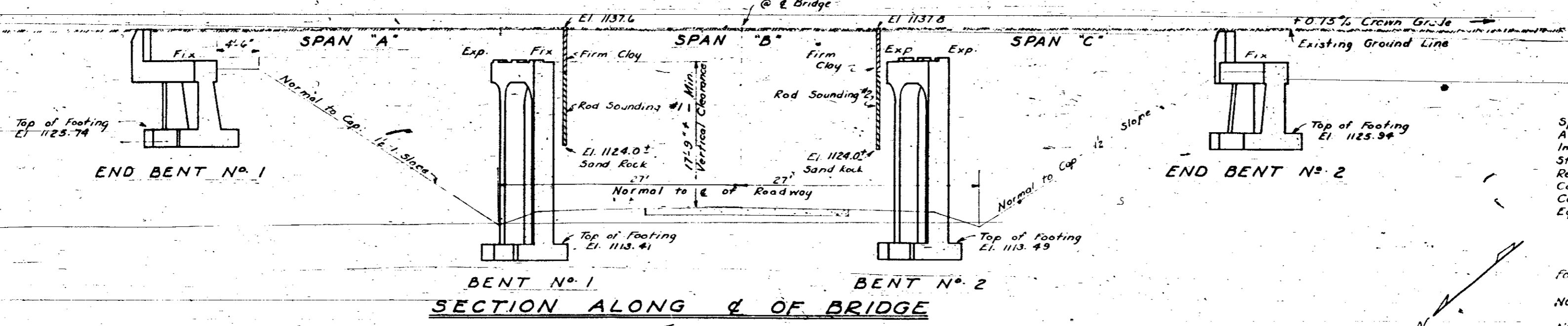


**NOTE:** This bridge to be built on a 0.15% grade. The handrails, slabs, and curbs shall conform to F.R.D. grade. Handrail post to be built plumb. Elevations shown do not include any allowance for dead load deflections, which shall be provided for in addition to the elevations given. The finished structure shall have the elevations shown.



**DESIGN DATA**

Specifications	A.A.S.H.O. (190)
Assumed Live Load	M <sub>15</sub> -S <sub>12</sub> (44)
Impact Allowance	See Specifications
Stress in Extreme Fibre of Structural Steel	18000 lbs per sq. in.
Reinforcing Steel in Tension	18000 lbs per sq. in.
Concrete in Compression	1000 lbs per sq. in.
Concrete in Shear	30 lbs per sq. in.
Equivalent Fluid Pressure of Earth	30 lbs per sq. ft.

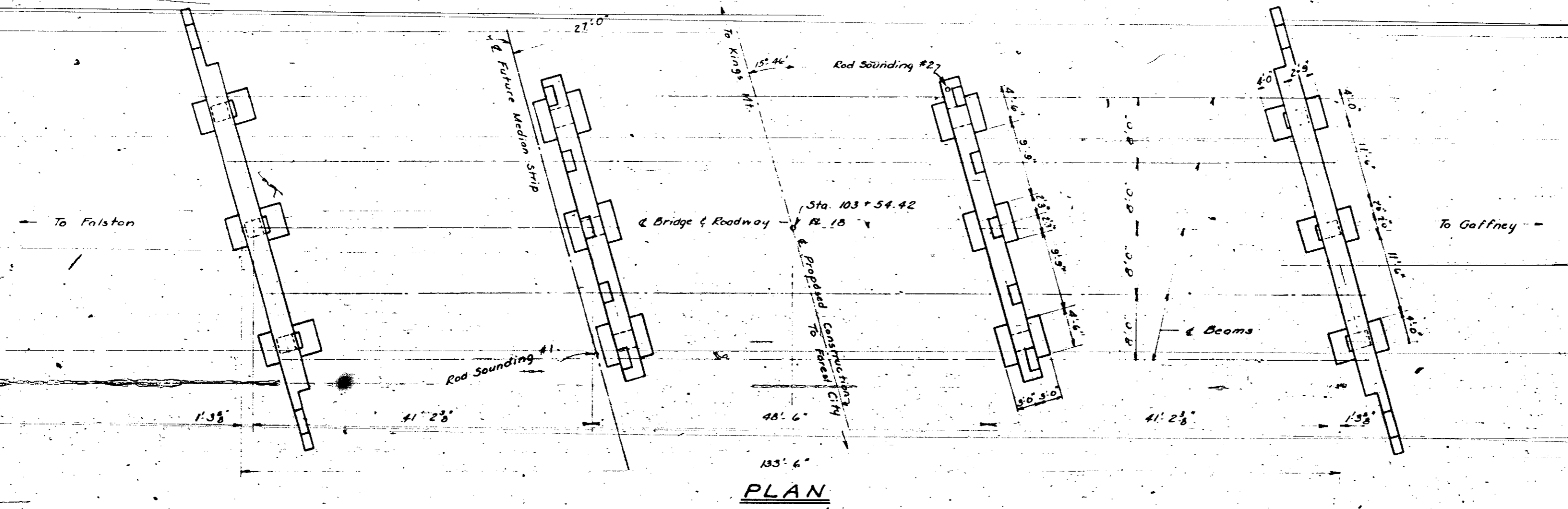
**NOTES**

For "General Note" see sheet 3-1

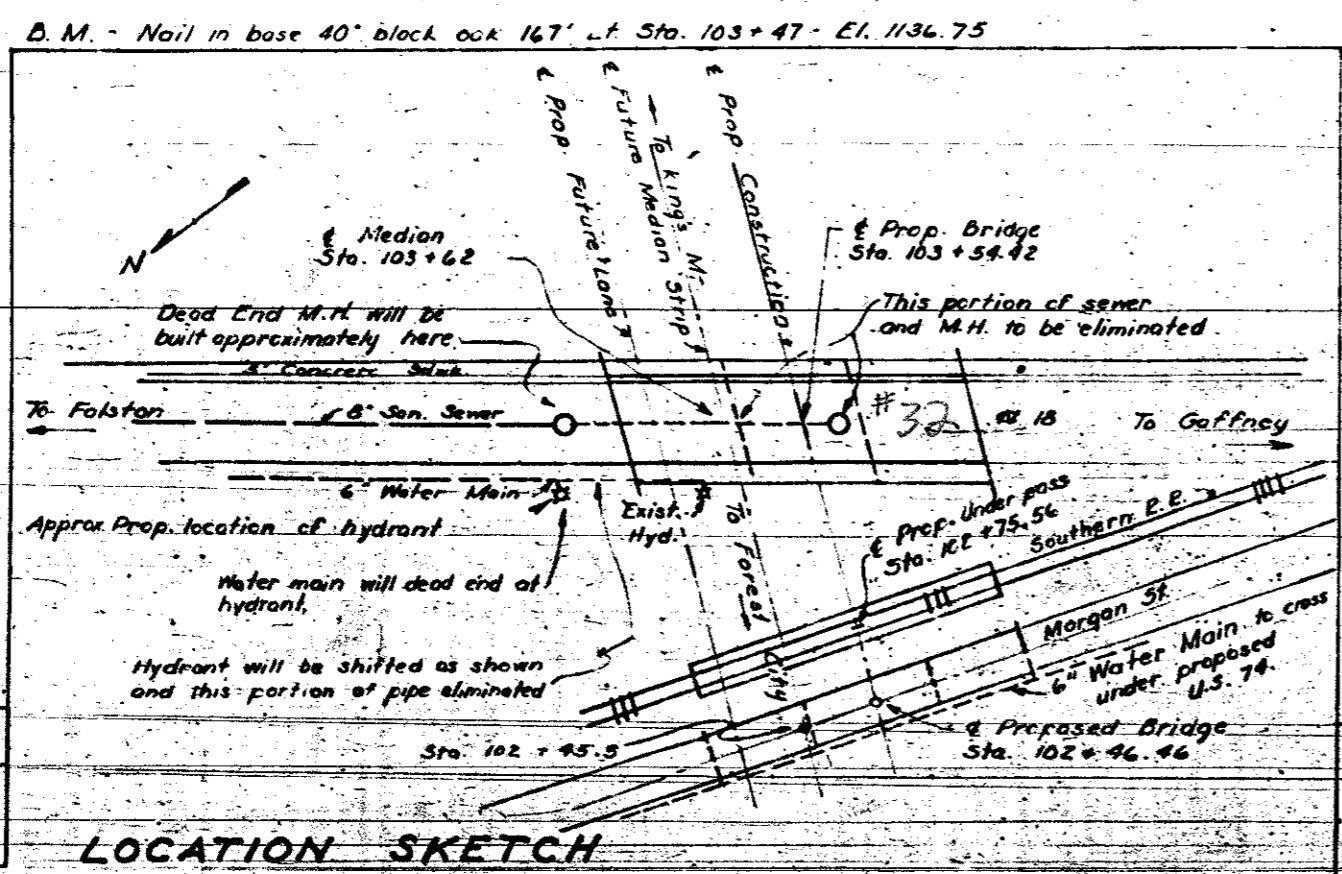
NOTE: Computed foundation load 3 1/2 tons per sq. ft.

NOTE: Unclassified Structure Excavation to be measured from surface of cut.

NOTE: Traffic on # 18 to be carried over temporary detour adjacent to structure during construction of this structure.



Reel # 415  
Pos # 2



**BILL OF MATERIAL**

	Class "A" Concrete	Reinforcing Steel	Structural Steel	Method "A" Waterproofing	Unclassified Structure Excavation	Metal Railing
	Cu. Yds.	Lbs.	Lbs. (Approx)	Sq. Yds.	Cu. Yds.	Lin. Ft.
Superstructure	153.7	31,921	97,000	24	155	273
End Bent No. 1	21.3	5,153				
Bent No. 1	28.2	5,200				
Bent No. 2	28.2	5,200				
End Bent No. 2	21.3	5,153				
<b>Total:</b>	<b>252.7</b>	<b>62,627</b>	<b>97,000</b>	<b>24</b>	<b>155</b>	<b>273</b>

PROJECT NO. 8233  
CLEVELAND COUNTY  
STATION: 103 + 54.42  
#32

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION

**GENERAL DRAWING**  
FOR BRIDGE  
ON # 18  
OVER PROPOSED U.S. 74

SEPTEMBER 1949

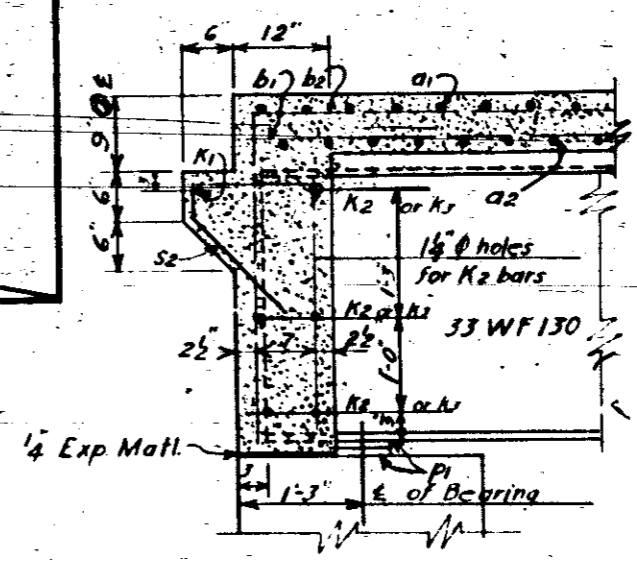
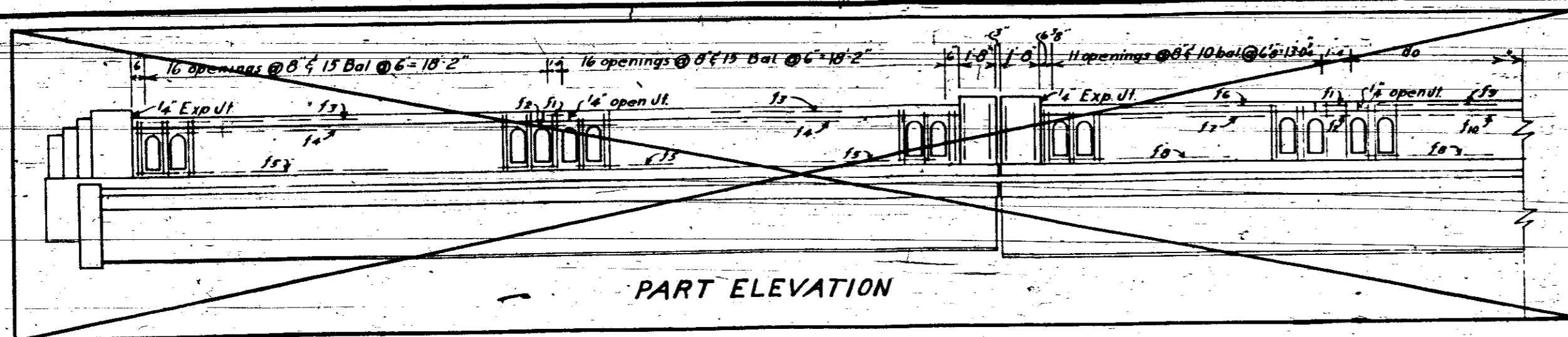
SUBMITTED BY: J.P. [Signature]  
APPROVED BY: [Signature]

SPECIAL

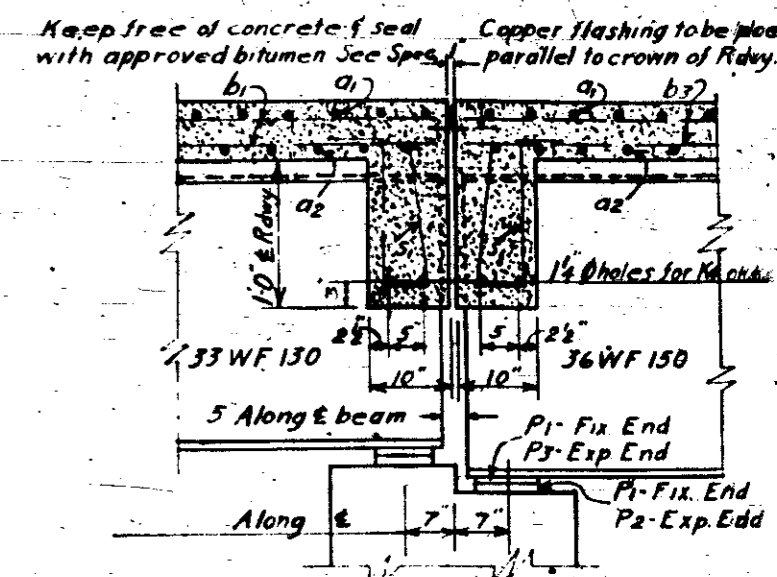
DESIGNED BY: M. Williams  
CHECKED BY: R.W. Skellan

DATE: Sept. 1949

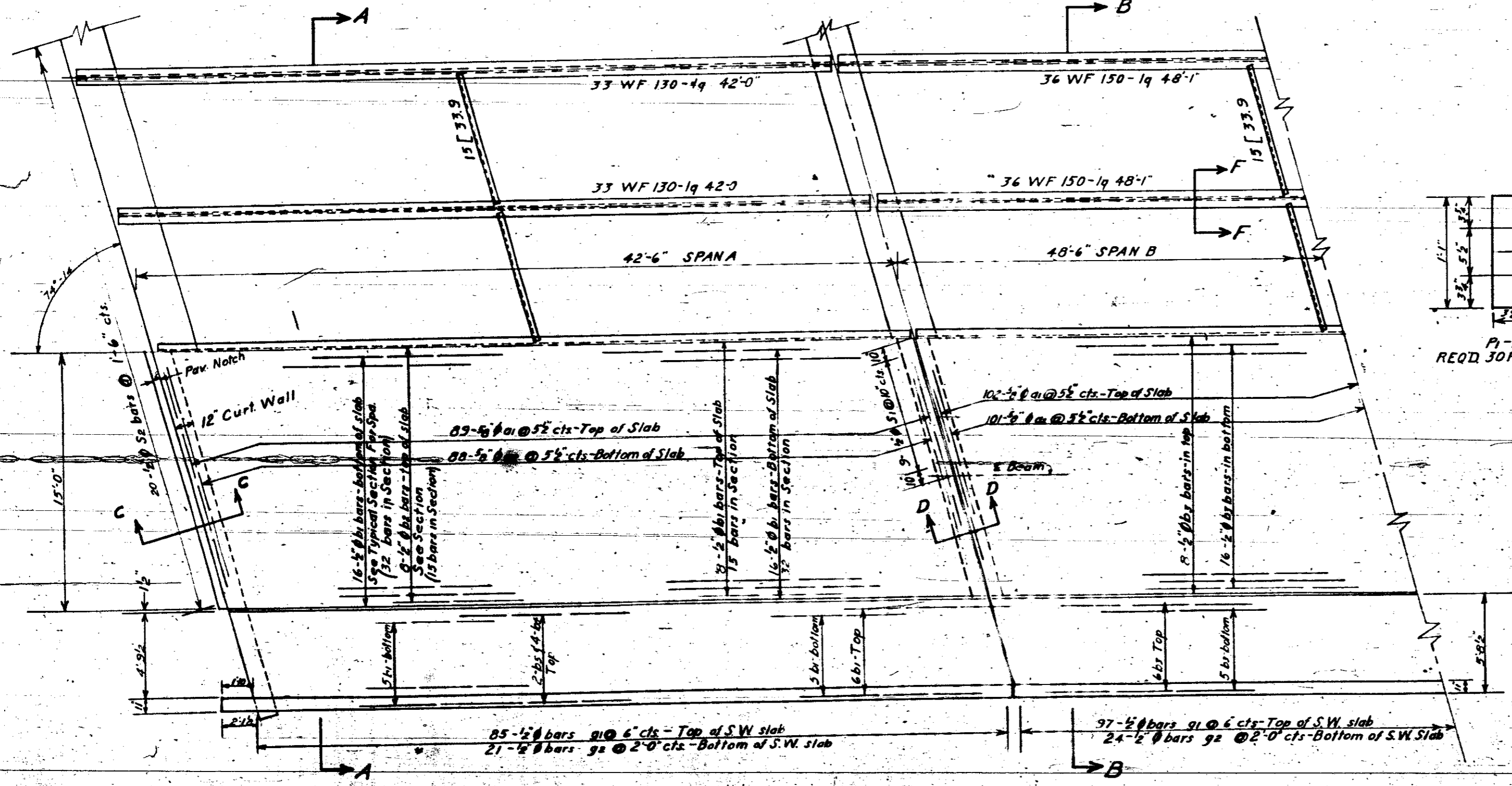
FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	8233	5-11	16
F.A. Proj. U-150(4)				



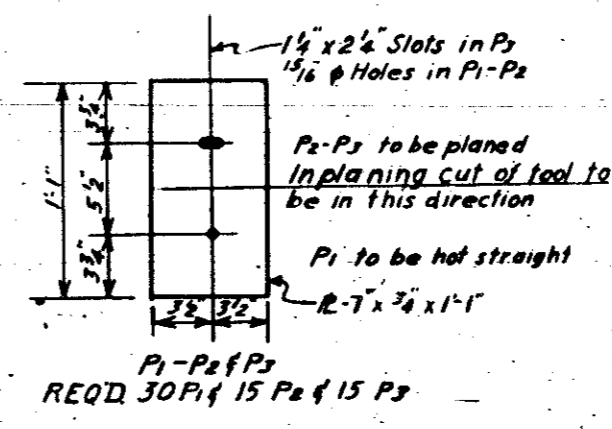
SECTION C-C



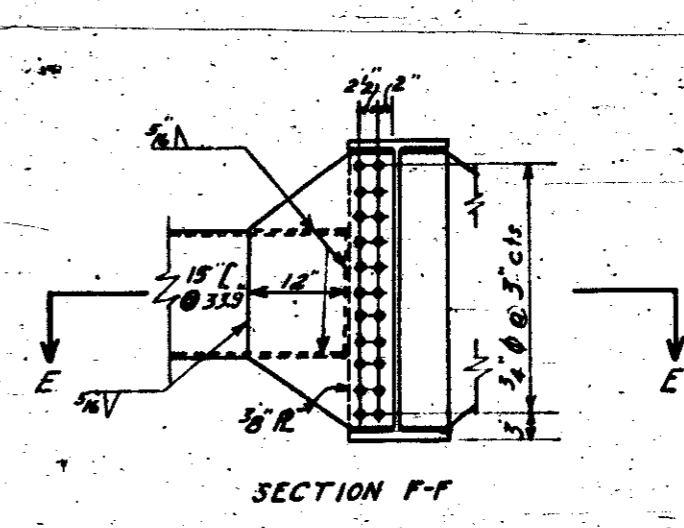
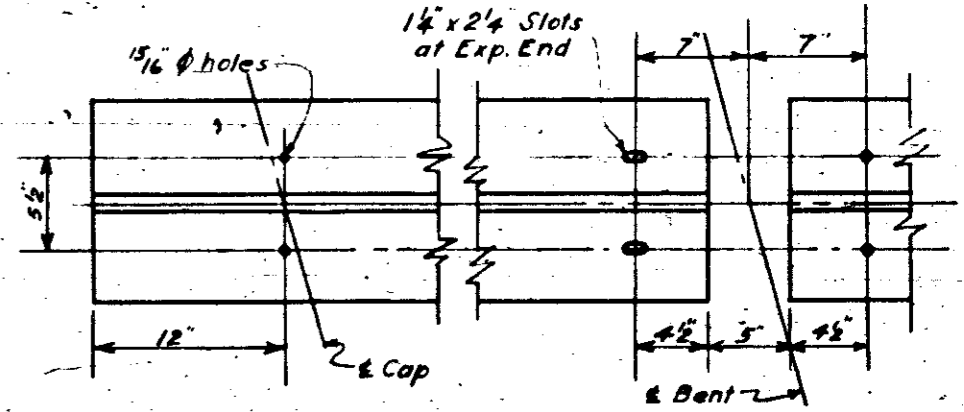
SECTION D-D



PART PLAN



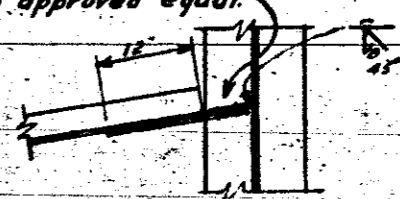
DETAIL OF BOTTOM FLANGE



SECTION F-F

PROJECT NO. 8233  
CLEVELAND COUNTY  
STATION: 103+54.42

Field Connection of diaphragm to stiffener shall be bolted using 1/2" turned bolts, Dardet bolts, or an approved equal.



SECTION E-E

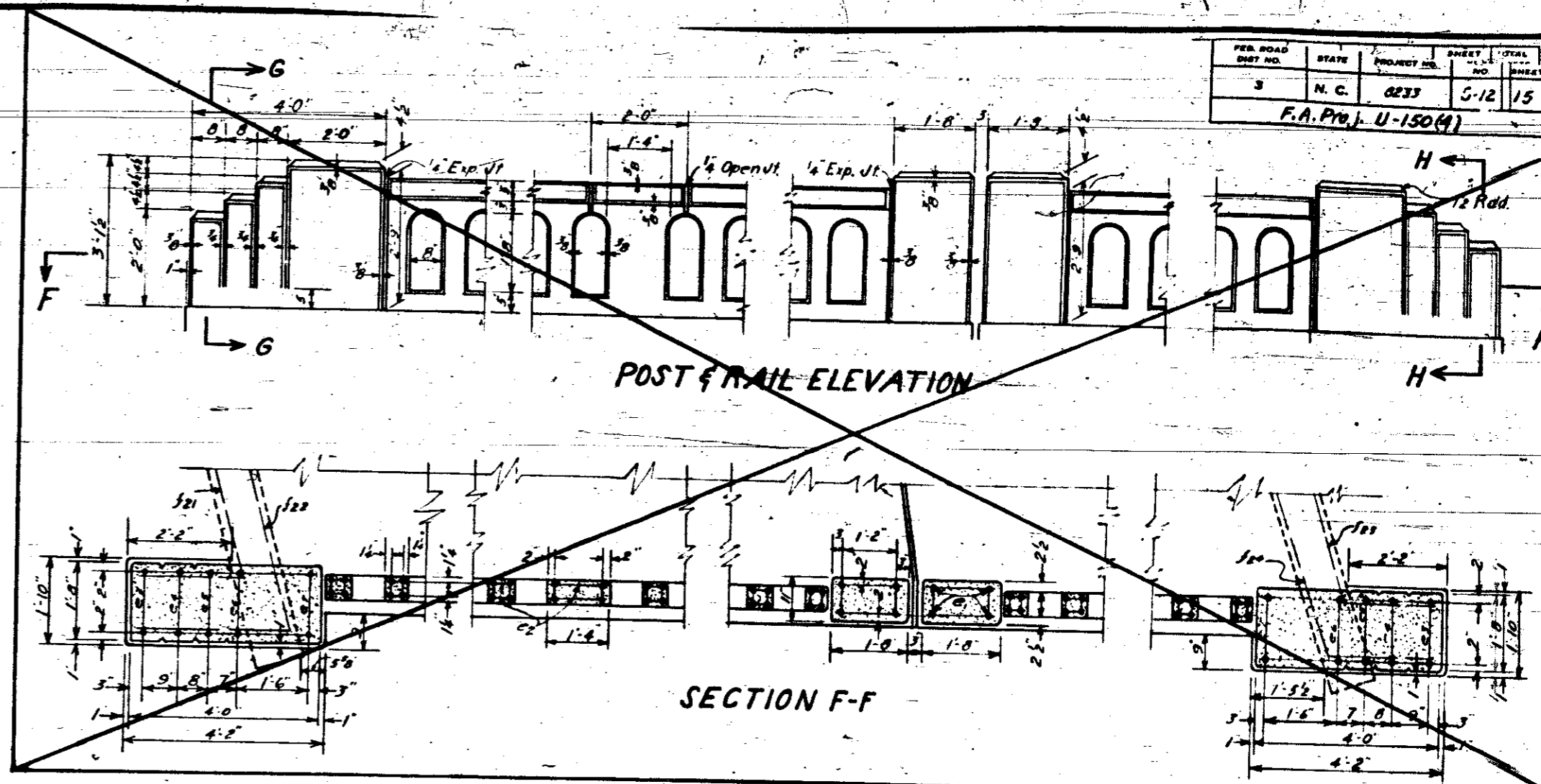
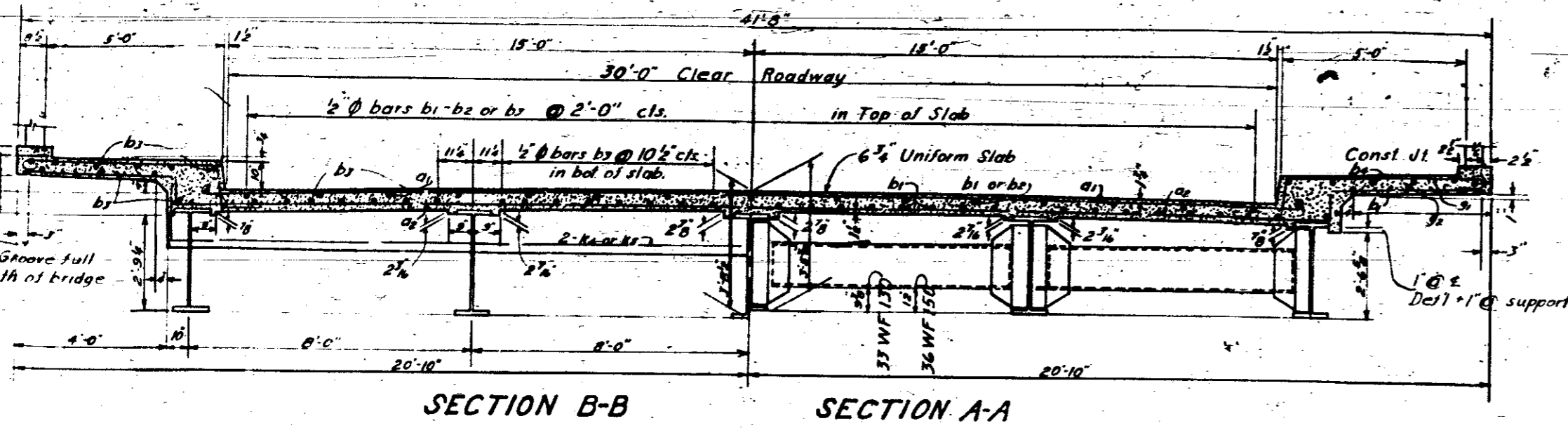
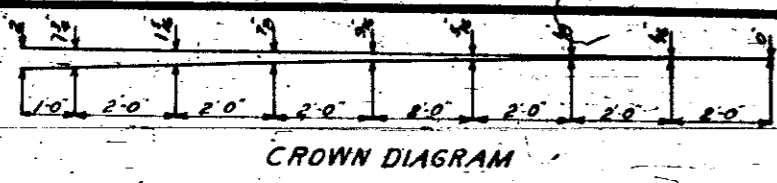
STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION

**SUPERSTRUCTURE**

AUGUST, 1949

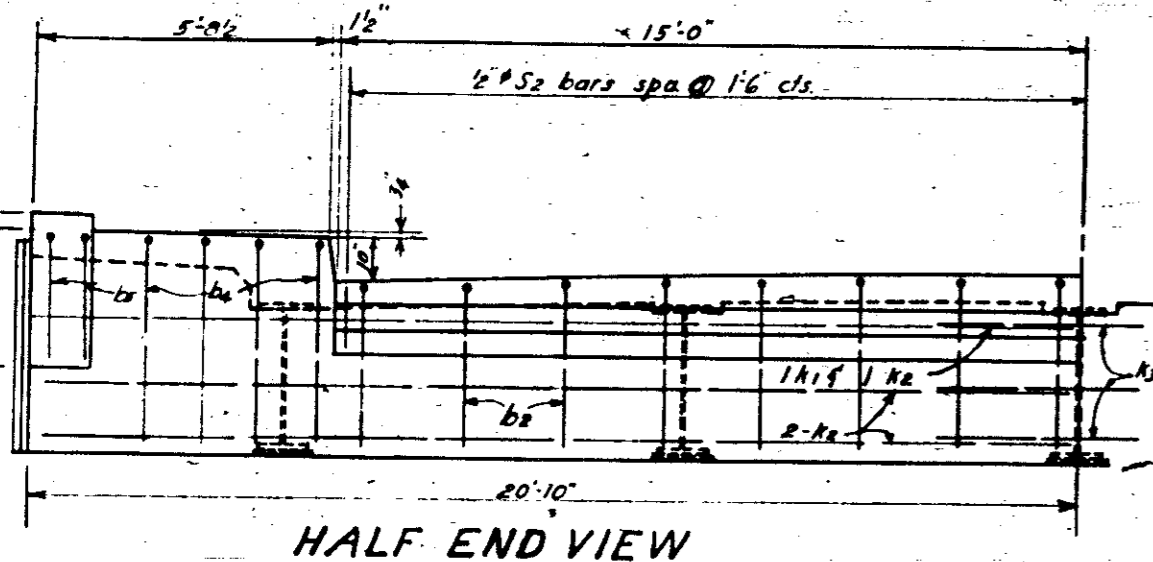
DESIGNED BY: *W.H. Rogers*  
CHECKED BY: *W.H. Rogers*

SPECIAL	ASSEMBLED BY: <i>W.H. Rogers</i>	DATE: <i>10-9-1949</i>
STANDARD	CHECKED BY: <i>W.H. Rogers</i>	DATE: <i>10-9-1949</i>

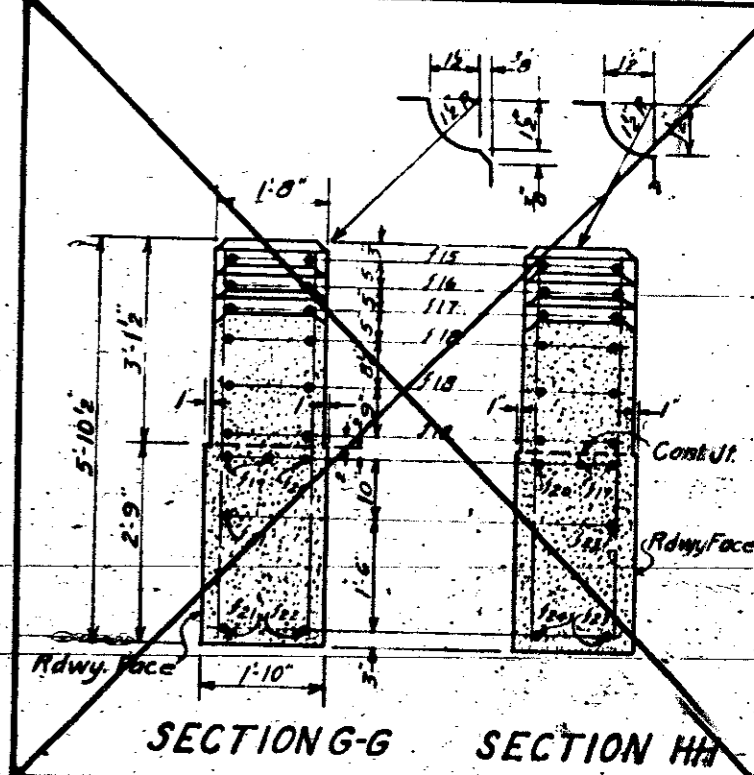
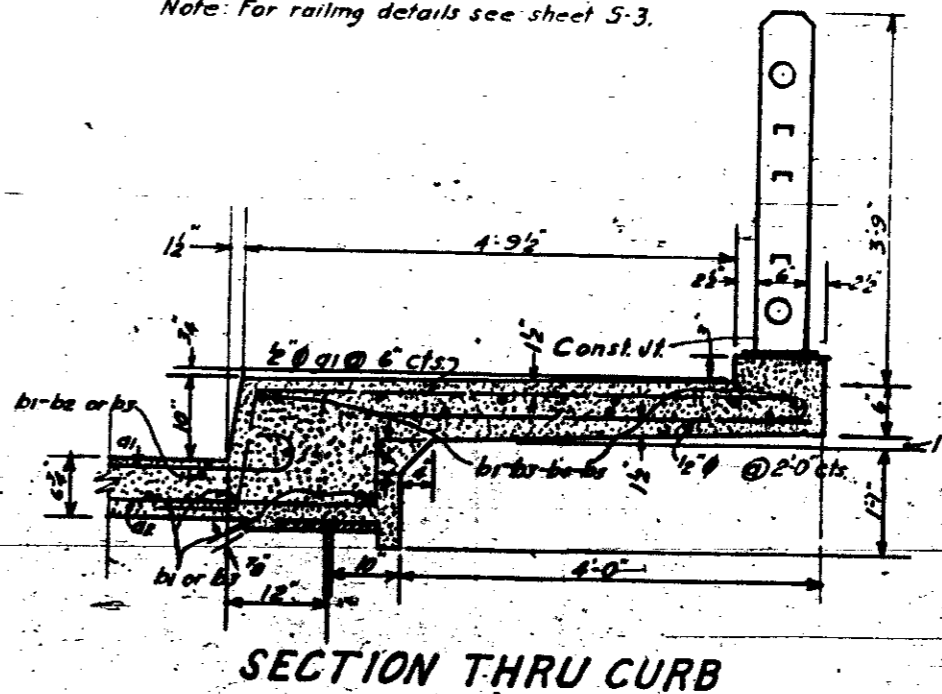
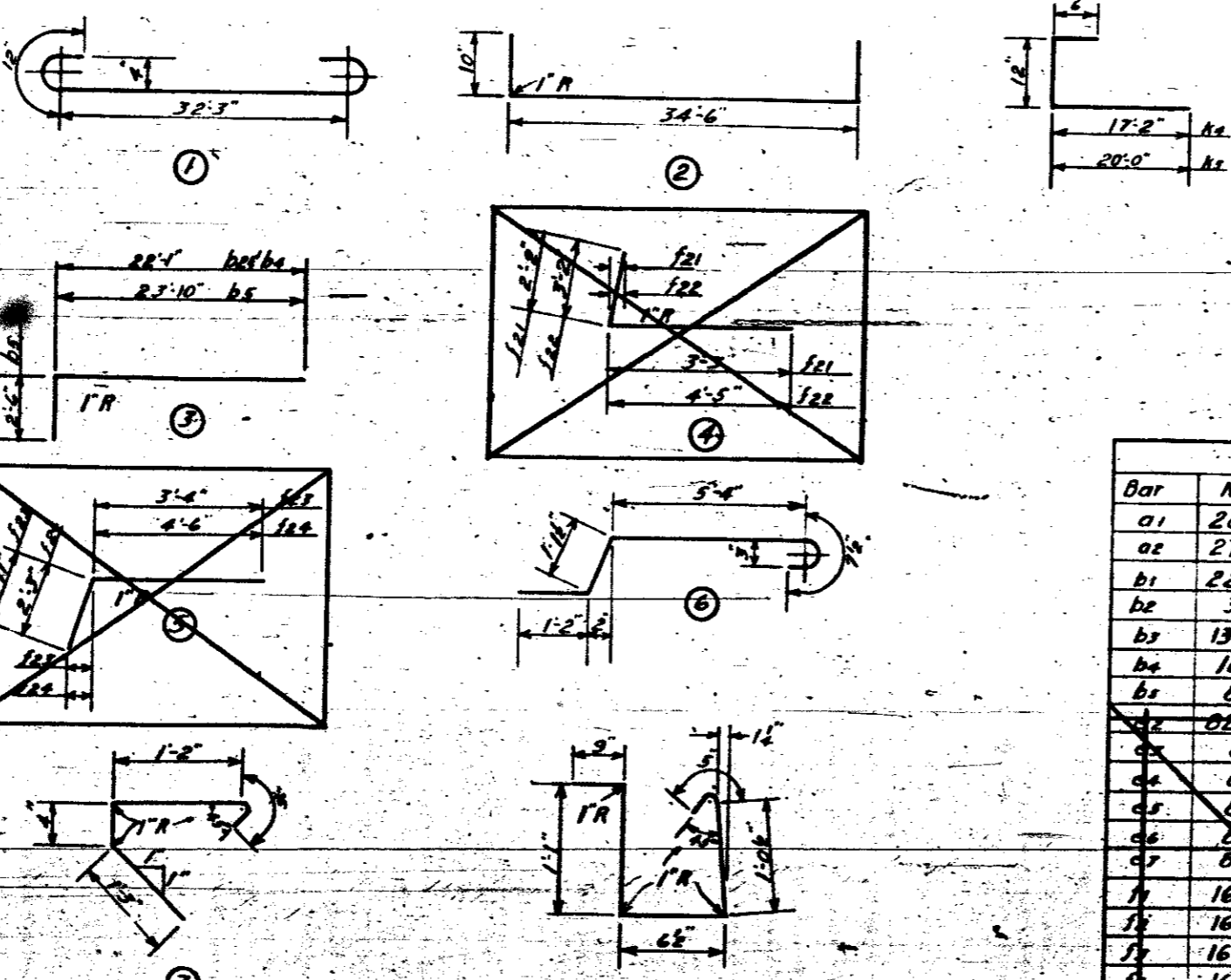


Note: All dimensions which are given in Section and are affected by Dead Load Deflections are dimensions at  $\frac{1}{2}$  of bearings. Roadway Slab shall be blocked up over beams as shown to provide the required crown. Also additional blocking shall be used between bearing points to compensate for Dead Load Deflections.

Max. D.L. Defl. - Exterior Beam      SPAN A/C      SPAN B  
 Max. D.L. Defl. - Interior Beam       $\frac{30}{30}$        $\frac{2}{30}$



Note: Method A Waterproofing to be placed over the fill side of joints between substructure and superstructure. Strips of waterproofing to be 2'-0" wide and placed symmetrical about the joint. Asphalt for top coat shall conform to the requirements for type A asphalt of A.A.S. H.O. Spec. M-115. See Specifications.



**BILL OF MATERIAL**

Bar	No.	Size	Type	Length	Weight	Bar	No.	Size	Type	Length	Weight
a1	280	1/2"	1	34'-3"	10,002	a1	16	1/2"	Str.	3'-9"	28
a2	277	5/8"	2	36'-2"	10,450	b1	16	1/2"	"	7'-0"	84
b1	222	1/2"	Str.	22'-1"	3274	b2	30	1/2"	"	3'-9"	27
b2	30	1/2"	3	25'-2"	504	b3	138	1/2"	Str.	5'-5"	37
b3	138	1/2"	Str.	25'-1"	2312	b4	16	1/2"	3	26'-1"	279
b4	16	1/2"	3	26'-1"	279	b5	8	1/2"	3	26'-4"	141
b5	8	1/2"	3	26'-4"	141	c1	8	1/2"	Str.	3'-11"	125
c1	8	1/2"	Str.	3'-11"	125	c2	8	1/2"	Str.	4'-6"	24
c2	8	1/2"	"	4'-10"	26	c3	8	1/2"	"	4'-10"	26
c3	8	1/2"	"	5'-3"	38	c4	8	1/2"	"	16'-1"	44
c4	8	1/2"	"	5'-7"	30	c5	8	1/2"	"	21'-6"	323
c5	8	1/2"	"	3'-7"	17	c6	8	1/2"	"	24'-6"	368
c6	8	1/2"	"	15'-9"	19	c7	8	1/2"	"	10'-8"	224
c7	8	1/2"	"	15'-9"	19	c8	8	1/2"	"	21'-6"	258
c8	8	1/2"	"	17'-7"	106	c9	8	1/2"	"	3'-10"	368
c9	8	1/2"	"	17'-7"	106	d1	8	1/2"	"	2'-11"	78
d1	8	1/2"	"	13'-0"	70	e1	12	1/2"	"	15'-6"	71
d2	8	1/2"	"	13'-0"	70	e2	4	1/2"	"	12'-2"	35
e1	12	1/2"	"	15'-6"	71	e3	4	1/2"	"	12'-2"	35
e2	4	1/2"	"	12'-2"	35	f1	8	1/2"	"	1'-3"	9
e3	4	1/2"	"	12'-2"	35	f2	8	1/2"	"	2'-3"	12
f1	8	1/2"	"	1'-3"	9	f3	8	1/2"	"	3'-0"	16
f2	8	1/2"	"	2'-3"	12						
f3	8	1/2"	"	3'-0"	16						

PROJECT NO. 8233  
 CLEVELAND COUNTY  
 STATION: 103+54.42

STATE OF NORTH CAROLINA  
 STATE HIGHWAY AND  
 PUBLIC WORKS COMMISSION

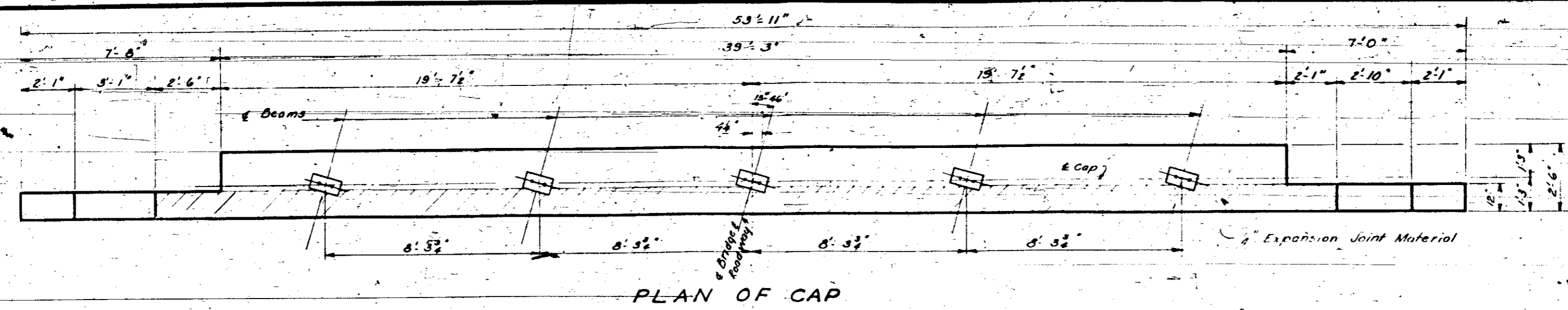
**SUPERSTRUCTURE  
 DETAILS**

AUGUST, 1949

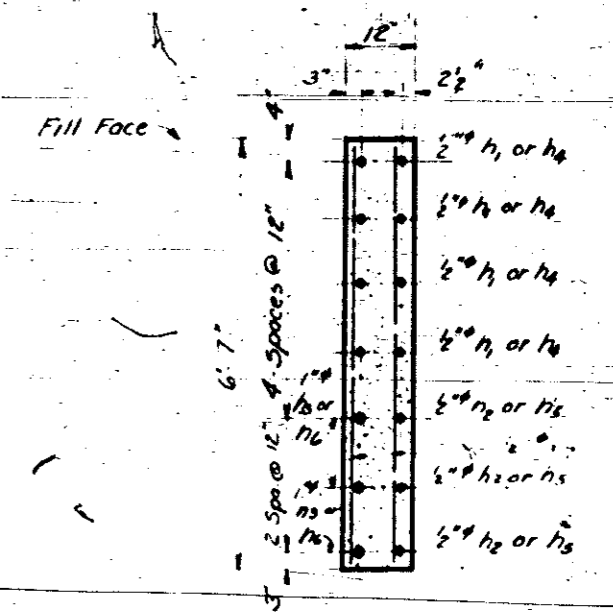
APPROVED BY: *J.P. ...*  
 APPROVED BY: *W.H. ...*

ASSEMBLED BY	DATE
CHECKED BY	DATE
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE

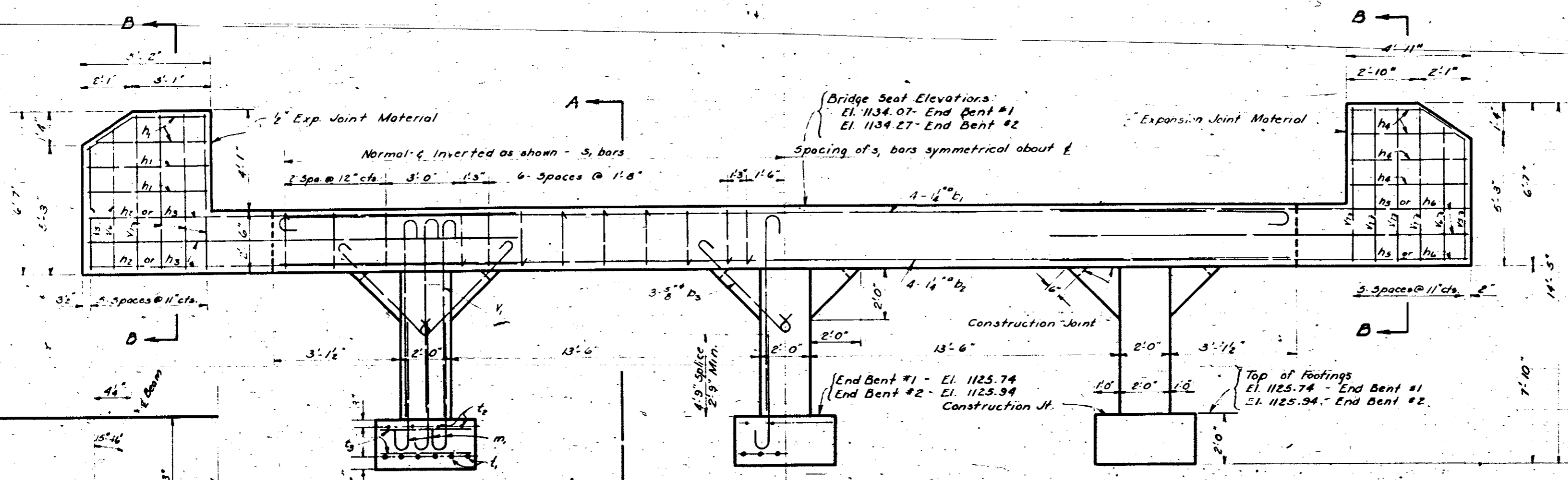
FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	8233	5-13	15
F.A. Proj. 11-150(4)				



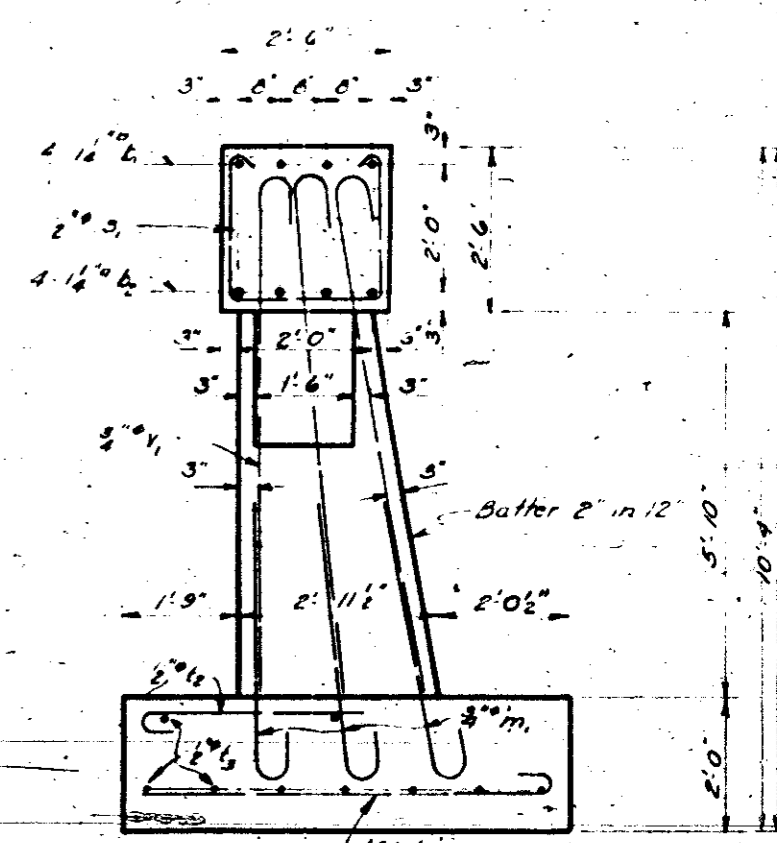
PLAN OF CAP



SECTION B-B

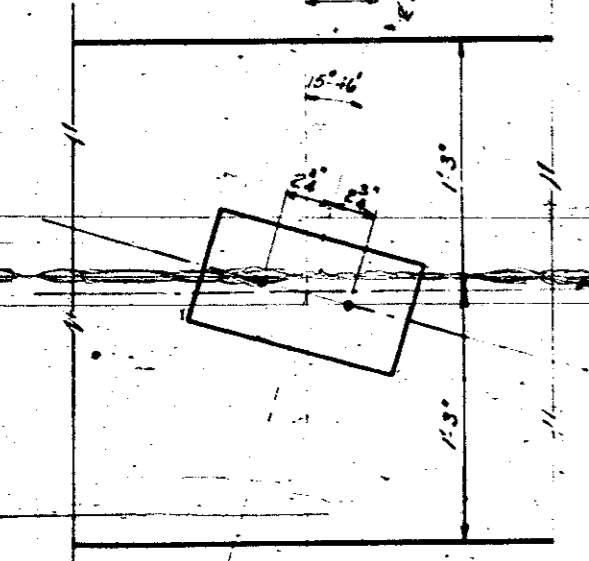


ELEVATION

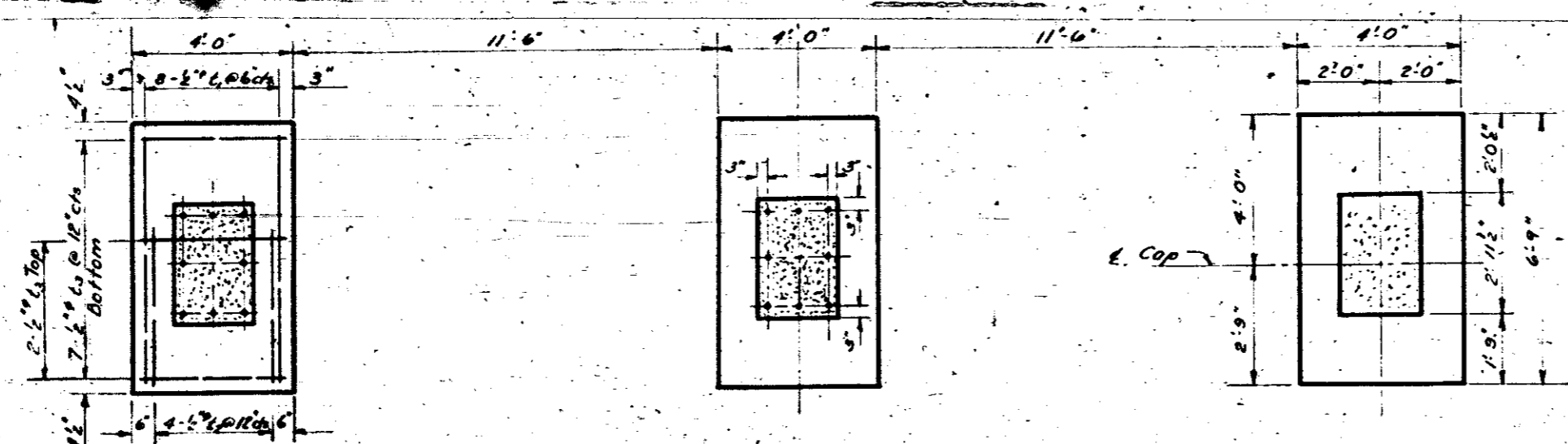


SECTION A-A

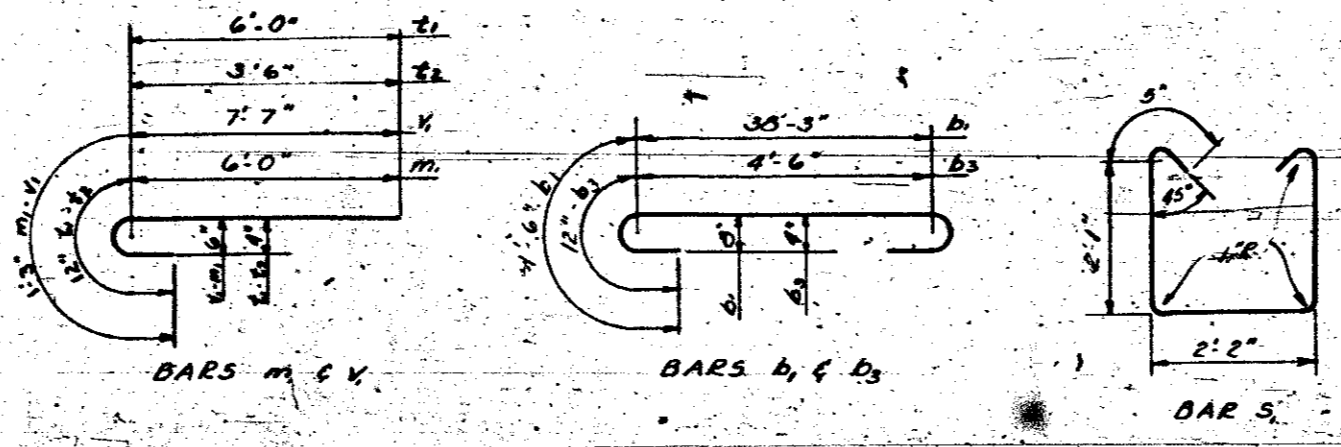
Note: For Design Data and General Note see sh. 3-1.



ANCHOR BOLT DETAIL



PLAN OF FOOTINGS



BILL OF MATERIAL				
FOR ONE END BENT				
Bar No	SIZE	LENGTH	WEIGHT	
b1	4"	14'-0"	47.5	877
b2	4"	38'-9"	123	824
b3	3"	6'-6"	122	
h1	2"	4'-10"	26	
h2	3"	9'-6"	18	
h3	3"	15'-3"	123	
h4	3"	4'-10"	26	
h5	3"	8'-10"	18	
h6	3"	14'-9"	112	
m	2"	7'-3"	26	
c	2"	7'-2"	115	
v	2"	7'-0"	112	
b1	2"	4'-6"	36	
b2	2"	3'-8"	66	
s	2"	8'-10"	318	
v1	2"	4'-11"	13	
v2	2"	5'-8"	18	
v3	2"	6'-2"	66	
Reinforcing Steel - Lbs.			3,183	
Class "A" Concrete - Cu. Yds.			21.3	

PROJECT NO. 8233  
CLEVELAND COUNTY  
STATION: 103 + 54.42

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION

END BENT NO. 1 & 2

SEPTEMBER 1949

SUBMITTED BY: J.P. [Signature]  
APPROVED BY: [Signature]

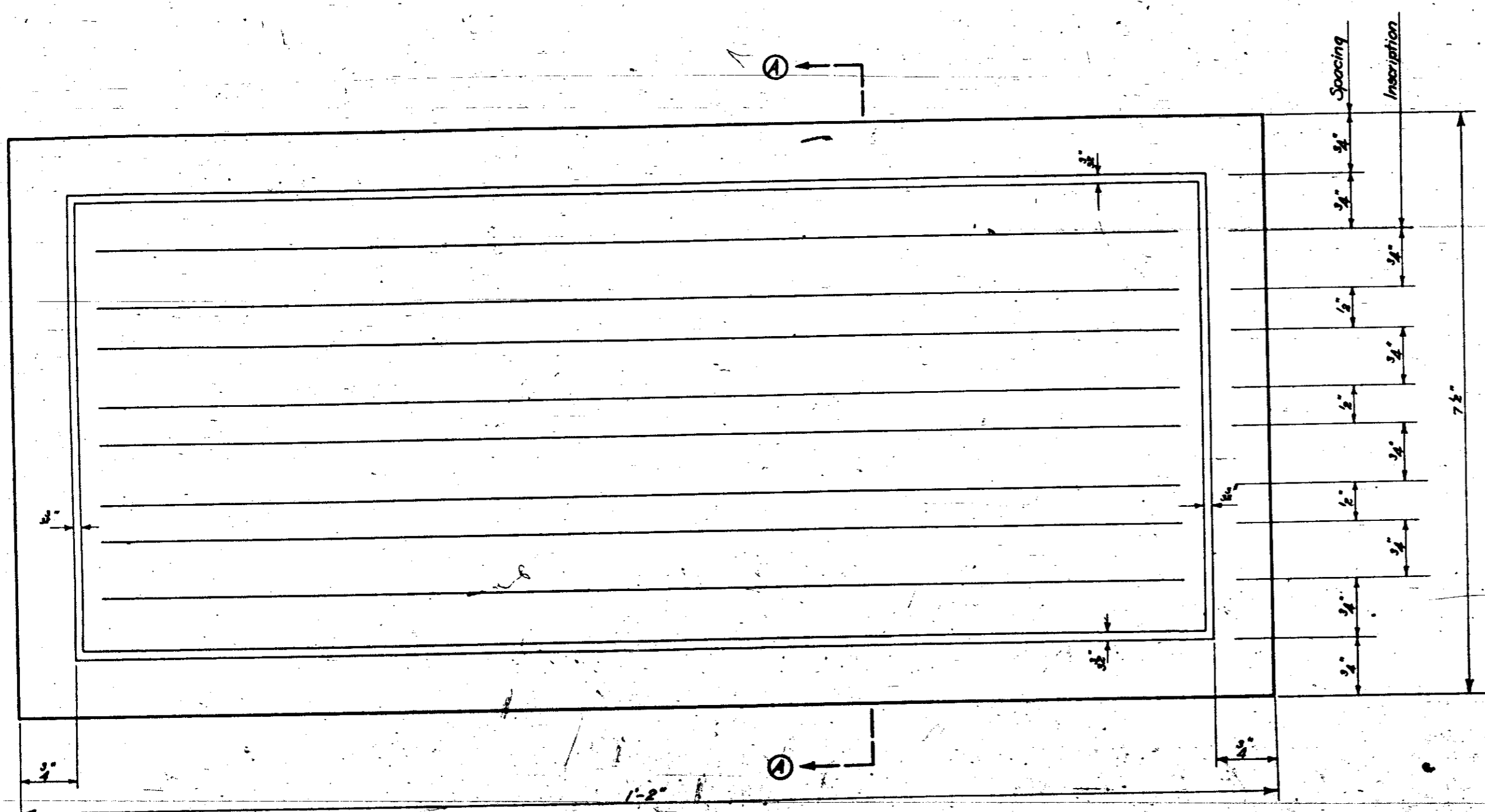
SPECIAL

DESIGNED BY: [Signature] DATE: 12-15-48  
CHECKED BY: [Signature] DATE: 1-1-49  
DRAWN BY: [Signature] DATE: 1-1-49  
IN CHARGE: [Signature] DATE: 1-1-49



FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N. C.	8233	545	65

F.A. Proj. U-180(4)



**ELEVATION**



**SECTION AA**

Station 102+46.46  
Station 103+54.42

**CLEVELAND COUNTY  
STATE PROJECT 8233  
FEDERAL AID  
1950**

DETAIL SHOWING CORRECT WORDING

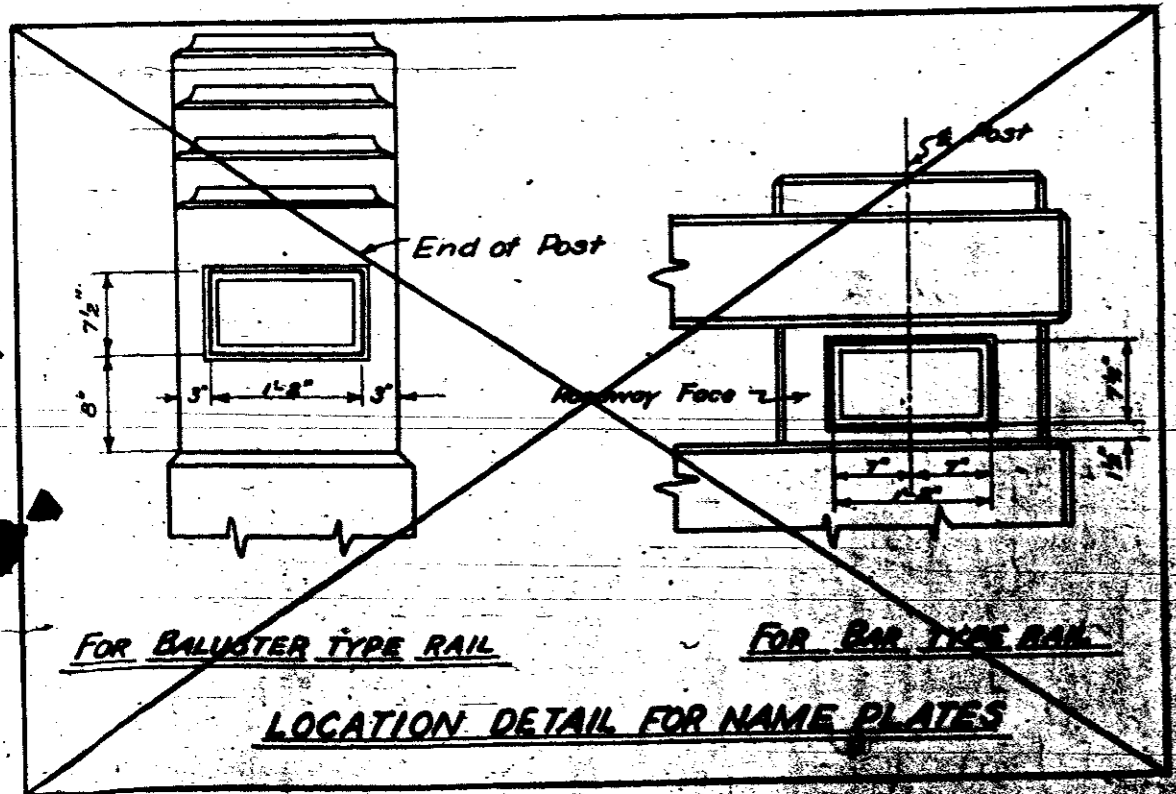
Two name plates are required for each bridge; one on each right hand end post approaching the bridge. See location Detail.

The name plates are to be made of granite. Granite shall be light gray, fine or medium grained, sound in quality and free from defects that would mar its appearance. Exposed face of plates to have a fine rubbed finish.

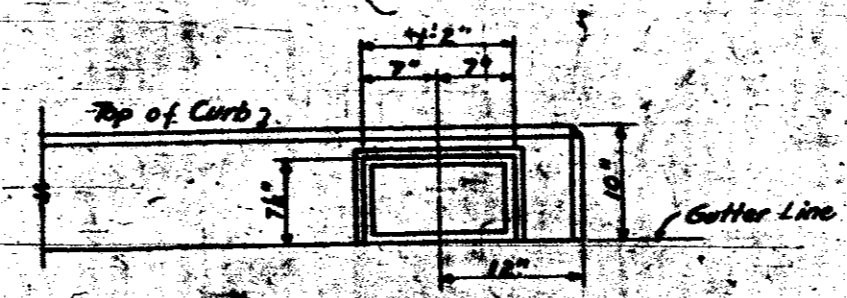
Lettering shall be sandblast sunk, 1/4" high, vertical, Modern Roman style. The wording shall be as shown in the "Detail Showing the Correct Wording."

The entire cost of the name plates, complete in place, shall be included in the contract price bid for Class "A" concrete.

**PROJECT NO. 8233  
CLEVELAND COUNTY  
STATION: 102+46.46  
103+54.42**



LOCATION DETAIL FOR NAME PLATES



LOCATION DETAIL FOR NAME PLATE

SPECIAL	APPROVED BY: [Signature]	DATE: May 1950
STANDARD	DESIGNED BY: [Signature]	DATE: May 1950

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION

**STANDARD  
NAME PLATE  
FOR  
CONCRETE BRIDGES  
MAY 1950**

[Signatures]