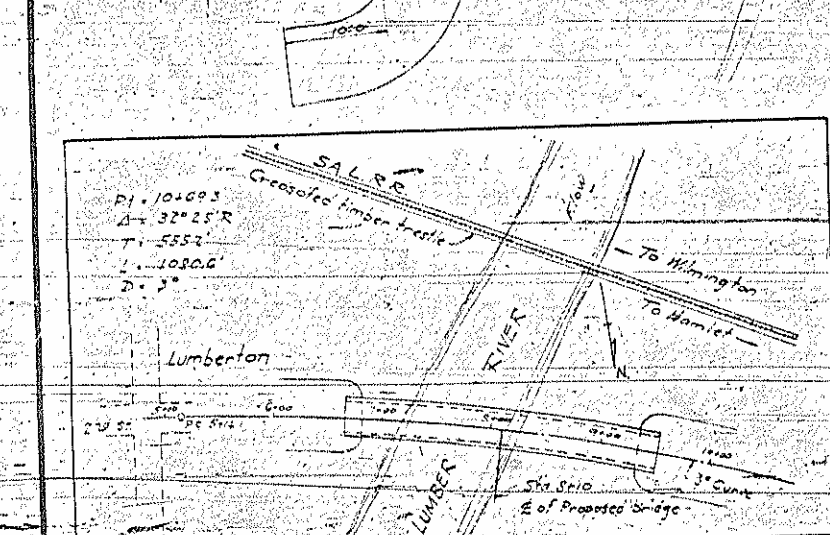
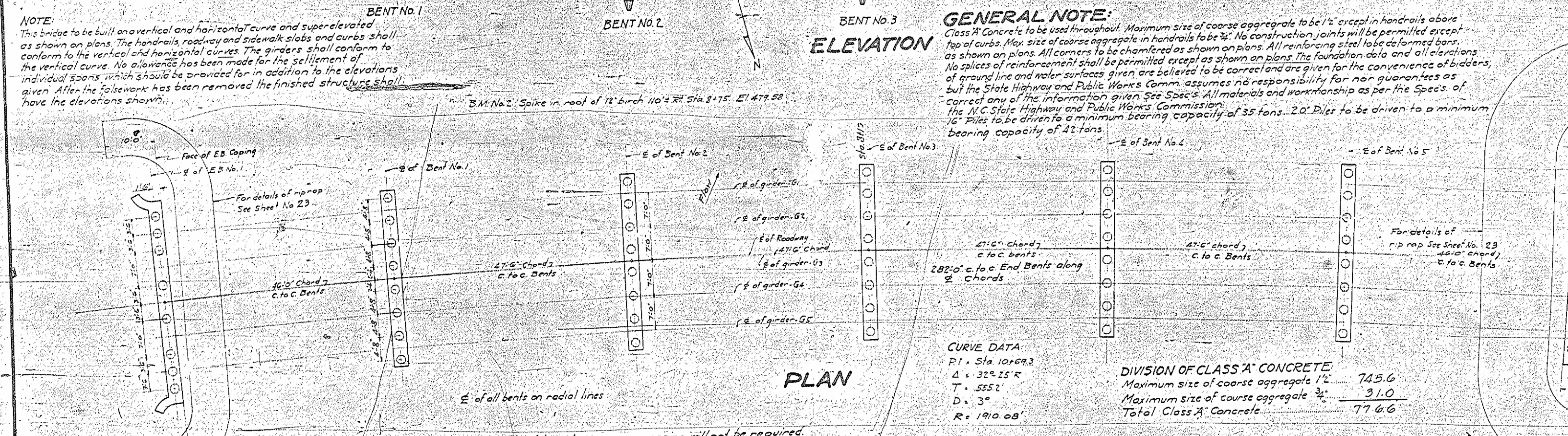




	GIRDER				
	G ₁	G ₂	G ₃	G ₄	G ₅
End Bent No. 1	486.80	486.66	486.51	486.36	486.22
Bent No. 1	487.15	486.99	486.84	486.69	486.55
Bent No. 2	487.36	487.22	487.07	486.92	486.78
Bent No. 3	487.43	487.29	487.14	486.99	486.85
Bent No. 4	487.36	487.22	487.07	486.92	486.78
Bent No. 5	487.13	486.99	486.84	486.69	486.55
End Bent No. 2	486.80	486.66	486.51	486.36	486.22

TOTAL BILL OF MATERIAL									
	Class A Conc. Cu Yds	Reinforcing Steel Lbs	Conc. Heon Surf Sq Yds	Plates & Bolts Lbs	Illuminating Stds. No.	Pre-cast Piles No. 1-4" 1-8"	R.C. Ring Sq. Yds	Castings & Struct. Steel	Unloaded Pn. Test Pile No.
Span A	1133	25457	145.4	118	—	—	—	—	—
Span B	1135	25645	147.5	118	—	—	—	—	—
Span C	1129	25769	146.2	118	2	—	—	22 1/2	—
Span D	1123	25732	146.2	118	2	—	—	22 1/3	—
Span E	1135	25645	147.5	118	—	—	—	—	—
Span F	1133	25457	145.4	118	—	—	—	—	—
End Bent No 1	164	1700	—	—	2	8	—	—	—
End Bent No 2	164	1700	—	—	2	8	250	—	—
Bent No 1	130	1986	—	118	—	8	—	—	—
Bent No 2	130	1986	—	118	—	8	—	—	—
Bent No 3	130	1986	—	269	—	8	—	—	—
Bent No 4	130	1986	—	118	—	8	—	—	—
Bent No 5	130	1986	—	118	—	8	—	—	—
Pre-cast PC Piles	—	24626	—	—	—	—	—	—	—
Totals	7766	191,511	878.2	1449	8	16 40	375	4425	3

PROJECT NO. 3880
ROBESON COUNTY

STATION 8+10

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION
RALEIGH
GENERAL DRAWING
FOR
LUMBER RIVER BRIDGE
OVER
LUMBER RIVER
LUMBERTON NC. 1934
EPA

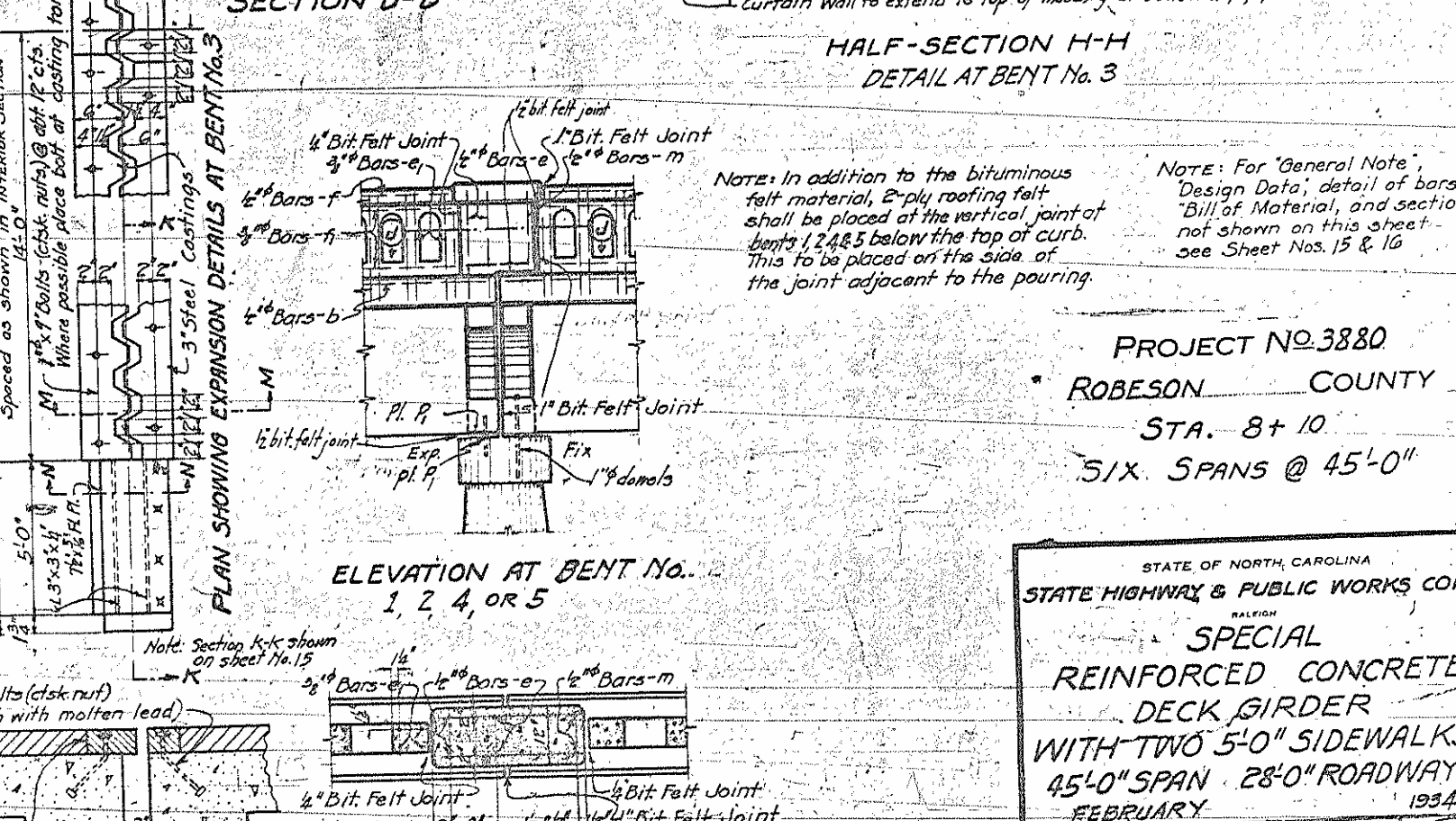
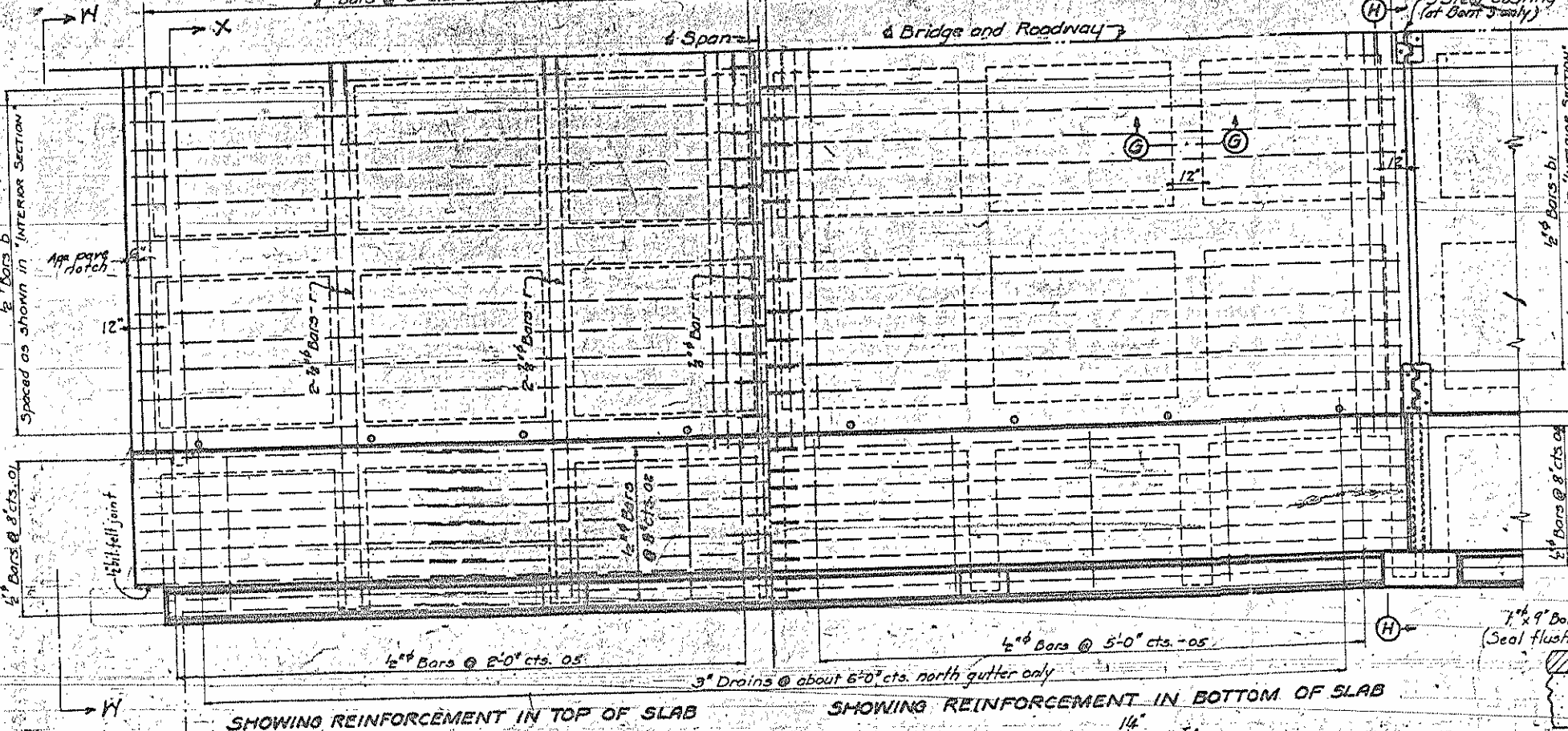
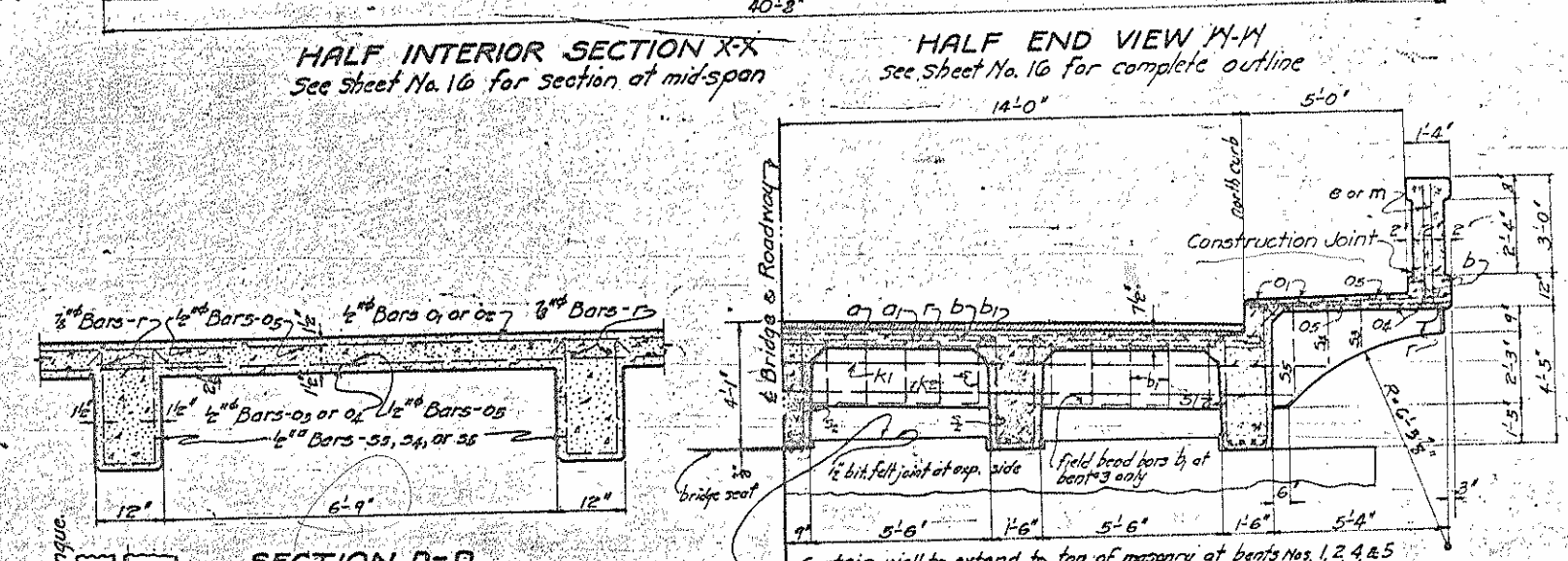
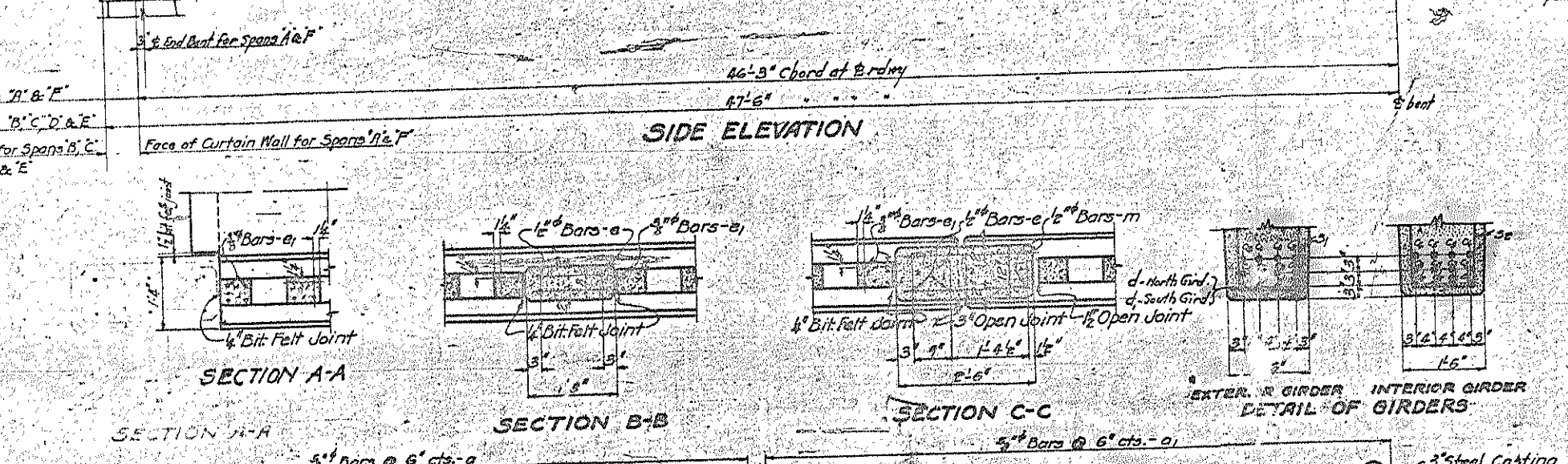
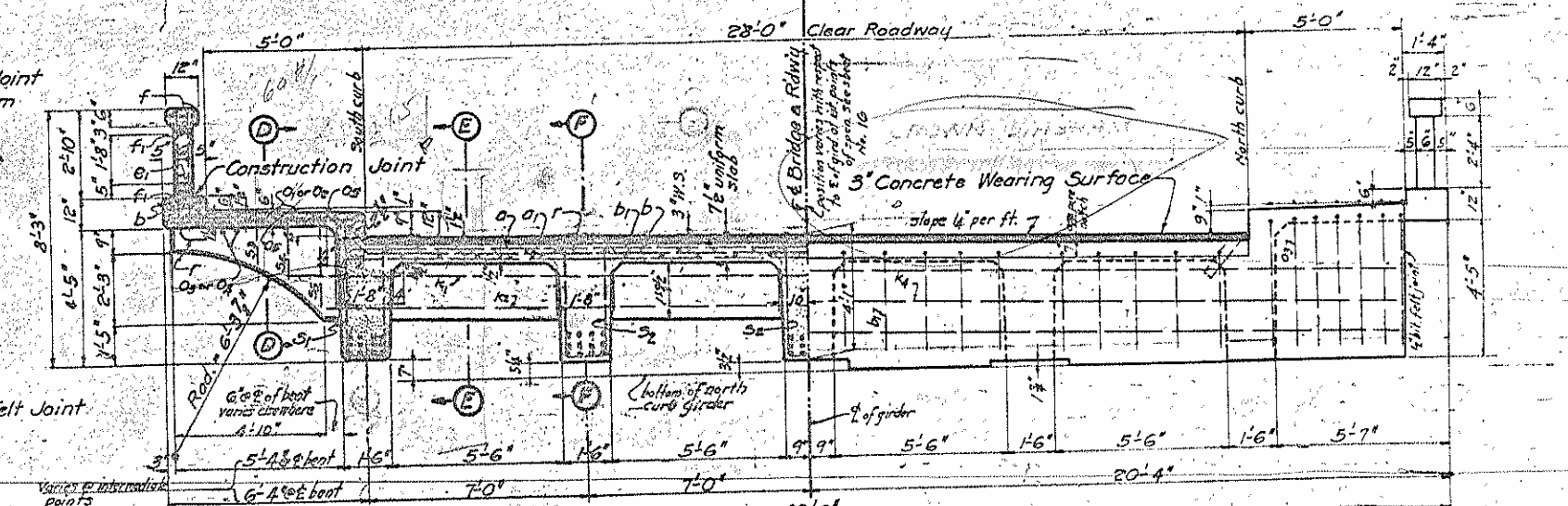
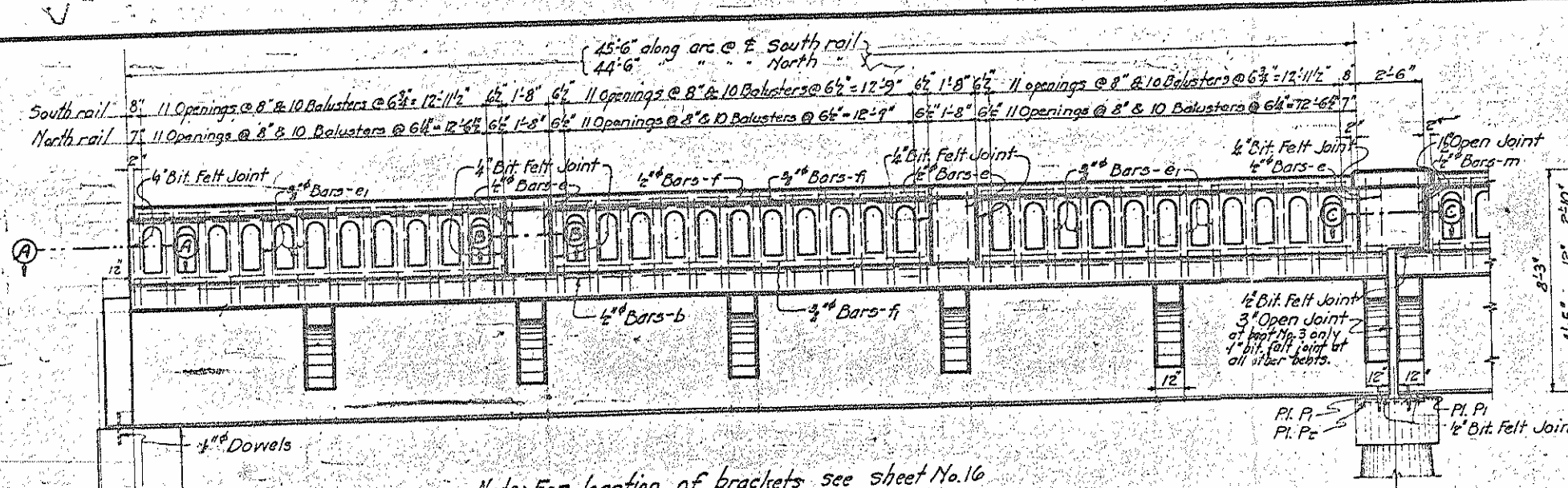
SUBMITTED BY W. L. Brown BRIDGE ENGR.
APPROVED BY John S. Waldrop DATE 7-23-50
STATE HIGHWAY ENGINEER

PLAN NO. 78-1
M-2
123

Reel 27
Box 17 41-46-85

STEM DEPTH
 $(4'-1") - (3' + 7\frac{1}{2}')$
 $49" - 10\frac{1}{2}" = 38.5"$

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	SHEET TOTAL
10	N. C.	3880	14	
N.R.M. PROJECT NO. 379-A				



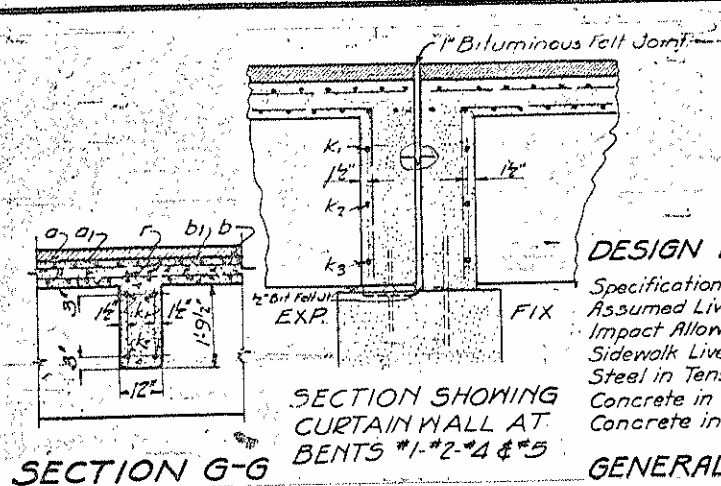
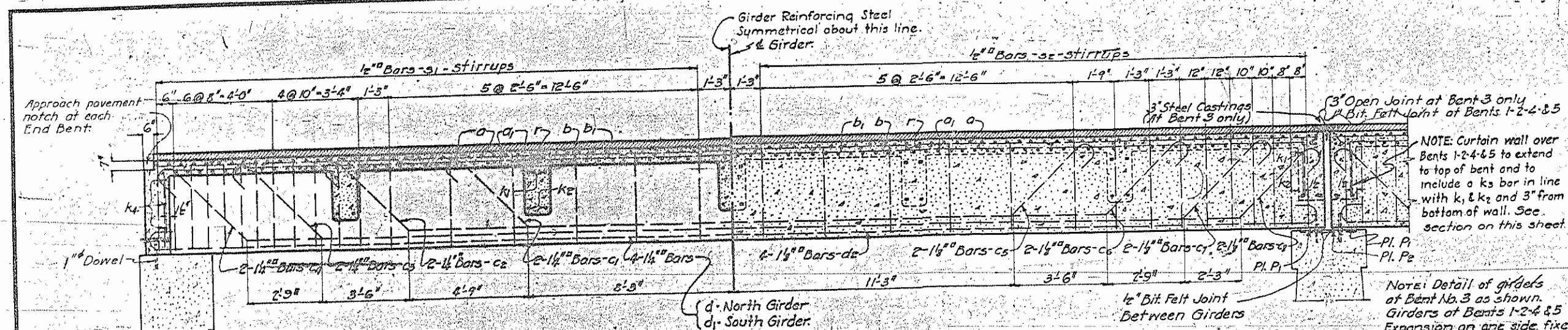
SHOWING REINFORCEMENT IN TOP OF SLAB
 SHOWING REINFORCEMENT IN BOTTOM OF SLAB
 SECTION N-N
 SECTION M-M
 SECTION J-J

EXT 1/4" 4-4
 INT 1/4" 4-4
 1/4" 4-4

PROJECT NO. 3880
 ROBESON COUNTY
 STA. 8+10
 SIX SPANS @ 45'-0"

STATE OF NORTH CAROLINA
 STATE HIGHWAY & PUBLIC WORKS COMM.
 SPECIAL REINFORCED CONCRETE DECK GIRDER WITH TWO 5'-0" SIDEWALKS 45'-0" SPAN 28'-0" ROADWAY
 FEBRUARY 1934

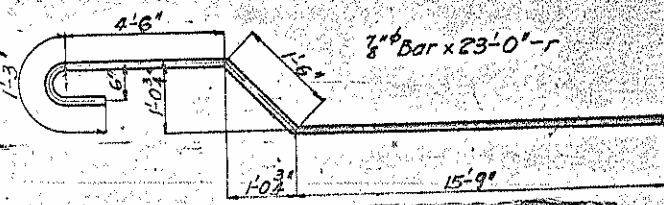
DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: [Date]



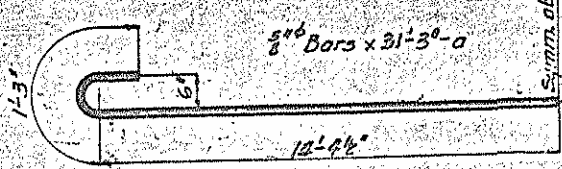
DESIGN DATA:
 Specifications: N.C. State Highway & Public Works Comm.
 Assumed Live Load: H-15
 Impact Allowance: See Specifications
 Sidewalk Live Load: 100 #/sq. ft. No Impact Allowance
 Steel in Tension: 18,000 #/sq. ft.
 Concrete in Compression: 3000 #/sq. ft.
 Concrete in Shear: 60 #/sq. ft.

GENERAL NOTE:

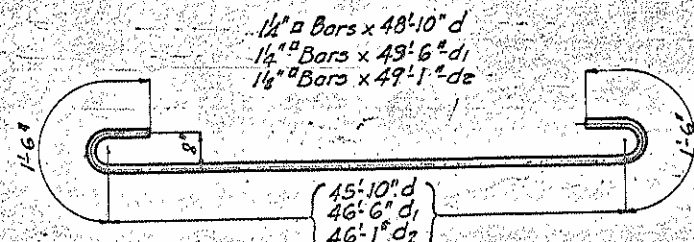
Class "A" concrete shall be used throughout. Maximum size of coarse aggregate to be $1\frac{1}{2}$ " except in hand rails. Maximum size of coarse aggregate in hand rails to be $\frac{3}{4}$ ". All exposed corners to be chamfered $1"$ except on hand rails and expansion joints. Hand rail corners to be chamfered $\frac{3}{4}"$. Baluster and expansion-joint corners to be chamfered $\frac{3}{8}"$. All concrete below the base of hand rail shall be poured in one operation allowing no time for initial set to take place between successive pourings. Construction joints will be permitted only at top of sidewalk curbs. 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. Unless otherwise stated under "Special Provisions", the wearing surface shall be laid by the Bridge Contractor. Two name plates shall be placed on the bridge, one on the inside of each right-hand end post approaching the bridge. All material and workmanship as per the Specifications of the North Carolina State Highway and Public Works Commission.



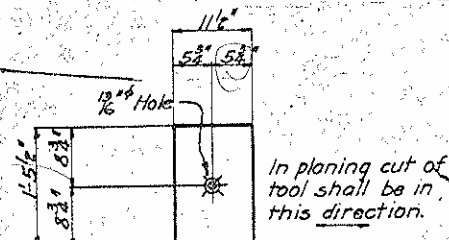
DETAIL OF BARS



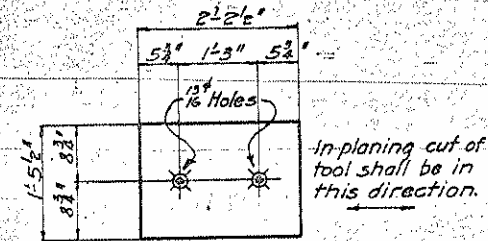
DETAIL OF BARS a



DETAIL OF BARS d_1 & d_2



MAKE 50 PLATES - P1

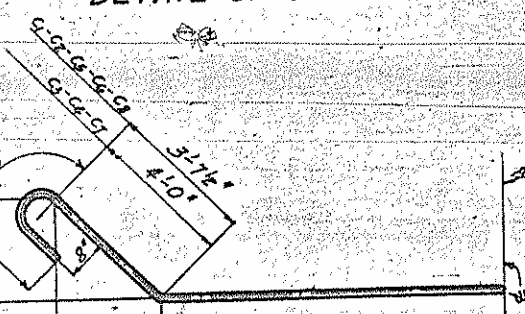


MAKE 5 PLATES-P₂



MAKE 60 BOLTS

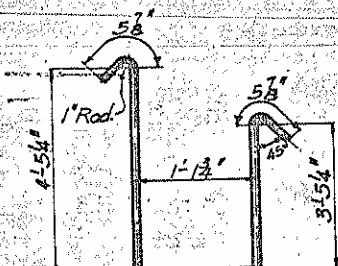
NOTE: For location of sections and for details not shown on this sheet see Sheet No. 14.



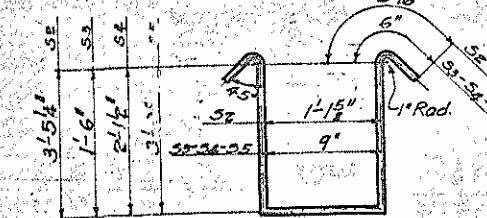
DETAIL OF BARS C1-C2-C3-C4-C5-C6-C7-C8

8'-3"
13'-0"
16'-6"
19'-3"
11'-3"
14'-9"
17'-6"
19'-9"

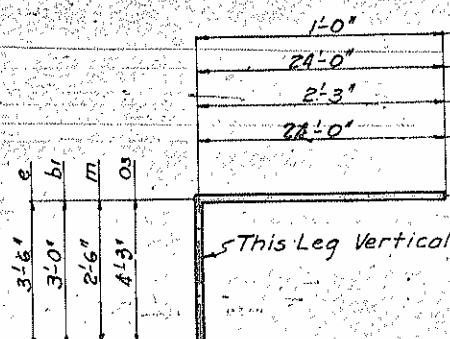
Symmetrical about



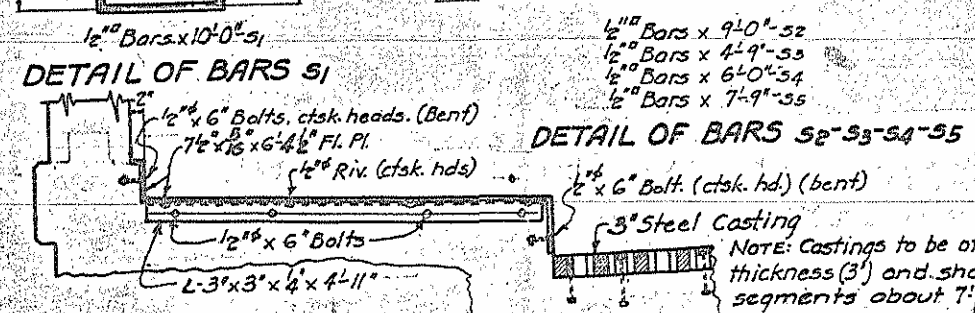
DETAIL OF BARS S1



DETAIL OF BARS S2-S3-S4-S5



DETAIL OF BARS e-b₁-m-o₃



SECTION K-K

(See Sheet No. 14)

BILL OF MATERIAL PER SPAN																																							
Bars	a	a ₁	b	b ₁	c ₁	c ₂	c ₃	c ₄	c ₅	c ₆	c ₇	c ₈	d	d ₁	e	e ₁	f	f ₁	k ₁	k ₂	k ₃	k ₄	m	o ₁	o ₂	o ₃	o ₄	o ₅	F	S ₁	S ₂	S ₃	S ₄	S ₅	Reinf. Steel Lbs.	Class 2 nd Conc. Cu Yds	Conc. Wear Surf. Sq. Yds.	Plates & Bolts Lbs.	
Span "A"	93	94	56	40	4	4	4	4	6	6	6	6	4	4	12	16	288	12	24	22	22	2	6	40	20	18	18	68	24	72	90	12	12	12	254.57	119.3	145.4	118	
Span "B"	93	94	56	40	4	4	4	4	6	6	6	6	4	4	12	16	288	12	24	24	24	4	4	40	20	—	36	68	28	72	90	14	14	14	256.45	119.5	147.5	118	
Span "C"	93	94	56	40	4	4	4	4	6	6	6	6	4	4	12	16	288	12	24	28	28	2	4	40	20	—	36	68	28	72	90	14	14	14	257.32	112.3	146.2	118	
Span "D"	93	94	56	40	4	4	4	4	6	6	6	6	4	4	12	16	288	12	24	24	24	4	4	40	20	—	36	68	28	72	90	14	14	14	256.45	113.5	147.5	118	
Span "E"	93	94	56	40	4	4	4	4	6	6	6	6	4	4	12	16	288	12	24	24	24	2	6	40	20	18	18	68	24	72	90	12	12	12	254.57	119.3	145.4	118	
Span "F"	93	94	56	40	4	4	4	4	6	6	6	6	4	4	12	16	288	12	24	22	22	2	6	40	20	36	180	408	160	432	540	80	80	80	1597.05	678.8	878.2	708	
Totals	558	564	336	240	24	24	24	24	36	36	36	36	24	24	72	136	1728	72	144	148	148	16	12	20	240	120	36	180	408	160	432	540	80	80	80	1597.05	678.8	878.2	708

DIVISION OF CONCRETE

* Includes 4103 lbs. of galvanized steel to be paid for as reinforcing steel.

DIVISION OF CONCRETE		
Maximum Size of Coarse Aggregate = $\frac{3}{4}$ "	Cu. Yds.	28.8
Maximum Size of Coarse Aggregate = $1\frac{1}{2}$ "	Cu. Yds.	650.0
Total	Cu. Yds.	678.8

[illegible]

PROJECT NO. 3880
ROBESON COUNTY
STA. 8+10
SIX SPANS @ 45'-0"

STATE OF NORTH CAROLINA
STATE HIGHWAY & PUBLIC WORKS COMM.
HALEIGH
SPECIAL
REINFORCED CONCRETE
DECK GIRDER
WITH TWO 5'-0" SIDEWALKS
45'-0" SPAN 28'-0" ROADWAY
FEBRUARY 1934

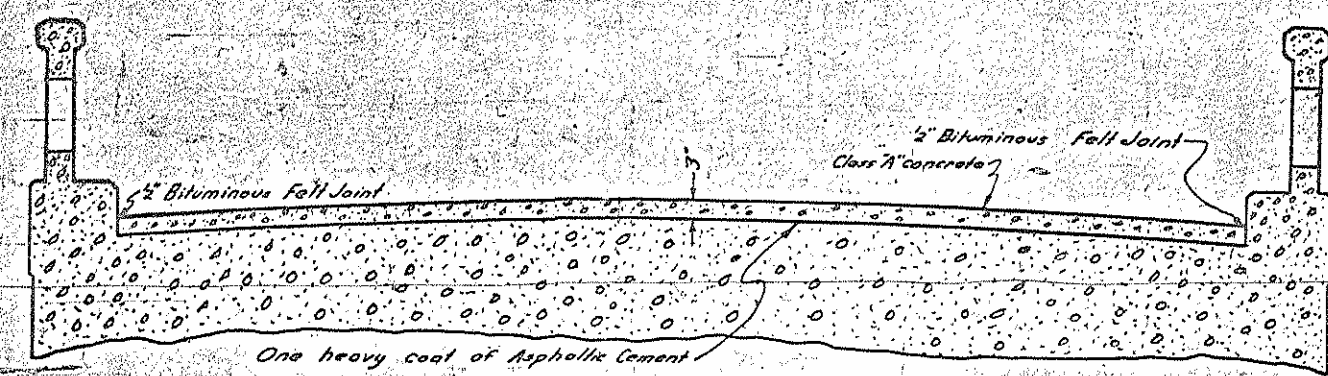
SUBMITTED BY *W. L. Craven* BRIDGE ENGR.
APPROVED BY *John D. Welding* DATE *3-22-25*
STATE HIGHWAY ENGINEER

PLAN NO. *10-123*
MAY 22 1925

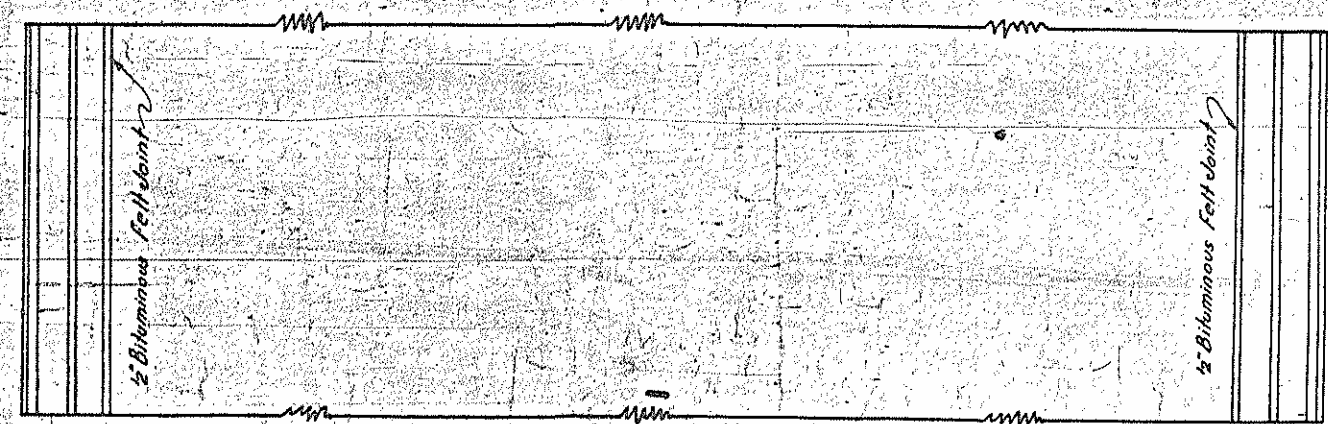
Note: Steel castings and structural steel shall receive one shop coat of red lead and two field coats of aluminum paint as per Specifications. The cost of structural steel and castings to be included in the unit price bid for Class "A" concrete.

*Galv. steel bars, to be paid for as reinforcing steel.

SPECIAL	CONFIDENTIAL
ASSIGNED BY <i>M. J. [illegible]</i>	DATE <i>OCT 1933</i>
KNOWN BY <i>[illegible]</i>	DATE <i>JUN 1935</i>
TRACED BY <i>[illegible]</i>	DATE <i>AUG 1935</i>
CHECKED BY <i>[illegible]</i>	DATE <i>FEB 1936</i>



SECTION THRU BRIDGE



PLAN

PLAIN CONCRETE OR REINFORCED CONCRETE PAVEMENTS
GRADED TOP SOIL, SAND CLAY, GRAVEL, SHALE, WATER-BOUND OR BITUMINOUS MACADAM ROADS

The wearing surface of the bridge shall consist of 2" of Class A concrete.
See Specifications.
The top of the floor slab shall be coated with a heavy coat of asphaltic cement applied hot before the wearing surface is laid.
A 1/2 bituminous felt joint shall be placed between the curbs and the wearing surface. A 1" bituminous felt joint shall be placed at all piers and abutments parallel to the face thereof. The joint shall be cut to the crown of roadway and shall not be in more than two pieces.
The wearing surface shall be hand finished in accordance with the Specifications. Payment will be made at the contract unit price for wearing surface. All material and workmanship as per specifications of the N. C. State Highway and Public Works Commission.

PROJECT NO. 3880
ROBESON COUNTY
STATION 8+10

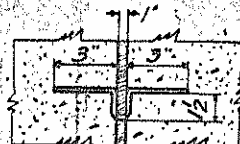
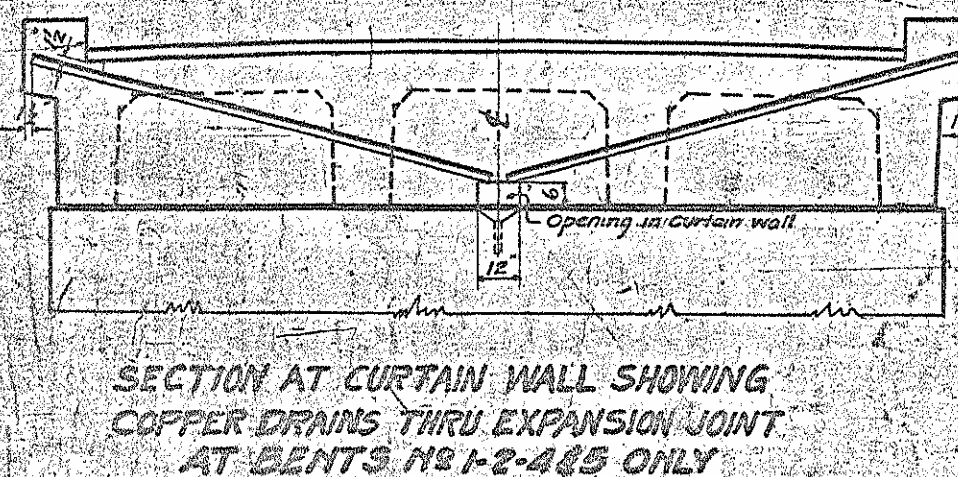
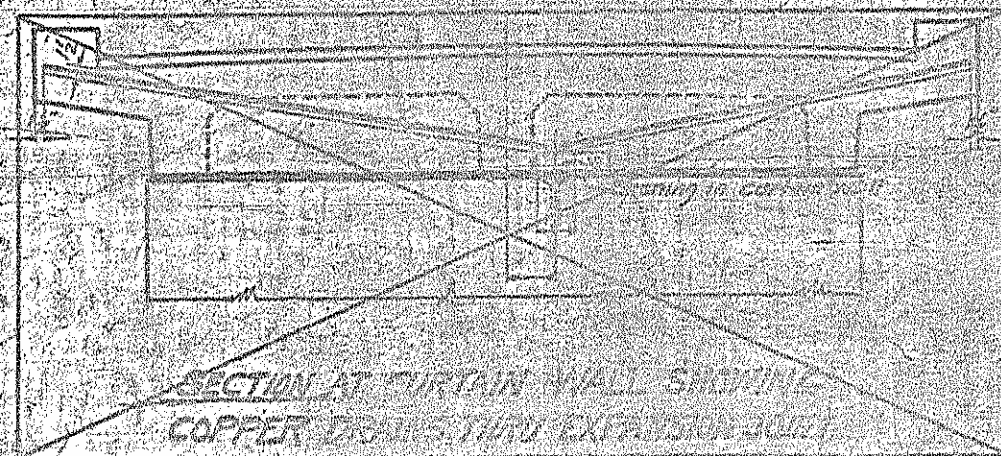
STATE OF NORTH CAROLINA
STATE HIGHWAY & PUBLIC WORKS COMMISSION

SKETCH SHOWING
STANDARD DETAILS
FOR
CONTINUING ROAD SURFACING
ACROSS
REINFORCED CONCRETE BRIDGES
APRIL 1932

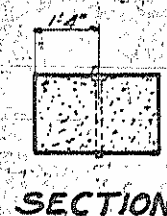
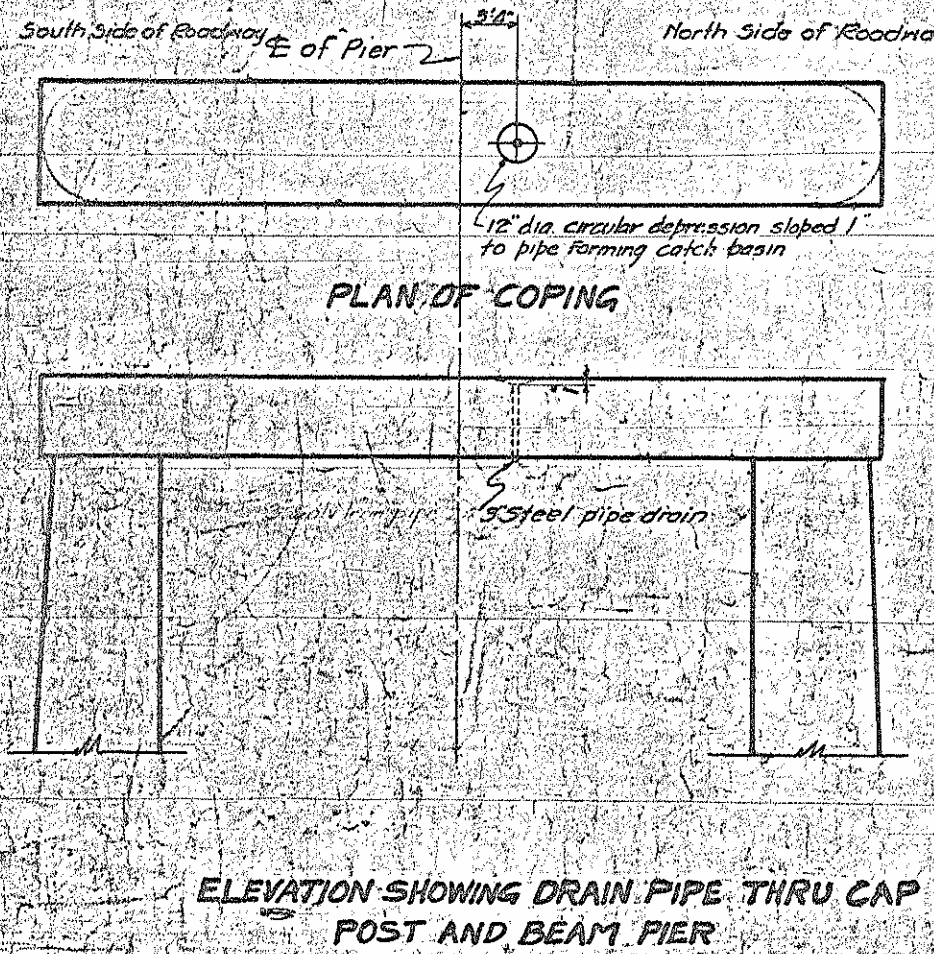
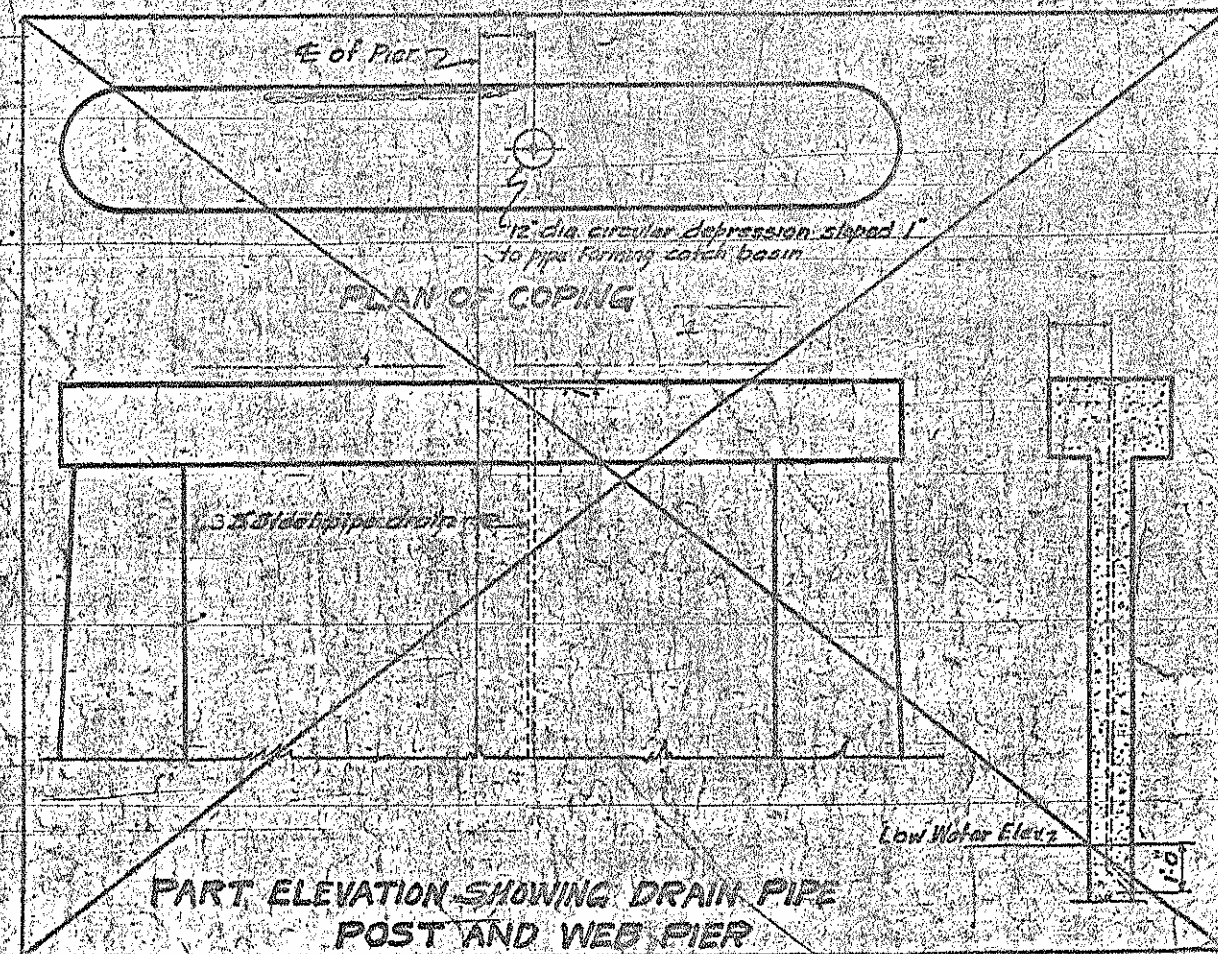
DESIGNED BY: W. L. C. [Signature]
SUPERVISOR: L. R. [Signature]
STATE HIGHWAY ENGINEER

PLAN NO. 10122
1932

SPECIAL	APPROVED BY: [Signature]	DATE: [Date]
STANDARD	APPROVED BY: [Signature]	DATE: [Date]



MAKE 4 PIECES 10" x 18'3" LONG
MAKE 4 PIECES 10" x 12'0" LONG

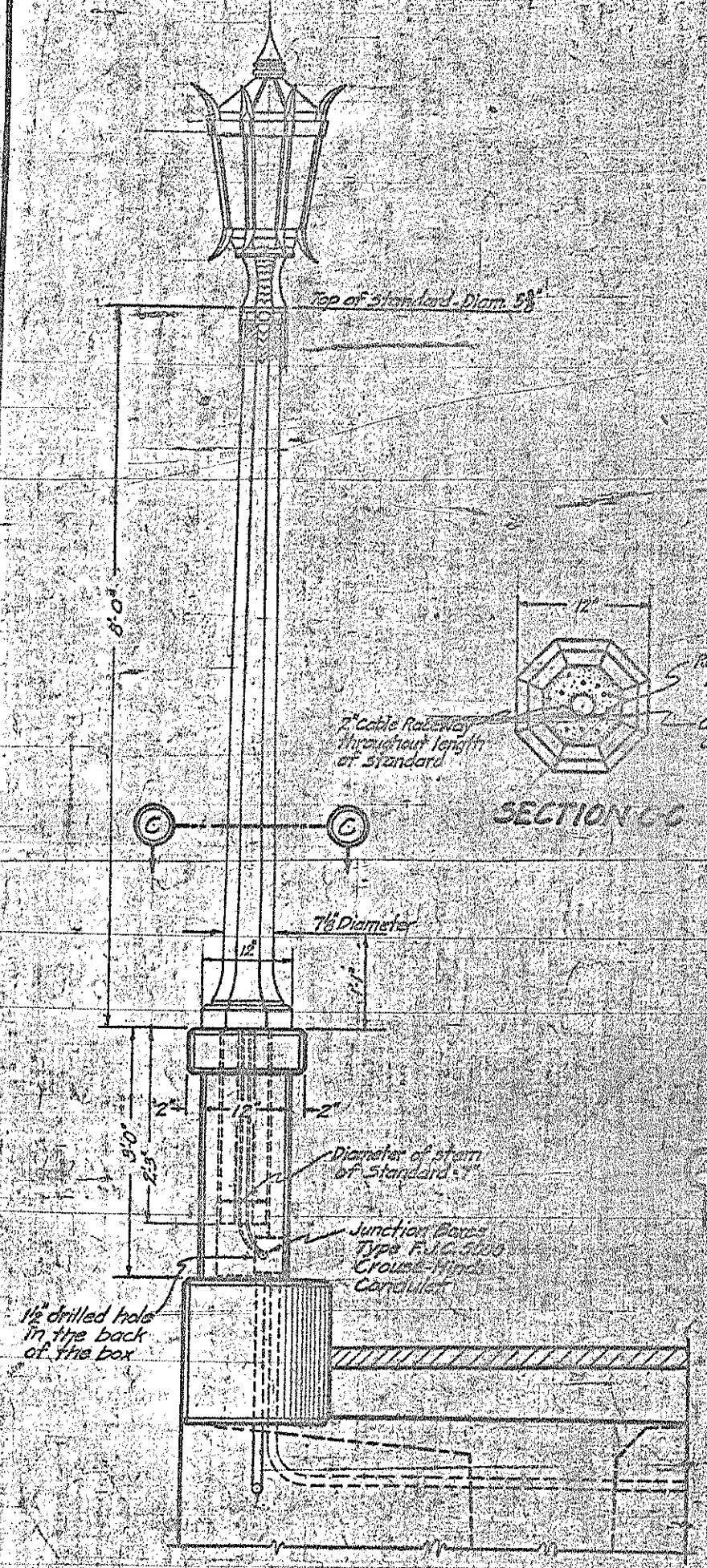


GENERAL NOTE
Copper drains shall be placed in expansion joints between spans at all piers as shown. Copper for drains to be of the best grade #20 gauge, 24 oz. sheet copper and shall be shop bent. The cost of shop bending shall be included in contract unit price bid for reinforcing steel, which price shall include cost of drains complete in place and all labor, tools and materials incidental thereto, including the steel pipe in piers or bents.

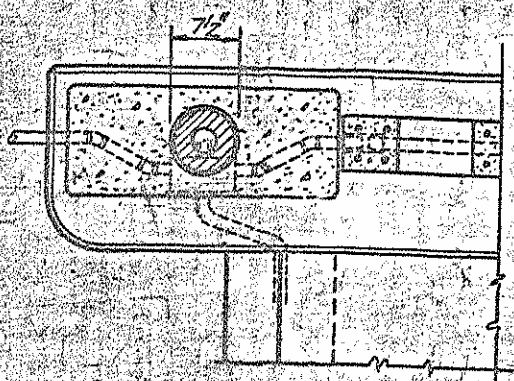
PROJECT NO. 3880
ROBESON COUNTY

STATION 8+10

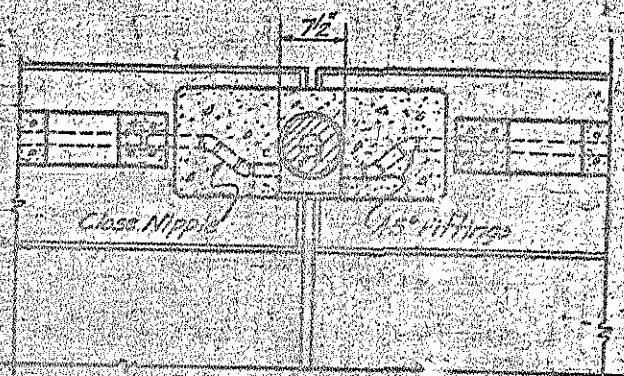
STATE OF NORTH CAROLINA
STATE HIGHWAY & PUBLIC WORKS COMM.
RALEIGH
STANDARD
DETAILS SHOWING COPPER DRAIN
THRU CURTAIN WALLS
R.C. DECK GIRDER
DEC 1921



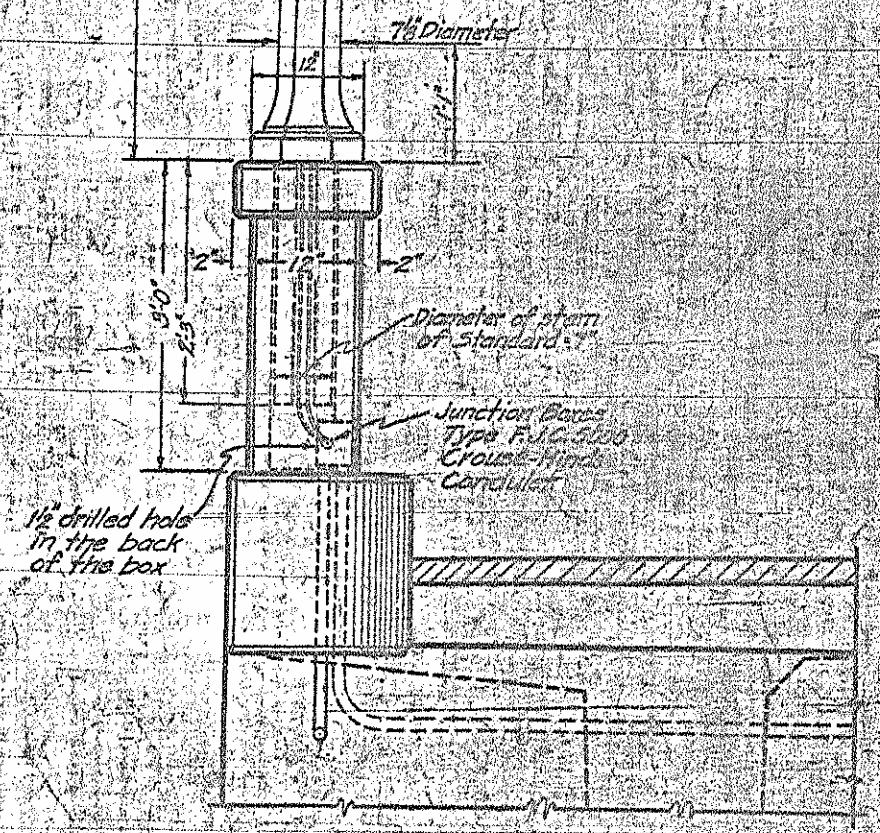
SECTION C-C



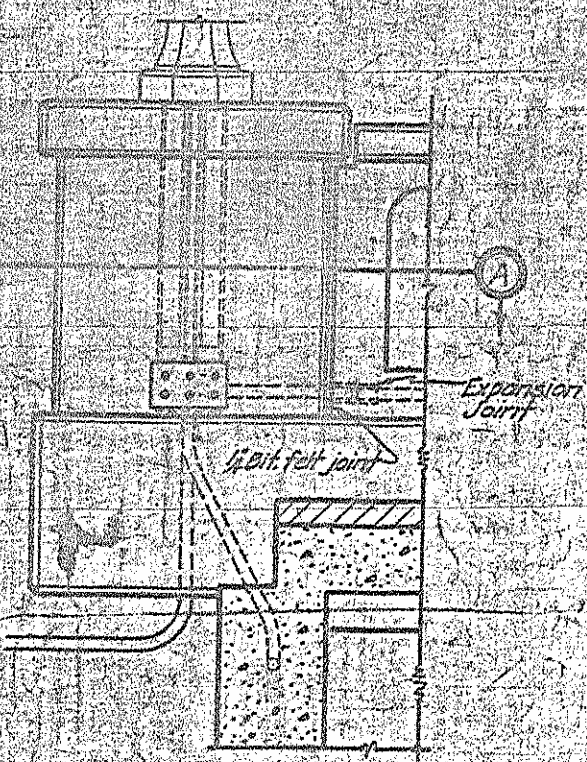
SECTION A-A



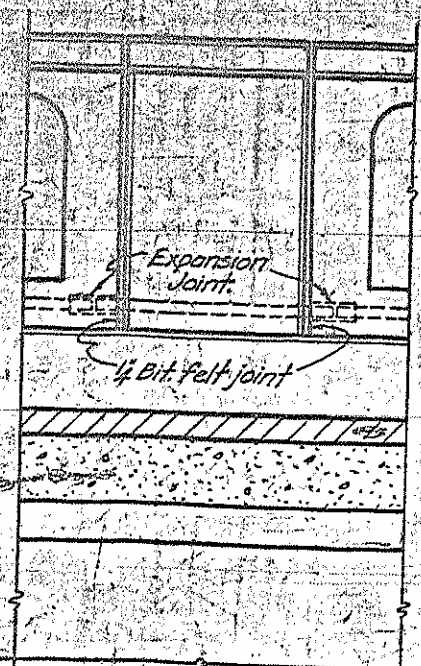
SECTION B-B



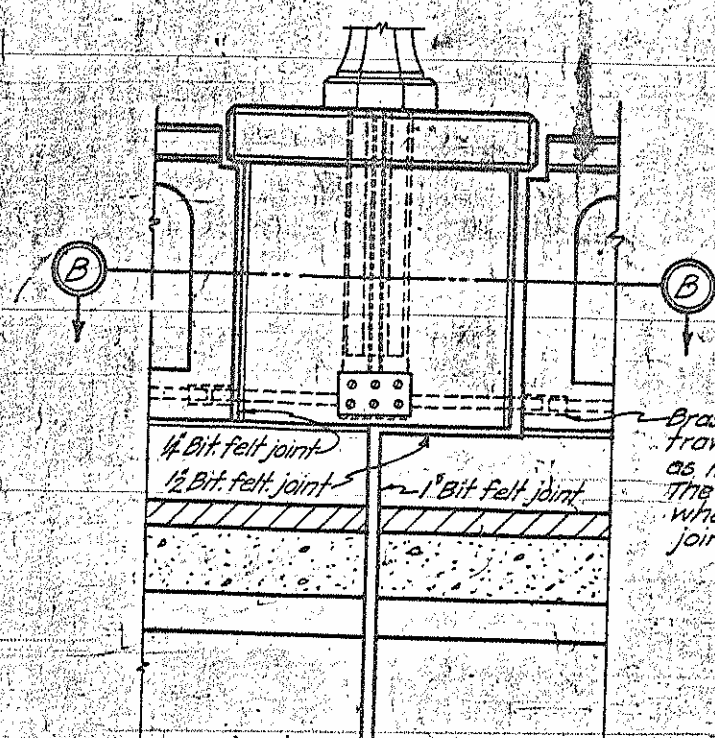
END VIEW



ELEVATION OF END POST



ELEVATION OF SUB-POST



ELEVATION OF INTERMEDIATE POST

GENERAL NOTE:

The Contractor shall furnish all Materials, labor, tools, etc. to completely install ready for operation a series, ornamental bridge lighting system, consisting of ornamental lighting units, standards, the necessary cable, laterals, transformers, time switches, lightning arresters, etc. as manufactured by the Westinghouse Electric and Manufacturing Company.

WIRING

Cables shall extend to first ornamental standard in one piece and then in one piece from standard to standard and be connected direct to the lamp socket terminals in each standard. Cables shall be No. 6, B.S. gauge, single conductor solid copper wire tinned, insulated for 2000 volts, braided and lead covered and have a conductivity of not less than 98% as manufactured by Hazard Mfg. Co. The cable shall be continuous in length from standard to standard and run in 1/2 galvanized conduit.

CONDUITS

All cables shall be run in 1/2 galvanized conduits imbedded in base of concrete handrail as shown. The conduits shall be galvanized and of an approved manufacture and shall be continuous from outlet to outlet. There shall be installed where shown Type F.J.C. 5000 Crouse-Hinds conduits with brass covers.

GROUNDING

The entire system shall be properly grounded.

TRANSFORMERS ETC.

The Contractor shall furnish and install one pole mounting isolating current transformer of 2 K.V.A. group series type, 6.6 amperes primary, 6.6 amperes secondary, 60 cycles, and four 5000 volt lightning arresters. The service pole will be furnished by others and located 50' from the bridge.

GUARANTEE

The Contractor shall give a written guarantee covering the entire installation for a period of one year from date of completion, this to apply both to material and workmanship.

REGULATIONS

All electrical work shall be done in strict accordance with the requirements of the National Electric Code, and with the ordinances and regulations of the local and State Authorities.

STANDARDS

The contractor shall furnish and install illuminating standards and equipment as shown on this plan. The concrete standards shall be reinforced and manufactured by the hollow spinning or centrifugal process and shall be equal to Westinghouse Electric & Mfg. Co. 5-B Type or General Electric Utility No. 8. Cast Aluminum foilium slipover casing, cast aluminum lighting unit with metal canopy and spurs including Bi-lux Bowl type or Holophane B symmetric Refractor. Mazda "C" Street Series, incandescent Lamp, 250 candle power, 6.6 Amperes.

CIRCUIT

The entire Bridge shall be wired on one circuit.

GROUTING

The standards shall be grouted in place with 2:1 sand-cement mortar.

BASIS OF PAYMENT

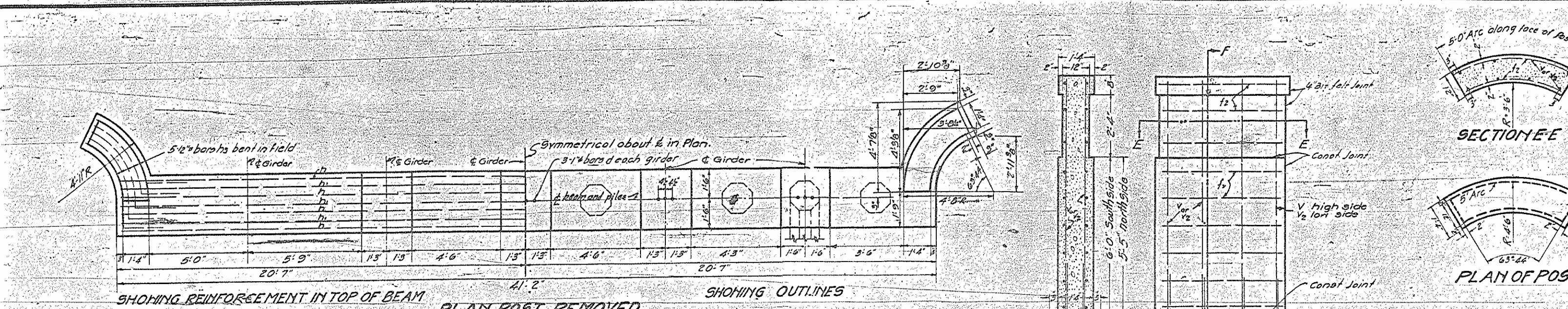
Illuminating Standards will be paid for at the contract unit price for "Illuminating Standards" as shown on plans, complete in place. This price will be payment in full for furnishing and placing the standards ready for use and for all wiring, switches, junction and pull boxes, conduits, lamps, globes, globe holders, and for all other materials, equipment, labor and all work incidental thereto necessary to make a complete job.

PROJECT NO. 3880
ROBESON COUNTY
STA. 8+10

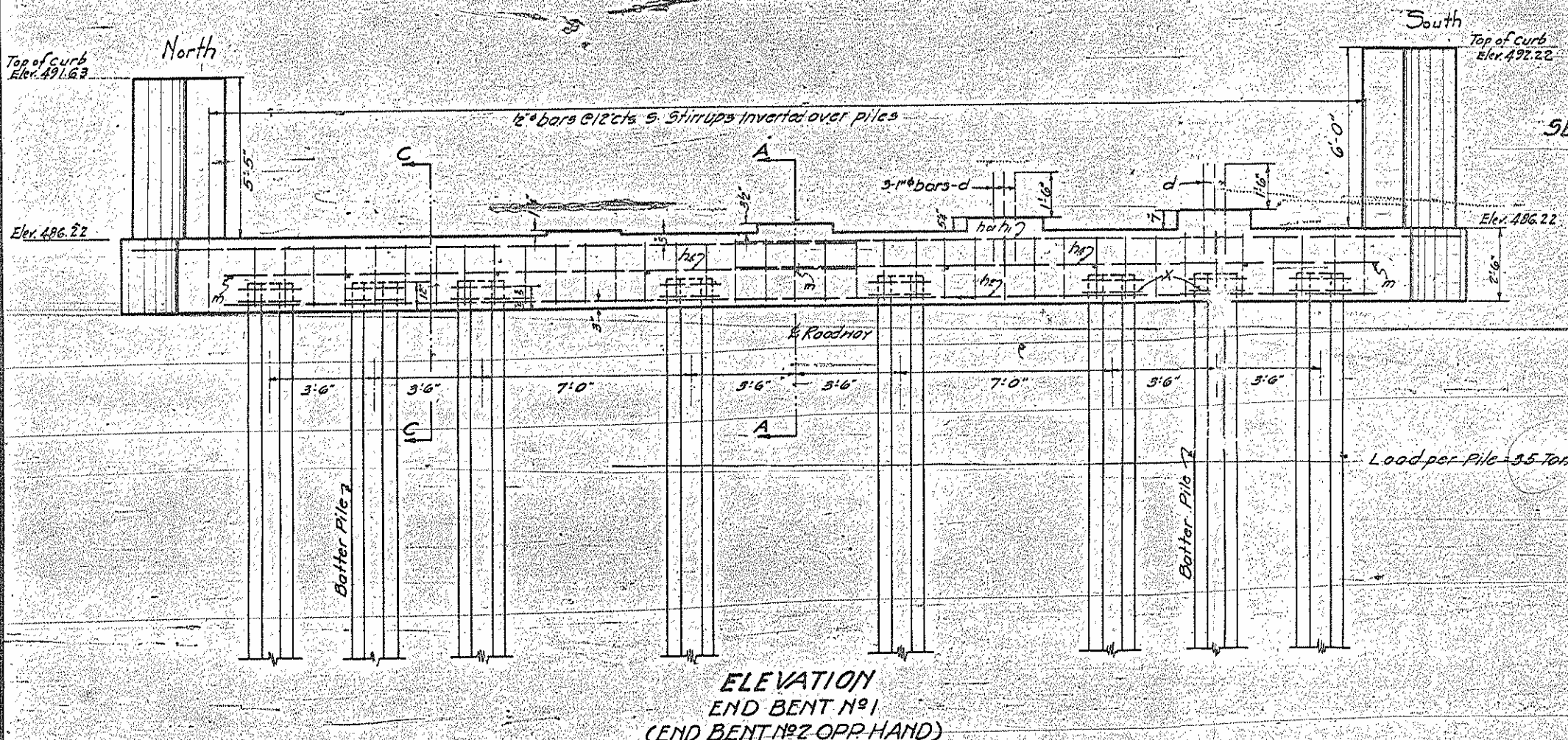
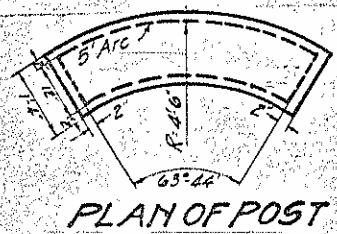
STATE OF NORTH CAROLINA
STATE HIGHWAY & PUBLIC WORKS COMM.
RALEIGH
STANDARD
DETAIL OF
ILLUMINATING STANDARD
AND
WIRING CIRCUIT
JAN. 1933

Revised 7-5-34 for transformer By F.H.H. & H.E.W.
Revised 2-10-34 by J.M.J. & by R.P.H.
Revised to show dimension at base of illuminating standard 1-3-34 by J.M.J. & by T.B.G.Jr.

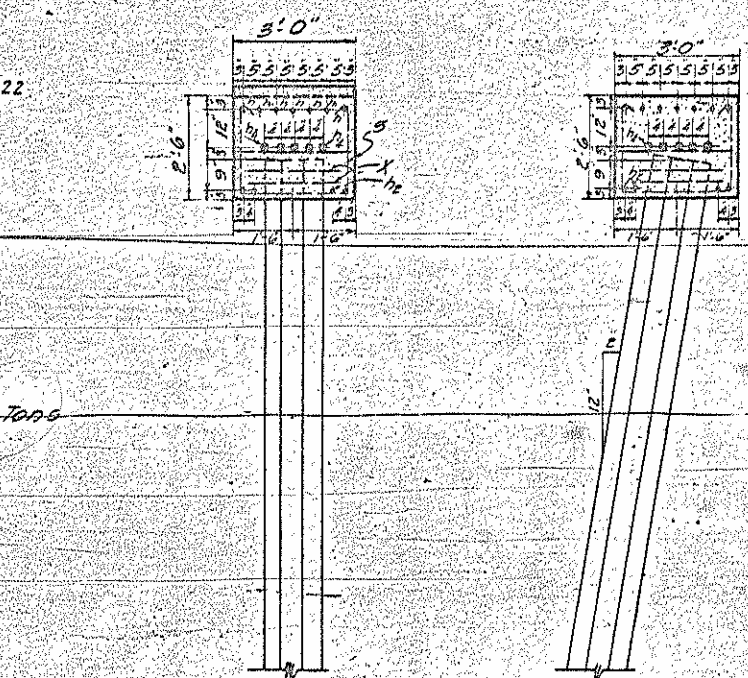
SUBMITTED BY *Wm. B. Craven*
APPROVED BY *R.P.H.*
DATE *2-10-34*
PLAN NO. *710-3*
1934



SECTION E-E

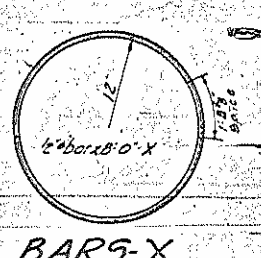
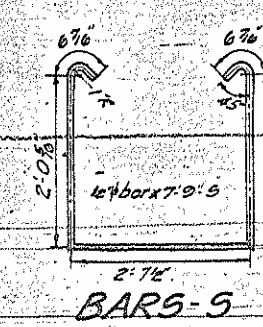


SECTION FF ELEVATION



DESIGN DATA
 Specifications N.C. State Highway & Public Works Commission
 Live Load H-15
 Impact Allowance None
 Steel in Tension 18000 Lbs per sq. in.
 Concrete in Compression 650 Lbs per sq. in.
 Sheet Class A Concrete 60 Lbs per sq. in.

GENERAL NOTE:
 Class A Concrete to be used throughout. Max size of coarse aggregate to be 1 1/2" except in Post and precast piles. Max size of coarse aggregate in post and precast piles to be 3/4".
 All corners to be chamfered 1" except on post. Post corners to be chamfered 3/4".
 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 to be securely held in correct position.
 The portion of the pile projecting into the cap shall be roughened, thoroughly cleaned of all loose material and wetted previous to pouring the cap. All material and workmanship as per specifications.



Approx. Lin. Ft. Piling End Bent #1 - 200
 Approx. Lin. Ft. Piling End Bent #2 - 240

Note: Volume of concrete displaced by piles has been deducted.

Note: Use 1" x 4" Piles in End Bents

BILL OF MATERIAL ONE BENT

Bars	No.	Size	Length	Weight
d	15	1"	3' 0"	120
h	36	2"	3' 9"	90
h	10	2"	21' 3"	222
h	4	2"	21' 3"	128
h	4	1"	38' 6"	411
h	10	2"	7' 6"	64
h	10	2"	21' 6"	183
m	2	2"	2' 9"	21
s	39	1/2"	7' 2"	202
v	8	1/2"	8' 9"	60
x	16	1/2"	8' 0"	85
v	16	1/2"	4' 3"	58
v	8	1/2"	8' 3"	56
Reinforcing Steel Lbs				1700
Conc. Max. Size Coarse agg. 3/4"				11
Total Concrete Cu Yds				16.4
RC Precast Piles No.				8

PROJECT NO. 3880
 ROBESON COUNTY
 STA. 8+10
 END BENTS 1 AND 2

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 RALEIGH
 SPECIAL
 PRECAST PILE END BENTS
 FOR
 LUMBER RIVER BRIDGE
 OVER
 LUMBER RIVER
 MARCH 1934

SUBMITTED BY *W. L. G. G.*
 APPROVED BY *John D. Waller*
 STATE HIGHWAY ENGINEER

SPECIAL
 DESIGNED BY *John D. Waller* DATE *Feb. 1934*
 DRAWN BY *John D. Waller* DATE *Feb. 1934*
 CHECKED BY *John D. Waller* DATE *Feb. 1934*

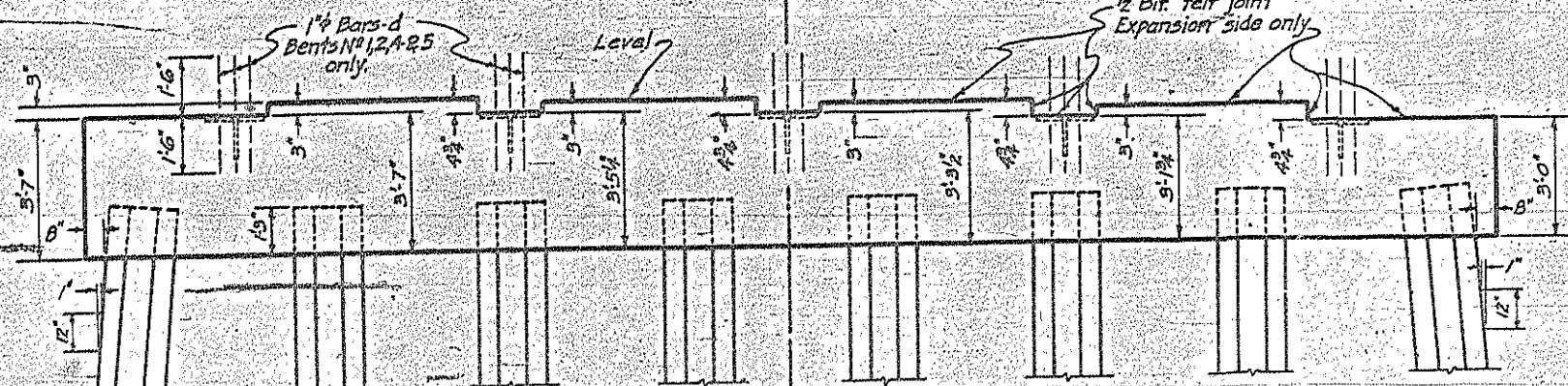
B.M. #2 spike in roof of 12" birch 10' x 8' Sta. 8+75 Elev. 479.58

PLAN
 78-133
 MAR. 22
 1934

South Side of Rdwy.

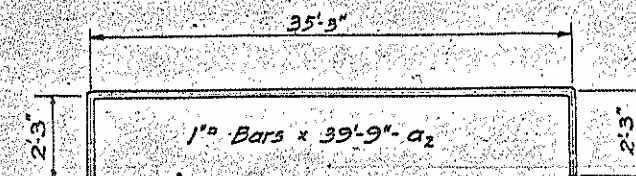
2 Roadway

North side of Rdwy.

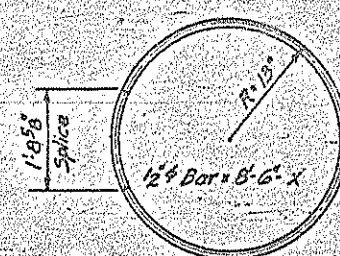


ELEVATION BENTS NO 1,2,3,4 & 5

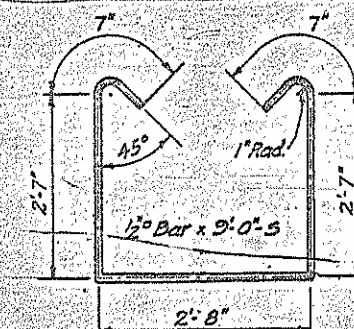
TABLE OF BRIDGE SEAT ELEVATIONS					
	Bent #1	Bent #2	Bent #3	Bent #4	Bent #5
Girder G ₁	487.13	487.36	487.43	487.36	487.13
Girder G ₂	486.99	487.22	487.23	487.22	486.99
Girder G ₃	486.84	487.07	487.14	487.07	486.84
Girder G ₄	486.69	486.92	486.99	486.92	486.69
Girder G ₅	486.53	486.78	486.85	486.78	486.53



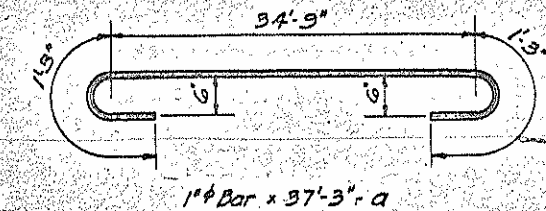
DETAIL OF BARS-a₂



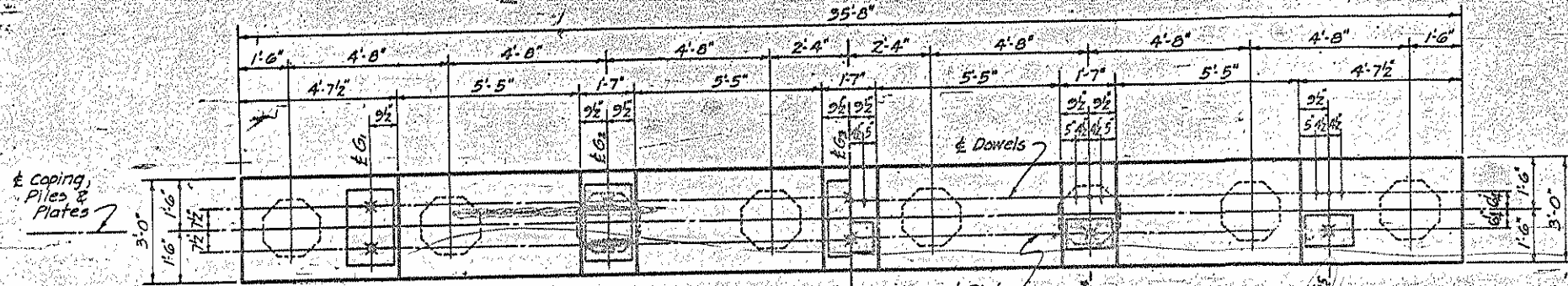
DETAIL OF BARS-X



DETAIL OF BARS-S



DETAIL OF BARS-a

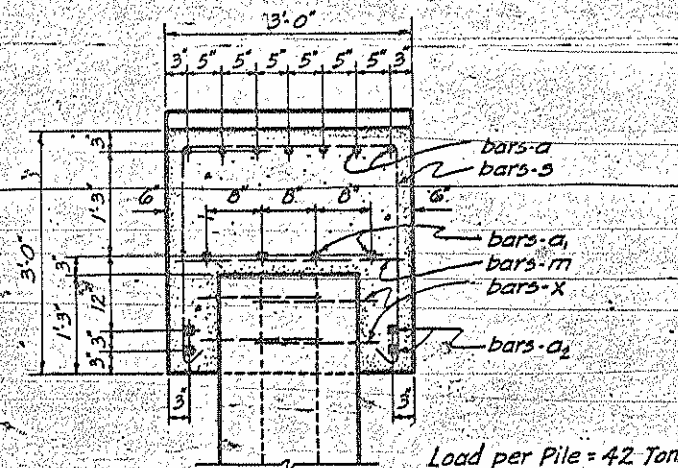


HALF PLAN BENT NO 3

NOTE: Place Plates & 'd' bars as shown for Bents No 1 & 2. Reverse location of plates & 'd' bars for Bents No 4 & 5.

HALF PLAN BENTS NO 1,2,4 & 5

NOTE: For "Design Data" see Sheet No 20.

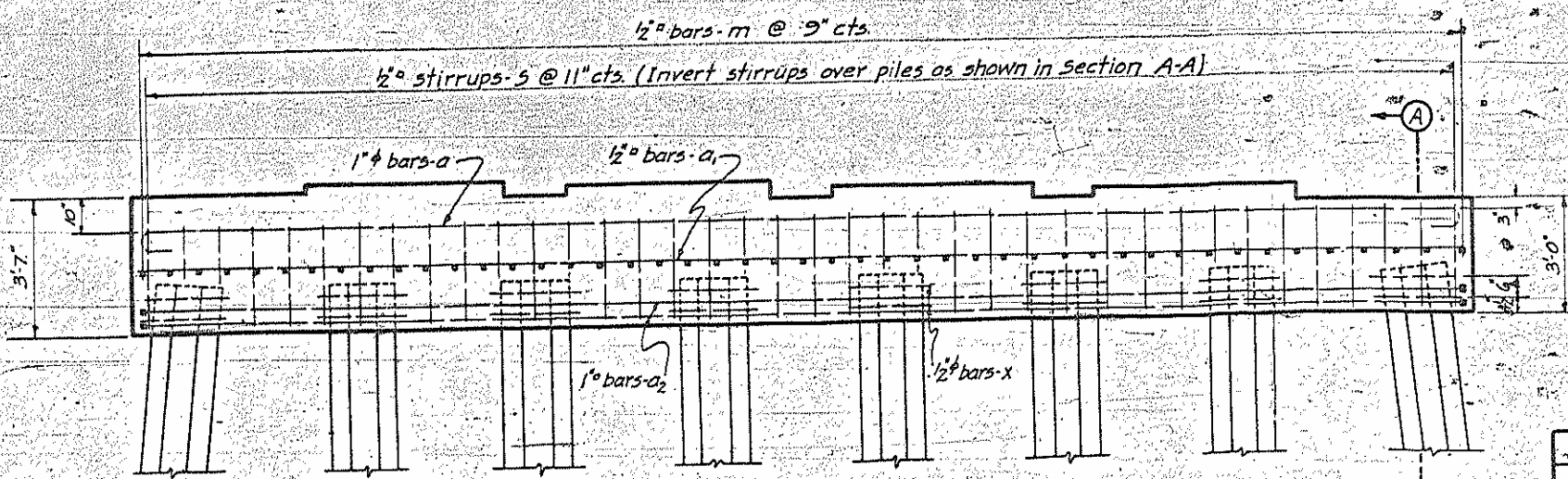


SECTION A-A

Load per Pile = 42 Tons

GENERAL NOTE:

Class 'A' concrete to be used throughout. Maximum size of coarse aggregate to be 1 1/2" except in precast piles. Maximum size of coarse aggregate in precast piles to be 3/4". 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 to be held securely in correct position. The portion of the pile extending into the cap shall be roughened, thoroughly cleaned of all loose material, and wetted, previous to pouring concrete. All exposed corners of concrete shall be chamfered 1". All material and workmanship as per specifications. Size of piles for all intermediate bents to be 20" diameter.



ELEVATION SHOWING REINFORCEMENT

BILL OF MATERIAL ONE BENT					
BENT NO 1,2,3,4 OR 5					
Bar	No	Size	Length	Weight	
a	7	1" φ	37'-3"	696	Plates & Bolts Bent #1,2,4 or 5 - Lbs. 118
a ₂	4	1/2" φ	35'-3"	120	Plates & Bolts Bent #3 - Lbs. 269
a ₂	4	1" φ	39'-9"	547	Approx. Lin. ft. 1'-8" Precast R.C. Piles Bent #1-280
* d	15	1" φ	3'-0"	120	Approx. Lin. ft. 1'-8" Precast R.C. Piles Bent #3-320
m	48	1/2" φ	2'-9"	112	Approx. Lin. ft. 1'-8" Precast R.C. Piles Bent #4-280
s	40	1/2" φ	9'-0"	306	Approx. Lin. ft. 1'-8" Precast R.C. Piles Bent #5-280
x	16	1/2" φ	8'-6"	91	
Total Reinforcing Steel Bent #1,2,4 or 5 Lbs.				1986	
Total Reinforcing Steel Bent #3 Lbs.				1866	
Total Class 'A' Concrete Cu. Yds.				19.0	
1'-8" Precast Reinforced Concrete Piles - No. 8					

* No 'd' bars required for Bent #3

NOTE: Volume of concrete displaced by piles has been deducted.

PROJECT NO. 3880
ROBESON COUNTY
STATION 8+10.00
BENTS NO 1,2,3,4 & 5

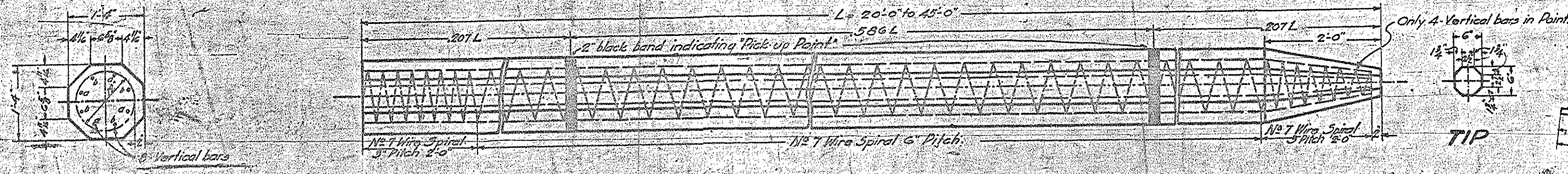
STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

SPECIAL DETAIL
OF
INTERMEDIATE PILE BENTS
FOR
LUMBER RIVER BRIDGE
FEB. 1934

SUBMITTED BY: *W. L. ...* BRIDGE ENGINEER
APPROVED BY: *John D. ...* STATE HIGHWAY ENGINEER
DATE: Feb. 22, 1934

PLAN NO. 78.133
Mar. 22, 1934

1-4" OCTAGONAL PILE



BUTT

TIP

QUANTITIES FOR ONE 1-4" OCTAGONAL PILE									
LENGTH "L"	VERTICAL REIN. BARS	SIZE	LENGTH	TOTAL REIN. STEEL LBS.	CONCRETE CU. YDS.	PILE WT. TONS	TWO PICKUP POINTS	THREE PICKUP POINTS	
20'-0"	8	4	17'-8"	149	1.04	2.11	4'-2"	11'-0"	
25'-0"	8	4	22'-8"	213	1.31	2.65	5'-2"	14'-8"	
30'-0"	8	4	27'-8"	256	1.58	3.20	6'-2"	17'-8"	
35'-0"	8	4	32'-8"	324	1.85	3.75	7'-3"	20'-6"	
40'-0"	8	4	37'-8"	400	2.13	4.31	8'-3"	23'-5"	
45'-0"	8	4	42'-8"	550	2.40	4.86	9'-4"	26'-4"	

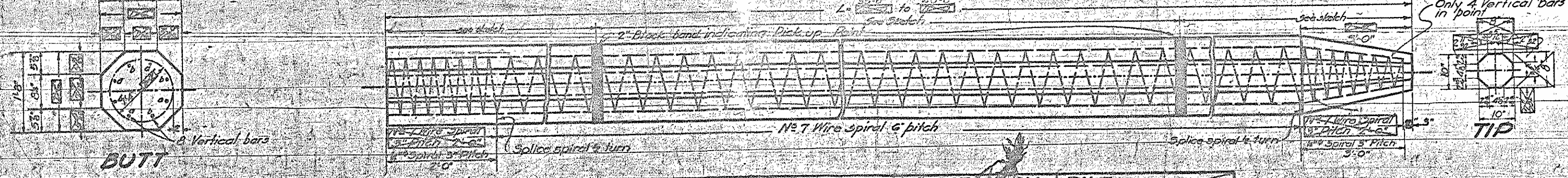
Wt. No. 7 Wire is considered as .20356 lbs. per ft. American Steel and Wire Co's. Standard. Conc. per lin. ft. of pile = 0.0545 cu. yds. Conc. in point = 0.055 cu. yds.

METHOD OF PICKING UP 1-8" ~~6~~ PILES 60 FEET AND OVER 3 PICKUP POINTS.

METHOD OF PICKING UP 1-4" AND ~~1-6~~ PILES UNDER 60 FEET 2 PICKUP POINTS

DETAIL OF BARS FOR 1-4" AND ~~1-6~~ PILES 1-8"

1-6" OCTAGONAL PILE



BUTT

TIP

QUANTITIES FOR ONE 1-6" OCTAGONAL PILE									
LENGTH "L"	VERTICAL REIN. BARS	SIZE	LENGTH	TOTAL REIN. STEEL LBS.	CONCRETE CU. YDS.	PILE WT. TONS	TWO PICKUP POINTS	THREE PICKUP POINTS	
40'-0"	8	4	37'-8"	761	3.11	6.30	9'-6"	27'-0"	
50'-0"	8	4	47'-8"	1073	3.39	6.86	10'-4"	29'-4"	
55'-0"	8	4	52'-8"	1195	3.73	7.55	11'-4"	32'-3"	
60'-0"	8	4	57'-8"	1269	4.08	8.26		9'-0"	21'-0"
65'-0"	8	4	62'-8"	1749	4.42	8.95		9'-9"	22'-9"
70'-0"	8	4	67'-8"	2965	4.77	9.66		10'-6"	24'-6"

Wt. No. 7 Wire is considered as .20356 lbs. per ft. American Steel and Wire Co's. Standard. Conc. per lin. ft. of pile = 0.069 cu. yds. Conc. in point = 0.076 cu. yds.

GENERAL NOTE:

Concrete shall be Class A. Maximum size of coarse aggregate to be 3/4". Coarse Aggregate shall consist of crushed stone only. All reinforcing steel shall be deformed bars. No splices of bars will be permitted. The spiral hoops shall be wired to the vertical bars at intervals of not more than 40" and in no case, a method approved by the Engineer shall be used whereby the head of the pile is not damaged. Piles shall be installed in ground by the following method:

All material and workmanship as per the specifications of the North Carolina State Highway and Public Works Commission.

QUANTITIES FOR ONE 1-8" OCTAGONAL PILE									
LENGTH "L"	VERTICAL REIN. BARS	SIZE	LENGTH	TOTAL REIN. STEEL LBS.	CONCRETE CU. YDS.	PILE WT. TONS	TWO PICKUP POINTS	THREE PICKUP POINTS	
35'-0"	8	4	31'-9"	432	2.87	5.9	7'-3"	20'-6"	
40'-0"	8	4	36'-9"	661	3.30	6.7	8'-3"	23'-6"	

Concrete per lin. ft. of pile = 0.0851 cu. yds. in point = 0.15 "

SUMMARY OF PILES.				
NO	LENGTH	DIAMETER	CONC. CU. YDS.	REIN. STEEL LBS.
8	45'-0"	1-4"	10.5	1704
8	35'-0"	1-4"	17.6	2048
24	35'-0"	1-6"	29.0	10368
12	40'-0"	1-6"	52.8	10576

PROJECT NO. 3880
ROBESON COUNTY

STATION 0+10

STATE OF NORTH CAROLINA
STATE HIGHWAY & PUBLIC WORKS COMM.

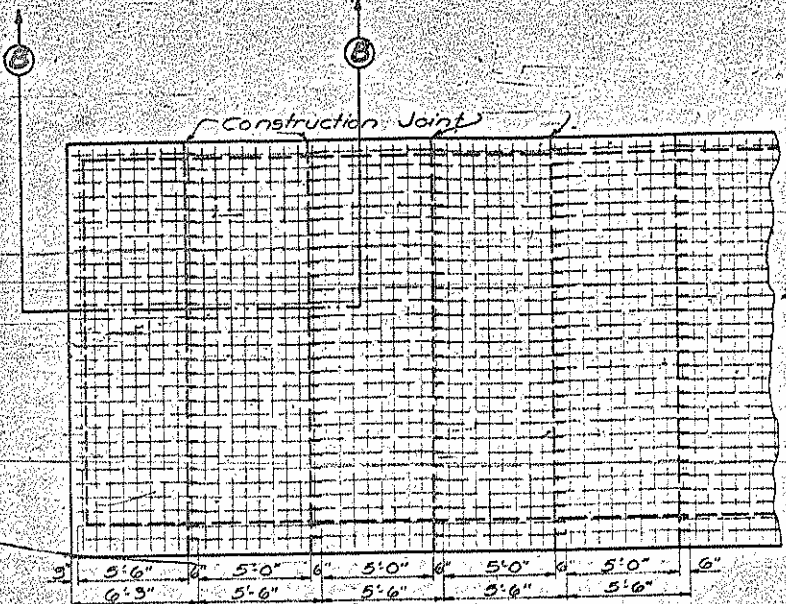
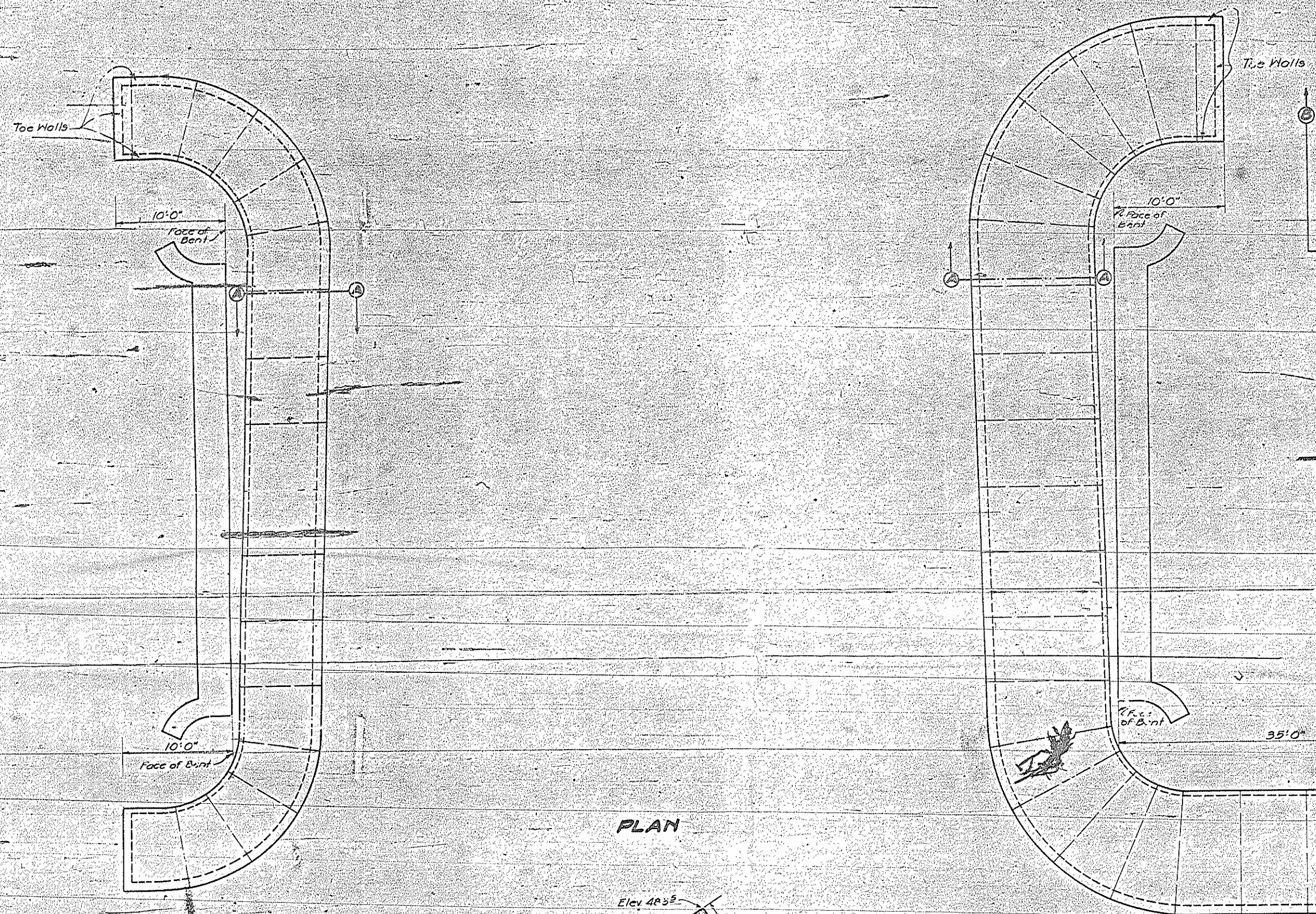
STANDARD
PRE-CAST
R.C. PILES
SEPTEMBER 1925

SPECIAL	APPROVED BY	DATE
STANDARD	APPROVED BY	DATE

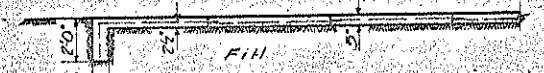
Revised to allow only crushed stone for coarse aggregate. May 1, 1934
Traced and revised as to Class A concrete & size of aggregate by K.H.P. & W.S.S. ck. by R.R. 28-31.
Revised May 20, 1936 for concrete quantities and pile weight by F.A.T. Jr. Checked by D.R.R.
Revised Jan. 31, 1942 for weight reinforcing steel & length by L.G.
Revised for 2 bars, 80 Pile, 4-20-24 by F.P. 1-1-42.
Revised for 2 bars, 10-16-22 by F.P. checked by G.T.B. Revised June 21, 1947 for Pickup Points by D.R.R. ck. by T.M. Jr.

REINFORCING STEEL LBS. 10,576
CONCRETE CLASS A CU. YDS. 122.9
LINEAR FEET 1-4" PILES 112
LINEAR FEET 1-6" PILES 100
TOTAL PILES NO. 36

APPROVED BY
STANDARD NO. 11-12



PART PLAN SHOWING WIRE MESH



SECTION B-B

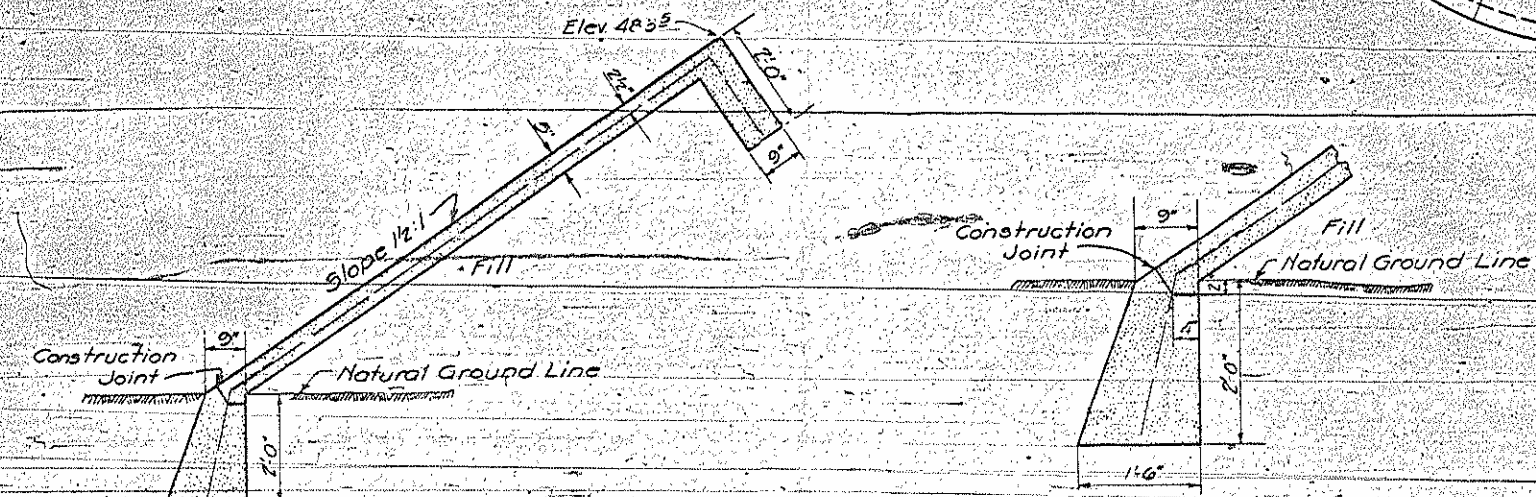
GENERAL NOTE

All concrete to be Class "B", Proportions 1 2 5
 Reinforcement to be #7 electrically welded wire mesh
 The wires in the mesh to be spaced at 4" centers
 in both directions.
 All materials and workmanship to be per specifications
 of the North Carolina State Highway and Public Works
 Commission.

Note: No allowance will be made for metal mesh.
 The cost of same complete in place including
 all material, equipment, tools, labor and incident-
 als to complete the item to be included in the
 unit price bid per sq. yd. for concrete rip rap.

PROJECT NO. 3880
 ROBESON COUNTY

STATION 8+10



SECTION A-A

DETAIL OF CONSTRUCTION JOINT AT TOE

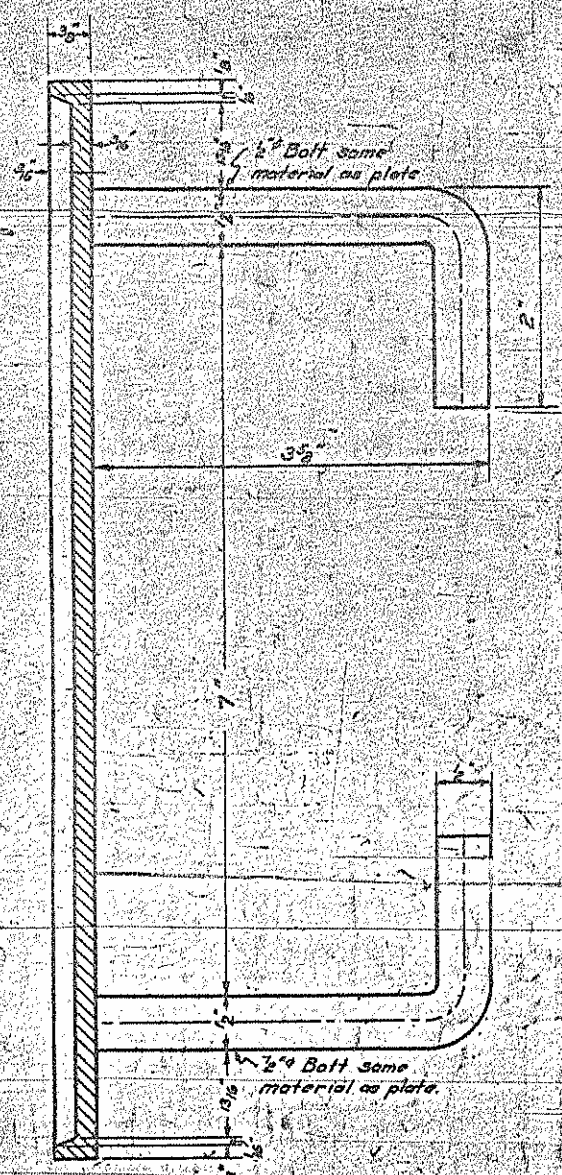
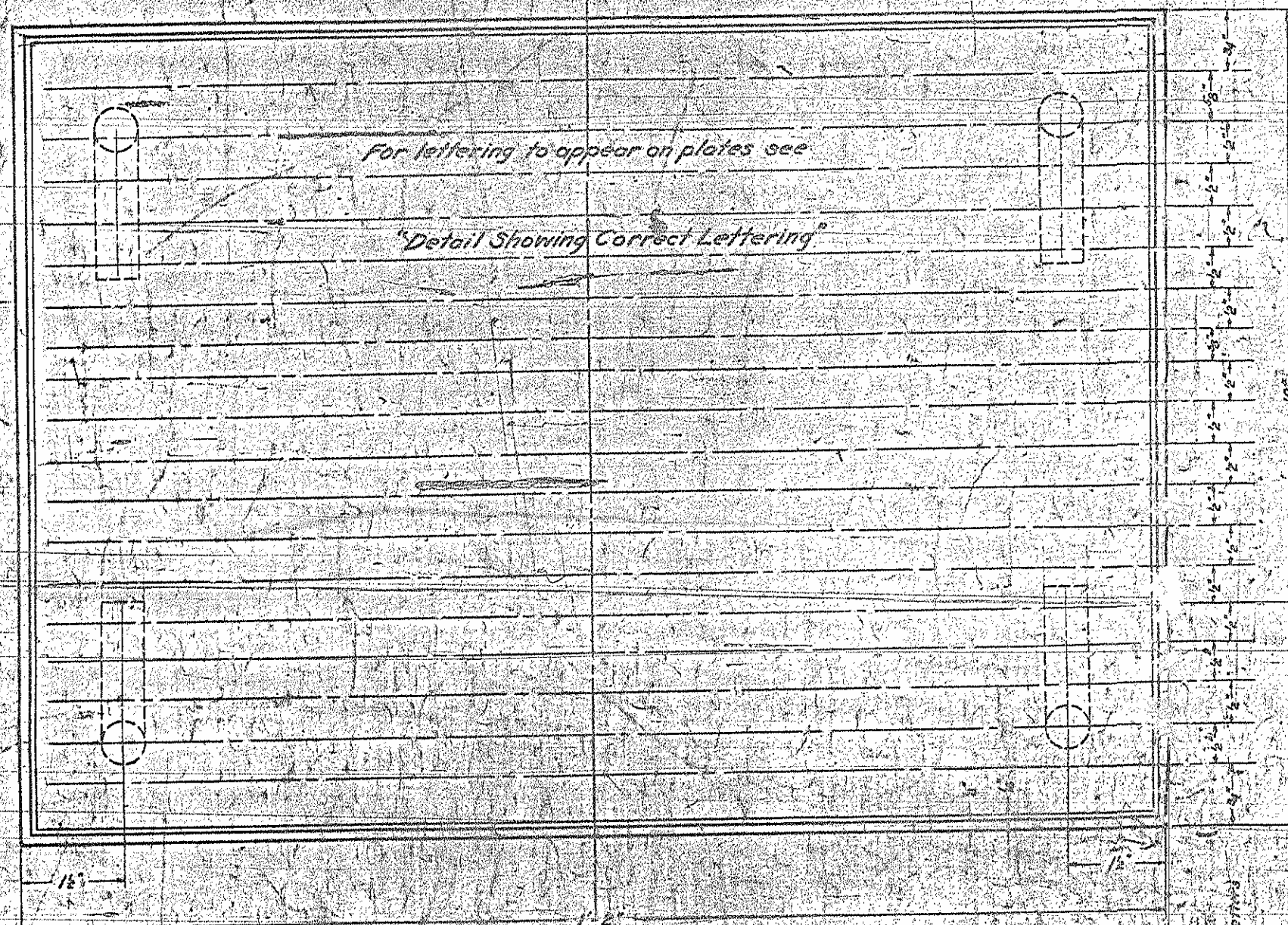
Concrete Rip Rap 375.0 Sq. Yds
 6" #7 Wire Mesh 740 Lin. Ft.

Approximate cu. yds. concrete rip rap 72.0

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 RALEIGH
SPECIAL
DETAIL OF CONCRETE
RIP RAP
LUMBER RIVER BRIDGE
FEBRUARY 1934

DESIGNED BY: *F. W. Flannery*
 DRAWN BY: *F. W. Flannery*
 CHECKED BY: *J. N. Wall*
 DATE: Feb. 1934
 DATE: Feb. 1934
 DATE: Feb. 1934
 APPROVED BY: *John D. Williams*
 STATE HIGHWAY ENGINEER
 PLAN NO. 7233
 NOV. 22, 1934

SPECIAL
 DESIGNED BY: *F. W. Flannery*
 DRAWN BY: *F. W. Flannery*
 CHECKED BY: *J. N. Wall*
 DATE: Feb. 1934
 DATE: Feb. 1934
 DATE: Feb. 1934



GENERAL NOTE:
 Two name plates are required for each bridge. One is to appear on each right hand end post approaching the bridge. It is to be securely fastened to the end of R.C. T-Beams Girders or on the roadway side of handrail posts of R.C. Slabs and R.C. Deck Girders.
 The plates are to be made of Grade C phosphor bronze 5/16 inch border and all lettering shall be raised 1/8 inch 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 1/2 inch and 3/8 inch. The lettering shall be as shown in the Detail Showing Correct Lettering.

Two name plates shall be provided for each bridge at station 5+10.

SECTION A-A

NOTE:
 Shape Name Plate to 4'-6" Radius to fit curvature of end post.

LUMBER RIVER BRIDGE
 ROBISON COUNTY
 STATE PROJECT NO. 3880
 BUILT BY
 NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 WITH FEDERAL AID
 1934

DETAIL SHOWING CORRECT LETTERING

STATE OF NORTH CAROLINA
 STATE HIGHWAY & PUBLIC WORKS COMMISSION
 STANDARD
 NAME PLATE
 FOR
 CONCRETE BRIDGES
 JULY 1934

SPECIAL	DESIGNED BY	DATE
STANDARD	DRAWN BY	DATE
	TRACED BY	DATE