

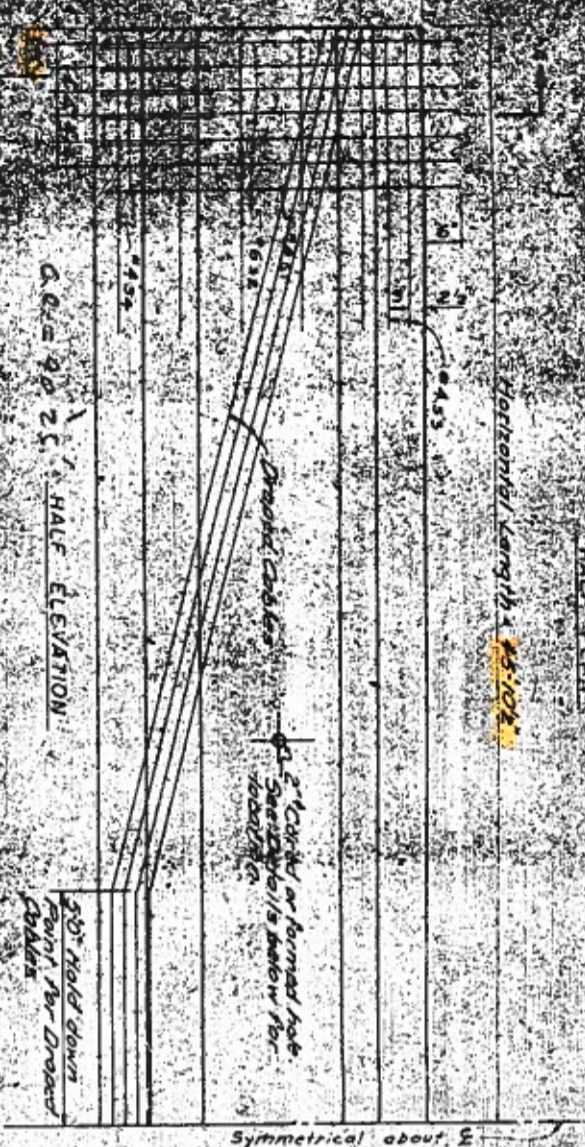
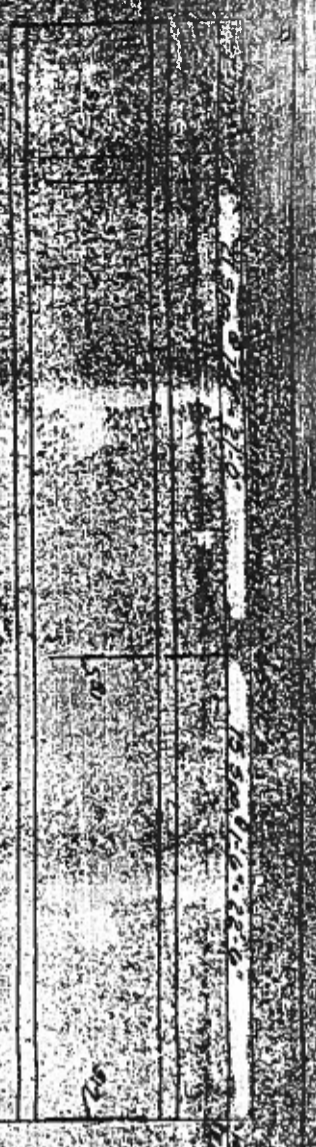
NOTE: DIMENSIONS OF GIRDERS IN THE GENERAL DIMENSIONS SHALL BE AS SHOWN IN THE DRAWING UNLESS OTHERWISE SPECIFIED. (SEE SPECIAL PROVISIONS FOR MATERIALS.)

NOTE: ALL DIMENSIONS ARE OUT TO OUT.

SECTION	BAR TYPES	NO. OF BARS	SIZE	SPACING	DEVELOPMENT LENGTH	ANCHOR
A1	①	4	#5	6"	12"	12"
A1	②	4	#5	6"	12"	12"
A1	③	4	#5	6"	12"	12"
A1	④	4	#5	6"	12"	12"
A1	⑤	4	#5	6"	12"	12"
A1	⑥	4	#5	6"	12"	12"
A1	⑦	4	#5	6"	12"	12"
A1	⑧	4	#5	6"	12"	12"
A1	⑨	4	#5	6"	12"	12"
A1	⑩	4	#5	6"	12"	12"
A1	⑪	4	#5	6"	12"	12"
A1	⑫	4	#5	6"	12"	12"
A1	⑬	4	#5	6"	12"	12"
A1	⑭	4	#5	6"	12"	12"
A1	⑮	4	#5	6"	12"	12"
A1	⑯	4	#5	6"	12"	12"
A1	⑰	4	#5	6"	12"	12"
A1	⑱	4	#5	6"	12"	12"
A1	⑲	4	#5	6"	12"	12"
A1	⑳	4	#5	6"	12"	12"
A1	㉑	4	#5	6"	12"	12"
A1	㉒	4	#5	6"	12"	12"
A1	㉓	4	#5	6"	12"	12"
A1	㉔	4	#5	6"	12"	12"
A1	㉕	4	#5	6"	12"	12"
A1	㉖	4	#5	6"	12"	12"
A1	㉗	4	#5	6"	12"	12"
A1	㉘	4	#5	6"	12"	12"
A1	㉙	4	#5	6"	12"	12"
A1	㉚	4	#5	6"	12"	12"
A1	㉛	4	#5	6"	12"	12"
A1	㉜	4	#5	6"	12"	12"
A1	㉝	4	#5	6"	12"	12"
A1	㉞	4	#5	6"	12"	12"
A1	㉟	4	#5	6"	12"	12"
A1	㊱	4	#5	6"	12"	12"
A1	㊲	4	#5	6"	12"	12"
A1	㊳	4	#5	6"	12"	12"
A1	㊴	4	#5	6"	12"	12"
A1	㊵	4	#5	6"	12"	12"
A1	㊶	4	#5	6"	12"	12"
A1	㊷	4	#5	6"	12"	12"
A1	㊸	4	#5	6"	12"	12"
A1	㊹	4	#5	6"	12"	12"
A1	㊺	4	#5	6"	12"	12"
A1	㊻	4	#5	6"	12"	12"
A1	㊼	4	#5	6"	12"	12"
A1	㊽	4	#5	6"	12"	12"
A1	㊾	4	#5	6"	12"	12"
A1	㊿	4	#5	6"	12"	12"

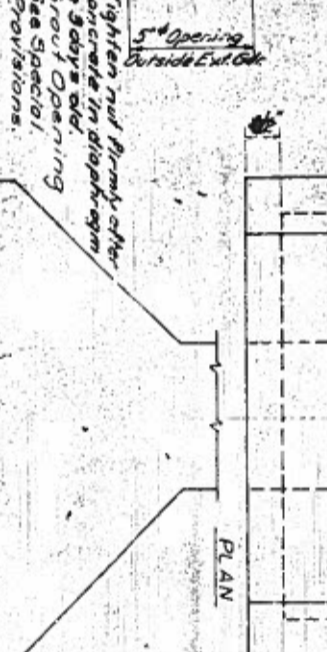
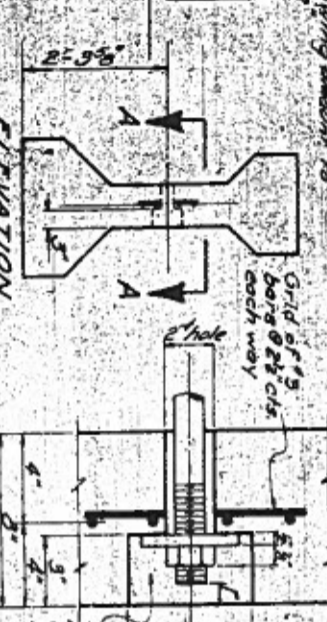
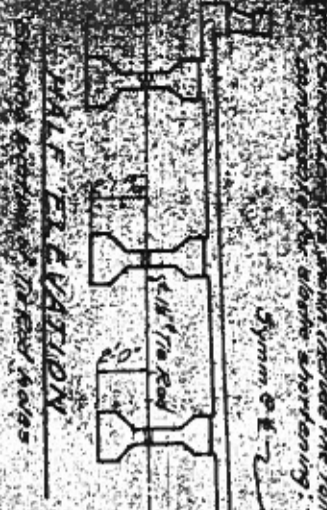
STATE HIGHWAY COMMISSION
SUPERSTRUCTURE
54" PRECASTER G.I.R.
DETAILS - SPA
 AUG. 1972
8-8

STATION: 139+1
 PROJECT NO. 81
 BRUN SWICK



GIRDER LENGTHS FOR 92' SPANS

SPAN	BEARING	L	A	B	X
30'-10"	P-8	31'-10"	30'-4"	31'-2 1/4"	2 5/8"
30'-10"	P-8	31'-10"	30'-4"	31'-2 3/8"	2 1/8"
30'-10"	P-7	31'-9 1/2"	30'-4"	31'-2 1/2"	1 3/4"
30'-10"	P-7	31'-9 1/2"	30'-4"	31'-1 3/4"	1 1/2"
30'-10"	P-6	31'-9 1/2"	30'-4"	31'-1 1/2"	1 1/2"
30'-10"	P-6	31'-9 1/2"	30'-4"	31'-1 1/2"	1 1/2"



DETAILS FOR THE END OPENING

External diaphragms only

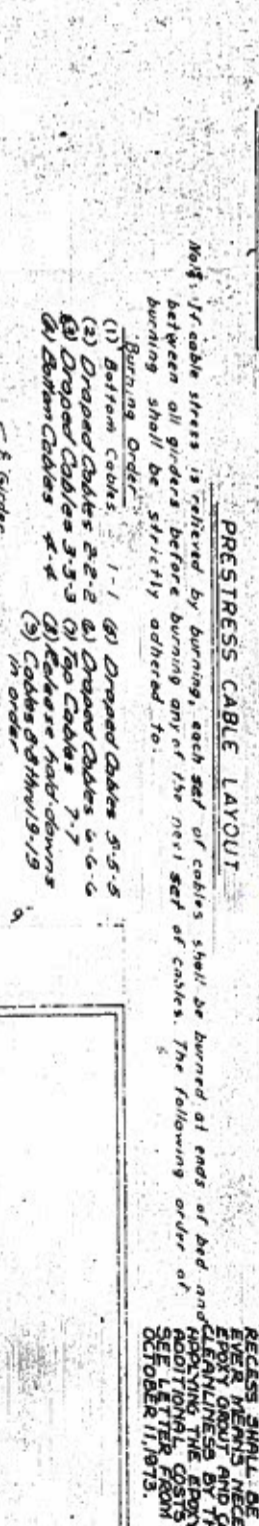
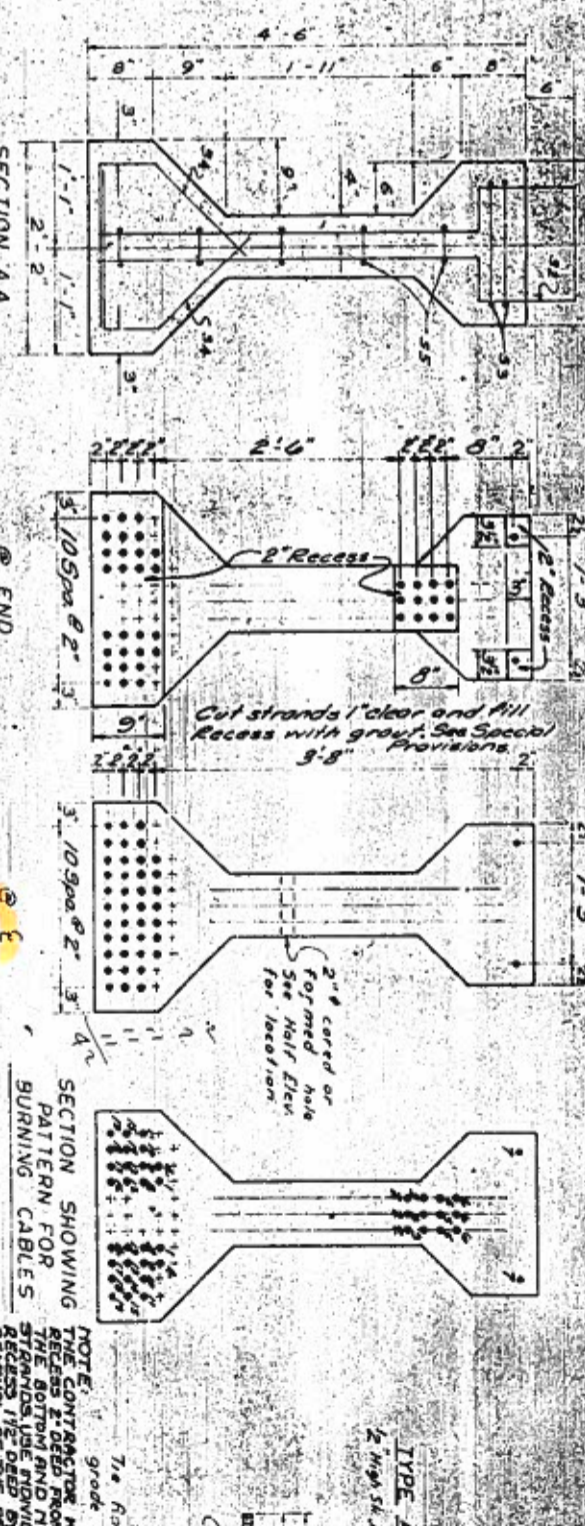
QUANTITIES FOR ONE GIRDER

ITEM	QTY	UNIT
Reinforcing Steel	1.85	TON
Formwork	1.85	SQ. YD.
Concrete	1.85	CY

REINFORCING STEEL FOR ONE GIRDER

BAR TYPE	BAR TYPE	BAR TYPE	BAR TYPE
1	2	3	4
5	6	7	8
9	10	11	12

All dimensions are out to out



DEAD LOAD DEFLECTIONS

SPAN	DEFLECTION
30'-10"	1/4"
30'-10"	1/4"
30'-10"	1/4"

STATE HIGHWAY DEPARTMENT

PROJ. BRU

STATIC

Sheet 3 of 3

8-8-47

CONC.

54

STATE HIGHWAY DEPARTMENT

PROJ. BRU

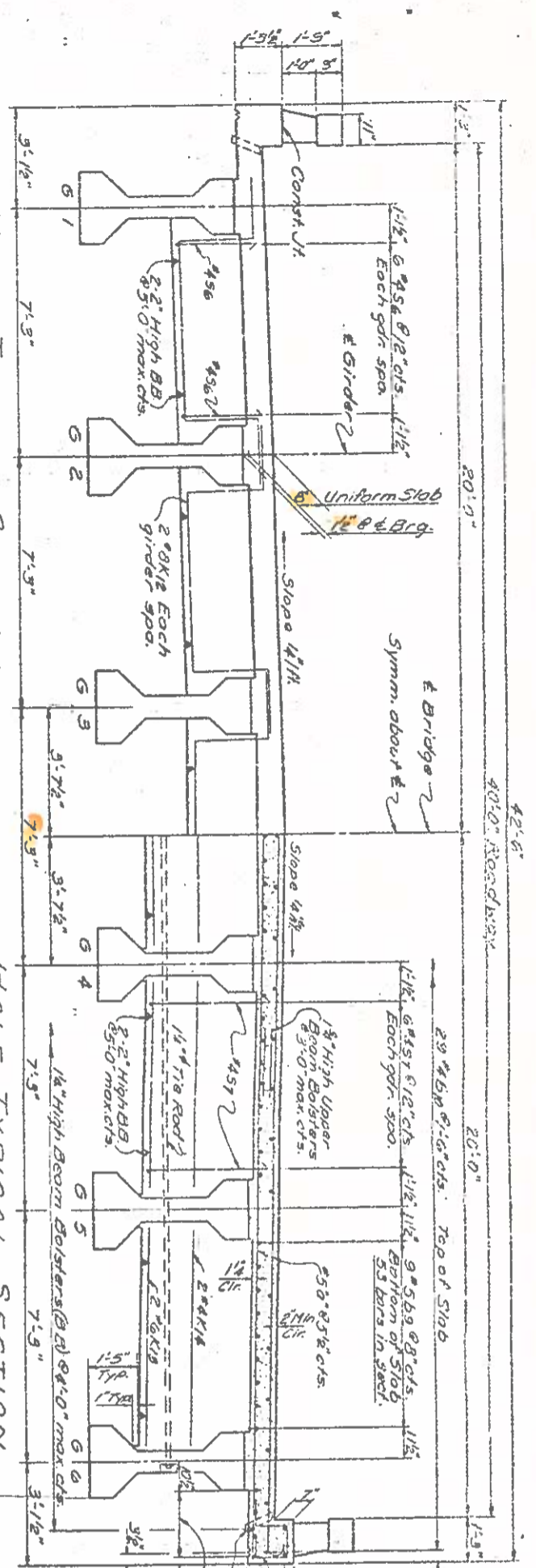
STATIC

Sheet 3 of 3

8-8-47

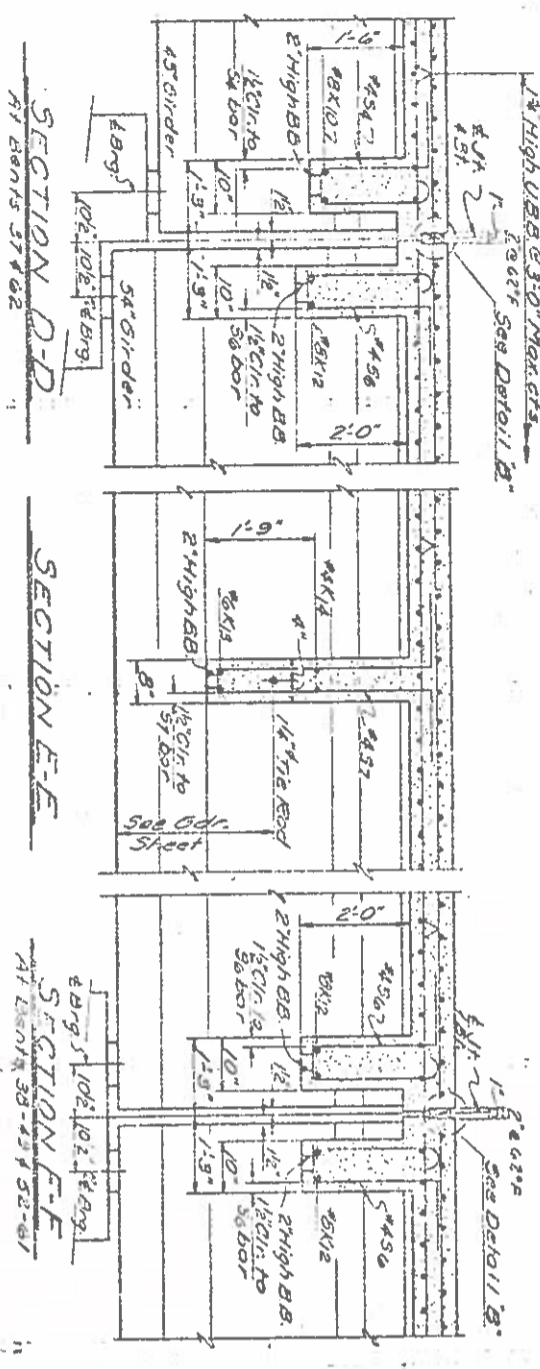
CONC.

54



HALE TYPICAL SECTION
Showing Bent Diaphragm

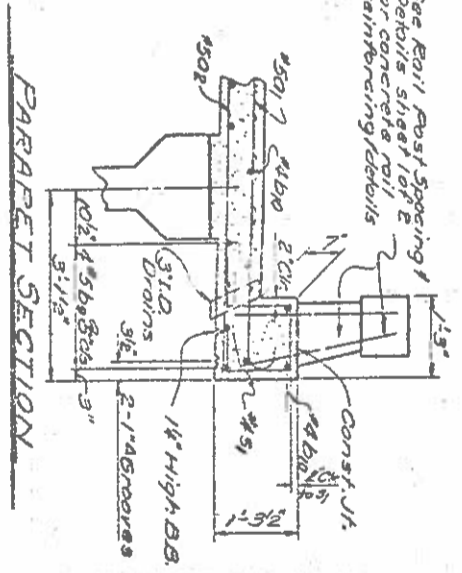
HALE TYPICAL SECTION
Showing Intermediate Diaphragm for Slab



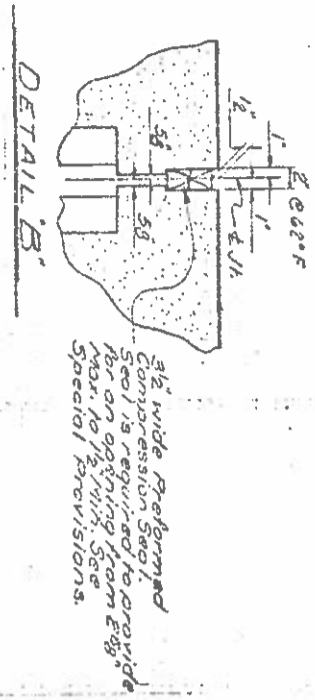
SECTION D-D
At Bent 37+62

SECTION E-E
At Bent 38+52-81

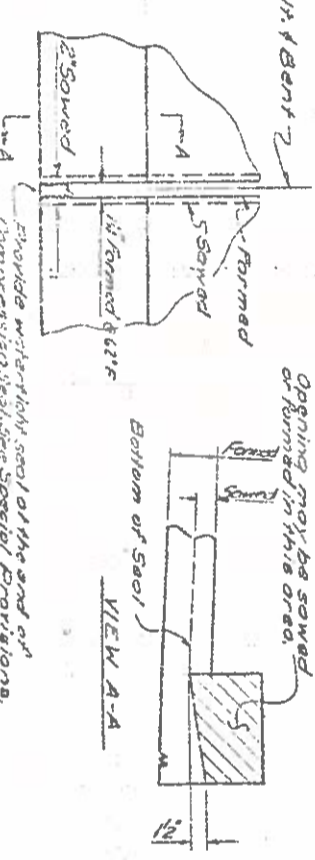
SECTION E-E
At Bent 38+52-81



PARAPET SECTION



DETAIL B



DETAILS OF CURVING EXPANSION Jt.

NOTES

ASSUMED LIVE LOAD HS 20-44 OR ALTERNATE DESIGN CONCRETE IN COMPRESSION 1100 LBS. PER SQ. IN. RETROFITTING STEEL IN FIBERS 20,000 LBS. PER SQ. IN.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET 9-1.

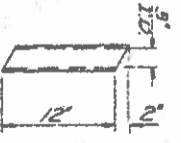
FOR BARS INDICATED AND NO BAR MARK SHEEN, SEE CONCRETE PLAN FOR THE DIFFERENT SPANS.

TEMPORARY STRUTS SHALL BE PLACED BETWEEN PRESTRESSED GIRDERS ADJACENT TO THE DIAPHRAGMS AND THE WITS OR THE 11" THE RODS SHALL BE FULLY TIGHTENED BEFORE DIAPHRAGM AND CAST. STRUTS SHALL REMAIN IN PLACE 3 DAYS AFTER CONCRETE IS PLACED. THE TIE RODS SHALL BE RETIGHTENED AFTER THE STRUTS HAVE BEEN REMOVED.

RAIN DETAIL

Drains shall be of PVC plastic pipe. Top of drains shall be set 5" below surface of slab.

660 Required (6" spans)



PROJECT NO. 8/313502
BRUNSWICK COUNTY
STATION 139+16.00

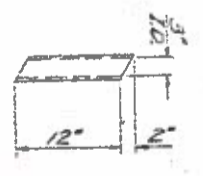
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
BRUNSWICK COUNTY

SUPERSTRUCTURE
TYPICAL SECTION
54" PRECAST CONG.
GIRDERS-SPANS 38.5m
CMT 4591492-2

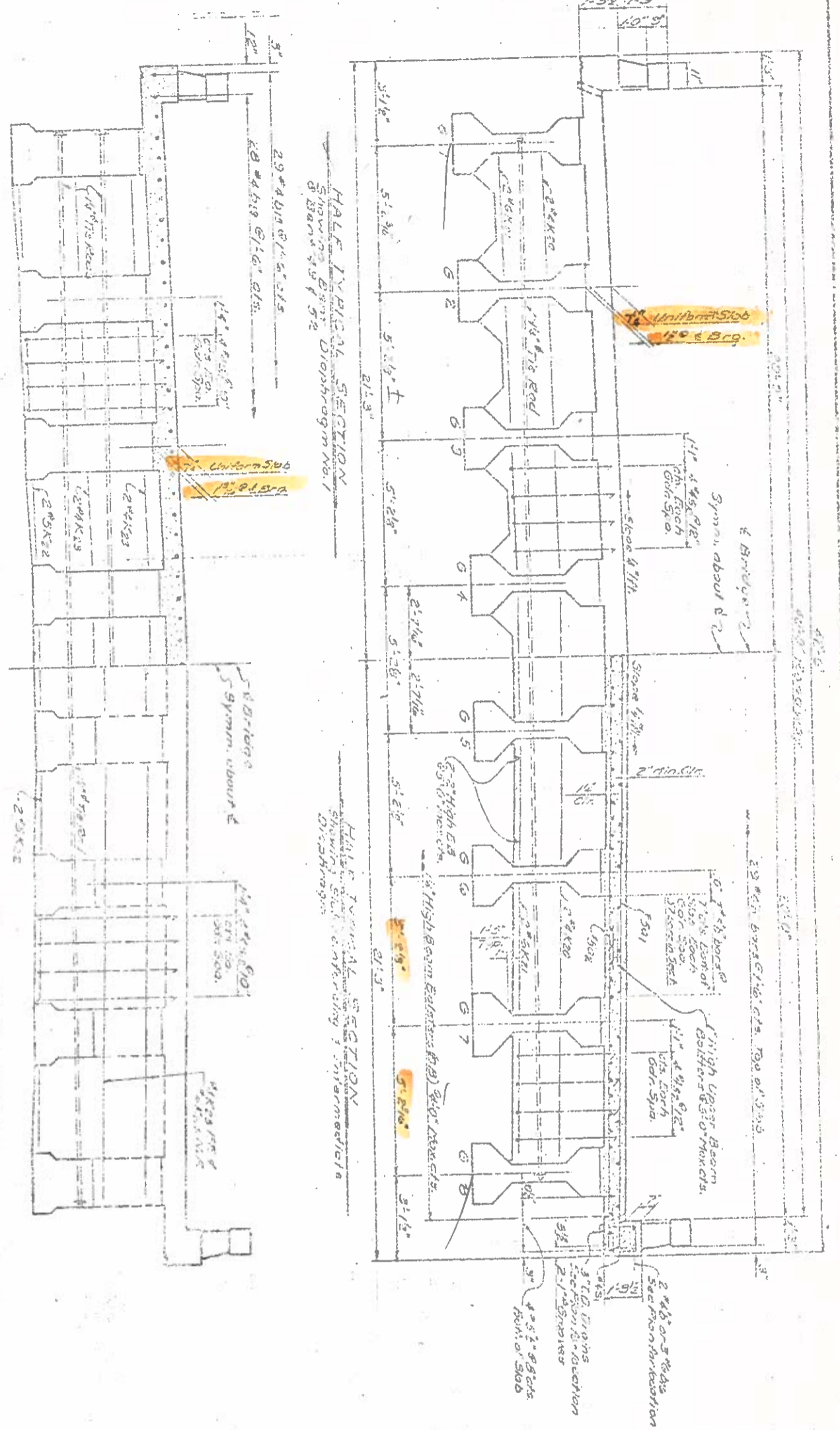
DATE	BY	CHKD	SCALE
1/1/50

PER. ROOM	DATE	PROJECT NO.
4	9/13/50	

ASSUMED LIVE LOAD IS 20-48 OR AVERAGE LOADING.
 CONCRETE IN COMPRESSION 1100 LBS. PER SQ. IN.
 REINFORCED STEEL IN TENSION 20,000 LBS. PER
 SQ. IN.
 FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE
 SHEET 5-11.
 FOR BARS INDICATED AND NO BAR MARK SHOWN, SEE
 CONCRETE PLAN FOR TIE DIFFERENTIAL SPANS.
 TEMPORARY STIFFENERS SHALL BE PLACED BETWEEN
 PRESTRESSED GIRDERS ADVISORY TO THE DRAWING
 AND THE CURS ON THE 1ST AND 2ND SHALL BE FILL
 TIGHTER BEFORE REINFORCEMENT AND CAST. STIFFENERS
 SHALL REMAIN IN PLACE 3 DAYS AFTER CONCRETE IS
 PLACED. THE TIE WIRE SHALL BE REINFORCED AFTER
 THE STIFFENERS HAVE BEEN REMOVED.



DRAIN DETAILS
 Details for 2" P.V.C. Plastic Pipe
 2" x 2" at floor openings to be set 2"
 below surface of slab.
 100% required (Spans 50-52)



HAIR TYING SECTION
 Showing Beam Diaphragm No. 1
 Span 51 & 52

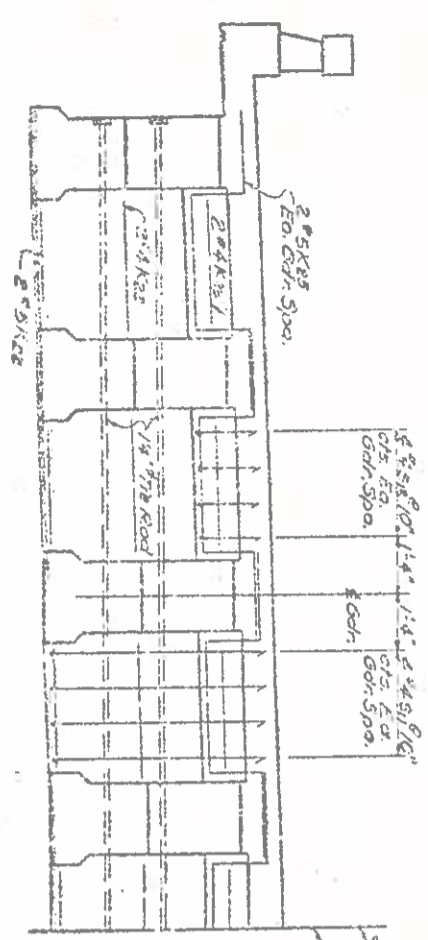
HAIR TYING SECTION
 Showing Beam Diaphragm No. 1
 Span 51 & 52

PROJECT NO. B133502
 BRUNSWICK COUNTY
 STATION 139+16.00

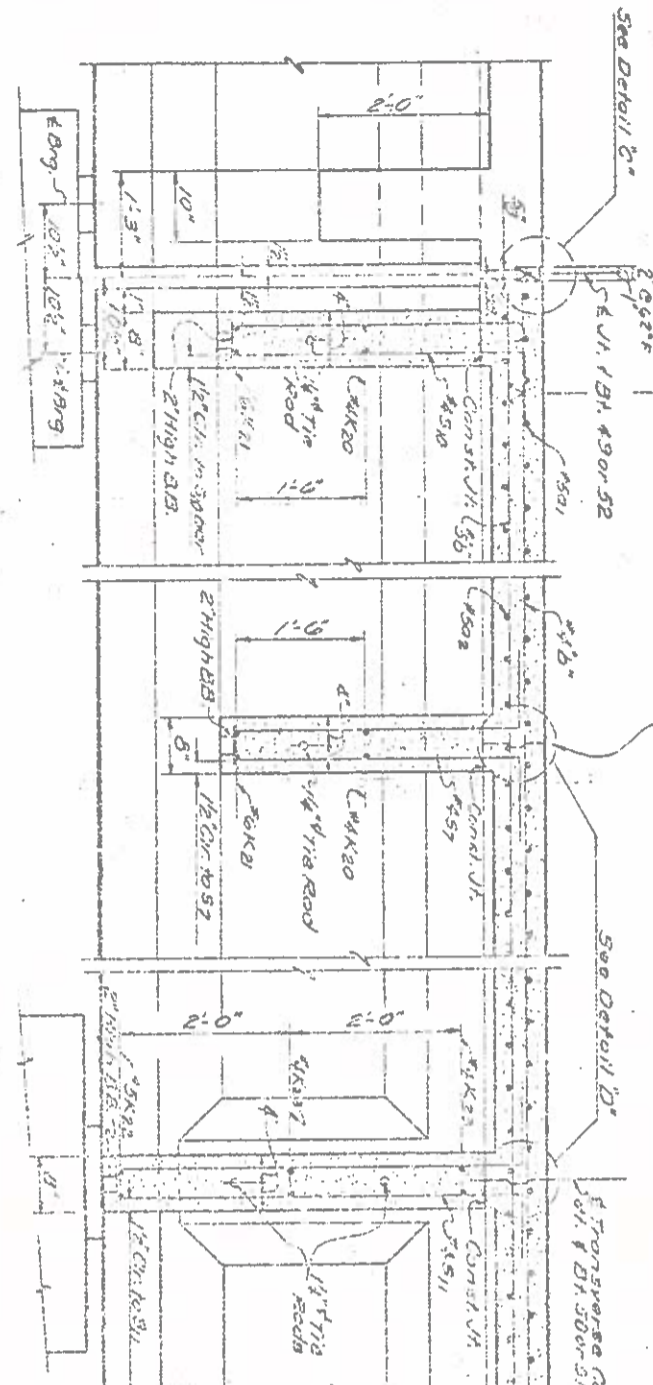
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 FLETCHER
 SUPER STRUCTURE
 TYPICAL SECTIONS
 B.S. WILKES, CONG.
 C. DEWEE, SPANS 50,
 51, & 52

NO.	DATE	BY	CHKD.	SCALE
1	9/13/50	W.P.	W.P.	AS SHOWN
2				
3				
4				

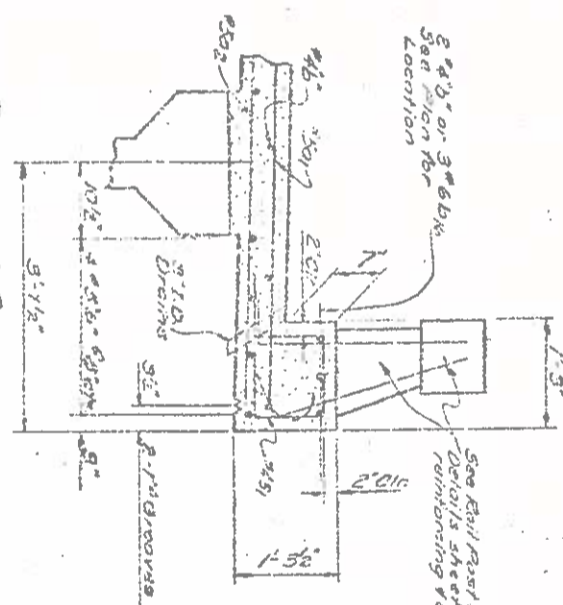
505152



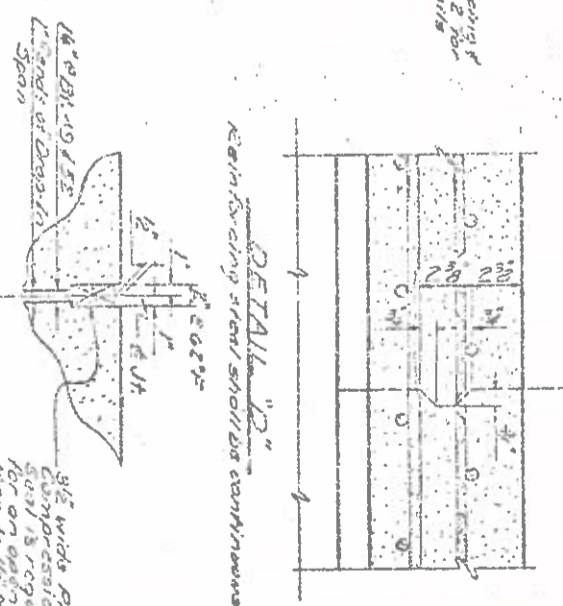
HALF TYPICAL SECTION
Showing Dimensions of ends of
Group 1st Span (Span 5)



Permitted Transverse Concr. in
only 5' section shown on plan



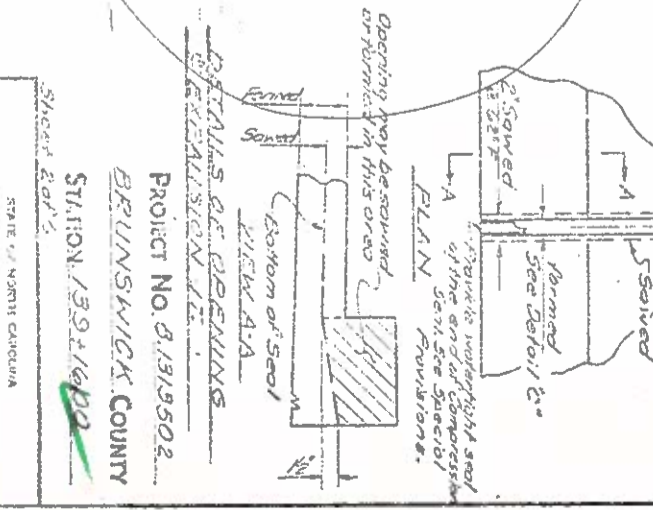
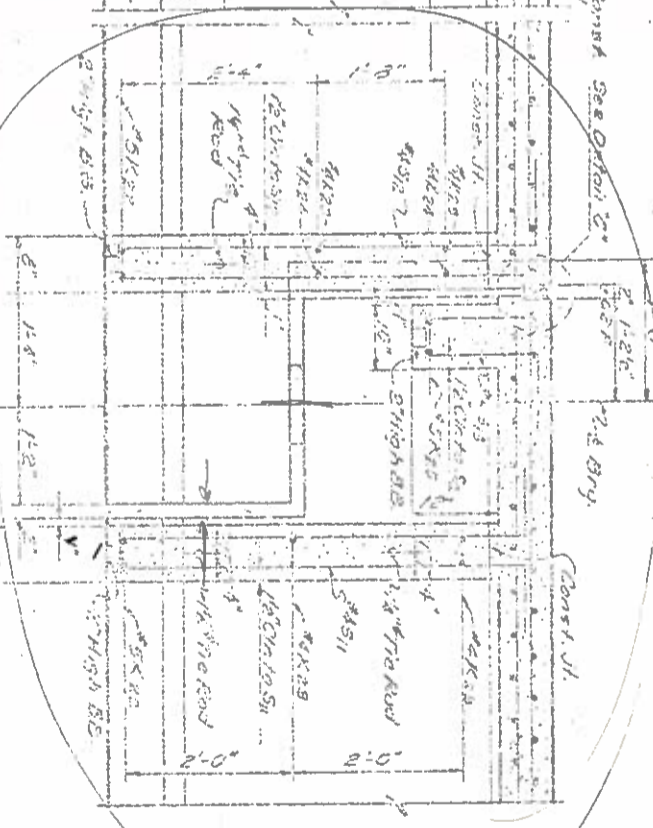
PARAPET SECTION



DETAIL 12\"/>

DETAIL 6\"/>

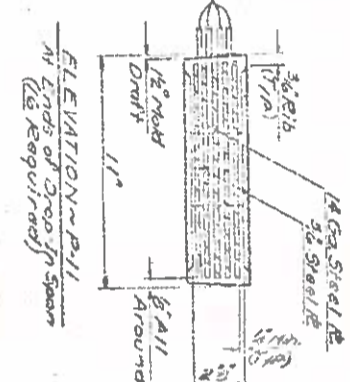
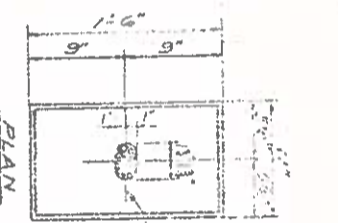
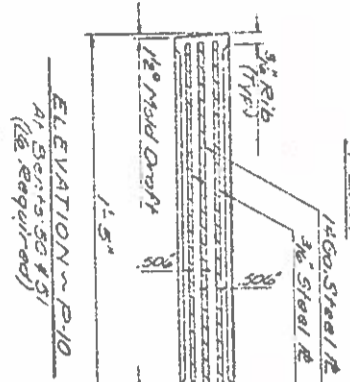
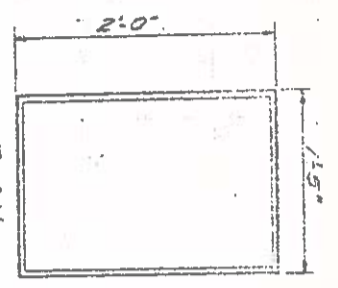
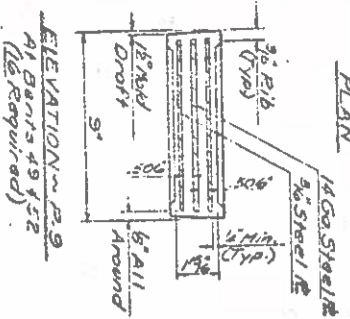
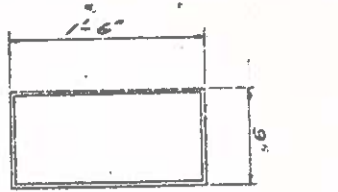
6\"/>



STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
BRUNSWICK COUNTY
PROJECT NO. 8131502
STATION 139+16.00
SHEET 602

APPROVED BY: [Signature]
DATE: [Date]

DATE	PROJECT NO.
8/1/50	8131502
DATE	SHEET NO.
8/1/50	602



ELASTOMERIC BEARING PADS
 For Spans 50, 51, & 52
 Note: Neoprene in all bearings shall have a Grade 50 diameter hardness. See Special Provisions. Steel plates in laminated bearing shall conform to ASTM A-96.

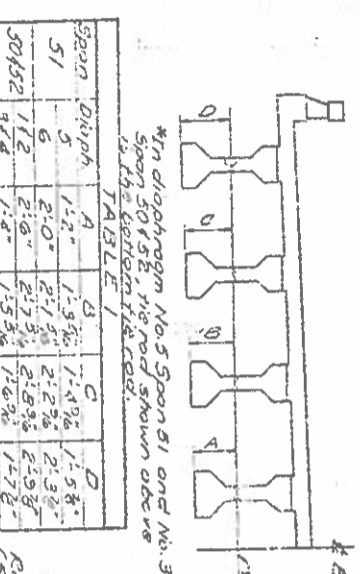
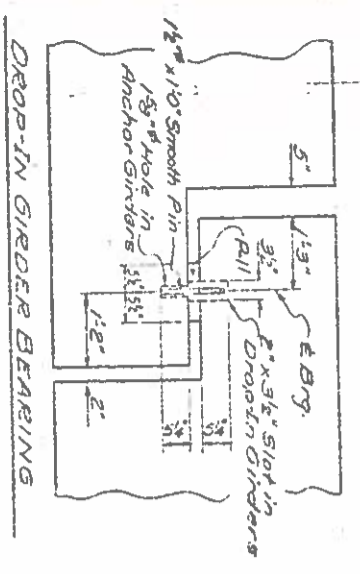
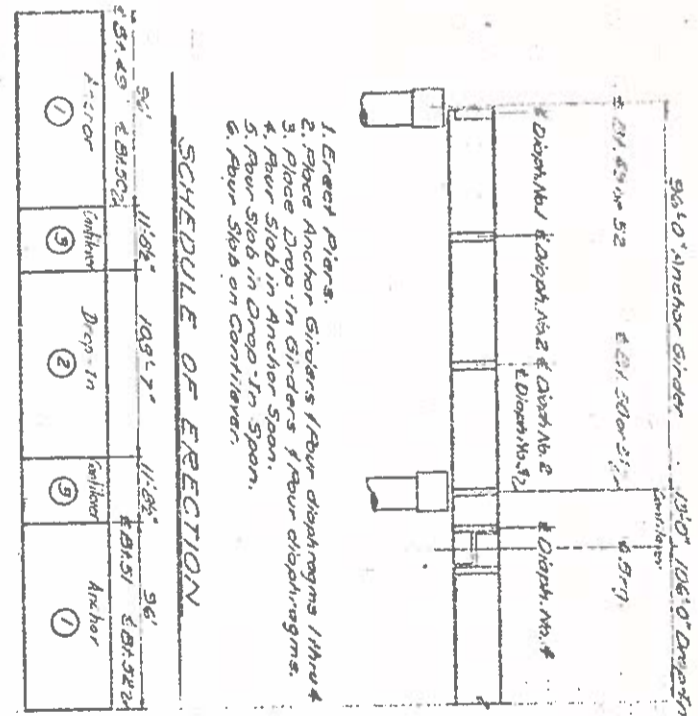


TABLE 1
 Spacing of 3 Bars
 51
 52

Span	Diaph	A	B	C	D
51	172	1-2	1-3 1/2	1-4 1/2	1-5 1/2
52	172	1-2	1-3 1/2	1-4 1/2	1-5 1/2

DETAILS FOR TIE ROD OPENING
 EXTERIOR GIRDERS ONLY



- SCHEDULE OF ERECTION**
1. Erect Piers.
 2. Place Anchor Girders (four diaphragms) (1 thru 4).
 3. Place Drop-in Girders (four diaphragms).
 4. Pour Slab in Anchor Span.
 5. Pour Slab in Drop-in Span.
 6. Pour Slab on Corridor.

SUMMARY OF DESIGN MOMENTS (K-FT)

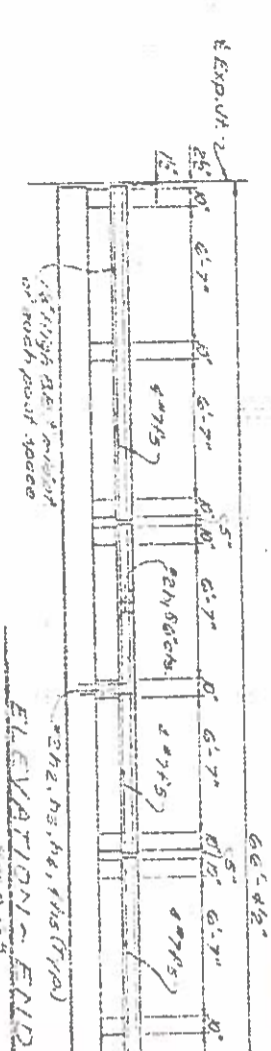
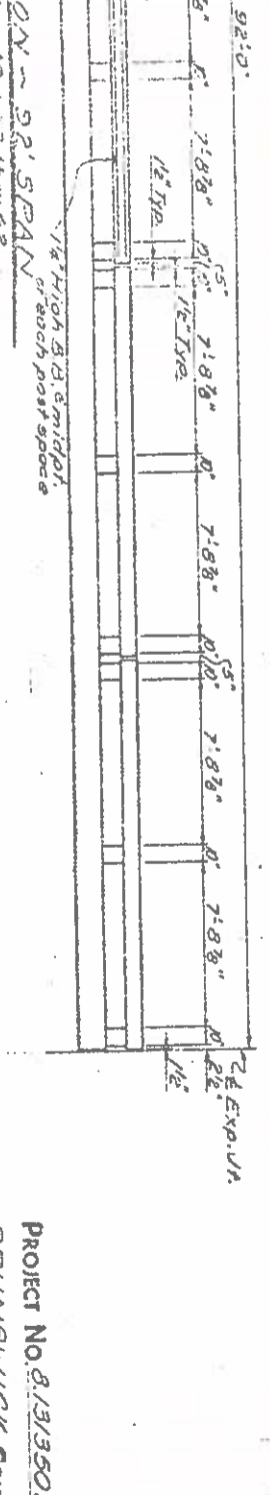
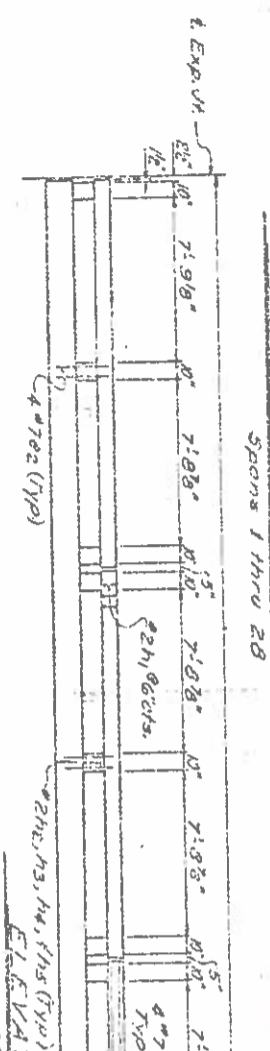
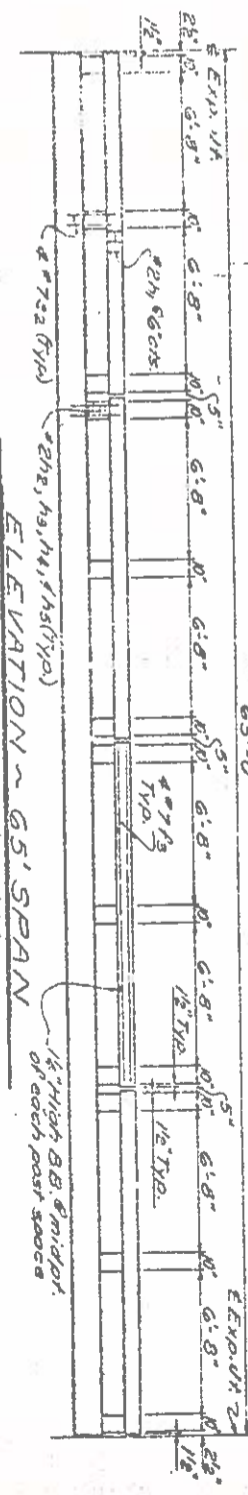
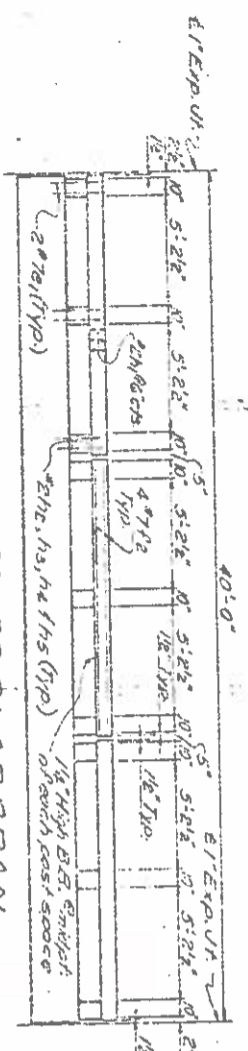
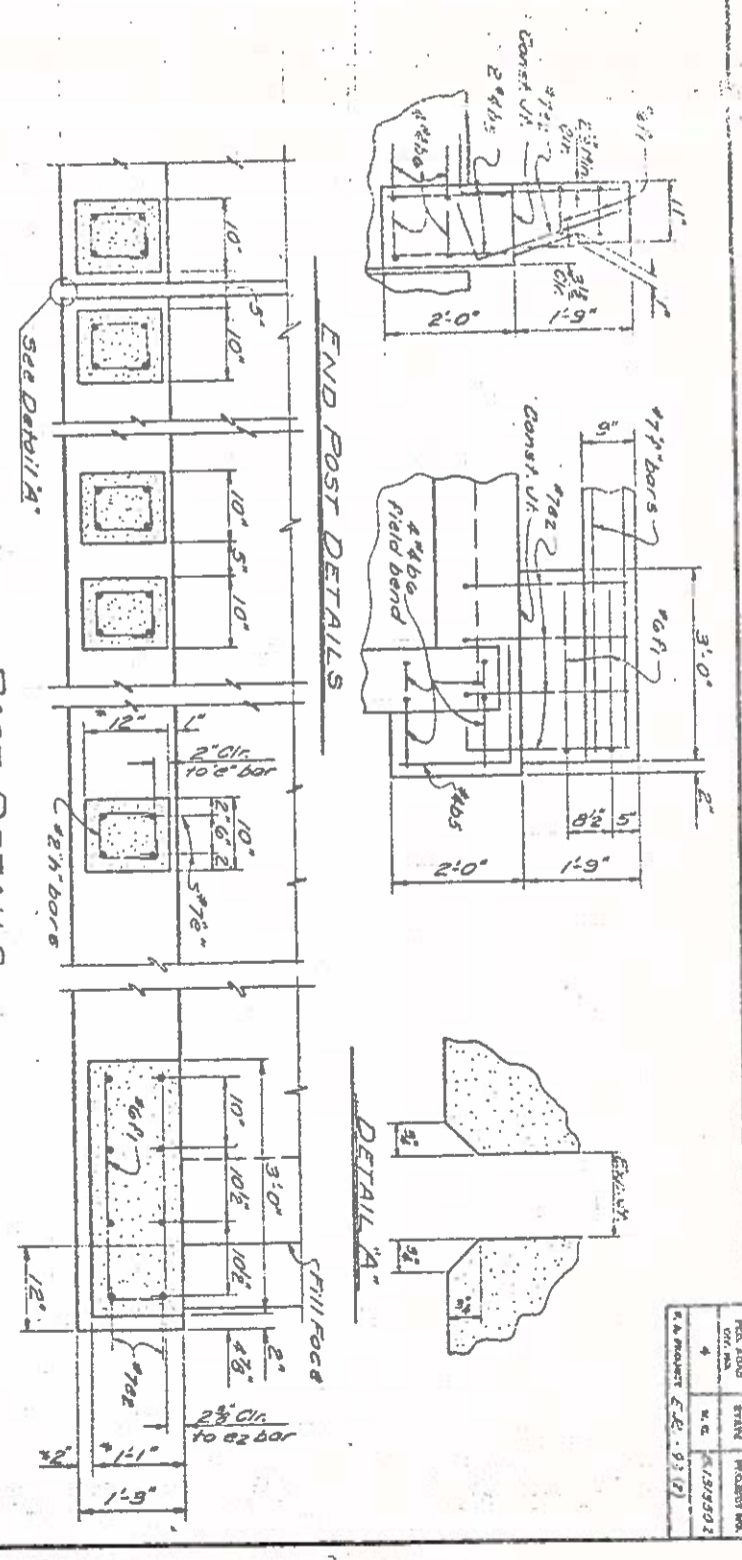
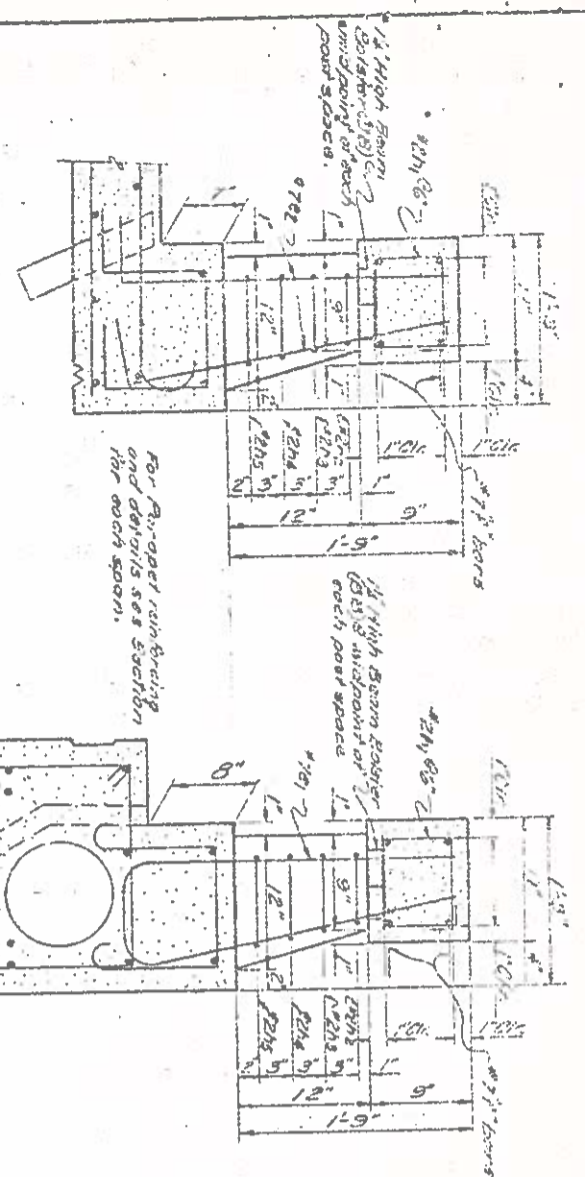
Span	Diaph	A	B	C	D
51	172	1-2	1-3 1/2	1-4 1/2	1-5 1/2
52	172	1-2	1-3 1/2	1-4 1/2	1-5 1/2



CONCRETE BUILD-UP OVER GIRORE
 Note: Camber varies from the assumed value shown, adjust built-ups accordingly.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 TULLIGHT
SUPERSTRUCTURE
54' PRESTRESS GIRDER
DETAILS - SPANS
 50, 51, & 52
 AUG. 1972

NO.	DATE	BY	CHKD.	APP.	REV.
1	8/1/72	J. H. H.	J. H. H.	J. H. H.	
2	8/1/72	J. H. H.	J. H. H.	J. H. H.	



STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
BALTIMORE

PROJECT NO. 8133502
BRUNSWICK COUNTY
STATION 139+16.00
Sheet 1 of 2

SUPERSTRUCTURE
CONCRETE RAIL
POST SPACING &
DETAILS
AUG 1972

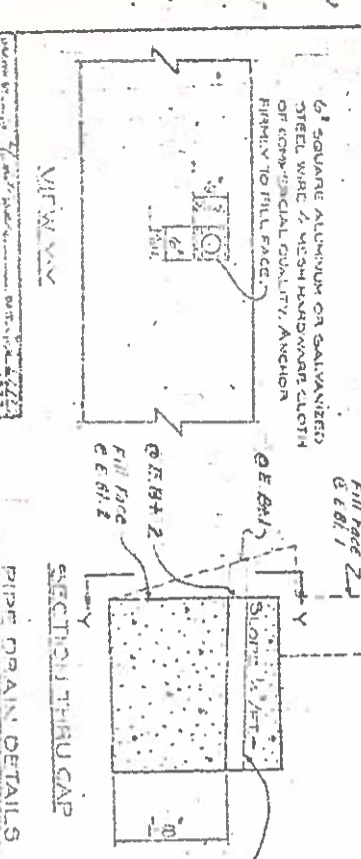
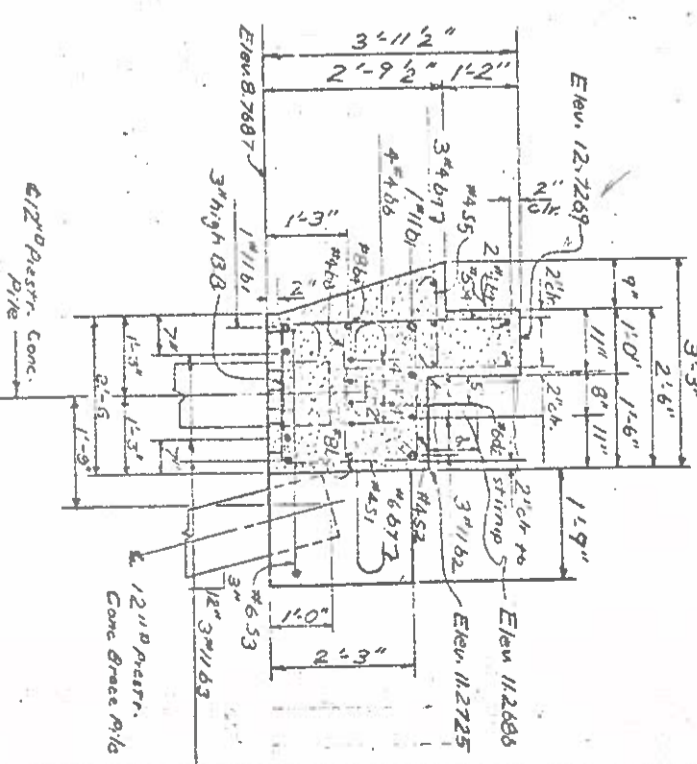
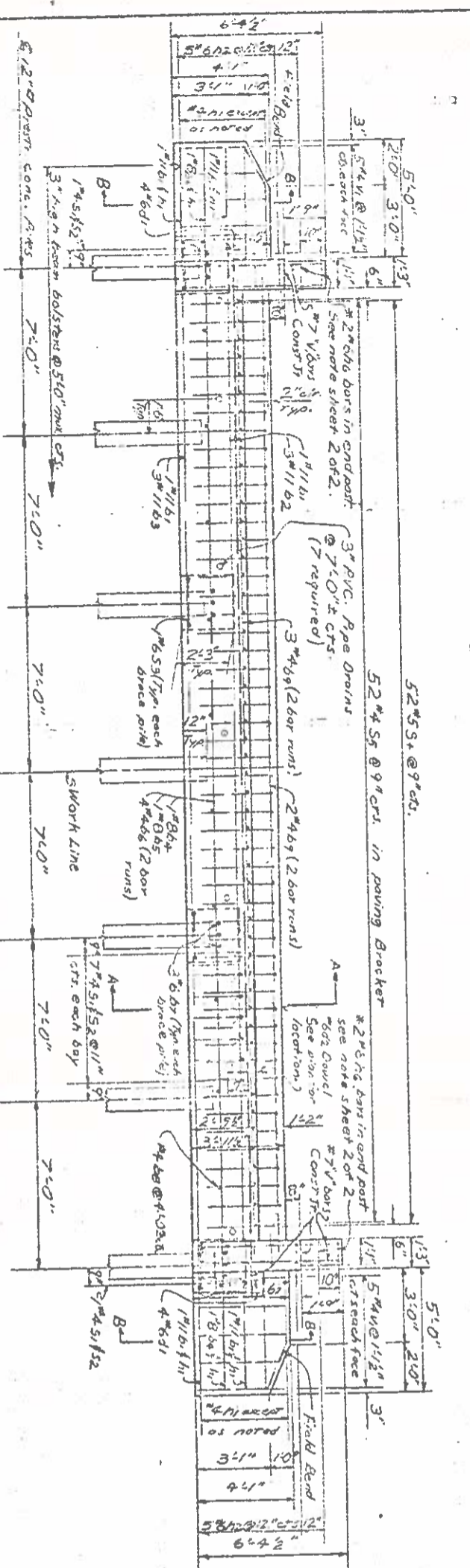
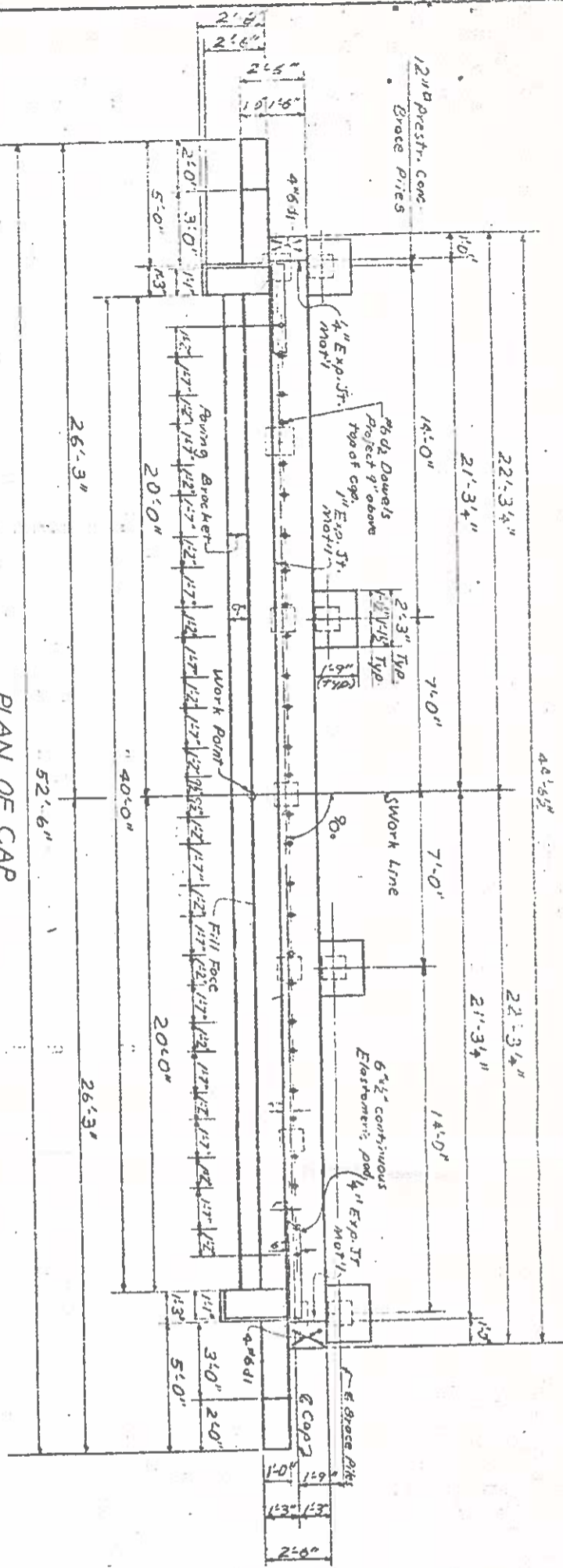
DATE	BY	CHKD	APP'D
5/23	WBS	WBS	WBS
5/23	WBS	WBS	WBS

FIG. NO.	DATE	PROJECT NO.
4	8/13/502	8133502
DATE PROJECT	DATE	DATE
8-13-50	8-13-50	8-13-50

DATE	BY	PROJECT NO.
4	M.B.	132-26-00
DATE	BY	PROJECT NO.
6-2-72		

NOTES

All piles are to be driven to a minimum bearing capacity of 30 tons each. Class 'A' concrete has been deducted for the pile heads (0.370 cu yd/pile) pipe driving may be shored to clear reinforcing steel. See Superstructure Details for location of Elastomeric bearing pads.



ELEVATION

NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FINISHING AND INSTALLING THE PVC PLASTIC PIPE DRAIN, HANDWARE CLUTCH AND FASTENERS. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BIDD FOR THE SEVERAL PILE HEADS.

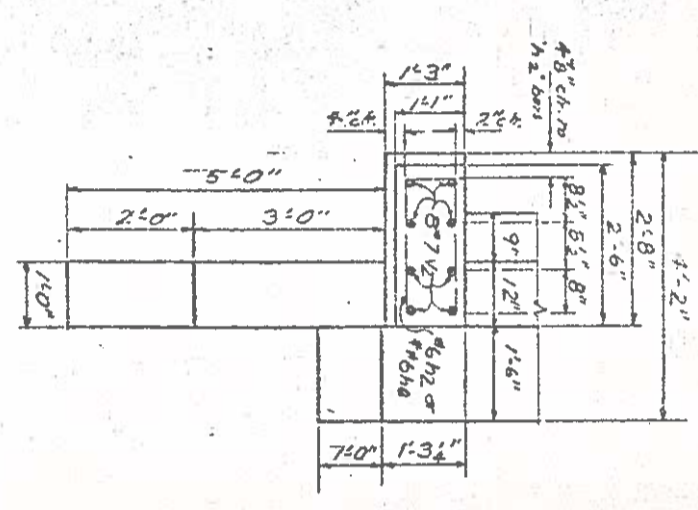
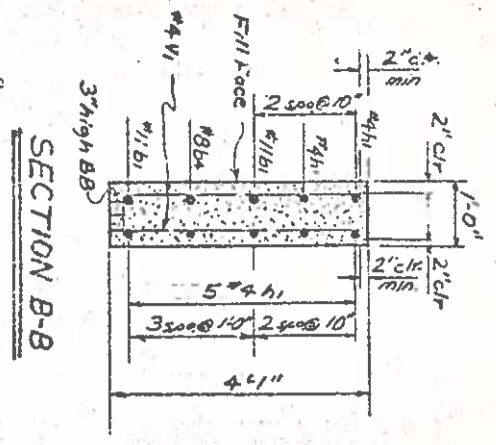
PROJECT NO. B.13/3502
BRUNSWICK COUNTY
STATION: 132-26-00
Sheet 1 of 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH
SUBSTRUCTURE
END BENT 1

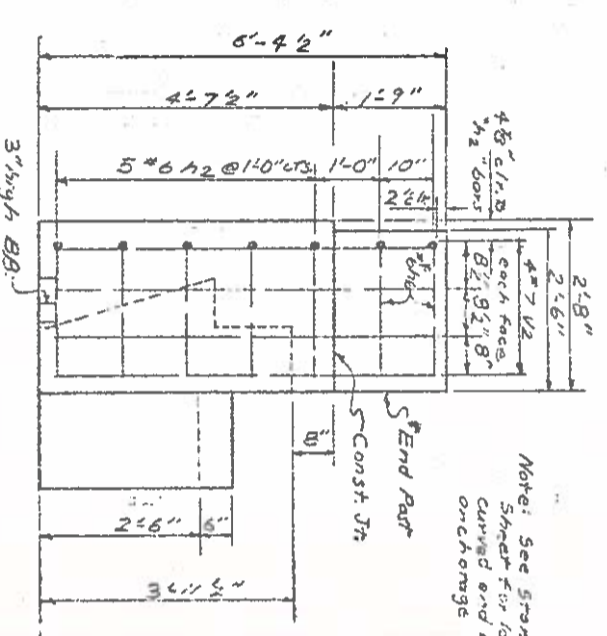
DATE	BY	PROJECT NO.
9-7-72		
DATE	BY	PROJECT NO.
5-29		
DATE	BY	PROJECT NO.
4-1		

EB 2 similar

DATE: 12/15/72
 DRAWN BY: J. L. B. S.
 CHECKED BY: J. L. B. S.
 APPROVED BY: J. L. B. S.



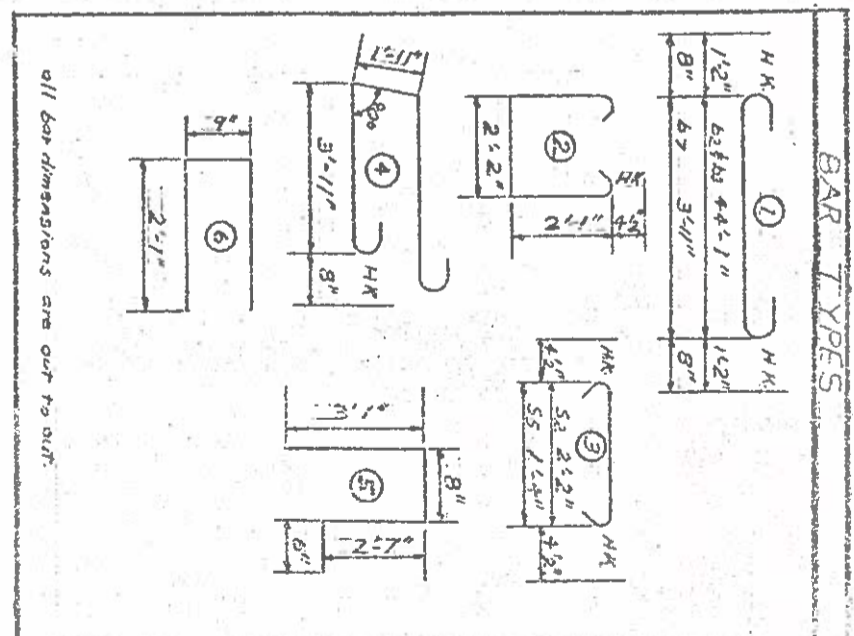
PLAN OF END POST



ELEVATION OF END POST

Note: See Standard Guard Rail Anchorage Sheet for location of C.B. Box for curved end blocks and guard rail on change assembly.

* #6 bars in End Post and class "A" concrete for End Post are included in the quantities for concrete rail. See Concrete Rail details.



All bar dimensions are out to out.

BAR TYPES

REV. NO.	DATE	PROJECT NO.
4	12/13/72	24-1-3(2)

BILL OF MATERIAL

NO.	SIZE	LENGTH	WEIGHT
1	#11	52'-2"	55.4
2	#11	44'-1"	47.0
3	#11	46'-5"	49.0
4	#11	46'-5"	49.0
5	#11	46'-5"	49.0
6	#11	46'-5"	49.0
7	#11	46'-5"	49.0
8	#11	46'-5"	49.0
9	#11	46'-5"	49.0
10	#11	46'-5"	49.0
11	#11	46'-5"	49.0
12	#11	46'-5"	49.0
13	#11	46'-5"	49.0
14	#11	46'-5"	49.0
15	#11	46'-5"	49.0
16	#11	46'-5"	49.0
17	#11	46'-5"	49.0
18	#11	46'-5"	49.0
19	#11	46'-5"	49.0
20	#11	46'-5"	49.0
21	#11	46'-5"	49.0
22	#11	46'-5"	49.0
23	#11	46'-5"	49.0
24	#11	46'-5"	49.0
25	#11	46'-5"	49.0
26	#11	46'-5"	49.0
27	#11	46'-5"	49.0
28	#11	46'-5"	49.0
29	#11	46'-5"	49.0
30	#11	46'-5"	49.0
31	#11	46'-5"	49.0
32	#11	46'-5"	49.0
33	#11	46'-5"	49.0
34	#11	46'-5"	49.0
35	#11	46'-5"	49.0
36	#11	46'-5"	49.0
37	#11	46'-5"	49.0
38	#11	46'-5"	49.0
39	#11	46'-5"	49.0
40	#11	46'-5"	49.0
41	#11	46'-5"	49.0
42	#11	46'-5"	49.0
43	#11	46'-5"	49.0
44	#11	46'-5"	49.0
45	#11	46'-5"	49.0
46	#11	46'-5"	49.0
47	#11	46'-5"	49.0
48	#11	46'-5"	49.0
49	#11	46'-5"	49.0
50	#11	46'-5"	49.0
51	#11	46'-5"	49.0
52	#11	46'-5"	49.0
53	#11	46'-5"	49.0
54	#11	46'-5"	49.0
55	#11	46'-5"	49.0
56	#11	46'-5"	49.0
57	#11	46'-5"	49.0
58	#11	46'-5"	49.0
59	#11	46'-5"	49.0
60	#11	46'-5"	49.0
61	#11	46'-5"	49.0
62	#11	46'-5"	49.0
63	#11	46'-5"	49.0
64	#11	46'-5"	49.0
65	#11	46'-5"	49.0
66	#11	46'-5"	49.0
67	#11	46'-5"	49.0
68	#11	46'-5"	49.0
69	#11	46'-5"	49.0
70	#11	46'-5"	49.0
71	#11	46'-5"	49.0
72	#11	46'-5"	49.0
73	#11	46'-5"	49.0
74	#11	46'-5"	49.0
75	#11	46'-5"	49.0
76	#11	46'-5"	49.0
77	#11	46'-5"	49.0
78	#11	46'-5"	49.0
79	#11	46'-5"	49.0
80	#11	46'-5"	49.0
81	#11	46'-5"	49.0
82	#11	46'-5"	49.0
83	#11	46'-5"	49.0
84	#11	46'-5"	49.0
85	#11	46'-5"	49.0
86	#11	46'-5"	49.0
87	#11	46'-5"	49.0
88	#11	46'-5"	49.0
89	#11	46'-5"	49.0
90	#11	46'-5"	49.0
91	#11	46'-5"	49.0
92	#11	46'-5"	49.0
93	#11	46'-5"	49.0
94	#11	46'-5"	49.0
95	#11	46'-5"	49.0
96	#11	46'-5"	49.0
97	#11	46'-5"	49.0
98	#11	46'-5"	49.0
99	#11	46'-5"	49.0
100	#11	46'-5"	49.0

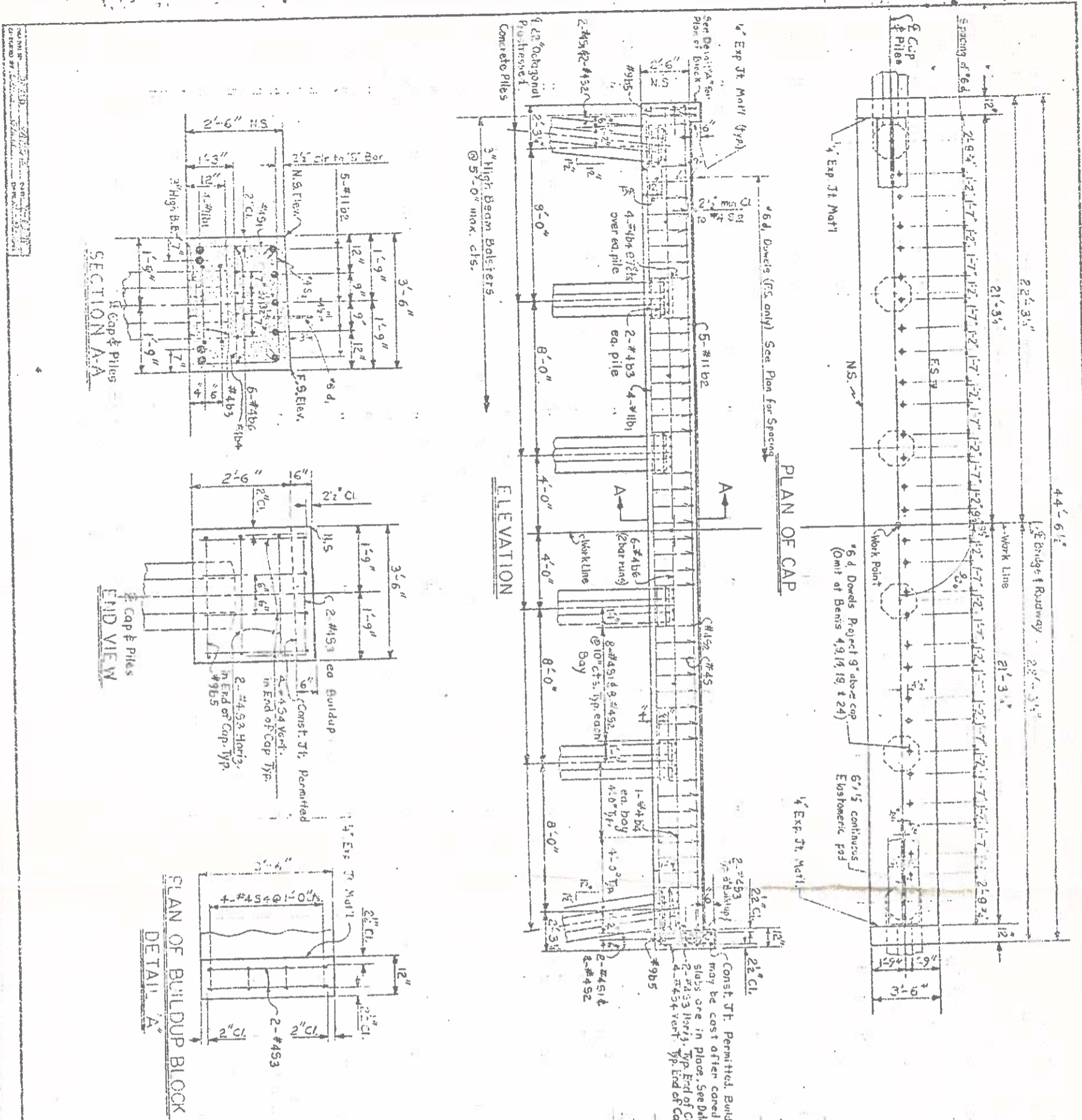
PROJECT No. B.13/3502
 PRUNSWICK COUNTY
 STATION: 287+6.00
 Sheet 2 of 2

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH

SUBSTRUCTURE
 END BENT 1

July 1972

NO.	REV.	DATE	BY	CHKD.
1				
2				
3				
4				
5				



BENT ELEVATIONS

BENT NO.	NEAR SIDE ELEV.	FAIR SIDE ELEV.
27	15,007.6	15,053.9
26	14,521.5	14,560.1
24	13,848.5	13,867.6
23	13,561.6	13,674.0
22	13,552.2	13,561.3
21	13,448.2	13,457.3
19	13,240.2	13,249.3
18	12,136.2	13,145.3
17	13,032.2	13,041.3
16	12,928.2	12,937.3
14	12,720.2	12,729.3
13	12,616.2	12,625.3
12	12,512.2	12,521.3
11	12,408.2	12,417.3
9	12,200.2	12,209.3
8	12,096.2	12,105.3
7	11,992.2	12,001.3
6	11,888.2	11,897.3
4	11,680.2	11,689.3
3	11,576.2	11,585.3
2	11,472.2	11,481.3
1	11,368.2	11,377.3

22" Octagonal Prestressed Concrete Piles

Bent No.	Pile No.	Length	Wt.
27	6	300	300
26	6	300	300
24	6	300	300
23	6	300	300
22	6	300	300
21	6	300	300
19	6	300	300
18	6	300	300
17	6	300	300
16	6	300	300
14	6	270	270
13	6	270	270
12	6	270	270
11	6	270	270
9	6	270	270
8	6	270	270
7	6	270	270
6	6	270	270
4	6	270	270
3	6	270	270
2	6	270	270
1	6	270	270

BILL OF MATERIAL FOR ONE BENT (22 REQUIRED)

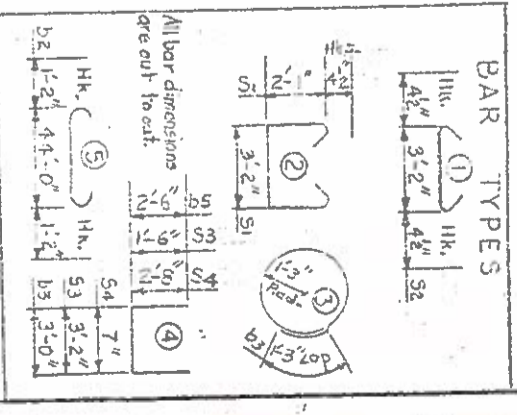
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
1	4"	#4	2	23.8
2	4"	#4	1	11.9
3	4"	#4	4	32.7
4	4"	#4	4	32.7
5	4"	#4	4	32.7
6	4"	#4	4	32.7
7	4"	#4	4	32.7
8	4"	#4	4	32.7
9	4"	#4	4	32.7
10	4"	#4	4	32.7
11	4"	#4	4	32.7
12	4"	#4	4	32.7
13	4"	#4	4	32.7
14	4"	#4	4	32.7
15	4"	#4	4	32.7
16	4"	#4	4	32.7
17	4"	#4	4	32.7
18	4"	#4	4	32.7
19	4"	#4	4	32.7
20	4"	#4	4	32.7
21	4"	#4	4	32.7
22	4"	#4	4	32.7
23	4"	#4	4	32.7
24	4"	#4	4	32.7
25	4"	#4	4	32.7
26	4"	#4	4	32.7
27	4"	#4	4	32.7

BILL OF MATERIAL (For one bent)

Item	Quantity	Weight (lb)
Reinforcing Steel	3,017	2,954
Class A Concrete	14.6	14.6
22" Oct Prest Concrete Piles	6	6

NOTES

1. Drive 22" Oct Prest. Conc. Piles to a minimum bearing capacity of 50 tons each.
 2. Concrete displaced by pile heads has been deducted (0.037 cu/ft/pile).
 3. Omit 4 bars of Bents 4, 9, 14, 19, and 24.

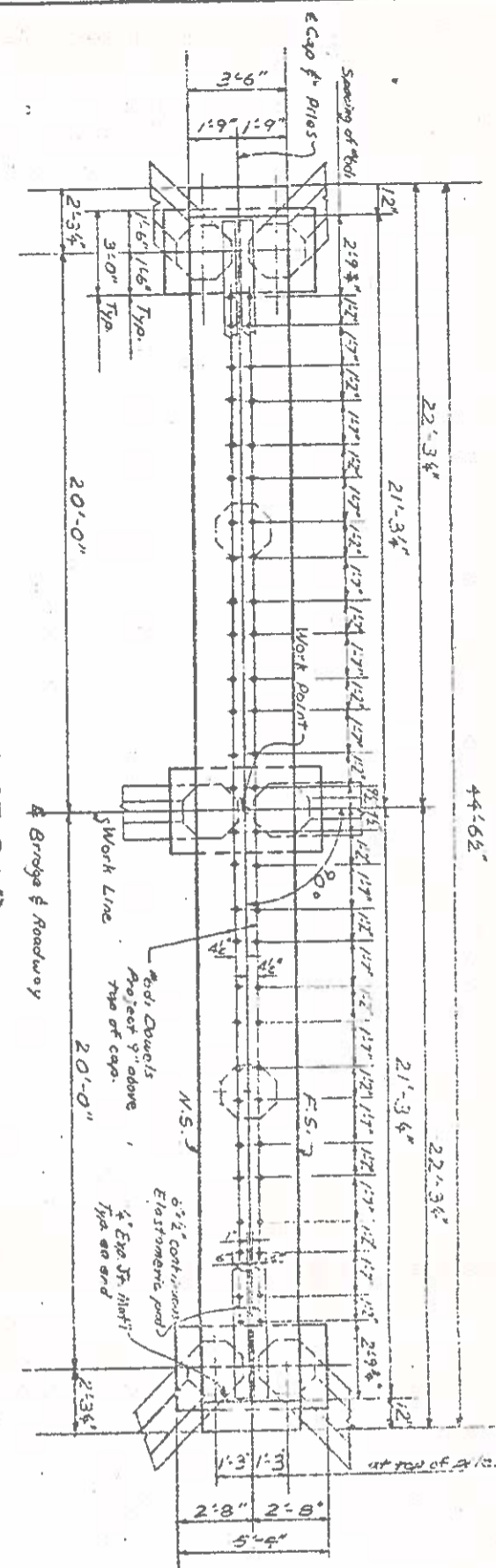


STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 SUBSTRUCTURE - PILE BENTS
 1234, 6789, 11213, 1416
 1718, 19, 21, 22, 23, 24, 25, 27
 1972

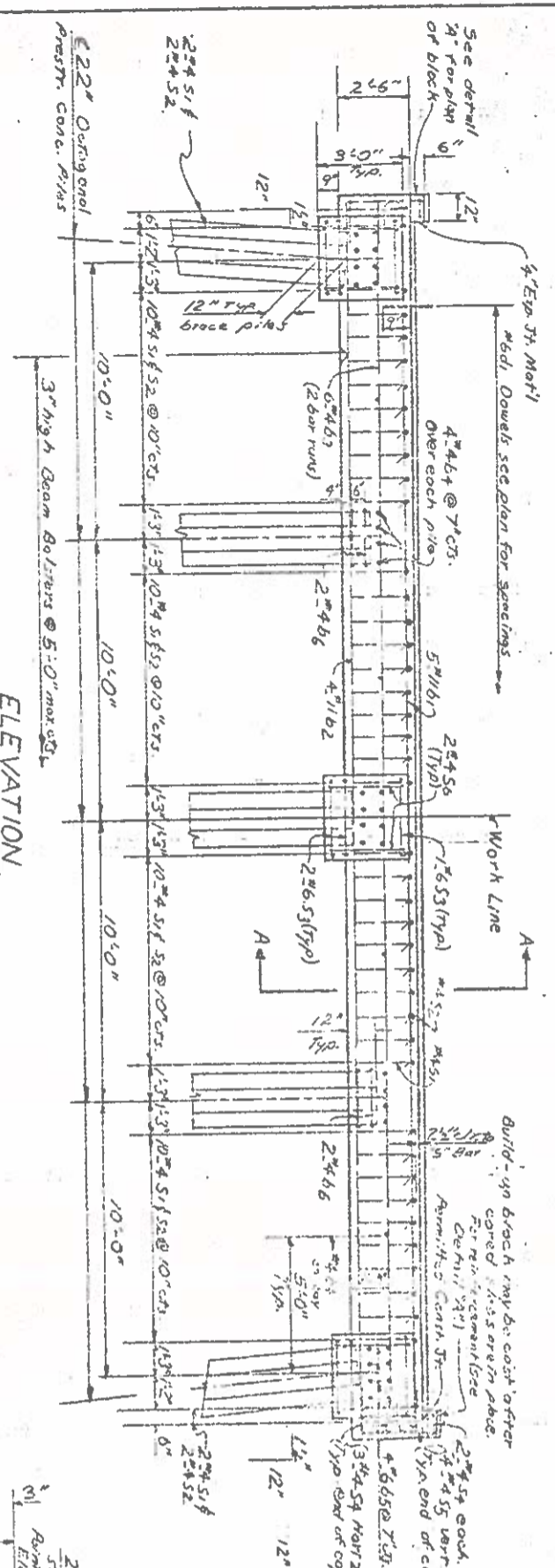
PROJECT NO. B.1313502
 BRUNSWICK COUNTY
 STATION 139+16.00

REVISIONS

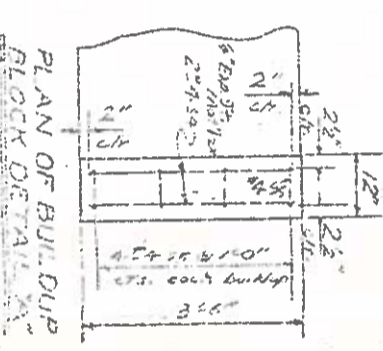
NO.	DATE	BY	CHKD.	DESCRIPTION
1				
2				
3				
4				



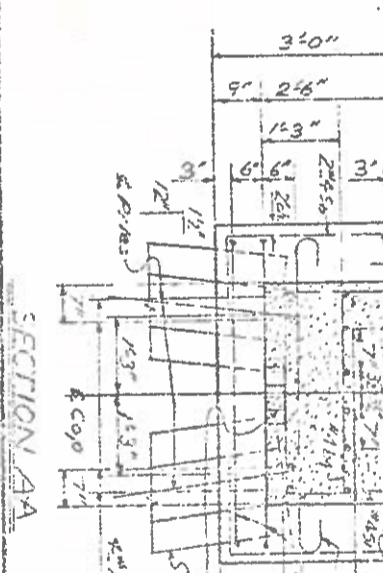
PLAN OF CAP



ELEVATION



PLAN OF BUILDUP BLOCK DETAIL



SECTION A-A

BENT ELEVATIONS

BENTS	N.S. ELEV.	S.E. ELEV.
Bent 25	14.1352	14.1650
Bent 20	13.3492	13.3533
Bent 15	12.8242	12.8333
Bent 10	12.3042	12.3133
Bent 5	11.7842	11.7933

22' OCT. PRESTR. CONC. PILES FOR EACH BENT

Bent	No.	40' LT	40' RT
Bent 25	8	400	400
Bent 20	8	400	400
Bent 15	8	400	400
Bent 10	8	400	400
Bent 5	8	360	360

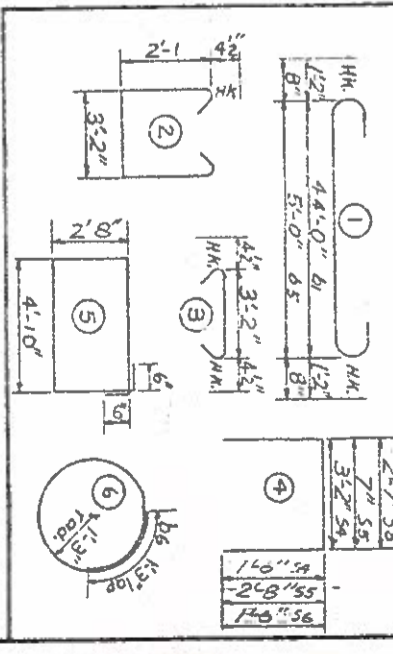
NOTES

Drive 22' oct. Prestr. Conc. Piles to a minimum bearing capacity of 50 tons each.
 Concrete displaced by pile heads has been deducted.
 (10317 sq/ft)

BILL OF MATERIAL FOR ONE BENT IS REQUIRED

Bar No.	Size	Length	Weight
1	1 1/2"	46'-4 1/2"	123.1
2	1 1/2"	44'-0"	115.2
3	1 1/2"	44'-0"	115.2
4	1 1/2"	44'-0"	115.2
5	1 1/2"	44'-0"	115.2
6	1 1/2"	44'-0"	115.2
7	1 1/2"	44'-0"	115.2
8	1 1/2"	44'-0"	115.2
9	1 1/2"	44'-0"	115.2
10	1 1/2"	44'-0"	115.2
11	1 1/2"	44'-0"	115.2
12	1 1/2"	44'-0"	115.2
13	1 1/2"	44'-0"	115.2
14	1 1/2"	44'-0"	115.2
15	1 1/2"	44'-0"	115.2
16	1 1/2"	44'-0"	115.2
17	1 1/2"	44'-0"	115.2
18	1 1/2"	44'-0"	115.2
19	1 1/2"	44'-0"	115.2
20	1 1/2"	44'-0"	115.2
21	1 1/2"	44'-0"	115.2
22	1 1/2"	44'-0"	115.2
23	1 1/2"	44'-0"	115.2
24	1 1/2"	44'-0"	115.2
25	1 1/2"	44'-0"	115.2
26	1 1/2"	44'-0"	115.2
27	1 1/2"	44'-0"	115.2
28	1 1/2"	44'-0"	115.2
29	1 1/2"	44'-0"	115.2
30	1 1/2"	44'-0"	115.2
31	1 1/2"	44'-0"	115.2
32	1 1/2"	44'-0"	115.2
33	1 1/2"	44'-0"	115.2
34	1 1/2"	44'-0"	115.2
35	1 1/2"	44'-0"	115.2
36	1 1/2"	44'-0"	115.2
37	1 1/2"	44'-0"	115.2
38	1 1/2"	44'-0"	115.2
39	1 1/2"	44'-0"	115.2
40	1 1/2"	44'-0"	115.2
41	1 1/2"	44'-0"	115.2
42	1 1/2"	44'-0"	115.2
43	1 1/2"	44'-0"	115.2
44	1 1/2"	44'-0"	115.2
45	1 1/2"	44'-0"	115.2
46	1 1/2"	44'-0"	115.2
47	1 1/2"	44'-0"	115.2
48	1 1/2"	44'-0"	115.2
49	1 1/2"	44'-0"	115.2
50	1 1/2"	44'-0"	115.2

BAR DETAILS



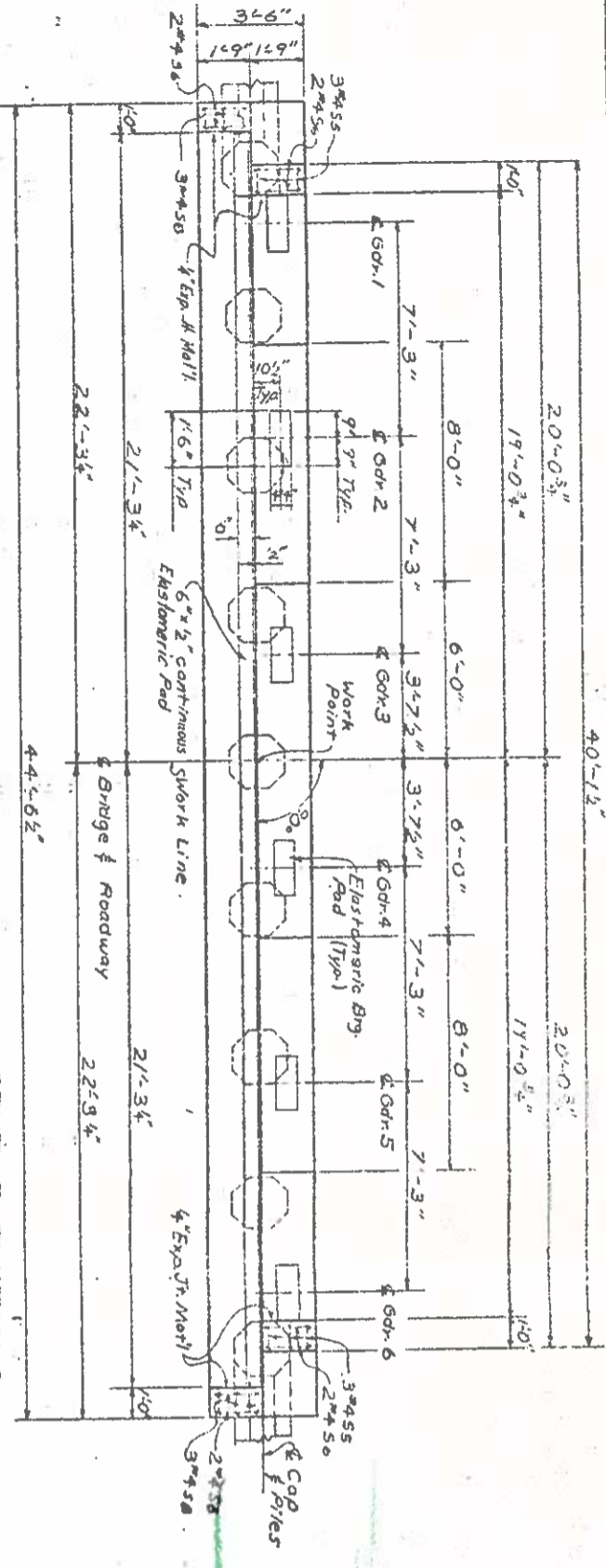
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 PROJECT NO. 81313502
 BRUNSWICK COUNTY
 STATION 139+16.00

SUBSTRUCTURE
 BRACE PILE BENTS
 5, 10, 15, 20, 25

1972

REV.	DATE	BY	DATE	REASON
1				
2				
3				
4				
5				
6				

DATE: 12/15/72
 DRAWN BY: [Name]
 CHECKED BY: [Name]

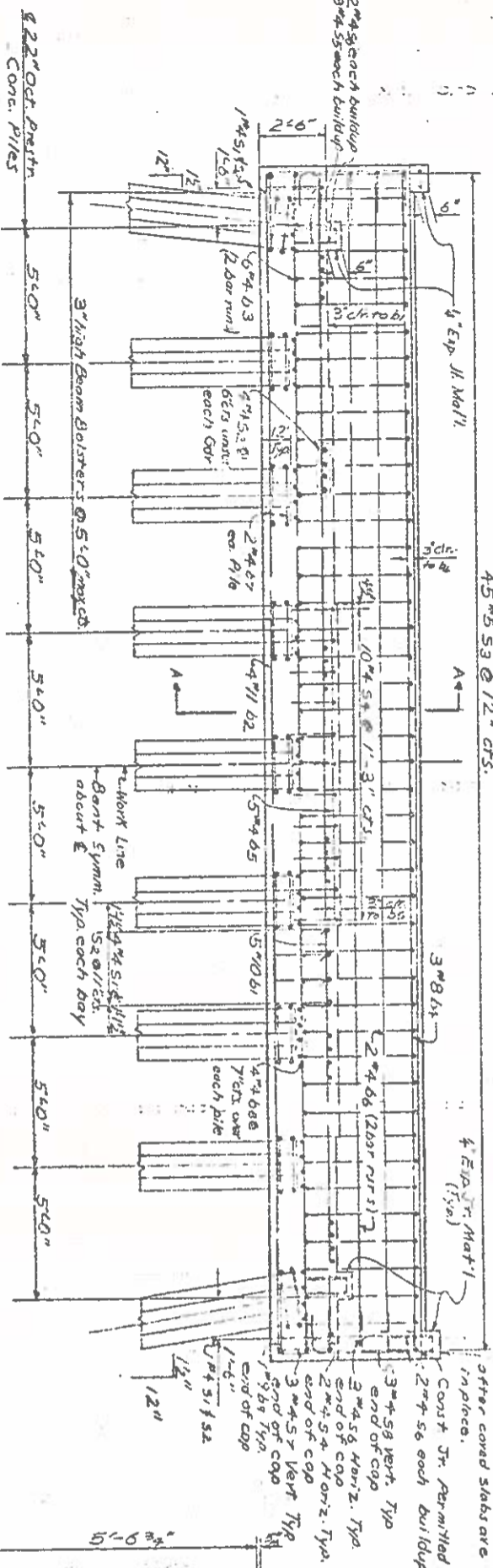


PLAN OF CAP

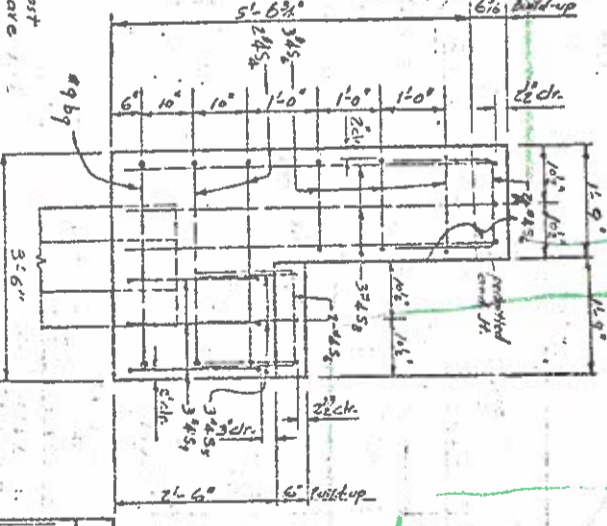
BENT ELEVATIONS.

NS Elev.	ES Elev.	NS Elev.	ES Elev.
125.529	125.291	125.807	125.569
125.613	125.375	126.001	125.763

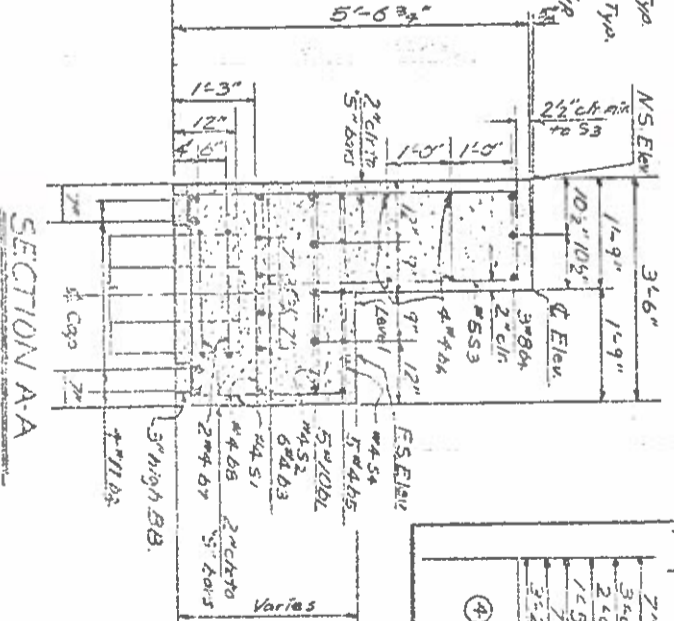
Indicates type of Elastomeric bearing pad:



ELEVATION



END VIEW



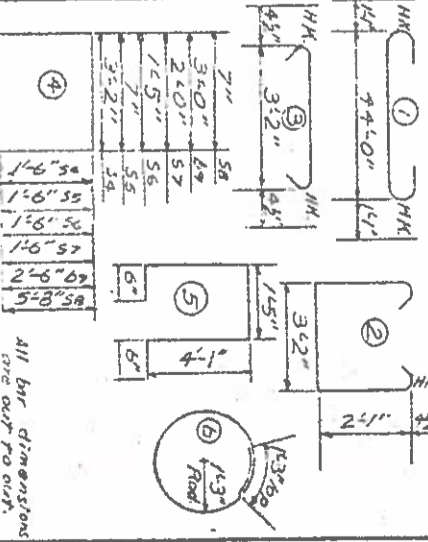
SECTION A-A

NOTES
 Drive 2" Oct. Prestr. Conc. Piles to a minimum bearing capacity of 50 tons each.
 Concrete displaced by pile heads has been deducted (10317 c/yd)

BILL OF MATERIAL FOR BENT 28

Qty	Unit	Description	Weight
32	cu yd	Concrete	10317
1	lb	Reinforcing steel	3874
1	cu yd	Gravel	229
1	cu yd	Sand	114

BAR TYPES



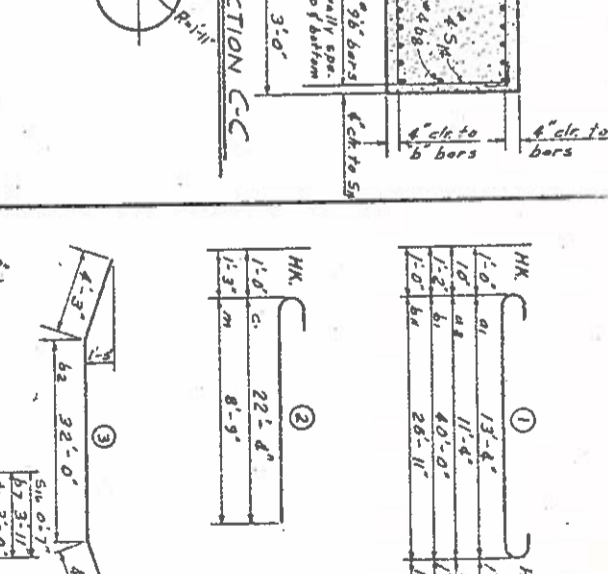
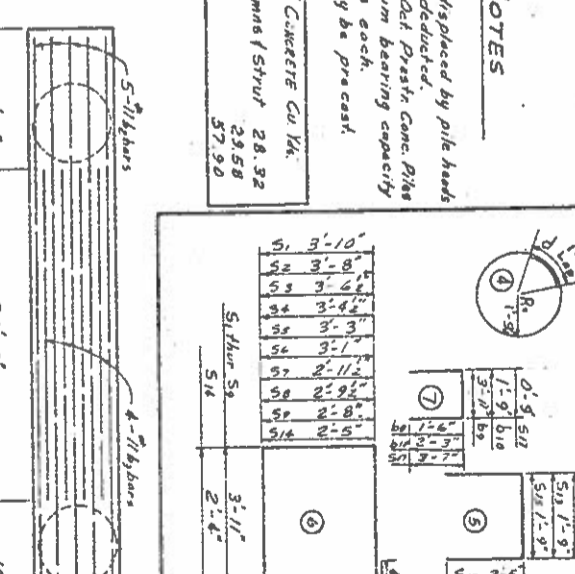
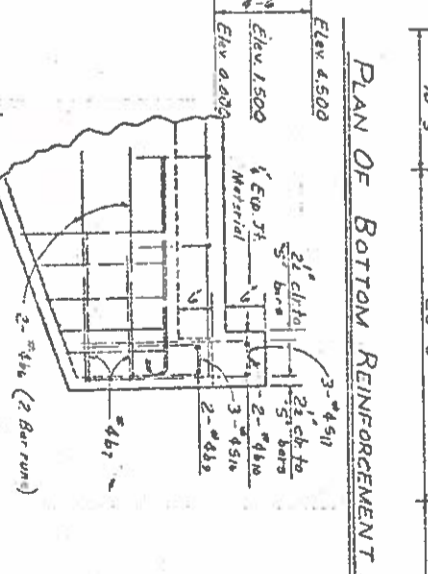
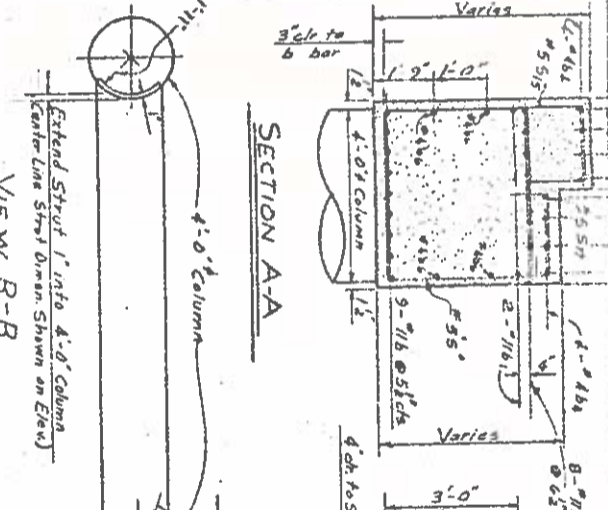
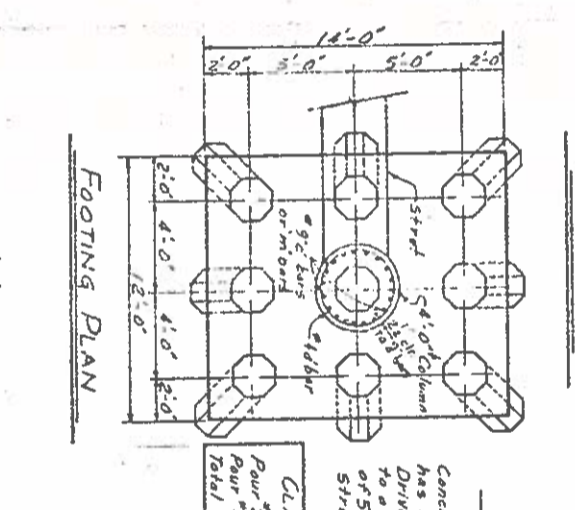
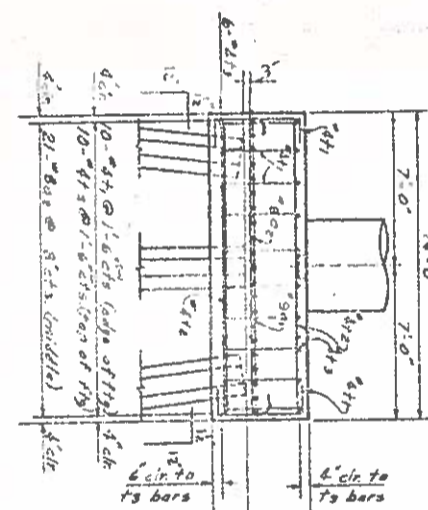
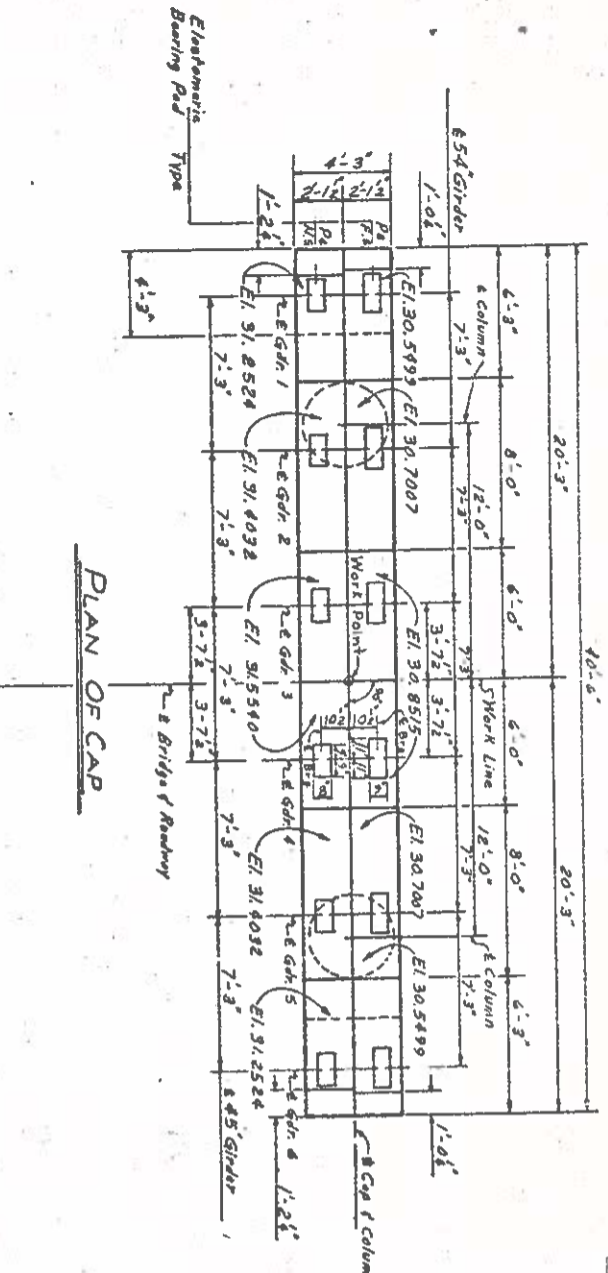
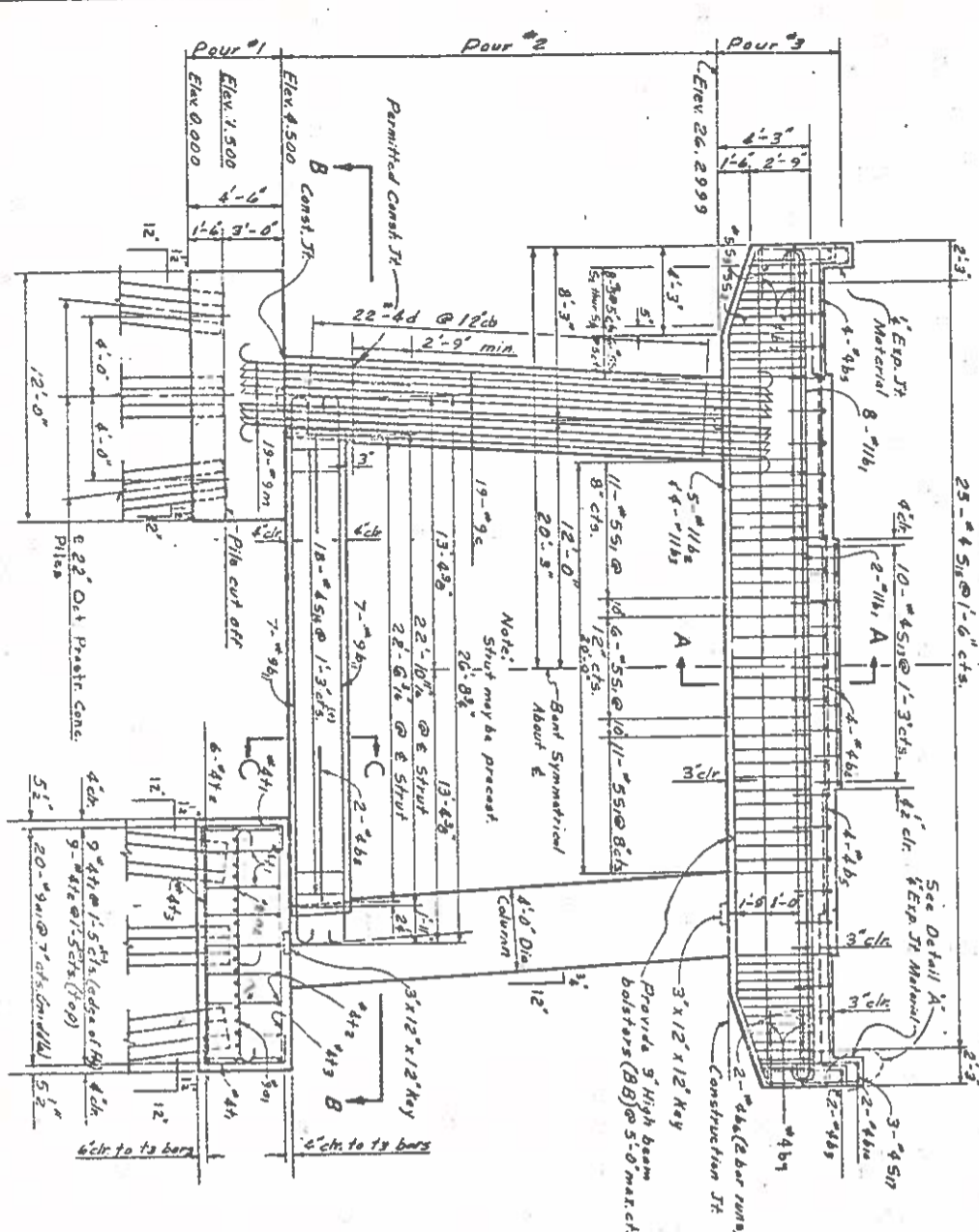
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 PROJECT NO. 8 (3/3502)
 BRUNSWICK COUNTY
 STATION 139+16.00

1972
 SUBSTRUCTURE
 BENT 28

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

ELEVATION Rev #1. Raised to correct quantity of Class Concrete. By: F.B.J. V.P.J. & E.

END ELEVATION OF FOOTING



STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUBSTRUCTURE
 BENT # 37
 #38 Similar
 AUB # 2 Similar
 197

PROJECT NO. 8.1313502
 BRAUNSWICK COUNTY
 STATION: 139+16.00

REINFORCING STEEL (LBS)

ITEM	DESCRIPTION	QTY	UNIT	WEIGHT
1	Class A Concrete (Cu. Yds.)	40	cu. yds.	15.69
2	Class A Concrete (Cu. Yds.)	22	cu. yds.	8.12
3	22' Out. Prest. Conc. Pile (No. 1)	1	lin. ft.	72.0

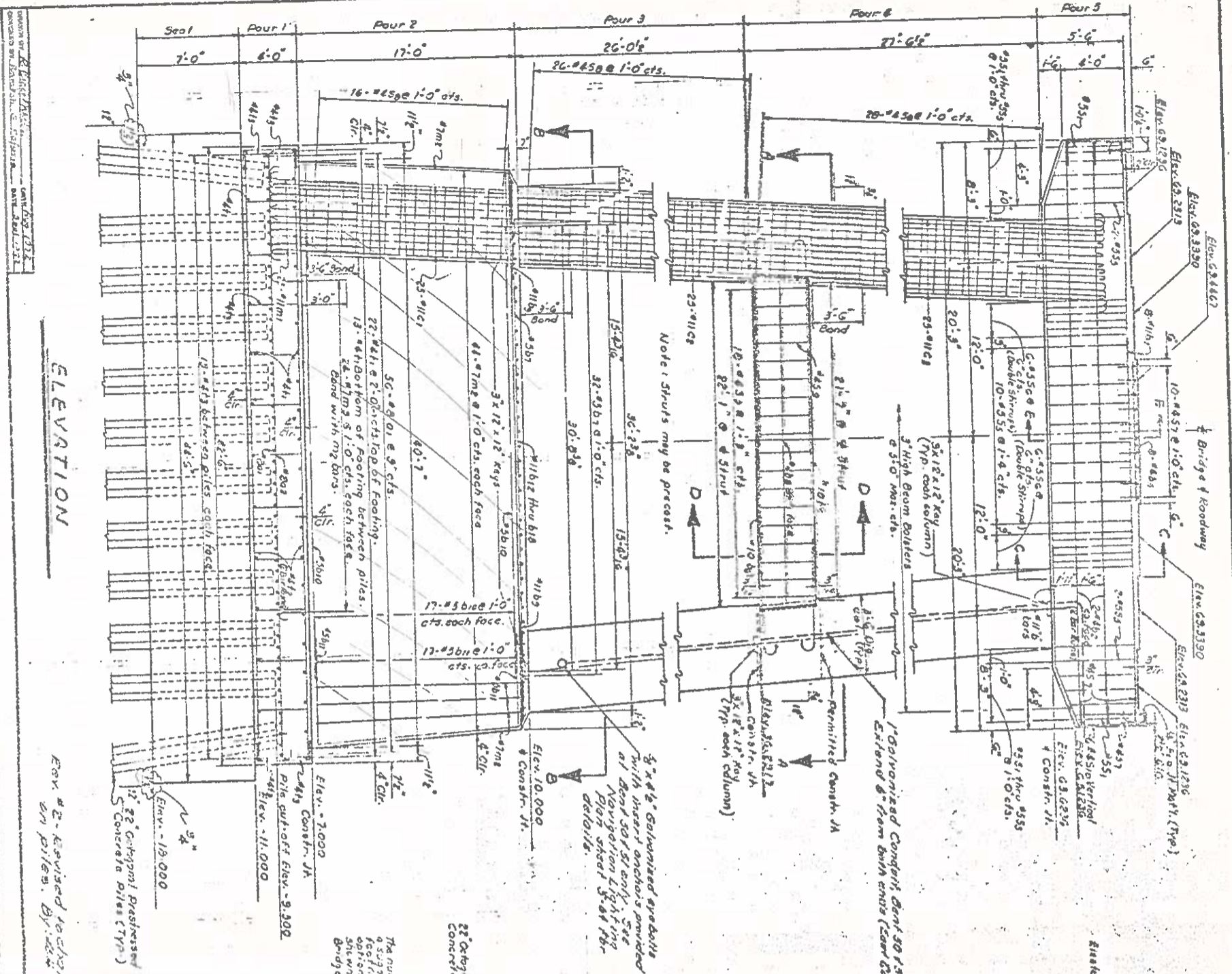
FOUNDATION EXCAVATION

ITEM	DESCRIPTION	QTY	UNIT	WEIGHT
1	Class A Concrete (Cu. Yds.)	40	cu. yds.	15.69
2	Class A Concrete (Cu. Yds.)	22	cu. yds.	8.12

BILL OF MATERIAL FOR BENT # 37

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
1	#4	1	15'-4"	20.88
2	#4	1	13'-0"	15.58
3	#4	1	40'-0"	155.8
4	#4	1	26'-11"	102.2
5	#4	1	43'-4"	224
6	#4	1	40'-6"	107.4
7	#4	1	20'-0"	42.5
8	#4	1	11'-8"	8.2
9	#4	1	15'-4"	8.2
10	#4	1	20'-8"	110
11	#4	1	7'-11"	21
12	#4	1	21'-11"	29
13	#4	1	6'-3"	17
14	#4	1	27'-11"	132.4
15	#4	1	23'-4"	30.4
16	#4	1	12'-6"	30.7
17	#4	1	9'-9"	12.4
18	#4	1	16'-6"	6.1
19	#4	1	16'-2"	3
20	#4	1	15'-11"	3
21	#4	1	15'-7"	3
22	#4	1	15'-4"	3
23	#4	1	15'-0"	3
24	#4	1	14'-9"	3
25	#4	1	14'-2"	3
26	#4	1	13'-11"	3
27	#4	1	13'-8"	3
28	#4	1	13'-4"	3
29	#4	1	12'-6"	12
30	#4	1	6'-7"	14.6
31	#4	1	6'-3"	2
32	#4	1	7'-11"	3

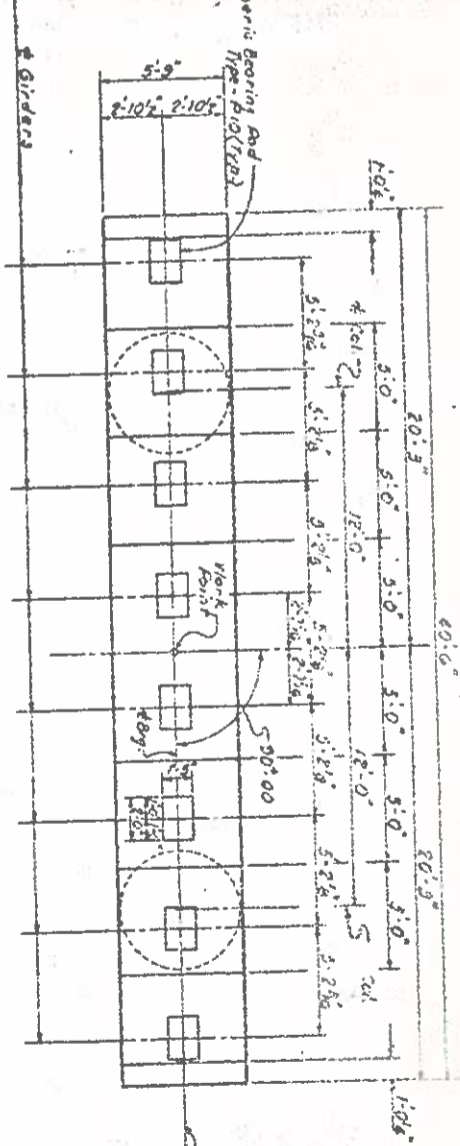
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 PROJECT NO. 8.1313502
 BRAUNSWICK COUNTY
 STATION: 139+16.00



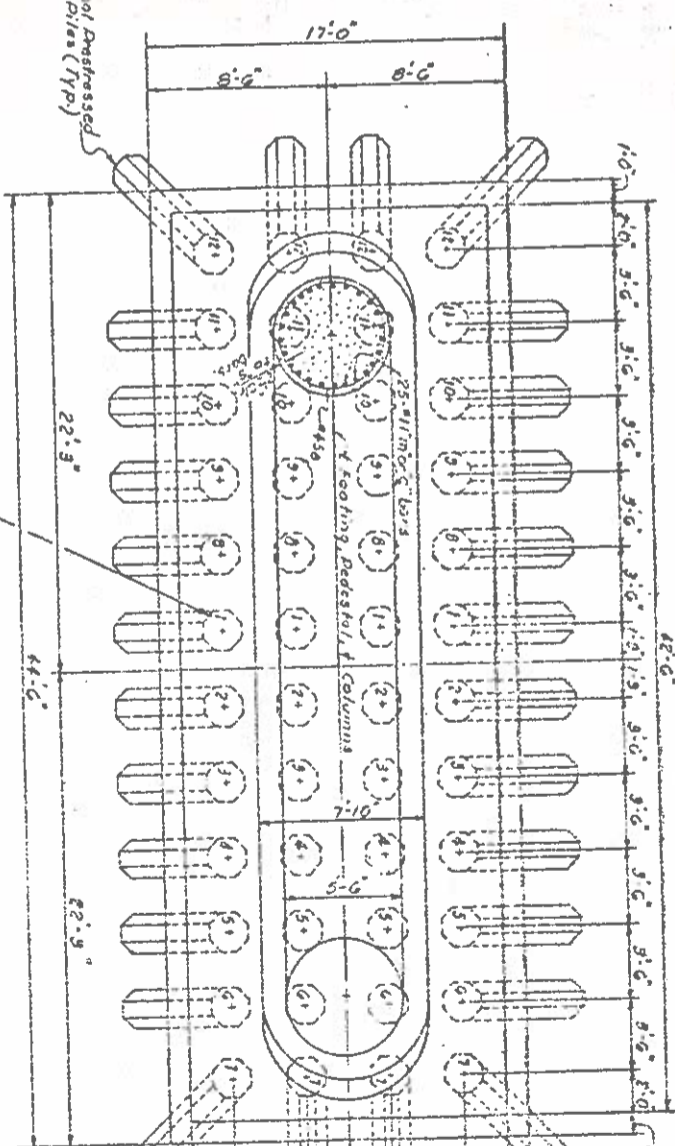
ELEVATION

Rev. #2 - Revised to change boiler on piles. By: [Signature] T.M.B.

Revision #1 - Revised to change conduit from steel column to cast column. By: [Signature] R.G.F.

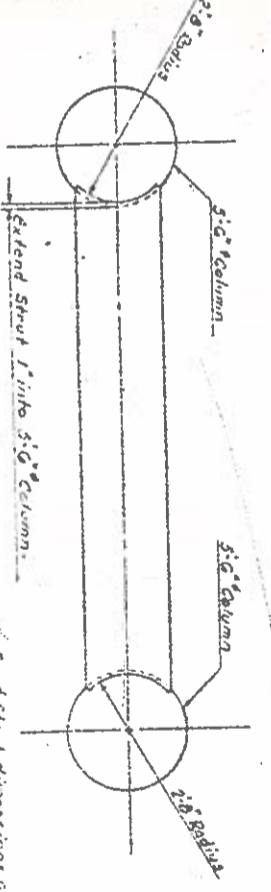


PLAN OF CAP



SECTION B-B

The numbers shown on the pile in this plan indicates a suggested pile driving sequence for post-tensioning of piles. No reference other than that shown may be used but must be submitted to the Bridge Design Department for approval.

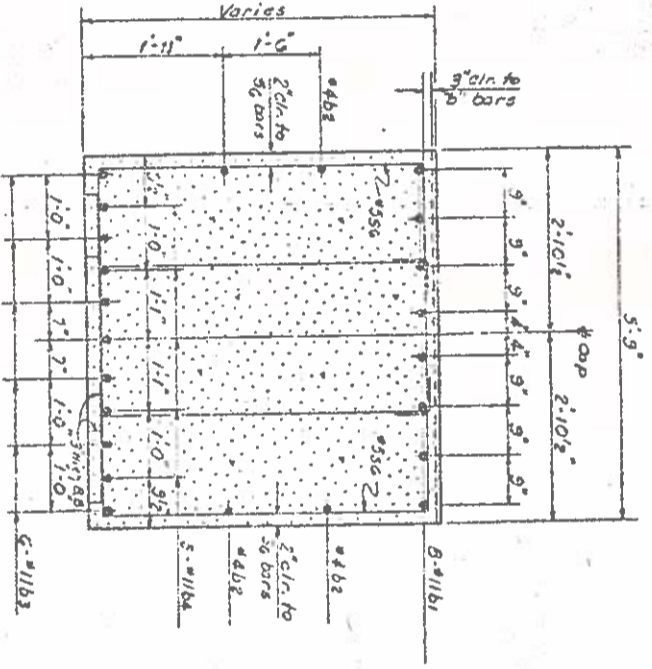
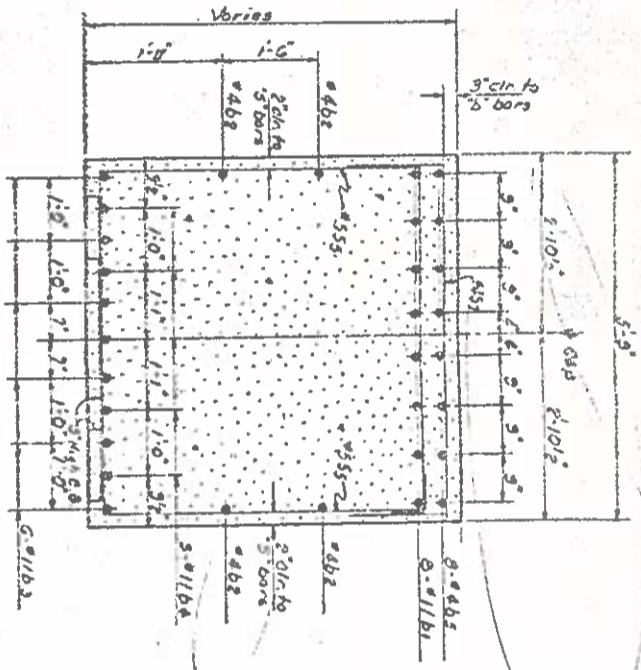
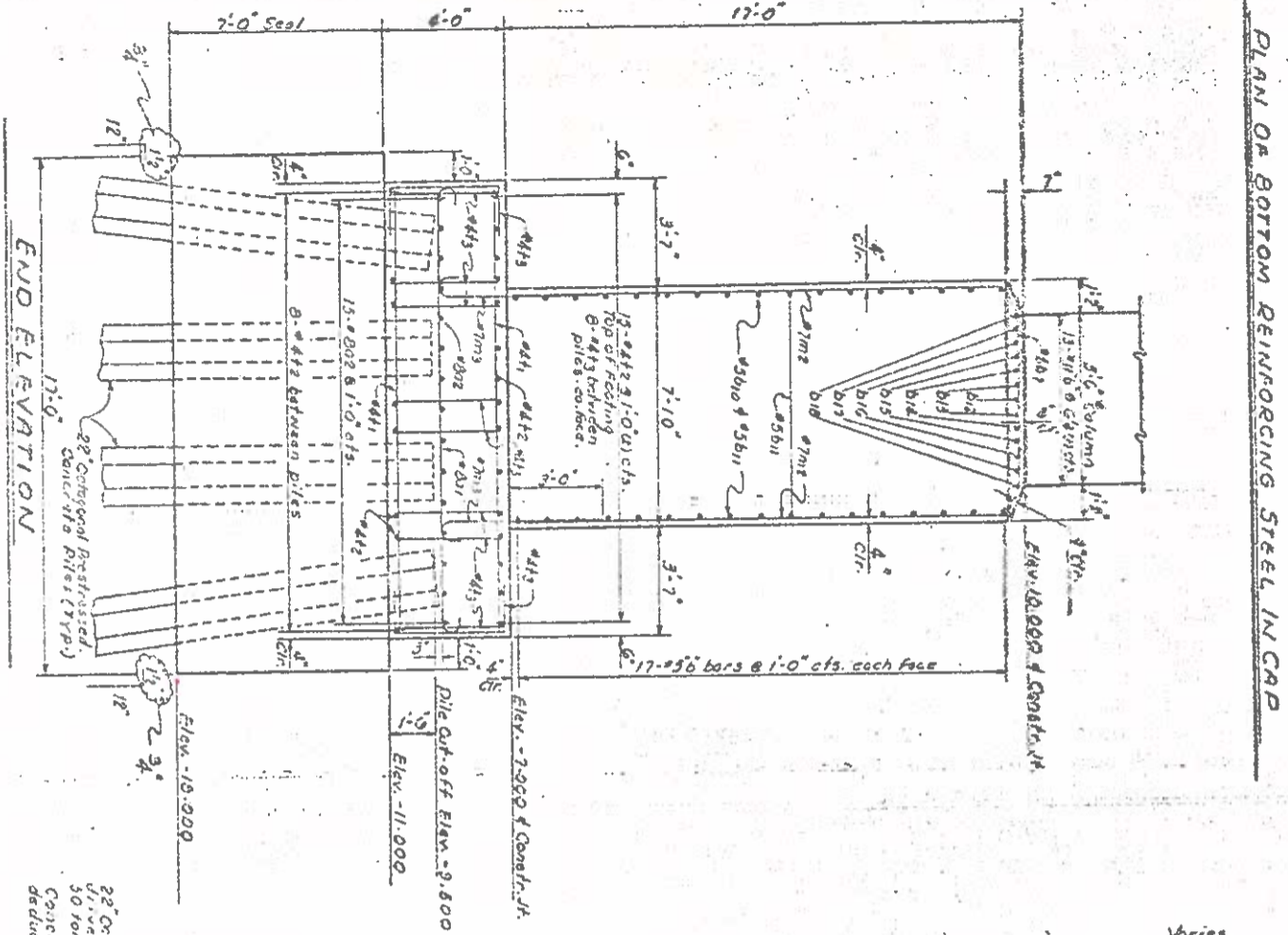
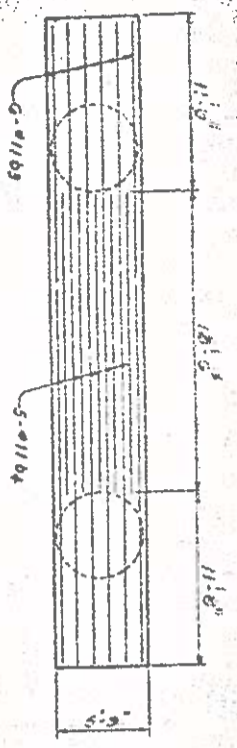


VIEW A-A

PROJECT NO. 81313502
 PUNNSWICK COUNTY
 STATION: 139+16.00
 SHEET 1 OF 2
 STATE HIGHWAY COMMISSION
 DIVISION
 SUBSTRUCTURE
 BENTS 504 51
 AUGUST 1979

NO.	DATE	BY	CHK	REVISION
1	8/1/79	[Signature]	[Signature]	ISSUE FOR CONSTRUCTION
2	8/1/79	[Signature]	[Signature]	REVISED TO CHANGE CONDUIT FROM STEEL COLUMN TO CAST COLUMN
3	8/1/79	[Signature]	[Signature]	REVISED TO CHANGE BOILER ON PILES

PROJECT NO.	81313502
DATE	8/1/79
BY	[Signature]
CHK	[Signature]

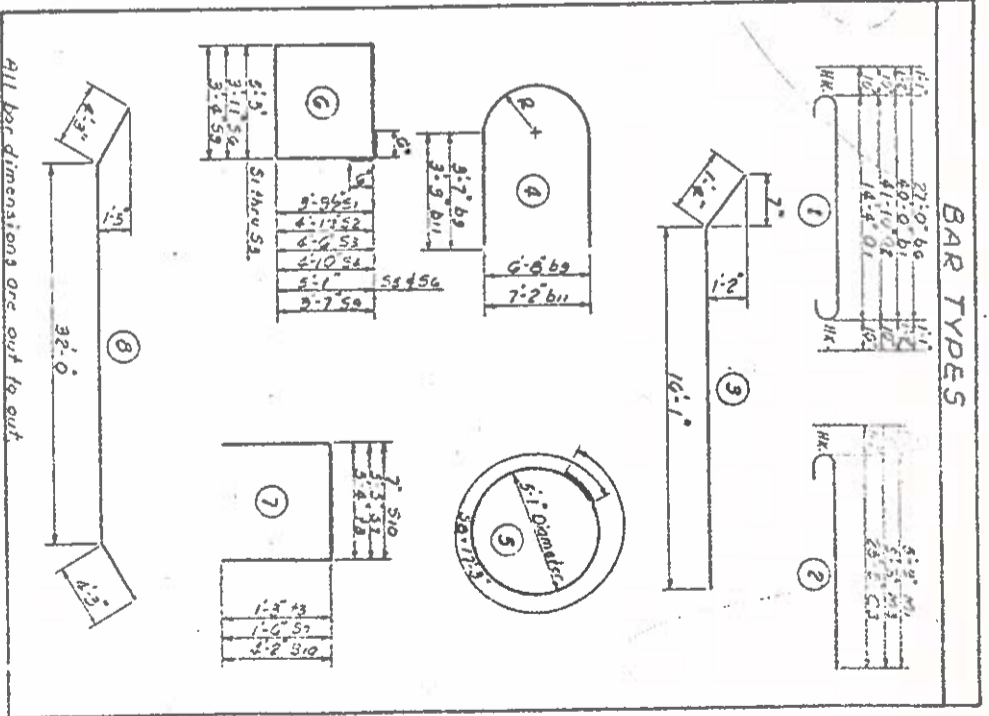


NOTES

22 Octagonal Prestressed concrete piles to be driven to a minimum bearing capacity of 50 tons each.

Concrete displaced by pile heads has been deducted (1.1526 Cubic Yds per pile in footing) (1.19221 Cubic Yards per pile in seal)

Rev #1 - Revised to change POWER on Piles to 100%.



CLASS 'A' CONCRETE - CUBIC YARDS

Pour 1 (Footing) - 87.01

Pour 2 (Pedestal) - 185.50

TOTALS - 272.51

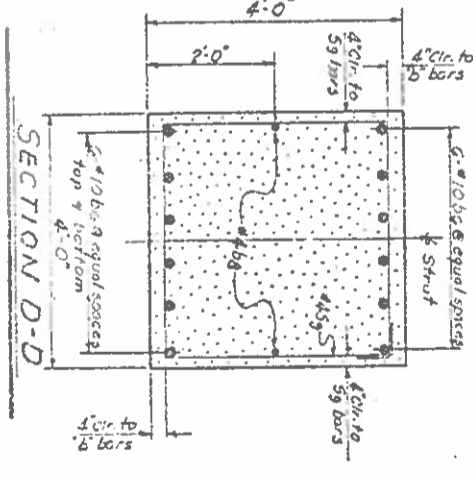
CLASS 'A' CONCRETE - CUBIC YARD

Pour 3 (Columns and Struts) - 45.92

Pour 4 (Columns and Struts) - 61.06

Pour 5 (Cap) - 47.00

TOTALS - 153.98



STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
HAULING

BRUNSWICK COUNTY
STATION: 139 + 16.00

SHEET NO. 2

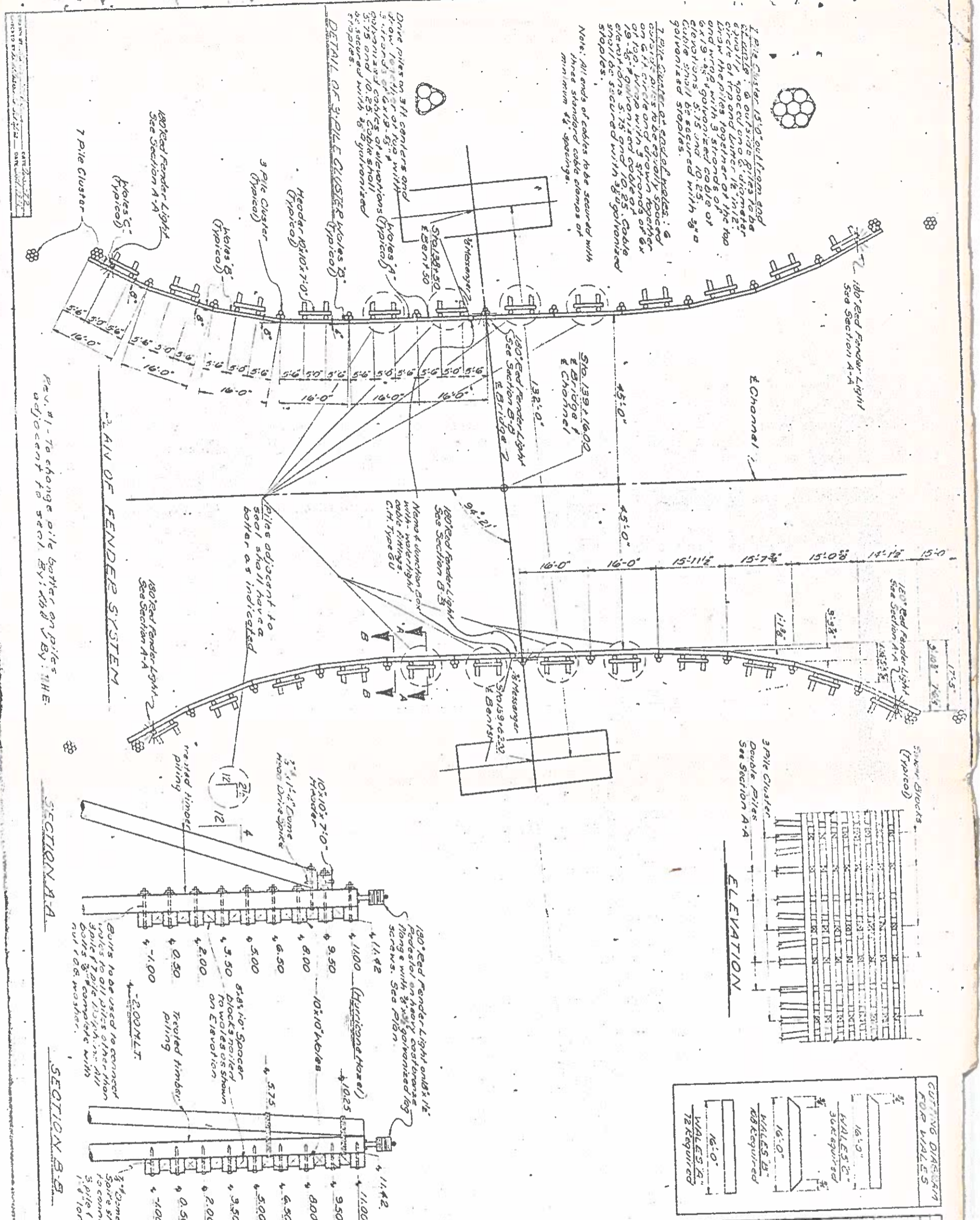
PROJECT NO. 8131502

STRUCTURE
BENTS 50 & 51

DATE: 1932

FOR ONE BENT - TWO REEDS

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
01	5/8"	1	16'-0"	5.332
02	3/4"	1	16'-0"	4.222
03	1"	1	16'-0"	6.312
04	5/8"	2	16'-0"	5.332
05	3/4"	2	16'-0"	4.222
06	1"	2	16'-0"	6.312
07	5/8"	3	16'-0"	5.332
08	3/4"	3	16'-0"	4.222
09	1"	3	16'-0"	6.312
10	5/8"	4	16'-0"	5.332
11	3/4"	4	16'-0"	4.222
12	1"	4	16'-0"	6.312
13	5/8"	5	16'-0"	5.332
14	3/4"	5	16'-0"	4.222
15	1"	5	16'-0"	6.312
16	5/8"	6	16'-0"	5.332
17	3/4"	6	16'-0"	4.222
18	1"	6	16'-0"	6.312
19	5/8"	7	16'-0"	5.332
20	3/4"	7	16'-0"	4.222
21	1"	7	16'-0"	6.312
22	5/8"	8	16'-0"	5.332
23	3/4"	8	16'-0"	4.222
24	1"	8	16'-0"	6.312
25	5/8"	9	16'-0"	5.332
26	3/4"	9	16'-0"	4.222
27	1"	9	16'-0"	6.312
28	5/8"	10	16'-0"	5.332
29	3/4"	10	16'-0"	4.222
30	1"	10	16'-0"	6.312



CUTTING DIAGRAM FOR WALES

Item	No.	Size	Surface Length	M.B.F.
Wales	110	10x10	16.0'	28.299
Spacers	400	2x6	16.0'	2.139
Headers	24	10x10	7.0'	1.400
CREOSOTED TIMBER PILES				
Item	No.	Size	Length	Total Length
Piles	218	10x10	45.0'	9810

GENERAL NOTES

All hardware shall be galvanized. All nuts, bolts, washers, and spacers shall be as manufactured by Jersey Bolt & Nut Company or Lewis Bolt and Nut Company or Screw Bolt Corp., Ringburg, Pa. or equal. Cross-timber shall be in accordance with the General Notes sheet 5-3. All piles in the fender system shall be driven to the elevations shown on drawings.

* Galvanized hardware will not be paid for as a separate item, the entire cost of the same to be included in the unit price bid for the several pay items.

The Contractor will be required to remove the portion of the existing fender system that interferes with construction of the new fender system. No additional pay item will be made for this removal. This cost to be included in the cost of the several pay items.

GENERAL NOTES

All hardware shall be galvanized. All nuts, bolts, washers, and spacers shall be as manufactured by Jersey Bolt & Nut Company or Lewis Bolt and Nut Company or Screw Bolt Corp., Ringburg, Pa. or equal. Cross-timber shall be in accordance with the General Notes sheet 5-3. All piles in the fender system shall be driven to the elevations shown on drawings.

* Galvanized hardware will not be paid for as a separate item, the entire cost of the same to be included in the unit price bid for the several pay items.

The Contractor will be required to remove the portion of the existing fender system that interferes with construction of the new fender system. No additional pay item will be made for this removal. This cost to be included in the cost of the several pay items.

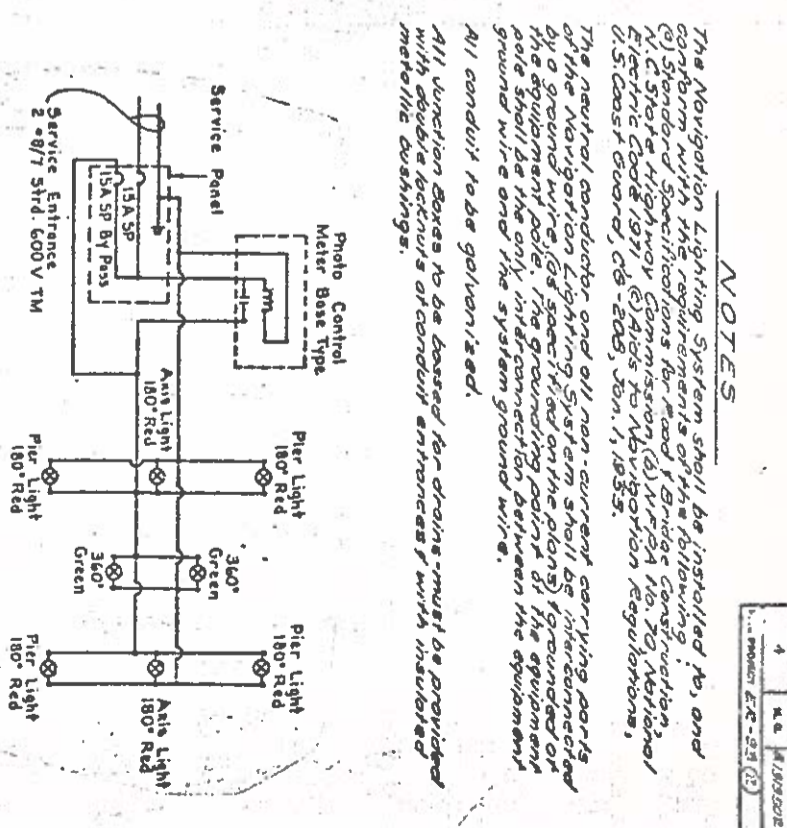
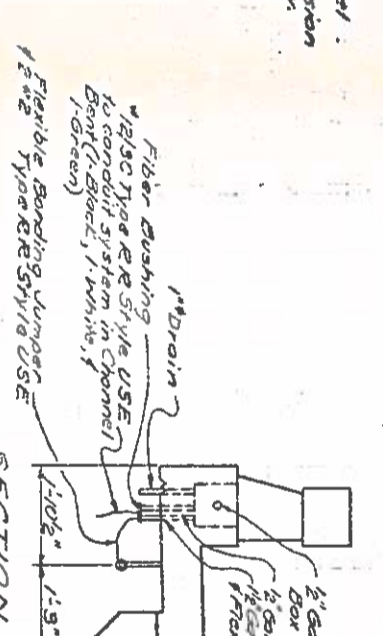
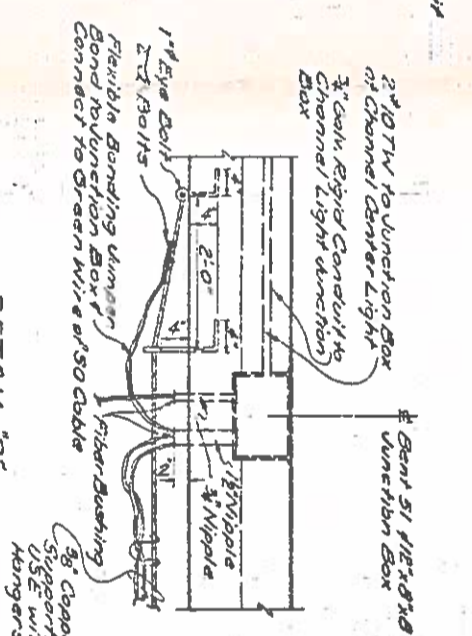
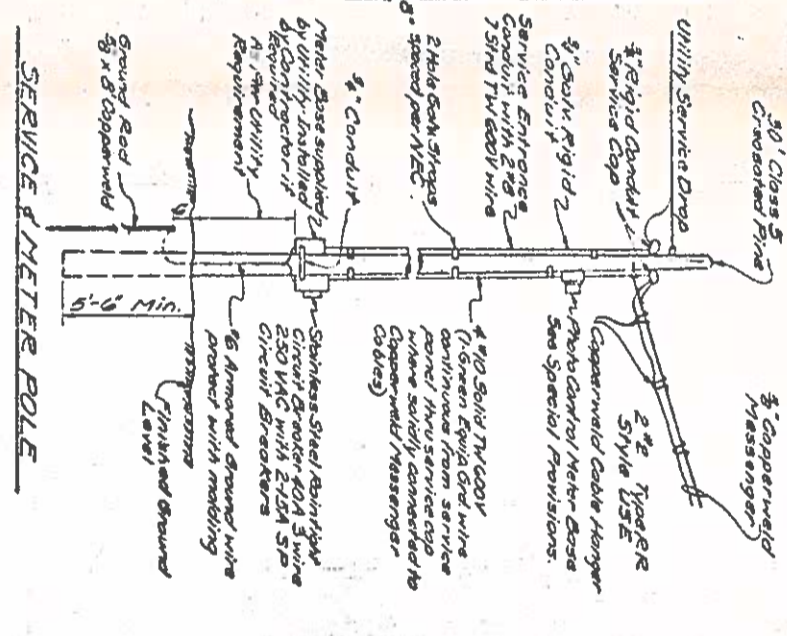
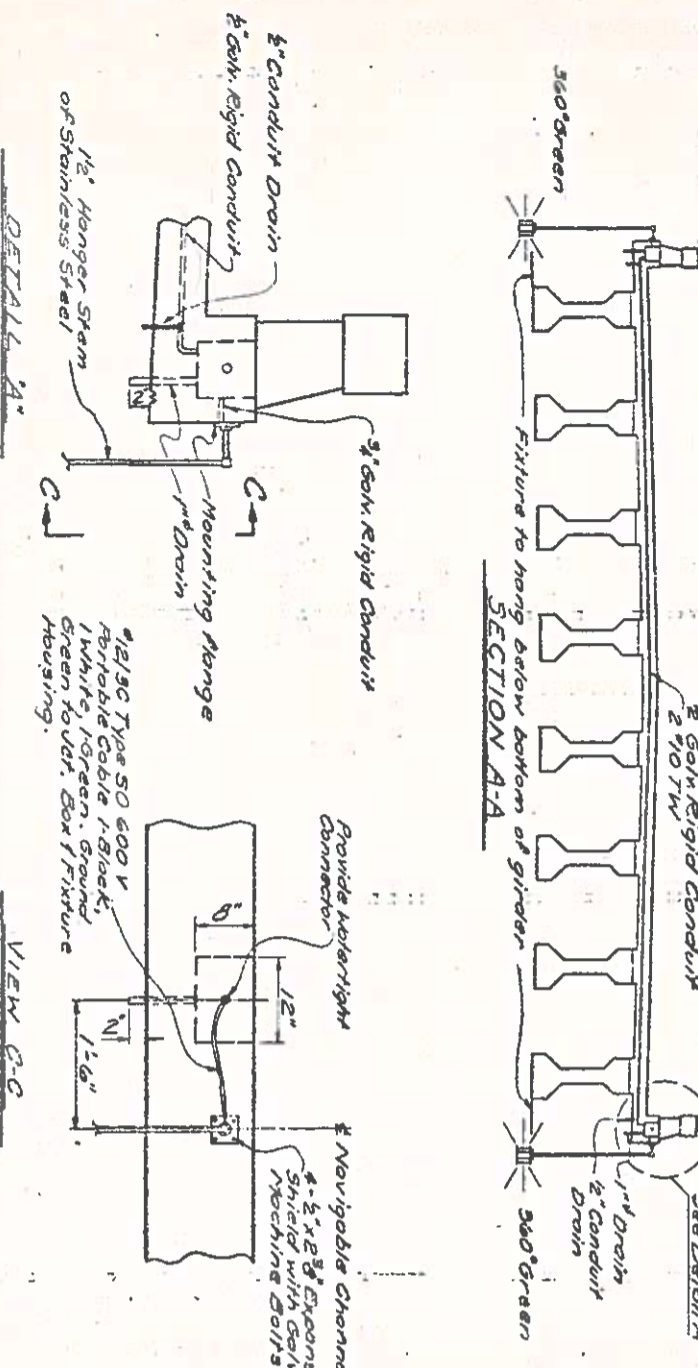
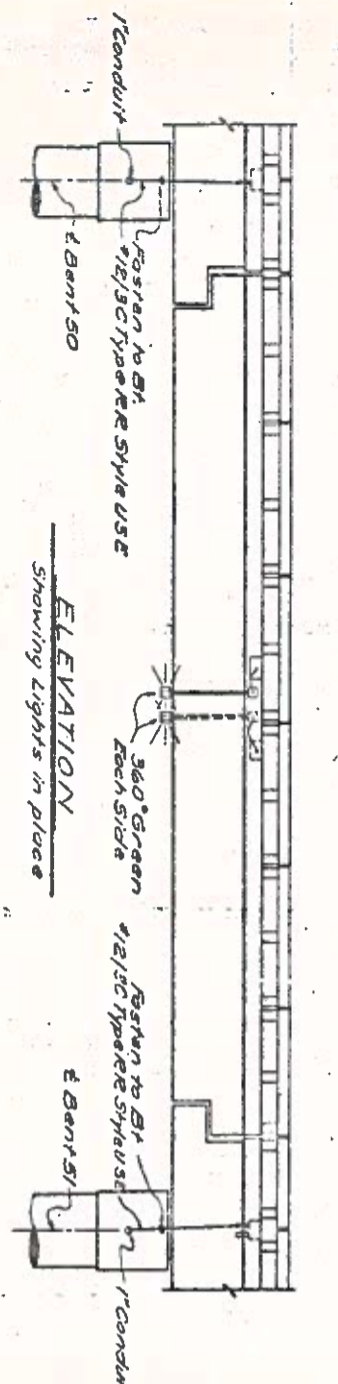
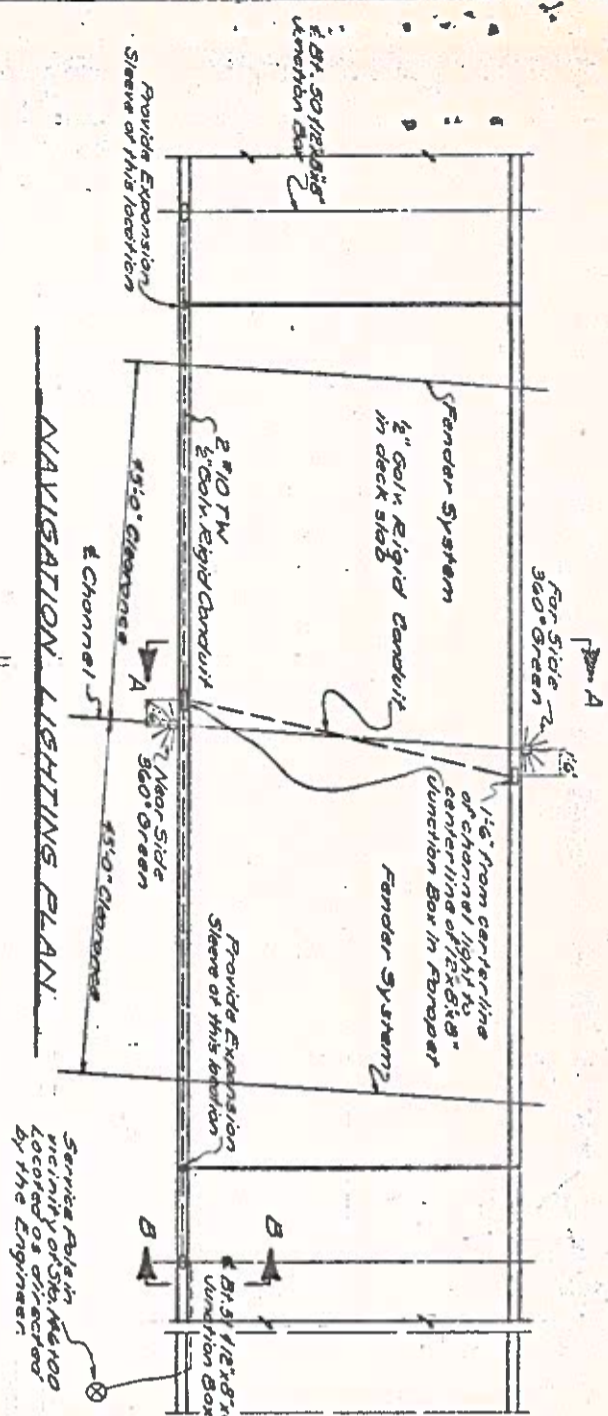
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 BURENSWICK COUNTY
 PROJECT NO. 8,19,15502
 STATION: 139+16.00

REVISIONS

NO.	DATE	BY	REVISION
1	JULY 1972		

FENDER SYSTEM SHOWING LOCATION OF NAVIGATION LIGHTS.

Rev. #1 - To change pile batter on piles adjacent to seal by 1/4" by 1/4" THE



NOTES

The Navigation Lighting System shall be installed in accordance with the requirements of the following:
 (a) Standard Specifications for Road & Bridge Construction, N.C. State Highway Commission, (b) AASHTO No. 70, National Electric Code (NEC), (c) AASHTO Navigation Regulations, (d) Coast Guard, CG-208, Jan. 1, 1955.
 The neutral conductor and all non-current carrying parts of the Navigation Lighting System shall be interconnected to a common ground. The ground connection of the equipment shall be the only interconnection between the equipment and ground wire and the system ground wire.
 All conduit to be galvanized.
 All Junction Boxes to be tested for drainage must be provided with gable sections of conduit entrances with insulated metallic bushings.

CB Universal Concrete Reinforced Inserts or equal spaced to fix the size galvanized steel rod will take machine bolt threads will be accepted.

PROJECT No. 81313502
 BRUNSWICK COUNTY
 STATION 139+16.00
 SHEET 2 OF 2
 STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 NALEDIGH
 NAVIGATION LIGHTING PLAN
 AUG. 1972

NO.	BY	DATE	NO.	BY	DATE
1			1		
2			2		
3			3		
4			4		

DATE P.L.D. 8/15/72
 CHECKED BY: [Signature]
 DESIGNED BY: [Signature]

DESIGN DATA:

SPECIFICATIONS	A.A.S.H.O. (CONCRETE)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE SPECIFICATIONS
STRESSES IN EXTREME FIBER OF	
5" STRUCTURAL STEEL - A.S.T.M. A50 GRADE	20,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION	20,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	1,100 LBS. PER SQ. IN.
EXCEPT FOR BRIDGE DECK SLABS	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	90 LBS. PER SQ. IN.
STRUCTURAL TIMBER - TREATED OR	
UNREQUITED - EXTREME FIBER STRESSES	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN	
IN TIMBER	575 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS. PER CU. FT.

MATERIAL AND WORKMANSHIP:

EXCEPT AS OTHERWISE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 1932 STANDARD SPECIFICATIONS OF THE N. C. STATE HIGHWAY COMMISSION.

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS "A" CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT CLASS "A" CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES.

CONCRETE CHANGERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS. CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE LEFT SQUARE OR ROUNDED WITH A 1/4" FINISHING TOOL. CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4" RADIUS WITH A FINISHING STONE OR TOOL.

DOVELS:

DOVELS WHEN INDICATED ON PLANS AS FOR CURVE EXTENSIONS, SHALL BE CHISELED AT LEAST 12" INTO THE OLD CONCRETE AND GROUDED INTO PLACE WITH 1:2 CEMENT MORTAR.

WATERSTOPS:

WATERSTOPS SHALL BE OF AN APPROVED MATERIAL, WHICH CAN BE EASILY CUT AND JOINTS EFFECTIVELY SEALED IN THE FIELD. WHEN USED IN BRIDGE DECKS WITH CURBS, THE MATERIAL SHALL FORM A CONTINUOUS WATERSTOP ACROSS THE SLAB, UP THE CURBS AND ACROSS THE TOP OF CURBS OR WALKS TO THE INSIDE FACE OF RAIL POSTS OR RAIL BRACKETS. WHEN USED IN BRIDGE DECKS WITH NO CURBS BUT WITH PARALLEL WALLS, THE MATERIAL SHALL FORM A CONTINUOUS WATERSTOP ACROSS THE SLAB TO A POINT 1/2" INSIDE THE WALL AND THEN VERTICALLY TO A POINT 5" ABOVE THE BRIDGE DECK. A CONTINUOUS WATERSTOP SPLICE SHALL BE PROVIDED FROM CURB TO CURB; OR FROM PARALLEL TO PARALLEL. FOR ALL SPANS AND FOR FULL LENGTH OF THE MATERIAL FOR SPANS WITH NO SHEAR. FOR SKIRMED SPANS, A 6" LAPPED AND WELDED JOINT, SHOP OR FIELD FABRICATED, WILL BE PERMITTED IN THE WATERSTOP AT THE BOTTOM OF CURB OR PARALLEL WALL. EXPANSION JOINT MATERIAL SHALL BE PLACED IN THE JOINT BELOW AND ABOVE THE WATERSTOP IN AN APPROVED MANNER, AND THE JOINT SHALL BE KEPT FREE OF CONCRETE. THE TOP OF THE JOINT SHALL BE SEALED WITH HOT POURED RUBBER ASPHALT MATERIAL.

STANDARD NOTES

ALLOWANCE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS, AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE. ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF RAILING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESSTRESS CONCRETE GIRDER BRIDGES, THE ELEVATIONS SHOWN SHALL BE ADJUSTED FOR DEAD LOAD DEFLECTIONS. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEAMS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS. VERTICAL CURVE OR MINUTE, AND ACTUAL BEAM CURVE, WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES. DEPTH OF SLAB BETWEEN BEAMS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE OR MINUTE, AND ACTUAL BEAM CURVE. IF DEFLECTIONS ARE NOT SHOWN ON PLANS, THEY WILL BE FURNISHED BY THE ASSISTANT CHIEF ENGINEER - BRIDGES.

IN SETTING FASTENERS AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF ABUTMENT, AND REMOVAL OF WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FASTENERS, THE FINISHED STRUCTURES SHALL CONFORM TO THE ELEVATIONS SHOWN PLUS THE ALLOWANCE FOR PERMANENT CAMBER SPECIFIED BY THE ENGINEER.

FIVE SETS OF DETAILED DRAWINGS FOR FASTENERS OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FASTENERS OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DETONED WITH THE EXCEPTION OF #2 BARS. NUMBER 2 BAR REINFORCEMENT MAY BE FABRICATED FROM COLD DRAWN STEEL WIRE CONFORMING TO THE REQUIREMENTS OF ASTM A-62 FOR SIZE NUMBER #2. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED ON THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED OR LOCKED ON ADJOINING PIECES.

STRUCTURAL STEEL:

UNLESS OTHERWISE SPECIFIED ON THE PLANS ALL STRUCTURAL STEEL EXCEPT ANCHOR BOLTS SHALL BE OF ASTM A56 GRADE. ANCHOR BOLTS SHALL BE OF ASTM A502 GRADE A, OR ASTM A56 GRADE.

STEEL BEAMS MAY VARY A MAXIMUM OF 1/8" FROM THE CENTER SPECIFIED ON THE PLANS. AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 7/8" B SHEAR STUDS FOR THE 3/4" B STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8" B STUDS FOR 4 - 3/4" B STUDS, AND STUD SPACING SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF STUDS FOR 4 - 3/4" B STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED.

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAM, WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A MAXIMUM OF 1/2" IN WIDTH TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 1-1/2 TIMES THE FLANGE THICKNESS. THE SIZE OF THE WELD FOR ATTACHING THESE COVER PLATES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.

HANDRAILS AND POSTS:

POSTS FOR CONCRETE HANDRAILS SHALL BE BUILT NORMAL TO THE GRADE OF THE CURB, AND THE CONCRETE RAILS AND TOPS OF POSTS SHALL BE EXACTLY PARALLEL TO THE GRADE OF THE CURB. POST BRACKETS, WHEN USED, SHALL ALSO BE BUILT NORMAL TO THE GRADE OF THE CURB WITH TOP AND BOTTOM OF BRACKETS PARALLEL TO GRADE OF CURB.

HANDRAILS AND POSTS CONTINUED:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB. UNLESS OTHERWISE SHOWN ON PLANS, THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL RECORDS ARE REQUIRED FOR METAL RAILS AND POSTS.

STEEL PILE ENCASEMENT:

WHERE WIRE MESH AROUND STEEL PILES IS CALLED FOR ON PLANS, IT SHALL BE OF AN APPROVED TYPE, 12 GAUGE WITH 4" X 8" OPENINGS OR 13 GAUGE WITH 4" X 4" OPENINGS. NO ALLOWANCE WILL BE MADE FOR WIRE MESH.

EXCAVATION AND FOUNDATION DATA:

THE INFORMATION SHOWN ON PLANS PERTAINING TO EXCAVATION AND FOUNDATION DATA AND ALL ELEVATIONS OF GROUND LINE AND WATER SURFACES GIVEN ARE BELIEVED TO BE CORRECT AND ARE FURNISHED FOR THE CONVENIENCE OF BIDDERS, BUT THE STATE HIGHWAY COMMISSION ASSUMES NO RESPONSIBILITY FOR, NOR GUARANTEES AS CORRECT, ANY OF THE INFORMATION GIVEN.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS, ARTICLE 105-4.