

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF CONSTRUCTION

U.S.P.W.H.P. NO.  
OHIO-NRS-699-A(1935)

FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	50
10	OHIO	NRS699A	1935	

S.H.(I.C.H.) 249 SEC. "D. PART"  
PREBLE COUNTY  
PROPOSALS NO 1 & 2

EATON - RICHMOND ROAD  
S.H.(I.C.H.) 249 SEC. "D. PART"  
PREBLE COUNTY  
JACKSON & WASHINGTON TWP.

The Standard Specifications of the State of Ohio, Department of Highways, together with the "Special Provisions for United States Public Works Highway Projects," and "Supplemental Specifications No. 1" in force on date of contract will govern this improvement.

I, hereby, approve these plans & declare that the making of this improvement will require the closing to traffic of the highway and that detours will be provided as indicated on the plans.

CONVENTIONAL SIGNS

Township Line	-----
City or Village Line	-----
Section Line	-----
Property Line	-----
Fence Line	-----
Center Line	-----
Steam Railroad	-----
Electric Ry.	-----
Telephone or Telegraph Poles	T-T-T-T-T
Hedge	-----
Guard Rail - New	-----
Drain Pipe - New	-----
Drain Pipe - Old	-----

LENGTH OF PROPOSAL NO 1 = 15987.06 LIN. FT. = 3.027 MI.  
" " " NO 2 = 113.94 " " = 0.021 MI.  
NET LENGTH OF PROJECT = 16101.00 LIN. FT. = 3.049 MI.

The necessary Right-of-Way as shown on the plans has been provided.

Approved *Otho Macathom*  
Date *5/25/34* Resident District  
Deputy Director

Approved *Luke Brannon, P.E.*  
Date *8-22-34* Resident Division  
Deputy Director

Approved *Simon Hilg*  
Date *7/19-35* Deputy Director  
Bureau of Construction

Approved \_\_\_\_\_  
Date \_\_\_\_\_ Deputy Director  
Bureau of Maintenance

Approved *J.P. Burkey*  
Date *8-30-34* Deputy Director  
Bureau of Bridges

Approved *Carl H. Wale, P.E.*  
Date *2-19-35* Chief Engineer &  
First Ass't Director

Approved *John J. ...*  
Date *2/17/35* Director of Highways

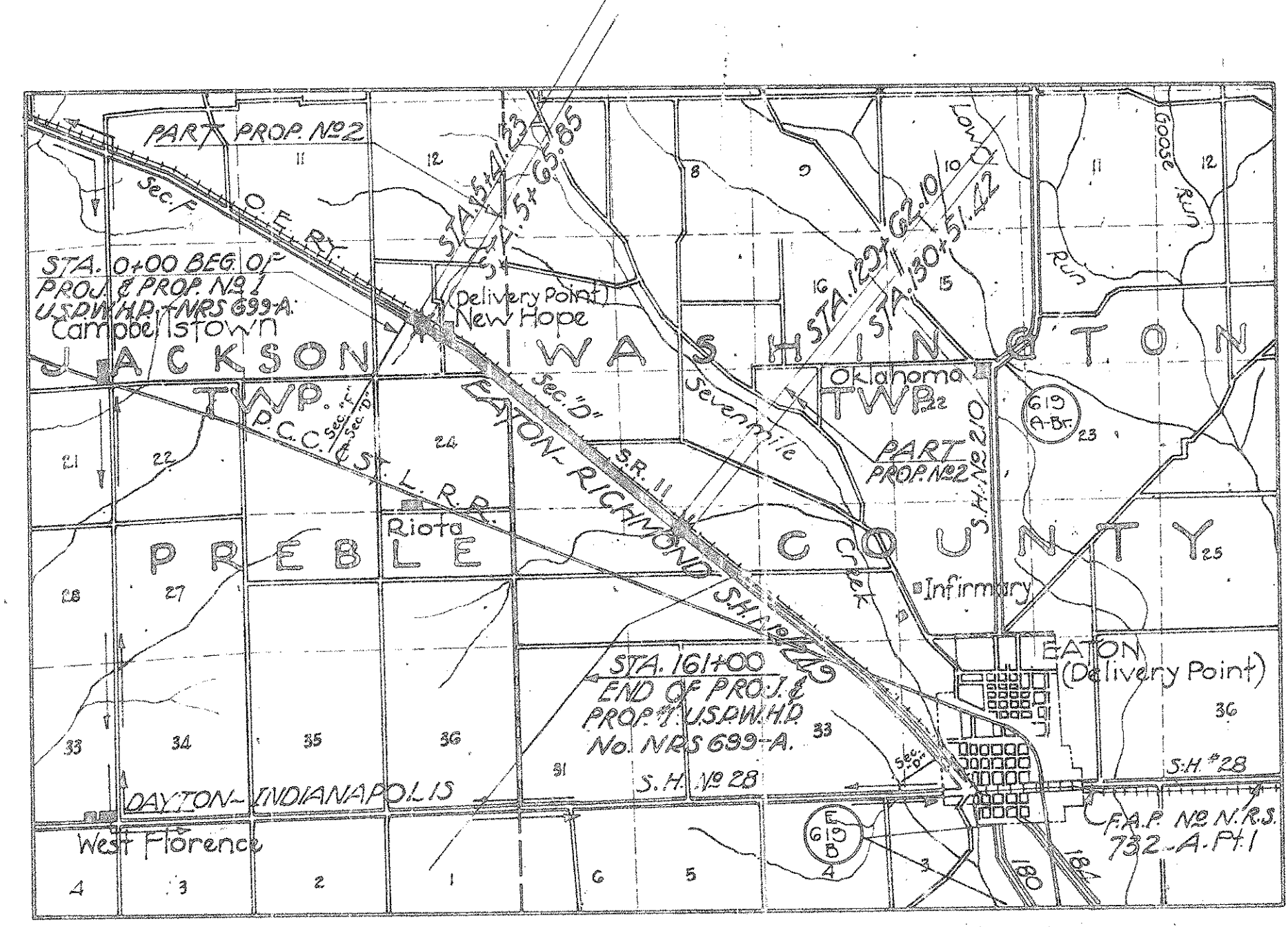
Recommended for Approval \_\_\_\_\_  
Date \_\_\_\_\_ District Engineer  
Bureau of Public Roads

Recommended for Approval \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer  
Bureau of Public Roads

Approved \_\_\_\_\_  
Date \_\_\_\_\_ Chief of Bureau

LINE DATA

GROSS LENGTH, PROP 1,	15986.06'
ADDITION	1.00'
NET LENGTH, PROP 1	15987.06' OR 3.027 MI.
GROSS LENGTH, PROP 2	113.94'
NET LENGTH, PROP 2	113.94' OR 0.021 MI.
NET LENGTH PROP. 1 & 2	16101.00 LIN. FT. OR 3.049 MI.



AVERAGE CEMENT HAUL = 2.5 MILES  
AGGREGATE = 11.0 "

LOCATION PLAN



Bridges Shown Thus	=====
State Highways	=====
Other Roads	=====
Portion to be Improved	=====
Detours Shown Thus	=====

D.S. & E. by G.J. Goehl  
& F.H. Brown 9-26-34

SCALES

PLAN	1" = 100' @ 50'
PROFILE - VERTICAL	1" = 10' @ 5'
PROFILE - HORIZONTAL	1" = 100' @ 50'
CROSS SECTIONS	1" = 5'

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS—  
T-70-J; S-27 PC-1; I-1, 2, 3, 4, & 5; I8 CB 12 & 23; I8 CB 13 & 14; I8 CB 23 & 24; B-45-33; R.R.-B;  
AS-33; SB-33; G-707; B-T-50-70-71-E NO 1; 3-T-70-71 E NO 1; T-70-71 E NO 1;  
I-15 S.C.; S-27 PC-2; S.T.C.-34; I-B-I NO 1; S-27 PC-3; I8 IN 2, 3, & 4; I8 MH NO 3

INDEX OF SHEETS

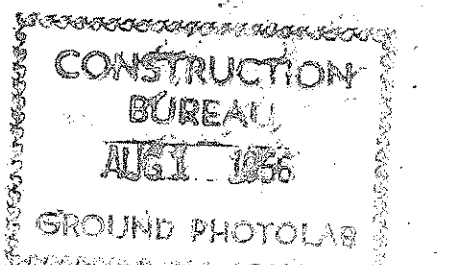
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Plan & Profile	4-12
Cross Sections	13-26
Flare & Approach, Priv. Drives & Walks	27-32
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FILE PREBLE - 249 SEC. "D. PART"  
No. \_\_\_\_\_ Date of Letting \_\_\_\_\_ 1935  
Contract No. \_\_\_\_\_

CHECKING RECORD		
OFFICE	BY	DATE
RESIDENT DIVISION	S.A.	1-31-35
BUREAU OF MAINTENANCE		
BUREAU OF BRIDGES	W.P.R.	8/30/34
BUREAU OF CONSTRUCTION	W.M.C.	12/27/34
BUREAU OF PUBLIC ROADS	I.W.H.	10-10-34

RECEIVED	
By <i>M. ...</i>	Date
Clerk of Sales	2-10-1935
Date	10-23-1934

APPROVED	
<i>[Signature]</i>	Date
Planning Engineer	
Remarks	<i>[Handwritten notes]</i>



NOTE: During the construction of this project, the Contractor shall conduct his construction operations in such a manner that no more of the present pavement shall be disturbed than can be rebuilt before weather conditions discontinue paving operations, and that the entire project be open to traffic during the winter months as designated by the Engineer in charge.

# TYPICAL SECTIONS

## TYPE T-70

FOR CONSTRUCTION DETAILS SEE STANDARD DRAWING NO T-70-J

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS-699A	1935

2  
50

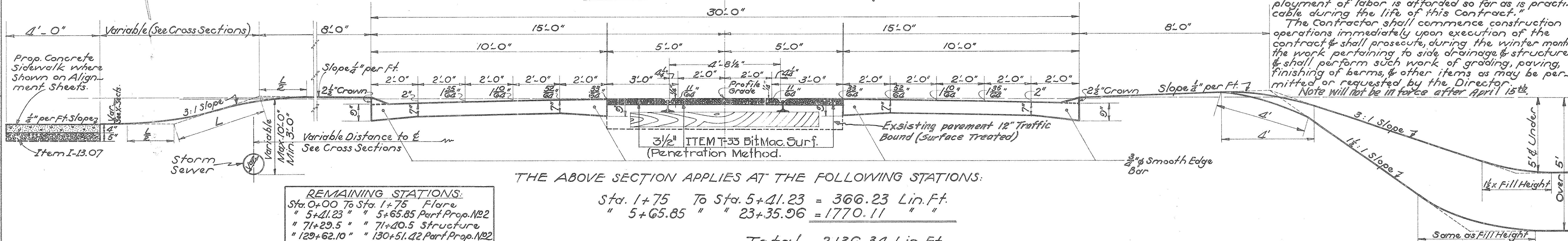
PREBLE COUNTY  
S.H. 249 SEC. "D" (Part)

PROPOSAL NO 1

**WINTER CONSTRUCTION NOTE**  
Regarding the clause in the Specifications for the above project which reads as follows:  
"The work covered by this contract shall be conducted in such a manner that maximum employment of labor is afforded so far as is practicable during the life of this Contract."  
The Contractor shall commence construction operations immediately upon execution of the contract & shall prosecute, during the winter months the work pertaining to side drainage & structures, & shall perform such work of grading, paving, finishing of berms, & other items as may be permitted or requested by the Director.  
Note will not be in force after April 15th.

SCALE IN FEET  
0 1 2 3 4 5

### SPECIAL PAVEMENT



THE ABOVE SECTION APPLIES AT THE FOLLOWING STATIONS:

**REMAINING STATIONS:**

Sta. 0+00 To Sta. 1+75	Flare
" 5+41.23 "	" 5+65.85 Part Prop. No 2
" 71+29.5 "	" 71+40.5 Structure
" 129+62.10 "	" 130+51.42 Part Prop. No 2

Sta. 1+75 To Sta. 5+41.23 = 366.23 Lin. Ft.

" 5+65.85 " " 23+35.96 = 1770.11 " "

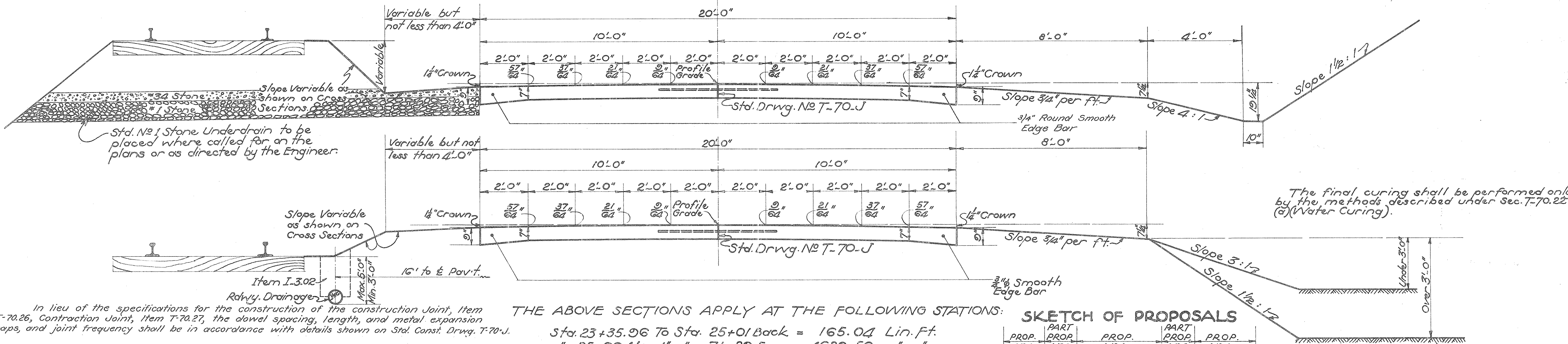
Total = 2136.34 Lin. Ft.

**FOR SECTIONS BELOW,  
SLOPES ARE TO BE  
ROUNDED & FINISHED AS  
SHOWN ON SUPPLEMENTAL  
SHEET NO 2A**

**NOTE:**  
All surplus excavation from driveways, pipe, storm sewers, roadway drainage, pipe, underdrains, or roadway culverts to be disposed of by the Contractor in supplying borrow. The same to be included for payment with the unit price bid per Lin. Ft. for pipe.

### 20 FT. PAVEMENT

### ROADWAY DRAINAGE SECTION



THE ABOVE SECTIONS APPLY AT THE FOLLOWING STATIONS:

Sta. 23+35.96 To Sta. 25+01 Back = 165.04 Lin. Ft.

" 25+00 Ahead " " 71+29.5 = 4629.50 " "

" 71+40.5 " " 129+62.10 = 5821.60 " "

" 130+51.42 " " 161+00 = 3048.58 " "

Total = 13664.72 Lin. Ft.

### SKETCH OF PROPOSALS

PROJ. NO 1	PART PROP. NO 2	PROJ. NO 1	PART PROP. NO 2	PROJ. NO 1
Sta. 0+00	Sta. 5+41.23	Sta. 5+65.85	Sta. 129+62.10	Sta. 130+51.42
				Sta. 161+00

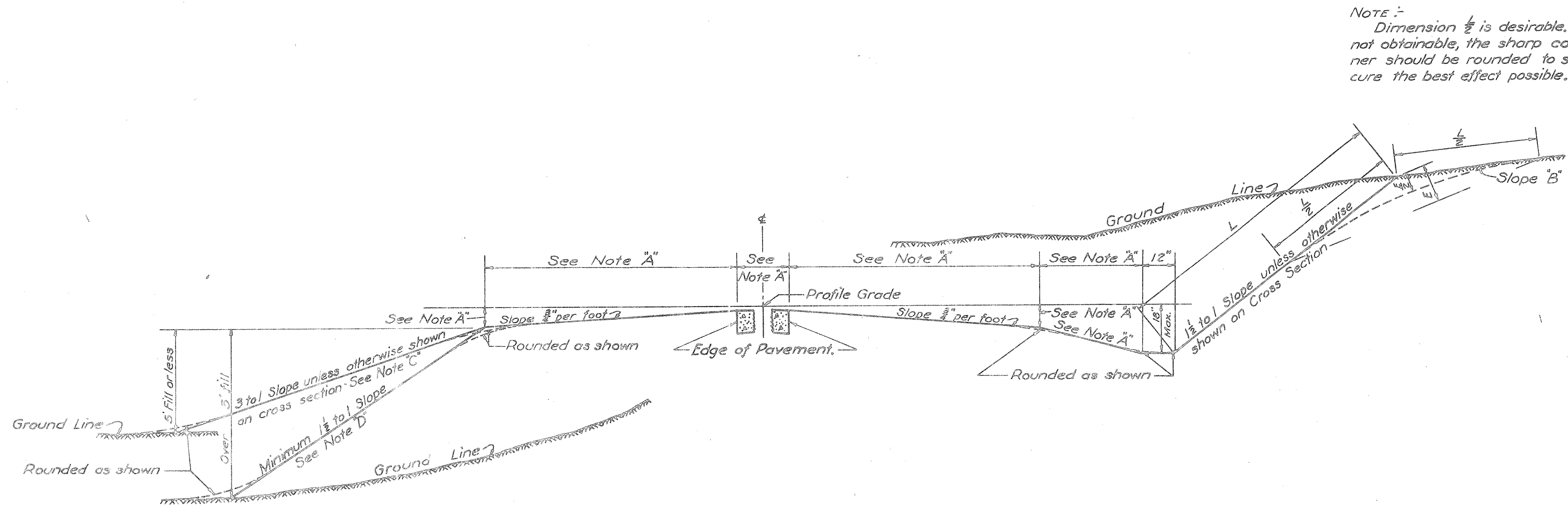
APPROVED

CHECKED  
Div. Office By S.A. 1-31-35  
Central Office By

In lieu of the specifications for the construction of the construction joint, Item T-70.26, Construction Joint, Item T-70.27, the dowel spacing, length, and metal expansion caps, and joint frequency shall be in accordance with details shown on Std. Const. Drwg. T-70-J.

FEDERAL AID DISTRICT	STATE	U.S. PRO NO.
10	OHIO	NRS 699-A

S. H. 249 SEC. D PR  
PREBLE COUNT



NOTE :-  
Dimension  $\frac{1}{2}$  is desirable. If not obtainable, the sharp corner should be rounded to secure the best effect possible.

NOTE :-  
Solid lines represent Standard Typical Section. Dotted lines represent revised Typical Section to be used as noted.

This section shall be used except where such use would involve prohibitive right of way expenditure.

When excessive right of way is involved, an attempt should be made to get the consent of the property owner to round Slope "B" to such an extent as will offset sloughing.

The intent of the revised typical section is to secure a more pleasing appearance of the roadway and a section less susceptible to erosion or wash.

The item of trimming or rounding of corners is included in unit price estimated for Item E-5, Finishing Berms, Ditches and Slopes.

NOTE "A". Dimensions shown on detailed Typical Section on preceding sheet shall apply.

NOTE "C" & "D". 3 to 1 slopes shall be used except where such use involves prohibitive right of way expenditure. Where expensive Right of Way is involved, the 3 to 1 slopes shall be modified to carry fill to the present Right of Way line.

**S.H.(I.C.H.) 249 SEC'D.PART"**  
**PREBLE COUNTY**  
**PROPOSALS NO 1 & 2**

**GEN. NOTES (CONT'D.)**

**APPLYING AGGREGATE FOR T-33.**  
The method of rolling and special compaction around the car rails and ties shall be approved by the Engineer before any aggregate is placed.

**EXISTING PIPE REMOVAL (See Item I-6)**  
All existing pipe, encountered during construction, shall be carefully removed & piled within the limits of the R/W as directed by the Engineer. The removing & piling of any pipe shall be included for payment in the unit price bid per Cu. Yd. for "Rdwy Excavation" unless otherwise specified on the plans.

**STONE UNDERDRAIN:**  
Stations for stone underdrain are shown on the plans, but are subject to change during construction if deemed advisable by the Engineer.  
Shoring for the tracks shall be included in unit price bid per Lin. Ft. of French Drains Item I-9 and Storm Sewers Item I-2.

**BERMS, SLOPES, & DITCHES:**  
All berms, slopes, & ditches are to be finished as shown on Typical Sections. (See note on Sheet No 13 of the Cross Sections.)

**REMOVAL OF EXISTING GUARD RAIL.**  
Existing guard rail to be removed & stored shall be carefully removed & transported to the State Highway garage at Eaton, Ohio.

**NOTE:**  
The agreement between the Cincinnati & Lake Erie Traction Co. and the State of Ohio on file at the Department of Highways, State of Ohio is to be considered a part of this contract.

**SPACING OF TRANSVERSE JOINTS:**  
The transverse joints shall be spaced so that they will not be placed within the limits of the trench reinforcing for trenches across the pavement.  
In case extra transverse joints are required to accomplish the above they shall be furnished complete without additional cost to the State.

**APPLYING BITUMINOUS MATERIAL FOR T-33**  
In applying the bituminous material for the penetration macadam, the Contractor shall protect the concrete pavement by a method or device to prevent the bituminous material from getting on the surfaces of otherwise marring or defacing the pavement.

Hand spraying the edges adjacent to the concrete will be permitted if the method of applying is approved by the Engineer.  
The Contractor will be required to keep the surface of the tracks free from bituminous material and open to traffic for the traction line at all times.  
The Contractor and the Traction Company shall coordinate their work so that the traction line will be open to traffic at all times. It being understood, the Traction Company shall regulate the speed of their cars during this construction.  
Payment for all of the above will be included for in the unit price bid per square yard for Item T-33, Penetration Macadam.

**GENERAL NOTES**

**TREE REMOVAL:**  
Trees listed on the plans for removal are to be considered approximate, not final, & are subject to additions & deductions as may be deemed necessary by the Engineer. Before any trees are removed, regardless of size, the contractor shall receive from the Engineer a written summary of the trees which are to be removed as determined during construction.  
Payment for removal & disposal of trees shall be according to Item E-9 of the Construction & Material Specifications.

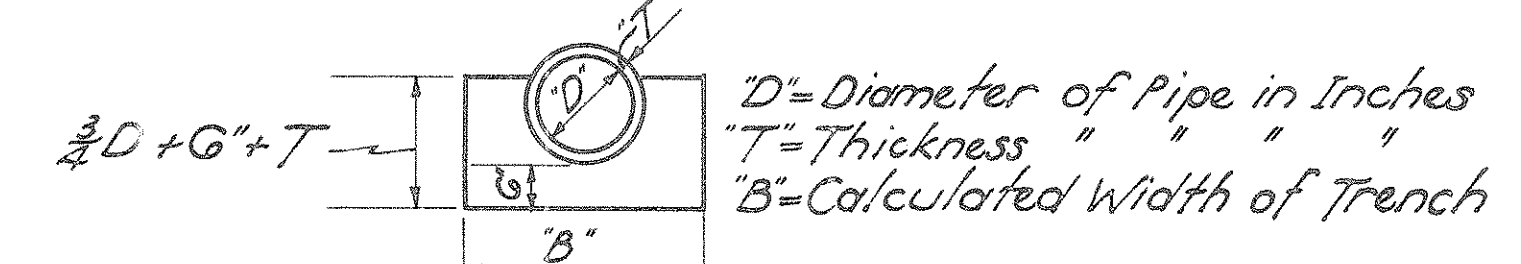
**BACKFILLING OF SEWER TRENCHES:**  
Special Attention is called to Item I-2.06 & Item E-2 of the Construction & Material Specifications.

During the excavation and installation of Items I-2 & I-9, the contractor shall maintain a watchman during the working hours for the protection of the workmen. Payment for this item will be by Lump Sum bid.

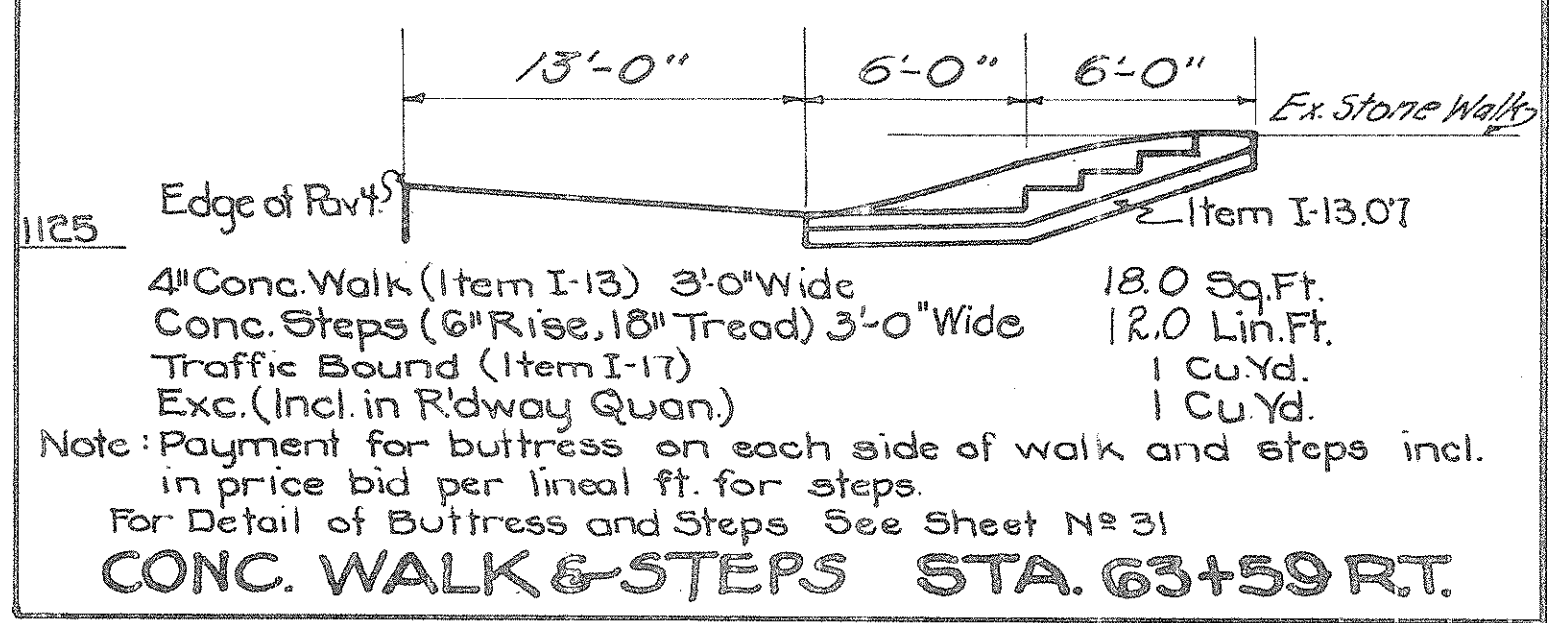
**REMOVAL OF EXISTING PAVEMENT:**  
Any existing pavement removed, that, in the opinion of the Engineer, is suitable for french drains, & the backfilling of storm sewer trenches shall be segregated & stored as directed by the Engineer. The removing, segregating & storing shall be included for payment in the unit price bid per Cu. Yd. for "Rdwy Excavation".  
Existing pav't, which is not to be removed, shall be scarified as specified under Item E-1.05 of the Specifications.

**STORM SEWERS:**  
Trenches for storm sewers shall have a limited maximum width (See Table) measured at the top of pipe. The trench, from this point to the surface of the ground, shall not slope back more than 1/4" per ft. of depth. Care shall be used in the excavating of the sewer trench so as not to harm or destroy trees adjacent to the proposed sewer.

Where R.C.P. with concrete cradles is used (as shown on the plans), the concrete for the cradles shall be poured the full width of the trench as excavated, & to the depth shown in the accompanying table. Payment for concrete cradle is included in unit price bid per Lin. Ft. for storm sewer. Any extra concrete required, due to an increased width of trench above that shown in the following table shall be furnished by the Contractor without additional cost to the State of Ohio.



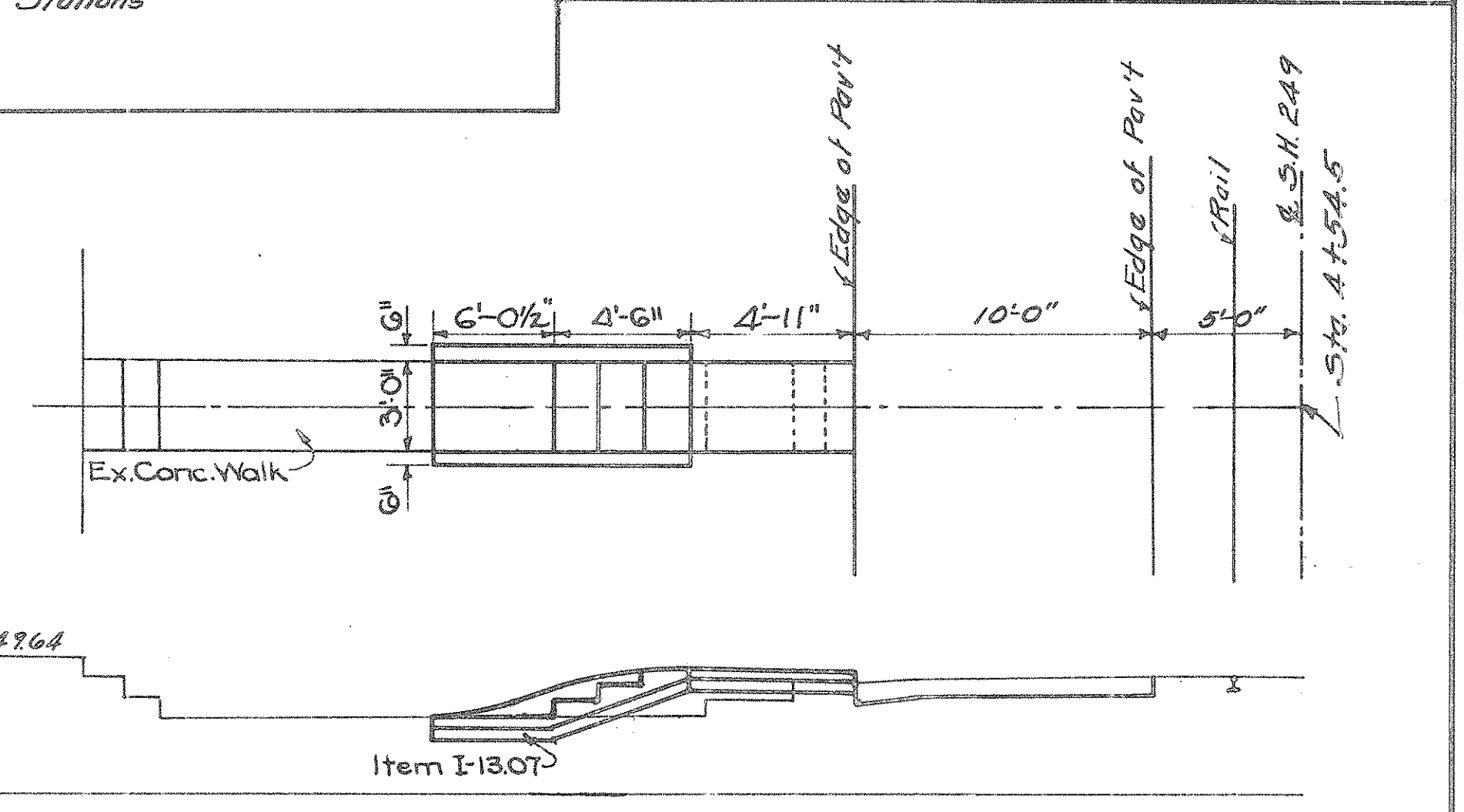
STATIONS	APPROX. MAX DEPTH OF TRENCH OVER PIPE	"D" INCHES	$\frac{3}{4}D + G + T$	"B" Feet	CU. YD. CONC. PER LIN. FT. OF TRENCH FOR CRADLES
5+64.60 to 6+44.60	7.5	24	2'-2"	3.33	0.147
6+47.60 " 7+69.60	8.5	24	2'-2"	3.33	0.147
7+72.60 " 9+24.60	8.0	24	2'-2"	3.33	0.147
9+27.60 " 11+73.60	8.5	24	2'-2"	3.33	0.147
11+76.60 " 13+52.60	8.25	21	1'-11 1/2"	3.00	0.125
13+55.60 " 15+37.60	8.0	21	1'-11 1/2"	3.00	0.125
15+40.60 " 16+52.60	7.5	18	None	2.67	None
16+54.60 " 18+00.60	7.0	18	"	2.67	"
18+25 " 20+25	6.0	15	"	2.33	"
20+27 " 22+31	3.25	15	"	2.33	"



**CONC. WALK & STEPS STA. 63+59 RT.**  
4" Conc. Walk (Item I-13) 3'-0" Wide 18.0 Sq. Ft.  
Conc. Steps (6" Rise, 18" Tread) 3'-0" Wide 12.0 Lin. Ft.  
Traffic Bound (Item I-17) 1 Cu. Yd.  
Exc. (Incl. in Rdwy Quan.) 1 Cu. Yd.  
Note: Payment for buttress on each side of walk and steps incl. in price bid per lineal ft. for steps.  
For Detail of Buttress and Steps See Sheet No 31

**ESTIMATED QUANTITIES**  
6" Conc. Pav't Item F-70 11.6 Sq. Yd.  
Corr. M. Pipe (See Align. Sh. #4) Lin. Ft.  
Traffic Bound Item I-17 (See Align. Sh. #4) Cu. Yd.

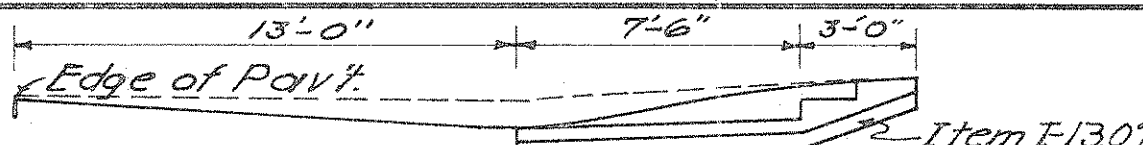
**TYPICAL PLAN**  
To Apply @ the following Stations  
Sta. 0+85 RT.  
A+15 LT



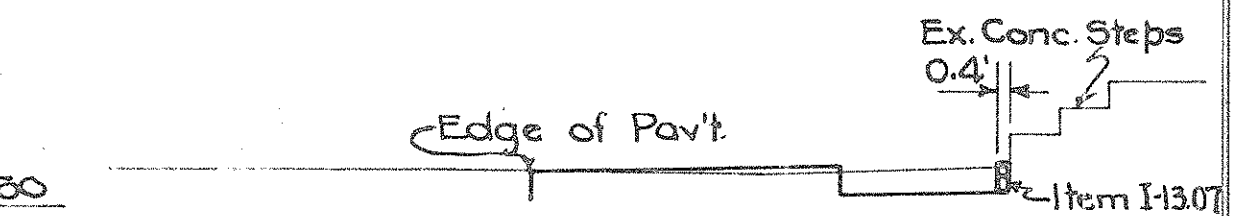
Note: Payment for buttress on each side of walk and steps included in price bid per lineal ft. for steps.  
For Detail of Buttress and Steps See Sheet No 31

**ESTIMATED QUANTITIES**  
4" Conc. Walk (Item I-13) 32.9 Sq. Ft.  
Conc. Steps (6" Rise 18" Tread) 9.0 Lin. Ft.  
Exc. (Incl. in Rdwy Quan.) 1 Cu. Yd.

**CONC. WALK & STEPS STA. 4+54.5 LT.**

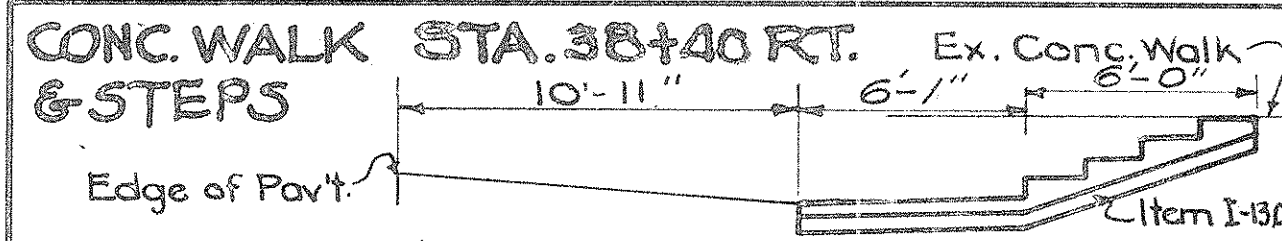


**CONC. WALK & STEPS STA. 4+30 RT.**  
4" Conc. Walk (Item I-13) 3'-0" Wide 22.5 Sq. Ft.  
Conc. Steps (18" Tread 6" Rise) 3'-0" Wide 6.0 Lin. Ft.  
Traffic Bound (Item I-17) 1 Cu. Yd.  
Exc. (Incl. in Rdwy. Quan.) 1 Cu. Yd.  
Note: Payment for buttress on each side of walk & steps incl. in price bid per lineal ft. for steps.  
For Detail of Buttress & Steps See Sheet No. 31



4" Conc. Walk (Item I-13) 3'-0" Wide 1.2 Sq. Ft.  
Traffic Bound (Item I-17) 1 Cu. Yd.

**CONC. WALK STA. 8+00 RT.**



4" Conc. Walk (Item I-13) 3'-0" Wide 18.2 Sq. Ft.  
Conc. Steps (18" Tread 6" Rise) 3'-0" Wide 12.0 Lin. Ft.  
Traffic Bound (Item I-17) 1 Cu. Yd.  
Exc. (Incl. in Rdwy. Quan.) 1 Cu. Yd.  
Note: Payment for buttress on each side of walk and steps included in price bid per lineal ft. for steps.

Drawn by J.W.B. Date 12-3-34  
Checked by R.H.H. Date 12-5-34  
For Detail of Buttress and Steps. See Sheet #31

PROPOSALS No. 1 + 2

S.H.(C.H.) 249 SEC. "D" PART " PREBLE COUNTY

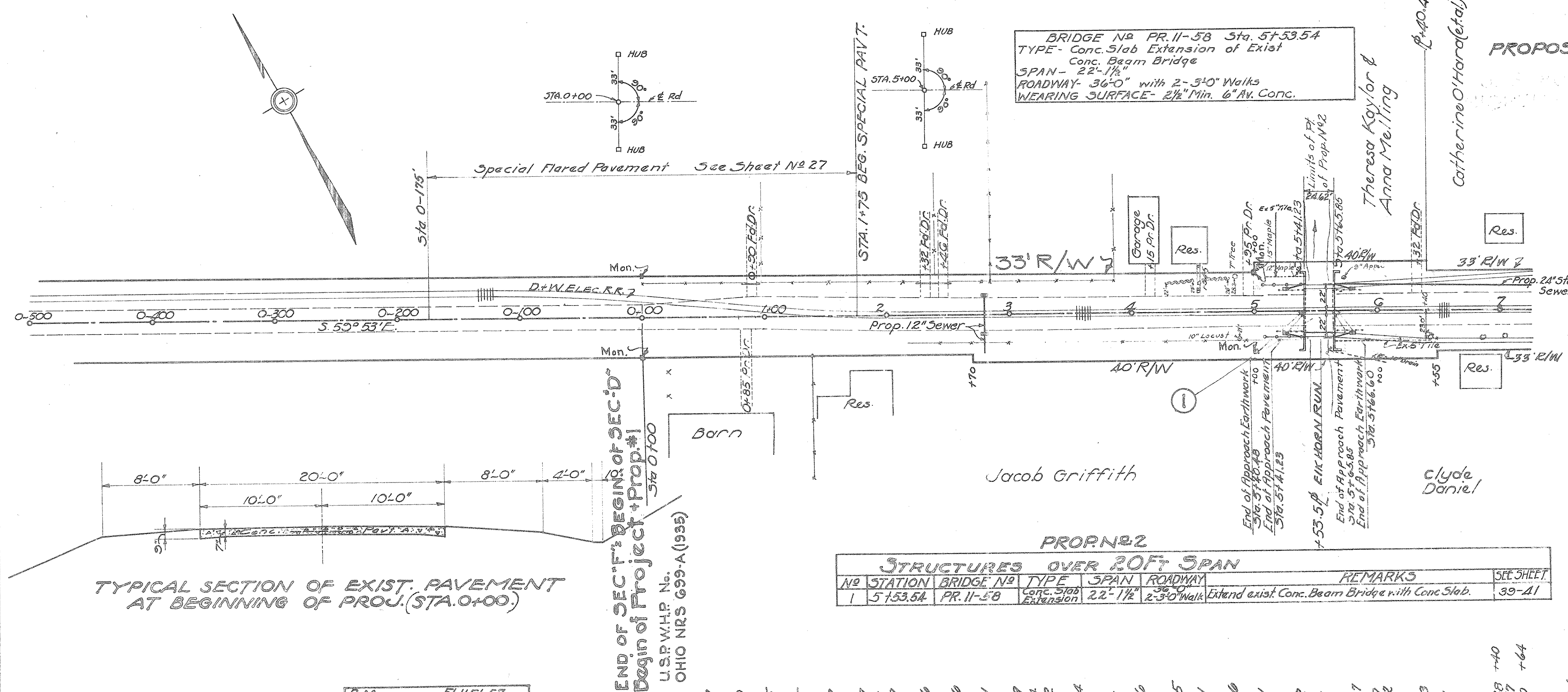
PROP No. 1  
**STORM SEWER**

STATION TO STATION	SIDE OF ROAD	12" Corr. M.P. (b3) Paved Invert or R.C.P. (b)	12" Pipe Not Under Pav't	24" Corr. M.P. (b3) Paved Invert or R.C.P. (b)	Double Curb Inlets Std. No. 4
		Lin. Ft.	Lin. Ft.	Lin. Ft.	Each
2+80 - 5+25	Lt+Rt	31.2	16		2
5+27 - 5+42.5	Lt		16		
5+27 - 5+42.5	Rt		16		
5+64.6 - 5+80	Lt		16		
5+64.6 - 5+80	Rt		16		
5+80 - 5+80	Lt+Rt			136	2
5+64 - 7+00	Lt			136	
<b>Totals</b>		<b>31.2</b>	<b>80</b>	<b>136</b>	<b>6</b>

PROP No. 1  
**PRIVATE DRIVES**

Station	Side of Road	Conc. Pav't Sp. Yd.	Traffic B Side App. Cu. Yd.	Corr. M.P. Item I-1 Lin. Ft. 12"	See Sheet No.
0+85	Rt	11.6	1		3
0+70	Lt		3	20	30
2+32.8					30
2+42	Lt		6	34	30
4+15	Lt	11.6	1		3
4+95	Lt	11.6	1		30
6+32	Lt		3		30
<b>TOTAL</b>		<b>34.8</b>	<b>15</b>	<b>54</b>	

BRIDGE No. PR. 11-58 Sta. 5+53.54  
TYPE - Conc. Slab Extension of Exist Conc. Beam Bridge  
SPAN - 22'-1 1/2"  
ROADWAY - 36'-0" with 2-3'0" Walks  
WEARING SURFACE - 2 1/2" Min. 6" Rv. Conc.



TYPICAL SECTION OF EXIST. PAVEMENT AT BEGINNING OF PROJ. (STA. 0+00)

PROP No. 2  
**STRUCTURES OVER 20 FT SPAN**

No.	STATION	BRIDGE No.	TYPE	SPAN	ROADWAY	REMARKS	SEE SHEET
1	5+53.54	PR. 11-58	Conc. Slab Extension	22'-1 1/2"	2-3'0" Walks	Extend exist. Conc. Beam Bridge with Conc. Slab.	39-A1

CHECKED	RES. C. FEE DIV. OFFICE
Drainage	O.T.M.
Boxes	HWA "O.T.M."
Bail Points	

All Elevations to U.S.G.S. Datum

B.M. E1151.57  
N.E. Cor. Bolt Conc. Strip  
Rt. Sta. 8+65

END OF SEC. "D" BEGIN OF SEC. "D"  
Begin of Project + Prop. No. 1  
U.S.R. W.H.P. No. OHIO NRS 699-A (1935)

GRADE LINE SHOWN IS CROWN OF FINISHED PAV'T.

PROP No. 1  
**REMOVE & STORE EXISTING TYPE D GUARD RAIL ITEM I-15**

Station to Station	Lin. Ft.
5+21 to 5+41 Rt	20
5+21 to 5+41 Lt	20
5+66 to 5+86 Rt	20
5+66 to 5+86 Lt	20
<b>Total</b>	<b>80</b>

PROP No. 1  
**TREE REMOVAL ITEM E-9**

Station	Dia.	No.
4+88	21" Et.	10
5+76	25" Lt	9
<b>Total</b>		<b>2</b>

PROP No. 1  
**TYPE S-C GUARD RAIL**

Stations	Side	Lin. Ft.
5+08.5 - 5+80.5	Rt.	32
5+08.5 - 5+80.5	Lt.	32
<b>Total</b>		<b>64</b>

PROP No. 1  
**TRENCH REINFORCING ITEM E-7**

STATION	No.	SIZE	LENGTH	WEIGHT LB
2+80	34	3/8" φ	8'-0"	284

PROP No. 1  
**CONC. SIDEWALK ITEM I-13**

STATION TO STATION	SIDE OF ROAD	4" CONC. SIDEWALK 39" FT.	CONC. STRIPS 6" R, 18" T 1:3 1/2 MIX LIN. FT.	Sheet No.
5+65.85 - 7+00	Lt.	536.6		
5+65.85 - 7+00	Rt.	536.6		
4+54.5	Lt.	32.9	9	
<b>TOTALS</b>		<b>1106.1</b>	<b>9</b>	

PROP No. 1  
**SPECIAL PAVEMENT**

Stations	For	Conc. Sq. Yd.	3/2" Spec. 5-33
0+00 to 0+175	Approach	72.2	13.9
0+00 to 1+75	Spec. Flare	417.4	160.4
<b>Total</b>		<b>489.6</b>	<b>174.3</b>

PROP No. 1  
**ADDITIONS & DEDUCTIONS**

Stations	Due To	Add	Deduct	Add. Ded.
0+00 - 0+175	Flare	112.5		
0+00 - 1+75				
5+41.23 - 5+65.85	Prop. 2			
5+40.18 - 5+66.00	Prop. 2	26.12		
4+71.23 - 5+41.23				
5+45 - 6+35.85	Flares			54.4
<b>Total</b>		<b>112.50</b>	<b>26.12</b>	<b>54.4</b>

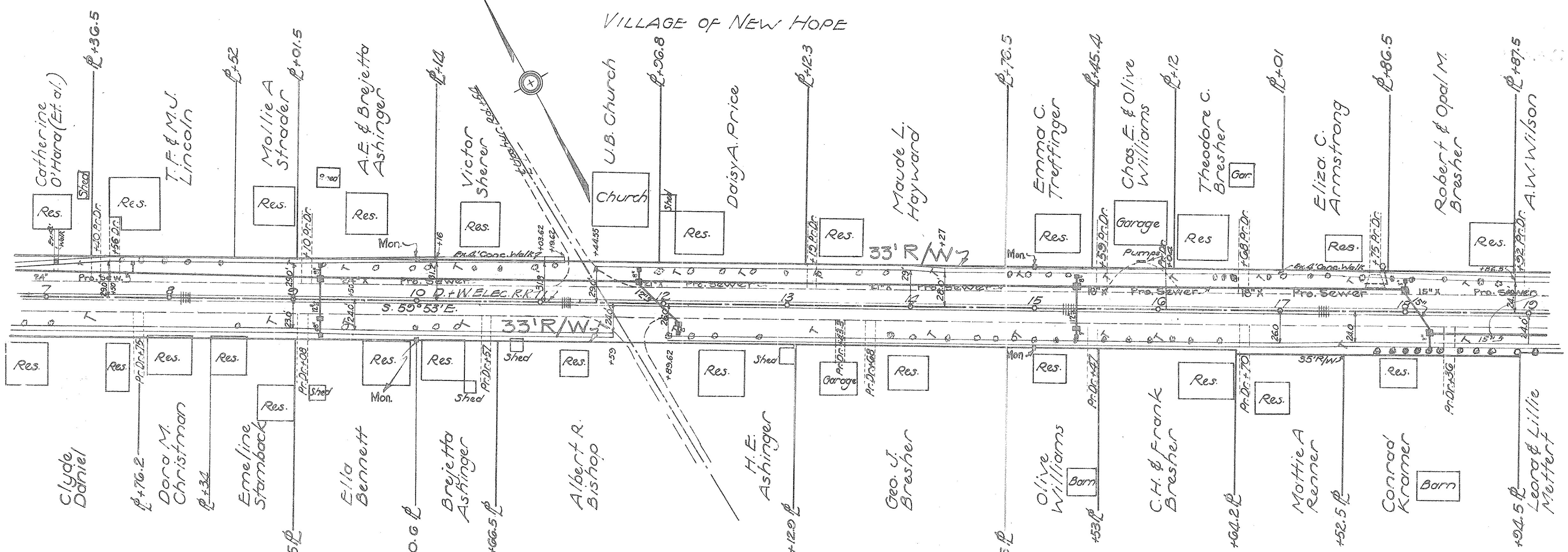
0-500 0-400 0-300 0-200 0-100 0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00

STA. 0-500 TO 7+00

S.H.(I.C.H.) 249 SEC. D. PART  
PREBLE COUNTY  
PROPOSAL NO. 1

### DRIVES & RD. APPROACHES

Station	Side	Extra 5'x7'9" Conc. Pavt. Item F-70 Sq. Yd.	6" Conc. Pavt. Bound Item F-70 Sq. Yd.	Traffic Bound Item F-17 Cu. Yd.	3" x 3" Raised Curb Item F-12 Net Deduct Lin. Ft.	See SHEET NO.
7+40	Lt.		17.6			30
7+56	Lt.		18.2			30
7+75	Rt.		11.6			30
9+08	Rt.		11.7			30
9+10	Lt.		18.4			30
10+57	Rt.		12.7			30
11+54	Lt.	152.6		7	15.9	29
13+19	Lt.		18.2			30
13+43.3	Rt.		14.9			30
13+68	Rt.		14.9			30
15+47	Rt.		14.9			30
15+59	Lt.		32.3			31
16+04	Lt.		17.7			31
16+68	Lt.		18.1			30
16+70	Rt.		14.9			30
17+75	Lt.		13.5			31
18+36	Rt.		12.7			30
18+92	Lt.		13.5			30
<b>TOTAL</b>		<b>152.6</b>	<b>281.8</b>	<b>21</b>	<b>15.9</b>	



CHECKED  
RES. OFFICE DIVISION  
DRAINAGE  
BOXES  
BALANCE POINTS

### CONC. WALKS & STEPS

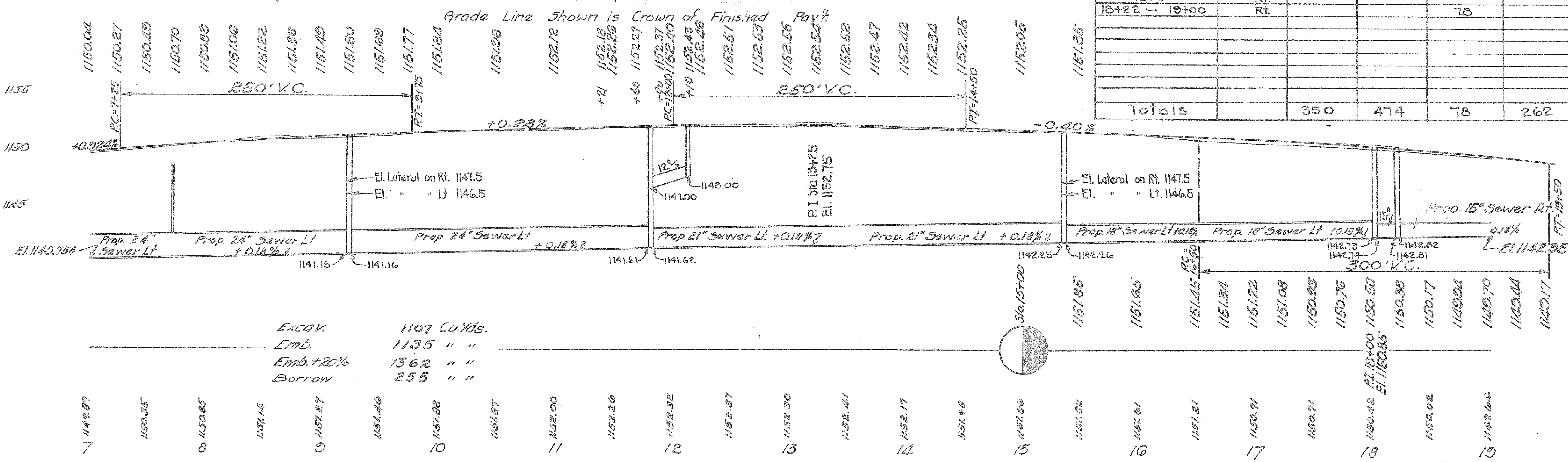
Stations	Side	4' Conc. Walk Item I-13 Sq. Ft.	6" Conc. Steps 6" Rise 18" Tread Bound Item F-17 Lin. Ft.	Traffic Sheet No.
7+06	Lt.	17.6	6.0	1
7+00-10+16	Lt.	1264.0		3
8+00	Rt.	1.2		
11+03.62-11+13.62	Lt.	64.0		
11+44.35-14+27	Lt.	1123.8		
18+06.5-19+00	Lt.	54.0		
7+00-11+59	Rt.	1836.0		
14+32.62-19+00	Rt.	2841.5		
<b>Total</b>		<b>7208.1</b>	<b>6.0</b>	<b>2</b>

B.M. El. 1151.57  
N.E. Cor. bot. conc. Step  
Rt Sta. 8+65

B.M. El. 1151.53  
S.W. End Conc. base of Gas Pump  
Lt. Sta. 15+80

### STORM SEWER

Stations	Side of Road	Corr. Metal Pipe Paved Invert (b-3) or R.C.P. (b)		Pipe Not Under Pavt. Lin. Ft.		Corr. Metal Pipe Paved Invert (b-3) or R.C.P. (b) Lin. Ft.		Double Curb Inlets Std. Dwg. I-81 No. 2, 3 & 4 Each	Comb. Double Curb Inlet and Manhole See Sheet No. 34	Special 8" Side Ditch Inlets See Sheet No. 33		
		24"	15"	18"	12"	15"	Type B			Type A		
7+00 - 9+20	Lt.	211	220									
7+70	Lt.											
9+24 - 11+78	Lt. & Rt.		254			31.2					2	
11+80	Lt.											
11+96	Lt. & Rt.					44.5					1	
12+12	Rt.											
11+82 to 15+32	Lt.		350								1	
15+34	Lt. & Rt.											
15+36 to 17+98	Lt.			262		31.2					2	
18+00	Lt.											
18+10	Lt. & Rt.					37.0					1	
18+20	Rt.											
18+22 - 19+00	Rt.										1	
<b>Totals</b>			<b>350</b>	<b>474</b>	<b>78</b>	<b>262</b>	<b>106.9</b>	<b>37.0</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>8</b>



Excav. 1107 Cu. Yds.  
Emb. 1135 " "  
Emb. +20% 1362 " "  
Borrow 255 " "

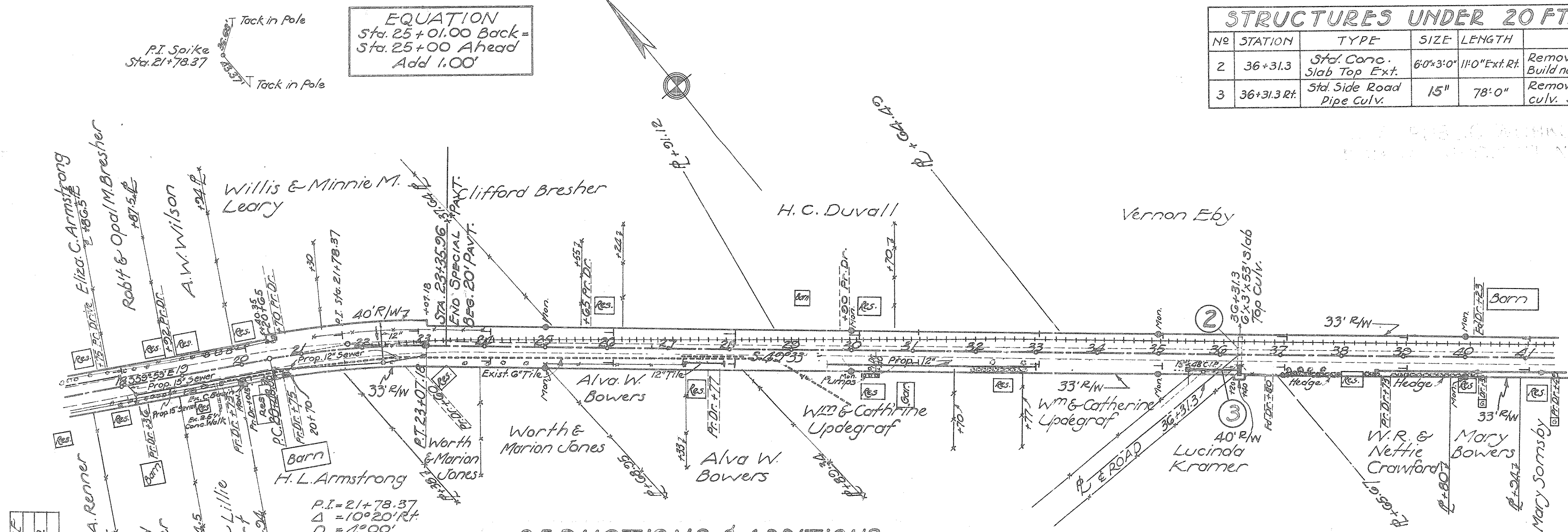
### TRENCH REINF. ITEM I-7

Stations	No.	Size	Length	Weight Lb.
9+22	34	"	8'-0"	284
11+12 - 11+59 Over Sewer (Lt.)	91	"	8'-0"	760
11+96	34	"	10'-0"	355
15+34	34	"	8'-0"	284
18+10	34	"	12'-0"	426
<b>TOTAL</b>				<b>2109</b>

STA. 7+00 TO 19+00

STRUCTURES UNDER 20 FT. SPAN					
NO	STATION	TYPE	SIZE	LENGTH	REMARKS
2	36+31.3	Stal. Conc. Slab Top Ext.	6'0" x 3'0"	11'0" Ext. Rt.	Remove portions of exist. culv. Build new ext. See Sheet No 35
3	36+31.3 Rt.	Stal. Side Road Pipe Culv.	15"	78'0"	Remove exist. culv. Build new culv. See Sheet No 36

DRIVES & ROAD APPROACHES					
Station	Side	Extra Conc. Pavt. Item I-7	6" Conc. Traffic Bound Item I-7	Sheet No	3 1/2 Pen. Macadam Item T-33
		Sq. Yd.	Sq. Yd.		Sq. Yds.
19+78	Rt.		13.2		30
20+01.6	Rt.		13.8		30
20+70	Lt.		11.6		30
20+75	Rt.		11.6		30
22+60	Rt.		15.0	2	30
25+65	Lt.		9.8		30
27+77	Rt.		11.6		30
29+00	Lt.		9.0		30
30+40	Rt.		10.0		31
36+31.3	Rt.	149.7		4	29
38+80	Rt.			3	30
38+78	Rt.		11.6		30
40+23	Lt.				31
40+33	Rt.		11.6		30
20+48.85-23+31.36					295.6
<b>TOTALS</b>		<b>149.7</b>	<b>160.1</b>	<b>27</b>	<b>295.6</b>



EQUATION  
Sta. 25+01.00 Back =  
Sta. 25+00 Ahead  
Add 1.00'

CHECKED RES. OFFICE  
L. O. W. A.  
M. W. A.  
H. W. A.

P.I. = 21+78.37  
Δ = 10° 20' Rt.  
D = 4° 00'  
L = 129.52'  
E = 5.84'  
R = 1432.40'  
RC = 20+48.85  
PT = 23+07.18  
For Super-elevation  
See Sheet No 28

DEDUCTIONS & ADDITIONS						
Stations	Due To	Length	Slopes	Special	Regular	Sheet No.
	Lin. Ft.					
20+48.85-23+31.36	Equat.	1.0	1.0	6.8	1.0	59.9
		1.0	1.0	6.8	1.0	59.9

PIPE REMOVAL			
Stations	Side	Lin. Ft.	Title
19+00-28+72	Rt.	912	6"
27+20-28+25	Rt.	105	12"
<b>TOTAL</b>		<b>912</b>	<b>105</b>

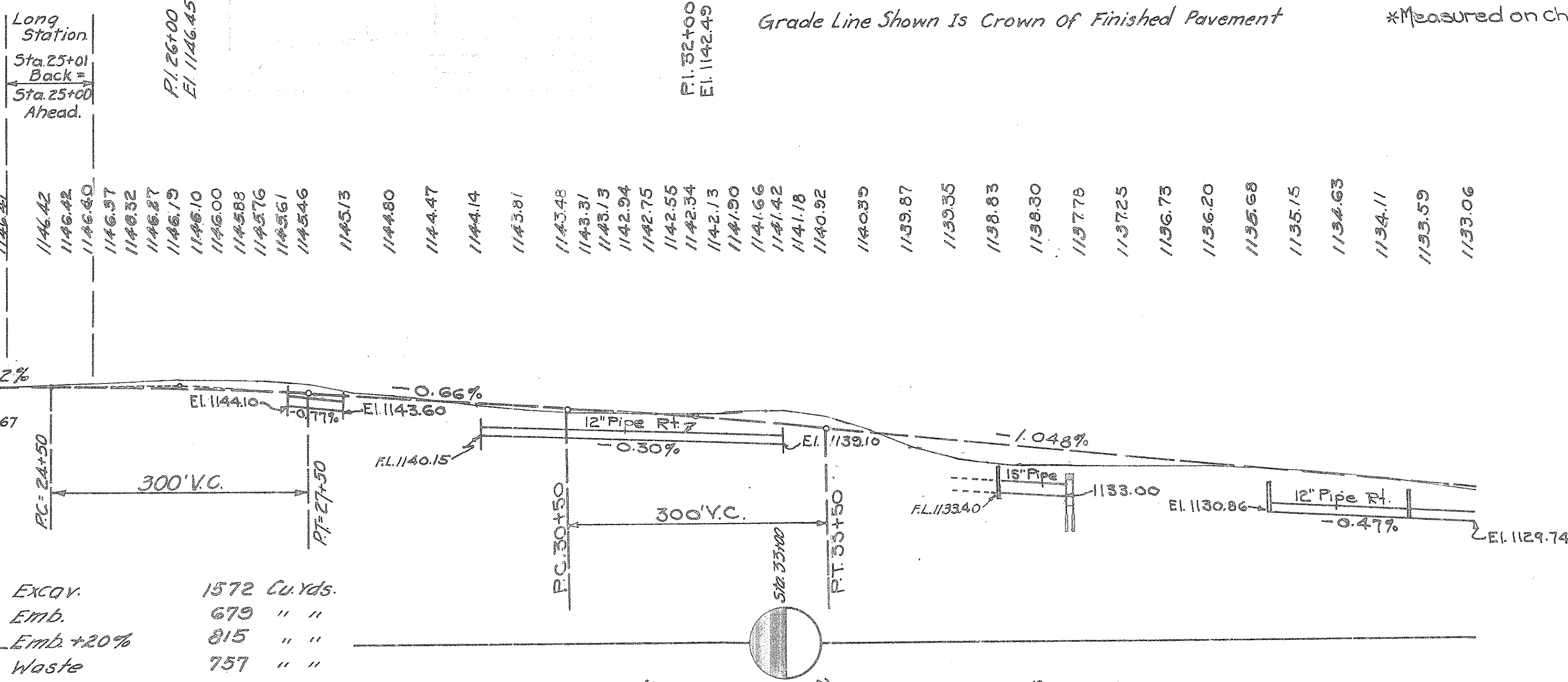
STORM SEWER					
Stations	Side	12" Cor. M.P. Paved Invert (6") or R.C.P. (6") Lin. Ft.	PIPE LIN. FT. Item I-2	SPEC. COMB. INLET# M.H. EACH	STD. NO 2 DOUBLE CURB INLET# SEE SHEET NO 39 CURB INLET# STD. DRWG. 234A) EACH
19+00-20+48	Rt.				
20+50	Rt.				
20+52-22+30	Rt.				
22+31	Rt.	66			
22+32-22+98	Rt.				
23+00	Rt.				
<b>TOTAL</b>		<b>66</b>	<b>148</b>	<b>1</b>	<b>1</b>

B.M. Elev. 1148.12  
Ring in W. Side of Stone Post. Sta. 21+55 Rt.

B.M. Elev. 1145.48  
N.E. Cor. Bottom Step Sta. 32+50 Rt.

B.M. Elev. 1135.92  
Spike in Trolley Pole Sta. 40+70 Lt.

LOCATION OF LONGITUDINAL S.W.			
STATION	DIST. OUT TO INSIDE OF WALK	LT.	RT.
19+00	25.0	24.0	
20+00	27.0	25.0	
20+50	28.0	25.0	
20+65	28.3	25.0	
20+70	none	25.0	



EXCAV. 1572 Cu. Yds.  
Emb. 679 " "  
Emb. +20% 815 " "  
Waste 757 " "

ROADWAY DRAINAGE							
Station	Side	12" Pipe Porous Backfill Lin. Ft.	12" Cor. M.P. Pipe Drives Lin. Ft.	1/2" Stone Underdrain Lin. Ft.	STD. NO 2-2 C.B. (STD. DRWG. NO 234A) EACH	Hd walls Std. Drwg. S27 PC.1 Excav. Cu. Yd.	Reinf. Steel 1/2" Dia. Lbs.
27+25	Rt.					2.0	0.7
27+25-27+91	Rt.	46	20				
27+91	Rt.					2.0	0.7
29+50	Rt.					2.0	0.7
29+50-33+00	Rt.	176	174				
33+00	Rt.					2.0	0.7
38+60	Rt.						
38+61-40+23	Rt.	140	22				
40+24	Rt.						
40+25-41+00	Rt.	55	20				
30+00	Lt.				20		
34+00	Lt.				20		
38+00	Lt.				20		
<b>TOTALS</b>		<b>417</b>	<b>236</b>	<b>60</b>	<b>2</b>	<b>8</b>	<b>2.8</b>

CONC. WALK AND STEPS				
Station	Side	4" Conc. Walk Item I-13	Conc. Steps 6" Rise, 18" Head 1-1/2" Mix Lin. Ft.	Traffic Bound Item I-17
19+26.6	Rt.	19.3	6	
20+29.2	Rt.	27.2		
38+40.0	Rt.	18.2	12	
19+00-20+65	Lt.	660.0		
19+00-20+70	Rt.	680.0		
<b>TOTALS</b>		<b>1399.7</b>	<b>18</b>	<b>3</b>

TRENCH REINF. ITEM I-7				
Stations	No	Size	Length	Weight
22+31	35	5/8" #	3'-0"	326
35+48.85-36+12	91	5/8" #	10'-0"	950
<b>TOTAL</b>				<b>1276</b>

STA. 19+00 TO 41+00

1150.42 1150.02 1149.64 1149.19 1148.64 1148.23 1147.70 1147.07 1147.02 1146.71 1146.50 1146.55 1146.54 1146.67 1146.84 1147.02 1147.12 1147.01 1146.99 1146.68 1146.50 1146.16 1145.60 1145.16 1144.51 1143.95 1143.57 1143.13 1143.00 1142.96 1142.96 1143.21 1143.01 1142.54 1140.80 1139.97 1137.44 1136.71 1136.49 1136.55 1136.37 1136.31 1135.70 1134.65 1133.29

**S.H. 249 SEC. "D" (PT.)  
PREBLE COUNTY  
PROPOSAL NO 1**

STRUCTURES UNDER 20 FT. SPAN					
N <sup>o</sup>	Station	Type	Size	Length	Remarks
4	45+11	Ex. 24" V.S.P. enc. Std. Pipe Culv. Ex. 48" x 18"	24"	12'-0" Ext.	Remove portions of exist. culv. Build new ext. on Rt. Inlet on Lt. See Sheet 37
5	47+27 (Rt.)	Corr. M.P. Side Rd. Culv.	12"	60'-0"	Remove exist. pipe culv. Build new culv. See Sheet 36
6	61+06	Std. Pipe Culv.	12"	40'-0"	Remove exist. pipe culv. Build new culv. See Sheet 37

DRIVE S & RD. APPROACHES						
Station	Side	Extra 9" 7-9 Conc. Pavt. Item 7-70 Sq. Yd.	6" Conc. Pavt. Item 7-70 Sq. Yd.	Traffic Spund. Item 1-7 Cu. Yd.	12" Cor. M. Pipe Lin. Ft.	Y. Sec.
41+49	Rt.		17.6	2		30
42+47	Rt.			3		30
47+27	Rt.	64.0		4		29
48+00	Rt.			3	22	30
50+54	Lt.	24.3		4		29
56+20	Rt.			3		30
63+02	Lt.		8.5			30
63+14	Rt.		11.6	2		30
<b>TOTAL</b>		<b>88.3</b>	<b>31.7</b>	<b>21</b>	<b>22</b>	

ROADWAY DRAINAGE							
Stations	Side	12" Pipe Lin. Ft.	12" Cor. M.P. Under Drives C. Basin Lin. Ft.	Std. I. 8 Stone Un. drain. Each	N <sup>o</sup> 1 Stone Un. drain. Lin. Ft.	Howl. Std. Drg. S. 27 P. 1 Cu. Yd.	Excav. Conc. 1-5/8" Steel Rein. Lb.
41+00-41+23	Rt.	23.0					
41+24	Rt.			1			
41+25-42+35	Rt.	90.0	20.0				
42+36	Rt.			1			
42+37-43+01	Rt.	44.0	20.0				
43+01	Rt.					2	0.7 20
45+50	Rt.					2	0.7 20
45+50-46+50	Rt.	100.0					
46+50	Rt.					2	0.7 20
56+09	Rt.						
56+10-58+50	Rt.	220.0	20.0				
58+50	Rt.					2	0.7 20
49+00	Lt.				20.0		
54+00	Lt.				21.0		
53+00	Lt.				18.0		
62+00	Lt.				23.0		
<b>TOTALS</b>		<b>477.0</b>	<b>60.0</b>	<b>3</b>	<b>82.0</b>	<b>8</b>	<b>2.8 80</b>

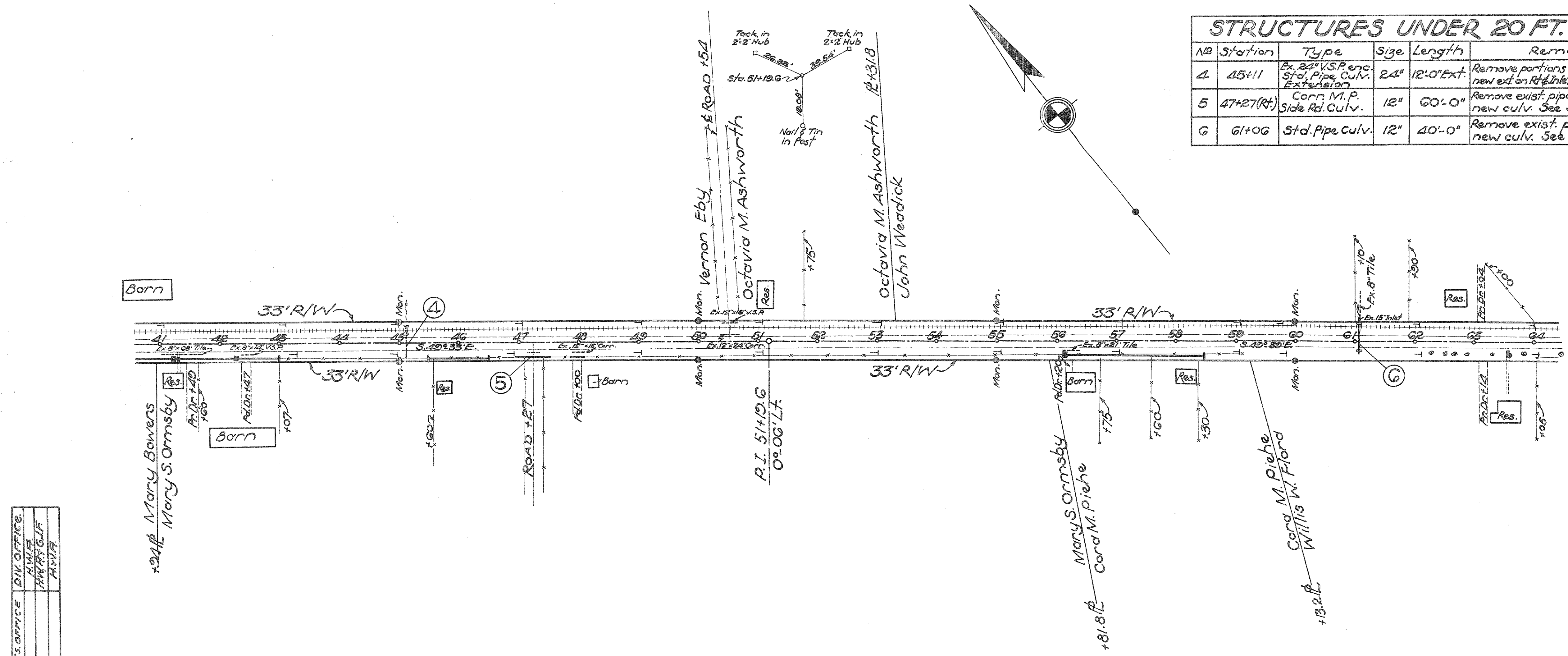
TRENCH REIN. ITEM I-7				
Station	N <sup>o</sup>	Size	Length	Wt. Lbs.
61+06	30	5/8" φ	8'-0"	326

PIPE REMOVAL				
Station	Side	8" Tile Lin. Ft.	8" V.S.P. Lin. Ft.	Corr. M.P. Lin. Ft.
41+02-41+70	Rt.	68		
42+47	Rt.		14	
48+00	Rt.			15
50+54	Lt.			24
56+20	Rt.	21		
<b>TOTALS</b>		<b>89</b>	<b>14</b>	<b>24 15</b>

CONC. WALK & STEPS					
Station	Side	5" x 8" (1.5%) Item L-7 Lin. Ft.	4" Conc. Walk Item L-7 Sq. Ft.	Traff. Bd. Item L-7 Cu. Yd.	Sheet No
41+30	Rt.	6.0	22.5	1	3
63+59	Rt.	12.0	18.0	2	3
<b>Total</b>		<b>18.0</b>	<b>40.5</b>	<b>3</b>	

TREE REMOVAL				
Station	Side	Diameter - N <sup>o</sup>		
		12"	15"	18"
62+75	Rt.			
62+82	Rt.	1		1
63+27	Rt.			
63+59	Rt.			
63+76	Rt.	1		
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>1</b>

STA. 41+00 TO 64+00



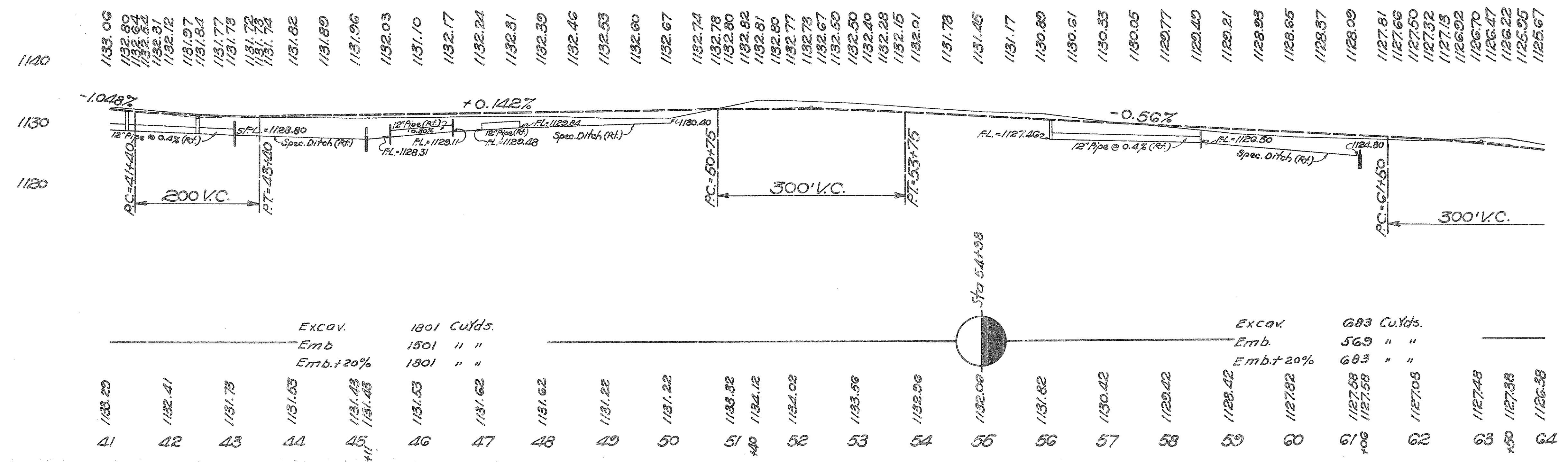
GRADE LINE SHOWN IS CROWN OF FINISHED PAVEMENT

B.M. Elev. 1133.73  
S.E. Cor. Conc. Porch Floor  
Sta. 51+05 Lt.

B.M. Elev. 1128.03  
Spike in Trolley Pole  
Sta. 58+45 Lt.

B.M. Elev. 1126.78  
S.E. Cor. of Conc. Step  
Sta. 62+85 Lt.

CHECKED	RES. OFFICE	DIV. OFFICE
DESIGNED	AMLR	
BOXES	AMLR	
BOI. POINTS	AMLR	



Excav.	1801 Cu.Yds.
Emb.	1501 " "
Emb.+20%	1801 " "

Excav.	683 Cu.Yds.
Emb.	569 " "
Emb.+20%	683 " "

1133.29	1132.41	1131.73	1131.53	1131.43	1131.43	1131.53	1131.62	1131.62	1131.22	1131.22	1133.32	1134.12	1134.02	1133.56	1132.96	1132.06	1131.82	1130.42	1129.42	1128.42	1127.82	1127.58	1127.58	1127.08	1127.48	1127.38	1126.38
41	42	43	44	45	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	64	64	64



DEDUCTIONS			
STATION TO STATION	FINISHING SHOULDERS SLOPES AND DITCHES	9"-7"-9" Conc. Pavt.	RE-MARKS
71+29.5 - 71+40.5	11.00'	11.00'	Due to Struct. No 7 See Sheet No 38

STRUCTURES UNDER 20 FT. SPAN					
NO	STATION	TYPE	SIZE	LENGTH	REMARKS
7	71+35	Special Slab Top Culv. Ext.	7'0" x 4'0"	15' @ Ext. Rt.	Remove portions of exist. culv. Build new ext. on Rt. See Sheet No 38
8	83+84	Existing Tile	6"		Build C.B. on Rt. See Sheet No 37

FED. AID DIST. NO	STATE	FED. AID PROJ. NO	FISCAL YEAR
10	OHIO	WRS 699-A	1935

8  
50

S.H.(I.C.H.) 249 SEC. "D" PT. "A"  
PREBLE COUNTY  
PROPOSAL NO 1

DRIVES & RD. APPROACHES

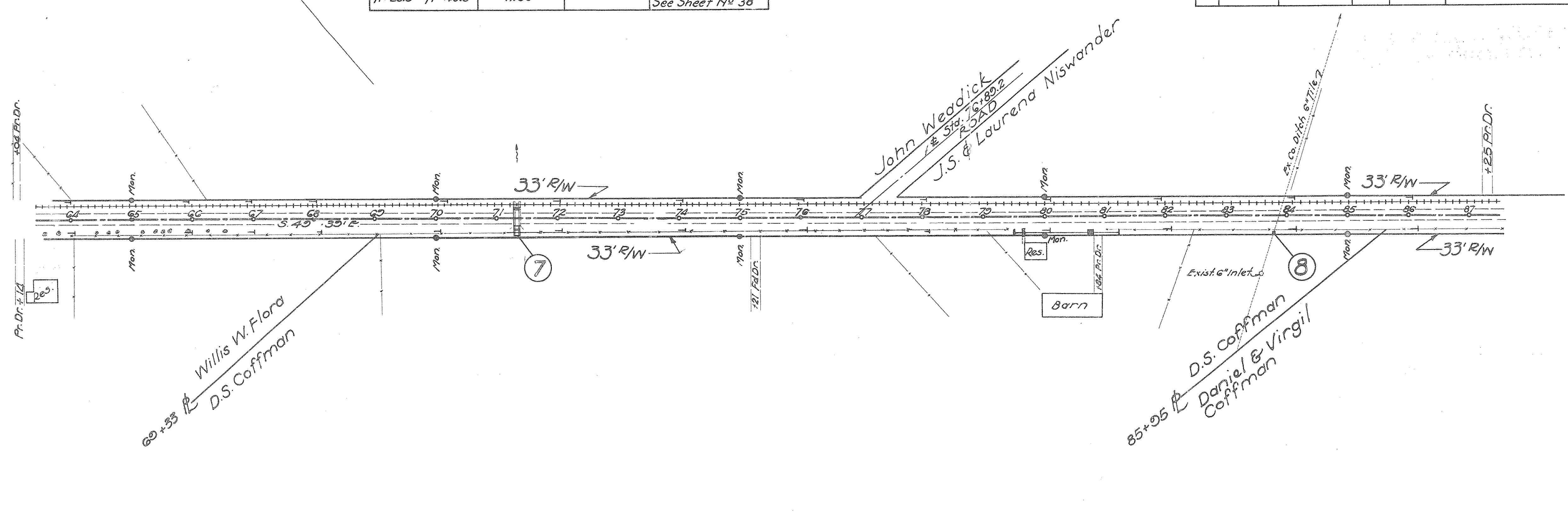
Station	Side	8" Conc. Traffic Pavt. from 70 Item 7 Sq. Yd.	6" Conc. Traffic Pavt. Bound from 70 Item 7 Sq. Yd.	5" x 3" Raised Curb from 1-1/2" Net Depth Cu. Yd.	Sheet No
75+21	Rt.			3	30
76+89.2	Lt.	46.9		5	29
80+84	Rt.		11.6	2	30
TOTAL		46.9	11.6	10	

ROADWAY DRAINAGE							
Station	Side	12" Pipe Porous Backfill Lin. Ft.	12" Corrugated Metal Drives Lin. Ft.	Std. I-8 N#2-2 C. Basin Each	N#1 Stone Udrains Lin. Ft.	14" W. Wall (S-27 P.C.I.) Excav. Cu. Yd.	Conc. 1-3/4" Steel Rein. Lbs.
79+50	Rt.					2	20
79+50-80+74	Rt.	124.0					
80+75	Rt.			1			
80+76-81+26	Rt.	300	200				
81+26	Rt.					2	20
66+37	Lt.				13.5		
71+00	Lt.				13.0		
74+00	Lt.				13.0		
79+00	Lt.				13.0		
84+00	Lt.				21.0		
87+00	Lt.				21.0		
Totals		1540	200	1	118.5	4	40

TREE REMOVAL			
STATION	SIDE	DIAMETER	NO
64+33	Rt.	12"	1
65+17	Rt.	18"	1
65+66	Rt.	1	
65+98	Rt.	1	
66+16	Rt.	1	
66+47	Rt.	1	
TOTALS		3	3

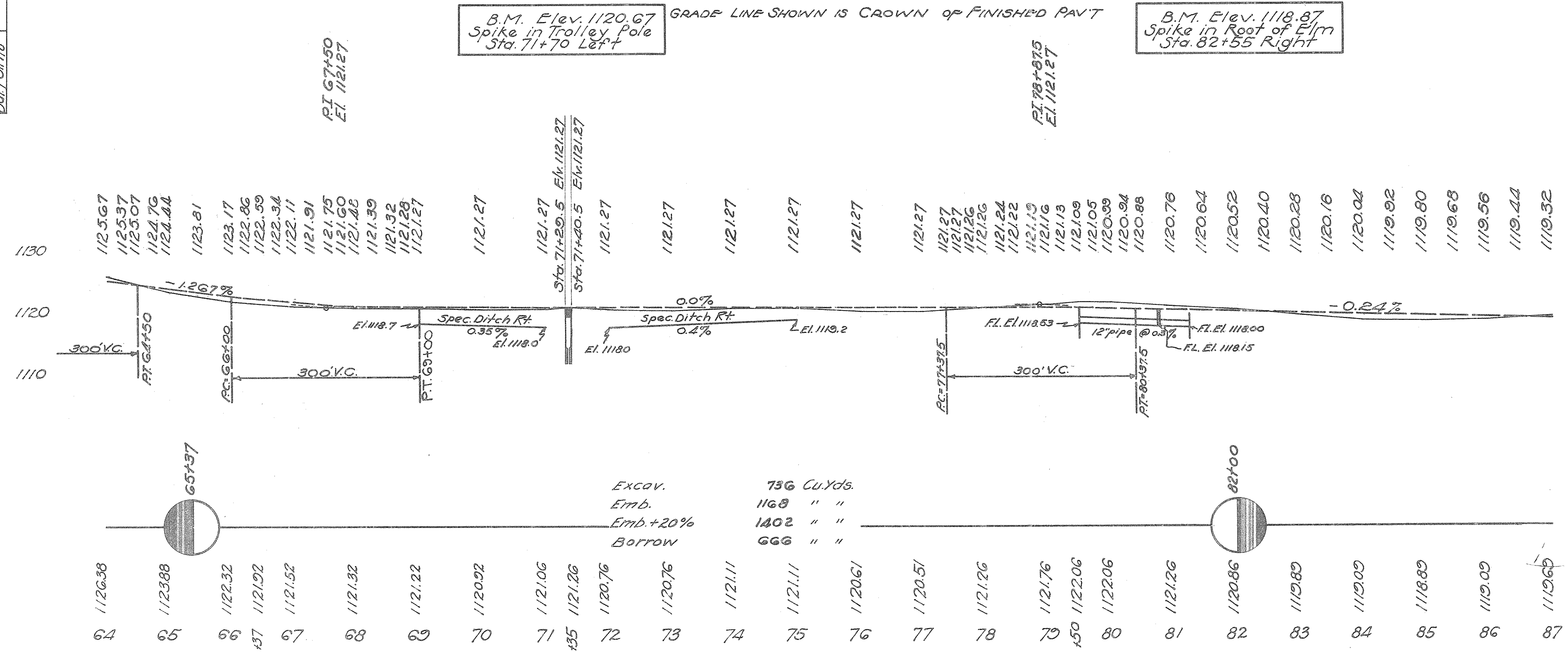
CONC. WALK & STEPS					
TRAFFIC BOUND ITEM 1-17 CU. YD.	STATION	SIDE	4" CONC. WALK ITEM 1-13 30 Ft. Lin. Ft.	CONC. STEPS 6" RISE 18" TR. (1-5/8") Lin. Ft.	SHEET NO
1	79+67	Rt.	13.5	12.0	31

CHECKED	RES. OF	CE DIV. OFFICE
Drainage	A.T.	
Boxes	H.M.A.E. O.T.M.	
Ball Points	H.N.A.	

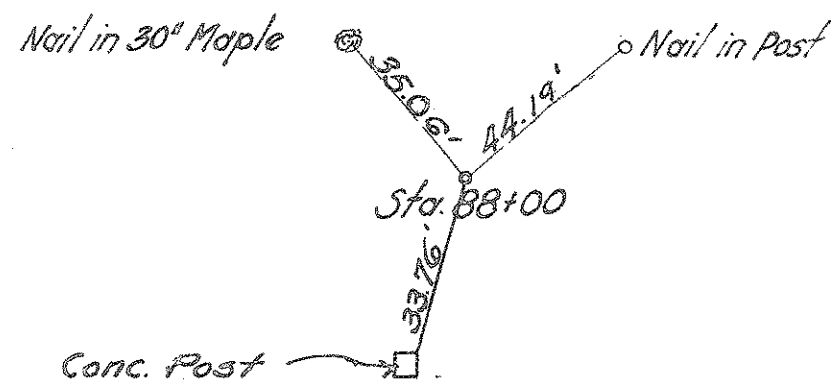


B.M. Elev. 1120.67  
Spike in Trolley Pole  
Sta. 71+70 Left

B.M. Elev. 1118.87  
Spike in Root of Elm  
Sta. 82+55 Right



STA. 64+00 TO 87+00

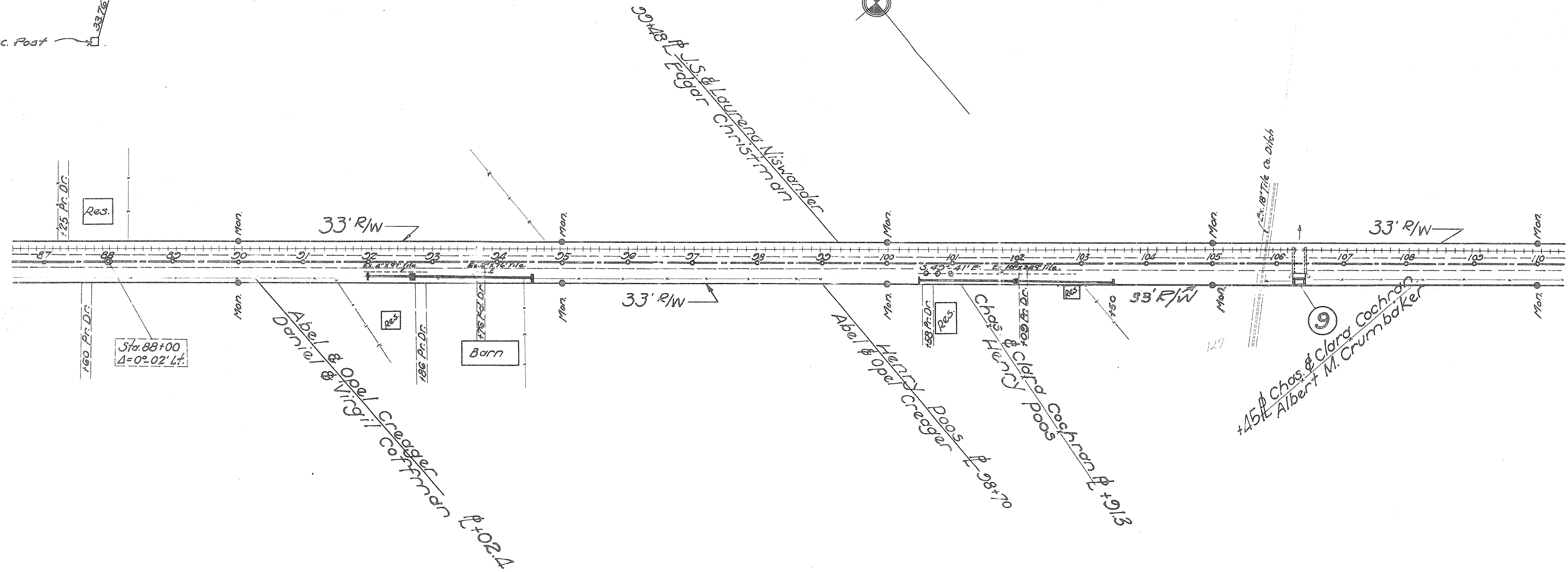


STRUCTURES UNDER 20FT. SPAN					
No	STATION	TYPE	SIZE	LENGTH	REMARKS
9	106+30	Special Slab Top Culv. Ext.	110x3'-0"	18'-6" Ext. Rt.	Remove portions of exist culv. Build new ext. on Rt. See Sheet 1038

FED. AID DIST. NO. 10 STATE OHIO FED. AID PROJ. NO. NRS 699-A FISCAL YEAR 1935  
 S.H.(I.C.H.) 249 SEC. "D" PART 1  
 PREBLE COUNTY  
 PROPOSAL NO 1

ROADWAY DRAINAGE

Stations	Side	Pipe Backfill Lin. Ft.	Corr. M. Pipe Drives Lin. Ft.	Std. I-8 Catch Basins	No. 1 Stone Under Drain	Head walls Under Excav. Conc. 1:5 1/2 Steel	Std. Drg. S-27 PC. 1	Reinf.		
92+00	Rt.									
92+00-92+74	Rt.	74								
92+75	Rt.			1						
92+76-94+50	Rt.	134	40							
94+50	Rt.					2	0.7	20		
100+50	Rt.					2	0.9	24		
100+50-101+98	Rt.	128	20							
101+99	Rt.			1						
102+00-103+50	Rt.	130	20							
103+50	Rt.					2	0.9	24		
91+00	Lt.						16.5			
95+00	Lt.						17.0			
98+00	Lt.						17.0			
102+00	Lt.						18.0			
106+00	Lt.						18.0			
107+00	Lt.						18.0			
Totals		208	258	40	40	2	104.5	8	3.2	88



CHECKED RES. OFFICE DIVISION  
 Drainage  
 Boxes  
 Bal. Points

B.M. Elev. 1121.47  
 S.E. Cor. Bott. Step  
 Sta. 87+80 Left

GRADE LINE SHOWN IS CROWN OF FINISHED PAVEMENT

B.M. Elev. 1110.93  
 N.W. Cor. of Bott. Step  
 Sta. 100+70 Right

B.M. Elev. 1107.04  
 N.W. Cor. of Bridge Abut.  
 Sta. 106+25 Left

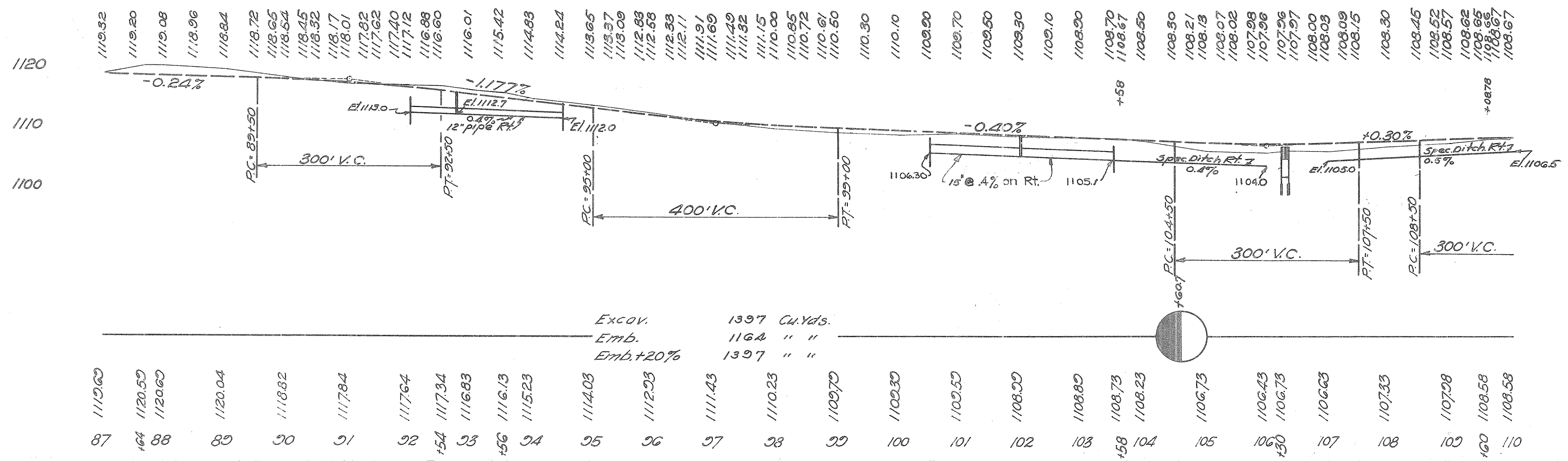
P.I. 110+00  
 E.I. 1108.90

DRIVES & ROAD APPROACHES

STATION	SIDE	6" CONG. PAV'T ITEM 7-10 Sq. Yds.	TRAFFIC BOUND ITEM 3-17 Cu. Yds.	SHEET NO
87+25	Lt.	8.5		30
87+60	Rt.	11.6	2	30
92+86	Rt.	11.6	2	30
93+76	Rt.		3	30
100+58	Rt.	11.6	2	30
102+09	Rt.	11.6	2	30
TOTALS		54.9	11	

PIPE REMOVAL

STATIONS	SIDE	TILE		
		4"	8"	10"
91+98-92+95	Rt.	97		
93+76	Rt.		16	
100+50-102+99	Rt.			249
TOTALS		97	16	249

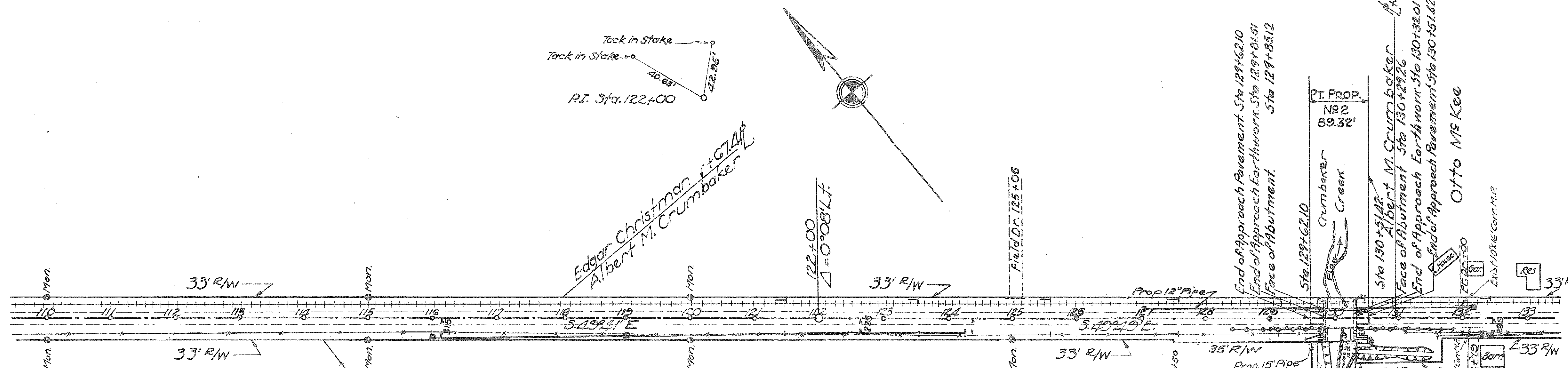


Excav. 1397 Cu. Yds.  
 Emb. 1164 " "  
 Emb. +20% 1397 " "

112.60	112.50	112.00	112.04	111.82	111.784	111.764	111.734	111.683	111.613	111.523	111.403	111.293	111.143	111.023	110.970	110.830	110.50	110.800	110.800	110.73	110.823	110.673	110.643	110.673	110.603	110.733	110.728	110.58	110.858
87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116

STA. 87+00 TO 110+00

S.H.(I.C.H.) 249 SEC. "D" PART  
PREBLE COUNTY  
PROPOSAL NO 1 & 2



Bridge No - PR-11-82  
Station 130+07.19  
Proposed Structure: Concrete Beam  
Bridge using existing Stone abutments.  
Span - 48'-1 3/4" Roadway - 24'-0"  
Approach Slabs: 12 1/2' x 20'-0"  
Wearing Surface: 4" Concrete.

**PROP. NO 1  
RDWY. DRAINAGE**

Station	Stone Under drain Item 3	Lin. Ft.
113+00	20	
119+00	20	
124+00	19	
<b>TOTALS</b>	<b>59</b>	

**ROADWAY DRAINAGE**

Stations	Side	Pipe Porous Bkfill Item I-3 Lin. Ft.	Corr. M.P. Under Drives Lin. Ft.	Std I-8 Catch Basins Each	Headwalls Std. Dwg 5-27PC.1 Exc. Conc. Item 1:5% Steel Gullys	Std I-2 Catch Basin Each	Remarks					
127+06.12	Lt.					1						
127+07.12-129+85.12	Lt.	278										
130+28.26-132+11.20	Lt.	162	20									
132+12.26	Lt.											
129+42.12-129+85.12	Rt.			1			Skew pipe ds shown.					
129+49.12	Rt.	37			5	2.0	Build one Std. Milside inlet HW'wl					
131+66	Rt.				5	2.0	" " " " " "					
131+66-132+30	Rt.		44	20			Excavate outlet as shown.					
132+131	Rt.											
132+32-133+00	Rt.		68									
116+00	Rt.											
116+01-118+99	Rt.	290										
119+00	Rt.											
119+01-124+25	Rt.	524										
124+25	Rt.				2	0.7	20					
<b>Totals</b>		<b>1262</b>	<b>37</b>	<b>112</b>	<b>20</b>	<b>20</b>	<b>4</b>	<b>12</b>	<b>4.7</b>	<b>70</b>	<b>1</b>	

**PROP. NO 1  
PIPE REMOVAL**

Station	Side	Corr. M.P. Rd. Lin. Ft.	Item
132+00	Lt.	16	
132+19	Rt.	20	
<b>TOTAL</b>		<b>16</b>	<b>20</b>

**PROP. NO 1  
DRIVES & RD. APPROACHES**

Station	Side	6" Cong. Traffic Sheet of Pavt. Bound	Item	Sq. Yd.	Cu. Yd.
125+05	Lt.	1			31
132+00	Lt.	0.8			30
132+19	Rt.	11.6		2	30
<b>TOTALS</b>		<b>21.4</b>	<b>3</b>		

**PROP. NO 1  
REMOVE & STORE EXIST. TYPE B GO. RAIL ITEM I-15**

Station to Station	Lin. Ft.
120+04-120+82 Rt.	78
130+34-131+20 Rt.	86
<b>TOTAL</b>	<b>164</b>

**PROP. NO 1  
TYPE S-C GUARD RAIL ITEM I-15**

Station to Station	Lin. Ft.
128+37.5-129+81.5 Rt.	144
120+65.5-129+81.5 Lt.	16
130+32-131+92 Rt.	160
130+32-130+48 Lt.	16
<b>TOTAL</b>	<b>336</b>

**PROP. NO 2  
TREE REMOVAL ITEM E-9**

Station	Side	Dist. Out	Size	No
130+11	Rt.	42'	15"	1
130+11	Rt.	45'	12"	1
130+13	Rt.	62'	12"	1
<b>TOTAL</b>				<b>3</b>

**PROP. NO 1  
DEDUCTIONS**

See Sheet No	Stations	Shoulder Slopes & Ditches	9'-7'-9" Conc. Pavt. Item F-70	Lin. Ft.	Remarks
42-47	129+81.51-130+32.01			50.50	
42-47	129+621-130+51.42			89.32	
<b>TOTALS</b>				<b>50.50</b>	<b>89.32</b>

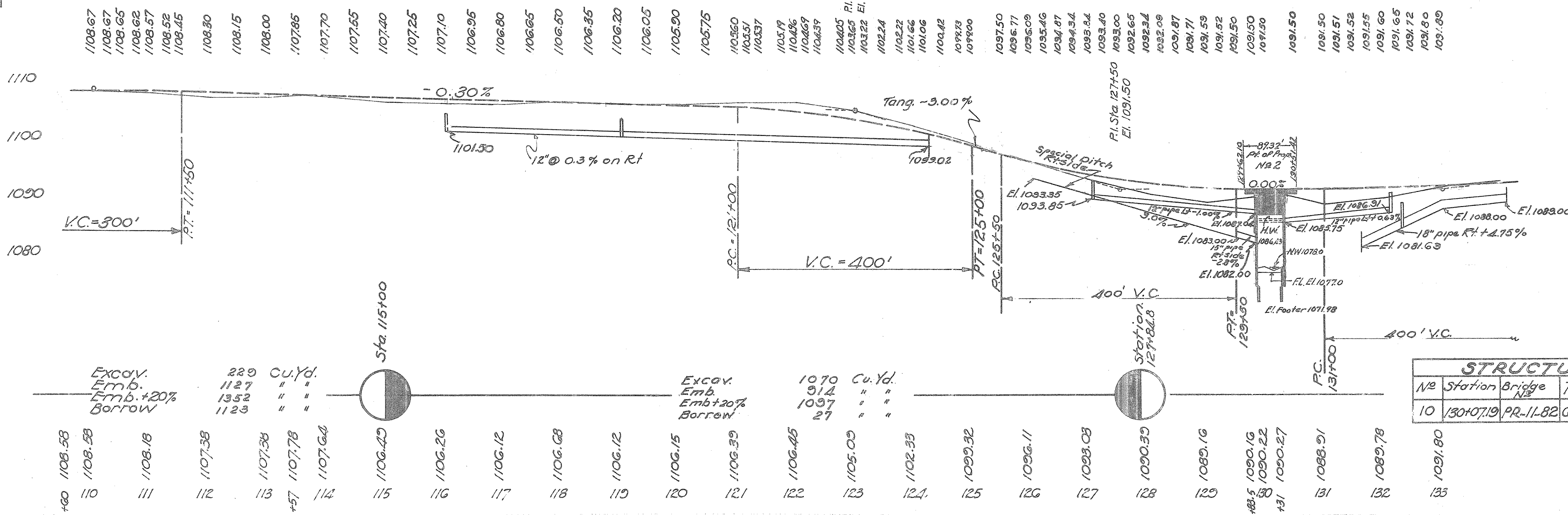
**PROP. NO 2  
STRUCTURES 20 FT. SPAN AND OVER**

No	Station	Bridge No	Type	Span	Rdwy.	Remarks	Sheet No
10	130+07.19	PR-11-82	Conc. Beam	48'-1 3/4"	24'-0"	Build Std. Conc. Beam Bridge using Exist. Stone Abutts.	42-47

CHECKED RES. C. FICE DIV. OFFICE  
Drainage H.W.A.  
Boxes G.T.M.  
Bolt Points M.B.C.

B.M. Elev. 1106.29 Spike in Trolley Pole. Sta. 115+00 Lt.  
B.M. Elev. 1093.24 Spike in Trolley Pole. Sta. 127+15 Lt.  
B.M. Elev. 1089.50 N.W. Cor. N.W. Wing of W. Abut. Sta. 129+85 Lt.

GRADE LINE SHOWN IS CROWN OF FINISHED PAVEMENT



Excav. Emb. +20% Borrow

Station	Cu. Yd.
1127	229
1352	"
1123	"

Excav. Emb. +20% Borrow

Station	Cu. Yd.
1070	1070
914	"
1097	"
27	"

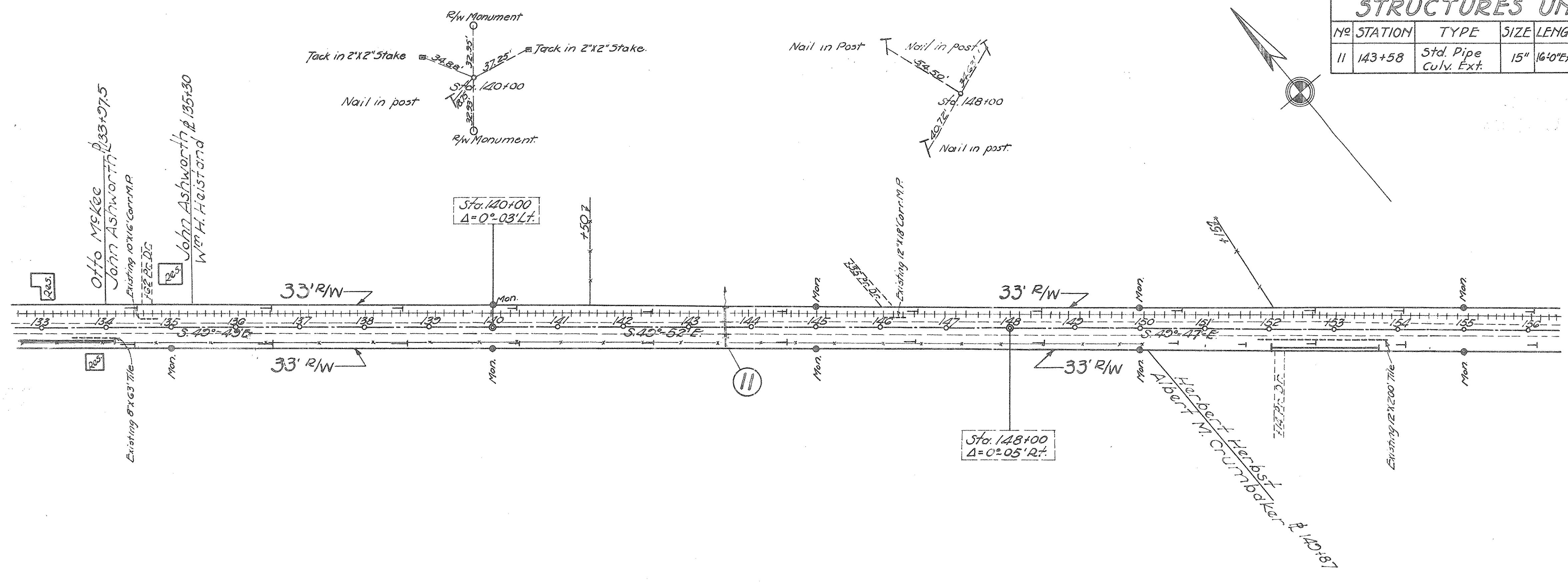
STA. 110+00 TO 133+00

STRUCTURES UNDER 20' SPAN					
NO	STATION	TYPE	SIZE	LENGTH	REMARKS
11	143+58	Std. Pipe Culv. Ext.	15"	16'-0" Ex. R/L	Build pipe culvert on Rt. and inlet on Lt. See Sheet No 31

FED. AID DIST. NO	STATE	FED. AID PROJ. NO	FISCAL YEAR
10	OHIO	NRS 699-A	1935

11  
46

S.H.(I.C.H.) 249 SEC. "D. PART"  
PREBLE COUNTY  
PROPOSAL NO 1



DRIVES & ROAD APPROACHES

STATION	SIDE	6" CONC PAVEMENT ITEM-70	4" TRAFFIC BOUND ITEM-17	SHEET NO
134+62	Lt.	10.0		30
146+35	Lt.	8.4		31
152+14	Rt.		3	30
TOTALS		184	3	

CHECKED RES. OFFICE DIRECTOR  
DRAINAGE P. T.  
BOXES H.M.A. - O.T.M.  
BOL. POINTS H.W.A.

B.M. Elev. 1091.70  
Spike in Trolley Pole  
Sta. 133+25 Left

GRADE LINE SHOWN IS CROWN OF FINISHED PAVEMENT

B.M. Elev. 1100.47  
Spike in Trolley Pole  
Sta. 146+35 Left

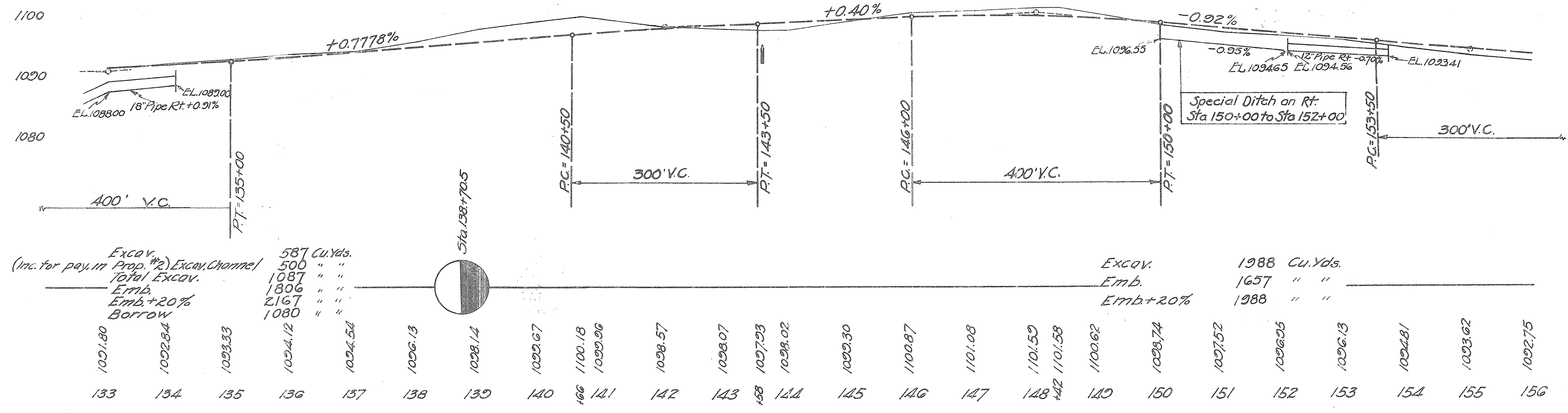
1091.89	1091.90	1092.11	1092.23	1092.38	1092.55	1092.69	1092.87	1093.06	1093.44	1093.63	1094.22	1094.61	1095.00	1095.39	1095.78	1096.17	1096.56	1096.95	1097.33	1097.53	1097.70	1097.88	1098.05	1098.21	1098.36	1098.50	1098.64	1098.76	1098.88	1099.00	1099.10	1099.30	1099.50	1099.70	1099.90	1100.10	1100.19	1100.26	1100.31	1100.34	1100.34	1100.33	1100.29	1100.25	1100.24	1100.16	1100.07	1099.95	1099.82	1099.66	1099.48	1099.28	1099.06	1098.60	1098.14	1097.68	1097.22	1096.76	1096.30	1095.84	1095.51	1095.40	1095.19	1094.58	1094.79	1094.60	1094.42	1094.24	1094.08	1093.92
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PIPE REMOVAL

STATIONS	SIDE	CORR. PIPE	TILE
133+47-134+10	Rt.	10" 12"	8" 12"
134+62	Lt.	16	63
146+35	Lt.	18	
151+82-153+82	Rt.		200
TOTALS		16 18	63 200

ROADWAY DRAINAGE

Station	Side	Pipe	Corr. MP	Headwalls
133+00-134+10	Rt.	12" 15"	110	
134+10	Rt.			4 10 26
152+04	Rt.			2 07 20
152+04-153+70	Rt.	146	20	
153+70	Rt.			2 07 20
136+00	Lt.			21.0
140+66	Lt.			22.0
155+00	Lt.			22.0
Totals		146	110 20	65.0 8 2.4 66.0



Excav. (inc. for pay in Prop. #2) 587 Cu. Yds.  
Total Excav. 500 " "  
Emb. 1087 " "  
Emb.+20% 1806 " "  
Borrow 2167 " "  
1080 " "

Excav. 1988 Cu. Yds.  
Emb. 1657 " "  
Emb.+20% 1988 " "

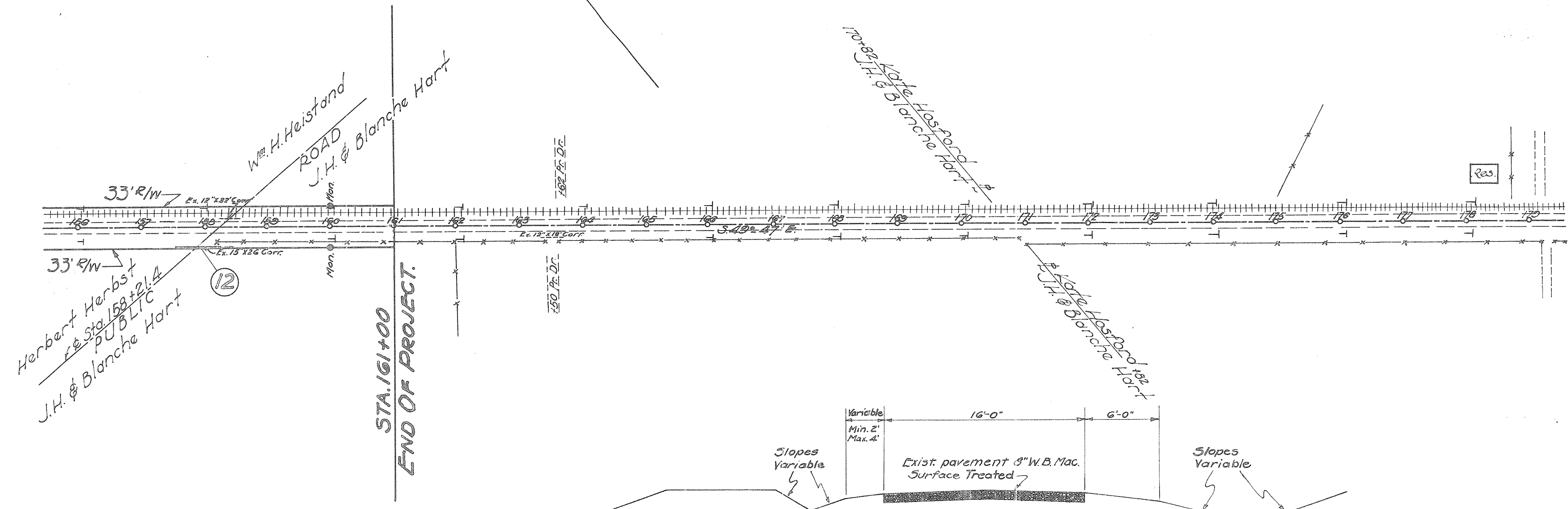
STA. 133+00 TO 156+00

STRUCTURES UNDER 20 FT. SPAN					
Nº	STATION	TYPE	SIZE	LENGTH	REMARKS
12	158+21.4 R/L	Corr. M. Pipe Side Road Culv.	15"	74'-0"	Remove exist. culv. Build new culv. See Sheet Nº 35

FED. AID DIST. Nº	STATE	FED. AID PROJ. Nº	FISCAL YEAR	12 50
10	OHIO	NRS 699-A	1935	

S.H. (I.C.H.) 249 SEC. "D. PT."  
PREBLE COUNTY  
PROPOSAL Nº 1

CHECKED	RES. OFFICE	DIV. OFFICE
Drainage	H.T.	H.T.
Boxes	H.W.F.	H.W.F.
Bar/prints	H.N.A.	H.N.A.

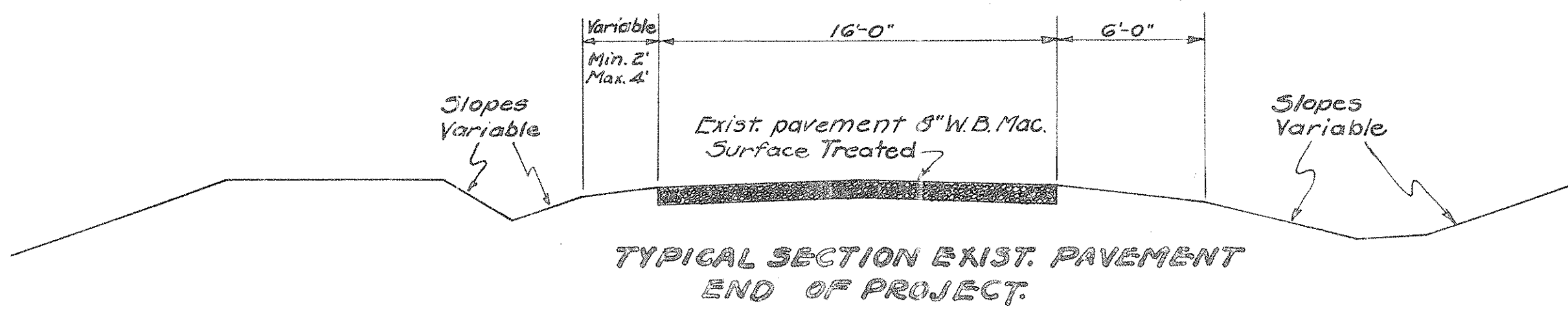


**DRIVES & ROAD APPROACHES**

STATION	SIDE	9'-7"-7'-9" TRAFFIC CONCRETE BOUND PAVT. ITEM 1-17	SHEET Nº
158+21.4	Rt&Lt	Sq. Yd. 177.8	C.U.Y.D. 8 29
<b>TOTALS</b>		<b>177.8</b>	<b>8</b>

**PIPE REMOVAL ROADWAY DRAINAGE**

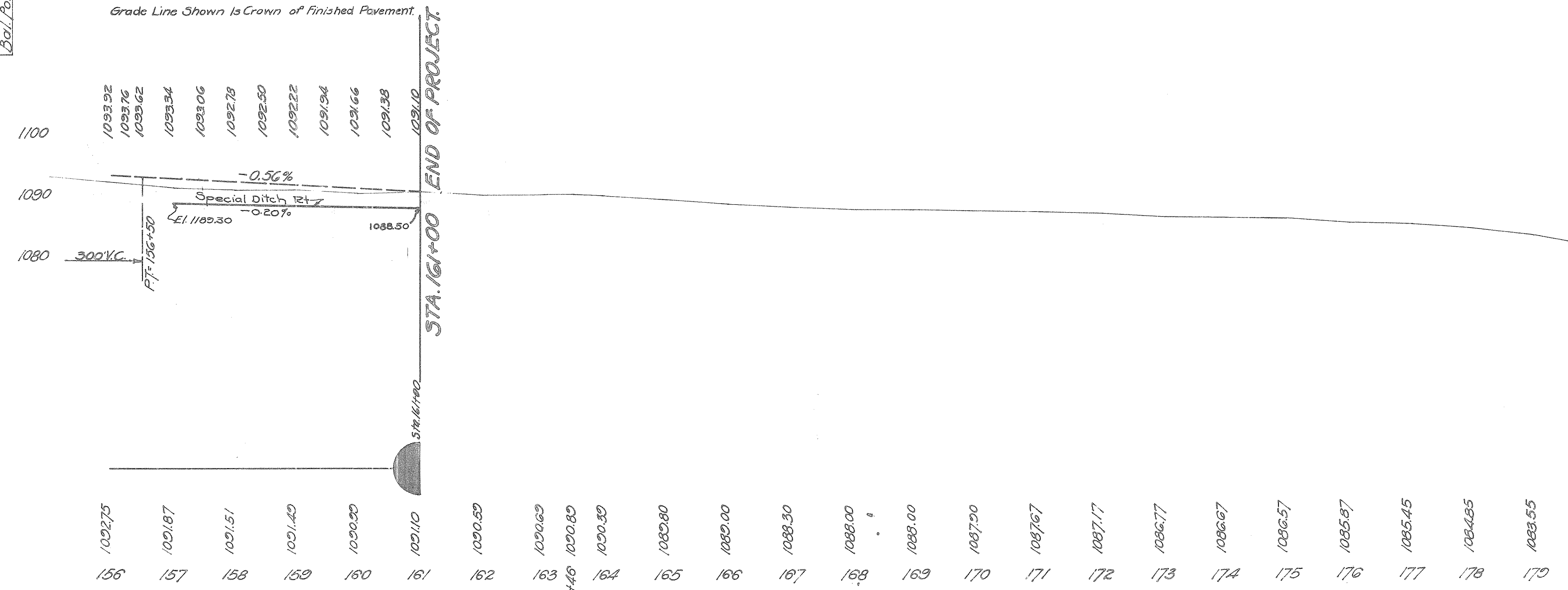
STATION	SIDE	12" CORR. M. PIPE LIN. FT.	Station	Nº 1 STONE UNDERDRAIN LIN. FT.
158+21.4	Lt	32	158+00	21.0
<b>TOTAL</b>		<b>32</b>	<b>TOTAL</b>	<b>21.0</b>



B.M. Elev. 1090.66  
Spike in Trolley Pole  
Sta. 159+15 Left

B.M. Elev. 1037.07  
Spike in Trolley Pole  
Sta. 168+50 Left

Grade Line Shown is Crown of Finished Pavement.



STA. 156+00 TO 161+00



40 35 30 25 20 15 10 5 0 5 10 15 20 25 30

30 25 20 15 10 5 0 5 10 15

FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	WRS 693A	1935

14 50

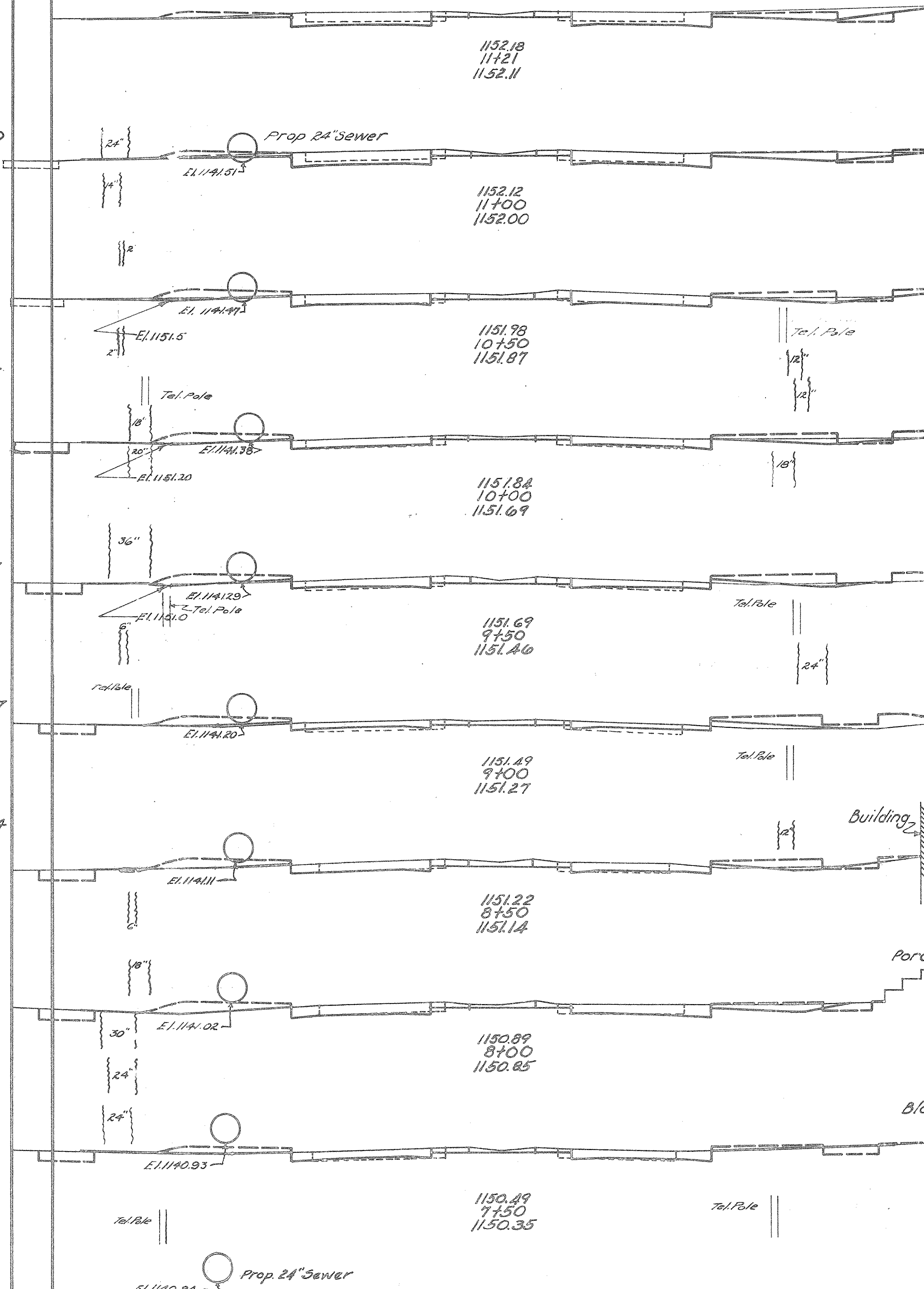
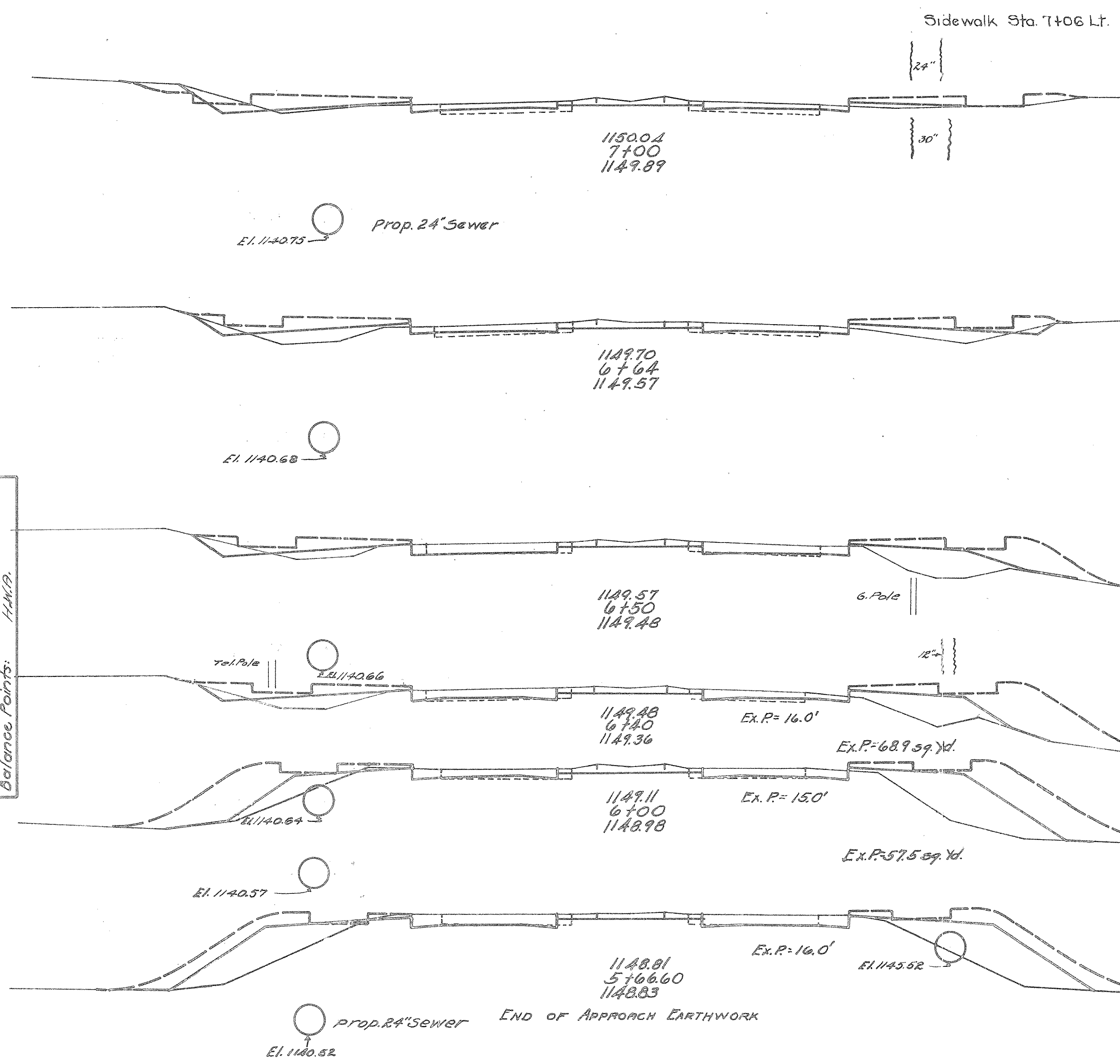
S.H. 249 SEC. 14 P. PREBLE COUNTY

20 25 30 35 40 45

Checked By: J.A.G.  
 Prepared by: G.J.F.  
 Temporary Plotted: M.B.C.  
 Drawings: C.H.K.  
 Areas: G.J.F.  
 Valuations: G.J.F.  
 Balance Points: M.B.C.  
 H.H.H.

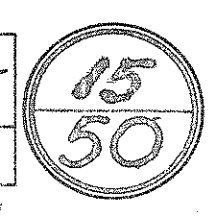
AREAS		CU. YD.	
Exc.	Emb.	Exc.	Emb.
16	17		
20	30		
14	28		
8	17		
16	39		
6	17		
15	52		
22	97		
15	79		
21	94		
19	73		

AREAS		CU. YD.	
Exc.	Emb.	Exc.	Emb.
28	2	20	2
24	3		
		41	11
20	9		
		36	19
19	11		
		34	23
18	14		
		31	30
15	18		
		32	26
20	10		
		40	16
23	7		
		40	12
20	6		
		33	21



STA. 5+70 TO STA. 11+21

FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	WRS 699A	1935

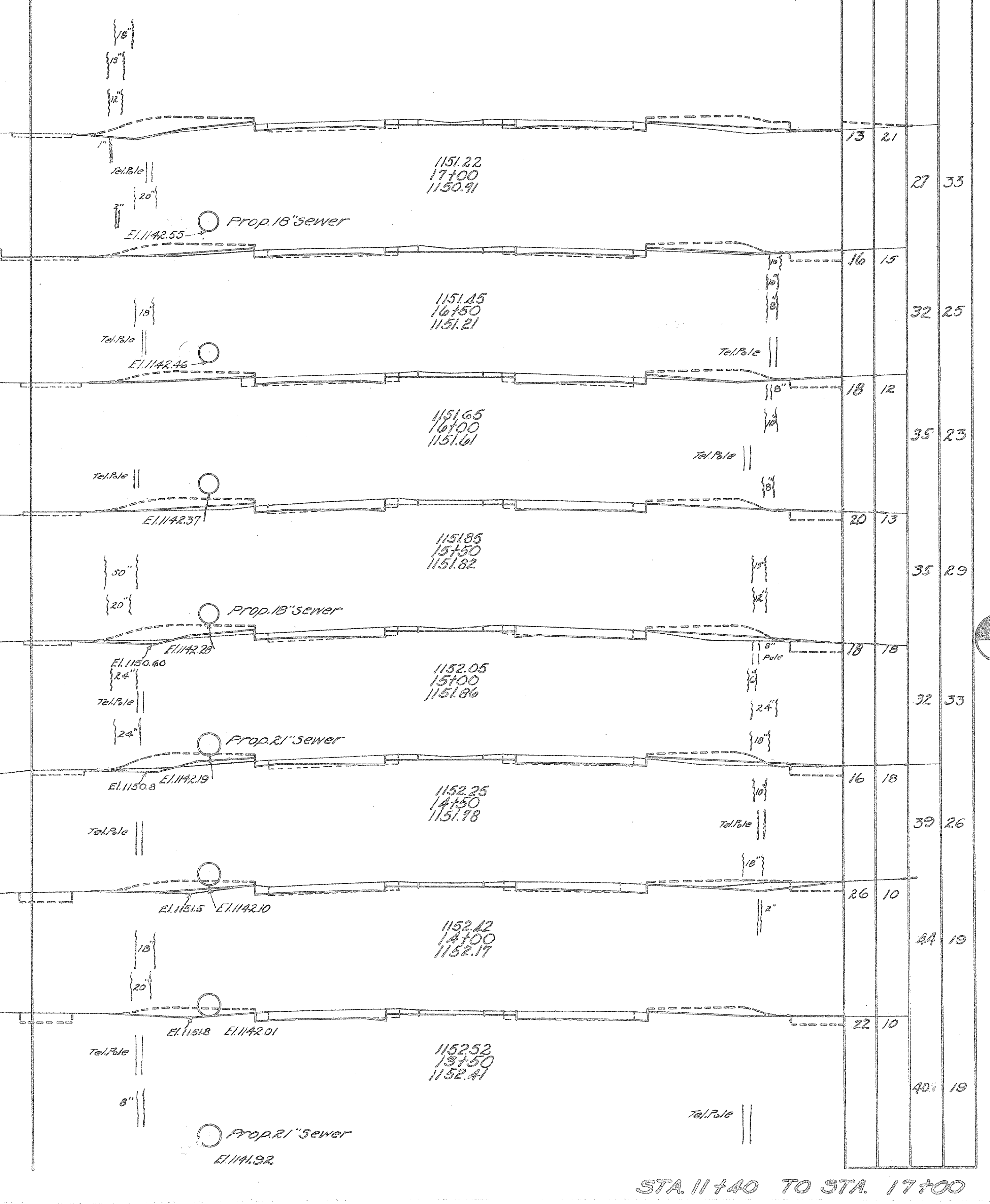
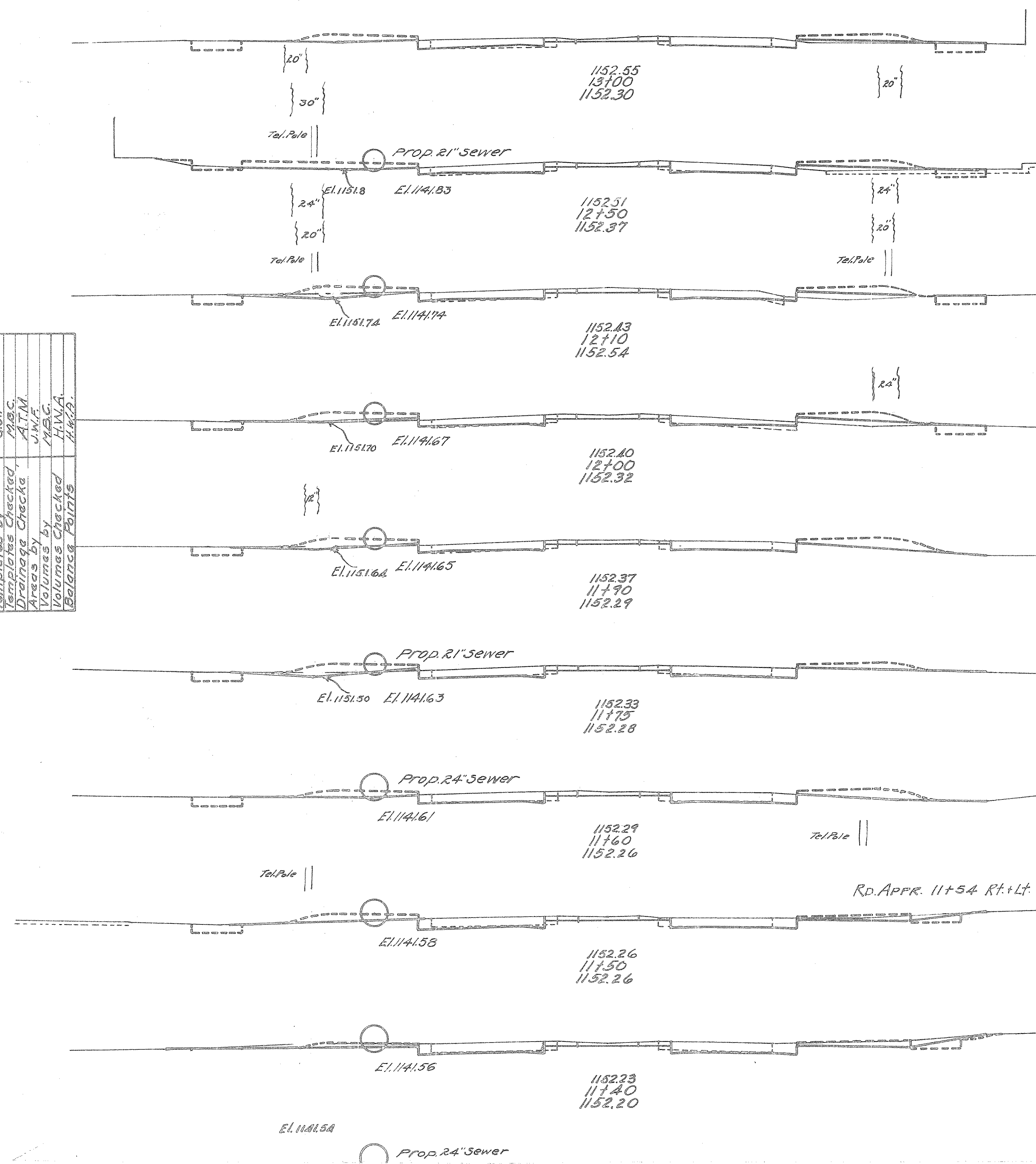


S.H.(I.C.H.) 240 SEC'D PT.  
PREBLE COUNTY

End Area	Cu. Yds.
Cut	Fill

25	30	35	40	45	
End Area	Cu. Yds.	End Area	Cu. Yds.	End Area	Cu. Yds.
Cut	Fill	Cut	Fill	Cut	Fill
13	21	16	15	18	12
27	33	32	25	35	29
18	12	20	13	18	18
35	23	20	13	18	18
32	33	16	18	16	18
39	26	26	10	26	10
44	19	22	10	22	10
40	19	19	1	19	1

End Area	Cu. Yds.
Cut	Fill
21	10
37	23
19	15
21	13
8	5
21	16
7	5
18	12
11	6
20	10
11	6
21	11
8	3
24	6
9	1
26	0
19	1



Plotted by  
Templates by  
Drainage Checks  
Volumes by  
Balance Points

E.H.G.  
G.J.F.  
M.B.C.  
A.T.M.  
J.W.F.  
M.B.C.  
H.W.A.  
H.K.P.

STA 15+00

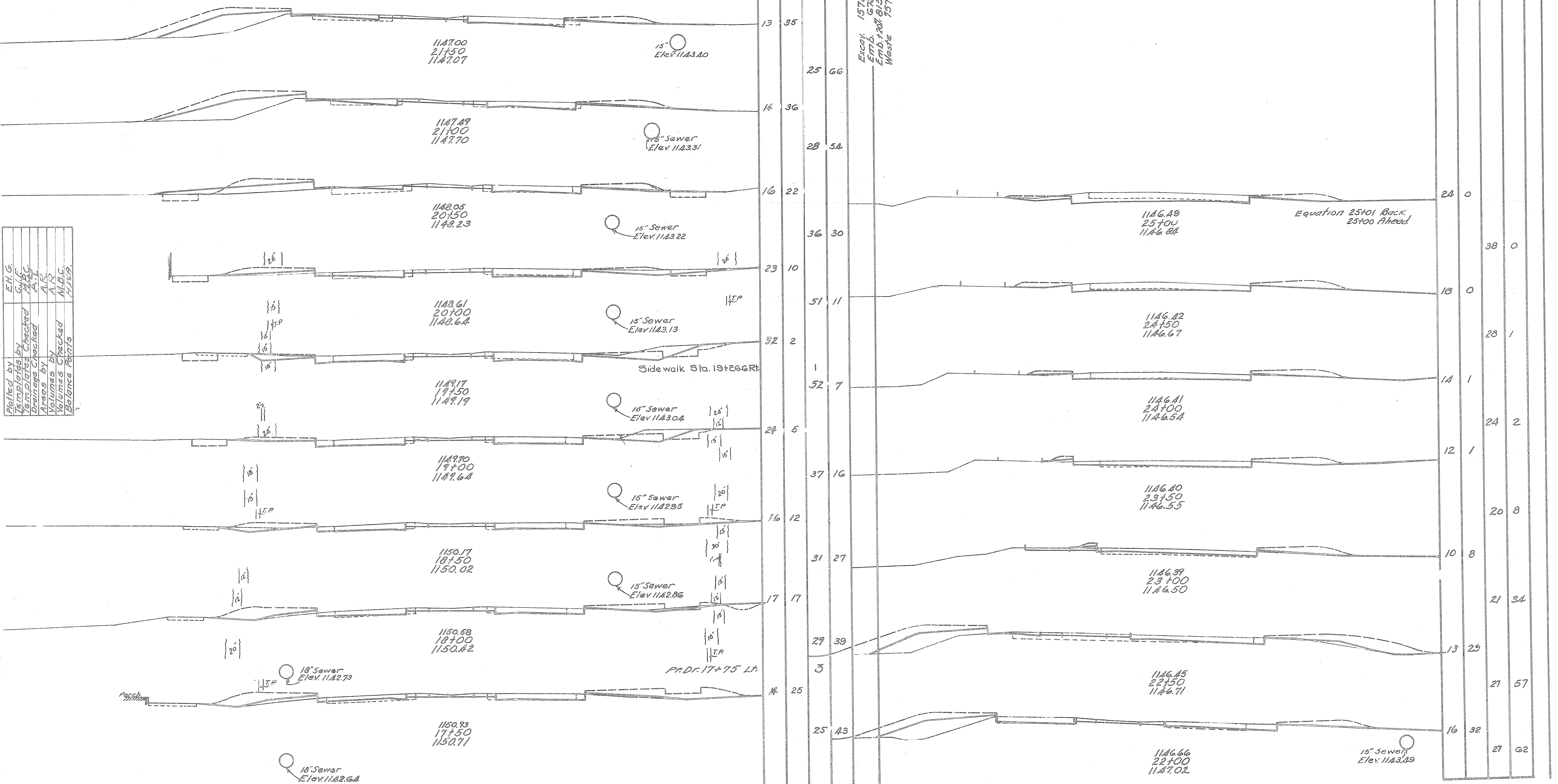
STA. 11+40 TO STA. 17+00



S.H. (I.C.H.) 240 SEC. D.P.T.  
PREBLE COUNTY

NOTE: FROM STA. 23+35.96 TO STA. 16+00  
BERMS, SLOPES & DITCHES, TO BE FINISHED  
AS SHOWN BY THE FULL LINE ON THE CROSS SECTIONS

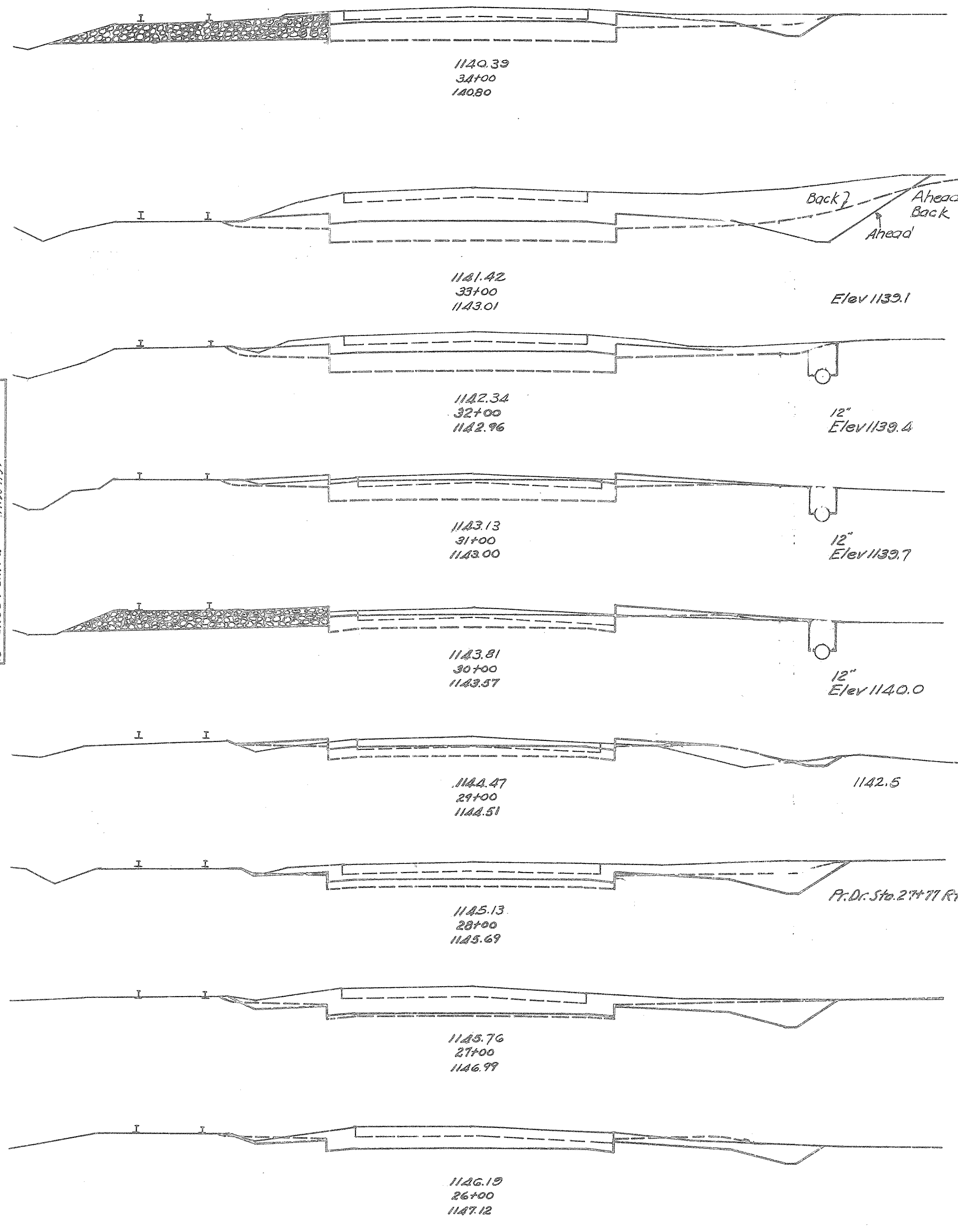
Plotted by	E.H.G.
Checked by	G.W.G.
Reviewed by	M.B.G.
Approved by	A.J.
Areas by	A.J.
Volumes by	A.J.
Materials by	M.B.G.
Balance Points	H.L.P.



STA. 17+50 TO 25+00

30 25 20 15 10 5 0 5 10 15 20 25 30

End Area		Cu Yd.	
Cut	Fill	Cut	Fill
29	1		
		235	2
98	0		
78	0		
		209	2
35	1		
		76	17
6	8		
		24	32
7	9		
		35	39
12	12		
		106	22
45	0		
		3	
		187	0
56	0		
		180	0
41	0		
		120	0



Plans by: A.P. & G.L.F.  
 Templates by: G.L.F.  
 Templates by: A.B.C.  
 Drafting by: A.P.C.  
 Areas by: A.P.C.  
 Volumes by: A.P.C.  
 Volumes by: G.L.F.  
 Balance Points: H.V.P.

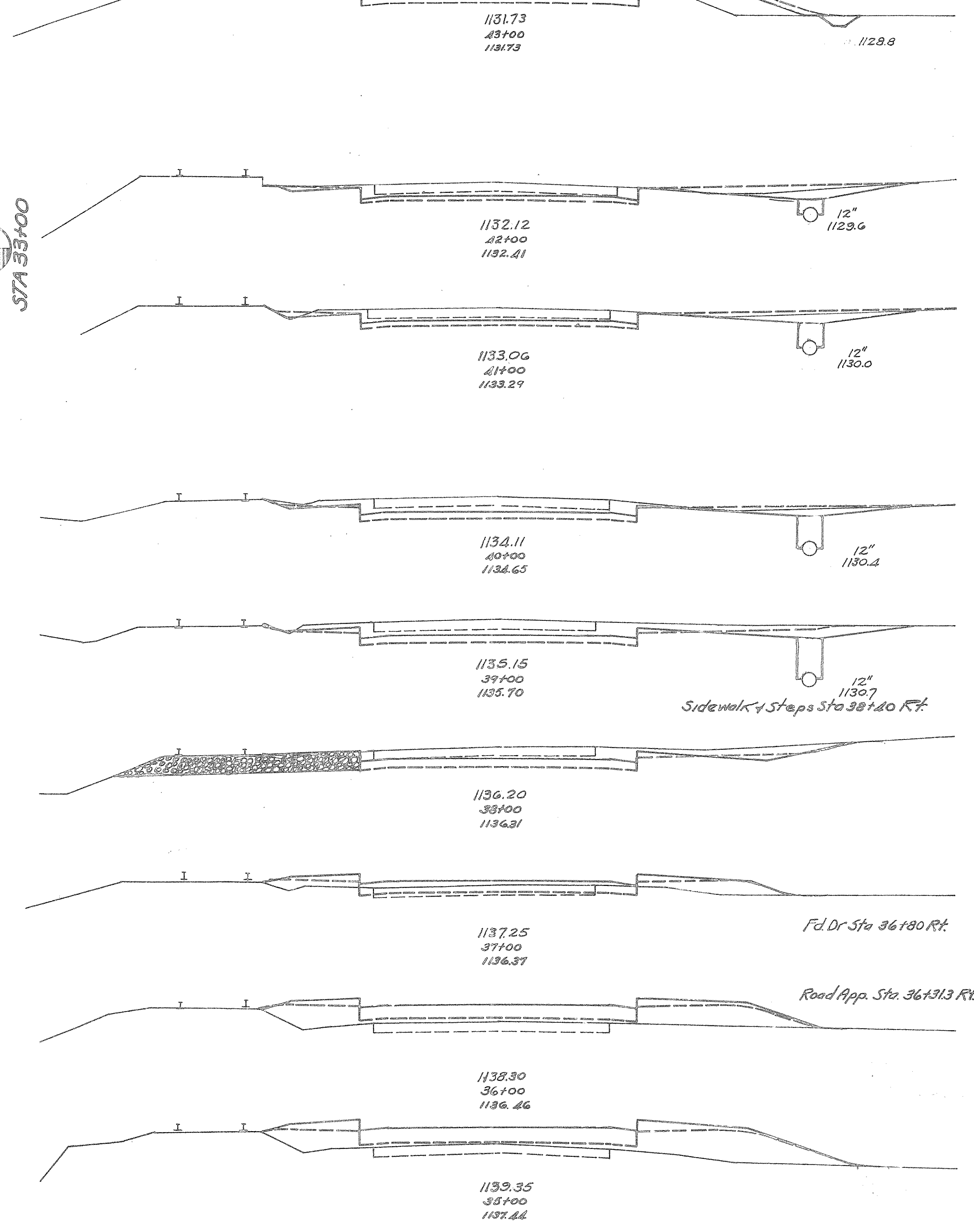
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FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS 699A	1935

S.H. (I.C.H.) 249 SEC. 'D' (PT.)  
PREBLE COUNTY.

17  
50

00+00 STA

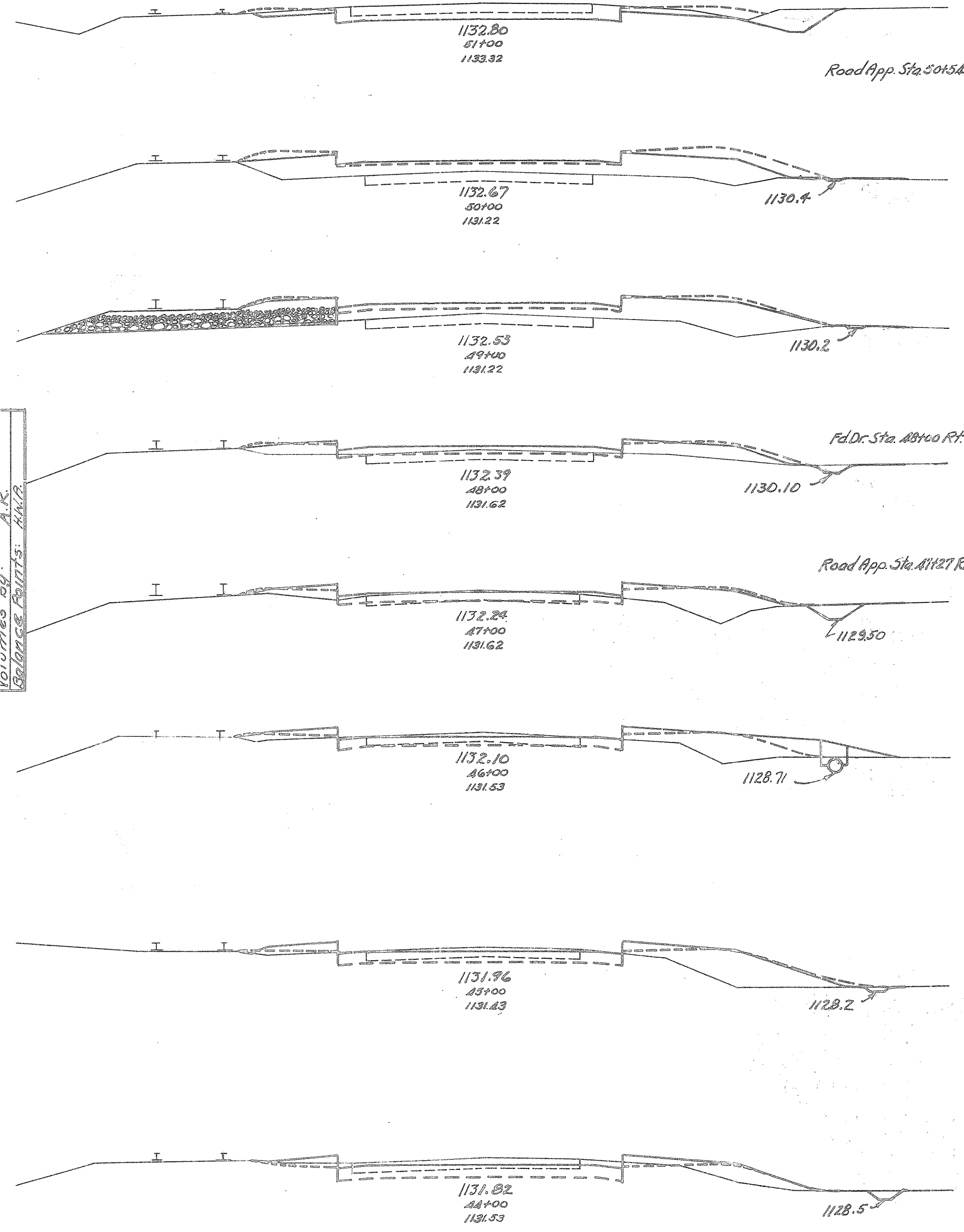


End Area		Sq. Yd.	
Cut	Fill	Cut	Fill
14	9		
		72	17
25	0		
		94	0
26	0		
		98	0
27	0		
		113	0
34	0		
		109	6
25	3		
		46	46
0	22		
		0	152
0	60		
		40	80
0	71		
		0	243
54	133		

STA. 26+00 TO STA. 43+00

30 25 20 15 10 5 0 5 10 15 20 25 30 35

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
32	0		
	7		
	61	83	
1	45		
	2	180	
0	52		
	2	141	
1	24	5	
	7	87	
	15	10	
3	23		
	9	91	
2	26		
	9	96	
	3	26	
	22	70	
9	12		
		43	39

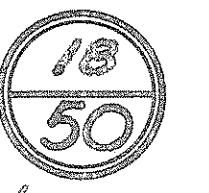


Templates By: H.M.A.  
 Details Ch. No: M.B.C.  
 Drawings Ch. No: M.B.C.  
 Areas By: A.R.  
 Volumes Ch. No: M.W.P.  
 Volumes By: A.R.  
 Balance Points: A.M.R.

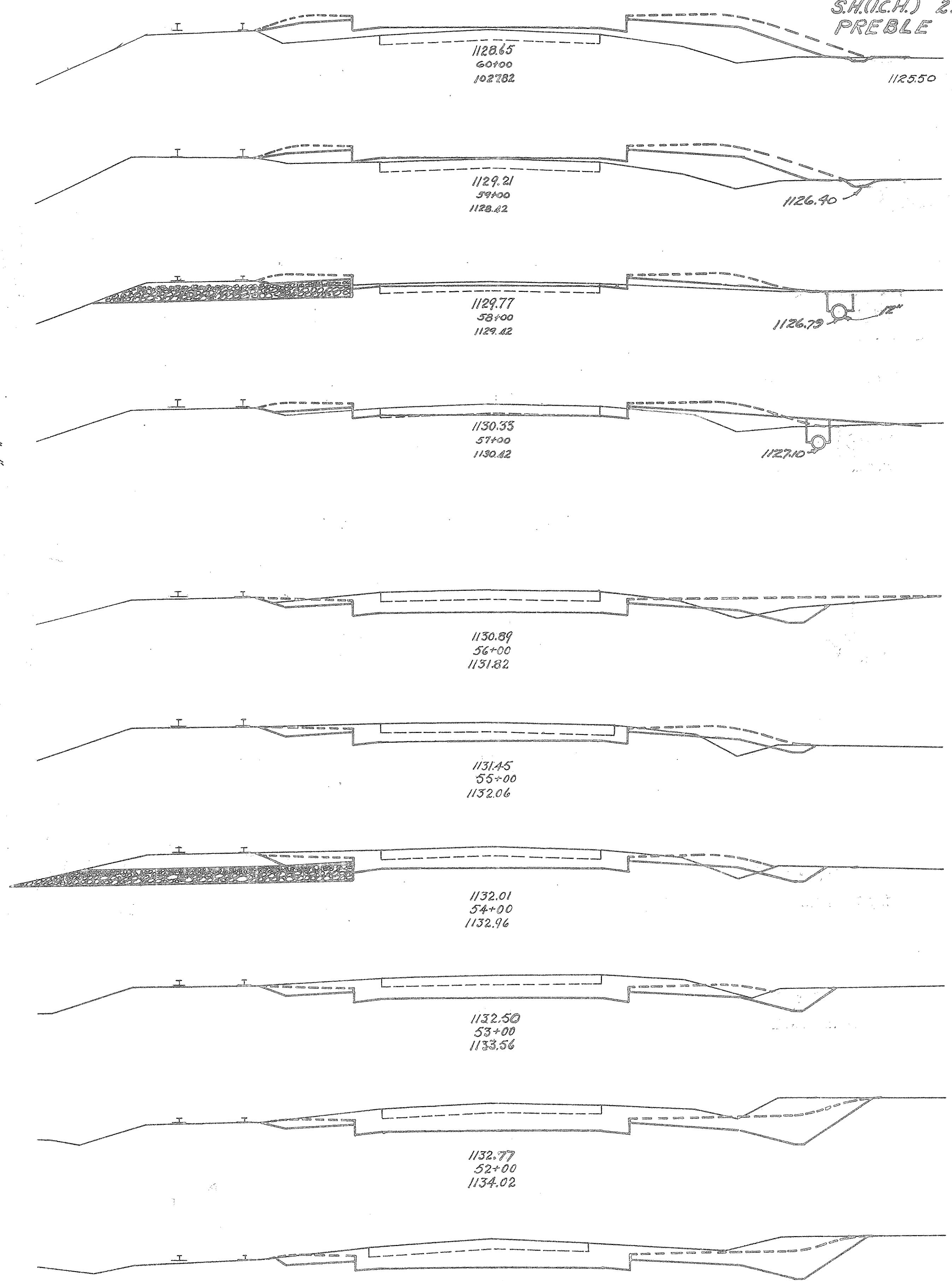
Excav. 1801 Cu. Yd.  
 Emb. 1501 " " "  
 Emb. 1201 1801 " "

35 30 25 20 15 10 5 0 5 10 15 20 25 30 35

FED. RD. DIST. No	STATE	FED. AID PROJ. No	FISCAL YEAR
10	OHIO	NR5639A	1935



SH.(C.H.) 247 SEC "D" PT.  
 PREBLE COUNTY.



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
1	40		
	4	132	
1	31		
	11	72	
5	8		
	32	39	
	12	13	
		96	28
40	2		
		143	11
	37	4	
		4	0
		142	11
42	2		
		172	4
	51	0	
		224	0
	70	0	
		151	0
	66	0	
		73	0

Sta. 54+98

STA 44+00 TO 60+00

30 25 20 15 10 5 E 5 10 15 20 25 30

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
7	19		
		13	87
0	28		
		0	82
0	42		
		0	56
0	40		
		1	1
		0	69
		0	111
		0	12
0	20		
		87	37
47	0		
		105	0
		1	
66	0		
		98	0
		3	
40	0		
		82	32
4	17		
		11	57
2	19		
		6	109

Excav. 603 Cu. Yds.  
Emb. 565 " " "  
Embr. 207 683 " "

STA 61+00

35 30 25 20 15 10 5 E 5 10 15 20 25 30

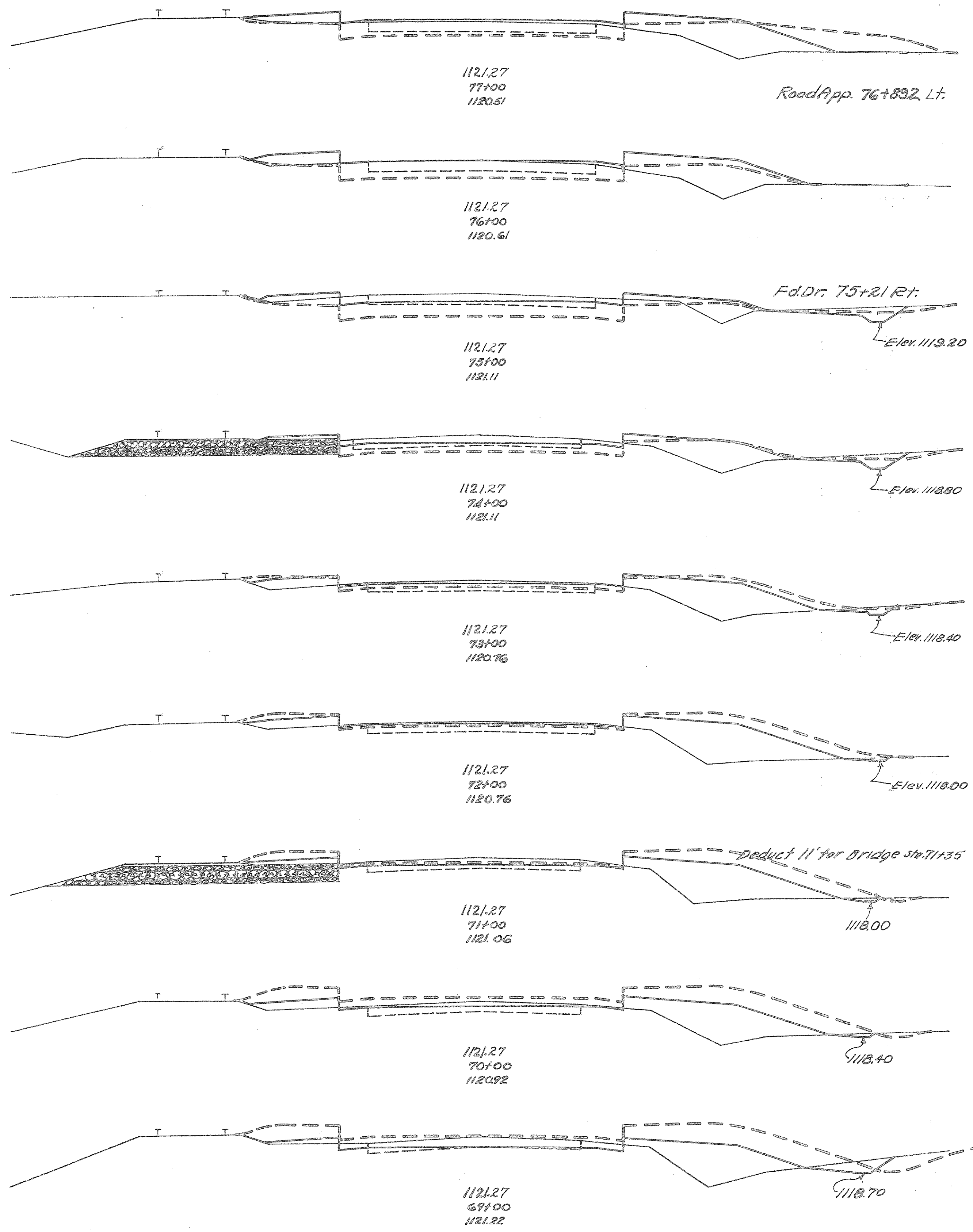
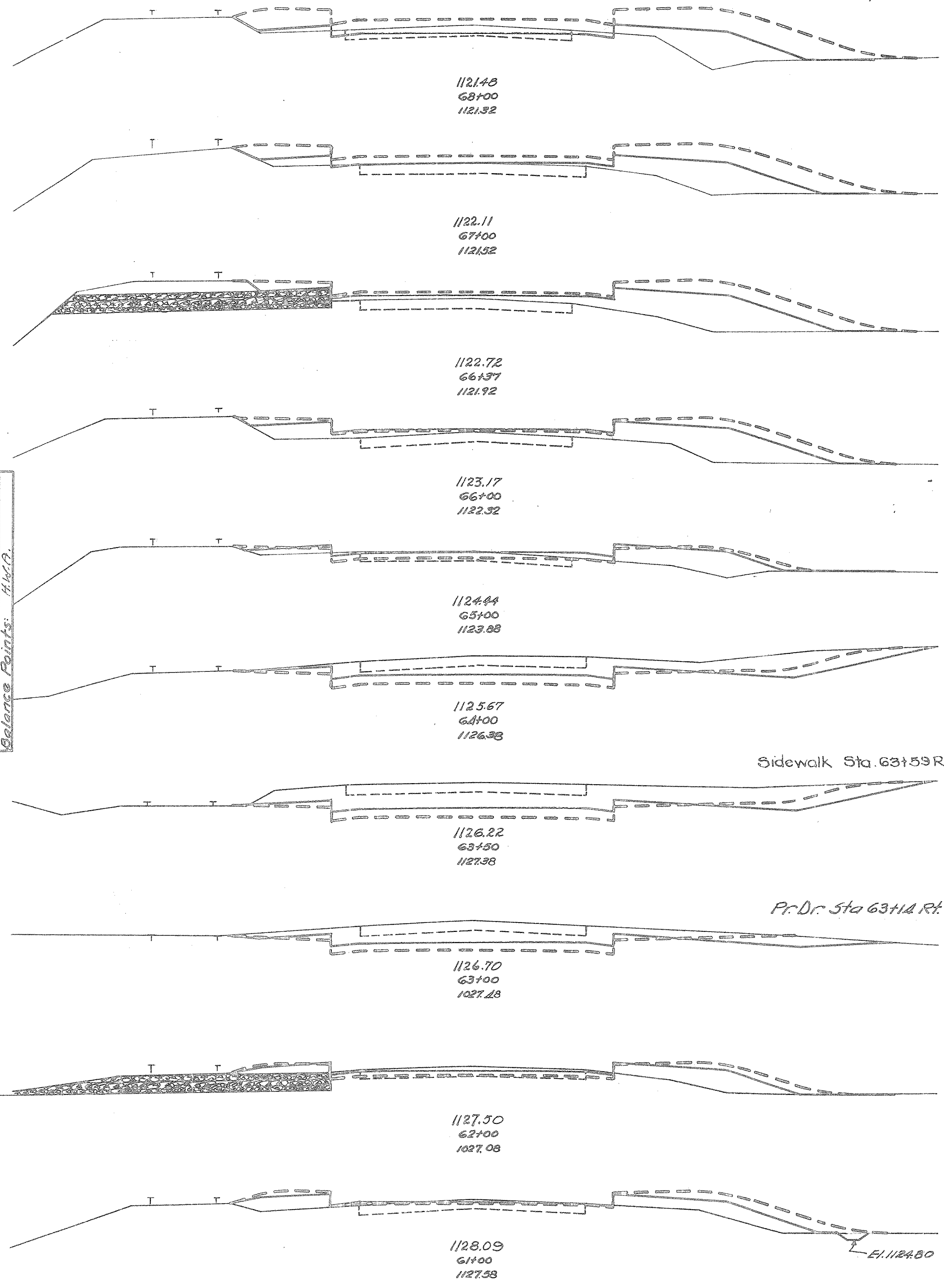
FEDAID DIST. N <sup>o</sup>	STATE	FEDAID PROJ. N <sup>o</sup>	FISCAL YEAR
10	OHIO	NRS699A	1935

1950

SH(ICH) 249 SEC 'D' PT  
PREBLE COUNTY

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
0	32		
		14	
0	106		
0	25		
		22	63
			3
12	9		
		43	48
11	17		
		24	78
2	25		
		6	102
1	30		
		13	96
7	28		
		19	98
3	25		
		30	85
13	21		
		37	74

STA 61+00 TO 77+00



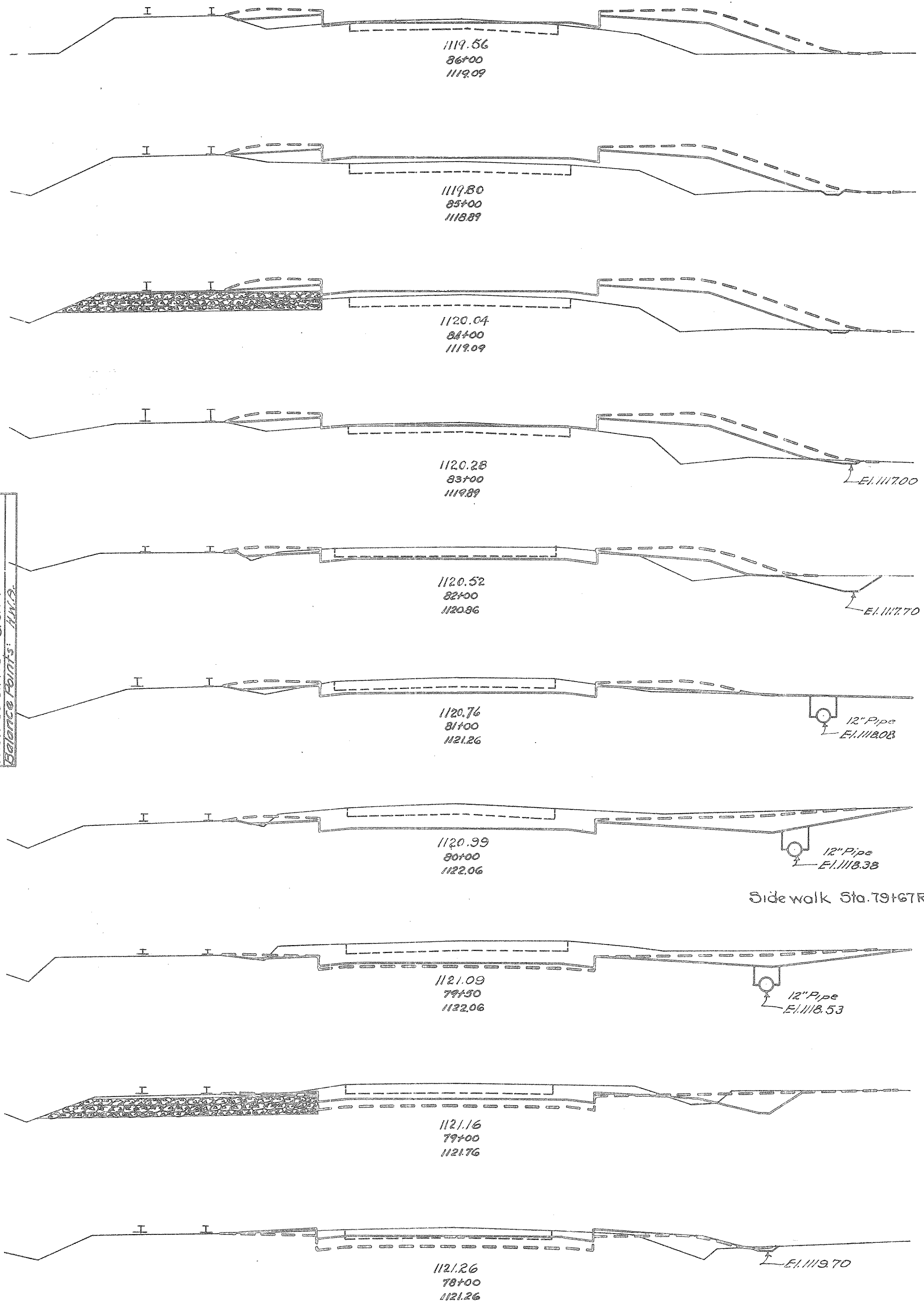
Scale  
Topographic Chart: M.C.  
Drainage Chart: M.C.  
Areas: A.C.  
Volumes: B.V.  
Volumes: C.V.  
Volumes: D.V.  
Balance Points: H.C.

30 25 20 15 10 5 0 5 10 15 20 25 30

End Area	Cu. Yds.
Cut	Fill
2	23
4	109
0	36
2	139
1	39
7	120
3	26
48	63
23	8
82	19
21	2
144	4
57	0
103	0
1	1
54	0
79	2
31	2
82	20
13	9
24	76

Excav 750 Cu. Yds.  
 Emb 1168 " "  
 Emb 201202 " "  
 Correr 666 " "

Templates Ch. 144. M.S.C.  
 Arrows Ch. 144. M.S.C.  
 Areas By A.C.  
 Volume 84. E.G.S.  
 Volume 84. G.U.F.  
 Balance Points. H.H.



Side walk Sta. 79+67 Rt.

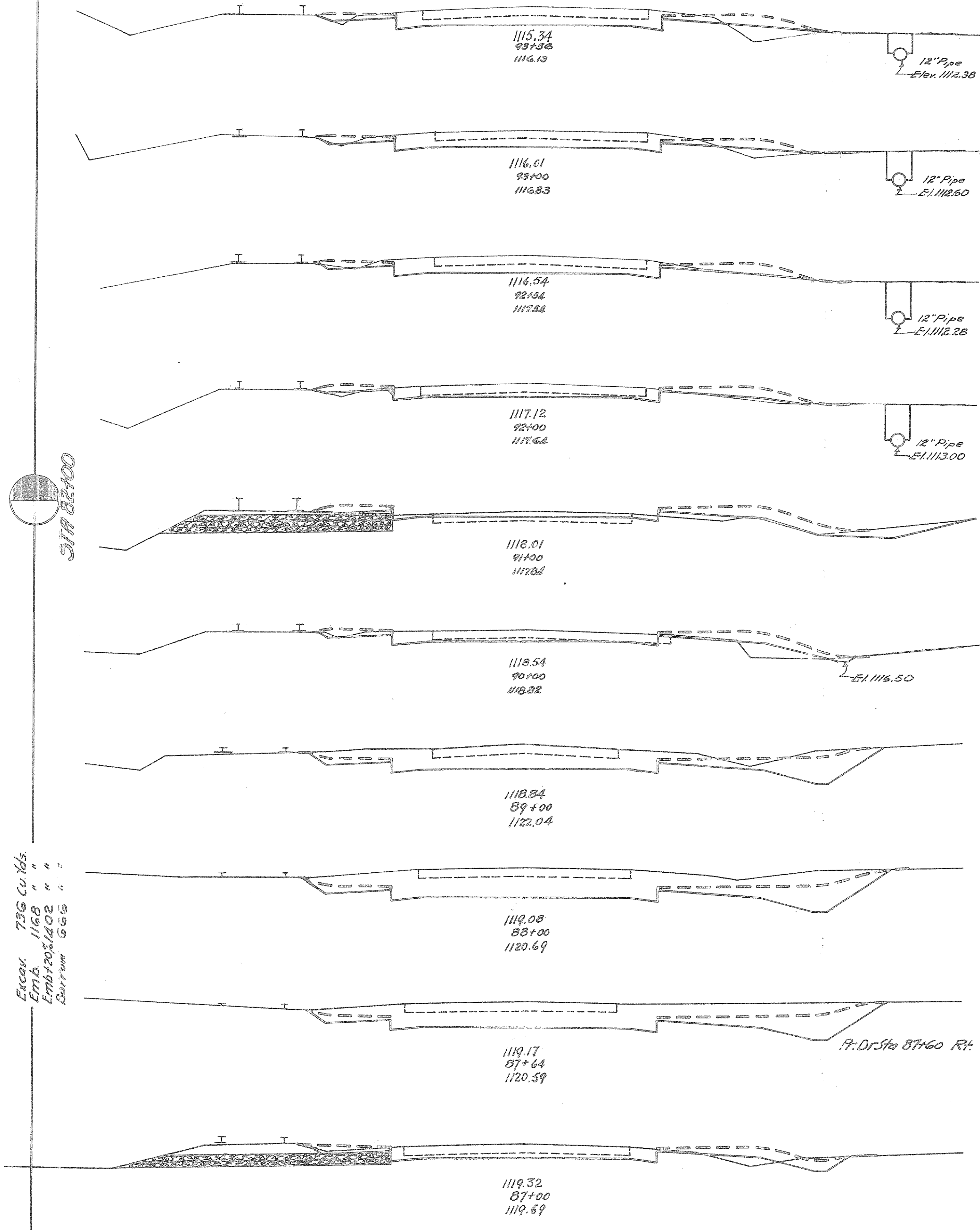
FED. AID. DIST. NO.	STATE	FED. AID. PROJ. NO.	FISCAL YEAR
10	OHIO	HR5 639-A	1935

20  
50

SH. (CH) 249 "D" Pt.  
PREBLE COUNTY.

30 25 20 15 10 5 0 5 10 15 20 25 30 35

End Area	Cu. Yds.
Cut	Fill
31	5
	62
	8
29	3
	49
	3
26	0
	48
	2
20	2
	50
	9
7	3
	46
	15
18	5
	143
	9
59	0
	261
	0
82	0
	105
	0
76	0
	3
	120
	2
25	2
	50
	46



STA 78+00 TO 93+56

30 20 10 ± 10 20 30

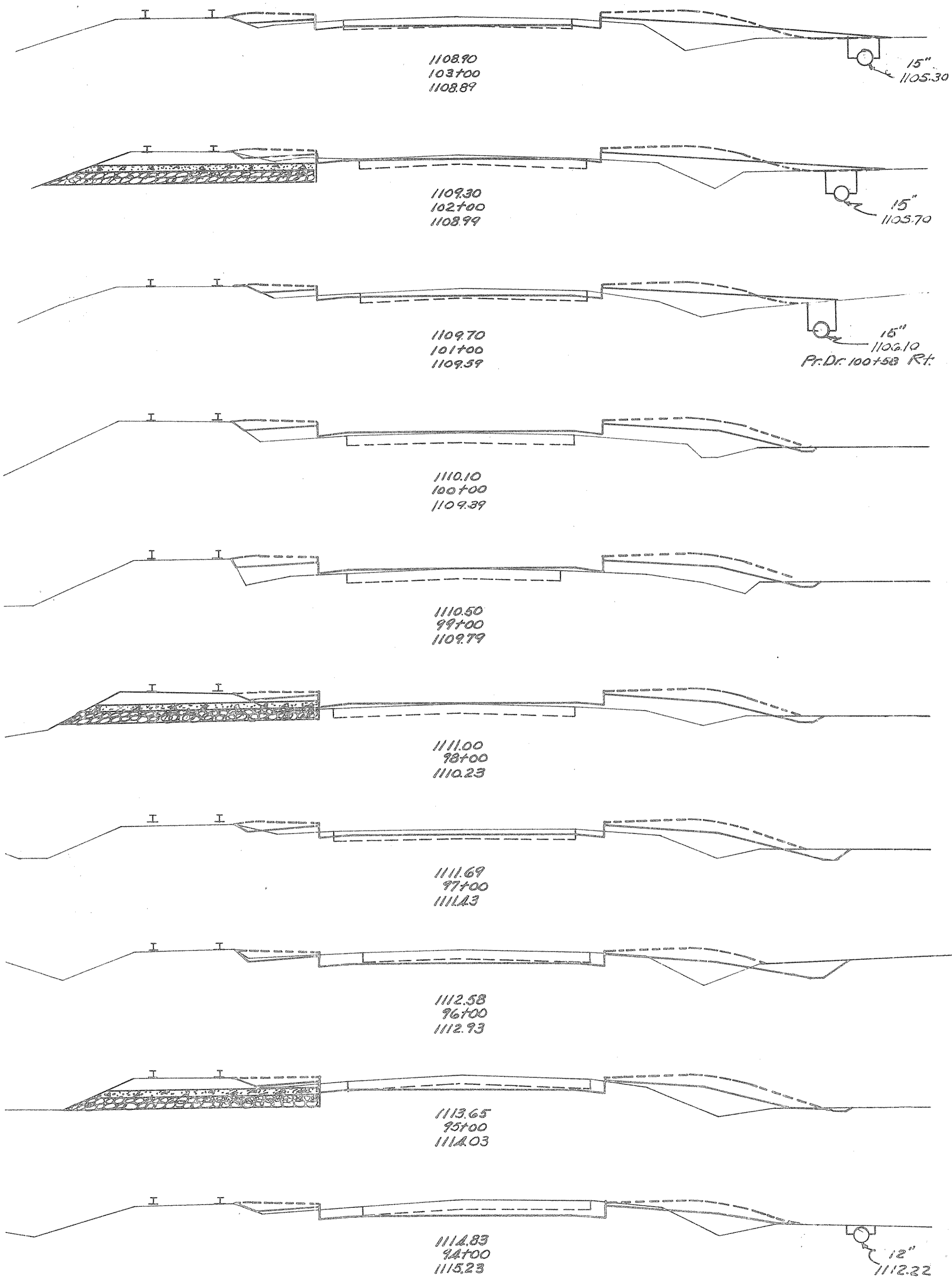
30 20 10 ± 10 20

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS 699-A	1935

21  
50

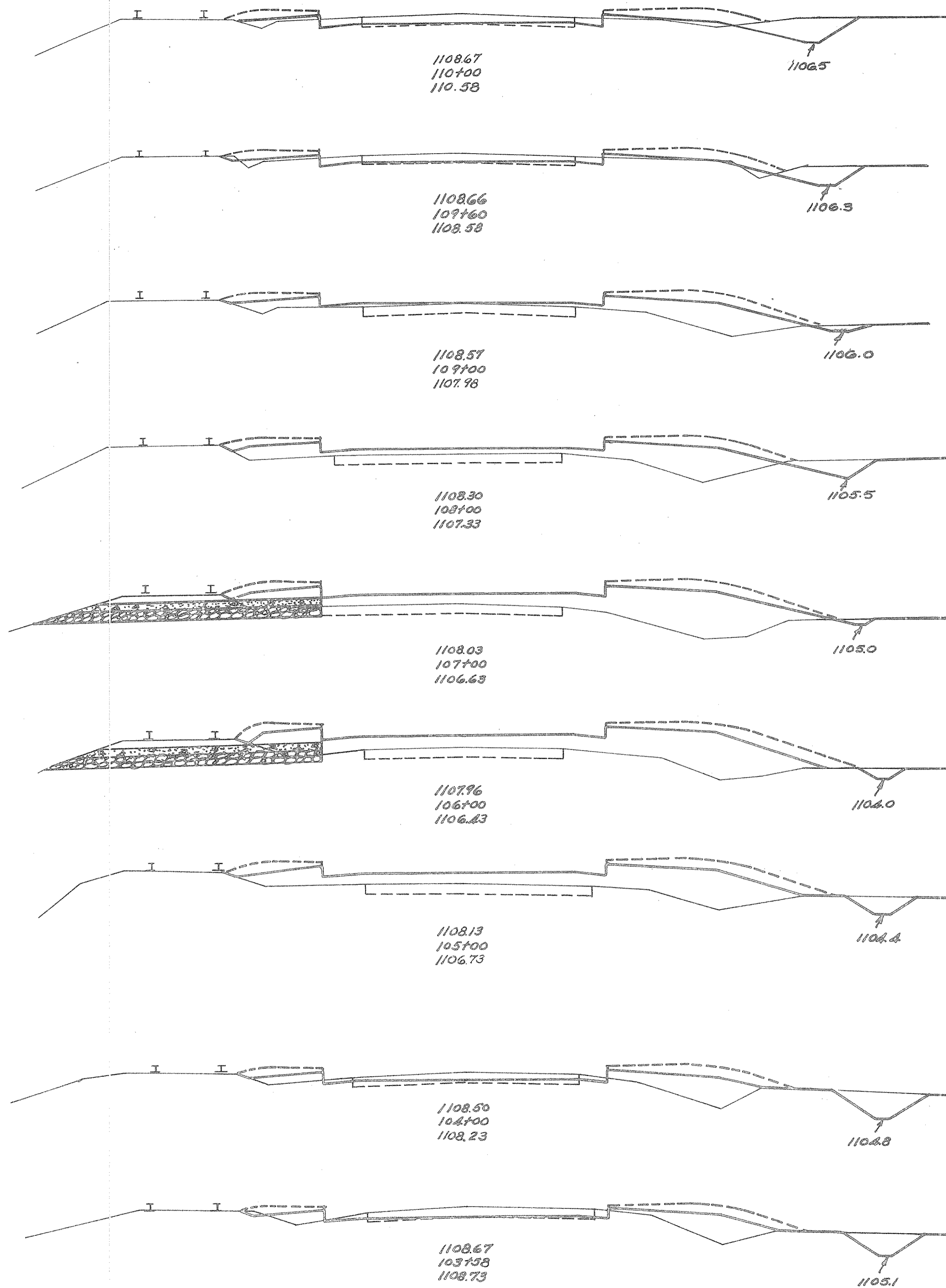
S.H. 249 SEC. "D" (PT.)  
PREBLE COUNTY

G.I.F.  
 Templates Plotted: G.I.F.  
 Drawings Checked: M.B.C.  
 Drainage Checked: M.B.C.  
 Areas By: G.I.F.  
 Volumes Checked: R.G.S.  
 Volumes Checked: G.I.F.  
 Balance Points: H.W.P.



Sta.	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
108+00	10	17		
108+50		24	59	
109+00	3	15		
109+50		19	56	
110+00	7	15		
110+50		13	69	2
111+00	0	22		
111+50		2	78	
112+00	1	20		
112+50		4	74	
113+00	1	20		
113+50		17	59	
114+00	8	12		
114+50		53	35	
115+00	24	7		
115+50		78	35	
116+00	18	12		
116+50		70	35	
117+00	20	7		
117+50		42	10	

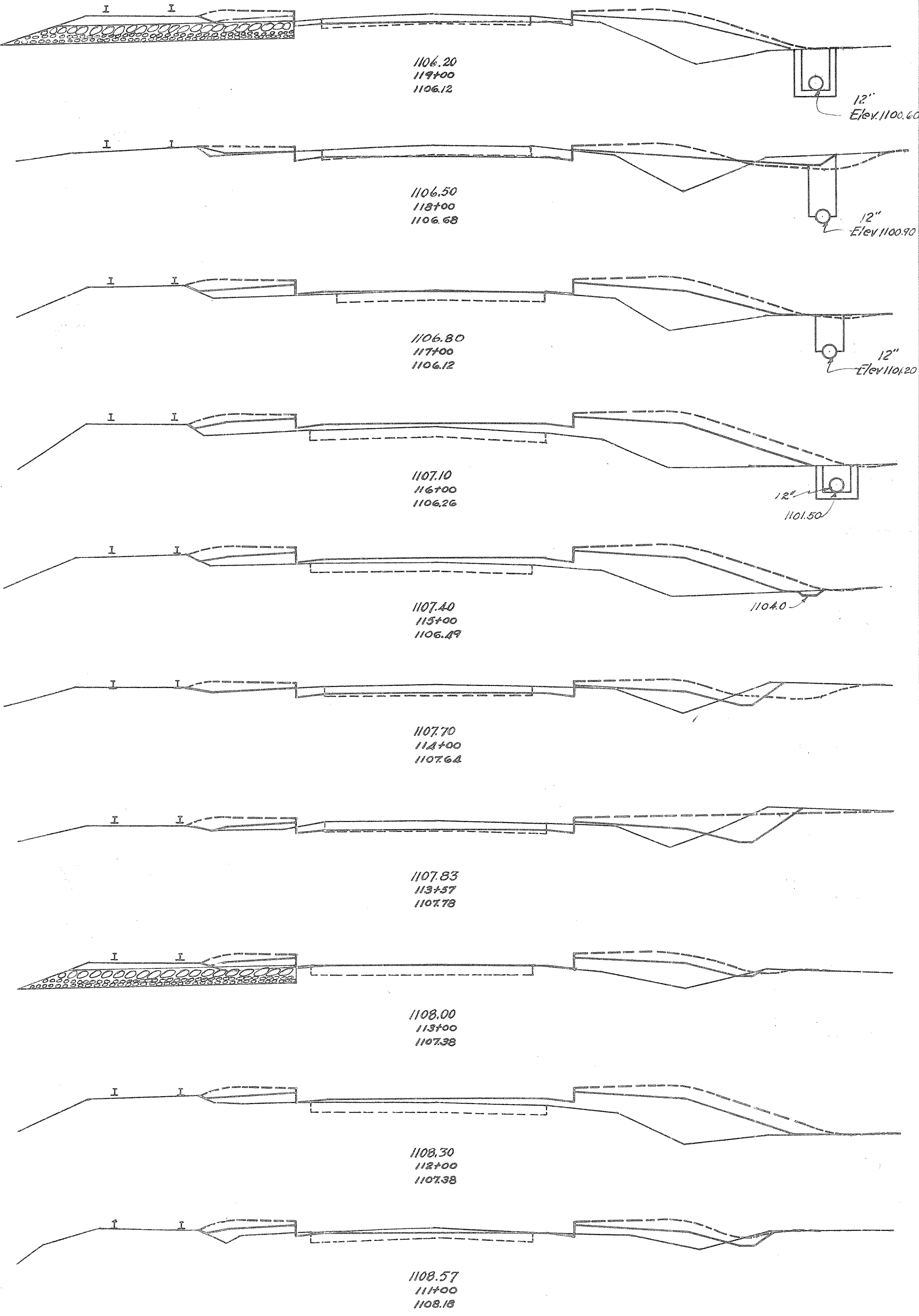
Excav. 1937 Cu. Yds.  
 Emb. 1102.1 "  
 Emb. 1104.1 "  
 Emb. 1106.1 "  
 Emb. 1108.1 "  
 Emb. 1110.1 "  
 Emb. 1112.1 "  
 Emb. 1114.1 "  
 Emb. 1116.1 "



Sta.	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
108+00	19	4		
108+50			25	6
109+00	15	4		
109+50			18	32
110+00	1	25		
110+50			11	106
111+00	5	32		
111+50			11	169
112+00	1	59		
112+50			6	217
113+00	2	58		
113+50			11	194
114+00	4	47		
114+50			15	86
115+00			33	117
115+50			18	71
116+00	14	16		
116+50			24	23
117+00	17	14		
117+50			29	33

STA. 94+00 TO STA. 110+00

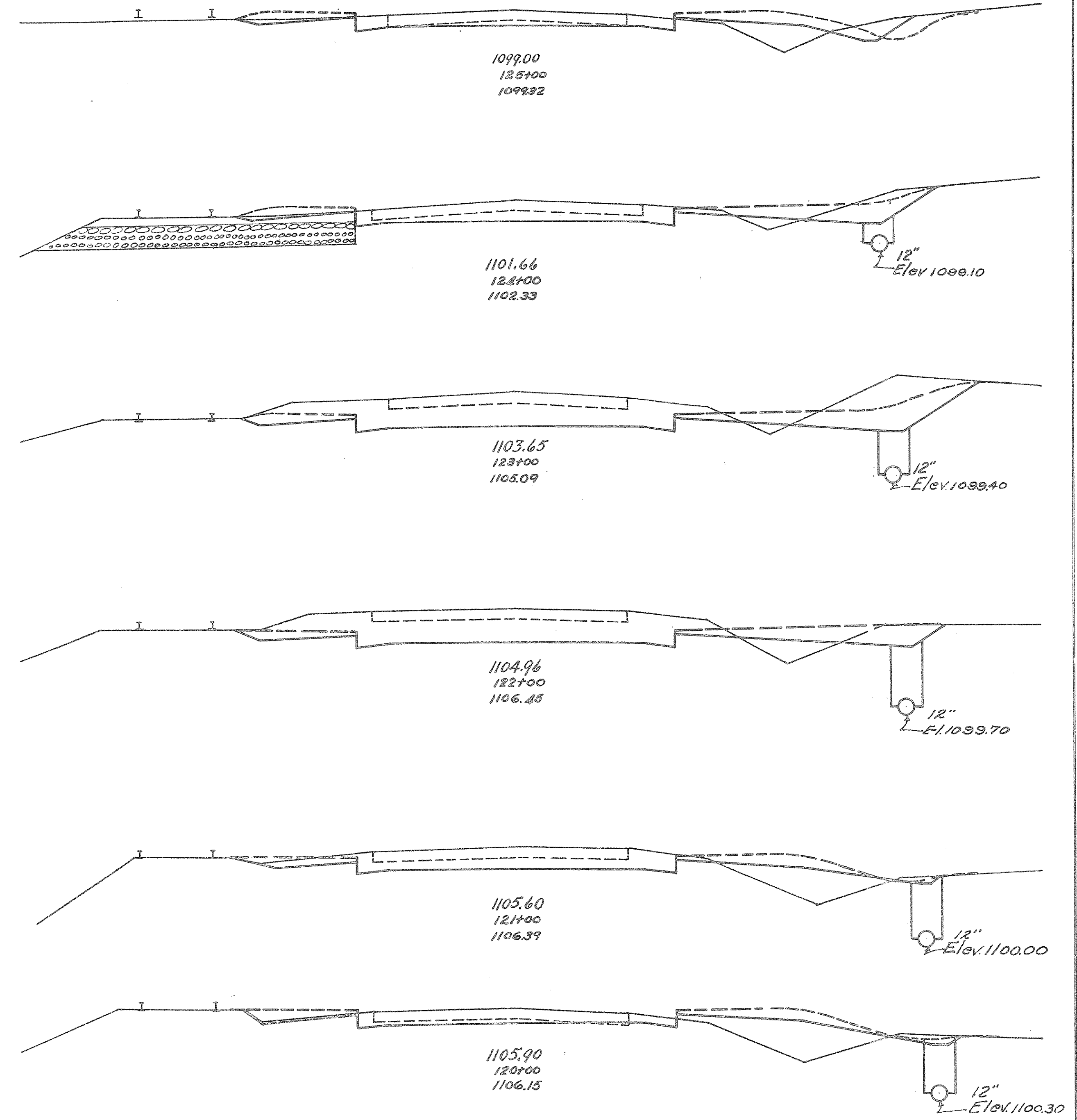
Sta 104+00.7



End Area		Cu Yd.	
Cut	Fill	Cut	Fill
9	24		
		48	70
17	14		
		32	83
0	31		
		0	144
0	47		
		2	159
1	39		
		30	85
15	7		
		28	12
20	8		
		22	27
1	18		
		2	107
0	40		
		7	96
4	12		
		43	30

Excav 229 Cu Yds  
Emb 1127 " "  
Emb 1200 " "  
Borrow 123 " "

STA 115+00



End Area		Cu Yd.	
Cut	Fill	Cut	Fill
23	7		
		107	19
35	3		
		198	7
72	1		
		241	11
38	5		
		167	33
32	13		
		34	56
19	17		
		52	76

Excav 1070 Cu Yds  
Emb 914 " "  
Emb 820 " "  
Borrow 1097 " "

FED. RD. DIST. No	STATE	FED. AID PROJ. No	FISCAL YEAR
10	OHIO	NRS 693A	1935

S.H.(I.C.H.) 249 SEC. "D(PT)"  
PREBLE COUNTY.

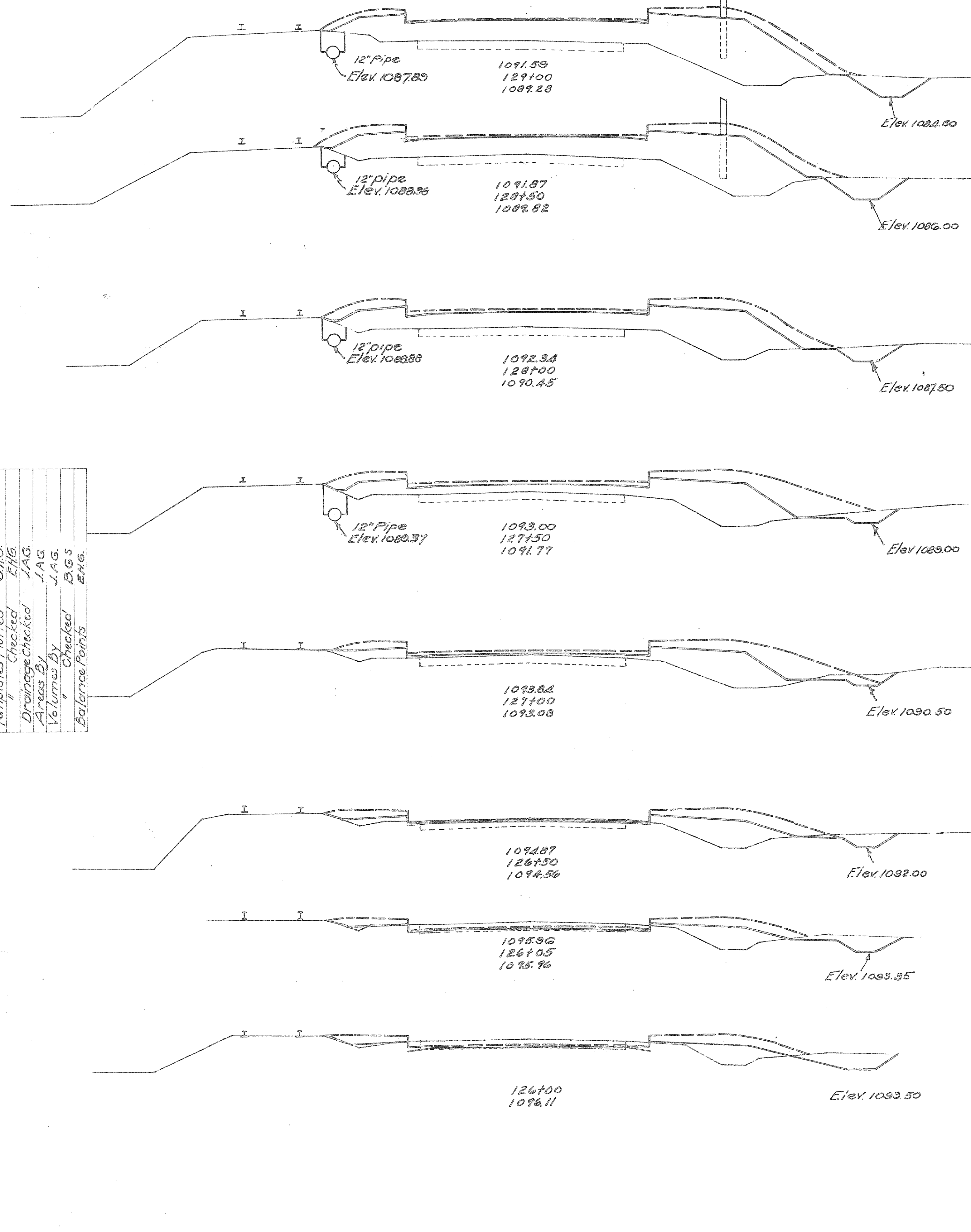
22  
50

STA. 111+00 TO STA. 125+00

Templates Plotted: H.W.A.  
Revisions Checked: H.W.C.  
Drainage Checked: H.W.P.  
Areas By: A.R.  
Volumes By: B.G.S.  
Volumes Checked: B.P.  
Balance Points: H.W.P.

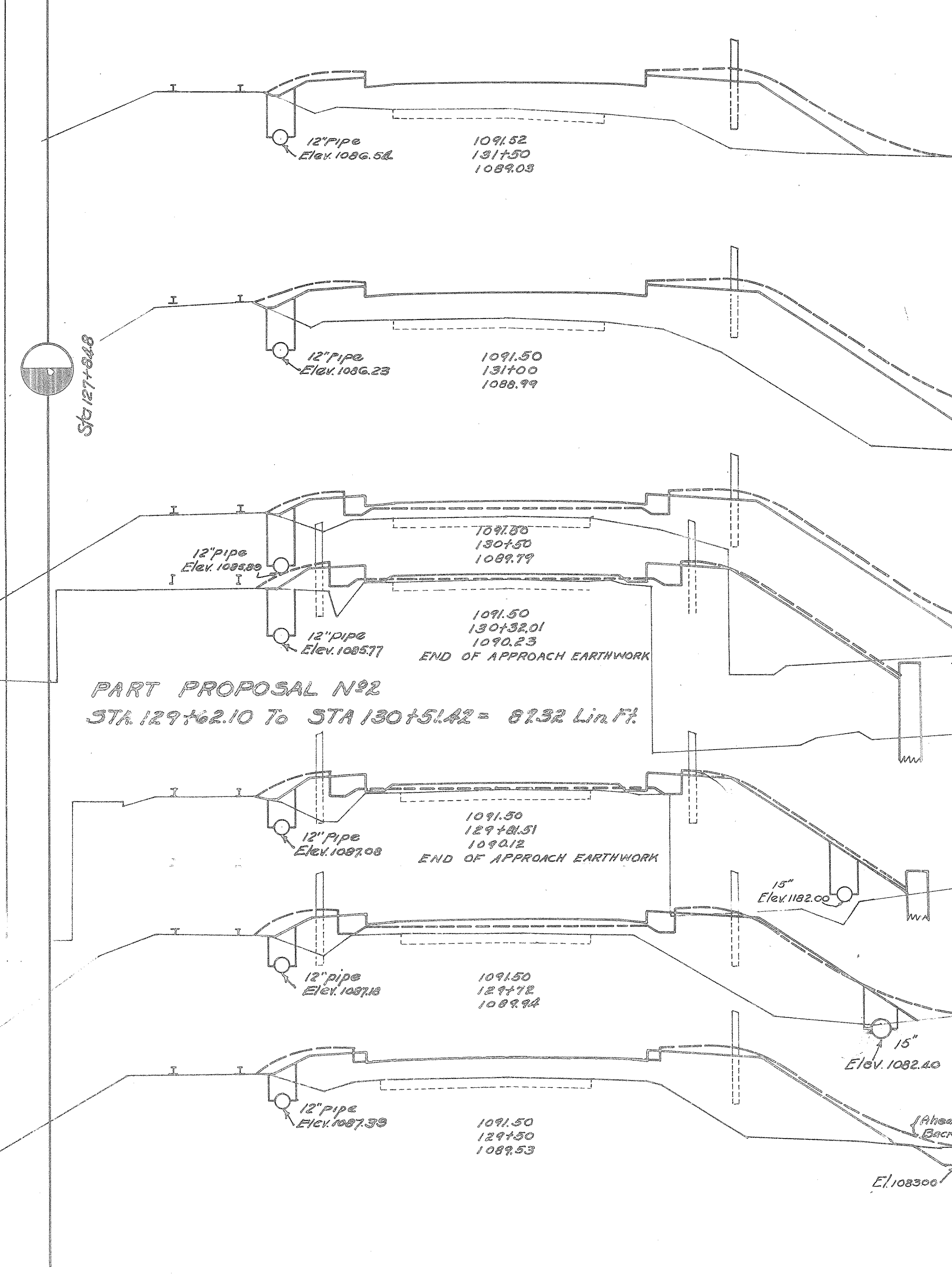
30 20 10 0 10 20 30

AREAS		CU. YD.	
Exc.	EMB.	Exc.	EMB.
8	38		
		15	174
8	30		
		12	142
5	63		
		3	32
		9	105
		6	73
5	50		
		8	75
4	31		
		11	47
8	20		
		21	27
		17	12
		3	2
20	10		
		80	32



30 20 10 0 10

AREAS		CU. YD.	
Exc.	EMB.	Exc.	EMB.
0	102		
			0 244
0	162		
			0 318
			0 126
			0 197
			0 138
			0 44
			0 109
			0 87
			0 104
			12 187



FED. AID DIST. NO. 10 STATE OHIO FED. AID PROJ. NO. NRS 699-A FISCAL YEAR 1935

S.H. 249 SEC'D PT. PREBLE COUNTY

20 30

23 50

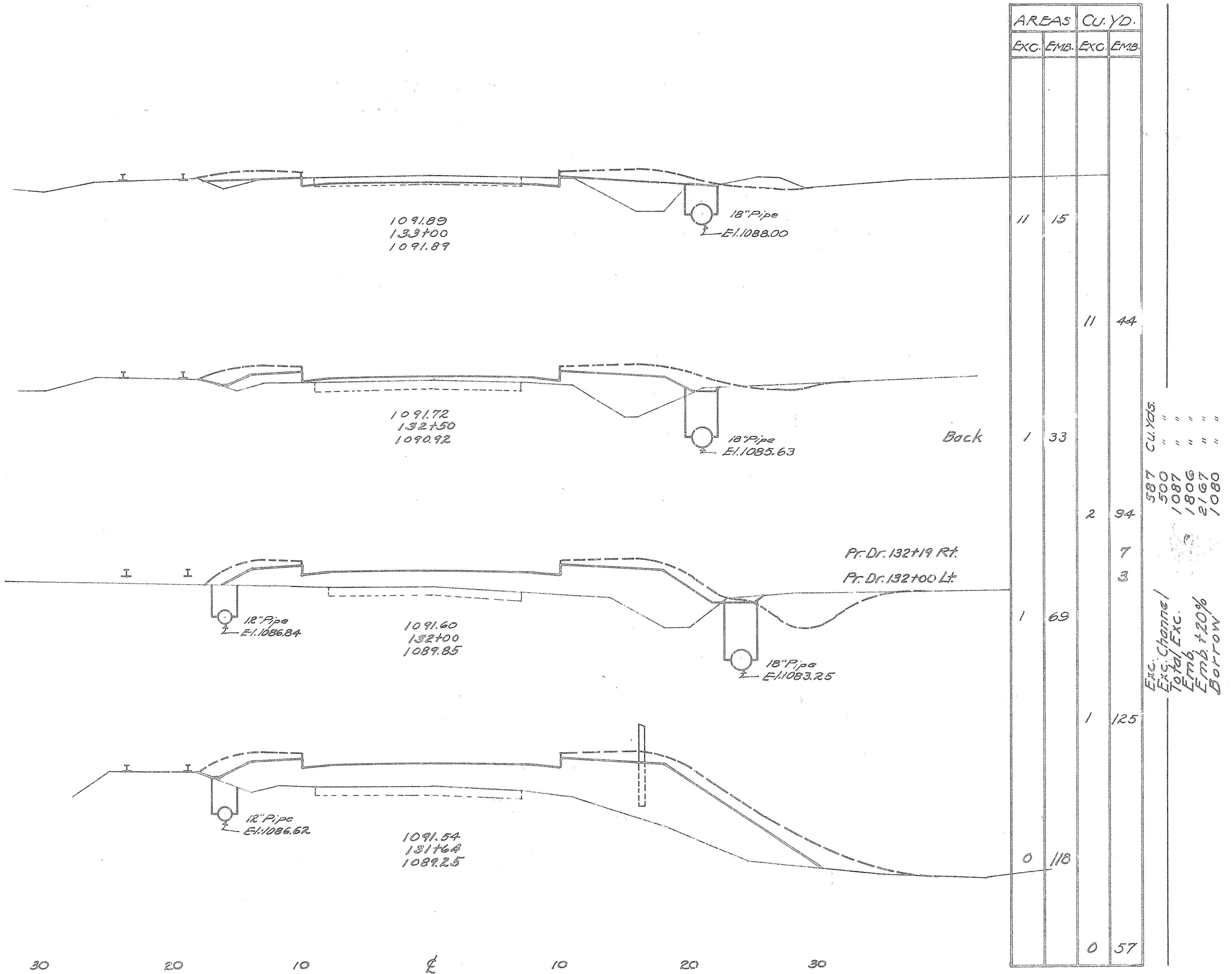
Temples Plotted J.A.G.  
Checked F.H.G.  
Drainage Checked J.A.G.  
Areas By J.A.G.  
Volumes By J.A.G.  
Checked B.G.S.  
Balance Points E.H.E.

STA. 126+00 To STA. 131+50



S.H. 249 SEC'D PT.  
PREBLE COUNTY

Plotted By: J.A.G.  
 Templates Plotted: J.A.G.  
 Checked: E.H.G.  
 Drainage: J.A.G.  
 Areas: J.A.G.  
 Volumes By: J.A.G. & B.A.R.  
 Volumes Checked: E.H.G. & M.F.  
 Balance Points: E.H.G.



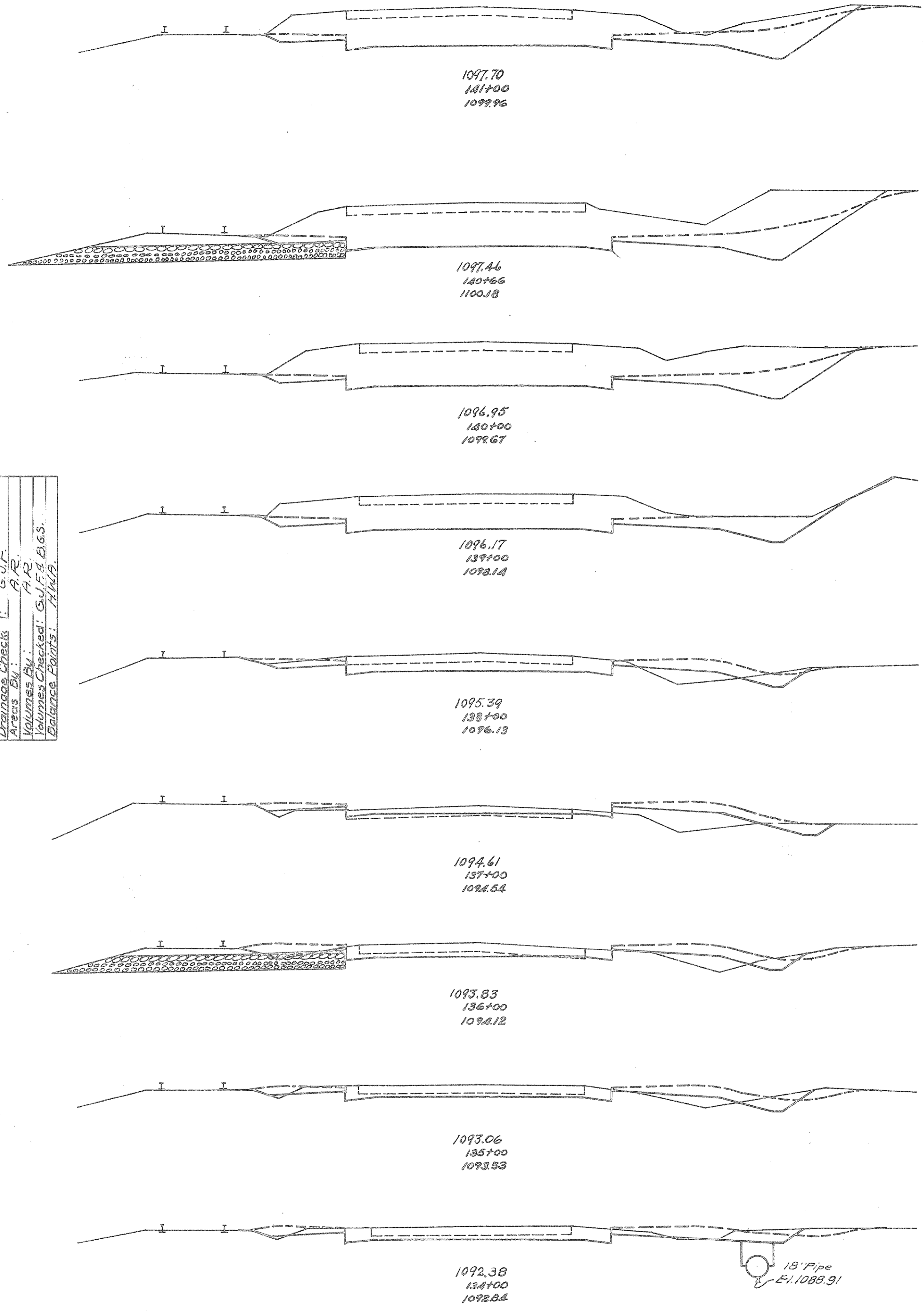
30 25 20 15 10 5 0 5 10 15 20 25 30

30 25 20 15 10 5 0 5 10 15 20 25 30

FED. RD DIST. NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR
10	OHIO	NR5699-A	1935

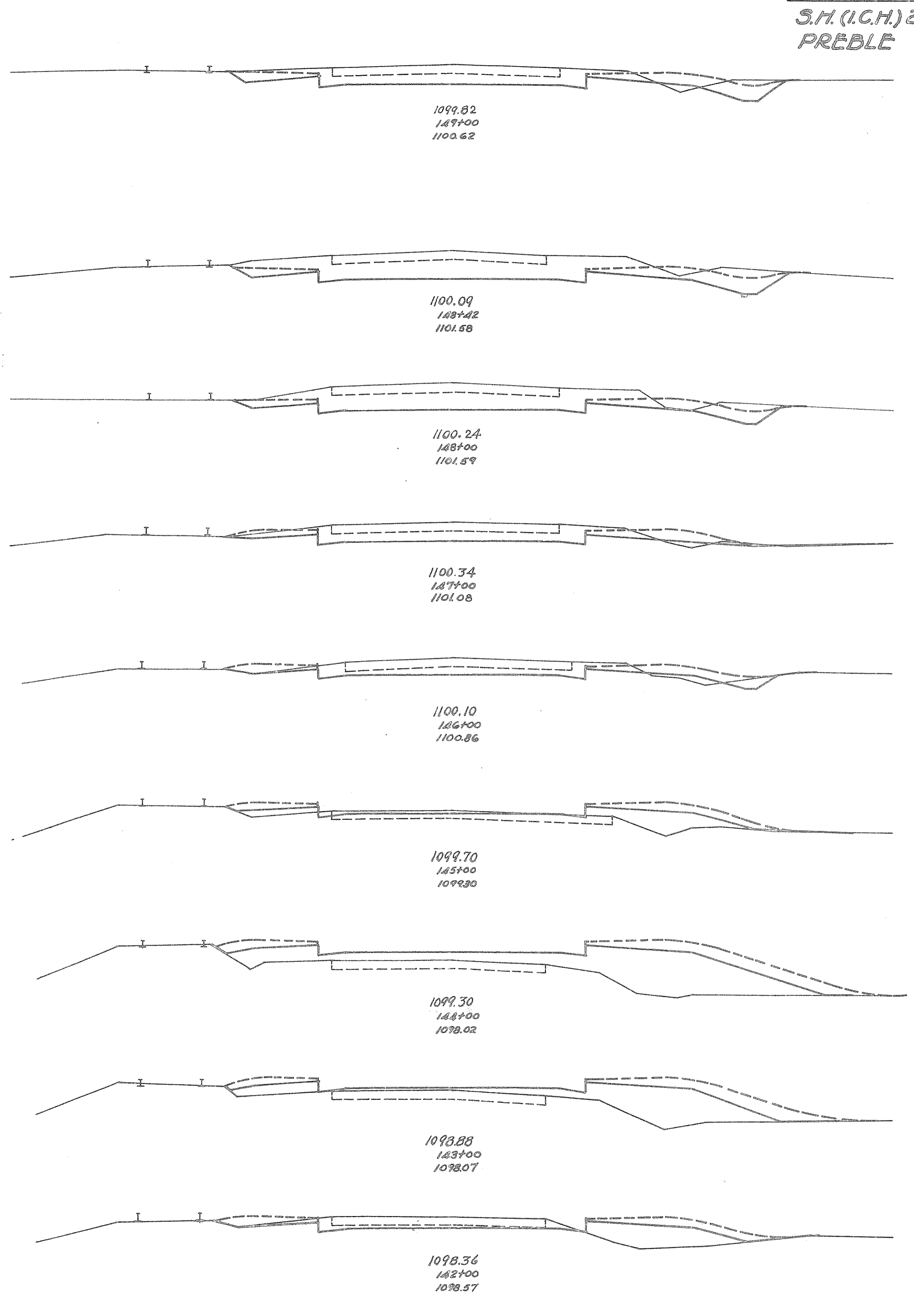
25  
50

S.H. (I.C.H.) 249 SEC. D (PT.)  
PREBLE COUNTY.



End Area	Cu. Yd.	
	Cut	Fill
98	0	
		147 0
135	0	
		314 0
122	0	
		385 0
86	0	
		64 3
		217 11
		153 8
31	6	
		74 32
9	11	
		54 30
20	5	
		82 17
24	4	
		96 7
28	0	
		72 28

STA 138+70.5



End Area	Cu. Yd.	
	Cut	Fill
40	1	
		112 1
64	0	
		92 0
54	0	
		165 2
35	1	
		119 6
29	2	
		59 32
3	15	
		6 146
0	64	
		0 189
0	38	
		30 98
16	15	
		211 28

STA. 134+00 TO STA. 149+00.

Checked by: G.J.F.  
 Templates Plotted: G.J.F.  
 Templates Checked: M.B.C.  
 Drainage Checks: L. G.J.F.  
 Areas by: A.R.  
 Volumes by: A.R.  
 Volumes Checked: G.J.F., B.G.S.  
 Balance Points: H.M.P.

15' Pipe  
E-11088.91

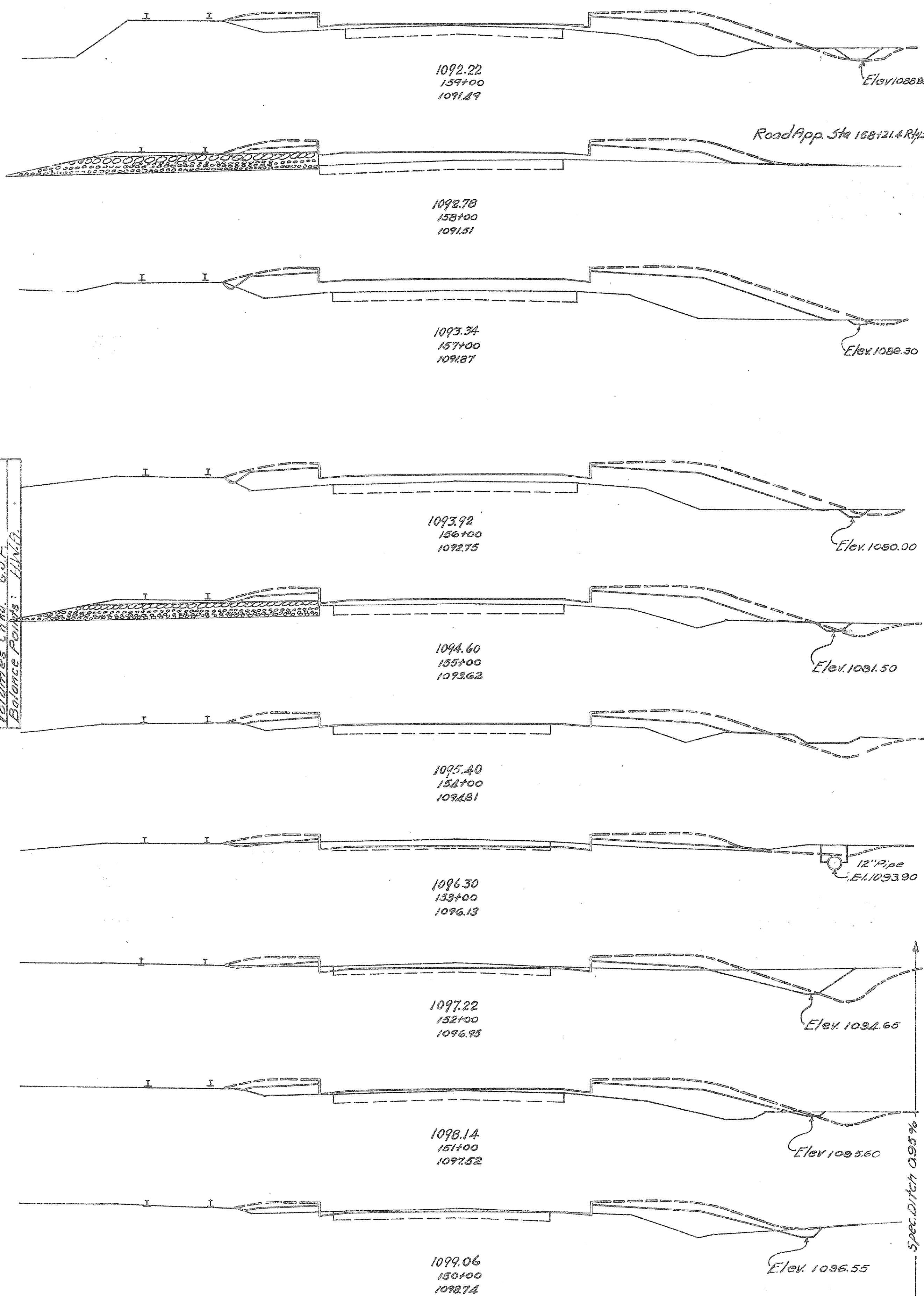
30 20 10 ± 10 20 30

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	WRS699-A	1935

26  
50

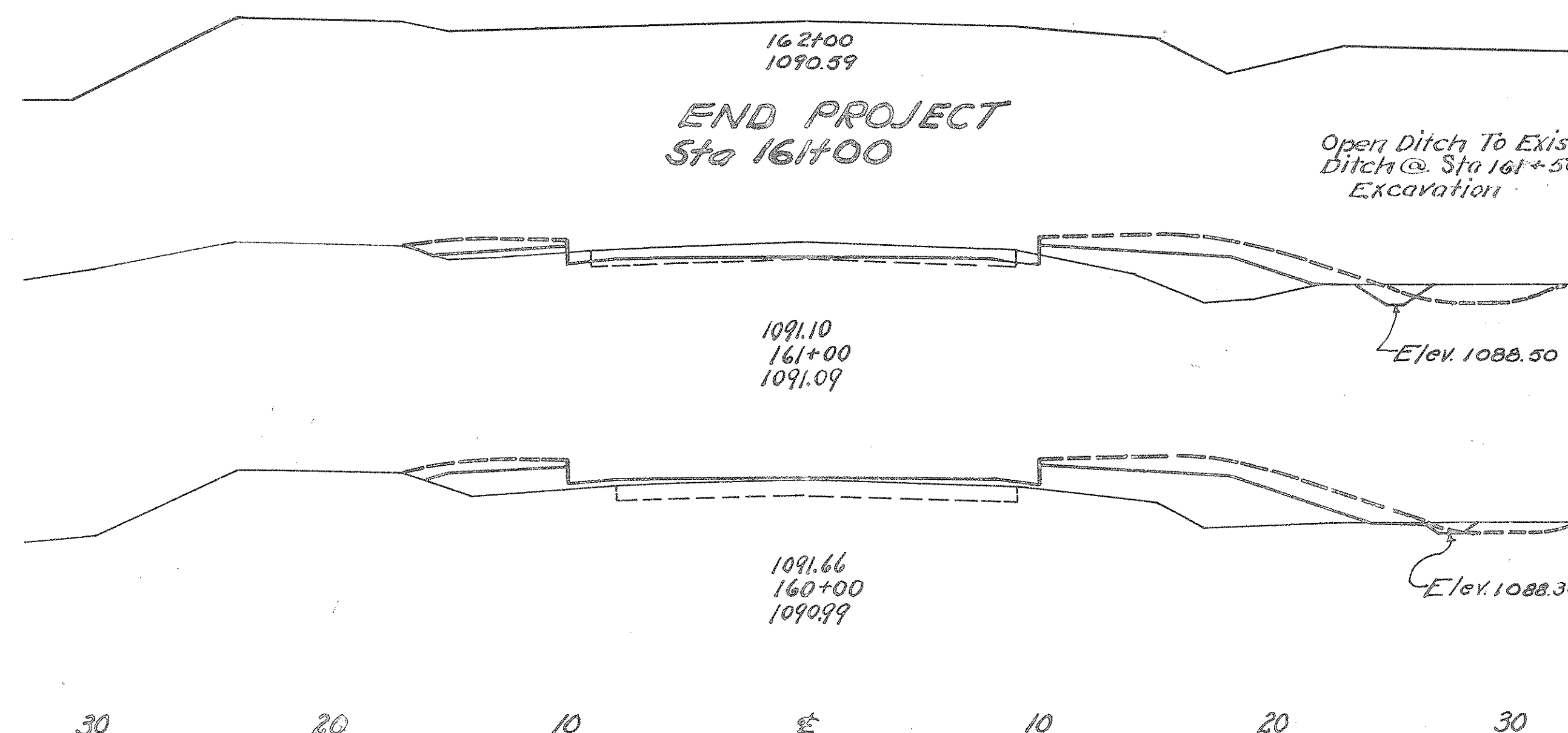
S.H. 249 SEC. "D(PT.)"  
PREBLE COUNTY

Plotted By: G.F.  
 Transfers Plotted: M.B.C.  
 Templates Chk'd: G.F.  
 Drawings Chk'd: G.F.  
 Areas By: G.V.  
 Volumes Chk'd: G.V.  
 Balance Points: H.V.H.



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
2	31		
	4	117	
	48	40	
0	32		
	2	170	
1	60		
	4	196	
1	46		
	4	144	
1	32		
	2	82	
0	12		
	17	32	
9	5		
	46	17	
16	1		
	32	52	
1	24		
	9	74	
4	16		
	82	32	

Excav. 1588 Cu.Yds.  
 Emb. 1657 " "  
 Emb. 1202/1998 " "



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
	4		
12	15		
	24	83	
1	30		
	6	113	

30 20 10 ± 10 20 30

30 20 10 ± 10 20 30

STA 150+00 TO STA 161+00

STA 161+00

# PLAN OF SPECIAL FLARED PAVEMENT & APPROACH

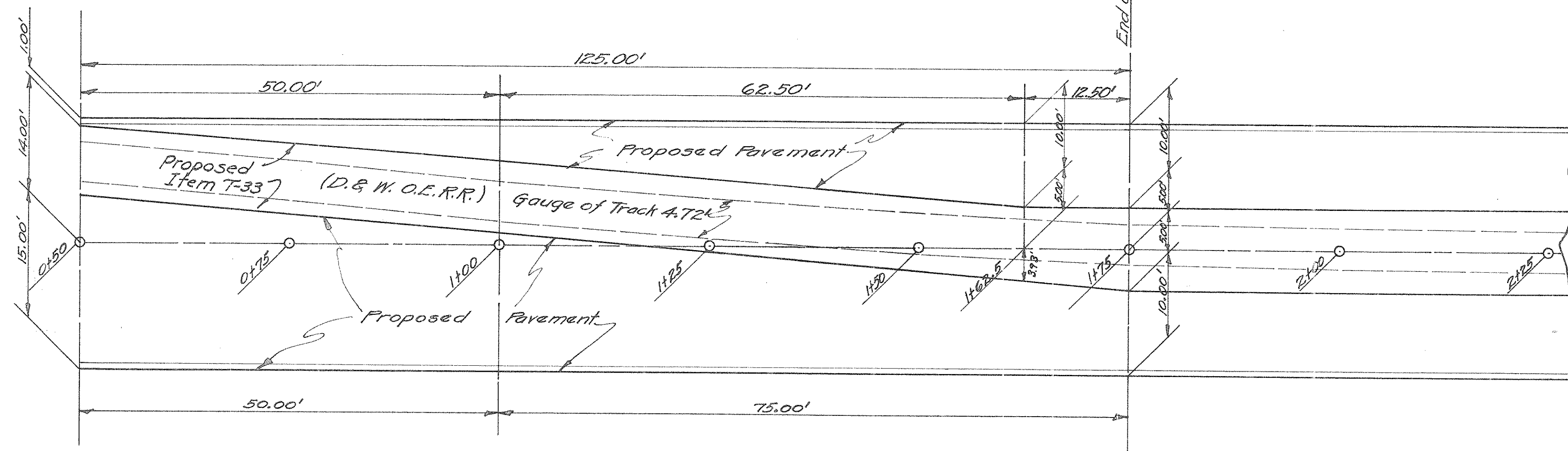
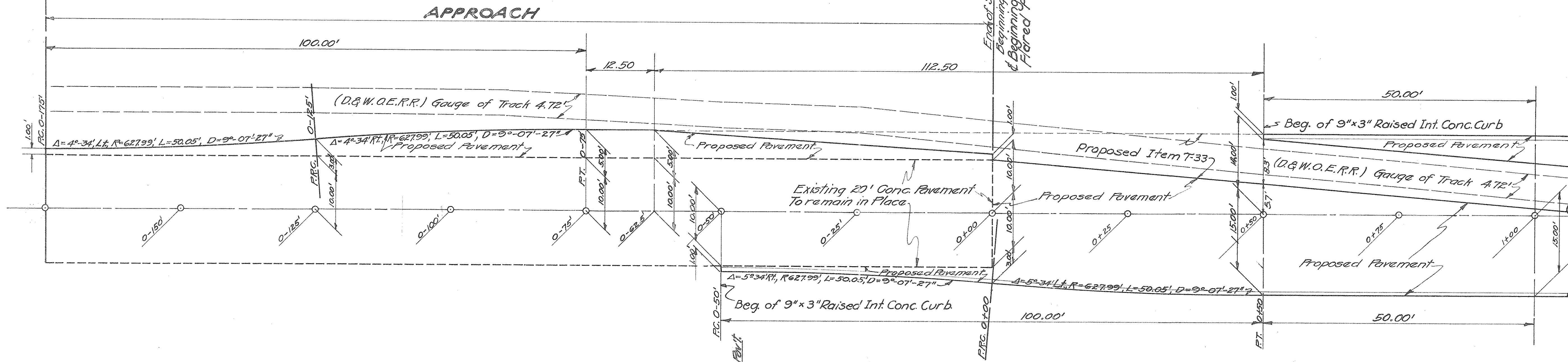
STA. 0+175 TO STA. 1+75

Scale 1" = 10'-0"

FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS 699-A	1935

27  
50

S.H.(I.C.H.) 249 SEC'D. PART  
PREBLE COUNTY  
PROPOSAL NO. 1



## SPECIAL FLARED PAVEMENT. STA. 0+00 TO STA. 1+75 ESTIMATED QUANTITIES

Extra Special Pav't. Item T-70	417.4 Sq. Yds.
9" x 3" Raised Integral Conc. Curb (Add.)	300.0 Lin. Ft.
3 1/2" Item T-33	160.4 Sq. Yds.

## APPROACH STA. 0+00 to 0+175' ESTIMATED QUANTITIES

Extra. Special Pav't.	72.2 Sq. Yds.
Finishing Shoulders Slopes & Ditches	112.5 Lin. Ft.
9" x 3" Raised Integral Conc. Curb (Add.)	50.0 Lin. Ft.
3 1/2" Item T-33	13.9 Sq. Yds.

- Note:
- Where exist. conc. pavement is widened, transverse joints shall be matched with joints in exist. pav't.
  - from Sta. 0+00 to Sta. 1+50 inclusive, transverse joints shall be spaced every 25.00 feet.

Drawn By: J.A.G. Date 8-21-34  
Checked By: E.H.G. Date 8-21-34  
Revised By: A.T.M. Date 12-3-34

# PLAN OF SPECIAL FLARED PAVEMENT

STA. 20+48.85 TO STA 23+35.96

Scale 1" = 10'-0"

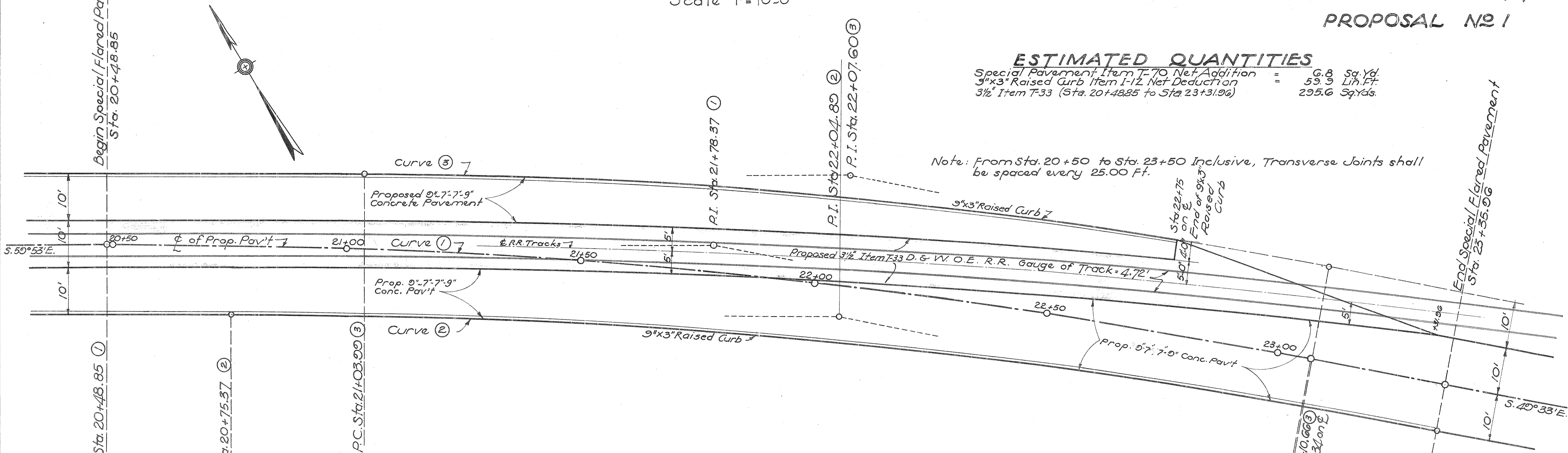
S.H. 249 SEC. "D-PART"  
PREBLE COUNTY

PROPOSAL NO 1

## ESTIMATED QUANTITIES

Special Pavement Item T-70 Net Addition = 6.8 Sq. Yd.  
 9"x3" Raised Curb Item I-12 Net Deduction = 59.9 Lin. Ft.  
 3 1/2" Item T-33 (Sta. 20+48.85 to Sta. 23+31.96) = 295.6 Sq. Yds.

Note: From Sta. 20+50 to Sta. 23+50 Inclusive, Transverse Joints shall be spaced every 25.00 Ft.



### MOD. STD. SUPERELEVATION TABLE FOR SPECIAL FLARED PAVEMENT ON CURVE

P.C. = Sta. 20+48.85 on Curve ① P.T. = 23+35.70 on Curve ②  
 P.I. = Sta. 21+78.37 on Curve ① = 23+35.96 on  $\epsilon$  (Fwd. Tang)  
 D = 4°00'  $\Delta$  = 10°20' Rt.

LEFT		C		RIGHT	
Elev. Edge	Width	Station	Elev.	Width	Elev. Edge
1148.97	15'	20+48.85	1148.18	15'	1148.97
1148.97	15'	20+50	1148.17	15'	1148.96
1148.91	15'	20+75	1148.89	15'	1148.68
1148.86	15'	20+00	1148.61	15'	1148.40
1148.81	15'	20+25	1148.33	15'	1148.12
1148.76	15'	20+48.85	1148.06	15'	1147.85
1148.76	15'	20+50	1148.05	15'	1147.84
1148.71	15.25'	20+75	1147.77	14.75'	1147.57
1148.67	15.70'	20+98.85	1147.50	14.60'	1147.31
1148.66	15.70'	21+00	1147.49	14.60'	1147.30
1148.42	16.40'	21+25	1147.23	14.00'	1147.05
1148.20	17.20'	21+50	1147.00	13.25'	1146.83
1148.05	18.20'	21+75	1146.81	12.9'	1146.65
1147.92	18.80'	22+00	1146.66	12.5'	1146.51
1147.80	19.00'	22+25	1146.54	12.0'	1146.40
1147.71	19.70'	22+50	1146.45	11.25'	1146.32
1147.67	20.10'	22+75	1146.41	10.50'	1146.29
1147.05	6.25'	22+85.96	1146.40	10.40'	1146.29
1146.97	7.50'	23+00	1146.39	10.50'	1146.28
1146.86	9.50'	23+25	1146.40	10.10'	1146.30
1146.81	10'	23+35.96	1146.40	10'	1146.30
1146.74	10'	23+50	1146.40	10'	1146.30
1146.62	10'	23+75	1146.41	10'	1146.31
1146.49	10'	24+00	1146.41	10'	1146.31
1146.37	10'	24+25	1146.42	10'	1146.32
1146.32	10'	24+35.96	1146.42	10'	1146.32

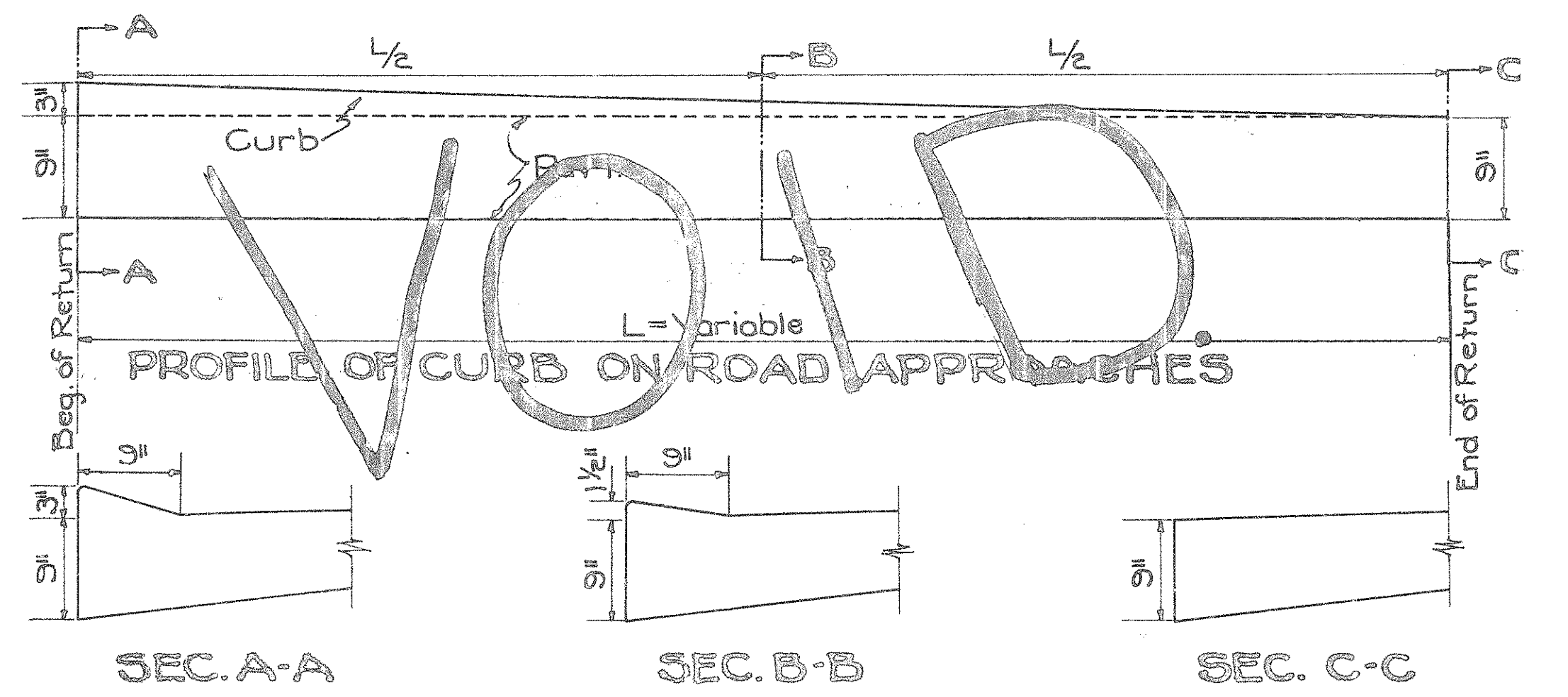
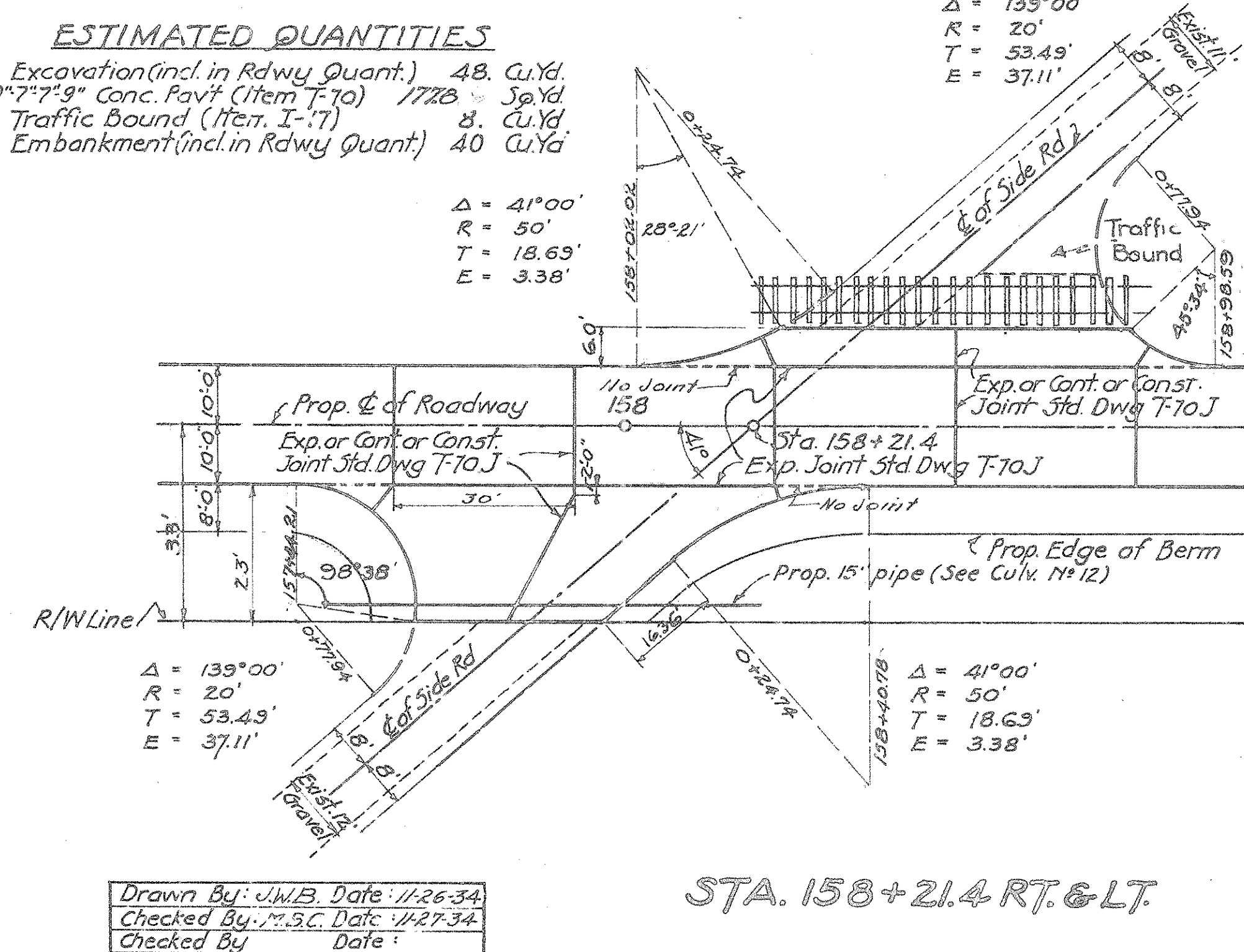
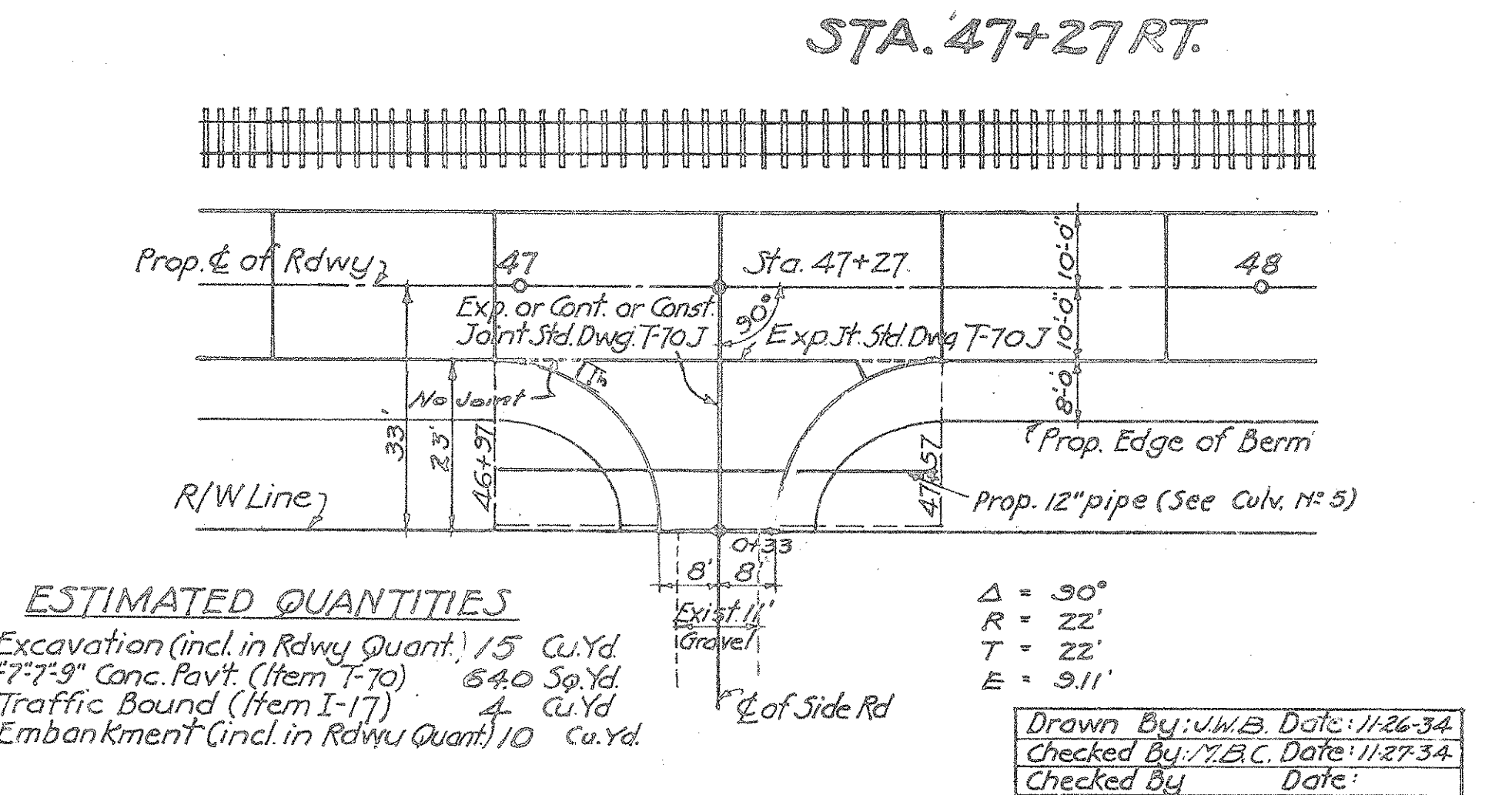
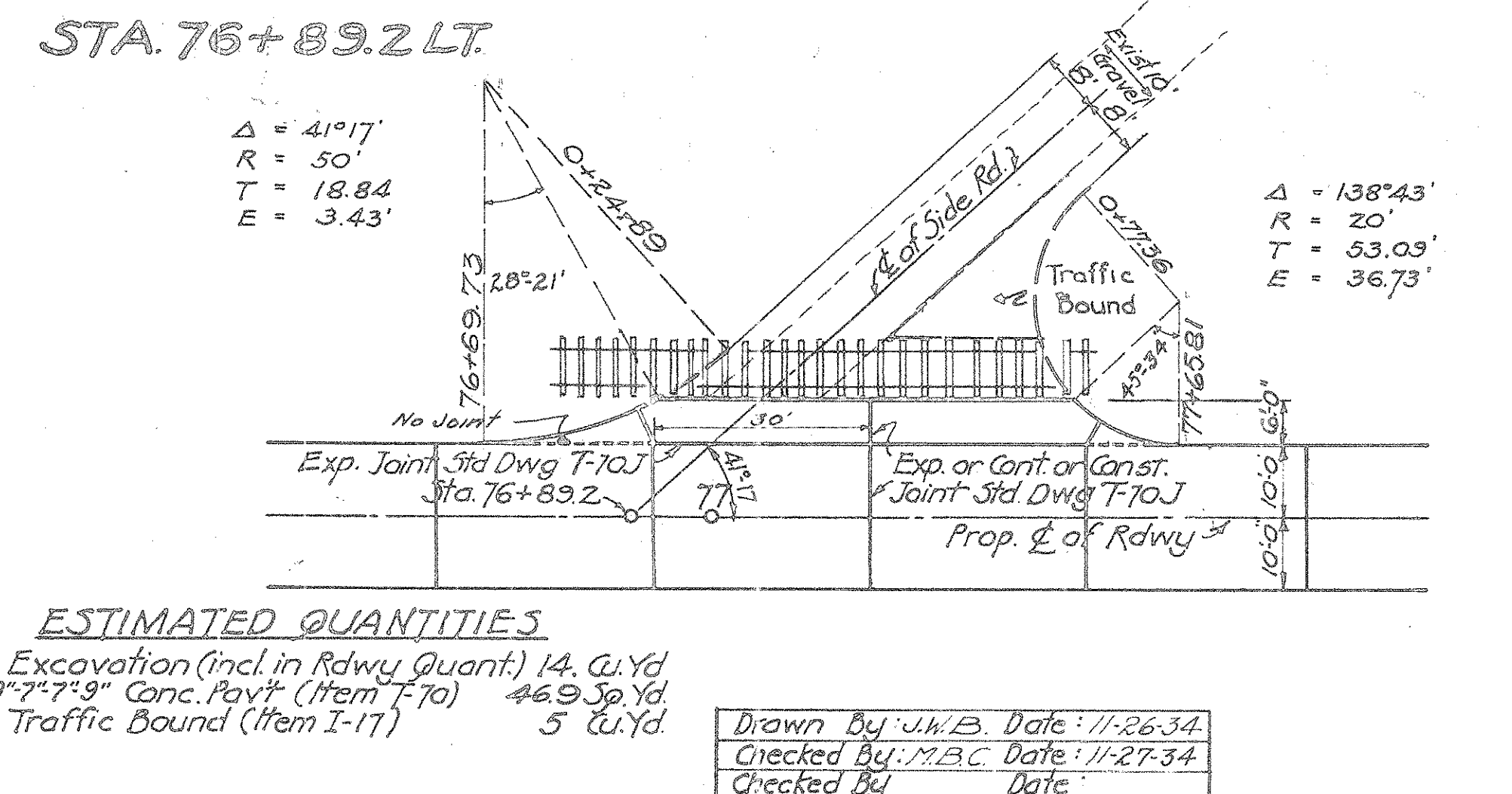
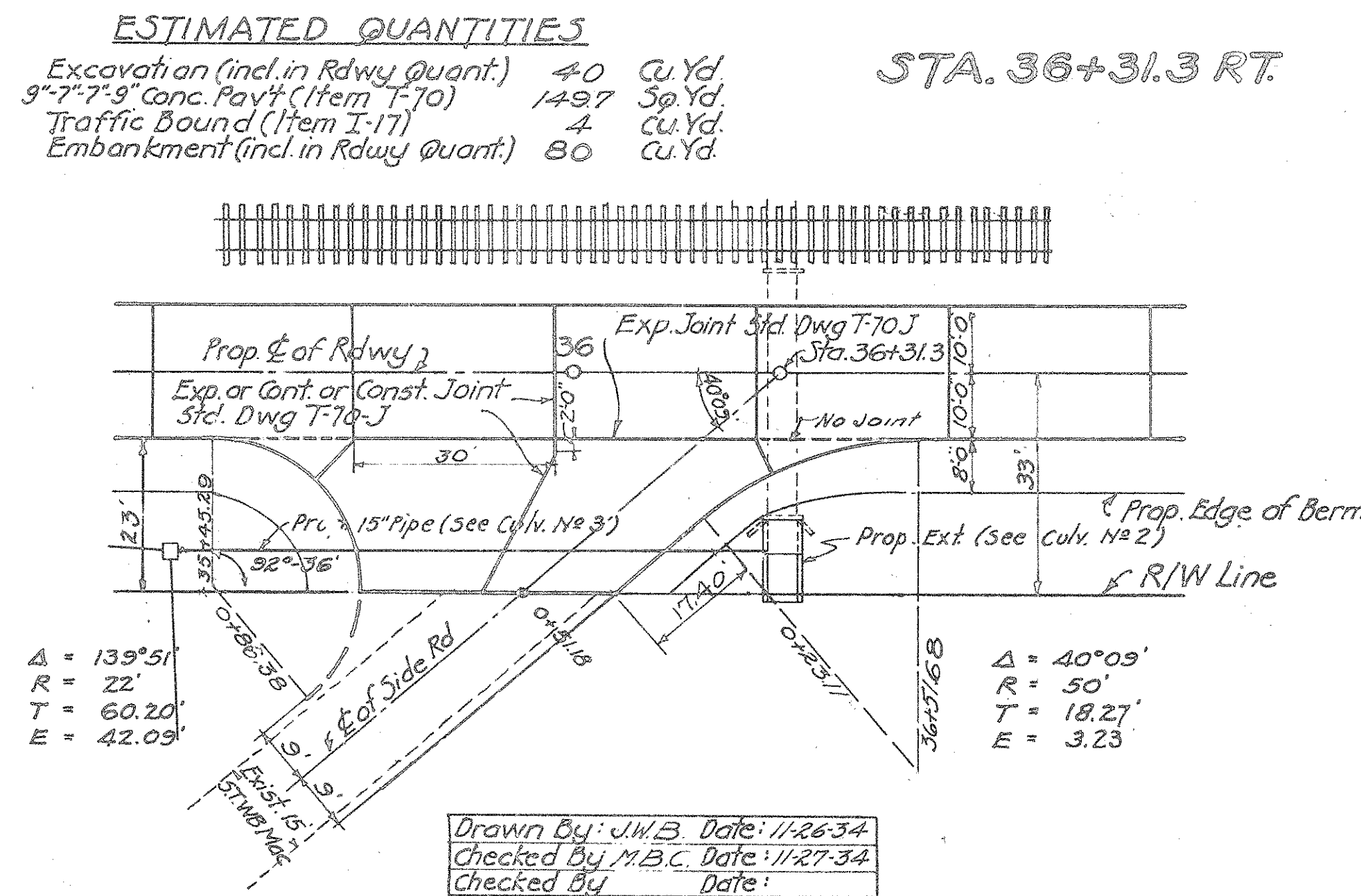
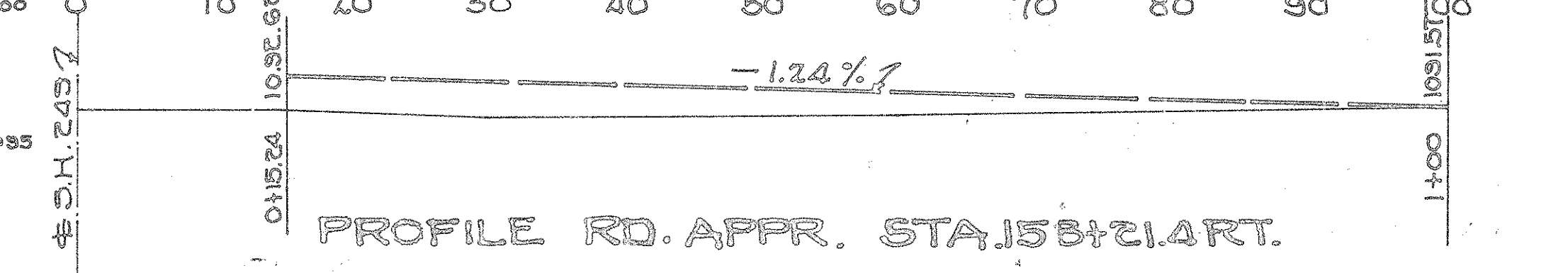
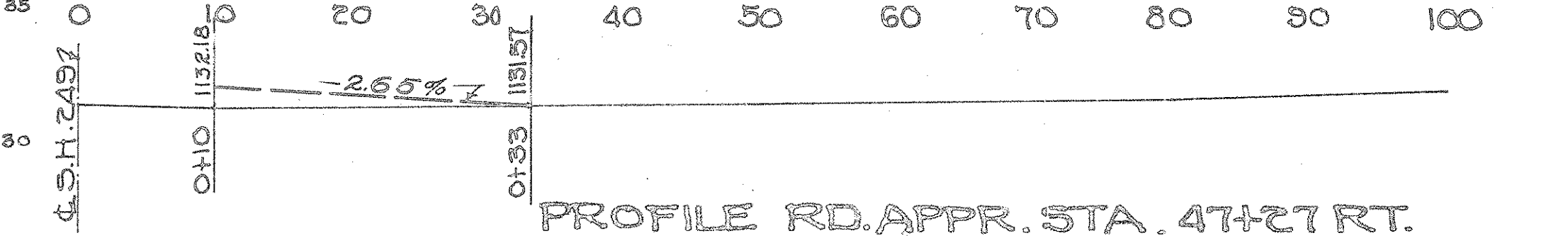
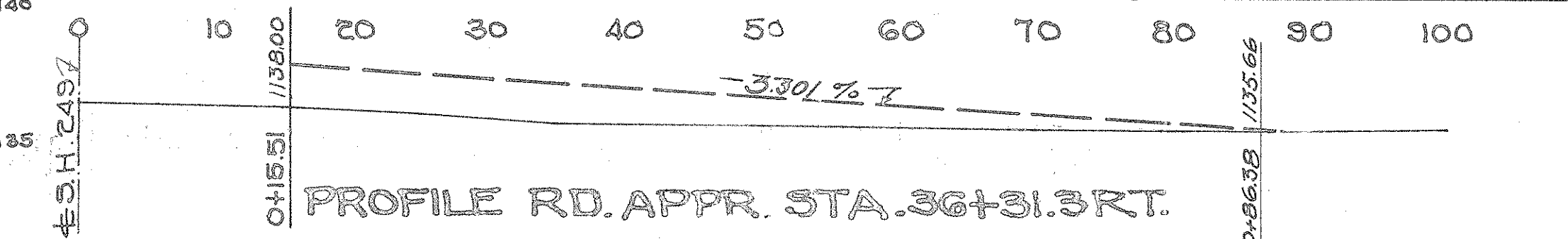
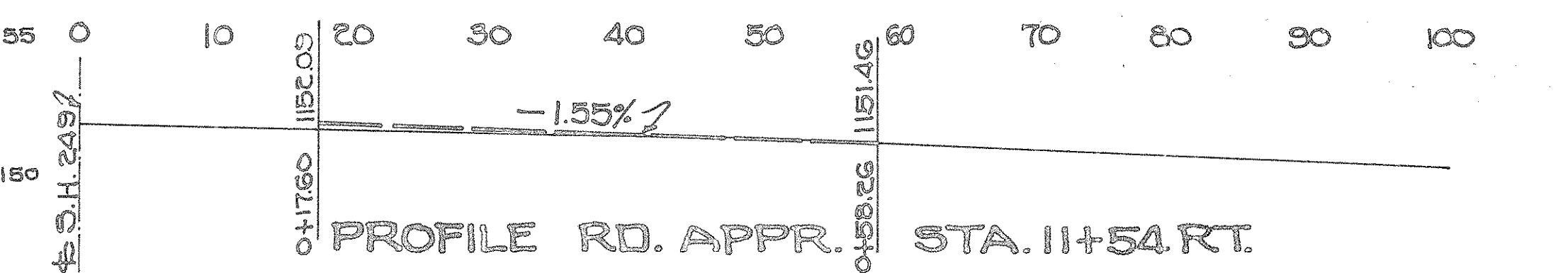
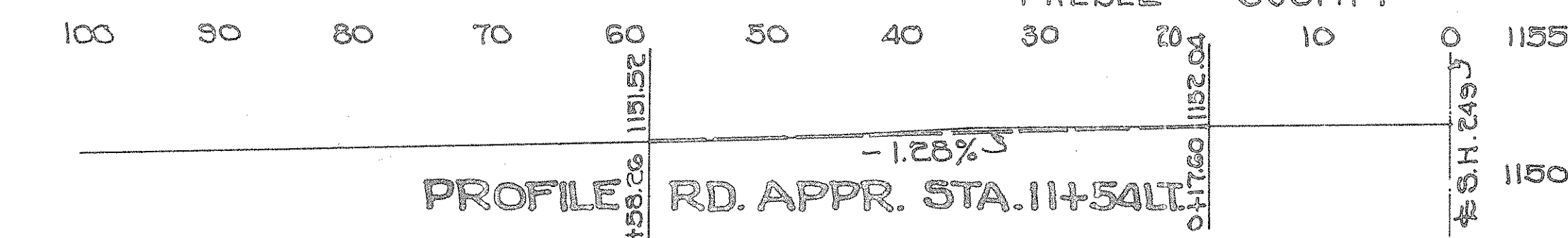
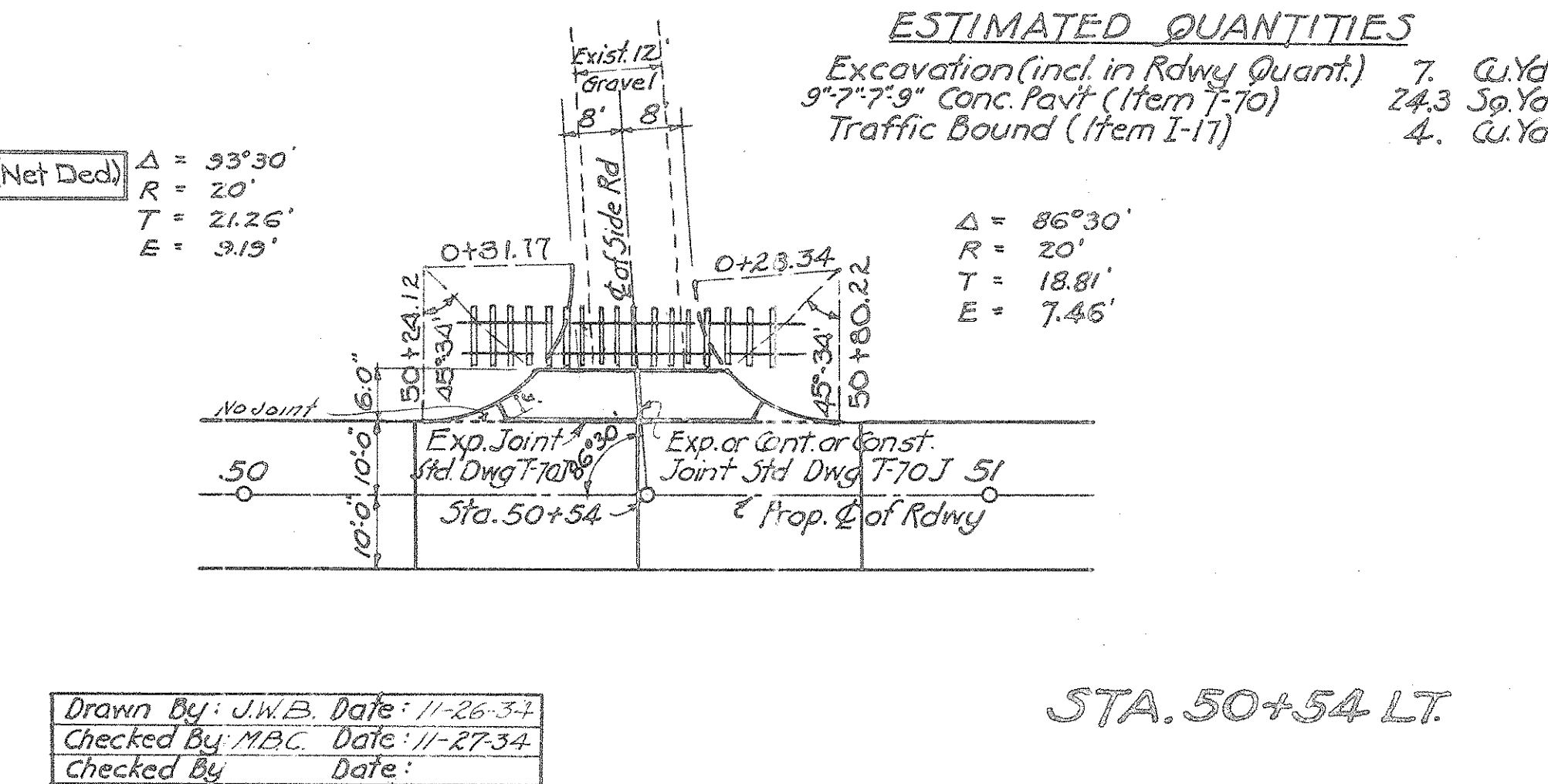
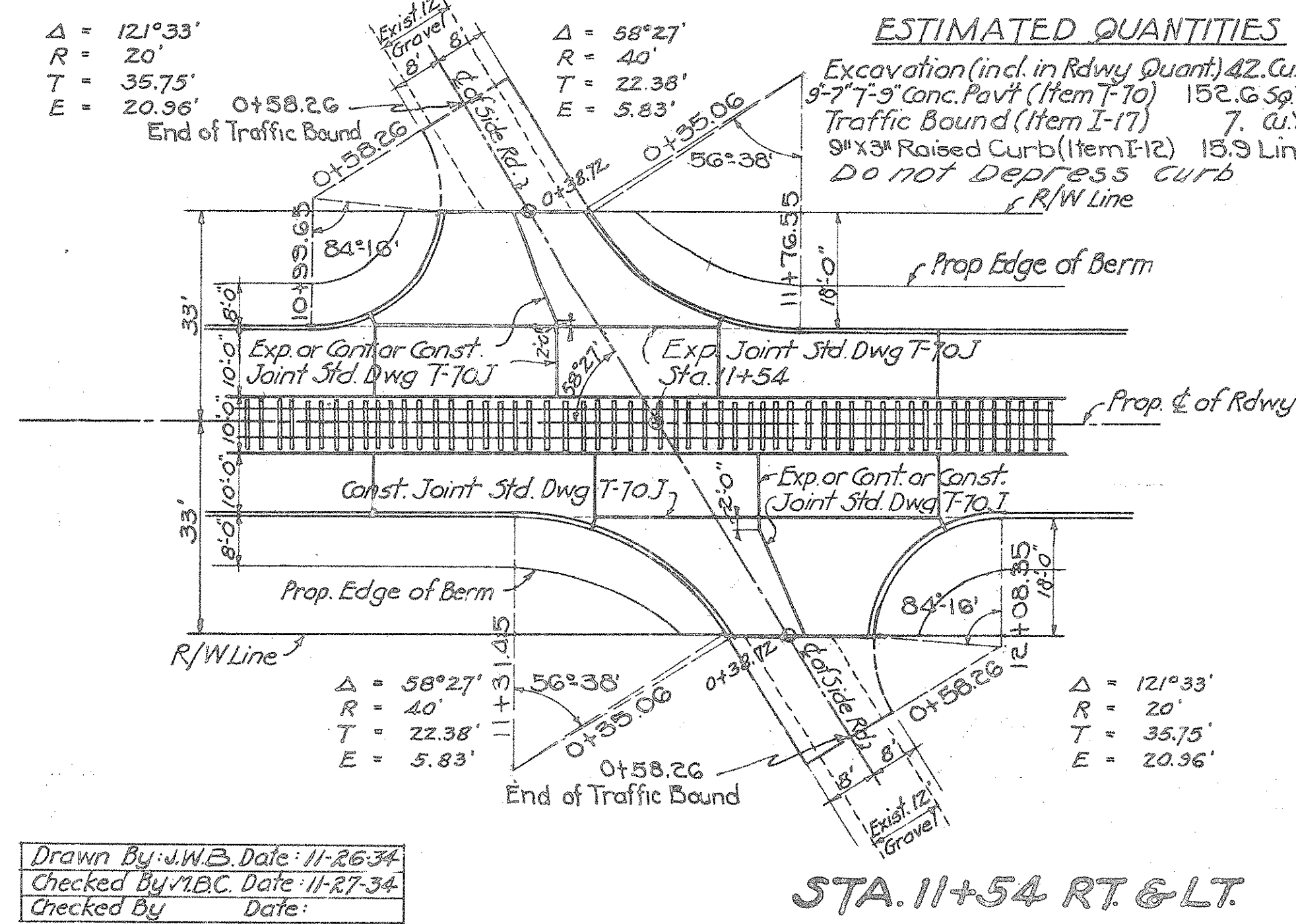
	Curve No ① ( $\epsilon$ )	Curve No ② (Rt. Edge of Pav't)	Curve No ③ (Lt. Edge of Pav't)
P.I.	Sta. 21+78.37	Sta. 22+04.89	Sta. 22+07.60
$\Delta$	10°20' Rt.	10°20' Rt.	10°20' Rt.
D	4°00'	4°00'	5°00'
T	129.52'	129.52'	103.61'
L	258.33'	258.33'	206.67'
R	1432.40'	1432.40'	1145.92'
E	5.84'	5.84'	4.66'
P.C.	Sta. 20+48.85	Sta. 20+75.37	Sta. 21+03.99
P.T.	Sta. 23+07.18	Sta. 23+33.70	Sta. 23+10.66

Drawn By: G.J.F. 8-20-34  
 Chk'd By: R.H.H. 8-21-34  
 Chk'd By:

# PLAN OF ROAD APPROACHES

FED AID PROJ NO	STATE	FED AID PROJECT	FISCAL YEAR
10	OHIO	NRS 697A	1935

S.H. No 249 SEC "D-PT."  
PREBLE COUNTY

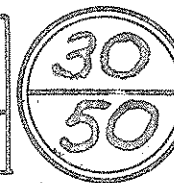


TYPICAL PRIVATE DRIVE

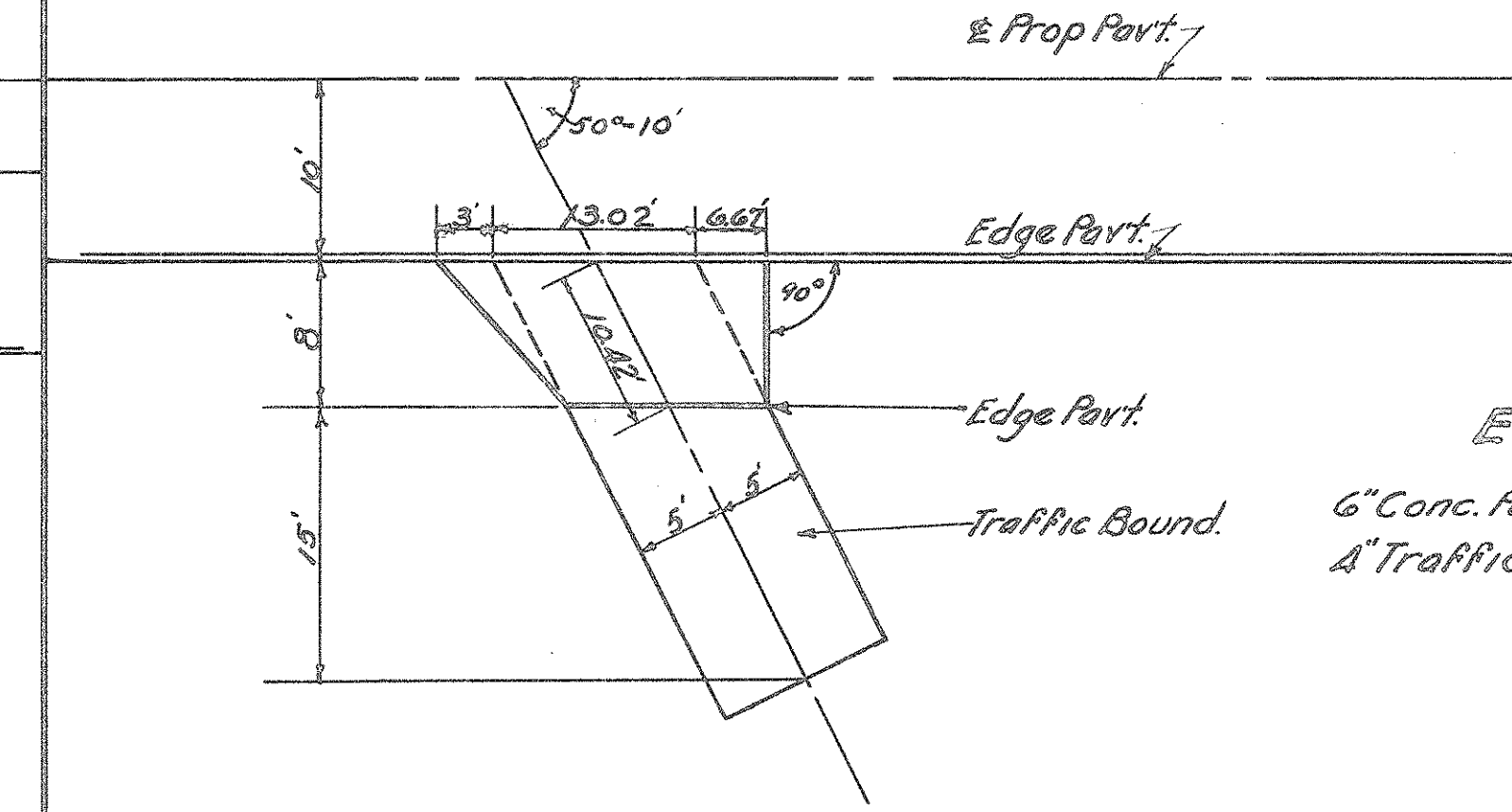
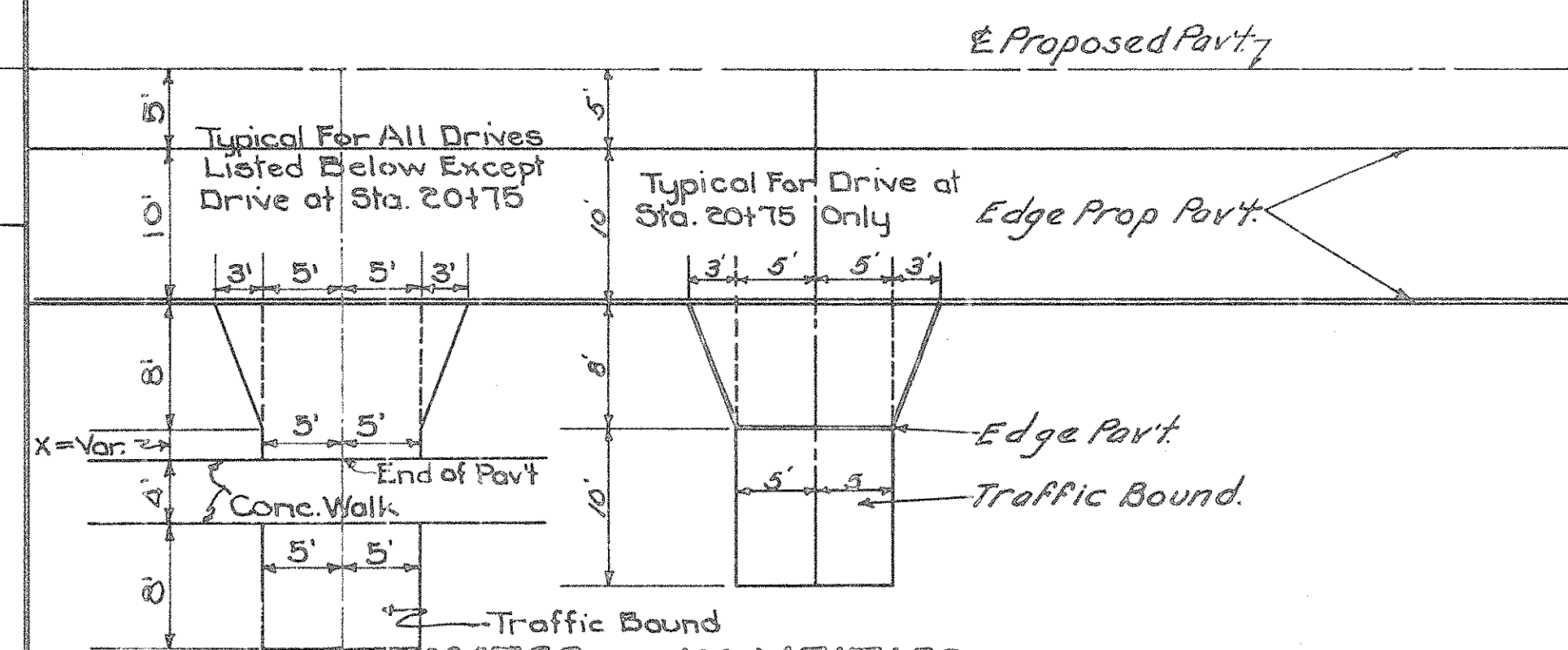
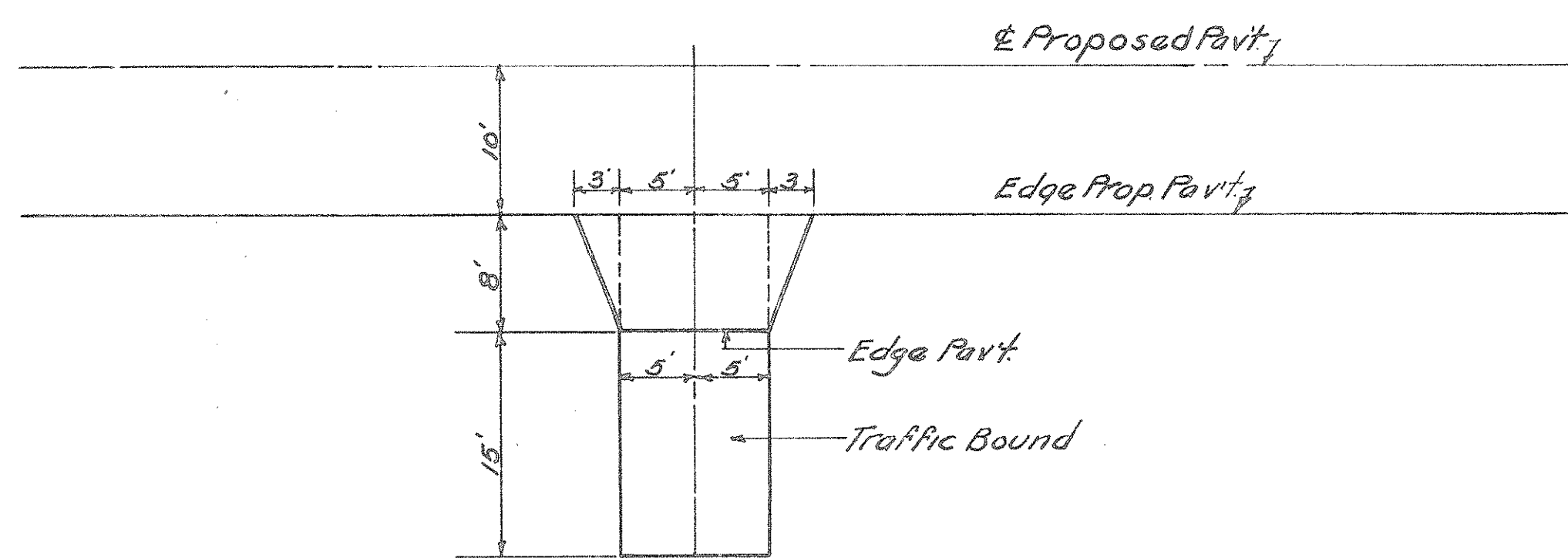
TYPICAL PRIVATE DRIVE

TYPICAL PRIVATE DRIVE  
STA. 22+60 (RT.)

FED. RD. DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR
10	OHIO	NRS 639A	1935



S.H 249 SEC "D- PART"  
PREBLE COUNTY



ESTIMATED QUANTITIES

Station	Side	Angle	6" Conc. Pavt. Item F-70 Sq. Yds.	4" Traffic Bound Item I-17 Cu. Yds.
27+77	Rt	90°-00'	11.6	2
38+73	Rt	90°-00'	11.6	2
40+33	Rt	90°-00'	11.6	2
41+49	Rt	90°-00'	11.6	2
63+14	Rt	90°-00'	11.6	2
80+84	Rt	90°-00'	11.6	2
87+60	Rt	90°-00'	11.6	2
92+86	Rt	90°-00'	11.6	2
100+58	Rt	90°-00'	11.6	2
102+09	Rt	90°-00'	11.6	2
132+19	Rt	90°-00'	11.6	2

The above typical private drive applies to the drives at the following Stations.

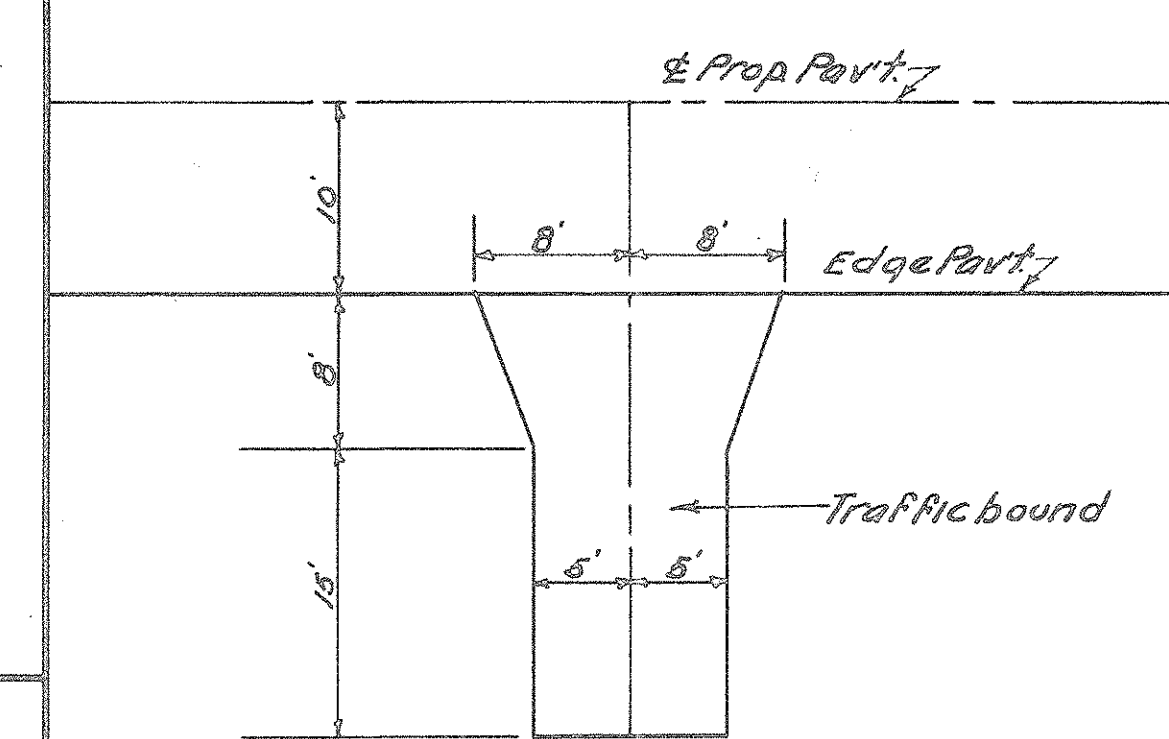
3 Cu. Yds. Excav.  
3 Cu. Yds. Excav.  
3 Cu. Yds. Excav.  
2 Cu. Yds. Emb.  
7 Cu. Yds. Emb.

ESTIMATED QUANTITIES

Station	Side	Angle	6" Conc. Pavt. Item F-70 Sq. Yds.	4" Traffic Bound Item I-17 Cu. Yds.	X
7+75	Rt	90°-00'	11.6	1	0.00
9+08	Rt	90°-00'	11.7	1	0.16
10+57	Rt	90°-00'	12.7	1	1.00
13+43.3	Rt	90°-00'	14.9	1	3.00
13+68	Rt	90°-00'	14.9	1	3.00
15+47	Rt	90°-00'	14.9	1	3.00
16+70	Rt	90°-00'	14.9	1	3.00
18+36	Rt	90°-00'	12.7	1	1.00
19+73	Rt	90°-00'	13.2	1	1.46
20+01.6	Rt	90°-00'	13.8	1	2.00
20+75	Rt	90°-00'	11.6	1	

The above typical private drives apply to the drives at the following Stations.

TYPICAL FIELD DRIVE



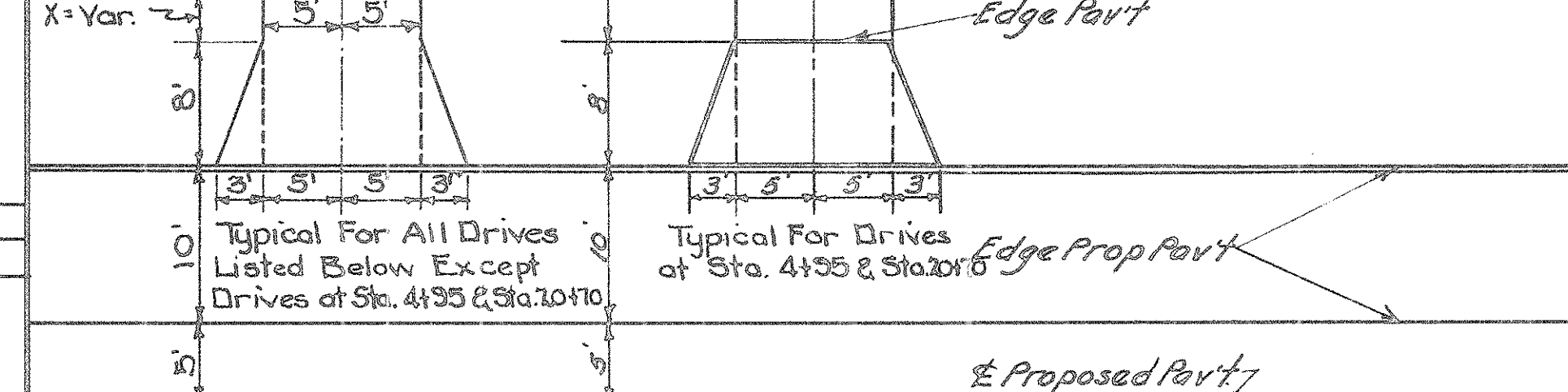
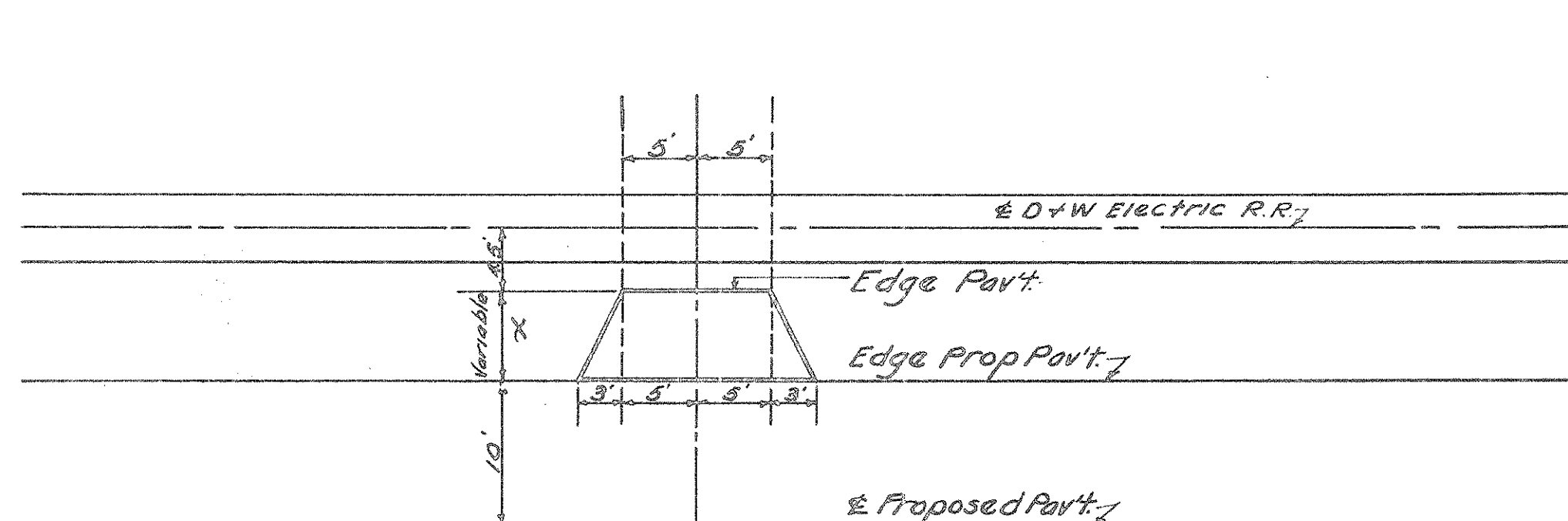
This typical field drive applies to the drives at the following Stations.

ESTIMATED QUANTITIES

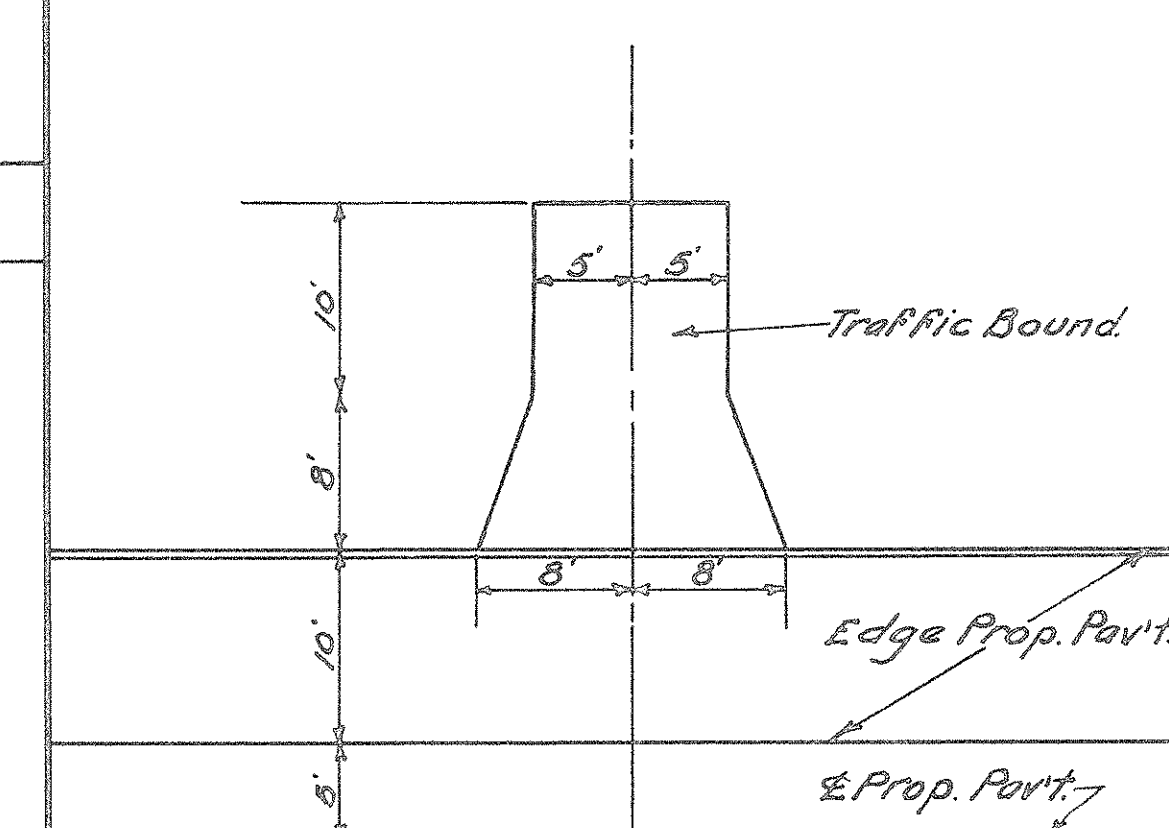
Station	Side	Angle	4" Traffic Bound Item I-17 Cu. Yds.	Corr. M.P. Item I-1 Lin. Ft. 12"
36+80	Rt	90°-00'	3	
42+47	Rt	90°-00'	3	
48+00	Rt	90°-00'	3	22
56+20	Rt	90°-00'	3	
75+21	Rt	90°-00'	3	
93+76	Rt	90°-00'	3	
152+18	Rt	90°-00'	3	

5 Cu. Yds. Emb.  
5 Cu. Yds. Emb.  
3 Cu. Yds. Emb.

TYPICAL PRIVATE DRIVE



TYPICAL FIELD DRIVE



This typical field drive applies to the drives at the following Stations.

ESTIMATED QUANTITIES

Station	Side	Angle	4" Traffic Bound Item I-17 Cu. Yds.	Corr. M.P. Item I-1 Lin. Ft. 12"
0+90	Lt	90°-00'	3	20
2+32.7	Lt	90°-00'	3	
2+46	Lt	90°-00'	6	3.4
6+32	Lt	90°-00'	3	

ESTIMATED QUANTITIES

Station	Side	Angle	X	6" Conc. Pavt. Item F-70 Sq. Yds.
25+65	Lt	90°-00'	6.45	9.3
29+90	Lt	90°-00'	6.20	9.0
63+0.8	Lt	90°-00'	5.85	8.5
87+23	Lt	90°-00'	5.85	8.5
132+00	Lt	90°-00'	6.75	9.8
134+62	Lt	90°-00'	6.75	10.0

The above typical private drive applies to the drives at the following Stations.

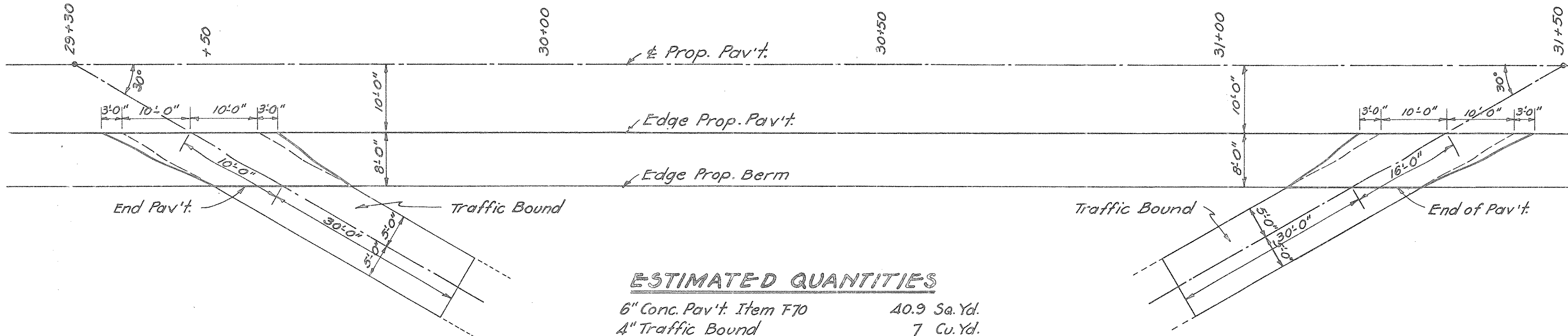
3 Cu. Yds. Emb.

ESTIMATED QUANTITIES

Station	Side	Angle	6" Conc. Pavt. Item F-70 Sq. Yds.	4" Traffic Bound Item I-17 Cu. Yds.	X
4+95	Lt	90°-00'	11.6	1	
7+40	Lt	90°-00'	17.6	1	5.40
7+58	Lt	90°-00'	18.2	1	6.00
9+10	Lt	90°-00'	18.4	1	6.20
13+19	Lt	90°-00'	18.2	1	6.00
16+68	Lt	90°-00'	18.1	1	5.85
18+92	Lt	90°-00'	13.5	1	1.76
20+70	Lt	90°-00'	11.6	1	

The above typical private drives apply to the drives at the following Stations.

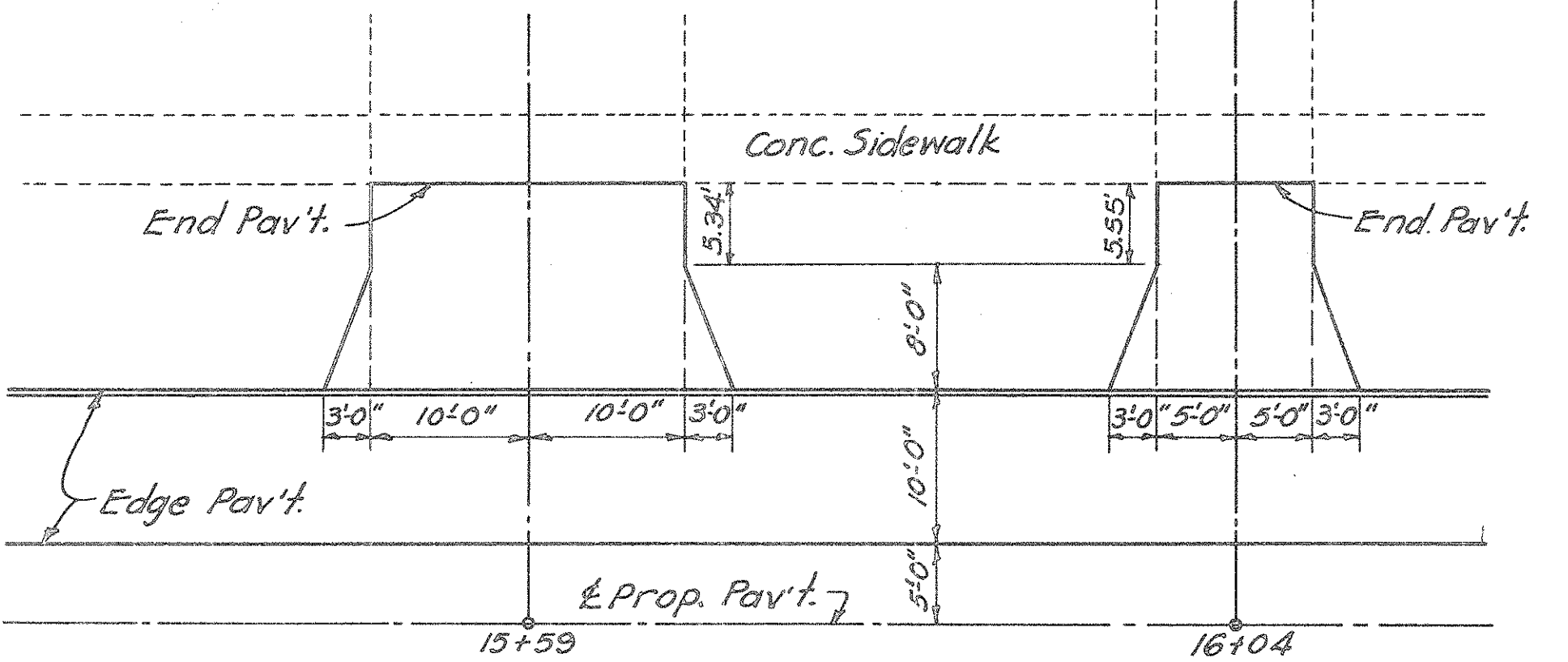
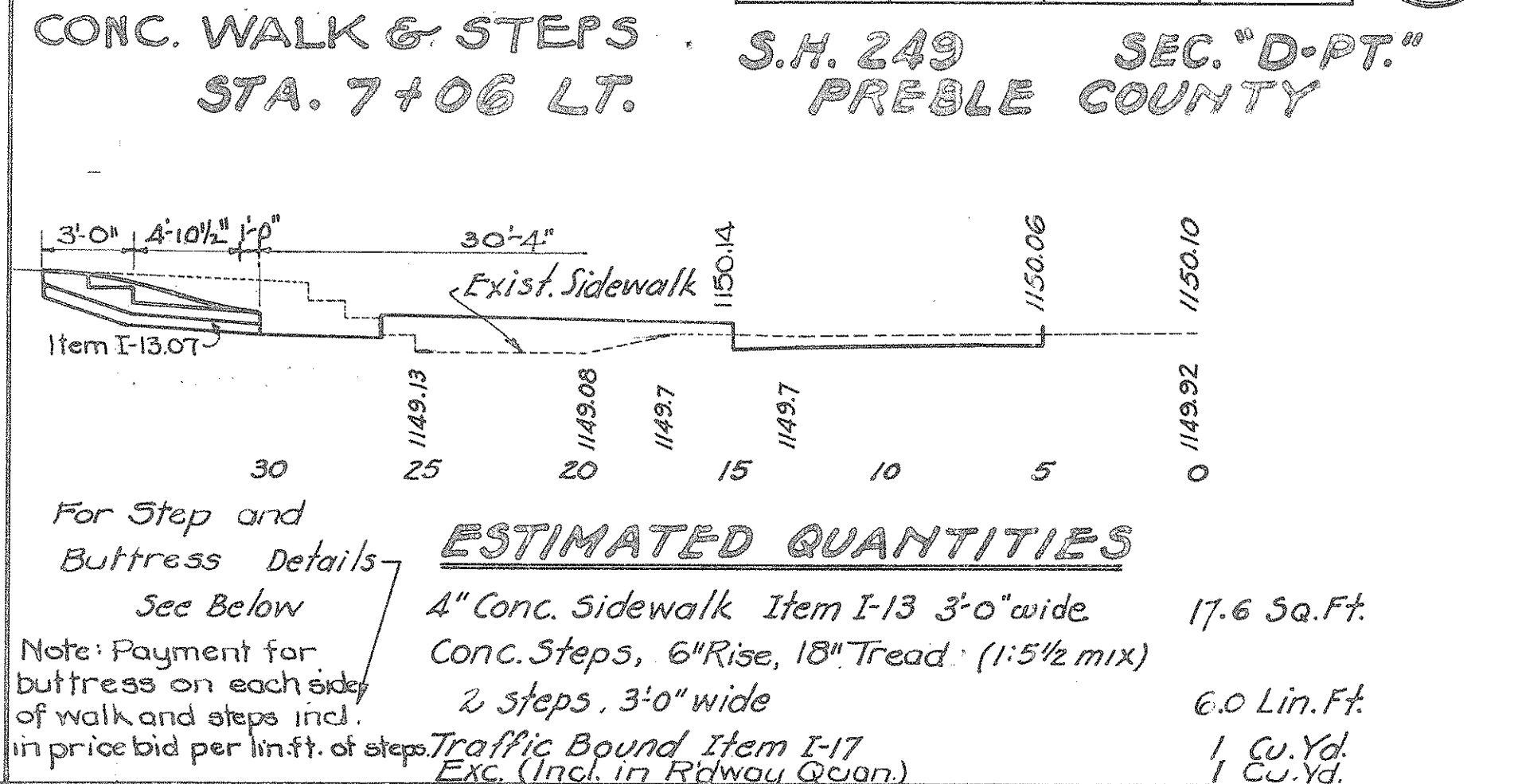
Drawn By: M.B.C. Date: 8-20-34  
Checked By: G.V.F. Date: 8-23-34  
Checked By: Date:



**ESTIMATED QUANTITIES**

6" Conc. Pav't. Item F70	40.9	Sq. Yd.
4" Traffic Bound	7	Cu. Yd.

PRIVATE DRIVE STA. 30+40 RT.



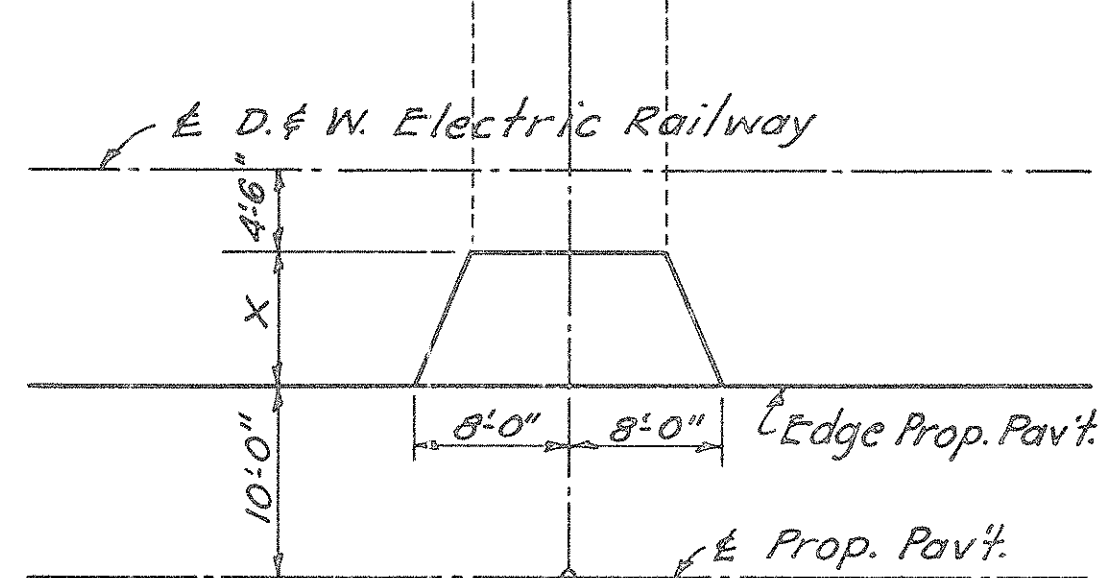
**ESTIMATED QUANTITIES**

Sta. 15+59	6" Conc. Pav't. Item F70	32.3	Sq. Yd.
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**ESTIMATED QUANTITIES**

Sta. 16+04	6" Conc. Pav't. Item F70	17.7	Sq. Yd.
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PRIVATE DRIVE STA. 15+59 & 16+04 LT.

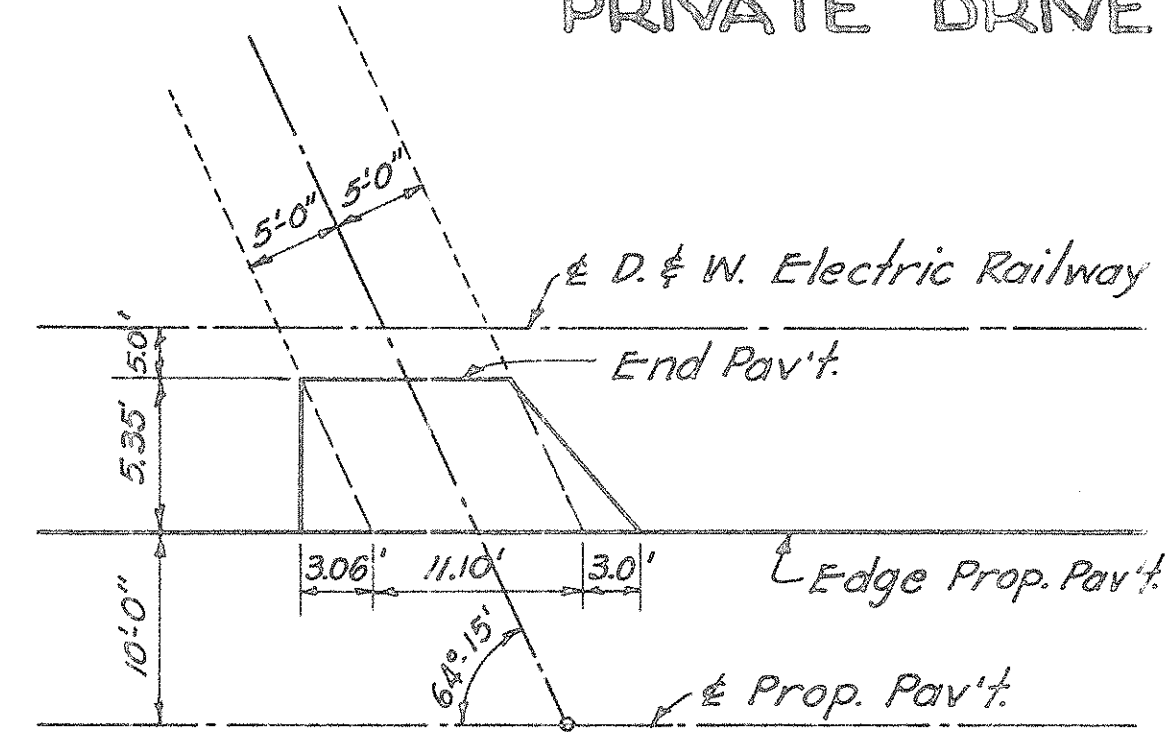


**ESTIMATED QUANTITIES**

Station	Side	Angle	X	4" Traffic Bound Item I-17 Cu. Yd.
40+23	Lt.	90° 00'	6.05	1
125+05	Lt.	90° 00'	6.75	1

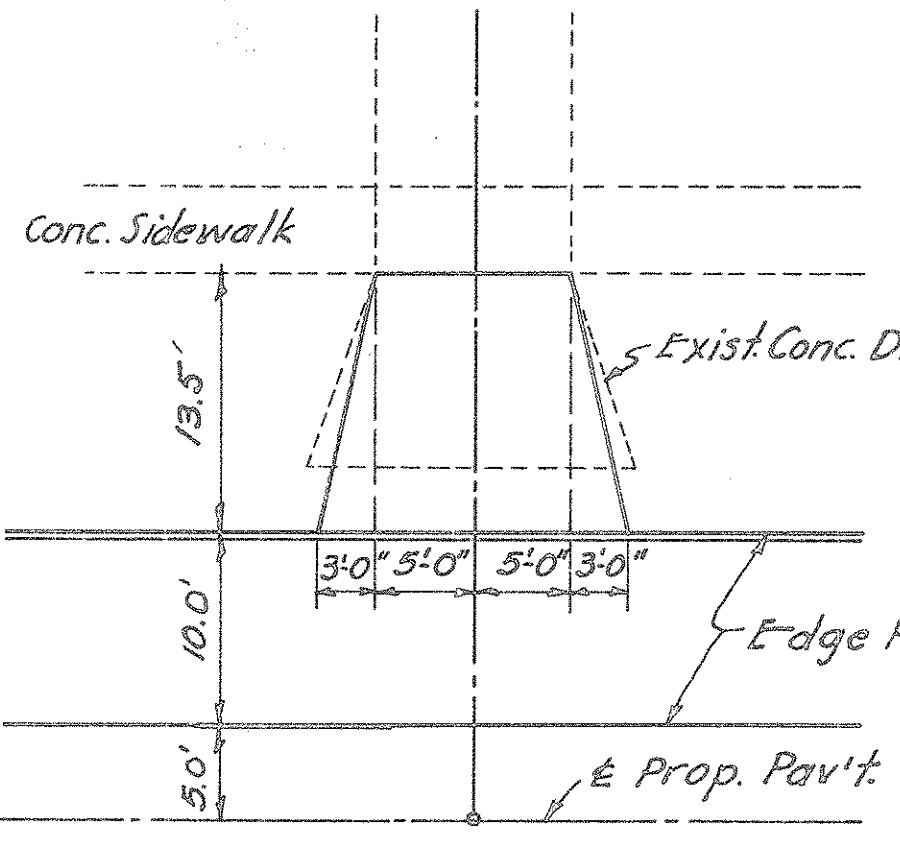
TYPICAL FIELD DRIVES LT.

PRIVATE DRIVE STA. 146+35 LT.



**ESTIMATED QUANTITIES**

6" Conc. Pav't. Item F70	8.4	Sq. Yd.
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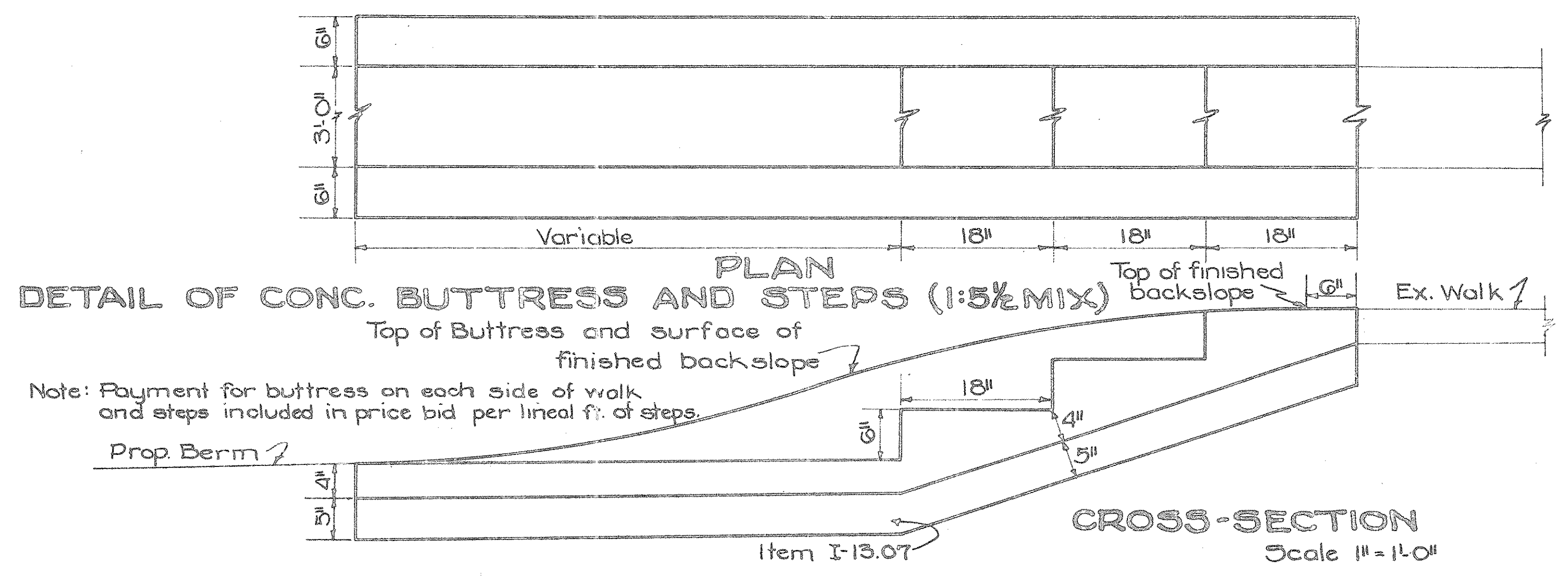
**ESTIMATED QUANTITIES**

6" Conc. Pav't. Item F70	19.5	Sq. Yd.
Excav. (incl. in Rdwy. Quant.)	3	Cu. Yd.

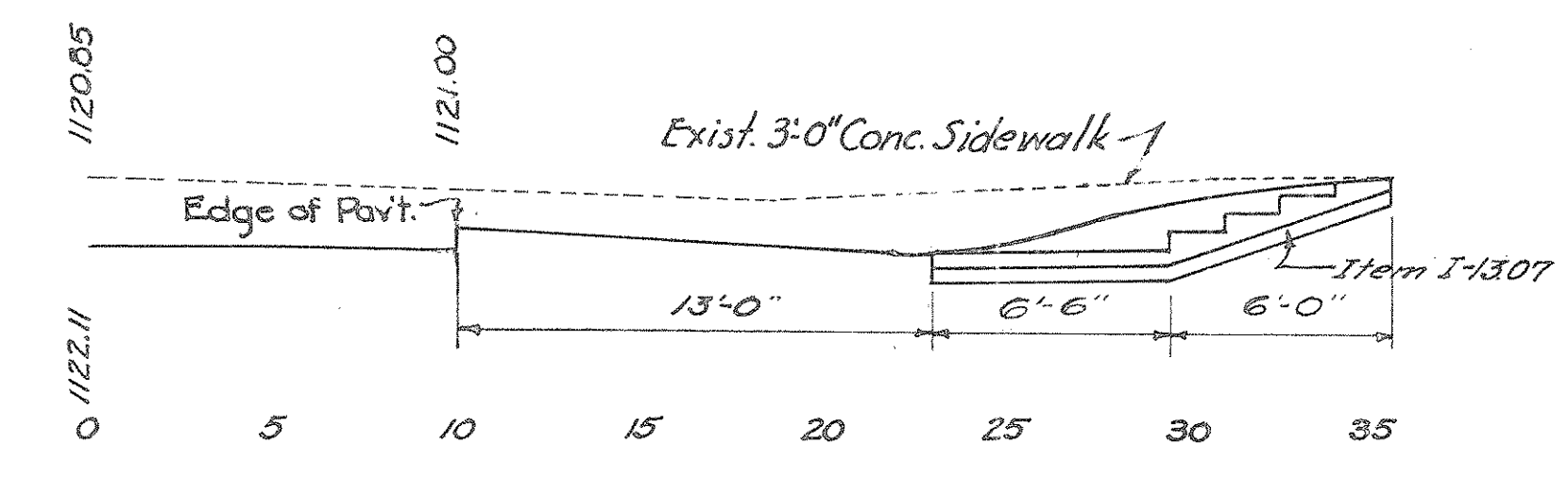
Note: Removal of exist. conc. drive included for payment with excavation.

PRIVATE DRIVE STA. 17+75 LT.

DRAWN BY: M.B.C. DATE: 8-25-34  
CHECKED BY: O.T.M. DATE: 8-28-34



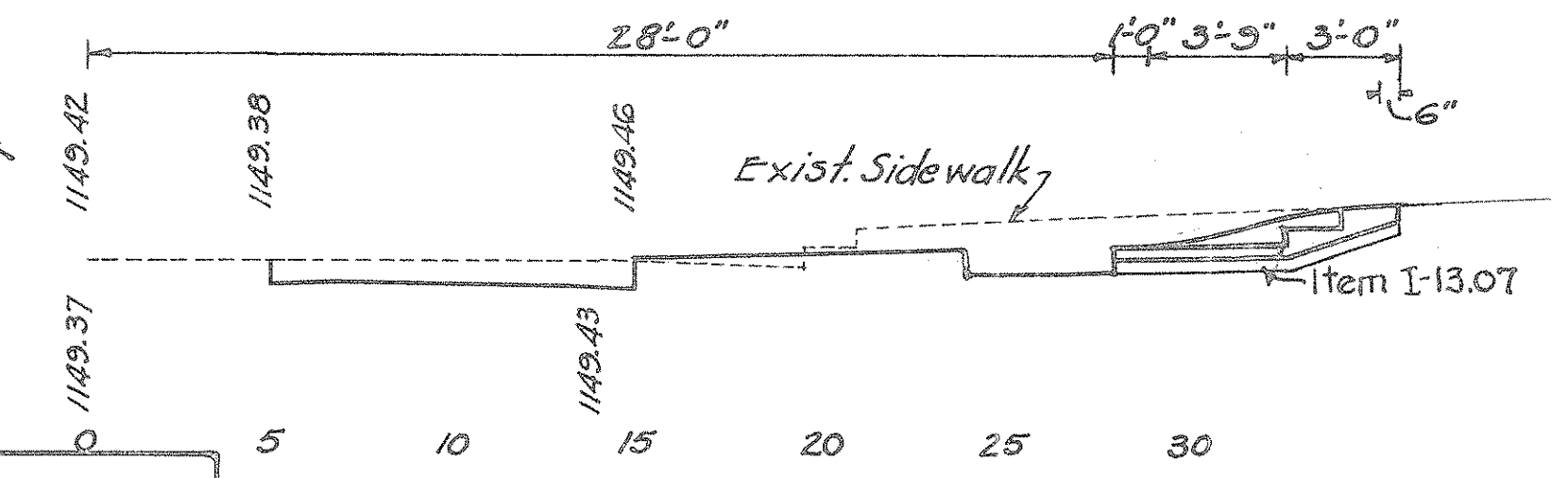
Note: Payment for buttness on each side of walk and steps included in price bid per lineal ft. of steps.



**ESTIMATED QUANTITIES**

Traffic Bound (Item I-17)	1	Cu. Yd.
4" Conc. Sidewalk Item I-13 3'-0" wide	19.5	Sq. Ft.
Conc. Steps 18" Tread, 6" Rise (1:5 1/2 mix)	12.0	Lin. Ft.
4 steps, 3'-0" wide	1	Cu. Yd.
Exc. (Incl. in Rdway Quan.)	1	Cu. Yd.

CONC. WALK & STEPS STA. 79+67 RT.



**ESTIMATED QUANTITIES**

4" Conc. Sidewalk Item I-13 3'-0" wide	14.3	Sq. Ft.
Conc. Steps 18" Tread, 6" Rise (1:5 1/2 mix)	6.0	Lin. Ft.
2 steps, 3'-0" wide	1	Cu. Yd.
Traffic Bound Item I-17	1	Cu. Yd.
Exc. (Incl. in Rdway Quan.)	1	Cu. Yd.

CONC. WALK & STEPS STA. 19+26.6 RT.

**ESTIMATED QUANTITIES**

4" Conc. Side walk (Item I-13) 4'-0" wide	27.2	Sq. Ft.
Traffic Bound (Item I-17)	1	Cu. Yd.

CONC. WALK STA. 20+29.2 RT.

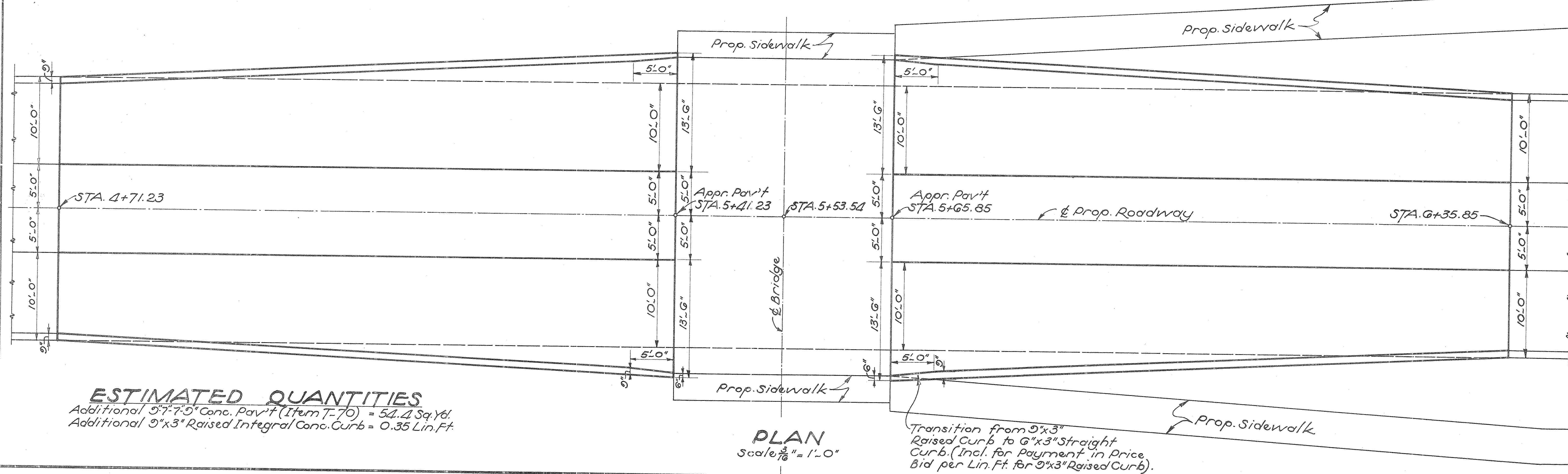


# FLARES

STA. 4+71.23 To STA. 5+41.23 AND STA. 5+65.85 To STA. 6+35.85

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	<div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <span style="font-size: 10px; margin-right: 2px;">32</span>  <span style="font-size: 10px;">50</span> </div>
10	OHIO	NRS-699A	1035	

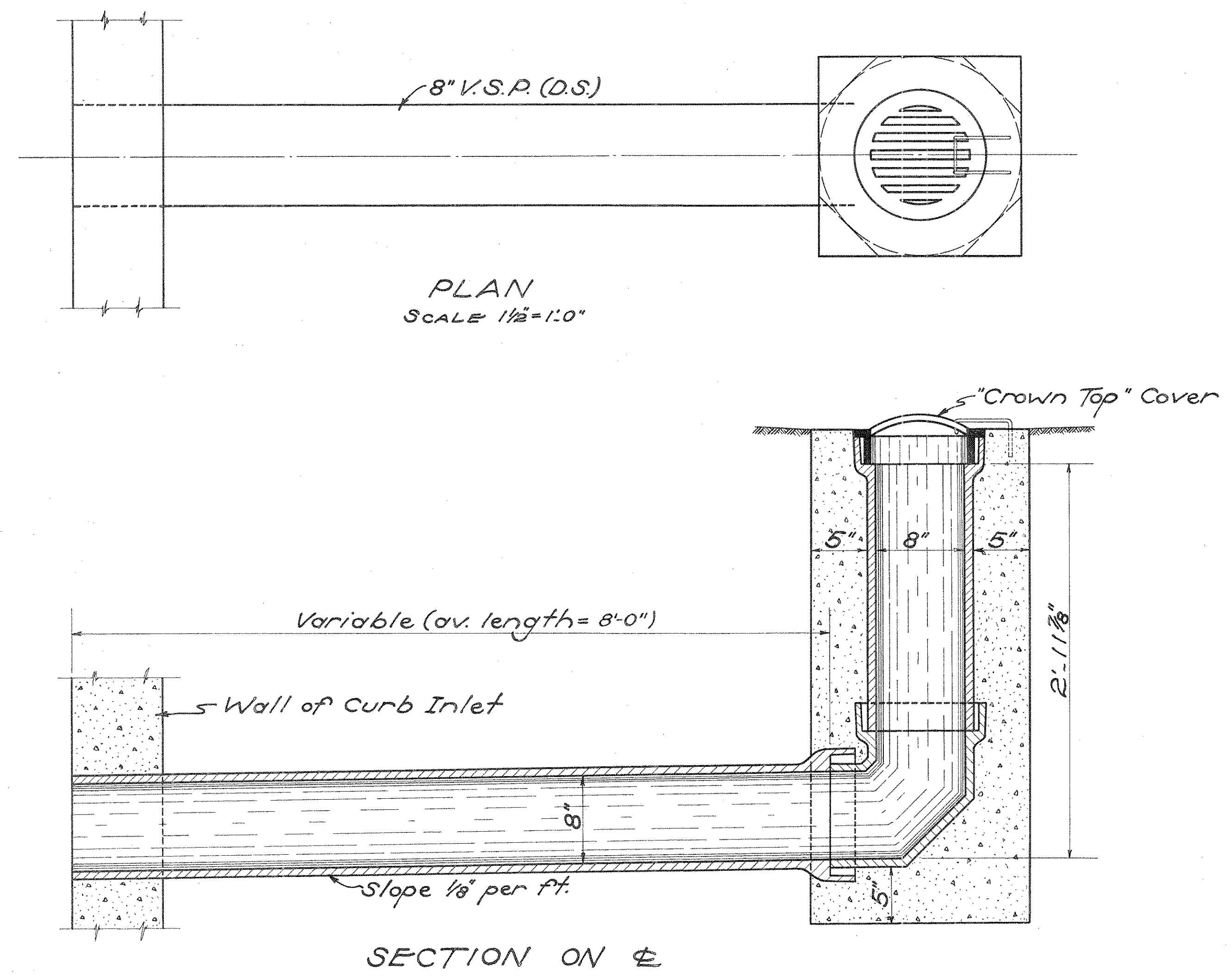
**PREBLE COUNTY**  
S.H. 240 SEC. "D (pt.)"



**ESTIMATED QUANTITIES**  
 Additional 5'-7" x 5" Conc. Pav't (Item T-70) = 54.4 Sq. Yd.  
 Additional 9"x3" Raised Integral Conc. Curb = 0.35 Lin. Ft.

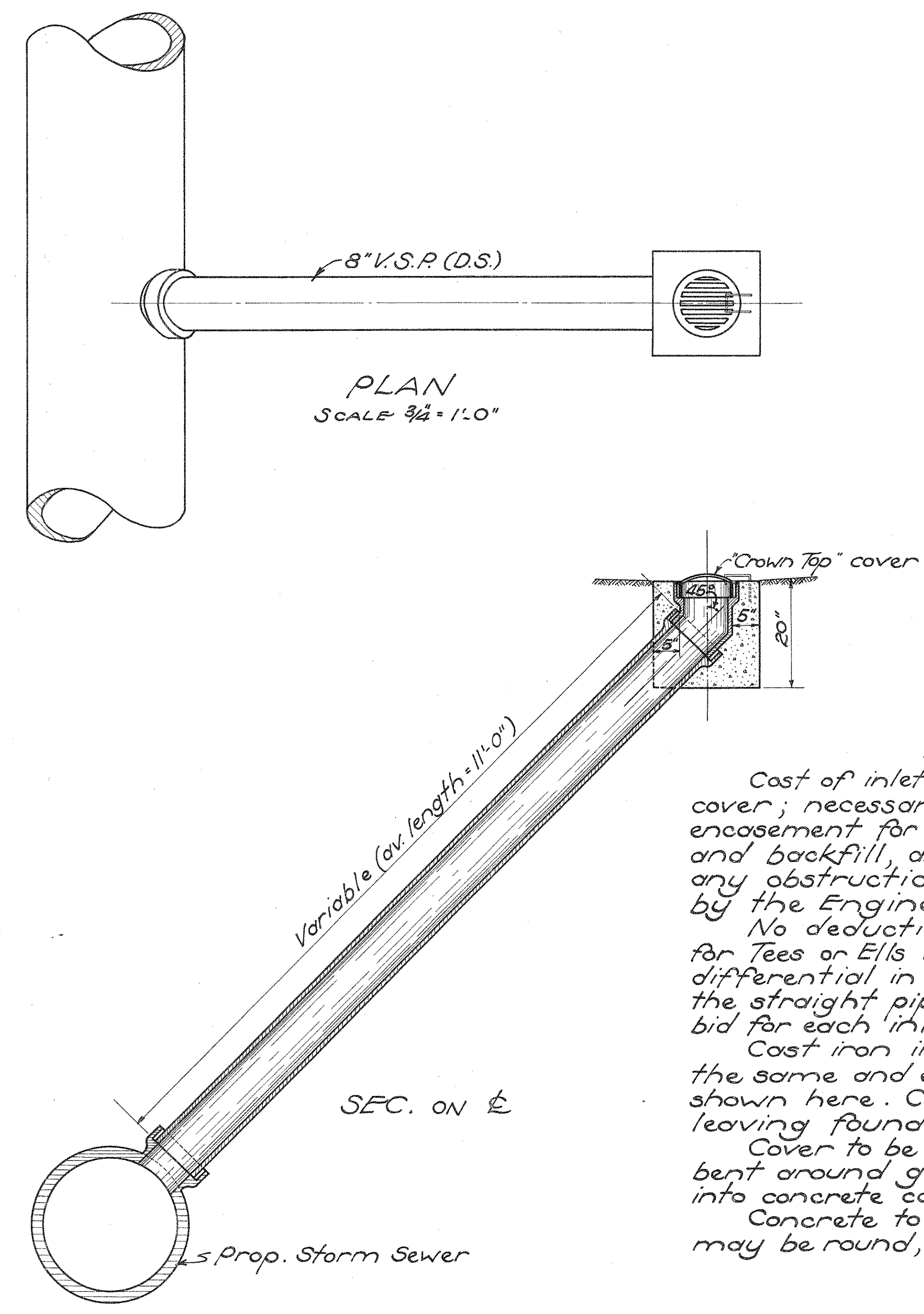
**PLAN**  
Scale 3/16" = 1'-0"

Drawn By	O.T.M.	11-21-34
Ch'kd By	R.H.H.	11-28-34
Ch'kd by		



**- NOTES -**  
 Cost of inlet to include cast iron "Crown Top" cover; necessary pipe, fittings and connections; encasement for V.S.P. (in place) as shown; excavation and backfill; removing or adjusting of any obstructions encountered as directed by the Engineer.  
 Cast iron inlet cover to be essentially the same and equally as strong as the one shown here. Casting shall be painted before leaving foundry.  
 Cover to be anchored by a 3/8"  $\phi$  rod, 2'-0" long, bent around grate as shown and anchored into concrete casing.  
 Concrete to be 1:5 1/2 mix. Concrete casing may be round, square or hexagonal in shape.

**SPECIAL 8" SIDE DITCH  
INLET (TYPE A)**



**- NOTES -**  
 Cost of inlet to include: Cast iron "Crown Top" cover; necessary pipe fittings and connections; encasement for V.S.P. as shown; excavation and backfill, and removing or adjusting of any obstructions encountered as directed by the Engineer.  
 No deduction made in Storm Sewer for Tees or Ells necessary to connect inlets. The differential in cost between the Tee or Ell and the straight pipe to be included in the price bid for each inlet.  
 Cast iron inlet cover to be essentially the same and equally as strong as the one shown here. Casting shall be painted before leaving foundry.  
 Cover to be anchored by a 3/8"  $\phi$  rod, 2'-0" long bent around grate as shown and anchored into concrete casing.  
 Concrete to be 1:5 1/2 mix. Concrete casing may be round, square or hexagonal in shape.

**SPECIAL 8" SIDE DITCH  
INLET (TYPE B)**

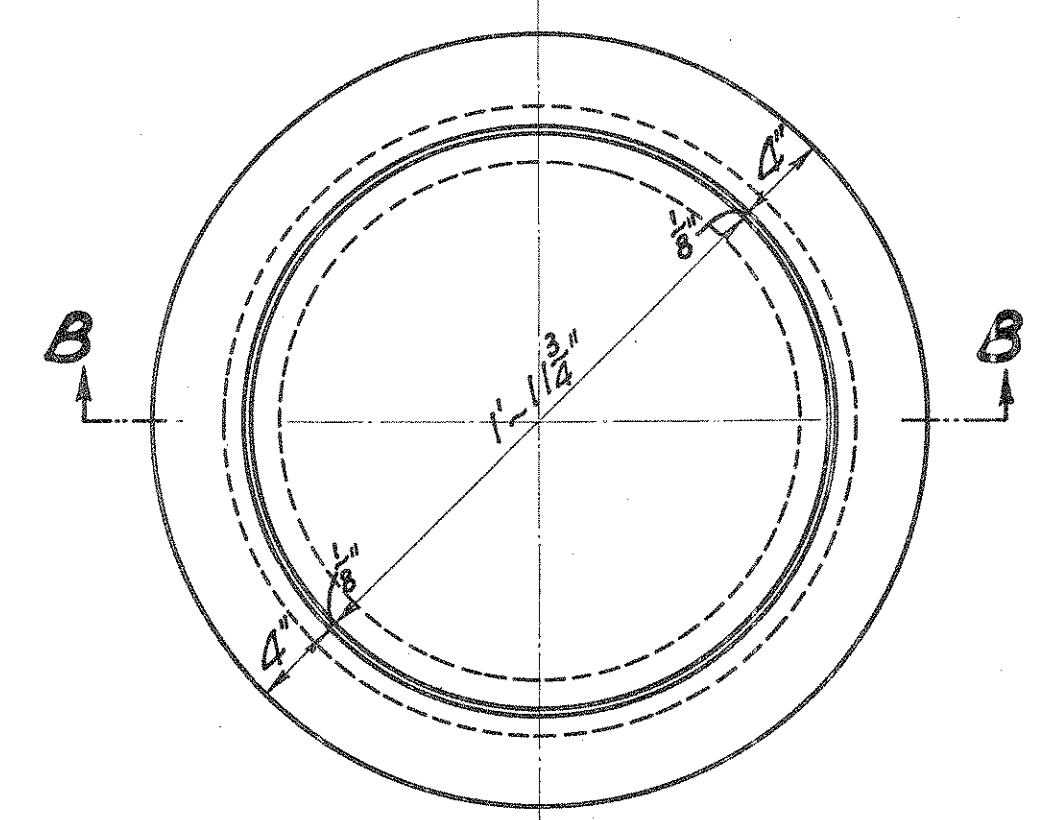
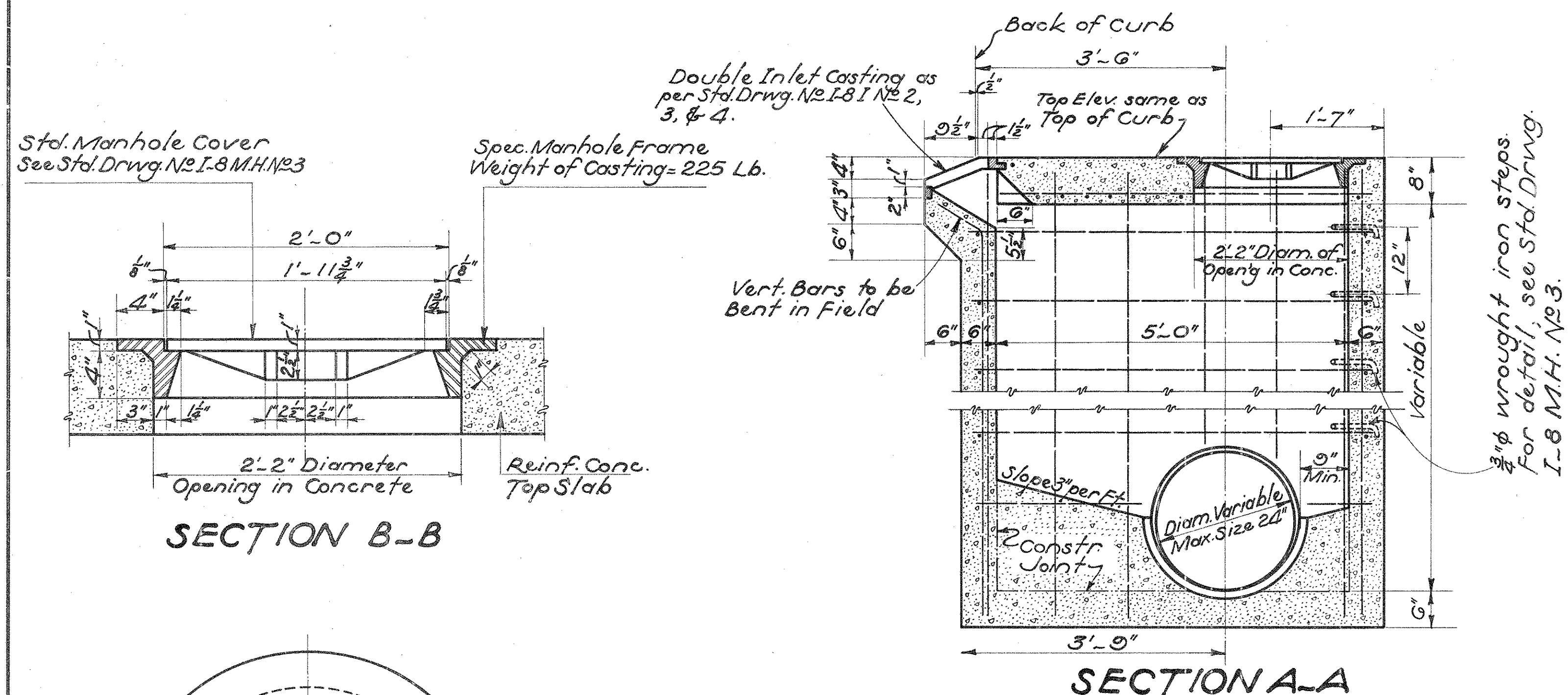
Drawn By: O.T.M. Date: 12-1-34  
 Checked By: R.B.H. Date: 12-5-34

# DETAIL OF SPECIAL COMBINATION DOUBLE CURB INLET AND MANHOLE.

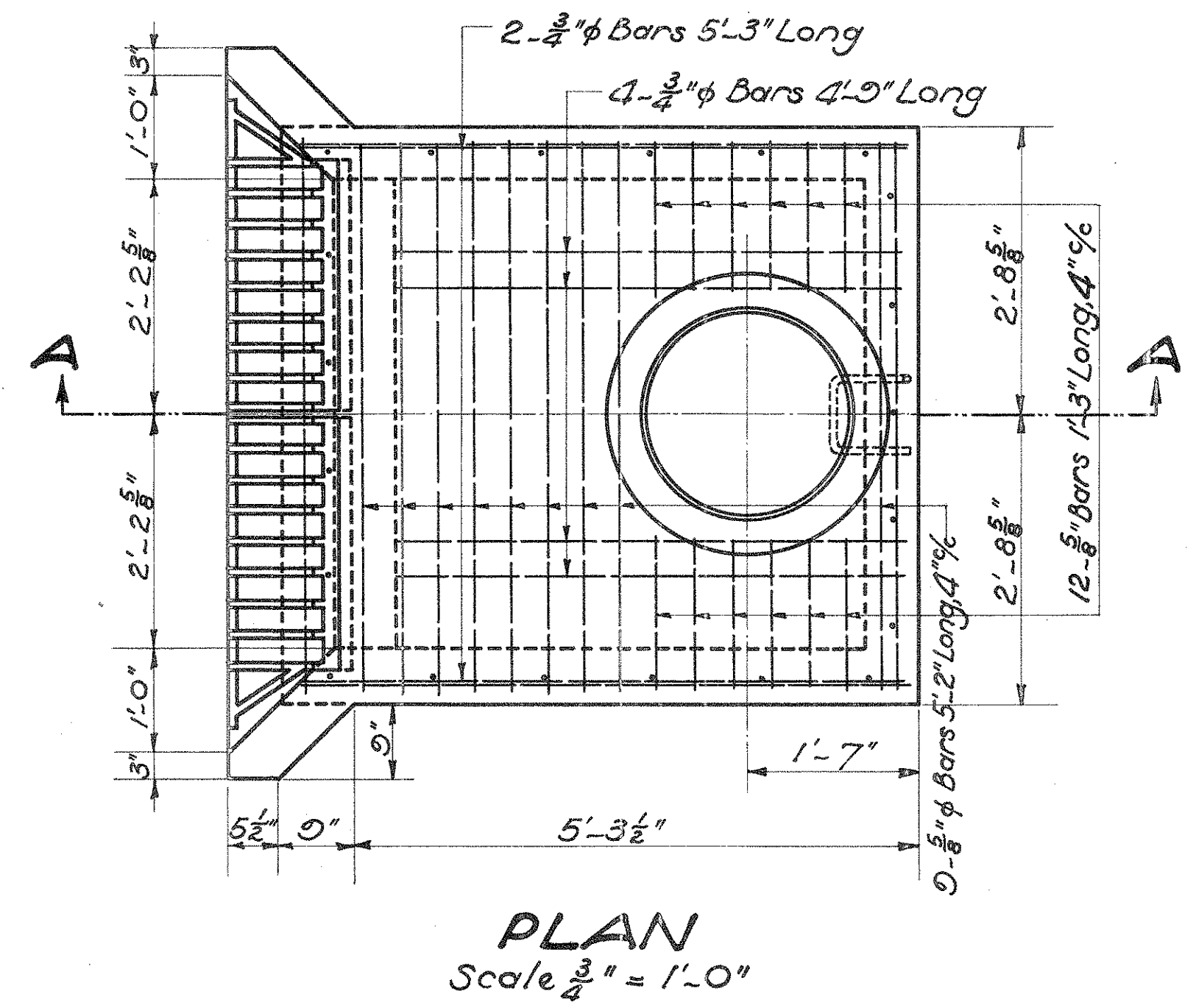
FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS-699-A	1935

34  
50

PREBLE COUNTY  
S.H. 249 SEC. "D (Pt)"



**DETAIL PLAN**  
Scale  $1\frac{1}{2}'' = 1'-0''$



**PLAN**  
Scale  $\frac{3}{4}'' = 1'-0''$

Note: Manhole casting may be made in accordance with detail here shown or may be of similar design but of equal weight. The casting shall be in accordance with Sec. M-7.8 of the Material Details. Bearing areas of frame & cover shall be machined to provide a firm & even seat for any portion of the cover.

**NOTES:-**  
All wall reinforcing, vertical & horizontal, shall be  $\frac{3}{4}''$  bars @ 12" c. to c.  
Concrete mix shall be 1:5 $\frac{1}{2}$  throughout.  
Steps shall be of good quality wrought iron (Sec. M-7.6) free from cracks, & painted with 2 coats of red lead.

Drawn By R.H.H. 12-3-34  
Ch'k'd By O.T.M. 12-3-34  
Ch'k'd By \_\_\_\_\_

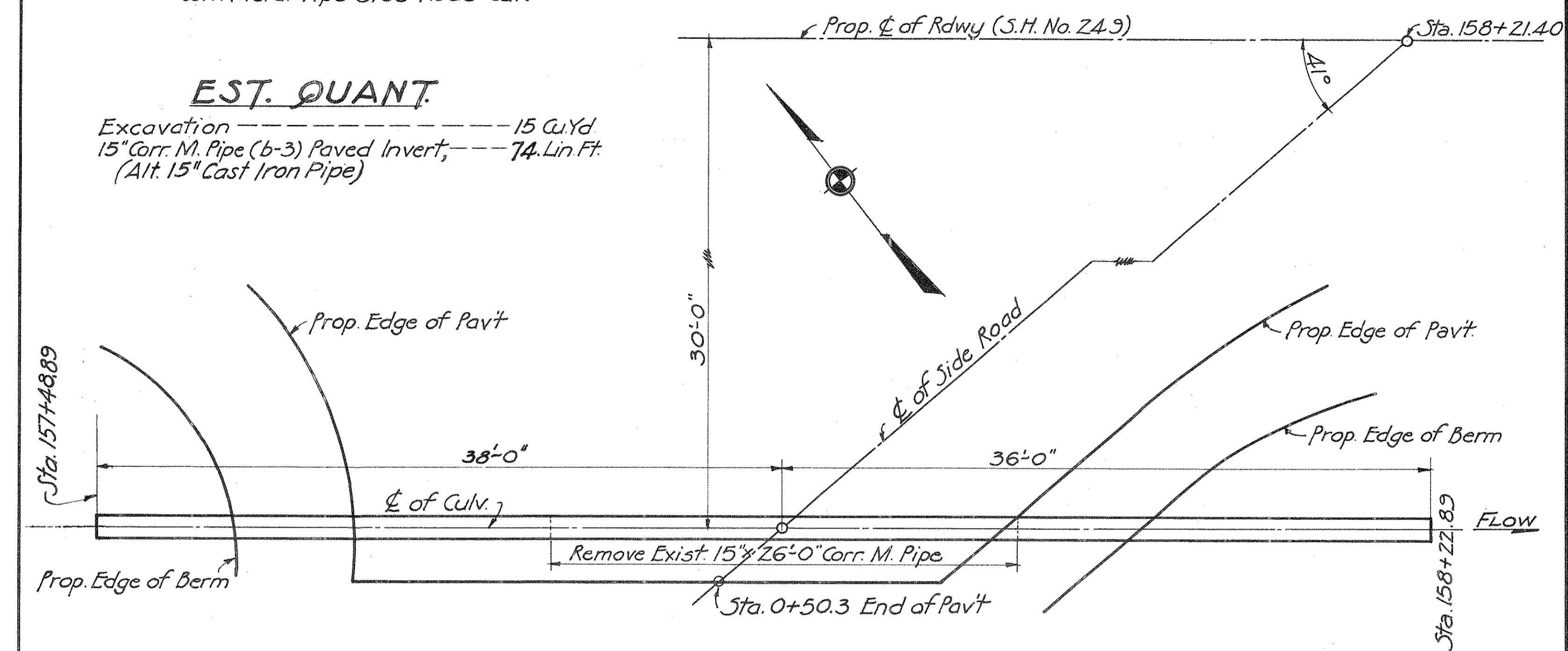
**S.H. 249 SEC "D-PART" PREBLE COUNTY**

**CULVERT DATA**

TYPE: Corr. Metal Pipe Side Road Culv. Std. Dwg. 5-27 P.C.3  
 SIZE: 15" x 74'-0"  
 WORK REQ: Remove existing 15" x 26'-0" Corr. Metal Pipe Culv. Build 15" x 74'-0" Corr. Metal Pipe Side Road Culv.

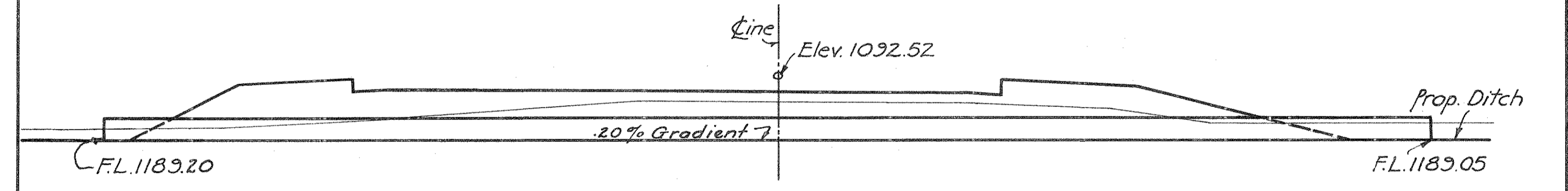
**EST. QUANT.**

Excavation ----- 15 Cu.Yd.  
 15" Corr. M. Pipe (b-3) Paved Invert, ----- 74. Lin.Ft.  
 (Alt. 15" Cast Iron Pipe)



**PLAN**  
Scale 1" = 5'-0"

NOTE: Removal of exist. structure incl. for payment with Excavation. The exist. Corr. M. Pipe shall be piled on the R/W of the disposal of the Maintenance Forces



**CROSS SECTION**  
Scale 1" = 5'-0"

Drawn By O.T.M. Date: 8-23-34	Rev. - EED
Checked By R.H.H. Date: 8-24-34	Date:
Checked By	Date:

**12 STA. 158+21.4 RT.**

NOTE:

In building the proposed extension the Contractor shall exercise care not to disturb the exist. 15" Tile & Inlet. Provide 1" clearance around tile.

**EST. QUANT.**

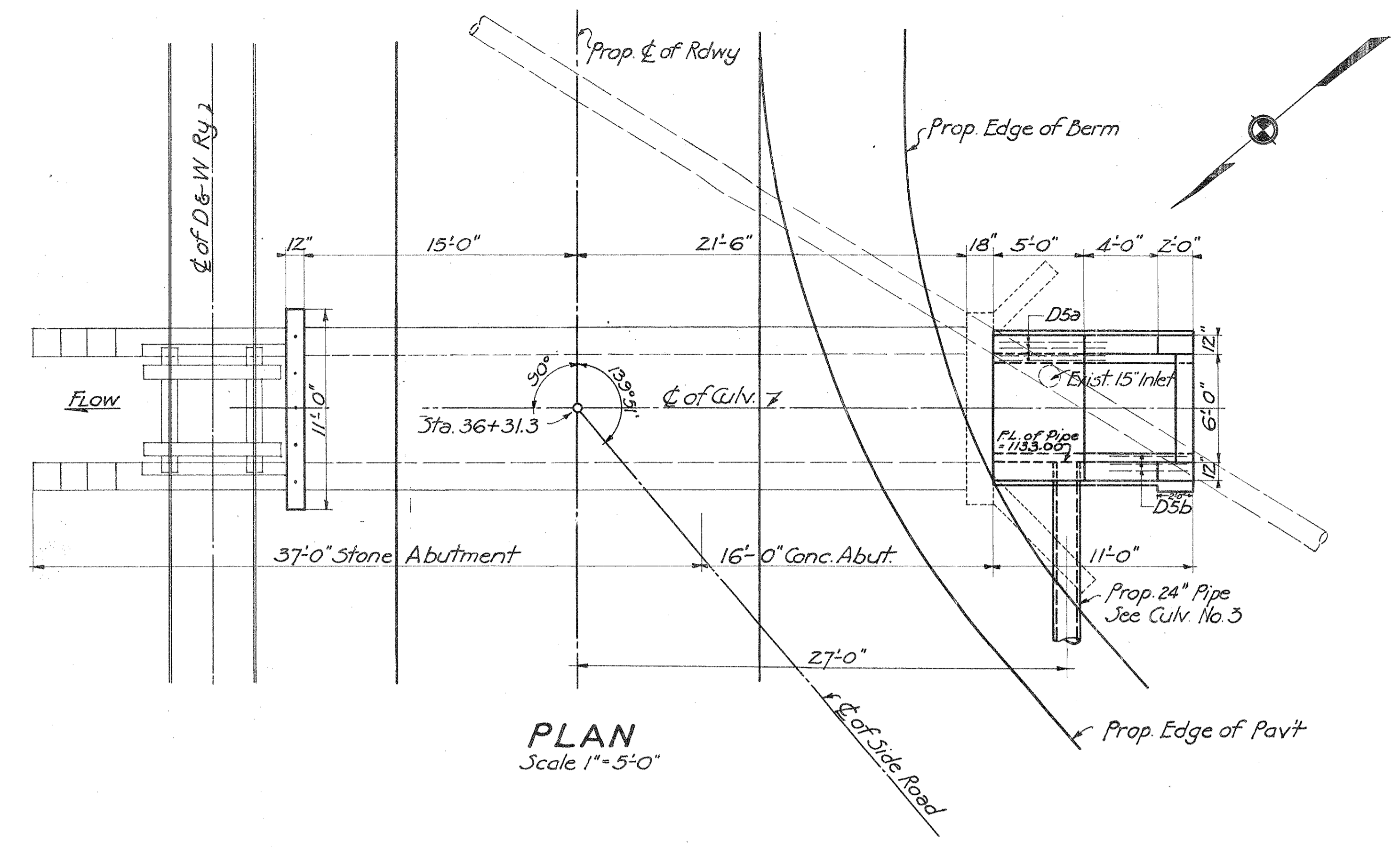
Excavation ----- 25 Cu.Yd.  
 Concrete 1:5 1/2 Mix ----- 5.2 Cu.Yd.  
 Concrete 1:6 1/2 Mix Footer ----- 3.0 Cu.Yd.  
 Reinf. Steel ----- 401 Lb.  
 Dowel Holes 1" x 12" ----- 8 Each  
 Dowel Holes 3/4" x 9" ----- 5 Each  
 Type "B" Waterproofing 36" wide ----- 52 Sp.Yd.  
 Removal of Portions of Exist. Masonry Lump

**CULVERT DATA**

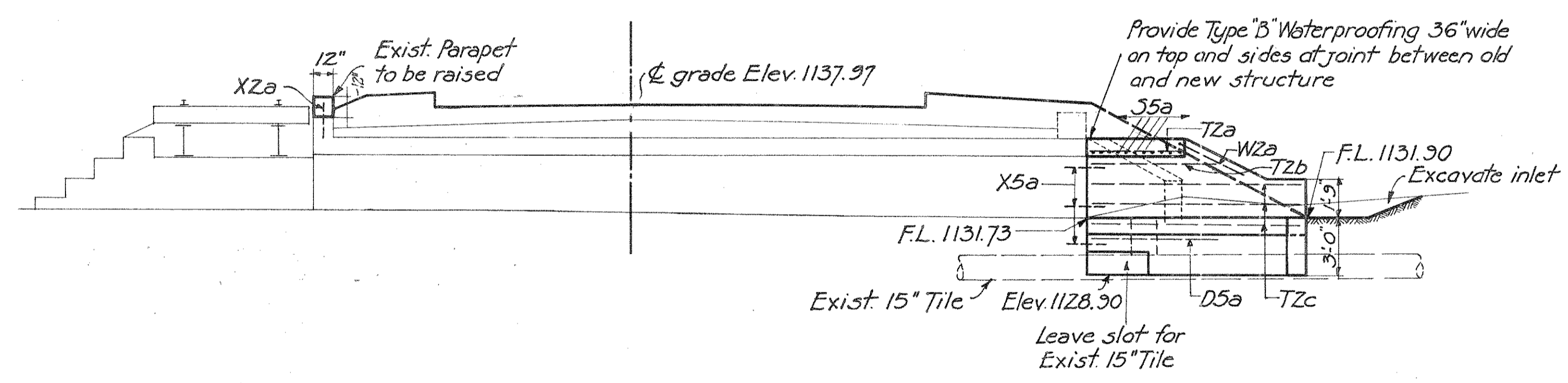
TYPE: Std. Conc. Slab Top Culv. Std. Dwg. No. STC-34.  
 SIZE: 6'-0" x 3'-0" x 11'-0" Ext. on Rt.  
 WORK REQ: Remove exist. parapet and wing walls on Rt. Build 6'-0" x 3'-0" x 11'-0" Std. Conc. Slab Top Culv. Ext. on Rt. of Exist. 6'-0" x 3'-0" x 53'-0" Stone & Conc. Slab Top Culv. Raise parapet on Lt. as shown. Apply Type "B" Waterproofing as noted. Dowel new structure to old. Excavate inlet.

Drawn By O.T.M. Date: 8-23-34	Rev. - EED
Checked By R.H.H. Date: 8-25-34	Date:
Checked By	Date:

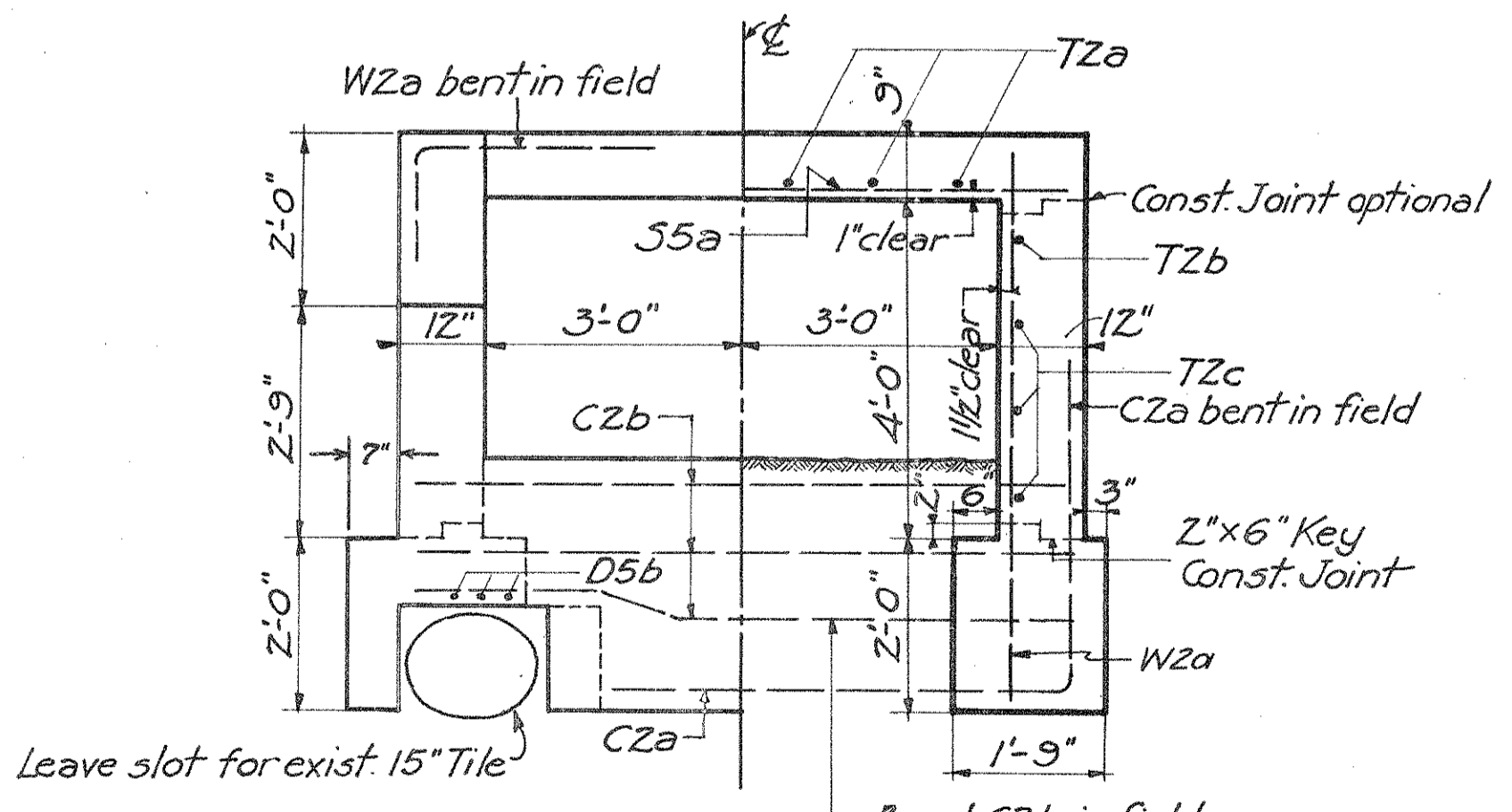
**2 STA. 36+31.3**



**PLAN**  
Scale 1" = 5'-0"



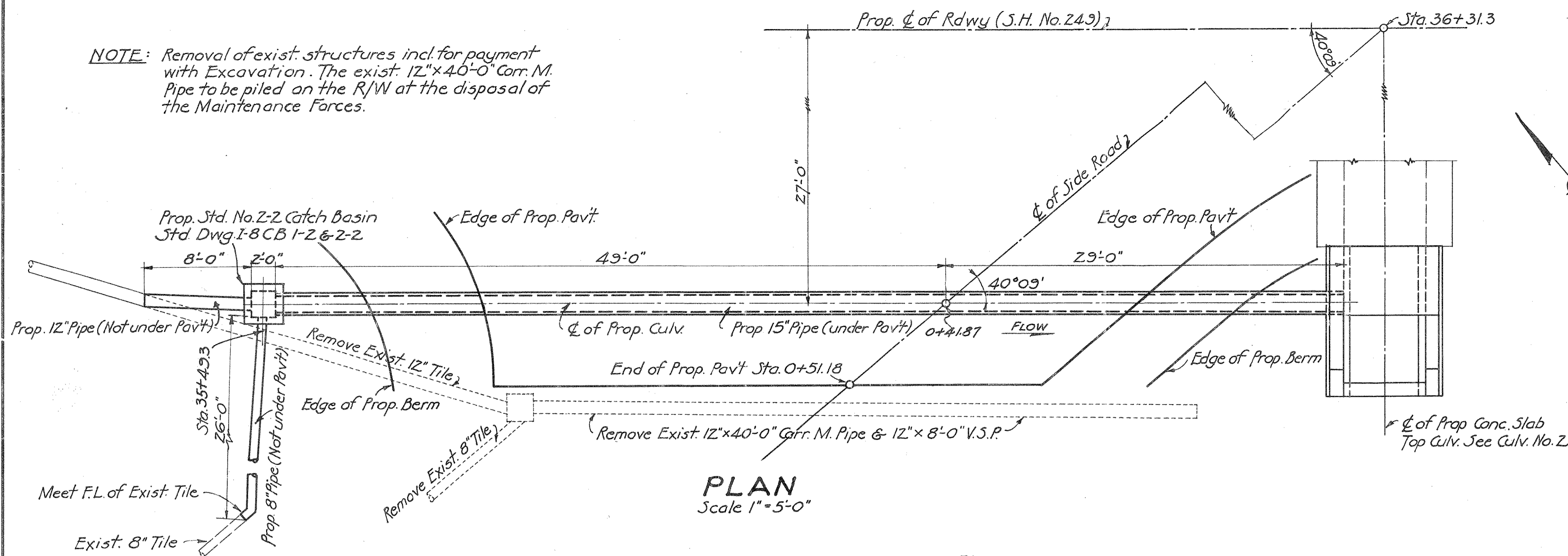
**CROSS SECTION**  
Scale 1" = 5'-0"



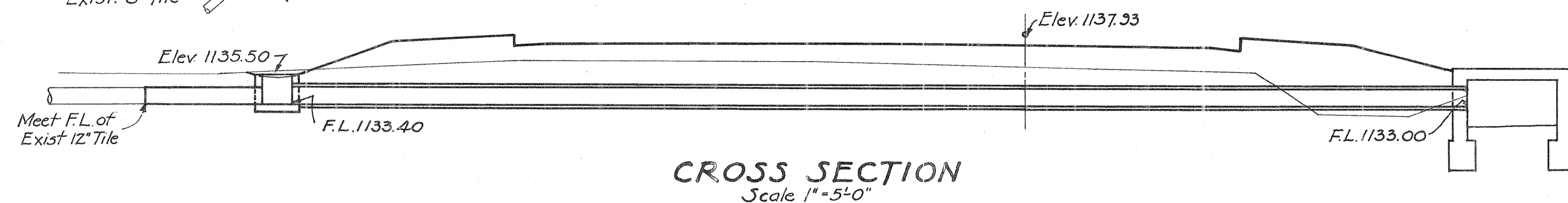
**HALF ELEVATION HALF SECTION**  
Scale 1/2" = 1'-0"

MARK	SIZE	SHAPE	SPACING	NO. REQ.	LENGTH	WEIGHT
S5a	3/4" φ	Straight	5 1/2"	11	7'-6"	124
TZa	1/2" φ		12"	6	4'-6"	18
TZb	1/2" φ			2	7'-0"	9
TZc	1/2" φ		12"	6	10'-6"	42
CZa	1/2" φ			1	15'-0"	10
CZb	1/2" φ			3	7'-0"	14
WZa	1/2" φ		12"	24	6'-0"	36
XZa	1/2" φ			5	1'-6"	5
D5a	3/4" φ			4	6'-6"	39
D5b	3/4" φ			3	4'-6"	20
<b>TOTAL</b>						<b>401</b>

NOTE: Removal of exist. structures incl. for payment with Excavation. The exist. 12"x40'-0" Corr. M. Pipe to be piled on the R/W at the disposal of the Maintenance Forces.



PLAN  
Scale 1" = 5'-0"



CROSS SECTION  
Scale 1" = 5'-0"

Drawn By O.T.M. Date: 8-21-34  
Checked By R.H.H. Date: 8-25-34  
Checked By Date:

EST. QUANT.

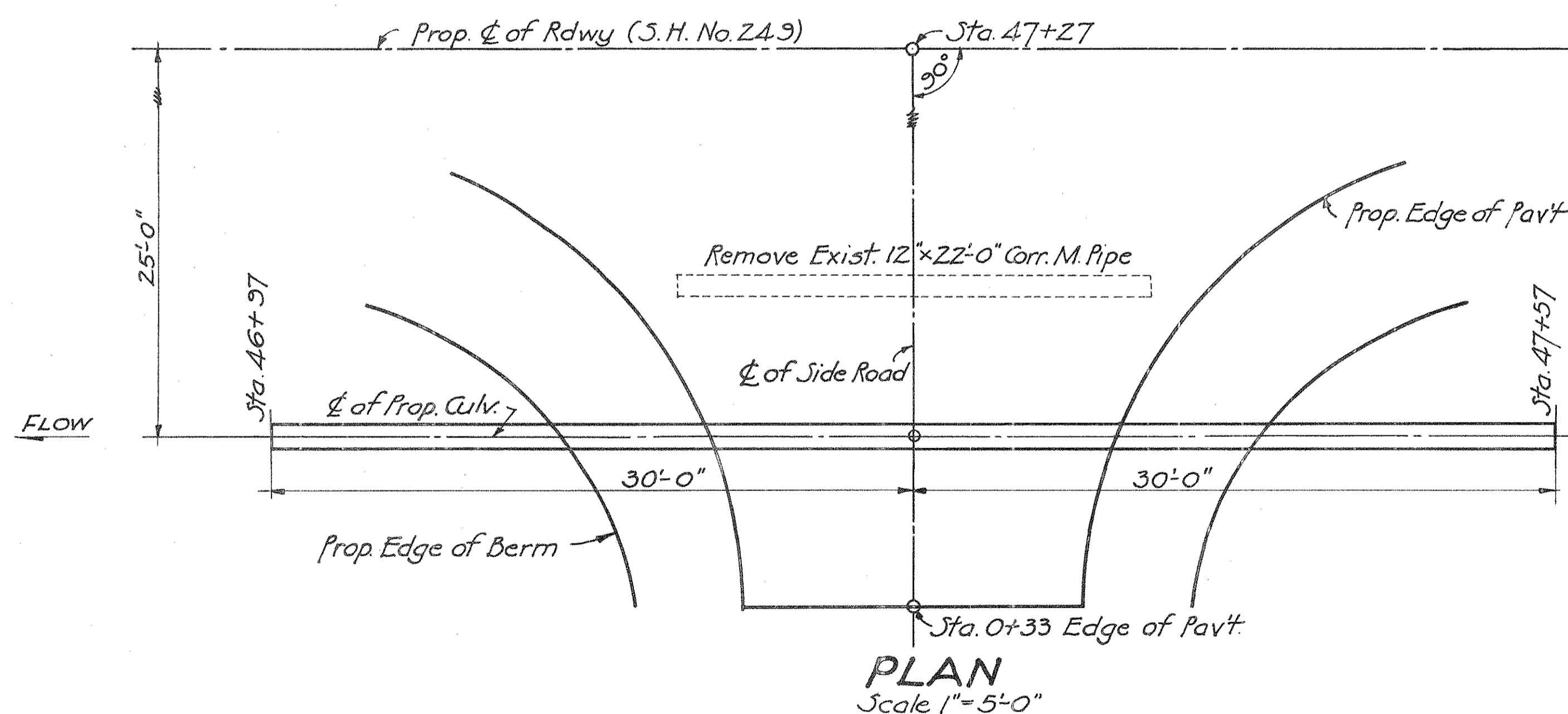
Excavation	35 Cu.Yd.
Std No. 2-2 Catch Basin	1 Only
15" Pipe (Under Pavt)	78 Lin.Ft.
12" Pipe (Not under Pavt)	8 Lin.Ft.
8" Pipe (Not under Pavt)	26 Lin.Ft.

CULVERT DATA

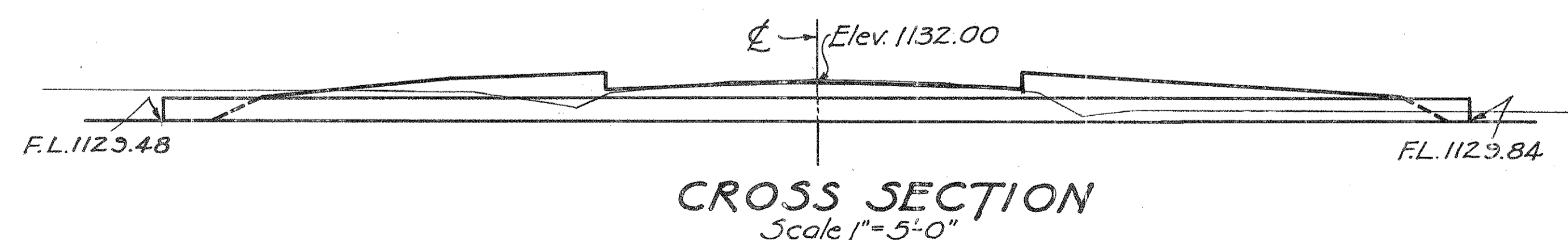
TYPE: Std. Side Road Pipe Culv. Std. Dwg. No. I-8 CBI-2 & 2-2, S-27 P.C. 3  
 SIZE: 15" x 78'-0"  
 WORK REQ: Remove Exist. 12"x40'-0" Corr. M. Pipe, 12"x8'-0" V.S.P. and Catch Basin on Lt. Remove exist. 8" & 12" tile as shown. Build Std. 15"x78'-0" Side Road Pipe Culv with Std. No. 2-2 Catch Basin at inlet end. Connect exist. 8" and 12" Tile into new C.B. with new 8" and 12" pipe as shown

3

STA. 36+31.3 RT.



PLAN  
Scale 1" = 5'-0"



CROSS SECTION  
Scale 1" = 5'-0"

NOTE: Removal of Exist. Structure incl. for payment with Excavation. The Exist. 12"x22'-0" Corr. Metal Pipe to be piled on the R/W at the disposal of the Maintenance Forces

Drawn By O.T.M. Date: 8-22-34  
Checked By R.H.H. Date: 8-24-34  
Checked By Date:

EST. QUANT.

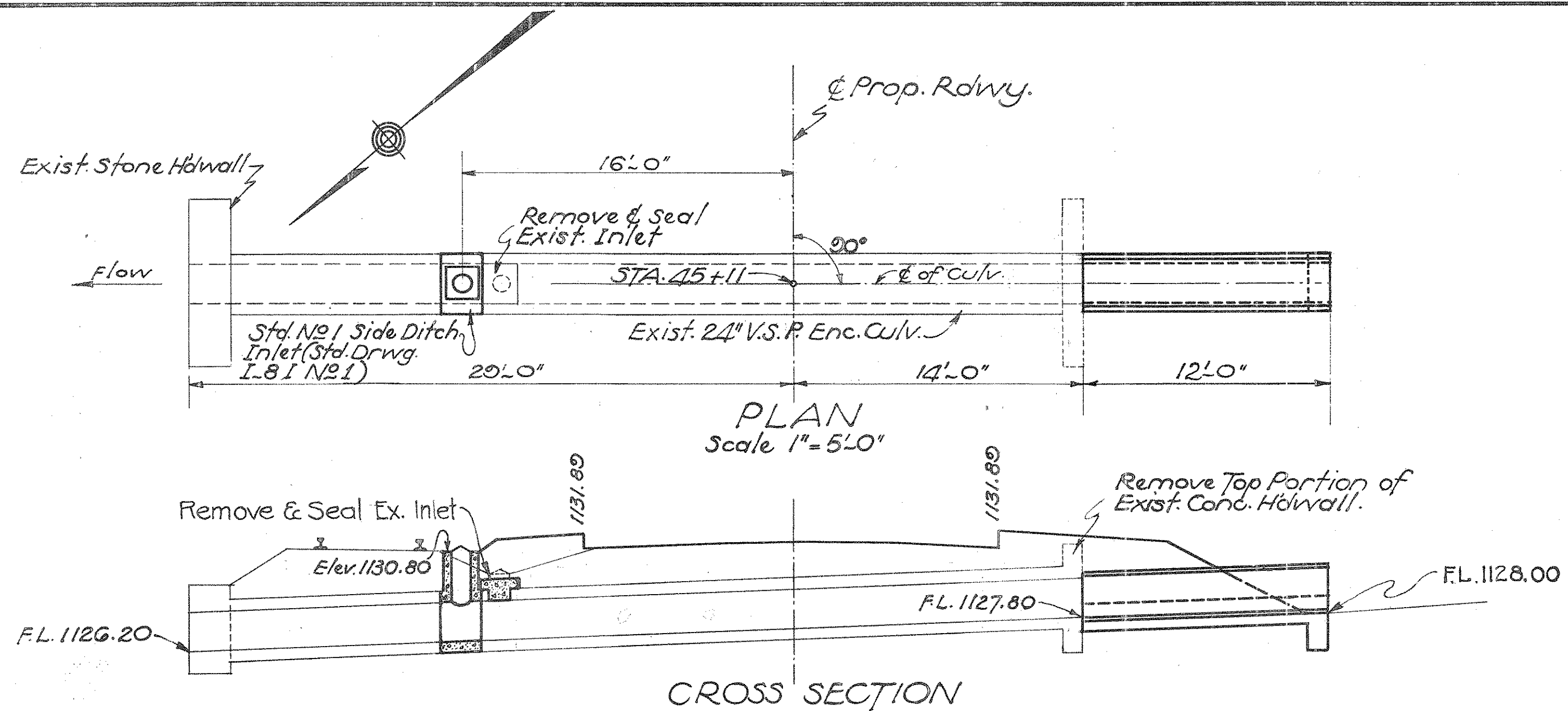
Excavation	10 Cu.Yd.
12" Corr. M. Pipe (b-3) Paved Invert,	60 Lin.Ft.
Alt. 12" Cast Iron Pipe	

CULVERT DATA

TYPE: Corr. Metal Pipe Side Road Culv. Std. Dwg. No. S-27 P.C. 3  
 SIZE: 12" x 60'-0"  
 WORK REQ: Remove Exist. 12"x22'-0" Corr. Metal Pipe Culv. Build 12"x60'-0" Corr. Metal Pipe Side Road Culv.

5

STA. 47+27 RT.

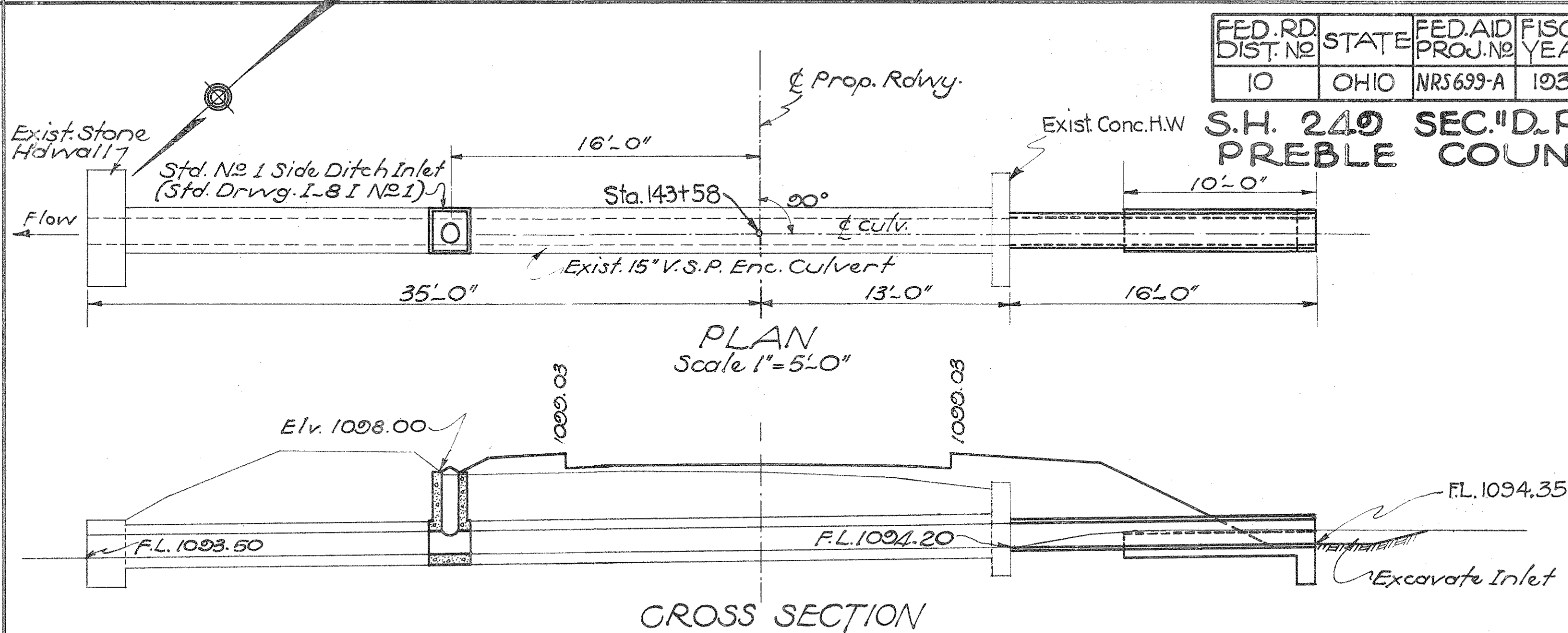


**ESTIMATED QUANTITIES**  
 Excavation (Fig'd for Reinf. Conc. Pipe) 4.0 Cu. Yd.  
 Concrete - 1:5 1/2 Mix 1.3 " "  
 24" Pipe 12 Lin. Ft.  
 Std. No 1 Side Ditch Inlet 1 Only  
 Removal of Portions of Ex. Masonry Lump

**CULVERT DATA**  
 TYPE: Std. Pipe Culvert (Std. Drwg. S-27 PC-2, I-B I No 1)  
 SIZE: 24"x12'-0" Extension on Right.  
 WORK REQ'D: Remove Top Portion of exist. conc. Hdwall on Rt. Remove & seal exist. inlet on Lt. Build Std. 24"x12'-0" extens. on Rt. Build Std. No 1 Side Ditch Inlet on Lt.

Note: - Removing & Sealing of Ex. Inlet Incl. for payment with "Excavation".

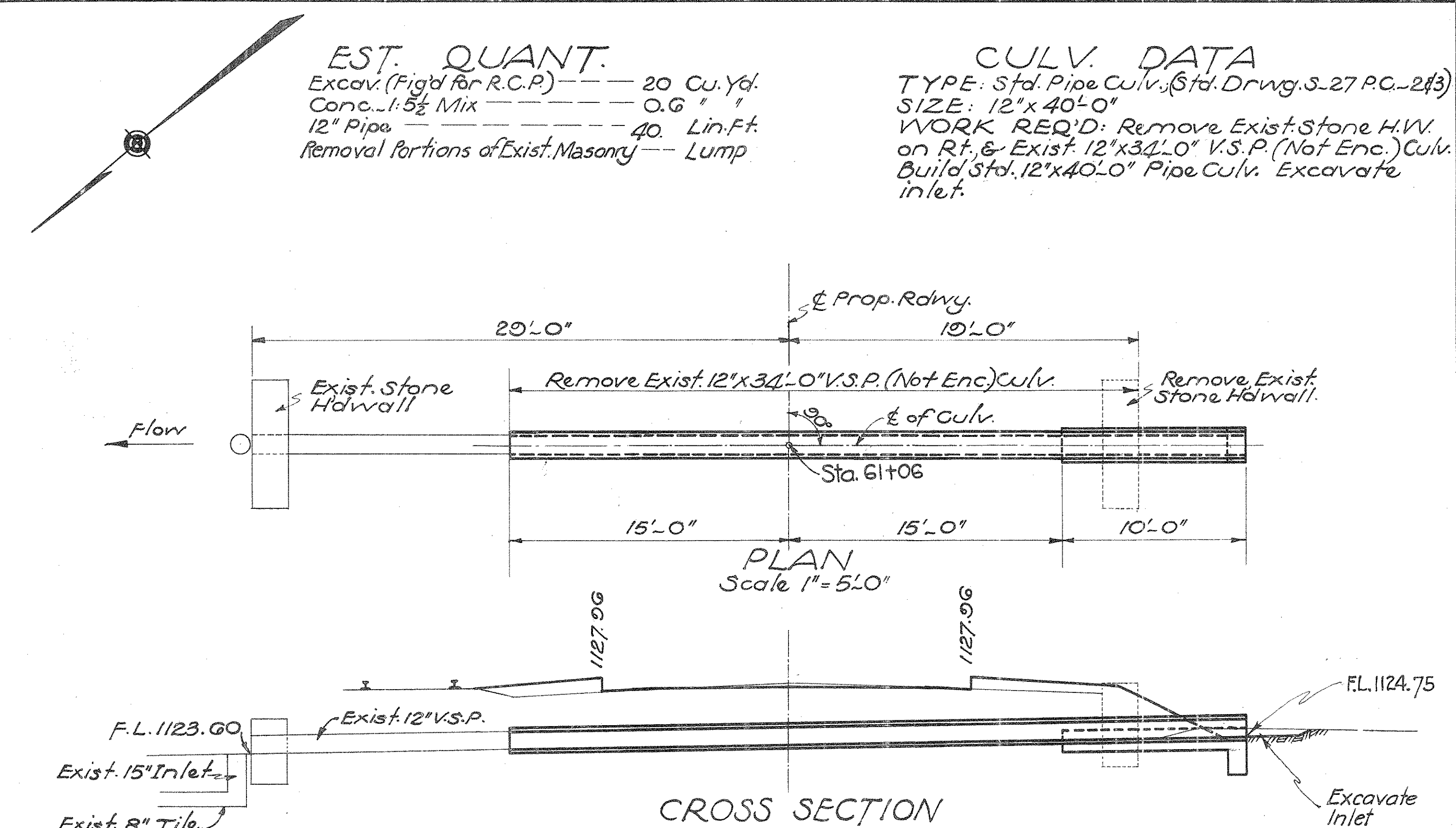
STA. 45+11 (4)



**EST. QUANT.**  
 Excav. (Fig'd for R.C.P.) 5 Cu. Yd.  
 Conc. - 1:5 1/2 Mix 0.7 " "  
 15" Pipe 16 Lin. Ft.  
 Std. No 1 Side Ditch Inlet 1 Only

**CULV. DATA**  
 TYPE: Std. Pipe Culvert (Std. Drwg. S-27 PC-2 & 3 I-B I No 1)  
 SIZE: 15"x16'-0" Ext. Rt.  
 WORK REQ'D: Build 15"x16'-0" Std. Pipe Culv. Ext. on Rt. of Ex. 15"x48'-0" V.S.P. Enc. Culv. Build Std. No 1 Side Ditch Inlet on Lt. Excavate Inlet.

STA. 143+58 (11)

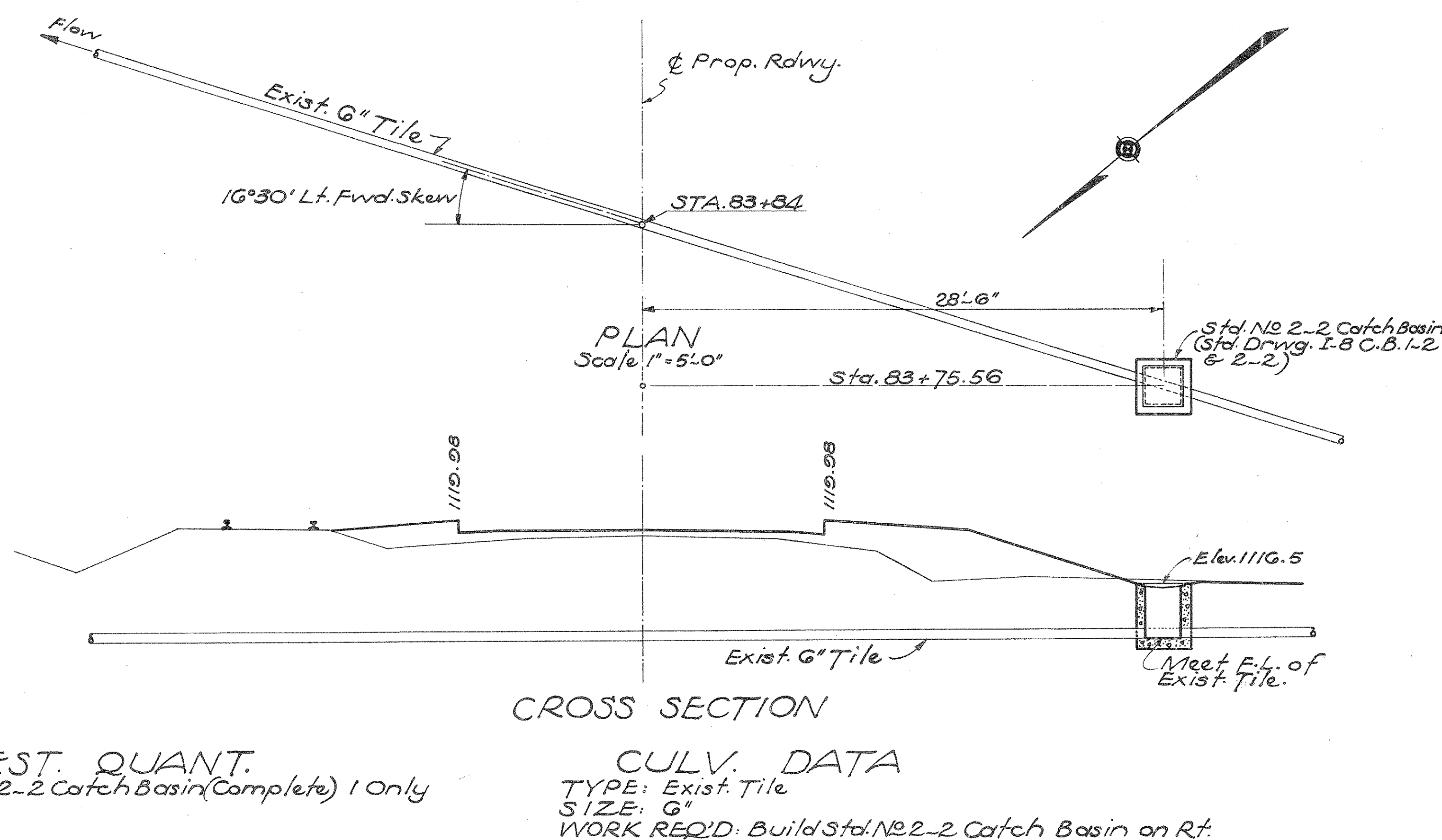


**EST. QUANT.**  
 Excav. (Fig'd for R.C.P.) 20 Cu. Yd.  
 Conc. - 1:5 1/2 Mix 0.6 " "  
 12" Pipe 40 Lin. Ft.  
 Removal Portions of Ex. Masonry Lump

**CULV. DATA**  
 TYPE: Std. Pipe Culvert (Std. Drwg. S-27 PC-2 & 3)  
 SIZE: 12"x40'-0"  
 WORK REQ'D: Remove Ex. Stone H.W. on Rt. & Ex. 12"x34'-0" V.S.P. (Not Enc.) Culv. Build Std. 12"x40'-0" Pipe Culv. Excavate inlet.

Drawn By: O.T.M. 8-19-34  
 Chkd By: R.H.H. 8-24-34  
 Chkd By:

STA. 61+06 (6)

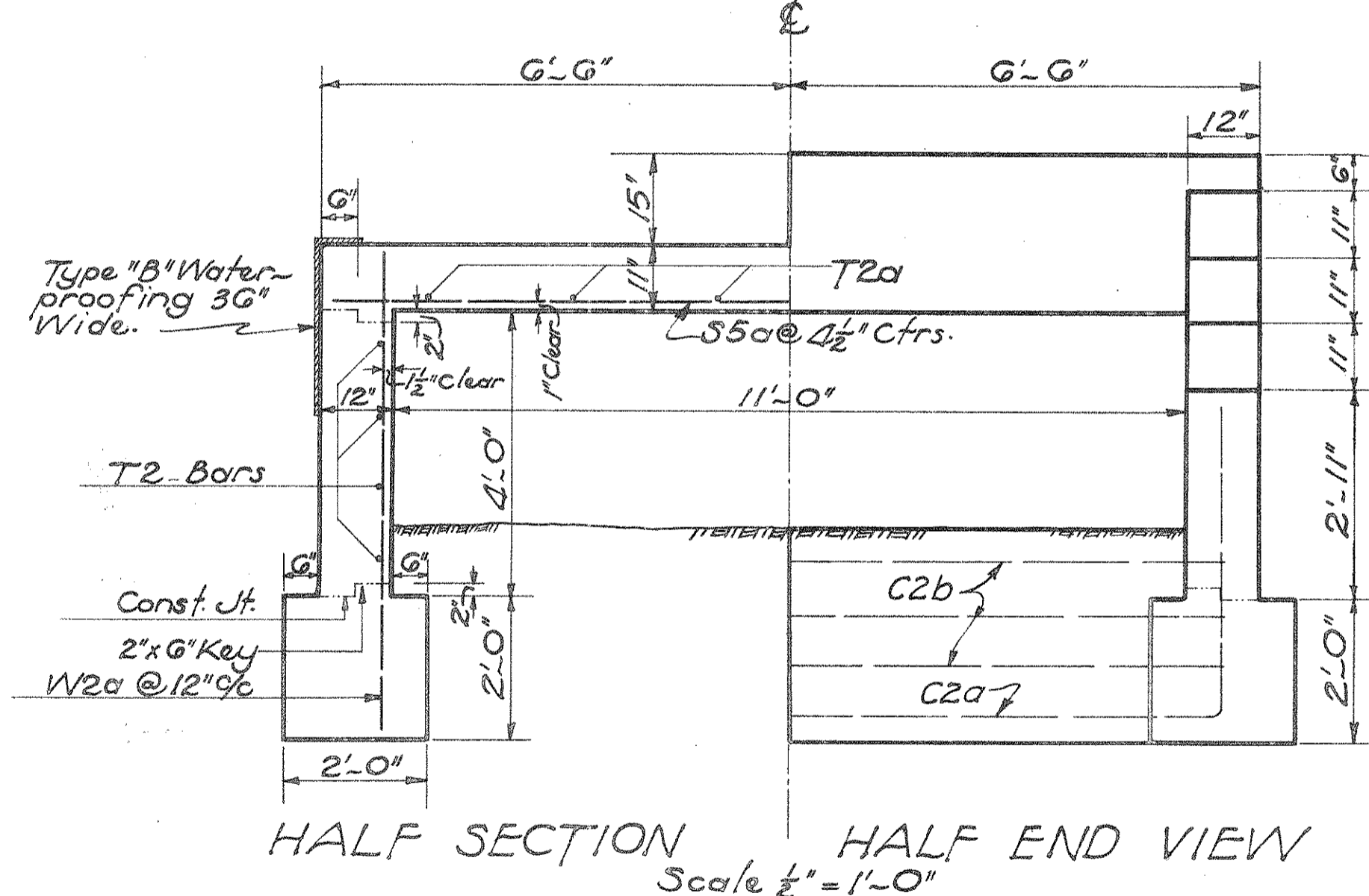
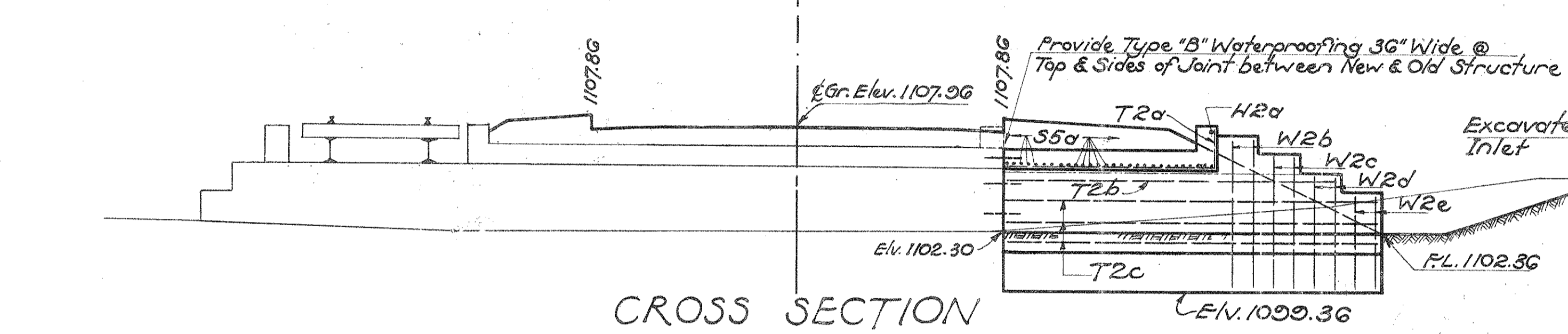
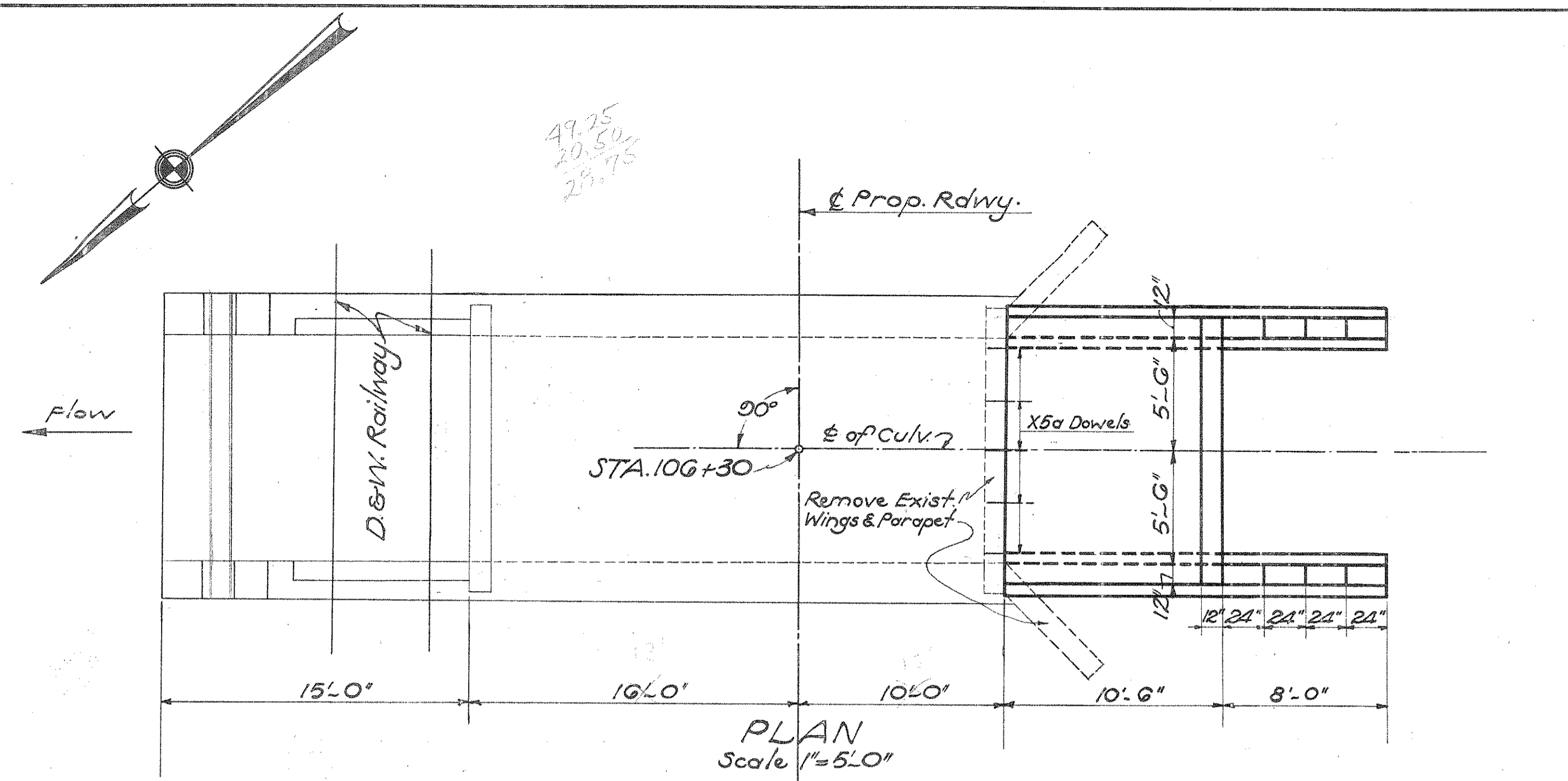


**EST. QUANT.**  
 Std. No 2-2 Catch Basin (Complete) 1 Only

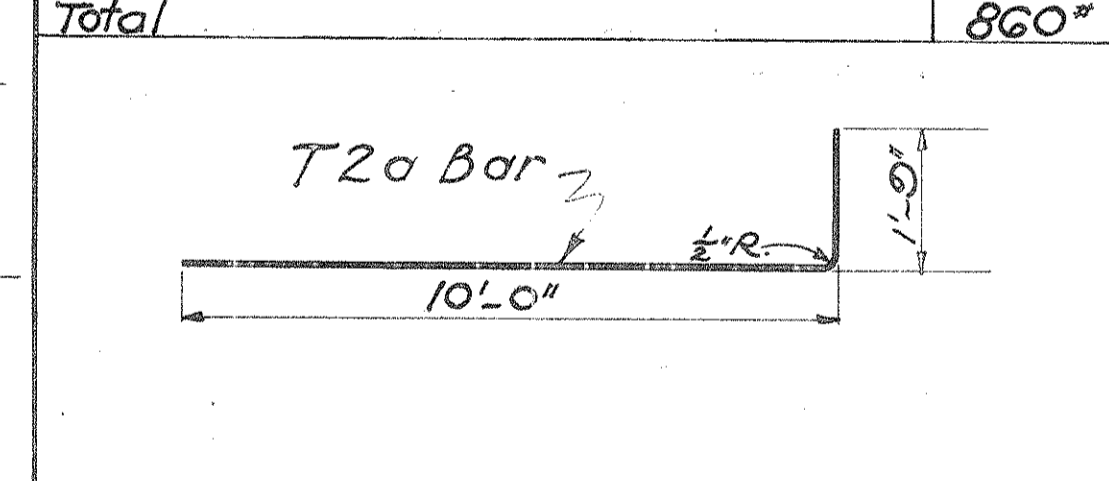
**CULV. DATA**  
 TYPE: Ex. Tile  
 SIZE: 6"  
 WORK REQ'D: Build Std. No 2-2 Catch Basin on Rt.

STA. 83+84 (8)

S.H. 240 SEC. "D" PART " PREBLE COUNTY



STEEL LIST						
MARK	SIZE	SHAPE	SPACING	NO.	LENGTH	WEIGHT
S5a	3/4" φ	str.	4 1/2"	28	12'-6"	526 #
T2a	1/2" φ	Bent	2'-0"	6	11'-9"	47
T2b	"	str.	"	2	16'-0"	21
T2c	"	str.	"	6	18'-0"	72
W2a	"	"	12"	22	6'-6"	96
W2b	"	"	"	4	7'-3"	19
W2c	"	"	"	4	6'-3"	17
W2d	"	"	"	4	5'-6"	15
W2e	"	"	"	4	4'-6"	12
H2a	"	"	"	1	12'-6"	8
X5a	3/4" φ	str.	"	9	2'-0"	27
Total						860 #



**ESTIMATED QUANTITIES**

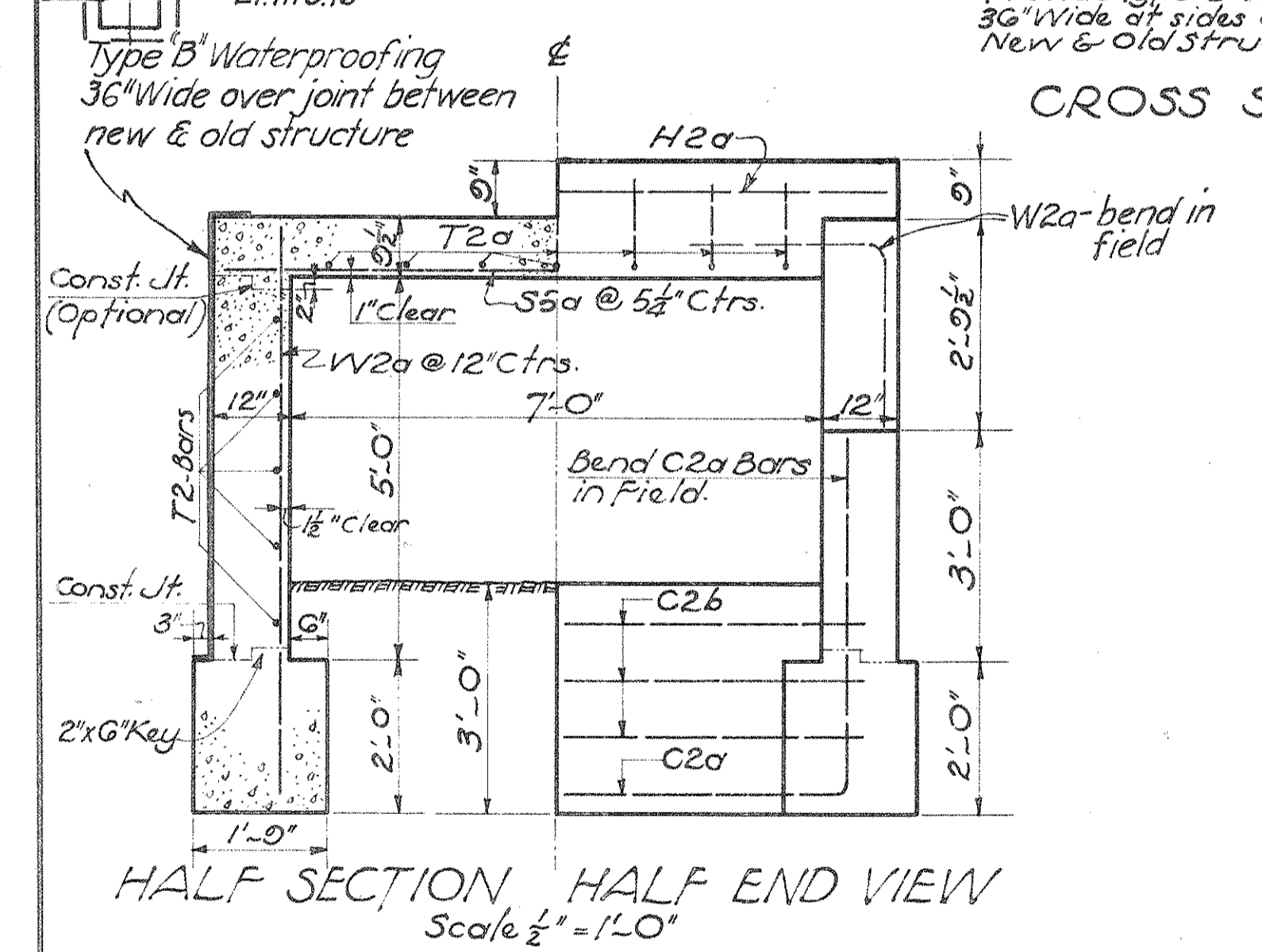
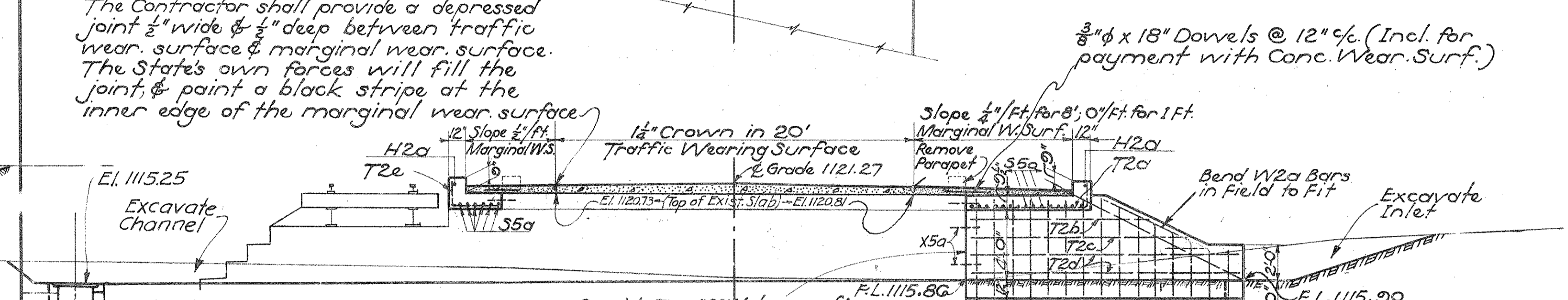
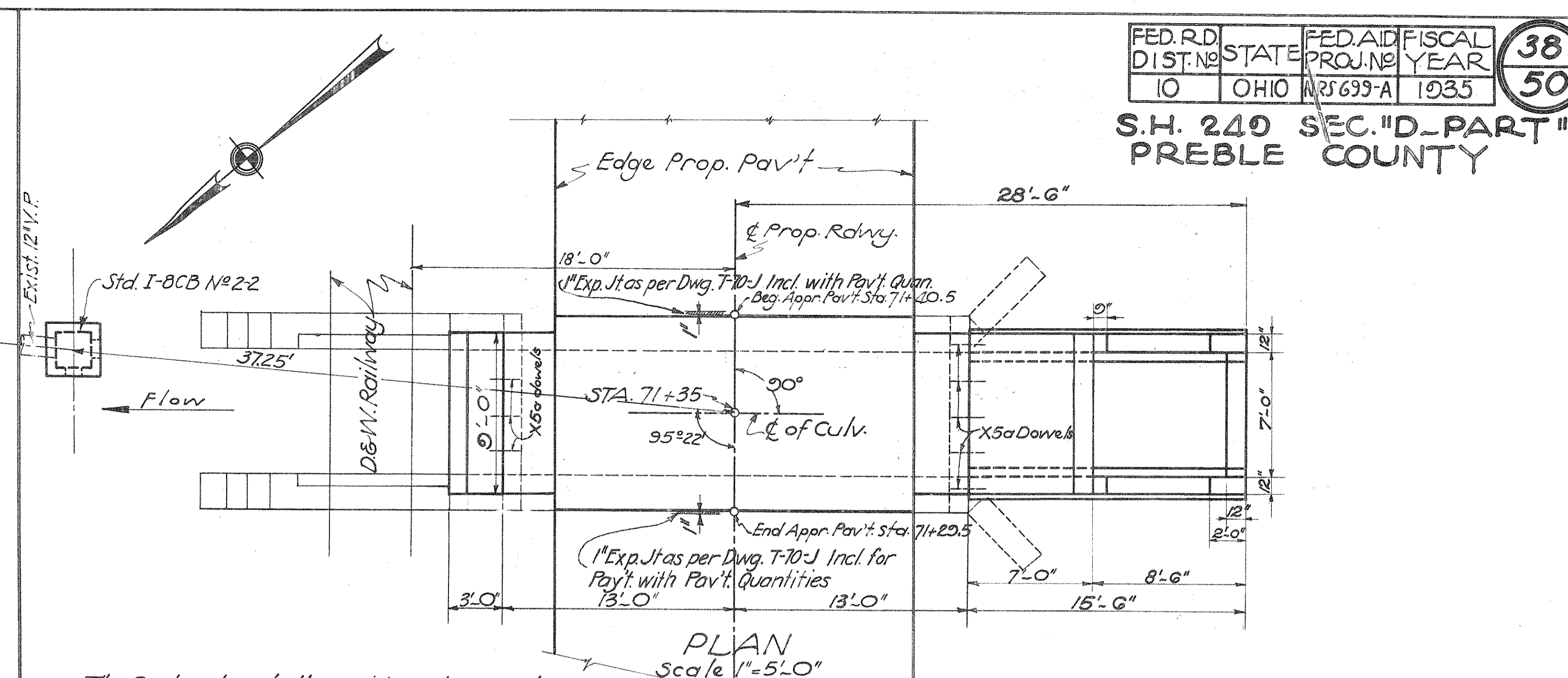
Excavation	35	Cu. Yd.
Concrete - 1:1 1/2 Mix (Footers)	5.6	"
" - 1:5 1/2 Mix	10.8	"
Reinf. Steel	860	Lb.
Dowel Holes - 1" φ x 12"	9	Each
Painting Exist. Masonry	60	Sq. Ft.
Type "B" Waterproofing 36" Wide	13.3	Sq. Yd.
Remove Portions of Exist. Masonry	Lump Sum	

**CULVERT DATA**  
 TYPE: Special Slab Top Culvert (Std. Dwg. STC-34)  
 SIZE: 11'-0" x 3'-0" x 18'-6" Extension on Right.  
 WORK REQ'D: Remove Conc. Wings & Parapet on Rt. of Exist. 11'-0" x 3'-0" x 4'-0" Conc. & Stone Slab Top Culv. Build 11'-0" x 3'-0" x 18'-6" Spec. Slab Top Culv. Extens. on Rt. doweled to Exist. Culv. Excavate in let. Point Exist. Masonry as directed. Apply Type "B" Waterproofing 36" Wide as shown.

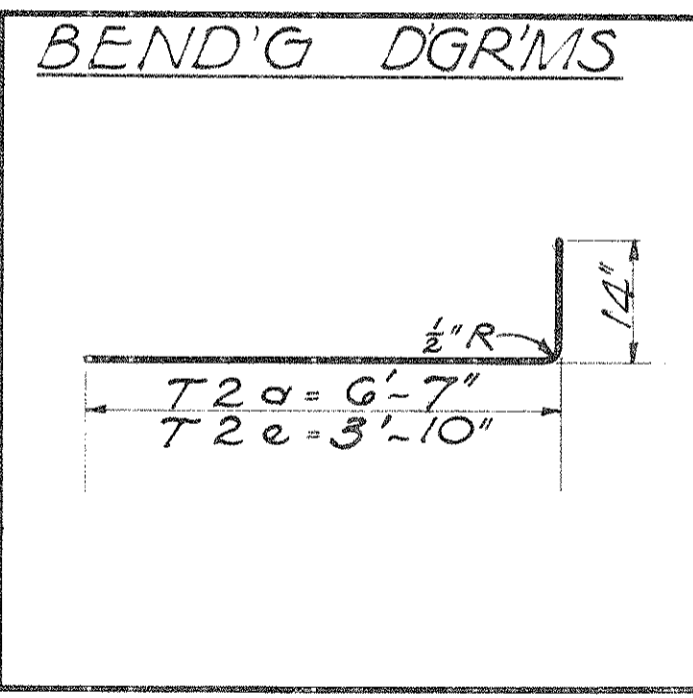
Drawn By: O.T.M. 8-15-34 Revised By: EED Date  
 Chk'd By: R.H.H. 8-23-34

STA. 106 + 30

9.



STEEL LIST						
MARK	SIZE	SHAPE	SPACING	NO.	LENGTH	WEIGHT
S5a	3/4" φ	str.	5 1/2"	23	8'-6"	204
T2a	1/2" φ	Bent	12"	7	7'-9"	36
T2b	"	str.	"	2	10'-0"	13
T2c	"	str.	"	2	12'-0"	16
T2d	"	"	"	4	15'-0"	40
W2a	"	"	12"	28	7'-0"	131
C2a	"	Bend in field	"	1	16'-0"	11
C2b	"	str.	"	3	8'-0"	16
H2a	"	"	"	2	8'-0"	11
X5a	3/4" φ	"	"	10	2'-0"	30
T2e	1/2" φ	Bent	12"	7	5'-0"	23
Total =						621 #



**ESTIMATED QUANTITIES**

Excavation	40	Cu. Yd.
Concrete - 1:1 1/2 Mix (Footers)	4.1	"
" - 1:5 1/2 Mix	8.9	"
Reinf. Steel	621	Lb.
Dowel Holes - 1" φ x 12"	10	Each
Conc. Wear Surf. (Avg. Thick=5")	38.4	Sq. Yd.
Type "B" Waterproofing 36" Wide	3.2	Sq. Yd.
" - 24"	4.0	"
Std. No 2-2 Catch Basin (Complete)	1	Each
Removal of Portions of Exist. Masonry	Lump Sum	

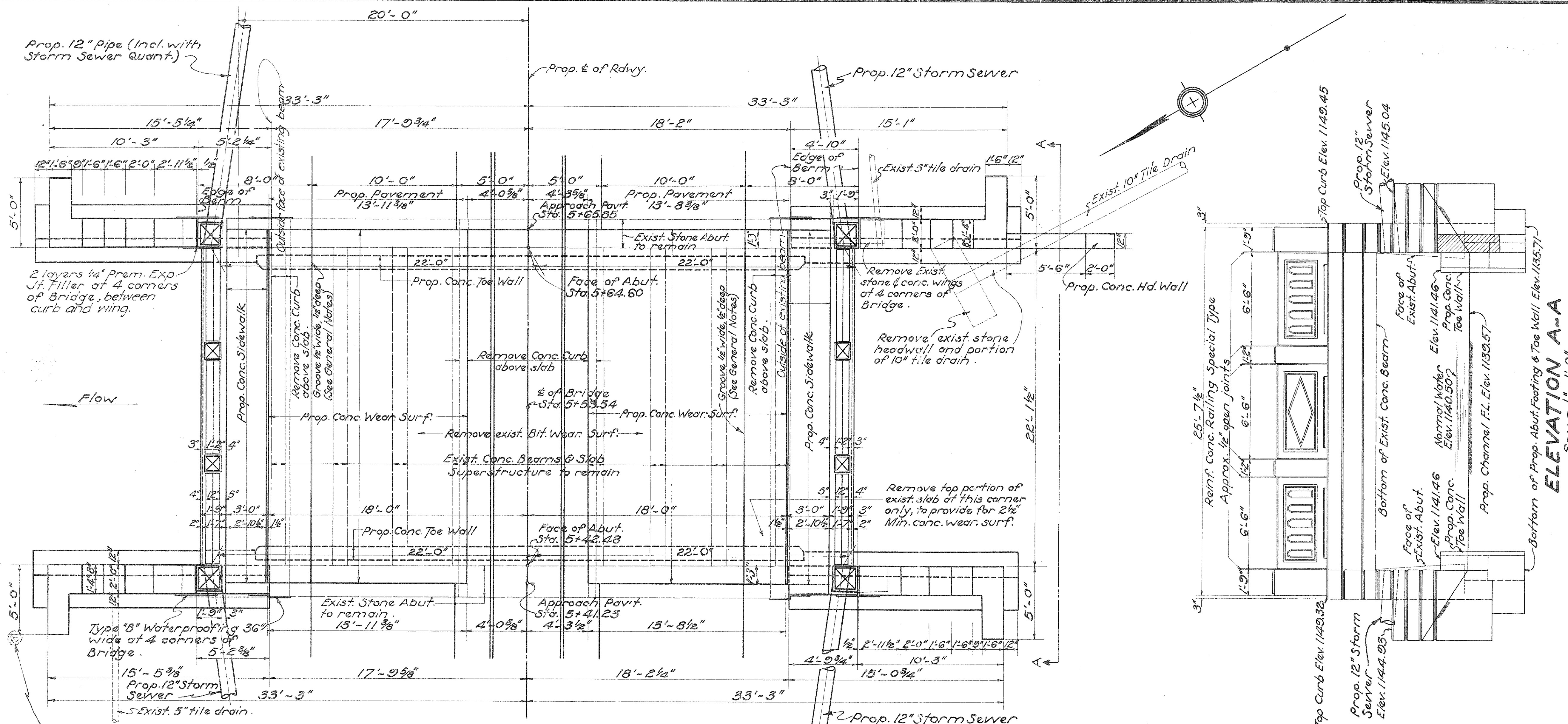
**CULVERT DATA**  
 TYPE: Special Slab Top Culvert (Std. Dwg. No. STC-34, I-8.C.B. 1-2 & 2-2)  
 SIZE: 7'-0" x 4'-0" x 15'-6" Extension on Right.  
 WORK REQ'D: Remove conc. wings & parapet on Rt. & Lt. of existing 7'-0" x 4'-0" x 43'-0" conc. & stone slab top culvert. Build 7'-0" x 4'-0" x 15'-6" Extens. on Rt. doweled to existing structure. Extend slab on Lt. as shown. Excavate inlet. Build Std. No 2-2 Catch Basin on Left.

\*Mix shall be (1-5 1/2) -

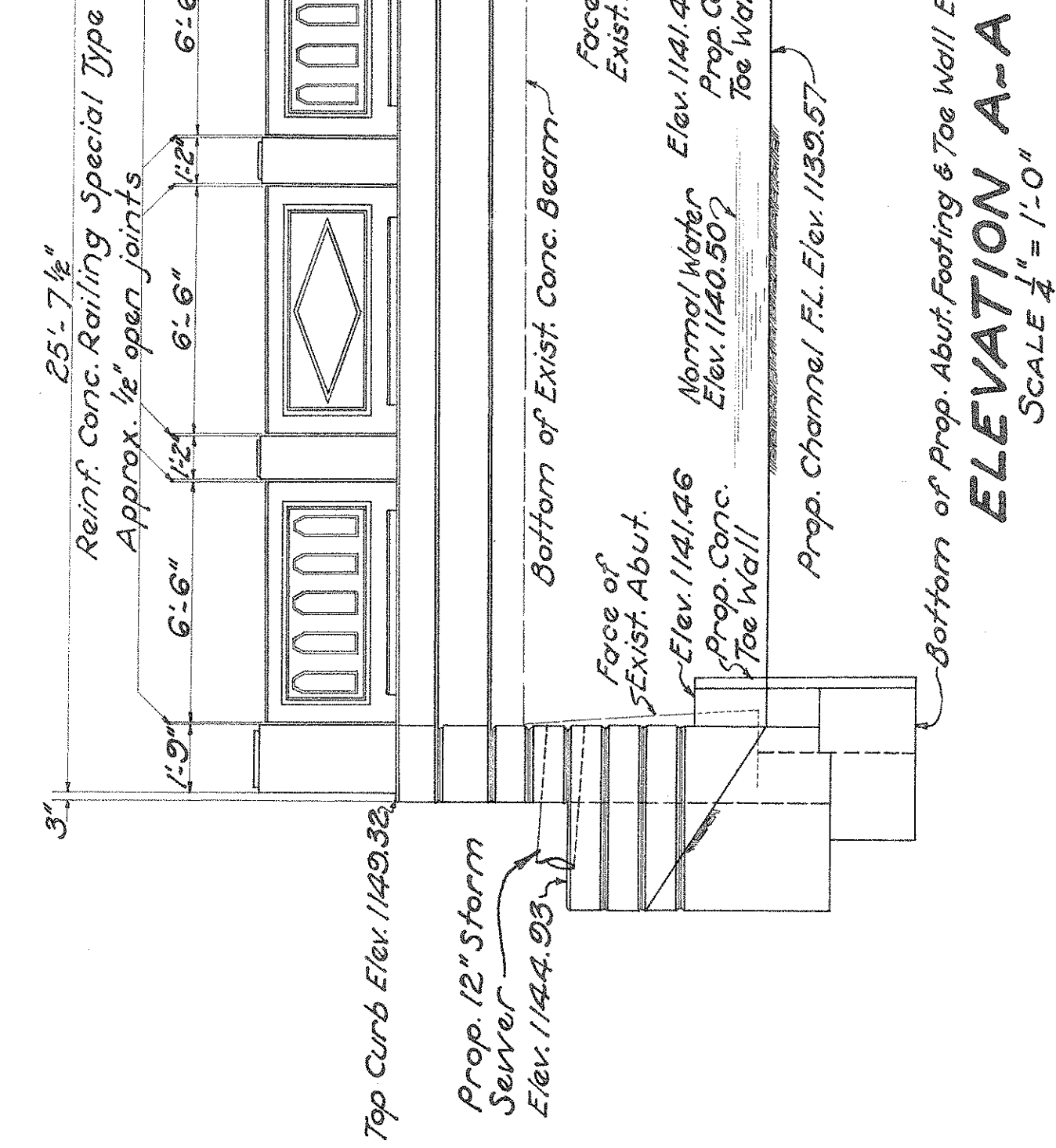
STA. 71 + 35

7.

S.H. 249 SEC. D. Pt.  
PREBLE COUNTY



**GENERAL PLAN**  
SCALE 1/4" = 1'-0"



**ELEVATION A-A**  
SCALE 1/4" = 1'-0"

Note: This 12" maple tree is to remain in place and the contractor shall take care not to disturb or injure it in any way.

**GENERAL NOTES**

**PROPOSED STRUCTURE** shall be a Standard Concrete Slab Extension on both sides of Existing Conc. Beam & Slab Bridge. Span: 22'-1 1/2". Roadway: 36'-0", 2'-3'-0" Concrete Sidewalks.

**LOADING** - Bridge Extension is designed for H-15 Loading.

**CONCRETE MIX** shall be 1-5 1/2 for superstructure slab, curbs, sidewalk and Railing; and 1-6 1/2 for abutments and wings, toe walls, footings and pipe headwall.

**SIDEWALK** shall be included with superstructure concrete quantities; metal concrete forms shall be 8"x20" 42g gage, "Berly" or equal make, included for payment with price bid per cu. yd. of concrete.

**SURFACE COURSE** shall be of 1-5 1/2 concrete, of variable thick, 2 1/2" min. & 6" average. Surface course shall conform to Std. parabolic crown of 2 1/2" for 15' and slope of 1/4" per ft. for 3'. Contractor shall provide a depressed joint 1/2" wide and 1/2" deep, paralleling 1/2" of Roadway and in line with edge of proposed roadway pavement 15'-0" on each side of 1/2"; he shall also provide a 1/2"x1" depressed joint between surface course and sidewalk. The State's own forces will fill the joints and paint a black stripe of the inner edge of the marginal surface course.

**CHAMFER** all exposed edges 3/8" unless otherwise shown.

**WATERPROOFING** - Type "A" Waterproofing 6" Type "B" Waterproofing 36" wide shall be applied in accordance with Std. Drwg. SB-33; Type "B" Waterproofing 36" wide shall likewise be applied in back of vertical joint between new and old abutments from bridge seat down to Elev. 1140.50; Type "A" Waterproofing shall likewise be applied at juncture of surface course, sidewalk & slab as shown on details.

**EXPANSION JOINT FILLER** - 2 layers 1/4" Prem. Exp. Joint Filler shall be provided as required by Std. Drwg. SB-33.

**GENERAL NOTES (CONTINUED)**

**RAILING** shall be of reinforced concrete, Special Type, as detailed. Reinforcing for railing included in price, bid per Lin. Ft. of Railing.

**EXCAVATION** - Excavation below normal water Elev. 1140.50 will be classified as "Wet"; that above Elev. 1140.50 will be classified as "Dry". Material obtained from excavation shall be disposed of as directed by Engineer. Porous backfill behind new walls shall be included for payment with Excavation.

**TOE WALL** - The concrete toe wall and underpinning in connection with existing stone abutments shall be poured in sections alternately as indicated on plans.

**DOWELING** - The new concrete slab extension shall be doweled to existing concrete beam as described on detail Sheet No 18.

**CONSTRUCTION JOINTS** other than shown will not be permitted.

**TEST SPECIMENS** of reinforcing bars shall be two 20" straight sections cut from one bar, from as near the ends of the bar as possible, and shall be replaced with listed replacement steel. Not more than two of the replacement bars may be used for test specimens.

**REMOVAL OF PORTIONS OF EXIST. MASONRY** - This item shall include the removal of concrete curbs and latticed iron railing at outside edges of exist. superstructure; the concrete curbs at inner edges along R.R. track; the exist. bituminous wearing surface down to top of slab; the stone and concrete wings beyond limits of existing superstructure; a portion of exist. slab at southwest corner of bridge to provide for 2 1/2" min. thickness wearing surface; the existing stone headwall and 6' of 10" drain tile at southeast corner. Masonry removed shall be disposed of as directed by the Engineer.

**TRAFFIC** to be maintained over this bridge at all times.

**ESTIMATED QUANTITIES**

Excavation (Wet)	135	Cu. Yd.
Excavation (Dry)	60	Cu. Yd.
Concrete 1-5 1/2 Mix (Superstructure)	20	Cu. Yd.
Concrete 1-6 1/2 Mix (Walls)	47	Cu. Yd.
Concrete 1-6 1/2 Mix (Footers)	50	Cu. Yd.
Reinforcing Steel	5081	Lb.
Reinf. Conc. Railing 1-5 1/2 Mix Special Type	51.25	Lin. Ft.
Type "A" Waterproofing	9.0	Sq. Yd.
Type "B" Waterproofing 36" wide	19	Sq. Yd.
1/4" Prem. Exp. Joint Filler	36.0	Sq. Ft.
1" x 9" Dowel Holes, including grouting	90	Lin. Ft.
Conc. Wearing Surf. Course 1-5 1/2 Mix (2 1/2" Min. Thickness, 6" Average Thickness)	75.7	Sq. Yd.
Timber Piling (To establish unit price - applying 1.0 Lin. Ft. from 0 - 800 Lin. Ft.)		
First Test Pile (Timber)		Lump Sum
Cofferdams, Sheet piling & Pumping		Lump Sum
Removal of Portions of Exist. Masonry		Lump Sum

**ADDITIONAL DETAILS** are shown on Std. Drwg. SB-33, which is supplementary to these drawings.

**PILING**, if used, shall be driven to a bearing capacity of 18 tons min., and preferably 20 tons.

**PART OF PROPOSAL NO 2**  
[BR. NO PR-11-58]

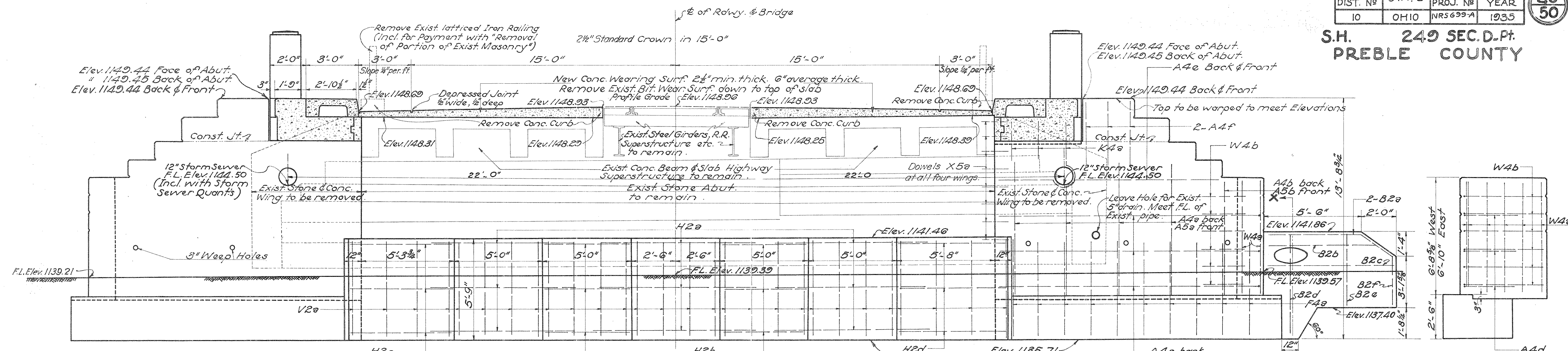
**GENERAL PLAN & ELEVATION NOTES & EST. QUANTITIES OF EXIST. CONC. BEAM & SLAB BRIDGE OVER ELK HORN RUN**

STA. 5+53.54  
22'-1 1/2" SPAN 36' ROADWAY  
S.H. 249 SEC. D. Pt.  
PREBLE COUNTY  
Scale 1/4" = 1'-0" June, 1934

DRAWN	TRACED	CHECKED	REVIEWED
R.H.H.	C.W.L.	A.T.M.	C.D.D.



**S.H. 249 SEC. D. Pt. PREBLE COUNTY**

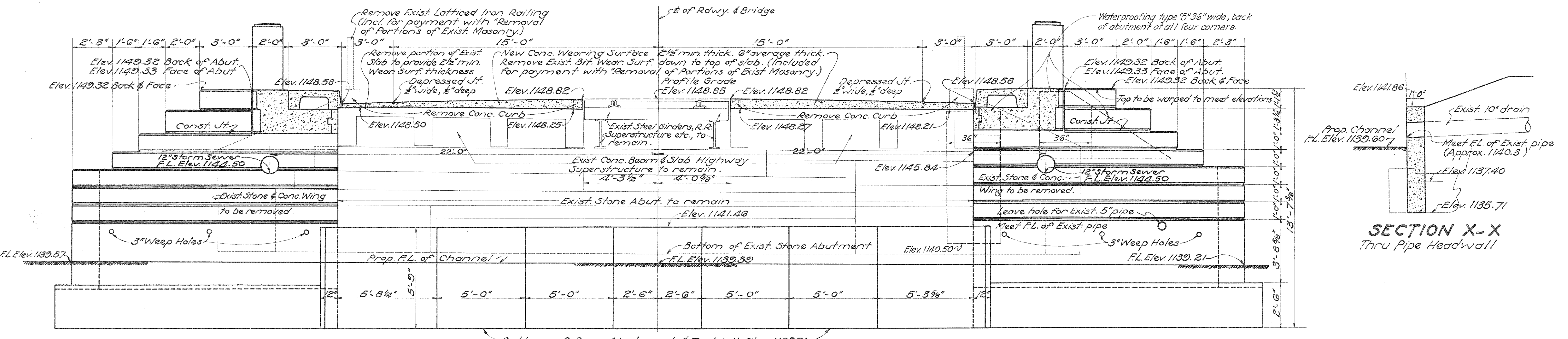


Note: Reinforcing for this wing is identical to that shown for the wing on the right.

Refer to Elevation of West Abut. for rustication of Abut. & wing walls. All Elevations unless otherwise noted are at face of Abut.

**ELEVATION OF EAST ABUTMENT**  
Showing Section Thru Superstructure at Face of Abut.

**TYPICAL ELEV.**  
Showing Reinf. of Turn Back Wings at four corners.



Refer to Elevation of East Abutment for Reinforcement of Abut., Wing & Toe Wall. All Elevations unless otherwise noted are at Face of Abutment.

**ELEVATION OF WEST ABUTMENT**  
Showing Section Thru Superstructure at Face of Abut.

**PART OF PROPOSAL NO 2**

**BR. NO PR-11-58**

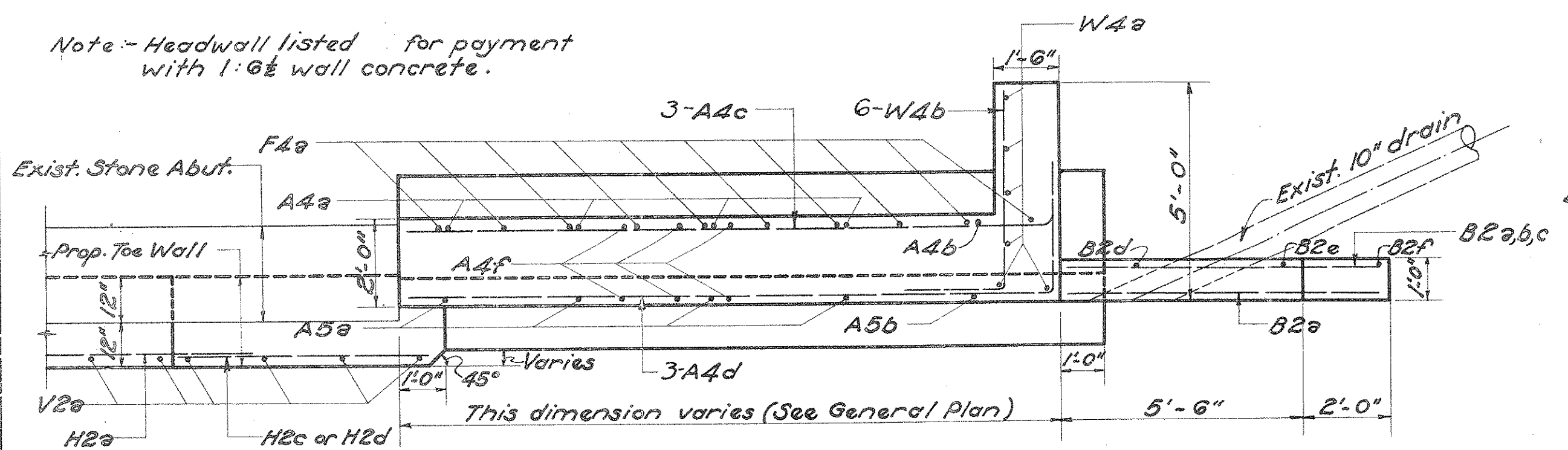
**EAST & WEST ABUTMENT ELEVATIONS**  
**CONC. SLAB EXTENSION OF EXIST. CONC. BEAM & SLAB BRIDGE OVER ELK HORN RUN**  
STA. 5+53.54  
22'-1 1/2" SPAN 36' ROADWAY  
**S.H. 249 SEC. D. Pt. PREBLE COUNTY**  
Scale 3/8" = 1'-0" June, 1934

DRAWN	TRACED	CHECKED	REVIEWED
R.H.H.	C.W.L.	O.T.M.	W.H.E.

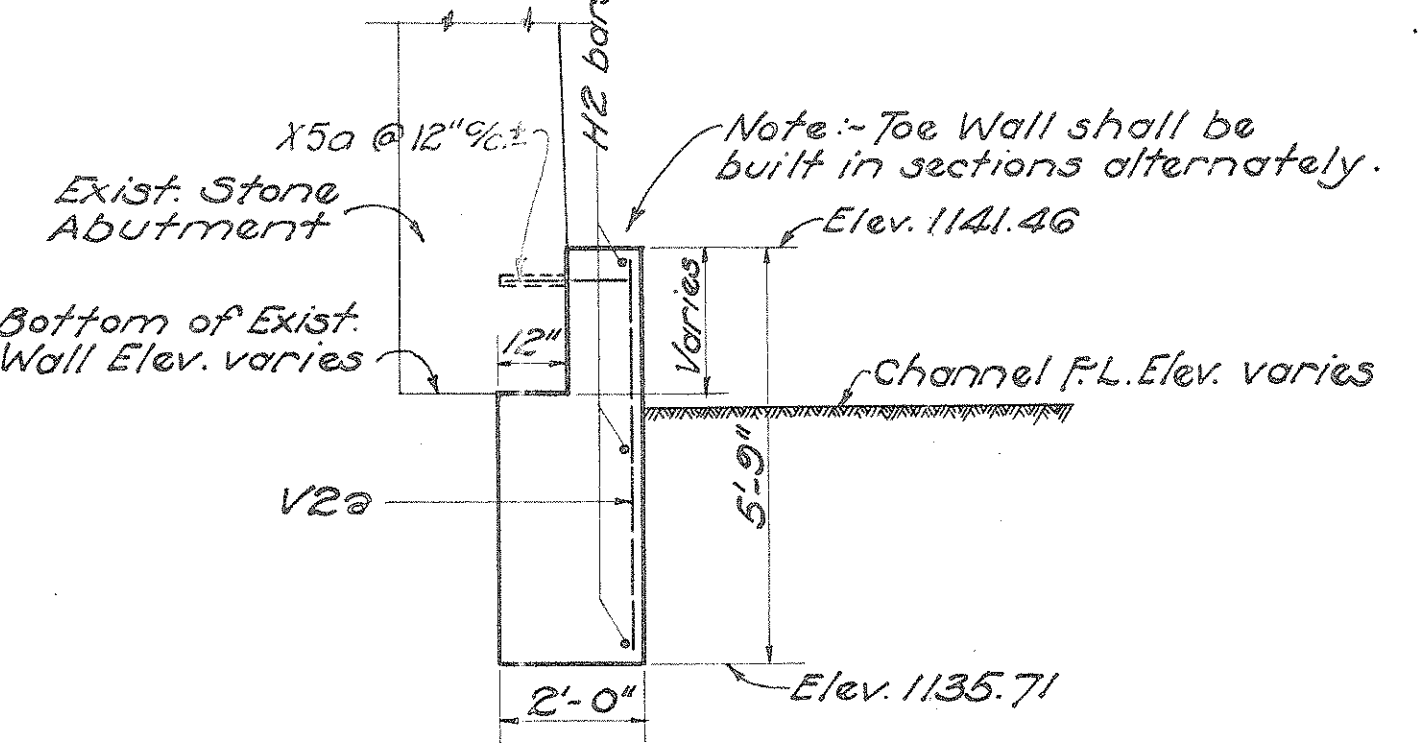
1.

S.H. 249 SEC. D. Pt.  
PREBLE COUNTY

Note - Headwall listed for payment with 1-0 1/2 wall concrete.

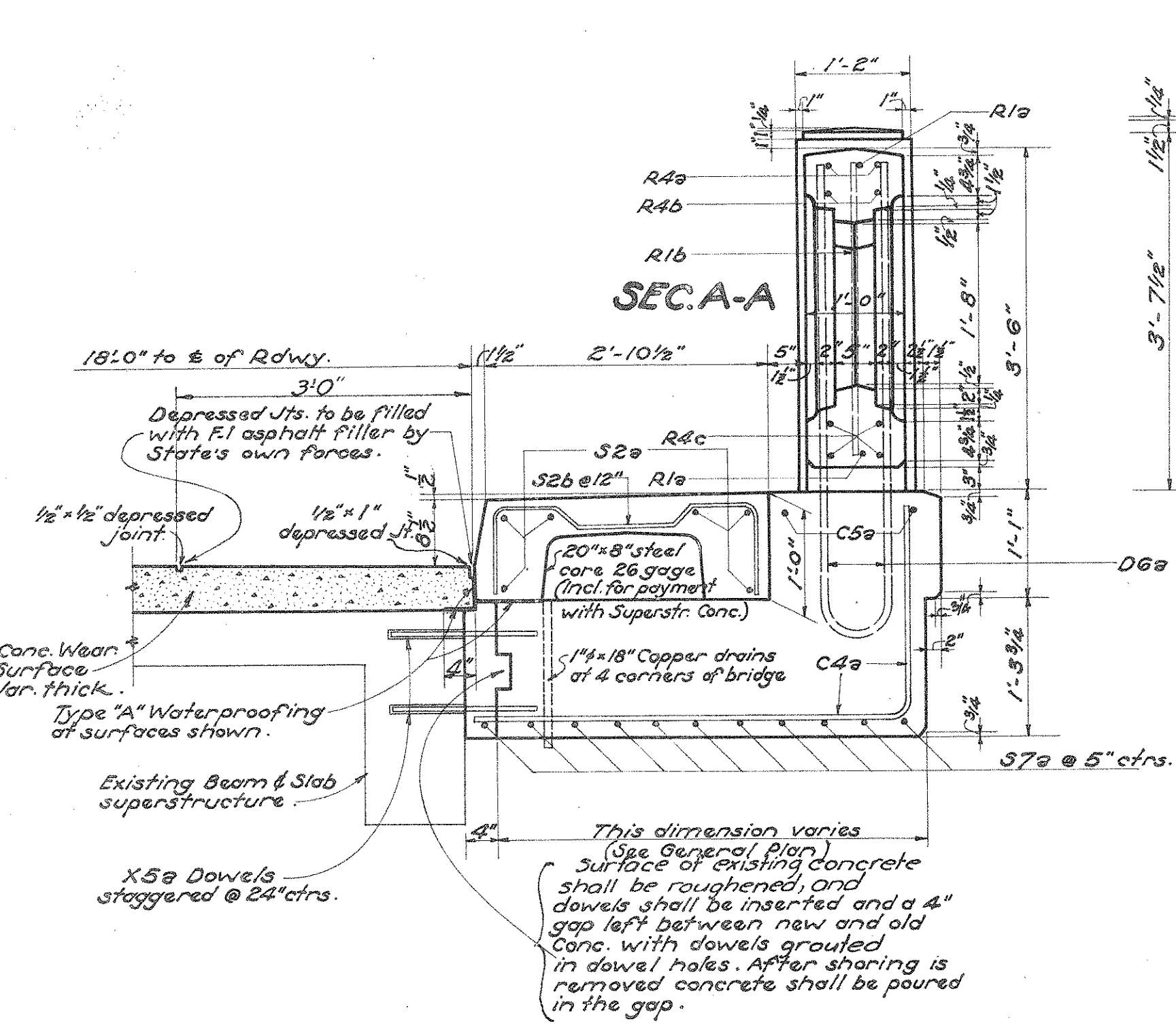


TYPICAL PLAN & ABUTMENT EXTENSION, WING & HEADWALL  
Showing Reinforcement  
SCALE 3/8" = 1'-0"

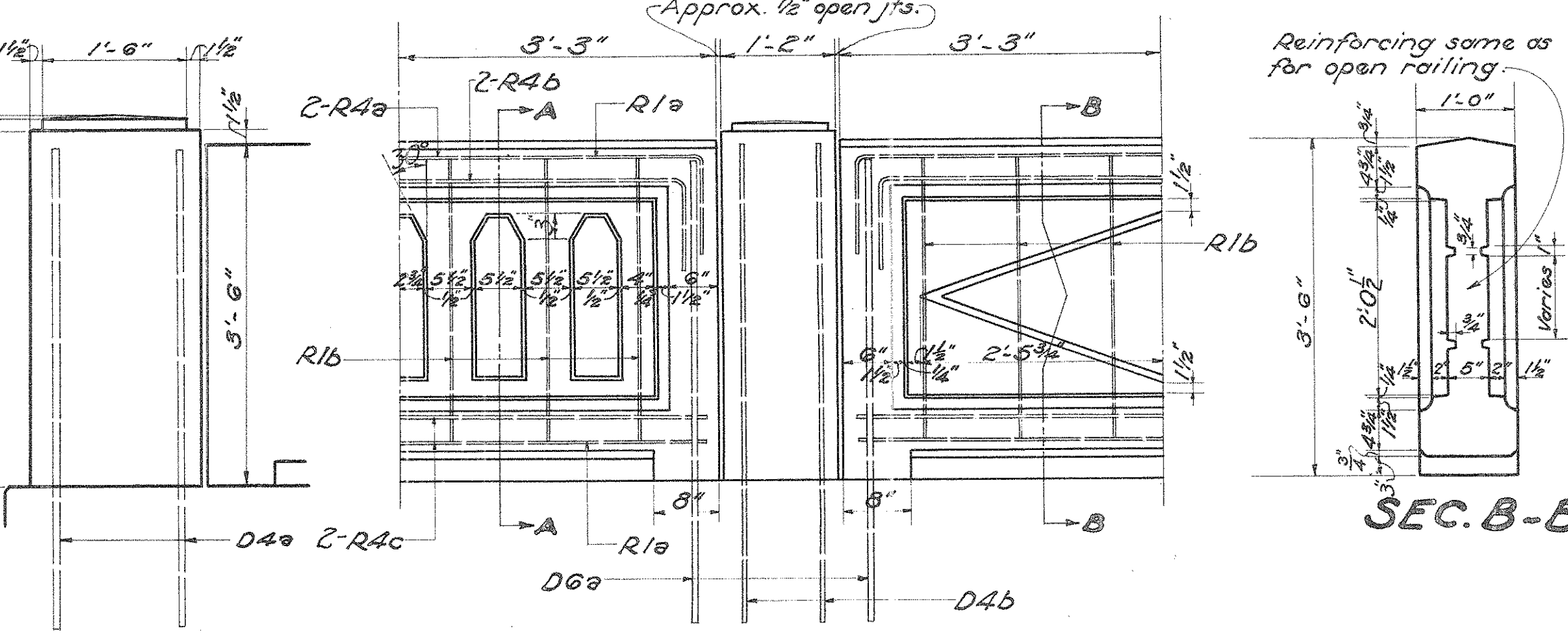


DETAIL & TOE WALL  
SCALE 3/8" = 1'-0"  
(Note - Toe Wall shall be 1:0 1/2 mix; incl. with Footer Conc. for payment.)

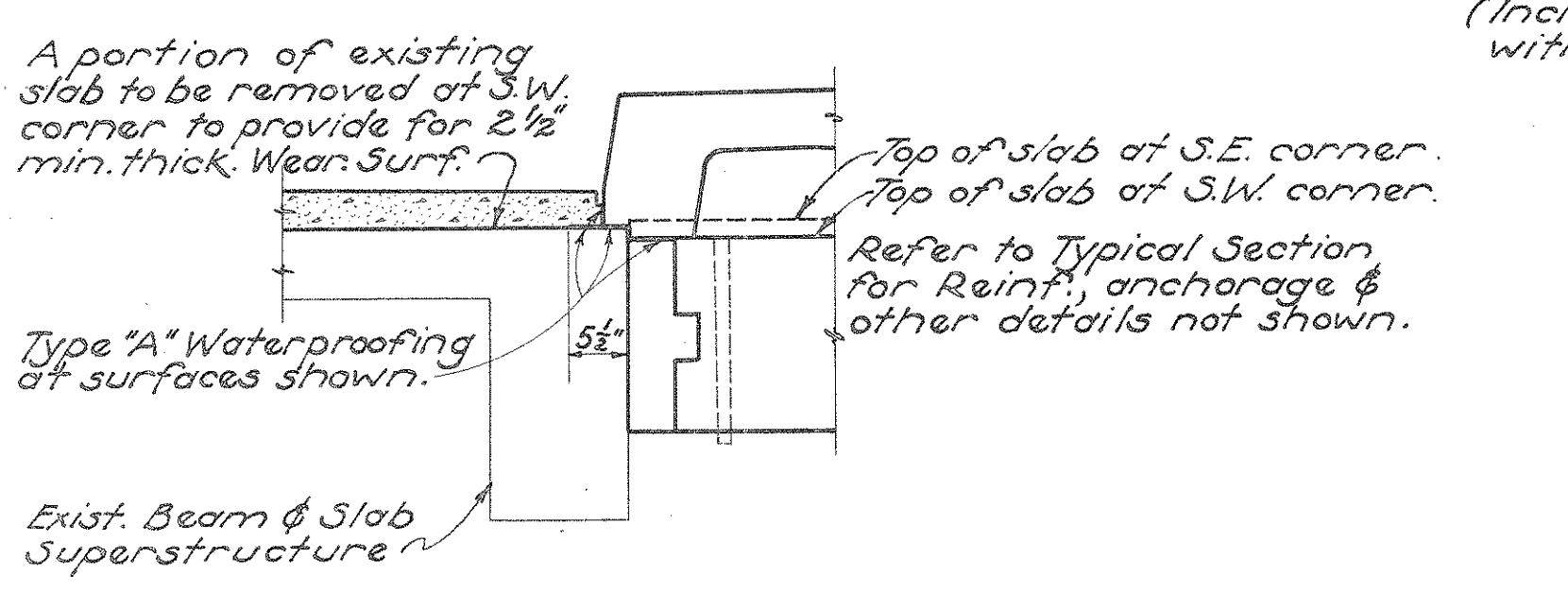
STEEL LIST						
MARK	SIZE	SHAPE	SPACING	No REQ.	LENGTH	WT.
A4a	5/8" φ	Strit.	36"	16	8'-3"	138
A4b	"	"	"	4	6'-3"	26
A4c	"	Bent	24"	12	16'-0"	200
A4d	"	"	24"	12	17'-6"	219
A4e	"	Strit.	"	8	12'-0"	100
A4f	"	"	As Shown	24	4'-0"	100
A5a	3/4" φ	"	36"	16	8'-6"	204
A5b	"	"	"	4	6'-3"	38
B2a	1/2" φ	Bent	As Shown	2	7'-6"	10
B2b	"	Strit.	"	1	6'-0"	4
B2c	"	"	"	1	7'-0"	5
B2d	"	"	"	1	5'-6"	4
B2e	"	"	"	1	4'-0"	3
B2f	"	"	"	1	2'-6"	2
C4a	5/8" φ	Bent	24" & 8"	36	6'-3"	235
C5a	3/4" φ	Strit.	As Shown	4	25'-0"	155
D4a	5/8" φ	Bent	"	8	11'-3"	94
D4b	5/8" φ	"	"	8	10'-3"	86
D6a	7/8" φ	"	"	12	10'-0"	246
F4a	5/8" φ	"	18"	40	6'-0"	251
H2a	1/2" φ	Strit.	As Shown	18	9'-0"	108
H2b	"	"	"	12	4'-0"	38
H2c	"	"	"	6	5'-9"	23
H2d	"	"	"	6	6'-0"	24
K4a	5/8" φ	"	18"	12	2'-0"	25
S2a	1/2" φ	"	As Shown	12	24'-3"	194
S2b	1/2" φ	Bent	12"	50	4'-3"	142
S7a	1" φ	"	5"	22	26'-3"	1544
V2a	1/2" φ	Strit.	As Shown	56	5'-3"	196
W4a	5/8" φ	"	12"	24	6'-6"	163
W4b	5/8" φ	Bent	12"	24	6'-9"	169
X5a	3/4" φ	Strit.	24" stagger.	120	1'-6"	271
RAILING STEEL						
R1a	3/8" φ	Strit.	As Shown	12	6'-3"	
R1b	"	"	"	36	3'-0"	
R4a	5/8" φ	Bent	"	12	8'-0"	
R4b	"	"	"	12	7'-3"	
R4c	"	Strit.	"	24	6'-3"	
REPLACEMENT STEEL						
Rep. 1	3/8" φ	Strit.	"	1	5'-6"	2
Rep. 2	1/2" φ	"	"	1	6'-0"	4
Rep. 4	5/8" φ	"	"	1	6'-6"	7
Rep. 5	3/4" φ	"	"	1	7'-0"	11
Rep. 6	7/8" φ	"	"	1	7'-6"	15
Rep. 7	1" φ	"	"	1	9'-6"	25
TOTAL						5081



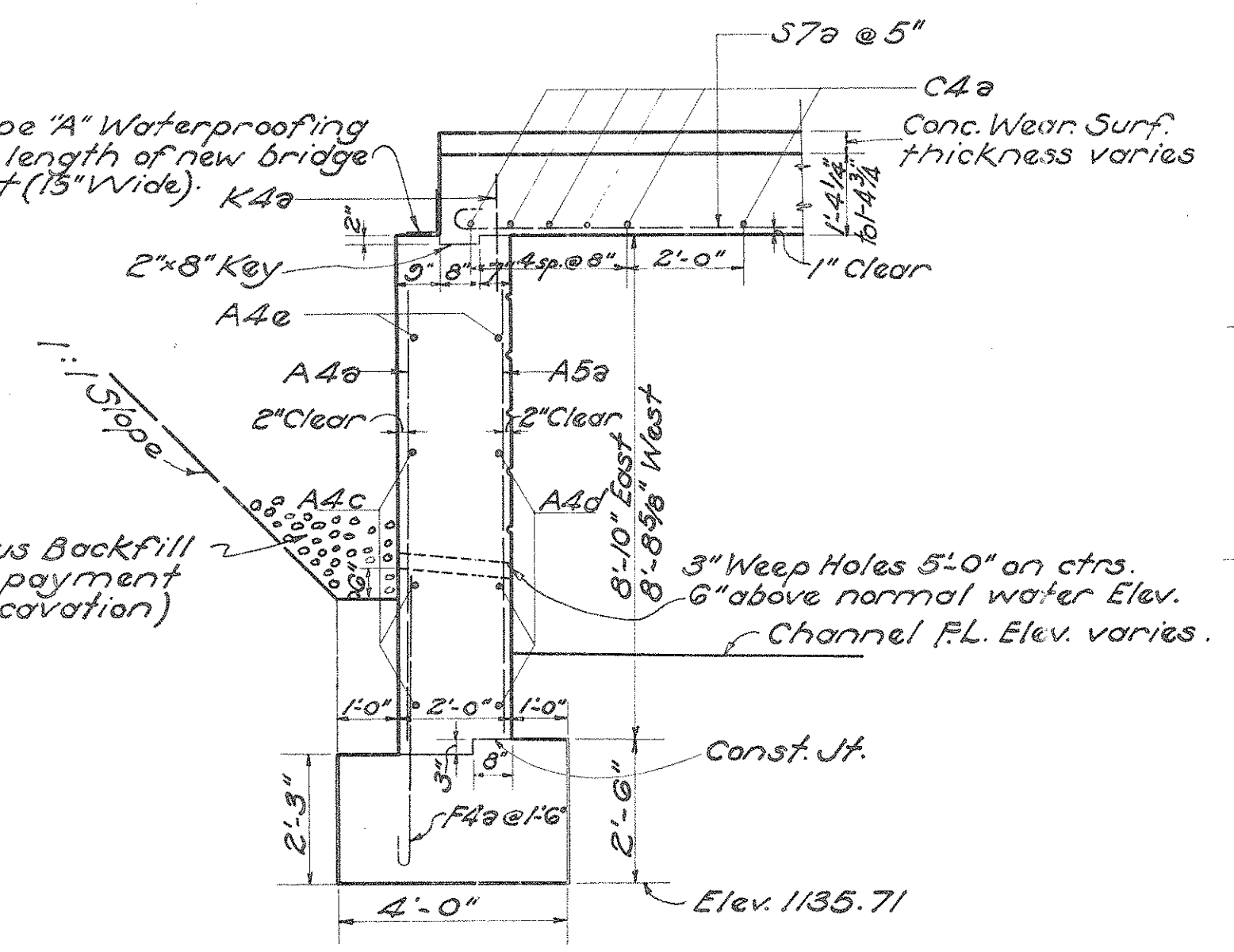
TYPICAL SEC. THRU SUPERSTRUCTURE EXTEN.  
Showing conditions at N.E. & N.W. corners.  
SCALE 3/4" = 1'-0"



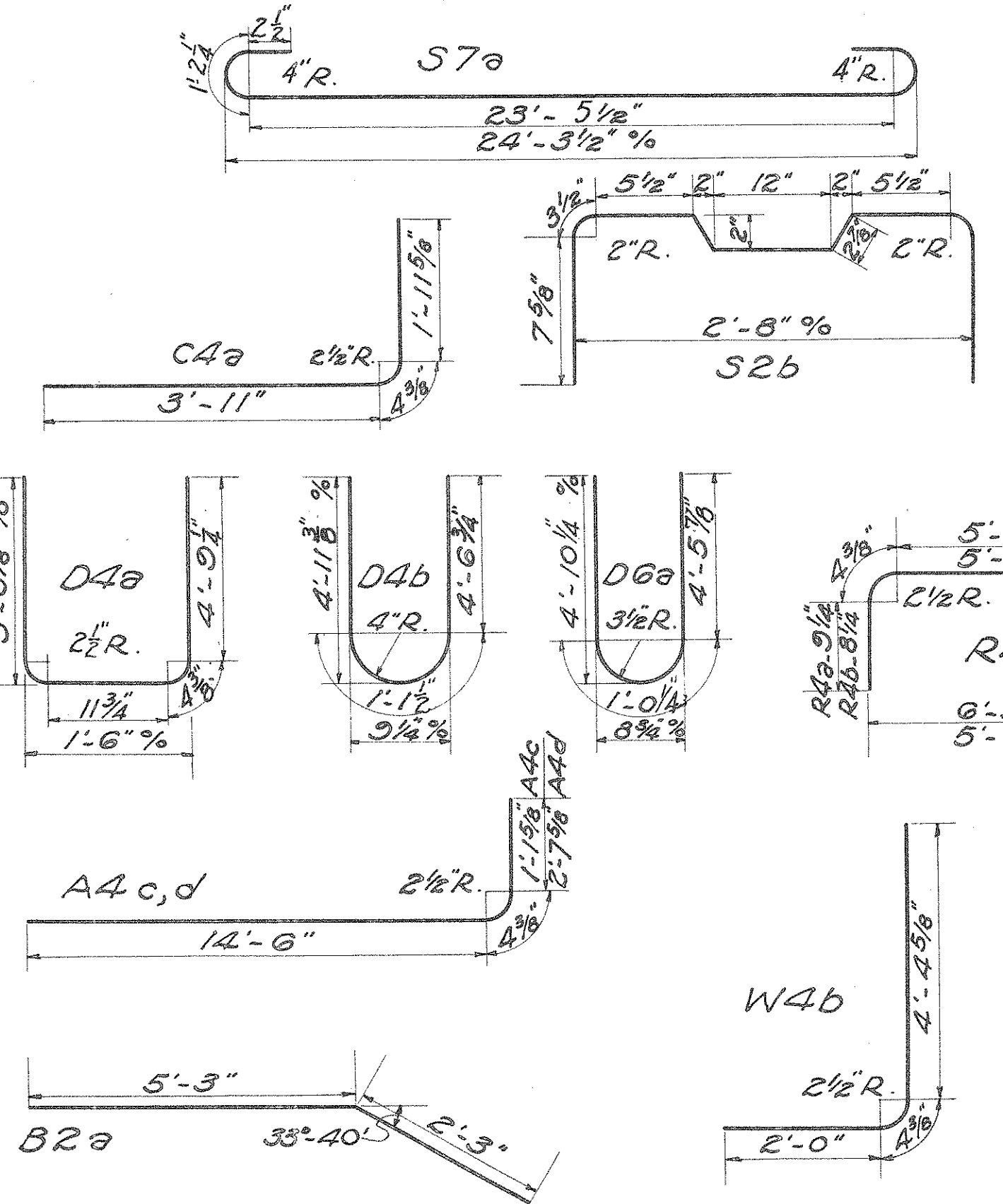
TYPICAL RAILING DETAILS  
Reinf. Concrete Special Type  
SCALE 3/4" = 1'-0"



SECTION  
Showing conditions at S.E. & S.W. corners.



TYPICAL SEC. THRU ABUT. EXTENSION  
SCALE 3/8" = 1'-0"



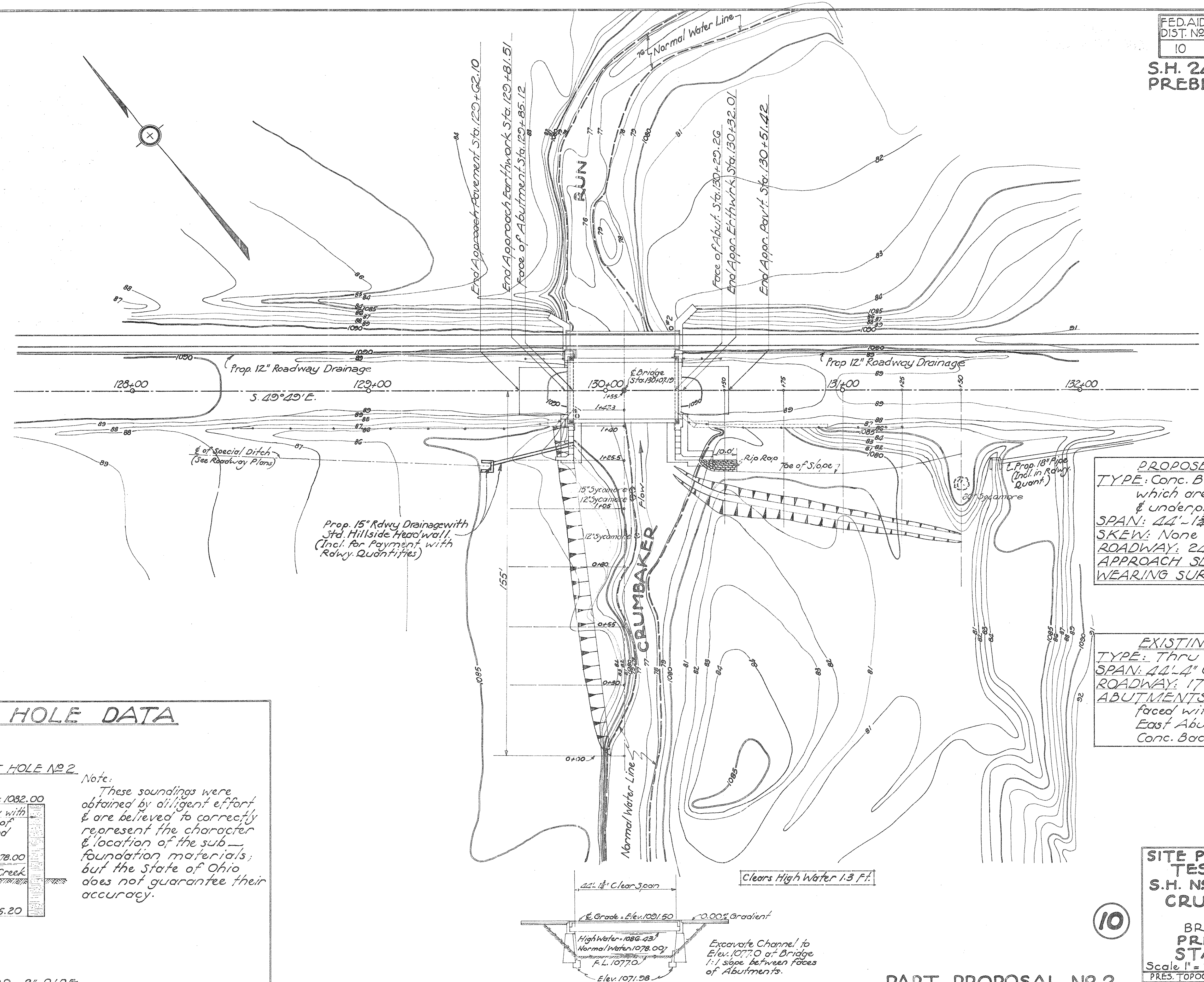
BAR BENDING DIAGRAMS  
Note - All radii inside.

PART OF PROPOSAL No 2  
BR. No PR. II. 58

SUPERSTRUCTURE DETAILS  
BENDING DIAGRAMS & STEEL LIST  
CONC. SLAB EXTENSION  
OF EXIST. CONC. BEAM & SLAB  
BRIDGE OVER ELK HORN RUN  
STA. 5+53.54  
22'-1 1/2" SPAN 36' ROADWAY  
S.H. 249 SEC. D. Pt.  
PREBLE COUNTY  
June, 1934

DRAWN	TRACED	CHECKED	REVIEWED
R.H.H.	C.W.L.	O.T.M.	W.H.B.

S.H. 240 SEC. D.P.  
PREBLE COUNTY



**PROPOSED STRUCTURE**  
 TYPE: Conc. Beams on Exist. Abutments which are to be extended, capped, & underpinned.  
 SPAN: 44'-1 1/2" Clear Span.  
 SKEW: None  
 ROADWAY: 24'-0"  
 APPROACH SLABS: 12 1/2" x 20'-0" x 20'-0"  
 WEARING SURFACE: 4" Plain Concrete

**EXISTING STRUCTURE**  
 TYPE: Thru Steel Plate Girder  
 SPAN: 44'-4" Clear Span  
 ROADWAY: 17'-0"  
 ABUTMENTS: West Abut. is Limestone faced with 1.21' of Concrete. East Abut. is Limestone with Conc. Backwall & Wing.

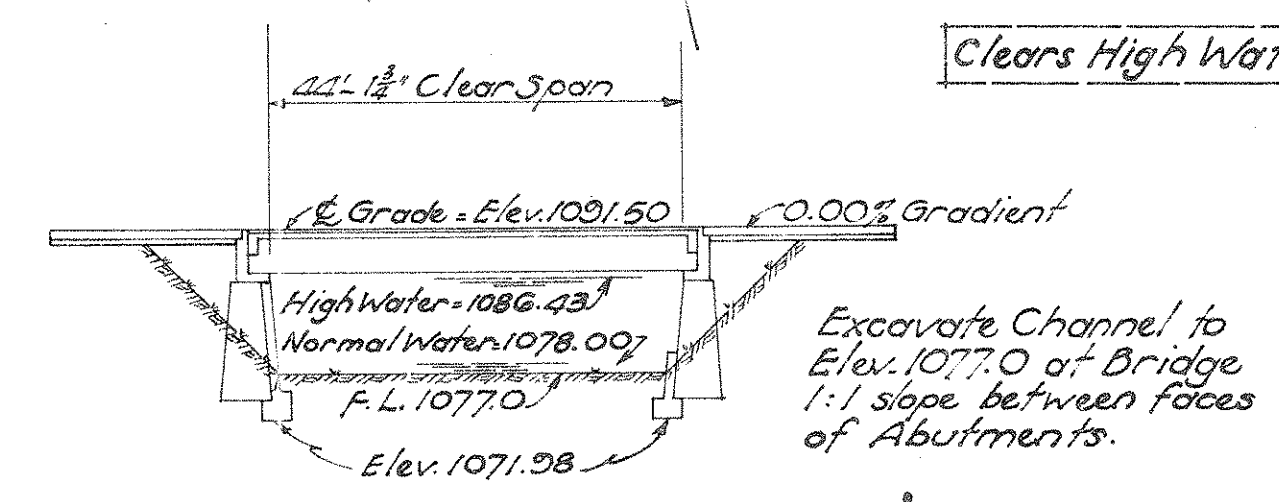
**TEST HOLE DATA**

TEST HOLE NO. 1	TEST HOLE NO. 2
Elev. 1083.20	Elev. 1082.00
Surface Soil	Blue Clay with pockets of Quick sand
1081.20	Water Level 1078.00
Blue Clay with pockets of Quick sand	Approx. Bed of Creek
1077.00	1075.20
1073.20	

Note: These soundings were obtained by diligent effort & are believed to correctly represent the character & location of the sub-foundation materials; but the State of Ohio does not guarantee their accuracy.

SOUNDING METHOD 2" PIPE

**PROFILE ON PROPOSED C**



PART PROPOSAL NO 2

**SITE PLAN - PROFILE AND TEST HOLE DATA**  
 S.H. NO 240, SEC. D.P.  
**CRUMBAKER RUN**  
 STA. 130+07.19  
 BR. NO PR. 11-82  
**PREBLE COUNTY**  
**STATE OF OHIO**  
 Scale 1" = 20'-0" APRIL 1934  
 PRES. TOPOGRAPHY PROPOSED WORK  
 SURVEYED DRAWN DES. DRN CKD. REVIEWED  
 Division Office M.W. 228 1/2 1/2 1/2

**S.H. 249 SEC. D. Pt. PREBLE COUNTY**

**GENERAL NOTES**

PROPOSED BRIDGE is a Std. 45 Ft. Span Concrete Beam Superstructure (Std. Drwg. B-45-33) placed on existing abutments; Roadway is 24'-0"; No Skew; Alignment is straight & Grade level. Existing abutments shall be extended, & capped with reinforced concrete. Actual clear span is 44'-1 3/4" but Std. 45 Ft. superstructure shall be used, & the difference taken up by extra width of bridge seat on west abutment.

LOADING: Bridge is designed for H-15-33 Loading.

RAILING shall be Type RR-10. The panel lengths vary from those shown on Superstructure Std. & shall be as shown on these plans.

APPROACH SLABS shall be reinf. conc., 20'-0" long & 12 1/2" thick (Std. Drwg. AS-33)

CONCRETE MIX shall be 1:5 1/2 for superstructure, railings, wearing surface, & approach slabs; & 1:6 1/2 for backwalls, bridge seats, abutments, wings, facing, underpinning, & footings.

REINFORCING STEEL in footings shall be accurately placed & secured before concrete is placed; tops of footings shall be cleaned of dirt, silt, & laitance before wall is poured.

TEST SPECIMENS of reinforcing bars shall be 2-24" straight sections cut from one bar, from as near the end of the bar as possible, & shall be replaced by bars included in "Replacement Steel List". Not more than two of the replacement bars may be used as test specimens.

CAMBER: No permanent camber in concrete beams is required, but the Contractor shall take care to prevent sag.

CHAMFER: all exposed edges of concrete 3/8" unless otherwise noted.

EXCAVATION: Channel excavation shall be made to Elev. 1077.00 as shown on "Site Plan" & "Channel Sections". All other excavation below elev. 1078.00 shall be classified as "Wet Excavation". All above elev. 1078.00, & not included in "Channel Excavation", shall be classified as "Dry Excavation".

CONSTRUCTION JOINTS: No horizontal constr. joints other than those shown will be permitted. Vertical constr. joints will be allowed only by special permission of the Engineer.

EXISTING SUPERSTRUCTURE shall be removed by, & become the property of the Contractor as payment for its removal.

RIP RAP: A portion of the stone removed from exist'g abutments shall be used as rip rap as shown on plans.

POROUS BACKFILL, as shown, shall extend full length of capping, new abutments, & wings. Any undisturbed earth above 1:1 slope need not be replaced with porous backfill. Payment for porous backfill shall be included with "excavation".

WEARING SURFACE COURSE shall be 4" plain concrete. The Contractor shall provide a Bituminous Filled Joint 1/2" wide & 1" deep between Traffic Wearing Surface & Marginal Wearing Surface. A 4" black stripe is to be painted on the Marginal Wearing Surface by the State's own forces upon completion of the project.

REMOVAL OF EXISTING MASONRY: The concrete, backwalls, portions of stone abutments, concrete facing, & stone & concrete wings shall be removed as indicated on plans and as directed by the Engineer.

PILING, if used, shall be driven to a bearing capacity of 18 tons, min., and of 20 tons, preferably.

FOR DETAILS not shown on these drawings reference shall be made to Std. Drs. BD-33, AS-33 and B-45-33 which are supplemental to these drawings.

WEEP HOLES: Fibre Conduits shall be used for Weep Holes.

**ESTIMATED QUANTITIES**

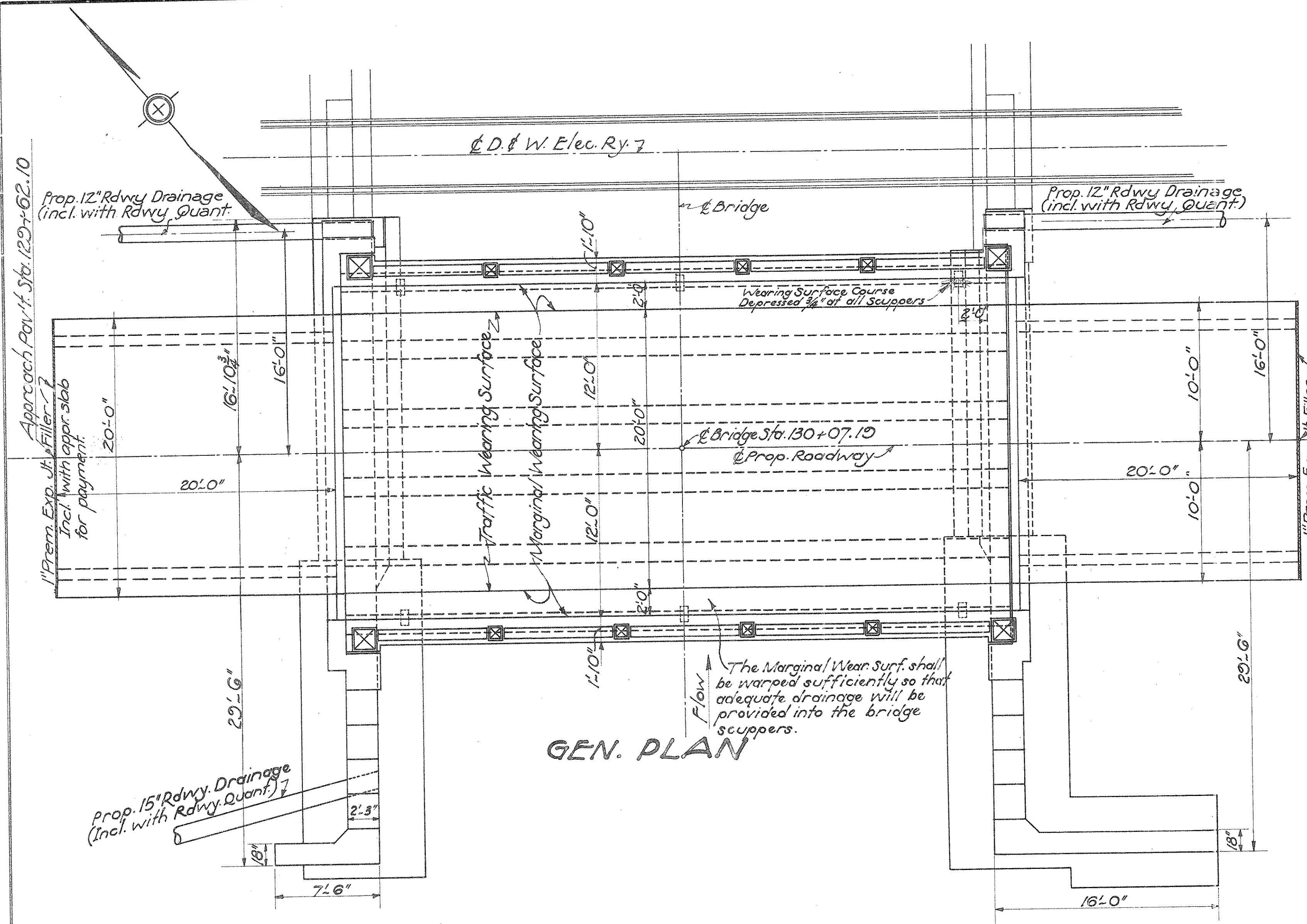
SUPERSTRUCTURE	
Concrete 1:5 1/2 Mix	76 Cu. Yd.
Reinf. Steel	21,972 Lb.
Reinf. Conc. Railing Type RR-10 (1:5 1/2 Mix)	25.3 Lin. Ft.
2" Bituminous Prem. Exp. Ut. Filler	11 Sq. Ft.
Expansion Joint	Lump Sum
1/2" Cast Lead Bronze Plates	173 Lb.
Cast Iron Scuppers (B-33)	6 Pieces
4" Plain Conc. Wearing Surface (Bridge) 1:5 1/2 Mix	127.7 Sq. Yd.
Reinf. Conc. Appr. Slabs 20'-0" x 12 1/2" (1:5 1/2 Mix)	83.2 "

SUBSTRUCTURE	
Dry Excavation	30 Cu. Yd.
Wet "	170 "
Channel "	560 "
Concrete Walls (1:6 1/2 Mix)	79.0 "
" Footers (1:6 1/2 Mix)	81.3 "
Reinf. Steel (Including Replacement Steel)	6102 Lb.
Type "B" Waterproofing 36" Wide	49 Sq. Yd.
Removal of Portions of Exist. Masonry	Lump Sum
First Test Pile (Timber)	"
Timber Piling (Est. Length 20') (to Apply from 0 to 1000 Lin. Ft.)	860 Lin. Ft.
Steel Pile Point (to establish unit price)	1 Unit

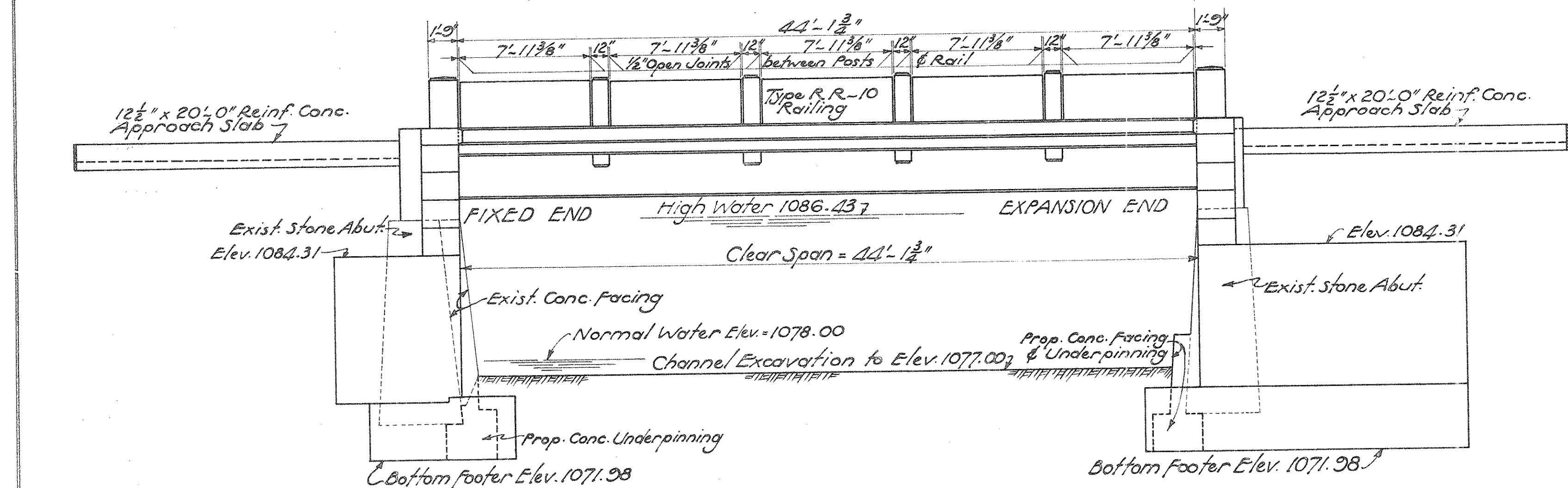
Cofferdams, Sheeting, & Pumping	Lump Sum
18" Handlaid Stone Rip Rap (Grouted)	10 Sq. Yd.
Removal of Trees	3 Trees
1" x 12" Dowel Holes (incl. grouting)	57 Lin. Ft.
1" x 15" " " " "	33 "

**PART PROPOSAL NO 2**

BR. NO. PR-11-82			
GEN. PLAN, ELEVATION, GEN. NOTES, EST. QUANTITIES			
CONC. BEAM BRIDGE OVER CRUMBAKER RUN			
STA. 130+07.19			
44'-1 3/4" SPAN		24' ROADWAY	
S.H. 249 SEC. D. Pt. PREBLE COUNTY			
Scale 3/16" = 1'-0" 1934			
DRAWN	TRACED	CHECKED	REVIEWED
O.T.M.	H.E.D.	R.H.H.	W.H.B.



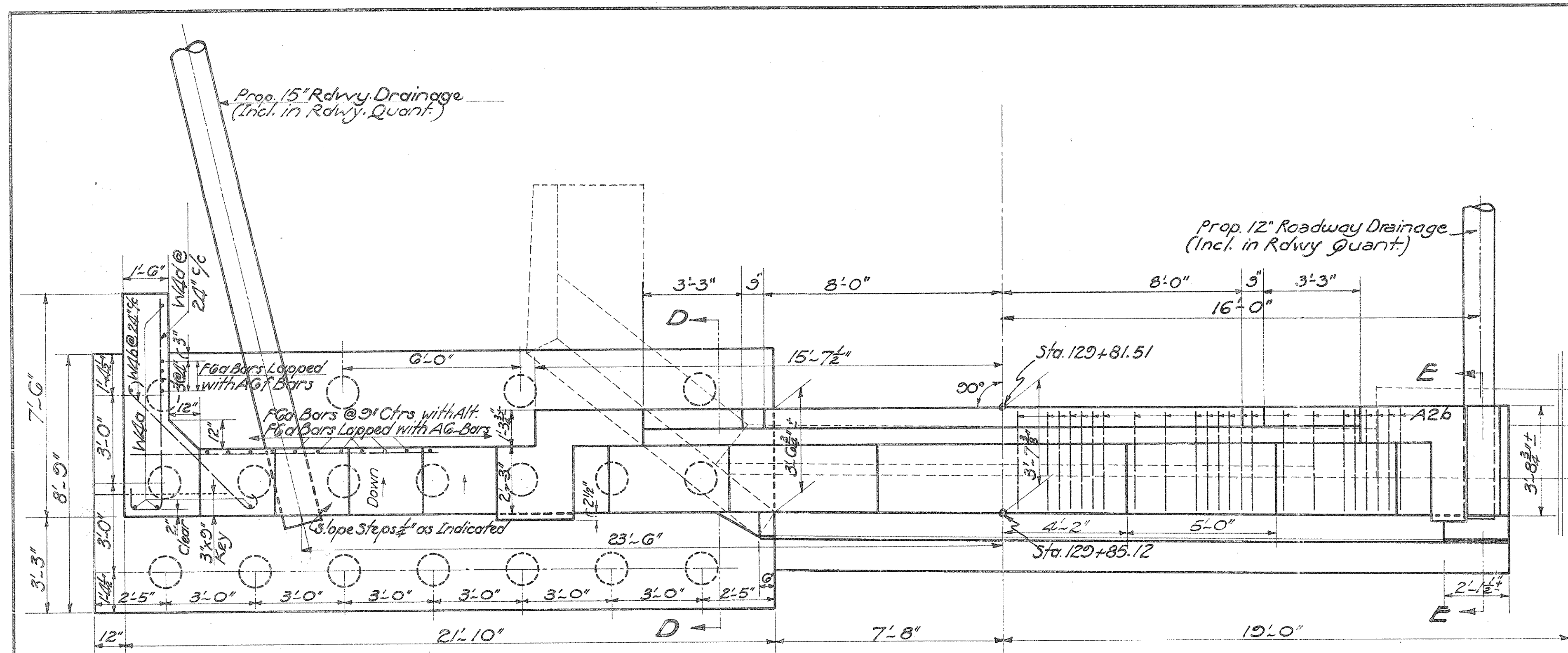
**GEN. PLAN**



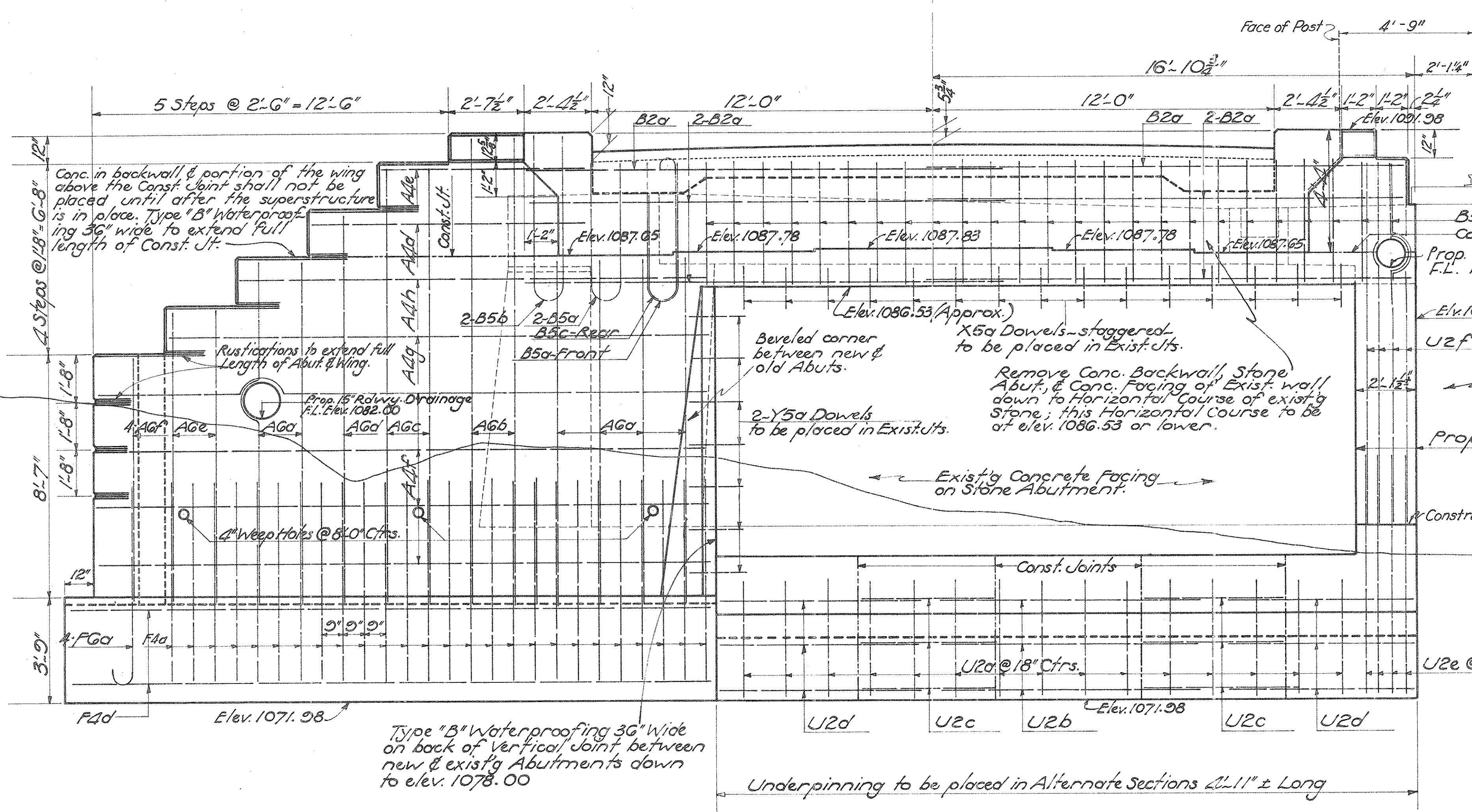
**ELEVATION**

10

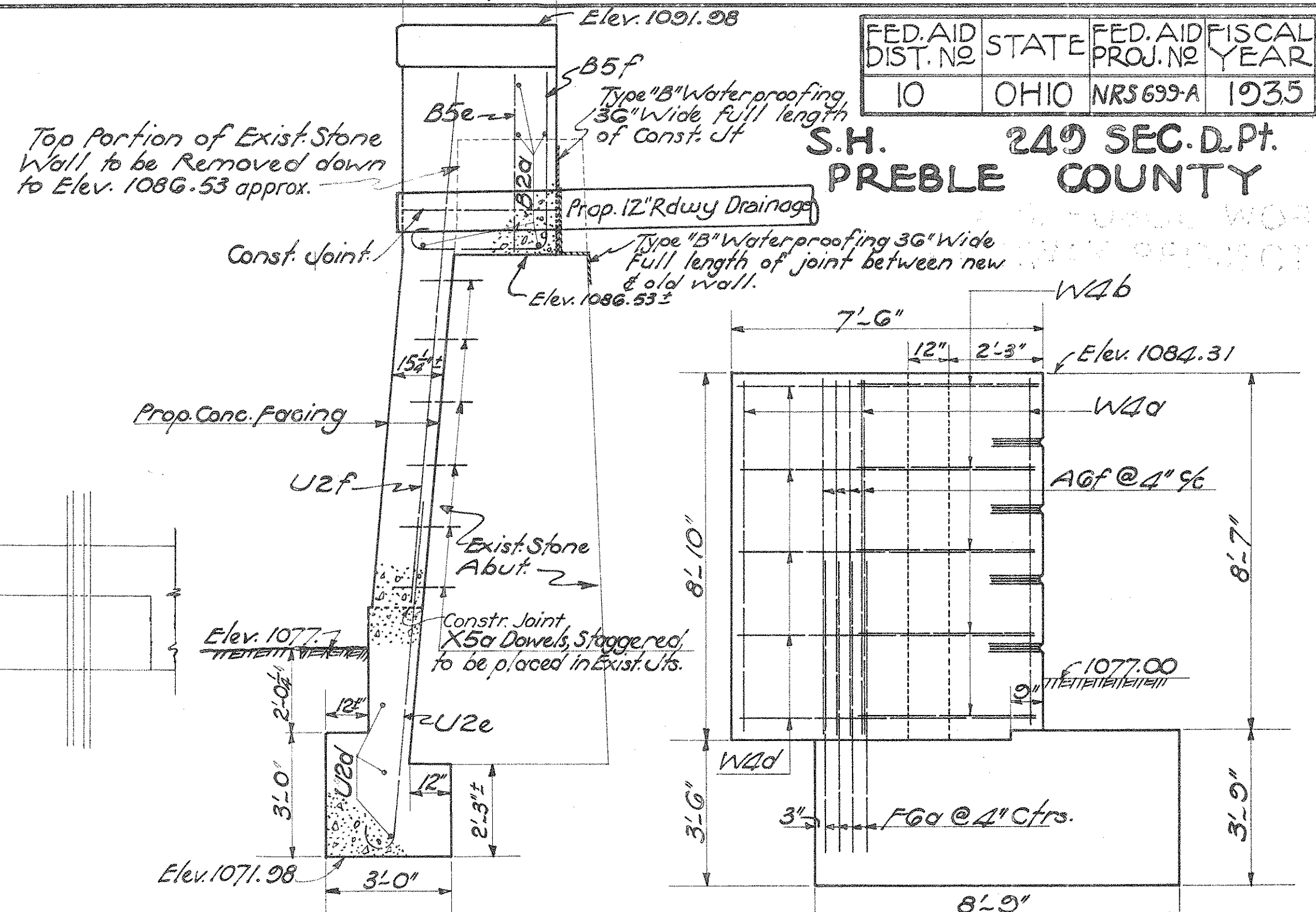
S.H. 24<sup>th</sup> SEC. D. Pt.  
PREBLE COUNTY



PLAN WEST ABUTMENT

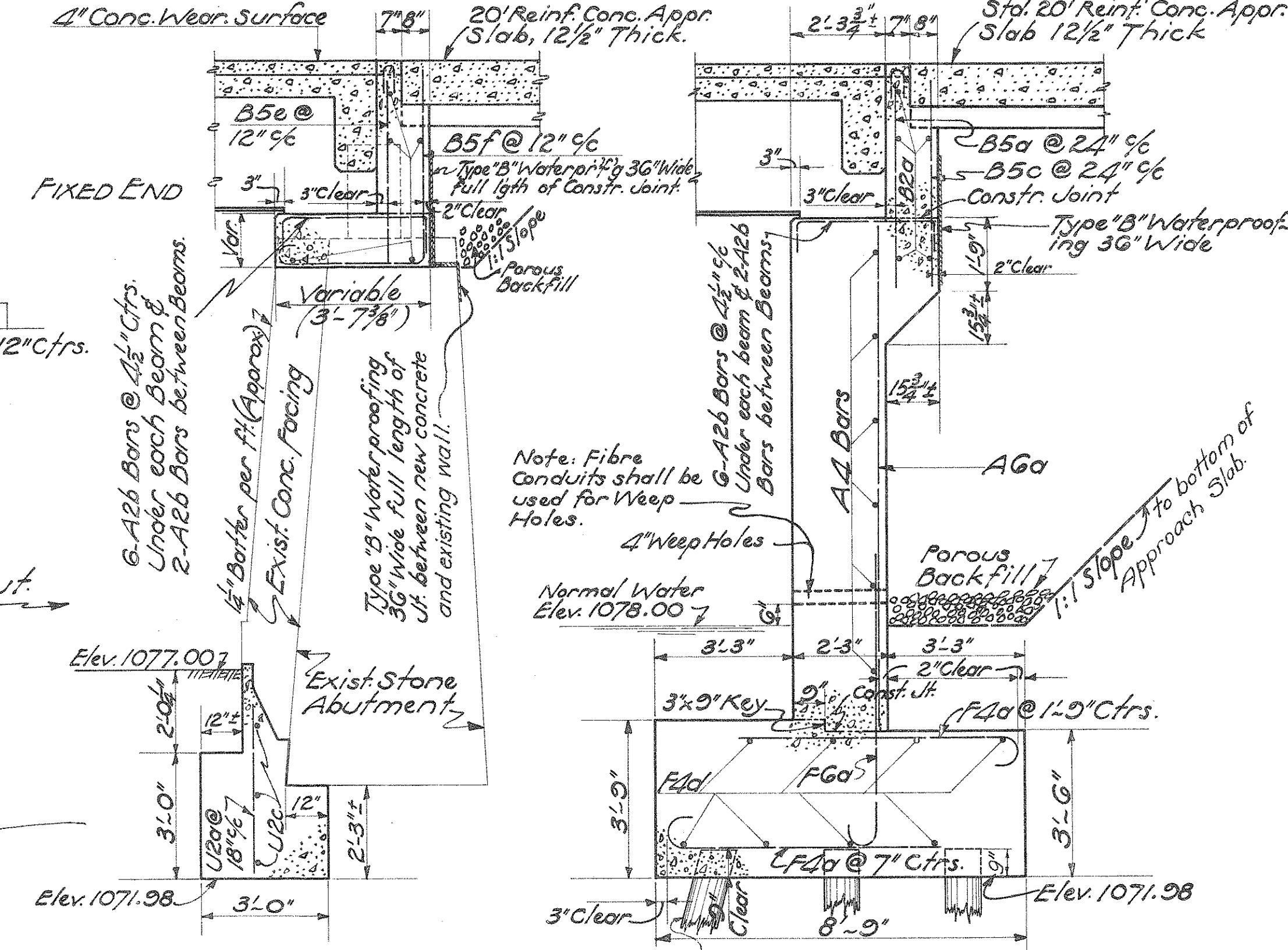


ELEVATION W. ABUT.



SEC. E-E

END VIEW OF WING



SECTION ON G

SEC. D-D

Note: If piles are not used, raise bottom of footers to elev. 1072.48 thereby decreasing thickness of footers by 6". For detail of pile point see sheet no. 45

BR. NO PR-11-82

**WEST ABUTMENT DETAILS**

CONC. BEAM BRIDGE OVER CRUMBAKER RUN

STA. 130+07.19

44'-1 1/2" SPAN      24' ROADWAY

S.H. 24<sup>th</sup> SEC. D. Pt.

PREBLE COUNTY

Scale 3/8" = 1'-0"

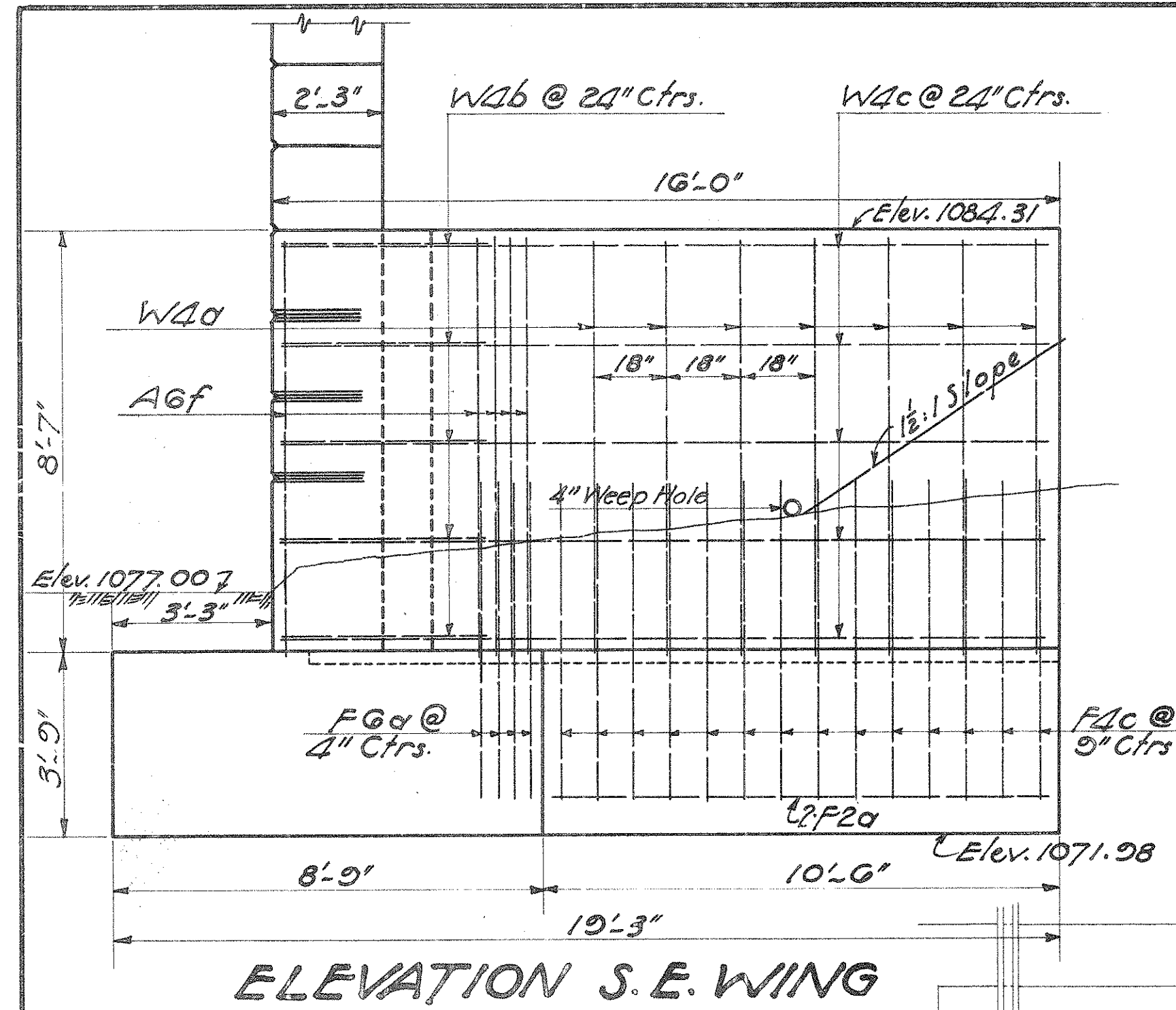
DRAWN	TRACED	CHECKED	REVIEWED
O.T.M.	H.E.D.	R.H.H.	J.H.C.

1934

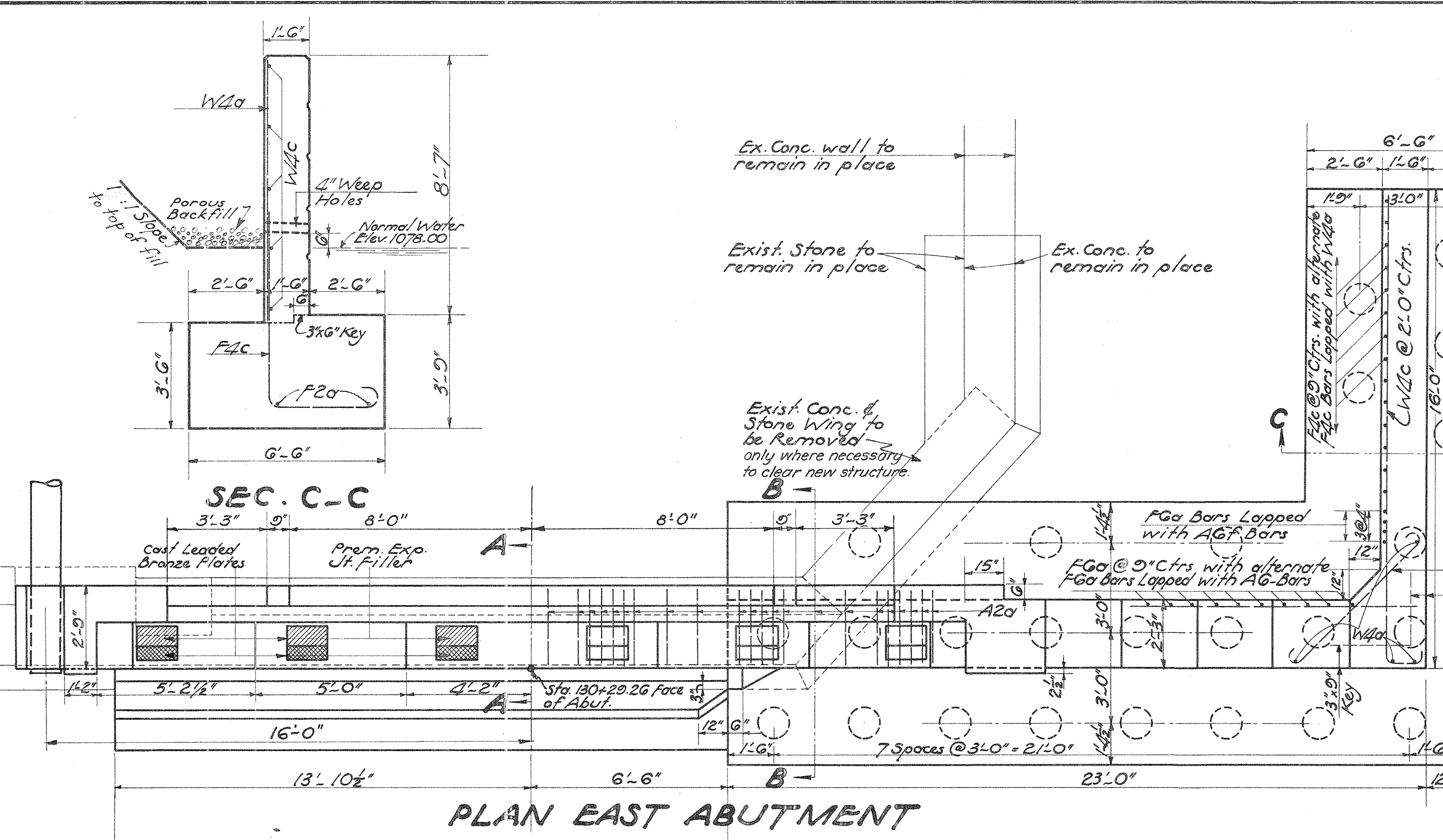
PART PROPOSAL NO 2

S.H. 240, SEC. D. Pt. PREBLE COUNTY

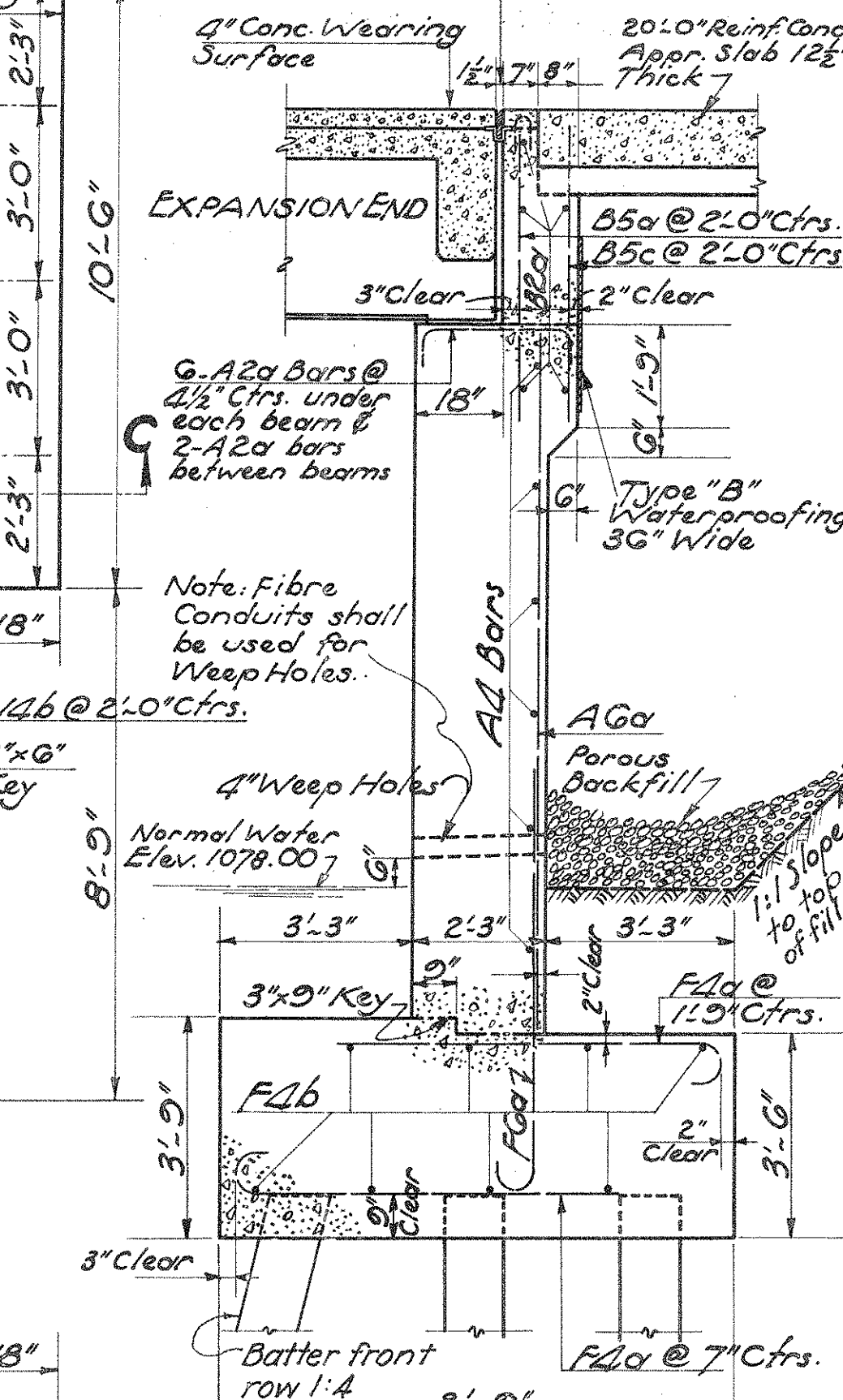
For Details of this Constr. Jt. See Std. Drwg. No. B.D.-33.



ELEVATION S.E. WING

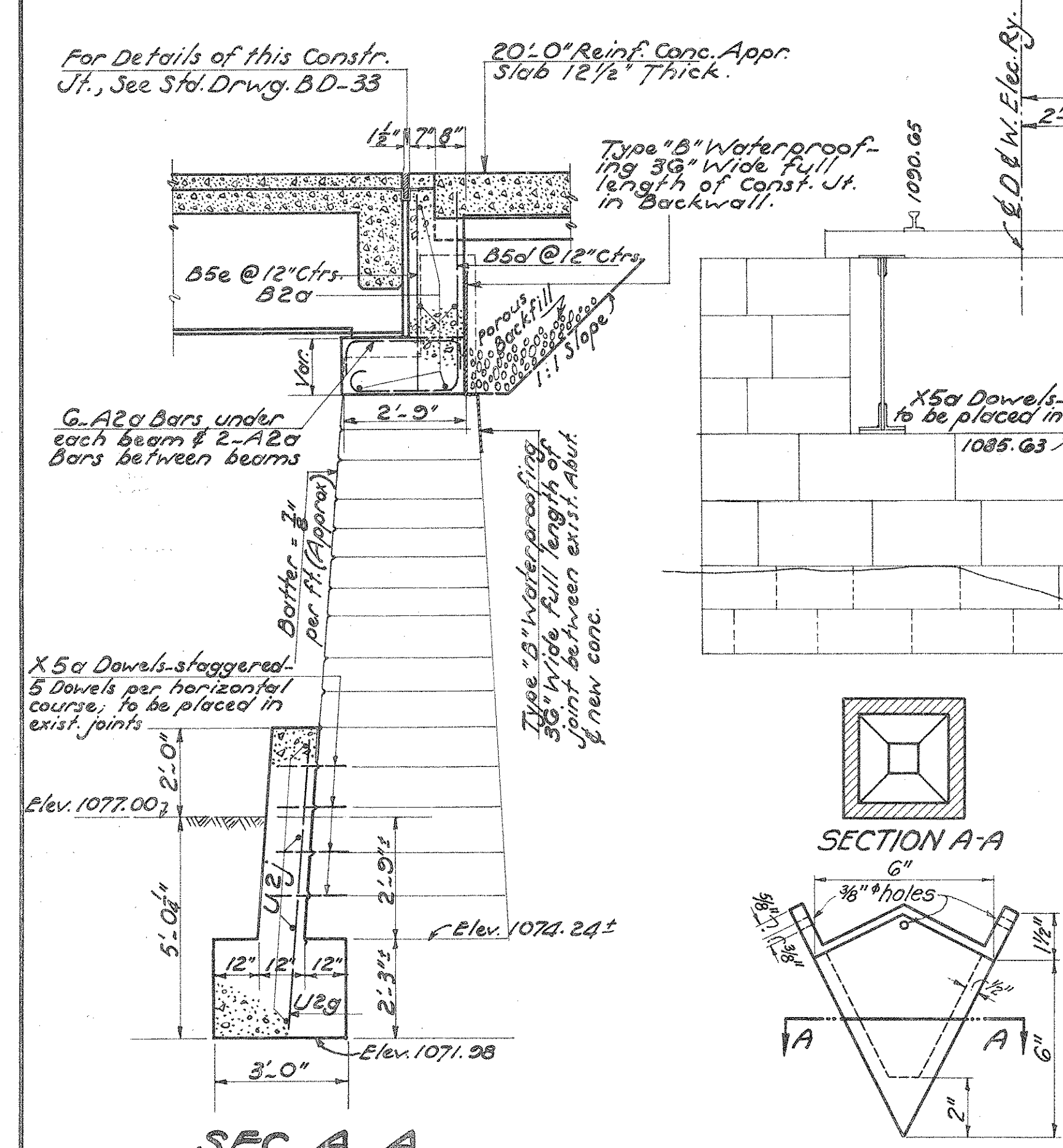


PLAN EAST ABUTMENT

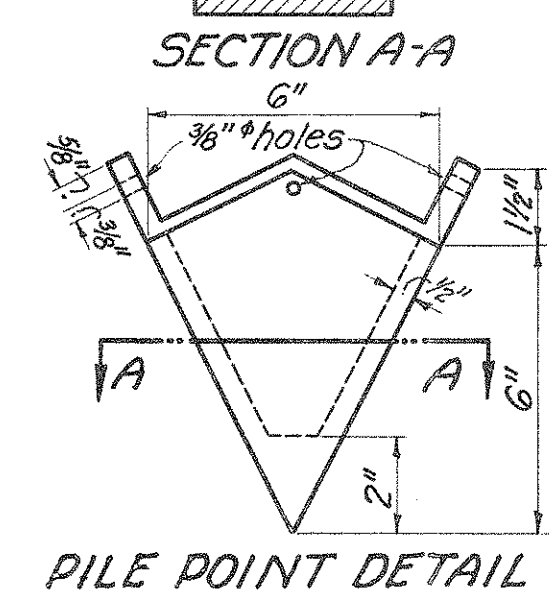


SEC. B-B

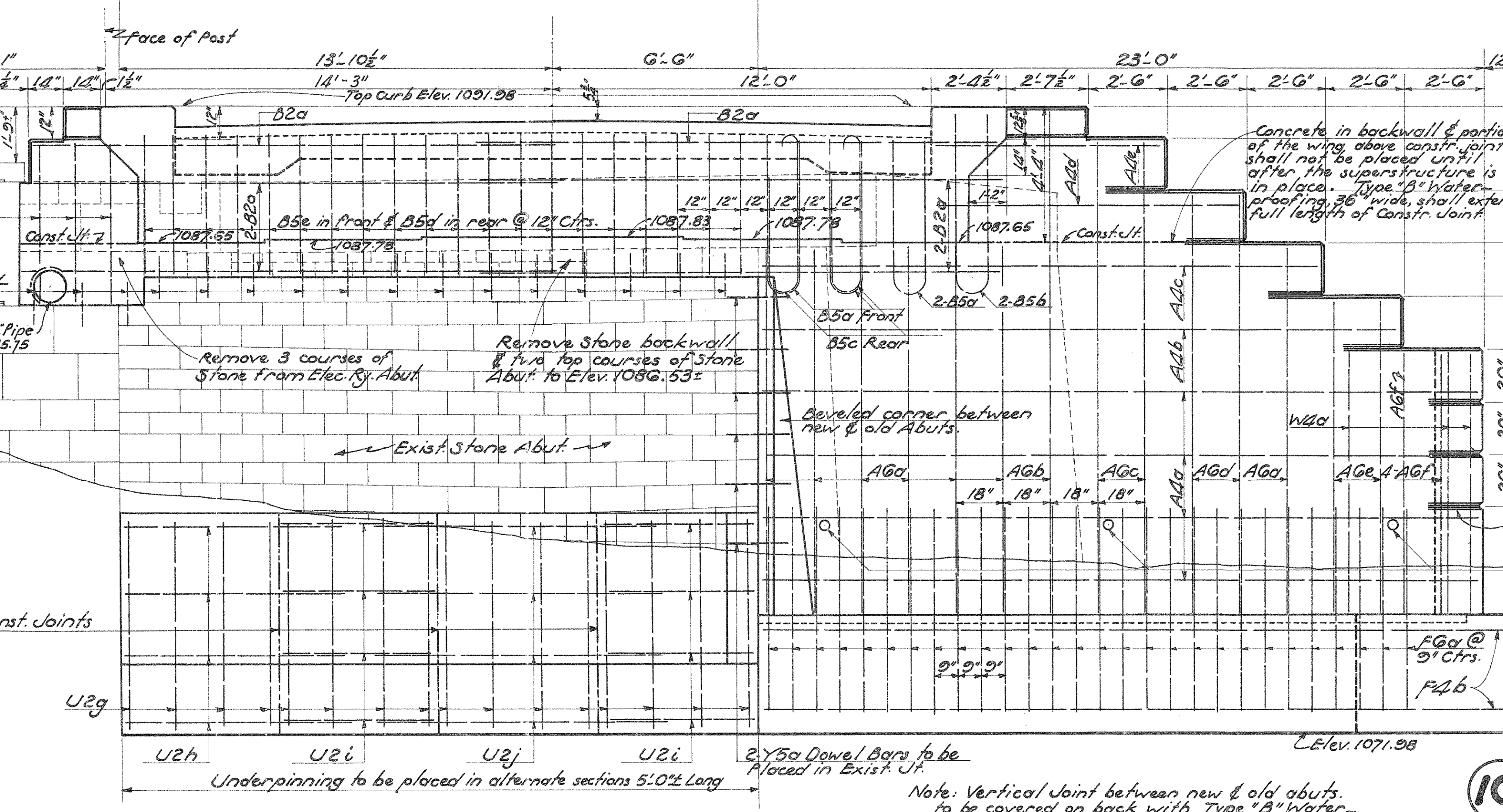
Note: If piles are not used, bottom of footers shall be raised to elev. 1072.28 thereby decreasing thickness of footers G.



SEC. A-A



PILE POINT DETAIL



ELEVATION E. ABUT.

BR. No PR-11-82  
**EAST ABUTMENT DETAILS**  
**CONC. BEAM BRIDGE OVER CRUMBAKER RUN**  
 STA. 130 + 07.19  
 44'-1 1/2' SPAN 24' ROADWAY  
 S.H. 240, SEC. D. Pt. PREBLE COUNTY  
 Scale 3/8" = 1'-0"  
 DRAWN TRACED CHECKED REVIEWED  
 O.T.M. HED. R.H.H. J.H.P. J.H.P.

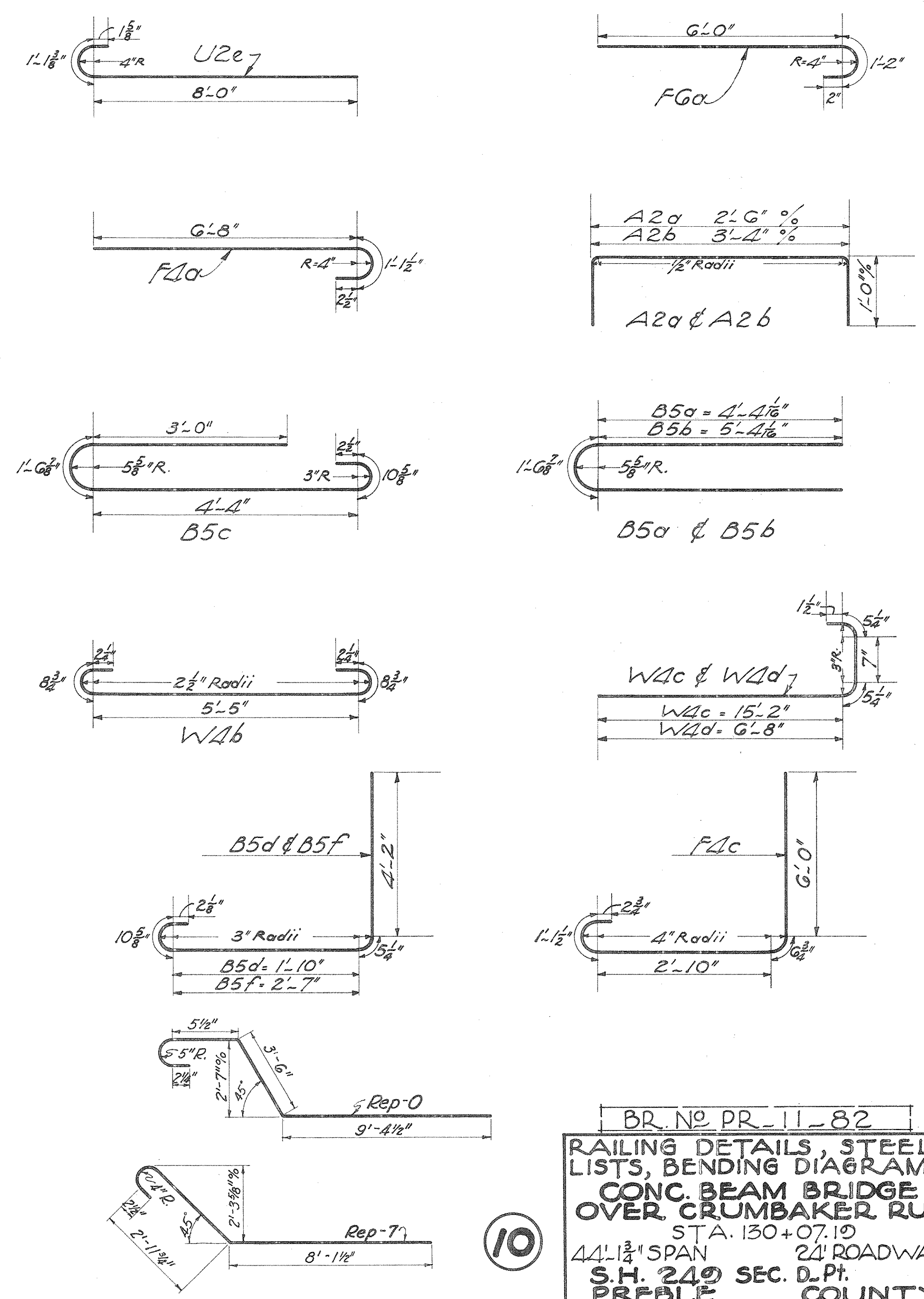
10

PART PROPOSAL No 2

Note: Vertical Joint between new & old abuts. to be covered on back with Type "B" Waterproofing 36" wide down to elev. 1078.00.

S.H. 240 SEC. D.P.  
PREBLE COUNTY

SUBSTRUCTURE BENDING DIAGRAMS



BR. NO PR-11-82  
RAILING DETAILS, STEEL LISTS, BENDING DIAGRAMS  
CONC. BEAM BRIDGE OVER CRUMBAKER RUN  
STA. 130+07.10  
44'-1 1/2" SPAN 24' ROADWAY  
S.H. 240 SEC. D.P.  
PREBLE COUNTY  
Scale as Shown JUNE, 1934  
DRAWN TRACED CHECKED REVIEWED  
O.T.M. H.E.D. R.H.H. J.P.H. W.H.C.

PART PROPOSAL No 2

STEEL LIST

WEST ABUTMENT						
MARK	SIZE	SHAPE	SPACING	NO REOD	LENGTH	WEIGHT
AGa	7/8" φ	Strt.	18"	6	11'-9"	144 Lb.
AGb	"	"	18"	2	16'-0"	65
AGc	"	"	18"	2	15'-0"	61
AGd	"	"	18"	1	13'-4"	27
AGe	"	"	18"	2	10'-0"	41
AGf	"	"	4"	4	8'-4"	68
A4d	5/8" φ	Bend in field		1	9'-6"	10
A4e	"	"		1	7'-0"	7
A4f	"	strt.	2'-0"	4	21'-3"	90
A4g	"	"		1	18'-9"	20
A4h	"	"		1	16'-3"	17
B5a	3/4" φ	Bent	2'-0"	3	10'-3"	46
B5b	"	"		2	12'-3"	37
B5c	"	"		1	10'-0"	15
B5e	"	strt.	12"	25	4'-6"	169
B5f	"	Bent	12"	25	8'-3"	310
B2a	1/2" φ	Strt.		10	16'-6"	110
A2b	"	Bent		46	5'-2"	159
F6a	7/8" φ	"	9"	30	7'-4"	450
F4a	5/8" φ	"	7" & 21"	52	8'-0"	435
F4d	"	strt.	2'-0"	8	22'-0"	184
W4a	"	"		5	8'-6"	44
W4b	"	Bent	2'-0"	5	7'-3"	38
W4d	"	"	2'-0"	5	8'-3"	43
X5a	3/4" φ	strt.		21	1'-6"	47
Y5a	"	"		14	2'-0"	42
U2a	1/2" φ	"	18"	15	4'-0"	40
U2b	"	"		3	5'-0"	18
U2c	"	"		6	4'-9"	19
U2d	"	"		6	7'-0"	28
U2e	"	Bent	4"	4	9'-3"	25
U2f	"	Strt.	4"	4	12'-6"	33

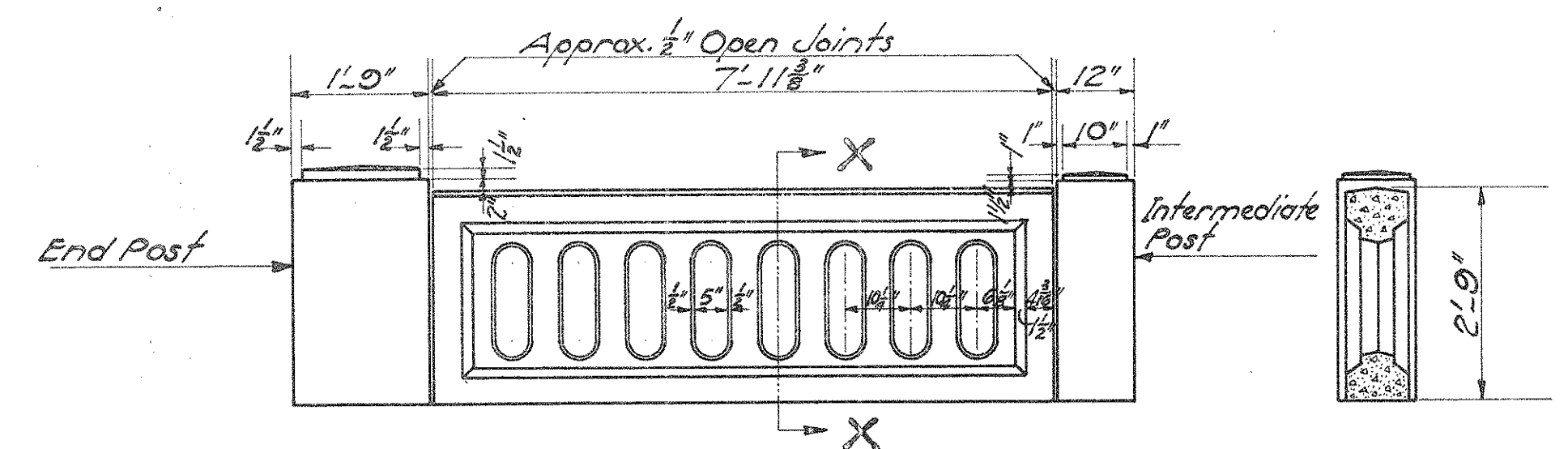
EAST ABUTMENT

AGa	7/8" φ	Strt.	18"	7	11'-9"	168
AGb	"	"	18"	1	16'-0"	33
AGc	"	"	18"	2	15'-0"	61
AGd	"	"	18"	2	13'-4"	55
AGe	"	"	18"	2	10'-0"	41
AGf	"	"	4"	5	8'-4"	85
A4a	5/8" φ	"	24"	4	22'-6"	94
A4b	"	"	24"	1	20'-0"	21
A4c	"	"	24"	1	17'-6"	18
A4d	"	"		1	9'-6"	10
A4e	"	"		1	7'-0"	7
A2a	1/2" φ	Bent	As Shown	46	4'-4"	133
B5a	3/4" φ	"	24"	4	10'-3"	62
B5b	"	"		2	12'-3"	37
B5c	"	"	24"	2	10'-0"	30
B5d	"	"	12"	20	7'-6"	225
B5e	"	strt.	12"	20	4'-6"	135
B2a	1/2" φ	"	As Shown	10	16'-6"	110
A2c	"	"		3	5'-0"	10
F6a	7/8" φ	Bent	9"	32	7'-4"	480
F4a	5/8" φ	"	7" & 21"	54	8'-0"	451
F4b	"	strt.	As Shown	8	23'-6"	196
F4c	"	Bent	9"	12	10'-9"	157
F2a	1/2" φ	Strt.	As Shown	2	10'-0"	13
W4a	5/8" φ	"		11	8'-6"	98
W4b	"	Bent	24"	5	7'-3"	38
W4c	"	"	24"	5	16'-9"	87
X5a	3/4" φ	strt.		36	1'-6"	81
Y5a	"	"		12	2'-0"	36
U2g	1/2" φ	"	18"	16	6'-6"	69
U2h	"	"	24"	4	7'-0"	19
U2i	"	"	24"	8	4'-9"	25
U2j	"	"	24"	4	9'-0"	24

REPLACEMENT STEEL

Rep-1	3/8" φ	Strt.		1	5'-6"	2
" -2	1/2" φ	"		1	6'-0"	4
" -4	5/8" φ	"		1	6'-6"	7
" -5	3/4" φ	"		1	7'-0"	10
" -6	7/8" φ	"		1	7'-6"	15
" -7	1" φ	Bent		1	12'-6"	33
" -8	1 1/2" φ	"		1	15'-0"	80

Total Substructure and Replacement Steel 6102 Lb.



ELEVATION-TYPICAL RAILING PANEL -- TYPE RR-10  
Scale 1/2" = 1'-0"

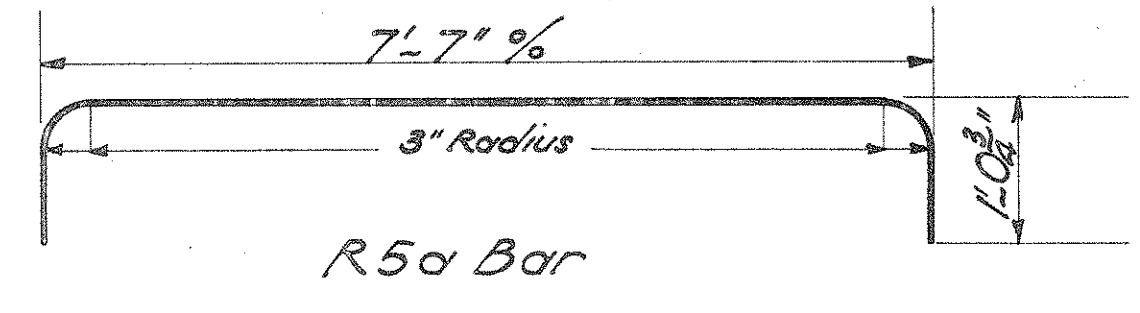
For further Details of Railing, See Std. Drwg. B-45-33

STEEL LIST

* SUPERSTRUCTURE					
MARK	SIZE	SHAPE	NO REOD	LENGTH	WEIGHT
R5a	3/4" φ	Bent	20	9'-4"	Included for Payment with Railing
R4a	5/8" φ	Strt.	20	7'-7"	
R1a	3/8" φ	"	20	7'-7"	

\* All Superstructure Bars not Listed Above are the Same as Listed on Std. Drwg. No B-45-33.

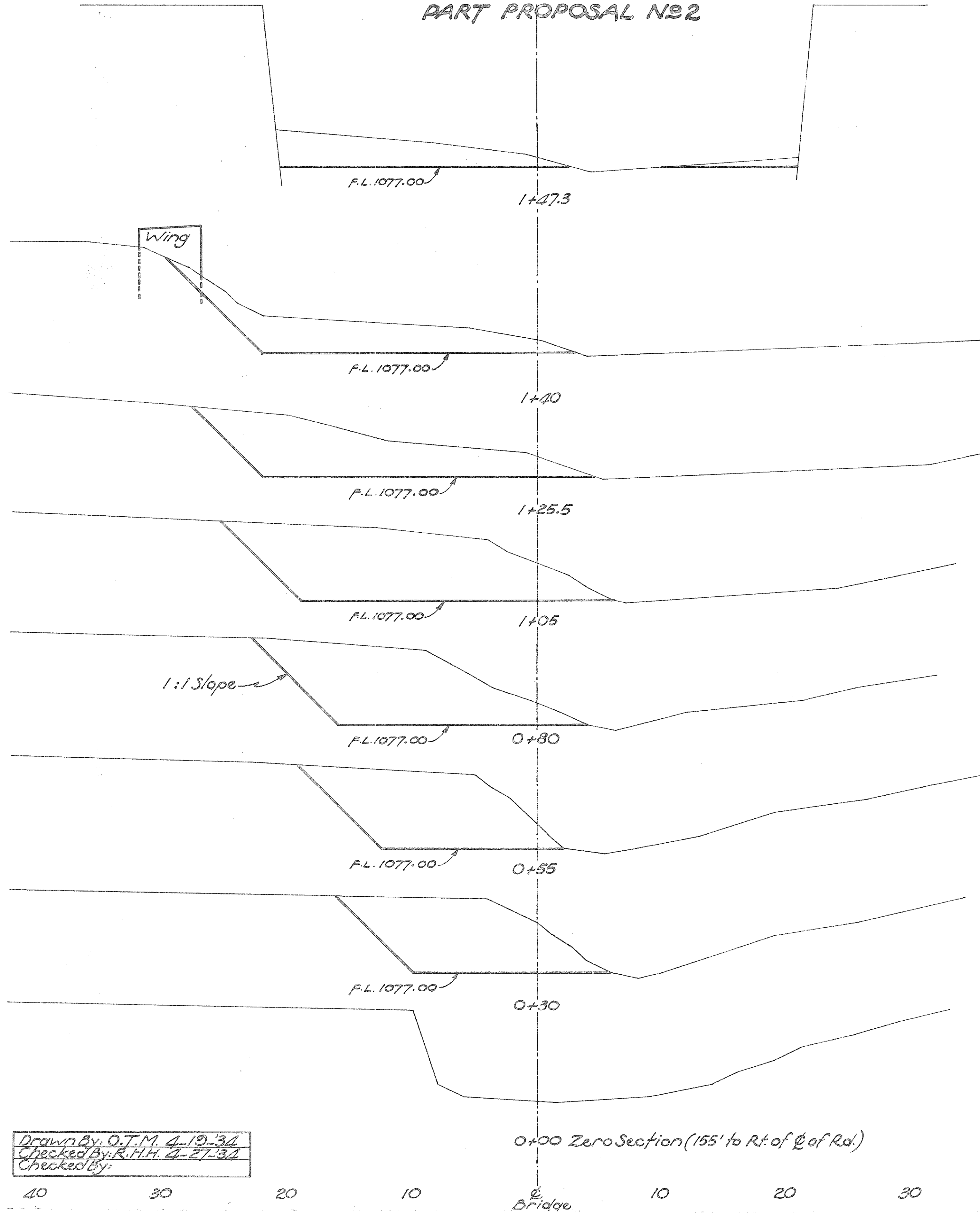
\* SUPERSTRUCTURE BENDING DIAGRAMS



\* All Superstructure Bending Diagrams, with the Exception of the one Shown Above, are the Same as Shown on Std. Drwg. No B-45-33.

# CHANNEL SECTIONS FOR CRUMBAKER RUN

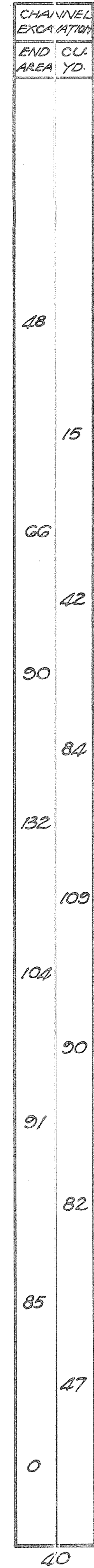
STA. 130+07.19  
BR. NO. PR-11-82  
PART PROPOSAL NO. 2



Drawn By: O.T.M. 4-19-34  
Checked By: R.H.H. 4-27-34  
Checked By:

40 30 20 10 0+00 Bridge 10 20 30

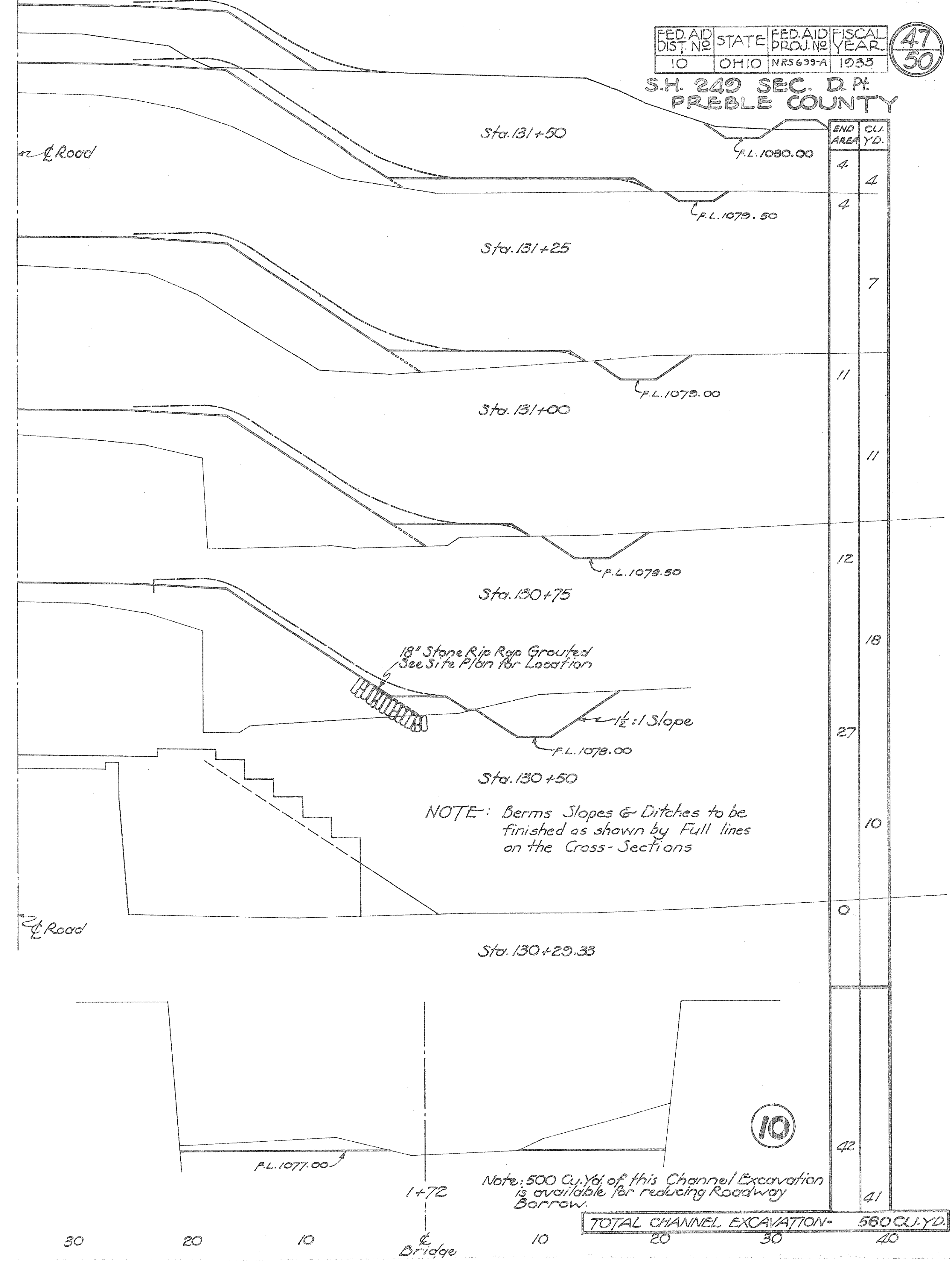
0+00 Zero Section (155' to Rt. of C of Rd)



FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR.
10	OHIO	NRS 699-A	1935

47  
50

S.H. 249 SEC. D. Pt.  
PREBLE COUNTY



END AREA	C.U. AREA	YD.
4	4	4
4	4	4
7	7	7
11	11	11
11	11	11
12	12	12
18	18	18
27	27	27
10	10	10
0	0	0
42	42	42
41	41	41

NOTE: Berms Slopes & Ditches to be finished as shown by Full lines on the Cross-Sections

Note: 500 Cu. Yd. of this Channel Excavation is available for reducing Roadway Borrow.

TOTAL CHANNEL EXCAVATION = 560 CU. YD.

30 20 10 0+29.33 Bridge 10 20 30 40



# SUMMARY OF QUANTITIES

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS 699-A	1955

48  
50

S.H. 240 SEC. "D" - PART I  
PREBLE COUNTY  
(PROPOSALS NO 1 & 2)

## STRUCTURES OVER 20 FT. SPAN - - - PROPOSAL NO 2

Struct. No.	Bridge No.	Station	Type	Span	Rdwy	Excavation Cu. Yd.			Concrete Cu. Yd.			Reinf. Steel Lb.	Reinf. Conc. Railing (1.5% Mix) Lin. Ft.	Waterproofing Sq. Yd.		Prem. Exp. Jt. Filler Sq. Ft.	Dowel Holes Lin. Ft.			Conc. Wearing Surface 1:5 1/2 Mix Sq. Yd.	Timber Piling (To Estab. Unit Price) Apply from 0 to 1000 Lin. Ft.	First Test Pile (Timber) Lump	Cofferdam Sheeting & Pumping Lump	Removal of Portions of Existing Masonry Lump	Expansion Joint Lump	Cast Lead Bronze Plates Lb.	Cast Iron Scuppers E-D Each	Tree Removal E-D Each	Reinf. Conc. Approach Slabs 20' x 12' (1.5% Mix) Sq. Yd.	Steel Piling Point Min. Wt. 10' (To Estab. Unit Price) Each	18" Stone Rip Rap (Grouted) Sq. Yd.	Std. Dwg. Nos.	See Sheet No.	
						Channel	Wet	Dry	1:5 1/2	1:6 1/2 Walls	1:6 1/2 Footers			Type "A"	Type "B"		1/4"	1/2"	1 1/2"															1 1/2"
1	PR-11-58	5+53.54	Conc. Slab Extension	22'-1 1/2"	36'		135	60	20.0	47.0	50.	5081	51.25		0.0	19	38.0	90		75.7	1.0		Lump	Lump	Lump						SB-33	3		
10	PR-11-82	130+07.19	Conc. Beam	44'-1 3/4"	24'		560	170	30	76.0	79.0	81.3	28074	95.3		49.0	11.0			127.7		860.	Lump	Lump	Lump	Lump	173	G	3	89.2	1	10.0	B-25-33, RR-B, AS-33	

## STRUCTURES UNDER 20 FT. SPAN PROPOSAL NO 1

No.	Station	Type	Size	Length	Excavation			Reinf. Steel Lb.	Pipe Under Pavement		Pipe Not Under Pavement Lin. Ft.	Corr. Metal Pipe (2-3) Paved Invert, or 12" Cast Iron Lin. Ft.	Dowel Holes		Waterproofing		Conc. Wear. Surface 1:5 1/2 Mix 5" Ave. Thick Sq. Yd.	Painting Existing Masonry Sq. Ft.	Std. No. 2-2 Catch Basin Std. Dwg. No. I-8 CB 1101.22 Each	Std. No. 1 Side Ditch Inlets Std. Dwg. No. I-8 I NR 1 Each	Removal of Existing Masonry Lump	Std. Dwg. No.	See Sheet No.		
					Cu. Yd.	1:6 1/2 Footers Cu. Yd.	1:5 1/2 Cu. Yd.		12" Lin. Ft.	15" Lin. Ft.			24" Lin. Ft.	Each	Type "A" 24" Wide Sq. Yd.	Type "B" 36" Wide Sq. Yd.									
																								12" x 12"	15" x 15"
2	36+31.3	Std. Conc. Slab Top	6'-0" x 3'-0"	11'-0" Ext. Rt.	25	3.0	5.2	401.					8	5		5.2						Lump	STC-34	3	
3	36+31.3 Rt.	Std. Pipe Side Road	15"	78'-0"	35				78	26	8								1			Lump	I-8CB1-2&2-2 5-27 PC 3	5	
4	45+11	Std. Pipe	24"	12'-0" Ext. Rt.	4		1.3		12											1		Lump	5-27 PC-2 I-8 I NR 1	3	
5	47+27 Rt.	Corr. M. Pipe Side Road	12"	60'-0"	10						60											Lump	5-27 PC 3	3	
6	61+06	Std. Pipe	12"	40'-0"	20		0.6															Lump	5-27 PC-2&3	3	
7	71+35	Spec. Conc. Slab Top	7'-0" x 4'-0"	15'-6" Ext. Rt.	40	4.1	8.9	621.					10		4.0	3.2	38.4			1		Lump	I-8CB NR 1-2&2-2 STC-34	5	
8	83+84	Exist. Tile	6"	-																1		Lump	I-8CB 1-2&2-2	3	
9	106+30	Spec. Conc. Slab Top	11'-0" x 3'-0"	18'-6" Ext. Rt.	35	5.6	10.8	860					9			13.3						Lump	STC-34	5	
11	143+58	Std. Pipe	15"	16'-0" Ext. Rt.	5		0.7		16													Lump	5-27 PC 2&3 I-8 I NR 1	3	
12	158+21.4 Rt.	Corr. M. Pipe Side Road	15"	74'-0"	15						74											Lump	5-27 PC-3	3	
<b>TOTALS</b>					189	12.7	27.5	1882.40	94	12	26	8	60	74	27	5	4.0	21.7	38.4	60	3		Lump	2	

**PROP. NO 1  
TREE REMOVAL**

Sheet No.	Diameter (No. of Trees)				
	9"	10"	12"	15"	18"
4	1	1			
7			2	2	1
8			3		3
10			2	1	
<b>Total</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>3</b>	<b>4</b>

**PROP. NO 1  
TYPE S.C. GRD RAIL**

Sheet No.	Lin. Ft.
4	64
10	336
<b>Total</b>	<b>400</b>

**PROP. NO 1  
PIPE REMOVAL**

Sheet No.	Tile Lin. Ft.					V.S.P. Lin. Ft.	Corr. M. Pipe Lin. Ft.																	
	4"	6"	8"	10"	12"		8"	10"	12"	15"	18"													
6					105																			
7					89					14					24	15								
9					97					16					249									
10															16							20		
11										63					200							16	18	
12																						32		
<b>Total</b>	<b>97</b>	<b>912</b>	<b>168</b>	<b>249</b>	<b>305</b>	<b>14</b>	<b>32</b>	<b>74</b>	<b>15</b>	<b>20</b>														

Note: For 10", 12", 15", & 18" Corr. M.P. listed for removal, payment shall be made in the price bid per Lin. Ft. for "Pipe Removed & Stored".  
The remaining pipe removal shall be included in the price bid for "Rdwy. Excavation" as per note on Sheet No. 3.

**PROP. NO 1  
TRENCH REINFRNG**

Sheet No.	Weight - Lb.
4	284
5	2109
6	1276
7	326
<b>Total</b>	<b>3995</b>

Drawn By: R.H.H. 12-8-54  
Chkd By: S.A. 1-30-55  
Chkd By: E.H.G. 1-30-55

# SUMMARY OF QUANTITIES

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NRS.689A	1935



**PREBLE COUNTY**  
**S.H. 249 SEC. "D (Pt.)"**

## EXCAVATION & EMBANKMENT

Stations	Excavation Cu.Yds.	Channel # Excavation Cu.Yds.	Embankment Cu.Yds.	Embankment +20% Cu.Yds.	Borrow Cu.Yds.	Waste Cu.Yds.
0+00 to 15+00	1107		1135	1362	255	
15+00 to 33+00	1572		679	815		757
33+00 to 54+98	1801		1501	1801		
54+98 to 65+37	683		569	683		
65+37 to 82+00	736		1168	1402	666	
82+00 to 104+60.7	1397		1164	1397		
104+60.7 to 115+00	229		1127	1352	1123	
115+00 to 127+84.8	1070		914	1097	27	
127+84.8 to 138+70.5	587	500	1806	2167	1080	
138+70.5 to 161+00	1088		1657	1988		
<b>Totals</b>	<b>11,170</b>	<b>500</b>	<b>11,720</b>	<b>14,064</b>	<b>3,151</b>	<b>757</b>

\* Channel Excav. Included for Payment under Prop. N<sup>o</sup> 2 & shall be used to supply borrow.  
Waste = 757 Cu.Yds.  
Net Borrow 2394 Cu.Yds.

## DRIVES & RD. APPROACHES

Sheet No	Extra 9'-7"-7'-9" Conc. Pav't. Item T-70 Sq.Yds.	6" Conc. Pav't. Item T-70 Sq.Yds.	Traffic Bound Item I-17 Size N <sup>o</sup> 46 Cu.Yd.	Corr. M.P. Item I-1 Lin. Ft. 12"	9' X 3' Raised Conc. Curb Item I-12	
					Lin. Ft. Add	Deduct
4		34.8	15	54		
5	152.6	281.1	21			15.9
6	149.7	160.1	27			
7	88.3	31.7	21	22		
8	46.9	11.6	10			
9		54.9	11			
10		21.4	3			
11		18.4	3			
12	177.8		8			
<b>Totals</b>	<b>615.3</b>	<b>614.0</b>	<b>119</b>	<b>76</b>		<b>15.9</b>

Net Deduction 15.9

Beginning of Project Sta 0+00  
End of Project Sta 161+00  
Gross Length of Project 16100.00 Lin. Ft.  
Add for Equation Sta 25+00 Ahead = Sta 25+01 Back 1.00 " "  
Net Length of Project 16101.00 Lin. Ft. = 3.049 Miles

### PROPOSAL LENGTHS

PROPOSAL N<sup>o</sup> 2  
Sta 5+41.23 to Sta 5+65.85 = 24.62 Lin. Ft.  
Sta 129+62.10 to Sta 130+51.42 = 89.32 " "  
Net Length of Proposal N<sup>o</sup> 2 113.94 Lin. Ft. = 0.021 Miles  
Net Length of Proposal N<sup>o</sup> 1 15981.06 Lin. Ft. = 3.028 Miles

### PAVEMENT CALCULATIONS

PROPOSAL N<sup>o</sup> 1  
**SPECIAL PAVEMENT 9'-7"-7'-9" ITEM T-70**  
Net Length (See Sheet N<sup>o</sup> 2) 2136.34 Lin. Ft.  
2136.34 X 20 X 1/9 = 4747.42 Sq.Yds.  
Extra (See Summary) 550.80 " "  
Total Special Pav't. 9'-7"-7'-9" Item T-70 5298.22 Sq.Yds.

**20 FT. PAVEMENT 9'-7"-7'-9" ITEM T-70**  
Net Length (See Sheet N<sup>o</sup> 2) 13664.72 Lin. Ft.  
13664.72 X 20 X 1/9 = 30366.0 Sq.Yds.  
Extra (See Summary) 615.3 " "

Total 20 Ft. Pav't. 9'-7"-7'-9" Item T-70 30981.3 Sq.Yds.  
**9' X 3" RAISED CONC. CURB ITEM I-12**  
Net Length of Special Pav't. (See Sheet N<sup>o</sup> 2) 2136.34 Lin. Ft.

2136.34 X 2 = 4272.68 Lin. Ft.  
Deduction (See Summary) 15.9 Lin. Ft.  
Addition (See Summary) 290.45 " "  
Net Addition 274.55 " "  
Net Length 9' X 3" Raised Conc. Curb Item I-12 4547.23 Lin. Ft.

**FINISHING SHOULDERS SLOPES & DITCHES (BOTH SIDES) ITEM E-5**  
Gross Length of Project 16100.00 Lin. Ft.  
Addition (See Summary) 25.88 " "  
Net Length Finishing Shoulders, Slopes & Ditches (Both Sides) Item E-5 16125.88 Lin. Ft.

**ITEM I-17 (Size N<sup>o</sup> 46) TRAFFIC BOUND SIDE APPROACHES**  
Berms (to be placed as directed) 598 Cu.Yds.  
16125.88 X 3 X 1/3 X 1/27 = 597.25 " Use 119 Cu.Yds.  
Extra for Drives & Rd. Approaches (See Summary) 8 Cu.Yds.  
Extra for Conc. Sidewalks (See Summary) 8 Cu.Yds.  
Total Traffic Bound Side Approaches Item I-17 725 Cu.Yds.  
Item I-17 (Size N<sup>o</sup> 46) for Mail Boxes to be placed as directed (20 Boxes X 3) = 180 " "  
Grand Total Item I-17 (Size N<sup>o</sup> 46 Aggr.) = 905 Cu.Yds.

### (3/2) T-33 PENETRATION MACADAM

From Sta. 1+75 to Sta. 5+41.23 = 366.23 Lin. Ft.  
" " 5+65.85 to " 20+48.85 = 1483.00 " "  
Net Length = 1849.23 Lin. Ft.  
1849.23 X 10 X 1/9 = 2054.7 Sq.Yds.  
Add for Flores (See Summary) 400.9 " "  
Total (3/2) T-33 Pent. Macadam = 2524.6 Sq.Yds.

## ROADWAY DRAINAGE

Sheet No.	Pipe Porous Backfill Lin. Ft.			Corr. Metal Pipe Under Drives Lin. Ft.			Catch Basins Standard 1-2 1-2.2 Each	Headwalls Std. Dwg. S-27 P.C. 1		
	12"	15"	18"	12"	15"	18"		Exc.	1.5% Conc.	Steel
								Cu.Yds.	Cu.Yds.	Lbs.
6	417			236			2	8	2.8	80
7	477			60			3	8	2.8	80
8	154			20			1	4	1.4	40
9	208	2580		40	40		2	8	3.2	88
10	1262	370	112	20		20	1	4	4.7	70
11	146		110	20				8	2.4	66
<b>Totals</b>	<b>2664</b>	<b>295</b>	<b>222</b>	<b>396</b>	<b>40</b>	<b>20</b>	<b>1</b>	<b>12</b>	<b>48</b>	<b>424</b>

## CONC. SIDEWALKS & STEPS

Sheet No	4" Conc. Sidewalk Item I-13 Sq. Ft.	Traffic Bound Item I-17 Size N <sup>o</sup> 46 Cu.Yd.	Conc. Steps 1.5 1/2 Mix 6" Rise 18' Tread Lin. Ft.
5	7208.1	2	6
6	1399.7	3	18
7	40.5	2	18
8	19.5	1	12
<b>Totals</b>	<b>9773.9</b>	<b>8</b>	<b>63</b>

## RDWY. DRAINAGE

Sheet No	N <sup>o</sup> 1 Stone Underdrain Lin. Ft.
6	60.
7	82.
8	118.5
9	104.5
10	59.
11	65.
12	21.
<b>Total</b>	<b>510.0</b>

## STORM SEWER

Sheet No.	Corr. Metal Pipe (b-3) Raved Inv. or R.C.P. (b) Lin. Ft.		Corr. Metal Pipe (b-3) Raved Invert or R.C.P. (b) Lin. Ft.			Item I-2 pipe Lin. Ft.			No. 4 Double Curb Inlets Std. Dwg. I-81 N <sup>o</sup> 2,3 & 4 Each	N <sup>o</sup> 2 Single Curb Inlets Std. Dwg. I-81 N <sup>o</sup> 2,3 & 4 Each	Spec. Comb. Double Curb Inlet & M.H. See Sheet N <sup>o</sup> 34 Each	Spec. 8" Side Ditch Inlets See Sheet N <sup>o</sup> 33 Each		Catch Basin Std. Dwg. I-8 N <sup>o</sup> 2-2 Each
	21"	24"	12"	15"	18"	Type "A"	Type "B"							
4		136	31.2		80				6					
5	350	474	106.9	37	78	262		3		5	8	1		
6			66.0		242	148							1	
<b>Totals</b>	<b>350</b>	<b>610</b>	<b>204.1</b>	<b>37</b>	<b>322</b>	<b>226</b>	<b>262</b>	<b>9</b>	<b>1</b>	<b>6</b>	<b>9</b>	<b>1</b>	<b>1</b>	

## ADDITIONS & DEDUCTIONS

Sheet No	Project Length Lin. Ft.	Special Pav't. 9'-7"-7'-9" Sq.Yds.	T-33 Pav't. 3 1/2" Sq.Yds.	Shoulders, Slopes & Ditches Lin. Ft.			9' X 3" Raised Conc. Curb Item I-12 Lin. Ft.			Pav't. 9'-7"-7'-9" Item T-70 Sq.Yds.
				Add	Ded	Net Add.	Add	Ded	Net Add.	
4		54.4		112.50	26.12		350.35			
4		489.6	174.3							
6	1	6.8	295.6	1.00				59.90		
8					11.00					
10					50.50					
<b>Totals</b>	<b>1</b>	<b>550.8</b>	<b>469.9</b>	<b>113.50</b>	<b>87.62</b>	<b>25.88</b>	<b>350.35</b>	<b>59.90</b>	<b>200.45</b>	

Drawn By: A.T. 12-7-34  
Ch'kd By: S.A. 1-29-35  
Ch'kd By: F.H.G. 1-30-35

# GENERAL SUMMARY

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO	NR3.609.A	1935

PREBLE COUNTY  
S.H. 249 SEC. "D" (Pt.)  
**PROPOSAL No 1**

ITEM	DESCRIPTION	UNITS
<b>ROADWAY</b>		
E-1	Roadway Excav. (Unclassified)	11170. Cu. Yd.
E-2	Excav. for Structures (Unclassified)	48 " "
E-4	Borrow (Contractor to furnish)	2394. " "
E-5	Finishing Shoulders, Slopes, & Ditches	16125.88 Lin. Ft.
E-9	9" Trees Removed & Disposed of	1 Only
E-9	10" " " " " " "	7 Each
E-9	12" " " " " " "	3 " "
E-9	15" " " " " " "	4 " "
E-9	18" " " " " " "	76 Lin. Ft.
I-1	12" Corr. M. Pipe for Driveways	322 " "
I-2	12" Pipe (Not under Pav't) Storm Sewer	226 " "
I-2	15" " " " " " "	262 " "
I-2	18" " " " " " "	204.1 " "
I-2	12" Corr. M. Pipe (b-3) Paved Invert or R.C.P. (b) Storm Sewers	37 " "
I-2	15" " " " " " "	350 " "
I-2	21" Corr. M. Pipe (b-3) Paved Invert, or R.C.P. (b) Storm Sewers	610 " "
I-2	24" " " " " " "	2664 " "
I-3	12" Pipe (Porous Backfill) Rdwy Drainage	295 " "
I-3	15" " " " " " "	222 " "
I-3	18" " " " " " "	396 " "
I-3	12" Corr. M. Pipe Rdwy Drainage (Under Drives)	40 " "
I-3	15" " " " " " "	20 " "
I-3	18" " " " " " "	32 " "
I-6	10" Corr. M. Pipe Removed & Stored	74 " "
I-6	12" " " " " " "	15 " "
I-6	15" " " " " " "	20 " "
I-6	18" " " " " " "	17.3 Cu. Yd.
S-1	Concrete for Headwalls (1:5 1/2 Mix)	424 Lb.
S-4	Reinf. Steel	3995 " "
I-7	Trench Reinf. Steel	9 Each
I-8	Std. No 2 Double Curb Inlets	1 " "
I-8	Std. No 2 Single Curb Inlets	6 " "
I-8 & Spec.	Spec. Combin Double Curb Inlet & Manhole	9 " "
I-8 & Spec.	Spec. 8" Side Ditch Inlets (Type A)	1 " "
I-8 & Spec.	" " " " " (Type B)	13 " "
I-8	Std. No 2-2 Catch Basin	9773.9 Sq. Ft.
I-13	4" Conc. Sidewalks (One Course Construction)	63 Lin. Ft.
I-13 & Spec.	6" Rise 18" Tread Conc. Steps (1:5 1/2 Mix)	400 " "
I-15	Type "S-C" Guard Rail	244 " "
I-15	Type "B" Guard Rail Removed & Stored	905 Cu. Yd.
I-17	Aggregate for Traffic Bound Side Approaches, Berms, & Walks, & Mail Boxes	1 Each
I-8	Std. No 1-2 Catch Basin	510 Lin. Ft.
I-9	Std. No 1 Stone Underdrain	
<b>PAVEMENT</b>		
T-70	9"-7"-7"-9" Portland Cement Conc. Pav't (10' Wide)	5298.22 Sq. Yd.
T-70	9"-7"-7"-9" " " " " (20' Wide)	30981.3 " "
T-70	6" " " " " (Drives)	614.0 " "
I-12	9"x3" Raised Concrete Curb	4547.23 Lin. Ft.
T-33	3 1/2" Penetration Macadam	2524.6 Sq. Yd.
<b>STRUCTURES UNDER 20 FT. SPAN</b>		
E-2	Excavation for Structures (Unclassified)	189 Cu. Yd.
S-1	Concrete for Footings (1:6 1/2 Mix)	12.7 " "
S-1	Concrete for Walls (1:5 1/2 Mix)	27.5 " "
S-3	Waterproofing (Type A) 24" Wide	4 Sq. Yd.
S-3	" " " (Type B) 36" Wide	21.7 " "
S-4	Reinf. Steel	1882 Lb.
S-20	Squared Stone Masonry (Painting Only)	60 Sq. Ft.
S-22	Removal of Portions of Existing Masonry	Lump
S-23	Dowel Holes 1" x 12"	27 Each
S-23	" " " 3/4" x 9"	5 " "
S-27	12" Pipe Under Pav't	40.0 Lin. Ft.
S-27	15" " " " " " "	94 " "
S-27	24" " " " " " "	12 " "
I-2	8" Pipe Not Under Pav't - (Storm Sewers)	26 " "
I-2	12" " " " " " "	8 " "
S-27	12" Corr. M. Pipe (b-3) Paved Invert. Alternate, Cast Iron Pipe	60 " "
S-27	15" " " " " " "	74 " "
I-8	Std. No 1 Side Ditch Inlet	2 Each
T-70	5" Average Conc. Wearing Surface (1:5 1/2 Mix)	38.4 Sq. Yd.
I-8	Std. No 2-2 Catch Basins	3 Each

Drawn By J.B. 12-7  
Ch'k'd By SA 1-3  
Ch'k'd By