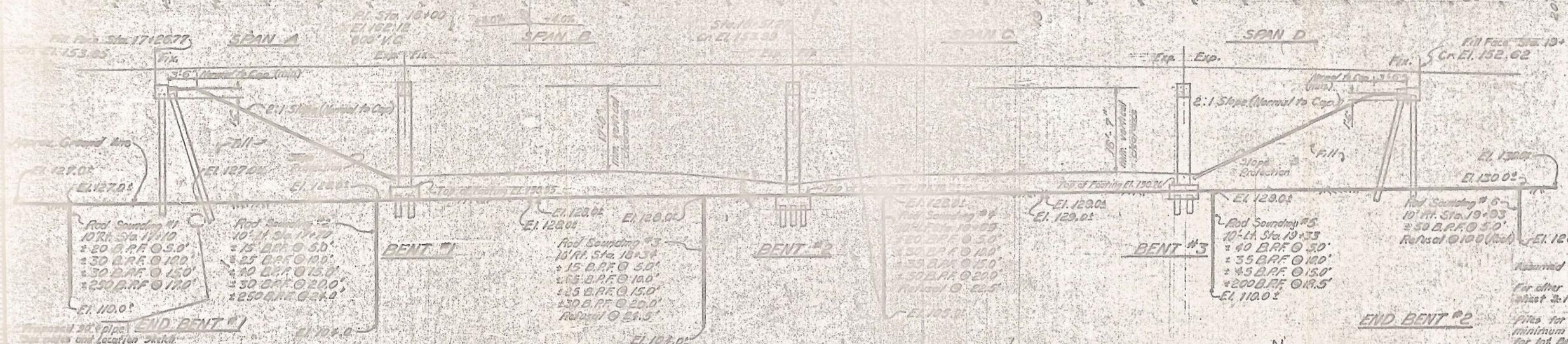


GRADE DATA

P.I. STA. 19+00.00
 P.I. ELEV. 122.12
 LENGTH OF CURVE 300'
 G1 = +4.0% G2 = -4.0%

FED. ROAD DIST. NO.	STATE	PROJECT NO.
8	N.C.	8.11618
A. PROJECT 1-95-3(13)111		
E.A. Proj. 2-3-310714E		



NOTES

Assumed Live Load - H15 (S4)

For other design data and general notes, see sheet 2-R.

Piles for E Bents 1 & 2 shall be driven to a minimum bearing capacity of 25 tons each. Piles for Int Bents shall be driven to a minimum bearing capacity of 30 tons each. The roadway contractor will be required to remove the existing pavement and scarify the roadbed to a minimum depth of 2'-0" within the area of the E Bent piles. The contractor will be required to excavate completely through the fill of E Bents 1 & 2 before driving piles. See sheet 2-R. The contractor will be responsible for determining the lengths of piles required. See Special Provisions.

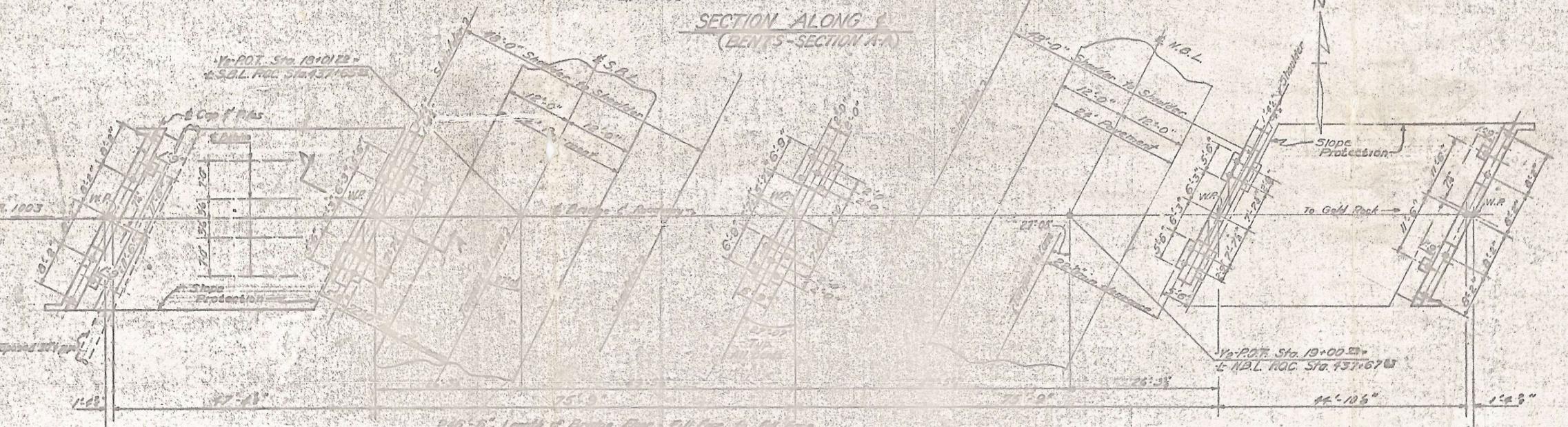
Traffic on 1/2 will be detoured over a proposed temporary detour. See Roadway Plans.

Special attention is called to the proposed 30" pipe at E Bent 1. The brace pile batter for E Bent 1 is based on pipe crossing line 1/2 at station 18+55 at 26" L.H. skew and bed elevation +122.0'. At intersection with 1/2 the brace pile batter may be varied from that given if conditions are such that a different batter is required to clear pipe. Care shall be taken to prevent damage to this pipe.

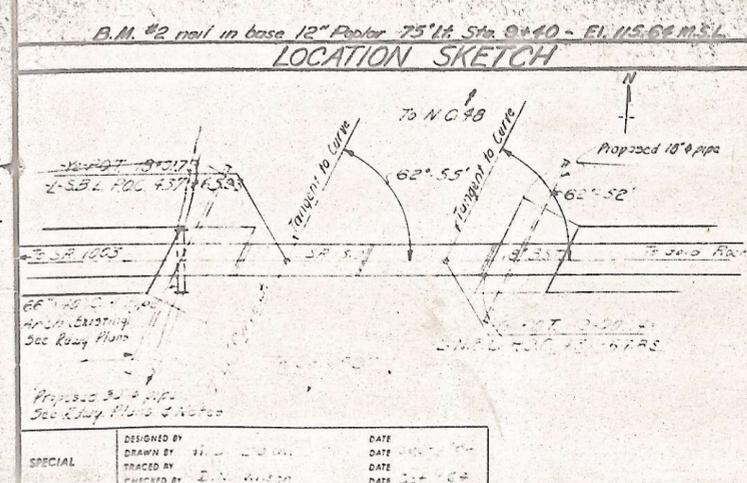
Work is not to be started on this bridge until after roadway fill has been placed by roadway contractor. Unclassified structure excavation shall be measured from finished surface of roadway fill.

The length of bridge was computed on the basis of no ditch section with the toe of slope 2'-0" outside of shoulder.

SECTION ALONG S (BENTS-SECTION A-A)



PLAN



TOTAL BILL OF MATERIAL

Structure	Class A Concrete	Reinforcing Steel	Structural Steel	Structural Steel	Structural Steel	Concrete	2" Dia. Pipe Protection	2" Dia. Pipe Protection
	Cu. Yds.	Lbs.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Yds.	Lin. Ft.	Lin. Ft.
Side Structure	137.6	42,779	15,500					432.47
End Bent #1	11.7	2,218		7	2576			100,100.44
Bent #1	29.2	4,035		8	1824			17,792
Bent #2	24.0	4,656		10	112.7			25,223
Bent #3	13.3	3,933		6	190			26.57
End Bent #2	11.7	2,311		7	2071			175.79
								156,175.02
TOTAL	276.0	57,552	15,510.47		6618	6772		321.26
								459,356.22

PROJECT No. 8.11618

#0224 NASH COUNTY

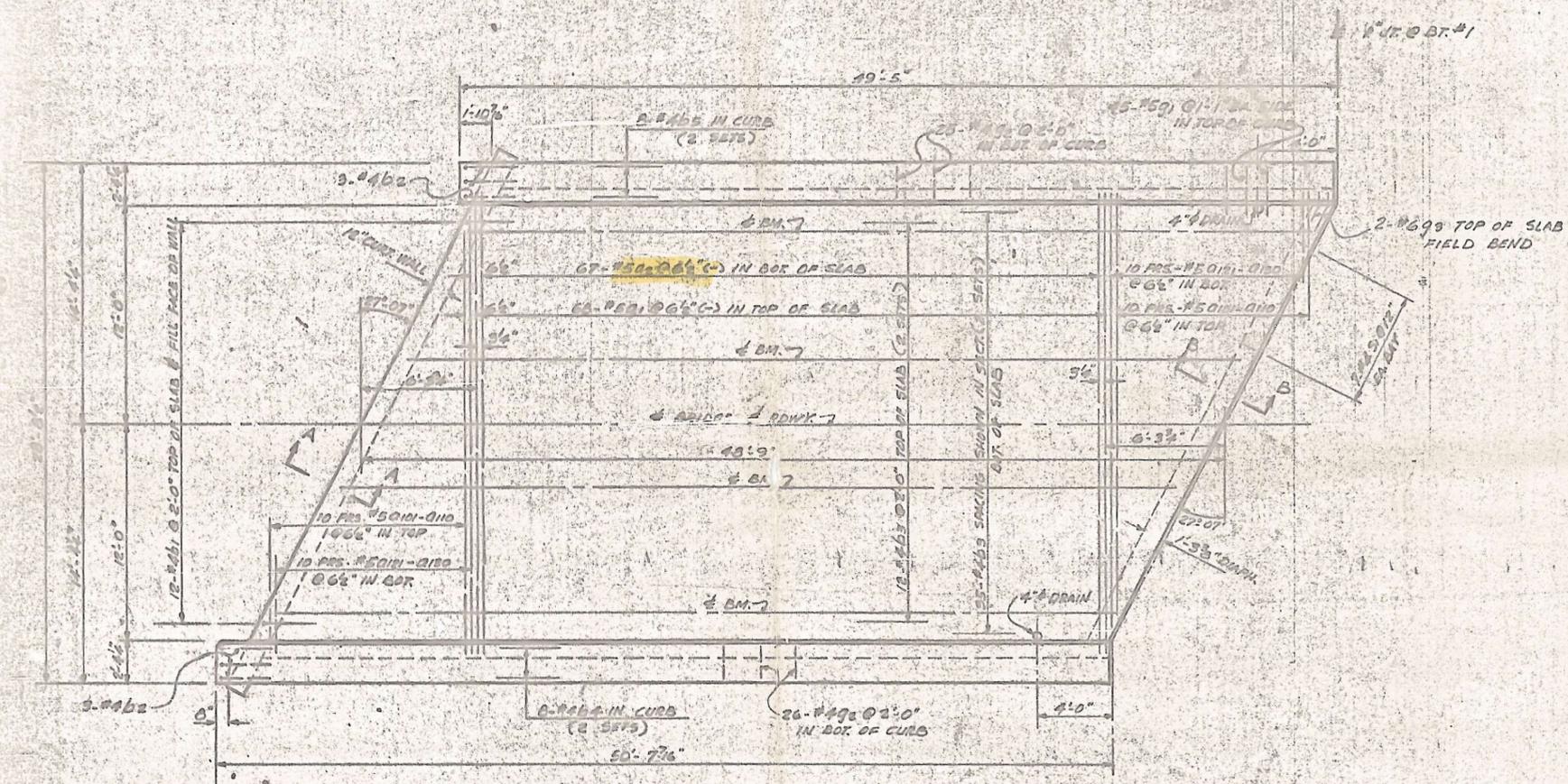
STATION: 437+67.83 N.B.L. 19+00.74 1/2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

GENERAL DRAWING FOR
BRIDGE OVER PROJECT (I 95) ON S.R. #1510 BETWEEN S.R. #1003 AND GOLD ROCK

5-PT-11618 1964

5-86



NOTE: FLARE OR FIELD BEND
9, BARS TO SUIT CORNER
CONDITIONS.

PLAN - SPAN A
NOTE: END POSTS AND RAILS ARE NOT SHOWN

PROJECT No. S. 1161B
NASH COUNTY
STATION: 1+52.00 TO 1+62.00

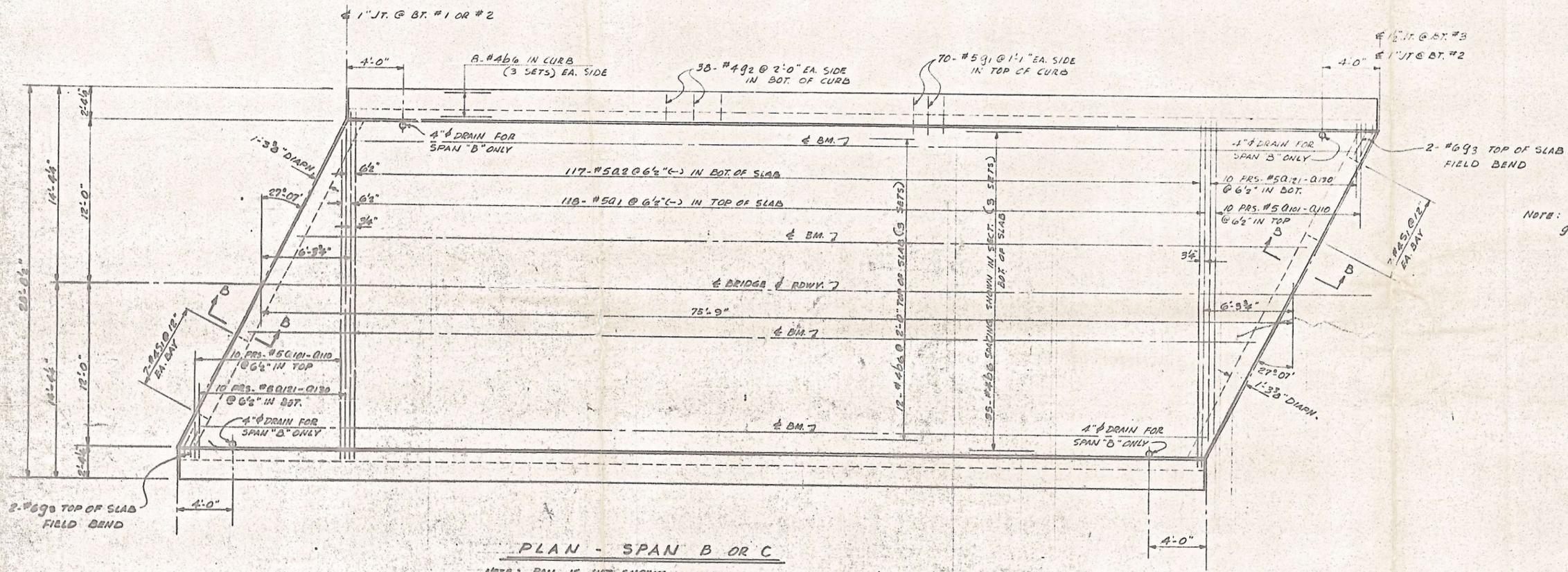
DESIGNED BY F. B. ALPHEA, JR. DATE AUG. 54
CHECKED BY GEORGE H. HARRIS DATE OCT. 54

APPROVED	DATE	
	BY	
	DATE	
	BY	

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
ASSEMBLY
SUPERSTRUCTURE
SPAN A

AUGUST 1954

5-59



NOTE: FLARE OR FIELD BAND REINFORCEMENT BARS AS NECESSARY TO SUIT CORNER CONDITIONS.

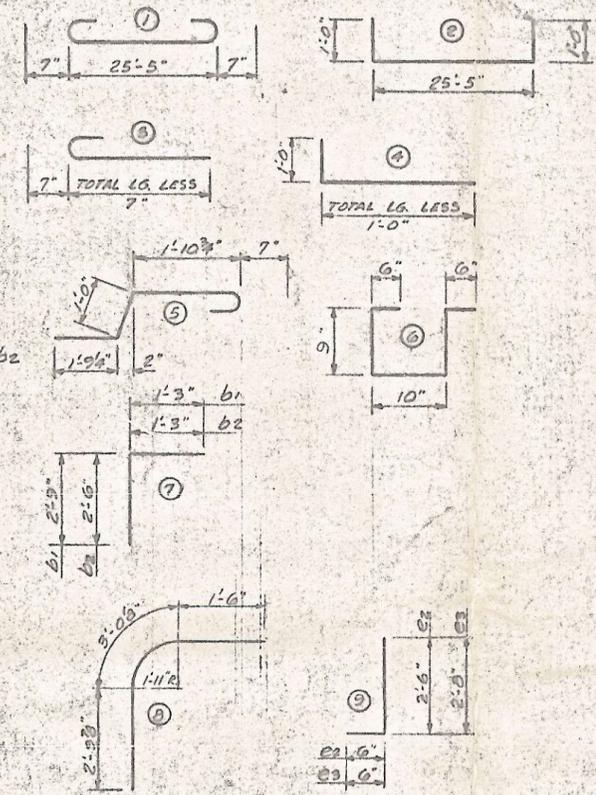
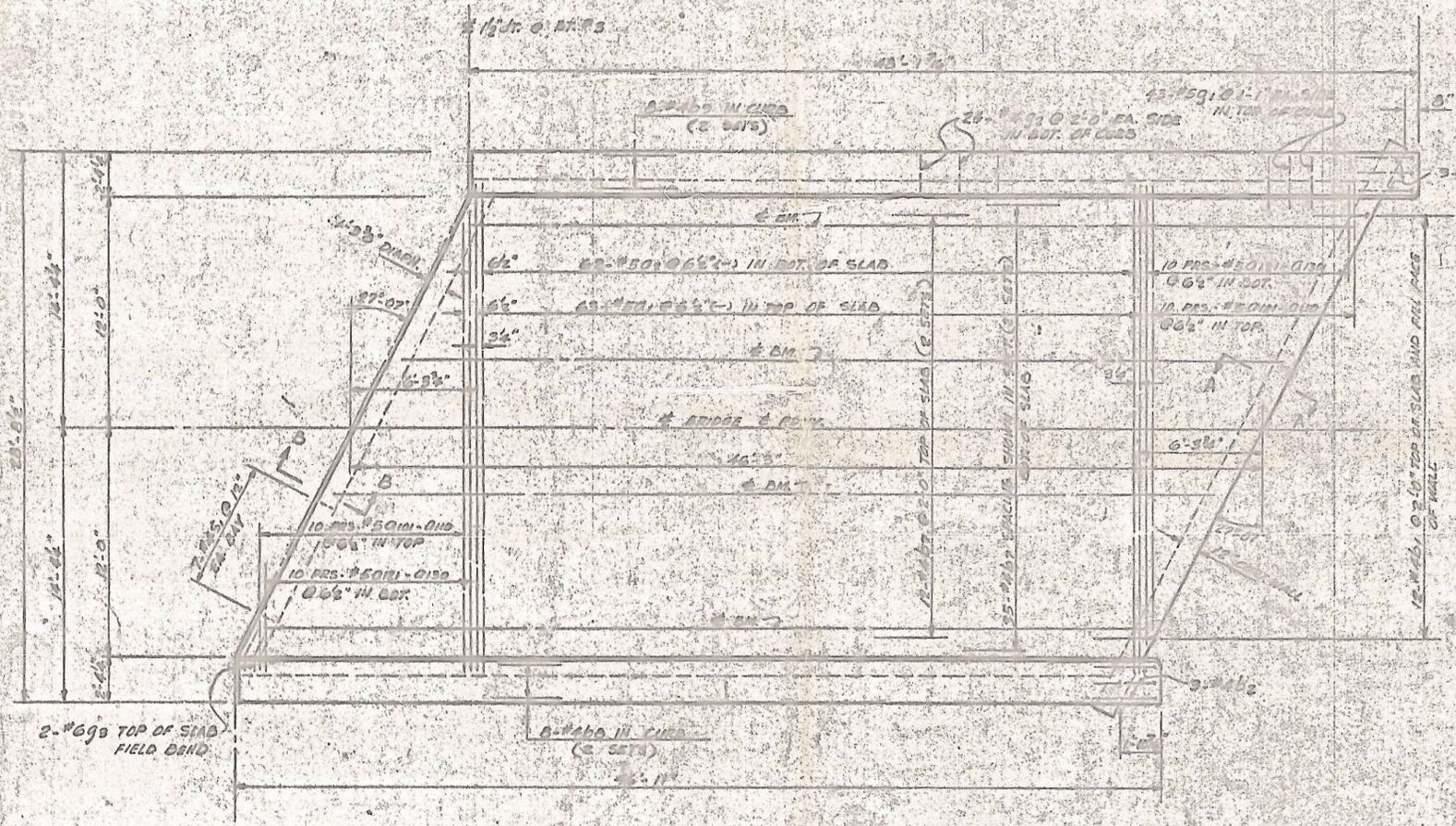
PLAN - SPAN B OR C

NOTE: RAIL IS NOT SHOWN.

PROJECT No. 8.11618
 NASH COUNTY
 STATION: 132+42.03 N.E.L.

STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
CALCULATED					
SUPERSTRUCTURE					
SPAN B OR C					
AUGUST 1968					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			2		
2			3		

DESIGNED BY	DATE
SAVED BY	DATE
CHECKED BY	DATE



BAR TYPES
 ALL DIMENSIONS ARE OUT TO OUT.

TOTAL BILL OF MATERIAL											
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
Q1	367	#5	1	24'-7"	10176	F1	3	#4	STR.	5'-2"	17
Q2	303	#5	2	27'-5"	10360	F2	3	#4	STR.	5'-5"	18
Q101	16	#5	3	25'-2"	967	G1	966	#5	5	5'-3"	2497
Q102	1	1	1	21'-0"	950	G2	251	#4	STR.	6'-0"	335
Q103	1	1	1	18'-11"	816	G3	12	#6	NOTED	6'-0"	108
Q104	1	1	1	16'-9"	780	K1	2	#6	STR.	52'-0"	96
Q105	1	1	1	14'-0"	665	K10	4	#6	STR.	17'-2"	103
Q106	1	1	1	18'-7"	810	K2	16	#4	STR.	16'-9"	179
Q107	1	1	1	10'-5"	424						
Q108	1	1	1	8'-4"	359	K4	36	#5	STR.	7'-7"	305
Q109	1	1	1	6'-8"	303	K4c	24	#5	STR.	5'-9"	94
Q110	16	#5	3	4'-1"	68	K41	24	#5	STR.	3'-5"	85
Q121	16	#5	4	24'-1"	402	S1	150	#4	6	3'-4"	934
Q122	1	1	1	21'-11"	966						
Q123	1	1	1	19'-10"	891						
Q124	1	1	1	17'-9"	826						
Q125	1	1	1	15'-7"	760						
Q126	1	1	1	15'-6"	755						
Q127	1	1	1	11'-4"	507						
Q128	1	1	1	9'-3"	424						
Q129	1	1	1	7'-2"	320						
Q130	16	#5	4	5'-0"	83						
b1	24	#4	7	4'-0"	64						
b2	12	#4	7	3'-9"	30						
b3	24	#4	STR.	24'-10"	1559						
b4	16	#4	STR.	25'-10"	876						
b5	10	#4	STR.	24'-2"	569						
b6	278	#4	STR.	25'-1"	6566						
b7	94	#4	STR.	23'-7"	1981						
b8	16	#4	STR.	23'-11"	556						
b9	16	#4	STR.	24'-7"	263						
c1	8	#4	8	7'-4"	99						
c2	8	#4	9	3'-0"	16						
c3	16	#4	9	3'-2"	84						
						REINFORCING STEEL LBS. 40,273					
CLASS "A" CONC. CU YDS											
		SPAN			SLAB		END POSTS		TOTAL		
		A			59.3		.6		59.9		
		B			54.8				54.8		
		C			54.0				54.0		
		D			37.5		.6		38.1		
		TOTAL							187.6		

NOTE: PLACE OR FIELD BEND OF BARS TO SUIT CURBER CONDITIONS.

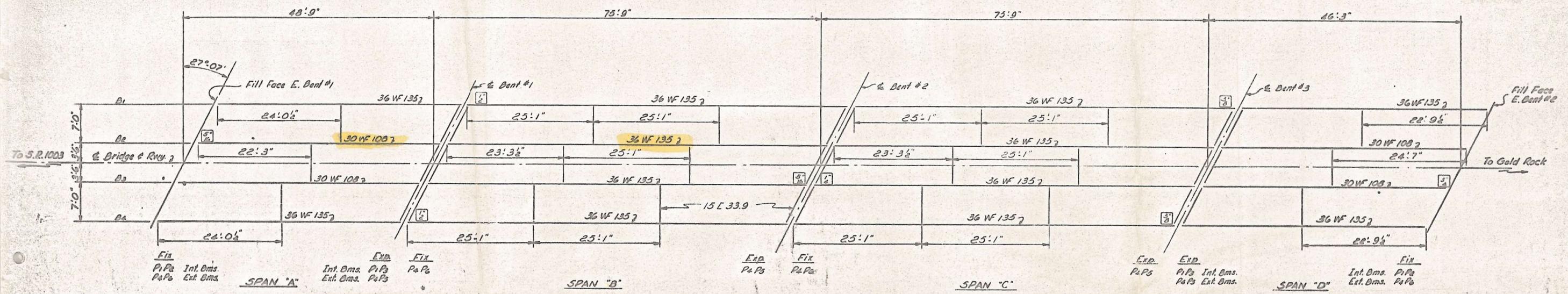
PLAN - SPAN D
 NOTE: RAIL IS NOT SHOWN

PROJECT NO. 8.11618
 NASH COUNTY
 STATION: 432 + 67.83141

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 SPAN D AND
 TOTAL BILL OF MATERIAL

AUGUST 1964

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



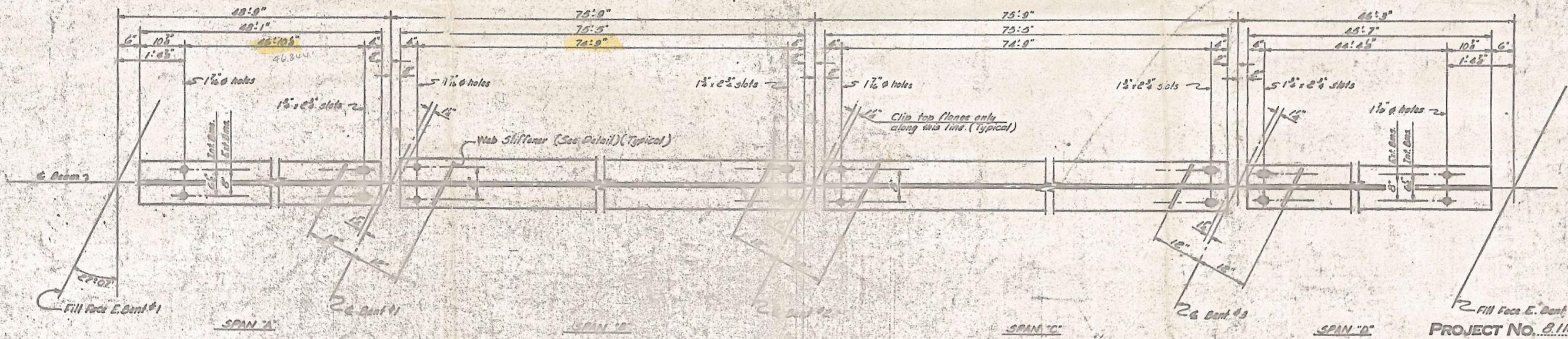
LEGEND:
 □ Indicates Fill Plate is required.

SPAN "A"
 Fix Int. Dms. PaPa Ext. Dms. Int. Dms. PaPa Ext. Dms. Fix PaPa

SPAN "B"
 Exp PaPa Fix PaPa

SPAN "C"
 Exp PaPa Fix PaPa

SPAN "D"
 Exp PaPa Int. Dms. PaPa Ext. Dms. Int. Dms. PaPa Ext. Dms. Fix PaPa



NOTE:
 No stiffeners at End Beams or on outside of exterior Beams.
 When dimensions shown in detail are horizontal.

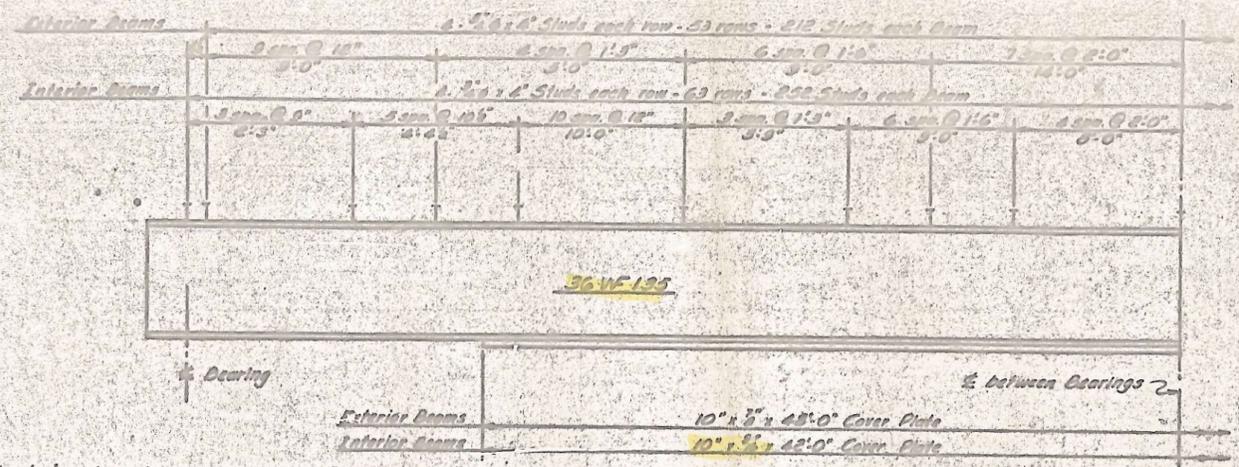
NOTE:
 See Superstructure Details for location of holes for Reinforcing Steel.

NOTE:
 Dimensions to Diaphragms are from ends of Beams.
 For Beam number see "Dead Load Deflection" Table.

PROJECT No. 8-11618
 NASH COUNTY
 STATION: 437+67.83 N&L

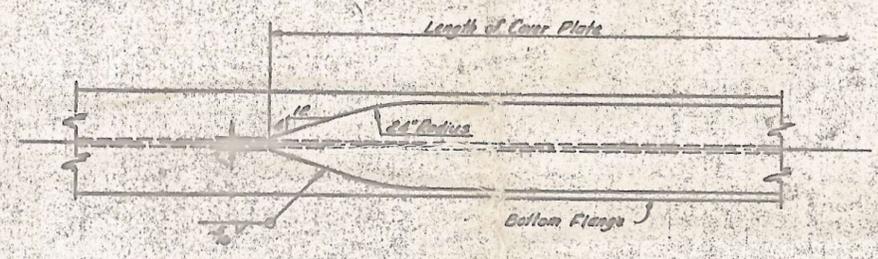
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 STRUCTURAL STEEL
 AUGUST 1964

REV.	NO.	DATE	BY	CHKD.	APP'D.



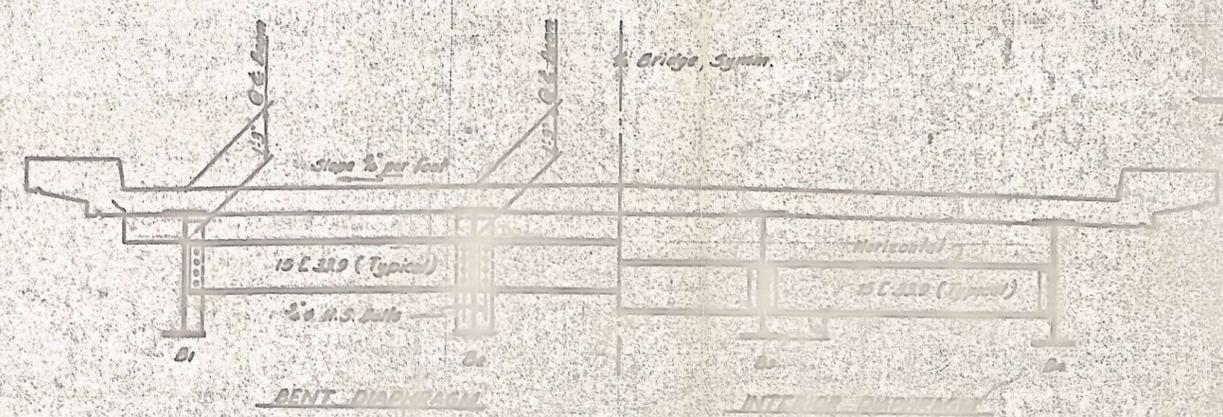
BEAM ELEVATION AND STUD SPACING
 SPANS "B" & "C"

Note: At the contractor's option he may substitute for the cover plates designated on the plans cover plates of equivalent area provided these plates are at least 5/8" in thickness and do not exceed a width equal to the flange width less 2" or a thickness equal to the flange thickness plus 1/8". The size of the weld for attaching these cover plates shall be in accordance with the AWS Specifications.



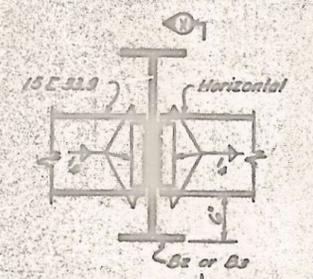
COVER PLATE WELD DETAIL

Note: Cover plate lengths are symmetrical about the center of bearings and the bottom flange only.



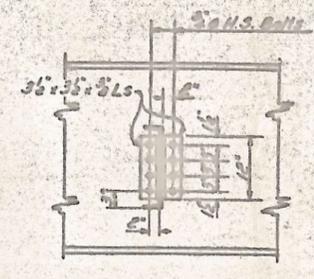
TYPICAL SECTION

DEAD LOAD DEFLECTIONS AND BEAM CAMBER					
Span	Deflection due to weight of beam	Deflection due to permanent load (distortion)	Total dead load deflection	Vertical curve ordinates	Camber
Span "A"					
Span "B" or "C"					
Span "D"					

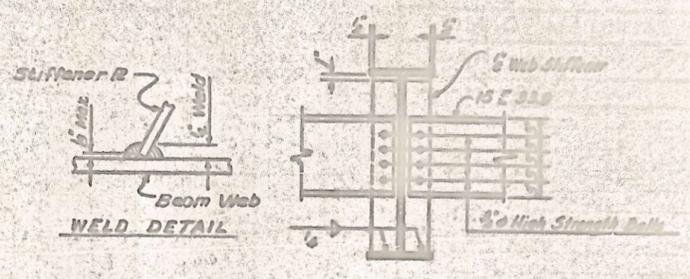


INTERIOR DIAPHRAGM CONNECTION

Note: Field connections of diaphragms to beams shall be bolted using 5/8" A.S. bolts in accordance with the Specifications and Special Provisions.
 All beams and cover plates shall be of A.S.T.M. A572 grade structural steel. See Sheet S-N.
 End stiffeners to be parallel to ends of beams.

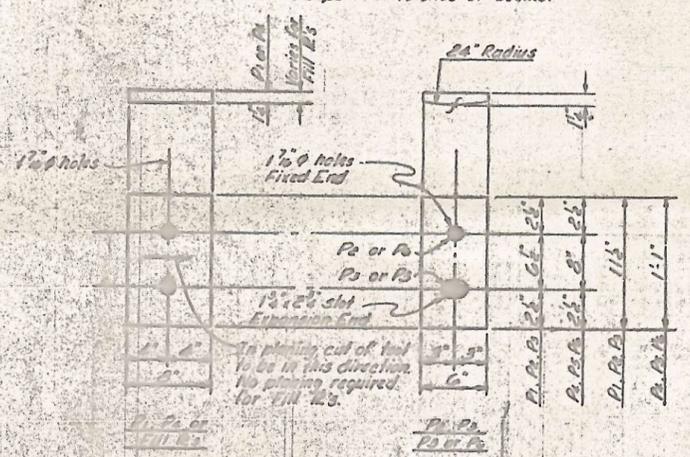


SECTION "X-X"



DIAPHRAGM CONNECTION AT BENT & DETAIL WEB STIFFENER

Note: No stiffeners are required at End Bents or on outside of exterior beams.

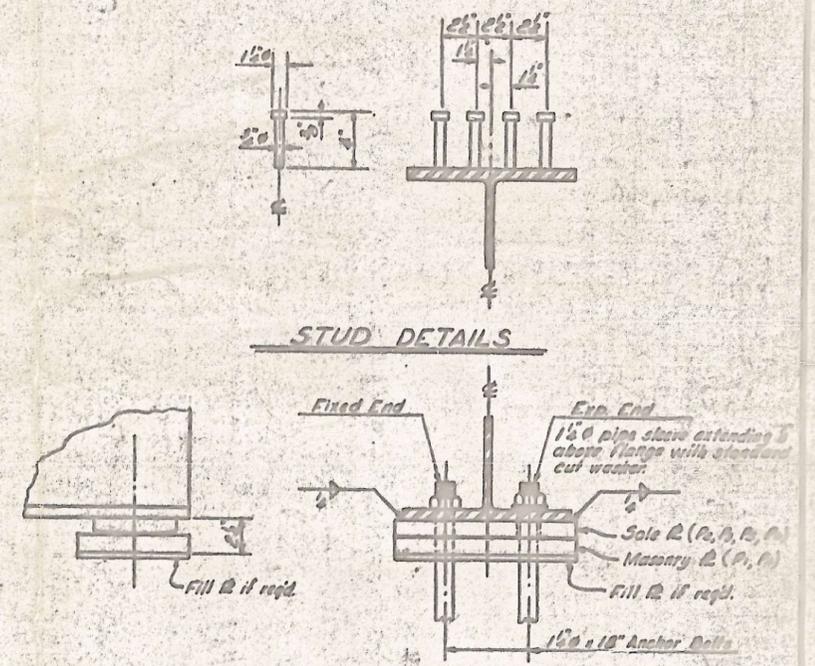


BEARING PLATE DETAILS

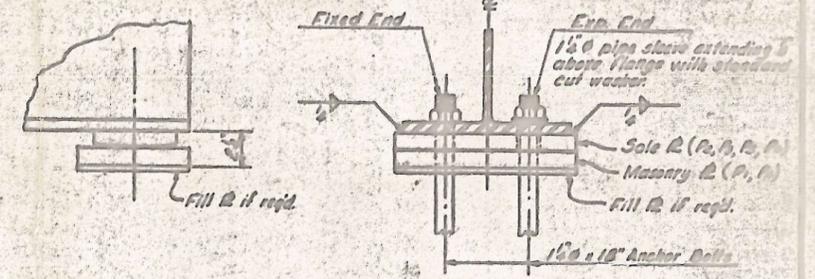
Note: At the contractor's option fill in's may be substituted with masonry in's.

- BEARING PLATES REQUIRED**
- 8 P1 - 6" x 16" x 1 1/2" - Paint finish to 1 1/2"
 - 4 P2 - 6" x 16" x 1 1/2" - As detailed
 - 4 P3 - 6" x 16" x 1 1/2" - As detailed
 - 24 P4 - 6" x 16" x 1 1/2" - Paint finish to 1 1/2"
 - 12 P5 - 6" x 16" x 1 1/2" - As detailed
 - 12 P6 - 6" x 16" x 1 1/2" - As detailed
- END PLATES REQUIRED**
- 1 - 6" x 6" x 1 1/2"
 - 1 - 6" x 6" x 1 1/2"
 - 1 - 6" x 6" x 1 1/2"
 - 1 - 6" x 6" x 1 1/2"
 - 2 - 6" x 6" x 1 1/2"
 - 2 - 6" x 6" x 1 1/2"

STRUCTURAL STEEL APPROX. WEIGHT = 150,500 LBS.



STUD DETAILS



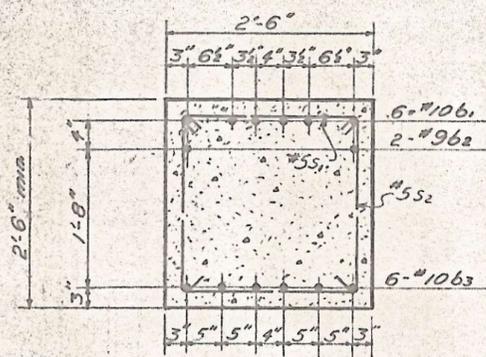
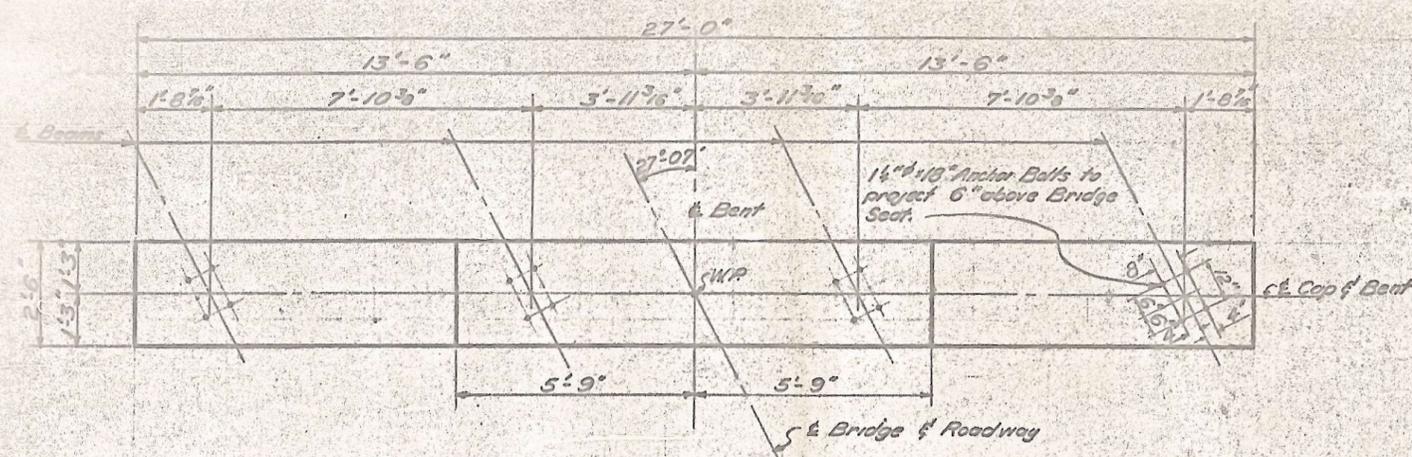
DETAILS AT BEARINGS

PROJECT No. 211618
 NASH COUNTY
 STATION: 437+67.83 N.M.

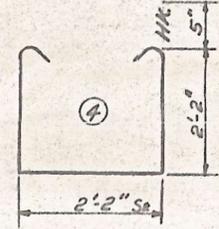
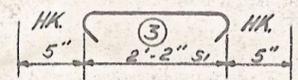
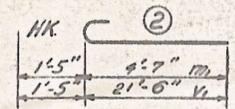
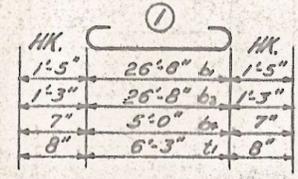
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

SUPERSTRUCTURE
 STRUCTURAL STEEL
 DETAILS
 AUGUST 1962

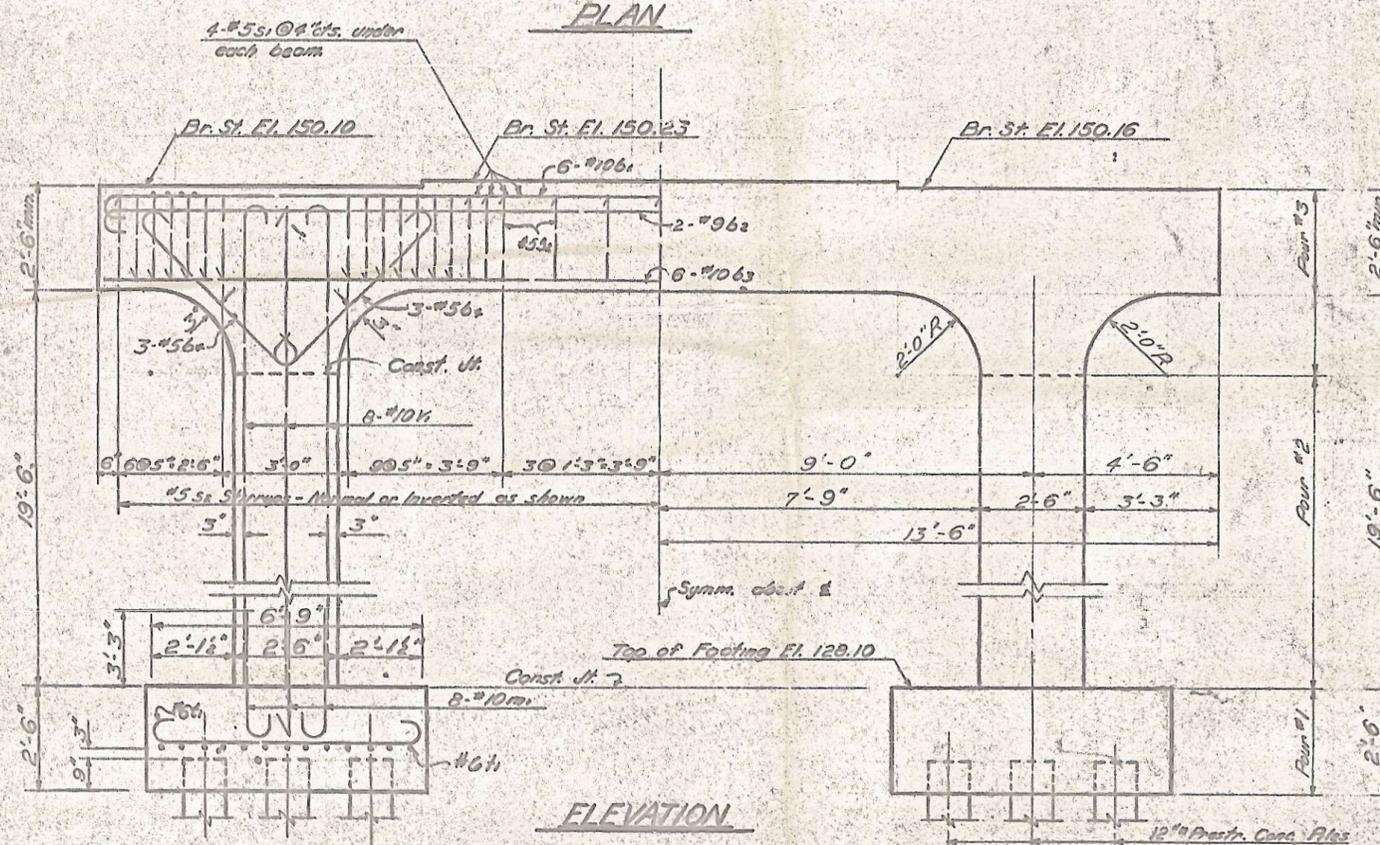
REV.	BY	DATE	REVISION
1			
2			



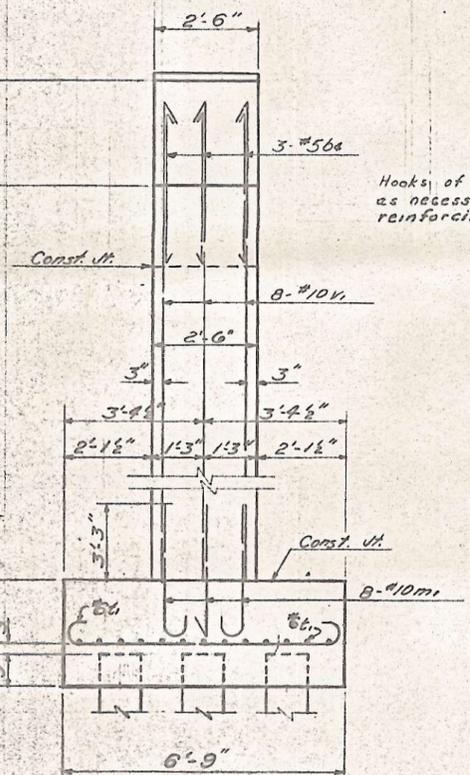
SECTION THRU CAP



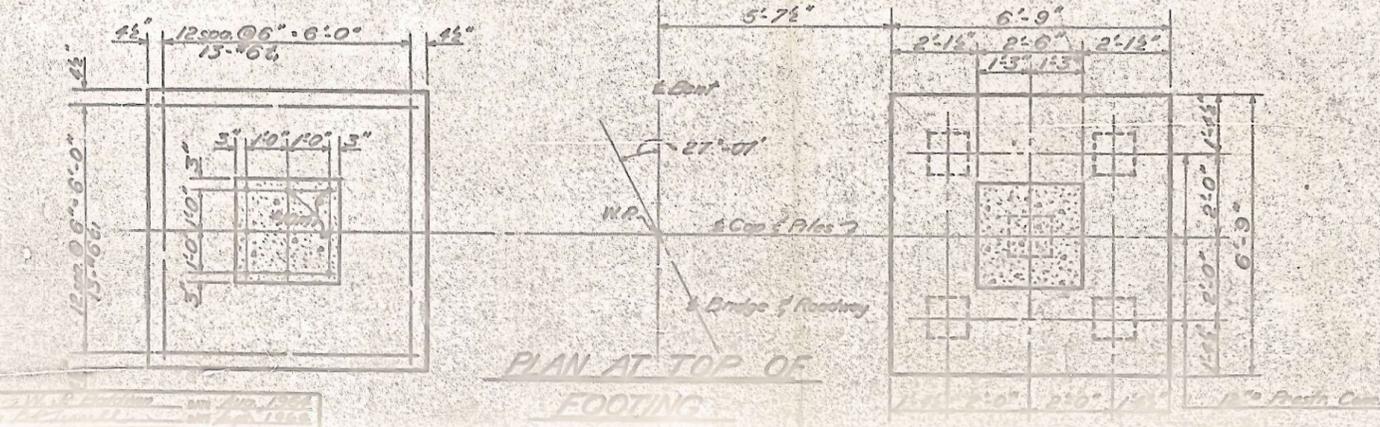
BAR TYPES
All bar dimensions are out to out



ELEVATION



LEFT END ELEVATION



PLAN AT TOP OF FOOTING

BILL OF MATERIAL FOR ONE BENT

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
b1	6	#10	1	29'-6"	762
b2	2	#9	1	29'-2"	188
b3	6	#10	str.	26'-8"	683
b4	12	#5	1	6'-2"	77
m	16	#10	2	6'-0"	413
s1	16	#5	3	3'-0"	52
s2	39	#5	4	7'-4"	262
t1	52	#6	1	7'-7"	592
v1	16	#10	2	22'-11"	1,570

Reinforcing Steel	Lbs	4,656
Class A Concrete	Cu. Yds.	
Pour #1		8.2
Pour #2		0.1
Pour #3		7.7
Total		26.0
12" Prest. Conc. Piles		
No. 10	Ln. Ft.	240
		116.7

* NOTE: Concrete displaced by pile head has been deducted

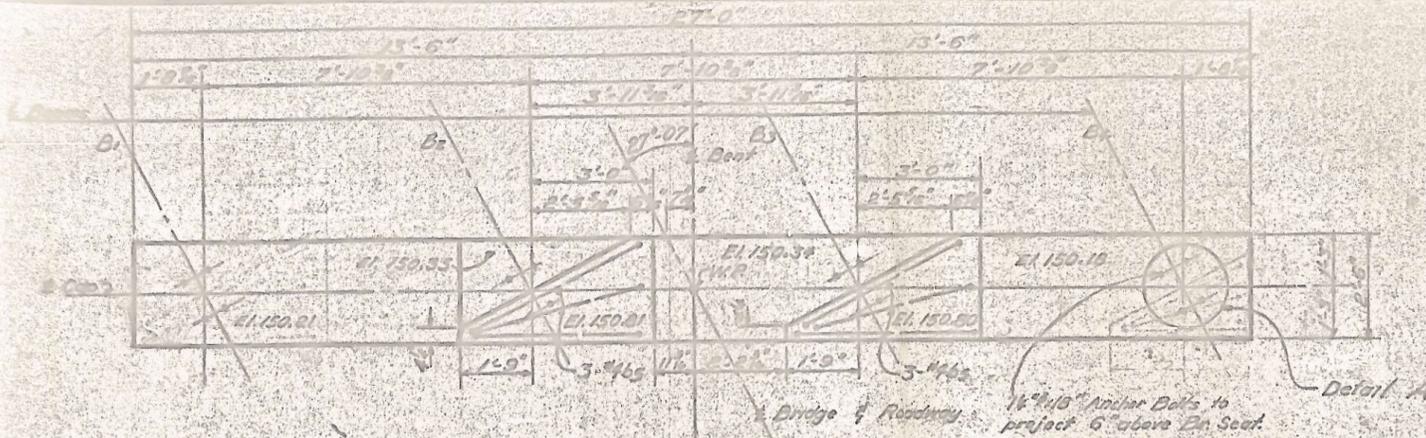
PROJECT NO. 8-11613
NASH COUNTY
STATION: 437+67.83 N.P.L.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

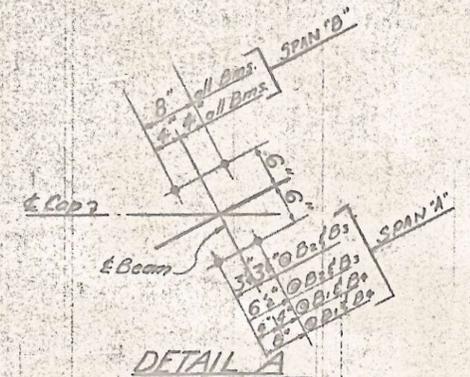
BENT # 2

AUG. 1963

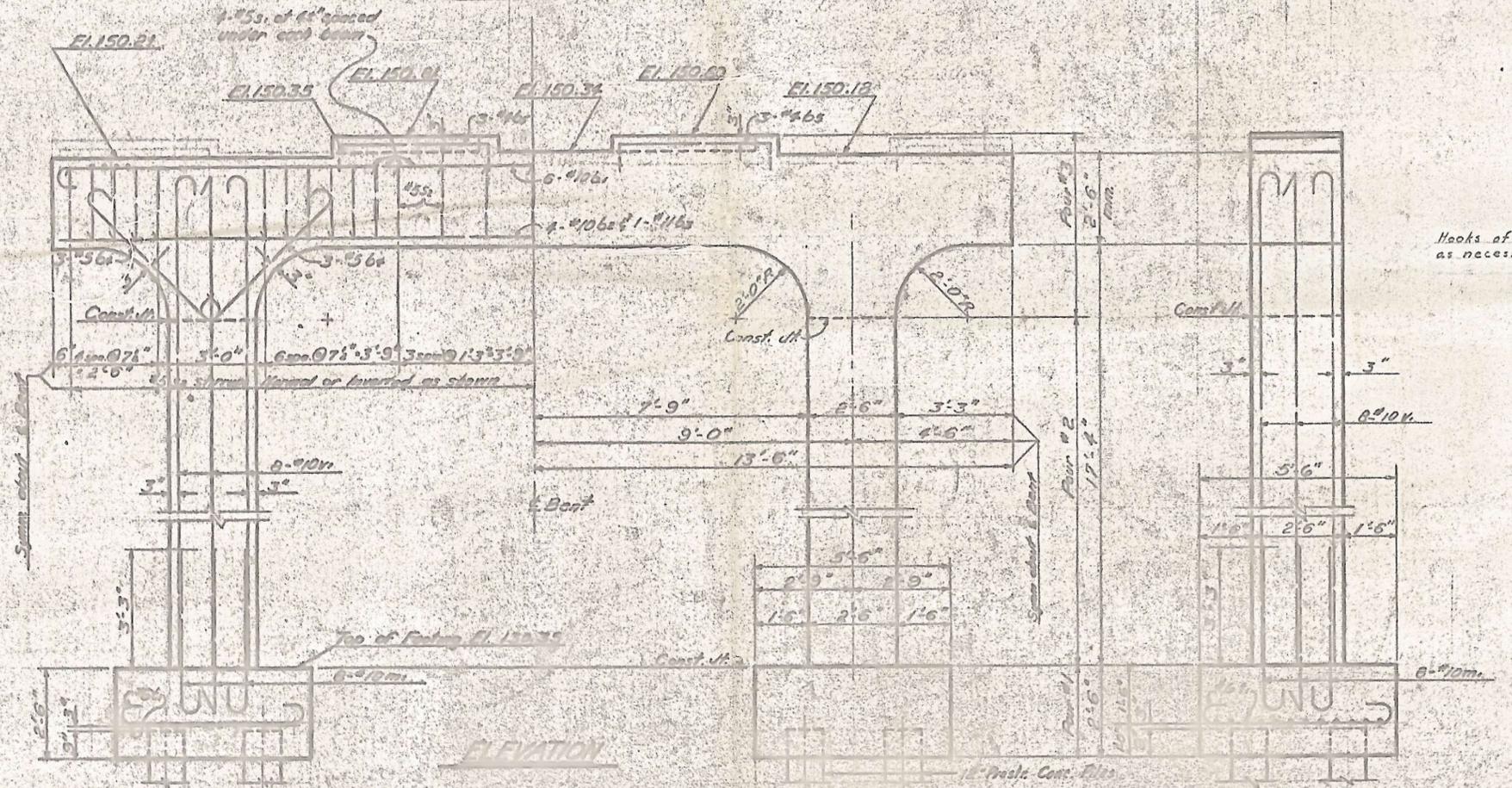
NO.	BY	DATE	NO.	BY	DATE
1			2		
2			3		



PLAN

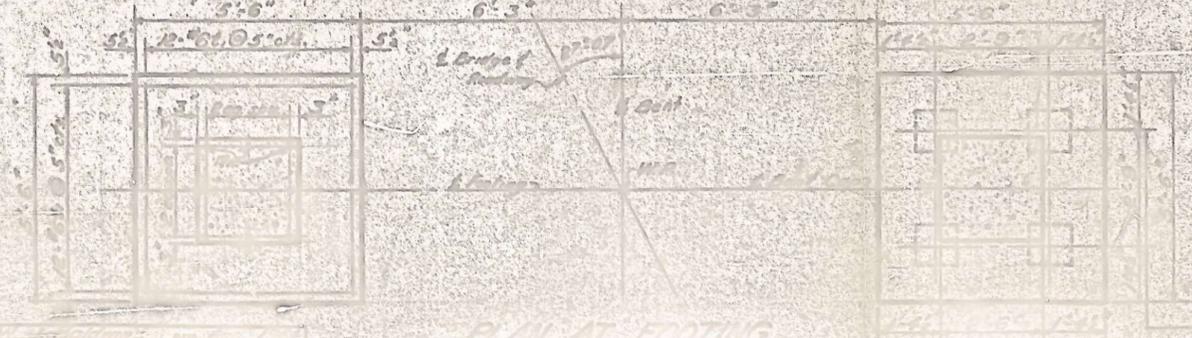


DETAIL A



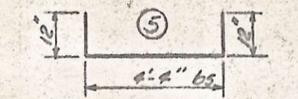
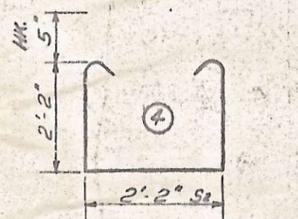
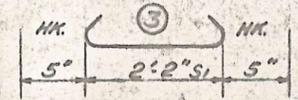
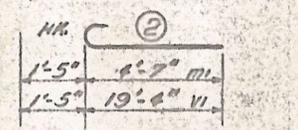
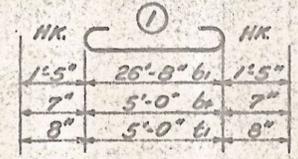
ELEVATION

RIGHT END ELEVATION



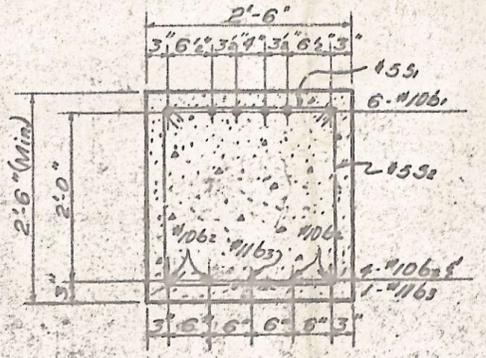
PLAN AT FOOTING

Hooks of "V" bars may be turned as necessary for placing reinforcing.



BAR TYPES

All bar dimensions are out to out.



SECTION THRU CAP

BILL OF MATERIAL FOR ONE BENT

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
61	6 #10	1	29'-6"	768
62	4 #10	str.	26'-8"	459
63	1 #11	str.	26'-8"	142
64	12 #5	1	6'-2"	77
65	6 #4	5	6'-4"	23
66	4 #5	3	3'-0"	50
67	29 #5	4	7'-4"	222
68	16 #10	2	6'-0"	413
69	16 #10	2	20'-9"	1429
Reinforcing Steel Lbs. 4,035				
Class A Concrete Cu. Yds.				
Four #1 5.4				
Four #2 7.1				
Four #3 8.0				
Total 20.5				
12 #8 Presfr. Conc. Piles				
No. 8 Lin. Ft. 116.7				

* Note: Concrete displaced by pile heads has been deducted.

PROJECT NO. B. 11618

NASH COUNTY

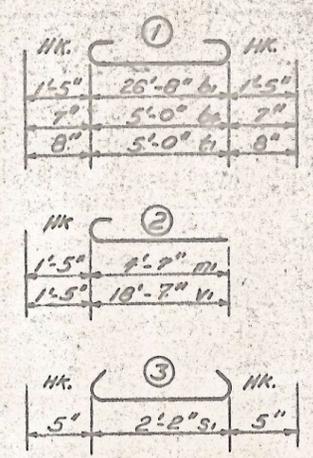
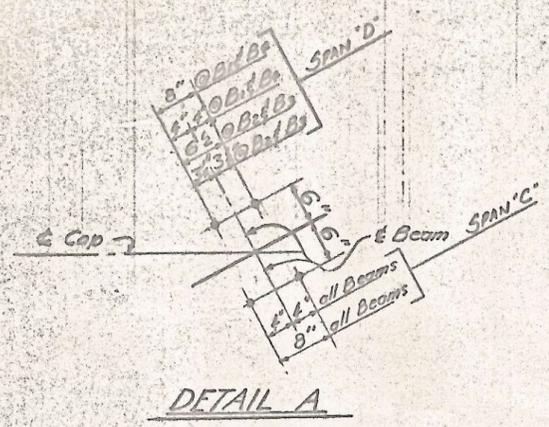
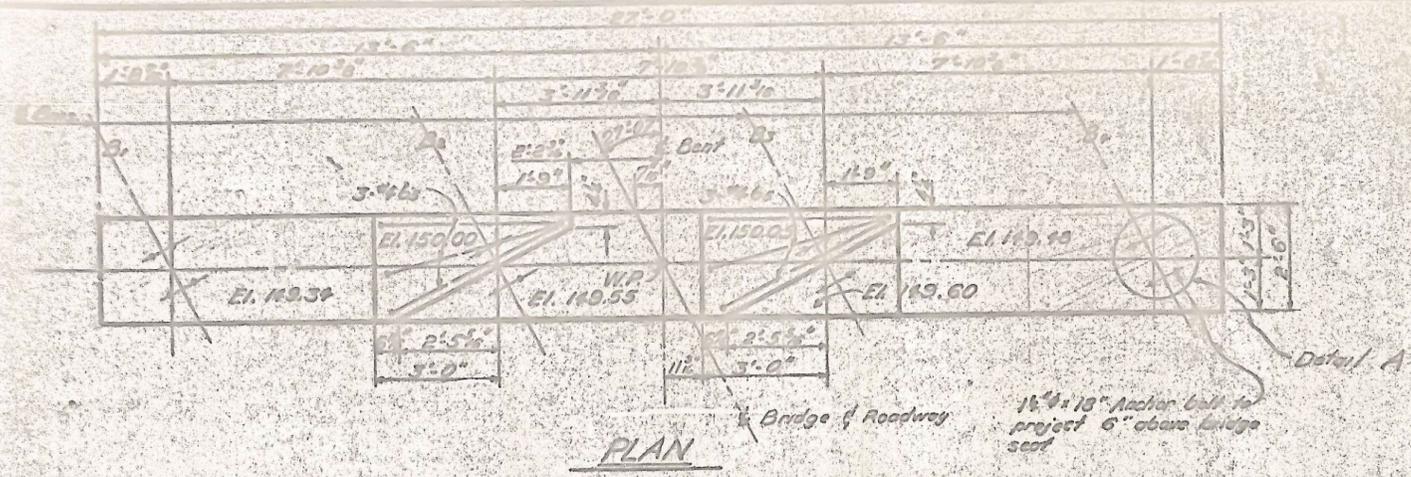
STATION: 137+67.83 N.B.L.

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

BENT #1

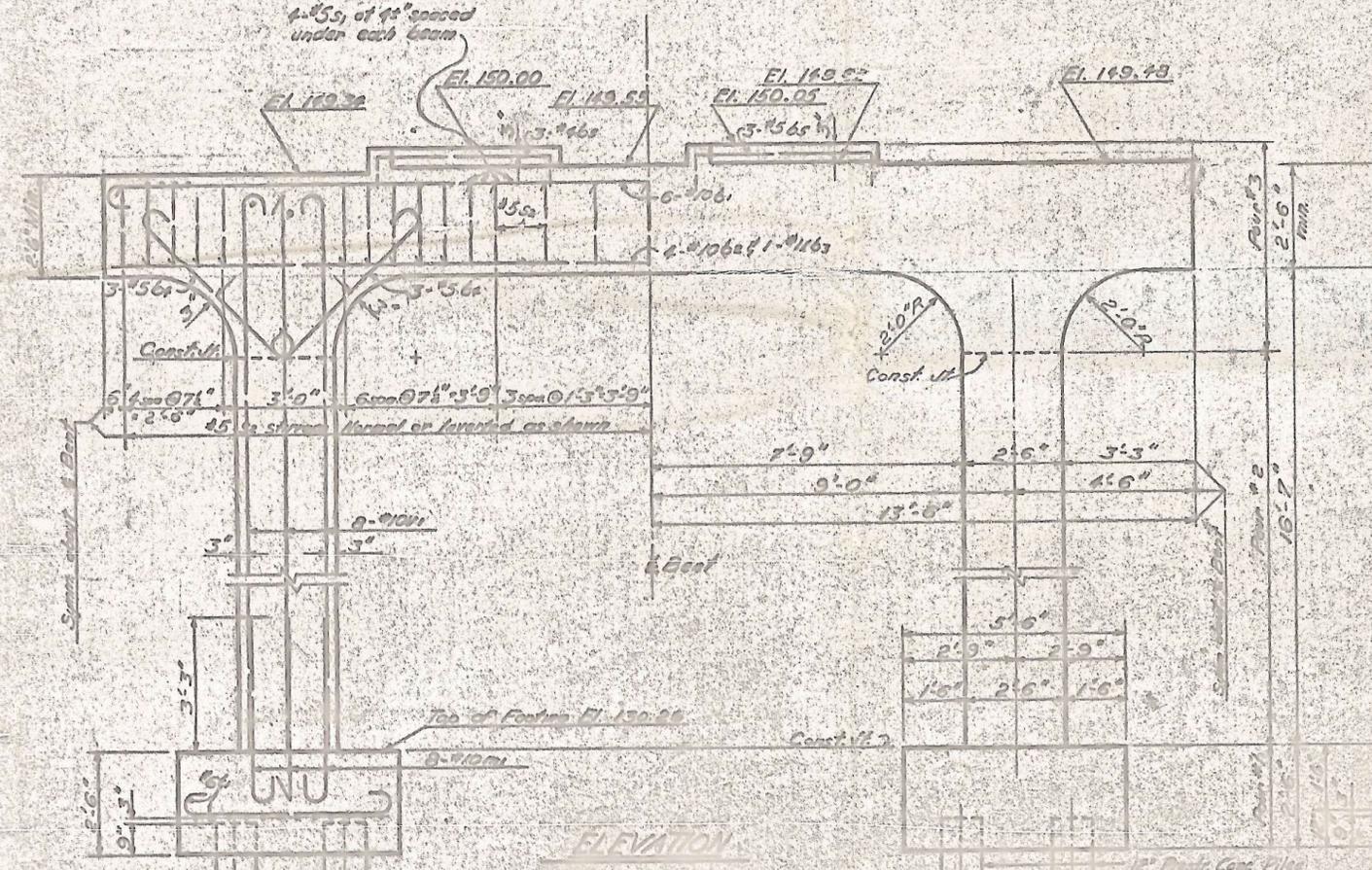
AUGUST 1964

NO.	DATE	BY	REVISION
1			
2			

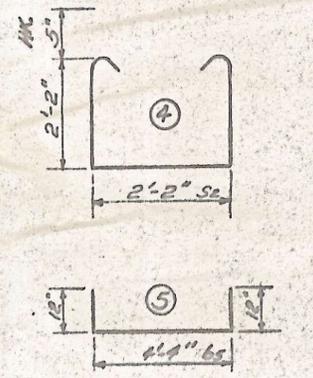


BILL OF MATERIAL FOR ONE BENT

BAR	QTY	SIZE	TYPE	LENGTH	WEIGHT
61	6	#10	1	29'-8"	762
62	4	#10	str.	26'-8"	439
63	1	#11	str.	26'-8"	162
64	12	#5	1	6'-2"	97
65	6	#4	5	6'-4"	83
E1	48	#6	1	6'-4"	688
S1	16	#5	3	3'-0"	59
S2	29	#5	4	7'-4"	222
M1	16	#10	2	6'-0"	413
V1	16	#10	2	20'-0"	1377



Hooks of "V" bars may be turned as necessary for placing reinforcing



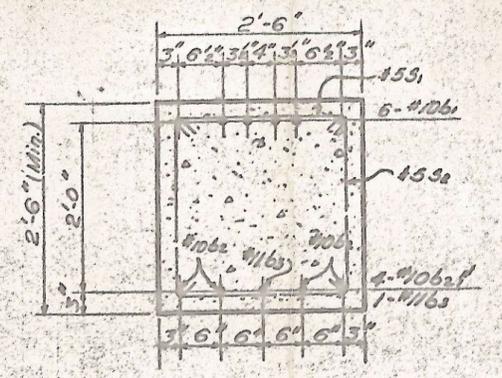
BAR TYPES
 All bar dimensions are cut to fit.

Reinforcing Steel Lbs. = 5.98

Class	Qty	Weight
Class A Concrete	Cu. Yds.	
Form #1	5.2	
Form #2	6.8	
Form #3	6.1	
Total	20.3	



LEFT END VIEW



*NOTE: Concrete displaced by pile heads has been deducted.

PROJECT NO. 2-11612
NASH COUNTY
STATION: 437+67.83 N.B.

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

BENT #3

AUGUST 1954

NO.	BY	CHKD.	DATE
1			5-29
2			
3			

