

INDEX OF SHEETS
See Sheet No. 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

GUILFORD-ROCKINGHAM COUNTIES

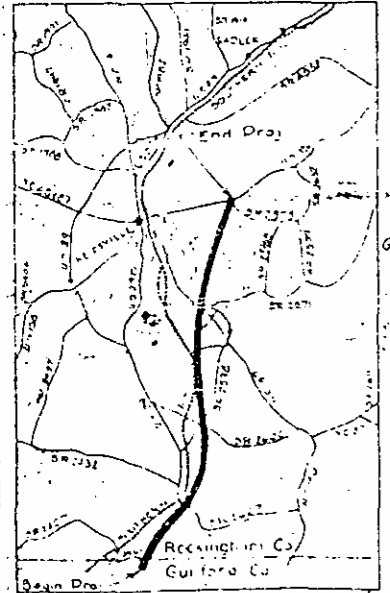
Beginning at Sta 15+11.31, a point in the C. of U.S. 29 approx. 500' south of the Guilford-Rockingham County Line, and running in a North-south direction 300' or more the C. of present U.S. 29 to Sta 90+52.66, and thence cross-country to Sta 505+52.28 North of the intersection of U.S. 158, end of Project.
This contract includes grading, drainage surfacing, fencing and culverts.

THESE PLANS MICRO-FILMED
BY
NORTH CAROLINA
STATE HIGHWAY COMMISSION
REPRODUCTION DEPT.

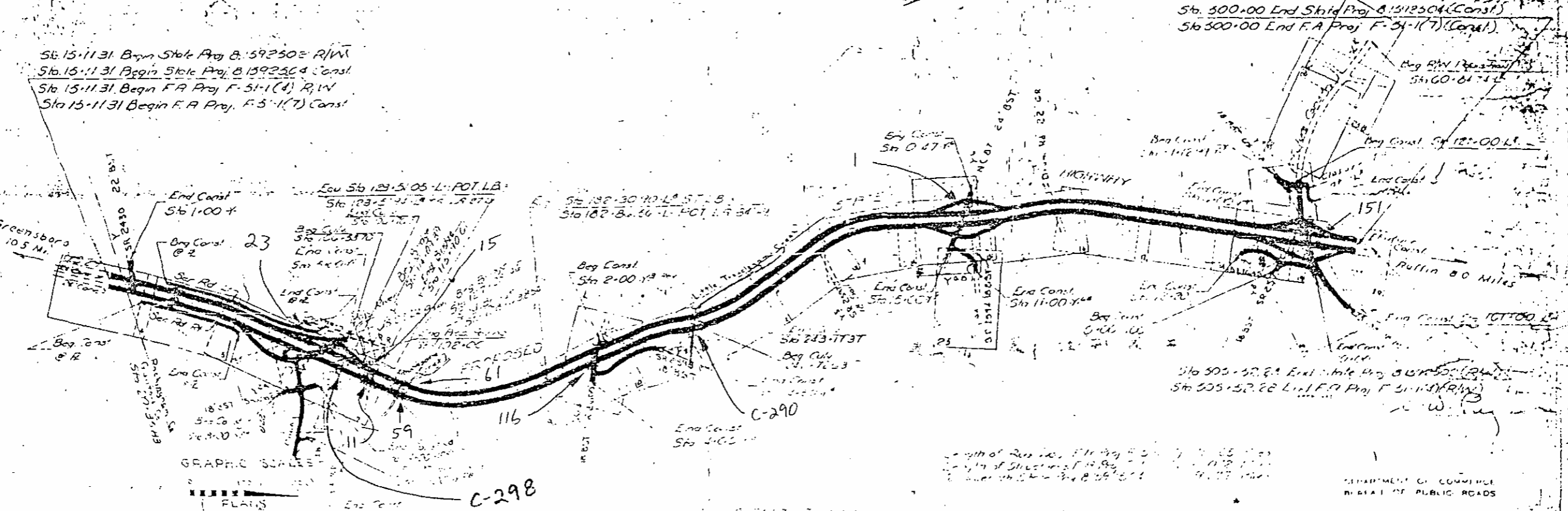
Project Reference No.	Fiscal Year	Show No.	Sheet No.
81592501		2	15
81592502	F-51-1(2)		DE
81592503	F-51-1(4)		R/W
81592504	F-51-1(7)		Const.

Symbol	Description
○	Prop. Urban Water Front
□	Prop. Canal Line Fence
■	Prop. Canal Line Fence (11'-12")
—	County Line
—	Township Line
—	City or Town Line
—	Right of Way Line
—	Survey Line
—	Property or Subst. Right of Way Line
—	Fence
—	Proposed Road
—	Existing Road
—	Railroad
—	Control of Access Line
—	Slope Stake Line
—	Bridge
—	Culvert
○	Woods
—	Telephone or Telegraph Pole
—	Tower Pole and Line
—	Power Pole
—	Proposed Right of Way Marker
—	Existing Right of Way Marker
—	Prop. Guard Rail
—	Future Center Line

DESIGN DATA
1967 ADT 7400
1987 ADT 15,200
OHV 12%
D 60%
F 29% to 30%
V 70 MPH



Sta 15+11.31 Begin State Proj. 81592501 R/W
Sta 15+11.31 Begin State Proj. 81592504 Const.
Sta 15+11.31 Begin F.A. Proj. F-51-1(4) R/W
Sta 15+11.31 Begin F.A. Proj. F-51-1(7) Const.



GRAPHIC SCALES

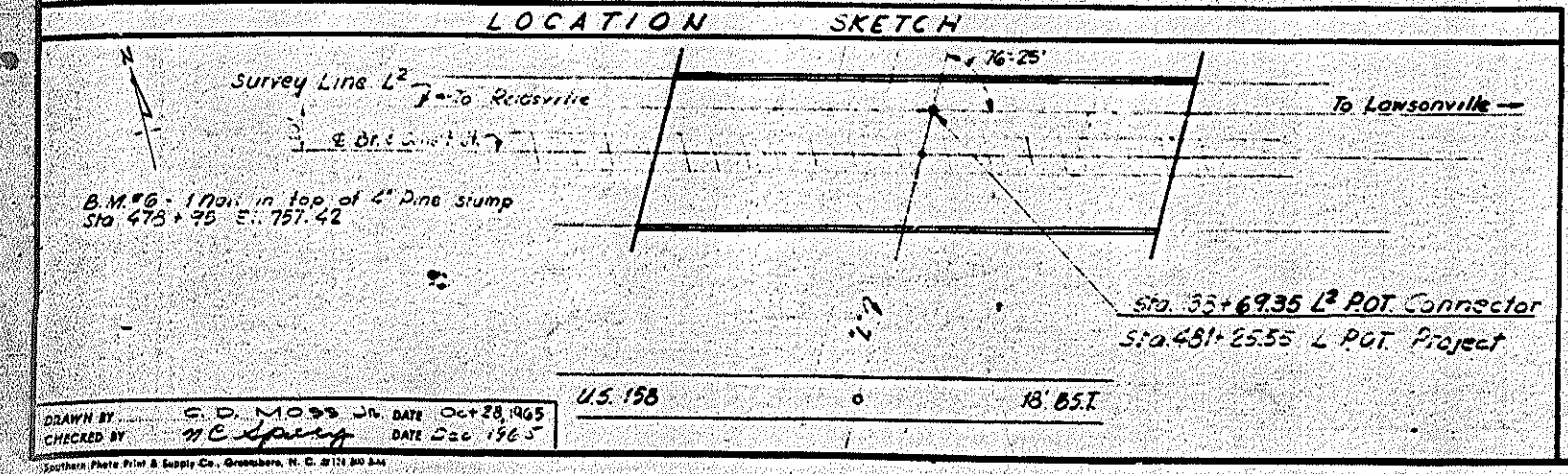
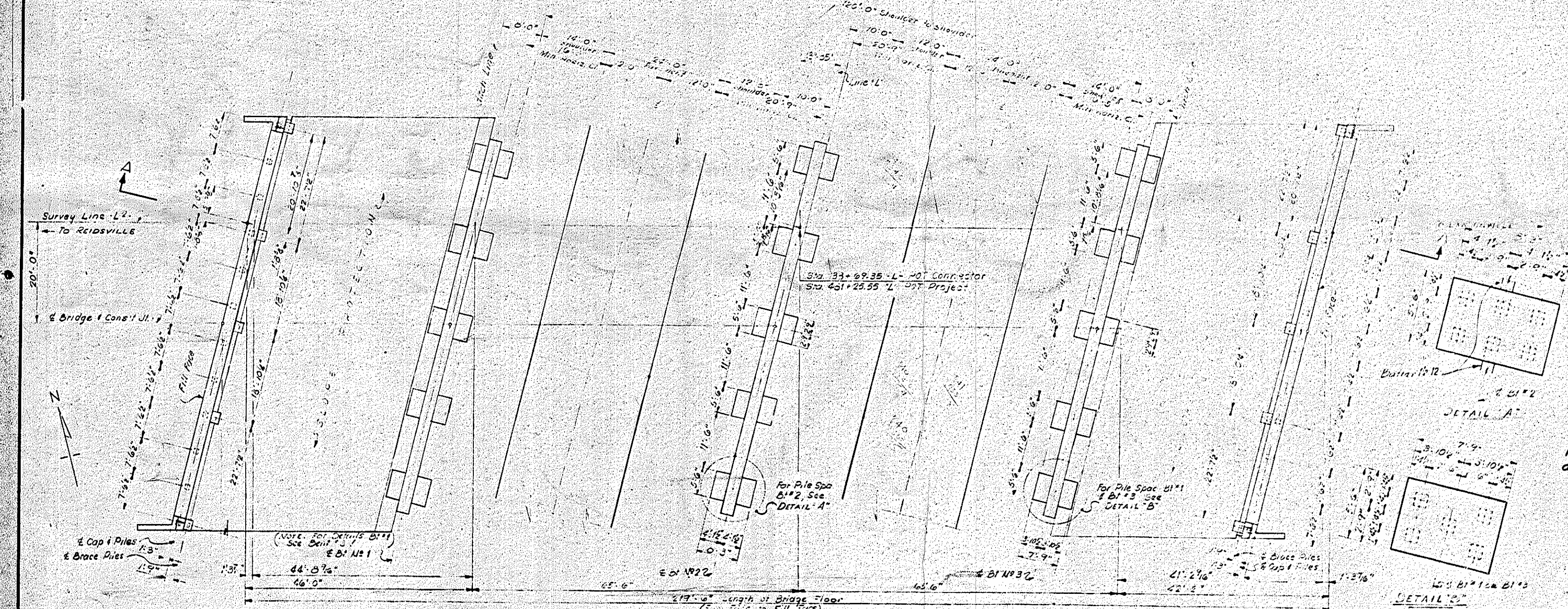
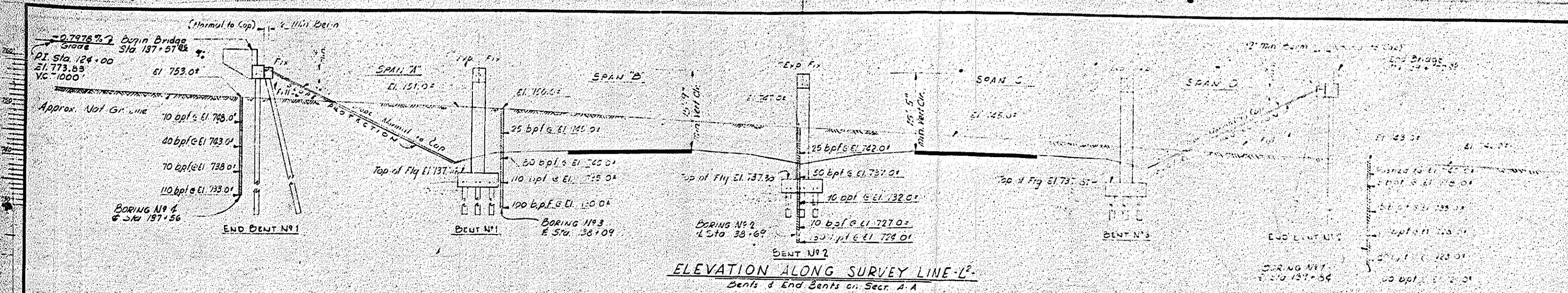
- PLANS
- PROFILE (HORIZONTAL)
- PROFILE (VERTICAL)
- LAYOUT (TITLE SHEET)

Approved by Bureau Control.

Prepared in Office of
STATE HIGHWAY COMMISSION
RALEIGH, N.C.

Surveyed by
D. W. Walker
D. W. Walker

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS



		TOTAL BILL OF MATERIAL				
		Reinforcing Steel	Structural Steel	4" Conc. Excav	4" Conc. Protection	12" Prest. Conc. Piles
		cu yds	sq ft	cu yds	sq ft	cu yds
SUPERSTRUCTURE						
SPAN A	107.8	24,545	37,000	426.8		
SPAN B	134.2	37,367				
SPAN C	134.0	37,367				
SPAN D	100.4	24,538				
END BENT N^o 1	27.5	5,703		112.34	365.47	
BENT N^o 1	35.4	11,254		135.87		
BENT N^o 2	28.7	11,026				
BENT N^o 3	44.1	11,403		106.88	327.44	
END BENT N^o 4	27.5	5,703		106.88	327.44	
TOTALS	727.4	172,824	377,000	426.8	629.1	

NOTES!

ASSUMED LIVE LOAD:
 Assumed live load = W20-S15(44) or A alternate loading.

DESIGN DATA:
 All other design data & general note see sheet S-1.

CONTRACTOR:
 The contractor shall be responsible for determining lengths of piles required, see general provisions.

PILE CAPACITY:
 The contractor will be required to calculate capacity through the full of end bent #2 before driving piles. See sheet S-1.

PILE CAPACITY:
 Piles for bents #1 & #2 to be driven to minimum bearing capacity of 20 tons. For bents #3 & #4 to be driven to a minimum bearing capacity of 20 tons. See sheet S-1.

PILE CAPACITY:
 The contractor shall be required to calculate capacity through the full of end bent #2 before driving piles. See sheet S-1.

WORK ON BRIDGE:
 Work is not to be started on bridge until all the necessary permits have been granted.

PERMITS:
 Piles for bent #1 to be driven through the roadway fill.

I hereby certify that this structure was built according to plans except as noted here in.

E. E. DeWalt
 Resident Engineer

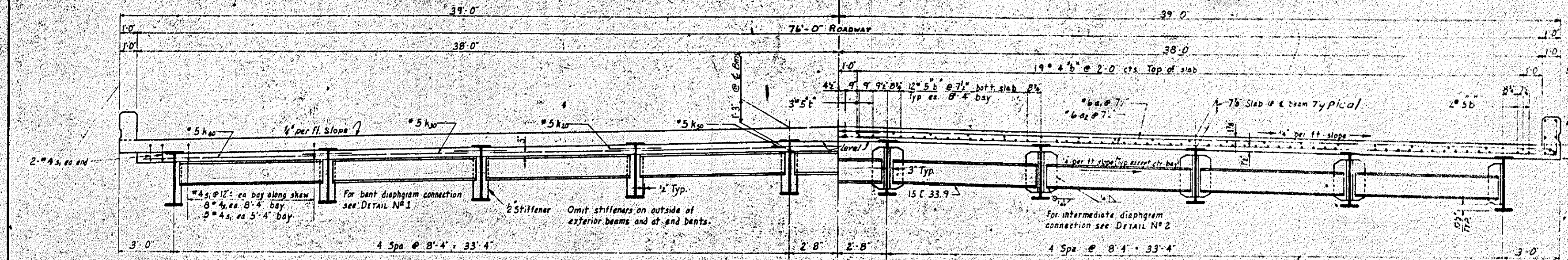
PROJECT NO. 5-1592504
 ROCKINGHAM COUNTY
 STATION: 431+25.55 - L²
 134+69.35 - L² conn.

STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
GENERAL DRAWING					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			1		
2			2		
					5-108
					130

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 $\frac{3}{4}$ " in thickness and do not exceed a width equal to the flange width less 2" or a thickness equal to 12 times the flange thick. The size of the weld for attaching these cover plates shall be in accordance with the AWS Specifications.
 Stress in extreme fiber of Structural Steel - 20,000 p.s.i.

FED. ROAD DIST. NO.	STATE	PROJECT NO.
1	N.C.	8.1592504
R.A. PROJECT F-51-117		

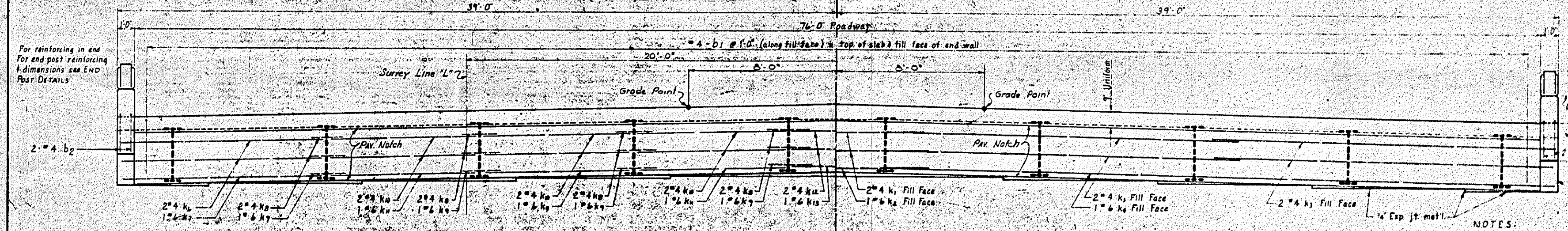
133-159



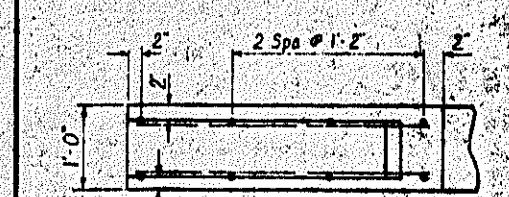
TYPICAL HALF SECTION @ BENT DIAPHRAGM
Symmetrical about & bridge

TYPICAL HALF SECTION @ INTERMEDIATE DIAPHRAGM
Symmetrical about & bridge

TYPICAL SECTION

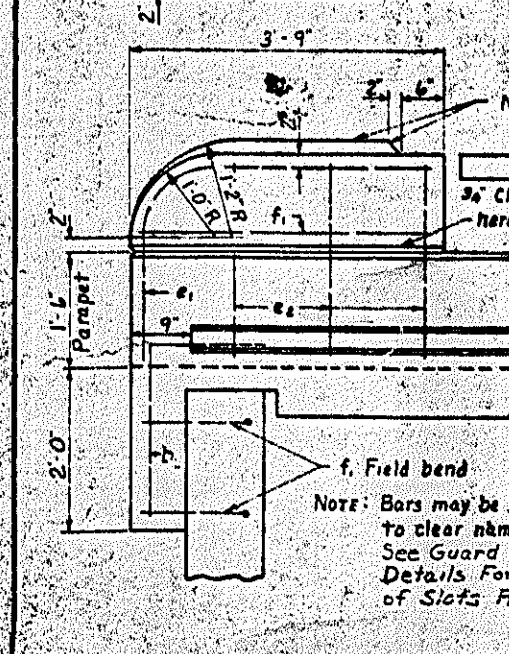


END VIEW

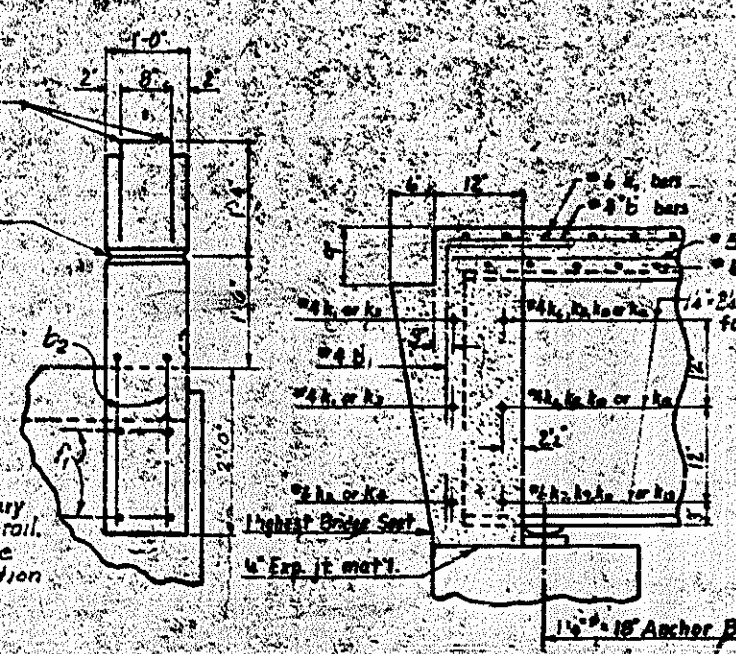


Reinforcing in Opposite Face of curtain wall. (Sym about & bridge)

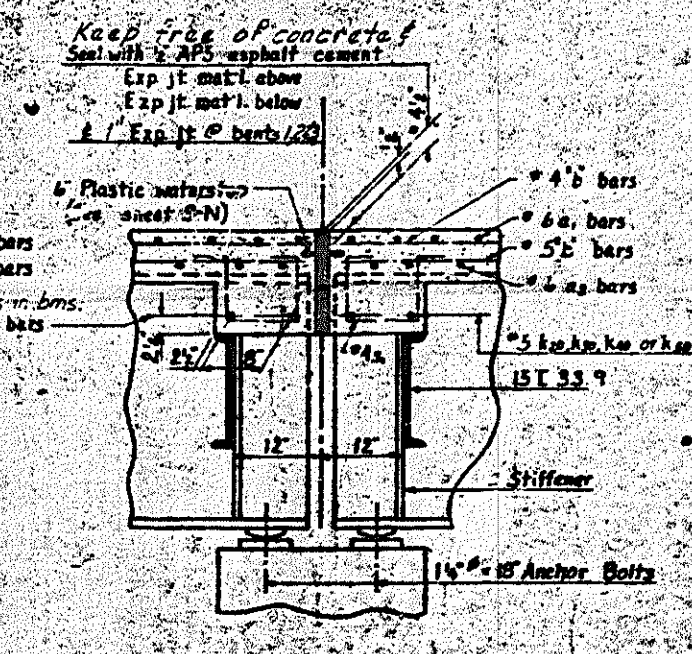
Reinforcing in Fill Face of curtain wall. (Sym about & bridge)



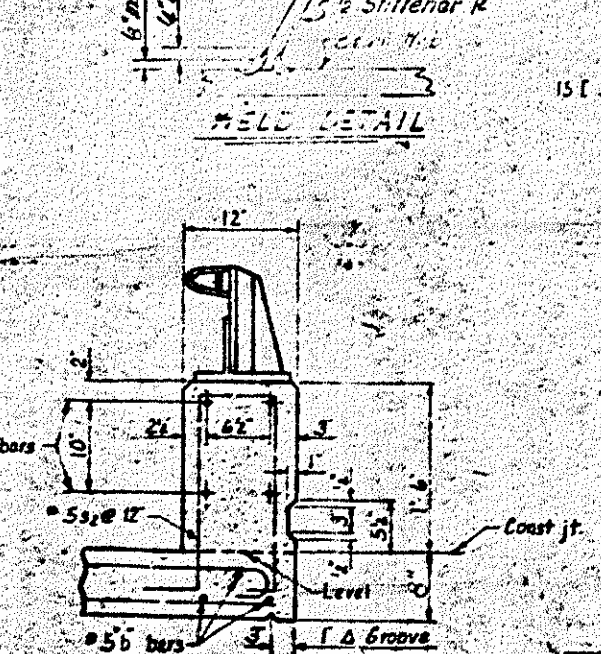
END POST DETAILS



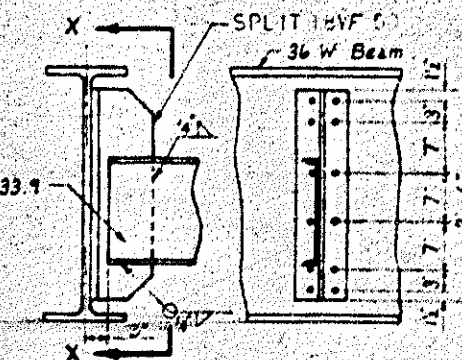
SECTION A-A
Thru End Wall



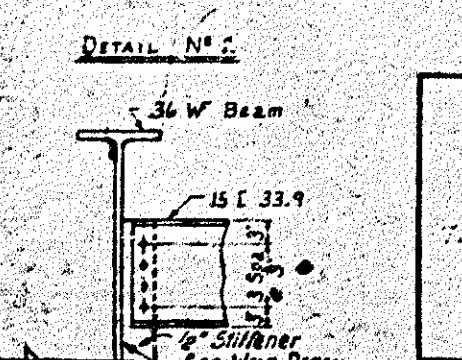
SECTION B-B
Thru Int. Diaphragm



PARAPET & RAIL SECTION



Section X-X



DETAIL No. 1

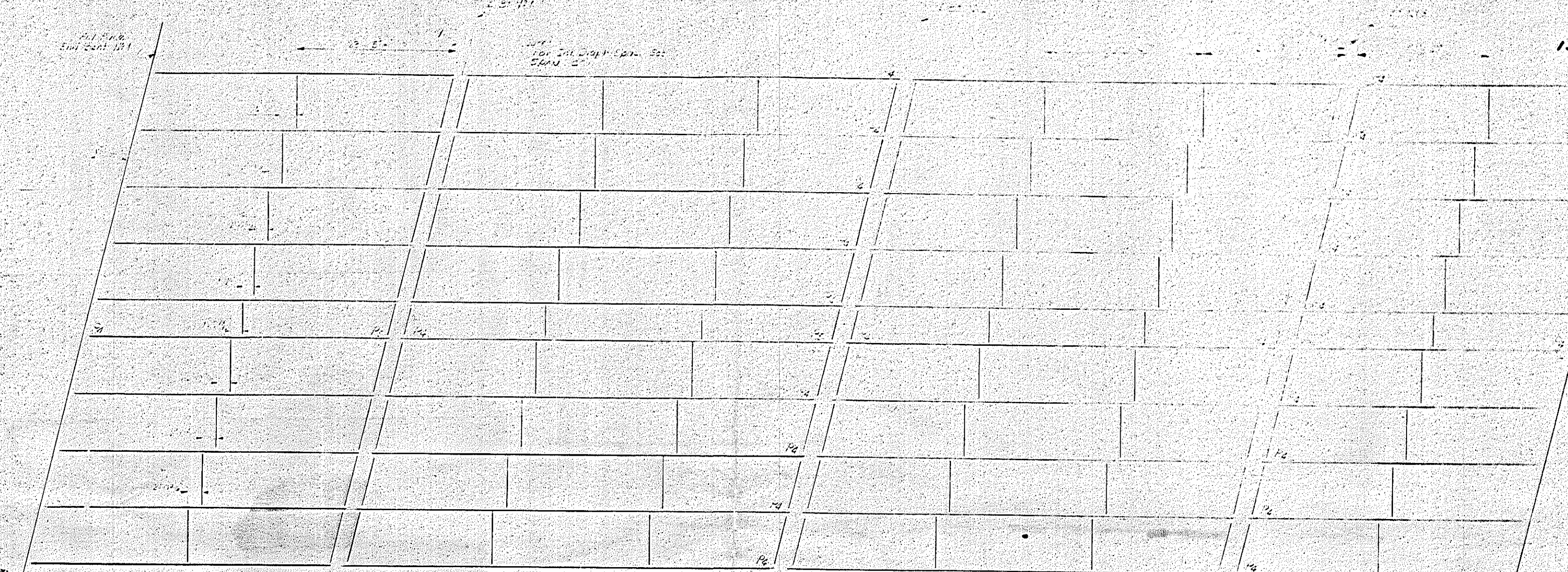
NOTES:
 High Strength Bolts: Field connection of diaphragms to beams shall be bolted using 1/2" high strength bolts in accordance with the specifications.
 STEEL GRADE: All beams and cover plates shall be of A 36. All girders structural steel, see sheet 5-N.
 Clip 15 E 33.9 flanges as necessary to clear H.S. bolts. (See X-X)

PROJECT No. 8.1592504
 ROCKINGHAM COUNTY
 STATION 481+25.5-L

STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
RALEIGH					
STANDARD TYPICAL SECTIONS					
2 Beam Spans - 120' Span - LL					
Oct. 1958					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			2		
SHEET 5409					TOTAL SHEETS 130

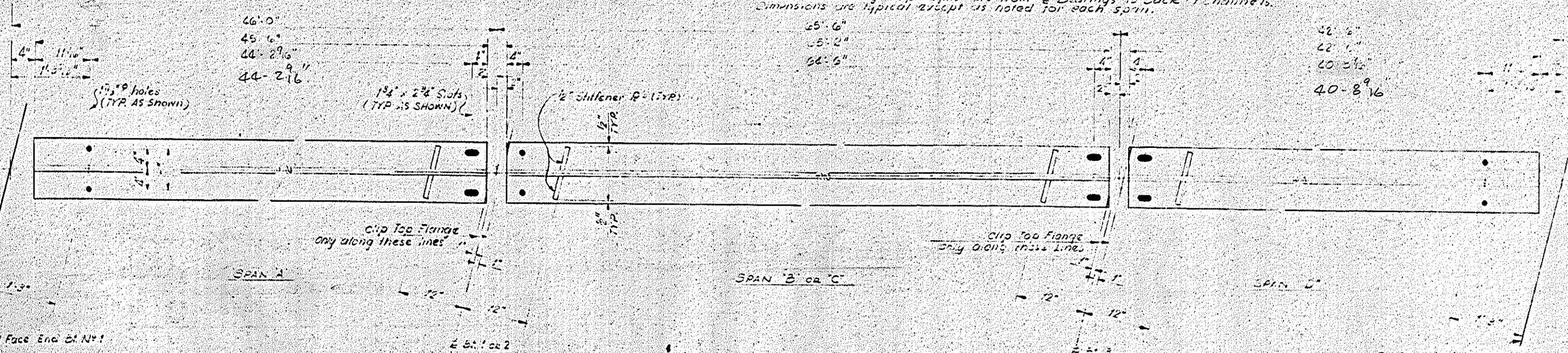
DRAWN BY G.H. Pridgen DATE Oct. 1958
 CHECKED BY DATE 11/2/58

FILE NO.	STATE	PROJECT NO.
134-159	N.C.	5-110



BEAM, DIAPHRAGM & R LAYOUT

For Structural Steel Notes See "STANDARD TYPICAL SECTIONS" Sheet
 Dimensions for wing diaphragms are from centerline of beam. Dimensions are typical except as noted for each span.

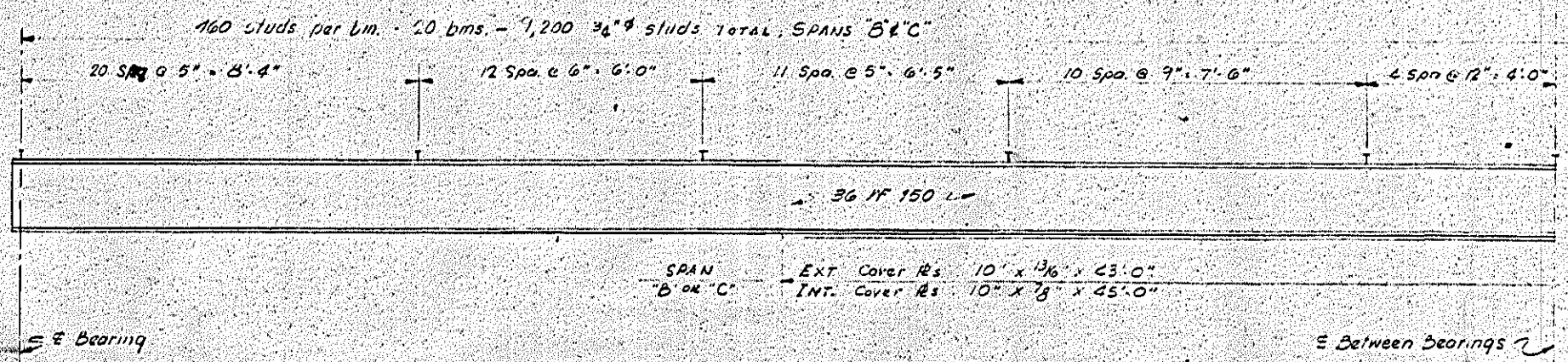


BOTTOM FLANGE DETAIL
(Top Flange Noted)

PROJECT NO. 134-159
 WILKINSON COUNTY
 STATION: 151+25.55 - L

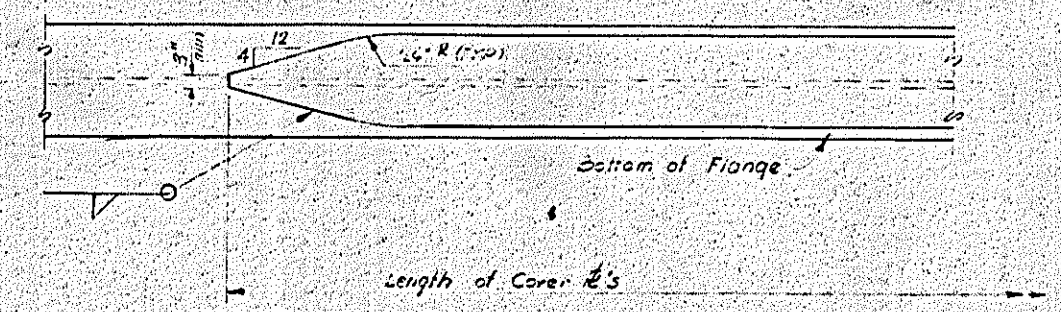
STATE OF NORTH CAROLINA					
STATE HIGHWAY COMMISSION					
STRUCTURAL STEEL DETAILS					
REVISED 1960					
REVISIONS			DRAWN		
NO.	BY	DATE	NO.	BY	DATE
1			1		5-110
2			4		130

DRAWN BY: J. L. G. J. 1088 JG
 CHECKED BY: J. L. G. J. 1088 JG
 DATE: OCT. 25, 1962
 DATE: NOV. 1, 1962



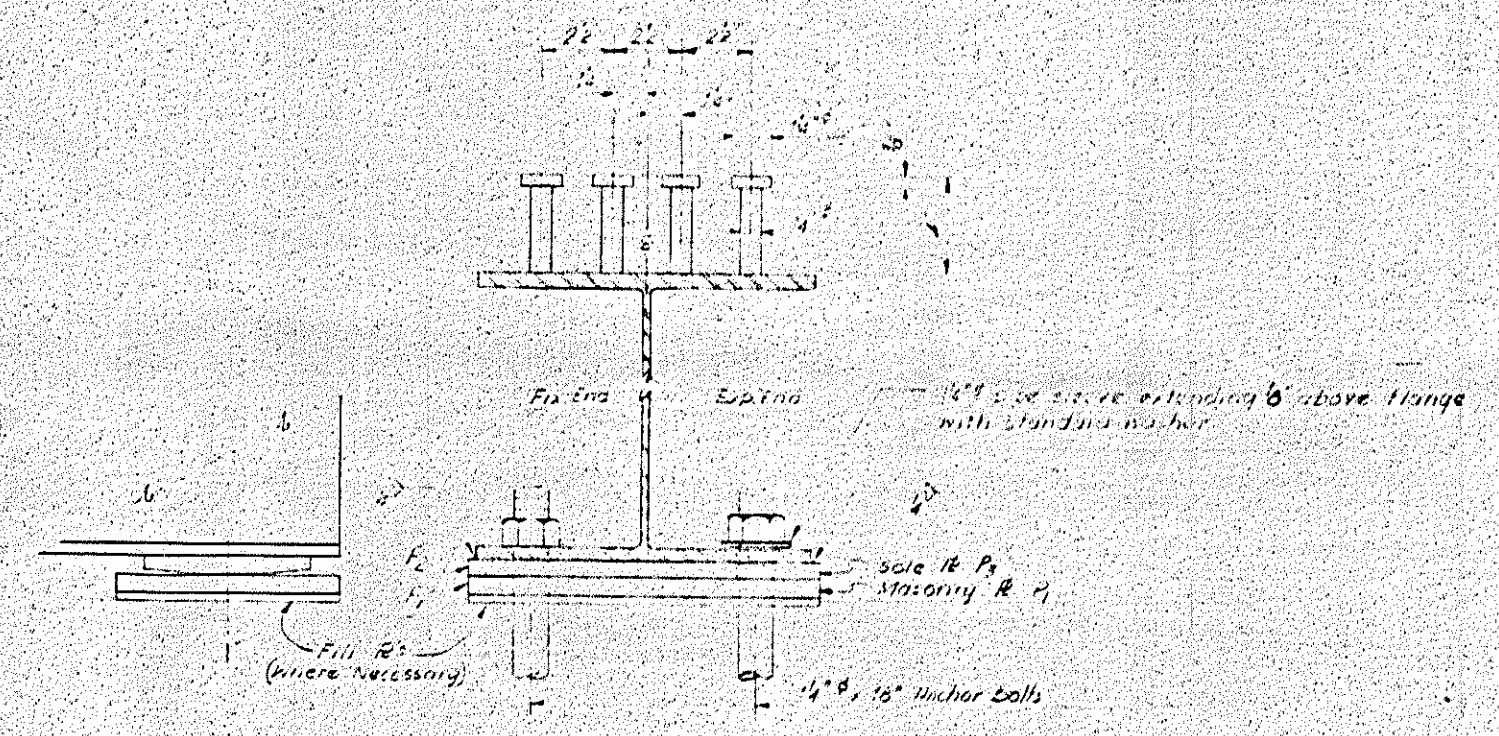
BEAM ELEVATION AND STUD SPACING
(SPANS "B" & "C")

NOTE!
For Structural Steel Notes See "STANDARD TYPICAL SECTIONS" Sheet.



COVER PLATE WELD DETAIL

NOTE!
Cover P lengths are symmetrical about E between bms.



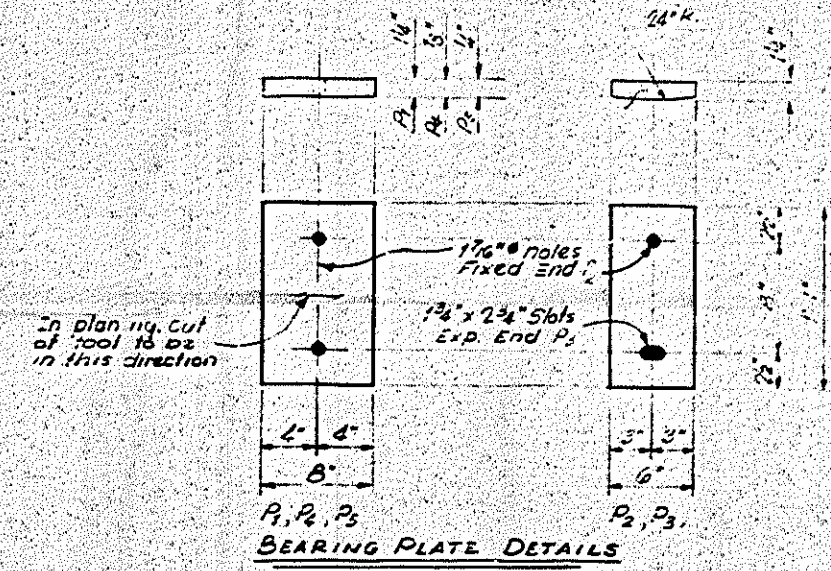
BEARING DETAILS
(Showing $\frac{3}{8}$ " Stud Detail)

NOTE:
Fill plates may be substituted with masonry R's.

	SPAN "A"		SPAN "B" OR "C"		SPAN "D"	
	Ext. Dms.	Int. Dms.	Ext. Dms.	Int. Dms.	Ext. Dms.	Int. Dms.
Deflection due to weight of beam	1 1/2"	1 1/2"	3 1/2"	2 1/2"	1 1/2"	1 1/2"
Deflection due to Superimposed D.L.	3 1/2"	5 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Total D.L. Deflection	5"	7"	5"	4"	3"	3"
Camber	0"	0"	1 1/2"	1 1/2"	0"	0"

DEAD LOAD DEFLECTION & BM CAMBER

* No other camber required other than natural mill camber (Spans "A" & "D")



BEARING PLATE DETAILS

- BEARING P'S REQUIRED**
- P₁ - 20
 - P₂ - 40
 - P₃ - 40
 - P₄ - 23
 - P₅ - 2

PROJECT NO. 5152-504
ROCKINGHAM COUNTY
STATION: 481.25³²-L

Sheet 2 of 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

**STRUCTURAL STEEL
DETAILS**

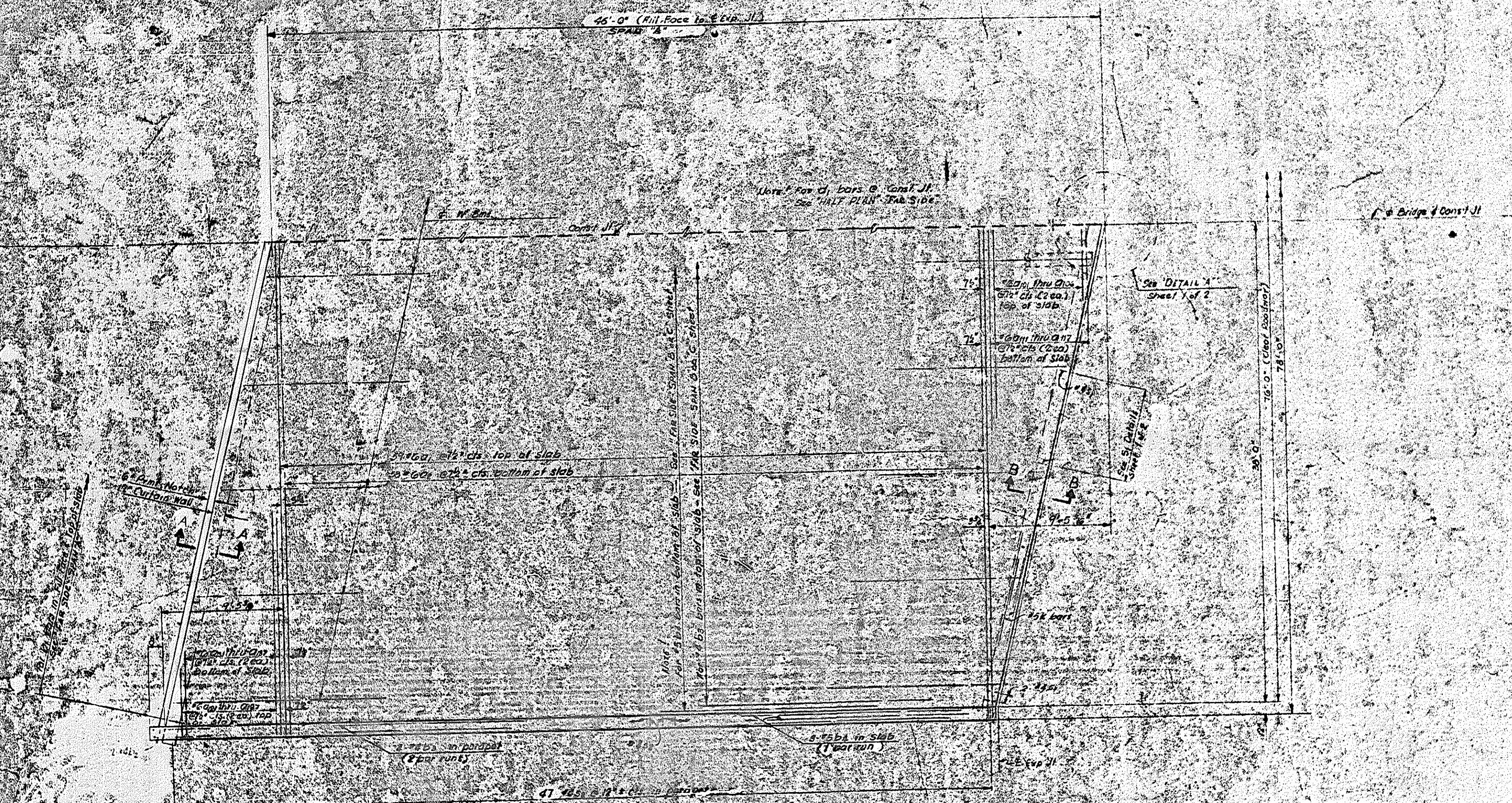
OCTOBER 1965

REVISIONS						SHEET NO. 5-111
NO.	BY	DATE	NO.	BY	DATE	
1			2			TOTAL SHEETS 130
2			3			

DRAWN BY: C. D. MOSS, JR. DATE: OCT. 20, 1965
CHECKED BY: S. C. [Signature] DATE: NOV. 17, 1965

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PROJECT NO. 8.1592504
 N.C. 8.1592504
 I.A. PROJECT F-51-1(7)
 136-159



HALF PLAN
 Pos. 4' 2 1/2' 107 5/8"

CONC. BY BOURS

Blue 1 - Slab	51.1	cu. yds.
Blue 2 - Parapet	2.6	cu. yds.
Blue 3 - End Post	2.2	cu. yds.
56.9 Total for HALF SPAN (Near Side)		

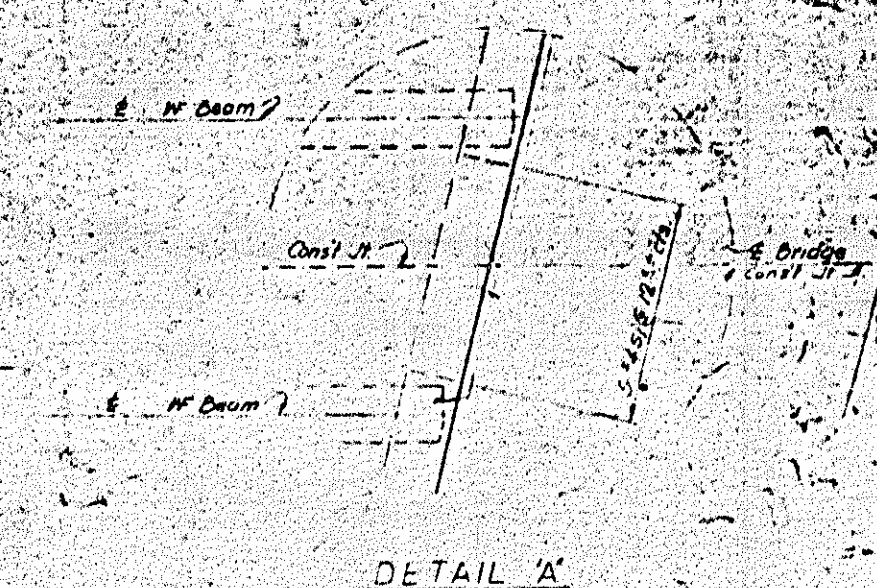
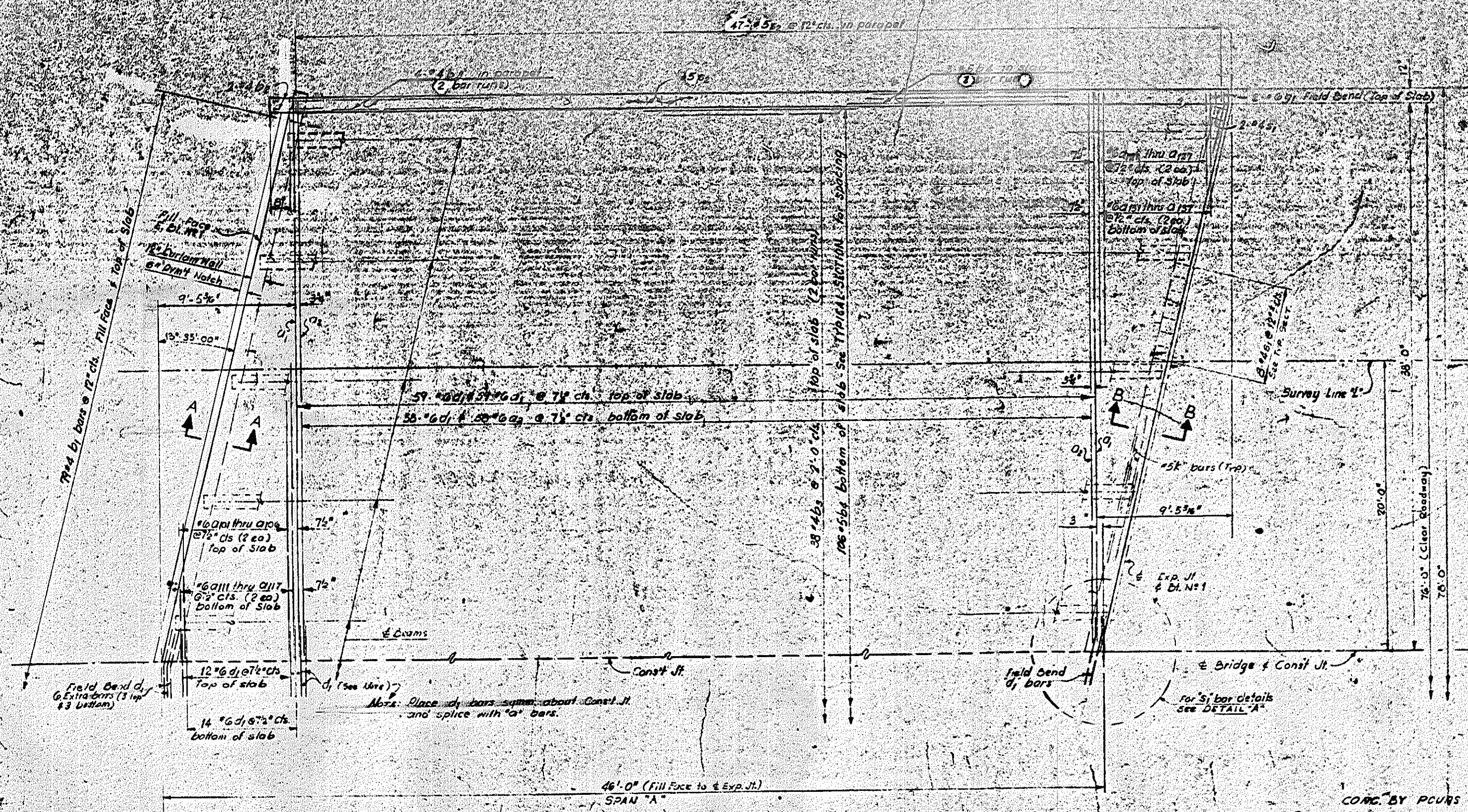
PROJECT NO. 8.1592504
 ROCKINGHAM COUNTY
 STATION: 481+25.55 L

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 NEAR SIDE - SPAN 'A'

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

C. D. Moss Jr.
 May 26, 1954

PROJECT NO. 8-1592504
 ROCKINGHAM COUNTY
 STATION: 481+25.23-L
 SHEET 1 OF 2



HALF PLAN
 PAVT AND RAIL NOT SHOWN

CONC. BY POURS

Pour 1 - Slab	=	2.11	Cu. Yds.
Pour 2 - Parapet	=	2.16	Cu. Yds.
Pour 3 - End Post	=	1.15	Cu. Yds.
53.9 cu. Total for Half Span (For Slab)			

DESIGNED BY: C.D. Moss, Jr.
 CHECKED BY: N.E. Sperry
 DATE: Oct. 11, 1965
 DATE: Nov. 1965

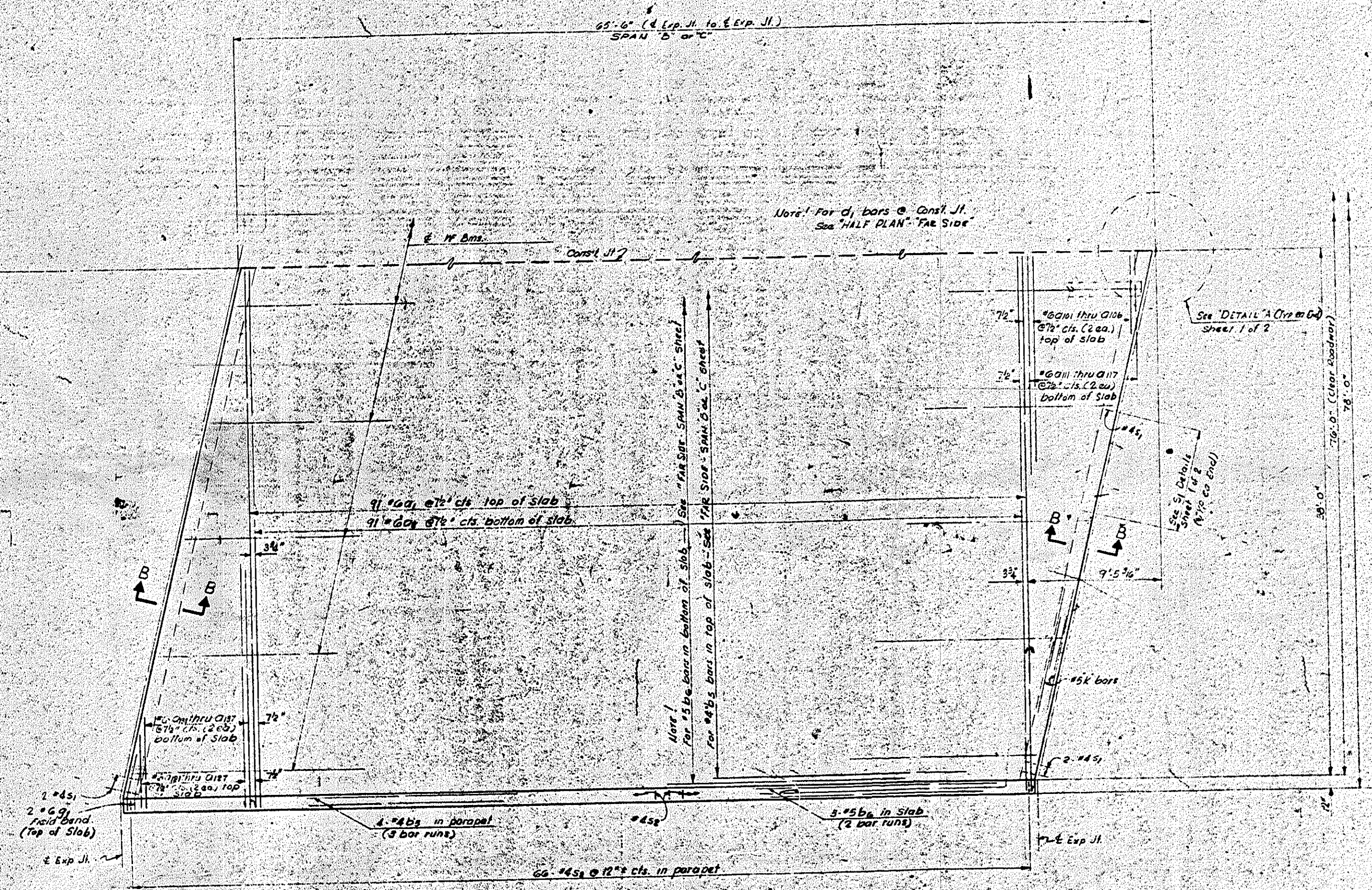
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 FAR SIDE - SPAN "A"

OCT 1965

NO.	BY	DATE	REVISIONS
1			
2			
3			

5-113
 150

PROJECT NO.	DATE	PROJECT NO.
J	M.C.	81592504
I. A. PROJECT F-51-1 (7)		
138-159		



HALF PLAN
RAIL NOT SHOWN

CONC. BY POURS
 Pour 1 - Slab - 83.6 cu. yds.
 Pour 2 - Parapet - 3.6 cu. yds.
 Total for HALF SPAN 'B' or 'C' - 87.2

PROJECT No. 81592504
 ROCKINGHAM COUNTY
 STATION: 481+25.55-L

Sheet 2 of 2
 STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 NEAR SIDE - SPAN 'B' or 'C'

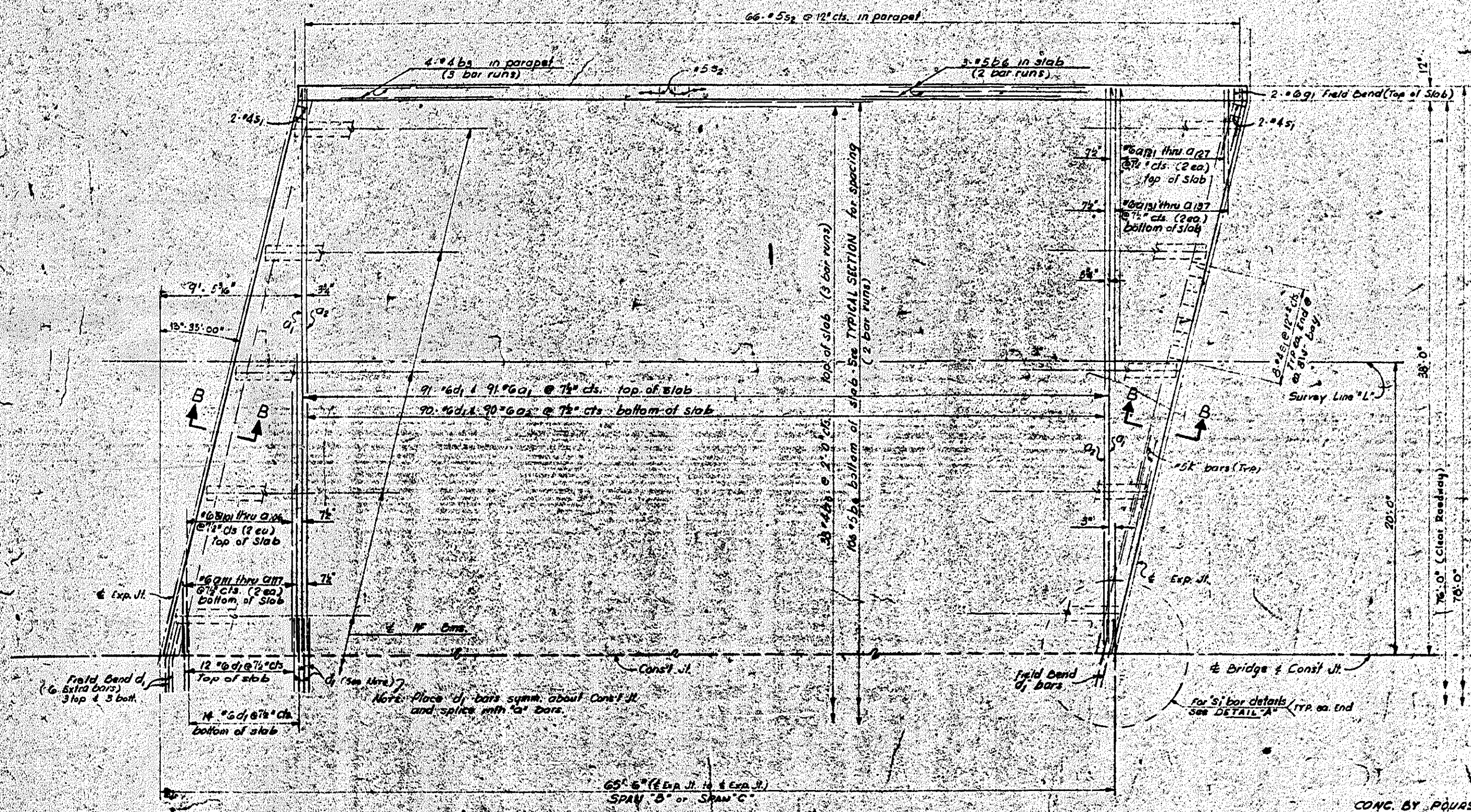
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			1		
2			2		

DRAWN BY: C. D. Moss, Jr. DATE: Oct 11, 1963
 CHECKED BY: M.C. [Signature] DATE: 1/6/1965

17506

9

PROJECT NO.	8.1592504
STATE	N. C.
PROJECT F.	51-1 (7)
159-159	



HALF PLAN

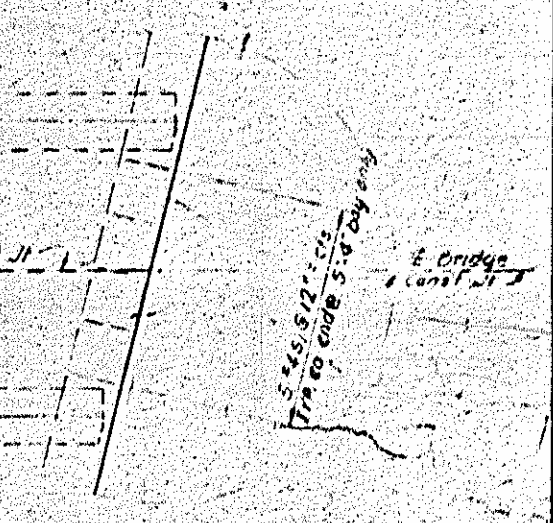
POST AND RAIL NOT SHOWN. SEE "RAIL SPAC" SHEET

CONC. BY POURS

Pour 1 - Slab = 63.3 Cu. Yds.

Pour 2 - Parapet = 2.6 Cu. Yds.

67.9 CY. Total for Half Span 'B' or 'C' F.S.



DETAIL 'A'

PROJECT NO. 8.1592504
 ROCKINGHAM COUNTY
 STATION: 481+25.53-L

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 FAR SIDE - SPAN 'B' OR 'C'

OCT. 1965

REVISIONS		DATE	BY	CHKD.
1				
2				

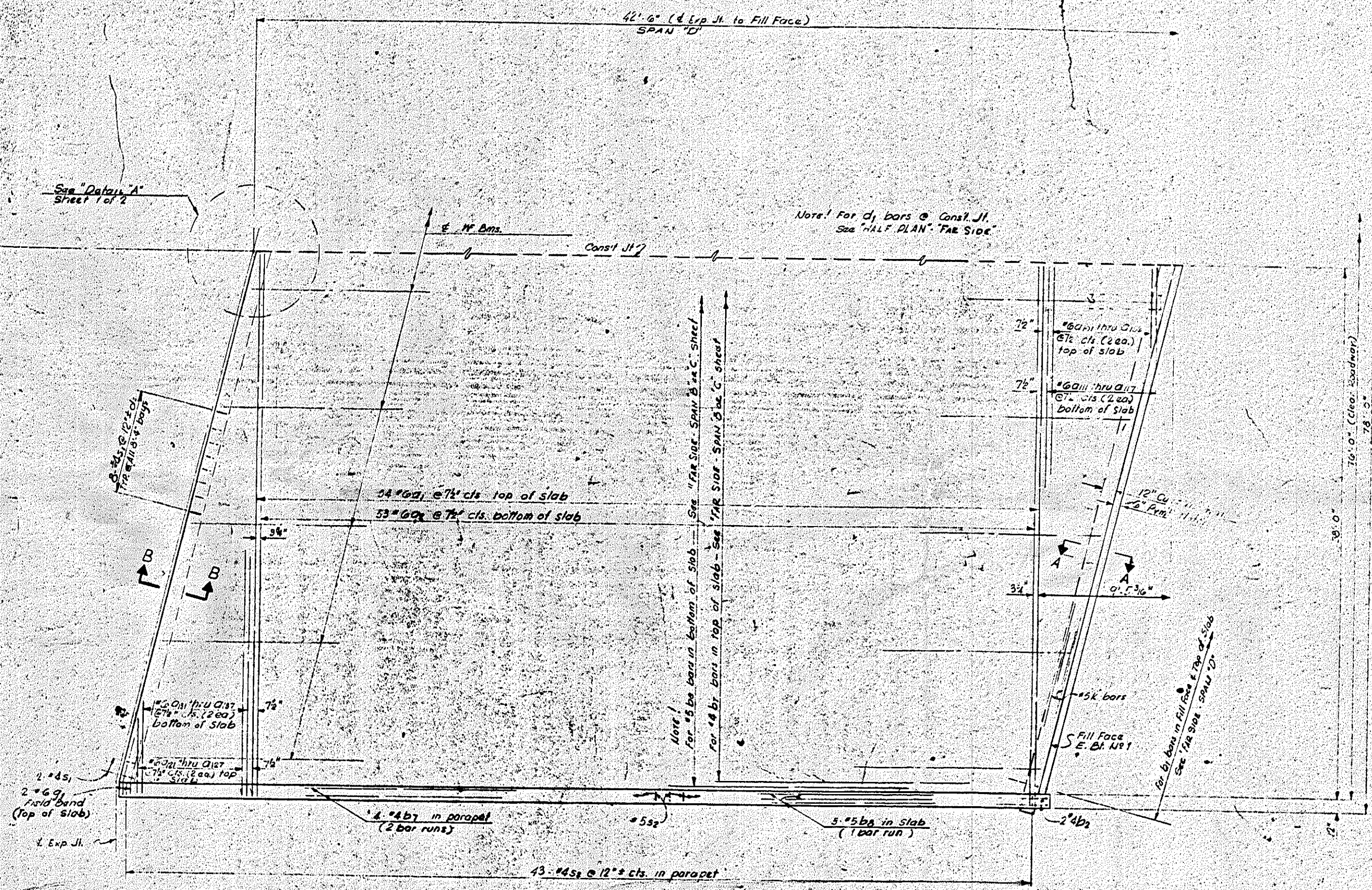
S-115
130

DESIGNED BY: C. D. MASS, JR.
 DATE: Oct. 11, 1965
 CHECKED BY: J. G. [unclear]
 DATE: [unclear]

504
 JNTY
 MISSION

5-11
 12
 13

PROJECT NO. 8.1592504
 ROCKINGHAM COUNTY
 STATION: 481+25.52-L
 SHEET: 140-159



HALF PLAN
 Post & Rail Not Shown

CONC. BY POURS

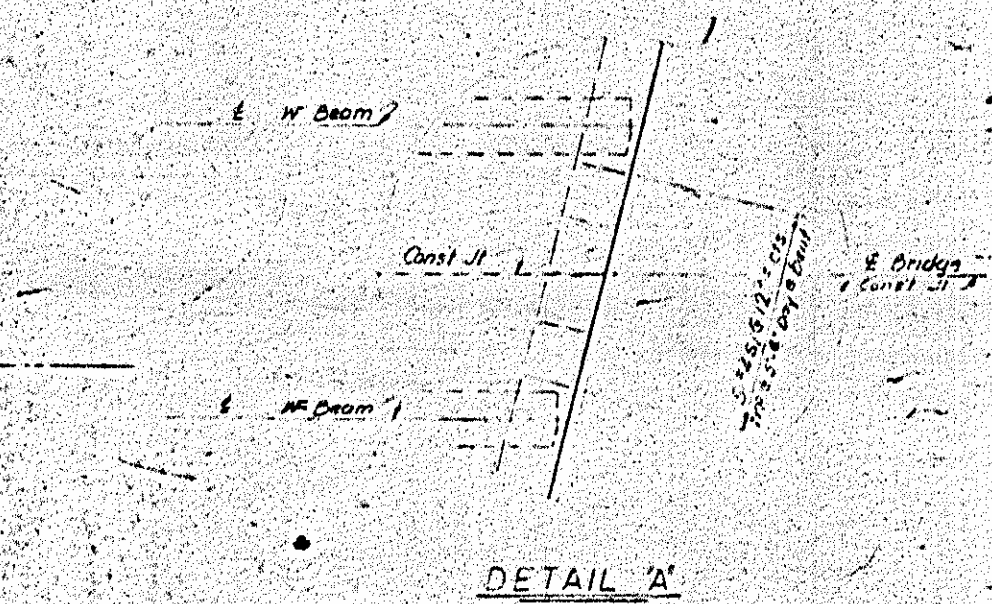
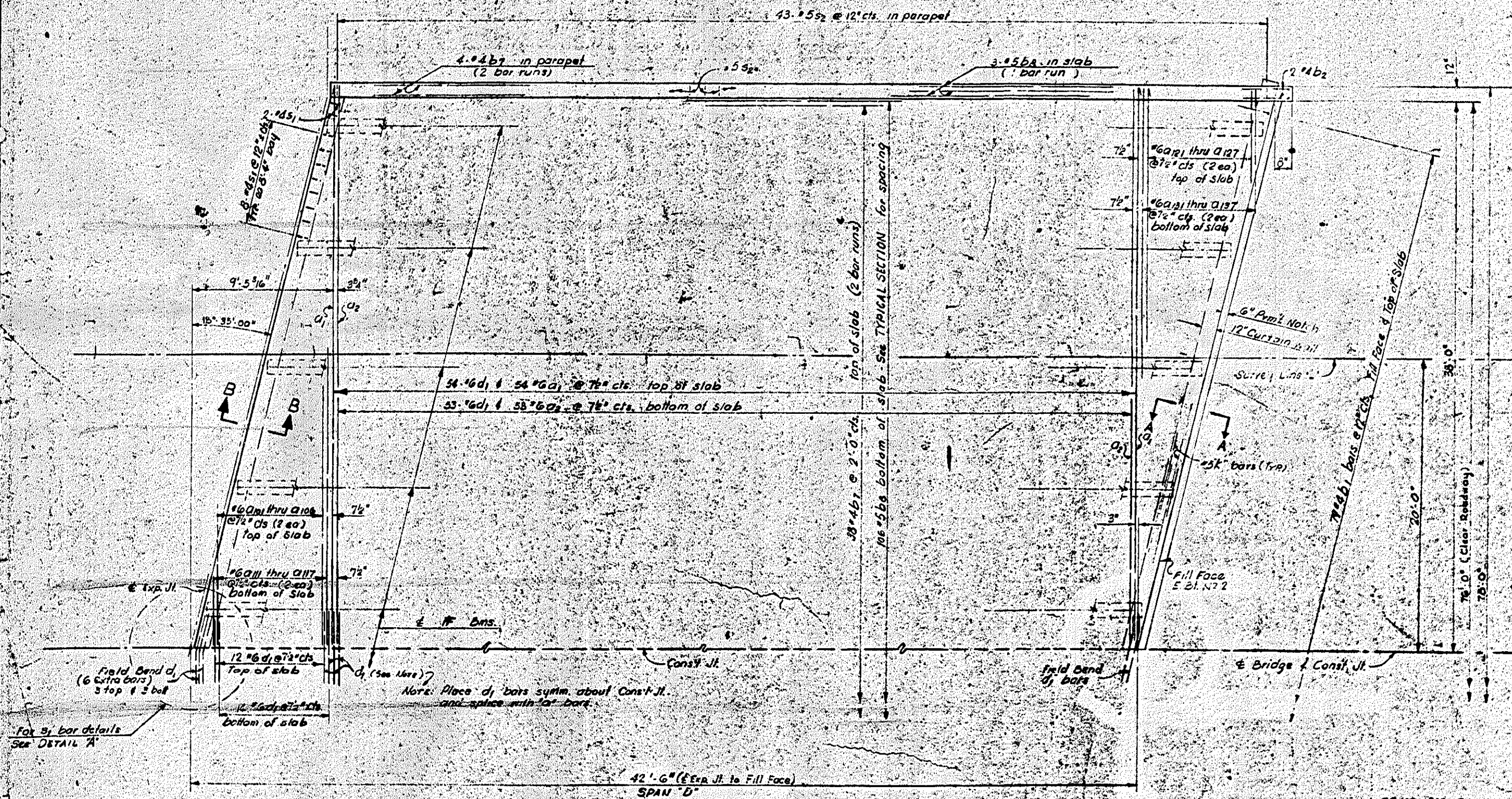
Four 1 - Slab	-	47.6	cu. Yds.
Pour 2 - Parapet	-	2.6	cu. Yds.
Pour 3 - End Post	-	2.7	cu. Yds.
		50.2	cu. Yds. Total for Half Span - Near Side

DRAWN BY: C. D. Adams
 CHECKED BY: [Signature]
 DATE: Oct. 11, 1965
 DATE: 1/26/65

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 NEAR SIDE - SPAN 'D'

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

SHEET NO. 5-116
 TOTAL SHEETS 130



HALF PLAN
POST AND RAIL NOT SHOWN

CONC. BY POURS

Pour 1 - Slab	47.6 Cu.Yds.
Pour 2 - Parapet	2.6 Cu.Yds.
Pour 3 - E. Post	2 Cu.Yds.
56.2 Total for No. 1 SPAN For Side	

PROJECT No. 8:1592504
ROCKINGHAM COUNTY
STATION: 481+23.55-L
 Sheet 1 of 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 SUPERSTRUCTURE
 FAR SIDE - SPAN "D"

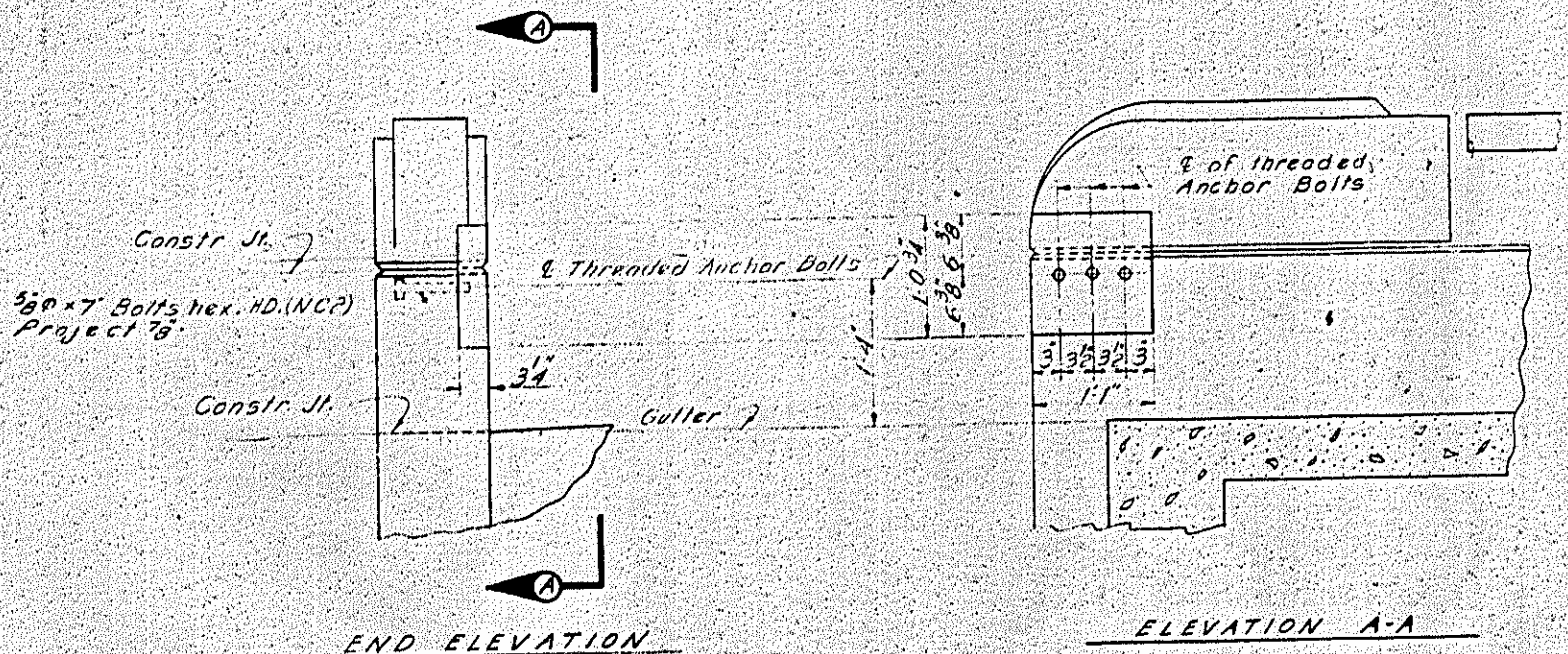
OCT. 1965

REVISIONS			
NO.	BY	DATE	DESCRIPTION
1			
2			
3			

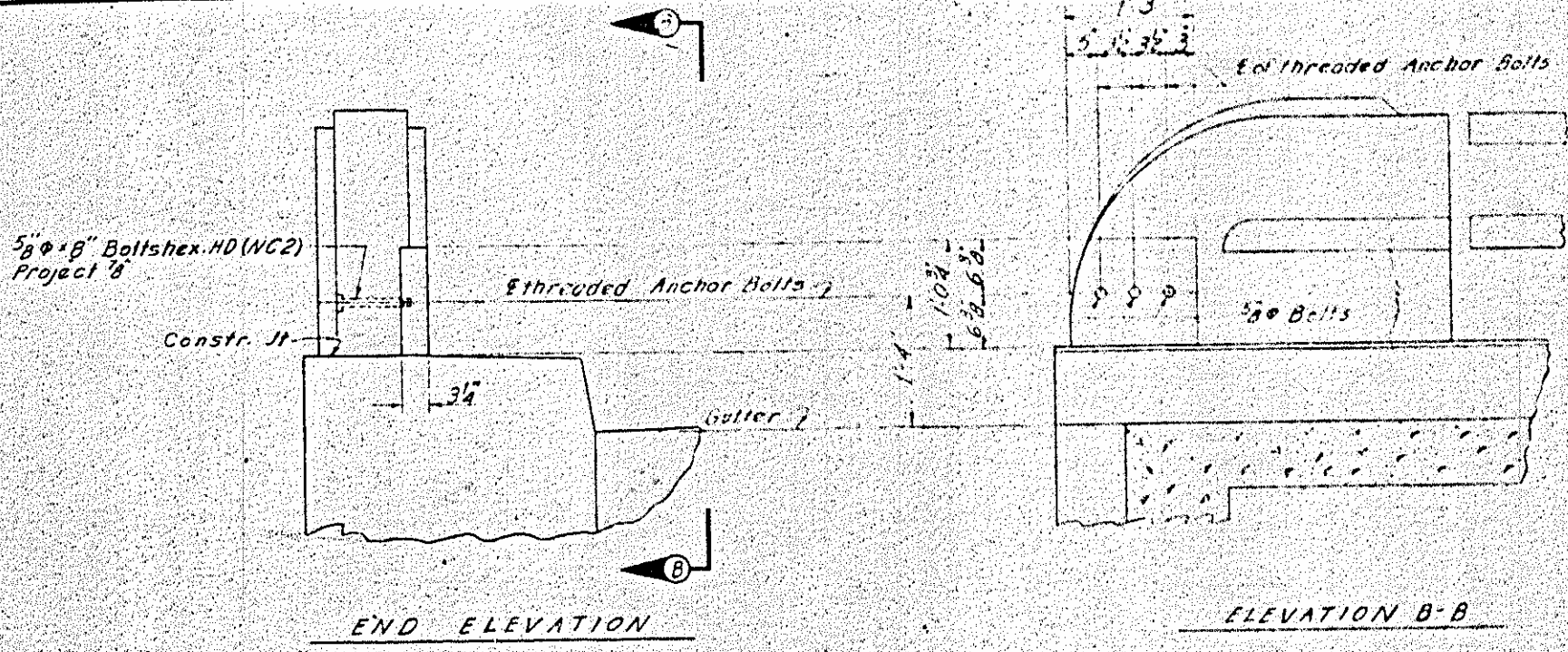
5-117
150

DESIGNED BY: C. D. MOSS
 DRAWN BY: C. D. MOSS
 DATE: Oct. 11, 1965
 CHECKED BY: J. C. SPURRY
 DATE: 1/20/1965

REV. NO.	DATE	PROJECT NO.
1	N. C.	8.1592504
1. PROJECT P. 1-1 (7)		142-159



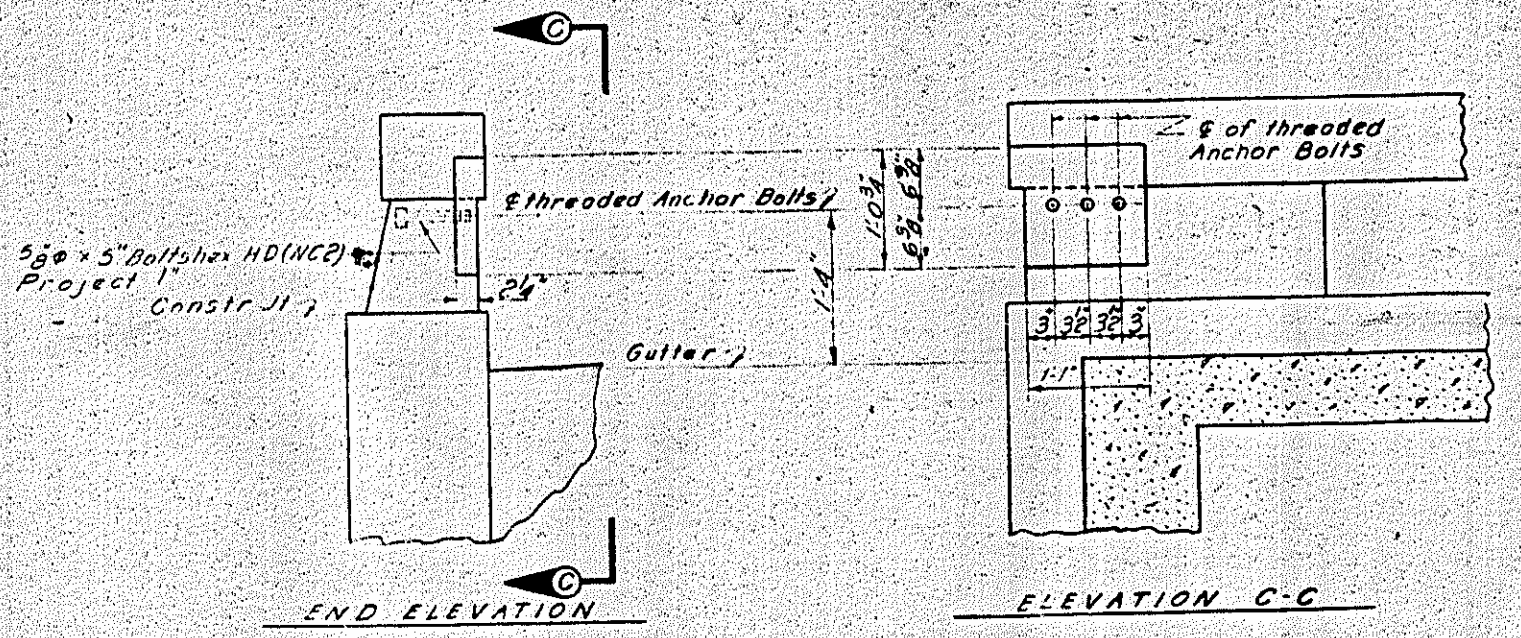
GUARD RAIL ANCHORAGE - TYPE 1



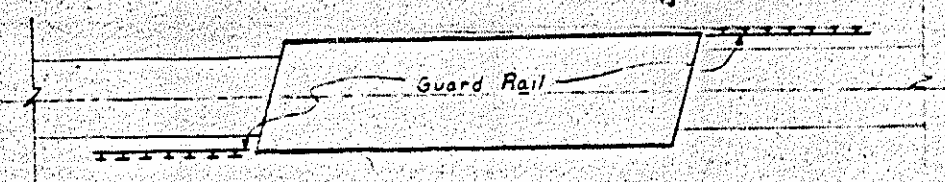
GUARD RAIL ANCHORAGE - TYPE 2

NOTE

Cost of guard rail anchor bolts complete in place shall be included in the unit contract price bid for class 'A' concrete.
 Nuts and bolts are to conform to the requirements of ASTM A-307 and are to be galvanized to conform to the requirements of ASTM A-153.
 Nuts to be regular hexagon.



GUARD RAIL ANCHORAGE - TYPE 3



PLAN
GUARD RAIL LOCATION

PROJECT NO. 8.1592504
 ROXVINGHAM COUNTY
 STATION: 481+25.55-L

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION

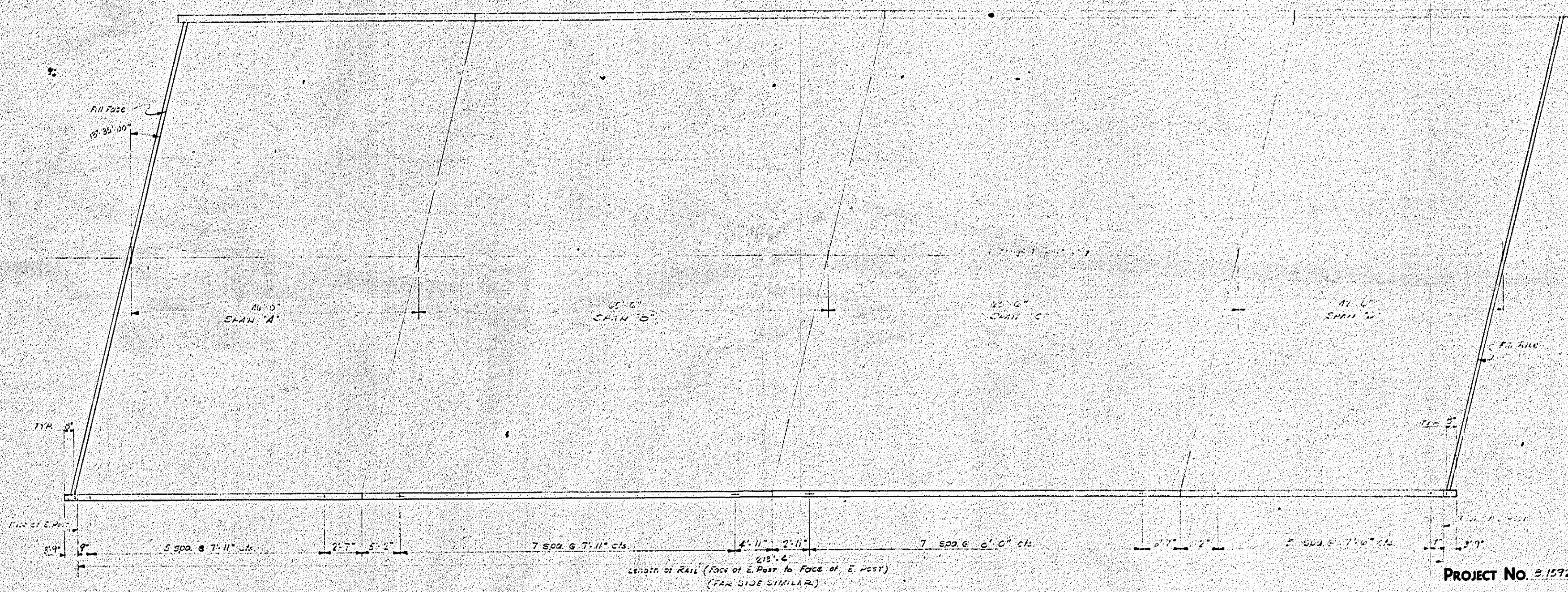
GUARD RAIL ANCHORAGE
 AT END POST

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

Don Nantz
 Jerry Ray
 DATE: 6-20-66
 DATE: 6-29-66

FIELD ROAD DIST. NO.	STATE	PROJECT NO.
144-159	N.C.	
F.A. PROJECT		

Note: For 1-Bar Metal Rail Post Spacing - see 100-100



PLAN

PROJECT No. 5157204
 ROCKINGHAM COUNTY
 STATION: 631+25.6-L

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
 1-BAR METAL RAIL
 POST SPACING

DRAWN BY: C. D. [Name] DATE: OCT. 11, 1963
 CHECKED BY: [Name] DATE: [Date]

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

SHEET NO. 3-120
 TOTAL SHEETS 130

SPAN 'A'

Bar No.	Size	Length	Weight	Bar No.	Size	Length	Weight
A1	#6	34'-3"	6967	A1	#6	34'-3"	6967
A2	#6	33'-8"	6787	A2	#6	33'-8"	6787
A101	#6	32'-8"	196	A101	#6	32'-8"	196
A102	#6	27'-6"	165	A102	#6	27'-6"	165
A103	#6	22'-4"	134	A103	#6	22'-4"	134
A104	#6	17'-2"	103	A104	#6	17'-2"	103
A105	#6	12'-0"	72	A105	#6	12'-0"	72
A106	#6	6'-9"	41	A106	#6	6'-9"	41
A111	#6	33'-11"	204	A111	#6	33'-11"	204
A112	#6	28'-9"	173	A112	#6	28'-9"	173
A113	#6	23'-7"	142	A113	#6	23'-7"	142
A114	#6	18'-5"	111	A114	#6	18'-5"	111
A115	#6	13'-3"	80	A115	#6	13'-3"	80
A116	#6	8'-1"	49	A116	#6	8'-1"	49
A117	#6	2'-11"	18	A117	#6	2'-11"	18
A121	#6	34'-3"	206	A121	#6	34'-3"	206
A122	#6	29'-1"	175	A122	#6	29'-1"	175
A123	#6	23'-11"	144	A123	#6	23'-11"	144
A124	#6	18'-9"	113	A124	#6	18'-9"	113
A125	#6	13'-7"	82	A125	#6	13'-7"	82
A126	#6	8'-4"	50	A126	#6	8'-4"	50
A127	#6	3'-2"	19	A127	#6	3'-2"	19
A131	#6	34'-11"	210	A131	#6	34'-11"	210
A132	#6	29'-9"	179	A132	#6	29'-9"	179
A133	#6	24'-7"	148	A133	#6	24'-7"	148
A134	#6	19'-5"	117	A134	#6	19'-5"	117
A135	#6	14'-3"	86	A135	#6	14'-3"	86
A136	#6	9'-1"	55	A136	#6	9'-1"	55
A137	#6	3'-11"	24	A137	#6	3'-11"	24
B1	#4	5'-9"	303	B1	#4	5'-9"	303
B2	#4	4'-6"	12	B2	#4	4'-6"	12
B3	#4	23'-7"	1449	B3	#4	23'-7"	1449
B4	#5	45'-8"	5935	B4	#5	45'-8"	5935

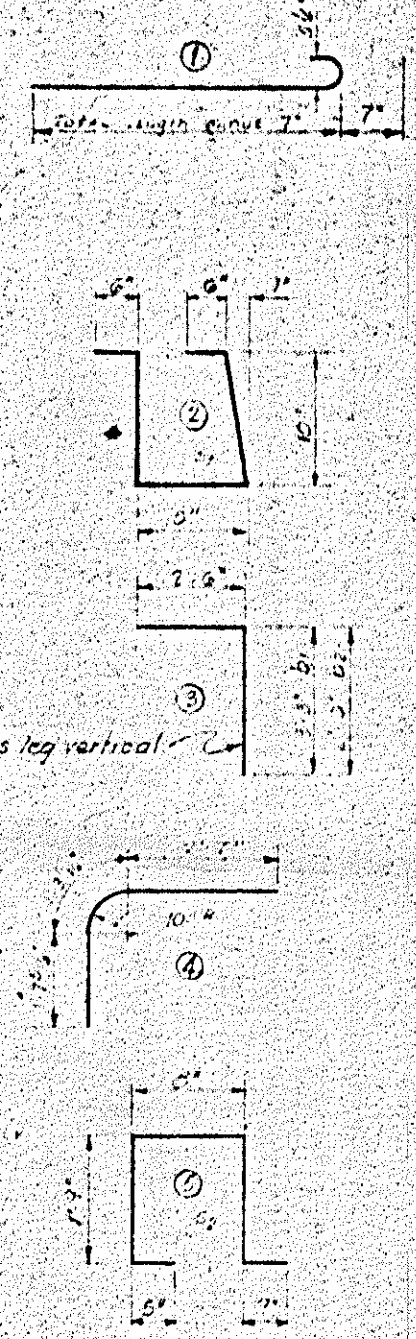
SPAN 'B' OR 'C' (2 REYS)

Bar No.	Size	Length	Weight	Bar No.	Size	Length	Weight
C1	#6	39'-3"	10730	C1	#6	39'-3"	10730
C2	#6	35'-8"	10258	C2	#6	35'-8"	10258
C101	#6	32'-8"	196	C101	#6	32'-8"	196
C102	#6	27'-6"	165	C102	#6	27'-6"	165
C103	#6	22'-4"	134	C103	#6	22'-4"	134
C104	#6	17'-2"	103	C104	#6	17'-2"	103
C105	#6	12'-0"	72	C105	#6	12'-0"	72
C106	#6	6'-9"	41	C106	#6	6'-9"	41
C111	#6	33'-11"	204	C111	#6	33'-11"	204
C112	#6	28'-9"	173	C112	#6	28'-9"	173
C113	#6	23'-7"	142	C113	#6	23'-7"	142
C114	#6	18'-5"	111	C114	#6	18'-5"	111
C115	#6	13'-3"	80	C115	#6	13'-3"	80
C116	#6	8'-1"	49	C116	#6	8'-1"	49
C117	#6	2'-11"	18	C117	#6	2'-11"	18
C121	#6	34'-3"	206	C121	#6	34'-3"	206
C122	#6	29'-1"	175	C122	#6	29'-1"	175
C123	#6	23'-11"	144	C123	#6	23'-11"	144
C124	#6	18'-9"	113	C124	#6	18'-9"	113
C125	#6	13'-7"	82	C125	#6	13'-7"	82
C126	#6	8'-4"	50	C126	#6	8'-4"	50
C127	#6	3'-2"	19	C127	#6	3'-2"	19
C131	#6	34'-11"	210	C131	#6	34'-11"	210
C132	#6	29'-9"	179	C132	#6	29'-9"	179
C133	#6	24'-7"	148	C133	#6	24'-7"	148
C134	#6	19'-5"	117	C134	#6	19'-5"	117
C135	#6	14'-3"	86	C135	#6	14'-3"	86
C136	#6	9'-1"	55	C136	#6	9'-1"	55
C137	#6	3'-11"	24	C137	#6	3'-11"	24
D5	#4	22'-8"	2090	D5	#4	22'-8"	2090
D6	#5	33'-7"	7846	D6	#5	33'-7"	7846
S1	#4	3'-6"	341	S1	#4	3'-6"	341
S2	#5	5'-4"	784	S2	#5	5'-4"	784

SPAN 'D'

Bar No.	Size	Length	Weight	Bar No.	Size	Length	Weight
D1	#6	37'-3"	6367	D1	#6	37'-3"	6367
D2	#6	33'-8"	6156	D2	#6	33'-8"	6156
D101	#6	32'-8"	196	D101	#6	32'-8"	196
D102	#6	27'-6"	165	D102	#6	27'-6"	165
D103	#6	22'-4"	134	D103	#6	22'-4"	134
D104	#6	17'-2"	103	D104	#6	17'-2"	103
D105	#6	12'-0"	72	D105	#6	12'-0"	72
D106	#6	6'-9"	41	D106	#6	6'-9"	41
D111	#6	33'-11"	204	D111	#6	33'-11"	204
D112	#6	28'-9"	173	D112	#6	28'-9"	173
D113	#6	23'-7"	142	D113	#6	23'-7"	142
D114	#6	18'-5"	111	D114	#6	18'-5"	111
D115	#6	13'-3"	80	D115	#6	13'-3"	80
D116	#6	8'-1"	49	D116	#6	8'-1"	49
D117	#6	2'-11"	18	D117	#6	2'-11"	18
D121	#6	34'-3"	206	D121	#6	34'-3"	206
D122	#6	29'-1"	175	D122	#6	29'-1"	175
D123	#6	23'-11"	144	D123	#6	23'-11"	144
D124	#6	18'-9"	113	D124	#6	18'-9"	113
D125	#6	13'-7"	82	D125	#6	13'-7"	82
D126	#6	8'-4"	50	D126	#6	8'-4"	50
D127	#6	3'-2"	19	D127	#6	3'-2"	19
D131	#6	34'-11"	210	D131	#6	34'-11"	210
D132	#6	29'-9"	179	D132	#6	29'-9"	179
D133	#6	24'-7"	148	D133	#6	24'-7"	148
D134	#6	19'-5"	117	D134	#6	19'-5"	117
D135	#6	14'-3"	86	D135	#6	14'-3"	86
D136	#6	9'-1"	55	D136	#6	9'-1"	55
D137	#6	3'-11"	24	D137	#6	3'-11"	24
E1	#4	5'-9"	303	E1	#4	5'-9"	303
E2	#4	4'-6"	12	E2	#4	4'-6"	12
E7	#4	21'-10"	1342	E7	#4	21'-10"	1342
E8	#5	42'-2"	4926	E8	#5	42'-2"	4926

BAR TYPES



All Bar Dimensions Are Out to Jul

BILL OF MATERIAL - SUPERSTRUCTURE

Reinforcing Steel	--- Lbs. 166,217
* Class 'A' Concrete	--- Cu. Yds. 478.2
Structural Steel	--- Lbs. 297,000
1-bar Metal Pail	--- Lin. Ft. 426.63

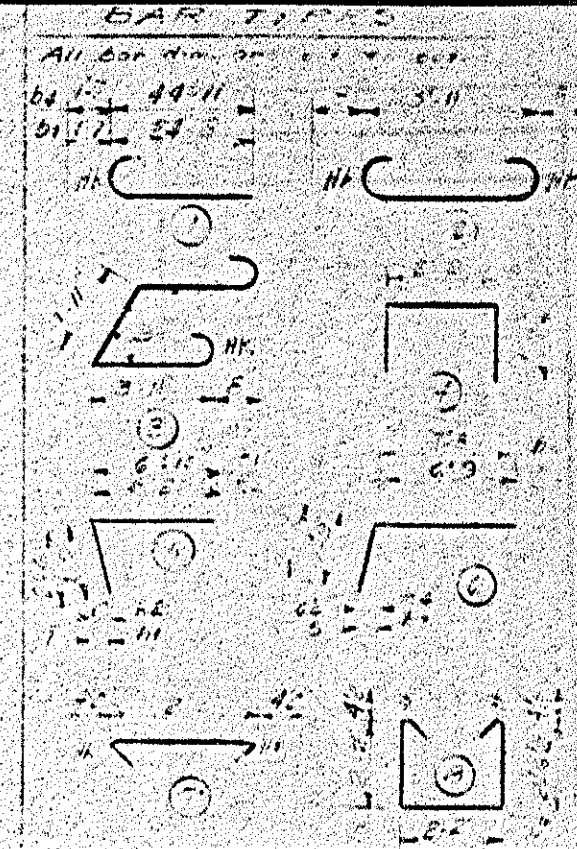
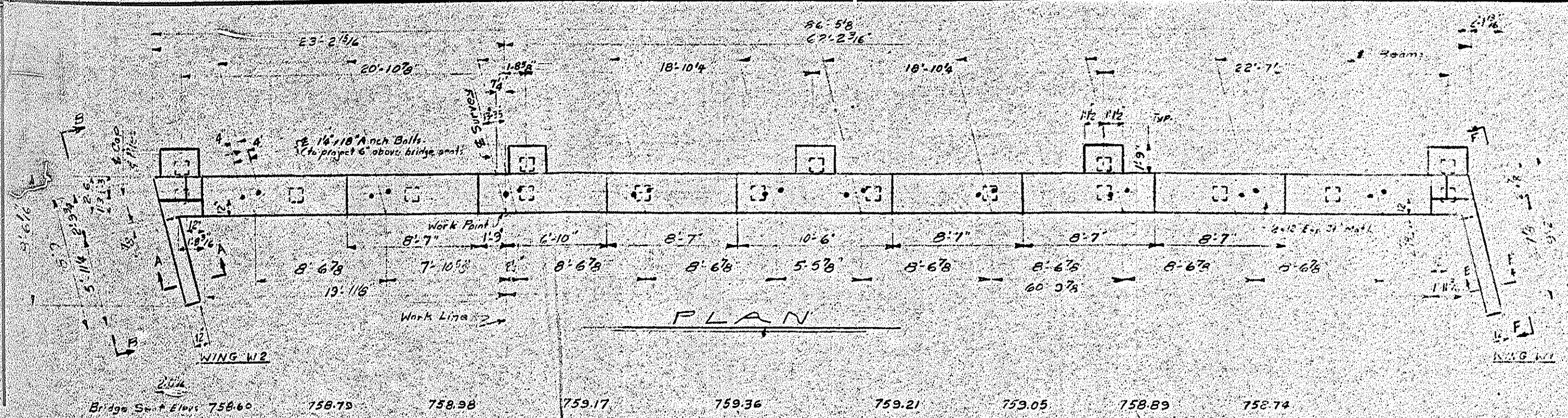
PROJECT NO. 8.1502504
 ROCKINGHAM COUNTY
 STATION 491+25.1-L

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
BILL OF MATERIAL
BAR TYPES
 OCTOBER 1965

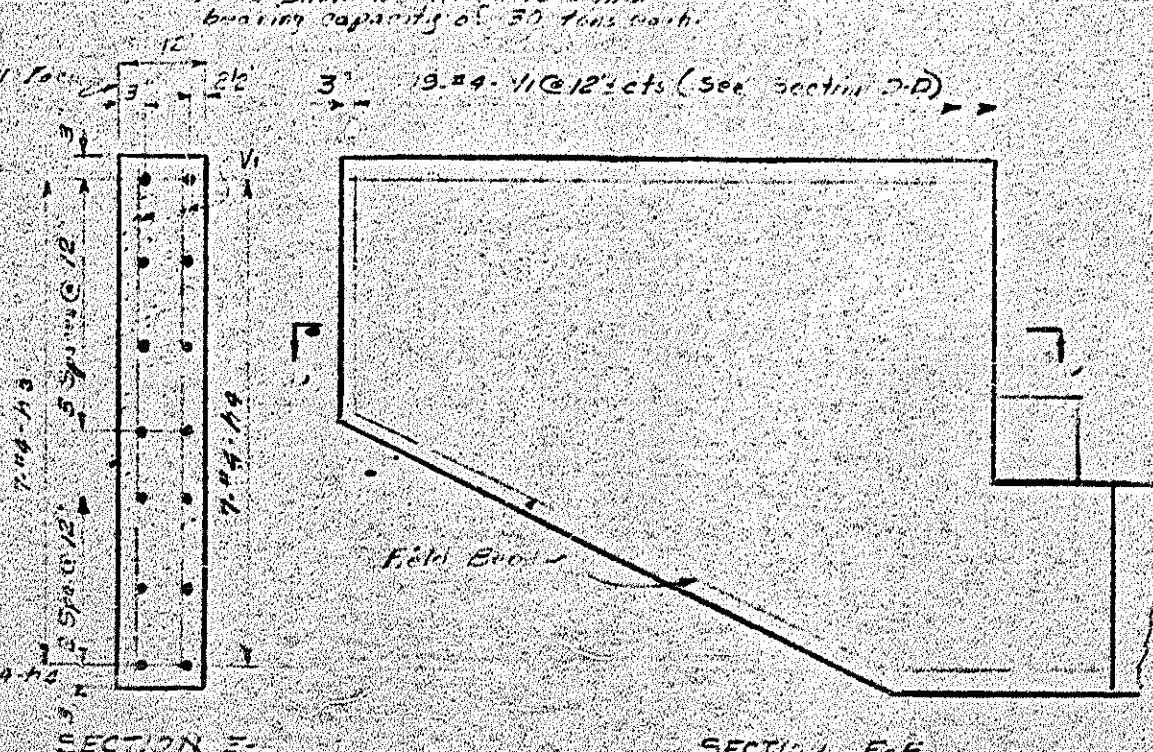
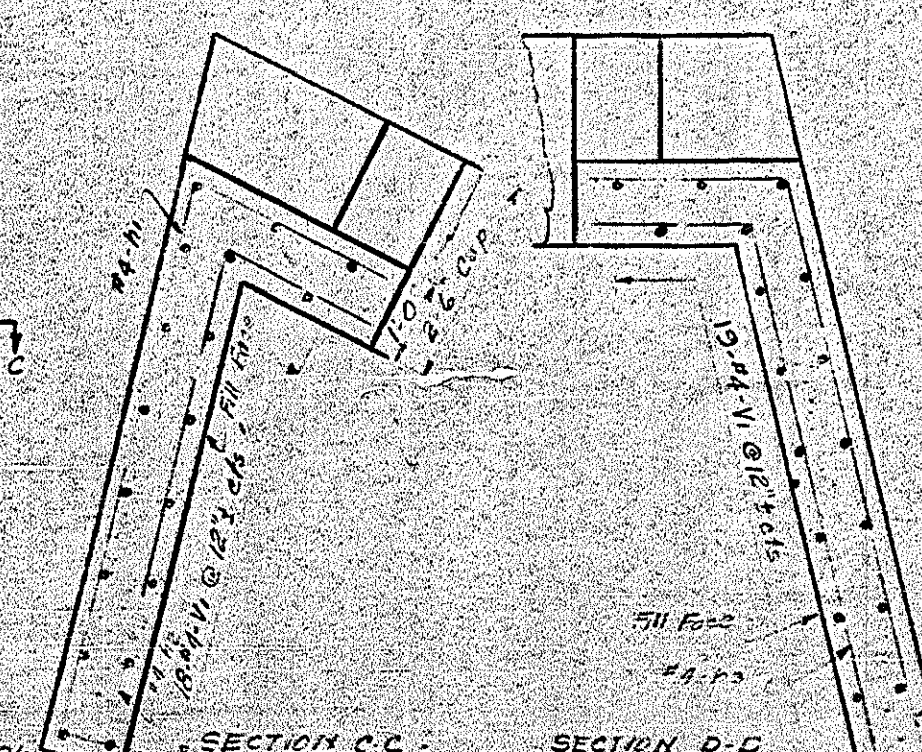
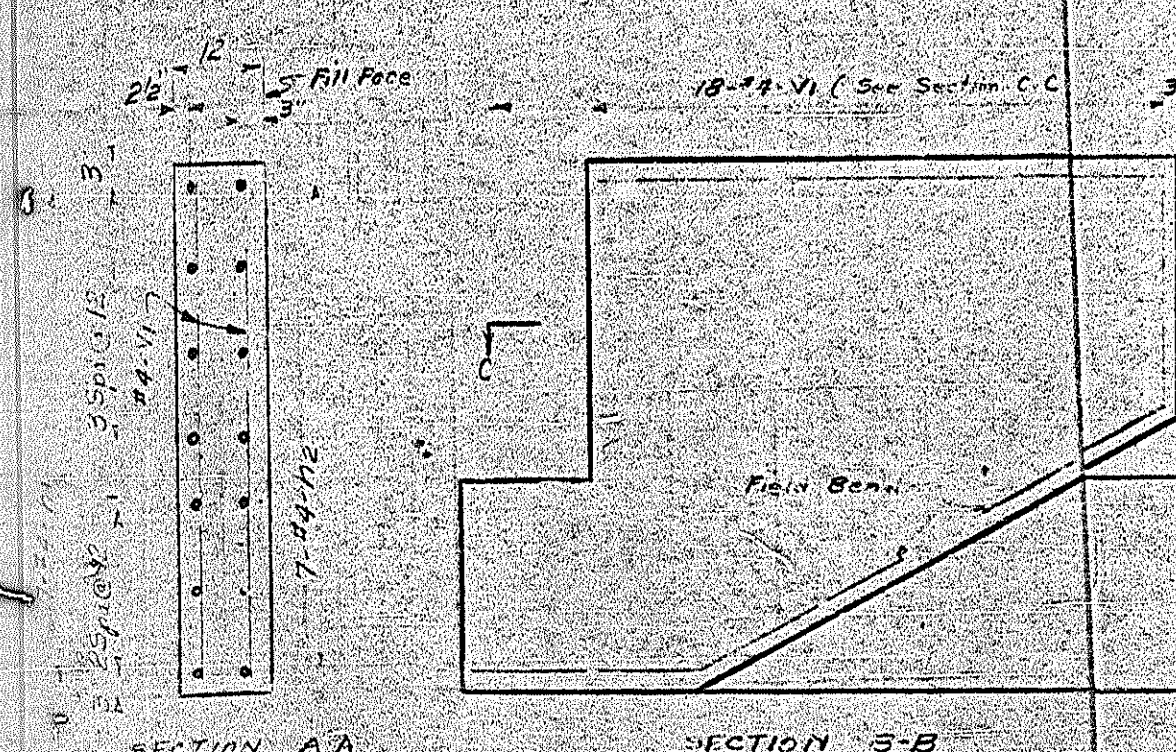
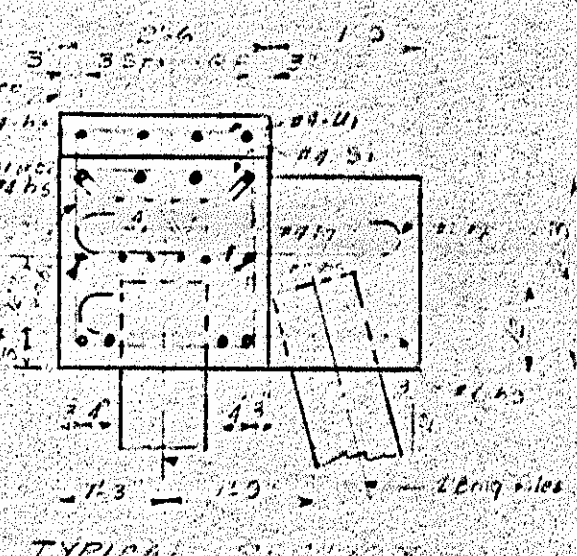
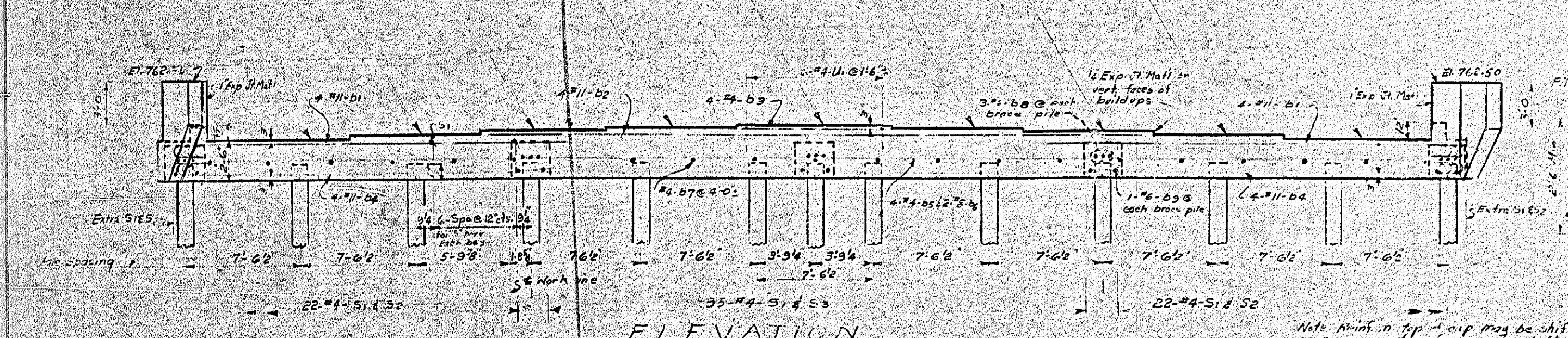
NO.	BY	DATE	NO.	BY	DATE
1			1		5-12-65
2			2		10-1-65

DRAWN BY: G. D. Moore
 CHECKED BY: M.C. [Signature]
 DATE: OCT 12, 1965

* For Class 'A' Conc. by course - See 'SPAN' sheets.



PROJECT NO.		YEAR		PROJECT	
3	N.C.				
F. A. PROJECT F.					
126-159					
BILL OF MATERIAL					
For End Bent No. 1					
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
01	2	#11	1	27'-0"	111
02	4	#11	Str	17'-0"	57
03	2	#8	Str	17'-0"	28
04	2	#11	1	46'-0"	166
05	16	#8	Str	22'-0"	224
06	4	#8	Str	22'-0"	88
07	21	#8	Str	22'-0"	218
08	12	#8	Str	22'-0"	118
09	2	#8	Str	11'-0"	22
10	6	#6	1	11'-0"	33
11	75	#6	7	21'-0"	765
12	22	#6	2	7'-0"	77
13	55	#6	2	2'-0"	110
14	3	#6	Str	2'-0"	18
15	7	#6	2	2'-0"	21
16	2	#6	2	2'-0"	12
17	1	#6	2	2'-0"	12



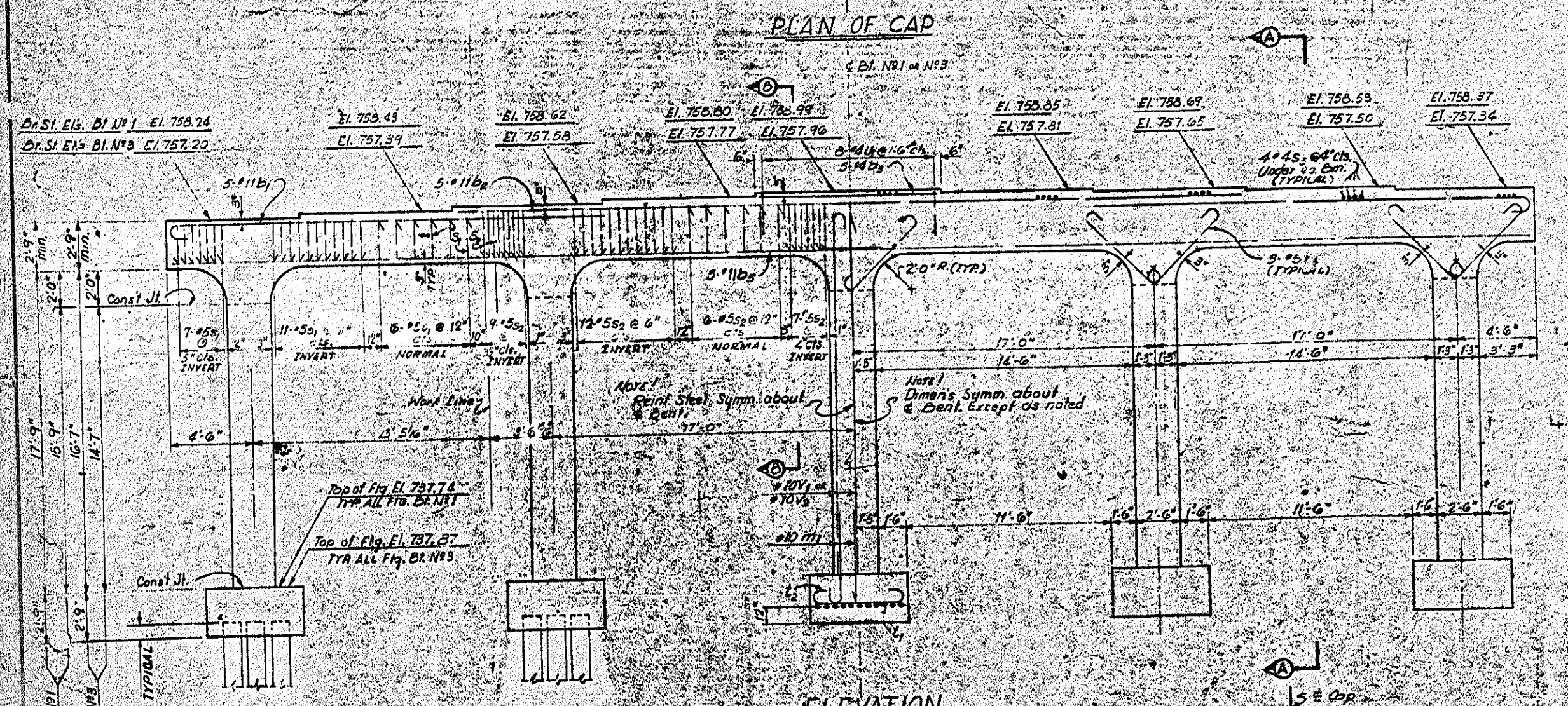
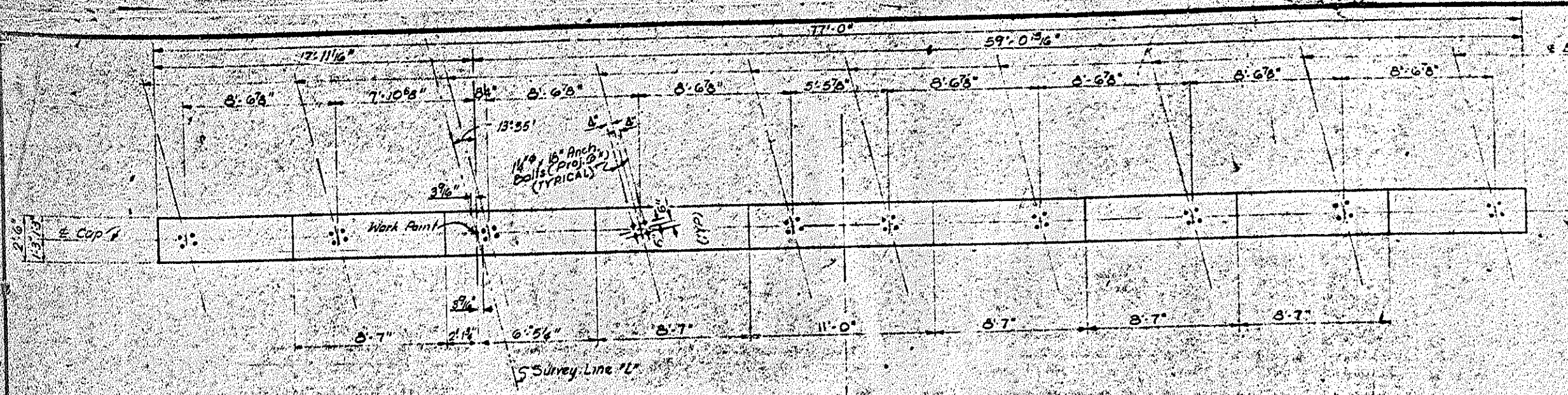
PROJECT NO. 6155-504
 ROCKINGHAM COUNTY
 STATION: 481+25.5

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 END BENT NO. 1

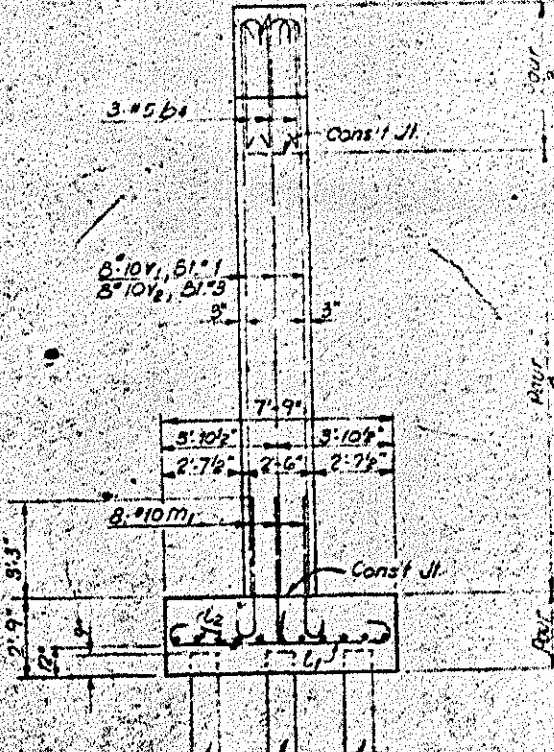
Nov. 1965

REVISIONS	
NO.	DATE
1	
2	

PROJECT NO. 8.1592504
 147-159



Note: Hooks on 'V' burs may be rotated as necessary.



Class 'A' Conc. by Pours - Bent No. 1

Pour 1 (Footings)	21.7	Cu. Yds.
Pour 2 (Cols)	18.2	Cu. Yds.
Pour 3 (Cap & Fillets)	25.5	Cu. Yds.
TOTAL	65.4	Cu. Yds.

Note: Piles to be driven to a minimum bearing capacity of 30 tons per ft.

Class 'A' Conc. by Pours - Bent No. 3

Pour 1 (Footings)	21.7	Cu. Yds.
Pour 2 (Cols)	16.9	Cu. Yds.
Pour 3 (Cap & Fillets)	25.5	Cu. Yds.
TOTAL	64.1	Cu. Yds.

BAR TYPES		BILL OF MATERIAL			
FOR BENT NO. 1 & 3					
1. Bar Dimensions Are Out to Out					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
b1	#11	12	16.1'	136.6	
b2	#11	12	44.3'	1176	
b3	#11	12	10.0'	56	
b4	#11	12	6.2'	93	
b5	#11	12	20.1'	2130	
m1	#10	10	5.6'	932	
s1	#5	5	7.40'	112	
s2	#6	6	8.7'	121	
s3	#4	4	2.1'	25	
u1	#4	4	2.0'	27	
v1	#10	10	21.5'	3686	
v2	#10	10	20.3'	3455	

FOR BENT NO. 1
 REIN. STEEL LBS. 11,465
 CLASS 'A' CONC. CU. YDS. 65.4
 12" CONC. PILES - NO. 25 - LBS. 11,500
 CONC. PILES - NO. 25 - LBS. 11,500
4779

FOR BENT NO. 3
 REIN. STEEL LBS. 11,493
 CLASS 'A' CONC. CU. YDS. 64.1
 12" CONC. PILES - NO. 25 - LBS. 11,500
 CONC. PILES - NO. 25 - LBS. 11,500
4779

PROJECT NO. 8.1592504
 ROCKINGHAM COUNTY
 STATION: 481.125⁵⁵ L.

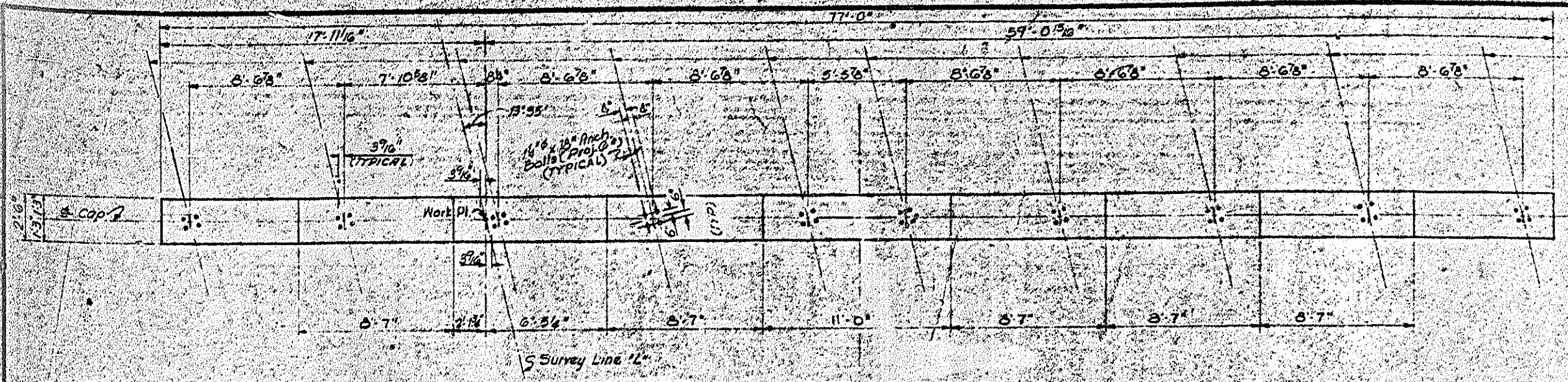
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUBSTRUCTURE

BENT NO. 1
 BENT NO. 3
 NOVEMBER 1968

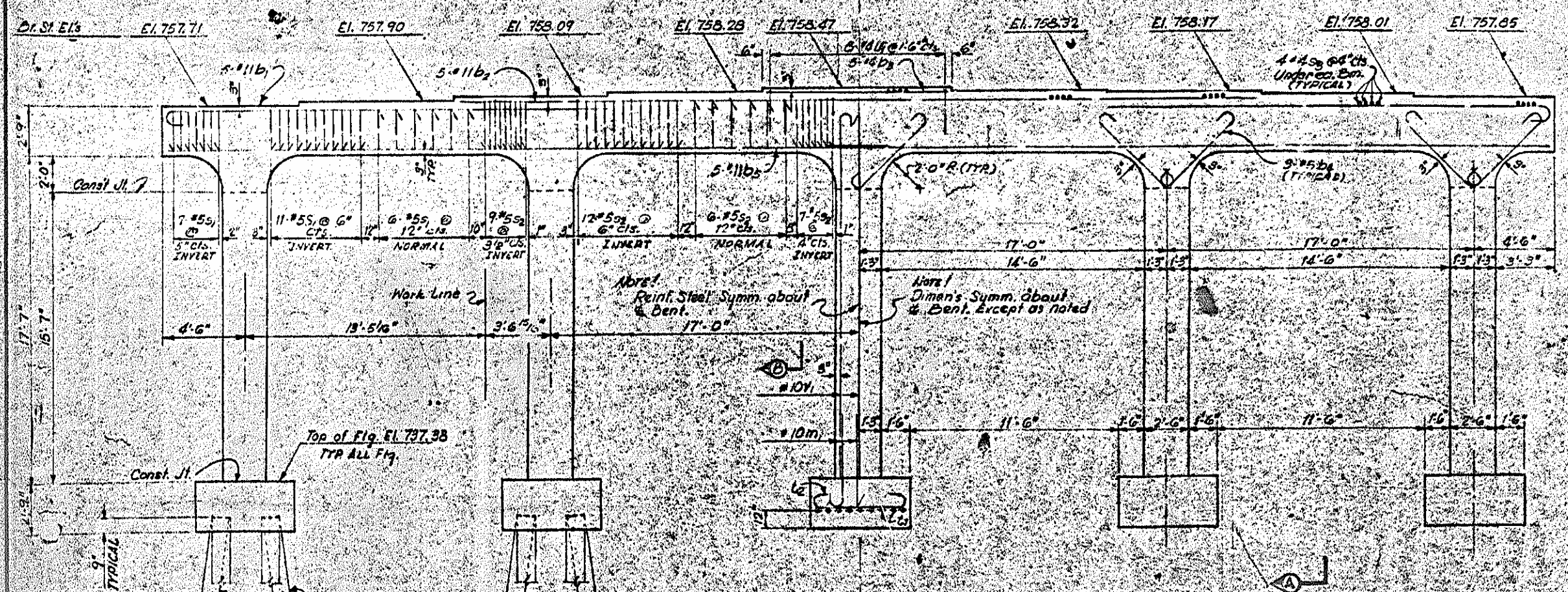
NO.	BY	DATE	REVISION
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2			130

DATE NOV. 11, 1968
 CHECKED BY
 DRAWN BY

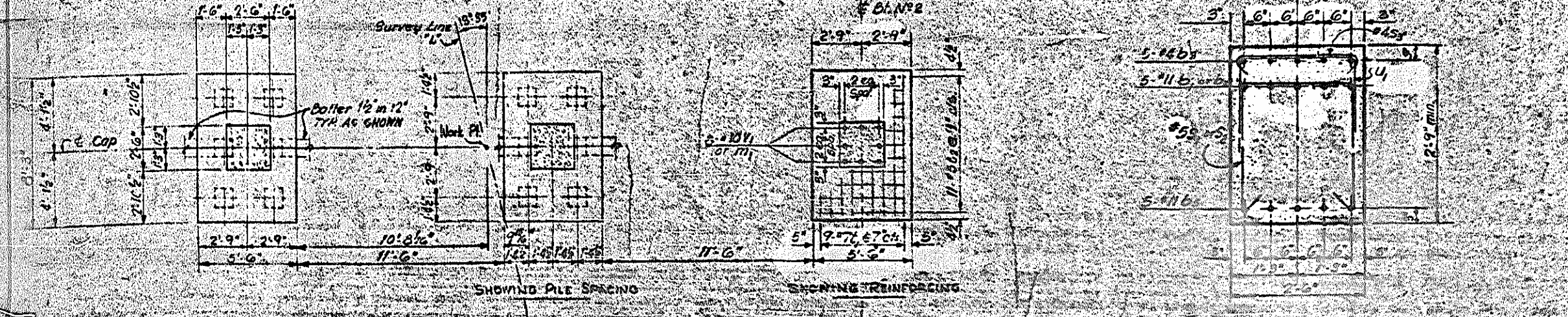
PROJECT NO. 3.1592504
 S. A. PROJECT F-51-1(7)
 148-159



PLAN OF CAP

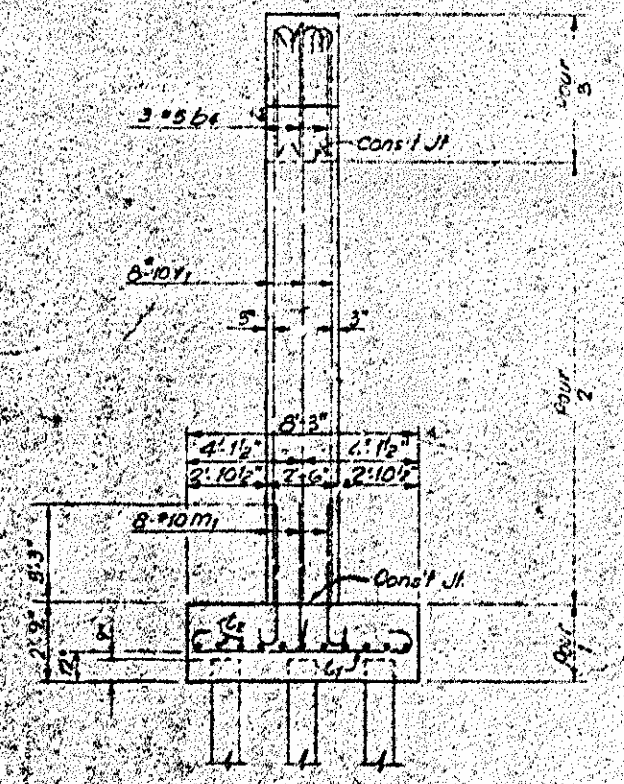


ELEVATION



PLAN OF FOOTINGS

Note: Hooks on Y bars may be rotated as necessary.



SECTION A-A

CLASS 'A' CONC. BY POURS

POUR 1 (Footings)	25.1 Cu Yds.
POUR 2 (Cap)	18.0 Cu Yds.
POUR 3 (Cap & Pile)	25.0 Cu Yds.
TOTAL	66.7 Cu Yds.

Note: Piles to be driven to a minimum bearing capacity of 30 tons/pile.

BAR TYPES		BILL OF MATERIAL	
All Bar Dimensions are Cut to Out		FOR BENT #2	
BAR NO.	SIZE	TYPE	LENGTH
10	#11	⊙	26'-1"
5	#11	⊙	44'-3"
5	#4	⊙	10'-0"
5	#2	⊙	6'-2"
10	#11	⊙	40'-1"
40	#10	⊙	5'-5"
45	#5	⊙	7'-10"
55	#5	⊙	8'-4"
5	#4	⊙	5'-0"
40	#10	⊙	7'-3"
45	#7	⊙	1'-5"
55	#5	⊙	8'-4"
5	#4	⊙	5'-0"
40	#10	⊙	7'-3"

REINFT. STEEL Lbs. 11,325
 CLASS 'A' CONC. Cu Yds. 66.7

* Conc. displaced by pile heads has not been deducted.
PROJECT NO. 3.1592504
ROCKINGHAM COUNTY
STATION: 481+25.55 L

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 SUBSTRUCTURE
 BENT #2

NOVEMBER 1960

NO.	BY	DATE	REVISIONS
1			
2			

