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STATE OF NORTH CAROLINA
 STATE HIGHWAY AND PUBLIC WORKS COMMISSION
 PLAN AND PROFILE OF PROPOSED
 STATE HIGHWAY
CLEVELAND COUNTY

FED. ROAD DIST. NO.	STATE	STATE PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8241	N.C.	8241		12	12
FA Proj. 187-A(2)					
FA Proj. 187-E(1)					

SHIPPING POINT
 SHELBY N.C.

Proposed Bridge and Approaches over First
 Broad River 1/2 Mile west of Shelby N.C. on
 U.S. Route 74

SCALES
 PLAN 1" = 50'
 PROFILE 1" = 50' HOR.
 PROFILE 1" = 5' VER

CONVENTIONAL SIGNS

County Line	_____
Township Line	_____
City or Town Line	_____
Right of Way Line	_____
Survey Line	_____
Property Line	_____
Wire Fence	_____
Board Fence	_____
Present Traveled Road	_____
Railroad	_____
Grade Elevation	DATUM 0'
Ground Elevation	DATUM 2'
Pipe Culvert	_____
Box Culvert	_____
Woods	3/3/3/3/3/
Telephone or Telegraph Pole	_____
Tower Pole and Line	_____
Power Pole	_____

8241

Sta 473+62.6 Begin State Proj. No 8241
 Sta 473+62.6 Begin FA Proj. No 187-A(2)
 Sta 473+62.6 of old State Proj. No 825
 Sta 473+62.6 of FA Proj. No 187-A

U.S. #74 - FA Road #2
 Exist. 18' Conc. Pavt.
 To Rutherford 27 Mi.

Sta 474+62.6 Begin FA Proj. No 187-E(1)

Sta 477+96.6 End FA Proj. No 187-E(1)

Sta 478+96.6 End State Proj. No 8241
 Sta 478+96.6 End FA Proj. No 187-A(2)
 Sta 478+96.6 of old State Proj. No 825
 Sta 478+96.6 of FA Proj. No 187-A

U.S. #74 - FA Road #2
 Exist. 18' Conc. Pavt.
 To Shelby 1/2 Mi.

Sta 481+00.6 End State Proj. 8240
 Sta 481+00.6 End U.S. Public Works Proj. No
 N.P.W. 187C

LAYOUT
 Scale 1" = 50'

LENGTH ROADWAY - FA PROJECT NO 187-A(2) = 0.038 MI.
 LENGTH STRUCTURE - FA PROJECT NO 187-E(1) = 0.063 MI.
 TOTAL LENGTH STATE PROJECT = 0.101 MI.

Prepared in Office of
 STATE HIGHWAY AND PUBLIC WORKS COMMISSION
 RALEIGH, N. C.

Surveyed by W.E. Bolch
 Drawn by H.O. Walker
 Date June 27 1938

1935
 State Standard Specifications
 Approved by Bureau Control

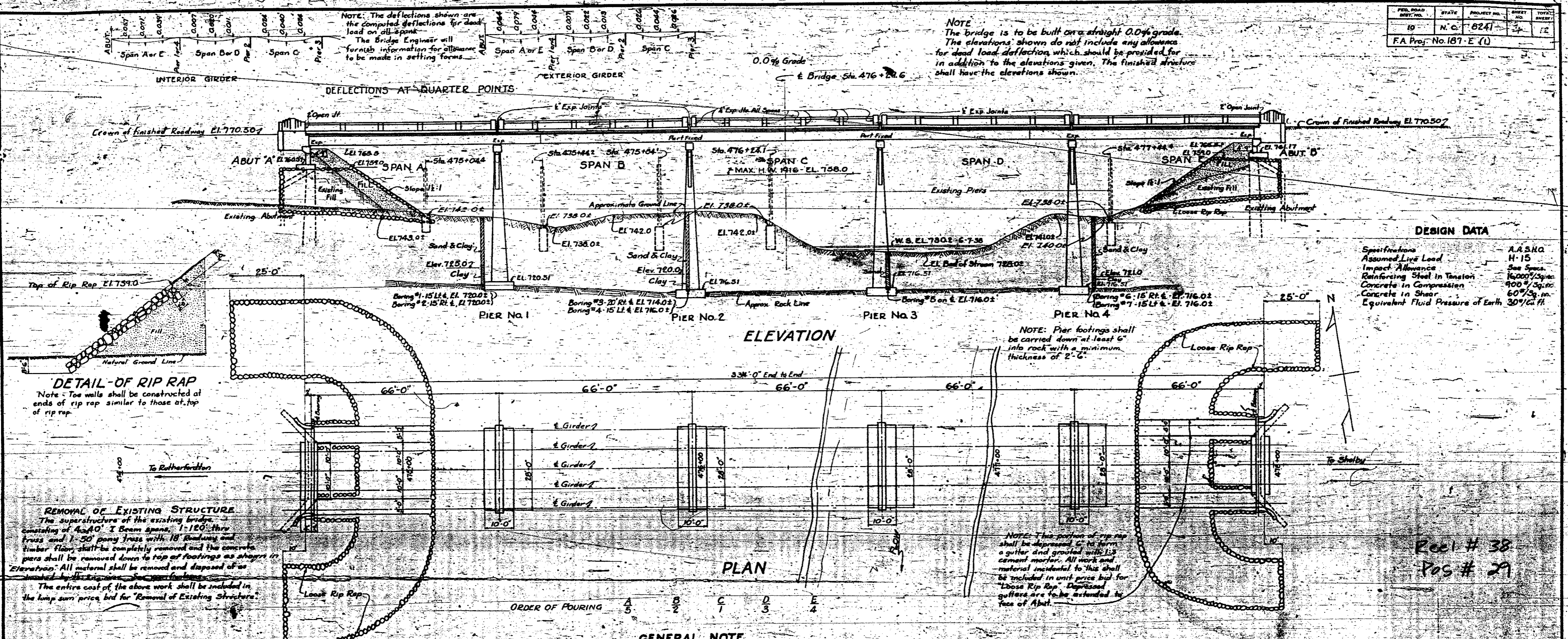
Note: Right of Way on this Project is 100' Wide

APPROVED: *W. S. ...*
 STATE HIGHWAY ENGINEER
 RECOMMENDED FOR APPROVAL: _____
 DIST. ENG. - BUREAU OF PUBLIC ROADS
 RECOMMENDED FOR APPROVAL: _____
 CHIEF ENG. - BUREAU OF PUBLIC ROADS
 APPROVED: _____
 CHIEF OF BUREAU, BUREAU OF PUBLIC ROADS

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	N.C.	8241	34	12
FA Proj. No. 187-E (1)				

NOTE: The deflections shown are the computed deflections for dead load on all spans. The Bridge Engineer will furnish information for allowances to be made in setting forms.

NOTE: The bridge is to be built on a straight 0.0% grade. The elevations shown do not include any allowances for dead load deflection, which should 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.
Assumed Live Load	H-15
Impact Allowance	See Specs.
Reinforcing Steel in Tension	6,000#/Sq. Ft.
Concrete in Compression	900#/Sq. Ft.
Concrete in Shear	60#/Sq. Ft.
Equivalent Fluid Pressure of Earth	30%/Cu. Ft.

DETAIL OF RIP RAP
Note: Toe walls shall be constructed at ends of rip rap similar to those at top of rip rap.

REMOVAL OF EXISTING STRUCTURE
The superstructure of the existing bridge, consisting of 4x40' I Beam spans, 1x120' truss and 1x50' pony truss with 18' roadway and timber floor, shall be completely removed and the concrete piers shall be removed down to top of footings as shown in Elevation. All material shall be removed and disposed of as directed by the Engineer.
The entire cost of the above work shall be included in the lump sum price bid for "Removal of Existing Structure."

NOTE: Pier footings shall be carried down at least 6' into rock with a minimum thickness of 2'-6".

NOTE: This portion of rip rap shall be depressed 6" to form a gutter and grouted with 1:3 cement mortar. All work and material incidental to this shall be included in unit price bid for "Loose Rip Rap." Depressed gutters are to be extended to face of Abut.

GENERAL NOTE

CONCRETE:
Class A concrete shall be used throughout. Maximum size of coarse aggregate to be 1 1/2" except in handrails. Maximum size of coarse aggregate in handrails to be 3/4". Each segment of slab and curbs to be poured in one continuous operation, allowing no time for initial set to take place between them. See order of pouring. No construction joints other than shown on plans will be permitted. All concrete except in handrails shall be compacted by Mechanical Vibration. See special Specifications in Proposal.

MATERIAL AND WORKMANSHIP:
All material and workmanship as per Specifications of the North Carolina State Highway and Public Works Commission.

CHAMFERS:
All exposed corners of concrete to be chamfered 1" except on expansion joints and handrails above top of curbs. Handrail corners to be chamfered 3/4" expansion joints and baluster corners to be chamfered 3/4".

STRUCTURAL STEEL:
Structural Steel shall be given one shop coat and one field coat of red lead and lastly one field coat of aluminum paint (second field coat). See specifications. Detail drawings for structural steel shall be submitted for approval. No unchecked drawings will be accepted. All field connections are to be riveted unless otherwise noted. All rivets shall be 3/4". General reaming will be required. See Specifications.

REINFORCING STEEL:
All reinforcing steel shall be deformed bars. All dimensions relative to reinforcement are to centers of bars. No splices of bars other than those shown on plans will be permitted. All reinforcing steel shall be securely held in correct position.

JOINT MATERIAL:
Expansion joint material may be rubber compound or cork as called for in the specifications.

NAME PLATES:
Two name plates shall be placed on the bridge, for location see Abutment details.

FOUNDATION DATA:
The excavation and foundation data and all elevations of ground line given are believed to be correct and are furnished for the convenience of bidders, but the State Highway and Public Works Commission assumes no responsibility for nor guarantees as correct any of the information given. See Specifications.

TEMPORARY CROSSING:
A temporary crossing shall be provided at Sta. 476+29.6. See specifications and special provisions.

BILL OF MATERIALS

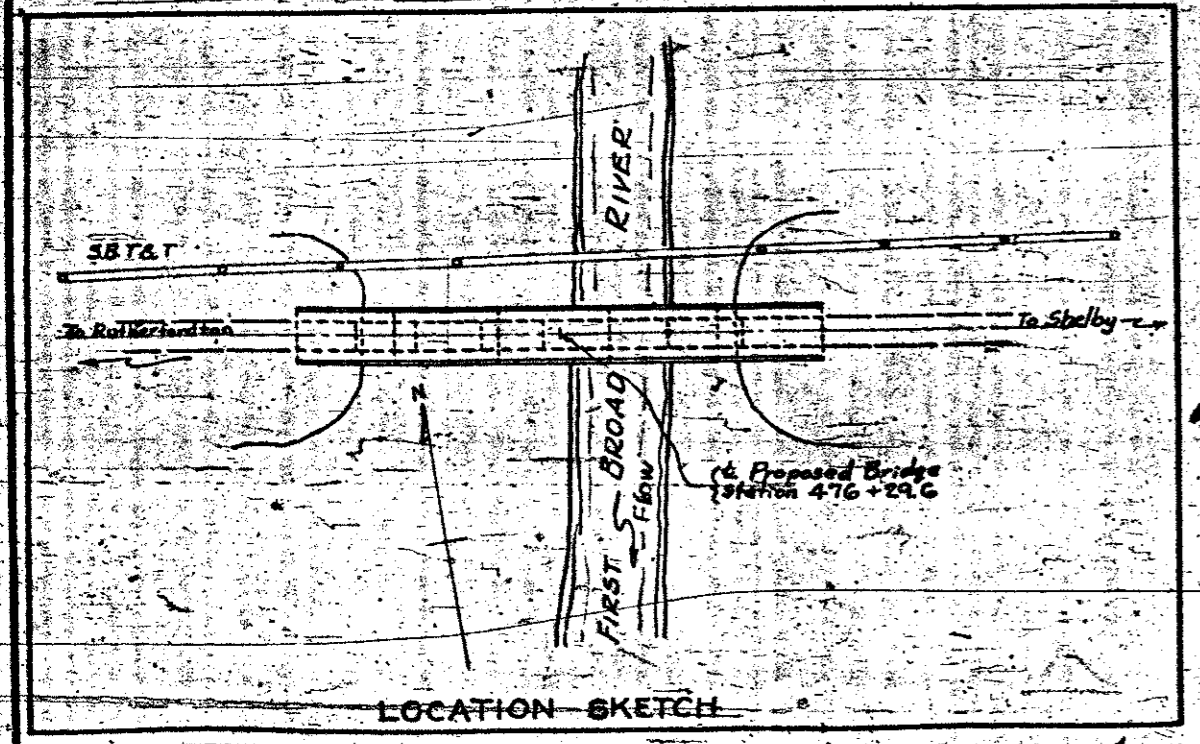
Item	Class A Conc. Cu. Yds.	Reinforcing Steel Lbs.	Approximate Structural Steel Lbs.	Removal of Old Bridge	Loose Rip Rap	Temporary Crossing	Temporary Crossing
Superstructure	323.3	83,180	288,500				
Abut. A	24.7	2,844					
Pier #1	112.7	12,149					
3	123.2	12,845					
4	123.2	12,845					
Abut. B	28.8	2,839					
Total	662.1	137,521	288,500			14.50	14.50

* Includes 6075 lbs. of galvanized steel to be paid for as reinforcing steel.

DIVISION OF CLASS A CONCRETE
Cu. Yds. Maximum Size of Coarse Aggregate: 3" 34.7
" 1 1/2" 827.5
Cu. Yds. Total 862.2

PROJECT NO. 8241
CLEVELAND COUNTY
STATION 476+29.6
79

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION
GENERAL DRAWING
FOR BRIDGE OVER
FIRST BROAD RIVER
JUNE, 1938



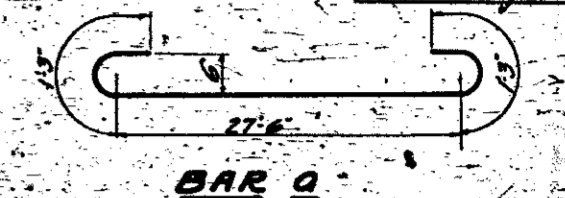
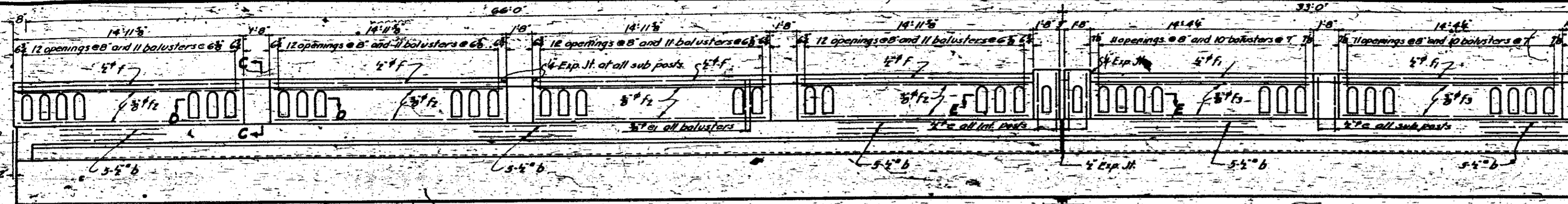
SPECIAL

DESIGNED BY: E. W. J.	DATE: June 1938
DRAWN BY: [Signature]	DATE: []
CHECKED BY: H. W. Shelton	DATE: []

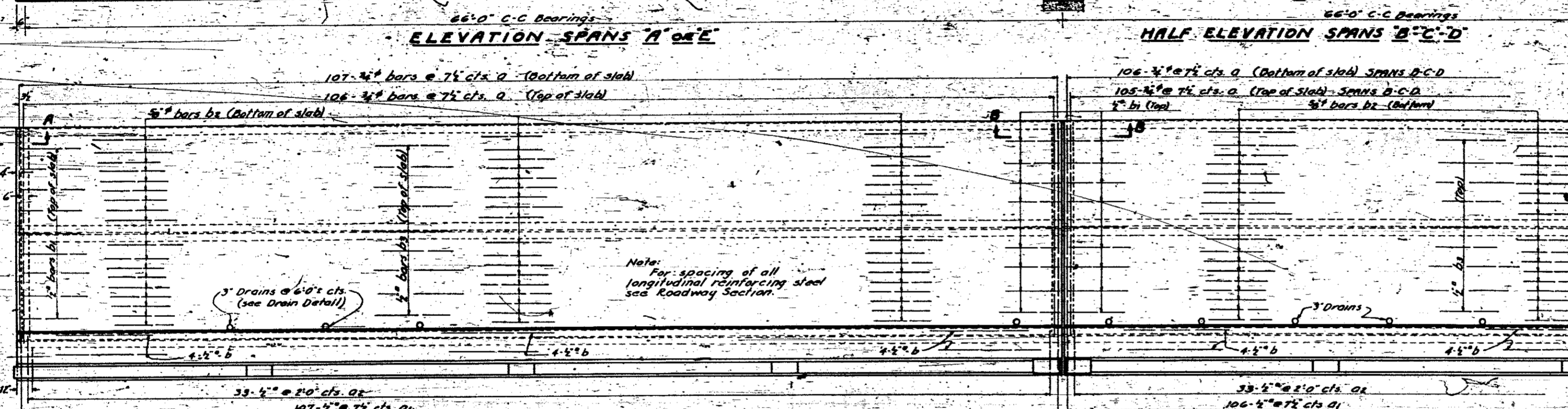
B.M. Nail in Roof 20' Paper, 32' R.R. Sta. 480+98 - El. 780.18 Revised for removal of existing piers to top of footings 7-14-38 by E.A.T. & by A.T.P.

PLAN NO.

PER. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	N. C.	8241	5	10
F.A. Proj. No. 187E(1)				



BARS b₁-c₁



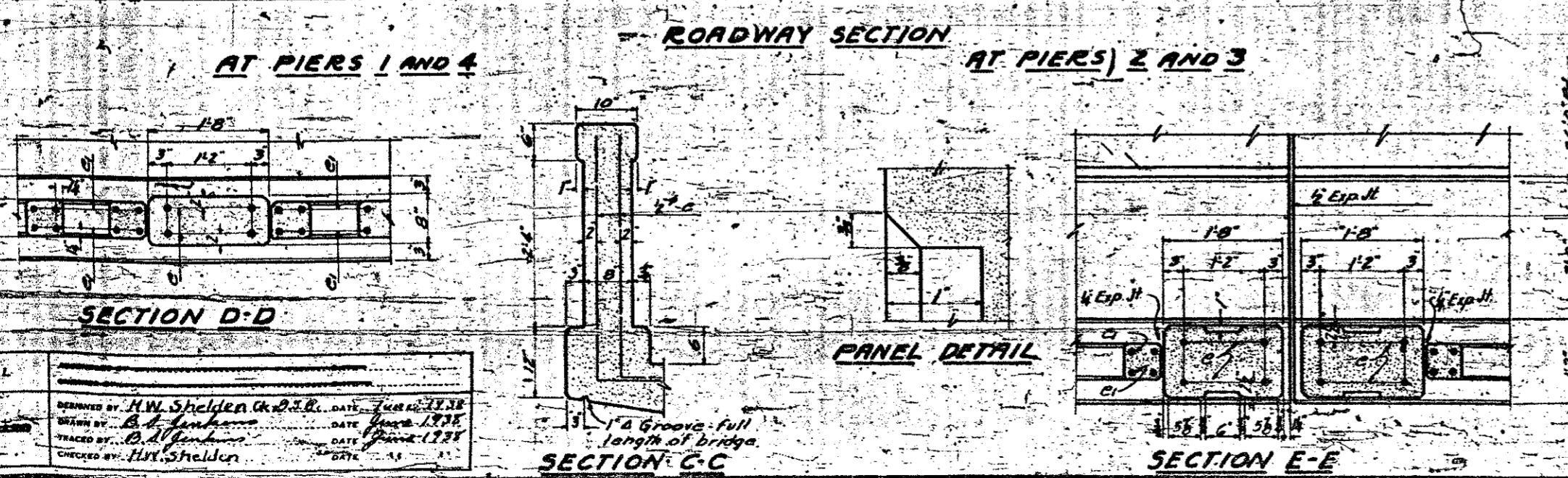
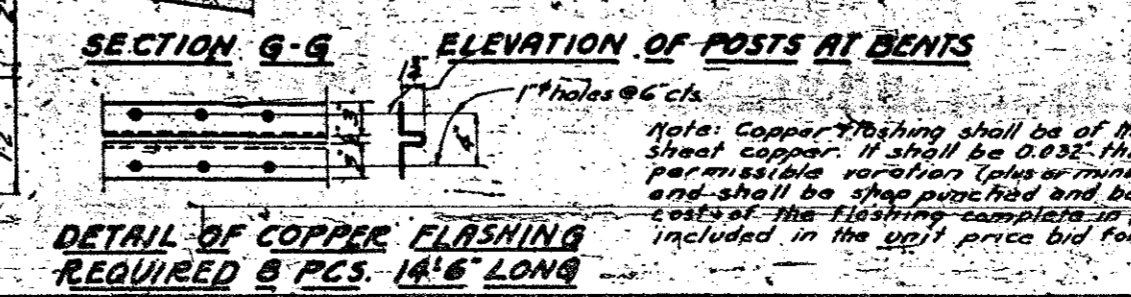
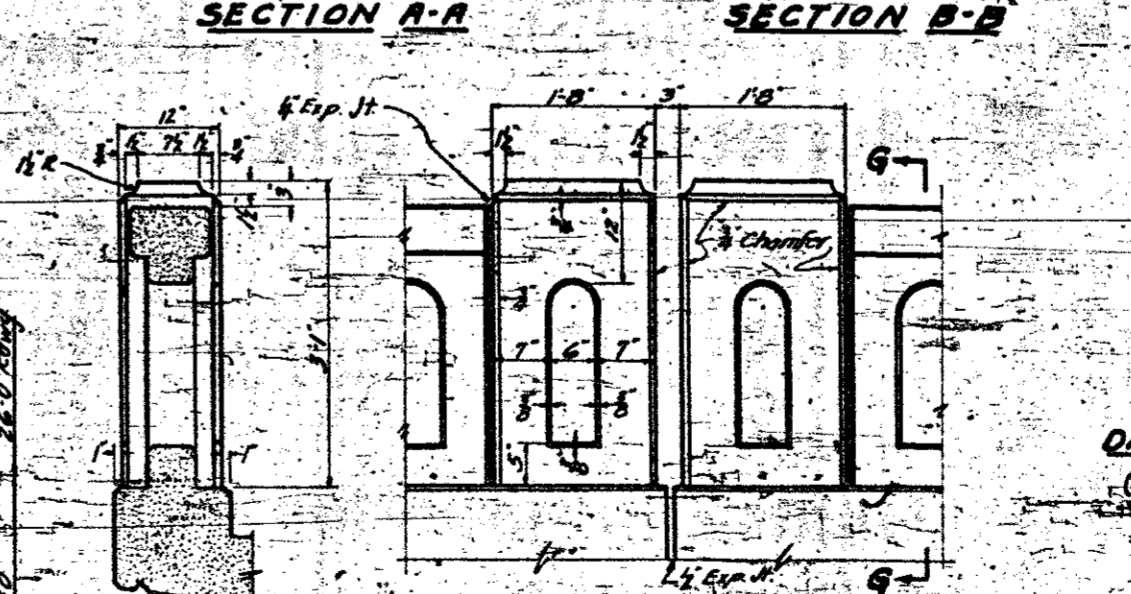
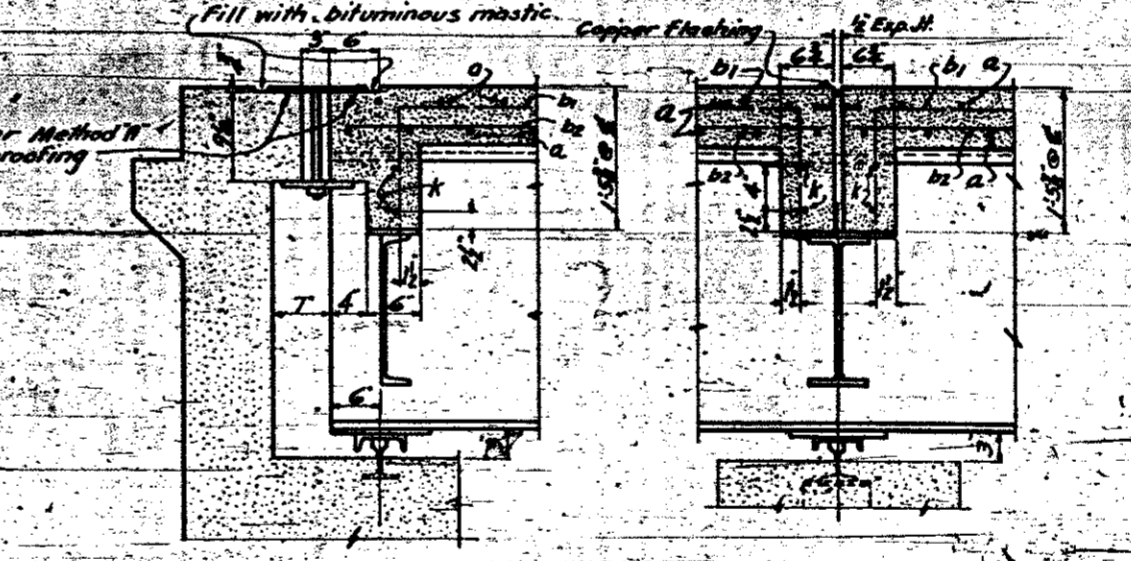
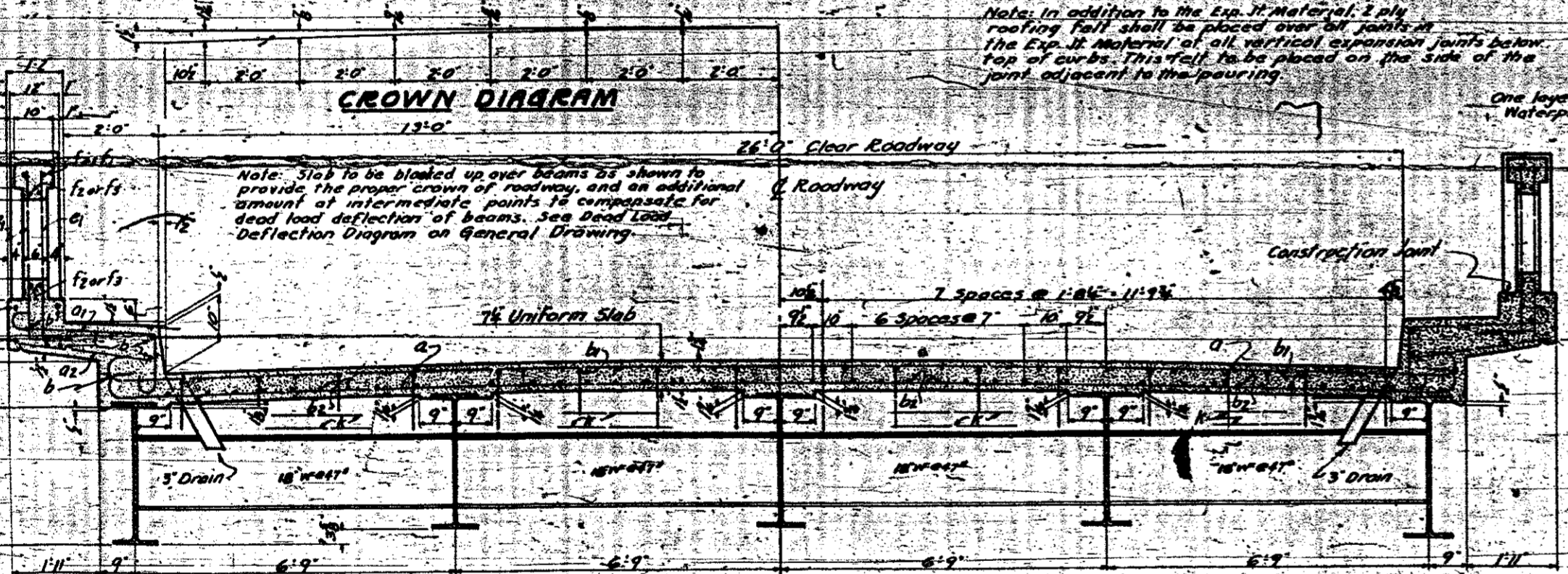
BILL OF MATERIAL FIVE SPANS				
Bar	No.	Size	Length	Weight
Q	1034	#7	30'-0"	477.00
Q1	1064	#7	5'-9"	5.20
Q2	330	#7	3'-0"	8.42
b	270	#7	23'-3"	5.33
b1	160	#7	23'-9"	3.28
b2	540	#7	22'-6"	13.23
b3	80	#7	23'-3"	1.52
c	184	#7	4'-7"	5.68
c1	1984	#7	4'-6"	33.37
f	32	#7	14'-9"	3.85
f1	48	#7	14'-2"	4.36
f2	64	#7	14'-9"	3.85
f3	96	#7	14'-2"	5.11
k	80	#7	6'-7"	4.47
Reinforcing Steel Lbs.				83,180
Class A Concrete Cu.Yds.				323.38

DIVISION OF CLASS "A" CONCRETE
 Maximum Size Coarse Aggregate 1/2 Cu.Yds. 27.9
 Maximum Size Course Aggregate 1/4 Cu.Yds. 27.9
 Total Class "A" Concrete Cu.Yds. 323.38

PROJECT NO. 8241
 CLEVELAND COUNTY

STA. 476+29.6

Note: For Design Data and General Note see General Drawing.



3/25/34 W. G. S. Steel or C. I. Pipe Drawing. All sizes to be determined after cutting.

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 RALEIGH

**SUPERSTRUCTURE DETAILS
 FOR BRIDGE OVER
 FIRST BROAD RIVER
 JUNE 1938**

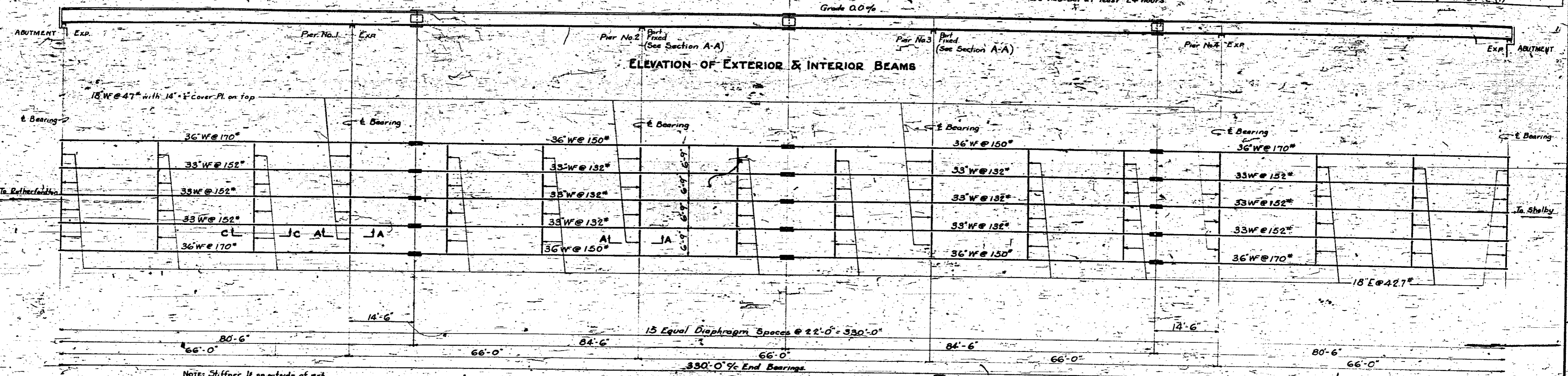
SUBMITTED BY: W. G. S. Steel or C. I. Pipe Drawing
 APPROVED BY: W. G. S. Steel or C. I. Pipe Drawing
 STATE HIGHWAY ENGINEER

SPECIAL
 DESIGNED BY: H. W. Sheldon, C.E.
 DRAWN BY: B. L. Lamb
 CHECKED BY: H. W. Sheldon
 DATE: June 1938
 DATE: June 1938
 DATE: June 1938

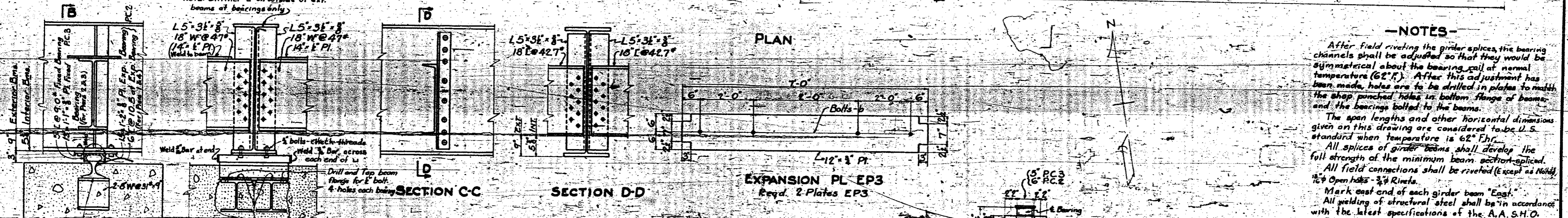
FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	N. C.	8241	12	12
F.A. Proj. No. 187-E (1)				

NOTE: The 1/2" tapped holes in rail bearing units are intended for use by the contractor in accurately suspending the rails from forms above the top of coping while placing concrete. Rads used for this purpose shall be removed, but not before the concrete has set at least 24 hours.

ELEVATION OF EXTERIOR & INTERIOR BEAMS



PLAN



NOTES

After field riveting the girder splices, the bearing channels shall be adjusted so that they would be symmetrical about the bearing rail at normal temperature (62°F). After this adjustment has been made, holes are to be drilled in plates to match the shop punched holes in bottom flange of beams, and the bearings bolted to the beams.

The span lengths and other horizontal dimensions given on this drawing are considered to be U.S. standard when temperature is 62°F.

All splices of girder beams shall develop the full strength of the minimum beam section spliced.

All field connections shall be riveted (except as noted).

1/4" Open holes - 3/4" Rivets.

Mark east end of each girder beam "East".

All welding of structural steel shall be in accordance with the latest specifications of the A.A.S.H.O. For Design Data and General Notes, see General Drawing.

PROJECT NO. 8241
CLEVELAND COUNTY
STATION 476+29.6

APPROXIMATE WEIGHT
Structural Steel = 288,500

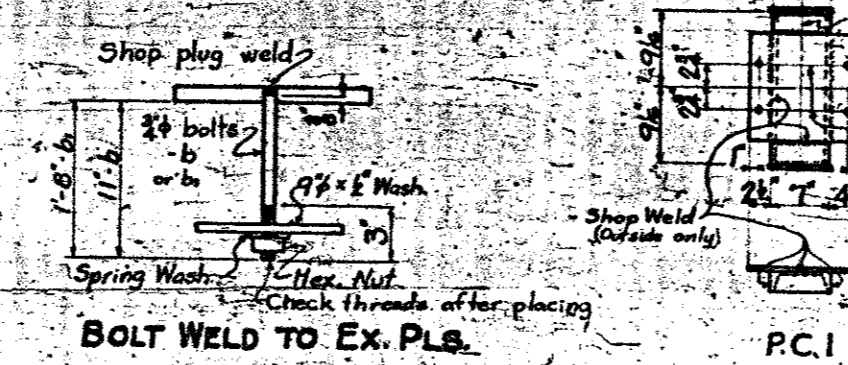
STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

STRUCTURAL STEEL
LAYOUT
FOR BRIDGE OVER
FIRST BROAD RIVER
JUNE, 1938

SUBMITTED BY *W. H. ...*
APPROVED BY *W. H. ...*
DATE *6-27-38*
STATE HIGHWAY ENGINEER

DESIGNED BY <i>H. W. ...</i>	DATE <i>JUNE, 1938</i>
DRAWN BY <i>E. ...</i>	DATE <i>JUNE, 1938</i>
CHECKED BY <i>H. W. ...</i>	DATE

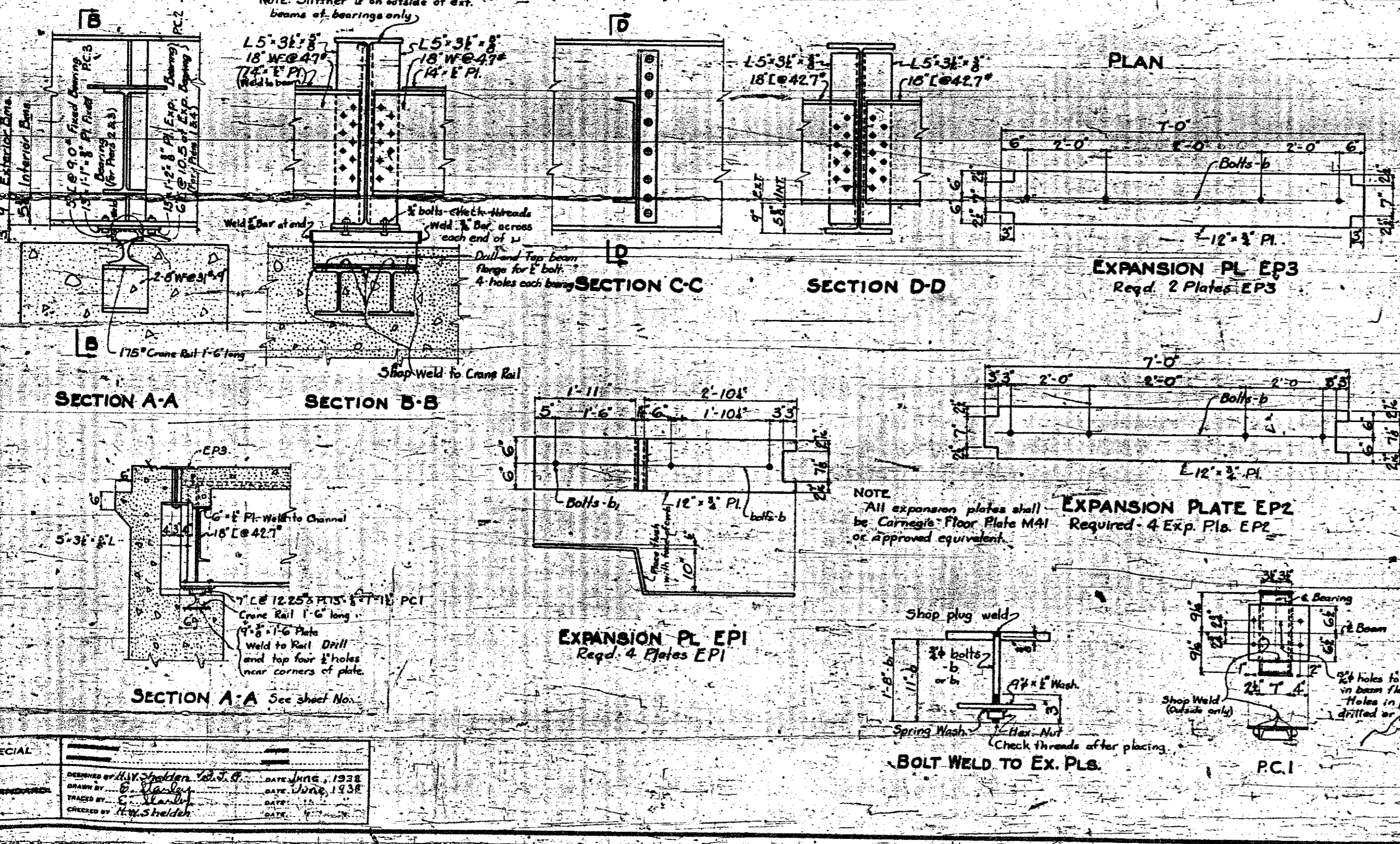
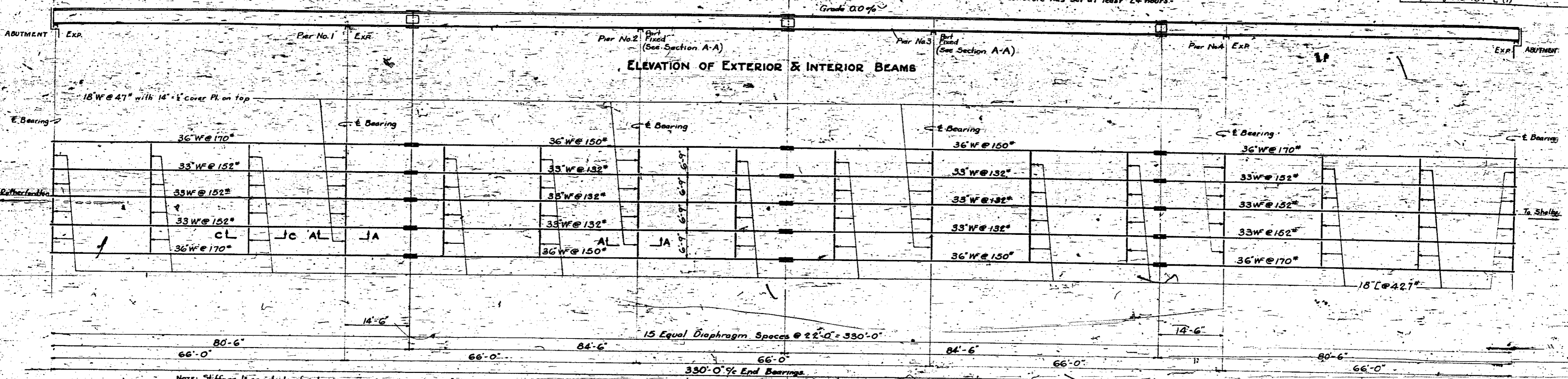
NOTE: All expansion plates shall be Carnegie Floor Plates MA1 or approved equivalent.



FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	N. C.	8241	12	12

F.A. Proj. No. 187-E (1)

NOTE: The tapped holes in rail bearing units are intended for use by the contractor in accurately suspending the rails from forms above the top of coping while placing concrete. Rods used for this purpose shall be removed, but not before the concrete has set at least 24 hours.



NOTES

After field riveting the girder splices, the bearing channels shall be adjusted so that they would be symmetrical about the bearing rail at normal temperature (62° F.). After this adjustment has been made, holes are to be drilled in plates to match the shop punched holes in bottom flange of beams, and the bearing bolts to the beams.

The span lengths and other horizontal dimensions given on this drawing are considered to be U. S. standard when temperature is 62° Fhr.

All splices of girder beams shall develop the full strength of the minimum beam section spliced.

All field connections shall be riveted (except as noted) 3/4" Open Holes - 3/4" Rivets.

Mark east end of each girder beam "East".

All welding of structural steel shall be in accordance with the latest specifications of the A. A. S. H. O. For Design Data and General Notes see General Drawing.

3/4" holes to be shop drilled in beam flange to match. Holes in plate to be field drilled or punched.

PC 2 and 3

PROJECT NO. 8241
CLEVELAND COUNTY
STATION 476+29.6
APPROXIMATE WEIGHT
 Structural Steel 288,500

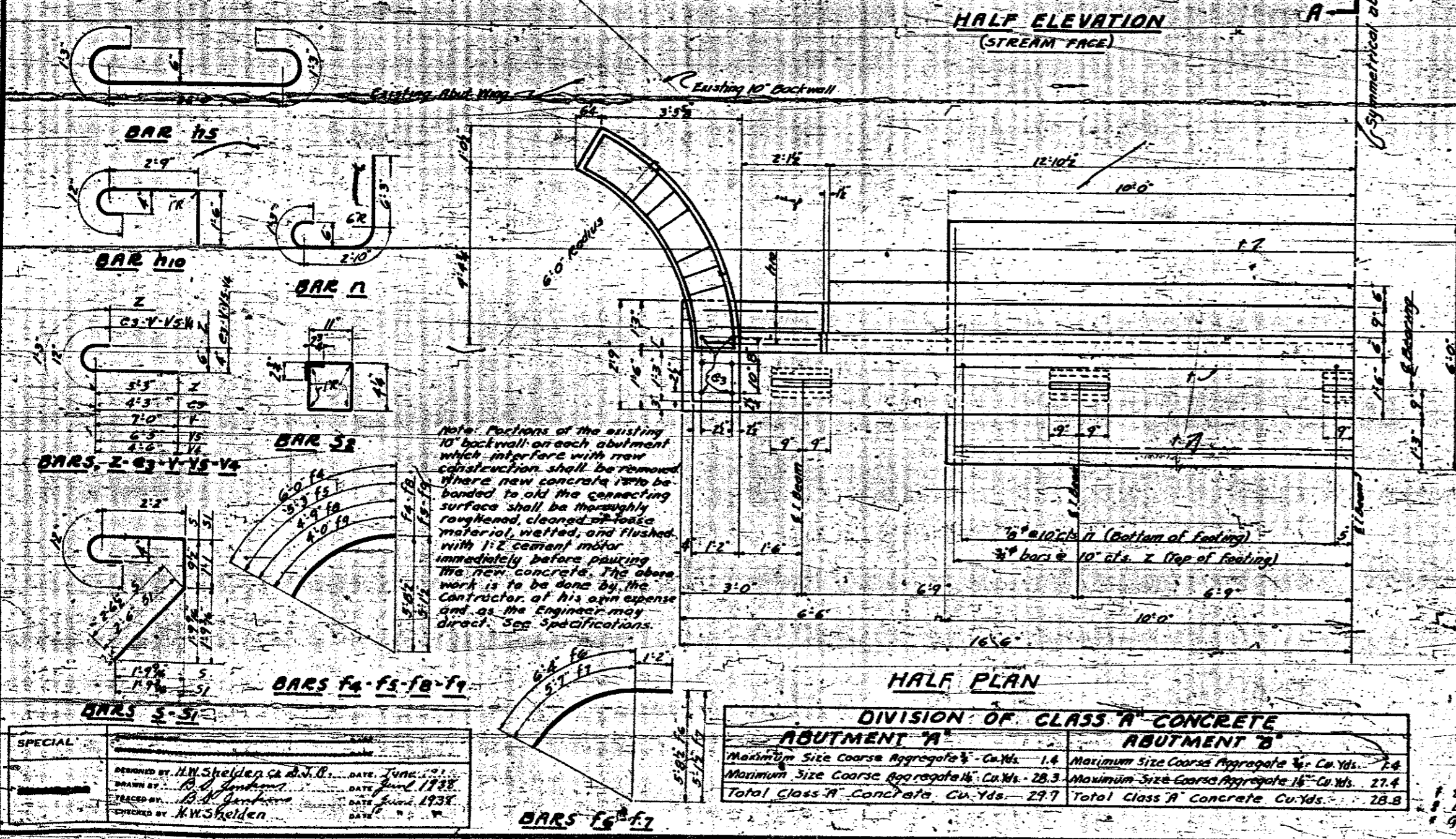
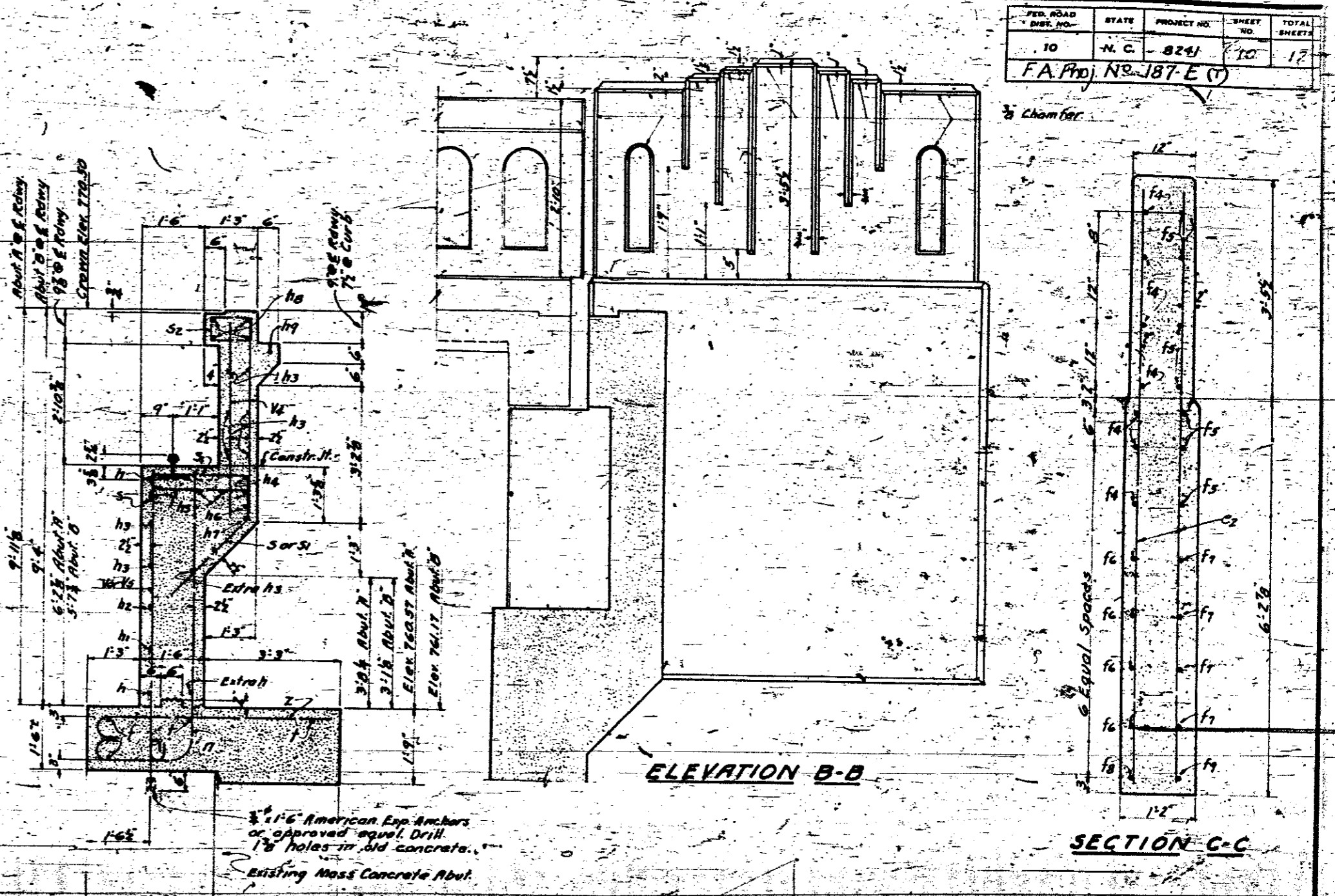
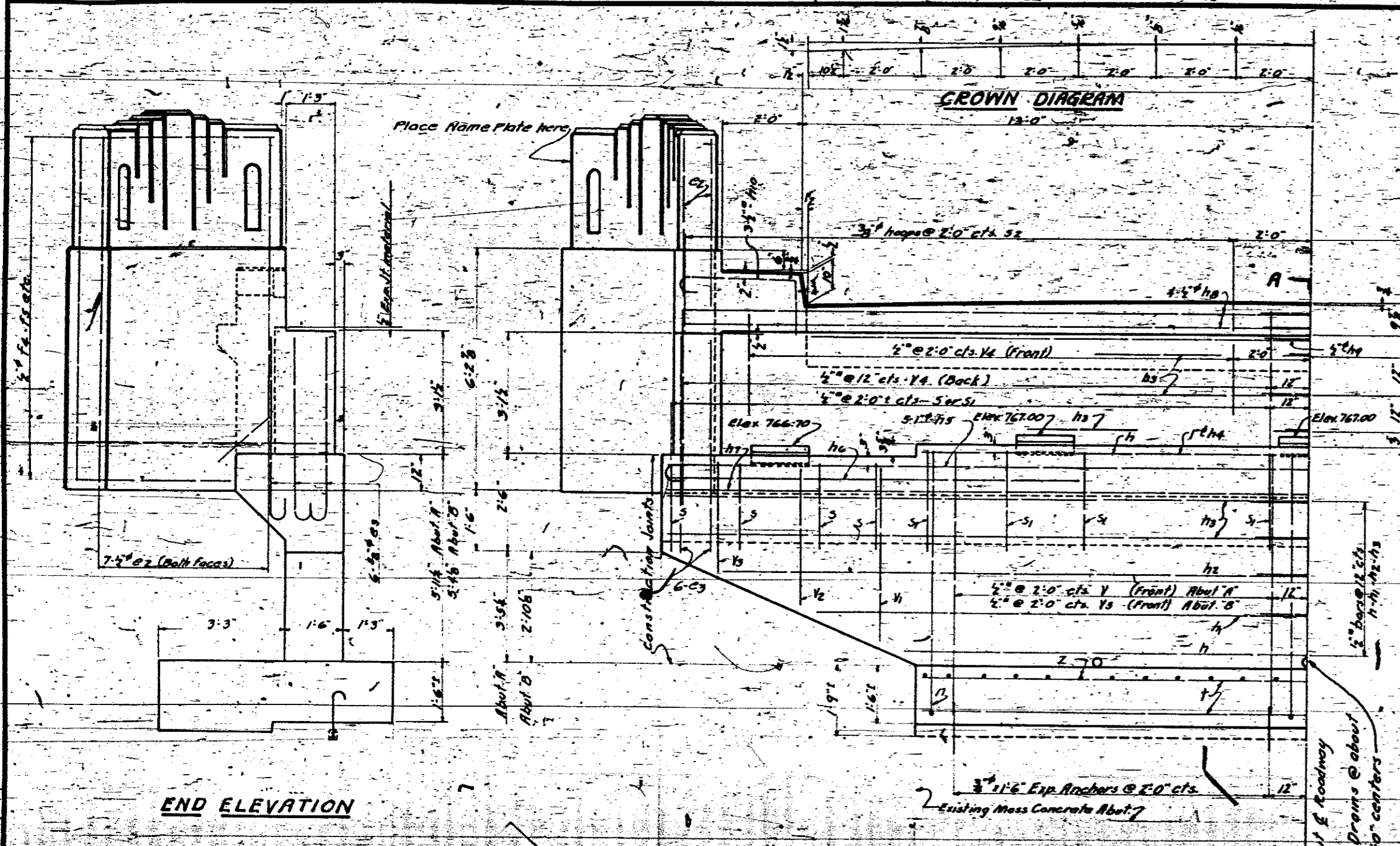
STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 DIVISION
**STRUCTURAL STEEL
 LAYOUT
 FOR BRIDGE OVER
 FIRST BROAD RIVER
 JUNE, 1938**

DESIGNED BY H. V. Spalding, C. E. DATE JUNE 1, 1938
 DRAWN BY G. W. Kelly DATE JUNE 1, 1938
 CHECKED BY G. W. Kelly DATE JUNE 1, 1938
 CHECKED BY H. W. Sheldon DATE

BRIDGE ENGINEER
 STATE HIGHWAY ENGINEER

SPECIAL

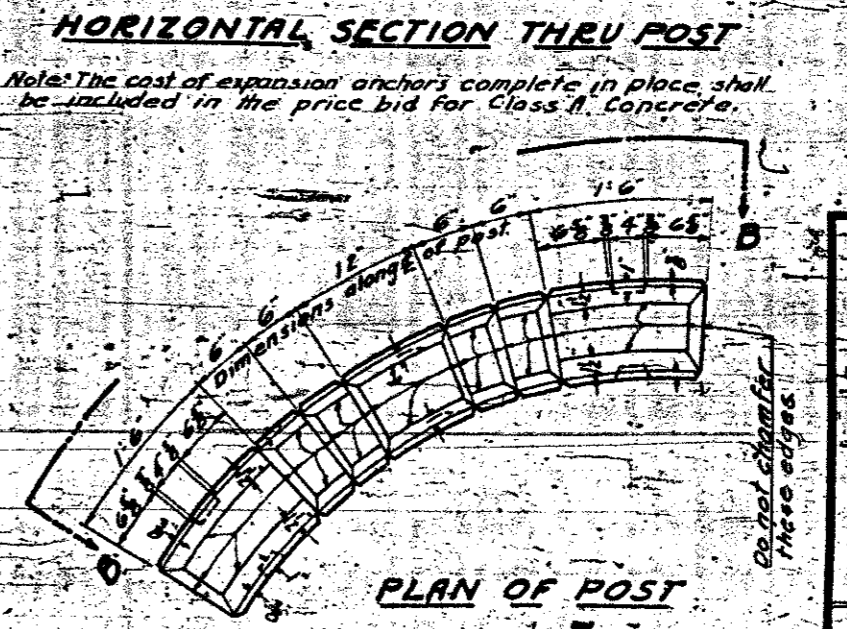
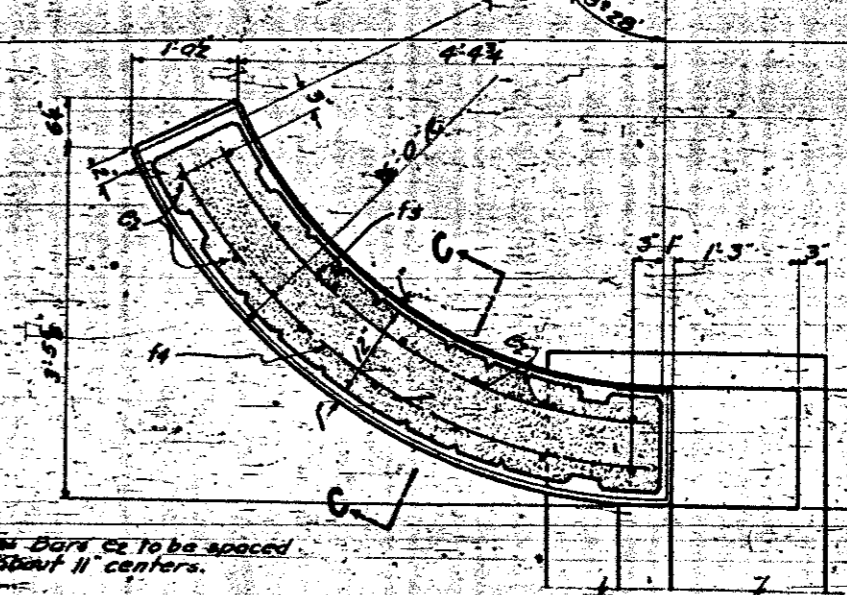
DESIGNED BY	H. V. Spalding, C. E.	DATE	JUNE 1, 1938
DRAWN BY	G. W. Kelly	DATE	JUNE 1, 1938
CHECKED BY	G. W. Kelly	DATE	JUNE 1, 1938
CHECKED BY	H. W. Sheldon	DATE	



SECTION A-A

BILL OF MATERIAL ONE ABUTMENT A OR B

Bar	No.	Size	Length	Weight
h	3	2"	11'-6"	50
h1	2	2"	13'-7"	23
h2	2	2"	16'-3"	28
h3	18	2"	11'-6"	268
h4	1	1"	11'-6"	52
h5	2	1"	31'-6"	461
h6	2	1"	10'-6"	56
h7	1	1"	32'-6"	87
h8	8	2"	17'-0"	91
h9	2	2"	13'-9"	18
h10	6	2"	5'-3"	27
n	24	5/8"	10'-4"	507
z	23	5/8"	6'-6"	244
z	4	2"	11'-6"	48
s	8	1/2"	6'-6"	44
sr	12	1/2"	6'-9"	67
sr	17	1/2"	3'-0"	17
v	10	1/2"	8'-0"	68
v	2	1/2"	4'-6"	8
v2	2	1/2"	3'-6"	6
v3	2	1/2"	2'-9"	5
w	48	1/2"	5'-6"	284
v5	10	1/2"	7'-5"	63
c2	28	1/2"	8'-10"	165
c3	12	1/2"	5'-3"	66
f4	14	1/2"	6'-0"	56
f5	18	1/2"	5'-3"	49
f6	8	1/2"	7'-6"	40
f7	8	1/2"	6'-6"	36
f8	2	1/2"	4'-9"	6
f9	2	1/2"	4'-0"	6
Reinforcing Steel Abut. A Lbs. 2844				
Reinforcing Steel Abut. B Lbs. 2839				
Class A Concrete Abut. A Cu.Yds. 297				
Class A Concrete Abut. B Cu.Yds. 28.8				
American Exp. Anchors or approved equal. 1/2" long. 40				



DIVISION OF CLASS A CONCRETE

ABUTMENT A	ABUTMENT B
Maximum Size Course Aggregate 3/4" Cu.Yds. 1.8	Maximum Size Course Aggregate 3/4" Cu.Yds. 2.4
Maximum Size Course Aggregate 1 1/2" Cu.Yds. 28.3	Maximum Size Course Aggregate 1 1/2" Cu.Yds. 27.4
Total Class A Concrete Cu.Yds. 297	Total Class A Concrete Cu.Yds. 28.8

PROJECT NO. 8241
CLEVELAND COUNTY
STA. 476+29.6

ABUTMENTS A AND B

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION

ABUTMENT DETAILS
FOR BRIDGE OVER
FIRST BROAD RIVER
JUNE 1938

DESIGNED BY: H.N. Sheldon, C.E.
 DRAWN BY: R.W. Jenkins
 CHECKED BY: R.W. Jenkins
 APPROVED BY: H.N. Sheldon

DATE: June 1938

APPROVED BY: [Signature]
 STATE HIGHWAY ENGINEER

SPECIAL

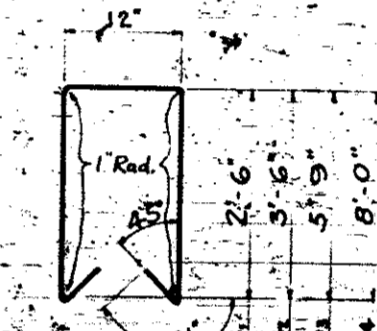
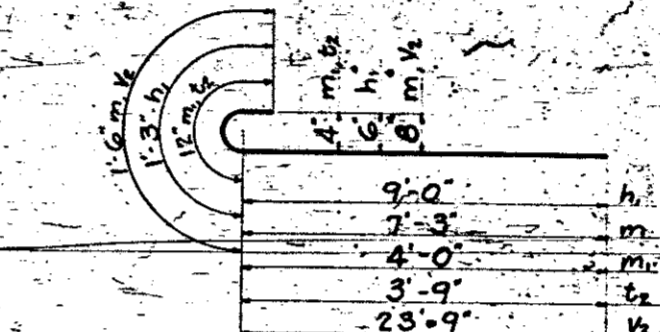
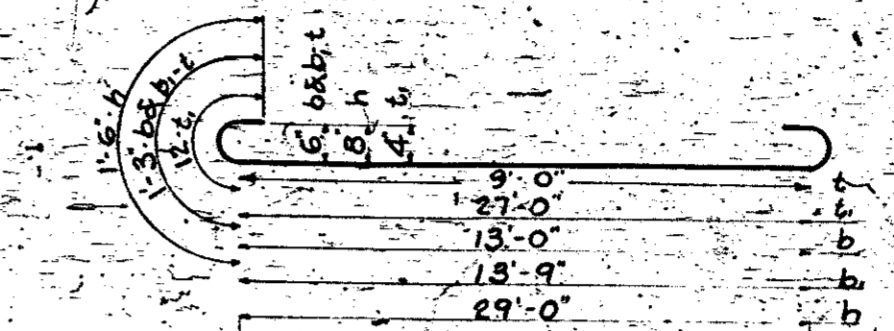
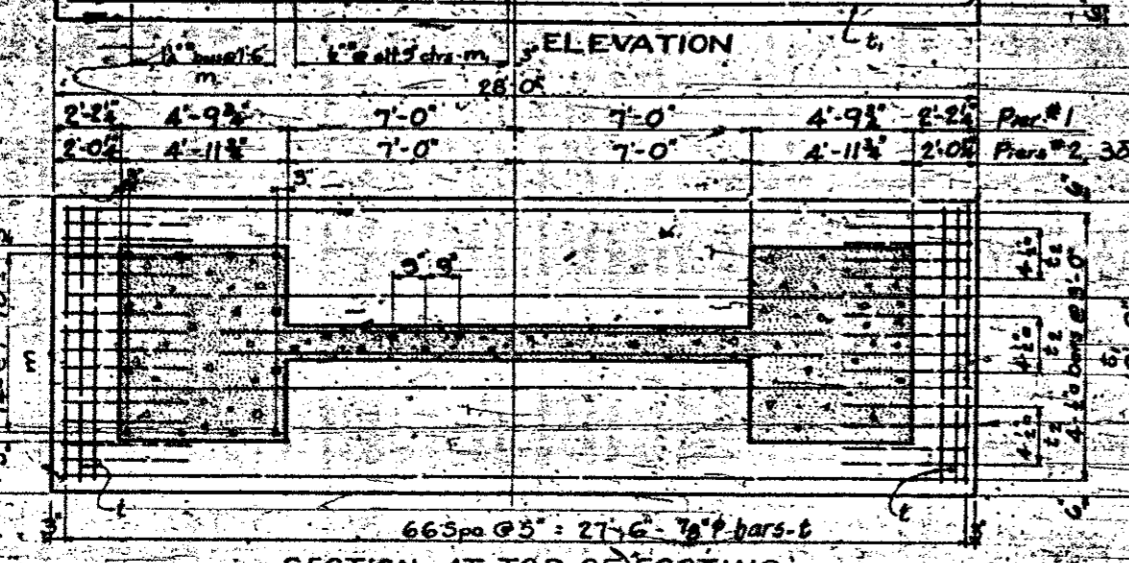
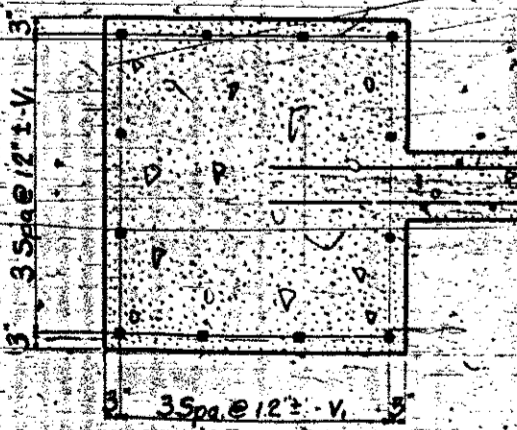
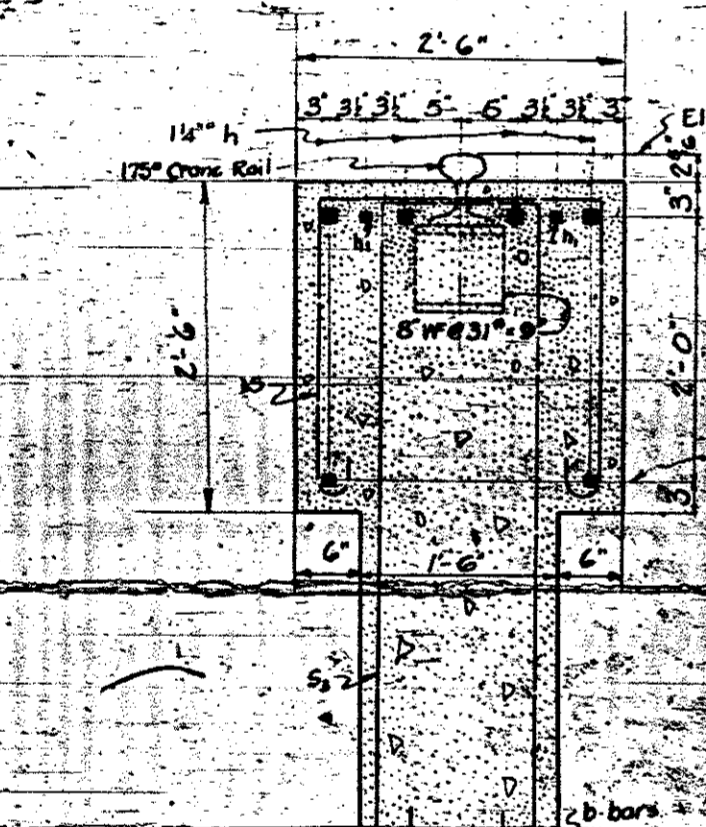
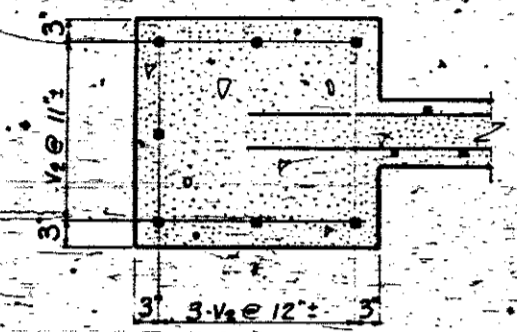
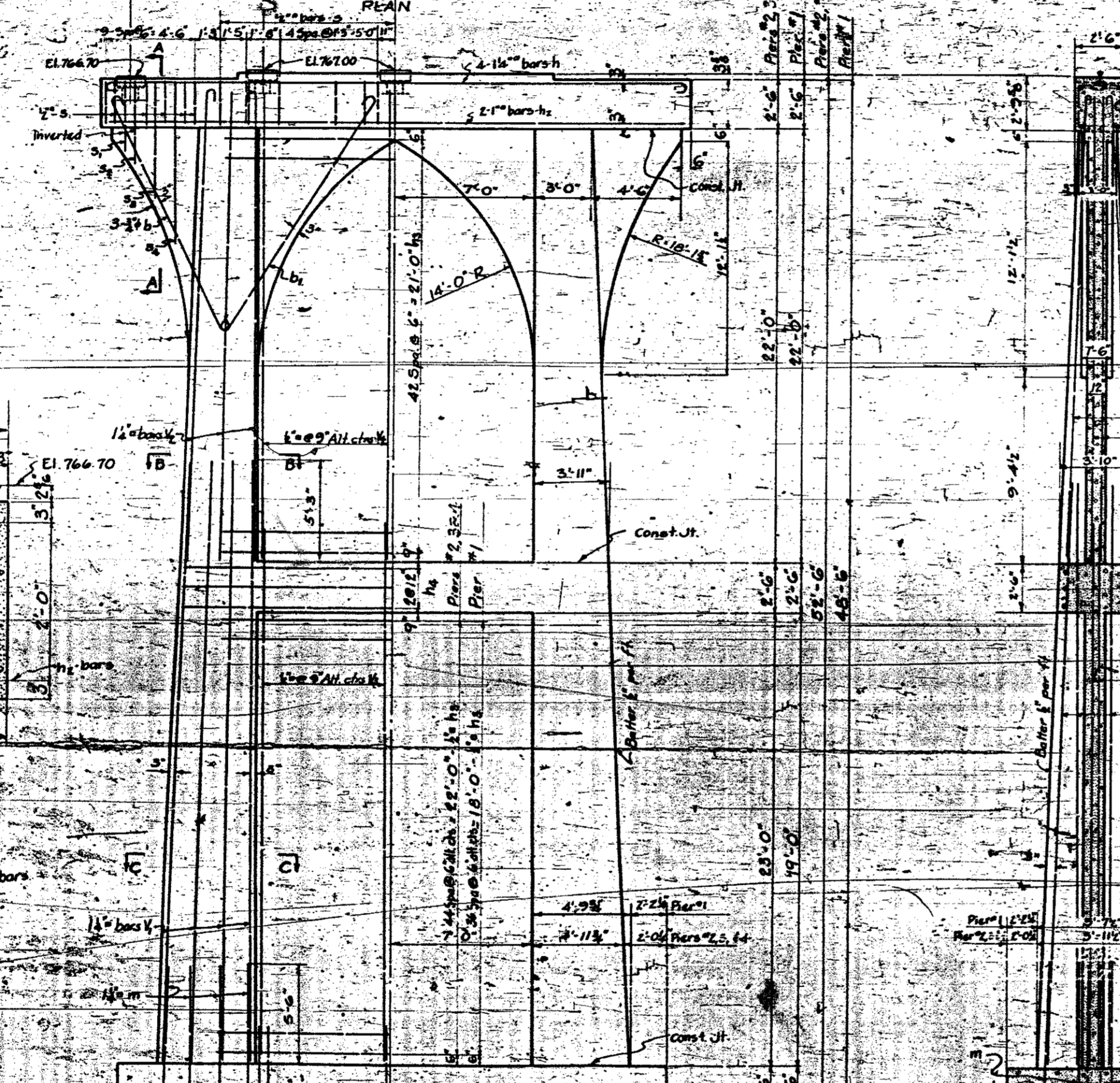
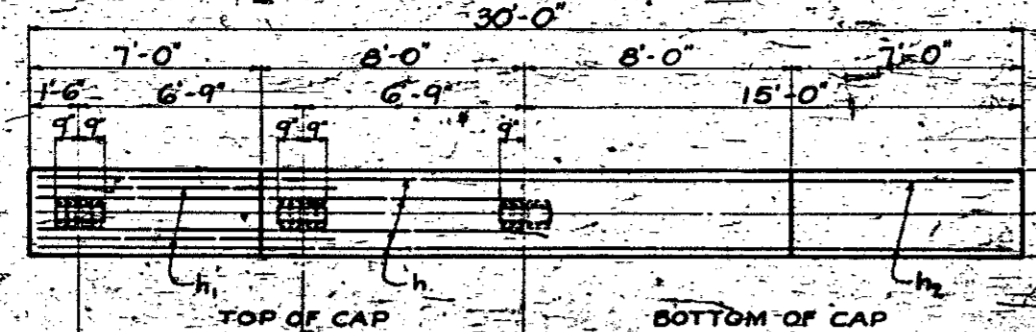
REMOVED BY: H.N. Sheldon, C.E.
 DATE: June 1938

REMOVED BY: R.W. Jenkins
 DATE: June 1938

REMOVED BY: R.W. Jenkins
 DATE: June 1938

REMOVED BY: R.W. Jenkins
 DATE: June 1938

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	N.C.	8241	11	11
F.A. Proj. No. 187-E(1)				



Note:
Special care shall be taken to set bearing rails level, square, at correct elevations; and at exact distance c to c of bearings between piers.

Note:
For design data and general note see general drawing.

Note:
Footings shall be carried down at least 6" into rock and have a minimum thickness of 2'-8"

Bar No.	Pier #1	Pier #2	Size	Length	Weight
b	6	6	3/8"	15'-6"	140
br	6	6	3/8"	16'-3"	146
h	4	4	1 1/2"	32'-0"	680
hb	4	4	1 1/2"	10'-3"	138
he	2	2	1 1/2"	29'-6"	201
hs	80	80	1/4"	18'-6"	1584
ht	6	6	1/4"	21'-6"	344
m	24	24	1 1/2"	8'-9"	1116
mt	18	18	1 1/2"	5'-0"	77
s	26	26	1/2"	7'-0"	155
s1	2	2	1/2"	6'-9"	20
s2	2	2	1/2"	8'-9"	26
s3	2	2	1/2"	13'-3"	40
s4	2	2	1/2"	17'-9"	53
t	67	67	3/8"	11'-6"	1575
tb	4	4	3/8"	29'-0"	99
tb1	24	24	3/8"	4'-9"	97
v	24	24	1 1/2"	30'-6"	3889
vb	14	14	1 1/2"	25'-3"	1878
vb1	18	18	1 1/2"	27'-6"	420
vb2	18	18	1 1/2"	24'-0"	367
Reinforcing Steel Lbs.					12,845
Class A Concrete, Cu Yds					1232
Concrete per ft. depth of Footing Cu Yds				10.370	10,370

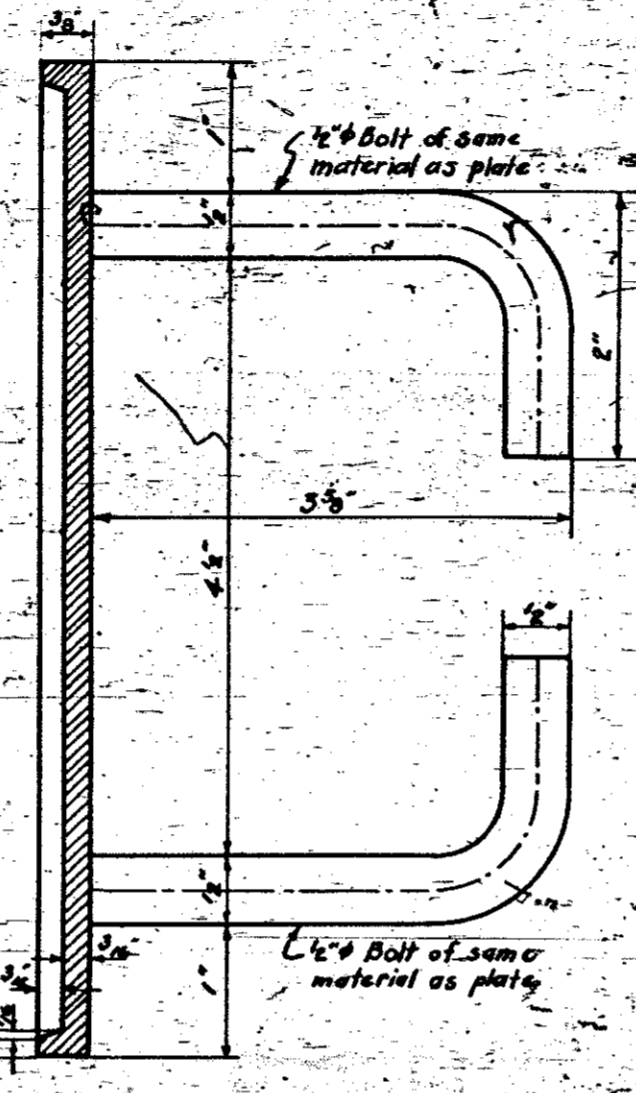
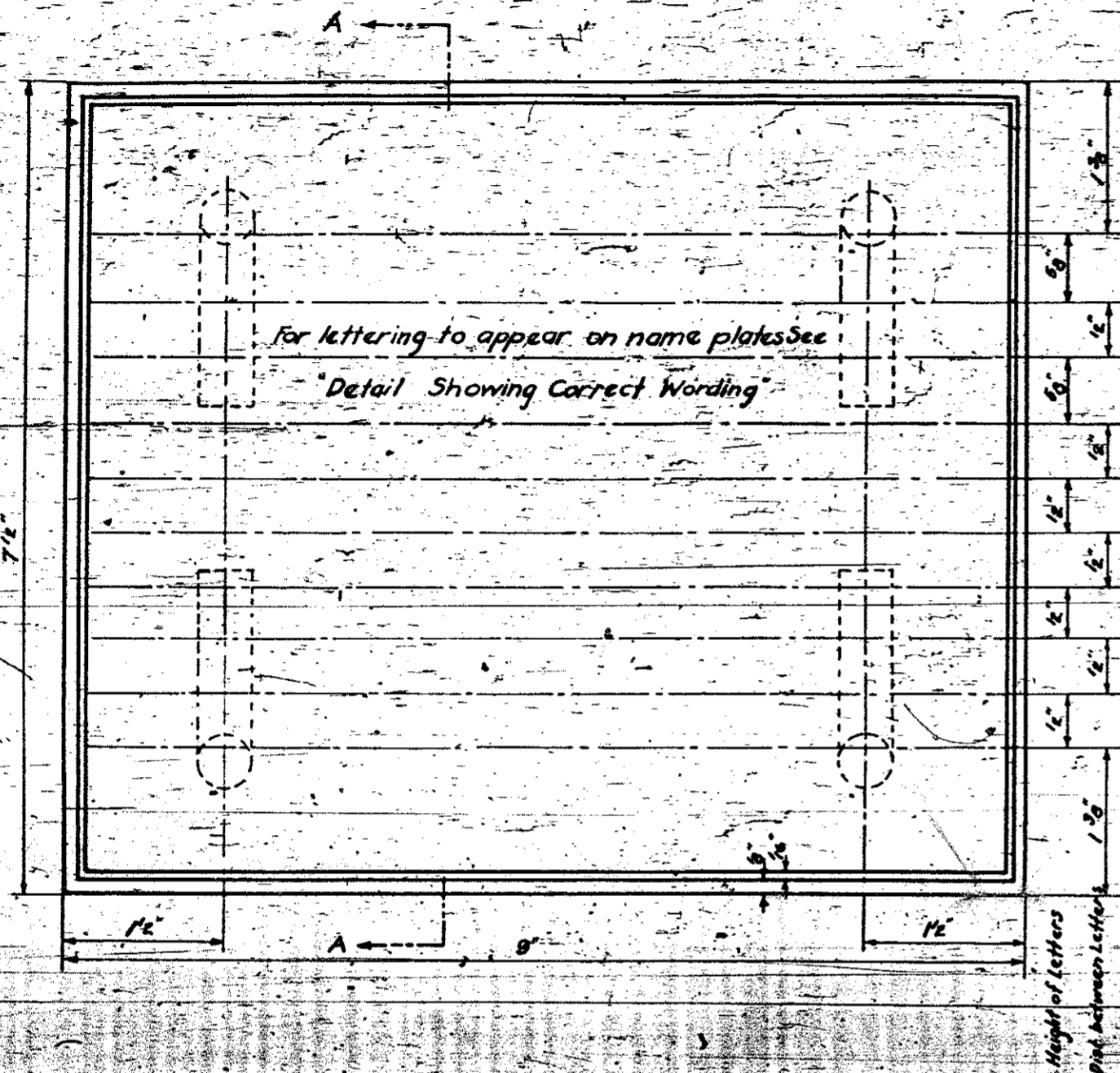
PROJECT NO. 8241
CLEVELAND COUNTY
STATION 476+29.2

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION
R.C. PIER DETAILS
FOR BRIDGE OVER
FIRST BROAD RIVER
JUNE, 1938

SPECIAL
DESIGNED BY H.W. Shelton, P.E. DATE 12/26/38
DRAWN BY G. G. Gentry, P.E. DATE 1/10/39
CHECKED BY H.W. Shelton, P.E. DATE 1/10/39

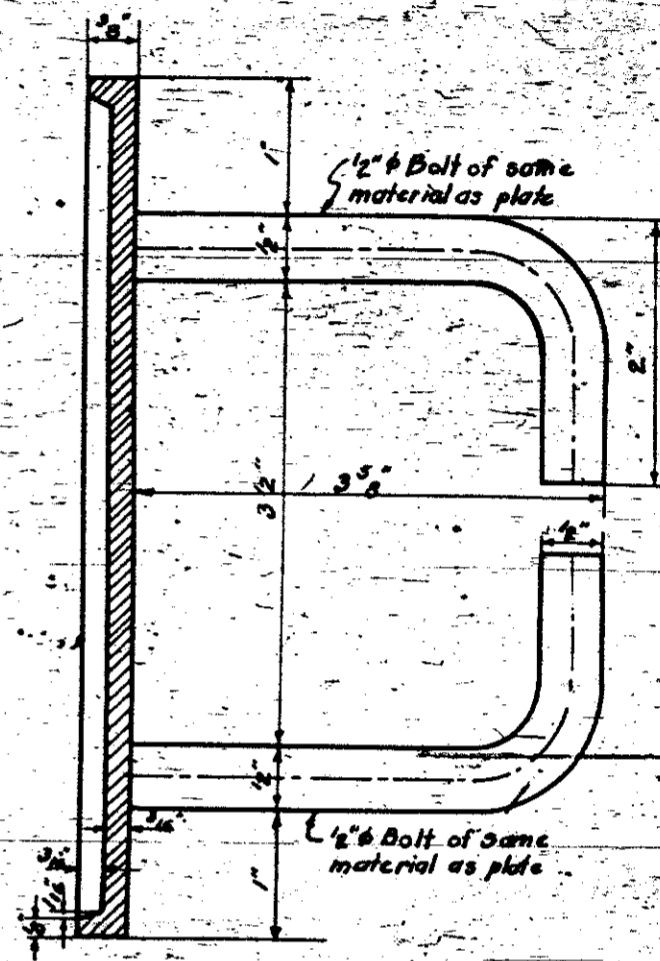
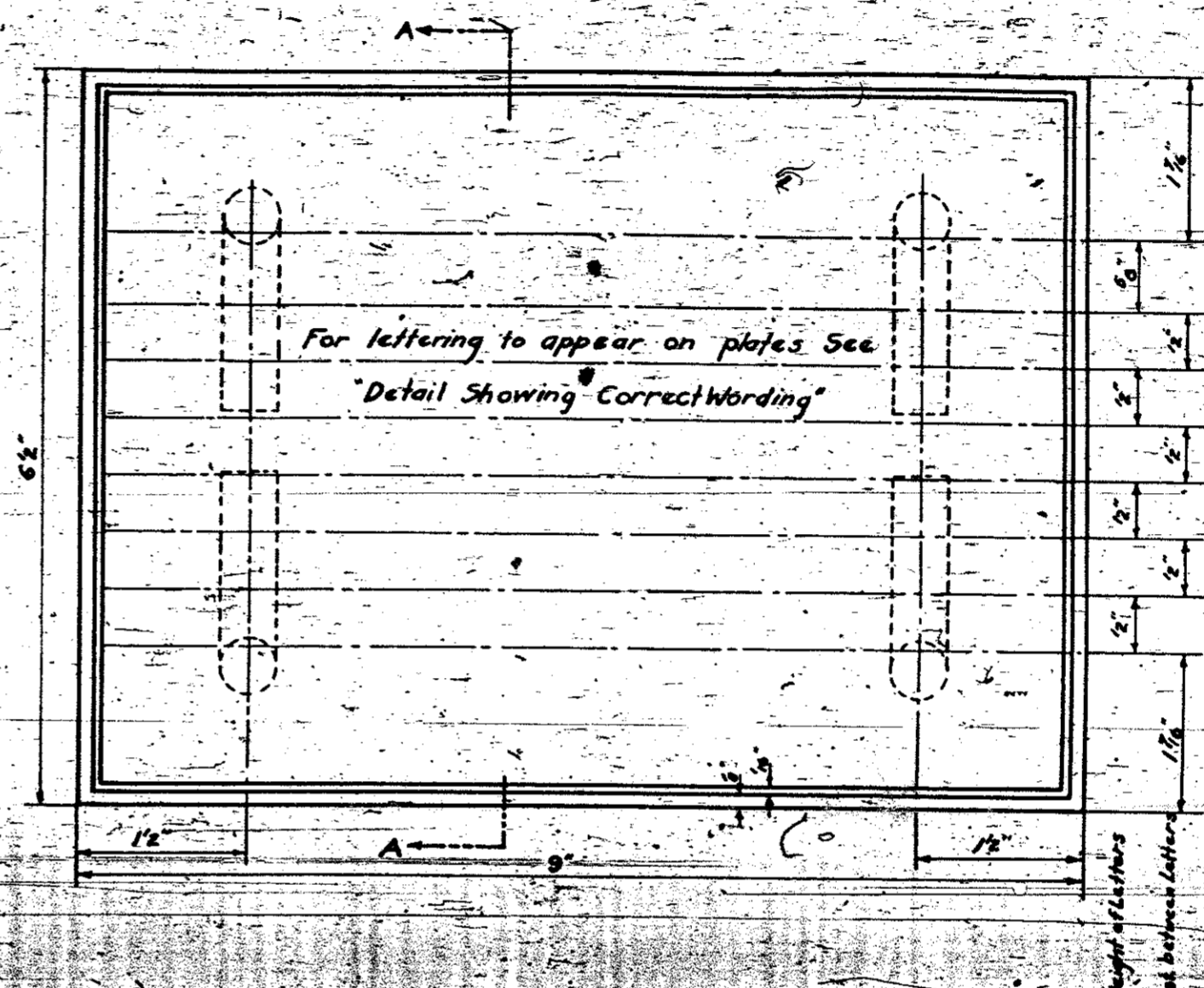
APPROVED BY [Signature] BRIDGE ENGR.
APPROVED BY [Signature] STATE HIGHWAY ENGINEER

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
40	N.C.	8241	22	15
F.A. Proj. 42-187E(1)				



SECTION A-A

THIS DETAIL TO BE USED WHEN TWO LINES ARE REQUIRED FOR NAME OF BRIDGE



SECTION A-A

THIS DETAIL TO BE USED WHEN ONE LINE IS REQUIRED FOR NAME OF BRIDGE

FIRST BROAD RIVER BRIDGE
CLEVELAND COUNTY
STATE PROJECT 8241
1938

DETAIL SHOWING
CORRECT WORDING

GENERAL NOTE:
Two name plates are required for each bridge. One is to appear on each right hand end post approaching the bridge. The plates are to be made of Grade "C" Phosphor Bronze. See Specifications. The border and all lettering are to be raised 3/16" above the face of the plate. The top surface of the raised border and lettering shall be smooth. Lettering may be square cut or tapered. The height of the letters shall be 5/8" and 1". The wording shall be as shown in the Detail Showing Correct Wording. Lettering shall be vertical. Each name plate shall be securely fastened on the end of the post.

PROJECT NO. 8241
CLEVELAND COUNTY

STATION: 476+29.6

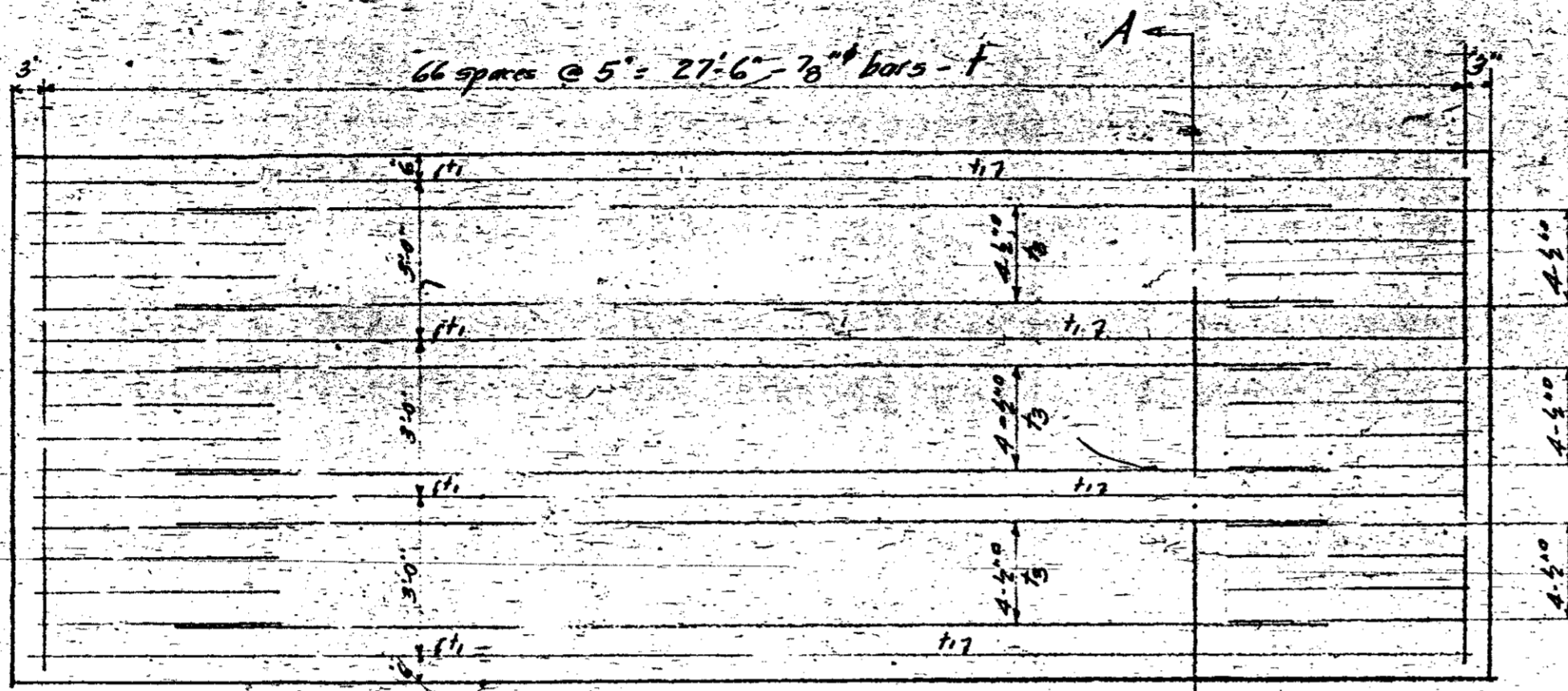
STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

STANDARD
NAME PLATE
FOR
CONCRETE BRIDGES
MARCH 1938

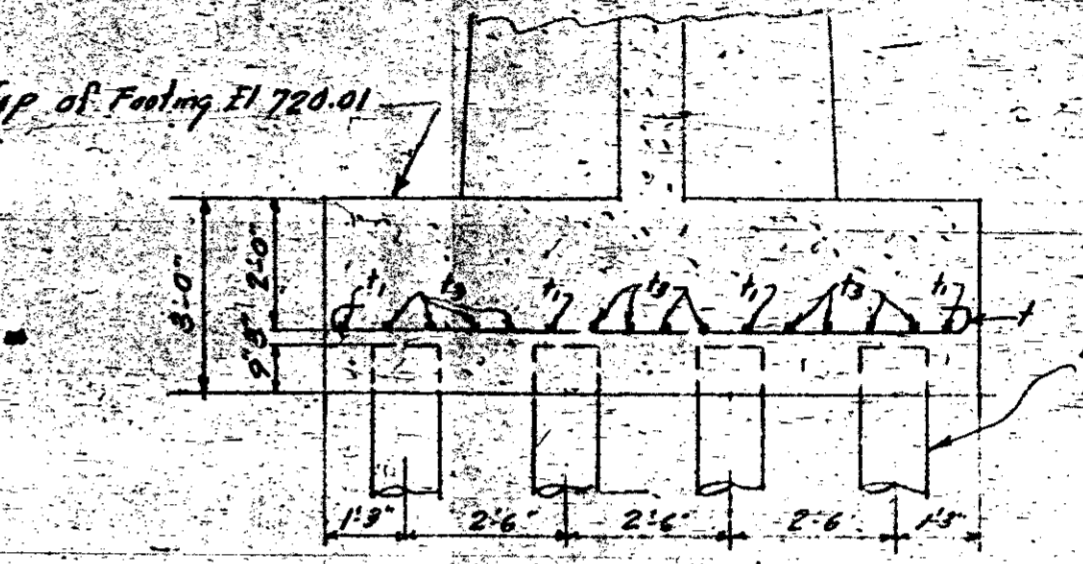
SUBMITTED BY: *W. B. ...* BRIDGE DIV.
APPROVED BY: *W. B. ...* STATE HIGHWAY ENGINEER

SPECIAL	DESIGNED BY: <i>E. D. Ward</i>	DATE: <i>June 1938</i>
	CHECKED BY: <i>A. T. ...</i>	DATE: <i>June 26, 1938</i>
STANDARD	DESIGNED BY: <i>R. S. Nicksar</i>	DATE: <i>March 1938</i>
	APPROVED BY: <i>G. Crocker</i>	DATE: <i>March 1938</i>
	TRACED BY: <i>E. D. Ward</i>	DATE: <i>June 1938</i>
	CHECKED BY: <i>George Crocker</i>	DATE: <i>June 1938</i>

Dist. No.	State	Proj. No.	Sheet No.	Total Sheets
10	N.C.	8241	11-A	12
FA Proj. 11-182-EP(1)				



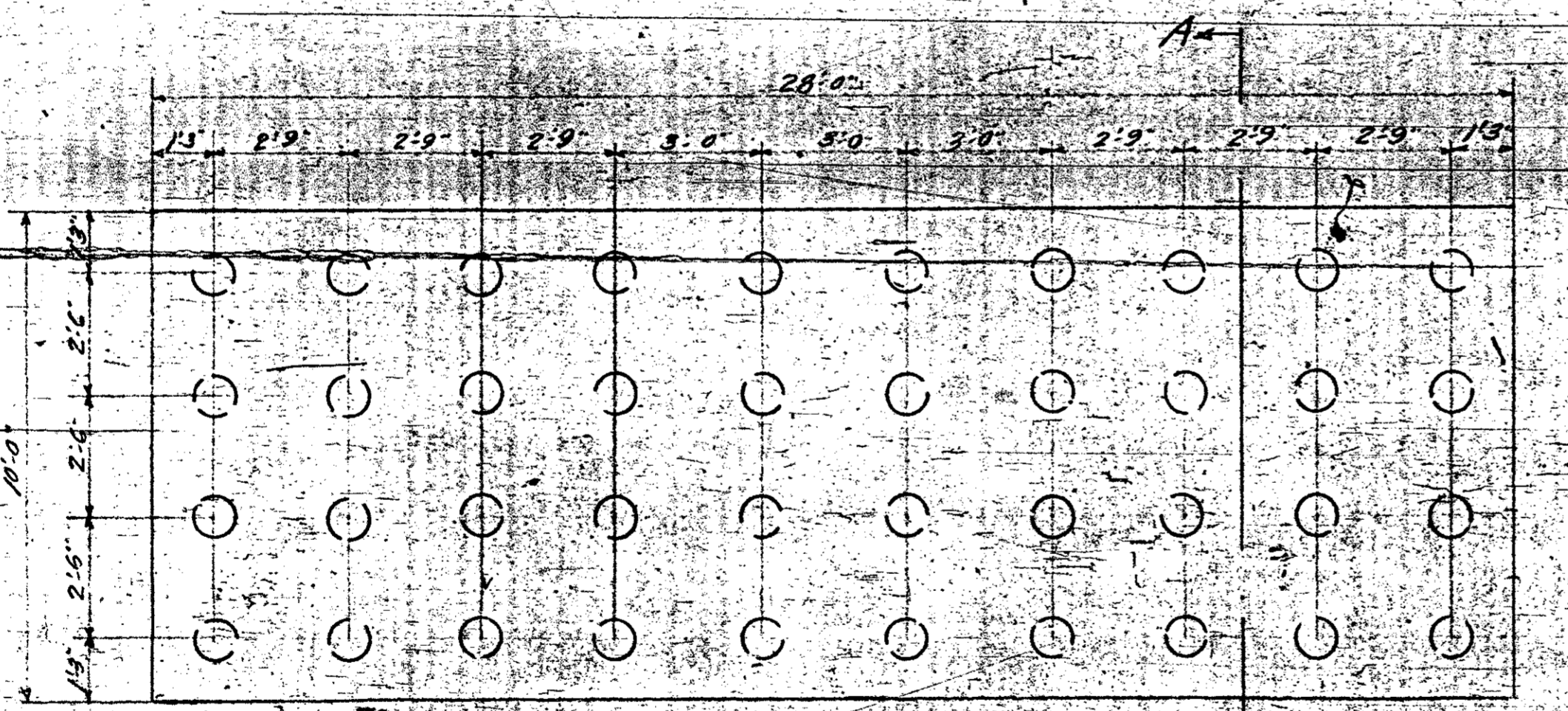
PLAN OF FOOTING - PIER No. 4 A
Showing Reinforcement in footing



Piles to be driven to a minimum bearing capacity of 18 tons.

SECTION A-A

STEEL TO BE ORDERED				
Bar	No.	Size	Length	Weight
\bar{f}_s	12	$\frac{3}{8}$ "	22'-0"	224



PLAN OF FOOTING - PIER No. 4 A
Showing pile spacing

PROJECT No. 8241
CLEVELAND COUNTY
STATION 476+29.6
PIER No. 4

DETAIL OF PILE
SPACING
FOR
PIER No. 4

Submitted by *W. J. [Signature]* Bridge Eng.
Approved by *[Signature]* Dist. Engr.
Date 11-28-38
State Highway Dept.

Revised for 40 piles 11-28-38 by R.S. [Signature]