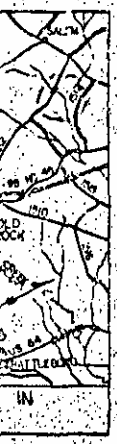
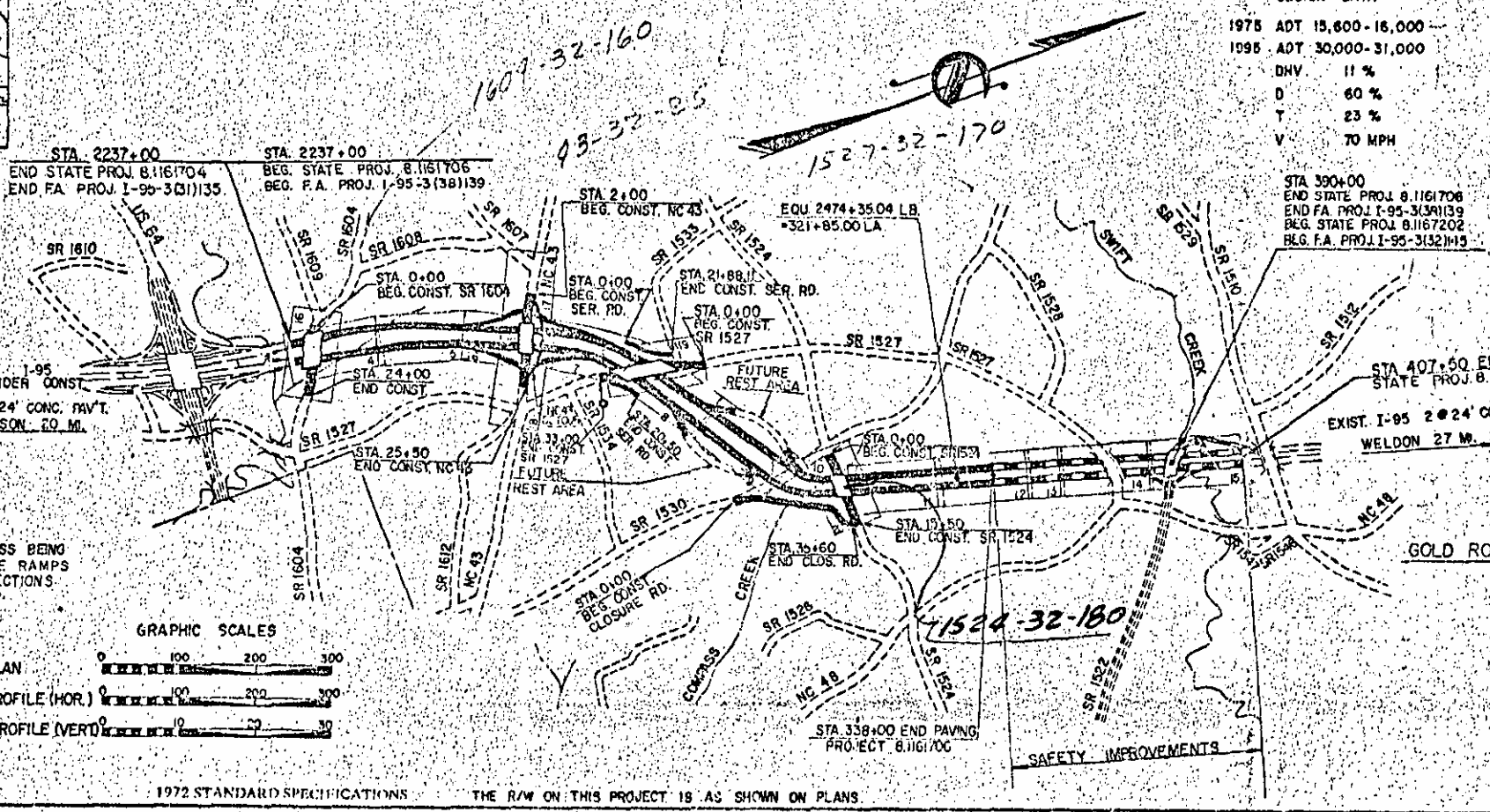
LOCATION: I-95 FROM APPROXIMATELY 317'± SOUTH OF SR.1604 NORTHEASTERLY TO SR.1522, ± 1 MILE SOUTH OF GOLD ROCK.

TYPE: THIS CONTRACT INCLUDES GRADING, DRAINAGE, PAVING, STRUCTURES, AND SAFTEY IMPROVEMENTS.

TOTAL LENGTH F.A. PROJECT I-95-3(38)139 = 5.786 MILES
TOTAL LENGTH STATE PROJECT 8.1161706 = 5.786 MILES





DESIGN DATA

1975	ADT	15,600 - 16,000
1995	ADT	30,000 - 31,000
	DHV	11 %
	D	60 %
	T	23 %
	V	70 MPH

City or Town Line
Exist. Right of Way Line
Right of Way Line
Survey Line
Property Line
Exist. 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
Guard Rail
Sanitary Sewer Line
Water Line
Gas Line
Proposed Woven Wire Fence
Proposed Chain Link Fence
Easement Line
BRUSH BARRIER
SILT CHECK DAM
SILT BASIN TYPE A
TEMPORARY LATERAL SILT DIT
TEMPORARY SILT FENCE
PROP. 1" MESH CHAIN LINK

OJECT ACCESS BEING
ANS AT THE RAMPS
THER CONNECTIONS
ELIMINATED.

GRAPHIC SCALES

PLAN 0 100 200 300
PROFILE (HOR.) 0 100 200 300
PROFILE (VERT) 0 10 20 30

1972 STANDARD SPECIFICATIONS

THE R/W ON THIS PROJECT IS AS SHOWN ON PLANS.

4	N.C.	B-1161706
F.A. PROJECT		95-3(39)139

NOTES

ASSUMED LIVE LOAD: HS 15-44

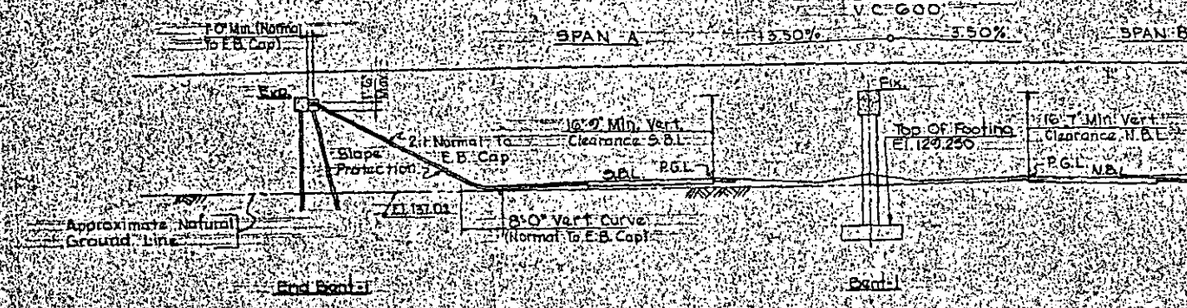
REFERENCE TO SHEET S-N: For Other Data And General Notes See Sheet S-N

PILE CAPACITIES: Piles Are Designed For Bearing Capacities Of 30 Tons Per Pile.

EXCAVATION: No Work Shall Be Started On This Bridge Until After The Roadway Section Has Been Graded. The Roadway Contractor Will Be Required To Remove The Existing Pavement And Scarify The Roadbed To A Minimum Depth Of 2'-0" Within The Area Of End Bent Piles.

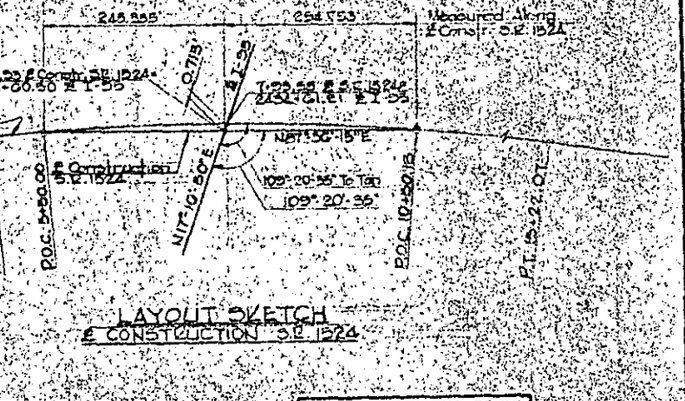
Foundation load for Bent 1 equals 3.2 Tons per sq. ft.

Structural Steel shall be painted in accordance with Paint System 4: See Special Provisions.

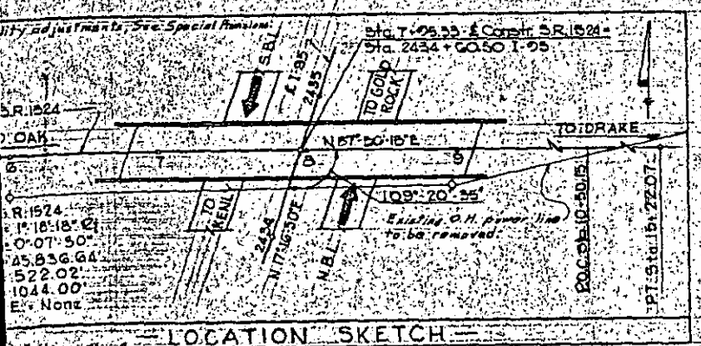


SECTION ALONG ℄ BRIDGE
(BENTS SECTION A-A)

PLAN



LAYOUT SKETCH
℄ CONSTRUCTION S.R. 1524



LOCATION SKETCH

TOTAL BILL OF MATERIAL

	CLASS AA CONCRETE	CLASS A CONCRETE	REINFORCING STEEL	STRUCTURAL STEEL	12" SQUARE PRESTRESSED CONCRETE PILES		LINSEED OIL CONCRETE PROTECTION	FOUNDATION EXCAVATION	4" CONCRETE SLOPE PROTECTION	I-BAR METAL RAILING	BRIDGE APPROACH SLABS
	CU. YDS.	CU. YDS.	LBS.	APPROX. LBS.	NO.	LIN. FT.	GALLONS	CU. YDS.	SQ. YDS.	LIN. FT.	LUMP SUM
SUPERSTRUCTURE	291.1		83,543	272,300			22			453.96	
END BENT NO. 1		20.3	4,503		14	292			211		
BENT NO. 1		90.3	19,075					328			
END BENT NO. 2		19.1	4,300		14	364			209		
CURVED END BLOCK	0.8		85								
TOTALS	291.9	129.7	91,506	272,300	28	656	22	328	420	453.96	LUMP SUM

REINFORCING STEEL LENGTHS ARE BASED ON FOLLOWING MINIMUM SPLICE LENGTHS

BAR SIZE	SPLICE DISTANCE
#4	1'-3"
#5	1'-9"
#6	2'-0"
#7	2'-3"
#8	2'-6"
#9	2'-9"
#10	3'-3"
#11	3'-6"

1524-32-180

PROJECT NO. B-1161706

NASH COUNTY

STATION: 2454+61.21 I-95
7+95.53 S.R. 1524

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

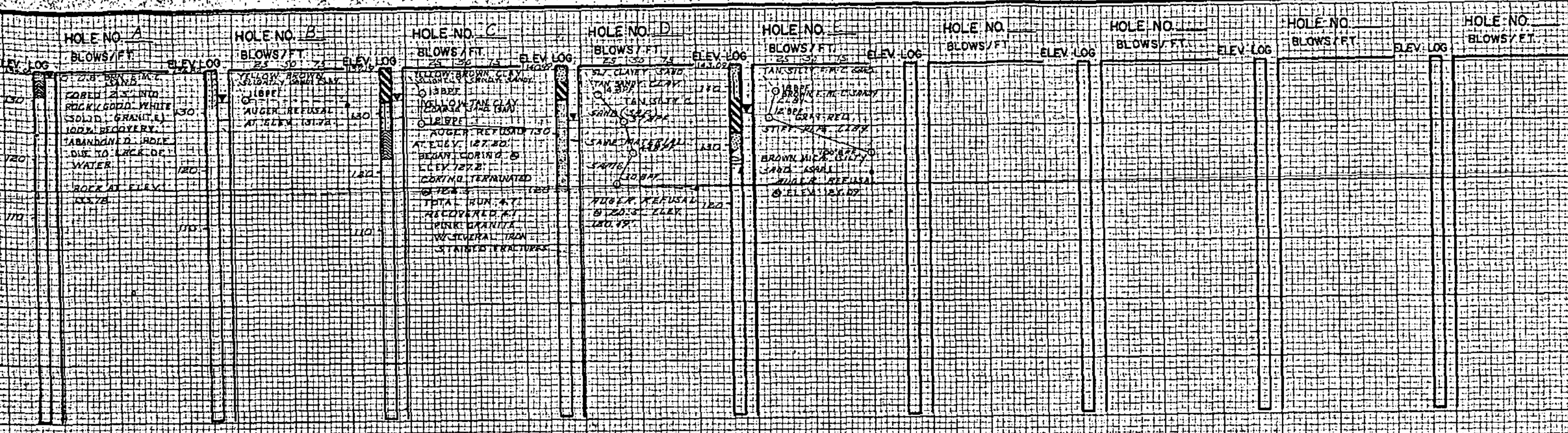
GENERAL DRAWING FOR BRIDGE
ON S.R. 1524 OVER PROJECT I-95
BETWEEN RED OAK AND DRAKE

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-67
1			3			TOTAL SHEETS
2			4			76

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	8.1161706	S-62	76

F. A. PROJ. NO. I-95-3(38)139



LEGEND

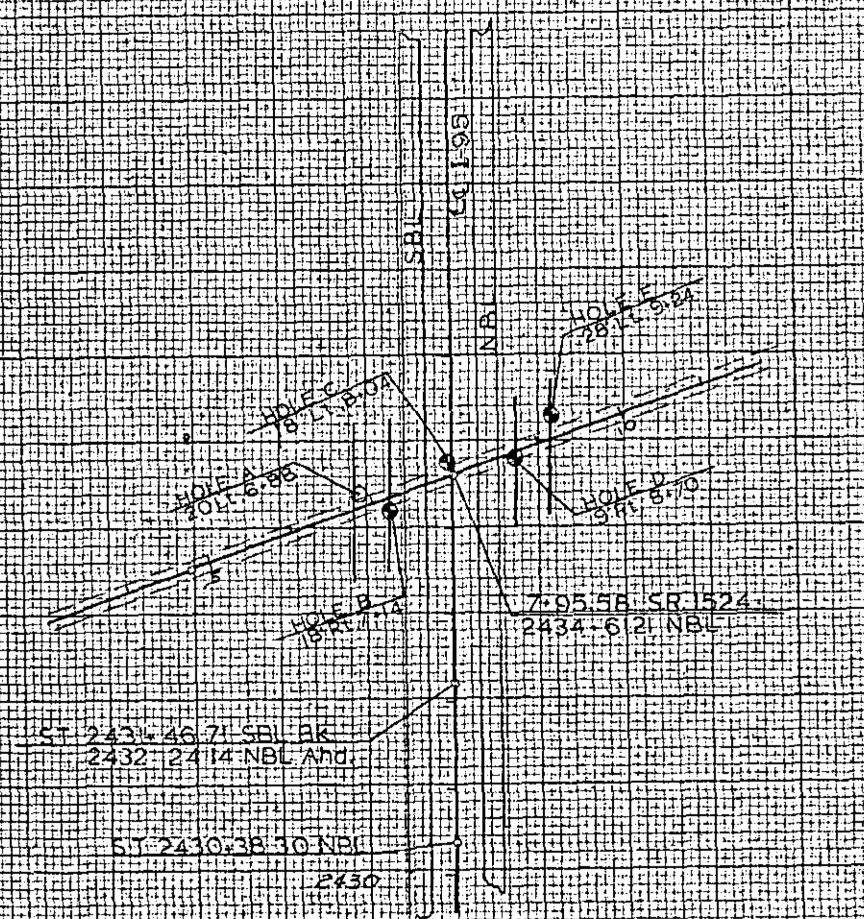
SOIL & ROCK DESCRIPTION & SYMBOLS

- SLIGHTLY CLAYEY SAND, SILTY SAND A-2-4
- SILTY COARSE SAND A-4
- SANDY CLAY A-4
- HEAVY CLAY A-7-6
- RIPPABLE ROCK SAPROLITE W/100 BPF
- HARD CRYSTALLINE ROCK - GRANITE BLAST ROCK
- WATER LEVEL

NOTES

THE LOGS SHOWN ON THIS PROFILE ARE TAKEN FROM FIELD SURVEY DATA AND REPRESENT THE BEST INFORMATION AVAILABLE. FIELD PROCEDURES ARE BASED ON A.S.T.M. AND A.A.S.H.O. STANDARDS WITH BEARING CAPACITIES DERIVED FROM STANDARD PENETRATION TEST. 140 LB. HAMMER, 30 IN. FALL, 2 IN. SAMPLER

B.M. Sta. 2454+64 @ SR 1524
B.M. Elev. 138.45

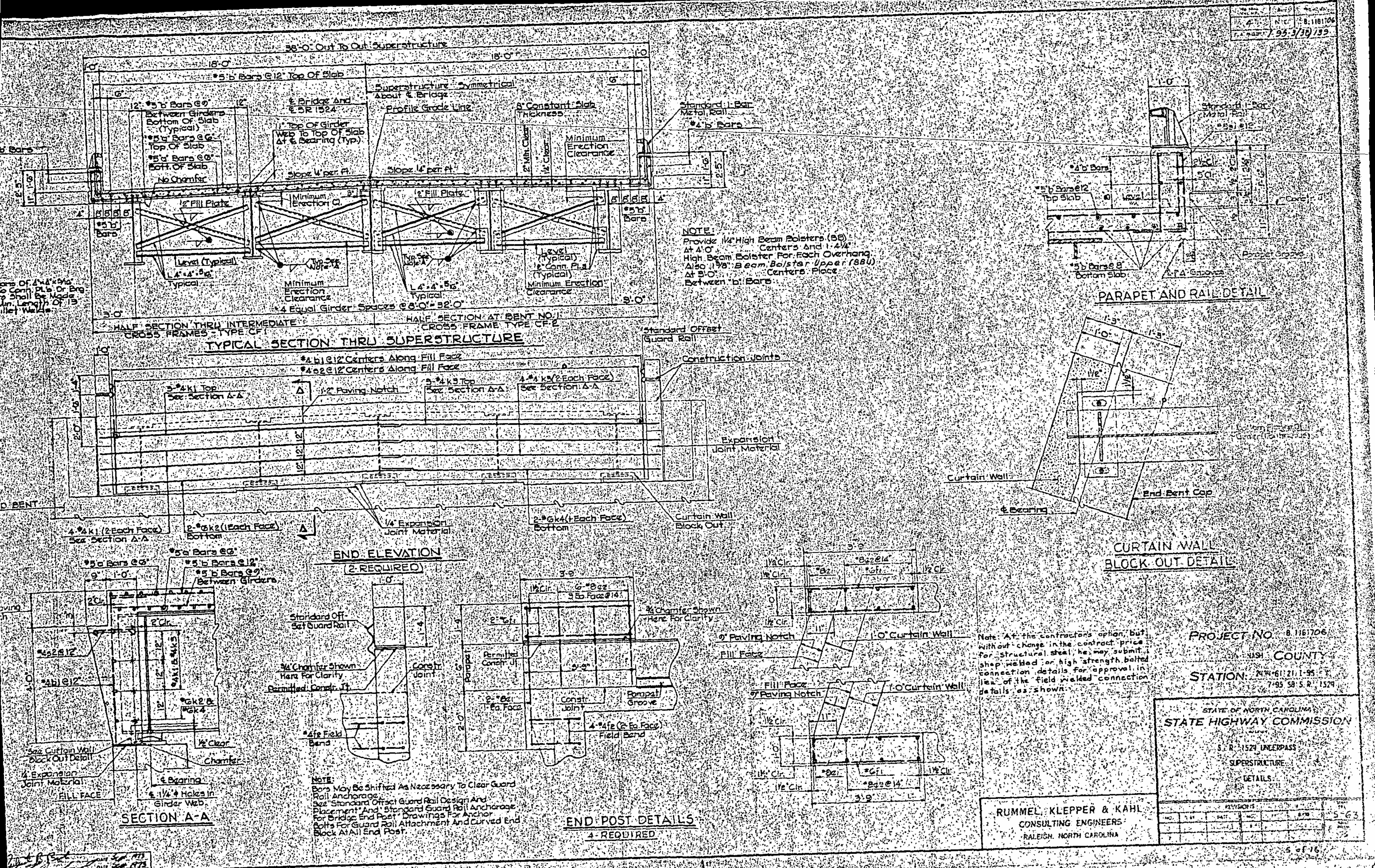


SOIL TEST RESULTS

LINE	STATION	[illegible]	AASHO CLASS	L.L.	P.I.	[illegible]	[illegible]	SILT	CLAY
	HOLE C	3-6	A-7-6	57	27	20	18	25	37
	HOLE C	8-9	A-6	33	13	30	22	27	10
	HOLE E	3-4	A-4	28	12	32	24	13	26
	HOLE E	6-7	A-7-6	55	38	8	30	16	46
	HOLE E	10-15	A-2-4	34	NP	39	33	17	9
	HOLE D	3-4	A-7-6	38	30	33	15	12	40
	HOLE D	6-7	A-4	30	10	40	17	18	15
	HOLE D	[illegible]	A-4	23	NP	47	20	22	11

NORTH CAROLINA
STATE HIGHWAY COMMISSION
DEPARTMENT OF LOCATIONS & SURVEYS
GEOLOGICAL DIVISION
BRIDGE FOUNDATION SURVEY

PROJECT 8.1161706
COUNTY NASH
ROUTE I-95
BRIDGE ON S.R. 1524
OVER I-95
SCALE: HORIZONTAL 1"=100' VERTICAL 1"=10'
SURVEY BY G. L. BUNCH (PARTY CHIEF)
ANALYSIS & REPORT BY J. T. LEDBETTER (AREA GEOLOGIST)
SUBMITTED BY A. C. DODSON (STATE HIGHWAY GEOLOGIST)
DRAWN BY M.D. Stephenson
CHECKED BY



PROJECT NO. 8.1161706

NASH COUNTY

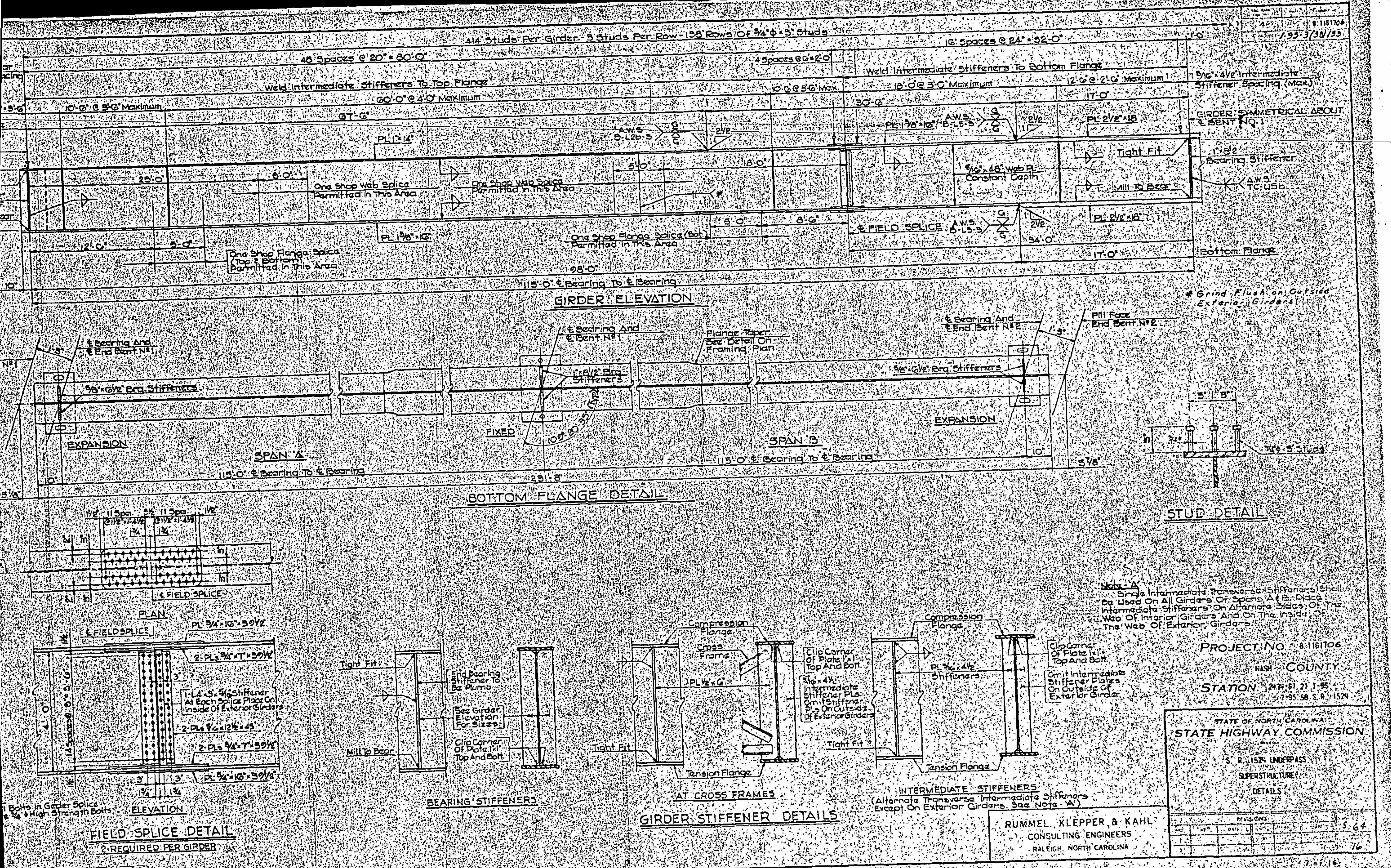
STATION: 24+74.61 -L- I-95 & 7+95.58 S.R. 1524

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

S.R. 1524 UNDERPASS
SUPERSTRUCTURE DETAILS

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

S-63



Note - 'A'
Single Intermediate Transverse Stiffeners Shall Be Used On All Girders Of Spans A & B. Place Intermediate Stiffeners On Alternate Sides Of The Web Of Interior Girders And On The Inside Of The Web Of Exterior Girders.

PROJECT NO. 8.1161706
NASH COUNTY
STATION 24+71.61 21 I-95, 7-95 58 S.R. 1524

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
S. R. 1524 UNDERPASS
SUPERSTRUCTURE
DETAILS

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

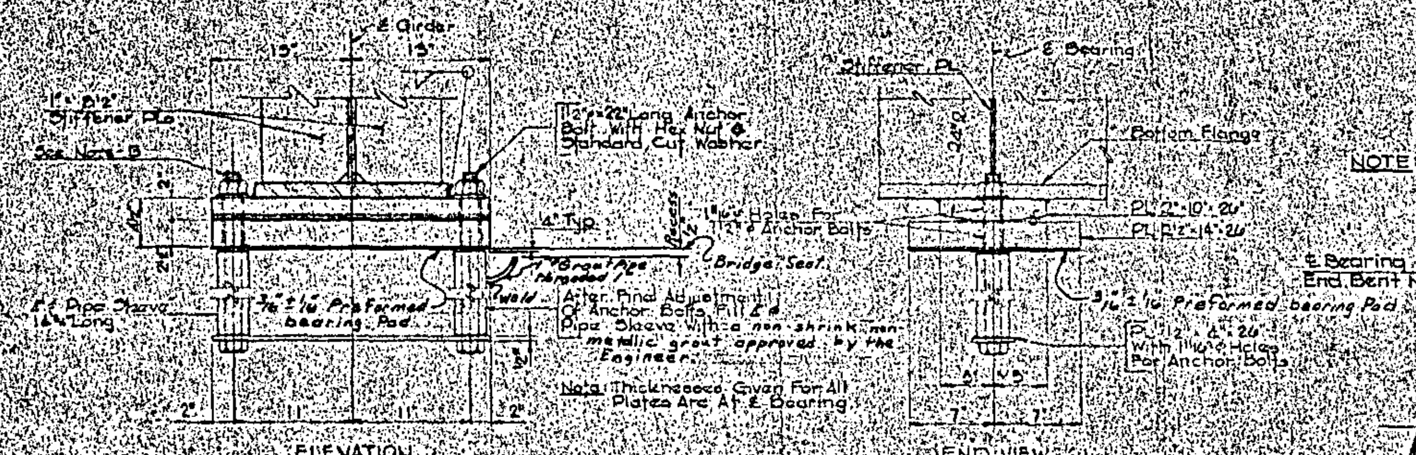
REVISIONS

S-6
16

* See Special Provisions

EXPANSION BEARING ASSEMBLY EB-1

NOTE A: At All Expansion Bearings, Thread Of The Nut And Bolt Shall Be Burred With A Sharp Pointed Tool.



FIXED BEARING ASSEMBLY FB-1

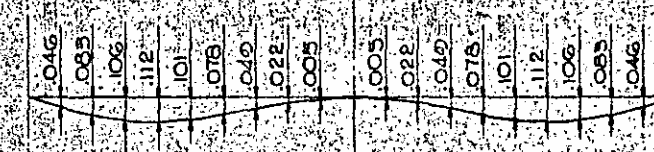
NOTE B: At All Fixed Bearings, Nuts For Anchor Bolts Are To Be Tightened Finger Tight And Then Backed Off 1/2 Turn. The Thread Of The Nut And Bolt Shall Then Be Burred With A Sharp Pointed Tool.

BEARING ASSEMBLIES REQUIRED

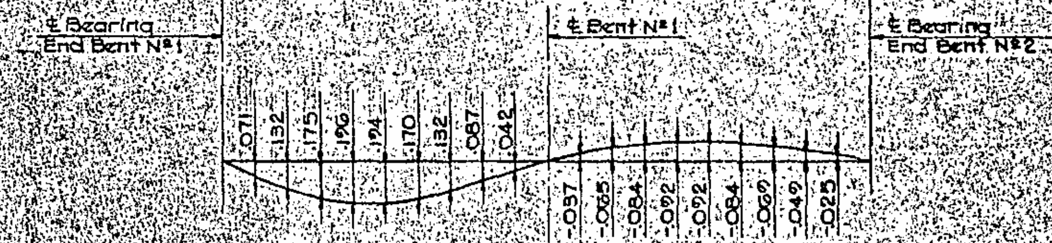
EB-1: 5 At End Bent Nº 1
5 At End Bent Nº 2
FB-1: 5 At Bent Nº 1

SPAN A — SPAN B

DEFLECTIONS DUE TO POURS 1 THRU 3

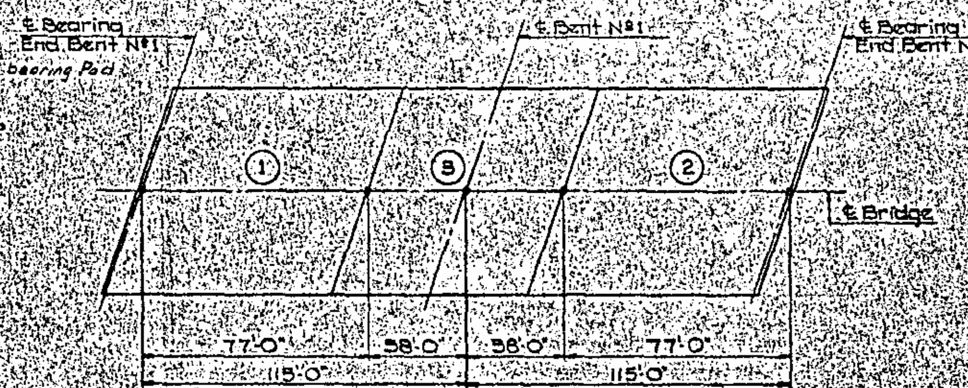


DEFLECTIONS DUE TO POURS 1 AND 2



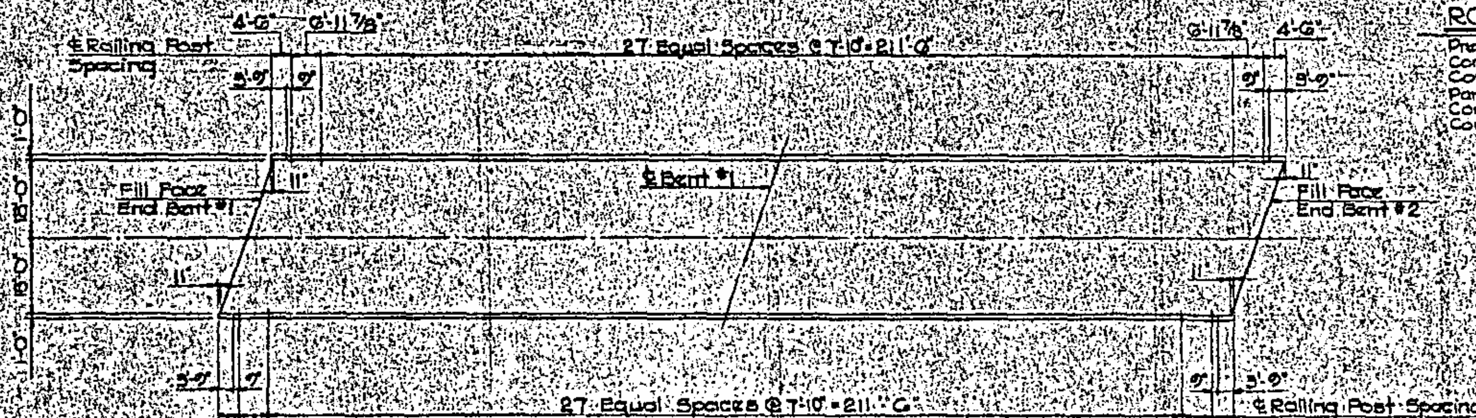
DEFLECTIONS DUE TO POUR 1

NOTE: All Deflection Ordinates Are In Feet And Are Given At The Tenth Points Of The Span Between Bearings For Interior Girders Only. Deflections Are For Weight Of Concrete Slab Only.



ROADWAY SLAB POURING SEQUENCE

Previously Cast Concrete Units Shall Attain A Minimum Compressive Strength Of 3,000 p.s.i. Before Additional Concrete Pours Are Made.
Parapet Concrete Shall Not Be Cast Until All Slab Concrete Has Been Cast And Has Reached A Minimum Compressive Strength Of 3,000 p.s.i.



RAILING POST SPACING

RAILING PAY LENGTH = 453.50 FT.

PROJECT NO. 8.1161706
NASH COUNTY
STATION: 2434+61.21 (1-95) / 7+95.58 S.R. 1524

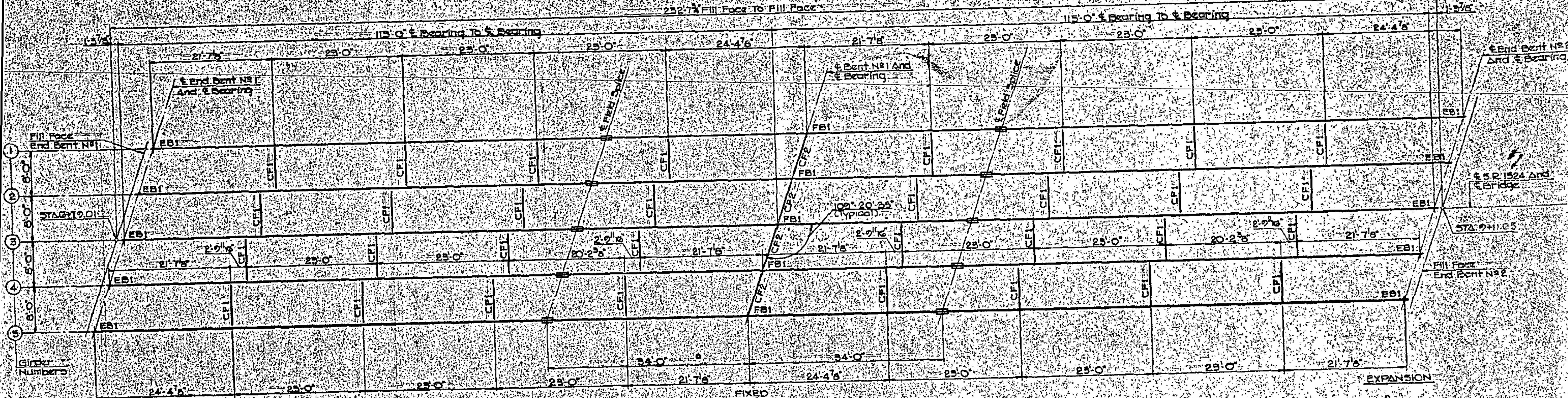
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
S.R. 1524 UNDERPASS
SUPERSTRUCTURE DETAILS

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

S-6

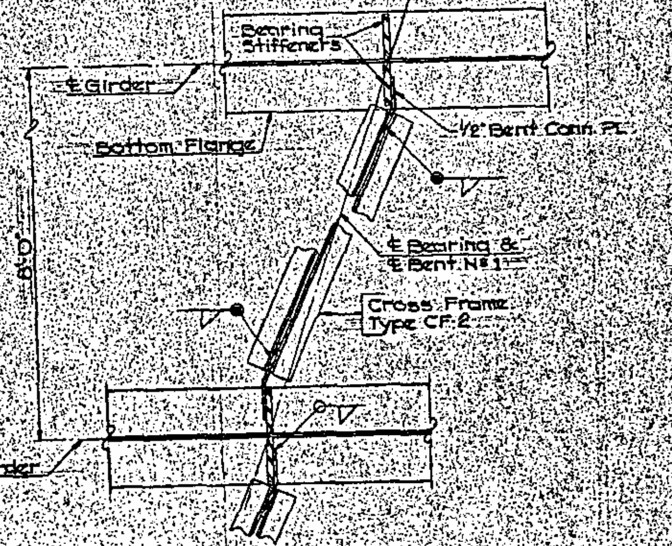
8.1161706 / I-95-3(38)133

4	N.C.	8.1161706
F.A. PROJECT	I-95-3(30)135	



FRAMING PLAN

FLANGE TAPER DETAIL



CROSS FRAME CONNECTION AT BENT NO.1

DEAD LOAD DEFLECTION AND CAMBER SCHEDULE - SPANS A AND B.

	1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		5/10 SPAN		6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BENT 1	
	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.	INT.	EXT.
DEFLECTION DUE TO WT. OF STEEL	.015	.015	.028	.027	.036	.034	.038	.037	.036	.034	.028	.027	.018	.018	.009	.009	.003	.003	.000	.000
DEFLECTION DUE TO WT. OF SLAB	.051	.050	.094	.090	.121	.117	.130	.125	.120	.116	.096	.093	.084	.081	.031	.030	.009	.009	.000	.000
DEFLECTION DUE TO WT. OF COMPOSITE LOADS	.009	.010	.017	.018	.023	.024	.025	.026	.024	.025	.021	.021	.015	.015	.008	.009	.003	.003	.000	.000
TOTAL DEAD LOAD DEFLECTION	.075	.075	.139	.135	.180	.175	.193	.188	.180	.175	.145	.141	.098	.094	.048	.048	.015	.015	.000	.000
VERTICAL CURVE ORDINATE	.069	.069	.123	.123	.162	.162	.185	.185	.193	.193	.185	.185	.162	.162	.123	.123	.069	.069	.000	.000
[illegible]	.144	.144	.262	.258	.342	.337	.378	.373	.373	.368	.330	.326	.260	.256	.171	.171	.084	.084	.000	.000

NOTES:
All Deflections Are In Feet.
Deflections And Cambers Are Symmetrical About ℄ Bent 1.
Slope Of The Zero Camber Base Line Varies.

NOTES

CAMBER: Girders Shall Be Fabricated With Camber To Compensate For The Deflection Caused By The Combined Weights Of The Structural Steel And The Superimposed Dead Loads And The Vertical Curve Ordinate. Cambered Girder Lengths Shall Be Adjusted And Bearings Are To Be Placed On The Cambered Girder So As To Be Aligned With The Anchors After Dead Load Deflection Has Occurred. Shop Plans Shall Be Prepared Accordingly.

FIELD CONNECTIONS: All Field Connections Not Welded Shall Be Made With 3/4" ϕ High Strength Bolts Unless Otherwise Noted.

SHOP SPLICES: All Shop Splices In Flange And Web Plates Shall Be Made Prior To Welding Flange Plates To Web Plates. No Splices Other Than Those Shown On The Plans Will Be Permitted In The Flange Plates. However, Additional Shop Web Splices Will Be Allowed Within The Areas Shown In The Details. The Location Of These Splices Shall Be Shown On The Shop Plans.

WELDING: All Welding Shall Conform To The Latest AWS Specification.

STUDS: For Description Of Studs See Special Provisions.

FIELD SPLICES: All Bolts In Field Splices Are 3/4" ϕ High Strength Bolts. Spacing Of Studs On Top Flange Splice Plate May Be Adjusted If Necessary To Clear Bolts. However, The Total Number Of Studs Required On Splice Plate Shall Not Be Less Than That Required By Using Normal Spacing.

Structural Steel shall be painted in accordance with Paint System 4. See Special Provisions.

STRUCTURAL STEEL: All Structural Steel To Be ASTM A36.

STRUCTURAL STEEL ERECTION: Erection Of Structural Steel Shall Be Completed For All Spans Before False Work Or Form Work Are Placed.

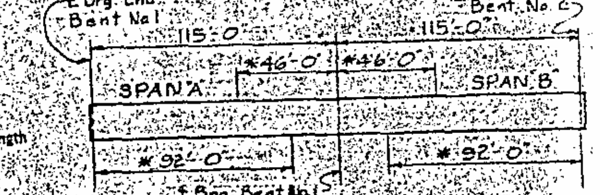
BEARING ASSEMBLIES: For Requirements Of Self-Lubricating Plate, See Special Provisions.

All Bearing Assemblies Except Self-Lubricating Plate Shall Be Galvanized.

Masonry Plates Shall Be Straight And Smooth On Both Sides. No Surface Finish Required.

For galvanized high strength bolts, See Special Provisions.

Shipping details for beams and girder shall be submitted for approval, indicating the top flange location during shipment, and in all cases showing the web vertical. The method of shipment, position on the vehicle, and attachments to the beams or girders of any shipping restraints shall be clearly detailed.



*Charpy V-Notch Tests will be required for top or bottom flange plates which falls within these limits. Also Charpy V-Notch Tests will be required for all web plates, web splice plates, and flange splice plates. For Charpy V-Notch Tests, see Special Provisions.

PROJECT NO. 8.1161706

NASH COUNTY

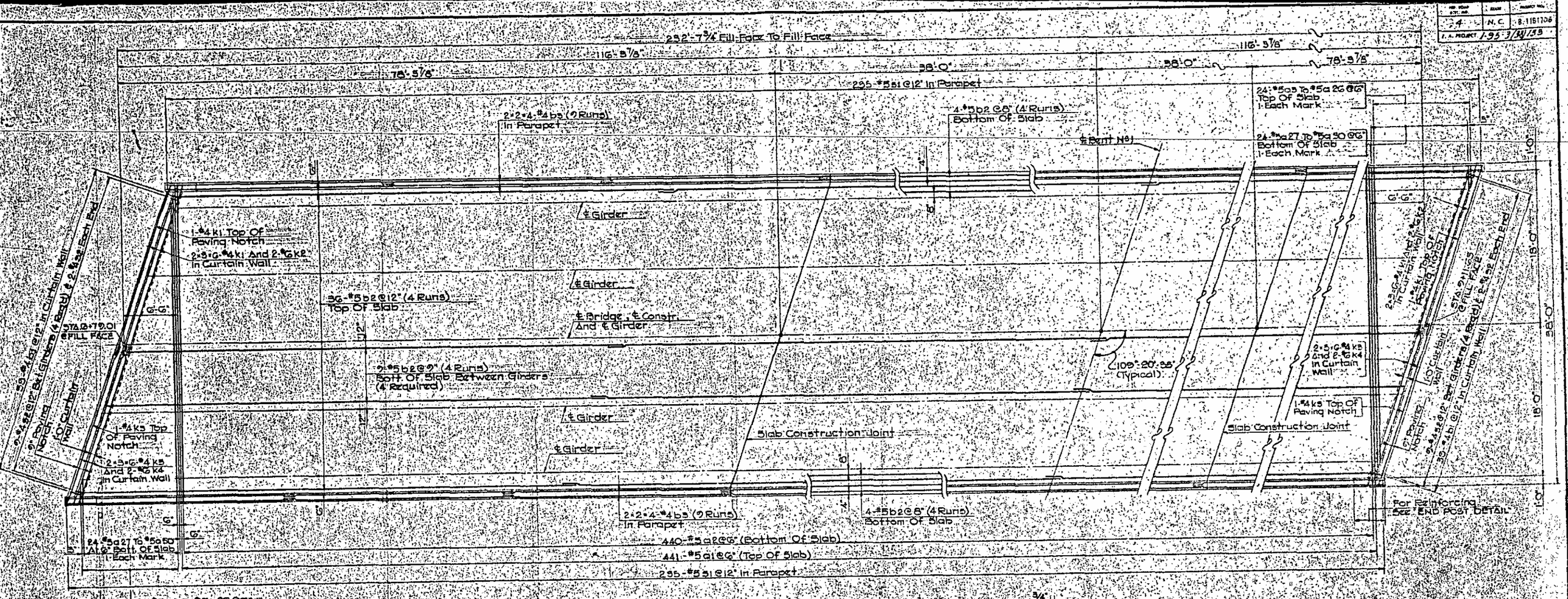
STATION: 2434+61.21 I-95 = 7+95.58 S.R. 1524

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

S.R. 1524 UNDERPASS
SUPERSTRUCTURE
FRAMING PLAN

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						
NO.	BY	DATE	NO.	BY	DATE	SHEET NO. S-66
1			3			TOTAL SHEETS 76
2			4			



DECK SLAB REINFORCING PLAN

BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
a1	441	#5	5	40'-2"	18,475
a2	440	"	5tr.	57'-8"	17,280
a3	2	"	5	56'-5"	76
a4	"	"	"	54'-11"	73
a5	"	"	"	53'-6"	70
a6	"	"	"	52'-1"	67
a7	"	"	"	50'-8"	64
a8	"	"	"	29'-5"	61
a9	"	"	"	27'-10"	58
a10	"	"	"	26'-5"	55
a11	"	"	"	25'-0"	52
a12	"	"	"	23'-7"	49
a13	"	"	"	22'-2"	46
a14	"	"	"	20'-8"	43
a15	"	"	"	19'-3"	40
a16	"	"	"	17'-10"	37
a17	"	"	"	16'-5"	34
a18	"	"	"	15'-0"	31
a19	"	"	"	13'-7"	28
a20	"	"	"	12'-2"	25
a21	"	"	"	10'-8"	22
a22	"	"	"	9'-4"	19
a23	"	"	"	7'-11"	17
a24	"	"	"	6'-6"	13
a25	2	#5	5	5'-0"	10

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
a26	2	#5	5	5'-1"	7
a27	"	"	5tr.	55'-8"	74
a28	"	"	"	54'-3"	71
a29	"	"	"	52'-9"	68
a30	"	"	"	51'-4"	65
a31	"	"	"	29'-11"	62
a32	"	"	"	28'-6"	59
a33	"	"	"	27'-1"	56
a34	"	"	"	25'-8"	54
a35	"	"	"	24'-3"	51
a36	"	"	"	22'-10"	48
a37	"	"	"	21'-5"	45
a38	"	"	"	20'-0"	42
a39	"	"	"	18'-6"	39
a40	"	"	"	17'-1"	36
a41	"	"	"	15'-8"	33
a42	"	"	"	14'-3"	30
a43	"	"	"	12'-10"	27
a44	"	"	"	11'-5"	24
a45	"	"	"	10'-0"	21
a46	"	"	"	8'-7"	18
a47	"	"	"	7'-2"	15
a48	"	"	"	5'-9"	12
a49	"	"	"	4'-5"	9
a50	2	#5	5tr.	2'-10"	6

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
b1	76	#4	5	6'-5"	326
b2	320	#5	5tr.	59'-6"	19859
b3	72	#4	5tr.	27'-2"	1,507
c1	8	#8	5tr.	4'-0"	96
c2	24	#8	5tr.	2'-8"	171
F1	8	#6	11	7'-9"	93
F2	16	#4	5tr.	3'-6"	57
k1	14	#4	5tr.	21'-5"	199
k2	4	#6	5tr.	22'-0"	132
k3	14	#4	5tr.	20'-0"	187
K4	4	#6	5tr.	20'-0"	120
s1	470	#5	2	6'-6"	5186
s2	80	#4	4	2'-0"	107

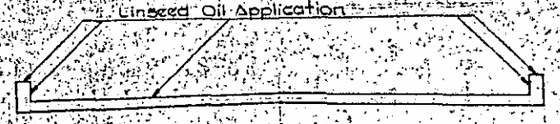
Reinforcing Steel — Pounds	65,545
Class 'AA' Concrete	Cubic Yards
Pour No. 1	51.7
Pour No. 2	51.7
Pour No. 3	80.9
Parapets	26.1
End Posts	0.7
TOTAL	201.1

BAR TYPES

Note: All Bar Dimensions Are Out To Out.

NOTE:
Reinforcing Steel Not Shown Longitudinal And Transverse Reinforcing Steel Shall Be Continuous Thru Joint.

TRANSVERSE CONSTRUCTION JOINT IN DECK SLAB



SKETCH SHOWING LIMITS OF LINSEED OIL APPLICATION

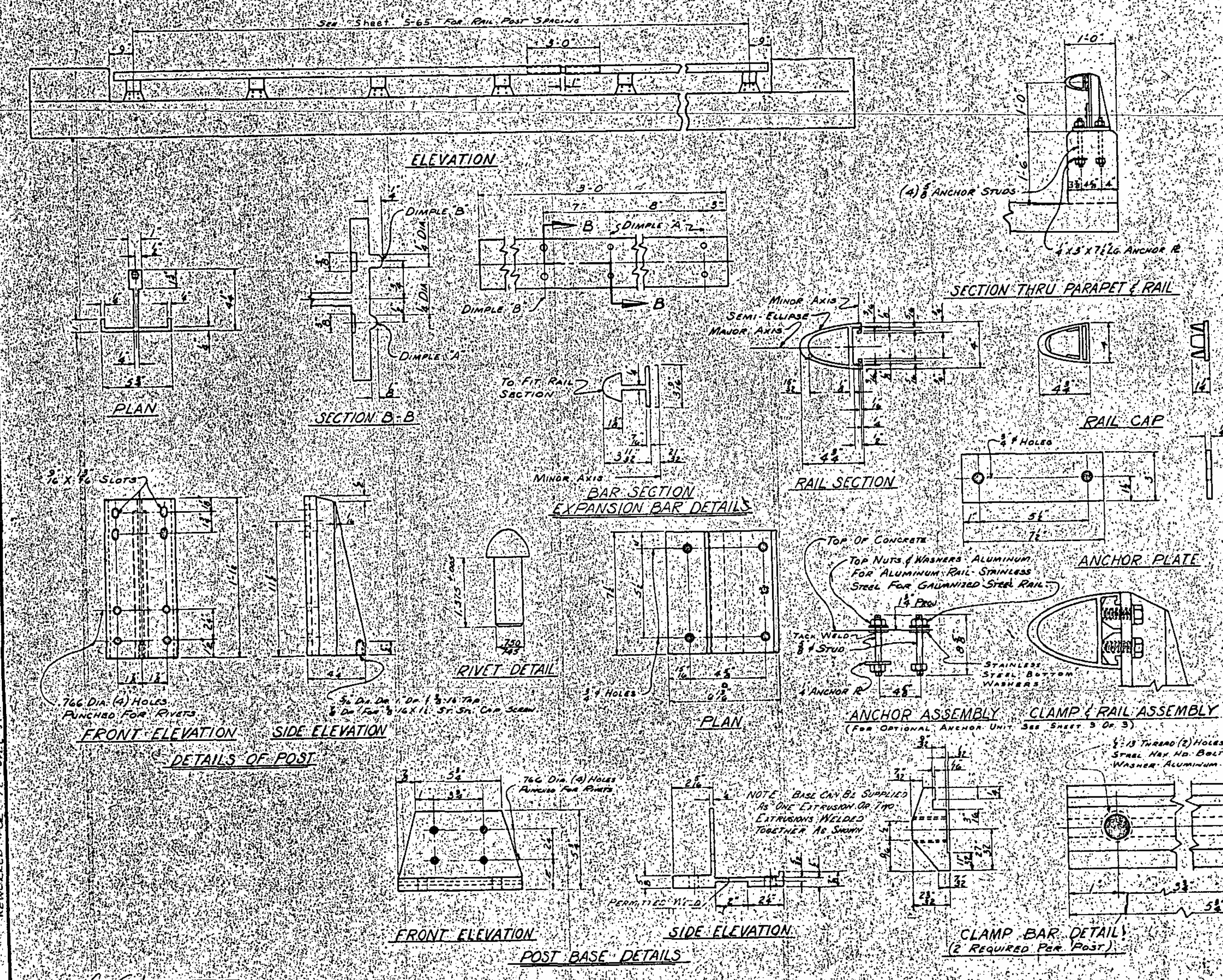
PROJECT NO. 8.1161706
NASH COUNTY
STATION: 2434+61.21 I-95
7+95.58 S.R.I 1524

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
S. R. 1524 UNDERPASS
SUPERSTRUCTURE
DECK PLAN

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-67
1			3			TOTAL SHEETS
2			4			76

SHEET NO.	STATE	PROJECT
4	N.C.	8.1161706
F. A. PROJECT I-95-3(30)139		



AT THE CONTRACTORS OPTION METAL RAIL MAY BE EITHER ALUMINUM OR GALVANIZED STEEL IN ACCORDANCE WITH THE REQUIREMENTS OF THE GENERAL NOTES AND THE FOLLOWING SPECIFICATIONS FOR THE ALTERNATE MATERIALS; HOWEVER THE CONTRACTOR WILL BE REQUIRED TO USE THE SAME RAIL MATERIAL ON ALL STRUCTURES ON THE PROJECT FOR WHICH METAL RAIL IS DESIGNATED.

ALUMINUM RAILS:

MATERIAL FOR POSTS, BASES & RAILS, EXPANSION BARS, & CLAMP BARS: SHALL BE A.S.T.M. B-221 ALLOY 6061-T6

MATERIAL FOR ALUMINUM WASHER SHALL BE A.S.T.M. B-209 ALLOY ALCLAD 2024-T3.

MATERIAL FOR RIVETS SHALL BE A.S.T.M. B316 ALLOY 6061-T6 RIVETS SHALL BE STD. BUTTON HEAD & CONE POINT COLD DRIVEN AS PER DRAWING.

MATERIAL FOR ALUMINUM NUTS SHALL BE A.S.T.M. B-211 ALLOY 6061-T6.

THE BASE OF RAIL POSTS, OR ANY OTHER ALUMINUM SURFACE IN CONTACT WITH CONCRETE SHALL BE THOROUGHLY COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND OF APPROVED QUALITY.

Material for shims to be A.S.T.M. B-209 Alloy 6061-T6

GALVANIZED STEEL RAILS

MATERIALS AND GALVANIZING ARE TO CONFORM TO THE FOLLOWING SPECIFICATIONS.

POSTS, POST BASES, RAILS, EXPANSION BARS AND CLAMP BARS: A.S.T.M. A36 GRADE STRUCTURAL STEEL – GALVANIZED TO A.S.T.M. A-123.

RIVETS: RIVETS SHALL MEET THE REQUIREMENTS OF A.S.T.M. A502 FOR GRADE 1 RIVETS.

NUTS & WASHERS FOR TOP END OF ANCHOR ASSEMBLY FOR STEEL RAIL SHALL BE TYPE 430 STAINLESS STEEL.

THE CUT ENDS OF GALVANIZED STEEL RAILING, AFTER GRINDING SMOOTH, SHALL BE GIVEN TWO COATS OF ZINC RICH PAINT MEETING THE REQUIREMENTS OF FEDERAL SPECIFICATION MIL-P-26915 USAF TYPE I OR OF FEDERAL SPECIFICATIONS TT-P-641.

SHIMS: SHIMS SHALL MEET THE REQUIREMENTS OF ASTM A570 FOR GRADE C OR A611 FOR GRADE C, AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123

CLOSURE PLATES: CLOSURE PLATES SHALL MEET THE REQUIREMENTS OF ASTM A246 GRADE C AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123

PAY LENGTH: 453.96 Lin. Ft.

GENERAL NOTES:

1. RAILING SHALL BE CONTINUOUS FROM END POST TO END POST OF BRIDGE. EACH JOINT IN RAIL LENGTH SHALL BE SPLICED AS DETAILED. PANEL LENGTHS OF RAIL SHALL BE ATTACHED TO A MINIMUM OF THREE POSTS.
2. END OF RAIL TO CLEAR FACE OF CONCRETE END POST BY 1 1/2".
3. MATERIAL FOR ANCHOR STUDS SHALL BE TYPE 430 STAINLESS STEEL WITH MINIMUM 70,000 P.S.I. ULTIMATE STRENGTH. STUDS TO BE EMBEDDED 7" IN CONCRETE. NUTS SHALL BE AMERICAN STANDARD FINISHED, HEXAGON THICK NUTS, CLASS 2B THREAD. ANCHOR PLATES SHALL BE A.S.T.M. A-36. MACHINE SCREWS FOR RAIL ATTACHMENT SHALL BE TYPE 430 STAINLESS STEEL.
4. CERTIFIED MILL REPORTS ARE REQUIRED FOR RAILS & POSTS. SHOP INSPECTION IS NOT REQUIRED.
5. METAL RAIL POSTS TO BE SET NORMAL TO CURB GRADE.
6. METHOD OF MEASUREMENT FOR METAL RAILS: FOR LENGTH OF METAL RAIL TO BE PAID FOR SEE THE 1972 STANDARD SPECIFICATIONS SUB ARTICLE 460-4(A).
7. CURVED RAIL USAGE: WHERE RAILS ARE TO BE USED ON BRIDGES ON HORIZONTAL AND/OR VERTICAL CURVATURE, THE CONTRACTOR MAY AT HIS OPTION HAVE THE REQUIRED CURVATURE IN THE RAIL FORMED IN THE SHOP OR IN THE FIELD. IN EITHER EVENT THE RAIL SHALL CONFORM WITHOUT BUCKLING OR KINKING TO THE REQUIRED CURVATURE IN A UNIFORM MANNER ACCEPTABLE TO THE ENGINEER.
8. To insure future identification of the Fabricator, a permanent identifying mark shall be placed on each post. The method of marking and location shall be such that it does not detract from the appearance of the post.
9. Shims to be used as necessary for post alignment.
10. Alloy 6351-T5 may be substituted for Alloy 6061-T6 where applicable.

PROJECT NO. 8.1161706

NASH COUNTY

STATION: 2434+61.21 I-95 & 7+95.58 S.R. 1524

NOTE: MINOR VARIATIONS IN DETAILS OF METAL RAIL WILL BE CONSIDERED. DETAILS OF SUCH VARIATIONS, IF DESIRED, SHALL BE SUBMITTED FOR APPROVAL.

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

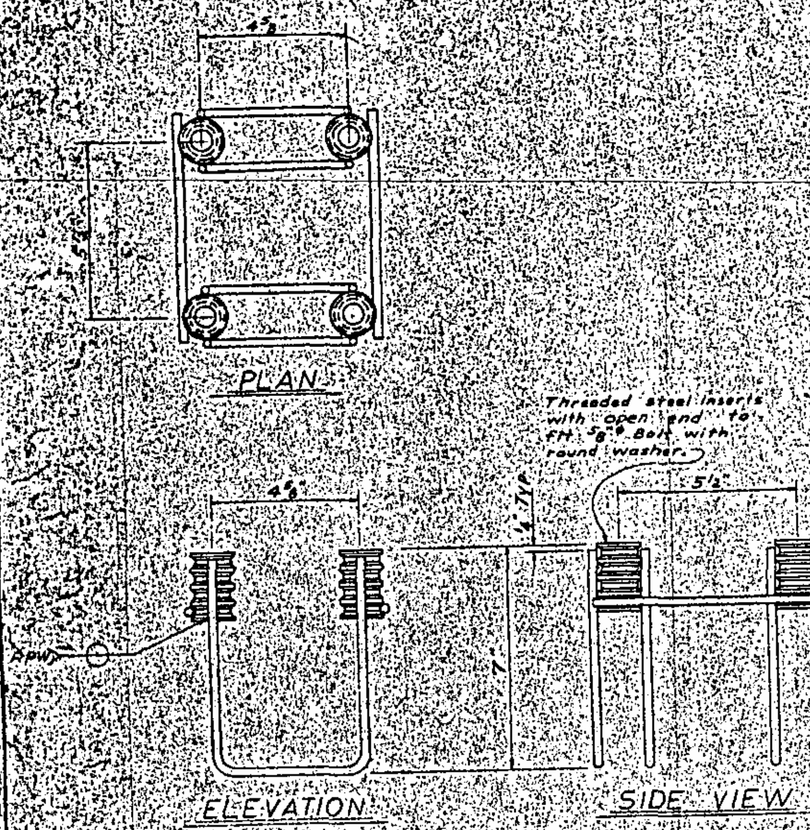
STANDARD
I BAR
METAL RAIL

JULY 1964

S-L8

REWORKED FOR 72 SPEC'S BY TMH 5-4-72

DRAWN BY: [signature] DATE Sept 1973

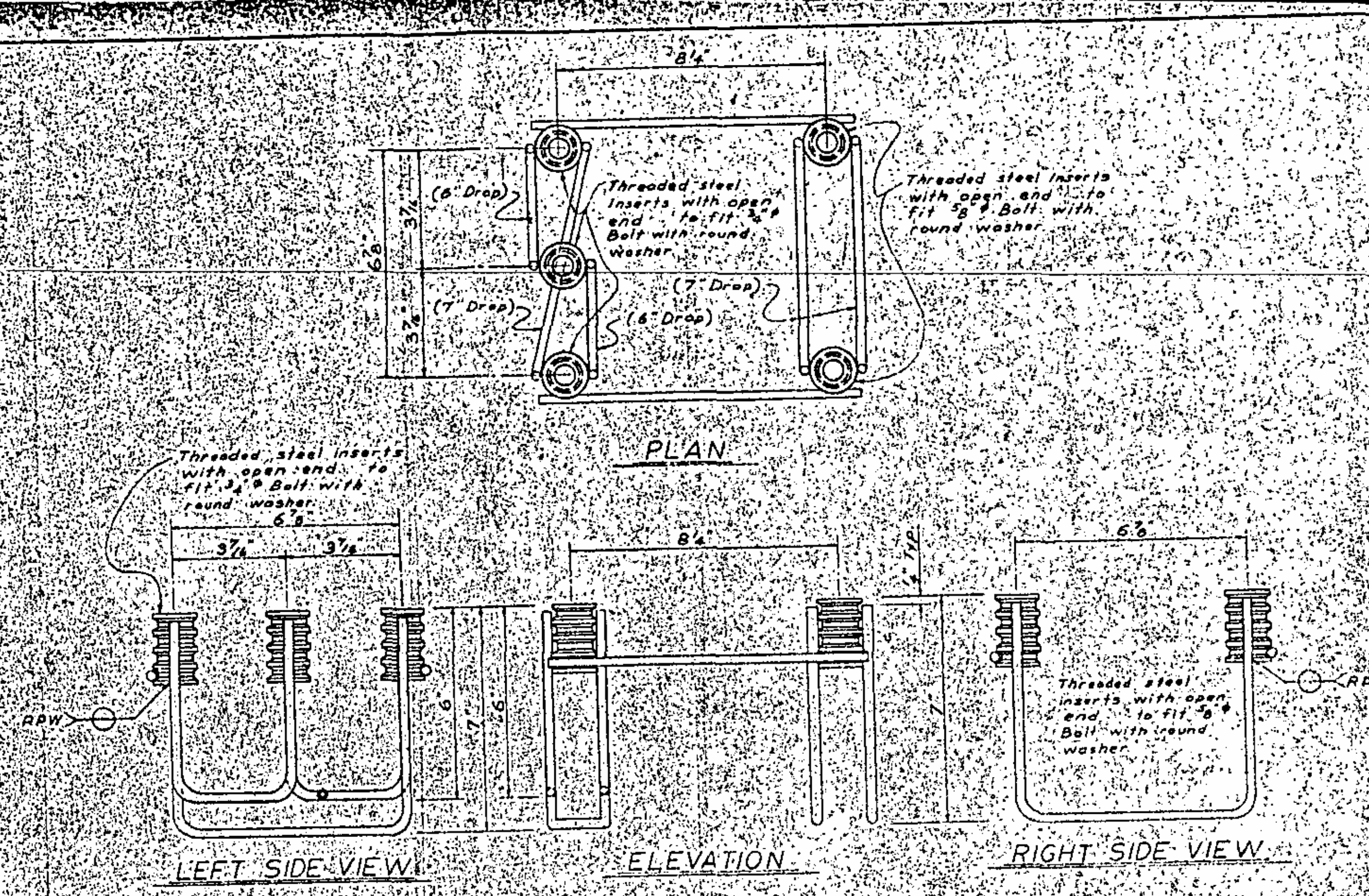


PLAN

ELEVATION

SIDE VIEW

4-BOLT PRESET ANCHOR
FOR 1 BAR METAL RAIL



PLAN

LEFT SIDE VIEW

ELEVATION

RIGHT SIDE VIEW

5-BOLT PRESET ANCHOR
FOR 2 OR 3 BAR METAL RAIL

GENERAL NOTES

This Preset Anchor Assembly may be used in lieu of the anchorage shown on the Standard Metal Rail Sheet.

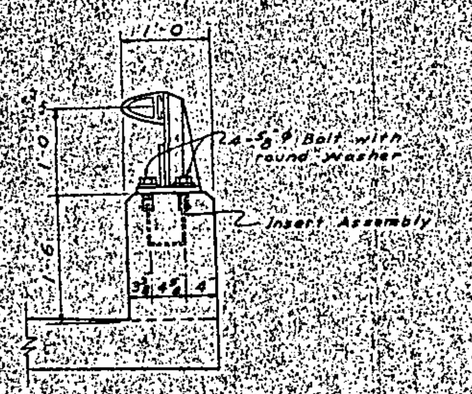
The cost of the Preset Anchor Assembly with bolts and washers complete in place shall be included in the price bid for Lin. Ft. Metal Rail.

The wire gage and threaded steel inserts to be of sufficient strength to insure load anchoring capacity as specified in the AASHO Specifications.

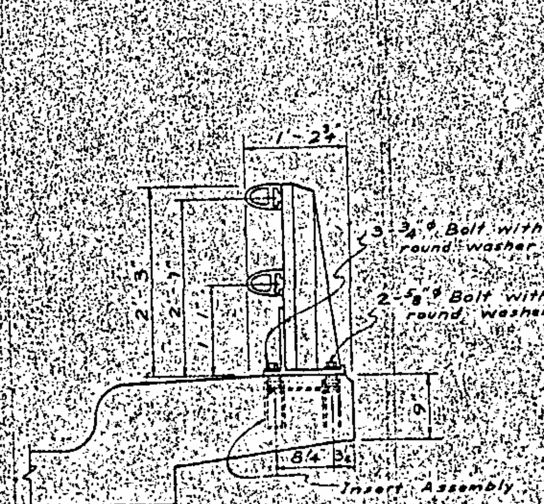
The Preset Anchor Units to be hot-dipped galvanized to conform to requirements of A.S.T.M. A 123.

Anchor Bolts to be either high tensile steel conforming to A.S.T.M. A 449 and galvanized to conform to A.S.T.M. 153 or stainless steel Type 430 with a minimum 70,000 p.s.i. ultimate strength.

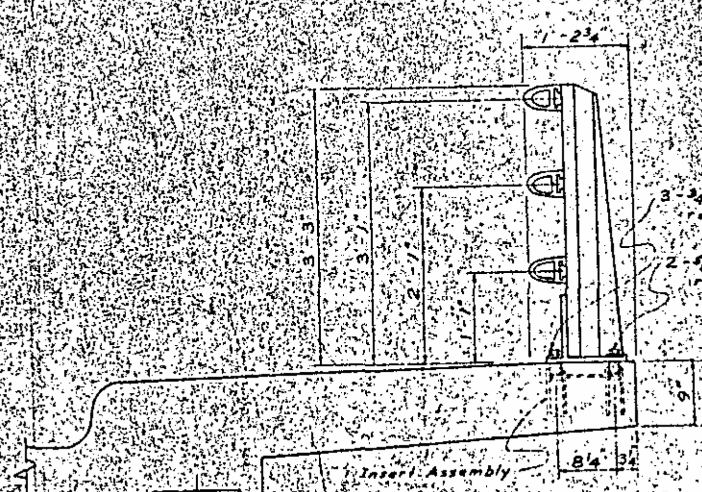
Bolts to be tightened one-half turn with the wrench from a finger tight position.



SECTION THRU PARAPET & RAIL



SECTION THRU CURB & RAIL



SECTION THRU SIDEWALK & RAIL

Revision No 1. Revised to change Preset Anchor for 1 Bar Metal Rail. 2-4-71. By J.A.J. / By J.L.S.
Revision No 2. Revised to change note concerning tightening of bolts. 3-15-71. By J.A.J. / by J.L.S.
Revision No 3. Revised to change weld symbol. 3-19-71. By J.A.J. / By J.L.S.

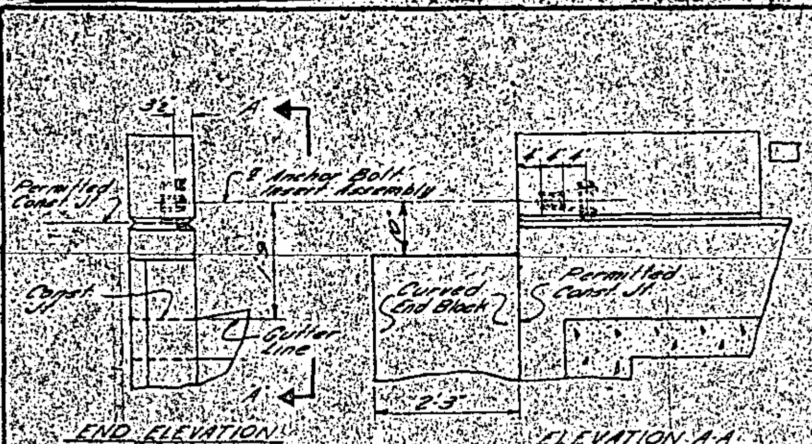
ASSEMBLED BY ... DATE Sept 73 SPECIAL
CHECKED BY ... DATE Sept 73

PROJECT NO. B 1161706
NASH COUNTY
STATION: 2431-61.21 I-95
7+95.56 S.R. 1571

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH
STANDARD
METAL RAIL
OPTIONAL PRESET
ANCHOR UNITS
DECEMBER 1970

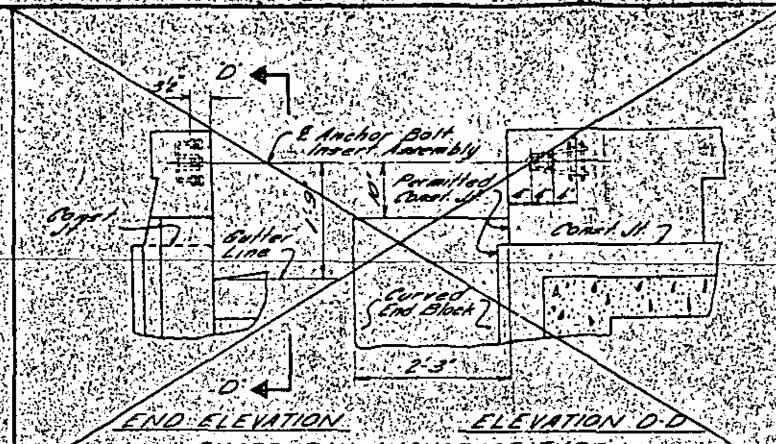
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1	J.A.J.	2-4-71	3	J.A.J.	3-19-71
2	J.A.J.	3-15-71	4		

FED. ROAD DIV. NO.	STATE	PROJECT NO.
	N.C.	8.1161706
F.A. PROJECT I-95-3(33)139		



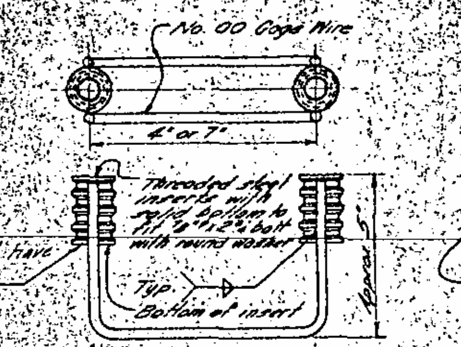
END ELEVATION — ELEVATION A-A

GUARD RAIL ANCHORAGE - TYPE 1

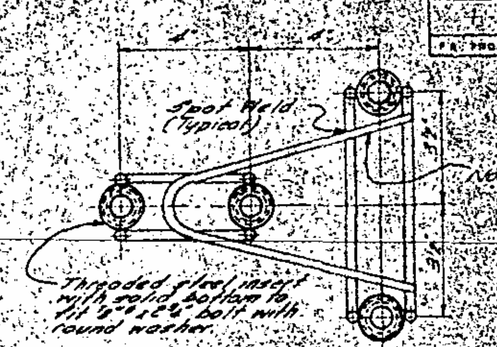


END ELEVATION — ELEVATION D-D

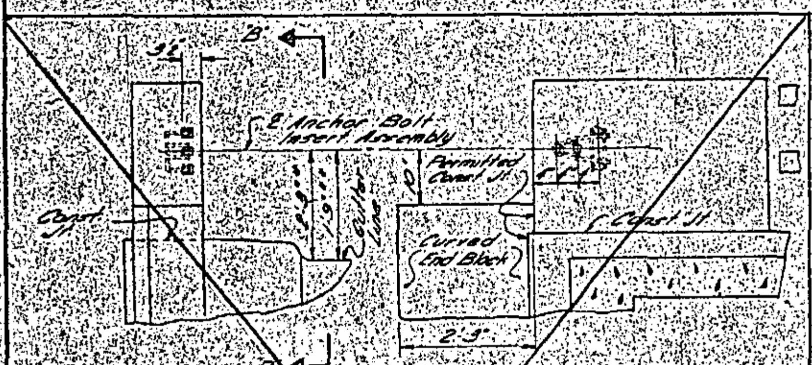
GUARD RAIL ANCHORAGE - TYPE 4



2 BOLT INSERT ASSEMBLY (ELEVATION VIEW)

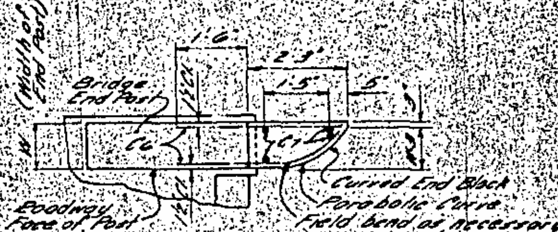


4 BOLT INSERT ASSEMBLY (Made up of 2-2 Bolt Insert Assemblies)

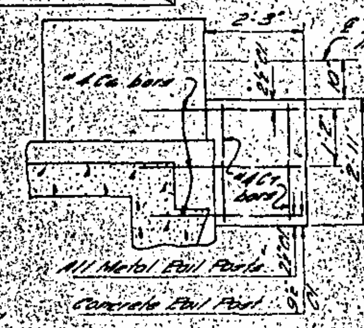


END ELEVATION — ELEVATION B-B

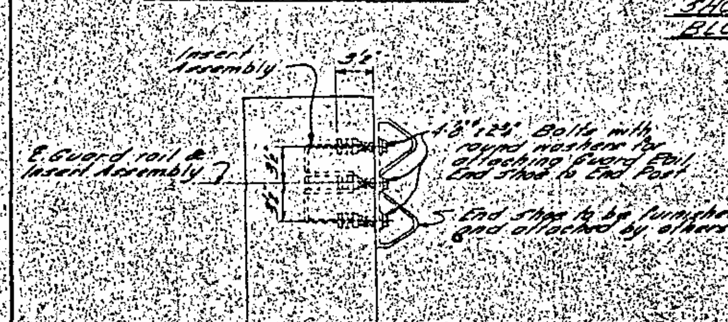
GUARD RAIL ANCHORAGE - TYPE 2



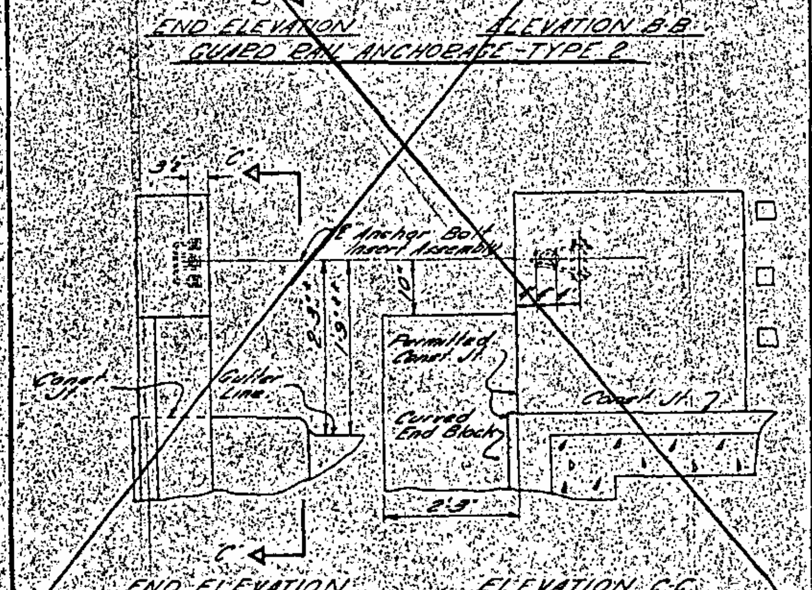
TOP VIEW - END POST



ELEVATION - END POST SHOWING CURVED END BLOCK



PART END VIEW OF END POST WITH GUARD RAIL END SHOE ATTACHED



END ELEVATION — ELEVATION C-C

GUARD RAIL ANCHORAGE - TYPE 3

BILL OF MATERIAL FOR 1-CURVED END BLOCK

Bar	No.	Size	Length	Weight
C6	6	#4	3'-7"	14
C7	4	#4	2'-7"	7
	Reinforcing Steel			21 lbs.
	Class AA Concrete			.2 C.Y.
Quantities for 2 Curved End Blocks	Reinforcing Steel			43 lbs.
	Class AA Concrete			.4 C.Y.
Quantities for 3 Curved End Blocks	Reinforcing Steel			64 lbs.
	Class AA Concrete			.6 C.Y.
Quantities for 4 Curved End Blocks	Reinforcing Steel			85 lbs.
	Class AA Concrete			.8 C.Y.

~~NOTE: CURVED END BLOCKS ARE TO BE CAST ONLY AT END POSTS WHERE GUARDRAIL IS TO BE ATTACHED~~

Curved End Blocks and Guardrail Attachment required at all end posts.

GENERAL NOTES

The cost of the 4 Bolt Insert Assembly Unit consisting of the Insert Assembly and 4-3/4"x2 1/4" bolts with washers complete in place shall be included in the unit contract price bid for Class AA Concrete.

The excavation and backfill for curved end block will not be measured or paid for as a separate item. The entire cost of this work shall be included in the unit price bid for Class AA Concrete.

The anchor unit shall be assembled in the shop. Bolt threads may be recut as necessary to insure fit.

The 3/4" bolts and washers shall conform to the requirements of A.S.T.M. A307 and shall be galvanized to conform to the requirements of A.S.T.M. A153.

At the contractors option stainless steel bolts and washers may be used as an alternate for the 3/4" galvanized bolts and washers. They shall conform to or exceed the mechanical requirements of A.S.T.M. A307. The use of this alternate shall be approved by the Engineer.

The threaded steel inserts shall conform to the requirements of A.S.T.M. A108 with a minimum tensile strength of 60000 psi.

2'-3" * For 6" Curb & Gutter approaching bridge when offset distance from bridge end post to face of curb is over 9".

1'-9" ** For no Curb & Gutter and 6" Curb & Gutter approaching bridge when offset distance from bridge end post to face of curb is 9" or less.

ASSEMBLED BY: [signature]
CHECKED BY: [signature]
DRAWN BY: H.L. Hollingsworth DATE 10-70
CHECKED BY: [signature] DATE 10-70

Rev. 1: Revised to change notes concerning height of Anchor Bolt Insert Assembly.

Version No 5

PROJECT NO. 8.1161706

NASH COUNTY

STATION: 2434+61; 2101+96; 7+95.58 S.R. 1524

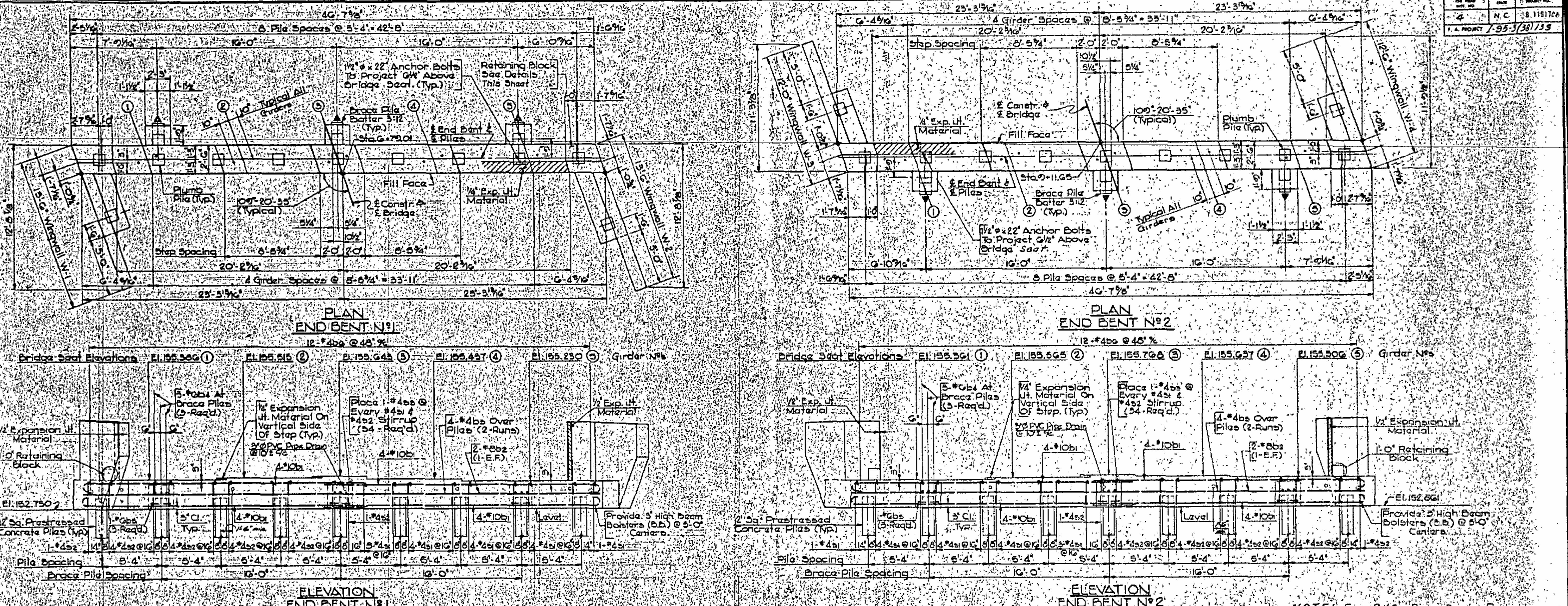
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

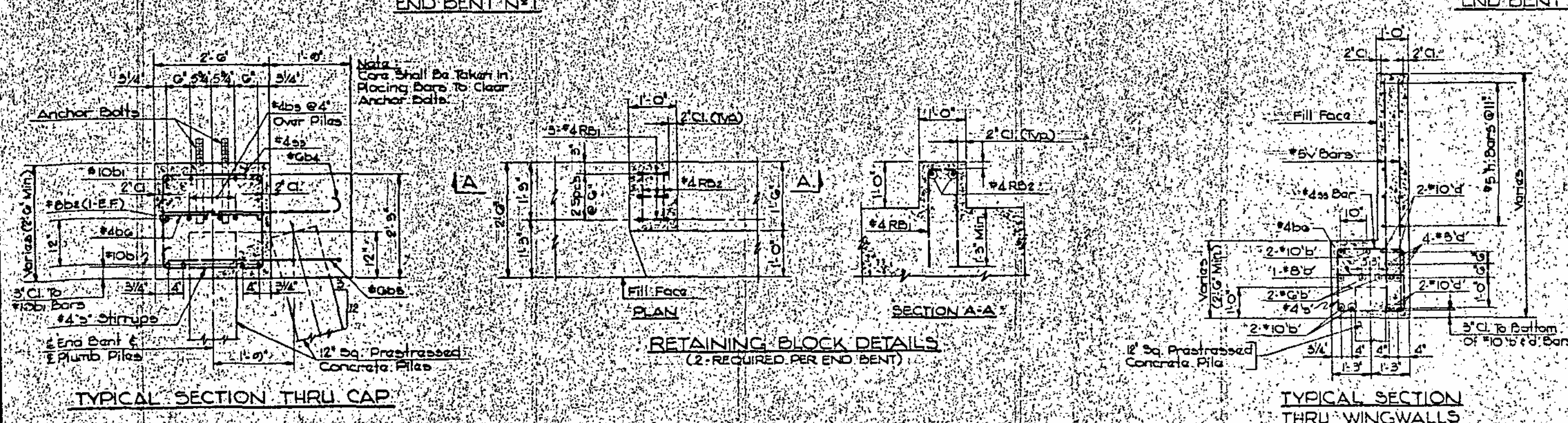
STANDARD GUARD RAIL ANCHORAGE FOR BRIDGE END POST

OCTOBER 1973

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1	[illegible]	[illegible]			
2					





NOTE: For P.V.C. Pipe Drain Details See Bridge Approach Slabs.

For 12" sq. Prestressed Concrete Pile standard, See Bridge at Sta. 2240+17.23 NBL

For Bill of Material See Sheet 2 of 2.

PROJECT NO. 8.1151706

NASH COUNTY

STATION: 2434+61.21 I-95
7+95.58 S.R. 1524

Sheet 1 of 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

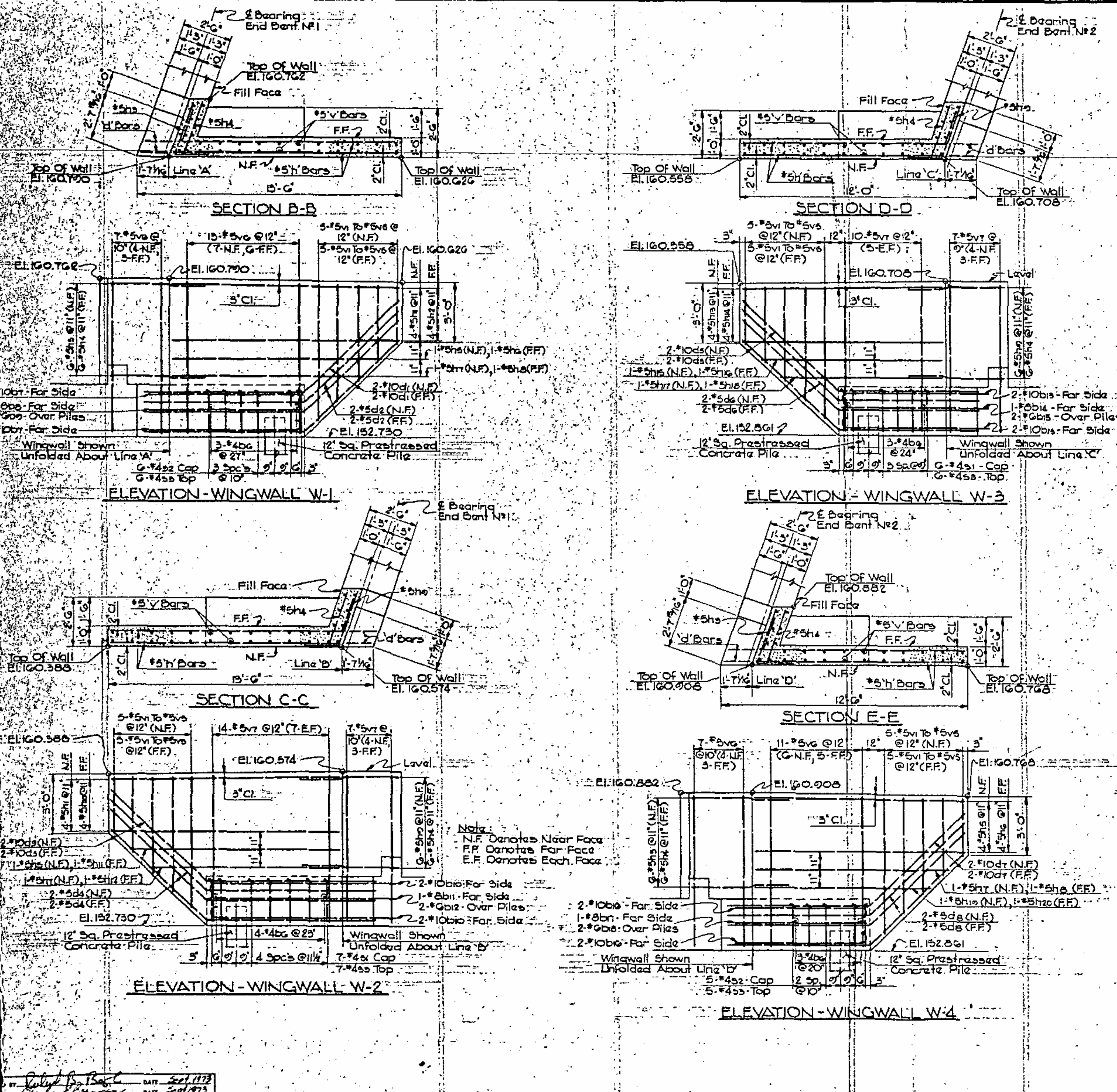
S. R. 1524 UNDERPASS
SUBSTRUCTURE
END BENTS NO. 1 & NO. 2

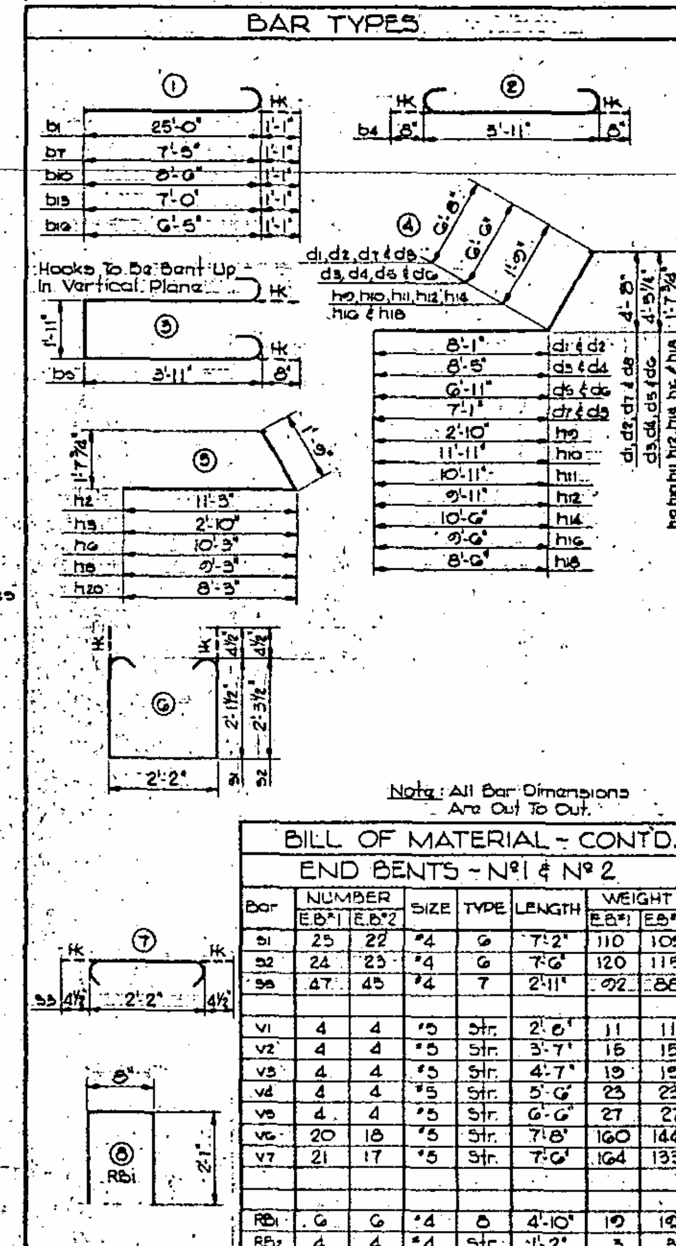
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

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

S-71

CHECKED BY: Robert B. Bear DATE Sept 1973
DRAWN BY: [illegible] DATE Sept 1973





BILL OF MATERIAL

END BENTS - Nº1 & Nº2

BAR	NUMBER E.B.#1	NUMBER E.B.#2	SIZE	TYPE	LENGTH	WEIGHT E.B.#1	WEIGHT E.B.#2
b1	16	16	#10	1	26'-1"	1,796	1,796
b2	2	2	#8	Str.	46'-4"	247	247
b3	8	8	#4	Str.	23'-10"	127	127
b4	9	9	#6	2	5'-9"	71	71
b5	3	3	#6	3	11'-1"	50	50
b6	19	18	#4	Str.	2'-2"	27	26
b7	4	–	#10	1	8'-6"	146	–
b8	1	–	#8	Str.	7'-5"	20	–
b9	2	–	#6	Str.	7'-9"	23	–
b10	4	–	#10	1	9'-7"	105	–
b11	1	–	#8	Str.	8'-7"	23	–
b12	2	–	#6	Str.	8'-7"	26	–
b13	–	4	#10	1	8'-1"	–	139
b14	–	1	#8	Str.	7'-1"	–	19
b15	–	2	#6	Str.	7'-1"	–	21
b16	–	4	#10	1	7'-6"	–	129
b17	–	1	#8	Str.	6'-5"	–	17
b18	–	2	#6	Str.	6'-9"	–	20
d1	4	–	#10	4	14'-5"	248	–
d2	4	–	#5	4	14'-5"	60	–
d3	4	–	#10	4	14'-11"	257	–
d4	4	–	#5	4	14'-11"	62	–
d5	–	4	#10	4	13'-5"	–	231
d6	–	4	#5	4	13'-5"	–	56
d7	–	4	#10	4	15'-5"	–	231
d8	–	4	#5	4	15'-5"	–	56
h1	8	–	#5	Str.	11'-7"	97	–
h2	4	–	#5	5	13'-0"	54	–
h3	6	6	#5	5	4'-7"	29	29
h4	12	12	#5	Str.	2'-10"	35	35
h5	2	4	#5	Str.	10'-7"	22	44
h6	1	4	#5	5	12'-0"	13	50
h7	2	1	#5	Str.	9'-7"	20	10
h8	1	1	#5	5	11'-0"	11	11
h9	6	6	#5	4	4'-7"	29	29
h10	4	–	#5	4	13'-8"	57	–
h11	1	–	#5	4	12'-8"	13	–
h12	1	–	#5	4	11'-8"	12	–
h13	–	4	#5	Str.	10'-2"	–	42
h14	–	4	#5	4	12'-3"	–	51
h15	–	1	#5	Str.	9'-2"	–	10
h16	–	1	#5	4	11'-3"	–	12
h17	–	1	#5	Str.	8'-2"	–	9
h18	–	1	#5	4	10'-3"	–	11
h19	–	1	#5	Str.	8'-7"	–	9
h20	–	1	#5	5	10'-0"	–	10

BILL OF MATERIAL - CONT'D.

END BENTS - Nº1 & Nº2

Bar	NUMBER E.B.#1	NUMBER E.B.#2	SIZE	TYPE	LENGTH	WEIGHT E.B.#1	WEIGHT E.B.#2
s1	25	22	#4	6	7'-2"	110	105
s2	24	23	#4	6	7'-6"	120	115
s3	47	45	#4	7	2'-11"	92	88
v1	4	4	#5	Str.	2'-6"	11	11
v2	4	4	#5	Str.	3'-7"	15	15
v3	4	4	#5	Str.	4'-7"	19	19
v4	4	4	#5	Str.	5'-6"	23	23
v5	4	4	#5	Str.	6'-6"	27	27
v6	20	18	#5	Str.	7'-8"	160	144
v7	21	17	#5	Str.	7'-6"	164	133
RB1	6	6	#4	8	4'-10"	19	19
RB2	4	4	#4	Str.	1'-2"	3	3
Reinforcing Steel					Lbs	4,503	4,300
Class 'A' Concrete *					C.Y.	20.3	19.1
12" Square Prestressed Concrete Piles					Nº	14	14
					L.F.	292	304

* Concrete Displaced By Pile Caps Has Been Deducted.

PROJECT NO. 8.1161706

NASH **COUNTY**

STATION: 2434+61.21 I-95 = 7+95.58 S.R. 1524

Sheet 2 of 2

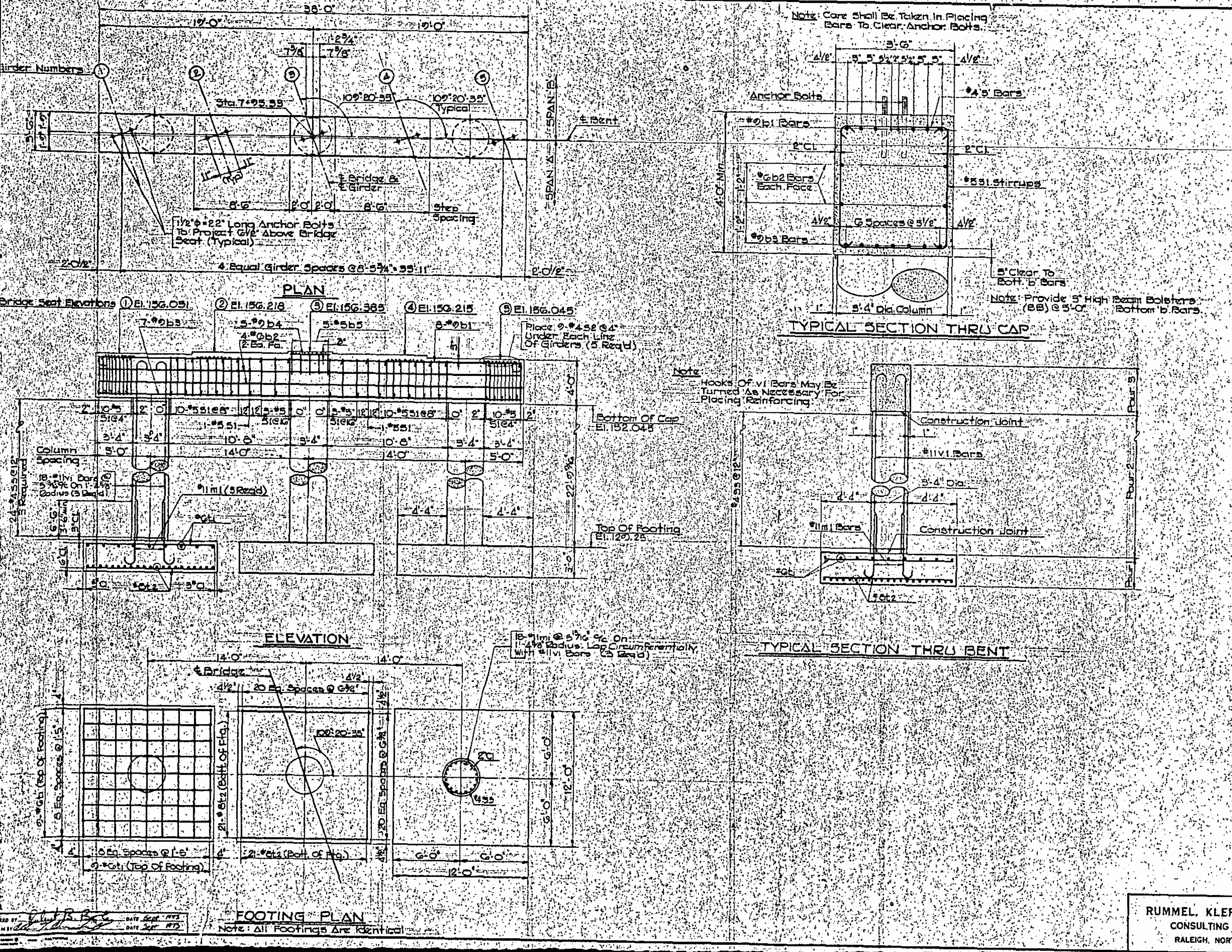
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

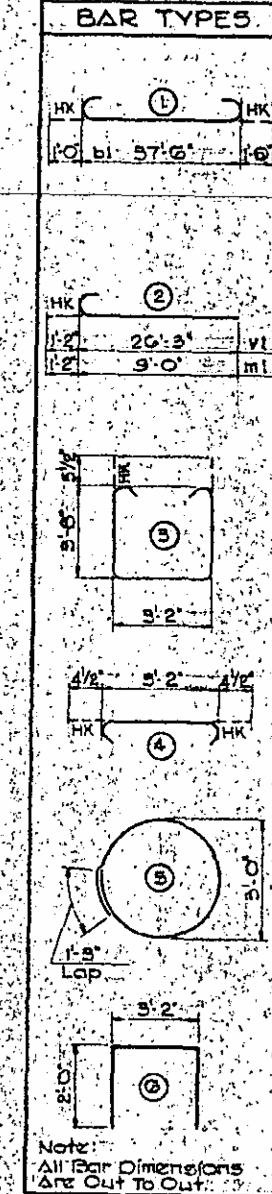
S. R. 1524 UNDERPASS
SUBSTRUCTURE
END BENT DETAILS

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-72
1			3			TOTAL SHEETS

Sept 1973





FED. ROAD DIST. NO.	STATE	PROJECT NO.
4	N.C.	8.1161706
F.A. PROJECT	I-95-3(37)139	

BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
b1	8	#9	1	39'-6"	1074
b2	4	#6	Str.	37'-6"	225
b3	7	#9	Str.	37'-6"	892
b4	5	#9	Str.	3'-6"	59
b5	5	#5	6	7'-2"	37
m1	54	#11	2	10'-2"	2,917
s1	48	#5	3	11'-5"	572
s2	45	#4	4	3'-11"	118
s3	72	#4	5	10'-8"	513
t1	54	#6	Str.	11'-6"	933
t2	126	#8	Str.	11'-6"	3,869
v1	54	#11	2	27'-5"	7,866

Reinforcing	Lbs.	19,075
CLASS 'A' CONCRETE BREAKDOWN		
Pour #1-Footings	C.Y.	48.0
Pour #2-Columns	C.Y.	22.1
Pour #3-Cap	C.Y.	20.2
TOTAL	C.Y.	90.3

Computed foundation bearing = 3½ Ton per sq ft.

PROJECT NO. 8.1161706

NASH COUNTY

STATION: 2434+61.21 I-95 = 7+95.58 S.R. 1524

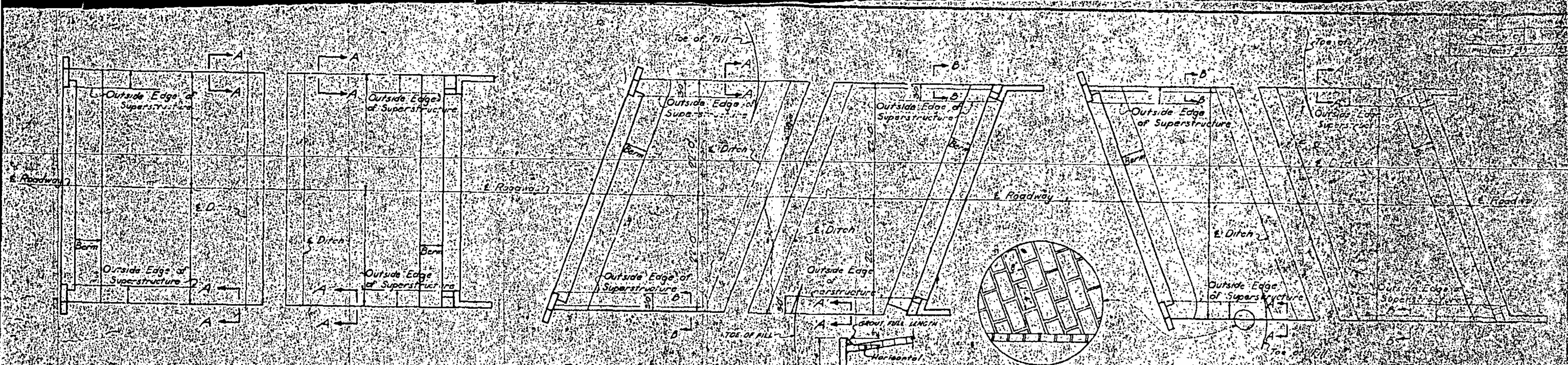
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

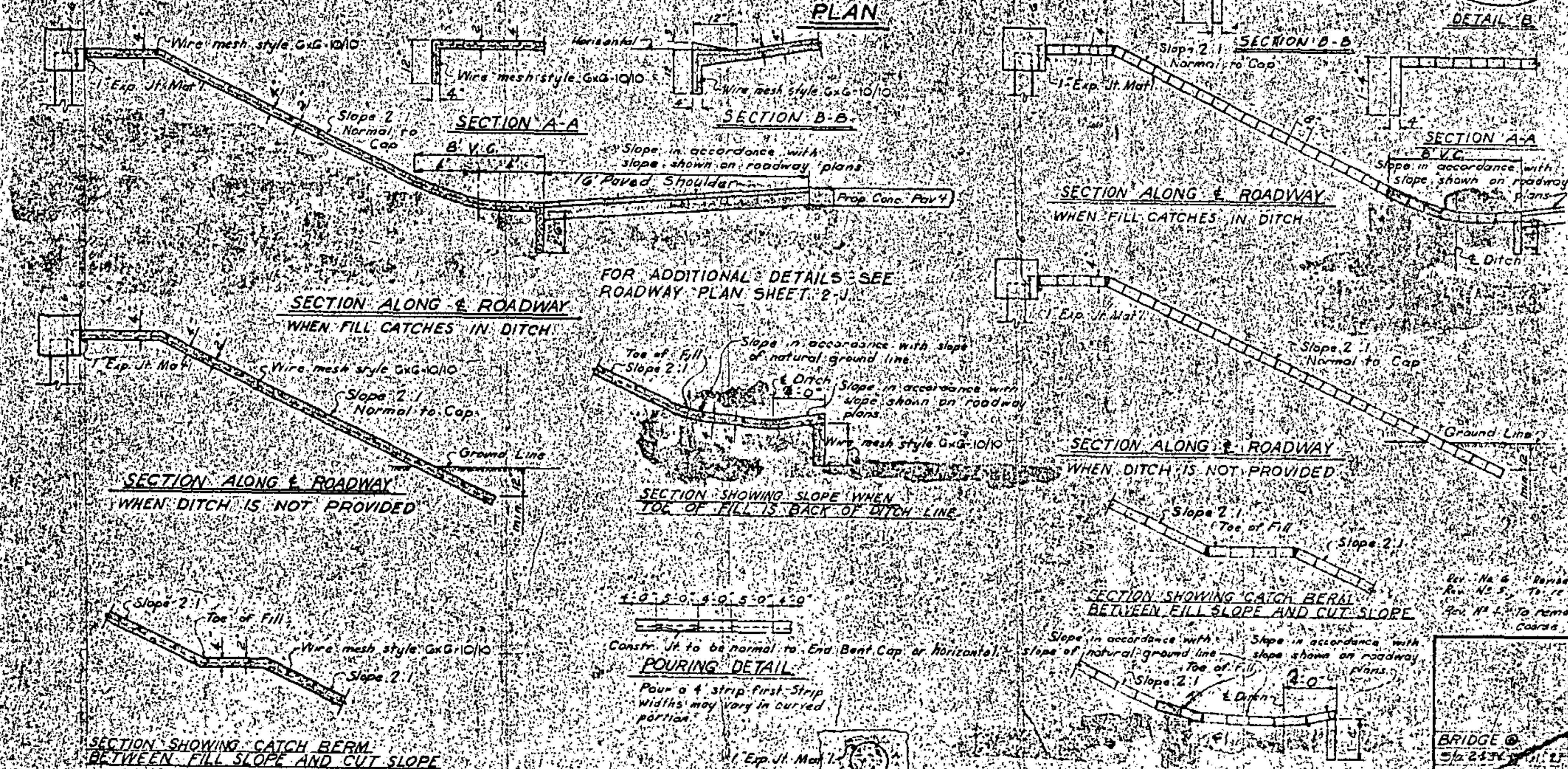
S. R. 1524 UNDERPASS
SUBSTRUCTURE
BENT NO. 1

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS

SHEET NO. S-73





Wire mesh style 6x6-10/10
1" Exp. Jt. Mat'l
Slope 2:1 Normal to Cap
SECTION A-A
Horizontal
Wire mesh style 6x6-10/10
4"
SECTION B-B
12"
B' V.C.
Slope in accordance with slope shown on roadway plans.
16' Paved Shoulder
Prop. Conc. Pav't
SECTION ALONG ℄ ROADWAY
WHEN FILL CATCHES IN DITCH
FOR ADDITIONAL DETAILS SEE ROADWAY PLAN SHEET 2-J
1" Exp. Jt. Mat'l
Wire mesh style 6x6-10/10
Slope 2:1 Normal to Cap
Ground Line
SECTION ALONG ℄ ROADWAY
WHEN DITCH IS NOT PROVIDED
Toe of Fill
Slope 2:1
Slope in accordance with slope of natural ground line
℄ Ditch
4'-0"
Slope in accordance with slope shown on roadway plans.
Wire mesh style 6x6-10/10
SECTION SHOWING SLOPE WHEN TOE OF FILL IS BACK OF DITCH LINE
Slope 2:1
Toe of Fill
Wire mesh style 6x6-10/10
Slope 2:1
SECTION SHOWING CATCH BERM BETWEEN FILL SLOPE AND CUT SLOPE
4'-0" 5'-0" 4'-0" 5'-0" 4'-0"
Constr. Jt. to be normal to End Bent Cap or horizontal.
POURING DETAIL
Pour a 4' strip first. Strip widths may vary in curved portion.
1" Exp. Jt. Mat'l
Slope 2:1 Normal to Cap
SECTION A-A
B' V.C.
Slope in accordance with slope shown on roadway plans.
SECTION ALONG ℄ ROADWAY
WHEN FILL CATCHES IN DITCH
℄ Ditch
1" Exp. Jt. Mat'l
Slope 2:1 Normal to Cap
Ground Line
SECTION ALONG ℄ ROADWAY
WHEN DITCH IS NOT PROVIDED
Slope 2:1
Toe of Fill
Slope 2:1
SECTION SHOWING CATCH BERM BETWEEN FILL SLOPE AND CUT SLOPE
Slope in accordance with slope of natural ground line
Slope in accordance with slope shown on roadway plans.
Toe of Fill
Slope 2:1
℄ Ditch
4'-0"
1" Exp. Jt. Mat'l

NOTES

A 4" concrete slope protection paving shall be placed [illegible] of the protection shall be as shown in the details. [illegible] either type, Alternate "A" or "B", as described [illegible] slope shall be properly shaped and firmly compacted [illegible] shown. The finished surface shall be reasonably smooth and uniform [illegible] more than ½ inch in a distance of 10 feet. Straight edging [illegible] opinion of the Engineer, visual inspection indicates a [illegible]

Alternate "A" shall consist of 4" poured in place concrete [illegible] Concrete shall be Class B. The concrete surface shall be [illegible] finished.

The quantity to be paid for under this item shall be [illegible] measured in place complete and accepted, including [illegible] of protection. (For example "B" pay area for toe [illegible]) The quantity measured as provided for above, shall be paid [illegible] yard for mesh, excavation, backfilling, preparation of slopes, [illegible] tools and incidentals necessary to complete the work.

Alternate "B" shall consist of solid concrete blocks 4" x 8" [illegible] in successive courses will break joints [illegible] with their long axis parallel to the end bent cap with [illegible] than ½" nor more than 1¼" wide between successive [illegible] by pouring a mixture of one part Portland cement [illegible] enable the mixture to be poured through a spout. The concrete blocks shall be cast to accurate dimensions [illegible] and shall be manufactured of materials to produce a concrete [illegible] p.s.i. at age of 28 days. No broken blocks [illegible] along each side of the paving down the slope. Care [illegible] a uniform workmanlike joint and surface. Method of measurement and basis of payment shall [illegible]

ALTERNATE "A" wire mesh reinforcing to be [illegible] mesh to lap at least 6". Slope Protection to be poured [illegible] Pouring Detail. The cost of wire mesh to be included [illegible] yard for 4" concrete slope protection.

The same type of slope protection shall be used under both ends of any one bridge.

Rev. No. 6 — Revise Section B-B to show 3" rise from horizontal. By [illegible]
Rev. No. 5 — To re-word note regarding surface finish requirements. By [illegible]
Rev. No. 4 — To remove that portion of the note calling for standard size [illegible] coarse aggregate. By VHS [illegible]

	4" Conc. Slope Protection or 4" Conc. Block Slope Protect.		Wire Mesh 60" Wide
	S.Y.		
BRIDGE @	E.B. 1	E.B. 2	Approx. L.F.
Sta. 243+[illegible]	211	209	840

STATE HIGHWAY [illegible]
SLOPE PROTECTION [illegible]

ASSEMBLED BY [illegible] DATE Sept. 23
CHECKED BY [illegible] DATE
DRAWN BY W. V. Bolo DATE Mar. 9, '64
CHECKED BY G.T. PHILLIPS DATE MAR. 10, '64

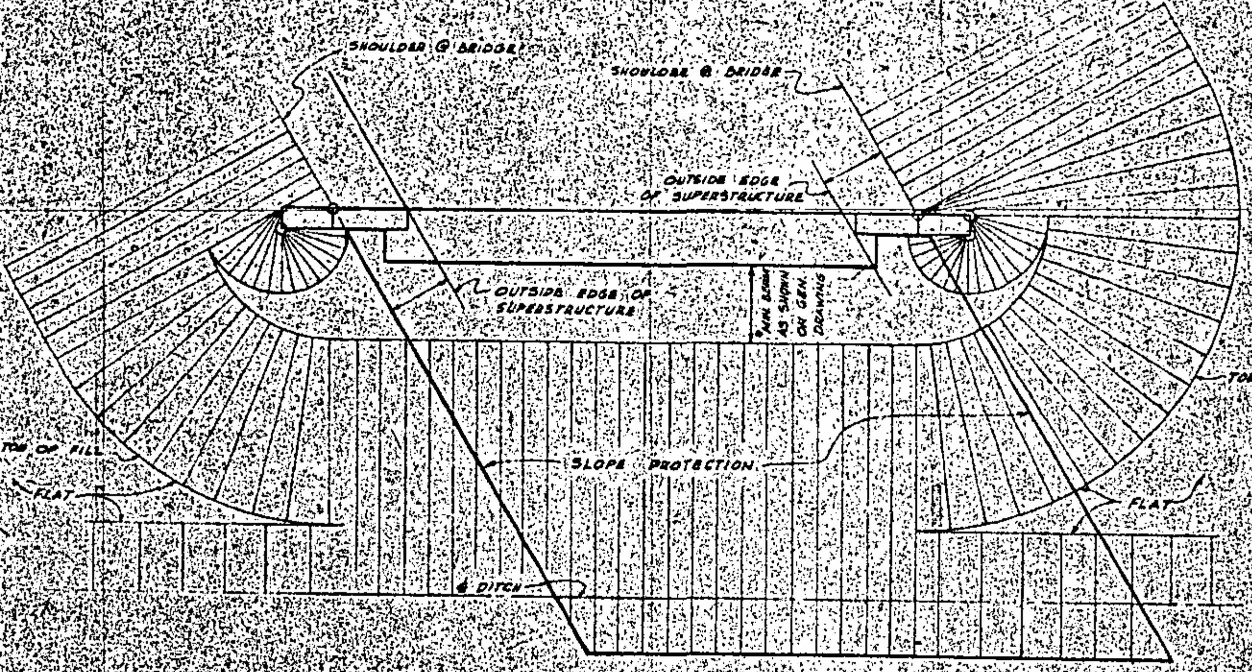
DETAILS FOR ALTERNATE "A"

Rev. No. 2 — To eliminate 90° corner at toe of slope for [illegible] access, add Sect. B-B, and to allow alternate for construction jts.

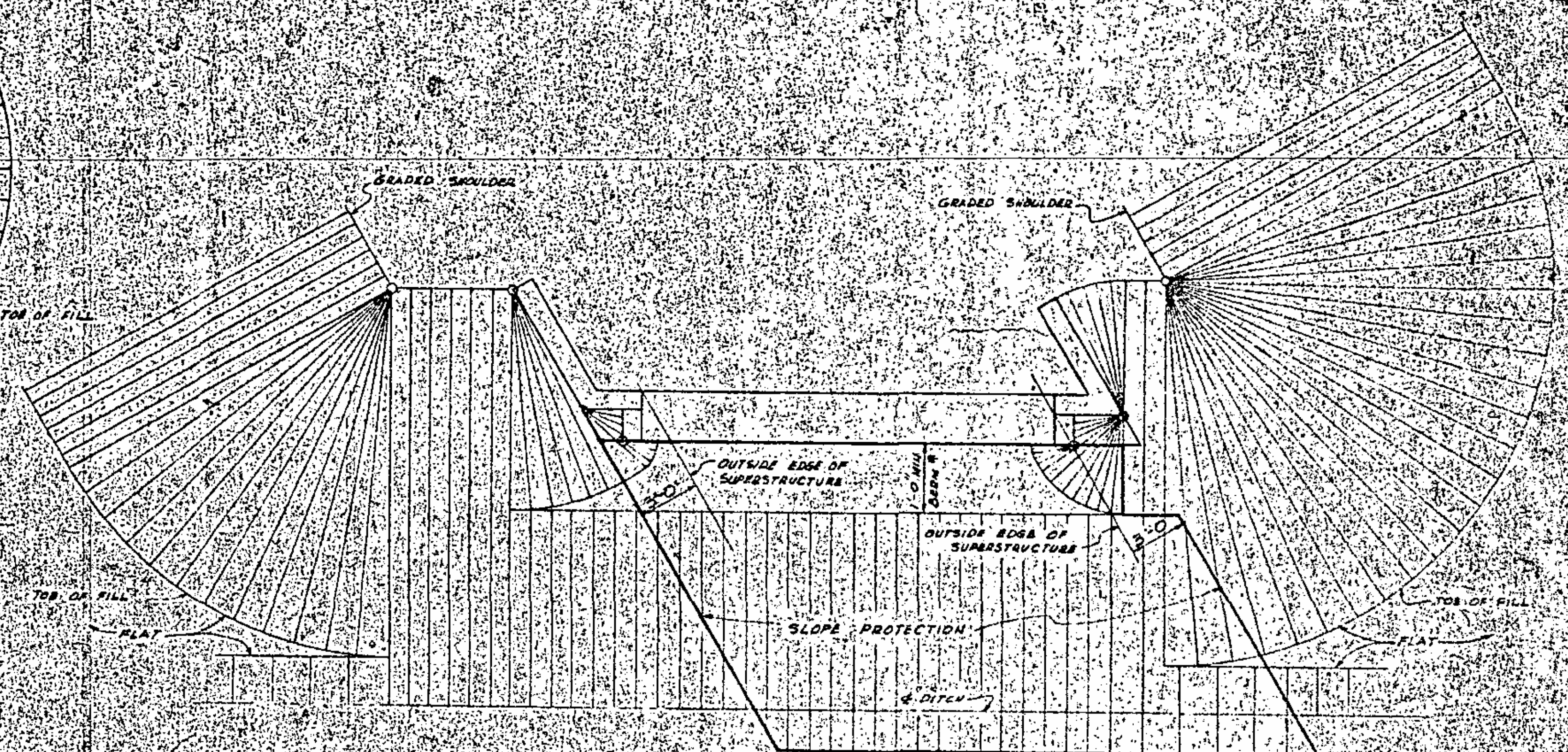
PLAN WHERE CONC. OR CONC. BLOCK SLOPE PROTECT. MUST BE PLACED AROUND A BENT COLUMN

DETAILS FOR ALTERNATE "B"

Rev. No. 3 — To take out dimensions from outside edge of superstructure to outside slope protection.
Rev. No. 1 — To show berm 1'-6" above bottom of cap [illegible]

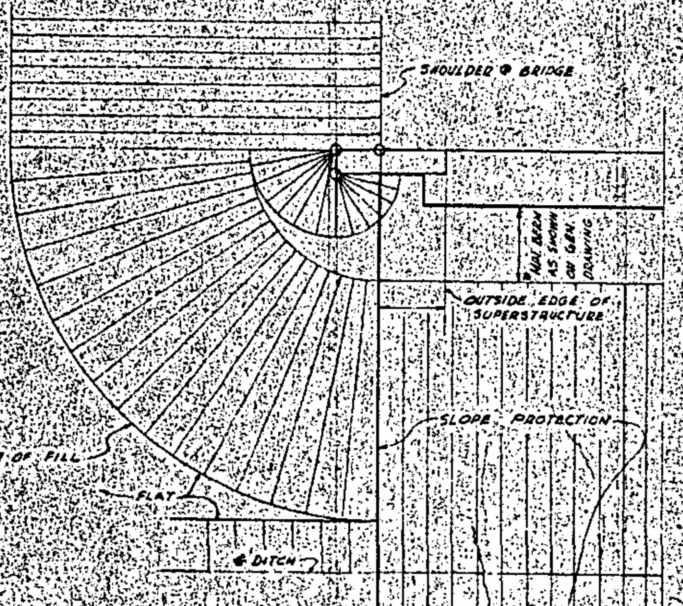


END BENT WITH EAR WALLS - SKEWED



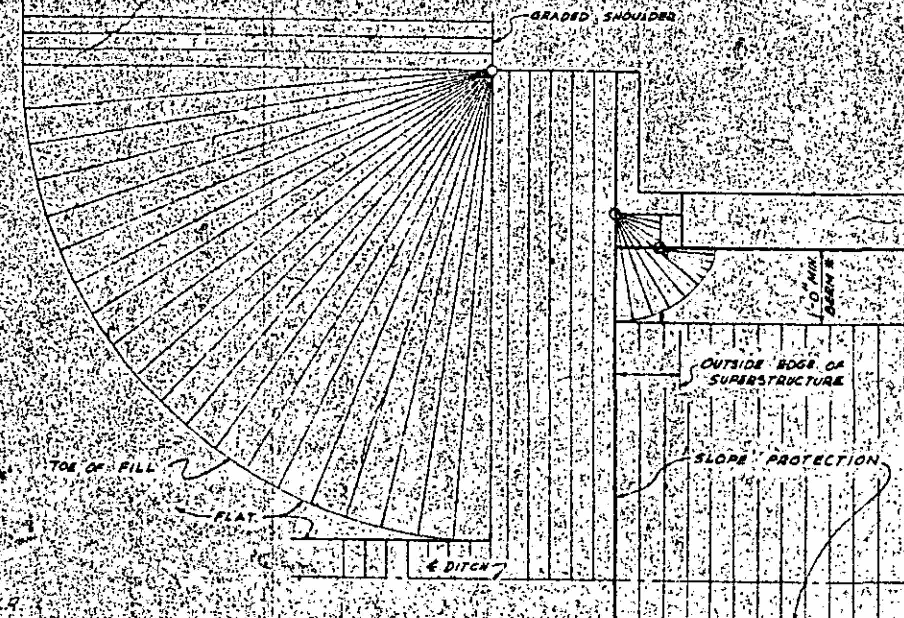
END BENT WITH SWEPT BACK WINGS - SKEWED

* NOTE: VARY BERM WIDTH AS NECESSARY TO FIT DITCH ALIGNMENT.



HALF PLAN END BENT WITH EAR WALLS - 90°

NOTE: OTHER SIDE SIMILAR



HALF PLAN END BENT WITH SWEPT BACK WINGS - 90°

NOTE: OTHER SIDE SIMILAR

PROJECT NO. 8.1161061

NASH COUNTY

STATION: 243+61.21 I-95
7+95.50 S.R. 1524

SHEET 2 OF 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

STANDARD
SLOPE PROTECTION PAVING
DETAILS

FEBRUARY 1964

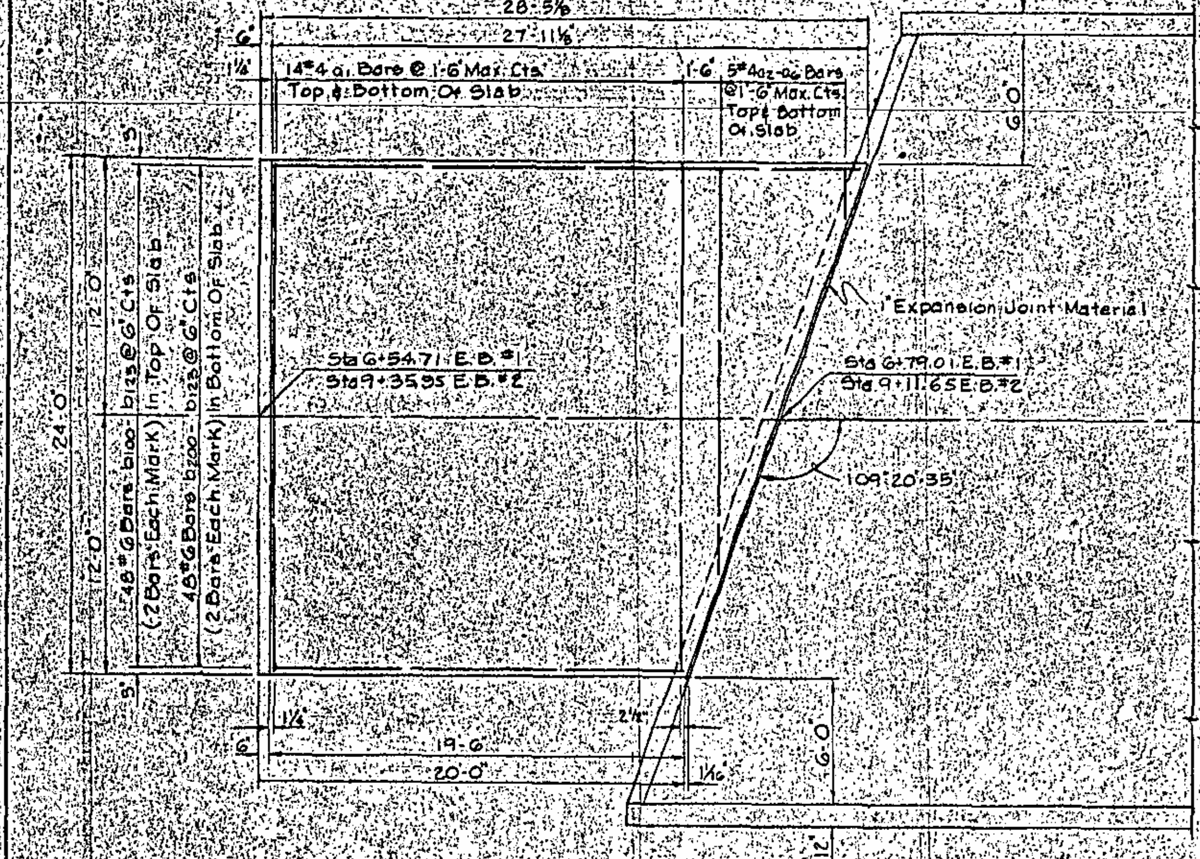
REVISIONS			
NO.	BY	DATE	
1	E.G.A.	10-27-64	
2	E.G.A.	2-5-65	
3	O.H.E.	10-3-68	

Rev No 3 To change min. berm from 3'-6" to 1'-0" on End Bents with Swept Back Wings. ✓ O.W.R.
REV. NO 2: TO ELIMINATE 90° CORNER AT TOE OF SLOPE FOR SKEWED BRIDGES. ✓ G.T.P.
REV. NO 1: TO TAKE OUT DIMENSIONS FROM OUTSIDE EDGE OF SUPERSTRUCTURE TO OUTSIDE SLOPE PROTECTION. ✓ E.G.A.

ASSEMBLED BY: [signature] DATE: Sept 73
CHECKED BY: [signature] DATE: Sept 73
DRAWN BY: E.G. ALFORD JR. DATE: FEB. 64
CHECKED BY: O.T. PHILLIPS DATE: MARCH, 64

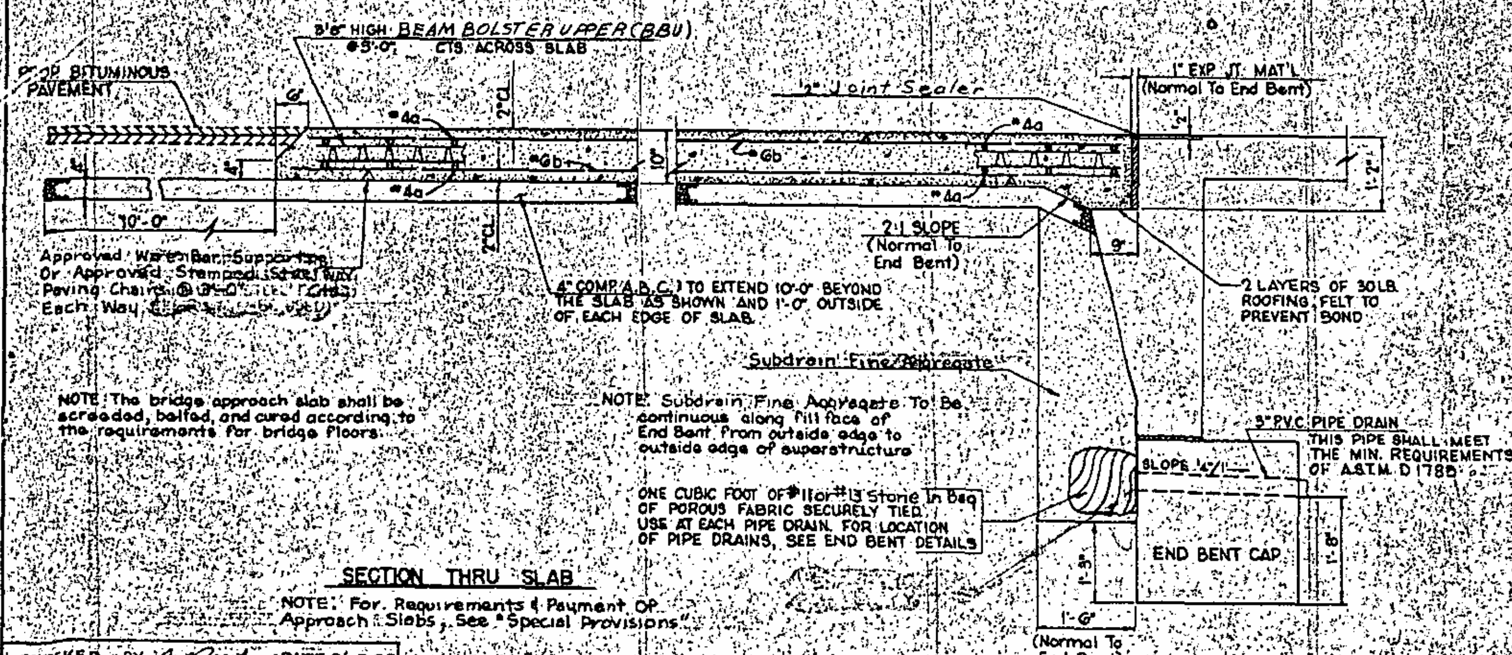
FED. ROAD DIV. NO.	STATE	PROJECT NO.
4	N.C.	8.1161706

F.A. PROJECT F-95-3(38)139



PLAN @ BENT NO. 1

Approach Slab @ End Bent No. 2 Similar By Rotation



NOTE: The bridge approach slab shall be screeded, belted, and cured according to the requirements for bridge floors.

NOTE: Subdrain Fine Aggregate To Be continuous along fill face of End Bent from outside edge to outside edge of superstructure.

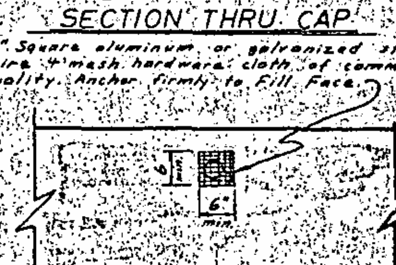
ONE CUBIC FOOT OF #11 or #13 Stone In Bag OF POROUS FABRIC SECURELY TIED. USE AT EACH PIPE DRAIN. FOR LOCATION OF PIPE DRAINS, SEE END BENT DETAILS.

SECTION THRU SLAB

NOTE: For Requirements & Payment Of Approach Slabs, See "Special Provisions".

SECTION THRU CAP

6" Square aluminum or galvanized steel wire 4 mesh hardware cloth of commercial quality. Anchor firmly to Fill Face.



VIEW Y-Y

Note: No seperate payment will be made for furnishing and installing the P.V.C. plastic pipe drains, hardware cloth and fasteners. The entire cost of this work shall be included in the unit contract price bid for the several pay items.

PIPE DRAIN DETAILS

BILL OF MATERIAL

FOR ONE UNIT — TWO REQUIRED

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
a1	28	4	Str.	23'-8"	443	b218	2	6	Str.	26'-0"	78
a2	2	|	|	19'-4"	26	b219				26'-9"	79
a3	|	|	|	15'-1"	20	b220				26'-9"	80
a4	|	|	|	10'-10"	14	b221				27'-1"	81
a5	|	|	|	6'-7"	9	b222				27'-5"	82
a6	2	4	Str.	2'-3"	3	b223	2	6	Str.	27'-9"	83
b100	2	6	Str.	19'-4"	58						
b101				19'-8"	59	Quantities For One Unit					
b102				20'-0"	60	Reinforcing Steel Lbs. = 3408					
b103				20'-4"	61	Class A-A Conc. Cu. Yds. = 18.2					
b104				20'-8"	62						
b105				21'-1"	63	Two Units Req'd @ This Structure					
b106				21'-5"	64	Location					
b107				21'-9"	65	Total Quantities					
b108				22'-1"	66	Reinforcing Steel Lbs. = 7816					
b109				22'-5"	67	Class A-A Conc. Cu. Yds. = 36.4					
b110				22'-10"	69						
b111				23'-2"	70						
b112				23'-6"	71						
b113				23'-10"	72						
b114				24'-3"	73						
b115				24'-7"	74						
b116				24'-11"	75						
b117				25'-3"	76						
b118				25'-7"	77						
b119				26'-0"	78						
b120				26'-4"	79						
b121				26'-8"	80						
b122				27'-0"	81						
b123	2	6	Str.	27'-4"	82						
b200	2	6	Str.	19'-9"	59						
b201				20'-1"	60						
b202				20'-5"	61						
b203				20'-9"	62						
b204				21'-1"	63						
b205				21'-6"	65						
b206				21'-10"	66						
b207				22'-2"	67						
b208				22'-6"	68						
b209				22'-10"	69						
b210				23'-3"	70						
b211				23'-7"	71						
b212				23'-11"	72						
b213				24'-3"	73						
b214				24'-8"	74						
b215				25'-0"	75						
b216				25'-4"	76						
b217	2	6	Str.	25'-8"	77						

PROJECT NO. 8.1161706

NASH COUNTY

STATION 2494+61.21 I-95
7+95.58 S.R. 1524

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

BRIDGE APPROACH SLAB FOR FLEXIBLE PAVEMENT OVERPASS @ S.R. 1524

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-76
1			3			TOTAL SHEETS

CHECKED BY: A. Morid DATE 9-13-73
DRAWN BY: K.E. Hildebran DATE 9-11-73