71	.55	.25	.70	.54	.25
O			.68	.52	.22	.68	.51	.22
P			100.66	100.49	100.19	.65	.48	.20
Q						.62	.45	100.18
R						100.60	100.43	100.15

Note
1 = & of Bridge
2 = & of North "Y"
3 = Inside curb - North "Y"
4 = & of South "Y"
5 = Inside curb - South "Y"
6 = Outside edge of slab, South
7 = Outside edge of slab, North

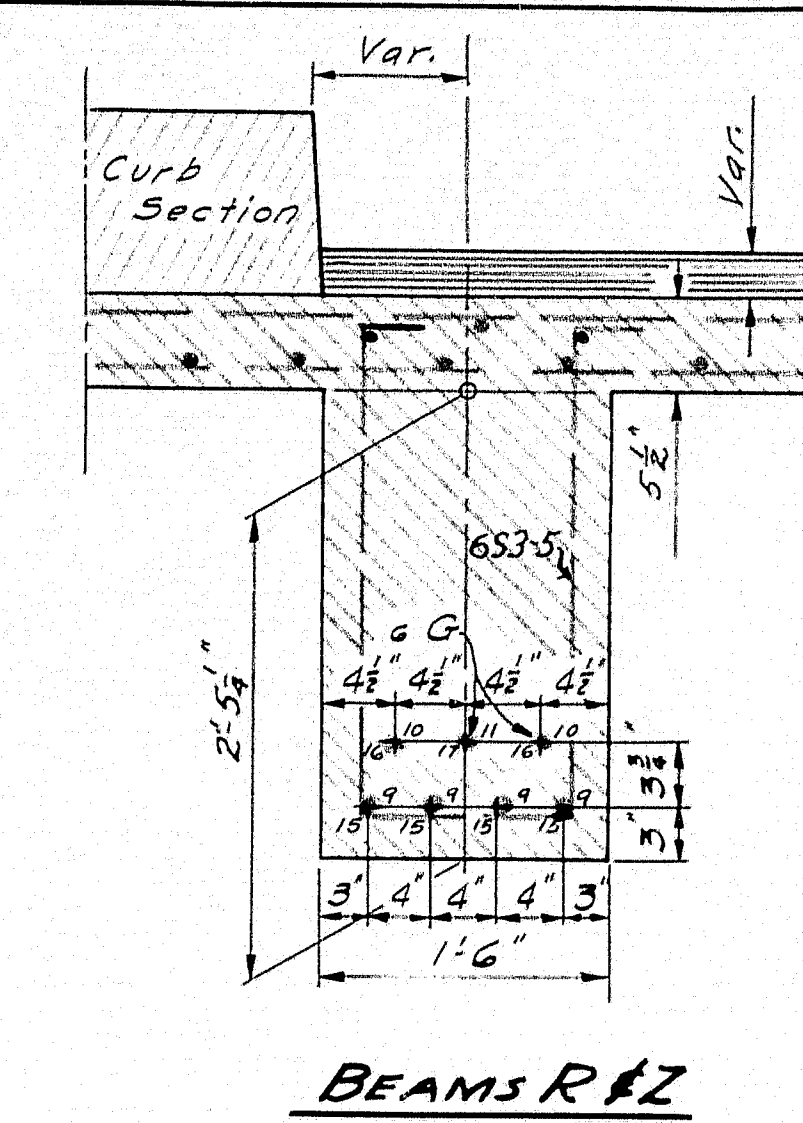
DESIGN - DENNIS
TRACE - MORRISON CHECK - CLC BRIDGE - 2267
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDEN-SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
SLAB LAYOUT & ELEVATION - SPAN NO. 6
SHEET 24 OF 22 AUGUSTA, MAINE MAY 1953



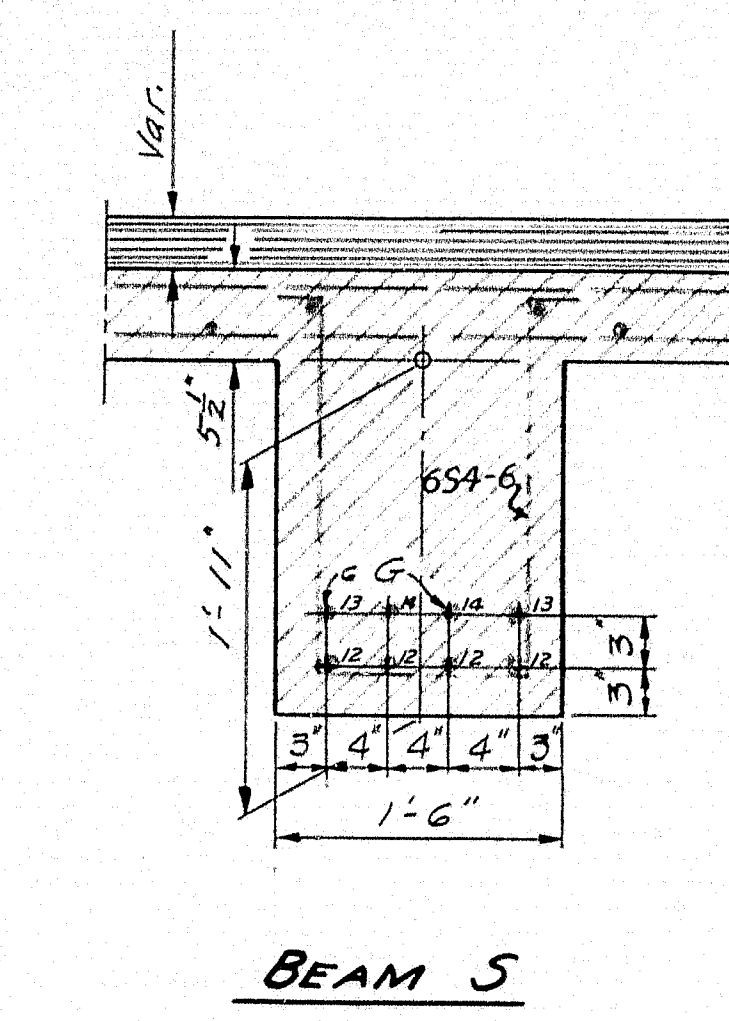
BEAMS U, V, W



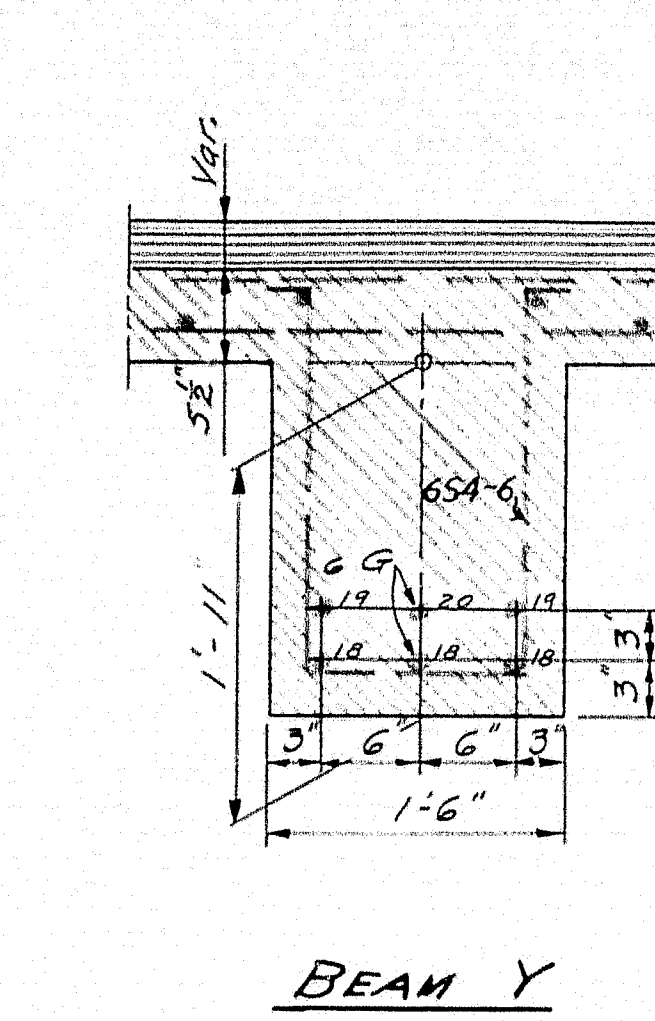
BEAMS T, X



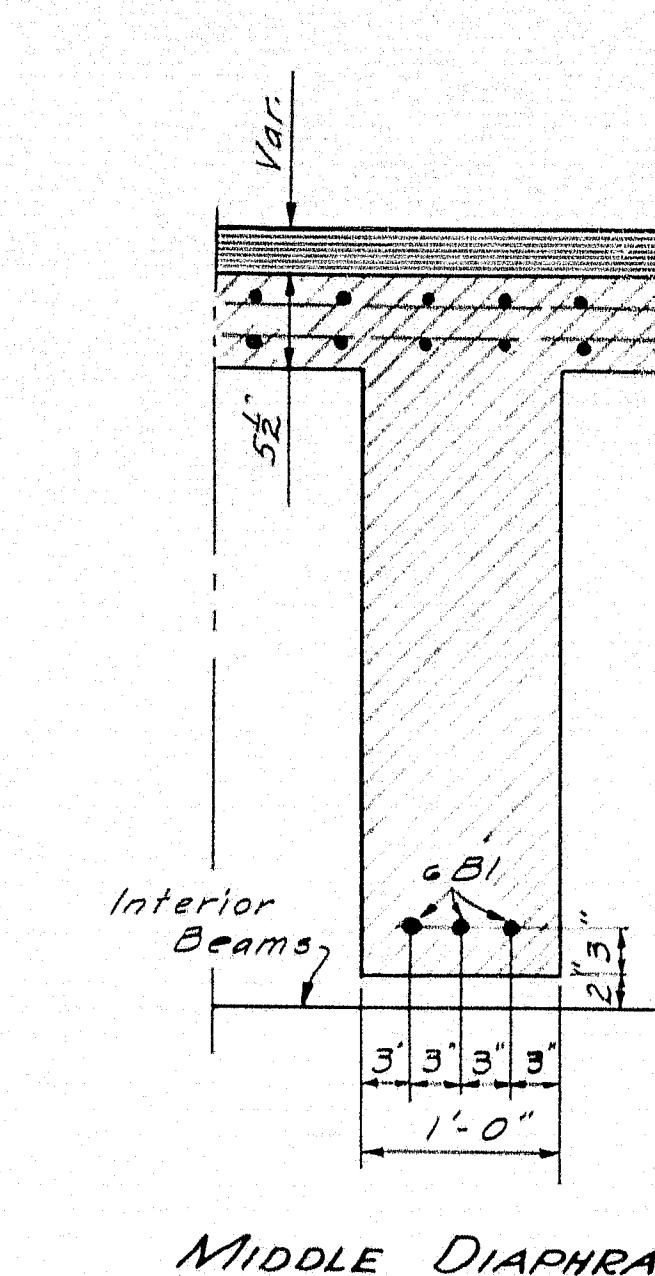
BEAMS R, Z



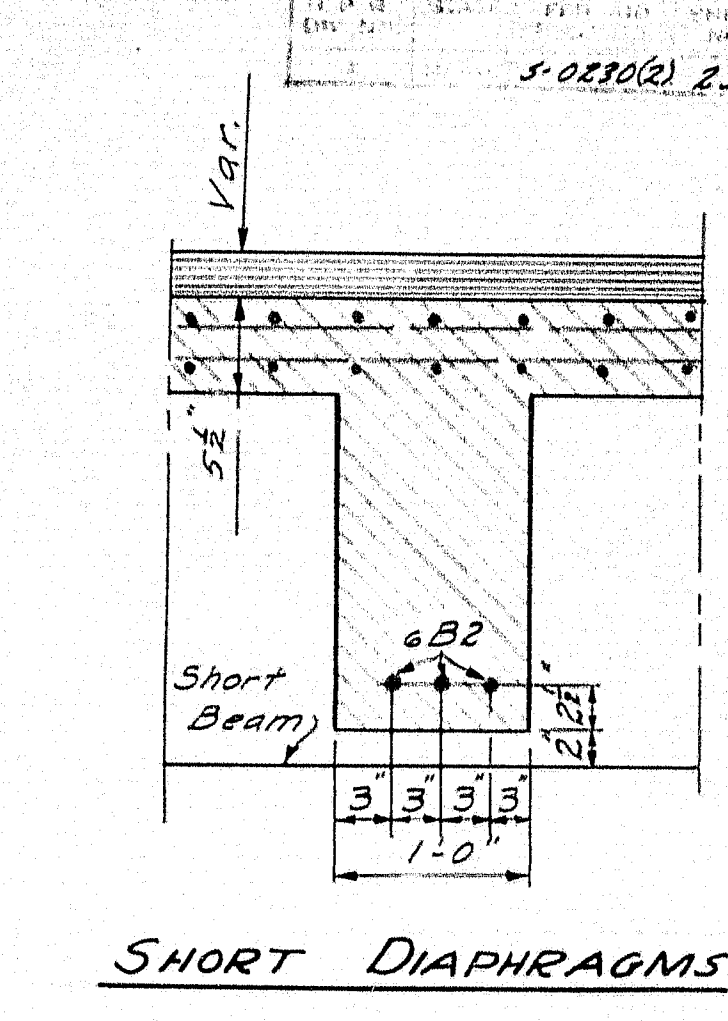
BEAM S



BEAM Y



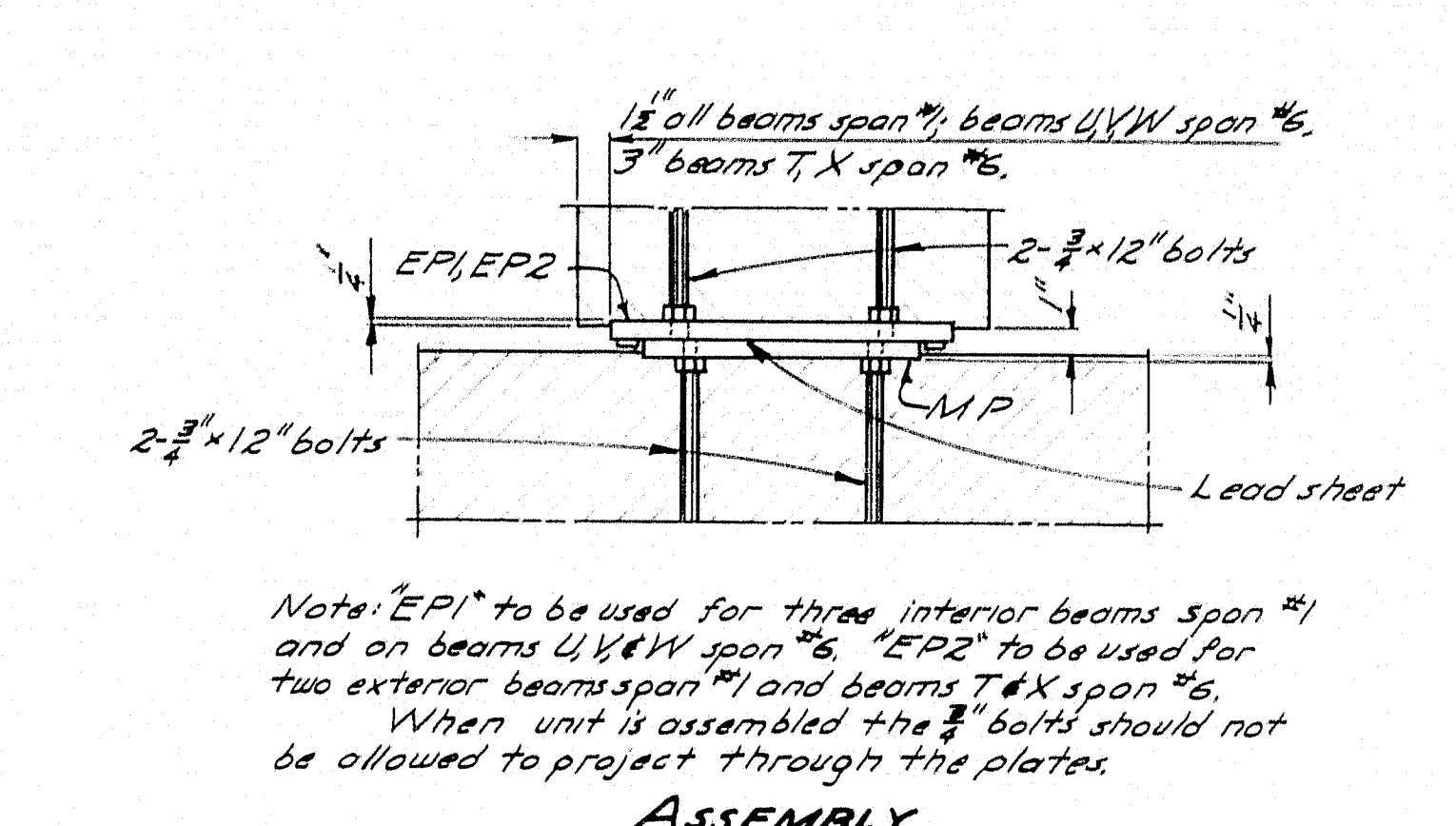
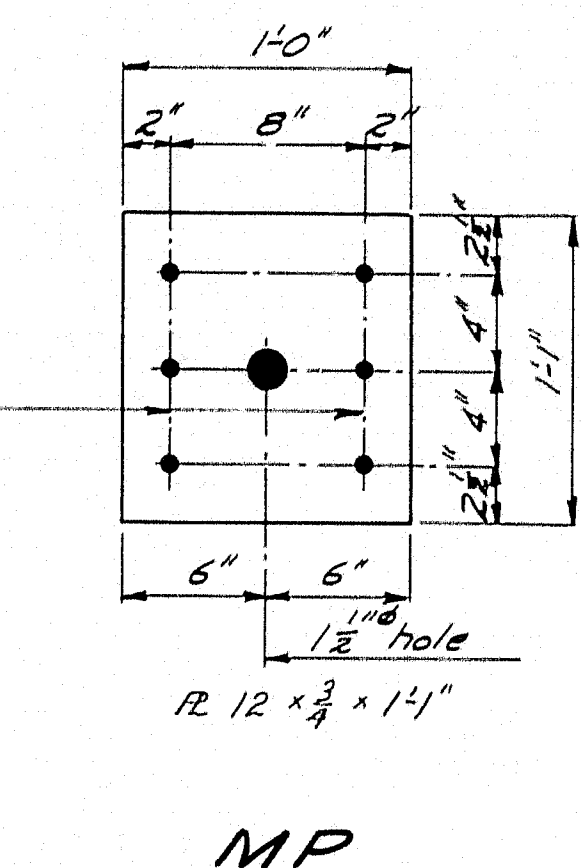
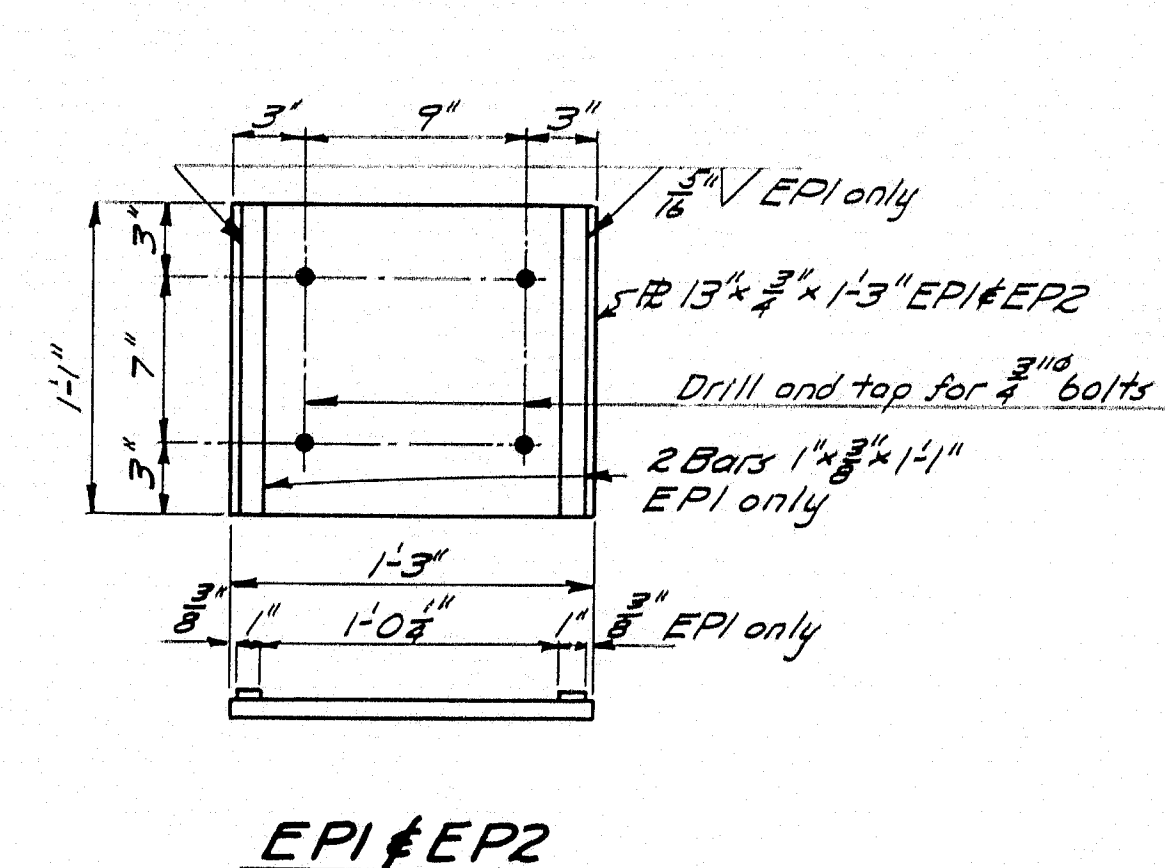
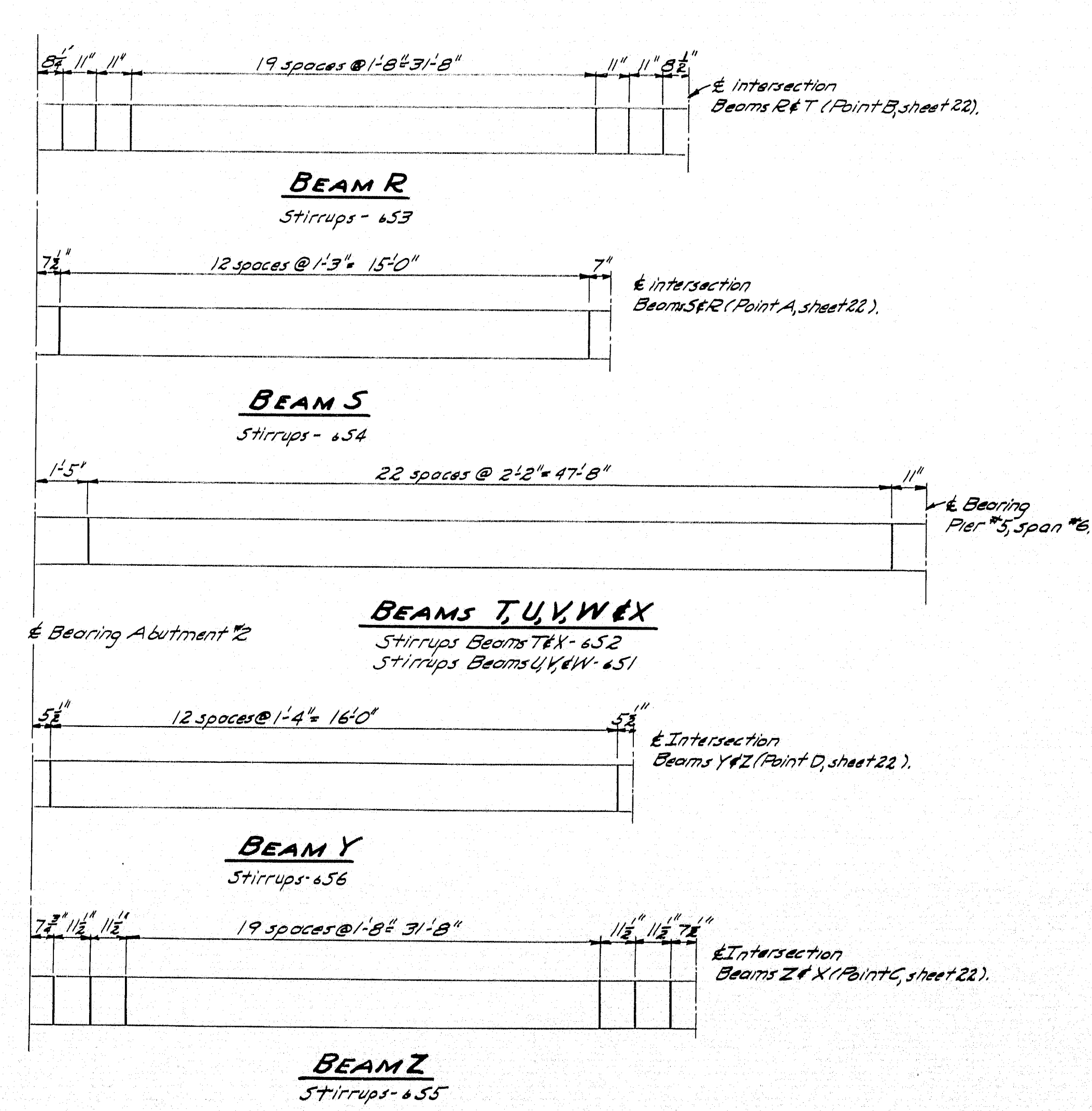
MIDDLE DIAPHRAGM



SHORT DIAPHRAGMS

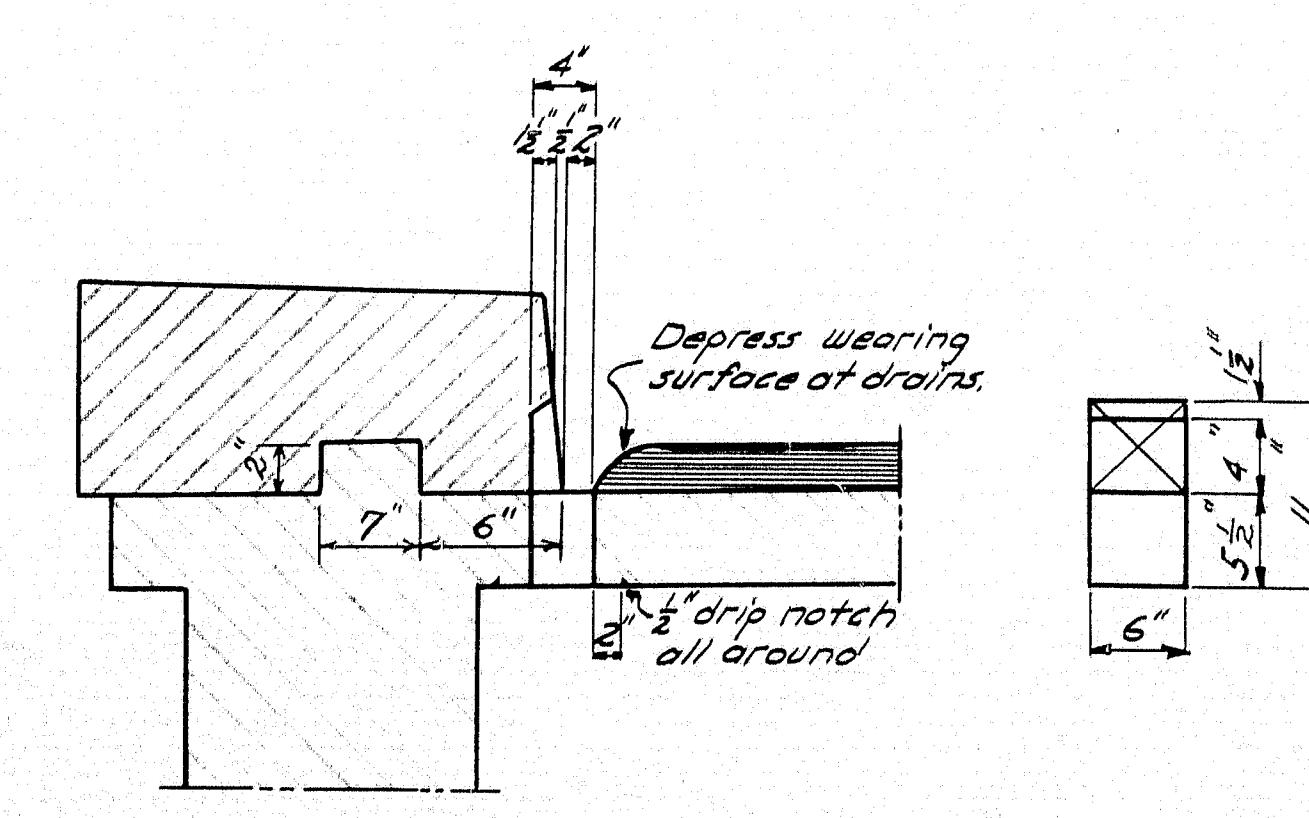
BEAM SECTIONS SPAN #6

BEAM STIRRUP SPACING SPAN #6



EXPANSION BEARING DETAILS SPANS #1 & #6

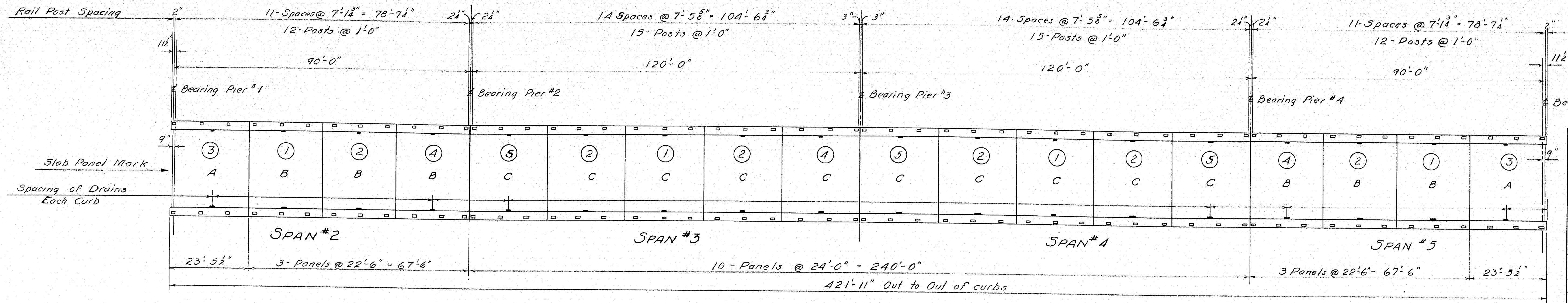
Material required: 6- EPI, 4- EP2, 10- MP
10- 8" x 12" lead sheets 12" x 1'-1"
80- 3/4" x 12" bolts, square head, hex nut.



DRAIN DETAIL SPAN #6

Construct drain forms of
24 gage galv iron. Two (2) req'd.

DESIGN - DENNIS DETAIL - DENNIS, RISSEL TRACE - MAZEIKO, RISSEL	CHECK DATE	BRIDGE - 2267 STATE HIGHWAY COMMISSION BRIDGE DIVISION
EMBDEN - SOLON BRIDGE OVER KENNEBEC RIVER BETWEEN THE TOWNS OF EMBDEN & SOLON SOMERSET COUNTY MISC. DETAILS, SPANS 1 & 6.		
SHEET 25 OF 22		AUGUSTA, MAINE MAY 1953

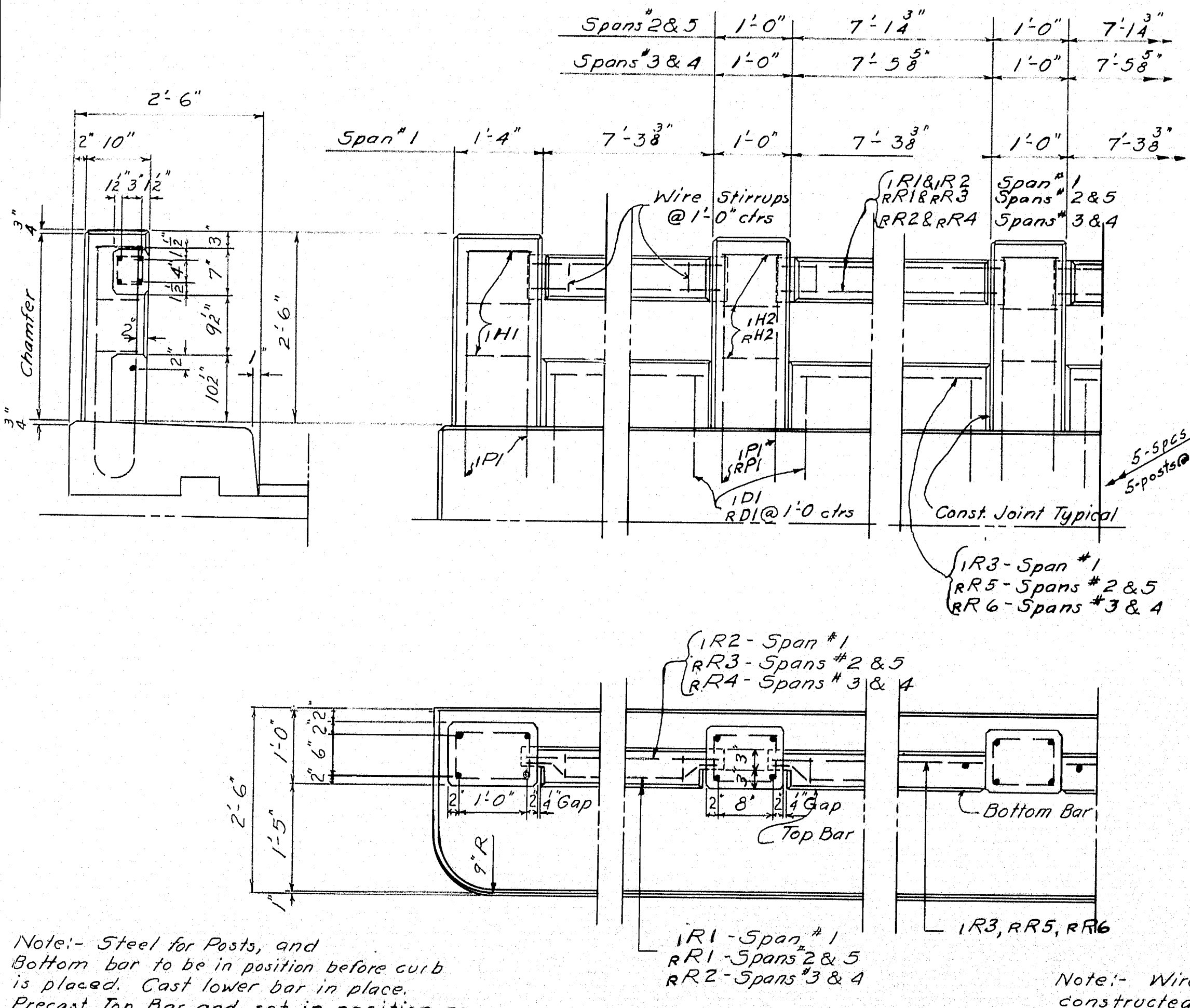


PLAN

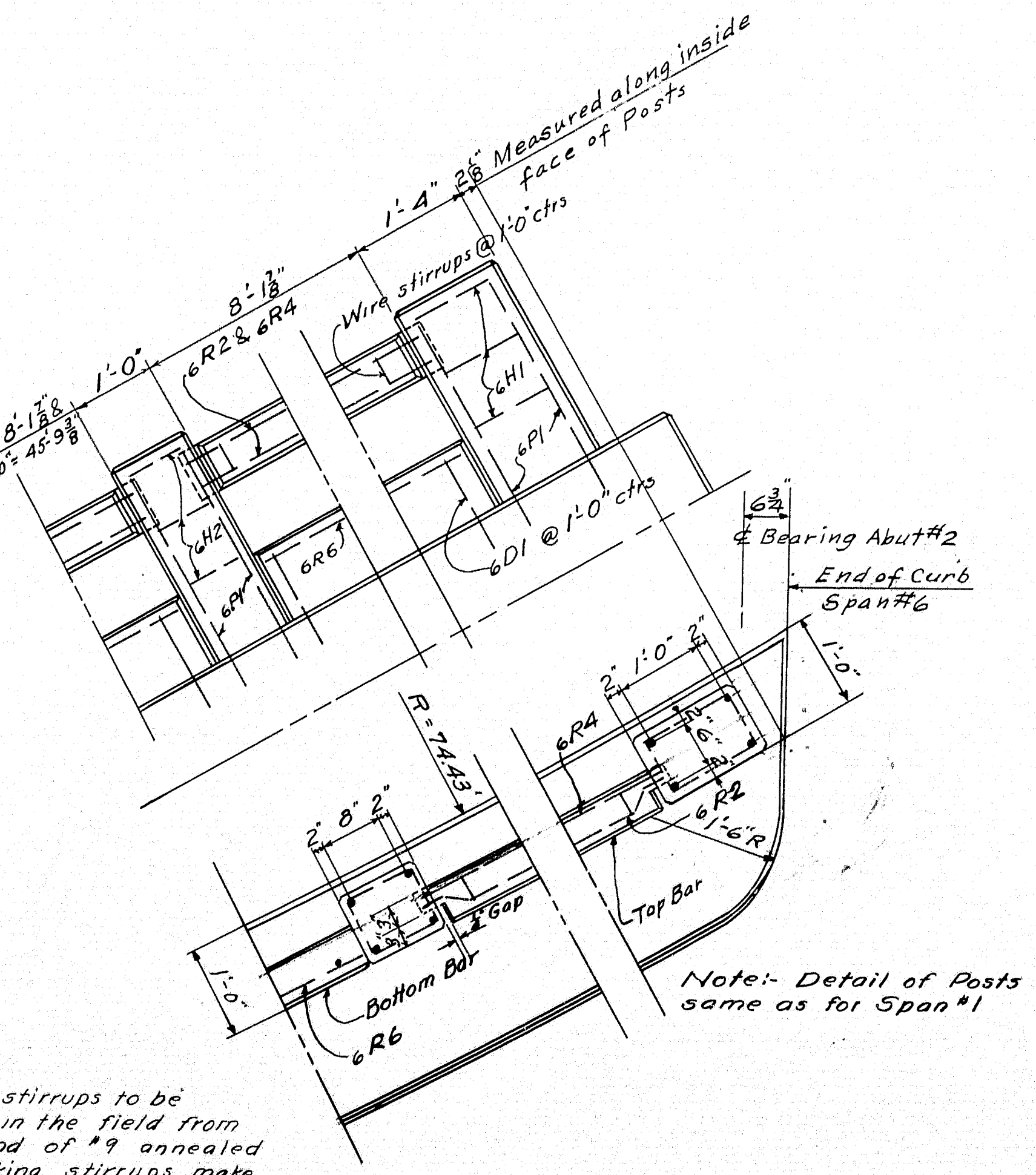
NOTE:- Numbers in circles in above Plan indicate the order in which Concrete Slabs shall be placed.

NOTE: This table voided because the steel company elected to fabricate comber into girders. For table of anticipated deflections due to dead loads superimposed on girders see sh.27, revised May 20, 1954.

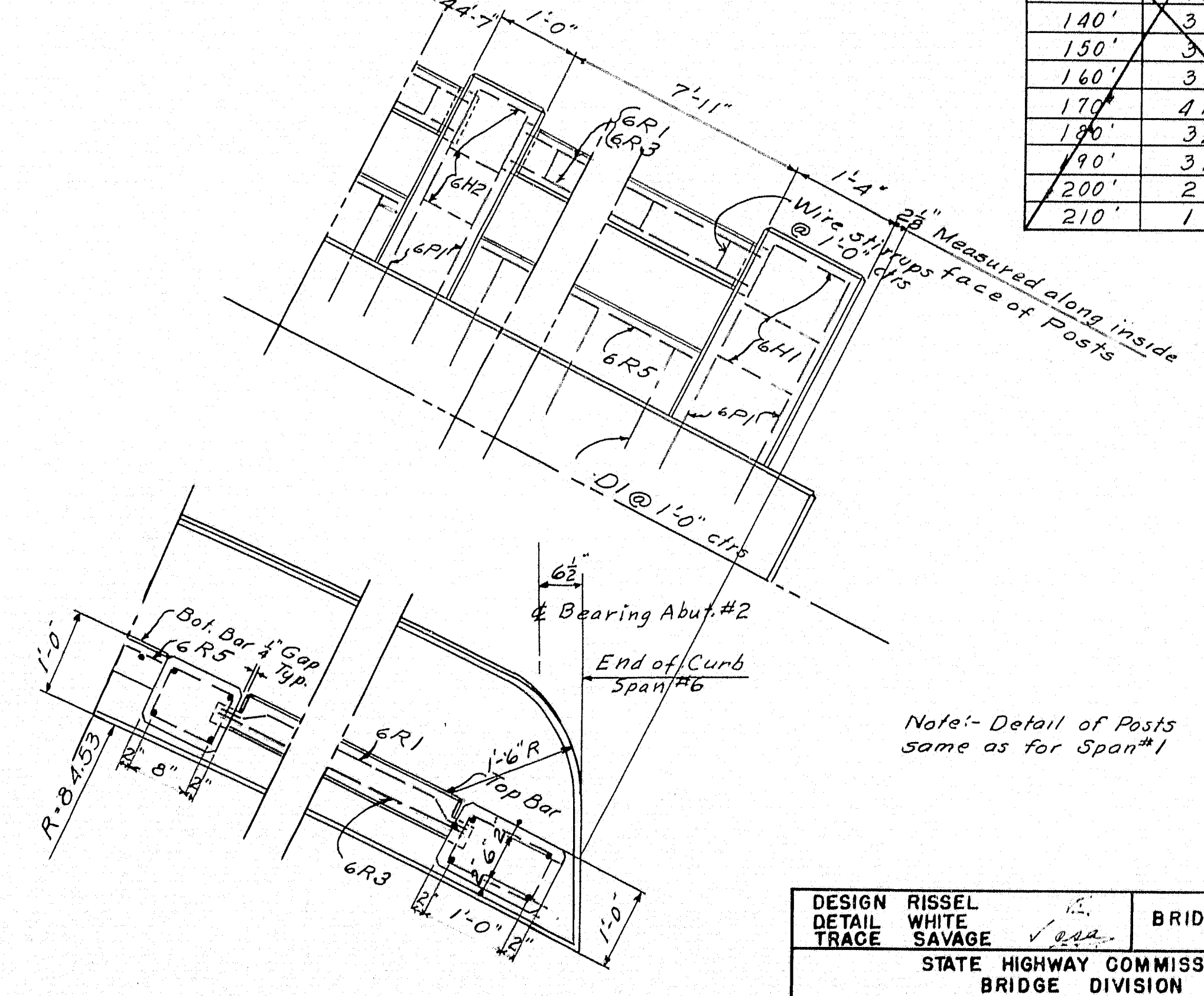
Distance from Pier #1 or Pier #5	Interior Girder Blocking Inches	Exterior Girder Blocking Inches
10'	3 1/2	2 1/2
20'	3 1/2	2 1/2
30'	4	2 1/2
40'	4	2 1/2
50'	3 1/2	2 1/2
60'	3 1/2	2 1/2
70'	3 1/2	2 1/2
80'	2 1/2	1 1/2
90'	1 1/2	1 1/2
100'	3	1 1/2
110'	3 1/2	2 1/2
120'	3 1/2	2 1/2
130'	4 1/2	2 1/2
140'	3 1/2	2 1/2
150'	3 1/2	2 1/2
160'	3 1/2	2 1/2
170'	4 1/2	2 1/2
180'	3 1/2	2 1/2
190'	3 1/2	2 1/2
200'	2 1/2	1 1/2
210'	1 1/2	1 1/2



RAIL DETAILS SPANS 1, 2, 3, 4 & 5



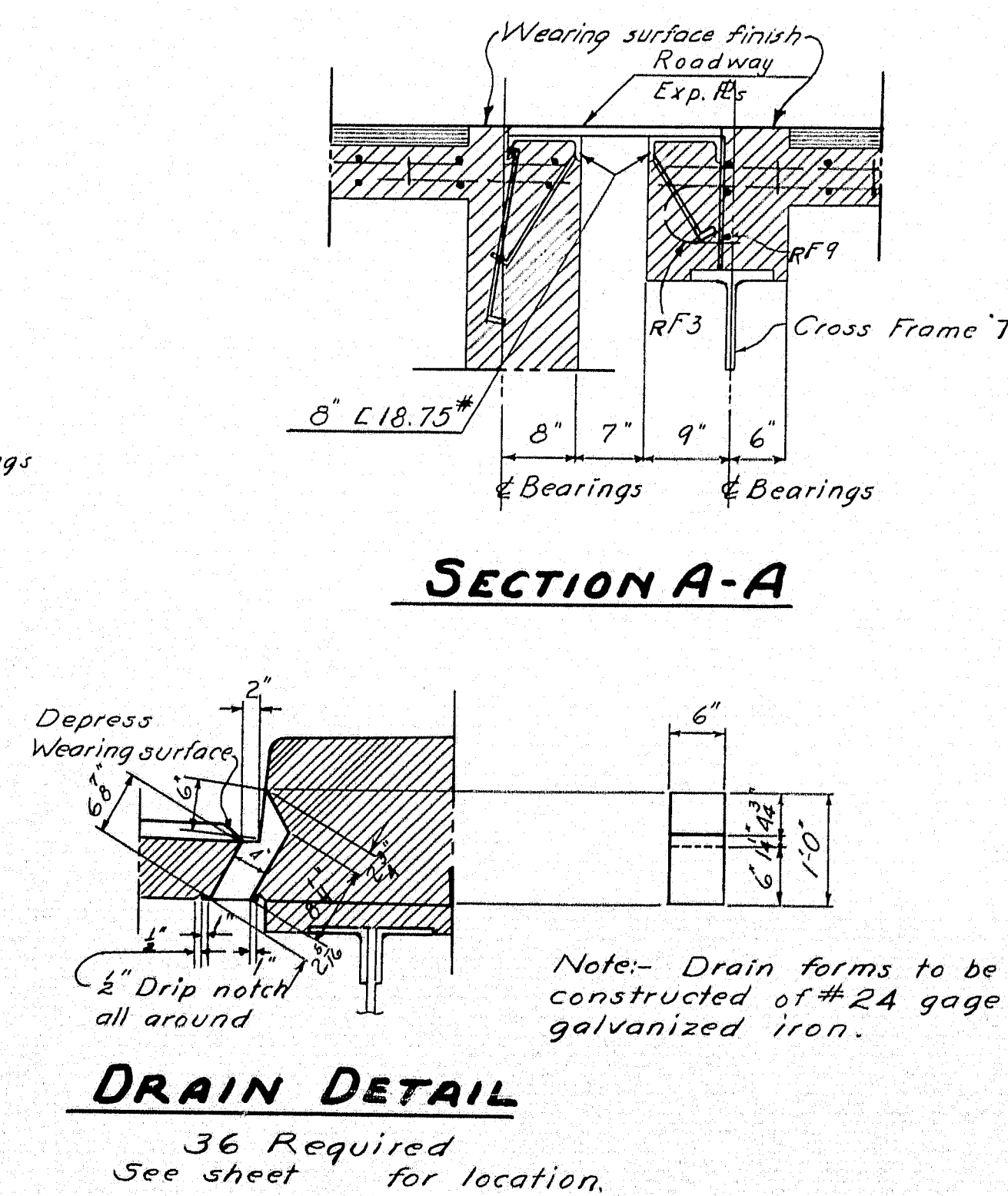
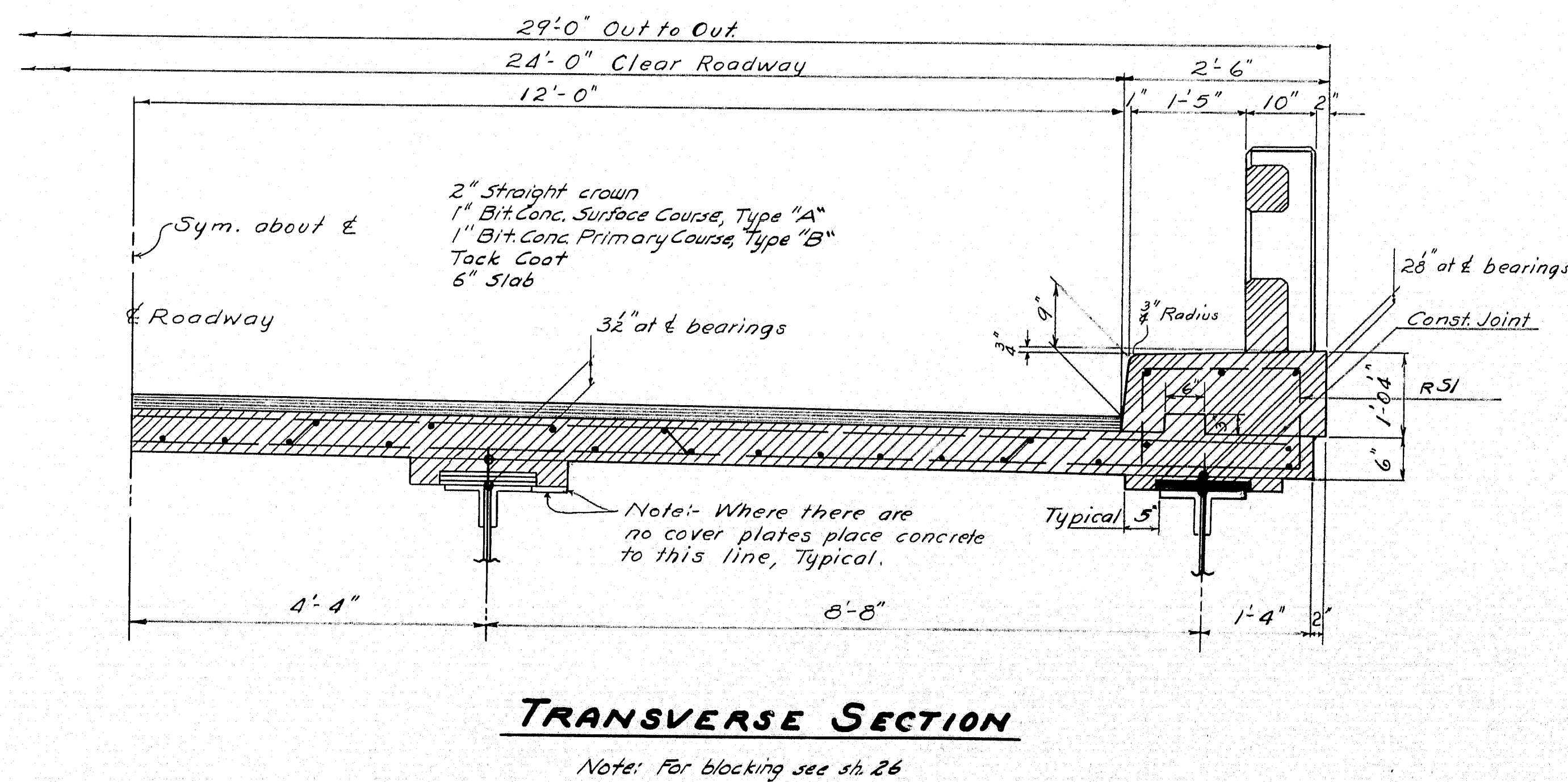
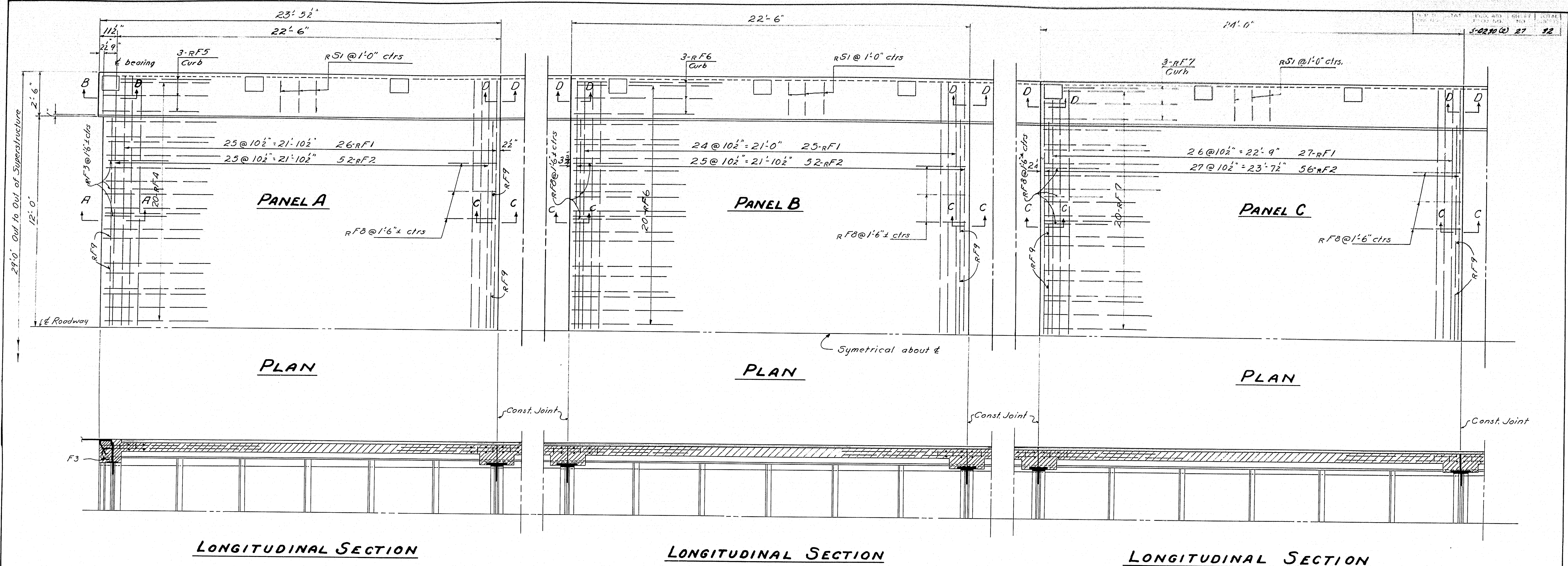
RAIL DETAILS SOUTH SIDE SPAN #6



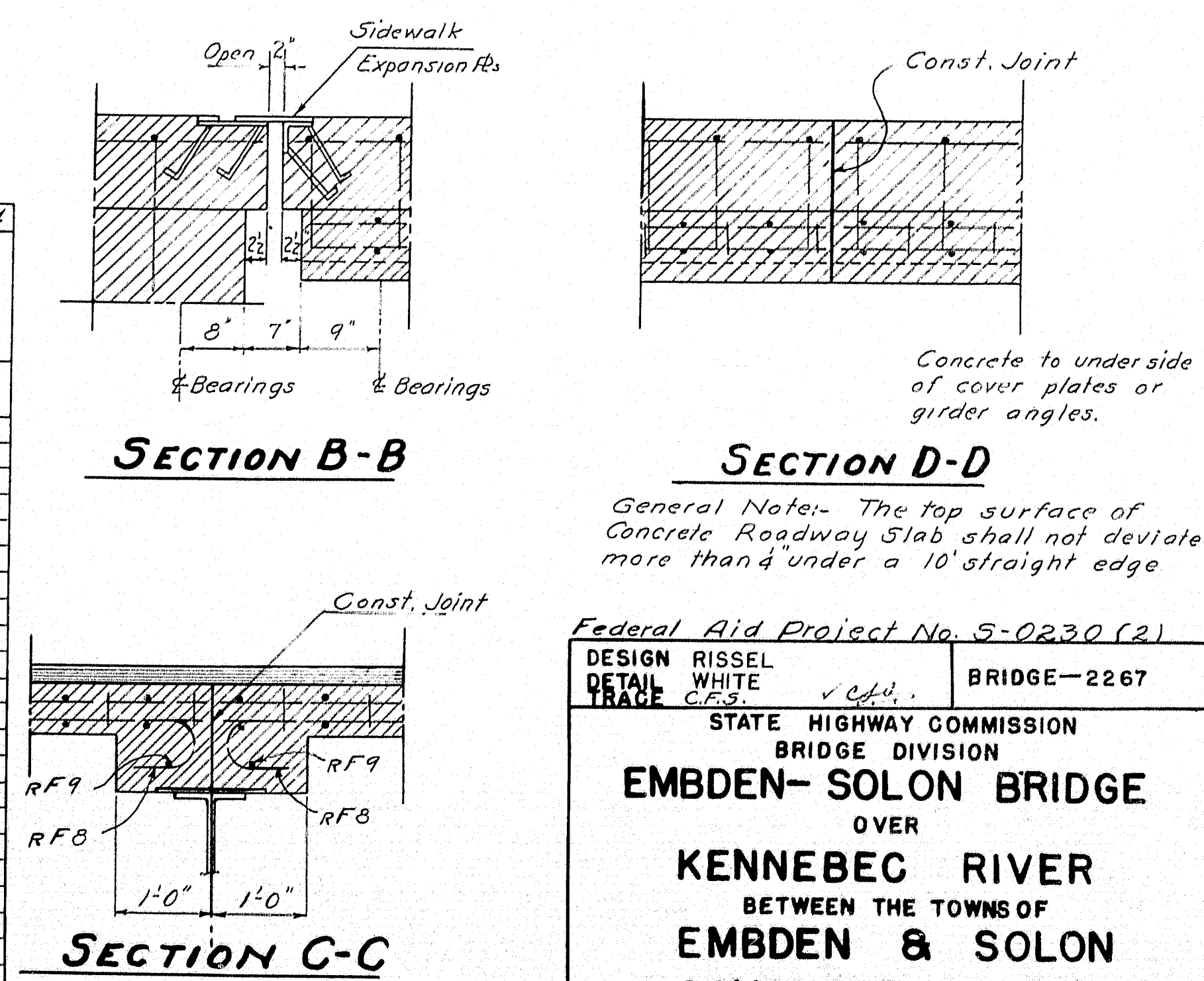
RAIL DETAILS NORTH SIDE SPAN #6

DESIGN TRACE	RISSEL WHITE SAVAGE	BRIDGE- 2267
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
EMBDEN- SOLON BRIDGE		
OVER		
KENNEBEC RIVER		
BETWEEN THE TOWNS OF		
EMBDEN & SOLON		
SOMERSET COUNTY		
GENERAL SLAB PLAN & RAIL DETAILS, SUPERSTR.		
SHEET 26 OF 32 AUGUSTA, MAINE. FEB. 1953		

Revised May 20, 1954. Voided Table of Blocking



Revision of May 20, 1954		
Table of anticipated deflections due to dead loads superimposed on girders exterior and interior.		
Distance from Pier No. 5	Anticipated Deflection	
@ Pier No. 5	0.000'	
10'	0.016'	
20'	0.029'	
30'	0.036'	
40'	0.036'	
50'	0.030'	
60'	0.020'	
70'	0.009'	
80'	0.002'	
90'	0.000'	
100'	0.000'	
110'	0.017'	
120'	0.030'	
130'	0.042'	
140'	0.048'	
150'	0.051'	
160'	0.047'	
170'	0.038'	
180'	0.025'	
190'	0.012'	
200'	0.003'	
210'	0.000'	



General Note:- The top surface of Concrete Roadway Slab shall not deviate more than 4" under a 10' straight edge

Federal Aid Project No. 5-0230 (2)

DESIGN	RISSEL	
DETAIL	WHITE	
TRACE	C.F.S.	✓ <i>C.F.S.</i>
		BRIDGE-2267

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

EMBDEN- SOLON BRIDGE

OVER

KENNEBEC RIVER

BETWEEN THE TOWNS OF

EMBDEN & SOLON

SOMERSET COUNTY

SUPERSTRUCTURE SPANS 2,3 & 5

SHEET 27 OF 32 AUGUSTA, MAINE FEB. 1958

Bent Bars						Straight Bars					
Mark	Size	No.	A	B	Length	Remarks	Mark	Size	No.	Length	Remarks
181	"10	30			53'-11"	All Beams	181	"6	12	28'-0"	Diaphragms
182	"10	10	43'-10"	3'-2 1/2"	54'-11"	" "	1D1	"6	84	1'-6"	Bottom Rail
183	"10	10	37'-0"	3'-5"	47'-0"	" "	1F2	"5	116	28'-5"	Slab
184	"10	10	32'-2"	3'-5"	42'-2"	" "	1R3	"5	12	6'-11"	Bottom Rail
1P1	"6	28			6'-9"	All Posts	1R2	"4	24	7'-7"	Top Rail
1F1	"5	58			29'-2"	Slab	1F3	"4	76	25'-8"	Slab - spliced
1S1	"4	93			8'-7"	Int. Beams					
1S2	"4	62			12'-6"	Ext. Beams					
1R1	"4	24			7'-10"	Top Rail					
1H1	"3	6			3'-9"	End Posts					
1H2	"3	36			3'-1"	Int. Posts					

Bent Bars

Mark	Size	No.	Length	Location
sP5	"5	15	9'7"	Plat #1
sP9	"5	15	8'2"	Plat #5
sA1	"4	14	18'0"	Abut #1
sA7	"4	36	18'8"	Abut #2

Dimensions are to E of bars.

Straight Bars

Mark	Size	No.	Length	Location
sD2	"8	168	2'0"	All piers
sD1	"6	24	1'6"	Both abutts
sA2	"5	8	35'4"	Abut #1
sA8	"5	16	40'0"	Abut #2
sP1	"5	180	10'11"	All piers
sP2	"5	30	5'0"	Plat #1
sP6	"5	30	7'8"	Plat #2
sP7	"5	30	7'8"	Plat #4
sP8	"5	30	5'2"	Plat #5
sA3	"4	4	3'6"	Abut #1
sA4	"4	4	10'0"	Abut #1
sA5	"4	4	9'2"	Abut #1
sA6	"4	4	8'4"	Abut #1
sP3	"4	72	28'11"	All piers
sP4	"4	75	5'11"	All piers

Bent Bars									Straight Bars				
Mark	Size	No	A	B	C	F	Length	Remarks	Mark	Size	No	Length	Remarks
#65	#11	12	50'-2"		5'-6"	6'-4"	34'-4"	Beams T, X	#61	#6	9	28'-0"	Bottom 3' diaphragm
#66	#11	4	42'-6"	4'-5"	5'-6"	6'-4"	35'-6"	" " "	#62	#6	3	15'-1"	N. 1/2 pt diaphragm
#67	#11	4	36'-7"	4'-2 1/2"	2'-0 1/2"		49'-1"	" " "	#63	#6	3	16'-6"	S. 1/2 pt. "
#68	#11	4	30'-8"	4'-2 1/2"	2'-0 1/2"		43'-2"	" " "	#64	#6	3	18'-2"	N. 1/2 end "
#69	#11	4	35'-8 1/2"		5'-6"	6'-4"	39'-11"	Beam R	#65	#6	3	21'-3"	S. 1/2 end "
#610	#11	2	31'-2"	2'-3"	5'-6"	6'-4"	40'-2"	" "	#D1	#6	96	1'-6"	Bottom Rail
#611	#11	1	27'-5 1/2"	2'-7 1/2"	2'-1 1/2"		36'-11"	" "	#F2	#5	116	28'-5"	Slab
#615	#11	4	35'-8 1/2"		5'-6"	6'-4"	39'-11"	Beam E	#F4	#4	40	1'-5"	
#616	#11	2	31'-2"	2'-5"	5'-6"	6'-4"	40'-2"	" "	#F5	#4	34	1'-11"	
#617	#11	1	27'-5 1/2"	2'-7 1/2"	2'-1 1/2"		36'-11"	" "	#F6	#4	24	2'-5"	
#61	#10	18	50'-1"		5"	5'-6"	53'-4"	Beams U, V, W	#F7	#4	42	3'-5"	
#62	#11	6	43'-10"	3'-7 1/2"	5"	5'-6"	54'-11"	" " "	#F8	#4	32	4'-5"	
#63	#10	6	37'-0"	3'-3"	1'-7"		47'-0"	" " "	#F9	#4	28	5'-3"	
#64	#10	6	32'-2"	3'-3"	1'-7"		42'-2"	" " "	#F10	#4	24	6'-5"	
#618	#9	3	16'-2 1/2"		4'-6"	5'	19'-7"	Beam Y	#F11	#4	24	7'-5"	
#619	#9	2	12'-6"	1'-9 1/2"	4'-6"	5"	19'-6"	" "	#F12	#4	20	8'-5"	
#620	#9	1	9'-8"	2'-0"	1'-8"		17'-0"	" "	#F13	#4	18	9'-5"	
#612	#8	4	15'-8"		4'-6"	4'-6"	18'-8"	Beam S	#F14	#4	20	10'-5"	
#613	#8	2	11'-10"	1'-9 1/2"	4"	4'-6"	18'-5"	" "	#F15	#4	14	11'-5"	
#614	#8	2	9'-7"	1'-11 1/4"	1'-5 1/2"		16'-5"	" "	#F16	#4	16	12'-5"	
#F1	#6	28					6'-9"	All Posts	#F17	#4	12	13'-5"	
#F1	#5	58					29'-2"	Slab	#F18	#4	24	14'-11"	
#F1	#4	12	7'-3"	8'-3"			8'-6"	N. Top Rail	#F19	#4	18	16'-5"	
#F2	#6	12	7'-6"	8'-6"			8'-9"	S. " "	#F20	#4	20	17'-11"	
#C1	#4	75					7'-2"	Curb	#F21	#4	8	19'-5"	
#C1	#4	69	34'-11"				8'-7"	Beams U, V, W	#F22	#4	8	20'-11"	Slab
#S2	#4	34	3'-1 1/4"	1'-4 1/2"			10'-0"	Beams T, X	#F25	#4	6	7'-7"	N. Bottom Rail
#S3	#4	24	2'-7"	1'-1 1/2"			7'-0"	Beam R	#F6	#5	6	7'-10"	" "
#S4	#4	13	2'-0 1/2"				5'-11"	Beam S	#F3	#4	12	8'-3"	N. Top Rail
#S5	#4	24	2'-7"	1'-1 1/2"			7'-0"	Beam Z	#F4	#4	12	8'-6"	S. " "
#S6	#4	13	2'-0 1/2"				5'-11"	Beam Y	#F3	#4	12	25'-9"	Slab - Spliced
#H1	#3	6					3'-9"	End Posts	#F23	#4	9	8'-0"	Slab
#H2	#3	36					3'-1"	Int. Posts	#F24	#4	3	10'-0"	" "
									#F25	#4	4	16'-6"	" "
									#F26	#4	8	23'-0"	" "
									#F27	#4	4	29'-0"	" "
									#F28	#4	10	27'-8"	N. Slab & Curb - spliced
									#F29	#4	10	28'-6"	S. " " "
									#F30	#4	8	18'-6"	Slab & Beam R2 - spliced

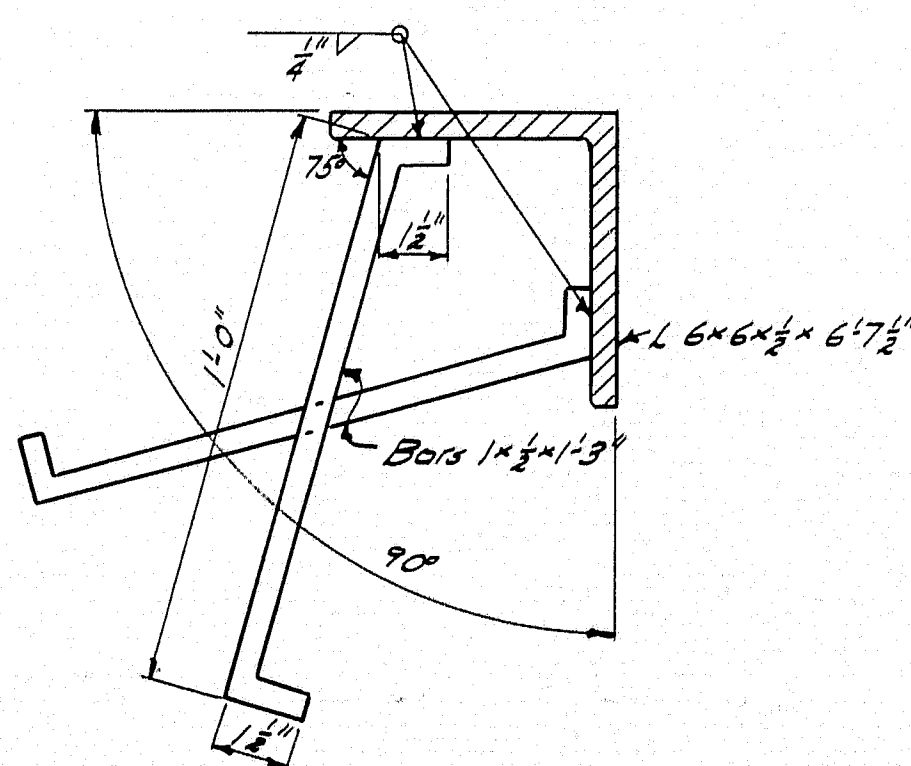
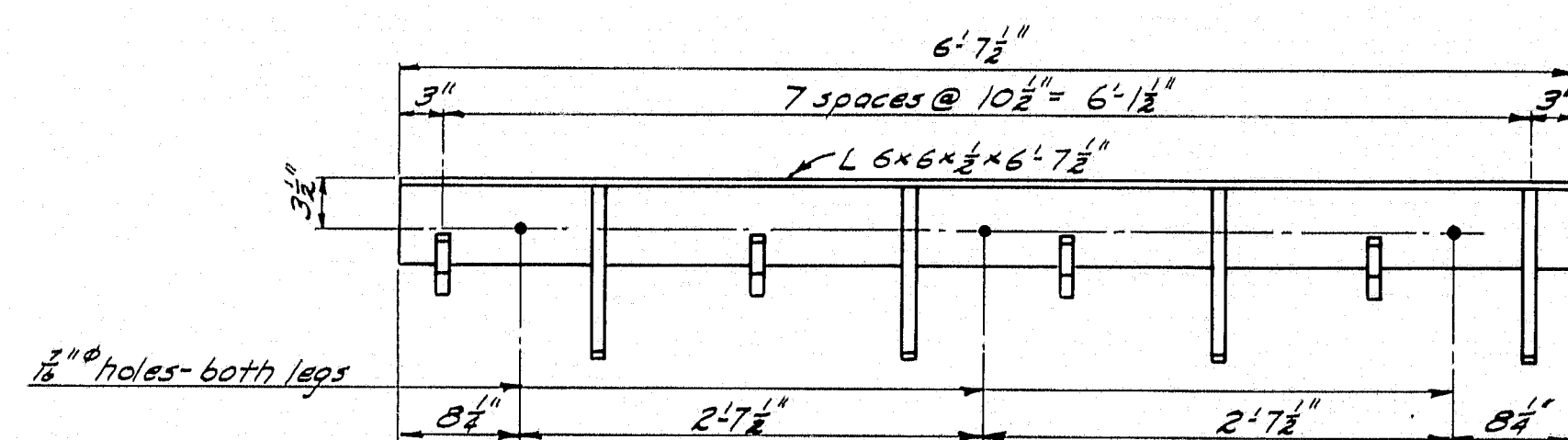
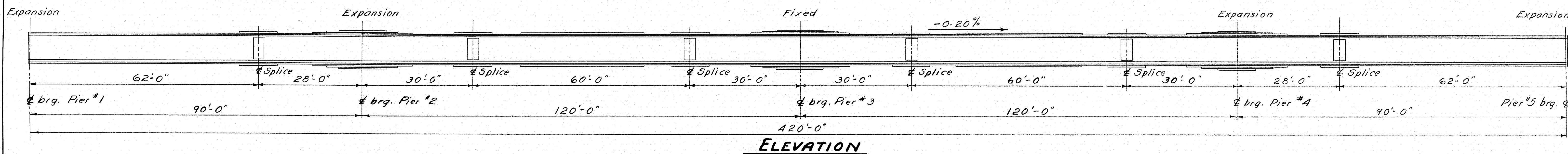
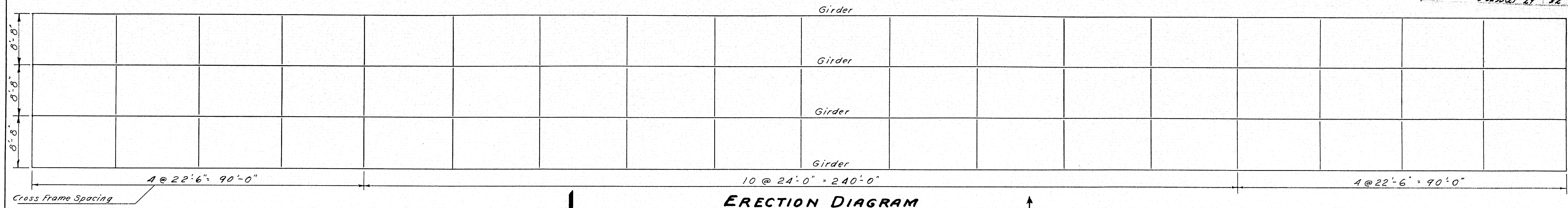
[illegible]

Bent Bars					Straight Bars				
Mark	Size	No.	Length	Location	Mark	Size	No.	Length	Location
RF1	#5	472	29'-1"	Slab Spans 2,3,4,5	RF2	#5	976	28'-4"	Slab Spans 2,3,4,5
RF3	#4	36	4'-4"	" " 2,5	RF4	#4	80	22'-11"	" " 2,5
RF8	#4	612	3'-10"	" " 2,3,4,5	RF5	#4	12	23'-2"	" " 2,5
RF1	#4	848	6'-5"	Curb " 2,3,4,5	RF6	#4	276	22'-2"	" " 2,5
SH2	#3	324	3'-1"	Posts " 2,3,4,5	RF7	#4	460	23'-8"	" " 3,4
RF1	#4	88	7'-8"	Rail " 2,5	RF9	#4	108	7'-3"	" " 2,3,4,5
RF2	#4	112	8'-0"	" " 3,4	RF3	#4	88	7'-5"	Rail " 2,5
RF1	#6	216	6'-9"	Rail Posts 2,3,4,5	RF4	#4	112	7'-9"	" " 3,4
					RF5	#4	44	6'-10"	" " 2,5
					RF6	#4	36	7'-2"	" " 3,4
					RF1	#6	700	1'-6"	" " 2,3,4,5

PLAN - DENNIS, RISSEL,
WHITE & VERRILL
TRACE - BACHELDER CHECK - *44* BRIDGE - 22 67
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDN - SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
REINFORCING STEEL

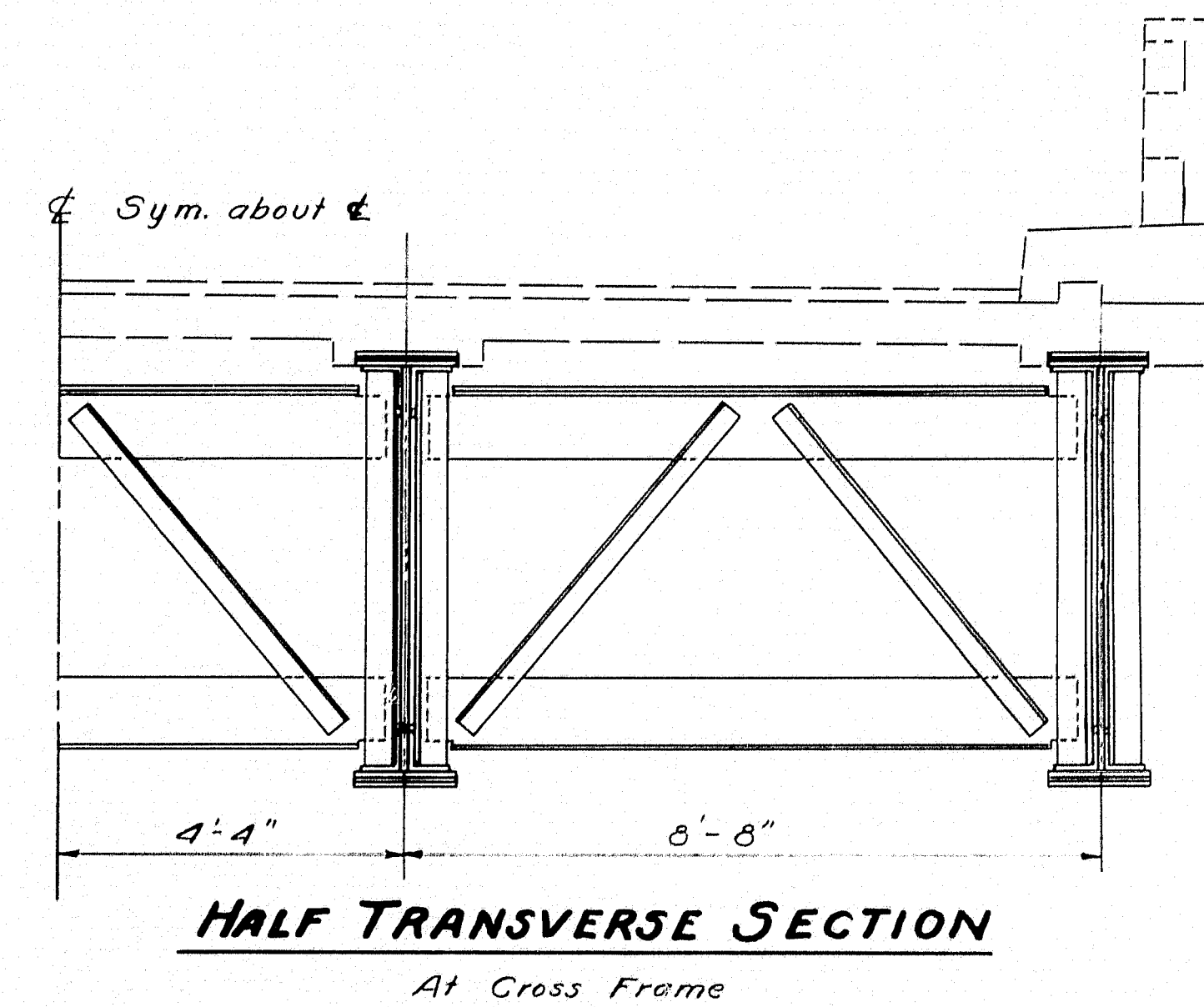
SHEET 28 OF 32 AUGUSTA, MAINE MAY, 1953

63-27

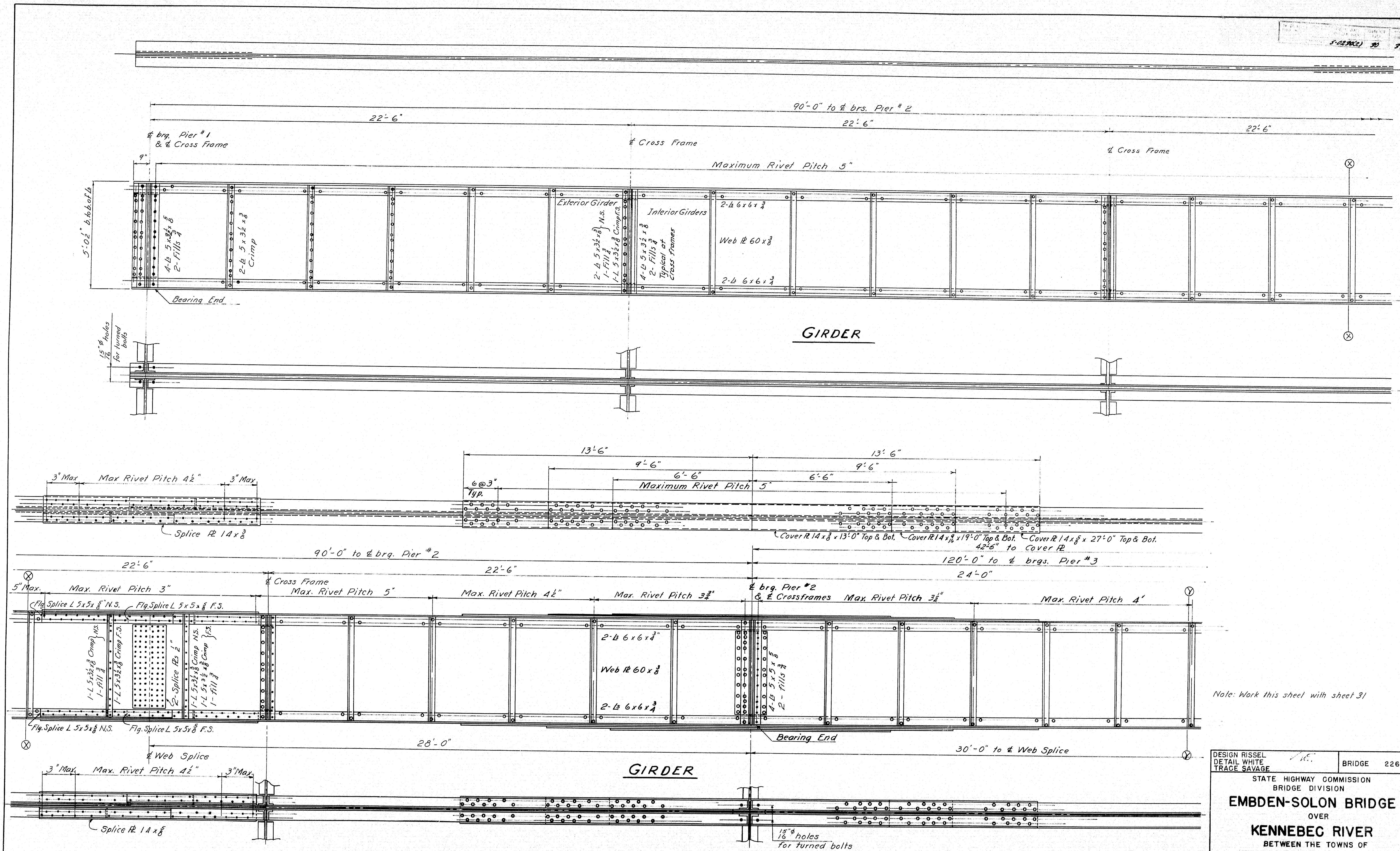


PIER NOSE ANGLE DETAIL

10 required - 2 per pier (see sh. 19 & 20)
Payment for delivery and erection of pier nose
angles to be included in structural steel items.



DESIGN RISEL
DETAIL WHITE
TRACE SAVAGE
STATE HIGHWAY COMMISSION
BRIDGE DIVISION.
EMBDEN-SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
ERECTION DIAGRAM
SHEET 29 OF 32 AUGUSTA, MAINE. FEB. 1953.



Note: Work this sheet with sheet 31

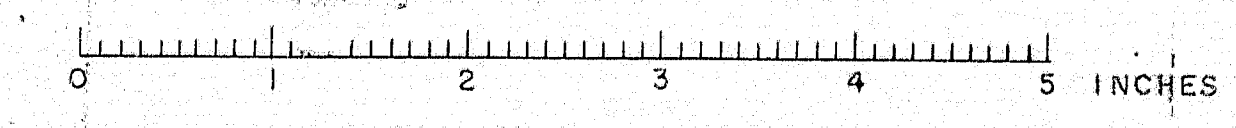
DESIGN RISSEL
DETAIL WHITE
TRACE SAVAGE

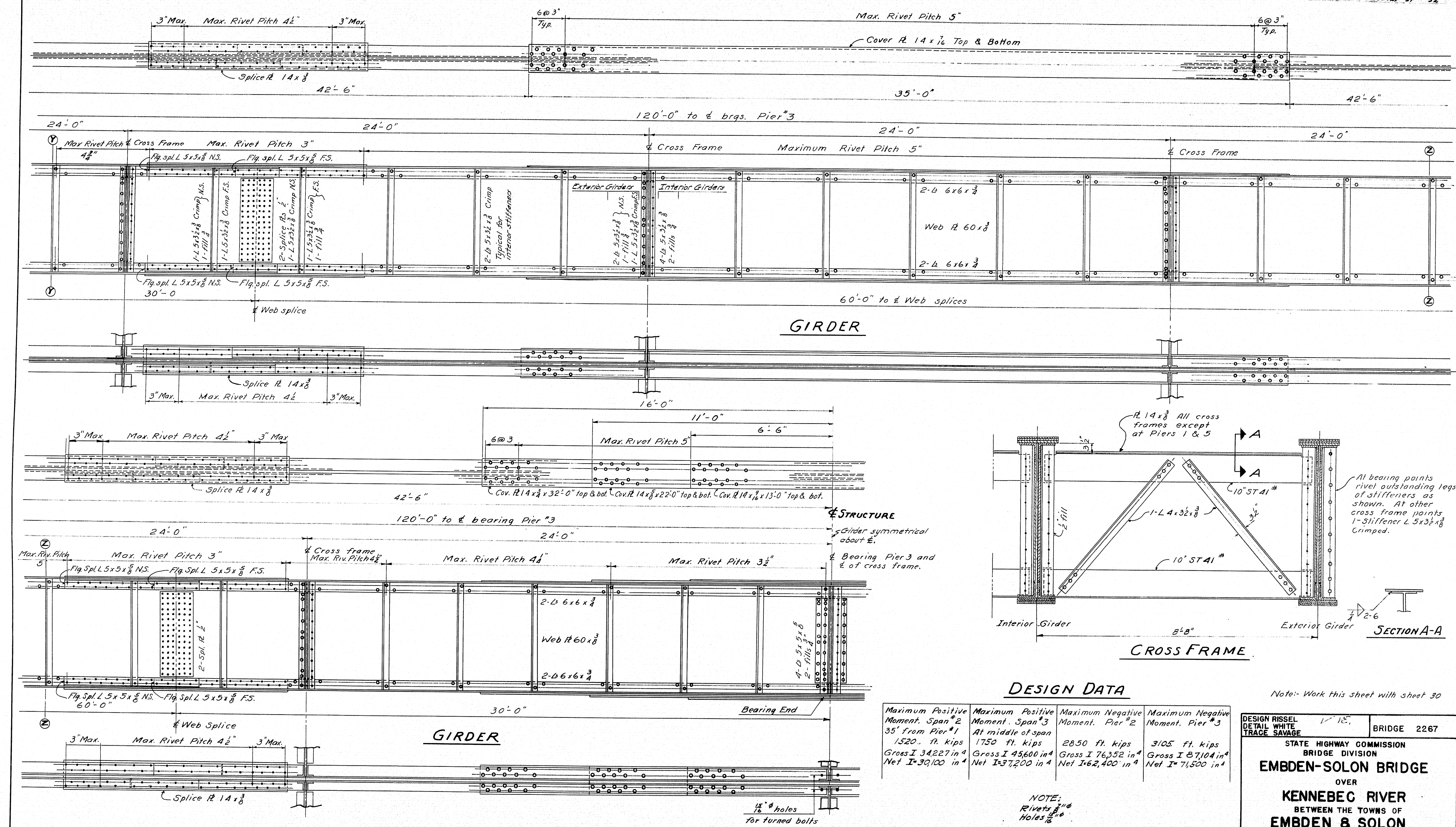
BRIDGE 2267

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

EMBDEN-SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
STRUCTURAL STEEL DETAILS

SHEET 20 OF 22 AUGUSTA, MAINE, FEB. 1953.



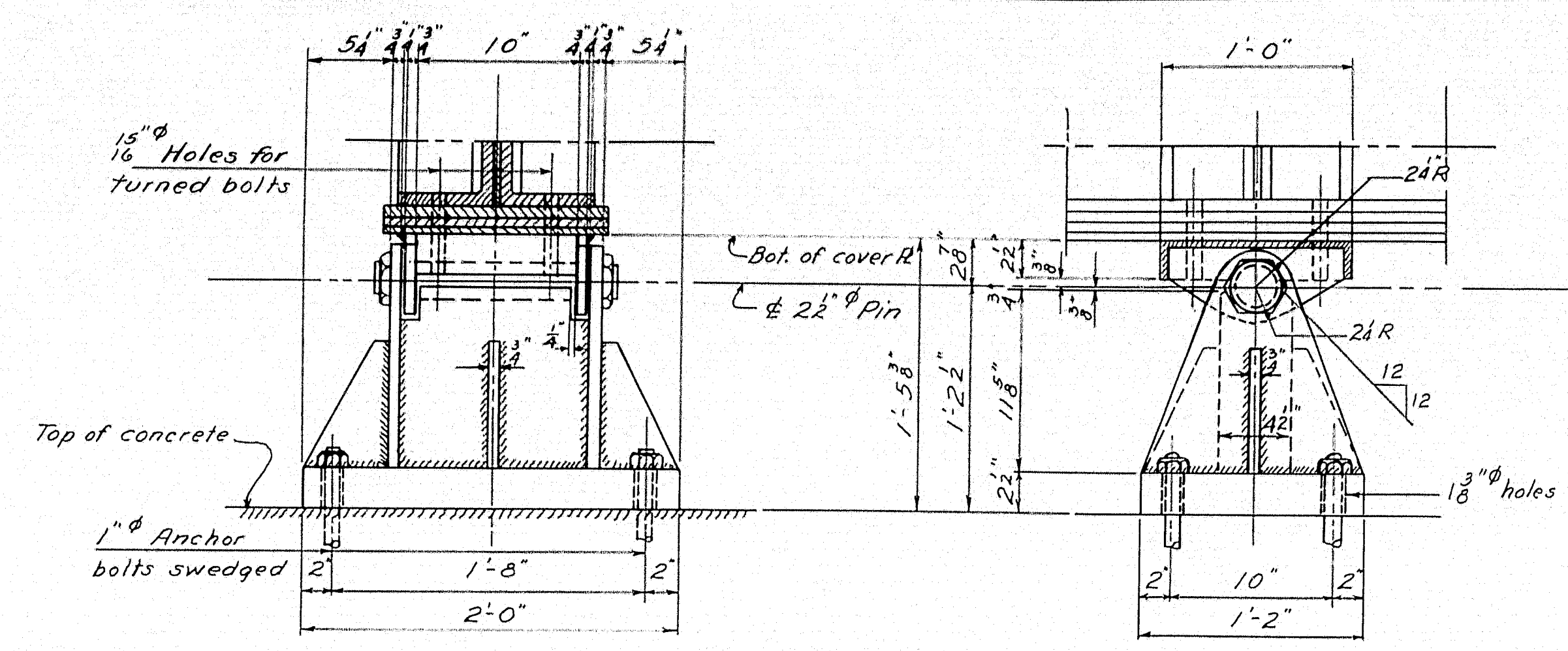


Note: Work this sheet with sheet 30

DESIGN R. S. WHITE
DETAIL WHITE
TRACE SAVAGE

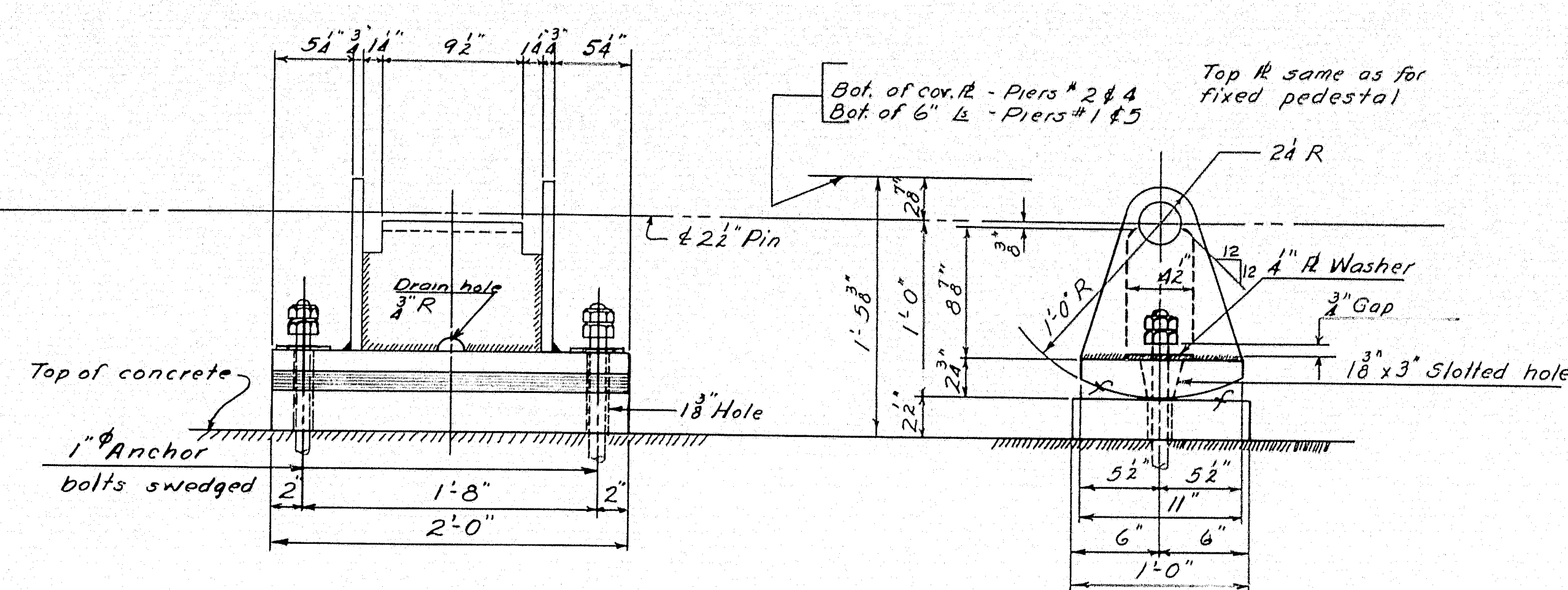
BRIDGE 2267

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
EMBDEN-SOLON BRIDGE
OVER
KENNEBEC RIVER
BETWEEN THE TOWNS OF
EMBDEN & SOLON
SOMERSET COUNTY
STRUCTURAL STEEL DETAILS
SHEET 3 OF 22 AUGUSTA, MAINE. FEB. 1933.

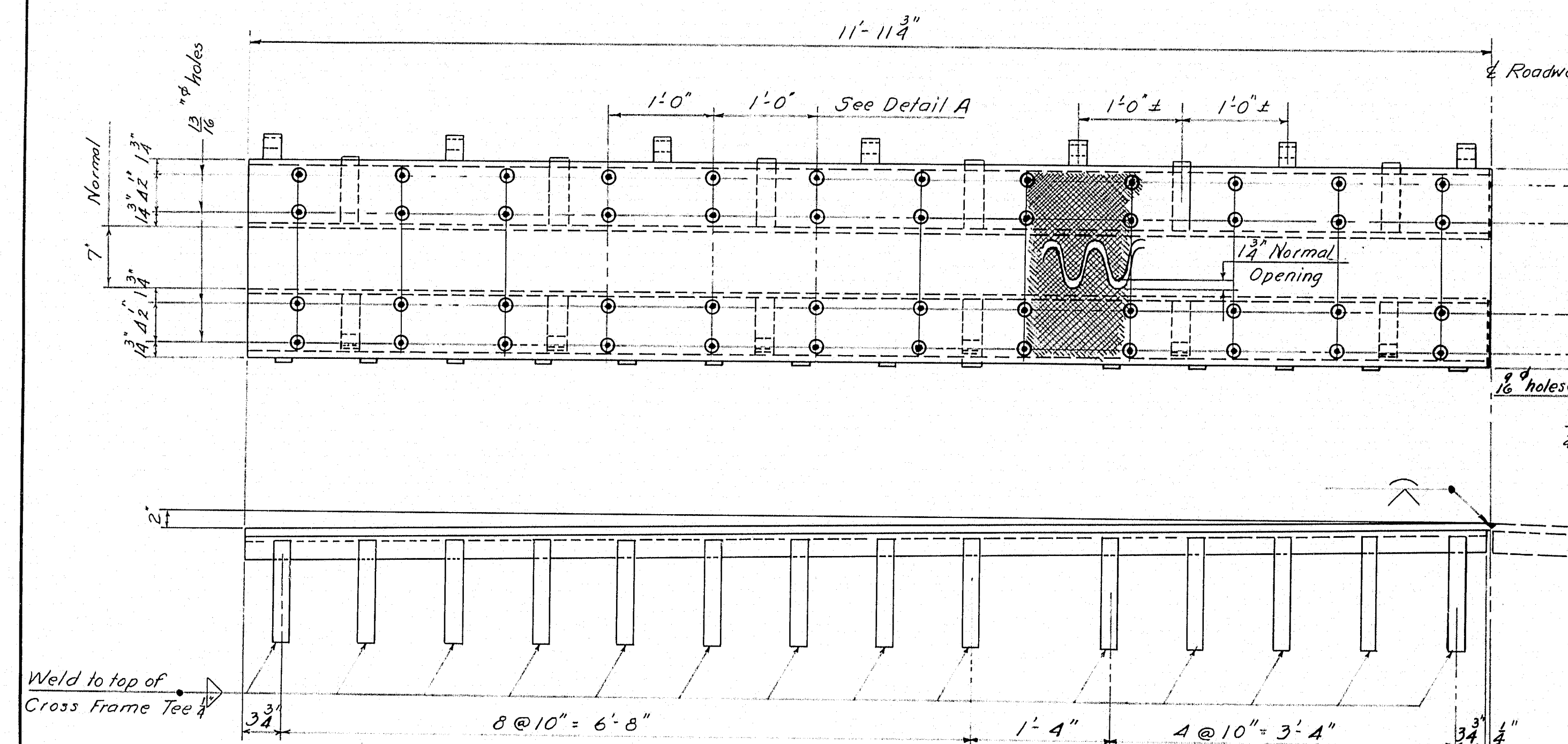


FIXED PEDESTAL PIER #3
4-Req'd

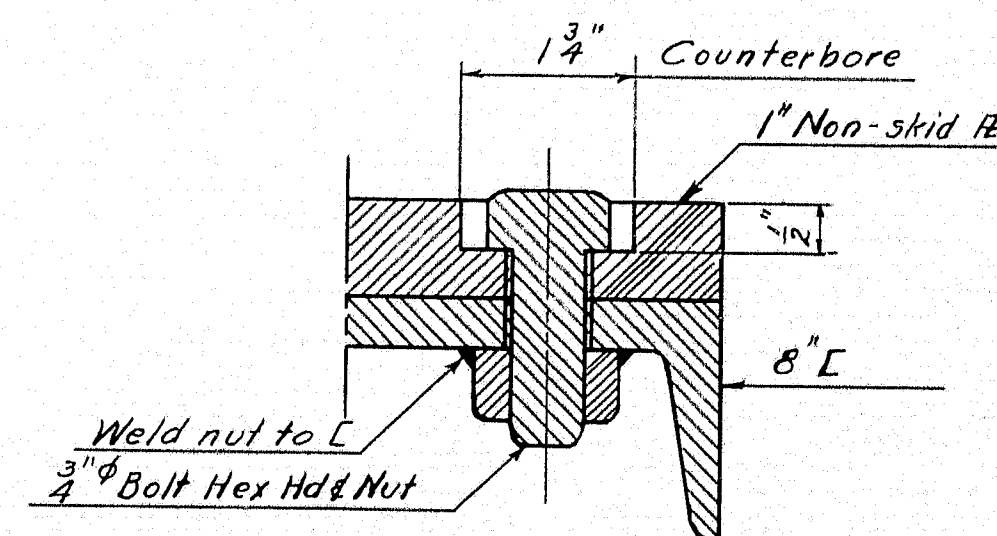
Note: All welds
1/2 fillet



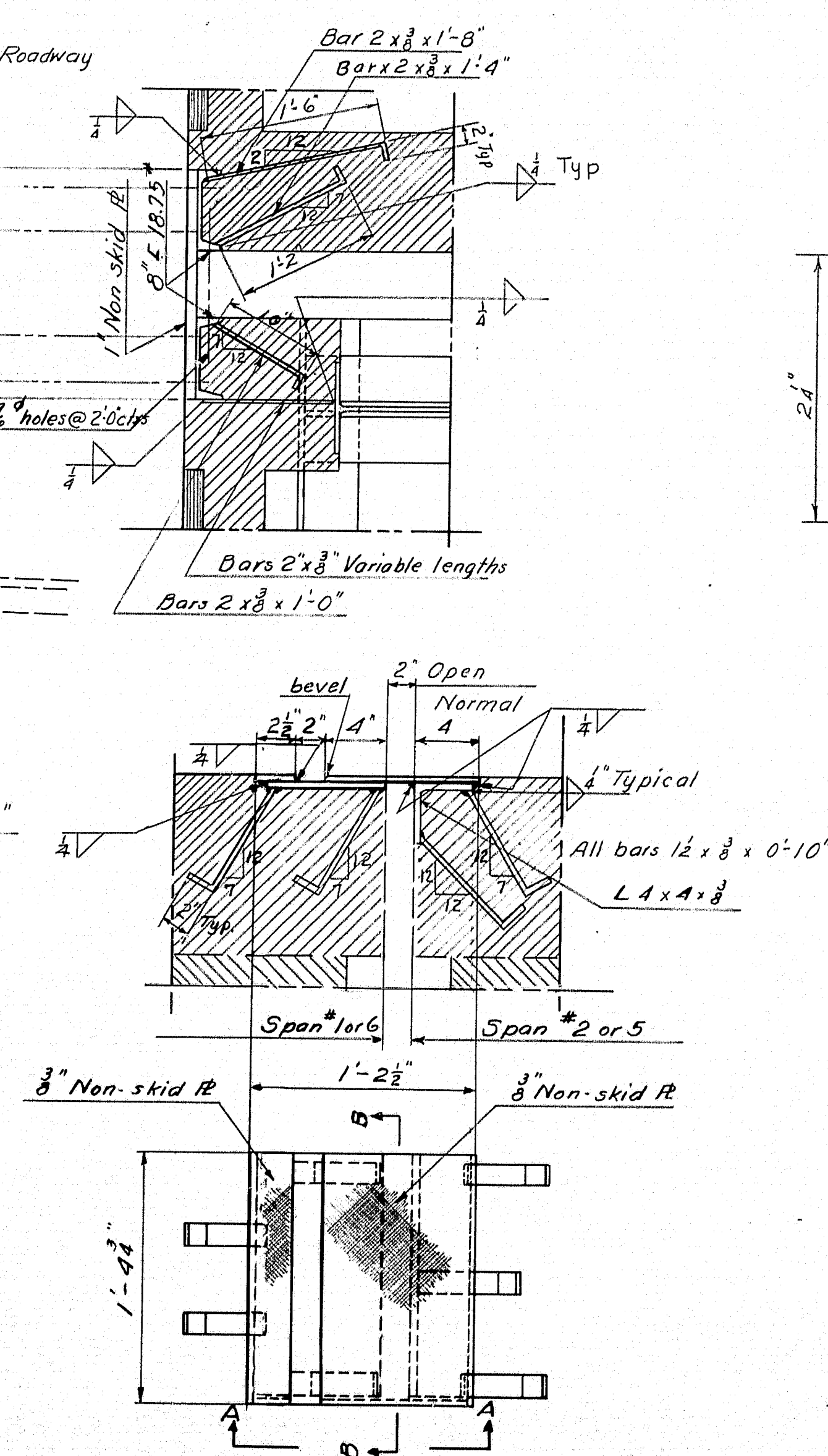
EXPANSION PEDESTAL PIERS #1, 2, 4 AND 5
16-Req'd



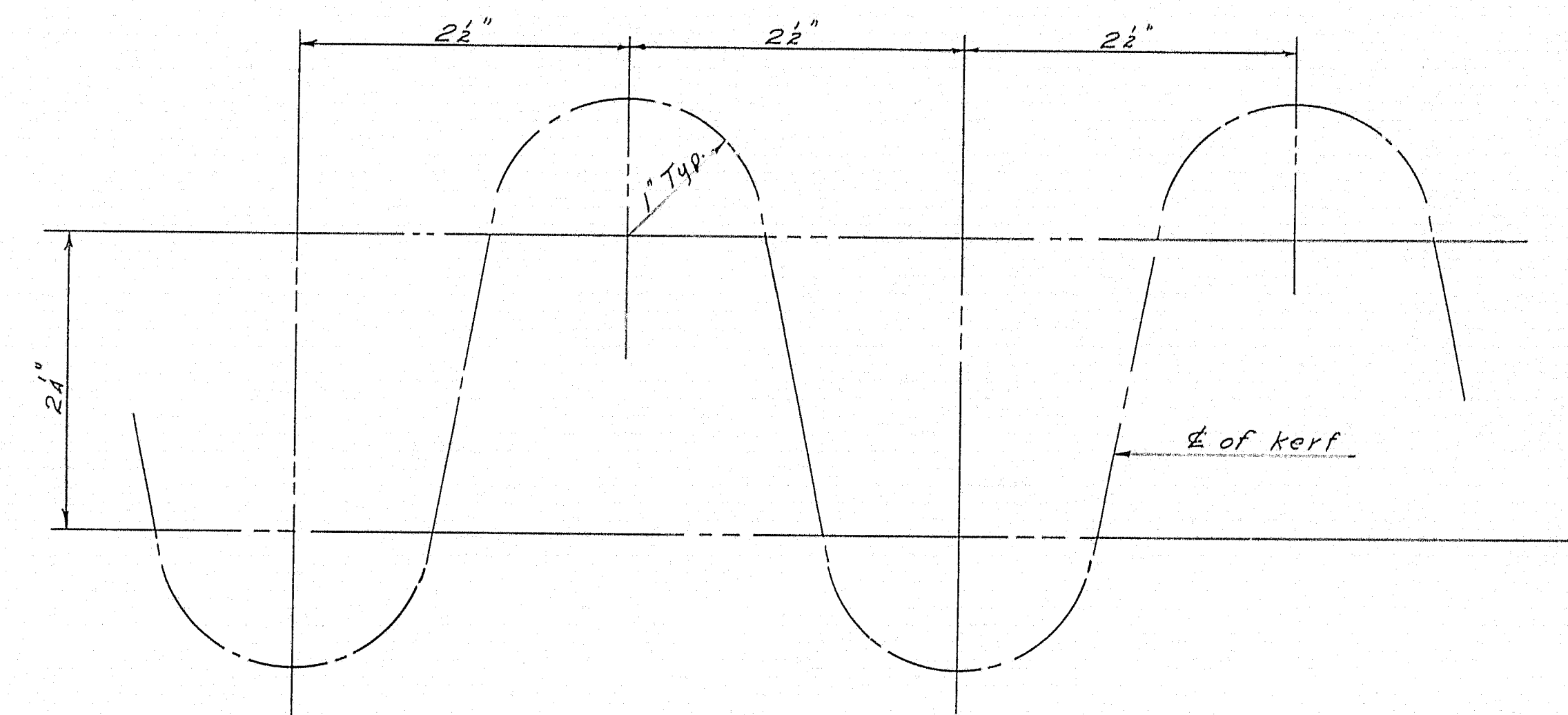
EXPANSION PLATES - ROADWAY
AT PIERS #1 & #5
4-Req'd



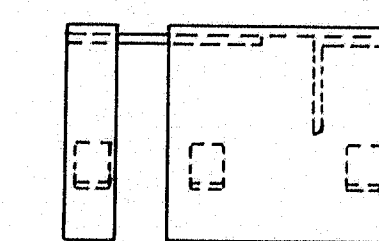
DETAIL-A



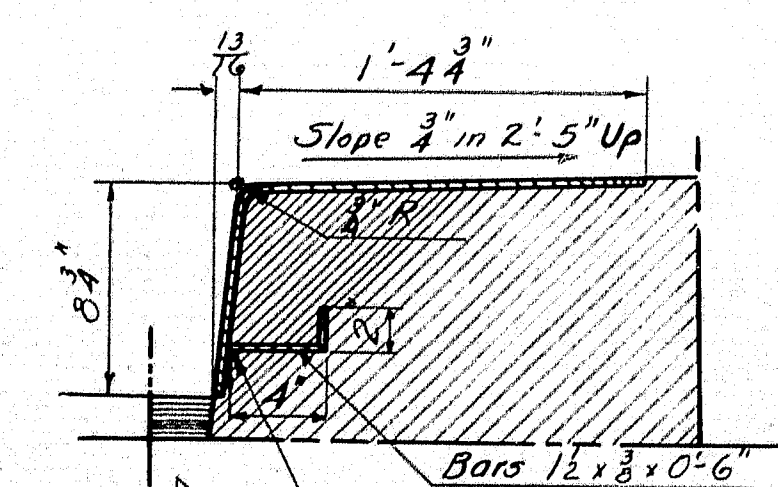
EXPANSION PLATES - CURB
4-Req'd



CUTTING DIAGRAM
FOR EXPANSION PLATES



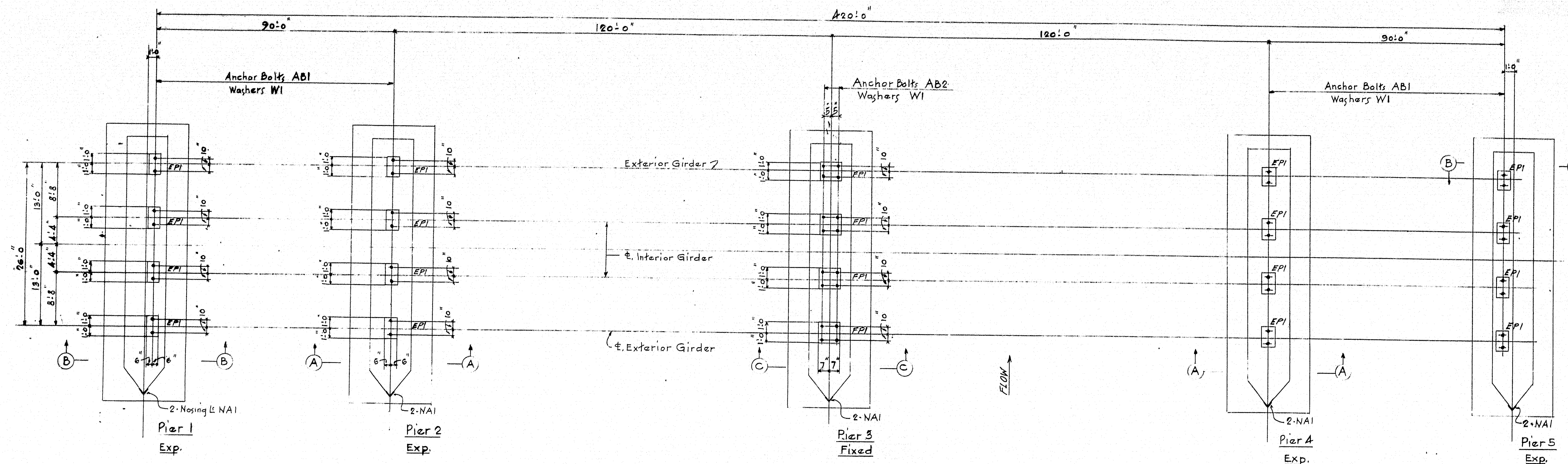
VIEW A-A



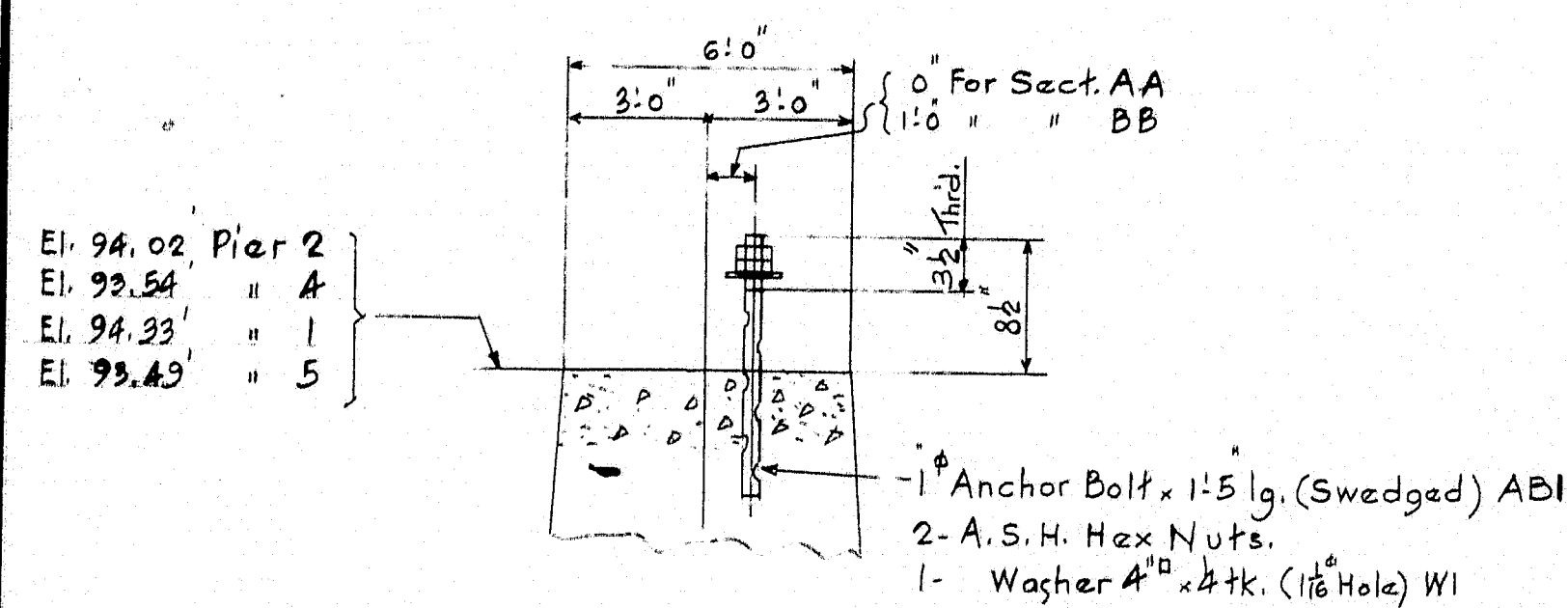
SECTION B-B

Note:
Holes as noted
Welds as noted

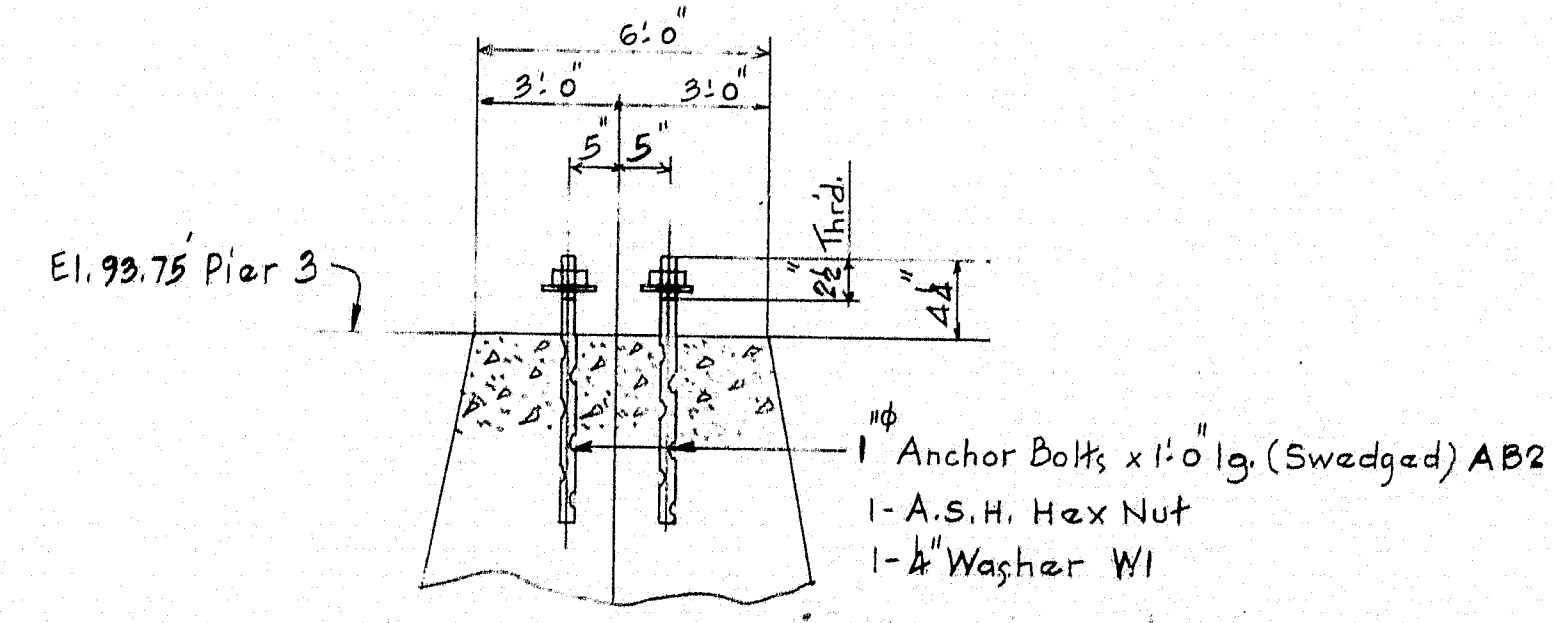
DESIGN DETAIL TRACE	RISSEL WHITE SAVAGE	BRIDGE— 2267
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
EMBDEN-SOLON BRIDGE		
OVER		
KENNEBEC RIVER		
BETWEEN THE TOWNS OF		
EMBDEN & SOLON		
SOMERSET COUNTY		
PEDESTAL & EXPANSION DETAILS		
SHEET 52 OF 52	AUGUSTA, MAINE.	FEB. 1953.



ANCHOR BOLT PLAN



SECT. A A PIER 2 & 4
" B B " 1 & 5



SECT. C C PIER 3

NOTE

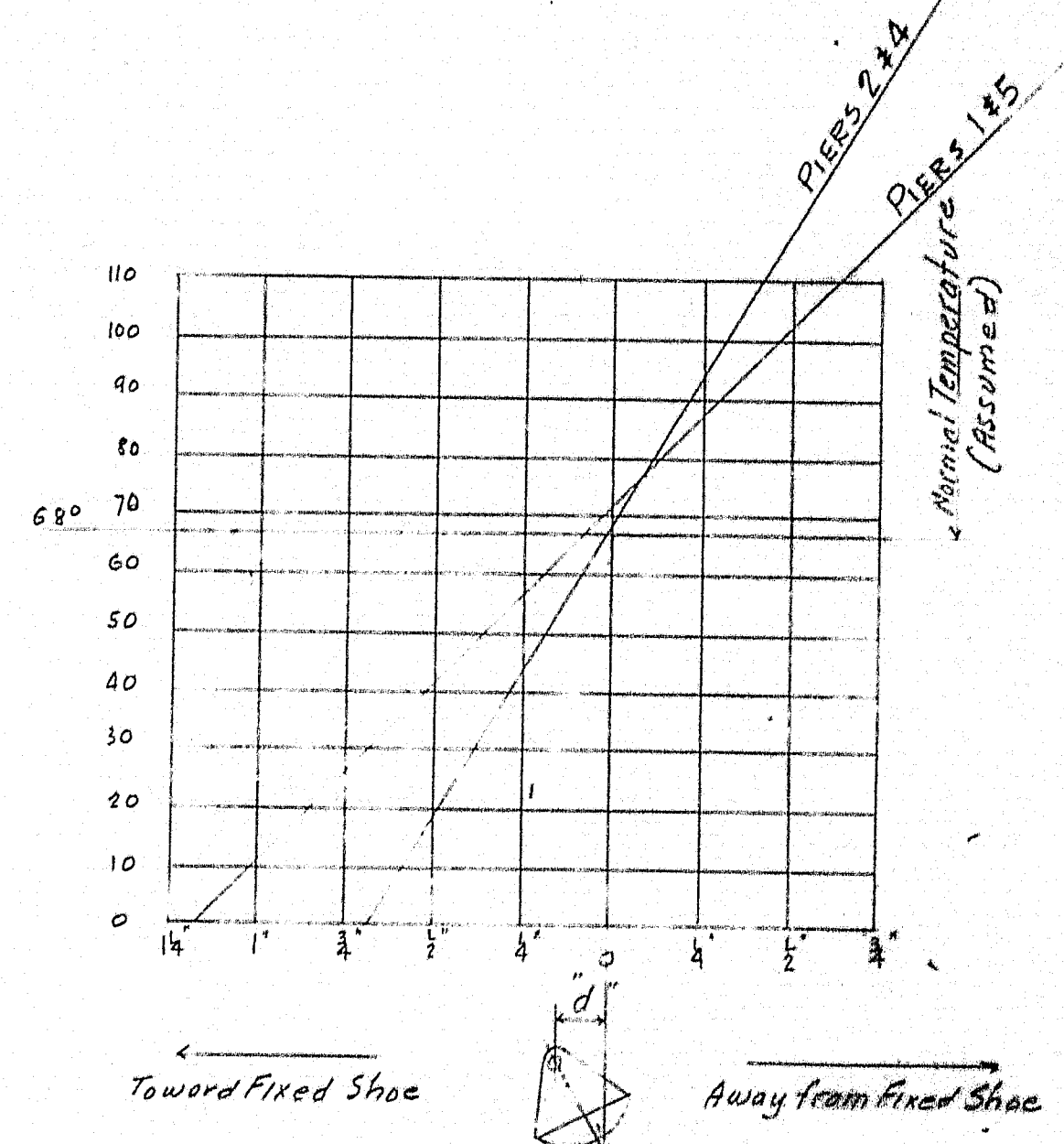
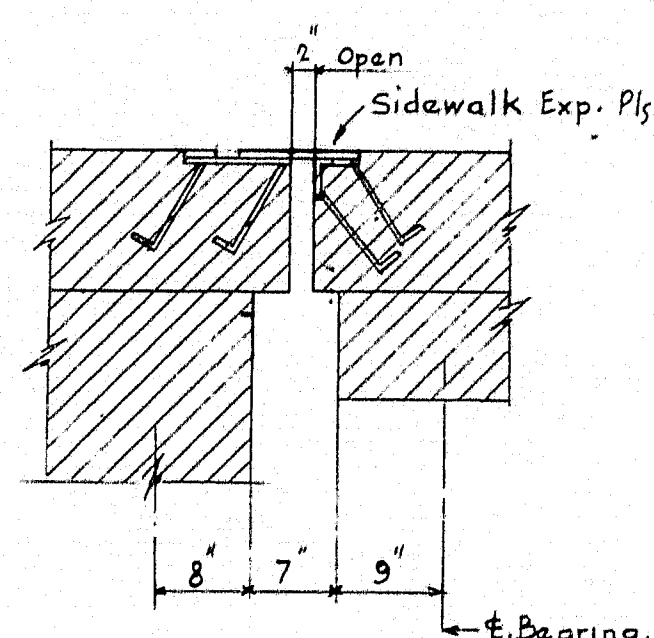
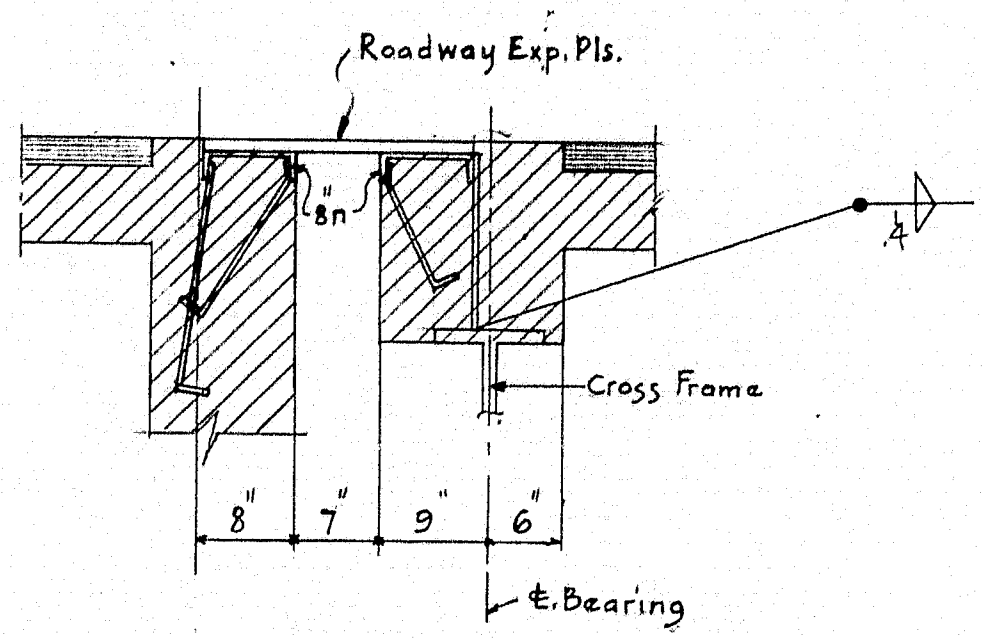
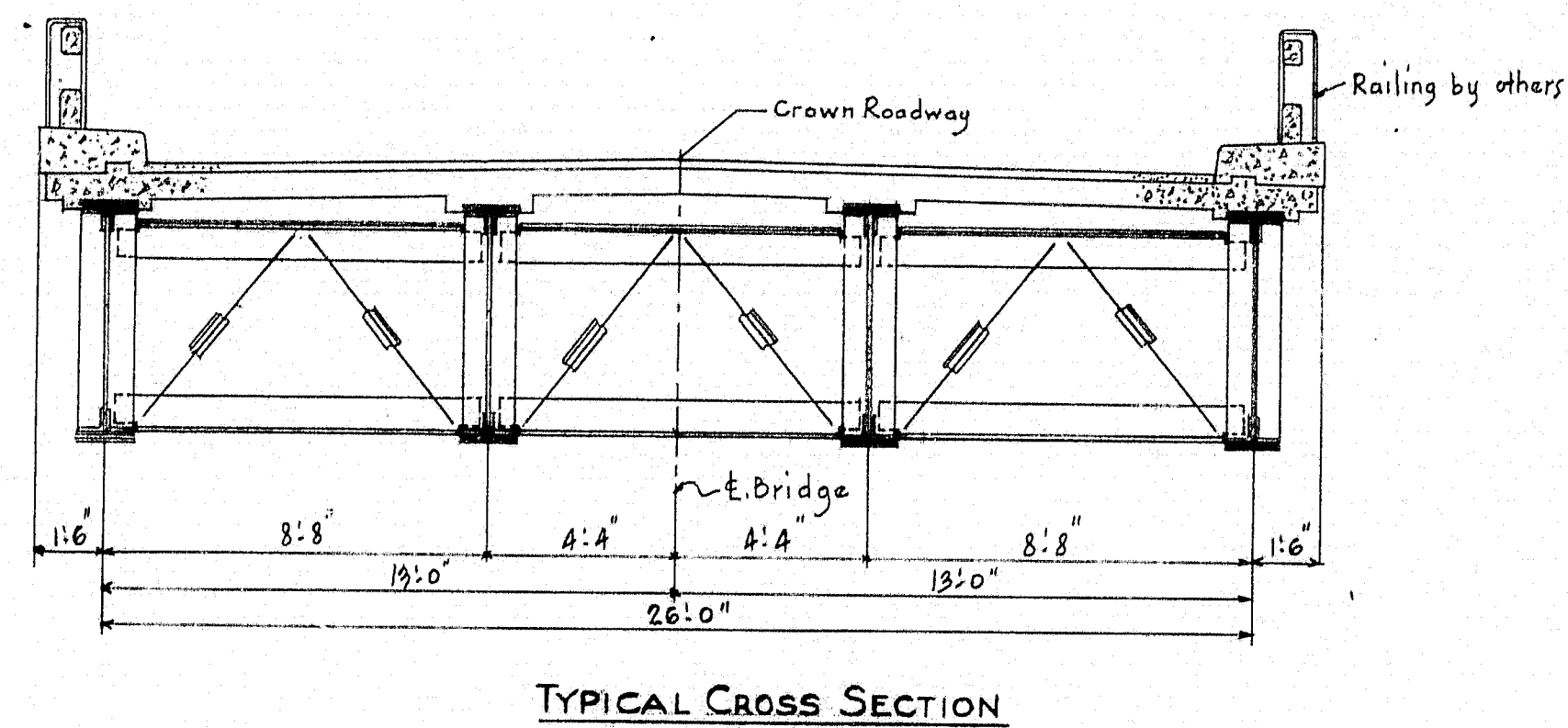
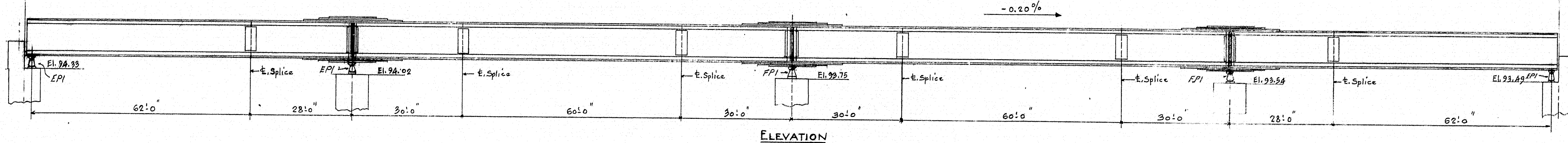
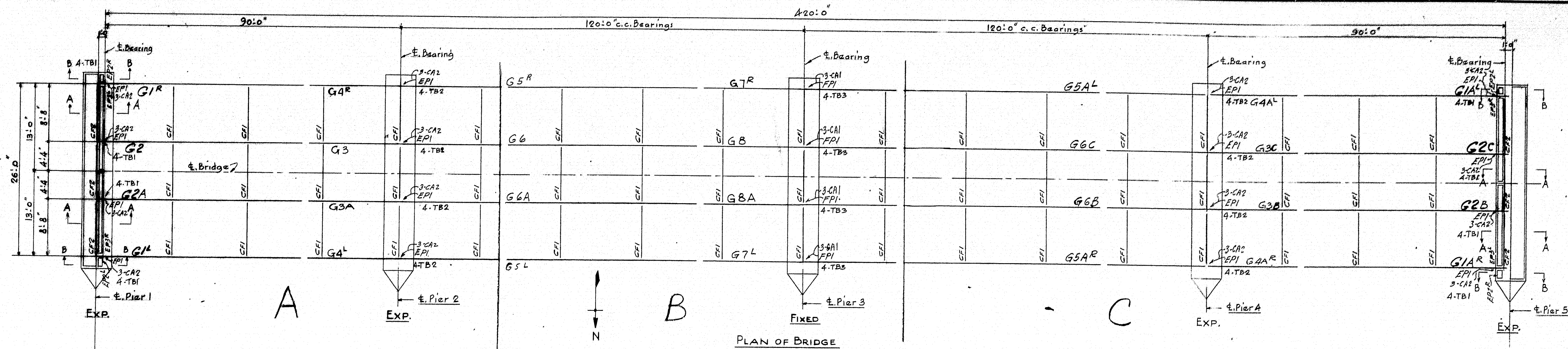
Anchor Bolts furnished by Bethlehem Steel Co. and set by others. All dimensions on this drawing must be strictly adhered to, otherwise steelwork will not fit. Report any errors or misunderstandings to this office at once.

TEMP.
SUPP.
LAYOUT
FITTER
SHOP INSP.
PC. WEL.
E. SMITH
WELD.
D. INSP.
NUTS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

Anchor Bolt Plan	
Emden-Solon Bridge	
Emden-Solon, Somerset County	
State of Maine	
BETHELEHEM STEEL COMPANY	
FABRICATED STEEL CONSTRUCTION	
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS	
IN CHARGE W.R. Barr	MADE BY H.L.
CHECKED BY E.L.G. 11/54	TRACED BY S.V.R. 2-28-54
REVISED	LAST ASSEM. M.K.
SHOP NO. CONTRACT C.J. 316A	SHEET

0 1 2 3 4 5 INCHES

63-31A

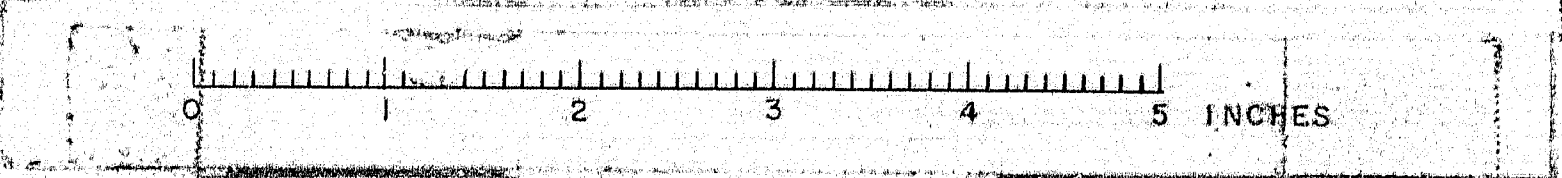


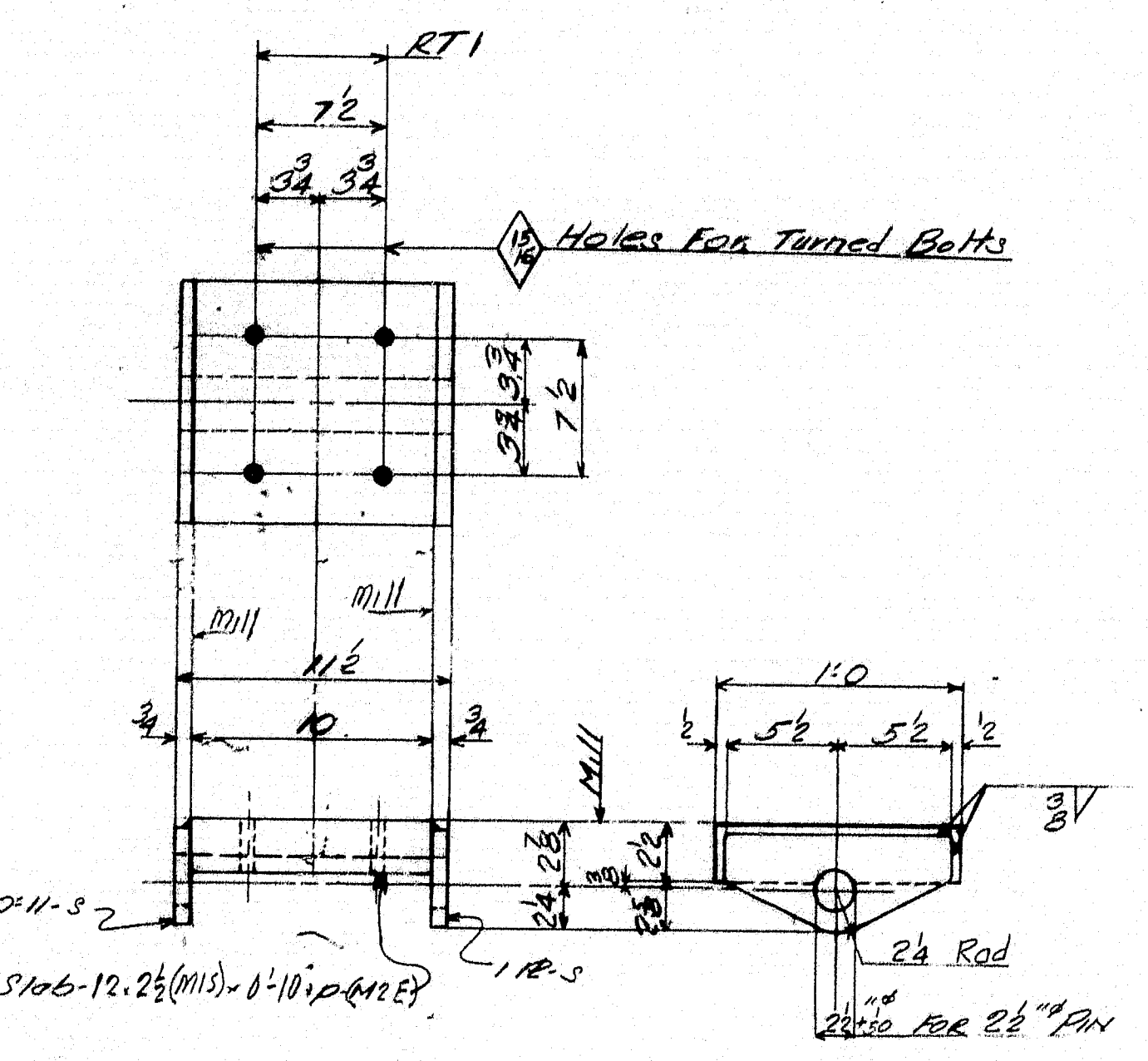
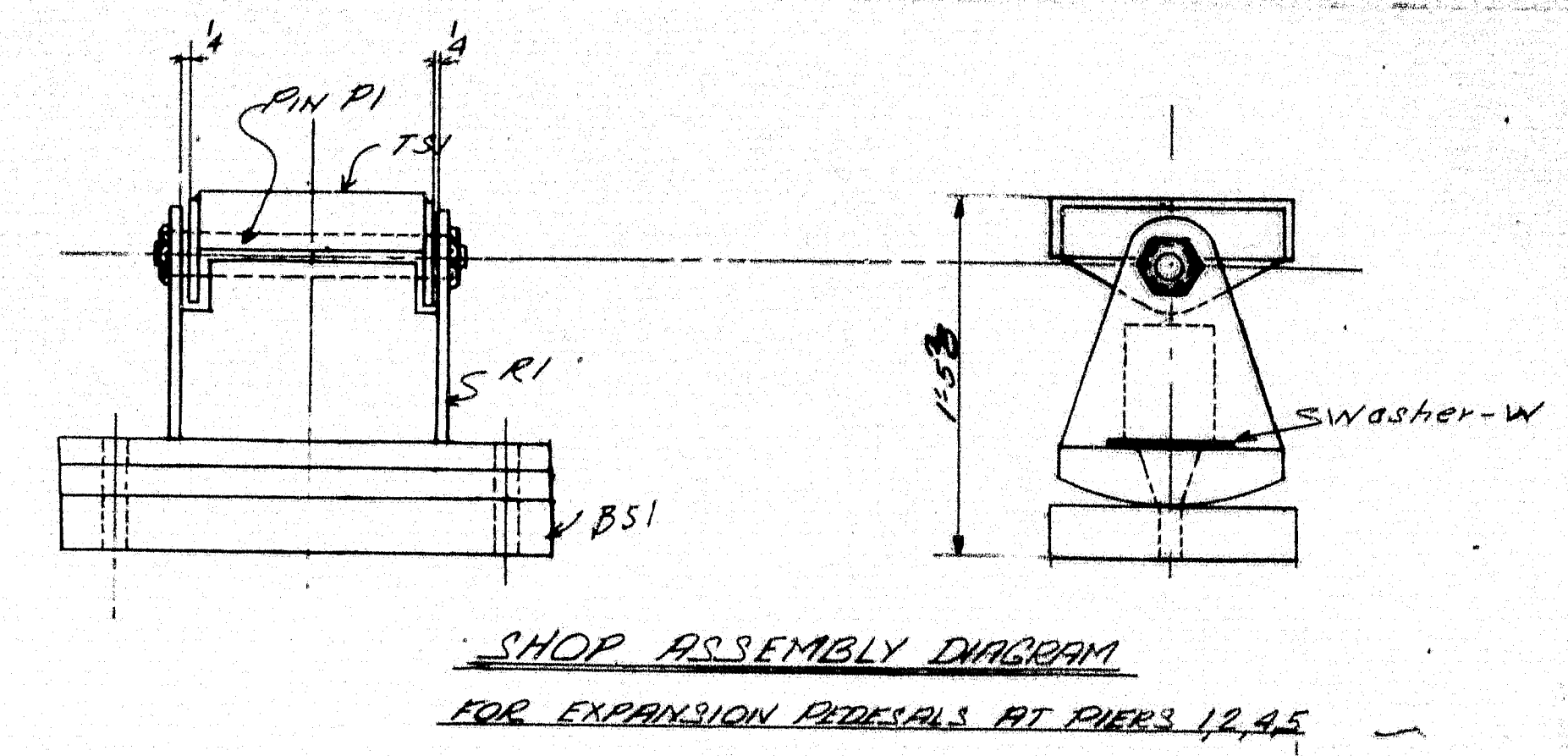
NOTE -
Pieces marked CA1 & CA2 are sheets of duck to be placed under fixed & expansion portions of FPI & EPI. Thoroughly swab the bridge-seat bearing area with red lead paint and place upon it 3 layers of 12oz. duck, each layer being thoroughly swabbed on its top surface with red lead paint.

TEMPERATURE SETTINGS FOR ROCKERS
Leans of Rockers shown are for full steel erected. Rockers will be theoretically vertical at normal temperature under full dead load.

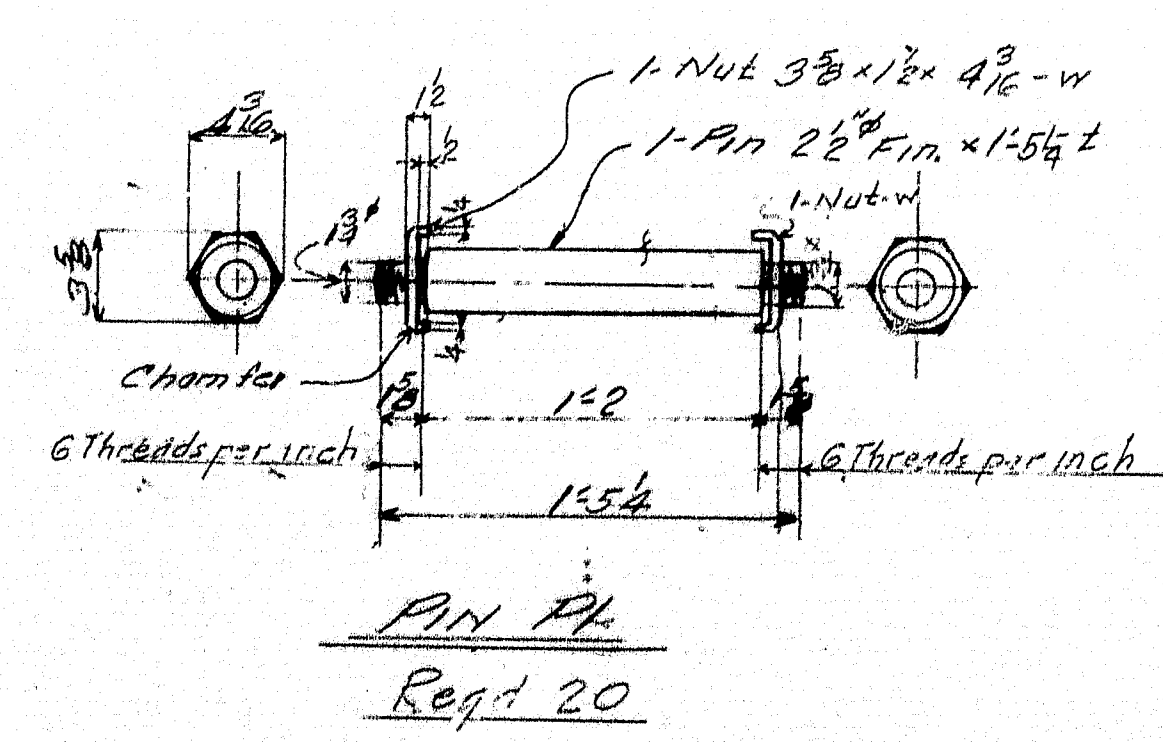
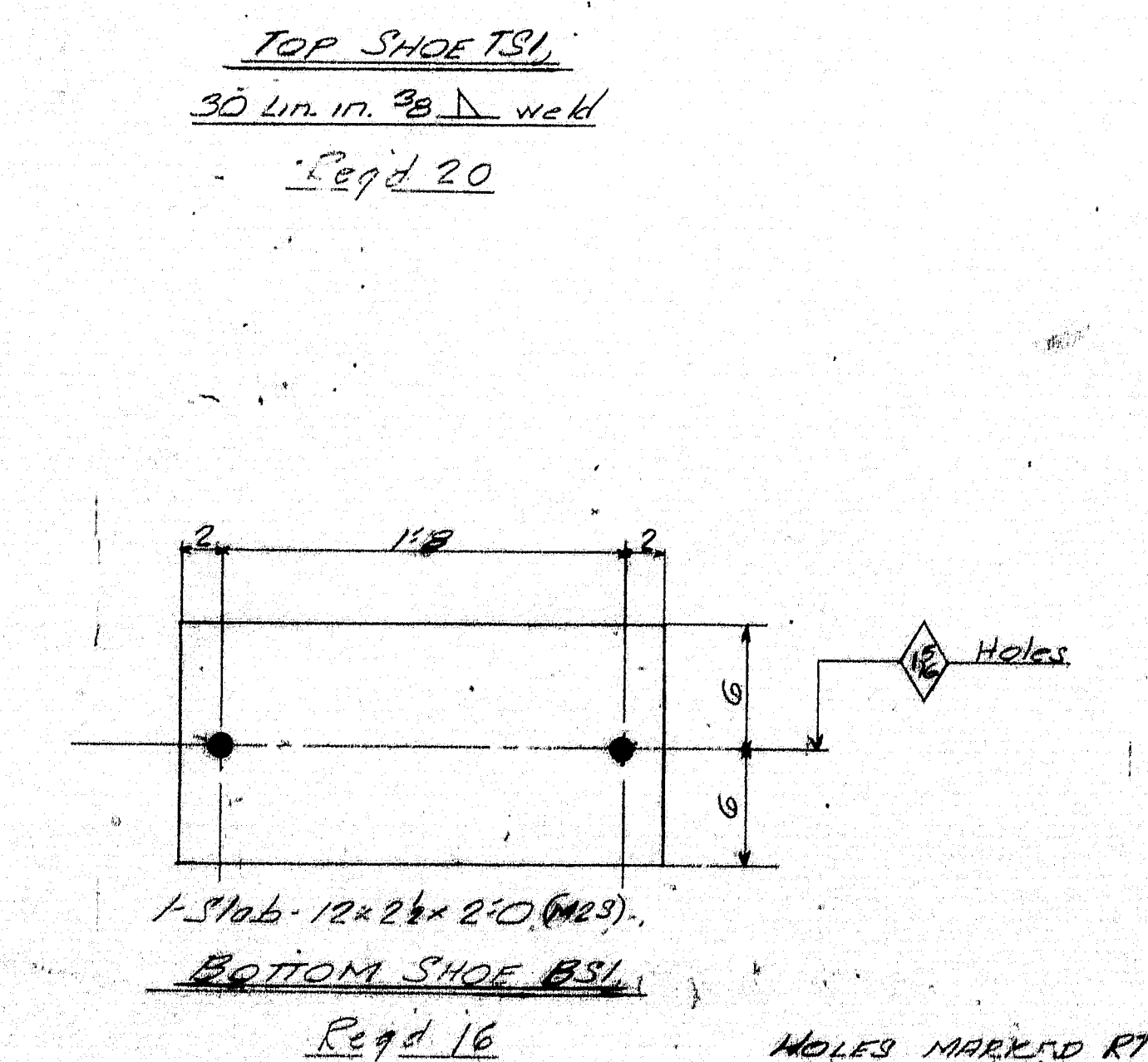
- RIVETS
- OPEN HOLES
- REAM
- MILLING
- PAINT
- WELDING
- SHOP CONTACT SURFACES

Erection Diagram	
TEMP.	Emden-Solon Bridge
SUP.	Emden & Solon Somerset County
LAYOUT	State of Maine
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	
BETHLEHEM STEEL COMPANY	
FABRICATED STEEL CONSTRUCTION	
POTTSTOWN DRAFTING ROOM Pottstown, PA.	
IN CHARGE W.R. BART	MADE BY S.M.R. 2-24-54
CHECKED BY R.L.G. 3/10/54	TRACED BY
REVISED	LAST ASSEM. MK.
SHOP NO.	CONTRACT C13164
SHEET E2	





INST		REQUIRED LIST				
A	B	C	NO	DESCRIPTION	MARK	REMARKS
	4		4	FIXED POSTURAL	FPI	
8	8	16		EXPANSION POSTURAL	FPI	



PAINT NOTE
ONE COAT RED LEAD EXCEPT
PINS AND BORED SURFACES TO BE
COATED WITH USA 2-121

PEDESTAL

EMBLEM - SOLOIN BRIDGE

Emblem to Solon - Somerset County

STATE OF MAINE

BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM *POTTSTOWN WORKS*

IN CHARGE *CLARK* MADE BY *KLP-2-1954*

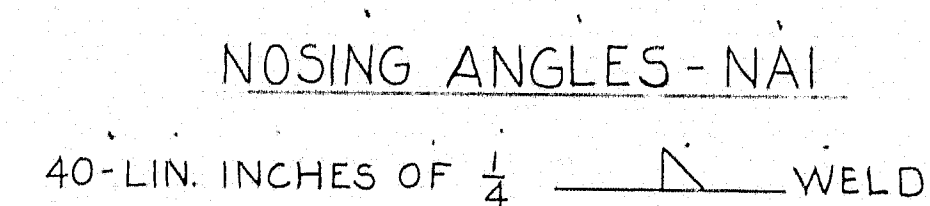
CHECKED BY *W. G. 745* TRACED BY _____

REVISED *7/7/45* LAST ASSEM. MK. _____

3 CONTRACT *273104* SHEET *1*

RIVETS None
OPEN HOLES As noted
REAM As Noted
MILLING As noted
PAINT SEE Note
WELDING As noted
SHOP CONTACT SURFACES X-16

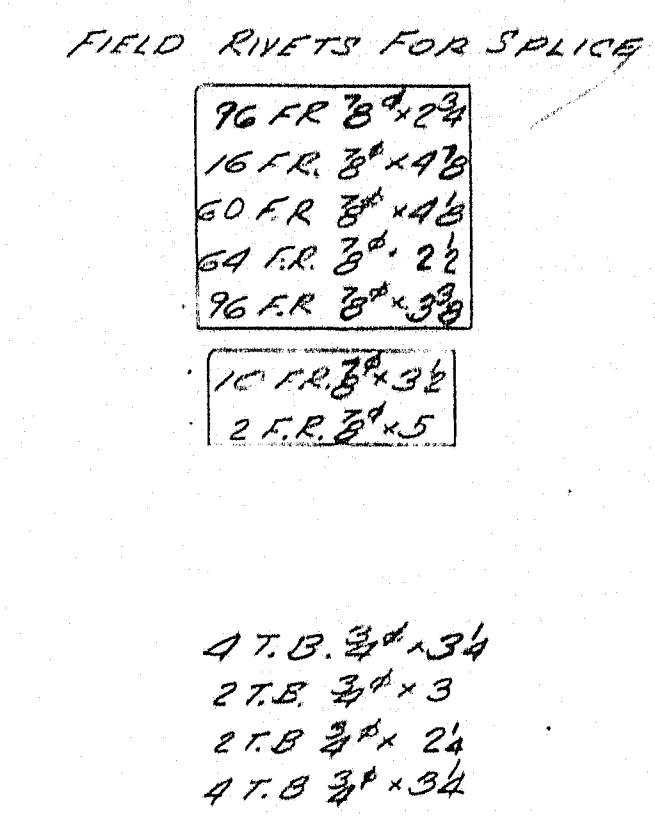
SHOP NO. 3 CONTRACT 273164 SHEET 1



INSTALLMENT-NA

PIER NOSING ANGLES

RIVETS NONE
OPEN HOLES $\frac{9}{16}$
REAM NONE
MILLING NONE
PAINT ONE COAT RED LEAD
AS NOTED
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED



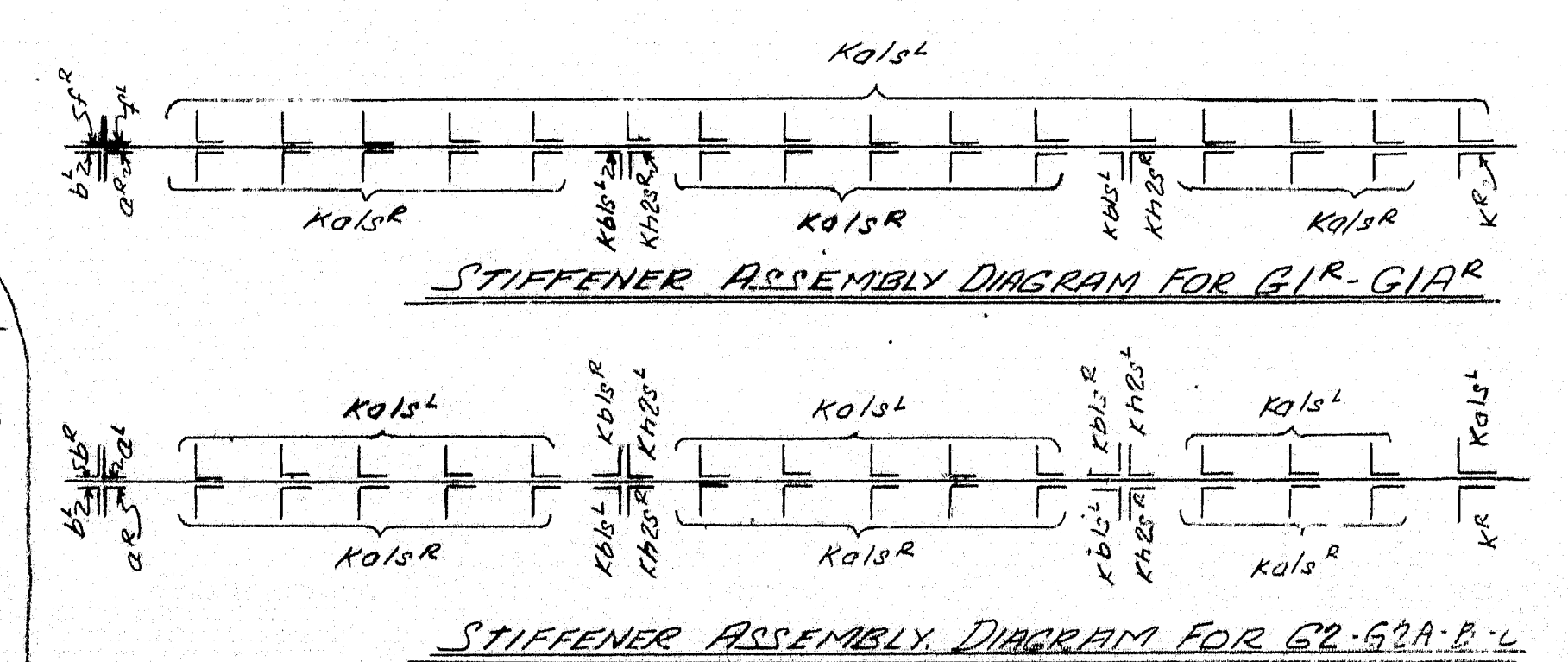
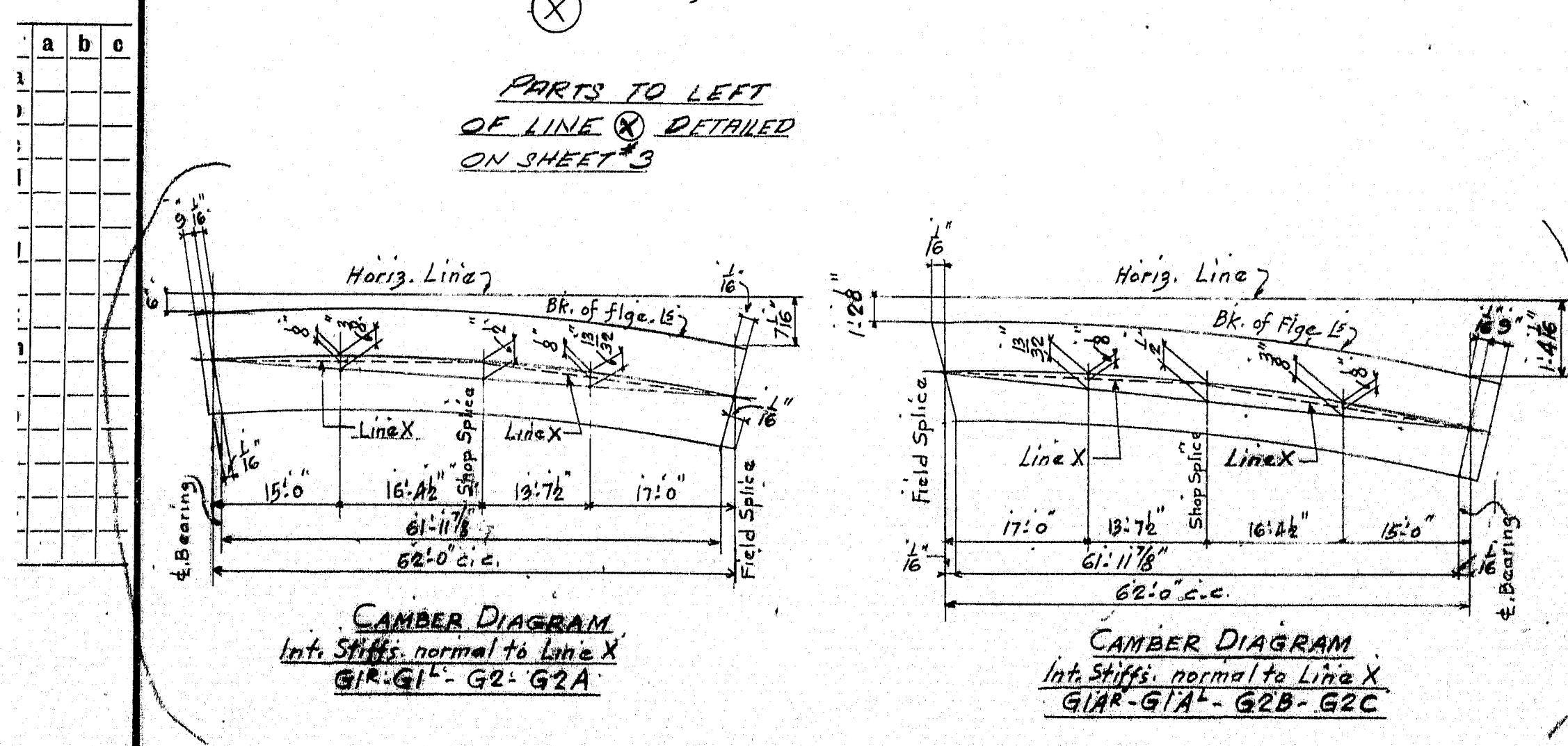
SPICE 2.00

$G1^R$	$G4^R$ SHG	$G1A^R$	$G4A^R$ SHG
$G2^R$	$G3^R$ do	$G2A^R$	$G3A^R$ do
$G2A$	$G3A$ do	$G2^A$	$G3^A$ do
$G1^A$	$G4^A$ do	$G1A^A$	$G4A^A$ do

SPICE REPAIRING COMBINATIONS

R1 (FOR CAMBER DIMENSIONS, 1.5" SEE DWG #1)

INST.		REQUIRED LIST		
AC	NO.	DESCRIPTION	MARK	REMARKS
1	ONE	GIRDER	G1 ^R	} (ALIKE UNTIL REPAIRED)
1	ONE	JO	G1A ^R	
1	ONE	do	G1 ^L	} (OP. HANG)
1	ONE	do	G1A ^L	
1	ONE	do	G2	} (ALIKE UNTIL REPAIRED)
1	ONE	do	G2A	
1	ONE	do	G2B	
1	ONE	do	G2C	



- RIVETS**
- OPEN HOLES**
- REAM**
- MILLING**
- PAINT**
- WELDING**
- SHOP CONTACT SURFACES**

FOR Notes
pgs 24-28

GIRDER G14G2

EMBDEN-SOLON BRIDGE

EMBDEN-SOLON-SOMERSET COUNTY

STATE OF MAINE

BATHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

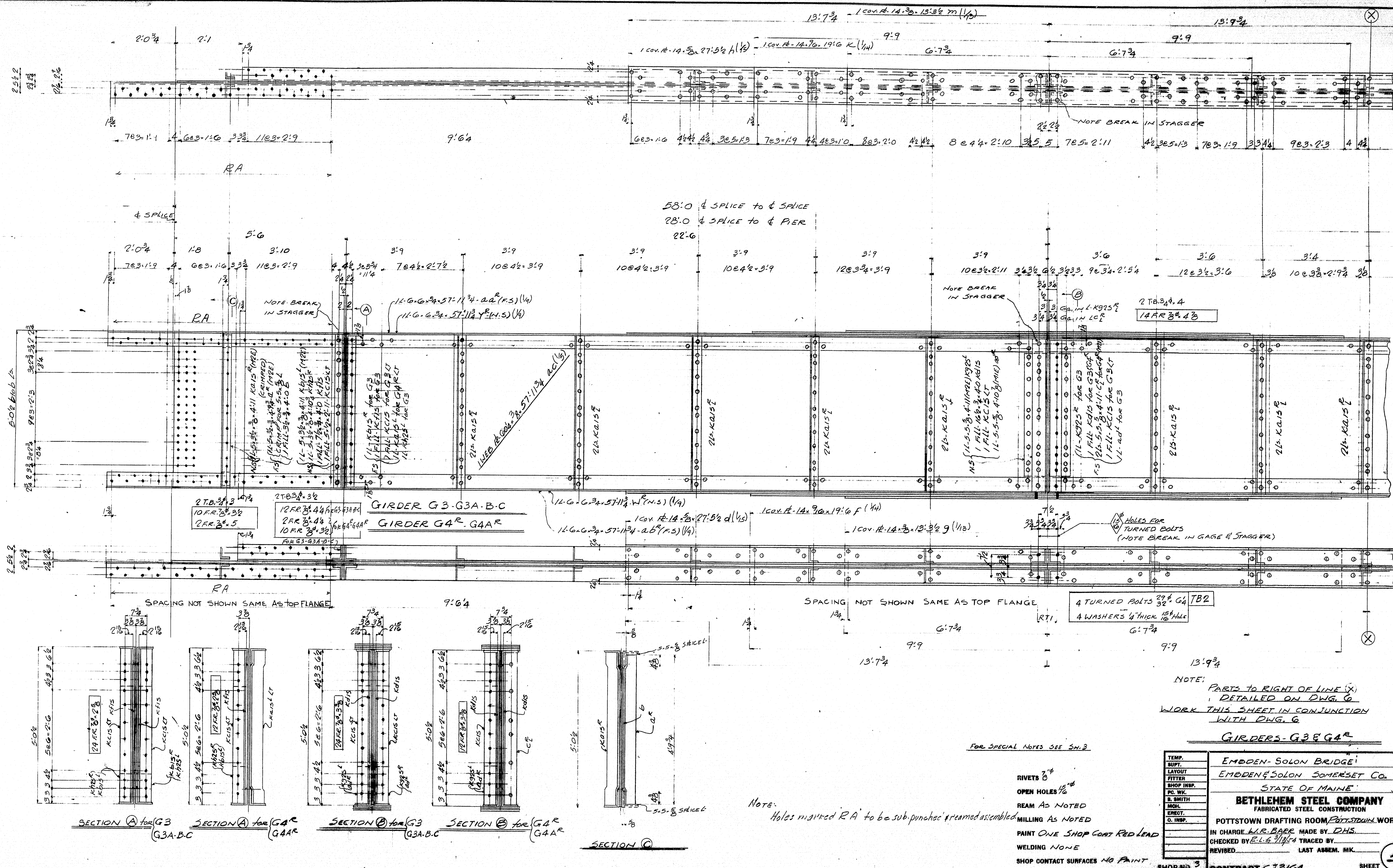
POTTSTOWN DRAFTING/ROOM ~~POTTSTOWN~~ WORKS

IN CHARGE ~~BARB~~ MADE BY ~~R.D. B.G.~~ 56

CHECKED BY ~~R.L.G. 7/15/64~~ TRACED BY

REVISED ~~2/15/64~~ LAST ASSEM. MK.

4



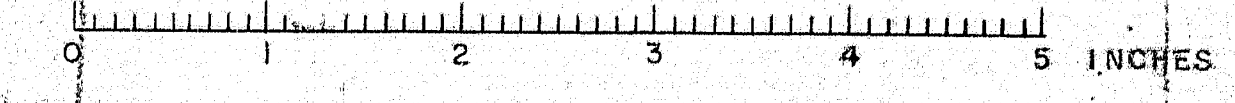
GIRDERS - G3 & G4^R

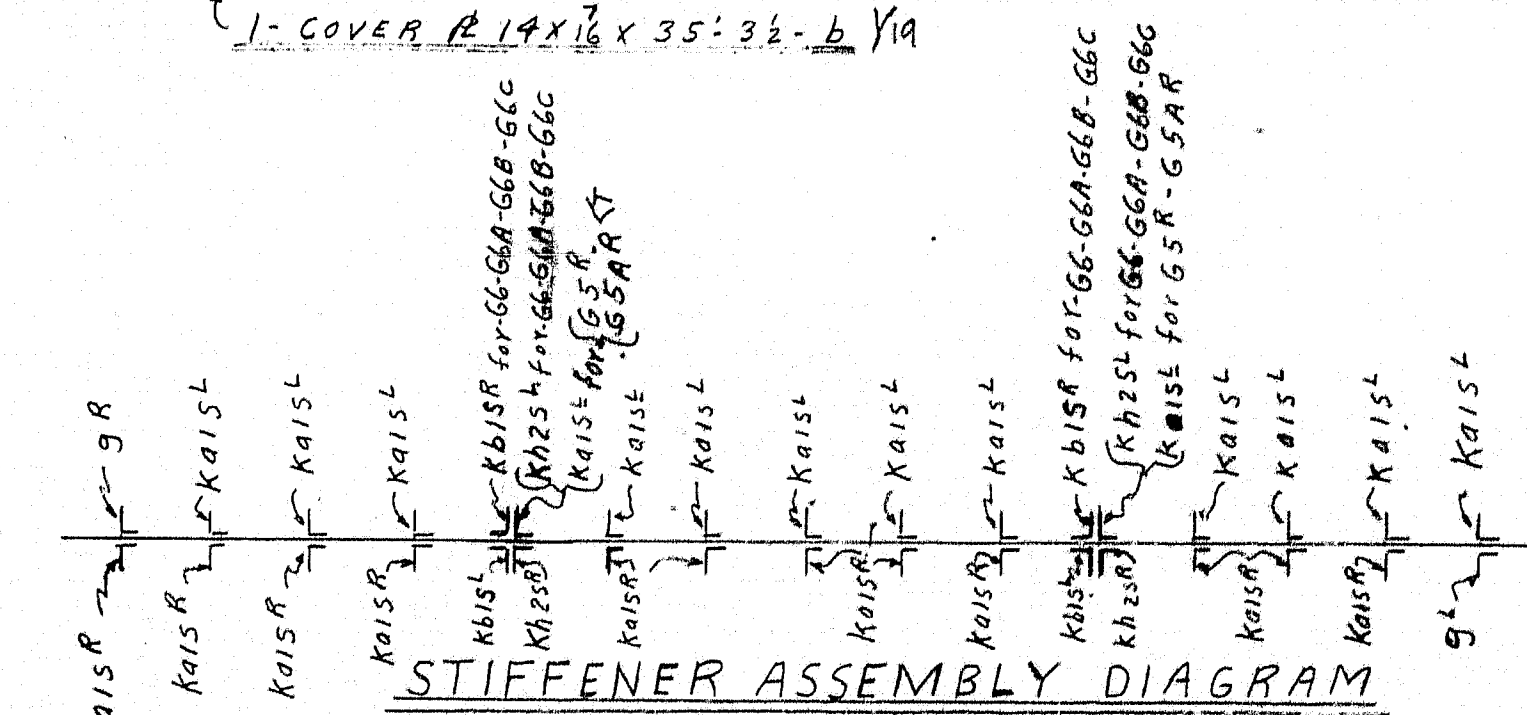
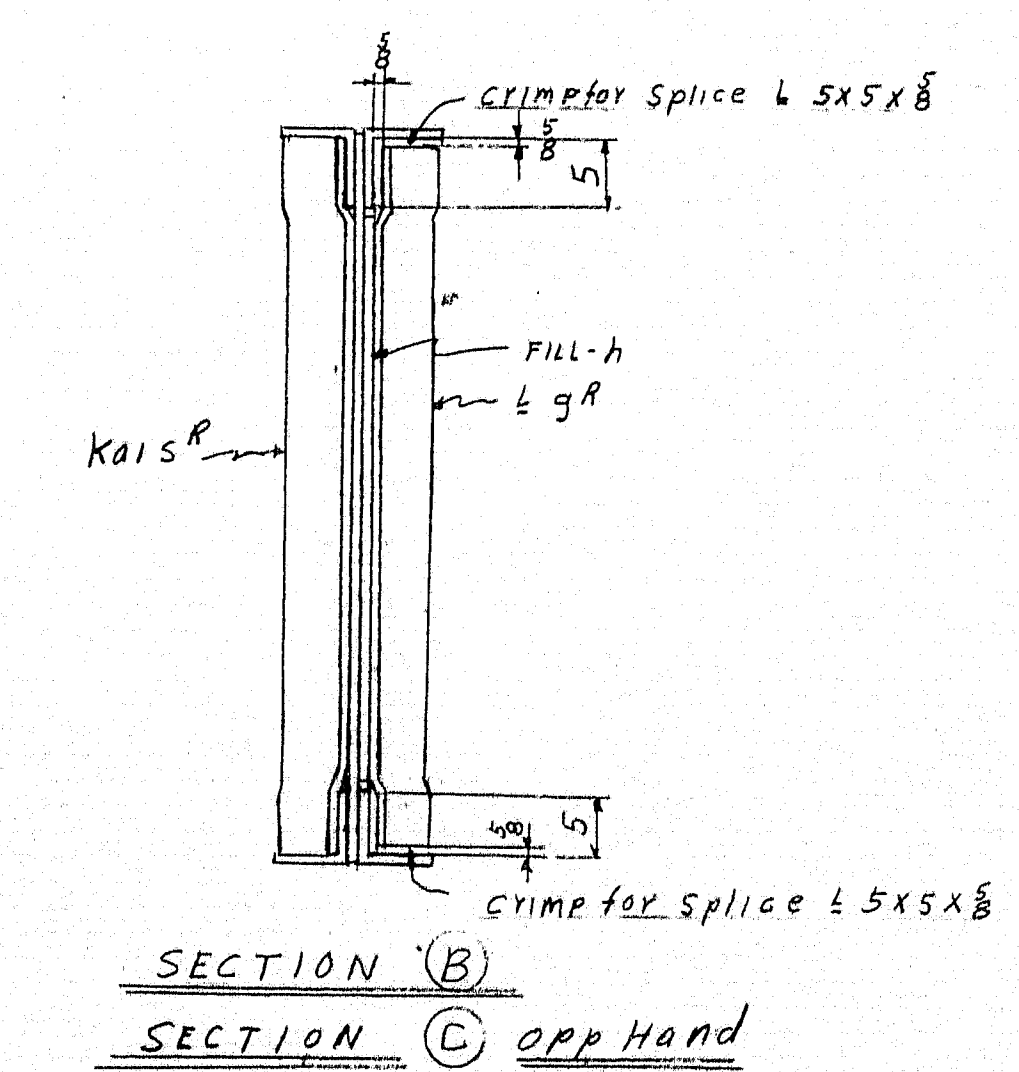
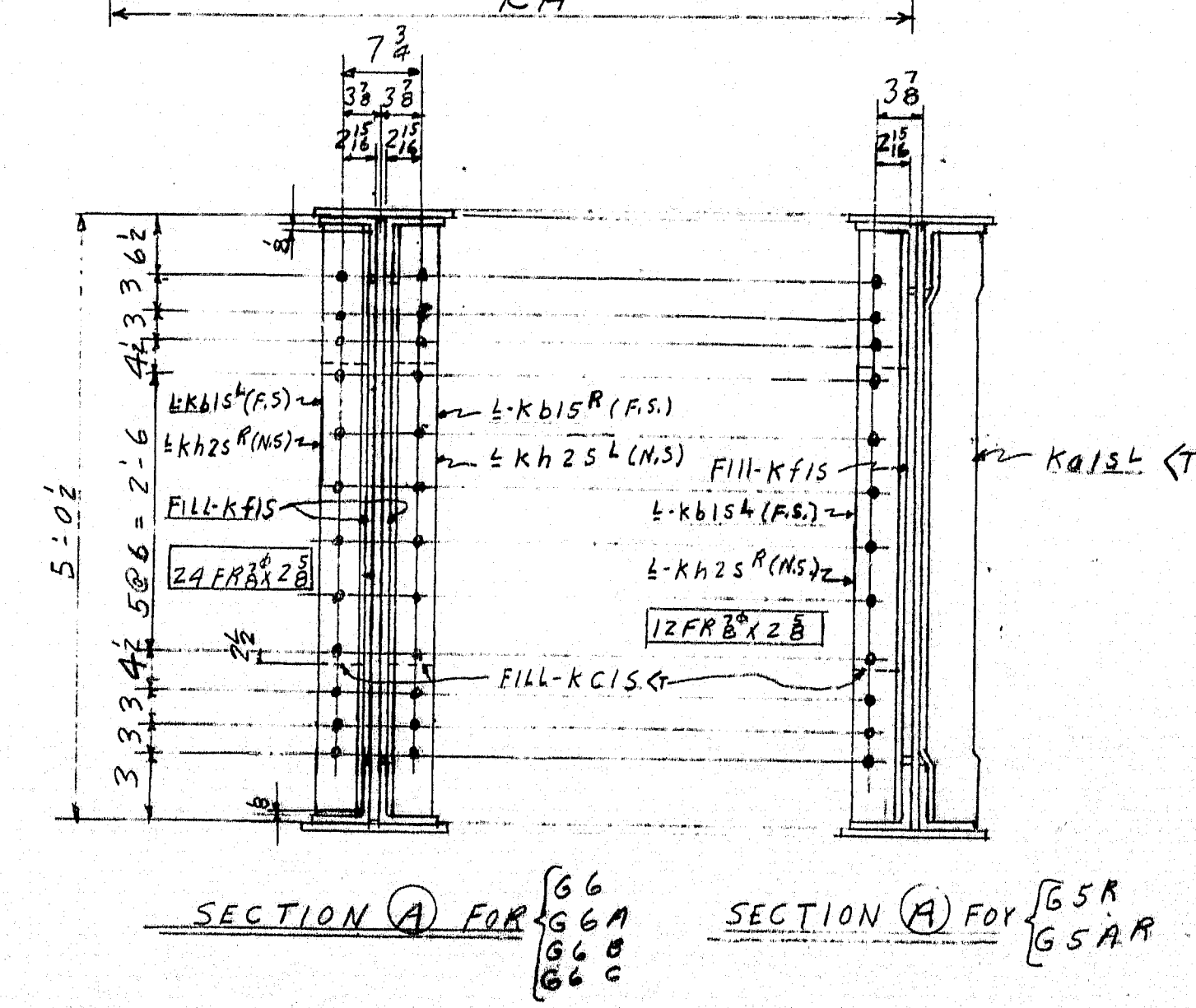
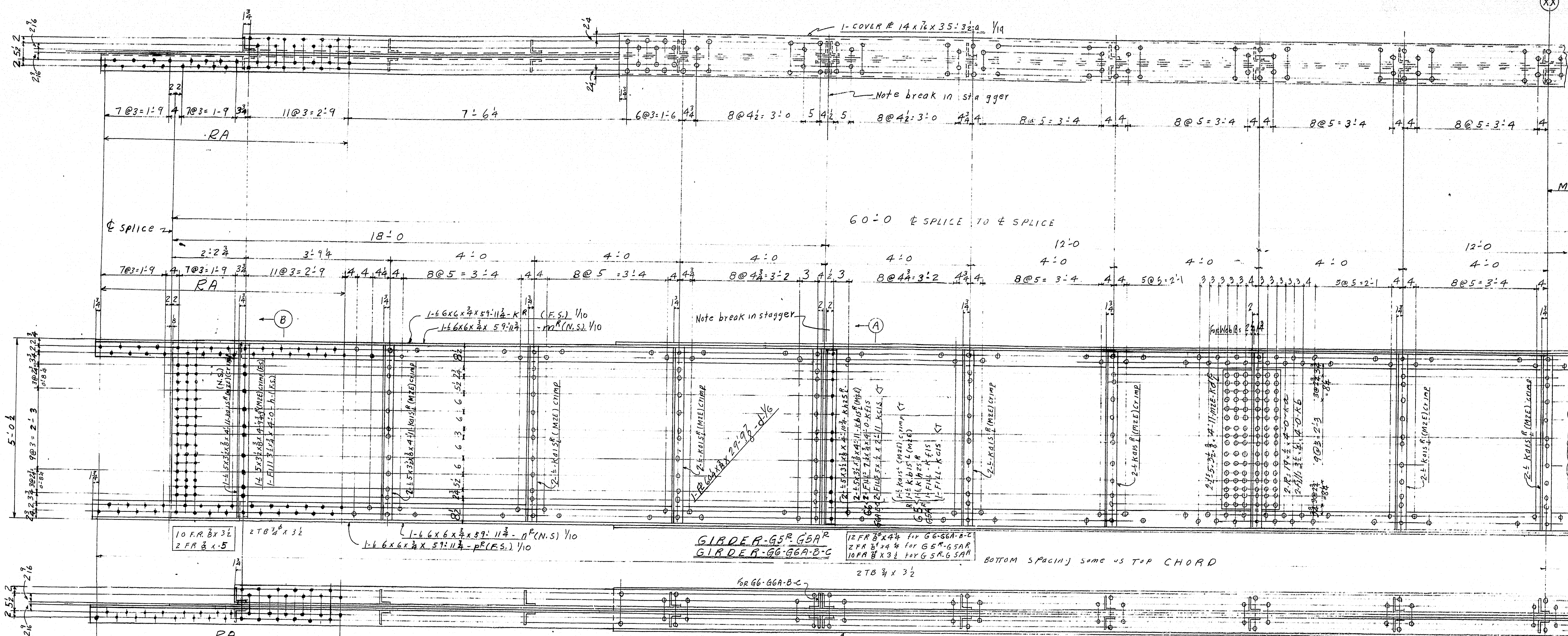
RIVETS 3rd
OPEN HOLES 1st/₂
REAM AS NOTED
6led MILLING AS NOTED
PAINT ONE SHOP COAT RED LEAD
WELDING NONE
SHOP CONTACT SURFACES NO PAINT

TEMP. _____
RUPF. _____
LAYING _____
FITTER _____
SHOP INSP. _____
PC. WK. _____
B. SMITH _____
MCH. _____
ERECT. _____
O. INSP. _____

EMBDEN-SOLON BRIDGE!
EMBDEN & SOLON SOMERSET CO.
STATE OF MAINE
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM, POTTSTOWN, WORE
IN CHARGE, W. R. BARR MADE BY DHS.
CHECKED BY E. L. G. 3/18/54 TRACED BY _____
REVISED _____ LAST ASSEM. MK. _____

SHOP NO. 3 CONTRACT C-7316A SHEET _____





WORK THIS SHEET IN CONJUNCTION WITH SH. B

FOR SPECIAL NOTES SEE SHEET 3

NOTE: holes marked RA to be reamed assembled.

RIVETS 7/8"

OPEN HOLES 1 1/2"

REAM AS NOTED

MILLING AS NOTED

PAINT ONE COAT RED LEAD

WELDING NONE

SHOP CONTACT SURFACES NOT PAINTED

INST.	REQU. LIST	MARK	REMARKS
B	C	DESCRIPTION	
1	1	GIRDER	RAIKE NOTI
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED
1	1	do	REAMED

GIRDERS G5 - G6 (60'-0" SPAN)

TEMP. _____

LAYOUT _____

FITTER _____

SHOP INSP. _____

PC. WK. _____

B. SMITH _____

INCH. _____

D. INSP. _____

EMBEN-SOLON BRIDGE

EMBEN & SOLON SOMERSET COUNTY

STATE OF MAINE

BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM, POTTSTOWN, WORKS

IN CHARGE M.R. BARR MADE BY 3-3-54

CHECKED BY E.L.G. 7/10/54 TRACED BY _____

REVISED _____ LAST ASSEM. MK. _____

SHOP NO. 3 CONTRACT CT 3164 SHEET 7

