FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

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I.C.H 553 SEC.-"D"
MEDINA COUNTY

STATE OF OHIO
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS
DIVISION OF HIGHWAYS
BUREAU OF CONSTRUCTION

CLEVELAND ~ RITTMAN ROAD

I.C.H. 553 SEC."D" PET. NO. 6229

MEDINA COUNTY

HINCKLEY TWP. APRIL 1927.

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SUPPLEMENTAL PRINTS OF STRUCTURAL STANDARDS

Drawing Number	300
" "	301
" "	305
" "	SB-2430
	AS-2430

The Standard Specifications of the State of Ohio, Division of Highways, in force on date of contract will govern this improvement.

I hereby approve these plans and declare that the making of this improvement will require the closing to traffic of the Highway and that detours will be provided as shown on the plan and estimates.

Approved: W. W. Anderson
Date, 6-9-27 Resident Engineer

Approved: R. P. Brindle
Date, 7/9/27 Division Engineer

Approved: Robt. S. Weighteler
Date, 8-2-27 Chief Engineer
Bureau of Construction

Approved: Harry J. Kirk
Date, 8-2-27 State Highway Engineer

Approved: G. F. Schlesinger
Date, 8-2-27 Director of Highways and Public Works.

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

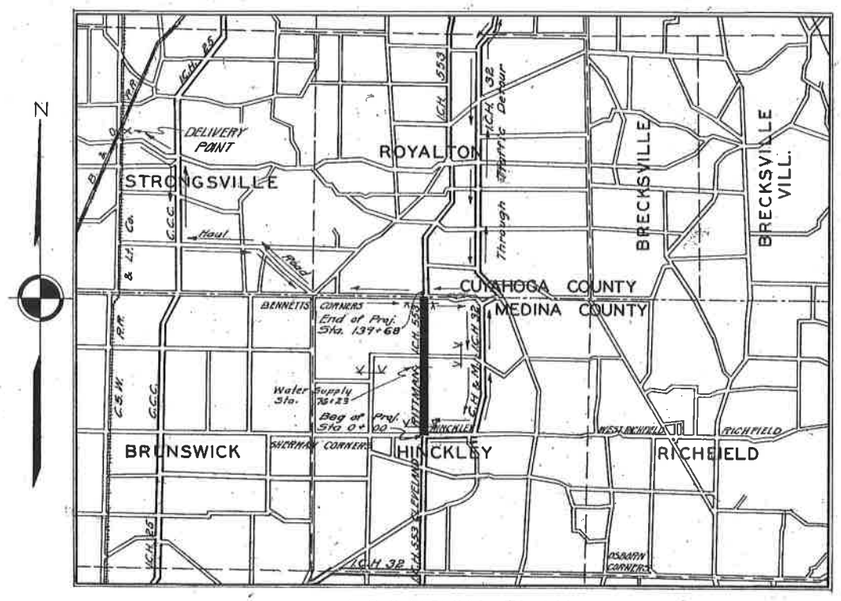
CONVENTIONAL SIGNS

State Line
County Line
Township Line
Section Line
Property Line not fenced
Center Line
City or Village Line
Fence
Telephone or Telegraph
Steam Railroad
Electric Line
Guard Rail
Drain Pipe - new
Drain Pipe - old

We the Commissioners of Medina County, hereby approve these plans and certify that the right-of-way 60 Feet wide is available for the construction, maintenance and repair of the above highway.

John Ewing
S. M. Overholt
John Rennie

Date, County Commissioners.



LOCATION PLAN
SCALE OF MILES

PORTION TO BE IMPROVED
DETOURS SHOWN THUS
BARRICADES SHOWN THUS

SCALES

PLAN	1" = 100'
PROFILE (VERTICAL)	1" = 10'
PROFILE (HORIZONTAL)	1" = 100'
CROSS SECTIONS	1" = 5'

CONSTRUCTION BUREAU
SEP 2 1955
GROUND PHOTOLAB

20-M
MEDINA 553 D
1927

TYPICAL CROSS SECTIONS

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
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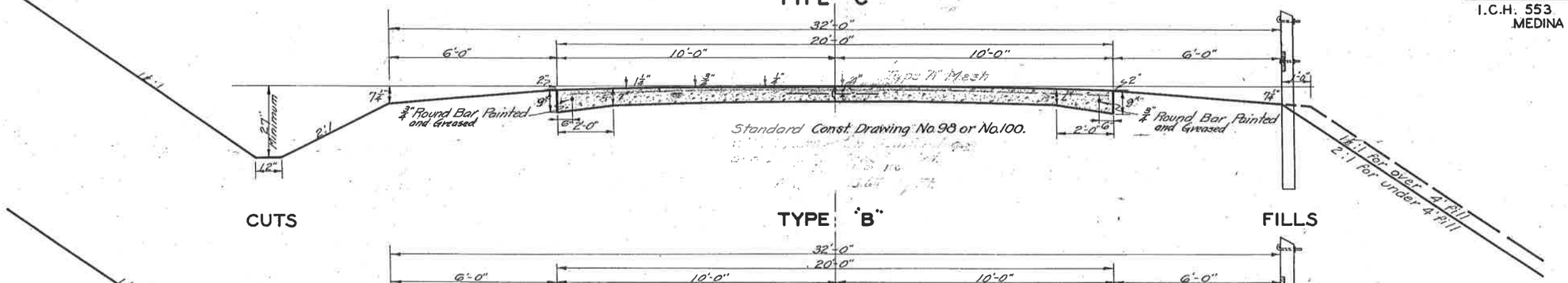
2/27

I.C.H. 553 SEC.-"D"
MEDINA COUNTY

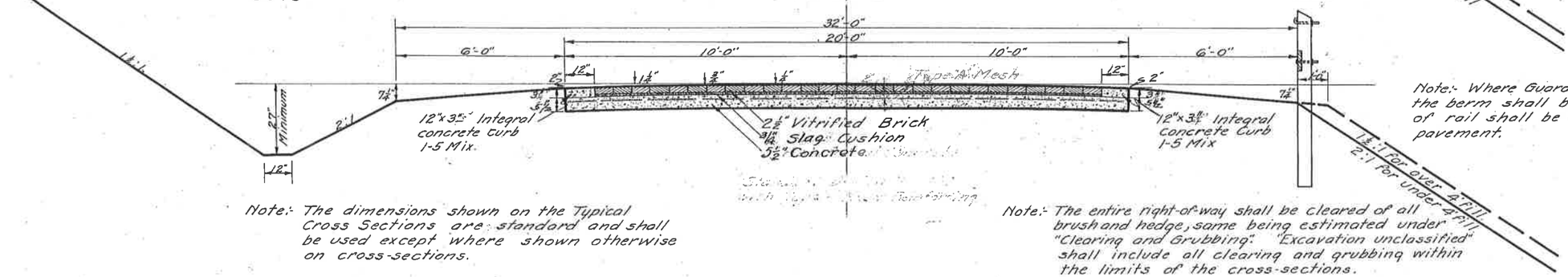
TYPE "C"



CUTS

TYPE "B"

FILLS



Note:- Where Guard Rail is required the berm shall be 7' wide and face of rail shall be 6' from edge of pavement.

Note:- The dimensions shown on the Typical Cross Sections are standard and shall be used except where shown otherwise on cross-sections.

Note:- The entire right-of-way shall be cleared of all brush and hedge, same being estimated under "Clearing and Grubbing". "Excavation unclassified" shall include all clearing and grubbing within the limits of the cross-sections.

CALCULATIONS

Note: Excavated materials shall be so distributed along the roadway as to make the shoulders the minimum width shown on the cross-sections. All excess excavation shall be used to uniformly widen the shoulders on the fills as directed.

Stations		Type "C"			Type "B"					Deductions	Remarks
		20' Concrete	9' Concrete	Extra at Curves	18' Brick	20' Conc. Base	12"x3½" Curb	Extra at Curves	9' Concrete		
From	To	Lin. Ft.	Sq. Yds.	Sq. Yds.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Sq. Yds.	Sq. Yds.	Lin. Ft.	
0+30	0+09		39						39	9	Intersection
0+09	76+10	7601			7601	7601	7601				
76+10	76+50			24.3				24.3		(26) 14	Approaches Bridge
76+50	139+68	6318			6318	6318	6318				
137+55.61	139+68			27				27			5° Curve
Totals		13919	39	51.3	13919	13919	13919	51.3	39	23	

13919 × 20' = 278380; 9) 278380 = 30931.1; 30931.1 + 39 + 51.3 = 310274 Sq. Yds. Conc.

13919 × 18' = 111352; 9) 111352 = 13919 Lin. Ft. Brick; 13919 × 51.3 = 250542; 250542 ÷ 9 = 27838 Sq. Yds. Brick

13919 × 20' = 278380; 9) 278380 = 30931.1 Sq. Yds. Conc. Base; 30931.1 + 51.3 = 30982.4 Sq. Yds. Base

13919 × 2 = 27838 Lin. Ft. Curb; 27838 ÷ 9 = 3093.1 Sq. Yds.

23 Sq. Yds. 7"x9' Concrete.

3,093.1 Sq. Yds. Curb.
27,889.3 Sq. Yds. Brick.
30,982.4 Sq. Yds. Base.
Check.

139+68 − 23' = 139.45 Lin. Ft. Shoulders, slopes & ditches.

~~Note: Excavated quantities are calculated from cross-sections as plated for Type "C" and adjusted for Type "B" as follows;~~
~~6590 Lin. Ft. in cut~~
~~174 Cu. Ft. extra cut per lin. ft.~~
~~27) 1,130,660 Cu. Ft.~~
~~41,8.9 Cu. Yds. extra excavation for Type "B".~~

Superseded by MED-3-(21.71-2232) 1962

FED RD DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR
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I.C.H. 553 SEC. "D"
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BEG. OF PROJECT

CO. RD. 10

I.C.H. 32

JOHN BRONGERS. 104' FRONT 0.73 ACRES.
1+04 P.L. HINCKLEY GENERAL SUPPLY CO. 70' FRONT 0.18 AC.
1+74 P.L. CHARLES SHOOK. 66' FRONT 0.30 AC.
2+40 P.L. L.B. & LOUISE WEST. 114' FRONT 0.85 AC.
3+54 P.L. R.T. SMITH. 59' FRONT 0.62 AC.
4+13 P.L. W. & EMMA EHMAN. 83' FRONT 0.53 AC.
4+96 P.L. W.C. EHMAN. 99' FRONT 4.18 AC.
5+87 P.L. CHARLES CADY. 90' FRONT 0.75 AC.
6+85 P.L. JAMES MATTINGLY. 101' FRONT 0.43 AC.
7+86 P.L. JULIA L. DAMON. 145' FRONT 3.00 AC.
9+30 P.L. MILTON CHARLTON. 152' FRONT 3.00 AC.
10+80 P.L.
ELLEN & MILTON CHARLTON 1664' FRONT 50.00 AC.
27+44 P.L.

Sta. 0+30 to 1+00 Req'd. 30'-8" Corr. I.P.
Req'd. 20'-8" Corr. I.P. each drive
Sta. 15+50 to 18+50 Req'd. 300'-8" Vit. Pipe each side.
Req'd. 20'-8" Corr. I.P.
Req'd. 20'-8" Corr. I.P.
Req'd. 20'-12" Corr. I.P.
Req'd. 20'-8" Corr. I.P.
No. 1 Sta. 6+60 See Sheet 18
Req'd. 20'-8" Corr. I.P. each drive
See Summary Sheet for Vit. Pipe & Catch Basins Req'd.
Req'd. 20'-10" Corr. I.P. each drive
No. 2 Sta. 11+65 See Sheet 18
No. 3 Sta. 24+40 See Sheet 18
No. 4 Sta. 28+94 See Sheet 18
From Sta. 28+50 to 29+46 Req'd. guard rail both sides
Sta. 2+36 to 2+86 Req'd. 56'-8" Corr. I.P.

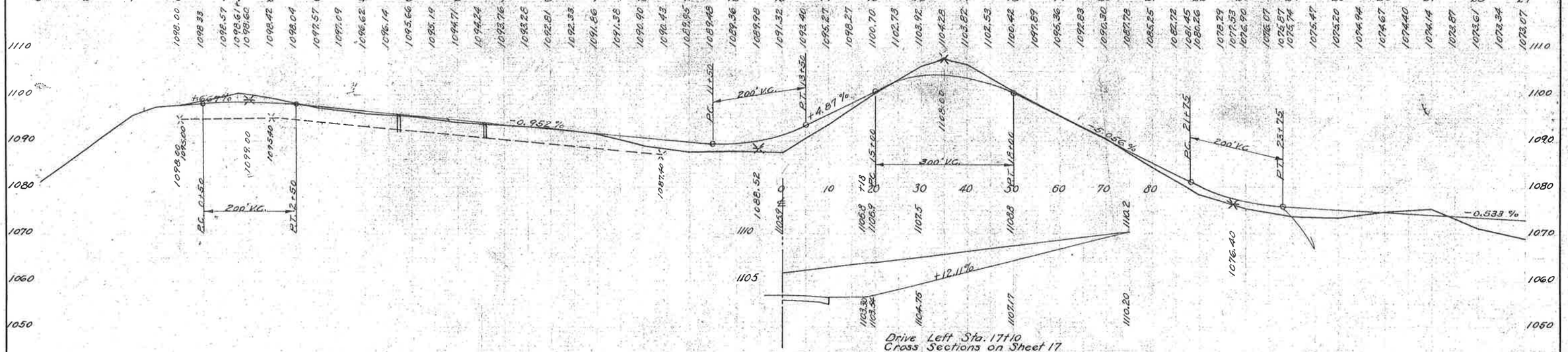
Sta. 0-30 30'
Sta. 0+10
Sta. 0+09
$\frac{39' \times 9'}{9} = 39$ Sq. Yds.

Note: From Sta 0-30 to 0+09 shall be 8" Concrete regardless of type of remainder of Project.

Nail in Tel.
Store
TOWN HALL. 62' FRONT.
Nail in Tel.
Sta. 0+0 0'-04' Left
1+62 P.L. Wm. C. EHMAN. 45' FRONT.
R.A. CHARLTON. 46' FRONT 0.28 AC.
CHURCH 83' FRONT 0.28 AC.
W.C. EHMAN. 36' FRONT 0.10 AC.
ELLEN RAY MATTINGLY. 46' FRONT 0.15 AC.
3+53 P.L.
3+89 P.L.
4+35 P.L.
JULIA L. DAMON 231' FRONT 0.70 AC.
JOSEPHINE HURD 371' FRONT 4.46 AC.
6+66 P.L.
10+37 P.L.
LUCIA M. ISHAM 390' FRONT 3.27 AC.
14+27 P.L.
JOHN A. ANDREW 215' FRONT 8.27 AC.
16+42 P.L.
Nail 12" Map.
Sta. 17+00 0'-03' Right
Nail 14" Map.
Nail 18" Map.
JULES & AGAFIA WASLUFF 1117' FRONT 20.00 AC.

From Sta. 0+0 to 2+50 Req'd. 50 Tons No. 46 Stone or Slag to be placed on berms.

B.M. Sta. 0+30 Xon Conc. Porch Floor at Store El. 1101.22
B.M. Sta. 5+83 Sp. in Electric Guy Pole East Side Road El. 1094.00
B.M. Sta. 14+27 Sp. in 24" Ash E. side road El. 1099.83
B.M. Sta. 25+70 Bent Sp. in 18" Maple E. side road El. 1074.09



Excav. 893.5 Cu. Yds.
Emb. +20% 876.6 Cu. Yds.
Waste 16.9 Cu. Yds.

Excav. Rdway. 2137.1 Cu. Yds.
Excav. Drives 98.5 Cu. Yds.
Emb. +20% 2096.3 Cu. Yds.
Waste 139.3 Cu. Yds.

Excav. Rdway. 2103.8 Cu. Yds.
Excav. Drives 99.8 Cu. Yds.
Emb. +20% 2179.7 Cu. Yds.
Waste 23.9 Cu. Yds.

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MARY I. PORTER 833' FRONT 50.00 AC.

MARY I. PORTER 411' FRONT 25.00 AC.

ANNA MURRAY 1151' FRONT 59.40 AC.

MELVIN & SADIE CASE 330' FRONT 10.00 AC.

GEORGE & OLGA CERESHKO. 237' FRONT 11.39 AC.

A.W. HARRELL. 309' FRONT 26.39 AC.

MARY I. PORTER 618 FRONT 25.17

H.M. RICHARDS 316 FRONT 14.37 AC.

SHERWIN RICHARDS 971 FRONT 61.63 AC.

F. J. & EDITH MCKEE 1512 FRONT 89.49 AC.

Reqd. guard rail from 34+10 to 35+06 and 35+26 to 36+54 on Right and 34+10 to 35+70 on left.

Reqd. 20'-8" Corr. I.P. each drive

No. 5. Sta. 35+26 See Sheet 18

No. 6. Sta. 44+54 See Sheet 18

Sta. 46+00 to 47+00 Reqd. 100'-8" U.P.

No. 7. Sta. 54+23 Abandon

Reqd. 20'-8" Corr. I.P.

Reqd. 20'-12" Corr. I.P.

Reqd. 20'-12" Corr. I.P. each drive

Reqd. guard rail from 59+50 to 60+62 on right

No. 8 Sta. 59+25 See Sheet 19

12" Maples

Brush to be remd.

Reqd. guard rail from 43+30 to 44+74 on left and 43+50 to 45+26 on right.

Sta. 48+00 to 54+12 Reqd. 612'-8" Vit. Pipe.

Nail 14" Map.

Nail 12" Map.

Sta. 31+00 Point on Tan.

Sta. 30+84 to 33+70 Reqd. 286'-8" Vit. Pipe

MED-3-22.96 (2005)

B.M. Sta. 38+18 Bent Sp. in 30" Locust E. side road El. 1053.30

B.M. Sta. 46+62 Bent Sp. in 20" Maple E. side road El. 1029.62

B.M. Sta. 54+95 Bent Sp. in 30" Maple E. side road El. 1003.26

3.00' V.C.

-5.714%

-0.555%

2.00' V.C.

-6.00%

3.00' V.C.

+2.00%

+11.05

Drive Left Sta. 46+90 Cross Sections on Sheet 17

Drive Right Sta. 30+93 Cross sections on Sheet 17

+12.81% Sta. 30+86 Drive Left Cross sections on sheet 17

+4.68%

2.50' V.C.

-3.347%

2.00' V.C.

0%

54+75

44+60

Excav. 4477.6 Cu. Yds.
Emb. +20% 4437.6 Cu. Yds.
Waste 40.0 Cu. Yds.

Excav. Rdway. 1849.6 Cu. Yds.
Excav. Drives 86.1 Cu. Yds.
Emb. +20% 1854.3 Cu. Yds.
Waste 81.4 Cu. Yds.

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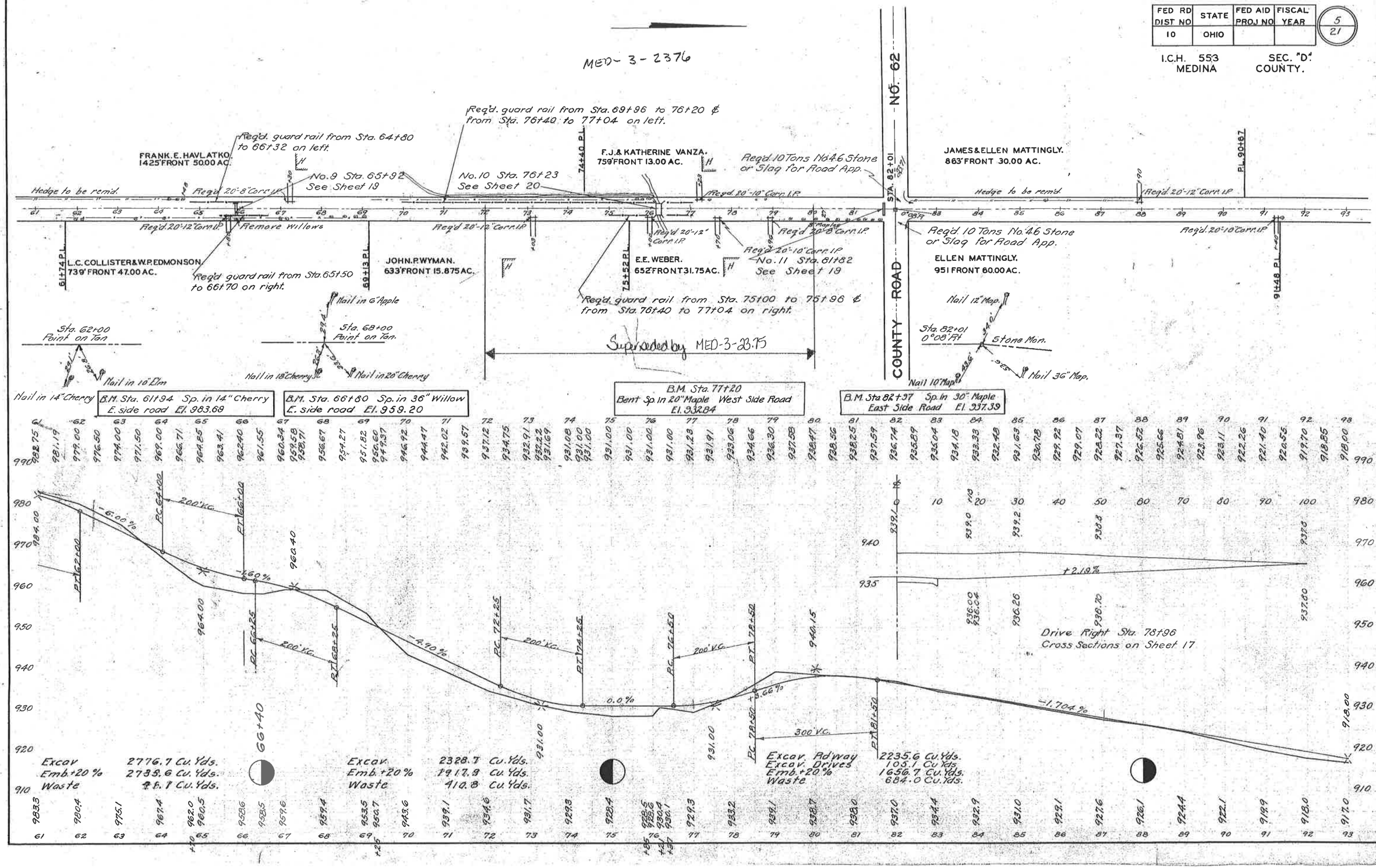
I.C.H. 553 MEDINA COUNTY. SEC. "D"

MED-3-2376



FED RD DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR
10	OHIO		

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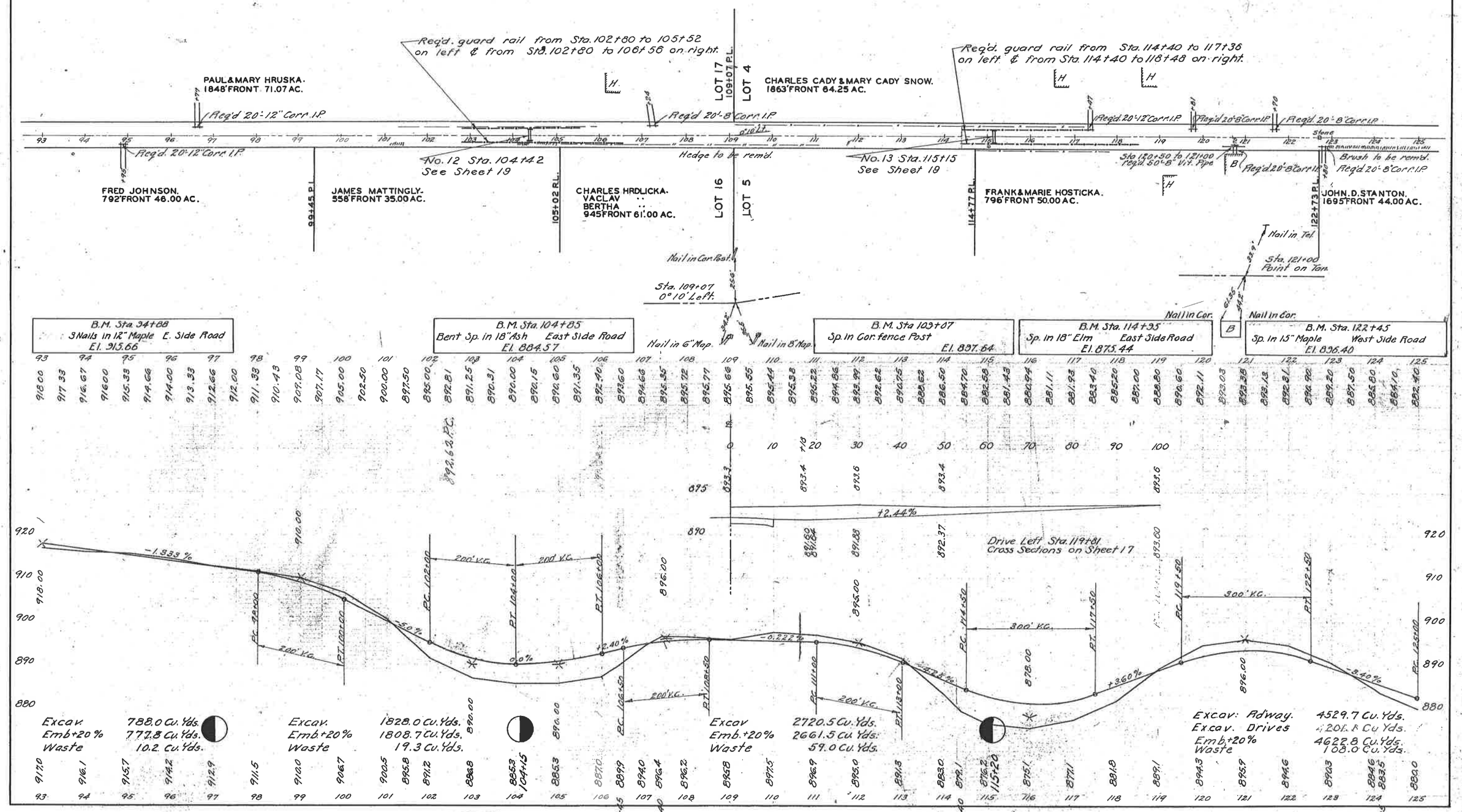
I.C.H. 553. MEDINA SEC. 'D'. COUNTY.



FED RD DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR
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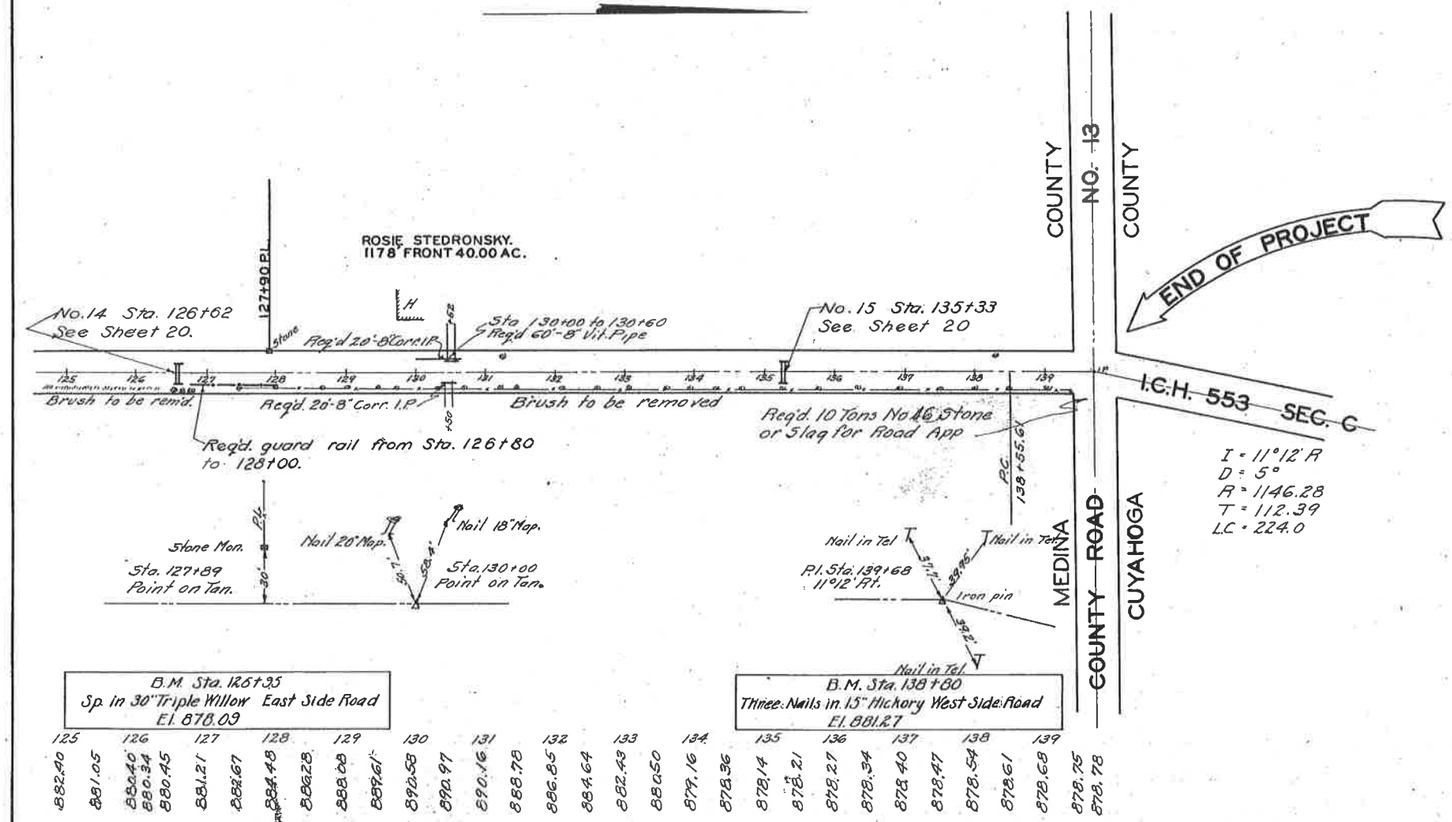
I.C.H. 553 MEDINA

SEC. "D" COUNTY.

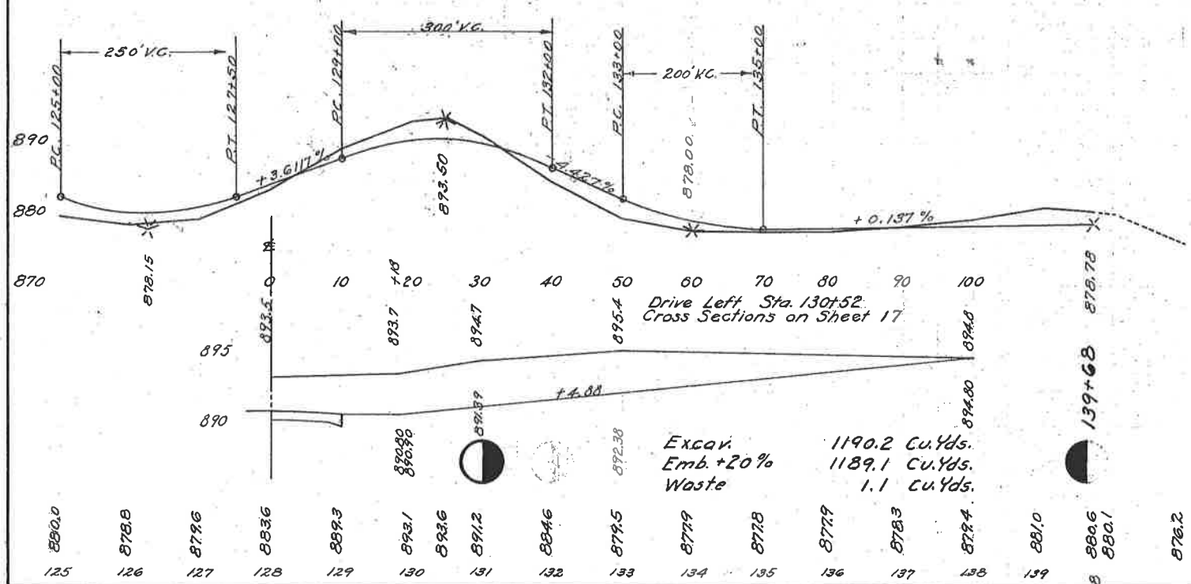


5° CURVE STA 139+68

Left			Center Line		Right		
Add to El. Edge Gr.	El. Edge	W	Station	Grade	W	El. Edge	Deduct from Grade
1.19	879.80	10.0	139+68	878.78	12.00	878.61	0.17
1.19	879.78	10.0	139+50	878.76	12.00	878.59	0.17
1.19	879.74	10.0	139+25	878.72	12.00	878.55	0.17
1.19	879.71	10.0	139+05.61	878.69	12.00	878.52	0.17
1.15	879.66	10.0	139+00	878.68	11.97	878.51	0.17
0.96	879.43	10.0	138+75	878.65	11.64	878.47	0.17
0.76	879.20	10.0	138+50	878.61	11.02	878.44	0.17
0.57	878.98	10.0	138+25	878.58	10.53	878.41	0.17
0.38	878.75	10.0	138+00	878.54	10.22	878.37	0.17
0.19	878.53	10.0	137+75	878.51	10.04	878.34	0.17
0.00	878.31	10.0	137+55.61	878.48	10.00	878.31	0.17

Extra Area

Area per 100 Lin. Ft. Curve	=	198.5 Sq. Ft.
Sta. 139+05.61 to 139+68	=	.6239
		123.84 Sq. Ft.
Area in one Transition Curve	=	119.5 Sq. Ft.
		9) 243.34 Sq. Ft.
Total extra area	=	27.0 Sq. Yd.



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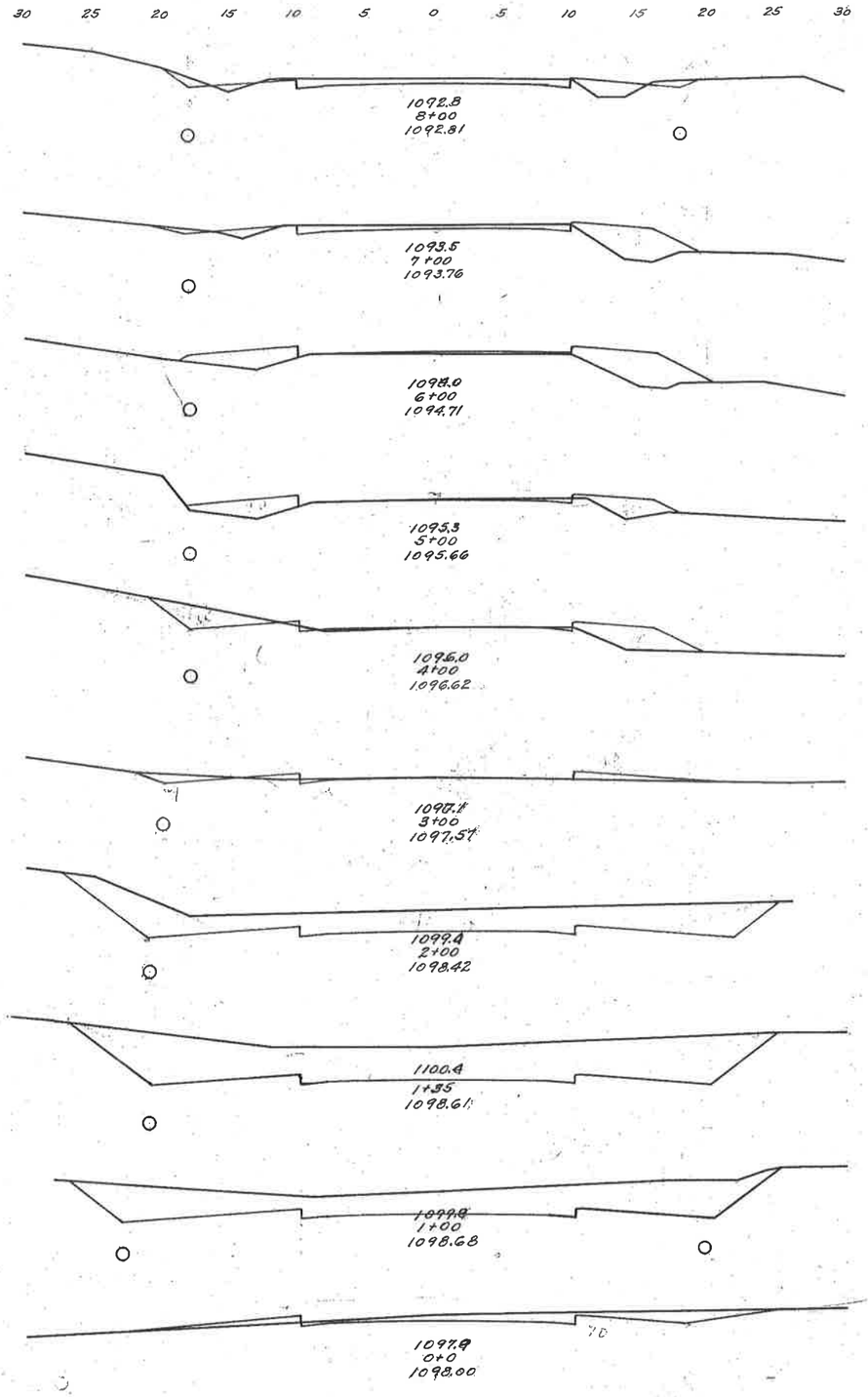
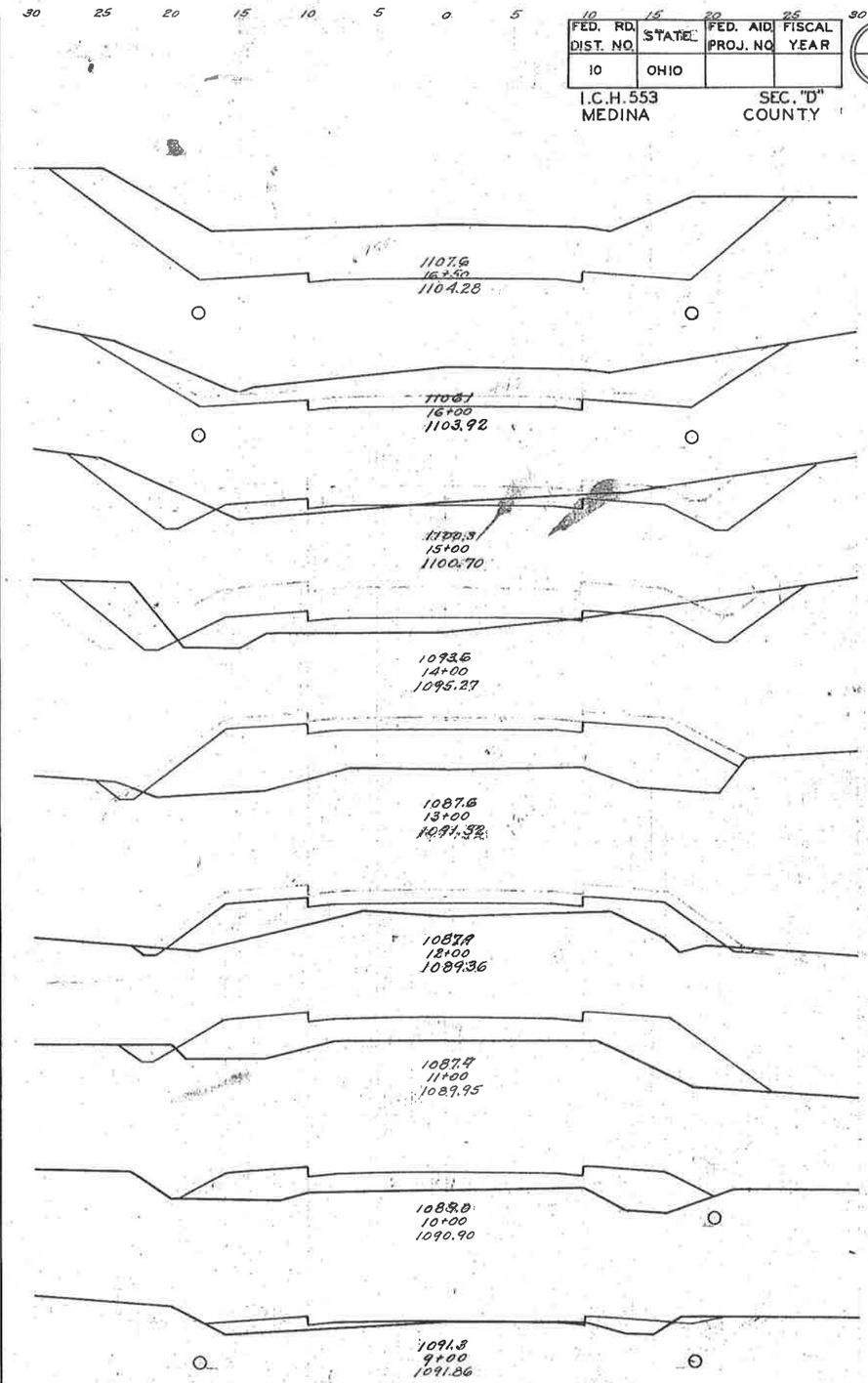
End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
12	6		
		37	38
8	15		
		14	74
0	25		
		0	72
0	14		
		16	44
9	10		
		21	25
2	4		
		162	8
85	0		
		261	0
132	0		
		145	0
92	0		
		202	6
17	3		

Excav. 893.5 Cu. Yds.
Emb. 20% 876.6 Cu. Yds.



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
189	0		
		277	0
111	0		
		306	18
54	10		
		179	75
42	31		
		84	312
3	137		
		12	354
3	54		
		12	273
3	93		
		6	285
0	60		
		1	138
1	14		
		24	37



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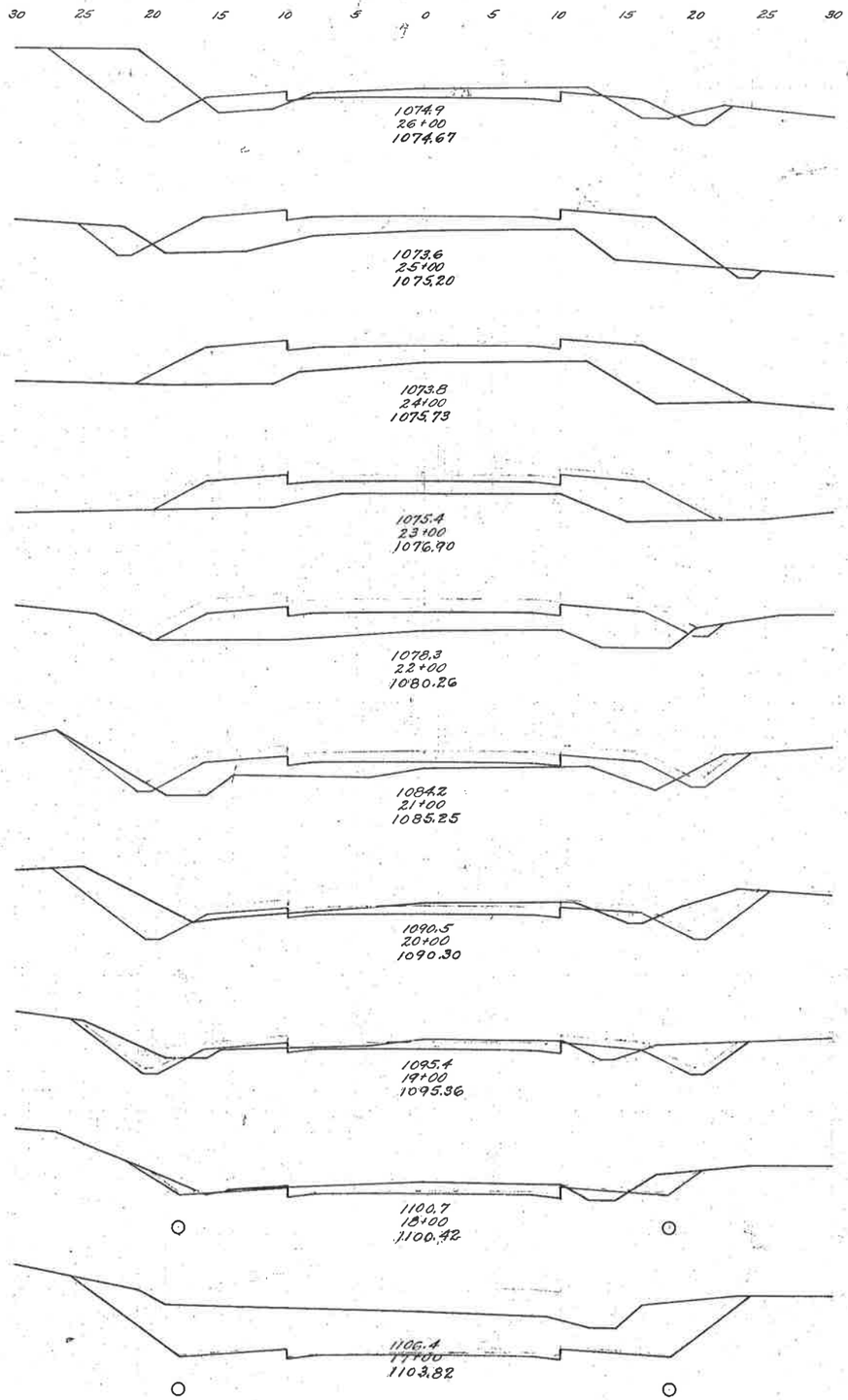
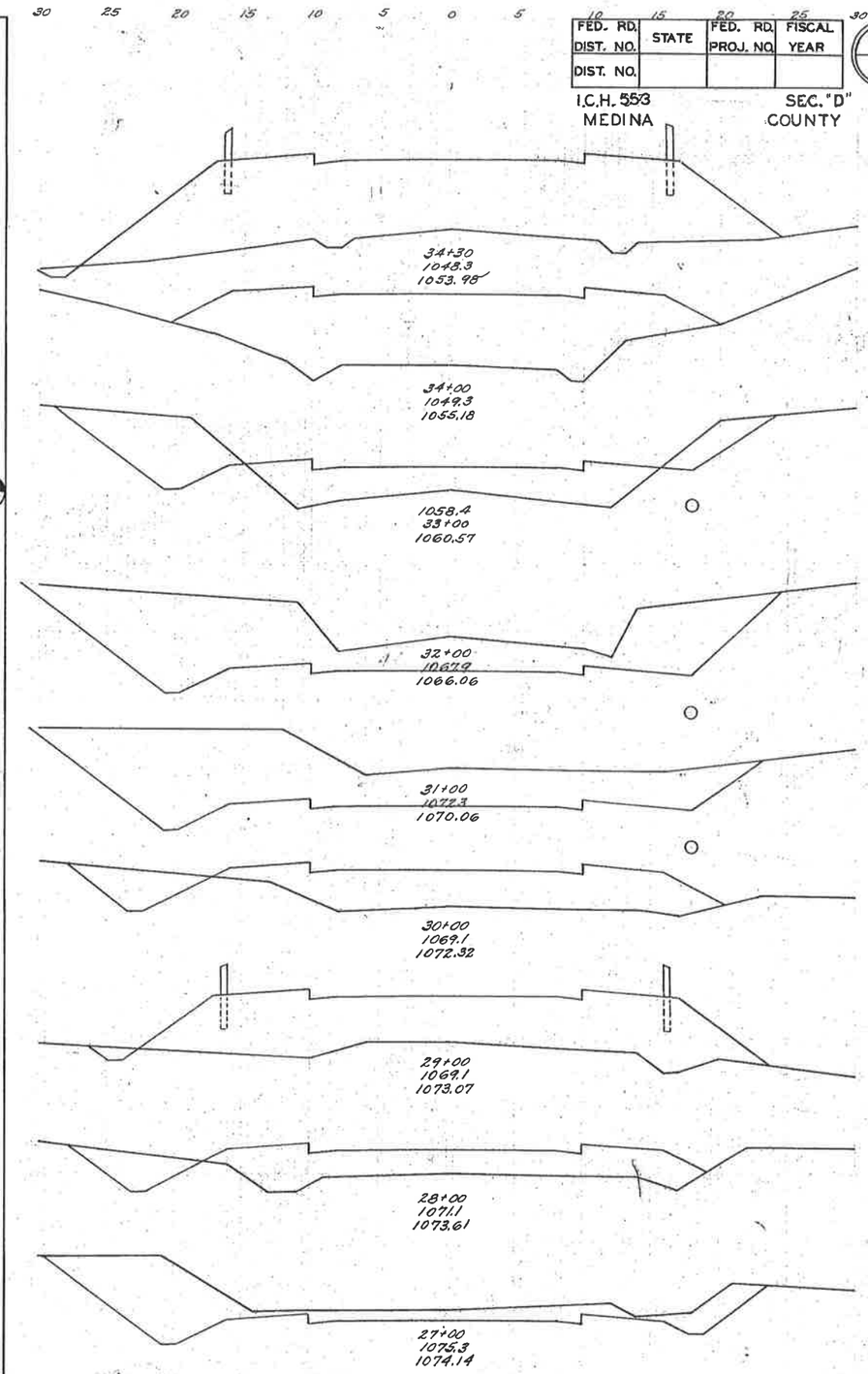
End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
46.5	10.5		
		97.2	149.1
8.0	70.0		
		14.8	279.6
0.0	81.2		
			126.4
		0.0	252.8
			126.4
0.0	55.8		
		2.8	232.4
1.5	70.2		
		19.4	223.2
9.2	40.5		
		107.4	84.3
49.2	5.2		
		146.3	20.4
30.0	6.2		
		92.8	18.6
20.0	4.0		
		291.7	7.4
137.5	0.0		
		604.1	0.0

Cu. Yds. Excav 2137.1
Cu. Yds. Emb+20% 2096.3



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
1.5	261.0		
		0.8	243.9
0.0	176.5		
		100.0	449.1
54.0	66.0		
		442.6	122.2
185.0	0.0		
		681.5	
183.0	0.0		
		372.3	153.2
18.0	83.2		
		38.0	439.5
2.5	154.3		
		32.4	406.1
15.0	65.9		
		183.3	120.4
84.0	0.0		
		241.7	19.4

Cu. Yds. Excav 2103.8
Cu. Yds. Emb+20% 2179.7



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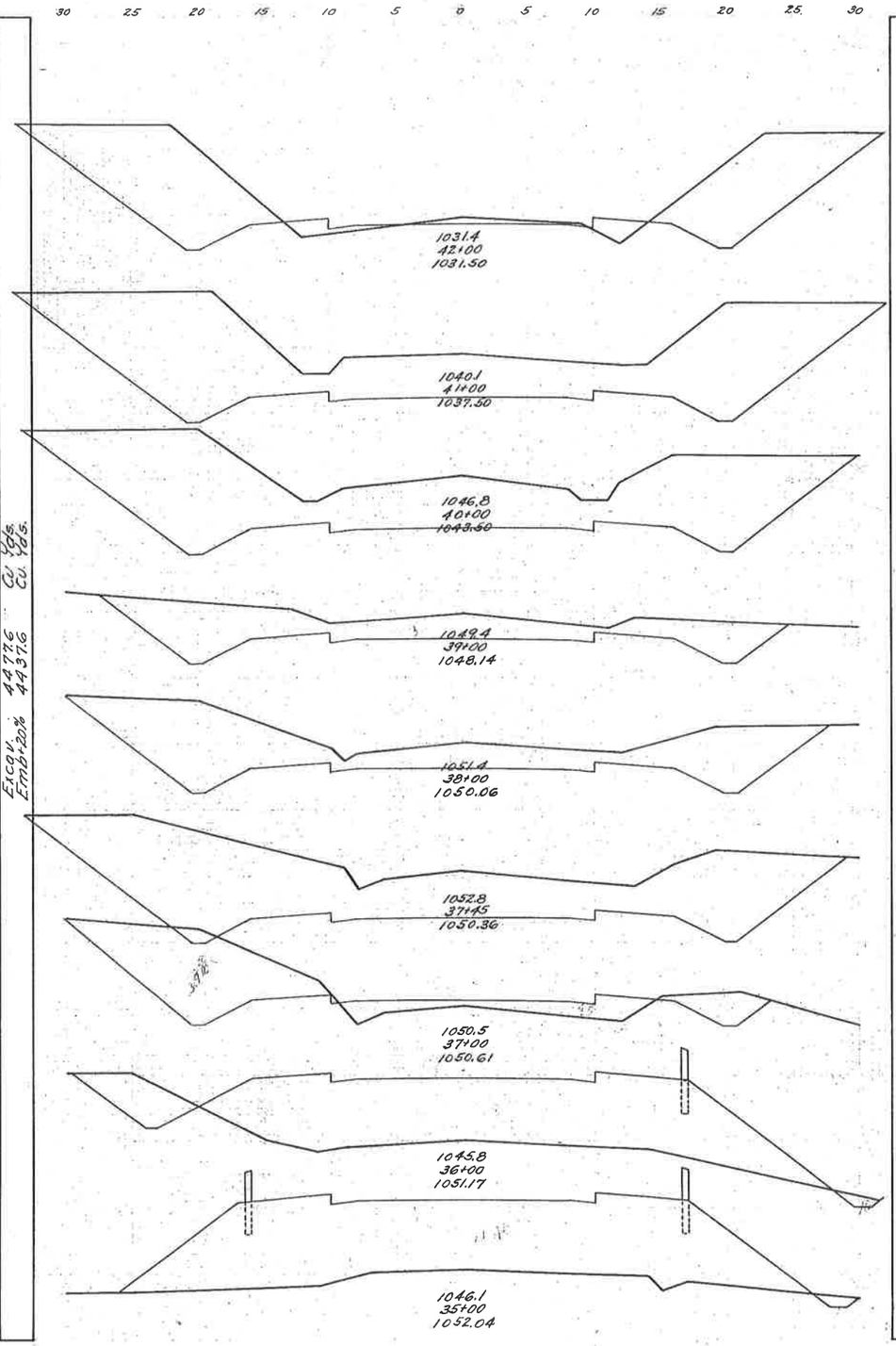
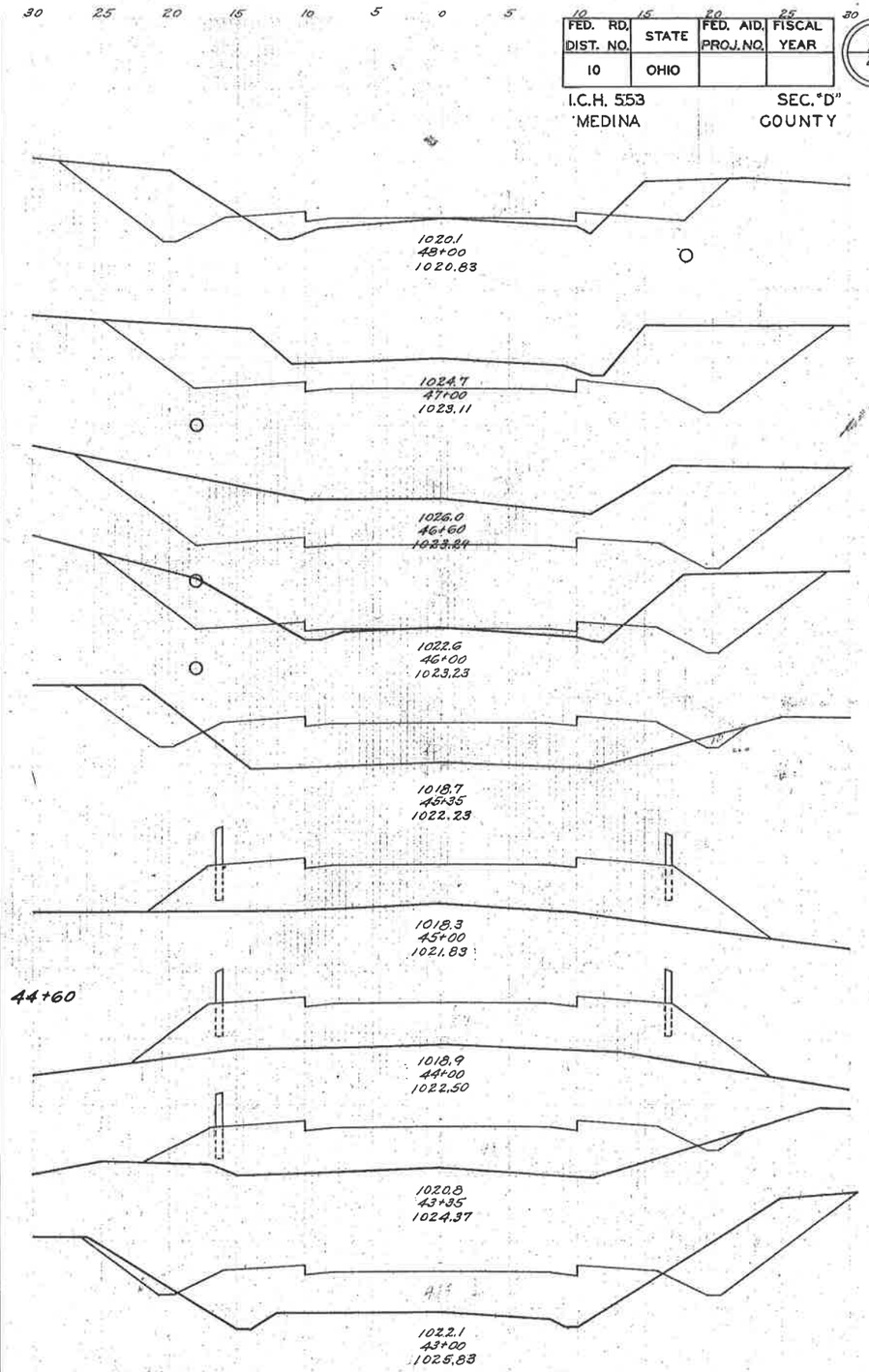
End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill	
162^{5}	10^{5}			
		837^{9}	19^{4}	
290^{0}	0^{0}			
		1018^{5}	0^{0}	
260^{0}	0^{0}			
		660^{2}	0^{0}	Cu. Yds. Cu. Yds.
96^{5}	0^{0}			
		450^{0}	0^{0}	Excav. 44776 Emb+20% 44376
146^{5}	0^{0}			
		403^{9}	0^{0}	
250^{0}	0^{0}			
		299^{6}	17^{9}	
109^{5}	21^{5}			
		244^{5}	426^{0}	
22^{5}	208^{5}			
		45^{5}	867^{6}	
2^{0}	260^{0}			
		4^{6}	675^{4}	



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
51^{5}	15^{0}		
		373^{2}	27^{8}
150^{0}	0^{0}		
		255^{6}	
195^{0}	0^{0}		
		297^{2}	8^{9}
72^{5}	8^{0}		
		116^{2}	134^{8}
24^{0}	104^{0}		
		15^{5}	158^{2}
0^{0}	140^{0}		
		209^{2}	
		523^{2}	
		313^{2}	
0^{0}	142^{5}		
		0^{0}	316^{0}
0^{0}	120^{0}		
		28^{8}	148^{9}
44^{5}	109^{0}		
		383^{9}	221^{3}

44+60



FED. RD. DIST. NO.	STATE	FED. AID. PROJ. NO.	FISCAL YEAR
10	OHIO		

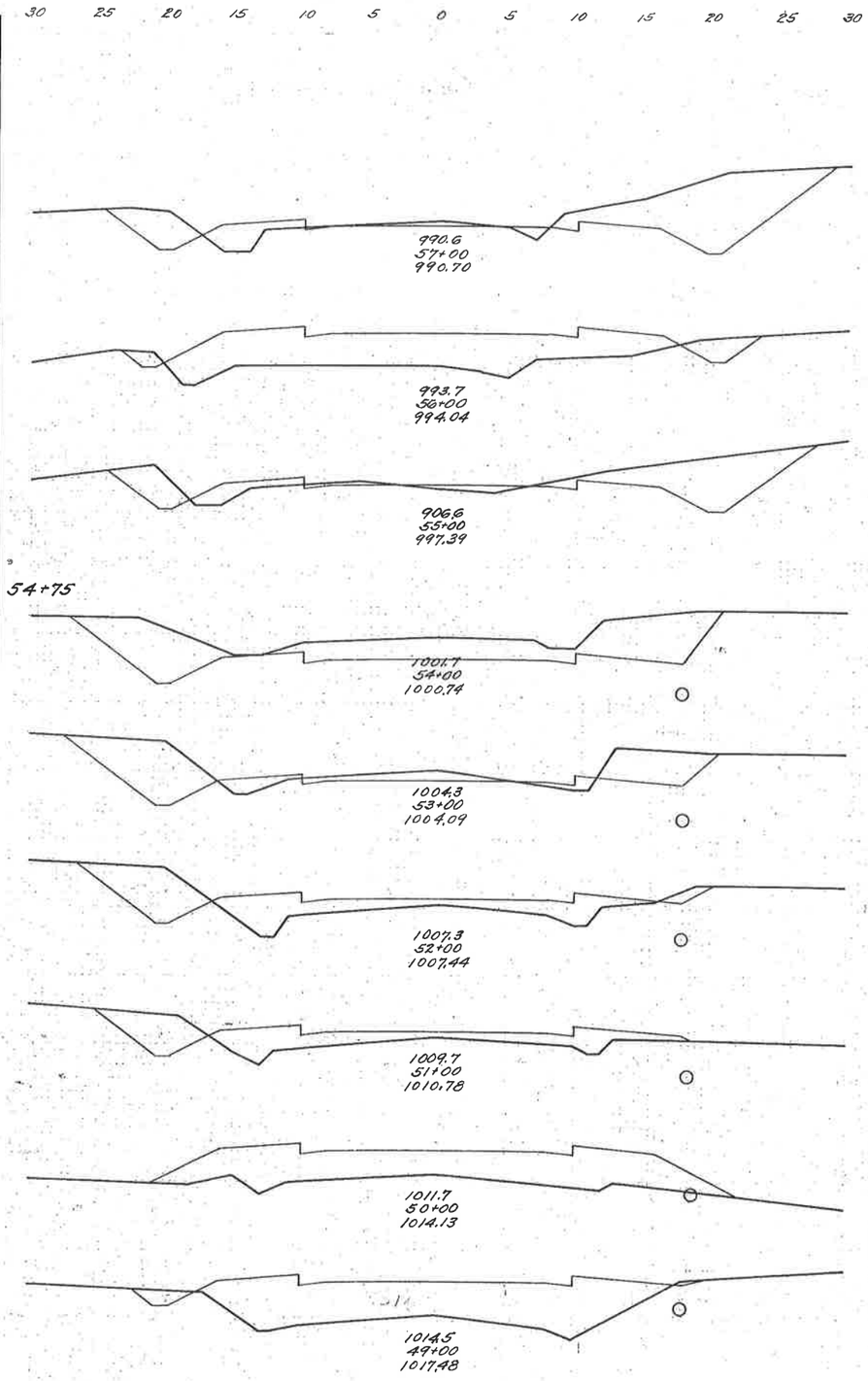
11/21

I.C.H. 553
MEDINA

SEC."D"
COUNTY

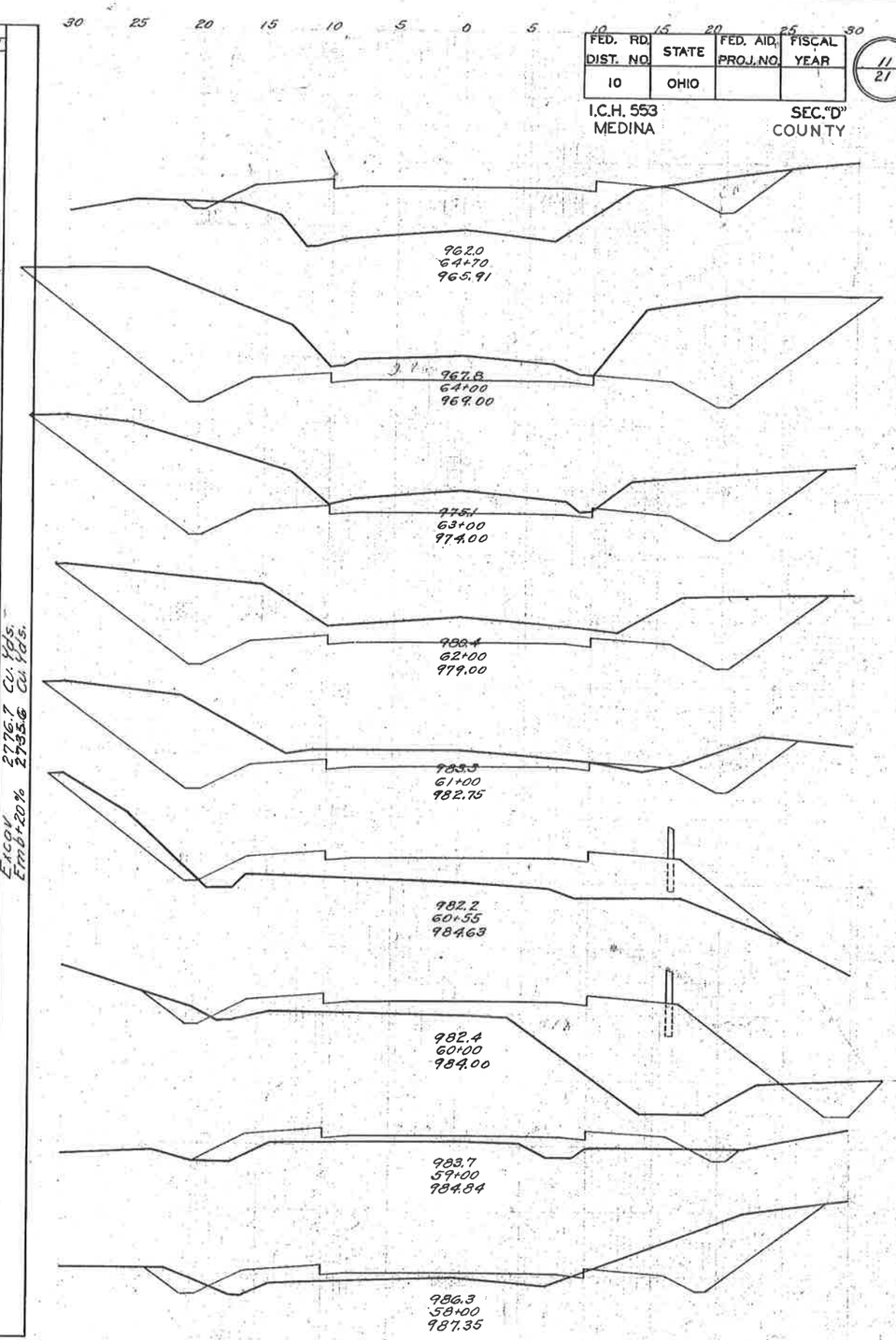
End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
47^5	10^0		
		104^6	174^1
9^0	84^0		
		106^5	175^9
48^5	11^0		
		61^8	5^1
		247^2	20^4
		185^9	15^3
85^0	0^0		
		257^4	13^0
54^0	7^0		
		141^7	80^6
22^5	36^5		
		69^4	126^9
15^0	32^0		
		27^8	219^5
0^0	86^5		
		7^4	341^7
4^0	98^0		
		102^8	209^3

Excav 1849.6 Cu. Yds.
Emb+20% 1854.3 Cu. Yds.



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
16^5	99^0		
		350^7	128^3
254^9	0^0		
		773^1	0^0
163^5	0^0		
		321^0	0^0
157^5	0^0		
		492^8	3^7
108^5	2^0		
		186^7	73^4
15^5	86^0		
		34^1	219^5
18^0	129^5		
		38^0	300^0
2^5	32^5		
		97^2	96^3
50^0	19^5		
		180^6	54^6

Excav 2776.7 Cu. Yds.
Emb+20% 2735.6 Cu. Yds.



FED. RD. DIST. NO.	STATE	FED. AID. PROJ. NO.	FISCAL YEAR
10	OHIO		

12
21

I.C.H. 553
MEDINA

SEC."D"
COUNTY

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
1^{4}	90^{5}		
		260^{4}	0^{0}
170^{5}	15		
		194^{7}	0^{7}
250^{0}	0^{0}		
		342^{2}	0^{0}
278^{6}	0^{0}		
		577^{0}	0^{0}
203^{0}	0^{0}		
		466^{7}	44^{4}
49^{0}	24^{0}		
		58^{3}	188^{8}
14^{0}	179^{0}		
		3^{2}	69^{8}
		15^{8}	348^{7}
		12^{6}	278^{9}
3^{0}	197^{5}		
		7^{4}	634^{3}
1^{0}	145^{0}		
		9^{7}	135^{6}

2328.7 Cu. Yds.
291.7 Cu. Yds.
Excav
Emb. 20%

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

943.6
70+00
946.92

950.7
69+25
950.60

953.5
69+00
951.82

956.4
68+65
953.53

959.4
68+00
956.67

959.6
67+00
960.80

958.5
66+50
961.55

66+40

958.6
66+00
962.40

960.5
65+00
964.85

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
169^{9}	0^{0}		
		329^{6}	135^{2}
9^{0}	79^{0}		
		16^{7}	501^{9}
0^{0}	198^{0}		
		14^{7}	99^{5}
53^{0}	160^{0}		
		97^{6}	329^{3}
9^{0}	100^{0}		
		38^{0}	266^{7}
11^{5}	44^{0}		
		95^{4}	117^{6}
40^{0}	19^{5}		
		117^{6}	204^{6}
23^{5}	91^{0}		
		92^{6}	353^{7}
26^{5}	100^{0}		
		80^{6}	352^{8}

30 25 20 15 10 5 0 5

933.2
78+00
933.06

929.3
77+00
931.31

928.6
76+00
931.00

928.5
75+85
931.00

928.4
75+00
931.00

929.3
74+00
931.08

931.7
73+00
932.91

934.6
72+00
937.12

939.1
71+00
942.02

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

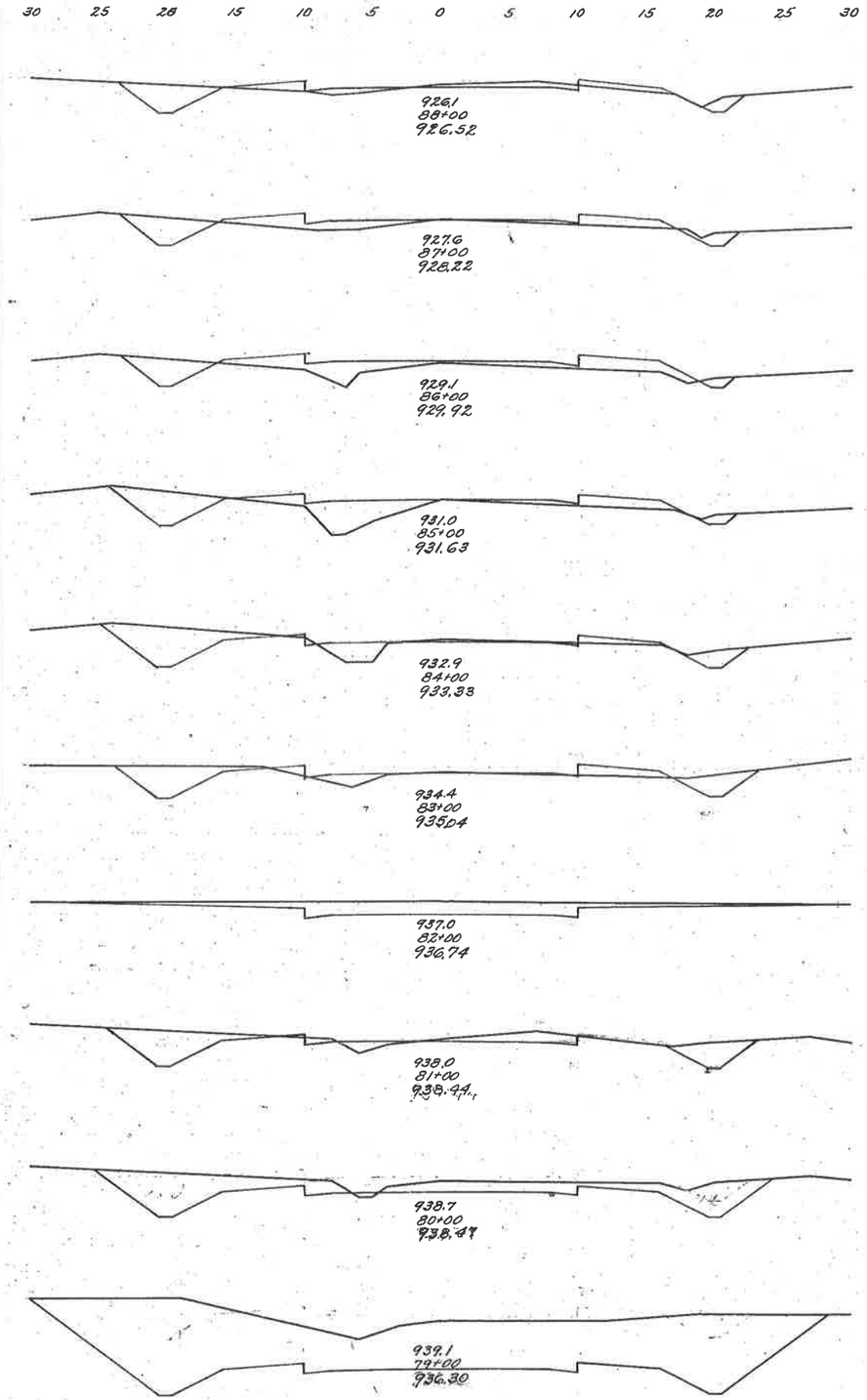
13/21

I.C.H. 553
MEDINA

SEC. "D"
COUNTY

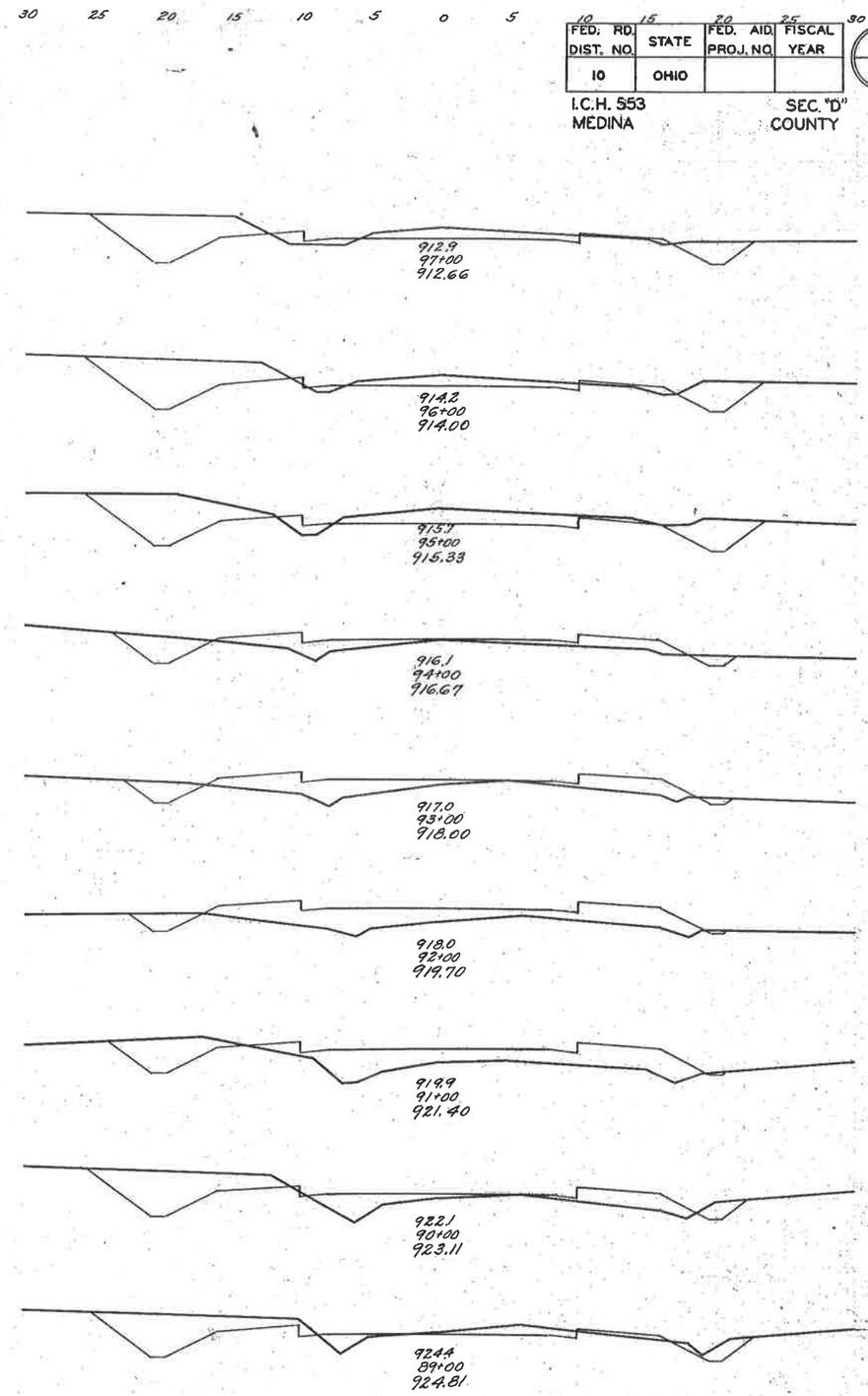
End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
12^{5}	7^{0}		
		42^{6}	40^{7}
10^{5}	15^{0}		
		35^{2}	75^{9}
8^{5}	26^{0}		
		39^{8}	87^{0}
13^{0}	21^{0}		
		61^{1}	51^{9}
20^{0}	7^{0}		
		70^{4}	31^{5}
18^{0}	10^{0}		
		84^{3}	18^{5}
27^{5}	0^{0}		
		103^{7}	4^{6}
28^{5}	2^{5}		
		150^{9}	4^{6}
53^{0}	0^{0}		
		487^{1}	
210^{0}	0^{0}		
		701^{9}	

Cu. Yds. Cut: $223^{6.6}$
Cu. Yds. Fill: $165^{6.7}$
Excav. Emb. 20%



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
36^{0}	3^{0}		
		150^{0}	9^{3}
45^{0}	2^{0}		
		177^{8}	8^{3}
51^{0}	2^{5}		
		111^{1}	41^{7}
9^{0}	20^{0}		
		26^{8}	97^{2}
5^{5}	32^{5}		
		17^{6}	143^{5}
4^{0}	45^{0}		
		31^{5}	160^{0}
13^{0}	41^{5}		
		75^{0}	118^{5}
27^{5}	22^{5}		
		113^{0}	49^{1}
33^{5}	4^{0}		
		85^{2}	20^{4}

Cu. Yds. Cut: 288.0
Cu. Yds. Fill: 777.8
Excav. Emb. 20%



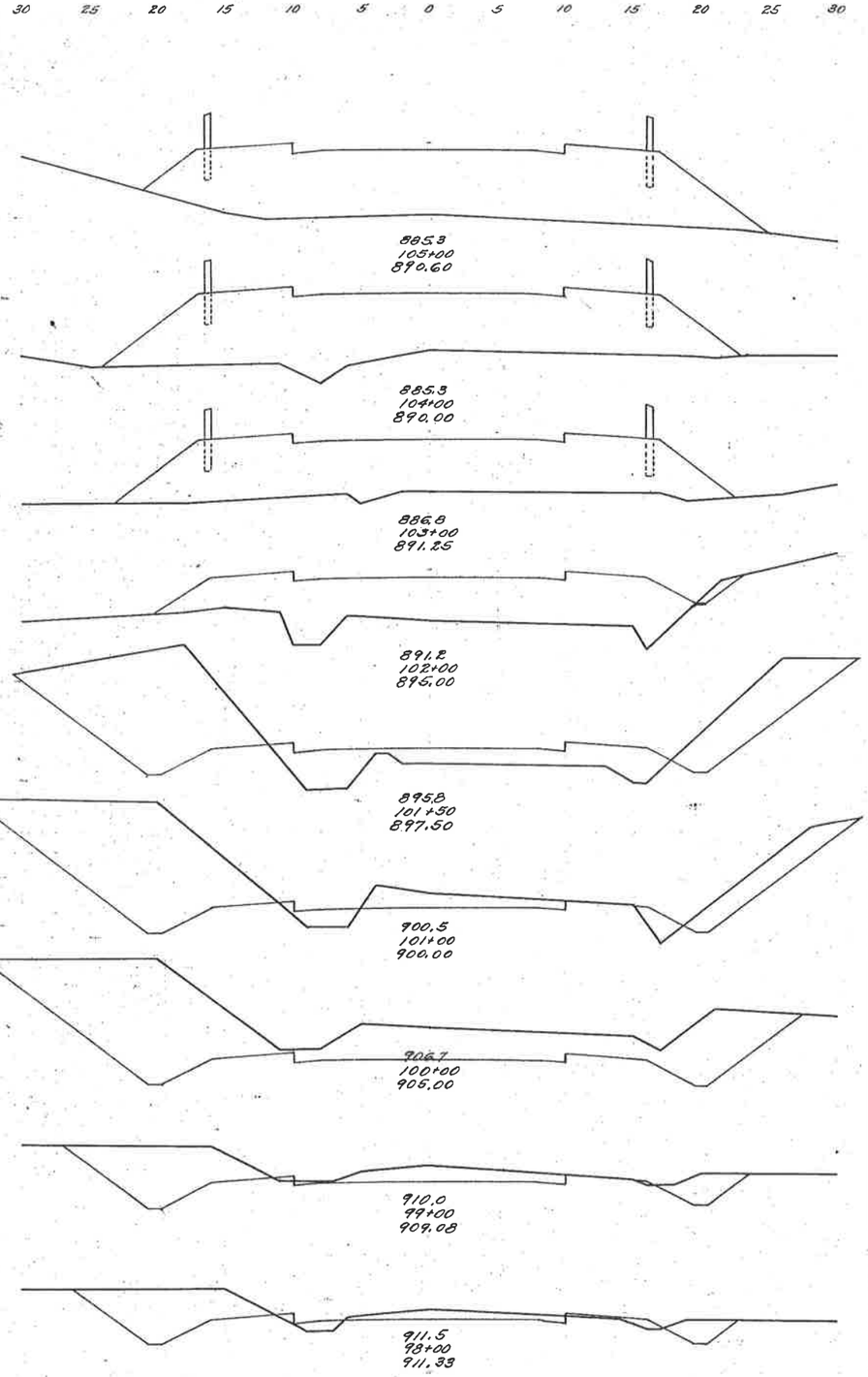
FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

14/21

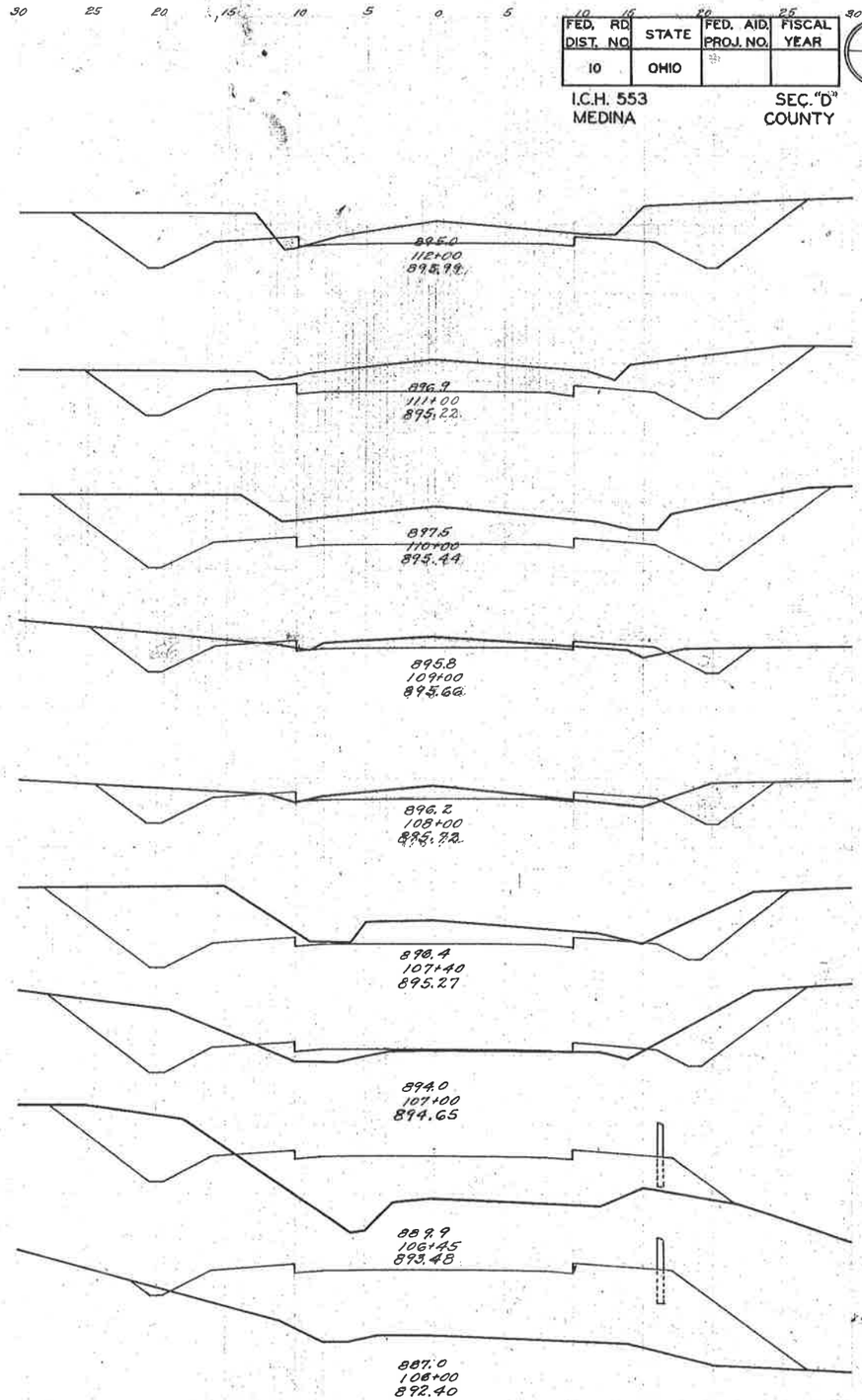
I.C.H. 553
MEDINA

SEC. "D"
COUNTY

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill	
0°	23°			
			314.8	
		0°	405.6	
			60.8	
0°	196°			
		0°	657.5	
0°	159°			
		1.9	531.5	
1.5	128°			
		125.5	163°	
134°	48°			
		260.7	53.7	1828.0 Cu. Yds. Excav. 1808.7 Cu. Yds. Emb. + 20%
147.5	10°			
		618.6	18.5	
186.5	0°			
		463.9	1.9	
64°	1°			
		204.6	8.3	
46.5	3.5			
		152.8	12°	



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill	
94°	1.5			
		368.5	2.8	
105°	0°			
		459.3	0°	
143°	0°			
		328.7	7.4	
34.5	4°			
		132.4	16.7	2720.5 Cu. Yds. Excav. 2661.5 Cu. Yds. Emb. + 20%
37°	5°			
		149.5	5.6	
97.5	0°			
		115.9	9.6	
57°	13°			
		96.7	124.2	
86°	109°			
		30.8	217.7	
1°	190.5			
		1.9	228.7	



FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

15/21

I.C.H. 553
MEDINA

SEC."D"
COUNTY

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
171°	0°		
		516⁷	2⁸
108°	1⁵		
		218⁵	201⁹
10°	107⁵		
		18⁵	560²
0°	195°		
		0°	817⁶
0°	246⁵		
		919³	
		0°	1149
			229⁸
0°	374°		
		0°	643³
0°	205°		
		79³	214¹
107°	84°		
		490⁸	163°
158°	4°		
		466⁷	10²

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

894.3
120+00
892.11

889.1
119+00
888.80

881.8
118+00
885.20

877.1
117+00
881.73

875.1
116+00
880.94

115+20

876.2
115+00
882.68

879.1
114+40
884.80

883.0
114+00
886.50

891.8
113+00
890.76

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
13°	45°		
		24¹	267⁶
0°	99⁵		
		0°	309³
0°	67⁵		
		11¹	277⁸
6°	82⁵		
		34⁶	314⁸
16⁵	63⁵		
		18⁹	27⁴
51⁵	35°		
		351⁹	67⁶
138⁵	1⁵		
		545⁴	2⁸
156°			
		548²	0°
140°	0°		
		576°	0°

Cu. Yds. 4529.7
Cu. Yds. 4622.8
Excav. Emb. +20%

30 25 20 15 10 5 0 5

883.6
128+00
884.48

879.6
127+00
881.21

878.8
126+00
880.40

880.0
125+00
882.40

883.5
124+15
885.29

884.6
124+00
885.80

890.8
123+00
887.20

894.6
122+00
892.31

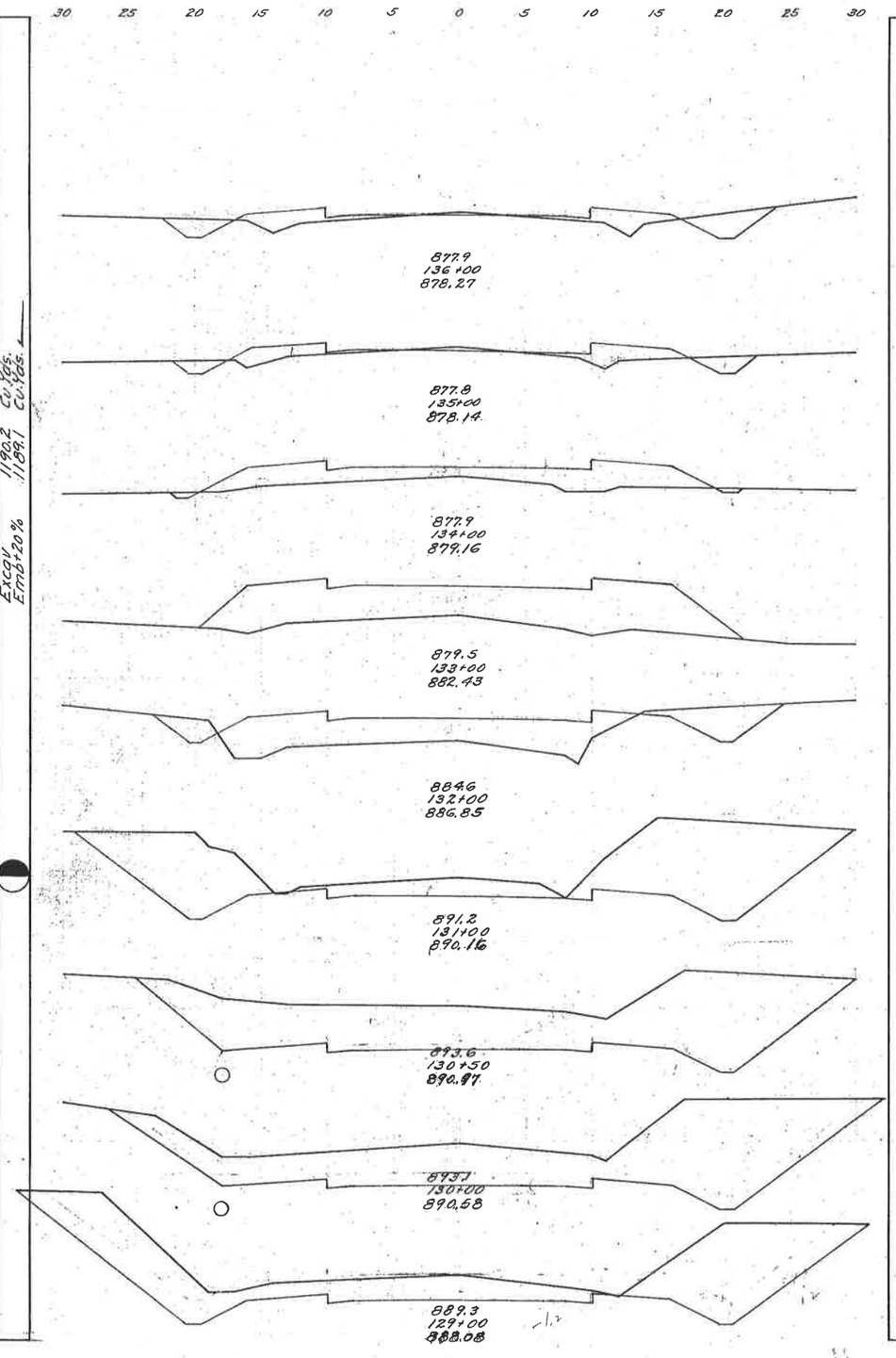
895.4
121+00
893.38

FED. RD. DIST. NO	STATE	FED. AID PROJ. NO	FISCAL YEAR	16/21
10	OHIO			

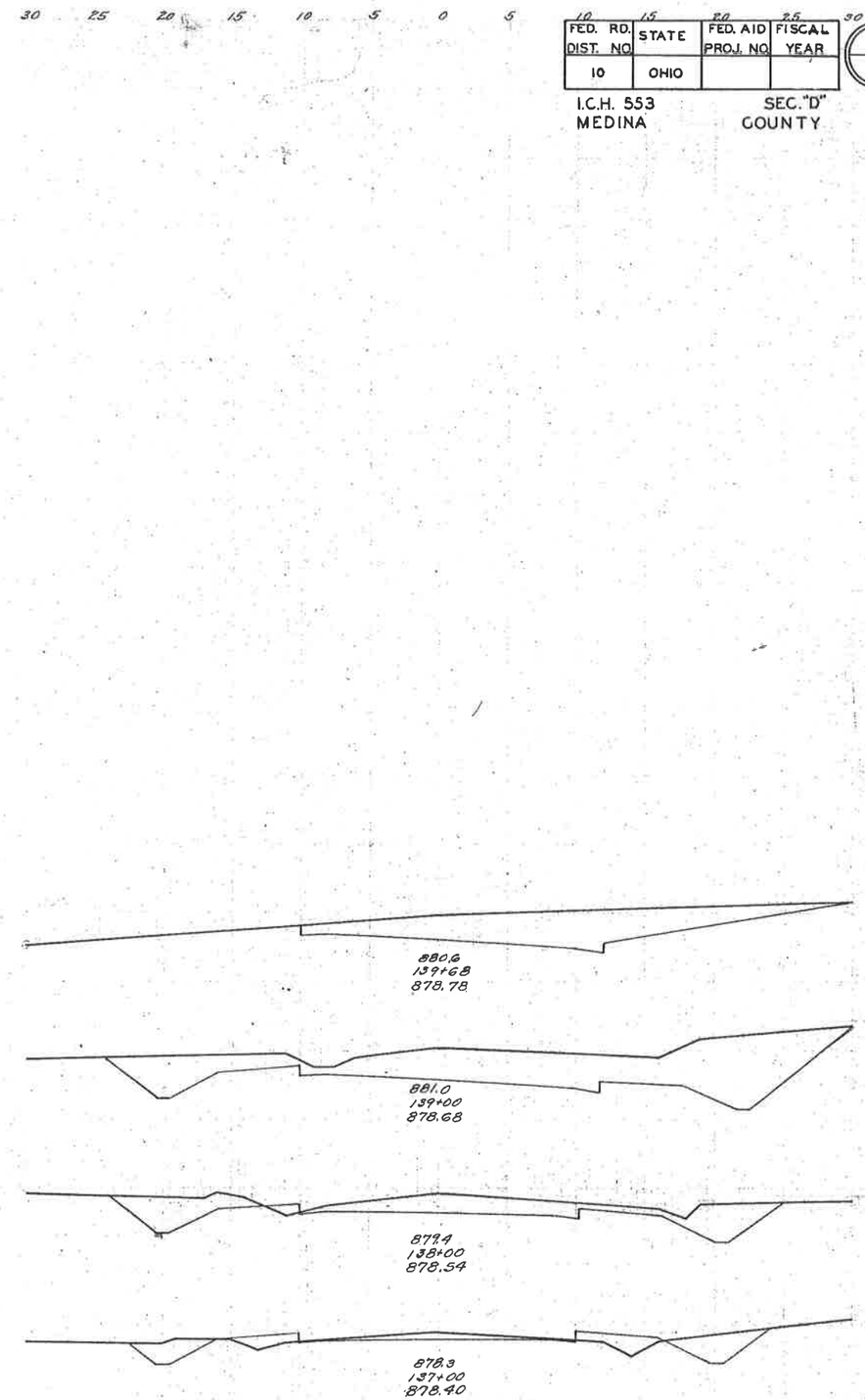
I.C.H. 553 MEDINA

SEC. "D" COUNTY

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill	
13°	17.5			
		37°	59.3	
7°	14.5			
		14.8	11.9.8	Cu. Yds. Cut Cu. Yds.
1°	47.5			11,920.2 11,891.1
		1°	29.4.5	Excav. Emb+20%
0°	111.5			
		37°	326.9	
20°	65°			
		343.5	120.9	
165.5	0°			
		331.5	0°	
192.5	0°			
		351.2	0°	
184.5	0°			
		652.8	0°	
165°	0°			
		329.8	83.3	

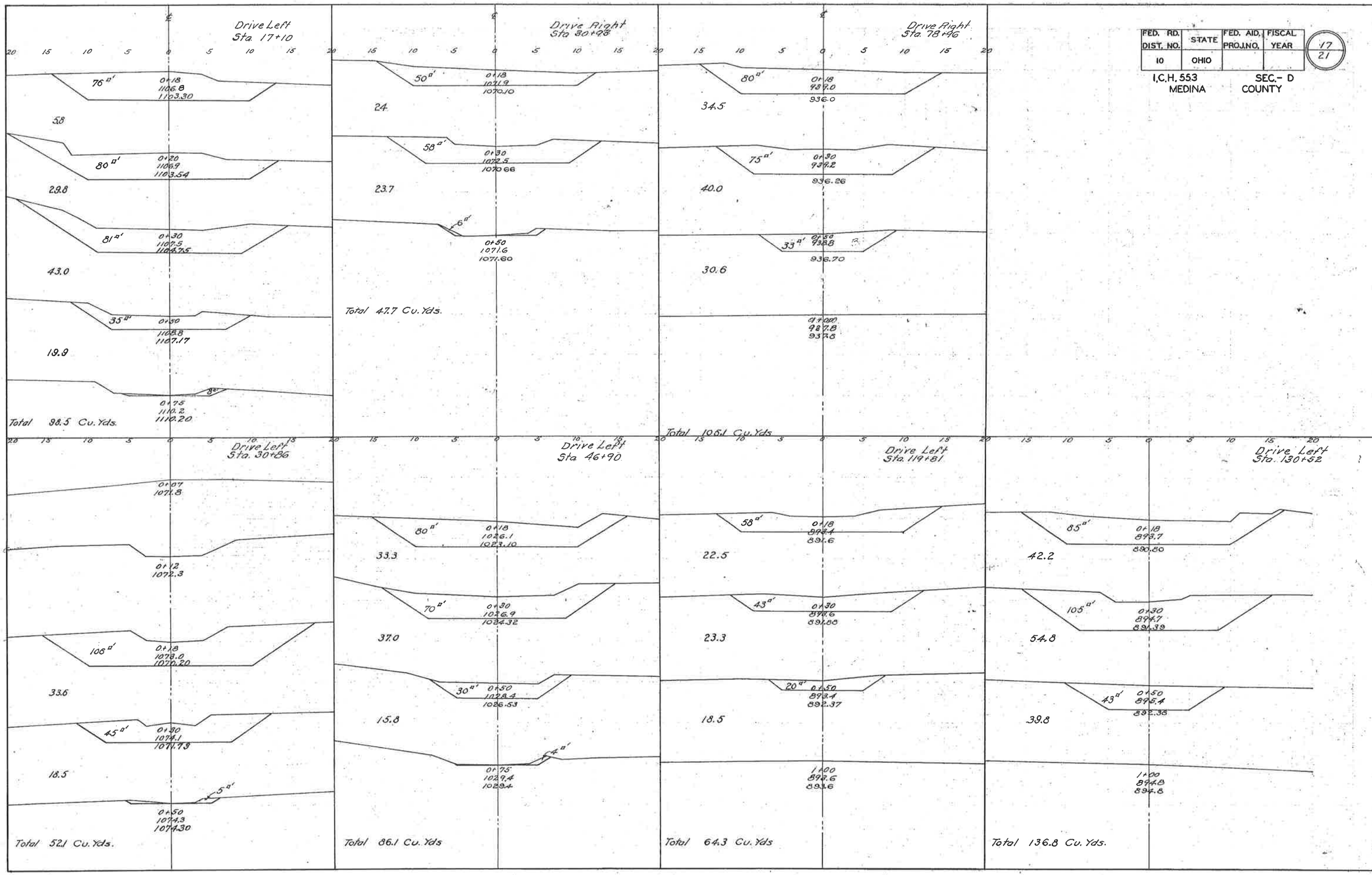


End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
61.5	0°		
		22.5	
117.5	0°		
		31.5.8	3.7
53°	2°		
		144.4	21.3
25°	9.5		
		70.4	50°



FED. RD. DIST. NO.	STATE	FED. AID. PROJ. NO.	FISCAL YEAR	17 / 21
10	OHIO			

I.C.H. 553 MEDINA — SEC.- D COUNTY

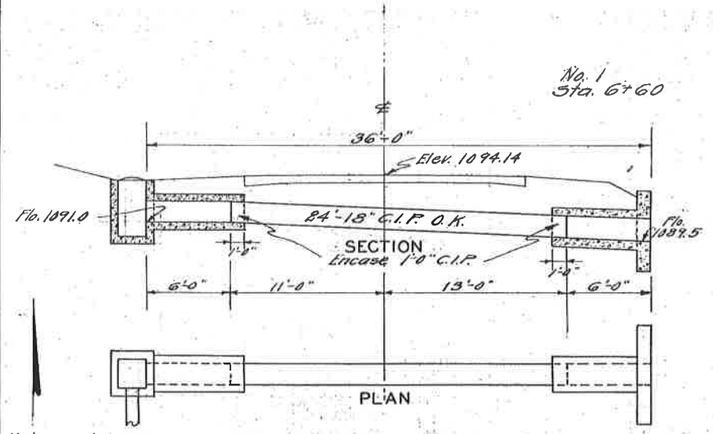


FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

18
21

I.C.H. 553 SEC.-"D"
MEDINA COUNTY

No. 1
Sta. 6+60



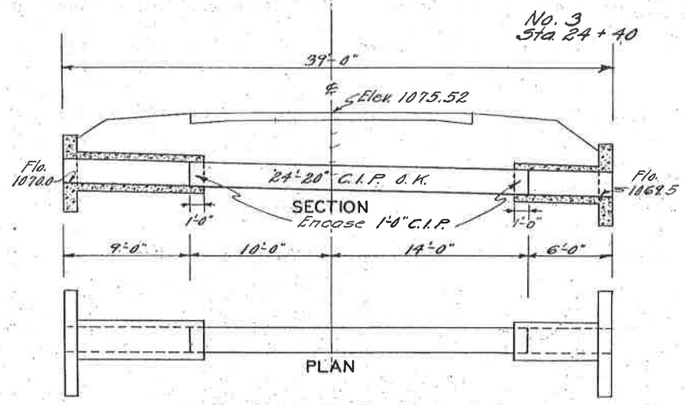
Note:- Catch Basin is estimated with roadway pipe.

Req'd. Extend Left & Right with Std. 18" Vit. Pipe encased. Std. Headwalls on Right.

Estimated Quantities

Excavation Unclass.	5.0 Cu. Yds.
1-5½ Concrete	1.4 Cu. Yds.
1-8 Concrete	2.0 Cu. Yds.
Reinf. Steel	40. Lbs.
18" Vit. Pipe	12 Lin. Ft.

No. 3
Sta. 24+40

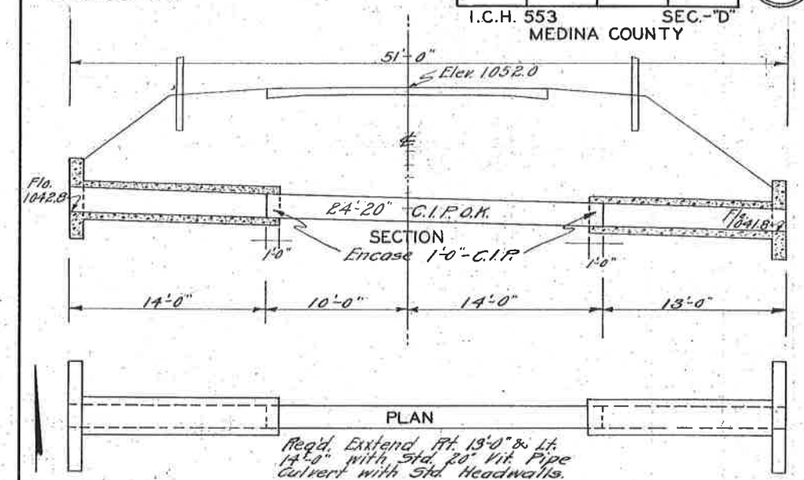


Req'd. Extend Rt. 6'-0" & Lt. 9'-0" with Std. 20" Vit. Pipe Culvert with Std. Headwalls.

Estimated Quantities

Excavation Unclass	5 Cu. Yds.
1-5½ Concrete	3 Cu. Yds.
1-8 Concrete	2.6 Cu. Yds.
Reinf. Steel	85 Lbs.
20" Vit. Pipe	15 Lin. Ft.

No. 5
Sta. 35+26

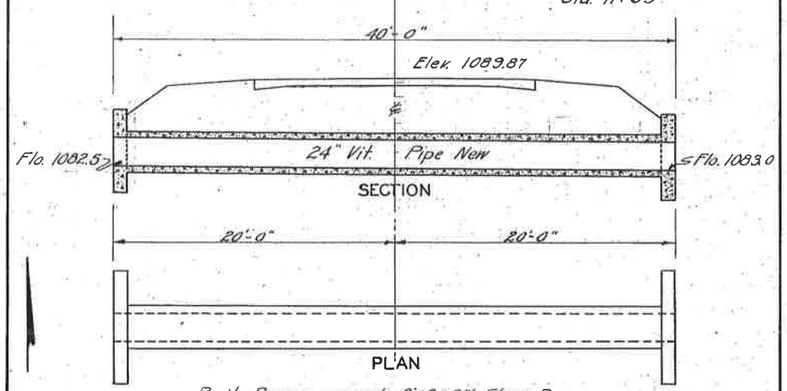


Req'd. Extend Rt. 13'-0" & Lt. 14'-0" with Std. 20" Vit. Pipe Culvert with Std. Headwalls.

Estimated Quantities

Excavation Unclass.	6.0 Cu. Yds.
1-5½ Concrete	3.0 Cu. Yds.
1-8 Concrete	4.6 Cu. Yds.
Reinf. Steel	85 Lbs.
20" Vit. Pipe	27 Lin. Ft.

No. 2
Sta. 11+65

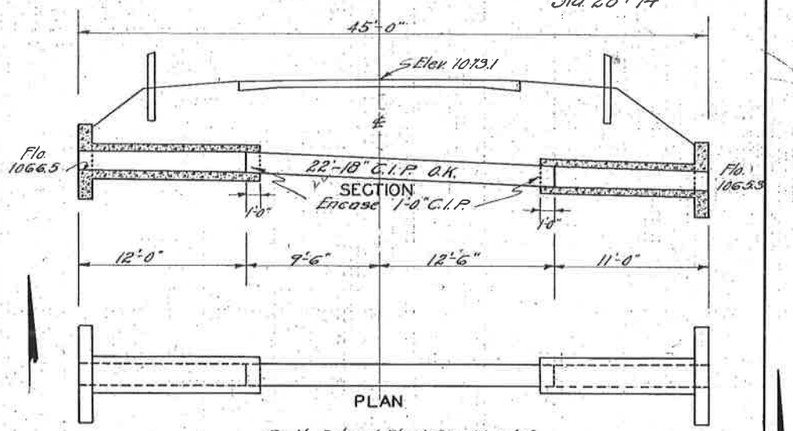


Req'd. Remove present 2'×2'×2.3' Stone Box Construct New Std. 24" Vit. Pipe Culvert with Std. Headwalls.

Estimated Quantities

Excavation Unclass.	5.0 Cu. Yds.
Stone Masonry rem'd.	9.0 Cu. Yd's.
1-5½ Concrete	3.5 Cu. Yds.
1-8 Concrete	7.8 Cu. Yds.
Reinforcing Steel	105 Lbs.
24" Vit. Pipe	40 Lin. Ft.

No. 4
Sta. 28+94

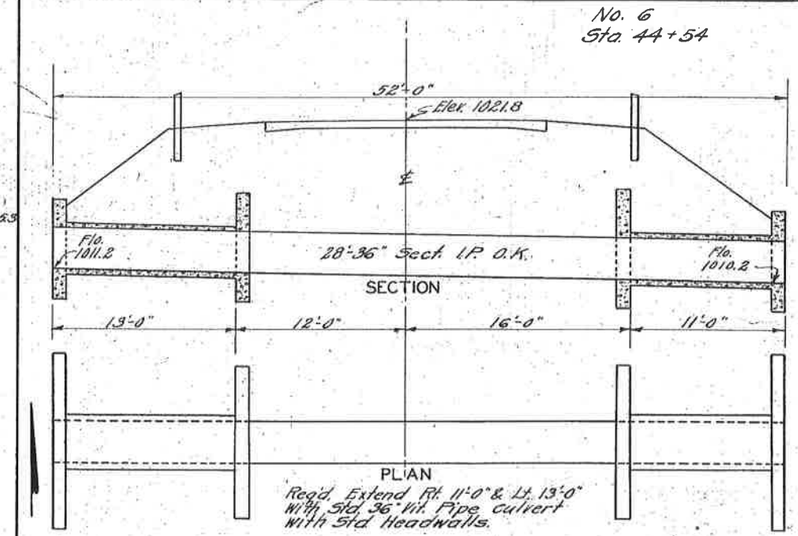


Req'd. Extend Rt. 11'-0" & Lt. 12'-0" With Std. 18" Vit. Pipe culvert with Std. Headwalls. Clean present 18" C.I.P.

Estimated Quantities

Excavation Unclass	6.0 Cu. Yds.
1-5½ Concrete	2.7 Cu. Yds.
1-8 Concrete	3.5 Cu. Yds.
Reinf. Steel	80. Lin. Ft.
18" Vit. Pipe	23 Lin. Ft.
18" C.I.P. Cleaned	22 Lin. Ft.

No. 6
Sta. 44+54



Req'd. Extend Rt. 11'-0" & Lt. 13'-0" With Std. 36" Vit. Pipe Culvert With Std. Headwalls.

Estimated Quantities

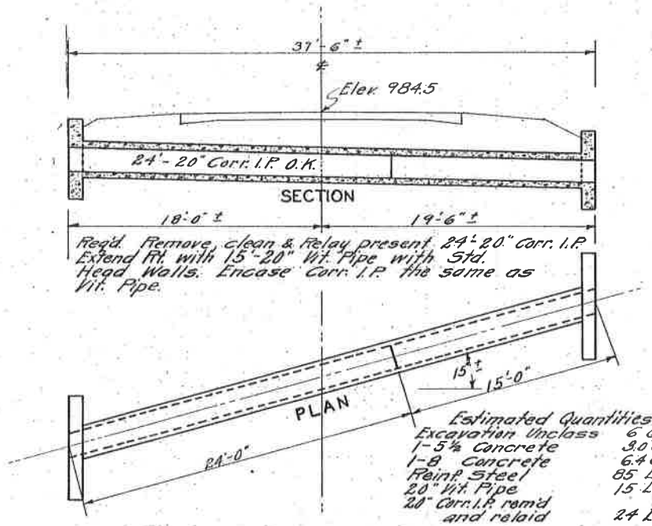
Excavation Unclass.	8.0 Cu. Yds.
1-5½ Concrete	5.8 Cu. Yds.
1-8 Concrete	7.2 Cu. Yds.
Reinf. Steel	165. Lbs.
36" Vit. Pipe	24 Lin. Ft.
36 Sect. I.P. Cleaned.	28 Lin. Ft.

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

19 / 21

I.C.H. 553 SEC.-"D"
MEDINA COUNTY

No. 8
Sta. 59+25

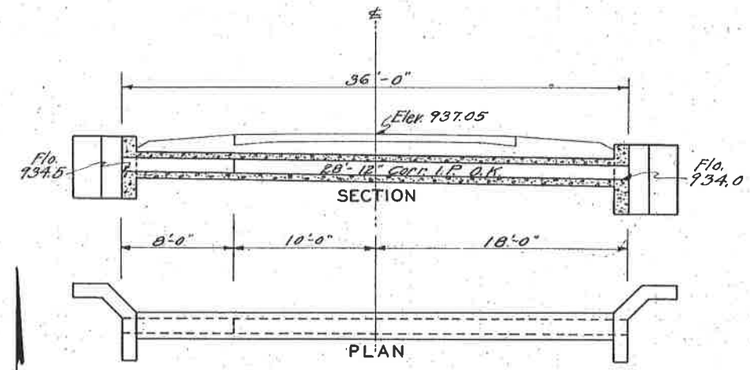


Req'd. Remove, clean & Relay present 24'-20" Corr. I.P. Extend Ft. with 15'-20" Vit. Pipe with Std. Head Walls. Encase Corr. I.P. the same as Vit. Pipe.

Estimated Quantities

Excavation Unclass	6 Cu. Yds.
1-5½ Concrete	3.0 Cu. Yds.
1-8 Concrete	6.4 Cu. Yds.
Reinf. Steel	85 Lbs.
20" Vit. Pipe	15 Lin. Ft.
20" Corr. I.P. rem'd and reloid	24 Lin. Ft.

No. 11
Sta. 81+82

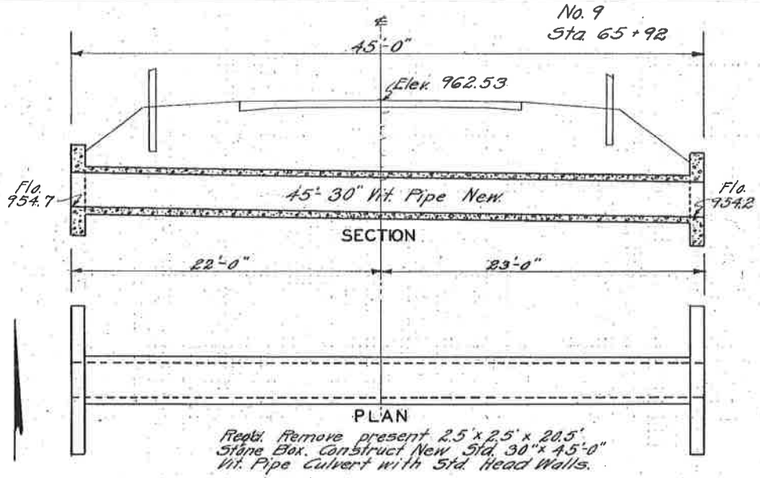


Req'd. Remove & Relay present 28'-12" Corr. I.P. Extend Lt. 8'-0" with Std. 12" Vit. Pipe Culvert. Encase the Corr. I.P. same as Vit. Pipe. 2 Std. Side Road Head Walls.

Estimated Quantities

Excavation Unclass.	6 Cu. Yds.
1-5½ Concrete	2.6 Cu. Yds.
1-8 Concrete	3.7 Cu. Yds.
12" Vit. Pipe	9 Lin. Ft.
12" Corr. I.P. removed & reloid	28 Lin. Ft.
Reinf. Steel	60 Lbs.

No. 9
Sta. 65+92

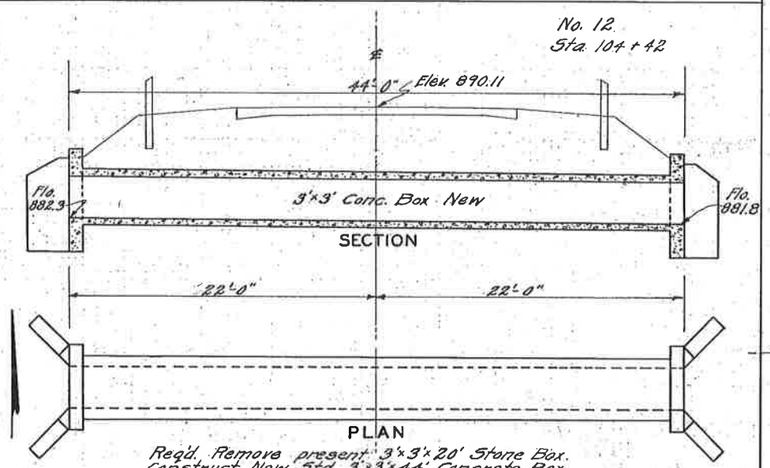


Req'd. Remove present 2.5'x2.5'x20.5' Stone Box. Construct New Std. 30"x45'-0" Vit. Pipe Culvert with Std. Head Walls.

Estimated Quantities

Excavation Unclass	8 Cu. Yds.
Stone Masonry rem'd.	12 Cu. Yds.
1-5½ Concrete	4.6 Cu. Yds.
1-8 Concrete	11.5 Cu. Yds.
Reinf. Steel	125 Lbs.
30" Vit. Pipe	45 Lin. Ft.

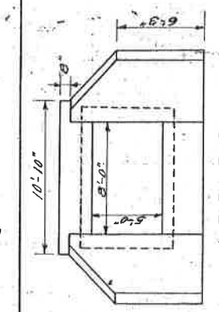
No. 12
Sta. 104+42

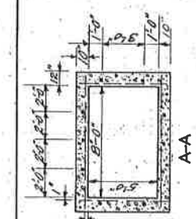


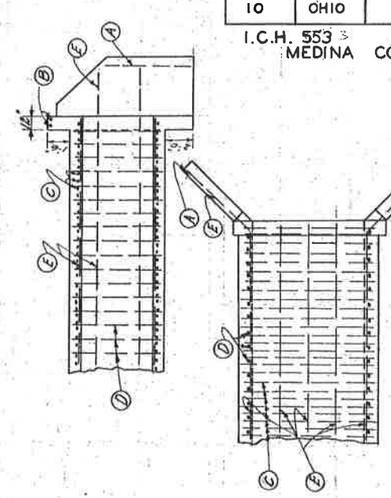
Req'd. Remove present 3'x3'x20' Stone Box. Construct New Std. 3'x3'x44' Concrete Box.

Estimated Quantities

Excavation Unclass.	12 Cu. Yds.
Stone Masonry rem'd.	12 Cu. Yds.
1-5½ Concrete	18.8 Cu. Yds.
Reinforcing Steel	915 Lbs.

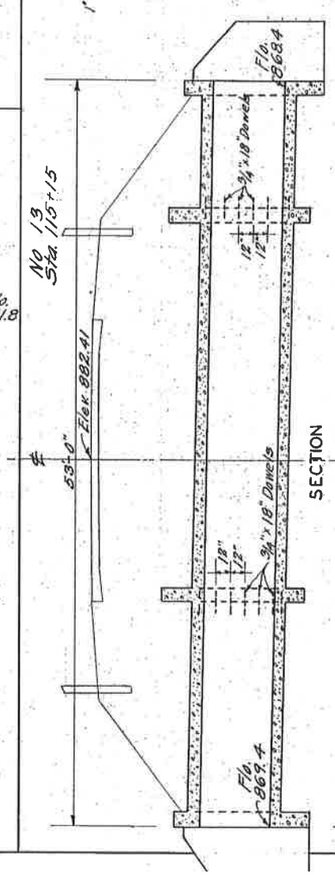


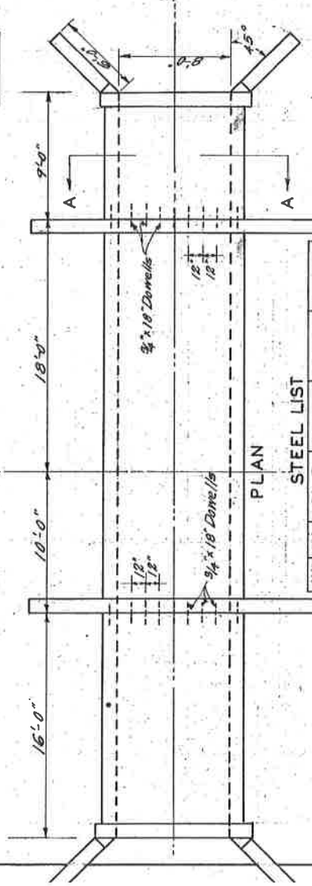




Estimated Quantities

Excavation Unclass.	15 Cu. Yds.
1-5½ Concrete	84.4 Cu. Yds.
Reinforcing Steel	1496 Lbs.
34"x18" Steel Dowels	38 Pieces





STEEL LIST

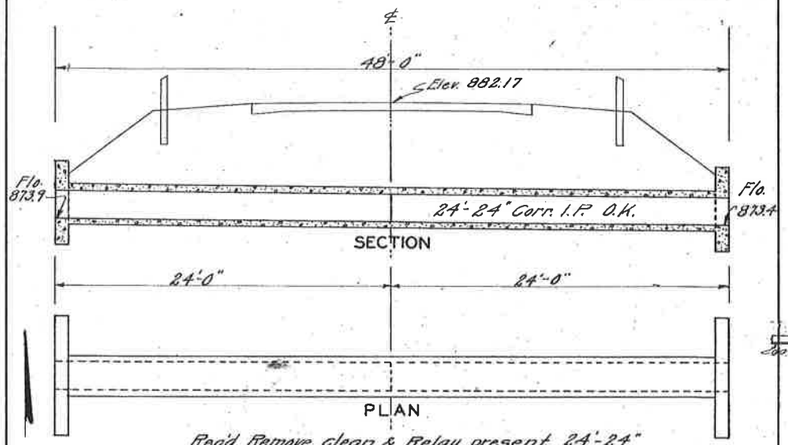
MK. NO.	SIZE	LENGTH	SPACED	WEIGHT
A	4 #8	6'-0"	Shown	12
B	4 #8	10'-4"	Shown	17
C	86 #8	9'-6"	12" C.to C.	1087
D	50 #8	6'-2"	12" C.to C.	148
E1	6 #8	8'-9"	Shown	85
E2	6 #8	13'-9"	Shown	45
E3	4 #8	14'-6"	Shown	28
E4	4 #8	23'-6"	Shown	155
			Total	1468

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
10	OHIO		

20
21

I.C.H. 553 SEC.-"D"
MEDINA COUNTY

No. 14
Sta 128+62

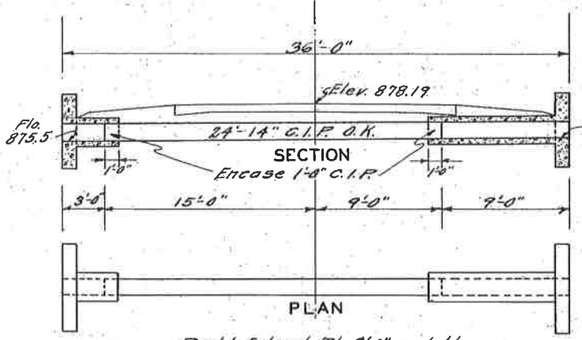


Req'd. Remove, clean & Relay present 24'-24" Corr. I.P. Extend Left 24' with Std. 24" Vit. Pipe Culvert. 2 Std. Head Walls. Encase Corr. I.P. the same as Vit Pipe.

Estimated Quantities

Excavation unclass.	6 Cu. Yds.
1-5% Concrete	3.5 Cu. Yds.
1-8 Concrete	4.5 Cu. Yds.
24" Vit. Pipe	24 Lin. Ft.
24" Corr. I.P. Remo'd & Relaid	24 Lin. Ft.
Reinforcing Steel	105 Lbs.

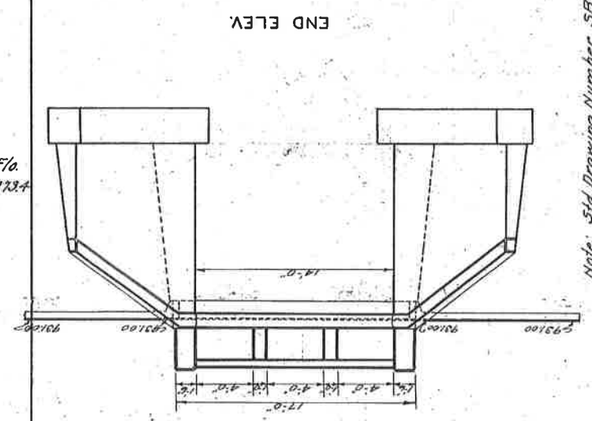
No. 15
Sta. 135+33



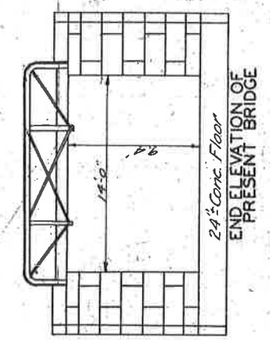
Req'd. Extend Rt. 9'-0" and Lt. 3'-0" with Std. 15" Vit. Pipe Culvert with Std. Head Walls.

Estimated Quantities

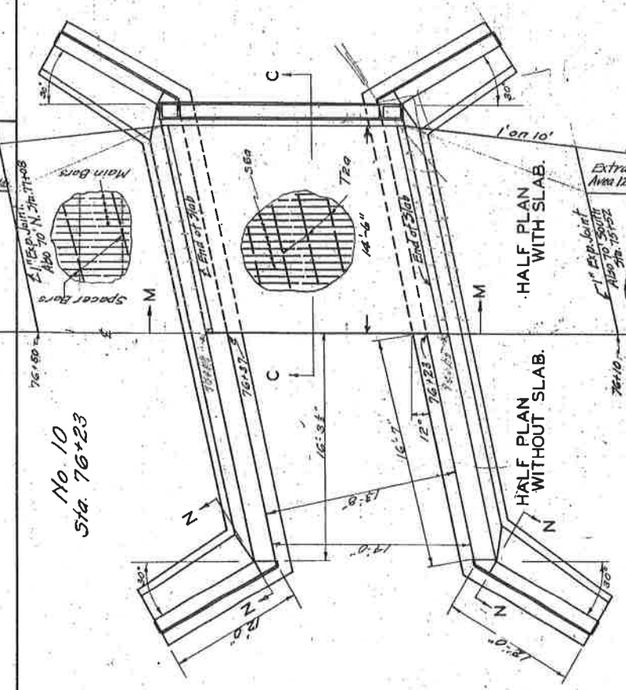
Excavation Unclass.	6 Cu. Yds.
1-5% Concrete	2.3 Cu. Yds.
1-8 Concrete	1.6 Cu. Yds.
Reinforcing Steel	70 Lbs.
15" Vit. Pipe	12 Lin. Ft.

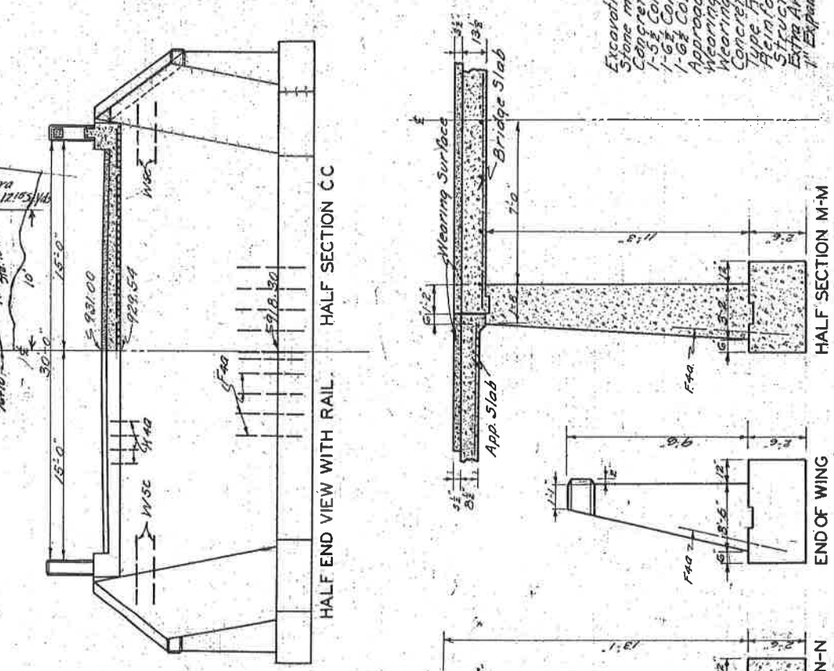


Note: Std. Drawing Number SB-2430 shall govern the construction of this bridge. For approach slab details see Drawing Number AS-2430



MARK	SIZE	LENGTH	SPACED	No.	WEIGHT
		Slab			
5Ga	⅞" ø	5'-1"	5"	77	267 lb
7Ga	½" ø	32'-1"	2'-0"	8	171 lb
D5a	¾" ø	8'-3"	Shown	8	100 lb
D4a	⅝" ø	4'-1"	Shown	8	75 lb
		Abutments			
W4c	¾" ø	9'-1"	Shown	16	216 lb
F4a	⅝" ø	2'-1"	Shown	Each	134 lb
F4a	⅝" ø	4'-6"	Shown	Each	320 lb
		Total			3692 lb





ESTIMATED QUANTITIES

Excavation unclass.	100	Cu. Yds.
Stone masonry remo'd.	24	Cu. Yds.
Concrete masonry remo'd.	21	Cu. Yds.
1-5% Concrete (walls)	22.0	Cu. Yds.
1-6% Concrete (footings)	111.8	Cu. Yds.
Approach Slab 1-5 mix. 8½" thick	51.7	Cu. Yds.
Wearing Surface Type "C"	55.0	Sq. Yds.
Wearing Surface Type "B"	122.3	Sq. Yds.
Concrete Curb 12"x22" Type "B"	117.2	Lin. Ft.
Concrete Rip-Rap Paving	46.0	Cu. Yds.
Reinforcing Steel	3.4	Lbs.
Structure removed	3692	Lin. Ft.
Extra Area Regular Berm	24.3	Sq. Yds.
1" Expansion Joint-Approaches	53.2	Lin. Ft.

Note: Wearing Surface for Type "C" shall be concrete 1-5 mix. Type "B" shall be 2½" Vitrified Brick including 1" sand cushion and bituminous filler.

Note: Present superstructure to be carefully dismembered and neatly piled within the limits of the highway and remain property of Medina County.

MED-3-2376

147
30
207

FED. RD. DIST. NO.	STATE	FED AID PROJ. NO	FISCAL YEAR
10	OHIO		21

I.C.H. 553 SEC. -"D"
MEDINA COUNTY

SUMMARY OF PIPE AND CATCH BASINS

Stations	Vit. Pipe 8"	Corrugated I.P. 8"	10"	12"	No. 1 C.B.	Side
	L.Ft.	L.Ft.	L.Ft.	L.Ft.		
0+0 to 9+65	965					L
0+50 to 1+00		50				L
0+0 to 2+00	200					R
1+75		20				L
2+30 to 2+86		56				R
2+37		20				L
3+72		20				L
3+82		20				R
4+75					1	L
5+77		20				R
5+87		20				L
6+60					1	L
6+73		20				L
7+50 to 10+40	290					R
9+92		20				L
8+42		20				R
13+86			20			R
14+73			20			R
15+50 to 18+50	300					R
15+50 to 18+50	300					L
21+70		20		20		R
27+52		20				R
30+18		20				L
30+86		20				L
30+93		20				R
30+84 to 33+70	286					R
35+10				20		R
38+23		20				R
39+05		20				L
44+86				20		L
46+00 to 47+00	100					L
46+90		20				L
48+00 to 54+12	612					R
54+54				20 20		R
56+19				20		R
56+28				20		L
59+52				20		L
65+80				20		R
67+30		20				L
72+03				20		R
76+00				20		R
77+23			20			L
77+70			20			R
78+96		20				R
87+90				20		L
91+40			20			R
94+95				20		R
96+77				20		L
107+24		20				L
117+47				20		L
119+81		20				L
120+50 to 121+00	50					R
120+75		20				R
121+70		20				L
130+50		20				R
122+80		20				R
130+00 to 130+80	80					L
130+52		20				
Totals	3163	626	100	300	2	

SUMMARY OF TYPE "D" GUARD RAIL

From	To	Lin. Ft.	Side
28+50	29+46	96	R
28+50	29+46	96	L
34+10	35+70	160	L
34+10	35+06	96	R
35+26	36+54	128	R
43+30	44+74	144	L
43+50	45+26	176	R
59+50	60+62	112	R
64+80	66+32	152	L
65+50	66+70	120	R
69+96	76+20	624	L
76+40	77+04	64	L
75+00	75+96	96	R
76+40	77+04	64	R
102+80	105+52	272	L
102+80	106+56	376	R
114+40	117+36	296	L
114+40	118+48	408	R
126+80	128+00	120	R
Total		3600 Lin. Ft.	

SUMMARY OF EXCAVATION

Stations From	Stations To	Excav. Rdway. Cu. Yds.	Excav. Drives Cu. Yds.	Excav. Total Cu. Yds.	Emb. +20% Cu. Yds.	Waste Cu. Yds.
0+0	11+00	893.5		893.5	876.6	16.9
11+00	23+50	2137.1	98.5	2235.6	2096.3	139.3
23+50	33+00	2103.8	99.8	2203.6	2179.7	23.9
33+00	44+60	4477.6		4477.6	4437.6	40.0
44+60	54+75	1849.6	86.1	1935.7	1854.3	81.4
54+75	66+40	2776.7		2776.7	2735.6	41.1
66+40	75+00	2328.7		2328.7	1917.9	410.8
75+00	88+00	2235.6	105.1	2340.7	1656.7	684.0
88+00	97+00	788.0		788.0	777.8	10.2
97+00	104+15	1828.0		1828.0	1808.7	19.3
104+15	115+20	2720.8		2720.5	2661.5	59.0
115+20	131+00	4529.7	201.1	4730.8	4622.8	108.0
131+00	139+68	1190.2		1190.2	1189.1	1.1
Totals		29869.0	590.6	30459.6	28824.6	1635.0

SUMMARY OF NO. 46 STONE OR SLAG FOR ROAD APP.

Station	Co. Rd.	Tons	Side
82+01	62	10	R
82+01	62	10	L
139+68	13	10	R
Total		30 Tons	

From Sta. 0+0 to 2+50 reqd. 50 Tons
✓ No. 46 Slag or Stone to be placed on berms.

Summary of Cast Iron Monument Boxes to be placed as directed. Each Box shall weigh not less than 40 lbs.
Stations; 0+0
82+01
109+07
122+73
139+68

Excavated quantities are calculated from cross-sections as plated for Type "C" and adjusted for Type "B" as follows;

6500 Lin. Ft. in cut
× 1.74 Sq. Ft. extra cut per lin. ft.
27) 11310.0 Cu. Ft.
418.9 Cu. Yds. extra excavation for Type "B"
29859.0 Cu. Yds. excavation Type "C"
30277.9 Cu. Yds. excavation Type "B"

ESTIMATED QUANTITIES

	Type "C"		Type "B"	
Excavation unclassified	29859.0	Cu. Yds.	30277.9	Cu. Yds.
Shoulders, slopes & ditches	13945	Lin. Ft.	13945	Lin. Ft.
Clearing and grubbing	(lump)		(lump)	
Type "D" Guard Rail	3600	Lin. Ft.	3600	Lin. Ft.
No. 46 loose stone for Road App.	30	Tons.	30	Tons.
No. 46 loose stone for berms.	50	Tons.	50	Tons.
No. 1 Catch Basins	2		2	
8" Vit. Pipe in place	3163	Lin. Ft.	3163	Lin. Ft.
8" Corr. I.P. in place	626	Lin. Ft.	626	Lin. Ft.
10" Corr. I.P. in place	100	Lin. Ft.	100	Lin. Ft.
12" Corr. I.P. in place	300	Lin. Ft.	300	Lin. Ft.
9"-7"-9" Inf. Conc. Pavement	30997.1	Sq. Yds.	39	Sq. Yds.
5½" Reinf. Conc. Base			30958.1	Sq. Yds.
2½" Vitrified Brick incl. 1" Sand cushion and Bit. Filler			27865.0	Sq. Yds.
12"×3½" Integral Conc. Curb			27838.0	Lin. Ft.
Monument Boxes in place	5	Pcs.	5	Pcs.

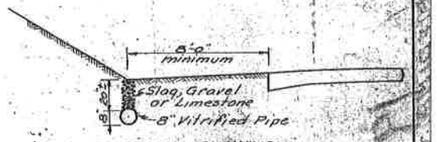


DIAGRAM SHOWING COVERING FOR 8" VIT PIPE

SUMMARY OF BRIDGE AND CULVERT QUANTITIES

No	Station	Type	Size	Length	Excavation	Stone Masry. Remd.	Conc. Masry. Remd.	Concrete 1-5½ Footings	1-6½ Footings	1-6½ Walls	1-8	Reinf. Steel	Vitrified Pipe 12"	18"	20"	24"	30"	36"	15"	Pipe Cl'g Rem'd	Pipe Cleaned	¾"×18" Dowells	8½" App. Slab 1-5 Mix	Wearing Type "C"	Surface Type "B"	12"×3½" Conc. Curb Type "B"	Type "A-4" Railing	Street Remd.	½" Exp. Joint
					Cu. Yds.	Cu. Yds.	Cu. Yds.	Cubic Yards				Lbs.	Lineal Feet							Lin. Ft.	Lin. Ft.	Pcs.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Lin. Ft.	Lin. Ft.	No	Lin. Ft.
1	6+60	Pipe	18"	36'-0"	5			1.4			2.0	40		12															
2	11+65	Pipe	24"	40'-0"	5	9		3.5			7.8	105				40													
3	24+40	Pipe	20"	39'-0"	5			3.0			2.6	85			15														
4	28+94	Pipe	18"	45'-0"	6			2.7			3.5	80		23							22								
5	35+26	Pipe	20"	51'-0"	6			3.0			4.6	85			27														
6	44+54	Pipe	36"	52'-0"	8			5.8			7.2	165						24			28								
7	54+23	Pipe	12"	Abandoned																									
8	59+25	Pipe	20"	39'-0"	6			3.0			6.4	85			15					24									
9	65+92	Pipe	30"	45'-0"	8	12		4.6			11.5	125					45												
10	76+23	Slab	14' Sp.	30' Rdwy.	100	24	21	22.0	51.7	111.8		3692											63.4	122.3	117.2	46.0	34	1	93.2
11	81+82	Pipe	12"	36'-0"	6			2.6			3.7	60	8						2	28									
12	104+42	Box	3'×3'	44'-0"	12	12		18.8				975																	
13	115+15	Box	8'×5'	53'-0"	15			34.6				1400										38							
14	126+62	Pipe	24"	48'-0"	6			3.5			9.5	105				24				24									
15	135+33	Pipe	15"	36'-0"	6			2.3			1.6	70							12										
Totals					194	57	21	110.8	51.7	111.8	60.4	7070	8	35	57	64	45	24	12	76	50	38	63.0	122.3	117.2	46.0	34	1	93.2