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- " 7: DETAILS OF FLARED CURB & GUTTER
- " 8: CONCRETE TILE SLOPE DRAINS
- " 9-11: BRIDGE PLAN & PROFILE SHEETS
- " 12: SUPERSTRUCTURE DETAILS
- " 13: UNTREATED TIMBER DETOUR BRIDGE
- " 14-22: CROSS SECTIONS

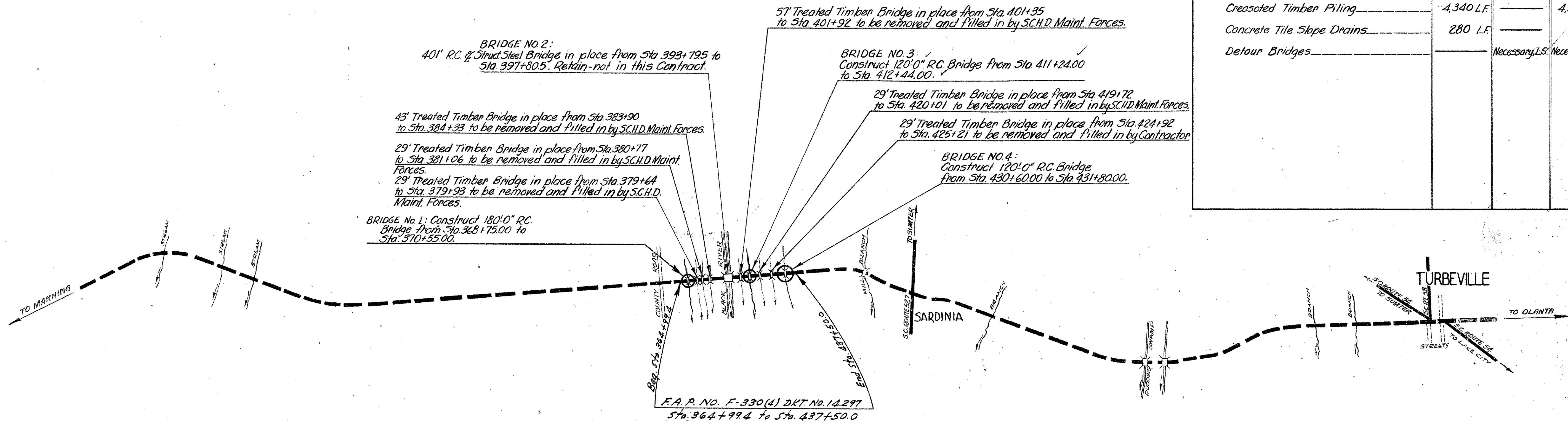
**STATE OF SOUTH CAROLINA**  
**STATE HIGHWAY DEPARTMENT**

# PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

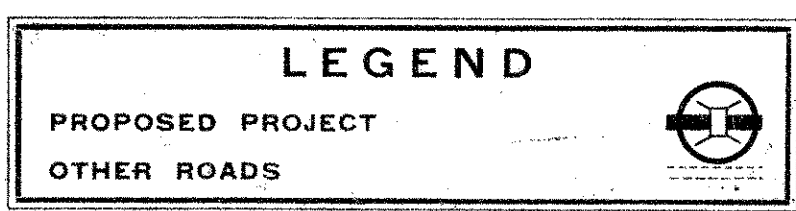
FEDERAL AID PROJECT NO. F-330(4)  
S. C. DOCKET NO. 14.297  
U. S. ROUTE NO. 301  
CLARENDON COUNTY  
BRIDGES & APPROACHES OVER  
BLACK RIVER SWAMP

FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CLARENDON	14.297	US 301	1	22

SUMMARY OF ESTIMATED QUANTITIES			
	U.S. ROUTE NO. 301	DETOUR	TOTAL
<b>ROADWAY QUANTITIES</b>			
Clearing within Right of Way	Necessary	—	Necessary
Common Excavation	16,521	17,829	34,521 C.Y.
Overhaul	58,279	60,464	118,633 C.Y.H.M.
Selected Material for Shoulders	967	—	955 C.Y.
Earth Type Base Course (Pit Material)	3,000	3247	6211 C.Y.
Clearing & Grubbing of Barren & Material Pits	3	—	3 Acres
Rip-Rap	600	—	600 Tons
<b>BRIDGE QUANTITIES:</b>			
Class "A" Concrete	646.72 CY.	—	646.72 CY.
Reinforcing Steel	138,688 Lbs.	—	138,688 Lbs.
Crossed Timber Piling	4,340 LF.	—	4,340 LF.
Concrete Tile Slope Drains	280 LF.	—	280 LF.
Detour Bridges	—	Necessary, L.S.	Necessary, L.S.



CONVENTIONAL SIGNS	
State Line	Trolley Poles
County Line	Power Poles
City or Town Limits	Telephone or Telegraph Poles
Property Line	Marsh
Fence	Trees
Retaining Wall	Brush
Existing Road	Stumps
Proposed Road	Buildings
Railroad	Bridge
Levee or Embankment	Concrete Box Culvert
Guard Rail	Pipe Culvert
Point of Intersection (P. I.)	Drop Inlet and Culvert
	Hub on Center Line



	LAYOUT	
	U.S. ROUTE NO. 301	DETOUR
Net Length of Roadway	0.589 Miles	0.712 Miles
Net Length of Bridges	0.079 Miles	0.026 Miles
Net Length of Project	0.668 Miles	0.738 Miles
Length of Exceptions	0.705 Miles	— Miles
Gross Length of Project	1.373 Miles	0.738 Miles

Equalities in Stationing  
NONE

Note: All workmanship and material on this project to conform with South Carolina State Highway Department Standard Specifications for Highway Construction dated March 15th, 1939 as approved by the Administrator, Federal Works Agency.

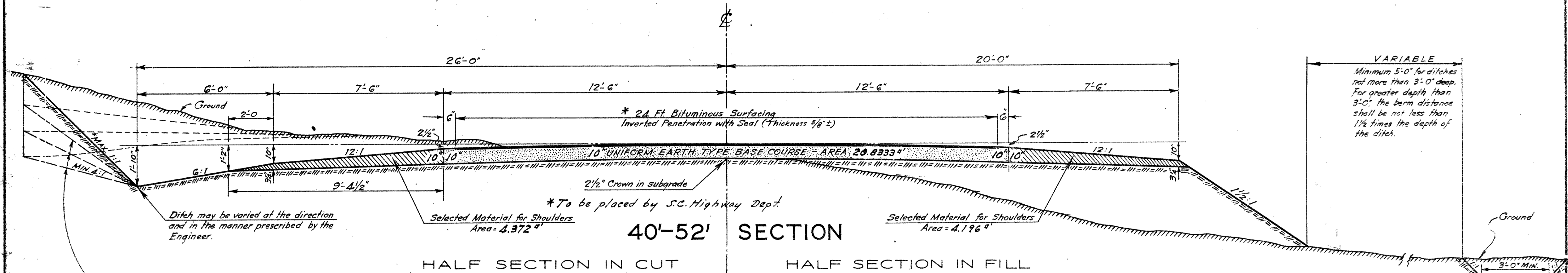
APPROVED: *S. J. Stearns* 5-26-57  
STATE HIGHWAY ENGINEER DATE

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
RECOMMENDED FOR APPROVAL:  
DISTRICT ENGINEER DATE  
APPROVED:  
DIVISION ENGINEER DATE

SOUTH CAROLINA HIGHWAY DEPARTMENT  
COLUMBIA

TYPICAL SECTIONS  
FOR  
EARTH TYPE BASE COURSE  
AND BITUMINOUS SURFACING

Fed Road Dist. No.	State	County	Docket No.	E.P. Proj. No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Clarendon	14.297	330(4)	301	2	22



40'-52' SECTION

HALF SECTION IN CUT      HALF SECTION IN FILL

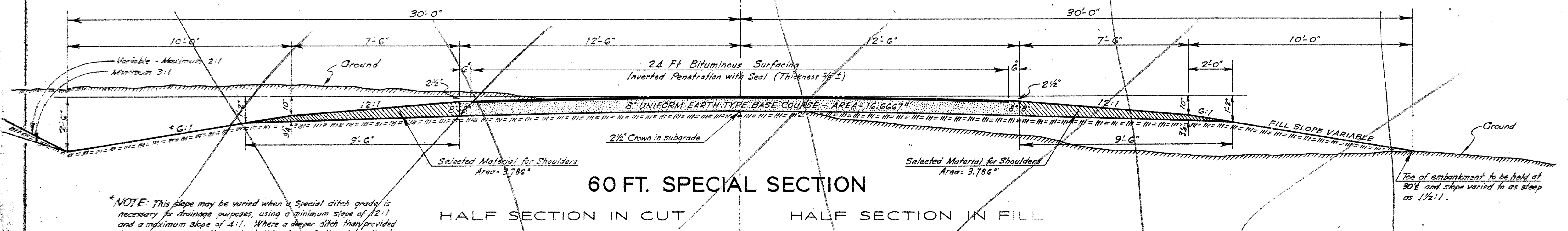
USE ABOVE SECTION FROM STA. 364+99.4 TO STA. 375+94.0,  
FROM STA. 405+70.0 TO STA. 417+70.0 AND FROM STA. 424+92.0  
TO STA. 437+50.0

VARIABLE  
Minimum 5'-0" for ditches  
not more than 3'-0" deep.  
For greater depth than  
3'-0", the berm distance  
shall be not less than  
1/2 times the depth of  
the ditch.

Ditch may be varied at the direction  
and in the manner prescribed by the  
Engineer.

\*Slopes to be flattened thru cuts of  
less than 5 Ft. and at ends of all cuts.

This line to be kept parallel to  
center of roadway where practicable.



60 FT. SPECIAL SECTION

HALF SECTION IN CUT      HALF SECTION IN FILL

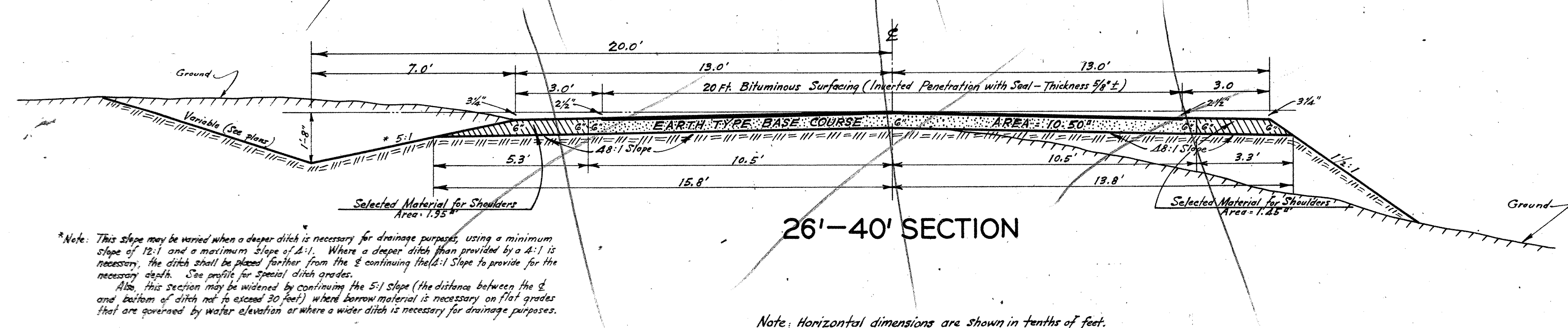
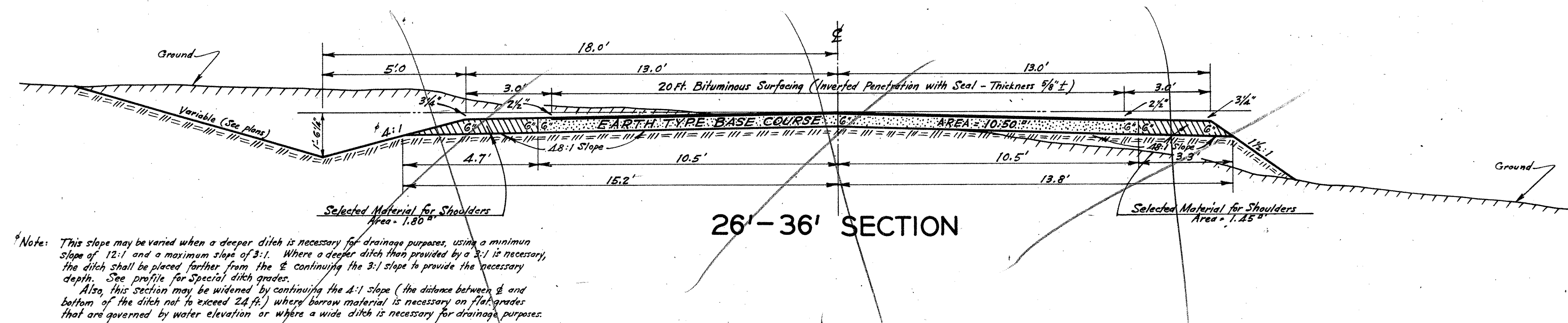
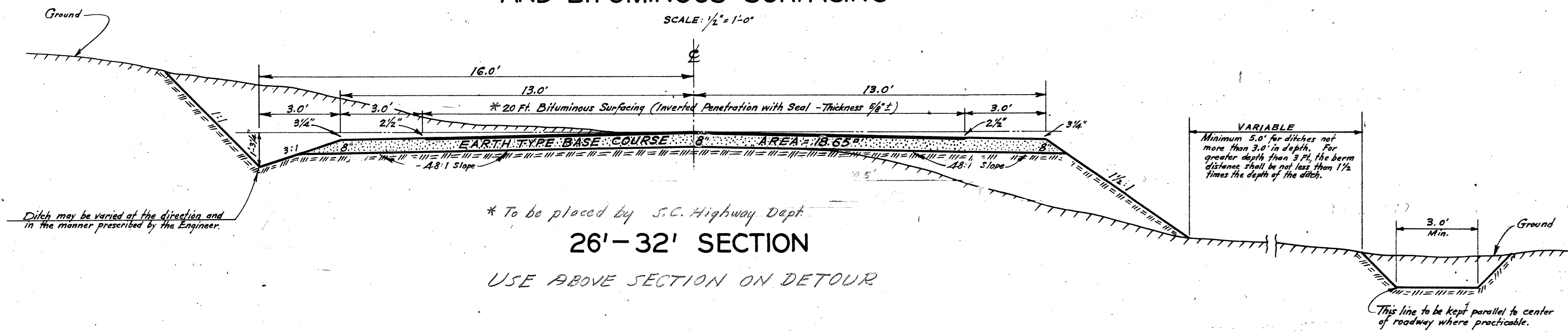
\*NOTE: This slope may be varied when a Special ditch grade is  
necessary for drainage purposes, using a minimum slope of 12:1  
and a maximum slope of 4:1. Where a deeper ditch than provided  
by a 4:1 is necessary, the ditch shall be placed farther from the  $\mathcal{C}$   
continuing the 4:1 slope to provide for the necessary depth. See  
profile for Special ditch grades.

Toe of embankment to be held at  
30% and slope varied to as steep  
as 1 1/2:1.

Fed. Rd. Div. No.	State	County	Dist. No.	Rd. No.	Sheet No.	Total Sheets
3	S.C.	Clarendon	14.297	391	3	27

STATE HIGHWAY DEPT.  
COLUMBIA  
**TYPICAL SECTIONS**  
FOR  
EARTH TYPE BASE COURSE  
AND BITUMINOUS SURFACING

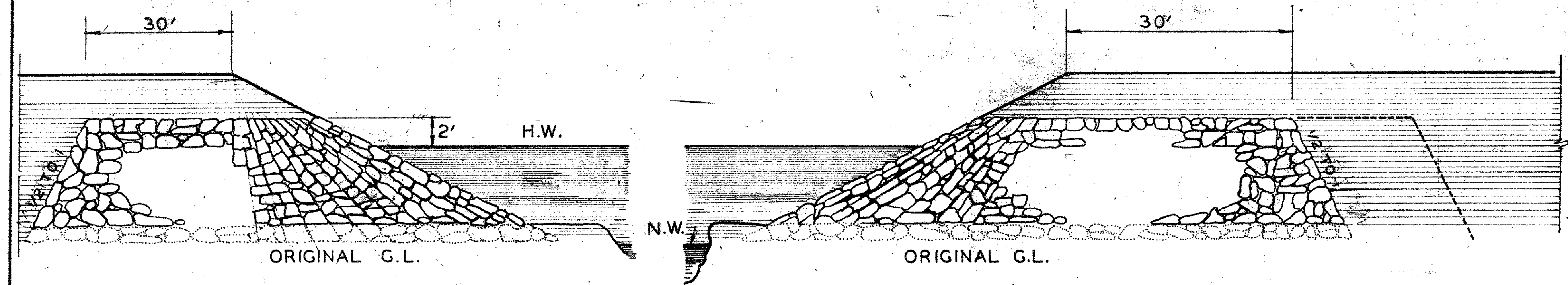
SCALE: 1/2" = 1'-0"



Note: Horizontal dimensions are shown in tenths of feet.

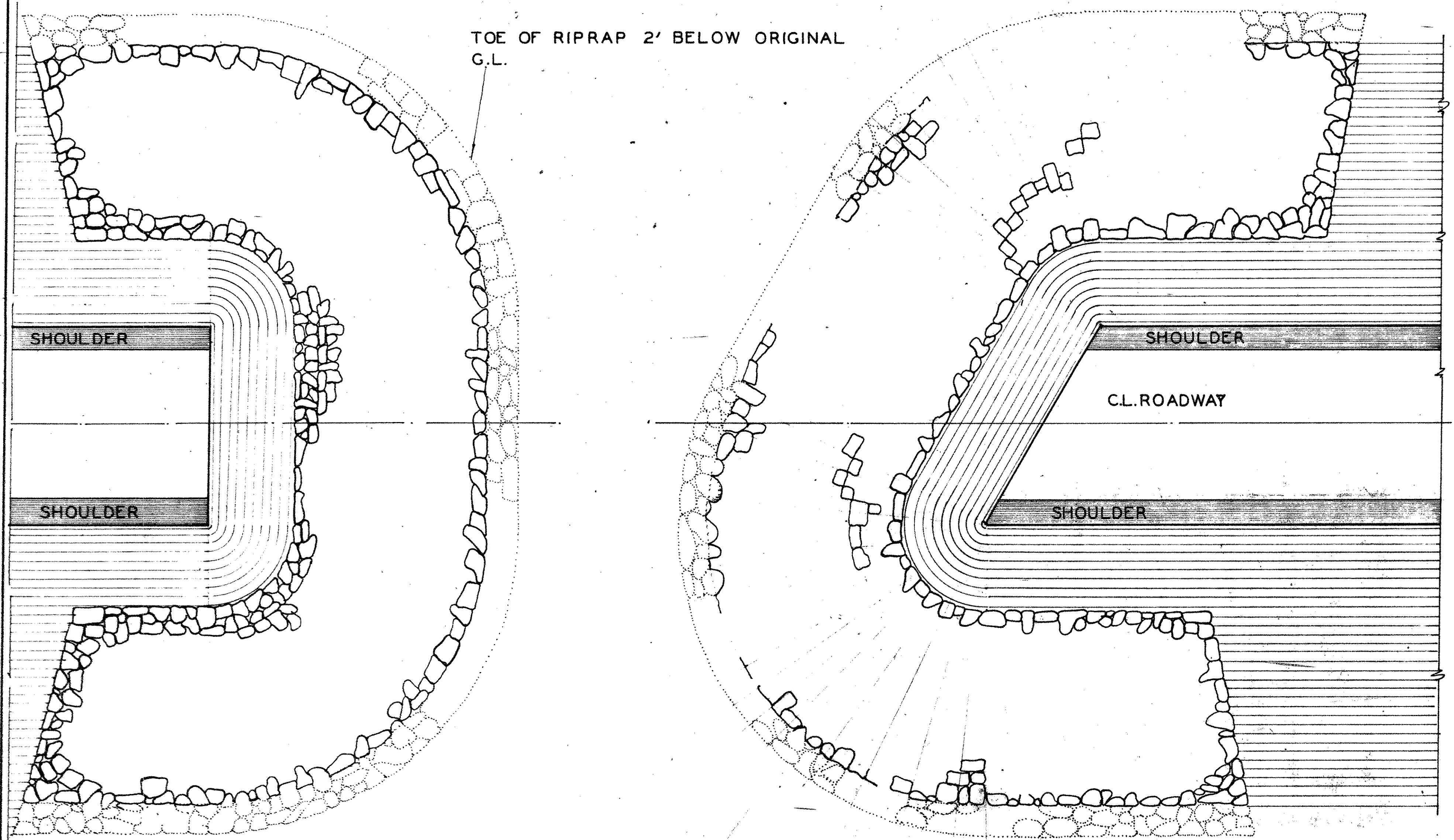
Fed. Dist. No.	State	County	Dist. No.	No.	Sheet No.	Total Sheets
3	S.C.	CLARENDON	14.297	301	3A	22

TOP OF RIPRAP TO BE 2' ABOVE H.W., BUT NOT CLOSER THAN 2' TO F.G.



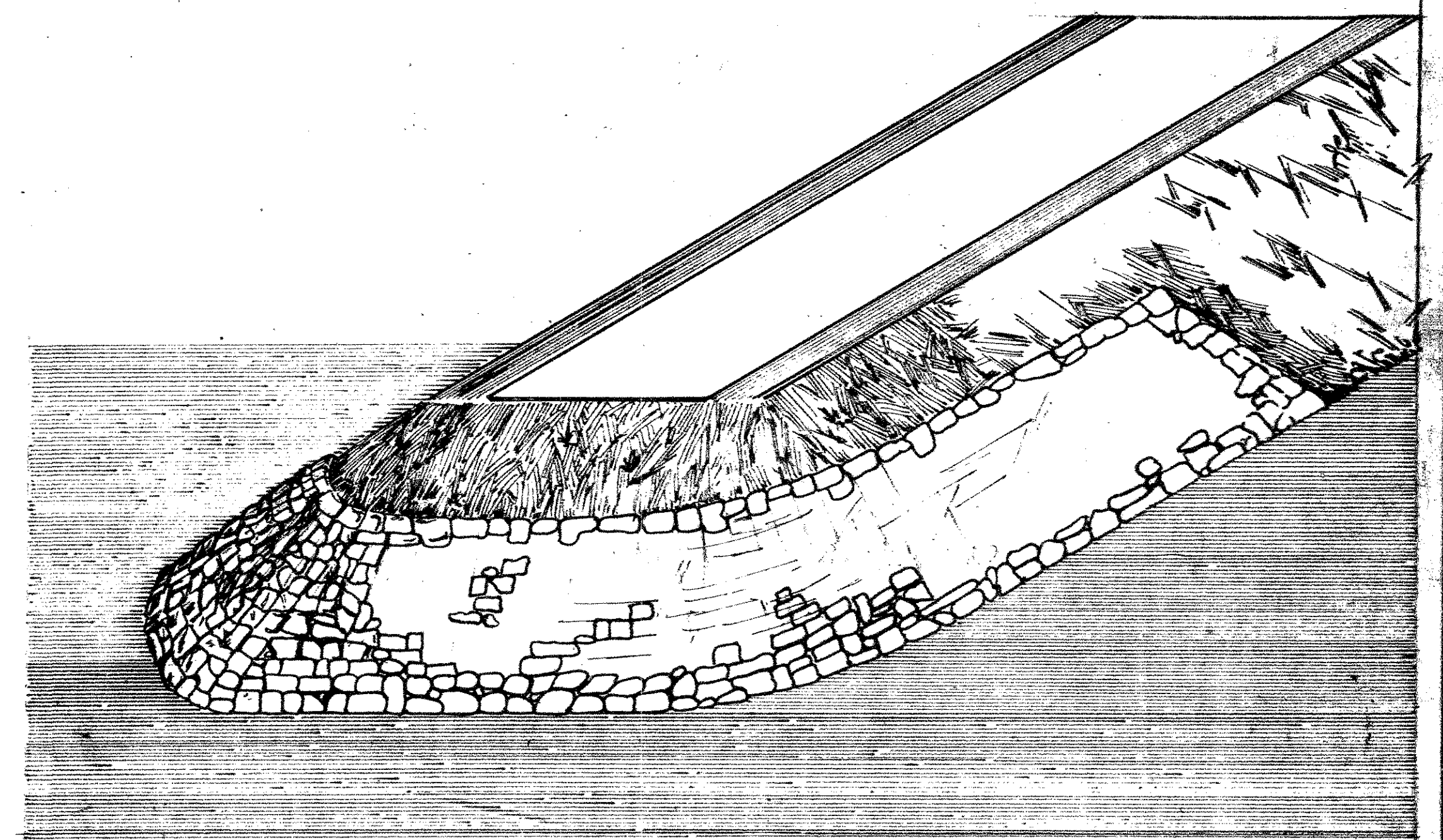
ELEVATION  
SQUARE END FILL

ELEVATION  
SKEWED END FILL



PLAN  
SQUARE END FILL

PLAN  
SKEWED END FILL

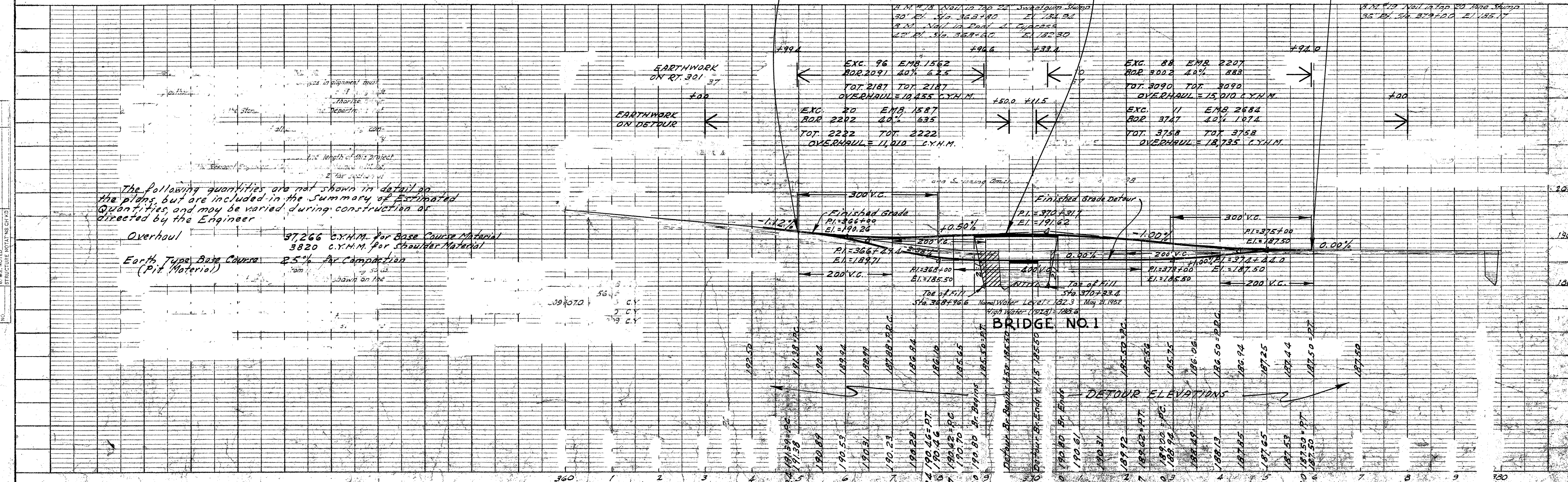
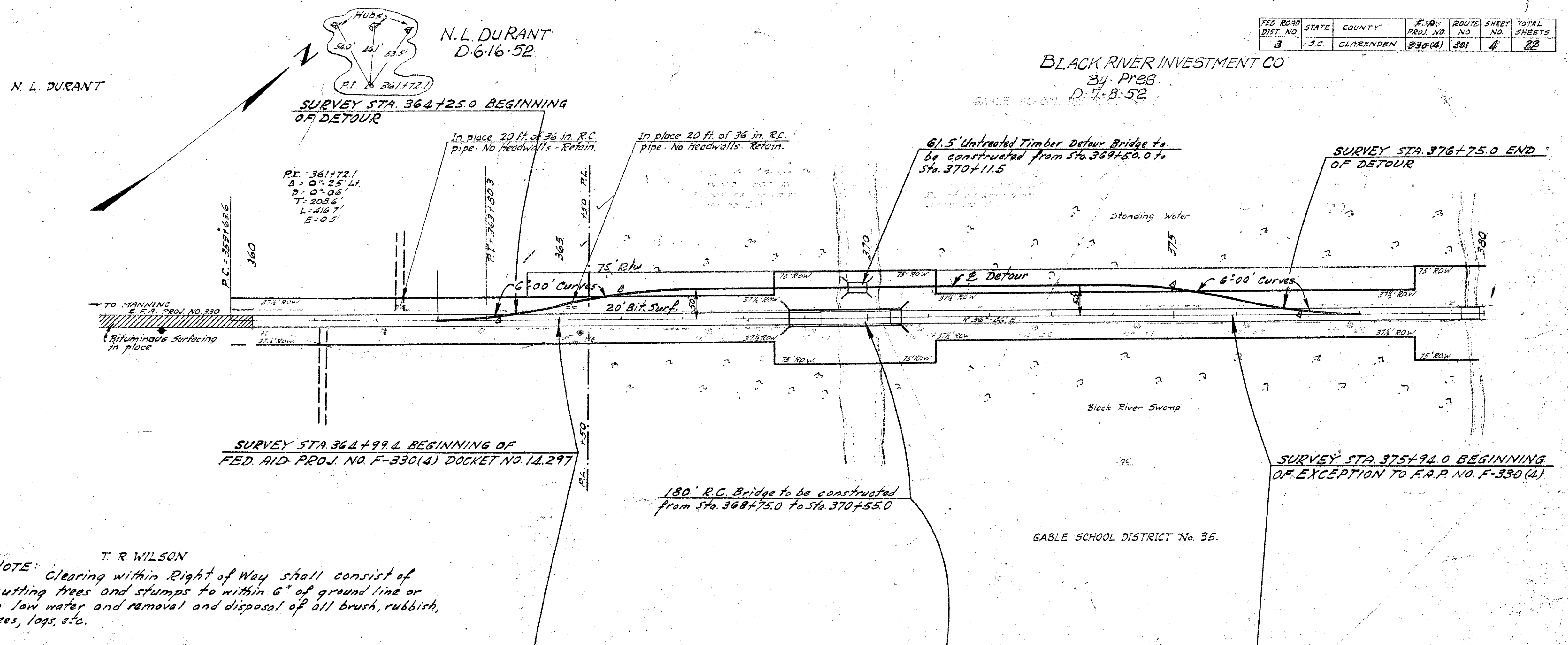


ESTIMATED QUANTITIES		
STATION	CU. YDS.	TONS
BRIDGE NO. 1		200
BRIDGE NO. 3		200
BRIDGE NO. 4		200
TOTAL		600

S. C. STATE HIGHWAY DEPT.  
COLUMBIA, S. C.  
**DETAIL SHOWING  
RIPRAP TO BE PLACED ON SLOPES  
OF EMBANKMENT AT BRIDGE ENDS**

DOCKET NO. 14.297 { ROAD ROUTE 301  
COUNTY CLARENDON

FED. ROAD DIST. NO.	STATE	COUNTY	F.P. PROJ. NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDEN	330(4)	301	4	22



PLAN	DATE	BY	DATE
DATE			
BY			
DATE			
BY			
DATE			
BY			

PROFILE	DATE	BY	DATE
DATE			
BY			
DATE			
BY			
DATE			
BY			

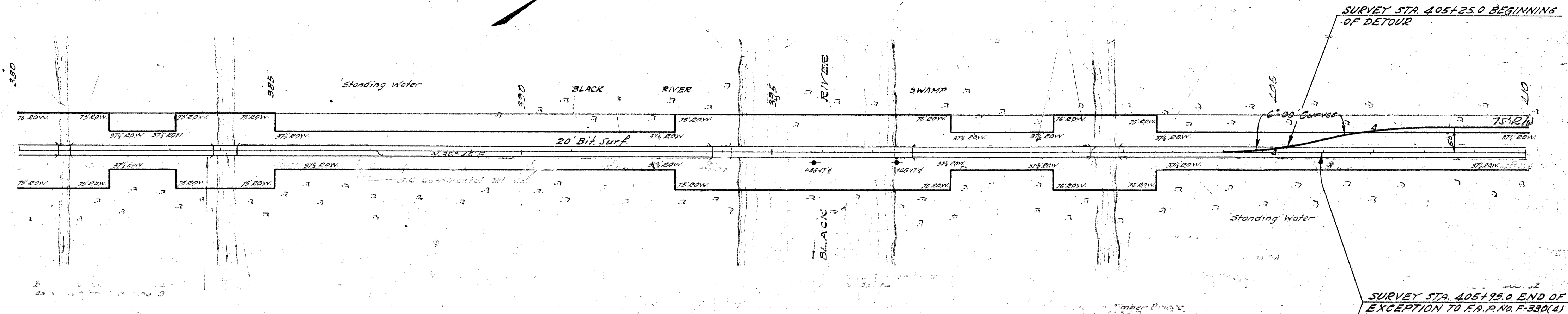
FED. ROAD DIST. NO.	STATE	COUNTY	P. O. PROJ. NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	330(4)	301	5	22

BLACK RIVER INVESTMENT CO  
By: Pres  
D. 7.8.52



DATE	BY	PLAN
		PLAN

NOTE: SURVEYED, ALIGNED, GRADES CHECKED, RT. OF WAY CHECKED.



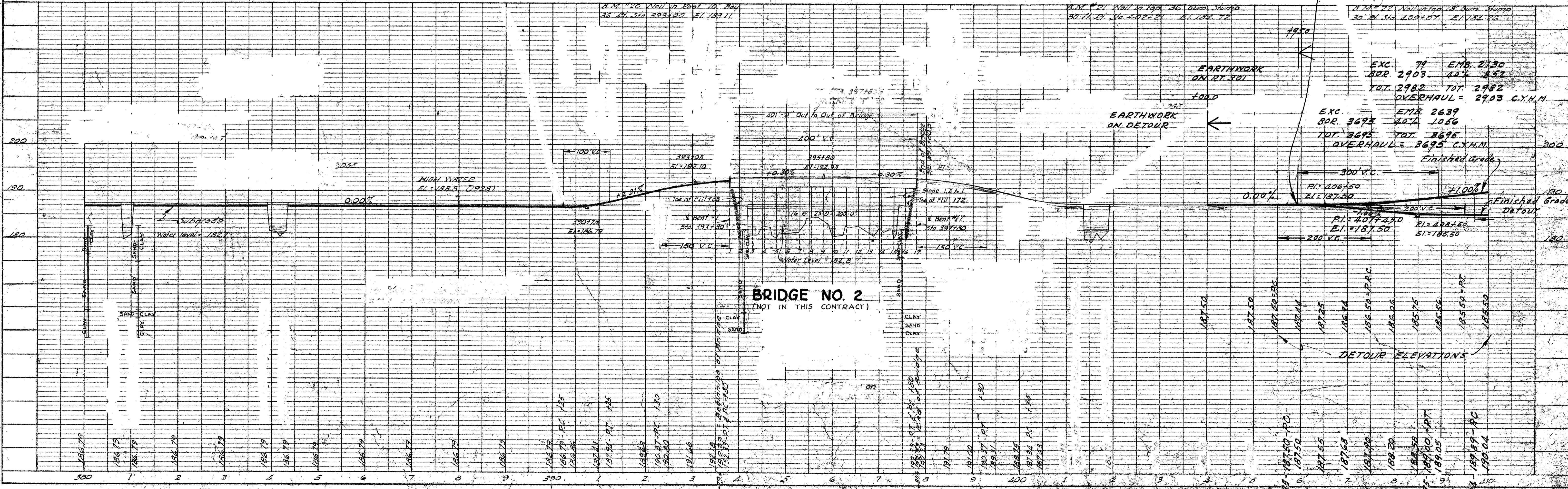
SURVEY STA. 405+25.0 BEGINNING OF DETOUR

SURVEY STA. 405+95.0 END OF EXCEPTION TO F.A.P. NO. F-330(4)

GABLE SCHOOL DISTRICT No. 35

DATE	BY	PROFILE
		PROFILE

NOTE: SURVEYED, GRADES CHECKED, E. M.S. NOTED, STRUCTURE NOTATION CHECKED.



EXC. 78	EMB. 2130
80R. 2903	42% 852
TOT. 2982	TOT. 2982
OVERHAUL = 29.03 C.Y.H.M.	

EXC. 3695	EMB. 2639
80R. 3695	42% 1056
TOT. 3695	TOT. 3695
OVERHAUL = 36.95 C.Y.H.M.	

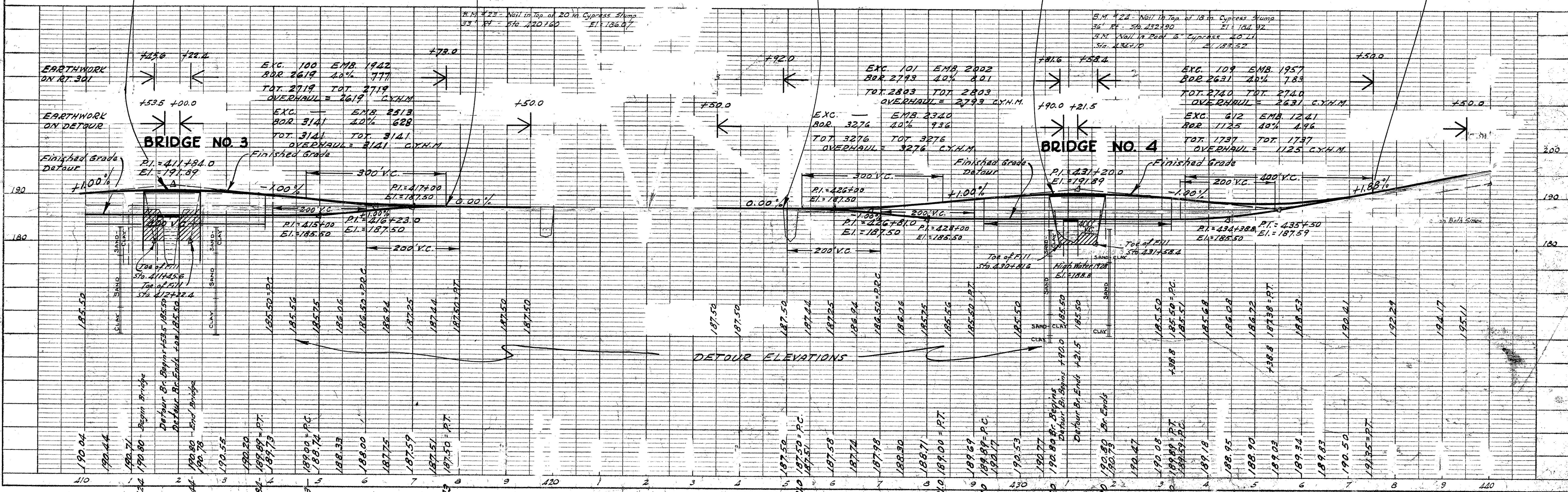
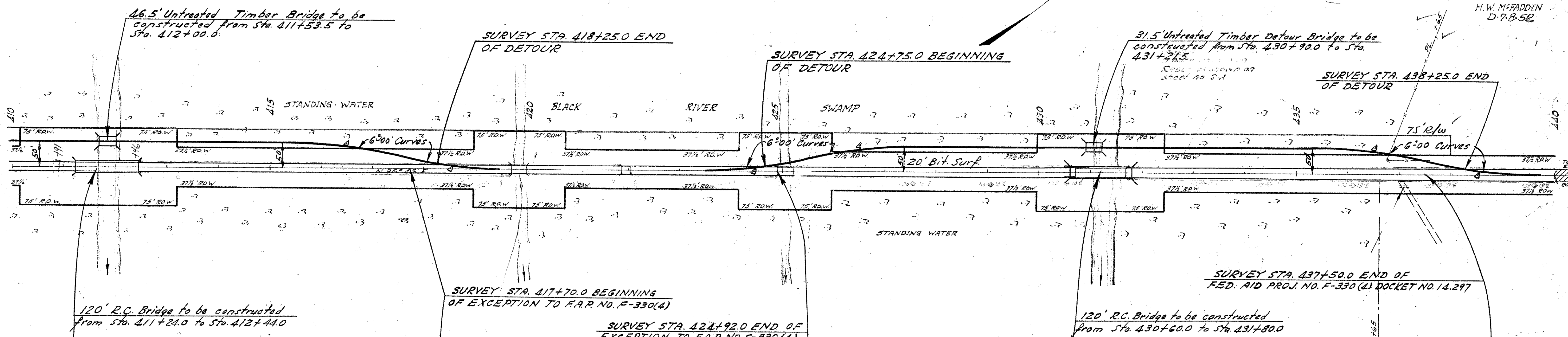
BRIDGE NO. 2  
(NOT IN THIS CONTRACT)

BLACK RIVER INVESTMENT CO  
By Pres  
D-7-8-52

FED. ROAD DIST. NO.	STATE	COUNTY	F.P. PROJ. NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	330(4)	301	6	22

H.W. MCFADDEN  
D-7-8-52

N.C. MCFADDEN



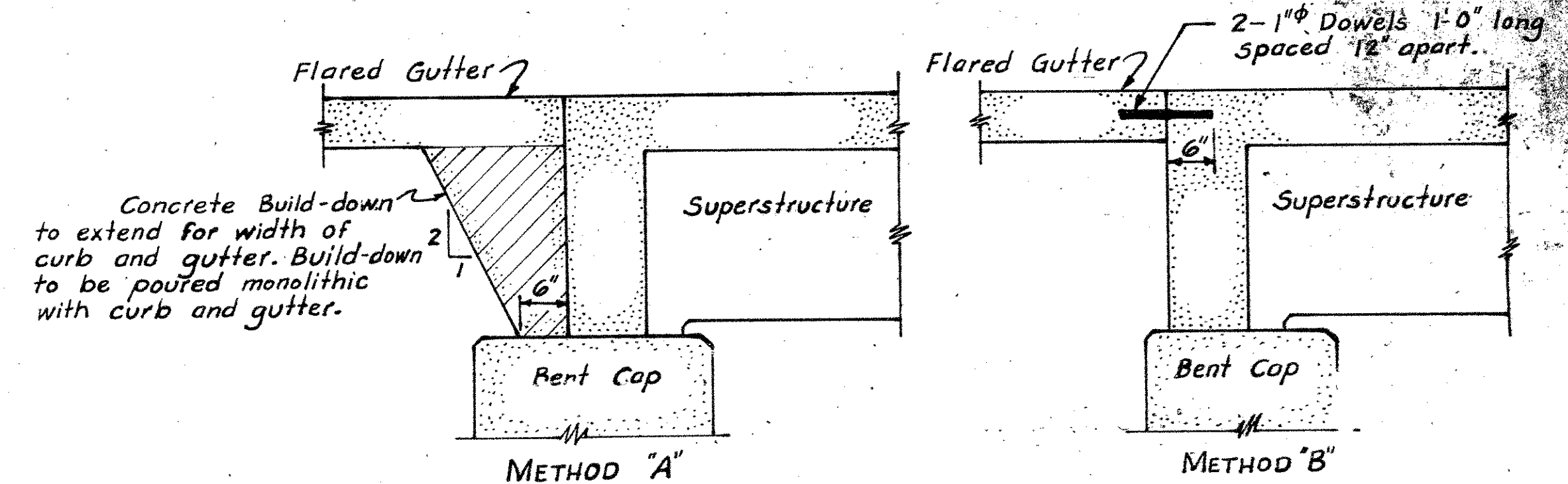
PLAN

DATE	
BY	
DESIGNED	
CHECKED	
NOTE BOOK	
FT. OF WAY CHECKED	
NO.	

PROFILE

DATE	
BY	
DESIGNED	
CHECKED	
NOTE BOOK	
STRUCTURE NOTATION CHECKED	
NO.	

FED. RD. DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	SC.	CLARENDON	14.297	U.S. 301	7	22

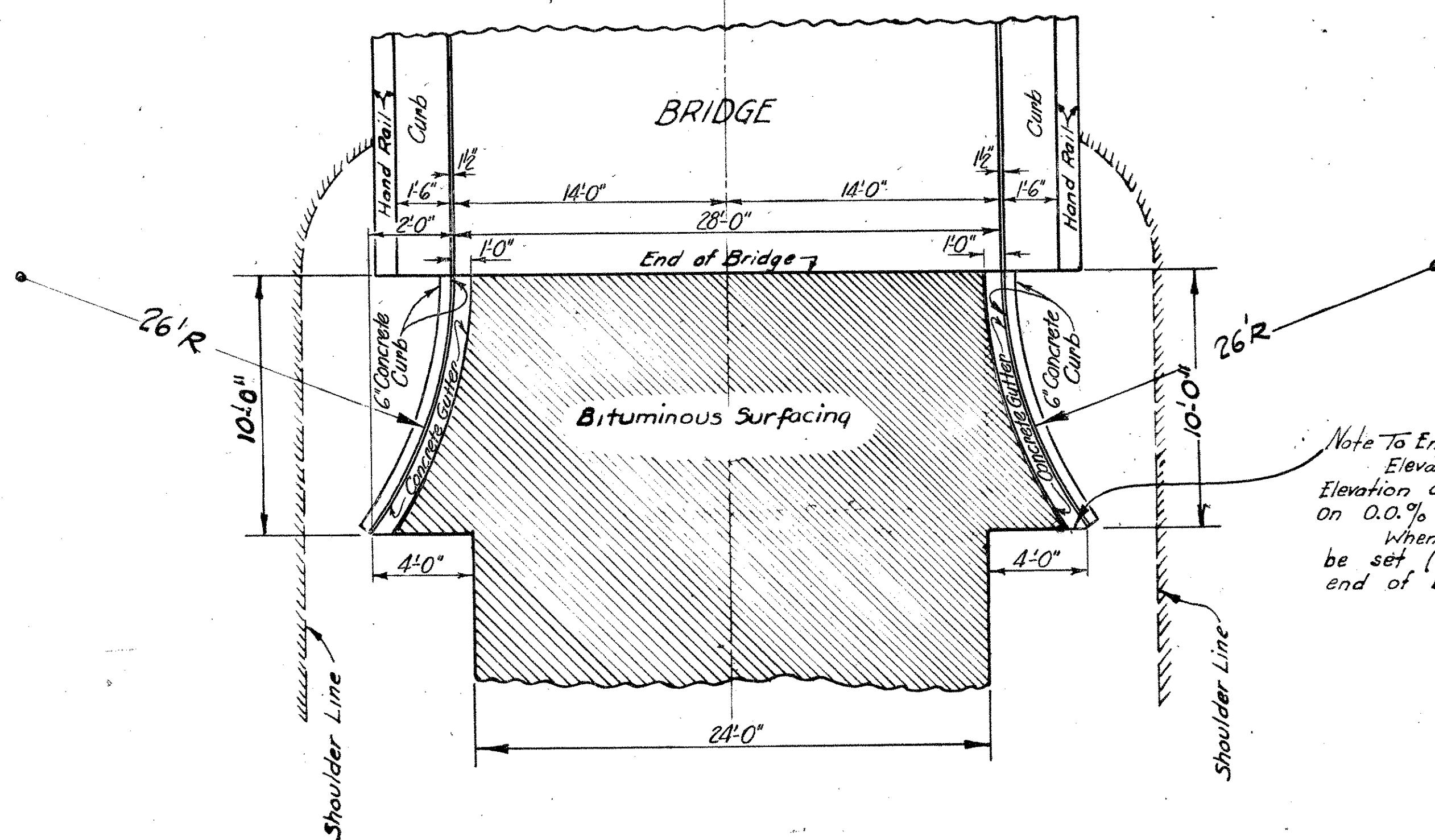


Note:— Ends of Curb and Gutter adjacent to bridge to be supported by one of the methods shown above. Use Method "A" when there is sufficient width and length of bent cap to support concrete build-down. Otherwise, use Method "B".  
The quantity of concrete or reinforcing steel involved shall be computed by the Engineer and added to the quantities shown on this sheet.

CURB AND GUTTER SUPPORT  
Scale:  $\frac{3}{4}$ " = 1'-0"

SKETCH  
SHOWING  
FLARE AT BRIDGE ENDS

Scale -  
1 inch = 5 feet



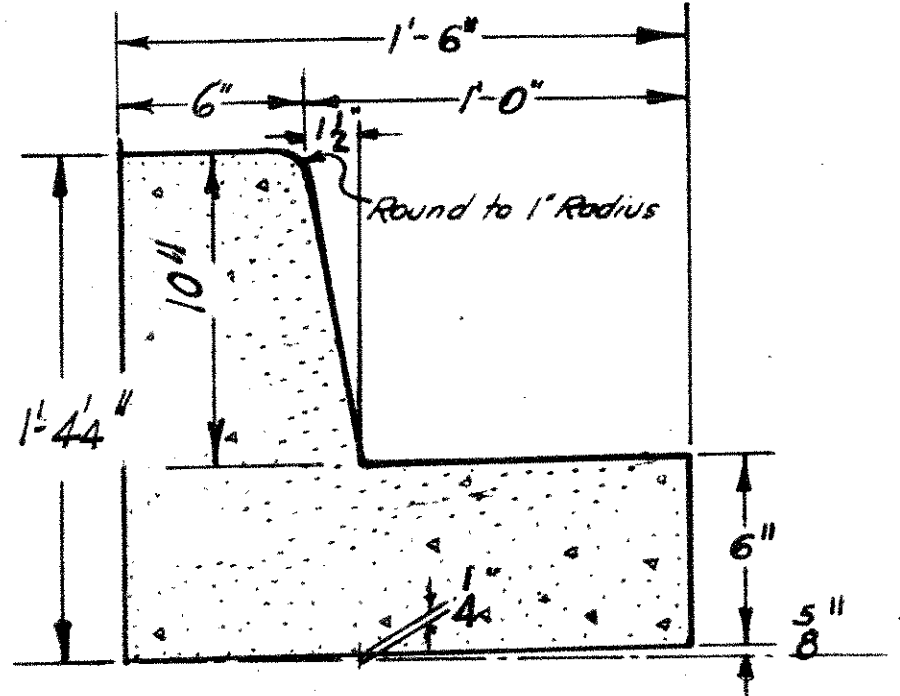
CURB & GUTTER QUANTITIES-ONE END ONE BRIDGE  
Class "A" Concrete for one end of bridge = .93 C.Y.

Note To Engineers:  
Elevation of this point to be set 6" below Elevation of gutter at end of Bridge where approach is on 0.0% grade.  
When the approach is on a grade this point should be set  $(6" \pm \% \text{ of grade} \times 10')$  below elevation of gutter at end of bridge.

All costs of constructing the concrete curb and gutter at the ends of the bridge will be included in payment for the concrete involved at the Unit Price Bid for Class "A" Concrete.

DETAIL  
OF  
CONC. CURB AND GUTTER

Scale -  
1 inch = 6 inches

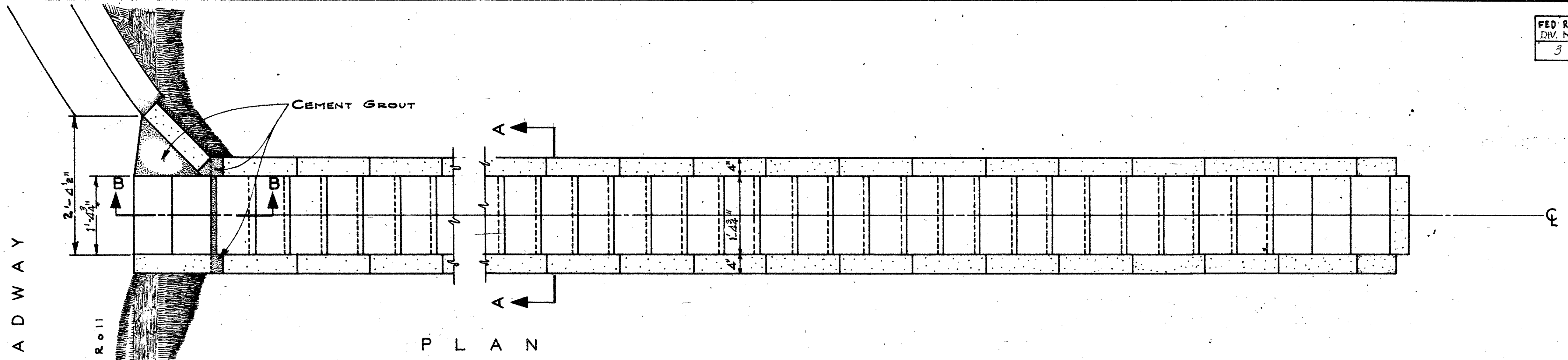


Adapted For Docket No. 14.297: E.A.S. - Apr. 1952  
Checked by: C.E.S. - Apr. 1952

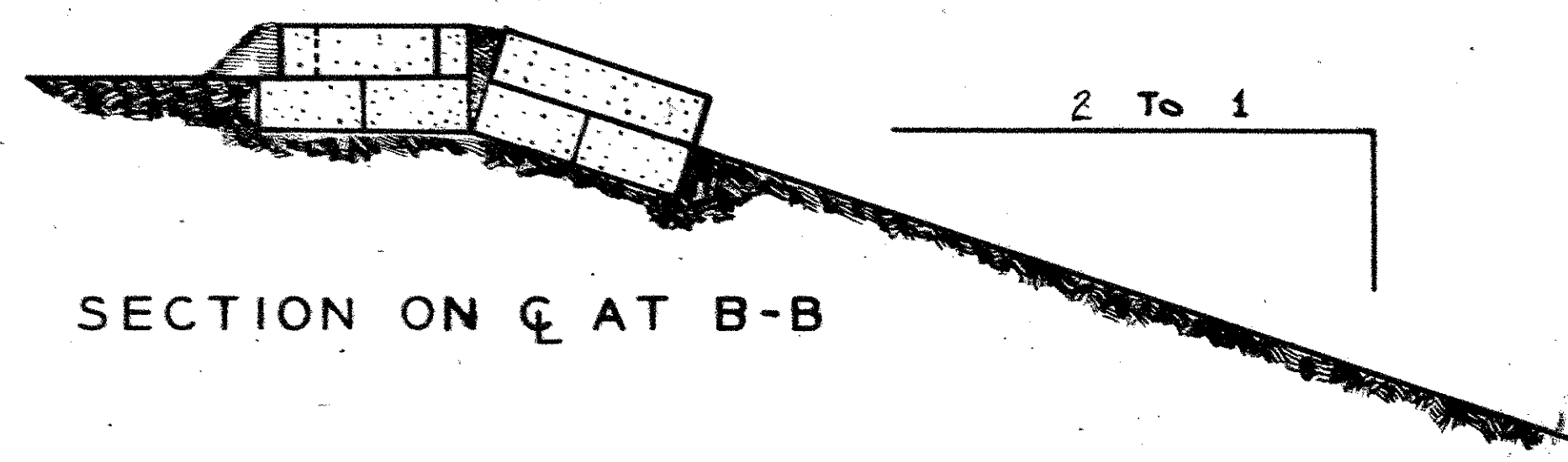
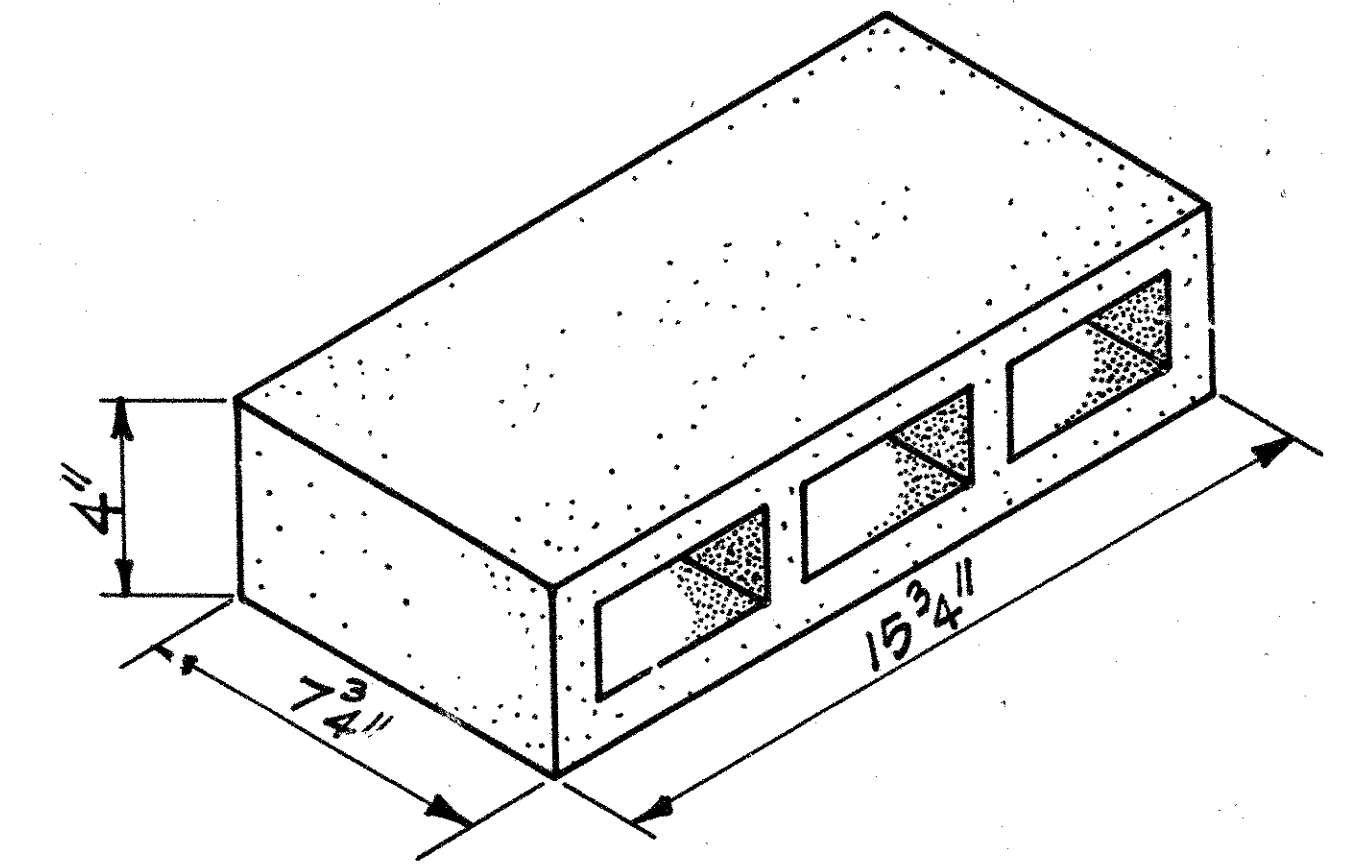
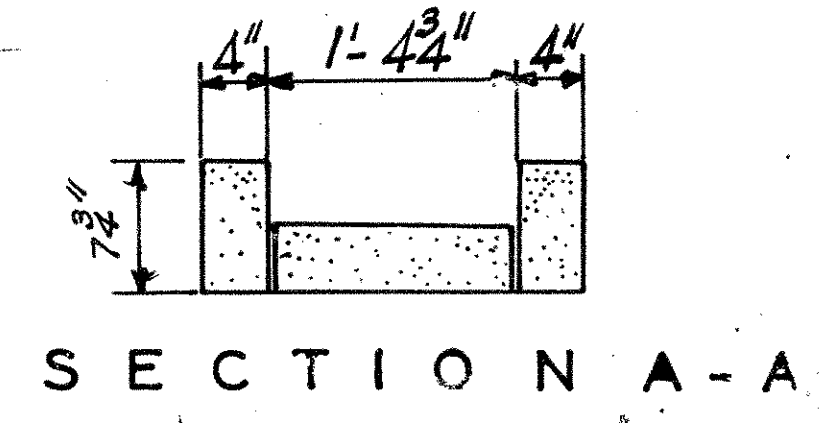
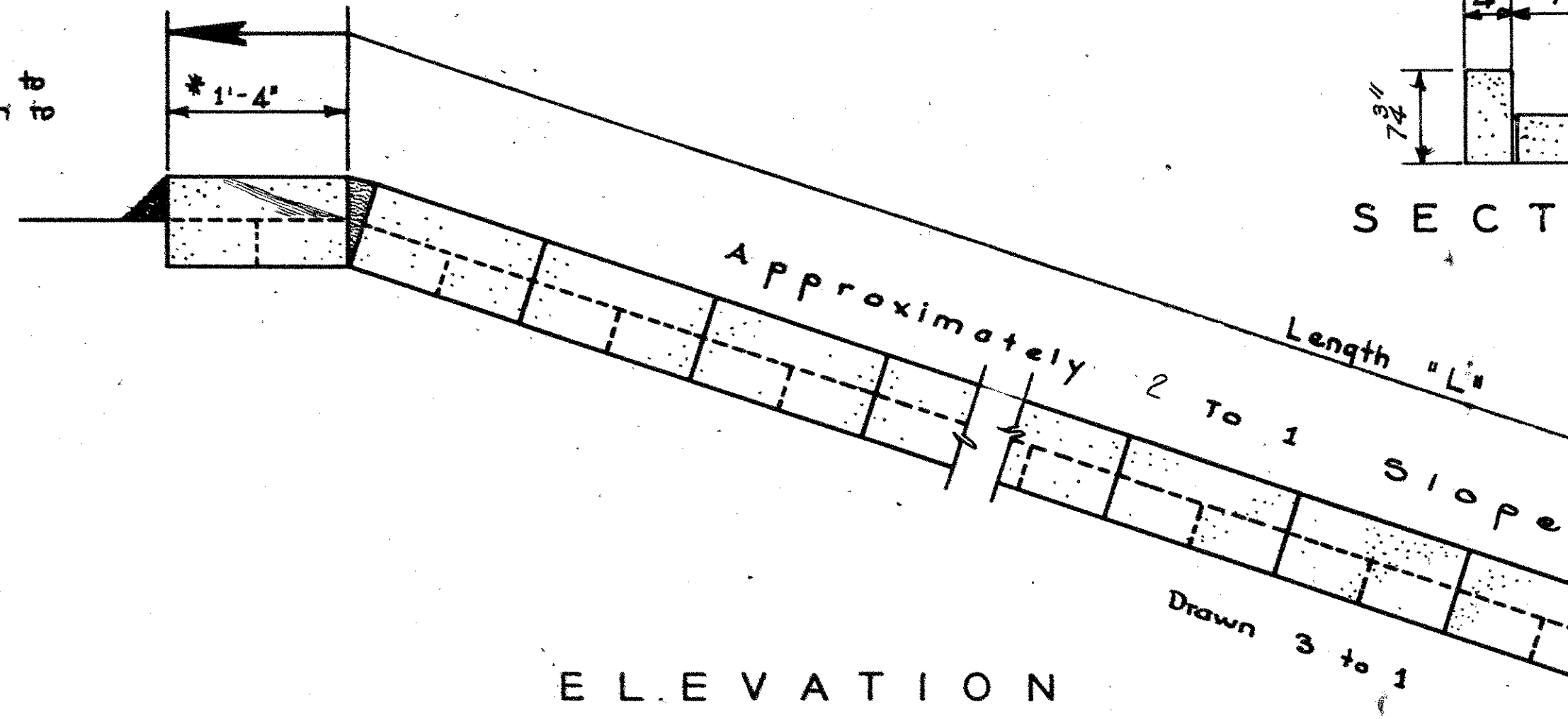
S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
DETAILS OF  
FLARED CURB & GUTTER  
AT ENDS OF BRIDGE  
DOCKET NO. 14.297 U.S. ROUTE NO. 301  
CLARENDON COUNTY APRIL 1952  
SCALE AS NOTED



FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	14,297	US.301	8	22



\* Resident Engineer to vary this dimension to suit shoulder



BRIDGE NO. 1	100 FT.
BRIDGE NO. 3	90 FT.
BRIDGE NO. 4	90 FT.
<b>TOTAL LENGTH</b>	<b>280 FT.</b>

Scale 1" = 1Ft

NOTE: Necessary concrete and extra blocks at end of drain will be paid for as 2 feet of slope drain at unit price bid per lin. ft. All blocks shall be laid with a 1/2" joint of 1:3 Mortar. All costs of necessary excavation for the construction of the slope drains shall be included in the unit-price bid per lin. ft. of concrete Tile Slope Drains.

S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
**TYPICAL CONCRETE TILE  
SLOPE DRAINS**

S. C. DOCKET NO. 14,297  
U.S. ROUTE NO. 301  
CLARENDON COUNTY  
DATE: APRIL 1952

Rev.	W.R.T.	5-47
QUANT.		
Tr.	W.R.T.	
Dr.	W.R.T.	

Adapted for Docket No. 14,297: E.A.S. - Apr. 1952  
Checked by: C.E.S. - Apr. 1952

FED. ROAD DIV. NO.	STATE	COUNTY	S.C. DOCK NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	14.297	301	9	22

N. L. DURANT  
D. 6-16-52

BLACK RIVER INVESTMENT CO.  
By Pres.  
D. 7-8-52

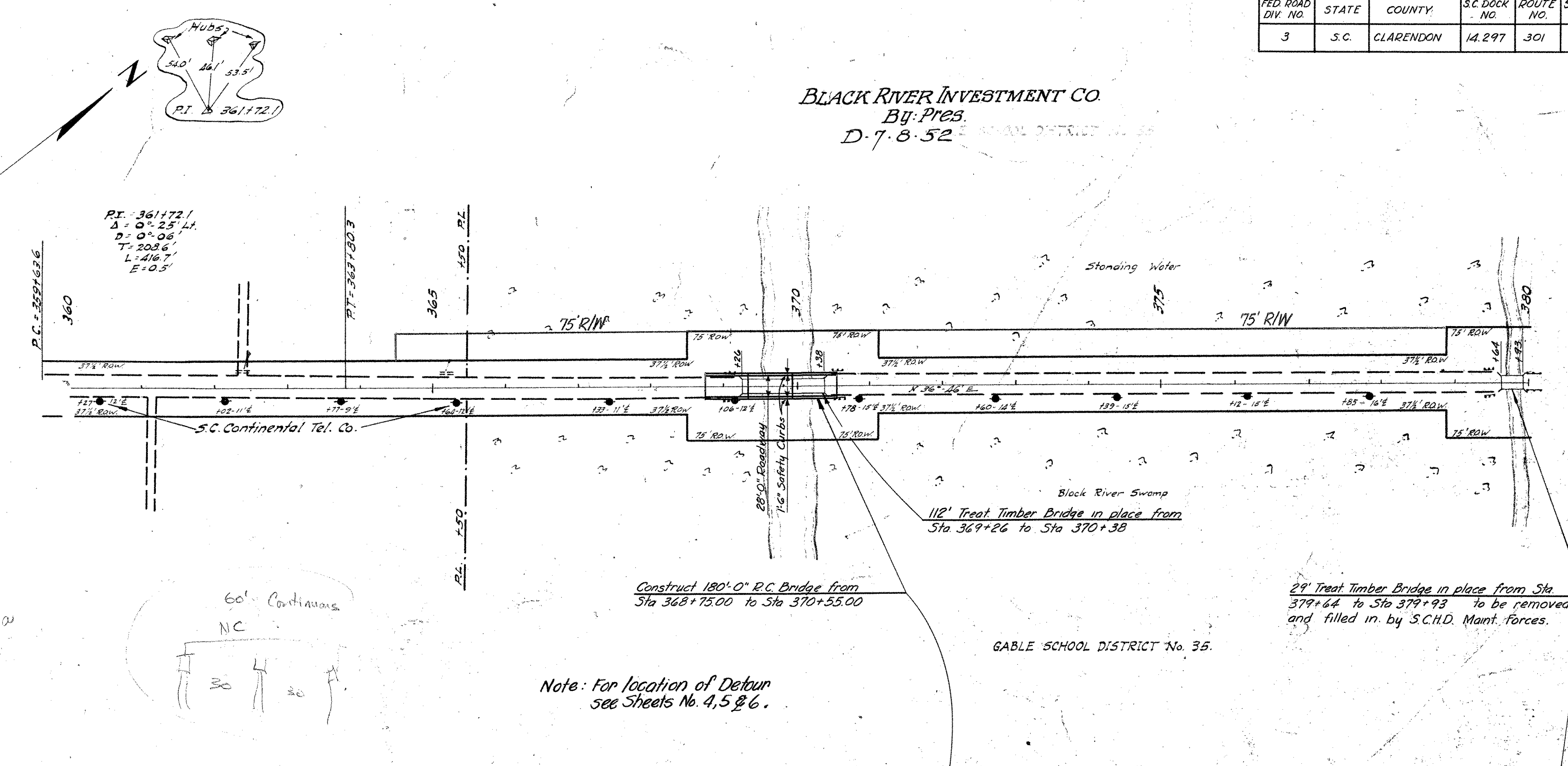
PLAN	DATE
NO.	
BY	
CHECKED	
APPROVED	

PROFILE	DATE
NO.	
BY	
CHECKED	
APPROVED	

For 14.297 by C.E.S. 4-52  
CKZ by C.A.S. 4-52

$\frac{4.75}{1.60} = 2.97$   
 $\frac{5.175}{4.540} = 1.14$   
 $5.175 \times 680 = 718$

T. R. WILSON



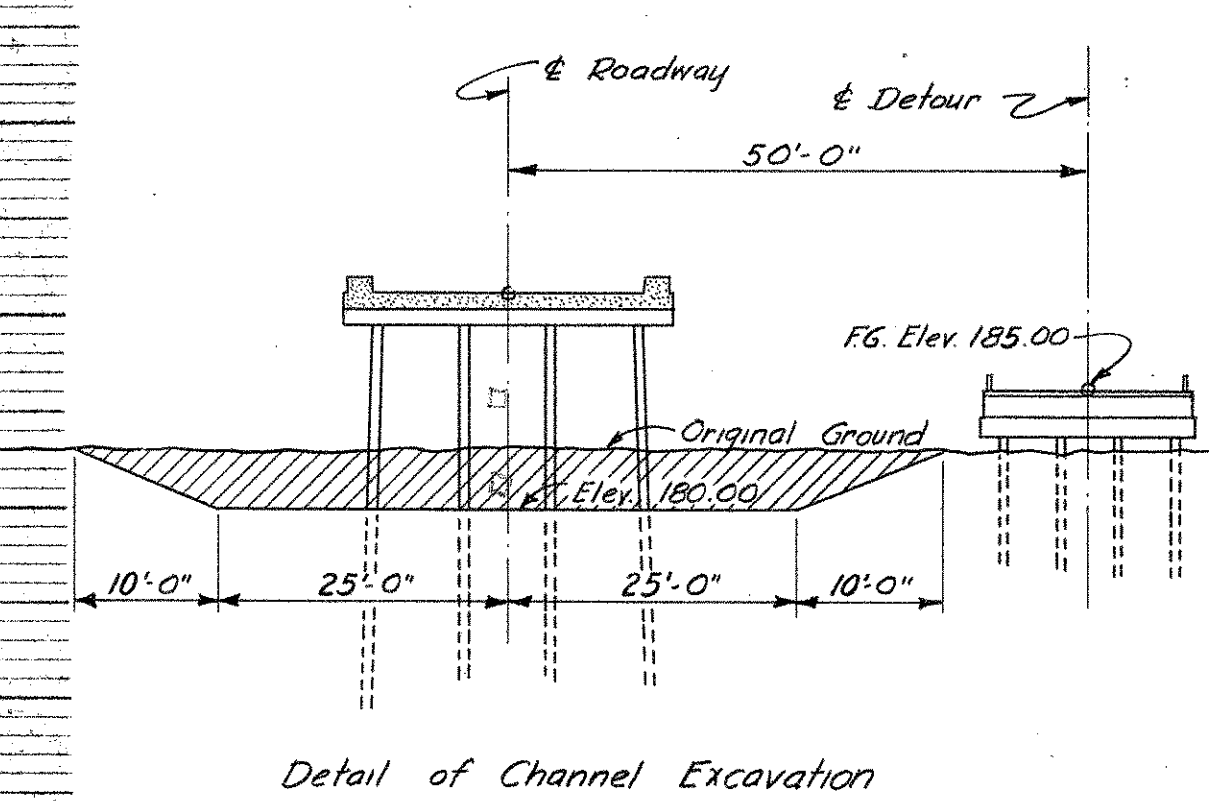
Note: For location of Detour see Sheets No. 4, 5 & 6.

GABLE SCHOOL DISTRICT No. 35.

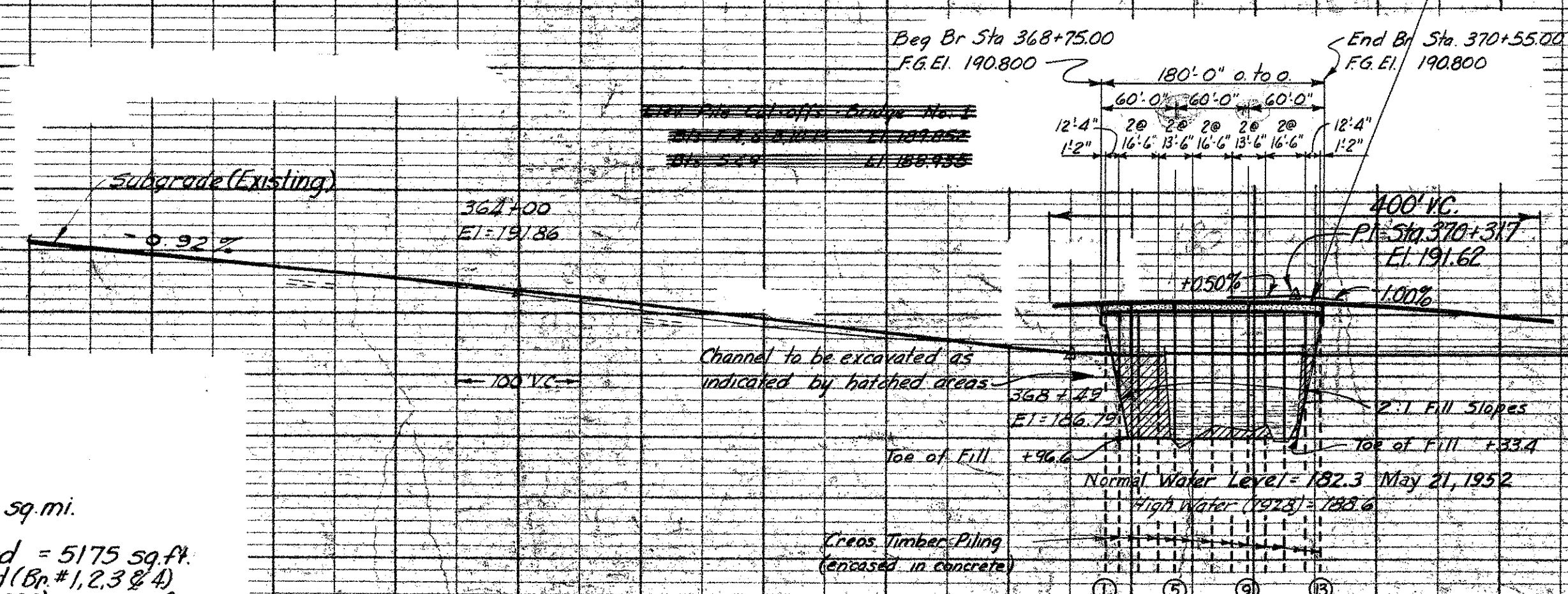
BRIDGE NO. 1

	SUMMARY OF QUANTITIES BRIDGE NO. 1			
	Class "A" Concrete C.Y.	Reinforcing Steel Lbs.	Creas. Timb. Piling LF	Conc. Tile Slope Drains LF
2 End Units	169.43	59,393	-	-
1 Int. Unit	84.76	14,825	-	-
Encasements	20.81	470	-	-
Curbs & Gutters (2)	1.86	-	-	100
<b>Total</b>	<b>276.86</b>	<b>59,288</b>	<b>1820</b>	<b>100</b>

Notes:  
All costs of excavation necessary to construct end bents and all encasements and to remove material under bridge to an elevation 0.5' below bottom of slab to be included in Unit Price bid for Class "A" Concrete.  
Construct Flared Curbs and Gutters and Concrete Tile Slope Drains on both sides of roadway at each end of Bridges No. 1, 3 and 4.



Drainage Area = 475 sq. mi.  
C=0.4  
Area Opening Required = 5175 sq. ft.  
Area Opening Furnished (Br. #1, 2, 3 & 4) under H.M. (E1188) = 5580 sq. ft.



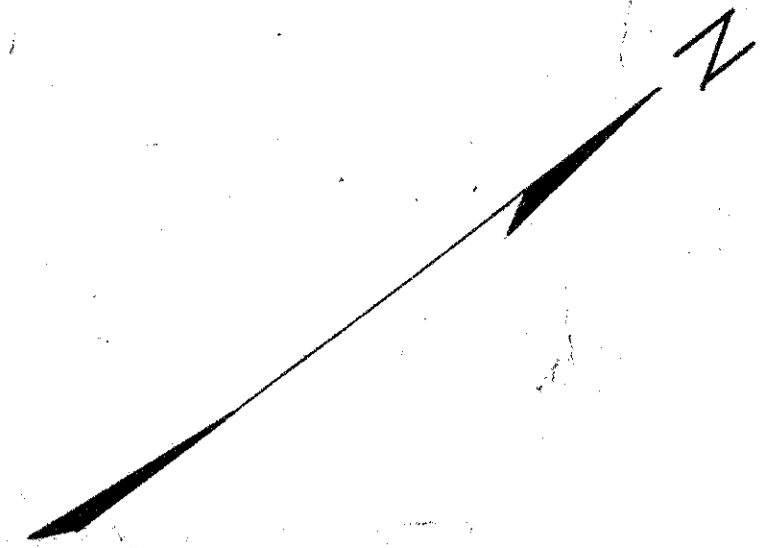
S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

PLAN & PROFILE  
FOR BRIDGES OVER  
BLACK RIVER SWAMP

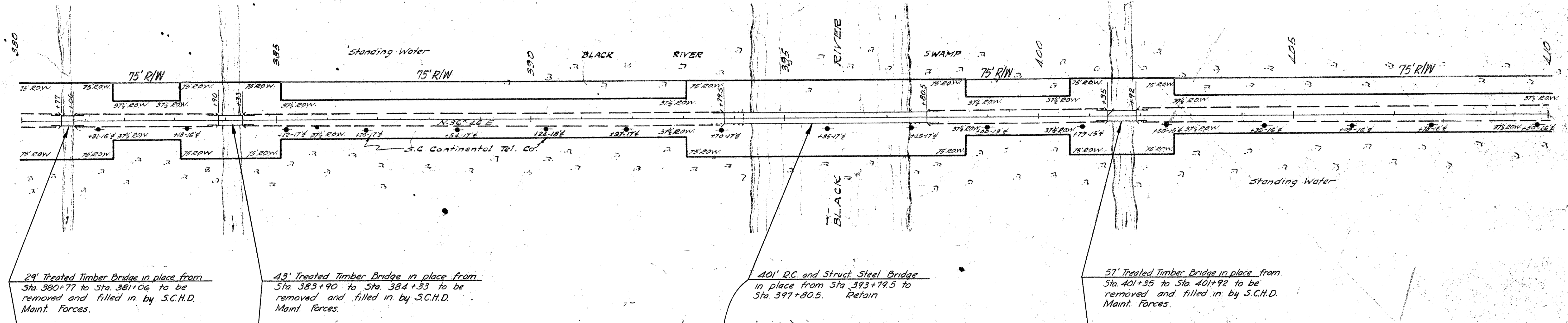
DOCKET NO. 14.297 U. S. ROUTE NO. 301  
CLARENDON COUNTY APRIL 1952

FED. ROAD DIV. NO.	STATE	COUNTY	SC. DOCK NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	14.297	301	10	22

BLACK RIVER INVESTMENT CO.  
By: Pres.  
D. 7-8-52



PLAN	DATE	BY
REVISIONS		
NO.	DATE	BY
1		



29' Treated Timber Bridge in place from Sta. 380+77 to Sta. 381+06 to be removed and filled in by S.C.H.D. Maint. Forces.

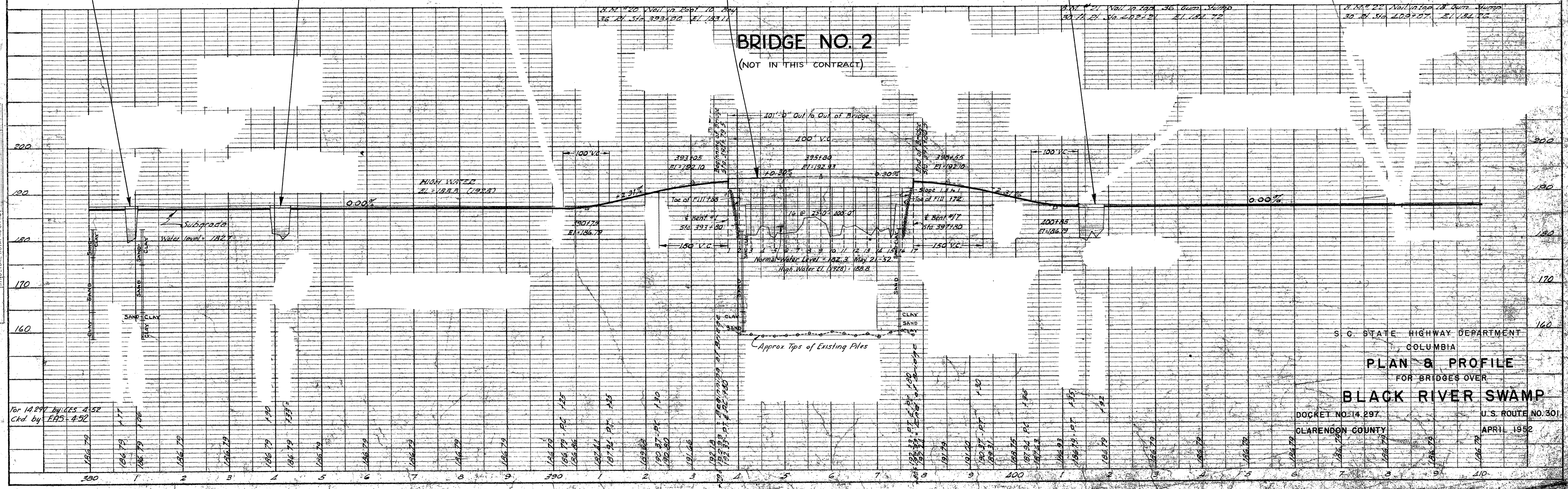
43' Treated Timber Bridge in place from Sta. 383+90 to Sta. 384+33 to be removed and filled in by S.C.H.D. Maint. Forces.

40' RC. and Struct Steel Bridge in place from Sta. 393+79.5 to Sta. 397+80.5. Retain

57' Treated Timber Bridge in place from Sta. 401+35 to Sta. 401+92 to be removed and filled in by S.C.H.D. Maint. Forces.

GABLE SCHOOL DISTRICT No. 35

PROFILE	DATE	BY
REVISIONS		
NO.	DATE	BY
1		



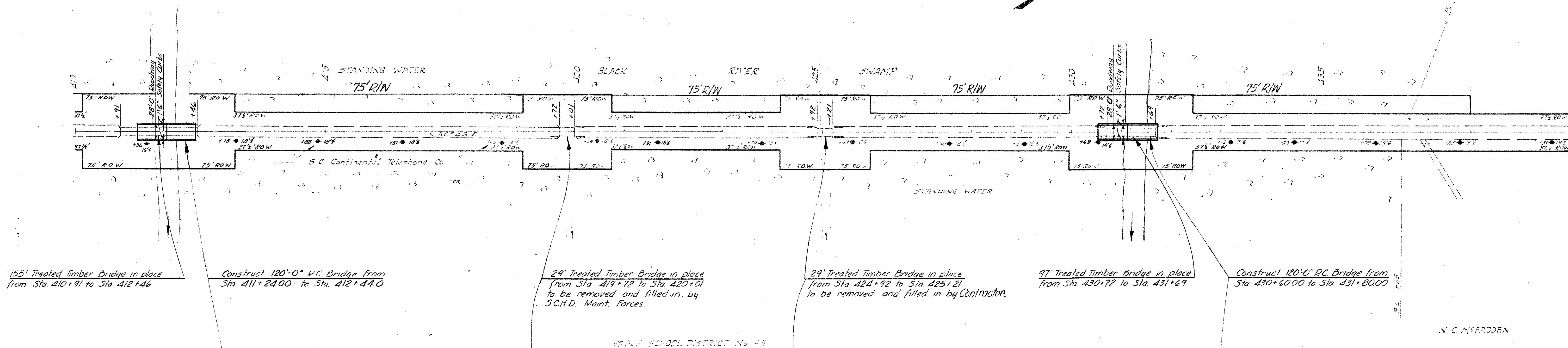
S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
**PLAN & PROFILE**  
FOR BRIDGES OVER  
**BLACK RIVER SWAMP**  
DOCKET NO. 14.297  
CLARENDON COUNTY  
U.S. ROUTE NO. 301  
APRIL 1952

For 14.297 BRIDGES 4-52  
Ckd by EAS-4-52

BLACK RIVER INVESTMENT CO  
By Pres.  
D 7-8-52

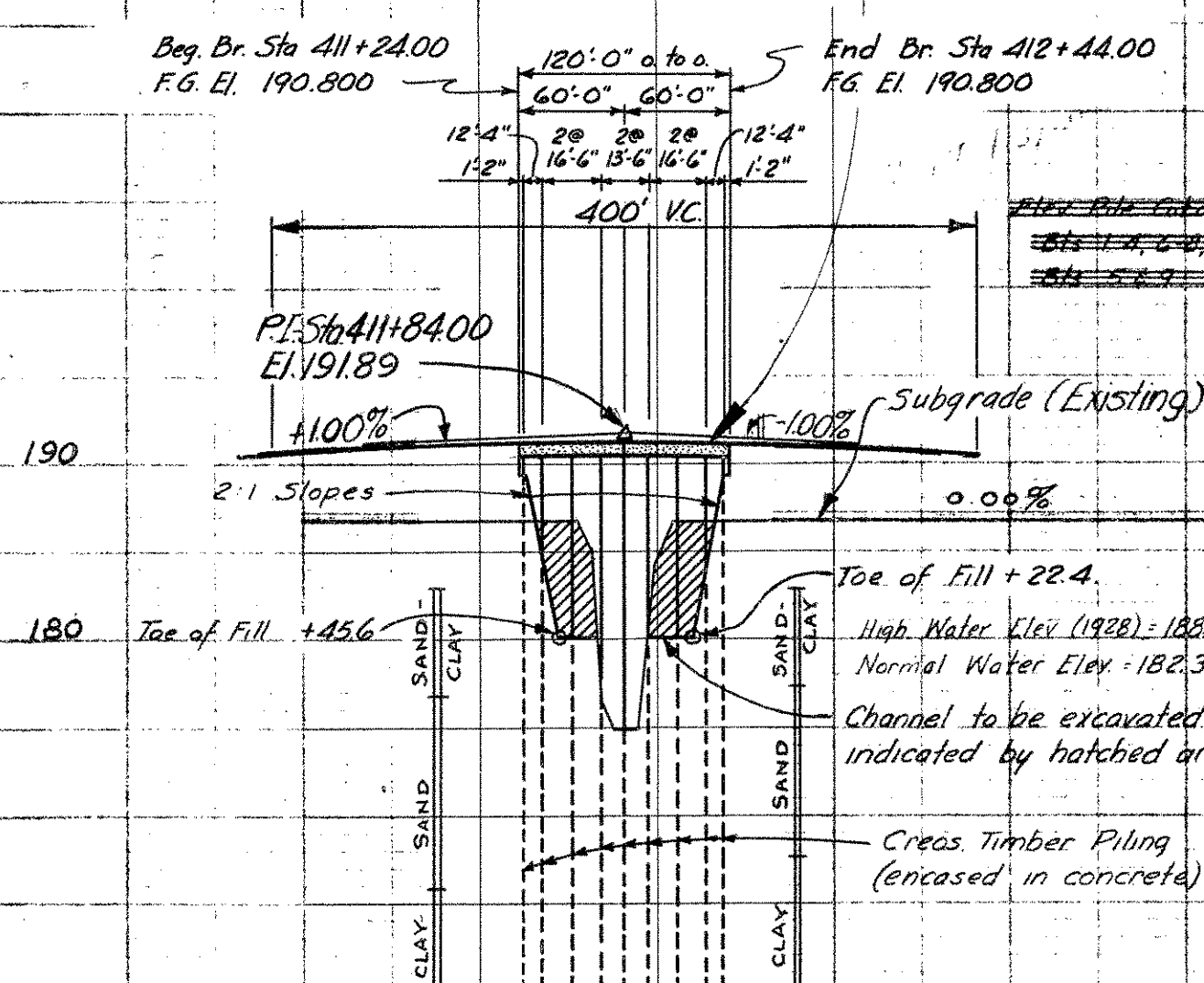
FED. ROAD DIV. NO.	STATE	COUNTY	S.C. DOCK NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	14,297	301	11	22

H.W. McFADDIN  
D 7-8-52



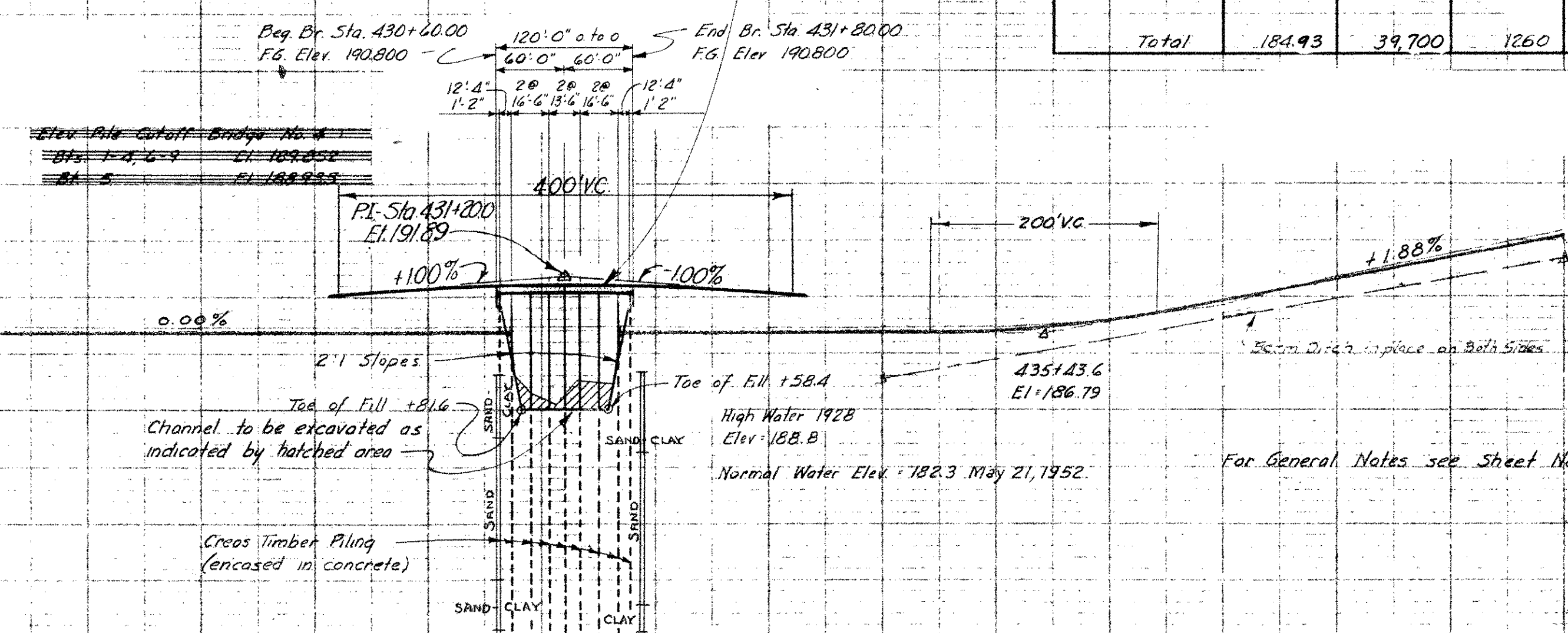
	Class "A" Concrete	Reinforcing Steel	Creos. Timb. Piling	Conc. TILE Slope Drains
	CY	Lbs	LF	LF
2 End Units Encasements	169.43	39,393	-	-
Curb & Gutter (2)	1.86	307	-	90
<b>Total</b>	<b>184.93</b>	<b>39,700</b>	<b>1260</b>	<b>90</b>

BRIDGE NO. 3



	Class "A" Concrete	Reinforcing Steel	Creos. Timb. Piling	Conc. TILE Slope Drains
	CY	Lbs	LF	LF
2 End Units Encasements	169.43	39,393	-	-
Curb & Gutter (2)	1.86	307	-	90
<b>Total</b>	<b>184.93</b>	<b>39,700</b>	<b>1260</b>	<b>90</b>

BRIDGE NO. 4



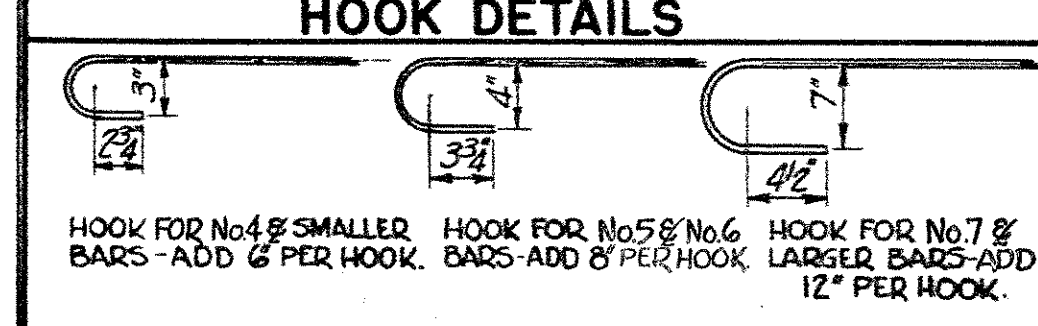
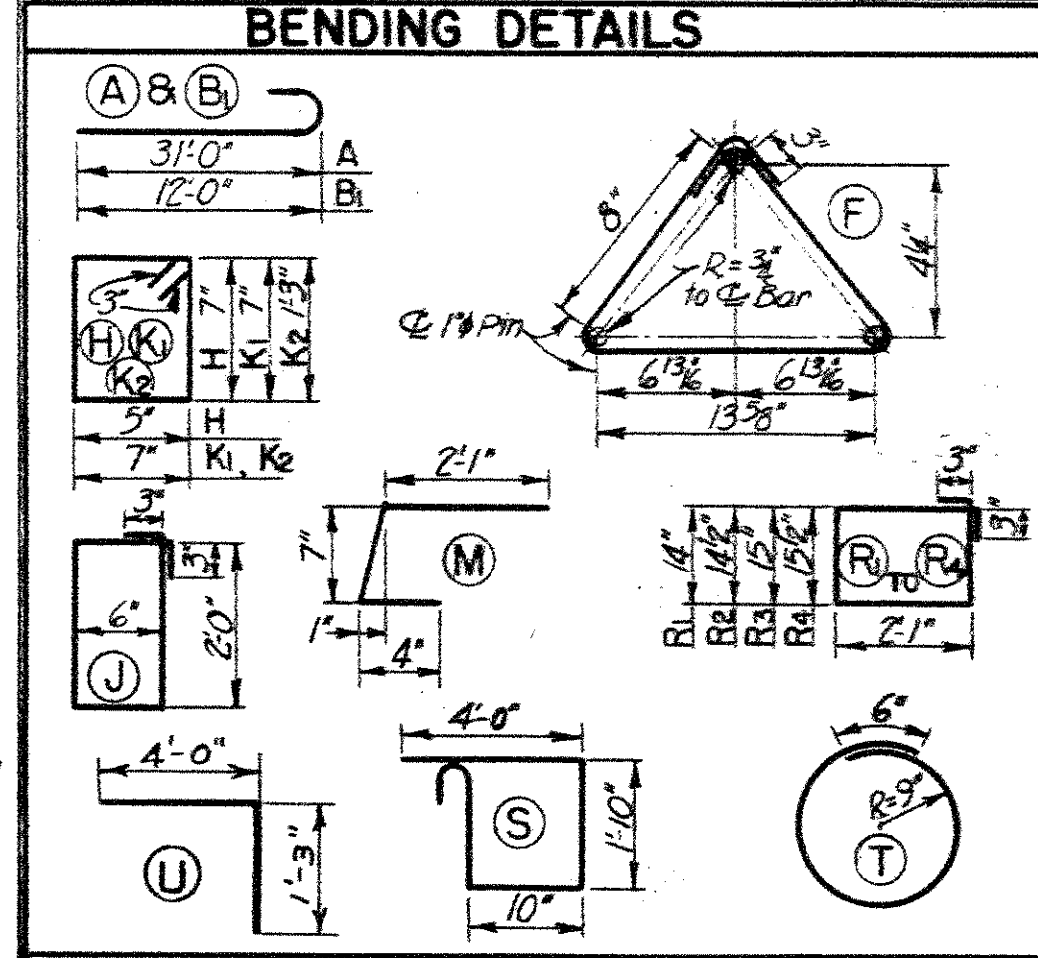
S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
PLAN & PROFILE  
FOR BRIDGES OVER  
**BLACK RIVER SWAMP**  
DOCKET NO. 14,297 U.S. ROUTE NO. 301  
CLARENDON COUNTY APRIL 1952

For 14,297 by CES 4-52  
Ctd by EAS-4-52  
Rev. by CES 7-52 (R. 763)  
Ctd by EAS-7-52

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CLARENDON	14.297	U.S. 301	12	22

STEEL SCHEDULE						
MARK	SIZE NO.	LENGTH	D	NUMBER REQ'D		
				TWO END UNITS	ONE INTERIOR UNIT	
A	6	31'-8"	B	272	136	
B <sub>1</sub>	7	13'-0"	B	136	68	
B <sub>2</sub>	7	13'-0"	S	136	68	
C <sub>1</sub>	7	10'-0"	S	136	68	
C <sub>2</sub>	7	7'-0"	S	68	34	
D	4	33'-8"	S	84	44	
E	5	33'-8"	S	92	48	
F	4	3'-6"	B	330	176	
G	4	29'-8"	S	32	16	
H	2	7'-6"	B	168	84	
J	4	5'-6"	B	68	32	
K <sub>1</sub>	2	2'-10"	B	84	48	
K <sub>2</sub>	2	4'-2"	B	12	—	
L	4	30'-10"	S	32	16	
M	4	3'-0"	B	192	96	
N	6	1'-0"	S	160	80	
P	7	33'-8"	S	72	32	
R <sub>1</sub>	4	7'-0"	B	48	18	
R <sub>2</sub>	4	7'-1"	B	91	37	
R <sub>3</sub>	4	7'-2"	B	80	30	
R <sub>4</sub>	4	7'-3"	B	72	27	
S	6	9'-2"	B	72	32	
T	4	5'-3"	B	72	32	
U	5	5'-3"	B	68	—	

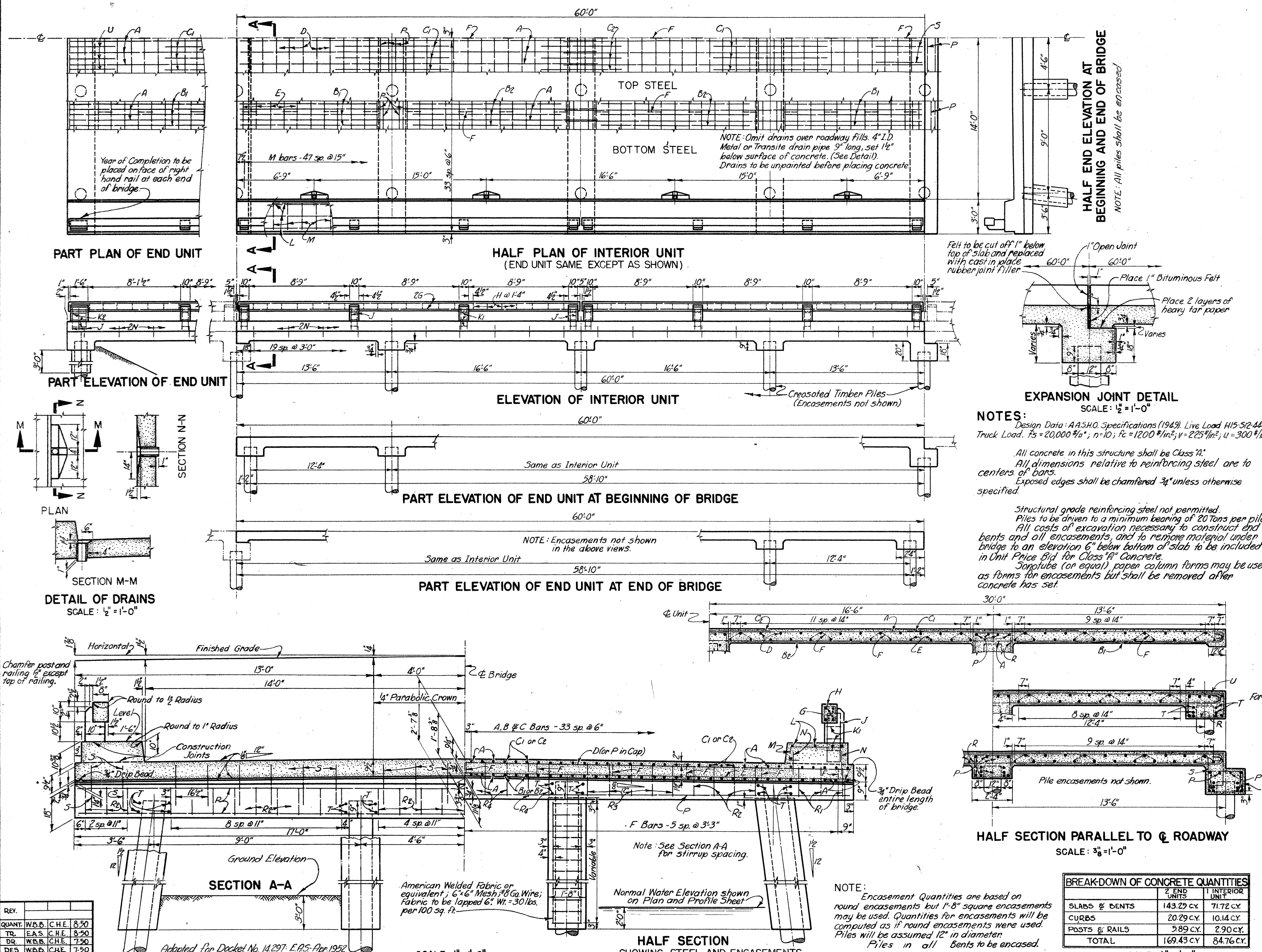
QUANTITIES		
CLASS	2 END UNITS	1 INTERIOR UNIT
CLASS "A" CONCRETE	169.43 CY	84.76 CY
REINFORCING STEEL	39,393 LBS	19,425 LBS



SUMMARY OF QUANTITIES			
	CLASS "A" CONCRETE	REINFORCING STEEL	DEPOSITED TIMBER/FILING
2 END UNITS	CY	LBS	LF
INTERIOR UNITS	CY	LBS	LF
* ENCASUREMENTS	CY	LBS	LF
TOTAL	CY	LBS	LF

\* ENCASUREMENT QUANTITIES:  
 CONCRETE PER ONE BENT (4 PILES) = 0.2069 CY  
 REINFORCING STEEL PER ONE BENT (4 PILES) = 4,9982 LBS

S. C. STATE HIGHWAY DEPARTMENT  
 COLUMBIA  
**60 FT. CONTINUOUS UNIT  
 FLAT SLAB**  
 FOR BRIDGES OVER  
**BLACK RIVER SWAMP**  
 DOCKET NO. 14.297 ROUTE NO. 301  
 COUNTY: CLARENDON DATE: APRIL 1952



REV.	BY	CHKD.	DATE
QUANT.	W.B.B.	C.H.E.	8-50
TR.	E.A.S.	C.H.E.	8-50
DR.	W.B.B.	C.H.E.	7-50
DES.	W.B.B.	C.H.E.	7-50

Adopted For Docket No. 14.297, E.R.S. Apr. 1952  
 Checked by: C.E.S. Apr. 1952

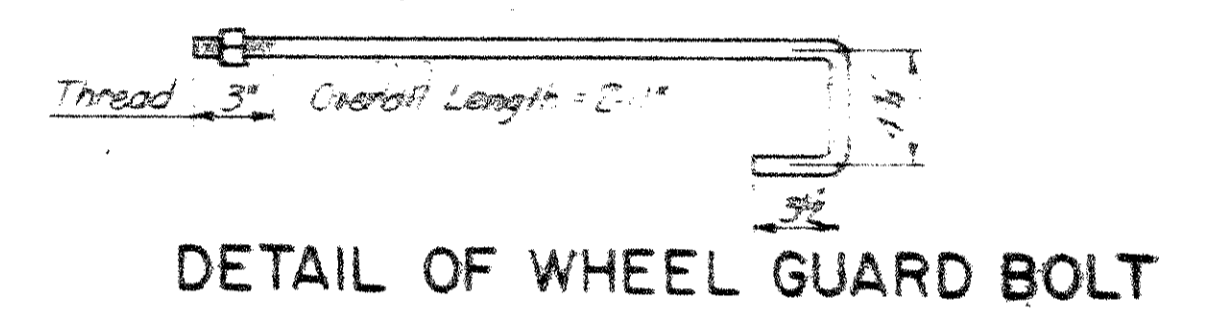
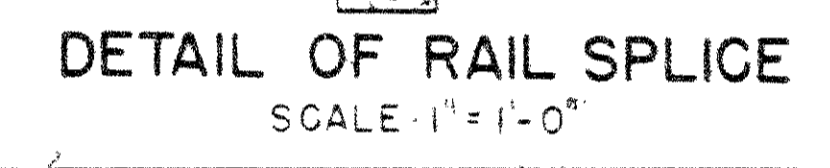
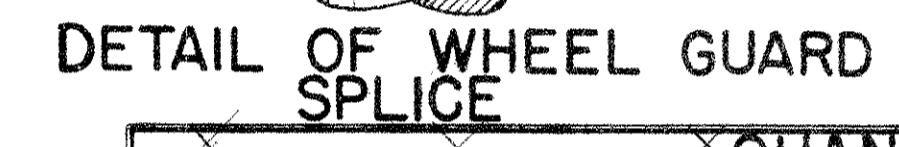
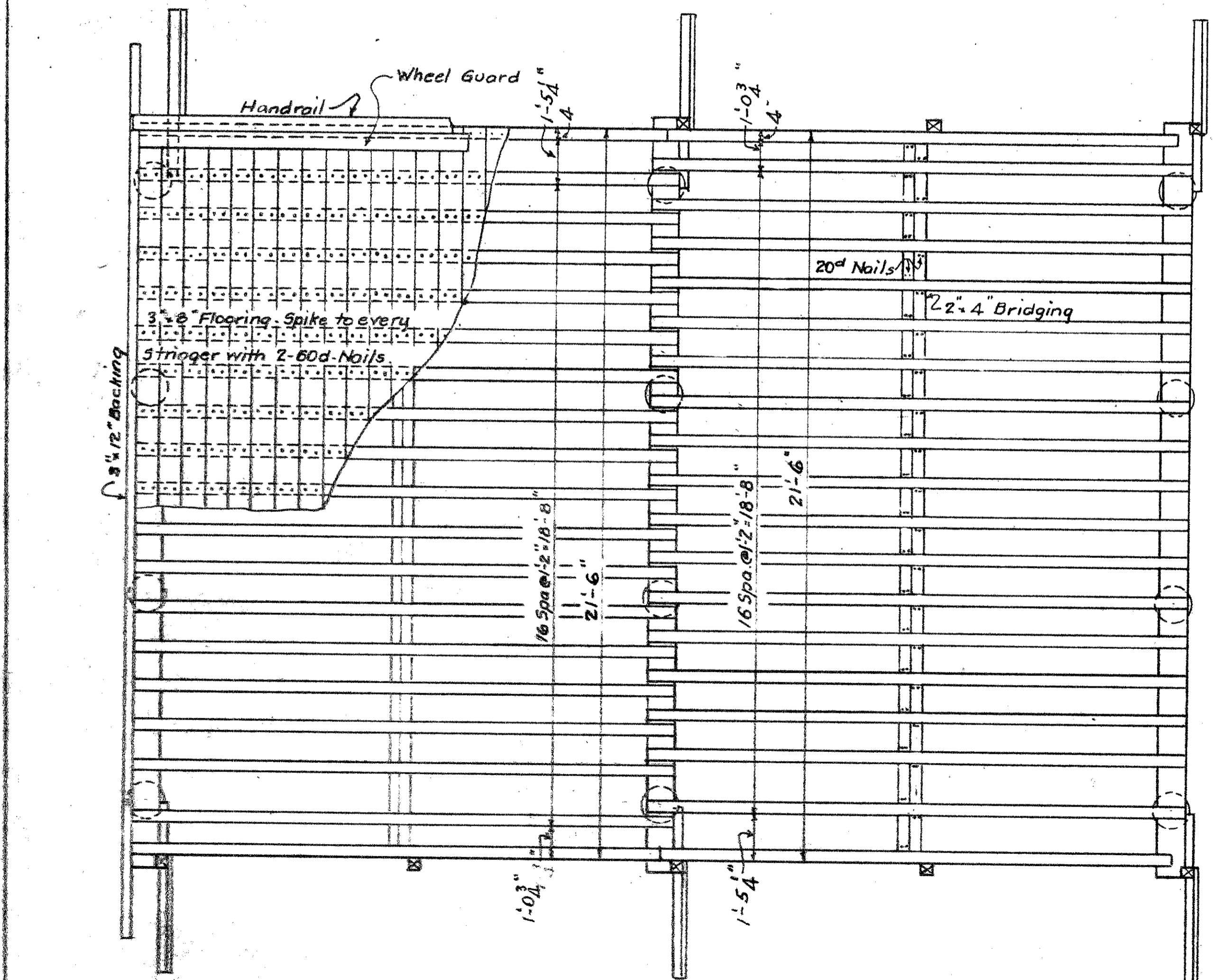
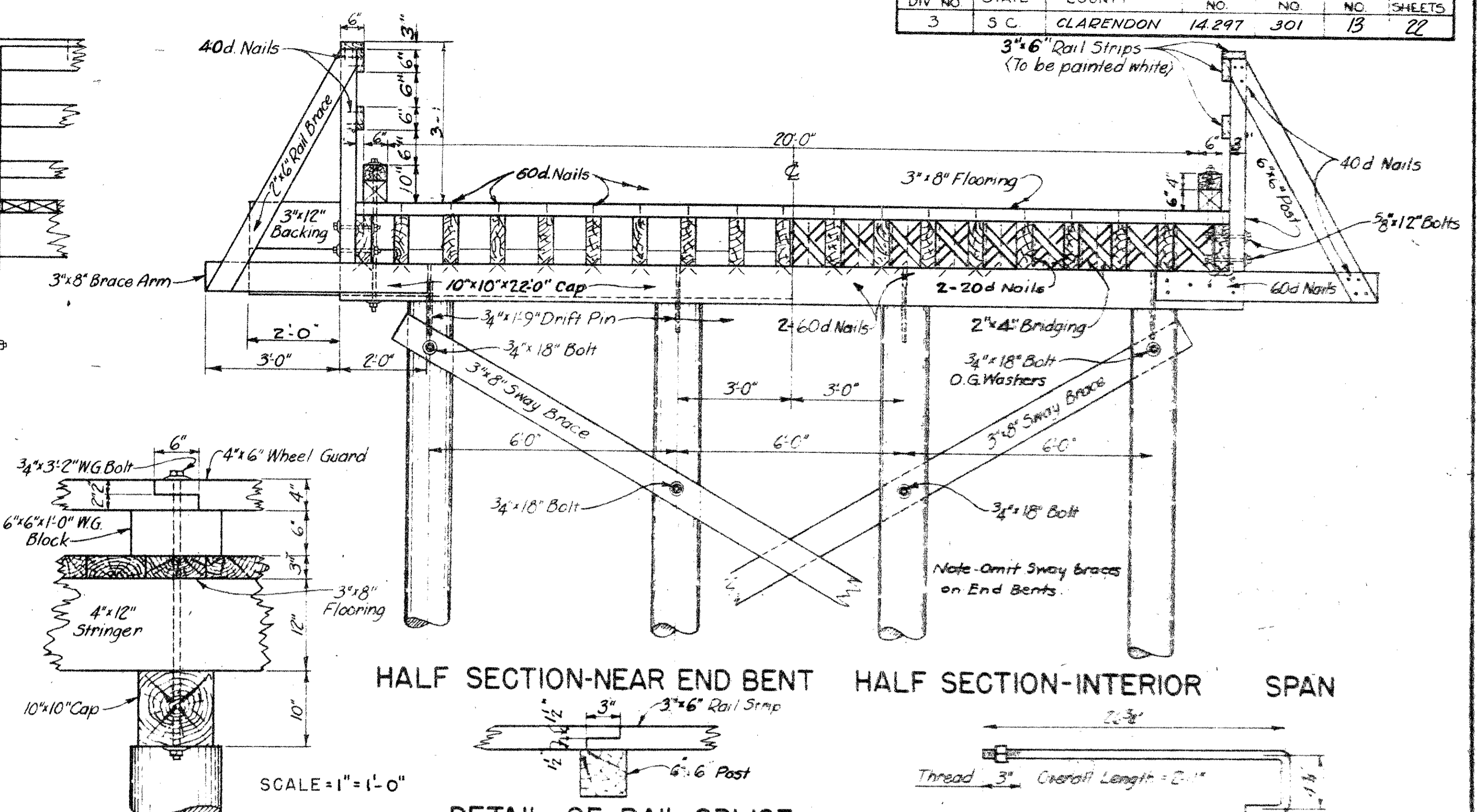
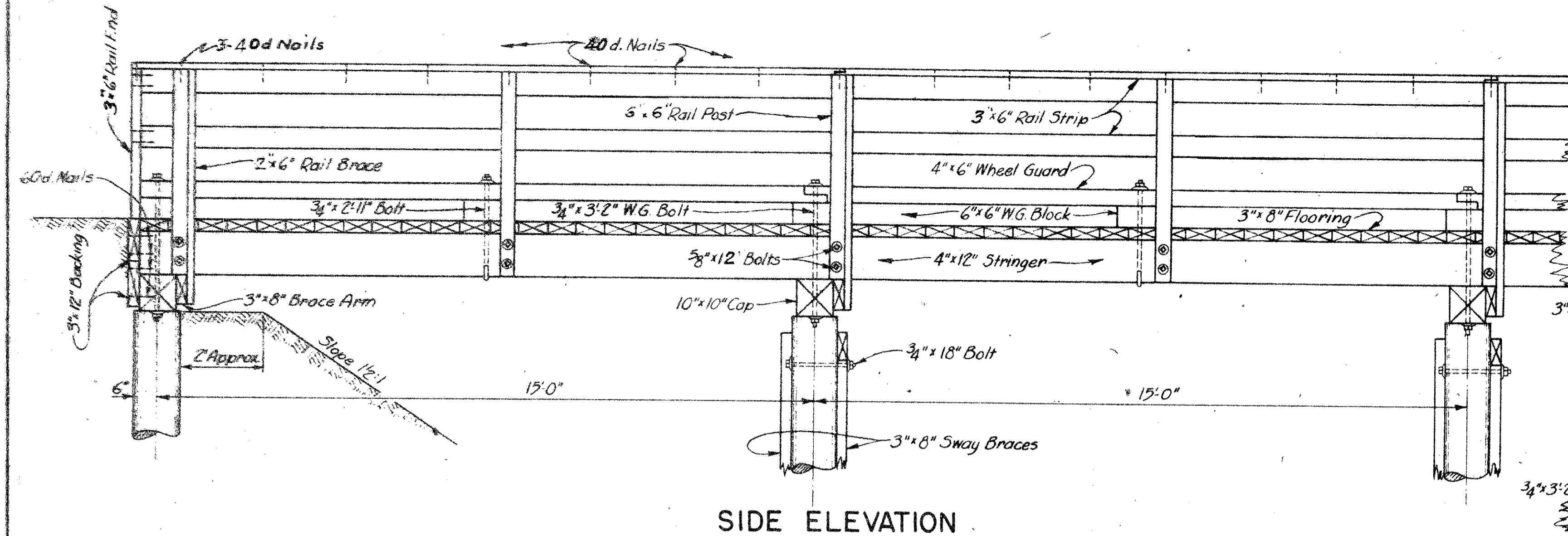
SCALE: 1/2" = 1'-0"

HALF SECTION SHOWING STEEL AND ENCASUREMENTS  
 SCALE: 1/2" = 1'-0"

NOTE: Encasement Quantities are based on round encasements but 1'-8" square encasements may be used. Quantities for encasements will be computed as if round encasements were used. Piles will be assumed 12" in diameter. Piles in all bents to be encased.

BREAK-DOWN OF CONCRETE QUANTITIES		
	2 END UNITS	1 INTERIOR UNIT
SLABS & BENTS	143.29 CY	71.72 CY
CURBS	20.29 CY	10.14 CY
POSTS & RAILS	5.89 CY	2.90 CY
TOTAL	169.43 CY	84.76 CY

SCALE: 1/4" = 1'-0", OR AS NOTED



QUANTITIES							
TWO END SPANS							
UNTREATED TIMBER			HARDWARE				
NO	DESCRIPTION	SIZE	M.B.M.	NO.	DESCRIPTION	SIZE	
4	Stringers	4"x12"x15'-5"	0.287	20	Bolts	3/4"x12"	
34	Stringers	4"x12"x15'-0"	2.153	40	Ogee Washers	3/8"	
8	Bridging	2"x4"x14'-0"	0.075	8	Wheel Guard Bolts	3/4"x2 1/2"	
47	Flooring, S1S1E	3"x8"x21'-6"	2.021	16	Wheel Guard Bolts	3/4"x3'-2"	
10	Rail Post	6"x6"x4'-1"	0.123	32	Ogee Washers	3/4"	
6	Brace Arms	3"x8"x5'-0"	0.060	8	Bolts	3/4"x18"	
6	Rail Braces	2"x6"x6'-0"	0.836	12	Drift Pins	3/4"x19"	
6	Rail Strips, D4S	3"x6"x15'-3"	0.148	288	Nails	20d	
6	Rail Strips, S1S1E	3"x6"x15'-3"	0.148	168	"	40d	
4	Rail Ends, D4S	3"x6"x2'-10"	0.017	240	"	60d	
4	Wheel Guards, S1S1E	4"x6"x15'-8"	0.125				
10	W.G. Blocks, S1S1E	6"x6"x14'-0"	0.030				
8	Backing	3"x12"x13'-0"	0.312				
3	Caps	10"x10"x22'-0"	0.250				
2	Sway Braces	3"x8"x23'-0"	0.092				
TOTAL			8.727	TOTAL			401.2
ONE INTERIOR SPAN							
UNTREATED TIMBER			HARDWARE				
NO	DESCRIPTION	SIZE	M.B.M.	NO.	DESCRIPTION	SIZE	
17	Stringers	4"x12"x15'-10"	1.077	8	Bolts	3/4"x12"	
7	Stringers	4"x12"x15'-0"	0.120	16	Ogee Washers	3/8"	
4	Bridging	2"x4"x14'-0"	0.037	2	Wheel Guard Bolts	3/4"x2 1/2"	
73	Flooring, S1S1E	3"x8"x21'-6"	0.989	2	Wheel Guard Bolts	3/4"x3'-2"	
4	Rail Post	6"x6"x4'-1"	0.049	22	Ogee Washers	3/4"	
2	Brace Arms	3"x8"x5'-0"	0.020	8	Bolts	3/4"x18"	
2	Rail Braces	2"x6"x6'-0"	0.012	4	Drift Pins	3/4"x19"	
3	Rail Strips, D4S	3"x6"x15'-3"	0.137	144	Nails	20d	
3	Rail Strips, S1S1E	3"x6"x15'-3"	0.137	88	"	40d	
2	Wheel Guards, S1S1E	4"x6"x15'-6"	0.062	1000	"	60d	
4	W.G. Blocks, S1S1E	6"x6"x14'-0"	0.012				
1	Cap	10"x10"x22'-0"	0.183				
2	Sway Braces	3"x8"x23'-0"	0.092				
TOTAL			2.792	TOTAL			188.6

Quantity for Bridge is equal to quantity for one interior span, times number of spans less two (N-2), plus quantity for two end spans.

DESIGN DATA:  
 4-12' Loading of 10 Tons on rear axle  
 F (Timber) = 1600 #/in<sup>2</sup>  
 20'-0" Roadway

QUANTITIES FOR BRIDGE	
UNTREATED TIMBER, M.B.M.	
PILES, L.T.	
HARDWARE, LBS.	
RIP RAP, TONS	

S.C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

**DETAILS OF 15 FT. SPAN  
UNTREATED TIMBER TRESTLE  
DETOUR BRIDGE**

DOCKET NO. 14.297    ROUTE NO. 301  
 COUNTY: CLARENDON    DATE: APRIL 1952

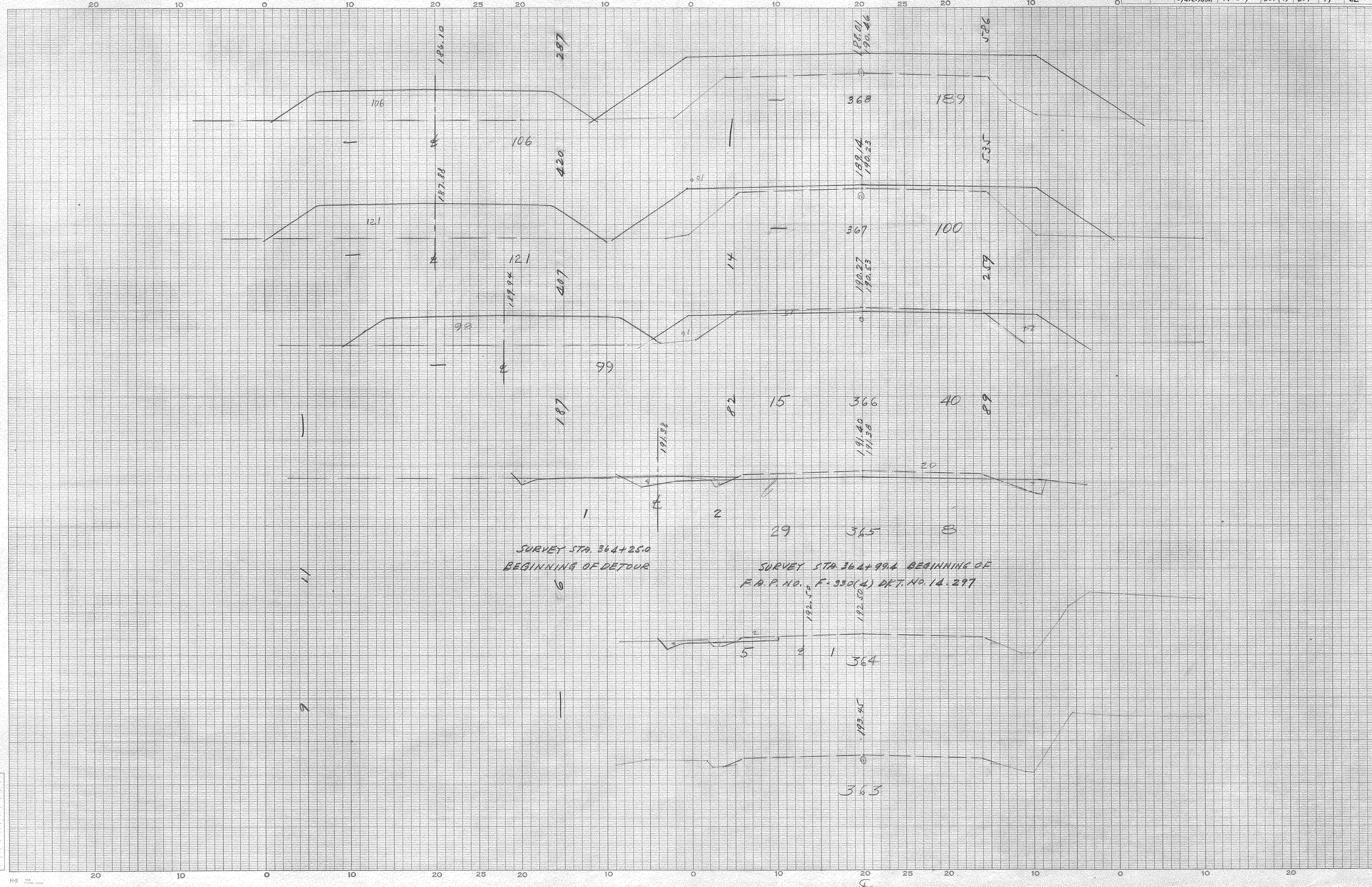
SCALE: 1/2" = 1'-0" OR AS NOTED

EMERSONS B-50	
STANDARD POSTS 5x8	
STANDARD POSTS 6x8	
STANDARD POSTS 8x8	
STANDARD POSTS 10x10	
STANDARD POSTS 12x12	
STANDARD POSTS 14x14	
STANDARD POSTS 16x16	
STANDARD POSTS 18x18	
STANDARD POSTS 20x20	
STANDARD POSTS 22x22	
STANDARD POSTS 24x24	
STANDARD POSTS 26x26	
STANDARD POSTS 28x28	
STANDARD POSTS 30x30	
STANDARD POSTS 32x32	
STANDARD POSTS 34x34	
STANDARD POSTS 36x36	
STANDARD POSTS 38x38	
STANDARD POSTS 40x40	
STANDARD POSTS 42x42	
STANDARD POSTS 44x44	
STANDARD POSTS 46x46	
STANDARD POSTS 48x48	
STANDARD POSTS 50x50	

ROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14.297	330 (4)	301	14	22



SURVEY STA. 364+25.0  
BEGINNING OF DETOUR

SURVEY STA 364+99.4 BEGINNING OF  
F.A.P. NO. F-350(4) DKT. NO. 14.297

Clarendon  
R+4

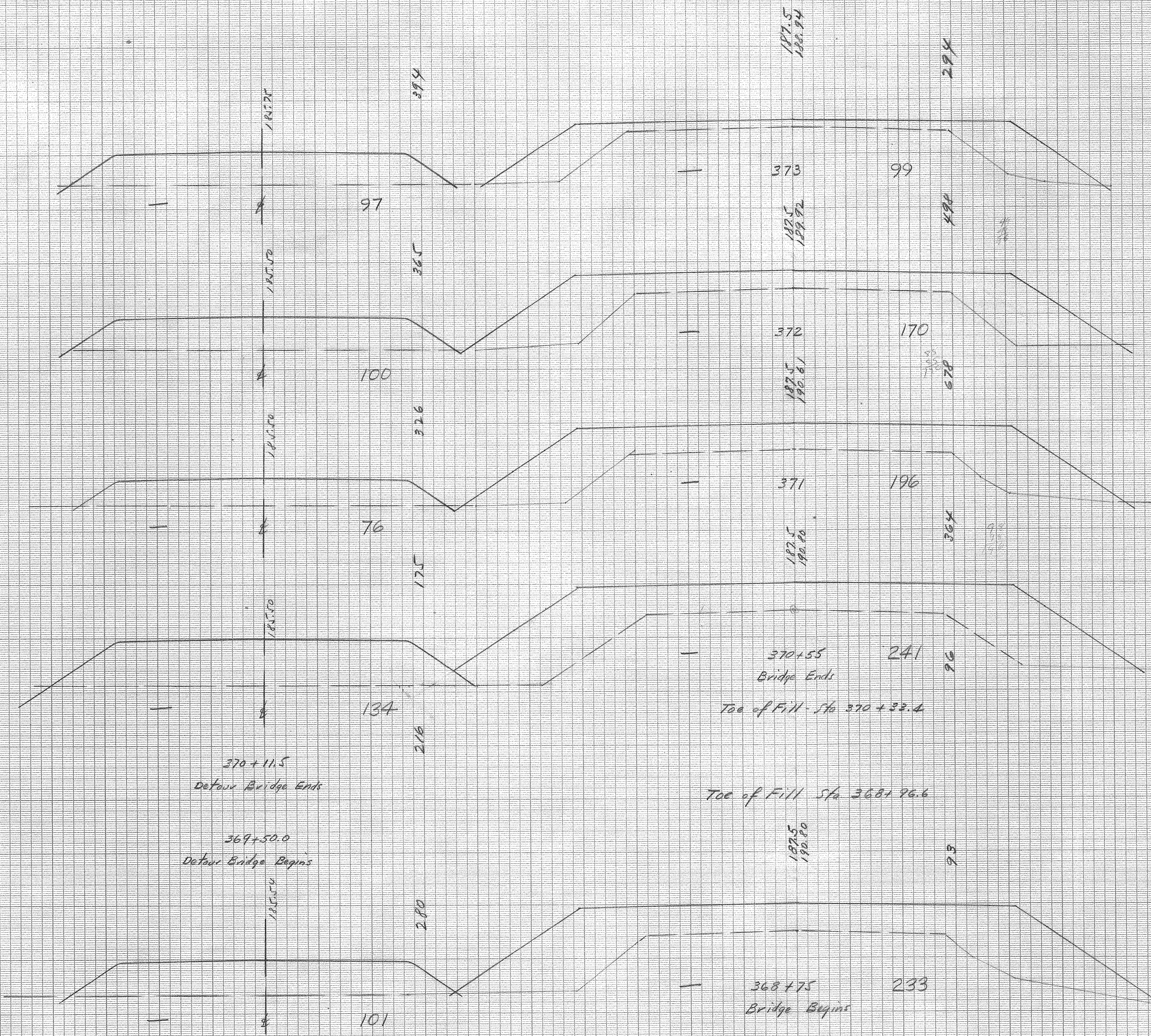
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CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14.297	33a(4)	301	15	22

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Clarendon  
Rt. 4

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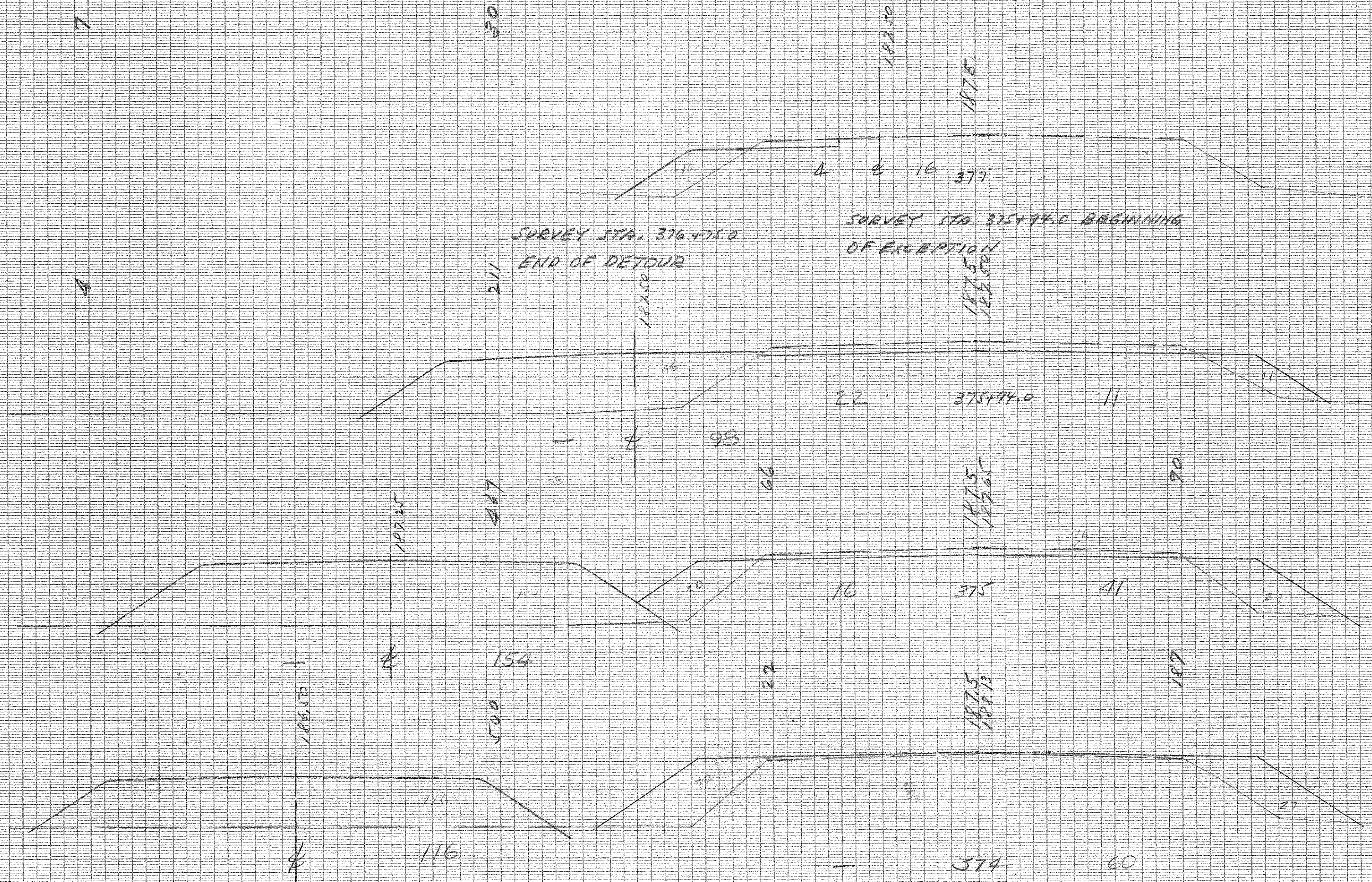


CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14-287	330(4)	301	16	22

20 10 0 10 20 25 20 10 0 10 20 25 20 10



Clarendon  
Rt. 4

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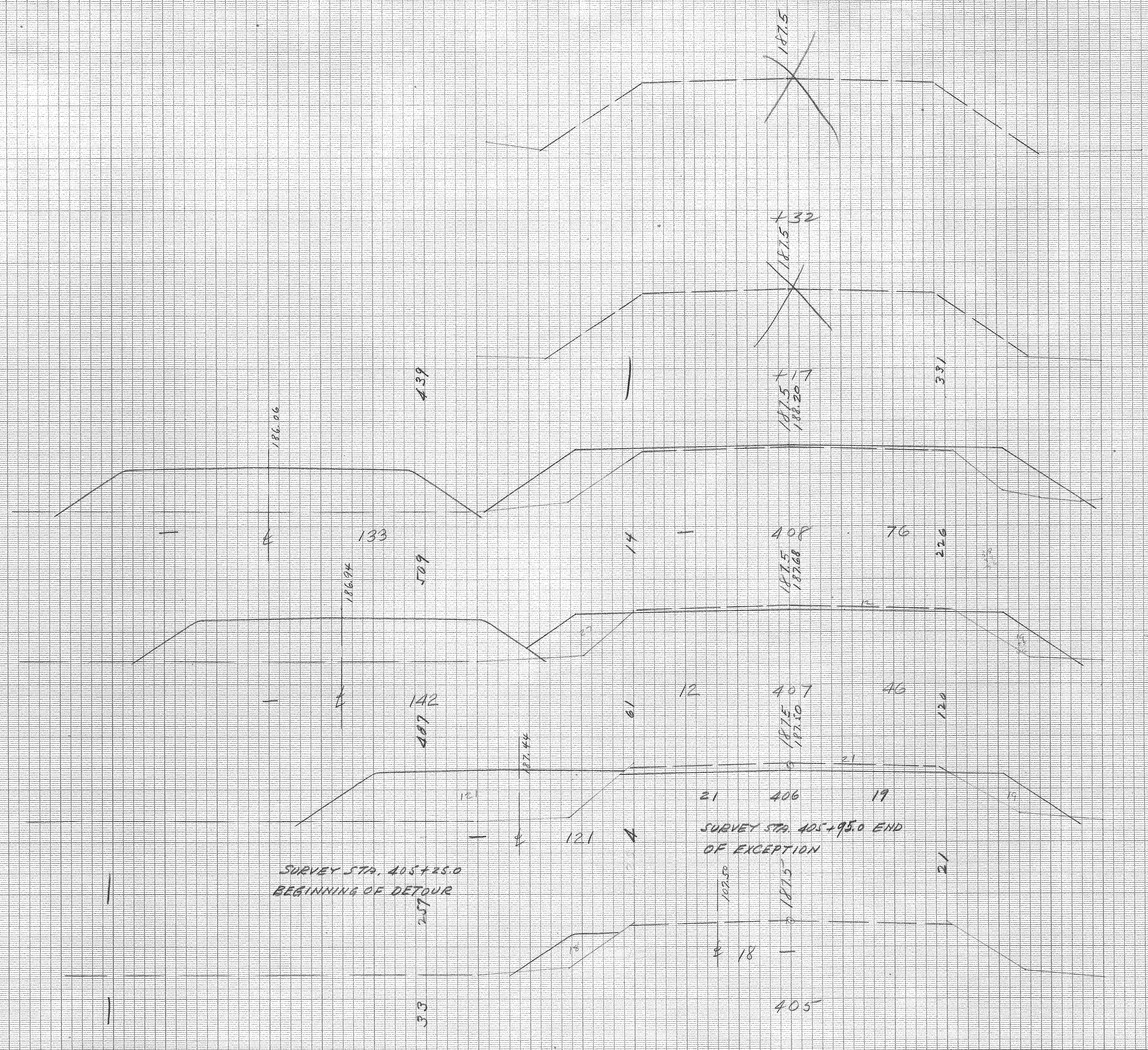
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14297	330(4)	301	17	22

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20 10 0 10 20 25 20 10 0 10 20 25 20 10 0



Clarendon  
Rt. 4

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Quantities Transferred and Inked by	

SURVEY STA. 405+25.0  
BEGINNING OF DETOUR

SURVEY STA. 405+95.0 END  
OF EXCEPTION

439

186.06

133

186.94

509

142

487

187.44

257

33

187.5

187.5

187.5

187.5

187.5

187.5

405

331

76

226

46

120

19

21

21

187

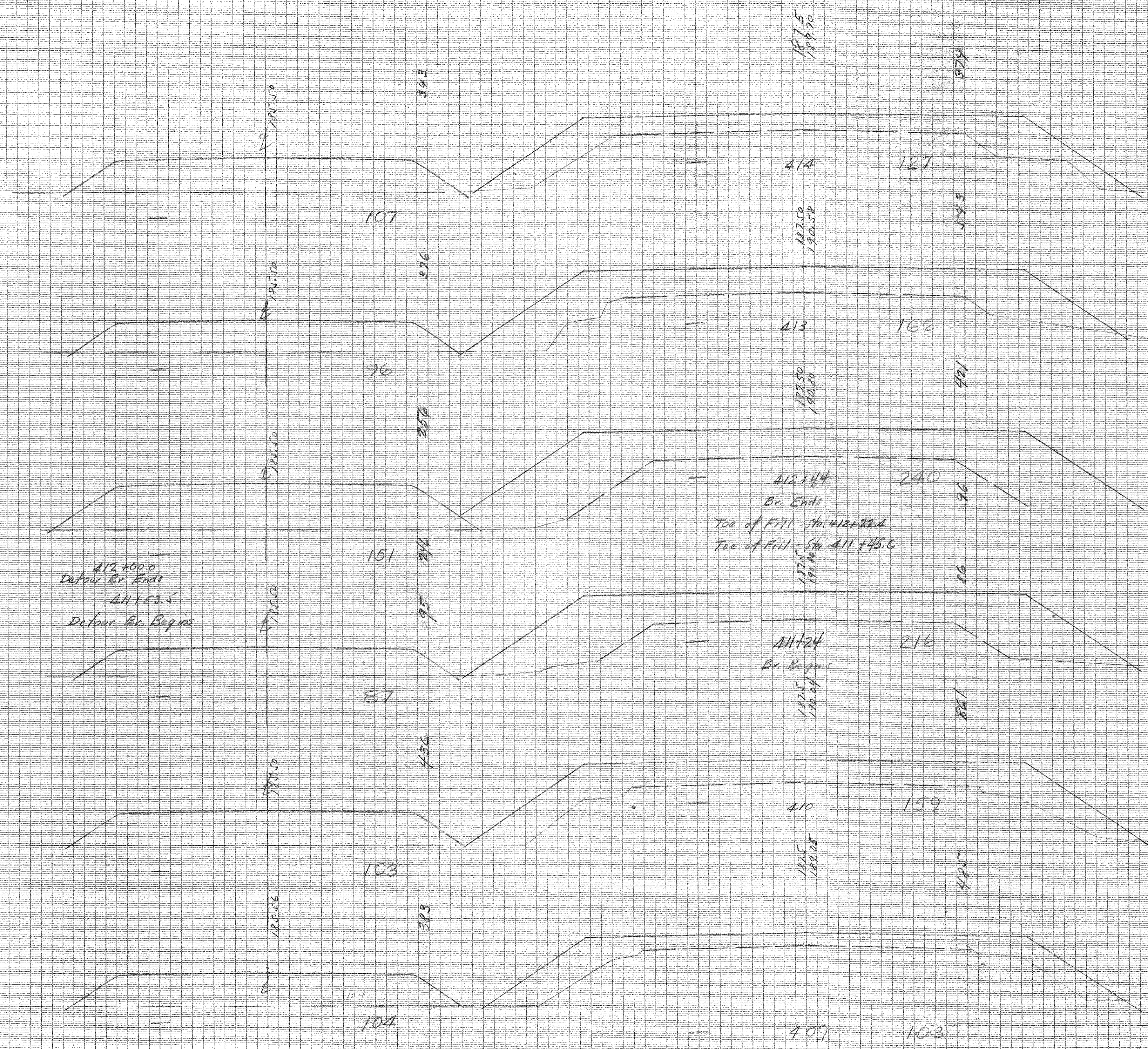
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CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14,297	330(4)	301	18	22

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Clarendon  
Rt. 4

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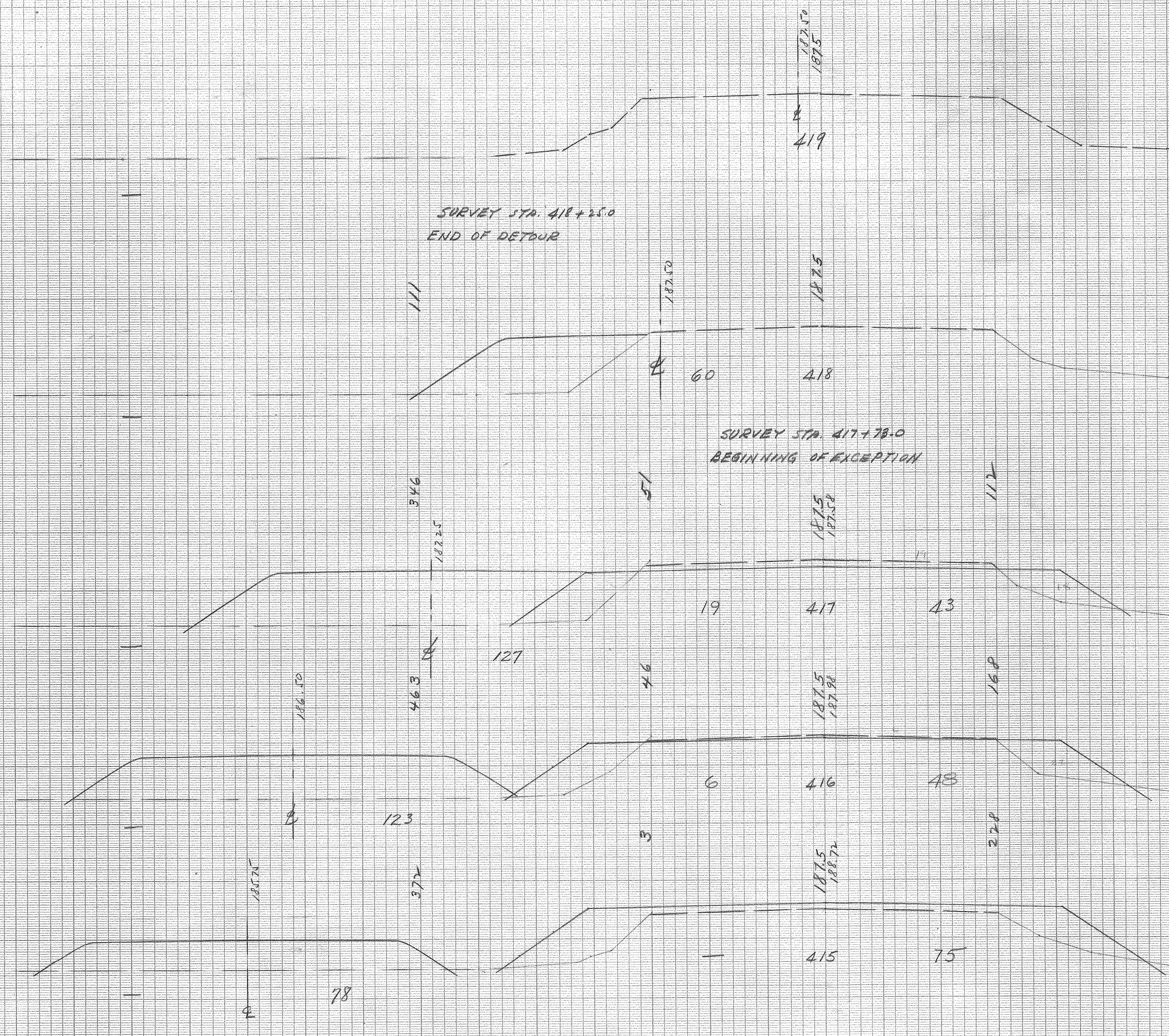
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CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14.297	330(4)	201	19	22

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Clarendon  
Rt. 4

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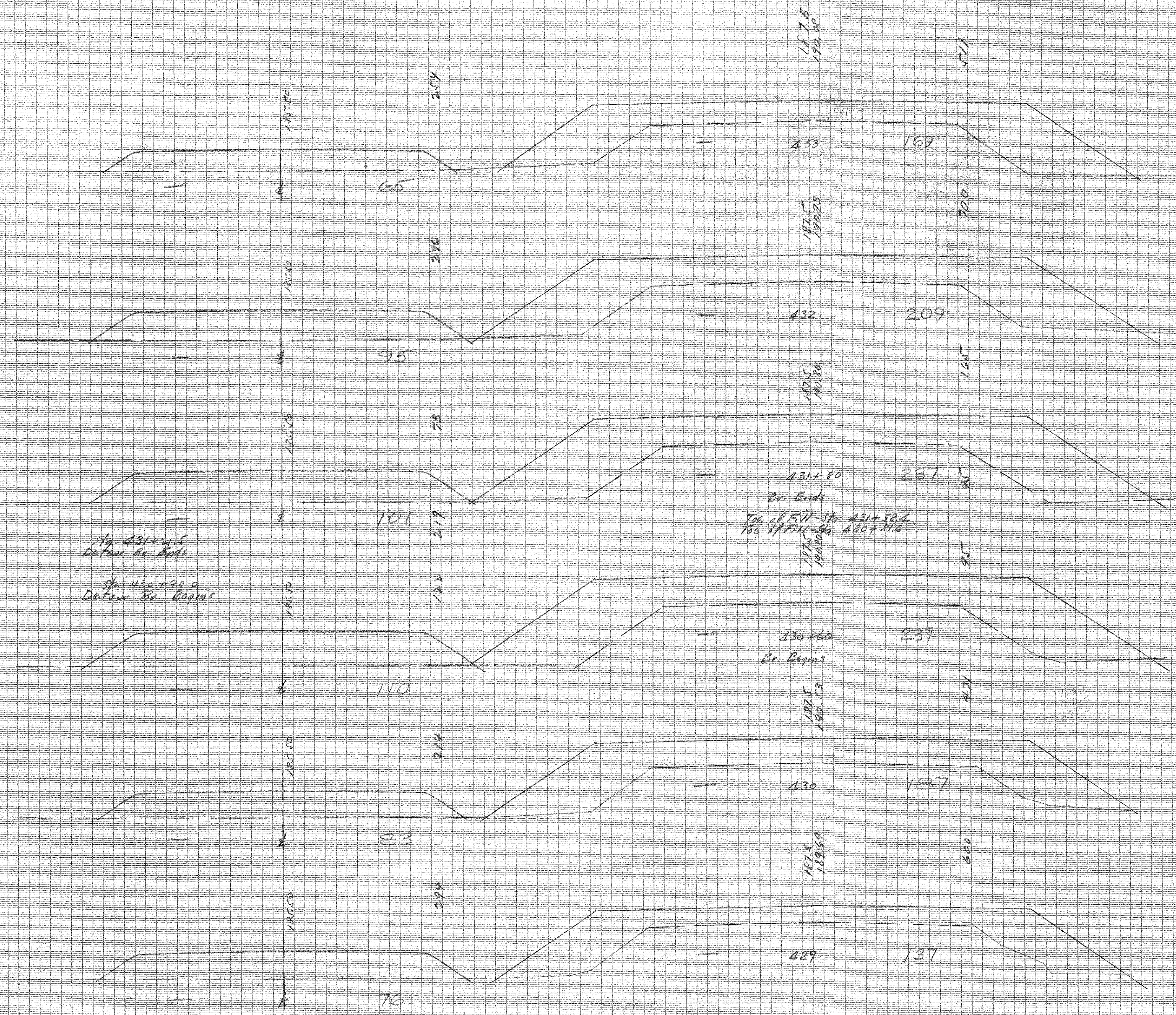


CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14-287	330 (4)	301	21	22

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Clarendon  
R+4

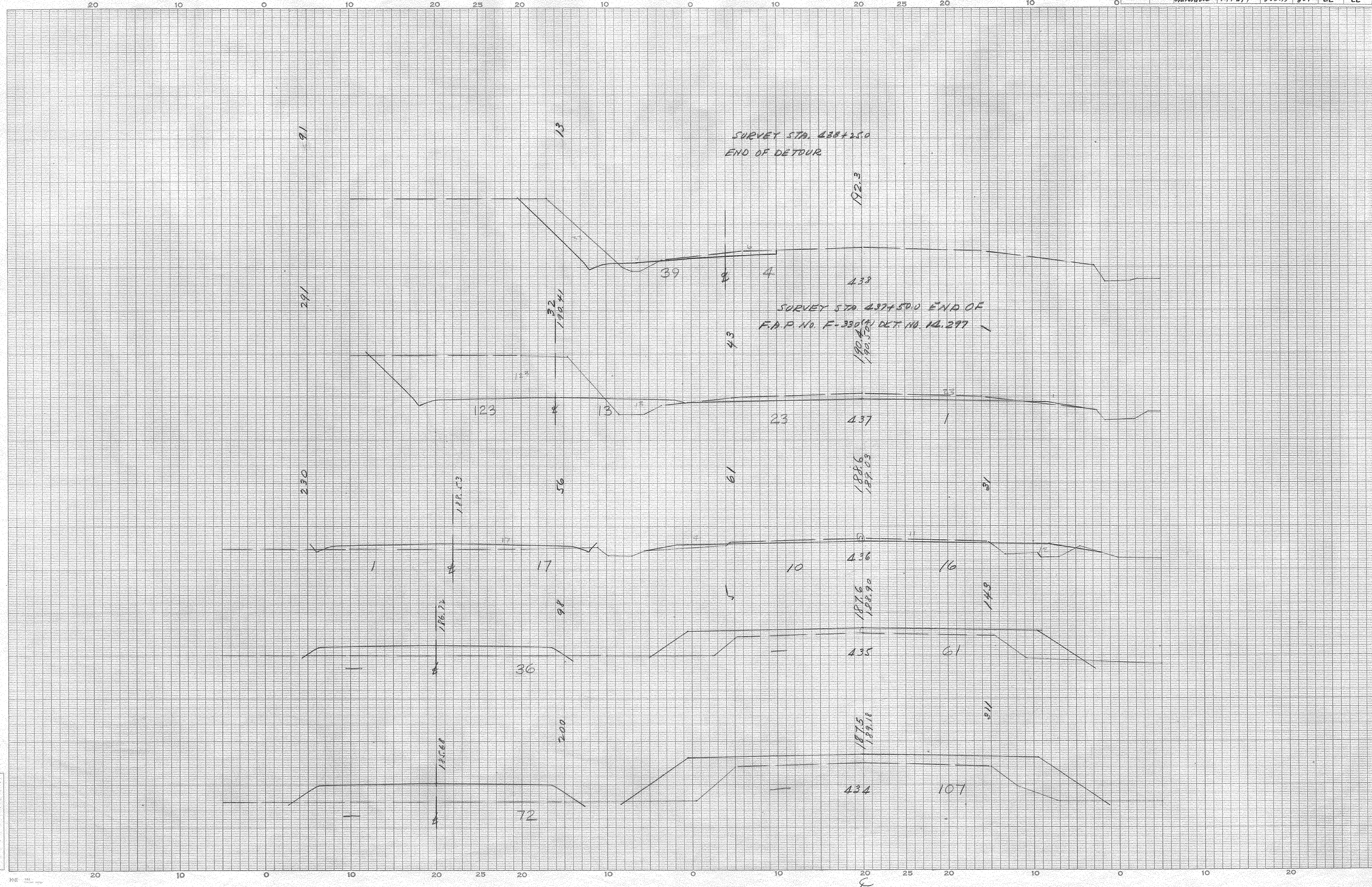
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Quantities Transferred and Inked by	

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CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Clarendon	14.297	33044	301	22	22



Clarendon  
Rt. 4

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