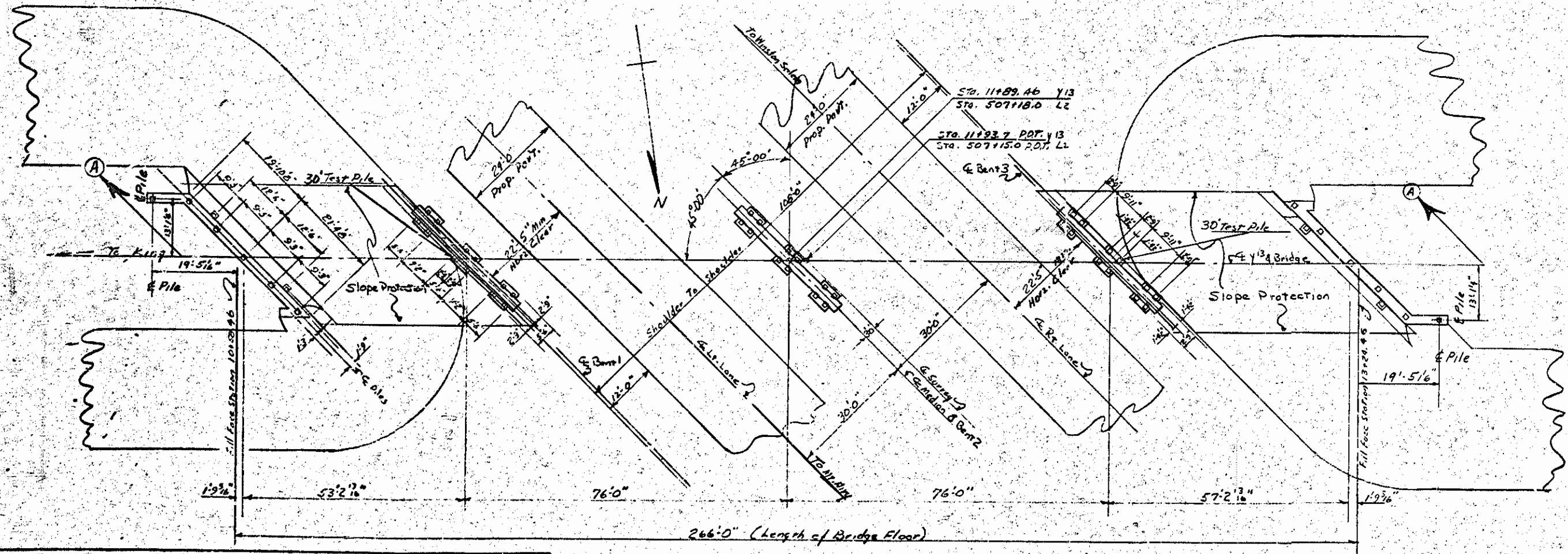


ELEVATION ALONG & OF BRIDGE
END BENTS & BENTS ALONG SECTION AA

NOTES

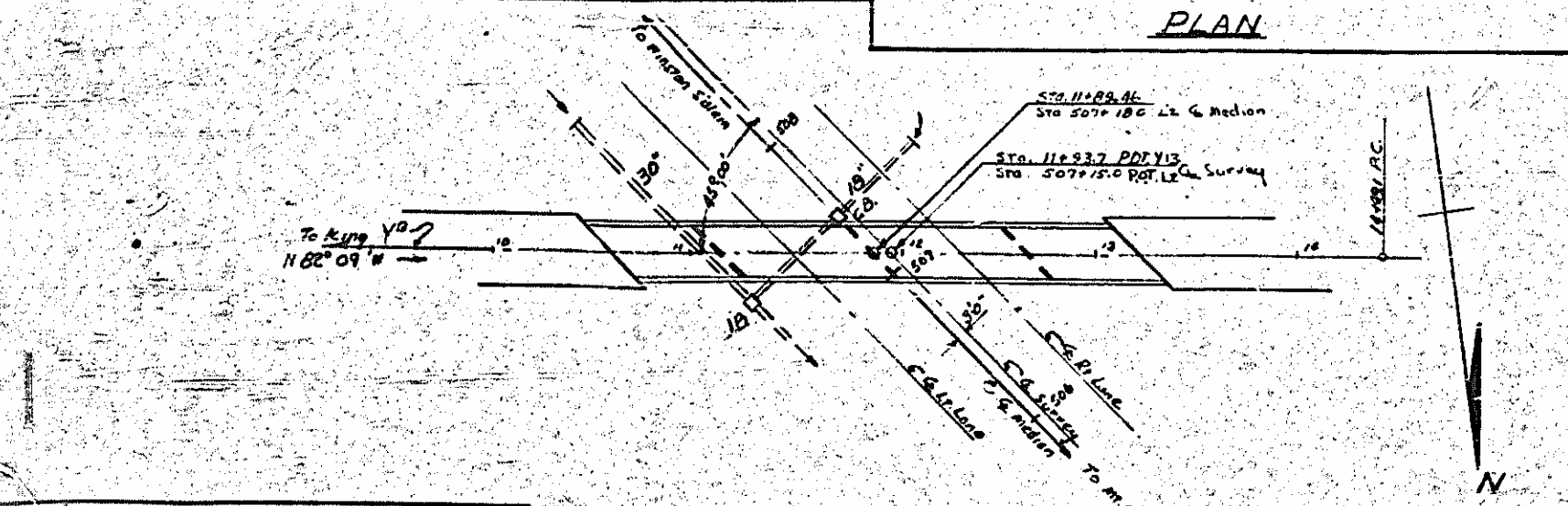
- Assumed Live Load, H 15 (44)
- For other design data and general notes see sheet S.N.
- The contractor will be required to drive two 12" prestressed concrete test piles in place at Bents 1&3 as shown on PLAN. The test piles shall be paid for as linear feet of 12" prestressed concrete piles. The order length for all 12" prestressed concrete piles will be given after the test piles have been driven.
- Piles for End Bents 1&2 and Bents 1-2&3 to be driven to a minimum bearing capacity of 27 tons each.
- End Bent piles to be driven through roadway fill.
- The contractor will be required to excavate to El. 1040.0 at End Bent 1 & El. 1038.0 at End Bent 2 before driving piles. See sheet S.N.
- Work is not to be started on Bents 1-2&3 until the roadway fill on line "L" has been placed by the roadway contractor.
- Unclassified structure excavation for Bents 1-2&3 to be measured from the surface of the roadway fill.
- Bench Marks:
 *53 Nail in base 3" oak 100' Lt. Sta. 504+35 Lz. El. 1025.87
 *54 Nail in power pole 70' Rt. Sta. 509+40 Lz. El. 1042.58

Note: This str. Built as per plan except EB#1. See Section Sheet # 247. C.K. Smith



PLAN

Reel # 751
 Post # 3
 Project No. 8,17542
 SURRY-STOKES COUNTY
 Station: 507+15.0 Lz. 11+93.7 Y13



LOCATION SKETCH

	TOTAL BILL OF MATERIAL								
	CLASS "A" CONCRETE	Reinforcing Steel	STRUCTURAL Steel	12" Prest. Conc. Piles	Unclass. Str. Excavation	4" CONCRETE SLOPE PROTECTION	4" CONCRETE 12" SLOPE PROTECTION	12" Prest. Conc. Pile CUT ON	+10" Top CUT OFF
	C.Y.	Lbs	Approx. lbs.	No.	LF	Sq. Ft.	Sq. Ft.	LF	LF
Superstructure	207.2	42,766	183,500						
End Bent 1	15.388	3,162		8	336	211.94			
Bent 1	29.4	4807		12	480	215	215	24' 4 1/2"	6' 0"
Bent 2	29.4	4807		12	480			0' 10"	0' 10"
Bent 3	29.4	4807		12	480			0' 10"	0' 10"
End Bent 2	15.3	3,162		8	336	227.20		0' 6"	0' 10"
TOTAL	326.048	63,535	183,500	52	1,656	439.14	215	22' 10 1/2"	5' 0"

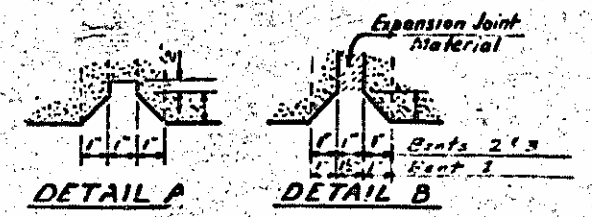
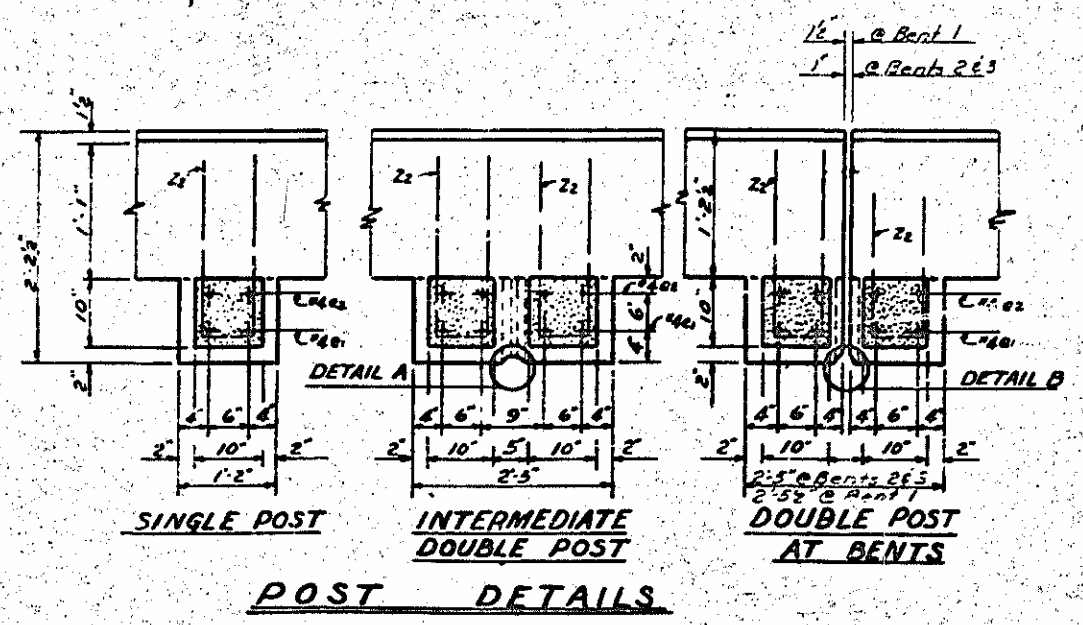
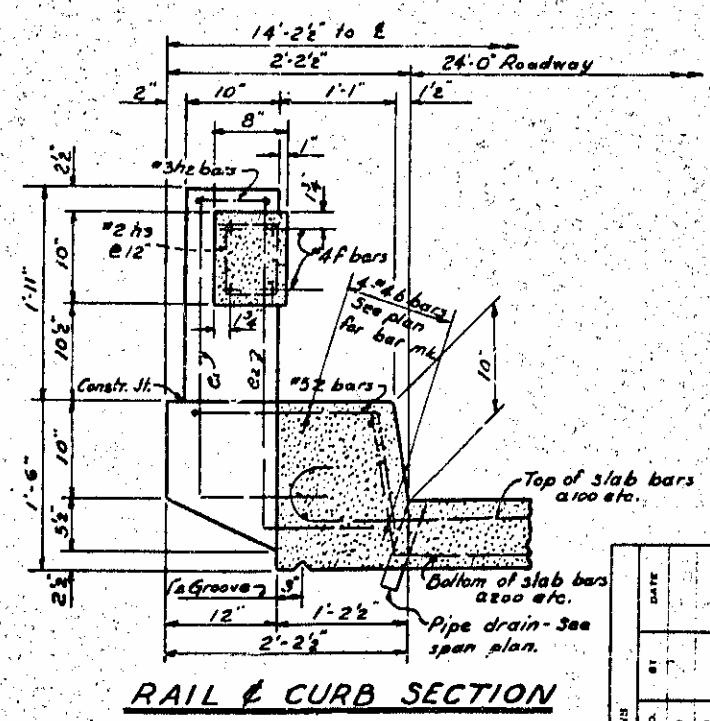
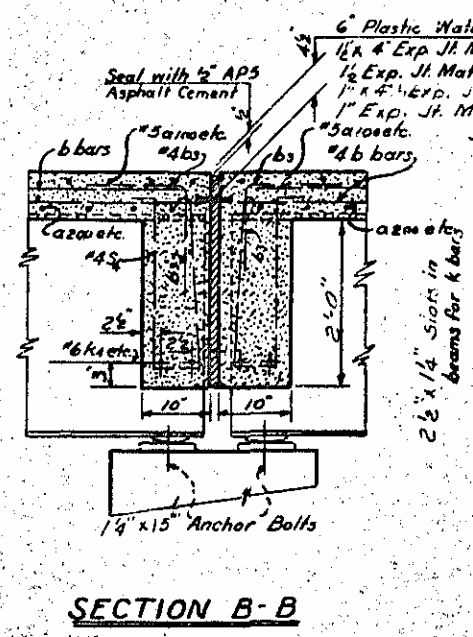
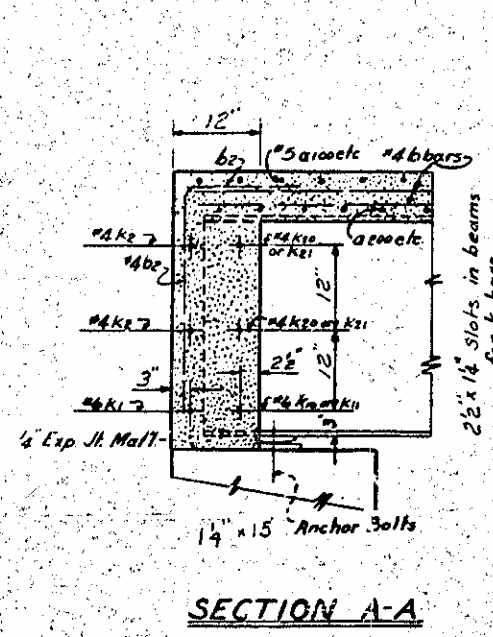
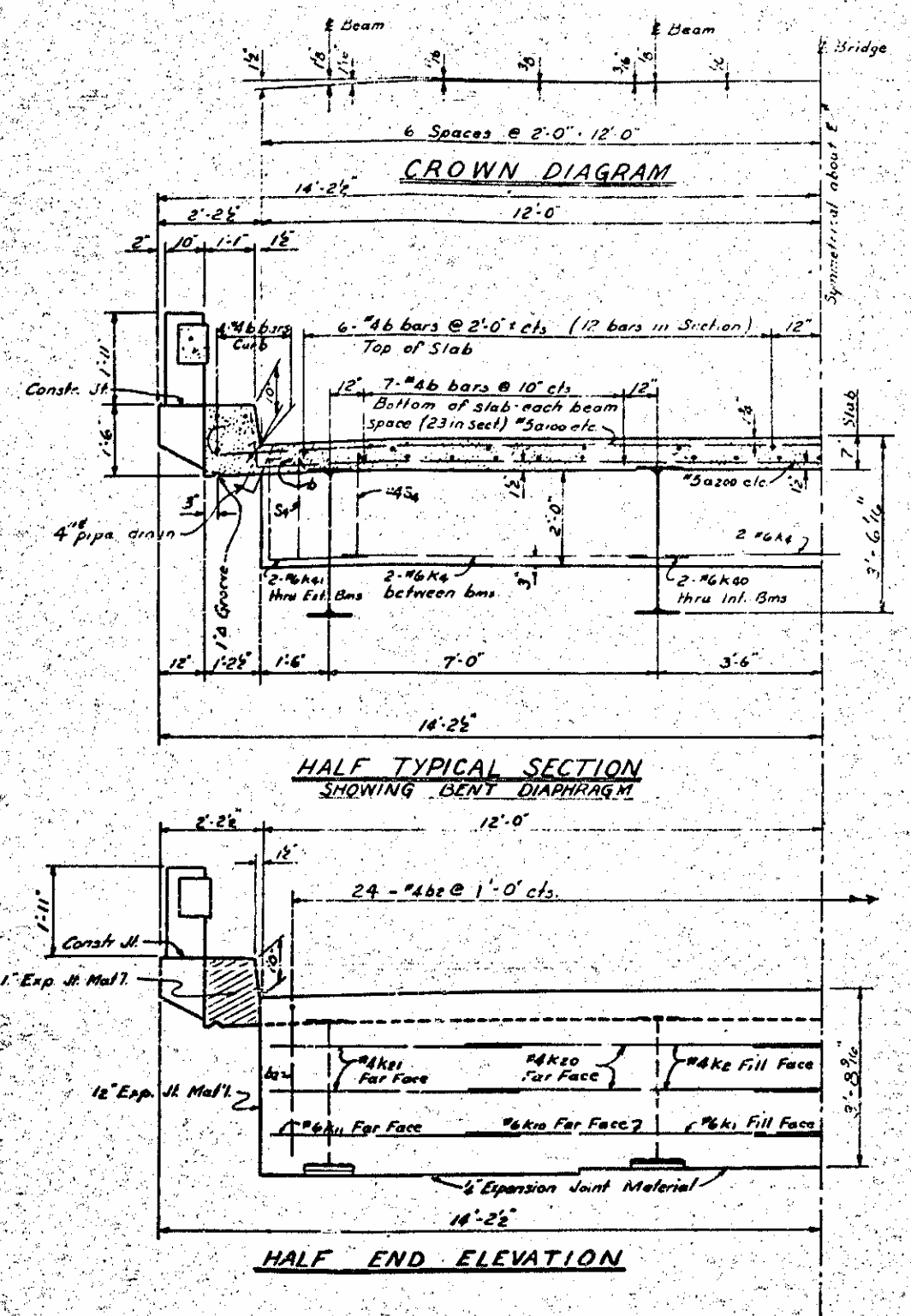
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 GENERAL DRAWING
 BRIDGE OVER PROJECT
 ON MEADOW BROOK DRIVE
 BETWEEN
 KING & TRINITY CHURCH ROAD
 DEC. 1953

DESIGNED BY: R. H. ELLIS
 CHECKED BY: R. H. ELLIS
 DATE: Dec 7, 1953
 DATE: Dec 23, 1953

APPROVED BY: G. W. K...
 DATE: 1/20/54

NOTE

For bars indicated and no bar mark shown, see Concrete Plan for the different spans.



SPECIAL	ASSEMBLED BY: <i>J. H. Forster</i>	DATE: <i>Nov. 1959</i>
STANDARD	DESIGNED BY: <i>J. H. Forster</i>	DATE: <i>Nov. 1959</i>
	DRAWN BY: <i>J. H. Forster</i>	DATE: <i>Nov. 1959</i>
	TRACED BY: <i>J. H. Forster</i>	DATE: <i>Nov. 1959</i>
	CHECKED BY: <i>T. H. Ellis</i>	DATE: <i>Dec. 1959</i>

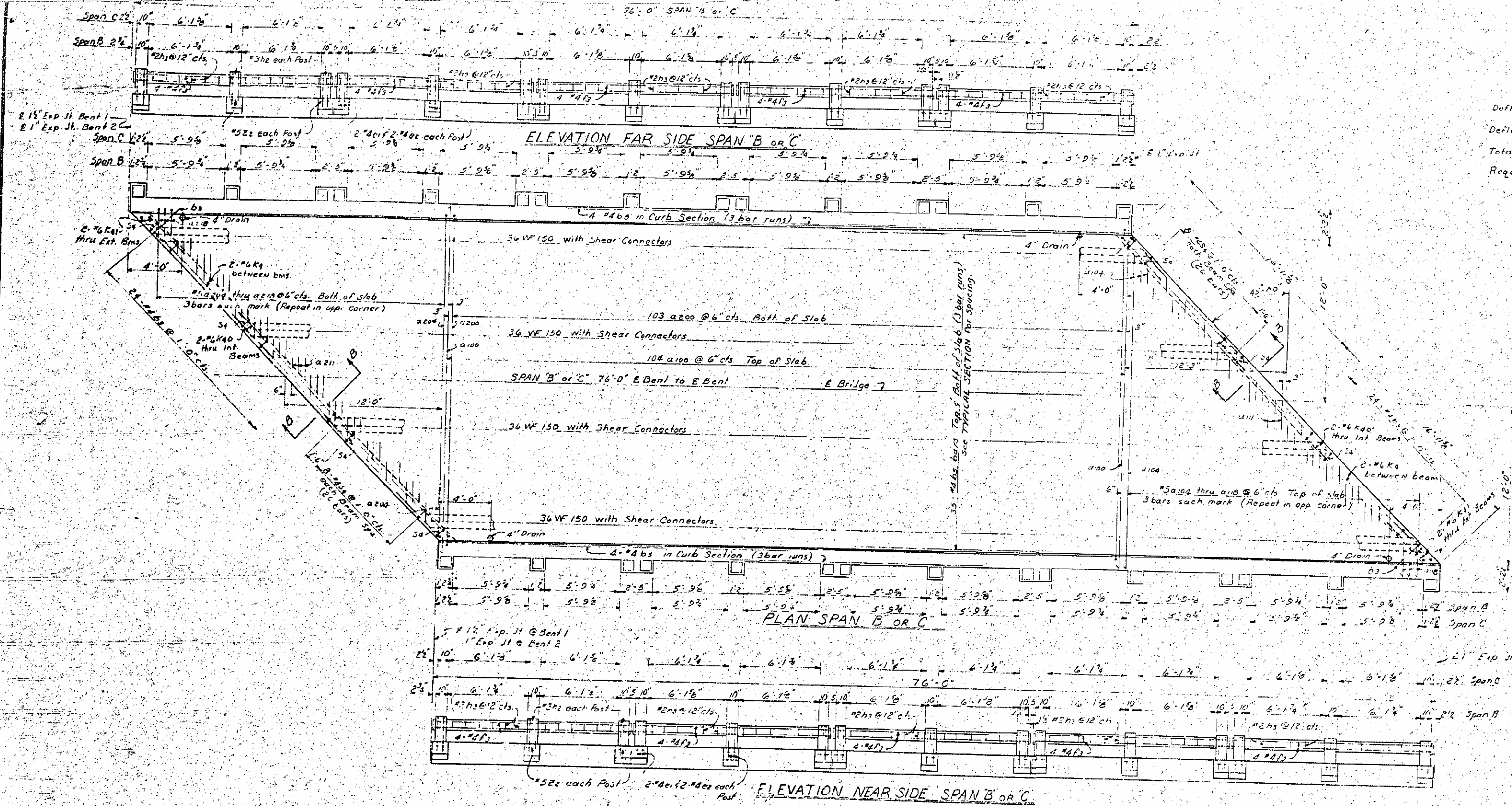
PROJECT NO. 8.17542
 SURRY-STOKES COUNTY
 STATION: 507 + 15.0 P.O.T. - 2'

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL CONCRETE SECTIONS
 STEEL BEAMS - CONCRETE SLAB
 24' ROADWAY ~ 12" CURBS
 NOVEMBER 1959

REVISIONS	DATE	BY

NOTE

Deflection due to weight of Beam	1/2"
Deflection due to superimposed dead load	1/2"
Total Dead Load Deflection	1 1/2"
Required Beam Camber	1 1/2"



PROJECT NO. 8.1754

SURRY - STOKES COUNTY

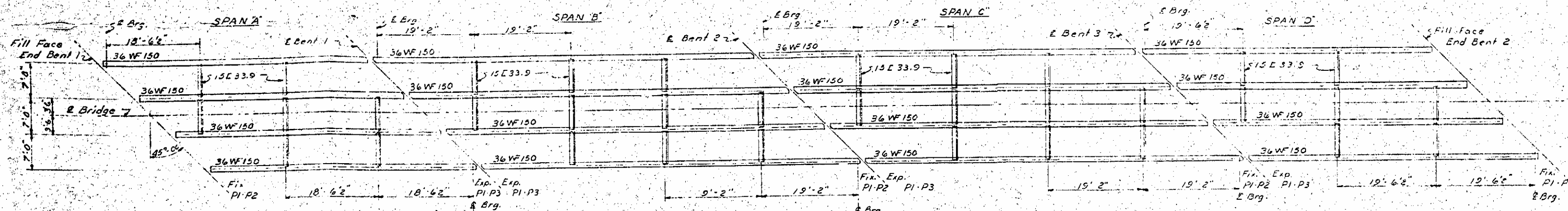
STATION: 507+15.9-12-

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISS
 RALEIGH
 SUPERSTRUCTURE
 SPAN B OR SPAN C

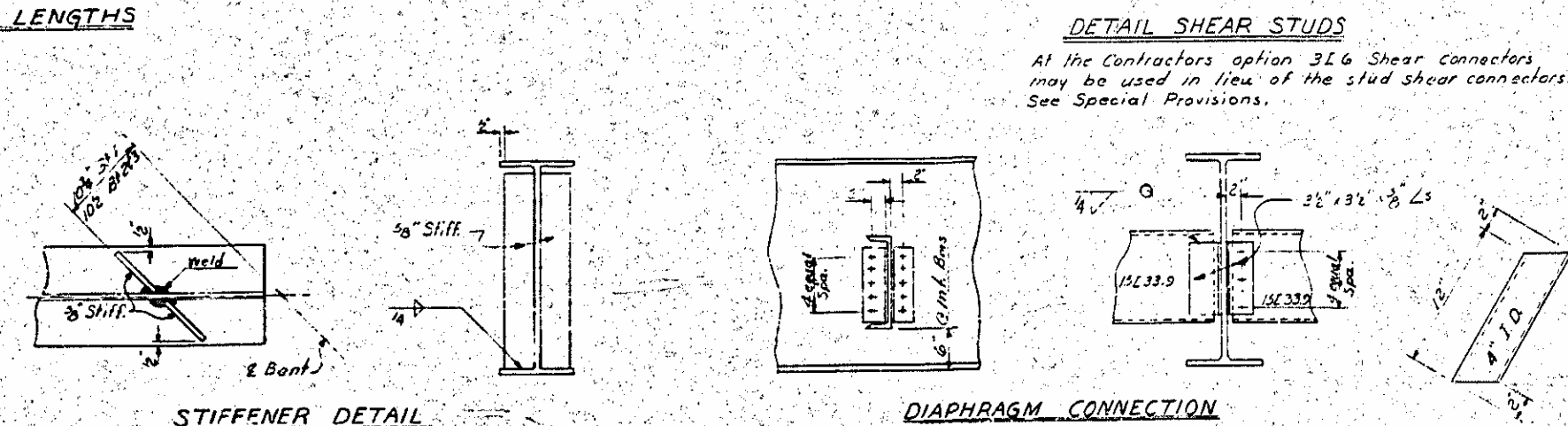
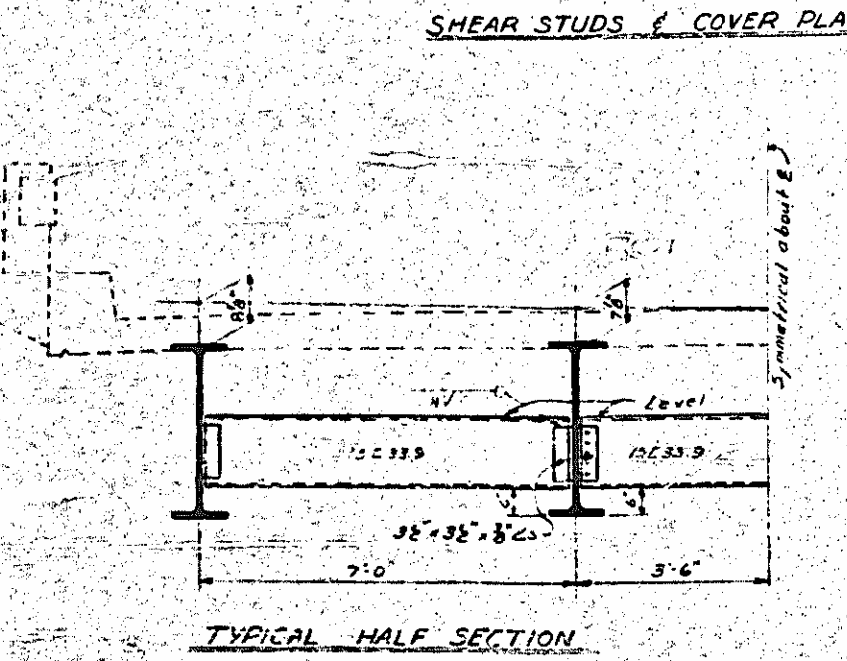
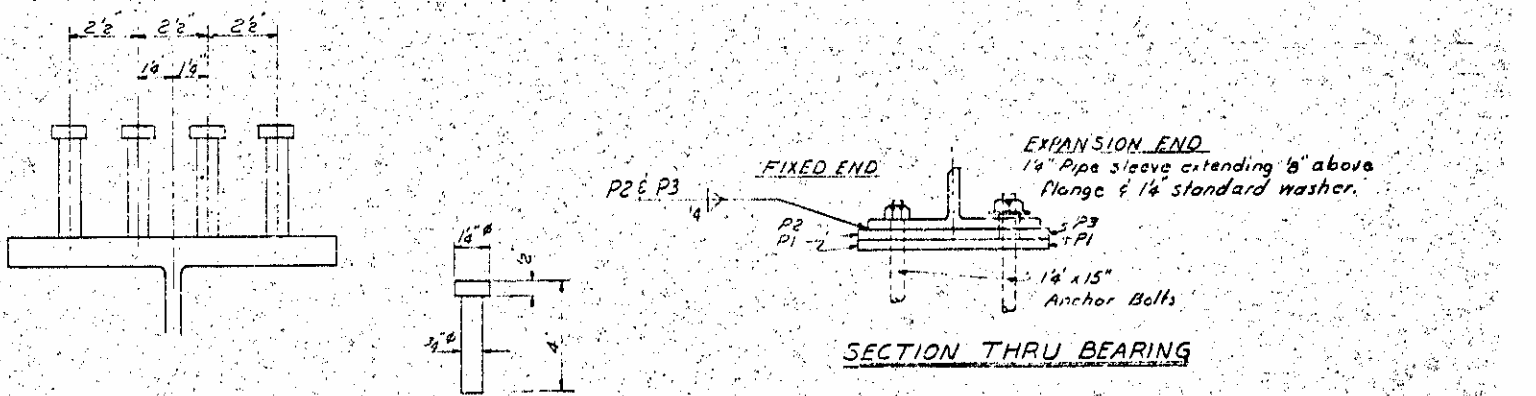
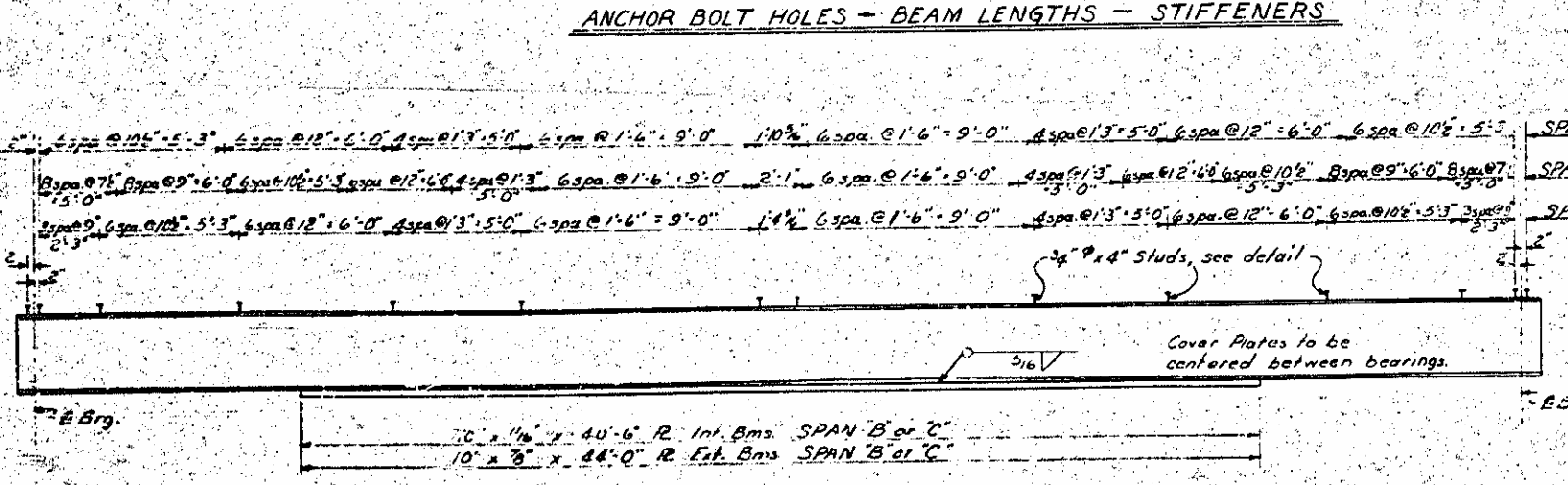
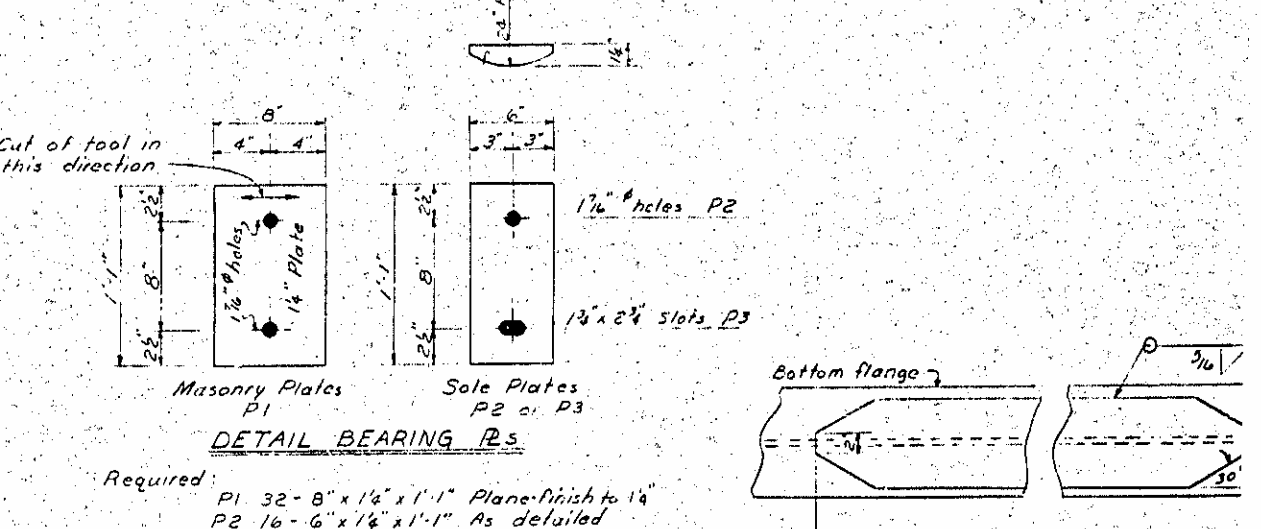
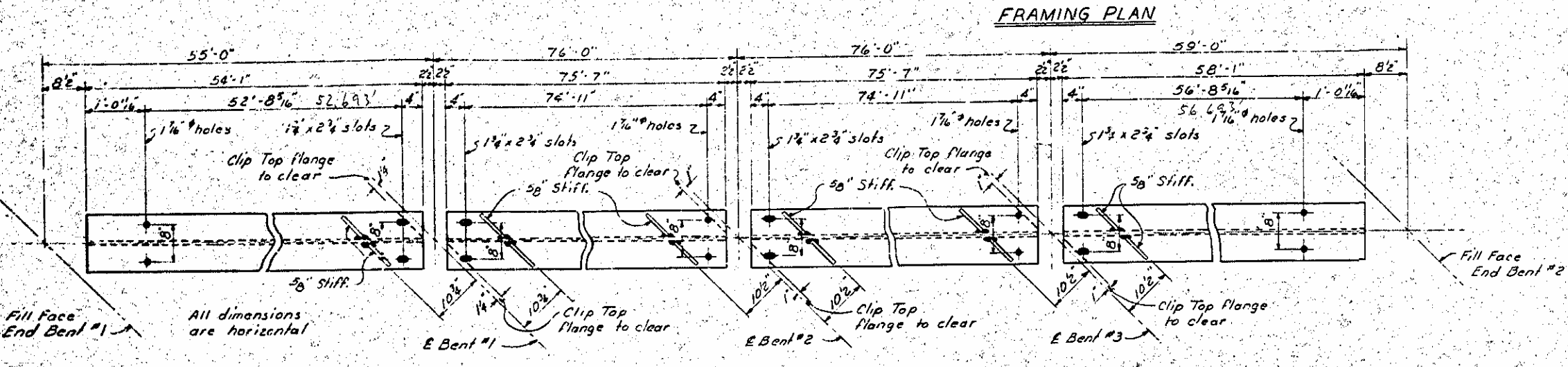
November 1959

REPORTED BY	DATE
DRAWN BY	DATE / 12 1959
TRACED BY	DATE / 12 1959
CHECKED BY	DATE / 12 1959

BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE



NOTE
 At the Contractor's option, shop can of 3/2" x 3/2" x 3/8" Ls to channels may be welded or riveted using 3/4" rivets. Connections of diaphragms to beams shall be bolted using 3/4" high st. bolts in accordance with the Specification.
 All beams to be shop cambered follows:
 SPAN A Int. Ems. 1/4"
 SPAN B & C 1/8"
 SPAN D 3/8"

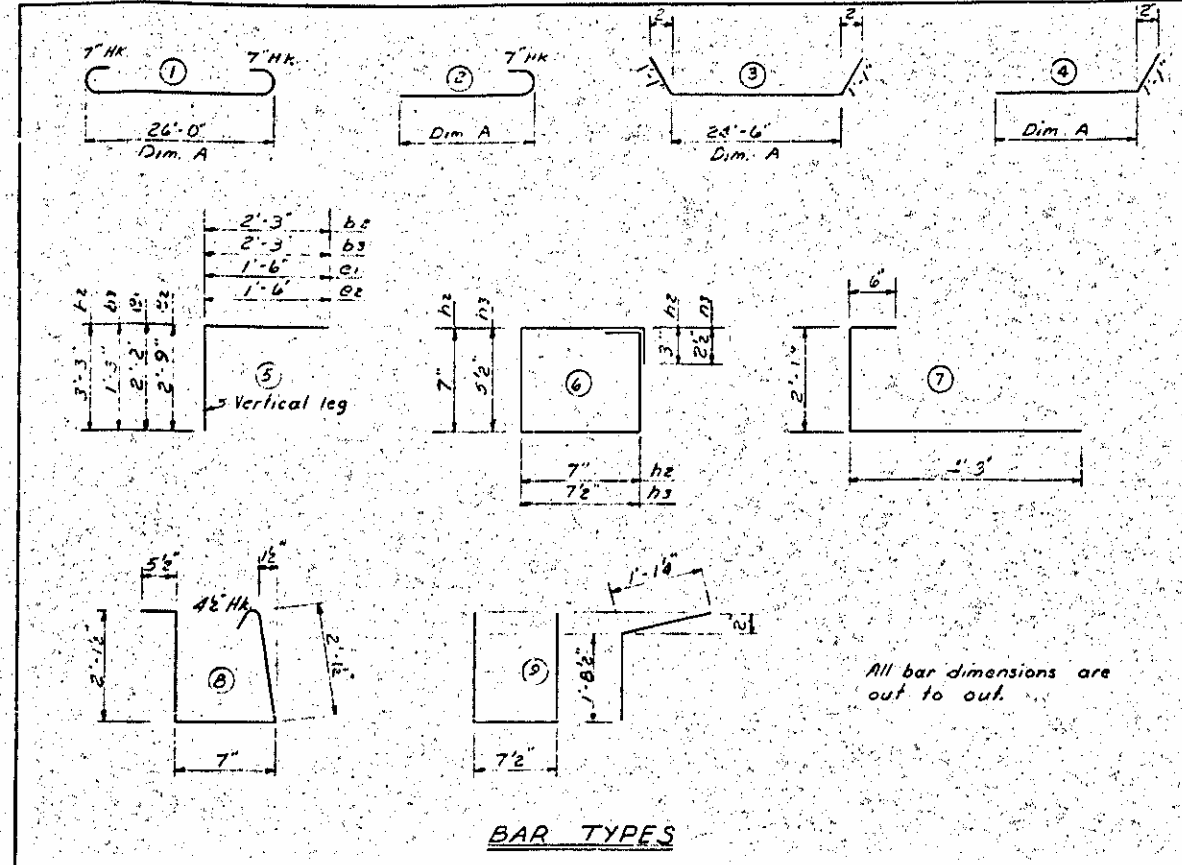


PROJECT NO. 8.17
SURRY - STOKES COU
STATION: 507 + 15.9

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 RALEIGH
 SUPERSTRUCTURE
 STRUCTURAL STEEL

December 1959

REVISIONS
 DATE BY
 DATE BY
 DATE BY



BAR SCHEDULE

Bar No	Size	Type	Dim. A	Length	Weight	Bars per span				Bar No	Size	Type	Length	Weight	Bars per span					
						A	B	C	D						A	A	C	D		
a100	322	#5	1	26'-0"	27'-2"	9,129	53	104	104	61	b1	70	#4	5'	1,315	73	-	-	-	
a101	12	#5	2	24'-9"	25'-4"	317	6	-	-	6	b2	48	#4	5'	1,176	24	-	-	24	
a102	6	#5	2	24'-6"	25'-1"	105	2	-	-	2	b3	144	#4	5'	337	24	48	48	24	
a103	2	#5	2	24'-0"	24'-7"	52	1	-	-	1	b4	16	#4	5'	250	16	-	-	-	
a104	24	#5	2	23'-6"	24'-1"	603	6	6	6	6	b5	258	#4	5'	1,487	-	120	120	-	
a105	24	#5	2	22'-0"	22'-7"	565	6	6	6	6	b6	70	#4	5'	1,003	-	-	-	70	
a106	24	#5	2	20'-6"	21'-1"	528	6	6	6	6	b7	16	#4	5'	313	-	-	-	16	
a107	24	#5	2	19'-0"	19'-7"	490	6	6	6	6										
a108	24	#5	2	17'-6"	18'-1"	453	6	6	6	6										
a109	24	#5	2	16'-0"	16'-7"	415	6	6	6	6										
a110	24	#5	2	14'-6"	15'-1"	378	6	6	6	6	e1	204	#4	5'	500	36	60	60	48	
a111	24	#5	2	13'-0"	13'-7"	340	6	6	6	6	e2	202	#4	5'	579	36	60	60	48	
a112	24	#5	2	11'-6"	12'-1"	302	6	6	6	6										
a113	24	#5	2	10'-0"	10'-7"	265	6	6	6	6										
a114	24	#5	2	8'-6"	9'-1"	227	6	6	6	6	f1	12	#4	5'	130	12	-	-	-	
a115	24	#5	2	7'-0"	7'-7"	190	6	6	6	6	f2	12	#4	5'	139	12	-	-	-	
a116	24	#5	2	5'-6"	6'-1"	152	6	6	6	6	f3	80	#4	5'	789	-	40	40	-	
a117	24	#5	2	4'-0"	4'-7"	115	6	6	6	6	f4	16	#4	5'	139	-	-	-	16	
a118	24	#5	2	2'-6"	3'-1"	77	6	6	6	6	f5	16	#4	5'	148	-	-	-	16	
a200	320	#5	3	24'-6"	26'-0"	8,900	53	103	103	61	h2	102	#3	6	2'-10"	105	18	30	30	24
a201	12	#5	4	24'-0"	25'-1"	314	6	-	-	6	h3	517	#2	6	2'-7"	223	105	150	150	112
a202	2	#5	4	23'-9"	24'-10"	52	1	-	-	1	k1	4	#6	5'	17'-5"	105	2	-	-	2
a203	2	#5	4	23'-3"	24'-4"	51	-	-	-	1	k2	5	#4	5'	17'-1"	91	4	-	-	4
a204	24	#5	4	23'-0"	24'-1"	603	6	6	6	6	k3	36	#6	5'	9'-6"	514	6	12	12	6
a205	24	#5	4	21'-6"	22'-7"	565	6	6	6	6	k4	4	#6	5'	11'-11"	72	2	-	-	2
a206	24	#5	4	20'-0"	21'-1"	528	6	6	6	6	k5	4	#6	5'	8'-0"	49	2	-	-	2
a207	24	#5	4	18'-6"	19'-7"	490	6	6	6	6	k6	6	#4	5'	11'-2"	60	4	-	-	4
a208	24	#5	4	17'-0"	18'-1"	453	6	6	6	6	k7	6	#4	5'	7'-8"	41	4	-	-	4
a209	24	#5	4	15'-6"	16'-7"	415	6	6	6	6	k8	24	#6	5'	4'-6"	162	4	8	8	4
a210	24	#5	4	14'-0"	15'-1"	378	6	6	6	6	k9	24	#6	5'	6'-10"	66	4	8	8	4
a211	24	#5	4	12'-6"	13'-7"	340	6	6	6	6										
a212	24	#5	4	11'-0"	12'-1"	302	6	6	6	6										
a213	24	#5	4	9'-6"	10'-7"	265	6	6	6	6										
a214	24	#5	4	8'-0"	9'-1"	227	6	6	6	6										
a215	24	#5	4	6'-6"	7'-7"	190	6	6	6	6										
a216	24	#5	4	5'-0"	6'-1"	152	6	6	6	6										
a217	24	#5	4	3'-6"	4'-7"	115	6	6	6	6										
a218	24	#5	4	2'-0"	3'-1"	77	6	6	6	6										

SUPERSTRUCTURE QUANTITIES

Reinforcing Steel	42,766 Lbs
Class A Concrete	207.2 C.Y
Structural Steel - Approx.	183,500 Lbs

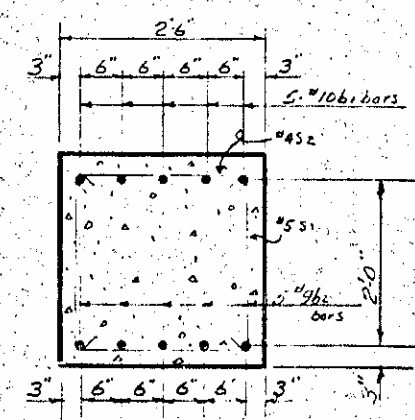
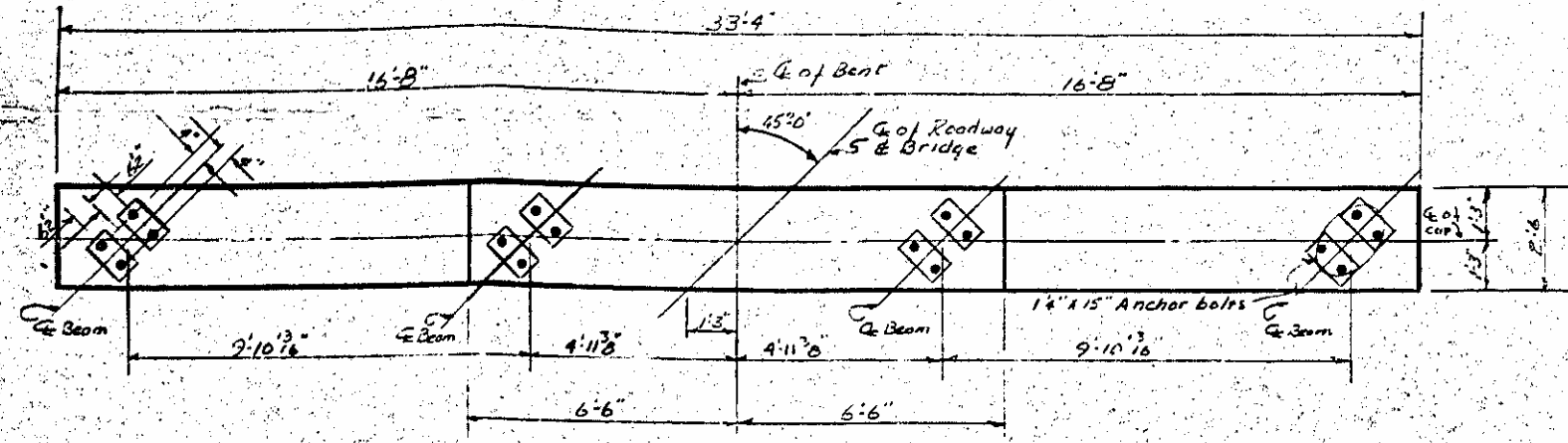
PROJECT No. 8.17542
SURRY - STOKES COUNTY
STATION: 507 + 15.0 - 12-

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
 RALEIGH
SUPERSTRUCTURE
BILL OF MATERIAL

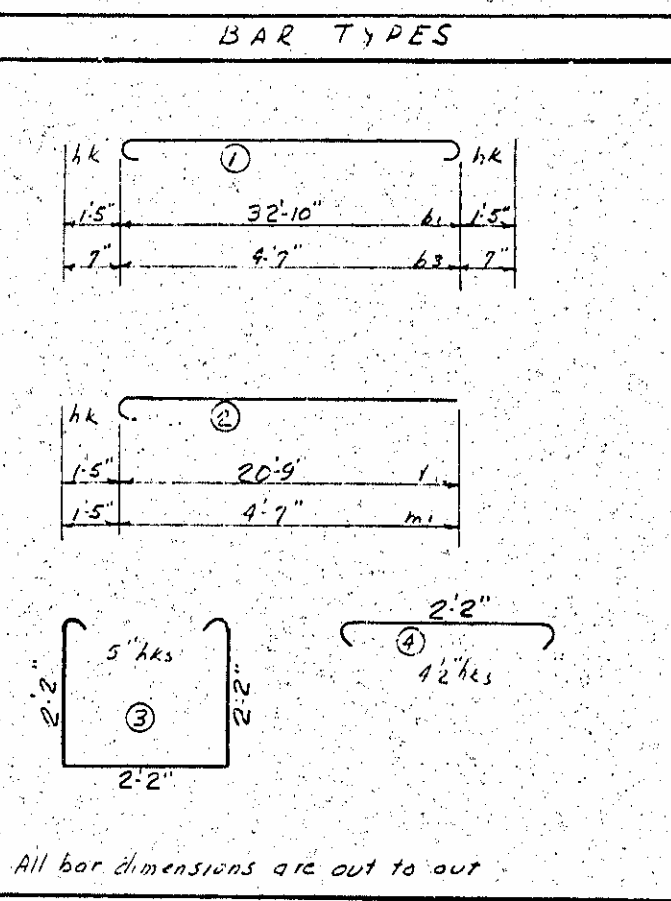
December 1959

DESIGNED BY: [Signature] DATE: Dec. 1959
 DRAWN BY: [Signature] DATE: Dec. 1959
 CHECKED BY: [Signature] DATE: Dec. 1959

SHEET NO. 178
 TOTAL SHEETS 281



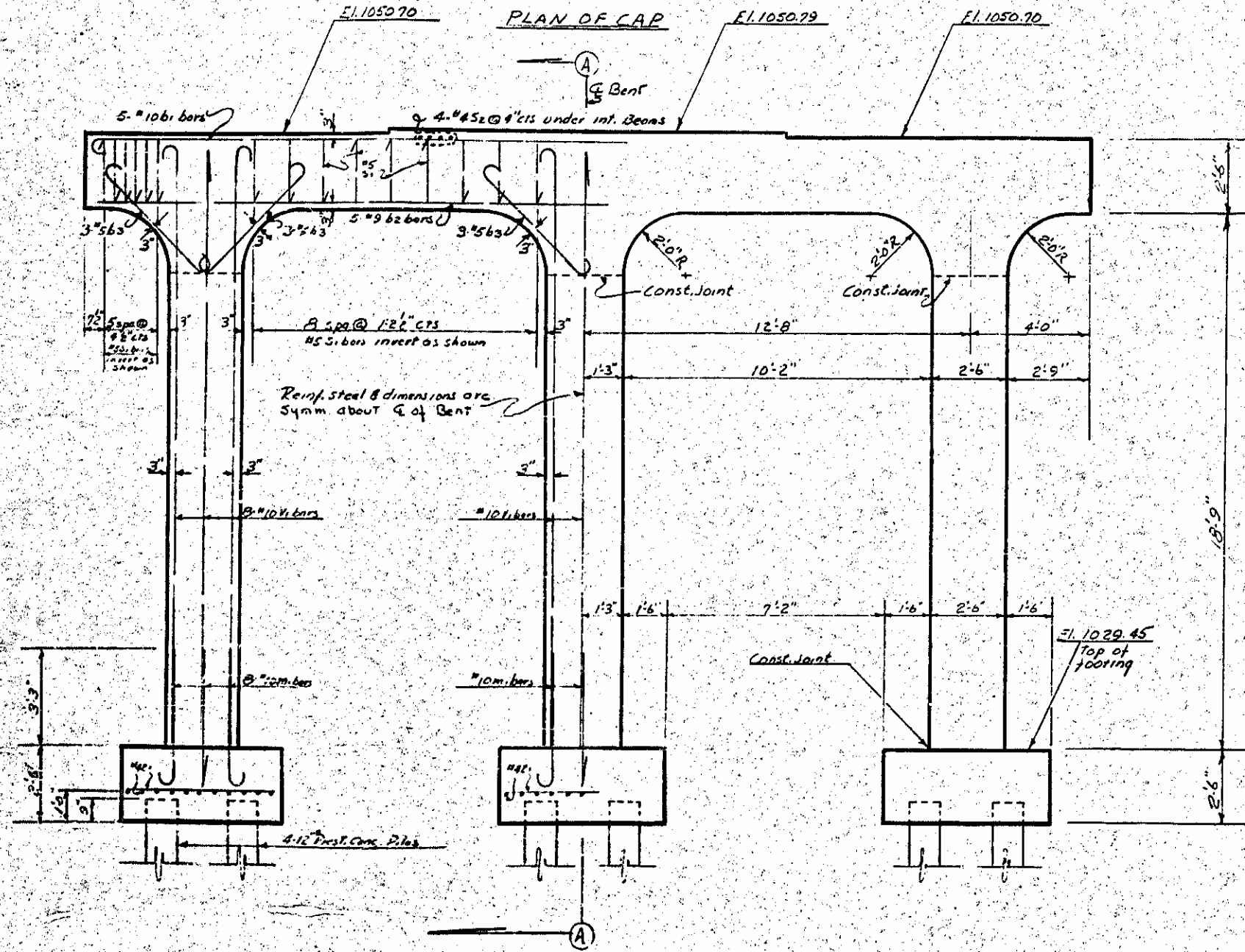
SECTION THRU CAP



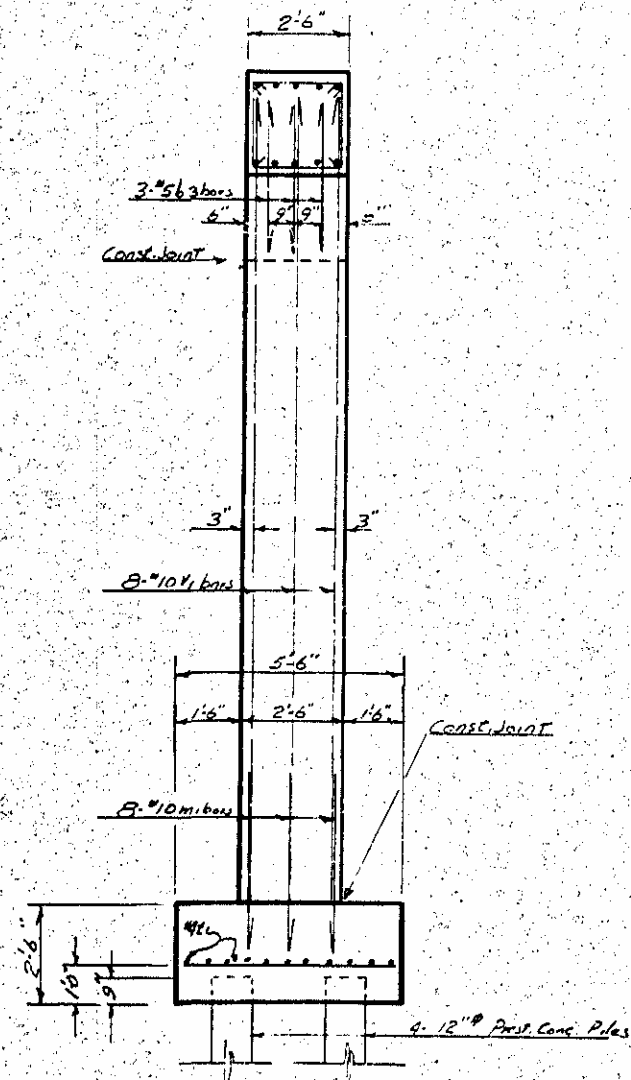
All bar dimensions are out to out

BILL OF MATERIAL					
FOR ONE BENT- 3 REQD					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
b1	5	#10	1	35'-8"	767
b2	5	#9	Str	32'-10"	558
b3	18	#5	1	5'-9"	108
s1	30	#5	3	7'-4"	229
s2	8	#4	4	2'-11"	16
v1	24	#10	2	22'-2"	2289
m1	24	#10	2	6'-0"	620
t1	66	#4	Str	5'-0"	220

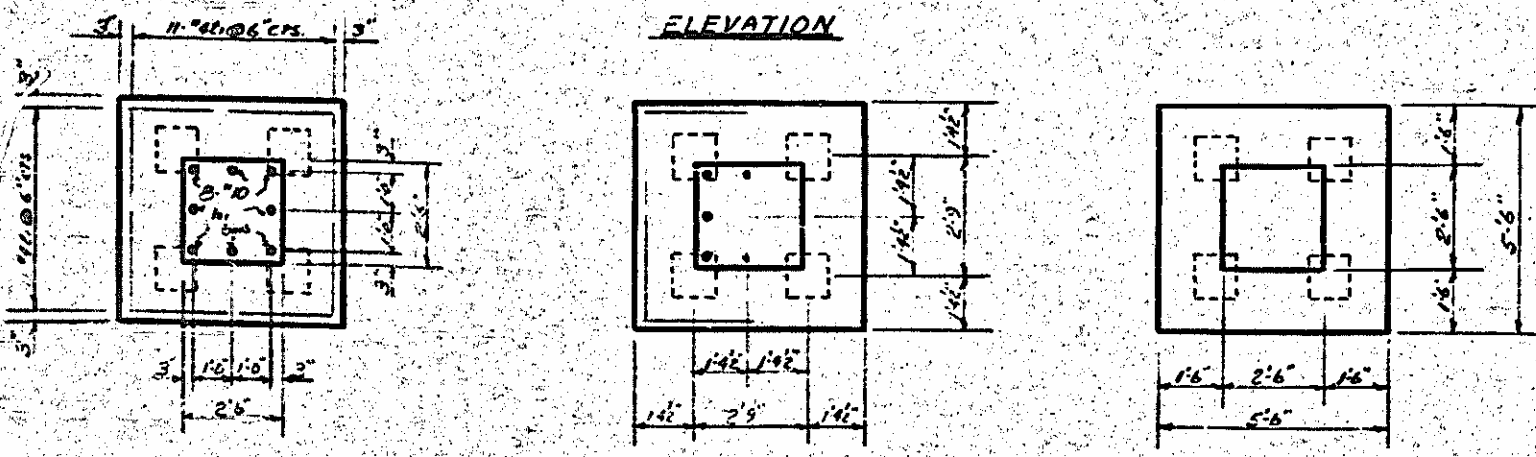
NOTE
 Piles to be driven to a minimum bearing capacity of 27 tons each.
 * Concrete displaced by pile heads has been deducted.
 Cap steel may be shifted to clear anchor bolts.



ELEVATION



SECTION AA



PLAN OF FOOTING

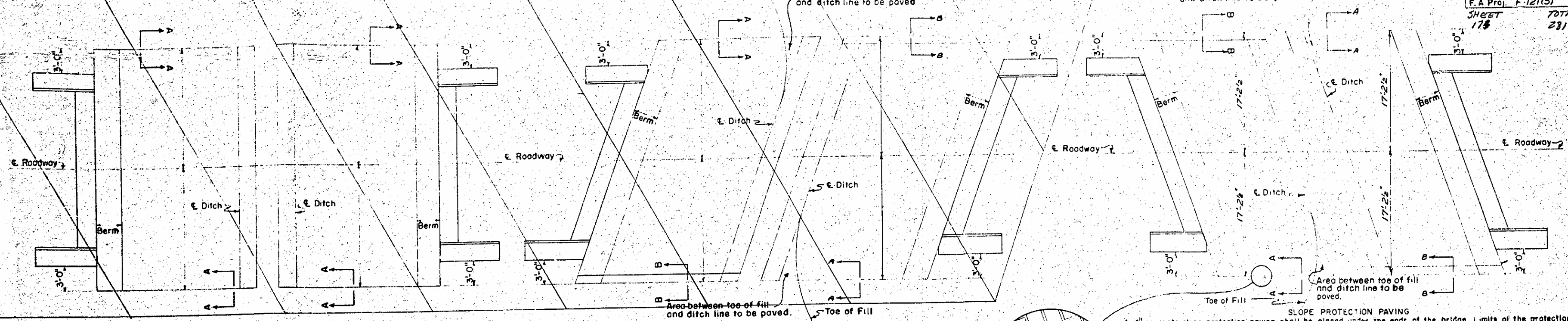
PROJECT NO. 8-17542
 SURRY-STOKES COUNTY
 STATION: 507+15.0 L.S.

REVISIONS		DATE	

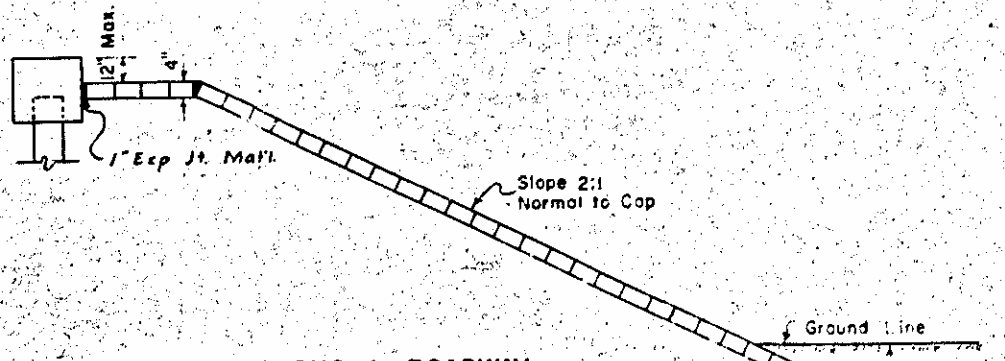
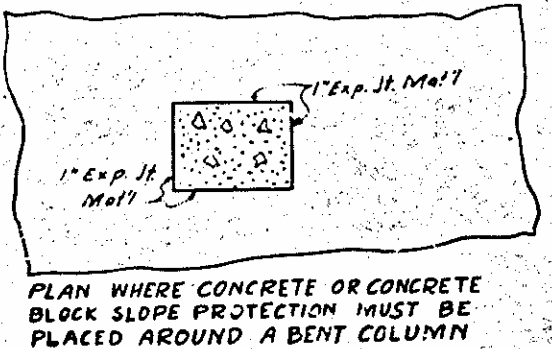
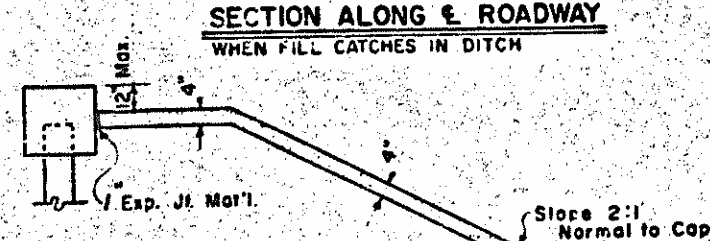
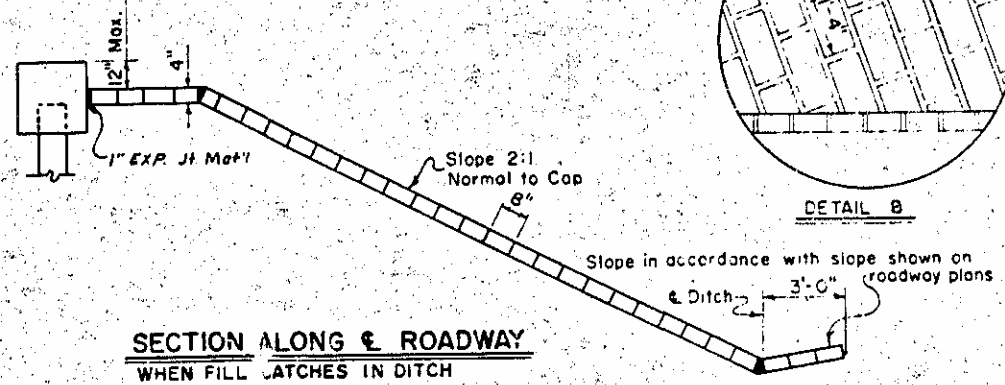
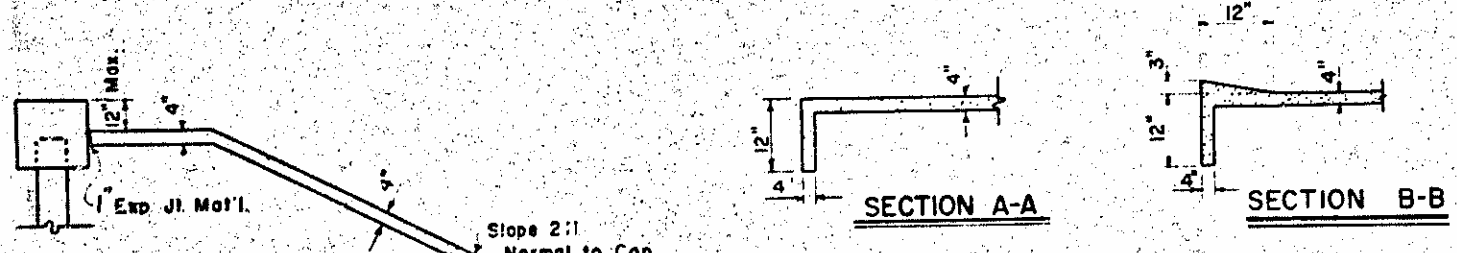
STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 BALDWIN
 SUBSTRUCTURE
 BENTS 1-283
 DEC. 1959

SHEET NO. 178
 TOTAL SHEETS 281

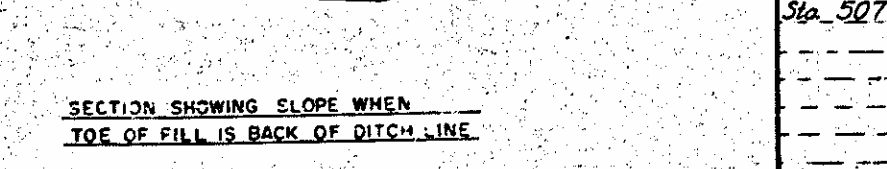
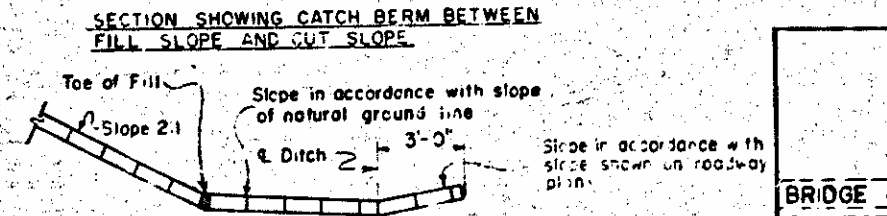
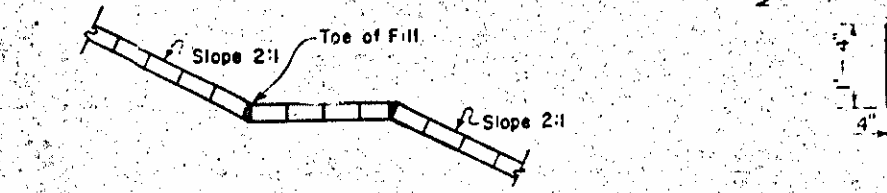
DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: Dec 8, 1959



PLAN



SECTION ALONG E ROADWAY WHEN DITCH IS NOT PROVIDED



DETAILS FOR ALTERNATE "B"

SLOPE PROTECTION PAVING
 A 4" concrete slope protection paving shall be placed under the ends of the bridge. Limits of the protection shall be as shown in the details. Bids will be accepted on either Alternate "A" or "B" as described below. Immediately before placing the paving, the slope shall be properly shaped and firmly compacted so that it conforms to the lines and grades shown. The finished surface shall be reasonably smooth and uniform and shall not vary from lines, grades, and sections shown by more than 1/2" along a 10' straight edge.

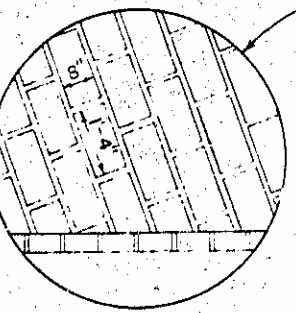
ALTERNATE "A"
 Alternate "A" shall consist of 4" poured in place concrete paving as shown in details on this sheet. Concrete shall be Class B using Standard size Number 3 coarse aggregate. The concrete surface shall be floated with a wooden float and finished.

The quantity to be paid for under this item shall be the number of square yards of slope protection measured in place complete and accepted, including the area of the toe walls below 4" thickness of protection (For example 8' pay area for toe wall 1'-0" deep).

The quantity measured as provided for above, shall be paid for at the contract unit price per square yard for 4" Concrete Slope Protection, complete in place, which price and payment shall be full compensation for all excavation, backfilling, preparation of slopes, and all materials, labor, equipment, tools, and incidentals necessary to complete the work.

ALTERNATE "B"
 Alternate "B" shall consist of solid concrete blocks 4" x 8" x 16" laid in horizontal courses such that those in successive courses will break joints with units in the preceding one. Blocks are to be laid with their long axis parallel to the end bent cap with grouted joints preferably 1/2" but not less than 1/4" nor more than 3/4" wide between successive courses and ends of blocks. Joints shall be grouted by pouring a mixture of one part portland cement to three parts sand mixed with sufficient water to enable the mixture to be poured through a spout.

The concrete blocks shall be cast to accurate dimensions, shall have uniform surface color and texture, and shall be manufactured of materials to produce a compressive strength of not less than 3,000 p.s.i. at age of 28 days. No broken blocks shall be used except in constructing a straight line along each side of the paving down the slope. Care shall be taken to break the blocks so as to give a uniform workmanlike joint and surface. Method of measurement and basis of payment shall be as prescribed above under Alternate "A" except that the item shall be 4" Concrete Block Slope Protection instead of 4" Concrete Slope Protection.



DETAIL B

PROJECT NO. 8.17542
SURRY-STOKES COUNTY
STATION: 507+15.0-B

BRIDGE #	4" Concrete Slope Protection or 4" Concrete Block Slope Protection	
	E.B. 1	E.B. 2
Sta. 507+15.0	215 211.94	235 227.20

STATE OF NORTH CAROLINA
 STATE HIGHWAY COMMISSION
 STANDARD
SLOPE PROTECTION PAVING
 DETAILS
 NOVEMBER, 1959

APPROVED BY: *[Signature]*
 DATE: 12-22-59
 S-169
 172

DETAILS FOR ALTERNATE "A"
 SPECIAL
 CHECKED BY: *C. S. Helt* DATE: May, 1960
P. H. Ellis DATE: May, 1960
 STANDARD
 DESIGNED BY: Carl J. Kiger DATE: Nov. 4, 1959
 DRAWN BY: W. J. Rogers DATE: Dec. 21, 1959

Revision #1 - to add Section B-B of E.C.P. 1/20/60
 Rev. 2 - To eliminate toe wall along front edge. C.A.A. 9-1-60
 Rev. 2 - to add plan at bent column. H.L.B. 3-8-60