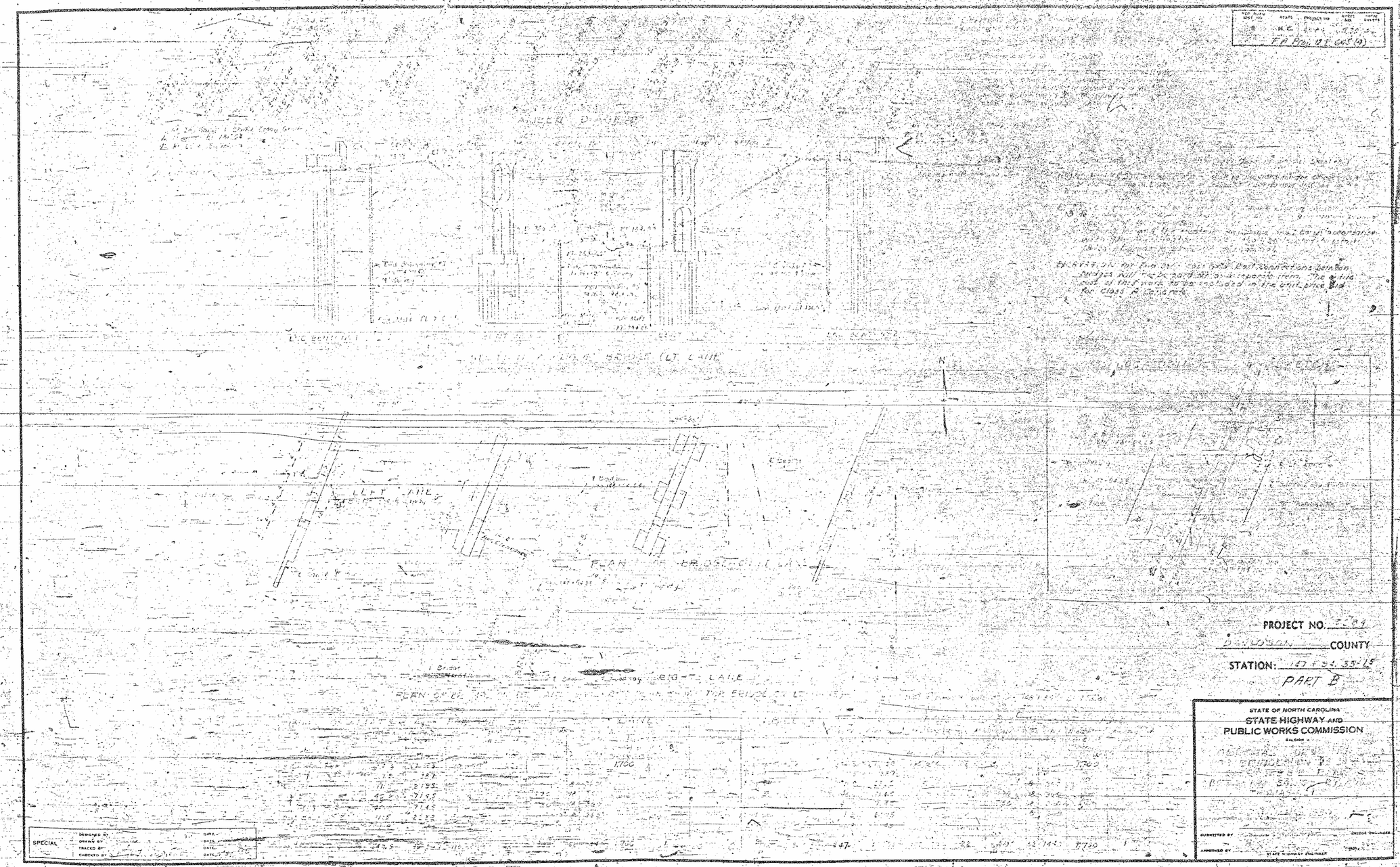


SEC. NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
B	R.C. [illegible]		

For Proj. Details (9)

PROJECT NO. [illegible]

DURHAM COUNTY

STATION: 47+54.35-45

PART B

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION
RALEIGH

SUBMITTED BY _____ BRIDGE ENGINEER

APPROVED BY _____ STATE HIGHWAY ENGINEER

Reel 453

Pos 1

FOR STATE HWY. DIV. USE ONLY	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	N.C.	5284	5-31	

FAP-Proj. U.I. 66(4)

1-E Span A
FB Span C
1-I Span E
FB Span H

SPAN A OR C

ELEVATION

SPAN B

Clymer Bridge Span, sheet 2

Bridge Span, sheet 2

Clymer Bridge Span, sheet 2

6" Barrier Rail

Top of Slab at Gutter Rail

Top of Slab at Gutter Rail

Top of Slab at Gutter

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
2	N. C.	5284	5 12	

F.A. Proj. U.I. 64(2)

This bar to be slotted as necessary to clear grade name plate

Slope this surface same as Int. Pier Bracket

1'-11½"

8'-0"

Slope this surface same as Int. Pier Bracket

2'-3"

10" 10" 10" 10"

2'-5"

2'-0"

RAIL POST DETAILS

Along ℄ of Beam

SECTION F-F

Note: Copper flashing shall be placed in joints between Spans as shown. See Specs. Flashing may be spliced in order to obtain lengths required. Joints to be soldered. See Specs.

Symm. about ℄

Copper Flashing in roadway Exp. Joint

Position of fig ⑧ bent

Deflected position of fig ⑧

6'-11"

6'-10"

HALF SECT. SHOWING FLASHING & DIAPHRAGMS

SECTION A-A

SECTION B-B

MAKE 2 PIECES 11" x 54'-3"

COPPER FLASHING

Clean area of concrete & coat with epoxy resin

Paint framing & its supports with 2 coats of red lead paint

SECTION C-C

¾" Pipe Sleeves, screwed & above flange, & ½" cut washer - Exp. end

WF Beam FIXED END

SECT. THRU BEAM

1	34'-0"				
2	44'-3"	43'-6"	1'-3"	1'-9"	2'-6"
3	44'-3"	43'-6"	1'-3"	1'-9"	2'-6"
4	44'-3"	43'-6"	1'-3"	1'-9"	2'-6"
5	15'-10"				

SPANS A, B & C

BEARING ℄ LOCATION DETAIL

6	16'-0"				
7	16'-0"				
8	1'-9"				

3-Spaces at 1'-4" = 4'

4'-6" ℄ of Track

PLAN

SECTION

BLAST PLATES

Blast Plates to be placed on bottom flanges of each beam in track span at ℄ of track.

For 33 WF 152, 3 Assemblies Reqd.
1-18" x ⅝" Pl. - Wrought Iron
2-9" x 1" Pl. - " "
2-6" x ⅝" Pl. - " "
8 ⅞" Bolts with Lock Washers - W.I.

For 33 WF 141, 2 Assemblies Reqd.
1-18" x ⅝" Pl. - Wrought Iron
2-5¾" x ⅝" Pl. - " "
2-6" x ⅝" Pl. - " "
8 ⅞" Bolts With Lock Washers, W.I.

SECTION C-D

Cut both flanges at End Spans (This end only)

Cut flange same as opposite end for Interior Beam only

Dip not ship Top Flange

℄ Bent

47'-4"

¾" ø holes

End Spans

Interior Span

Exp. End only

(End Bents)

DETAIL OF BEAM

Field connection of diaphragm to stiffner should be perfect using ⅞" turned bolts, Cordalast bolts, or an approved equal.

SECTION E-E

BEARING ℄ DETAILS

Fix.

Exp. Fix

Exp. Exp.

Fix.

NOTE: At exp. bearings place Pl. 2.5 Pl. on top of Pl. P1 to be hot cemic tapped.

BEARING PLATES FOR SPANS A-B-C			
Mark No.	31-2		
P1	20	7" x ⅝" x 1'-8"	
P2	4	7" x ⅝" x 1'-8"	
P11	3	12" x ⅝" x 2'-2"	

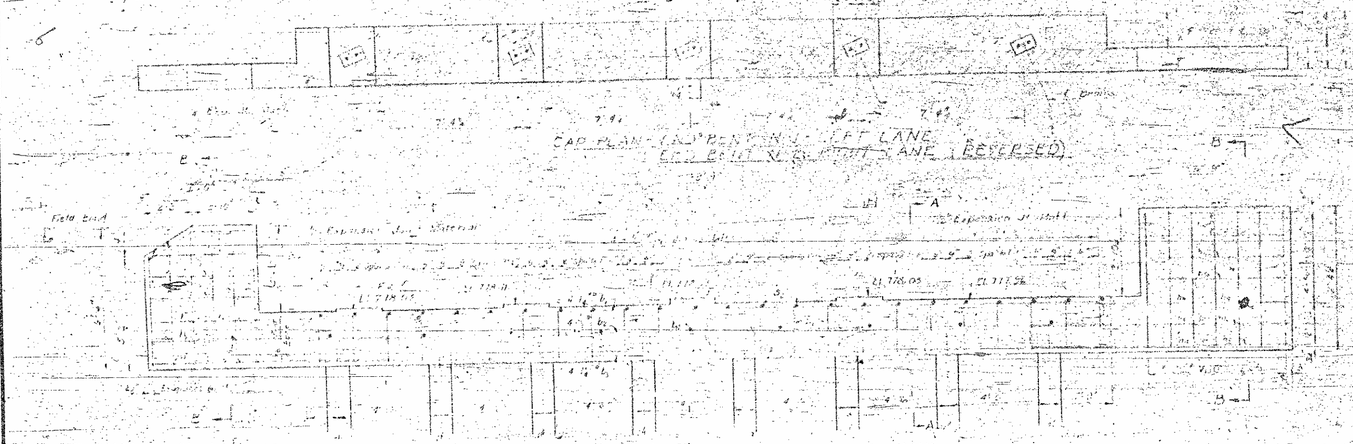
1" planing cut at this line to this line

BILL OF MATERIAL FOR SPANS A-B-C

Mark	No.	Size	Wgt.	Length	Weight
P1	24	7"	⅝"	1'-8"	240
P2	6	7"	⅝"	1'-8"	60
P11	3	12"	⅝"	2'-2"	51
P12	3	12"	⅝"	2'-2"	51
L1	12	7"	⅝"	28'-9"	691
L2	28	7"	⅝"	29'-11"	1439
L3	30	7"	⅝"	27'-0"	1551
L4	150	7"	⅝"	29'-6"	7600
L5	110	5"	⅝"	24'-7"	1837
G1	12	½"	3	3'-8"	274
G2	12	½"	3	4'-3"	319

F.A. PROJ. U-605(1)

CAP PLAN - END BENT No. 1 - LEFT LANE
END BENT No. 2 - RIGHT LANE (REVERSED)



ELEVATION - END BENT No. 1 - LEFT LANE
END BENT No. 2 - RIGHT LANE (REVERSED)

NOTE: End Bent piles to be driven to a minimum bearing capacity of 15 tons per pile.

SECTION A-A

SECTION B-B

BILL OF MATERIALS

End Bent No. 1 - Left Lane						End Bent No. 2 - Right Lane					
Item	No.	Size	Length	Weight	Class	Item	No.	Size	Length	Weight	Class
Piles	12	HP 12 x 53	50'	53.0 Lbs.		Piles	12	HP 12 x 53	50'	53.0 Lbs.	
Reinforcing Steel						Reinforcing Steel					
Bar Mark						Bar Mark					
A	24	#5	24'	1.043 Lbs.		A	24	#5	24'	1.043 Lbs.	
B	24	#5	24'	1.043 Lbs.		B	24	#5	24'	1.043 Lbs.	
C	24	#5	24'	1.043 Lbs.		C	24	#5	24'	1.043 Lbs.	
D	24	#5	24'	1.043 Lbs.		D	24	#5	24'	1.043 Lbs.	
E	24	#5	24'	1.043 Lbs.		E	24	#5	24'	1.043 Lbs.	
F	24	#5	24'	1.043 Lbs.		F	24	#5	24'	1.043 Lbs.	
G	24	#5	24'	1.043 Lbs.		G	24	#5	24'	1.043 Lbs.	
H	24	#5	24'	1.043 Lbs.		H	24	#5	24'	1.043 Lbs.	
J	24	#5	24'	1.043 Lbs.		J	24	#5	24'	1.043 Lbs.	
K	24	#5	24'	1.043 Lbs.		K	24	#5	24'	1.043 Lbs.	
L	24	#5	24'	1.043 Lbs.		L	24	#5	24'	1.043 Lbs.	
M	24	#5	24'	1.043 Lbs.		M	24	#5	24'	1.043 Lbs.	
N	24	#5	24'	1.043 Lbs.		N	24	#5	24'	1.043 Lbs.	
P	24	#5	24'	1.043 Lbs.		P	24	#5	24'	1.043 Lbs.	
Q	24	#5	24'	1.043 Lbs.		Q	24	#5	24'	1.043 Lbs.	
R	24	#5	24'	1.043 Lbs.		R	24	#5	24'	1.043 Lbs.	
S	24	#5	24'	1.043 Lbs.		S	24	#5	24'	1.043 Lbs.	
T	24	#5	24'	1.043 Lbs.		T	24	#5	24'	1.043 Lbs.	
U	24	#5	24'	1.043 Lbs.		U	24	#5	24'	1.043 Lbs.	
V	24	#5	24'	1.043 Lbs.		V	24	#5	24'	1.043 Lbs.	
W	24	#5	24'	1.043 Lbs.		W	24	#5	24'	1.043 Lbs.	
X	24	#5	24'	1.043 Lbs.		X	24	#5	24'	1.043 Lbs.	
Y	24	#5	24'	1.043 Lbs.		Y	24	#5	24'	1.043 Lbs.	
Z	24	#5	24'	1.043 Lbs.		Z	24	#5	24'	1.043 Lbs.	
AA	24	#5	24'	1.043 Lbs.		AA	24	#5	24'	1.043 Lbs.	
BB	24	#5	24'	1.043 Lbs.		BB	24	#5	24'	1.043 Lbs.	
CC	24	#5	24'	1.043 Lbs.		CC	24	#5	24'	1.043 Lbs.	
DD	24	#5	24'	1.043 Lbs.		DD	24	#5	24'	1.043 Lbs.	
EE	24	#5	24'	1.043 Lbs.		EE	24	#5	24'	1.043 Lbs.	
FF	24	#5	24'	1.043 Lbs.		FF	24	#5	24'	1.043 Lbs.	
GG	24	#5	24'	1.043 Lbs.		GG	24	#5	24'	1.043 Lbs.	
HH	24	#5	24'	1.043 Lbs.		HH	24	#5	24'	1.043 Lbs.	
JJ	24	#5	24'	1.043 Lbs.		JJ	24	#5	24'	1.043 Lbs.	
KK	24	#5	24'	1.043 Lbs.		KK	24	#5	24'	1.043 Lbs.	
LL	24	#5	24'	1.043 Lbs.		LL	24	#5	24'	1.043 Lbs.	
MM	24	#5	24'	1.043 Lbs.		MM	24	#5	24'	1.043 Lbs.	
NN	24	#5	24'	1.043 Lbs.		NN	24	#5	24'	1.043 Lbs.	
PP	24	#5	24'	1.043 Lbs.		PP	24	#5	24'	1.043 Lbs.	
QQ	24	#5	24'	1.043 Lbs.		QQ	24	#5	24'	1.043 Lbs.	
RR	24	#5	24'	1.043 Lbs.		RR	24	#5	24'	1.043 Lbs.	
SS	24	#5	24'	1.043 Lbs.		SS	24	#5	24'	1.043 Lbs.	
TT	24	#5	24'	1.043 Lbs.		TT	24	#5	24'	1.043 Lbs.	
UU	24	#5	24'	1.043 Lbs.		UU	24	#5	24'	1.043 Lbs.	
VV	24	#5	24'	1.043 Lbs.		VV	24	#5	24'	1.043 Lbs.	
WW	24	#5	24'	1.043 Lbs.		WW	24	#5	24'	1.043 Lbs.	
XX	24	#5	24'	1.043 Lbs.		XX	24	#5	24'	1.043 Lbs.	
YY	24	#5	24'	1.043 Lbs.		YY	24	#5	24'	1.043 Lbs.	
ZZ	24	#5	24'	1.043 Lbs.		ZZ	24	#5	24'	1.043 Lbs.	

PROJECT NO. 7.605

DAVIDSON COUNTY

STATION: 197 + 94.35 ℄

PART B

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
RALEIGH

END BENT No. 1 - LEFT LANE
AND END BENT No. 2 - RIGHT LANE

END BENT No. 1 - RIGHT LANE
AND END BENT No. 2 - LEFT LANE

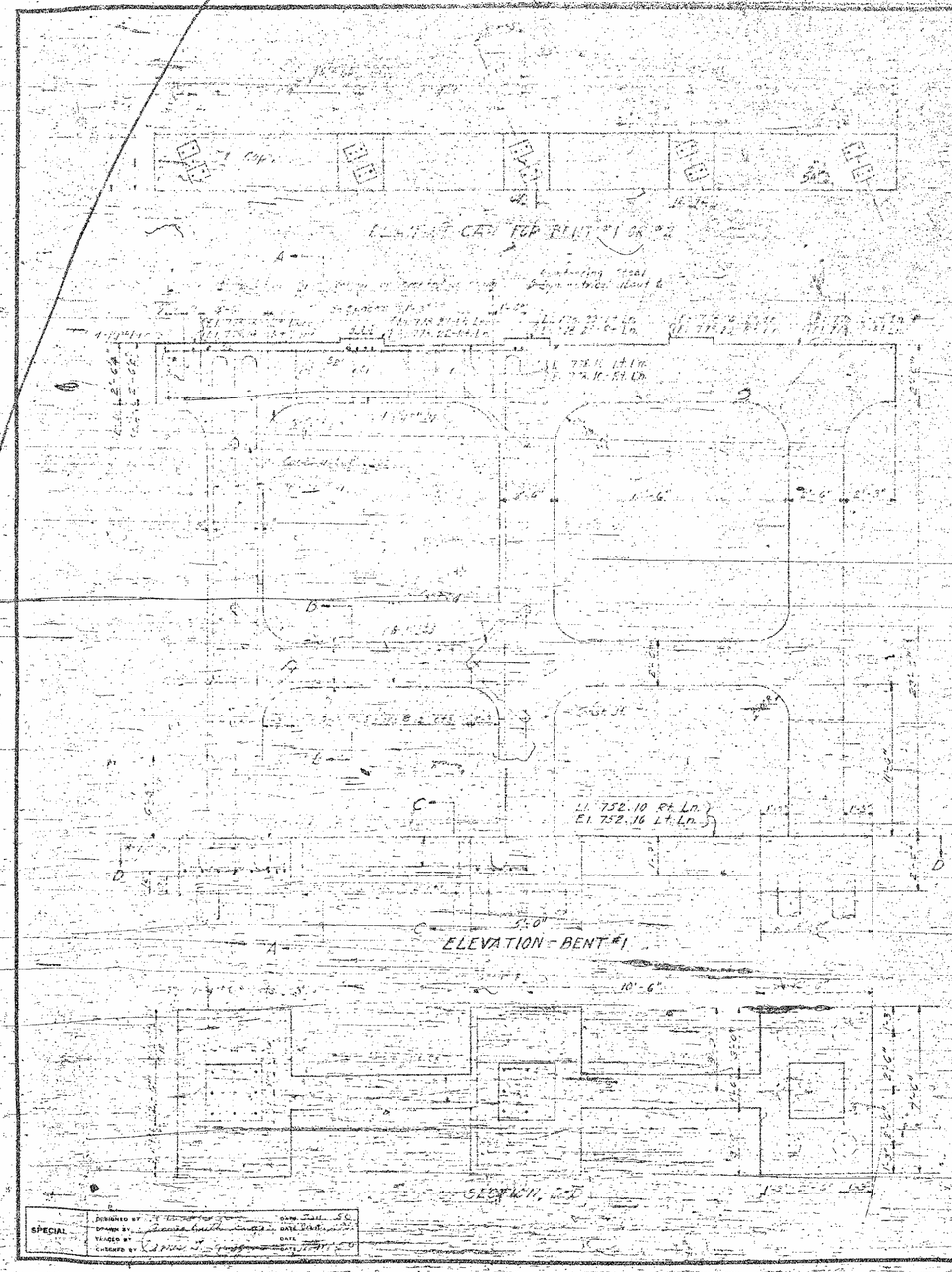
JAN. 1950

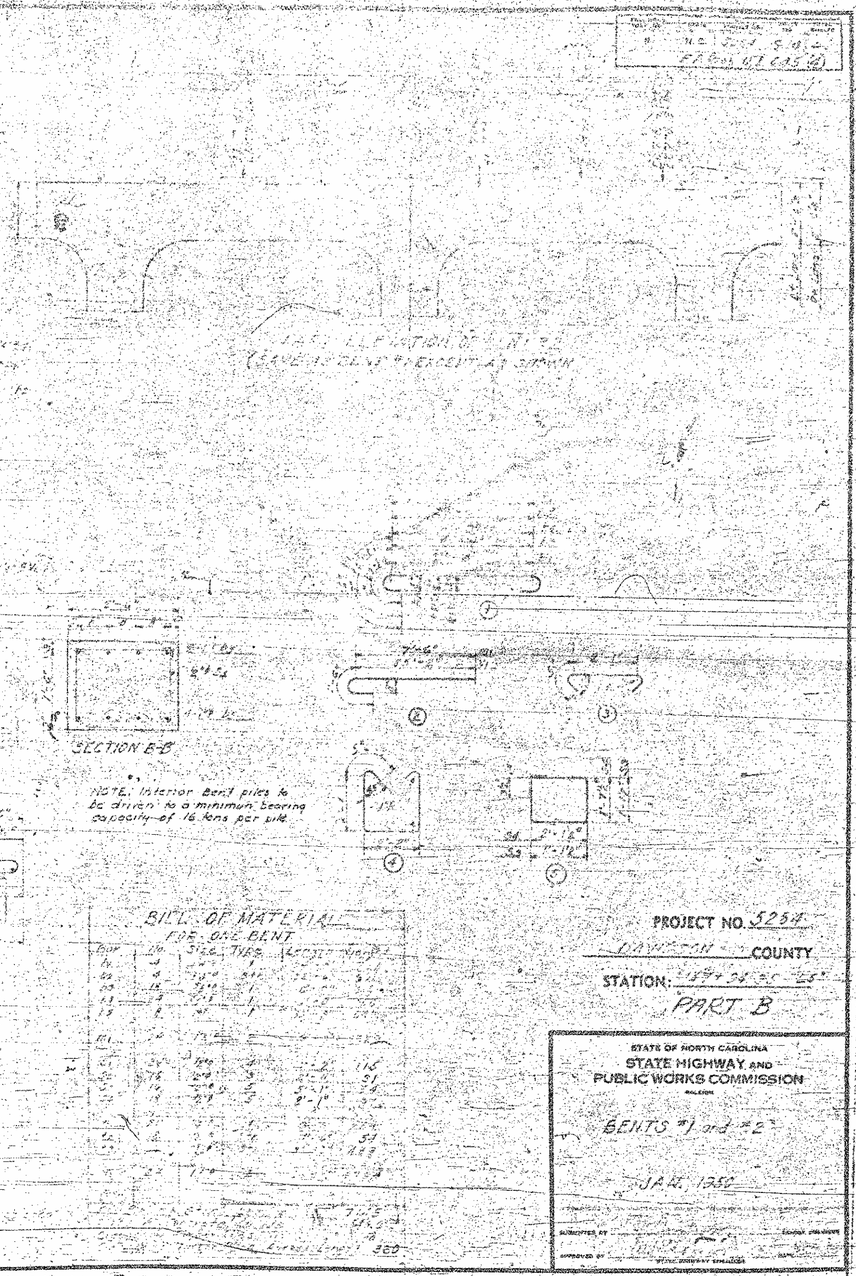
SUBMITTED BY: _____ BRIDGE ENGINEER

APPROVED BY: _____ DATE: _____
STATE HIGHWAY ENGINEER

SPECIAL

DESIGNED BY _____ DATE _____
DRAWN BY _____ DATE _____
TRACED BY _____ DATE _____
CHECKED BY _____ DATE _____





BILL OF MATERIAL
FOR ONE BENT

Footing	No.	Size	Type	Length	Weight
A1	12	12"	1	41'-0"	5166
A2	12	12"	1	41'-0"	5166
A3	12	12"	1	41'-0"	5166
A4	12	12"	1	41'-0"	5166
B1	12	12"	1	41'-0"	5166
B2	12	12"	1	41'-0"	5166
B3	12	12"	1	41'-0"	5166
B4	12	12"	1	41'-0"	5166
C1	12	12"	1	41'-0"	5166
C2	12	12"	1	41'-0"	5166
C3	12	12"	1	41'-0"	5166
C4	12	12"	1	41'-0"	5166
D1	12	12"	1	41'-0"	5166
D2	12	12"	1	41'-0"	5166
D3	12	12"	1	41'-0"	5166
D4	12	12"	1	41'-0"	5166
Cap	1				51
Cap	1				51
Cap	1				51