

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
SCI-335-9.79
MADISON TOWNSHIP
SCIOTO COUNTY

OAA-5-10(3)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	OAA-5-10(3)	1957

SCI-335-9.79

PART 2
FOR PART 1 SEE SCI-335-9.19

CONVENTIONAL SIGNS

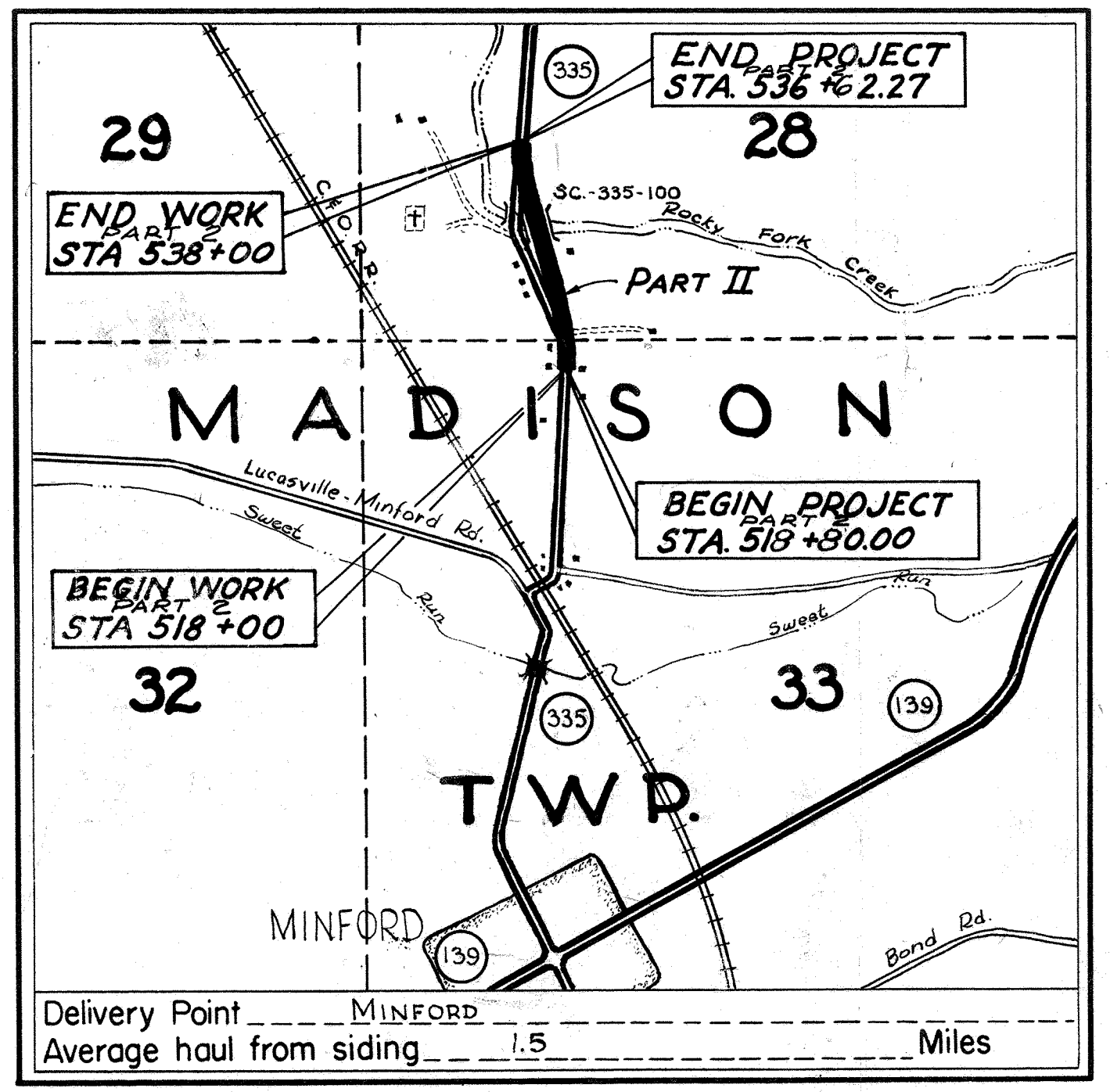
State Line	-----
County Line	-----
Township Line	-----
Section Line	-----
Center Line	-----
Corporation Line	-----
Fence Line	x x x x x
Guard Rail (existing)	o o o o o
Guard Rail (proposed)	o o o o o
Steam Railroad	-----
Power Poles	⊕ ⊕ ⊕ ⊕
Telephone Poles	⊕ ⊕ ⊕ ⊕
Trees (existing)	⊗ ⊗ ⊗ ⊗
Trees (to be removed)	⊗ ⊗ ⊗ ⊗

INDEX OF SHEETS

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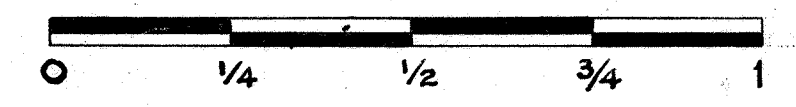
LINE DATA

Begin Project (Part 2) STA. 518+80.00
 End Project (Part 2) STA. 536+62.27
 Net Length of Project on Pt 2 1,782.27 LIN. FT.
 or 0.337 Mi.
 Begin Work (Part 2) STA. 518+00.00
 End Work (Part 2) STA. 538+00.00
 Net Length of Work on Part 2 2,000.00 LIN. FT.
 or 0.378 Mi.



LOCATION MAP

SCALE OF MILES



Portion to be improved
 State Roads
 Other Roads

SCALE

Plan 1" = 100'
 Profile: Horizontal 1" = 100'
 Profile: Vertical 1" = 10'

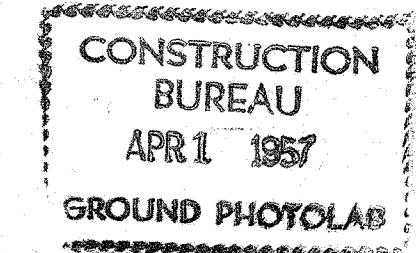


The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

- Approved Joseph M. Doyle P.E. 1209
Date 2-23-54 Division Deputy Director
- Approved John J. Hever
Date 2-26-54 Deputy Director of Planning & Programming
- Approved Richard O'Neil
Date 2-28-54 Engineer of Bridges
- Approved K. L. Roth
Date 2-24-54 Engineer of Location & Design
- Approved W. F. Ginn
Date 2-27-54 Deputy Director of Design & Construction
- Approved S. J. Schaubert
Date 2-27-54 First Asst Director
- Approved W. J. ...
Date 2-27-54 Director of Highways



**DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS**

APPROVED: _____
 DISTRICT ENGINEER DATE

* Accepted By B.P.R.
 ** Submitted to B.P.R. for Approval

Supplemental Prints of Standard Construction Drawings			
* RI-1	6-1-53	* G-707	1-2-53
* T-35	10-1-52	L-3	4-1-50
S-27 PC.3	2-20-45	L-3-A	4-1-50
* S-27 PC.4	1-4-54	AS-3-47, AS-4-47	7-27-49
I-1,2,3,4,45	2-20-45	L-1	4-1-50
* I-15 No.1	2-2-53		
* I-15 No.2	2-2-53		

Supplemental Specifications	
B-119 Rev.	12-14-53
10 Rev.	7-6-53
T-171.19 Rev.	3-19-53
CE-107	5-21-53
M-101.7	1-24-53

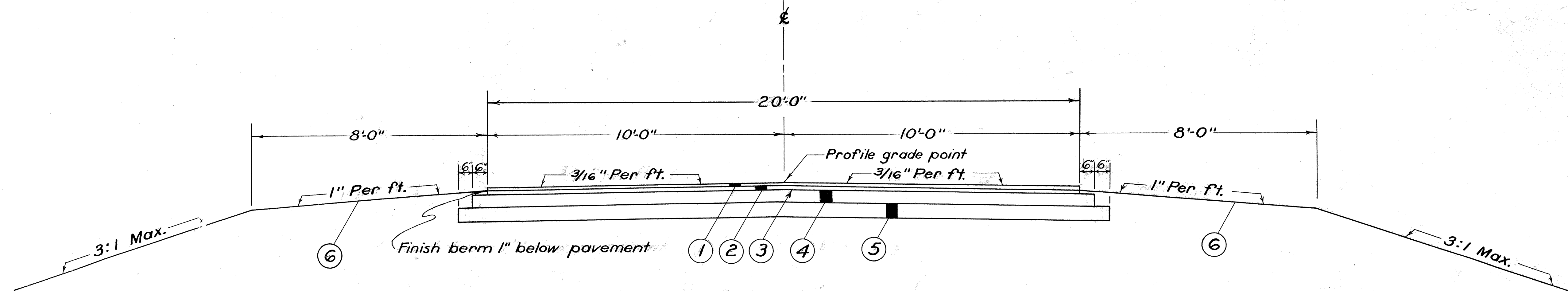
File No.	Date of Letting _____
	Contract No. _____

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

2
19

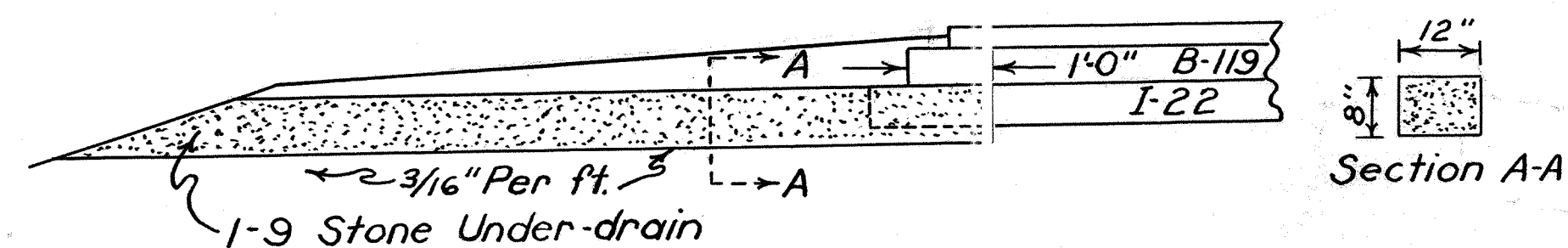
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TYPICAL SECTION TYPE T-35



STA. 518+80 TO STA. 536+62.27

TYPICAL STONE UNDER-DRAIN SECTION



I-9 Stone Under-drains shall be placed at 100'± intervals on opposite sides of the road or at the direction of the Engineer.

- ① T-35 - 1 1/2" Asphaltic Concrete Surface Course, Type "A" (85-100)
- ② B-35 - 1 1/2" Asphaltic Concrete Leveling Course
- ③ T-30 - Bituminous Prime Coat 0.35 gal. per sq. yd. M-5.7 RT-2 or RT-3
- ④ B-119 - 5" Crushed Aggregate Base Course
- ⑤ I-22 - 6" Subbase
- ⑥ L-9 - Seeding & Protecting Type "A"

Use 8' Shoulder & 2:1 Slope with Guardrail
Reference shall be made to Standard Drawing RI-1, Dated 9-1-53 for details not shown.
See Superelevation Tables on Sheet No. 8.

GENERAL NOTES

DESIGN SPEED :

The geometrics of this project have been planned for a design speed of 50 miles per hour.

UTILITIES :

Any and all work required for private utilities shall be done by and at the expense of their respective owners unless otherwise noted on the plans. The names of utilities involved are listed on sheet No. 5

REMOVALS :

All items marked for removal and disposal shall become the property of the contractor and be disposed of by him unless otherwise specified on the detailed plans.

REMOVALS, MISCELLANEOUS :

The removal and disposal of any existing pavement, sidewalk, building foundations, steps, cellar floors, well covers, cisterns, tanks, concrete bases, walls, curbs and gutters, rails, ties, pole stubs, guard posts, headwalls, pipes, cast iron plates, and other masonry lying within or below the limits of any Excavation, (and not specifically paid for under a separate item, are classified as excavation and paid for under the excavation item of which they are a part.

Sidewalks, steps, cellar floors, or other masonry shall be removed to a depth of three (3) feet below the proposed pavement area, and to a depth of three (3) feet below the proposed finished surface if without the limits of the proposed pavement area.

Backfilling shall be performed according to section E-1.08 of the Construction and Material Specifications.

SANITARY SEWERS AND DRAINAGE :

Existing or proposed sanitary sewers, house sewers or the drainage from such appurtenances to a sewerage system shall not be connected in any manner to the proposed storm sewers, pipes, gutter drains, ditches or any other portion of the drainage system for this project unless a permit has been obtained from the County Health Authority.

SILT :

Excavated material and borrow of which the grain size of 50% or more is between 0.074 mm. and 0.005 mm., (State Highway Testing Laboratory method of testing) shall be placed at least three (3) feet below the pavement when used in embankment.

EXISTING PAVEMENT REMOVAL :

Existing pavement to be removed shall be removed to a depth of three (3) feet below the proposed pavement area, and to a depth of three (3) feet below the proposed finished surface if without the limits of the proposed pavement area.

SEEDING QUANTITIES :

Quantities for seeding are calculated for the soil areas between the construction limits as shown on the cross sections. See note in Proposal for seed mixture and rate of application.

EARTHWORK :

In lieu of the requirements for full width construction as specified in Sec. E-1.05 and Sec. E-1.08 of the Specifications, part width construction may be performed where necessary for the maintenance of traffic.

FIELD OFFICE :

The contractor shall provide a suitable field office in accordance with Section S-0.01(b) having a minimum floor area of 200 sq. ft. The contractor shall have a telephone installed and maintained during the construction of this project.

PRESERVATION AND RESTORATION OF CORNERSTONES, MONUMENTS & LAND MARKERS :

Existing cornerstones, monuments, and land markers within the proposed highway right-of-way shall be protected, referenced and preserved or replaced as outlined in section G-7.09 of the specifications, except that payment to the contractor for all work incidental to the installation of cornerstones, monuments, and land markers shall be included in the unit price bid for Item E-1, Roadway Excavation.

TREE AND STUMP REMOVAL :

Payment for the removal of all trees and stumps designated for removal by the Engineer within the areas required by these plans shall be included in the price bid per cubic yard for Roadway Excavation, Item E-1 and no additional compensation will be allowed.

The estimated number of trees and stumps to be removed, Listed below, was arrived at by diligent effort but the State does not guarantee the accuracy thereof.

4 - 12" to 18" 2 - 18" to 24" 1 - 36" and over

TRAFFIC :

Traffic shall be maintained at all times. The item of "Maintaining Traffic" shall include furnishing lights, signs, barricades and watchmen necessary to secure the safe flow of traffic twenty-four (24) hours daily, Length of one-way zones to be held to a minimum.

The following amounts of calcium chloride and aggregate have been provided for maintenance of traffic:

T-10 = 975 cu. yds M-10 = 20 tons

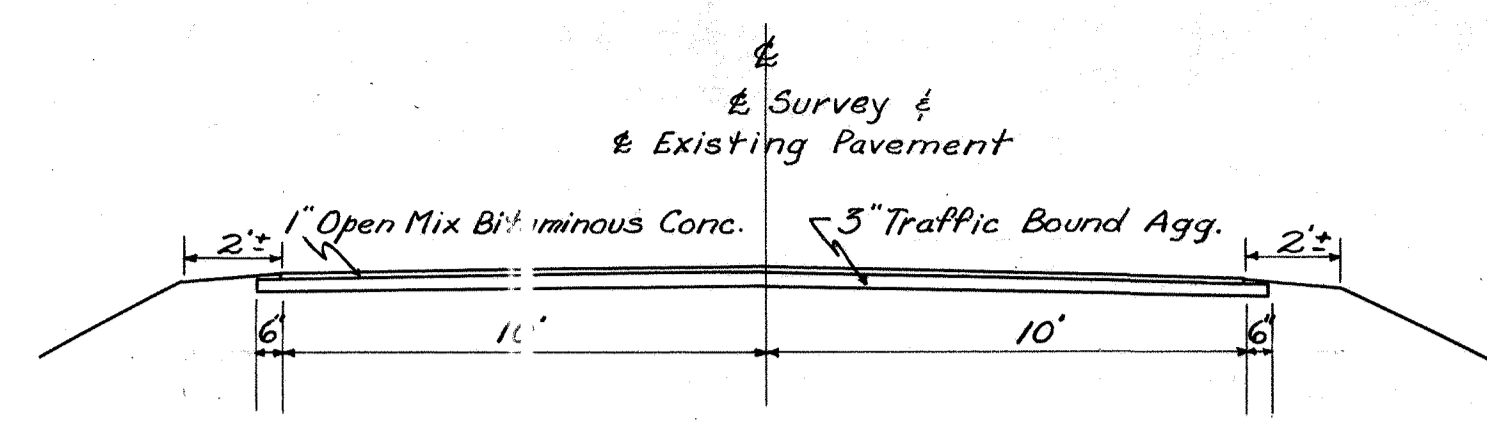
CALCULATIONS

LENGTH OF PAVEMENT	
Sta. 518+50 to Sta. 536+21 =	1842.21 Lin. Ft.
Deduct for Bridges & Approach Slabs	155.10
Net Length of Pavement =	1687.11 Lin. Ft.
T-35 ASPHALTIC CONCRETE SURFACE COURSE	
(1687.11 x 20 ÷ 9) x 0.04167 =	156.3 Cu. Yds.
Add for Feathering	1
	157.3 Cu. Yds.
Use 158	Cu. Yds.
B-35 ASPHALTIC CONCRETE LEVELING COURSE	
(1687.11 x 20 ÷ 9) x 0.04167 =	156.3 Cu. Yds.
Add for Feathering	1
	157.3 Cu. Yds.
Use 158	Cu. Yds.
T-30 BITUMINOUS PRIME COAT	
(1687.11 x 21 ÷ 9) x 0.35	1377 Gal.
B-119 CRUSHED AGGREGATE BASE COURSE	
(1687.11 x 21 ÷ 9) x 0.1389 =	547.2 Cu. Yds.
Use 548	Cu. Yds.
I-22 SUBBASE	
(1687.11 x 22 ÷ 9) x 1.667	687.5 Cu. Yds.
Use 688	Cu. Yds.
E-1 COMPACTED SUBGRADE	
Net Length of Pavement =	1687.11 Lin. Ft.
1687.11 x 20 ÷ 9 =	3749 Sq. Yds.
Add for Approach Slabs =	67 Sq. Yds.
Total =	3816 Sq. Yds.
L-9 COMMERCIAL FERTILIZER	
Seeding from Summary =	14652 Sq. Yds.
(14707 x 9 ÷ 1000) x 20 ÷ 20 =	1.324 Tons
Use 1.33	Tons
L-9 AGRICULTURAL GROUND LIMESTONE	
Seeding and Sodding from Summary =	14707 Sq. Yds.
(14707 x 9 ÷ 1000) x 100 ÷ 200 =	6.618 Tons
Use 6.62	Tons
E-11 WATER	
For Embankment: 12661 x 5 ÷ 1000	63.305 M. Gals.
For I-22 & SS-10 (688 + 296) x 8 ÷ 1000	7.872
Use 72	M. Gals.
E-1 FROM CROSS SECTIONS	
Excavation =	5007 Cu. Yds.
Embankment =	10550 Cu. Yds.
Embankment + 20% =	12661 Cu. Yds.
E-4 BORROW	
Embankment + 20%	12661 Cu. Yds.
Excavation	5007 Cu. Yds.
Borrow	7654 Cu. Yds.

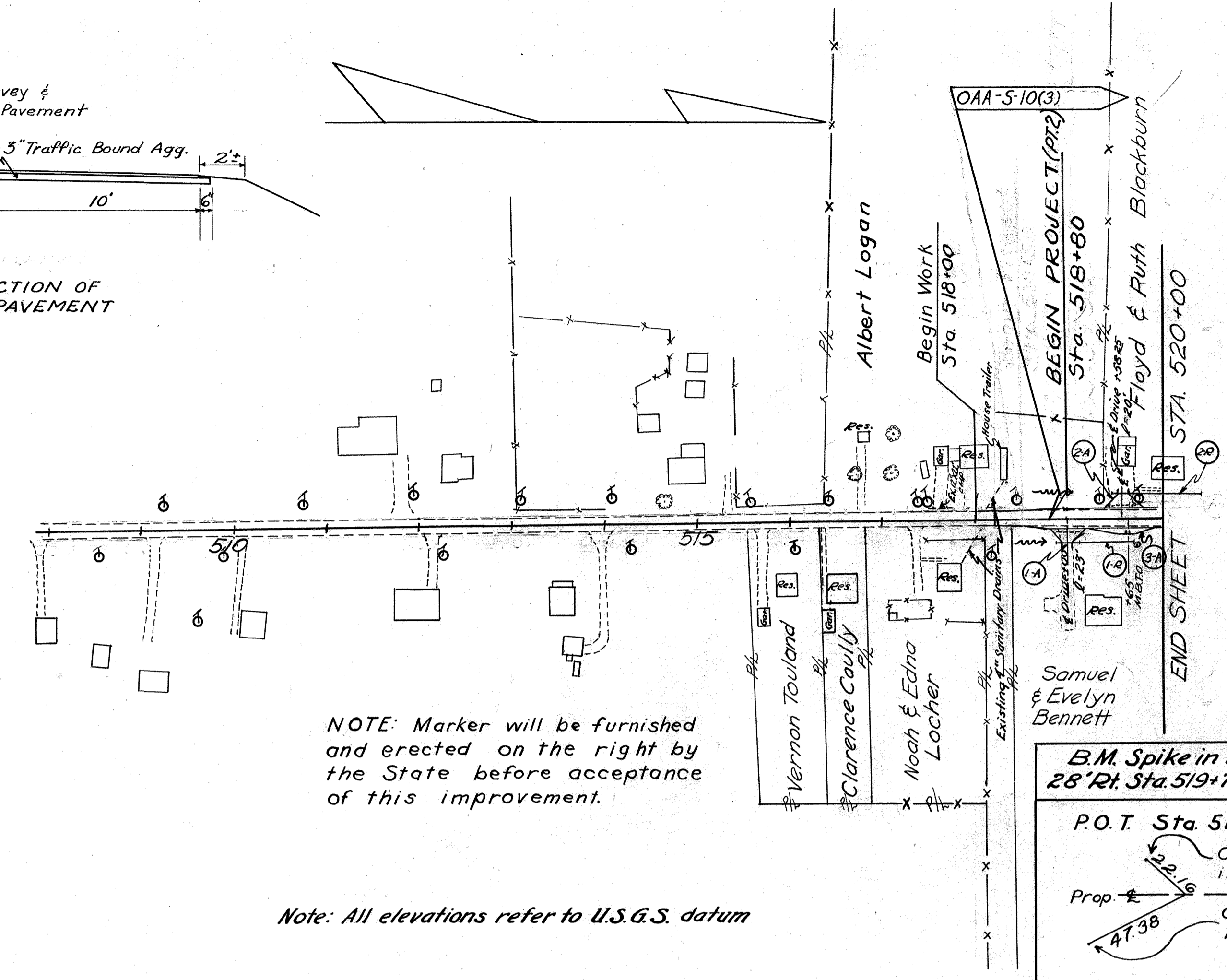
GENERAL SUMMARY

SHEET NO. (PART-2)				ITEM NO.	UNIT	TOTAL CODE 6201	DESCRIPTION
5	6	7	12				
				E-1	Cu. Yds.	5007	Roadway Excavation
				E-1	Sq. Yds.	3816	Compacted Subgrade
				E-4	Cu. Yds.	7654	Borrow
				E-11	M. Gals.	72	Water
47	36	14		E-12	Lin. Ft.	97	Pipe Removed, 15" & Under
			140	E-12	Lin. Ft.	140	Pipe Removed, Over 15"
			212.3	I-15	Lin. Ft.	212.30	Guard Rail, Steel Beam Type (Deep)
			175	I-15	Lin. Ft.	175	Guard Rail, Removed and Disposed Of
23	273			SS-10	Cu. Yds.	296	Stabilized Crushed Aggregate Shoulders & Approaches
				L-9	Sq. Yds.	14697	Seeding and Protecting, Type "A", As Per Plan
				L-9	Tons	1.32	Commercial Fertilizer (10-6-4)
				L-9	Tons	6.62	Agricultural Ground Limestone
			10	L-10	Sq. Yds.	10	Sodding
				M-10	Tons	20	Calcium Chloride Furnished & Applied for Maintaining Traffic
				T-10	Cu. Yds.	975	Traffic Compacted Surface Course for Maintaining Traffic
			6	E-2	Cu. Yds.	151	Excavation for Structures
			83	E-3	Cu. Yds.	83	Channel Excavation
42	108			I-1	Lin. Ft.	150	12" Pipe for Driveways
135				I-3	Lin. Ft.	135	12" Pipe for Roadway Drainage
			20	I-3	Lin. Ft.	20	18" Pipe for Roadway Drainage
				I-9	Lin. Ft.	192	Stone Underdrains, No. 2
				I-10	Sq. Yds.	3	Riprap Type "B"
				I-10	Cu. Yds.	14	Dumped Rock Fill
		0.8	1.8	S-1	Cu. Yds.	2.6	Concrete for Structures, Class "E"
0.6				S-22	Cu. Yds.	0.6	Removal of Portions of Existing Structures
		54		S-27	Lin. Ft.	54	24" Pipe for Roadway Culverts
			168	S-27	Lin. Ft.	168	42" Pipe for Roadway Culverts
				T-35	Cu. Yds.	158	Asphaltic Concrete Surface Course, Type "A" (85-100)
				B-35	Cu. Yds.	158	Asphaltic Concrete Leveling Course (85-100)
				T-30	Gals.	1377	Bituminous Prime Coat, Sec. M-5.7 RT-2 or 3
				B-119	Cu. Yds.	548	Crushed Aggregate Base
				I-22	Cu. Yds.	688	Subbase
				I-7	Sq. Yds.	67	Reinforced Concrete Approach Slabs
				Lump	Lump	Lump	Maintaining Traffic Including Lights, Signs, Barricades, and Watchman (24 hr Service)
							STRUCTURES OVER 20' SPAN
							Bridge No. SC 335-100 For Est. Quan. See Sheet No. 15

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TYPICAL SECTION OF ADJOINING PAVEMENT



UTILITIES
Ohio Power Co.
Minford Federation Telephone Co.

ADDRESS
Canton Ohio
Minford Ohio

NOTE: Marker will be furnished and erected on the right by the State before acceptance of this improvement.

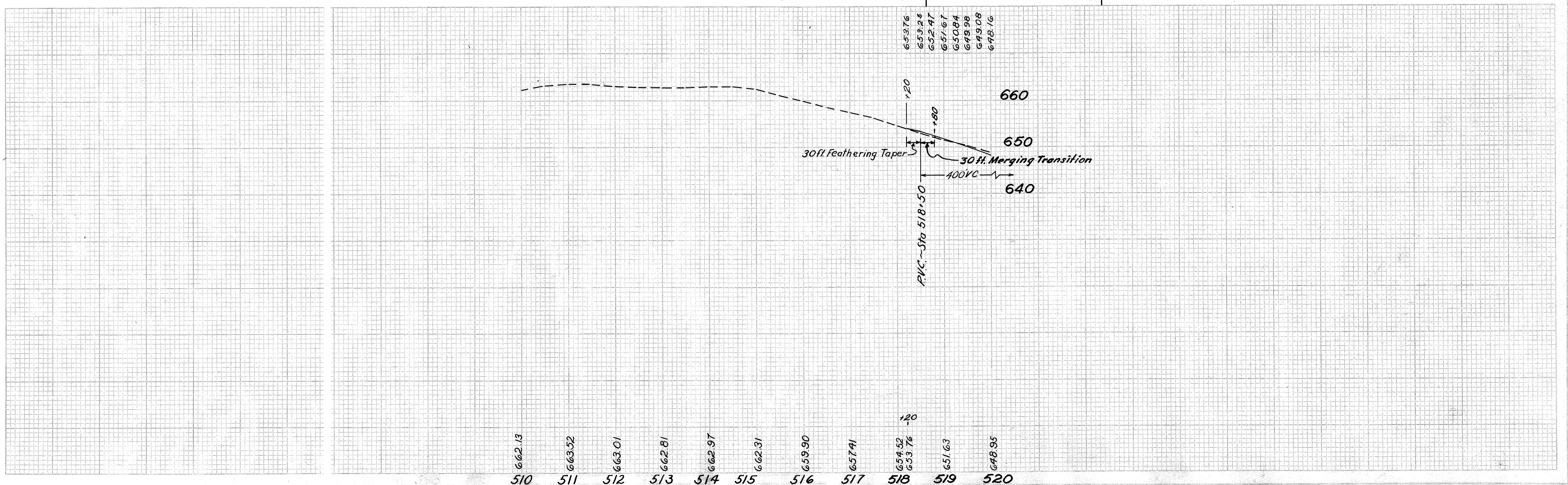
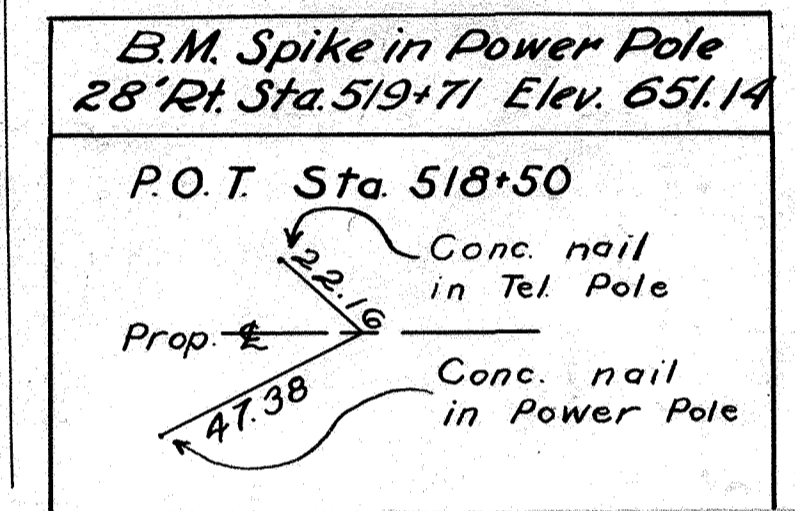
Note: All elevations refer to U.S.G.S. datum

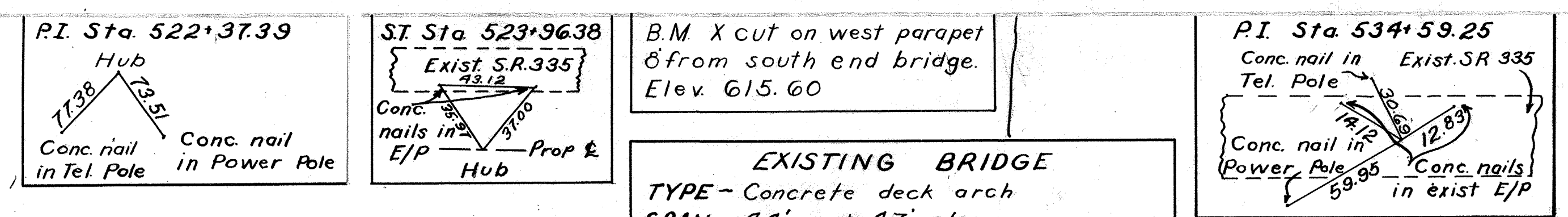
A DRIVE APPROACHES

Mark	Station	Side	SS-10 Stab. Crushed Aggregate Shoulders & Approaches Cu. Yds.	I-1	E-12	S-22
				Pipe for Driveways Lin Ft.	Pipe Removed Lin Ft.	Removal of Portions of Existing Structure Description Cu. Yds.
1-A	519+00	Rt.	9	22	18	
2-A	519+58.25	Lt.	9	20	29	4x4x1 Conc. Hdwl. 0.6
3-A	519+65	Rt.	5			

R ROADWAY DRAINAGE

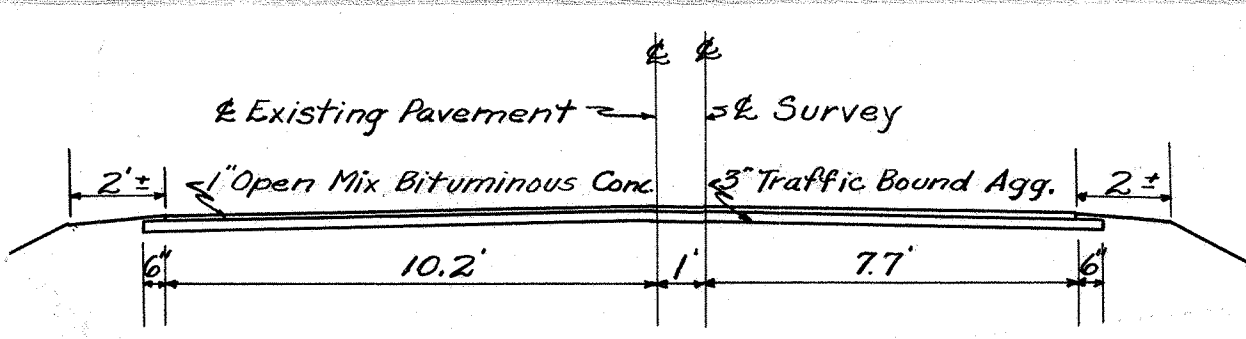
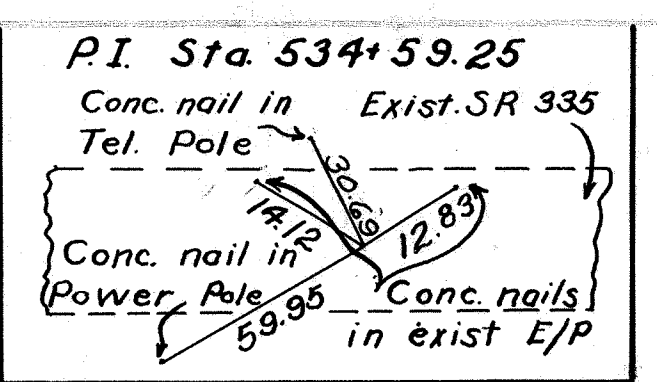
Mark	Station		Side	I-3
	From	To		Roadway Drainage Lin Ft.
1-R	519+11	519+71	Rt.	60
2-R	519+68.3	520+43.3	Lt.	75





Curve Data
 $\Delta = 6^\circ 43' 45''$ Lt
 $D_c = 4^\circ 00'$
 $L_c = 150'$
 $L_s = 159.24'$
 $P.I. = \text{Sta. } 522+37.39$

EXISTING BRIDGE
 TYPE - Concrete deck arch
 SPAN - 44' and 47' clear
 RDWY. - 15'-7" Between parapets
 SKEW - None
 LOADING - H-15
 DRAINAGE AREA - 38.5 Sq. Miles



TYPICAL SECTION OF ADJOINING PAVEMENT

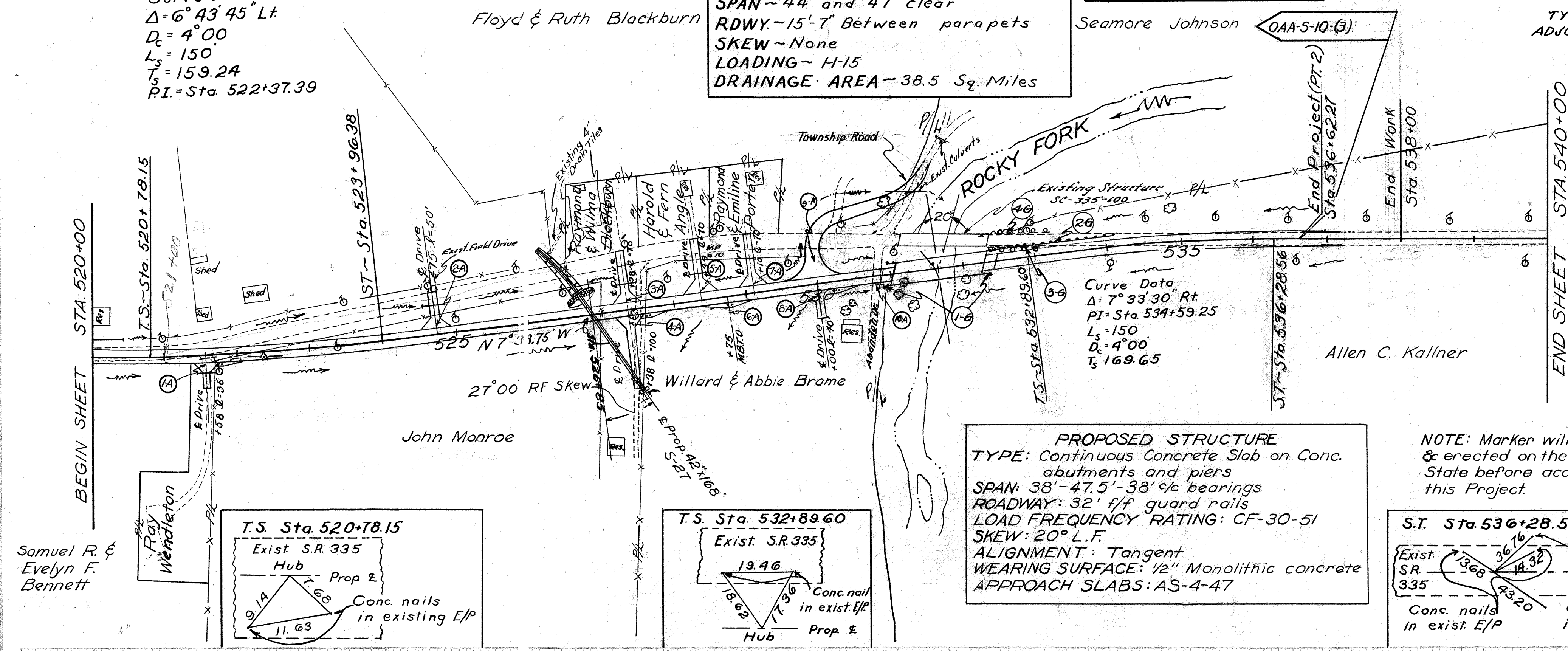
A DRIVE APPROACHES

Mark	Station	Side	SS-10 Stab Crushed Aggregate Shoulders & Approaches Cu. Yds	I-1 Pipe for Driveways		E-12 Pipe Removed
				Lin. Ft.	Lin. Ft.	Lin. Ft.
1-A	521+58	Rt.	14	20	20	
2-A	524+75	Lt.	15	30		
3-A	527+38	Lt.	20	34		
4-A	527+38	Rt.	29			
5-A	528+39	Lt.	20	24		
6-A	528+75	Rt.	5			
7-A	529+10	Lt.	20			
8-A	530+00	Rt.	16			
9-A	530+00	Lt.	134			
10-A	530+75	Rt.				16

G GUARD RAIL

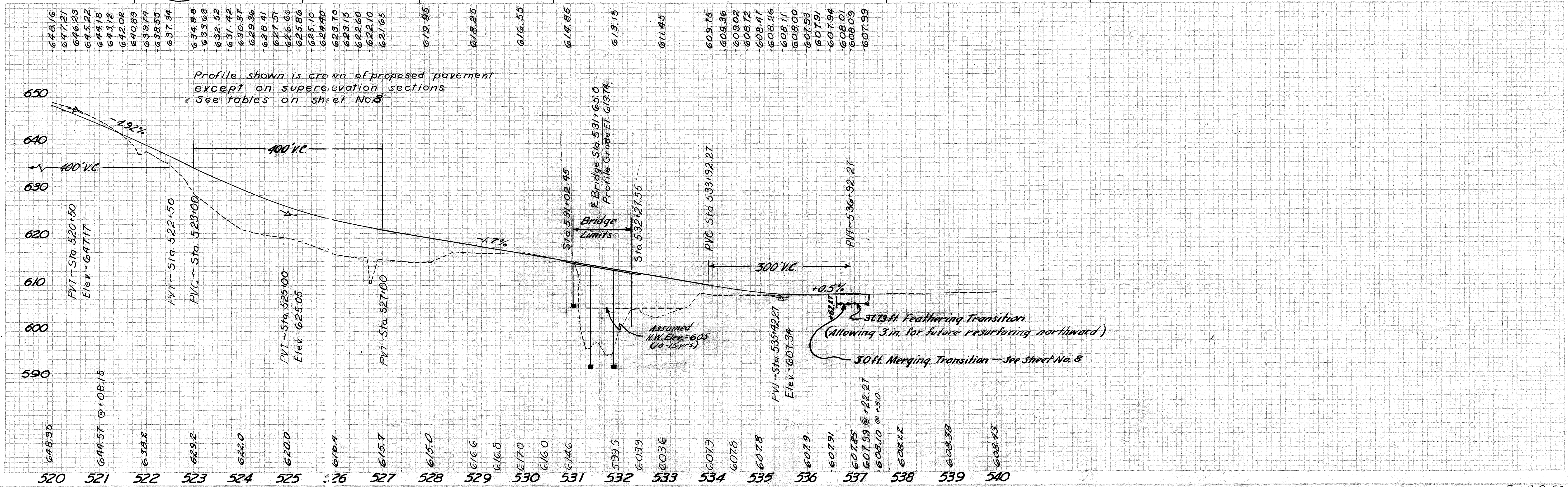
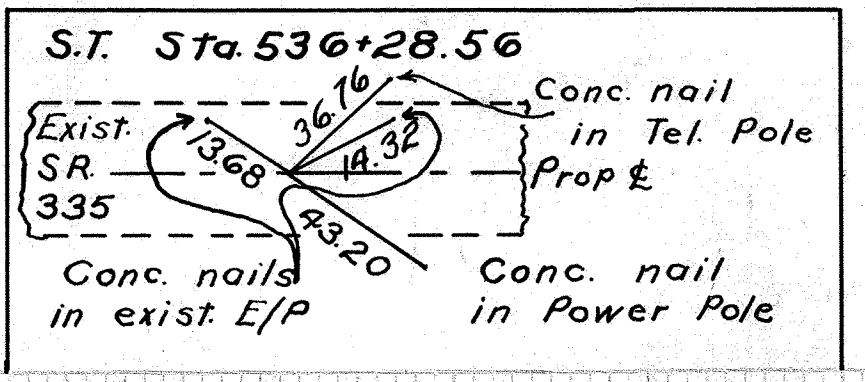
Mark	Station		Side	I-15 Guard Rail Lin. Ft.	I-15 G.R. Rem. & Disp. Lin. Ft.
	From	To			
1-G	530+87.06	532+37.06	Rt.	* 24.90	
2-G	530+92.94	534+05.14	Lt.	* 187.40	
3-G	532+39.5	533+20.5	Lt.		87.50
4-G	532+43.0	533+24.0	Lt.		87.50

* Bridge Railing has been deducted.

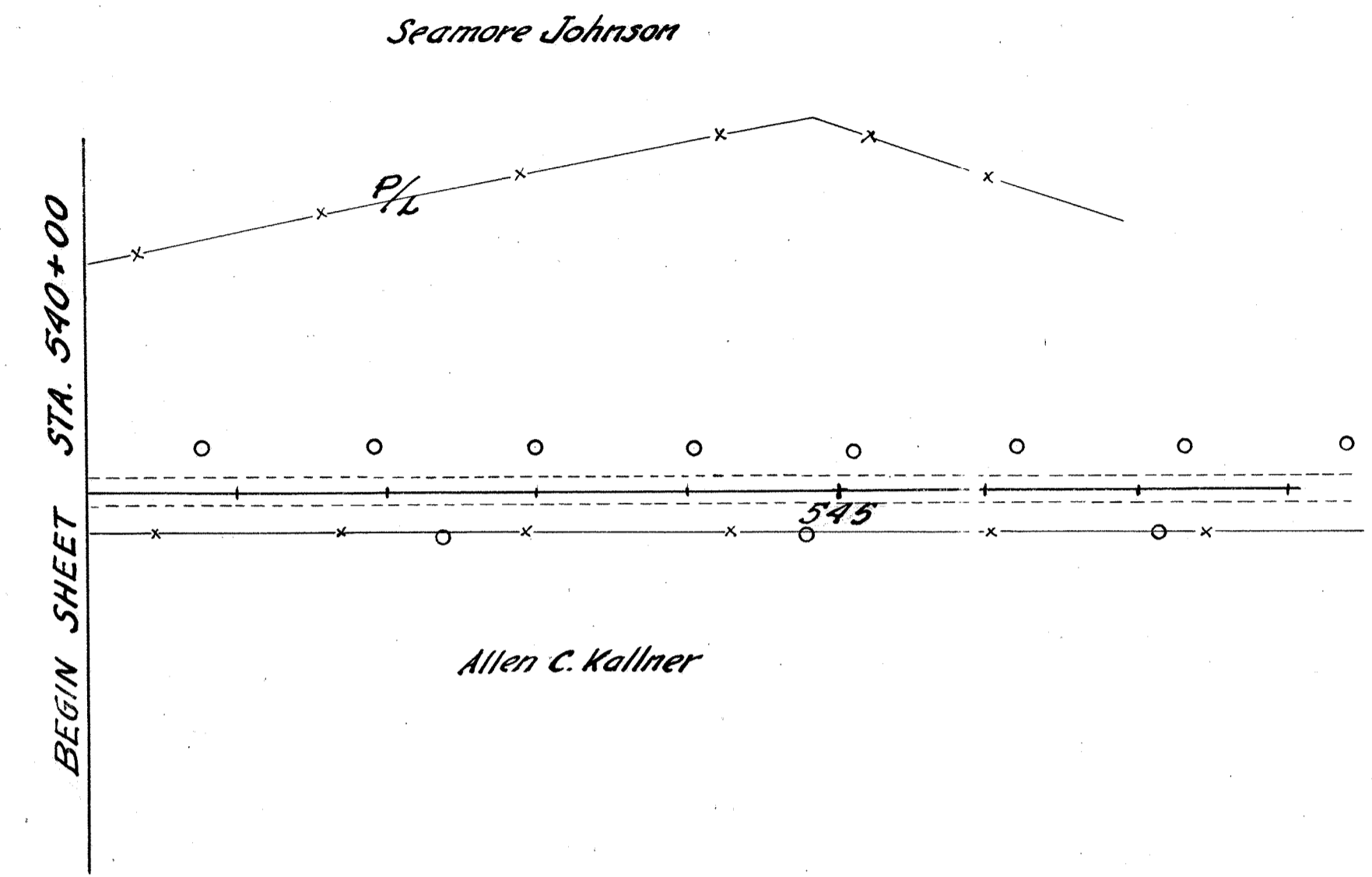


PROPOSED STRUCTURE
 TYPE: Continuous Concrete Slab on Conc. abutments and piers
 SPAN: 38'-47.5'-38' % bearings
 ROADWAY: 32' f/f guard rails
 LOAD FREQUENCY RATING: CF-30-51
 SKEW: 20° L.F.
 ALIGNMENT: Tangent
 WEARING SURFACE: 1/2" Monolithic concrete
 APPROACH SLABS: AS-4-47

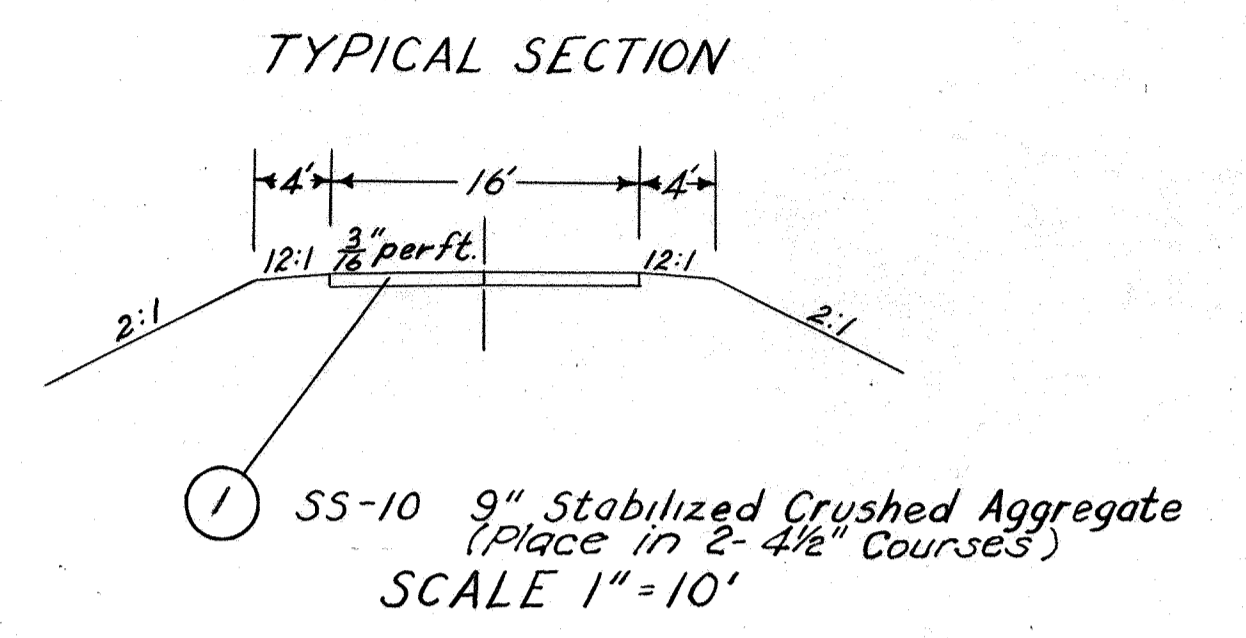
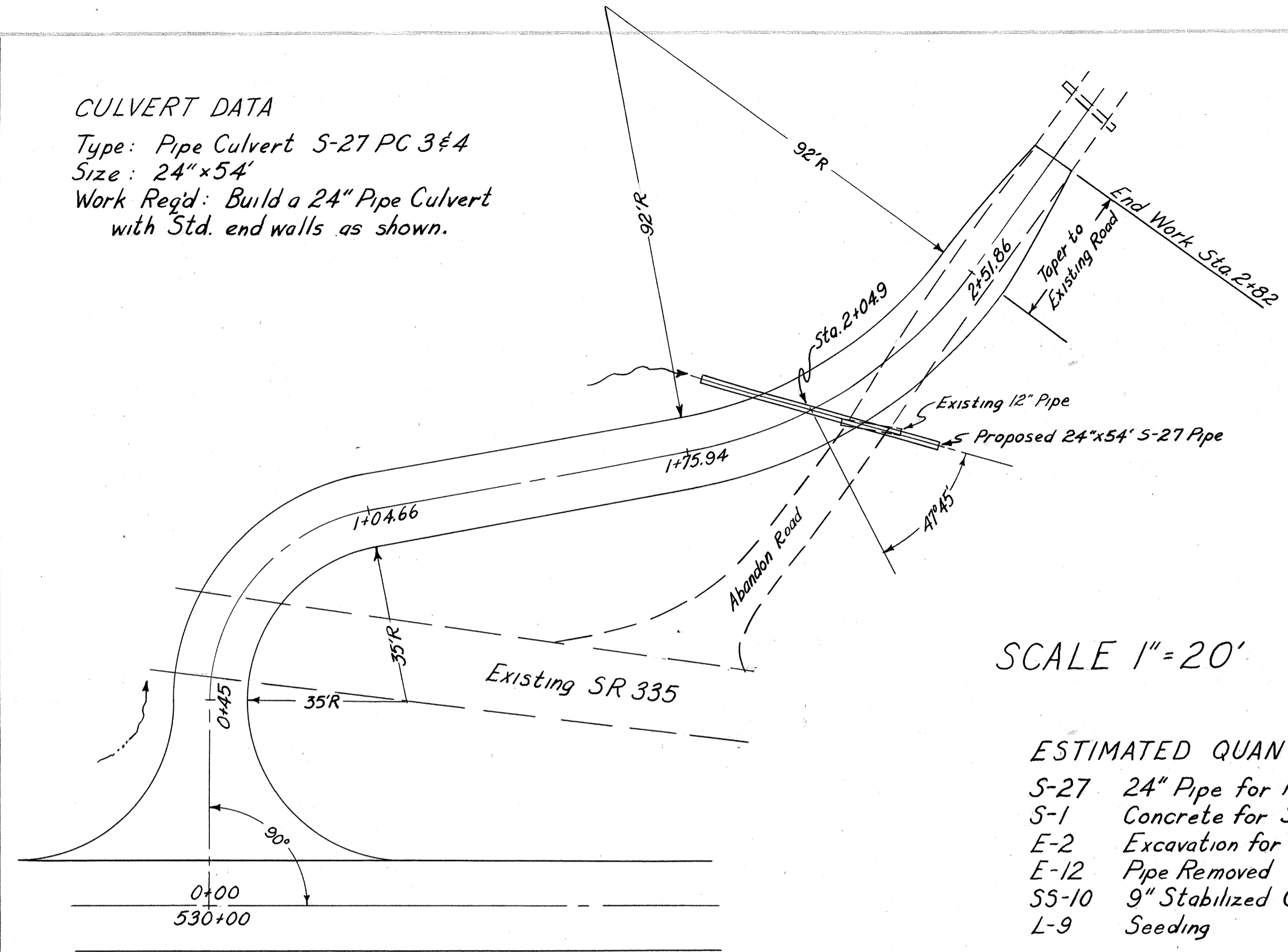
NOTE: Marker will be furnished & erected on the left by the State before acceptance of this Project.



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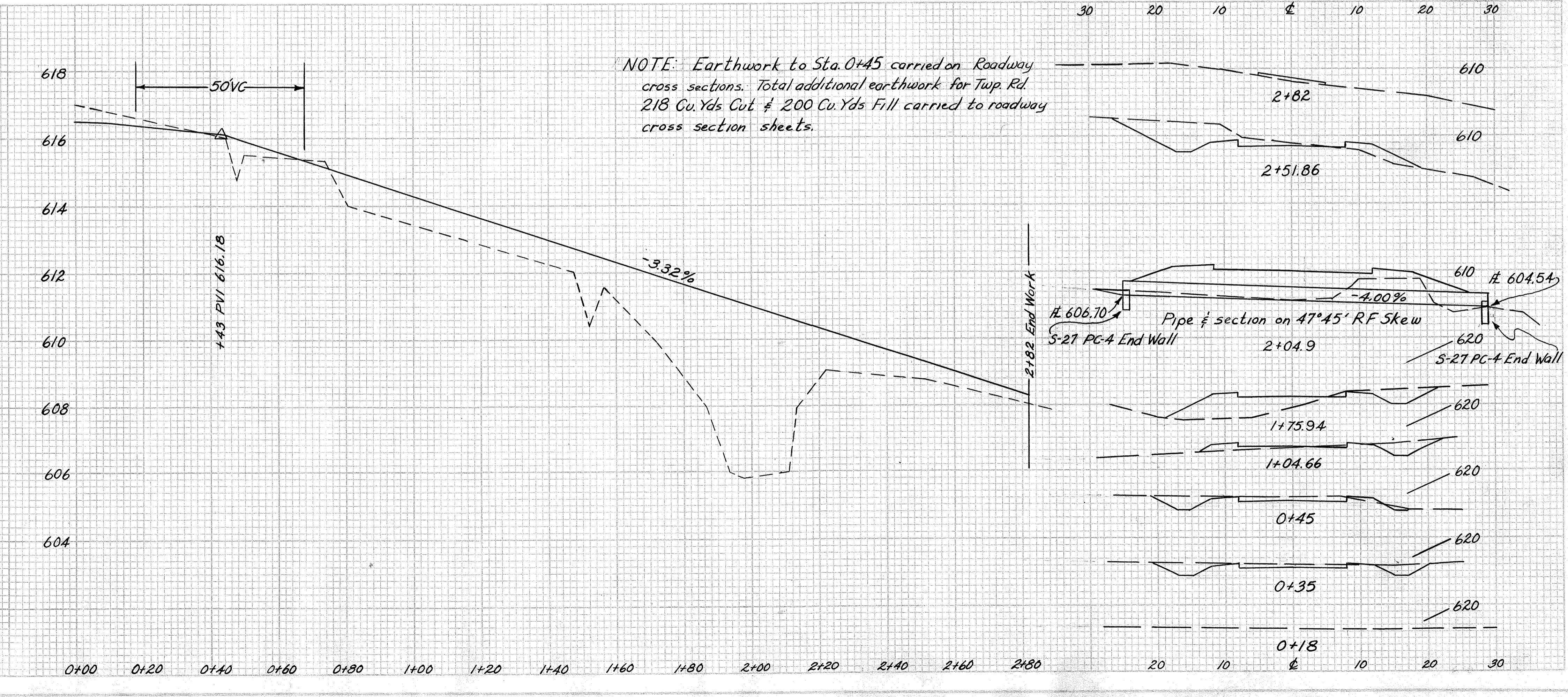
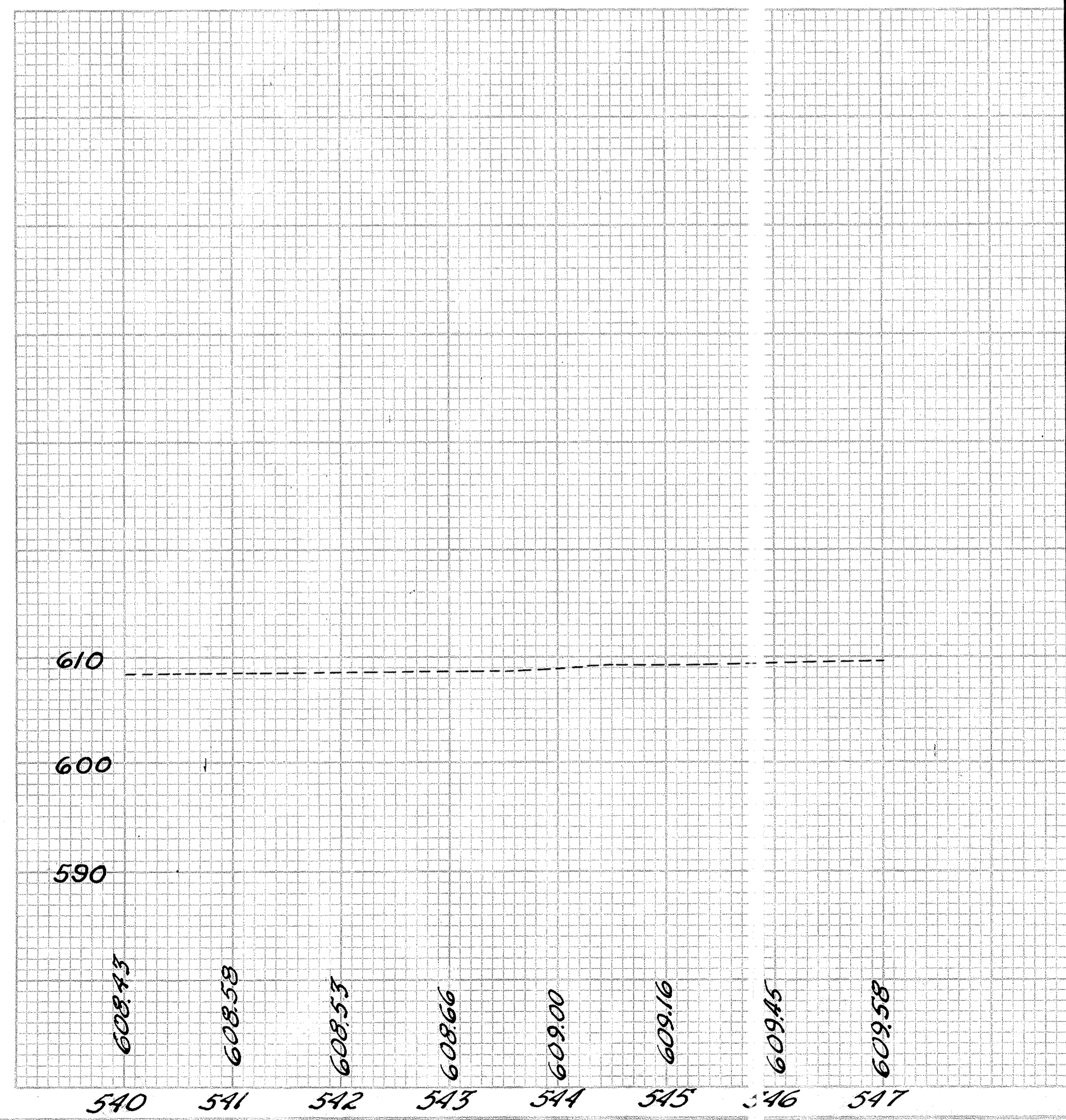


CULVERT DATA
 Type: Pipe Culvert S-27 PC 3#4
 Size: 24"x54'
 Work Req'd: Build a 24" Pipe Culvert with Std. end walls as shown.



ESTIMATED QUANTITIES

S-27	24" Pipe for Roadway Culvert	54 Lin. Ft.
S-1	Concrete for Structures	.82 Cu. Yd.
E-2	Excavation for Structures	6 Cu. Yd.
E-12	Pipe Removed	14 Lin. Ft.
SS-10	9" Stabilized Crushed Aggregate	134 Cu. Yd.
L-9	Seeding	509 Sq. Yd.



NOTE: Earthwork to Sta. 0+45 carried on Roadway cross sections. Total additional earthwork for Twp. Rd. 218 Cu. Yds. Cut & 200 Cu. Yds. Fill carried to roadway cross section sheets.

PI - STA. 522+37.39 Δ=6°43'45" LT.
Dc = 4°-00' Ls = 150.00'

ELEV L.T. EDGE	DEDUCT FROM PROFILE	STATION	PROFILE ELEV	+OR- FROM PROFILE	ELEV RT. EDGE
648.00	0.16	520+00	648.16	-0.16	648.00
647.05	0.16	+25	647.21	-0.16	647.05
646.07	0.16	+50	646.23	-0.11	646.12
645.06	0.16	+75	645.22	-0.02	645.20
644.89	0.18	TS +78.15	645.07	0.00	645.07
643.86	0.32	521+00	644.18	+0.01	644.19
642.67	0.45	+25	643.72	+0.07	643.19
641.48	0.54	+50	642.02	+0.17	642.19
640.27	0.62	+75	640.89	+0.30	641.19
639.09	0.65	522+00	639.74	+0.55	640.19
637.89	0.66	+25	638.55	+0.64	639.19
637.72	0.66	SC +28.15	638.38	+0.66	639.04
636.52	0.66	CS +23.33	637.59	-0.66	639.27
636.73	0.67	+50	637.34	+0.66	638.00
635.63	0.48	+75	636.11	+0.62	636.73
634.55	0.33	523+00	634.88	+0.57	635.45
633.44	0.24	+25	633.68	+0.48	634.16
632.38	0.14	+50	632.52	+0.36	632.88
631.29	0.13	+75	631.42	+0.18	631.60
630.40	0.16	ST +96.38	630.56	+0.00	630.56
630.21	0.16	524+00	630.37	+0.00	630.37
629.20	0.16	+25	629.36	-0.05	629.31
628.25	0.16	+50	628.41	+0.13	628.28
627.35	0.16	+75	627.51	+0.16	627.35

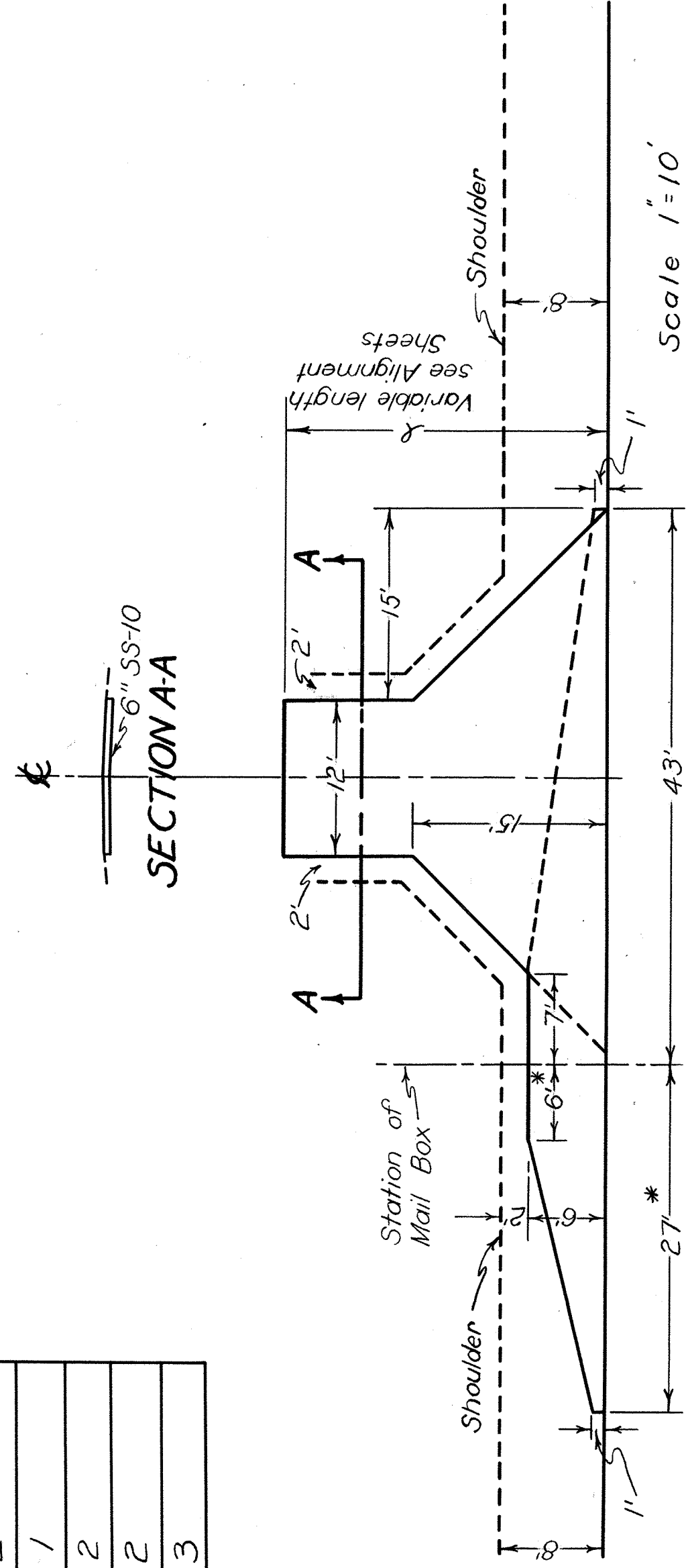
PI - STA. 534+59.25 Δ=7°33'30" RT.
Dc = 4°-00' Ls = 150.00'

ELEV L.T. EDGE	+OR- FROM PROFILE	STATION	PROFILE ELEV	DEDUCT FROM PROFILE	ELEV RT. EDGE
612.56	-0.16	532+25	612.72	0.16	612.56
612.19	-0.11	+50	612.30	0.16	612.14
611.82	-0.05	+75	611.87	0.16	611.21
611.61	0.00	TS +89.60	611.61	0.16	611.45
611.49	+0.05	533+00	611.45	0.20	611.25
611.17	+0.15	+25	611.02	0.28	610.74
610.85	+0.25	+50	610.60	0.38	610.22
610.54	+0.37	+75	610.17	0.46	609.71
610.24	+0.49	534+00	609.75	0.54	609.21
609.98	+0.62	+25	609.36	0.59	608.77
609.81	+0.66	SC +39.60	609.15	0.66	608.49
609.68	+0.66	+50	609.02	0.66	608.36
609.33	-0.22	+75	608.72	0.66	608.06
609.33	+0.66	CS +78.56	608.67	0.66	608.01
609.03	+0.56	535+00	608.47	0.60	607.87
608.75	+0.49	+25	608.26	0.51	607.75
608.48	+0.37	+50	608.11	0.42	607.69
608.13	+0.13	+75	608.00	0.34	607.66
608.04	+0.11	536+00	607.93	0.25	607.68
607.91	-0.00	+25	607.91	0.19	607.72
607.90	-0.01	ST +28.56	607.91	0.17	607.74
607.86	-0.08	+50	607.94	0.16	607.78
607.88	-0.13	+75	608.07	0.16	607.85
607.96	-0.16	537+00	608.12	0.16	607.96

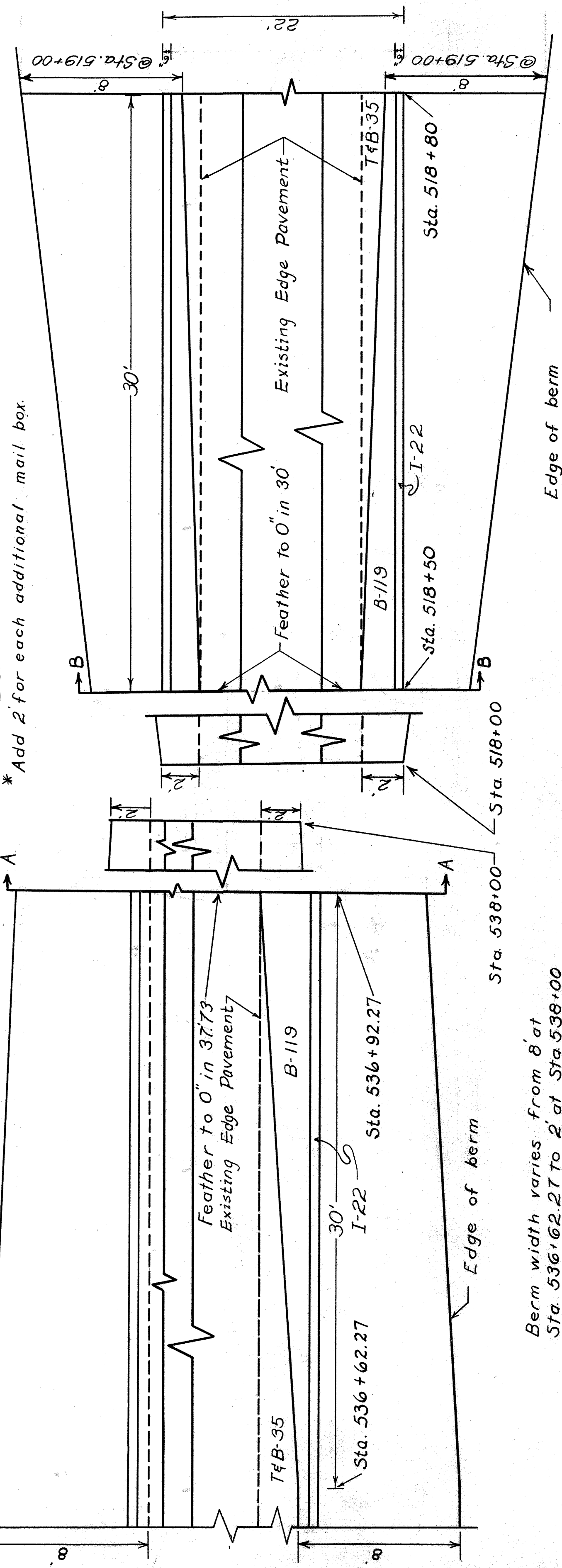
SUPERELEVATION TABLES

MAIL BOX TURNOUTS

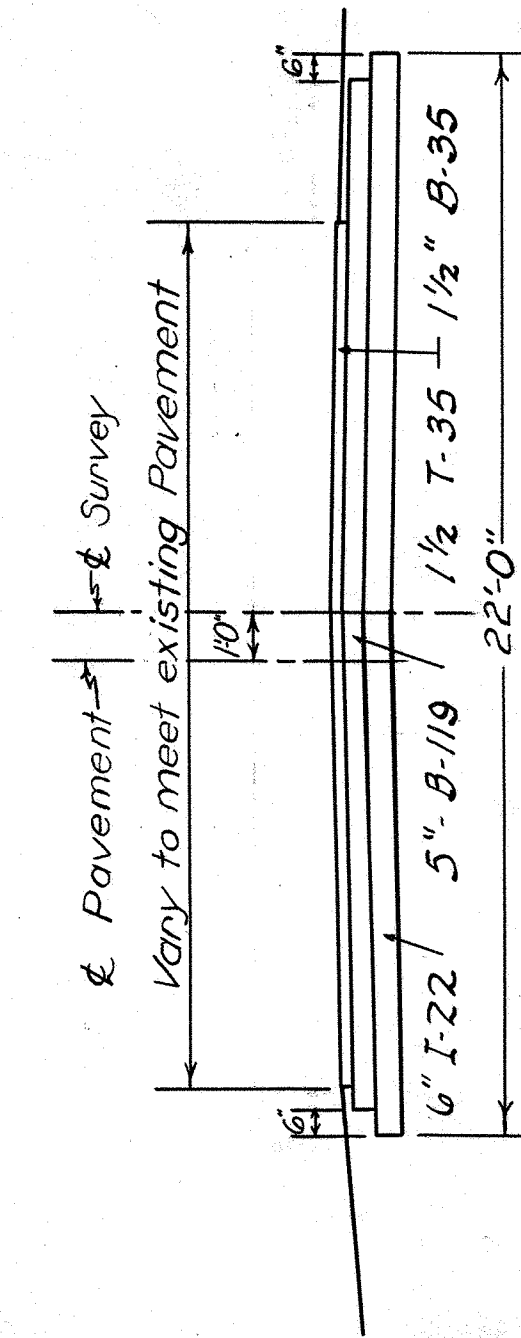
Station	No. of Mailboxes
519+65	2
521+58	1
527+38	2
528+75	2
530+00	3



TYPICAL DRIVE & MAIL BOX TURNOUT



Berm width varies from 8' at Sta. 536+62.27 to 2' at Sta. 538+00



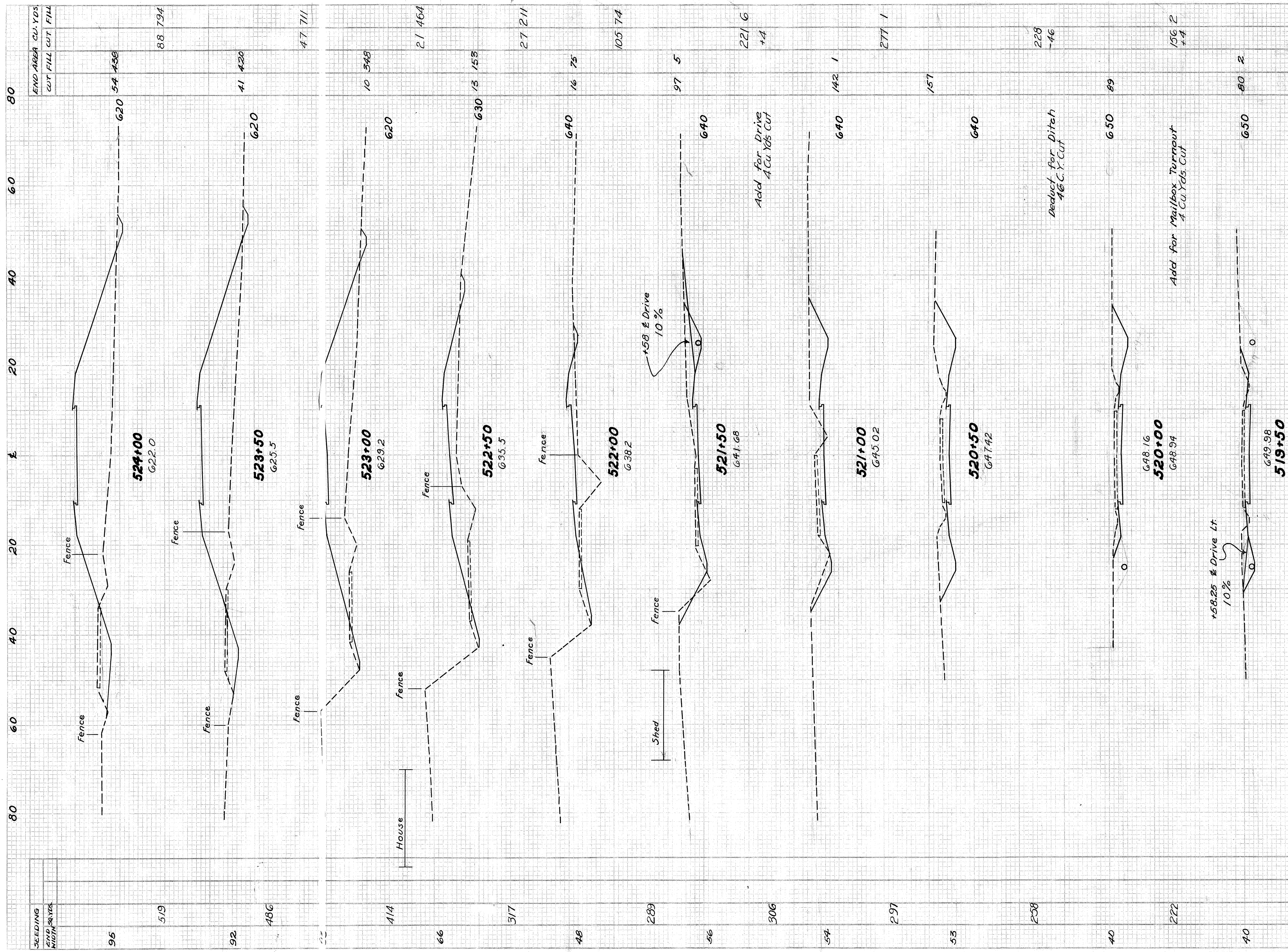
SECTION A-A

SECTION B-B

* Berm width varies from 2' at Sta. 518+00 to 8' at Sta. 519+00

Scale: 1" = 4'

TRANSITION DETAILS



SEEDING SQ. YDS.	END AREA CU. YDS.	CUT CU. YDS.	FILL CU. YDS.
96	620	54	438
519			88 794
92	41	420	
486			47 711

10	348		
21	464		
27	211		
16	75		
105	74		
97	5		
22	6		+4
142	1		
277	1		
157			
640			
228			-46
650			
89			
650			
80	2		

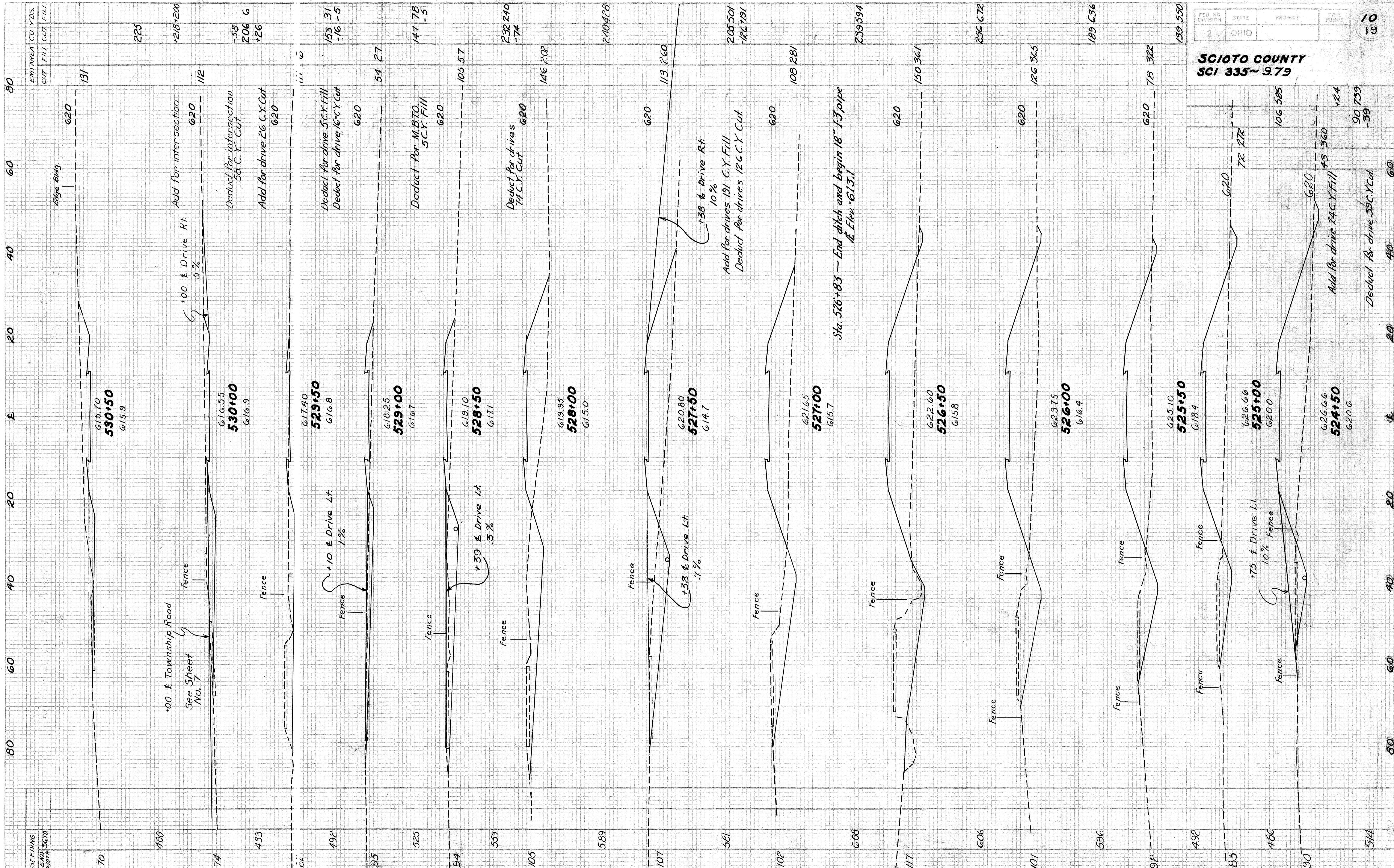
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

SCIOTO COUNTY
SCI 335~9.79

122	8		
52	7		
103	13		
59	7		
55	6		
0	0		
0	0		
0	0		

122	8		
52	7		
103	13		
59	7		
55	6		
0	0		
0	0		
0	0		

STA. 518+00 TO STA. 524+00

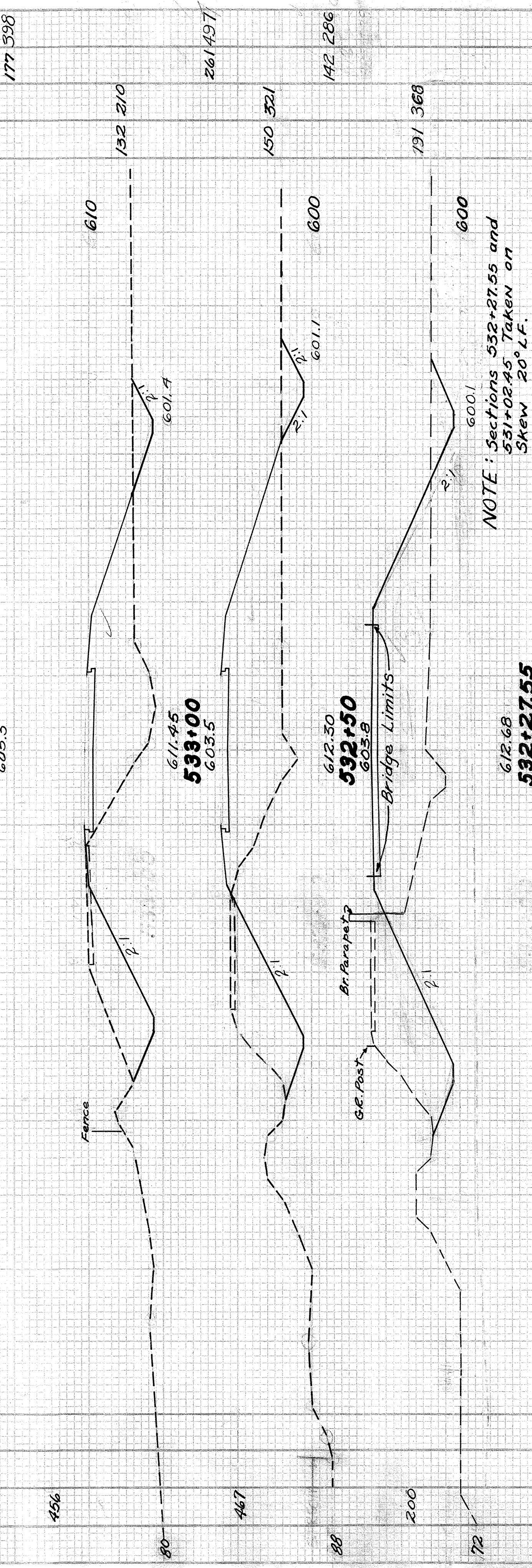
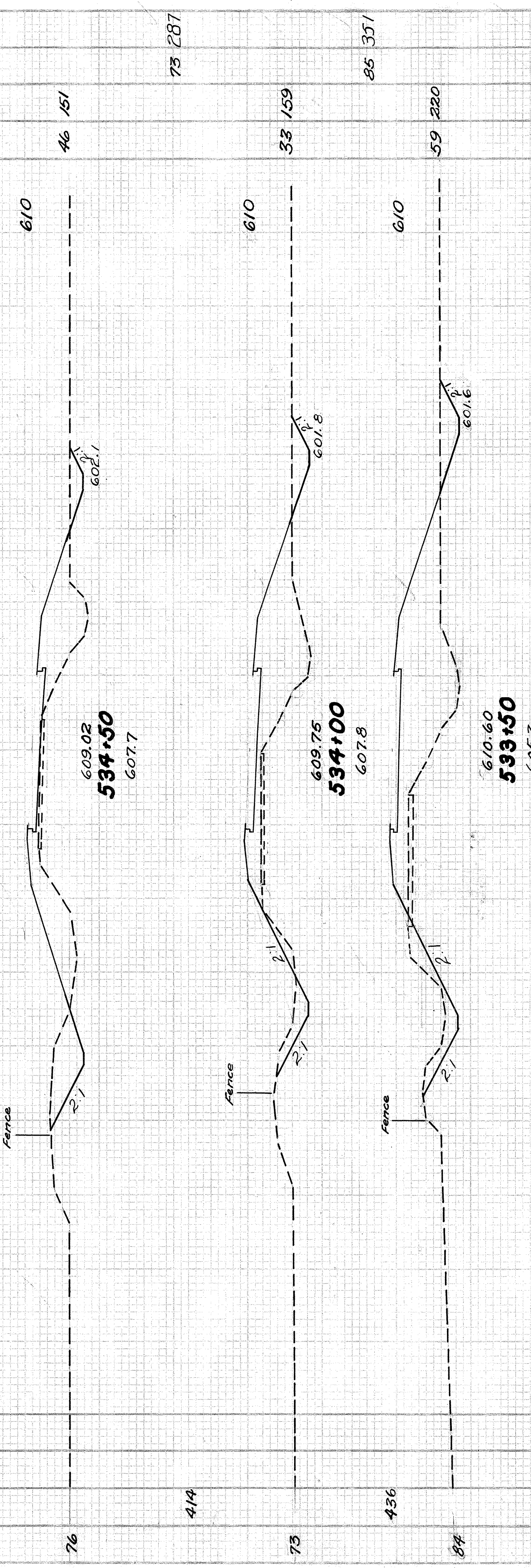
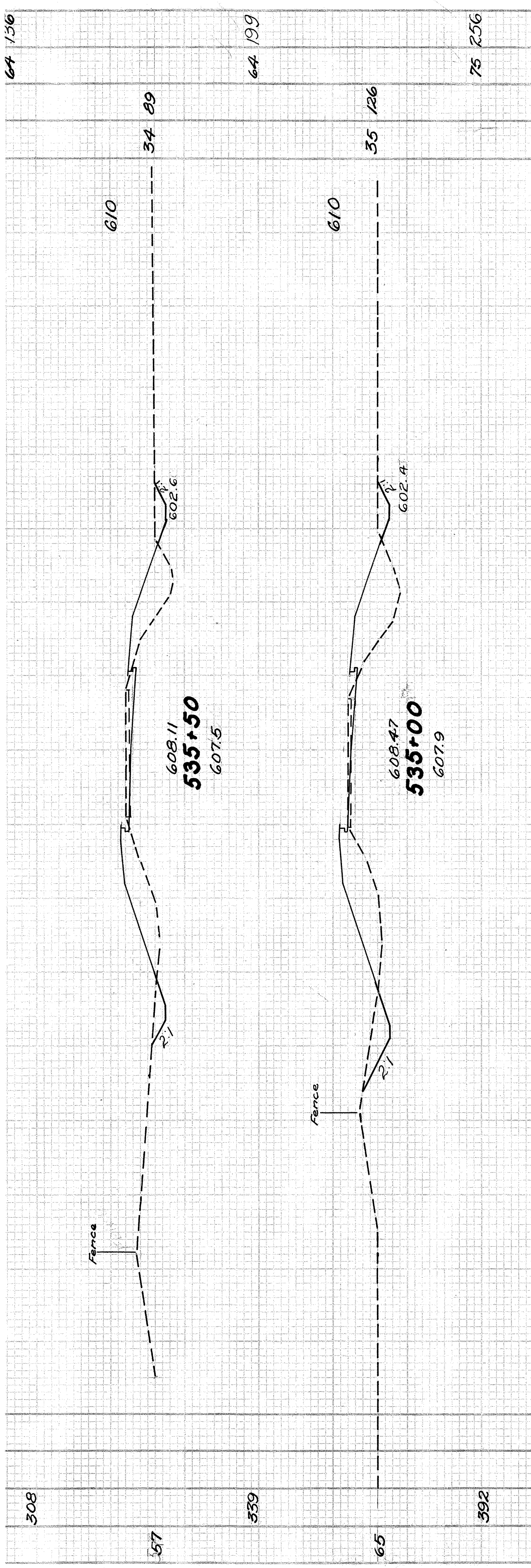
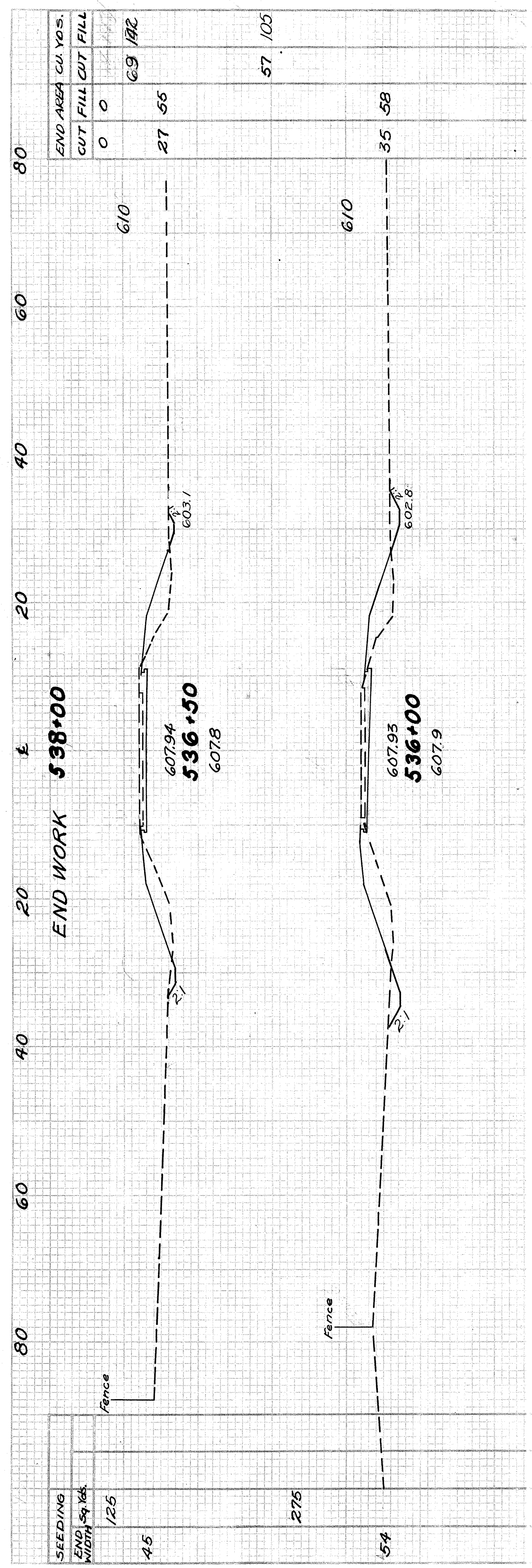


SCIO TO COUNTY
SCI 335~ 9.79

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

10
19

STA. 524+00 TO STA. 530+50



NOTE: Sections 532+27.55 and 531+02.95 Taken on Skew 20° L.F.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

SCIOTO COUNTY
SCI 335~9.79

114
19 25
146 24

Add for Spillage
114 CU Yds Fill

610

600

600

612.68
532+27.55
604.5

614.80
531+02.95
614.6

114
19 25
146 24

114

19 25

146 24

114

19 25

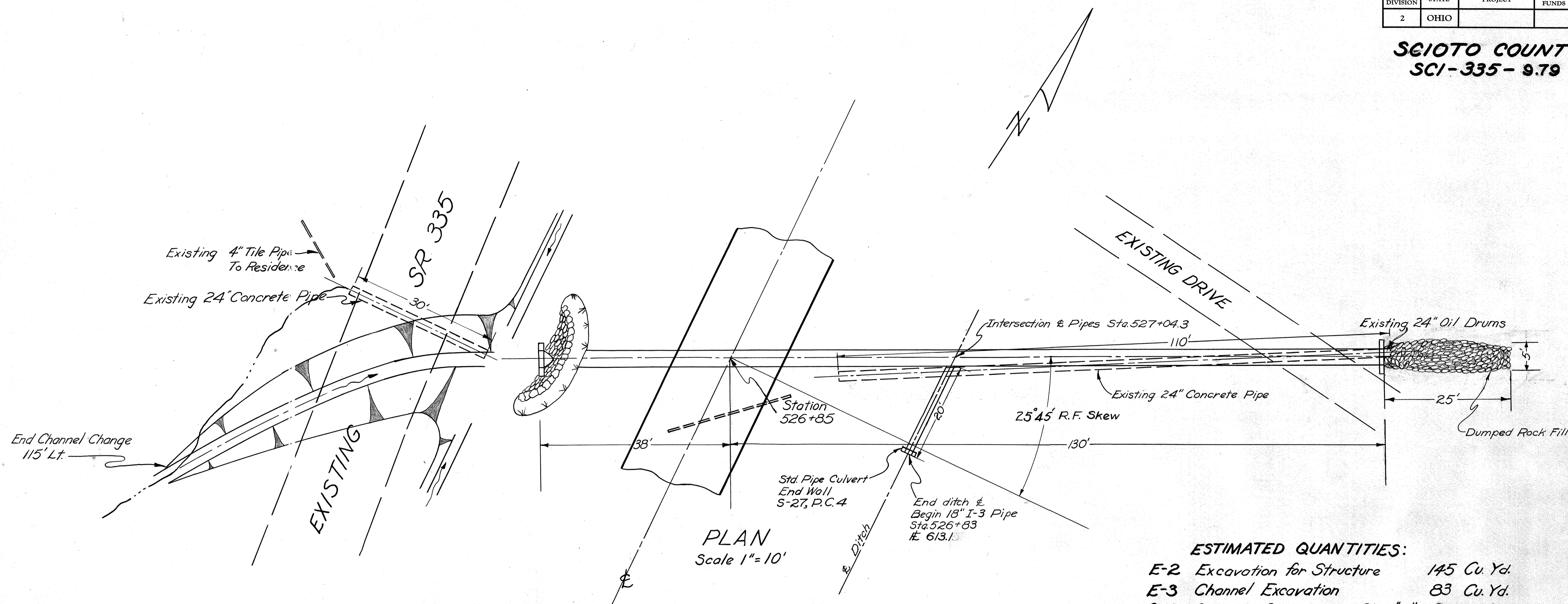
146 24

114

19 25

146 24

SCIOTO COUNTY
SCI-335-9.79



CULVERT DATA:

Existing:

TYPE: Concrete Pipe Culvert with CMP extension on Lt.
SIZE: 24" x 30'

Proposed:

TYPE: Pipe Culvert S-27, F. 2.3 & P.C. 4
SIZE: 42" x 168'

WORK REQUIRED:

Build a 42" Pipe Culvert with Std. Cut-off walls on Rt. & Lt. and riprap headwall on Lt. Remove existing 24" pipe culvert under existing roadway and excavate inlet channel as shown. Remove 24" structure to Rt. of proposed & and backfill outside of roadway embankment to provide a smooth blending with the existing ground and seed disturbed area.

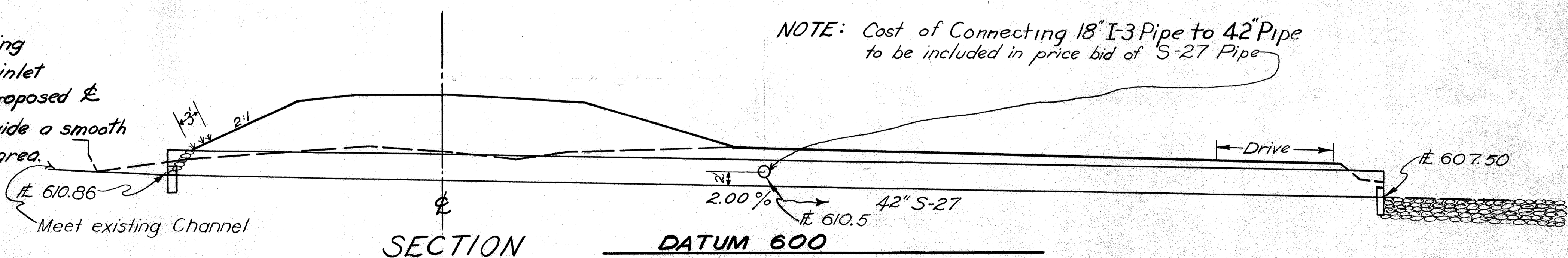
Dumped Rock Fill at outlet as shown. Connect 18" I-3 pipe from ditch to culvert as detailed.

Drainage Area = 64 Acres
 $Q_{10} = 84 \text{ c.f.s.}$

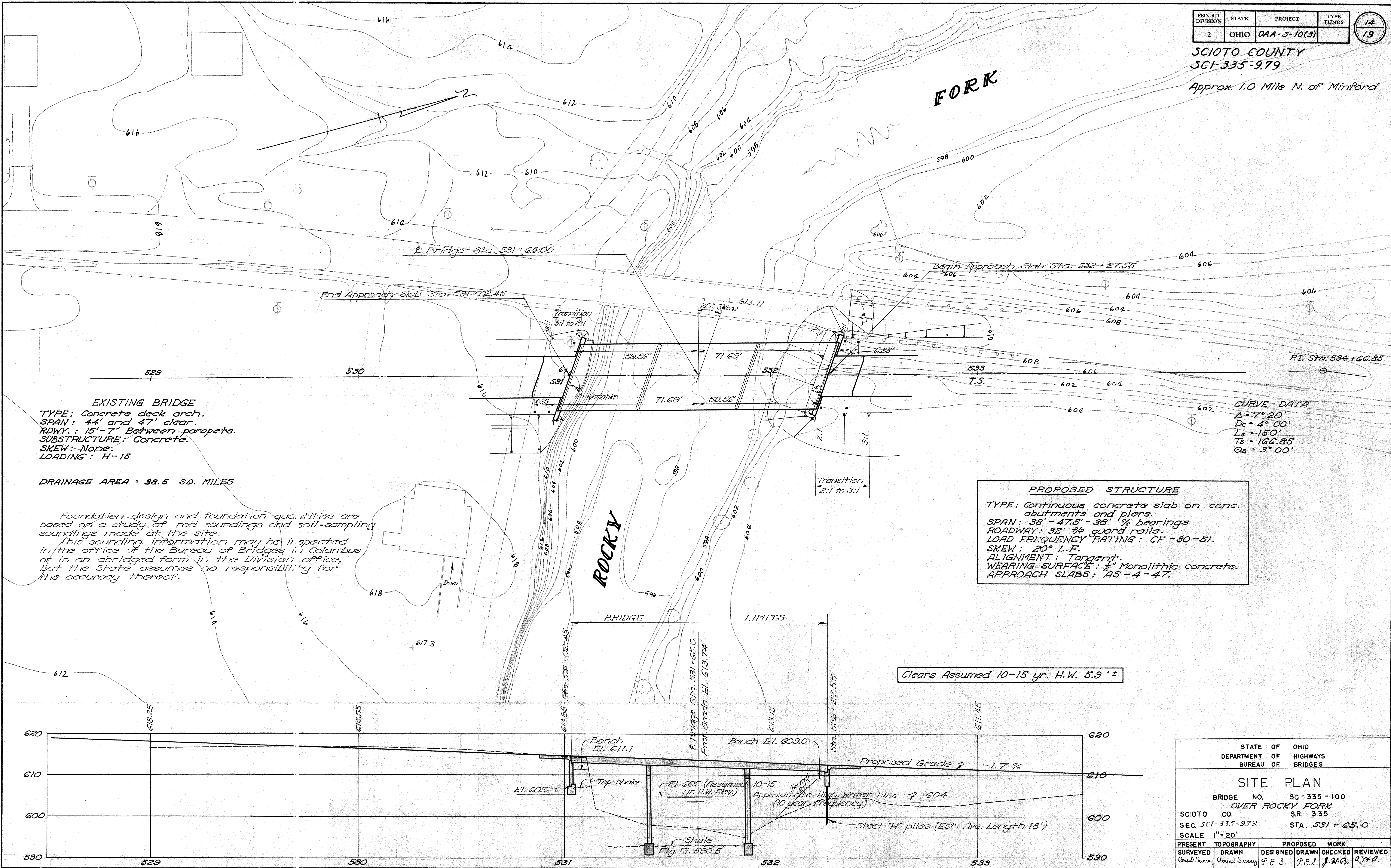
ESTIMATED QUANTITIES:

E-2	Excavation for Structure	145 Cu. Yd.
E-3	Channel Excavation	83 Cu. Yd.
S-1	Concrete for Structures Class "E"	182 Cu. Yd.
S-27	42" Pipe for Roadway Culverts	168 Lin. Ft.
I-10	Riprap Type "B"	3 Sq. Yd.
L-10	Sodding	10 Sq. Yd.
L-9	Seeding	45 Sq. Yd.
E-12	Pipe Removed (24")	140 Lin. Ft.
I-3	18" Pipe for Roadway Drainage	20 Lin. Ft.
I-10	Dumped Rock Fill	14 Cu. Yd.

NOTE: Cost of Connecting 18" I-3 Pipe to 42" Pipe to be included in price bid of S-27 Pipe



SCIOTO COUNTY
 SCI-335-9.79
 Approx. 1.0 Mile N. of Minford



EXISTING BRIDGE
 TYPE: Concrete deck arch.
 SPAN: 44' and 47' clear.
 RDWY.: 15'-7" Between parapets.
 SUBSTRUCTURE: Concrete.
 SKEW: None.
 LOADING: H-15

DRAINAGE AREA = 38.5 SQ. MILES

Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site.
 This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in an abridged form in the Division office, but the State assumes no responsibility for the accuracy thereof.

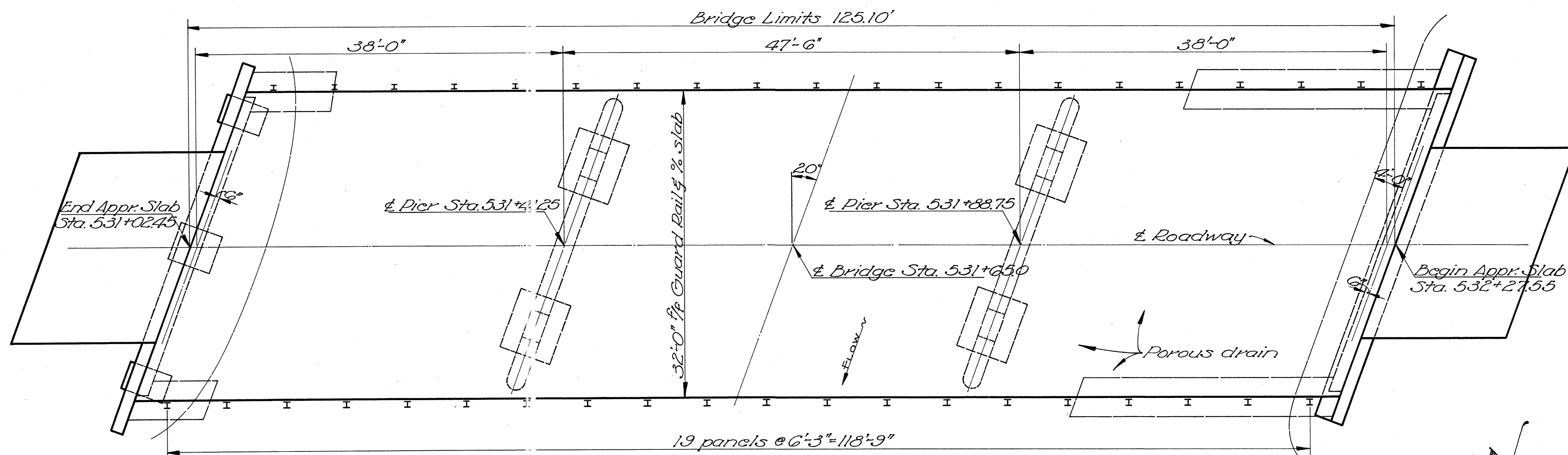
CURVE DATA
 $\Delta = 7^{\circ} 20'$
 $D_c = 4^{\circ} 00'$
 $L_s = 150'$
 $T_s = 166.85'$
 $O_s = 3^{\circ} 00'$

PROPOSED STRUCTURE
 TYPE: Continuous concrete slab on conc. abutments and piers.
 SPAN: 38' - 47.5' - 38' $\frac{1}{2}$ bearings
 ROADWAY: 32' $\frac{1}{4}$ guard rails
 LOAD FREQUENCY RATING: CF-30-51.
 SKEW: 20° L.F.
 ALIGNMENT: Tangent.
 WEARING SURFACE: $\frac{1}{2}$ " Monolithic concrete.
 APPROACH SLABS: AS-4-47.

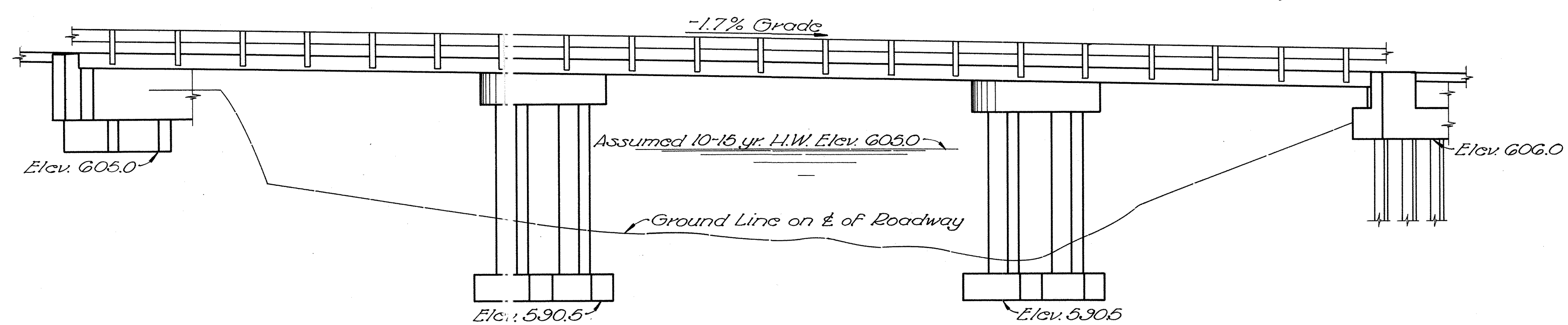
Clears Assumed 10-15 yr. H.W. 5.9' ±

STATE OF OHIO		DEPARTMENT OF HIGHWAYS		BUREAU OF BRIDGES	
SITE PLAN					
BRIDGE NO. SC-335-100		OVER ROCKY FORK			
SCIOTO CO		S.R. 335			
SEC. SCI-335-9.79		STA. 531 + 65.0			
SCALE 1" = 20'					
PRESENT TOPOGRAPHY			PROPOSED WORK		
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Aerial Survey	Aerial Survey	P.E.S.	P.E.S.	J.W.B.	A.Y.A.
BFG 2-13-34					

SCIOTO COUNTY
SCI-335-9.79



PLAN



ELEVATION

GENERAL NOTES

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed. Existing south abutment shall be removed to existing ground line; existing north abutment shall be removed to 6" below the finished ground line. Suitable waste masonry shall be used as bank protection where directed by the Engineer. The remainder shall become the property of the Contractor.

EXCAVATION QUANTITY includes the removal of fill material between top of earth bench and bottom of abutment crossbeam at north abutment.

PILING shall be driven with a hammer of not less than 7000' energy per blow, to firm contact with rock which shall be considered as attained when the capacity according to the formula in Sec. 5-18.06 is at least 60 tons if a 7000' steam hammer is used, or 45 tons if a steam hammer or drop hammer of 15000' or greater energy is used and if the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report. If the energy rating of the hammer is between these values, the required formula capacity shall be determined by interpolation. (The design load is 30 tons per pile.) If a drop hammer is used, the capacity formula shall be $P = \frac{W \cdot H}{L}$ instead of as specified in Sec. 5-18.06 (and the weight of the ram shall be great enough to be able to provide the required capacity according to this formula).

FOOTINGS shall extend into shale a minimum of 2 ft. at south abutment and 3 ft. at piers or to the elevation shown, whichever is lower.

SURFACE FINISH OF CONCRETE: fascia of deck slab shall receive a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item S-1.

POROUS DRAINS extending from face of abutment to Elev. 607 at south abutment and Elev. 600 at north abutment shall be placed on and flush with embankment slopes at all four corners of the bridge. The drains shall be 4' wide and 1' thick. They shall be centered under edge of deck. They shall be composed of No. 1 or No. 12 gravel, stone or slag. Construction procedure shall conform essentially to Item I-9. Trench excavation shall be included for payment with the price per cu. yd. bid for "Porous drains on embankment slopes".

GRAVEL, if used as the coarse aggregate, shall be according to Sec. M-3.93 instead of 3.91 for class "C" concrete, superstructure.

GUARD RAIL shall be of the same type as used on approaches using posts as shown hereon. Transition between rail height on bridge and on approaches shall be made in a distance of 100 ft. at each end of bridge. Rail shall be painted white in accordance with Sec. I-15.07 of the Construction and Material Specifications. Galvanized posts and anchors shall not be painted.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER	GEN'L	As BUILT
E-2	Lump	sum	Coffers, dams, cribs and sheeting				Lump	
E-2	33	Cu. yds.	Unclassified excavation	30	13			
E-2	22	Cu. yds.	Shale excavation	5	17			
S-1	220	Cu. yds.	Class "C" concrete, superstructure			220		
S-1	29	Cu. yds.	Class "C" concrete, pier caps and columns		29			
S-1	41	Cu. yds.	Class "C" concrete, abutments	41				
S-1	18	Cu. yds.	Class "C" concrete, footings	5	13			
S-4	59135	Lbs.	Reinforcing steel	2718	8489	47775	153	
S-14	2502	Lin. Ft.	Railing (Type I-15.13 guard rail with galvanized steel posts)			2502		
S-16	Lump	Sum	First test pile				Lump	
S-18	30	Lin. Ft.	Steel piling, 12 BP 63	30				22.98 67.02
S-24	Lump	Sum	Removal of existing structure				Lump	
S-29	11	Cu. yds.	Porous drains on embankment slopes				11	
S-29	25	Cu. yds.	Porous backfill	25				

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

GENERAL PLAN, ELEVATION, NOTES AND ESTIMATED QUANTITIES

BRIDGE No. SC-335-100
OVER ROCKY FORK

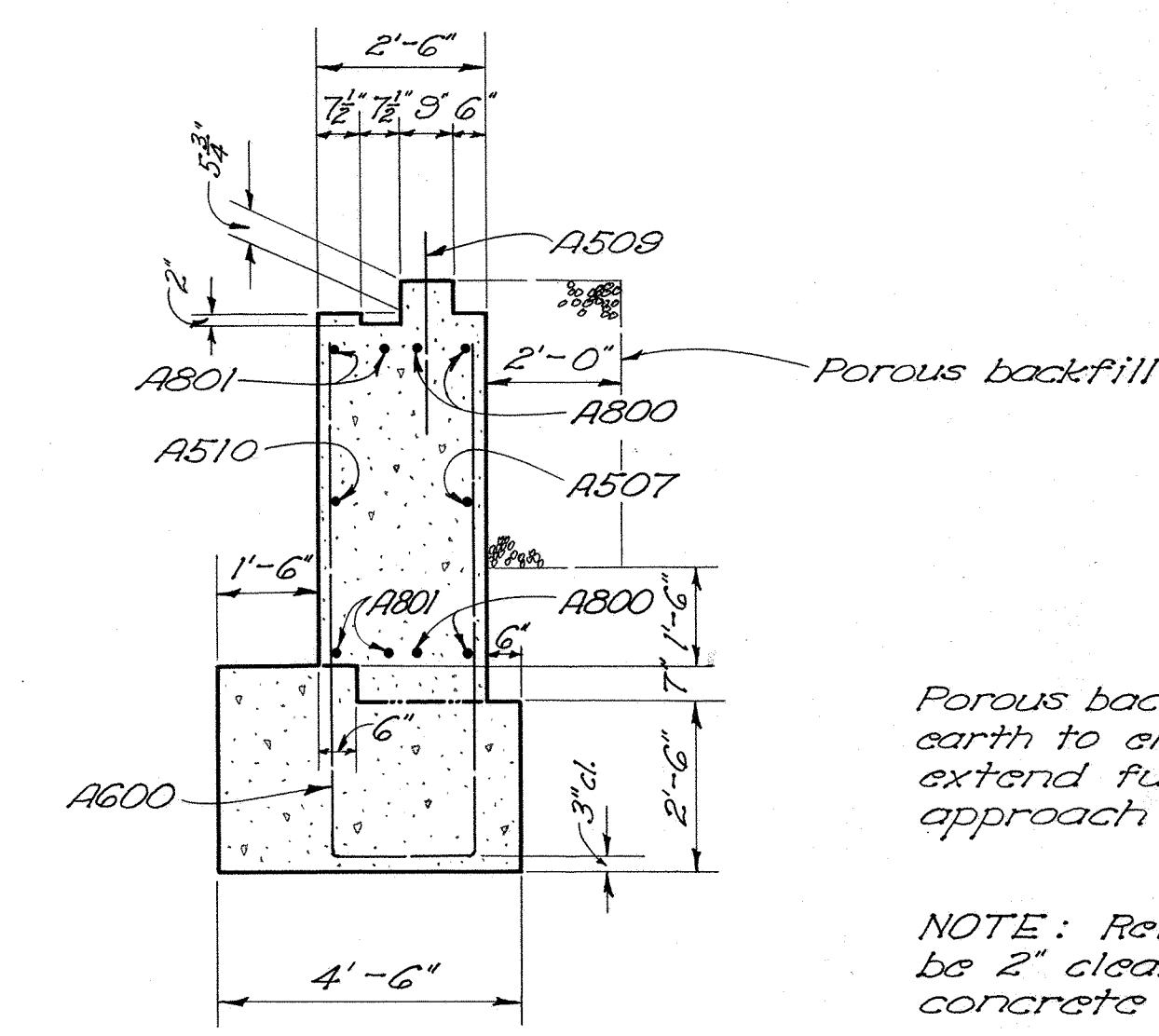
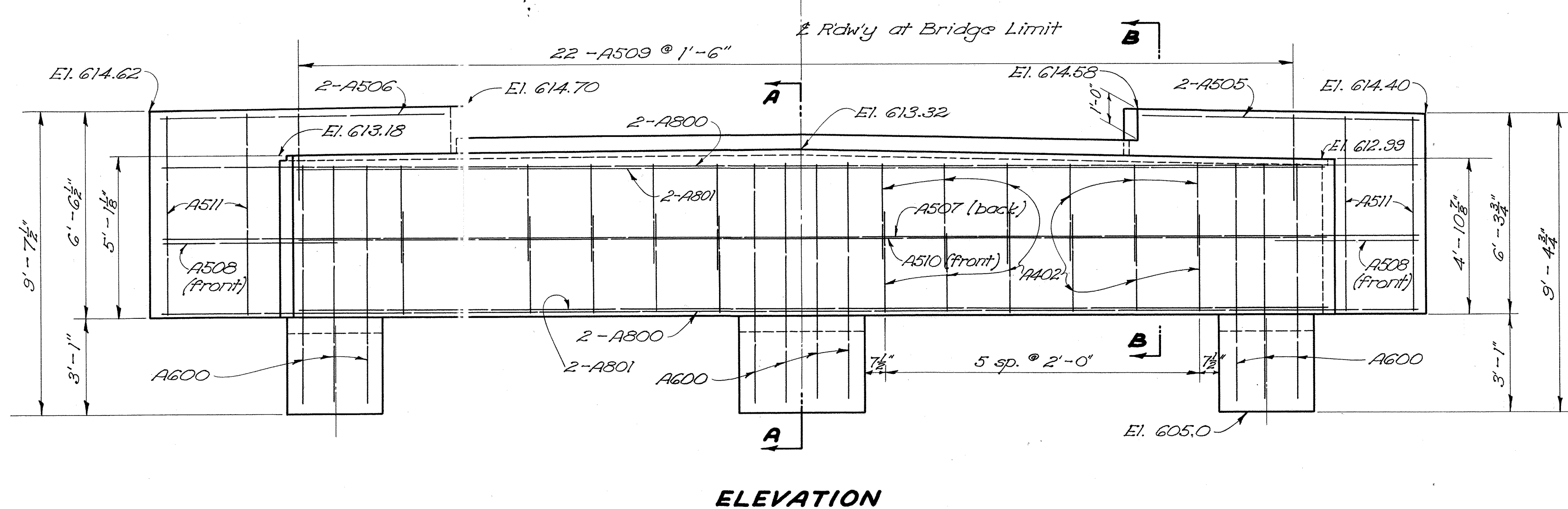
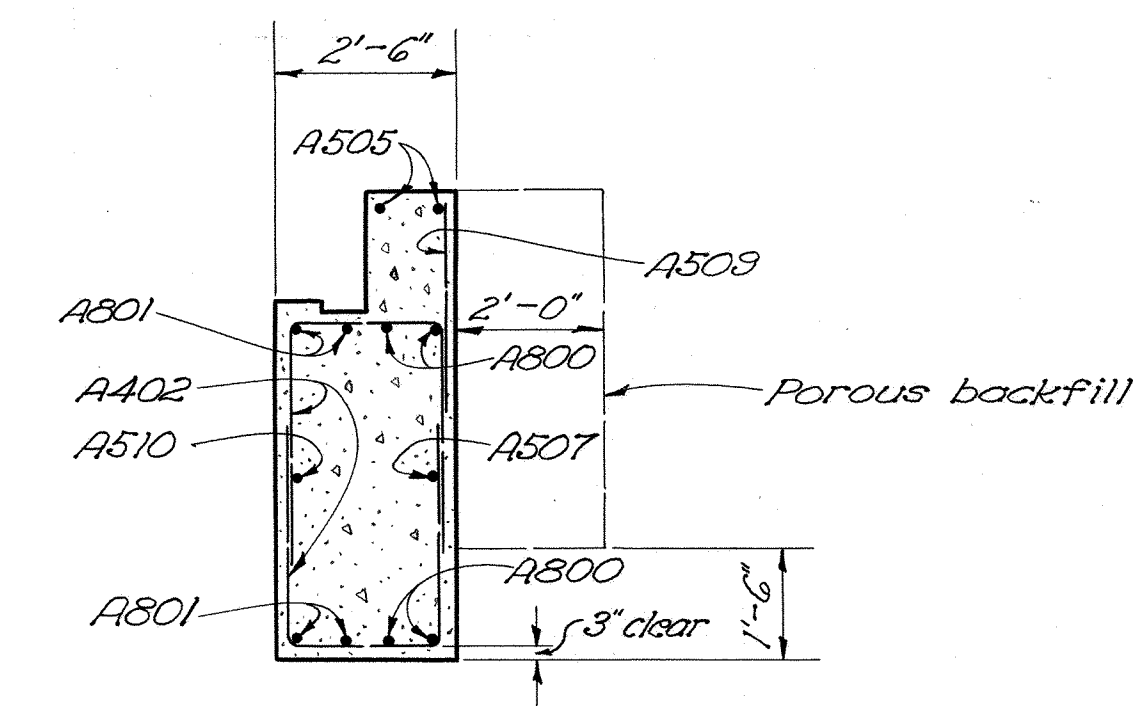
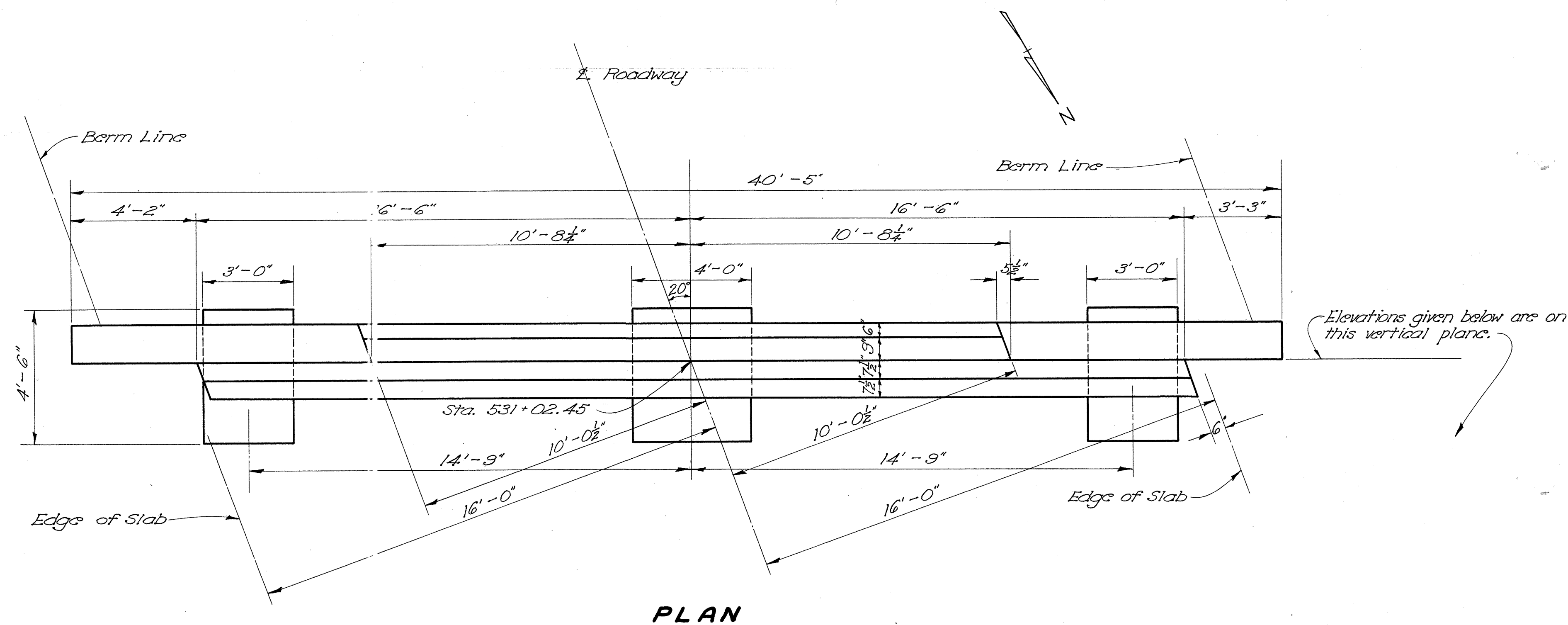
SCIOTO COUNTY STA. 531+65.0
SEC. SCI-335-9.79

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
mfer	mfer	JEV.	M.P.B.	A.J.F.	2-13-54	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	OAA-S-10(3)	

16
19

SCIOTO COUNTY
SCI-335-9.79

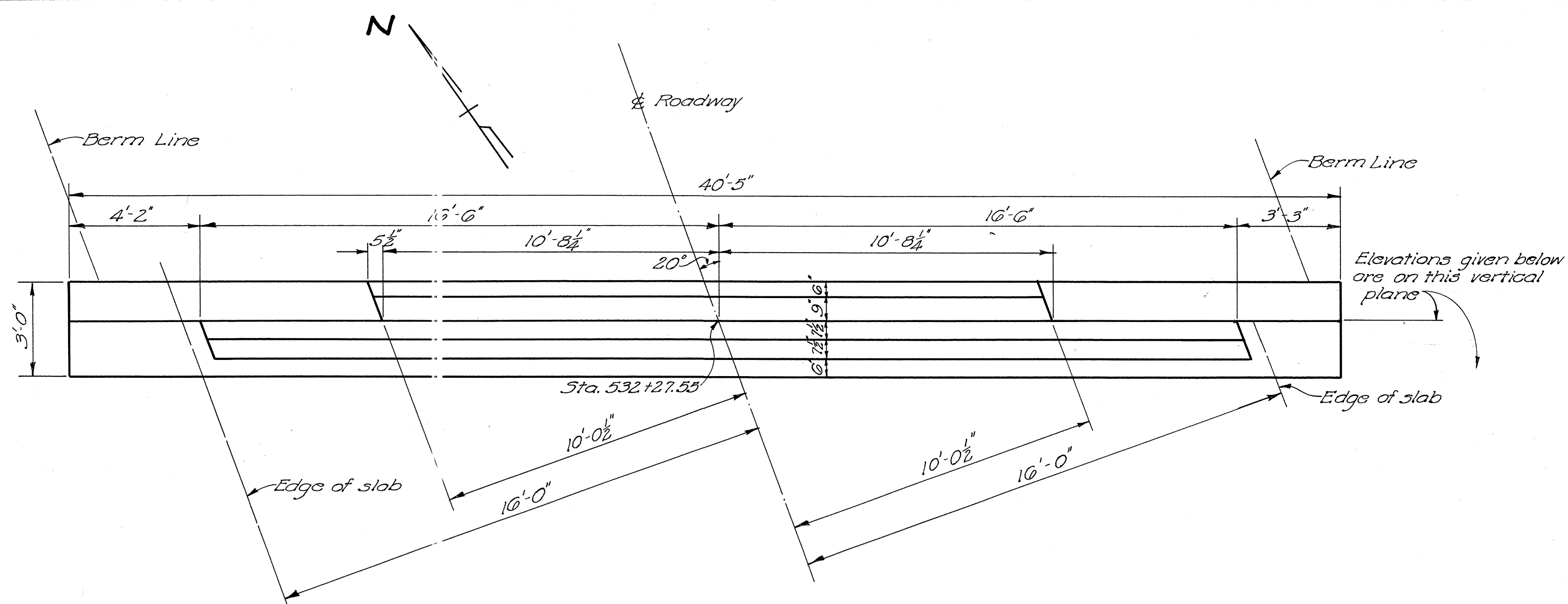


Porous backfill from top of earth to elevation shown shall extend full width of approach embankment.

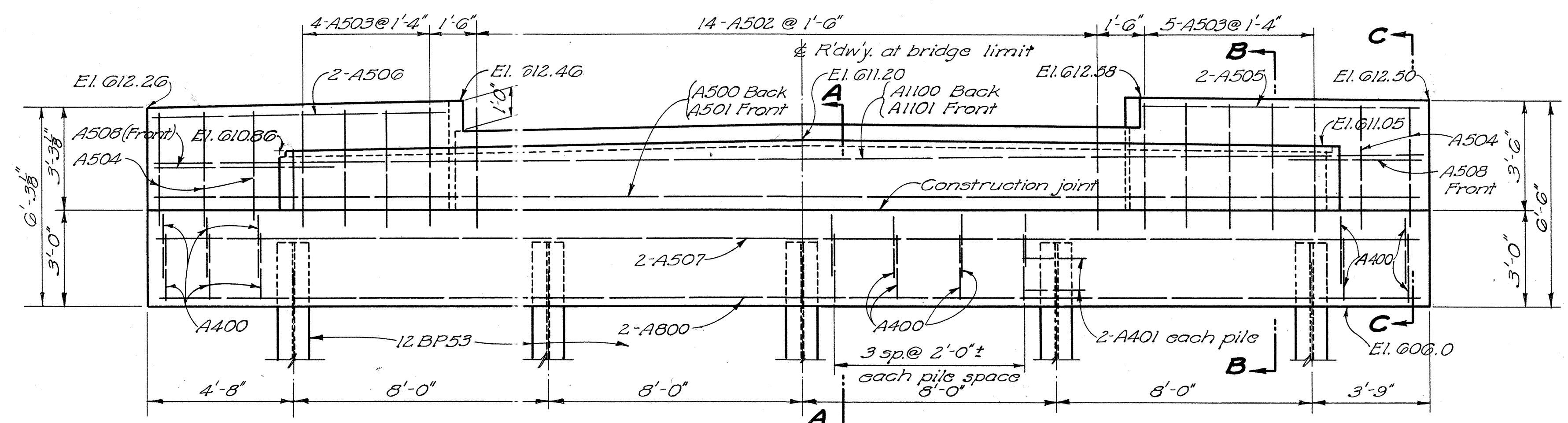
NOTE: Reinforcing steel shall be 2" clear from face of concrete except as shown.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS						
SOUTH ABUTMENT DETAILS						
BRIDGE No. SC-335-100 over ROCKY FORK						
Scioto County Sec. SCI-335-9.79 Sta. 531+65.0						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
mfw	mfw		M.P.B.	BFG	2-13-54	

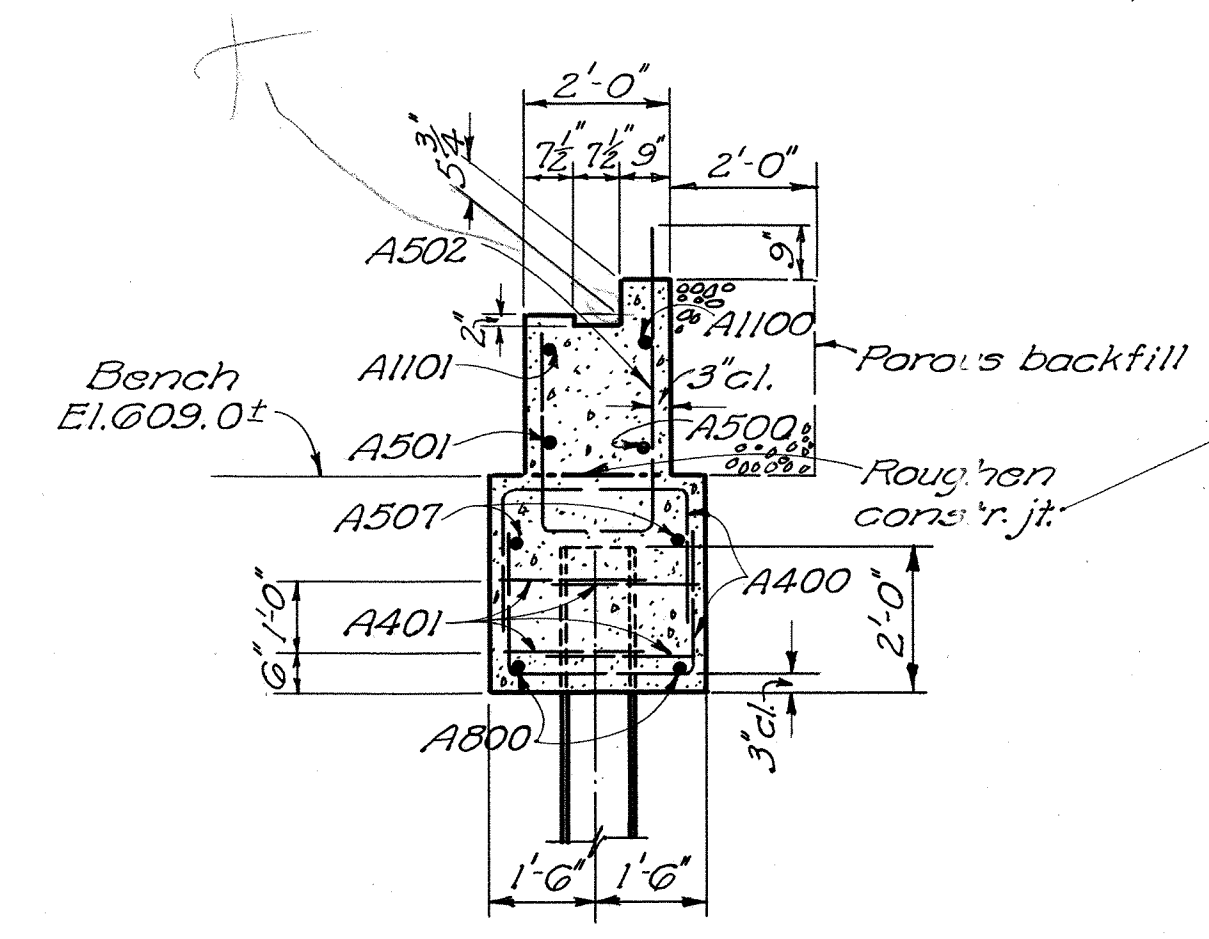
SCIOTO COUNTY
SCI-335-9.79



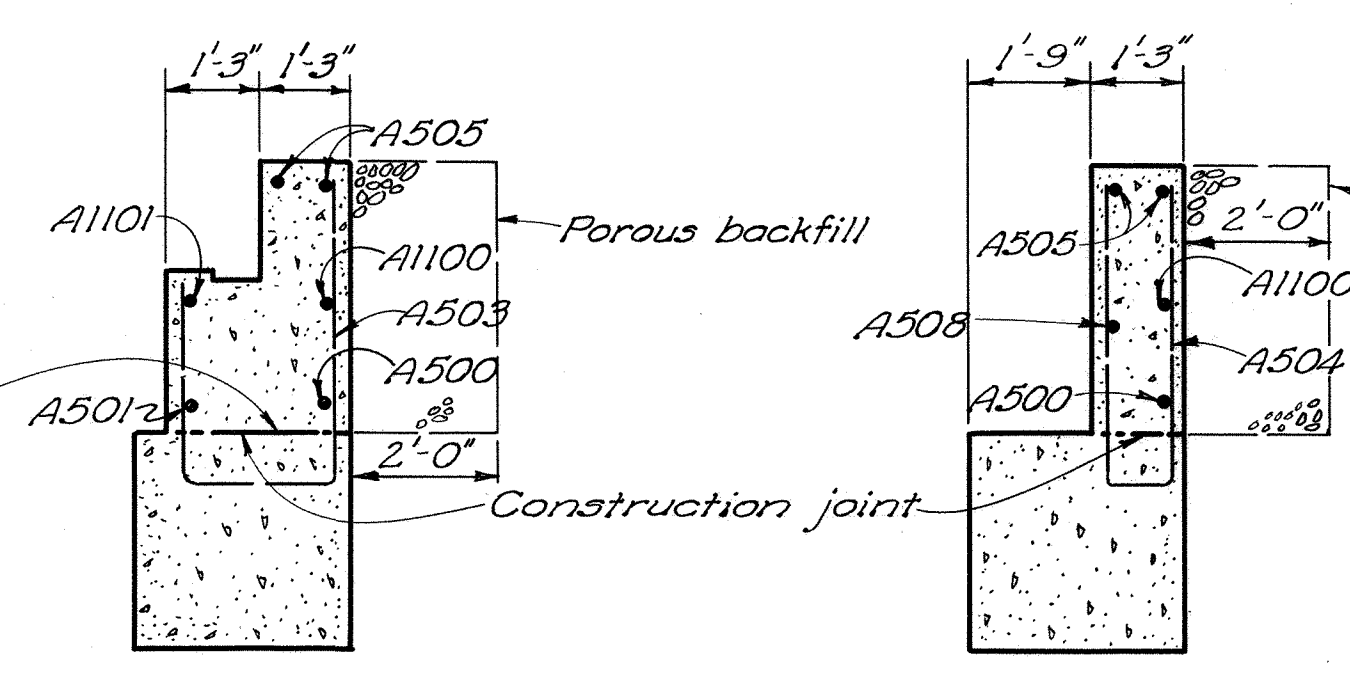
PLAN



ELEVATION

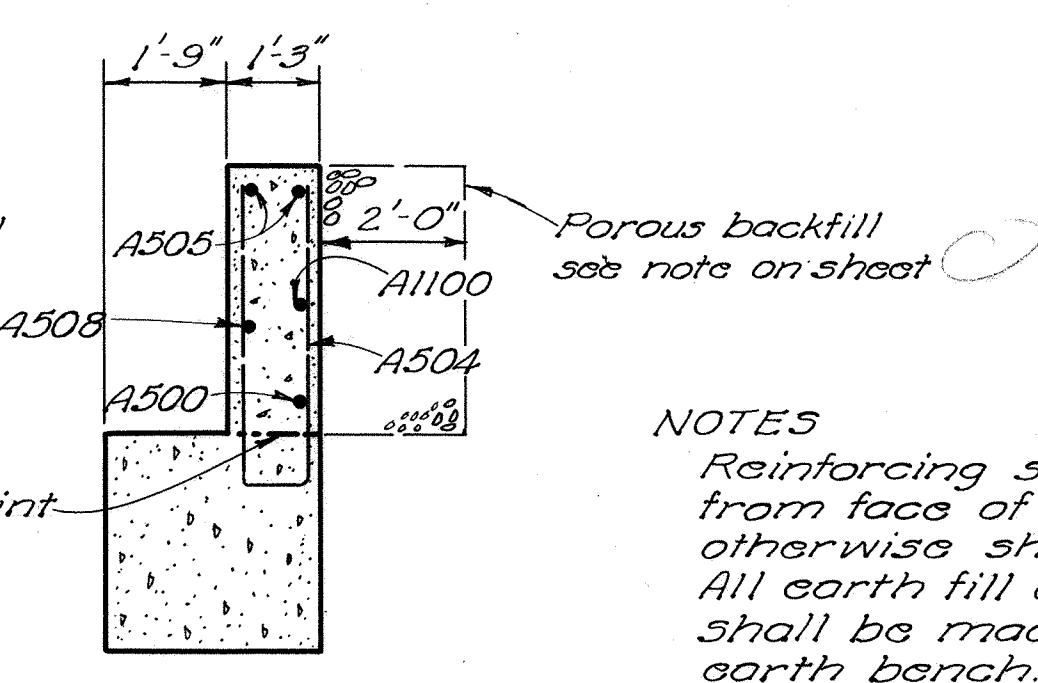


SECTION A-A



Details not shown same as Sect. A-A

SECTION B-B



Details not shown same as Sect. A-A

SECTION C-C

NOTES
Reinforcing steel shall be 2" clear from face of concrete unless otherwise shown.
All earth fill around the abutment shall be made full height of earth bench. Excavation shall then be made for the abutment cap, after which the piling shall be driven.

REINFORCING STEEL LIST					BENDING DIAGRAMS				
MARK	No.	LENGTH	WEIGHT	SHR					
Slab					South Abutment (cont'd)				
S1000	68	30'-8"	8973	S	A504				
S1001	34	17'-6"	2560	S	A505				
S1002	32	12'-2"	1075	S	A506				
S900	93	43'-6"	13755	S	A507				
S901	30	30'-2"	3077	B	A508				
S902	30	26'-9"	2728	B	A509				
S903	15	27'-0"	1403	S	A510				
S904	15	19'-10"	1011	S	A511				
S600	34	26'-9"	1366	S	A402				
S601	17	24'-10"	634	S	A400				
S602	210	33'-7"	10593	S	A401				
North Abutment					Piers				
A1100	1	40'-5"	215	B	P1100				
A1101	1	32'-8"	174	S	P1101				
A800	2	40'-0"	214	S	P1102				
A500	1	40'-5"	42	B	P1103				
A501	1	32'-8"	94	S	P600				
A502	14	7'-11"	110	B	P601				
A503	9	8'-6"	80	B	P500				
A504	5	8'-8"	45	B	P501				
A505	2	8'-10"	18	S	RE11				
A506	2	9'-3"	19	S	RE10				
A507	2	40'-0"	83	S	RE9				
A508	2	5'-3"	11	S	RE8				
A400	42	6'-6"	182	B	RE6				
A401	20	5'-10"	78	B	RE5				
A600	10	16'-10"	253	B	RE4				
Replacement Steel									
RE11	1	7'-7"	40	S					
RE10	1	7'-2"	31	S					
RE9	2	6'-10"	46	S					
RE8	1	6'-6"	17	S					
RE6	1	5'-11"	9	S					
RE5	1	5'-7"	6	S					
RE4	1	5'-3"	4	S					

NOTE
In the reinforcing steel bar marks, the numeral following the first letter is the Bar Number which indicates the size of the bar.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

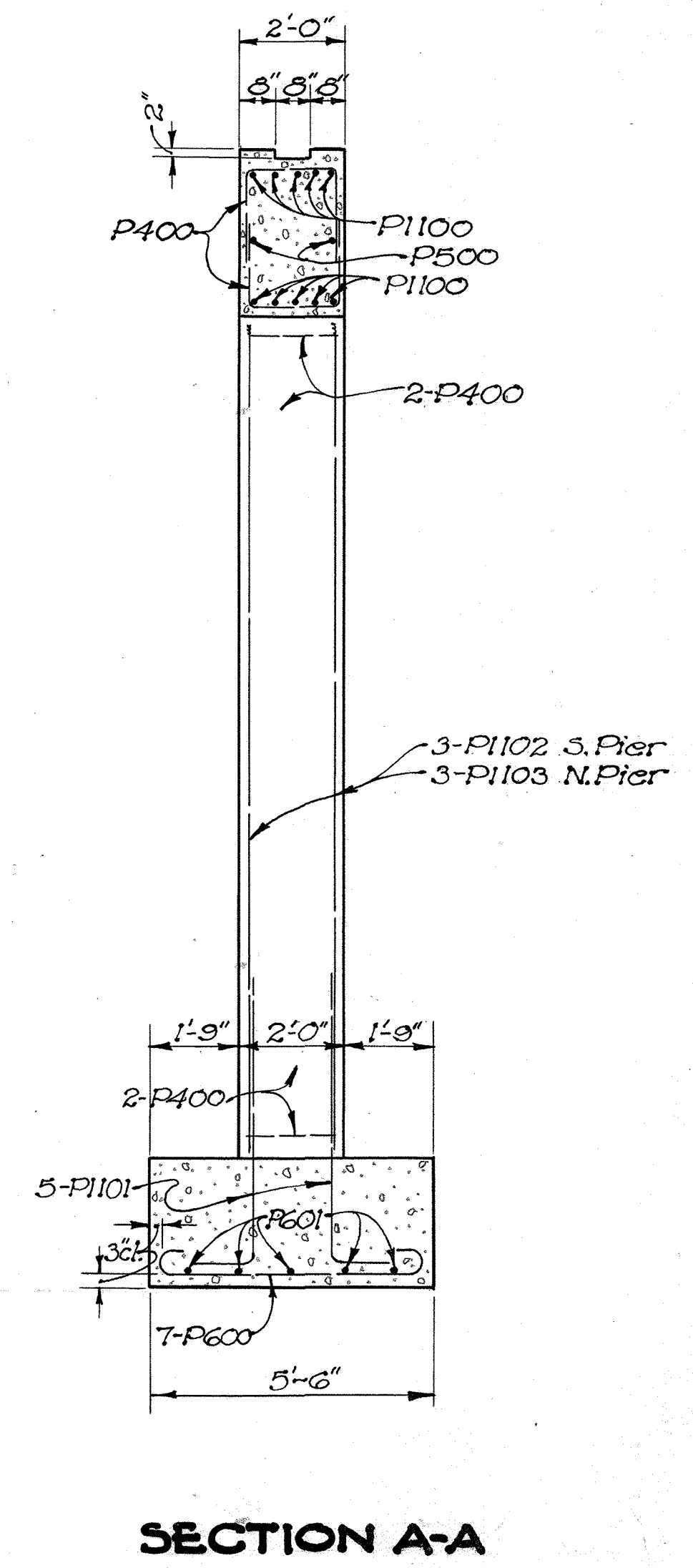
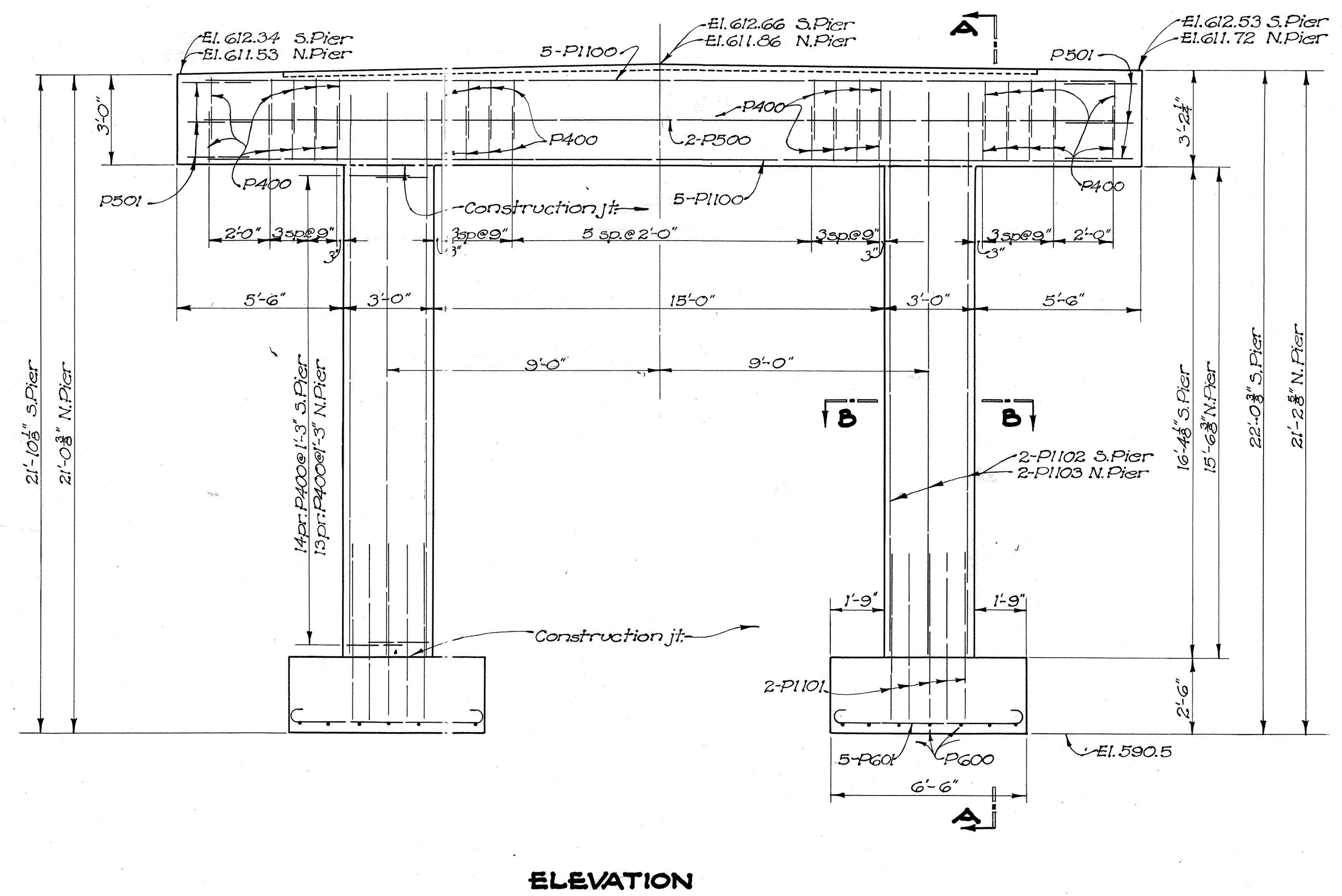
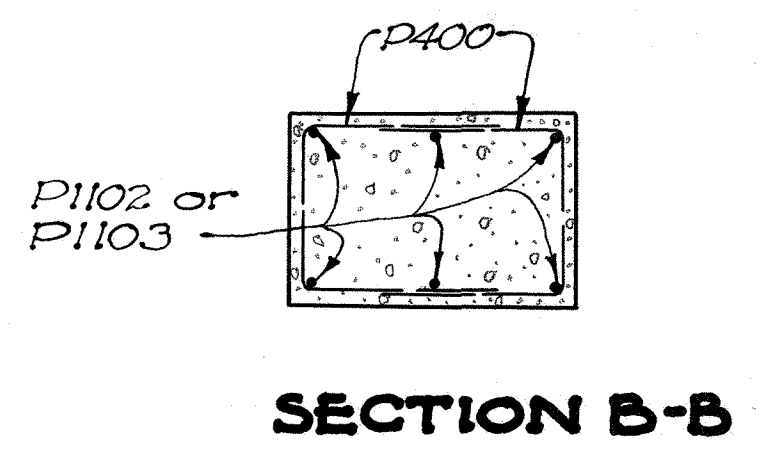
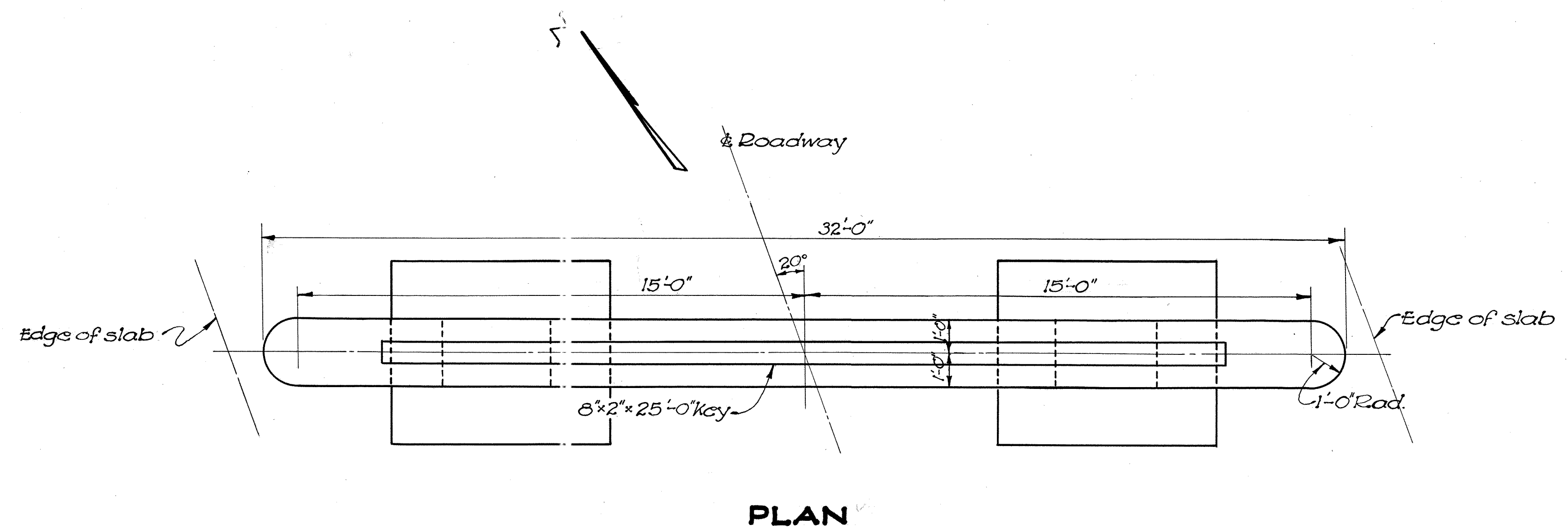
NORTH ABUTMENT DETAILS & REINFORCING STEEL LIST
Bridge No. SC-335-100
OVER ROCKY FORK
SCIOTO COUNTY STA. 531+05.0
SEC. SCI-335-9.79

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
mfw	mfw	JDJ	MPB	BFG	2-13-54	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	OAA-5-10(3)	

18
19

SCIOTO COUNTY
SCI-335-9.79



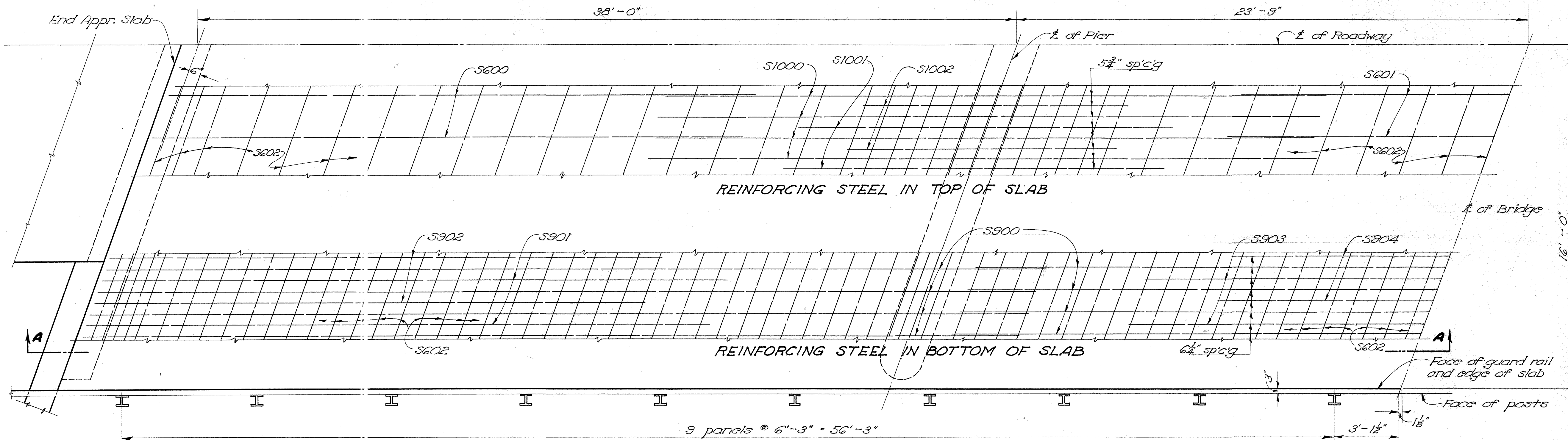
NOTE: Reinforcing steel shall be 2" clear from face of concrete unless otherwise shown.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS						
PIER DETAILS						
BRIDGE NO. SC-335-100 OVER ROCKY FORK						
SCIOTO CO.			STA. 531+65.0			
SEC. SCI-335-9.79						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
mfw	mfw	RGB	M.P.B.	BFG	2-13-54	

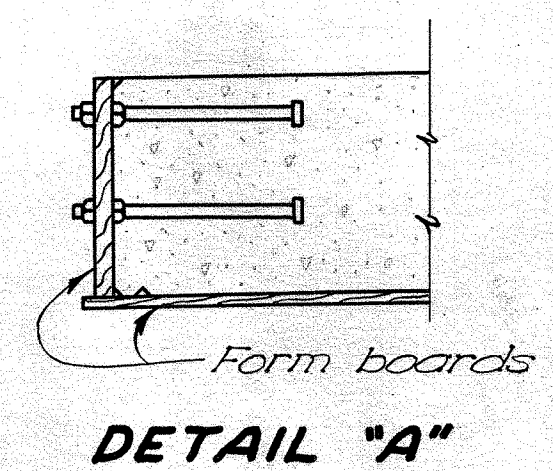
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	QAA-5-10(B)	19

19
19

SCIOTO COUNTY
SCI-335-9.79

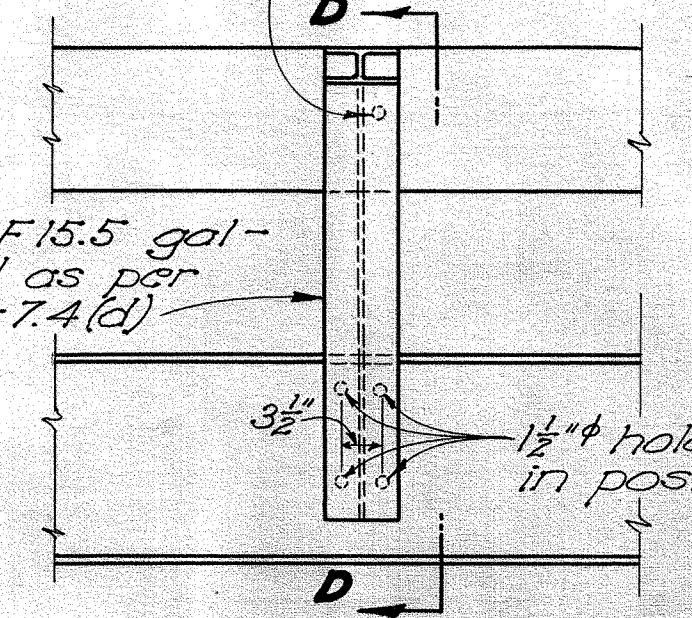


QUARTER PLAN OF SLAB

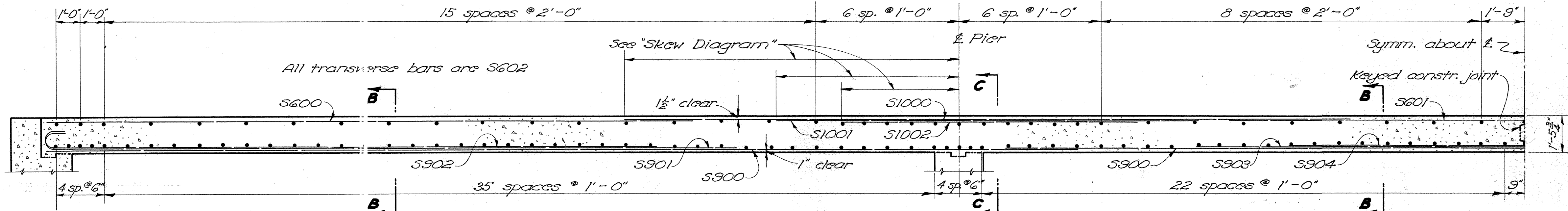


DETAIL "A"

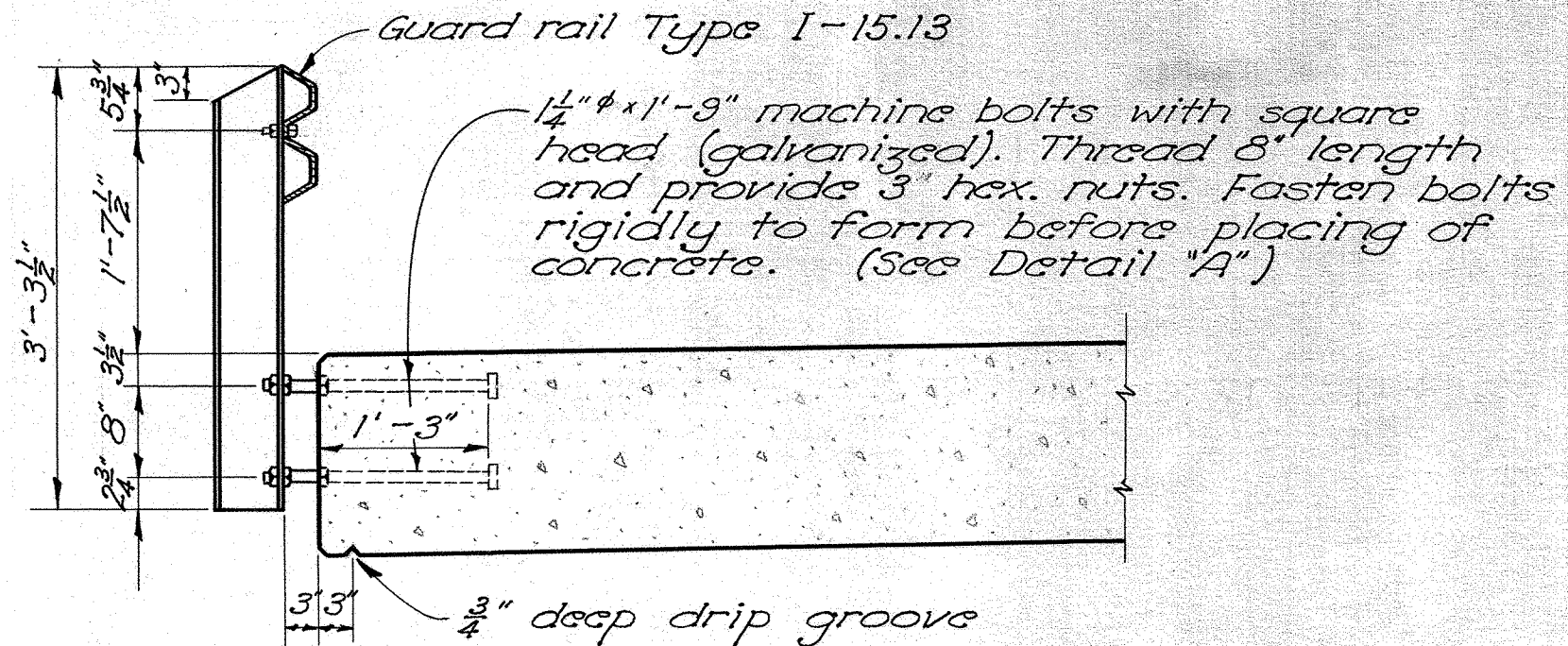
Bolt 1", 3/4" or 5/8" with ultimate shear strength of not less than 24,000#. Hole in post 1/8" larger than bolt.



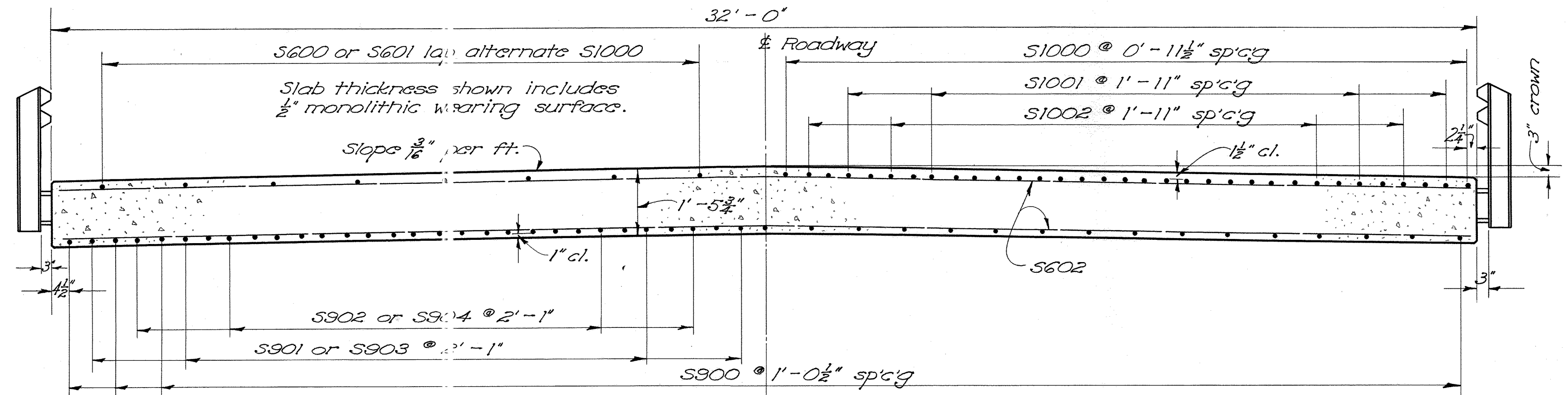
ELEVATION OF POST



SECTION A-A

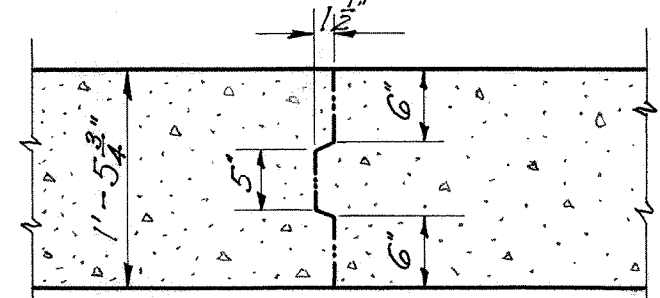


SECTION D-D



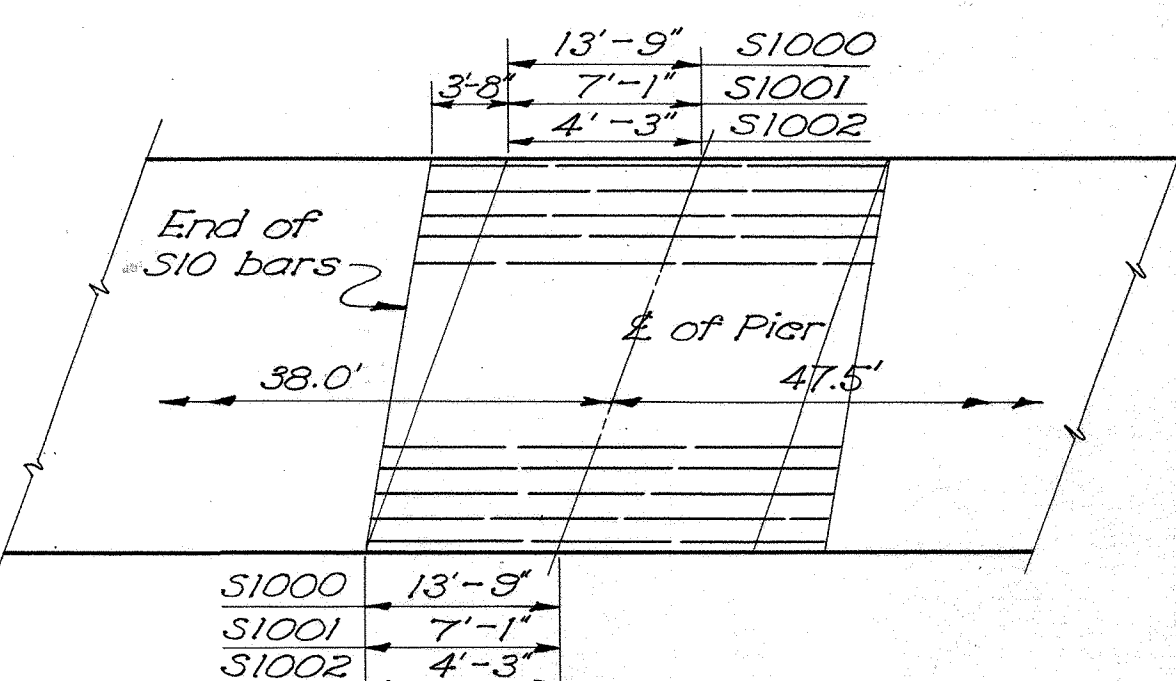
SECTION B-B

SECTION C-C



CONSTRUCTION JOINT DETAIL

Construction joint: One transverse construction joint in bridge slab shall be placed on center of middle span. One longitudinal joint will be permitted on E of roadway.



SKEW DIAGRAM

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS					
SLAB DETAILS					
BRIDGE No. SC-335-100 over ROCKY FORK					
Scioto County Sec. SCI-335-9.79 Sta. 531+65.0					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
<i>m.f.u.</i>	<i>m.f.u.</i>		M.P.B.	<i>BFG</i>	2-13-54

UTILITIES
 * Telephone Line Owned By The Miffland Federation Telephone Company
 Miffland, Ohio
 * Power Line Owned By The Ohio Power Company
 Canton, Ohio

MADISON TOWNSHIP

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

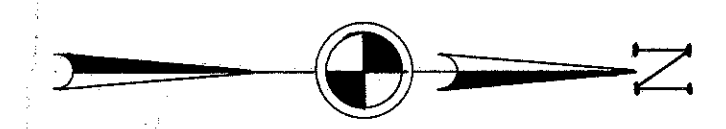
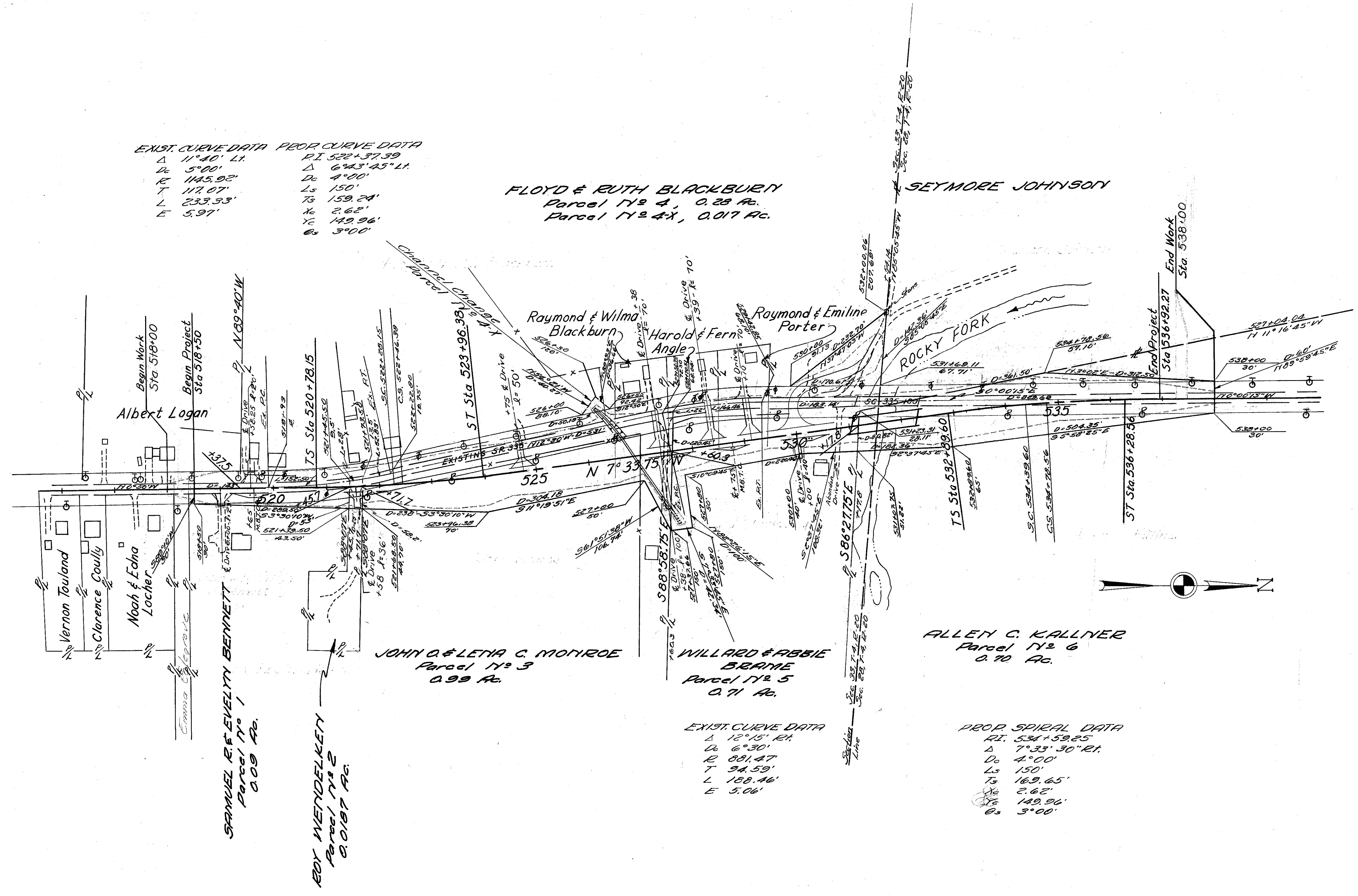
13
19

SCIOTO COUNTY
 SCI-335-9.79
 R/W PLAN 1954
 Scale 1"=100'

EXIST. CURVE DATA	PROP. CURVE DATA
Δ 11°40' L.	PI 522+37.39
D_c 5°00'	Δ 6°43'45" L.
R 145.02'	D_c 4°00'
T 117.07'	L_s 150'
L 233.33'	T_s 159.24'
E 5.91'	X_c 2.62'
	Y_c 149.96'
	O_s 3°00'

FLOYD & RUTH BLACKBURN
 Parcel 172 4, 0.28 Ac.
 Parcel 172 4X, 0.017 Ac.

SEYMORE JOHNSON



JOHN O. & LENA C. MOYROE
 Parcel 172 3
 0.99 Ac.

WILLARD & ABBIE
 BEARIE
 Parcel 172 5
 0.71 Ac.

ALLEN C. KALLNER
 Parcel 172 6
 0.70 Ac.

EXIST. CURVE DATA
Δ 12°15' RT.
D_c 6°30'
R 881.47'
T 94.59'
L 188.46'
E 5.06'

PROP. SPIRAL DATA
PI 534+59.25
Δ 7°33'30" RT.
D_c 4°00'
L_s 150'
T_s 169.65'
X_c 2.62'
Y_c 149.96'
O_s 3°00'

R/W