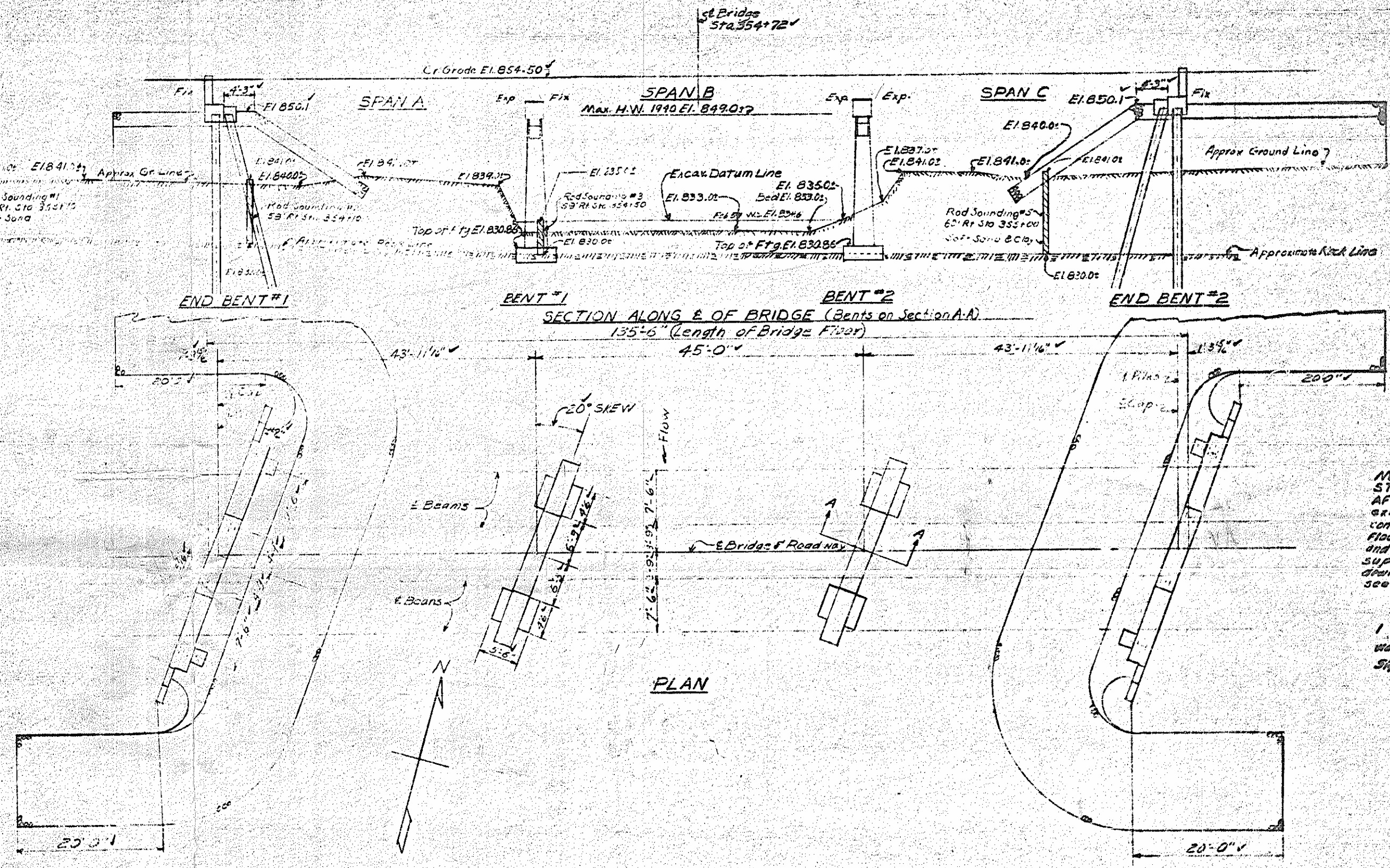


K O D A V K S A F E T V L T M V O

FILE NO.	STATE	PROJECT NO.	DATE
5-10-105	N.C.	2512	JUN 1954



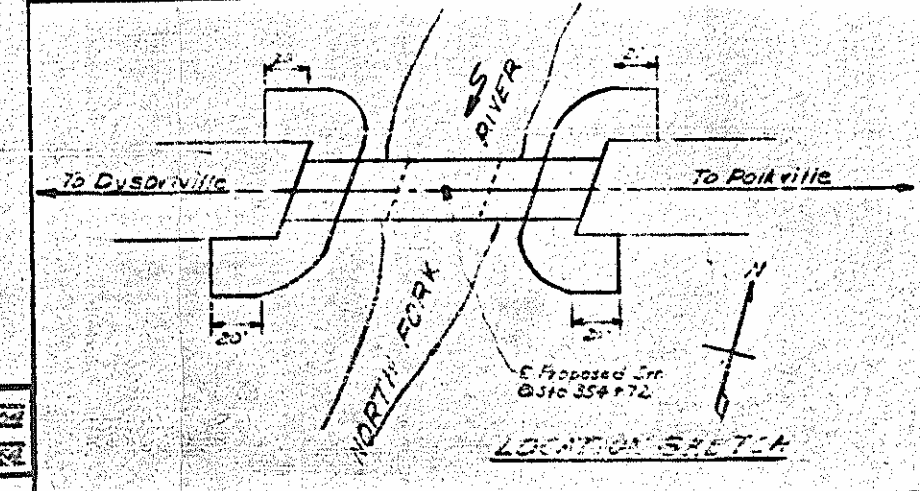
Assumed Live Load: H15 S12
Computed Foundation Loads: Interior Bents - 4 Tons Ca. Ft.
All End Bent Piles to be driven to a minimum bearing capacity of 30 Tons each. Test piles will not be required. Order List to be based on Piles 25' long for End Bents #1 & 2.
All footings to be carried at least 6" into rock with minimum thicknesses as shown.
For Surface finish requirements see Special Provisions.
For other Design Data and General Notes see Sheet S-N.
End Bent piles to be driven through road fill.

MAINTENANCE AND REMOVAL OF EXISTING STRUCTURE.
After serving as a temporary crossing the existing structure located 300' down street consisting of 20' 40" I-Beam spans, 11" I-beam floor, clear roadway 17', on concrete pier and abutments shall be removed as follows: supports for floor comprised of pier and abutment down to 10" below natural ground or bed of stream see Specs.

I hereby certify that this structure was built according to plans:
Signed: J. S. Small Date: 5-20-1954
May. Eng. 33

PROJECT NO. 2512
MCDOWELL
BUTTERFORD COUNTY
STATION: 354+72

B.M. # 32 Nail in base 5" Twin Poplar 250 Ft. Rt. Sta. 355+00 Elev. 855.30



	TOTAL BILL OF MATERIAL									
	Class A Reinforcing Concrete	Steel	Structural Steel	Dry Excavation	Wet Excavation	12" 459# Steel H Piles	Plan Rip Rap	Misc. Removal of Exist. Str.	Method of Underpinning	12" 459# Steel H Piles Cut-off
	Cu Yds.	Lbs.	Sq. Yds.	Cu Yds.	Cu Yds.	No.	Sq. Yds.	Cu Yds.	Sq. Yds.	Lb. Ft.
Superstructure	118.9'	24,957'	78,400'							
End Bent #1	11.0'	2,377'	7,400'							
Bent #2	7.0'	1,487'	4,600'							
End Bent #2	14.2'	3,097'	9,500'							
Approach Curbs	3.2'	76'	230'							
Total	156.5'	32,974'	90,130'							

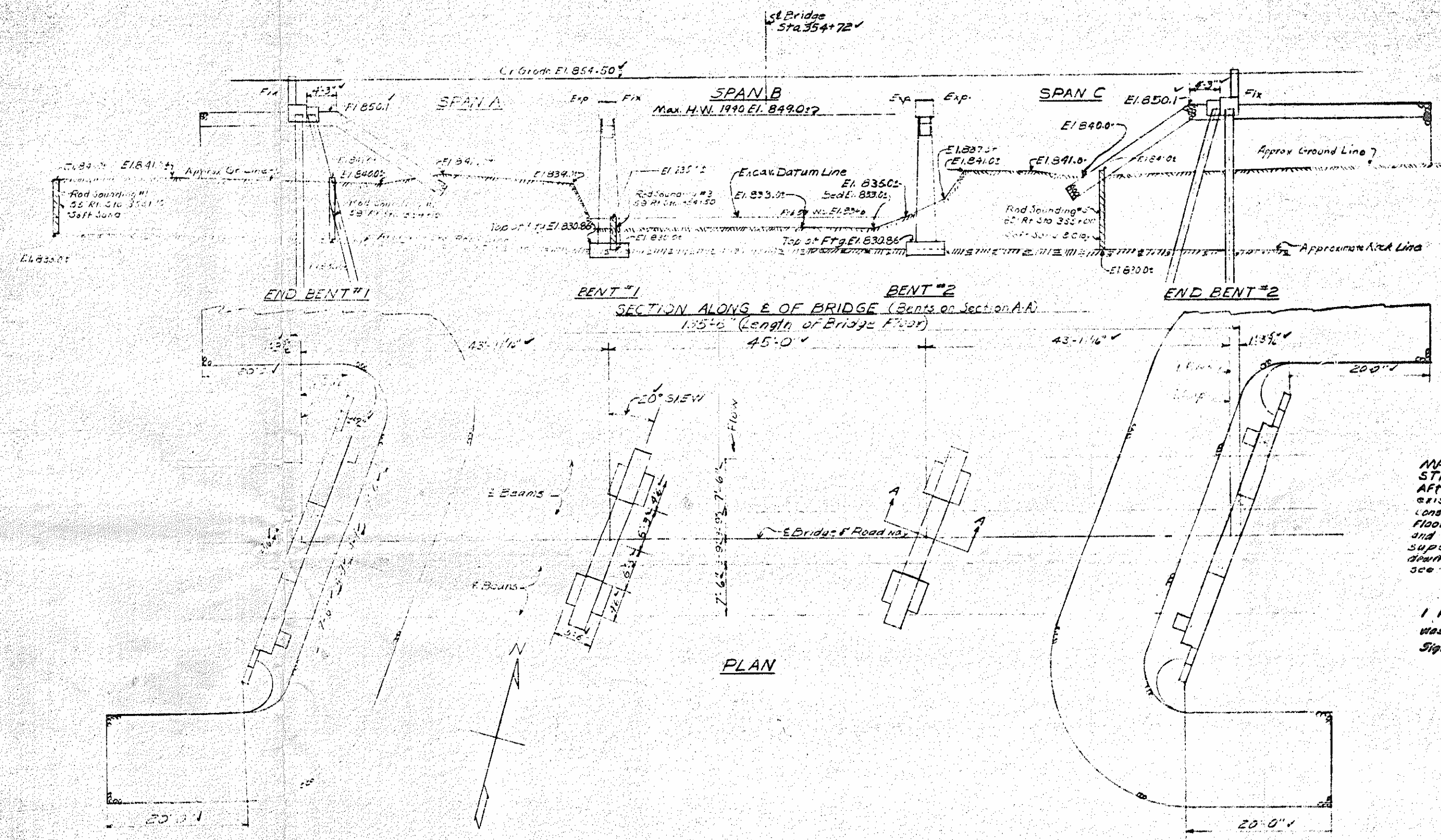
STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
GENERAL DRAWING FOR BRIDGE OVER NORTH FORK RIVER BETWEEN DYSORTVILLE AND POLKVILLE
JUNE 1954

226-89-20

40
BUTTERFORD

K O D A R K S A F F L T M V

PROJECT NO.	STATE	PROJECT NO.	DATE
3	N.C.	8962	5-30-54
FA Proj. 5-89712			



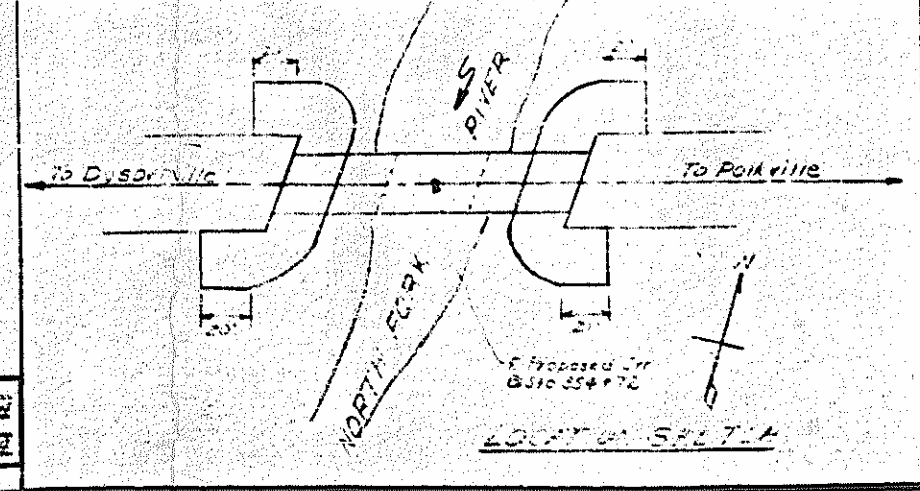
Assumed Live Load H15 S12
 Computed Foundation Loads Interior Bents - 4 Tons Sq. Ft.
 All End Bent Piles to be driven to a minimum bearing capacity of 20 Tons each. Test piles will not be required. Order List to be based on Piles 25' long for End Bents #1 & #2.
 All footings to be carried at least 6" into rock with minimum thickness as shown.
 For Surface finish requirements see Special Provisions.
 For other Design Data and General Notes see Sheet S-N.
 End Bent piles to be driven through roadway fill.

MAINTENANCE AND REMOVAL OF EXISTING STRUCTURE.
 After serving as a temporary crossing the existing structure, located 300' down stream, consisting of 2 @ 40' I Beam spans, timber floor, clear roadway 17', on concrete pier and abutments shall be removed as follows: superstructure completely, pier and abutment, down to 10' below natural ground or bed of stream see Specs.

I hereby certify that this structure was built according to plans:
 Signed: J.E. Russell Date: 5-30-54
 Hwy. Eng. III

PROJECT NO. 8212
 McDowell
 Rutherford County
 STATION: 354+72

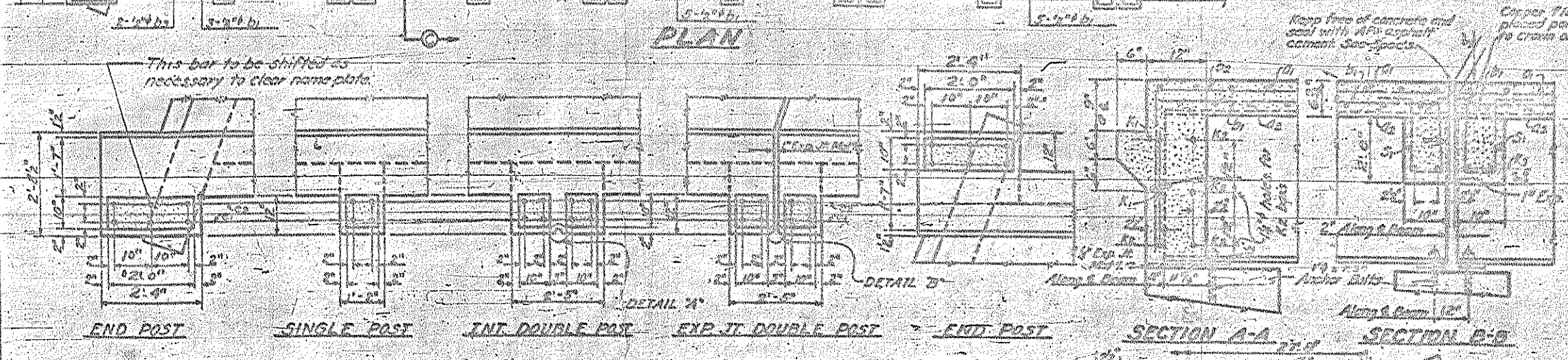
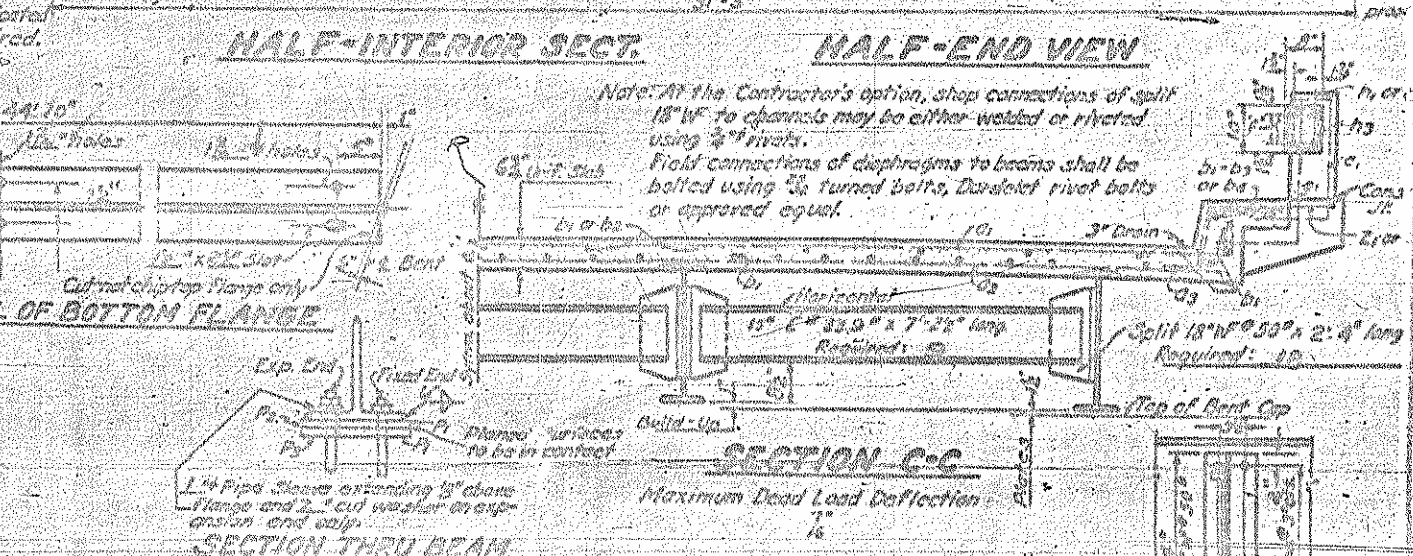
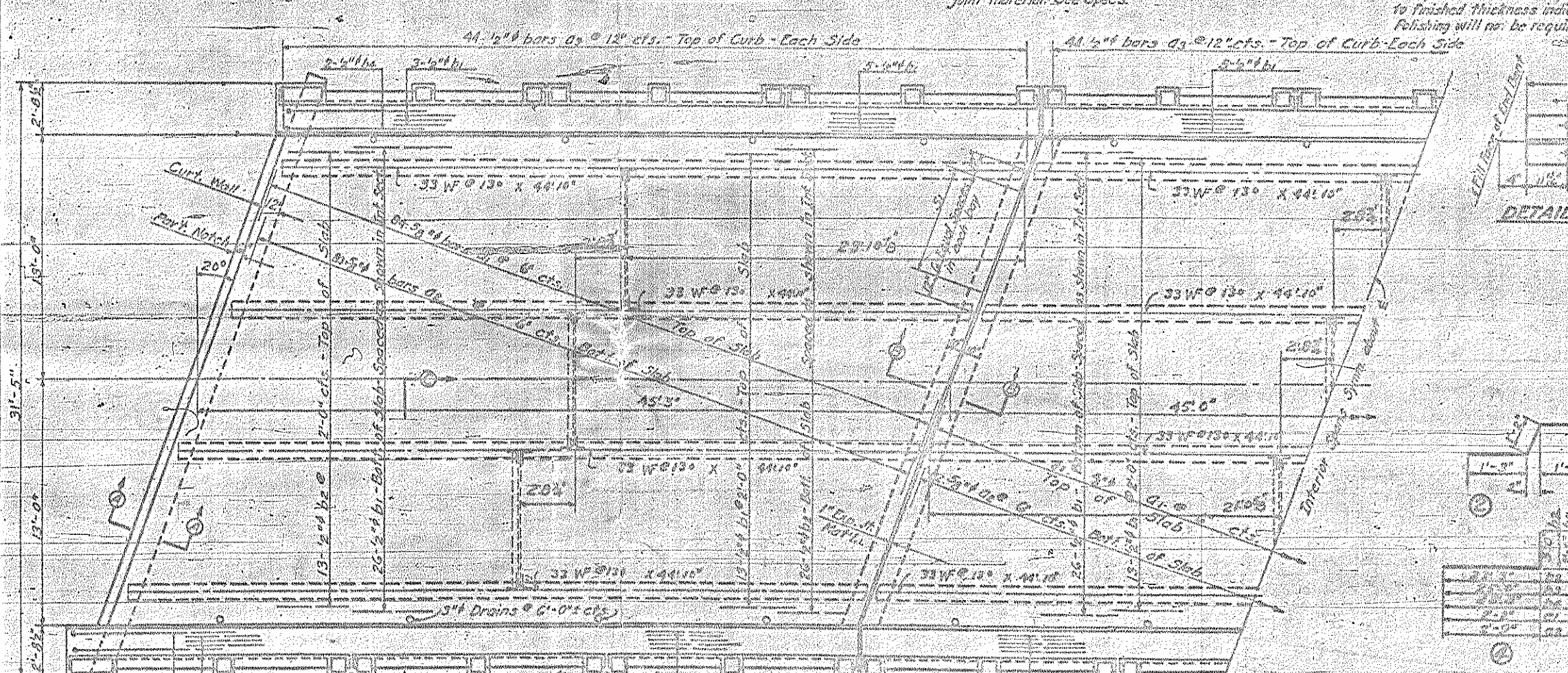
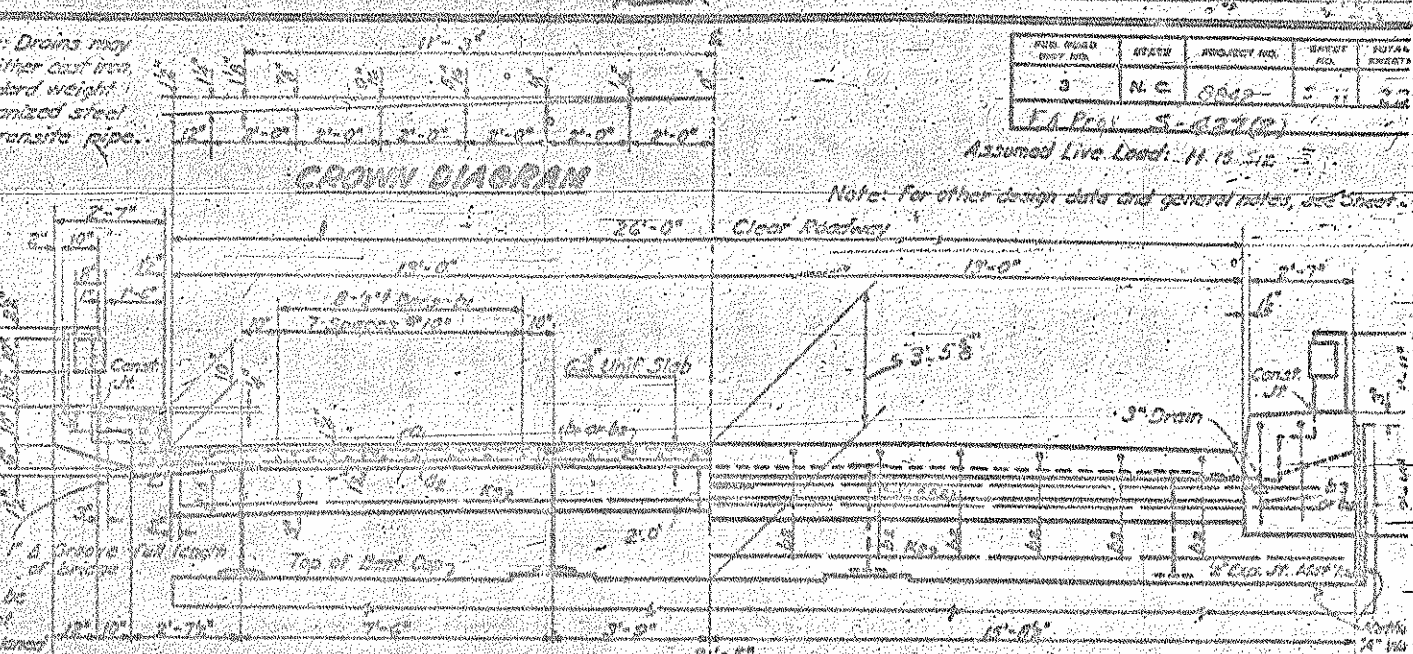
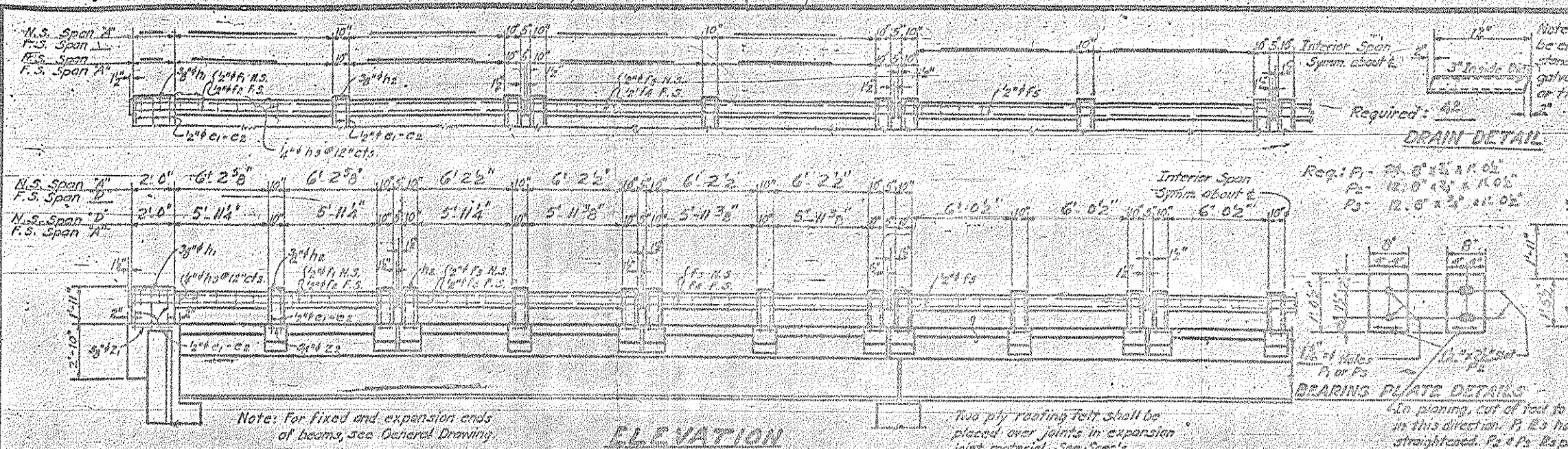
B.M. # 32 Nail in base 5" Twp. Pile at 250' Ft. Sta. 355+00 Elev. 855.50



TOTAL BILL OF MATERIAL										
	CLASS A Reinforcing Concrete	Steel	Struct. Steel	Dr. Steel	Exc. Material	Exc. Soil	Exc. Stone	Exc. Gravel	Exc. Sand	Exc. Rip Rap
	Cu Yds.	Lbs.	Sq. Yds.	Cu Yds.	Cu Yds.	No.	Sq. Ft.	Cu Yds.	Sq. Yds.	Cu Yds.
Substructure	118.9'	24,947'	74,400'							
Span #1	70.0'	3,797'	11,600'							
Span #2	70.0'	3,797'	11,600'							
Span #3	70.0'	3,797'	11,600'							
Approach Curbs	3.2'	16'								
Total	265.1'	33,558'	107,600'							

DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND PUBLIC WORKS COMMISSION
 GENERAL DRAWING FOR BRIDGE OVER NORTH FORK RIVER BETWEEN DYSORTVILLE AND POLKVILLE
 JUNE 1954
 SHEET 5-10 OF 23



BILL OF MATERIAL FOR THREE SPANS @ 45.0'

Qty	Size	Type	Length	Weight
1	33	WF 130	44.10'	7544
2	33	WF 130	20.12'	3544
2	33	WF 130	5'-8"	647
2	24	WF 67	28.12'	4056
2	24	WF 67	6'-0"	456
2	24	WF 67	27.12'	74
2	24	WF 67	22.12'	62
2	12	WF 42	3'-0"	274
2	12	WF 42	4'-9"	310
1	2	WF 37	10.11'	86
1	2	WF 37	15.7'	85
1	16	WF 37	10.11'	159
1	16	WF 37	7.5'	155
1	20	WF 37	10.11'	226
1	6	WF 5	5.2'	8
1	50	WF 3	2'-10"	62
1	20	WF 5	2'-0"	157
1	8	WF 37	17.4'	98
1	16	WF 37	14.7'	425
1	16	WF 37	12.3'	415
1	20	WF 7	5.16'	327
1	4	WF 8	0.5'	24
1	50	WF 3	7'-11"	362

DIAPHRAGM CONNECTION

PROJECT NO. 8842

McDOWELL COUNTY

RUTHERFORD STATION, 354+72

SPECIAL

APPROVED BY: *[Signature]* DATE: *[Date]*

STANDARD

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

DRAWN BY: *[Signature]* DATE: *[Date]*

TRACED BY: *[Signature]* DATE: *[Date]*

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

STATE OF NORTH CAROLINA

STATE HIGHWAY AND PUBLIC WORKS COMMISSION

STANDARD I-BEAM SUPERSTRUCTURE WITH R.C. FLOOR AND RAIL

26' ROADWAY 20' L.H. SKEW

MAY, 1954

[Signature]



FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	N.C.	4802	12	23

F.R. Proj. 5-437(2)

BILL OF MATERIAL
FOR END BENT #1 OR 2 (2 REQ'D)

Qty	Size	Type	Length	Weight
01	2 1/2"	SPL	30'-0"	1155
02	2 1/2"	SPL	22'-0"	468
03	2 1/2"	SPL	17'-2"	321
04	7 1/2"	SPL	2'-2"	10
05	6 3/8"	SPL	5'-5"	47
06	3"	SPL	5'-0"	27
07	4 1/2"	SPL	7'-0"	19
08	3"	SPL	2'-7"	24
09	4 1/2"	SPL	6'-1"	16
10	2 1/2"	SPL	7'-5"	121
11	2 1/2"	SPL	2'-8"	49
12	2 1/2"	SPL	10'-0"	32
13	4 1/2"	SPL	6'-1"	65
14	4 1/2"	SPL	5'-7"	16
15	4 1/2"	SPL	4'-9"	13

Reinforcing Steel: 155
 Class A Concrete - Cu: 15
 2" Dia. Steel H. Piles - No.: 6
 12" Dia. Steel H. Piles - L: 155

7/11/54
 3/11/58
 11/11

All dimensions in Bar Bending Details are
 cut to cut of bar.

PROJECT NO. 4802
ROADWAY - RUTHERFORD COUNTY
STATION: 54+7.1

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
 Raleigh

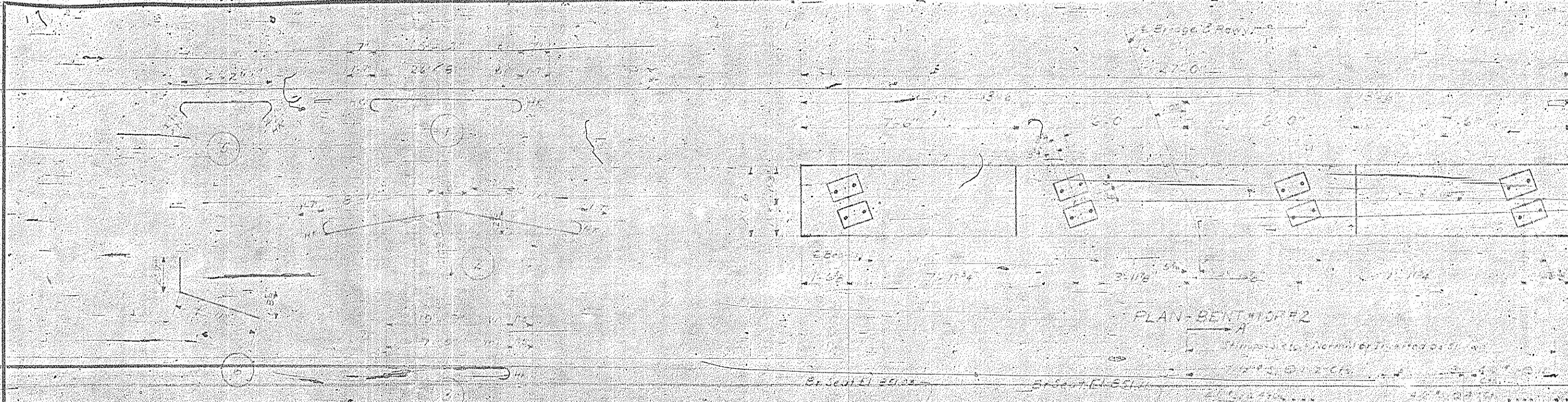
END BENT #1 AND 2

MAY 1954

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

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

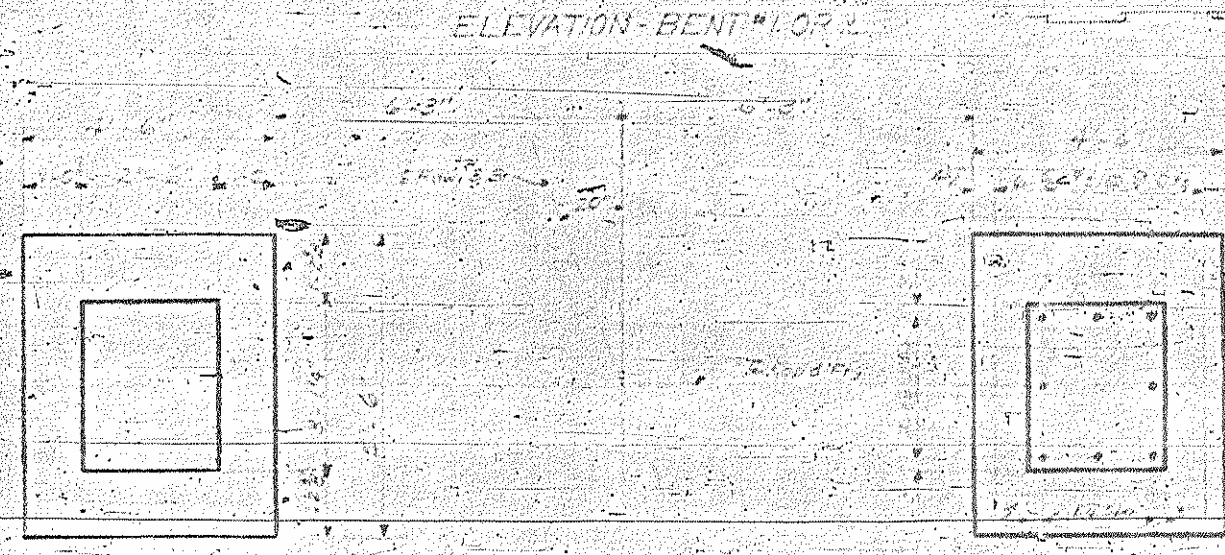
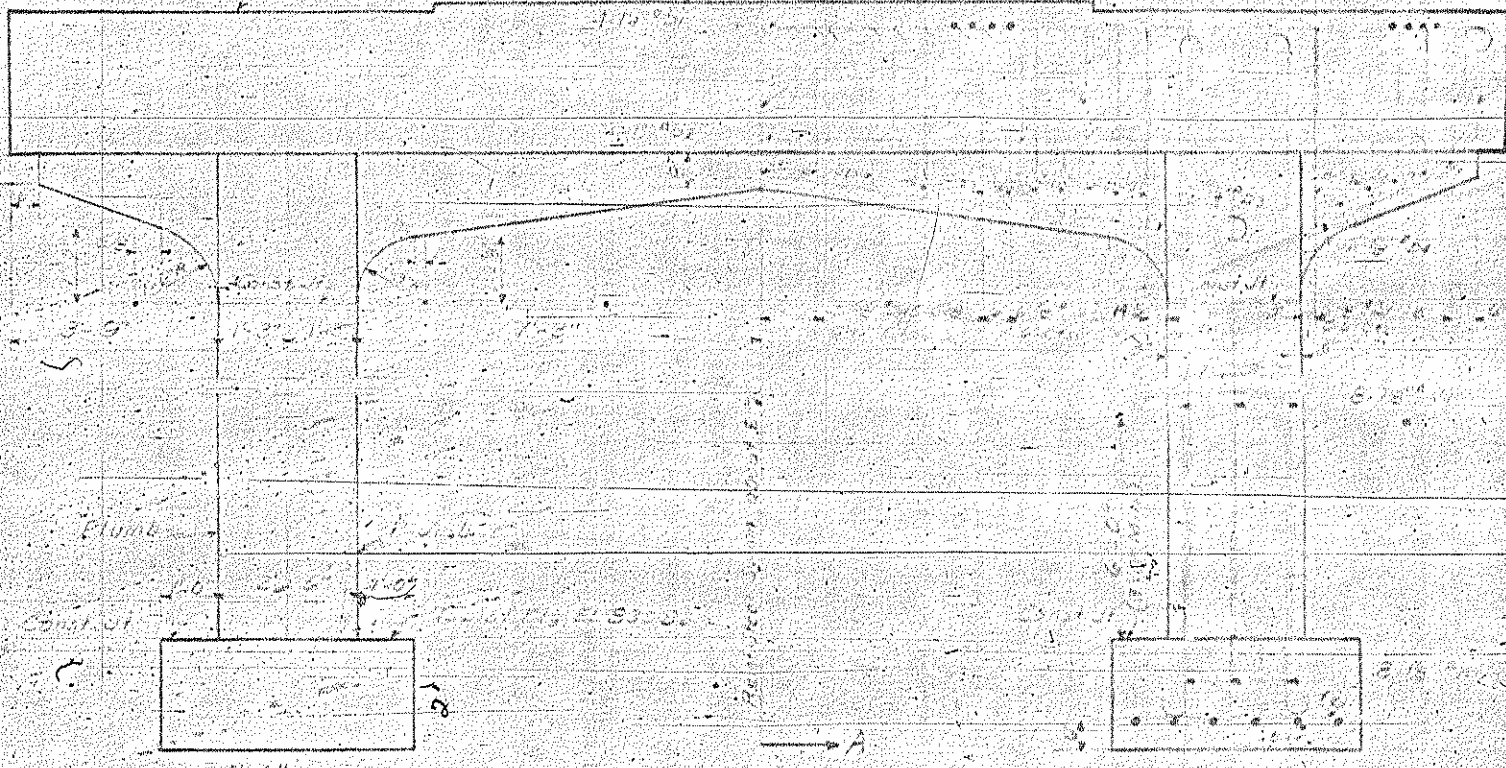
FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
5	N. C.	5847	5	24
P.A. 101-437(3)				



All dimensions in Bar Bending Details are outside unless noted.

BILL OF MATERIAL FOR BENT #10R#2 (2 REQUIRED)

Bar	No.	Size	Length	Weight
1	4	#4	25'-0"	6.24
2	2	#4	25'-0"	3.12
3	2	#4	25'-0"	3.12
4	2	#4	25'-0"	3.12
5	16	#4	6'-10"	6.16
6	2	#4	25'-0"	3.12
7	2	#4	25'-0"	3.12
8	2	#4	25'-0"	3.12
9	2	#4	25'-0"	3.12
10	2	#4	25'-0"	3.12
11	2	#4	25'-0"	3.12
12	2	#4	25'-0"	3.12
13	2	#4	25'-0"	3.12
14	2	#4	25'-0"	3.12
15	2	#4	25'-0"	3.12
16	2	#4	25'-0"	3.12
17	2	#4	25'-0"	3.12
18	2	#4	25'-0"	3.12
19	2	#4	25'-0"	3.12
20	2	#4	25'-0"	3.12
21	2	#4	25'-0"	3.12
22	2	#4	25'-0"	3.12
23	2	#4	25'-0"	3.12
24	2	#4	25'-0"	3.12
25	2	#4	25'-0"	3.12
26	2	#4	25'-0"	3.12
27	2	#4	25'-0"	3.12
28	2	#4	25'-0"	3.12
29	2	#4	25'-0"	3.12
30	2	#4	25'-0"	3.12
31	2	#4	25'-0"	3.12
32	2	#4	25'-0"	3.12
33	2	#4	25'-0"	3.12
34	2	#4	25'-0"	3.12
35	2	#4	25'-0"	3.12
36	2	#4	25'-0"	3.12
37	2	#4	25'-0"	3.12
38	2	#4	25'-0"	3.12
39	2	#4	25'-0"	3.12
40	2	#4	25'-0"	3.12
41	2	#4	25'-0"	3.12
42	2	#4	25'-0"	3.12
43	2	#4	25'-0"	3.12
44	2	#4	25'-0"	3.12
45	2	#4	25'-0"	3.12
46	2	#4	25'-0"	3.12
47	2	#4	25'-0"	3.12
48	2	#4	25'-0"	3.12
49	2	#4	25'-0"	3.12
50	2	#4	25'-0"	3.12
51	2	#4	25'-0"	3.12
52	2	#4	25'-0"	3.12
53	2	#4	25'-0"	3.12
54	2	#4	25'-0"	3.12
55	2	#4	25'-0"	3.12
56	2	#4	25'-0"	3.12
57	2	#4	25'-0"	3.12
58	2	#4	25'-0"	3.12
59	2	#4	25'-0"	3.12
60	2	#4	25'-0"	3.12
61	2	#4	25'-0"	3.12
62	2	#4	25'-0"	3.12
63	2	#4	25'-0"	3.12
64	2	#4	25'-0"	3.12
65	2	#4	25'-0"	3.12
66	2	#4	25'-0"	3.12
67	2	#4	25'-0"	3.12
68	2	#4	25'-0"	3.12
69	2	#4	25'-0"	3.12
70	2	#4	25'-0"	3.12
71	2	#4	25'-0"	3.12
72	2	#4	25'-0"	3.12
73	2	#4	25'-0"	3.12
74	2	#4	25'-0"	3.12
75	2	#4	25'-0"	3.12
76	2	#4	25'-0"	3.12
77	2	#4	25'-0"	3.12
78	2	#4	25'-0"	3.12
79	2	#4	25'-0"	3.12
80	2	#4	25'-0"	3.12
81	2	#4	25'-0"	3.12
82	2	#4	25'-0"	3.12
83	2	#4	25'-0"	3.12
84	2	#4	25'-0"	3.12
85	2	#4	25'-0"	3.12
86	2	#4	25'-0"	3.12
87	2	#4	25'-0"	3.12
88	2	#4	25'-0"	3.12
89	2	#4	25'-0"	3.12
90	2	#4	25'-0"	3.12
91	2	#4	25'-0"	3.12
92	2	#4	25'-0"	3.12
93	2	#4	25'-0"	3.12
94	2	#4	25'-0"	3.12
95	2	#4	25'-0"	3.12
96	2	#4	25'-0"	3.12
97	2	#4	25'-0"	3.12
98	2	#4	25'-0"	3.12
99	2	#4	25'-0"	3.12
100	2	#4	25'-0"	3.12



SECTION A
PROJECT NO. 5847
MCDONELL RUTHERFORD COUNTY
STATION: 5+54.72

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

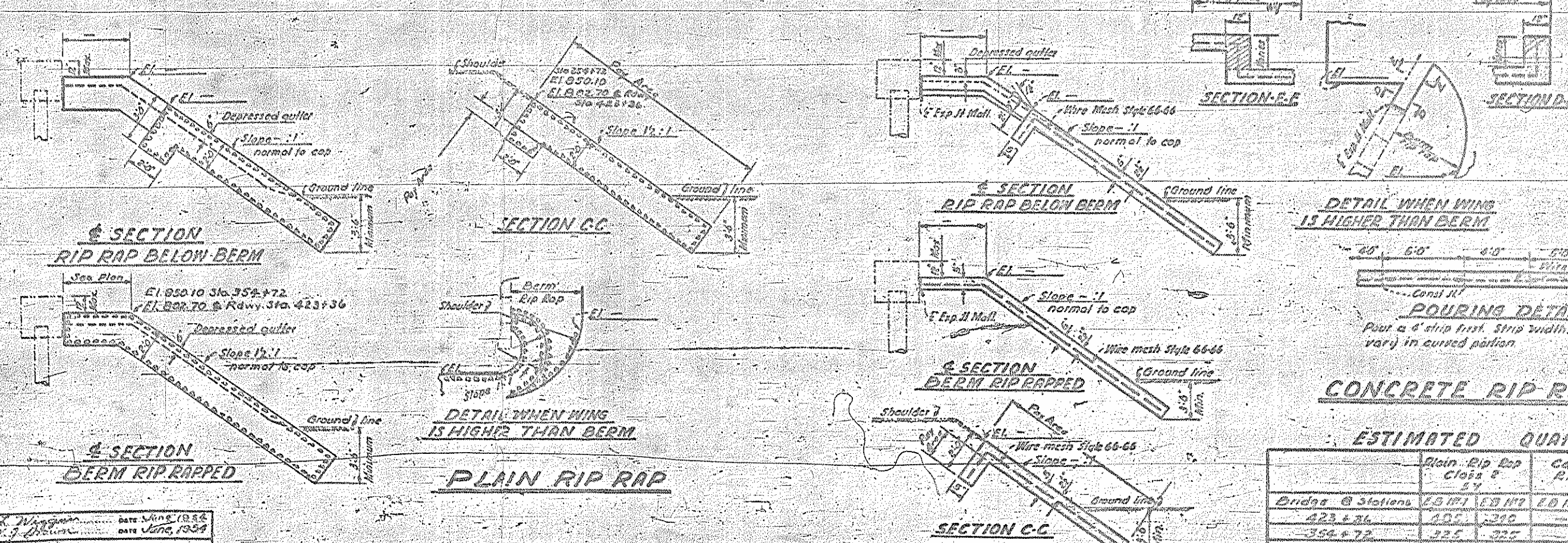
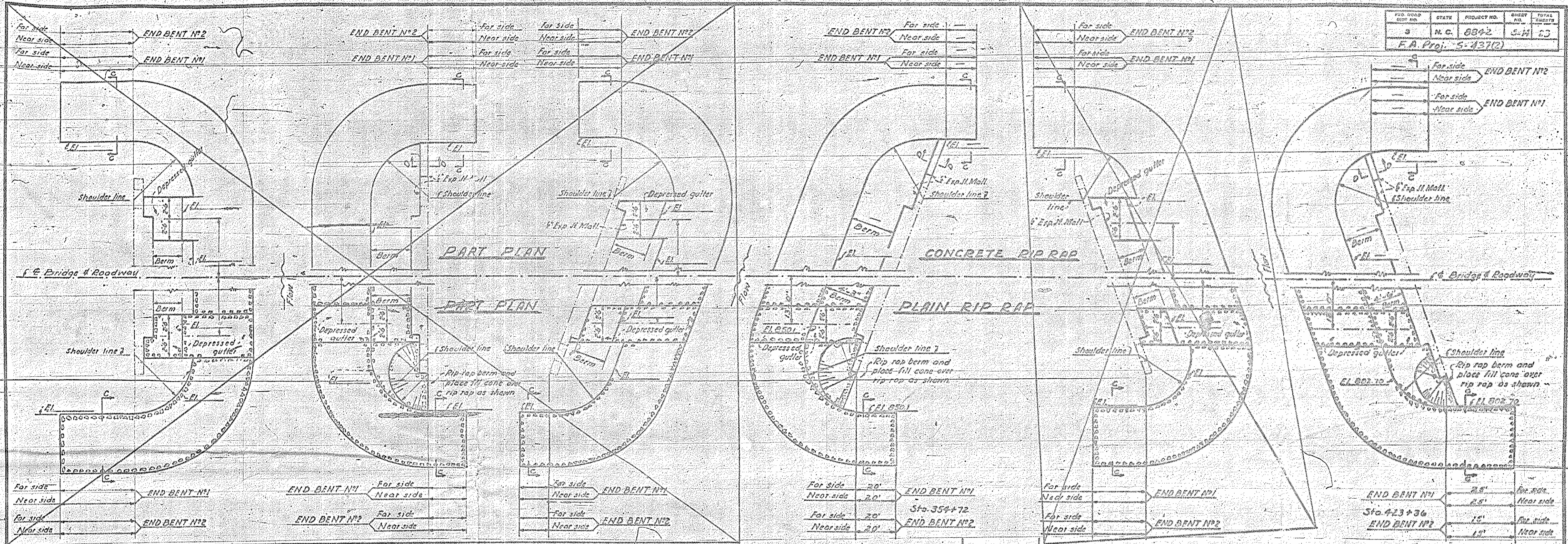
BENT #10R#2

SPECIAL DESIGN BY: DATE: CHECKED BY: DATE:

SHEET 15 OF 23

APPROVED BY: DATE:

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	6842	5-H	53
F.A. Proj. 5-4372				



NOTE
 CONCRETE RIP RAP shall be Class 'B' Concrete using 3rd size No. 3 coarse aggregate. Wire mesh reinforcing to be Style 66-66-60 wide. Adjacent runs of wire mesh to lap at least 6". Concrete rip rap to be poured in alternate 6" x 6" strips as shown in Pouring Detail.
 TOE WALLS shall be constructed at ends of rip rap similar to that shown for the top of the rip rap.
 DEPRESSED GUTTERS to be formed as indicated for type of rip rap specified. Gutter area in Plain Rip Rap to be grouted with 1:3 cement mortar. All work and material incidental to forming and grouting shall be included in the unit price bid for Rip Rap.
 Note: Concrete in walls of and back-wings to be finished by same contractor as in section C-C and E-E will not be paid for as a separate item as the entire cost of same shall be included in 3:1:1.
PROJECT NO. 8842
MCDOWELL-RUTHERFORD COUNTY

STATION: 354+72 & 423+36

ESTIMATED QUANTITIES

Bridge @ Stations	Plain Rip Rap Class B	Concrete Rip Rap	Wire-Mesh 60" wide Approx. lin. ft.
423+36	125	125	
354+72	225	225	

SPECIAL ASSEMBLED BY: *[Signature]* DATE: June 1936
 CHECKED BY: *[Signature]* DATE: June 1936
 STANDARD DRAWN BY: *[Signature]* DATE: *[Signature]*
 CHECKED BY: *[Signature]* DATE: Sept. 1933

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND PUBLIC WORKS COMMISSION
 STANDARD RIP RAP DETAILS
 AUGUST 1933
[Signature]
 SHEET NO. 29