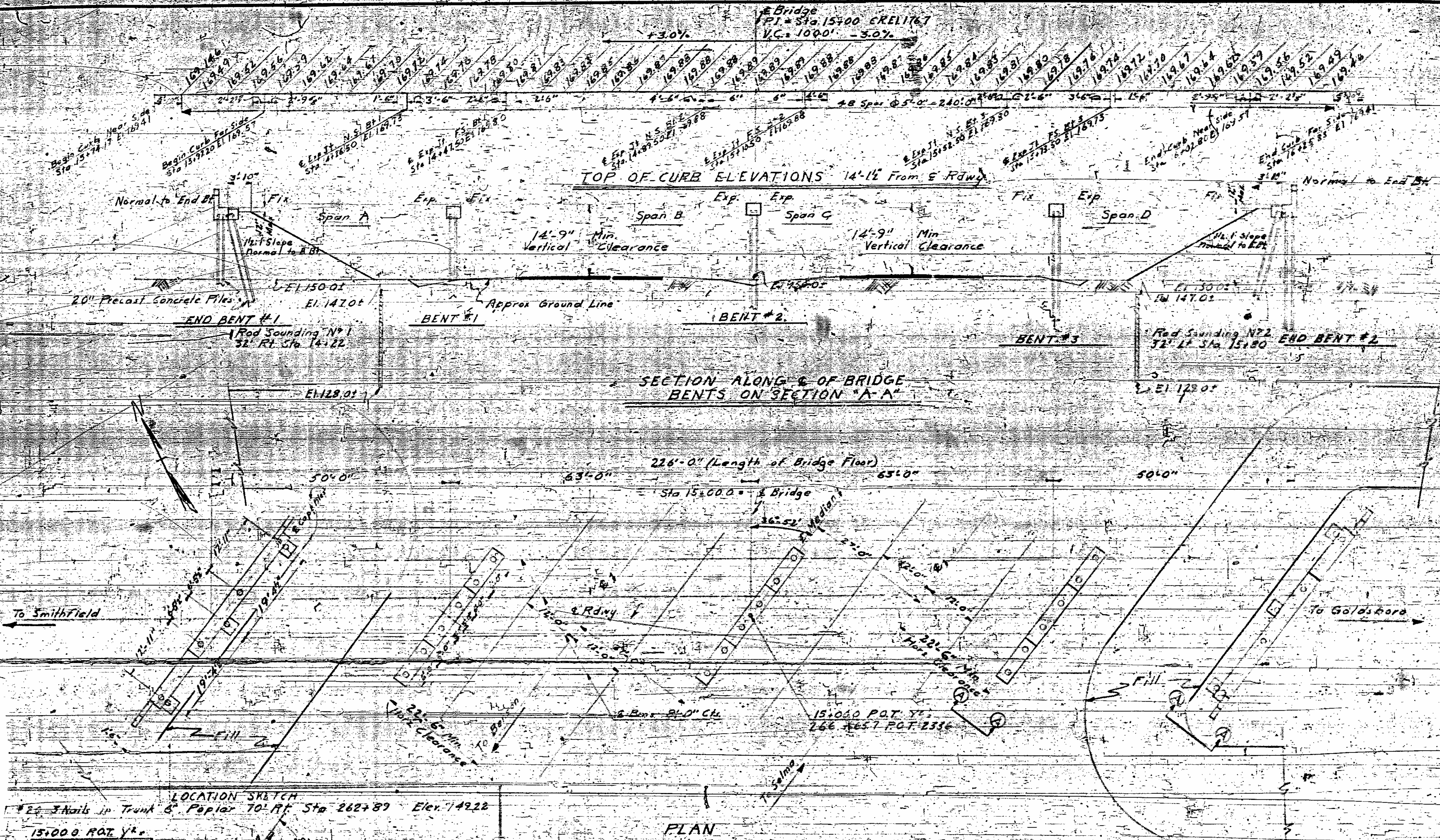
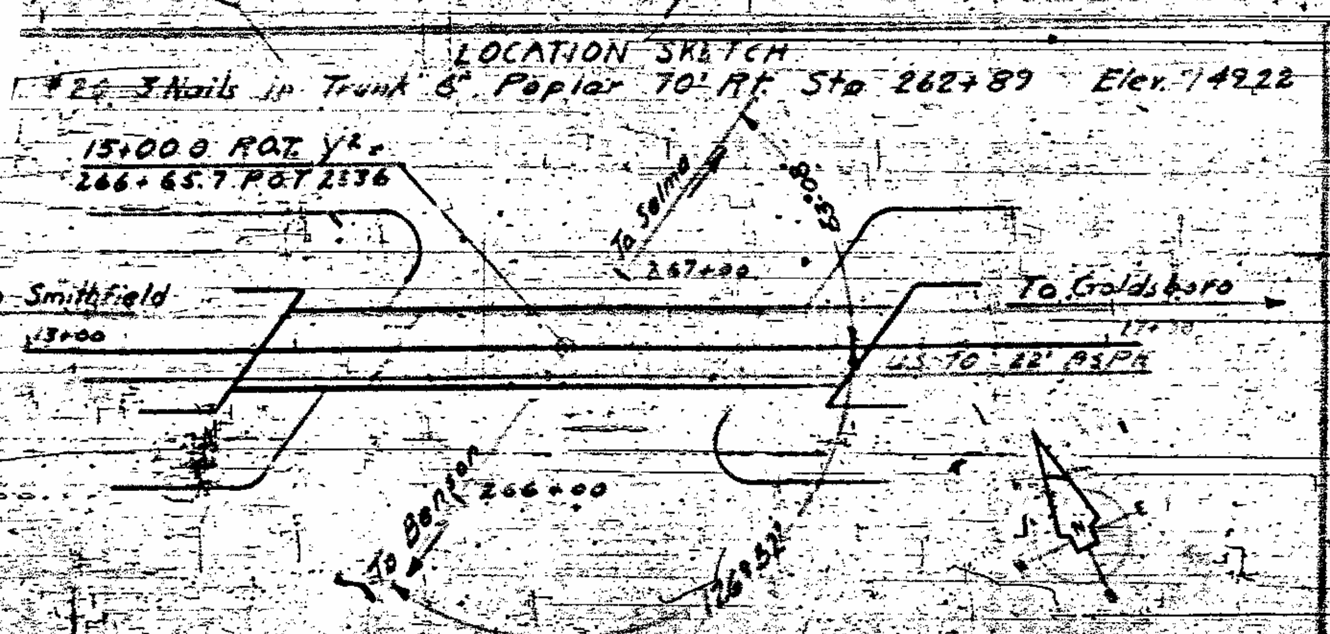
N.C.	2336

Fed Aid Proj. F-703(





Notes:

Assumed L.L. - H20 S16 (44)

For other design data & Gen. notes, See Sh. S-11.

All exposed concrete surfaces to be finished in accordance with the specifications.

End Bent piles to be driven in the roadway fill.

All piles to be driven to a net bearing capacity of 40 Tons ea.

Before driving end bent piles fill to be excavated to El. 159.0 for End Bent #1 & 2. See Special Provisions. Excavation will not be measured and paid for as a separate item, the cost to be included in the unit price of the several pay items.

The contractor will be req'd. to drive one 20" Octagonal unloaded timber test pile in a location specified by the engineer to determine the length of concrete piles. See Specifications.

Traffic on U.S. 70 will be detoured during construction of the structure. See Special Prov.

Brg #66

TOTAL BILL OF MATERIAL

	CLASS "A" CONC. CU. YDS.	REINF. STEEL LBS.	STRUCT. STEEL LBS.	20" Precast CONC. PILES No.	20" Precast CONC. PILES LIN. FT.	METHOD A WATERPROOFING SQ. YDS.	UNLOADED TIM. TEST PILE NO.
SUPERSTRUCTURE	205.6	41999	156,800			22	
END BENT 1	16.1	3251		7	280		
BENT 1	9.2	1630		6	240		
BENT 2	9.1	1630		6	240		
BENT 3	9.2	1630		6	240		
END BENT 2	16.1	3251		7	280		
20" P.C. Piles		21,184					
APPR. CURBS	3.2	76					
TOTAL	268.4	74,651	156,800	32	1280	22	1

PROJECT No. 2336

JOHNSTON COUNTY

STATION: 266+65.7 ℄ Median

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION

GENERAL DRAWING
BRIDGE OVER PROP. US 301 ON U.S. 70 BETWEEN SMITHFIELD & GOLDSBORO

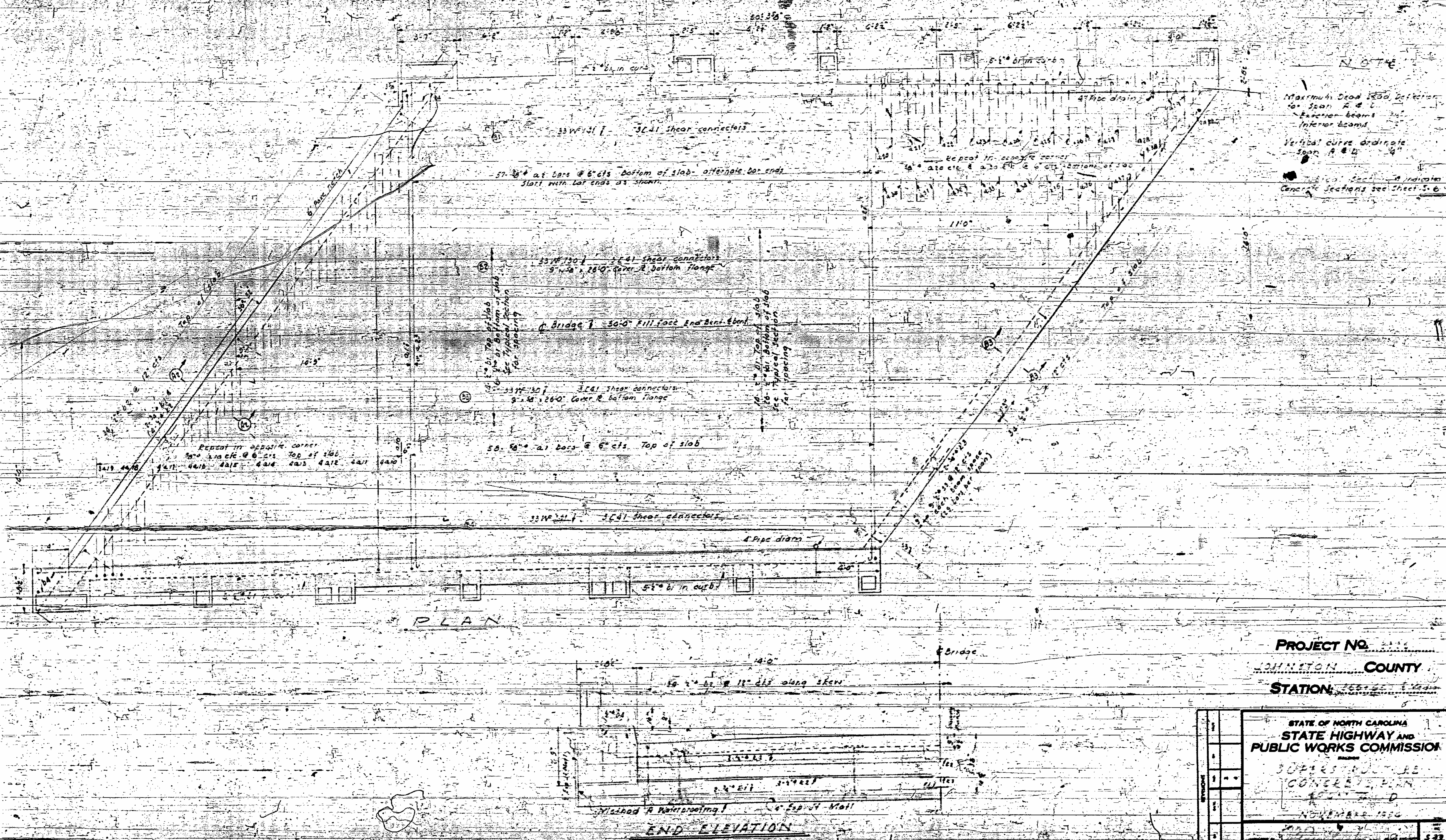
NOV. 1954

S-31

39

Fed. Aid Project F1-7030

N.C. 2336



PROJECT NO.

JOHNSTON COUNTY

STATION:

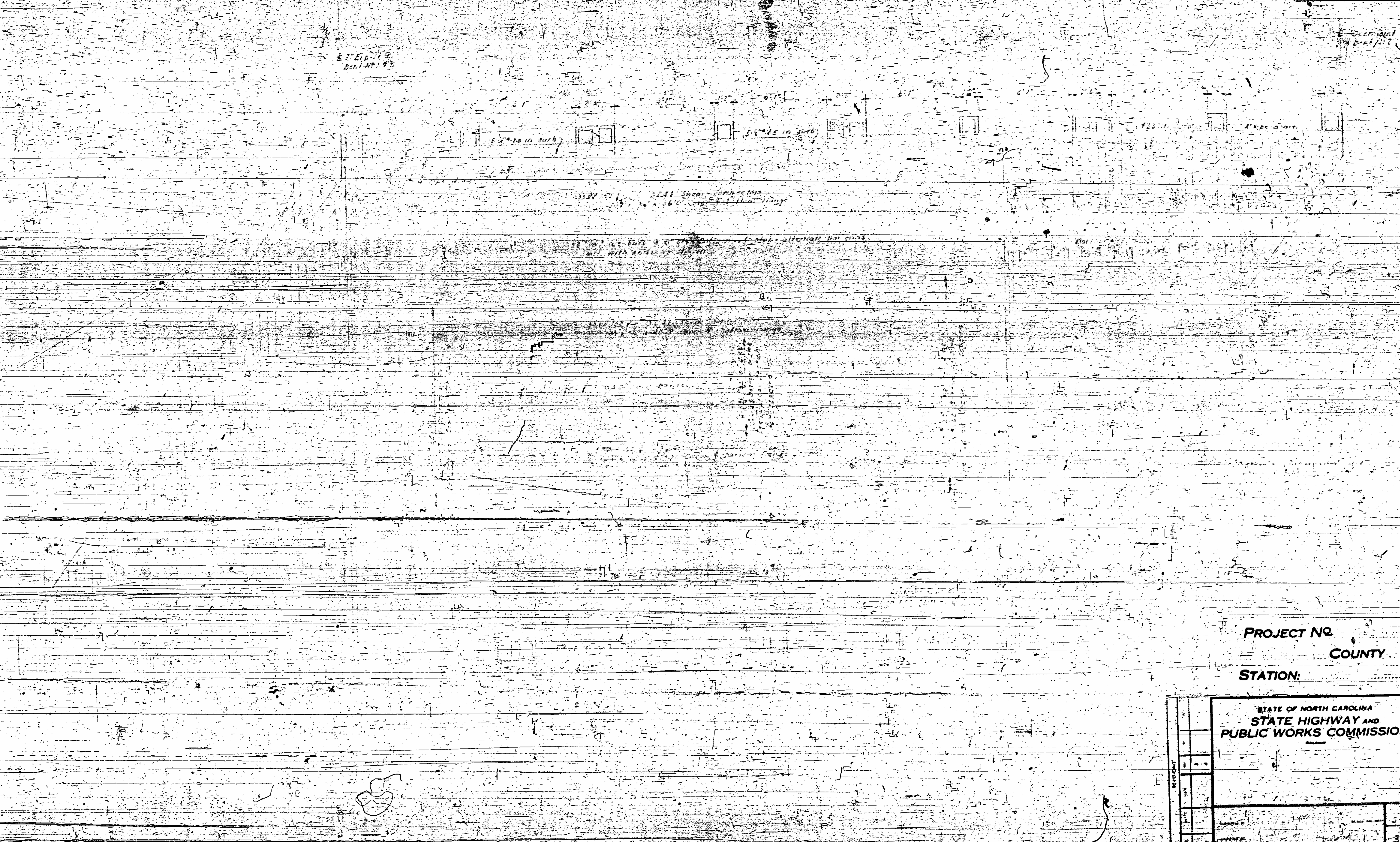
STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION

SUPERSTRUCTURE CONCRETE PLAN

NOVEMBER 1956

SPECIAL

3	N.C.	2336
Fed Aid Project FI-76(11)		

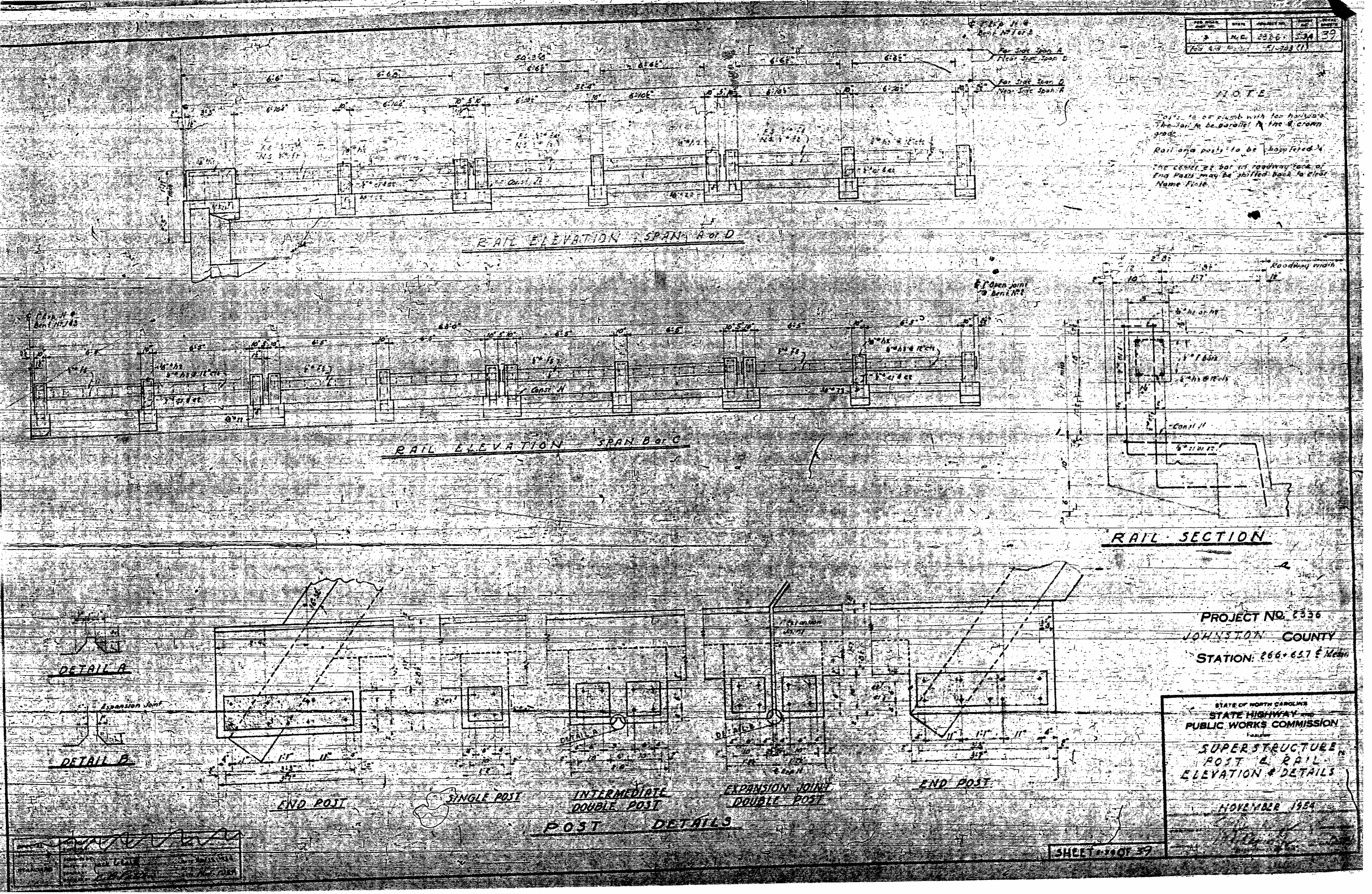


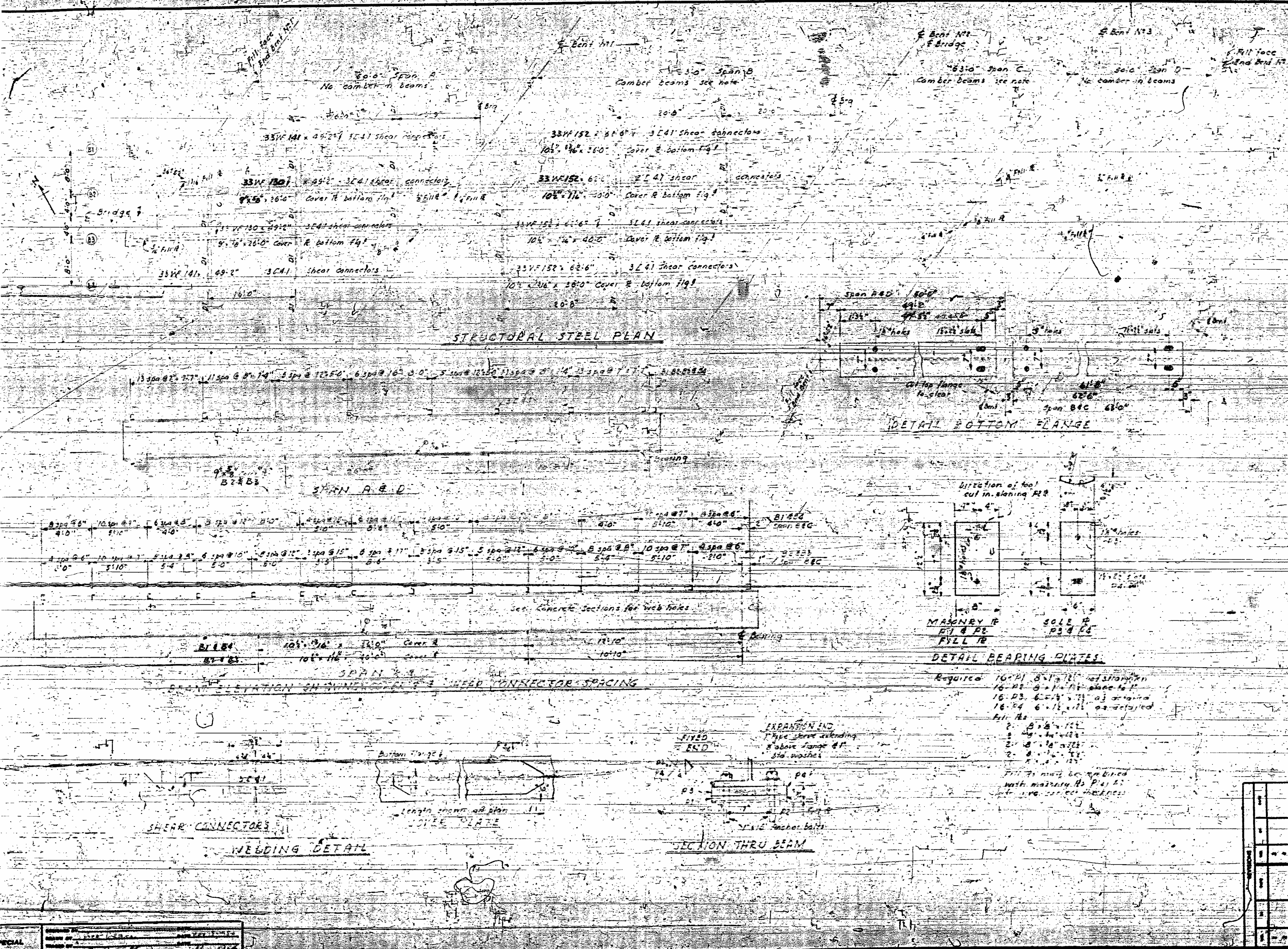
PROJECT NO.

COUNTY

STATION:

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION


RAIL ELEVATION SPAN A or D
RAIL ELEVATION SPAN B or C
RAIL SECTION
NOTE
Name Plate.
DETAIL A
Expansion Joint
DETAIL B
END POST
SINGLE POST
INTERMEDIATE DOUBLE POST
EXPANSION JOINT DOUBLE POST
END POST
POST DETAILS
PROJECT NO. 2336
JOHNSTON COUNTY
STATION: 266+65.7
STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
SUPERSTRUCTURE
POST & RAIL
ELEVATION & DETAILS
NOVEMBER 1954
SHEET OF 39



NOTE

Riveted connection may be substituted for welded connection shown for cover plates.

The Contractor's attention is called to the requirement that where welding is used to connect cover plate to beam the cover plate, 3C41 shear connectors and beam shall be of weldable steel conforming to ASTM Designation A373-54T.

Workmanship to be in accordance with the revised AWS Specification for Steel for Welded Bridges.

The top of top flange of beams and shear connectors will not be painted.

Beams to be cambered as follows:

Span A & D no camber

Span B & C

Exterior beams B1 & B4 Camber $1\frac{3}{8}$"

Interior beams B2 & B3 Camber $1\frac{1}{4}$"

Allowable camber tolerance $+\frac{1}{4}$" $-\frac{1}{8}$"

See note on sheet S-6 regarding buildup for dead load deflection and vertical curve for cambered beams.

PROJECT NO. [illegible]

[illegible] COUNTY

STATION: [illegible]

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
RALEIGH

SUPERSTRUCTURE
STRUCTURAL STEEL
PLAN & DETAIL

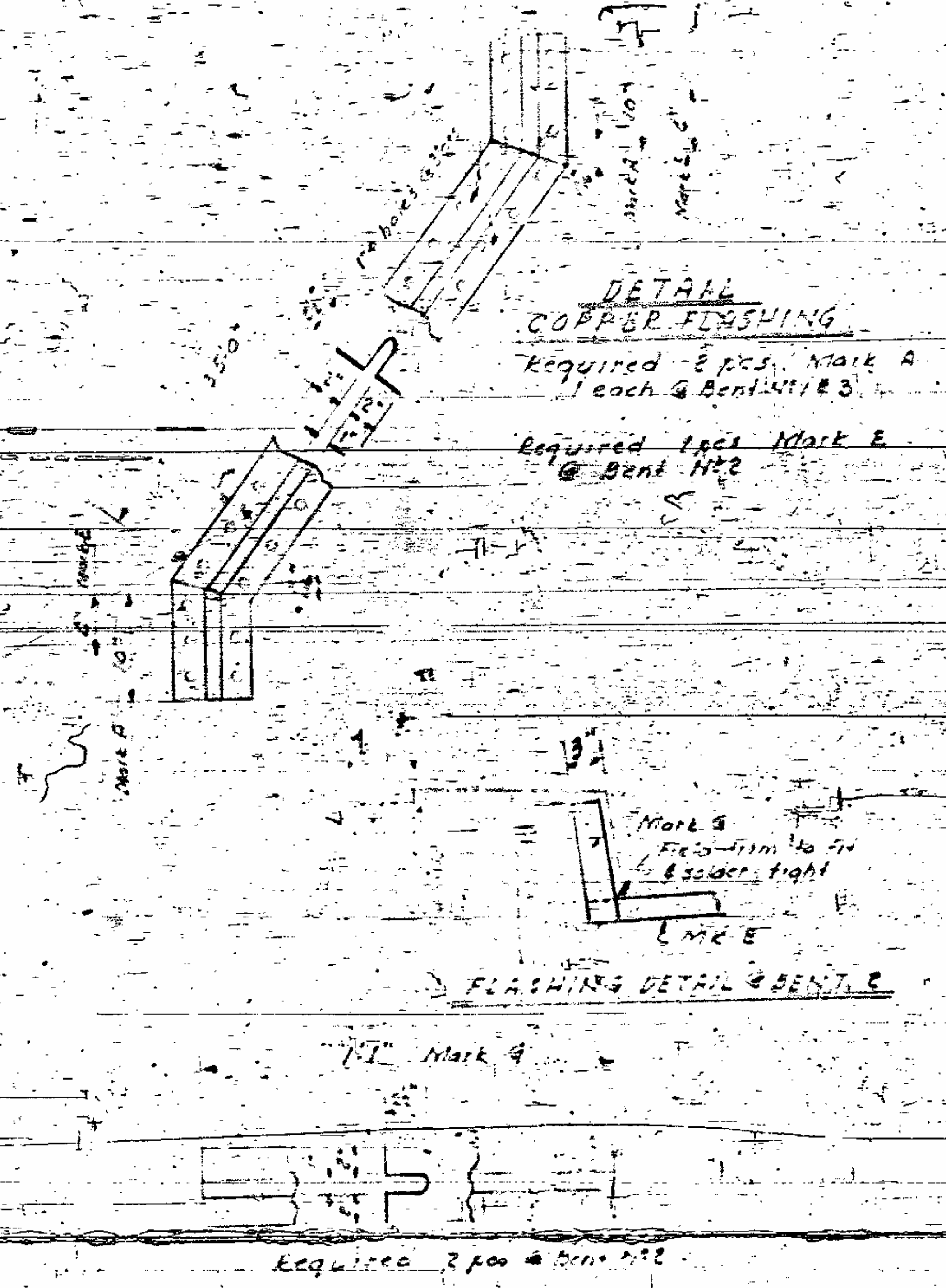
NOVEMBER 1954

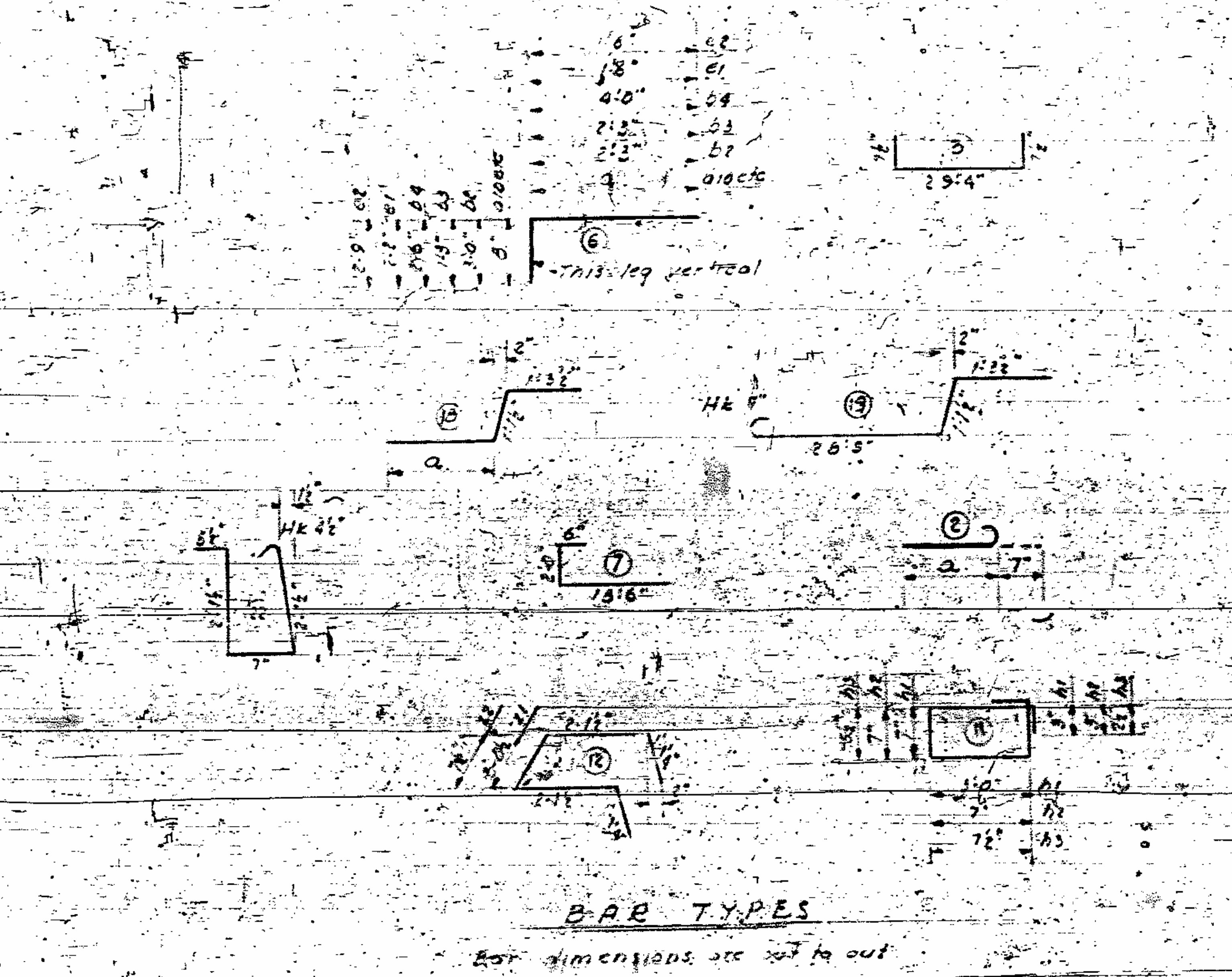
S-3[illegible]

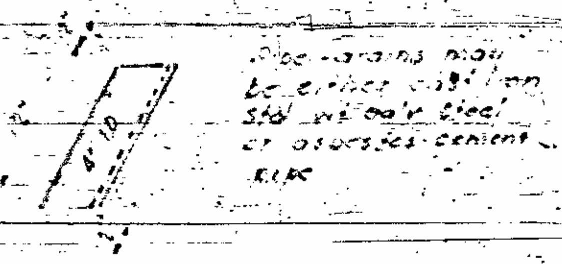
39

Fed. Road Dist. No.	State	Project
3	N.C.	236

Fed. Aid Project F-[illegible](1)







Bar Mark	No. Pcs.	Size	Type	Dimension "a"	Length	Weight
a1	264	[illegible]	Str.		36'-7"	9067
a10	32	[illegible]	6	30'-0"	16'-5"	330
a11	32	[illegible]	6	23'-4"	24'-0"	801
a12	32	[illegible]	6	16'-8"	21'-6"	[illegible]
a13	32	[illegible]	6	23'-0"	18'-9"	603
a14	32	[illegible]	6	15'-4"	[illegible]	534
a15	32	[illegible]	6	12'-8"	13'-4"	445
a16	32	[illegible]	6	10'-0"	10'-8"	357
a17	32	[illegible]	6	7'-4"	8'-0"	267
a18	32	[illegible]	6	4'-8"	5'-4"	178
a19	24	[illegible]	6	2'-0"	3'-4"	83
a2	200	[illegible]	2		31'-9"	9072
a20	16	[illegible]	18	26'-4"	18'-9"	480
a21	16	[illegible]	[illegible]	23'-8"	26'-1"	435
a22	18	[illegible]	18	21'-0"	23'-5"	391
a23	16	[illegible]	18	[illegible]	20'-9"	346
a24	16	[illegible]	18	15'-6"	18'-1"	302
a25	16	[illegible]	18	13'-0"	15'-5"	257
a26	16	[illegible]	18	10'-4"	12'-9"	213
a27	16	[illegible]	18	7'-8"	9'-1"	168
a28	16	[illegible]	18	5'-0"	7'-5"	124
a29	16	[illegible]	18	2'-4"	4'-9"	79
a30	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
a31	16	[illegible]	[illegible]	23'-8"	[illegible]	[illegible]
a32	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
a33	16	[illegible]	[illegible]	18'-4"	[illegible]	[illegible]
a34	16	[illegible]	[illegible]	15'-0"	[illegible]	[illegible]
a35	16	[illegible]	[illegible]	12'-5"	13'-[illegible]	227
a36	16	[illegible]	[illegible]	10'-6"	[illegible]	[illegible]
a37	16	[illegible]	[illegible]	7'-8"	[illegible]	[illegible]
a38	16	[illegible]	[illegible]	5'-0"	[illegible]	[illegible]
a39	16	[illegible]	[illegible]	2'-4"	[illegible]'-11"	49
c1	176	[illegible]	6		[illegible]	[illegible]
c2	176	[illegible]	6		[illegible]	[illegible]
f1	8	[illegible]	Str.		[illegible]	[illegible]
f2	16	[illegible]	[illegible]		[illegible]	[illegible]
f3	8	[illegible]	[illegible]		[illegible]	[illegible]
f4	16	[illegible]	[illegible]		[illegible]	[illegible]
f5	64	[illegible]	Str.		[illegible]	[illegible]
h1	4	[illegible]	[illegible]		[illegible]	[illegible]
h2	20	[illegible]	[illegible]		[illegible]	[illegible]
h3	462	[illegible]	17		[illegible]	[illegible]
z1	4	[illegible]	[illegible]		[illegible]	[illegible]
z2	80	[illegible]	12		[illegible]	[illegible]

Bar Mk	No. Pcs	Size	Type	Length	Weight
b1	200	[illegible]	Str.	25'-6"	34071
b2	68	[illegible]	6	5'-3"	238
b3	204	[illegible]	6	3'-6"	477
b4	8	[illegible]	6	6'-6"	54
b5	300	[illegible]	Str.	21'-9"	6359
k1	8	[illegible]	Str.	22'-0"	264
k2	76	[illegible]	Str.	21'-6"	230
k3	24	[illegible]	7	21'-0"	757
s1	174	[illegible]	22	5'-6"	659

Class A Concrete	[illegible]	[illegible]
Reinforcing Steel	[illegible]	[illegible]
Structural Steel [illegible]	15,[illegible]	[illegible]
Method A Waterproofing	22	[illegible]

PROJECT No. [illegible]

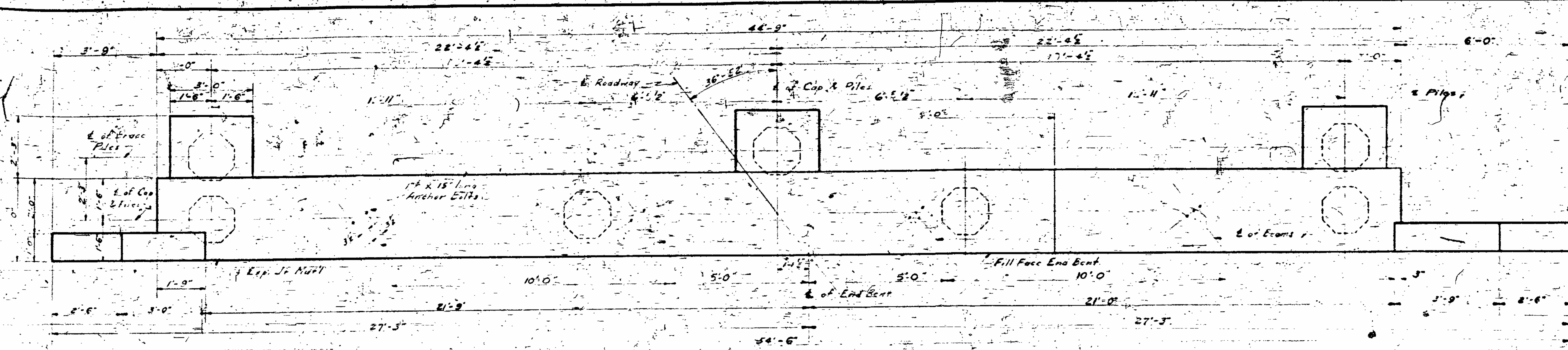
[illegible] COUNTY

STATION: [illegible]

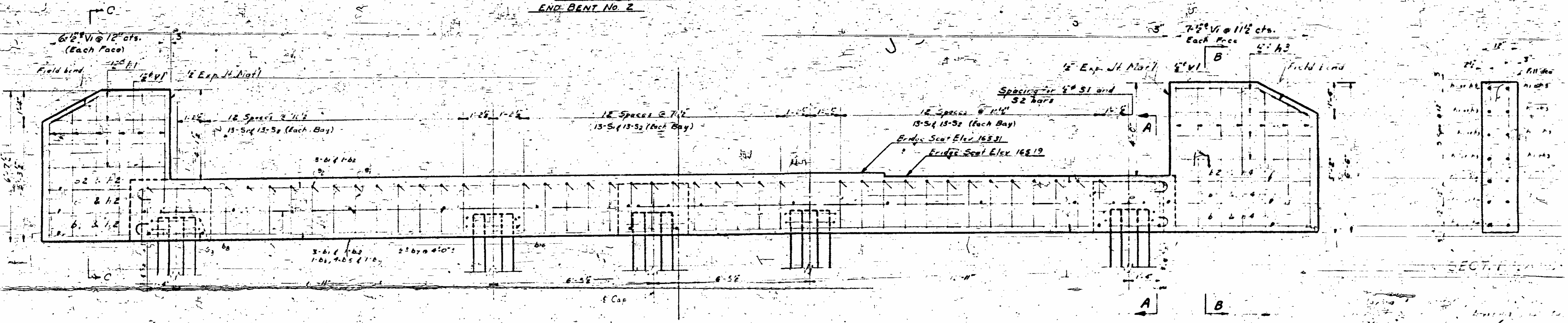
STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
RALEIGH

SUPERSTRUCTURE
BILL OF MATERIAL

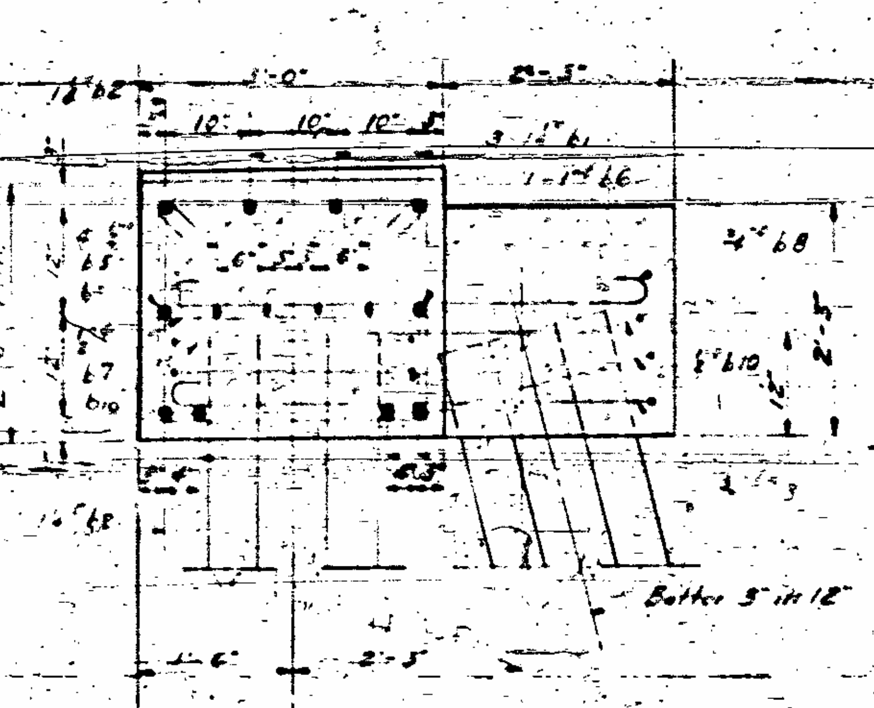
NOVEMBER 1954



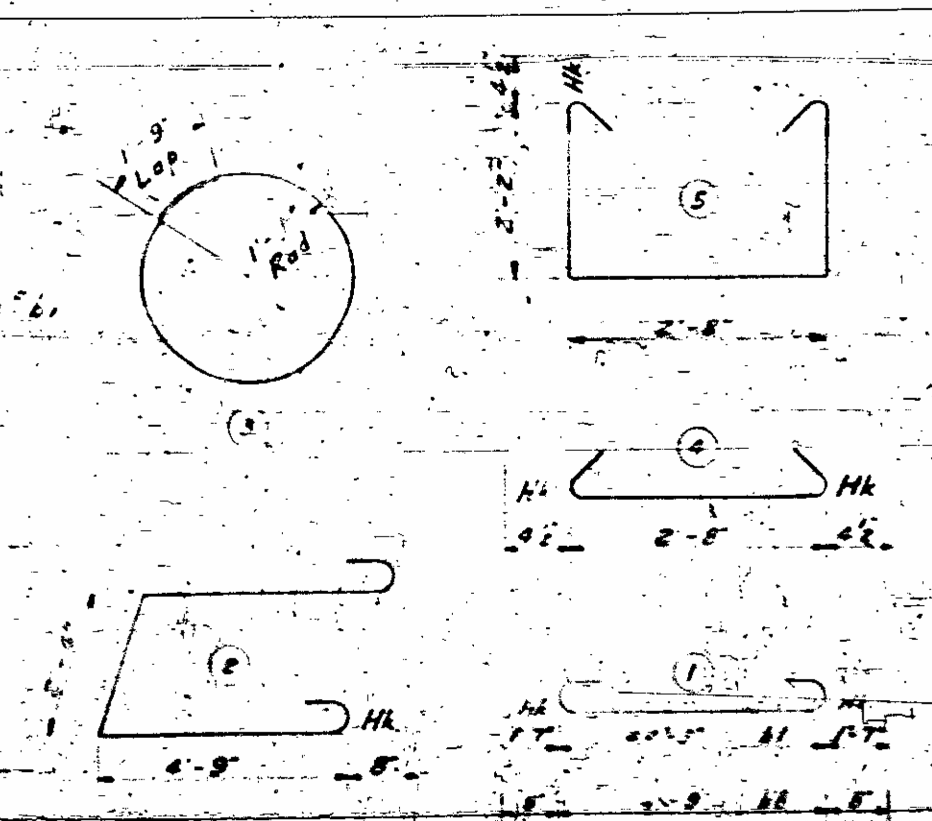
PLAN OF END BENT No. 1 OR END BENT No. 2



ELEVATION OF END BENT No. 1 OR END BENT No. 2



SECTION A-A



BAR TYPES

All dim. are out to out

BILL OF MATERIAL FOR ONE END BENT – TWO REQUIRED											
BAR	No.	SIZE	TYPE	LENGTH	WEIGHT	BAR	No.	SIZE	TYPE	LENGTH	WEIGHT
b1	6	1¼"	1	47'-5"	[illegible]	h4	3	½"	Str	7'-1"	4
b2	[illegible]	1¼"	Str.	54'-0"	[illegible]						
b3	1	1"	Str.	54'-0"	194	s1	41	½"	5	7'-9"	[illegible]
						s2	41	½"	4	3'-5"	[illegible]
b5	8	½"	Str	23'-0"	[illegible]	s3	3	⅝"	2	12'-4"	60
b6	1	1"	Str	44'-3"	[illegible]	v1	26	½"	Str	6'-2"	[illegible]
b7	12	½"	Str	2'-6"							
b8	9	¾"	1	6'-1"	32						
b10	14	½"	3	[illegible]	80						
h1	8	½"	Str.	5'-2"	28						
h2	3	½"	Str	4'-10"	10						
h3	8	½"	Str.	5'-11"	32						

Reinforcing Steel – Lbs. [illegible]
Class A Concrete – [illegible] 76.1
20 Precast Conc. Piles [illegible] 7

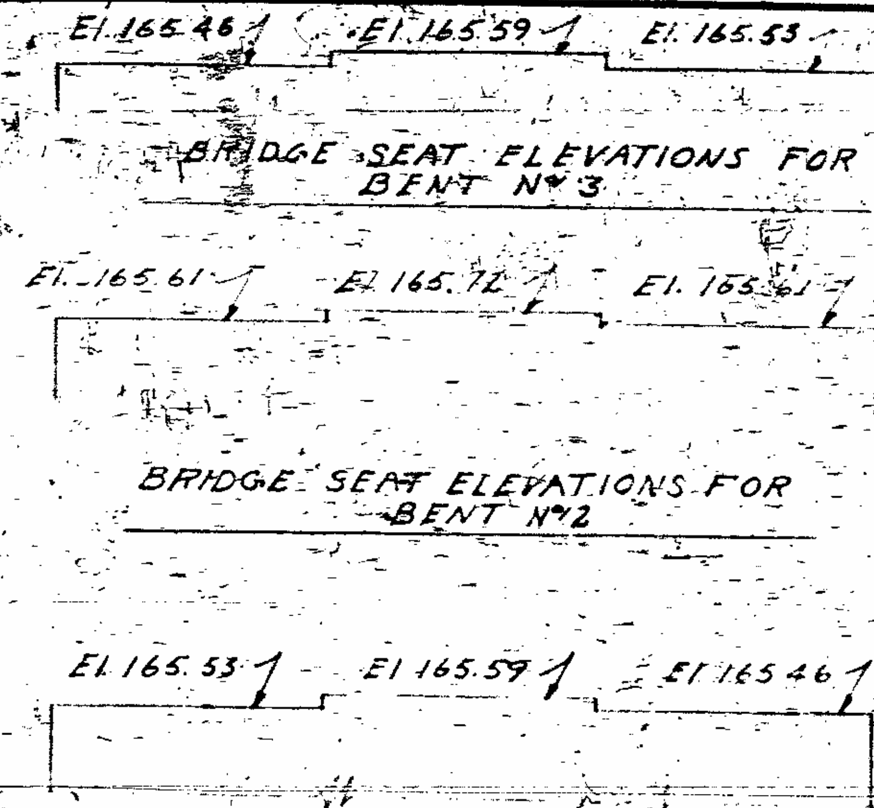
PROJECT No. 2336
JOHNSTON COUNTY
STATION: 266+65.7
℄ Median

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
RALEIGH

END BENT [illegible]

SPECIAL

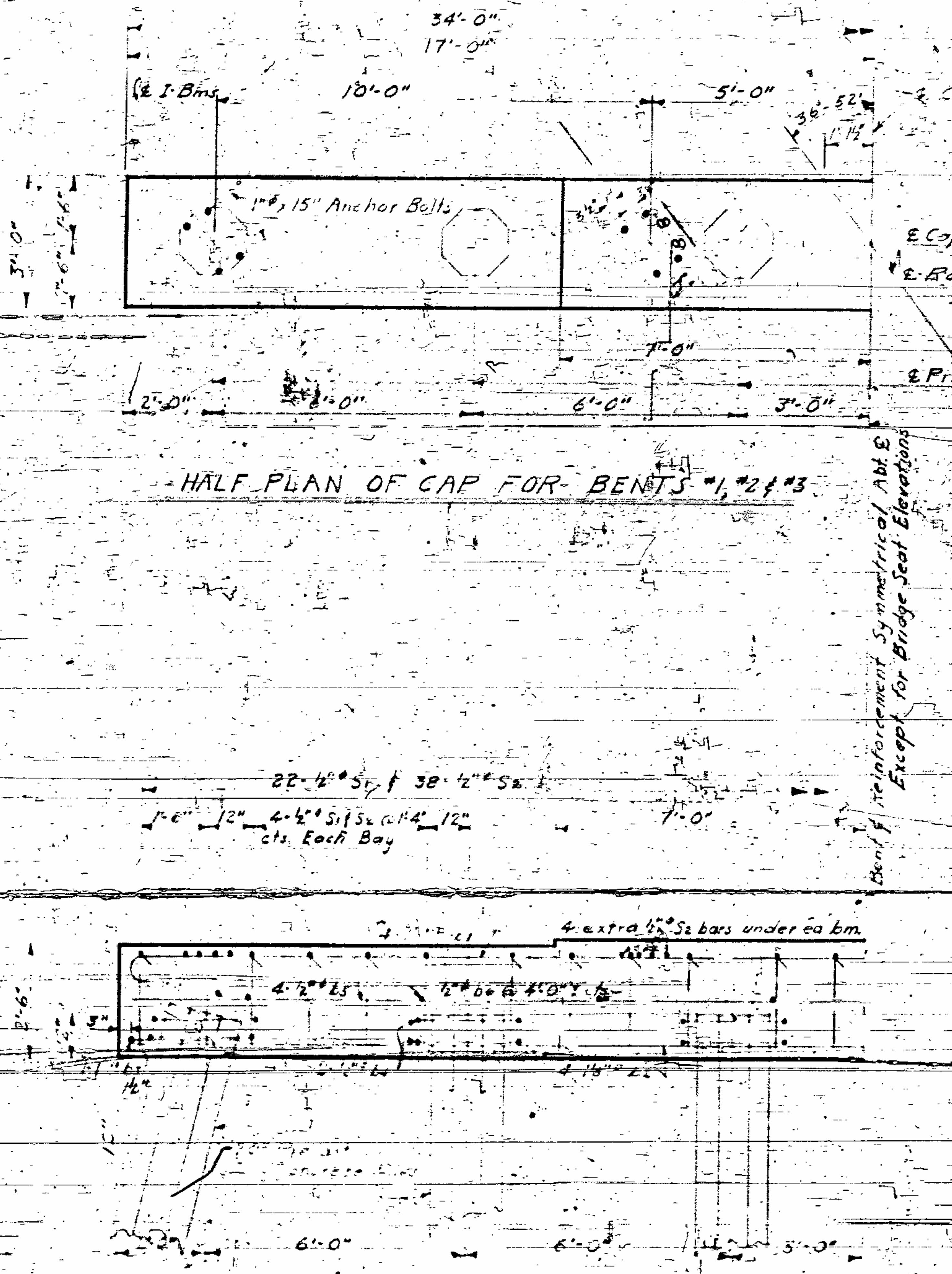
	N.C.	2336
Fed.-Aid		F1-703 (1)



BRIDGE SEAT ELEVATIONS FOR BENT No 3

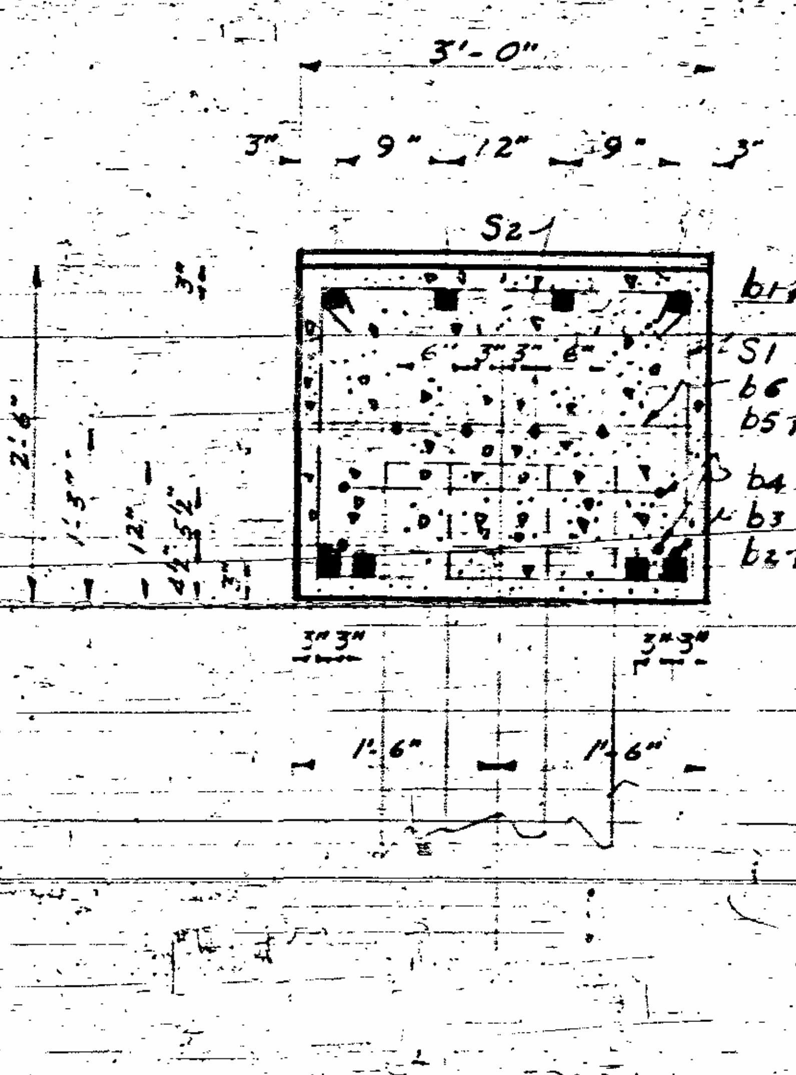
BRIDGE SEAT ELEVATIONS FOR BENT No 2

BRIDGE SEAT ELEVATIONS FOR BENT No 1



HALF PLAN OF CAP FOR BENTS #1, #2 & #3

HALF ELEVATION BENTS #1, #2 & #3



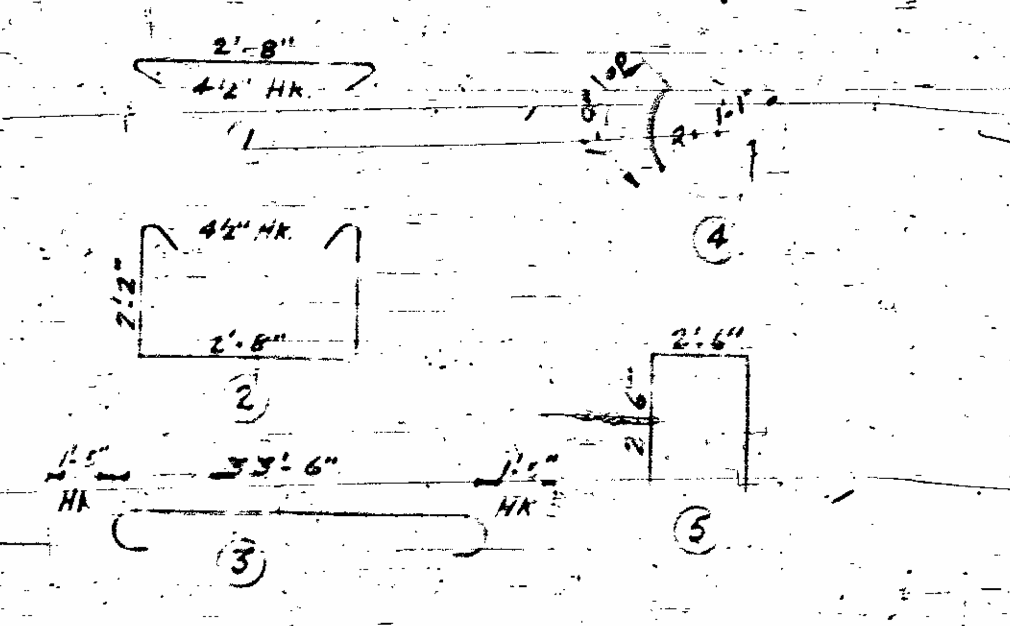
SECTION THRU CAP

3 Required

BILL OF MATERIAL (ONE BENT)					
Bar	No	Size	Type	Length	Weight
b1	4	1⅛"□	3	36'-2"	625
b2	4	1⅛"□	Str.	33'-6"	577
b3	2	1"□	5	7'-6"	51
b4	12	½"Ø	4	8'-7"	69
b5	8	½"Ø	Str.	17'-5"	93
b6	8	½"Ø	Str.	2'-8"	14
S1	22	½"Ø	2	7'-9"	114
S2	38	½"Ø	1	3'-5"	87
Reinforcing Steel - Lbs.					1630
* Bent #1 & #3 Class "A" Concrete Cu. Yds.					9.2
* Bent #2 Class "A" Concrete Cu. Yds.					9.1
20' Precast Concrete Piles - No					6

* Concrete displaced by pile heads has been deducted.

All piles to be driven to a minimum bearing capacity of 40 Tons Each.



Note: All bar dimensions are out to out.

BAR TYPES

PROJECT NO. 2336

JOHNSTON **COUNTY**

STATION: 266 + 65.7 ℄ Median

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
RALEIGH

SUBSTRUCTURE
BENT #1, #2 & #3

S-38