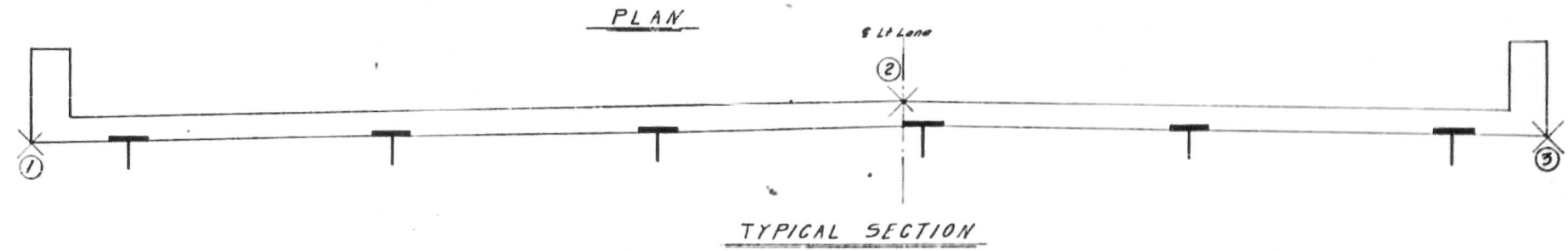
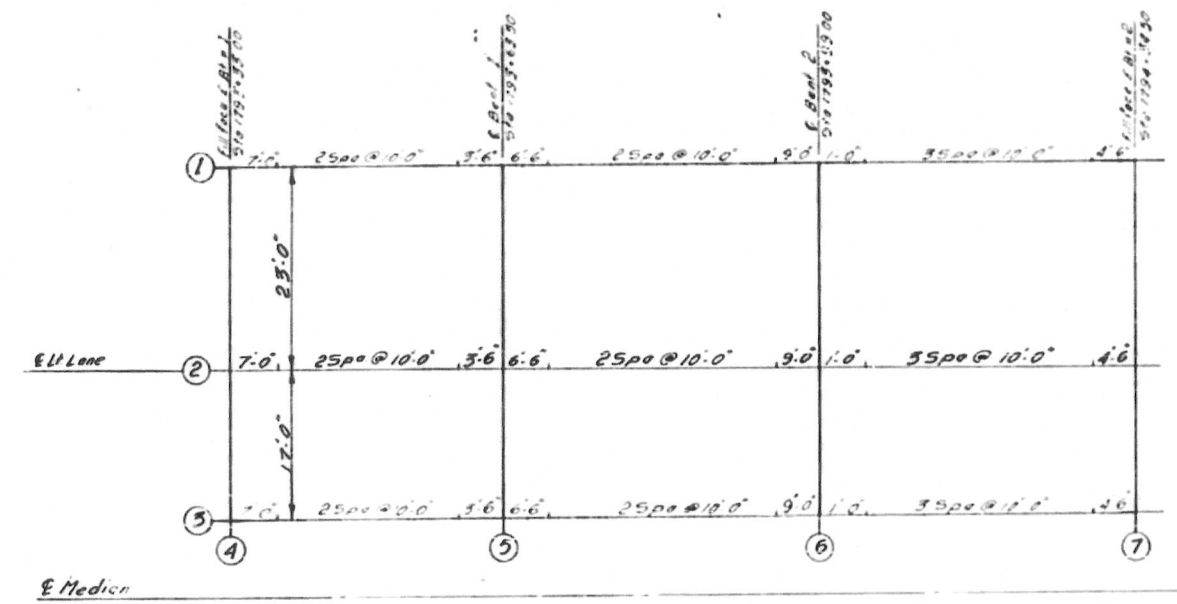


Column (1) Bottom of overhang		Column (2) Eof Roadway		Column (3) Bottom of overhang	
Dist.	Elev.	Dist.	Elev.	Dist.	Elev.
7'-0"	2074125	7'-0"	2075145	7'-0"	2074250
10'-0"	2074480	10'-0"	2075410	10'-0"	2074575
10'-0"	74380	10'-0"	75310	10'-0"	75075
10'-0"	75480	10'-0"	76410	10'-0"	75575
5'-6"	75620	3'-6"	76005	3'-6"	75745
6'-6"	75980	6'-6"	76590	6'-6"	76075
10'-0"	76480	10'-0"	77170	10'-0"	76575
10'-0"	76980	10'-0"	77860	10'-0"	77075
9'-0"	77430	9'-0"	78410	9'-0"	77525
1'-0"	77430	1'-0"	78410	1'-0"	77525
10'-0"	77930	10'-0"	78910	10'-0"	78025
10'-0"	78430	10'-0"	79410	10'-0"	78525
10'-0"	78930	10'-0"	79910	10'-0"	79025
4'-6"	2074200	4'-6"	2075210	4'-6"	2074310

GRADE DATA

P.I. Sta. 1790+00
 P.I. Elev. 2058.190
 Length of Curve 700'
 G1: +0.50% G2: +5.00%

FED. ROAD DIST. NO.	STATE	PROJECT NO.
3	N.C.	8190030
P.A. PROJECT I-26-1(7)1		



HEADERS							
Column 4 Fill Face E.B.1	Column 5 E Bent 1	Column 6 E Bent 2	Column 7 Fill Face E.B.2	Column 8 E Bent 4	Column 9 E Bent 5	Column 10 E Bent 6	Column 11 Fill Face E.B.2
Dist. Elev.	Dist. Elev.	Dist. Elev.	Dist. Elev.	Dist. Elev.	Dist. Elev.	Dist. Elev.	Dist. Elev.
074 800	2076322	2076322	79872				
836	353	353	903				
867	384	384	934				
899	415	415	965				
930	447	447	997				
961	478	478	1028				
992	509	509	1059				
15085	540	540	1090				
055	571	571	1121				
086	603	603	1152				
117	634	634	1183				
148	665	665	1214				
179	696	696	1245				
210	727	727	1276				
241	758	758	1307				
272	789	789	1338				
303	820	820	1369				
334	851	851	1400				
365	882	882	1431				
396	913	913	1462				
427	944	944	1493				
458	975	975	1524				
489	1006	1006	1555				
520	1037	1037	1586				
551	1068	1068	1617				
582	1099	1099	1648				

SUPERIMPOSED DEAD LOAD DEFLECTION (inches)

SPAN	SPAN	SPAN	SPAN
2	15	10	10

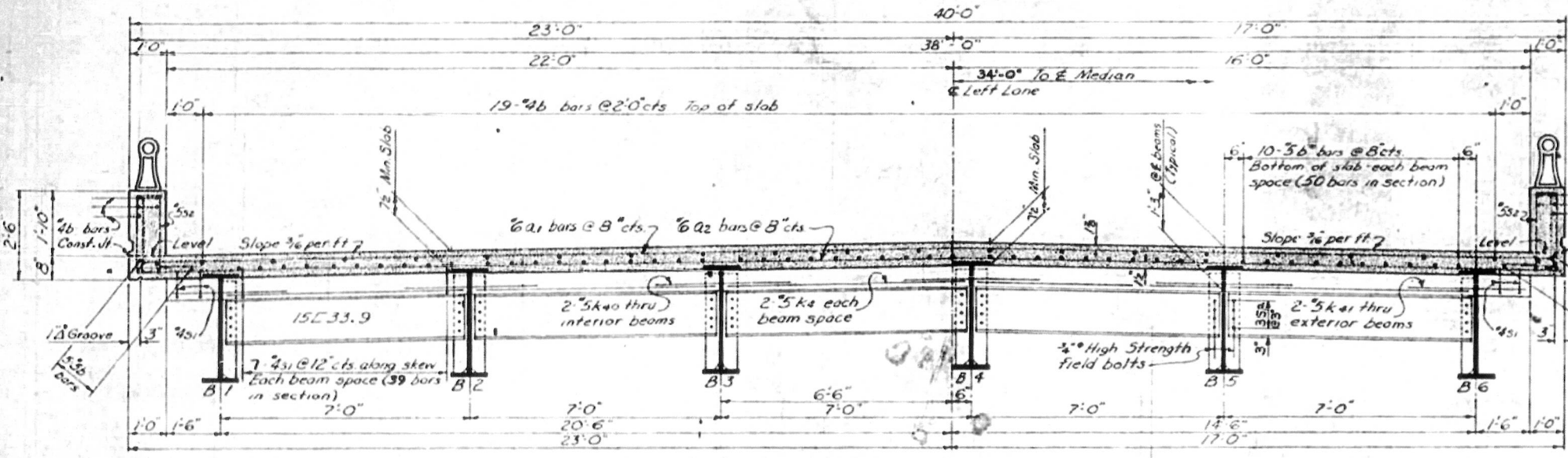
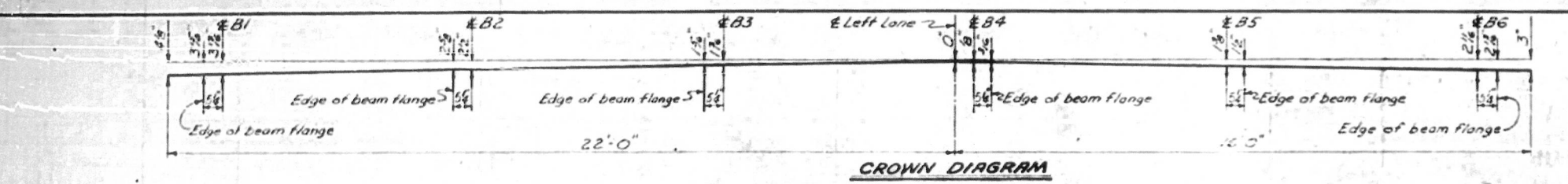
NOTE For Defl see Struct Steel Sheet

PROJECT No. 8190030/
 BUNCOMBE COUNTY
 STATION 1793+80
 Left Lane

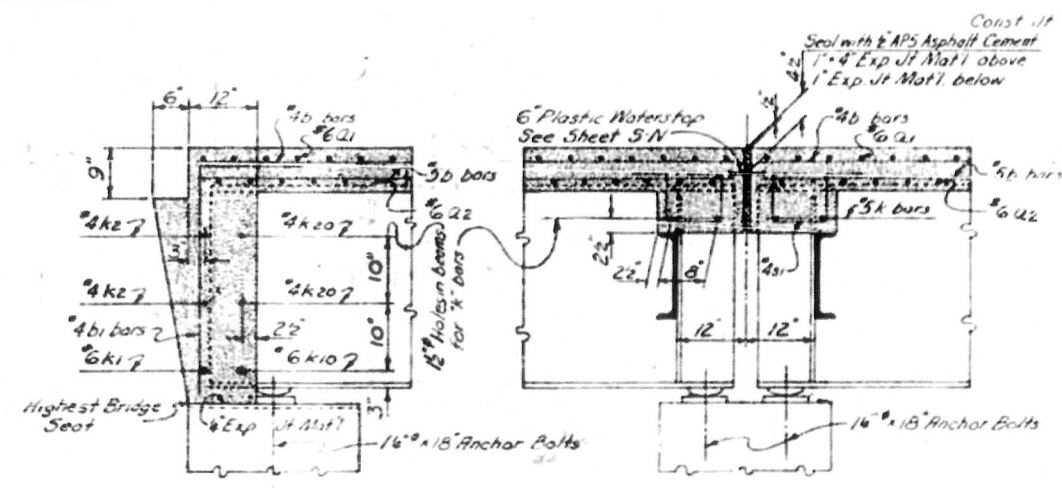
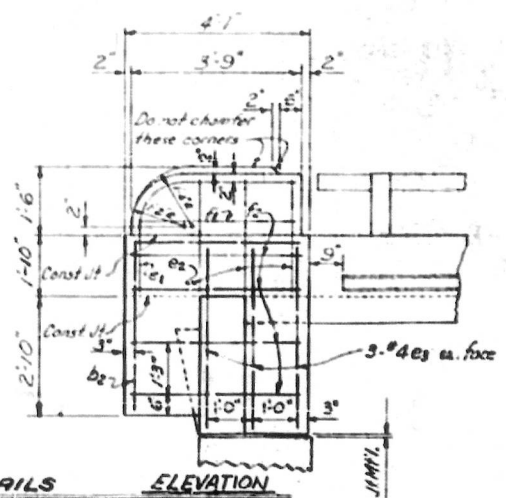
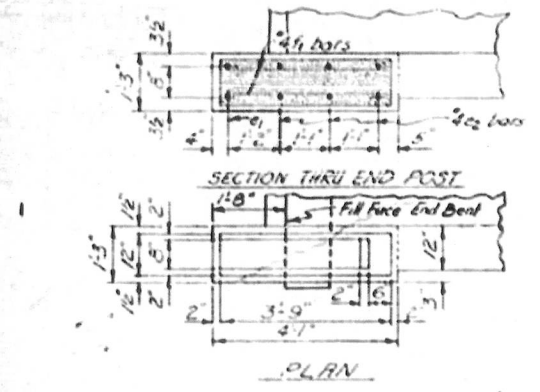
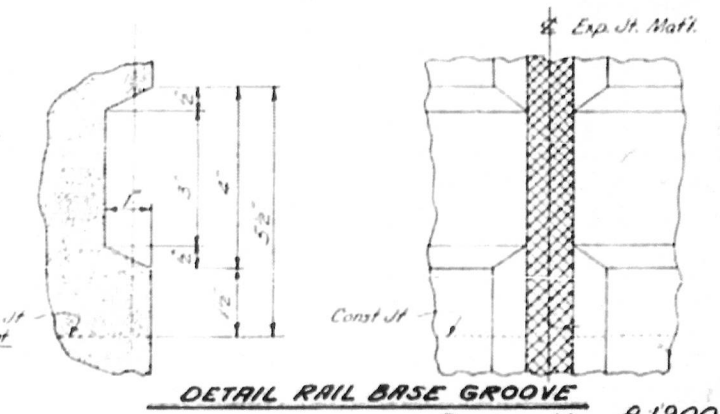
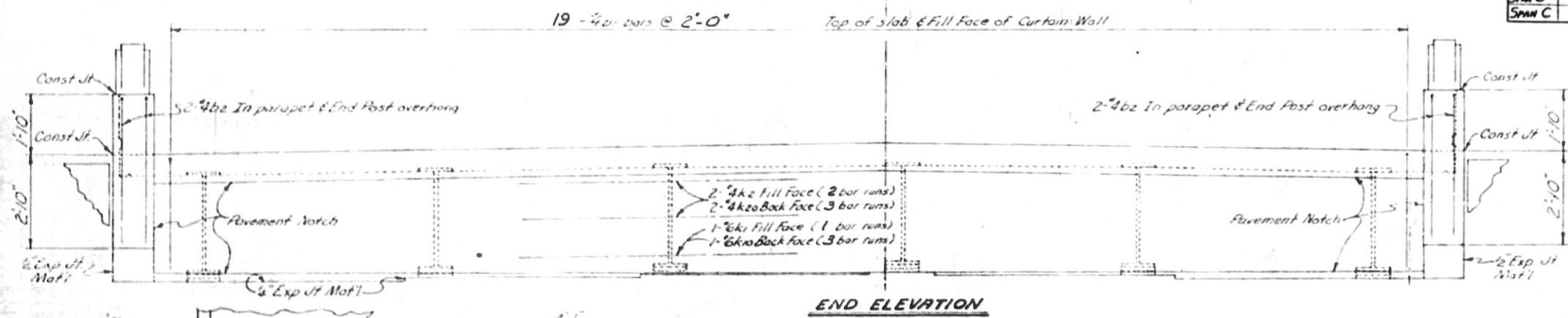
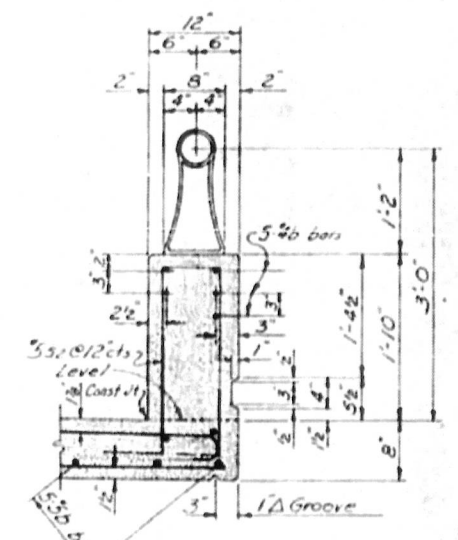
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 HALES
 ELEVATIONS
 FOR
 SETTING UP
 FORMS AND SCREEDS
 August 1962

NOTES

Assumed Live Load ----- H20-S16(44) or Alternate Loading
 Reinforcing Steel in Tension ----- 20,000 Lbs. per sq. in.
 Concrete in Compression ----- 1,100 Lbs. per sq. in.
 Stress in Extreme Fiber of Structural Steel ----- 20,000 Lbs. per sq. in.
 For other design data and general notes see sheet S-N.
 For bars indicated and no bar mark shown, see concrete plan for the different spans.
 Expansion joints kept free of concrete and sealed with APS asphalt cement. See Specifications.



	Above Top of Slab	Below Top of Slab	Totals
Span A	4.8	35.2	40.0
Span B	4.8	35.8	40.6
Span C	5.5	40.4	45.9



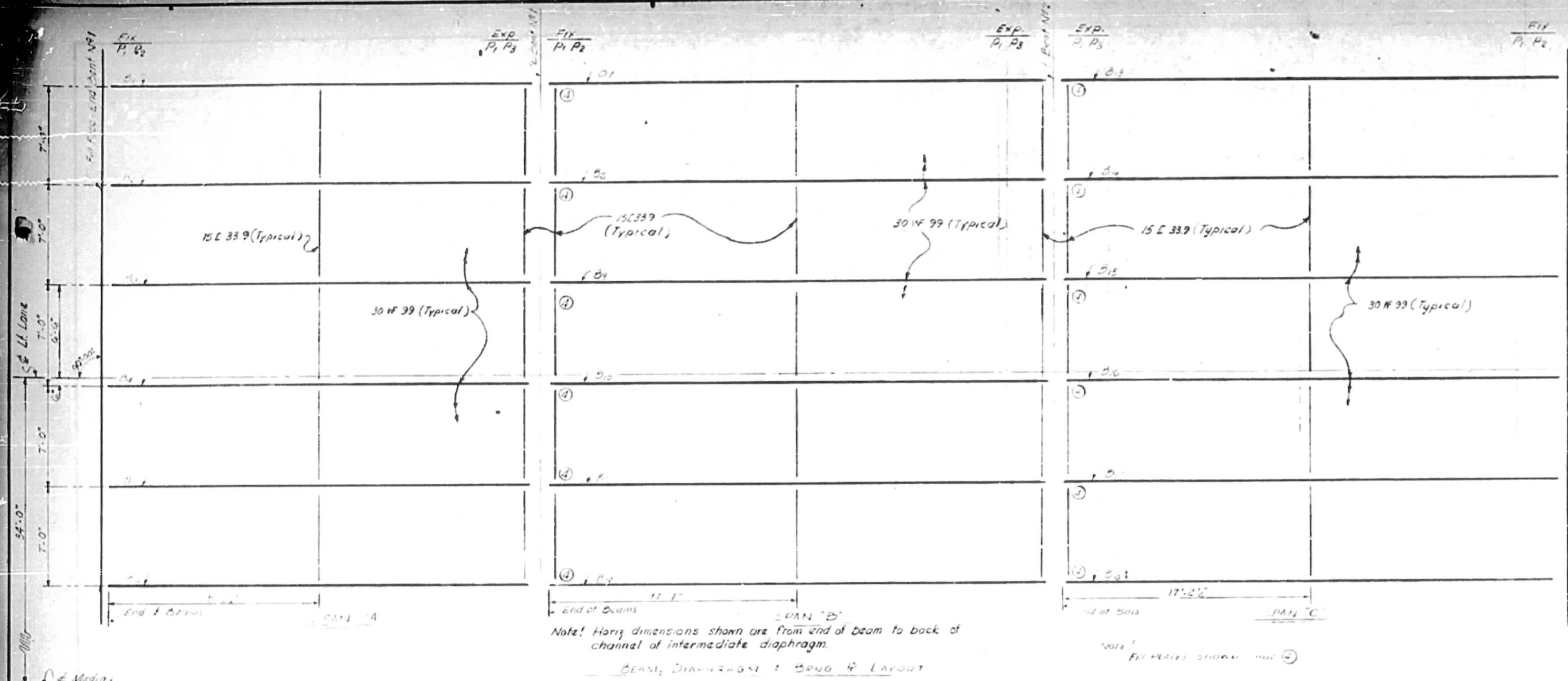
PROJECT No. 8.1900301
 BUNCOMBE COUNTY
 STATION: 1793 + 80
 LEFT LANE

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH
 STANDARD TYPICAL SECTIONS
 FOR INTERSTATE BRIDGES
 38' ROADWAY ~
 6-STEEL BEAMS ~ H20-S16 I.L.
 1-BAR METAL RAIL ~ LEFT LANE
 MARCH 1964

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

SHEET NO. 5-70
 TOTAL SHEETS 111

ASSEMBLED BY Gerry Page DATE 7-31-64
 CHECKED BY J.E.P. DATE 8-13-64
 DRAWN BY Carl J. Roper DATE March 3, 1964
 SPEC. IRL
 STANDARD



Note! Horiz dimensions shown are from end of beam to back of channel of intermediate diaphragm.

Note! Fillet radii shown.

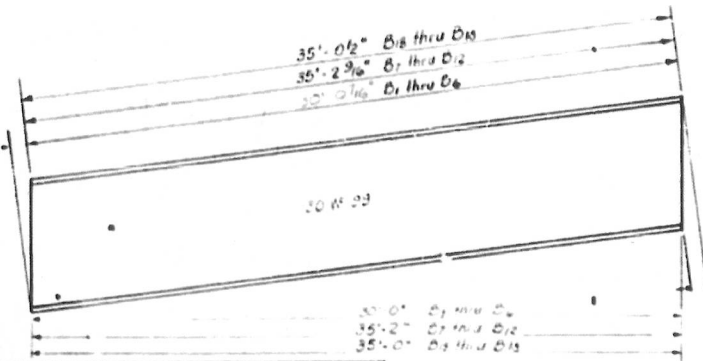
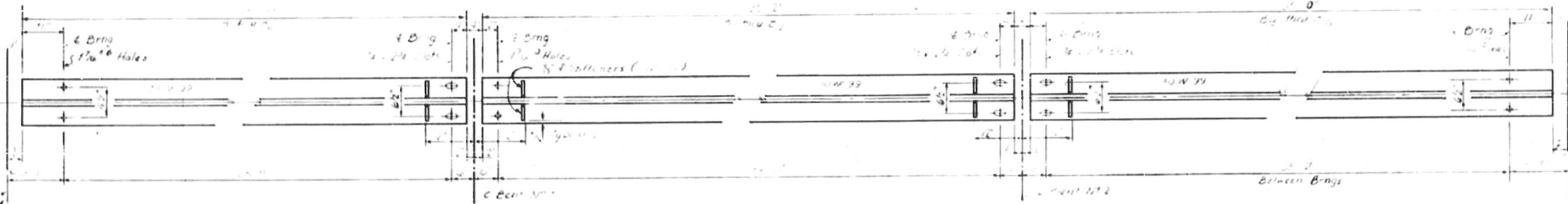
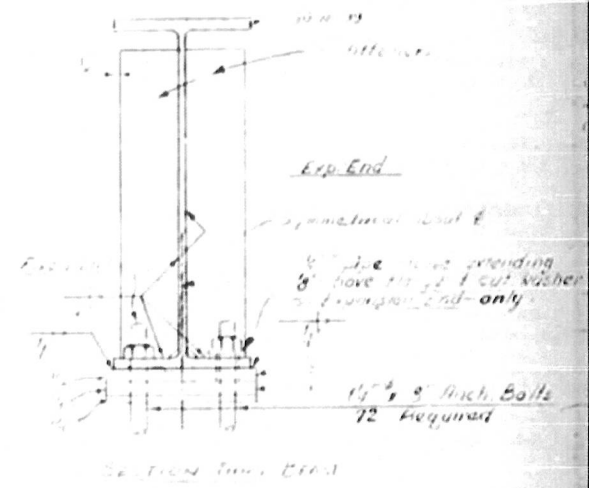
BEAM, DIAPHRAGM & BRG LAYOUT

Note! No camber other than natural mill camber required for beams.

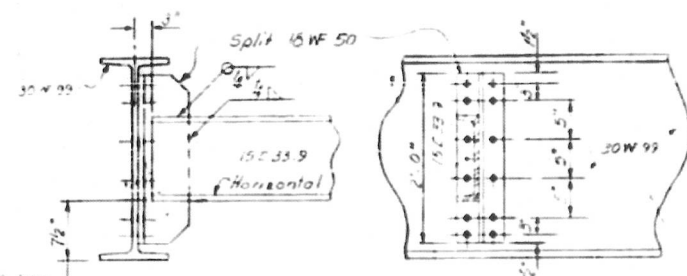
DEFLECTION TABLE

	SPAN "A"		SPAN "B"		SPAN "C"	
	L_1	L_2	L_1	L_2	L_1	L_2
Deflection at support	0	0	0	0	0	0
Deflection at midspan	0	0	0	0	0	0
Max. Deflection	0	0	0	0	0	0
Adjusted Deflection	0	0	0	0	0	0

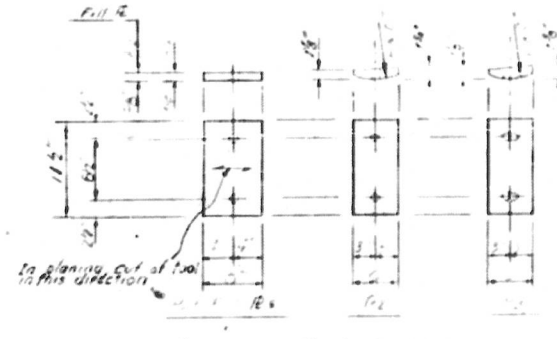
Note!
 Field connections between beams to be welded with 1/2" x 1/4" fillet weld. See Specs & Special Prov. for beams to be welded. Use A36 grade structural steel. See Sheet S/N.
 All bolts on outside of exterior beams and end bents. All bolts to be parallel to beam axis.
 All bolts in diaphragms @ bents see Section A-A for details on 15L 33.9 SECTION SHEET.
 For details in beam web for "k" bars see SECTION A-A for details on 15L 33.9 SECTION SHEET.



BOTTOM FLANGE DETAIL



INTERMEDIATE DIAPHRAGM DETAILS



BEARING P. DETAILS

PROJECT NO. 8190301
 BUNN COUNTY
 STATION: 103+50
 Lt. Lane

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

STRUCTURAL STEEL DETAILS
 Lt. Lane

JULY 1965

NO.	BY	DATE	NO.	BY	DATE
1			1		5-72
2			2		

SPECIAL
 DESIGNED BY: G.O. Moss, Jr.
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 7-7-64

NOTE:
 Aluminum posts are to be furnished with test coupons attached and to be in accordance with the requirements of AASHTO Specification M 193-60.

At the Contractor's option metal rail may be either Aluminum ~~Galvanized Steel~~ in accordance with the requirements of the general notes and the following specifications for the alternate materials; ~~however~~, the Contractor ~~will be~~ required to use the same rail material on all structures on the project for which metal rail is designated.

GENERAL NOTES

Unless noted on the plans, maximum length of rail section ~~to be~~ two panels plus "stick thru."

End of rail ~~to~~ clear face of concrete End Post by 1/2".

For double panel runs of rail, set screws ~~shall be~~ set tight at center post and snug at ends to allow for expansion.

For single panel runs, set screw ~~shall be~~ tight at one end and snug at other end.

3/8" Anchor bolts - hex nuts and washers ~~shall be~~ steel galvanized in accordance with ASTM A-153 and painted with 2 coats of aluminum paint after erection.

Cast posts ~~to be~~ as shown or an approved equal.

Certified Mill reports ~~are~~ required for rails and posts. Shop inspection ~~is~~ not required.

Metal Rail Posts ~~shall be~~ set normal to curb grade.

Method of measurement for Metal Rails:
 Unless otherwise stated, the length of Metal rails ~~to be~~ paid for ~~shall be~~ the continuous horizontal length measured from inside to inside of concrete posts, but without deductions for spaces between rail sections.

Concrete and reinforcing steel for End Post are included with Superstructure or End Bents.

ALUMINUM RAILS

Aluminum alloys are ~~to be~~ as follows:

Cast Rail Posts	A356 - T6
Round Tubular Rail	6061 - T6 or 6062 - T6
Set Screws	2024 - T4
Closure Plates	6061 - T6 or 6062 - T6

Round Tubular Rails are ~~to be~~ of 4" O.D. with 3/16" minimum wall thickness.

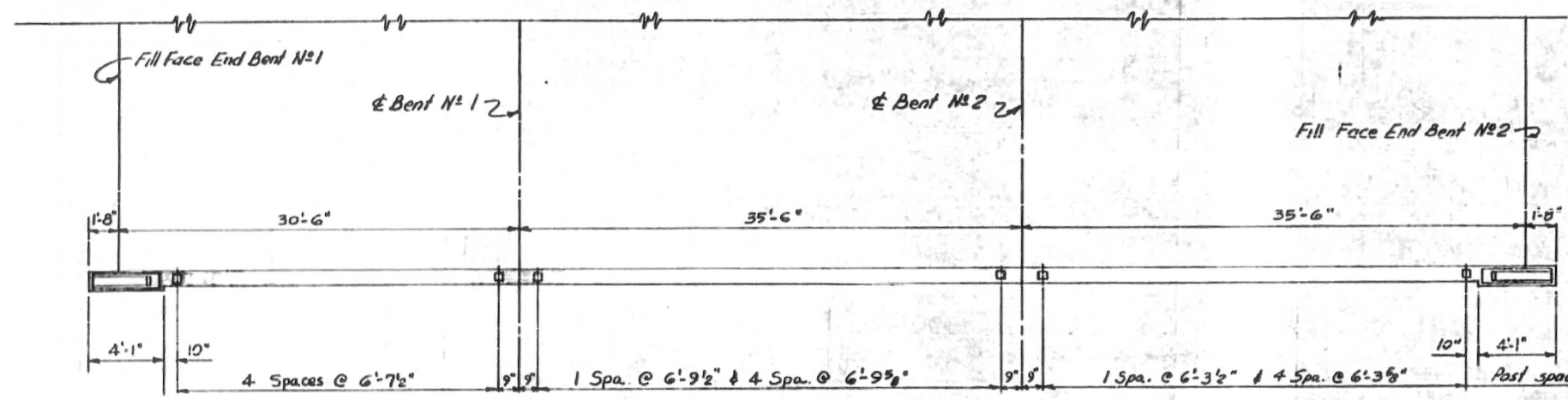
The base of rail posts, or any other aluminum surface in contact with concrete ~~shall be~~ thoroughly coated with an aluminum impregnated caulking compound of approved quality.

GALVANIZED STEEL RAILS

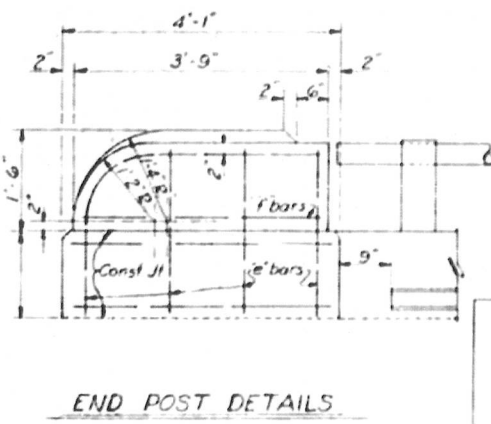
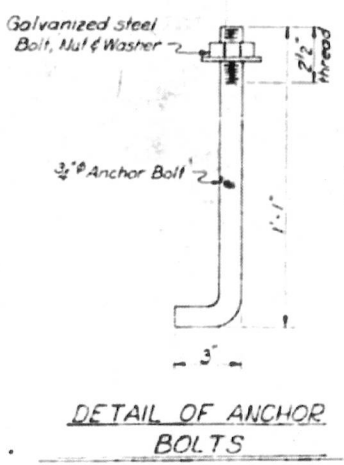
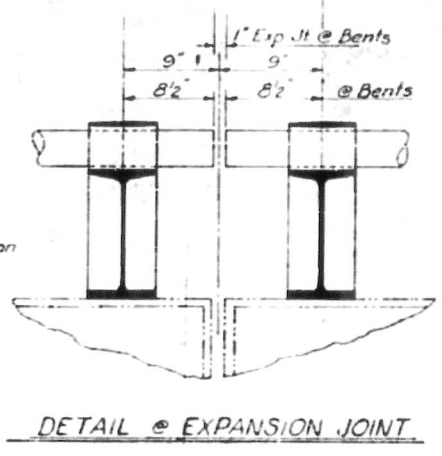
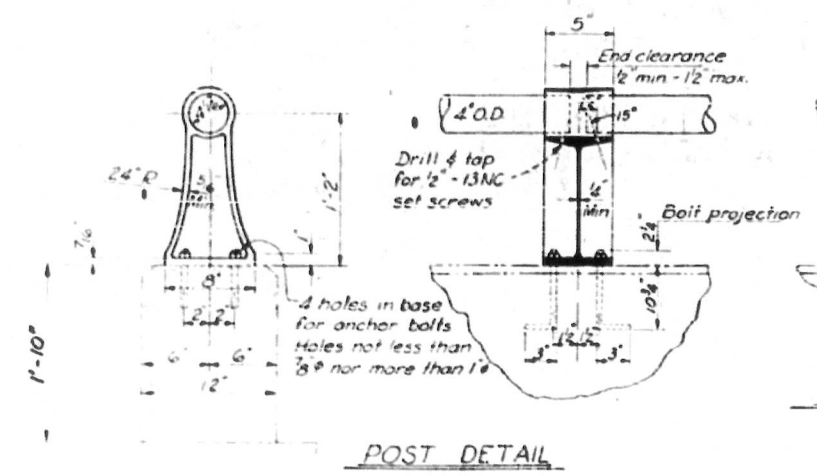
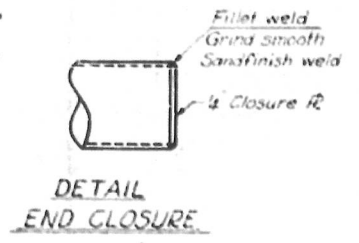
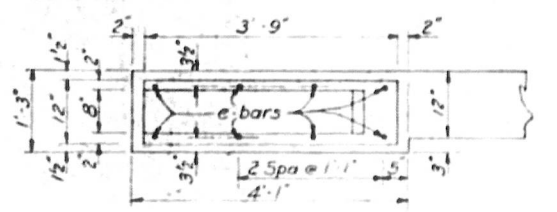
Material and galvanizing ~~are to~~ conform to the following specifications:

Cast Rail Post	Malleable cast iron, ASTM A47 Grade 35018, Galvanized to ASTM A123, or Cast Steel, AASHTO M 192-60 Class 70, Galvanized to ASTM A-123
4" O.D. Rail	Standard 3/8" Galvanized Steel Pipe, ASTM A 53
Closure Plates & Shims	Steel, ASTM A-245 Grade C, Galvanized to ASTM A-123
Set Screws	Standard Steel Cap Screws, Galvanized to ASTM A153

The cut ends of galvanized pipe railing, the end closure plate weld after grinding smooth and areas adjacent to the weld where spatter coating has been burned by welding shall be thoroughly cleaned by wire brushing to remove all traces of welding flux and loose or cracked spelter, after which these cleaned areas shall be given two coats of Zinc paint meeting the requirements of Federal Specification MIL-P-24915 (USAF) Type 1.



PLAN - LEFT LANE BRIDGE
 Pay length 194.0 L.F.



PROJECT NO. 8.1900301
BUNCOMBE COUNTY
STATION: 1793+80
LEFT LANE

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

STANDARD 1 BAR METAL RAIL

October 1962

DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
CONTRACT NO.	DATE

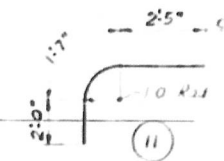
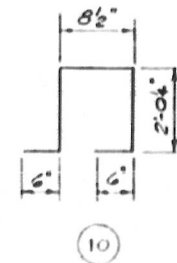
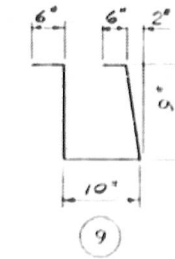
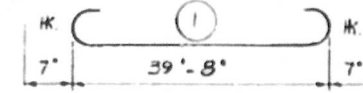
Revision 1 Revised to add note regarding AASHTO Spec M 193-60 5.3.4.3 By JLB - 28P

BILL OF MATERIAL FOR LEFT LANE BRIDGE

Bar	Number Each Span					Tot. No.	Size	Type	Length	Weight	Bar	Number Each Span			Tot. No.	Size	Type	Length	Weight	
	A	B	C	D	E							A	B	C						
											Q1	46	53	53		152	#6	I	40'-10"	9322
											Q2	45	52	52		149	#6	Str.	39'-8"	8577
											b1	19	-	19		38	#4	7	5'-5"	137
											b2	4	-	4		8	#4	7	8'-1"	43
											b3	29	-	-		29	#4	Str.	30'-0"	581
											b4	60	-	-		60	#5	Str.	30'-0"	1877
											b5	-	58	58		116	#4	Str.	18'-4"	1421
											b6	-	60	60		120	#5	Str.	35'-0"	4381
											e1	4	-	4		8	#4	11	6'-0"	32
											e2	12	-	12		24	#4	Str.	3'-0"	48
											e3	12	-	12		24	#4	Str.	4'-6"	72
											f1	4	-	4		8	#4	Str.	3'-5"	18
											f2	16	-	16		32	#4	Str.	3'-9"	80
											k1	1	-	1		2	#6	Str.	39'-8"	119
											k10	3	-	3		6	#6	Str.	14'-8"	132
											k2	4	-	4		8	#4	Str.	20'-7"	110
											k20	6	-	6		12	#4	Str.	14'-2"	114
											k4	10	20	10		40	#5	Str.	6'-8"	278
											k40	8	16	8		32	#5	Str.	4'-0"	134
											k41	4	8	4		16	#5	Str.	3'-4"	56
											S1	39	78	39		156	#4	9	3'-4"	347
											S2	62	72	72		206	#5	10	5'-9"	1235

BAR TYPES

Bar dimensions are out to out



PROJECT NO. 8.190030 /
BUNCOMBE COUNTY
STATION: 1793 + 80
LEFT LANE

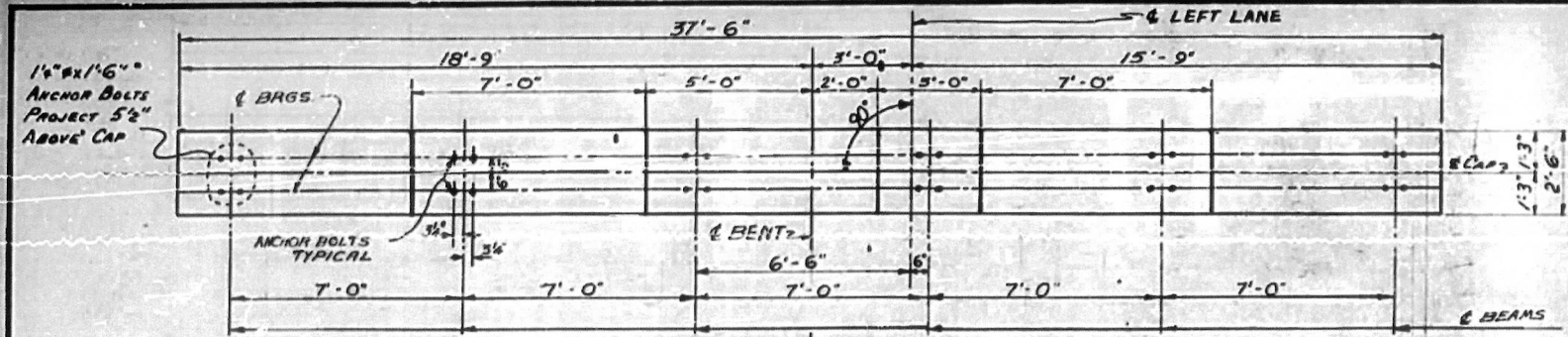
SUMMARY OF QUANTITIES

Reinforcing Steel	29,414 Lbs
Class A Concrete	126.5 Cu Yds
Structural Steel	Approx. 72,500 lbs
I-Bar Metal Rail	194.0 Lin Ft.

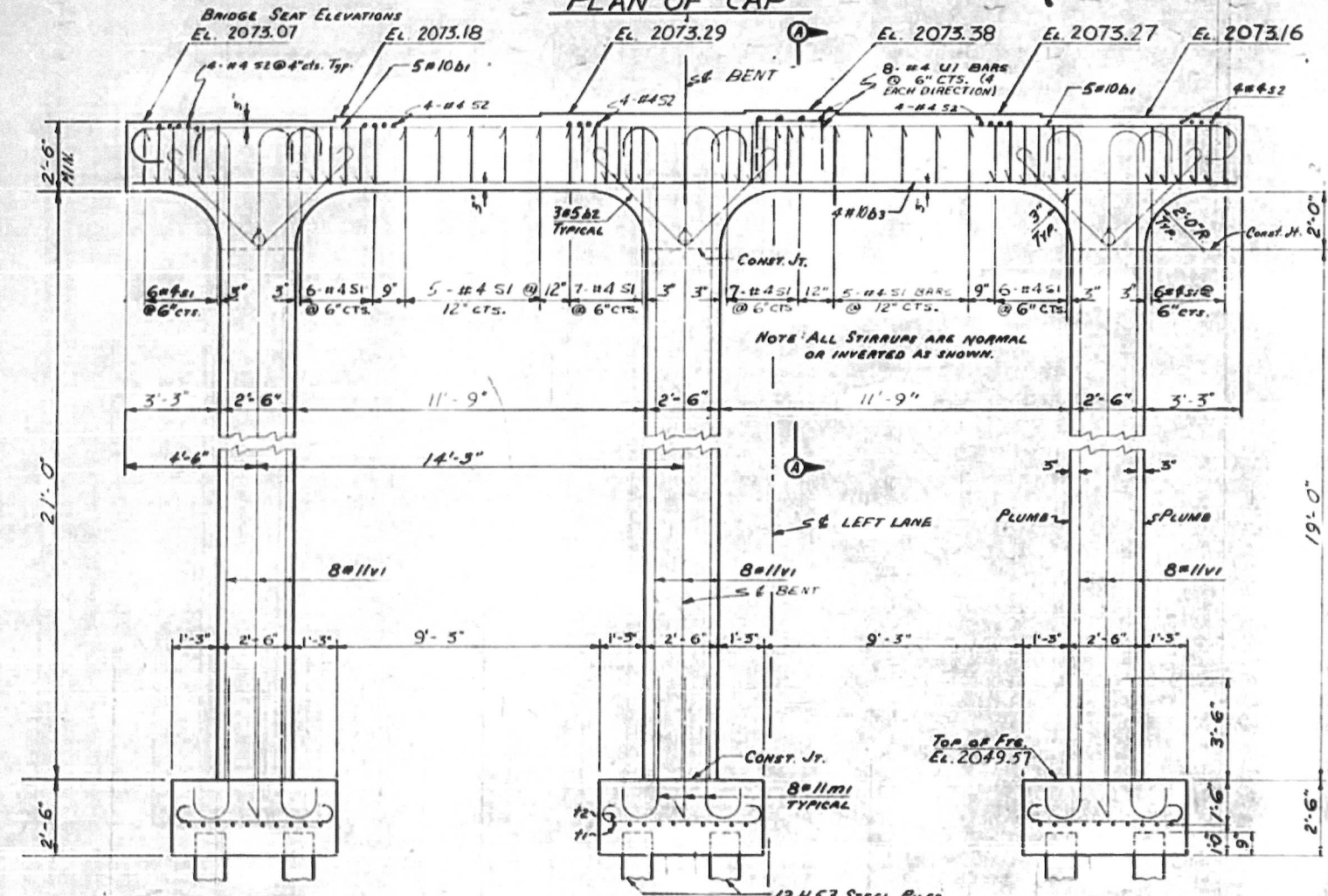
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
SUPERSTRUCTURE BILL OF
MATERIAL & BAR TYPES
LEFT LANE
AUGUST, 1964

DRAWN BY Gerry Page DATE 8-4-64
CHECKED BY C. B. Villa DATE 8-13-64

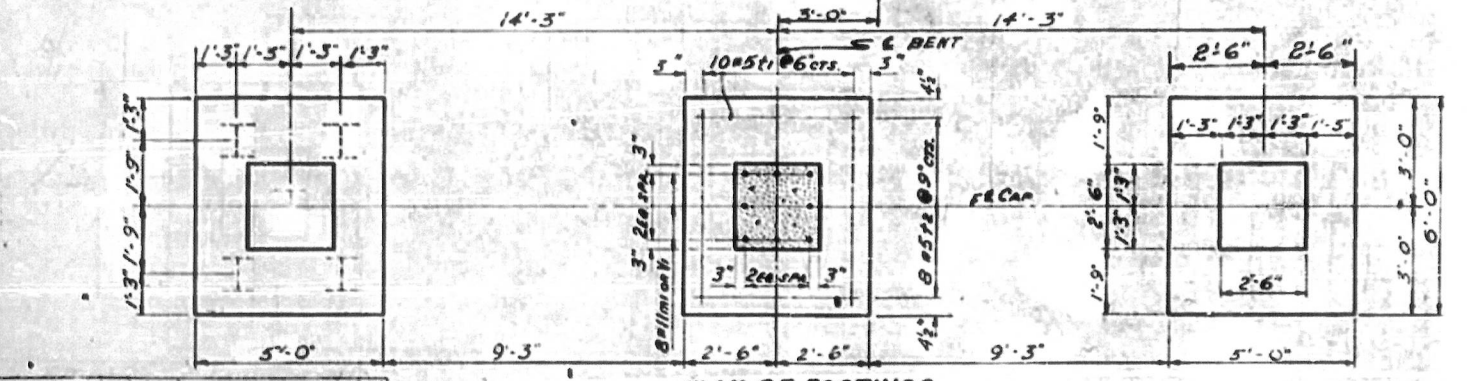
5-74 5-36
187 HT



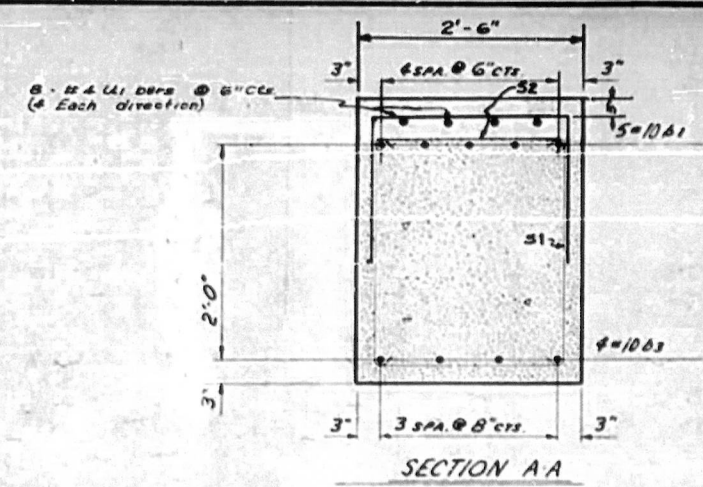
PLAN OF CAP



ELEVATION

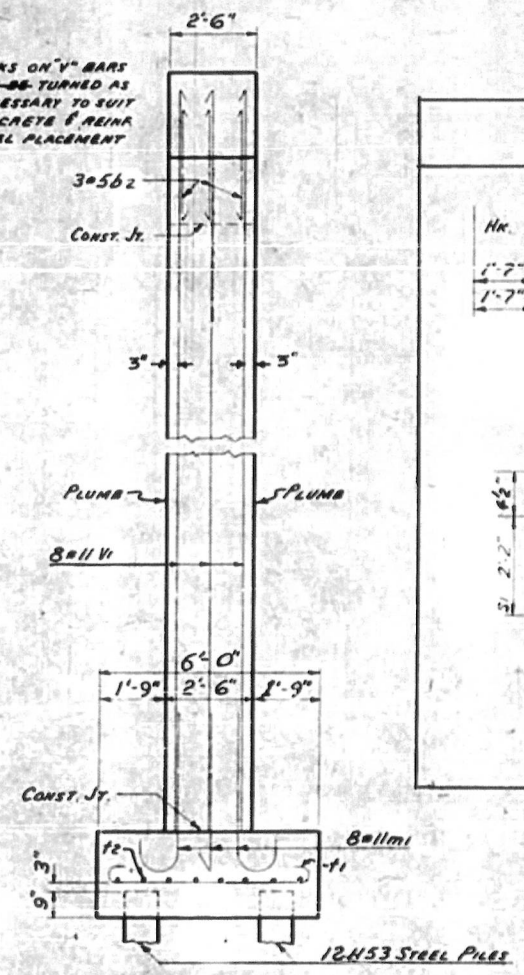


PLAN OF FOOTINGS



SECTION A-A

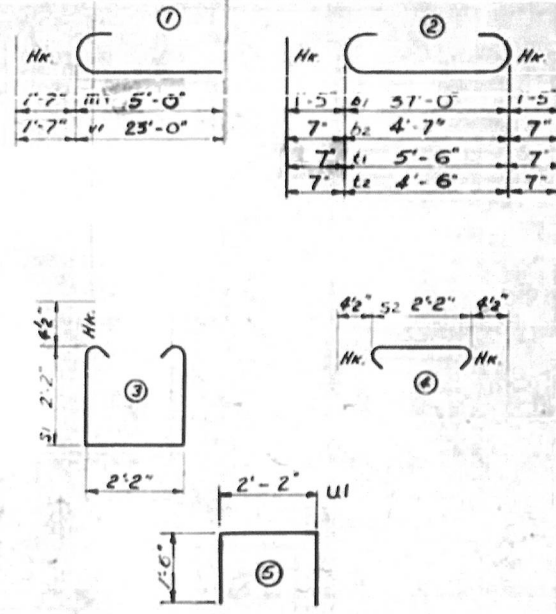
HOOKS ON 'V' BARS
 MUST BE TURNED AS
 NECESSARY TO SUIT
 CONCRETE REINFORCING
 STEEL PLACEMENT



END ELEVATION

BAR DETAILS

ALL BAR DIMENSIONS ARE OUT TO OUT.



NOTE:
 Piles shall be driven to a
 minimum bearing capacity of 30
 tons each.
 For Pile Splice Detail see Piers 245
 @ Sta. 1017+53.

BILL OF MATERIAL

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
61	5	#10	2	39'-10" 857
62	18	#5	2	5'-9" 108
63	4	#10	5	37'-0" 637
64	24	#11	1	6'-7" 838
65	48	#6	3	7'-3" 232
66	20	#4	4	2'-11" 39
67	8	#4	5	5'-2" 28
68	30	#5	2	6'-8" 209
69	24	#5	2	5'-8" 142
70	24	#11	1	24'-7" 3155

REINFORCING STEEL, LBS 6225
 CLASS 'A' CONCRETE, CU YDS. 32.6
 12 H53 STEEL PILES, No. 12
 12 H53 STEEL PILES LIN. FT. 240
 271.5

PROJECT NO. 8.1900301
 BUNCOMBE COUNTY
 STATION: 1793+80

LEFT LANE

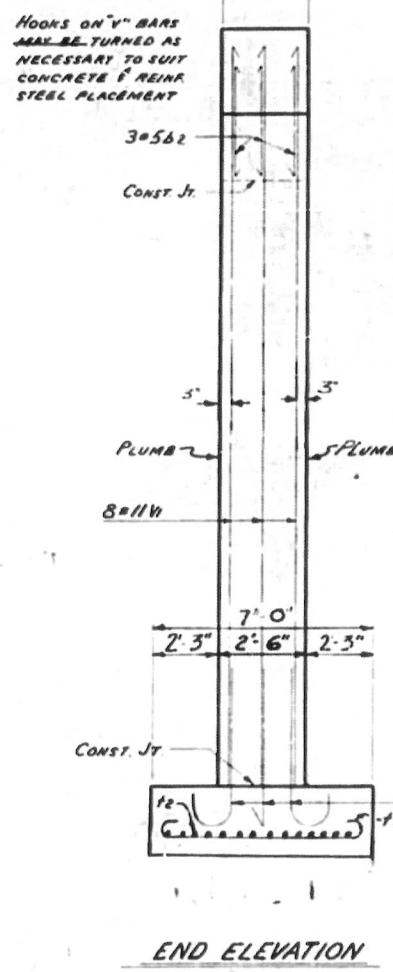
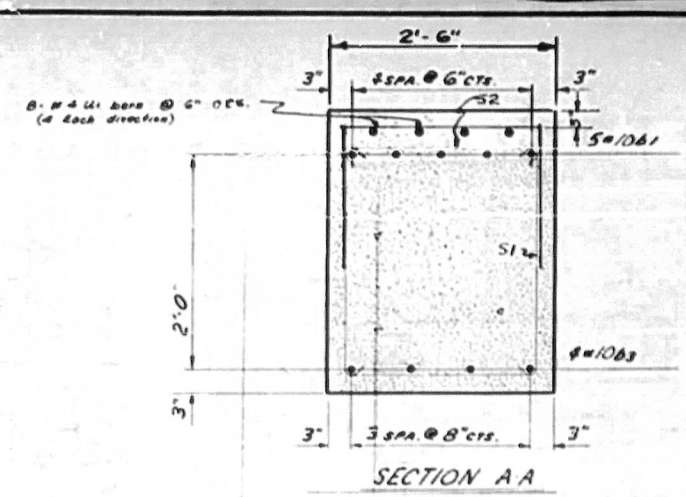
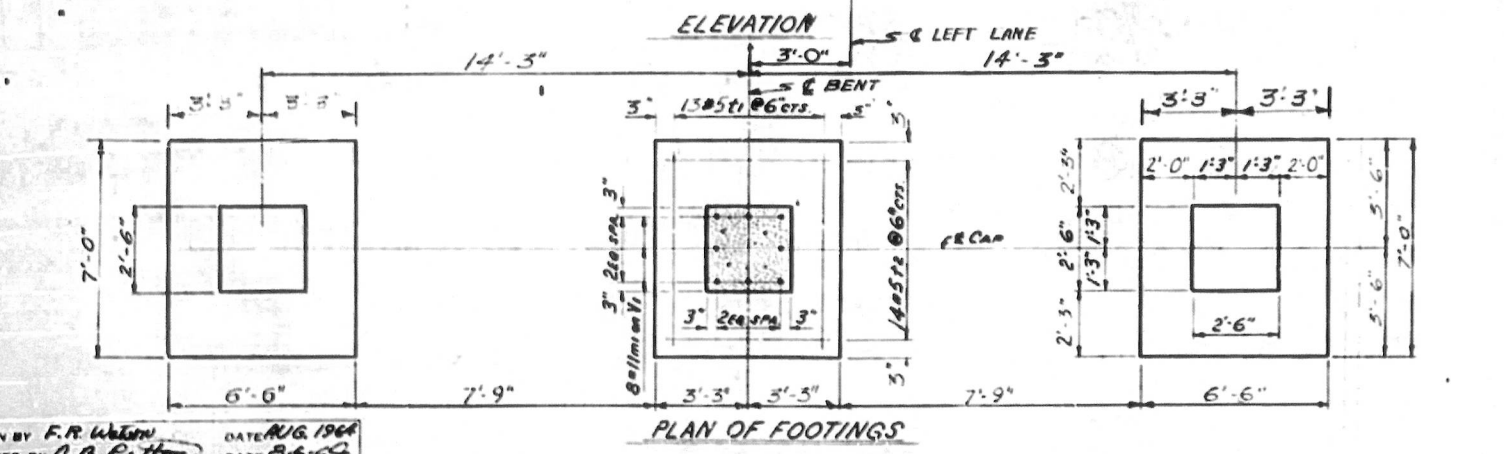
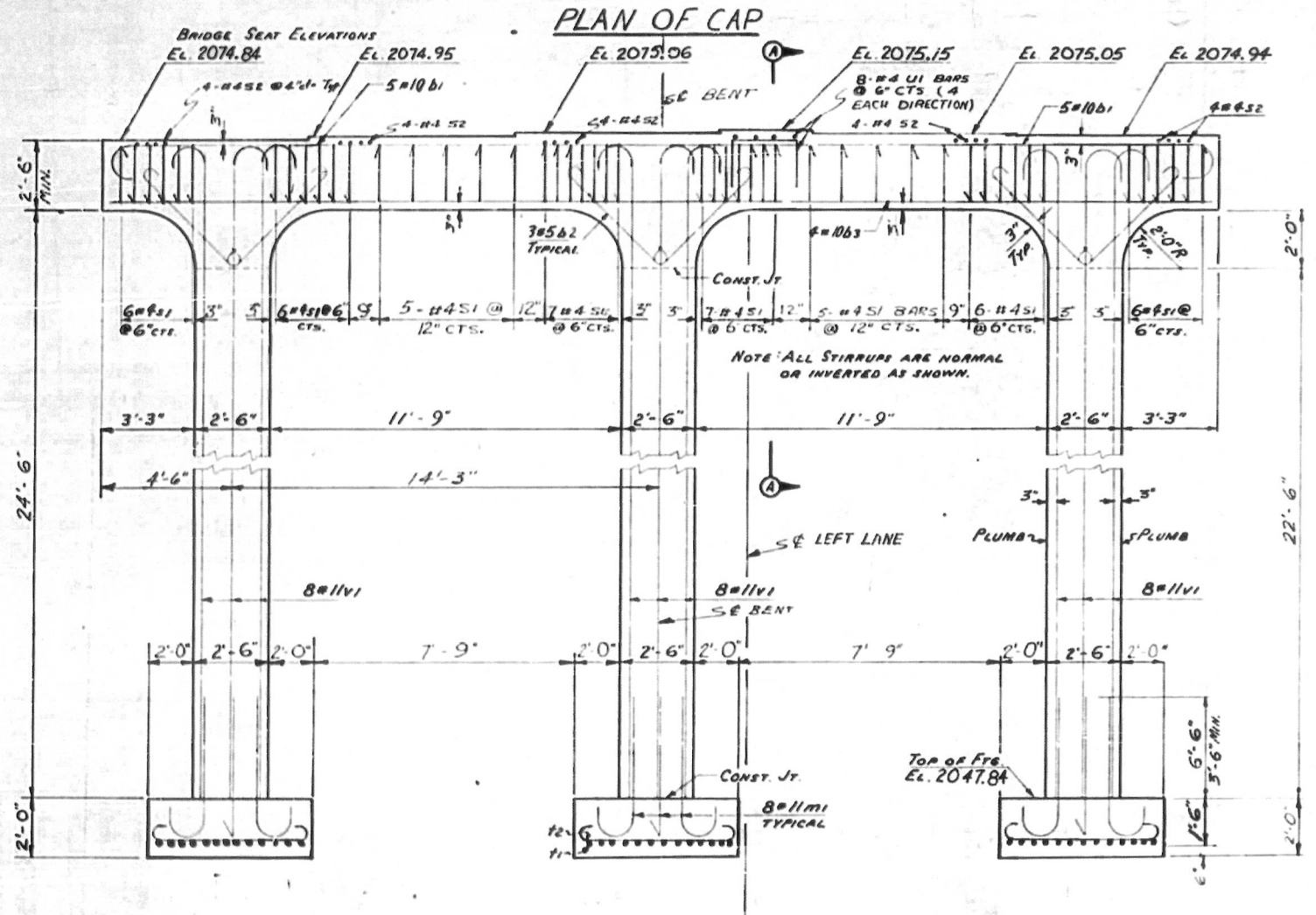
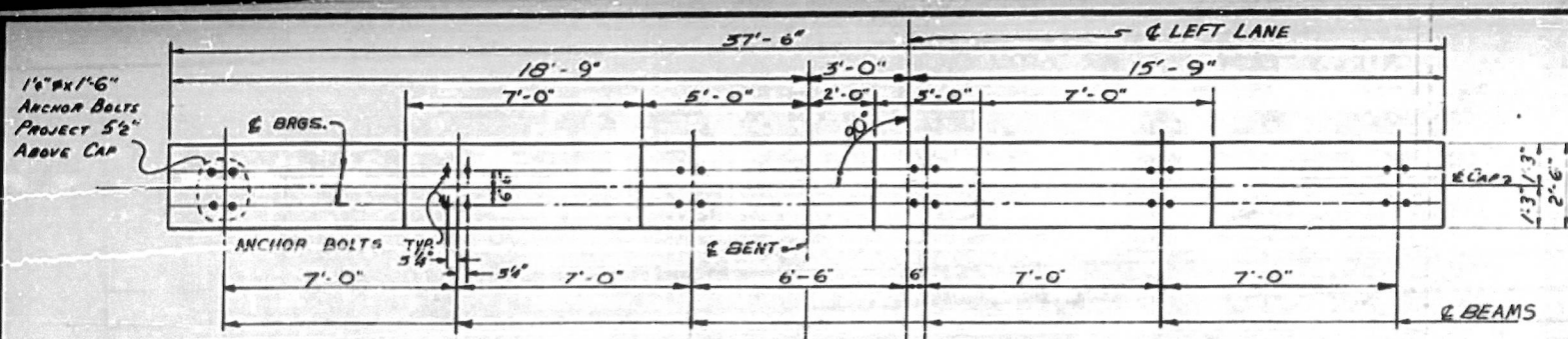
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

SUBSTRUCTURE
 INTERIOR BENT NO. 1

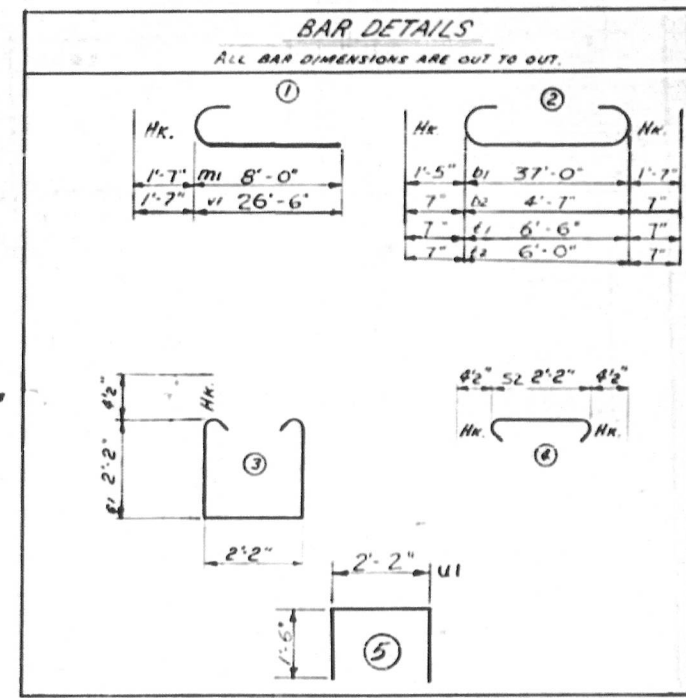
JULY, 1964

DRAWN BY J.R. Wilson
 CHECKED BY C.R. Feltner
 DATE 8-6-64

REV.	DATE	BY	REASON
1	5-76	JRW	
2	187	JRW	



DIVISION OF CONCRETE	
Pour No.	Cu. Yds.
1. FOOTINGS	10.1
2. COLUMNS	15.7
3. CAP	11.0
TOTAL	36.8



BILL OF MATERIAL				
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
b1	5	#10	2 39'-10"	857
b2	18	#5	2 5'-9"	108
b3	4	#10	37'-0"	657
m1	24	#11	1 9'-7"	1222
s1	48	#4	3 7'-3"	232
s2	20	#4	4 2'-11"	39
u1	8	#4	5 5'-2"	28
v1	39	#5	2 7'-8"	312
v2	42	#5	2 7'-2"	314
w1	24	#11	1 28'-1"	3581

REINFORCING STEEL, LBS 7530
CLASS "A" CONCRETE, Cu. Yds. 368

NOTE:
Computed Foundation load equals
3 Cons per square foot.

PROJECT NO. 81900301
BUNCOMBE COUNTY
STATION: 1795+80

LEFT LANE
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH
SUBSTRUCTURE
INTERIOR BENT NO. 2
JULY, 1964

DRAWN BY F.R. Wilson DATE AUG. 1964
CHECKED BY C.B. Patton DATE 8-6-64

