

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BRO-52-13.88
UNION TOWNSHIP
BROWN COUNTY

Box 30

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	STATE	51

BROWN COUNTY
BRO-52-13.88

CONVENTIONAL SIGNS

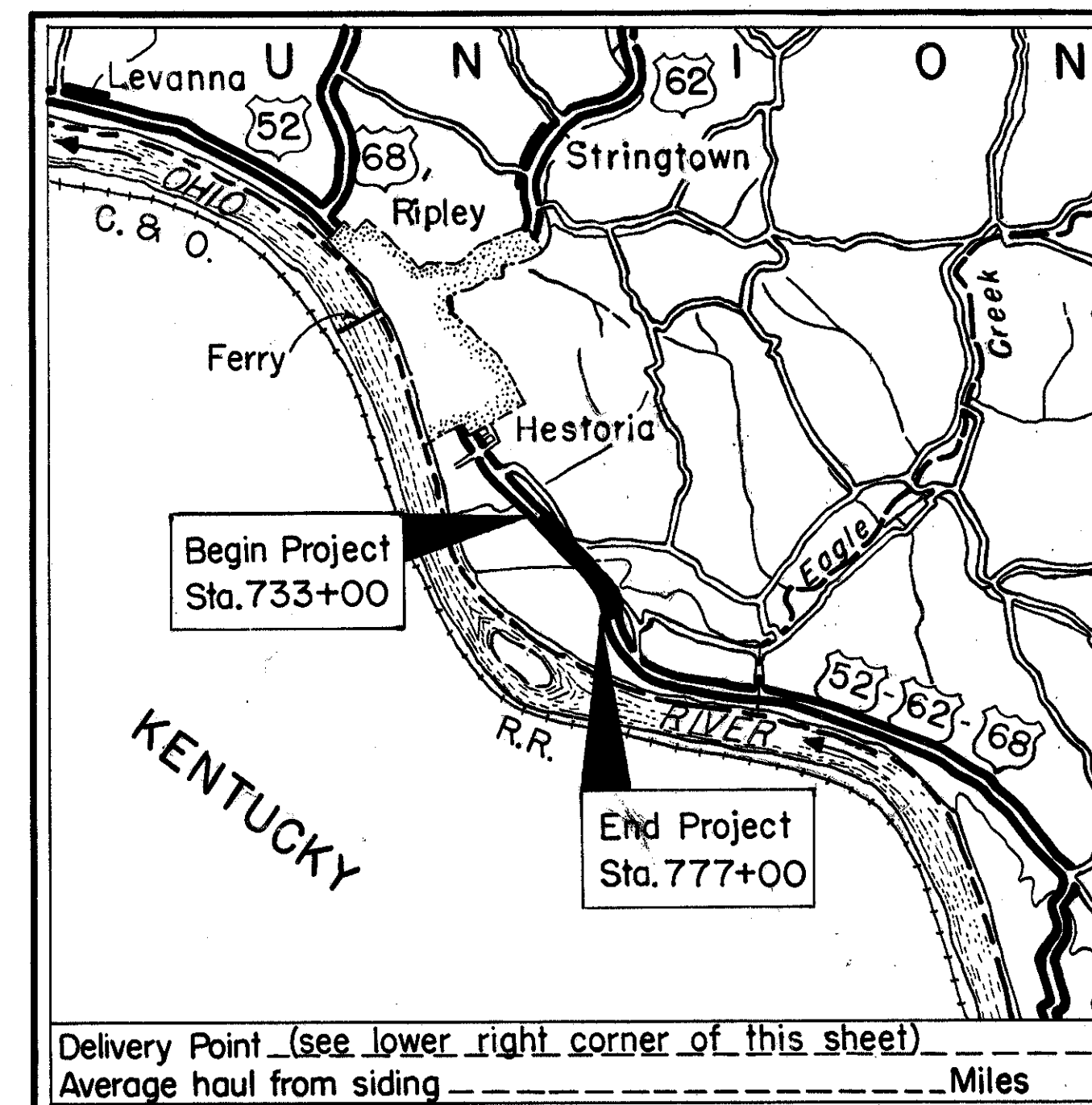
State Line	
County Line	
Township Line	
Section Line	
Center Line	
Corporation Line	
Fence Line	
Guard Rail (existing)	
Guard Rail (proposed)	
Steam Railroad	
Power Poles	
Telephone Poles	
Trees or Stumps (existing)	
Trees or Stumps (to be removed)	

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Structure Over 20' Span	41-48
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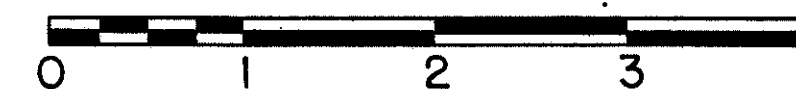
LINE DATA

Begin Project	Sta. 733+00
End Project	Sta. 777+00
Net Length of Project	4400 Lin. Ft. or 0.833 Mi.
Add for Approaches	
Sta. 732+50 to Sta. 733+00	50 Lin. Ft.
Sta. 777+00 to Sta. 777+50	50 Lin. Ft.
Net Length of Work	4500 Lin. Ft. or 0.852 Mi.



LOCATION MAP

SCALE OF MILES



Portion to be improved
State Roads
Other Roads

SCALE

Plan	1" = 50'
Profile: Horizontal	1" = 50'
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 to traffic of the highway and that provisions for maintenance and safety of traffic will be as set forth on these plans and estimates.

Approved James N. Doyle P.E. 1209
Date 2-10-55 Division Deputy Director

Approved John J. Heuer esq.
Date 5-26-55 Deputy Director of Planning & Programming

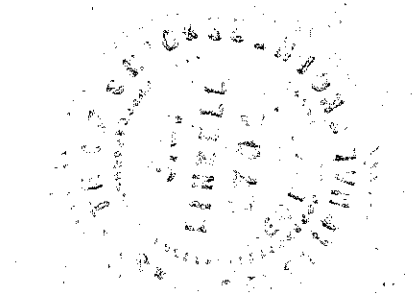
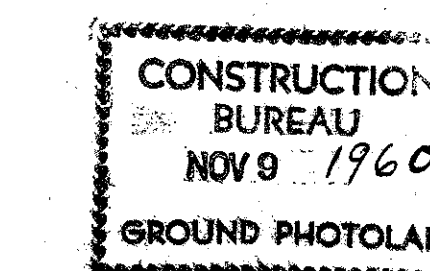
Approved Richard Orth
Date 5-2-55 Engineer of Bridges

Approved Robert W. [Signature]
Date _____ Engineer of Location & Design

Approved DT [Signature]
Date 5/14/55 Deputy Director of Design & Construction

Approved L. F. Schaeffer
Date 5-20-55 First Assistant Director

Approved [Signature]
Date 5-2-55 Director of Highways



Reviewed & Approved: [Signature]
Date: 5/16/55 Engineer of Traffic

File No. 53
BROWN COUNTY BRO-52-13.88
Date of Letting _____ 19
Contract No. _____

Supplemental Prints of Standard Construction Drawings							
B-T-50-70-71E N#1	10-1-47	I-15 N#1	12-1-54	L-1	4-1-50	AS-1-54	12-1-54
B-T-71R	3-2-53	I-15 N#2	12-1-54			SBC-45 (25fts) 9-18-47	
G-7.07	1-2-53	I-21-23	12-1-54	T-35	10-1-52	LBC-45 (25fts) 9-18-47	
I-1,2,3,4&5	2-20-45	L-3	4-1-50	T.J. N#1	3-2-53		
I-8 C.B. 1-2-A&B	5-1-52	L-3-A	4-1-50	T.J. N#2	3-2-53		
I-8 C.B. 1-3 & 1-4	5-1-52	L.J. N#1	3-2-53	T.J. N#3	10-1-54		
		RI-1	6-1-53				

Supplemental Specifications	
L-209.12	7-17-54
M-110.27	9-9-52

Delivery Point	Average haul from siding
RIPLEY, O. via Ohio River	2.1 Miles
MAYSVILLE, KY. via C. & O. R.R.	7.3 Miles
MACON, O. via N. & W. Ry.	29.0 Miles

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THE UNIVERSITY OF CHICAGO



TOTAL = 1907.22 Linear Feet

- (1) Item T-71 9" Reinforced Portland Cement Concrete Pavement.
- (2) Item B-70 8" Portland Cement Concrete Base Course.
- (3) Standard Longitudinal Joint.
- (4) Item I-22 6" Subbase
*12" Subbase
- (5) Item T-35 1 1/4" Asphaltic Concrete Surface Course. Type "A" (70-80)
- (6) Item B-35 1 1/4" Asphaltic Concrete Leveling Course (70-80)
- (7) Item B-35 Variable Depth 0" Min. 3" Max. 1 1/2" Ave. Asphaltic Concrete Leveling Course (70-80)
- (8) Item T-30 Bituminous Tack Coat (See note in proposal) applied at 0.10 Gal. per sq. yd. on Item B-70 only
- (9) Item I-1B 6" Stabilized Crushed Aggregate Shoulders and Approaches.
- (10) Item L-9 Seeding and Protecting
- (A) Existing T-35 Asphaltic Concrete Surface Course.
- (B) Existing B-35 Asphaltic Concrete Leveling Course
- (C) Existing T-71 (9-7-7-9) Reinforced Portland Cement Concrete Pavement.
- (D) Existing 6" or 8" I-A Underdrain

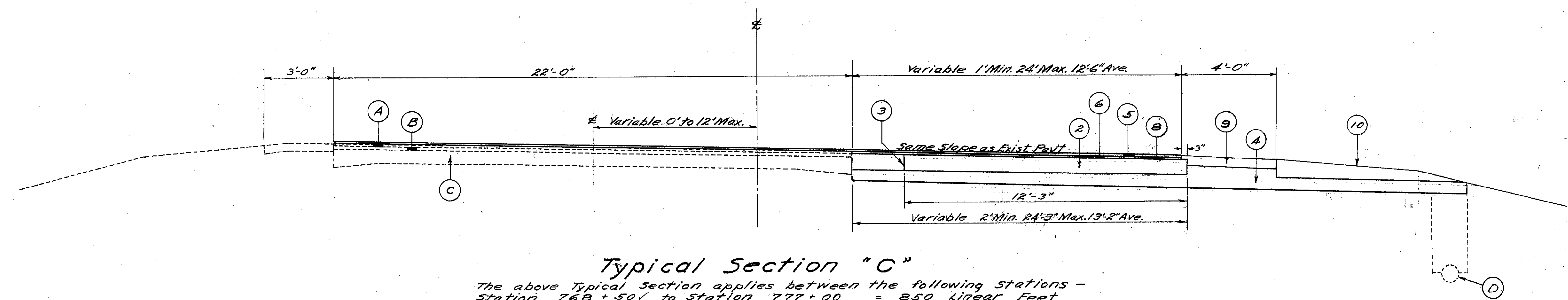


TOTAL = 1220 Linear Feet

TYPICAL SECTION

BROWN COUNTY
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Scale 3/8" = 1'-0"



Typical Section "C"

The above Typical Section applies between the following stations -
Station 768+50 to Station 777+00 = 850 Linear Feet
TOTAL = 850 Linear Feet

NOTE

- 'F' Denotes field drive paved with 6" I-18
- 'R' Denotes residence drive paved with 7" T-70
- 'B' Denotes business drive paved with 6" T-70

SUPER ELEVATION & WIDENING										Super Elevation per ft. .051 Max. Super Elevation 1.12				
Elevation Left Edge	Width	Super Elevation	Station	Center Elevation	Super Elevation	Width	Elevation Right Edge	Elevation Left Edge	Width	Super Elevation	Station	Center Elevation	Super Elevation	Elevation Right Edge
512.69	12'	-1.18	764+86.58	512.87	-1.18	12'	512.69	528.26	11.9	+60	772+00	527.66	-60	527.06
513.23		-1.13	+25	513.36	-1.18		513.18	528.49	11.2	+57	+25	527.92	-59	527.33
513.79		-0.09	+50	513.88	-1.18		513.70	528.83	10.4	+54	+50	528.15	-58	527.57
514.39		-0.04	+75	514.43	-1.18		514.25	528.90	10.2	+50	+75	528.33	-58	527.75
515.02		+0.00	766+00	515.02	-1.18		514.84	528.97	10.0	+45	+89.50	528.45	-59	527.86
515.66		+0.05	+25	515.61	-1.18		515.43	529.12	10.0	+47	773+00	528.50	-59	527.91
516.30		+0.09	+50	516.21	-1.18		516.03	529.25	10.0	+48	+25	528.64	-60	528.04
516.95		+0.14	+75	516.81	-1.18		516.63	529.35	10.0	+49	+50	528.76	-60	528.16
517.60		+0.18	767+00	517.42	-1.18		517.24	529.36	10.0	+51	+69.50	528.84	-60	528.24
518.26		+0.23	+25	518.03	-1.23		517.80	529.41	10.1	+51	+75	528.85	-60	528.25
518.90		+0.27	+50	518.63	-1.27		518.36	529.46	10.3	+52	774+00	528.89	-60	528.29
519.56		+0.32	+75	519.24	-1.32		519.02	529.46	10.5	+54	+25	528.92	-60	528.32
520.21		+0.36	768+00	519.85	-1.36		519.49	529.49	10.6	+55	+49.50	528.94	-60	528.34
520.87		+0.41	+25	520.16	-1.45		520.01	529.52	10.8	+56	+75	528.94	-60	528.34
521.52		+0.45	+50	521.07	-1.50		520.57	529.52	11.0	+58	775+00	528.94	-60	528.34
522.18		+0.50	+75	521.68	-1.50		521.18	529.47	11.3	+59	+25	528.88	-59	528.29
522.83		+0.56	768+86.58	522.27	-1.56		521.71	529.47	11.4	+60	+29.50	528.87	-59	528.28
523.48		+0.58	769+00	522.30	-1.56		521.74	529.46	11.6	+59	+50	528.88	-59	528.29
524.13	33.5	+1.58	+25	522.90	-1.55		522.35	529.45	11.8	+57	+75	528.89	-59	528.30
524.78	28.3	+1.29	+50	522.51	-1.55		522.96	529.44	11.1	+54	776+00	528.91	-59	528.32
525.43	26.1	+1.20	+75	524.03	-1.55		523.48	529.31	11.0	+53	+29.50	528.91	-59	528.32
526.08	24.0	+1.10	770+00	524.55	-1.55		524.00	529.14	11.0	+47	+25	528.84	-51	528.33
526.73	22.0	+1.03	+25	525.02	-1.57		524.45	528.88	10.9	+38	+50	528.76	-42	528.34
527.38	19.9	+0.96	+50	525.50	-1.60		524.90	528.84	10.9	+32	+75	528.66	-31	528.35
528.03	18.2	+0.86	+75	525.94	-1.60		525.34	528.76	10.9	+24	+89.50	528.60	-24	528.36
528.68	16.5	+0.77	771+00	526.38	-1.60		525.78		10.9	+19	777+00	528.57	-21	528.36
529.33	15.2	+0.70	+25	526.73	-1.57		526.16							
529.98	13.9	+0.63	+50	527.09	-1.58		526.51							
530.63	12.9	+0.61	+75	527.37	-1.59		526.78							

NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		4 51

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GENERAL

FIELD OFFICE

The Contractor shall provide a suitable "Field Office" in accordance with Section 5-0.01(b), having a minimum of 200 sq. ft. of floor space. The contractor shall have a telephone installed and maintained during construction of the project.

UTILITY ADJUSTMENT

Any and all work required for Public or Private Utilities will be done by and at the expense of their respective owners unless otherwise noted in these plans.

DESIGN SPEED

This project has been designed for a speed of 65 miles per hour.

TRAFFIC

Two way traffic shall be maintained at all times, except between the following locations: Station 732+50 to Station 745+40, and Station 768+15 to Station 777+50. In the excepted areas above, two way traffic shall be maintained at all times except when placing Items T or B-35, when one way traffic will be permitted. The length and period of use of one way traffic lanes shall be kept to a minimum.

Use of existing pavement and bridge for moving earth from cut areas to fill areas, will not be permitted.

All use of existing bridge by the Contractor shall be kept to a minimum, and only for such operations or periods of time as permitted by the Engineer.

The Contractors attention is directed to the following sections of the Construction and Material Specifications:

G-4.05 Maintenance of Local Traffic

G-7.06 Public Convenience and Safety

G-7.07 Barricades, Danger and Warning Signs

T-35.23 Protection of Wearing Course

This note shall not be construed to waive any portion of the Construction and Material Specifications and the Lump Sum bid for Maintaining Traffic shall constitute full payment for this Item, and no additional compensation will be allowed.

PAVEMENT

SUPERELEVATION

Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in that portion between the beginning of the transition and the point where the superelevation equals twice the crown.

FORMS

Use of 9" concrete forms of an approved type will be permitted on areas requiring T or B of T-70, or B-70. If excavation under forms is made to bring top of form level with finished surface of concrete. Such excavation will be made by and at the expense of the contractor, and no additional payment for this Item will be allowed by the State.

DAMAGE TO EXISTING PAVEMENT

Existing pavement surfaces outside work limits shown on the plans which are damaged by the Contractors operations or equipment will be replaced in kind by the Contractor at no expense to the State.

ROADWAY

DUMPED ROCK FILL:

Payment for any additional excavation required for placing Dumped Rock Fill shall be included in the unit price bid for Item I-10, Dumped Rock Fill.

REMOVAL OF EXISTING GUARD RAIL

Metal parts of existing guard rail, Rt. Sta. 739+20 to Sta. 742+10, shall be carefully removed and stored on the side of the right of way for disposal by the State. Wood posts shall become the property of the Contractor and removal and disposal of them shall be included in the price bid for Item I-15 Guard Rail Removed and Stored.

REPAIR OF EXISTING I-4 UNDERDRAINS

Additional allowances of fifty (50') linear feet each of 6" and 8" I-4 Underdrains have been included in the General Summary for repairing or replacing of damaged portions of existing I-4 Underdrains as directed by the Engineer.

FERTILIZING SOD AREAS

All sod areas are to have Commercial Fertilizer (10-6-4) and Agricultural Ground Limestone applied at the same rate and in the same manner as for the seeded areas in accordance with Section L-9.11

The sod bed shall have two inches of loose soil on which sod is laid after excavation for sod thickness.

SEEDING QUANTITIES

Quantities for seeding are calculated for the soil areas between lines ten feet (10') outside the construction limits as shown on the cross sections or to the R/W line if such line is less than ten feet from the construction limits. All areas outside these limits where the vegetative growth has been injuriously disturbed or destroyed by the contractor shall be restored and seeded in accordance with the provisions of Item L-9 by the contractor at his own expense.

ROADWAY

ROADWAY EXCAVATION

All roadway excavation shown on the roadway cross-sections, regardless of the nature of the material encountered, will be paid for as Item E-1, Roadway Excavation.

REMOVAL OF TREES AND STUMPS

The number, type and size of trees and stumps shown for removal on these plans is as nearly correct as the available information permits. The State of Ohio will not be responsible for any variations found during construction. The Lump Sum bid for Item E-9, Removal of Trees and Stumps shall constitute full payment for this item, and no additional compensation will be allowed.

LOCATION AND SIZE OF EXISTING PIPE

The location, type, depth and size of all existing pipes are shown as near exact as the available information will permit. The State of Ohio will not be responsible for any variations found during construction.

Payment for pipe removed will be made according to the listing shown on these plans.

REMOVAL (MISCELLANEOUS)

The removal and disposal of existing pavement, sidewalk, building foundations, steps, cellar floors, well covers, cisterns, tanks of all kinds, concrete bases, walls, headwalls, pipes, cast iron plates, or other masonry lying within or below the limits of Roadway Excavation, Item E-1, Excavation for Structures, Item E-2, or Channel Excavation, Item E-3 (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 excavated to a depth of three (3) feet below the proposed pavement subgrade if located within 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.

Pavement, cellar floors, or other masonry below the above limits shall be broken into portions whose area does not exceed one (1) square foot, but need not be removed.

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

Wells, cisterns, and tanks of all kinds shall be filled with broken foundation masonry, or rock placed as rock embankment, according to section E-1.08 of the Construction and Material Specifications.

Payment for the above operations shall be included in the contract unit price bid for Roadway Excavation, Item E-1, Excavation for all Structures, Item E-2, and Channel Excavation, Item E-3.

Additional excavation necessary to perform any of the above operations shall be paid for at the contract unit price bid per cubic yard for Roadway Excavation, Item E-1, Excavation for Structures, Item E-2, and Channel Excavation, Item E-3.

TOE WALLS

Payment for toe walls on paved gutters or riprap where called for in these plans, shall be included in price bid per linear foot of paved gutter, or square yard of riprap.

SUBBASE COURSE

In the final finishing of slopes and ditches, care shall be exercised to assure that the exposed edge of the subbase course will be left free of earth cover that would impede free drainage.

SUMMARY OF QUANTITIES

PAVEMENT CALCULATIONS											
Description & Location	T-35 Asph. Conc. Surf. Course	B-35 Asphaltic Concrete Leveling Course	T-30 Bituminous Tack Coat	I-22 Subbase		I-18 Stabilized Crush. Agg.	T-71 Rein. Port. Conc. Pavement	T-70 Portland Cement Concrete Pavement		I-7 Rein. Conc. App. Slab	B-70 Port. Cement Concrete Base Course
	1 1/4" Sq. Yds.	1 1/4" Sq. Yds.	Var. 1 1/2" Ave. Sq. Yds.	6" Sq. Yds.	12" Sq. Yds.	6" Sq. Yds.	9" Sq. Yds.	7" Sq. Yds.	8" Sq. Yds.	13" Sq. Yds.	9" Sq. Yds.
Typical Section "A"							5,085.92				
1907.22' x 24' x 1/2"											
1,837.22' x 4' x 1/2"						816.54					
1,907.22' x 39' x 1/2"					8,264.62						
Typical Section "B"											
1220' x 16' x 1/2"					2,168.89						2,168.89
1220' x 15 1/2' x 1/2"		2,078.07									
1220' x 37 1/2' x 1/2"	5,060.29										
1220' x 11' x 1/2"			1,491.11								
100' x 12' x 1/2"					133.33						
650' x 16' x 1/2"					1,155.55						
470' x 19' x 1/2"					992.22						
1100' x 4' x 1/2"						488.00					
Typical Section "C"											
850' x 12 1/2' x 1/2"		1,180.56									
850' x 13 1/2' x 1/2"					1,243.46						1,243.46
850' x 4' x 1/2"						377.78					
850' x 21' x 1/2"					1,983.33						
850' x 34 1/2' x 1/2"	3,258.33										
Drives & Approaches											
170' x 12' x 1/2"						226.67					
1490' x 2' x 1/2"								97.78	331.11		
880' x 1' x 1/2"								238.89			
2150' x 1' x 1/2"											
Feather Areas											
40.63' x 22' x 1/2" x 4	397.27										
9.38' x 22' x 1/2" x 4		91.72									
Approach Slabs										133.33	
25' x 24' x 1/2" x 2											
Sub-Totals	8,715.89	3,950.35	1,491.11	3,412.35	11,373.50	1,155.55	1,908.99	5,085.92	97.78	570.00	133.33
Conversion Factor	x 5/144	x 5/144	x 7/144	x 0.1	x 1/6	x 1/3	x 1/6	x 1/4	x 7/36	x 2/9	x 1
TOTAL	30263 Cu.Yd.	188.81 Cu.Yd.	341.24 Gal.	2,280.8 Cu.Yd.	318.10 Cu.Yd.	1,271.48 Cu.Yd.	1145.68 Cu.Yd.	13333 Sq.Yd.	7528.3 Cu.Yd.		

* Estimated Extra Surface Course Material for Existing Pavement (Typical Sections "B" & "C" = 25 C.Y. Total to General Summary = 327.6 Cu. Yds.
† Extra Subbase under Stabilized Shoulders = 130.4 C.Y. Total to General Summary = 2411.2 Cu. Yds.

EXCAVATION & EMBANKMENT				
Sheet No.	Station to Station	E-1 Roadway Excavation Cu.Yd.	Roadway Embankment Cu.Yd.	Embankment +20% Cu.Yd.
9	732+50 to 756+50	33,638	7,493	8,992
11	759+85 to 777+50	2,986	10,651	12,781
	TOTAL	36,624	18,144	21,773

EROSION CONTROL					
Sheet No.	Station to Station	L-10 Sodding 4' Wide Sq.Yd.	L-9 Seeding Protecting Sq.Yd.	L-9 Commercial Fertilizer (10-6-4) Tons	L-9 Agricultural Ground Limestone Tons
9	745+20 to 748+00	124.44			
10	756+70 to 759+76				
11	764+50 to 765+50	44.44			
11	766+62 to 768+50	83.56			
B-11	732+50 to 777+50		20,184		
	TOTAL	252.44	20,184	1.84	9.20

GUARD RAIL			
Station to Station	I-15 Steel Beam Type (Deep)	I-15 Guard Rail Removed/Stored	
755+93± to 756+5679/ft	64.29 Lin. Ft.		
756+05± to 756+6843/ft	63.68 Lin. Ft.		
760+2957 to 761+17± ft	87.93 Lin. Ft.		
760+4121 to 761+17± ft	76.04 Lin. Ft.		
739+20 to 742+10 ft		230 Lin. Ft.	
	TOTAL	291.94 Lin. Ft.	230 Lin. Ft.

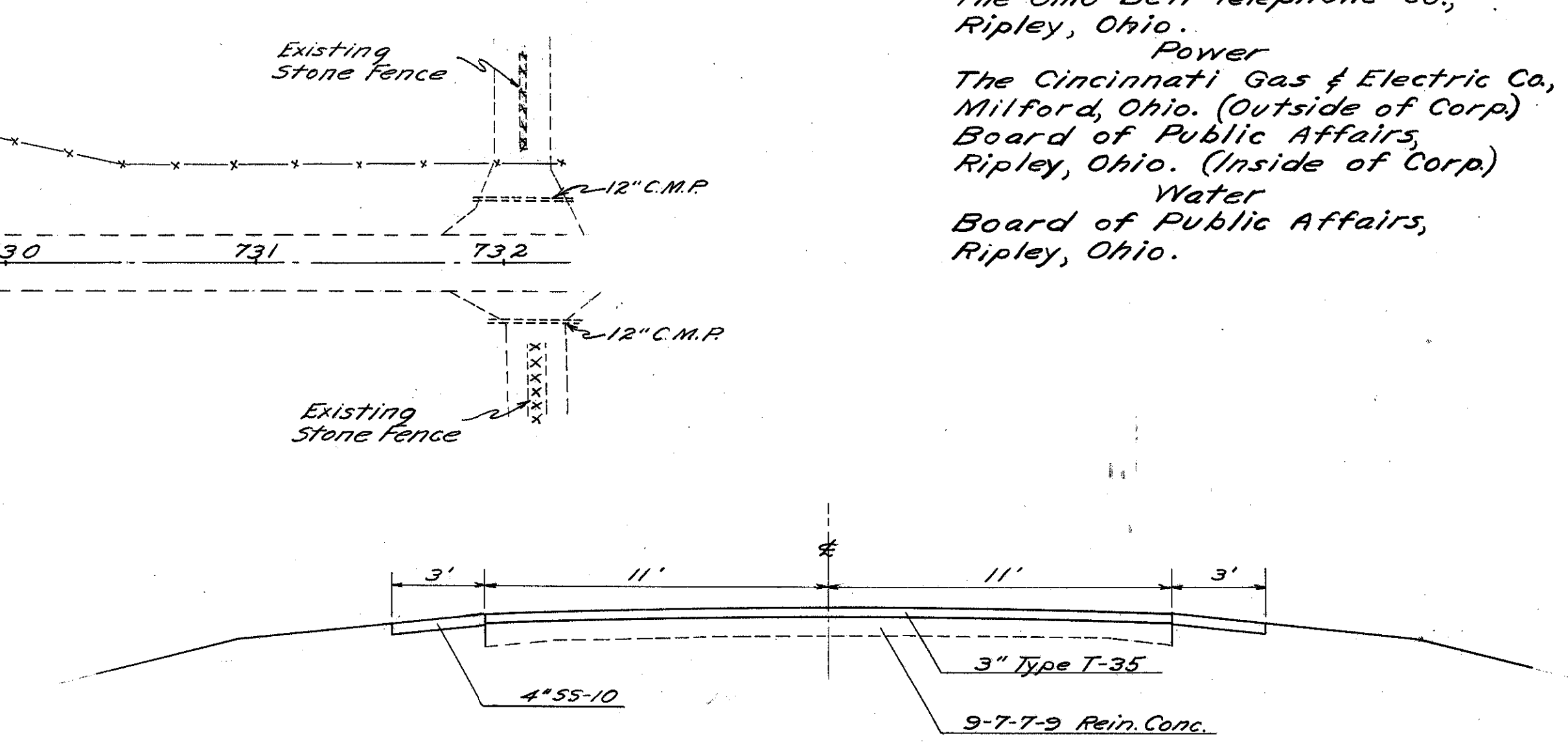
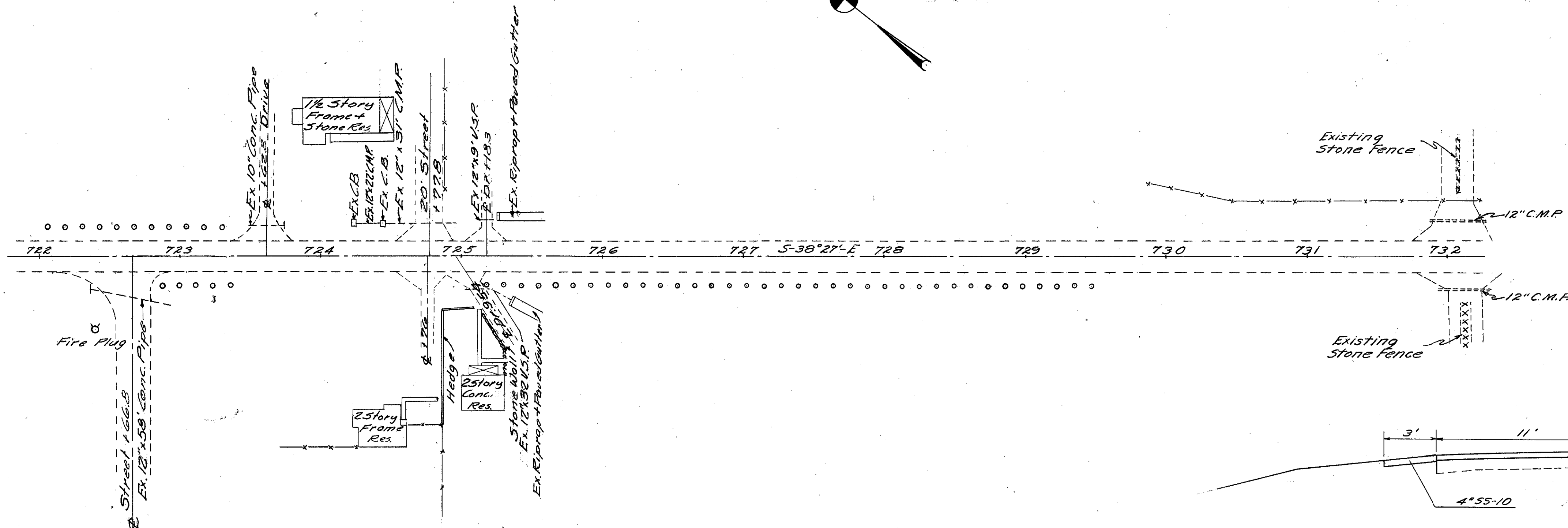
STRUCTURES 20 FT. SPAN & UNDER																											
Sheet No.	Station & Description	E-2 Excavation for Structure	E-3 Channel Excavation	E-12 Pipe Removed for Re-use	S-1 Concrete for Structures	S-4 Reinforcing Steel	S-22 Removal of Portions of Exist. Struct.	S-23 Dowel Holes	I-2 Class A Storm Sewers Under Pavement or Approaches	I-1 Pipe for Driveways	I-3 Roadway Drainage Sec. M-6.4(d)	I-4 Pipe Underdrains	I-4 Pipe Outlets for Underdrain	I-6 Relaying Pipe	I-8 Catch Basins	I-10 Riprap Type "A"	I-10 Dumped Rock Fill (24" Thick)	I-21 Port. Cement Concrete Median	I-23 Precast White Port. Cement Conc. Traffic Dividers Each	I-5 For Roadway Drainage							
		Cu. Yd.	Cu. Yd.	8" Lin. Ft. 12" Lin. Ft.	Class "C" Cu. Yd.	Lb.	Lump	1 1/2" Dia. Lin. Ft.	15" Lin. Ft.	12" Lin. Ft. 18" Lin. Ft.	18" Lin. Ft. 24" Lin. Ft.	6" Lin. Ft. 8" Lin. Ft.	8" Lin. Ft. 12" Lin. Ft.	8" Lin. Ft. 12" Lin. Ft.	8" Lin. Ft. 12" Lin. Ft.	1-2-A Ea. 1-3 Ea.	Sq. Yd.	Cu. Yd.	Type 2 Sq. Yds.	Each	18" Each	24" Each					
B	Sta. 733 to 742, I-4 & Outlets																										
B	Sta. 735 to 740, I-4 structure	18	17		26.4	2737	Lump	22																			
B	Sta. 741 to 748 structure	23	10		44.5	6126	Lump	30																			
9	Sta. 742 to 752 I-4																										
B-9	Sta. 737 to 745+80 I-21 & 23																										
9	Sta. 742 to 744 Pipe Remove			20																							
9	Sta. 744 to 746 Drive Rt.			40						20																	
10	Sta. 752 to 762 I-4 & Outlets			10							268	362		471													
11	Sta. 762 to 772 I-4 & Outlets												450		10			19				3	1				
11	Sta. 766 to 772 Drive Rt. & Lt.			20					60	24																	
11	Sta. 768 to 770+81 I-21 & 23 Repairing Exist. I-4												50	50					5	18							
	TOTAL	41	27	10	80	70.9	8863	Lump	52	60	20	24	268	362	485	1921	10	10	80	3	2	19	122	15	80	3	1

GENERAL SUMMARY

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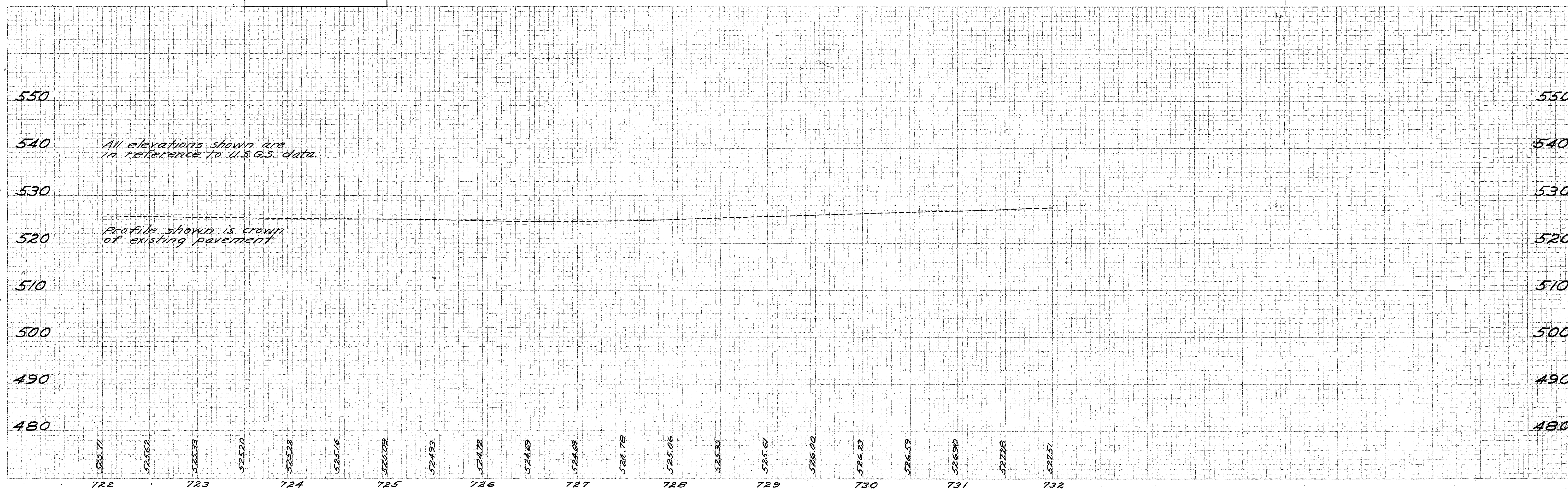
BROWN COUNTY **BR0-52-13.88**

UTILITIES & OWNERS
 Telephone
 The Ohio Bell Telephone Co.,
 Ripley, Ohio.
 Power
 The Cincinnati Gas & Electric Co.,
 Milford, Ohio. (Outside of Corp.)
 Board of Public Affairs,
 Ripley, Ohio. (Inside of Corp.)
 Water
 Board of Public Affairs,
 Ripley, Ohio.



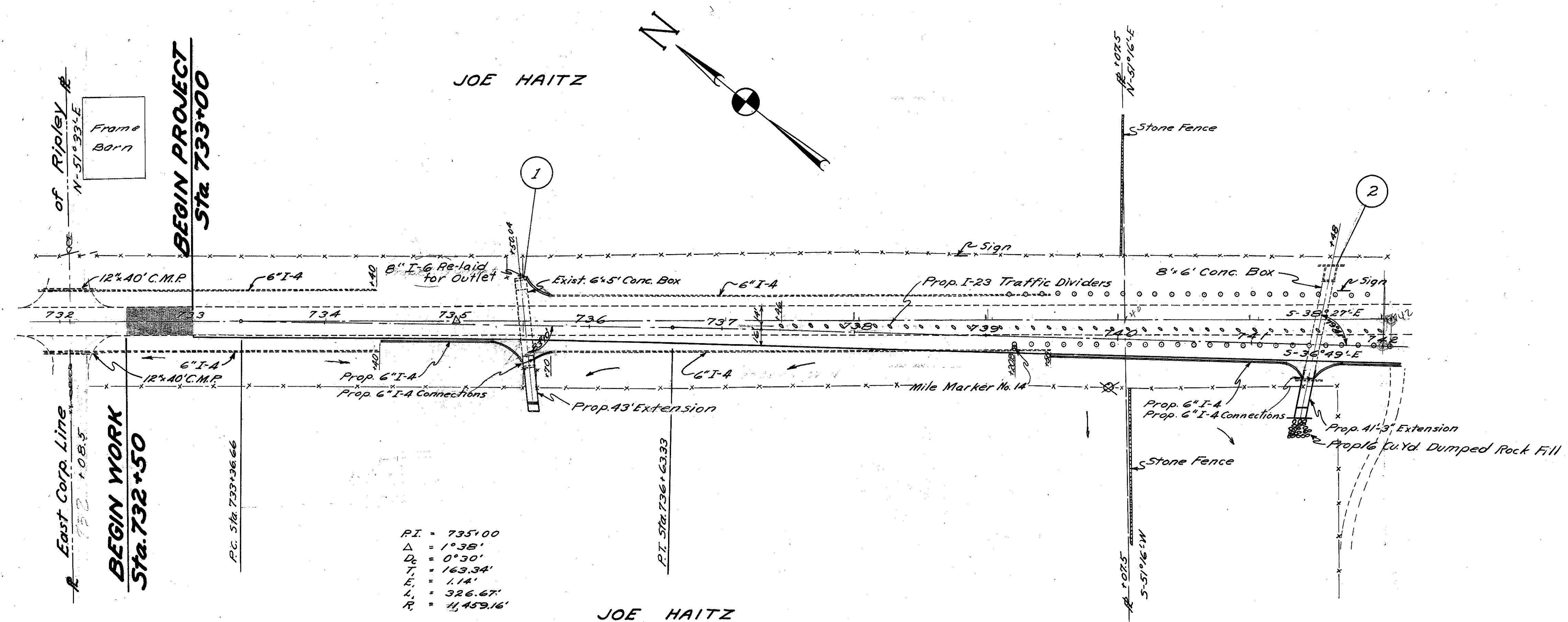
TYPICAL SECTION AT BEGINNING & END OF PROJECT

B.M. - $\square$ Cut on N.W. corner of conc. C.B. 24.5' x 14' Sta. 724+25 Elev. 524.90



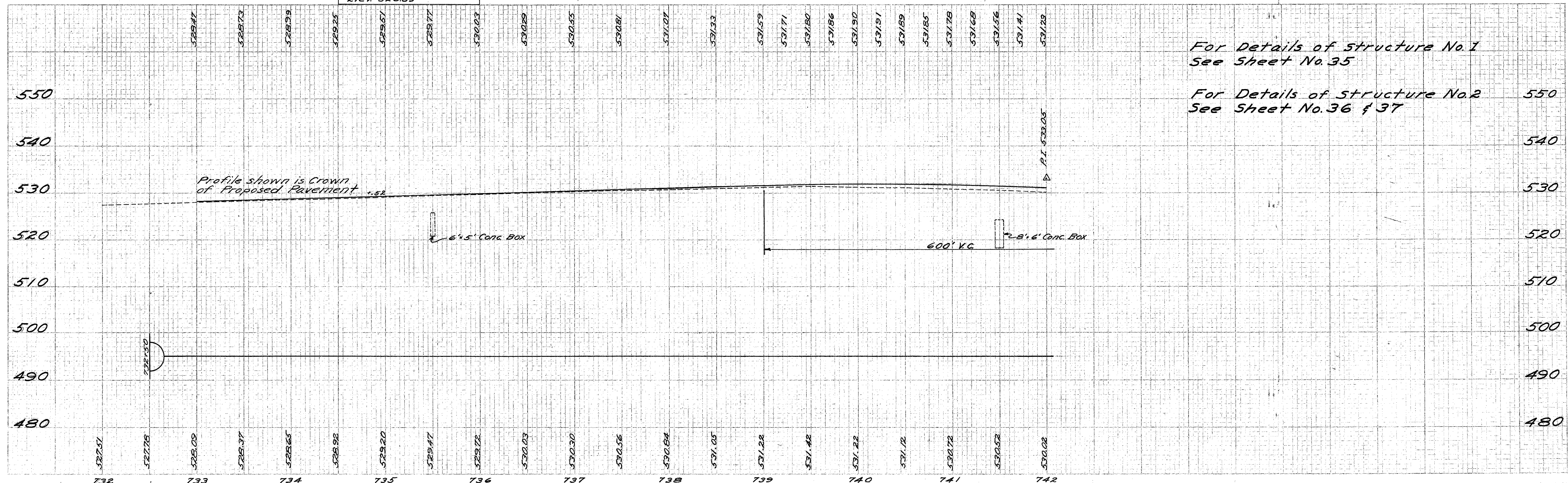
Sta. 722+00 to Sta. 732+00

BROWN COUNTY BRO-52-13.88



P.I. = 735+00
 Δ = 1°38'
 Δ_c = 0°30'
 T = 163.34'
 E = 1.14'
 L = 326.67'
 R = 11,459.16'

B.M. $\square$ Cut in center
 of South Hdw. of
 Culvert 25.3 Rt.
 Sta. 735+54
 Elev. 526.39



For Details of Structure No. 1
 See Sheet No. 35

 For Details of Structure No. 2
 See Sheet No. 36 & 37



Profile shown is crown of Proposed Pavement

600' V.C.

Excavation 33,638 Cu.Yd.
Embankment 7,493 Cu.Yd.

600' V.C.

Station	Elevation (ft)
742.00	531.28
742.50	531.03
743.00	530.80
743.50	530.64
744.00	530.26
744.50	529.95
745.00	529.61
745.50	529.25
746.00	528.86
746.50	528.44
747.00	528.00
747.50	527.53
748.00	526.80
748.50	525.81
749.00	524.85
749.50	523.84
750.00	522.85
750.50	521.83
751.00	520.81
751.50	519.79
752.00	518.77
752.50	517.75
753.00	516.73
753.50	515.71
754.00	515.21
754.50	514.73
755.00	514.28
755.50	513.84
756.00	513.43
756.50	513.03

Sta. 742+00 to Sta. 752+00

ALBERT L. HAITZ et al

JOHN E. BLATTER et al

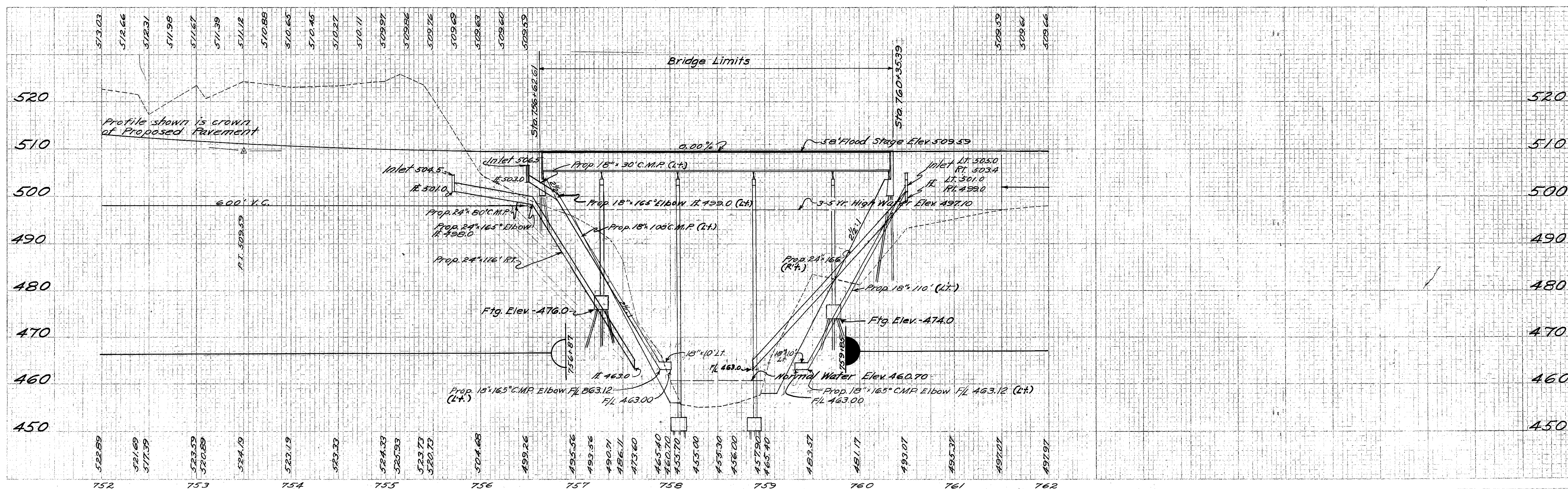
ROBERT CAMPBELL

ALBERT L. HAITZ et al

ROBERT CAMPBELL

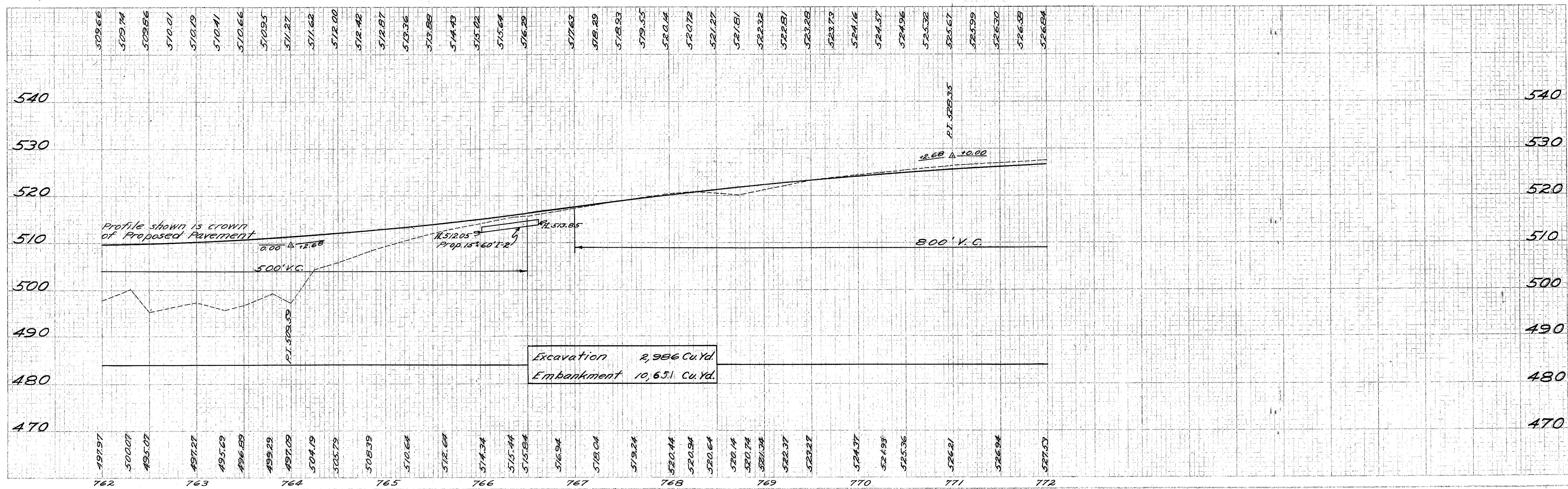
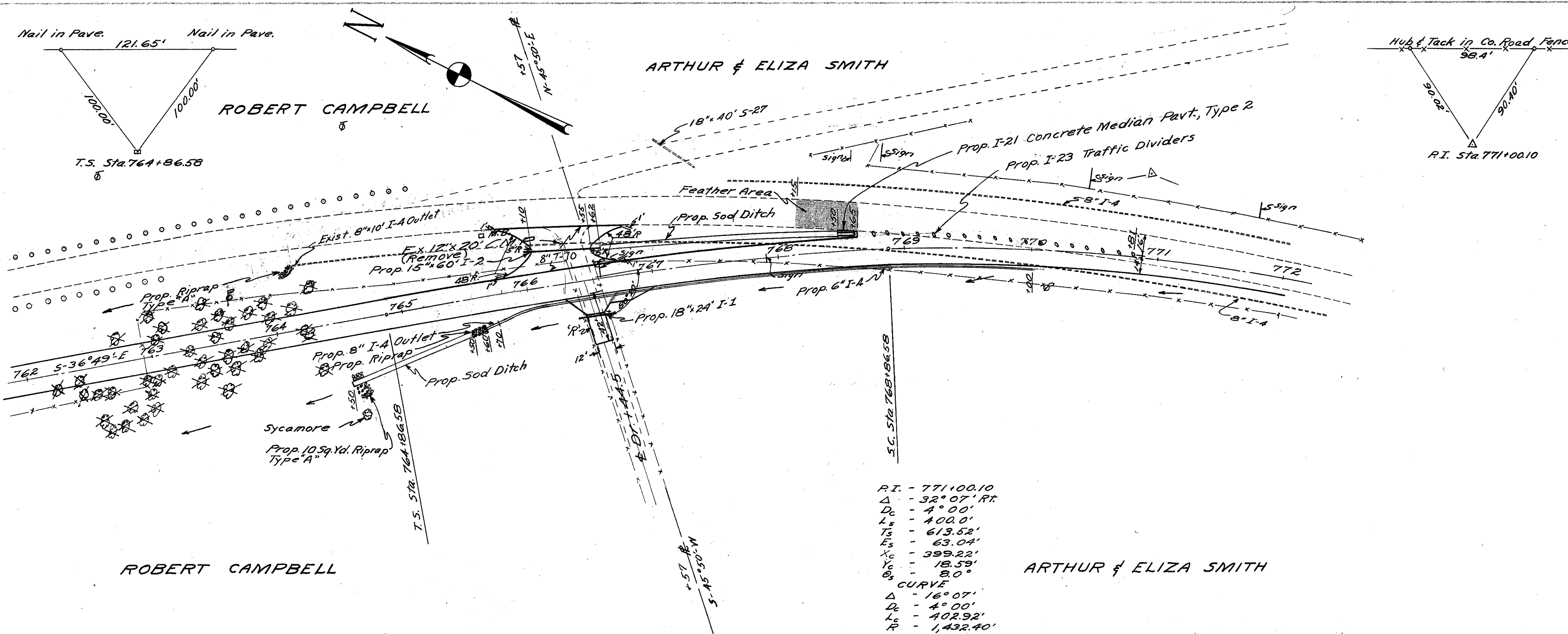
EXISTING STRUCTURE
BRIDGE No. BR-52-143
TYPE - 1 Span High Truss
2 Spans Low Truss
CLEAR SPAN - 1-177'
2-87'10"
ROADWAY - 18'9"
LOADING - H-15
GENERAL CONDITION - Good

BROWN COUNTY
BRO-52-13.88



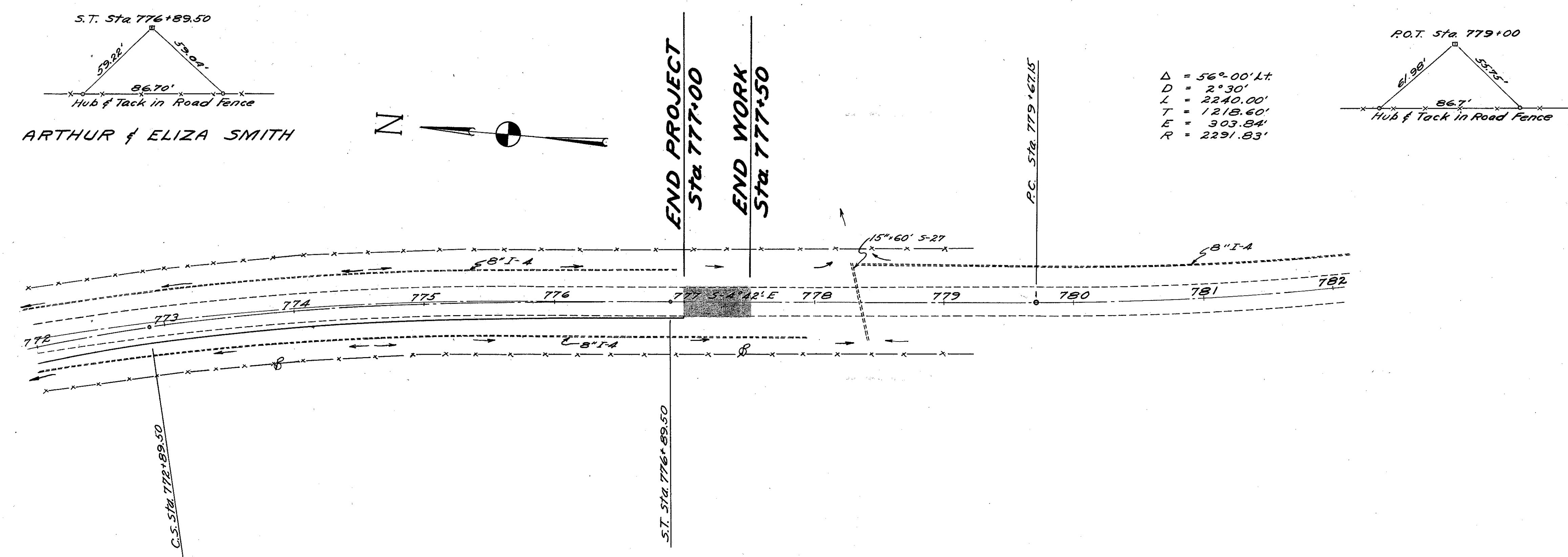
Sta. 752+00 to Sta. 762+00

BROWN COUNTY
BRO-52-13.88



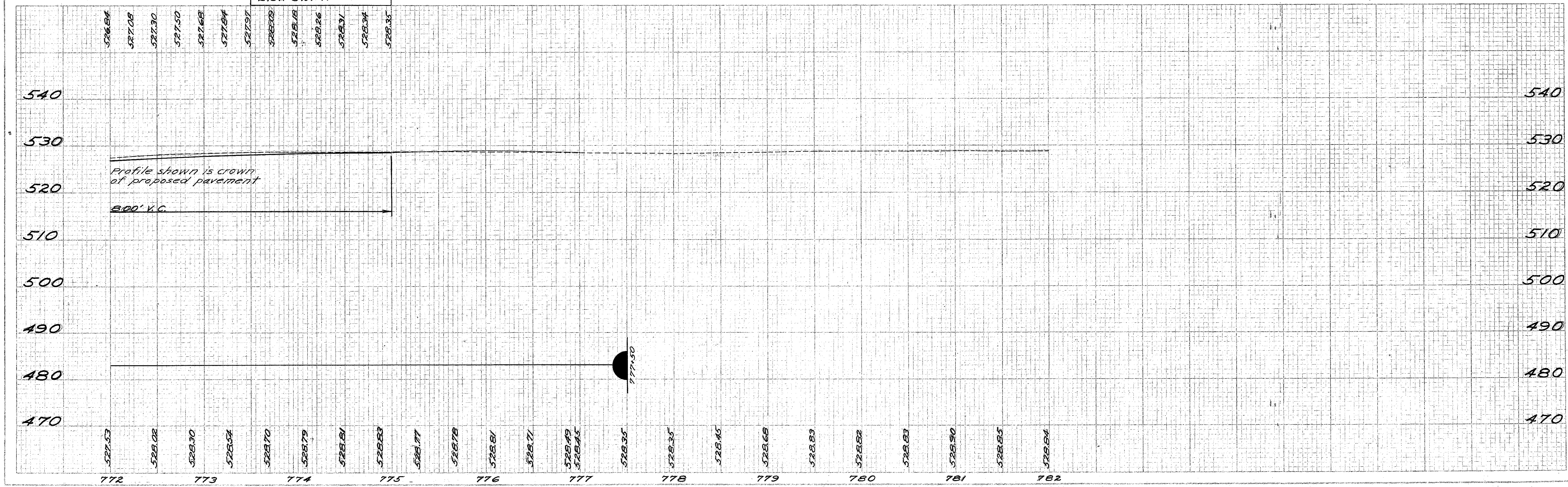
Sta. 762+00 to Sta. 772+00

BROWN COUNTY
BR0-52-13.88

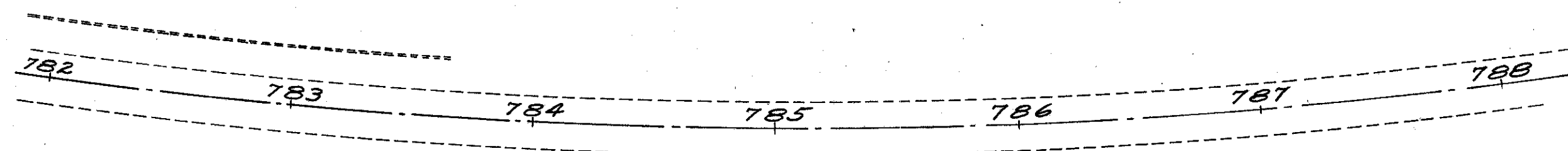
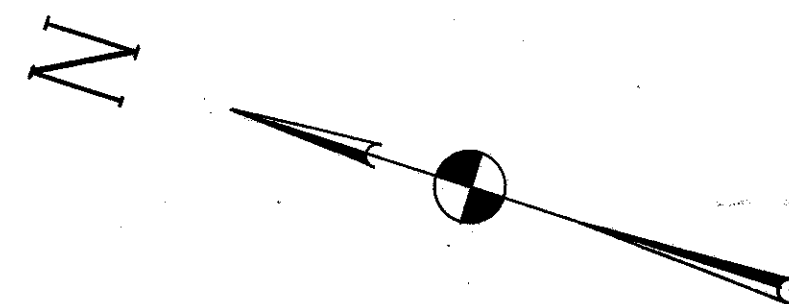


ARTHUR & ELIZA SMITH

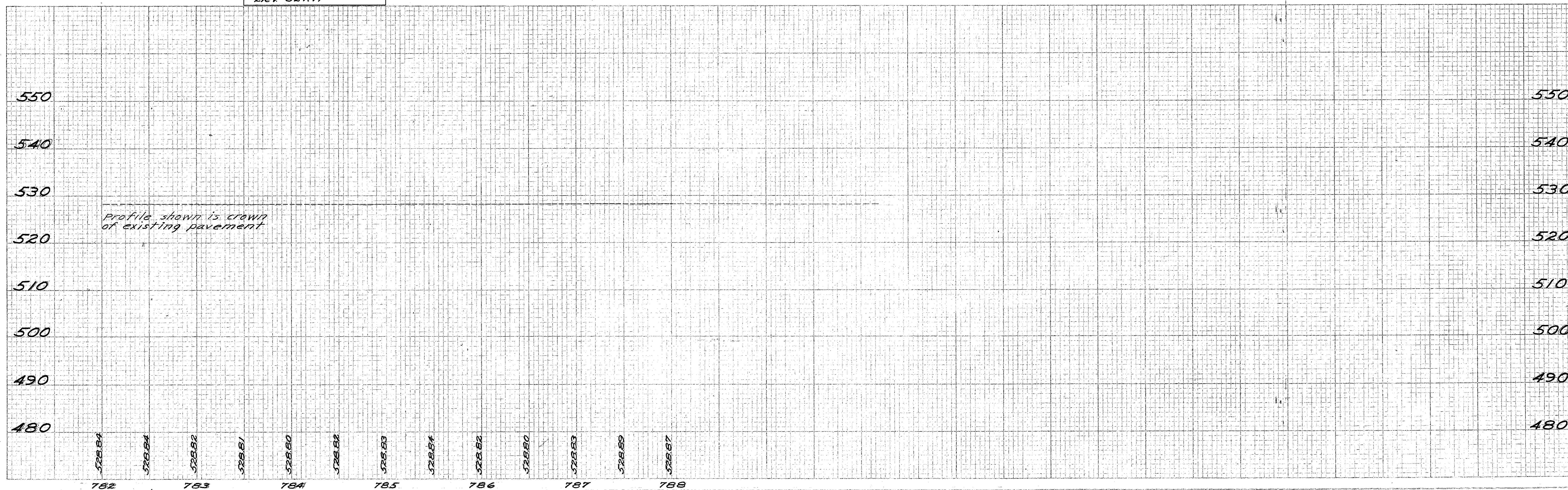
B.M. Spike nail in
P 38.3' Rt. & Sta.
777+45
Elev. 527.71



BROWN COUNTY
BR0-52-13.88



B.M. Spike nail in
of 38.3' Rt. #
Sta. 777+45
Elev. 527.71

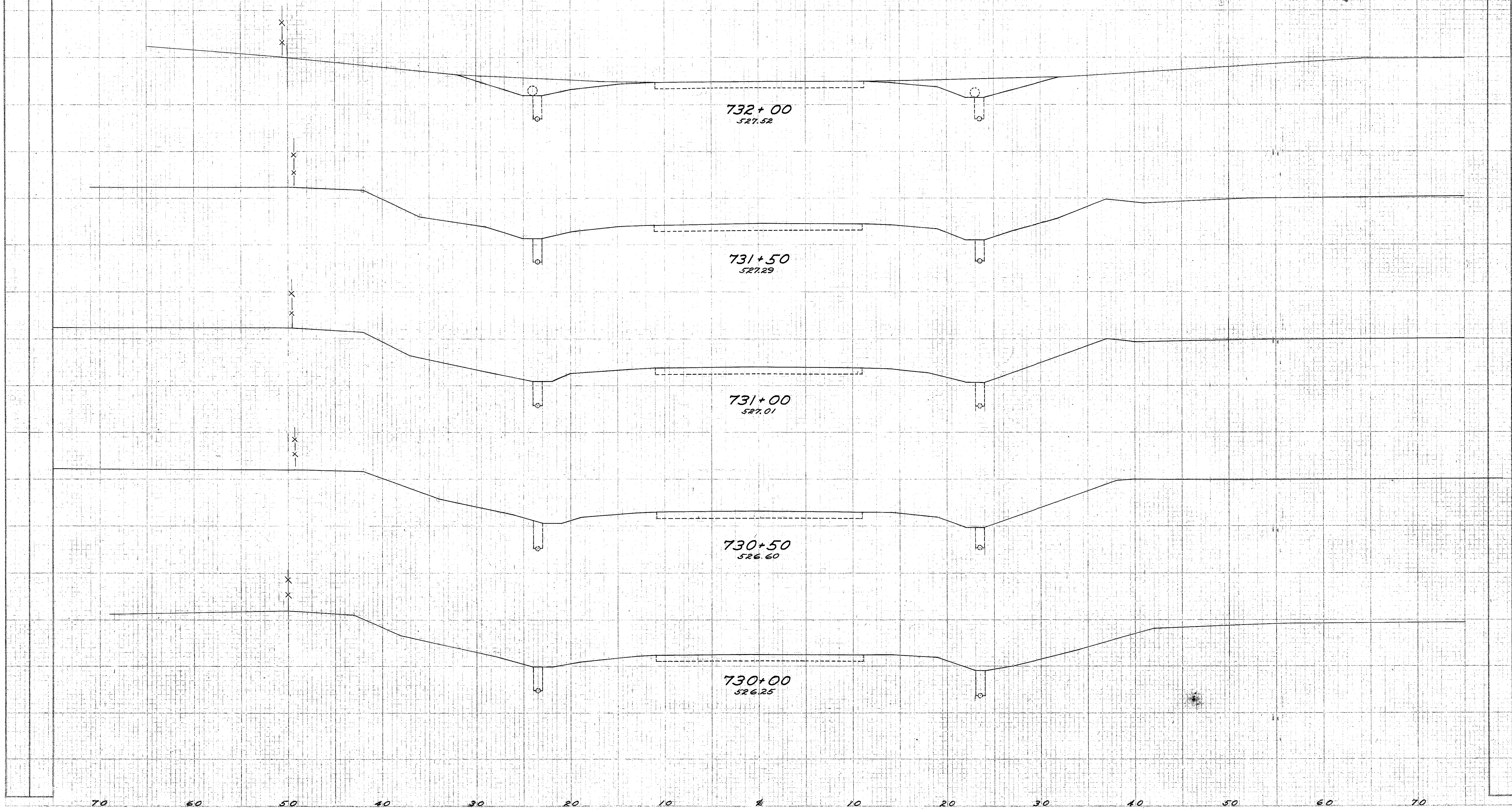


Sta. 782+00 to Sta. 788+00

Seeding
End
Width
Sq.
Yds.

BROWN COUNTY
BR0 - 52 - 13.88

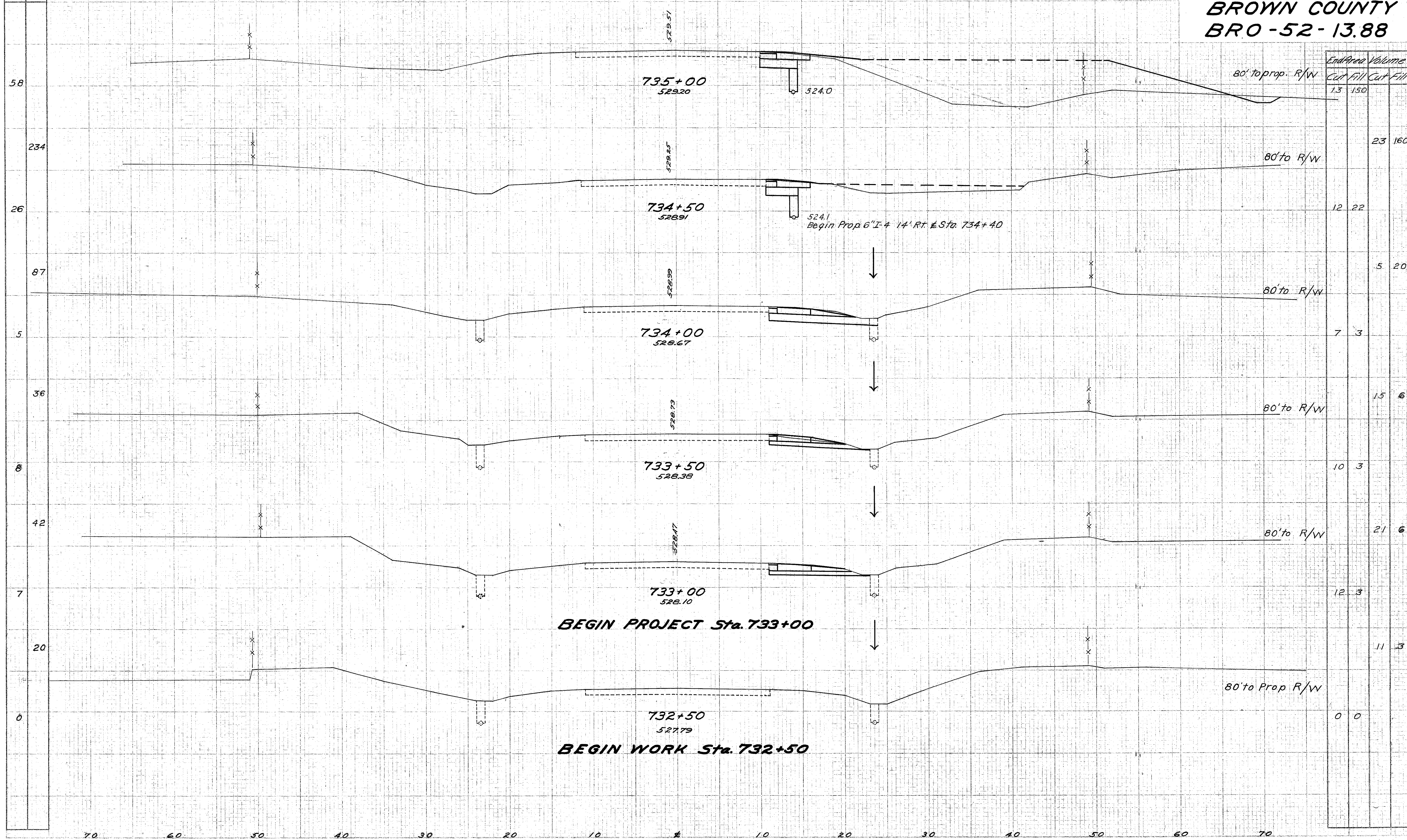
End Area Volume			
Cut	Fill	Cut	Fill



Sta. 730+00 to Sta. 732+00

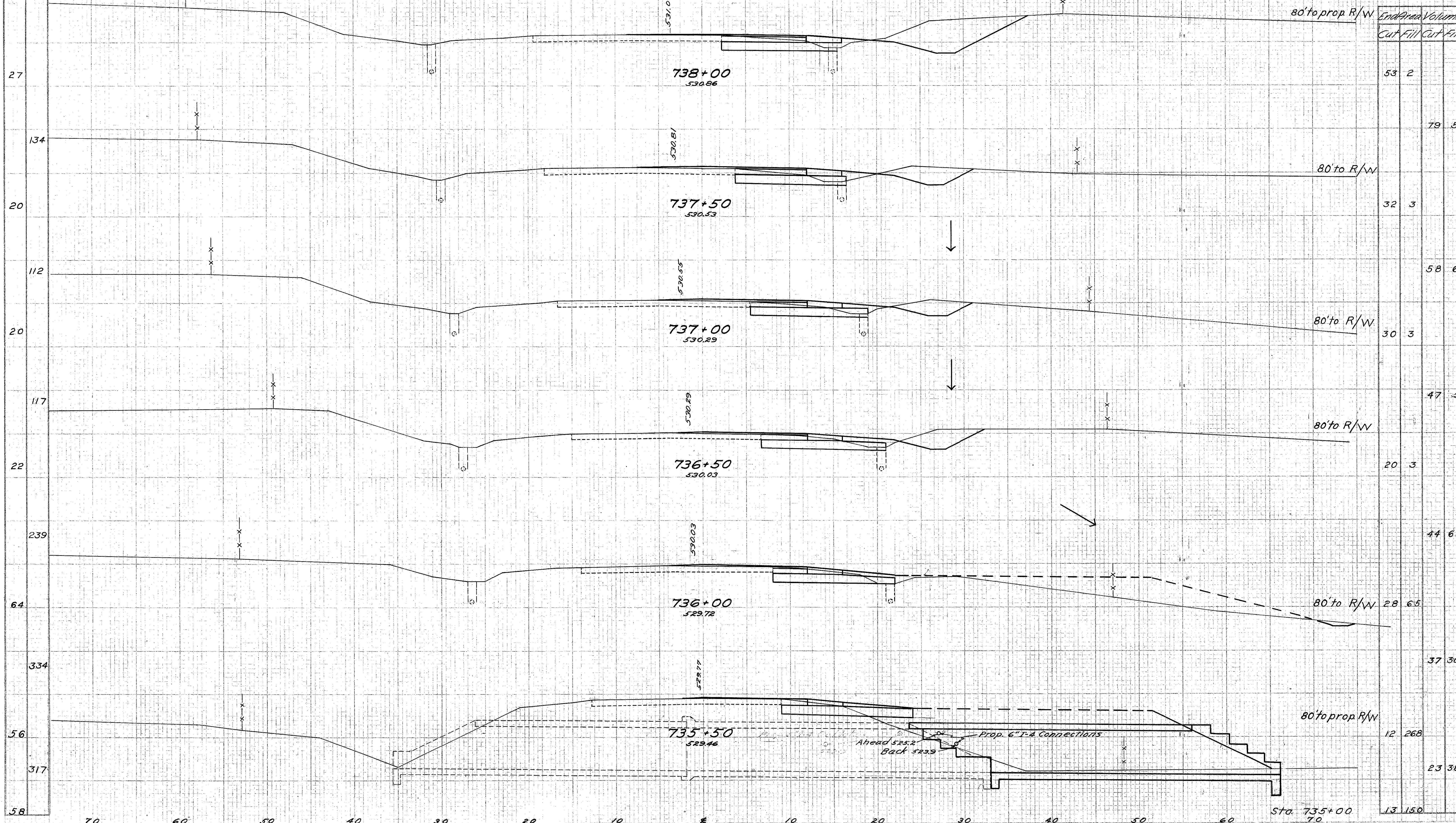
Seeding
End
Width
Sq.
Yds.

BROWN COUNTY
BR0-52-13.88



Seeding
End
Width
Yds.

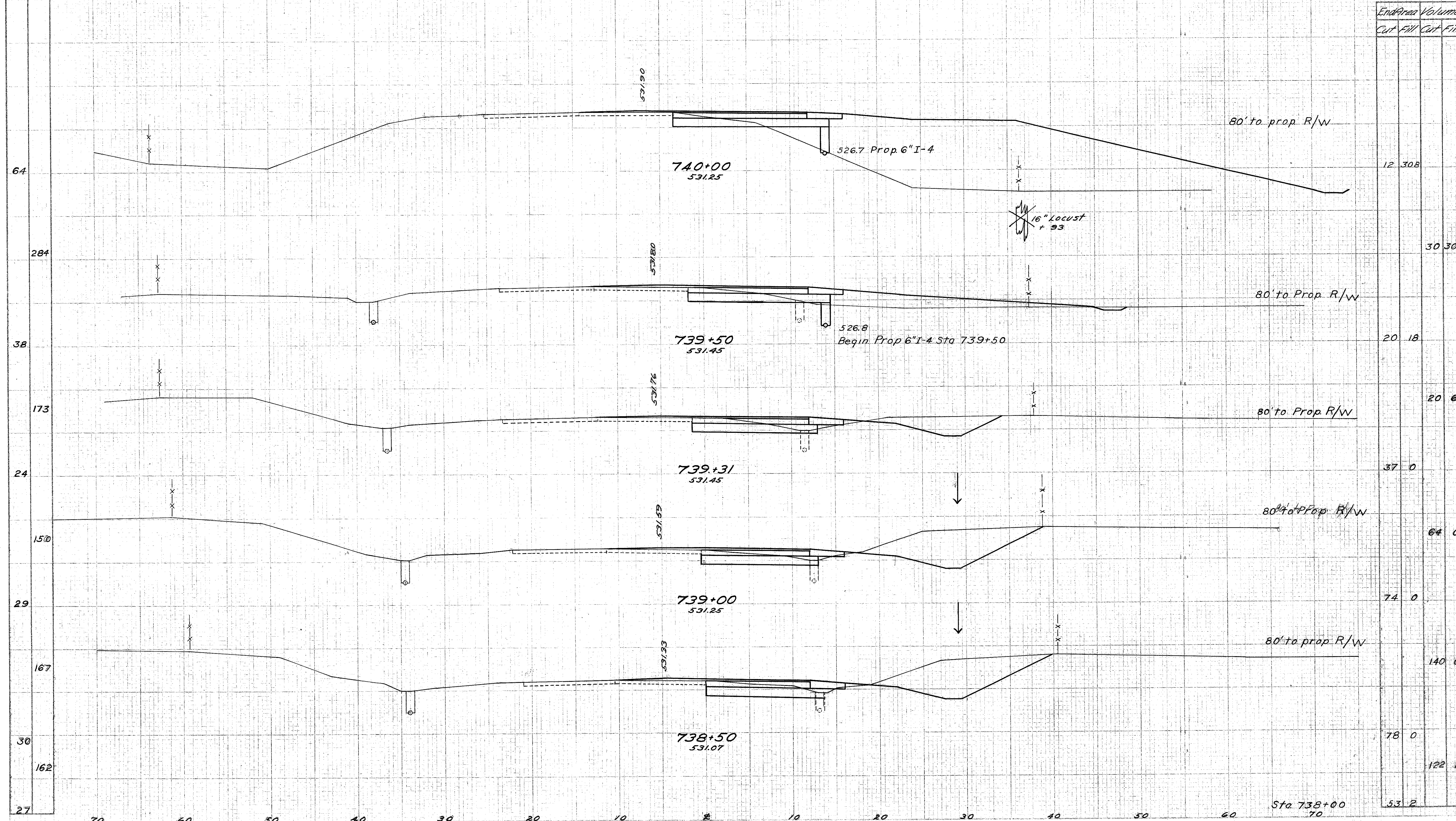
BROWN COUNTY
BR0-52-13.88



Sta. 735+50 to Sta. 738+00

Seeding
End Sq.
Width Yds.

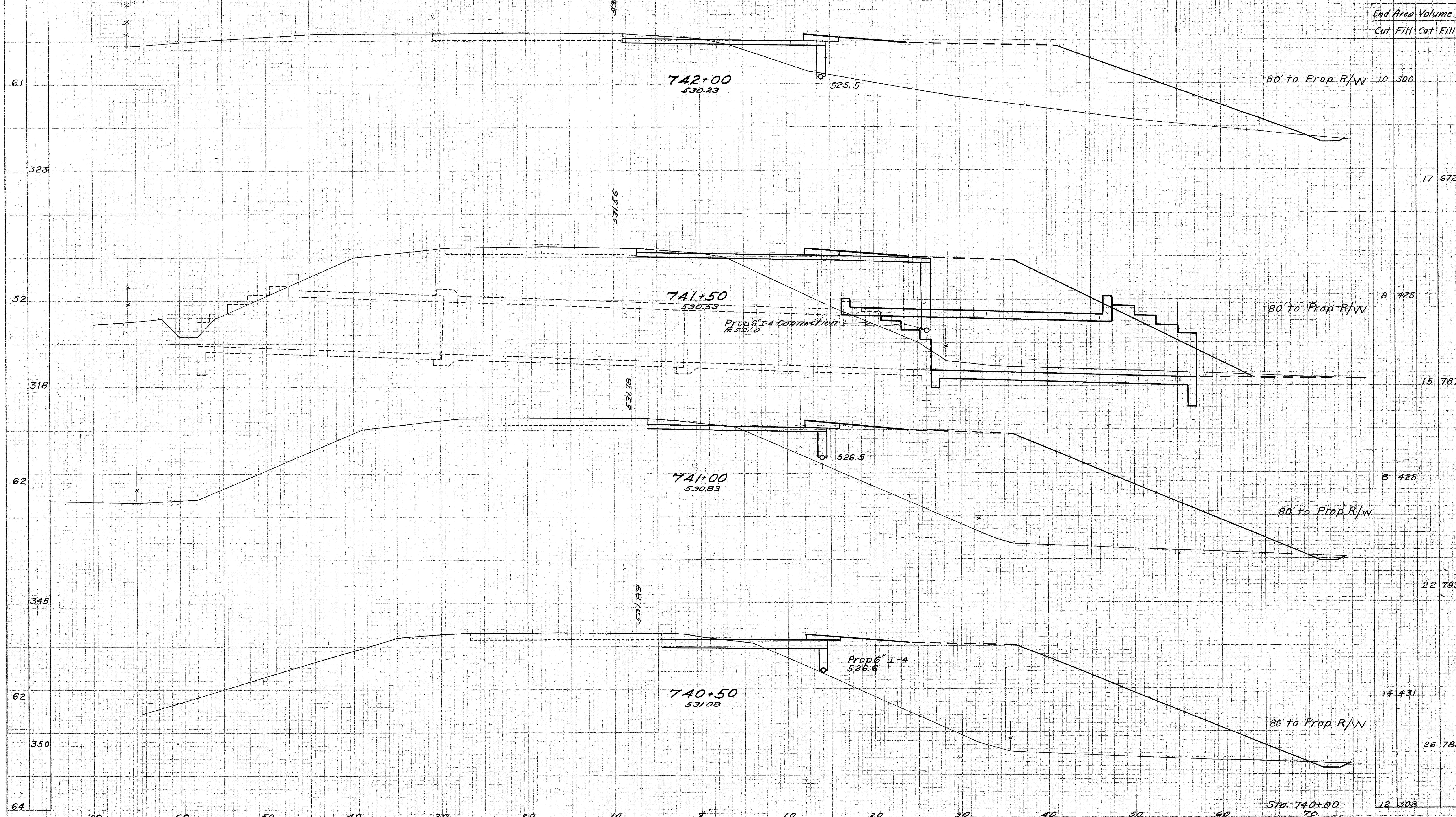
BROWN COUNTY
BR0 - 52 - 13.88



Sta. 738+50 to Sta. 740+00

Seeding
End Sq.
Width Yds.

BROWN COUNTY
BRO - 52 - 13.88

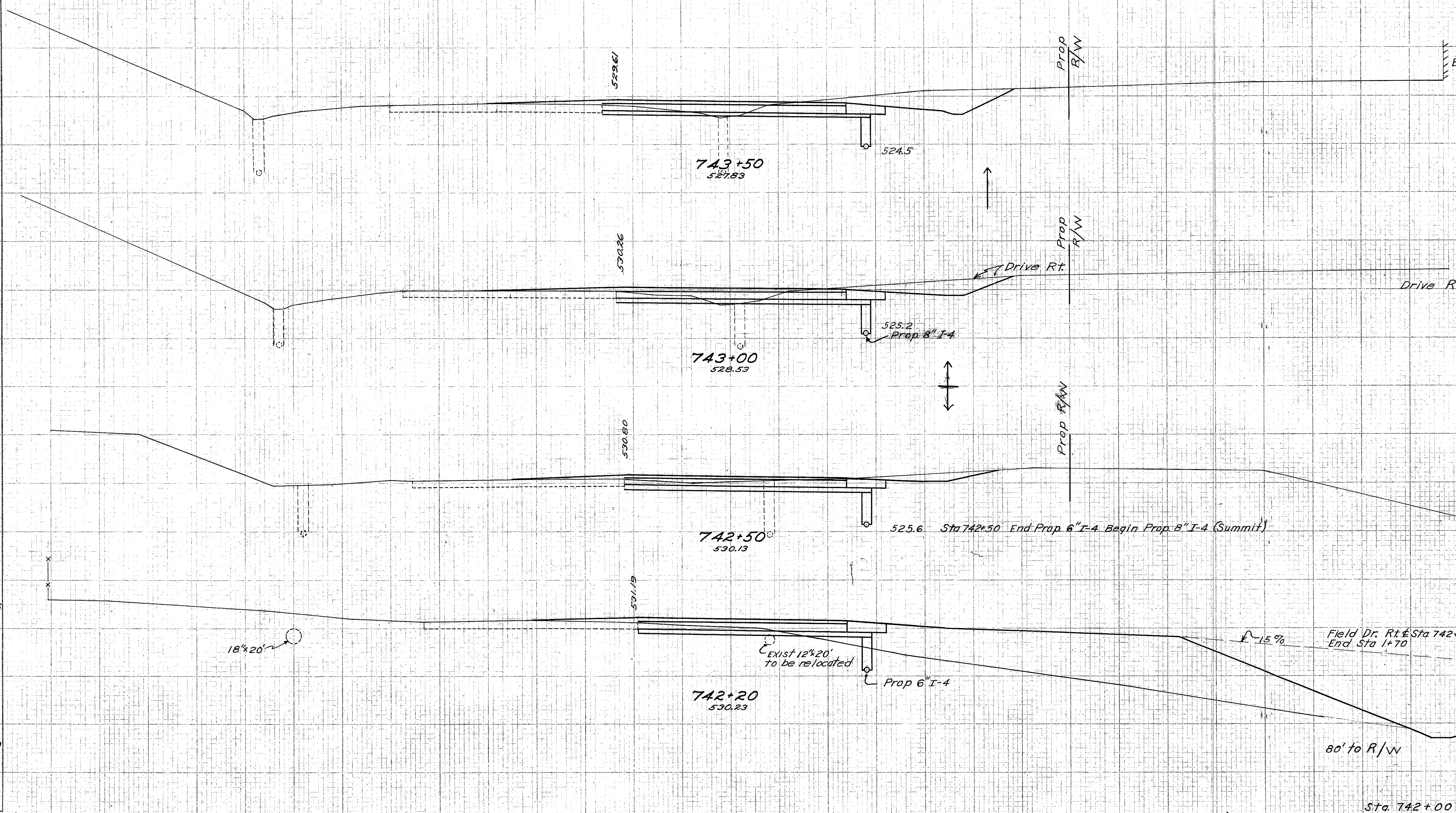


Sta. 740+50 to Sta. 742+00

Seeding
End Width
Sp Yds

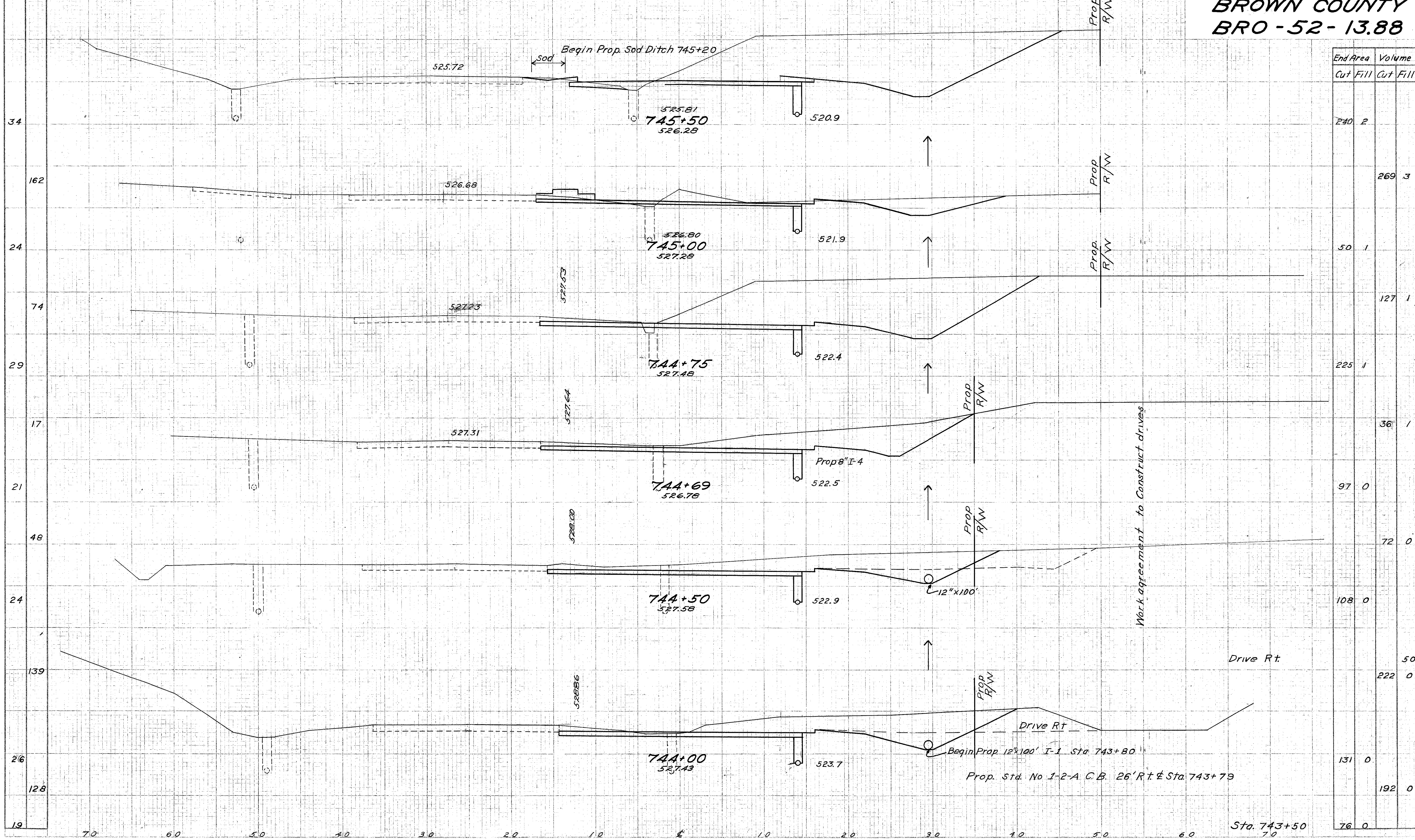
19
95
14
72
12
206
61
339
61

End Area		Volume	
Cut	Fill	Cut	Fill
76	0		
		126	0
			50
60	0		
		90	0
38	0		
		29	129
		0	380
14	232		
		9	197
		10	300



Sta. 742+20 to Sta. 743+50

Seeding
End Sq.
Width Yds

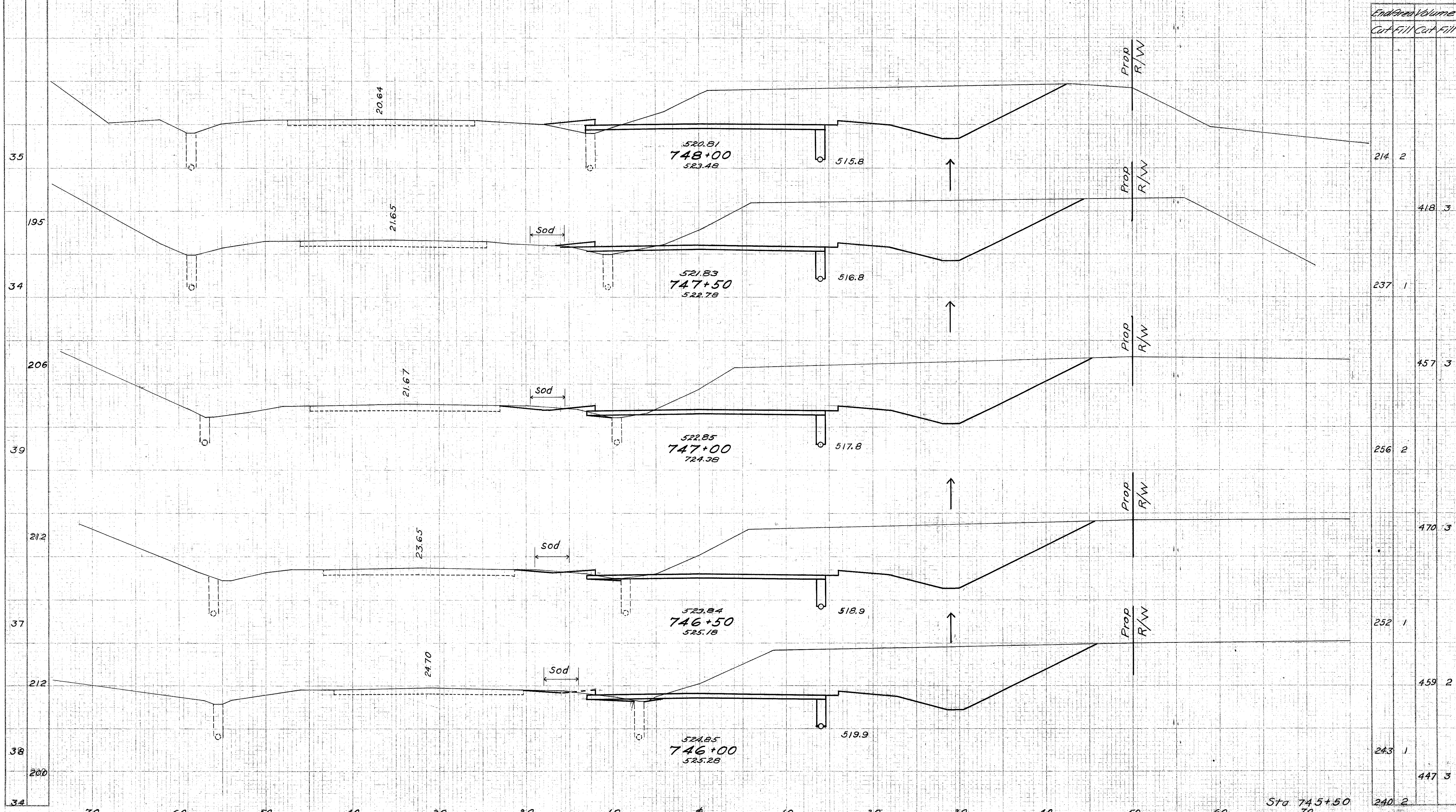


End Area		Volume	
Cut	Fill	Cut	Fill
240	2		
		269	3
50	1		
		127	1
225	1		
		36	1
97	0		
		72	0
108	0		
		50	0
222	0		
		131	0
		192	0
76	0		

Sta. 744+00 to Sta. 745+50

Seeding
End
Width
Sq.
Yds.

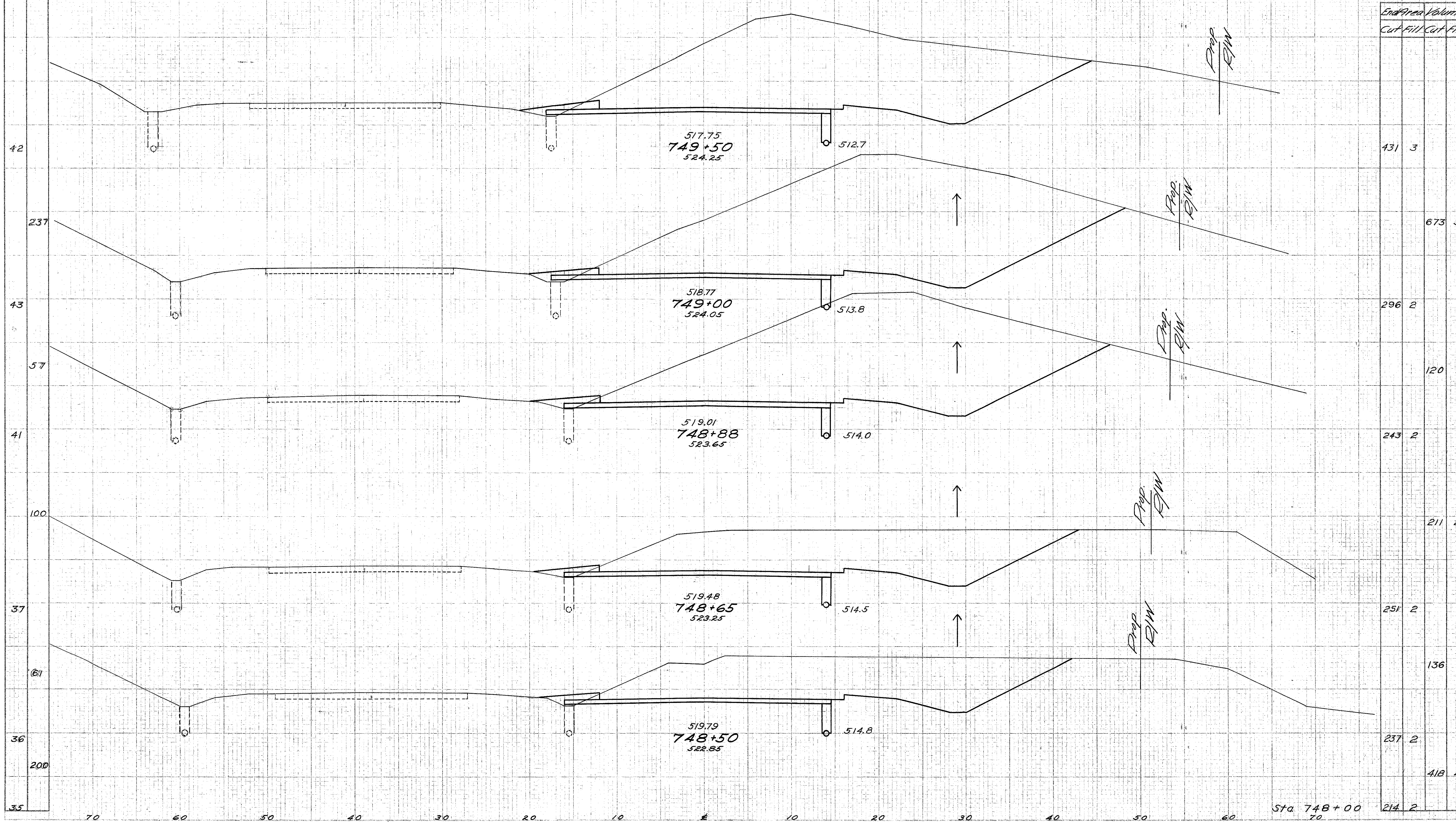
BROWN COUNTY
BR0-52-13.88



Sta. 746+00 to Sta. 748+00

Seeding
End
Width
Sq. Yds.

BROWN COUNTY
BR0-52-1388

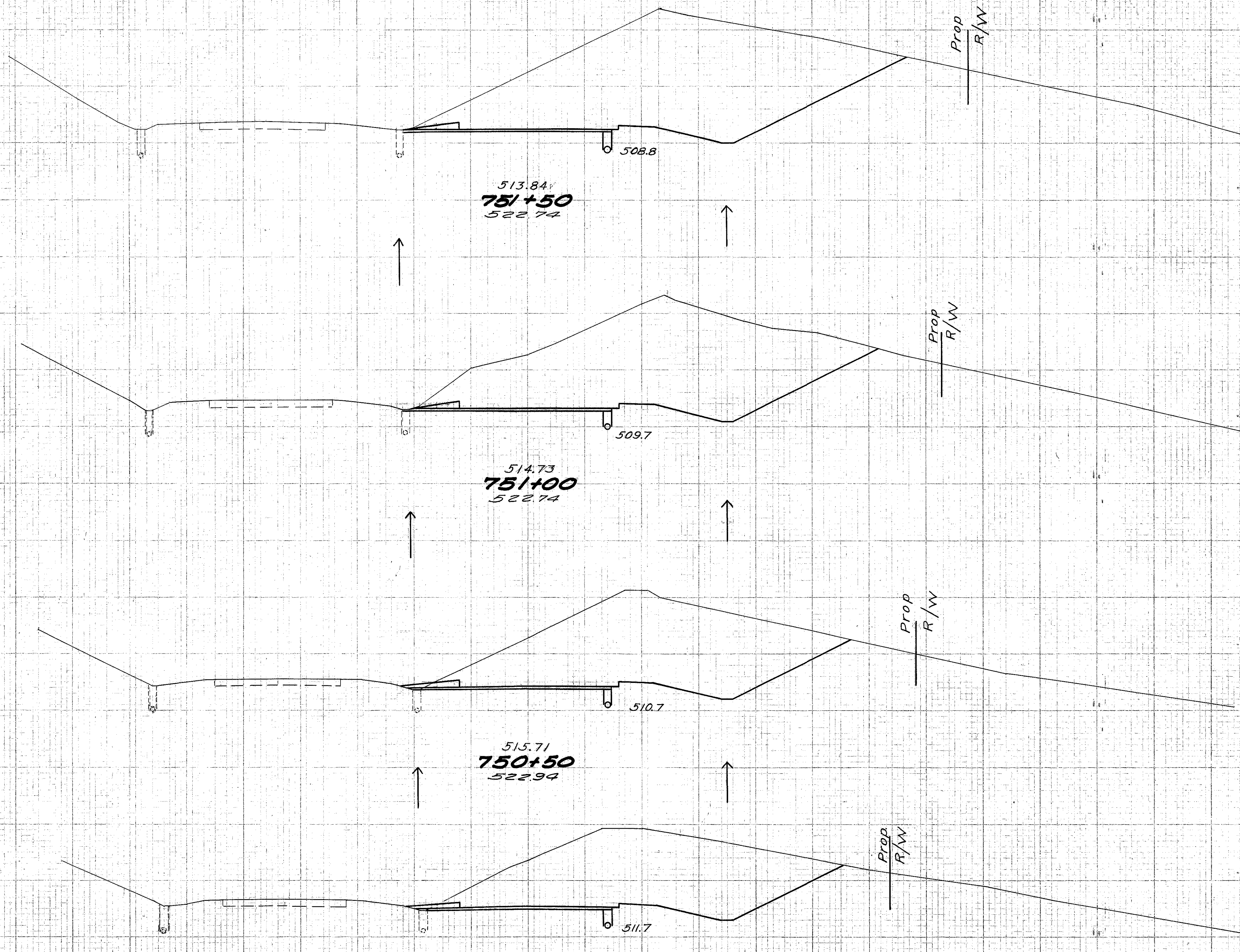


Sta. 748+50 to Sta. 749+50

Seeding
End Sq
Width Yds

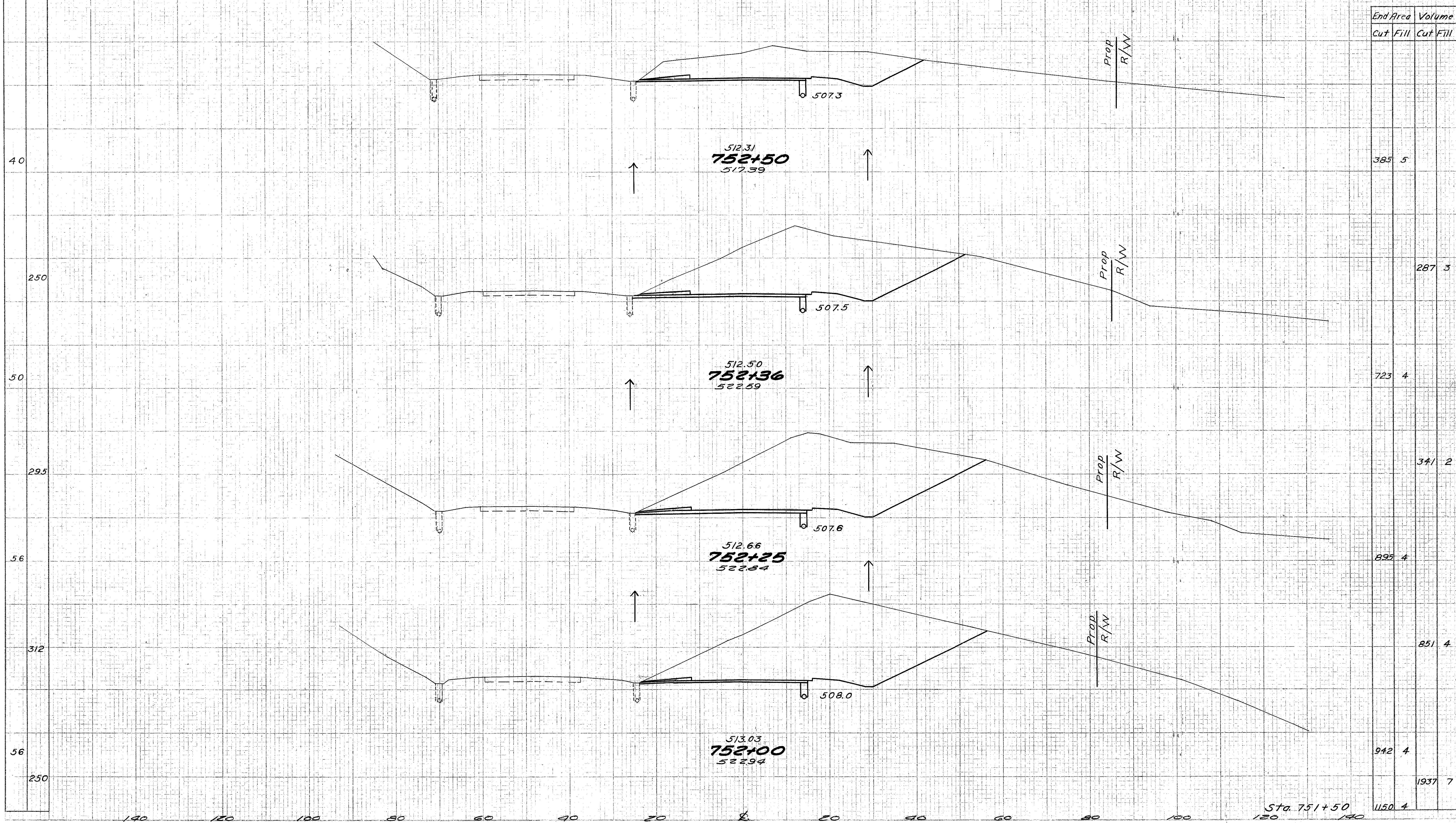
33
178
30
162
28
150
26
189
42

End Area		Volume	
Cut	Fill	Cut	Fill
1150	4		
1977	7		
985	3		
1635	7		
780	4		
1360	7		
690	3		
1038	6		
431	3		



Sta. 749+50
STA. 750+00 TO STA. 751+50

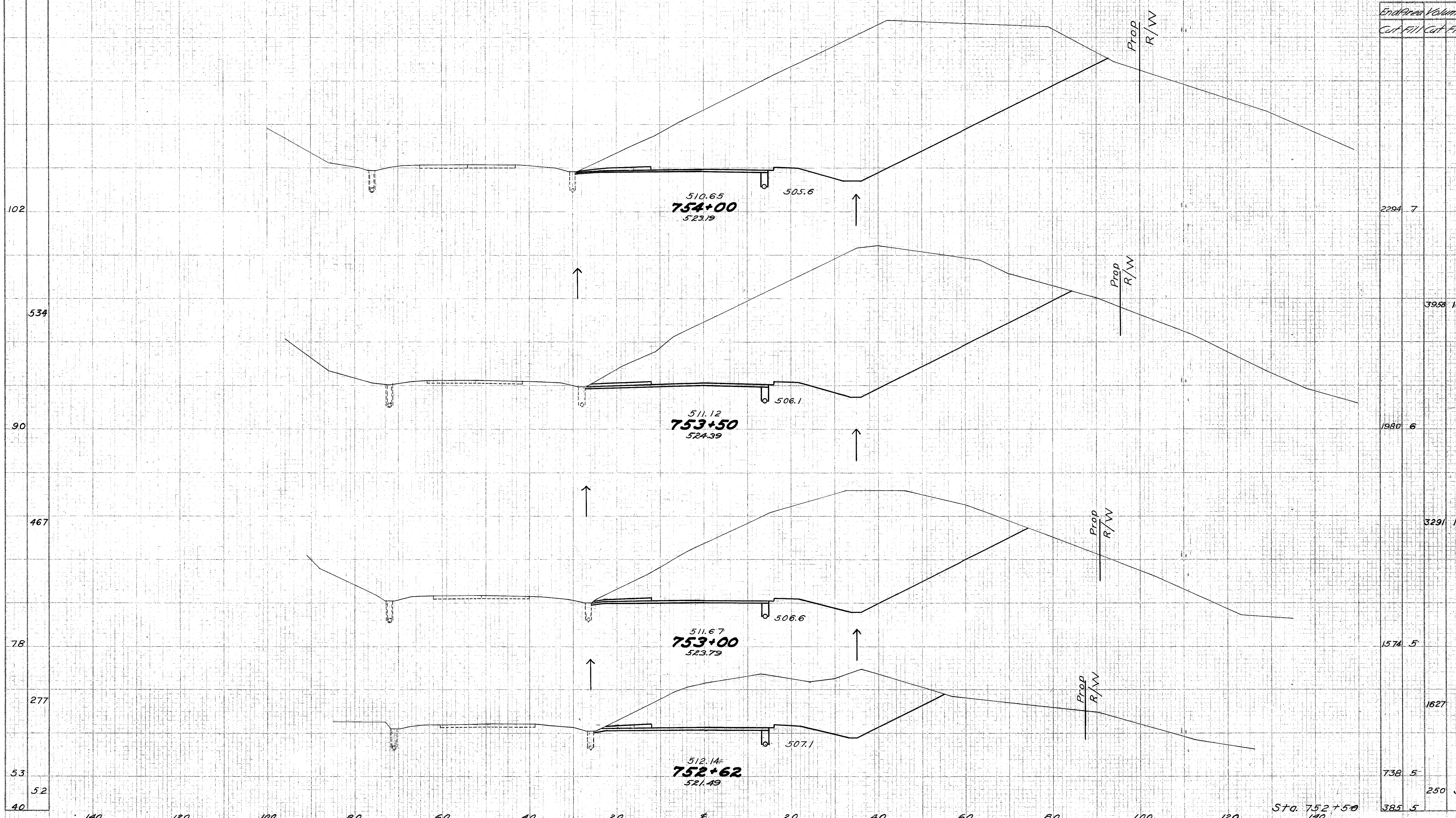
Seeding
End Width
Sq. Yds.



STA. 751+50
STA. 752+00 TO STA. 752+50

Seeding
End
Width
Sq. Yds.

BROWN COUNTY
BR0-52-13.88



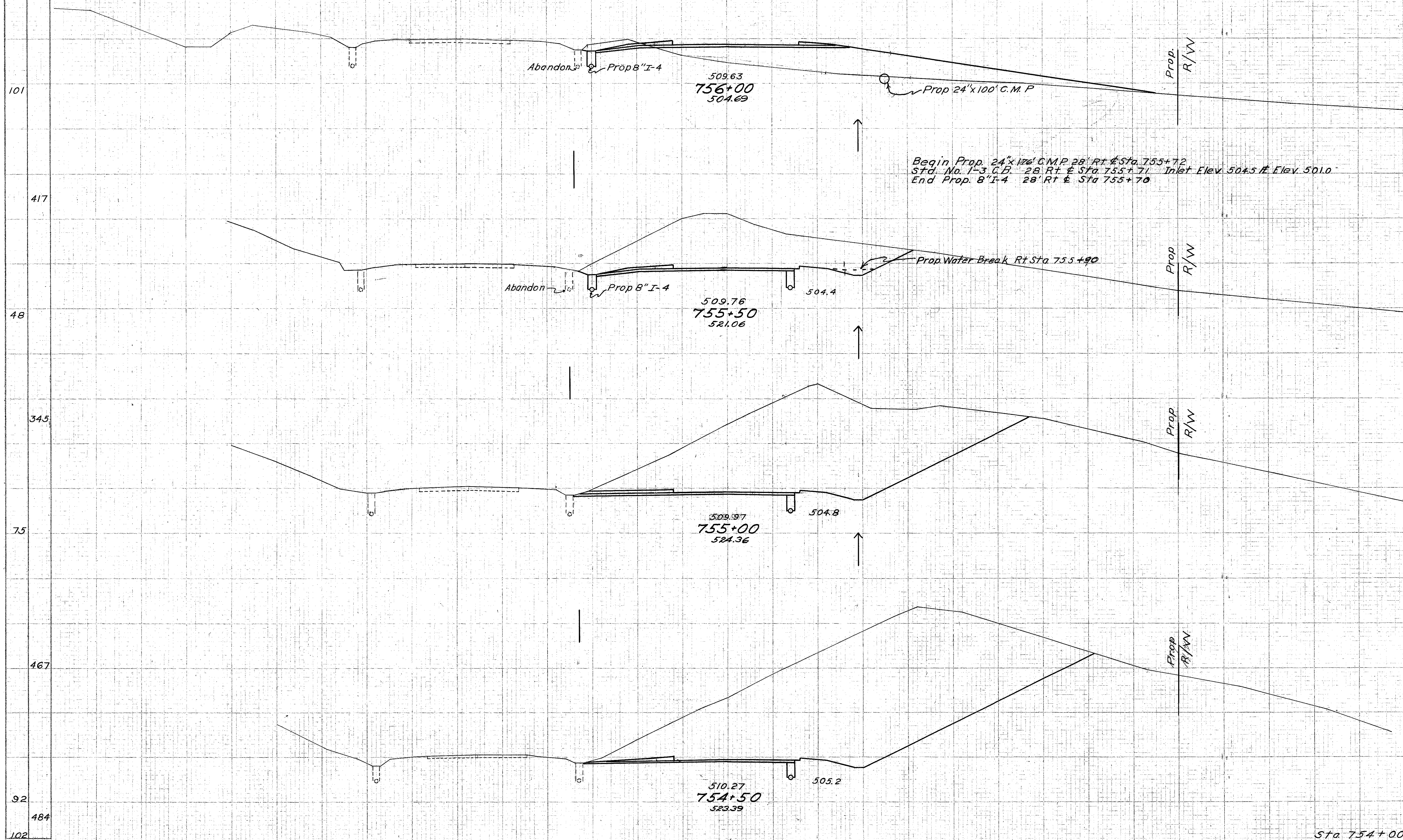
Sta. 752+62 to Sta. 754+00

Seeding
End Sta
Width 165

101
417
48
345
75
467
92
484
102

BROWN COUNTY
BR0-52-13.88

End Area		Volume	
Cut	Fill	Cut	Fill
40	362		
		582	343
			5
588	8		
		1770	15
1323	8		
		2999	15
1916	8		
		3898	14
2294	7		

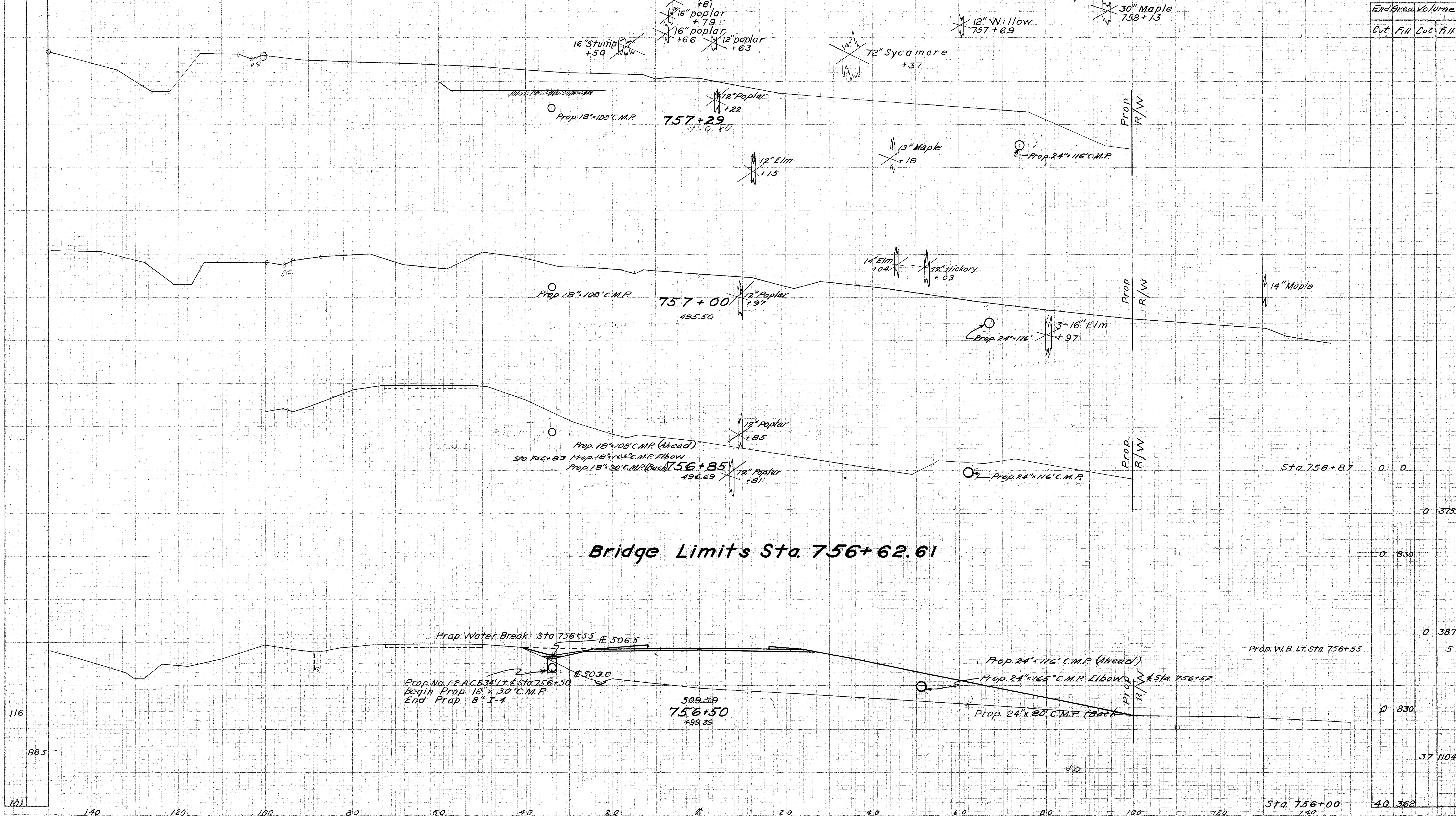


Sta. 754+50 to Sta. 756+00

Seeding
End Sp.
Width Vols.

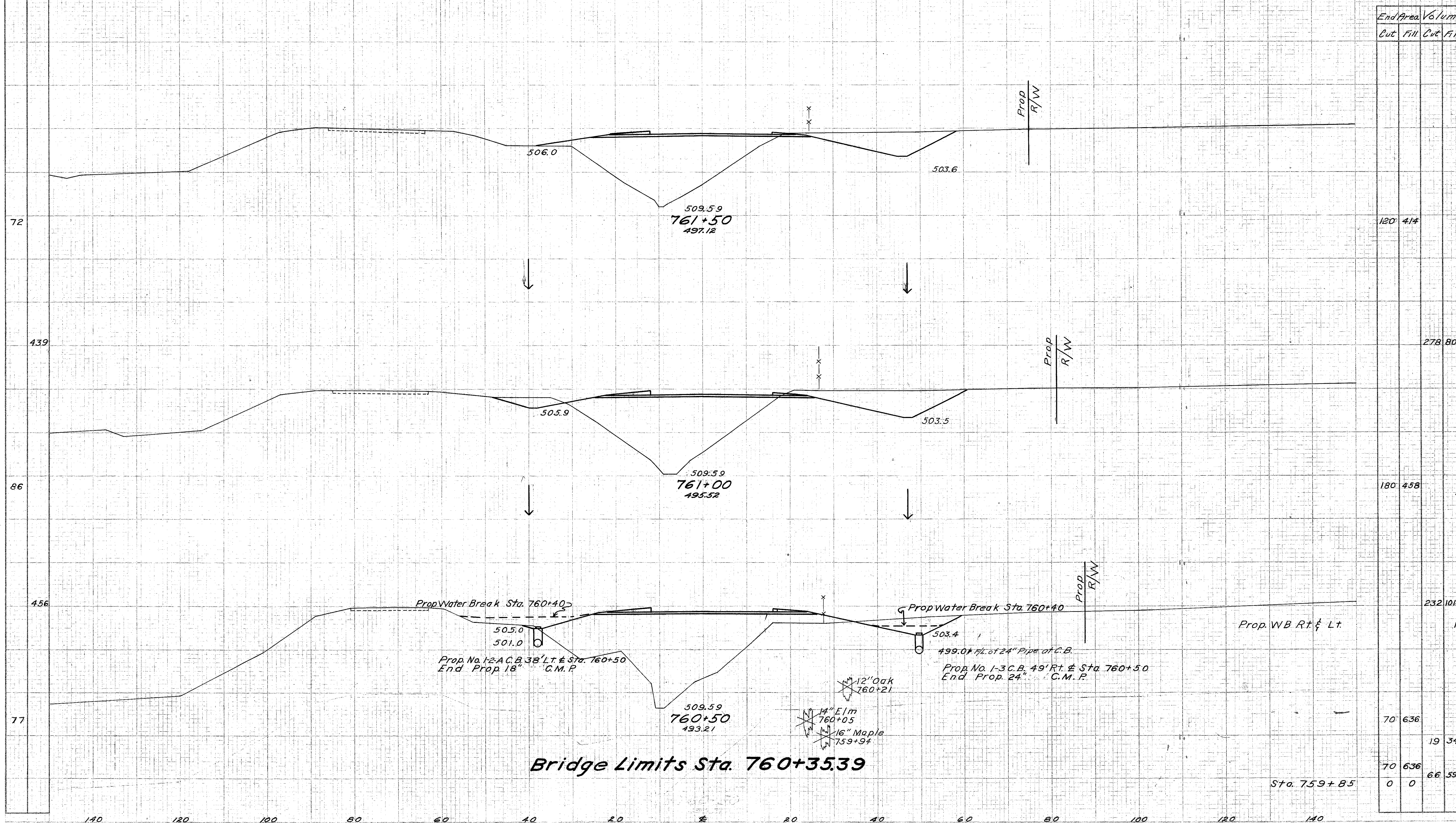
BROWN COUNTY
BR0-52-13.88

End Area Volume
Cut Fill Cut Fill



Seeding
End Width Sq. Yds

BROWN COUNTY
BR0 - 52 - 13.88



End Area		Volume	
Cut	Fill	Cut	Fill
120	414		
278	808		
180	458		
232	1013		
70	636	19	344
70	636	66	594
0	0		

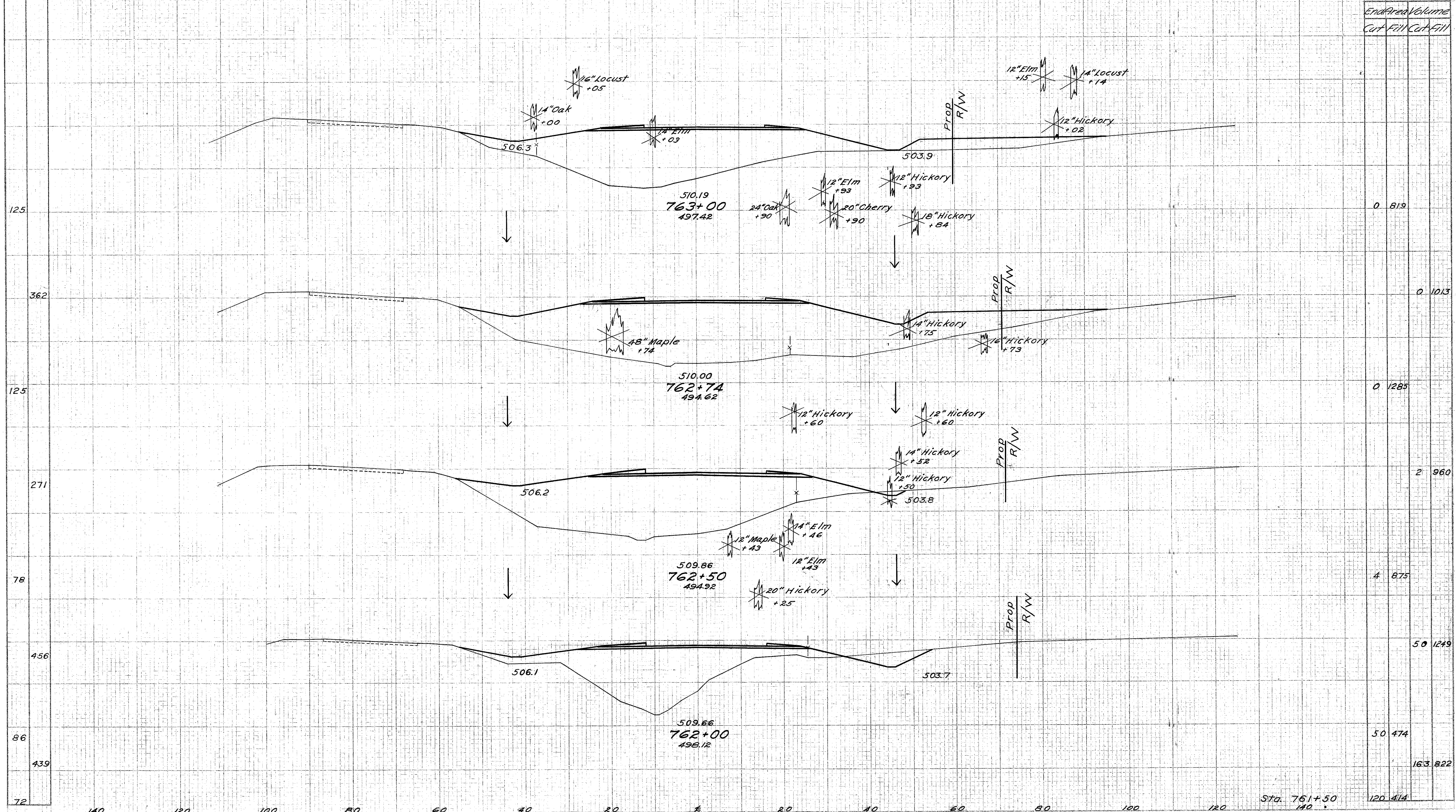
Bridge Limits Sta. 760+35.39

Sta. 760+50 to Sta. 761+50

Seeding
End
Width
Sq.
Yds.

BROWN COUNTY
BR0-52-13.88

End Area	Volume
Cut	Fill

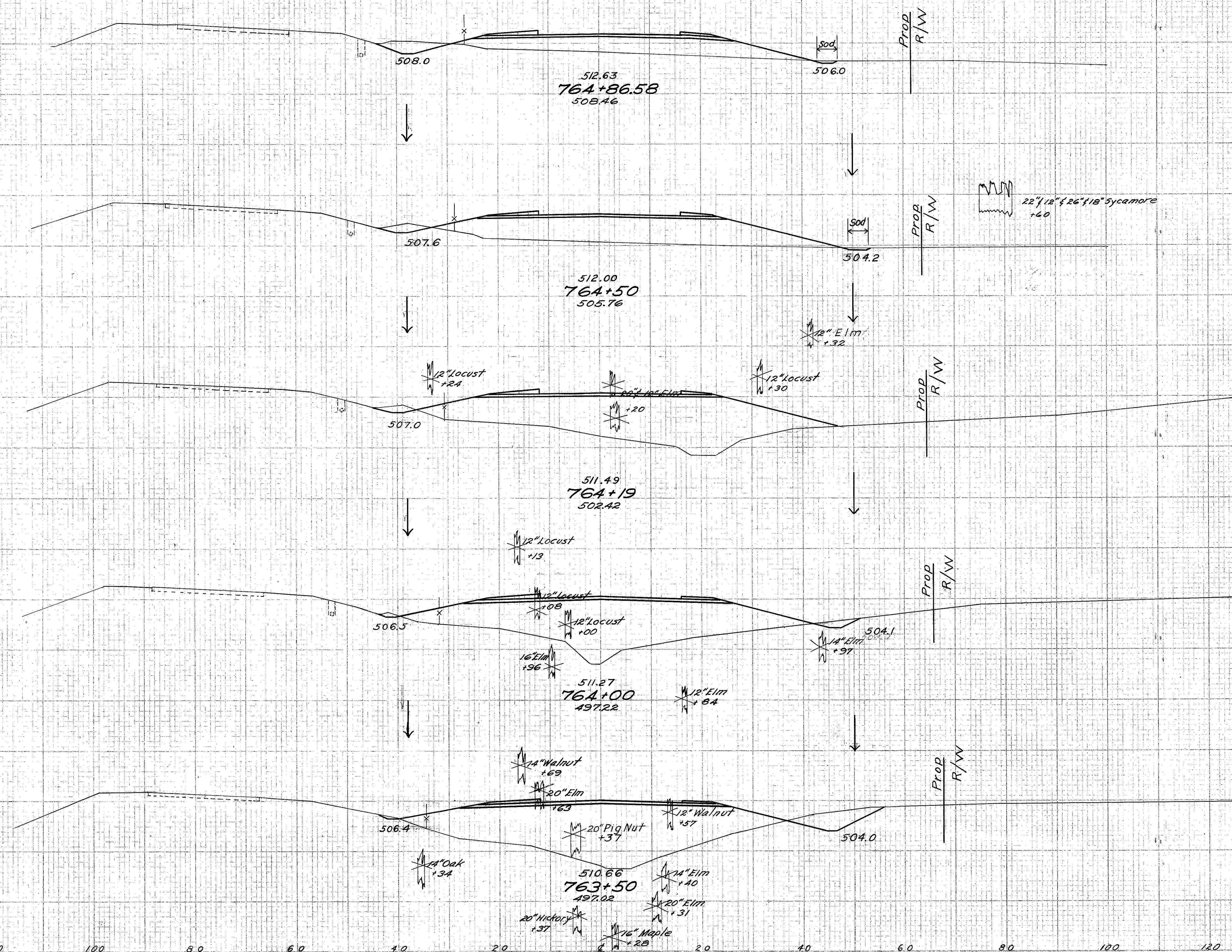


Sta. 762+00 to Sta. 763+00

Seeding
End Sta
Width Yds.

61
261
67
230
66
144
70
406
75
556
125

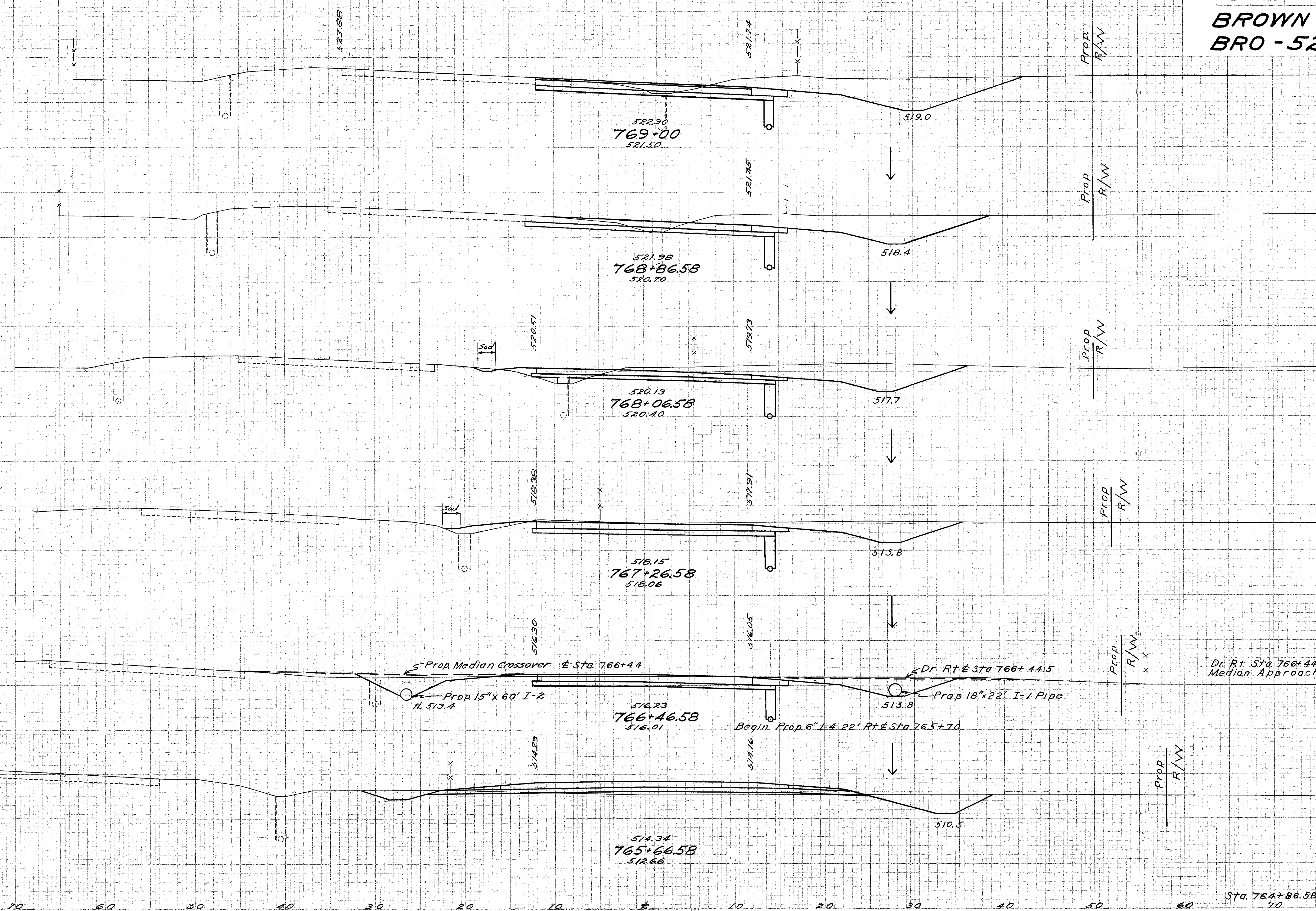
End Area		Volume	
Cut	Fill	Cut	Fill
26	183		
		26	323
13	294		
		13	468
9	521		
		12	365
25	515		
		60	1000
40	565		
		37	1282
0	819		



Sta. 763+50 to Sta. 764+86.58

Seeding	
End	Sq.
Width	Yds.
31	
44	
27	
253	
30	
280	
33	
347	
45	
378	
40	
450	
61	

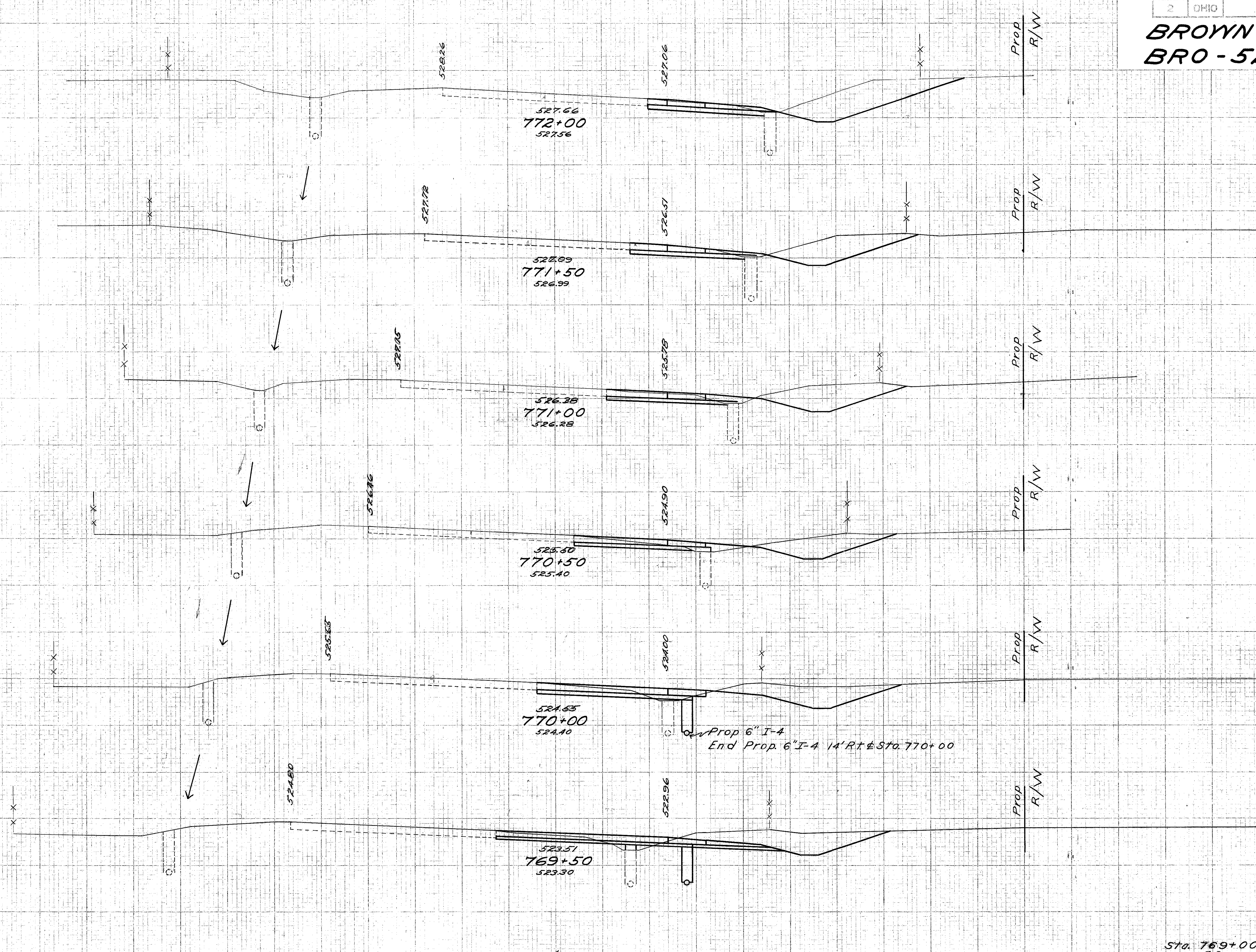
End Area		Volume	
Cut	Fill	Cut	Fill
110	0		
		50	0
91	0		
		245	1
74	4		
		216	15
72	6		
		227	8
		0	12
		0	120
81	0		
		155	30
24	20		
		75	163
26	183		



Sta. 765+66.58 to Sta. 769+00

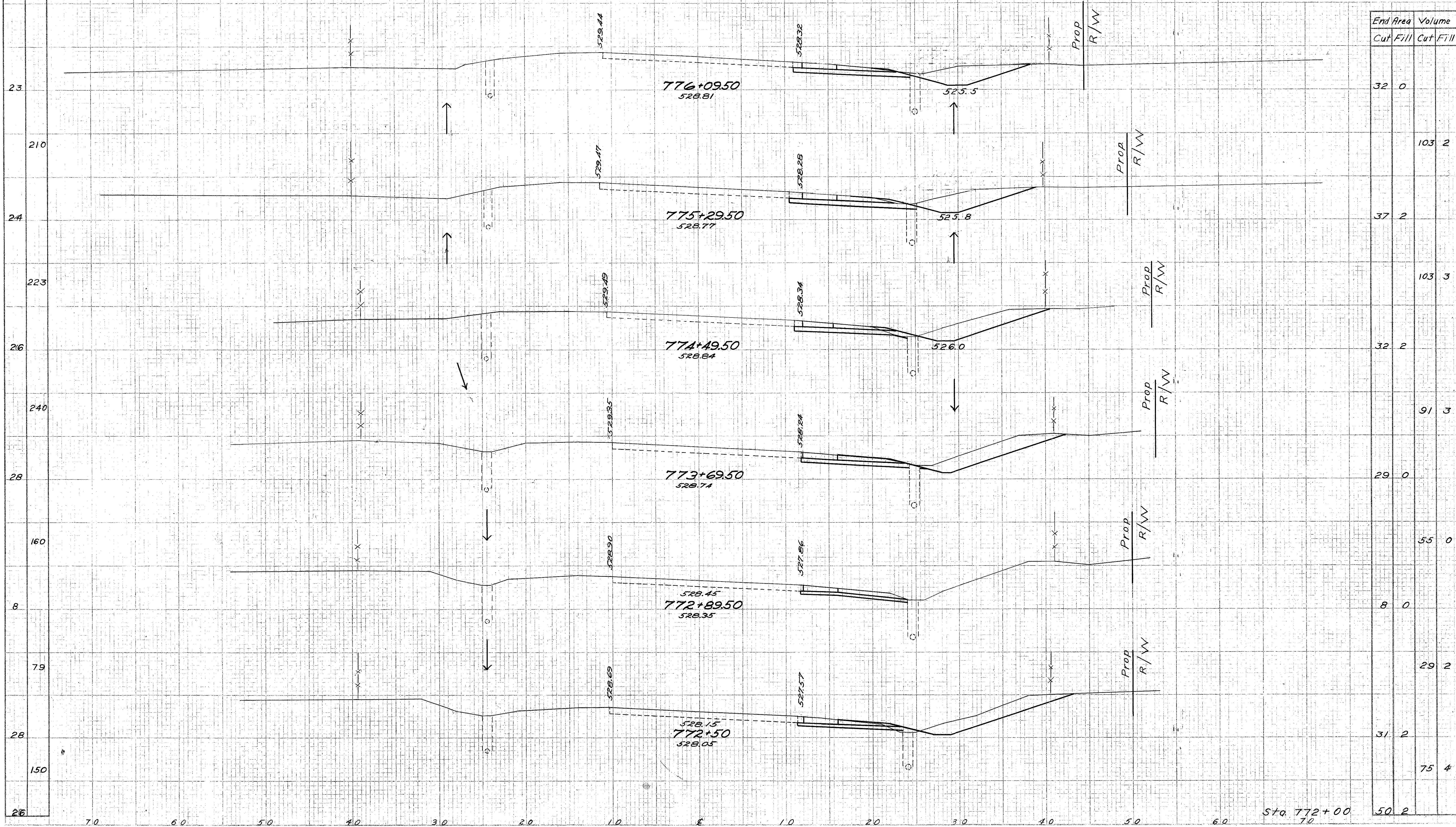
Seeding	End	Sq	Width	Yds
26				
139				
24				
134				
23				
123				
21				
123				
22				
167				
20				
145				
31				

End Area		Volume	
Cut	Fill	Cut	Fill
50	2		
		74	4
30	2		
		62	6
37	4		
		70	7
38	3		
		73	5
41	2		
		87	6
53	4		
		151	4
110	0		



Sta. 769+50 to Sta. 772+00

Seeding
End Sq.
Width Yds.



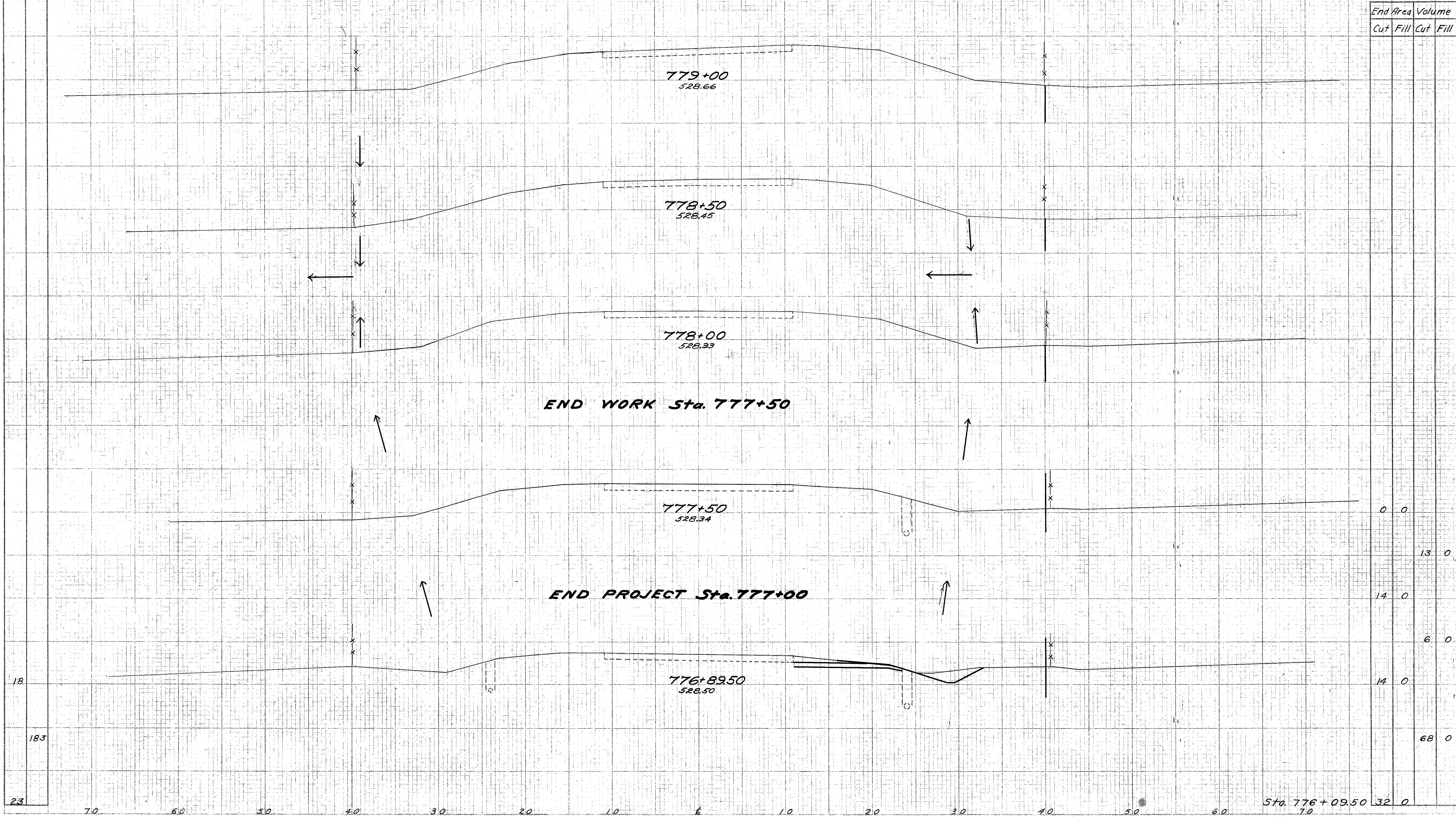
End Area		Volume	
Cut	Fill	Cut	Fill
32	0		
		103	2
37	2		
		103	3
32	2		
		91	3
29	0		
		55	0
8	0		
		29	2
31	2		
		75	4
50	2		

Sta. 772+50 to Sta. 776+09.50

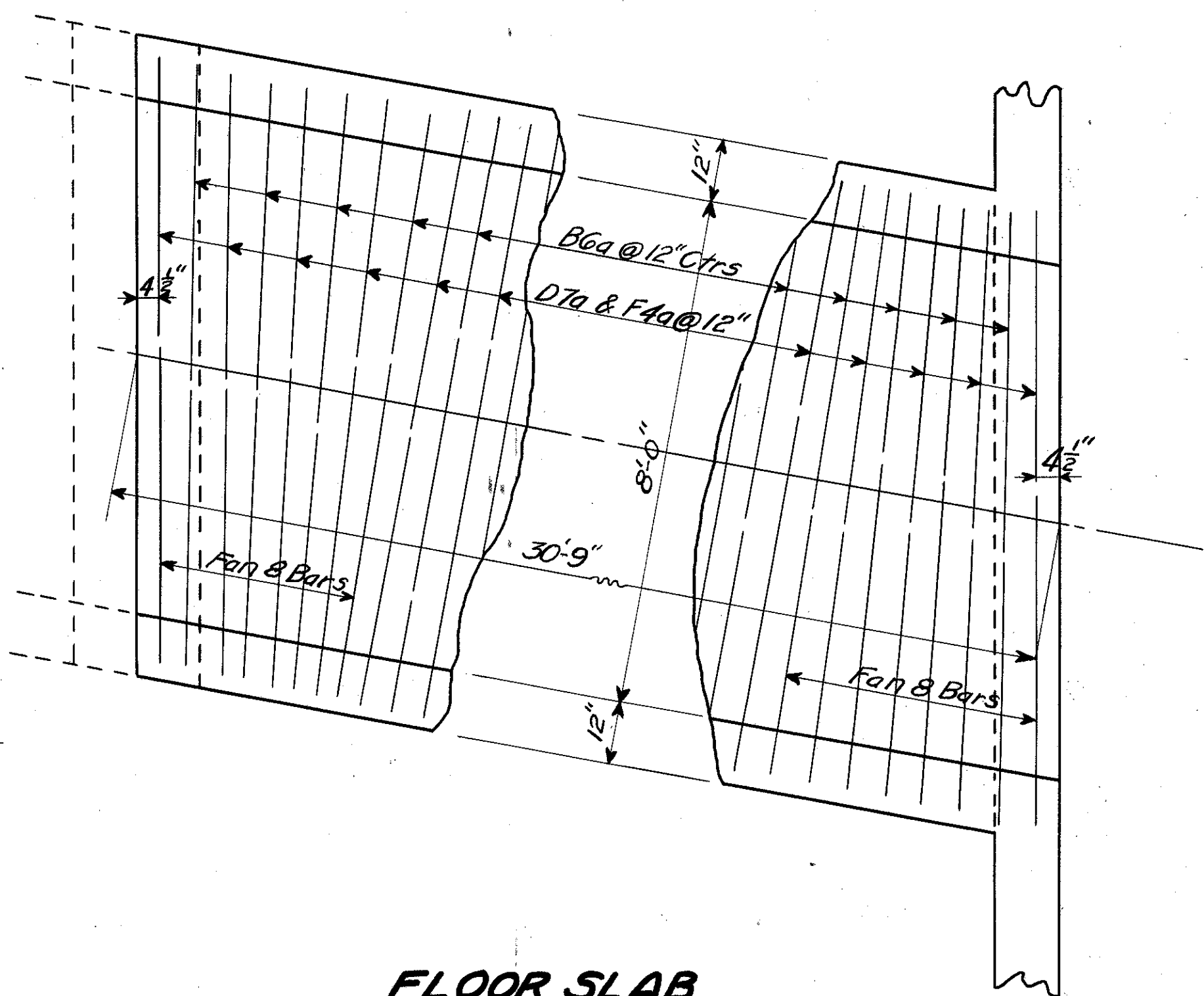
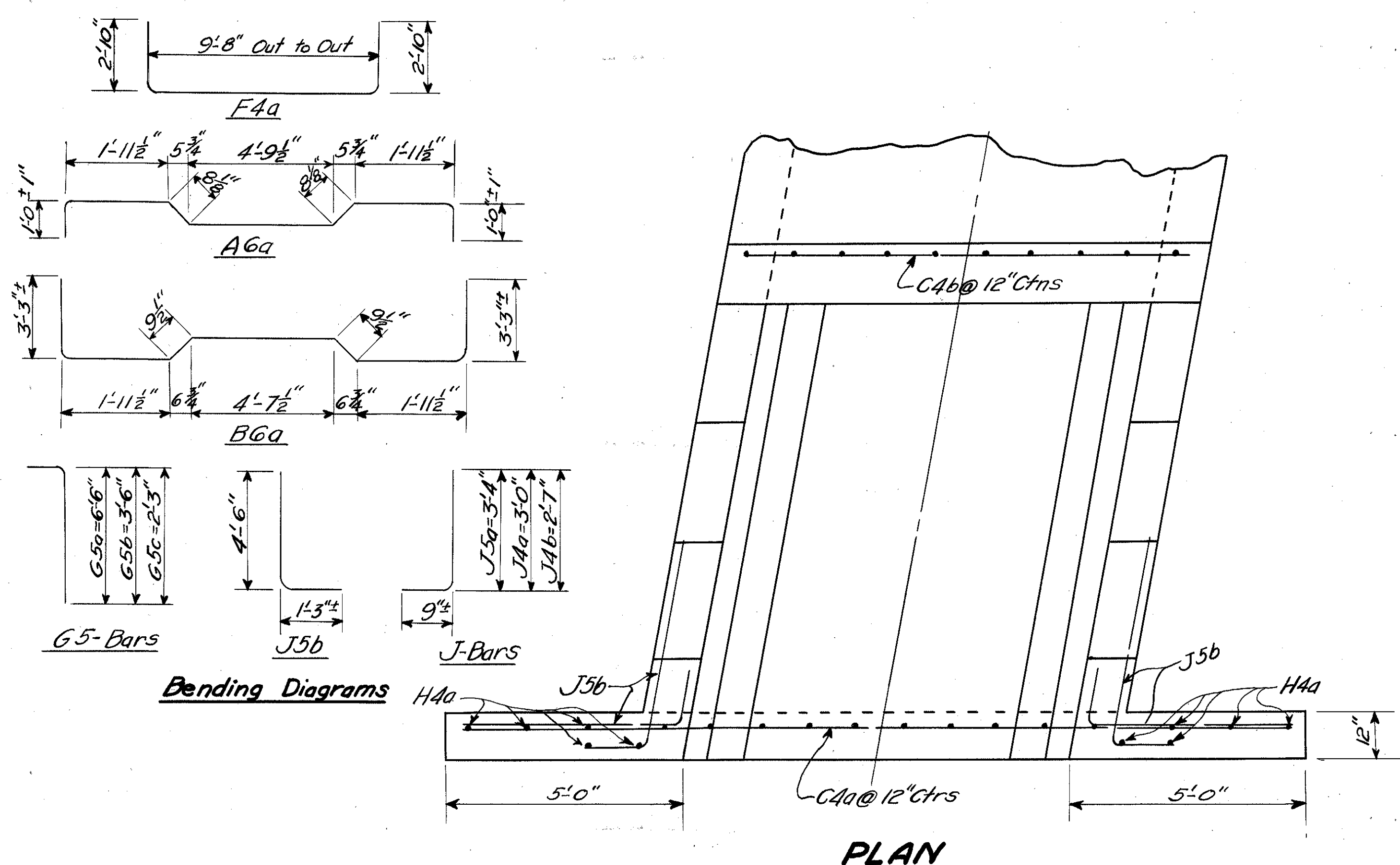
Seeding
End Sq
Width Yds

BROWN COUNTY
BR0-52-13.88

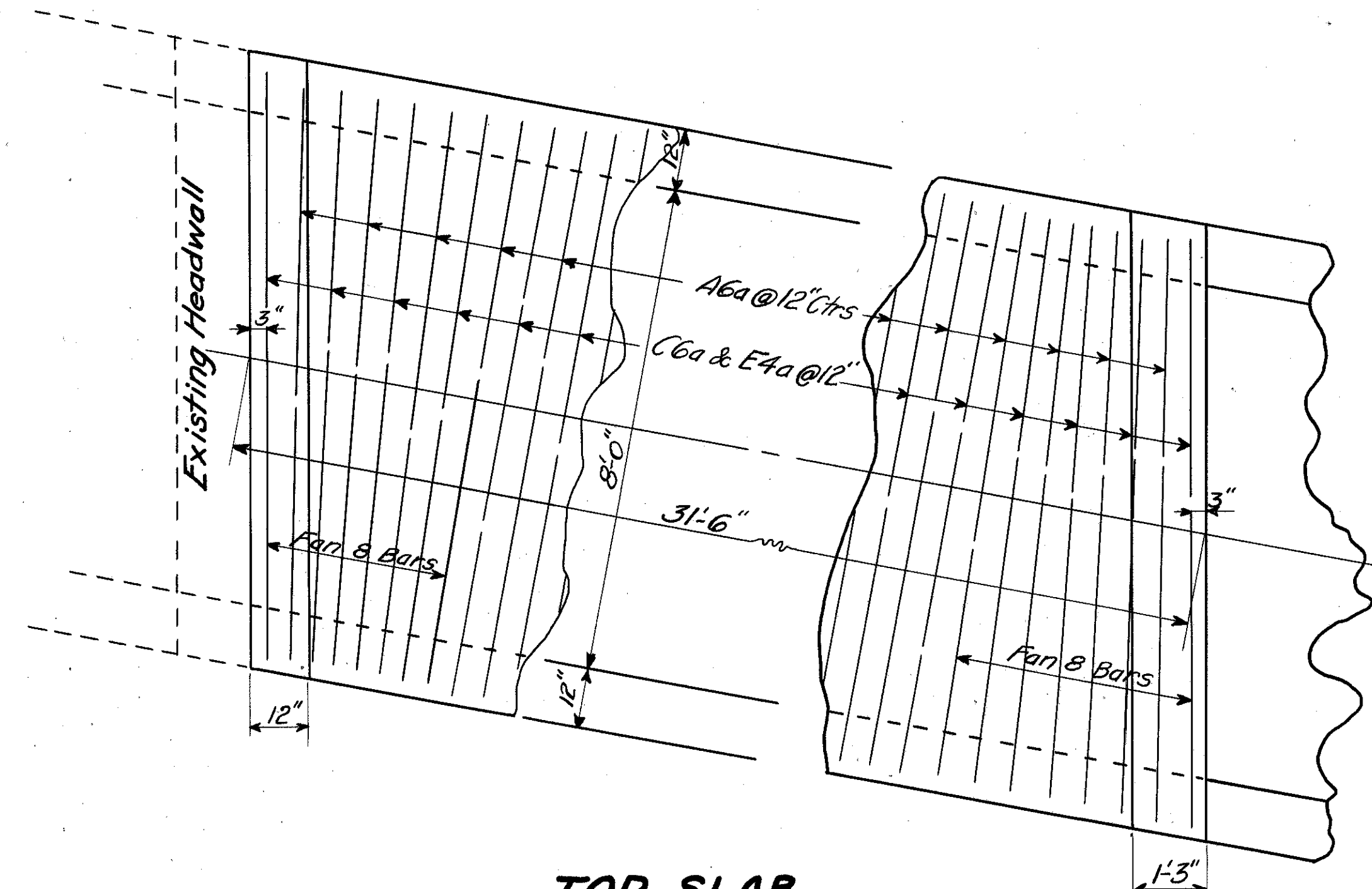
End Area		Volume	
Cut	Fill	Cut	Fill



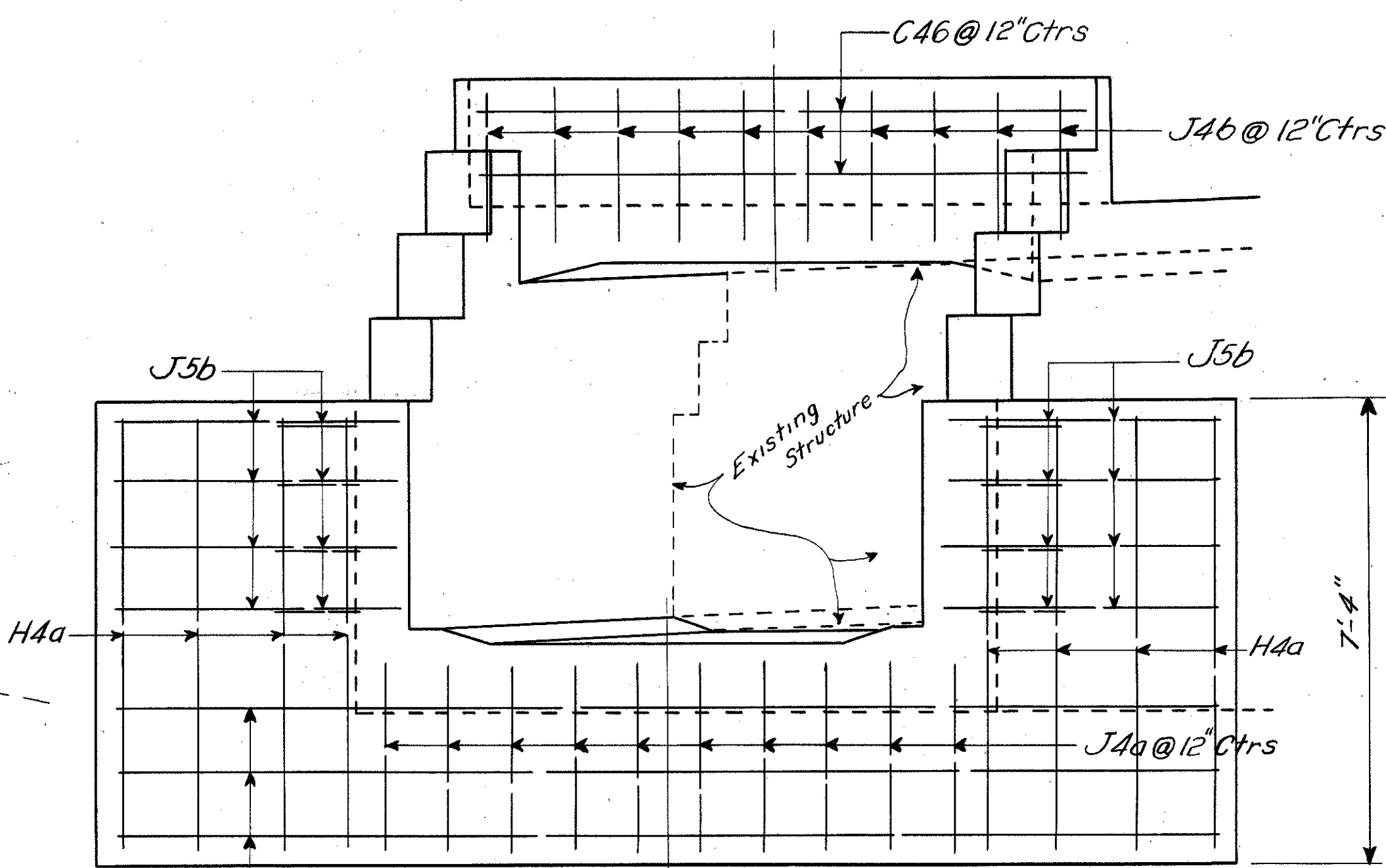
REINFORCING STEEL						
Mark	Size	Shape	Spacg	No.Reqd	Length	Weight
K6a	3/4"	Str	Std	25	30'-3"	1137
K6b	3/4"	Str	Std	13	31'-0"	605
G5a	5/8"	Bent	6"	84	7'-3"	635
G5b	5/8"	Bent	6"	6	4'-3"	27
G5c	5/8"	Bent	6"	10	3'-0"	31
H5a	5/8"	Str	30"	20	6'-3"	130
H5b	5/8"	Str	30"	2	5'-6"	11
H5c	5/8"	Str	30"	2	4'-3"	9
H5d	5/8"	Str	30"	2	2'-3"	5
W5a	5/8"	Str	6"	10	7'-0"	73
W5b	5/8"	Str	6"	10	6'-0"	63
W5c	5/8"	Str	6"	10	4'-9"	50
W5d	5/8"	Str	6"	8	3'-6"	29
J5a	5/8"	Bent	30"	24	4'-1"	102
J5b	5/8"	Bent	12"	16	5'-9"	96
J4a	1/2"	Bent	12"	10	3'-9"	25
J4b	1/2"	Bent	12"	10	3'-4"	22
C4a	1/2"	Str	12"	3	17'-6"	35
C4b	1/2"	Str	12"	2	9'-6"	13
H4a	1/2"	Str	As shown	10	6'-10"	46
A6a	3/4"	Truss	12"	31	11'-9"	547
C6a	3/4"	Str	12"	32	9'-6"	457
E4a	1/2"	Str	12"	32	9'-6"	203
B6a	3/4"	Truss	12"	30	16'-3"	733
D7a	1/2"	Str	12"	31	9'-6"	602
F4a	1/2"	Bent	12"	31	15'-1"	302
Dowels	3/4"	Str	As shown	30	2'-0"	90
Replacement for test Bars						
R7a	7/8"	Str		2	5'-0"	20
R6a	3/4"	Str		2	4'-6"	14
R5a	5/8"	Str		2	4'-1"	9
R4a	1/2"	Str		2	3'-8"	5
Total Weight of Steel (Lbs)						6126



FLOOR SLAB
Top Slab removed
Scale 1/2" = 1'-0"



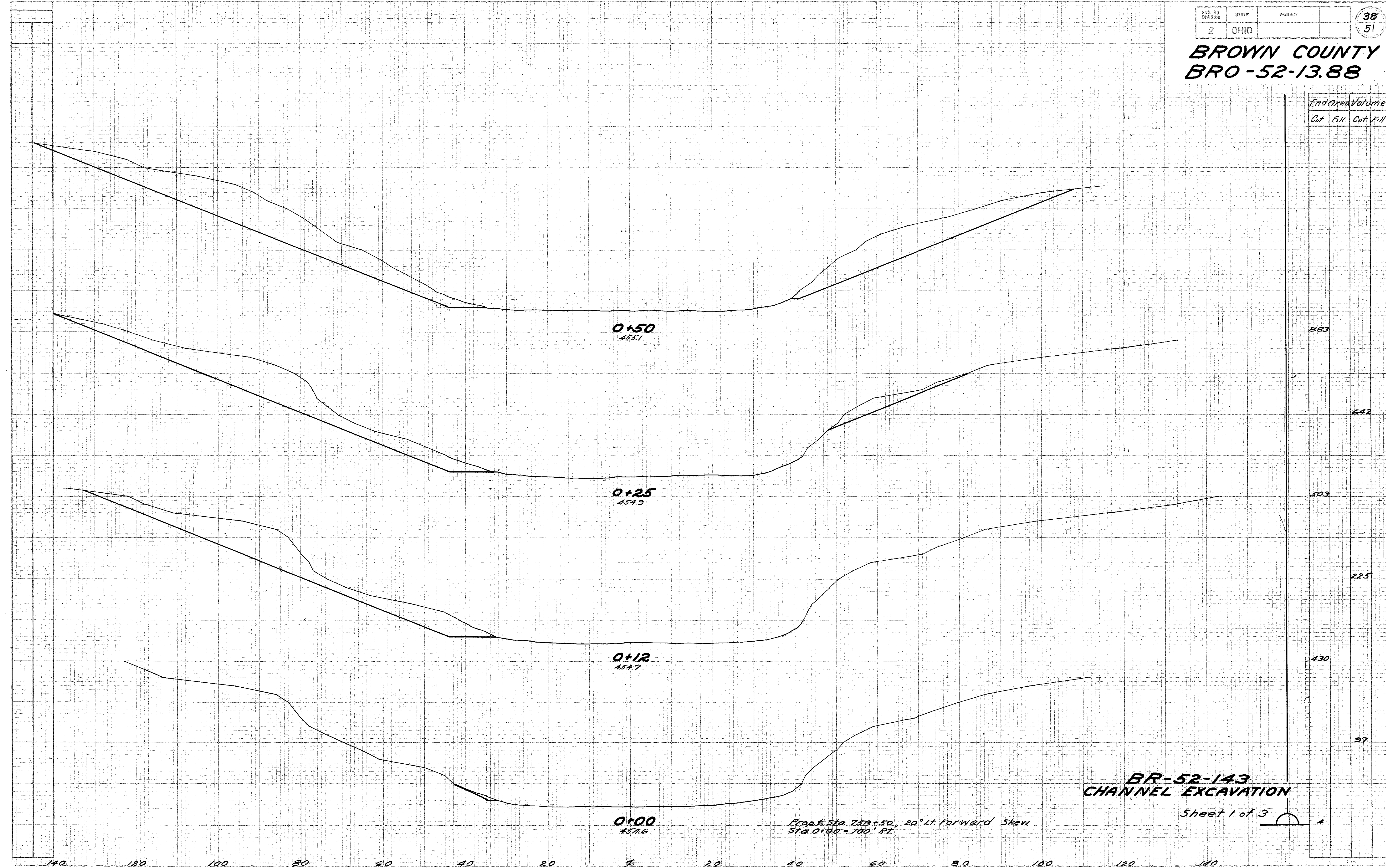
TOP SLAB
Scale 1/2" = 1'-0"



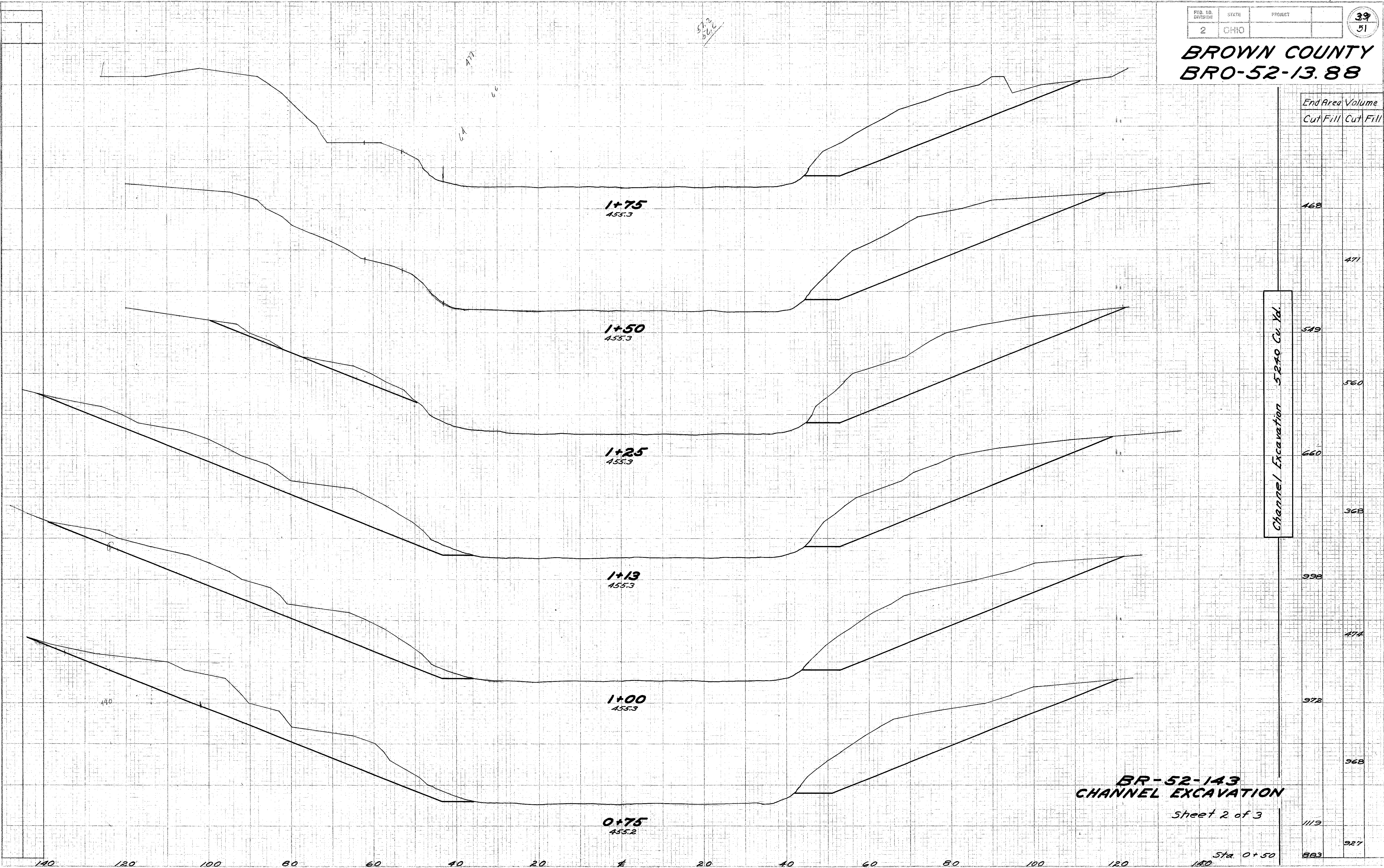
ELEVATION
HEADWALL and TURNBACK WINGS
Scale 1/2" = 1'-0"

BROWN COUNTY
BR0-52-13.88

End Area Volume			
Cut	Fill	Cut	Fill



BROWN COUNTY
BR-52-13.88



End Area	Volume
Cut	Fill

1468	
------	--

471	
-----	--

549	
-----	--

560	
-----	--

660	
-----	--

368	
-----	--

998	
-----	--

474	
-----	--

972	
-----	--

968	
-----	--

BR-52-143
CHANNEL EXCAVATION

Sheet 2 of 3

1119	
------	--

927	
-----	--

Sta. 0+50

883	
-----	--

BROWN COUNTY
BR-0-52-13.88

End Area		Volume	
Cut	Fill	Cut	Fill

Sta. 2+82

2+75
455.3

2+50
455.3

2+25
455.3

2+00
455.2

1+87
455.2

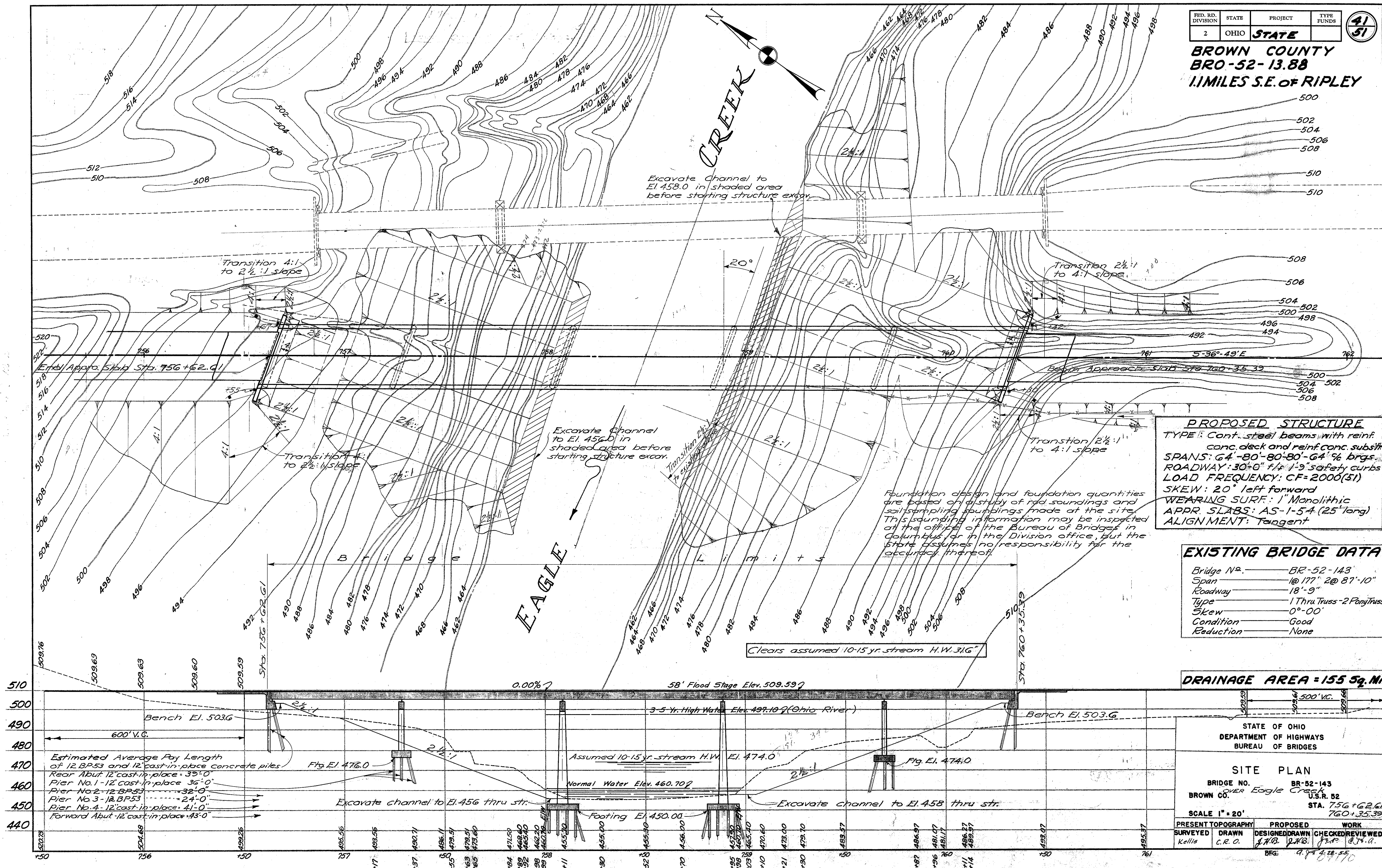
BR-52-143
CHANNEL EXCAVATION

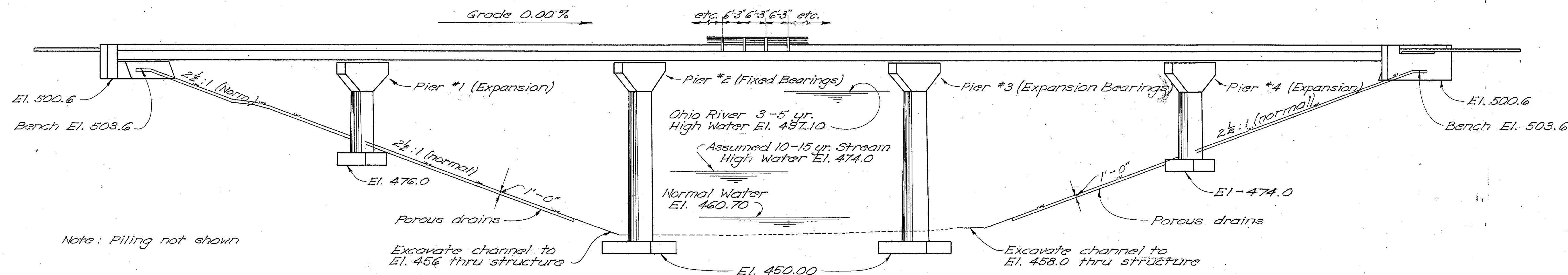
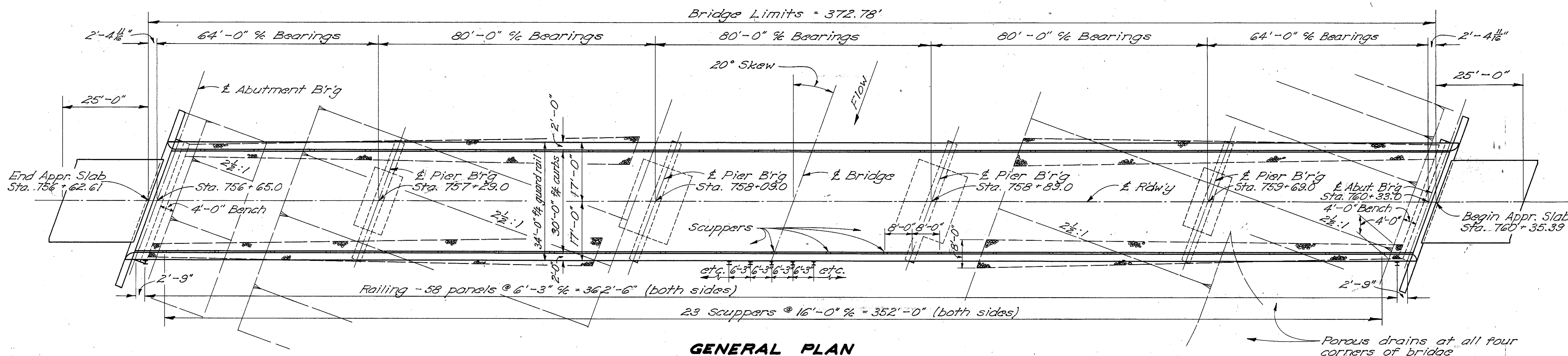
Sheet 3 of 3

Sta. 1+75

0			
64		8	
89		71	
148		110	
58		95	
		69	
230		155	
468			

BROWN COUNTY
BR-52-13.88
1.1 MILES S.E. OF RIPLEY





ELEVATION

GENERAL NOTES

PILES for Piers 2 and 3 shall be driven with a hammer of not less than 15,000' energy per blow, to firm contact with rock which shall be considered as attained when the capacity according to the formula in Sec. 5-18.05 is at least 60 tons per pile and if the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report. (The design load is 40 tons per pile for these pier piles.) The piles for the abutments and for Piers 1 and 4 shall be driven with a hammer of not less than 7,000' energy, to a capacity of 30 tons.

WELDING of structural steel shall be Class "A" except as otherwise shown.

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

POROUS DRAINS shall extend from face of abutment to Elev. 461.0 at all four corners of the bridge. The drains shall be 8 ft. wide at the low end, tapering to 4 ft. wide at face of abutments, and one foot thick.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated October 1, 1951, together with revisions thereof, dated April 1, 1954 and February 1, 1955.

GRAVEL, if used as the coarse aggregate, shall be according to Sec. M-3.93 instead of M-3.91 for Class "C" concrete in the superstructure. Gravel meeting the requirements of Sec. M-3.93 also may be used for other concrete in this structure.

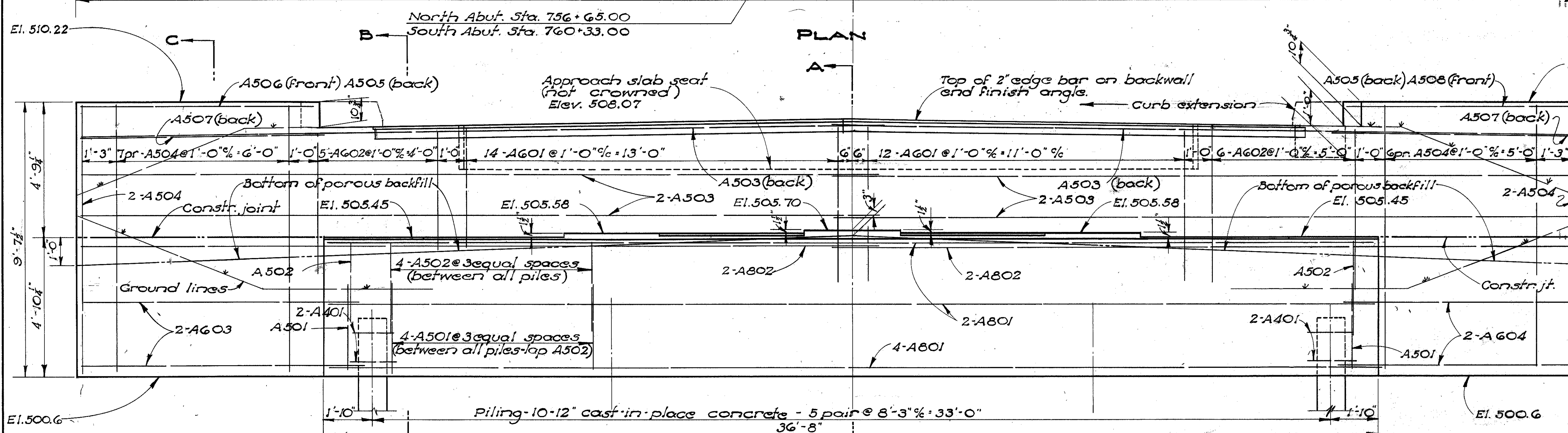
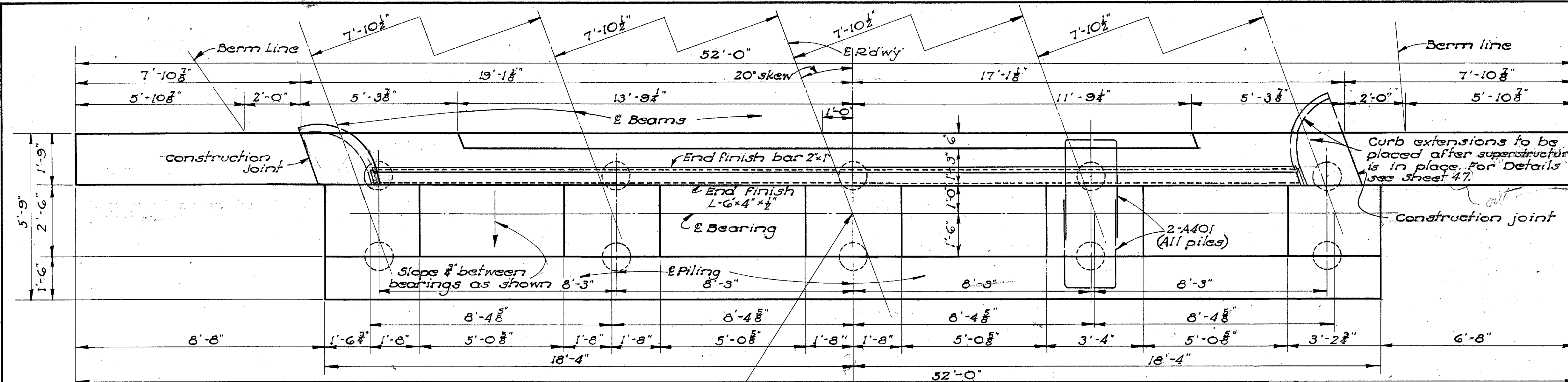
WELDED STEEL: The steel for the superstructure beams shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4(a) of the Construction and Material Specifications) or to A-373.

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Piers 1&4	Piers 2&3	Abuts.	Superstr.	Gen.	As Built
E-2	1ump	sum	Cofferdams, cribs and sheeting					1ump	
E-2	405	cu. yd.	Unclassified excavation	126	198	81			
E-3	5240	cu. yd.	Channel excavation					5240	784
S-1	388	cu. yd.	Class "C" concrete, superstructure				388		
S-1	88	cu. yd.	Class "C" concrete, pier caps	44	44				
S-1	168	cu. yd.	Class "C" concrete, pier shafts	47	121				
S-1	124	cu. yd.	Class "E" concrete, pier footings	44	80				
S-1	105	cu. yd.	Class "E" concrete, abutments			105			
S-4	153,266	lb.	Reinforcing steel	13,391	22,933	6,252	110,670	120	111,340
S-7	469,000	lb.	Structural steel				469,000		467,189
S-8	469,000	lb.	Field painting of structural steel				469,000		467,189
S-9	8	sq. ft.	1/2" preformed expansion joint filler	4	4				
S-9	1ump	sum	Bearing devices					1ump	
S-14	745.56	lin. ft.	Railing (Type I-15.13 with top handrail and galvanized steel posts)				745.56		
S-16	1ump	sum	First test pile, steel or concrete					1ump	
S-18	1260	lin. ft.	Steel piling, 12 BP53		1260				115.7
S-18	2230	lin. ft.	12" cast-in-place reinforced concrete piling	1400		830			1780
S-29	20	cu. yd.	Porous backfill			20			14.6
S-29	120	cu. yd.	Porous drains on embankment slopes					120	114.7

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES			
GENERAL PLAN & ELEVATION, NOTES & ESTIMATED QUANTITIES			
BRIDGE No. BR-52-143 over EAGLE CREEK			
Brown County		Sta. 756+62.61 760+35.39	
DESIGNED JEM	DRAWN JEM	TRACED RG	CHECKED RG
DATE 4-28-55		REVISED 1-2-58 JVP	

BR0-52-13.88

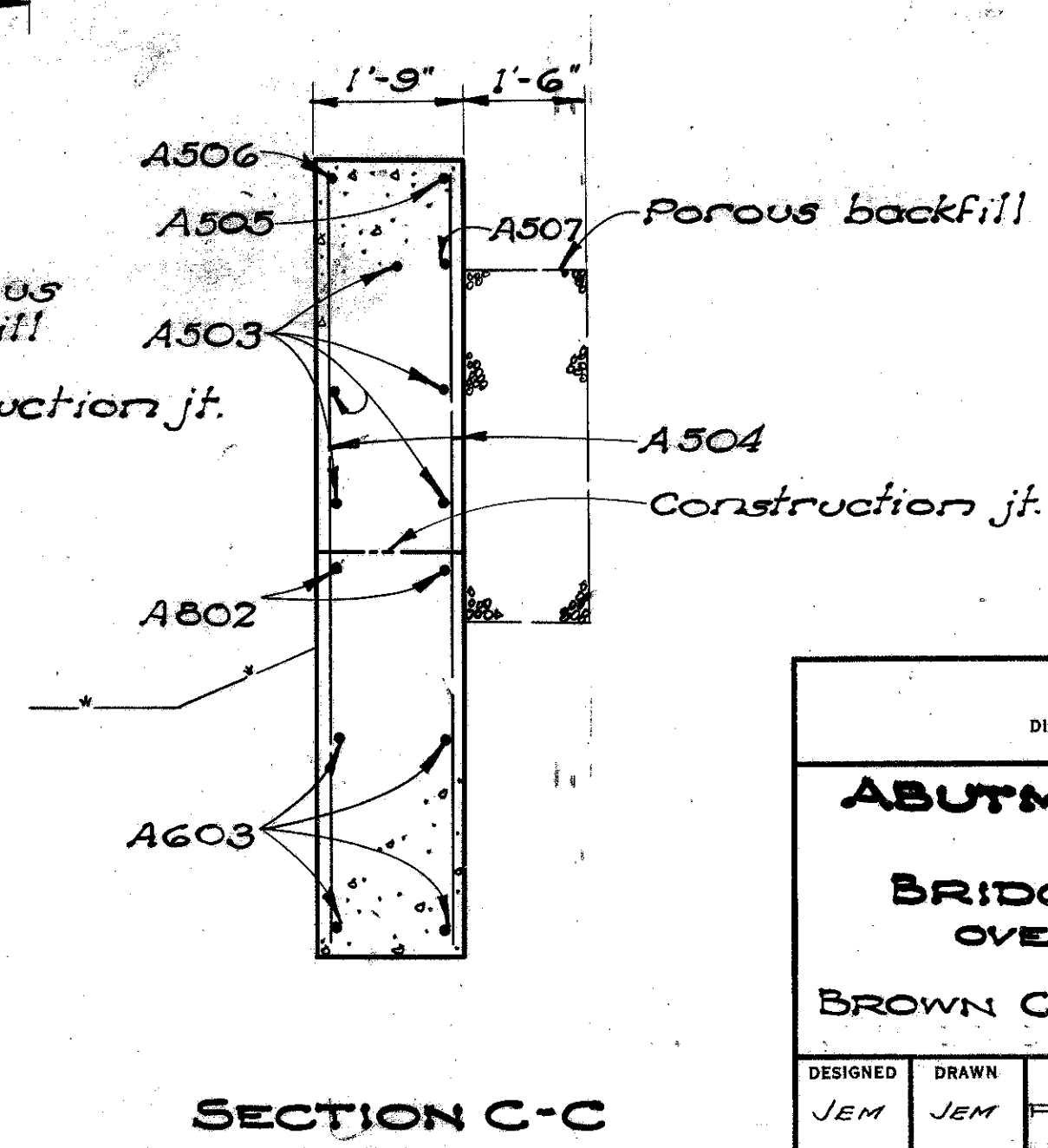
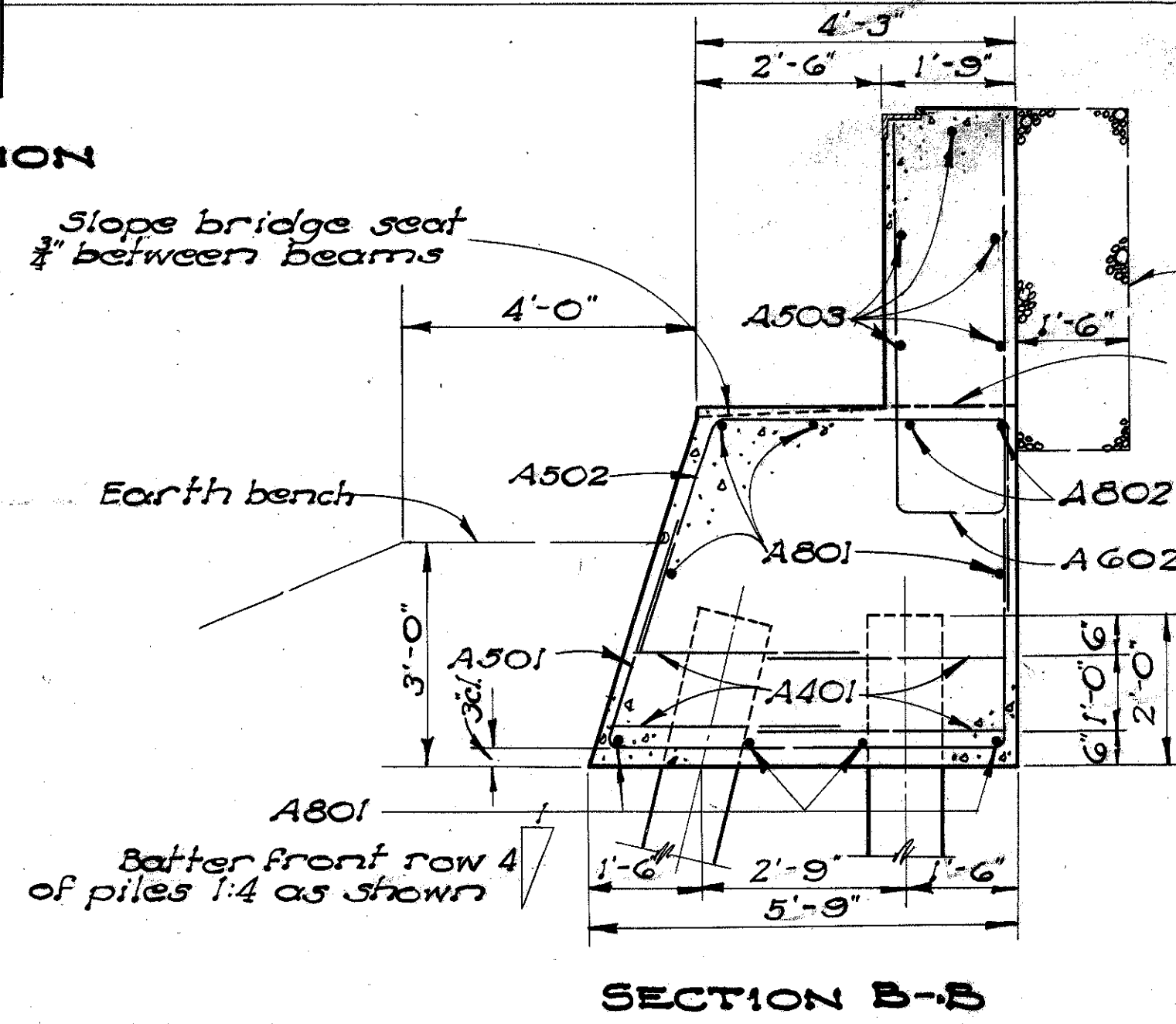
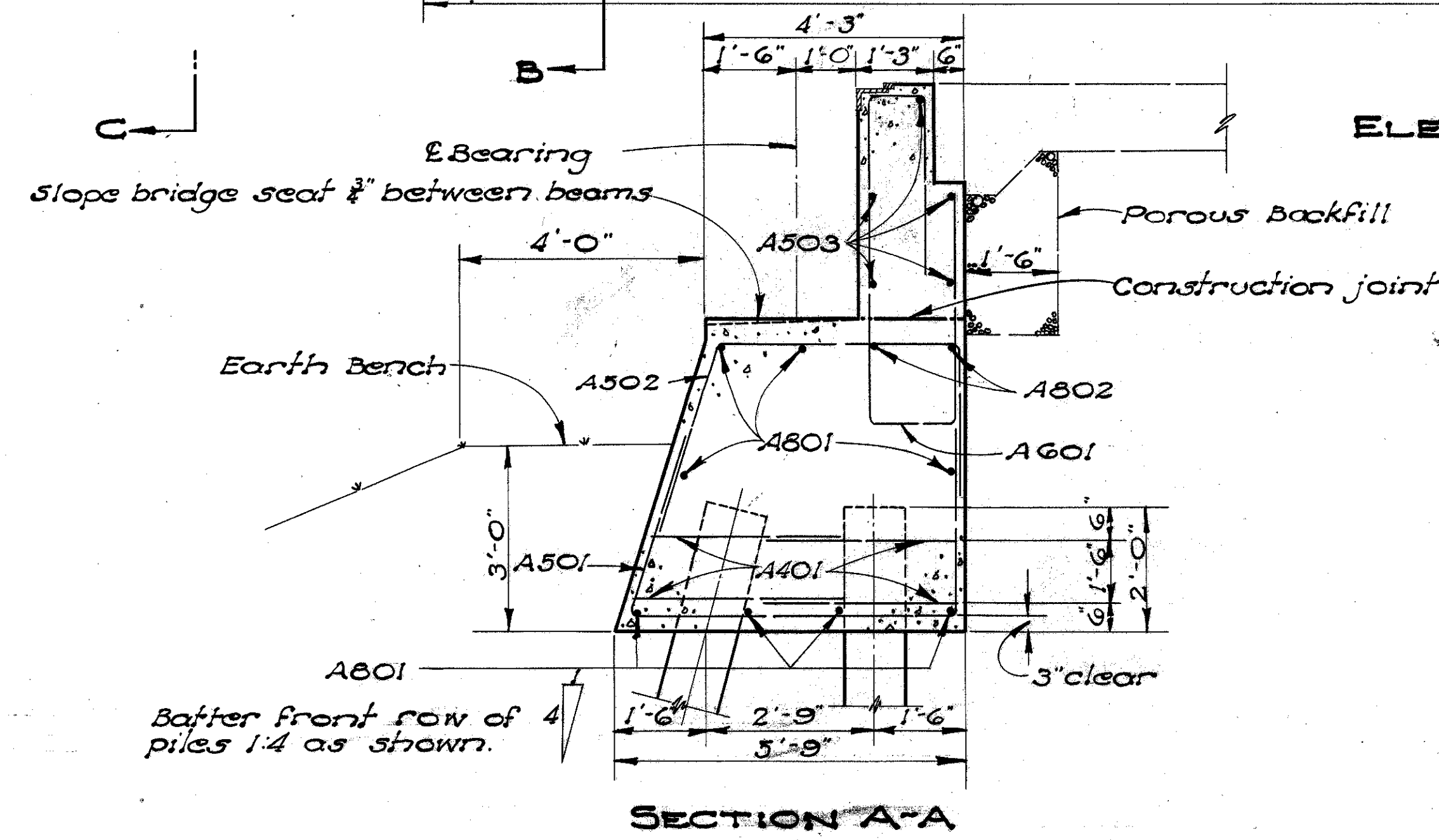


NOTES

CONCRETE shall be Class "E" and payment will be made on this basis, but Class "C" concrete may be used for any or all parts of the abutments.

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the footings, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

CLEARANCE from the face of the concrete to the reinforcing steel shall be 2" unless otherwise shown.



STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES							
ABUTMENT DETAILS							
BRIDGE No. BR-52-143 OVER EAGLE CREEK							
BROWN COUNTY STA. 756+62.61 760+33.39							
DESIGNED JEM	DRAWN JEM	TRACED R.G.	CHECKED R.G.	REVIEWED BFG	DATE 4-28-55	REVISED	

BR0-52-13.88

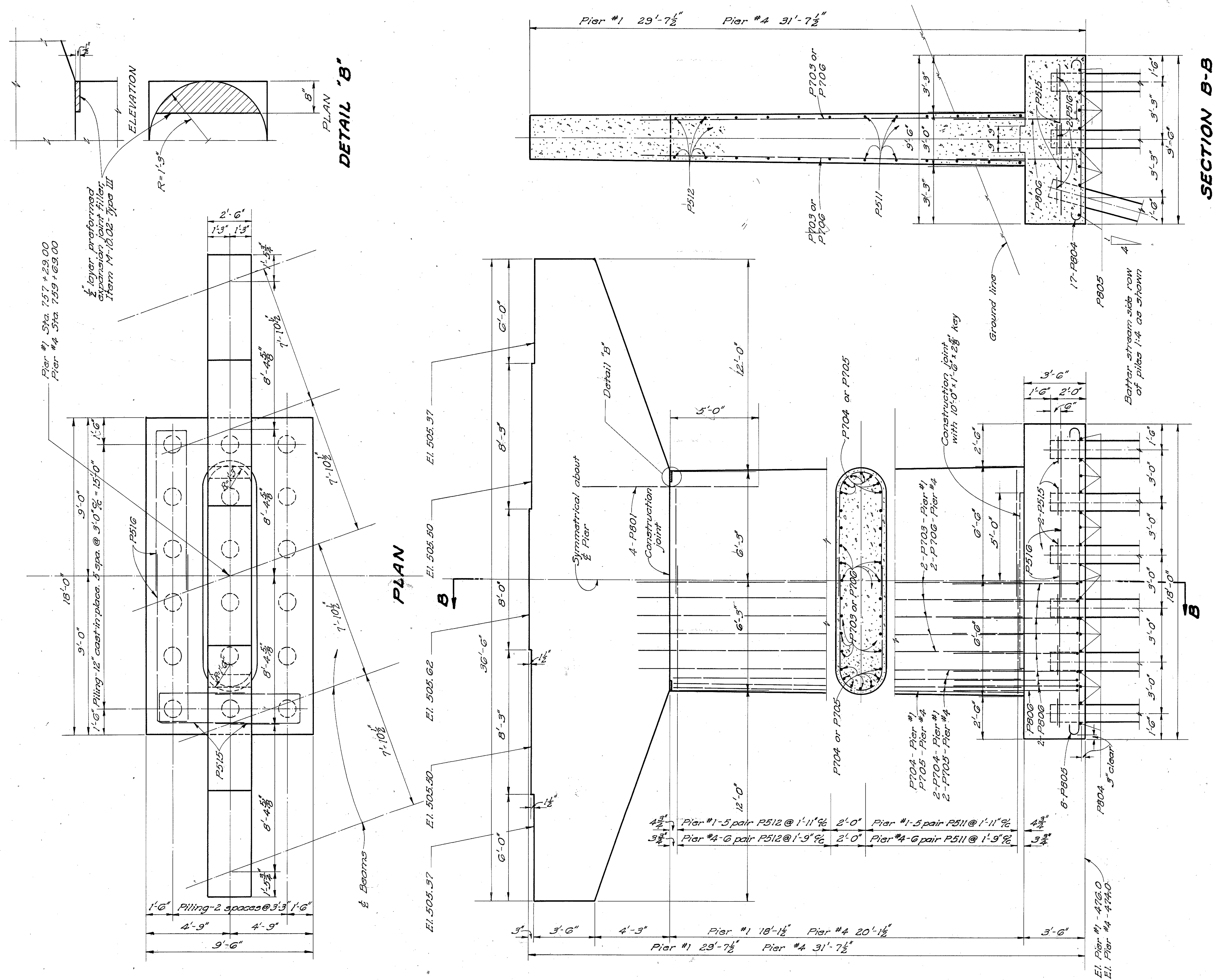
NOTES

CONCRETE shall be Class "E" for footings and Class "C" for remainder of pier. Payment will be made on this basis but Class "C" concrete may be used for the footing

For additional notes, details and reinforcing see Sheet 44 Details of Piers #2 & #3.

CLEARANCE from the face of the concrete to the reinforcing steel shall be 2" unless otherwise shown.

CHANNEL EXCAVATION to be completed before pier cofferdams are started.

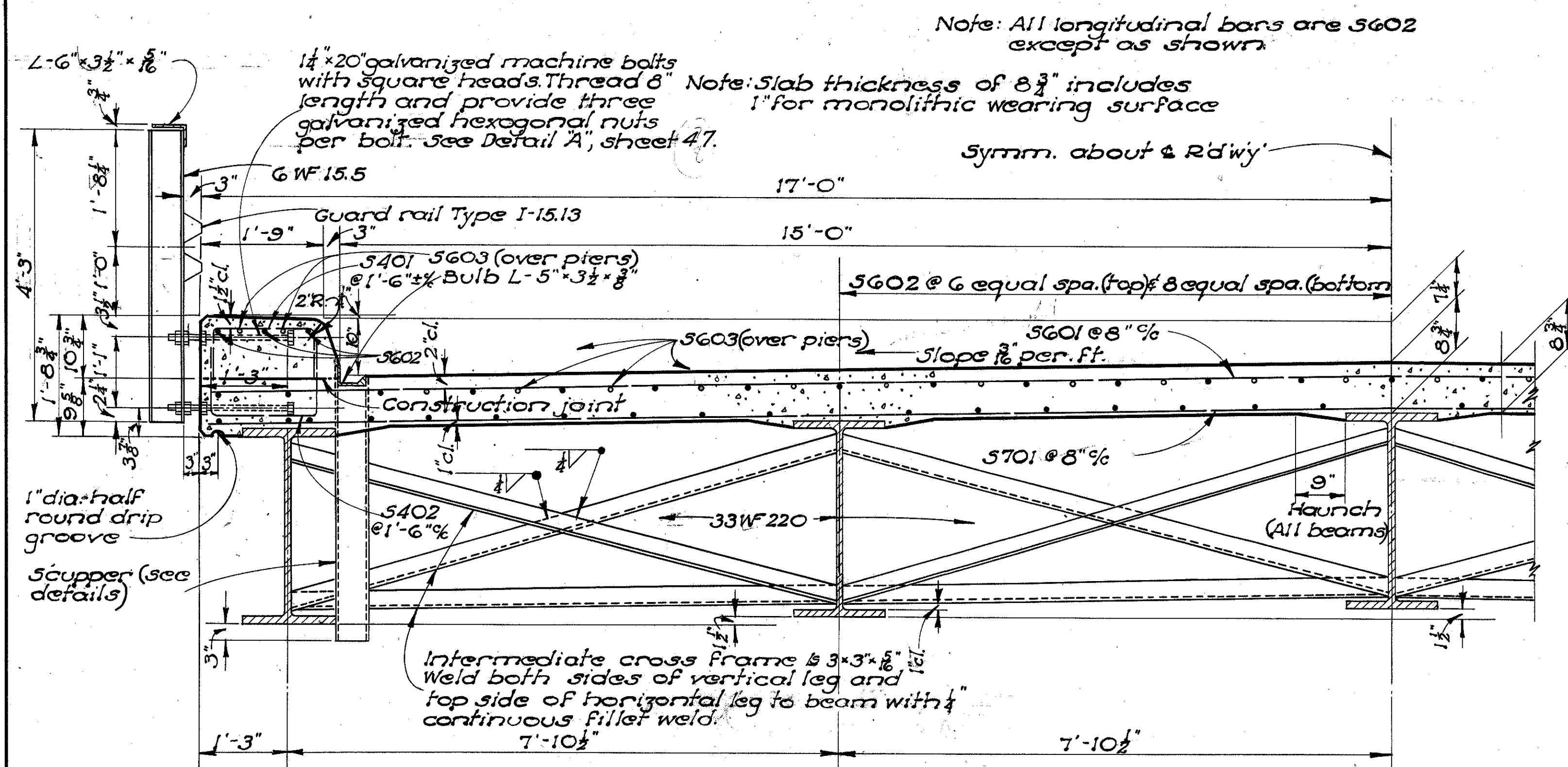


SECTION B-B

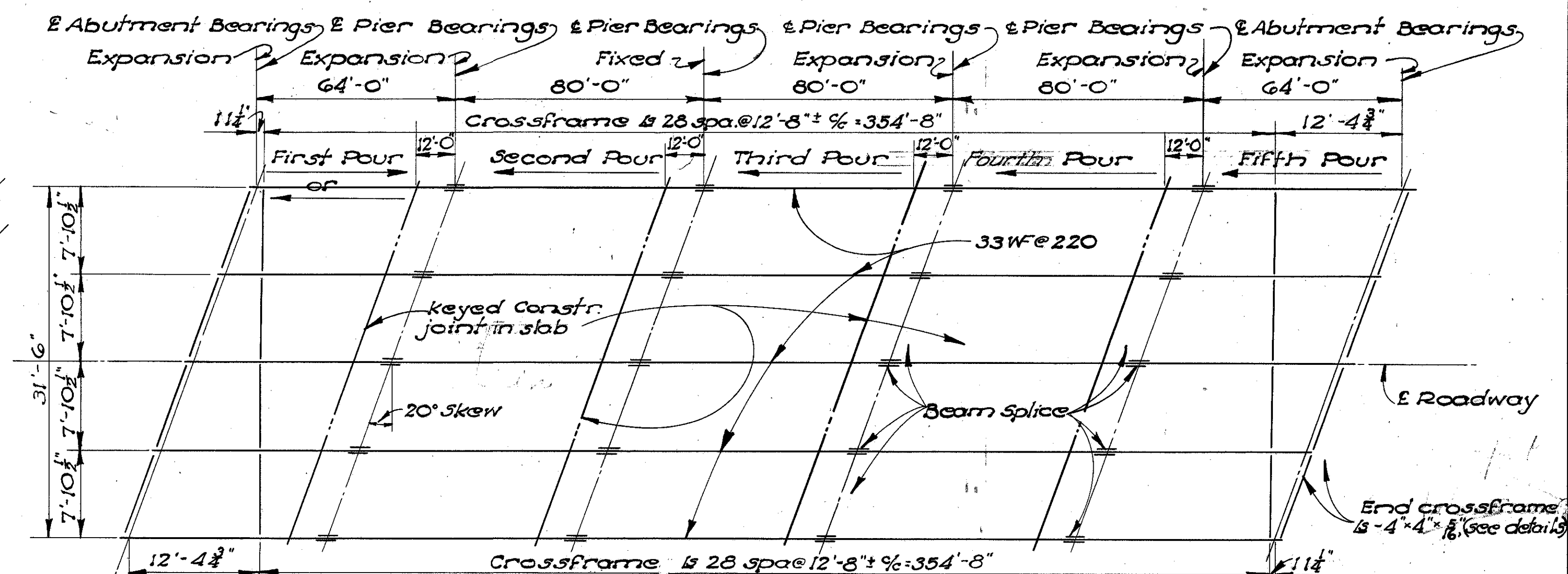
ELEVATION

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES					
DETAILS OF PIERS #1 & #4					
BRIDGE NO. BR-52-143					
OVER EAGLE CREEK					
BROWN COUNTY			STA. 756 + 62.61 STA. 760 + 35.39		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
JEM	JEM	JDJ	R.G.	BFG	4-20-55

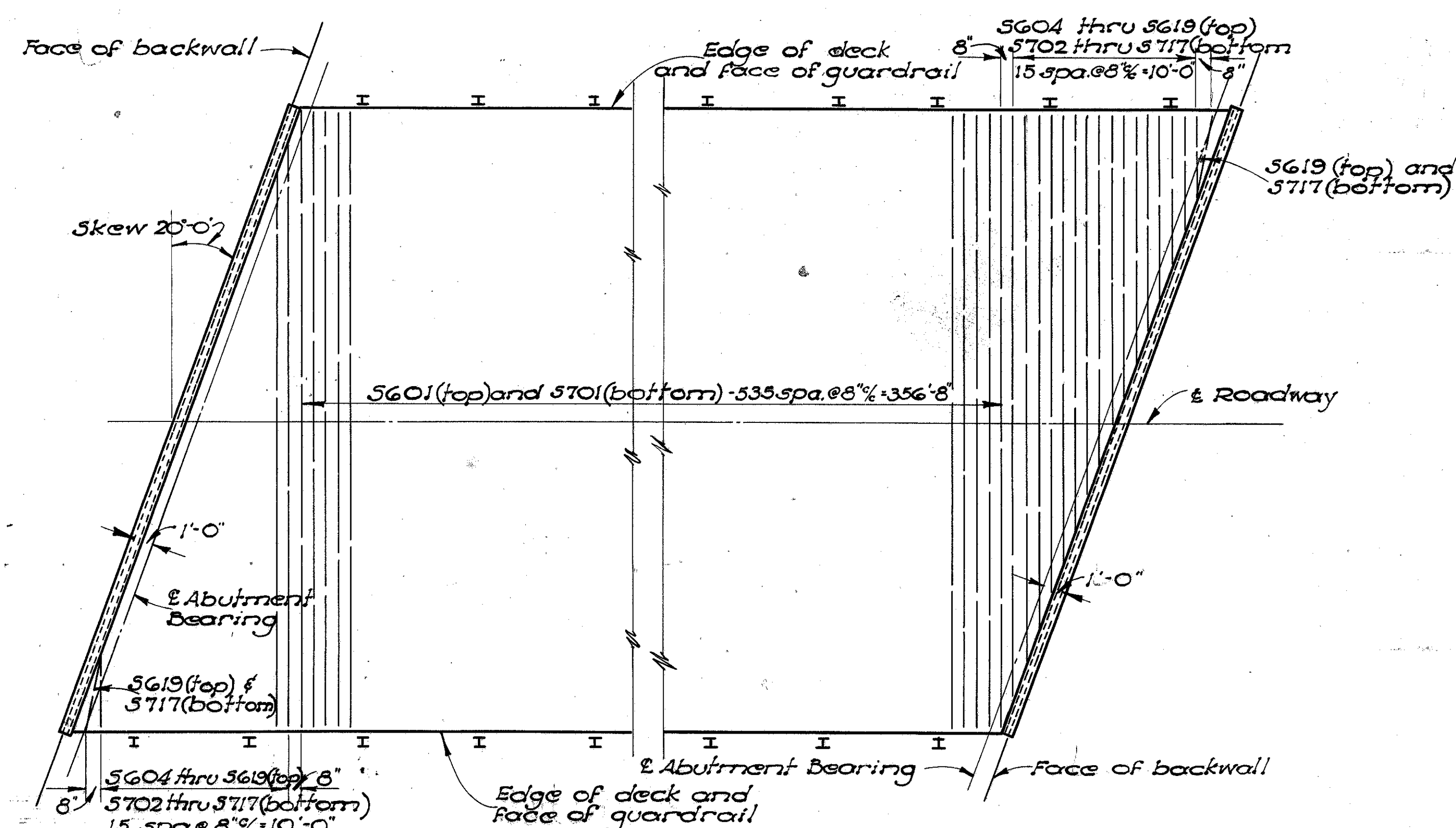
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HALF TYPICAL ROADWAY SECTION



STEEL FRAMING PLAN AND CONCRETE POURING SEQUENCE



PLAN OF SUPERSTRUCTURE REINFORCING

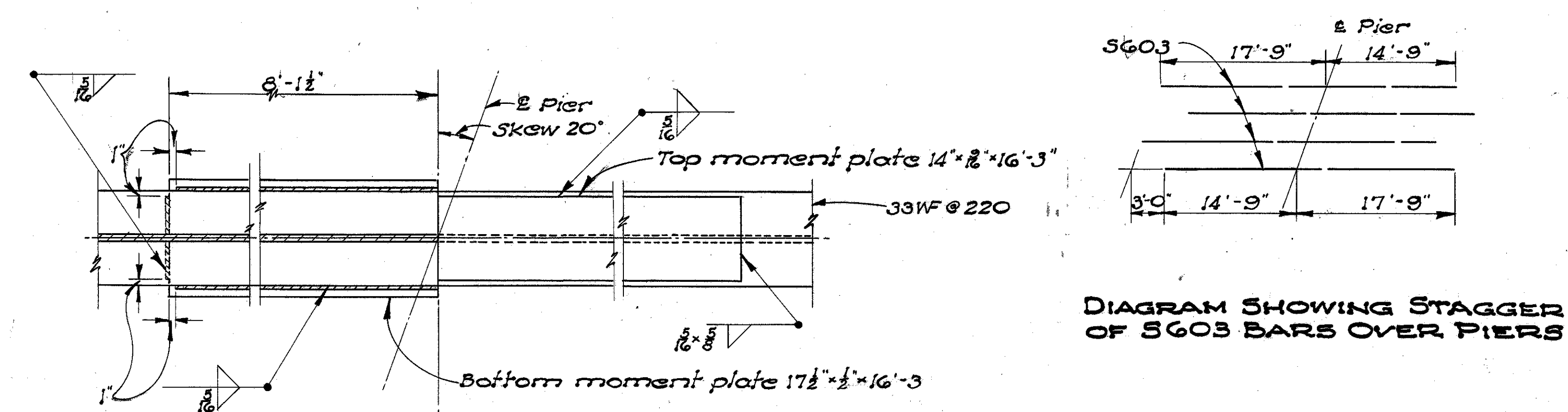
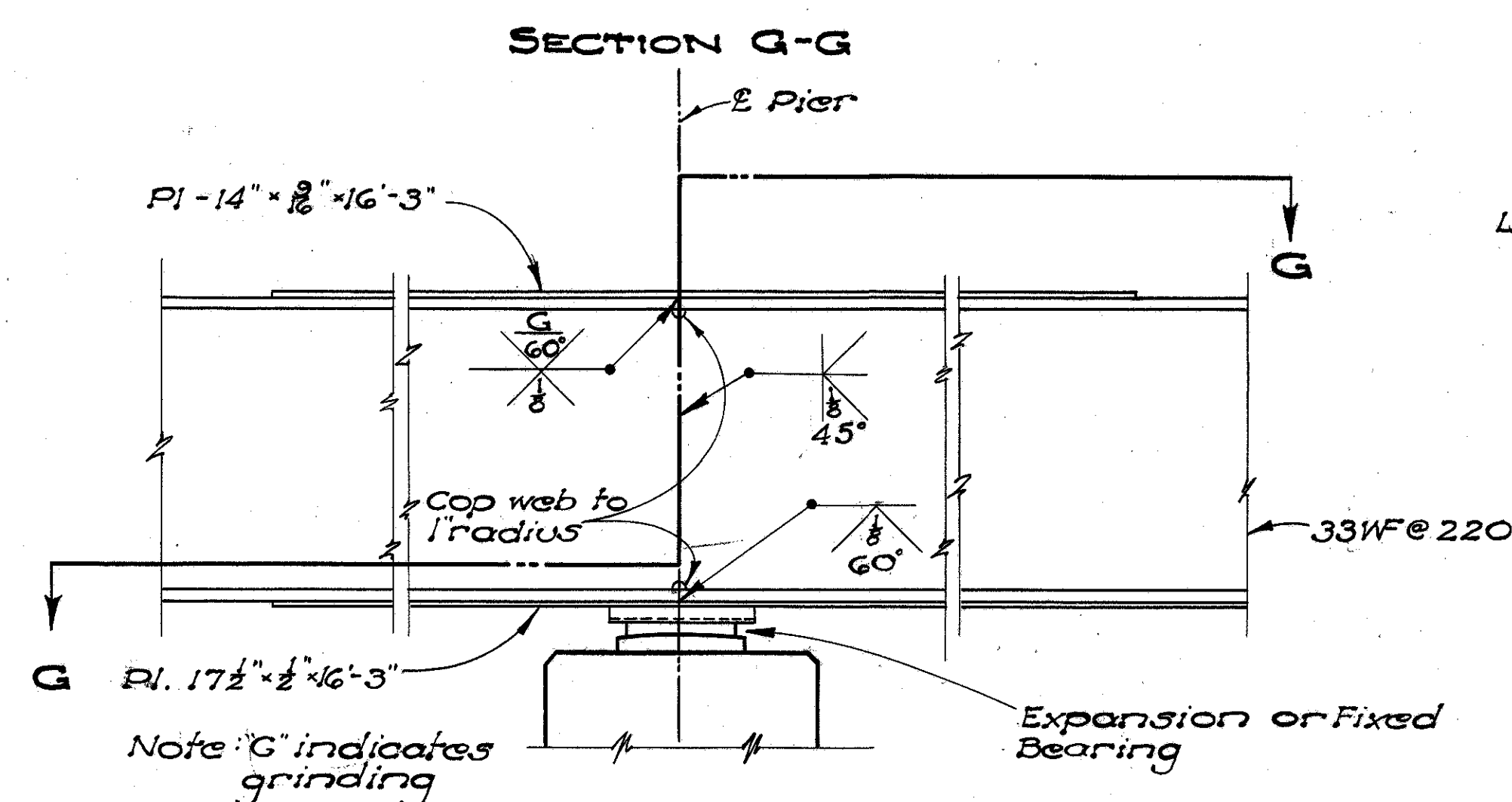
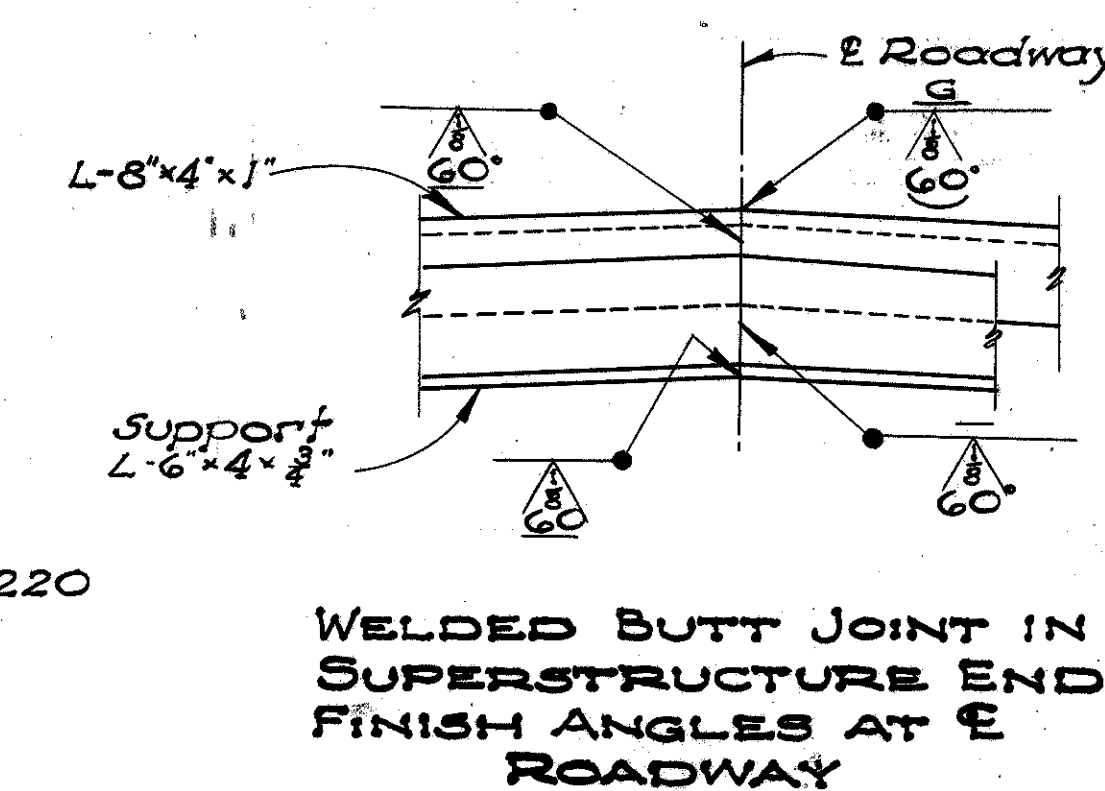


DIAGRAM SHOWING STAGGER
OF 5603 BARS OVER PIERS

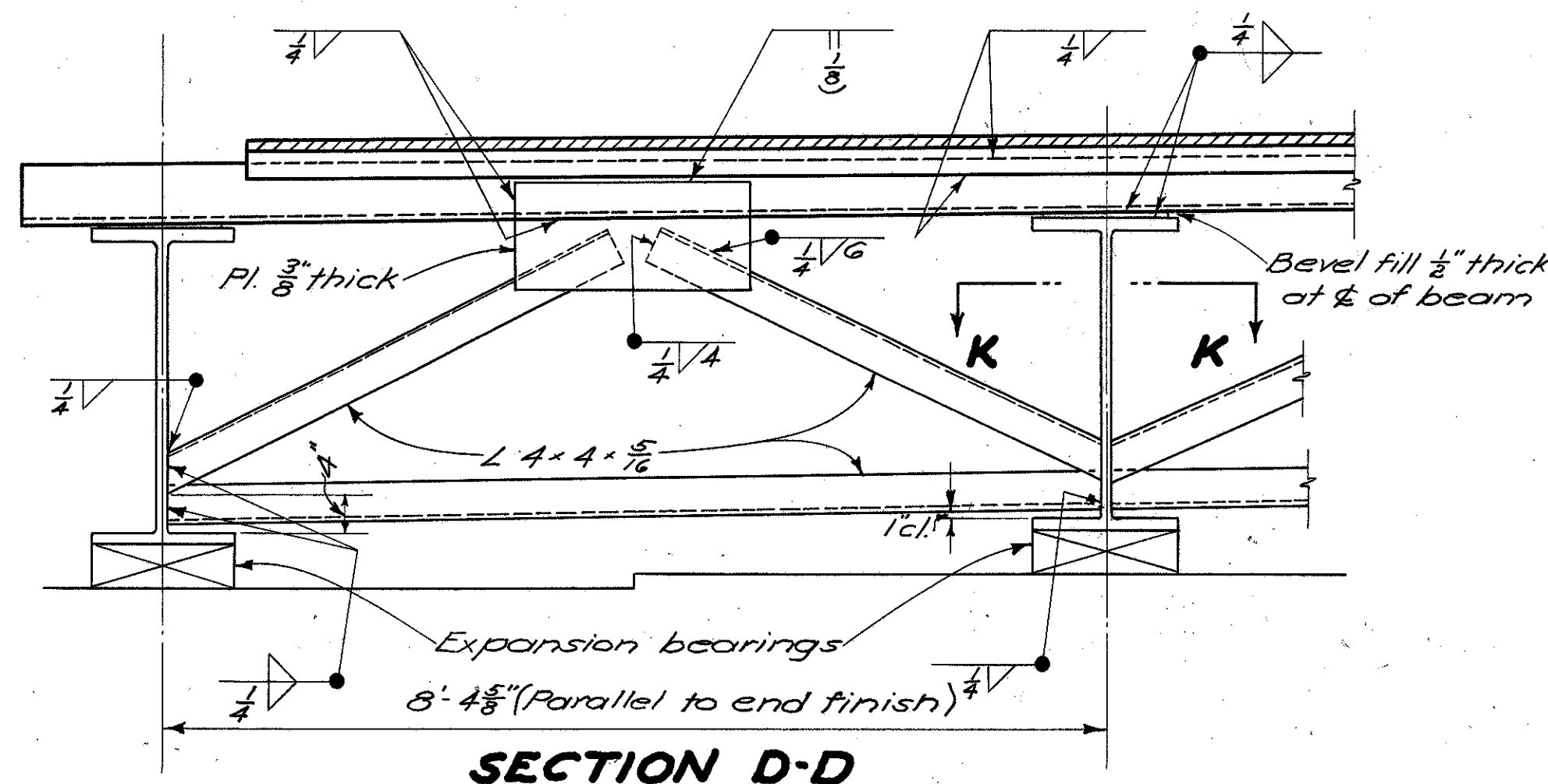


BEAM SPLICE DETAILS



WELDED BUTT JOINT IN
SUPERSTRUCTURE END
FINISH ANGLES AT E
ROADWAY

Note: For superstructure notes
see sheet 47.

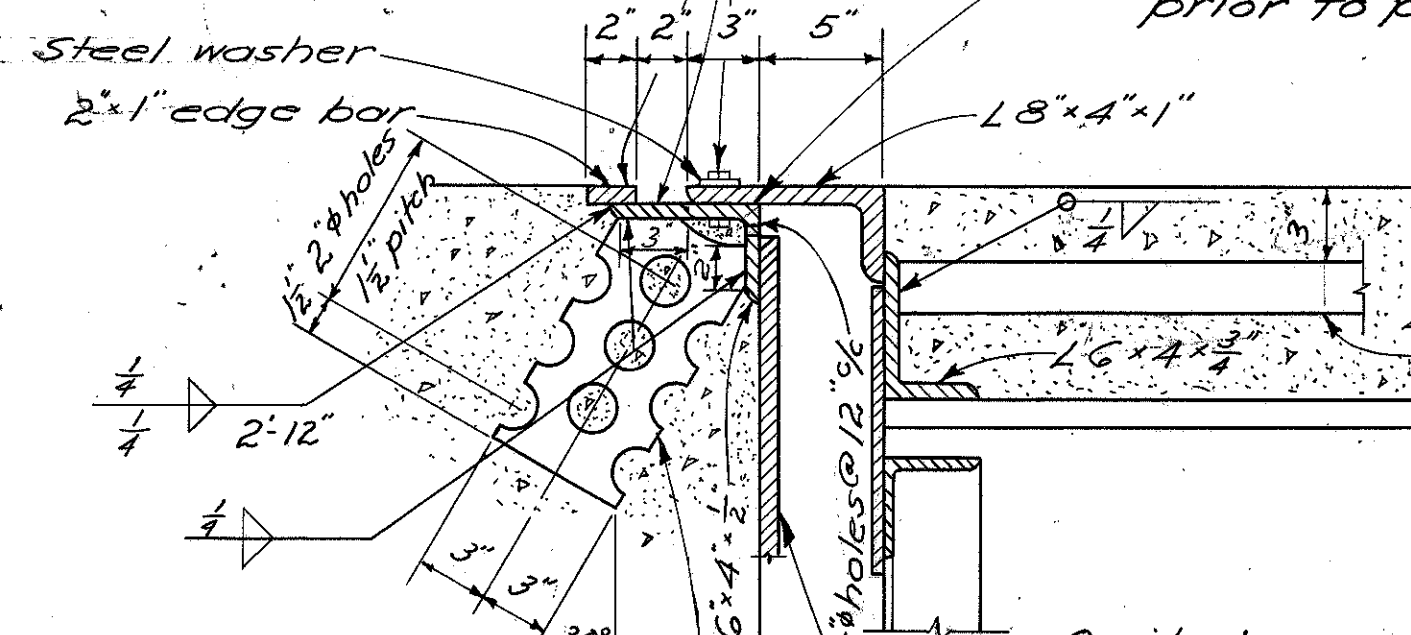


SECTION D-D

Provide a joint in the edge bar and in the angle on the centerline of the roadway. Additional joints may be provided in them at a minimum spacing of 6'-0". (Joints shall not be welded.)

5/8"x2" bolts at not more than 2'-0", with nuts tack-welded to under side of lower angle. 1" holes in upper angle. Center 5/8" bolts in 1" holes. Apply flake graphite between washers and angle. Turn bolt tight and release one-half turn. Remove bolts as soon as concrete has been reasonably set, preferably within two hours, to avoid effect of temperature expansion or contraction of superstructure. Fill holes with bituminous material.

This contact surface shall not be painted and shall be lubricated with flake graphite prior to placing of backwall concrete.

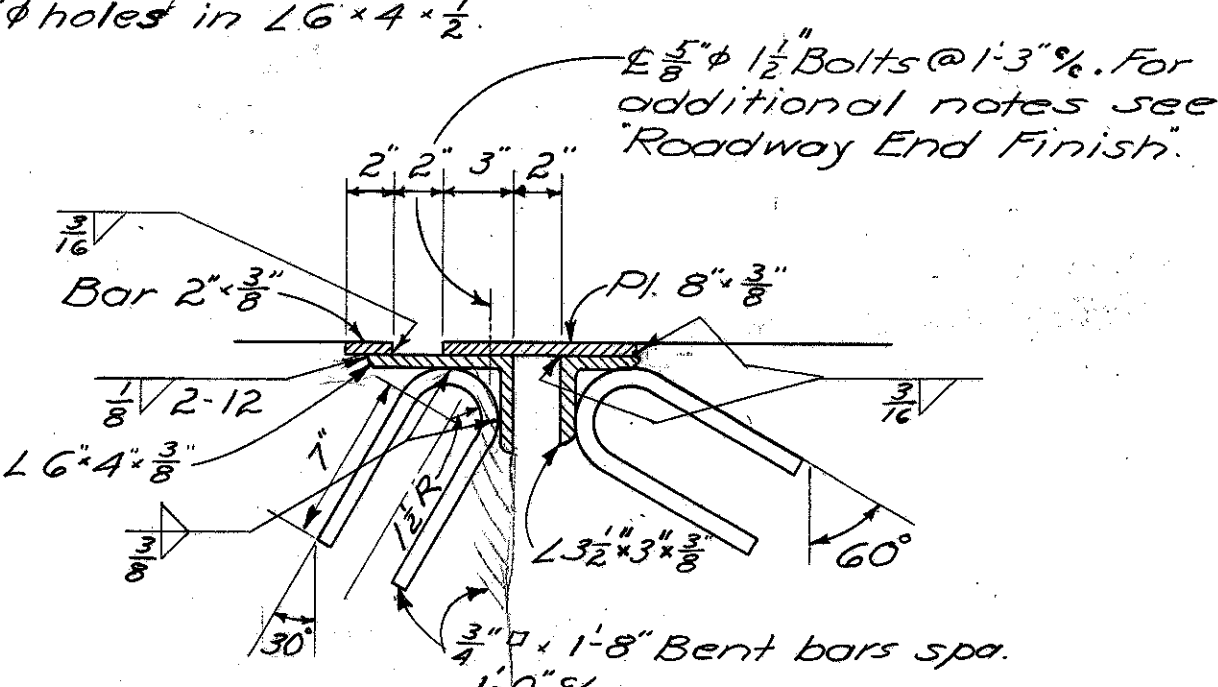


ROADWAY END FINISH

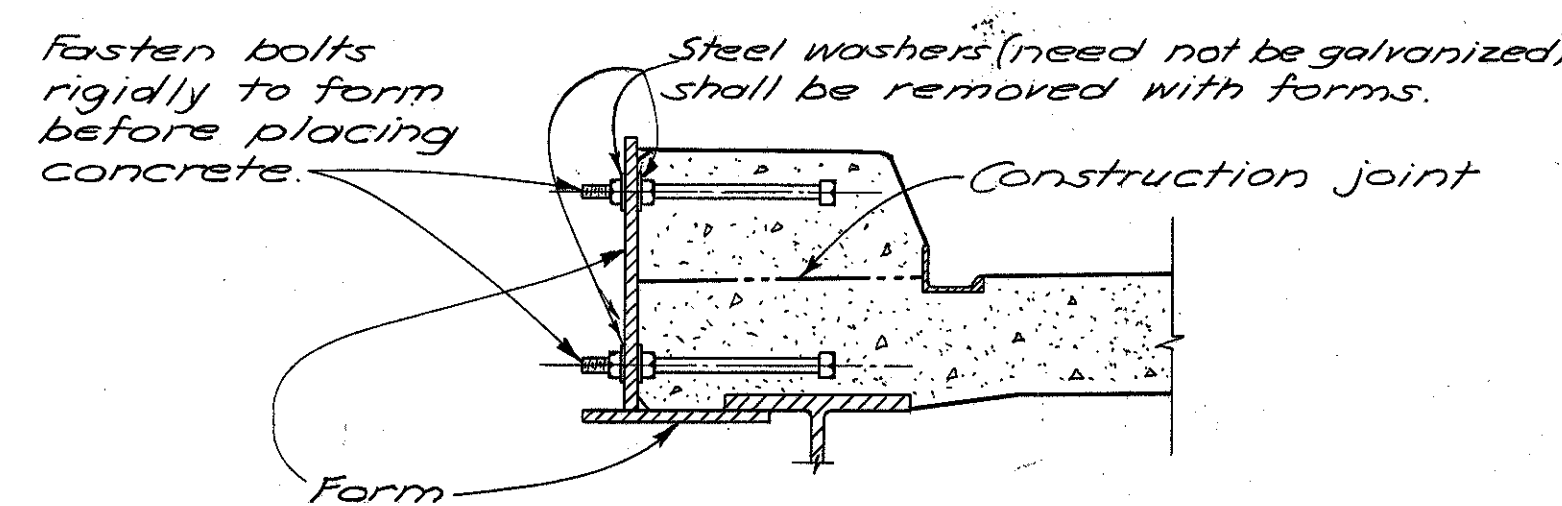
6"x1/2"x12" plates, spaced at approximately 15", except near joints in the angle, where the plates shall be placed within 6" of each side of the joint. The holes may be burned in the plate.

Omit shop coat on all portions of end finish. Portions in contact with steel or with concrete shall not be painted. All other portions shall be cleaned and given the shop coat in the field as well as the two field coats.

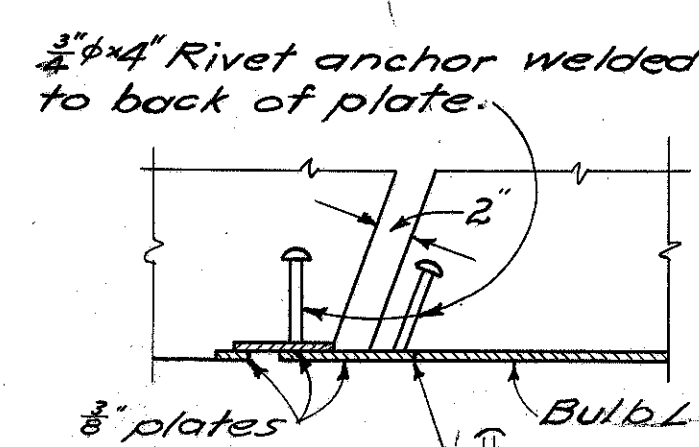
Top of backwall form shall be below 1/2" holes in LG 4x1/2.



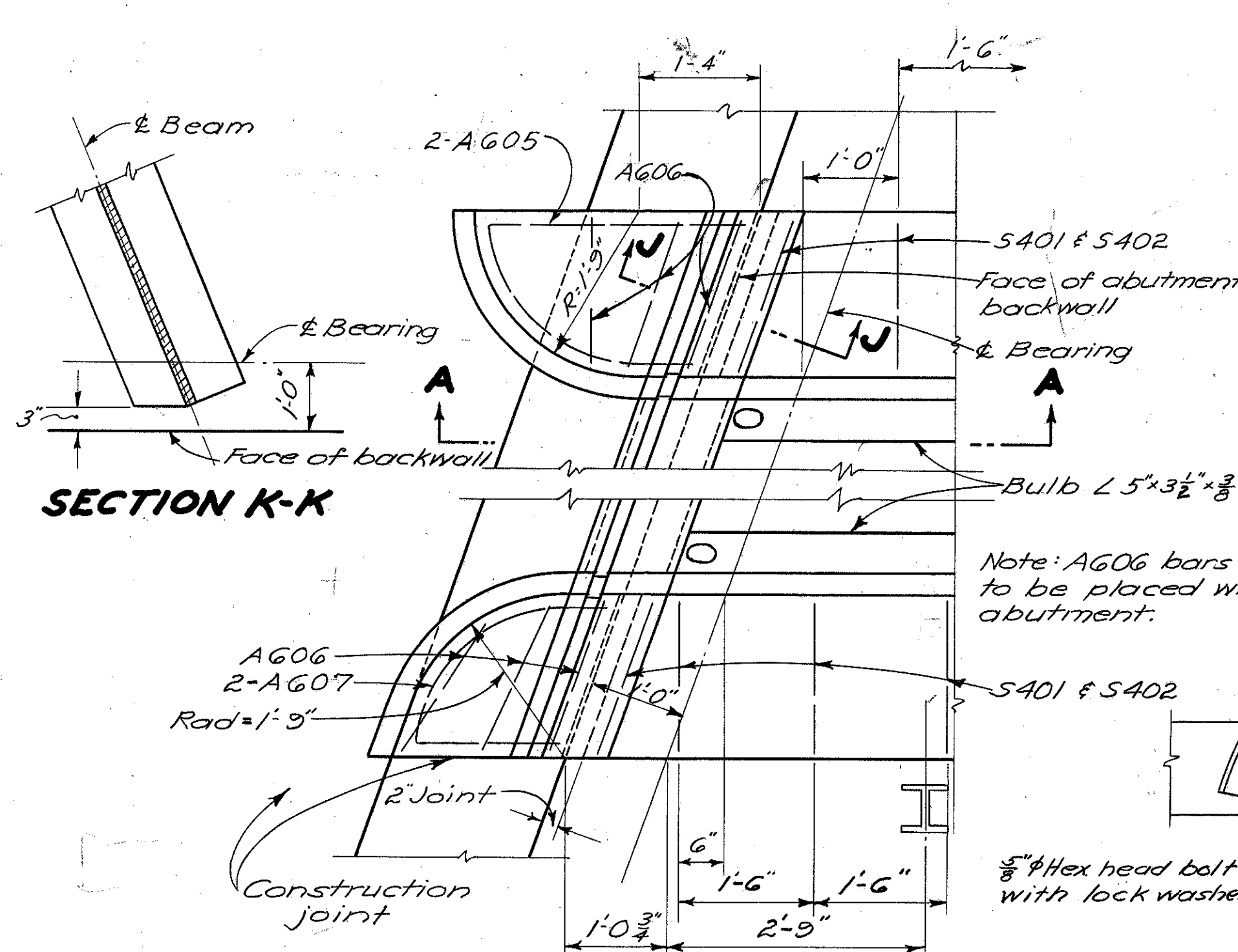
SECTION J-J



DETAIL "A"



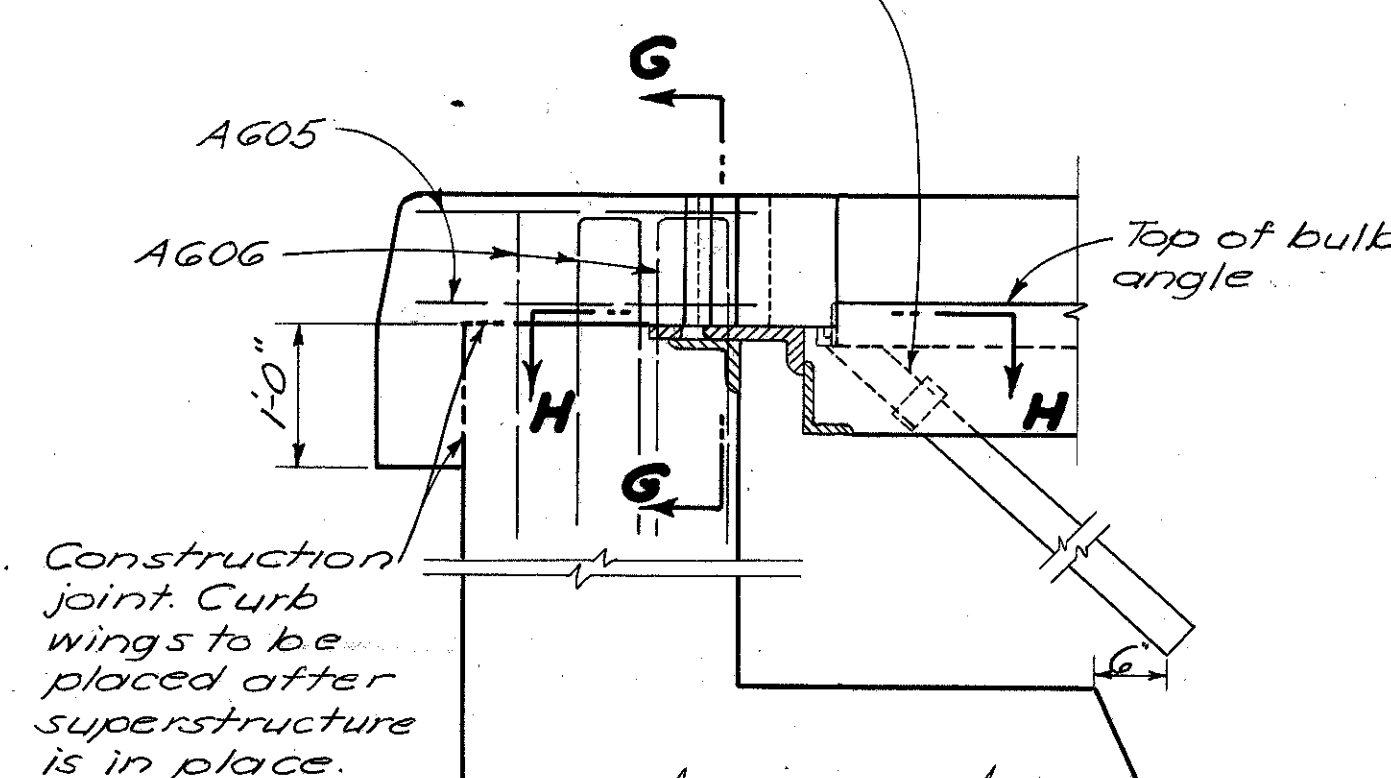
SECTION H-H



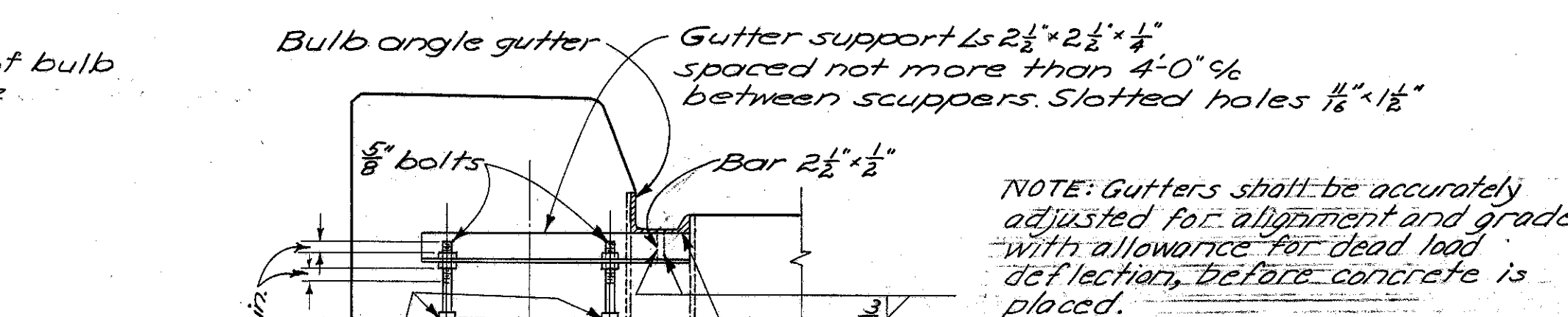
SECTION K-K

DETAIL OF CURB ENDS

3" Standard steel pipe. Weld stub end full perimeter to bulb angle and provide coupling. Pipe to be located at all four corners of bridge.



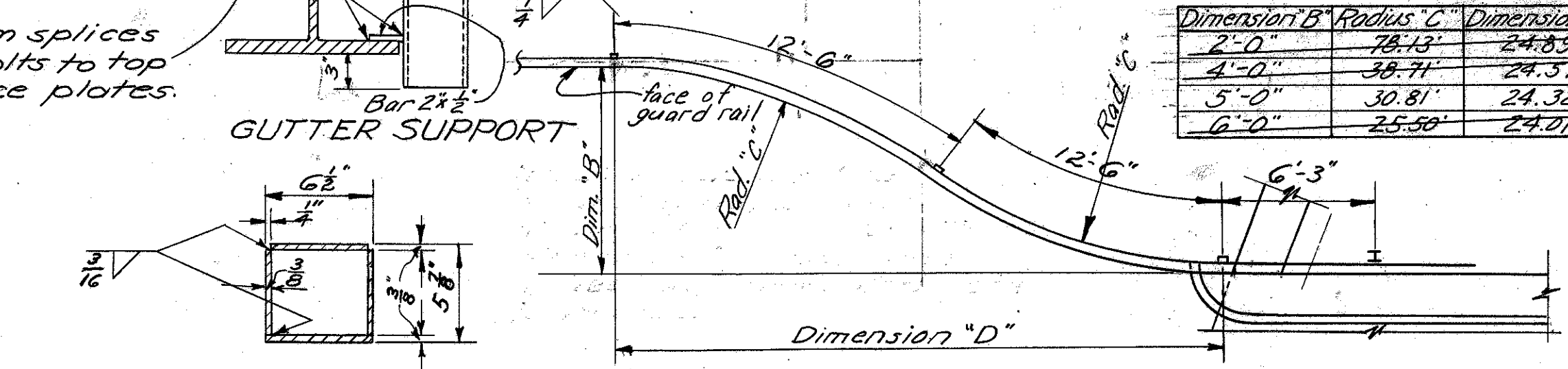
SECTION A-A



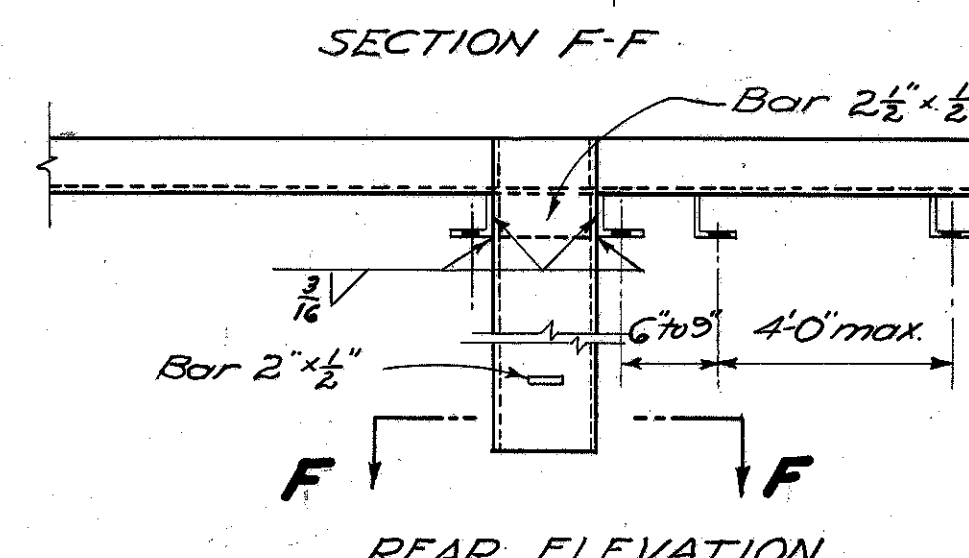
At beam splices weld bolts to top of splice plates.

GUTTER SUPPORT

NOTE: Gutters shall be accurately adjusted for alignment and grade with allowance for dead load deflection, before concrete is placed.



TRANSITION OF GUARD RAIL ON APPROACHES



REAR ELEVATION

GUTTER AND SCUPPER DETAILS

Dimension B	Radius C	Dimension D
2'-0"	18.13	24.89
4'-0"	38.11	24.37
5'-0"	30.81	24.32
6'-0"	25.50	24.01

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

BRIDGE NO. BR-52-143
OVER EAGLE CREEK

BROWN COUNTY

STA. 756+62.61
760+35.39

DESIGNED
JEM.

DRAWN
JEM.

TRACED


CHECKED
R.G.

REVIEWED
BFG

DATE
4-28-55

REVISED

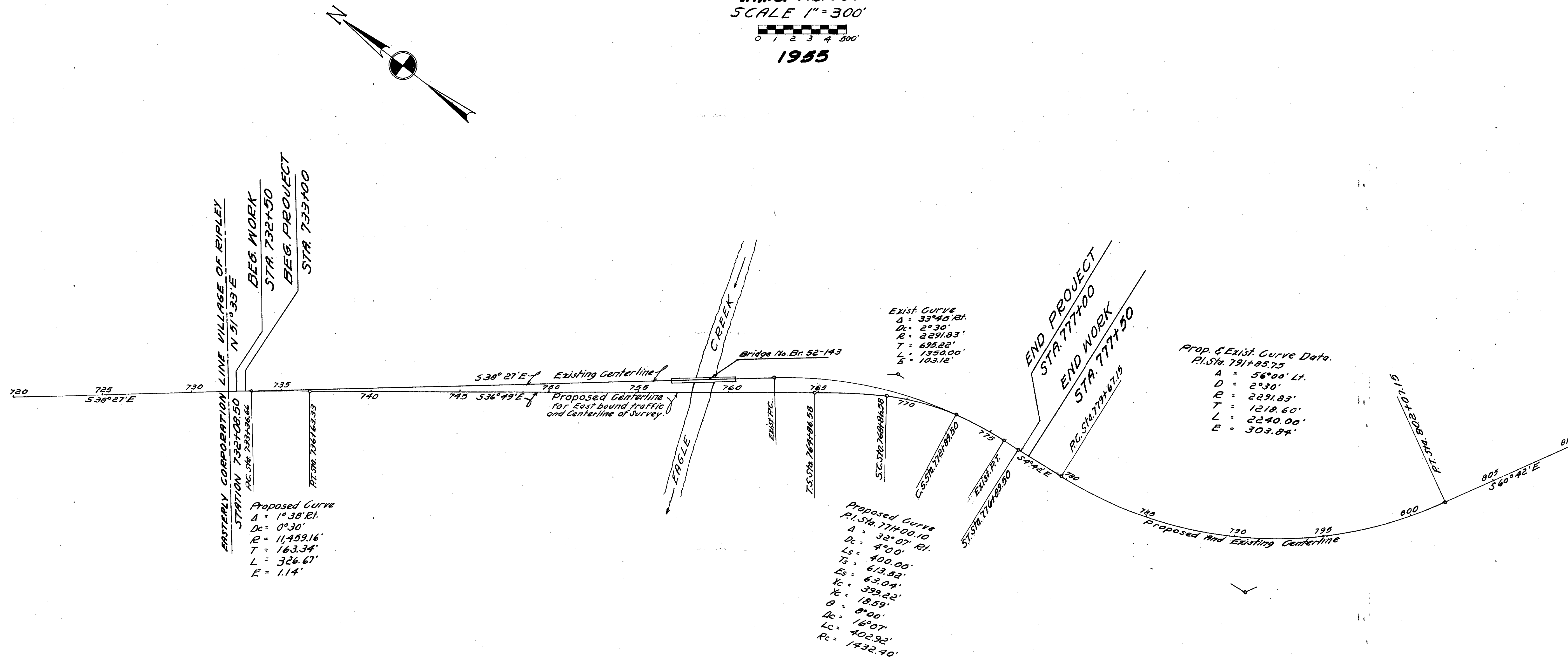
REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp.	Bending Diagrams	Mark	No.	Length	Weight	Shp.	Bending Diagrams	Mark	No.	Length	Weight	Shp.	Bending Diagrams																																																																														
Superstructure						Piers #1 and #4						Piers #2 and #3																																																																																			
S701	536	33'-6"	36,702	S		P1001	14	24'-2"	1456	S		P1001	14	24'-2"	1456	S																																																																															
S702	2	32'-0"	131	S		P1002	14	36'-2"	2179	S		P1002	14	36'-2"	2179	S																																																																															
S703	2	30'-2"	123	S		P801	16	10'-0"	427	S		P801	16	10'-0"	427	S																																																																															
S704	2	28'-4"	116	S		P804	34	11'-2"	1014	B		P802	50	22'-2"	2959	B																																																																															
S705	2	26'-6"	108	S		P805	16	19'-8"	840	B		P803	82	16'-8"	3649	B																																																																															
S706	2	24'-8"	101	S		P806	64	7'-8"	1310	B		P806	64	7'-8"	1310	B																																																																															
S707	2	22'-10"	93	S		P703	18	20'-4"	748	S		P701	100	24'-3"	5059	S																																																																															
S708	2	21'-0"	86	S		P704	14	17'-10"	510	S		P702	28	22'-0"	1259	S																																																																															
S709	2	19'-2"	78	S		P705	14	19'-10"	568	S		P501	8	36'-2"	302	S																																																																															
S710	2	17'-4"	71	S		P706	18	22'-4"	822	S		P502	16	17'-5"	291	B																																																																															
S711	2	15'-6"	63	S		P501	8	36'-2"	302	S		P503	4	35'-6"	148	S																																																																															
S712	2	13'-8"	56	S		P502	16	17'-5"	291	B		P504	4	29'-10"	124	S																																																																															
S713	2	11'-10"	48	S		P503	4	35'-6"	148	S		P505	4	24'-3"	101	S																																																																															
S714	2	10'-0"	41	S		P504	4	29'-10"	124	S		P506	4	18'-7"	78	S																																																																															
S715	2	8'-2"	33	S		P505	4	24'-3"	101	S		P507	4	12'-6"	52	S																																																																															
S716	2	6'-4"	26	S		P506	4	18'-7"	78	S		P509	24	16'-0"	401	B																																																																															
S717	4	4'-6"	37	S		P507	4	12'-6"	52	S		P510	24	15'-9"	394	B																																																																															
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614	2	13'-8"	41	S	S615	2	11'-10"	36	S	S616	2	10'-0"	30	S	S617	2	8'-2"	25	S	S618	2	6'-4"	19	S	S619	4	4'-6"	27	S
S601	536	33'-6"	26,970	S		S602	585	42'-9"	37,563	S	S603	104	32'-6"	5077	S	S604	2	32'-0"	96	S	S605	2	30'-2"	91	S	S606	2	28'-4"	85	S	S607	2	26'-6"	80	S	S608	2	24'-8"	74	S	S609	2	22'-10"	69	S	S610	2	21'-0"	63	S	S611	2	19'-2"	58	S	S612	2	17'-4"	52	S	S613	2	15'-6"	47	S	S614																													

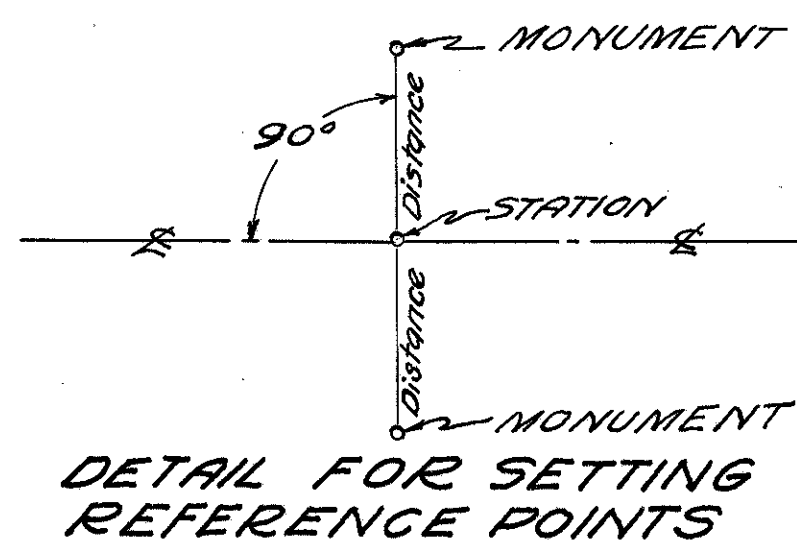
LOCATION PLAN

STATE OF OHIO, DEPARTMENT OF HIGHWAYS
 STATE ROUTE No. 52
 SECTION 13.88
 BROWN COUNTY
 UNION TOWNSHIP
 V.M.S. No. 386
 SCALE 1" = 300'

1955



REFERENCE POINTS TO BE SET AFTER CONSTRUCTION								
Station	Dist. from L.		Station	Dist. from L.		Station	Dist. from L.	
	Lt.	Rt.		Lt.	Rt.		Lt.	Rt.
720+00	18'	18'	750+00	56'	21'	785+00	20'	20'
725+00	18'	18'	755+00	72'	21'	790+00	20'	20'
730+00	18'	18'	764+86.58	74'	21'	795+00	20'	20'
733+36.66	18'	18'	768+86.58	45'	21'	800+00	20'	20'
736+63.33	18'	20'	772+89.50	21'	21'	802+02.15	20'	20'
740+00	32'	21'	776+89.50	21'	21'	805+00	20'	20'
745+00	—	21'	779+67.15	20'	20'	810+00	20'	20'



RECORDED IN BROWN COUNTY RECORDS
 PLAT BOOK C-3 PAGE 205 DATE Feb. 17, 1955
 # 31919

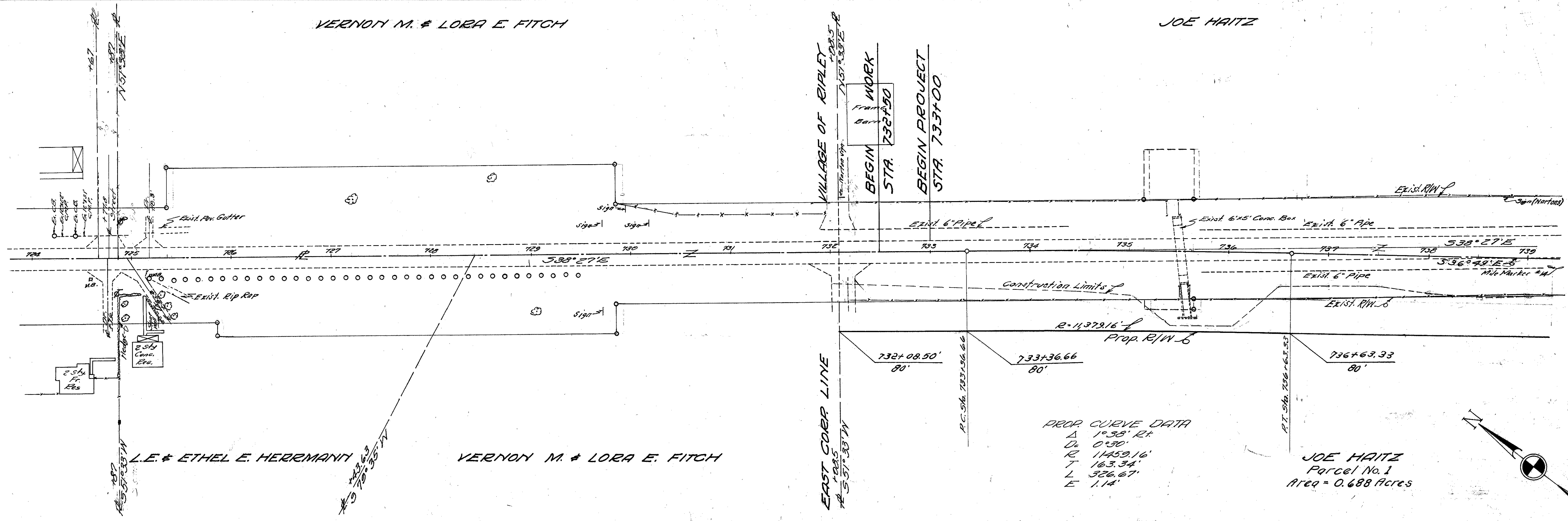
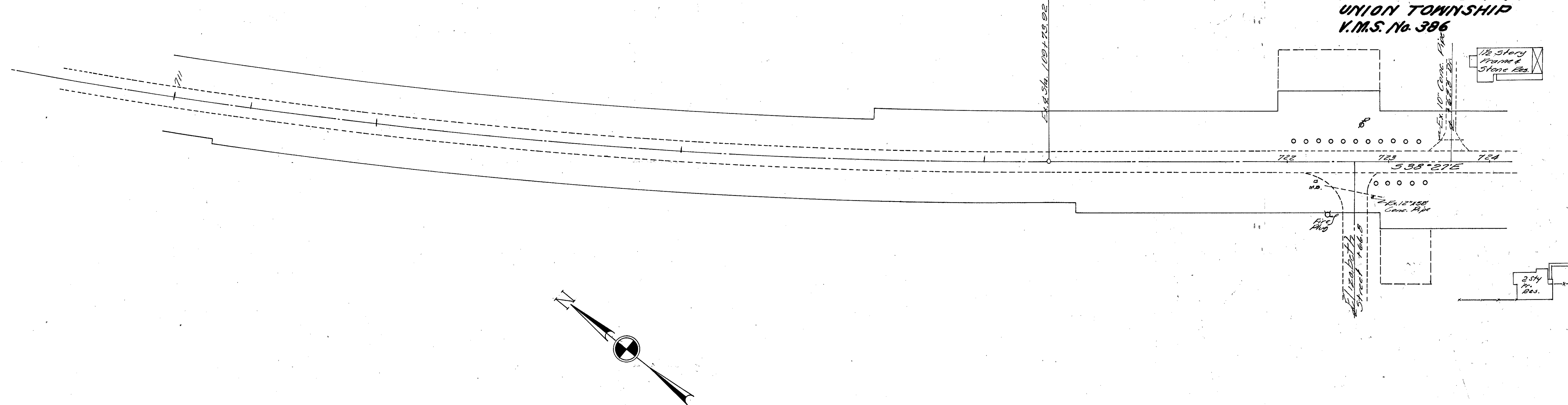
I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE BY THE OHIO DEPARTMENT OF HIGHWAYS.
 Date 11 Feb. 55
 Joseph H. Doyle
 DIVISION ENGINEER
 DIVISION 9 (P.E. 1209)

UTILITIES:
 * Telephone Line Owned By The Ohio Bell Telephone Co.
 Cleveland, Ohio
 * Power Line Owned By The Cincinnati Gas & Elect. Co.
 Milford, Ohio
 * Power Line in Corp. Owned By The Board of Public Affairs
 Ripley, Ohio
 * Water Line Owned By The Board of Public Affairs
 Ripley, Ohio

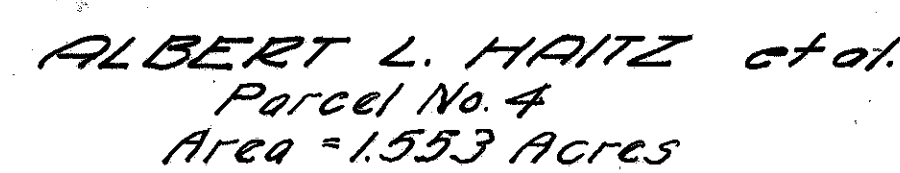
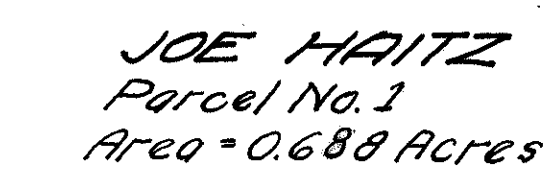
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		



R/W PLAT
BRD-52-13.88
BROWN COUNTY
UNION TOWNSHIP
V.M.S. No. 386



R/W PLAIN
BR0-52-1388
BROWN COUNTY
UNION TOWNSHIP
V.M.S. No. 386



ROBERT CAMPBELL
Parcel No. 5
Area = 1.854 Acres

ARTHUR & ELIZA SMITH
Parcel No. 6
Area = 0.52 Acres

ARTHUR & ELIZA SMITH

PROP. & EXIST. CURVE DATA

Δ 56° 00' Lt.
Q 2° 30'
R 2291.83'
T 1218.60'
L 2240.00'
E 303.84'

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

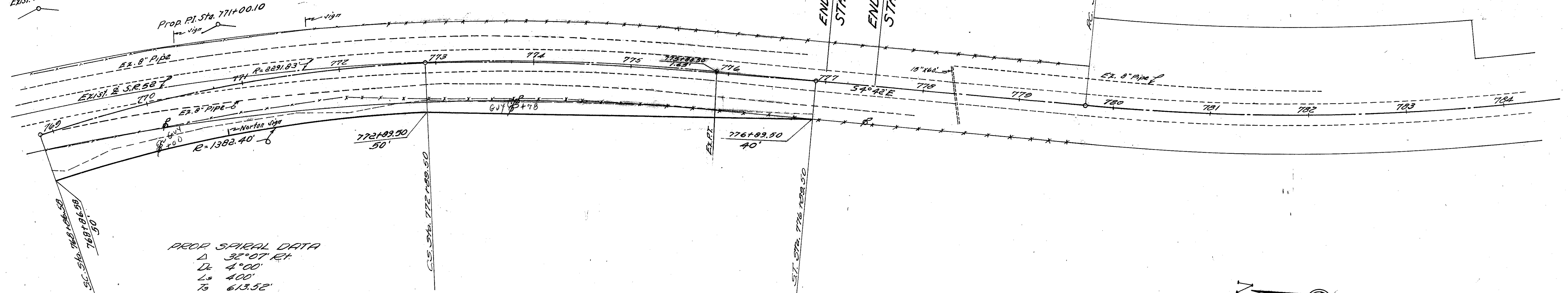
R/W PLAN
BRD-52-13.88
BROWN COUNTY
UNION TOWNSHIP
V.M.S. No. 386

EXIST. P.I.

PROP. P.I. Sta. 771+00.10

END PROJECT
Sta. 777+00

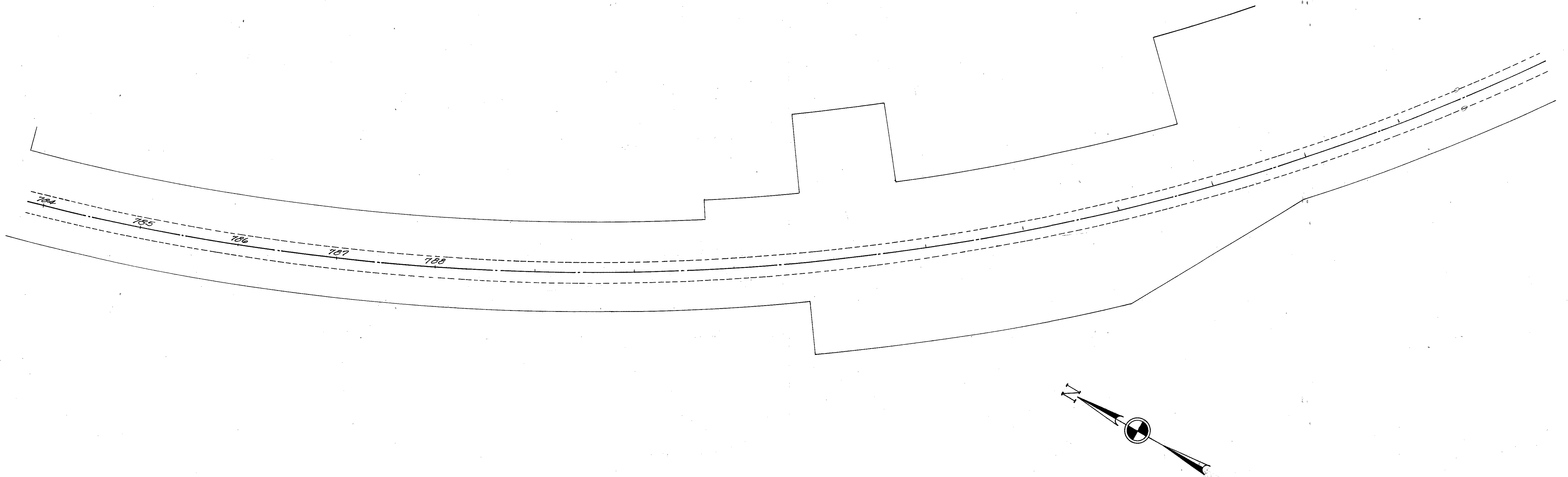
END WIDEK
Sta. 777+50



PROP. SPIRAL DATA

Δ 32° 07' Rt.
Lc 4' 00'
Ls 400'
Ts 613.52'
Es 63.04'
Xc 300.22'
Yc 18.59'
Qc 8' 00'
Δc 16° 07'
Lc 402.92'
Rc 1432.40'

ARTHUR & ELIZA SMITH
Parcel No. 6
Area - 0.52 Acres.



LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 42 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
FINE SAND	A-3(10)	A-3	0	6	85	3	6	NP	NP	3	1
COARSE & FINE SAND	—	A-3a	0	2	80	10	8	NP	NP	3	4
SANDY SILT	A-4(17)	A-4a	0	1	39	37	23	25	7	14	5
SILT	A-4(10)	A-4b	1	1	10	60	28	29	7	18	10
SILT & CLAY	A-6(10)	A-6a	1	2	9	50	38	31	13	19	9
CLAY	A-6(11)	A-6b	5	2	7	41	45	36	18	17	10
CLAY	A-7-6(14)	A-7-6a	0	1	3	44	52	42	23	21	2
GRAVEL w/ SAND & SILT	A-2-4(6)	A-2-4	88	12	-	-	-	24	7	-	1
WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT											
AUGER BORING-PLAN VIEW											
TOP SOIL											
BERM MATERIAL											

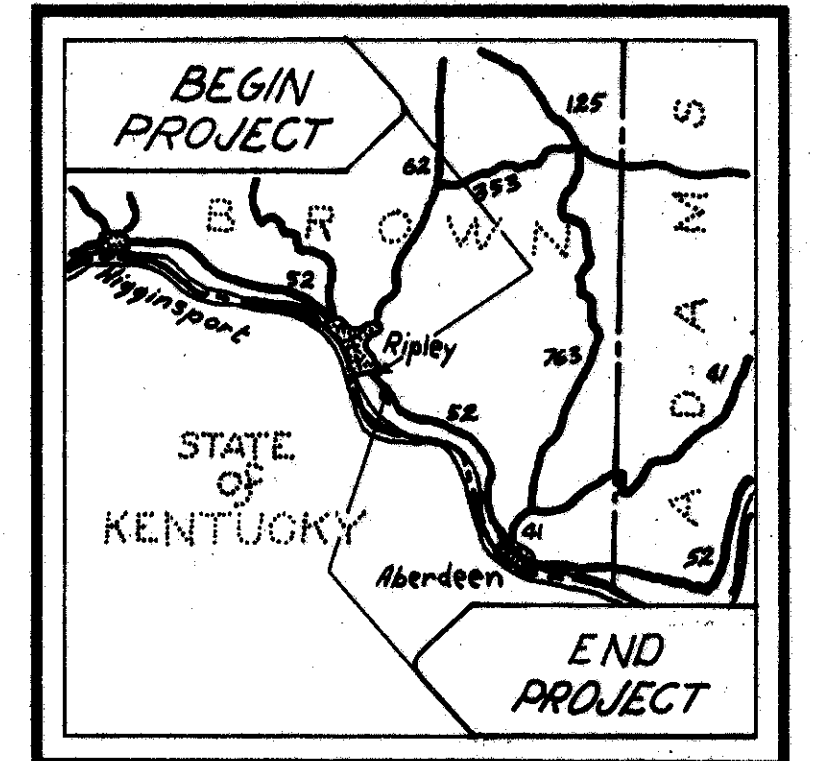
— SAMPLES TESTED —
LAB NOS 50-3710-3733 INCL 3519-5833 INCL.
— MOISTURE DENSITIES —
LAB NOS 50-3676-3678 INCL.

NOTE: FIGURES BESIDE BORINGS INDICATE MOISTURE CONTENT IN PERCENT.

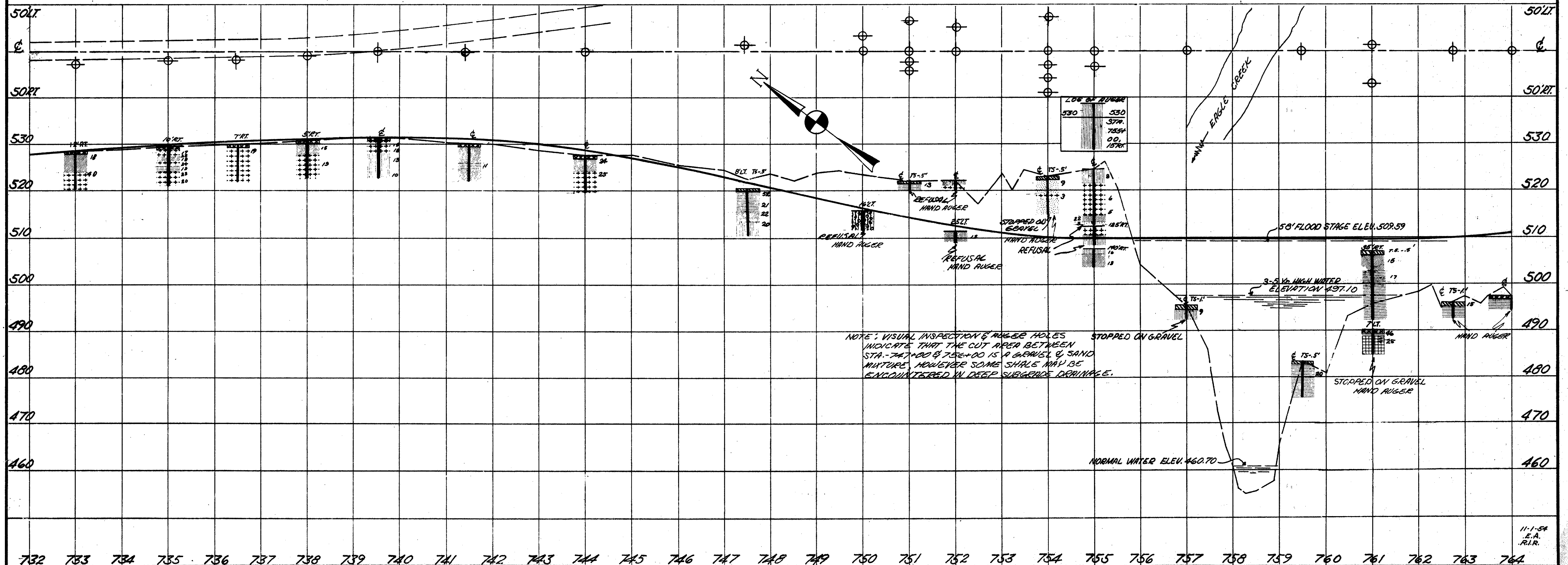
SOIL PROFILE
BROWN COUNTY
BRO-52-13.88

STATE HIGHWAY TESTING AND
RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE
PROFILE WAS SECURED FOR THE USE OF THE STATE OF
OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE
PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.



LOCATION MAP



SOIL PROFILE

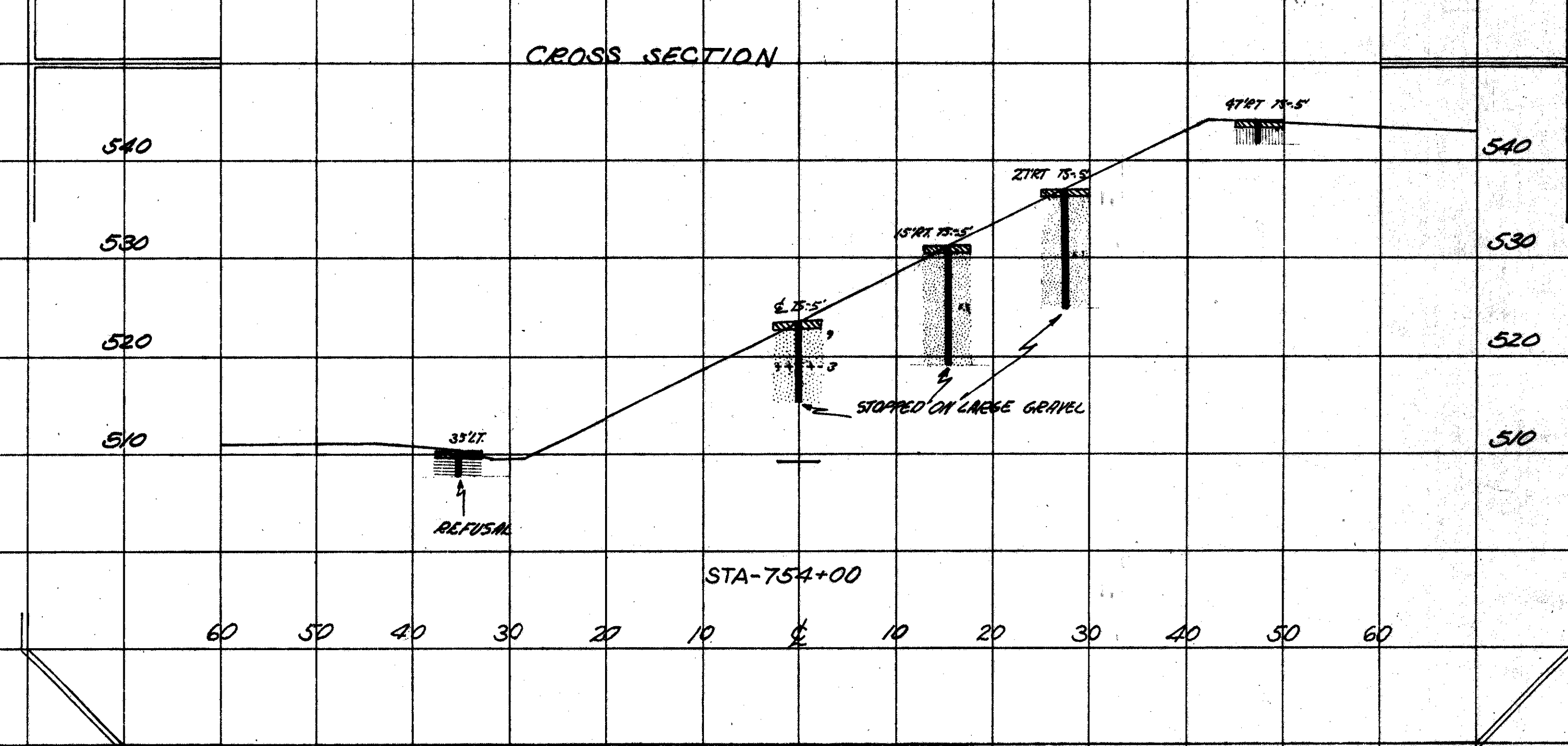
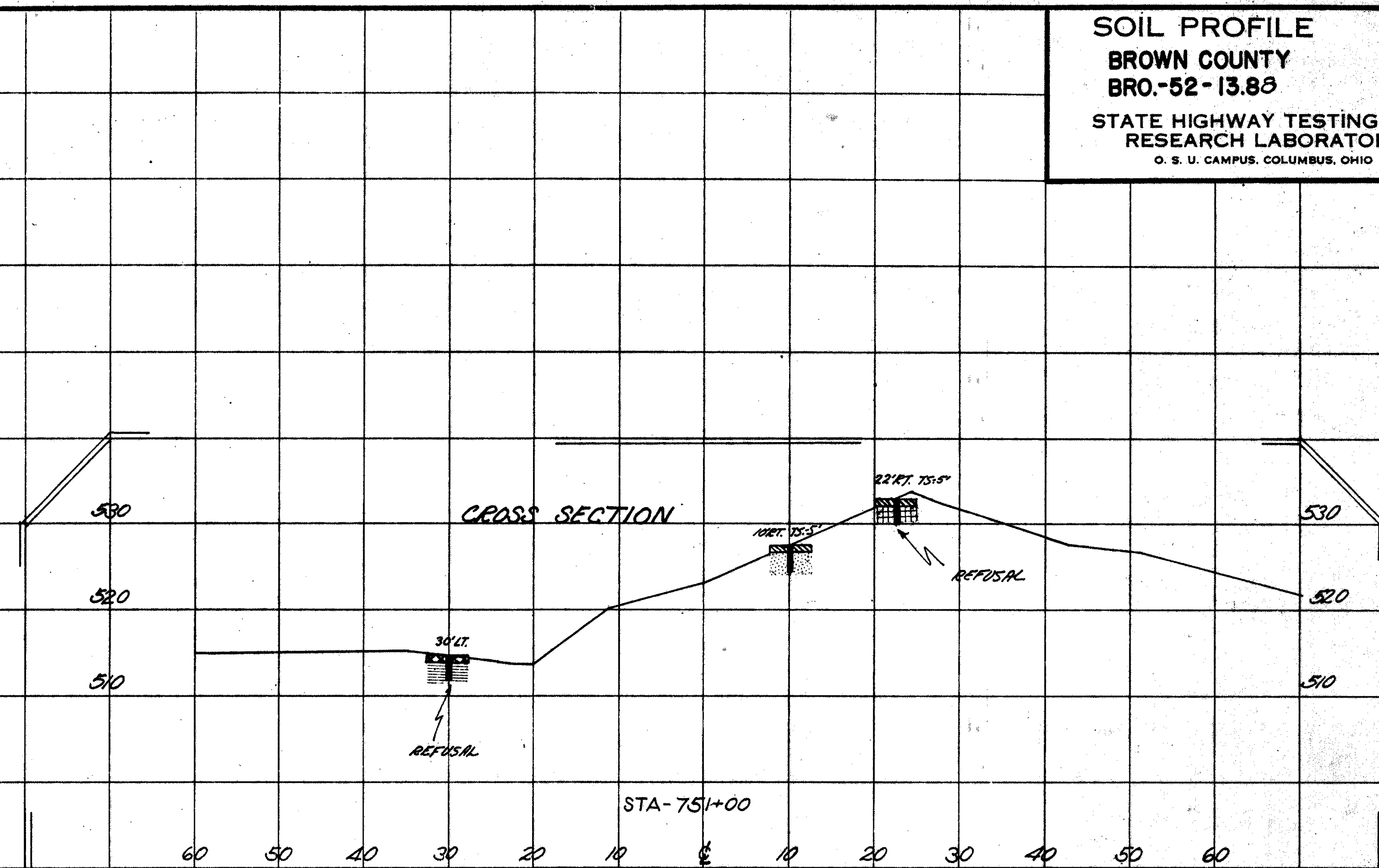
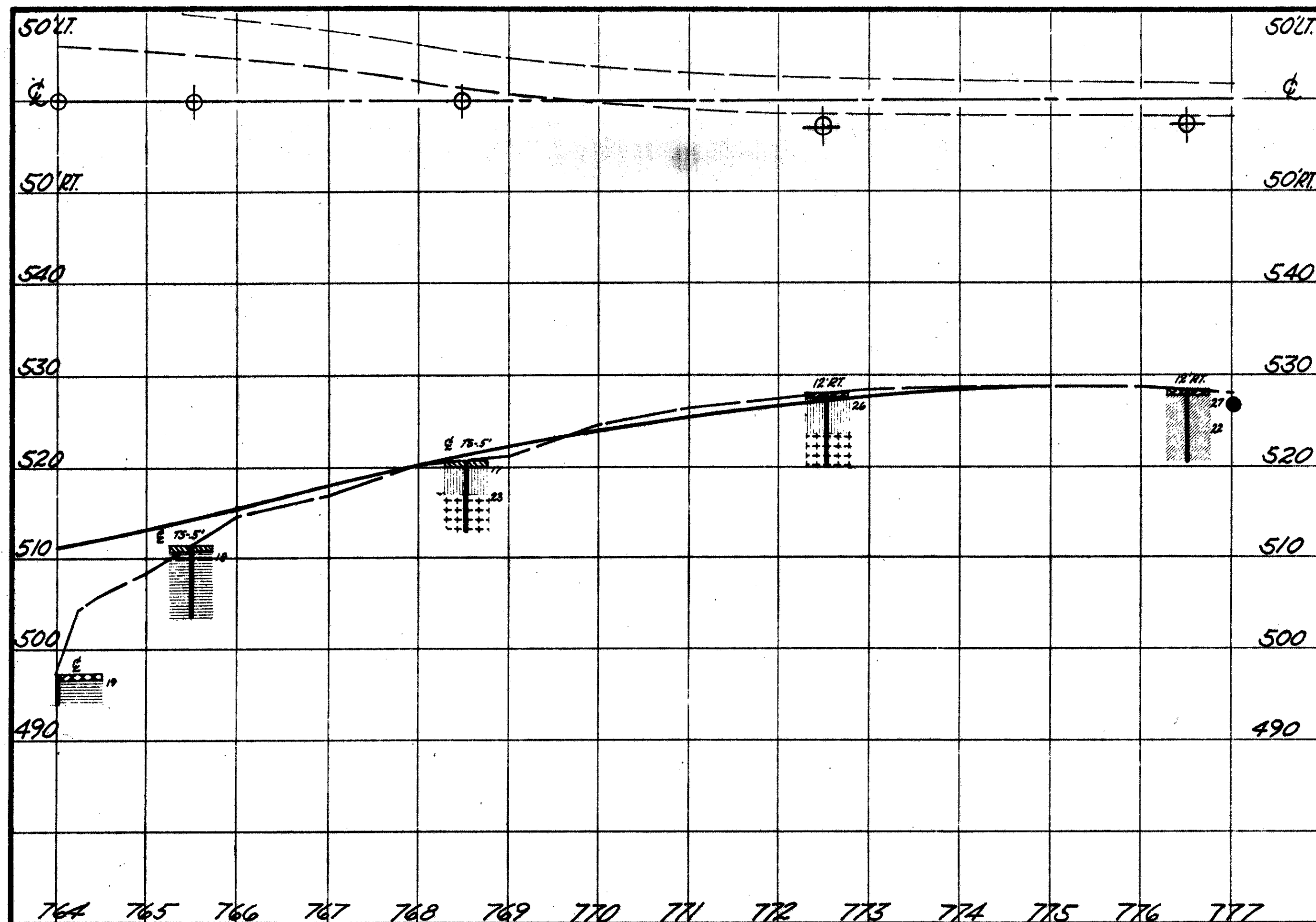
BROWN COUNTY

BR0-52-13.88

STATE HIGHWAY TESTING AND
RESEARCH LABORATORY

O. S. U. CAMPUS, COLUMBUS, OHIO

2
2



BR0-52-13.88