

1003 WAK #30
 1003 WAK #30

around to cap 0.12'

PROJ. NO. 610110
 DATE 11/20/73
 SHEET NO. 07

SPAN A

E 90° 0'

SPAN B

END BENT NO 1

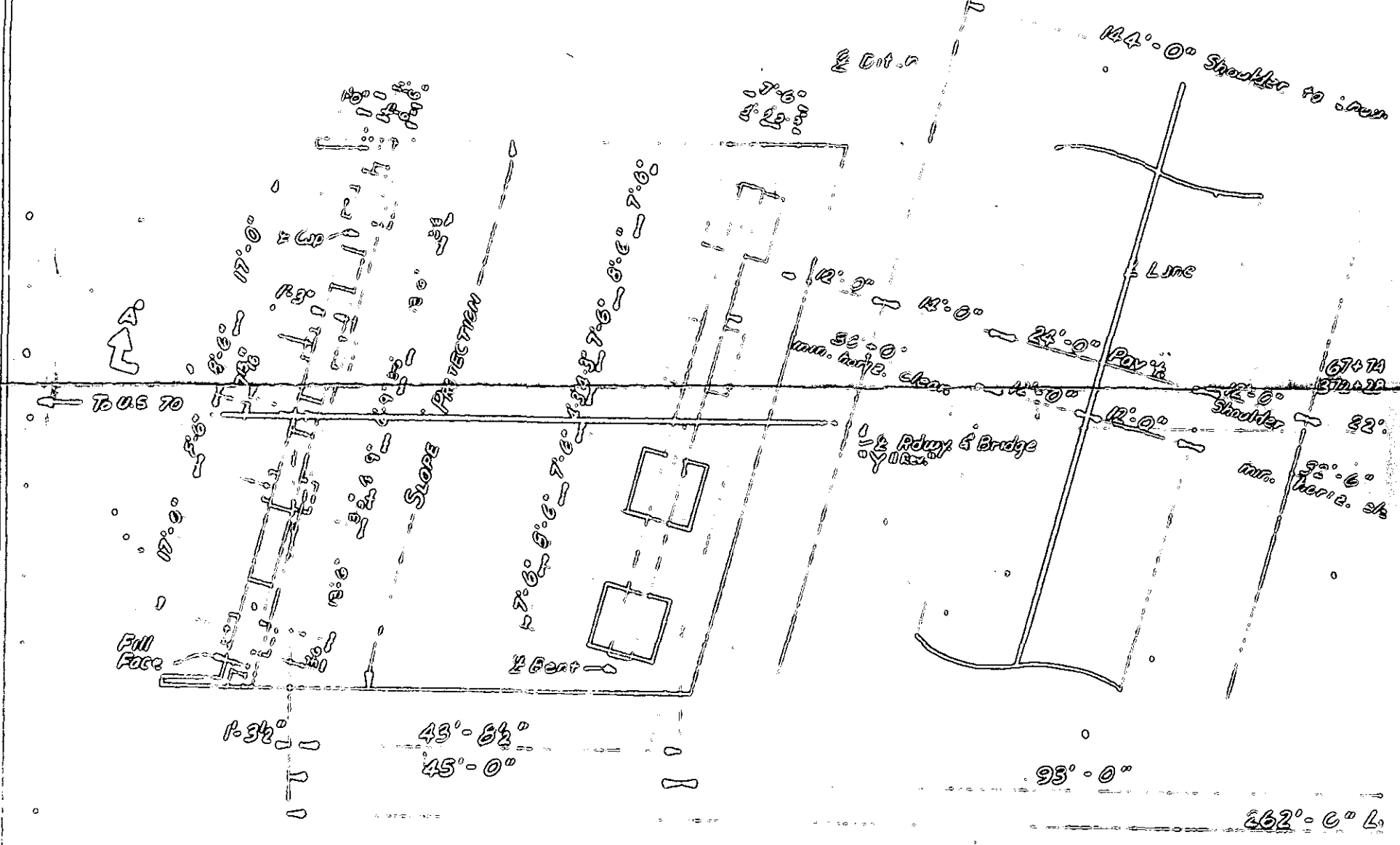
P.I. STA 68+20.44
 P.L. EQV 272.64
 2:50' V.C.

VI = 8.000
 EI 330.0
 SEC SURVEY 62

BENT NO 1

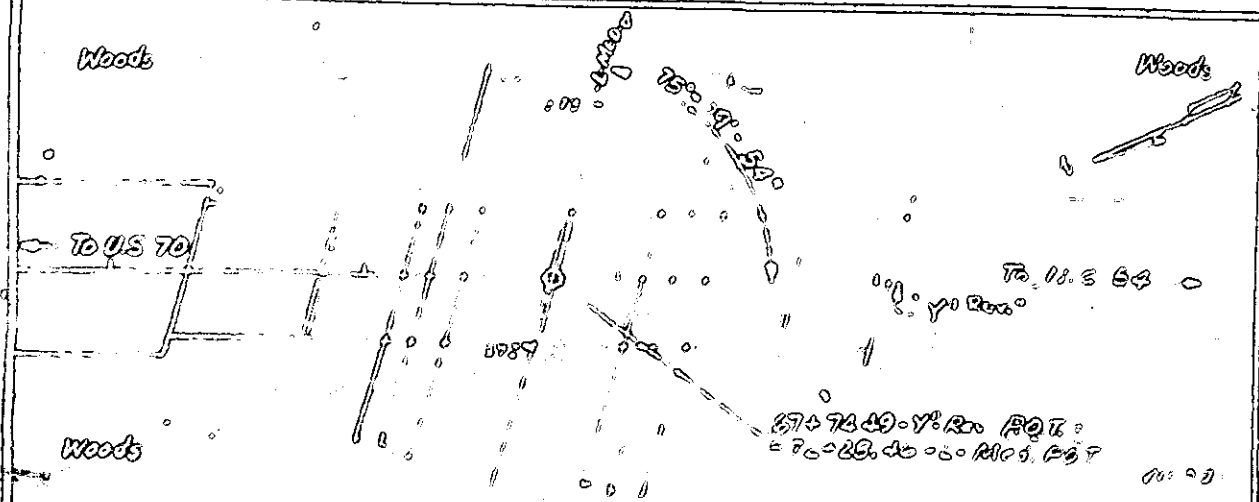
SEC
 END 61

GRADE DATA



B.M. 3 Nails in Base of 10" Pine 150' Lt of -1-10-11 Sta 37+40. El. 367.09

LOCATION SKETCH



SUBSTR. - FOUND. - AB.	CLASS 'A'	CLASS '1A'	GEOM. STE
	CU YDS	CONCRETE	
END 68+00 NO 8			122
BENT NO 1			11
BENT NO 2			9
BENT NO 3			9
END BENT NO 2			9

DESIGNED BY [Signature]
 CHECKED BY [Signature]

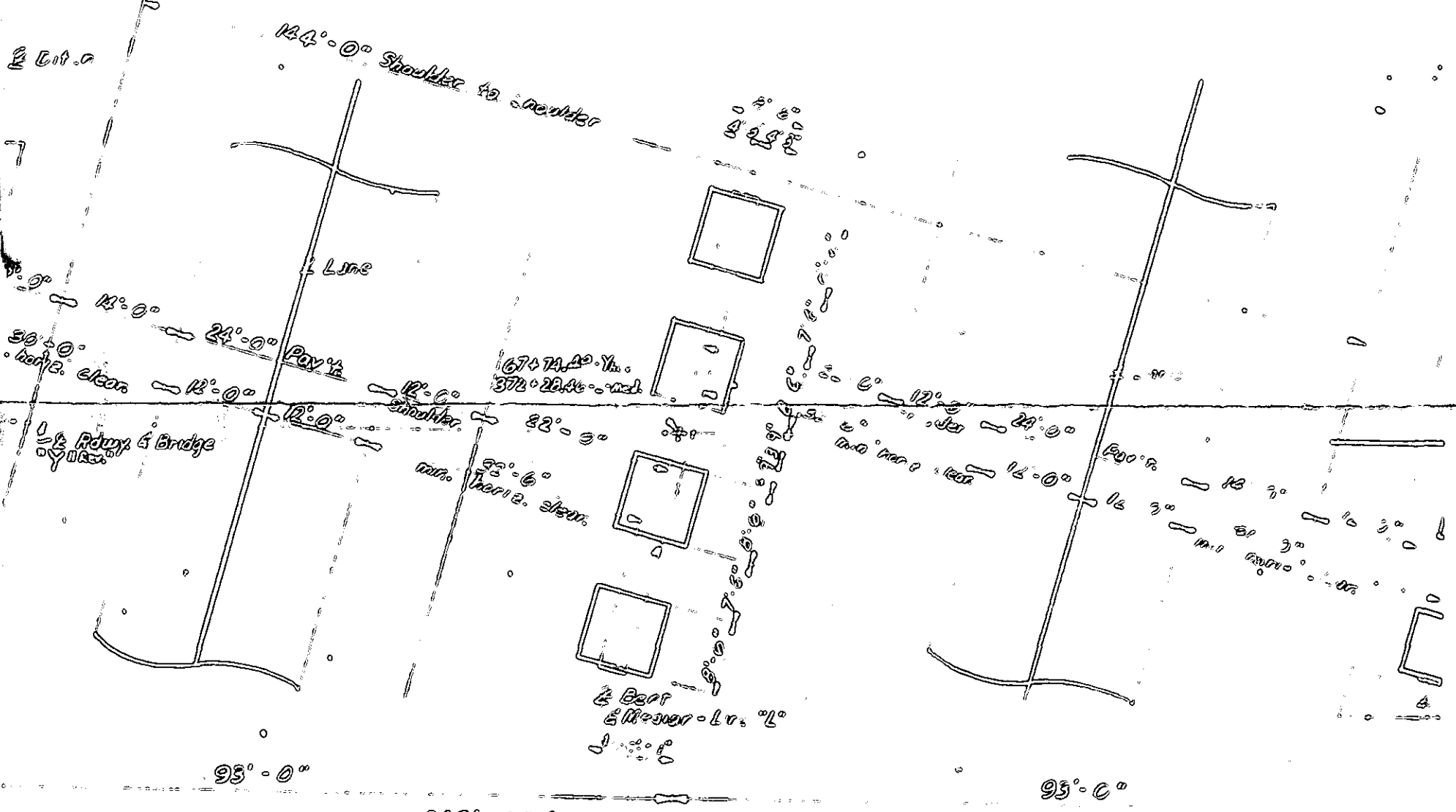
SPAN B

SPAN C

BENT NO 2

SECTION ALONG E BRIDGE

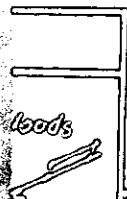
END BENTS AND BENTS IN SECTION A-F



I HEREBY CERTIFY THAT THIS STRUCTURE WAS BUILT EXCEPT AS NOTED HEREIN

PLAN

RESIDENT ENGINEER



TOTAL BILL OF MATERIAL

	CLASS 'A' CONCRETE	CLASS 'A' CONCRETE	REINFORCING STEEL	STRUCTURAL STEEL	UNSEALING CONC. P.P.T.	UNCLASS. STR. CONC.	4" CONCRETE SLOPE FROTH	ONE BAR METAL PAUL
	CU YDS.	CU YDS.	LEBS.	APPROX LBS.	APPROX GALS.	CU YDS.	SQ. YDS.	LIN. FT.
SUPERSTRUCTURE	92.20	122.3	357,905	35				519.3
END BENT NO 1								
BENT NO 1			11,630					
BENT NO 2			9,799					
BENT NO 3			2,421					
END BENT NO 2								
TOTAL	92.20	122.3	357,905	35				519.3

SPAN C

SPAN D

Full Face End Bent No 2
 STA. 67+74.49
 ELEV. 32.08'

END BENT No 2

BENT No 3

NOTES

1. REFS. = U.S. GEO. SURV. MAPS
 2. CHECK & BORROW DATA FOR OTHER
 3. ALL DATA MUST GENERAL
 4. ALL DATA MUST BE SET S-N

COMPUTED FOUNDATION LOADS
 Comp. of foundation loads
 for Bent No 1, Bents No
 1, 2, 3 & piers & footings
 for Bent No 2 & 3
 feet per sq foot

Foundation footings to be built
 shall be a minimum of 12" wide
 or 12" with minimum thickness
 as shown on plans.

PIERS OVER CUT SECTIONS
 shall be to be spaced at
 10' to 12' center to center
 unless otherwise specified by the
 engineer. Unless otherwise
 specified, all work shall be
 done to the satisfaction of
 the engineer.

CONSTRUCTION ELEVATIONS FOR
 FORMS SHALL BE MAINTAINED
 AS SHOWN AND WILL BE
 MAINTAINED BY THE RESIDENT
 ENGINEER BY THE BRIDGE
 DESIGN DEPT. BEFORE
 CONSTRUCTION OF
 THE WORK IS BEGUN.

100% "A.A." concrete shall be
 used in the superstructure and
 100% "A" concrete shall be used
 in all other portions of
 the structure. See Special
 Provisions and Specs.



THAT THIS STRUCTURE WAS BUILT ACCORDING TO PLANS

RESIDENT
 ENGINEER

SPECIAL PROVISIONS FOR DESIGN
 OF BRIDGE OVER FELLOWS N.C. 54
 ON SR 1070 BETWEEN U.S. 70
 AND N.C. 54

PROJECT No. B.1409705

DURHAM - WARE COUNTY

STATION 67+74.49 - Yth Res
 372+28.46 - L.

NO.	DESCRIPTION	QTY.	UNIT	PRICE	TOTAL
1	4" CONCRETE SLABE FLOOR				
2	ONE BAR METAL PAUL				
3	Sq. Yds.				
4	LINE. FT.				
5	513.9				
6	513.9				

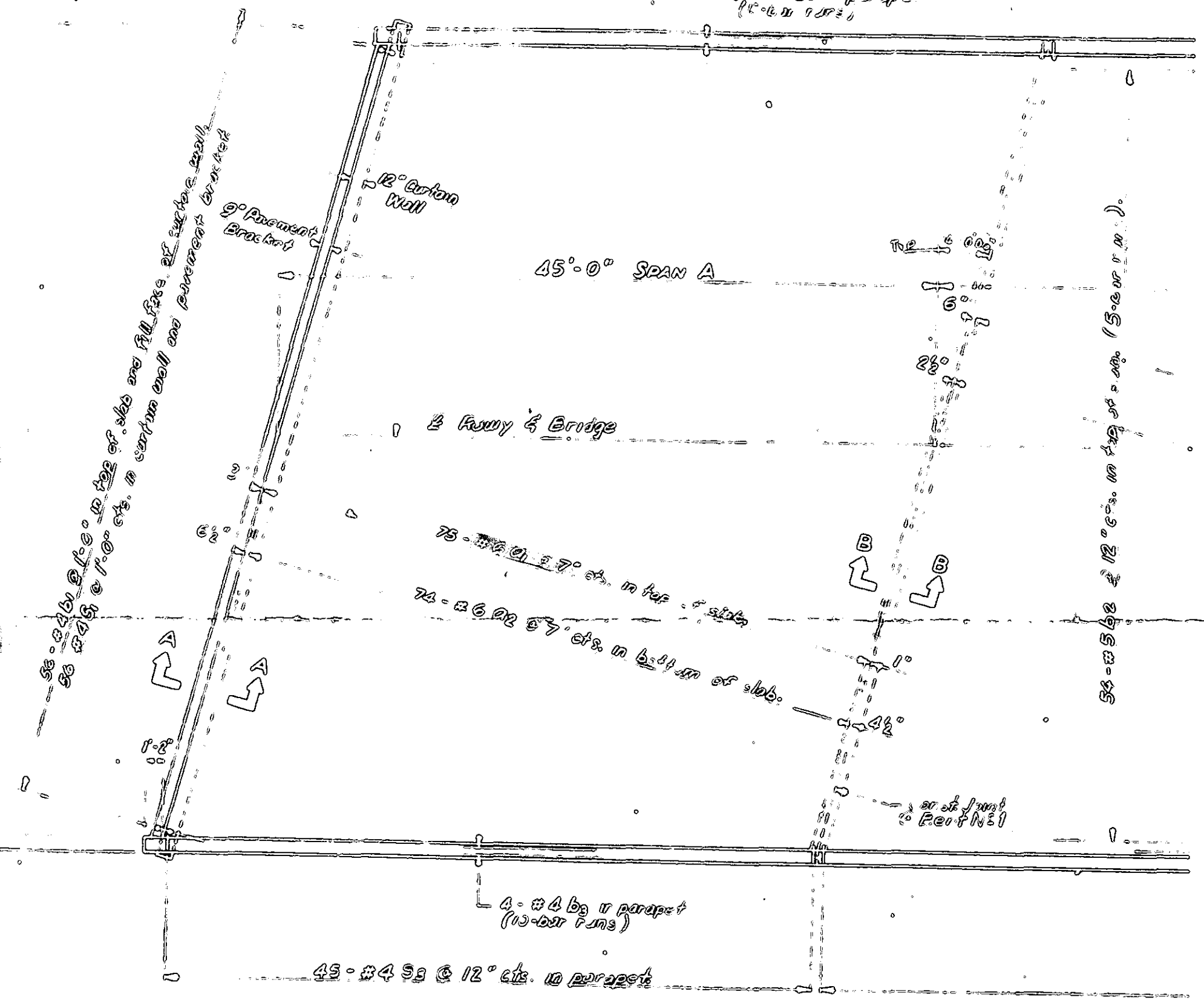
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 DIVISION

GENERAL DRAWING
 FOR BRIDGE OVER FELLOWS N.C. 54
 ON SR 1070 BETWEEN U.S. 70
 AND N.C. 54

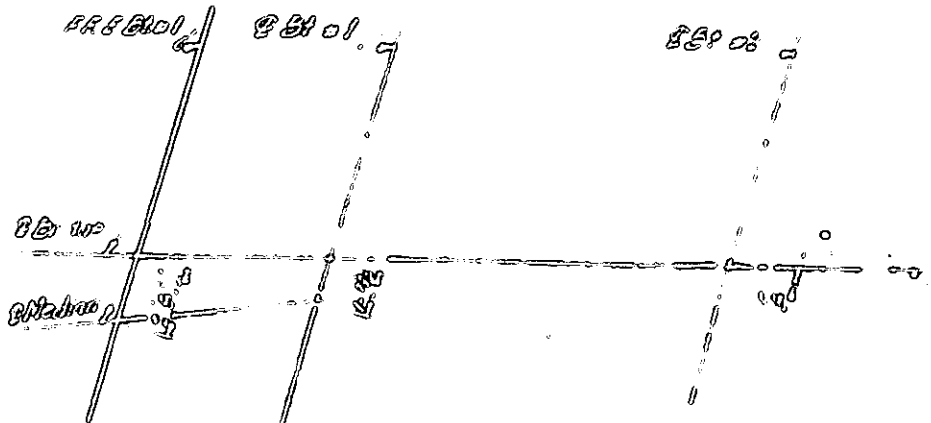
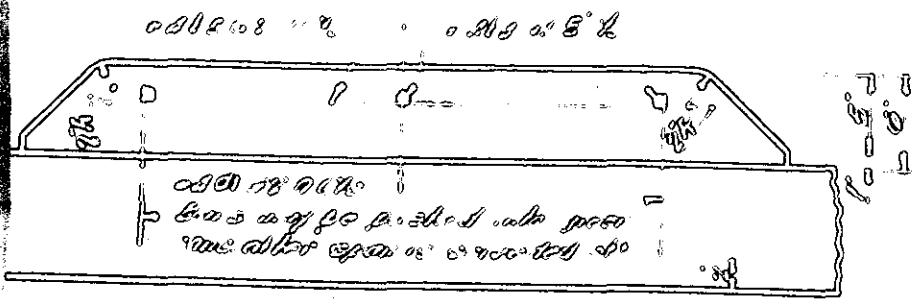
NO.	BY	DATE	NO.	BY	DATE
1	B.W.	10-20-68	0		
2	B.W.	11-20-68	0		

45-#4 S3 @ 12" cts. in parapet.

4-#4 b3 in parapet (10-bar fans)



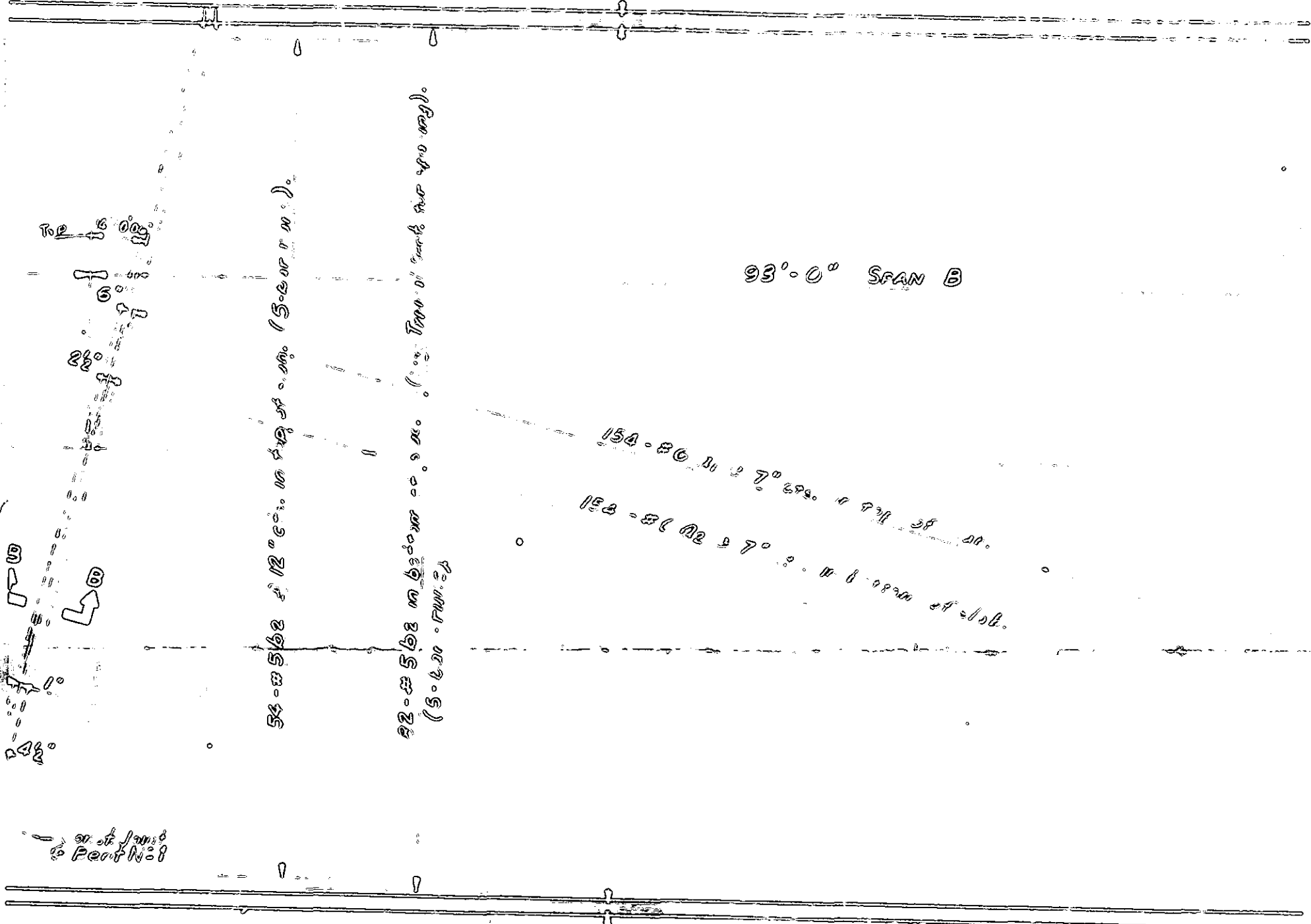
PLAN OF SPANS A & B



DATE: 10/1/57
 DATE: 10/1/57

23 #4 @ 12" cts in p.u. spet.

3-#5 @ 12" cts in p.u. spet.



93'-0" SPAN B

154-#6 @ 7" cts in p.u. spet.

152-#6 @ 7" cts in p.u. spet.

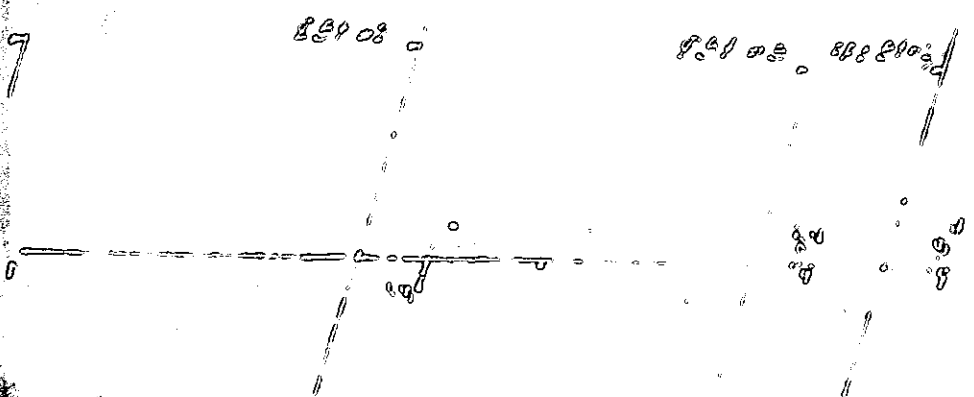
54-#5 @ 12" cts in p.u. spet. (5-bar run)

52-#5 @ 12" cts in p.u. spet. (5-bar run)

3-#5 @ 12" cts in p.u. spet. (3-bar run)

23-#4 @ 12" cts in p.u. spet.

PLAN OF SPANS A & B



at joint to Part No. 8

RED ROAD DIV. NO.	STATE	PROJECT NO.
9	N.C.	8.1409705
R.A. PROJECT 1/22/18		

Sheet # 52 of 104

3 - # 5 b₂ in top of pier (5-bar runs).

3 - # 5 b₂ in top of pier (5-bar runs).

93'-0" SPAN B

154-#6 @ 7" cts. in pier top.

24-#6 @ 7" cts. in pier top.

14°
5%

- Const. Joint @ Bent No 2

3 - # 5 b₂ in top of pier (5-bar runs).

2 - # 12° cts. in pier top.

PROJECT No. 8.1409705

DURHAM - WAKE COUNTY

STATION: 27+74.49 - Yr Rev
372+29.46 - L.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH

SUPERSTRUCTURE
PLAN - A 4B

REVISIONS						CREATED BY
NO.	BY	DATE	NO.	BY	DATE	

93'-0" SPAN C

154 - #6 @ 7" c/c in top of slab.
154 - #3 @ 12" c/c in bottom of slab.

13000 psi concrete

93'-0" SPAN C

Note: For bar sizes see PLAN for spans A & B and TR. SECTION.

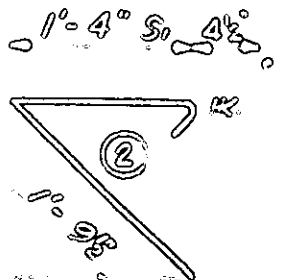
93'-0" SPAN C

PLAN OF SPANS C & D

BAR TYPES

ALL DIMENSIONS ARE OUT TO OUT

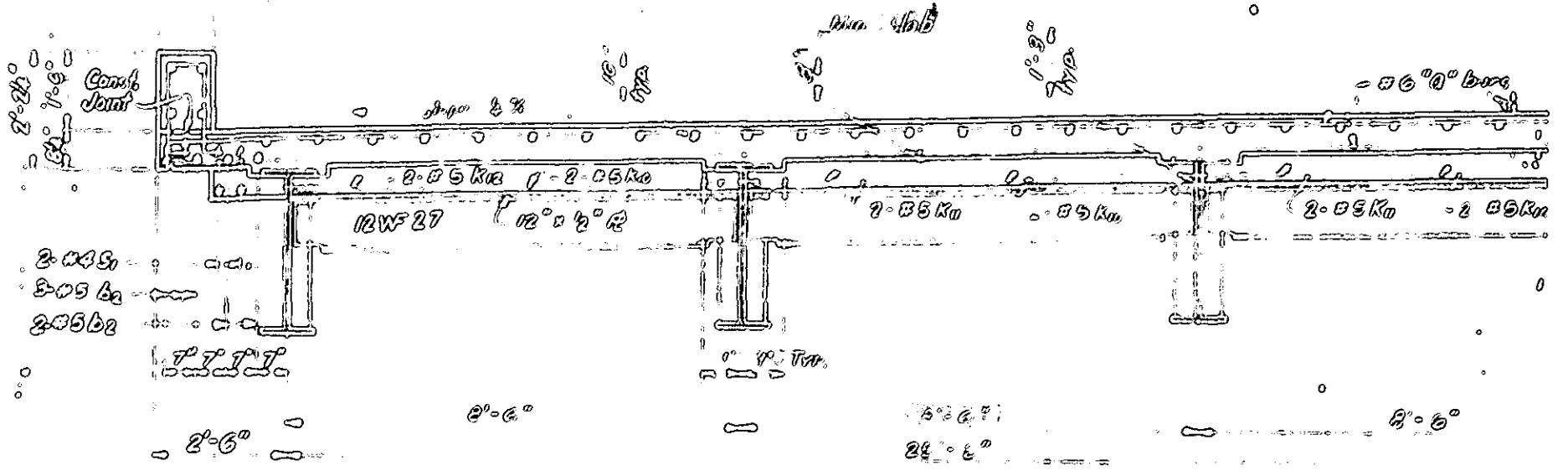
3" - 57'-7" - 3"



1/11/19

23°-0"
27°-0"

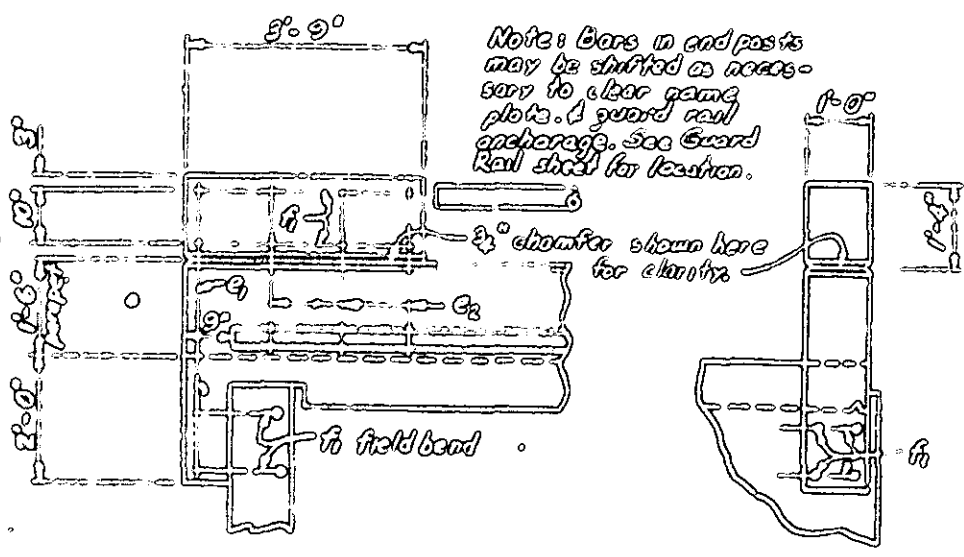
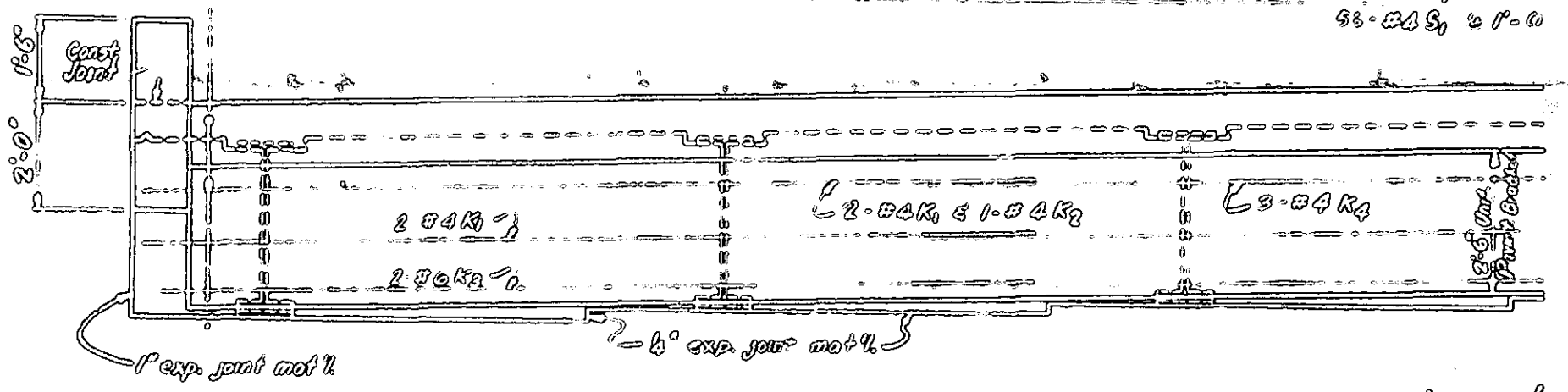
PA-#5 02 12



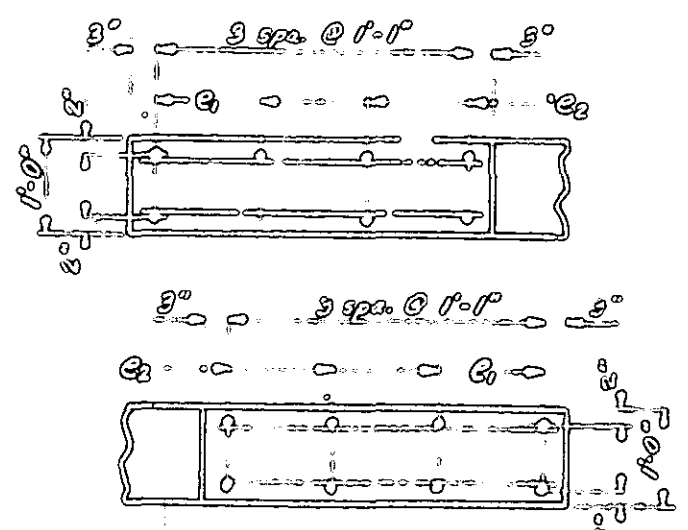
TYPICAL

SECTION 5-A

46-#4 @ 1'-9"
56-#4 @ 1'-6"



ELEVATIONS



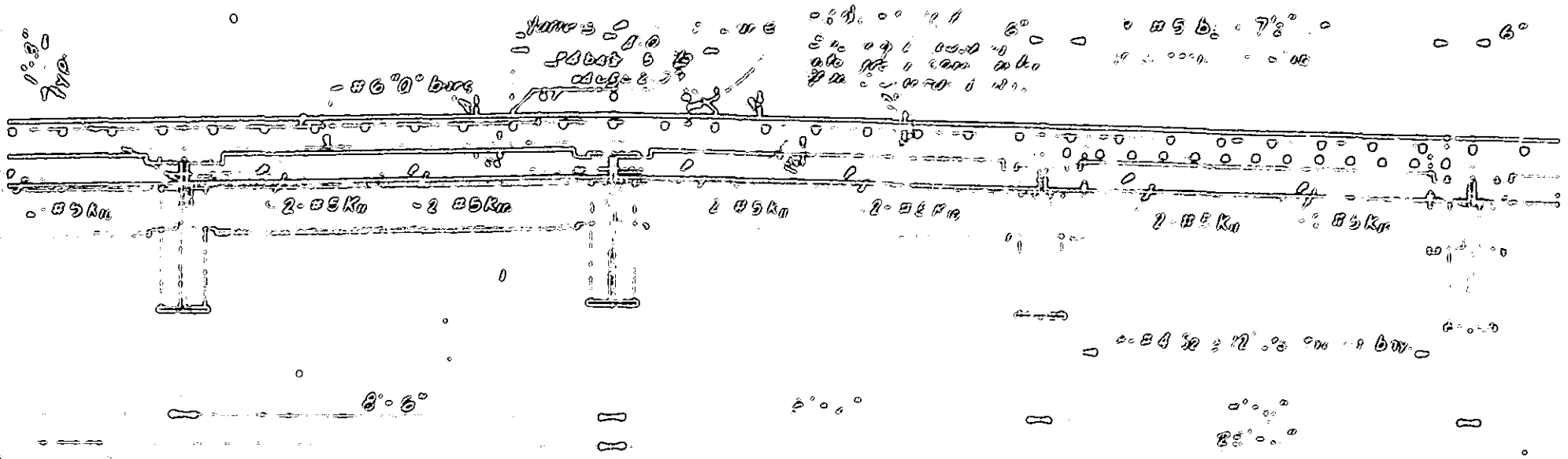
PLANS

END POST DETAILS

56-50

28-50
27-50

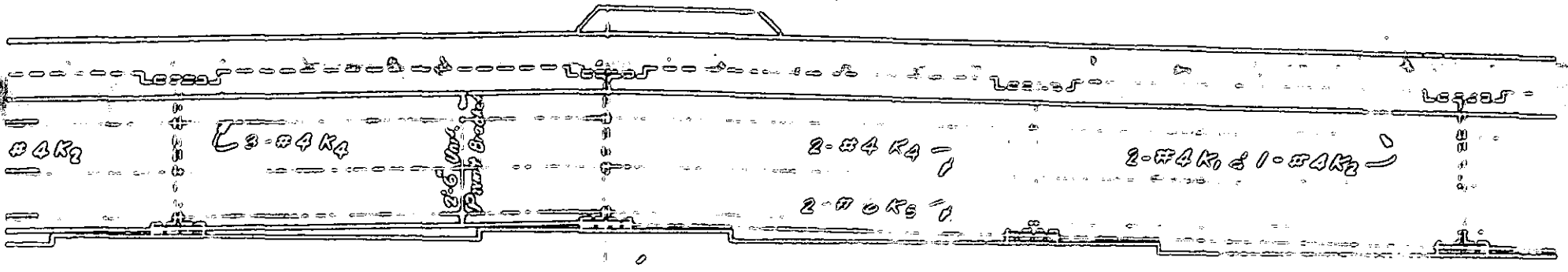
54-50 @ 12" c/c, 0' cap 50'



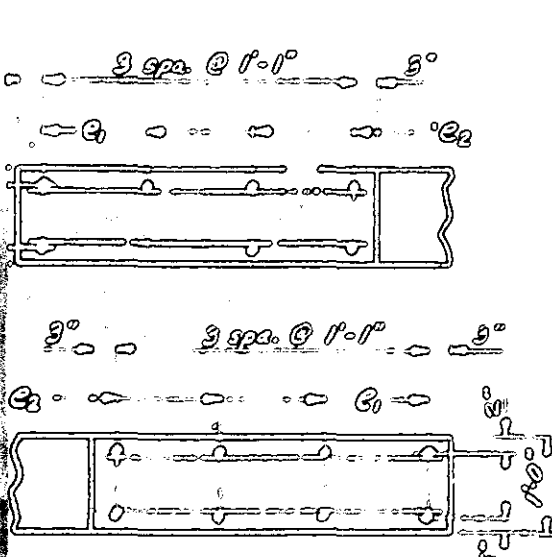
TYPICAL SECTION

SHOWING CURB AND AT INTERIOR PERIMETER

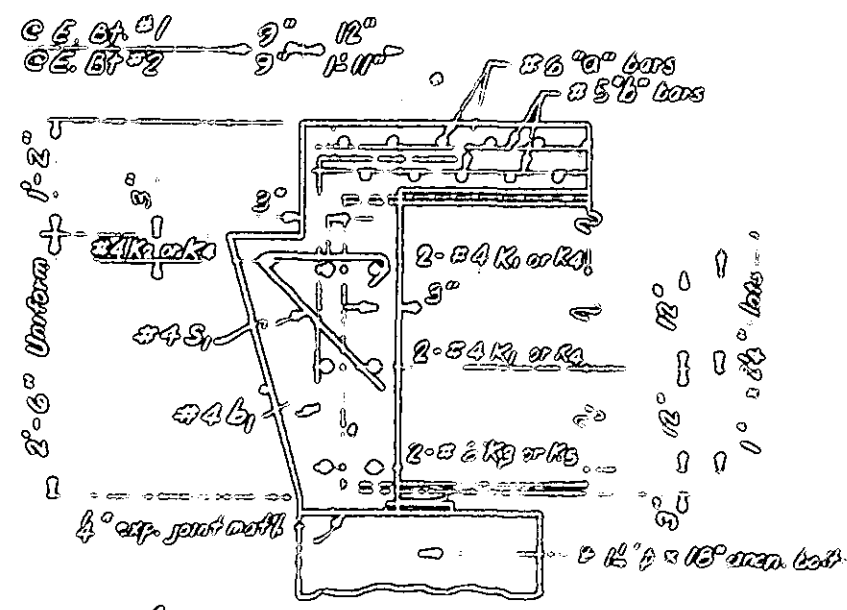
46-54 b, @ 1'-5" in span, 4' ab to f. h. f. d. at 10' 0" width.
 56-54 S, @ 1'-0" in span, 3' ab to f. h. f. d. at 10' 0" width.



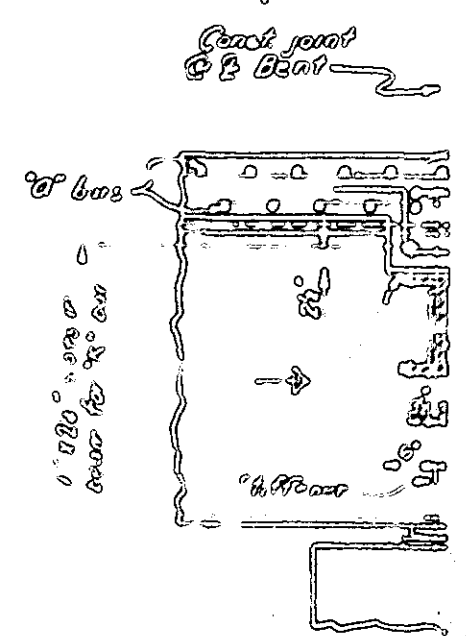
END ELEVATION



PLANS

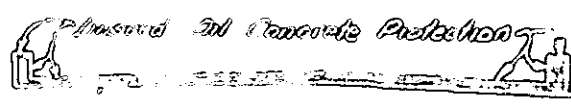
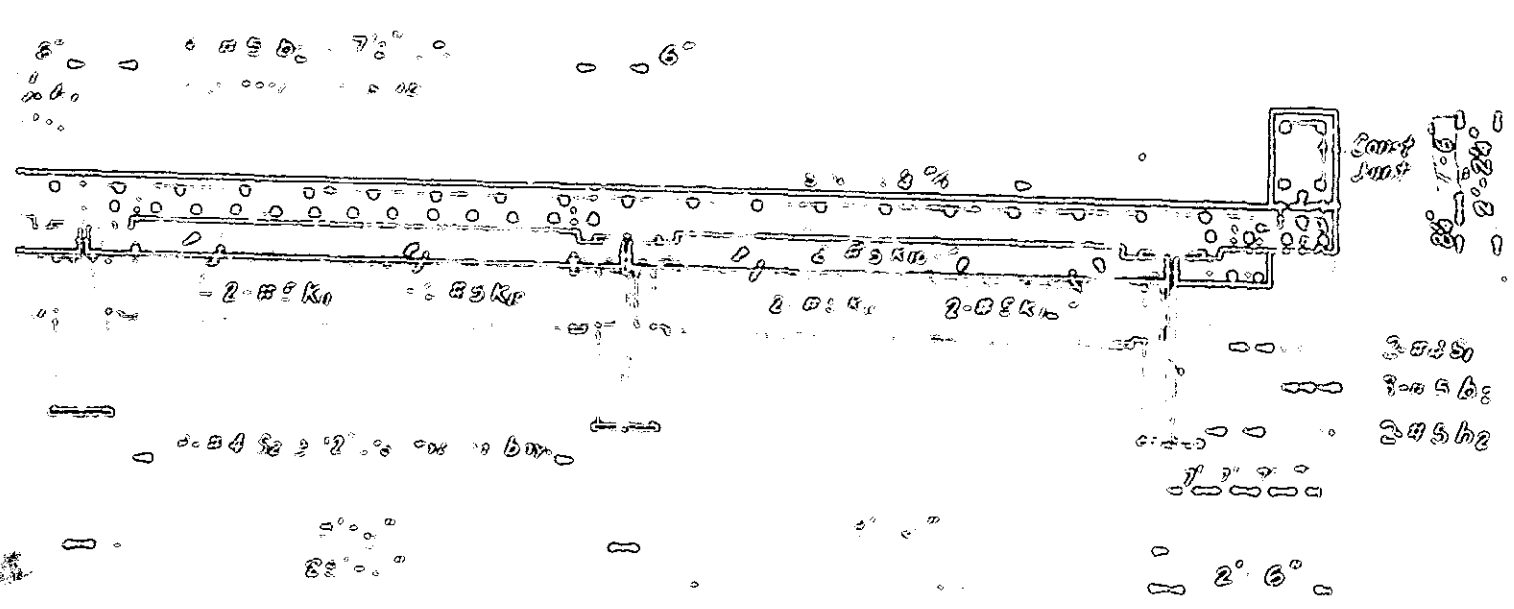


SECTION A-A

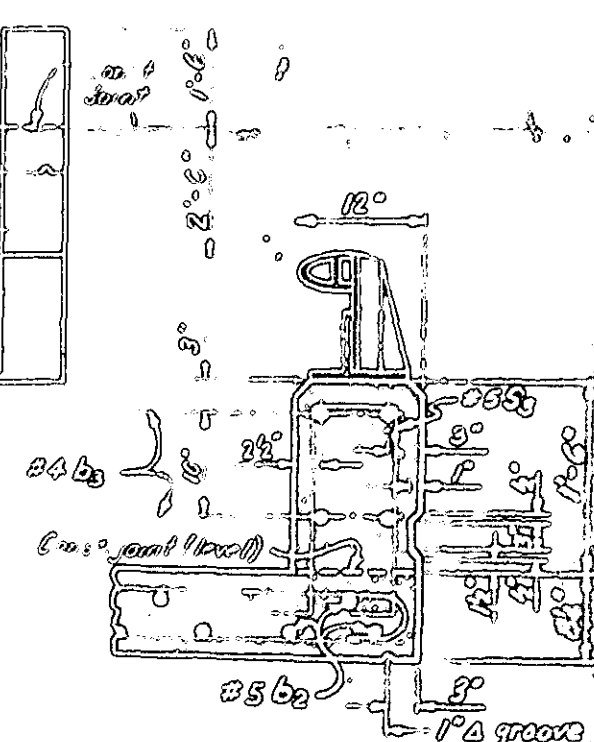
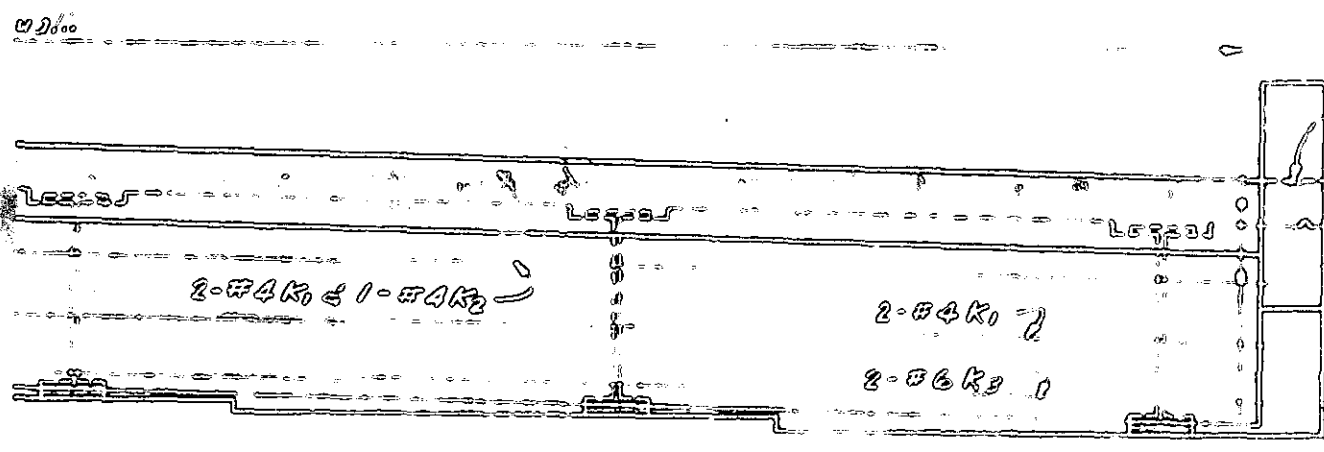


SECTION B-B

2' 6" =



Plastic in Concrete Protection
LINSEED OIL APPLICATION SYSTEM

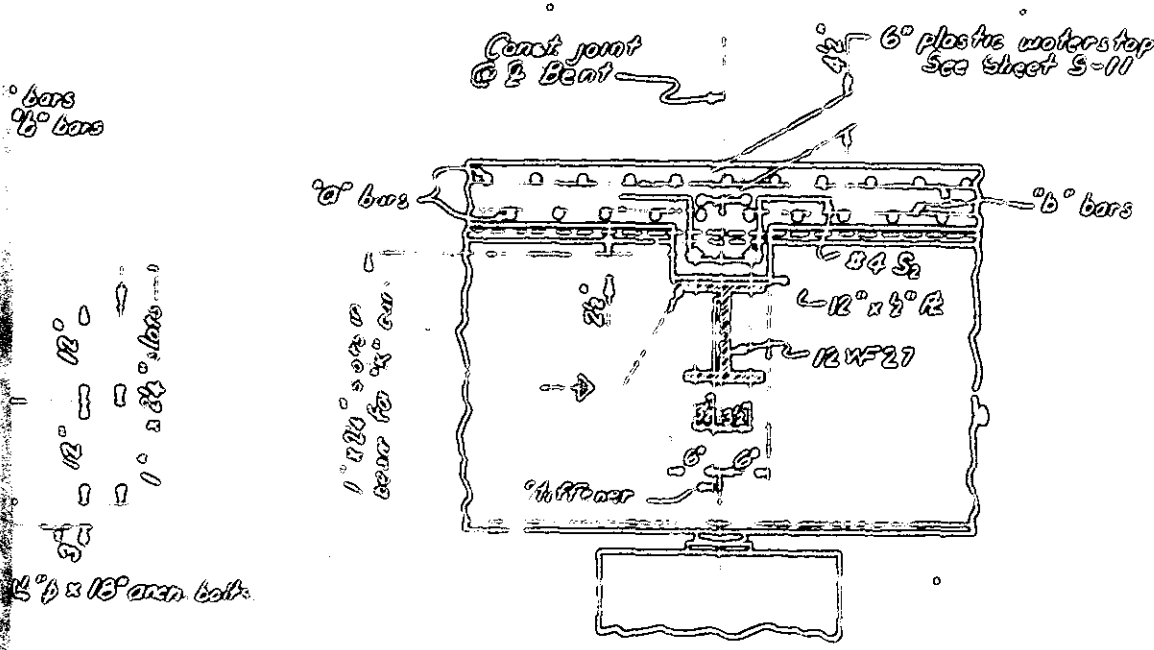


PAHAPET DETAIL

PROJECT No. 3.1409705

DURHAM-WAKE COUNTY

STATION: 67+74.43 - Yd. Mt.
372+28.46 - L.



SECTION B-B

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RAILWAY

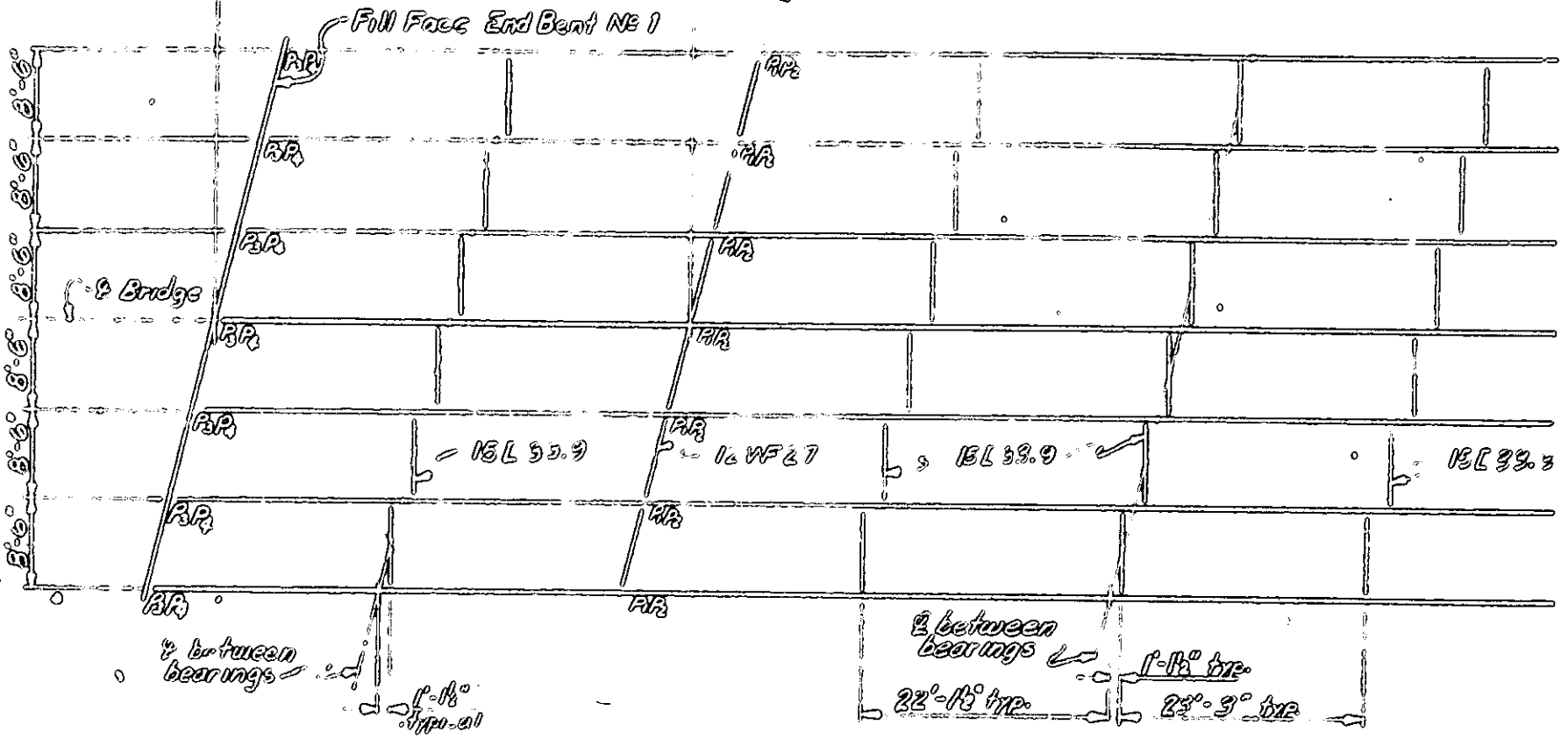
I-BM SUPERSTRUCTURE
DETAILS - ONE-BAR METAL
RAIL - NO CURBS.

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
0			0		
0			0		

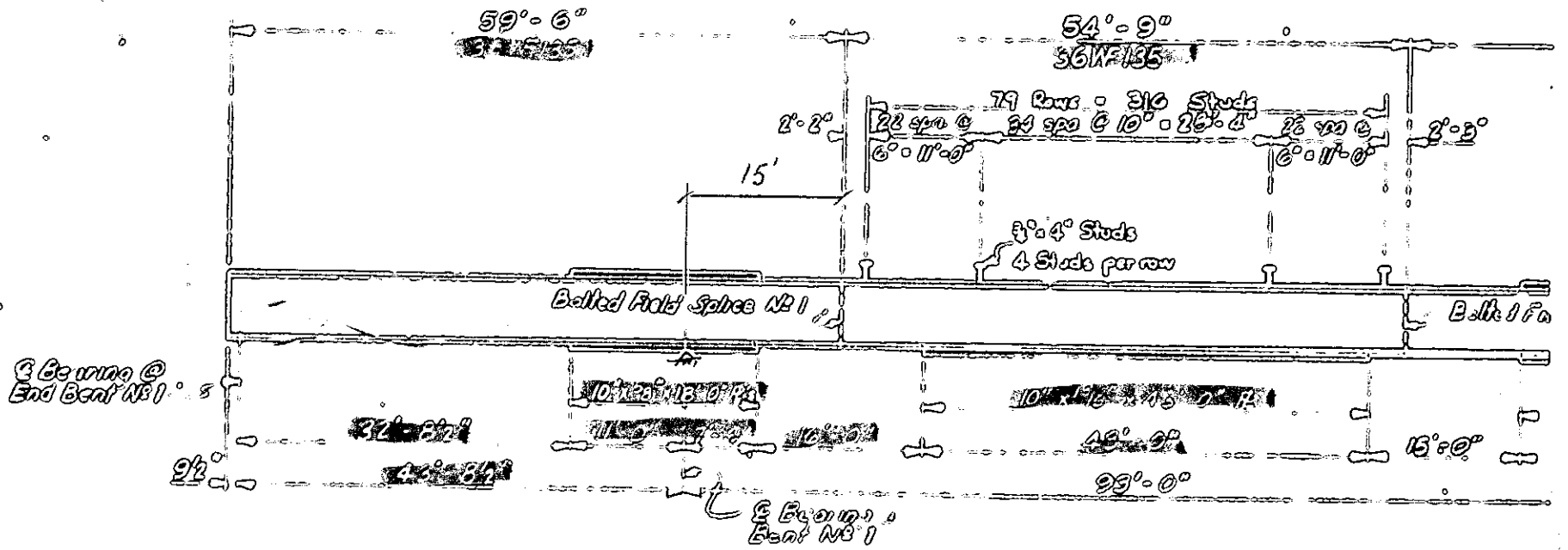
45°-0' S.A. 1 A

39°-0' FAN B

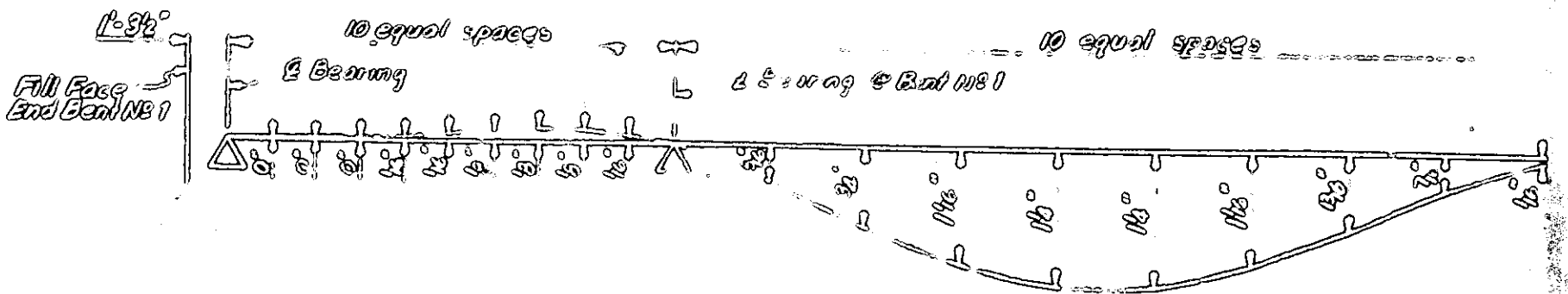
2 Per. 108 1



BEAM 1
Y BRG R / DIA



BEAM ELE

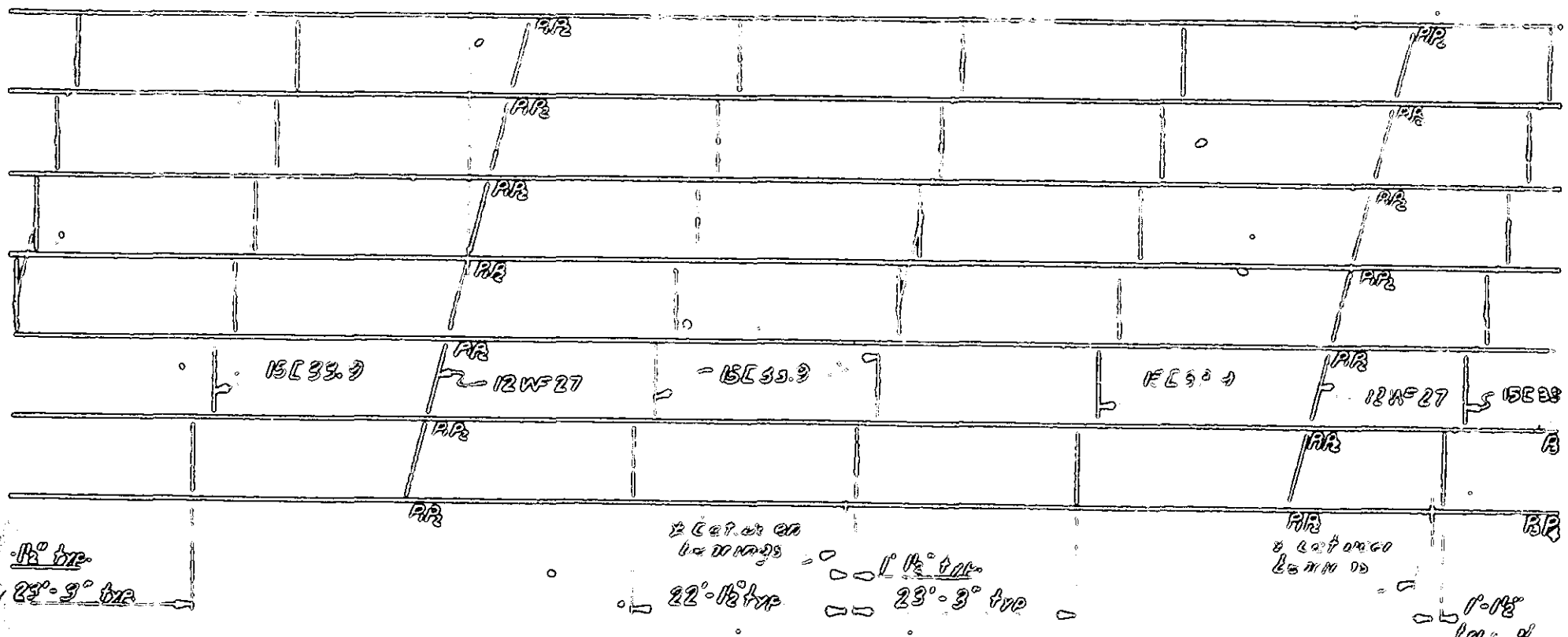


DEAD LOAD BEA

BA B

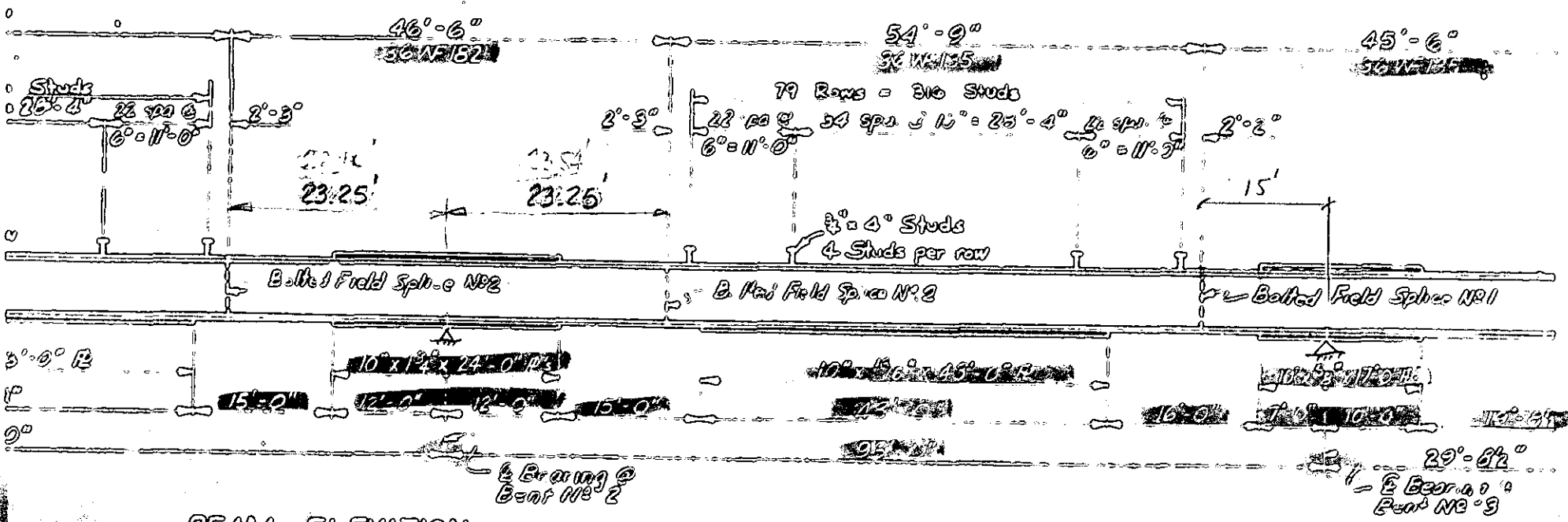
BA C

19° 53' 00" E Bear - NR 2

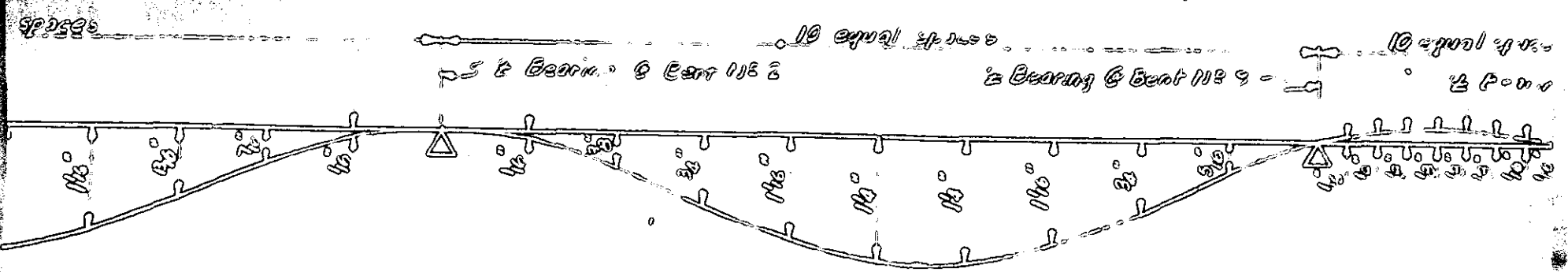


BEAM LAYOUT

7 BRG R & DIAPHRAGM LOCATION.

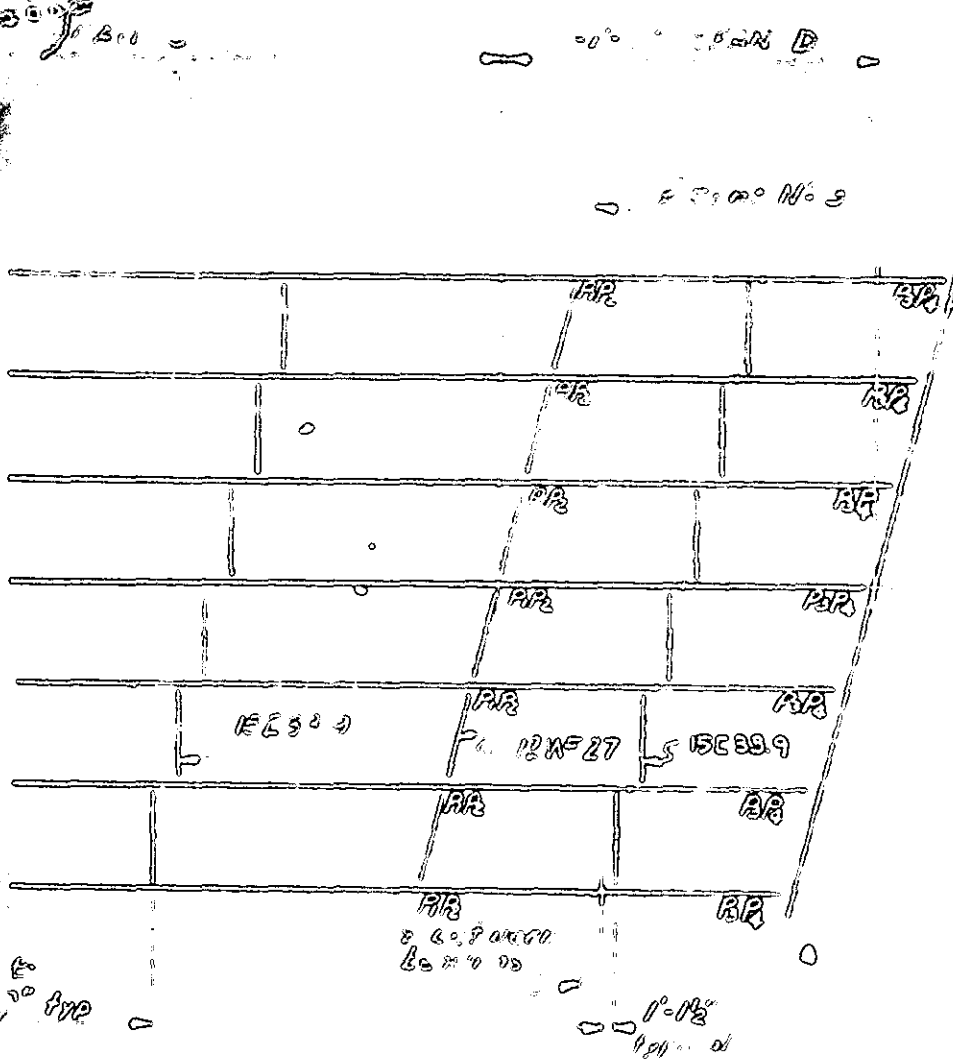


BEAM ELEVATION



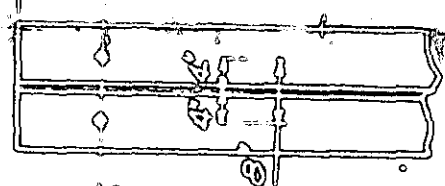
DEAD LOAD BEAM DEFLECTIONS & CAMBER LAYOUT

Beam shall be cambered to compensate for the dead load deflections plus the thermal camber change.

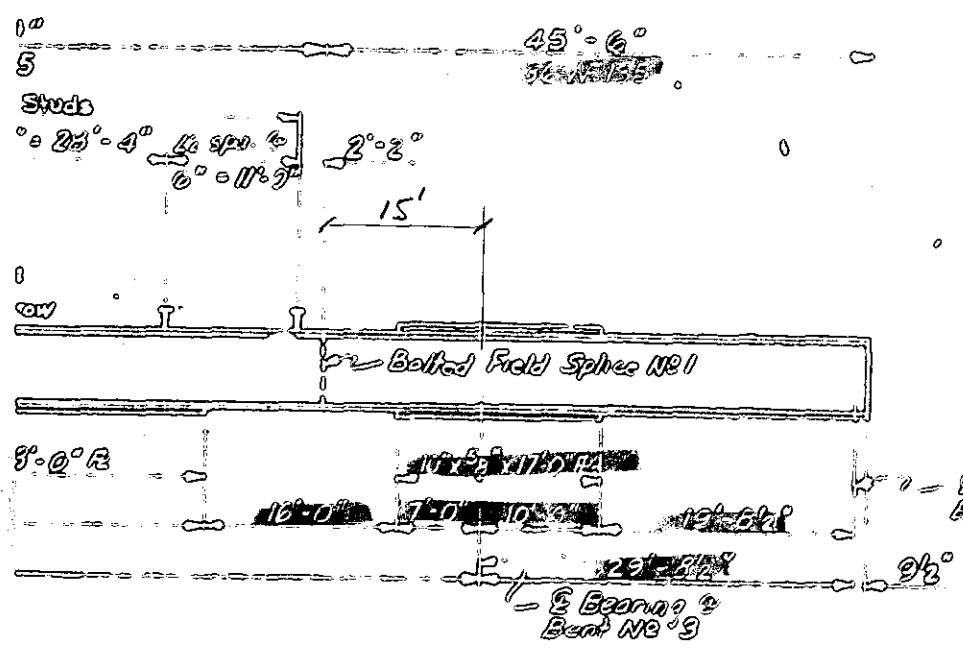


Full Face End Beam No 2

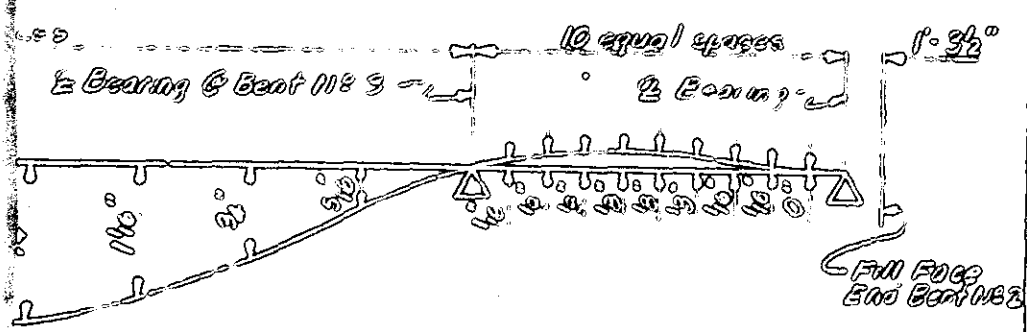
7/8" E Beam & G.C.



BOTTOM FLANGE & END BRG.



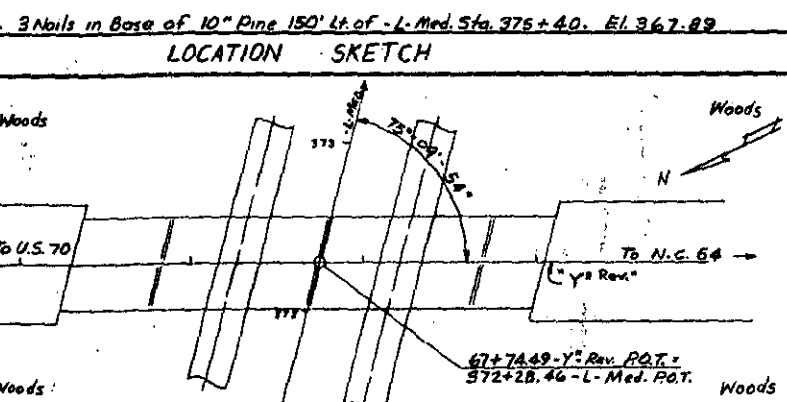
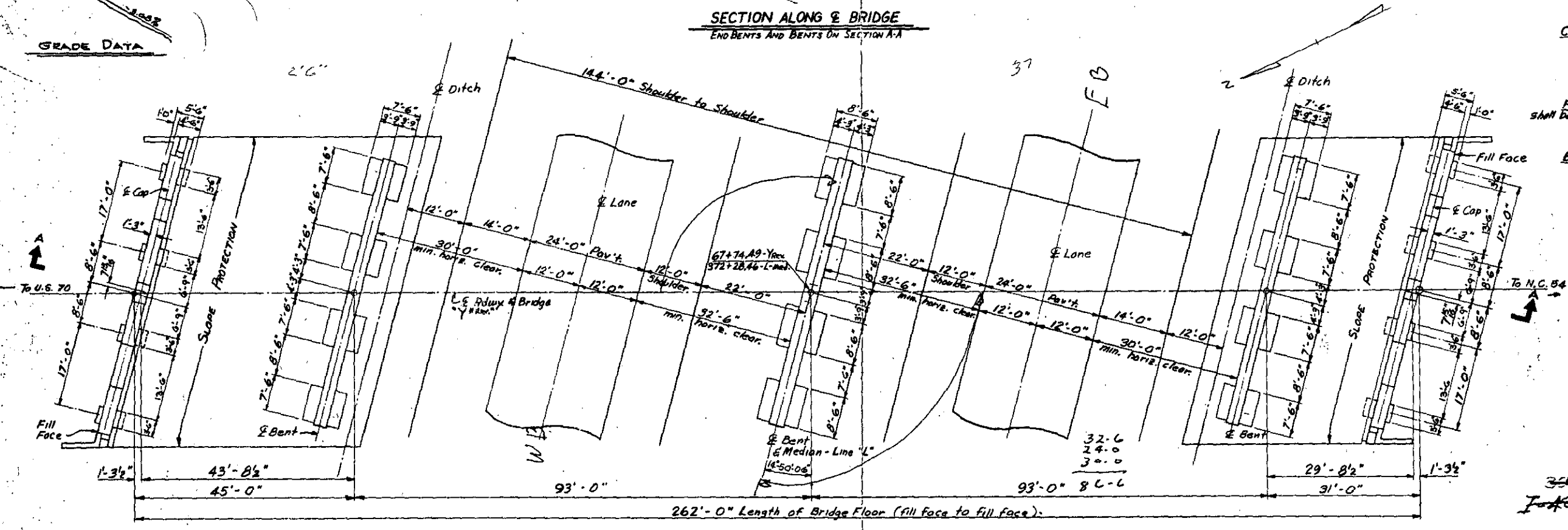
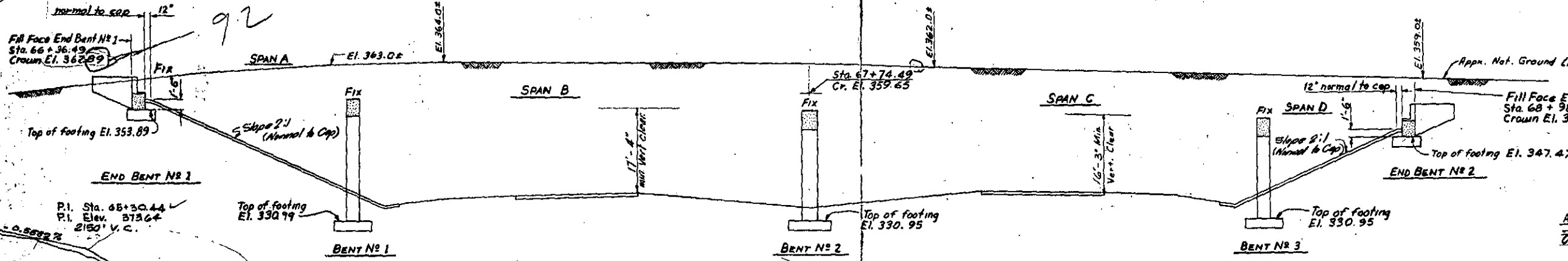
PROJECT No. 8.1409705
 DURHAM - WAKE COUNTY
 STATION: 67+74.49-Yin Box
 372+28.46-L-



STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH

**SUPERSTRUCTURE
 STRUCTURAL STEEL DETAILS**

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
0			0		
1			1		



TOTAL BILL OF MATERIAL

	CLASS "A" CONCRETE	CLASS "AA" CONCRETE	REINFORCING STEEL	STRUCTURAL STEEL	LINSEED OIL CONC. PROT.	UNCLAS. STRUC. EXG.	4" CONCRETE SLOPE PROT.	ONE BAR METAL RAIL
	CU. YDS.	CU. YDS.	LBS.	APPROX. LBS.	APPROX. GALS.	CU. YDS.	SQ. YDS.	LIN. FT.
SUPERSTRUCTURE		481.5	122,300	357,900	35			513.0
END BENT NO 1	39.5		5,438			40	380	
BENT NO 1	56.0		11,630			130		
BENT NO 2	67.7		13,698			90		
BENT NO 3	51.8		9,799			125		
END BENT NO 2	39.6		5,438			40	275	
TOTAL	254.6	481.5	168,303	357,900	35	425	655	513.0

NOTES

ASSUMED LIVE LOAD HS-20 (44)

OTHER DESIGN DATA For other design data and general notes, see sheet S-N

COMPUTED FOUNDATION LOADS
 Computed foundation loads for End Bent No 1, Bents No 1, 2, & 3 equals 3 1/2 tons per sq. foot; End Bent No 2 = 2 1/2 tons per sq. foot.

FOOTINGS Footings for all Bents shall be carried at least 12" into rock with minimum thickness as shown on plans.

BRIDGES OVER CUT SECTIONS Work is not to be started on this bridge until after roadway section has been excavated by the roadway contractor. Unclassified struct. excav. for bents & end bents to be measured from surface of roadway cut.

Construction Elevations for setting deck forms and screeds will be furnished to the Resident Engineer by the Bridge Design Dept. before construction of the deck is begun.

Class "AA" concrete shall be used in the superstr. and Class "A" conc. shall be used in all other portions of the structure. See Special Provisions and Specs.

1002
 Job 40-20
 # 498

PROJECT NO. 8,140,970-5
 WAKE COUNTY
 STATION: 67+74.49 - Yn Rev.
 372+28.46-L

* See Special Provisions for method of curing bridge deck and mixing and applying the linseed oil solution.

Rev. #2: To change grade. 108
 Rev. #1: To change wt. of Reinf. Steel. 108

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH

GENERAL DRAWING
 FOR BRIDGE OVER RELOC. N.C. 54
 ON SR #1002 BETWEEN U.S. 70
 AND N.C. 54

NO.	BY	DATE	NO.	BY	DATE
1	Burr	12-2-68	2		
2	LWB	11-7-68			

AUG. 1967
 SHEET 5-18
 TOTAL SHEETS 112