

**TOTAL BILL OF MATERIAL**

Class	Qty	Unit	Price	Total	Remarks
Struct. Steel	172.8	lbs	36.50	6300.00	
Struct. Iron	12.2	lbs	20.00	244.00	
Struct. Cast Iron	27.2	lbs	18.00	489.60	
Struct. Concrete	22.8	cu yd	12.50	285.00	
Struct. Brick	23.1	sq yd	16.50	381.15	
Struct. Mortar	10.9	cu yd	19.50	212.55	
Struct. Gravel	3.2	cu yd	7.00	22.40	
<b>Total</b>	<b>272.2</b>			<b>10,074.60</b>	

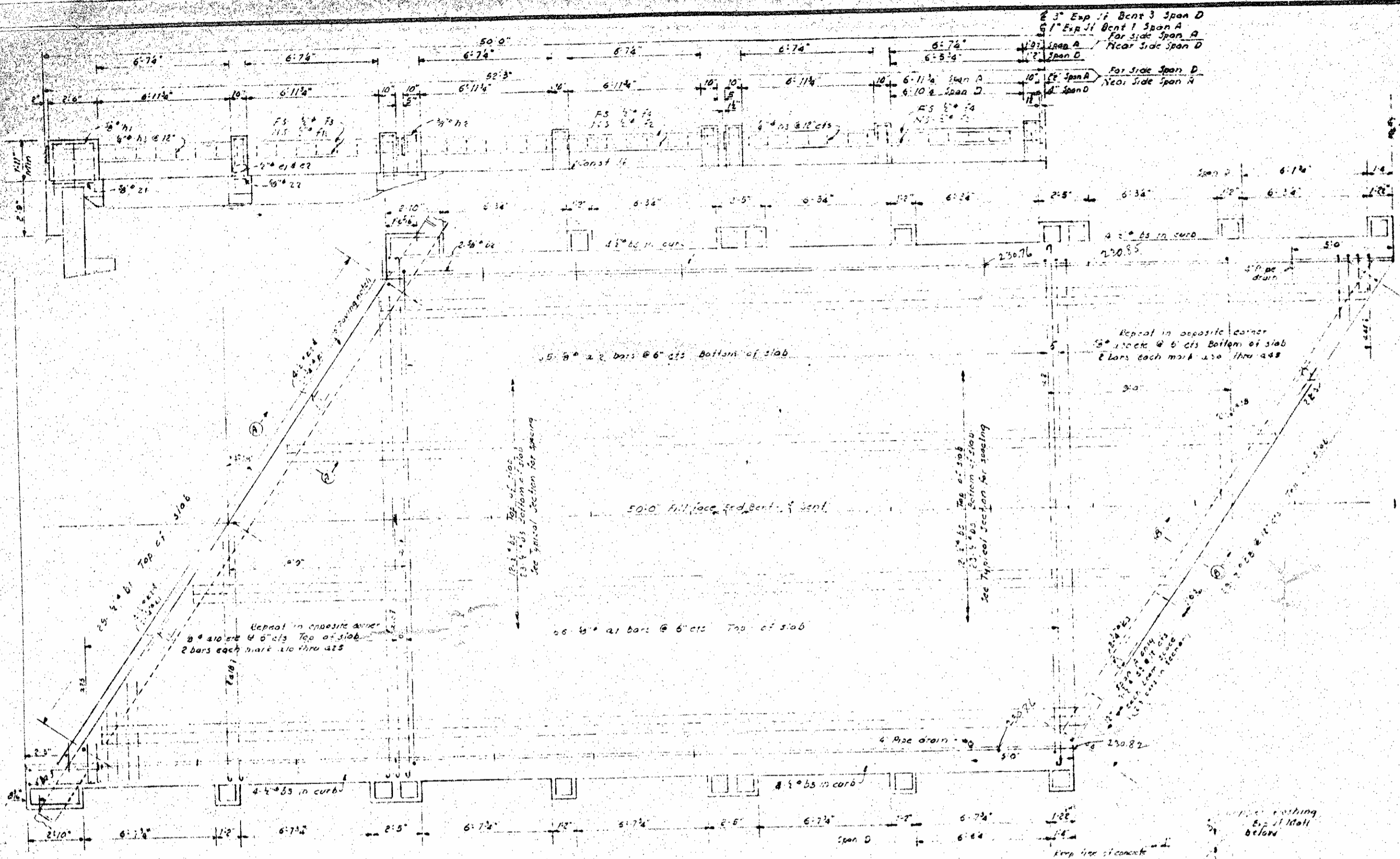
**Notes:**  
 Assumed Live Load H-15-44  
 For other design data of Gen. notes see sheet 3-N.  
 All exposed concrete surfaces to be finished in accordance with the specifications.  
 Concrete for all bridge structures to contain a minimum of 18% of crushed stone.  
 Concrete timber piles shall be driven to a minimum bearing capacity of 20 tons each.  
 End Bent piles to be driven through the roadway fill.  
 The contractor will be required to drive test piles to determine the length of treated timber piles. See Specs.  
 Traffic to be detoured over run-off on proposed ramps during construction of this structure see special provisions.  
 Work is not to be started on bents 1, 2 & 3 until after the roadway section has been excavated by the roadway contractor.  
 Unfinished structure excavation for bents 1 & 2 to be measured from the surface of the cut. Excavation for bent 3 will be measured to 11' 6" (5' 0" special provision) excavation will not be measured and paid for as a separate item. The cost to be included in the unit price of the several pay items.

I CERTIFY THAT THIS BRIDGE WAS BUILT ACCORDING TO PLANS SIGNATURE DATE  
 SIGNATURE DATE 10-6-55

**PROJECT NO. 1724**  
**HARNETT COUNTY**  
**STATION: 328+50.0**

STATE OF NORTH CAROLINA  
 STATE HIGHWAY AND  
 PUBLIC WORKS COMMISSION  
 GENERAL DRAWING  
 BRIDGE OVER PROPOSED  
 US 501 ON COUNTY ROAD  
 BETWEEN DUNDY &  
 SAMPSON COUNTY LINES

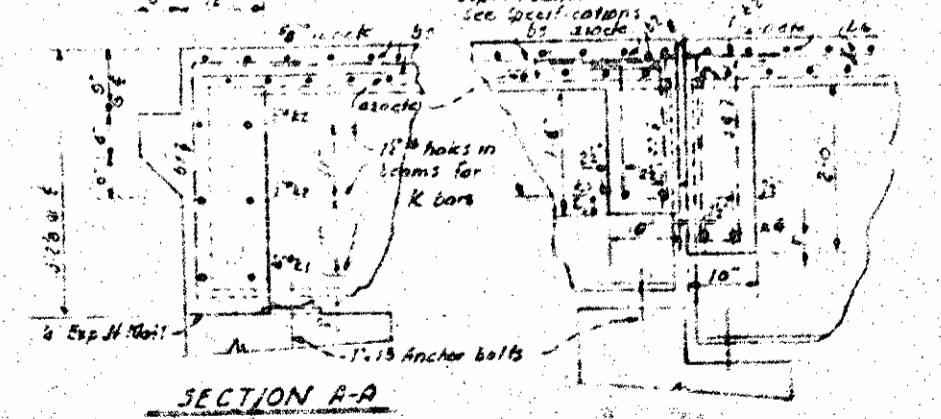
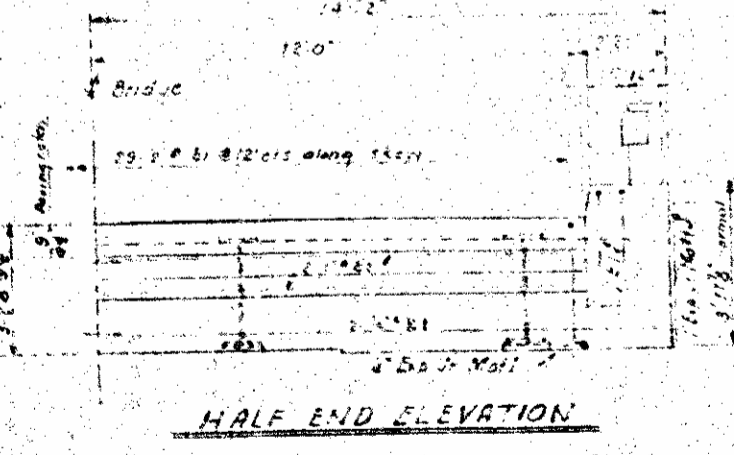
DATE 5-24-55

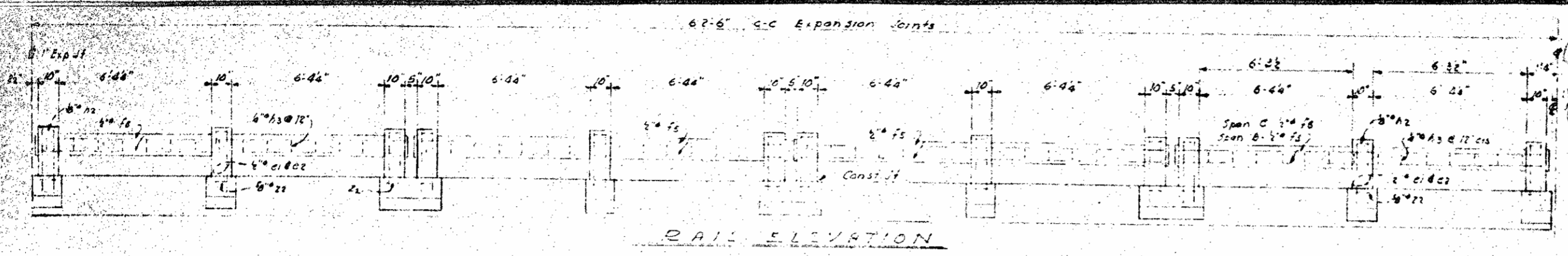


REV	DATE	BY	CHKD
0	01.01.42		

PROJECT NO. 1374  
 HARNETT COUNTY  
 STATION: 508+561.11

STATE OF NORTH CAROLINA  
 STATE HIGHWAY AND  
 PUBLIC WORKS COMMISSION  
 SUPERSTRUCTURE  
 CONCRETE PLAN  
 SPAN A & D  
 JUNE 1958



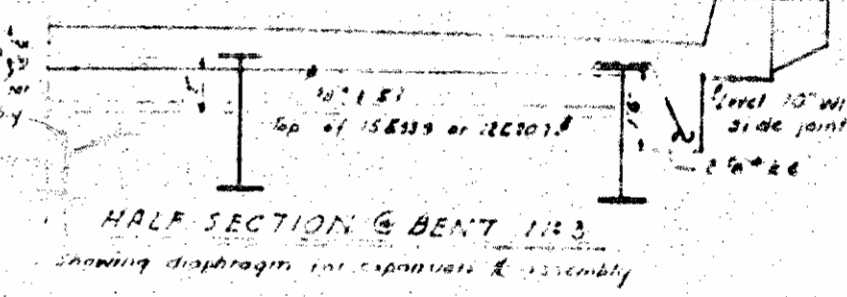
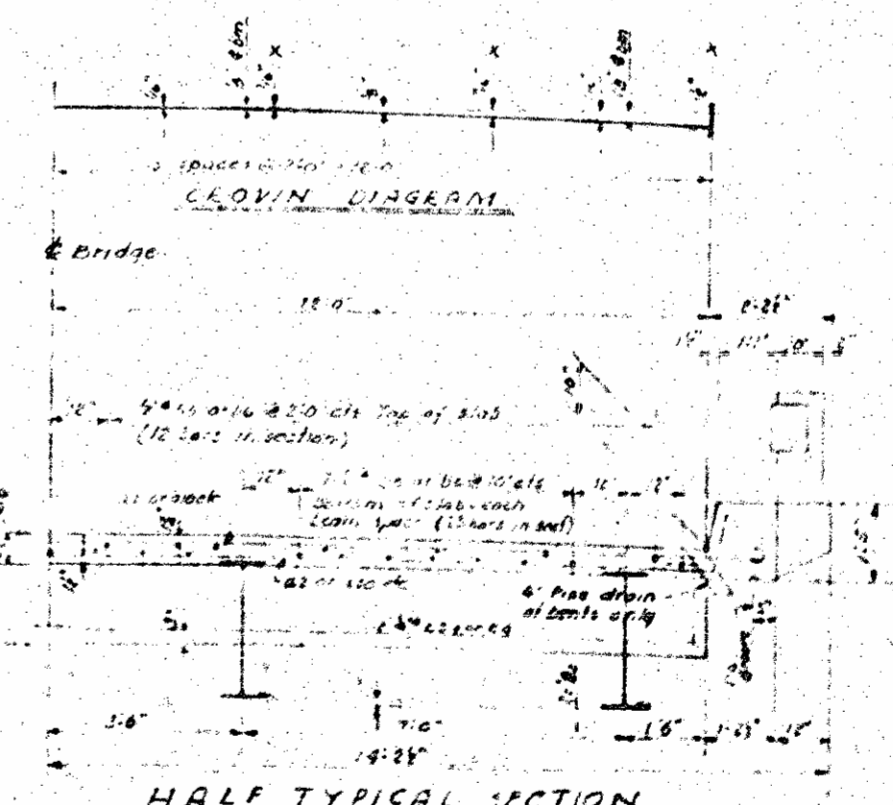
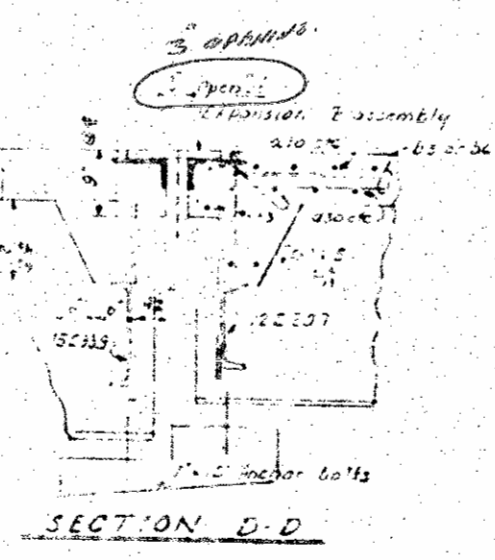
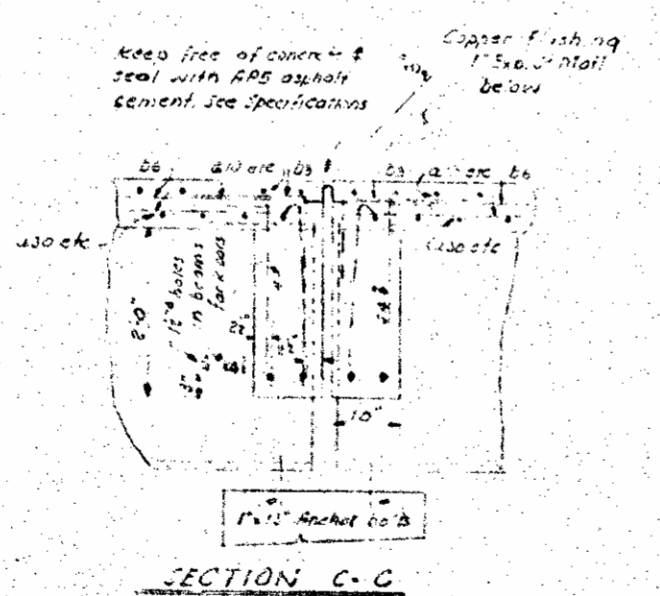
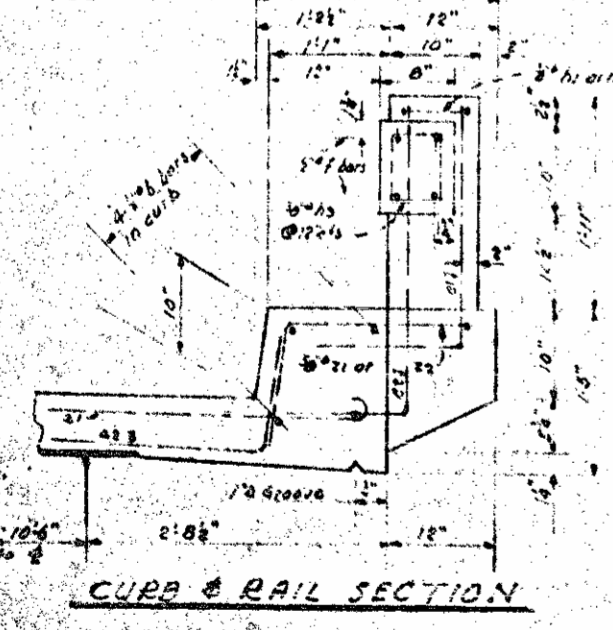
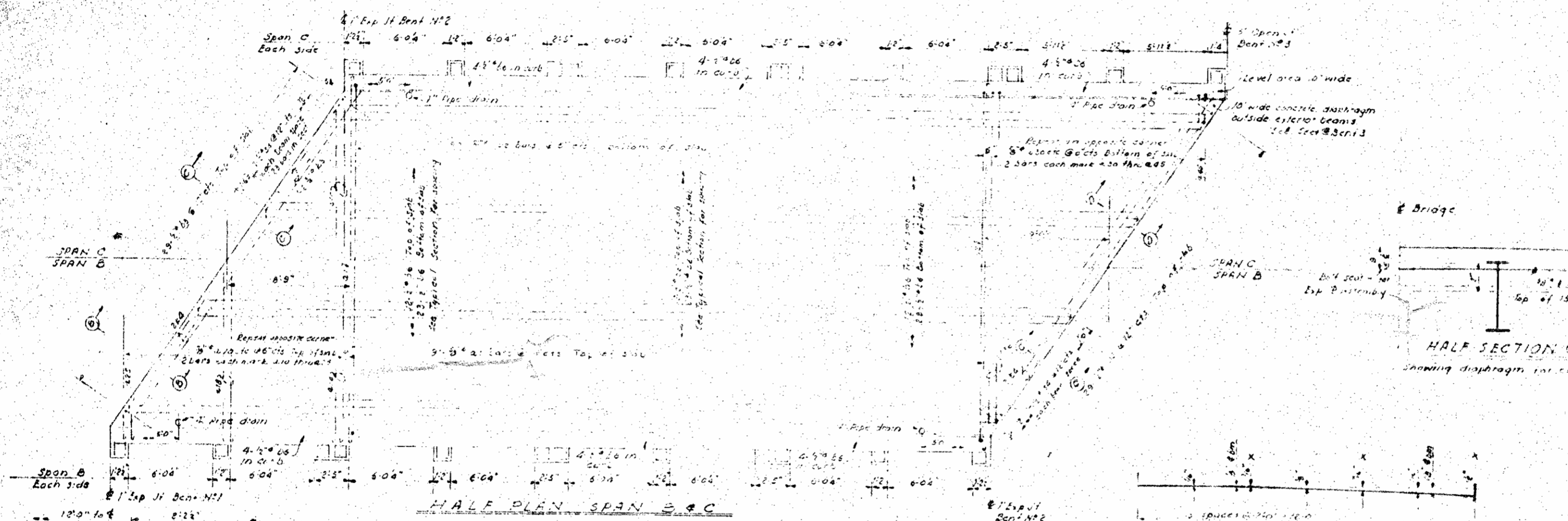


PROJ. NO.	SHEET NO.	TOTAL SHEETS
4374	5	33

**NOTE**

Maximum Lead Load deflection

Span A	Span B	Span C	Span D
Exterior beams	1/4"	1/4"	1/4"
Interior beams	1/4"	1/4"	1/4"
Vertical curve ordinate	1/4"	1/4"	1/4"



PROJECT NO. 4374  
HARNETT COUNTY  
STATION: 359+50.12

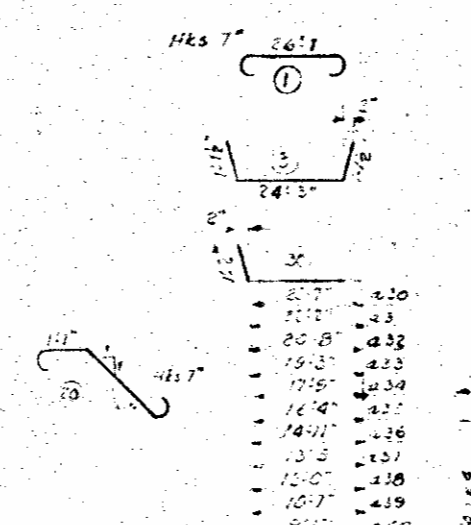
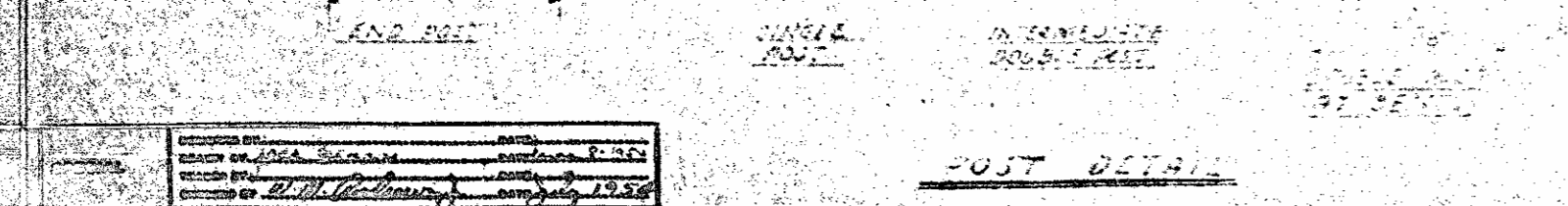
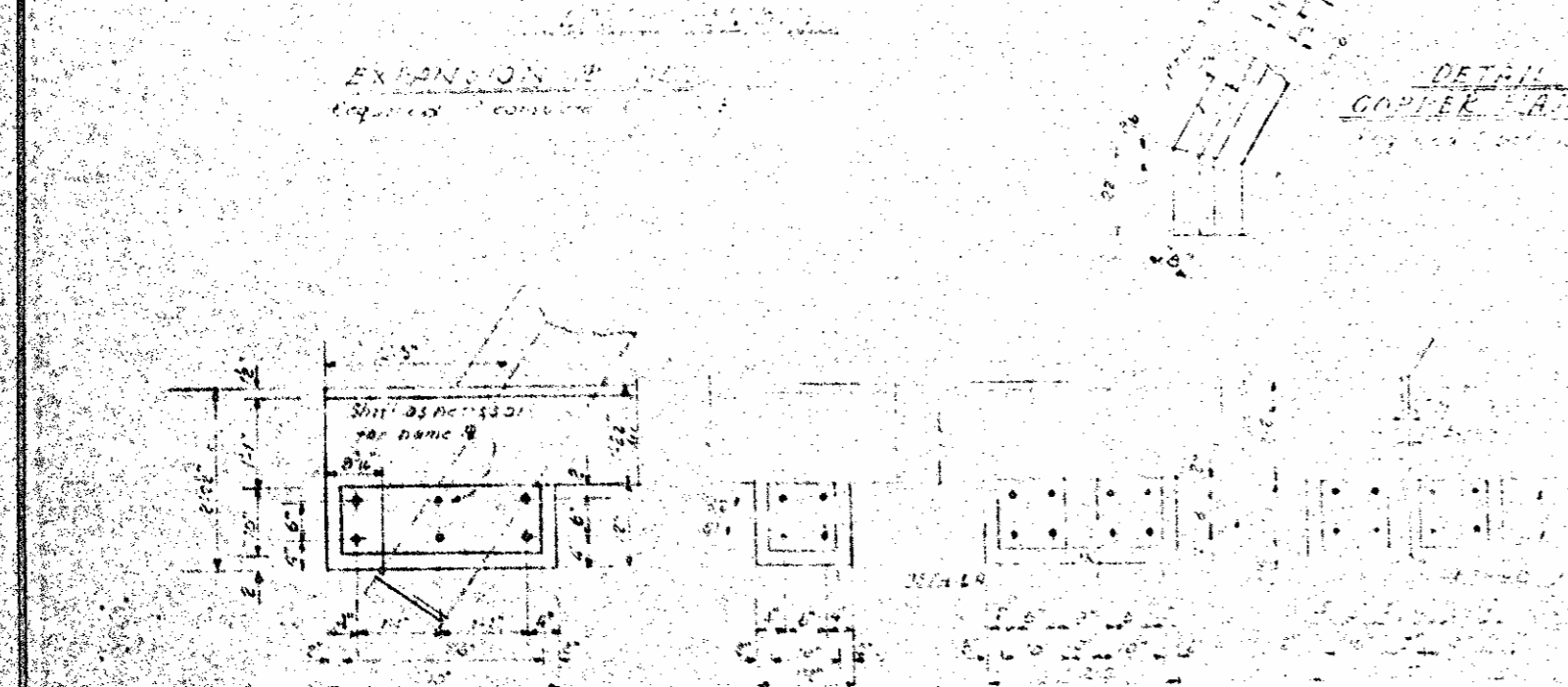
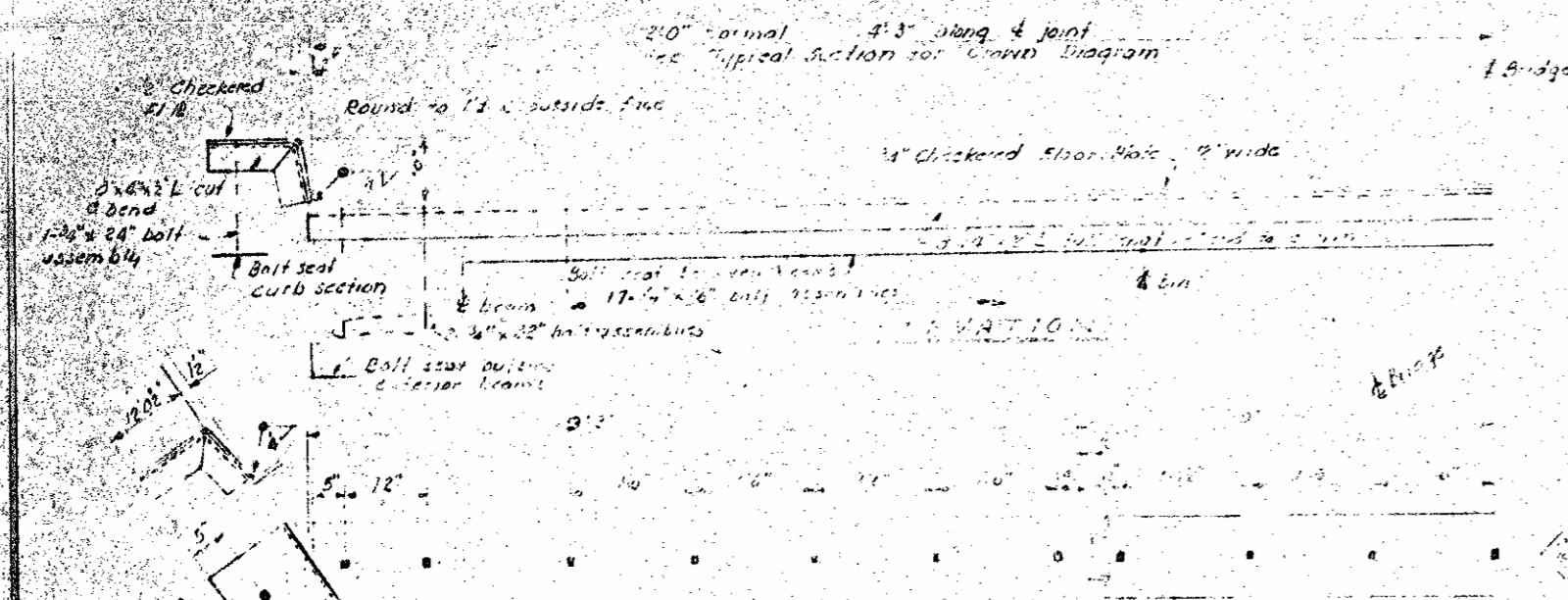
STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION

**SUPERSTRUCTURE  
CONCRETE PLAN  
SPAN B & C  
TYPICAL SECTIONS**

JUNE 1956

DESIGNED BY: [Signature]  
APPROVED BY: [Signature]

EST. NO.	STATE	PROJECT NO.
5	N.C.	4374



BAR TYPES  
Dimensions are out to out

BILL OF MATERIAL

Bar	Qty	Size	Type	Length	Weight	Bars per span
1	21	4/8	1/2"	24.5	407	4
2	21	4/8	1/2"	24.5	407	4
3	21	4/8	1/2"	24.5	407	4
4	21	4/8	1/2"	24.5	407	4
5	21	4/8	1/2"	24.5	407	4
6	21	4/8	1/2"	24.5	407	4
7	21	4/8	1/2"	24.5	407	4
8	21	4/8	1/2"	24.5	407	4
9	21	4/8	1/2"	24.5	407	4
10	21	4/8	1/2"	24.5	407	4
11	21	4/8	1/2"	24.5	407	4
12	21	4/8	1/2"	24.5	407	4
13	21	4/8	1/2"	24.5	407	4
14	21	4/8	1/2"	24.5	407	4
15	21	4/8	1/2"	24.5	407	4
16	21	4/8	1/2"	24.5	407	4
17	21	4/8	1/2"	24.5	407	4
18	21	4/8	1/2"	24.5	407	4
19	21	4/8	1/2"	24.5	407	4
20	21	4/8	1/2"	24.5	407	4
21	21	4/8	1/2"	24.5	407	4
22	21	4/8	1/2"	24.5	407	4
23	21	4/8	1/2"	24.5	407	4
24	21	4/8	1/2"	24.5	407	4
25	21	4/8	1/2"	24.5	407	4
26	21	4/8	1/2"	24.5	407	4
27	21	4/8	1/2"	24.5	407	4
28	21	4/8	1/2"	24.5	407	4
29	21	4/8	1/2"	24.5	407	4
30	21	4/8	1/2"	24.5	407	4
31	21	4/8	1/2"	24.5	407	4
32	21	4/8	1/2"	24.5	407	4
33	21	4/8	1/2"	24.5	407	4
34	21	4/8	1/2"	24.5	407	4
35	21	4/8	1/2"	24.5	407	4
36	21	4/8	1/2"	24.5	407	4
37	21	4/8	1/2"	24.5	407	4
38	21	4/8	1/2"	24.5	407	4
39	21	4/8	1/2"	24.5	407	4
40	21	4/8	1/2"	24.5	407	4
41	21	4/8	1/2"	24.5	407	4
42	21	4/8	1/2"	24.5	407	4
43	21	4/8	1/2"	24.5	407	4
44	21	4/8	1/2"	24.5	407	4
45	21	4/8	1/2"	24.5	407	4
46	21	4/8	1/2"	24.5	407	4
47	21	4/8	1/2"	24.5	407	4
48	21	4/8	1/2"	24.5	407	4
49	21	4/8	1/2"	24.5	407	4
50	21	4/8	1/2"	24.5	407	4
51	21	4/8	1/2"	24.5	407	4
52	21	4/8	1/2"	24.5	407	4
53	21	4/8	1/2"	24.5	407	4
54	21	4/8	1/2"	24.5	407	4
55	21	4/8	1/2"	24.5	407	4
56	21	4/8	1/2"	24.5	407	4
57	21	4/8	1/2"	24.5	407	4
58	21	4/8	1/2"	24.5	407	4
59	21	4/8	1/2"	24.5	407	4
60	21	4/8	1/2"	24.5	407	4
61	21	4/8	1/2"	24.5	407	4
62	21	4/8	1/2"	24.5	407	4
63	21	4/8	1/2"	24.5	407	4
64	21	4/8	1/2"	24.5	407	4
65	21	4/8	1/2"	24.5	407	4

Pipe diams may be either cast iron, 3/4" galv steel pipe or transite

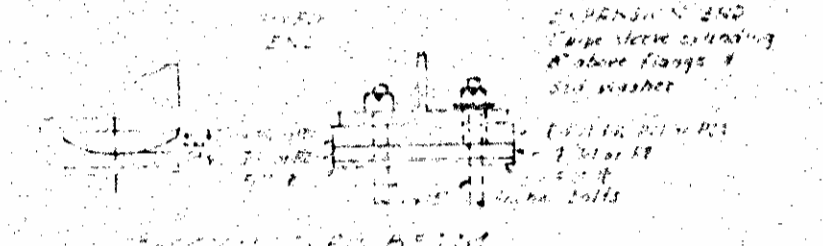
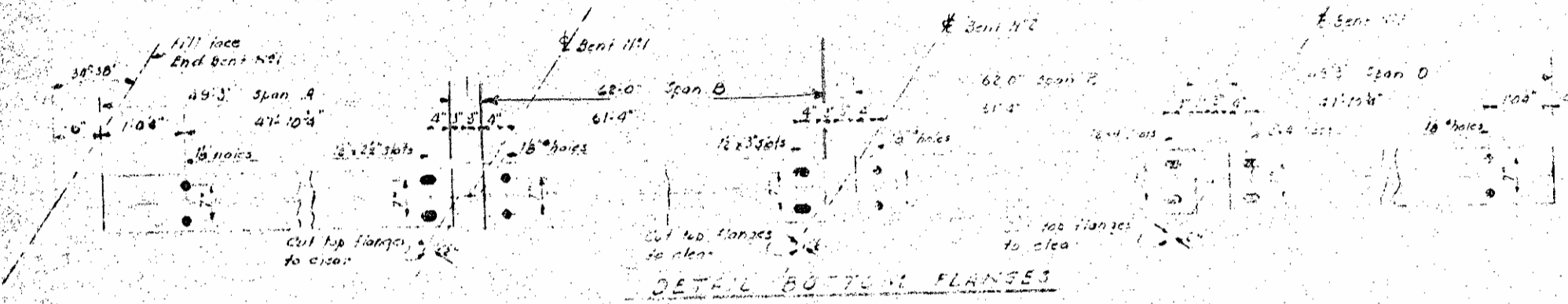
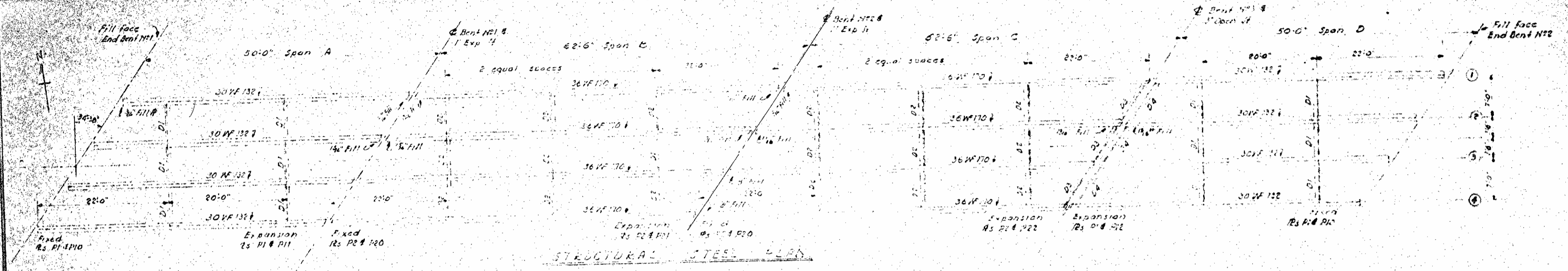
PROJECT NO. 4374  
HARNETT COUNTY  
STATION: 350+50.12

SUPERSTRUCTURE QUANTITIES

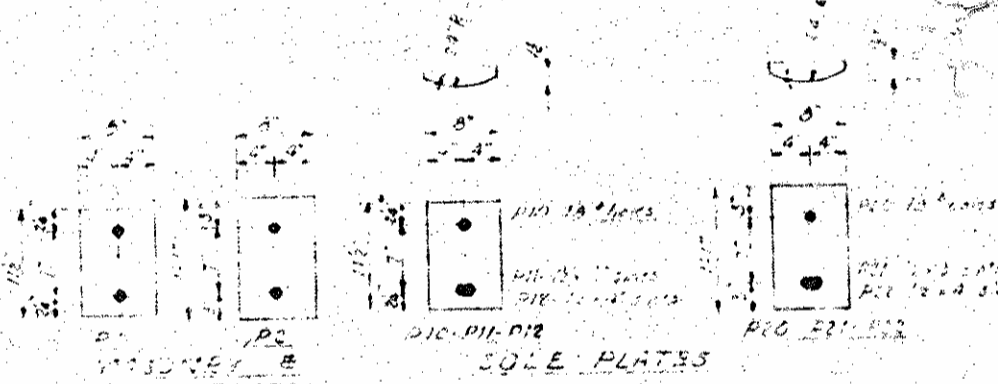
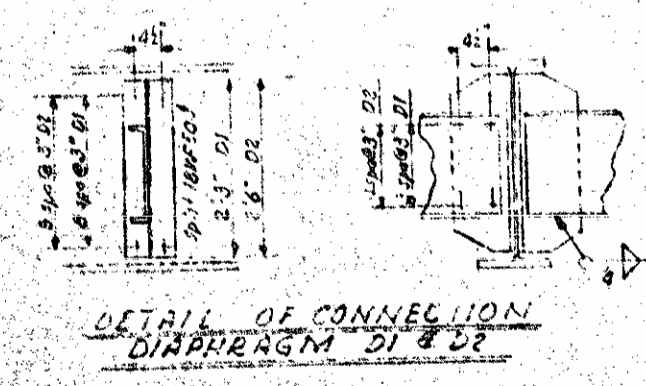
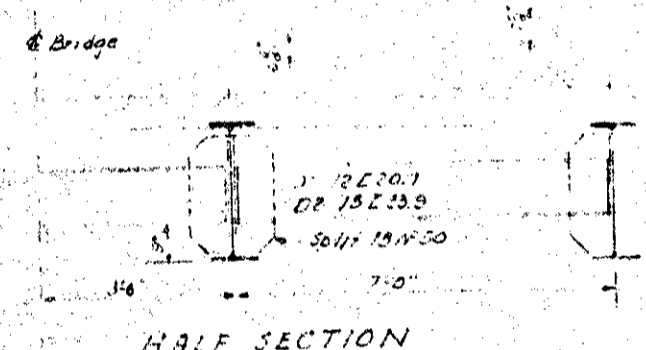
Reinforcing Steel	1786	Lbs
Class A Concrete	1786	Cu Yds
Structural Steel (Approx)	12300	Lbs

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION  
SUPERSTRUCTURE  
EXPANSION PLATE  
BILL OF MATERIAL

JUNE 1954



As the contractor option shop connection of beams to end bent (Bent No. 1) may be a steel moment-resisting joint, the connection of diaphragms to beams shall be either moment-resisting or direct first bent or end bent equal.



- DETAIL BEARING PLATES**
- Required:
- Bent 1: 8 @ 12" x 12" x 1/2" plates
  - Bent 2: 8 @ 12" x 12" x 1/2" plates
  - Bent 3: 8 @ 12" x 12" x 1/2" plates
  - Bent 4: 8 @ 12" x 12" x 1/2" plates
  - Span A: 8 @ 12" x 12" x 1/2" plates
  - Span B: 8 @ 12" x 12" x 1/2" plates
  - Span C: 8 @ 12" x 12" x 1/2" plates
  - Span D: 8 @ 12" x 12" x 1/2" plates
- Notes:
- Ends to be cut to the full out to be along span.
  - Span A, B, C, D, and ends to be cut to and straightened.
  - Holes same as P2 & P3.
  - Fill & etc. may be combined with masonry to give total required thickness after casting.
  - Holes same as P2 & P3.

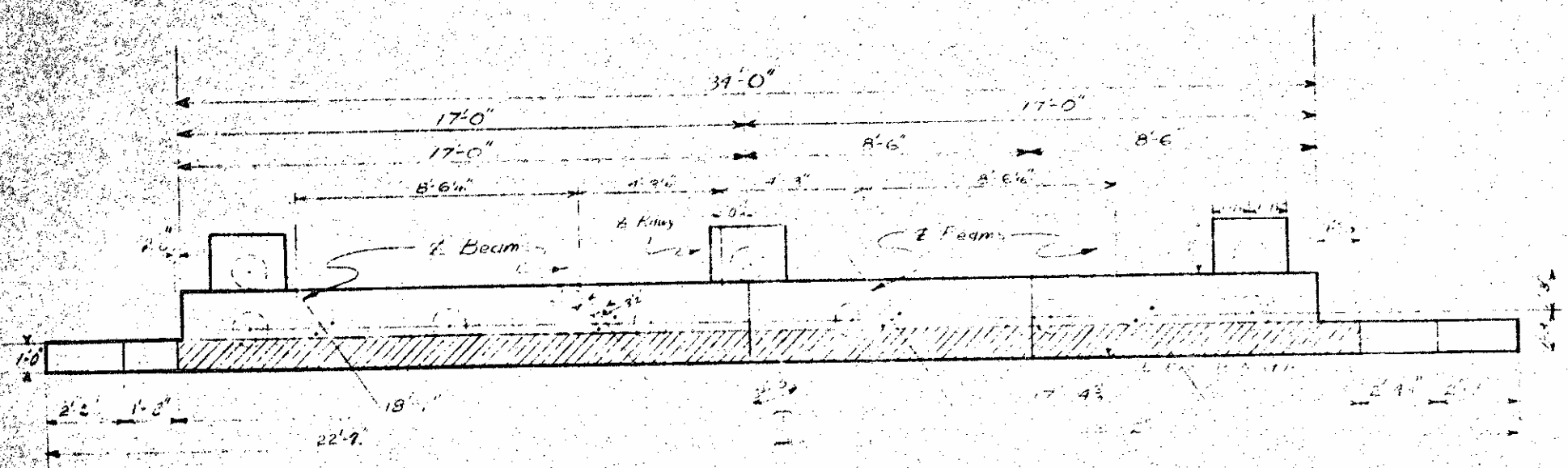
PROJECT NO. 4374  
 HARNETT COUNTY  
 STATION: 350+50.12

STATE OF NORTH CAROLINA  
 STATE HIGHWAY AND  
 PUBLIC WORKS COMMISSION  
 SUPERSTRUCTURE  
 STRUCTURAL STEEL

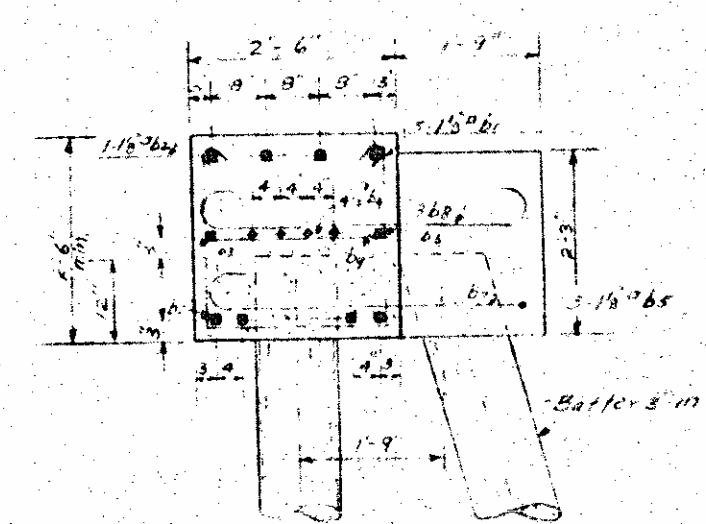
JUNE 1958

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]

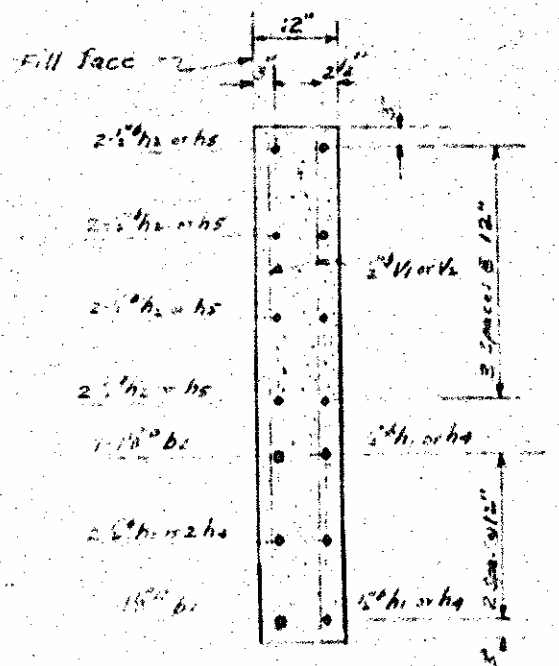
PROJECT NO. 4374



PLAN OF CAP END BENT No. 1

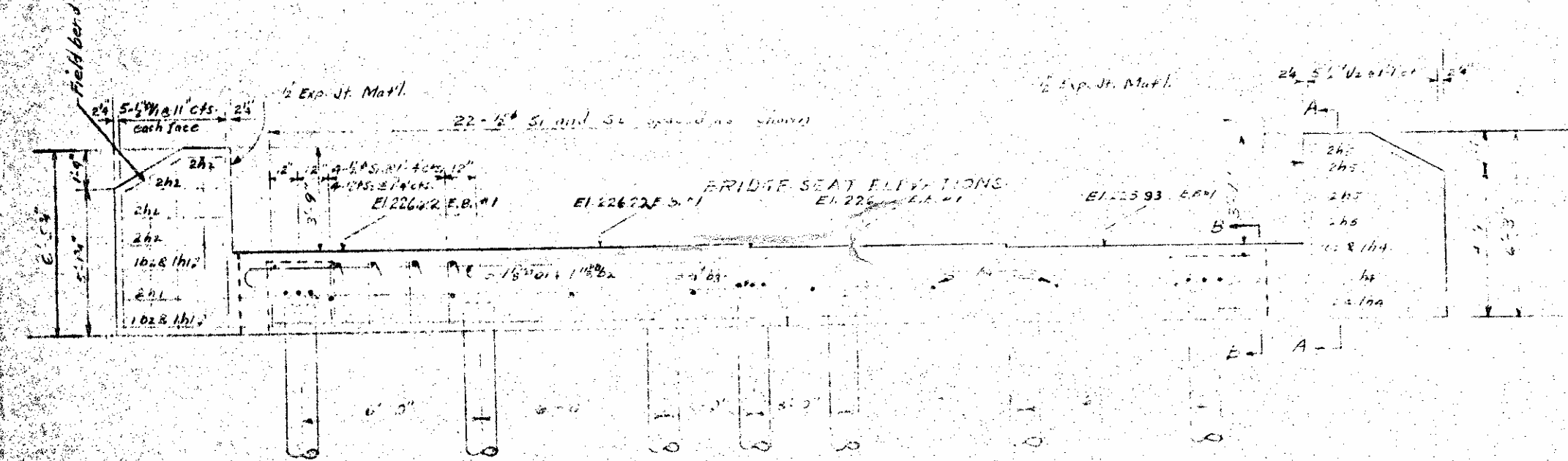


SECTION B-B

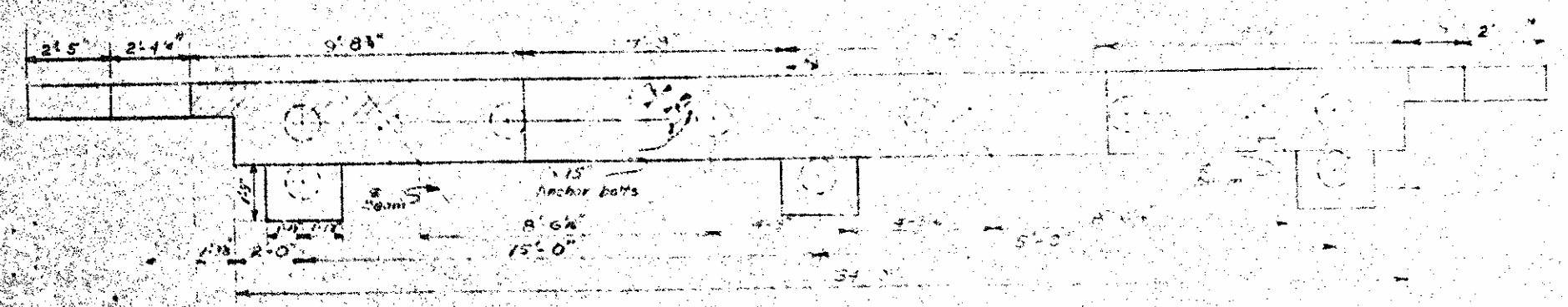


SECTION A-A

NOTE: Piles shall be driven to a minimum bearing capacity of 18 tons each.



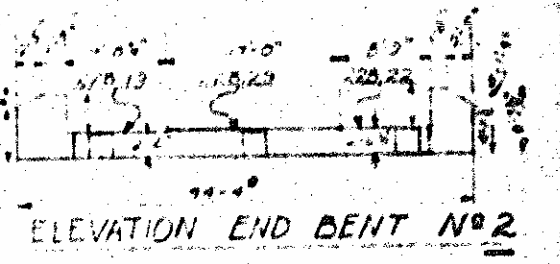
ELEVATION END BENT No. 1  
FILL FACE



PLAN CAP END BENT No. 2

Bill of Material for ONE END BENT TWO REQUIRED:

Bar No.	Size	Type	Length	Weight
1	1 1/2"	10	34'	9.77
2	1 1/2"	10	34'	9.77
3	1 1/2"	10	34'	9.77
4	1 1/2"	10	34'	9.77
5	1 1/2"	10	34'	9.77
6	1 1/2"	10	34'	9.77
7	1 1/2"	10	34'	9.77
8	1 1/2"	10	34'	9.77
9	1 1/2"	10	34'	9.77
10	1 1/2"	10	34'	9.77
11	1 1/2"	10	34'	9.77
12	1 1/2"	10	34'	9.77
13	1 1/2"	10	34'	9.77
14	1 1/2"	10	34'	9.77
15	1 1/2"	10	34'	9.77
16	1 1/2"	10	34'	9.77
17	1 1/2"	10	34'	9.77
18	1 1/2"	10	34'	9.77
19	1 1/2"	10	34'	9.77
20	1 1/2"	10	34'	9.77
21	1 1/2"	10	34'	9.77
22	1 1/2"	10	34'	9.77
23	1 1/2"	10	34'	9.77
24	1 1/2"	10	34'	9.77
25	1 1/2"	10	34'	9.77
26	1 1/2"	10	34'	9.77
27	1 1/2"	10	34'	9.77
28	1 1/2"	10	34'	9.77
29	1 1/2"	10	34'	9.77
30	1 1/2"	10	34'	9.77
31	1 1/2"	10	34'	9.77
32	1 1/2"	10	34'	9.77
33	1 1/2"	10	34'	9.77
34	1 1/2"	10	34'	9.77
35	1 1/2"	10	34'	9.77
36	1 1/2"	10	34'	9.77
37	1 1/2"	10	34'	9.77
38	1 1/2"	10	34'	9.77
39	1 1/2"	10	34'	9.77
40	1 1/2"	10	34'	9.77
41	1 1/2"	10	34'	9.77
42	1 1/2"	10	34'	9.77
43	1 1/2"	10	34'	9.77
44	1 1/2"	10	34'	9.77
45	1 1/2"	10	34'	9.77
46	1 1/2"	10	34'	9.77
47	1 1/2"	10	34'	9.77
48	1 1/2"	10	34'	9.77
49	1 1/2"	10	34'	9.77
50	1 1/2"	10	34'	9.77
51	1 1/2"	10	34'	9.77
52	1 1/2"	10	34'	9.77
53	1 1/2"	10	34'	9.77
54	1 1/2"	10	34'	9.77
55	1 1/2"	10	34'	9.77
56	1 1/2"	10	34'	9.77
57	1 1/2"	10	34'	9.77
58	1 1/2"	10	34'	9.77
59	1 1/2"	10	34'	9.77
60	1 1/2"	10	34'	9.77
61	1 1/2"	10	34'	9.77
62	1 1/2"	10	34'	9.77
63	1 1/2"	10	34'	9.77
64	1 1/2"	10	34'	9.77
65	1 1/2"	10	34'	9.77
66	1 1/2"	10	34'	9.77
67	1 1/2"	10	34'	9.77
68	1 1/2"	10	34'	9.77
69	1 1/2"	10	34'	9.77
70	1 1/2"	10	34'	9.77
71	1 1/2"	10	34'	9.77
72	1 1/2"	10	34'	9.77
73	1 1/2"	10	34'	9.77
74	1 1/2"	10	34'	9.77
75	1 1/2"	10	34'	9.77
76	1 1/2"	10	34'	9.77
77	1 1/2"	10	34'	9.77
78	1 1/2"	10	34'	9.77
79	1 1/2"	10	34'	9.77
80	1 1/2"	10	34'	9.77
81	1 1/2"	10	34'	9.77
82	1 1/2"	10	34'	9.77
83	1 1/2"	10	34'	9.77
84	1 1/2"	10	34'	9.77
85	1 1/2"	10	34'	9.77
86	1 1/2"	10	34'	9.77
87	1 1/2"	10	34'	9.77
88	1 1/2"	10	34'	9.77
89	1 1/2"	10	34'	9.77
90	1 1/2"	10	34'	9.77
91	1 1/2"	10	34'	9.77
92	1 1/2"	10	34'	9.77
93	1 1/2"	10	34'	9.77
94	1 1/2"	10	34'	9.77
95	1 1/2"	10	34'	9.77
96	1 1/2"	10	34'	9.77
97	1 1/2"	10	34'	9.77
98	1 1/2"	10	34'	9.77
99	1 1/2"	10	34'	9.77
100	1 1/2"	10	34'	9.77



ELEVATION END BENT No. 2

PROJECT NO. 4374  
HARNETT COUNTY  
STATION 358 + 58.1 L

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION  
SUBSTRUCTURE  
END BENTS No. 1 & 2

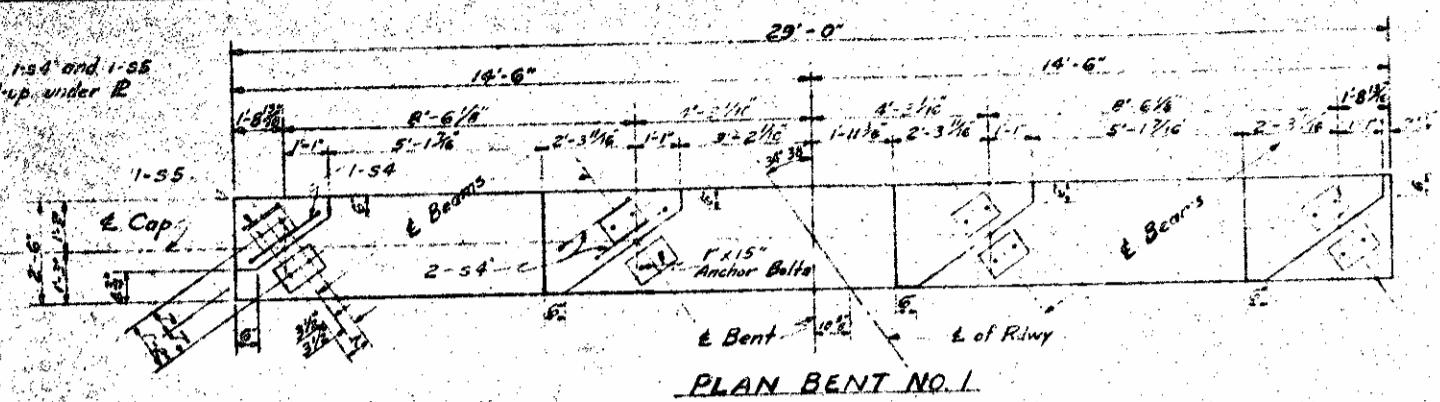
JUNE 1954

BAR DETAILS

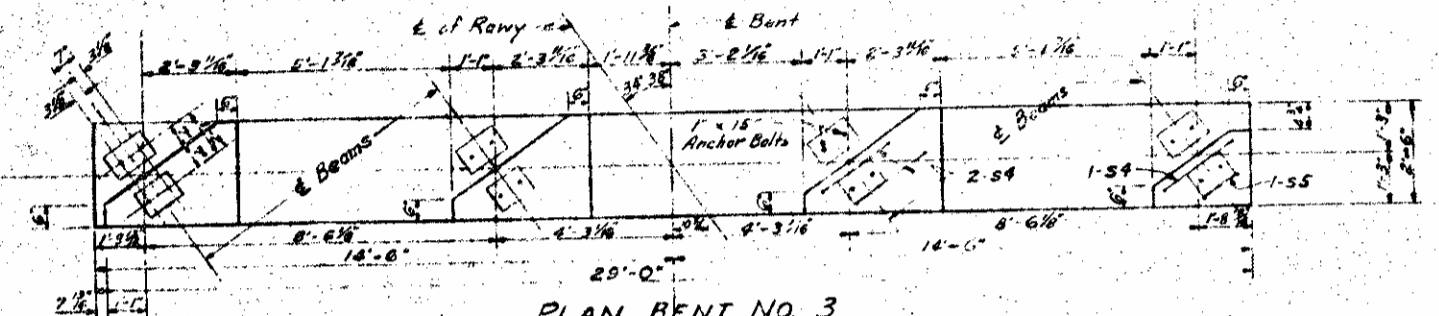
SHEET 5-29 OF 33

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

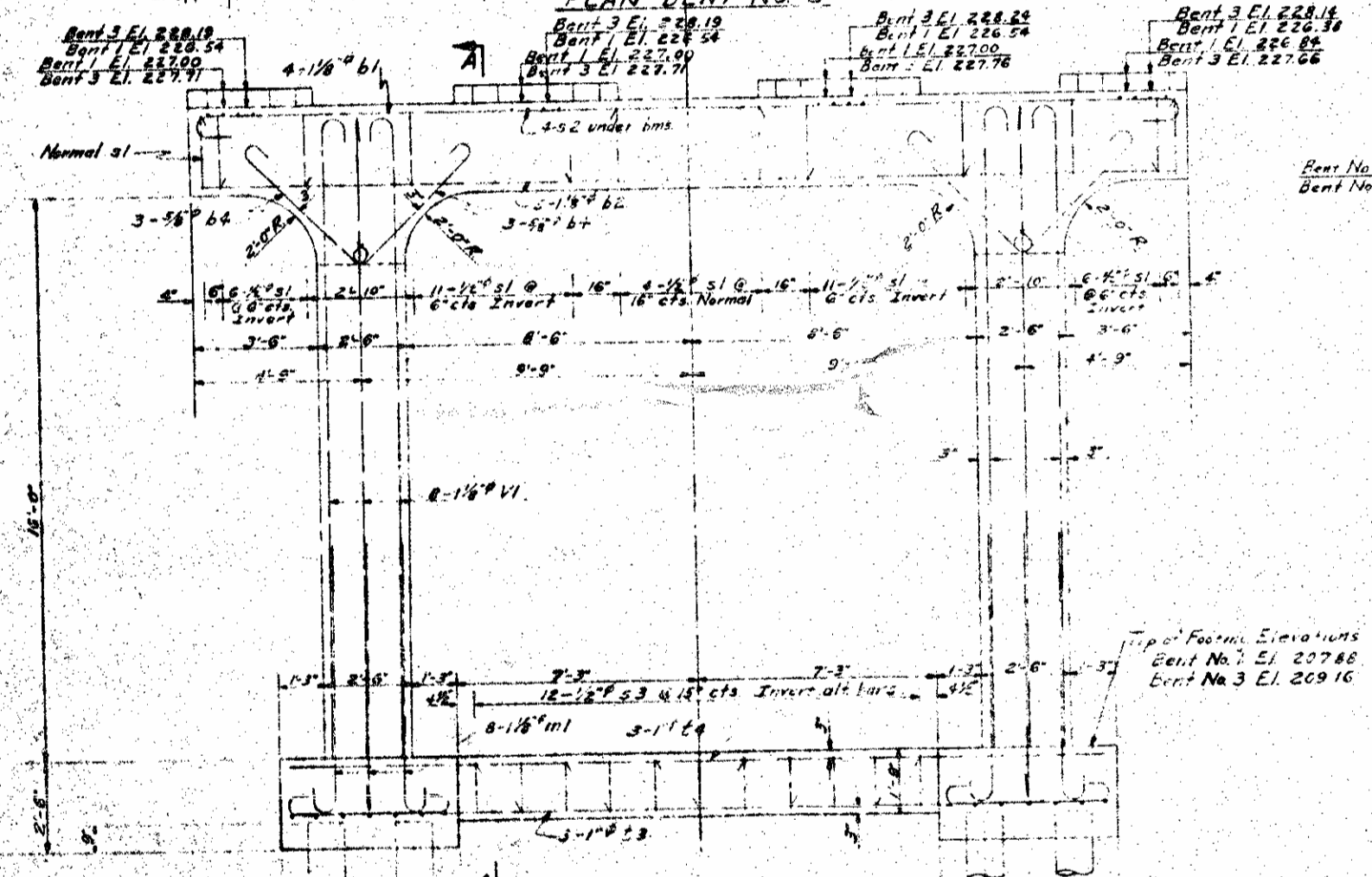
Note: 3/8" or 1/2" and 1-55 each laid up under R



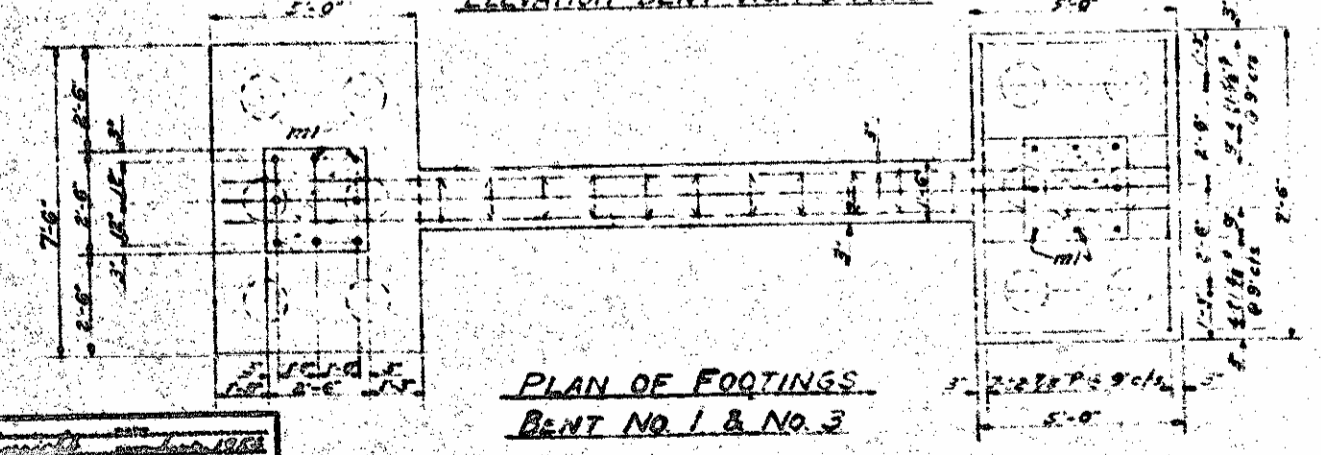
PLAN BENT NO. 1



PLAN BENT NO. 3



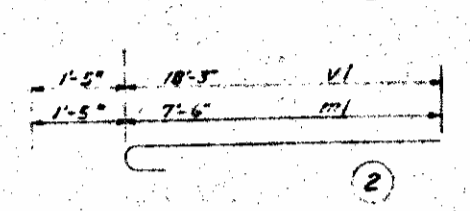
ELEVATION BENT NO. 1 & NO. 3



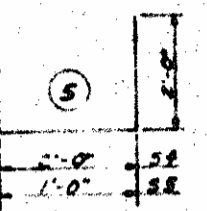
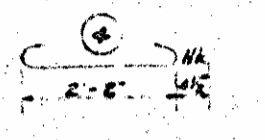
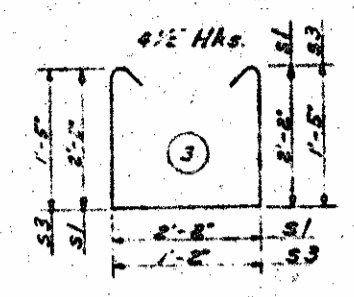
PLAN OF FOOTINGS  
BENT NO. 1 & NO. 3

Dir: All bar dimensions are out to out.

Hk	Length	Qty
1-1"	25'-0"	63
1-1"	7'-2"	62
7	4'-8"	61
7	4'-7"	60
1-1"	23'-6"	61



1



BAR TYPES

FOR ONE BENT TWO REQ'D  
BILL OF MATERIAL

BAR No.	SIZE	TYPE	LENGTH	WEIGHT
b1	4 1/8"	1	31'-6"	539
b2	5 1/8"	Sir	28'-0"	613
b3	1E 3/8"	1	5'-9"	72
m1	1 1/8"	2	8'-11"	616
v1	1 1/8"	2	19'-5"	1554
s1	1 1/8"	1	5'-10"	97
s2	1 1/8"	1	8'-10"	852
s3	3 7/8"	1	25'-0"	800
c1	3 7/8"	Sr	20'-0"	192
s1	4 1/8"	3	7'-5"	190
s2	1 1/8"	4	2'-11"	31
s3	1E 1/8"	3	4'-5"	36
o1	7 3/8"	5	6'-0"	63
s5	1 1/8"	5	8'-0"	8

Reinforcing Steel	Lbs	Each Bent
Class A Concrete	477	Bent No. 1
Class A Concrete	671	Bent No. 3
Unl. Str. Rebar	35	Bent No. 1
Unl. Str. Rebar	30	Bent No. 3
Cross Timber Piles	No. 16	Each Bent

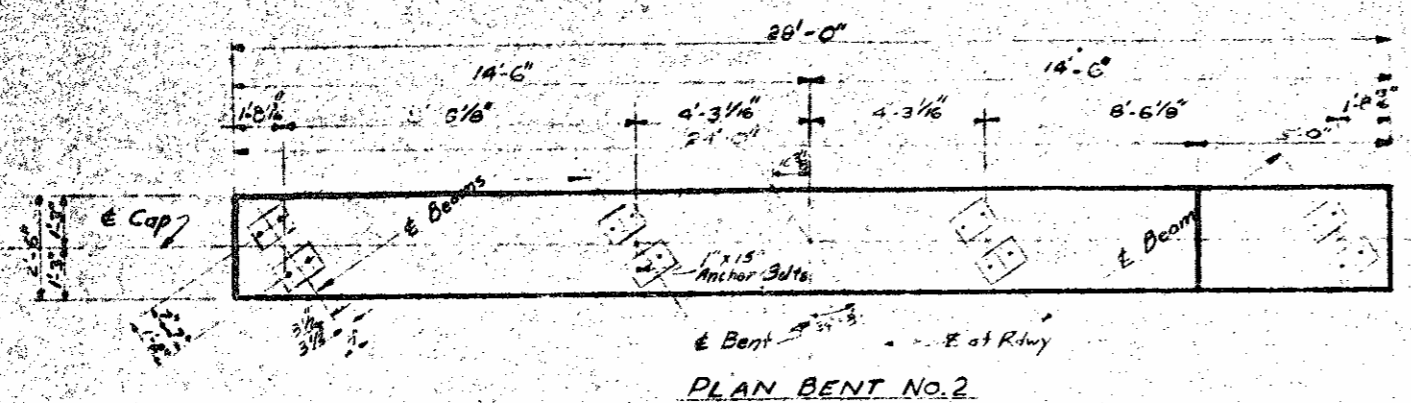
PROJECT NO. 237A  
HARNETT COUNTY  
STATION: 358 + 081.6

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION  
SUBSTRUCTURE  
BENT NO. 1 & NO. 3

JUNE, 1956

Revised 9-10-56 to correct  
Dr. H. H. H. S.  
SHEET 2-3000 33

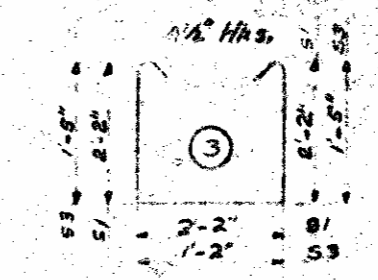
NOTE: Crossed Timber Piles to be driven to a minimum bearing capacity of 18 tons each. Volume of Pile heads has been deducted from concrete quantity.



N.B. All Bar Dimensions are out to out.

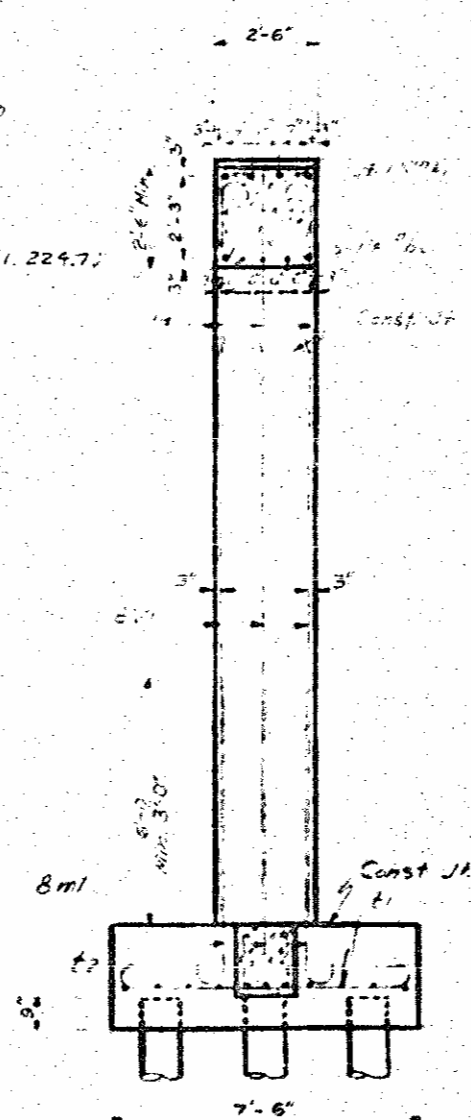
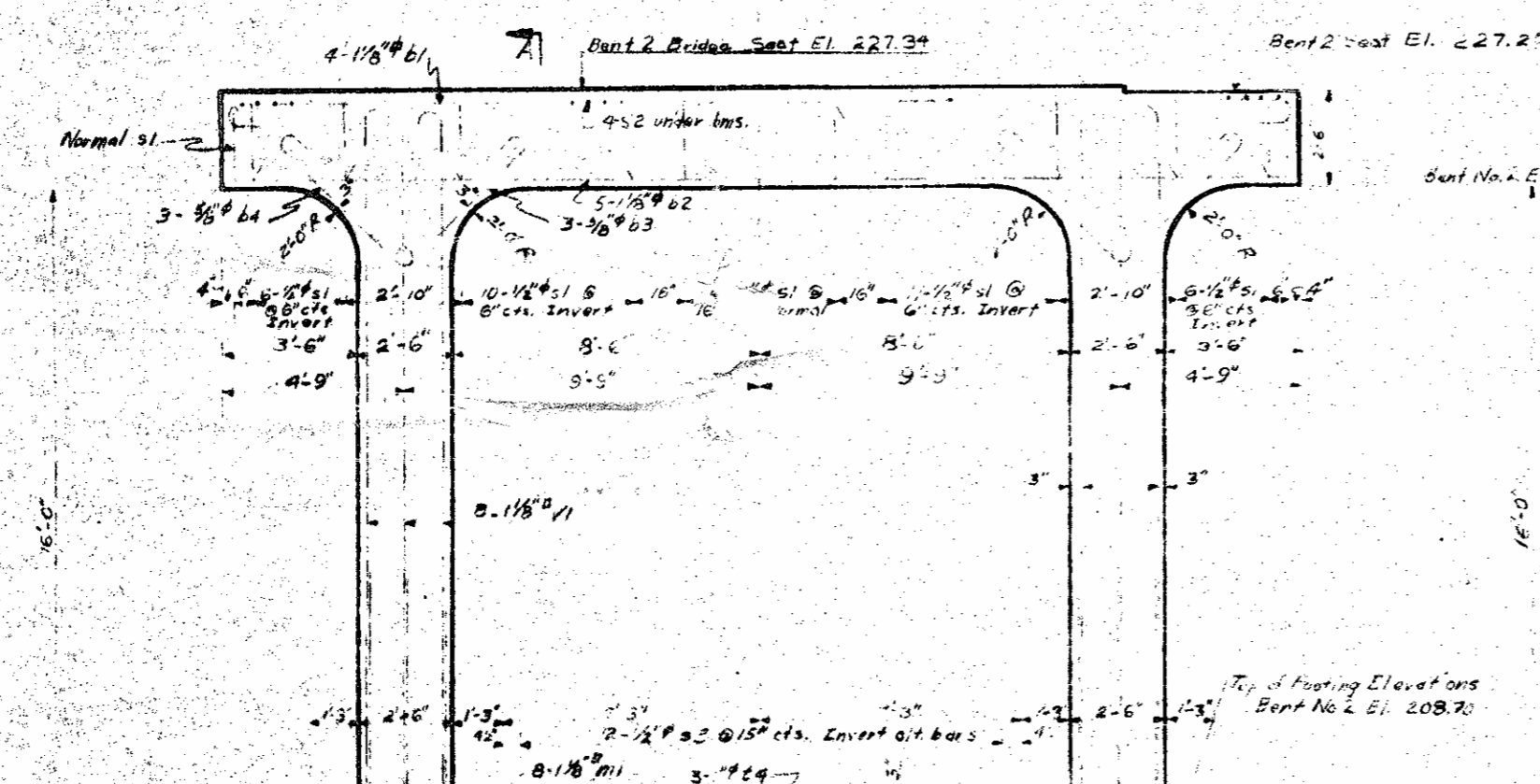
Hk.

1-1"	24'-0"	23
1-2"	7'-2"	22
7"	4'-8"	21
7"	4'-7"	21
1-5"	28'-6"	21
1-5"	18'-3"	VI
1-5"	7'-6"	MI



BAR TYPES

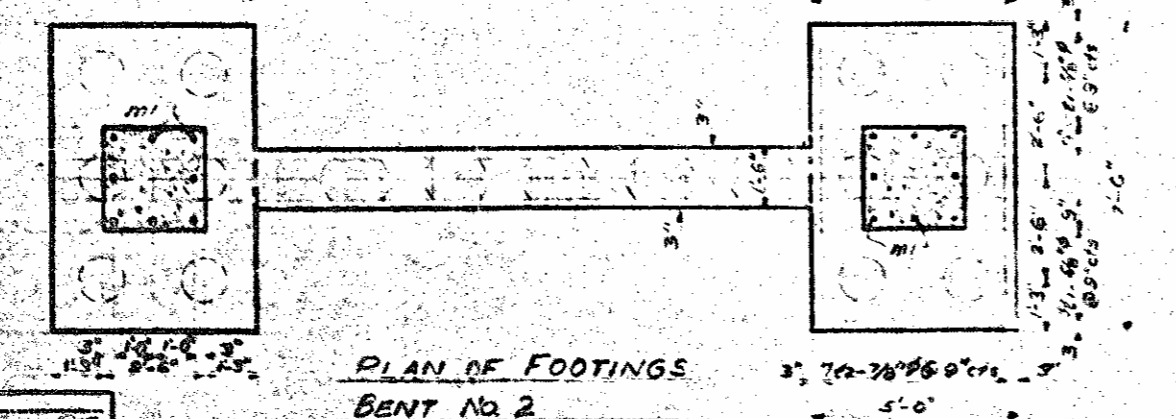
NO. ROAD DIST. NO.	DATE	REVISED	BY
5	R.C.	4374	



NOTE: Creosoted Timber Piles to be driven to a minimum bearing capacity of 18 tons each. Volume of Pile heads has been deducted from concrete quantity.

FOR ONE BENT

BAR NO.	SIZE	TYPE	LENGTH	AMOUNT
b1	1 1/8"	#6	7'-4"	530
b2	3/8"	#4	2'-3"	713
b3	1/2"	#4	3'-9"	72
MI	1/6"	#6	2'-6"	21
VI	1/6"	#6	13'-6"	121
b4	1/2"	#4	5'-7"	72
b5	1/2"	#4	8'-6"	213
b6	3/8"	#4	2'-3"	713
b7	3/8"	#4	2'-3"	713
b8	1 1/8"	#6	7'-5"	144
b9	1/2"	#4	2'-11"	91
b10	1/2"	#4	4'-8"	72
Reinforcing Steel			Lbs.	7,023
Class II Concrete			C.Y.	32.8
Uncl. Str. Excess			C.Y.	35
Cres. Timber Piles			No.	12



PROJECT NO. 4374  
HARNETT COUNTY  
STATION: 238+58.4

STATE OF NORTH CAROLINA  
STATE HIGHWAY AND  
PUBLIC WORKS COMMISSION  
SUBSTRUCTURE  
BENT NO. 2  
JUNE 1959  
DRAWN BY: [Signature]  
CHECKED BY: [Signature]