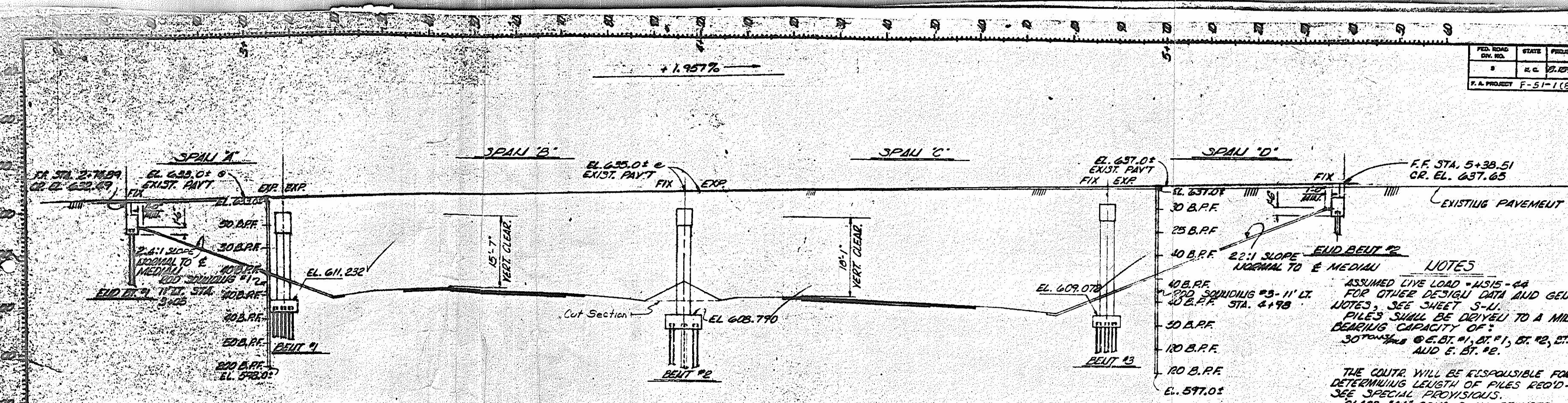


FED. ROAD DIST. NO.	STATE	PROJECT NO.
8	N.C.	1592802
F.A. PROJECT F-51-1(8)		

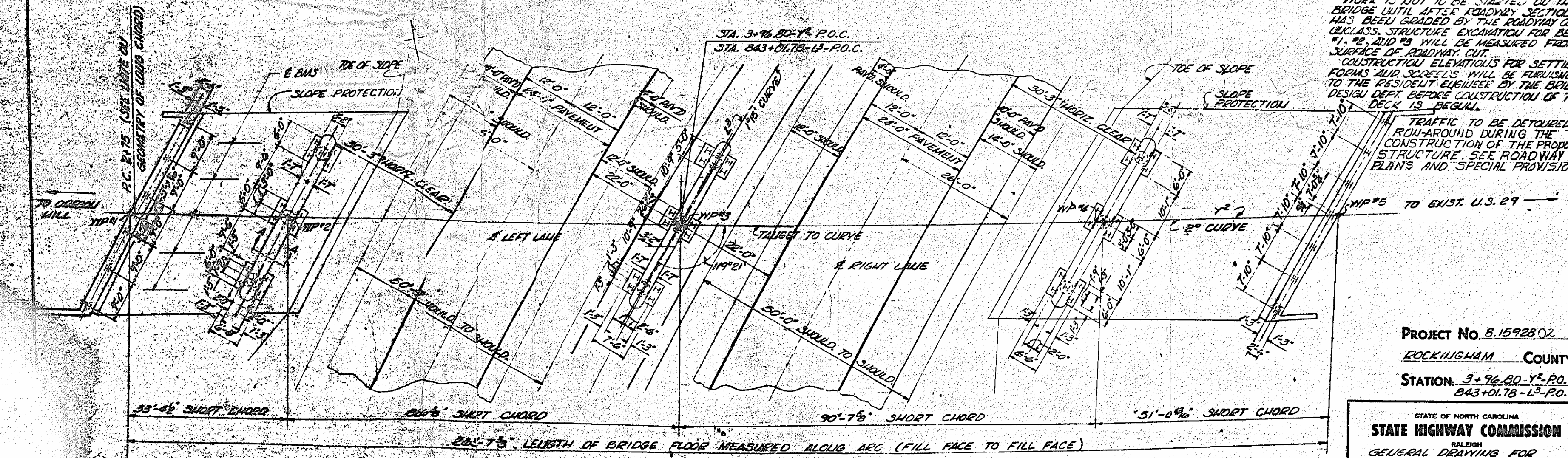


SECTION ALONG E BRIDGE
(BELTS ALONG SECTION A-A)

NOTES

ASSUMED LIVE LOAD = MS15-64
FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET S-11.
PILES SHALL BE DRIVEN TO A MIN. BEARING CAPACITY OF 30 TONS @ C.B.T. #1, #2, #3, AND E. BT. #2.

THE CONTR. WILL BE RESPONSIBLE FOR DETERMINING LENGTH OF PILES REQ'D - SEE SPECIAL PROVISIONS.
CLASS "AA" CONC. SHALL BE USED IN THE SUPERSTRUCTURE AND CLASS "A" CONC. SHALL BE USED IN ALL OTHER PORTIONS OF THE STRUCTURE. SEE SPECIAL PROVISIONS AND SPECIFICATIONS.
WORK IS NOT TO BE STARTED ON THIS BRIDGE UNTIL AFTER ROADWAY SECTION HAS BEEN GRADED BY THE ROADWAY CONTR. UNLESS STRUCTURE EXCAVATION FOR BELTS #1, #2, AND #3 WILL BE MEASURED FROM SURFACE OF ROADWAY CUT.
CONSTRUCTION ELEVATIONS FOR SETTLING FORMS AND SCREEDS WILL BE FURNISHED TO THE RESIDENT ENGINEER BY THE BRIDGE DESIGN DEPT. BEFORE CONSTRUCTION OF THE DECK IS BEGUN.
TRAFFIC TO BE DETOURED OR ROUNDOFF DURING THE CONSTRUCTION OF THE PROPOSED STRUCTURE. SEE ROADWAY PLANS AND SPECIAL PROVISIONS.

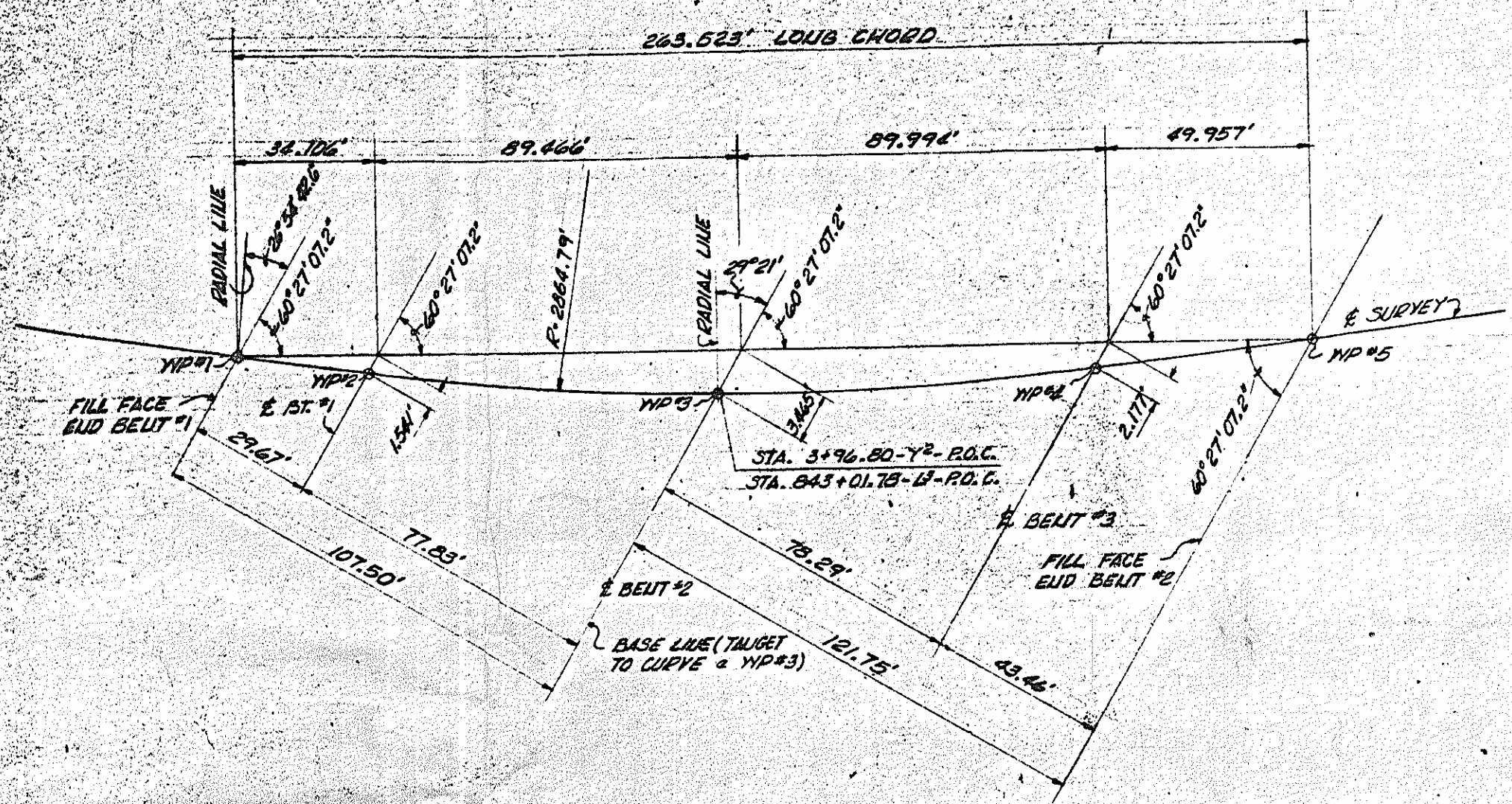


PLAN

PROJECT No. 8.1592802
ROCKINGHAM COUNTY
STATION: 3+96.80-Y²-P.O.C.
843+01.78-L³-P.O.C.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH
GENERAL DRAWING FOR
BRIDGE OVER PROJECT
LINE E³ ON LINE Y² BETW.
OREGON HILL AND EXIST.
U.S. 29.
MAY 1968

REVISIONS				SHEET NO.			
NO.	BY	DATE	NO.	BY	DATE	590	
1			2				
2			3				
3			4				



GEOMETRY OF LONG CHORD*

NOTE: ALL BEITS ARE PARALLEL TO BASE LINE (TANGENT TO CURVE @ WP #3)

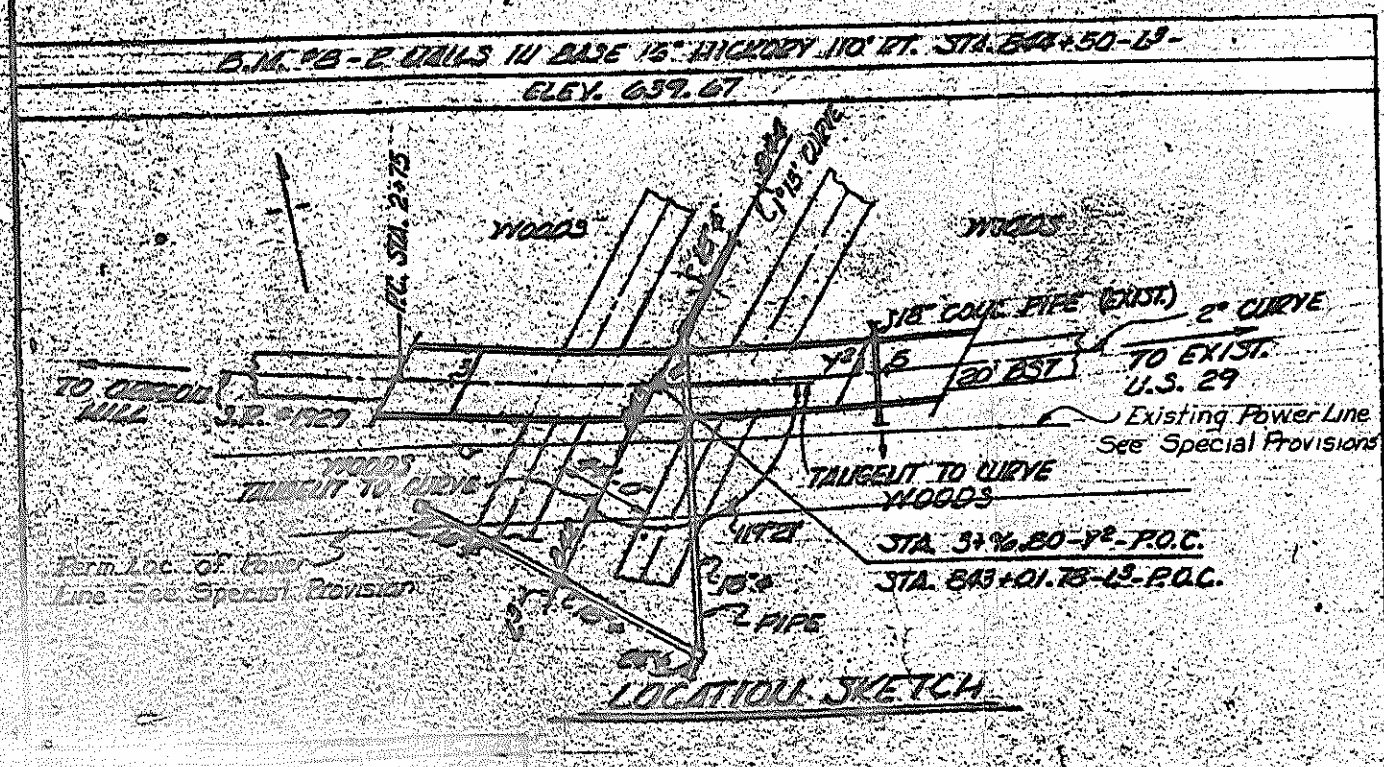
THE GEOMETRICS OF THIS BRIDGE ARE BASED ON A CIRCULAR CURVE FOR ITS ENTIRE LENGTH DISREGARDING THE TANGENT BACK OF P.C. STA. 2+75. THE LAYOUT FOR THIS BRIDGE SHALL NOT BE MADE BEGINNING AT END BENT #1 DUE TO THE P.C. OF THE SURVEY LINE YE OCCURRING AT STA. 2+75.

TOTAL BILL OF MATERIAL

	CLASS 2A	CLASS 4	REINFORCING	STRUCTURAL	12M53	6" CONC.	UNCLASS	ONE BAR	PARALLEL	
	CONCRETE	CONCRETE	STEEL	STEEL	STEEL PILES	SLOPE PROT.	STRUCT. EN.	MAT. RAIL	CONCRETE	
	CU. YDS.	CU. YDS.	LBS.	APPROX. LBS.	NUMBER	LIQ. FT.	SQ. YDS.	CU. YDS.	LIQ. FT.	GALLONS
SUPERSTRUCTURE	287.2		67,568	289,600		115.827		51,720	ES	
E. END BENT #1		19.4	2,733		6	240.4	225	516.70		
BENT #1		39.2	4,783		15	375		708.0		
BENT #2		43.9	6,045		18	450.11		754.11		
BENT #3		44.0	7,011		15	375	283.254	707.64		
E. END BENT #2		21.3	2,935		7	275	335	516.70		
CURVED END BLOCKS			85		1	171.2	171.2	516.70		
-TOTAL-	287.2	167.8	91,160	289,600	61	475.1	560	517.20	28	

* NOTE: SEE SPECIAL PROVISIONS FOR METHOD OF CURING BRIDGE DECK AND MIXING AND APPLYING THE LINSEED OIL SOLUTION.

I HEREBY CERTIFY THAT THESE STRUCTURES WERE BUILT ACCORDING TO THE PLANS, EXCEPT AS NOTED HEREIN.
 SIGNED: E. E. DeVault, P.E., Engr.



PROJECT No. 8.15928.02
 ROCKINGHAM COUNTY
 STATION: 3+96.80-Y²-R.O.C.
 843+01.78-L³-R.O.C.

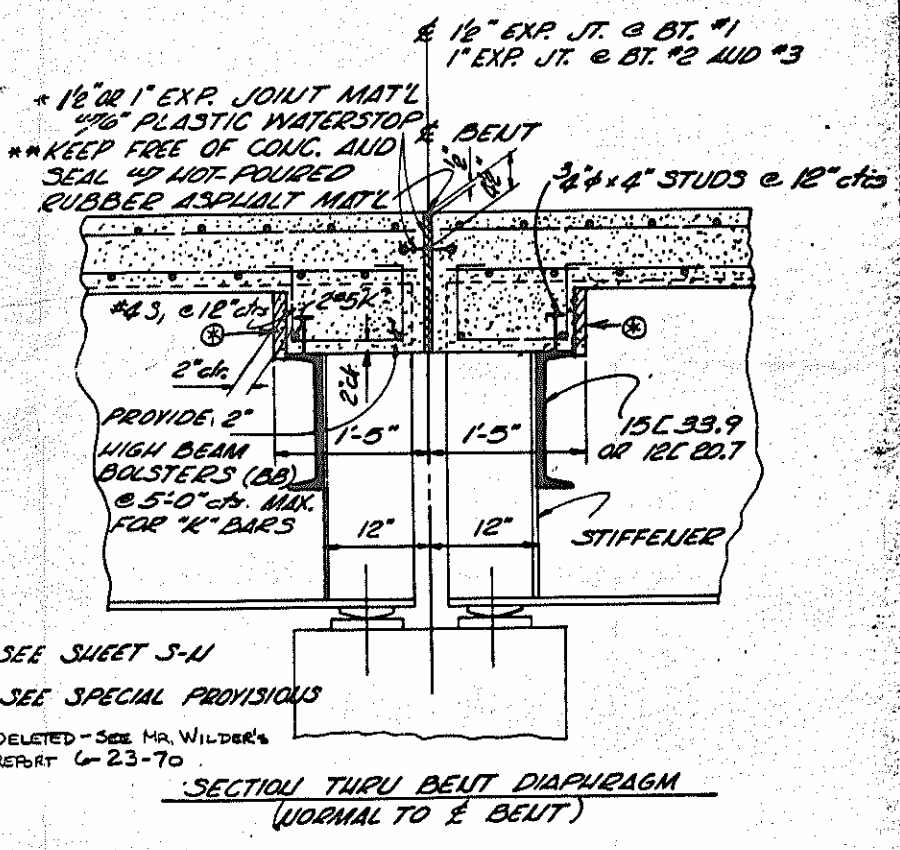
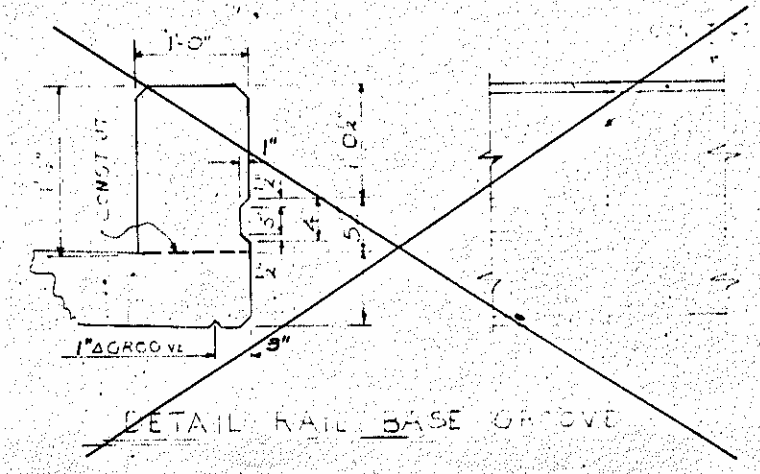
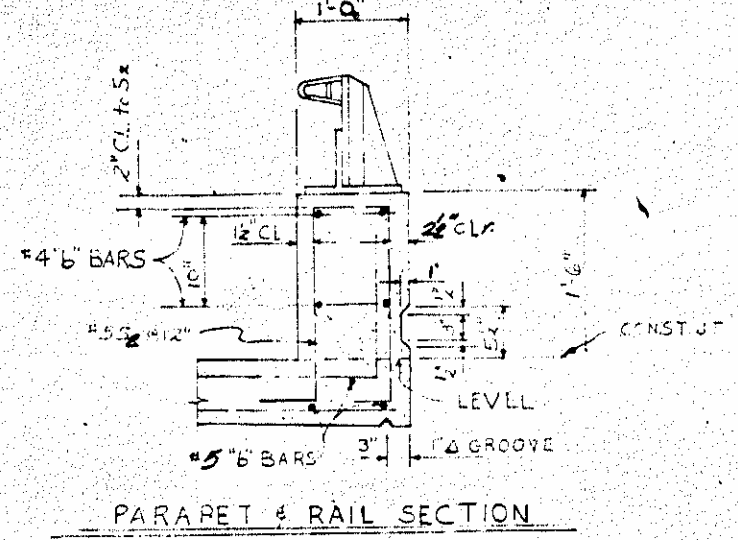
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
 TOTAL BILL OF MATERIAL -
 GEOMETRY OF LONG CHORD -
 AND
 LOCATION SKETCH

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

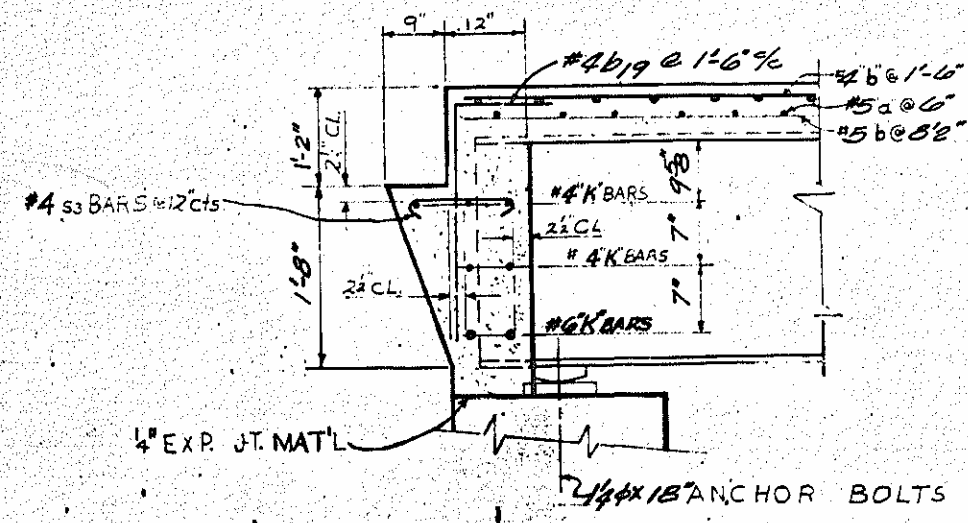
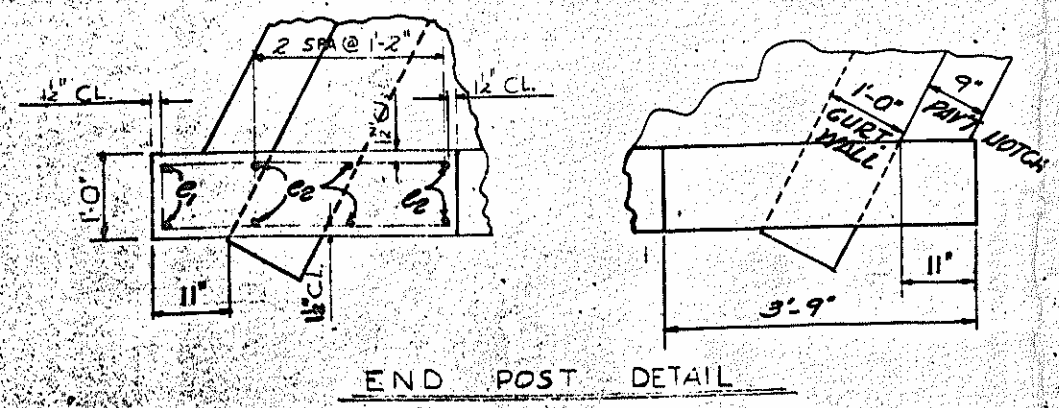
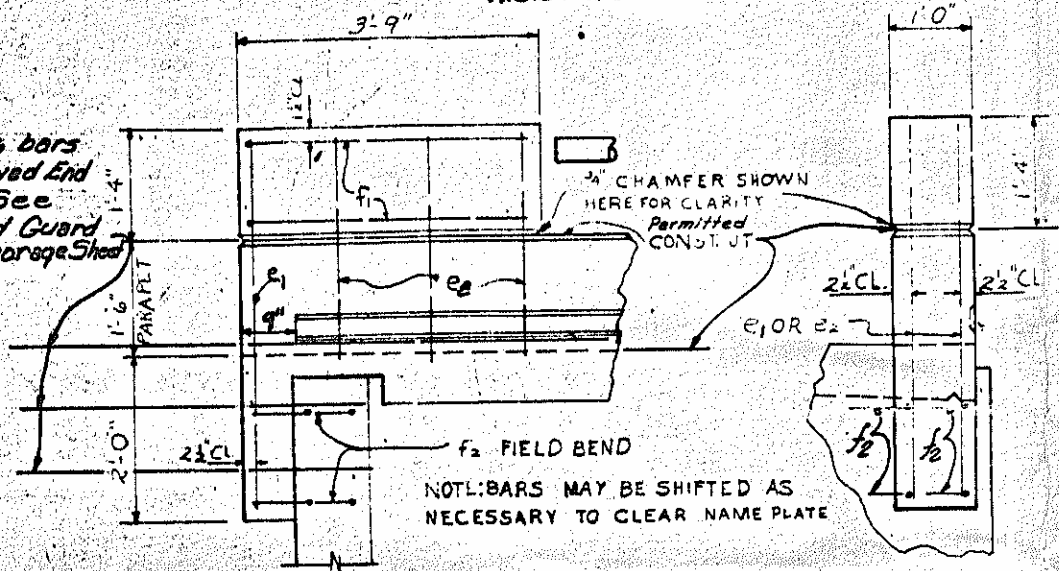
Rev No. 1 - Revised to change length of One Bar Metal Rail by JKP 11-70 - EGA.

ASSUMED LIVE LOAD HS15-44
 CONCRETE IN COMPRESSION - 4000 LBS PER SQ IN
 REINFORCING STEEL IN TENSION - 20000 LBS PER SQ IN
 STRESS IN EXTREME FIBER OF STRUCTURAL STEEL =
 20000 LBS PER SQ IN
 FOR OTHER DESIGN DATA AND GENERAL NOTES,
 SEE SHEET S-11
 FOR BARS INDICATED AND NO BAR MARK SHOWN
 SEE PLAN

NOTE: FOR DETAILS OF ANCHOR BOLTS AND
 DOWELS TO BE SET AT END POST FOR GUARD
 RAIL ATTACHMENT, SEE GUARD RAIL ATTACH-
 MENT SHEET.



Note: Co bars
 and Curved End
 Blocks See
 Standard Guard
 Rail Anchorage Sheet



* SEE SHEET S-11
 ** SEE SPECIAL PROVISIONS
 (X) DELETED - SEE Mr. Wilder's
 REPORT G-23-70

PROJECT No. B.1592802
 ROCKINGHAM COUNTY
 STATION: 843+01.78-43

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH

I-BM SUPERSTRUCTURE
 ONE BAR METAL RAIL

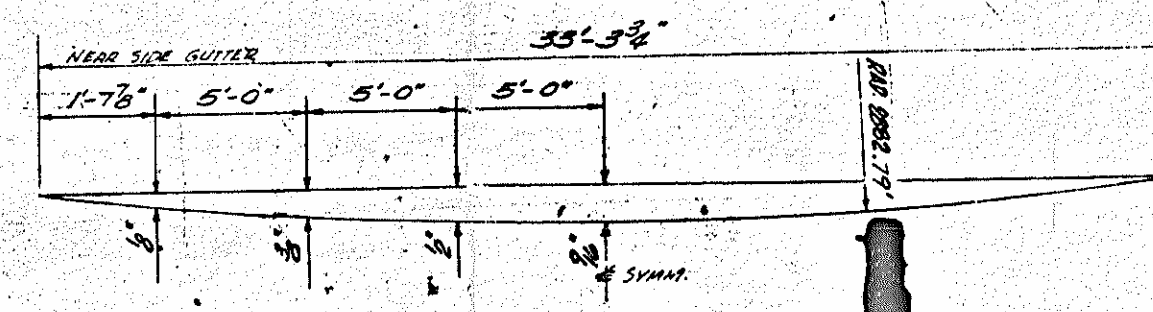
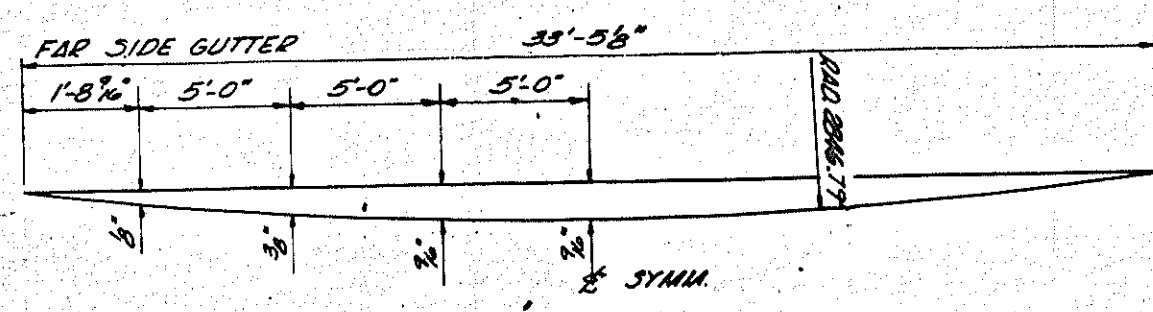
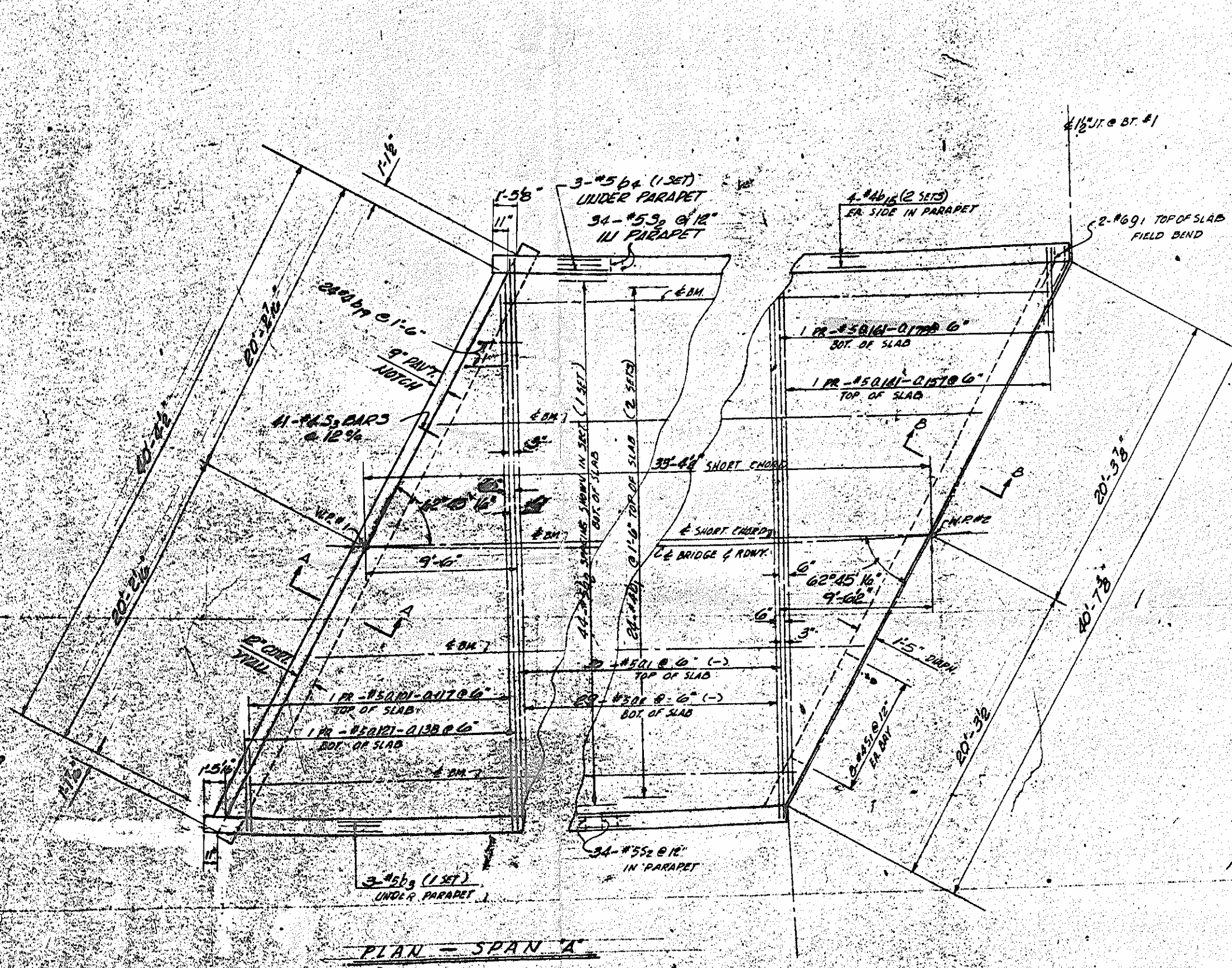
NO.		DATE		BY		DATE	
1				3			
2				4			

SHEET NO. 5-93
 TOTAL SHEETS 156

SPECIAL
 DRAWN BY: J. H. WILDER
 CHECKED BY: L. G. BLEWETT, JR.
 DATE: MAY 1969

STANDARD
 DRAWN BY: H. D. WILSON
 CHECKED BY: J. C. GIBSON
 DATE: APRIL 1968

FED. ROAD DIV. NO.	STATE	PROJECT NO.
3	N.C.	815928
F. A. PROJECT F-51-1(B)		



CURVE OFFSETS

NOTE: SHORT CHORD IS MEASURED FROM FILL FACE
EQ. BENT #1 TO EQ. BENT #1.

NOTE: #0 BARS SHALL BE PLACED PERPENDICULAR TO THE SHORT CHORD & SPACED ALONG THE SHORT CHORD.

PROJECT No. 815928 02
ROCKINGHAM COUNTY
STATION: 843+01.78-13-

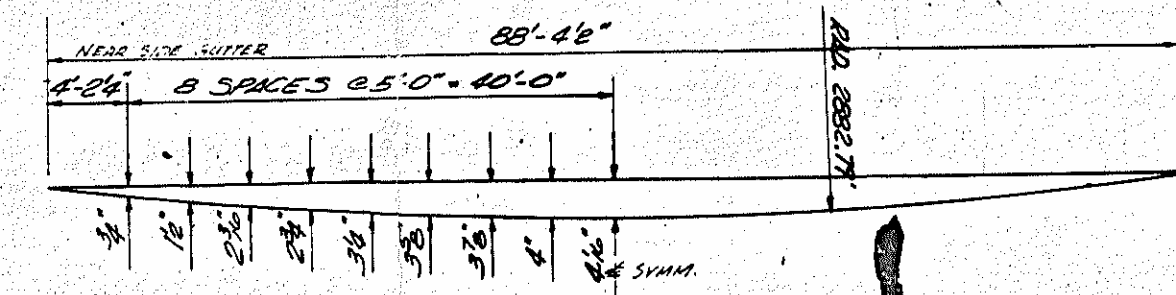
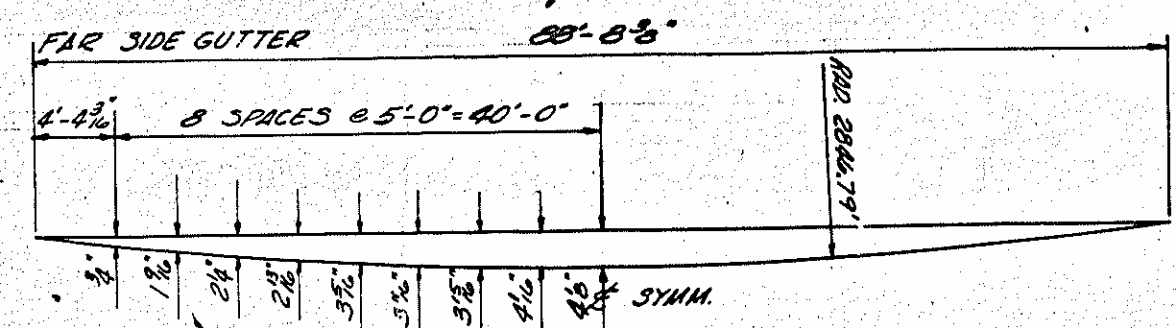
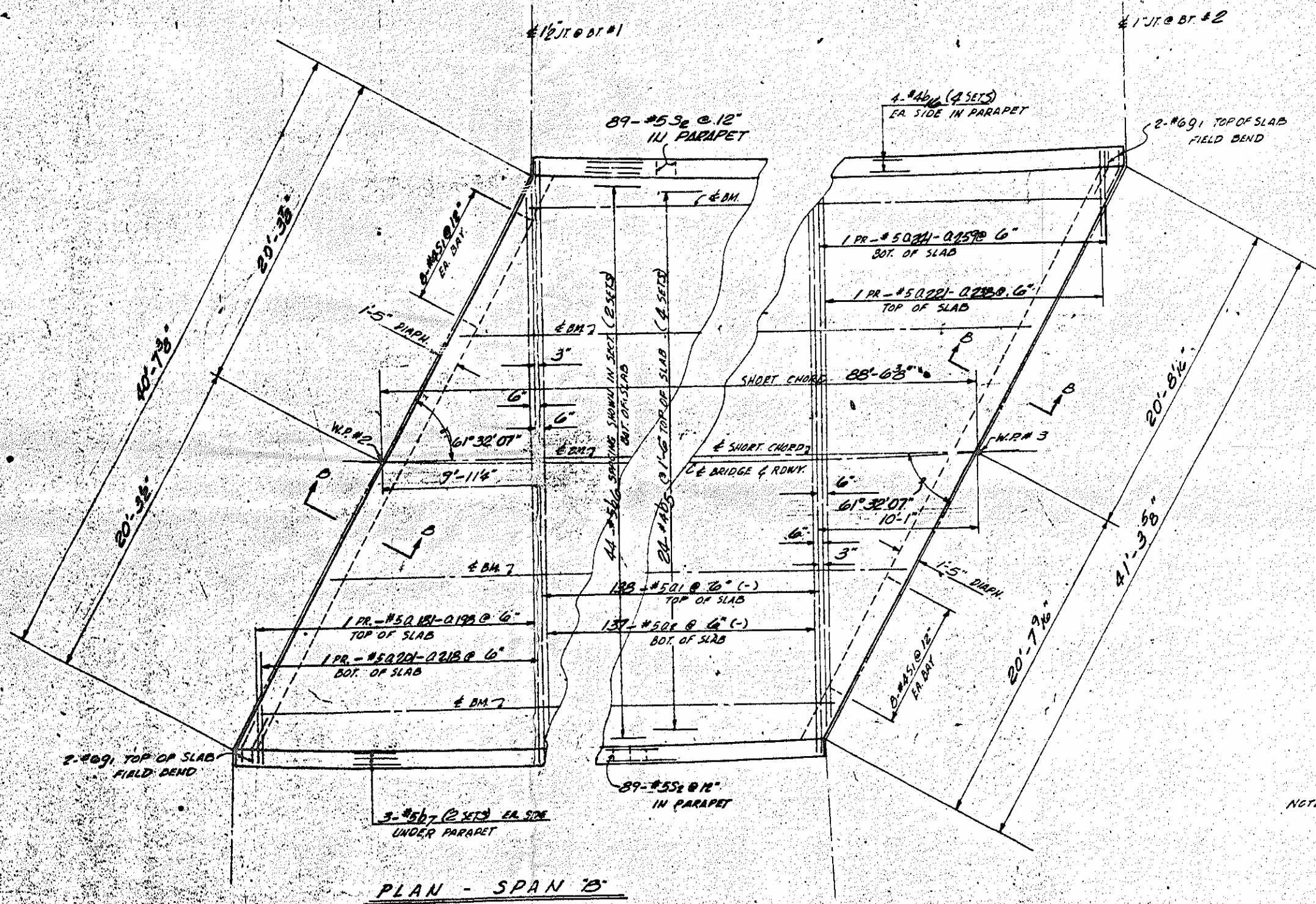
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

SUPERSTRUCTURE
SPAN "A"

MAY 1965

REVISIONS			
NO.	BY	DATE	DESCRIPTION
1			
2			
3			
4			

FED. ROAD DIV. NO.	STATE	PROJECT NO.
3	N.C.	15928
P. A. PROJECT F-51-1 (B)		



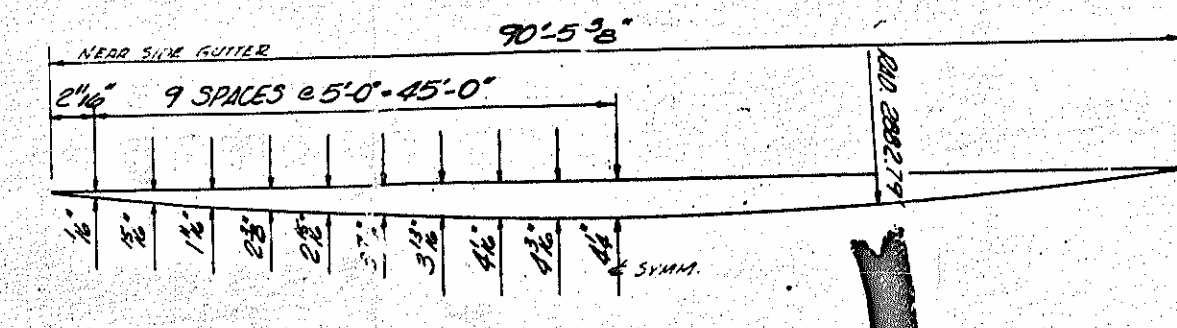
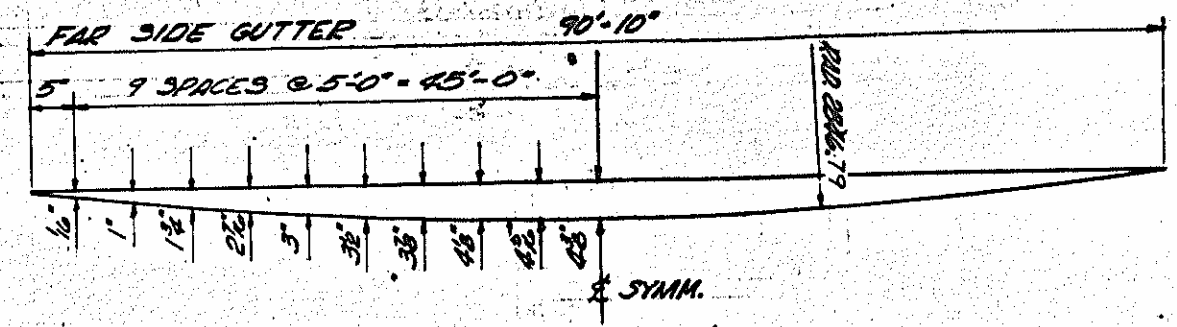
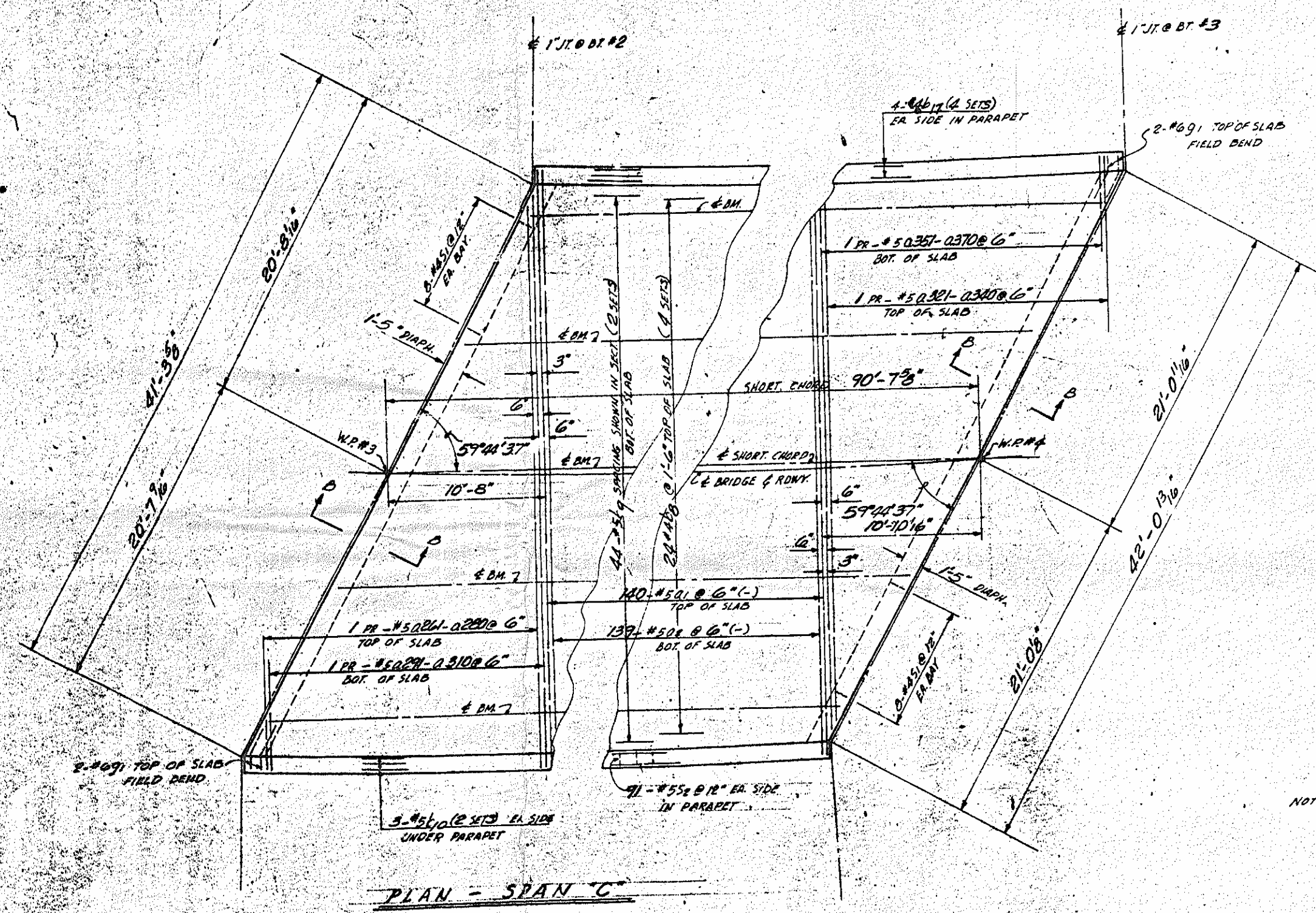
CURVE OFFSETS
 NOTE: SHORT CHORD IS MEASURED FROM $\frac{1}{2}$ BELT #1 TO $\frac{1}{2}$ BELT #2.

NOTE: "O" BARS SHALL BE PLACED PERPENDICULAR TO THE $\frac{1}{2}$ SHORT CHORD & SPACED ALONG THE SHORT CHORD.

PROJECT No. 15928 02
 ROCKINGHAM COUNTY
 STATION 843+01.78-13-

STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
RALEIGH					
SUPERSTRUCTURE					
SPAN "B"					
MAY 1965					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

FIELD ROAD DIV. NO.	STATE	PROJECT NO.
8	N.C.	81592802
P.A. PROJECT F-51-1 (S)		



CURVE OFFSETS
 NOTE: SHORT CHORD IS MEASURED FROM & BEUT #2 TO & BEUT #5.

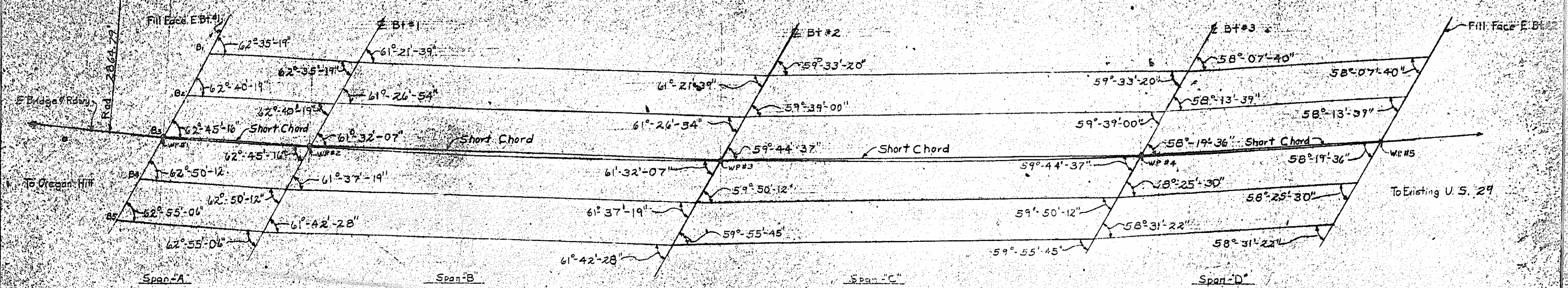
NOTE: "G" BARS SHALL BE PLACED PERPENDICULAR TO THE & SHORT CHORD & SPACED ALONG THE SHORT CHORD.

PLAN - SPAN "C"

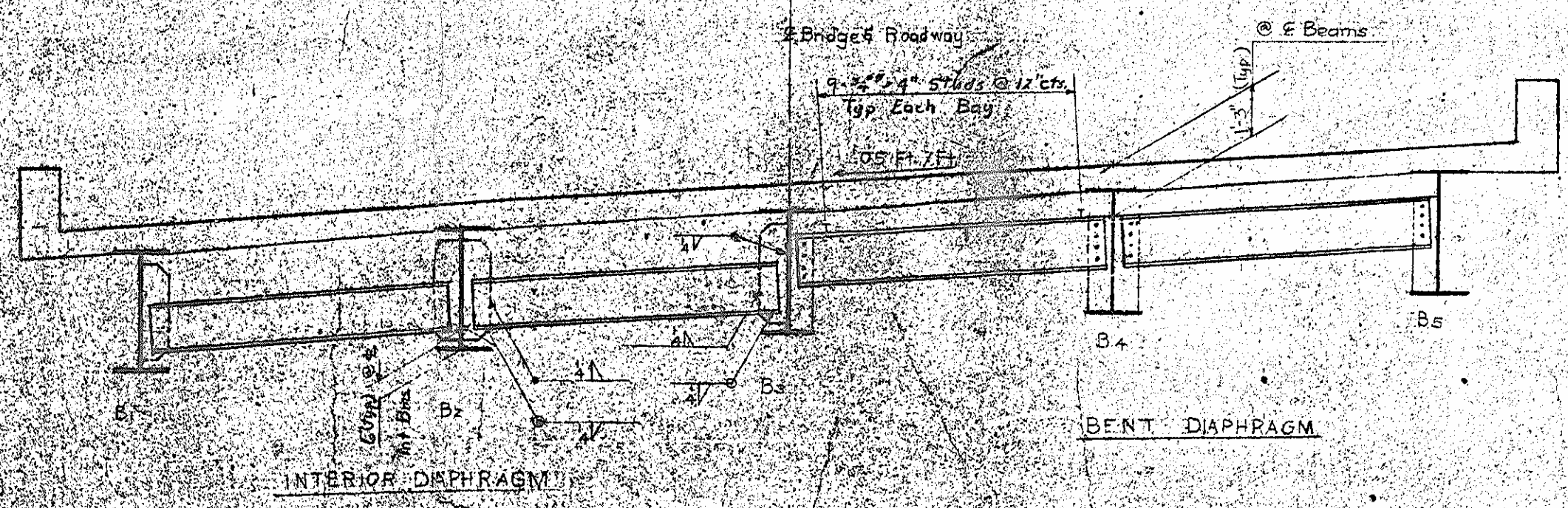
PROJECT No. 81592802
 ROCKINGHAM COUNTY
 STATION: 823+01.78-13

STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
TRALEIGH					
SUPERSTRUCTURE					
SPAN "C"					
MAY 1965					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
					5-26
					156

PLAN	DATE	BY
PA. 5/10		



PLAN SHOWING ANGLES AT BENTS



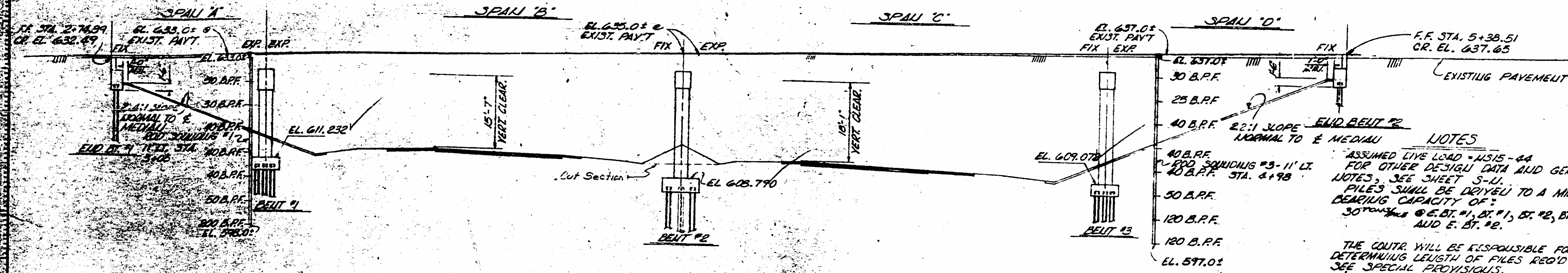
TYPICAL SECTION

PROJECT No. 81592802
 ROCKINGHAM COUNTY
 STATION 843+01.78-13

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH

SUPERSTRUCTURE
 STRUCTURAL STEEL
 April 1968

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE



SECTION ALONG E BRIDGE
(BELITS ALONG SECTION A-A)

NOTES

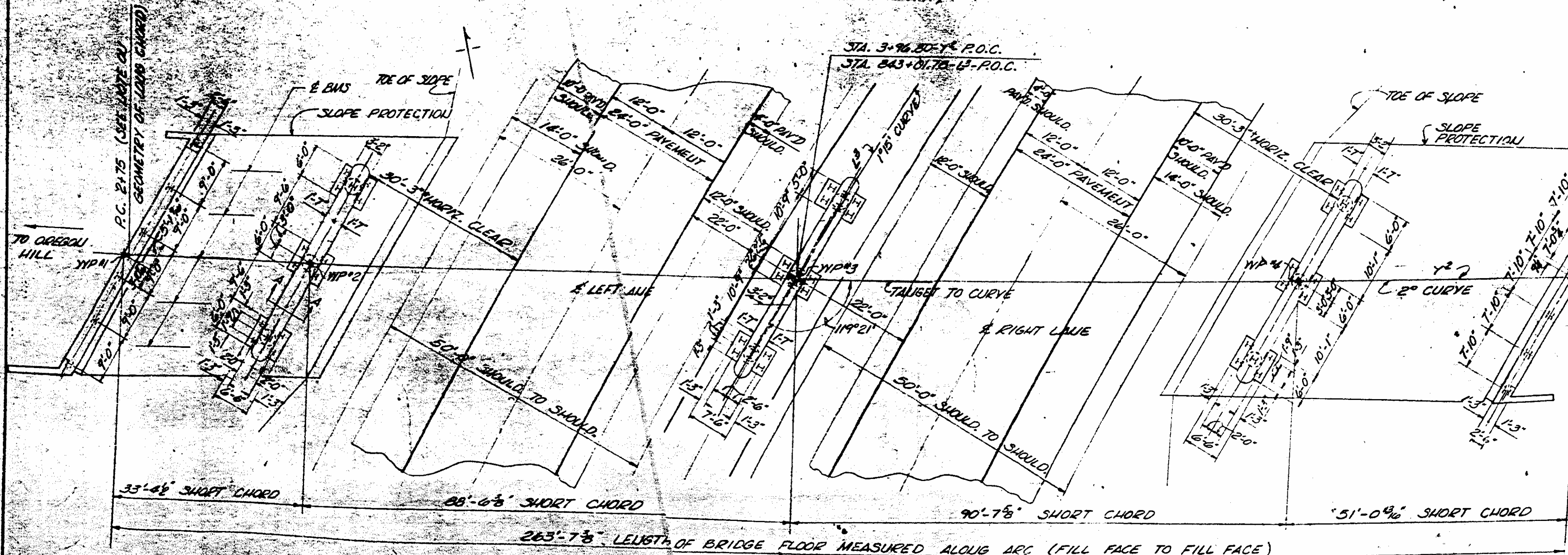
ASSUMED LIVE LOAD - HS15-44
FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET S-U.
FILES SHALL BE DRIVEN TO A MIN. BEARING CAPACITY OF:
30 TONS @ E. BT. #1, BT. #1, BT. #2, BT. #3 AND E. BT. #2.

THE CONTR. WILL BE RESPONSIBLE FOR DETERMINING LENGTH OF FILES REQ'D - SEE SPECIAL PROVISIONS.
CLASS "AA" CONC. SHALL BE USED IN THE SUPERSTRUCTURE AND CLASS "A" CONC. SHALL BE USED IN ALL OTHER PORTIONS OF THE STRUCTURE. SEE SPECIAL PROVISIONS AND SPECIFICATIONS.
WORK IS NOT TO BE STARTED ON THIS BRIDGE UNTIL AFTER ROADWAY SECTION HAS BEEN GRADED BY THE ROADWAY DIST. UNCLASS. STRUCTURE EXCAVATION FOR BELITS #1, #2, AND #3 WILL BE MEASURED FROM SURFACE OF ROADWAY CUT.
CONSTRUCTION ELEVATIONS FOR SETTING FORMS AND SCAFFOLS WILL BE FURNISHED TO THE RESIDENT ENGINEER BY THE BRIDGE DESIGN DEPT. BEFORE CONSTRUCTION OF THE DECK IS BEGUN.

TRAFFIC TO BE DETOURED ON ROUTE AROUND DURING THE CONSTRUCTION OF THE PROPOSED STRUCTURE. SEE ROADWAY PLANS AND SPECIAL PROVISIONS.

JUN. 05 1992
Roll # 976
Pos # 3

PROJECT No. B.1592802
ROCKINGHAM #178 COUNTY
STATION: 3+96.80-Y²-P.O.C.
843+01.78-L³-P.O.C.



263'-7 3/8" LENGTH OF BRIDGE FLOOR MEASURED ALONG ARC (FILL FACE TO FILL FACE)

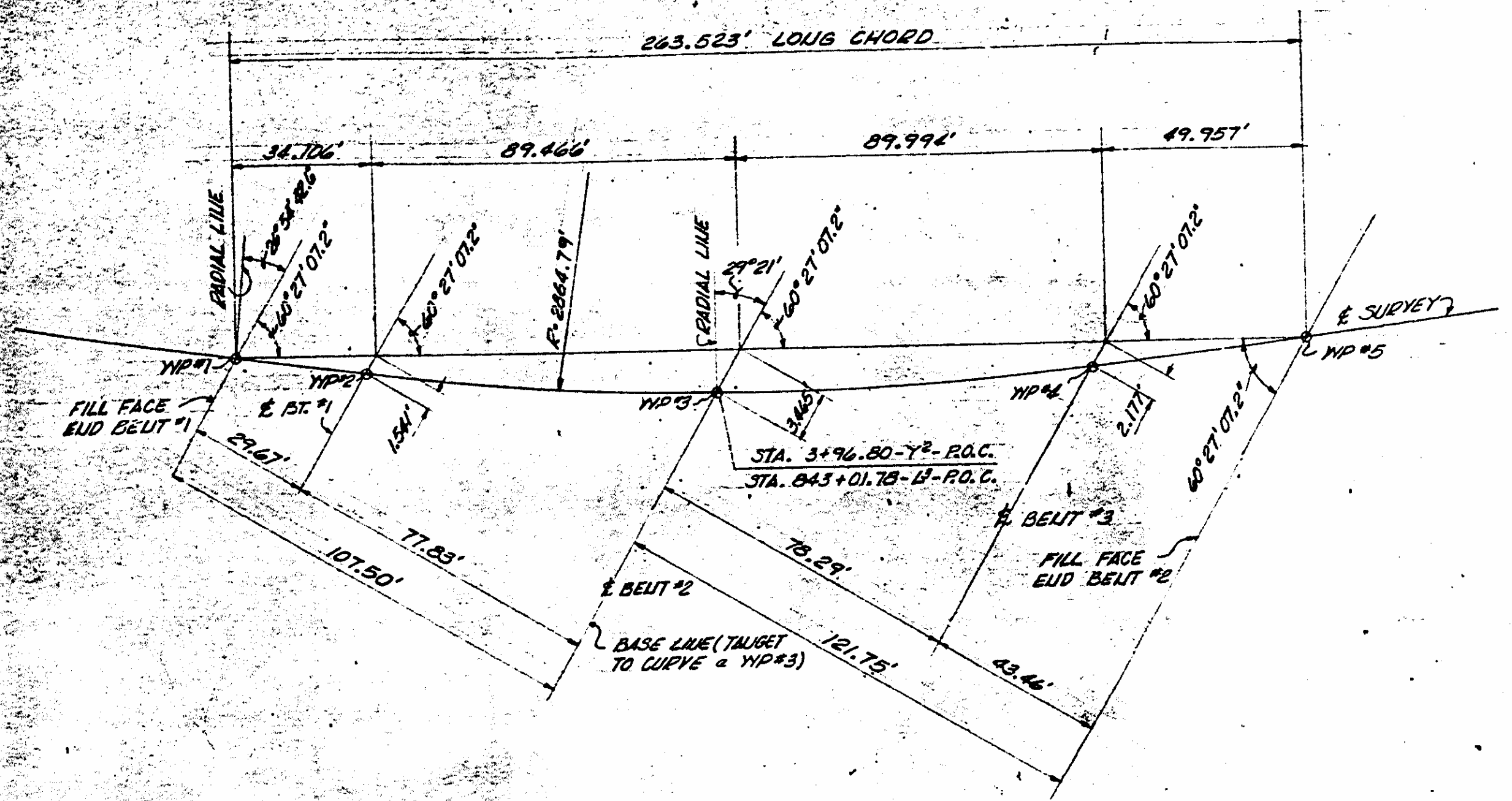
PLAN

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH
GENERAL DRAWING FOR
BRIDGE OVER PROJECT
LINE L³ ON LINE Y² BETW.
OREGON HILL AND EXIST.
U.S. 29.
MAY 1968

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

DRAWN BY T.J. McLELLAN DATE 7-26-68
CHECKED BY B.F. [unclear] DATE 10-1-68

SHEET NO. 590



GEOMETRY OF LONG CHORD *

NOTE: ALL BELTS ARE PARALLEL TO BASE LINE (TANGENT TO CURVE @ WP #3)

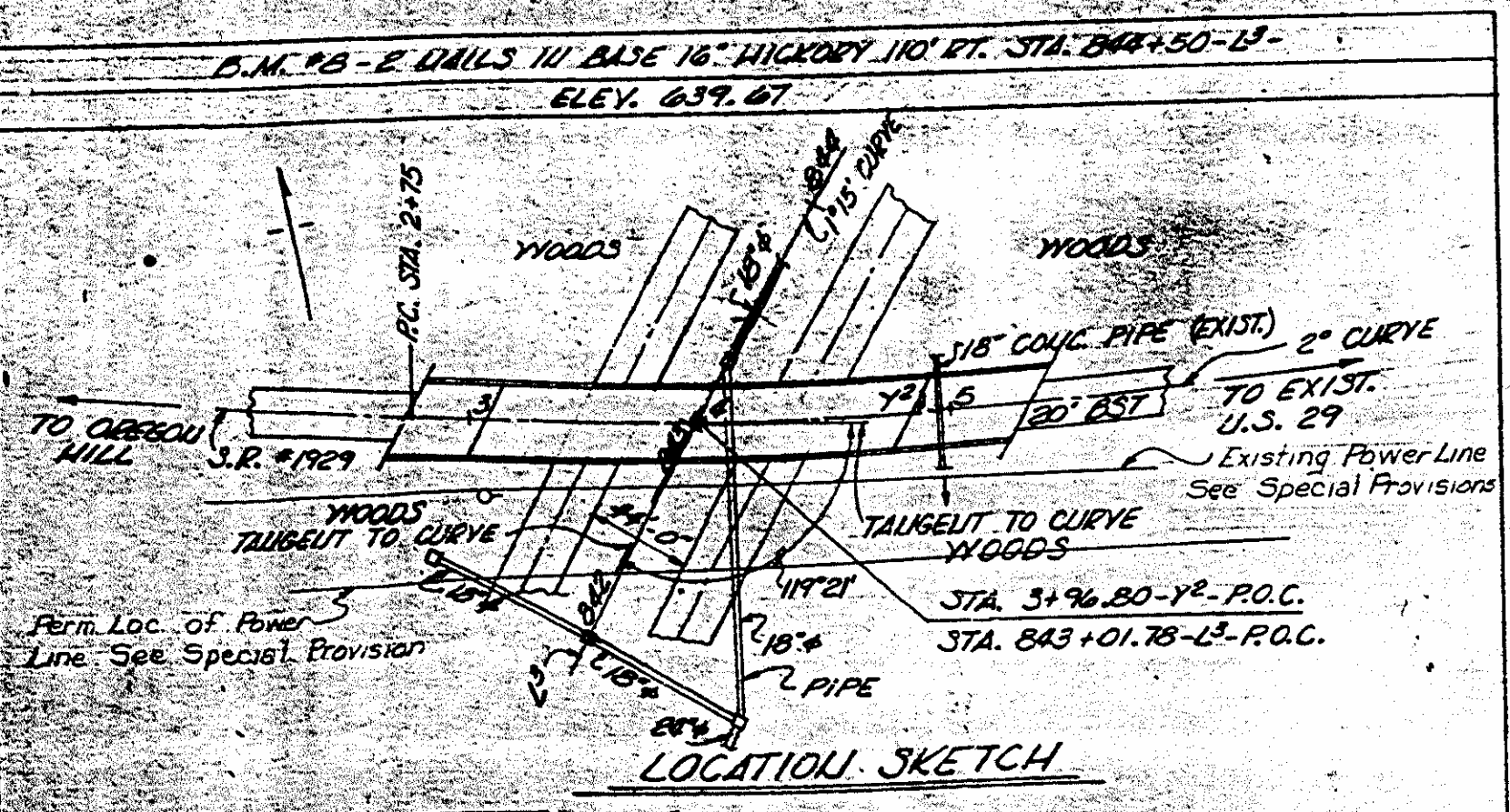
*THE GEOMETRICS OF THIS BRIDGE ARE BASED ON A CIRCULAR CURVE FOR ITS ENTIRE LENGTH DISREGARDING THE TANGENT BACK OF P.C. STA. 2+75. THE LAYOUT FOR THIS BRIDGE SHALL NOT BE MADE BEGINNING AT END BELT #1 DUE TO THE P.C. OF THE SURVEY LINE TO OCCUR AT STA. 2+75.

TOTAL BILL OF MATERIAL

	CLASS #1	CLASS #2	REINFORCING	STRUCTURAL	12#53	4" CONC.	UNGLASS	ONE BAR	LANEED OIL	
	CONCRETE	CONCRETE	STEEL	STEEL	STEEL PILES	SLOPE PROT.	STRUCT. EX.	MET. RAIL	CONCRETE PROTECTION	
	CU. YDS.	CU. YDS.	LBS	APPROX. LBS	NUMBER	LIQ. FT.	SQ. YDS.	CU. YDS.	LIQ. FT.	GALLONS
SUPERSTRUCTURE	287.2		67,568	289,600			185.837		517.00	24
END BELT #1	19.4		2,733		6	240.0	225		516.70	
BELT #1		39.2	4,783		15	282.57		708.0		
BELT #2		43.9	6,045		18	450.11		724.1		
BELT #3		44.0	7,011		15	375	282.256	707.1		
END BELT #2		21.3	2,935		7	282.57	335			
CURVED END BLOCKS	8		85			179.62	168.023	177.21	516.70	
-TOTAL-	288.8	167.8	91,160	289,600	61	1755	560	213	517.00	24

* NOTE: SEE SPECIAL PROVISIONS FOR METHOD OF CURING BRIDGE DECK AND MIXING AND APPLYING THE LINSEED OIL SOLUTION.

I HEREBY CERTIFY THAT THESE STRUCTURES WERE BUILT ACCORDING TO THE PLANS EXCEPT AS NOTED HEREIN.
 SIGNED: E. E. DeVault, RES. ENG.

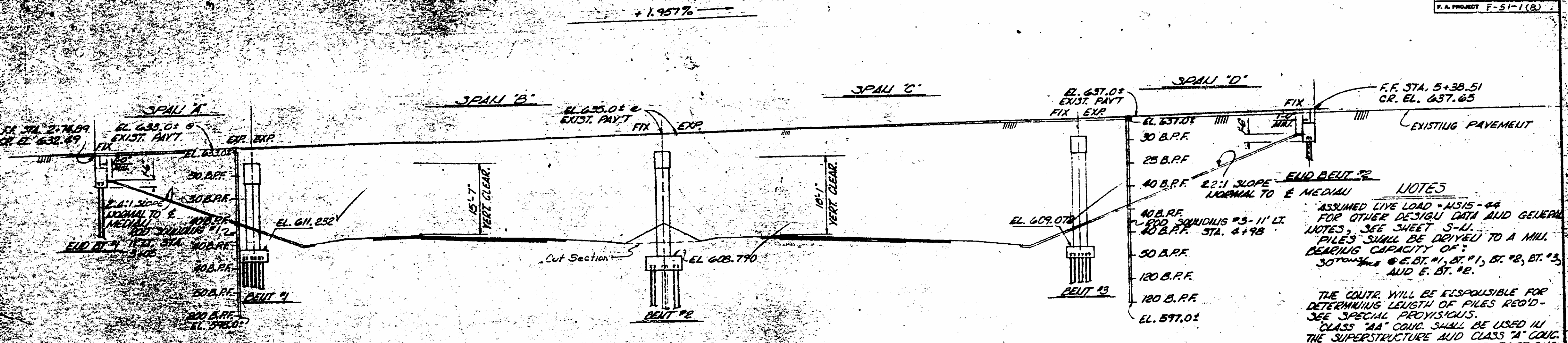


PROJECT No. 1592802
 ROCKINGHAM COUNTY
 STATION: 3+96.80-Y2-P.O.C.
 843+01.78-L3-P.O.C.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
 TOTAL BILL OF MATERIAL - GEOMETRY OF LONG CHORD - AND LOCATION SKETCH

REVISIONS				SHEET NO.			
NO.	BY	DATE	NO.	BY	DATE	TOTAL SHEETS	
1			3			156	
2			4				

Rev. No. 1 - Revised to change length of One Bar Metal Rail. by JK 6-16-70 E.G.A.



SECTION ALONG E BRIDGE
(BELTS ALONG SECTION A-A)

NOTES

ASSUMED LIVE LOAD - HS15-44 FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET S-11.

PILES SHALL BE DRIVEN TO A MIN. BEARING CAPACITY OF:

30 TONS @ E. BT. #1, BT. #1, BT. #2, BT. #3, AND E. BT. #2.

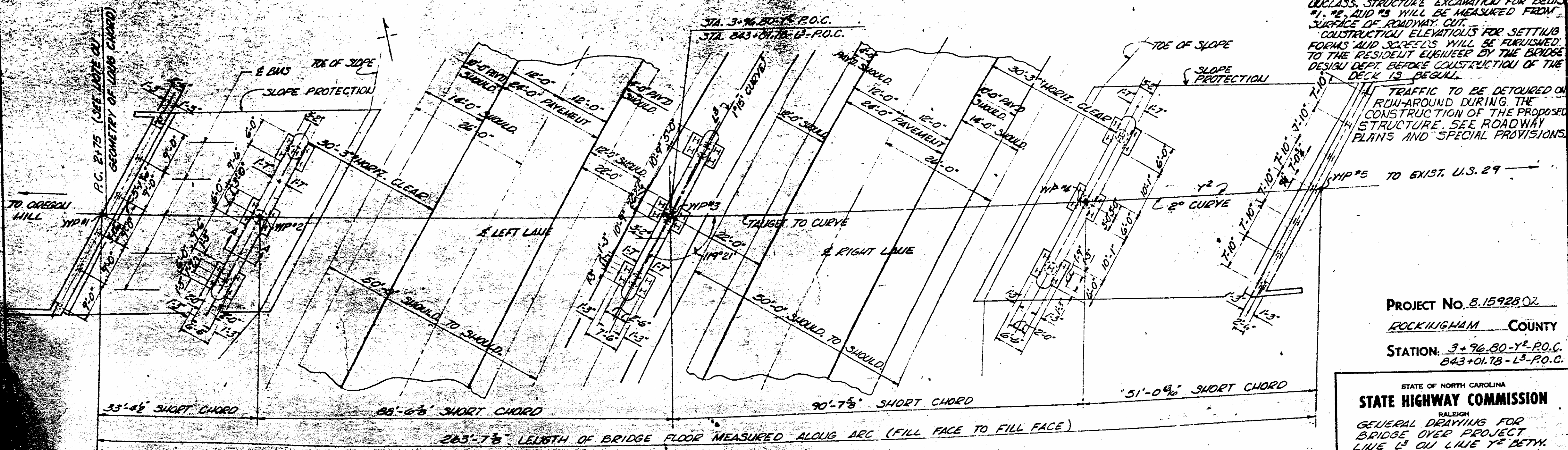
THE CONTR. WILL BE RESPONSIBLE FOR DETERMINING LENGTH OF PILES REQ'D - SEE SPECIAL PROVISIONS.

CLASS "AA" CONC. SHALL BE USED IN THE SUPERSTRUCTURE AND CLASS "A" CONC. SHALL BE USED IN ALL OTHER PORTIONS OF THE STRUCTURE. SEE SPECIAL PROVISIONS AND SPECIFICATIONS.

WORK IS NOT TO BE STARTED ON THIS BRIDGE UNTIL AFTER ROADWAY SECTION HAS BEEN GRADED BY THE ROADWAY CONTR. UNLESS STRUCTURE EXCAVATION FOR BELTS #1, #2, AND #3 WILL BE MEASURED FROM SURFACE OF ROADWAY CUT.

CONSTRUCTION ELEVATIONS FOR SETTING FORMS AND SCREENS WILL BE FURNISHED TO THE RESIDENT ENGINEER BY THE BRIDGE DESIGN DEPT. BEFORE CONSTRUCTION OF THE DECK IS BEGUN.

TRAFFIC TO BE DETOURED ON RUI-AROUND DURING THE PROPOSED CONSTRUCTION OF THE BRIDGE. SEE ROADWAY PLANS AND SPECIAL PROVISIONS.

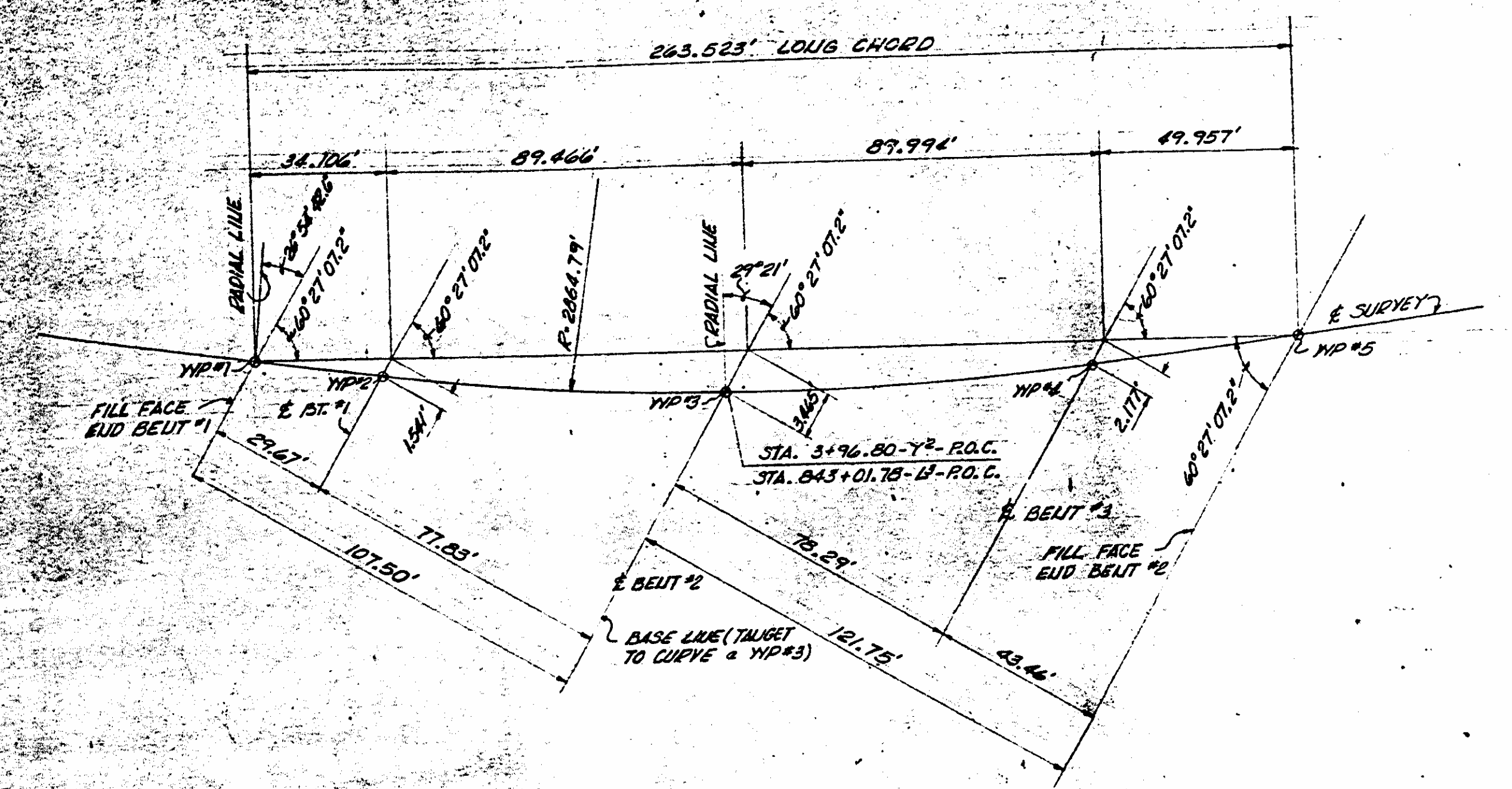


PLAN

PROJECT No. 8.1592802
 ROCKINGHAM COUNTY
 STATION: 3+96.80-Y2-P.O.C.
 843+01.78-L3-P.O.C.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
 GENERAL DRAWING FOR
 BRIDGE OVER PROJECT
 LINE L3 ON LINE Y2 BETW.
 OREGON HILL AND EXIST.
 U.S. 29.
 MAY 1965

REVISIONS						SHEET NO. 5-90
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL
2			4			



GEOMETRY OF LONG CHORD *

NOTE: ALL BELTS ARE PARALLEL TO BASE LINE (TANGENT TO CURVE @ WP #3)

THE GEOMETRICS OF THIS BRIDGE ARE BASED ON A CIRCULAR CURVE FOR ITS ENTIRE LENGTH DISREGARDING THE TANGENT BACK OF P.C. STA. 2+75. THE LAYOUT FOR THIS BRIDGE SHALL NOT BE MADE BEGINNING AT EUD BELT #1 DUE TO THE P.C. OF THE SURVEY LINE Y₂ OCCURRING AT STA. 2+75.

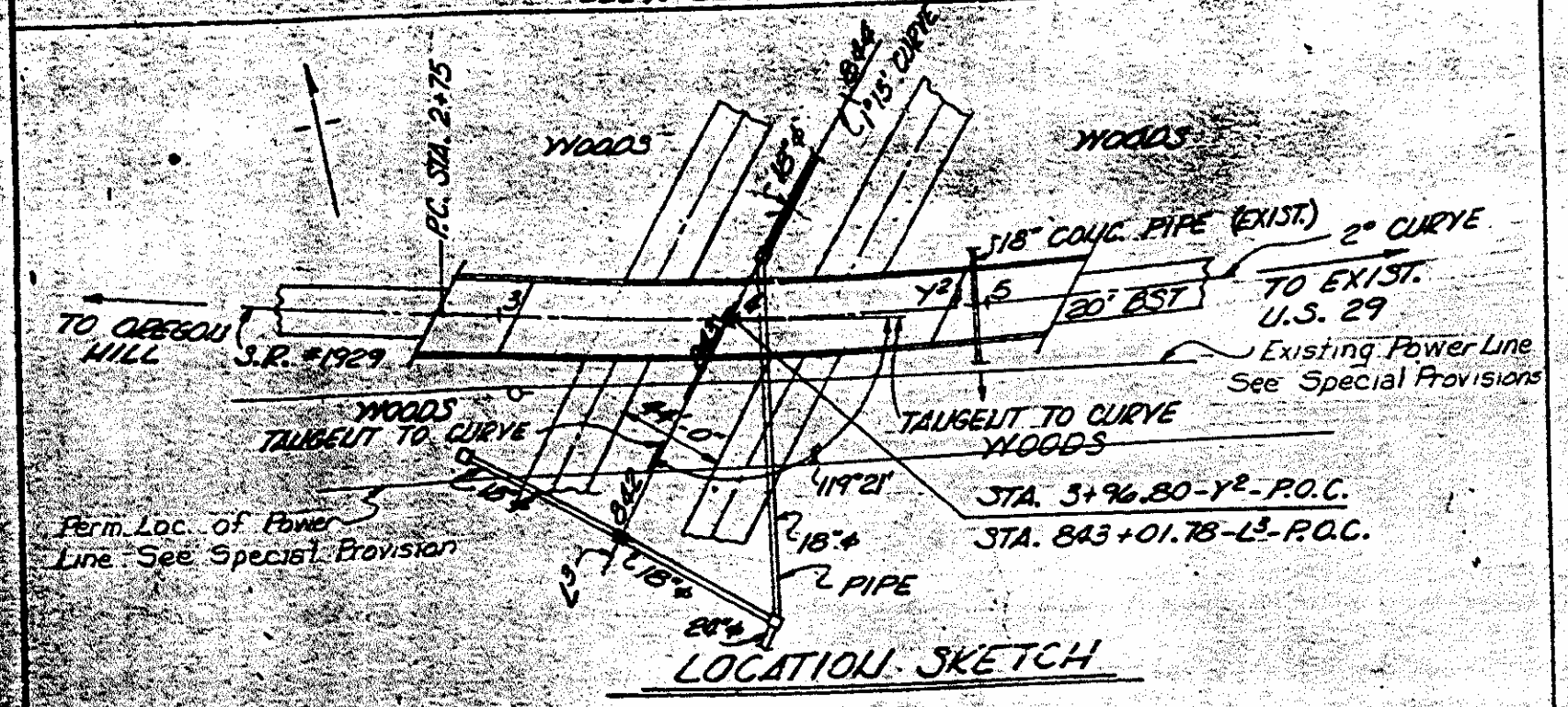
TOTAL BILL OF MATERIAL

	CLASS #1 CONCRETE CU. YDS.	CLASS #2 CONCRETE CU. YDS.	REINFORCING STEEL LBS	STRUCTURAL STEEL APPROX. LBS	12x53 STEEL PILES NUMBER	4" CONC. SLOPE PROT. SQ. YDS.	UNGLASS STRUCT. EN. CU. YDS.	ONE BAR MET. RAIL LIII. FT.	UNSEED OIL CONCRETE PROTECTION GALLONS
SUPERSTRUCTURE	287.2		67,568	289,600	6	185.837		517.00	24
EUD BELT #1	19.6		2,733		6	225		516.70	
BELT #1	39.2		4,783		15		708.07		
BELT #2	43.9		6,045		18	450.11	7547.11		
BELT #3	44.0		7,011		15	375	707.47		
EUD BELT #2	21.3		2,935		7	375	335		
CURVED EUD BLOCKS	2		85		179.62	448.033	177.21	516.70	
-TOTAL-	258.5	167.8	91,160	289,600	61	1755	560	517.00	24

* NOTE: SEE SPECIAL PROVISIONS FOR METHOD OF CURING BRIDGE DECK AND MIXING AND APPLYING THE LINSEED OIL SOLUTION.

I HEREBY CERTIFY THAT THESE STRUCTURES WERE BUILT ACCORDING TO THE PLANS EXCEPT AS NOTED HEREIN.
 SIGNED: E. E. DeVault, RES. ENG.

D.M. #18 - 2 DILLS 11" BASE 16" HICKORY 110' BT. STA. 843+50-L³
 ELEV. 639.67



PROJECT No. 8-1592802
 ROCKINGHAM COUNTY
 STATION: 3+96.80-Y²-P.O.C.
 843+01.78-L³-P.O.C.

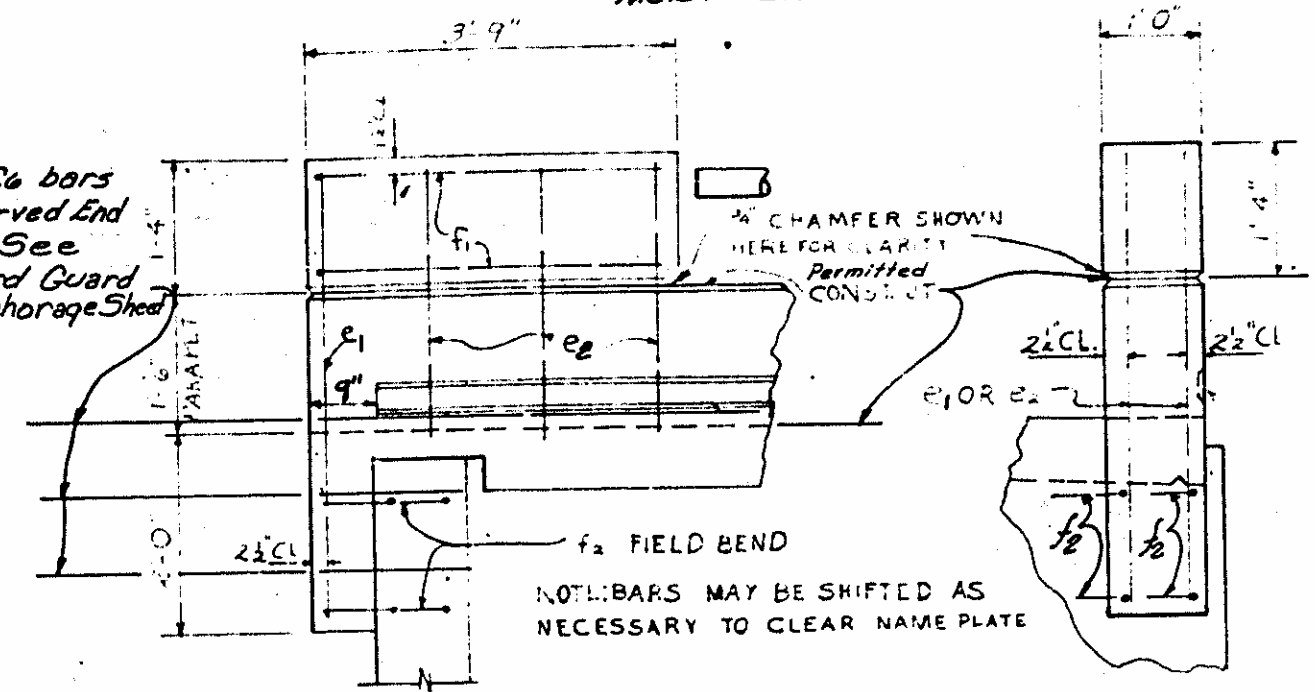
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
 TOTAL BILL OF MATERIAL -
 GEOMETRY OF LONG CHORD -
 AND
 LOCATION SKETCH

REVISIONS						SHEET NO. 5-2
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 156
2			4			

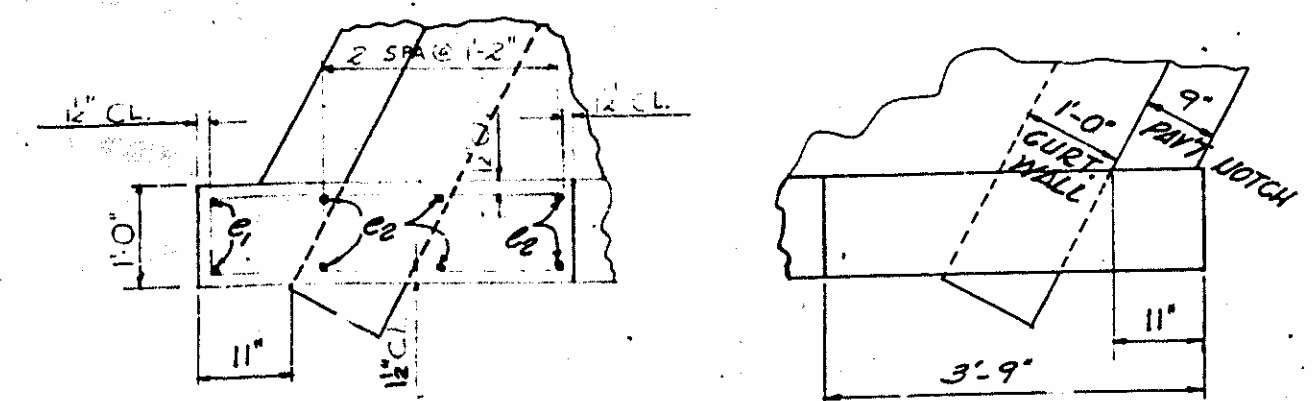
Rev No. 1 - Revised to change length of One Bar Metal Rail by JRP 6-16-70 'E.G.A.

NOTE: FOR DETAILS OF ANCHOR BOLTS AND DOWELS TO BE SET AT END POST FOR GUARD RAIL ATTACHMENT, SEE GUARD RAIL ATTACHMENT SHEET.

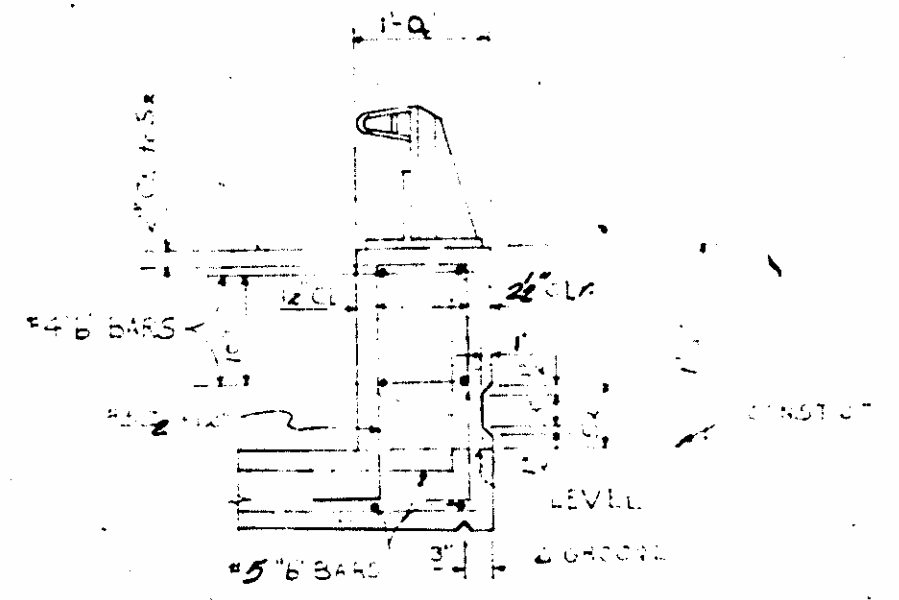
Note: C6 bars and Curved End Blocks. See Standard Guard Rail Anchorage Sheet



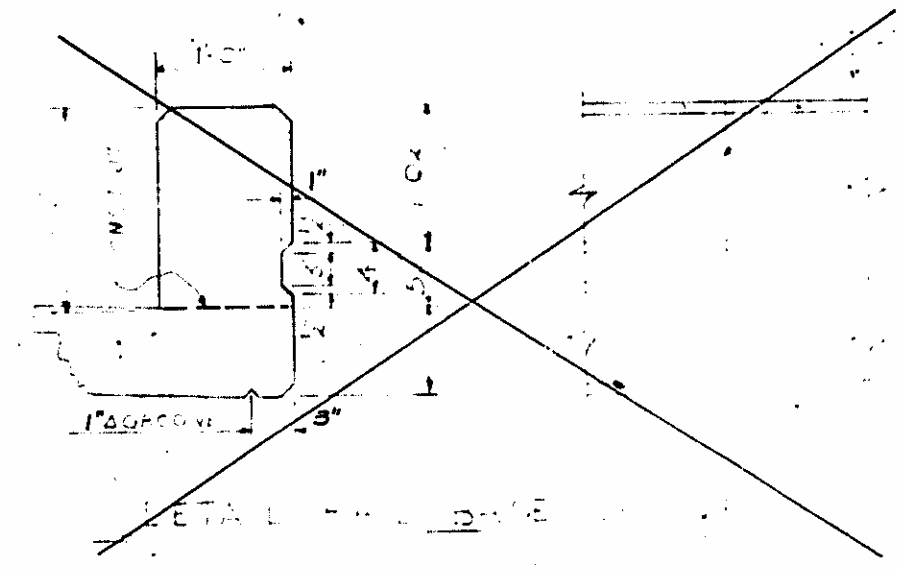
END POST DETAILS



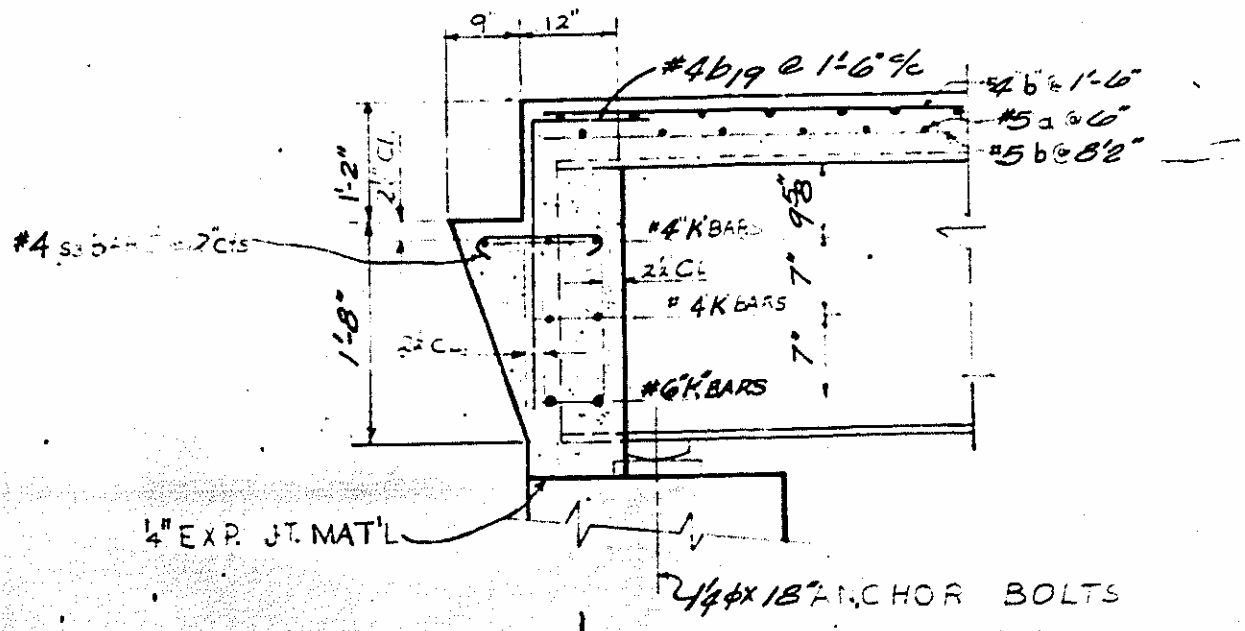
END POST DETAIL



PARAPET & RAIL SECTION

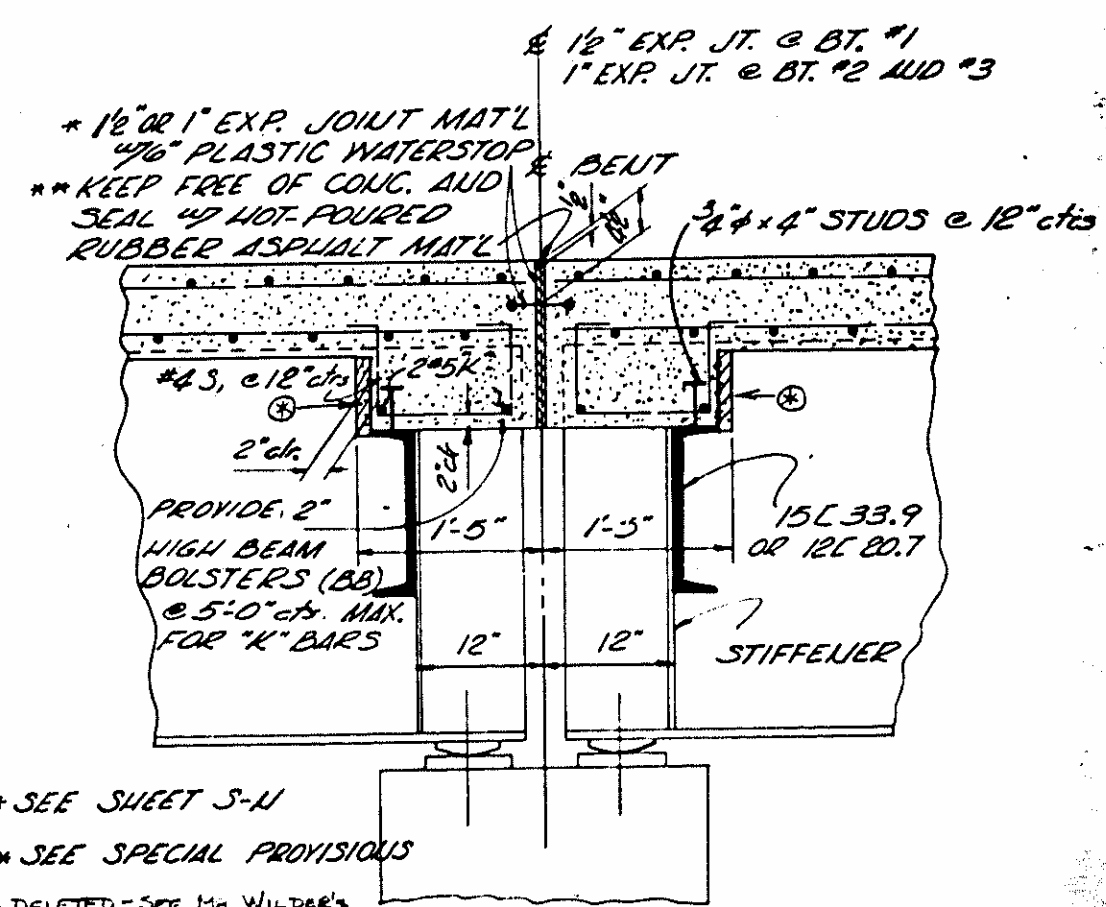


DETAIL OF BENT



SECTION A-A

ASSUMED LINE FOR HS15-44
 CONSTRUCTION OF THIS STRUCTURE IS TO BE IN ACCORDANCE WITH THE
 STRESS IN EXTREME FIBER OF STRUCTURAL STEEL
 FOR OTHER DETAILS SEE GENERAL NOTE
 SEE SHEET S-11
 DIMENSIONS INDICATED AND THE BAR MARK SHOWN
 SEE PLAN



* SEE SHEET S-11
 ** SEE SPECIAL PROVISIONS
 (C) DELETED - SEE MR. WILDER'S REPORT 6-23-70

SECTION THRU BENT DIAPHRAGM (NORMAL TO BENT)

PROJECT No. 8.1592802
 ROCKINGHAM COUNTY
 STATION: 843+01.78-L³

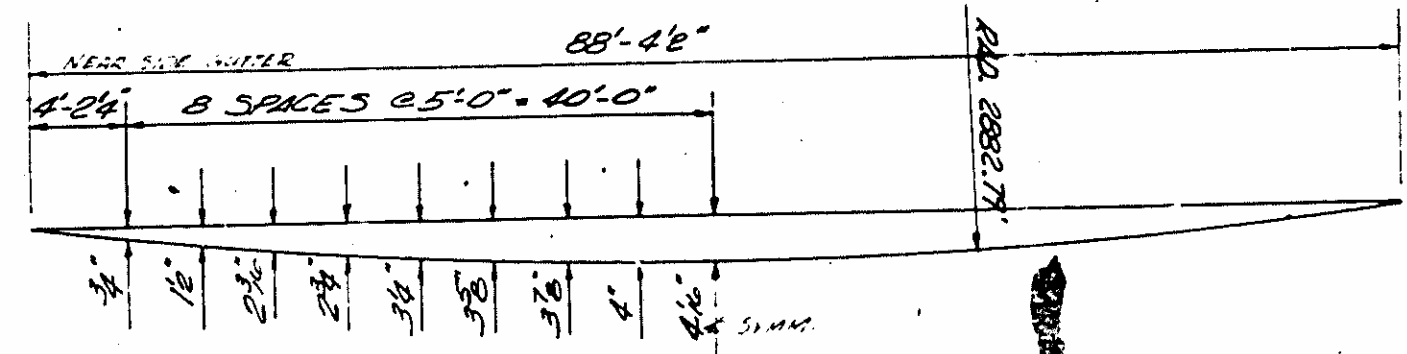
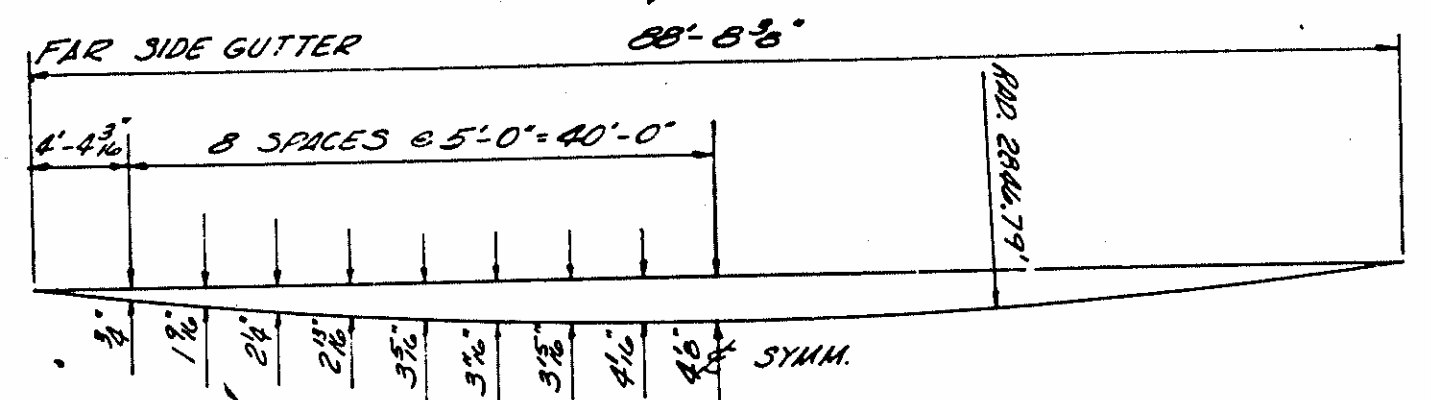
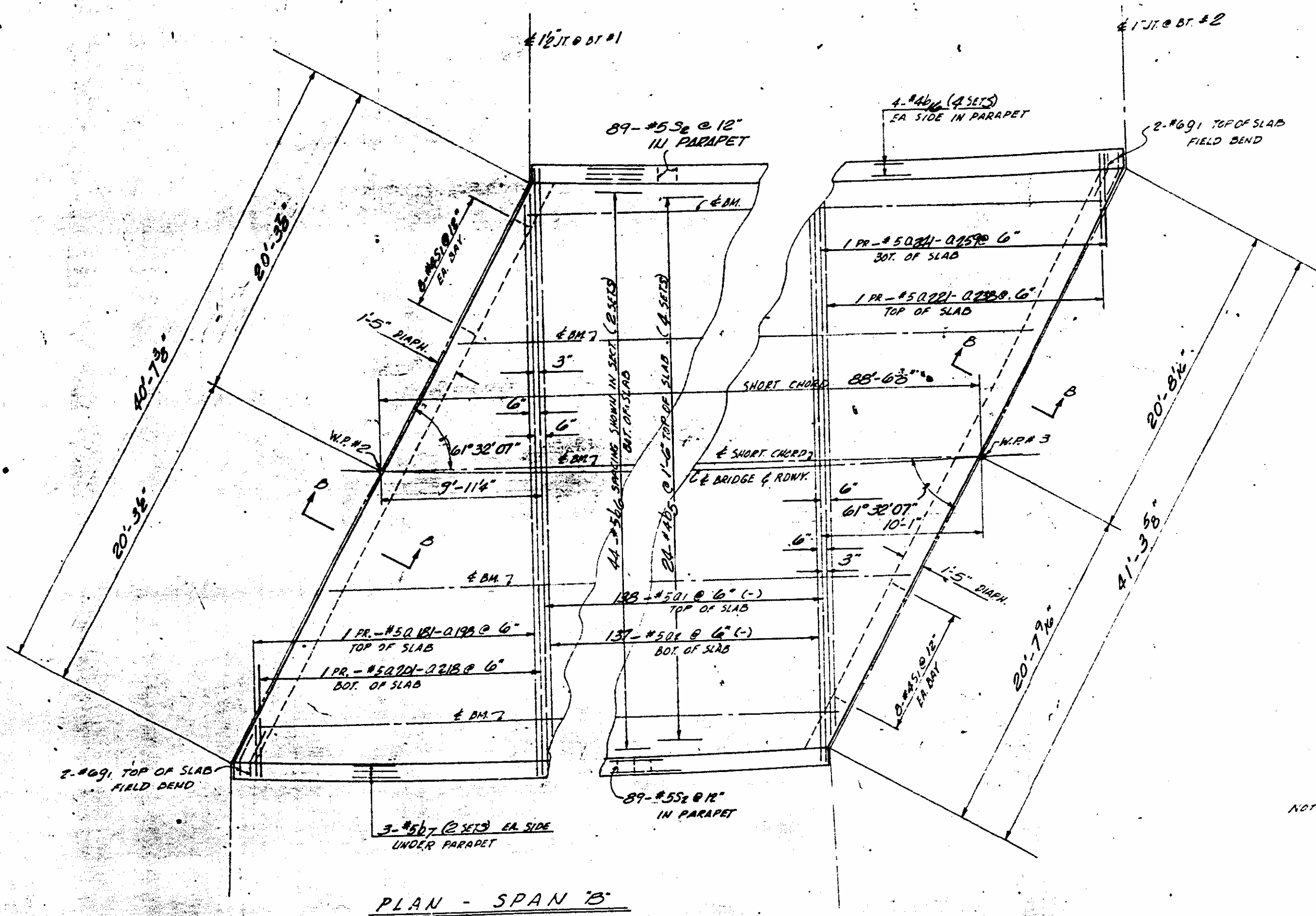
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH

I-BM SUPERSTRUCTURE
 ONE BAR METAL RAIL

NO.		BY		DATE		SHEET NO. 5-93	TOTAL SHEETS 150
NO.	BY	DATE	NO.	BY	DATE		
1			4				
2							

SPECIAL

DRAWN BY: T. J. McCLELLAN	DATE: MAY '68
CHECKED BY: L. G. ALFORD, JR.	DATE: JUNE '68
STANDARD	
DRAWN BY: H. D. JOHNSON	DATE: APRIL 1968
CHECKED BY: L. G. ALFORD, JR.	DATE: MAY '68



CURVE OFFSETS
 NOTE: SHORT CHORD IS MEASURED FROM \pm BEUT #1 TO \pm BEUT #2.

NOTE: "D" BARS SHALL BE PLACED PERPENDICULAR TO THE \pm SHORT CHORD & SPACED ALONG THE SHORT CHORD.

PROJECT No. 0.15928 02
 ROCKINGHAM COUNTY
 STATION: 843+01.78-13-

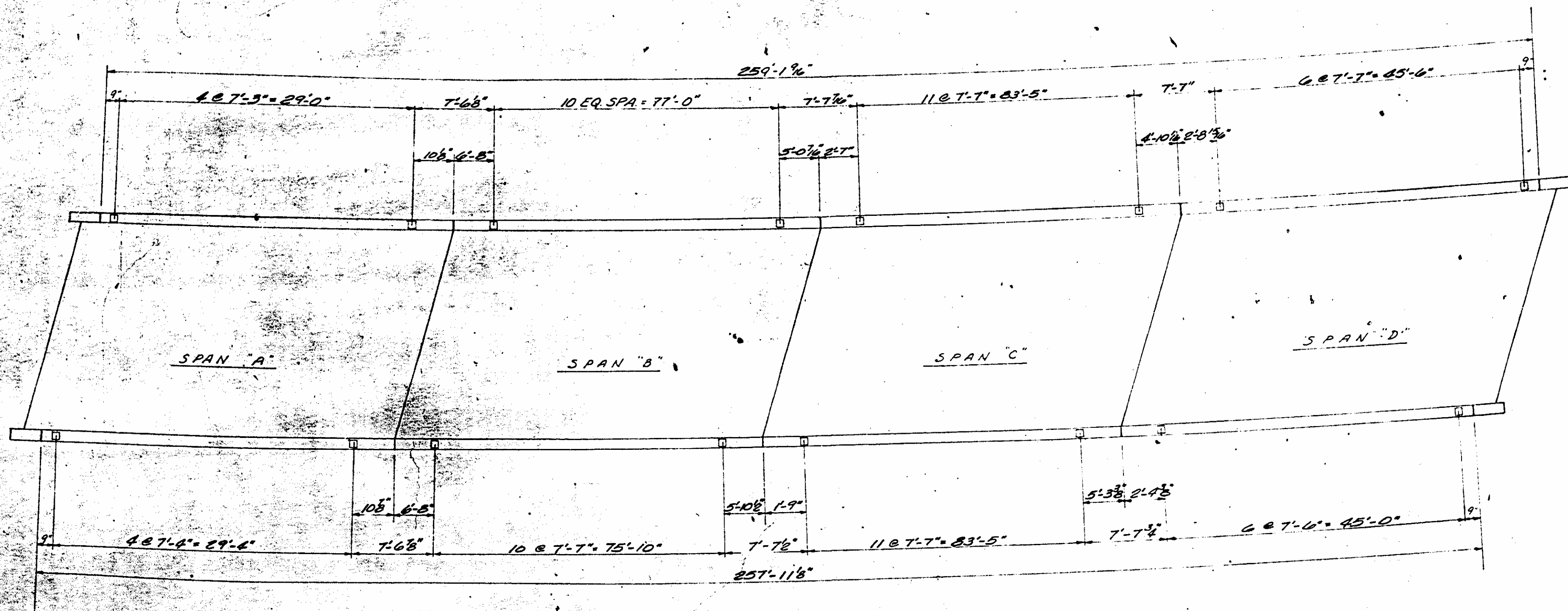
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH
 SUPERSTRUCTURE
 SPAN "B"

MAY 1965

REVISIONS						SHEET NO. 5-95
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 1-6
2			4			

MAY 68

BAR	NO.	SIZE	TYPE	LENGTH	WT.	BAR	NO.	SIZE	TYPE	LENGTH	WT.	BAR	NO.	SIZE	TYPE	LENGTH	WT.	BAR	NO.	SIZE	TYPE	LENGTH	WT.	BAR	NO.	SIZE	TYPE	LENGTH	WT.	BAR	NO.	SIZE	TYPE	LENGTH	WT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
A1	366	#5	2	44.5	15.397	A170	2	#5	str	2'-5"	5	A460	2	#5	str	25'-3"	53	A461	2	#5	1	12'-3"	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A2	362	#5	str	37'-8"	14.222	A181	2	#5	1	36'-3"	70	A457	2	#5	str	6'-2"	13	A458	2	#5	str	23'-7"	49	A459	2	#5	1	10'-8"	22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
A3	2	#5	1	36'-5"	75	A182	2	#5	1	36'-5"	72	A459	2	#5	str	21'-11"	46	A460	2	#5	1	9'-1"	19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A4	2	#5	1	34'-3"	71	A183	2	#5	1	32'-7"	68	A460	2	#5	str	20'-8"	42	A461	2	#5	1	7'-6"	16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A5	2	#5	1	32'-3"	67	A184	2	#5	1	30'-8"	64	A461	2	#5	str	18'-4"	39	A462	2	#5	1	5'-0"	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A6	2	#5	1	28'-5"	59	A185	2	#5	1	28'-10"	60	A462	2	#5	str	15'-1"	31	A463	2	#5	1	4'-3"	9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A7	2	#5	1	26'-5"	55	A186	2	#5	1	27'-0"	56	A463	2	#5	str	13'-5"	28	A464	2	#5	1	3'-7"	8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A8	2	#5	1	24'-7"	47	A187	2	#5	1	23'-3"	48	A464	2	#5	str	11'-8"	24	A465	2	#5	1	3'-0"	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A9	2	#5	1	22'-7"	43	A188	2	#5	1	21'-5"	45	A465	2	#5	str	10'-0"	21	A466	2	#5	1	2'-9"	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A10	2	#5	1	20'-7"	39	A189	2	#5	1	19'-4"	41	A466	2	#5	str	8'-4"	17	A467	2	#5	1	2'-7"	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A11	2	#5	1	18'-8"	35	A190	2	#5	1	17'-8"	37	A467	2	#5	str	6'-7"	14	A468	2	#5	1	2'-6"	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A12	2	#5	1	16'-9"	31	A191	2	#5	1	15'-10"	33	A468	2	#5	str	4'-11"	10	A469	2	#5	1	2'-5"	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A13	2	#5	1	12'-10"	27	A192	2	#5	1	13'-11"	29	A469	2	#5	str	3'-3"	7	A470	2	#5	1	2'-0"	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A14	2	#5	1	10'-10"	23	A193	2	#5	1	12'-1"	25	A470	2	#5	str	1'-11"	3	A471	2	#5	1	1'-0"	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A15	2	#5	1	8'-11"	19	A194	2	#5	1	10'-3"	21	A471	2	#5	str	1'-8"	2	A472	2	#5	1	1'-0"	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A16	2	#5	1	6'-11"	14	A195	2	#5	1	8'-4"	17	A472	2	#5	str	1'-5"	2	A473	2	#5	1	1'-0"	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A17	2	#5	1	5'-0"	10	A196	2	#5	1	4'-8"	10	A473	2	#5	str	1'-0"	2	A474	2	#5	1	1'-0"	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A18	2	#5	str	35'-4"	74	A201	2	#5	str	35'-5"	74	A202	2	#5	str	33'-6"	70	A203	2	#5	str	31'-8"	66	A204	2	#5	str	29'-6"	62	A205	2	#5	str	27'-6"	58	A206	2	#5	str	25'-7"	53	A207	2	#5	str	23'-5"	48	A208	2	#5	str	21'-5"	45	A209	2	#5	str	19'-4"	41	A210	2	#5	str	17'-8"	35	A211	2	#5	str	15'-10"	33	A212	2	#5	str	14'-10"	31	A213	2	#5	str	13'-11"	29	A214	2	#5	str	12'-10"	27	A215	2	#5	str	11'-11"	25	A216	2	#5	str	10'-11"	23	A217	2	#5	str	9'-1"	19	A218	2	#5	str	7'-6"	16	A219	2	#5	str	5'-8"	12	A220	2	#5	str	3'-9"	8	A221	2	#5	str	3'-2"	7	A222	2	#5	str	3'-2"	7	A223	2	#5	str	3'-2"	7	A224	2	#5	str	3'-2"	7	A225	2	#5	str	3'-2"	7	A226	2	#5	str	3'-2"	7	A227	2	#5	str	3'-2"	7	A228	2	#5	str	3'-2"	7	A229	2	#5	str	3'-2"	7	A230	2	#5	str	3'-2"	7	A231	2	#5	str	3'-2"	7	A232	2	#5	str	3'-2"	7	A233	2	#5	str	3'-2"	7	A234	2	#5	str	3'-2"	7	A235	2	#5	str	3'-2"	7	A236	2	#5	str	3'-2"	7	A237	2	#5	str	3'-2"	7	A238	2	#5	str	3'-2"	7	A239	2	#5	str	3'-2"	7	A240	2	#5	str	3'-2"	7	A241	2	#5	str	3'-2"	7	A242	2	#5	str	3'-2"	7	A243	2	#5	str	3'-2"	7	A244	2	#5	str	3'-2"	7	A245	2	#5	str	3'-2"	7	A246	2	#5	str	3'-2"	7	A247	2	#5	str	3'-2"	7	A248	2	#5	str	3'-2"	7	A249	2	#5	str	3'-2"	7	A250	2	#5	str	3'-2"	7	A251	2	#5	str	3'-2"	7	A252	2	#5	str	3'-2"	7	A253	2	#5	str	3'-2"	7	A254	2	#5	str	3'-2"	7	A255	2	#5	str	3'-2"	7	A256	2	#5	str	3'-2"	7	A257	2	#5	str	3'-2"	7	A258	2	#5	str	3'-2"	7	A259	2	#5	str	3'-2"	7	A260	2	#5	str	3'-2"	7	A261	2	#5	str	3'-2"	7	A262	2	#5	str	3'-2"	7	A263	2	#5	str	3'-2"	7	A264	2	#5	str	3'-2"	7	A265	2	#5	str	3'-2"	7	A266	2	#5	str	3'-2"	7	A267	2	#5	str	3'-2"	7	A268	2	#5	str	3'-2"	7	A269	2	#5	str	3'-2"	7	A270	2	#5	str	3'-2"	7	A271	2	#5	str	3'-2"	7	A272	2	#5	str	3'-2"	7	A273	2	#5	str	3'-2"	7	A274	2	#5	str	3'-2"	7	A275	2	#5	str	3'-2"	7	A276	2	#5	str	3'-2"	7	A277	2	#5	str	3'-2"	7	A278	2	#5	str	3'-2"	7	A279	2	#5	str	3'-2"	7	A280	2	#5	str	3'-2"	7	A281	2	#5	str	3'-2"	7	A282	2	#5	str	3'-2"	7	A283	2	#5	str	3'-2"	7	A284	2	#5	str	3'-2"	7	A285	2	#5	str	3'-2"	7	A286	2	#5	str	3'-2"	7	A287	2	#5	str	3'-2"	7	A288	2	#5	str	3'-2"	7	A289	2	#5	str	3'-2"	7	A290	2	#5	str	3'-2"	7	A291	2	#5	str	3'-2"	7	A292	2	#5	str	3'-2"	7	A293	2	#5	str	3'-2"	7	A294	2	#5	str	3'-2"	7	A295	2	#5	str	3'-2"	7	A296	2	#5	str	3'-2"	7	A297	2	#5	str	3'-2"	7	A298	2	#5	str	3'-2"	7	A299	2	#5	str	3'-2"	7	A300	2	#5	str	3'-2"	7	A301	2	#5	str	3'-2"	7	A302	2	#5	str	3'-2"	7	A303	2	#5	str	3'-2"	7	A304	2	#5	str	3'-2"	7	A305	2	#5	str	3'-2"	7	A306	2	#5	str	3'-2"	7	A307	2	#5	str	3'-2"	7	A308	2	#5	str	3'-2"	7	A309	2	#5	str	3'-2"	7	A310	2	#5	str	3'-2"	7	A311	2	#5	str	3'-2"	7	A312	2	#5	str	3'-2"	7	A313	2	#5	str	3'-2"	7	A314	2	#5	str	3'-2"	7	A315	2	#5	str	3'-2"	7	A316	2	#5	str	3'-2"	7	A317	2	#5	str	3'-2"	7	A318	2	#5	str	3'-2"	7	A319	2	#5	str	3'-2"	7	A320	2	#5	str	3'-2"	7	A321	2	#5	str	3'-2"	7	A322	2	#5	str	3'-2"	7	A323	2	#5	str	3'-2"	7	A324	2	#5	str	3'-2"	7	A325	2	#5	str	3'-2"	7	A326	2	#5	str	3'-2"	7	A327	2	#5	str	3'-2"	7	A328	2	#5	str	3'-2"	7	A329	2	#5	str	3'-2"	7	A330	2	#5	str	3'-2"	7	A331	2	#5	str	3'-2"	7	A332	2	#5	str	3'-2"	7	A333	2	#5	str	3'-2"	7	A334	2	#5	str	3'-2"	7	A335	2	#5	str	3'-2"	7	A336	2	#5	str	3'-2"	7	A337	2	#5	str	3'-2"	7	A338	2	#5	str	3'-2"	7	A339	2	#5	str	3'-2"	7	A340	2	#5	str	3'-2"	7	A341	2	#5	str	3'-2"	7	A342	2	#5	str	3'-2"	7	A343	2	#5	str	3'-2"	7	A344	2	#5	str	3'-2"	7	A345	2	#5	str	3'-2"	7	A346	2	#5	str	3'-2"	7	A347	2	#5	str	3'-2"	7	A348	2	#5	str	3'-2"	7	A349	2	#5	str	3'-2"	7	A350	2	#5	str	3'-2"	7	A351	2	#5	str	3'-2"	7	A352	2	#5	str	3'-2"	7	A353	2	#5	str	3'-2"	7	A354	2	#5	str	3'-2"	7	A355	2	#5	str	3'-2"	7	A356	2	#5	str	3'-2"	7	A357	2	#5	str	3'-2"	7	A358	2	#5	str	3'-2"	7	A359	2	#5	str	3'-2"	7	A360	2	#5	str	3'-2"	7	A361	2	#5	str	3'-2"	7	A362	2	#5	str	3'-2"	7	A363	2	#5	str	3'-2"	7	A364	2	#5	str	3'-2"	7	A365	2	#5	str	3'-2"	7	A366	2	#5	str	3'-2"	7	A367	2	#5	str	3'-2"	7	A368	2	#5	str	3'-2"	7	A369	2	#5	str	3'-2"	7	A370	2	#5	str	3'-2"	7	A371	2	#5	str	3'-2"	7	A372	2	#5	str	3'-2"	7	A373	2	#5	str	3'-2"	7	A374	2	#5	str	3'-2"	7	A375	2	#5	str	3'-2"	7	A376	2	#5	str	3'-2"	7	A377	2	#5	str	3'-2"	7	A378	2	#5	str	3'-2"	7	A379	2	#5	str	3'-2"	7	A380	2	#5	str	3'-2"	7	A381	2	#5	str	3'-2"	7	A382	2	#5	str	3'-2"	7	A383	2	#5	str	3'-2"	7	A384	2	#5	str	3'-2"	7	A385	2	#5	str	3'-2"	7	A386	2	#5	str	3'-2"	7	A387	2	#5	str	3'-2"	7	A388	2	#5	str	3'-2"	7	A389	2	#5	str	3'-2"	7	A390	2	#5	str	3'-2"	7	A391	2	#5	str	3'-2"	7	A392	2	#5	str	3'-2"	7	A393	2	#5	str	3'-2"	7	A394	2	#5	str	3'-2"	7	A395	2	#5	str	3'-2"	7	A396	2	#5	str	3'-2"	7	A397	2	#5	str	3'-2"	7	A398	2	#5	str	3'-2"	7	A399	2	#5	str	3'-2"	7	A400	2	#5	str	3'-2"	7	A401	2



PLAN SHOWING RAIL POST SPACING
 NOTE: DIMENSIONS ARE MEASURED ALONG INSIDE FACE OF PARAPET.

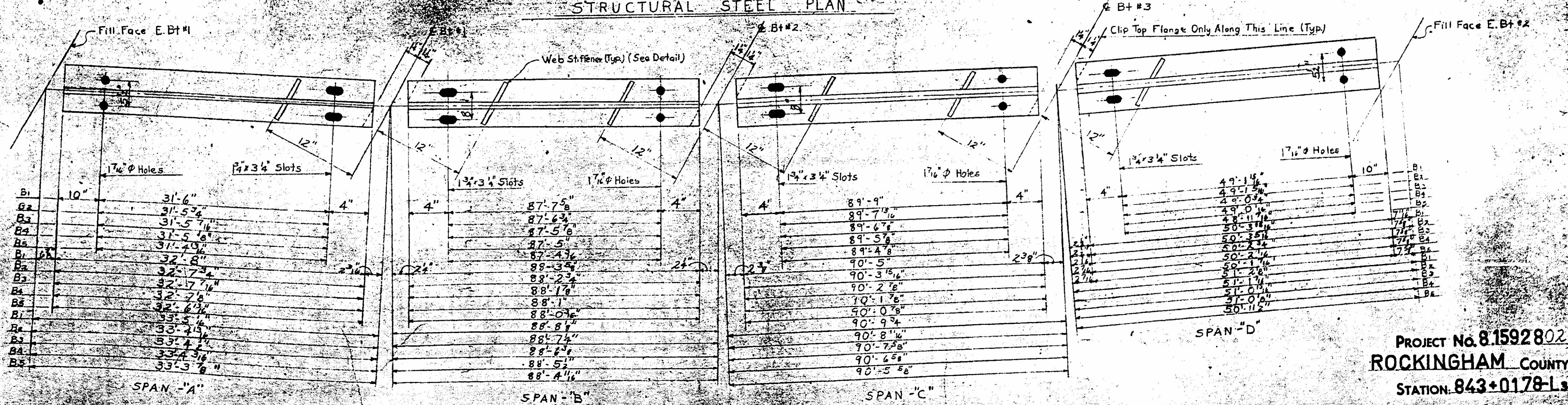
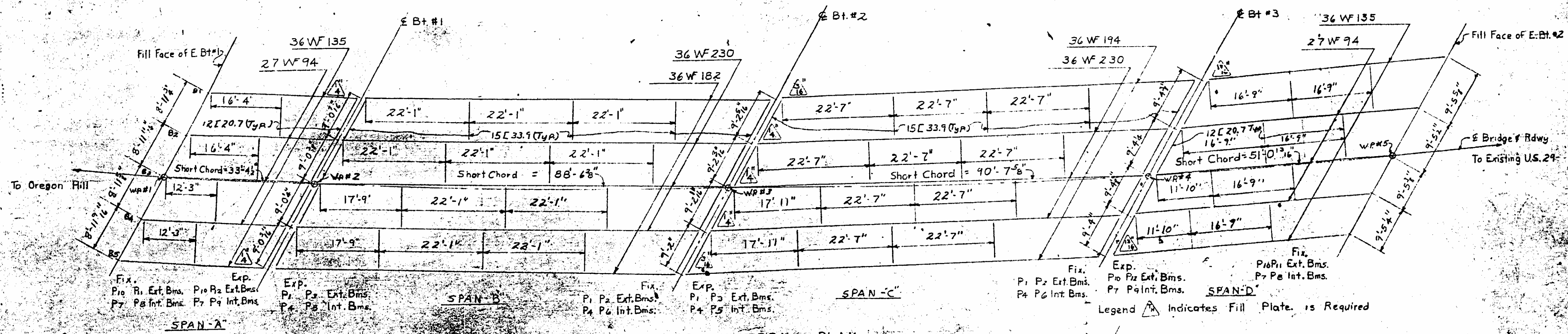
PROJECT No. 8-159280
 ROCKINGHAM COUNTY
 STATION: 843+01.78-13

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
 RAIL POST SPACING

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

Rev. No. 1 - Revised to change rail length.
 by JKP (6-16-70) J.E.G.A.

SHEET NO. 5-100
 TOTAL SHEETS 156

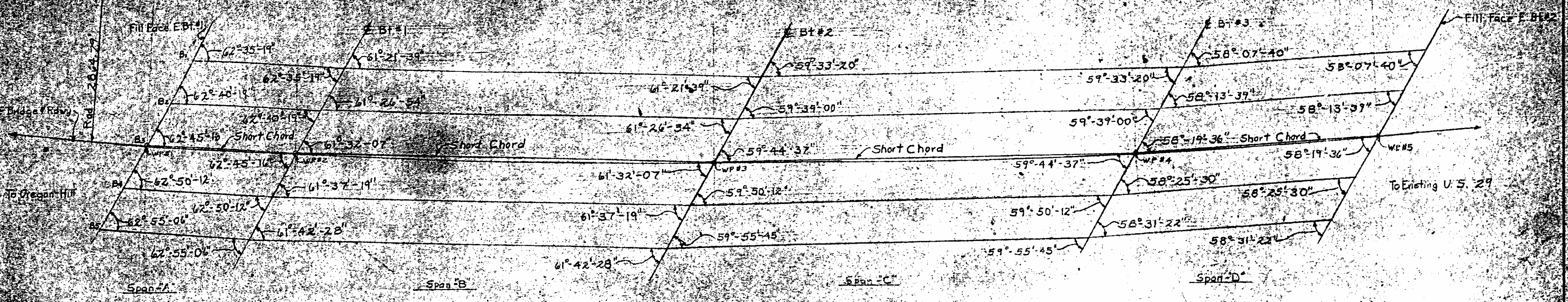


PROJECT No. 8.1592802
ROCKINGHAM COUNTY
 STATION: 843+0178-Ls

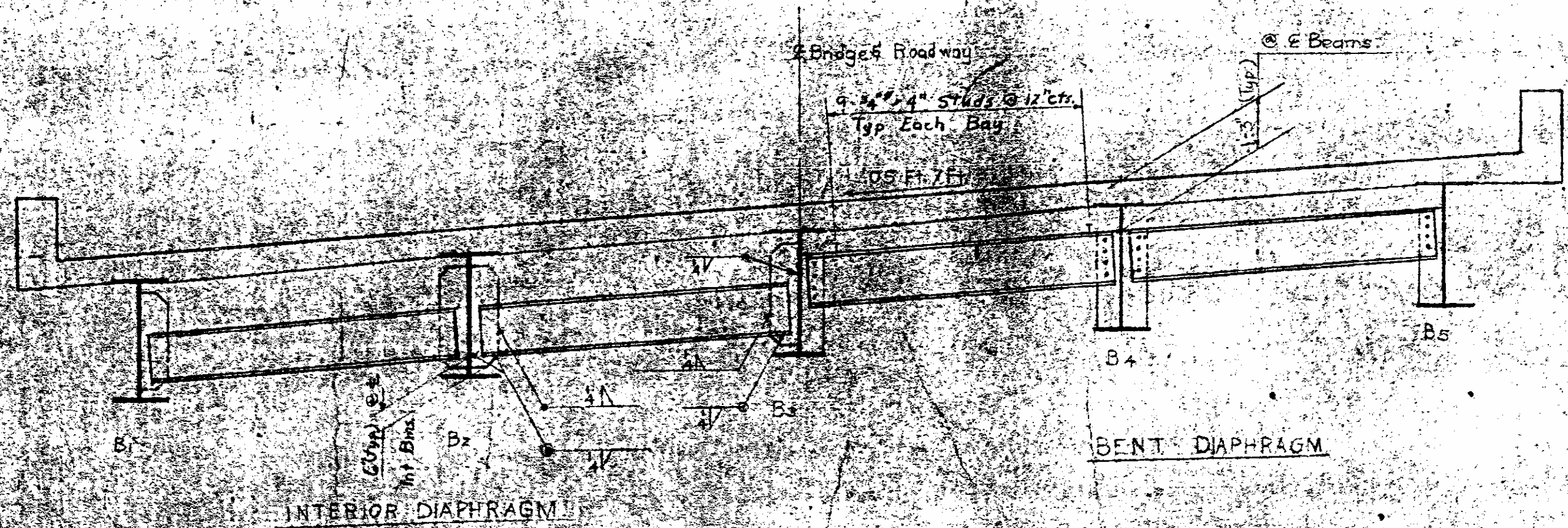
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
SUPERSTRUCTURE
STRUCTURAL STEEL
 APRIL 1968

Revision No. 1 To Change Bearing Plates on Ext. Bms. Span A & D
 S.S.T.

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1	HDM	3/28/69	1		



PLAN SHOWING ANGLES AT BENTS



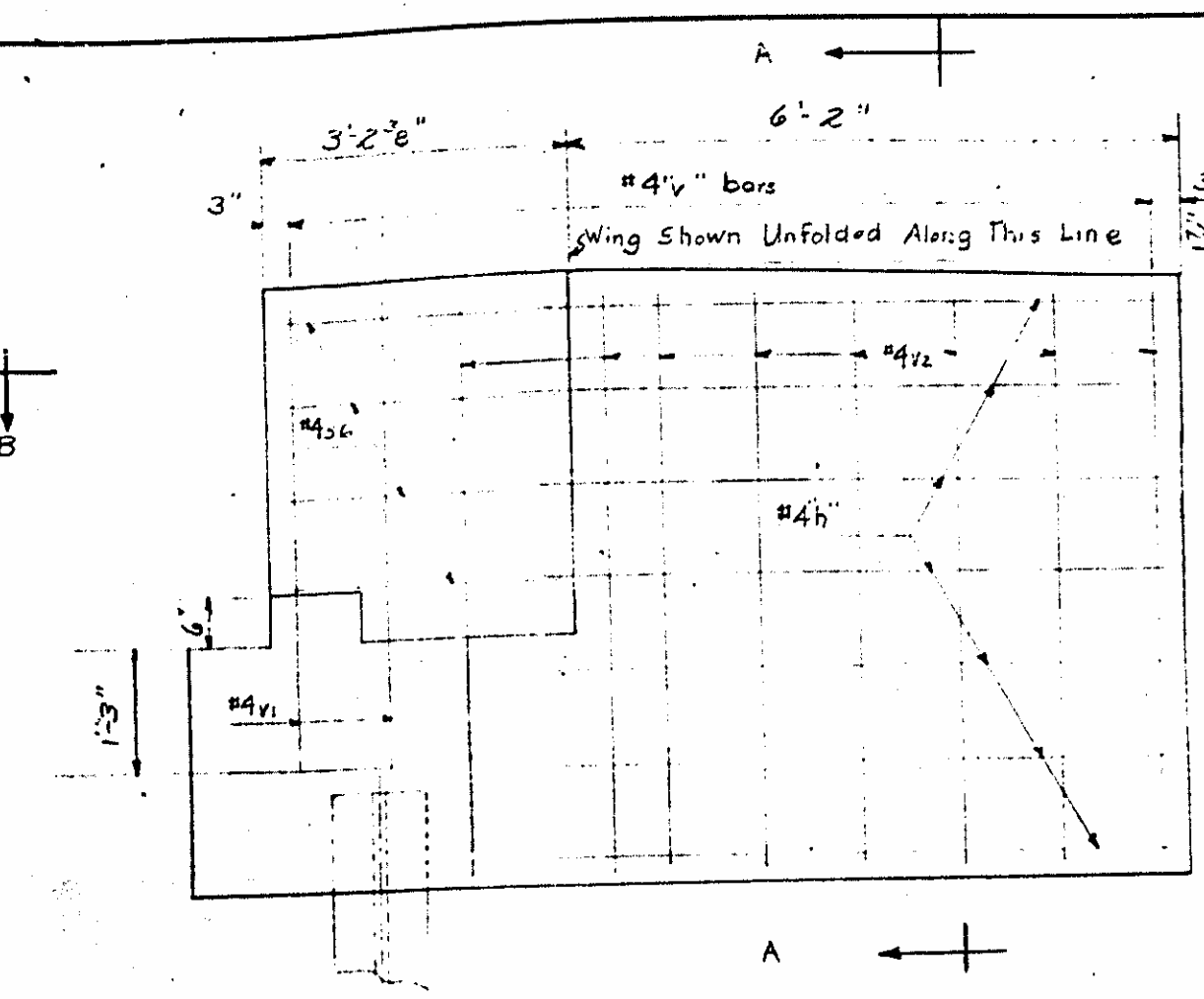
TYPICAL SECTION

PROJECT No. 81592802
 ROCKINGHAM COUNTY
 STATION: 843+01/78-1

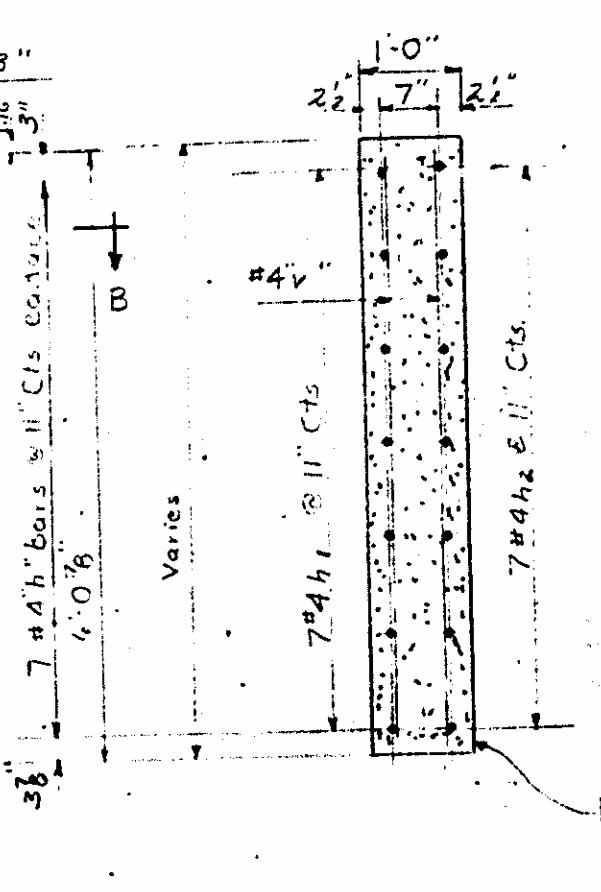
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH

SUPERSTRUCTURE
 STRUCTURAL STEEL
 April 1968

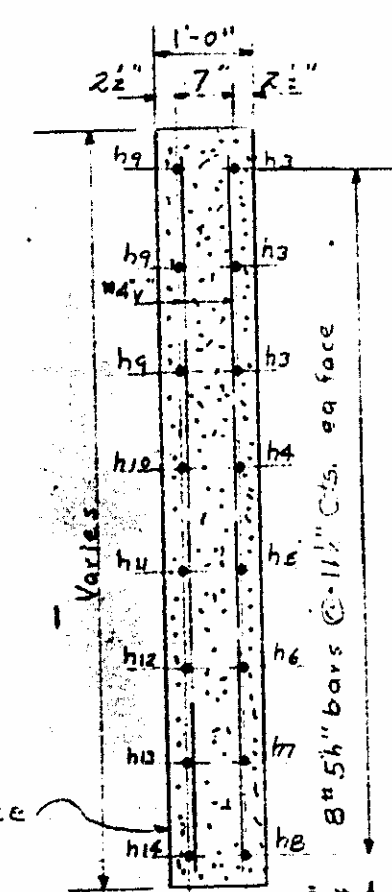
REVISIONS						NO.
NO.	BY	DATE	NO.	BY	DATE	
1			1			1
2			2			2
3			3			3



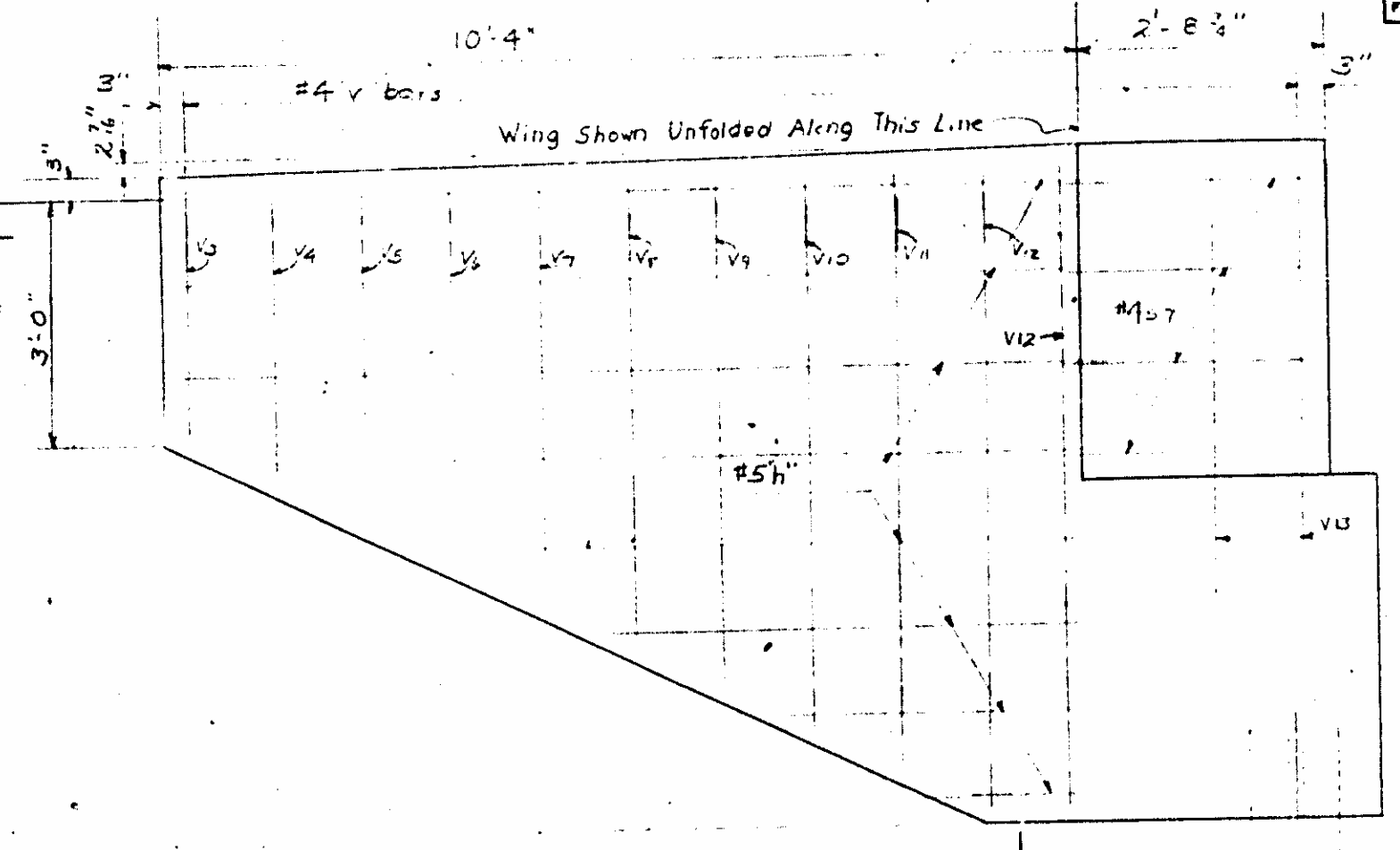
VIEW W-1



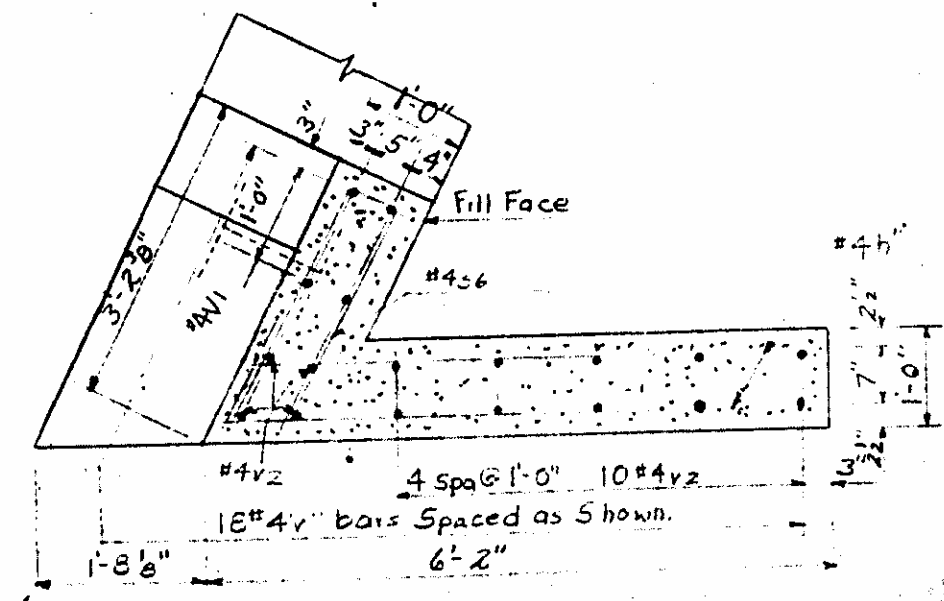
SECTION A-A



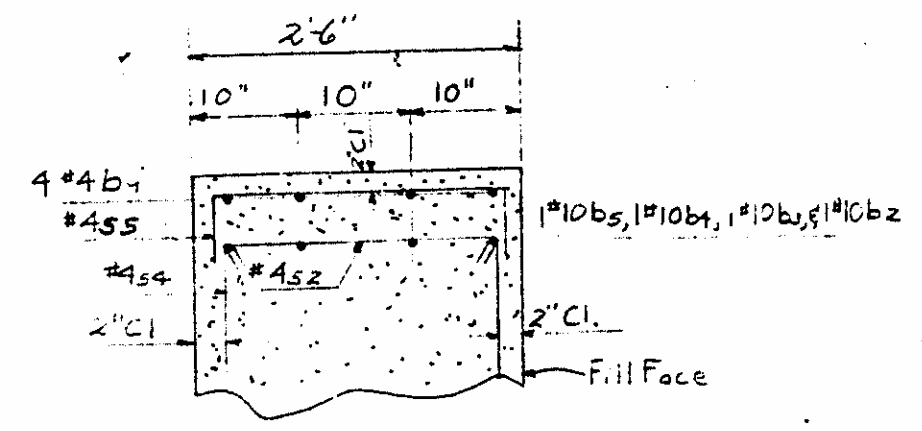
SECTION D-D



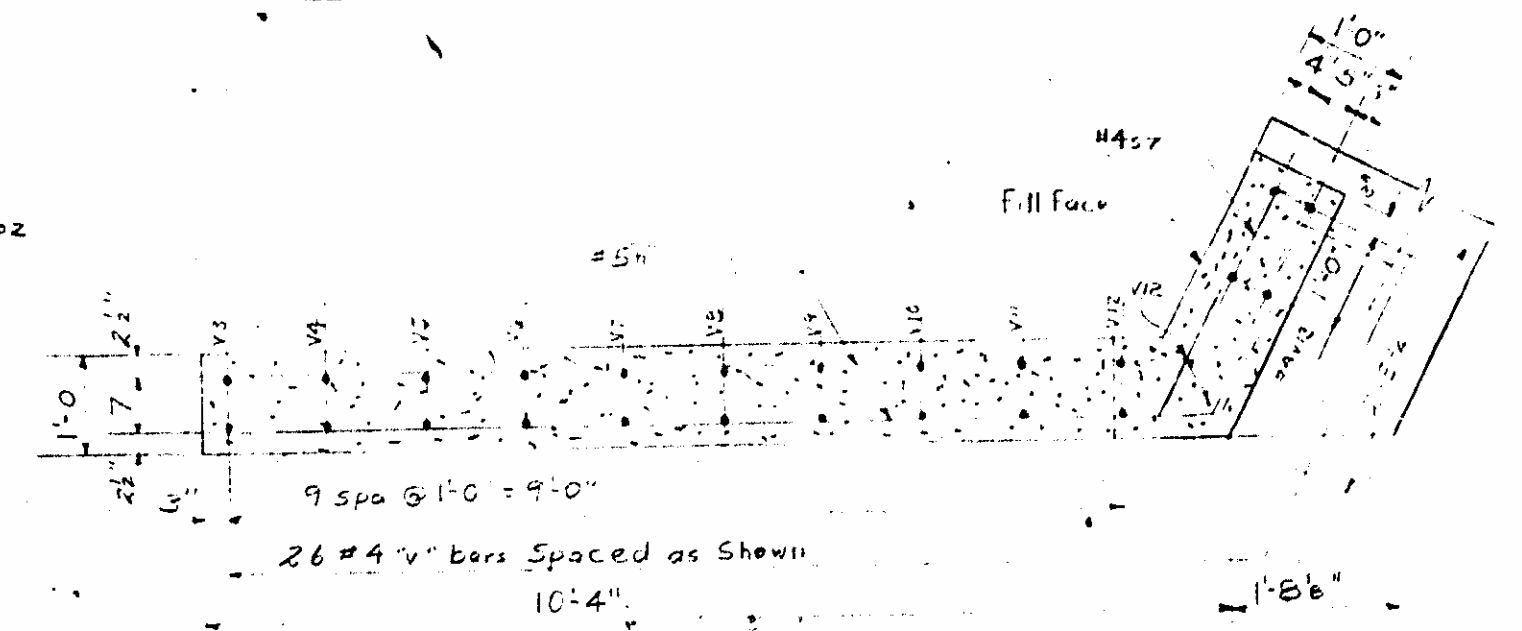
VIEW W-2



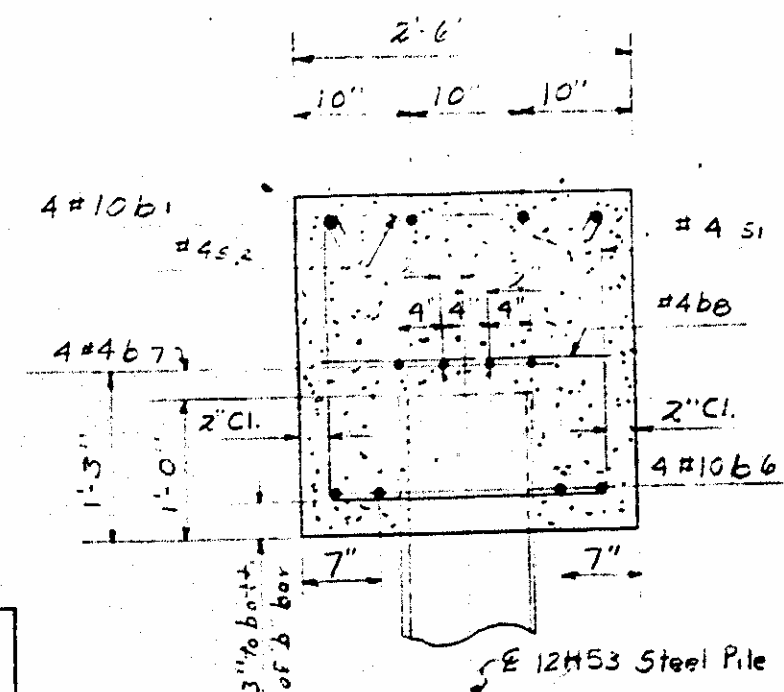
SECTION B-B



PARTIAL SECTION X-X



SECTION C-C



SECTION Y-Y

BILL OF MATERIAL											
BAR	No.	SIZE	TYPE	LENGTH	WEIGHT	BAR	No.	SIZE	TYPE	LENGTH	WEIGHT
b1	4	#10	2	19'-5"	334	h14	1	#5	8	2'-0"	2
b2	1	#4	1	27'-9"	119	s1	10	#4	3	7'-2"	48
b3	1	#4	1	27'-1"	117	s2	37	#5	5	2'-11"	72
b4	1	#4	2	26'-10"	115	s3	7	#4	3	9'-9"	43
b5	4	#10	1	51'-10"	892	s4	20	#4	3	9'-8"	129
b6	6	#4	Stv	25'-2"	134	s5	3	#4	4	3'-2"	6
b7	13	#4	1	2'-2"	19	s6	4	#4	6	5'-9"	16
b8	4	#4	1	2'-8"	7	s7	4	#4	6	5'-8"	15
b9	4	#10	Stv	12'-3"	211	v1	4	#4	Stv	4'-10"	13
b10	7	#4	7	6'-2"	29	v2	14	#4	1	5'-8"	53
h1	7	#4	7	5'-11"	25	v3	2	#4	1	2'-8"	4
h2	3	#5	8	10'-6"	33	v4	1	#4	1	3'-3"	4
h3	1	#4	1	9'-9"	10	v5	1	#4	1	3'-8"	5
h4	1	#4	1	7'-9"	8	v6	1	#4	1	4'-2"	6
h5	1	#4	1	5'-9"	6	v7	1	#4	1	4'-8"	6
h6	1	#4	1	3'-9"	4	v8	1	#4	1	5'-2"	7
h7	1	#4	1	1'-9"	2	v9	1	#4	1	5'-7"	7
h8	3	#4	1	10'-9"	34	v10	1	#4	1	6'-1"	5
h9	1	#4	1	18'-0"	10	v11	2	#4	1	6'-7"	9
h10	1	#4	1	8'-0"	8	v12	4	#4	1	7'-1"	9
h11	1	#4	1	6'-0"	6	v13	4	#4	Stv	4'-10"	13
h12	1	#5	8	4'-0"	4						
h13	1	#5	8	4'-0"	4						

Reinforcing Steel Lbs. = 2733
 4" Conc. Slope Prot. - S.Y. = 185.837
 Class "A" Concrete = 19.4 Cu Yds.
 12 H53 Steel Piles
 No. = 6 Lin Ft. = 240'

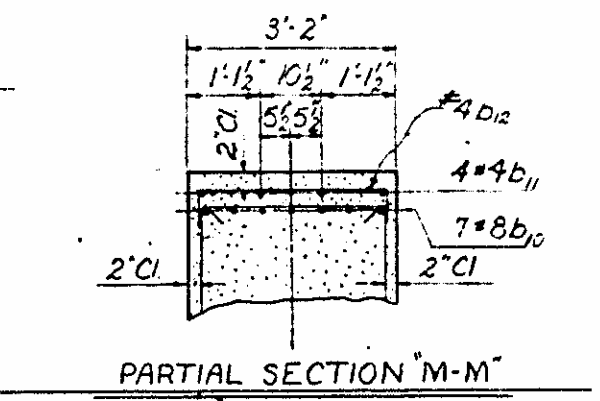
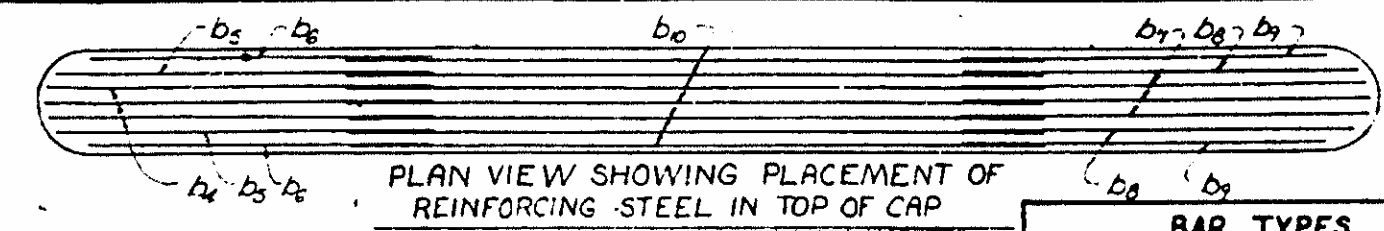
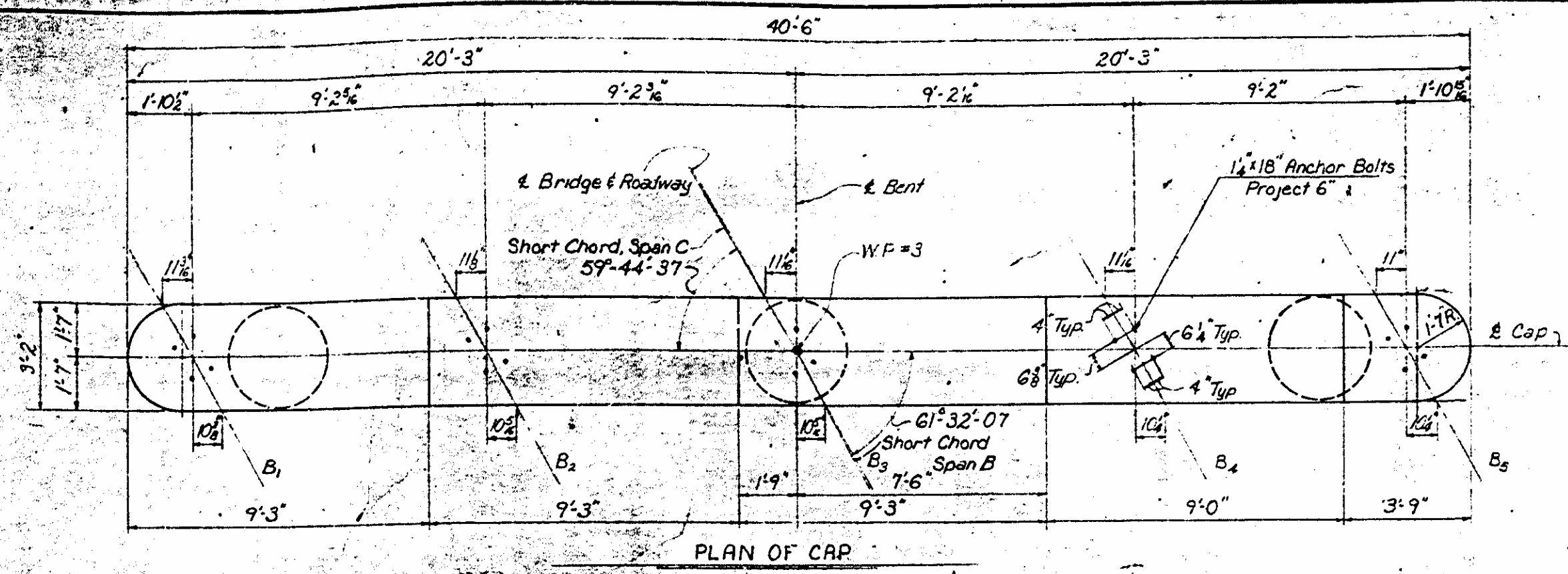
PROJECT No. 81592802
 ROCKINGHAM COUNTY
 STATION: 843+01.78-13-

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH

END BENT No. 1

May 1968

REVISIONS						SHEET NO.	
NO.	BY	DATE	NO.	BY	DATE	3-105	
1			3			TOTAL SHEETS	
2			4			156	

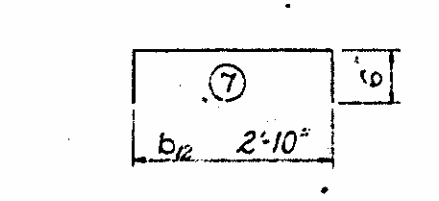
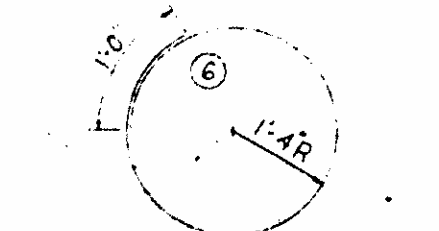
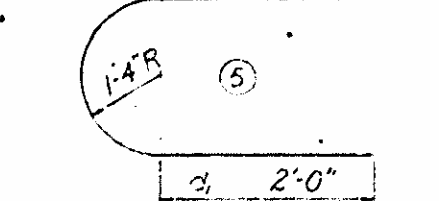
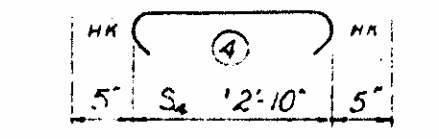
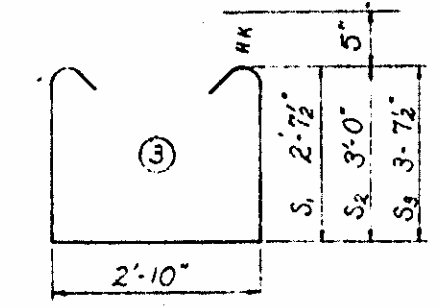


BAR TYPES
All Dimensions Are Out To Out

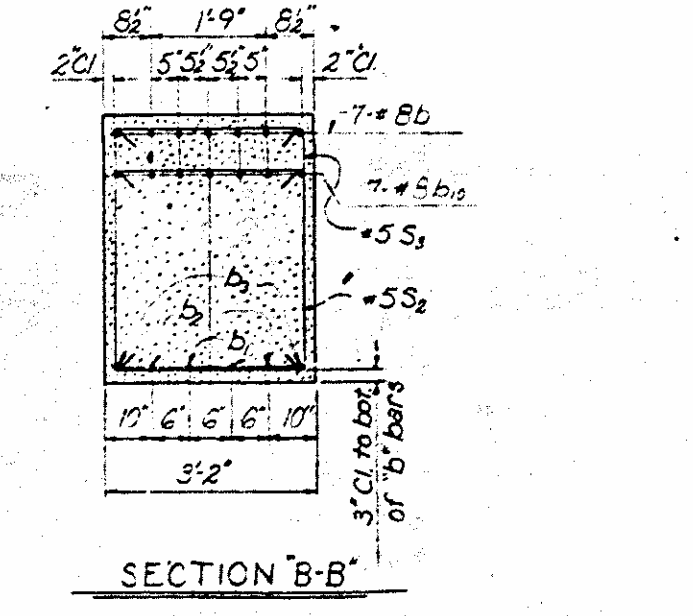
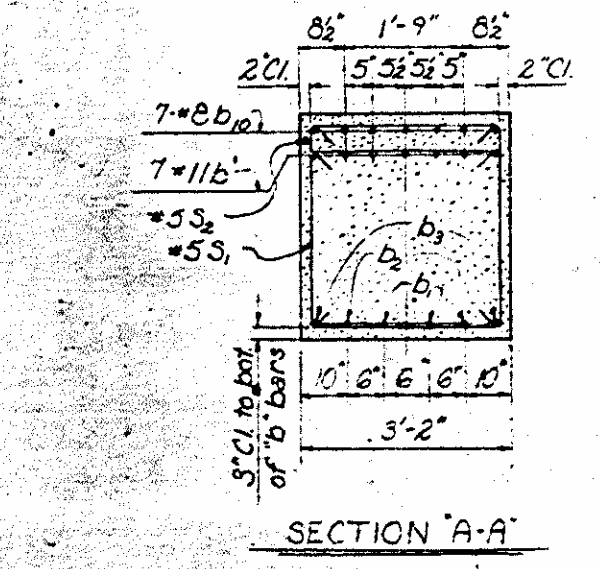
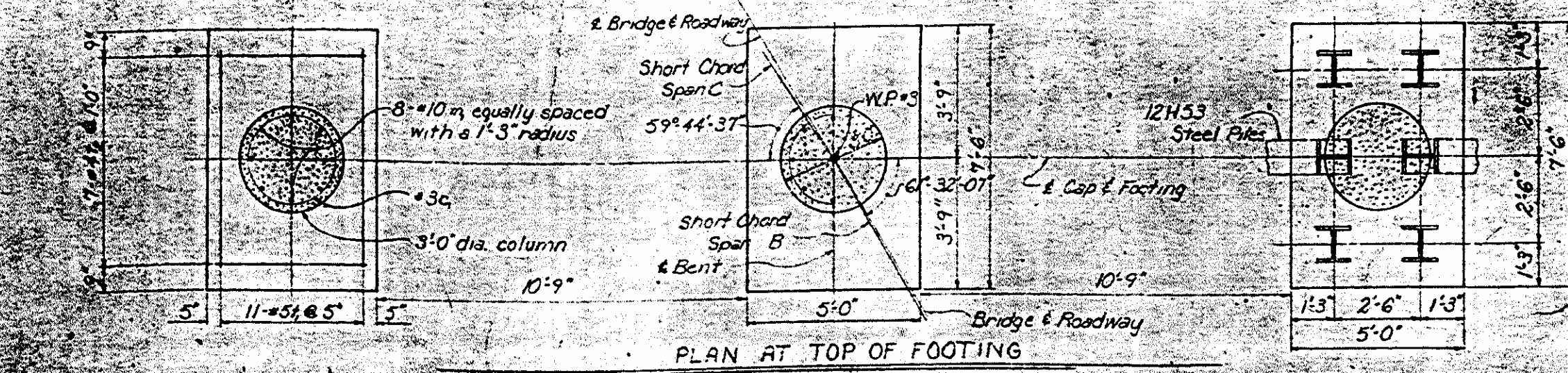
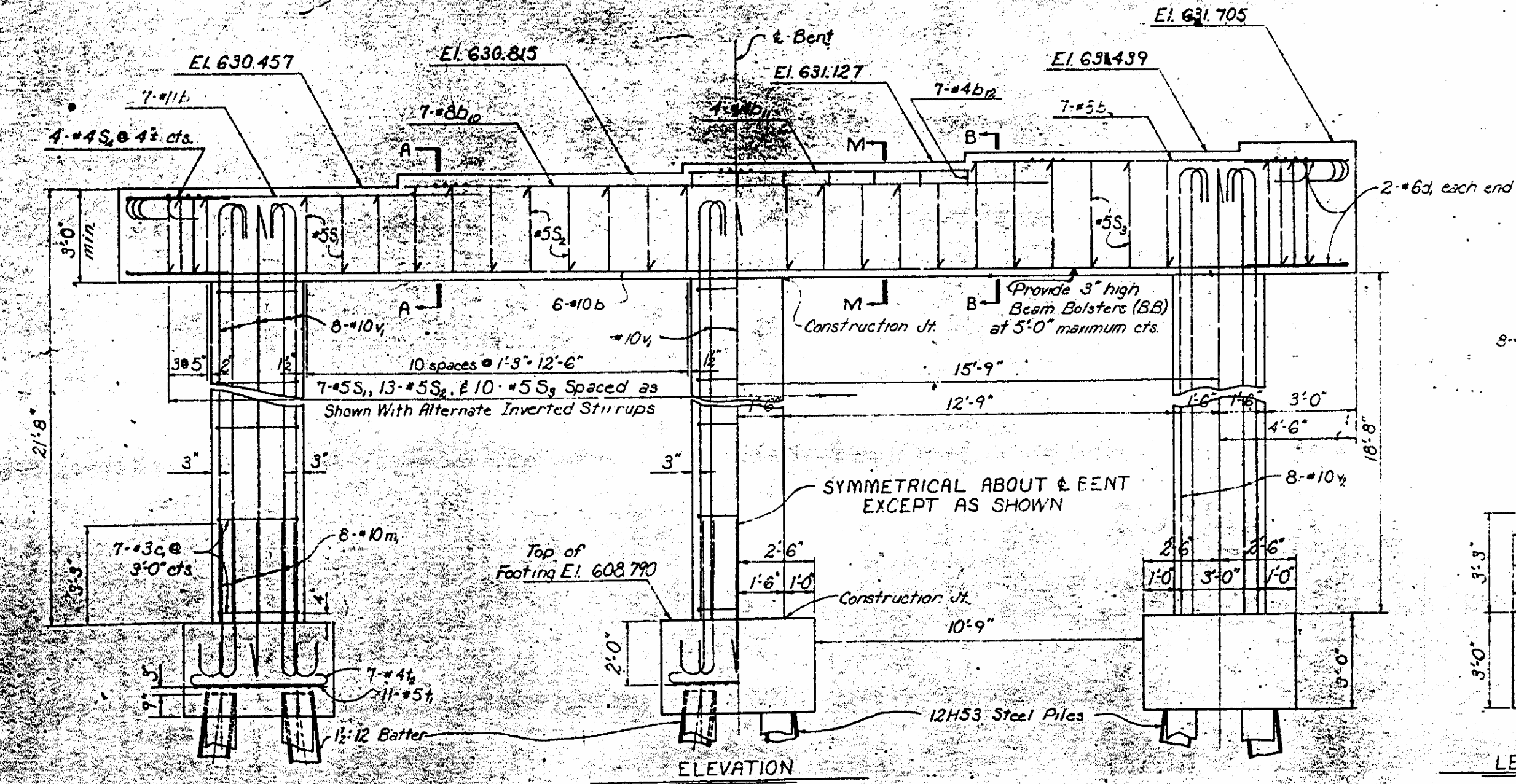
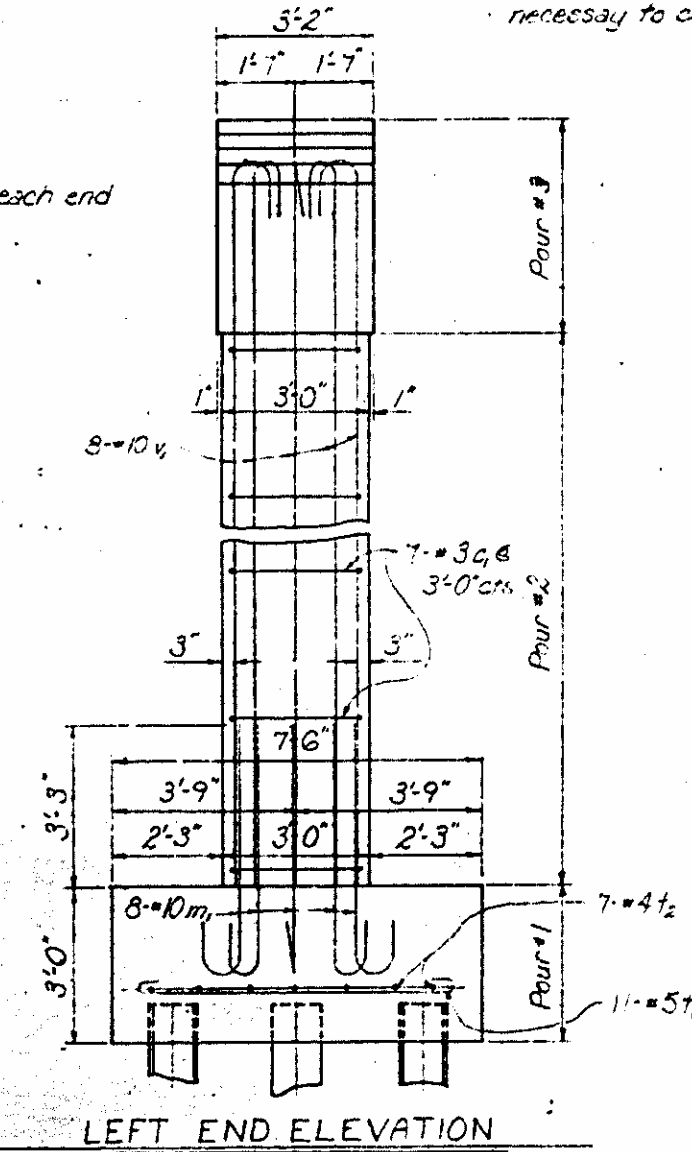
HK	①	HK
7'	7'-0"	7'
6'	2'-6"	6'
②		
b1, b2, b3	Total Lg. Less 1'-7"	1'-7"
b4, b5, b6	Total Lg. Less 1'-1"	1'-1"
v1	20'-11"	1'-3"
v2	21'-11"	1'-5"
m1	5'-3"	1'-5"

BILL OF MATERIAL
For One Bent Only

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
b1	#10	Str.	40'-7"	345	
b2	#10	Str.	37'-8"	341	
b3	#10	Str.	38'-0"	327	
b4	#11	2	13'-4"	213	
b5	#11	2	13'-11"	139	
b6	#11	2	12'-5"	123	
b7	#8	2	13'-5"	107	
b8	#8	2	13'-2"	70	
b9	#9	2	12'-6"	67	
b10	#8	Str.	21'-0"	332	
b11	#4	Str.	9'-3"	25	
b12	#4	7	3'-10"	18	
S1	#5	3	8'-11"	65	
S2	#5	3	9'-8"	131	
S3	#5	3	10'-11"	114	
S4	#4	4	3'-8"	49	
v1	#16	#10	2	22'-4"	1533
v2	#8	#10	2	23'-4"	503
m1	#24	#10	2	6'-3"	688
t1	#30	#5	1	8'-2"	281
t2	#21	#4	1	5'-6"	77
c1	#21	#3	6	9'-5"	74
d1	#4	#6	5	8'-2"	49



NOTE: v bars may be turned as necessary to clear cap steel



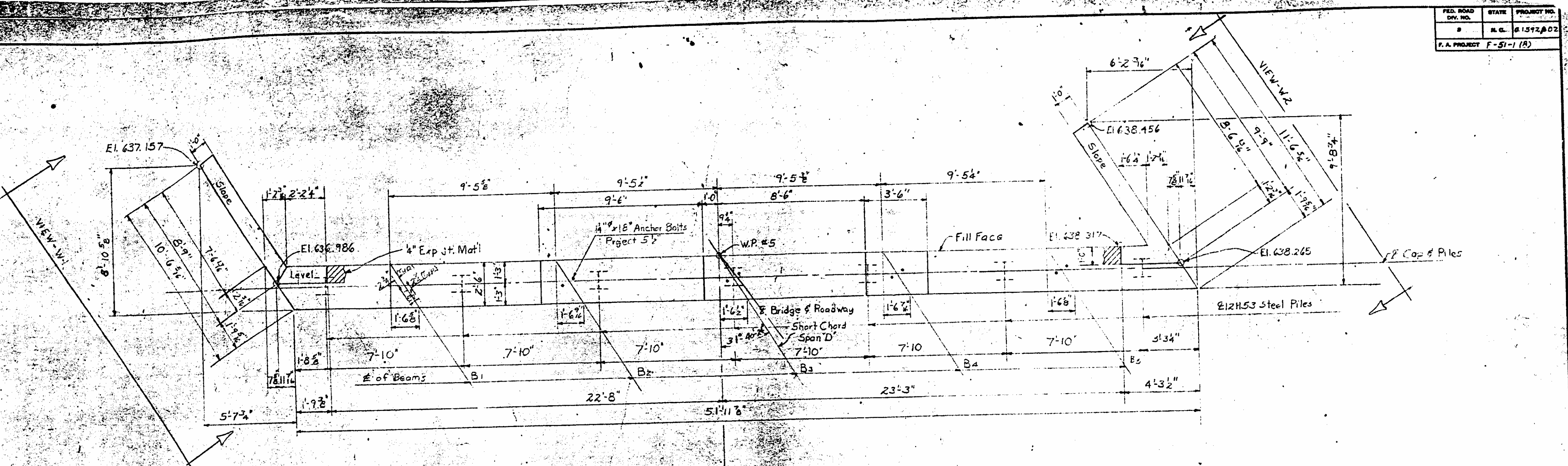
PROJECT No. 81592802
ROCKINGHAM COUNTY
STATION: 843+01.78-1.5

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH
BENT NO. 2

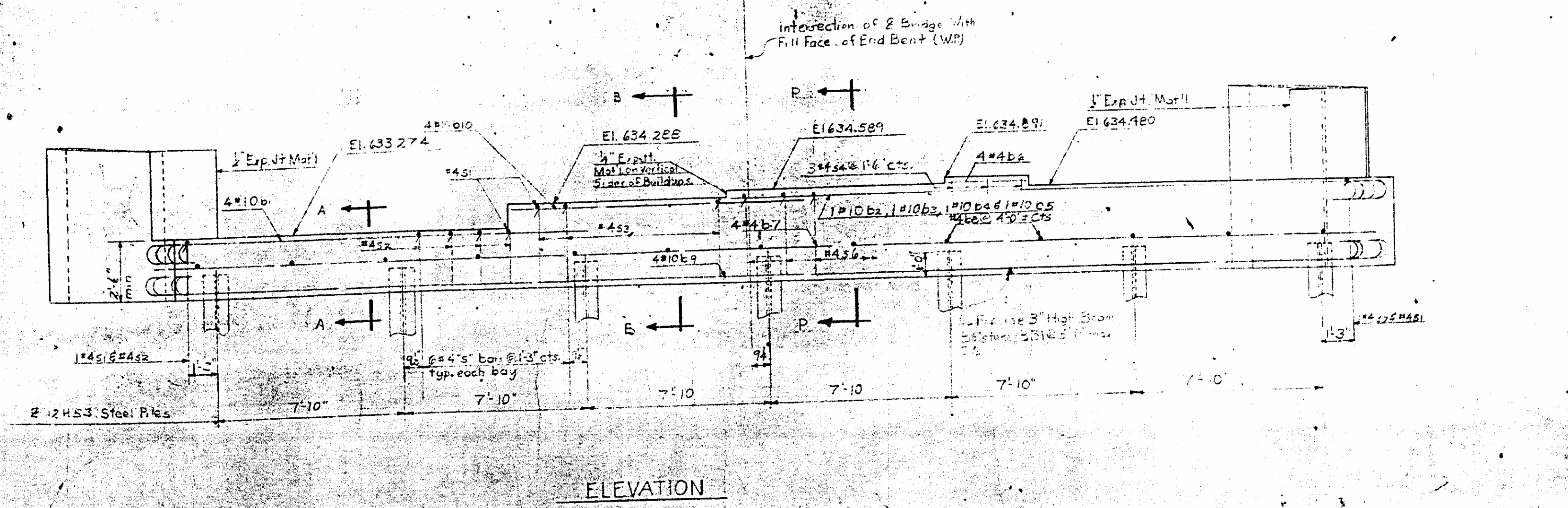
April 1968

REVISIONS			
NO.	BY	DATE	NO.
1			3
2			4

SHEET NO. 5-107
TOTAL SHEETS 156



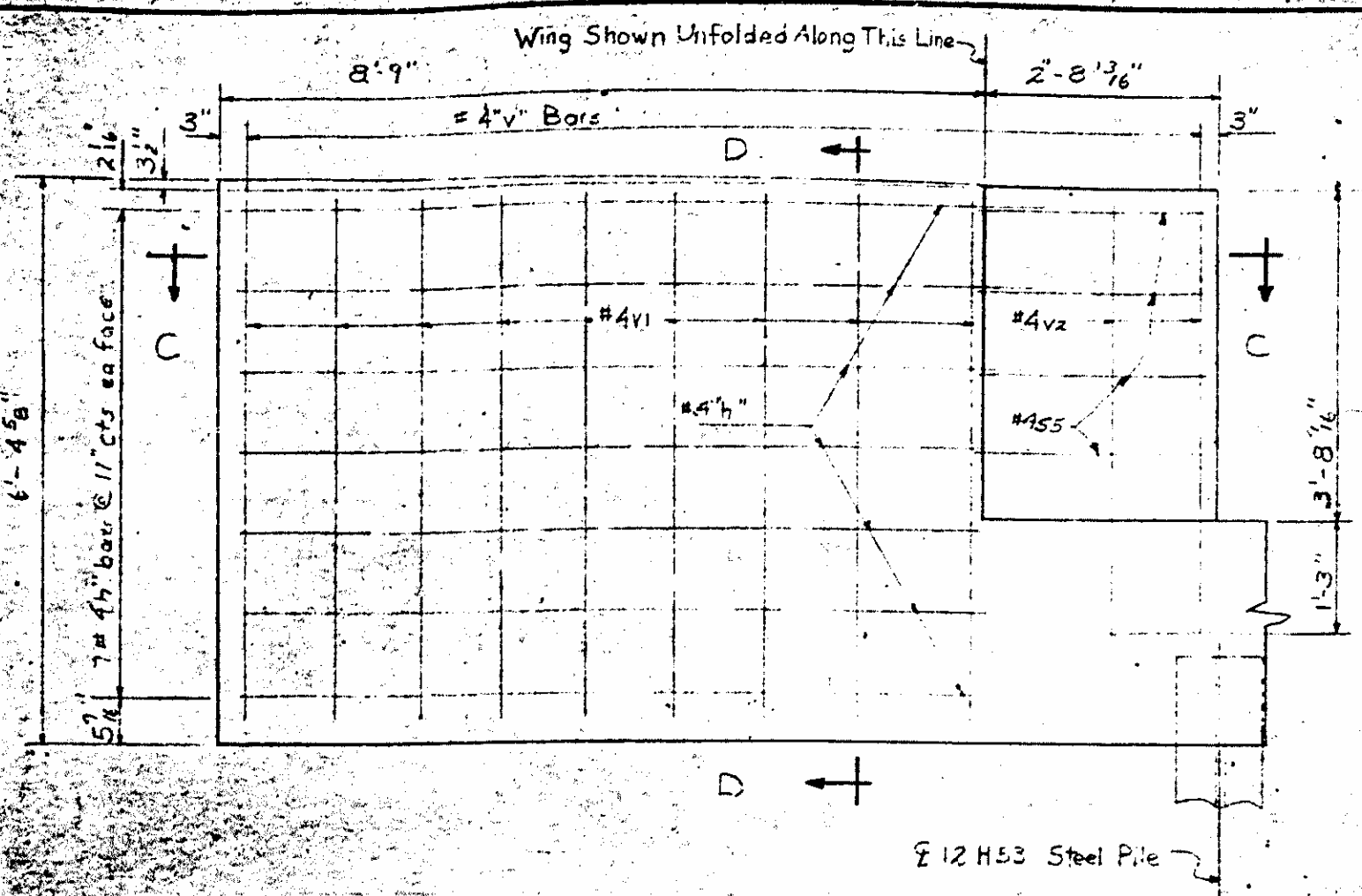
PLAN



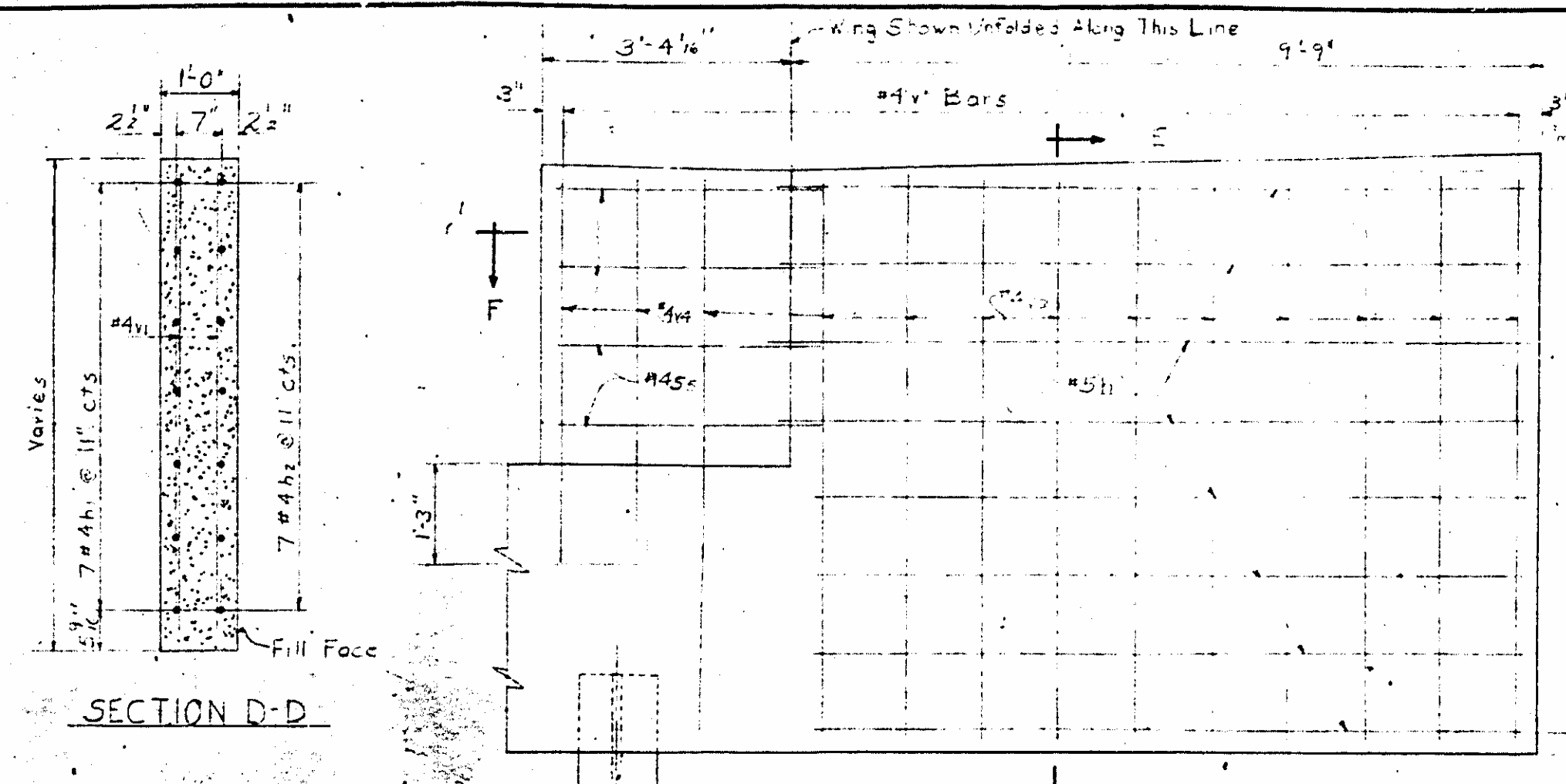
ELEVATION

PROJECT No. 81592802
 ROCKINGHAM COUNTY
 STATION: 843+01.78-13-

STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
RALEIGH					
END BENT No. 2					
May 1968					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			2		
2			3		
					SHEET NO. 3-09
					TOTAL SHEETS 156

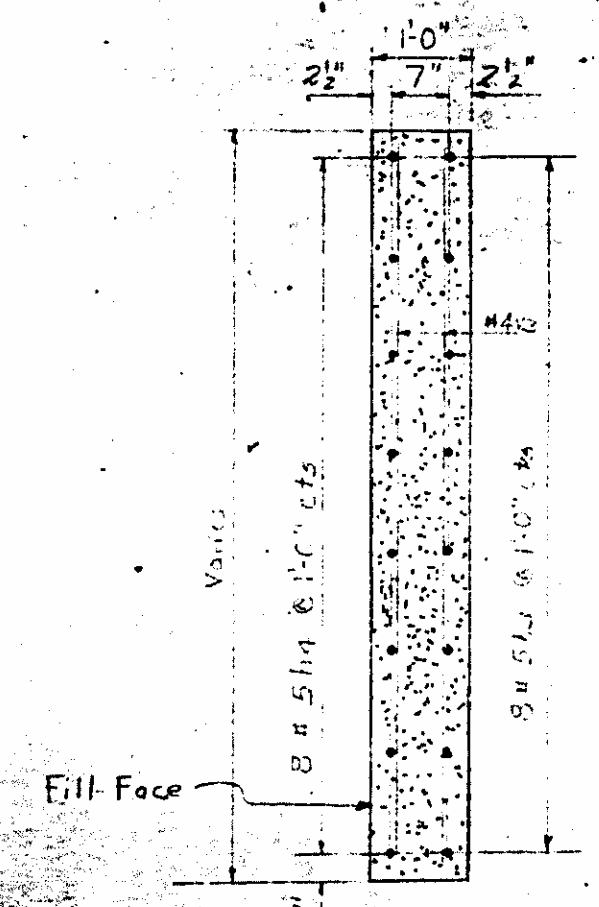


VIEW - W1

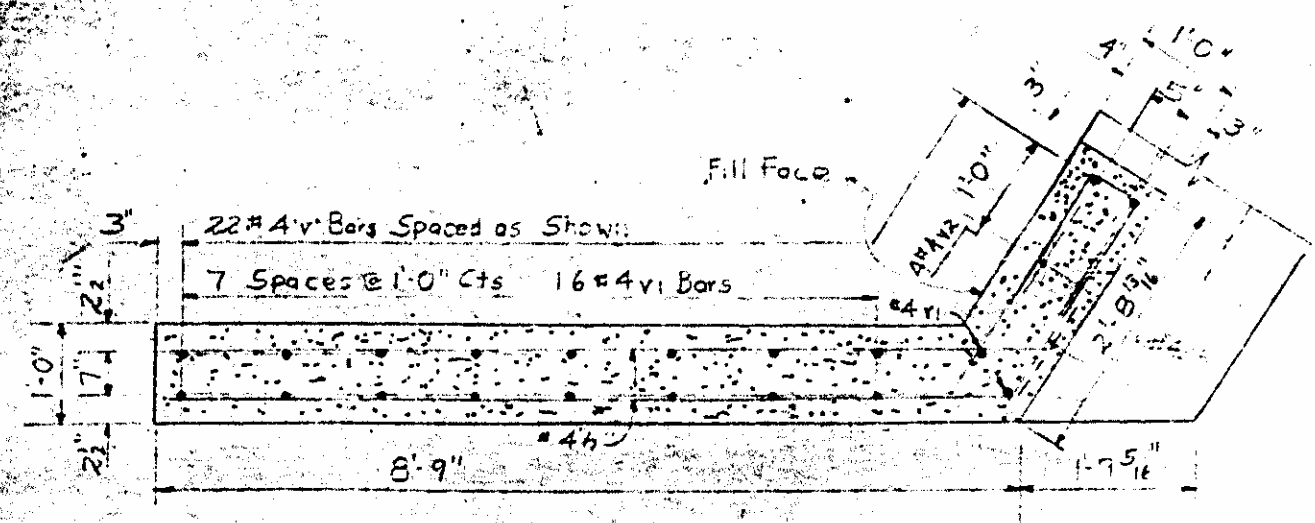


VIEW - W2

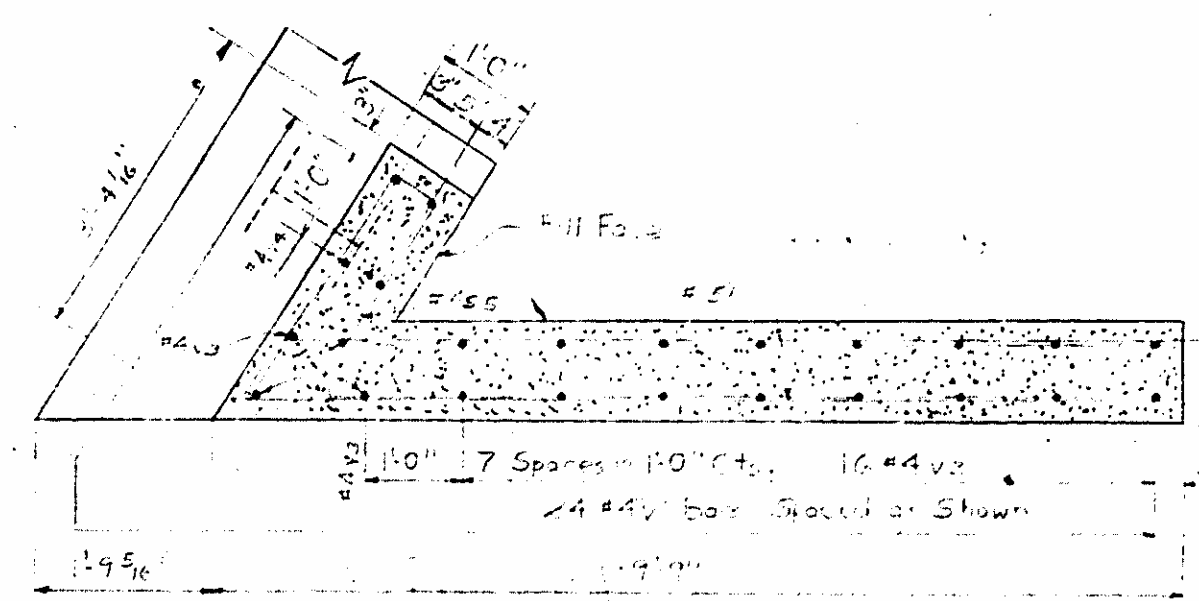
SECTION D-D



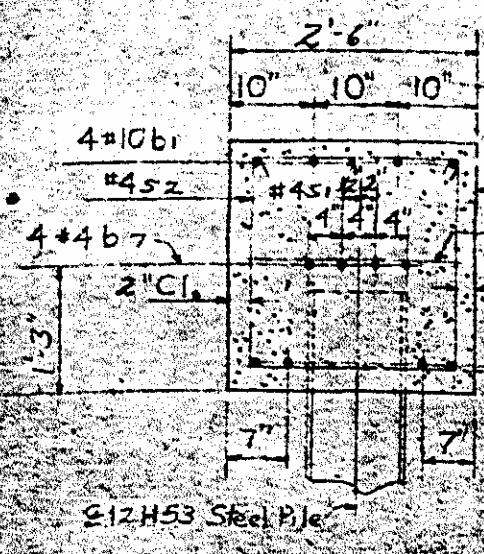
SECTION E-E



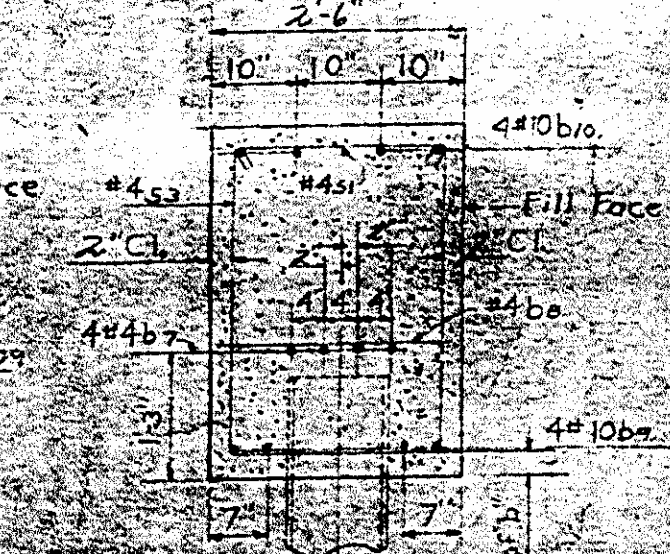
SECTION-CC



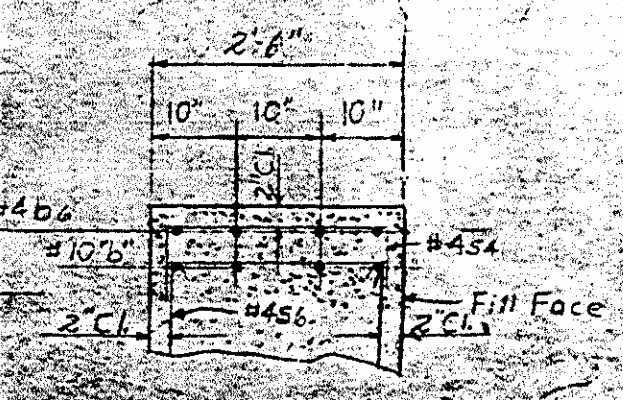
SECTION-FF



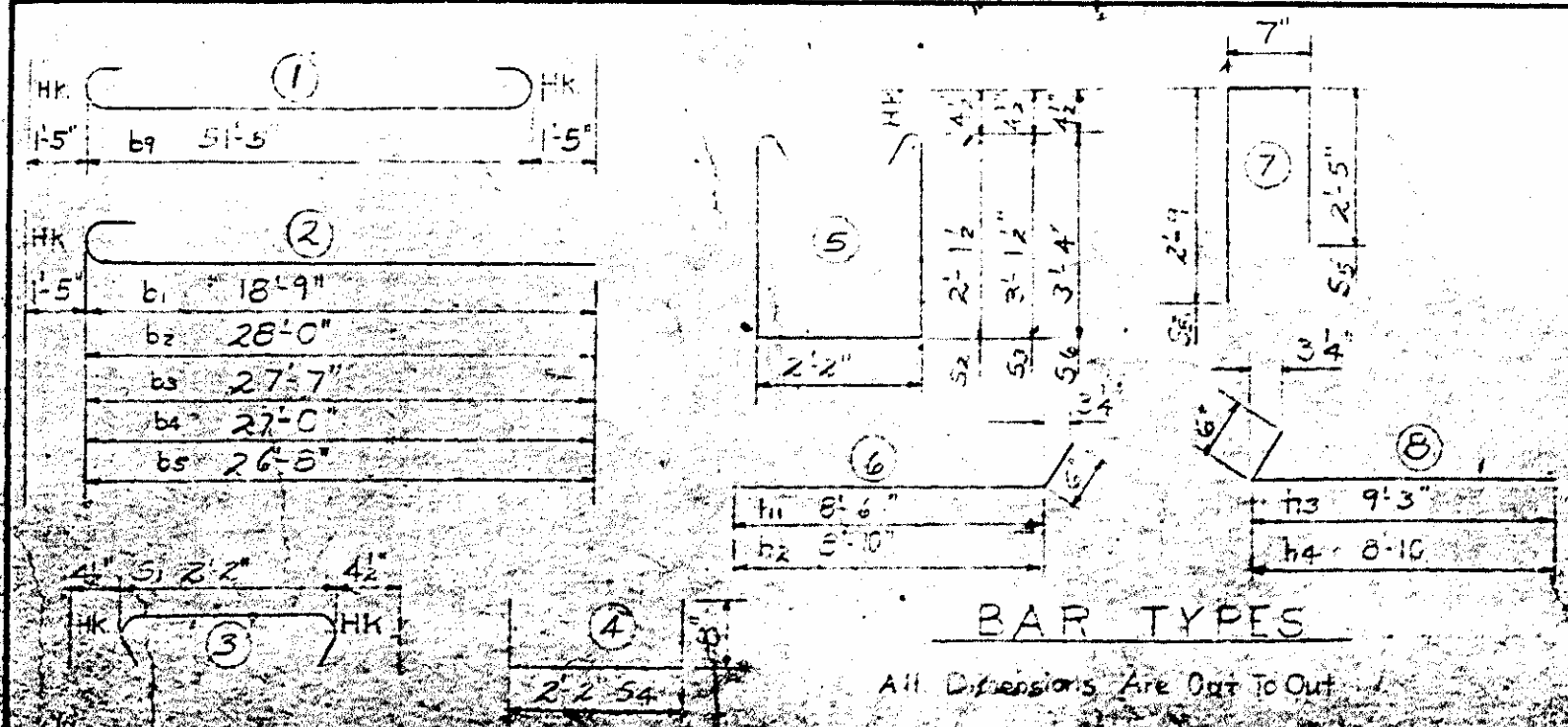
SECTION AA



SECTION BB



SECTION PP



BAR TYPES

All Dimensions Are Out To Out

BILL OF MATERIAL
FOR END BENT NO. 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
b1	4	#10	2	20'-2"	347
b2	1	#10	1	29'-5"	127
b3	1	#10	1	29'-0"	125
b4	1	#10	1	28'-5"	122
b5	1	#10	2	26'-1"	121
b6	4	#4	str	3'-2"	8
b7	8	#4	str	26'-5"	141
b8	13	#4	str	2'-2"	10
b9	4	#10	1	54'-3"	934
b10	4	#10	str	12'-9"	219
b11	1	#4	6	9'-0"	42
b12	1	#4	6	7'-4"	44
b13	8	#5	8	7'-7"	81
b14	8	#5	8	7'-4"	79
s1	38	#4	3	2'-11"	74
s2	11	#4	5	7'-2"	53
s3	7	#4	5	9'-2"	43
s4	3	#4	4	3'-2"	7
s5	2	#4	7	5'-7"	31
s6	20	#4	5	7'-7"	122
v1	18	#4	str	5'-10"	70
v2	4	#4	1	4'-9"	13
v3	20	#4	1	7'-1"	95
v4	4	#4	str	3'-10"	13

Reinforcing Steel Lbs 2975.5
Concrete 213 C.Y.
#12 H53 Steel Piles
Piles - 7 In. Dia. - 315 - 200.0
4' Conc. Slope Pile - 51 - 282.250

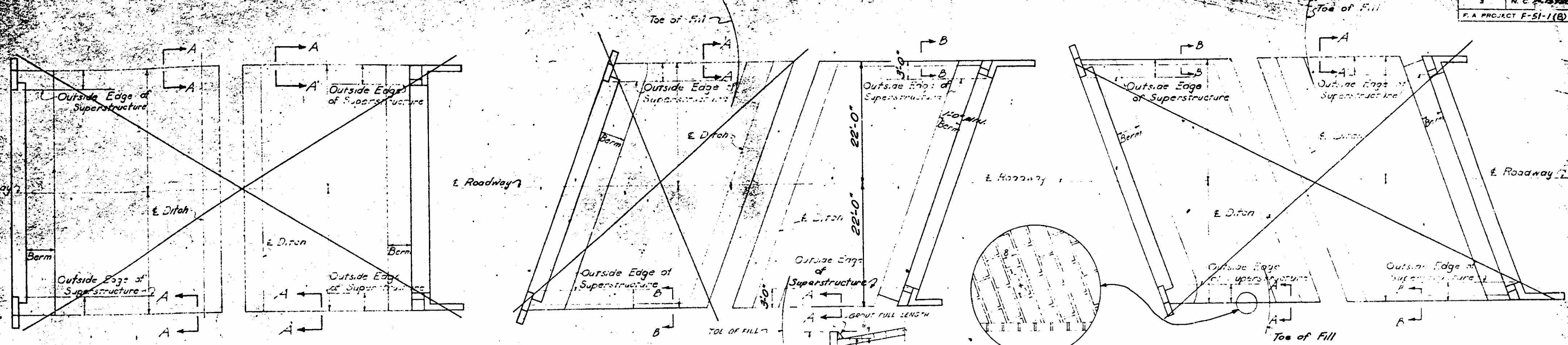
PROJECT No. 8.1592802
ROCKINGHAM COUNTY
STATION: 343+01.72-1.3

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

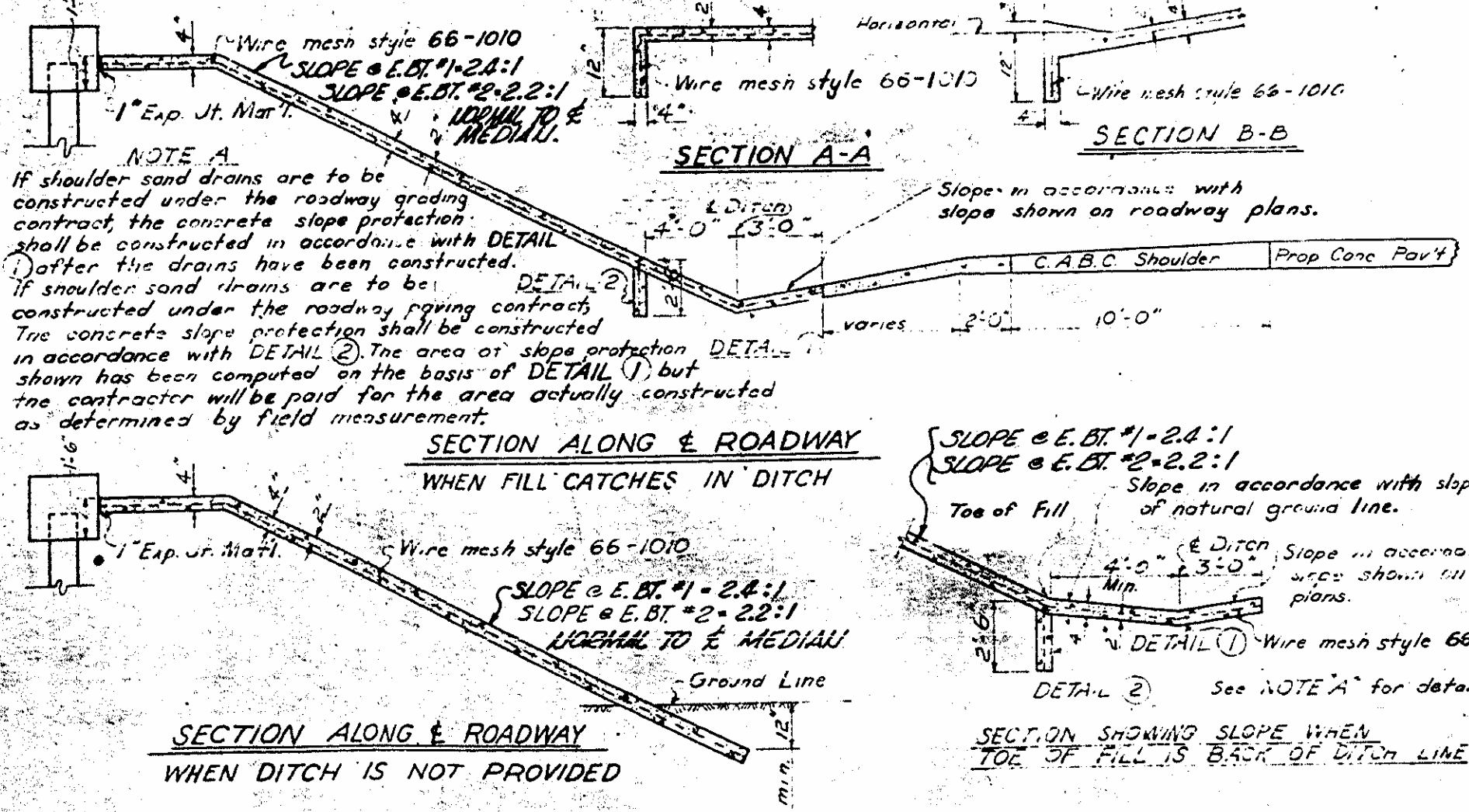
END BENT No. 2

May 1968

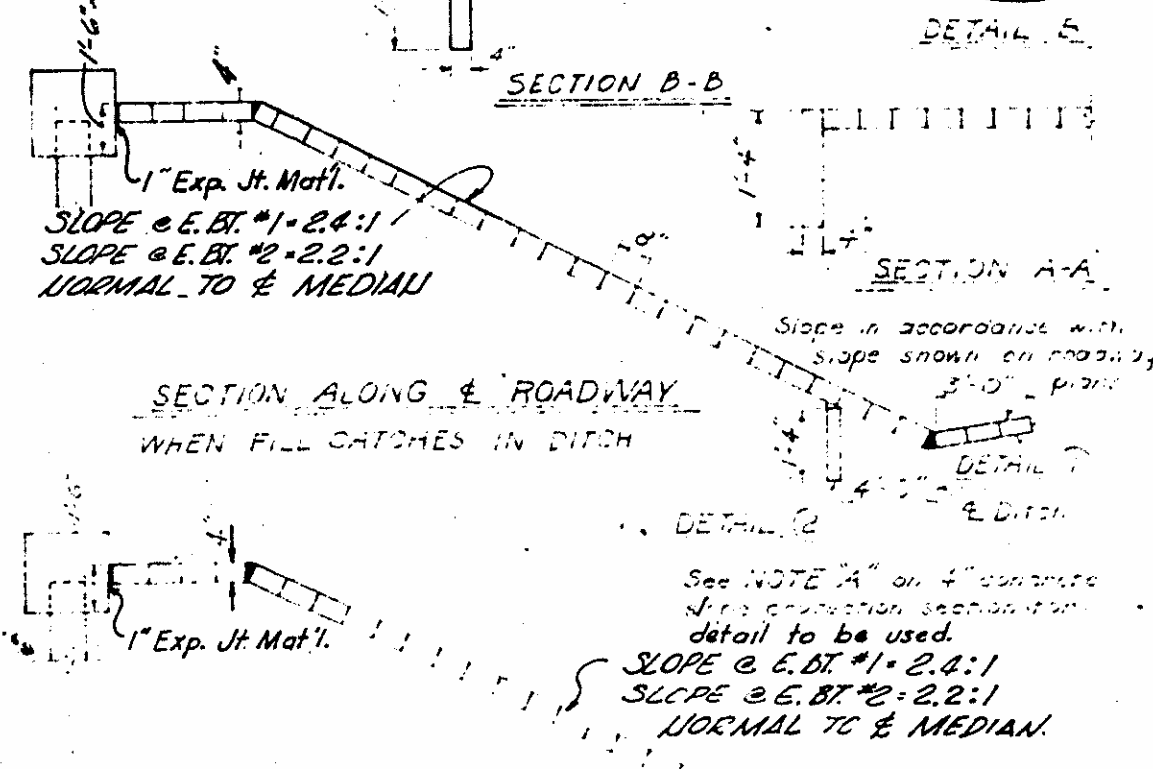
REVISIONS						SPRINT
NO.	BY	DATE	NO.	BY	DATE	NO.
1			1			5/10
2			2			TOTAL SHEETS
3			3			152
4			4			



PLAN



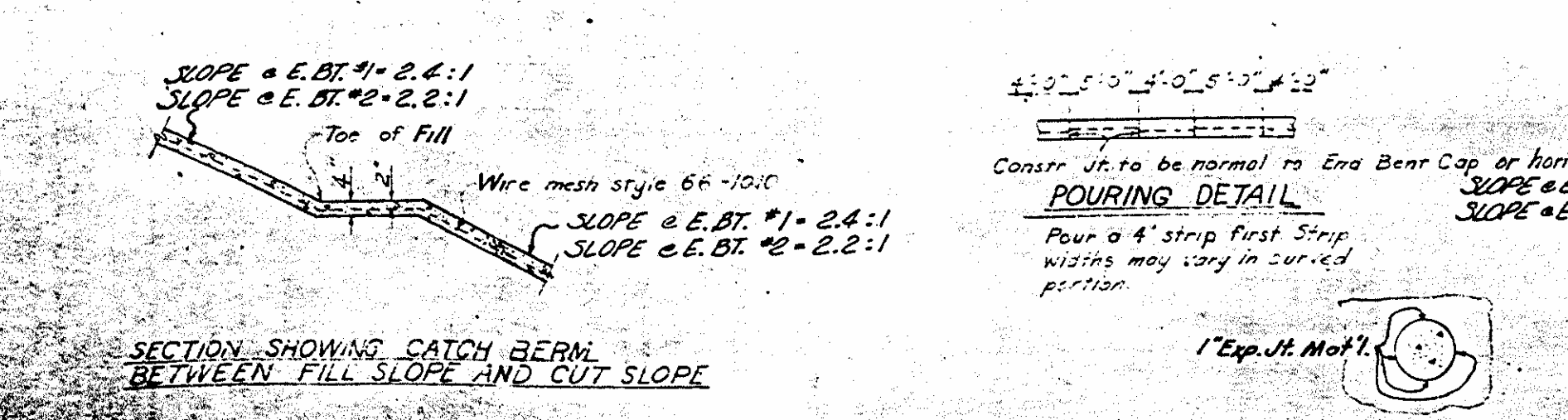
NOTE A:
 If shoulder sand drains are to be constructed under the roadway grading contract, the concrete slope protection shall be constructed in accordance with DETAIL (1) after the drains have been constructed. If shoulder sand drains are to be constructed under the roadway paving contract, the concrete slope protection shall be constructed in accordance with DETAIL (2). The area of slope protection shown has been computed on the basis of DETAIL (1), but the contractor will be paid for the area actually constructed as determined by field measurement.



SECTION B-B
 SLOPE @ E.B.T. #1 = 2.4:1
 SLOPE @ E.B.T. #2 = 2.2:1
 NORMAL TO & MEDIAN

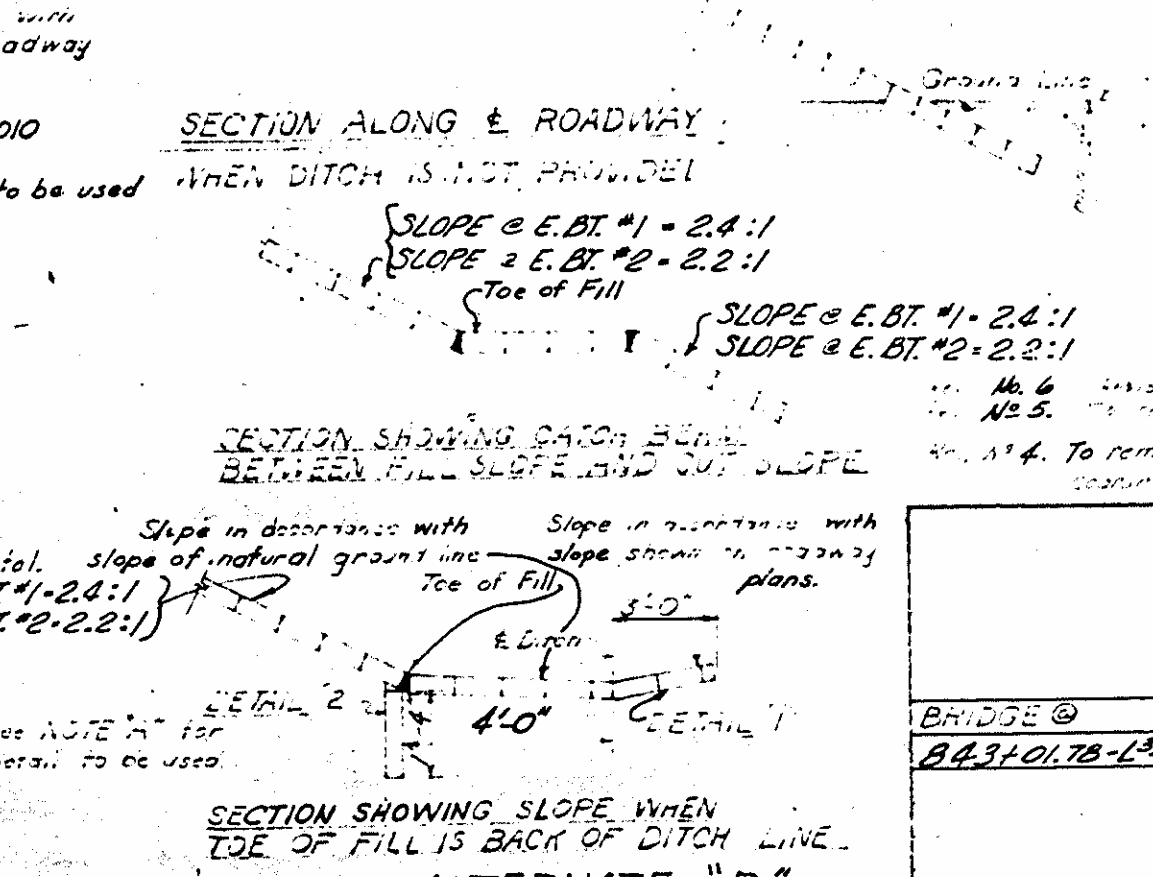
SECTION A-A
 SLOPE @ E.B.T. #1 = 2.4:1
 SLOPE @ E.B.T. #2 = 2.2:1
 NORMAL TO & MEDIAN

NOTES:
 A 4" concrete slope protection paving shall be placed under the ends of the bridge limits of the protection shall be as shown in the details. The contractor, at his option, may place either type, Alternate "A" or "B" as described below. Immediately before placing the paving, the slope shall be properly sloped and firmly compacted so that it conforms to the lines and grades shown. The finished surface shall be reasonably smooth and uniform and shall not vary more than 1/8" in a distance of 10 feet. Straight edging will not be required unless, in the opinion of the Engineer, visual inspection indicates a need for it.
 Alternate "A" shall consist of 4" poured in place concrete paving as shown in details on this sheet. Concrete shall be Class B. The concrete surface shall be floated with a wooden float and finished.
 The quantity to be paid for under this item shall be the number of square yards of slope protection measured in place complete and accepted, including the area of the toe wall below 4" thickness of protection. (For example "B" may apply for toe wall 1'-0" deep.)
 The quantity measured as provided for above, shall be paid for at the contract unit price per square yard for mesh excavation, backfilling, preparation of slopes, and all materials, labor, equipment, tools and incidentals necessary to complete the work.



SECTION ALONG & ROADWAY WHEN DITCH IS NOT PROVIDED
 SLOPE @ E.B.T. #1 = 2.4:1
 SLOPE @ E.B.T. #2 = 2.2:1
 NORMAL TO & MEDIAN

SECTION SHOWING SLOPE WHEN TOE OF FILL IS BACK OF DITCH LINE
 SLOPE @ E.B.T. #1 = 2.4:1
 SLOPE @ E.B.T. #2 = 2.2:1

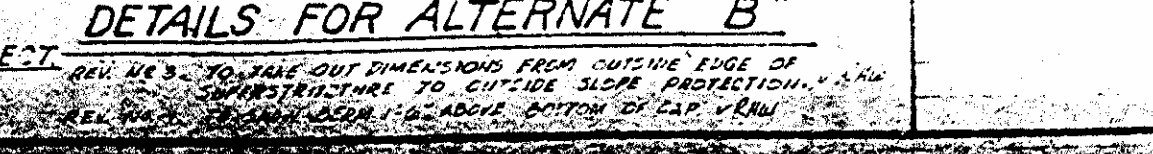


SECTION ALONG & ROADWAY WHEN DITCH IS NOT PROVIDED
 SLOPE @ E.B.T. #1 = 2.4:1
 SLOPE @ E.B.T. #2 = 2.2:1
 NORMAL TO & MEDIAN

SECTION SHOWING SLOPE WHEN TOE OF FILL IS BACK OF DITCH LINE
 SLOPE @ E.B.T. #1 = 2.4:1
 SLOPE @ E.B.T. #2 = 2.2:1

Alternate "B" shall consist of solid concrete blocks 4" x 8" x 16" laid in horizontal courses such that those in successive courses will break joints with units in the preceding one. Blocks are to be laid with their long axis parallel to the end bent cap with grout joints preferably 1/4" but not less than 1/2" nor more than 1/4" wide between successive courses and ends of blocks. Joints shall be grouted by pouring a mixture of one part Portland cement to three parts sand mixed with sufficient water to enable the mixture to be poured through a spout.
 The concrete blocks shall be cast to accurate dimensions, shall have uniform surface color and texture, and shall be manufactured of material to produce a compressive strength of not less than 3,000 p.s.i. at age of 28 days. No broken blocks shall be used except in constructing a straight line along each side of the paving down the slope. Care shall be taken to break the blocks so as to give a uniform workmanlike joint and surface.
 Method of measurement and basis of payment shall be as prescribed above under Alternate "A".
 ALTERNATE "A" wire mesh reinforcing to be style 66-100 60" wide. Adjacent runs of wire mesh to lap at least 6". Slope Protection to be poured in alternate 4' x 5' strips as shown in Pouring Detail. The cost of wire mesh to be included in the contract unit price bid per square yard for 4" concrete slope protection.
 The same type of slope protection shall be used under both ends of any one bridge.

PROJECT NO. 8.1592802
 ROCKINGHAM COUNTY
 STATION: 803+01.78-13



POURING DETAIL
 Pour a 4" strip first strip. Widths may vary in curved portion.
 1" Exp. Jt. Mat'l.

BRIDGE @	4" Conc. Slope Protection or 4" Conc. Block Slope Protect		Wire Mesh 60" Wide
	E.B. 1	E.B. 2	
843+01.78-13	225	335	1120
	185,837	282,256	

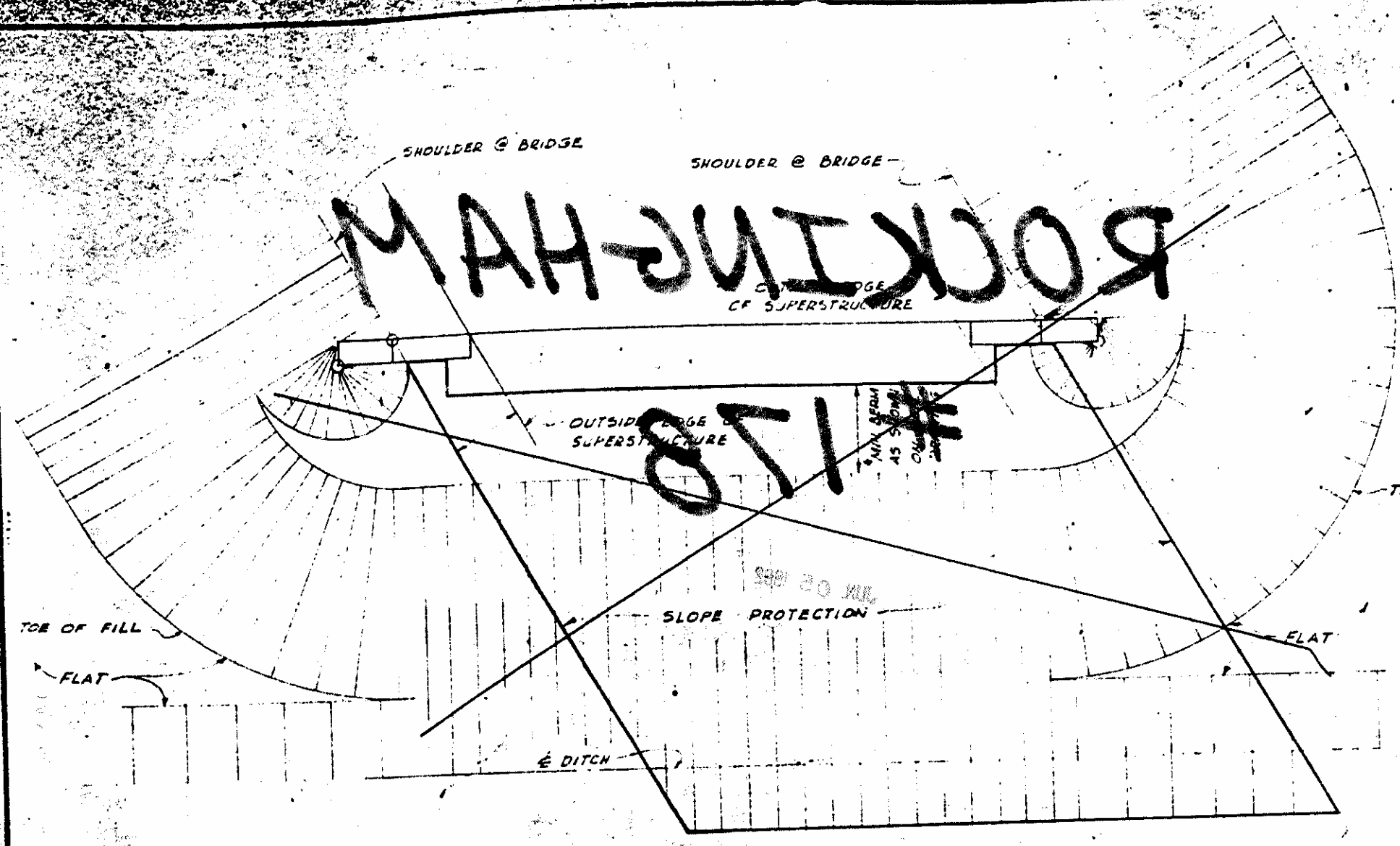
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 STANDARD SLOPE PROTECTION PAVING DETAILS
 March 1964

DESIGNED BY T.J. McLELLAN DATE MAY 1964
 CHECKED BY D.W. WILSON DATE JUNE 1964

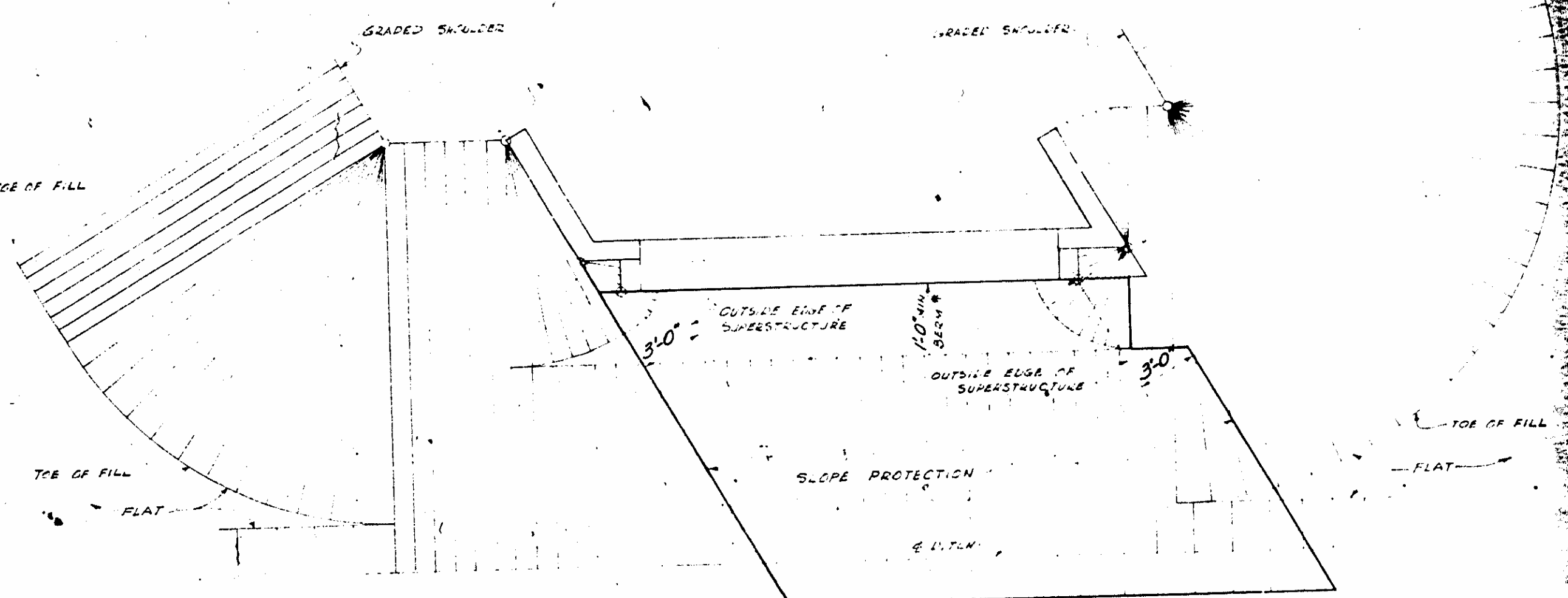
DETAILS FOR ALTERNATE "A"

DETAILS FOR ALTERNATE "B"

TERMINATE JOE CENTER AT THE END OF SLOPE FOR SLOPE TO BE PLACED AROUND
 PLAN WHERE CONC. OR CONC. BLOCK SLOPE PROTECT. TO BE PLACED AROUND
 TO MAKE OUT DIMENSIONS FROM OUTSIDE EDGE OF SUPERSTRUCTURE TO OUTSIDE SLOPE PROTECTION
 TO ALLOW APPROPRIATE PROTECTION WITH A BERM COLUMN

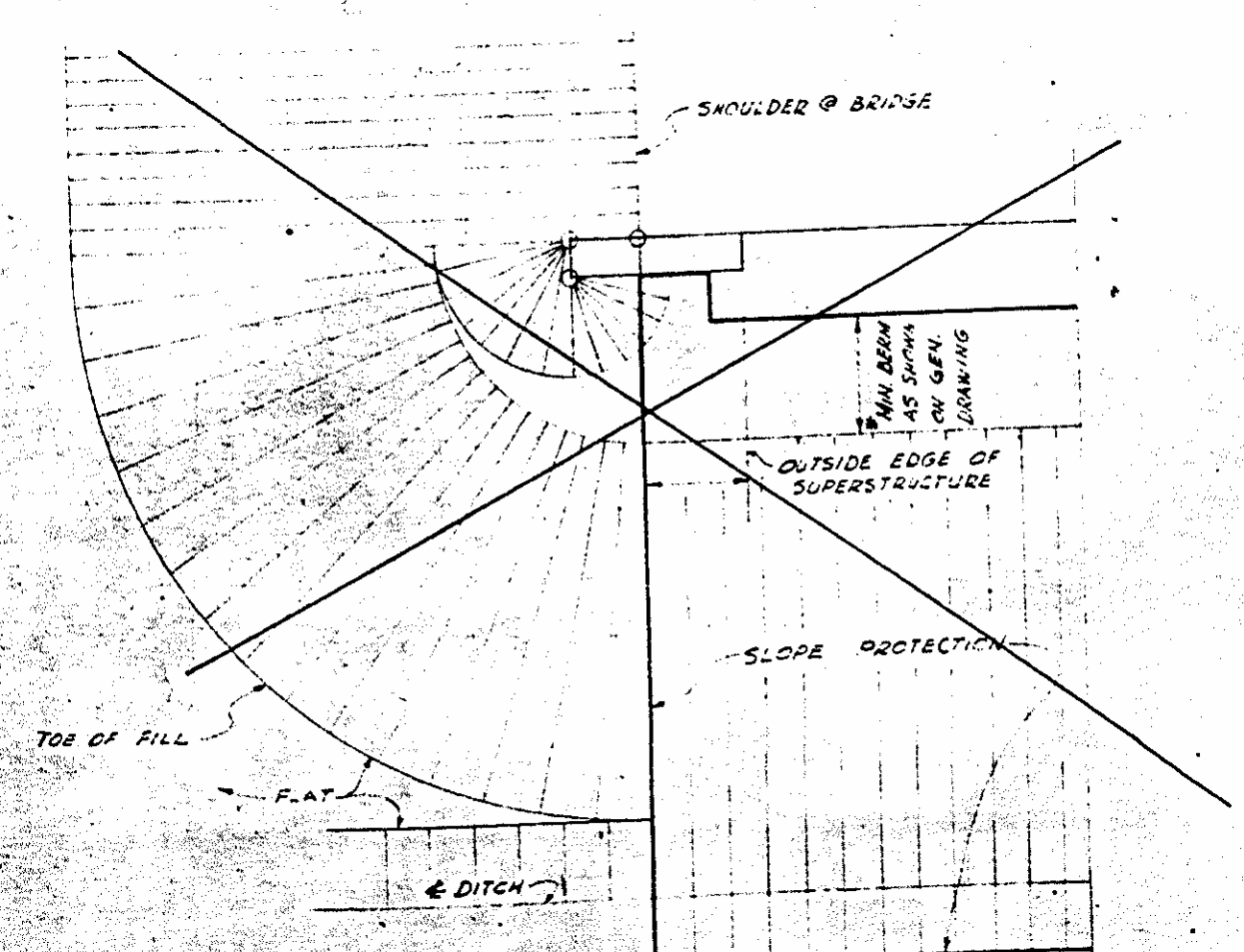


END BENT WITH EAR WALLS - SKEWED



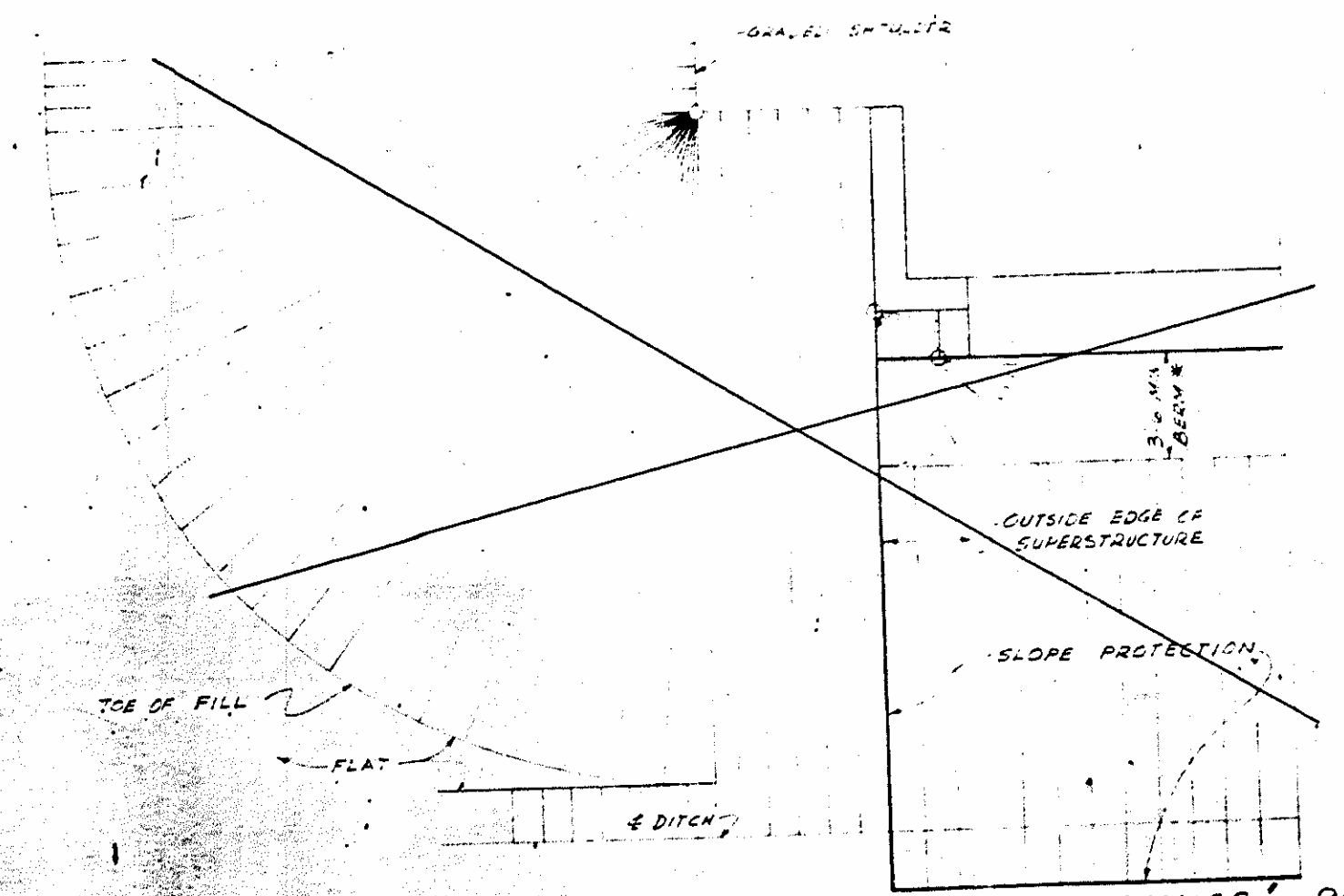
END BENT WITH SWEEP BACK WINGS - SKEWED

* NOTE VARY BEAM WIDTH AS NECESSARY TO FIT DITCH ALIGNMENT.



HALF PLAN END BENT WITH EAR WALLS - 90°

NOTE: OTHER SIDE SIMILAR.



HALF PLAN END BENT WITH SWEEP BACK WINGS - 90°

NOTE: OTHER SIDE SIMILAR.

PROJECT NO. 8.1572802
 ROCKINGHAM COUNTY
 STATION: 843+01.78-13-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 WALEIGH
 STANDARD
 SLOPE PROTECTION PAVING
 DETAILS
 FEBRUARY 1964

ASSEMBLED BY T.M. McCLELLAND DATE MAY 1962
 CHECKED BY D.M. Walker DATE JUNE 1962
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

REV. NO. 2 TO ELIMINATE 30° CORNER AT TOE OF SLOPE FOR SKEWED BRIDGES. Y.G.T.P.
 REV. NO. 1 TO TAKE OUT DIMENSIONS FROM OUTSIDE EDGE OF SUPERSTRUCTURE TO OUTSIDE SLOPE PROTECTION. (L.M.)

5-112