STATE	PROJECT	FUNDS
OHIO	F-524(5)	POST WAR

1 / 154

F-524 (5)

TRU-62-(4.59-9.67)

510

LIMITED ACCESS

4655C

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
TRU-62-(4.59-9.67)
TRUMBULL COUNTY
HUBBARD AND BROOKFIELD TOWNSHIPS
VILLAGE OF HUBBARD

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
FENCE LINE
CENTER LINE
POLE LINE
STEAM RAILROAD
GUARD RAIL

INDEX OF SHEETS

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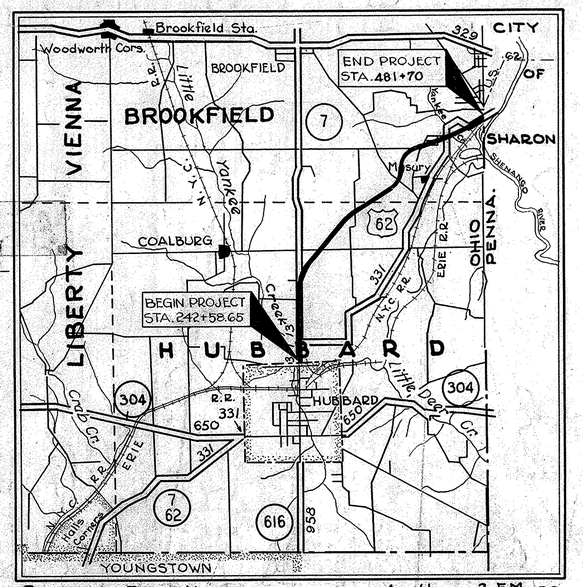
LINE DATA

BEGIN PROJECT F-524 (5) STA. 242+58.65
END PROJECT (NO ADDITION OR DEDUCTION) STA. 481+70
NET LENGTH F-524 (5) = 23911.35 LIN. FT.
OR 4.528 MILES

BEGIN WORK MUNICIPAL STA. 238+45
END WORK MUNICIPAL STA. 240+40.12
NET LENGTH MUNICIPAL = 195.12 LIN. FT.
OR 0.036 MILES

BEGIN WORK RURAL STA. 240+40.12
END WORK RURAL STA. 485+00
NET LENGTH RURAL = 24,459.88 LIN. FT.
ADD FOR APPROACHES (SHEET 5) 3479.54 LIN. FT.
NET LENGTH OF WORK = 28,134.54 LIN. FT.
OR 5.328 MILES



LOCATION PLAN

Scale = 1" = 1 Mile

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS

SCALES

PLAN 1" = 50' & 1" = 100'
PROFILE HORIZONTAL 1" = 50' & 1" = 100'
PROFILE VERTICAL 1" = 5 & 1" = 10'
CROSS SECTIONS 1" = 10'
* Submitted to B.P.R. for Approval

The Standard Specifications of the State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

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

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

Approved W. R. Turner
Date: 7/12/1952 Division Deputy Director

Approved Norman M. Stiles
Date: 3-10-52 Chief Engineer, Bureau of Planning & Programming

Approved Richard Orth
Date: 2-28-52 Chief Engineer, Bureau of Bridges & R.R. Crossings

Approved M. Rummey
Date: 3-10-52 Chief Engineer, Bureau of Location & Design

Approved L. T. Shauck
Date: 3-11-52 First Asst. Director & Chief Engineer

Approved M. Miller
Date: 3-12-52 Director of Highways

SUPPLIMENTAL SPECIFICATIONS		STANDARD DRAWINGS					
SPECIFICATION NO.	DATE	DRAWING No.	DATE	DRAWING No.	DATE	DRAWING No.	DATE
		*G-8.07	5-1-51	I-15 Nº 1	3-1-47	*T.J. Nº 2	8-1-51
		I-1,2,3,4 & 5	2-20-45	I-15 Nº 2	6-17-49	*T.J. Nº 3	8-1-51
M-110.25	Rev. 7-25-51	I-8 M.H. Nº 1	5-1-51	I-15 Nº 8	2-1-47	S-27 P.C. 2	3-16-46
		I-8 M.H. Nº 2	1-2-51	L-3	4-1-50	S-27 P.C. 3	2-20-45
18	Rev. 1-14-52	I-8 C.B. Nº 1-2-A & B	1-2-51	BT-50-70-71E Nº 1	10-1-47	AS-3-47 AS-4-47	7-27-49
24	5-23-48	I-8 C.B. 2-2-A & B	1-2-51	BT-71-R	1-2-51	CSB-5-50 Sheets No. 1 & 2	5-12-50
		I-8 I. Nº 1	3-1-39	*T.J. Nº 1	8-1-51	SSB-1-47	7-27-49
31	6-13-49	I-12	1-25-52	*T.J. Nº 1	8-1-51	STC-47	9-18-47
J-1711.12	Rev. 7-30-50	I-24	1-22-51	I-2-A	4-1-50		

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL:

DISTRICT ENGINEER DATE

APPROVED:

DIVISION ENGINEER DATE

FILE No.	TRUMBULL COUNTY TRU-62 (4.59-9.67)
DATE OF LETTING	19
CONTRACT	

TITLE SHEET

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F584(5)	POST WAR

TYPICAL SECTIONS

TYPES-T-71 & T-35

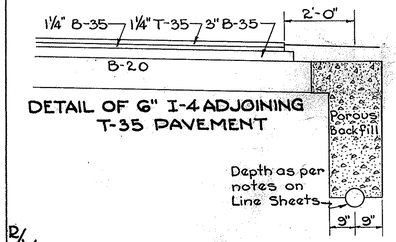
Scale 1/4" = 1'-0"

DESIGN SPEED 70 M.P.H.

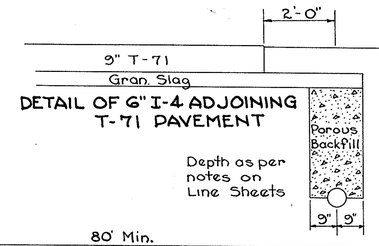
TRUMBULL COUNTY
TRU-62-(4.59-9.67)

FIELD BOOK NUMBERS
T-693, T-694, T-695, T-696
T-697, T-698, T-699, T-700
T-701, T-703, T-704

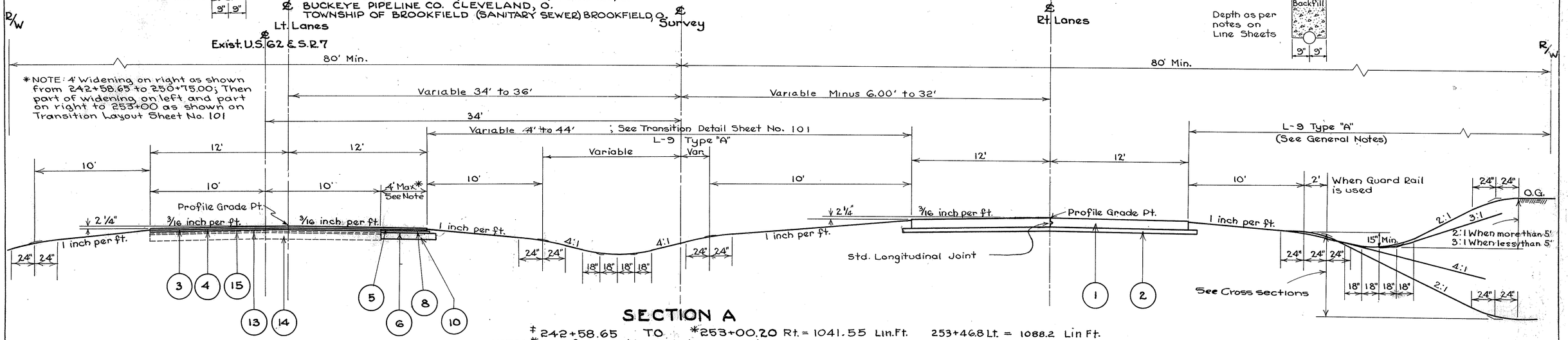
UTILITIES AFFECTED
UNITED NATURAL GAS CO. SHARON, PA.
SHENANGO VALLEY WATER CO. SHARON, PA.
OHIO EDISON CO. YOUNGSTOWN, O.
OHIO BELL TELEPHONE CO. YOUNGSTOWN, O.
EAST OHIO GAS CO. YOUNGSTOWN, O.
VILLAGE OF HUBBARD (LIGHT & WATER) HUBBARD, O.
BUCKEYE PIPELINE CO. CLEVELAND, O.
TOWNSHIP OF BROOKFIELD (SANITARY SEWER) BROOKFIELD, O.



DETAIL OF 6" I-4 ADJOINING T-35 PAVEMENT



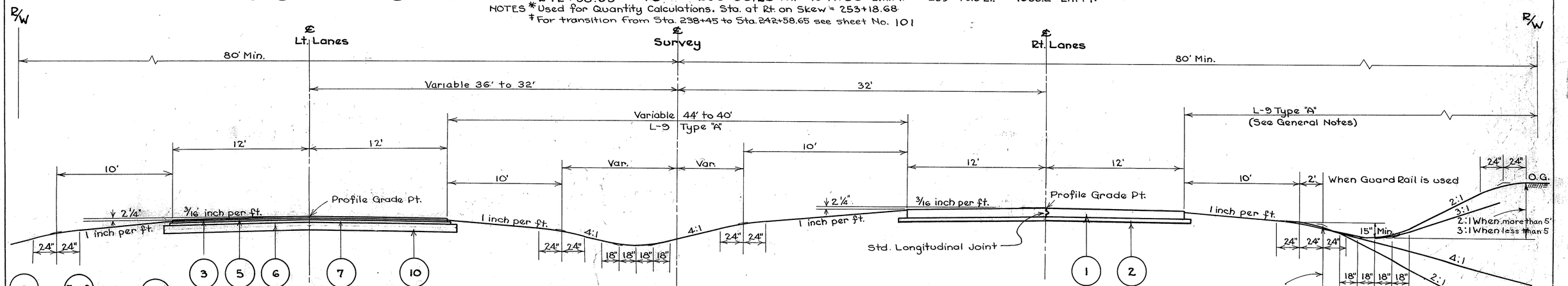
DETAIL OF 6" I-4 ADJOINING T-71 PAVEMENT



SECTION A

‡ 242+58.65 TO *253+00.20 Rt. = 1041.55 Lin.Ft. 253+46.8 Lt. = 1088.2 Lin Ft.

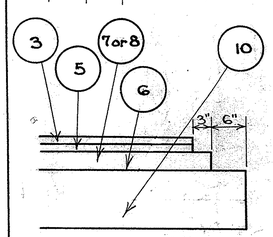
NOTES *Used for Quantity Calculations. Sta. at Rt. on Skew = 253+18.68
‡ For transition from Sta. 238+45 to Sta. 242+58.65 see sheet No. 101



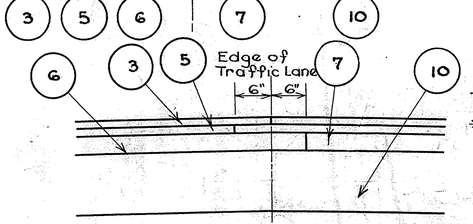
SECTION B

{ 254+08.8 Lt. to 262+00 Lt. = 791.20 Lin.Ft.
{ *254+00.40 Rt. to 262+00 Rt. = 799.60 Lin.Ft.

*Used for Quantity Calculations. Sta. at Rt on Skew = 254+18.88



EDGE CONSTRUCTION AND COURSE DETAIL
Scale 1" = 1'-0"



LAPPING DETAIL SECTION B
Scale 1" = 1'-0"

NOTE: Berms will be finished 1" below all pavement edges.

1 T-71 9" Reinforced Portland Cement Concrete Pavement
2 Special Granulated Slag (See Sheet No. 7 for dimensions and quantities), M3.13
3 T-35 1¼" Asphaltic Concrete Surface Course (Type A)
4 B-35 1¼" Minimum Asphaltic Concrete Leveling Course
5 B-35 1¼" Asphaltic Concrete Leveling Course
6 T-30 Bituminous Prime Coat using 0.35 gal. bituminous material { M5.3 MC-0 or MC-1; M5.7 RT-2 or RT-3 } per square yard
7 B-35 3" Asphaltic Concrete Base Course
8 B-35 3" Asphaltic Concrete Level Course
10 B-20 10" water bound Macadam Base Course, 2-5" Courses
13 Existing 1¼" Asphaltic Concrete Base Course
14 Existing 7" Bituminous Macadam Base Course
15 Existing 1¼" Asphaltic Concrete Surface Course

SEE REVISED BERM AND DITCH SECTIONS ON SHEET NO. 6.

E.T.F.

L D-1-176

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

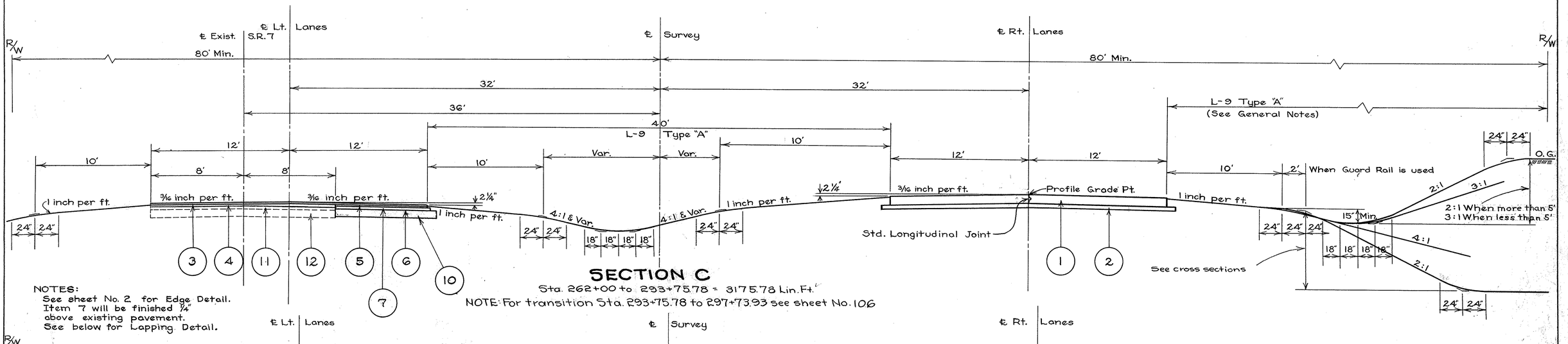
3
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

TYPICAL SECTIONS

TYPES - T-71 & T-35

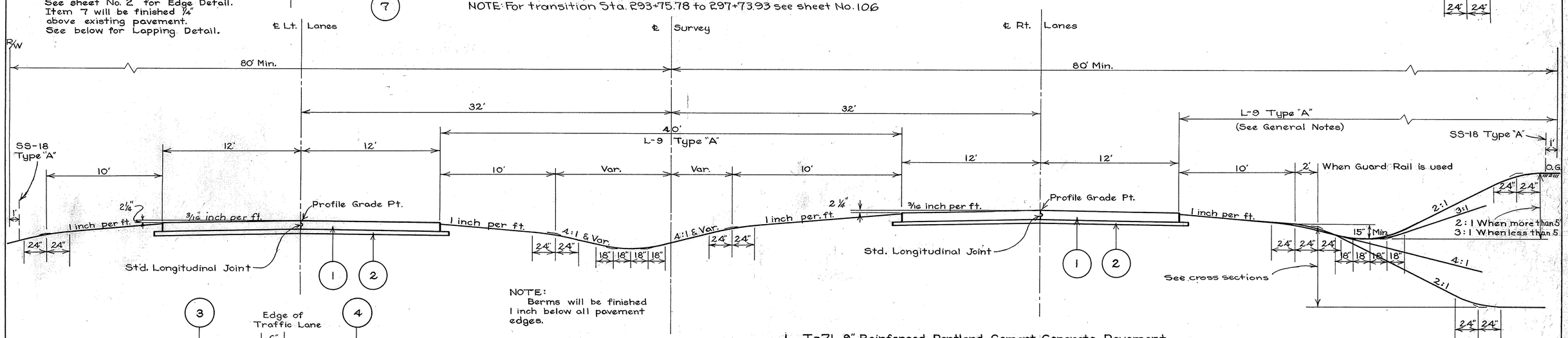
Scale 1/4" = 1'0"



NOTES:
See sheet No. 2 for Edge Detail.
Item 7 will be finished 1/4" above existing pavement.
See below for Lapping Detail.

SECTION C

Sta. 262+00 to 293+75.78 = 3175.78 Lin. Ft.
NOTE: For transition Sta. 293+75.78 to 297+73.93 see sheet No. 106



NOTE:
Berms will be finished 1 inch below all pavement edges.

LAPPING DETAIL SECTIONS A AND C
Scale 1" = 1'-0"

SECTION D

Sta. 309+21.02 to 346+84.94 = 3763.92 Lin. Ft.
Sta. 356+42.56 to 385+29.75 = 2887.19 Lin. Ft.
Sta. 404+89.19 to 410+02.68 = 513.49 Lin. Ft.
Sta. 428+99.82 to 459+61.61 = 3061.79 Lin. Ft.
Sta. 461+26.39 to 464+00.47 = 274.08 Lin. Ft.
Total = 10500.47 Lin. Ft.

1. T-71 9" Reinforced Portland Cement Concrete Pavement
2. Special Granulated Slag (See Sheet No. 7 for dimensions and quantities), M3.13
3. T-35 1 1/4" Asphaltic Concrete Surface Course (Type A)
4. B-35 1 1/4" Minimum Asphaltic Concrete Leveling Course
5. B-35 1 1/4" Asphaltic Concrete Leveling Course
6. T-30 Bituminous Prime Coat using 0.35 gal. bituminous Material } M5.3, M.C.-0 or M.C.-1; M5.7, RT-2 or RT-3 per square yard
7. B-35 3" Asphaltic Concrete Base Course.
10. B-20 10" Waterbound Macadam Base Course, 2-5" Courses
11. Existing 3" Penetration Macadam
12. Existing 8" Macadam Base

SEE REVISED BERM AND DITCH SECTIONS ON SHEET NO. 6.

E.T.F.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

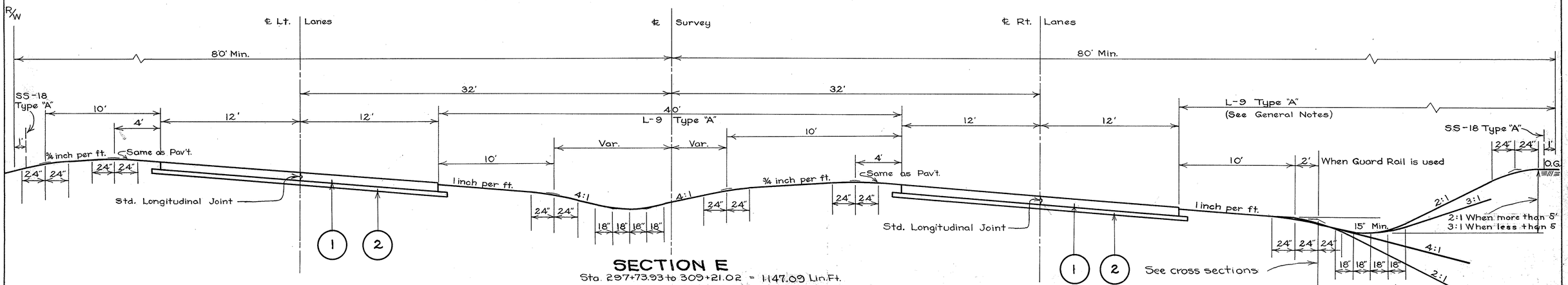
4
154

TRUMBULL COUNTY
TRU.-62 (4.59-9.67)

TYPICAL SECTIONS

TYPE-T-71

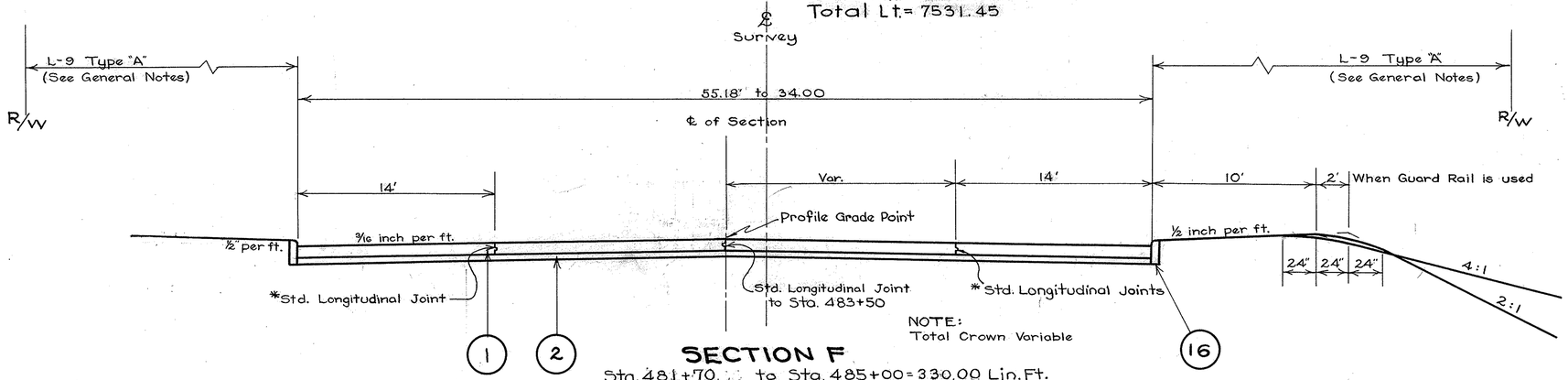
Scale ¼"=1'0"



SECTION E

Sta. 297+73.93 to 309+21.02 = 1147.09 Lin.Ft.
Sta. 346+84.94 to 356+42.56 = 957.62 Lin.Ft.
Sta. 385+29.75 to 404+89.19 = 1959.44 Lin.Ft.
Sta. 410+02.68 to 428+99.82 = 1897.14 Lin.Ft.
* Sta. 464+00.47 to 479+70.63 Lt. Lanes 481+10 Rt. Lanes = { 1570.16 Lin.Ft. Lt. / 1709.53 Lin.Ft. Rt.
Sta. 479+70.63 Lt. Lanes to 481+70 Transition
Sta. 481+10 Rt. Lanes to 481+70 Transition
Total Rt. = 7670.82
Total Lt. = 7531.45

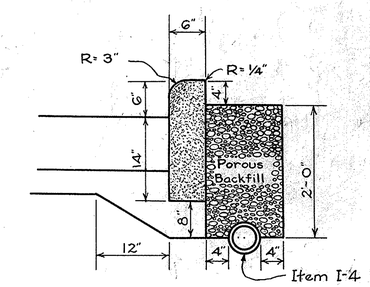
* NOTE: No Superelevation of left lanes beyond Sta. 477+31.39



SECTION F

Sta. 481+70 to Sta. 485+00 = 330.00 Lin.Ft.
(See Sheets Nos 12D and 15A for Typical Section F Quantities.

* Longitudinal Joints connected by transverse joint Sta. 483+50



SANDSTONE CURB DETAIL
Scale 1" = 1'-0"

1 T-71 9" Reinforced Portland Cement Concrete Pavement.
2. Special Granulated Slag (See Sheet No. 7 for dimensions and quantities), M3.13
16 I-11 6" x 20" Sandstone Curb

NOTE:
Berms will be finished 1" below all pavement edges except on high side of super-elevated curves and curbed section.

SEE REVISED BERM AND DITCH SECTIONS ON SHEET NO. 6

E.T.F.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

5/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

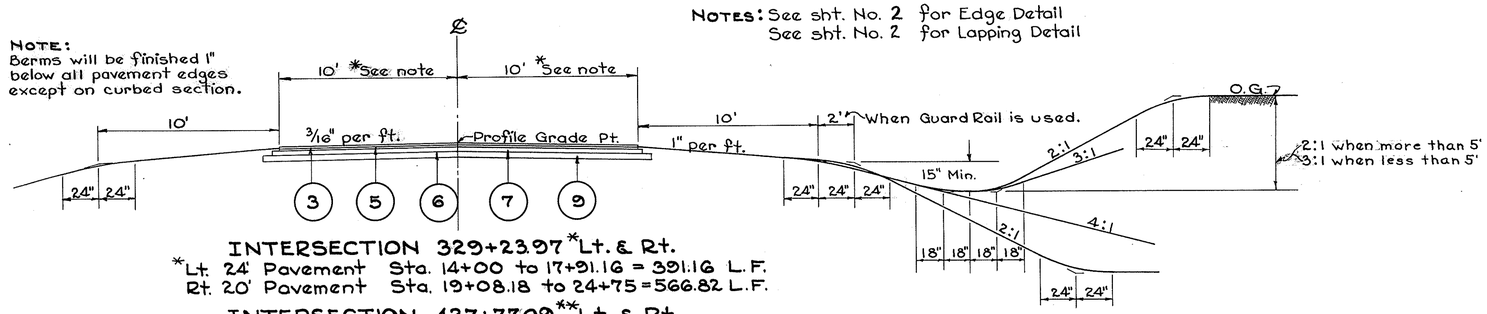
TYPICAL SECTIONS OF INTERSECTING ROADS

TYPES T-71 & T-35

SCALE 1/4" = 1'-0"

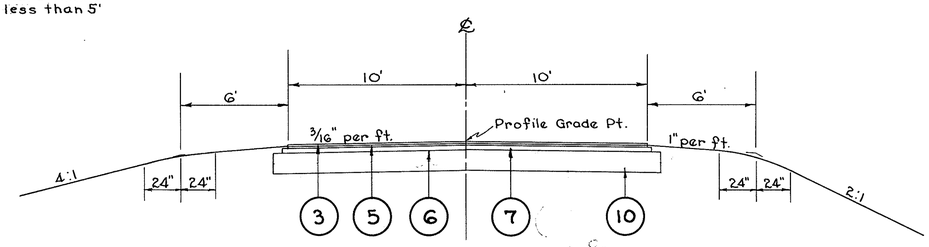
NOTES: See sht. No. 2 for Edge Detail
See sht. No. 2 for Lapping Detail

NOTE:
Berms will be finished 1" below all pavement edges except on curbed section.



INTERSECTION 329+23.97 *Lt. & Rt.
*Lt. 24' Pavement Sta. 14+00 to 17+91.16 = 391.16 L.F.
Rt. 20' Pavement Sta. 19+08.18 to 24+75 = 566.82 L.F.

INTERSECTION 427+77.09 **Lt. & Rt.
** See cross-sections for berms & slopes
Lt. Sta. 4+45 to 6+41.99 = 196.99 L.F.
Rt. Sta. 7+55.25 to 9+90 = 234.75 L.F.

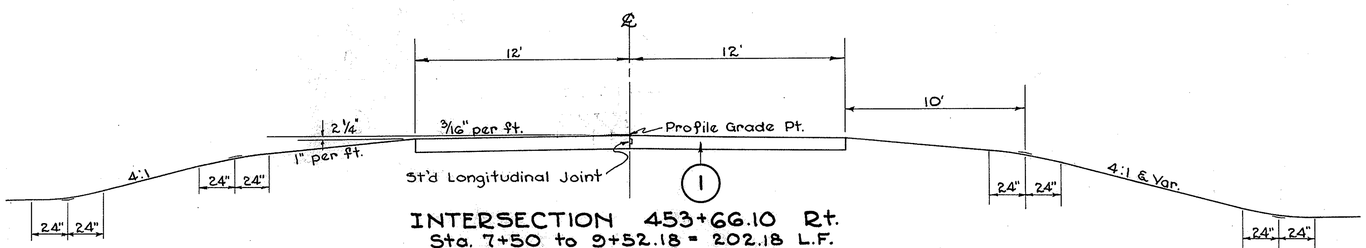


INTERSECTION 255+50.48 Rt.
Sta. 0+44.02 to 2+34 = 189.98 L.F.

NOTE: See General Notes Sheet No. 6 For L-9 Limits

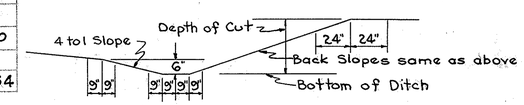
APPROACH LENGTHS ADDED TO LINE DATA				
Station on ℄	Station on Approach		Side	Length
	From	To		Lin. Ft.
329+23.97	14+00	17+91.16	Lt.	391.16
329+23.97	19+08.18	24+75	Rt.	566.82
360+70.19	7+50	9+50.67	Rt.	200.67
360+70.19	10+49.33	14+50	Lt.	400.67
405+20.92	7+00	9+51.11	Lt.	251.11
405+20.92	10+48.80	19+00	Rt.	851.11
422+80	1+75	9+93	Lt.	818.00
Total Length				3479.54

See Line Data Sheet Nº 1

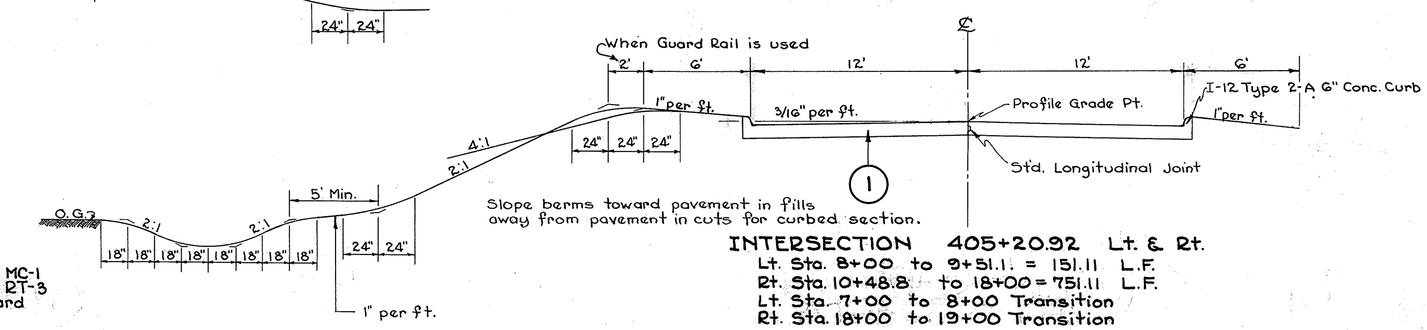


INTERSECTION 453+66.10 Rt.
Sta. 7+50 to 9+52.18 = 202.18 L.F.
Sta. 7+00 to 7+50 Transition

INTERSECTION 479+38.14 Lt.
Sta. 0+46.07 to 2+25 = 178.93 L.F.
Sta 2+25 to 2+75 Transition



DITCH DETAIL
FOR TYPICAL SECTION BELOW



Slope berms toward pavement in fills away from pavement in cuts for curbed section.

INTERSECTION 405+20.92 Lt. & Rt.
Lt. Sta. 8+00 to 9+51.11 = 151.11 L.F.
Rt. Sta. 10+48.8 to 18+00 = 751.11 L.F.
Lt. Sta. 7+00 to 8+00 Transition
Rt. Sta. 18+00 to 19+00 Transition

1 T-71 9" Reinforced Portland Cement Concrete Pavement
3 T-35 1 1/4" Asphaltic Concrete Surface Course (Type A)
5 B-35 1 1/4" Asphaltic Concrete Leveling Course
6 T-30 Bituminous Prime Coat using 0.35 gal. bituminous material
7 B-35 3" Asphaltic Concrete Base Course
9 B-20 5" Waterbound Macadam Base Course
10 B-20 10" Waterbound Macadam Base Course, 2-5" Courses

{ M 5.3 MC-0 or MC-1
M 5.7 RT-2 or RT-3
per square yard

E.T.F.

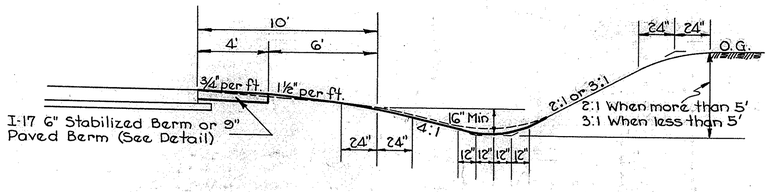
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

6
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

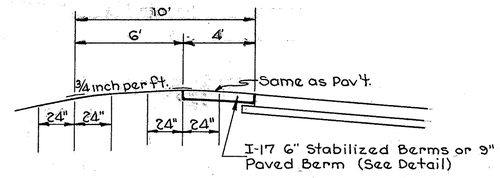
REVISED TYPICAL SECTIONS

Scale 1/4" = 1'-0"



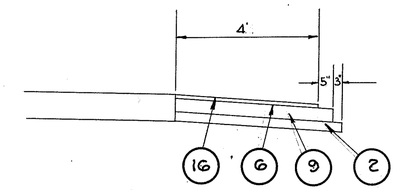
REVISED BERM AND DITCH SECTION FOR CUT AREAS

NOTE:
Berms will be finished flush with all pavement edges.



REVISED BERM SECTION FOR HIGH SIDE OF SUPERELEVATED CURVES

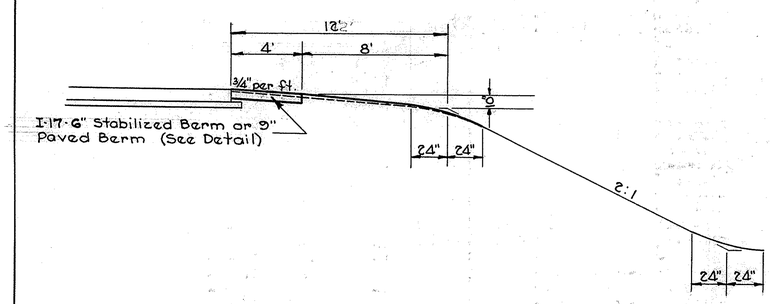
NOTE:
These Revised Typical Sections are applicable only to Typical Sections A, B, C, D and E.



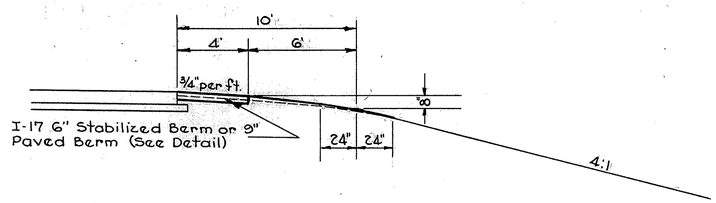
PAVED BERM DETAIL
Scale 1/2" = 1'-0"

2- Special Granulated Slag 3", M-3.13
6- T-30 Bituminous Prime Coat using 0.35 gal. Bituminous Material per sq. yds. Sec. M-5.7 RT-2 or RT-3 or M-5.3 MC-0 or MC-1.
9- B-20 5" Waterbound Macadam Base Course
16- T-35 1" Asphaltic Conc. Surf. Course Type "A"

NOTE: Stabilized Berm Material will be carried around the uncurbed returns of all T-35 and T-71 Intersections.



REVISED BERM SECTION FOR HEAVY FILL



REVISED BERM SECTION FOR LIGHT FILL & MEDIAN

NOTE:
Broken lines represent berm slope and ditch lines as planned prior to revision.

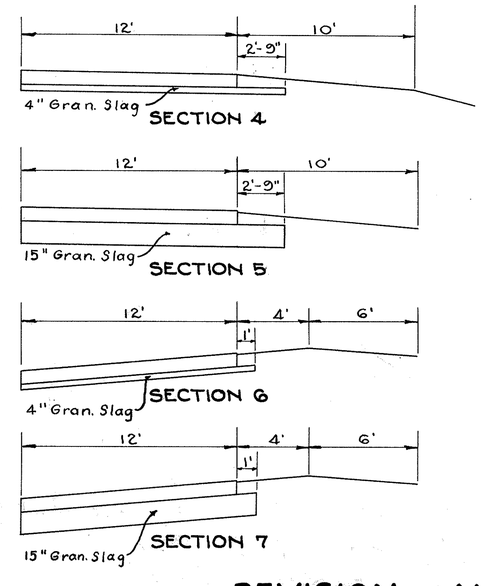
PAVED BERMS											
LEFT LANES						RIGHT LANES					
LEFT SIDE			RIGHT SIDE			LEFT SIDE			RIGHT SIDE		
FROM	TO	L.F.	FROM	TO	L.F.	FROM	TO	L.F.	FROM	TO	L.F.
309+25	315+00	575	300+85	315+00	1415	309+25	315+00	575	294+00	315+00	2100
369+00	391+00	2200	369+00	385+50	1650	369+00	391+00	2200	369+00	385+50	1650
			416+00	427+17.6	1117.6				416+00	426+55.7	1055.7
Sub Totals		2775			4182.6	Sub Totals		2775	426+55.7		480.5.7
			427+17.6	AROUND RETURN	53.4				426+55.7	AROUND RETURN	78.9
TOTALS					4236.0	TOTALS					4884.6

REVISED SECTIONS

GRANULATED SLAG

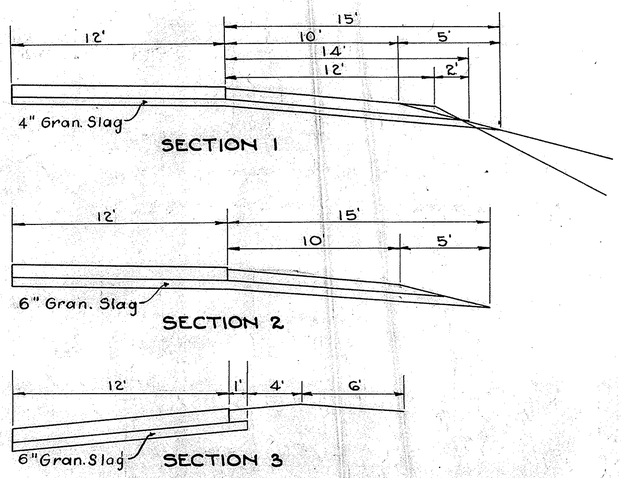
STATION LIMITS FROM	STATION LIMITS TO	LANES Rt.	LANES Lt.	SIDE Rt.	SIDE Lt.	SEC. NO.	DEPTH INS.	LENGTH LIN. FT.	WIDTH FEET	VOLUME CU. FT.	VOLUME CU. YDS.
242+58.65	253+15.20	Rt		Rt		1	4	1056.55	27	9508.95	
242+58.65	247+00	Rt			Lt	4	4	441.35	14.75	2169.97	
247+00	253+15.20	Rt			Lt	1	4	615.20	27	5536.80	
253+85.40	254+30.00	Rt			Lt	1	4	44.60	27	401.40	
253+85.40	254+85.66	Rt		Rt		1	4	100.26	27	902.34	
254+30	259+50	Rt			Lt	4	4	520	14.75	2556.67	
254+85.66	256+21.20	Rt		Rt			4	134.54	12	403.62	
256+21.20	259+50	Rt		Rt		4	4	328.80	14.75	1616.60	
259+50	260+50	Rt			Lt	1	4	100	27	900	
259+50	260+33.83	Rt		Rt		1	4	83.83	27	754.77	
260+33.83	297+73.93	Rt		Rt		4	4	3740.10	14.75	18388.82	
260+50	293+75.78	Rt			Lt	4	4	3325.78	14.75	16351.75	
293+75.78	296+30.72	Rt			Lt	6	4	254.94	13	1104.74	
296+30.72	297+55	Rt			Lt	6	4	124.28	16	662.83	
297+55	297+73.93	Rt			Lt	4	4	18.93	20.5	129.35	
TOTAL CODE TYPE 9672										61947.87	2294.36
297+73.93	311+50	Rt		Rt		4	4	1376.07	14.75	6765.68	
297+73.93	311+25		Lt	Rt		4	4	1351.07	14.75	6642.76	
297+73.93	308+50		Lt		Lt	6	4	1076.07	13	4662.97	
297+73.93	298+30.72	Rt			Lt	4	4	56.79	23.75	449.59	
298+30.72	300+10.72	Rt			Lt	4	4	180.00	26.75	1605.00	
300+10.72	300+66.79	Rt			Lt	6	4	56.07	25.00	467.25	
300+66.79	301+36.79	Rt			Lt	6	4	70	19.50	455.00	
301+36.79	308+50	Rt			Lt	6	4	713.23	13	3090.58	
308+50	311+25		Lt		Lt	4	4	275	14.75	1352.08	
308+50	311+50	Rt			Lt	4	4	300	14.75	1475.00	
311+25	331+50		Lt	Rt		1	4	2025	28.5	19237.50	
311+25	327+97.44		Lt		Lt	1	4	1672.44	26	14494.48	
311+50	329+18.45	Rt		Rt		1	4	1768.45	27	15916.05	
311+50	330+47.84	Rt			Lt	1	4	1897.84	28.5	18029.48	
327+97.44	329+32.15		Lt		Lt		4	134.71	12	404.13	
329+18.45	330+47.84	Rt		Rt			4	129.39	12	388.17	
329+32.15	331+50		Lt		Lt	1	4	217.85	26	2832.05	
330+47.84	348+50	Rt		Rt		2	6	1802.16	27	24329.16	
330+47.84	346+84.94	Rt			Lt	2	6	1637.10	28.5	23328.68	
331+50	348+50		Lt	Rt		2	6	1700	28.5	24255.00	
331+50	346+84.94		Lt		Lt	2	6	1534.94	27	20721.69	
346+84.94	348+50	Rt			Lt	3	6	165.06	13	1072.89	
346+84.94	348+50		Lt		Lt	3	6	165.06	13	1072.89	
348+50	354+0	Rt		Rt		5	15	550	14.75	10140.62	
348+50	354+00	Rt			Lt	7	15	550	13	8937.50	
348+50	355+00		Lt	Rt		5	15	650	14.75	11984.37	
348+50	355+00		Lt		Lt	7	15	650	13	10562.50	
354+00	364+75	Rt		Rt		2	6	1075	27	14512.50	
354+00	356+42.56	Rt			Lt	3	6	242.56	13	1576.64	
355+00	364+75		Lt	Rt		2	6	975	28.5	13893.75	
355+00	356+42.56		Lt		Lt	3	6	142.56	13	926.64	
356+42.56	364+75	Rt			Lt	2	6	832.44	28.5	11862.27	
356+42.56	364+75		Lt		Lt	2	6	832.44	27	11237.94	
364+75	367+25	Rt		Rt		1	4	250	27	2250.00	
364+75	380+00	Rt			Lt	1	4	1525	28.5	14487.50	
364+75	380+00		Lt	Rt		1	4	1525	28.5	14487.50	
364+75	368+50		Lt		Lt	1	4	375	27	3375.00	
367+25	378+13	Rt		Rt		1	4	1088	26	9429.33	
368+50	377+75		Lt		Lt	1	4	925	26	8016.67	
377+75	380+00		Lt		Lt	1	4	225	27	2025.00	
378+13	380+00	Rt		Rt		1	4	187	27	1683.00	
380+00	386+25	Rt		Rt		5	15	625	14.75	11523.43	
380+00	386+25	Rt			Lt	5	15	625	14.75	11523.43	
380+00	386+37		Lt	Rt		5	15	637	14.75	11744.68	
380+00	386+37		Lt		Lt	5	15	637	14.75	11744.68	
386+25	405+48.99	Rt		Rt		6	4	1923.99	13	8337.29	
386+25	410+02.68	Rt			Lt	1	4	2377.68	27	21399.12	
386+37	405+63.00		Lt	Rt		6	4	1926	13	8346.00	
386+37	391+25		Lt		Lt	4	4	448	14.75	2399.33	
391+25	410+02.68		Lt		Lt	1	4	1877.68	27	16899.12	
405+48.99	410+51	Rt		Rt		1	4	502.01	26	4350.75	
405+63.00	410+02.68		Lt	Rt		1	4	439.68	33	4836.48	
410+02.68	412+00	Rt			Lt	6	4	197.32	13	855.05	
410+02.68	412+00		Lt	Rt		5	15	197.32	14.75	3638.08	
410+02.68	412+00		Lt		Lt	7	15	197.32	13	3206.45	
410+51	412+00	Rt		Rt		1	4	149	27	1341.00	
412+00	423+00	Rt		Rt		2	6	1100	27	14850.00	
412+00	423+00	Rt			Lt	3	6	1100	13	7150.00	
412+00	423+00		Lt	Rt		2	6	1100	25	13750.00	
412+00	423+00		Lt		Lt	3	6	1100	13	7150.00	
423+00	424+25	Rt		Rt		5	15	125	14.75	2348.68	
423+00	424+25	Rt			Lt	7	15	125	13	2031.25	
423+00	426+25		Lt	Rt		5	15	325	14.75	5592.18	
423+00	426+25		Lt		Lt	7	15	325	13	5281.25	

STATION LIMITS FROM	STATION LIMITS TO	LANES Rt.	LANES Lt.	SIDE Rt.	SIDE Lt.	SEC. NO.	DEPTH INS.	LENGTH LIN. FT.	WIDTH FEET	VOLUME CU. FT.	VOLUME CU. YDS.
424+25	426+55.70	Rt		Rt		1	4	230.70	27	2076.30	
424+25	428+99.82	Rt			Lt	6	4	474.82	13	2057.55	
426+25	428+99.82		Lt	Rt		1	4	274.82	27	2473.38	
426+25	427+68.40		Lt		Lt	6	4	143.40	13	621.40	
426+55.70	427+86.20	Rt		Rt			4	130.50	12	522.00	
427+68.40	428+93.70		Lt		Lt		4	125.30	12	501.20	
427+86.20	429+25	Rt		Rt		1	4	138.80	26	1202.93	
428+93.70	442+30.20		Lt		Lt	1	4	1336.50	27	12028.50	
428+99.82	459+88.26	Rt			Lt	1	4	3088.44	28.50	29340.18	
428+99.82	459+64.96		Lt	Rt		1	4	3065.14	28.50	29118.83	
429+25	439+50	Rt		Rt		1	4	1025.	27	9325.00	
439+50	440+30	Rt		Rt		1	4	80.	26	693.33	
440+30	454+06.31	Rt		Rt		1	4	1376.31	27	12386.79	
442+30.20	459+64.96		Lt		Lt	1	4	1734.76	26	15034.50	
454+06.31	455+56.31	Rt		Rt		1	4	150.00	32.50	1625.00	
455+56.31	459+88.26	Rt		Rt		1	4	431.95	26	3743.57	
460+99.74	464+00.47		Lt		Lt	1	4	300.73	26	2606.33	
460+99.74	464+00.47		Lt	Rt		1	4	300.73	28.50	2856.94	
461+23.04	464+25	Rt			Lt	1	4	313.61	28.50	2979.30	
461+23.04	462+41.20	Rt		Rt		1	4	119.16	26	1032.72	
462+41.20	464+00.47	Rt		Rt		1	4	159.27	27	1433.43	
464+00.47	464+25	Rt		Rt		6	4	24.53	13	106.30	
464+00.47	470+25		Lt	Rt		7	15	624.53	13	10148.61	
464+00.47	470+25		Lt		Lt	5	15	624.53	14.75	11514.77	
464+25	469+50	Rt		Rt		7	15	525.	13	8531.25	
464+25	469+50	Rt			Lt	5	15	525	14.75	9679.68	
469+50	481+10	Rt		Rt		6	4	1160	13	5026.67	
469+50	476+63.33	Rt			Lt	1	4	713.33	27	6419.97	
470+25	476+63.33		Lt	Rt		6	4	638.33	13	2766.10	
470+25	474+70		Lt		Lt	1	4	395.	27	3555.00	
474+70	477+27		Lt		Lt	1	4	257.	26	2227.33	
476+63.33	479+72		Lt	Rt		1	4	308.67	25	2572.25	
476+63.33	479+72	Rt			Lt	1	4	308.67	24	2469.36	
477+27	478+31.50		Lt		Lt	1	4	104.50	27	940.50	
478+31.50	479+67.86		Lt		Lt	6	4	136.36	13.5	613.62	
479+67.86	481+70		Lt		Lt		4	202.14	16	1078.08	
479+72	481+70	Rt			Lt		4	198.00	18	1188.00	
479+72	481+70		Lt	Rt			4	198.00	18	1188.00	
481+10	481+70	Rt		Rt			4	60.00	16	320.00	
481+70	485+00	NOT SEPARATED					4	330.00	48	5280.00	
TOTAL CODE TYPE 7221										734006.45	27185.42



REVISION NOTE

GRANULATED SLAG IN SECTIONS ON THIS SHEET SHALL BE PARALLEL TO THE BERM SURFACE AS MODIFIED ON SHEET NO. 6.



RECAPITULATION GRANULATED SLAG

SHEET NO.	DEPTH INS.	AREA SQ. YDS.	VOLUME CU. YDS.
T			2294.36
101	4	51.6	5.73
103	4	247.0	27.44
104	4	280.2	31.13
105	4	276.3	30.70
TOTAL CODE TYPE 9672			2389.36
T			27185.42
106	4	508.4	56.47
107	4	60.8	6.76
111	4	149.8	16.64
116	4	181.0	20.11
118	4	38.0	4.22
120	4	174.0	19.33
✓ 27	6"	1870.0	311.67
TOTAL CODE TYPE 7221			27620.62

NOTE: Above quantities carried to Calculations on Sheet No. 15A.

GENERAL NOTES

TRAFFIC:
Traffic on U.S. Route 62 and S.R. 7 shall be maintained at all times. The length of one-way traffic zones and duration of one-way traffic restriction shall be the minimum consistent with the requirements of Sec. T-35.23 and T-71.25. The item of "Maintaining Traffic" shall include furnishing lights, signs, barricades and watchmen necessary to secure the flow of traffic twenty-four (24) hours daily.

PROPOSED SCHEDULE OF CONSTRUCTION:
The following order of work shall be complied with unless the Contractor proposes an alternate schedule acceptable to the Director.

STAGE I

Construct bridges TR-62-48 and TR-62-87

Perform all practicable items of grading, culverts, drains, and paving which do not interfere with two-way traffic on U.S. 62, S.R. 7, Chestnut Ridge Rd., Bedford Rd., Elm St. or Standard Ave. The work shall include at least 80% of the estimated amount of Item E-1 Excavation.

Construct culvert No. T.R. 62-81 and Structure No. T.R. 62-81 A, rebuild Broadway and provide temporary or permanent facilities for traffic along this street and along Woodland Ave. from Sta. 1+75 to Stewart Rd.

Substantial completion of Stage I shall be accomplished before starting Stage II.

STAGE II

(a) Complete any unfinished work of grading, draining, and paving from Sta. 242+58.65 Rt. and Sta. 297+73.93 Lt. to at least Sta. 301+50 Lt. and Rt. Construct the intersection at approximately Sta. 255+50 while maintaining at least one-way traffic on existing U.S. 62. Also build all cross-overs up to Sta. 301+50 and the connection between the new U.S. 62 and S.R. 7 at approximately Sta. 302+50 (S.R. 7 Sta.). As soon as practicable after the above described operations, complete drainage and pavement on the left lanes from the beginning of the project to Sta. 298+80, including approaches. Throughout the entire construction period two-way traffic shall be maintained on S.R 7, using the left lanes, the right lanes or both.

(b) Rebuild Chestnut Ridge Rd. and re-open it to traffic.

(c) Rebuild Bedford Rd. which shall be opened to traffic before closing Elm St.

(d) Complete all paving between about Sta. 454 and the end of the project, maintaining at least one-way traffic on U.S. 62

(e) Open to traffic the pavement in (d) and construct the intersection at about Sta. 453+40, maintaining at least one-way traffic on U.S. 62.

(f) The work in section (a) through (e) may be performed concurrently or in any sequence except (e) shall not be performed prior to the completion of (d).

STAGE III

Complete the project.

LIMITED ACCESS:
This improvement has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 1178-21, General Code of Ohio.

BERMS AND SLOPES:
Berms and slopes shall be finished in accordance with the typical sections except where otherwise shown or noted in the cross sections. Although the cross sections as drawn show straight lines and angles in construction all corners shall be rounded as shown in the typical sections. All transition from excavation to embankment slopes shall be blended with the surrounding terrain as directed by the Engineer.

COMPACTION:
Compaction will not be required on the top 3" to be seeded or sodded. The thickness of the subgrade to be compacted on this project will be 8" loose measurement, the width shall be 18" outside the Pavement.

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

UTILITY ADJUSTMENT:
Any and all work required for public or private utilities will be done by and at the expense of their respective owners unless otherwise noted in these plans.

SUPERELEVATION:
Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in that portion between the beginning of the transition and the point where the superelevation equals twice the crown. The beginning of the transition shall be defined as the point where normal crown ends, as shown in the superelevation tables.

ABANDONED DRAINS:-
The outfall ends of abandoned drains which will remain under the highway embankment shall be plugged with class "C" concrete. The cost of this operation shall be included in the price bid under Item E-1.

FIELD OFFICE:
The contractor shall provide a suitable "Field Office" in accordance with Sec. S-0.01(b) having a minimum of 200 sq. ft. of floor space. The contractor shall have a telephone installed and maintained during construction of this project.

ITEMS L-9 SEEDING & PROTECTING, TYPE A, L-9 10-6-4 COMMERCIAL FERTILIZER AND L-9 AGRICULTURAL GROUND LIMESTONE:
Quantities for these items are calculated for the soil areas between lines ten feet (10') outside the work limits as shown on the cross sections or to the R/W line if such line is less than ten feet from the work limits. L-9, Type A shall be omitted on areas to be sodded.

ITEM L-10 SODDING:
Areas to be sodded shall be loosened to a depth of 2" just prior to laying the sod. This work shall be included for payment in the price bid per sq. yd. of sodding.

ROCK CUTS:
Excavation in rock shall be in accordance with Sec. E-1.04. The granular material used for replacing excavated rock shall conform to Sec. E-1.05 and in addition 100% shall pass a 1½ inch screen.

Locations of rock are known only approximately. When the actual locations are known, the limits of the 6 inch thickness of granulated slag base course and locations of underdrains may be varied at the discretion of the Engineer.

WORK AT ABANDONED SITES:
The following work within the Right-of-Way shall be performed by the Contractor at sites formerly occupied by residence, industrial, or incidental structures.

Foundations, Buildings, Walls, Wells, Sidewalks, Cisterns and Septic Tanks shall be removed to a line at least 2 ft. below the proposed finished grade and the concrete or masonry floors broken up into pieces whose areas do not exceed one sq. ft. and the hole filled with acceptable earth according to Sec. E-1.05 as directed by the Engineer.

All the work described above shall be included in the unit price bid per cubic yard for Item E-1 Roadway Excavation.

CHANNEL SECTIONS:
Channel sections will be furnished at the time of construction for the channel excavation to be performed at structures Nº TR-62-48 and TR-62-87.

I-17 STABILIZED SIDE APPROACHES, MAILBOX TURNOUTS AND BERM MATERIAL AS PER PLAN - SEE PROPOSAL NOTE.
~~I-17 material used in the construction of approaches and shoulders shall be placed in layers not to exceed six inches (6") compacted depth.~~
~~The initial compaction of the I-17 material may be obtained by the use of a tamping roller. Final compaction shall be obtained by a pneumatic tired roller. The finished course shall be of such composition and density that it will preclude the ready entrance of surface water and will not have loose aggregate on the surface. Material shall meet the requirements of Sec. M 3.6 or M 3.7 and consist of 80% No. 34 and 20% Screenings.~~

SPECIAL NOTES:
See sheets 8, 9, 10, 11, 12, 13, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 34, 35, 36 60, 71, 79, 101, 102, 103, 104, 105, 106, 107, 116, 118, 120, 132, 133, 134, 135, 136, 137, 138 139, 141, 142, 143, 7, 110.

TRENCH ROLLER:
In narrow base widening areas inaccessible to the standard width roller, the necessary compaction shall be obtained with a roller meeting the requirements of Sec. G-7.01.

DITCHES IN ROCK CUT
All ditches in rock cuts shall be made to drain, in no case shall rock excavation be made which will leave pockets, if pockets are unavoidable due to blasting etc. the hole shall be filled to the level of the normal ditch grade with Class "F" Concrete. Cost of concreting is included in the unit price bid per Cu. Yd. for E-1 Roadway Excavation.

FINISHING CONCRETE PAVEMENT:
Hand finishing will be permitted as per Sec. T-71.211 of the General Specification as governed by note in proposal.

DEDUCTIONS FOR PIPE SPECIALS ARE AS FOLLOWS:

SIZE	Y's	CURVES	T's
6"	1'-1'	1'	1'-1'
12"	3'-1'	1'	3'-1'
15"-21"	4'-1'	1'	
24"-over	4'	2'	

PAVED GUTTERS IN ROCK CUTS:-
In rock cuts the Engineer may require nonperformance of paved gutters and substitution of ditches if in his opinion the rock strata are satisfactory for this purpose. In such cases a normal ditch as shown in the applicable typical section will be substituted for the paved gutter. If pockets are unavoidable due to blasting or other causes the holes shall be filled with Class "F" concrete to the normal ditch level. The cost of concreting shall be included in the unit price bid per cubic yard for Item E-1 Roadway Excavation.

LAMP HOLES:-
Lamp holes shall be constructed on existing lateral drains where directed by the Engineer. Installation detail is shown on sht. 9.
Estimated Quantities are as follows:

Item	9672 Municipal	9672	7221	Total	Unit	Description
I-2	40	40	80	160	L.F.	6" Storm Sewer
I-8	2	2	4	8	Each	Lamp Holes as per plan

ITEM E-8 MATERIAL TO BE REMOVED:-
Material to be removed and disposed under Item E-8 shall be used in lieu of borrow under the direction of the Engineer if in his opinion such materials are suitable for embankment.

REMOVAL OF TREES
Payment for Removal of Trees and Stumps is included in the unit price bid for Item E-1 Roadway Excavation

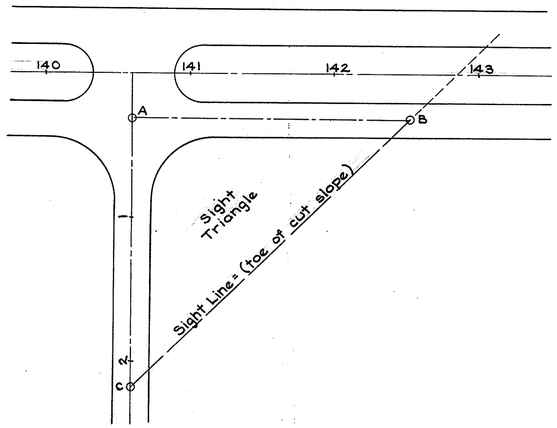
ITEM B-20 - See proposal for alternate method of constructing waterbound macadam base course.

REMOVAL OF RUBBISH - Any cans, rubbish, etc. left of ℄ Sta. 470+75 to Sta. 471+50 and Sta. 476+75 to Sta. 478+00 shall be removed and disposed of prior to placing embankment. Cost of this work shall be included in Item E-1 for payment.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

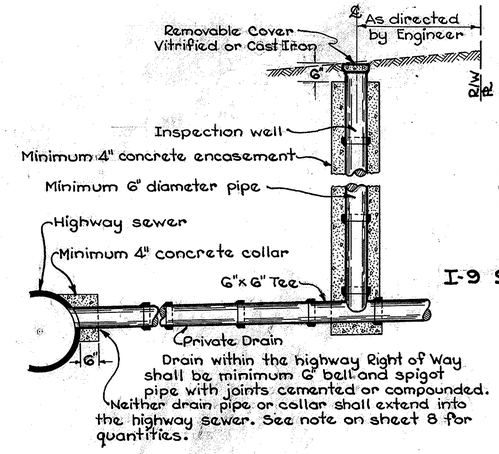
9
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

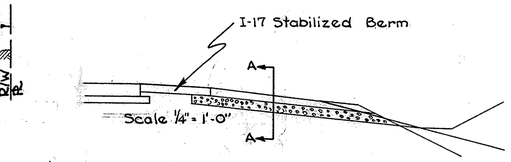


TYPICAL GRADING
OF SIGHT TRIANGLES
(Applicable only where "Sight Line" is shown on Line Sheet)

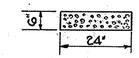
Earth and other obstructions to be removed above a string line grade from Lines A-B and A-C to Sight Line B-C. Lines A-B and A-C are 1 ft. above and parallel to profile grades. Line B-C is a straight line connecting points B and C, each 1 ft. above pavement grade.



LAMP HOLE DETAIL



Estimated Quantity per Drain 11 L.F.

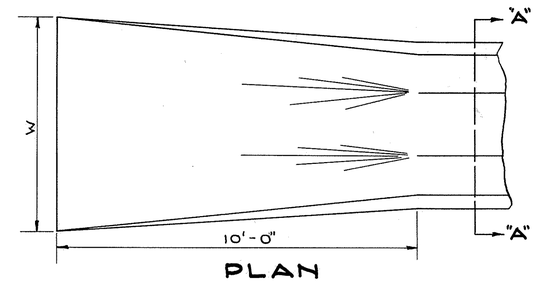


SECTION A-A
Scale 1/2" = 1'-0"

NOTE: Drains to be placed along waterbound macadam base and I-17 Stabilized Berms at the direction of the Engineer to provide drainage to ditch or side of fill slope.

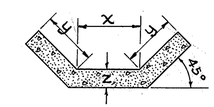
I-9 STONE UNDERDRAIN DETAIL

PAVED GUTTER DETAILS

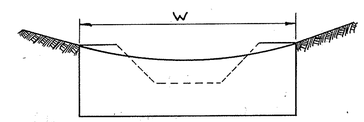


PLAN

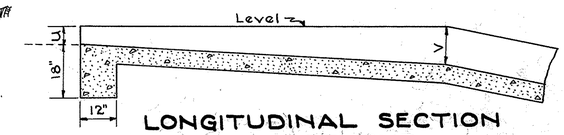
NOTE:
The lettered dimensions are shown below in figures for the different types



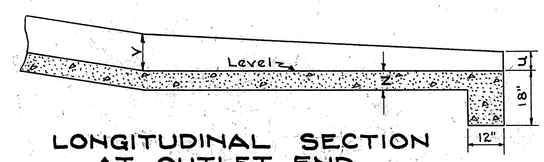
SECTION A-A



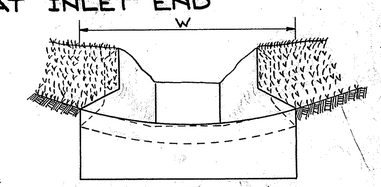
END VIEW AT INLET END



LONGITUDINAL SECTION AT INLET END

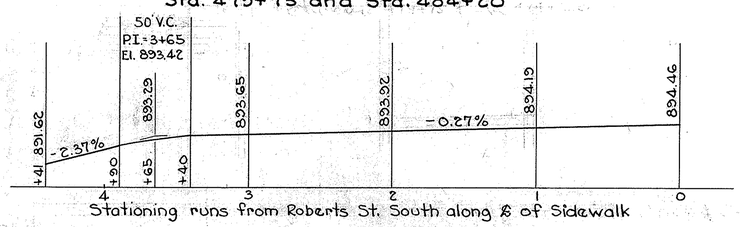


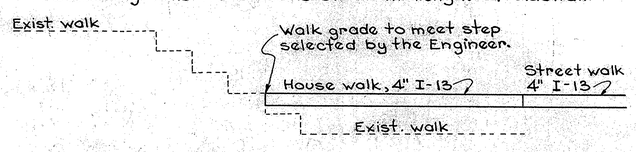
LONGITUDINAL SECTION AT OUTLET END



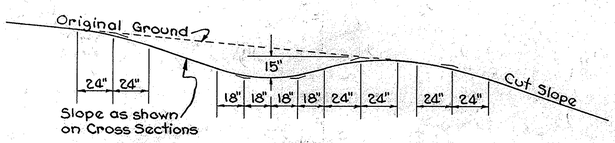
END VIEW AT OUTLET END

Profile Grade of Sidewalk on left between Sta. 479+75 and Sta. 484+20



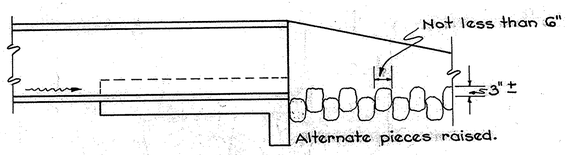


TYPICAL SIDEWALK DETAIL ALONG STANDARD AVE.
Scale 1/2" = 1'-0"

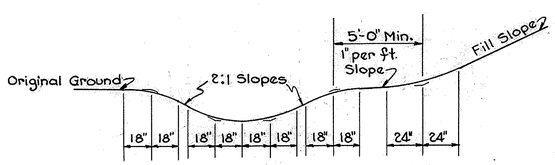


DETAIL OF INTERCEPTING DITCH
Scale 1/4" = 1'-0"

ROUGH RIPRAP



NOTE: This detail shall be used where rough riprap is called for on the outlet end of culverts; the cost is to be included in the unit price bid for I-10 12" Grout Filled Type A Riprap.



DETAIL OF DITCH AT TOE OF SLOPE
Scale 1/4" = 1'-0"

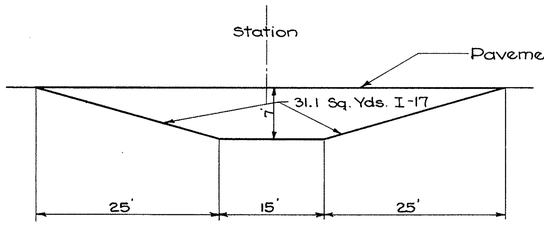
PAVED GUTTER DIMENSIONS

DIMENSIONS	TYPE A	TYPE B	TYPE C
U	1'-0"	1'-8"	
V	1'-5"	2'-1½"	2'-10"
W	7'-0"	10'-0"	
X	2'-0"	3'-0"	4'-0"
Y	2'-0"	3'-0"	4'-0"
Z	6"	6"	8"

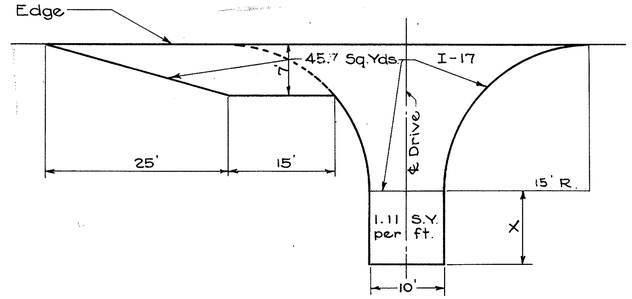
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F 524 (5)	POST WAR

10
154

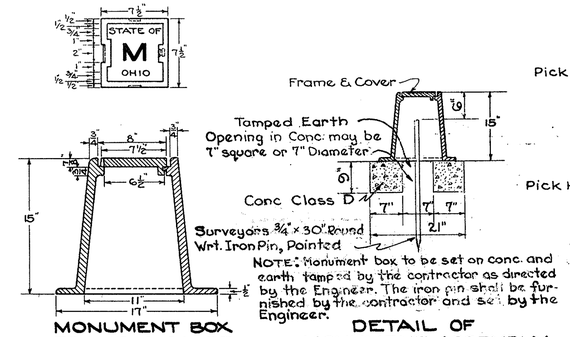
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MAIL BOX APPROACH
TYPE "A"
Scale 1" = 10'

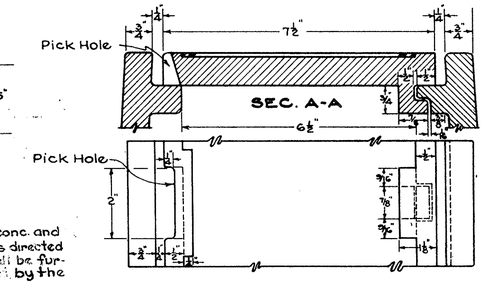


COMBINED MAIL BOX
& DRIVE APPROACH
TYPE "C"
Scale 1" = 10'



MONUMENT BOX
FRAME & COVER
Scale 1½" = 1'-0"

DETAIL OF
MONUMENT ASSEMBLY
Scale ¾" = 1'-0"

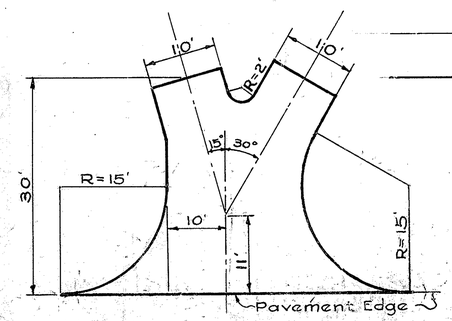


PART PLAN
Scale ½" = 1"

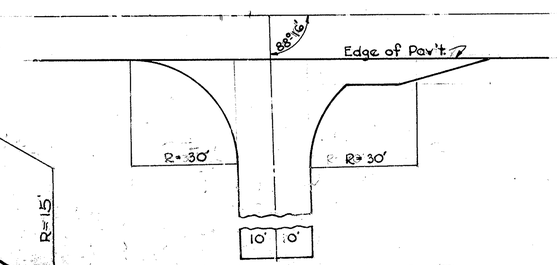
STATION	SIDE	TYPE	X LENGTH IN FEET	I-17 SQ. YDS.	I-1 SIZE	I-1 LIN. FT.
242+07	Rt.	Spec.	Sheet #102	31.0		
244+43	Lt.	TYPE B 14' Wide	11	51.2		
245+39	Lt.	B	14	42.9		
245+39	Rt.	C	43	93.4		
249+90	Rt.	A		31.1		
251+65	Lt.	Special	Sheet #20	36.2		
257+73	Rt.	A		31.1		
257+85	Lt.	B	64	98.4		
259+63	Rt.	A		31.1		
259+94	Lt.	B	29	59.6		
262+25	Lt.	B	11	39.6	21"	28
263+05	Rt.	A		31.1		
264+52	Rt.	A		31.1		
266+72	Rt.	A		31.1		
267+61	Rt.	TYPE B 14' Wide	15	57.5	36" x 22"	33
269+51.11	Rt.	C	20	67.9	36" x 22"	35
271+62	Rt.	A		31.1		
273+64	Rt.	C	20	67.9	24"	30
279+00	Lt.	B	21	50.7	18"	26
279+25	Rt.	A		31.1		
282+56	Rt.	B	23	52.9	21"	35
284+53.5	Rt.	C	30	79.0	21"	34
285+52	Lt.	Spec.	Sheet #10	67.4	18"	30
286+89	Rt.	A		31.1		
288+77.94	Rt.	Spec.	Sheet #10	185.3	21	37
483+75	Rt.	E	12	23.3		

STATION	SIDE	TYPE	X LENGTH IN FEET	I-17 SQ. YDS	I-1 SIZE	I-1 LIN. FT.
294+45	Lt.	B	21	50.7	12"	22
295+37	Rt.	A		31.1		
* 1+73	Rt.	A		31.1		
@ 13+28	Rt.	TYPE A 14' WIDE		47.8		
‡ 21+85	Rt.	C	75	129.0	12"	28
‡ 22+18.5	Rt.	B	60	118.3	12"	30
‡ 24+41	Rt.	C	15	62.4	12"	24
x 7+15	Lt.	E	0	10.0		
x 7+78	Rt.	E	47	62.2		
x 8+46	Rt.	E	10	21.1		
x 16+02	Lt.	TYPE E 14' Wide	190	314.4		
x 16+37	Lt.	E	55	71.1		
x 18+80	Rt.	E	0	10.0		
# 4+71	Lt.	B	0	27.4	12"	24
# 5+00	Rt.	Spec.	Sheet #117	72.0		
# 8+21	Lt.	B	25	55.2		
# 9+52	Rt.	Spec.	Sheet #117	60.5		
280+82.5	Rt.	A		31.1		
277+00	Rt.	B	23	71.2	24"	26
‡ 15+00	Lt.	Spec.	Sheet #107	127.4	18"	38
@ 13+61	Lt.	B	35	63.3		

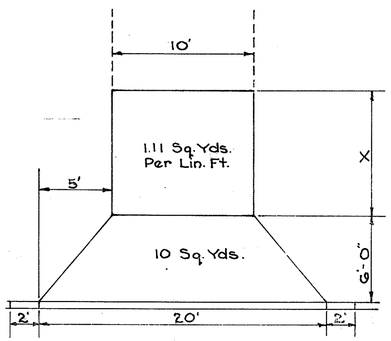
* Crossover Station See Sheet No. 106
‡ Chestnut Ridge Station See Sheet No. 107
x Bedford Rd. Station See Sheet No. 111
\# Broadway Station See Sheet No. 117
@ Hubbard-Thomas Station See Sheet No. 109

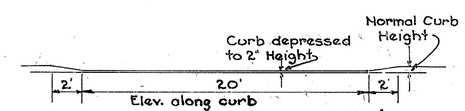


DETAIL OF SPECIAL DRIVE
STA. 285+52 Lt.
Scale 1" = 10'

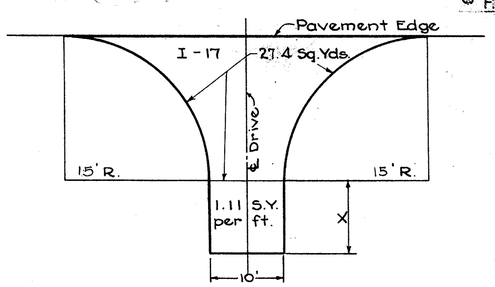


DETAIL OF SPECIAL DRIVE
STA. 288+77.94
Scale 1" = 20'
NOTE: Driveway grade to be +6.0% from edge of berm to R/W line. Property owner to grade beyond this point.

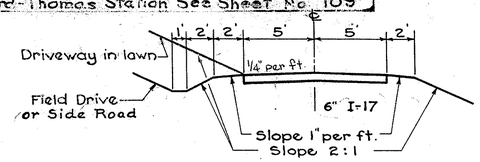




DRIVE APPROACH TYPE "E"
Scale 1" = 5'

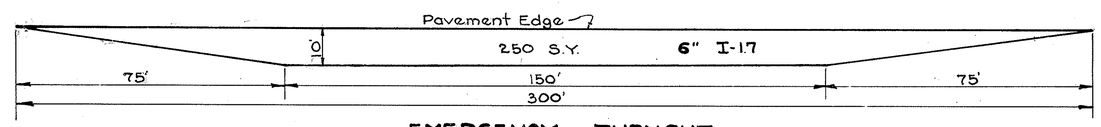


DRIVE APPROACH
TYPE "B"
Scale 1" = 10'

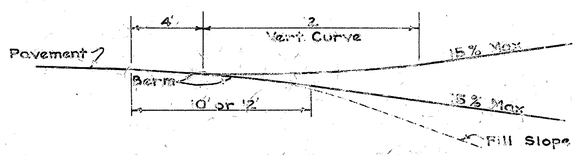


TYPICAL SECTION
FOR DRIVES
Scale 1" = 5'

NOTE:
On those drives marked Spec. check the sheet applicable for details.



EMERGENCY TURNOUT
TYPE "D"
Scale 1" = 20'



TYPICAL DRIVEWAY PROFILES
Scale ¼" =

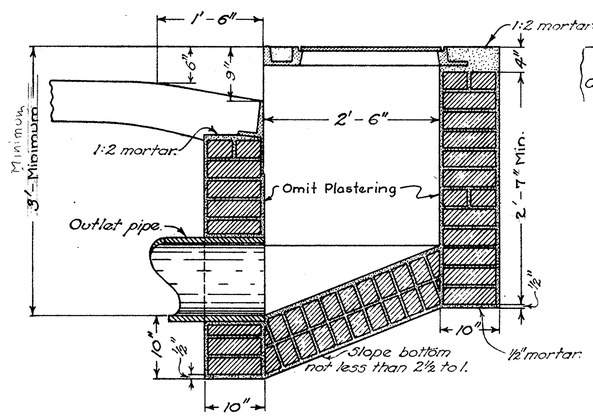
TYPICAL DETAILS

SPECIAL RAISED CURB INLET

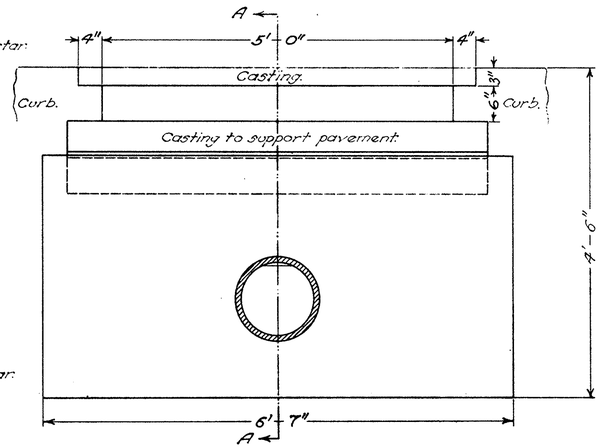
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

11
154

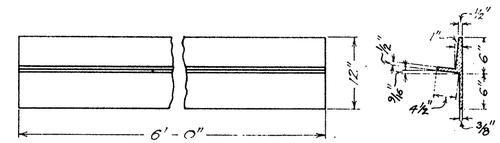
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



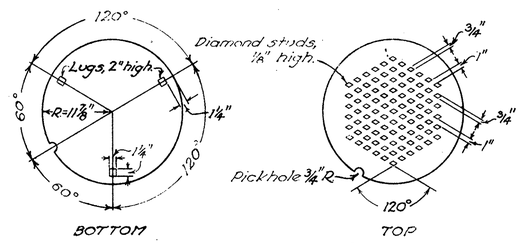
SECTION A-A



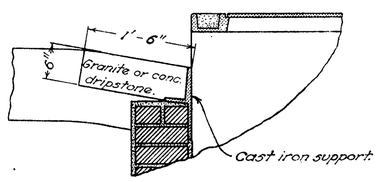
ELEVATION



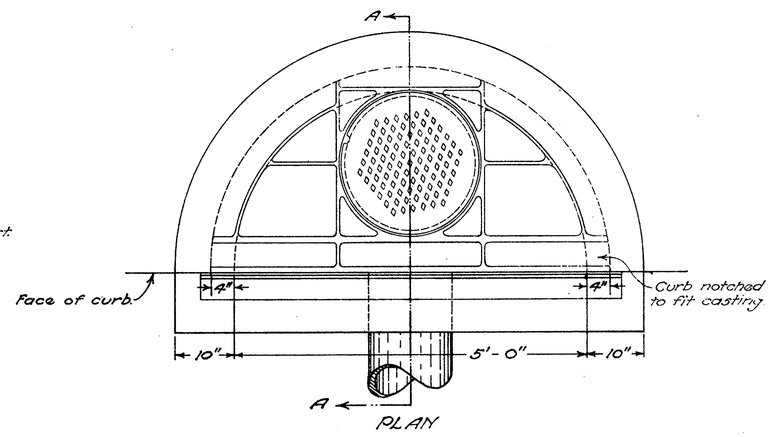
DETAIL OF PAVEMENT SUPPORT
Approximate weight 160#



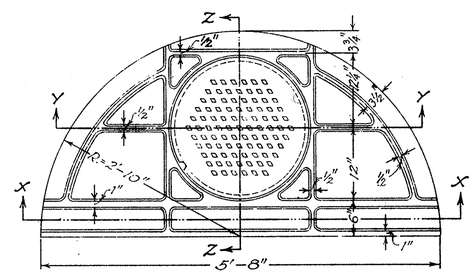
DETAIL OF COVER



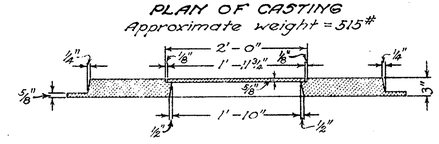
SECTION OF DRIPSTONE
For macadam or unpaved streets.



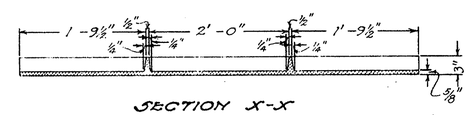
PLAN



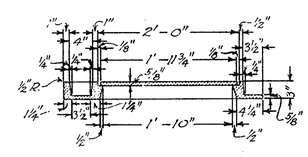
PLAN OF CASTING
Approximate weight = 515#



SECTION Y-Y



SECTION X-X



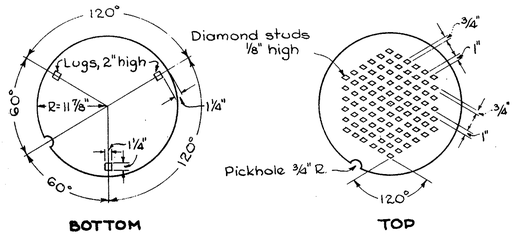
SECTION Z-Z

CURB INLET

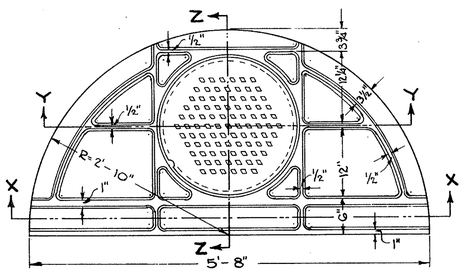
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	12
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

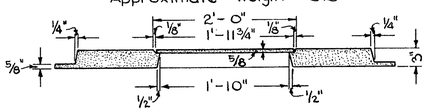
SPECIAL DITCH INLET



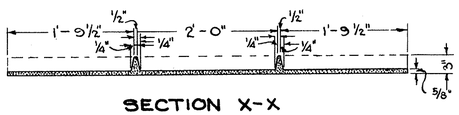
DETAIL OF COVER



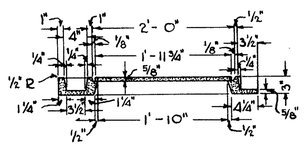
PLAN OF CASTING
Approximate weight = 515#



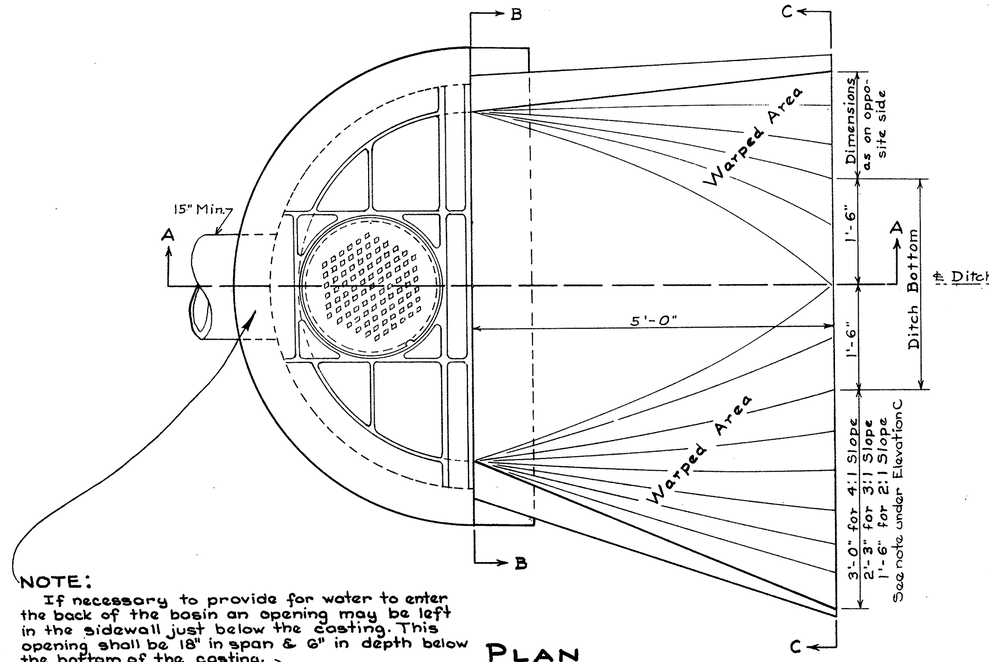
SECTION Y-Y



SECTION X-X

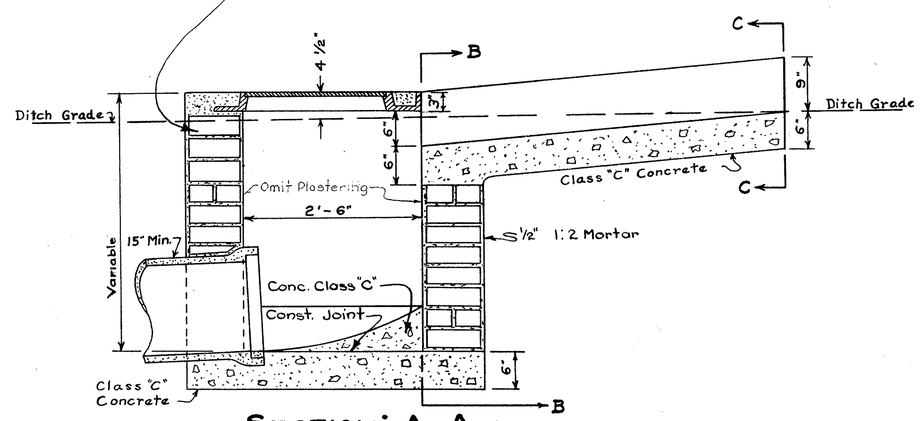


SECTION Z-Z



PLAN

NOTE:
If necessary to provide for water to enter the back of the basin an opening may be left in the sidewall just below the casting. This opening shall be 18" in span & 6" in depth below the bottom of the casting.



SECTION A-A

NOTES

Castings shall be of cast iron in accordance with Material Details. The design shall be essentially the same and equally as strong as those shown hereon and shall be given one coat of asphaltum paint as per specifications. Casting weight shall be approximately 515 lbs.

After casting has been set the space between the webs shall be filled with 1:2 cement mortar.

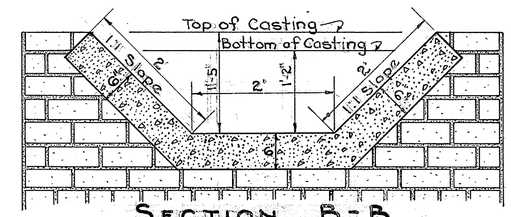
Construction: Inlets shall be constructed of a 6" Class "C" concrete base and 8" brick sidewalls, laid in portland cement concrete mortar with every sixth course a stretcher course.

8" Class "C" concrete may be substituted for brick sidewall construction.

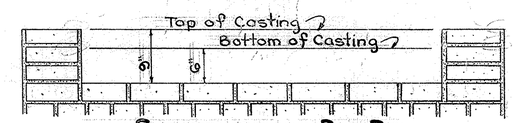
In case of through pipe or side pipe connections, the bottom of the inlet shall be shaped accordingly.

Variations of this design will consist of:
(a) the design as shown with the approach apron;
(b) without the approach apron;
(c) without the approach apron and with an opening to fit the paved gutter section.

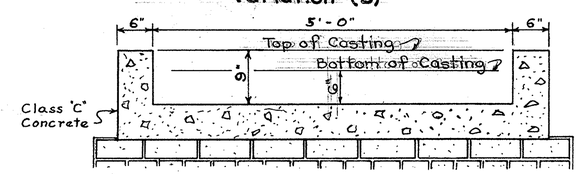
All variations of this design will be paid for under the unit bid price for the Special Ditch Inlet.



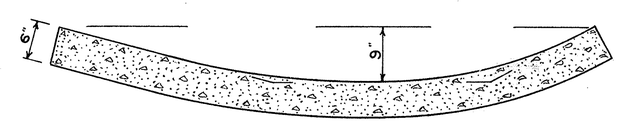
SECTION B-B
Variation (c)



SECTION B-B
Variation (b)



SECTION B-B
Variation (a)



ELEVATION C-C
Approach at C-C shall be warped to fit the typical ditch.

Variation (c)

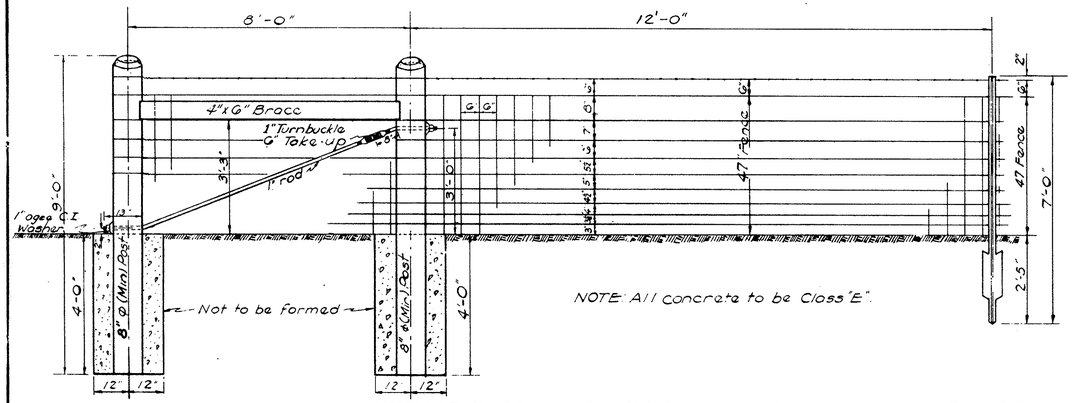
SPECIAL DITCH INLET

FED. RD DIV. No	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

13
154

TRUMBULL COUNTY
TRU 62-(4.59-9.67)

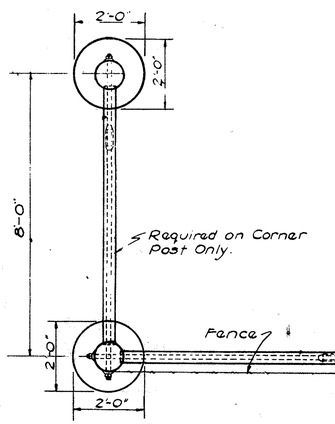
FENCE DETAILS



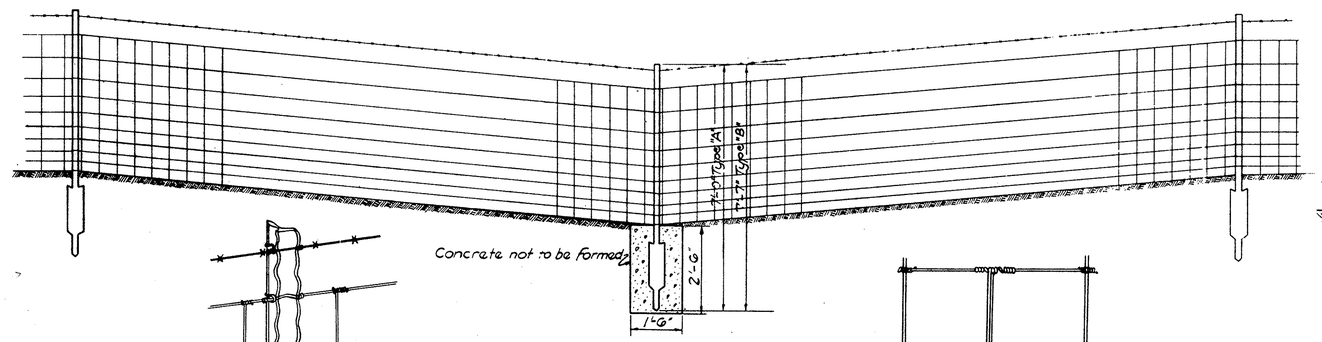
CORNER OR END POST ASSEMBLY TYPE "A"

FENCE CONSTRUCTION NOTE:-
Maximum spacing between intermediate post assemblies or between end post assemblies and intermediate post assemblies to be 660 lin.ft.
All points where individual spans of fence change alignment in excess of 4% and less than 30% an intermediate post assembly shall be built at the point of change. If change in alignment is 30% or more a corner post assembly shall be built at the point of change.

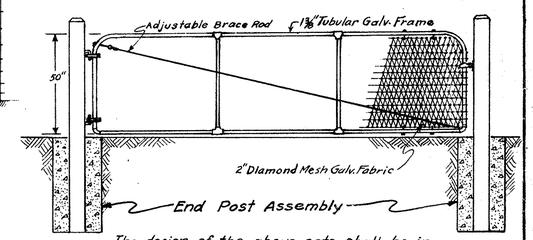
RIGHT-OF-WAY GATE



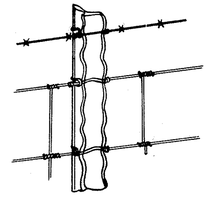
PLAN OF CORNER OR END POST ASSEMBLY TYPE "A"



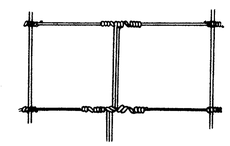
LINE POST IN DIP SECTION



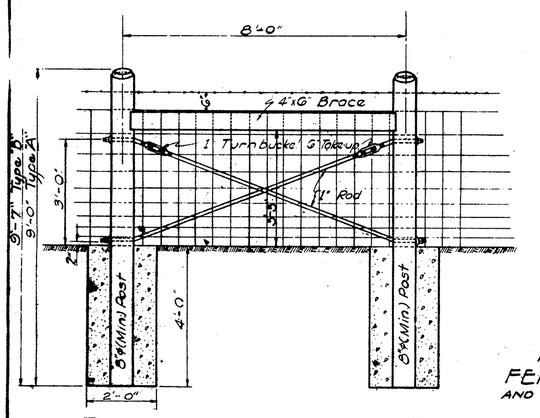
The design of the above gate shall be in accordance with the details of the American Steel and Wire Co. gate or equal.



METHOD OF FASTENING FENCE AT LINE POST.

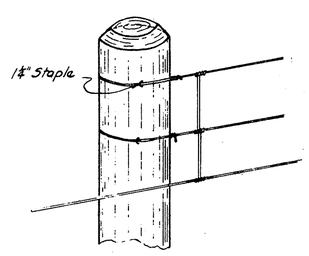


SPLICE DETAIL

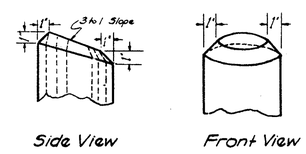


To be placed at locations shown on Plans, or shifted if directed by the Engineer

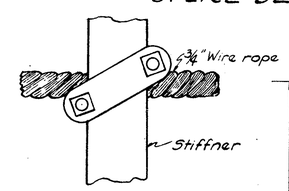
INTERMEDIATE ANCHOR POST ASSEMBLY TYPE "A" Shown

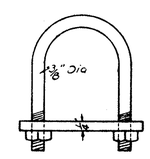


METHOD OF FASTENING FENCE AT END, CORNER POST AND ONE POST OF INTERMEDIATE ANCHOR POST ASSEMBLY

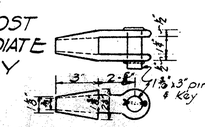


TOP OF POSTS

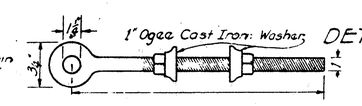




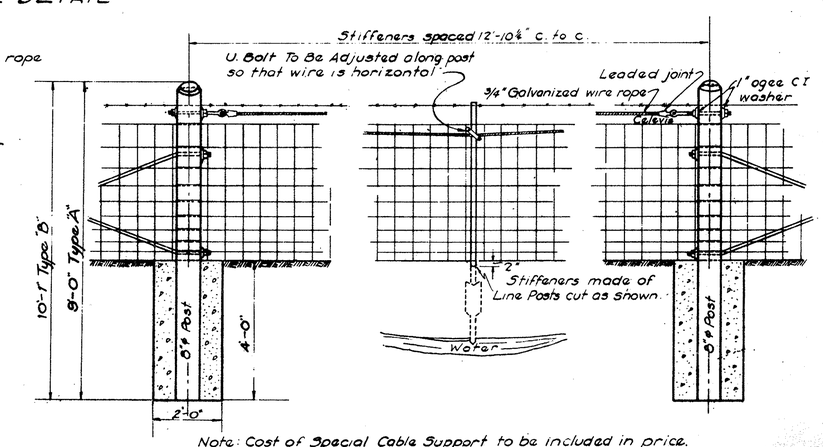
DETAIL OF U-BOLT



DETAIL OF CLEVIS



DETAIL OF EYE BOLT



Note: Cost of Special Cable Support to be included in price bid per lin. Ft. for R/W Fence.

DETAIL OF SPECIAL CABLE SUPPORT

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

RECAPITULATION

DRAINAGE

Sheet No.	Struct. No.	E-2 Struct. Exc. C.Y.	E-3 Chan. Exc. C.Y.	I-1 12" L.F.	I-1 15" L.F.	I-1 18" L.F.	I-1 21" L.F.	I-1 24" L.F.	I-1 36"x22" C.M.A. L.F.	I-2 6" San. L.F.	I-2 8" San. L.F.	I-2 12" L.F.	I-2 15" L.F.	I-2 15" U.A. L.F.	I-2 18" L.F.	I-2 18" U.A. L.F.	I-2 21" L.F.	I-2 24" L.F.	I-2 30" L.F.	I-2 36" L.F.
CODE 9672																				
20												649	291							
21							28		83			337	7		182					
22								56	68				74							
23						56	106													
24				22																
122	C-1	140																		
TO GEN. SUM.		140		22		56	134	56	151			986	372		182					
CODE 7221																				
24												139		77		75				
25													10							
26													65							
27												102	162		130					
28													6							
29												8								
30											221	37	224			164	106			
31				24						210	152		235							
32													8							
33												84	90							
34																				
35												295	156		273			138		
36												50	59							
107				82		38														
111												144	35		32			157	782	6
123	C-2	97																		
124	C-3	37											3							
125	C-4	93	424										3							
128	C-5	55																		
129	C-6	14																		
130	C-7	7																		
132	C-8	650																		
141	C-9	270																		
142	C-10	170	129																	
143	C-11	21																		
143A	C-12	13	2	182	99	134	40													
TO GEN. SUM.		1427	555	288	99	172	40			210	373	859	1056	77	435	239	106	295	782	6

Sheet No.	I-4 6" L.F.	I-4 8" Outlet L.F.	I-4 12" L.F.	I-12 Type G Curb L.F.	I-5 FOR I-2 12"x6" WYE E.A.	I-5 FOR I-2 15"x6" WYE E.A.	I-5 FOR I-2 15"x12" WYE E.A.	I-5 FOR I-2 15" WYE E.A.	I-5 FOR I-2 15" 45° CURVE E.A.	I-5 FOR I-2 18"x6" WYE U.A. E.A.	I-5 FOR I-2 21" 45° CURVE E.A.	I-5 FOR I-2 24" 45° CURVE E.A.	I-5 FOR I-2 24"x12" WYE E.A.	I-5 FOR I-2 30"x12" WYE E.A.	I-5 FOR I-2 30"x15" WYE E.A.	I-5 FOR I-4 6" 45° CURVE E.A.	I-5 FOR I-4 6" 90° CURVE E.A.	I-5 FOR I-4 6" WYE E.A.	I-5 FOR I-4 6" TEE E.A.	I-5 FOR I-4 12" WYE E.A.	I-5 FOR I-4 12" TEE E.A.	SHT. No.
CODE 9672																						
20	451			186															1			20
21	3804	20			4											7		2	2			21
22	2396					2																22
23	2400																	2				23
24	1235																					24
122																						122
TO GEN. SUM.	10286	20		186	4	2										7		4	3			
CODE 7221																						
24	1076									1						1						24
25	2635	10														2		2				25
26	298																					26
27	1017	10			1				1							1						27
28	3170	10														2		3				28
29	115	20																				29
30	290	10							2		2											30
31	626					1	1	1								2		1				31
32																						32
33																						33
34	1217	10														1		1				34
35	218																					35
36																						36
107																						107
111												1	2	3	1							111
123																						123
124																						124
125																						125
128																						128
129																						129
130																						130
132	296		28													1	1			1	1	132
141																						141
142																						142
143																						143
143A																						143A
TO GEN. SUM.	10958	70	28		1	1	1	1	3	1	2	1	2	3	1	10	1	7		1	1	

Sheet No.	Struct. No.	I-5 FOR CULVERTS 21"x12" WYE EA.	24"x12" WYE EA.	27"x15" TEE EA.	42"x15" WYE EA.	66"x15" WYE EA.	I-8 M.H.#1 AS PER PLAN EA.	M.H.#2 EA.	C.B. 1-2-A EA.	C.B. 2-2-A EA.	#1 SIDE DT. INLET EA.	SPEC. RAISED CB. INLET EA.	SPEC. DITCH INLET EA.	I-10 RIPRAP TYPE A AS PER PLAN S.Y.	I-13 4" CONC. S'WALK S.F.	I-14 PAVE'D GUTTER TYPE A L.F.	I-14 PAVE'D GUTTER TYPE B L.F.	I-14 PAVE'D GUTTER TYPE C L.F.	I-14 PAVE'D GUTTER TYPE D L.F.	SPEC. 4" GRAN. SLAG S.Y.	S-1 CLASS "C" CONC. C.Y.	S-1 CLASS "E" CONC. C.Y.	S-3 WATER PROOF TYPE B S.Y.	S-4 REINF. STEEL LBS.	S-9 1" EXP. JOINT MAT. S.F.	S-14 G.RAIL TYPE I 15.13 L.F.	S-24 R & D. EXIST. STRUCT LUMP	S-25 ELECT. LIGHT SYS. LUMP.	S-27 12" L.F.	S-27 15" L.F.	S-27 18" L.F.	S-27 21" L.F.	S-27 24" L.F.	S-27 27" L.F.	S-27 36" L.F.	S-27 42" L.F.	S-27 66" L.F.	S-29 POROUS BACK-FILL C.Y.	S-24 C.B. GRATING S.F.	SHT. No.
CODE 9672																																								
20									4			1																												20
21									3				3																											21
22													1																											22
122	C-1			1																		2.39					Lump(1)							122						122
TO GEN. SUM.				1					7			1	4									2.39					Lump(1)							122						
TO CALCUL.																																								
CODE 7221																																								
24									1				2																											24
25													1			1095																								25
26													1			255																								26
27													3			1050																								27
28													1			100	1625																							28
29							2	1					1																											29
30							1	2				1	5	3		865	383																							30
31							1		2				1				1062																							31
32													1			63	860	123																						32
33													2																											33
34																577																								34
35							2		2	1		3	2	6																										35
36							1					2																												36
111							5		1			11	2																											111
123	C-2				1									15								4.24													153					123
124	C-3						1							24								2.15											74							124
125	C-4																					136.11		8510																125
128	C-5	1												6								2.15												174						128
129	C-6																					2.34										58								129
130	C-7																					4.29														59				130
132	C-8										2				1527				236	170	207	67	60	27211	80	112.5		Lump(1)										40	8	132
141	C-9				1		1															6.6													155					141
142	C-10					1								37								9.0															182			142
143	C-11		1				1							21								2.2											186							143
143A	C-12																					1.80										48								143A
TO GEN. SUM.		1	1		2	1	15	3	6	1	2	17	22	1.12		4005	3436	123	236		207	237.88	60	35721	80	112.5		Lump(1)				106	174	260		59	308	182	40	8	
TO CALCUL.																				170																				
TO 2 WAY.															1527																									

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	15A 154
2	OHIO	F-524(5)	POST WAR	

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

RECAPITULATION

ROADWAY

Sheet No.	E-8 Rem & Disp. Pav't S.Y.	E-8 Rem. & Disp. S'walk S.F.	E-8 R.&D. Exist. Curb L.F.	E-8 R.&D. Part Ex. Curb L.F.	E-8 Rem. for Revse Curb L.F.	E-12 15" and Under L.F.	E-12 Over 15" L.F.	I-8 Mon. Boxes EA.	I-13 4" Conc. S'walk S.F.	I-15 G.R. L.F.	I-15 G.R. Type I-15.13 L.F.	I-15 G.R. Posts EA.	I-15 G.R. Rem. & Store L.F.	I-16 C.B. Abd. EA.	I-16 M.H. Abd. EA.	I-17 6" S.Y.	L-9 Seeding S.Y.	L-10 Sod S.Y.	SS-18 Fence L.F.
MUNICIPAL																			
19																24.3	374		
To Gen. Sum.																			
To Calcul.																24.3	374		
CODE TYPE 9672																			
19	19															137.6	613		
20											246.50	20	776			874.8	11162		
21						297	186	4			288.10	20	368			761.0	15150	1374	
22						68	184									687.0	12723	2196	
23						567	30	2								785.2	12929	2837	89.0
24						105	33	1								81.8	9210	1680	762.1
To Gen. Sum.	19					1037	433	7			534.60	40	1144					8087	851.1
To Calcul.																3327.4	61787		
CODE TYPE 7221																			
24							16	2								31.1	6283	497	3998
25								2			1482					500	34466	3253	4811.1
26								2			614	15				500	43328	2649	4669.6
27						21		3			675					334.1	40810	2332	4906.7
28								2			957					250	31369	2560	4793.4
29								2			1184	8			3	250	22385	731	2233.5
30	436		404		46	416	168	2			123			2	1		20767	1755	2436.2
31	203	675				495	38	2			250					465.1	18972	816	2219.9
32											80					250	17201	416	2404.7
33						16					546.1					500	20249		2400.4
34								2			830.28	24					25180	473	2141.2
35	1124	1150	488			166	100	3	1463		1547		320	2		424	23338	587	980.8
36	919	1200	468				135	1	1150		160		10	1		23.3	2564		
107						61										437.1			
111	1023						18				1008			12	1	488.8			
114				73							25					166.9			
From Drain.									1527										
To Gen. Sum	3705	3025	1360	73	46	1175	475	23	4140		9481.38	47	330	17	5			16069	34483
To Calcul.																6122.5	306912		

PAVEMENT

Sheet No.	I-7 Conc. Appr. Slab S.Y.	I-11 6" Stone Curb L.F.	I-11 S.S. Curb Reset L.F.	I-12 Conc. Curb Type 2-A L.F.	I-21 12" Port. Cem. Conc. Traffic Island Pave. S.Y.	SPECIAL Precast Traffic Dividers EA.	B-20 5" W.B. Mac. S.Y.	B-20 10" W.B. Mac. S.Y.	B-35 1¼" S.Y.	B-35 1¼" Min. S.Y.	B-35 3" S.Y.	T-30 Tack Coat S.Y.	T-30 Prime Coat S.Y.	T-35 1¼" S.Y.	T-35 1¼" Av. S.Y.	T-71 9" S.Y.	T-71 6" S.Y.	Sheet No.
MUNICIPAL																		
19					64.9			172.8	157.4	630.0	162.5		172.8	787.4	218.0			19
To Gen. Sum.					64.9			172.8										
To Calcul.									157.4	630.0	162.5		172.8	787.4	218.0			
CODE TYPE 9672																		
19					26.2			416.2	402.8	460.4	407.3		416.2	863.2	32.0			19
20	40				142.7	4		226.5	221.6	130.3	223.2	40	226.5	431.9		993		20
21	40						60.4	576.0	595.3		608.7	40	636.4	675.3		555.2		21
22							110.0		96.6		101.1		110.0	96.6		131.8		22
23							61.5		54.4		56.8		61.5	54.4		159.4		23
24								555.6	533.4	896.4	544.4		555.6	1429.8		1091.2		24
To Gen. Sum.	80				168.9	4	231.9											
To Calcul.								1774.3	1904.1	1487.1	1941.5	80	2006.2	3551.2	32.0	2036.9		
CODE TYPE 7221																		
24				258.5												899.9		24
25																		25
26																		26
27																1629	1228	27
28																		28
29																		29
30			46															30
31							1229		1150		1176		1229	1150		290		31
32																		32
33				300												1625		33
34	160											160		320				34
35		384		124		3										1965		35
36		462				1			155		156			155		1402		36
107							3324		2527		2793		3324	2527		3724		107
111				2293												3393.3		111
114																		114
From Drain.																		
To Gen. Sum	160	846	46	2975.5		4											1228	
To Calcul.							4553		3832		4125	160	4553	4152		10110.5		

EARTHWORK

Sheet No.	E-1 Exc. C.Y.	E-1 Emb. C.Y.	Emb. +19% C.Y.
MUNICIPAL			
19	19	40	
*Correction		(−) 15	
To Calcul.	19	25	30
CODE TYPE 9672			
19	61	17	
20	918	13055	
21	23437	4081	
22	2906	2568	
23	10362	1266	
24	17886	736	
*Correction	(+) 500	(−) 1100	
To Calcul.	56070	20623	24,541
CODE TYPE 7221			
24	11777	238	
25	25142	79803	
26	79124	13614	
27	79190	35740	
28	19026	29550	
29	2042	77413	
30	71737	1695	
31	10381	16269	
32	1583	27691	
33	1216	46661	
34	86974	25104	
35	30116	81850	
36	107	3464	
*Correction	(+) 1100	(−) 3600	
To Calcul.	392415	441492	525,375

* Corrections estimated for differences between cross sections as plotted and revised typical sections. See Sheet No. 6.

EARTHWORK CALCULATIONS

MUNICIPAL
Embankment +19% 30 C.Y.
Excavation 19 C.Y.
Borrow 11 C.Y.

CODE 9672
Excavation 56070 C.Y.
Embankment +19% 24541 C.Y.
Surplus 31529 C.Y.

CODE 7221
Embankment +19% 525,375 C.Y.
Excavation 392415
Surplus From Above 31529
423944 C.Y.
Borrow 101431 C.Y.

E-11 WATER CALCULATIONS

MUNICIPAL
In Embankment 25×5 125 Gal.
In Cut 5" B-20 Area ÷ 2 = 1728 S.Y.
1.5×175÷9 = 29.2 S.Y.
202.0 S.Y.
202×8×5÷36 = 224 Gal.
349 Gal.
To Gen. Sum. 0.4 M.Gal.

CODE 9672
In Embankment 20623×5 103115 Gal.
In Cut 1088×6.25÷9 = 756 S.Y.
791×28.5÷9 = 2505 S.Y.
3175×10.25÷9 = 3616 S.Y.
5" B-20 Area from Sht #106÷2 = 556 S.Y.
400×1.5 ÷9 = 67 S.Y.
2500×27 ÷9 = 7500 S.Y.
15000 S.Y.
15000×8×5÷36 = 16667 Gal.
119782 Gal.
To Gen. Sum. 119.8 M.Gal.

CODE 7221
In Embankment 437733×5 2188665 Gal.
In Cut 7150×54÷9 = 42900 S.Y.
42900×8×5÷36 = 47667 Gal.
2236332 Gal.
To Gen. Sum. 2236.3 M.Gal.

L-9 FERTILIZER

MUNICIPAL
Fertilizer @ 20 lbs. per 1000 S.F.
From Recap. 374 S.Y.
374×9×20 ÷ (1000×2000) = 0.03 Tons

CODE 9672
Fertilizer @ 20 lbs. per 1000 S.F.
From Recap. 61787 S.Y.
61787×9×20÷(1000×2000) = 5.56 Tons

CODE 7221
Fertilizer @ 20 lbs. per 1000 S.F.
From Recap 306912 S.Y.
306912×9×20÷(1000×2000) = 27.62 Tons

GRAN. SLAG GRADE B COMP. BASE COURSE

CODE 9672
From Sht. #7 2389.36 C.Y.

CODE 7221
From Sht. #6 2775 L.F.
4236.0 L.F.
2775 L.F.
4884.6 L.F.
14670.6 L.F.
14670.6×4.67÷9 = 7612.41 S.Y.
7612.41× 3÷36 = 634.4 C.Y.
From Drain. Recap. = 170 S.Y.
170×4÷36 = 18.9 C.Y.
From Sht. #7 27620.6 C.Y.
28273.9 C.Y.

I-9 STONE UNDERDRAINS

CODE 9672
Est. Quantity 1200 L.F.

CODE 7221
Est. Quantity 1200 L.F.

L-9 LIMESTONE

MUNICIPAL
Limestone @ 100 lbs. per 1000 S.F.
374×9×100÷(1000×2000) = 0.17 Tons

CODE 9672
Limestone @ 100 lbs. per 1000 S.F.
61787×9×100÷(1000×2000) = 27.80 Tons

CODE 7221
Limestone @ 100 lbs. per 1000 S.F.
306912×9×100÷(1000×2000) = 138.10 Tons

I-2 6" PIPE FOR STORM SEWERS

MUNICIPAL
Est. Quantity 40 L.F.

CODE 9672
Est. Quantity 40 L.F.

CODE 7221
Est. Quantity 80 L.F.

I-8 LAMP HOLES

MUNICIPAL
Est. Quantity 2 EA.

CODE 9672
Est. Quantity 2 EA.

CODE 7221
Est. Quantity 4 EA.

For Additional Calculations See Sheet 16

STABILIZED BERMS

TABLE NO. 1

STABILIZED BERMS AT INTERSECTIONS

Station From	Station To	Side	Deduct Along Pavt. Edge L.F.	Extra Length L.F.	Detail Sheet No.
238+45	240+40.12	R		195.12	101
Total Municipal				195.12	
240+40.12	242+58.65	R		218.53	101
240+68	242+58.65	L		190.65	101
247+03.47	247+54.08	M	50.61	71.0	101
247+03.47	247+54.08	M	50.61		
254+85.56	258+21.20	R	135.54	177.5	103
254+96.07	256+05.07	M	109.00	123.9	103
255+30.07	255+71.52	M	41.45		
264+85.14	266+10.40	R	125.26	57.8	104
265+14	266+12	M	98.00	164.4	104
265+14	266+12	M	98.00		
265+22.84	266+02.60	L	79.76	49.8	104
269+39.60	270+19.65	L	80.05	49.8	104
272+36.42	273+06.44	L	70.02	49.8	104
276+71	277+29	M	58.00	107	105
276+71	277+29	M	58.00		
288+37	289+19	M	82.00	106.8	105
288+57	288+99	M	42.00		
288+35.91	289+15.93	L	80.02	49.8	105
293+73.78	297+73.93			1594.60	106
Total Code 9672			1258.32	3011.38	
300+13.07	301+36.25	M	123.18		106
300+53	300+90.23	M	37.23		106
300+60.78	301+48.16	L	87.38		106
327+97.44	329+32.15	L	134.71	143.3	107
328+59	329+69	M	110.0	106.8	107
328+79	329+89	M	110.0		
329+18.45	330+47.84	R	129.39	143.3	107
360+04.72	360+88.17	R	83.45	89.6	109
360+37.68	361+02.70	M	65.02	106.8	109
360+37.68	361+02.70	M	65.02		
360+52.21	361+35.66	L	83.45	89.6	109
404+30.21	405+48.99	R	118.78	39.04	110
404+78	405+63	M	85.00	107.0	110
404+78	405+63	M	85.00		
404+92.85	406+11.63	L	118.78	39.04	110
426+55.7	427+86.2	R	130.5	144.0	116
427+17.6	428+17.2	M	99.6	53.4	116
427+37.6	428+37.2	M	99.6		
427+68.4	428+93.7	L	125.3	71.7	116
452+54.07	454+06.31	R	152.24	200.2	118
453+15.26	454+04.36	M	89.10		118
453+39.26	453+79.23	M	39.97		118
478+31.94	479+70.63	L	138.69	73.1	120
479+09	479+54.5	M	45.5	63.4	120
479+09	479+75	M	66		
479+70.63	481+70	M		199.37	120
481+0	481+70	M		60	120
Total Code 7221			2422.89	1729.65	

TABLE NO. 2

DEDUCTION FROM I-17 AREAS DUE TO REVISION OF TYPICAL SECTIONS (See Sht. 6)

Station From	Station To	Side	Deduct Along Pavt. Edge S.Y.	Detail Sheet No.
240+00	242+40.12	R	13.4	102
Total Municipal			13.4	
240+40.12	242+20	R	45.9	102
244+43		L	11.6	10
245+39		L	11.6	10
245+39		R	23.7	10
245+70	248+70	R	120.0	10
245+82	248+53	L	85.0	102
249+90		R	22.5	10
251+65		L	11.6	10
257+73		R	22.5	10
257+85		L	11.6	10
259+63		R	22.5	10
259+94		L	11.6	10
262+25		L	11.6	10
263+05		R	22.5	10
264+52		R	22.5	10
266+72		R	22.5	10
267+61		R	13.4	22
269+51.11		R	23.7	10
271+62		R	22.5	10
273+64		R	23.7	10
274+50	277+50	L	120.0	10
277+00		R	11.6	10
277+50	280+50	R	120.0	10
279+00		L	11.6	10
280+82.5		R	22.5	10
282+56		R	11.6	10
284+53.5		R	23.7	10
285+52		L	15.2	10
286+89		R	22.5	10
288+77.94		R	37.1	10
294+45		L	11.6	10
295+37		R	22.5	10
Total Code 9672			992.40	
310+00	313+00	R	120.0	10
310+00	313+00	L	120.0	10
342+75	345+75	R	120.0	10
342+75	345+75	L	120.0	10
366+00	369+00	R	120.0	10
378+00	381+00	L	120.0	10
429+00	432+00	R	120.0	10
434+00	437+00	L	120.0	10
446+00	449+00	R	120.0	10
450+00	453+00	L	120.0	10
Total Code 7221			1200.0	

CALCULATIONS

I-17 STABILIZED

MUNICIPAL
From Table No. 1 195.12 L.F.
195.12 × 4 ÷ 9 = 86.72 S.Y.
From Recap 24.3 S.Y.
Less Table No. 2 13.4 S.Y.
10.9 S.Y. — 10.9 S.Y.
97.62 S.Y.
Extra Compaction?
97.62 × 6 × 1.20 ÷ 36 = 19.52 C.Y.

CODE 9672
From Typical Sec. A 1041.55 L.F.
From Typical Sec. A 1088.20 L.F.
From Typical Sec. B 791.20 L.F.
From Typical Sec. B 799.60 L.F.
From Typical Sec. C 6351.56 L.F. = 2×3175.78
10072.11 × 2 = 20144.22 L.F.
Plus Table No. 1 3011.38 L.F.
23155.60 L.F.
Less Table No. 1 1258.32 L.F.
21897.28 L.F.
21897.28 × 4 ÷ 9 = 9732.12 S.Y.
From Recap. 3327.4 S.Y.
Less Tab. No. 2 992.4 S.Y.
2335.0 S.Y. — 2335.0 S.Y.
12067.12 S.Y.
12067.12 × 6 × 1.20 ÷ 36 = 2413.4 C.Y.

CODE 7221
From Typical Sec. D 21000.94 L.F. 2×10500.47
From Typical Sec. E 7670.82 L.F.
From Typical Sec. E 7531.45 L.F.
36203.21 × 2 = 72406.42 L.F.
Plus Table No. 1 1729.65 L.F.
74136.07 L.F.
Less Table No. 1 2422.89 L.F.
71713.18 L.F.
Less Table SHT. # 6 (Sub-Total) 14538.30 L.F.
57174.88 L.F.
57174.88 × 4 ÷ 9 = 25411.05 S.Y.
From Recap. 6122.5 S.Y.
Less Tab. No. 2 1200.0 S.Y.
4922.5 S.Y. — 4922.50 S.Y.
30333.55 S.Y.
30333.55 × 6 × 1.20 ÷ 36 = 6066.71 C.Y.

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

CODE 9672
From Typical Sec. A 1041.55 L.F.
From Typical Sec. B 799.60 L.F.
From Typical Sec. C 3175.78 L.F.
TOTAL 5016.93 L.F.
5016.93 × 24 ÷ 9 = 13378.5 S.Y.
From Recap. 2036.9 S.Y.
TOTAL 15415.4 S.Y.

CODE 7221
From Typical Sec. D 21000.94 L.F. = 2×10500.47
From Typical Sec. E 15202.27 L.F. = 7670.82 + 7531.45
TOTAL 36203.21 L.F.
36203.21 × 24 ÷ 9 = 96541.89 S.Y.
From Recap. 10110.50 S.Y.
TOTAL 106652.39 S.Y.

B-20 WATERBOUND MACADAM BASE COURSE, 10" THICKNESS

CODE 9672
From Typical Sec. A 1088.20 L.F. 4.75 Ft. wide
From Typical Sec. B 791.20 L.F. 25.50 Ft. wide
From Typical Sec. C 3175.78 L.F. 8.75 Ft. wide
1088.20 × 4.75 ÷ 9 = 574.4 S.Y.
791.20 × 25.50 ÷ 9 = 2241.7 S.Y.
3175.78 × 8.75 ÷ 9 = 3087.6 S.Y.
From Recap 1774.8 S.Y.
TOTAL 7678.0 S.Y.

CODE 7221 5" THICKNESS
From Sheet # 6
2775.0 L.F.
4236.0 L.F.
2775.0 L.F.
4884.6 L.F.
14670.6 L.F.
14670.6 × 4.42 ÷ 9 = 7204.9 S.Y.
From Recap. 4553.0 S.Y.
TOTAL 11757.9 S.Y.

B-35 1¼" MIN. (2" AVE) ASPHALTIC CONCRETE LEVELING COURSE

MUNICIPAL
From Recap. 630.0 S.Y.
630.0 × 2 ÷ 36 = 35.0 C.Y.

CODE 9672
From Typical Sec. A 1088.20 L.F. 20 ft. wide
From Typical Sec. C 3175.78 L.F. 16 ft. wide
1088.2 × 20 ÷ 9 = 2418.20 S.Y.
3175.78 × 16 ÷ 9 = 5645.83 S.Y.
From Recap. 1487.10 S.Y.
9551.13 S.Y.
9551.13 × 2 ÷ 36 = 530.6 C.Y.

B-35 1¼" ASPHALTIC CONCRETE LEVELING COURSE

MUNICIPAL
From Recap. 157.4 S.Y.
157.4 × 1.25 ÷ 36 = 5.5 C.Y.

CODE 9672
From Typical Sec. A 1088.20 L.F. 4 ft. wide
From Typical Sec. B 791.20 L.F. 24 ft. wide
From Typical Sec. C 3175.78 L.F. 8 ft. wide
1088.2 × 4 ÷ 9 = 483.60 S.Y.
791.2 × 24 ÷ 9 = 2109.87 S.Y.
3175.78 × 8 ÷ 9 = 2822.92 S.Y.
From Recap 1904.10 S.Y.
7320.49 S.Y.
7320.49 × 1.25 ÷ 36 = 254.2 C.Y.

CODE 7221
From Recap. 3832 S.Y.
3832 × 1.25 ÷ 36 = 133.1 C.Y.

B-35 3" ASPH. CONC. LEVELING COURSE

CODE 9672
From Typical Sec. A 1088.2 L.F. 4.25 ft. wide
1088.2 × 4.25 ÷ 9 = 513.87 S.Y.
513.87 × 3 ÷ 36 = 42.8 C.Y.

B-35 ASPH. CONC. LEVELING MAT'L.

MUNICIPAL
B-35 1¼" Min 35.0 C.Y. + 5.5 C.Y. =
To General Summary 41 C.Y.

CODE 9276
B-35 1¼" Min. 530.6 C.Y. + 254.2 C.Y. = 784.8 C.Y.
B-35 3" Min. 42.8 C.Y.
To General Summary 828 C.Y.

CODE 7221
To General Summary 133 C.Y.

B-35 3" ASPH. CONC. BASE COURSE

MUNICIPAL
From Recap. 162.5 S.Y. − 162.5 × 3 ÷ 36 = 13.5 C.Y.

CODE 9672
From Typical Sec. B 791.20 L.F. 24.5 ft. wide
From Typical Sec. C 3175.78 L.F. 8.25 ft. wide
791.2 × 24.5 ÷ 9 = 2153.82 S.Y.
3175.78 × 8.25 ÷ 9 = 2911.13 S.Y.
From Recap 1941.50 S.Y.
7006.45 S.Y.
7006.45 × 3 ÷ 36 = 583.9 C.Y.

CODE 7221
From Recap 4125 S.Y.
4125 × 3 ÷ 36 = 343.8 C.Y.

T-30 BIT. PRIME COAT @ 0.35 GAL. PER S.Y.

MUNICIPAL
From Recap 172.8 S.Y.
172.8 × 0.35 = 60.5 Gal.

CODE 9672
From B-20 Calcul's. 574.4 S.Y.
2241.7 S.Y.
3087.6 S.Y.
5903.7 S.Y.
From Recap 2006.2 S.Y.
TOTAL 7909.9 S.Y.
7909.9 × 0.35 = 2768.5 Gal.

CODE 7221
From B-20 Calcul's. 7204.89 S.Y.
From Recap 4553.0 S.Y.
TOTAL 11757.89 S.Y.
11757.89 × 0.35 = 4115.3 Gal.

T-30 BIT. TACK COAT @ 0.10 GAL. PER S.Y.

CODE 9672
From Recap. 80 S.Y.
80 × 0.10 = 8 Gal.

CODE 7221
160 × 0.10 = 16 Gal.

T-35 1¼" ASPH. CONC. SURFACE COURSE (TYPE A)

MUNICIPAL
From Recap. 787.4 S.Y.
787.4 × 1.25 ÷ 36 = 27.3 C.Y.

CODE 9672
From Typical Sec. A 1088.20 L.F.
From Typical Sec. B 791.20 L.F.
From Typical Sec. C 3175.78 L.F.
TOTAL 5055.18 L.F.
5055.18 × 24 ÷ 9 = 13480.48 S.Y.
From Recap. 3551.20 S.Y.
17031.68 S.Y.
17031.68 × 1.25 ÷ 36 = 591.4 C.Y.

CODE 7221
From Sheet No. 6 2775.0 L.F.
1¼" Thickness used in calculations for quants. from Sht #6 to provide extra surf. mat'l. to fill voids in B-20. 4236.0 L.F.
2775.0 L.F.
4884.6 L.F.
14670.6 L.F.
14670.6 × 4 ÷ 9 = 6520.27 S.Y.
From Recap. 4152.0 S.Y.
10672.27 S.Y.
10672.27 × 1.25 ÷ 36 = 370.6 C.Y.

T-35 1¼" AVE. ASPH. CONCRETE SURFACE COURSE (TYPE A)

CODE 9672
From Recap. 32.0 S.Y.
32.0 × 1.25 ÷ 36 = 1.1 C.Y.

MUNICIPAL
From Recap. 218.0 S.Y.
218.0 × 1.25 ÷ 36 = 7.6 C.Y.

T-35 ASPH. CONC. SURFACE

MUNICIPAL
T-35 1¼" 27.3 C.Y.
T-35 1¼" Ave. 7.6 C.Y.
34.9 C.Y. To Gen. Sum. 35 C.Y.

CODE 9672
T-35 1¼" 591.4 C.Y.
T-35 1¼" Ave. 1.1 C.Y.
592.5 C.Y. To Gen. Sum. 593 C.Y.

CODE 7221
To General Summary 371 C.Y.

GENERAL SUMMARY

ITEM NO.	QUANTITY Code Type 9672 MUNIC.	9672 RURAL	7221 RURAL	TOTAL	UNIT	DESCRIPTION
						ROADWAY
E-1	19	56070	392415	448504	Cu.Yds.	Roadway Excavation
E-4	11		101431	101442	Cu.Yds.	Borrow
E-8		19	3705	3724	Sq.Yds.	Removal and disposal of Existing Pavement
E-8			3025	3025	Sq.Ft.	Removal and disposal of Existing Sidewalks
E-8			1360	1360	Lin.Ft.	Removal and disposal of Existing Curb, Curb and Gutter or Header Curb
E-8			73	73	Lin.Ft.	Removal and disposal of Portions of Existing Curb as per plan
E-8		20	46	46	Lin.Ft.	Removal for re-use of Existing Sandstone Curb
E-11	1.04	119.8	2236.3	2357	M.Gal.	Water
E-12		1037	1175	2212	Lin.Ft.	Pipe Removed and Stored, 15" and under
E-12		433	475	908	Lin.Ft.	Pipe Removed and Stored, Over 15"
I-8		7	23	30	Each	Monument Boxes as per plan
I-13			4140	4140	Sq.Ft.	4 inch Concrete Sidewalks
I-15		534.60	9481.38	10015.98	Lin.Ft.	Guard Rail Steel Beam Type (Deep)
I-15		40	47	87	Each	Wood Guard Rail Posts Complete in place
I-15		1144	330	1474	Lin.Ft.	Guard Rail Removed and Stored.
I-16			5	5	Each	Manholes Abandoned
I-16			17	17	Each	Catch Basins Abandoned
I-17	20	2413	6067	8500	Cu.Yds.	Side Approaches, Mail Box Turnouts and Berm Material as per plan
L-9	374	61787	306912	369073	Sq.Yds.	Seeding and Protecting Type "A"
L-9	0.03	5.56	27.62	33.21	Tons	Commercial Fertilizer 10-6-4
L-9	0.17	27.80	138.10	166.07	Tons	Agricultural Ground Limestone
L-10		8087	16069	24156	Sq.Yds	Sodding
SS18		851	34403	35254	Lin.Ft.	Right-of-Way Fence Type "A" as per plan
						DRAINAGE
I-1			99	99	Lin.Ft.	15 inch Pipe for Driveways
E-2		140	1427	1567	Cu.Yds.	Excavation for Structures
E-3			555	555	Cu.Yds.	Channel Excavation
I-1		22	288	310	Lin.Ft.	12 inch Pipe for Driveways
I-1		56	172	228	Lin.Ft.	18 inch, Pipe for Driveways
I-1		134	40	174	Lin.Ft.	21 inch Pipe for Driveways
I-1		56		56	Lin.Ft.	24 inch Pipe for Driveways
I-1		151		151	Lin.Ft.	36 inch span by 22 inch rise Corrugated Metal Arch with Integral Base, Sec. M-6.4(j) for driveways
I-2			210	210	Lin.Ft.	6 inch Pipe for Storm Sewers (Sanitary, using bituminous joints)
I-2			373	373	Lin.Ft.	8 inch Pipe for Storm Sewers (Sanitary, using bituminous joints)
I-2		986	859	1845	Lin.Ft.	12 inch Pipe for Storm Sewers
I-2		372	1056	1428	Lin.Ft.	15 inch Pipe for Storm Sewers
I-2			77	77	Lin.Ft.	15 inch Pipe for Storm Sewers Under Approaches
I-2		182	435	617	Lin.Ft.	18 inch Pipe for Storm Sewers
I-2			239	239	Lin.Ft.	18 inch Pipe for Storm Sewers Under Approaches
I-2			106	106	Lin.Ft.	21 inch Pipe for Storm Sewers
I-2			295	295	Lin.Ft.	24 inch Pipe for Storm Sewers
I-2			782	782	Lin.Ft.	30 inch Pipe for Storm Sewers
I-2			6	6	Lin.Ft.	36 inch Pipe for Storm Sewers
I-4		10286	10958	21244	Lin.Ft.	6 inch Pipe for Underdrains
I-4		20	70	90	Lin.Ft.	8" Plain Corrugated Metal Pipe, Sec. M-6.4(a) for Outlets for Underdrains
I-4			28	28	Lin.Ft.	12 inch Pipe for Underdrains
I-5		4	1	5	Each	12 inch Pipe Specials for Storm Sewers
I-5		2	6	8	Each	15 inch Pipe Specials for Storm Sewers
I-5			1	1	Each	18 inch Pipe Specials for Storm Sewers Under Approaches
I-5			2	2	Each	21 inch Pipe Specials for Storm Sewers
I-5			3	3	Each	24 inch Pipe Specials for Storm Sewers
I-5			4	4	Each	30 inch Pipe Specials for Storm Sewers
I-5		14	18	32	Each	6 inch Pipe Specials for Underdrains
I-5			2	2	Each	12 inch Pipe Specials for Underdrains
I-5			1	1	Each	21 inch Pipe Specials for Roadway Culverts
I-5			1	1	Each	24 inch Pipe Specials for Roadway Culverts
I-5		1		1	Each	27 inch Pipe Specials for Roadway Culverts
I-5			2	2	Each	42 inch Pipe Specials for Roadway Culverts
I-5			1	1	Each	66 inch Pipe Specials for Roadway Culverts
I-8			15	15	Each	Standard No. 1 Manholes
I-8			3	3	Each	Standard No. 2 Manholes
I-8		7	6	13	Each	Standard Catch Basins No. 1-2-A
I-8			1	1	Each	Standard Catch Basins No. 2-2-A
I-8			2	2	Each	Standard No. 1 Side ditch Inlet
I-8		1	17	18	Each	Raised Curb Inlet as per plan
I-8		4	22	26	Each	Special Ditch Inlet as per plan
I-10			112	112	Sq.Yds	Riprap Type A Grouted, as per plan
I-9		1200	1200	2400	Lin.Ft.	Stone Underdrain as per plan
I-14			4005	4005	Lin.Ft.	Paved Gutter Type "A" as per plan
I-14			3436	3436	Lin.Ft.	Paved Gutter Type "B" as per plan
I-14			123	123	Lin.Ft.	Paved Gutter Type "C" as per plan
I-14			236	236	Lin.Ft.	Paved Gutter Type "D" as per plan
S-1			207	207	Cu.Yds.	Concrete for Structures Class "C"
S-1		2.4	237.9	240.3	Cu.Yds.	Concrete for Structures Class "E"
S-3			60	60	Sq.Yds.	Waterproofing Type "C"
S-4			35721	35721	Lbs.	Reinforcing Steel
S-9			80	80	Sq.Ft.	1 inch Premolded Structural Expansion Joint
S-14			112.5	112.5	Lin.Ft.	Railing Type I-15.13 with steel posts
S-24		Lump		Lump	Lump	Removal of Existing Structure
S-25			Lump	Lump	Lump	Electrical Equipment Complete
S-27			106	106	Lin.Ft.	18 inch Pipe for Roadway Culverts
S-27			174	174	Lin.Ft.	21 inch Pipe for Roadway Culverts
S-27			260	260	Lin.Ft.	24 inch Pipe for Roadway Culverts
S-27		122		122	Lin.Ft.	27 inch Pipe for Roadway Culverts
S-27			59	59	Lin.Ft.	36 inch pipe for Roadway Culverts
S-27			308	308	Lin.Ft.	42 inch Pipe for Roadway Culverts
S-27			182	182	Lin.Ft.	66 inch Pipe for Roadway Culverts
S-28			40	40	Cu.Yds.	Porous Backfill
SS-24			8	8	Sq.Ft.	Sidewalk Grating as per plan
I-2	40	40	80	160	Lin.Ft.	6 inch Pipe for Storm Sewers
I-8	2	2	4	8	Each	Lamp Holes as per plan
						PAVEMENTS
B-20	173	7478		7651	Sq.Yds.	10" Waterbound Macadam Base Course as per plan
B-35	14	584	344	942	Cu.Yds.	Asphaltic Concrete Base Course (70-80)
T-71			1228	1228	Sq.Yds.	6 inch Reinforced Portland Cement Concrete Pavement
T-30		8	16	24	Gal.	Bituminous Tack Coat Sec. M-5.5, MS-2 or SS-1
B-20		232	11758	11990	Sq.Yds.	5 inch Waterbound Macadam Base Course
B-35	41	828	133	1002	Cu.Yds.	Asphaltic Concrete Leveling Course (70-80)
T-30	61	2769	4115	6945	Gal	Bituminous Prime Coat Sec. M5.3, MC-0, or MC-1 or Sec. M5.7 RT-2 or RT-3
T-35	85	593	371	999	Cu.Yds.	Asphaltic Concrete Surface Course Type A (70-80)
T-71		15415	106653	122068	Sq.Yds.	9 inch Reinforced Portland Cement Concrete Pavement
I-7		80	160	240	Sq.Yds.	Reinforced Concrete Approach Slabs
I-11			846	846	Lin.Ft.	6"x20" Sandstone Curb
I-11			46	46	Lin.Ft.	Sandstone Curb Reset
I-12			2976	2976	Lin.Ft.	Concrete Curb, Standard Type 2-A
I-21	65	169		234	Sq.Yds.	Portland Cement Concrete Traffic Island Pavement
Spec.		2389	28274	30663	Cu.Yds.	Granulated Slag Grade B, Base Course
Spec.		4	4	8	Each	Precast Concrete Traffic Dividers
I-12	186			186	Lin.Ft.	Type 6 Concrete curb as per plan

*STRUCTURES OVER 20' SPAN
For Quantities See Sheets No. 145, 151

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	TYPE	POSTS	MAP
2	OHIO	F-524(5)			

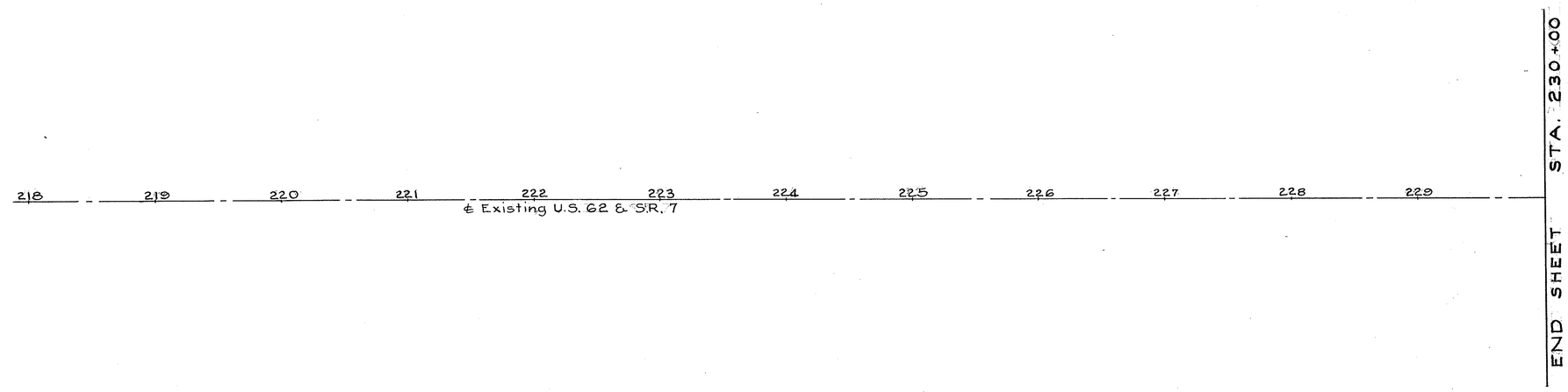
TRUMBULL COUNTY
TRU-62 (4.59-9.67)

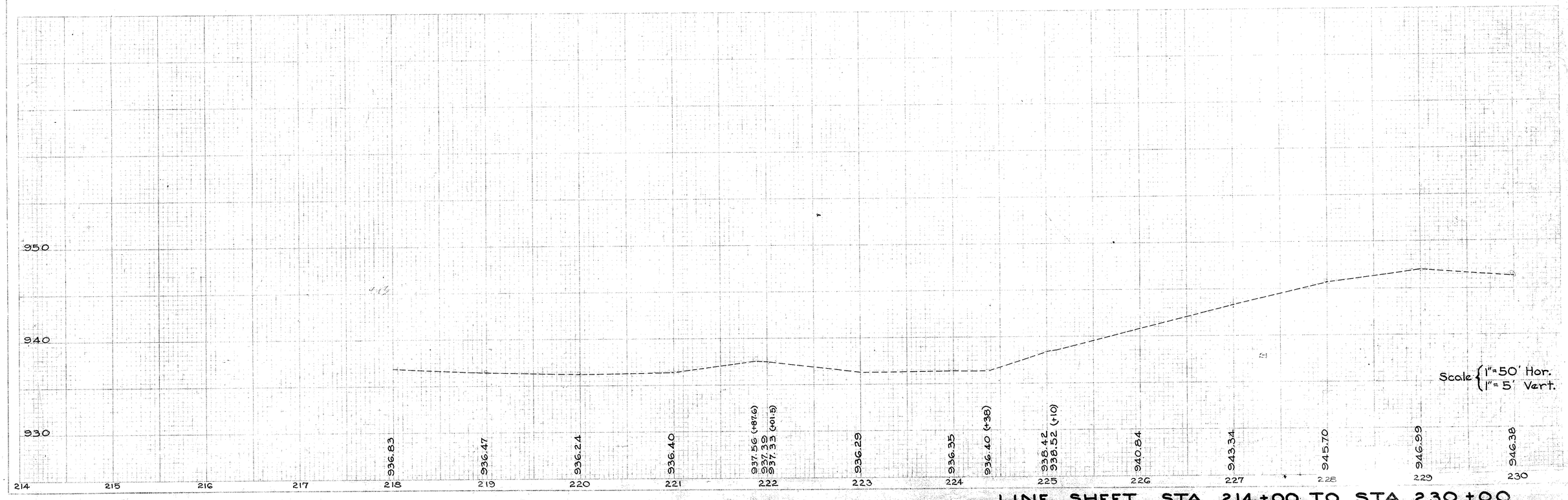
17
154

	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

18
154

TRUMBULL COUNTY
TRU-62 - (4.59 - 9.67)

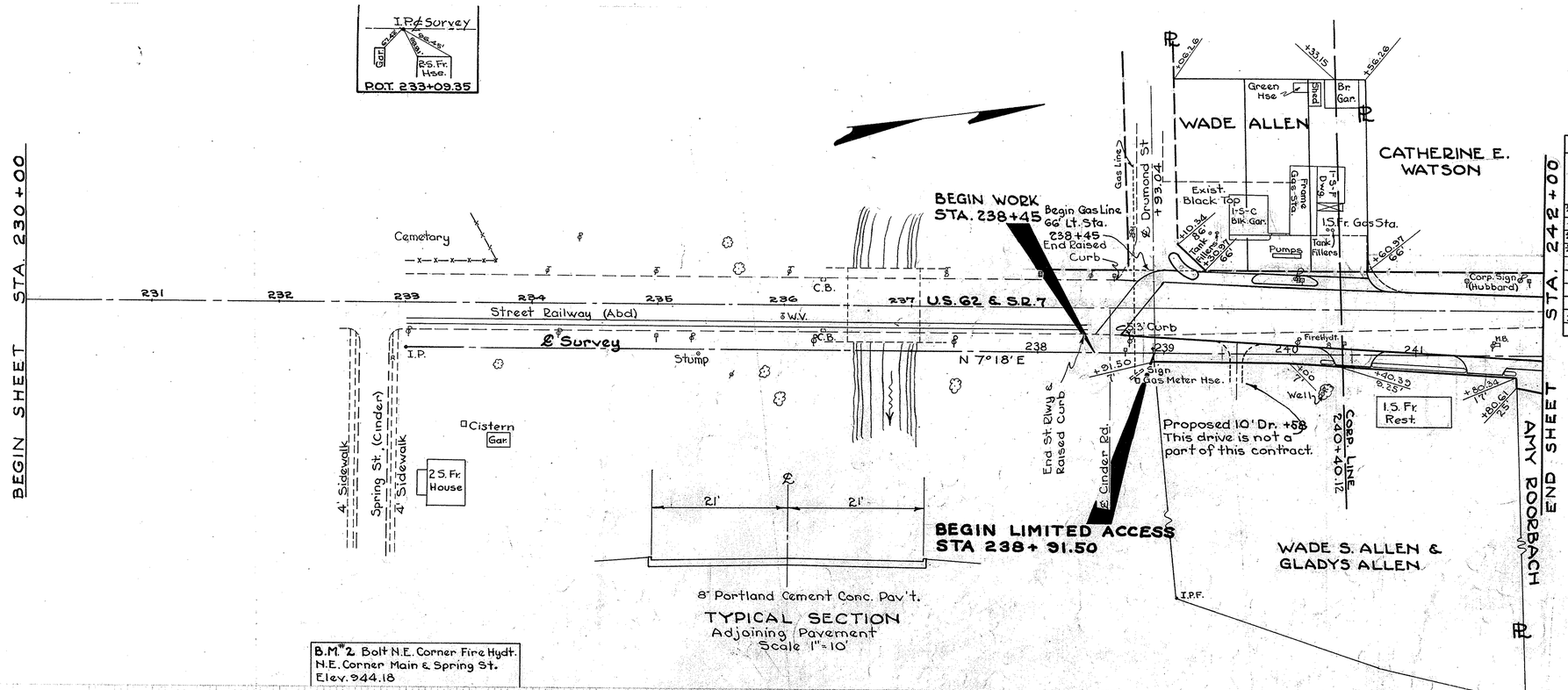




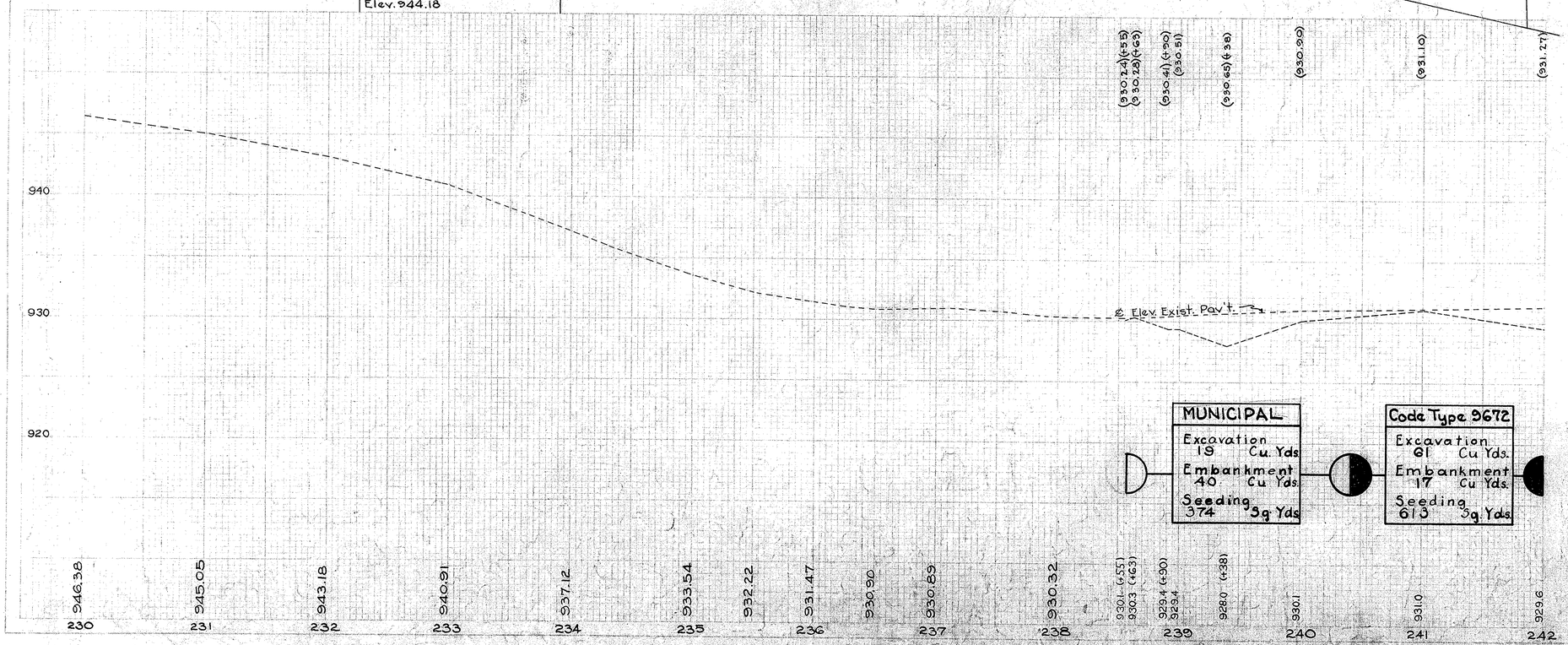
LINE SHEET STA. 214+00 TO STA. 230+00

2	OHIO	F-524(5)	TYPE FUNDS	19
			POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



B.M. #2 Bolt N.E. Corner Fire Hydt. N.E. Corner Main & Spring St. Elev. 944.18



MUNICIPAL	Code Type 9672
Excavation 19 Cu. Yds.	Excavation 61 Cu. Yds.
Embankment 40 Cu. Yds.	Embankment 17 Cu. Yds.
Seeding 374 Sq. Yds.	Seeding 613 Sq. Yds.

APPROACHES

STATION FROM	STATION TO	SIDE	B-20 10" S.Y.	B-35 1¼" S.Y.	B-35 1¼" Min. S.Y.	B-35 3" S.Y.	I-17 6" S.Y.	I-21 12" S.Y.	T-30 Prime Coat S.Y.	T-35 1¼" S.Y.	T-35 1¼" Av. S.Y.		Detail Sht. No.
*238+45	*240+40.12		172.8	157.4	630.0	162.5			172.8	787.4	218.0		101
240+40.12	242+00		416.2	402.8	460.4	407.3			416.2	863.2	32.0		101
*239+05	*240+18.5	L						58.5					102
*240+00	*240+40.12	R					24.3	6.4					102
240+40.12	242+00	R					137.6	26.2					102
*TOTAL Municipal			172.8	157.4	630.0	162.5	24.3	64.9	172.8	787.4	218.0		
TOTAL Code 9672			416.2	402.8	460.4	407.3	137.6	26.2	416.2	863.2	32.0		

REMOVALS

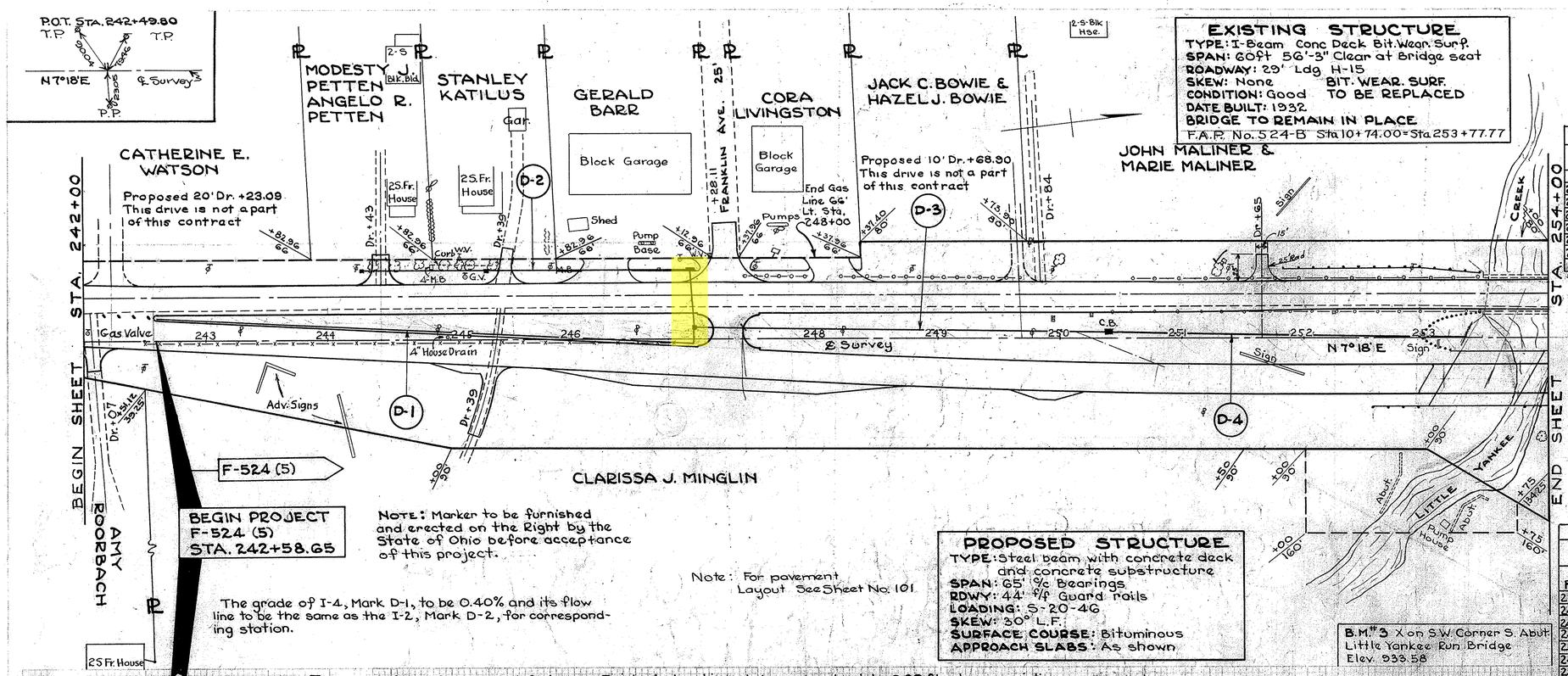
STATION FROM	STATION TO	SIDE	E-8 Bit. Pav't. Rem. Sht. No. 102 S.Y.
240+55	240+80	L	19
TOTAL Code 9672			19

Scale { 1" = 50' Hor. 1" = 5' Vert.

LINE SHEET STA. 230+00 TO STA. 242+00

2	OHIO	F-524(5)	TYPE FUNDS POST WAR	20	154

TRUMBULL COUNTY
TRU-62 -(4.59-9.67)



EXISTING STRUCTURE

TYPE: I-Beam Conc Deck Bit. Wear. Surf.
SPAN: 60ft 5G'-3" Clear at Bridge seat
ROADWAY: 29' Ldg H-15
SKEW: None BIT. WEAR. SURF.
CONDITION: Good TO BE REPLACED
DATE BUILT: 1932
BRIDGE TO REMAIN IN PLACE
F.A.P. No. 524-B Sta 10+74.00 = Sta 253+77.77

GUARD RAIL					GUARD RAIL REMOVAL			
STATION			I-15		STATION			I-15
FROM	TO	SIDE	I-15,13 L.F.	POST EA.	FROM	TO	SIDE	Rem & Str. L.F.
251+83	253+45.5	L	162.5		247+42	247+90	L	48
252+95	Bridge	Med.		*20	248+23	249+67	L	144
252+56.85	253+02.50	R	45.65		250+44	253+44	M	300
253+72.70	254+00	R	27.30		250+60	253+44	L	284
253+98.10	254+00	M	1.90					
253+18.76	253+27.91	M	9.15					
TOTAL			246.50	20	TOTAL			776

* Spaced approx. 4' c to c.

DRAINS

	STATION			I-2			I-4	I-5 for I-4		I-8	
				12"	15"		6"	6" Tee		C.B. I-2-A	Raised Curb Inlet
MARK	FROM	TO	SIDE	L.F.	L.F.		L.F.	EA.		EA.	EA.
D-1	242+59	247+00	M				451	1			
D-2	244+28	247+00	L	311						3	1
D-3	247+00	250+40	M	338						1	
D-4	250+40	253+32	M		291						
TOTAL				649	291		451	1		4	1

PROPOSED STRUCTURE

TYPE: Steel beam with concrete deck and concrete substructure
SPAN: 65' ℄ Bearings
RDWY: 44' ff Guard rails
LOADING: S-20-46
SKEW: 30° L.F.
SURFACE COURSE: Bituminous
APPROACH SLABS: As shown

Note: For pavement Layout See Sheet No. 101

NOTE: Marker to be furnished and erected on the Right by the State of Ohio before acceptance of this project.

The grade of I-4, Mark D-1, to be 0.40% and its flow line to be the same as the I-2, Mark D-2, for corresponding station.

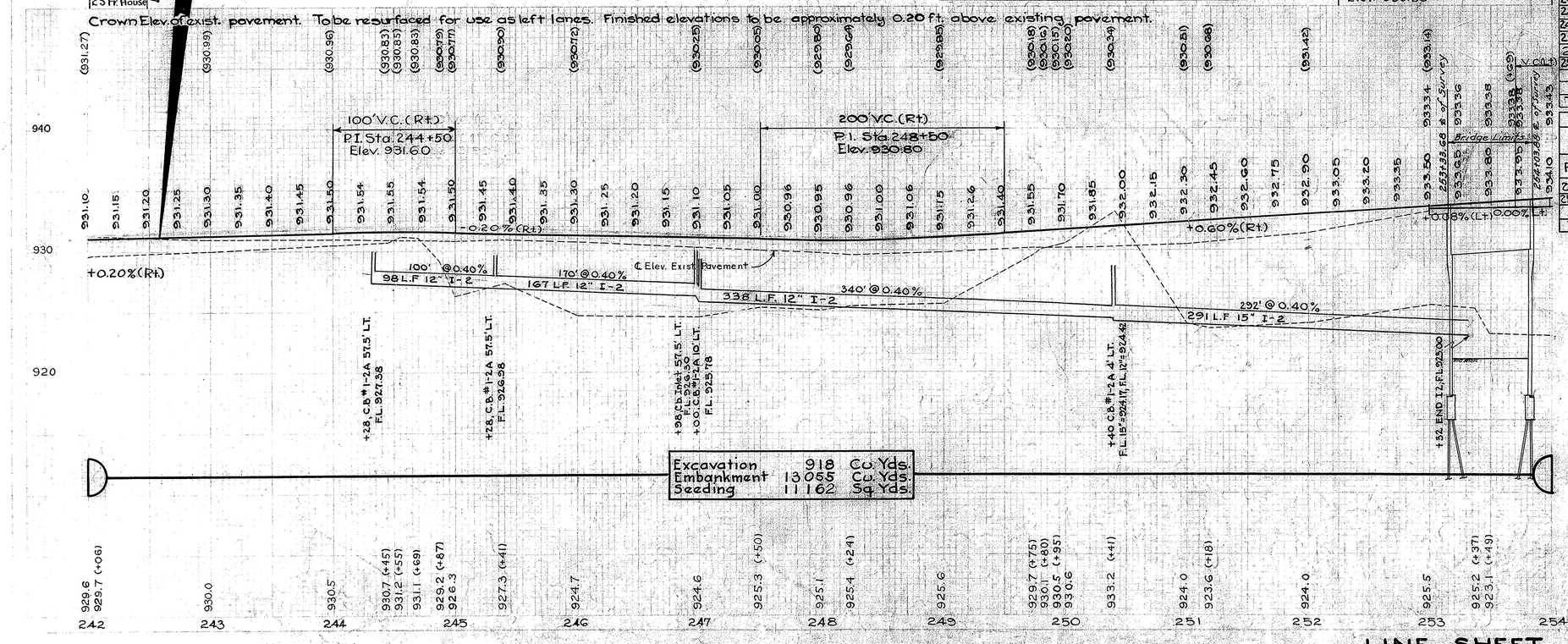
B.M. #3 X on S.W. Corner S. Abut. Little Yankee Run Bridge Elev. 933.58

APPROACHES

STATION		SIDE	Type 6 Curb Lin. Ft.	B-20 10" S.Y.	B-35 1¼" S.Y.	B-35 1¼" Min. S.Y.	B-35 3" S.Y.	I-17 6" S.Y.	I-21 12" S.Y.	T-30 Prime Coat S.Y.	T-35 1¼" S.Y.	T-71 9" S.Y.	I-7 App. Slab S.Y.	Detail Sht. No.
FROM	TO													
242+00	246+58.65	—	186	226.5	221.6	130.3	223.2			226.5	351.9			101
242+07		R						31.0						102
244+43		L						51.2						10
245+39		L						42.9						10
245+39		R						93.4						10
245+70	248+70	R						250.0						10
245+83	248+37	L						339.0	142.7					102
247+03.47	247+54.06	M										99.3		101
249+90		R						31.1						10
251+65		L						36.2						20
253+18.68	253+33.68	R									80		40	
TOTAL Code 9672			186	226.5	221.6	130.3	223.2	874.8	142.7	226.5	431.9	99.3	40	

APPROACHES

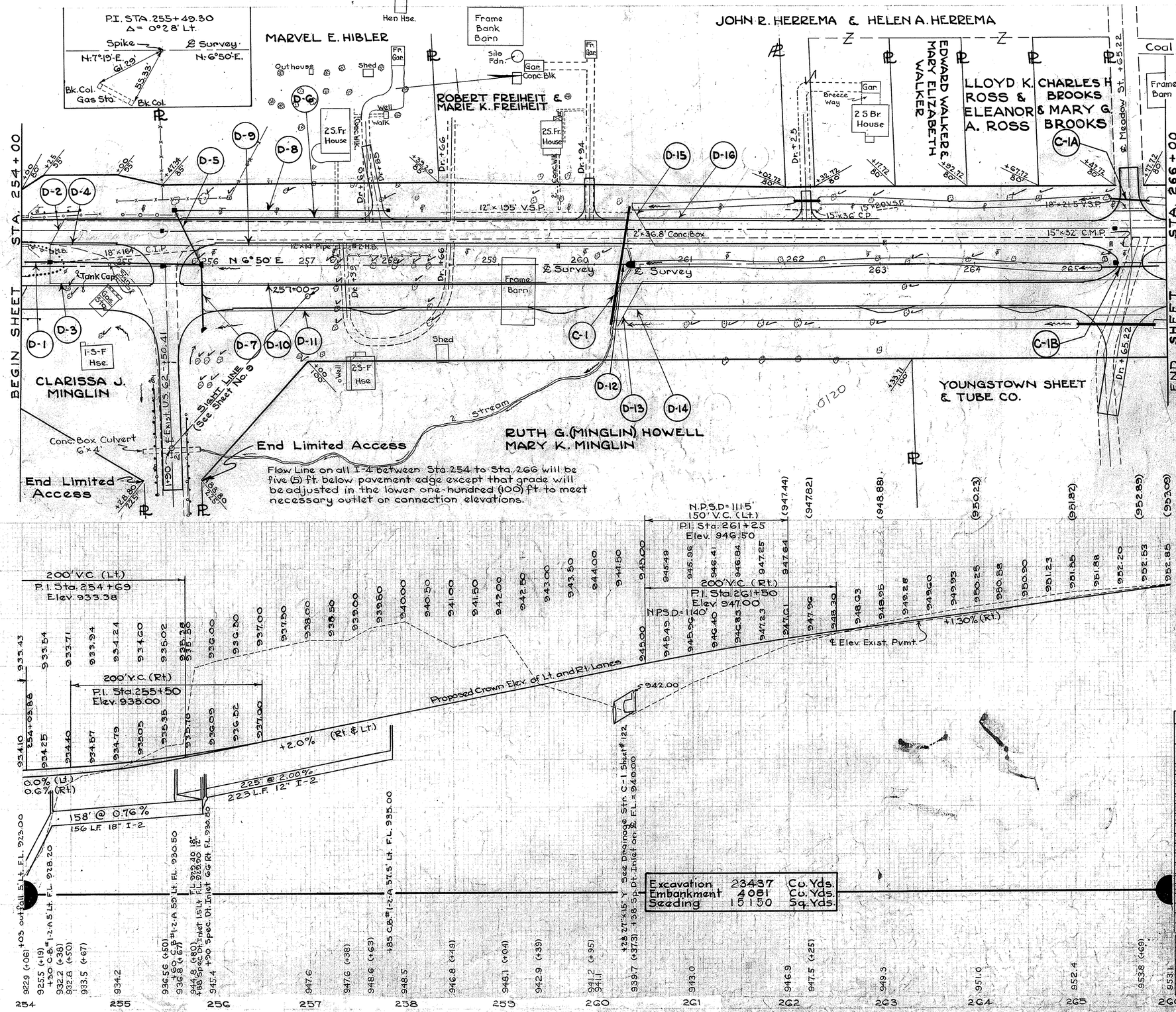
STATION		SIDE	Special Traffic Dividers Ea.	T-30 Tack Coat S.Y.	Detail Sht. No
FROM	TO				
242+17	242+53	M	4		101
253+18.68	253+33.68	R		40	
TOTAL			4	40	



LINE SHEET STA. 242+00 TO STA. 254+00

OHIO	F-524 (5)	TYPE FUNDS POST WAR	21 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES

STATION	SIDE	I-8 MON. BOX-EACH
255+49.30	℄ 36' L	2
265+49.0	℄ 36' L	2
TOTAL		4

STRUCTURES 20' SPAN & UNDER

MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-1	260+28.0	Std. Pipe Culv.	27" × 126'	122
C-1A	265+65.22		21" × 40'	143A
C-1B	265+65.22		15" × 62'	143A

* Spaced approx. 4' c to c # Exist. U.S. 62 Sta.

GUARD RAIL

STATION FROM	STATION TO	SIDE	I-15 I-15.13 L.F.	POST EA.
254+11	254+61	L	50.	
Bridge	254+45	Med.		*20
254+00	254+19.35	R	19.35	
# 1+27.5	2+40	R	112.5	
# 1+60	2+60	L	100.0	
254+00	254+06.25	M	6.25	
TOTAL			288.10	20

GUARD RAIL REMOVAL

STATION FROM	STATION TO	SIDE	I-15 B&M Exc. L.F.
254+11	254+83	L	72
254+11	254+27	M	16
255+07	255+63	L	56
# 1+20	# 2+40	R	120
# 1+57	# 2+61	L	104
TOTAL			368

DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-2 12" L.F.	I-2 15" L.F.	I-2 18" L.F.	I-4 6" L.F.	I-4 8" Outlet L.F.	I-5 for I-2 12"×6" Wye EA.	I-5 for I-4 6" 45° Curve EA.	I-5 for I-4 6" Tee EA.	I-5 for I-4 6" Wye EA.	I-8 C.B. Sp. Dt. I-2-A Inlet EA.	I-8 C.B. Sp. Dt. Inlet EA.
D-1	254+03	255+88	M			182							1	1(b)*
D-2	254+30	255+66	L				165			1	1			
D-3	254+30	255+89	M				180				1			
D-4	254+30	255+75	M				148							
D-5	255+60	255+88	M	56					2				1	
D-6	255+66	260+33	L				465			1				
D-7	255+88	255+90	M-2	58					2					1(b)*
D-8	255+60	257+85	L	223									1	
D-9	255+80	260+25	M				447			1				
D-10	255+89	259+50	M				359			1				
D-11	255+89	259+50	R				359			1				
D-12	260+28	260+38	M		7									1(a)*
D-13	260+23	266+00	M				595	10		1		1		
D-14	260+34	266+00	R				565			1				
D-15	260+41	263+00	M				271	10		1		1		
D-16	260+49	263+00	L				250							
TOTAL				337	7	182	3804	20	4	7	2	2	3	3

* Variation of Spec. Ditch Inlet

GUTTERS

STATION FROM	STATION TO	SIDE	L-10 7' Wide S.Y.	L-10 11' Wide S.Y.
260+20	265+06	R		594
260+35	262+10	L	136	
260+44	265+32	M	380	
262+38	265+42	L	237	
265+82	266+00	L	14	
265+89	266+00	R		13
TOTAL			767	607

PIPE REMOVAL

STATION FROM	STATION TO	SIDE	E-12 15" & Over L.F.	E-12 Under 15" L.F.
254+20	255+84	M		164
257+30	257+44	M	14	
258+40	260+35	L	195	
262+01	262+37	L	36	
262+98	263+19	L	20	
265+56	265+88	M	32	
265+54	265+76	L		22
TOTAL			297	186

APPROACHES

STATION FROM	STATION TO	SIDE	B-20 5" S.Y.	B-35 1¼" S.Y.	B-35 3" S.Y.	B-20 10" S.Y.	I-1 21" L.F.	I-1 36"×22 C.M.A. L.F.	I-17 6" S.Y.	T-30 Prime Coat S.Y.	T-35 1¼" S.Y.	T-71 9" S.Y.	I-7 App. Slab S.Y.	Detail Sht. No.
255+50.48		R		542	553	576				576	542			103
255+50.48		M										244		103
257+73		R							31.1					10
257+85		L							98.4					10
259+63		R							31.1					10
259+94		L							59.6					10
262+25		L					28		39.6					10
263+05		R							31.1					10
264+52		R							31.1					10
265+65.22		L	60.4	53.3	55.7				115.5	60.4	53.3			104
265+65.22		M										211.5		104
265+65.22		R						83	323.5			99.7		104
254+03.88	254+18.88	R									80		40	
TOTAL Code 9672			60.4	595.3	608.7	576	28	83	761.0	636.4	675.3	555.2	40	

APPROACHES

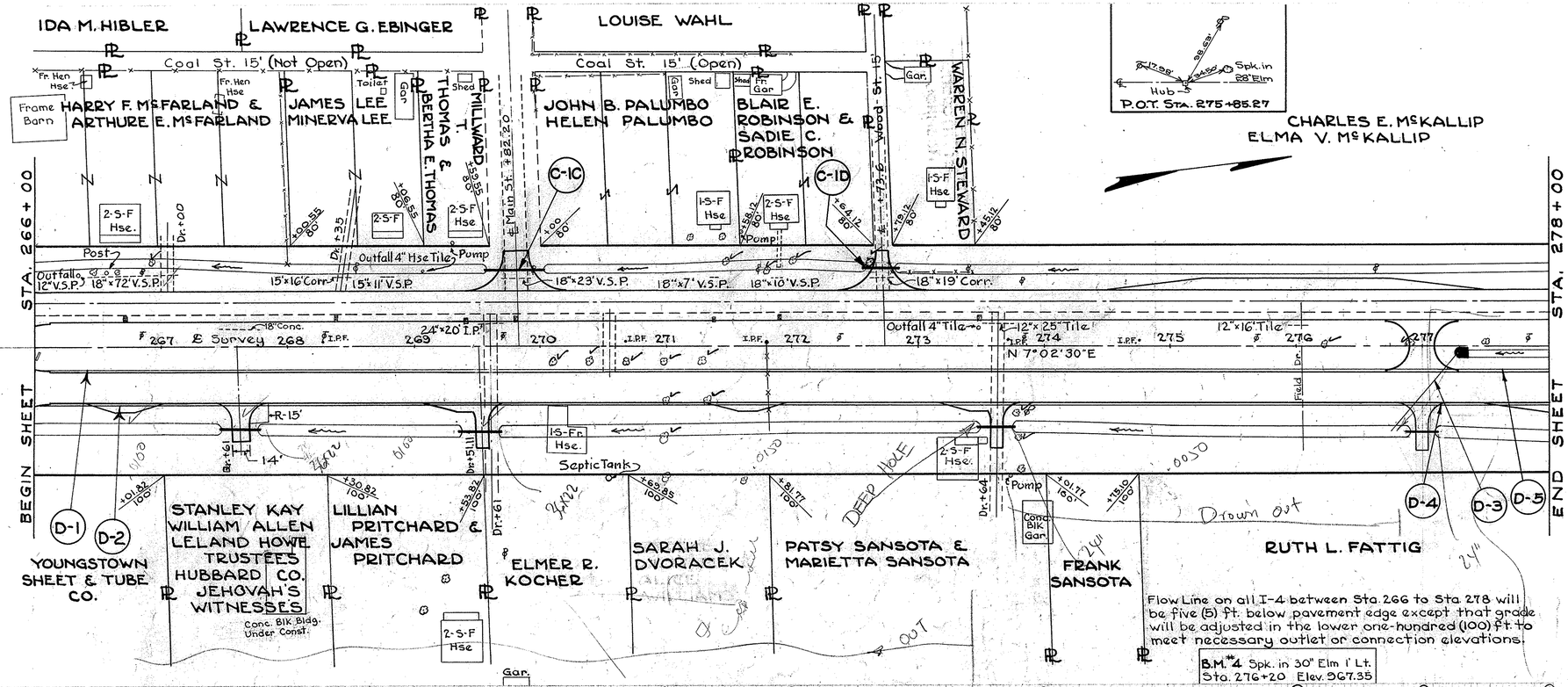
STATION FROM	STATION TO	Side	T-30 Tack Coat S.Y.	Detail Sht. No.
254+03.88	254+18.88		40	
TOTAL			40	

Scale { 1" = 50' Hori. / 1" = 5' Vert.

LINE SHEET STA. 254+00 TO STA. 266+00

2	0110	F-524(5)	TYPE FUNDS	22
			POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-2 15" L.F.		I-4 6" L.F.	I-5 for I-2 15"x6" Wye EA.		I-8 Sp.Dt. Inlet EA.
D-1	266+00	277+15	M			1115			
D-2	266+00	276+93	R			1093			
D-3	276+75	277+27	R-M	74			2		1(a)*
D-4	276+94	278+00	R			105			
D-5	277+16	278+00	M			83			
TOTAL				74		2396	2		1

*Variation of Spec. Ditch Inlet.

PIPE REMOVAL

STATION FROM	STATION TO	SIDE	E-12 15" & Under L.F.	E-12 Over 15" L.F.
266+42	267+14	L		72
268+35	268+51	L	16	
268+74	268+85	L	11	
269+51	269+71	M		20
269+70	269+93	L		23
271+35	271+42	L		7
271+83	271+93	L		10
272+62	272+81	L		19
273+51	273+76	M	25	
275+94	276+10	M	16	
267+45	267+78	M		33
TOTAL			68	184

GUTTERS

STATION FROM	STATION TO	SIDE	L-10 7' Wide S.Y.	L-10 9' Wide S.Y.	L-10 11' Wide S.Y.
266+00	269+55	L	276		
266+00	267+46	R			179
267+79	269+35	R			191
269+70	273+47	R			461
270+03	272+56	L	197		
272+86	278+00	L	400		
273+77	275+50	R			212
275+50	276+88	R		139	
277+11	278+00	R		89	
277+33	278+00	M	52		
TOTAL			925	228	1043

APPROACHES

STATION FROM	STATION TO	SIDE	B-20 5" S.Y.	B-35 1¼" S.Y.	B-35 3" S.Y.	I-1 2.4" L.F.	I-1 36"-22 C.M.A. L.F.	I-17 6" S.Y.	T-30 Prime Coat S.Y.	T-35 1¼" S.Y.	T-71 9" S.Y.	Detail Sht. No.
266+72		R						31.1				10
269+61		R					33	57.5				10
269+51.11		R					35	67.9				10
269+82.20		L	60.4	53.3	55.7			59.8	60.4	53.3		104
271+62		R						31.1				10
272+73.6		L	49.6	43.3	45.4			32.0	49.6	43.3		104
273+64		R				30		67.9				10
274+50	277+50	L						250.0				10
277+50	278+00	R						18.5				10
277+00		M									131.8	105
277+00		R				26		71.2				10
TOTAL Code 9672			110.0	96.6	101.1	5.6	68	687.0	110.0	96.6	131.8	

STRUCTURES 20' SPAN & UNDER

MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-1C	269+82.20	Stamped Conc.	18"x48'	143 A
C-1D	272+73.6	Stamped Conc.	18"x30'	143 A

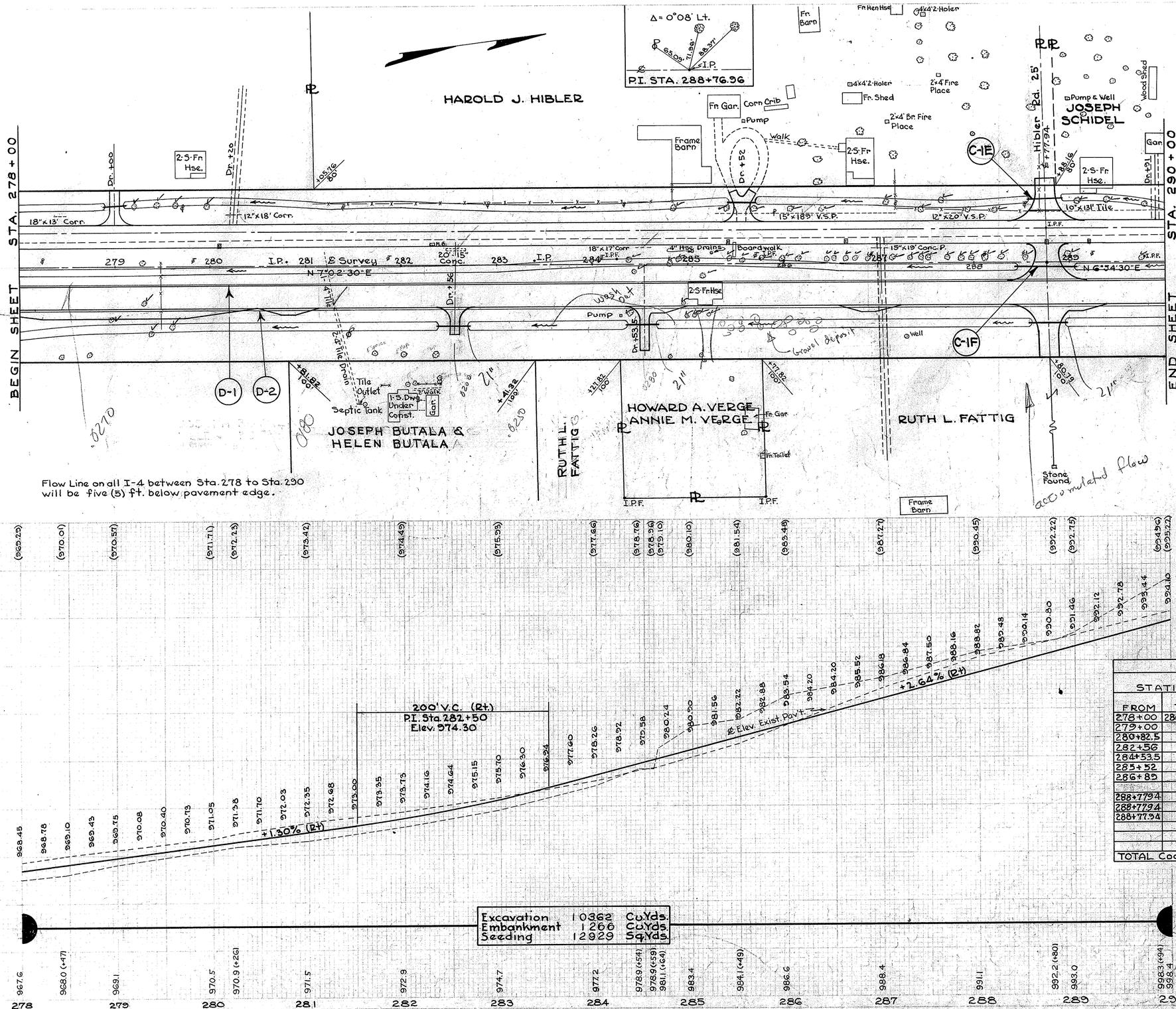
Scale { 1" = 50' Hor. / 1" = 5' Vert.

LINE SHEET STA. 266+00 TO STA. 278+00

			TYPE FUNDS	23
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX-EACH
288+76.96	℄ & 36'L	2



DRAINS				
	STATION			I-4 6"
MARK	FROM	TO	SIDE	L.F.
D-1	278+00	290+00	M	1200
D-2	278+00	290+00	R	1200
TOTAL				2400

FENCE				
FROM		TO		SS18
STATION	DIST.	STATION	DIST	L.F.
289+11	99 R	290+00	99 R	89.0
TOTAL				89.0

PIPE REMOVAL				
STATION			E-12	
			15" & Under	Over 15"
FROM	TO	SIDE	L.F.	L.F.
278+37	278+50	L		13
280+16	280+34	L	18	
281+20	281+44	M-R	170	
282+47	282+68	M	20	
284+45	284+62	M		17
285+29	287+18	L	189	
286+92	287+11	M	19	
287+69	287+89	L	20	
288+69	290+00	L	131	
TOTALS			567	30

GUTTERS				
STATION			L-10	
			7' Wide	9' Wide
FROM	TO	SIDE	S.Y.	S.Y.
278+00	278+88	L	69	
278+00	288+43	M	811	
278+00	282+37	R		437
279+14	285+42	L	488	
282+77	284+35	R		158
284+69	288+60	R		391
285+72	288+56	L	221	
288+93	290+00	R		107
288+93	290+00	L	83	
289+08	290+00	M	72	
TOTAL			1744	1093

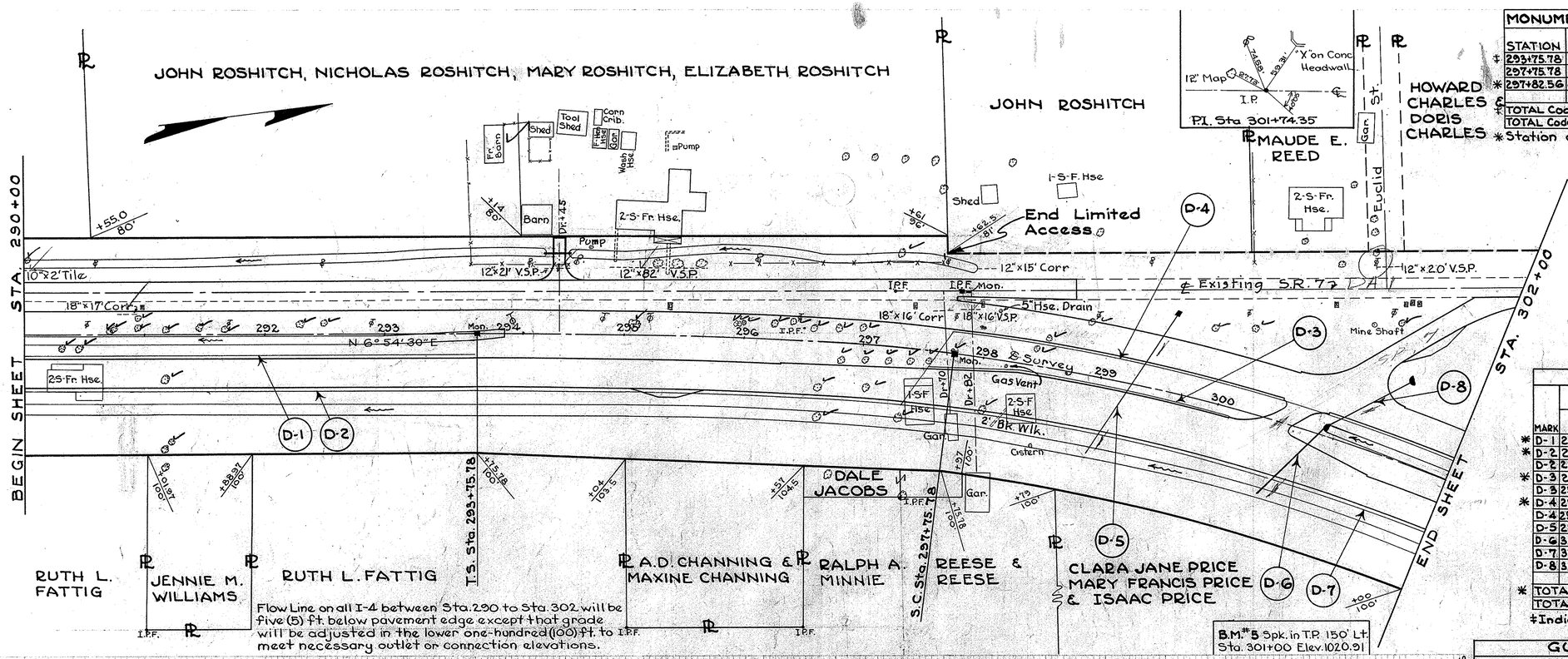
STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-1E	288+77.94		18" x 37'	143A
C-1F	288+77.94		12" x 65'	143A

APPROACHES															
STATION			B-20	B-35		I-1			I-17	T-30	T-35	T-71		Detail
			5"	1¼"	3"		18"	21"	6"	Prime Coat	1¼"	9"		Sht. No.
FROM	TO	SIDE	S.Y.	S.Y.	S.Y.		L.F.	L.F.	S.Y.	S.Y.	S.Y.	S.Y.		
278+00	280+50	R							231.5					10
279+00		L					26		50.7					10
280+82.5		R							31.1					10
282+56		R						35	52.9					10
284+53.5		R						34	79.0					10
285+52		L					30		67.4					10
286+85		R							31.1					10
288+77.94		L	61.5	54.4	56.8				562	61.5	54.4			105
288+77.94		M										159.4		105
288+77.94		R						37	185.3					10
TOTAL Code 9672			61.5	54.4	56.8		56	106	785.2	61.5	54.4	159.4		

LINE SHEET STA. 278+00 TO STA. 290+00

DIVISION	STATE	PROJECT	TYPE FUNDS	24
12	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES

STATION	SIDE	I-8 MON. BOX-EACH
293+75.78	℄	1
297+75.78	℄	1
* 297+82.56	Old ℄	1
TOTAL Code 9672		1
TOTAL Code 7221		2

* Station along old ℄

FENCE

FROM STATION	DIST.	TO STATION	DIST.	5518 L.F.
290+00	99R	293+75.78	99R	375.8
293+75.78	99R	297+73.93	99R	386.3
Total Code 9672				762.1
297+73.93	99R	297+75.78	99R	1.2
* 297+75.78	99R	302+00	99R	398.6
Total Code 7221				399.8

* Along Arc

DRAINS

MARK	STATION FROM	STATION TO	U D M	I-2 12" L.F.	I-2 15" U.A. L.F.	I-2 18" U.A. L.F.	I-4 6" L.F.	I-5 for I-4 6" 45° Wye EA.	I-5 for I-4 6" Curve Wye EA.	I-5 for I-2 18"x6" Wye EA.	I-8 C.B. I-2-A EA.	I-8 Sp. Dt. Inlet EA.
* D-1	290+00	293+76	M				376					
* D-2	290+00	297+73.93	R				770	1				
D-2	297+73.93	300+61	R				275					
* D-3	297+56	297+73.93	M				18					
D-3	297+73.93	300+11	M				236					
* D-4	297+36	297+73.93	R-M				71	1				
D-4	297+73.93	302+00	M				431		1			
D-5	299+00	299+50	R-L	139							1	
D-6	300+51.5	300+91	R-M			75				1		1(b)‡
D-7	300+61	302+00	R				134					
D-8	300+91	301+45	M-L		77							1(b)‡
* TOTAL Code 9672							1235	2				
TOTAL Code 7221				139	77	75	1076		1	1	1	2

‡ Indicates Variation of Spec. Ditch Inlet.

GUTTERS

STATION FROM	STATION TO	SIDE	L-10 7' Wide S.Y.	L-10 9' Wide S.Y.
290+00	*294+33	L	33.7	
290+00	294+00	M	31.1	
290+00	297+73.93	R		768
294+55	*297+35	L	26.4	
TOTAL Code 9672			91.2	768
297+73.93	302+00	R		41.3
300+92	302+00	M	8.4	
TOTAL Code 7221			8.4	41.3

* S.R. #7 Station

PIPE REMOVAL

STATION FROM	STATION TO	SIDE	E-12 15" & Under L.F.	E-12 Over 15" L.F.
290+00	290+02	L	2	
290+77	290+94	M		17
294+33	294+54	L	21	
294+87	295+69	L	82	
297+55	297+71	L		16
Total Code 9672			105	33
297+78	297+84	L		16
Total Code 7221				16

APPROACHES

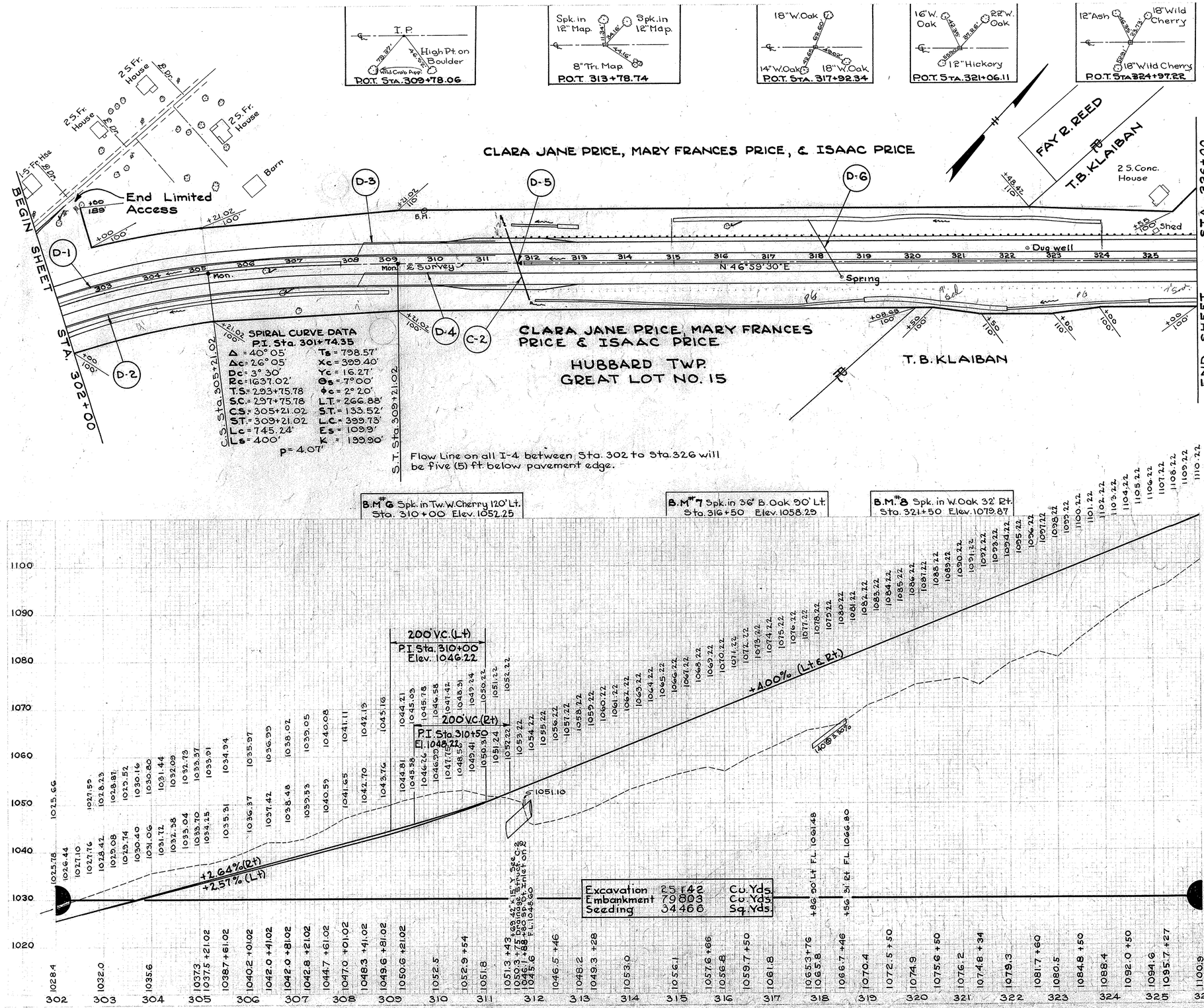
STATION FROM	STATION TO	SIDE	B-20 10" S.Y.	B-35 1¼" S.Y.	B-35 1¼" Min. S.Y.	B-35 3" S.Y.	I-1 12" L.F.	I-17 6" S.Y.	T-30 Prime Coat S.Y.	T-35 1¼" S.Y.	T-71 9" S.Y.	I-12 Type 2-A L.F.	Detail Sht. No.
293+75.78	297+73.93	R									1046.4		106
293+75.78	297+73.93	L	555.6	533.4	533.2	544.4			555.6	1066.6			106
293+75.78	*298+80	L			363.2					363.2			106
294+45		L					22	50.7					10"
295+37		R						31.1					10
296+30.72	297+73.93	M									44.8		106
TOTAL Code 9672			555.6	533.4	896.4	544.4	22	81.8	555.6	1429.8	1091.2		
297+73.93	301+36.25	M									516.2	165.6	106
300+54.15	303+39.76	L									383.7	92.9	106
‡ 1+73		R						31.1					10"
TOTAL Code 7221								31.1			899.9	258.5	

* S.R. 7 Station
‡ Crossover Station See Sheet No. 106

LINE SHEET STA. 290+00 TO STA. 302+00

FED. AID PROJ.	STATE	PROJ.	TYPE FUNDS	25
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



MONUMENT BOXES		
STATION	SIDE	I-8 MON BOX-EACH
305+21.02	℄	1
309+21.02	℄	1
TOTAL		2

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-2	311+69.0	Std. Pipe Culv.	42" × 157'	123

GUARD RAIL			
STATION			I-15
FROM	TO	SIDE	L.F.
311+18	326+00	L	1482
TOTAL			1482

APPROACHES				
STATION			I-17 6"	Detail Sht.
FROM	TO	SIDE	S.Y.	No.
310+00	313+00	L	250	10
310+00	313+00	R	250	10
TOTAL			500	

FENCE					
FROM		TO			SS18
STATION	DIST.	STATION	DIST.		L.F.
302+00	— R	305+21.02	99 R		301.6
302+99	189 L	302+89	99 L		90.0
302+99	99 L	305+21.02	99 L	*	235.5
305+21.02	99 L	309+21.02	109 L	*	412.3
309+21.02	109 L	322+48.42	109 L		1327.4
322+48.42	109 L	325+56	99 L		306.6
325+56	99 L	326+00	— L		70.0
305+21.02	99 R	309+21.02	99 R		387.7
309+21.02	99 R	320+50	99 R		1129.0
320+50	99 R	321+50	109 R		100.5
321+50	109 R	323+00	109 R		150.0
323+00	109 R	324+00	99 R		100.5
324+00	99 R	326+00	— R		200.0
TOTAL					4811.1

* Along arc.

DRAINS										
	STATION			I-2		I-4		I-5 to I-4	I-8	
				15"		6"	8"	6.45° Curve	6' Wye	Sp. Dt. Inlet
MARK	FROM	TO	SIDE	L.F.		L.F.	Outlet L.F.	EA.	EA.	EA.
D-1	302+00	311+25	M			931			1	
D-2	302+00	311+50	R			935			1	
D-3	308+34	311+25	L			307		1		
D-4	308+34	311+50	M			332		1		
D-5	311+69	311+80	M	10						1(a)*
D-6	317+86	318+56	L.R			130	10			
TOTAL				10		2635	10	2	2	1

* Variation of Spec. Ditch Inlet

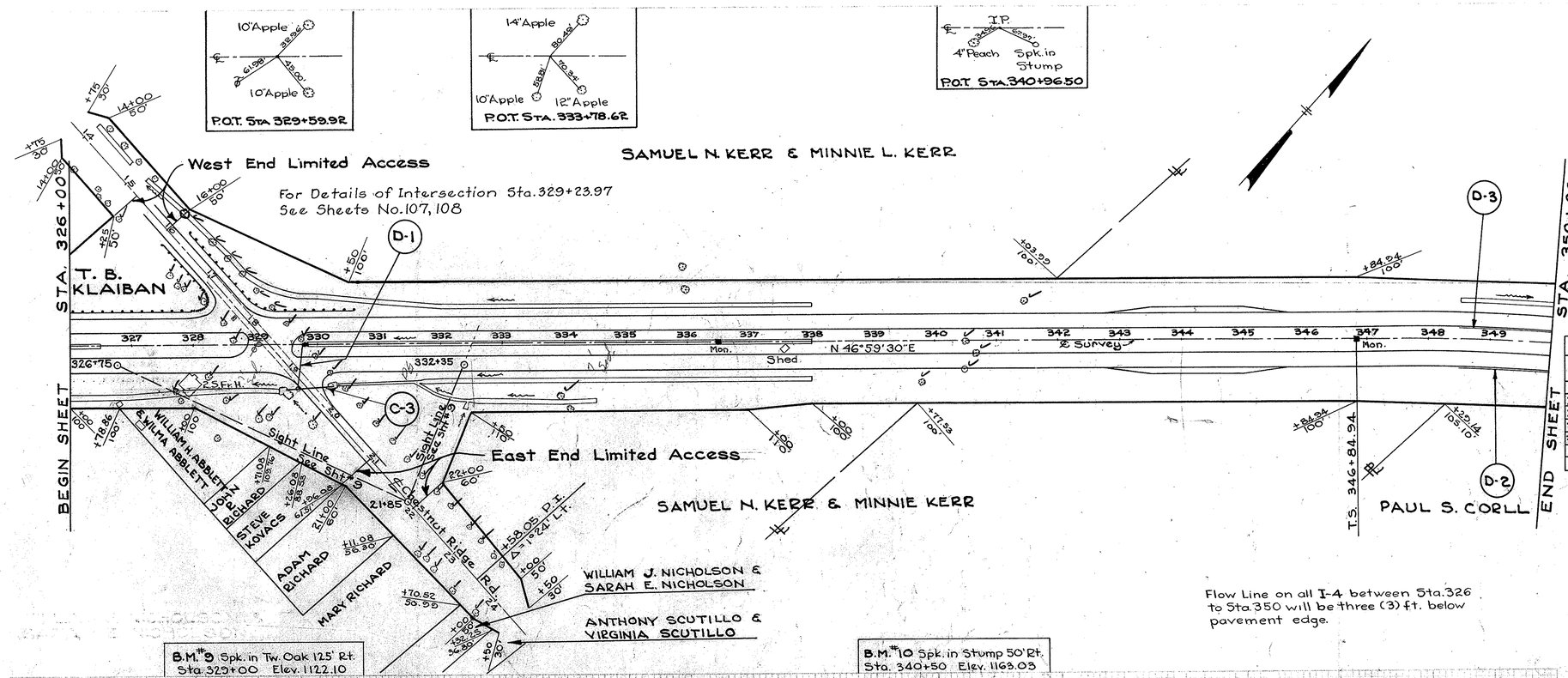
GUTTERS					
STATION			L-10		I-14
			7' Wide	9' Wide	P.C. Type A
FROM	TO	SIDE	S.Y.	S.Y.	L.F.
302+00	308+00	M	467		
302+00	304+00	R		191	
304+00	309+00	R	378		
311+60	312+50	L			90
311+86	326+00	M	1100		
311+95	319+00	R			705
312+50	313+00	L	39		
315+00	324+00	L	700		
319+00	322+00	R		300	
322+00	325+00	R			300
325+00	326+00	R	78		
TOTAL			2762	491	1095

Scale { 1" = 100' Hor. / 1" = 10' Vert.

LINE SHEET STA. 302+00 TO STA. 326+00

2	OHIO	F-524(5)	TYPE FUNDS / POST WAR	26 / 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX EACH
336+50.0	℄	1
346+84.94	℄	1
TOTAL		2

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-3	119+42.09	Std Pipe Culv.	24"x78'-6"	124

APPROACHES					
STATION			I-17 6"		Detail Sht.
FROM	TO	SIDE	S.Y.		No.
342+75	345+75	L	250		10
342+75	345+75	R	250		10
TOTAL			500		

GUARD RAIL				
STATION			I-15	
FROM	TO	SIDE	L.F.	POST EA.
326+00	327+98	L	198	
327+98	#17+10	L		15
#16+14	#17+10	R	96	
#16+30	330+60	L	320	
TOTAL			614	15

FENCE					
FROM		TO		SS18	
STATION	DIST.	STATION	DIST.	L.F.	
326+00	— L	#15+26	49 R	91.9	
#16+00	49 L	330+50.46	99 L	281.1	
330+50.46	99 L	346+84.94	99 L	1634.5	
346+84.94	99 L	350+00	— L	324.0	
326+00	— R	328+00.46	99 R	200.5	
328+00.46	99 R	#20+96.1	60.4 R	269.3	
#21+99.4	59 L	332+49.38	109 R	126.2	
332+49.38	109 R	336+99.9	109 R	450.6	
336+99.9	109 R	337+99.9	99 R	100.5	
337+99.9	99 R	346+84.94	99 R	885.0	
346+84.94	99 R	350+00	— R	306.0	
TOTAL				4609.6	

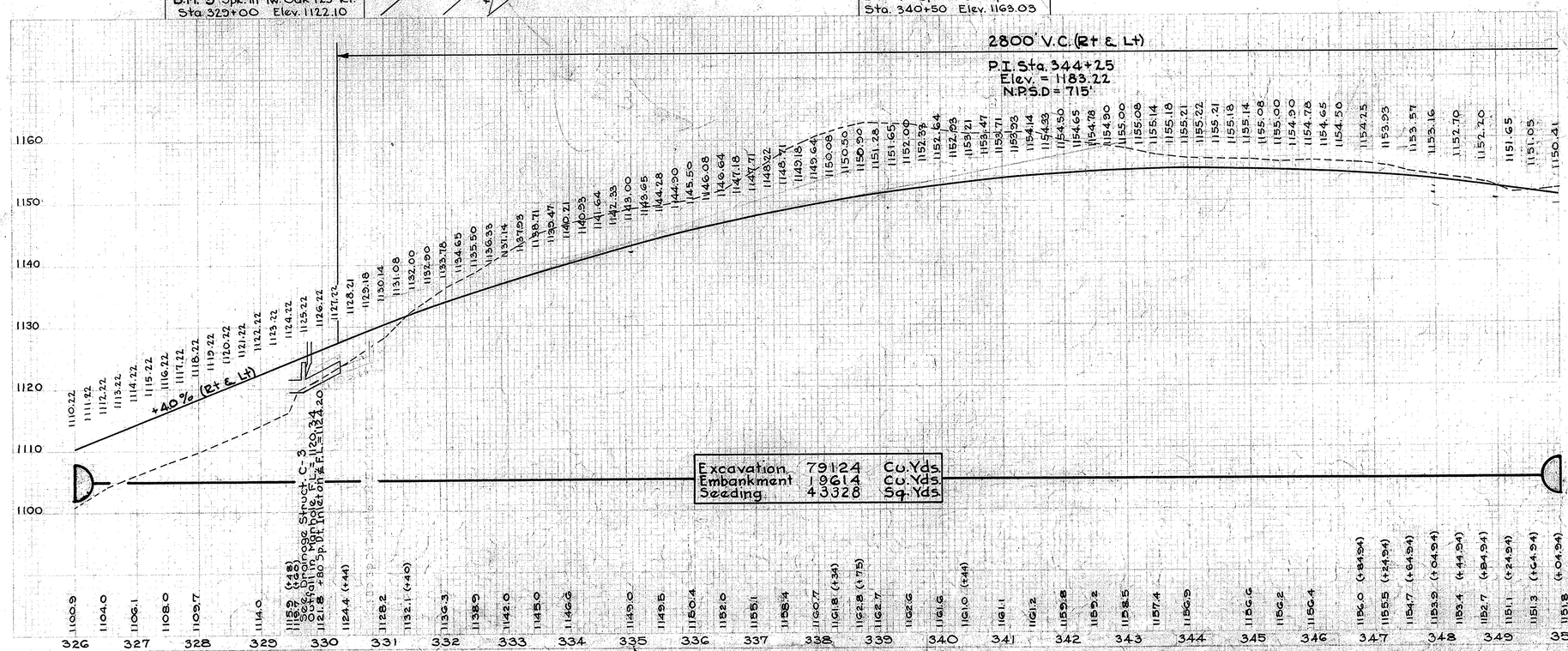
#Chestnut Ridge Rd. Stations

DRAINS						
STATION				I-2 15"	I-4 6"	I-8 Sp. Dt Inlet
MARK	FROM	TO	SIDE	L.F.	L.F.	EA.
D-1	329+68	329+80	R-M	65		1(a)*
D-2	348+50	350+00	R		147	
D-3	348+50	350+00	M		151	
TOTAL				65	298	1

*Variation of Spec Ditch Inlet

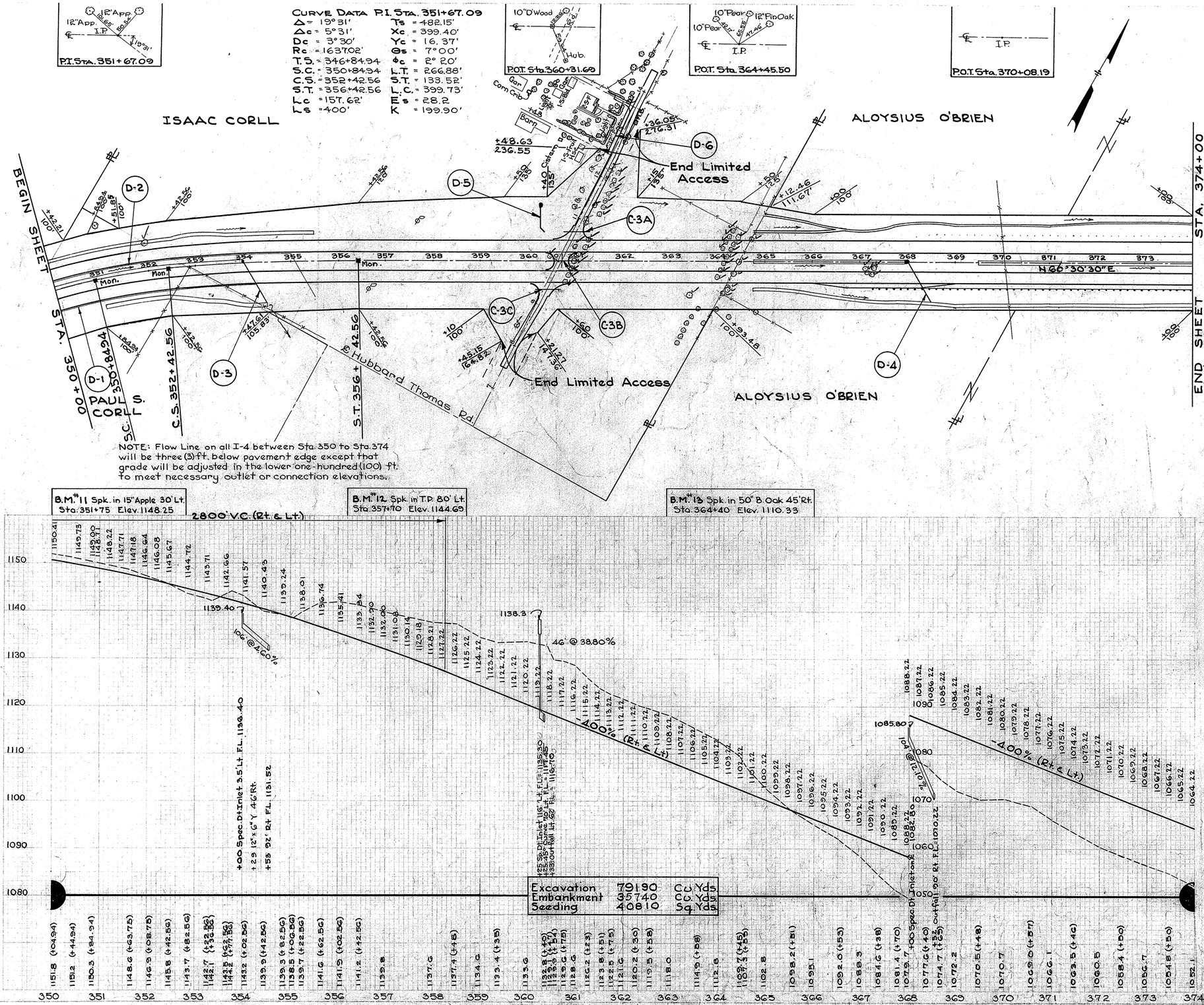
GUTTERS				
STATION			L-10 7' Wide S.Y.	I-14 P.G. Type A L.F.
FROM	TO	SIDE		
326+00	326+50	M	39	
326+00	329+45	R	268	
*15+15	338+00	L	887	
329+86	338+00	M	633	
330+30	332+50	R		255
331+75	338+00	R	486	
332+50	334+50	R	156	
348+50	350+00	L	117	
*14+00	*14+81	L	63	
Total			2649	255

* Chestnut Ridge Rd. Sta.



LINE SHEET STA. 326+00 TO STA. 350+00

CURVE DATA P.I. STA. 351+67.09	
Δ = 19° 31'	Ts = 482.15'
Δc = 5° 31'	Xc = 399.40'
Dc = 3° 30'	Yc = 16.37'
Rc = 1637.02'	θs = 7° 00'
T.S. = 346+84.94	φc = 2° 20'
S.C. = 350+84.94	L.T. = 266.88'
C.S. = 352+42.56	S.T. = 133.52'
S.T. = 356+42.56	L.C. = 399.73'
Lc = 157.62'	Es = 28.2
Ls = 400'	K = 199.90'



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX EACH
350+84.94	℄	1
352+42.56	℄	1
356+42.56	℄	1
TOTAL		3

FED. ROAD DIVISION	STATE	ROUTE	TYPE FUNDS	27
2	OHIO	F-524-(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-4.59-9.67

GUARD RAIL			
STATION FROM	STATION TO	SIDE	I-15 L.F.
367+25	374+00	R	675
TOTAL			675

PIPE REMOVAL			
STATION FROM	STATION TO	SIDE	E-12 15" & Under L.F.
12+40	12+61	L	21
TOTAL			21

FENCE					
FROM STATION	DIST.		TO STATION	DIST.	SS 18 L.F.
350+00	—	L	350+84.94	99	L 87.9
* 350+84.94	99	L	352+42.56	99	L 167.2
352+42.56	99	L	356+42.56	119	L 413.1
356+42.56	119	L	359+50	134	L 307.9
359+50	134	L	360+40.4	134	L 90.4
364+50	124	L	366+00	99	L 152.1
366+00	99	L	374+00	—	L 800.0
350+00	—	R	350+84.94	99	R 81.5
* 350+84.94	99	R	352+42.56	99	R 148.1
352+42.56	99	R	356+42.56	99	R 387.5
356+42.56	99	R	359+10.9	99	R 268.3
362+13.9	134	L	364+50	124	L 236.3
360+40.4	134	L	361+49.3	235.9	L 145.6
362+85.1	276.2	L	362+13.9	134	L 44.2
359+10.9	99	R	359+46.0	64.3	R 74.1
360+20.5	146.7	R	360+59.5	99	R 61.8
360+59.5	99	R	374+0	99	R 340.5
TOTAL					4906.7

* Along Arc

DRAINS													
	STATION			I-2			I-4		I-5 for I-2	I-5 for I-4		I-8
MARK	FROM	TO	SIDE	12" L.F.	15" L.F.	18" L.F.	6" L.F.	8" Outlet L.F.	12"x6" Wye EA.	15"x45° Curve EA.	6"x45° Curve EA.	Sp. Dt. Inlet EA.
D-1	350+00	354+29	R				418					
D-2	350+00	355+50	M				599	10			1	
D-3	354+00	354+53	M R	102					1			1(b)*
D-4	368+00	368+52	MR		103							1(a)*
D-5	360+25	360+33	L		59					1		1(a)*
D-6	⊙12+50	13+80	L			130						
TOTAL				102	162	130	1017	10	1	1	1	3

* Variation of Spec. Ditch Inlet
⊙ Intersection Station

STRUCTURES 20' SPAN & UNDER				
Mark	Station	Type	Size	Sheet
C-3A	360+70.19		18"x56'	143A
C-3B	360+70.19		12"x65'	143A
C-3C	360+70.19		12"x52'	143A

GUTTERS				
STATION FROM	STATION TO	SIDE	L-10 7' Wide S.Y.	I-14 P.G. Type A L.F.
350+00	355+50	L	440	
350+00	353+99	M	310	
351+00	354+53	R	264	
365+00	366+25	L		125
364+75	367+94	M	248	
364+75	374+00	R	720	
364+75	374+00	L		925
369+50	374+00	M	350	
TOTAL			2332	1050

APPROACHES							
Station From	Station To	Side	I-17 6" S.Y.	T-71 6" S.Y.	T-71 9" S.Y.	Spec. Gran. Slag S.Y.	Det. Sht. No.
360+70.19		L	66.3	74.1		140	109
360+70.19		M			62.9	28	109
360+70.19		R		48.7		70.2	109
366+00	369+00	R	25.0				10
13+28		R	17.8				
TOTAL			334.1	228	62.9	187.0	

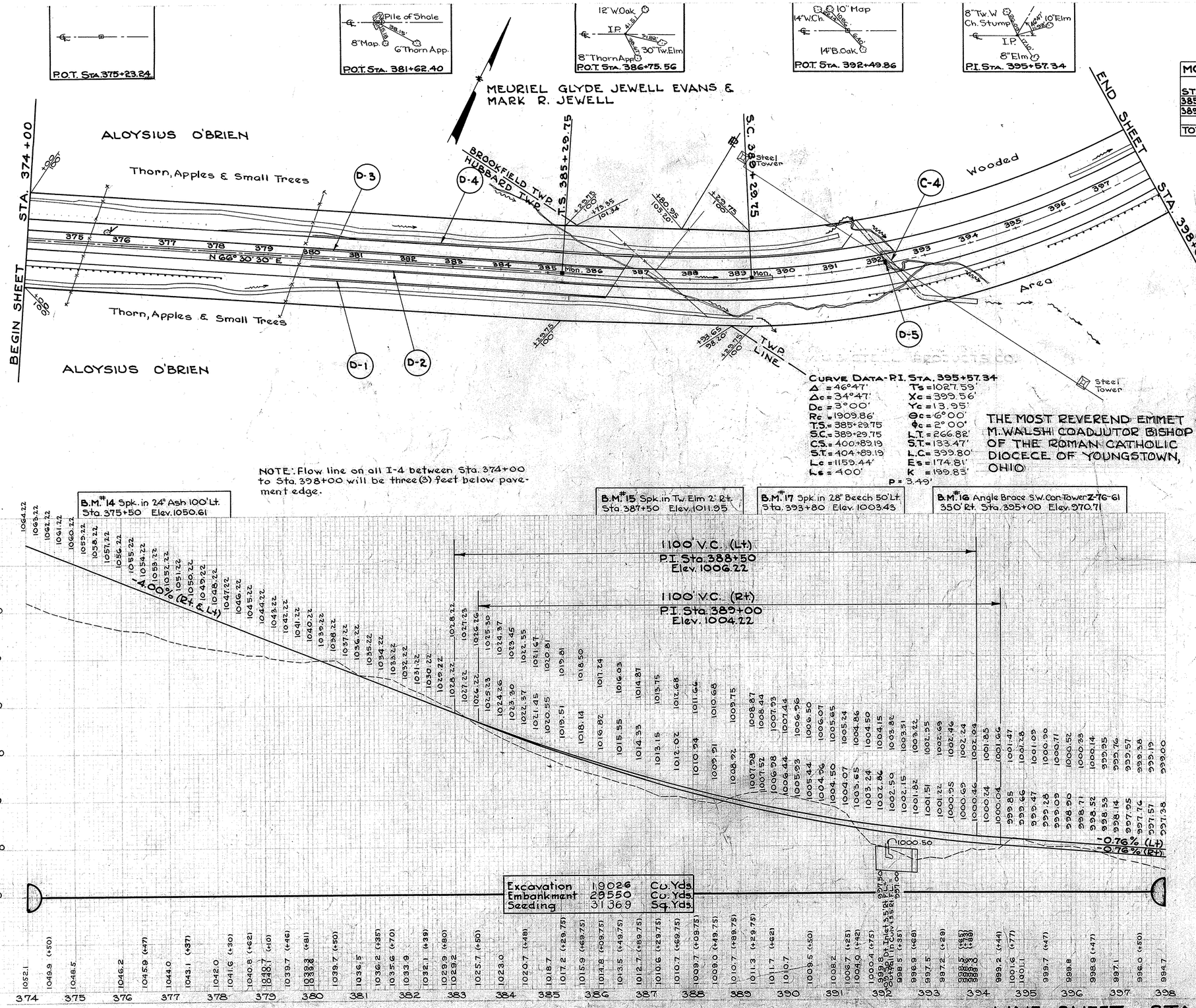
Note: Gran. Slag Carried to Sht. # 7

Scale { 1" = 100' Hor. / 1" = 10' Vert.

LINE SHEET STA. 350+00 TO STA. 374+00

2	OHIO	F-524(5)	TYPE FUNDS / POST WAR	28 / 154

TRUMBULL COUNTY
TRU-62-4.59-9.67



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX-EACH
385+29.75	℄	1
389+29.75	℄	1
TOTAL		2

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-4	392+24	Std. Slab Top Culv.	8'x5'x162'-10"	125

GUARD RAIL			I-15
STATION			
FROM	TO	SIDE	L.F.
374+00	378+13	R	413
391+70	394+50	R	288
395+51	398+00	R	256
TOTAL			957

FENCE					
FROM		TO		SS 18	
STATION	DIST.	STATION	DIST.	L.F.	
374+00	L	385+29.75	99 L	1129.6	
385+29.75	99 L	389+29.75	99 L	389.5	
389+29.75	99 L	398+00*	— L	825.1	
374+00	99 R	385+29.75	99 R	1129.6	
385+29.75	99 R	389+29.75	99 R	410.2	
389+29.75	99 R	398+00*	— R	915.4	
				4799.4	
TOTAL					

* Along Arc

DRAINS											
	STATION			I-2	I-4	I-4		I-5 for I-4		I-8	
				15"	6"	8" Outlet		6" Wye	6" 45° Curve	Sp. DT Inlet	
MARK	FROM	TO	SIDE	L.F.	L.F.	L.F.		EA.	EA.	EA.	
D-1	380+00	386+78	R		727			2	1		
D-2	380+00	386+41	M		641						
D-3	380+00	386+62	M		662						
D-4	380+00	391+55	L		1140	10		1	1		
D-5	392+09	392+24	M	6						(D) *	
Totals				6	3170	10		3	2	1	

* Variation of Spec. Ditch Inlet

APPROACHES			I-17	
STATION			6"	Detail Sht.
FROM	TO	SIDE	S.Y.	No.
378+00	381+00	L	250	101
TOTAL			250	

GUTTERS			L-10		I-14		
STATION			7' Wide	9' Wide	R.G. Type A	P.G. Type B	
FROM	TO	SIDE	S.Y.	S.Y.	L.F.	L.F.	
374+00	375+00	L			100		
374+00	389+75	M	1225				
374+00	389+30	R	1190				
375+00	391+25	L				1625	
396+50	398+00	L		145			
TOTALS			2415	145	100	1625	

CURVE DATA - P.I. STA. 395+57.34

Δ = 46°47'	Ts = 1027.59'
Δc = 34°47'	Xc = 399.56'
Dc = 3°00'	Yc = 13.95'
Rc = 1909.86'	θc = 6°00'
T.S. = 385+29.75	φc = 2°00'
S.C. = 389+29.75	L.T. = 266.82'
C.S. = 400+89.19	S.T. = 133.47'
S.T. = 404+89.19	L.C. = 399.80'
Lc = 1159.44'	Es = 174.81'
Ls = 400'	K = 199.83'
	p = 3.49'

THE MOST REVEREND EMMET M. WALSH COADJUTOR BISHOP OF THE ROMAN CATHOLIC DIOCECE OF YOUNGSTOWN, OHIO

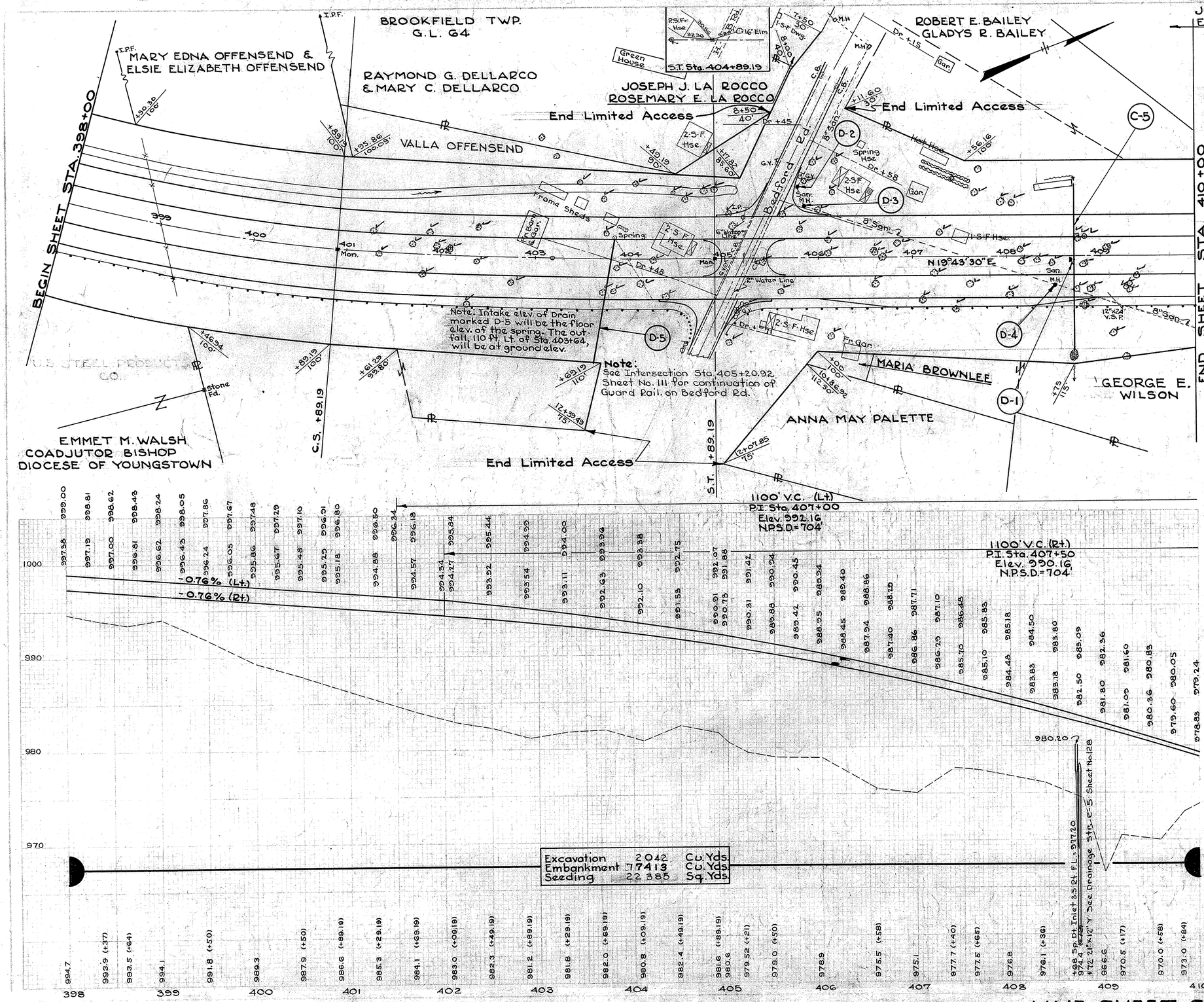
NOTE: Flow line on all I-4 between Sta. 374+00 to Sta. 398+00 will be three (3) feet below pavement edge.

Scale { 1" = 100' Hor. / 1" = 10' Vert.

LINE SHEET STA. 374+00 TO STA. 398+00

STATE	ROUTE NO.	PROJECT	TOTAL SHEETS	SHEET NO.
OHIO	F-524(5)	POST WAR	154	29

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX-EACH
400+89.19	℄	1
404+89.19	℄	1
TOTAL		2

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-5	408+72	Std. Pipe Culv.	21"x178'-0"	128

GUARD RAIL					
STATION			I-15		
FROM	TO		L.F.		POST EA.
398+00	404+55	R	672		
404+55	‡ 11+12	R			8
‡ 10+81	410+00	R	512		
TOTAL			1184		8

‡ Bedford Rd. Station

APPROACHES					
STATION			I-17 6"		Detail Sht.
FROM	TO	SIDE	S.Y.		No.
406+00	409+00	R	250		10
TOTAL			250		

FENCE					SS18	
FROM		TO			L.F.	
STATION	DIST.	STATION	DIST.			
398+00 *	— L	400+89.19	99 L		274.2	
400+89.19	99 L	404+49.52	89 L		350.2	
‡ 8+12.60	30 L	407+55.94	99 L		139.5	
407+55.94	99 L	410+00	— L		244	
398+00 *	— R	400+89.19	99 R		304.9	
400+89.19	99 R	403+70.38	109 R		291.1	
403+70.38	109 R	‡ 12+39.49	74 R		74.0	
‡ 12+07.85	74 L	405+99.6	99 R		154.0	
405+99.6	99 R	408+75	114 R		275.8	
408+75	114 R	410+00	— R		125.8	
TOTAL					2233.5	

* Along arc.
‡ Bedford Rd. Station

DRAINS									
I-4					I-2	I-8		I-16	
6"	8" Outlet	STATION			12"	M.H.	Sp. Dt. Inlet	M.H. Abon.	
L.F.	L.F.	FROM	TO	SIDE	L.F.	#1 #2 EA	EA.	EA.	
		D-1	408+68	408+72	M	8		1(b)*	1
		D-2			L		1		1
		D-3			L		1		1
		D-4			R		1		1
		D-5	403+64	403+84	R-L				
115	20	TOTAL				8	2 1	1	3

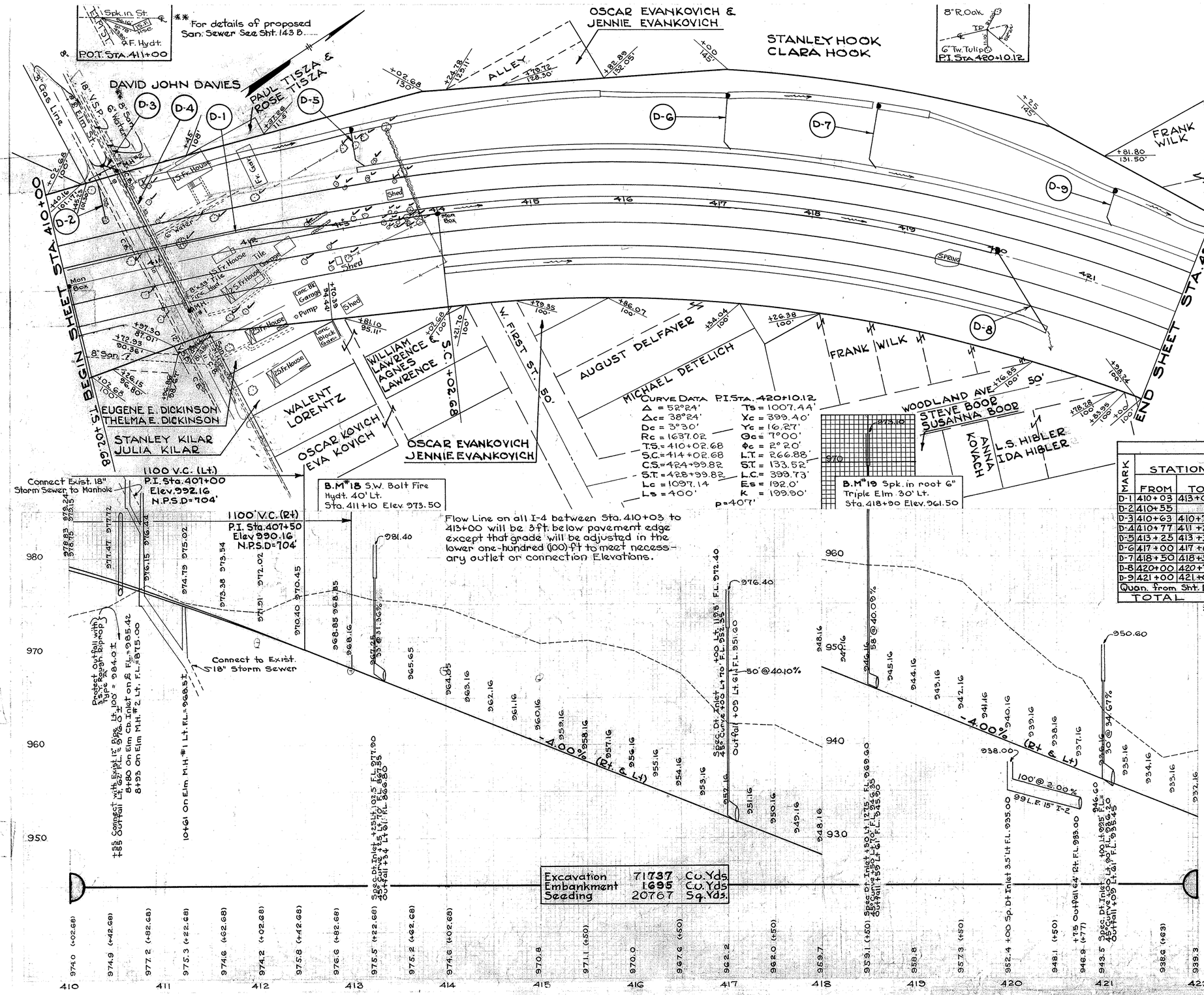
*Variation of Spec. Ditch Inlet

GUTTERS				
STATION			L-10	
			7' Wide	9' Wide
FROM	TO	SIDE	S.Y.	S.Y.
398+00	405+10	L		700
408+30	408+70	L	31	
TOTAL			31	700

Scale 1" = 50' Hor.
1" = 5' Vert.

F-524(5) POST WAR

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX EACH
410+02.68	℄	1
414+02.68	℄	1
TOTAL		2

GUARD RAIL				
STATION			I-15	
FROM	TO	SIDE	L.F.	I-15.13 L.F.
410+00	410+48	R		
* 410+46	410+80	L		37.50
* 411+00	410+38	R		37.50
TOTAL				123

* Place G.R. Sta. 8+85 & Sta. 10+94 on Elm @ Rt. ∆s to Elm facing away from U.S.R. No. 62

FENCE					
FROM		TO		SS18	
STATION	DIST.	STATION	DIST.	L.F.	
410+00	— L	410+02.68	99 L	2.7	
410+02.68	99 L	414+02.68	129 L	415.2	
414+02.68	129 L	417+00	144 L	322.2	
* 417+00	144 L	420+25	144 L	353.6	
420+25	144 L	422+00	— L	200.0	
410+00	— R	410+02.68	99 R	2.7	
410+02.68	99 R	411+44.72	80.5 R	132.6	
411+44.72	80.5 R	414+02.68	99 R	258.1	
* 414+02.68	99 R	422+00	— R	749.1	
TOTAL				2436.2	

* Along arc.

PIPE REMOVAL						
STATION			E-12		I-16	
FROM	TO	SIDE	15" & Under L.F.	Over 15" L.F.	C.B. Abd. EA.	M.H. Abd. EA.
410+55	411+05	L-R	190			
410+82	411+24	L-R		168		
* 9+10		L			1	
* 9+70		R			1	
Quan. from Sht. 143 B			226			1
TOTAL			416	168	2	1

* Elm St. Station

DRAINS																			
MARK	STATION		SIDE	I-2				I-4		I-2	I-5 for I-2		I-8				I-10	
	FROM	TO		12" L.F.	15" L.F.	18" U.A. L.F.	21" L.F.	6" L.F.	8" Outlet L.F.	8" San. L.F.	15°25°12°45° Curve EA	Space & Curb Inlet EA.	Sp. Dt. Inlet EA.	M.H. #1 EA.	M.H. #2 EA.	Type "A" S.Y.	
D-1	410+03	413+00	M					290	10								
D-2	410+55		L	37												3	
D-3	410+63	410+77	L		17							1					
D-4	410+77	411+23	L.R			164								1	1		
D-5	413+25	413+34	L		35						1		1(b)*				
D-6	417+00	417+09	L				64					1	1(c)*				
D-7	418+50	418+59	L		73						1		1(c)*				
D-8	420+00	420+75	M.R		99								1(c)*				
D-9	421+00	421+09	L				42					1	1(c)*				
Quan. from Sht. 143 B										221					1		
TOTAL				37	224	164	106	290	10	221	2	2	1	5	1	2	3

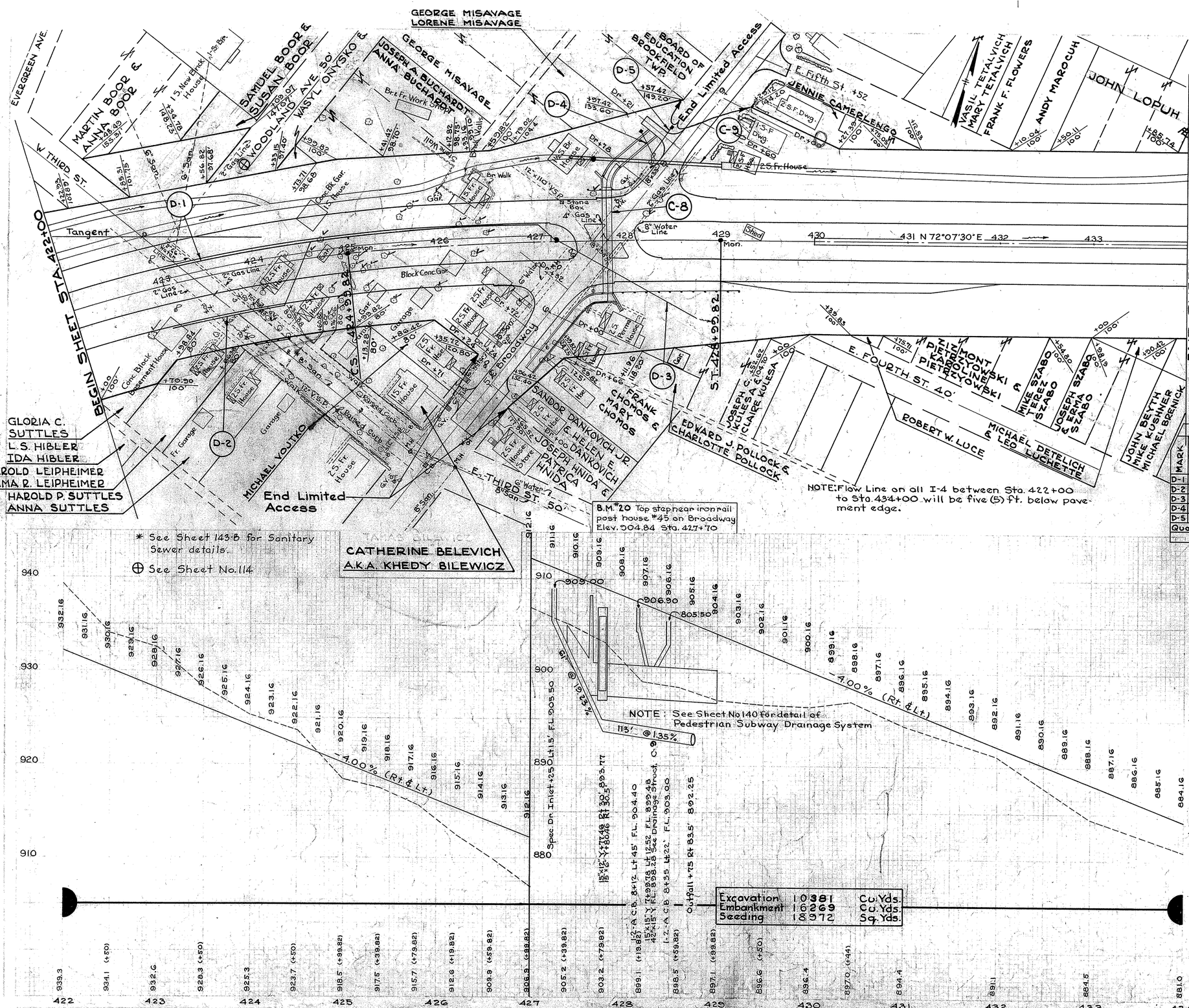
* Variation of Spec. Ditch Inlet

REMOVAL				
STATION		E-8		
	SIDE	R&D Pav't S.Y.	R&D Curb L.F.	R for Reuse Curb L.F.
410+93.0	L-R	436	404	46
TOTAL		436	404	46

APPROACHES			
STATION		I-11	Detail Sht.
	SIDE	Curb Reset L.F.	No.
410+93.00	L.R	46	
TOTAL		46	

GUTTERS					
STATION			L-10	I-14	
FROM	TO	SIDE	7' Wide S.Y.	P.G. Type A L.F.	P.G. Type B L.F.
411+00	415+75	L	390		
413+25	418+25	L		518	
412+00	419+94	M	617		
414+00	420+75	R	506		
415+75	417+00	L		134	
417+00	419+00	L	160		
418+25	422+00	L			389
419+00	421+00	L		213	
421+00	422+00	L	82		
TOTAL			1755	865	389

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX-EACH
424+99.82	℄	1
428+99.82	℄	1
TOTAL		2

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-8	427+77.09	Pedestrian Subway	8'x7'-6"x114'	131-140
C-9	427+77.09	Std Pipe Culv.	42"x162'-6"	141

GUARD RAIL			
STATION			I-15
FROM	TO	SIDE	I-15.13 L.F.
‡1+82±			37.5
427+59*	7+81	L	62.5
427+70.54	428+20.84	R	150.0
TOTAL			250.0

* Indicates Broadway Station.
‡ W. Third St. Station G.R. Parallel to and 81' From ℄ of Survey

FENCE				
FROM		TO		SS18
STATION	DIST.	STATION	DIST.	L.F.
422+00	— L	424+99.82	99 L	320.
424+99.82	99 L	426+59.82	99 L	163.9
426+59.82	99 L	427+97	82 L	152
429+29.0	143 L	430+27.0	99 L	110.
430+27.0	99 L	434+00	— L	373.
422+00	— R	422+70.54	99 R	66.2
422+70.54	99 R	422+98.48	79 R	33.0
422+98.48	79 R	425+86.82	79 R	274.2
425+86.82	79 R	426+36.0	119 R	59.6
427+29.82	124 R	430+00	99 R	268.
430+00	99 R	434+00	— R	400.
TOTAL				2219.9

PIPE REMOVAL				
STATION		SIDE	E-12	
FROM	TO		15" & Under L.F.	Over 15" L.F.
426+75	427+58	L-M	110	
427+59	427+81	M		38
428+05	428+27	L	33	
Quan. from Sht. 143-B			340	
Quan. from Sht. 117			12	
TOTALS			495	38

DRAINS															
STATION			I-2		I-2	I-4	I-5 for I-2			I-5 for I-4		I-8			
MARK	FROM	TO	SIDE	6" San. L.F.	8" San. L.F.	15" L.F.	6" L.F.	15"x12" Wye EA.	15"x15" Wye EA.	15"x6" Wye EA.	6" 45° Curve EA.	6" Wye EA	C.B. 12-A EA.	Sp. Dt. Inlet EA.	No. 1 M.H. EA.
D-1	423+00	427+25	M				428				1	1			
D-2	423+00	424+62	R				198				1				
D-3	427+25	428+15	M-R			169		1		1				1(b)*	
D-4	428+15	428+30	L			33			1				1		
D-5	428+27	428+47	L			33							1		
Quan. from Sht. 143-B				210	152										
TOTAL				210	152	235	626	1	1	1	2	1	2	1	1

* Variation of Spec. Ditch Inlet

APPROACHES											
STATION				B-20	B-35	I-1	I-17	T-30	T-35	T-71	Detail Sht. No.
FROM	TO	SIDE		5" S.Y.	1¼" S.Y.	3" S.Y.	12" L.F.	6" S.Y.	Prime Coat S.Y.	1¼" S.Y.	9" S.Y.	
427+77.09		R		566	530	542			566	530		116
427+77.09		M									290	116
427+77.09		L		663	620	634			663	620		116
*4+71		L					24	27.4				10
*5+00		R						72.0				117
*8+21		L						55.2				10
*9+52		R						60.5				117
429+00	432+00	R						250				10
TOTAL (Code 7221)				1229	1150	1176	24	465.1	1229	1150	290	

*Broadway Station

REMOVALS					
STATION			E-8		
FROM	TO	SIDE	R&D Pav't S.Y.	R&D S'walk S.F.	
*1+15.5	*1+83±	—	203		
*1+15.5	*1+83±			675	
TOTAL			203	675	

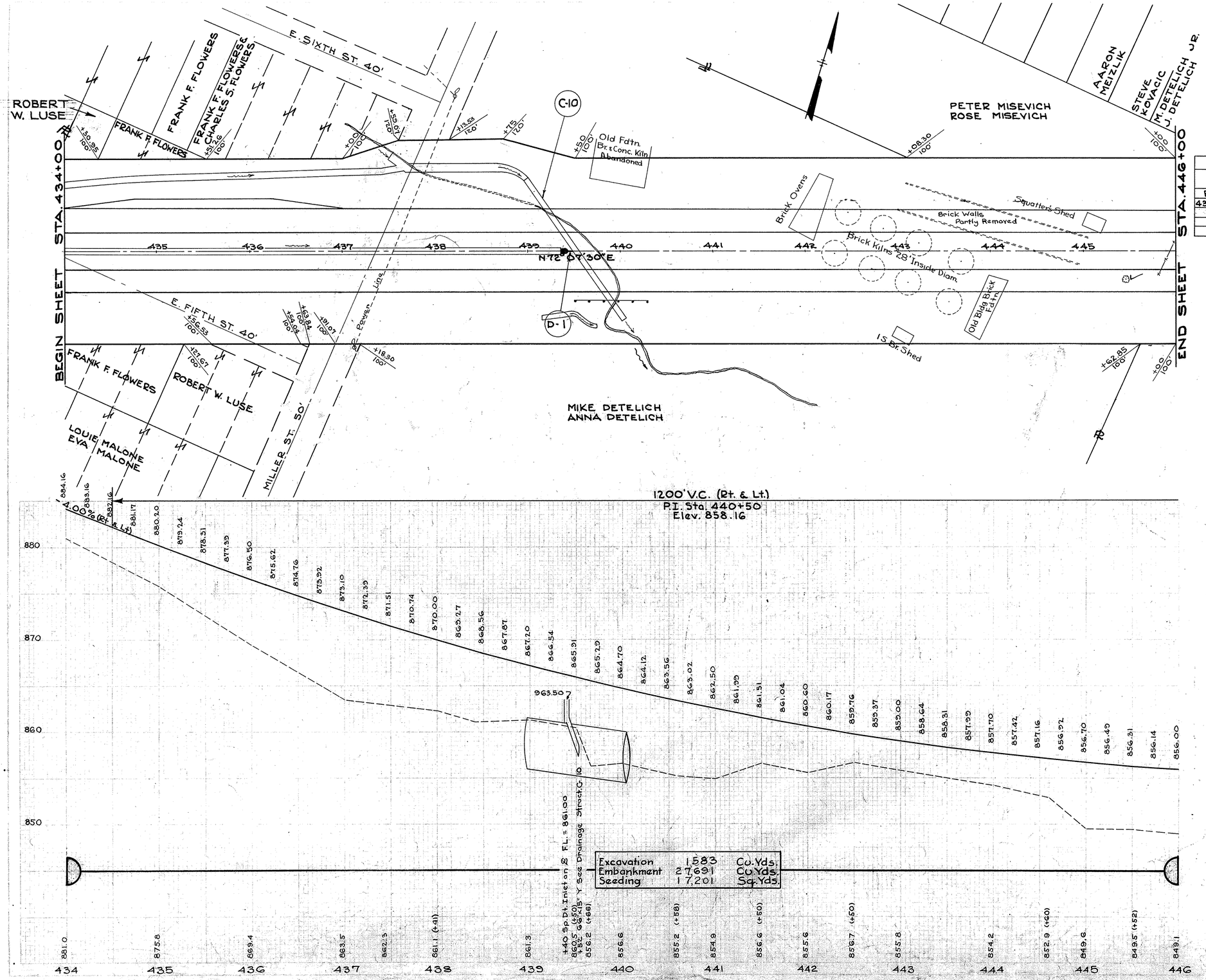
*W. Third St. Station
NOTE: Pavement and Sidewalk removed to a line parallel to and 82 ft. from ℄ of Survey

GUTTERS				
STATION			L-10 7' Wide S.Y.	I-14 P.G. Type B L.F.
FROM	TO	SIDE		
422+00	427+40	L		562
422+00	424+25	L	175	
423+00	427+24	M	330	
429+00	434+00	L		500
430+00	434+00	M	311	
TOTAL			816	1062

Scale { 1" = 50' Hor. 1" = 5' Vert.

LINE SHEET STA. 422+00 TO STA. 434+00

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-10	439+52	Std. Pipe Culv.	66"x185'-6"	142

GUARD RAIL			
STATION			I-15
FROM	TO	SIDE	L.F.
439+50	440+30	R	80
TOTAL			80

FENCE					
FROM		TO		SS18	
STATION	DIST.	STATION	DIST.	L.F.	
434+00	— L	437+00	99 L	300.0	
437+00	99 L	437+59.07	119 L	62.0	
437+59.07	119 L	438+75	119 L	115.1	
438+75	119 L	439+50	99 L	77.6	
439+50	99 L	446+00	— L	650	
434+00	— R	446+00	— R	1200	
TOTAL				2404.7	

DRAINS						
	STATION			I-2	I-8	
				15"	Sp. Dt. Inlet	
MARK	FROM	TO	SIDE	L.F.	EA.	
D-1	439+40	439+52	M	8	1(a)*	
TOTAL				8	1	

*Variation of Spec. Ditch Inlet

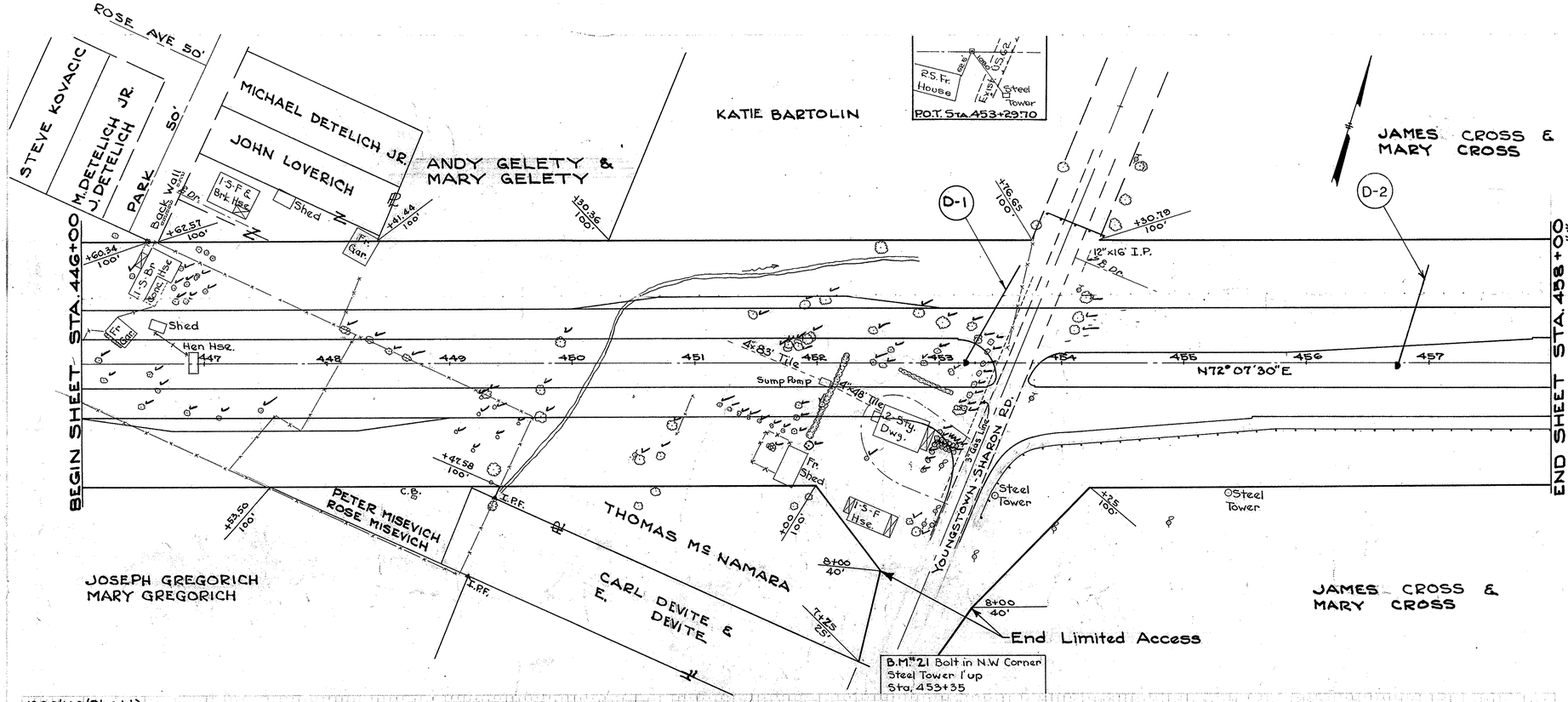
APPROACHES					
STATION			I-17 6"		Detail Sht
FROM	TO	SIDE	S.Y.		No.
434+00	437+00	L	250		10
TOTAL			250		

GUTTERS							
STATION			I-14				L-10
			P.G. Type A	P.G. Type B	P.G. Type C		7' Wide
FROM	TO	SIDE	L.F.	L.F.	L.F.		S.Y.
434+00	437+60	L		360			
439+15	439+75	R	63				
434+00	439+34	M					416
437+51	438+71	L			123		
TOTAL			63	360	123		416

Scale { 1" = 50' Hor. / 1" = 5' Vert.

LINE SHEET STA. 434+00 TO STA. 446+00

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



GUARD RAIL				
STATION			I-15	
FROM	TO	SIDE	L.F.	I-15.13 L.F.
‡ 8+71.5	458+00	R		496.1
# 453+89	454+35	L		50
TOTAL				546.1

*Old U.S. 62 stations.
Place G.R. Sta. 11+22 @ Rt ∠s to Exist. U.S. 62 facing away from U.S. 62

FENCE				
FROM		TO		SS 18
STATION	DIST.	STATION	DIST.	L.F.
446+00	— L	458+00	— L	1200
446+00	— R	452+00.7	99 R	600.7
452+00.7	99 R	‡ 8+01	39 L	86.0
‡ 7+99	39 R	454+24.3	99 R	138.0
454+24.3	99 R	458+00	— R	375.7
TOTAL				2400.4

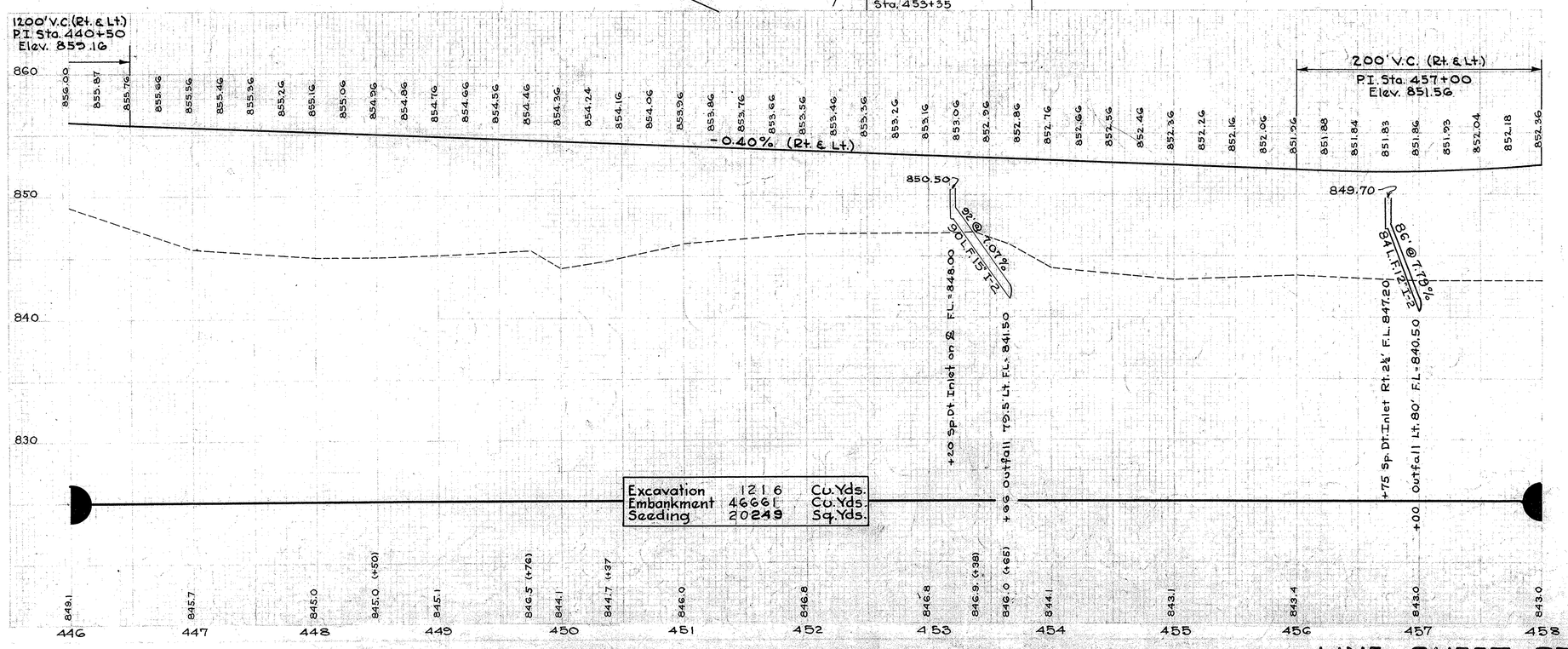
‡ Old Route #62 Stations.

DRAINS						
	STATION			I-2		I-8
MARK	FROM	TO	SIDE	12" L.F.	15" L.F.	Sp. Dt. Inlet EA.
D-1	453+20	453+66	M		90	1(b)*
D-2	456+75	457+00	M	84		1(b)*
TOTAL				84	90	2

*Variation of Spec. Ditch Inlet

PIPE REMOVAL				
STATION			E-12	
FROM	TO	SIDE	15" & Under L.F.	Over 15" L.F.
454+17	454+24	L	16	
TOTAL			16	

APPROACHES						
STATION			I-17	T-71	I-12 Type Z-A	Detail Sht. No.
FROM	TO	SIDE	6" S.Y.	9" S.Y.	L.F.	
446+00	449+00	R	250			10
450+00	453+00	L	250			10
453+66.10		R		1019	200	118
453+15.26	457+84.36	M		606	100	118
TOTAL Code 7221			500	1625	300	



Scale 1" = 50' Hor.
1" = 5' Vert.

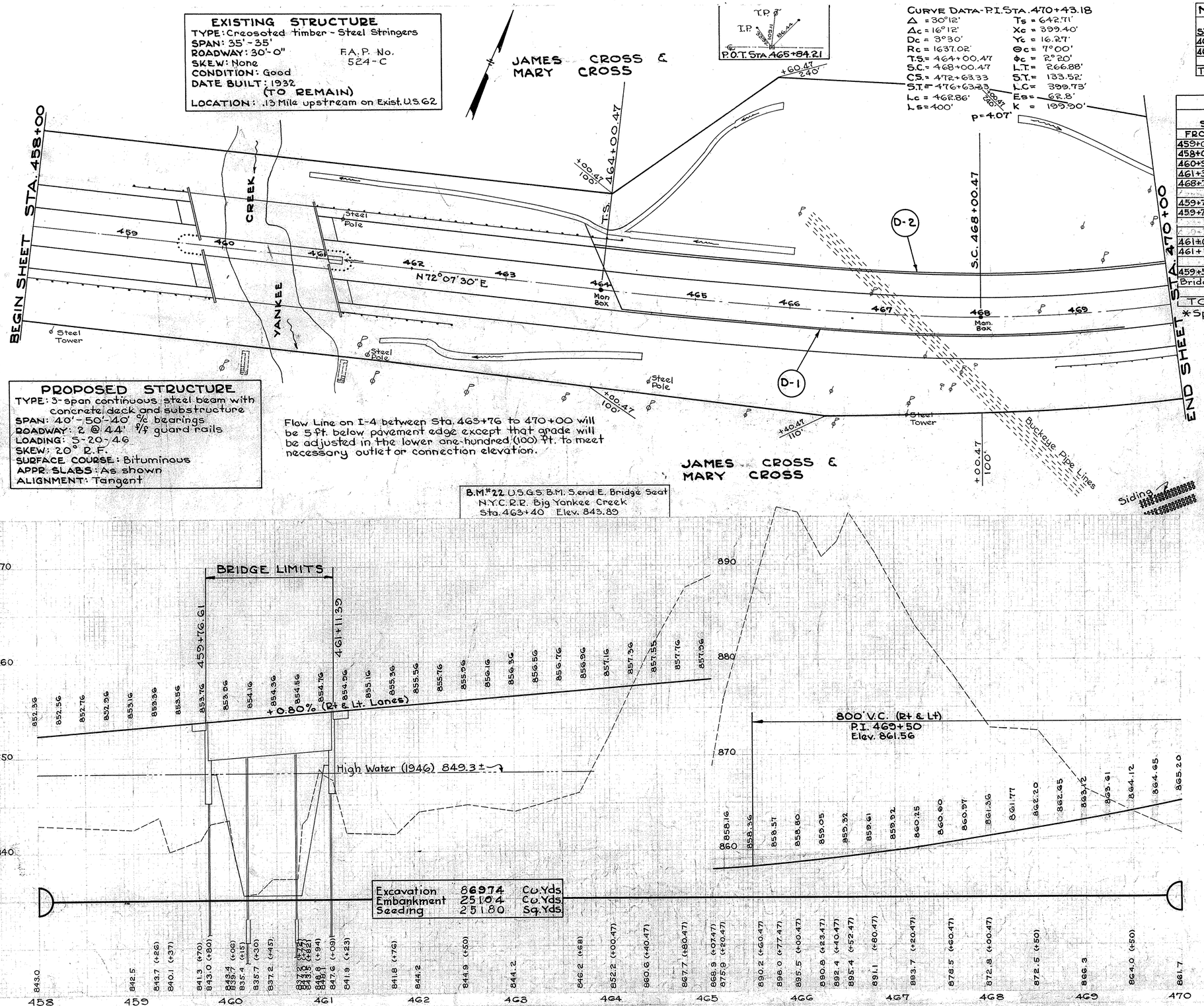
LINE SHEET STA. 446+00 TO STA. 458+00

F-524(5) POST WAR

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

EXISTING STRUCTURE
TYPE: Creosoted timber - Steel Stringers
SPAN: 35'-35'
ROADWAY: 30'-0"
SKEW: None
CONDITION: Good
DATE BUILT: 1932
(TO REMAIN)
LOCATION: .13 Mile upstream on Exist. U.S. 62
F.A.P. No. 524-C

PROPOSED STRUCTURE
TYPE: 3-span continuous steel beam with concrete deck and substructure
SPAN: 40'-50'-40' ℄ bearings
ROADWAY: 2 @ 44' ℄/℄ guard rails
LOADING: S-20-46
SKEW: 20° R.F.
SURFACE COURSE: Bituminous
APPR. SLABS: As shown
ALIGNMENT: Tangent



CURVE DATA - P.I. STA. 470+43.18

Δ = 30°12'	Ts = 642.71'
Δc = 16°12'	Xc = 399.40'
Dc = 3°30'	Yc = 16.27'
Rc = 1637.02'	Θc = 7°00'
T.S. = 464+00.47	Φc = 2°20'
S.C. = 468+00.47	L.T. = 266.88'
C.S. = 472+63.33	S.T. = 133.52'
S.T. = 476+63.33	L.C. = 399.73'
Lc = 462.86'	Es = 62.8'
Ls = 400'	K = 199.90'
	p = 4.07'

MONUMENT BOXES		
STATION	SIDE	I-8 MON BOX-EACH
464+00.47	℄	1
468+00.47	℄	1
TOTAL		2

GUARD RAIL					
STATION			I-15		
FROM	TO	SIDE	I-15.13 L.F.	I-15.13 L.F.	POST EA.
459+03.5	459+56.96	L		53.46	
458+00	459+96.26	R		196.26	
460+91.74	464+16	L		324.26	
461+31.04	462+53.9	R		122.86	
468+77.0	470+00	R		128.0	
459+71.6	459+72.96	Med.		1.36	*
459+78.89	459+80.25	Med.		1.36	
461+07.75	461+09.11	Med.		1.36	
461+15.03	461+16.39	Med.		1.36	
459+50.25	Bridge	Med.			*12
Bridge	461+37.75	Med.			*12
TOTAL				830.28	*24

*Spaced approx. 4' c to c.

FENCE					
FROM		TO		SS18	
STATION	DIST.	STATION	DIST.	L.F.	
458+00	— L	459+75	99 L	175.0	
464+00.90	99 L	465+60.8	239 L	211.3	
465+60.8	239 L	468+00.47	239 L	219.9	
468+00.47	239 L	470+00	— L	180.0	
458+00	— R	460+30	99 R	230.0	
464+00.47	99 R	466+40.47	109 R	244.3	
466+40.47	109 R	468+00.47	99 R	167.8	
468+00.47	99 R	470+00	— R	211.5	*
461+50	99 L	464+00.90	99 L	250.9	
461+50	99 R	464+00.47	99 R	250.5	
TOTAL				2141.2	

* Along arc.

DRAINS								
	STATION			I-4	I-4		I-5 for I-4	
				6"	8"		6"45°	6"
MARK	FROM	TO	SIDE	L.F.	Outlet L.F.		Curve EA.	Wye EA
D-1	463+76	469+50	M	617	10		1	1
D-2	463+88	470+00	L	600				
TOTAL				1217	10		1	1

GUTTERS					
STATION			L10	I-14	
FROM	TO	SIDE	7' Wide S.Y.	P.G. Type A L.F.	
460+82	464+25	L		347	
461+75	462+25	R		50	
462+25	464+50	R	179		
464+10	465+25	L		165	
464+25	466+00	L	134		
465+25	465+75	L	41		
468+50	470+00	L	119		
* 461+11.39	461+26.39	M		15	
TOTAL			473	577	

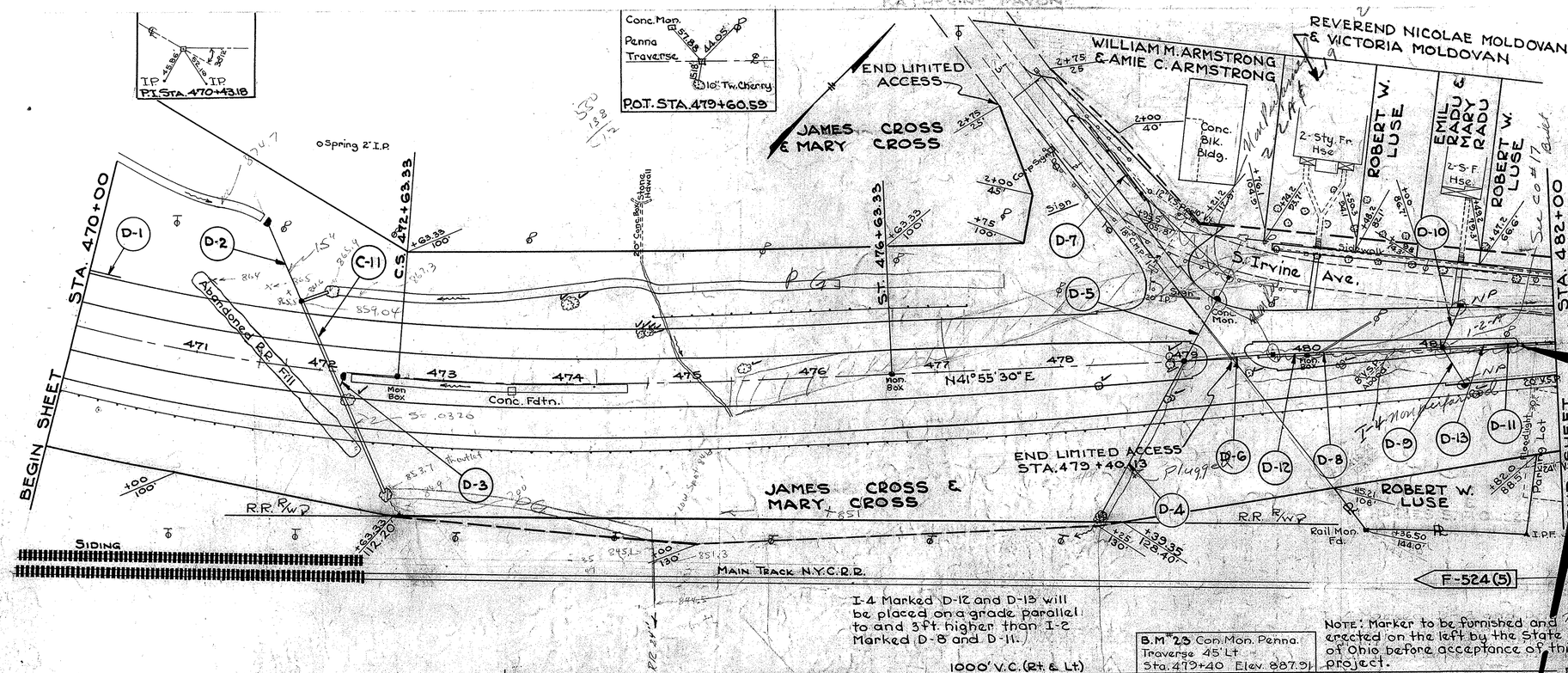
* NOTE: This paved gutter will be warped at its outfall end to fit the paved gutter section down the back slope of the bridge

APPROACHES						
STATION		SIDE	I-7	T-35	T-30	
FROM	TO		App. Slab S.Y.	1¼" S.Y.	Tack Coat S.Y.	
459+61.61	459+76.61	L-R	80	160	80	
461+11.39	461+26.39	L-R	80	160	80	
TOTAL			160	320	160	

Scale { 1" = 50' Hor. / 1" = 5' Vert.

2	OHIO	F-524(5)	TYPE FUNDS	35	
			POST WAR	154	

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



MONUMENT BOXES		
STATION	SIDE	I-8 MON. BOX-EACH
472+63.33	℄	1
476+63.33	℄	1
480+00	℄	1
TOTAL		3

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-11	472+10	Std. Pipe Culv.	24"×193'-9"	145

GUARD RAIL					
STATION		SIDE	I-15		Rem & Store
FROM	TO		L.F.	I-15B L.F.	L.F.
‡ 1+43	2+18	R		75	
470+00	482+00	R		1216	
474+70	477+27	L		256	
477+95	480+05	L			250
‡ 1+07	2+26	R			70
TOTAL				1547	320

FENCE					
FROM		TO		SS18	
STATION	DIST.	STATION	DIST.	L.F.	
470+00	—L	472+63.33	99L	256.3	
472+63.33	99L	476+63.33	99L	387.5	
476+63.33	99L	477+75.35	99L	112.0	
477+75.35	99L	‡2+00	43.7L	40.7	
470+00	—R	471+00	99R	106.0	*
2+00	43.7L	2+75	24L	78.3	
TOTAL				980.8	

* Along Arc
‡ Intersection Station

END PROJECT
STA. 481+70
F-524(5)

DRAINS																		
	STATION			I-2				I-4	I-8							I-10	
MARK	FROM	TO	SIDE	12" L.F.	15" L.F.	18" L.F.	24" L.F.	6" L.F.	C.B. 2-2A EA.	C.B. 1-2-A EA.	Sp. Dt. Inlet EA.	M.H. #1 EA.	Spec. Conc. Inlet EA.	Type "A" S.Y.	
D-1	470+00	470+25	L					25							
D-2	471+30	471+79	L		66							1(1)*			
D-3	472+16	472+20	M	10								1(1)*			
D-4	478+28	479+00	R-M				138							6	
D-5	479+00	479+39	M-L			71				1			1		
D-6	479+00	479+72	M			69						1			
D-7	‡ 2+81	‡ 0+54		219											
D-8	479+72	481+08	M			133				1					
D-9	481+08	481+25	M-R	33									1		
D-10	481+08	481+25	M-L	33									1		
D-11	481+08	482+00	M		90							1			
D-12	479+73	481+04	M					133							
D-13	481+10	481+70	M					60							
TOTAL				295	156	273	138	218	1	2	2	2	3	6	

* Variation of Spec. Ditch Inlet ‡ Intersection Station

I-4 Marked D-12 and D-13 will be placed on a grade parallel to and 3 ft. higher than I-2 Marked D-8 and D-11.

B.M. "23" Con. Mon. Penna. Traverse 45' Lt. Sta. 479+40 Elev. 887.91

NOTE: Marker to be furnished and erected on the left by the State of Ohio before acceptance of this project.

GUTTERS			
STATION			L-10 7' Wide
FROM	TO	SIDE	S.Y.
470+00	471+25	L	98
472+09	476+25	L	315
472+26	474+50	M	174
TOTAL			587

PIPE REMOVAL				
STATION			E-12	I-16
FROM	TO	SIDE	15" & Under L.F.	Over 15" L.F.	C.B. Abd. EA.
478+78	478+79	L		19	
478+80	479+11	L		57	1
‡ 2+81	‡ 1+12	R	166		
481+76	482+00	R		24	
TOTAL			166	100	2

‡ Intersection Station

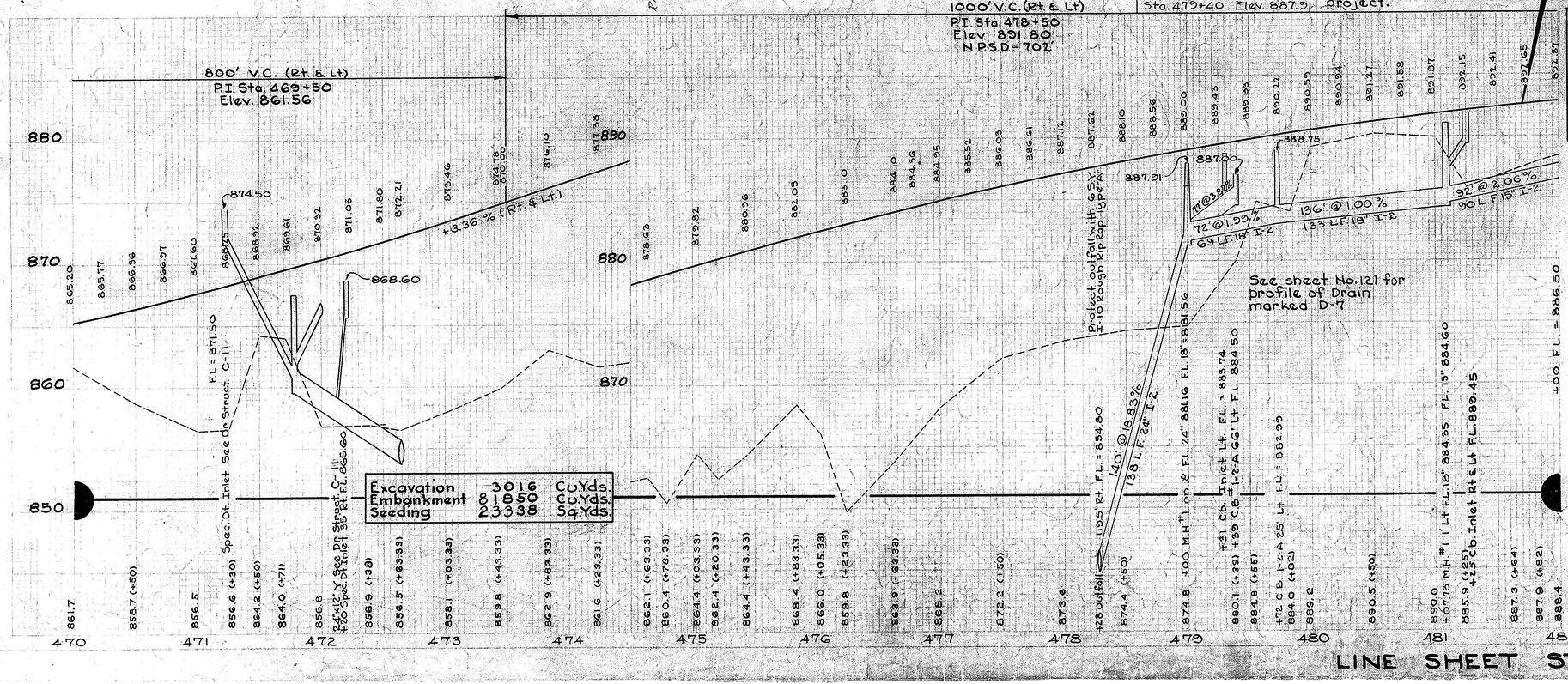
APPROACHES							
STATION			I-11	T-71	Spec. Trafficdiv.	I-17
FROM	TO	SIDE	6" L.F.	9" S.Y.	Eq.	6" S.Y.
* 479+38.14		L	79	907		424
* 479+38.14		M		113		
* 479+10.63	481+70	L	190	581		
481+10	481+70	R	55	177		
481+73	482+00	M			3	
481+70	482+00	L-R	60	187		
TOTAL Code 7221			384	1965	3	424

* Note: See Detail Sht. No. 120

REMOVALS					
STATION			E-8		
FROM	TO		R&D Pavt. S.Y.	R&D Curb L.F.	R&D S.walk S.F.
2+75	482+00	L	1124		
479+63	482+00	L		488	
479+75	482+00	L			1150
TOTAL			1124	488	1150

SIDEWALK						
STATION			Dimensions		I-13 4" Conc.	Detail Sht. No.
FROM	TO	SIDE	WDT.	LGT.	S.F.	
* 479+75	482+00	L	5'	227	1135	9
479+98		L	4'	48	192	9
481+16		L	4'	34	136	
TOTAL					1463	

* ℄ of sidewalk will be 13 ft. from and parallel to the slope easement line.

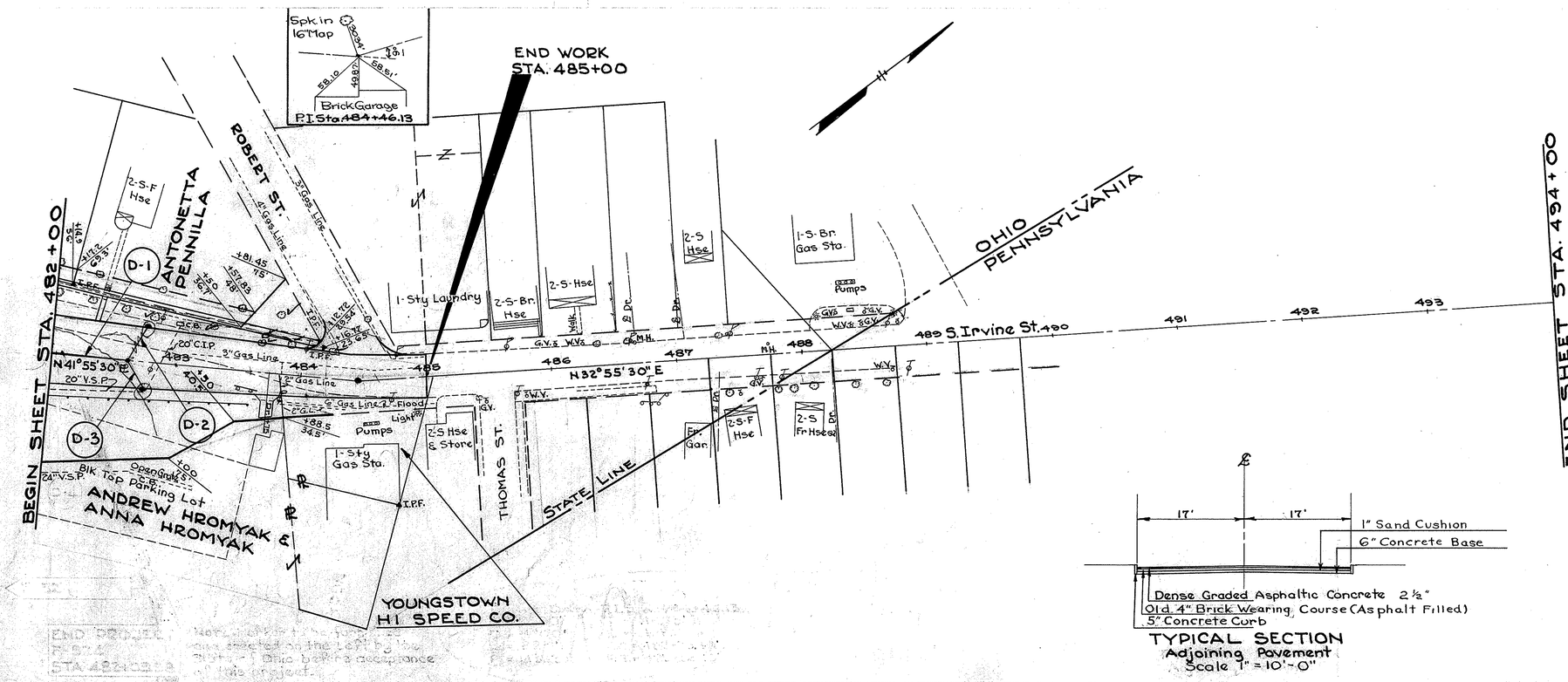


LINE SHEET STA. 470+00 TO STA. 482+00

MONUMENT BOXES		
STATION	SIDE	I-8 MON BOX-EACH
484+46.13	℄	1

				TYPE FUNDS	36
2	OHIO	F-524(5)		POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



TYPICAL SECTION
Adjoining Pavement
Scale 1" = 10'-0"

GUARD RAIL			I-15
STATION FROM	STATION TO	SIDE	L.F.	Rem. & Str. L.F.
482+00	483+60	R	160	
483+50	483+60	R		10
TOTAL			160	10

PIPE REMOVAL			E-12		I-16
STATION FROM	STATION TO	SIDE	15" & Under L.F.	Over 15" L.F.	C.B. Abd. EA.
	483+02	L			1
482+00	483+02	R&L		135	
TOTAL				135	1

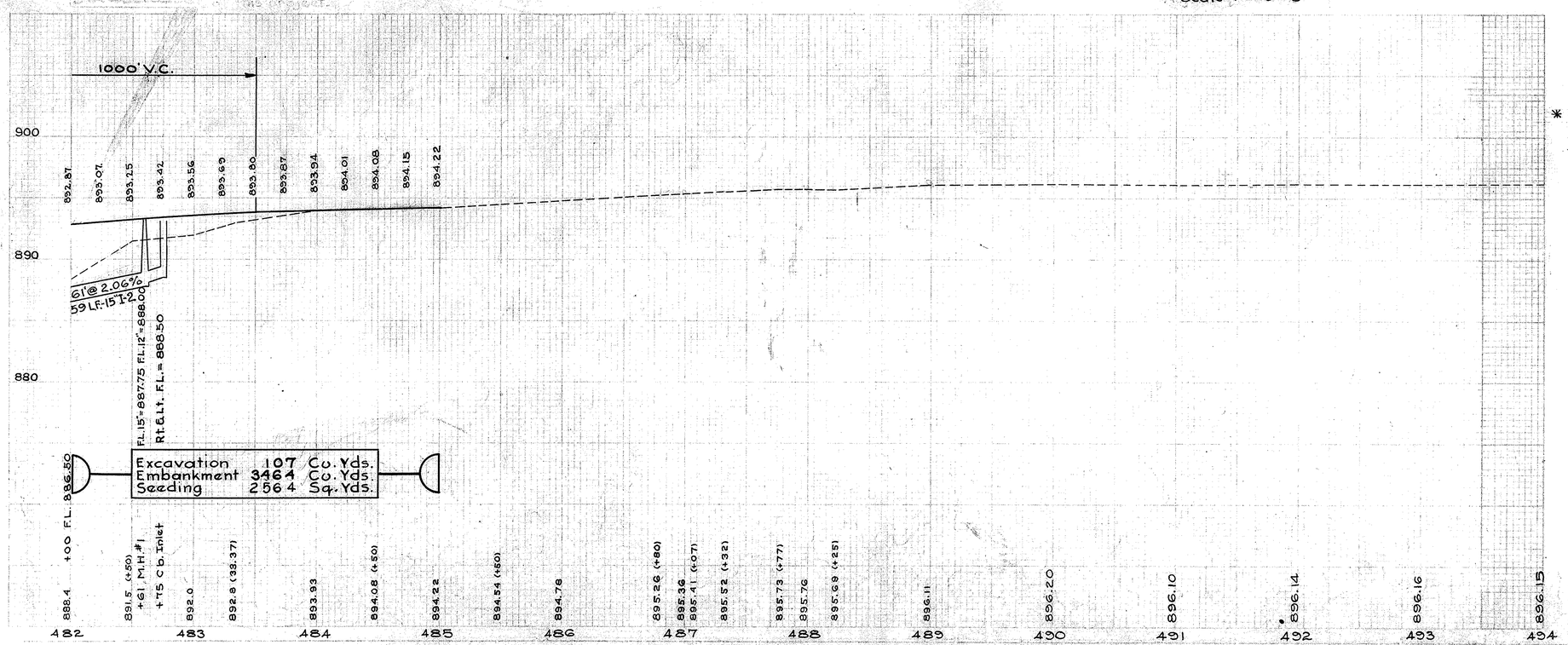
DRAINS				I-2		I-4		I-8	
MARK	STATION FROM	STATION TO	SIDE	12" L.F.	15" L.F.	6" L.F.		M.H. #1 EA.	Spec. R.Curb Inlet EA.
D-1	482+00	482+63	M		59			1	
D-2	482+60	482+75	M-L	28					1
D-3	482+63	482+75	M-R	22					1
TOTALS				50	59			1	2

APPROACHES			B-35		I-11	T-35	T-71	Spec. Traff. Div	T-17 G
STATION FROM	STATION TO	SIDE	1¼" S.Y.	3" S.Y.	6" L.F.	1¼" S.Y.	9" S.Y.	Ea.	S.Y.
482+00	482+09	M						1	
482+00	485+00	L-R			462		1402		
484+03.40	485+00	R	44	44		44			
484+00	485+00	L	111	112		111			
483+75		R							23.3
TOTAL Code 7221			155	156	462	155	1402	1	23.3

REMOVAL			E-8		
STATION FROM	STATION TO	SIDE	R&D Pav't. S.Y.	R&D Curb L.F.	R&D Swalk S.F.
482+00	485+00	R&L	919		
482+00	485+00	L		468	1200
TOTAL			919	468	1200

SIDEWALK			Demensions		I-13 4" Conc. S.F.	Detail Sht. No.
STATION FROM	STATION TO	SIDE	WDT	LGT		
* 482+00	484+12	L	5'	214'	1070	9
482+30		L	4'	20'	80	9
TOTAL					1150	

* Centerline of sidewalk will be 13 ft. from and parallel to the slope easement line.

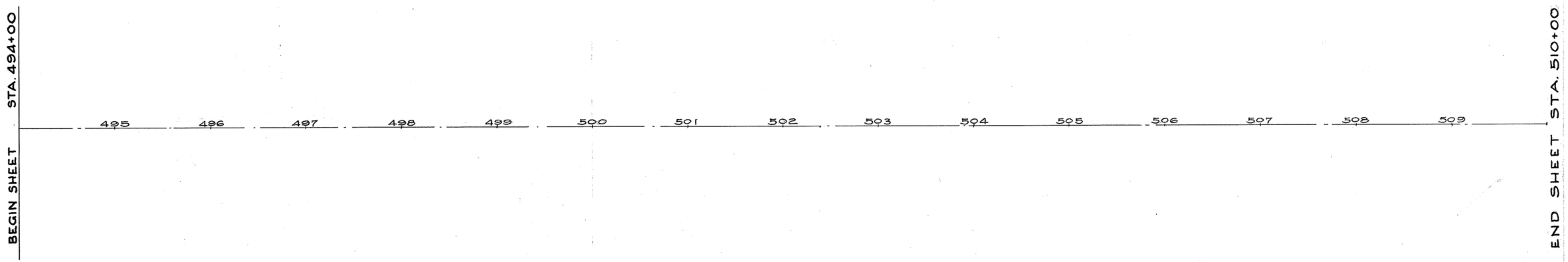


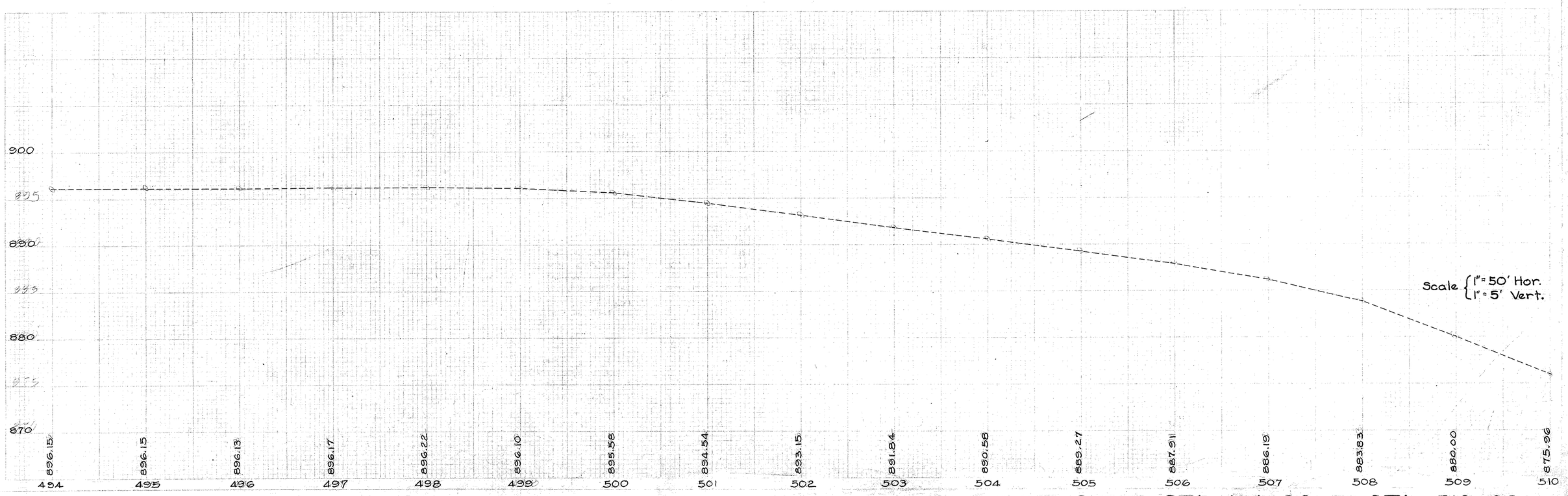
Scale { 1" = 50' Hor. / 1" = 5' Vert.

LINE SHEET STA. 482+00 TO STA. 494+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	37
2	OHIO	F-524(	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)





LINE SHEET STA. 494+00 TO STA. 510+00

SUPERELEVATION TABLES

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

LEFT LANES
P.I. STA. 301+74.35

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
1002.57	-0.17	12'	293+08	1002.74	12'	-0.17	1002.57
1003.04	-0.13		+25	1003.17		-0.17	1003.00
1003.76	-0.06		+50	1003.82			1003.65
1004.48	0		+75.78	1004.48			1004.31
1005.69	+0.18		294+15.78	1005.51			1005.34
1006.91	+0.37		+55.78	1006.54			1006.37
1008.12	+0.55		+95.78	1007.57			1007.40
1009.32	+0.73		295+35.78	1008.59			1008.42
1010.54	+0.92		+75.78	1009.62			1009.45
1011.75	+1.10		296+15.78	1010.65			1010.48
1012.96	+1.28		+55.78	1011.68			1011.51
1014.17	+1.46		+95.78	1012.71			1012.54
1015.38	+1.65		297+35.78	1013.73			1013.56
1016.59	+1.83		+75.78	1014.76			1014.59
1017.21	+1.85		298+00	1015.38			1015.21
1017.85			+25	1016.02			1015.85
1018.50			+50	1016.67			1016.50
1019.14			+75	1017.31			1017.14
1019.78			299+00	1017.95			1017.78
1020.42			+25	1018.59			1018.42
1021.07			+50	1019.24			1019.07
1021.71			+75	1019.88			1019.71
1022.35			300+00	1020.52			1020.35
1022.99			+25	1021.16			1020.99
1023.64			+50	1021.81			1021.64
1024.28			+75	1022.45			1022.28
1024.92			301+00	1023.09			1022.92
1025.56			+25	1023.73			1023.56
1026.21			+50	1024.38			1024.21
1026.85			+75	1025.02			1024.85
1027.49			302+00	1025.66			1025.49
1028.13			+25	1026.30			1026.13
1028.78			+50	1026.95			1026.78
1029.42			+75	1027.59			1027.42
1030.06			303+00	1028.23			1028.06
1030.70			+25	1028.87			1028.70
1031.35			+50	1029.52			1029.35
1031.99			+75	1030.16			1029.99
1032.63			304+00	1030.80			1030.63
1033.27			+25	1031.44			1031.27
1033.92			+50	1032.09			1031.92
1034.56			+75	1032.73			1032.56
1035.20	+1.83		305+00	1033.37			1033.20
1035.74	+1.83		+21.02	1033.91			1033.74
1036.59	+1.65		+61.02	1034.94			1034.77
1037.43	+1.46		306+01.02	1035.97			1035.80
1038.27	+1.28		+41.02	1036.99			1036.82
1039.12	+1.10		+81.02	1038.02			1037.85
1039.97	+0.92		307+21.02	1039.05			1038.88
1040.81	+0.73		+61.02	1040.08			1039.91
1041.66	+0.55		308+01.02	1041.11			1040.94
1042.50	+0.37		+41.02	1042.13			1041.96
1043.34	+0.18		+81.02	1043.16			1042.99
1044.21	0		309+21.02	1044.21			1044.04
1044.96	-0.07		+50	1045.03		-0.17	1044.86
1046.06	-0.17	12'	+89	1046.23	12'	-0.17	1046.06

RIGHT LANES
P.I. STA. 301+74.35

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
1002.03	-0.17	12'	293+07	1002.21	12'	-0.17	1002.03
1002.55	-0.13		+25	1002.68		-0.17	1002.51
1003.28	-0.06		+50	1003.34		-0.17	1003.17
1004.02	0		+75.78	1004.02		-0.17	1003.85
1005.12	+0.17		294+11	1004.95		-0.17	1004.78
1005.26	+0.18		+15.78	1005.08		-0.18	1004.90
1006.40	+0.27		+55.78	1006.13		-0.27	1005.86
1007.55	+0.36		+95.78	1007.19		-0.36	1006.83
1008.69	+0.45		295+35.78	1008.24		-0.45	1007.79
1009.84	+0.54		+75.78	1009.30		-0.54	1008.76
1011.00	+0.64		296+15.78	1010.36		-0.64	1009.72
1012.14	+0.73		+55.78	1011.41		-0.73	1010.68
1013.29	+0.82		+95.78	1012.47		-0.82	1011.65
1014.43	+0.91		297+35.78	1013.52		-0.91	1012.61
1015.58	+1.00		+75.78	1014.58		-1.00	1013.58
1016.22			298+00	1015.22			1014.22
1016.88			+25	1015.88			1014.88
1017.54			+50	1016.54			1015.54
1018.20			+75	1017.20			1016.20
1018.86			299+00	1017.86			1016.86
1019.52			+25	1018.52			1017.52
1020.18			+50	1019.18			1018.18
1020.84			+75	1019.84			1018.84
1021.50			300+00	1020.50			1019.50
1022.16			+25	1021.16			1020.16
1022.82			+50	1021.82			1020.82
1023.48			+75	1022.48			1021.48
1024.14			301+00	1023.14			1022.14
1024.80			+25	1023.80			1022.80
1025.46			+50	1024.46			1023.46
1026.12			+75	1025.12			1024.12
1026.78			302+00	1025.78			1024.78
1027.44			+25	1026.44			1025.44
1028.10			+50	1027.10			1026.10
1028.76			+75	1027.76			1026.76
1029.42			303+00	1028.42			1027.42
1030.08			+25	1029.08			1028.08
1030.74			+50	1029.74			1028.74
1031.40			+75	1030.40			1029.40
1032.06			304+00	1031.06			1030.06
1032.72			+25	1031.72			1030.72
1033.38			+50	1032.38			1031.38
1034.04			+75	1033.04			1032.04
1034.70			305+00	1033.70			1032.70
1035.25	+1.00		+21.02	1034.25		-1.00	1033.25
1036.22	+0.91		+61.02	1035.31		-0.91	1034.40
1037.19	+0.82		306+01.02	1036.37		-0.82	1035.55
1038.15	+0.73		+41.02	1037.42		-0.73	1036.69
1039.12	+0.64		+81.02	1038.48		-0.64	1037.84
1040.07	+0.54		307+21.02	1039.53		-0.54	1038.99
1041.04	+0.45		+61.02	1040.59		-0.45	1040.14
1042.01	+0.36		308+01.02	1041.65		-0.36	1041.29
1042.97	+0.27		+41.02	1042.70		-0.27	1042.43
1043.94	+0.18		+81.02	1043.76		-0.18	1043.58
1044.06	+0.17		+86	1043.89		-0.17	1043.72
1044.81	0		309+21.02	1044.81		-0.17	1044.64
1045.51	-0.07		+50	1045.58		-0.17	1045.41
1046.49	-0.17	12'	+89	1046.66	12'	-0.17	1046.49

LEFT LANES
P.I. STA. 351+67.09

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
1154.52	-0.17	12'	346+16.88	1154.69	12'	-0.17	1154.52
1154.41	-0.09		346+50	1154.50			1154.33
1154.25	0		+84.94	1154.25			1154.08
1154.11	+0.18		347+24.94	1153.93			1153.76
1153.94	+0.37		+64.94	1153.57			1153.40
1153.71	+0.55		348+04.94	1153.16			1152.99
1153.43	+0.73		+44.94	1152.70			1152.53
1153.12	+0.92		+84.94	1152.20			1152.03
1152.75	+1.10		349+24.94	1151.65			1151.48
1152.33	+1.28		+64.94	1151.05			1150.88
1151.87	+1.46		350+04.94	1150.41			1150.24
1151.38	+1.65		+44.94	1149.73			1149.56
1150.83	+1.83		+84.94	1149.00			1148.83
1150.54			351+00	1148.71			1148.54
1150.05			+25	1148.22			1148.05
1149.54			+50	1147.71			1147.54
1149.25			+63.75	1147.42			1147.25
1149.01			+75	1147.18			1147.01
1148.47			352+00	1146.64			1146.47
1147.91			+25	1146.08			1145.91
1147.50	+1.83		+42.56	1145.67			1145.50
1146.37	+1.65		+82.56	1144.72			1144.55
1145.17	+1.46		353+22.56	1143.71			1143.54
1143.94	+1.28		+62.56	1142.66			1142.49
1142.67	+1.10		354+02.56	1141.57			1141.40
1141.35	+0.92		+42.56	1140.43			1140.26
1139.97	+0.73		+82.56	1139.24			1139.07
1138.56	+0.55		355+22.56	1138.01			1137.84
1137.11	+0.37		+62.56	1136.74			1136.57
1135.59	+0.18		356+02.56	1135.41			1135.24
1133.84	0		+42.56	1133.84			1133.67
1132.82	-0.08		356+75	1132.90			1132.73
1131.44	-0.17	12'	357+10.62	1131.61	12'	-0.17	1131.44

RIGHT LANES
P.I. STA. 351+67.09

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
1154.52	-0.17	12'	346+16.88	1154.69	12'	-0.17	1154.52
1154.41	-0.09		+50	1154.50			1154.33
1154.25	0		+84.94	1154.25			1154.08
1154.15	+0.17		347+20	1153.98		-0.17	1153.81
1154.11	+0.18		+24.94	1153.93		-0.18	1153.75
1153.84	+0.27		+64.94	1153.57		-0.27	1153.30
1153.52	+0.36		348+04.94	1153.16		-0.36	1152.80
1153.15	+0.45		+44.94	1152.70		-0.45	1152.25
1152.75	+0.55		+84.94	1152.20		-0.55	1151.65
1152.29	+0.64		349+24.94	1151.65		-0.64	1151.01
1151.78	+0.73		+64.94	1151.05		-0.73	1150.32
1151.23	+0.82		350+04.94	1150.41		-0.82	1149.59
1150.64	+0.91		+44.94	1149.73		-0.91	1148.82
1150.00	+1.00		+84.94	1149.00		-1.00	1148.00
1149.71			351+00	1148.71			1147.71
1149.22			+25	1148.22			1147.22
1148.71			+50	1147.71			1146.71
1148.42			351+63.75	1147.42			1146.42
1148.18			+75	1147.18			1146.18
1147.64			352+00	1146.64			1145.64
1147.08			+25	1146.08			1145.08
1146.67	+1.00		+42.56	1145.67		-1.00	1144.67
1145.63	+0.91		+82.56	1144.72		-0.91	1143.81
1144.53	+0.82		353+22.56	1143.71		-0.82	1142.89
1143.39	+0.73		+62.56	1142.66		-0.73	1141.93
1142.21	+0.64		354+02.56	1141.57		-0.64	1140.93
1140.98	+0.55		+42.56	1140.43		-0.55	1139.88
1139.69	+0.45		+82.56	1139.24		-0.45	1138.79
1138.37	+0.36		355+22.56	1138.01		-0.36	1137.65
1137.01	+0.27		+62.56	1136.74		-0.27	1136.47
1135.59	+0.18		356+02.56	1135.41		-0.18	1135.23
1135.41	+0.17		+07.50	1135.24		-0.17	1135.07
1133.84	0		+42.56	1133.84			1133.67
1132.82	-0.08		+75	1132.90			1132.73
1131.44	-0.17	12'	357+10.62	1131.61	12'	-0.17	1131.44

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524-(5)	POST WAR

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

SUPERELEVATION TABLES

LEFT LANES
P.I. STA. 395+57.34

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
1021.34	-0.17	12'	384+79.75	1021.51	12'	-0.17	1021.34
1020.57	-0.24		385+00	1020.81			1020.64
1019.47	-0.34		+29.75	1019.81			1019.64
1017.67	-0.51		+79.75	1018.18			1018.01
1016.55	-0.69		386+09.75	1017.24			1017.07
1015.15	-0.88		+49.75	1016.03			1015.86
1013.81	-1.06		+89.75	1014.87			1014.70
1012.50	-1.25		387+29.75	1013.75			1013.58
1011.25	-1.43		+69.75	1012.68			1012.51
1010.04	-1.62		388+09.75	1011.66			1011.49
1008.88	-1.80		+49.75	1010.68			1010.51
1007.77	-1.98		+89.75	1009.75			1009.58
1006.70	-2.17		389+29.75	1008.87			1008.70
1006.27			+50	1008.44			1008.27
1005.76			+75	1007.93			1007.76
1005.27			390+00	1007.44			1007.27
1004.79			+25	1006.96			1006.79
1004.33			+50	1006.50			1006.33
1003.90			+75	1006.07			1005.90
1003.48			391+00	1005.65			1005.48
1003.07			+25	1005.24			1005.07
1002.69			+50	1004.86			1004.69
1002.33			+75	1004.50			1004.33
1001.98			392+00	1004.15			1003.98
1001.65			+25	1003.82			1003.65
1001.34			+50	1003.51			1003.34
1001.05			+75	1003.22			1003.05
1000.78			393+00	1002.95			1002.78
1000.52			+25	1002.69			1002.52
1000.29			+50	1002.46			1002.29
1000.07			+75	1002.24			1002.07
999.87			394+00	1002.04			1001.87
999.68			+25	1001.85			1001.68
999.49			+50	1001.66			1001.49
999.30			+75	1001.47			1001.30
999.11			395+00	1001.28			1001.11
998.92			+25	1001.09			1000.92
998.73			+50	1000.90			1000.73
998.54			+75	1000.71			1000.54
998.35			396+00	1000.52			1000.35
998.16			+25	1000.33			1000.16
997.97			+50	1000.14			999.97
997.78			+75	999.95			999.78
997.59			397+00	999.76			999.59
997.40			+25	999.57			999.40
997.21			+50	999.38			999.21
997.02			+75	999.19			999.02
996.83			398+00	999.00			998.83
996.64			+25	998.81			998.64
996.45	-2.17	12'	+50	998.62	12'	-0.17	998.45

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
996.26	-2.17	12'	398+75	998.43	12'	-0.17	998.26
996.07			399+00	998.24			998.07
995.88			+25	998.05			997.88
995.69			+50	997.86			997.69
995.50			+75	997.67			997.50
995.31			400+00	997.48			997.31
995.12			+25	997.29			997.12
994.93			+50	997.10			996.93
994.74			+75	996.91			996.74
994.63	-2.17		400+89.19	996.80			996.63
994.52	-1.98		401+29.19	996.50			996.33
994.38	-1.80		+69.19	996.18			996.01
994.22	-1.62		402+09.19	995.84			995.67
994.01	-1.43		+49.19	995.44			995.27
993.74	-1.25		+89.19	994.99			994.82
993.44	-1.06		403+29.19	994.50			994.33
993.08	-0.88		+69.19	993.96			993.79
992.69	-0.69		404+09.19	993.38			993.21
992.40	-0.51		+39.19	992.91			992.74
991.73	-0.34		+89.19	992.07			991.90
991.58	-0.30		405+00	991.88			991.71
990.98	-0.17	12'	+39.19	991.15	12'	-0.17	990.98

RIGHT LANES
P.I. STA. 395+57.34

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
1021.76	-0.17	12'	384+61.69	1021.93	12'	-0.17	1021.76
1020.38			385+00	1020.55		-0.07	1020.48
1019.34			+29.75	1019.51		0	1019.51
1017.97			+69.75	1018.14		+0.18	1018.32
1016.65			386+09.75	1016.82		+0.37	1017.19
1015.38			+49.75	1015.55		+0.55	1016.10
1014.16			+89.75	1014.33		+0.73	1015.06
1012.98			387+29.75	1013.15		+0.92	1014.07
1011.85			+69.75	1012.02		+1.10	1013.12
1010.77			388+09.75	1010.94		+1.28	1012.22
1009.74			+49.75	1009.91		+1.46	1011.37
1008.75			+89.75	1008.92		+1.65	1010.57
1007.81			389+29.75	1007.98		+1.83	1009.81
1007.35			+50	1007.52			1009.35
1006.81			+75	1006.98			1008.81
1006.27			390+00	1006.44			1008.27
1005.76			+25	1005.93			1007.76
1005.27			+50	1005.44			1007.27
1004.79			+75	1004.96			1006.79
1004.33			391+00	1004.50			1006.33
1003.90			+25	1004.07			1005.90
1003.48			+50	1003.65			1005.48
1003.07			+75	1003.24			1005.07
1002.69			392+00	1002.86			1004.69
1002.33			+25	1002.50			1004.33
1001.98			+50	1002.15			1003.98
1001.65			+75	1001.82			1003.65
1001.34			393+00	1001.51			1003.34
1001.05			+25	1001.22			1003.05
1000.78			+50	1000.95			1002.78
1000.52			+75	1000.69			1002.52
1000.29			394+00	1000.46			1002.29
1000.07			+25	1000.24			1002.07
999.87			+50	1000.04			1001.87
999.68			+75	999.85			1001.68
999.49			395+00	999.66			1001.49
999.30			+25	999.47			1001.30
999.11			+50	999.28			1001.11
998.92			+75	999.09			1000.92
998.73			396+00	998.90			1000.73
998.54			+25	998.71			1000.54
998.35			+50	998.52			1000.35
998.16			+75	998.33			1000.16
997.97			397+00	998.14			999.97
997.78			+25	997.95			999.78
997.59			+50	997.76			999.59
997.40			+75	997.57			999.40
997.21			398+00	997.38			999.21
997.02			+25	997.19			999.02
996.83	-0.17	12'	+50	997.00	12'	+1.83	998.83

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
996.64	-0.17	12'	398+75	996.81	12	+1.83	998.64
996.45			399+00	996.62			998.45
996.26			+25	996.43			998.26
996.07			+50	996.24			998.07
995.88			+75	996.05			997.88
995.69			400+00	995.86			997.69
995.50			+25	995.67			997.50
995.31			+50	995.48			997.31
995.12			+75	995.29			997.12
995.01			400+89.19	995.18		+1.83	997.01
994.71			401+29.19	994.88		+1.65	996.53
994.40			+69.19	994.57		+1.46	996.03
994.10			402+09.19	994.27		+1.28	995.55
993.75			+49.19	993.92		+1.10	995.02
993.34			+89.19	993.54		+0.92	994.46
992.94			403+29.19	993.11		+0.73	993.84
992.46			+69.19	992.63		+0.55	993.18
991.93			404+09.19	992.10		+0.37	992.47
991.36			+49.19	991.53		+0.18	991.71
990.74			+89.19	990.91		0	990.91
990.14			405+25	990.31		-0.09	990.22
989.78	-0.17	12'	+57.25	989.95	12'	-0.17	989.78

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

SUPERELEVATION TABLES

LEFT LANES
P.I. STA. 420+10.12

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
981.15	-0.17	12'	409+34.62	981.32	12'	-0.17	981.15
979.98	-0.07		409+75	980.05			979.88
979.15	0		410+02.68	979.15			978.98
977.90	+0.18		+42.68	977.72			977.55
976.81	+0.37		+82.68	976.44			976.27
975.57	+0.55		411+22.68	975.02			974.85
974.27	+0.73		+62.68	973.54			973.37
972.94	+0.92		412+02.68	972.02			971.85
971.55	+1.10		+42.68	970.45			970.28
970.13	+1.28		+82.68	968.85			968.68
968.71	+1.46		413+22.68	967.25			967.08
967.30	+1.65		+62.68	965.65			965.48
965.88	+1.83		414+02.68	964.05			963.88
964.99			+25	963.16			962.99
963.99			+50	962.16			961.99
962.99			+75	961.16			960.99
961.99			415+00	960.16			959.99
960.99			+25	959.16			958.99
959.99			+50	958.16			957.99
958.99			+75	957.16			956.99
957.99			416+00	956.16			955.99
956.99			+25	955.16			954.99
955.99			+50	954.16			953.99
954.99			+75	953.16			952.99
953.99			417+00	952.16			951.99
952.99			+25	951.16			950.99
951.99			+50	950.16			949.99
950.99			+75	949.16			948.99
949.99			418+00	948.16			947.99
948.99			+25	947.16			946.99
947.99			+50	946.16			945.99
946.99			+75	945.16			944.99
945.99			419+00	944.16			943.99
944.99			+25	943.16			942.99
943.99			+50	942.16			941.99
942.99			+75	941.16			940.99
941.99			420+00	940.16			939.99
940.99			+25	939.16			938.99
939.99			+50	938.16			937.99
938.99			+75	937.16			936.99
937.99			421+00	936.16			935.99
936.99			+25	935.16			934.99
935.99			+50	934.16			933.99
934.99			+75	933.16			932.99
933.99			422+00	932.16			931.99
932.99			+25	931.16			930.99
931.99			+50	930.16			929.99
930.99			+75	929.16			928.99
929.99			423+00	928.16			927.99
928.99	+1.83	12'	+25	927.16	12'	-0.17	926.99

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
927.99	+1.83	12'	423+50	926.16	12'	-0.17	925.99
926.99			+75	925.16			924.99
925.99			424+00	924.16			923.99
924.99			+25	923.16			922.99
923.99			+50	922.16			921.99
922.99			+75	921.16			920.99
922.00	+1.83		+99.82	920.17			920.00
920.22	+1.65		425+39.82	918.57			918.40
918.43	+1.46		+79.82	916.97			916.80
916.65	+1.28		426+19.82	915.37			915.20
914.87	+1.10		+59.82	913.77			913.60
913.09	+0.92		+99.82	912.17			912.00
911.30	+0.73		427+39.82	910.57			910.40
909.52	+0.55		+79.82	908.97			908.80
907.74	+0.37		428+19.82	907.37			907.20
905.95	+0.18		+59.82	905.77			905.60
904.17	0		+99.82	904.17			904.00
903.10	-0.06		429+25	903.16			902.99
901.27	-0.17	12'	+67.88	901.44	12'	-0.17	901.27

RIGHT LANES
P.I. STA. 420+10.12

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
980.64	-0.17	12'	409+34.62	980.81	12'	-0.17	980.64
979.53	-0.07		+75	979.60		-0.17	979.43
978.75	0		410+02.68	978.75		-0.17	978.58
977.81	+0.17		+37.74	977.64		-0.17	977.44
977.65	+0.18		+42.68	977.47		-0.18	977.29
976.42	+0.27		+82.68	976.15		-0.27	975.88
975.15	+0.36		411+22.68	974.79		-0.36	974.43
973.83	+0.45		+62.68	973.38		-0.45	972.93
972.46	+0.55		412+02.68	971.91		-0.55	971.36
971.04	+0.64		+42.68	970.40		-0.64	969.76
969.58	+0.73		+82.68	968.85		-0.73	968.12
968.07	+0.82		413+22.68	967.25		-0.82	966.43
966.56	+0.91		+62.68	965.65		-0.91	964.74
965.05	+1.00		414+02.68	964.05		-1.00	963.05
964.16			+25	963.16			962.16
963.16			+50	962.16			961.16
962.16			+75	961.16			960.16
961.16			415+00	960.16			959.16
960.16			+25	959.16			958.16
959.16			+50	958.16			957.16
958.16			+75	957.16			956.16
957.16			416+00	956.16			955.16
956.16			+25	955.16			954.16
955.16			+50	954.16			953.16
954.16			+75	953.16			952.16
953.16			417+00	952.16			951.16
952.16			+25	951.16			950.16
951.16			+50	950.16			949.16
950.16			+75	949.16			948.16
949.16			418+00	948.16			947.16
948.16			+25	947.16			946.16
947.16			+50	946.16			945.16
946.16			+75	945.16			944.16
945.16			419+00	944.16			943.16
944.16			+25	943.16			942.16
943.16			+50	942.16			941.16
942.16			+75	941.16			940.16
941.16			420+00	940.16			939.16
940.16			+25	939.16			938.16
939.16			+50	938.16			937.16
938.16			+75	937.16			936.16
937.16			421+00	936.16			935.16
936.16			+25	935.16			934.16
935.16			+50	934.16			933.16
934.16			+75	933.16			932.16
933.16			422+00	932.16			931.16
932.16			+25	931.16			930.16
931.16			+50	930.16			929.16
930.16			+75	929.16			928.16
929.16	+1.00	12'	423+00	928.16	12'	-1.00	927.16

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
928.16	+1.00	12'	423+25	927.16	12'	-1.00	926.16
927.16			+50	926.16			925.16
926.16			+75	925.16			924.16
925.16			424+00	924.16			923.16
924.16			+25	923.16			922.16
923.16			+50	922.16			921.16
922.16			+75	921.16			920.16
921.17	+1.00		+99.82	920.17		-1.00	919.17
919.48	+0.91		425+39.82	918.57		-0.91	917.66
917.79	+0.82		+79.82	916.97		-0.82	916.15
916.10	+0.73		426+19.82	915.37		-0.73	914.64
914.41	+0.64		+59.82	913.77		-0.64	913.13
912.72	+0.55		+99.82	912.17		-0.55	911.62
911.02	+0.45		427+39.82	910.57		-0.45	910.12
909.33	+0.36		+79.82	908.97		-0.36	908.61
907.64	+0.27		428+19.82	907.37		-0.27	907.10
905.95	+0.18		+59.82	905.77		-0.18	905.59
905.74	+0.17		+64.70	905.57		-0.17	905.40
904.17	0		+99.82	904.17		-0.17	904.00
903.10	-0.06		429+25	903.16		-0.17	902.99
901.27	-0.17	12'	+67.88	901.44	12'	-0.17	901.27

SUPERELEVATION TABLES

LEFT LANES
P.I. STA. 470+43.18

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
856.45	-0.17	12'	463+32.41	856.62	12'	-0.17	856.45
856.79	-0.17		+75	856.96		-0.06	856.90
856.99	-0.17		464+00.47	857.16		0	857.16
857.27	-0.17		+35.53	857.44		+0.17	857.61
857.30	-0.18		+40.47	857.48		+0.18	857.66
857.53	-0.27		+80.47	857.80		+0.27	858.07
857.86	-0.36		465+20.47	858.12		+0.36	858.48
857.99	-0.45		+60.47	858.44		+0.45	858.89
858.25	-0.55		466+00.47	858.80		+0.55	859.35
858.57	-0.64		+40.47	859.21		+0.64	859.85
858.94	-0.73		+80.47	859.67		+0.73	860.40
859.36	-0.82		467+20.47	860.18		+0.82	861.00
859.84	-0.91		+60.47	860.75		+0.91	861.66
860.36	-1.00		468+00.47	861.36		+1.00	862.36
860.77			+25	861.77			862.77
861.20			+50	862.20			863.20
861.65			+75	862.65			863.65
862.12			469+00	863.12			864.12
862.61			+25	863.61			864.61
863.12			+50	864.12			865.12
863.65			+75	864.65			865.66
864.20			470+00	865.20			866.20
864.77			+25	865.77			866.77
865.36			+50	866.36			867.36
865.97			+75	866.97			867.97
866.60			471+00	867.60			868.60
867.25			+25	868.25			869.25
867.92			+50	868.92			869.92
868.61			+75	869.61			870.61
869.32			472+00	870.32			871.32
870.05			+25	871.05			872.05
870.80			+50	871.80			872.80
871.21	-1.00		+63.33	872.21		+1.00	873.21
872.55	-0.91		473+03.33	873.46		+0.91	874.37
873.96	-0.82		+43.33	874.78		+0.82	875.60
875.37	-0.73		+88.33	876.10		+0.73	876.83
876.74	-0.64		474+23.33	877.38		+0.64	878.02
878.08	-0.55		+63.33	878.63		+0.55	879.18
879.37	-0.45		475+03.33	879.82		+0.45	880.27
880.60	-0.36		+43.33	880.96		+0.36	881.32
881.78	-0.27		+83.33	882.05		+0.27	882.32
882.92	-0.18		476+23.33	883.10		+0.18	883.28
883.03	-0.17		+28.27	883.20		+0.17	883.37
883.93	-0.17		+63.33	884.10		0	884.10
884.78	-0.17		477+00	884.95		-0.09	884.86
885.49	-0.17	12'	+31.39	885.66	12'	-0.17	885.49

RIGHT LANES
P.I. STA. 470+43.18

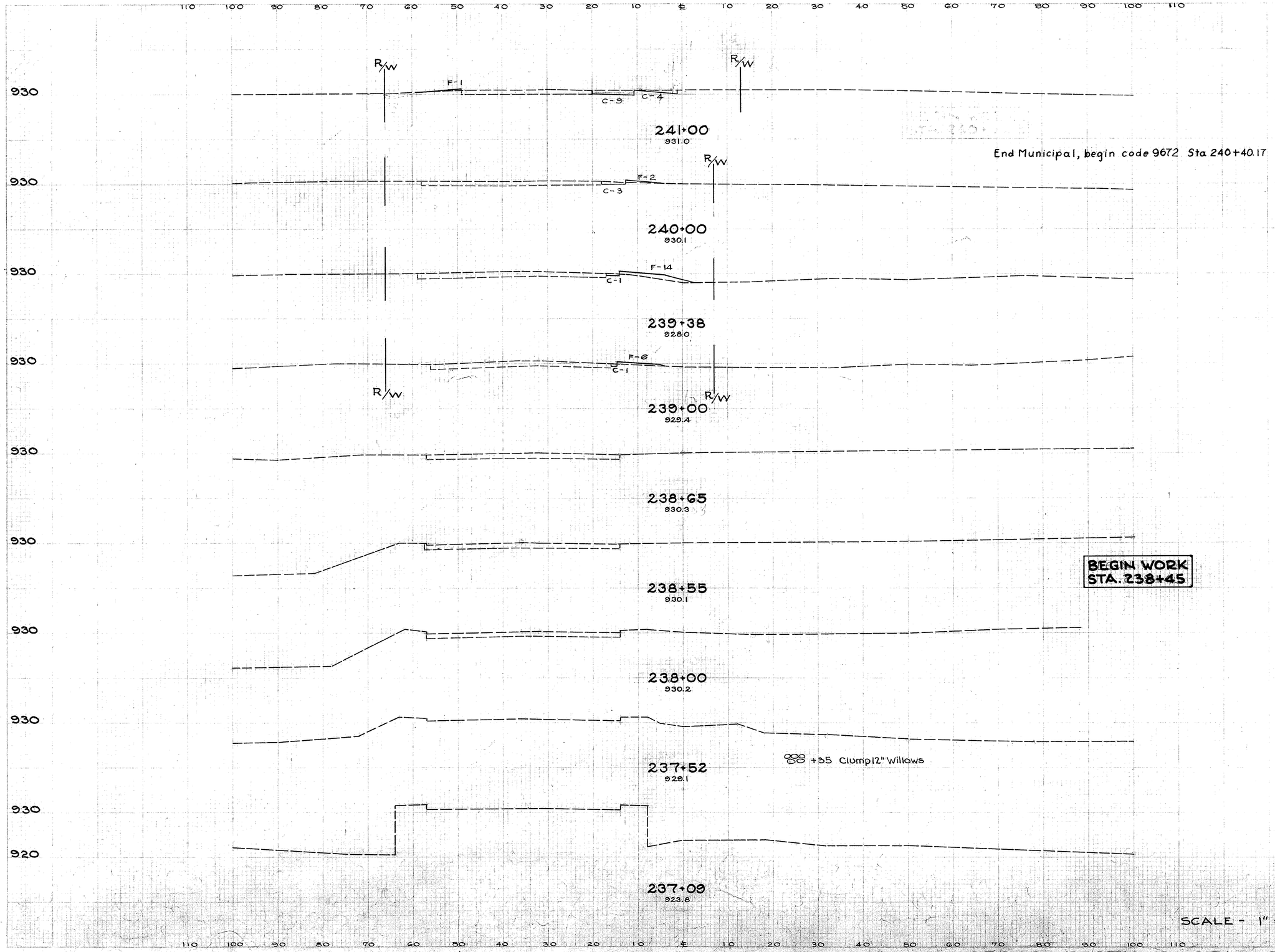
LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
856.45	-0.17	12'	463+32.41	856.62	12'	-0.17	856.45
856.79			+75	856.96		-0.06	856.90
856.99			464+00.47	857.16		0	857.16
857.31			+40.47	857.48		+0.18	857.66
857.63			+80.47	857.80		+0.37	858.17
857.95			465+20.47	858.12		+0.55	858.67
858.27			+60.47	858.44		+0.73	859.17
858.63			466+00.47	858.80		+0.92	859.72
859.04			+40.47	859.21		+1.10	860.31
859.50			+80.47	859.67		+1.28	860.95
860.01			467+20.47	860.18		+1.46	861.64
860.58			+60.47	860.75		+1.65	862.40
861.19			468+00.47	861.36		+1.83	863.19
861.60			+25	861.77			863.60
862.03			+50	862.20			864.03
862.48			+75	862.65			864.48
862.95			469+00	863.12			864.95
863.44			+25	863.61			865.44
863.95			+50	864.12			865.95
864.48			+75	864.65			866.48
865.03			470+00	865.20			867.03
865.60			+25	865.77			867.60
866.19			+50	866.36			868.19
866.80			+75	866.97			868.80
867.43			471+00	867.60			869.43
868.08			+25	868.25			870.08
868.75			+50	868.92			870.75
869.44			+75	869.61			871.44
870.15			472+00	870.32			872.15
870.88			+25	871.05			872.88
871.63			+50	871.80			873.63
872.04			+63.33	872.21		+1.83	874.04
873.29			473+03.33	873.46		+1.65	875.11
874.61			+43.33	874.78		+1.46	876.24
875.93			+83.33	876.10		+1.28	877.38
877.21			474+23.33	877.38		+1.10	878.48
878.46			+63.33	878.63		+0.92	879.55
879.65			475+03.33	879.82		+0.73	880.55
880.79			+43.33	880.96		+0.55	881.51
881.88			+83.33	882.05		+0.43	882.48
882.93			476+23.33	883.10		+0.43	883.53
883.93	-0.17	12'	+63.33	884.10	12'	+0.43	884.53

RIGHT LANES
P.I. STA. 477+75

LEFT			CENTERLINE		RIGHT		
Elevation Left Edge	+ or − from Profile	Width	Station	Profile Grade	Width	+ or − from Profile	Elevation Right Edge
884.19	-0.17	12'	476+75	884.36	12'	+0.43	884.79
884.78			477+00	884.95			885.38
885.75			+25	885.92			886.35
885.86			+50	886.03			886.46
886.44			+75	886.61			887.04
886.95			478+00	887.12			887.55
887.45			+25	887.62			888.05
887.93			+50	888.10			888.53
887.39			+75	888.56		+0.43	888.99
888.83			479+00	889.00		+0.39	889.39
889.26			+25	889.43		+0.34	889.77
889.66			+50	889.83		+0.30	890.13
890.05			+75	890.22		+0.26	890.48
890.42			480+00	890.59		+0.21	890.80
890.77			+25	890.94		+0.17	891.11
891.10			+50	891.27		+0.09	891.36
891.41			+75	891.58		0	891.58
891.70			481+00	891.87	12	-0.09	891.78
891.98	-0.17	12'	+25	892.15	14	-0.20	891.95

SHEET NO.	STATE	PROJECT	TYPE FUNDS	42
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



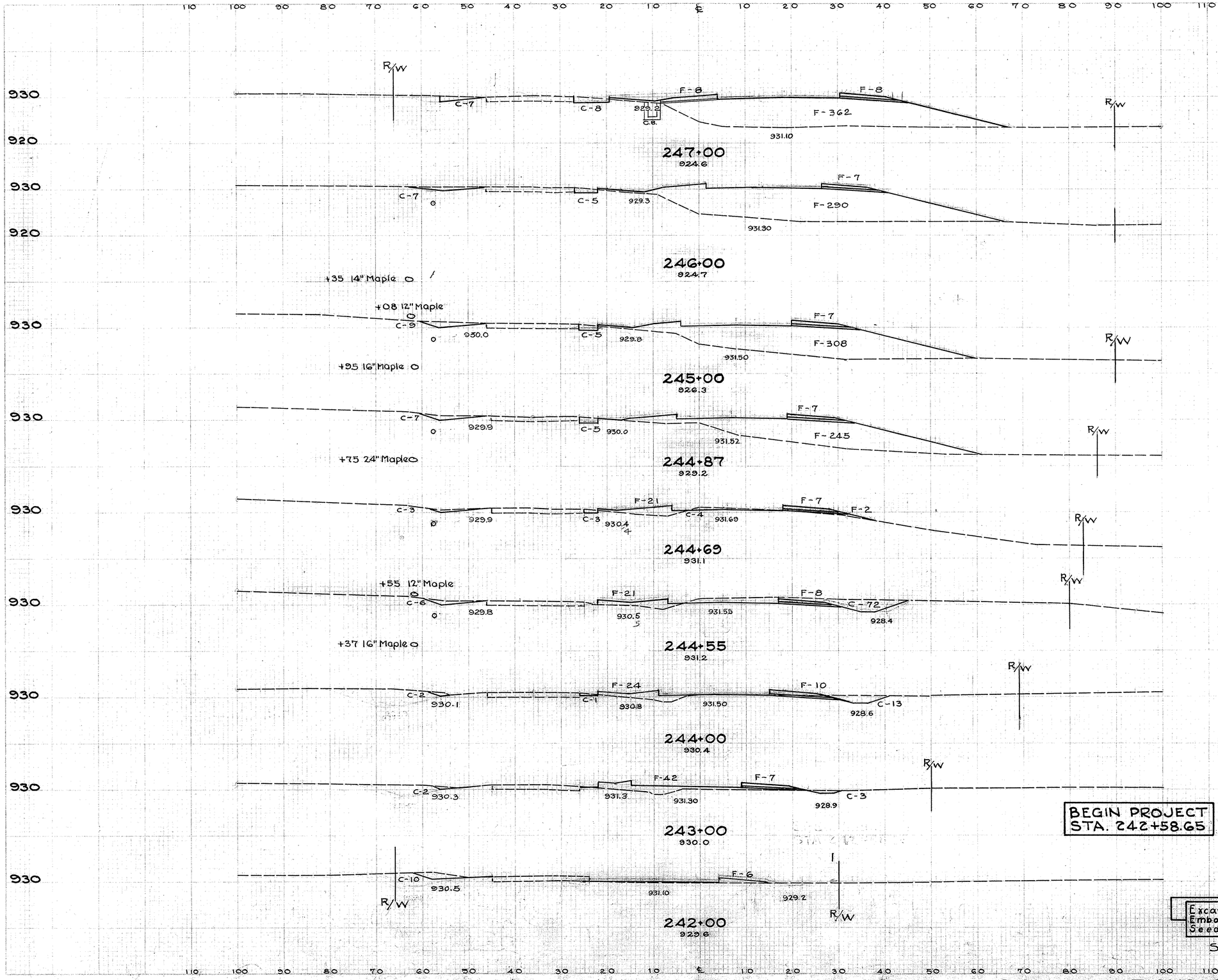
Excavation 19 Cu. Yds.
Embankment 40 Cu. Yds.
Seeding 374 Sq. Yds.

Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
36		13	1		
	180			18	4
	120			12	2
18		3	2		
	131			4	19
20		1	14		
	84			2	15
20		1	6		
	39			1	4
0		0	0		

CROSS SECTIONS STA. 237+09 TO STA. 241+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	43
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

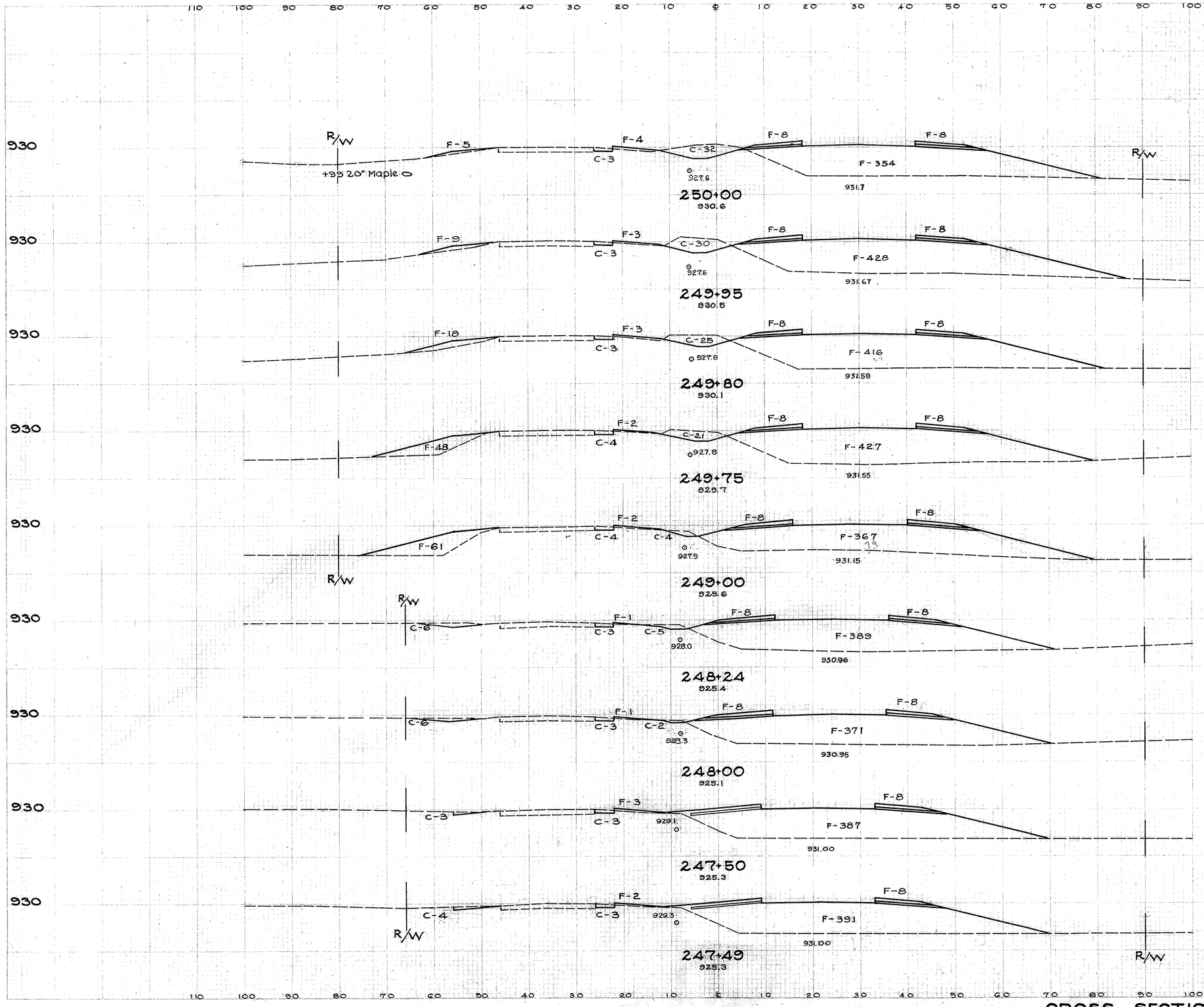


Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
82		15	378		
	1000			50	1250
98		12	297		
	1033			48	1133
				2	51
				7	0
88		14	315		
	128			6	137
89		12	252		
	157			7	94
68		10	30		
	111			23	15
75		78	29		
				6	0
	440			96	64
69		16	34		
	722			39	154
61		5	49		
	572			28	102
				0	4
42		10	6		
	433			43	13
36		13	1		

CROSS SECTIONS STA. 242+00 TO STA. 247+00

2	OHIO	F-524(5)	TYPE FUNDS / POST WAR	44 / 154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



SCALE - 1" = 10'

Excavation 918 Cu. Yds.
Embankment 13055 Cu. Yds.
Seeding 11162 Sq. Yds.

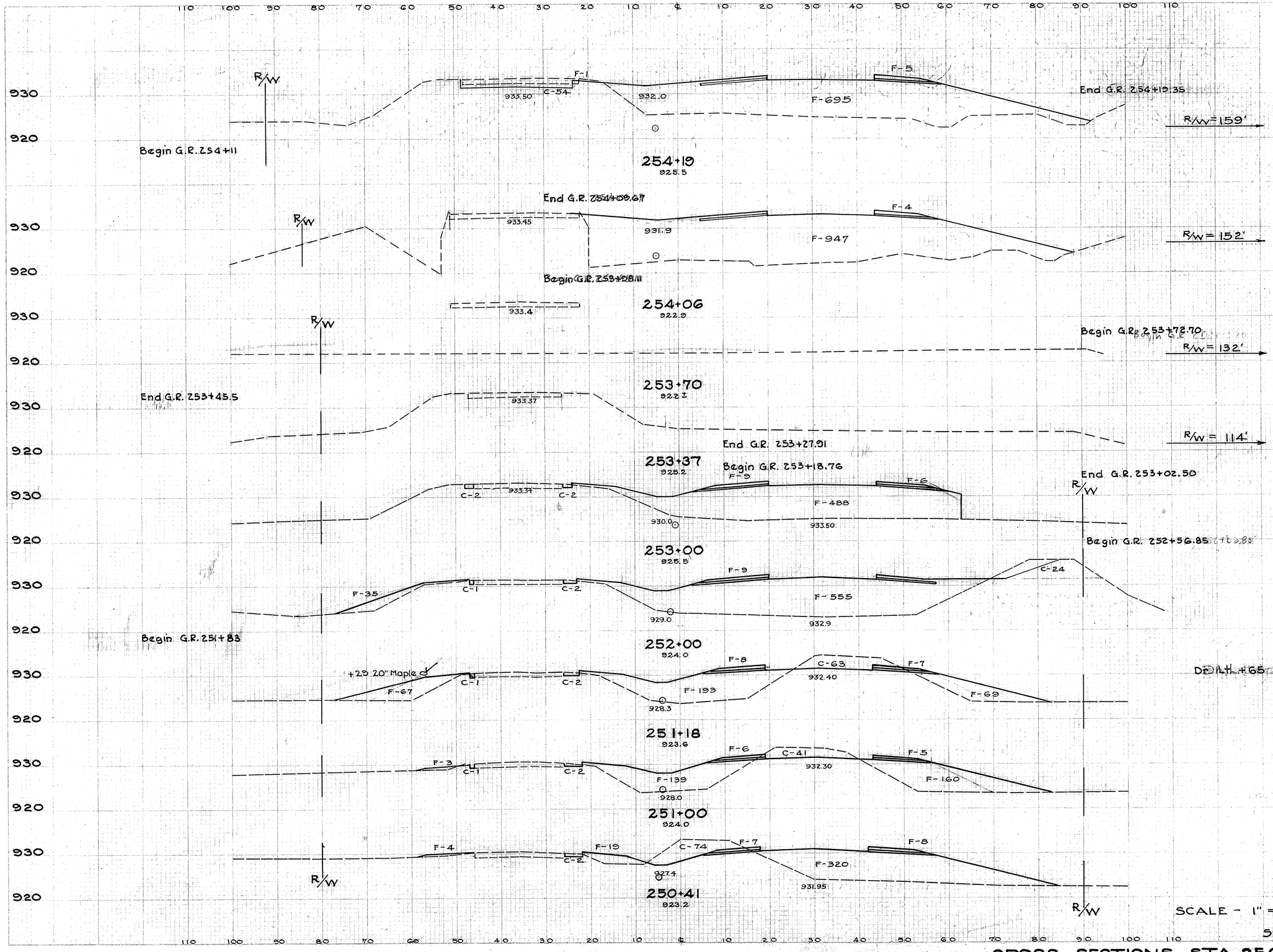
Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
250+00	115		35	379		
		65			6	77
249+95	118		33	456		
		198			17	252
249+80	119		28	453		
		67			5	88
249+75	122		25	493		
		1021			46	1304
249+00	123		8	446		
		946			31	1199
248+24	101		14	406		
		277			11	353
248+00	98		11	388		
		514			16	728
247+50	87		6	398		
		10			0	14
247+49	87		7	401		
		460			20	707
Sta. 247+00	82		15	378		

CROSS SECTIONS STA. 247+49 TO STA. 250+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

45
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

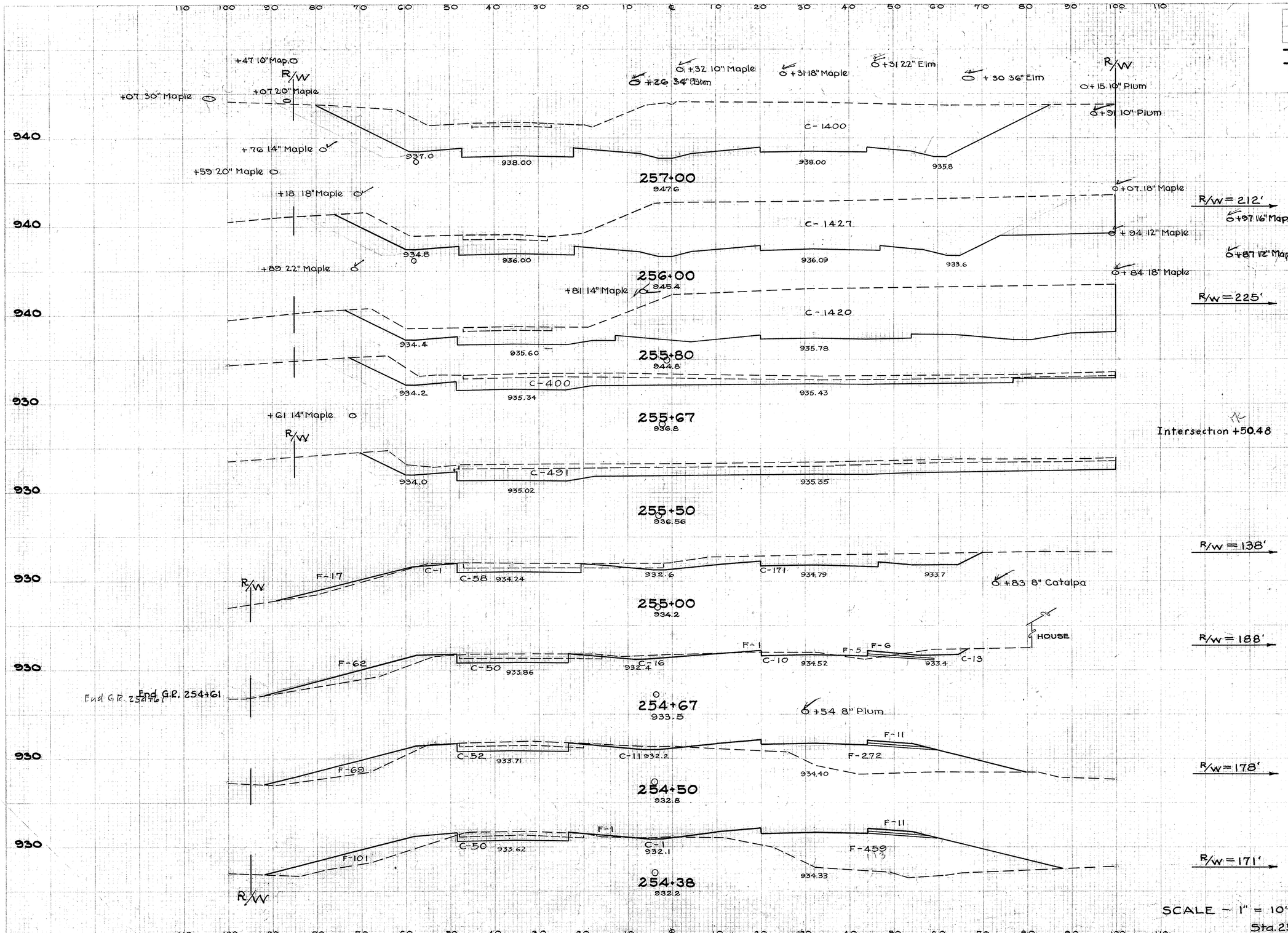


Seeding		End Area		Cu. Yds.	
L.F	S.Y.	Cut	Fill	Exc.	Emb.
104		54	701		
	145			13	398
97		0	951		
	194			0	634
0		0	0		
0		0	0		
	43			3	344
64		4	503		
	900			57	2041
98		27	599		
	1011			141	1432
124		66	344	11	11
	236			37	218
112		44	313		
	734			131	733
112		76	358		
	517			84	560
115		35	379		

CROSS SECTIONS STA. 250+41 TO STA. 254+19

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	46
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

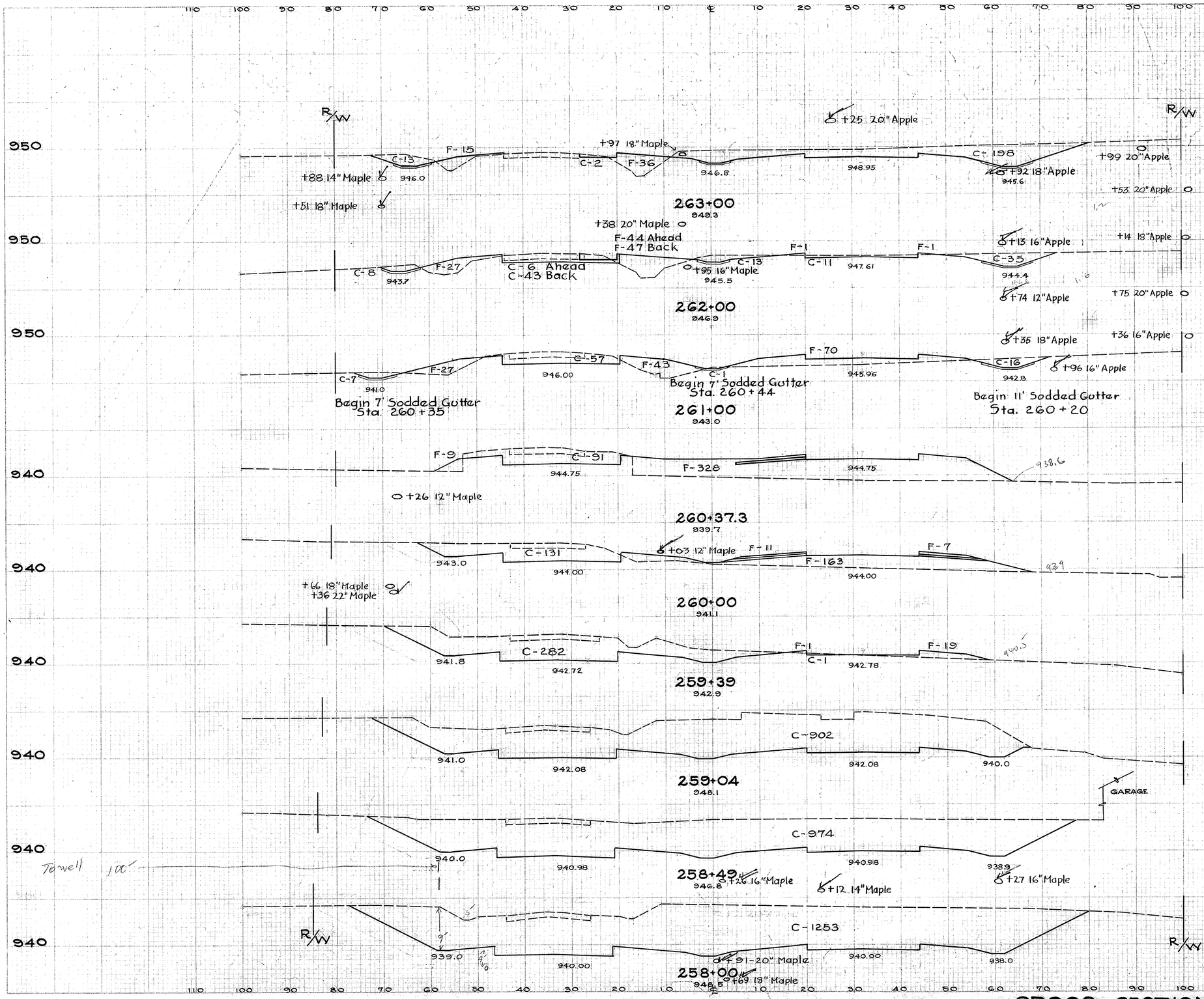


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb
136		1400	0		
	1528			5235	0
139		1427	0		
	282			1055	0
115		1420	0		
	125			438	0
58		400	0		
	866			960	5
	87			281	0
33		491	0		
	431			668	16
122		230	17		
	451			195	56
124		89	74		
	246			48	134
136		63	352		
	187			25	205
145		51	572		
	263			37	448
104		54	701		

CROSS SECTIONS STA. 254+38 TO STA. 257+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

TRUMBULL COUNTY
TRU-62 -(4.59-9.67)



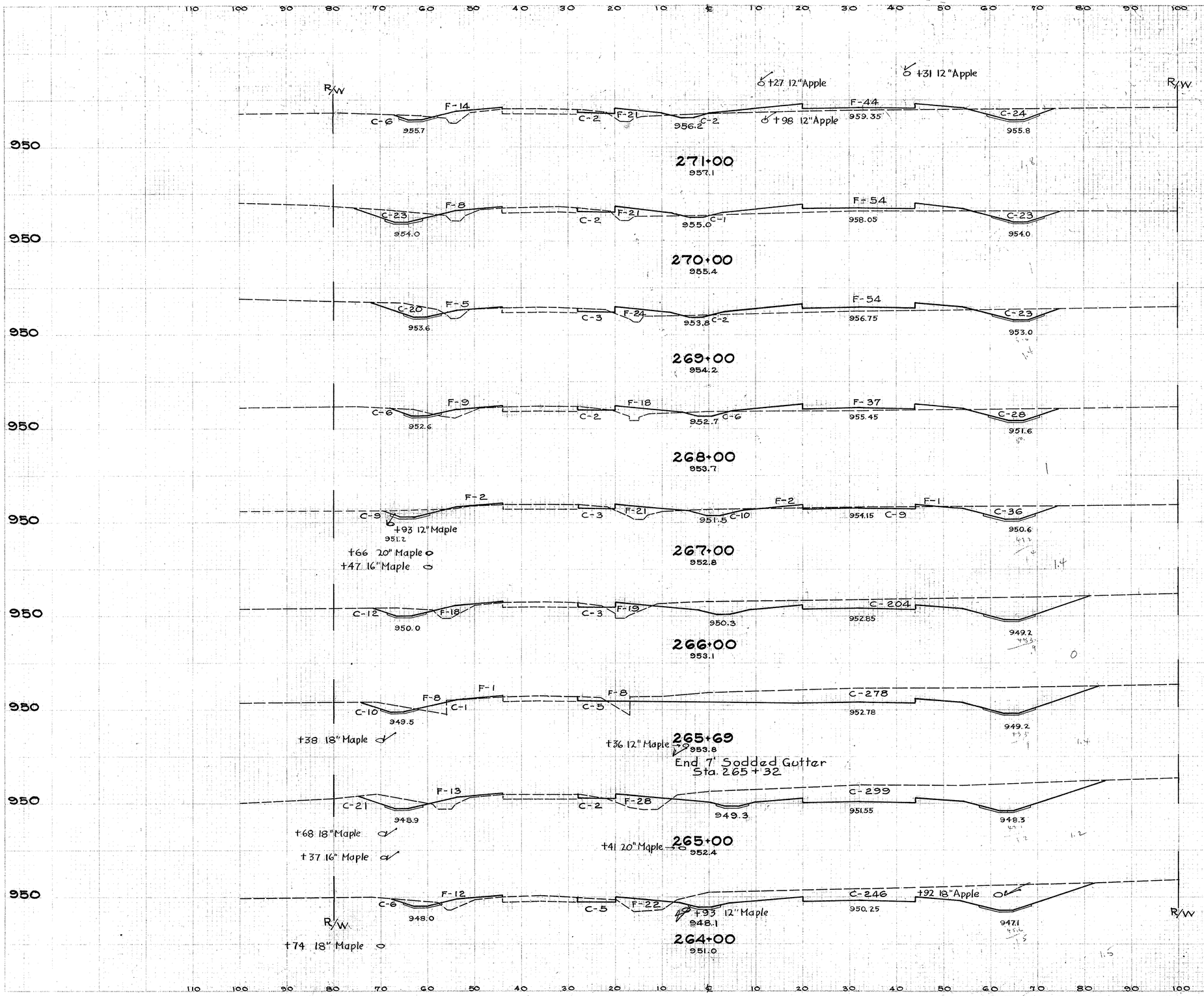
	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
	98		213	51		
		1061			530	230
					0	2
Ahead	93		73	73		
Back			110	76		
		1006			354	400
	88		81	140		
		641			200	554
	96		91	337		
		408			153	358
	101		131	181		
					10	0
		685			468	227
	101		283	20		
		418			768	13
	114		902	0		
		727			1911	0
	124		974	0		
		691			2020	0
	130		1253	0		
					99	0
		1478			4913	0
	136		1400	0		

Excavation 23437 Cu. Yds.
Embankment 14081 Cu. Yds.
Seeding 115150 Sq. Yds.

CROSS SECTIONS STA. 258+00 TO STA. 263+00

DIVISION	STATE	PROJECT	TYPE FUNDS	48
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Intersection +82.20
Drive +51.11 Rt

Drive + 61.0 Rt

Intersection +65.22

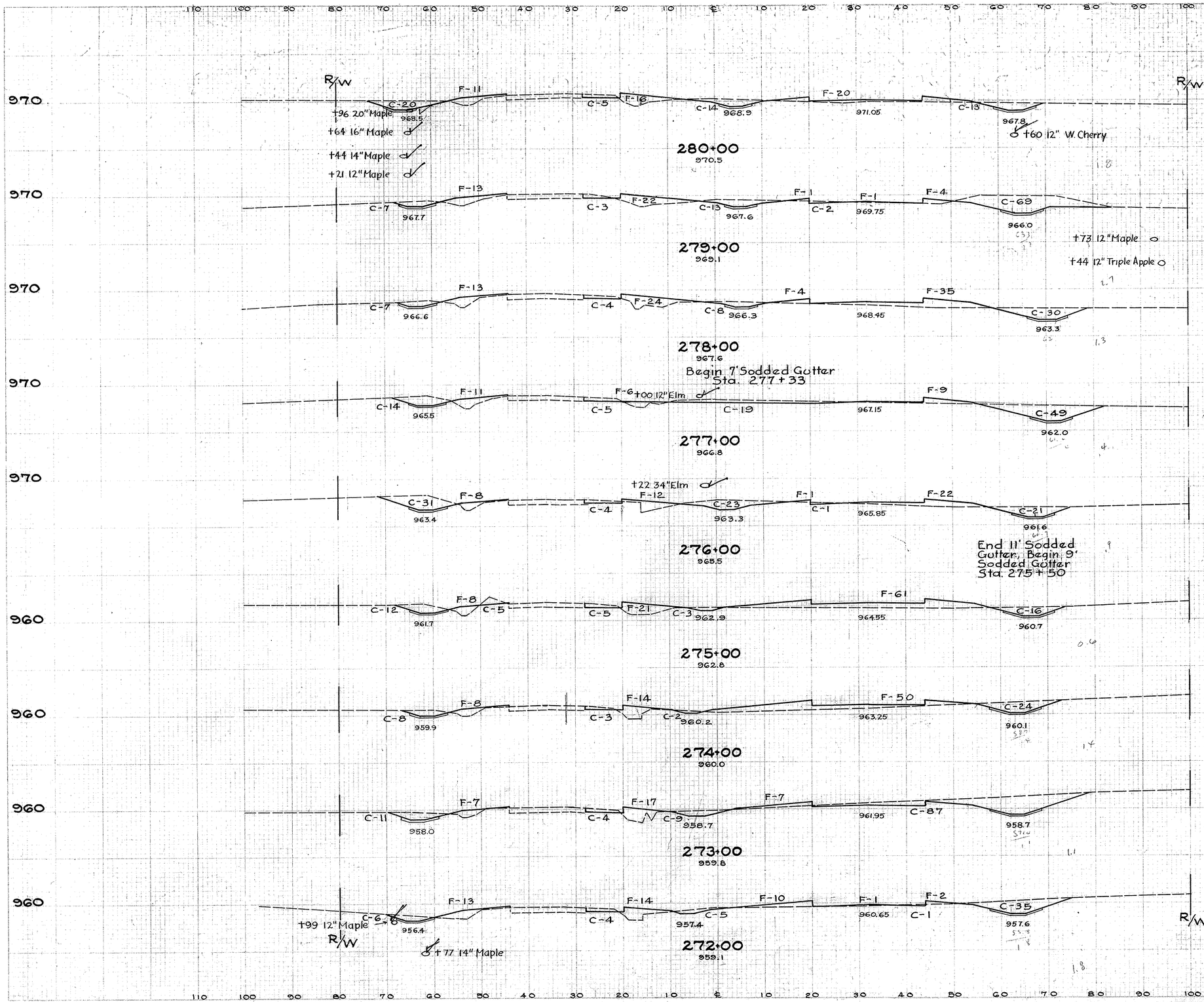
Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
271+00	95		34	79		
		1072			154	300
270+00	98		49	83		
Intersection +82.20					5	0
Drive +51.11 Rt					2	0
		1078			180	307
269+00	96		48	83		
		1078			167	272
268+00	98		42	64		
Drive + 61.0 Rt					0	0
		1078			202	167
267+00	96		67	26		
		1122			530	117
266+00	106		219	37		
		298			295	31
265+69	67		294	17		
Intersection +65.22					32	0
		671			787	74
265+00	108		322	41		
		1139			1072	139
264+00	97		257	34		
		1122			870	157
Sta. 263+00	105		213	51		

SCALE - 1" = 10'

CROSS SECTIONS STA. 264+00 TO STA. 271+00

12 RD DIVISION		PROJ.	TYPE FUNDS	49
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



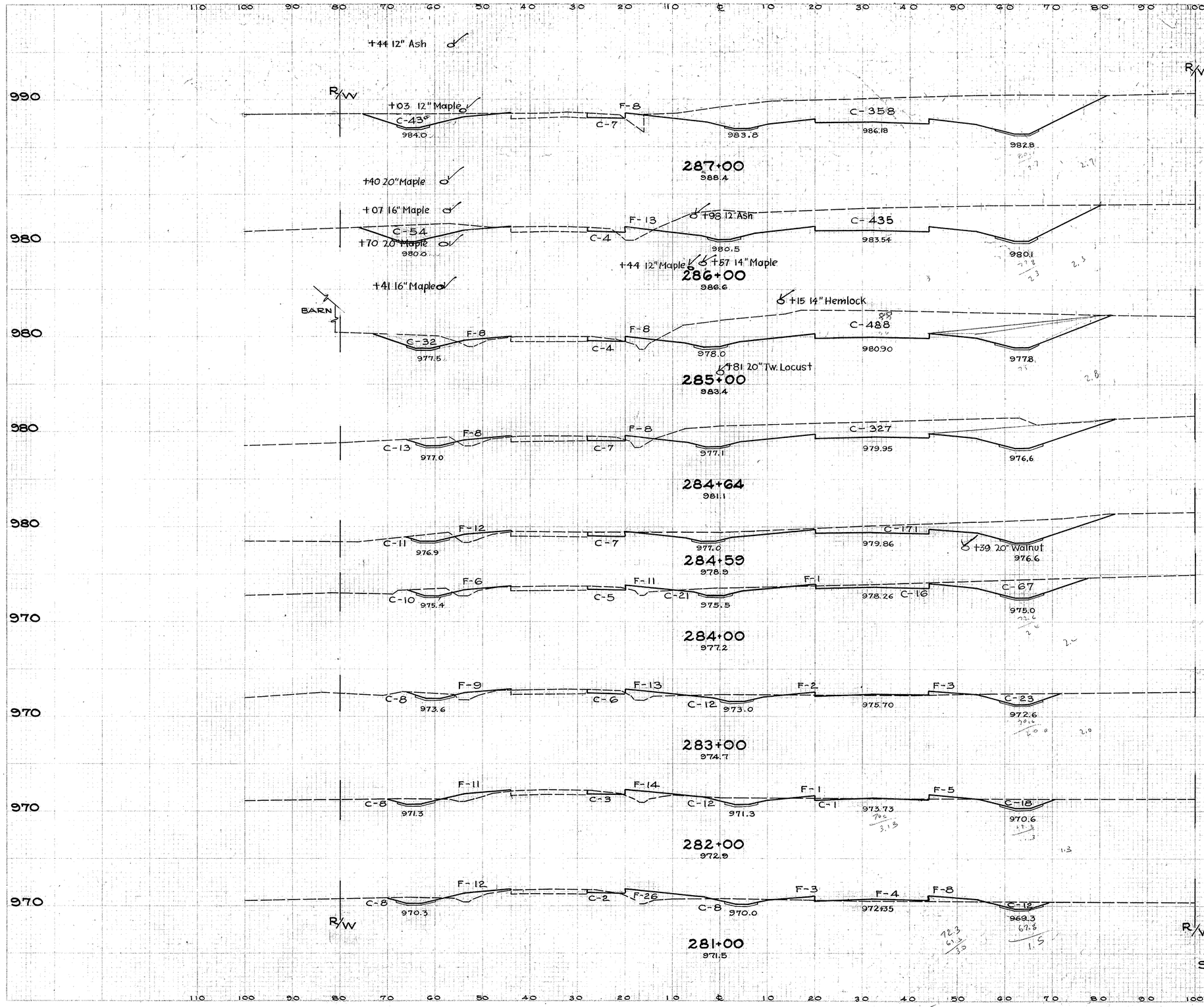
Excavation	2906 Cu. Yds.
Embankment	2568 Cu. Yds.
Seeding	1272.3 Sq. Yds.

Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
91		52	47		
				2	0
	1072			270	163
102		94	41		
	1100			265	217
96		49	76		
	911			252	189
				0	0
68		87	26		
	933			309	128
100		80	43		
	1089			224	246
96		41	90		
	1056			144	300
94		37	72		
				2	0
	1100			274	191
104		111	31		
	1128			300	131
				4	0
99		51	40		
	1078			157	220
95		34	79		

CROSS SECTIONS STA. 272+00 TO STA. 280+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	50
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



	Cu. Yds.
Excavation	10362
Embankment	1266
Seeding	1292 Sq. Yds.

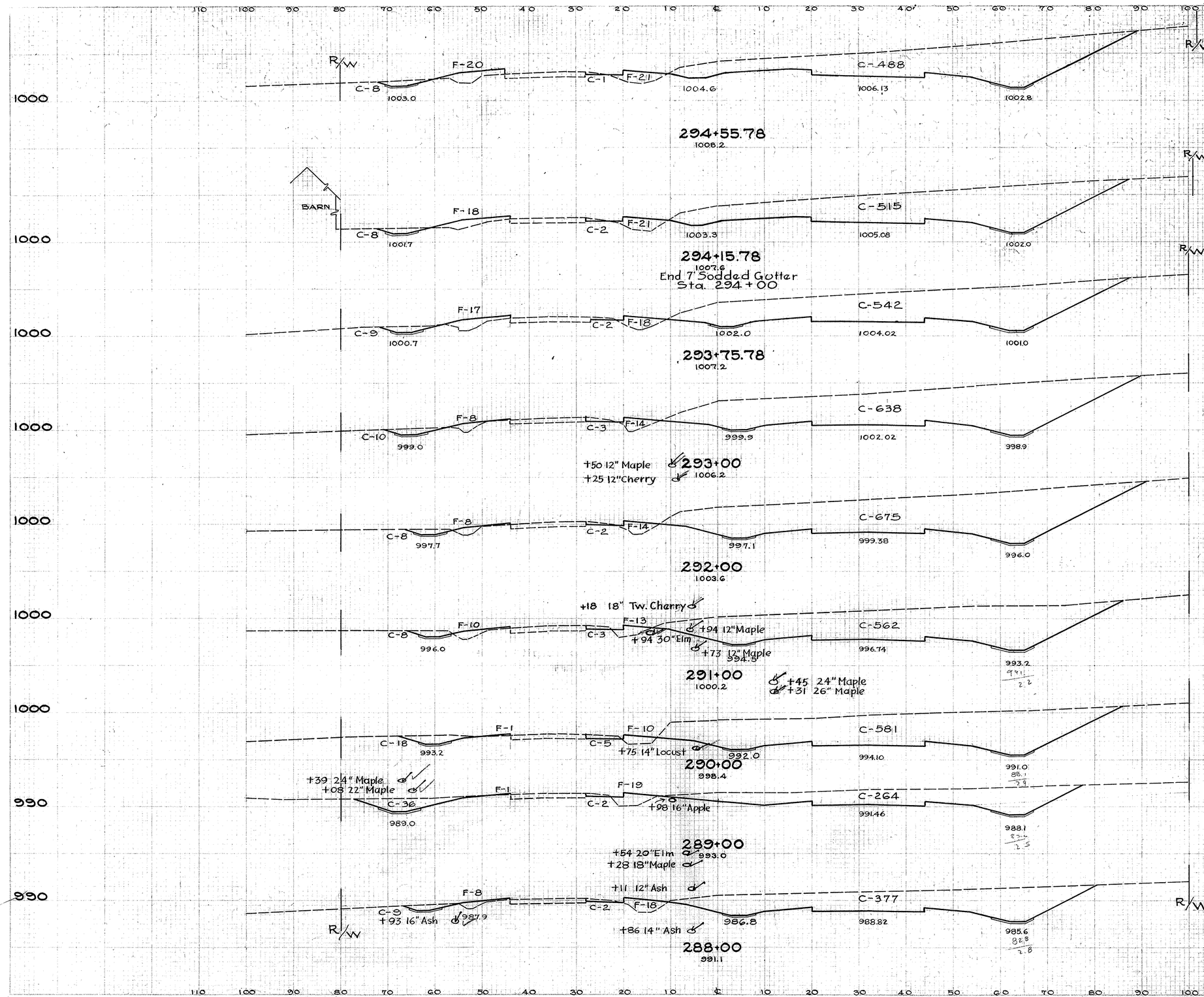
	Seeding		End Area		Cu. Yds.	
	L.F.	S.Y.	Cut	Fill	Exc.	Emb
	104		408	8		
		1133			1669	39
	100		493	13		
					5	0
		1117			1883	54
	101		524	16		
		396			581	21
	97		347	16		
		55			50	3
	100		189	12		
					3	0
		639			336	33
	95		119	18		
		1006			311	83
	86		49	27		
		983			169	107
					0	0
	91		42	31		
		1000			133	156
	89		30	53		
		1000			152	185
Sta. 280+00	91		52	47		

CROSS SECTIONS STA. 281+00 TO STA. 287+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

51
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

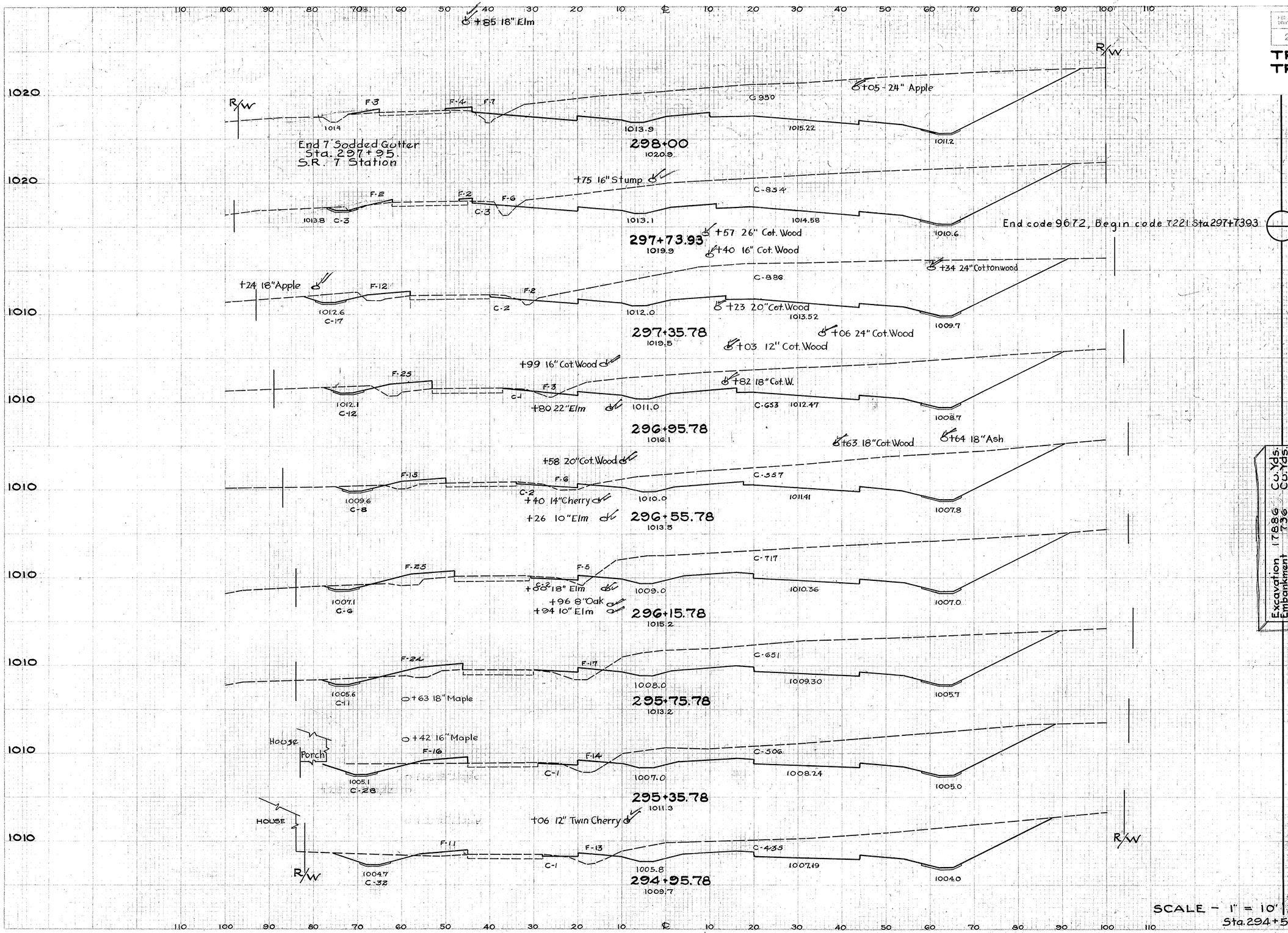


Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
116		497	41	3	0
	516			757	59
116		525	39		
	504			798	55
111		553	35		
	450			1690	81
114		651	22		
	1250			2474	81
111		685	22		
	1200			2330	83
105		573	23		
	1167			2180	63
105		604	11		
	1167			1678	57
105		302	20		
	1133			1278	85
				22	0
				81	0
99		388	26		
	1128			1474	6
104		408	8		

CROSS SECTIONS STA. 288+00 TO STA. 294+

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	52
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



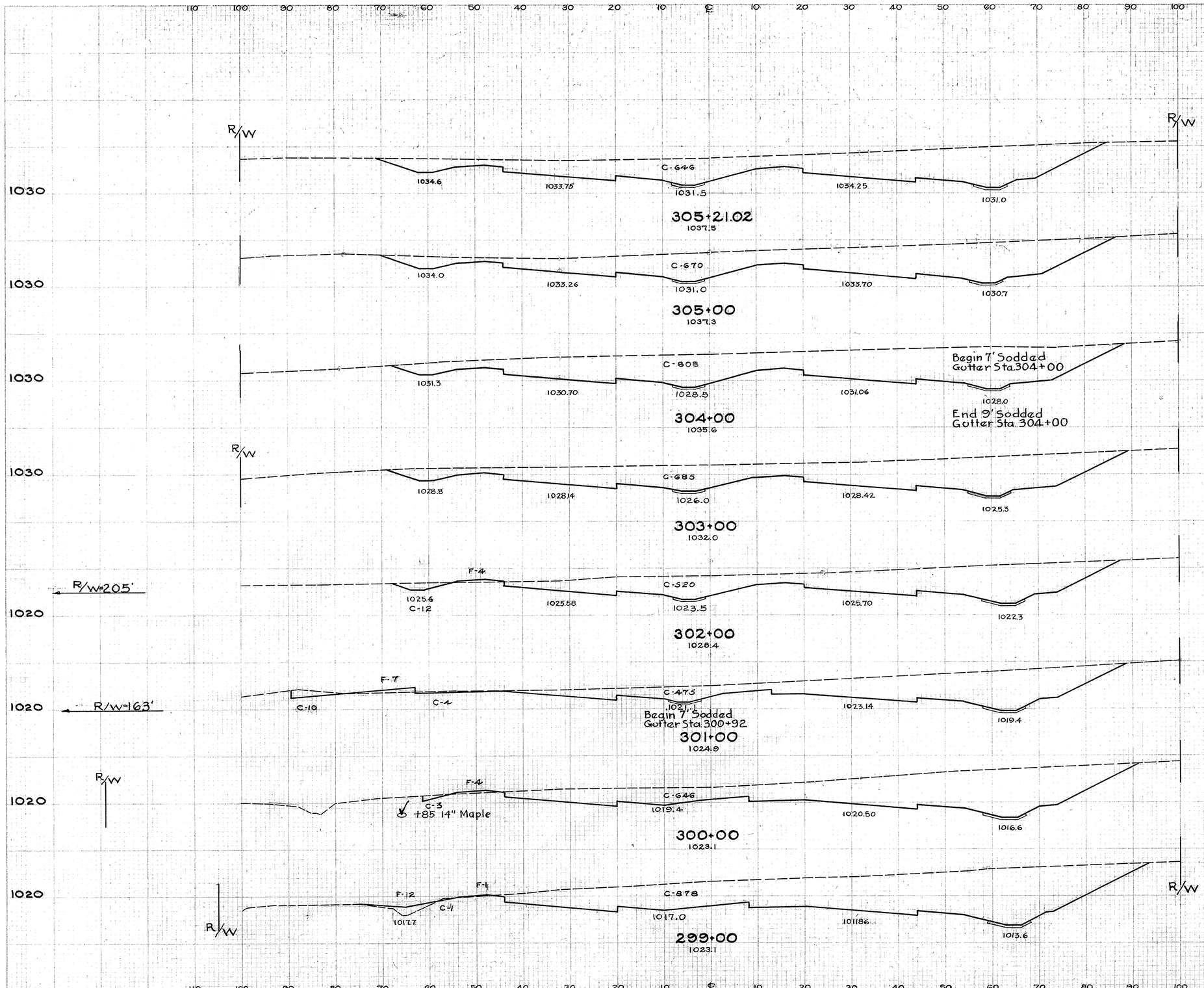
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
105		950	14		
	267			874	11
95		860	10		
	460			1247	17
112		905	14		
	498			1164	31
112		666	28		
	507			913	36
116		561	21		
	529			957	38
122		725	30		
	540			1028	52
121		662	41		
	536			887	52
120		535	30		
	531			743	40
119		468	24		
	522			715	48
116		497	41		

Sta. 294+55.78

CROSS SECTIONS STA. 294+95.78 TO STA. 298+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	53
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

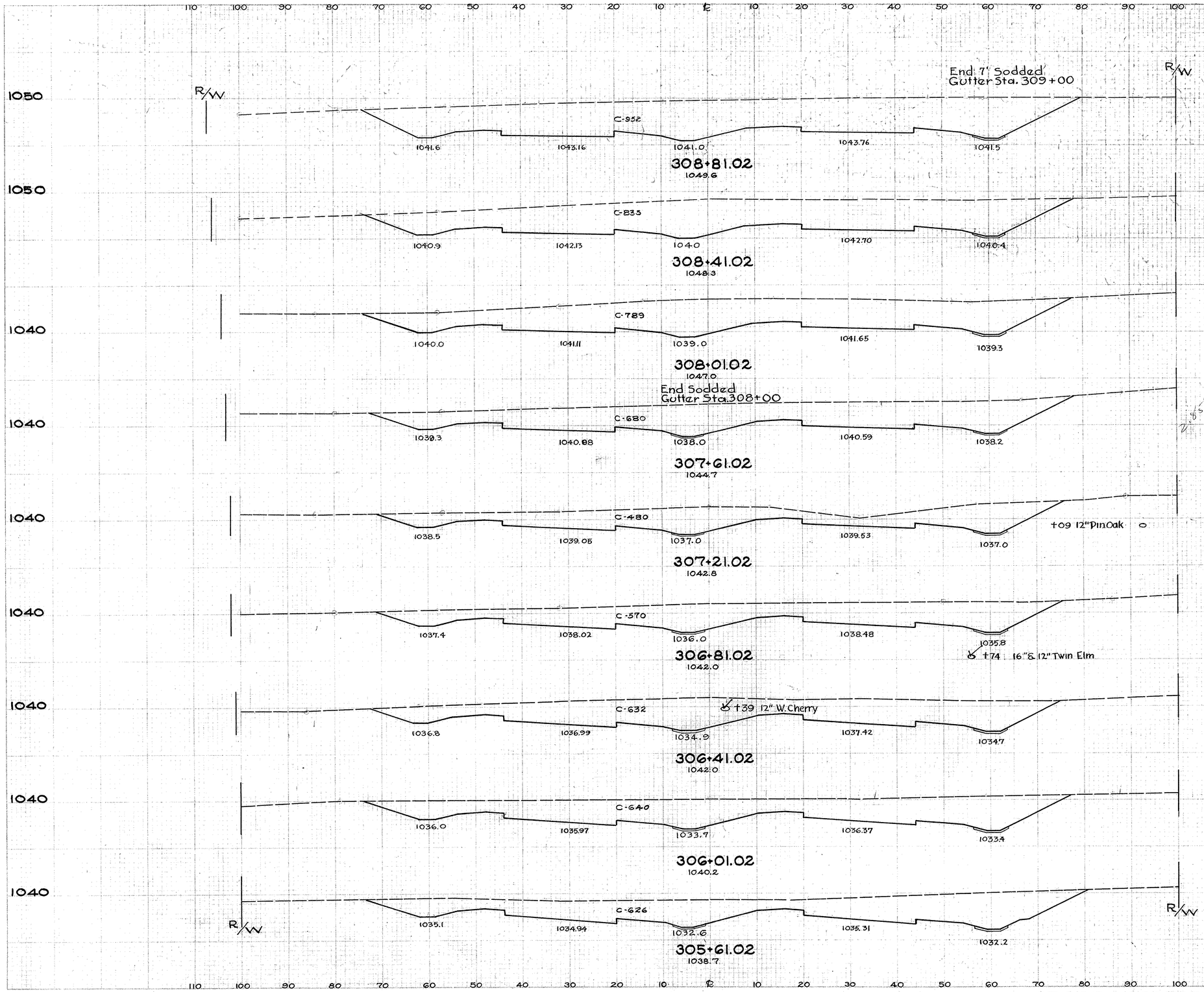


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
116		646	0		
	273			512	0
118		670	0		
	1300			2737	0
116		808	0		
	1289			2765	0
116		685	0		
	1278			2254	7
114		532	4		
				1891	20
	1194				
101		489	7		
	1255			687	106
	1089			2108	20
95		649	4		
	1211			2830	31
123		879	13		
	1267			3387	50
105		950	14		

CROSS SECTIONS STA. 299+00 TO STA. 305+21.02

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	54
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



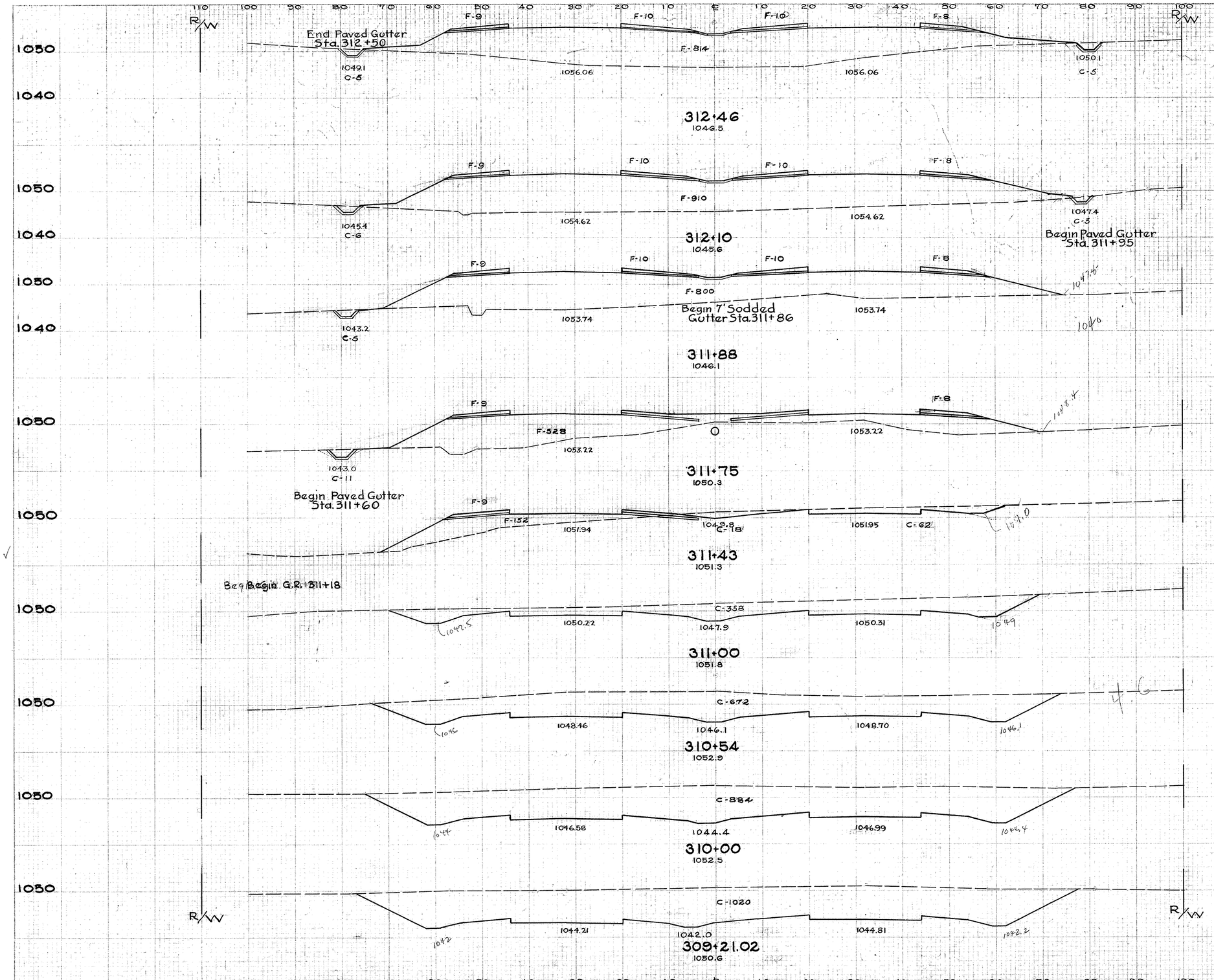
Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb
124		952	0		
	536			1324	0
117		835	0		
	527			1203	0
120		789	0		
	511			1088	0
110		680	0		
	484			859	0
108		480	0		
	476			778	0
106		570	0		
	473			890	0
107		632	0		
	487			942	0
112		640	0		
	504			938	0
115		626	0		
	513			942	0
Sta. 305+21.02 116		646	0		

SCALE - 1" = 10'

CROSS SECTIONS STA. 305+61.02 TO STA. 308+81.02

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	55
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



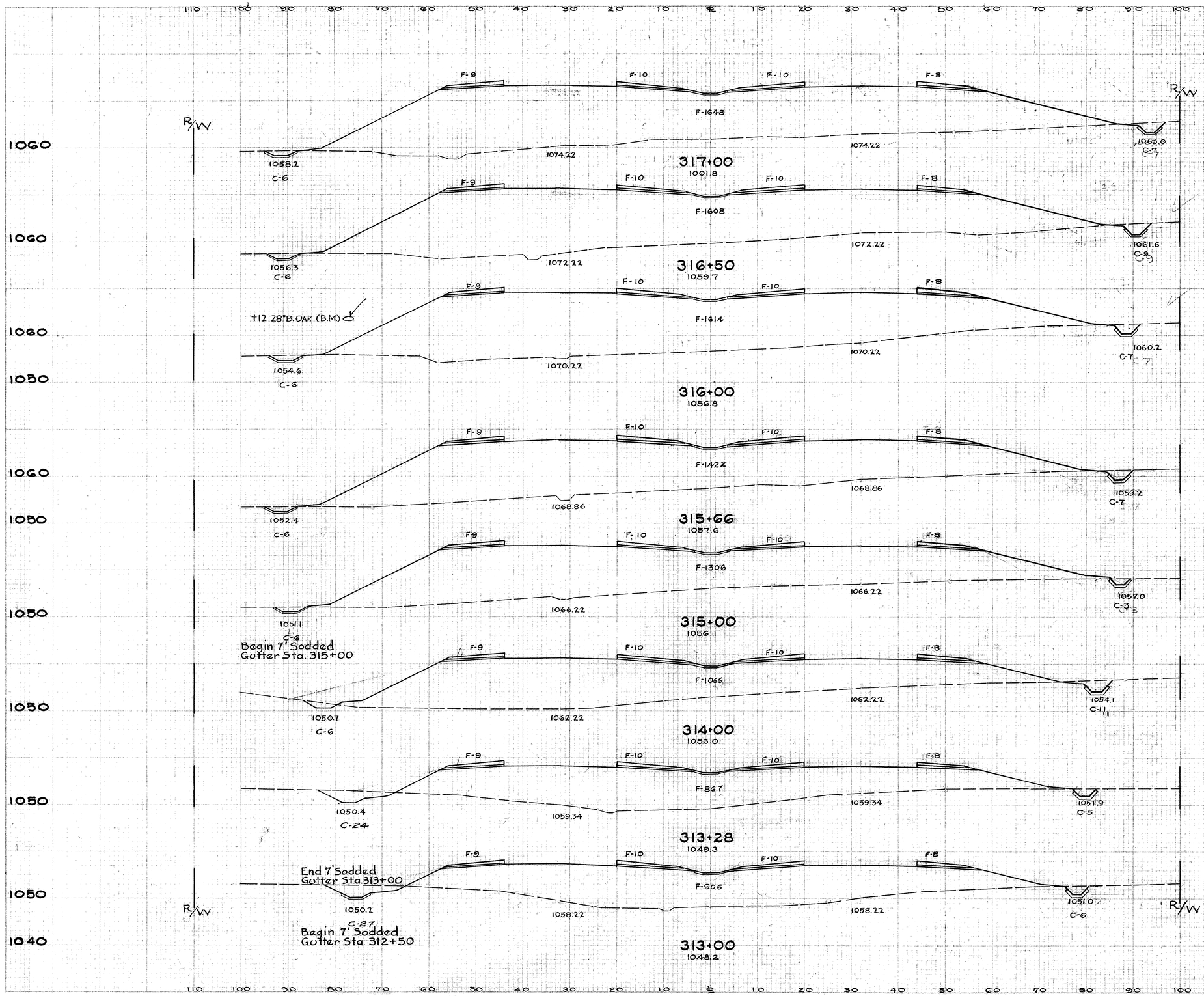
SCALE - 1" = 10'

	Seeding		End Area		Cu. Yds.	
Sta.	L.F.	S.Y.	Cut	Fill	Exc.	Emb.
308+81.02	124		952	0		
	118		10	851		
		562			1461	0
		470			13	1199
	129		1020	0		
	117		9	947		
		1124			2786	0
		286			6	727
	127		884	0		
	117		5	837		
		741			1556	0
		178			4	333
	120		672	0		
	130		11	545		
		593			878	0
		425			54	418
	112		358	0		
	109		80	161		
		528			349	128

CROSS SECTIONS STA. 309+21.02 TO STA. 312+46

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	56
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
142		13	1685		
	786			26	3084
141		15	1645		
	786			26	3052
142		13	1651		
	538			16	1958
143		13	1459		
	1038			27	3425
140		9	1343		
	1533			48	4530
136		17	1103		
	1060			61	2676
129		29	904		
	389			32	958
121		33	943		
	717			43	1794
Sta. 312+46 118		10	851		

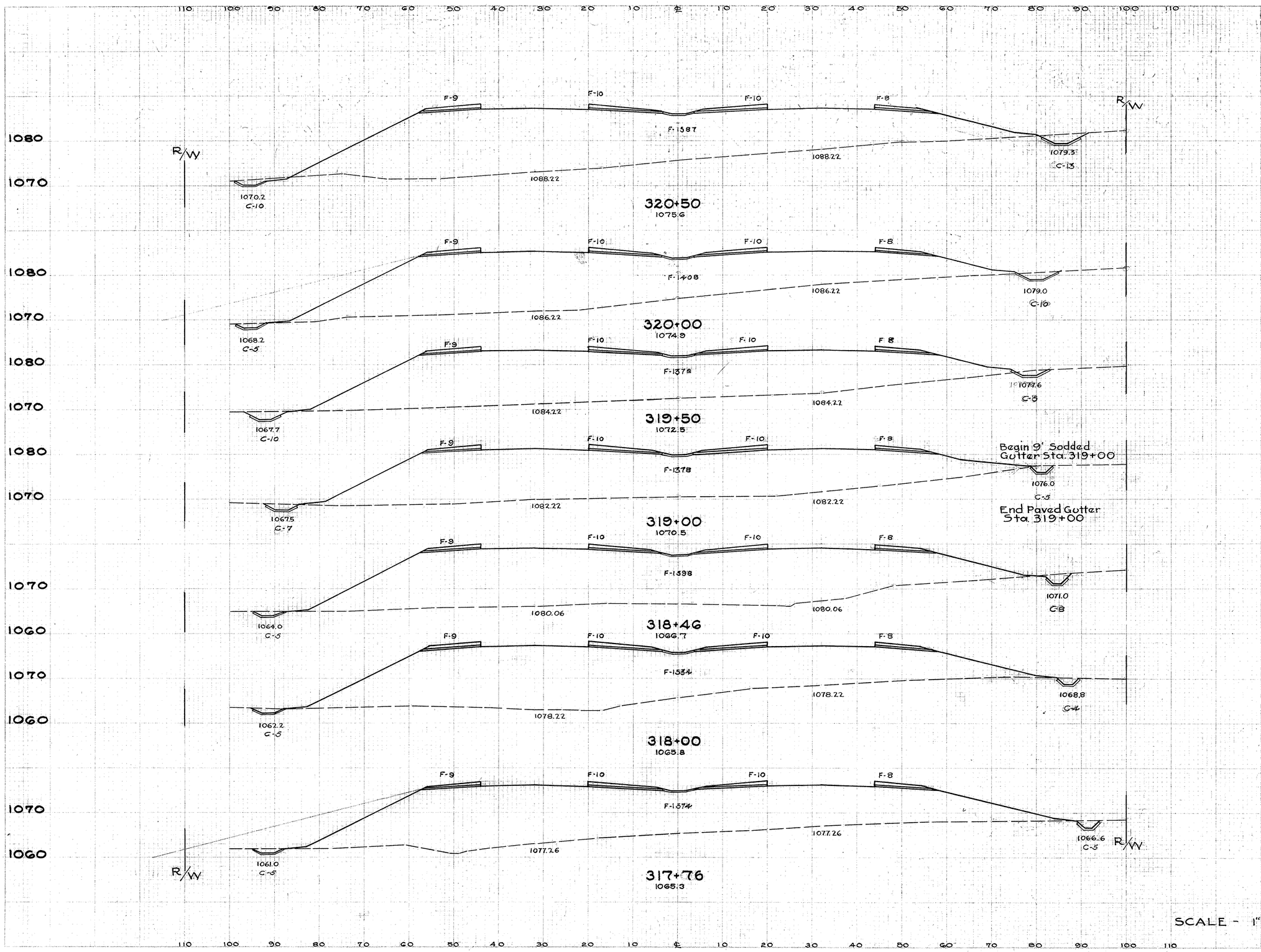
Excavation 25142 Cu. Yds.
Embankment 79803 Cu. Yds.
Seeding 34466 Sq. Yds.

SCALE - 1" = 10'

CROSS SECTIONS STA. 313+00 TO STA. 317+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	57
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



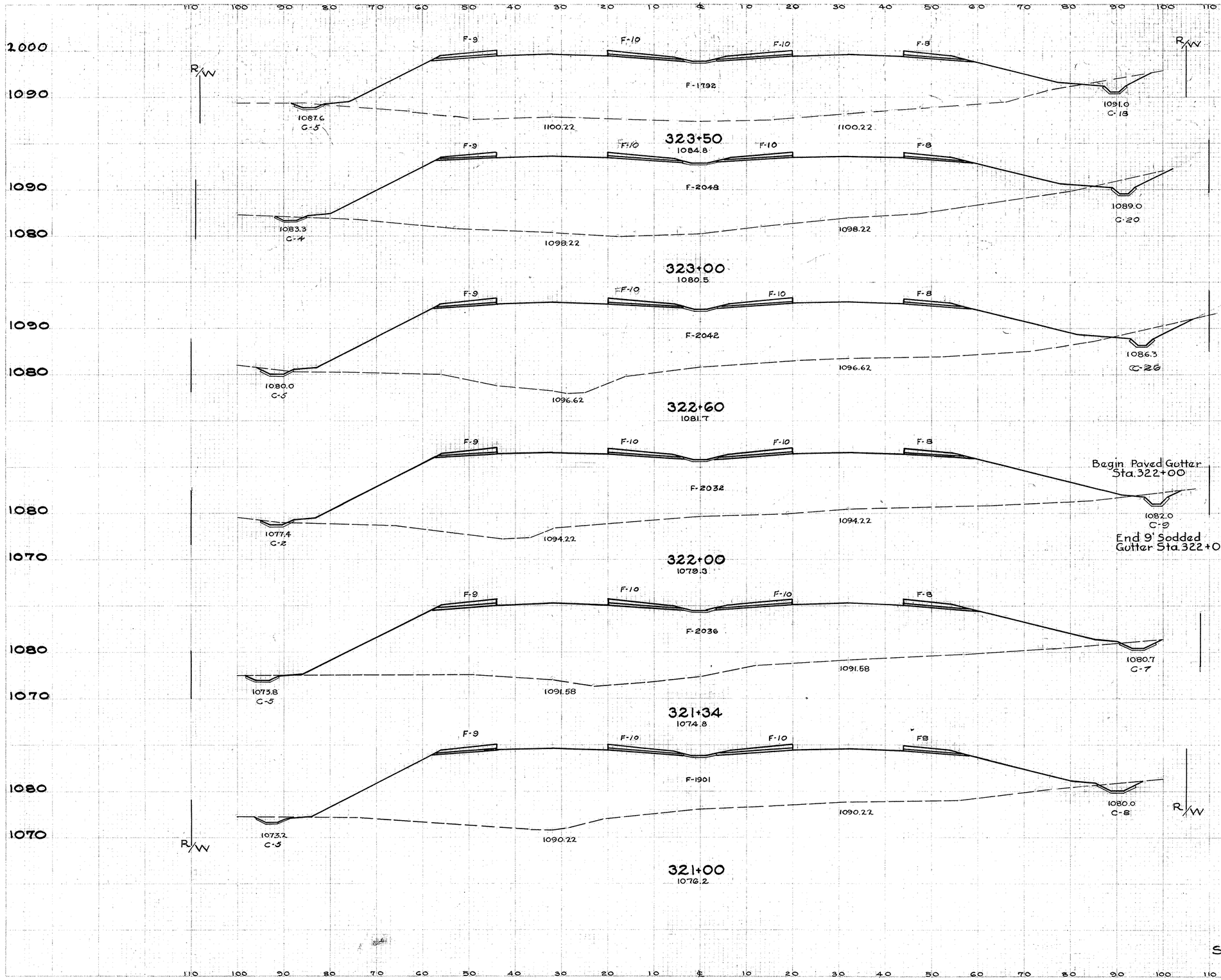
SCALE - 1" = 10'

Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
320+50	144		23	1624		
		775			35	2842
320+00	135		15	1445		
		747			28	2849
319+50	134		15	1415		
		733			25	2621
319+00	130		12	1415		
		813			25	3050
318+46	141		13	1635		
		718			19	2731
318+00	140		9	1571		
		376			8	1414
317+76	142		10	1611		
		1199			33	4639
Sta. 317+00	142		13	1685		

CROSS SECTIONS STA. 317 + 76 TO STA. 320 + 50

F.A. NO. DIVISION	STATE	PROJECT	TYPE FUNDS	58
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc	Emb
140		23	1829		
	803			44	3625
149		24	2085		
	667			41	3084
151		31	2079		
	1007			47	4609
151		11	2069		
	1104			28	5062
150		12	2073		
	555			16	2525
144		13	1938		
	800			34	3299
144		23	1624		

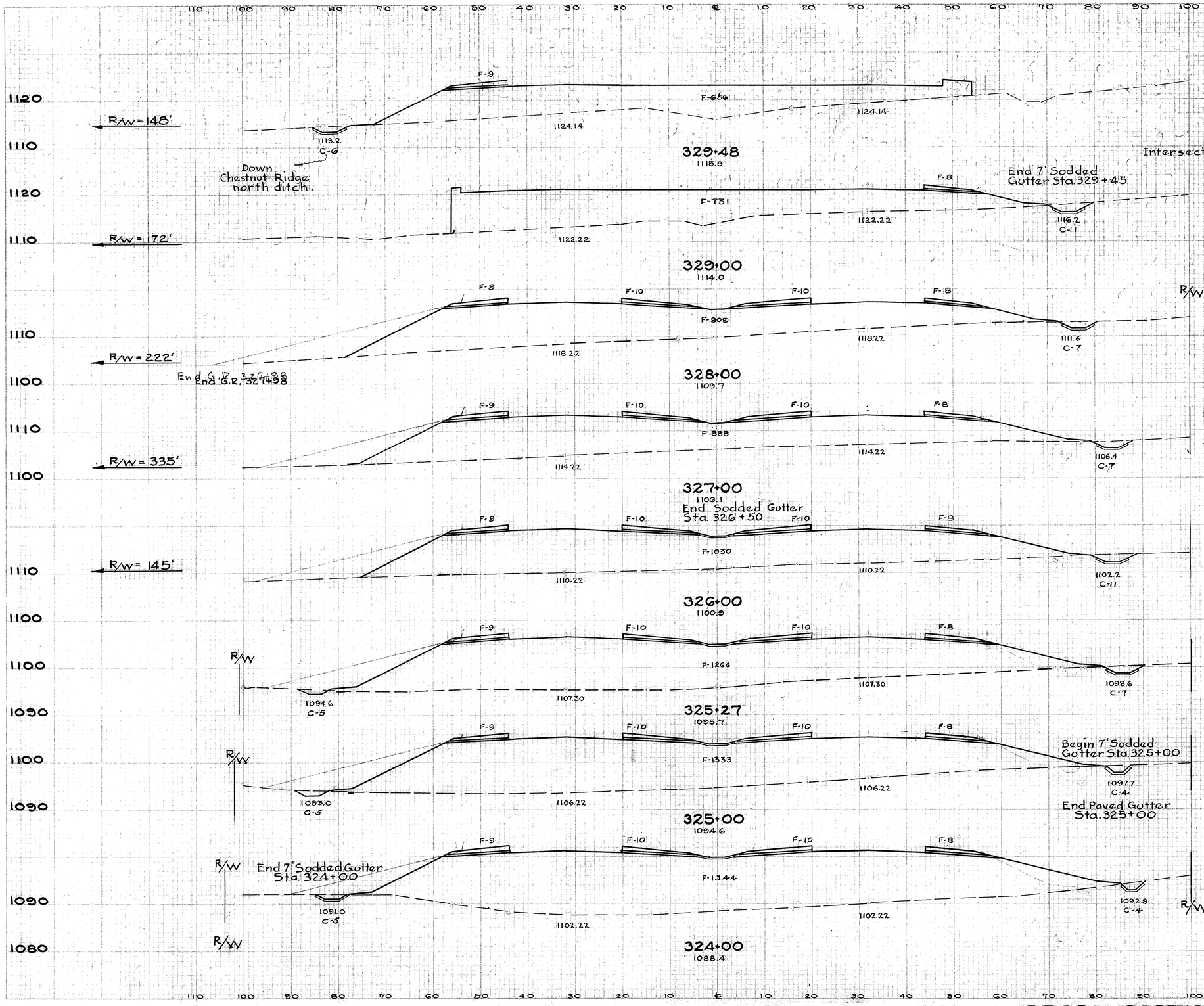
SCALE - 1" = 10'

Sta. 320+50

CROSS SECTIONS STA. 321+00 TO STA. 323+50

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	59
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



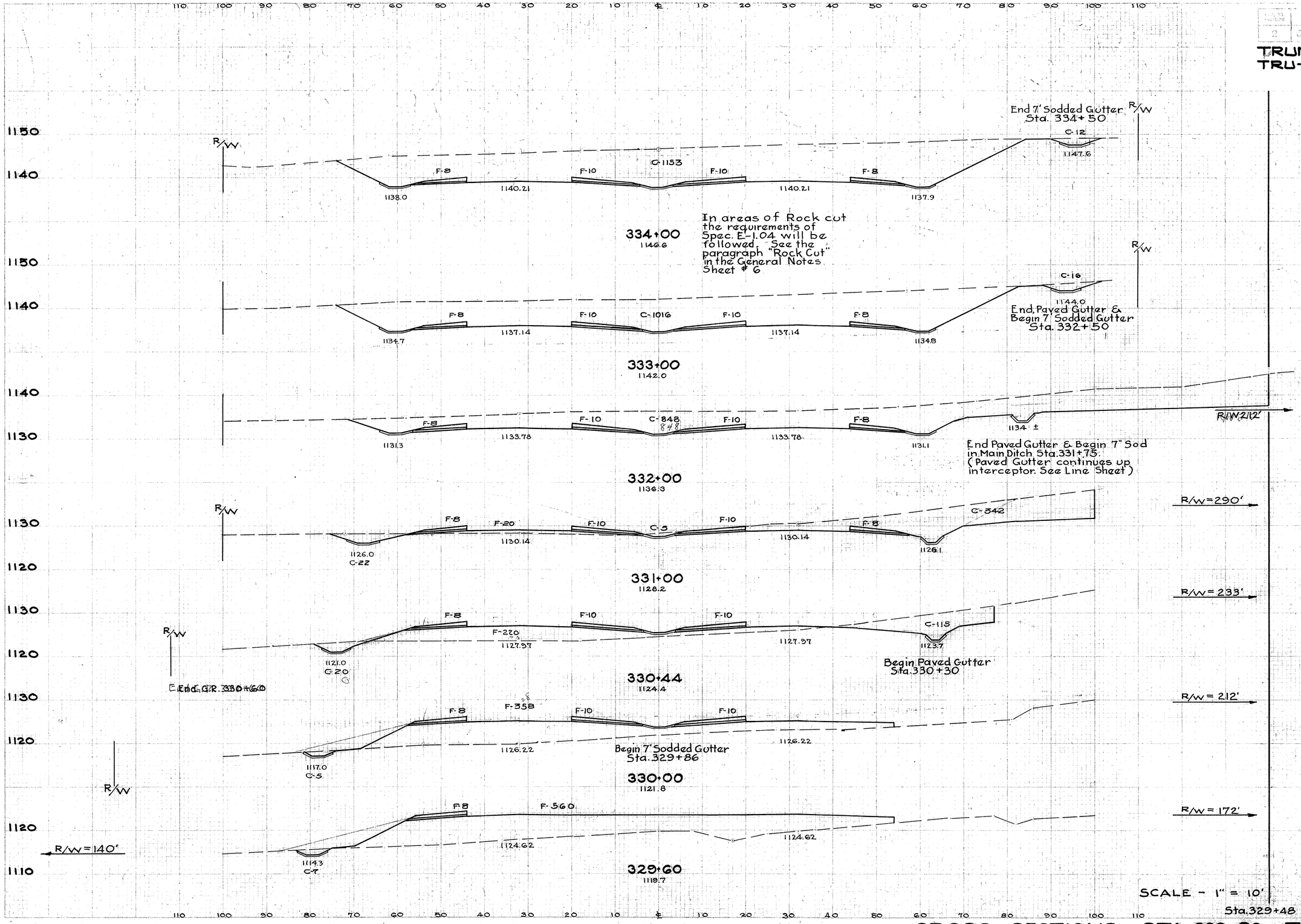
Seeding		End Area		Cu. Yds.	
L.F	S.Y.	Cut	Fill	Exc.	Emb
46		6	665		
	1166			1399	3864
	220			15	1248
40		11	739		
	944			33	3121
130		7	946		
	1478			26	3465
136		7	925		
	1456			33	3689
126		11	1067		
	1079			31	3204
140		12	1303		
	421			11	1337
141		9	1370		
	1511			33	5465
131		9	1581		
	753			30	3158
Sta. 323+50 140		23	1829		

SCALE - 1" = 10'

CROSS SECTIONS STA. 324+00 TO STA. 329+48

2		F-524(5)	TYPE FUNDS	60
			POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

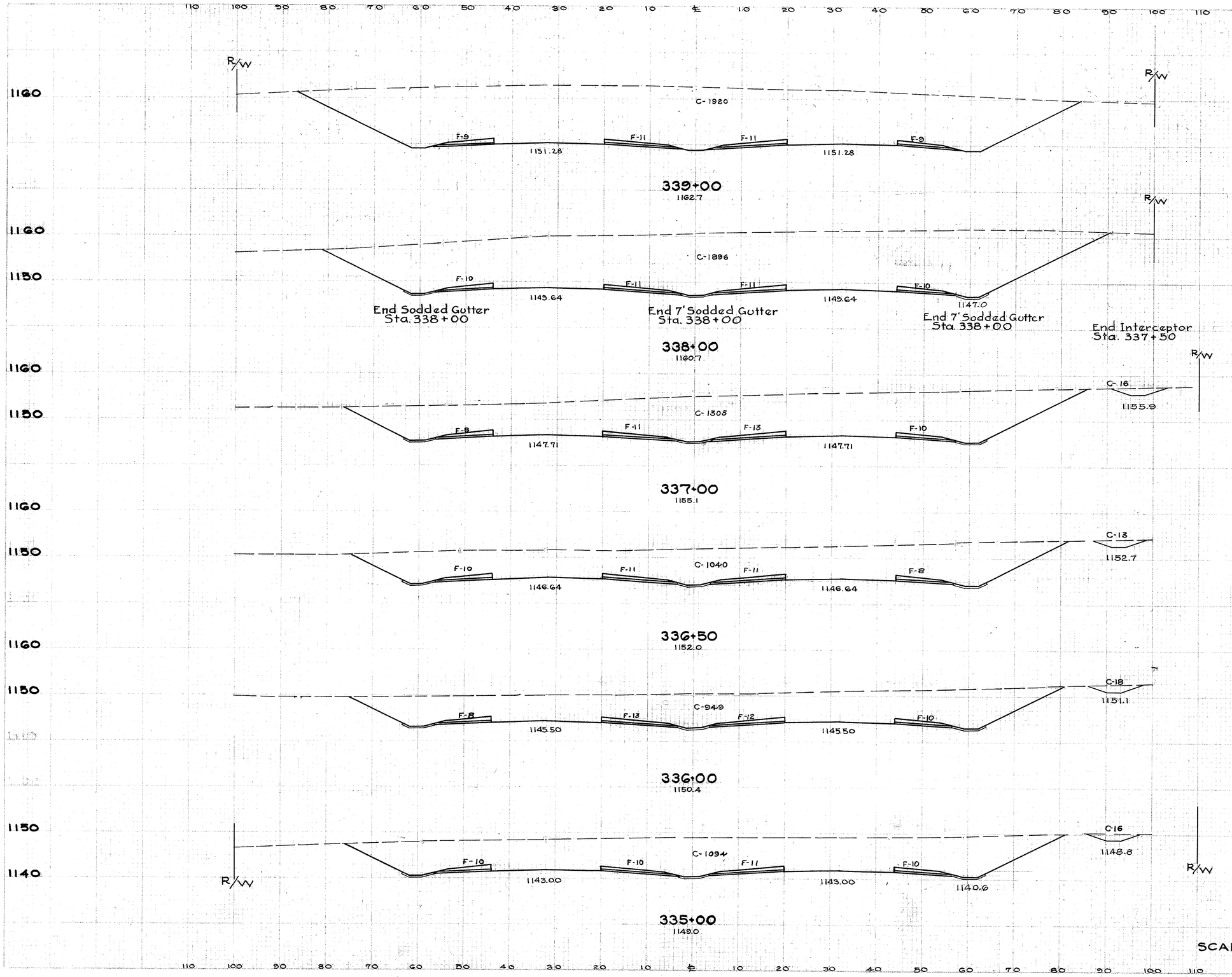


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
121		1165	36		
	1356			4069	133
123		1032	36		
	1533			3482	133
153		848	36		
	1522			2254	170
121		369	56		
	688			522	315
100		135	248		
	428			114	517
75		5	386		
	267			9	707
45		7	568		
	61			3	274
46		6	665		

CROSS SECTIONS STA. 329+60 TO STA. 334+00

				TYPE FUNDS	61
2	OHIO	F-524(5)		POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



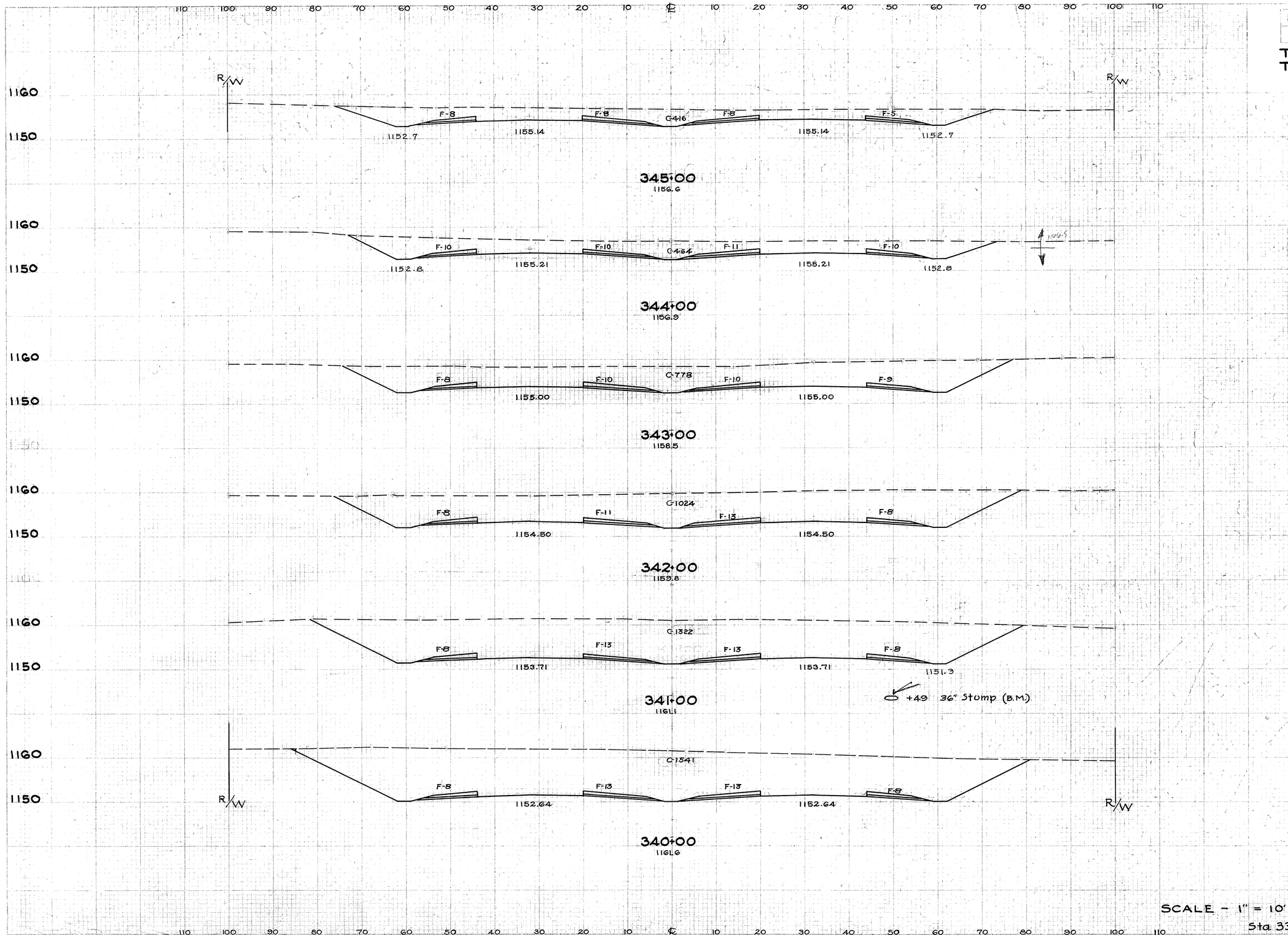
Excavation 79124 Cu.Yds
Embankment 19614 Cu.Yds
Seeding 43328 Sq.Yds

Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb
149		1920	40		
	1528			7067	152
126		1896	42		
	1433			5958	156
132		1321	42		
	722			2199	76
128		1053	40		
	711			1871	77
128		967	43		
	1433			3847	156
130		1110	41		
	1394			4213	143
Sta. 334+00 121		1165	36		

CROSS SECTIONS STA. 335+00 TO STA. 339+00

SECT. NO. DIVISION	STATE	PROJECT	TYPE FUNDS	62
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



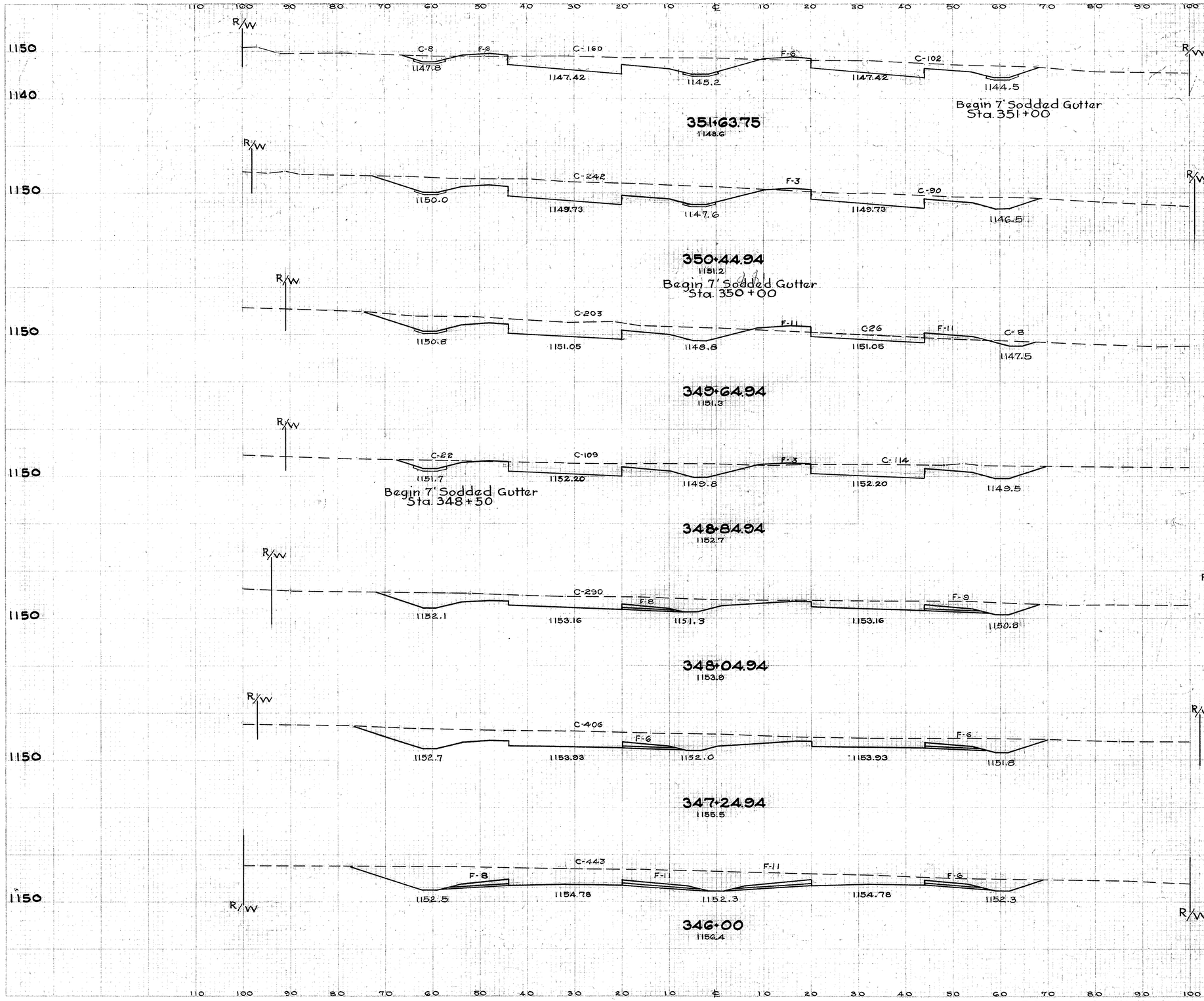
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
124		416	29		
	1367			1630	130
122		464	41		
	1394			2300	144
129		778	37		
	1450			3337	143
132		1024	40		
	1506			4345	152
139		1322	42		
	1583			5302	156
146		1541	42		
	1639			6410	152
149		1920	40		

Sta. 339+00

CROSS SECTIONS STA. 340+00 TO STA. 345+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	63
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

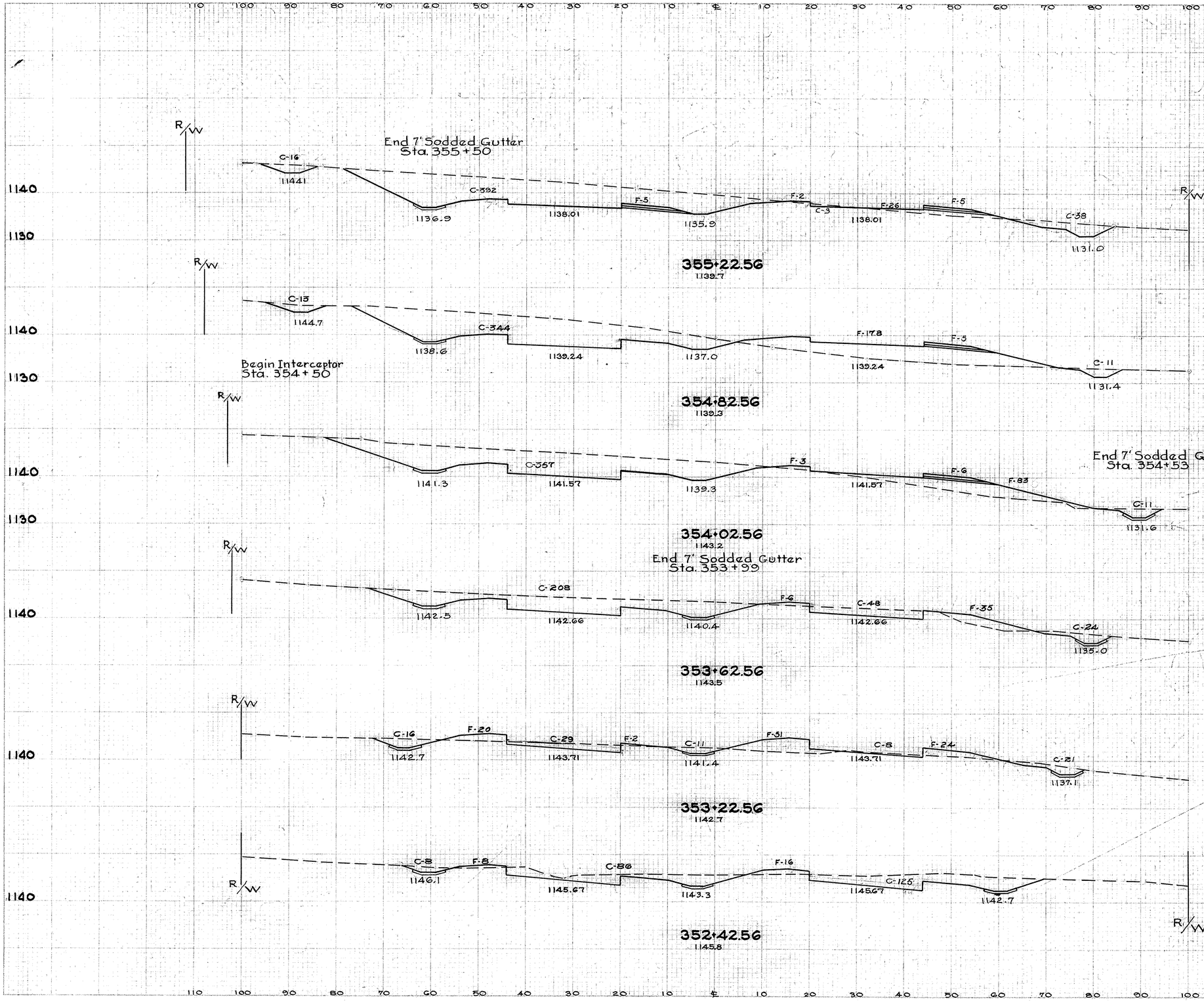


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
90		270	12		
	1283			1325	33
104		332	3		
	951			843	37
110		237	22		
	956			714	37
105		245	3		
	978			793	30
115		290	17		
	1049			1031	43
121		406	12		
	1694			1965	111
123		443	36		
	1372			1591	120
Sta. 345+00 124		416	29		

CROSS SECTIONS STA. 346+00 TO STA. 351+63.75

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	64
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



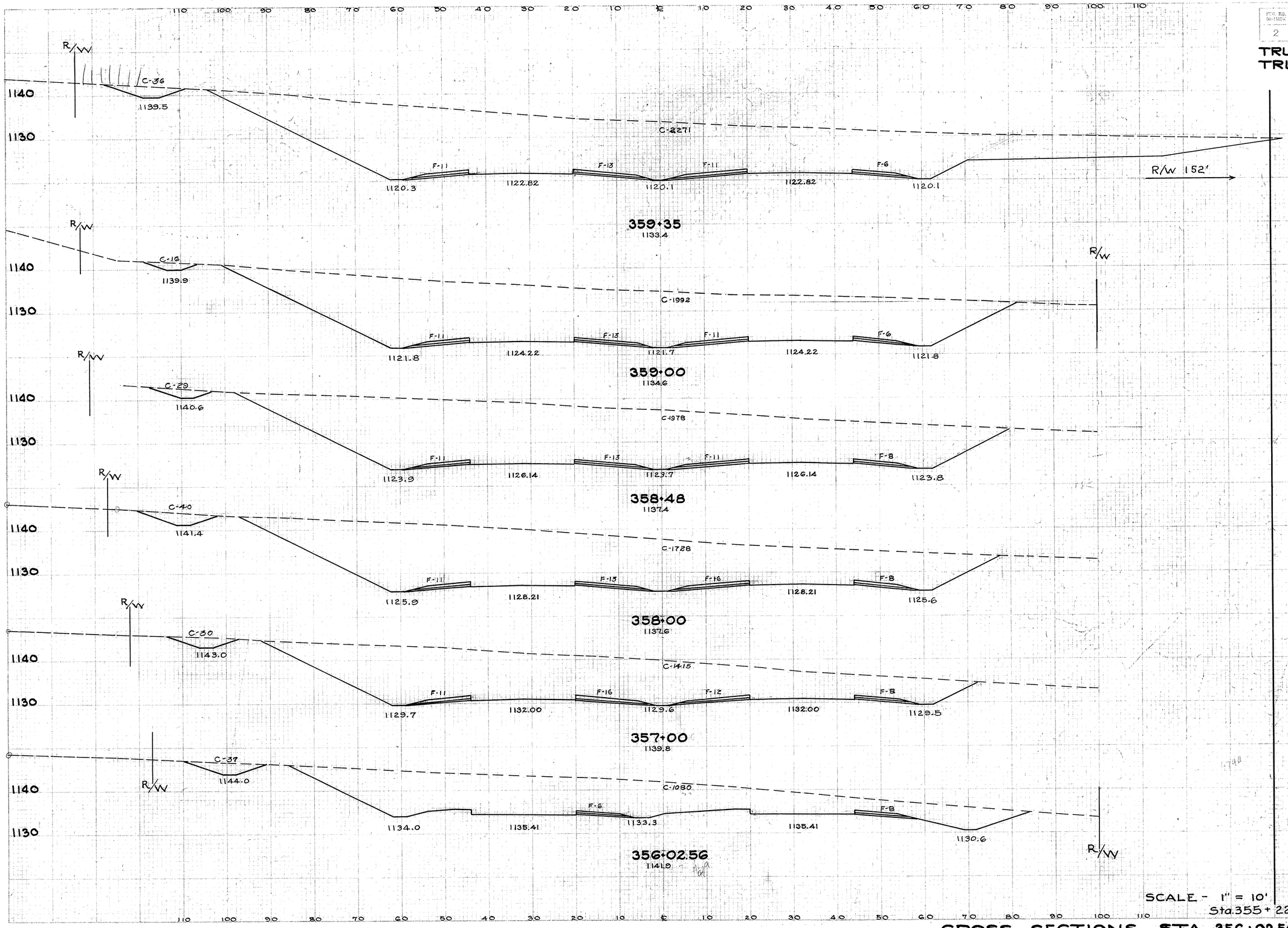
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
150		449	38		
	667			605	164
150		368	183		
	1267			1090	407
135		368	92		
	549			480	98
112		280	41		
	482			270	102
105		85	97		
	867			450	179
90		219	24		
	790			714	53
90		270	12		

SCALE 1" = 10
Sta 351+63.75

CROSS SECTIONS STA. 352+42.56 TO STA. 355+22.56

STATE ROAD DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-524(5)	POST WAR	65 / 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



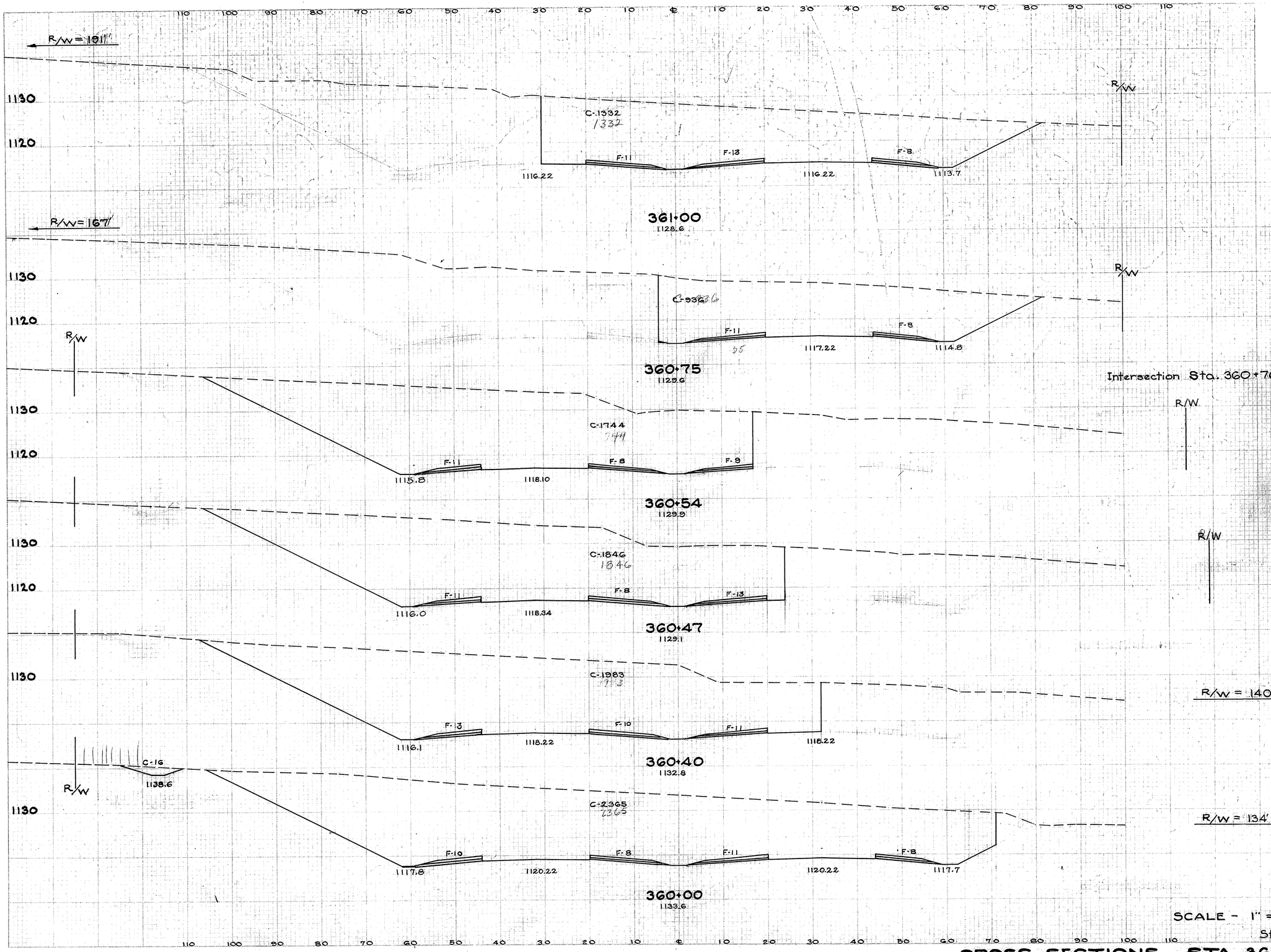
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
247		2307	41		
	832			2797	53
181		2008	41		
	1031			3866	81
176		2007	45		
	936			3356	81
175		1768	48		
	1872			5950	176
162		1445	47		
	1792			4624	110
169		1117	14		
	1418			2320	77
Sta. 355+22.56 150		449	38		

SCALE - 1" = 10'

CROSS SECTIONS STA. 356+02.56 TO STA. 359+35

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	66
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



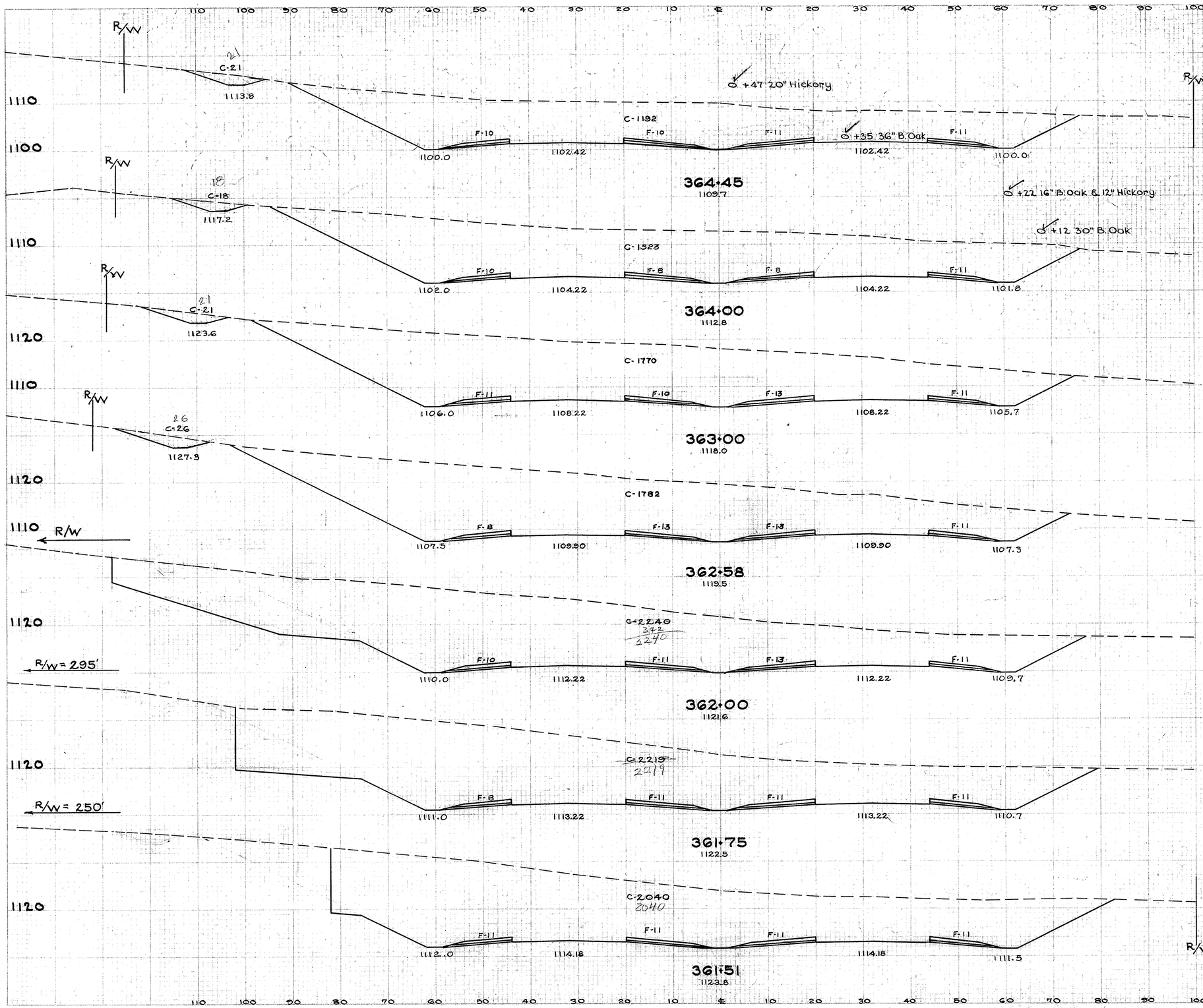
Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
91		1332	32		
	231			1050	24
75		936	19		
	222			1042	18
	3549			10250	45
115		1744	28		
	91			465	8
119		1846	32		
	93			496	9
120		1983	34		
	571			3232	52
137		2381	37		
	1387			5643	94
Sta. 359+35 247		2307	41		

Excavation 79,190 Cu. Yds.
Embankment 35,740 Cu. Yds.
Seeding 40,810 Sq. Yds.

CROSS SECTIONS STA. 360+00 TO STA. 361+00

I.D. NO. DIVISION	STATE	PROJECT	TYPE FUNDS	67
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

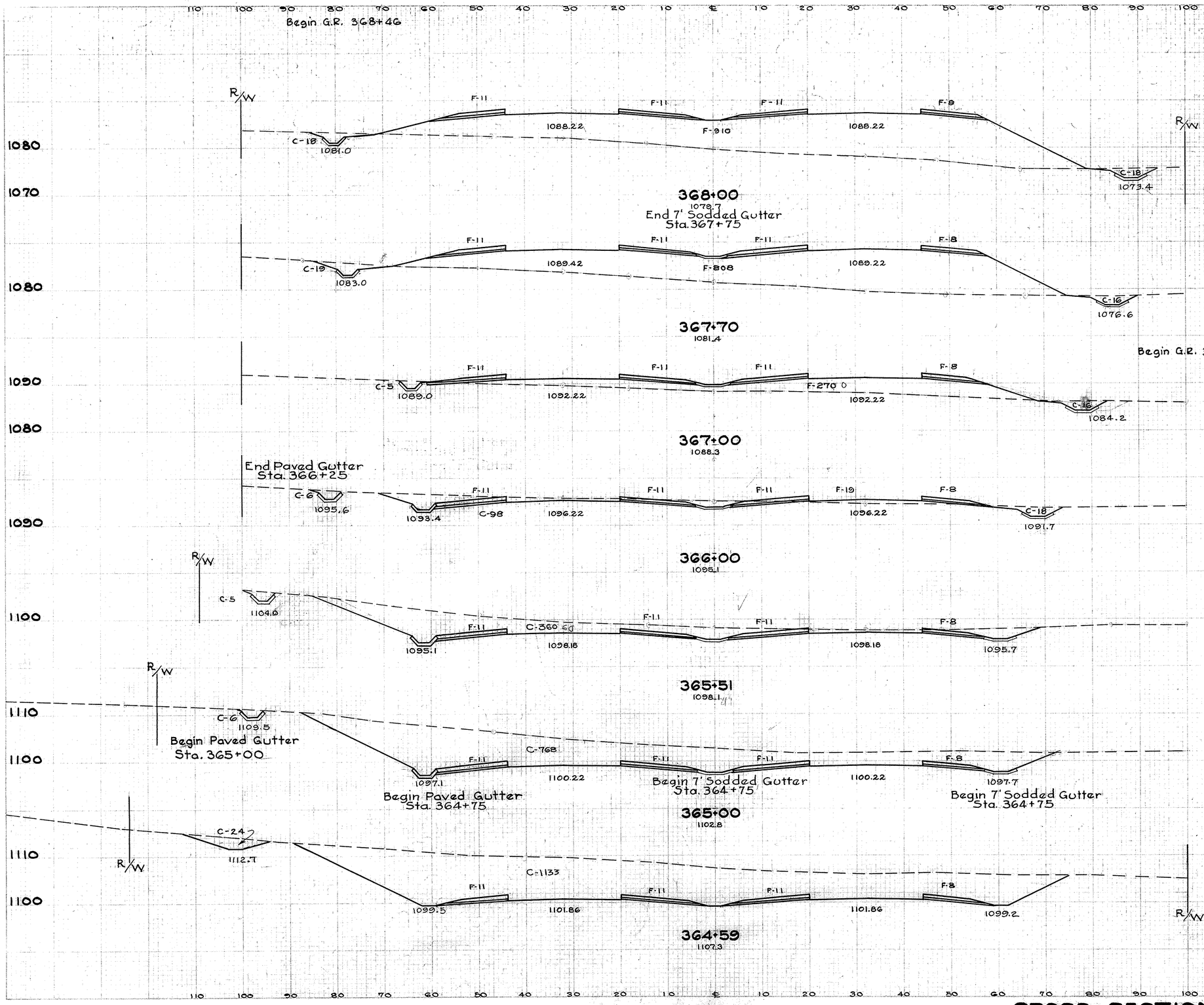


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
168		1213	42		
168		1212			
	847			2295	66
	847				
171		1541	37		
171					
	1911			6171	152
173		1791	45		
	814			2799	70
176		1808	45		
	1125			4348	97
173		2240	45		
	444			2064	40
147		2219	41		
	372			1893	38
132		2040	44		
	632			3185	72
91		1332	32		
Sta. 361+00					

CROSS SECTIONS STA. 361+51 TO STA. 364+45

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	68
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

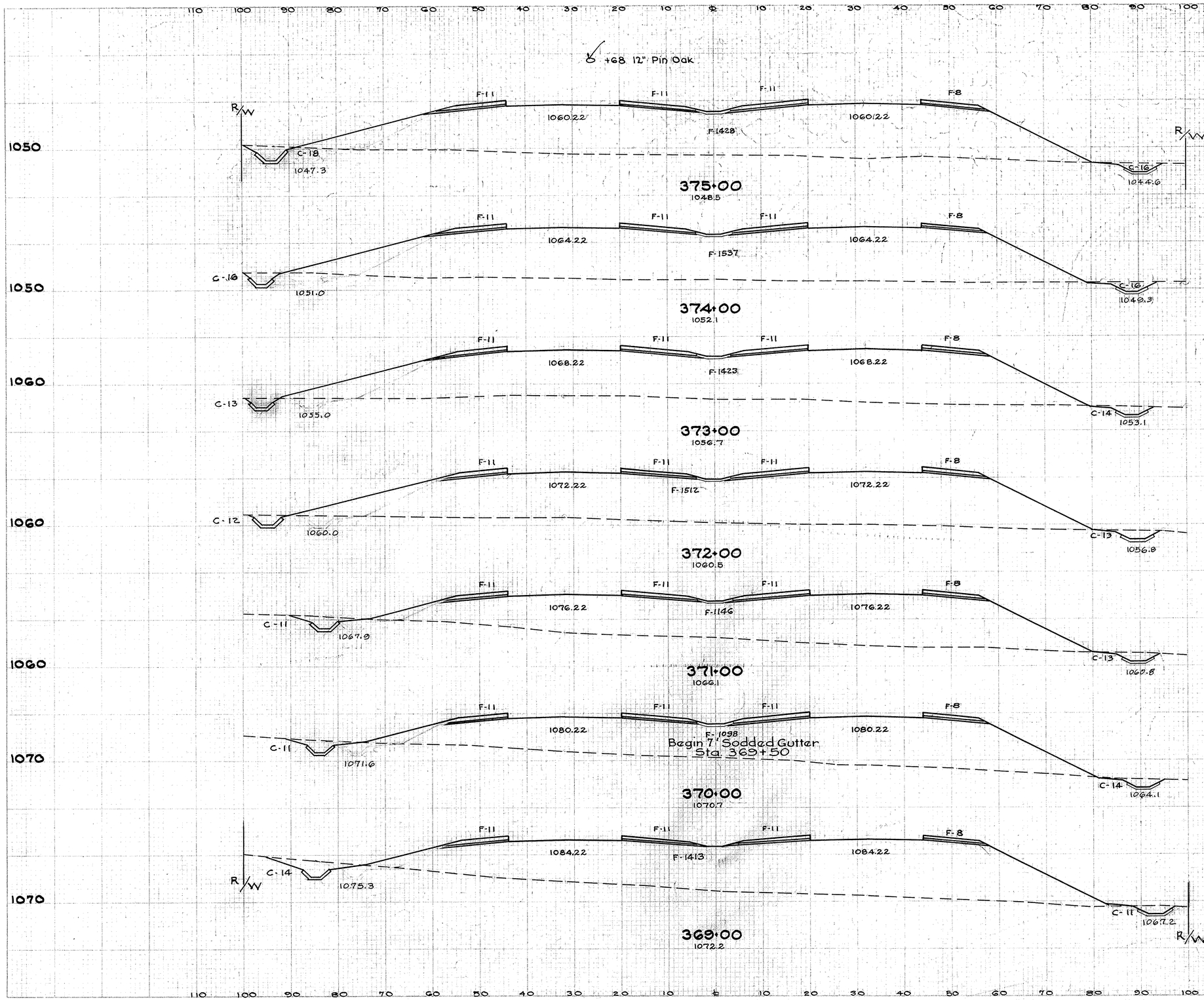


Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
	140		36	951		
		452			39	1000
	131		35	849		
		937			73	1504
	110		21	311		
		1206			265	687
	107		122	60		
		604			442	92
	115		365	41		
		680			1075	78
	125		774	41		
		638			1466	62
	155		1157	41		
		251			614	22
Sta. 364+45	168		1213	42		

CROSS SECTIONS STA. 364+59 TO STA. 368+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	69
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



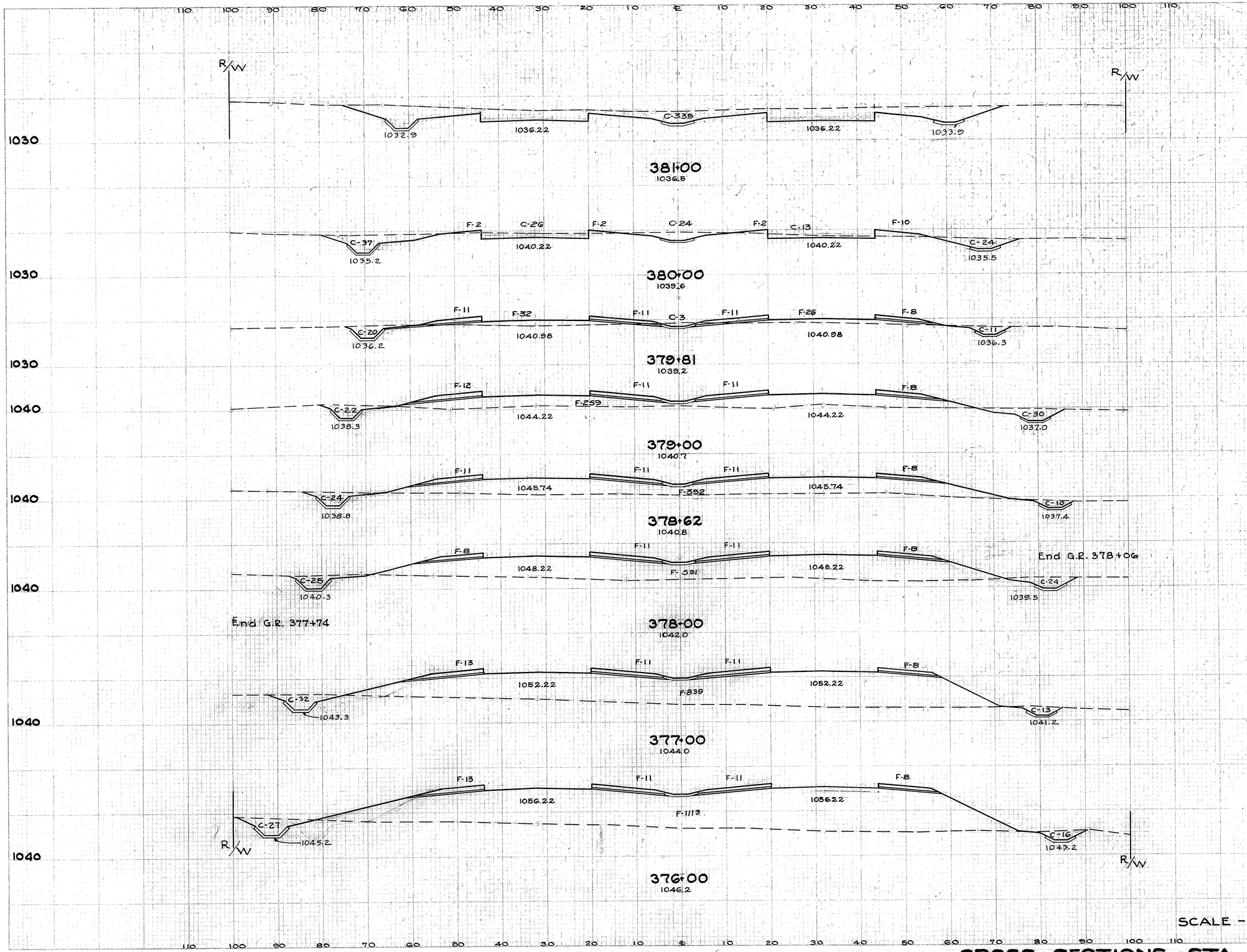
SCALE - 1" = 10'

Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb
136		34	1469		
	1528			122	5643
139		32	1578		
	1544			109	5634
139		27	1464		
	1539			96	5587
138		25	1553		
	1472			91	5074
127		24	1187		
	1422			91	4308
129		25	1139		
	1489			93	4802
139		25	1454		
	1550			113	4454
Sta. 368+00 140		36	951		

CROSS SECTIONS STA. 369+00 TO STA. 375+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	70
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



SCALE - 1" = 10'

Sta. 375+00

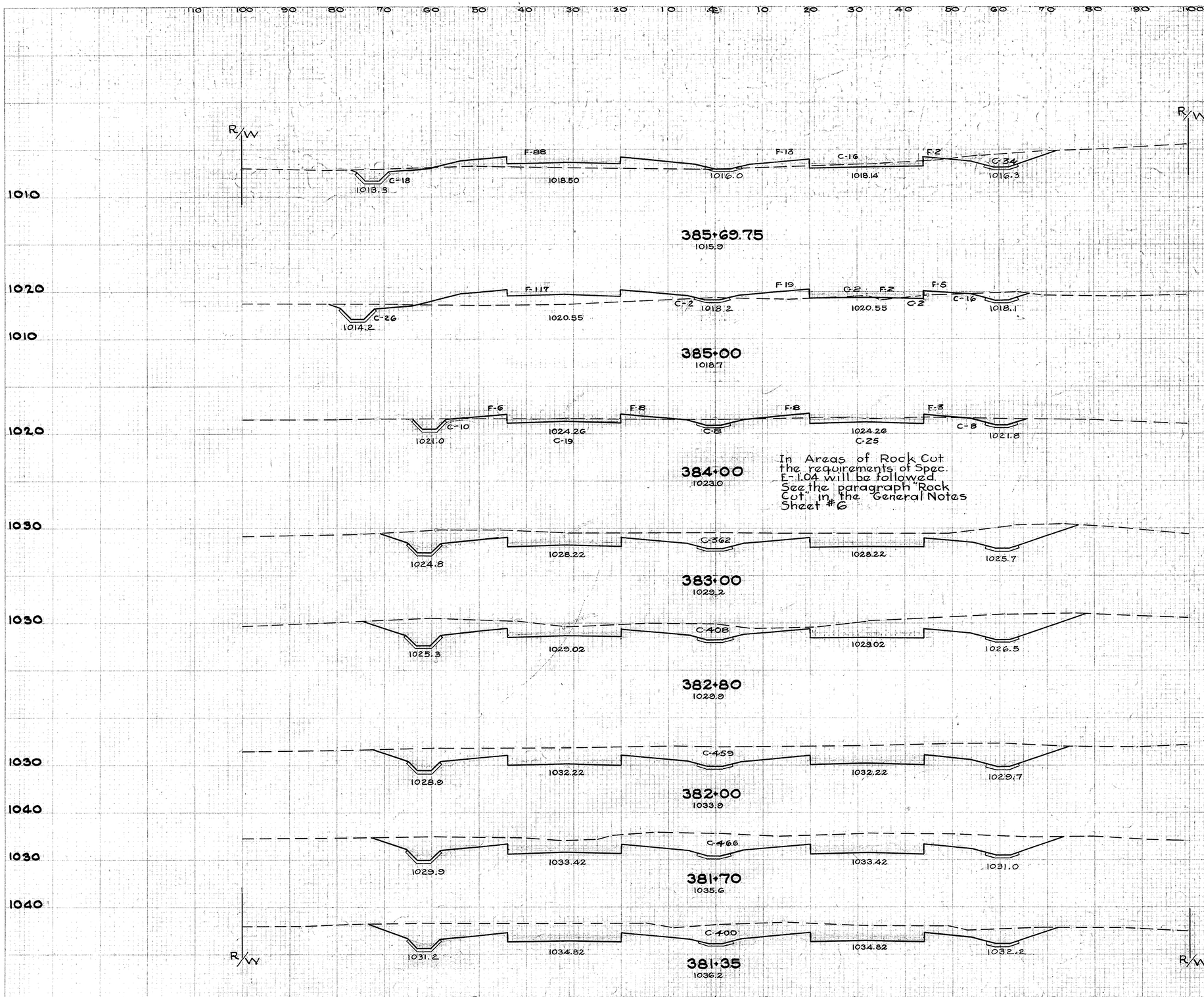
Seeding L.F.	Seeding S.Y.	End Area Cu.	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
100		339	0		
	1167			857	30
110		124	16		
	222			56	40
100		34	99		
	990			129	600
120		52	301		
	515			60	516
124		34	433		
	854			95	1213
124		49	629		
	1372			174	2798
123		45	882		
	1439			163	3774
136		43	1156		
	1511			143	4861
136		34	1469		

CROSS SECTIONS STA. 376+00 TO STA. 381+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(S)	POST WAR

71
154

TRUMBULL COUNTY
TRU - 62 - (4.59-9.67)

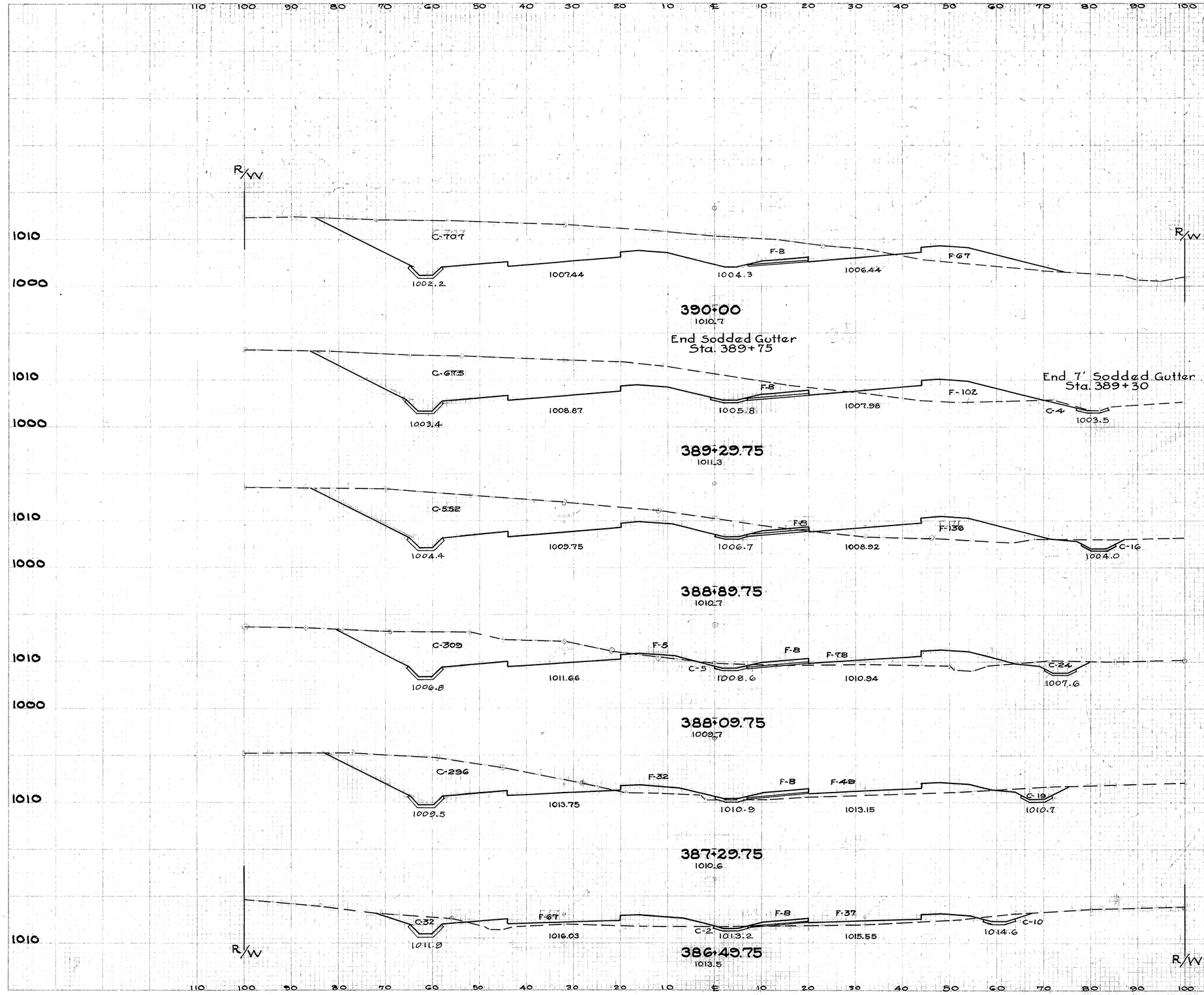


Seeding		End Area		Cu. Yds.	
L.F	S.Y.	Cut	Fill	Exc.	Emb.
100		68	103		
	775			151	319
100		48	143		
	1017			219	311
83		70	25		
	1028			800	46
102		362	0		
	231			285	0
106		408	0		
	920			1285	0
101		459	0		
	332			514	0
98		466	0		
	385			561	0
100		400	0		
	389			479	0
Sta. 381+00 100		339	0		

CROSS SECTION STA. 381+35 TO STA. 385+69.75

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	72
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



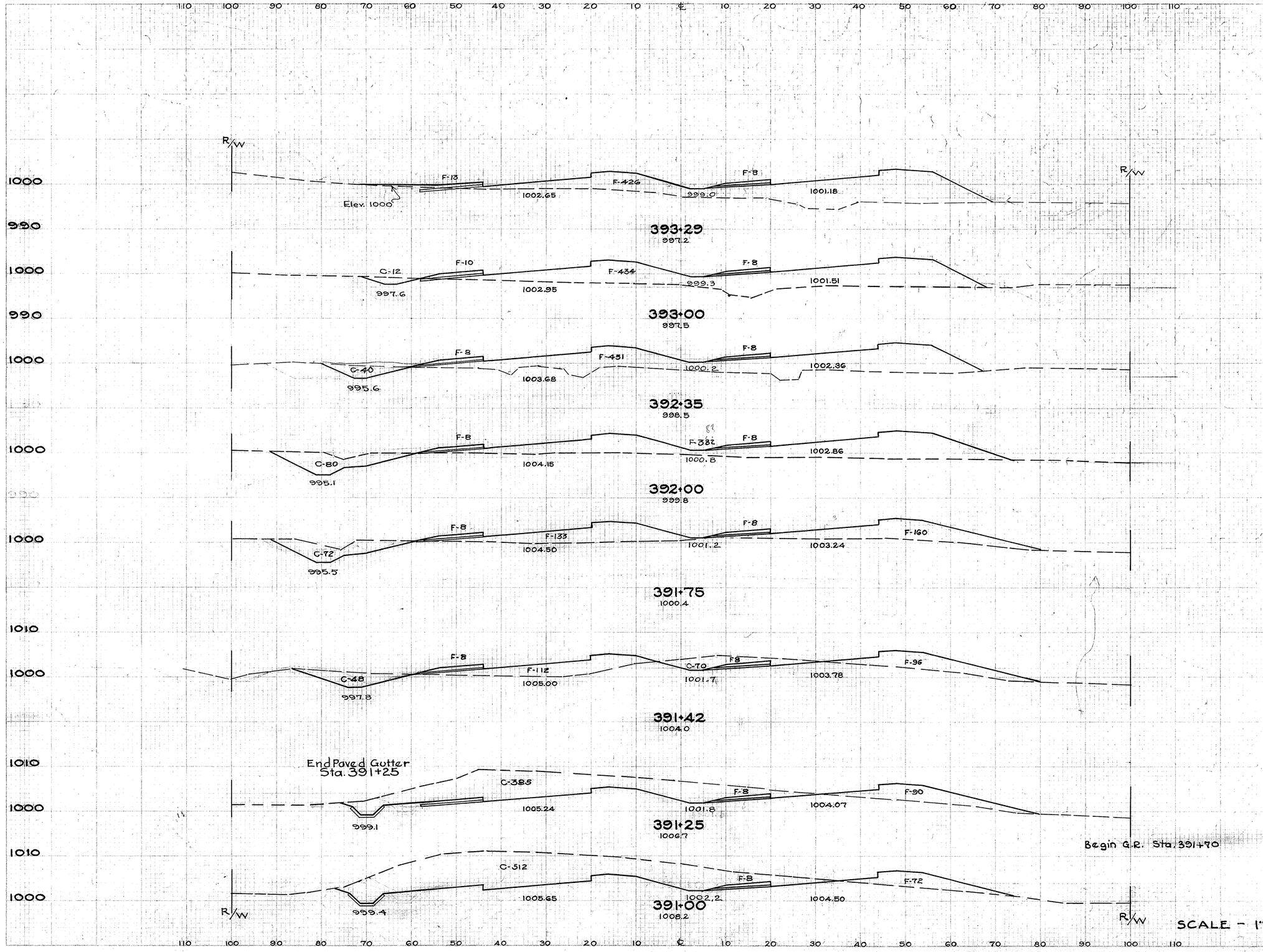
Excavation 19026 Cu. Yds.
Embankment 29550 Cu. Yds.
Seeding 31369 S.Y.

Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
385+69.75	100		68	103		
	92		44	112		
		853			166	318
	114		515	88		
		916			532	296
	115		338	91		
		1018			967	265
	128		568	144		
		1080			1342	348
	124		679	110		
		560			924	188
	130		707	76		
		991			1803	240

CROSS SECTIONS STA. 386+49.75 TO STA. 390+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	73
2	OHIO	F-524 (S)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



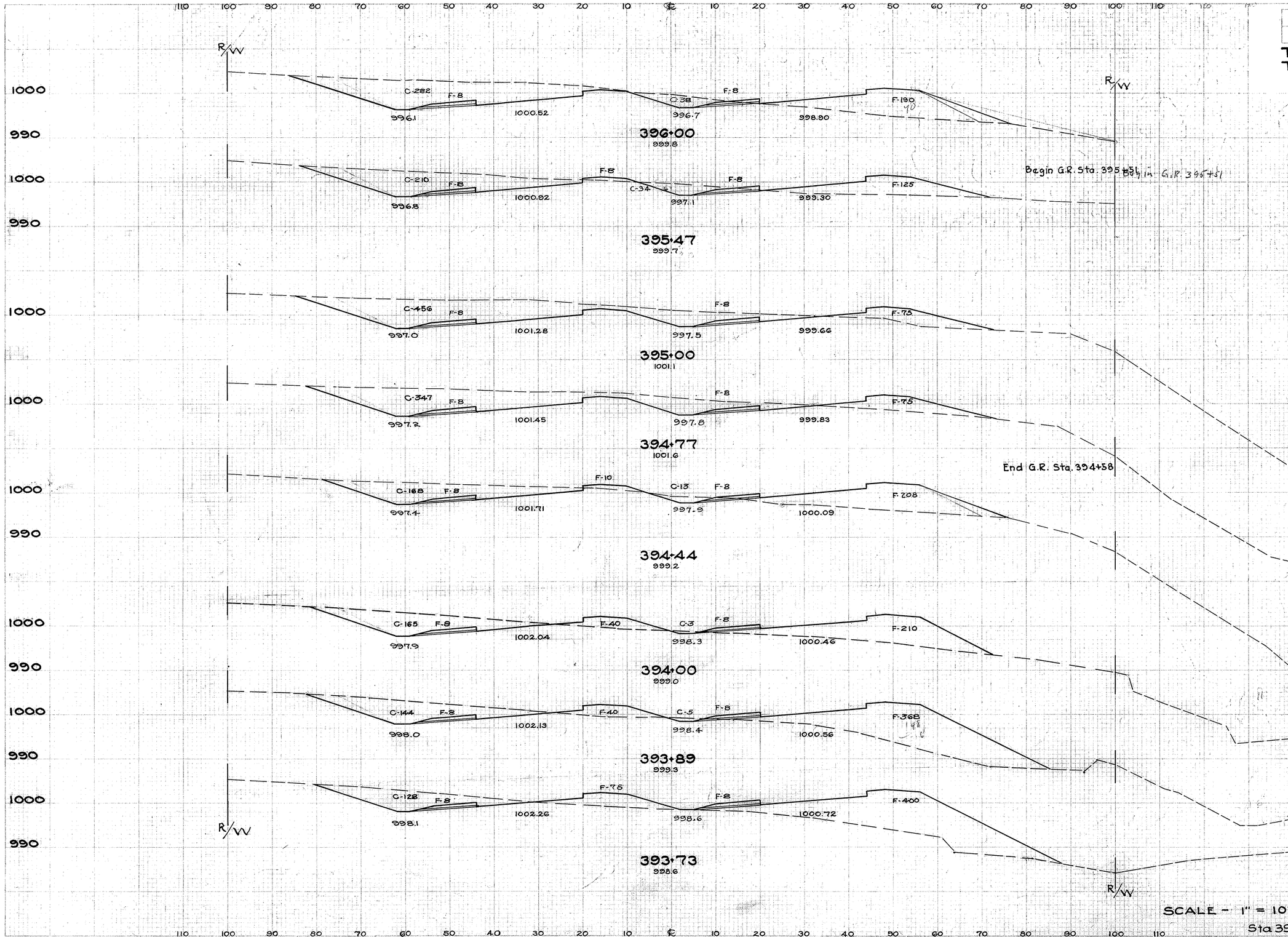
SCALE - 1" = 10'

Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb
390+00	120		707	75		
		1339			2258	287
	121		512	80		
		339			415	83
	123		385	98		
		250			158	101
	142		118	224		
		524			116	326
	144		72	309		
		386			70	327
	134		80	338		
		502			78	561
	124		40	467		
		856			62	1106
	113		12	452		
		369			6	482
	116		0	447		

CROSS SECTIONS STA. 391+00 TO STA. 393+29

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	74
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

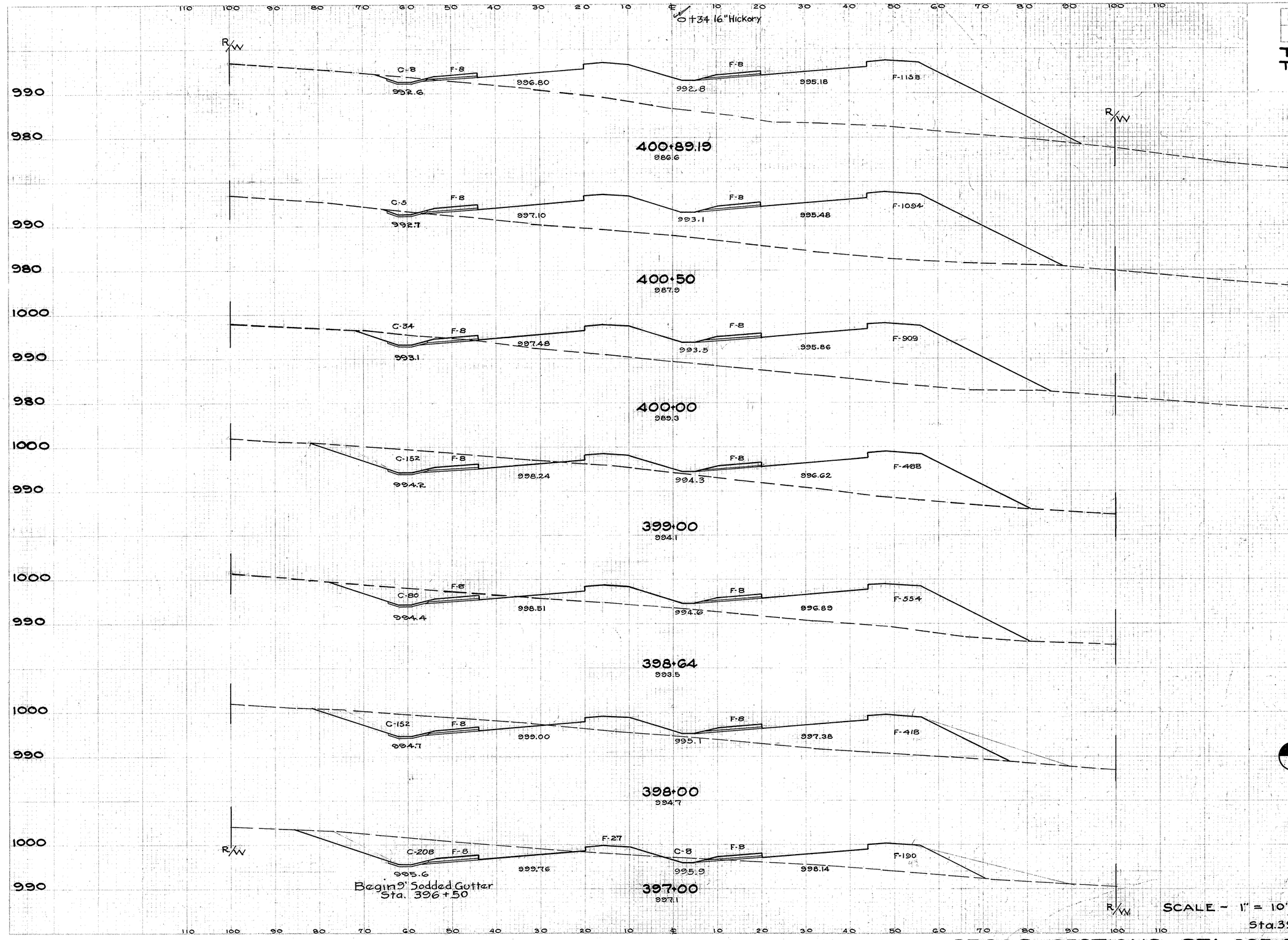


Sta	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
396+00	131		320	206		
		771			553	348
395+47	131		244	149		
		684			609	209
395+00	131		456	91		
		331			342	78
394+77	128		347	91		
		466			323	198
394+44	126		181	234		
		621			284	407
394+00	128		168	266		
		166			65	141
393+89	143		149	424		
		256			82	271
393+73	145		128	491		
		638			104	764
Sta 393+29	116		0	447		

CROSS SECTIONS STA. 393+73 TO STA. 396+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	75
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 -(4.59-9.67)

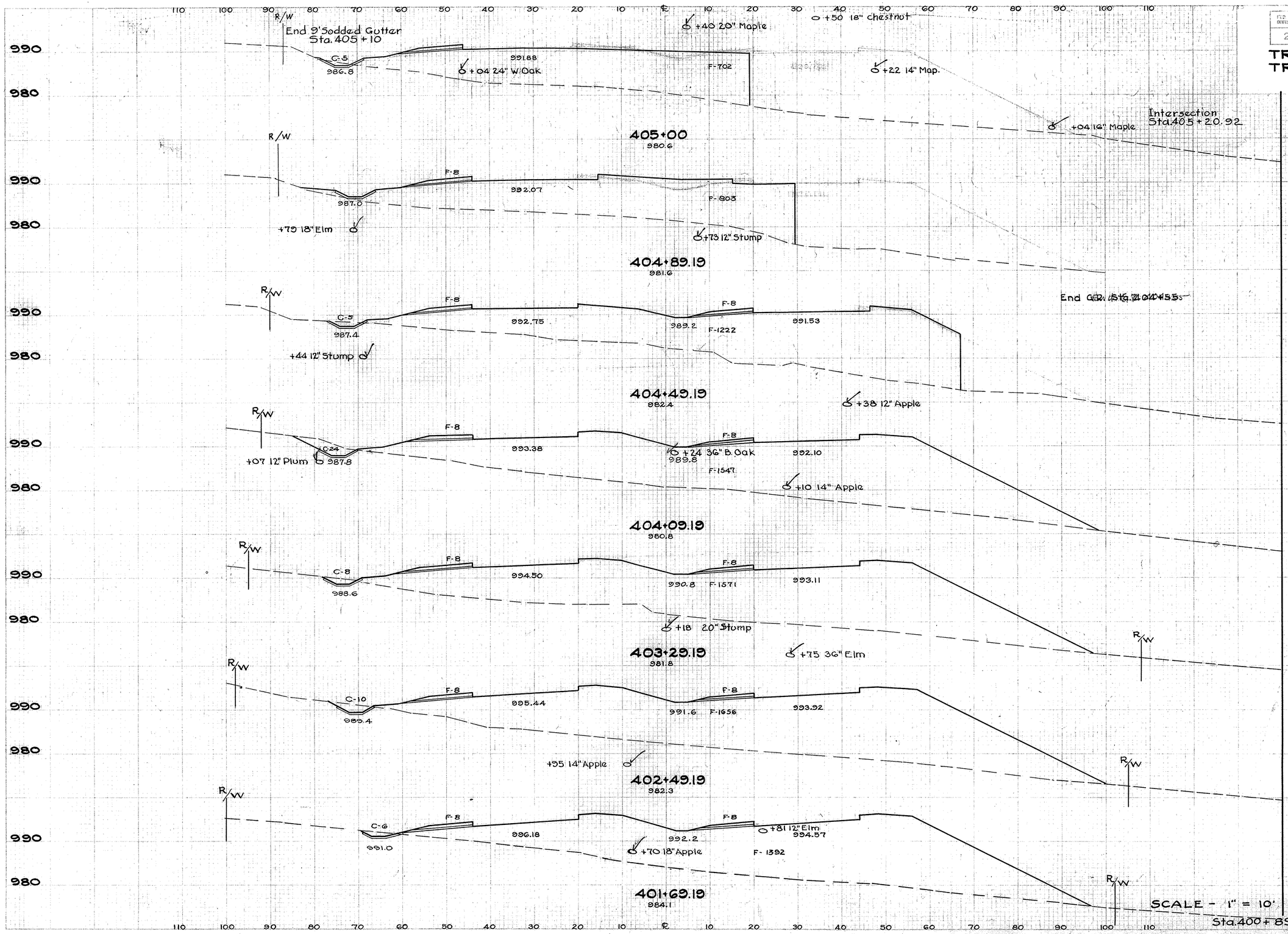


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
127		8	1174		
	538			9	1650
120		5	1110		
	681			36	1885
125		34	925		
	1417			344	2646
130		152	504		
	508			155	716
124		80	570		
	878			275	1190
123		152	434		
	1367			681	1235
123		216	233		
	1411			993	813
Sta. 396+00 131		320	206		

CROSS SECTIONS STA. 397+00 TO STA. 400+89.19

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	76
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

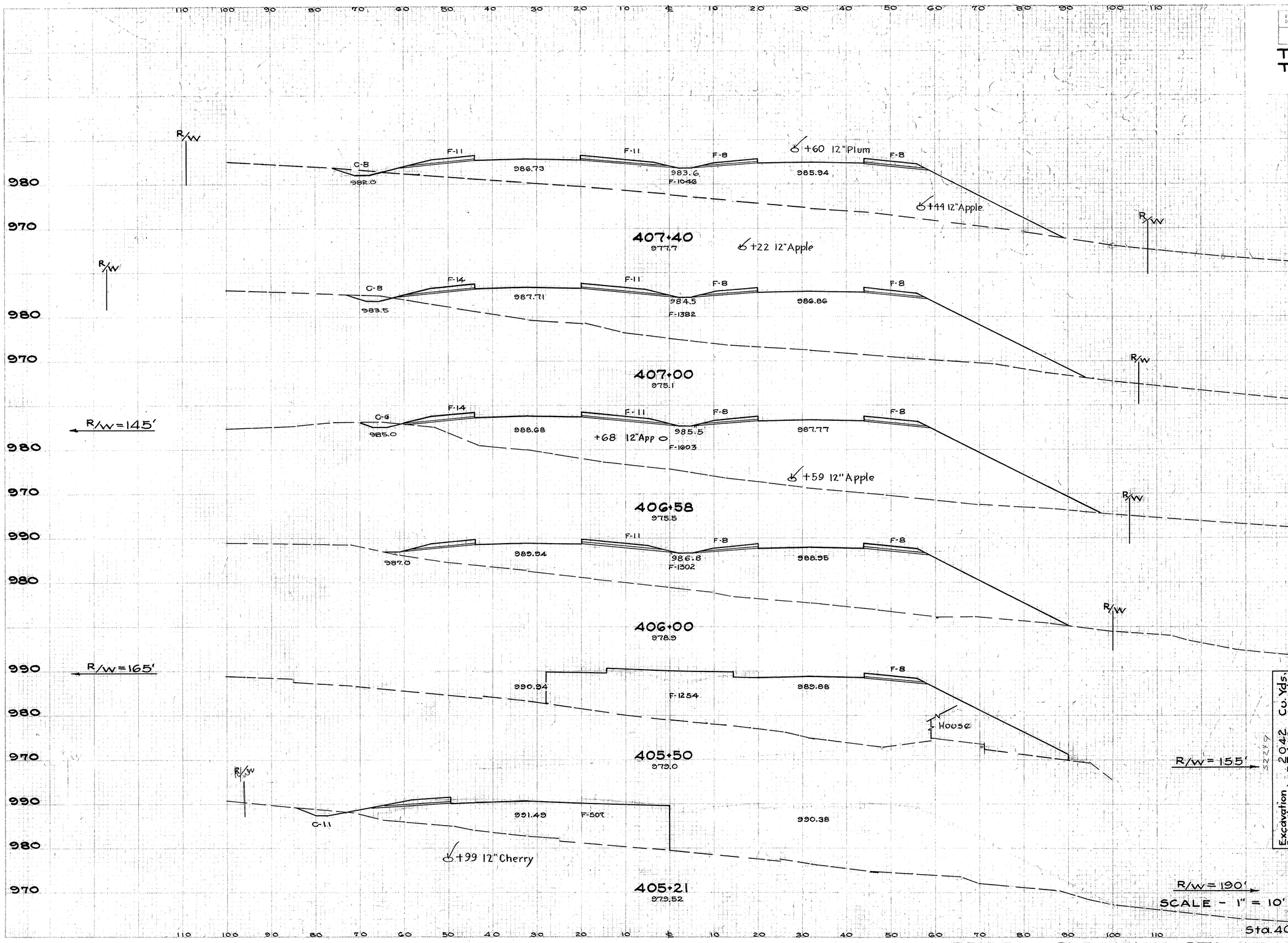


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
34	9173	5	702	874	25164
	631			1	303
71		0	811		
	371			4	1518
96		5	1238		
	549			22	2075
151		24	1563		
	131			47	4667
144		8	1587		
	128			26	4829
145		10	1672		
	125			24	4563
136		6	1408		
	117			21	3826
127		8	1174		

CROSS SECTIONS STA. 401+69.19 TO STA. 405+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	77
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

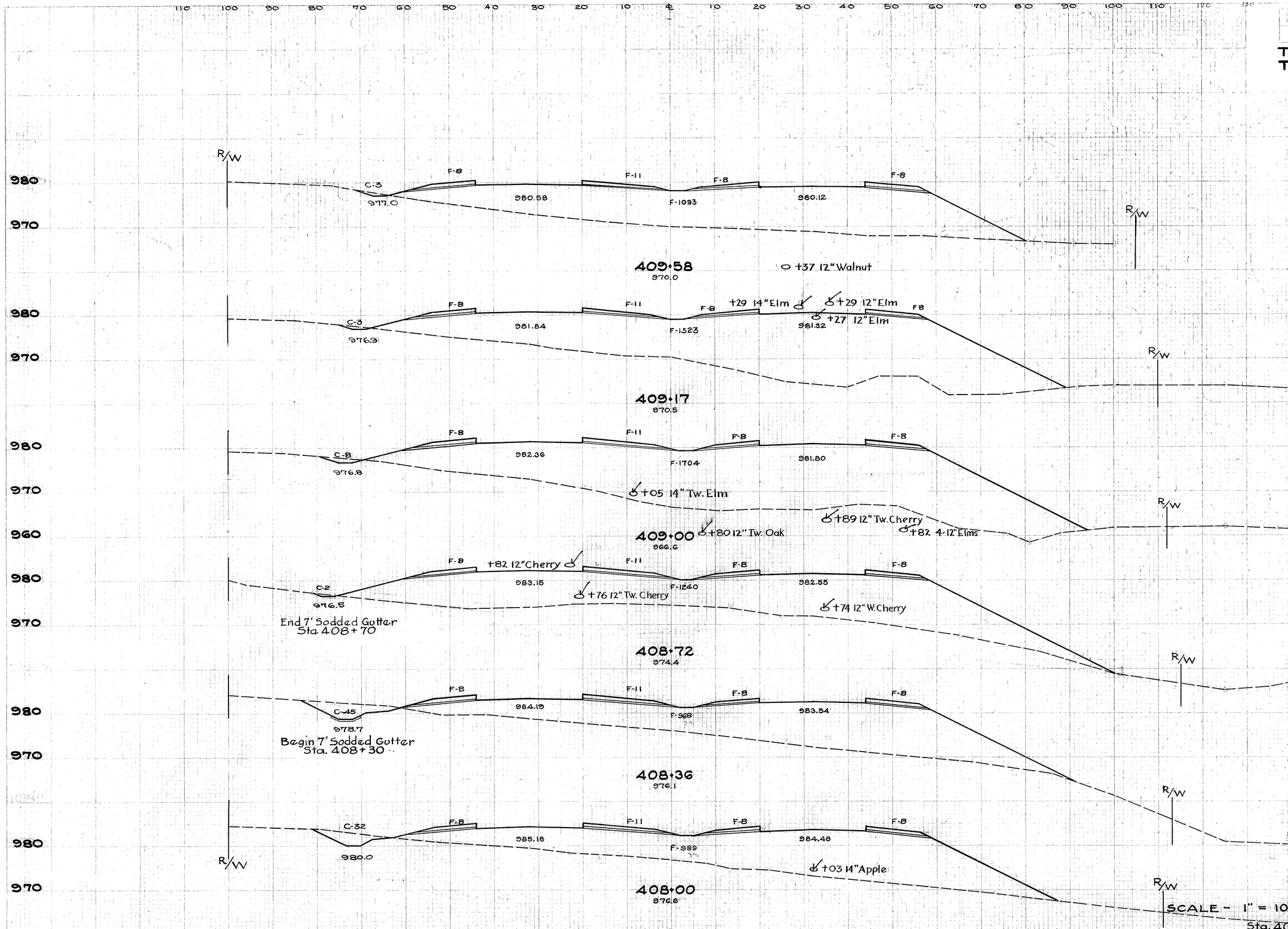


Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
141		8	1084		
	633			12	1857
144		8	1423		
	677			11	2386
146		6	1644		
	883			6	3193
128		0	1323		
	572			0	2399
78		0	1262		
	200			6	950
46		11	507		
	93			6	470
34		5	702		

CROSS SECTIONS STA. 405+21 TO STA. 407+40

DIST. NO. DIVISION	STATE	PROJECT	TYPE FUNDS	78
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

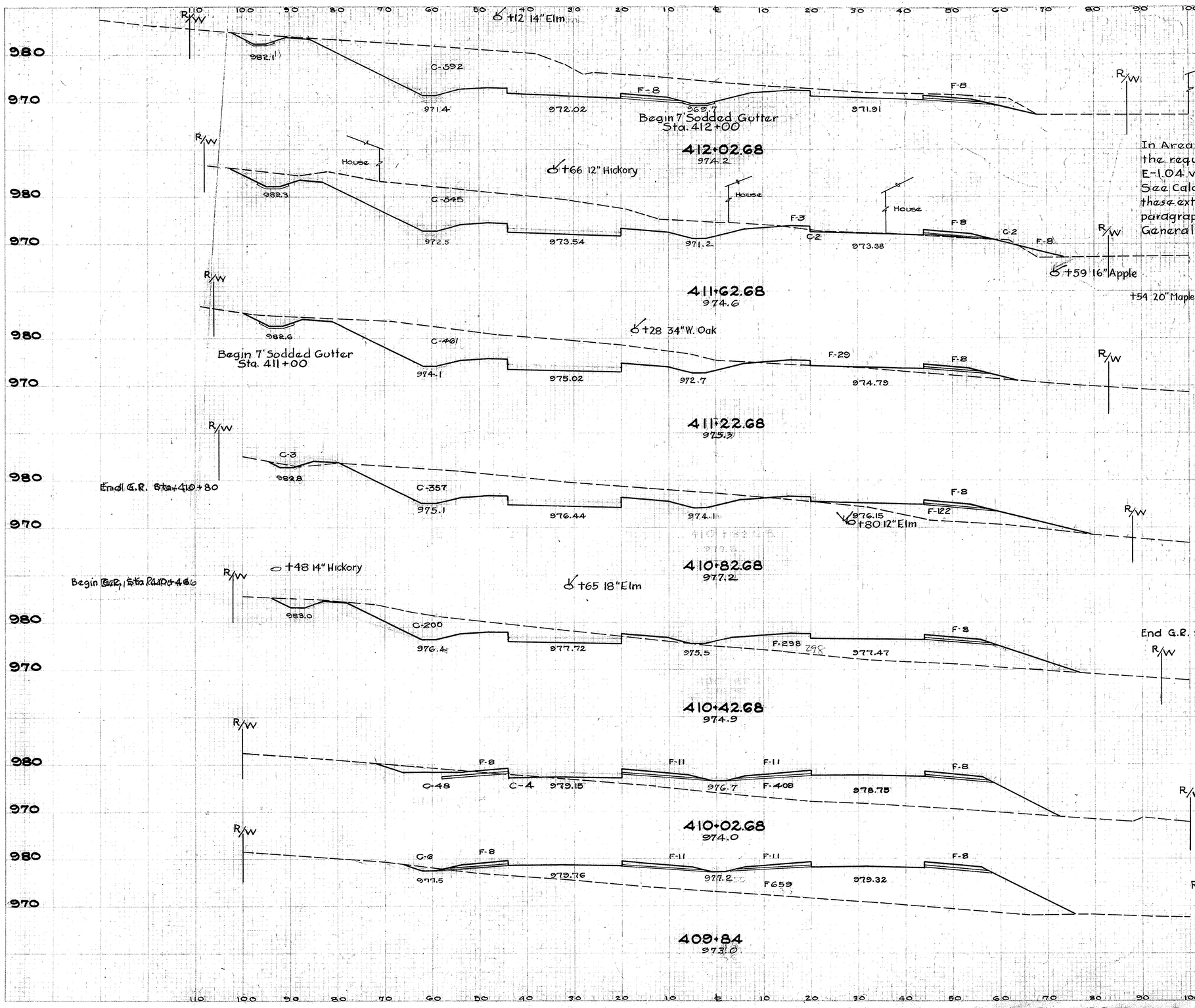


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
127		3	1128		
	588			5	2039
131		3	1558		
	265			3	1038
150		8	1739		
	481			5	1563
159		2	1275		
	616			31	1519
149		45	1003		
	586			51	1351
144		32	1024		
	950			44	2342
Sta. 407+40 141		8	1084		

CROSS SECTIONS STA. 408+00 TO STA. 409+58

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	79
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



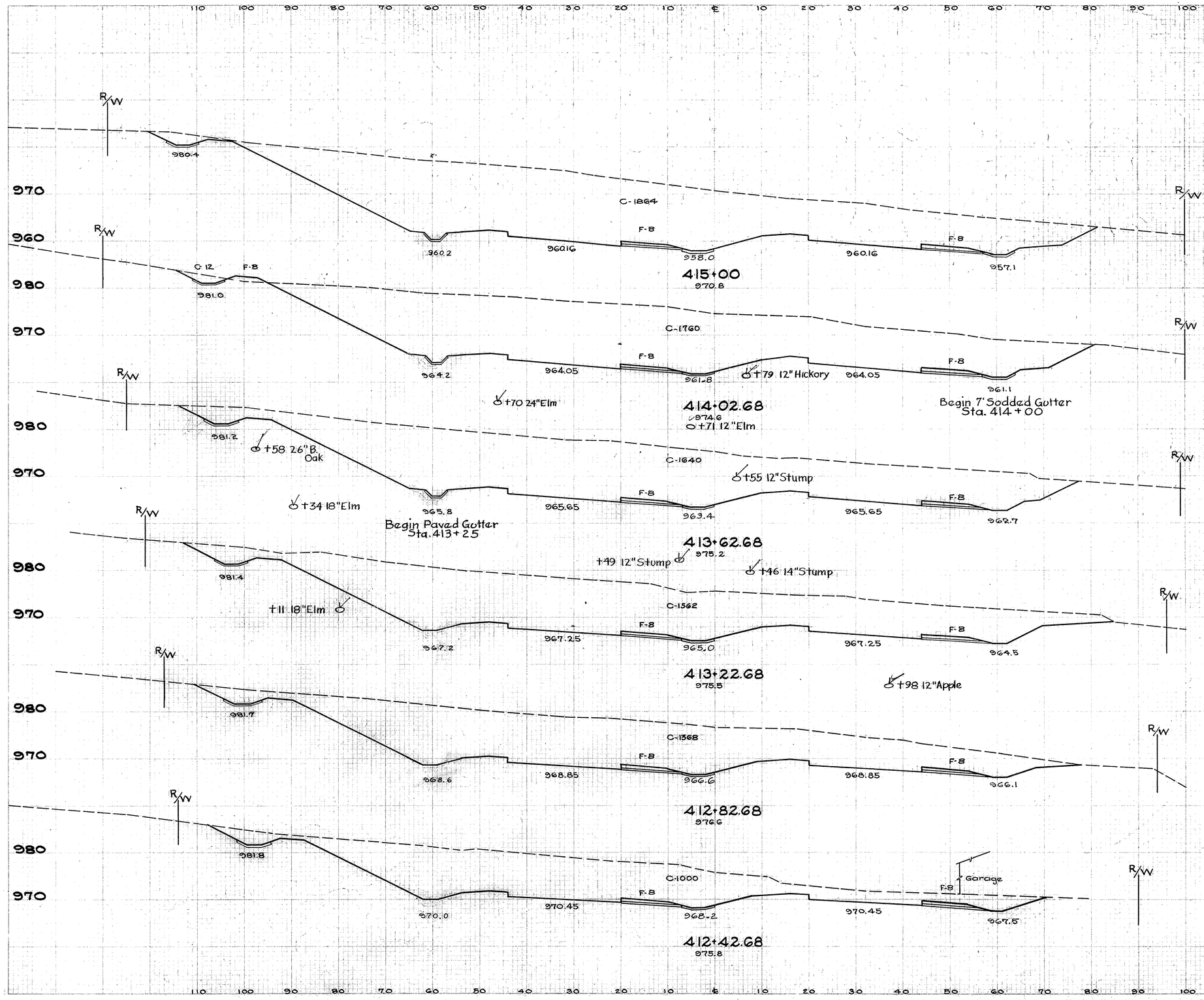
In Areas of rock out the requirements of Spec. E-1.04 will be followed. See Calculation Sheet #16 for these extra quantities. See the paragraph "Rock Cut" in the General Notes Sheet No. 6

Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
132		592	16		
	620			845	26
147		549	19		
	622			748	42
133		461	37		
	629			608	124
150		360	130		
	642			415	323
139		200	306		
	571			187	557
118		52	446		
	243			20	395
116		6	697		
	351			4	879
127		3	1128		

CROSS SECTIONS STA. 409+84 TO STA. 412+02.68

CO. RD. DIVISION	CITY	PROJECT	TYPE FUNDS	80
2	OHIO	F-524(S)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



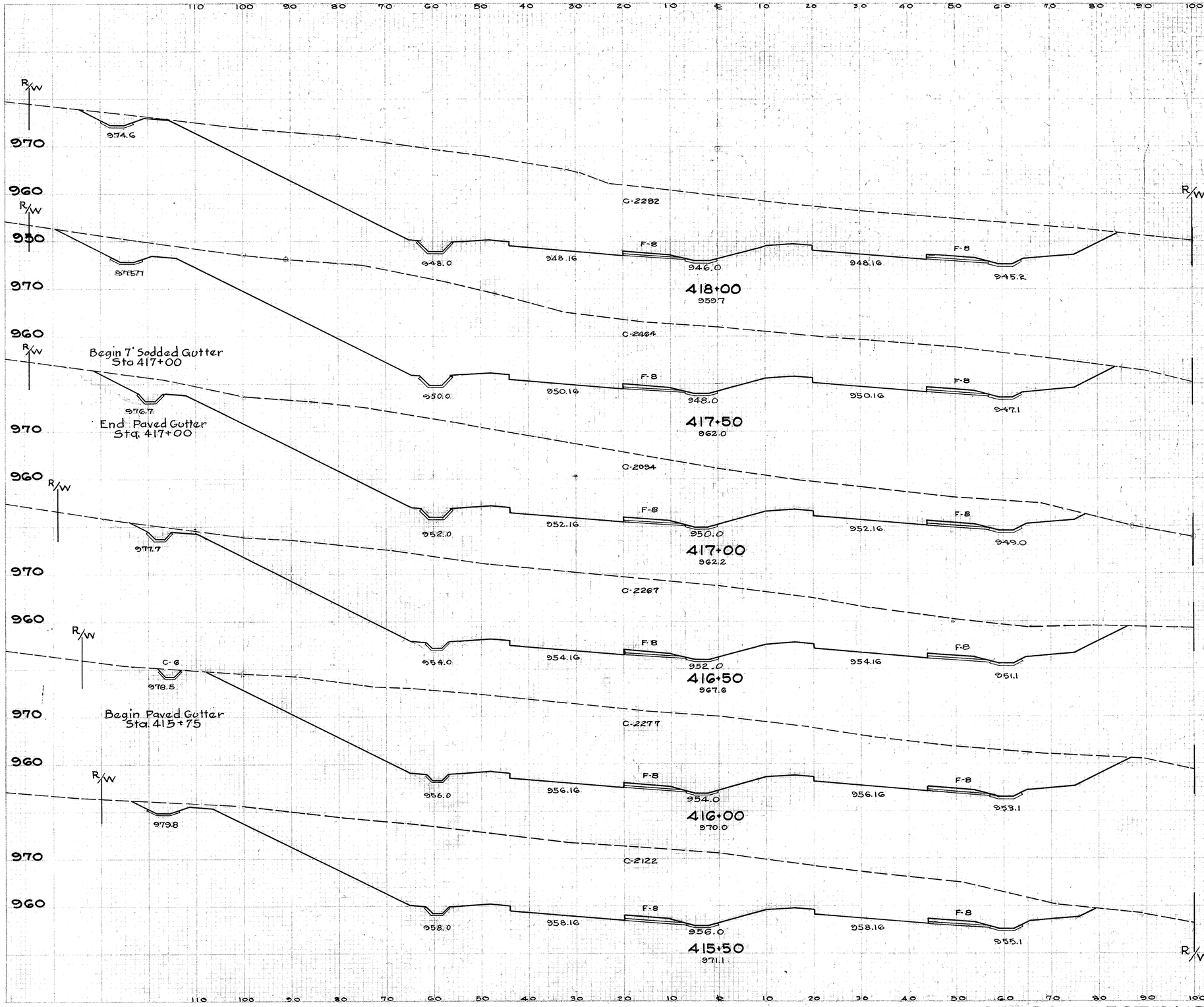
SCALE - 1" = 10'

Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
158		1864	16		
	1671			6554	72
151		1772	24		
	673			2528	30
152		1640	16		
	691			2372	24
159		1562	16		
	671			2170	24
143		1368	16		
	636			1754	24
143		1000	16		
	611			1179	24
Sta. 412+02.68 132		592	16		

CROSS SECTIONS STA. 412+42.68 TO STA. 415+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	81
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



	Seeding		End Area		Cu. Yds.	
	L.F.	S.Y.	Cut	Fill	Exc.	Emb
	172		2282	16		
		981			4394	30
	181		2464	16		
		956			4220	30
	163		2094	16		
		919			4038	30
	168		2267	16		
		928			4213	30
	166		2283	16		
		903			4079	30
	159		2122	16		
		881			3691	30
Sta. 415+00	158		1864	16		

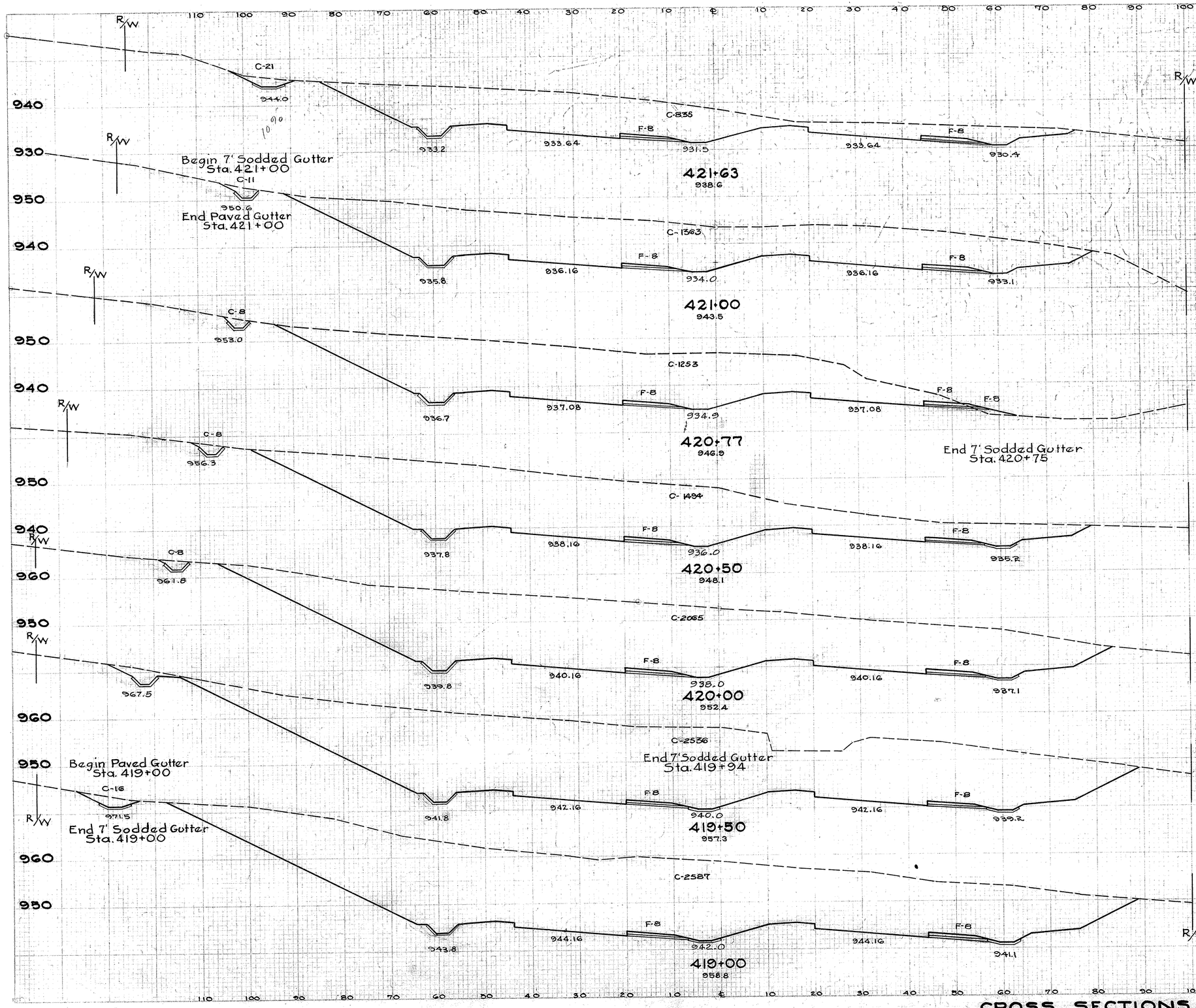
Excavation 71737 Cu. Yds.
Embankment 71695 Cu. Yds.
Seeding 20767 Sq. Yds.

SCALE - 1" = 10'

CROSS SECTIONS STA. 415+50 TO STA. 418+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	82
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU 62 (4.59-9.67)



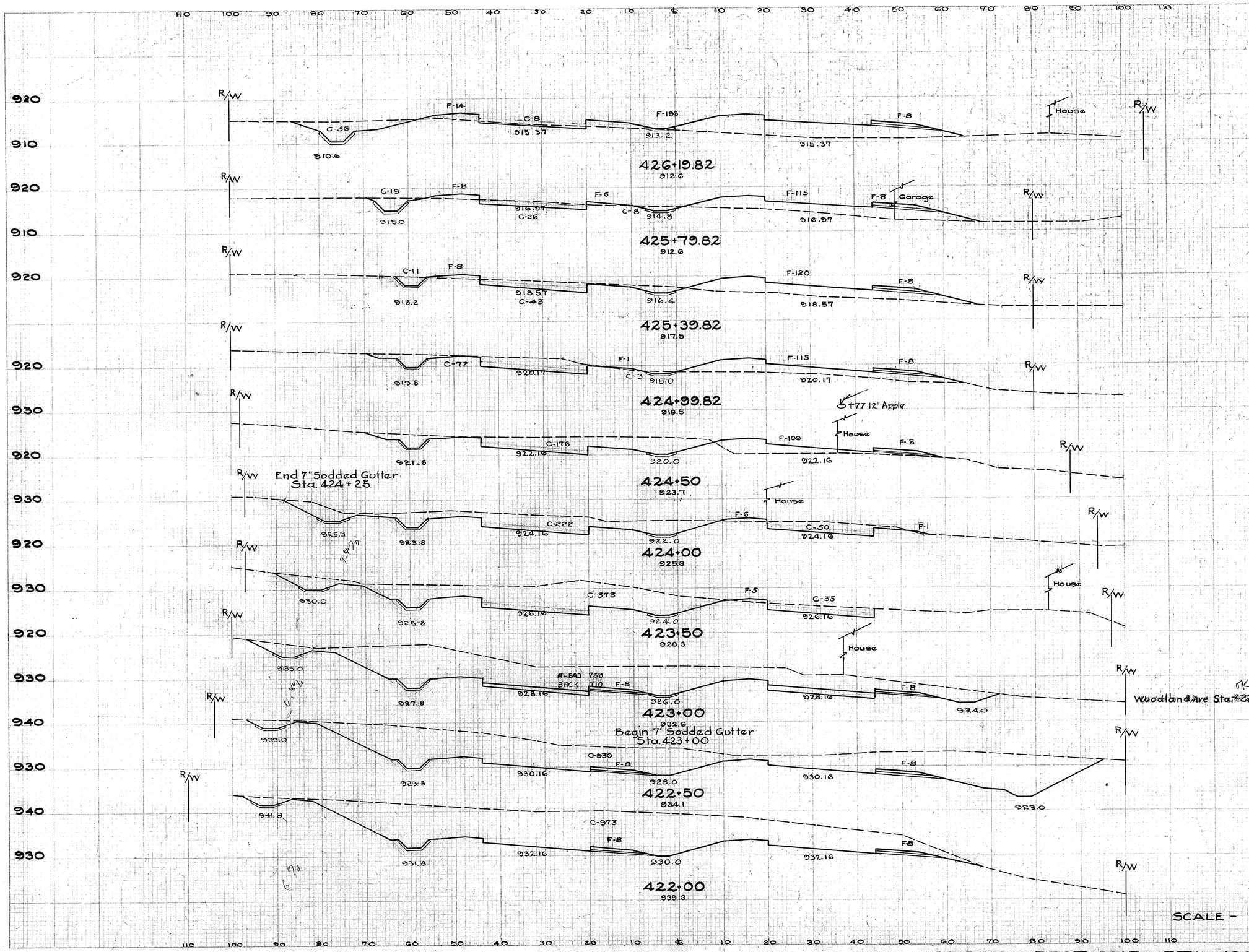
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
143		856	16		
	1029			2602	37
151		1374	16		
	363			1122	17
133		1261	24		
	427			1382	20
152		1502	16		
	878			3311	30
164		2073	16		
	942			4268	30
175		2536	16		
	994			4758	30
183		2603	16		
	1972			9046	59
Sta 418+00 172		2282	16		

SCALE - 1" = 10'

CROSS SECTIONS STA. 419 + 00 TO STA. 421 + 63

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	83
2	OHIO	F-524 (5)	POST WAR	154

TRUMBULL COUNTY
TRU 62-(4.59-9.67)

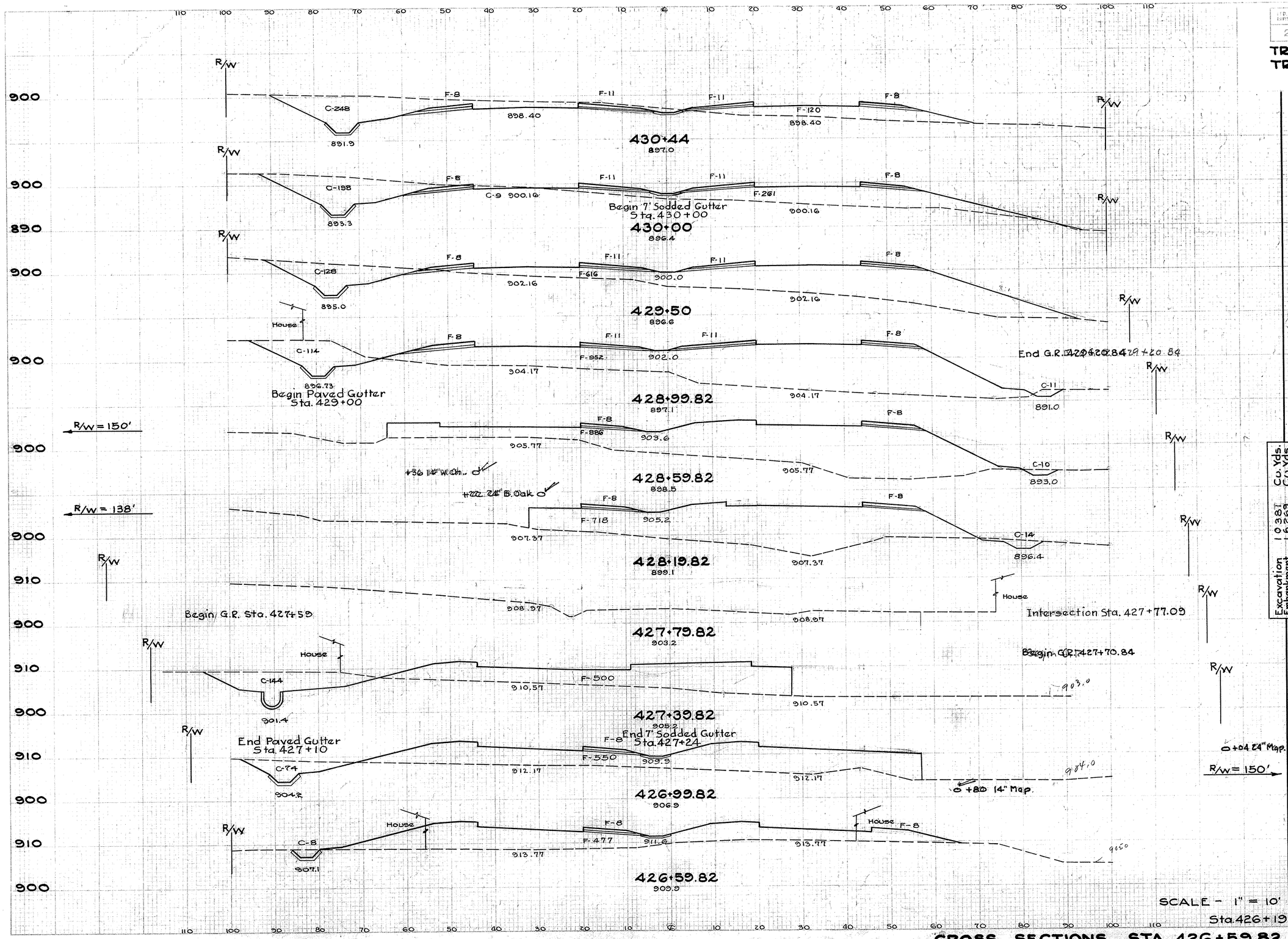


Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
111		64	218		
	460			87	263
96		53	137		
	413			79	202
90		54	136		
	407			96	192
93		75	124		
	511			233	223
91		176	117		
	522			415	115
97		272	7		
	486			630	11
78		408	5		
	567			1080	20
126		758 AHEAD 710 BACK	16 16		
	3759			910	2196
	789			1519	30
158		930	16		
	794			1762	30
128		973	16		
	557			1253	22
143		856	16		

CROSS SECTIONS STA. 422+00 TO STA. 426+19.82

I.D. NO. DIVISION	STATE	PROJECT	TYPE FUNDS	84
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
121		248	158		
	655			371	372
147		207	299		
	836			310	883
154		128	654		
	1040			235	1528
158		125	880		
	59			100	1402
108		10	902		
	43			18	1212
86		14	734		
	191			10	544
0	1338	0	0	141	1585
	213			107	370
96		144	500		
	420			162	784
93		74	558		
	458			61	778
113		8	493		
	498			53	527
111		64	218		

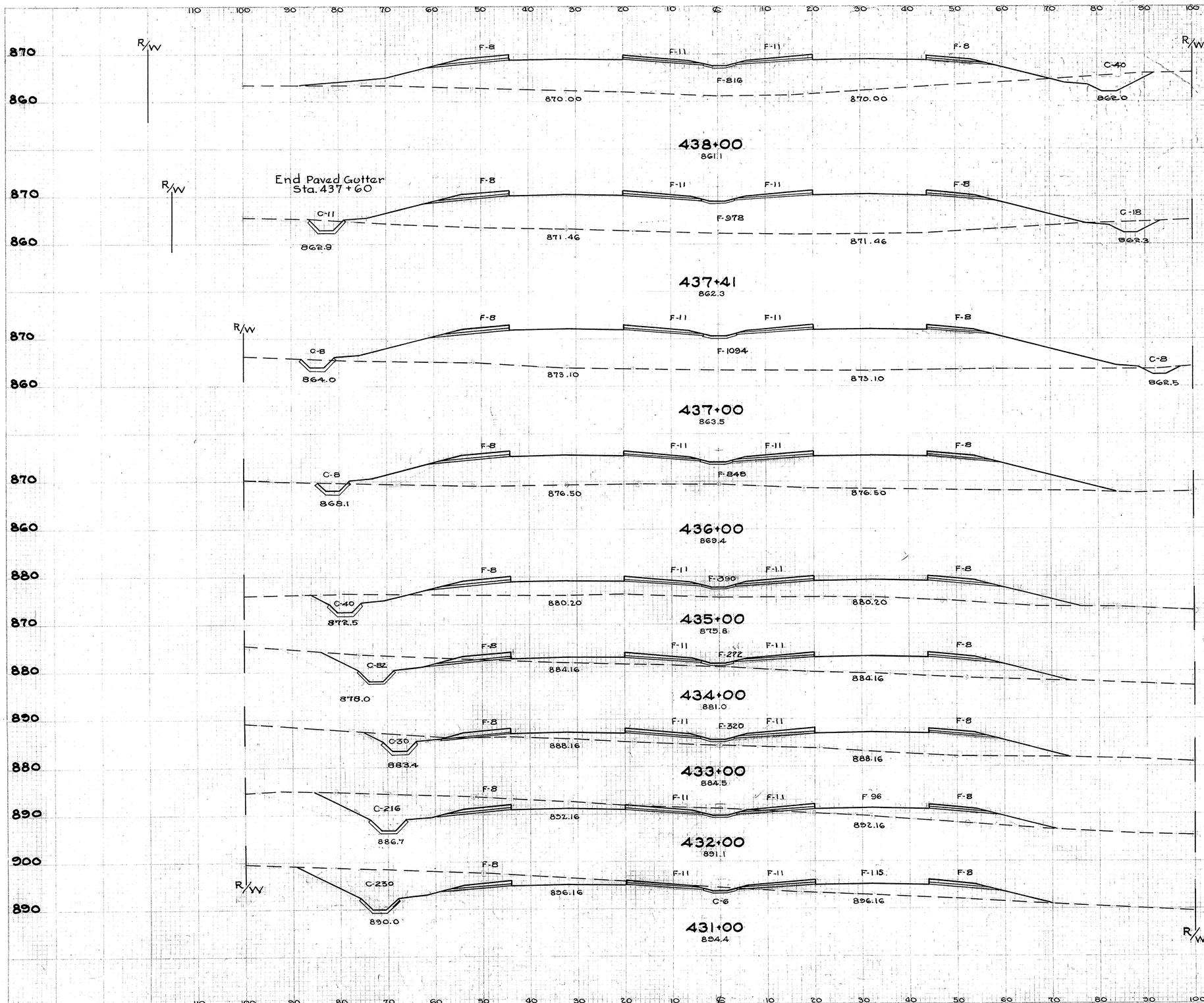
Excavation	Cu. Yds.
Embankment	10381 Cu. Yds.
Seeding	16269 Sq. Yds.
	18972

CROSS SECTIONS STA. 426+59.82 TO STA. 430+44

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

85
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds Exc.	Cu. Yds Emb.
146		40	834		
	937			76	2043
140		29	1016		
	651			34	1631
146		16	1132		
	1522			44	3737
128		8	886		
	1400			89	2433
124		40	428		
	1344			226	1367
118		82	310		
	1256			207	1237
108		30	358		
	1233			456	911
114		216	134		
	1283			837	531
117		236	153		
	741			502	323
121		248	158		

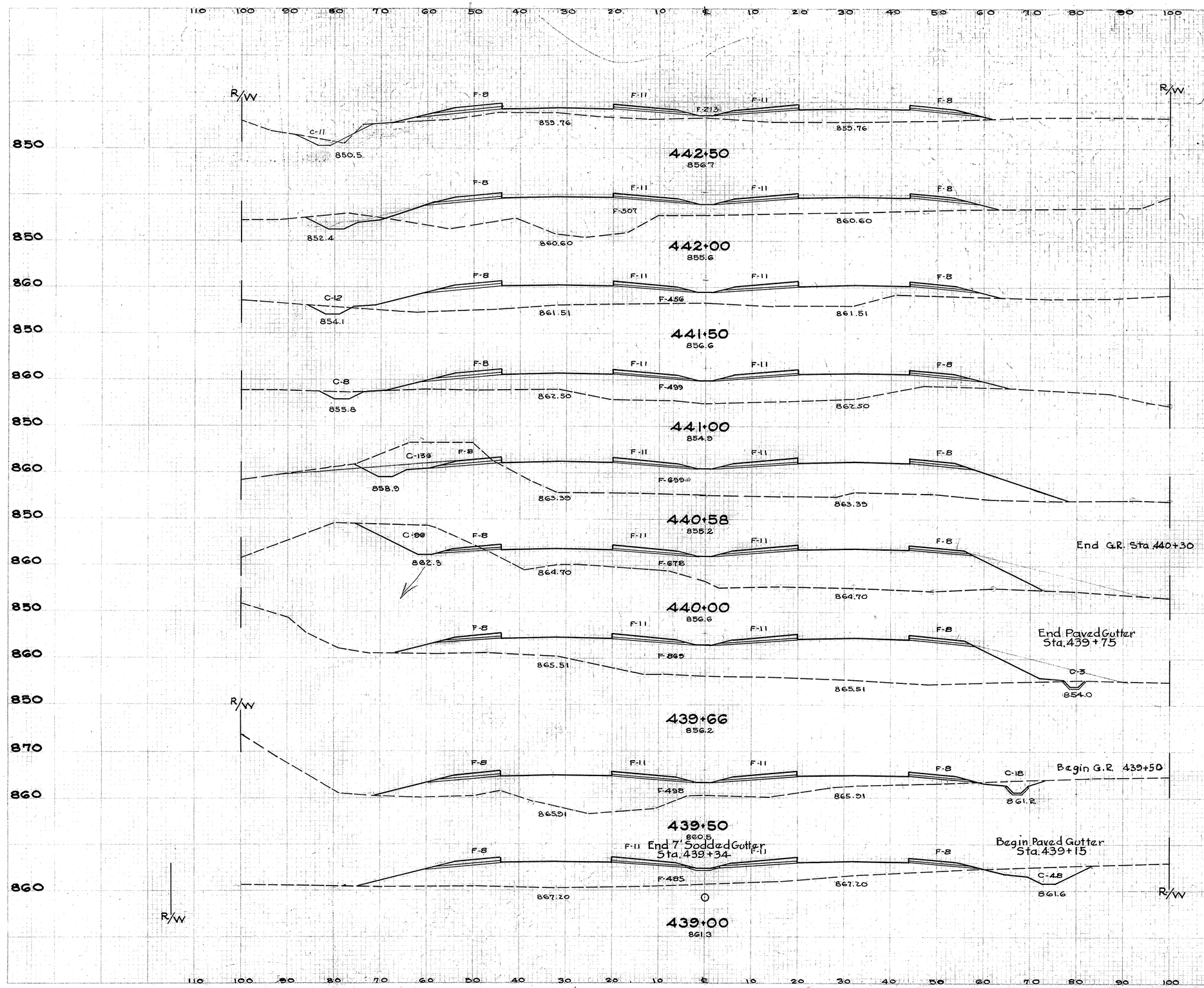
SCALE - 1" = 10'

Sta. 430+44

CROSS SECTIONS STA. 431+00 TO STA. 438+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	86
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
114		11	251		
	669			44	737
127		37	545		
	689			46	962
121		12	494		
	681			19	955
124		8	557		
	583			112	991
126		136	737		
	802			249	1561
123		96	716		
	467			62	1022
124		3	907		
	217			6	428
120		18	536		
	703			61	981
133		48	523		
	1550			163	2550
146		40	854		

	Cu. Yds.
Excavation	1583
Embankment	27691
Seeding	17201

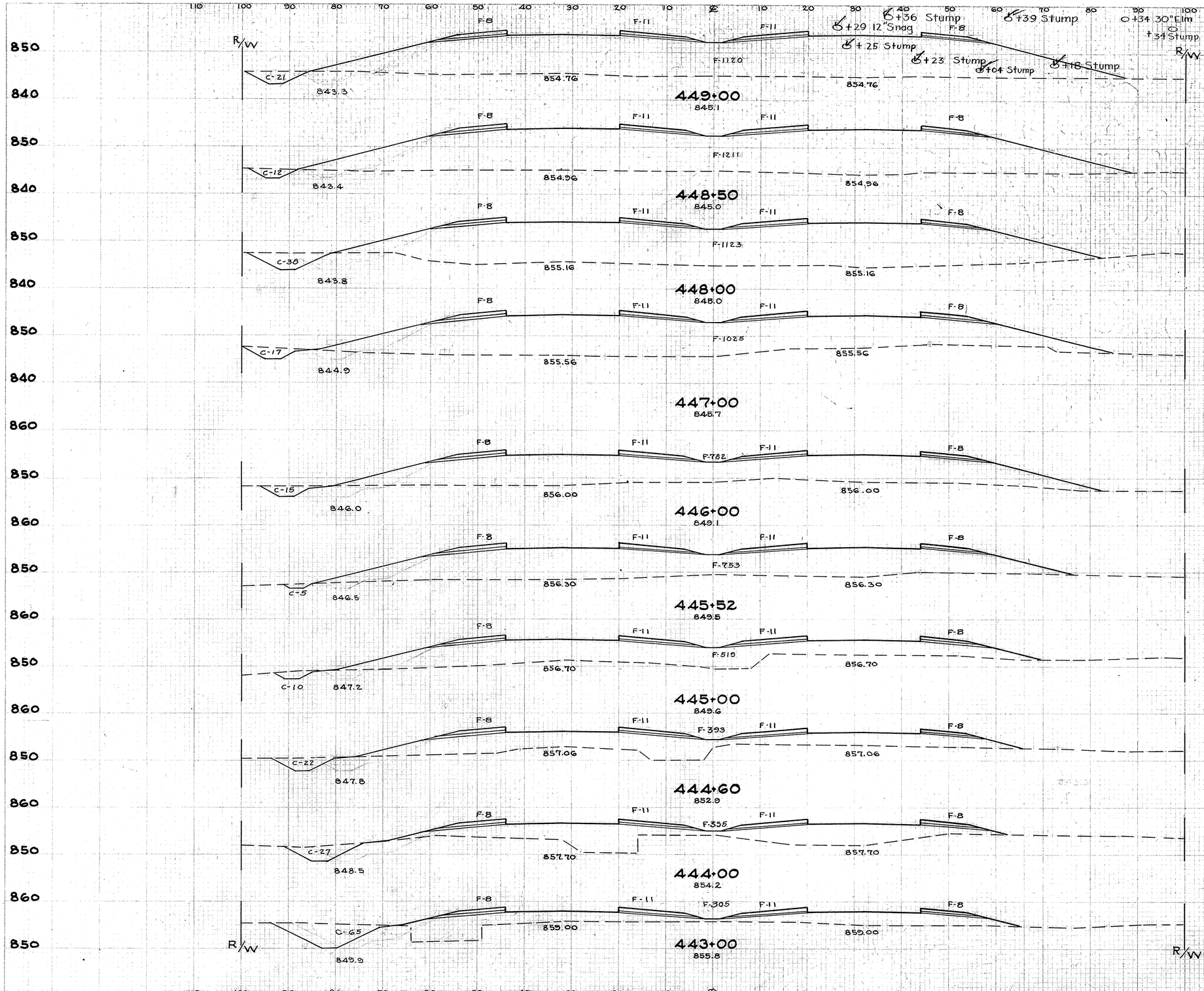
Sta 438+00

CROSS SECTIONS STA. 439+00 TO STA. 442+50

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

87
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



SCALE - 1" = 10'

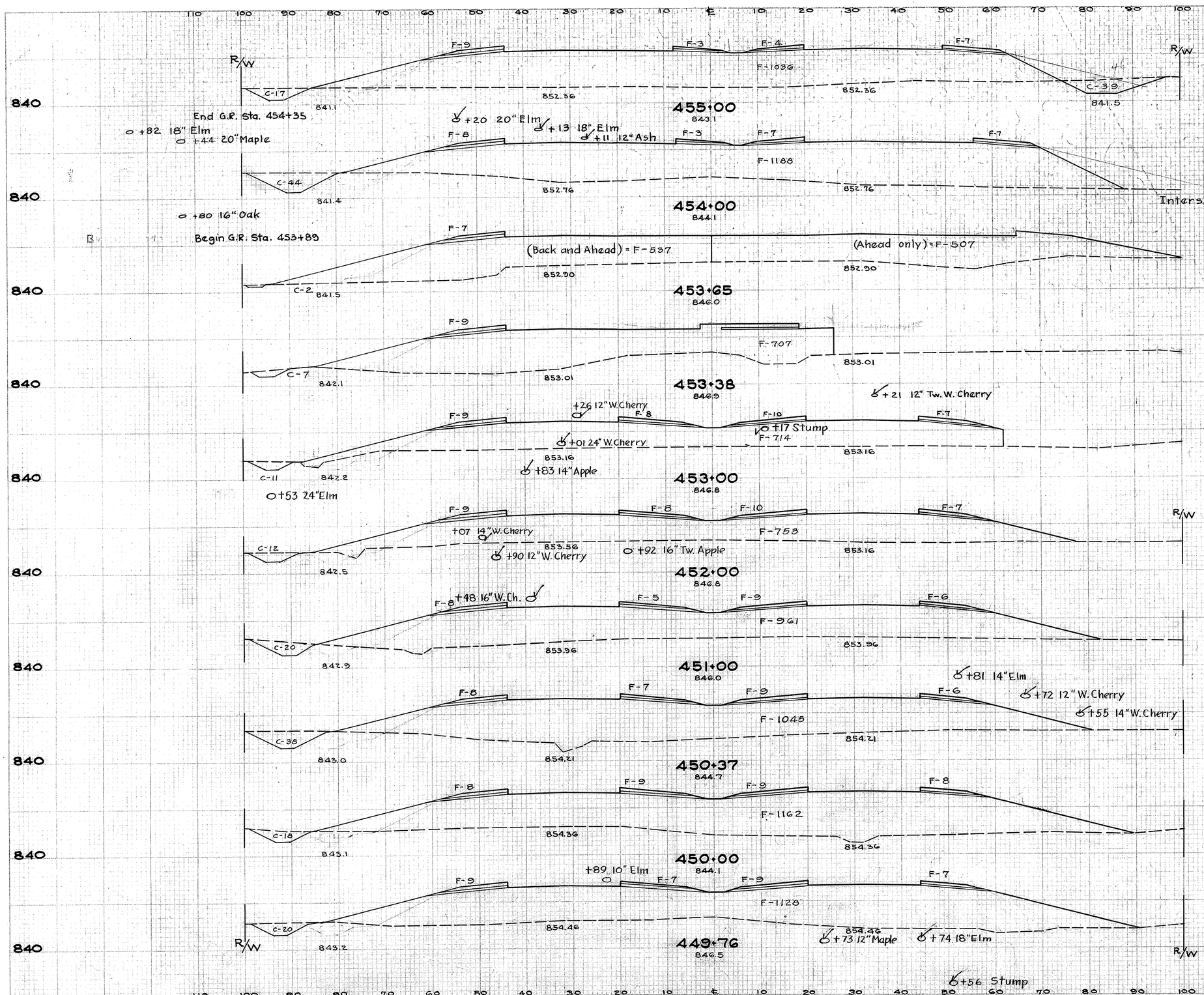
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
151		21	1158		
	844			31	2230
153		12	1249		
	844			46	2232
151		38	1161		
	1661			102	4119
148		17	1063		
	1611			59	3487
142		15	820		
	739			18	1432
135		5	791		
	757			15	1298
127		10	557		
	564			24	732
127		22	431		
	840			55	916
125		27	393		
	1411			170	1363
129		65	343		
	675			70	550
114		11	251		

Sta. 442+50

CROSS SECTIONS STA. 443+00 TO STA. 449+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	88
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds Exc.	Cu. Yds Emb.
	145		56	1059		
		1544			185	4208
	133		44	1213		
		1412			35	1226
		447			30	1468
Ahead	97		2	1051		
Back			2	544		
		259			5	630
	76		7	716		
		405			13	1030
	116		11	748		
		1422			43	2843
	140		12	787		
		1578			59	3289
	144		20	989		
		1022			67	2408
	148		38	1076		
		619			36	1556
	153		18	1196		
		409			17	1047
	154		20	1160		
		1288			58	3263
Sta. 449+00	151		21	1158		

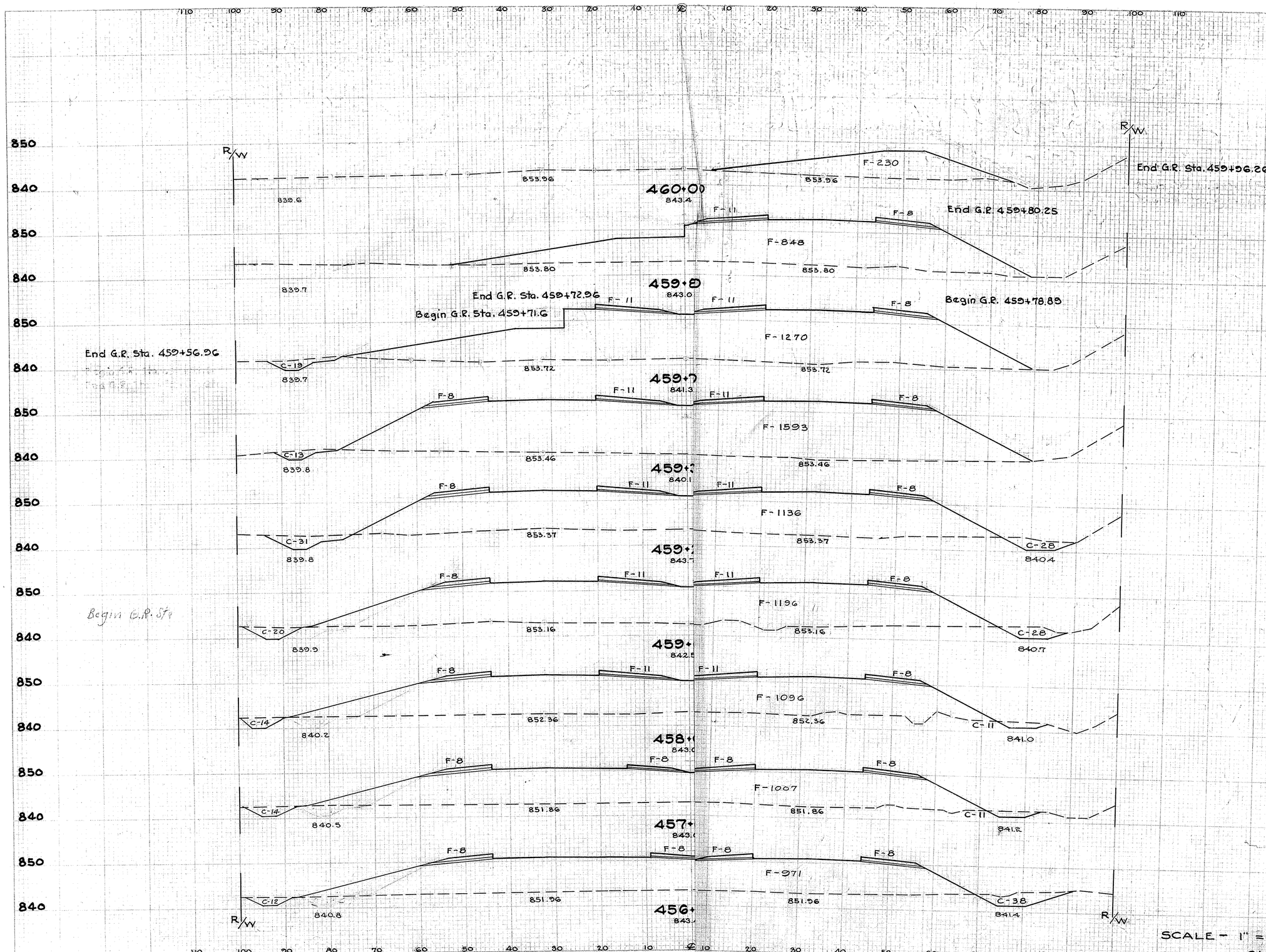
	Cu. Yds.	Cu. Yds.	Sq. Yds.
Excavation	12	16	61
Embankment	46	66	61
Seeding	20	24	9

CROSS SECTIONS STA. 449+76 TO STA. 455+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(S)	POST WAR

89
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding		End Area		Cu.Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
89		0	230		
	243			0	406
130		0	867		
	163			4	401
163		19	1300		
	576			19	1791
151		13	1631		
	193			15	577
165		59	1174		
	469			52	1160
160		48	1234		
	1739			135	4385
153		25	1134		
	1639			95	4024
142		25	1039		
	1589			139	3782
144		50	1002		
	1606			196	3819
Sta.455+00	145	50	1059		

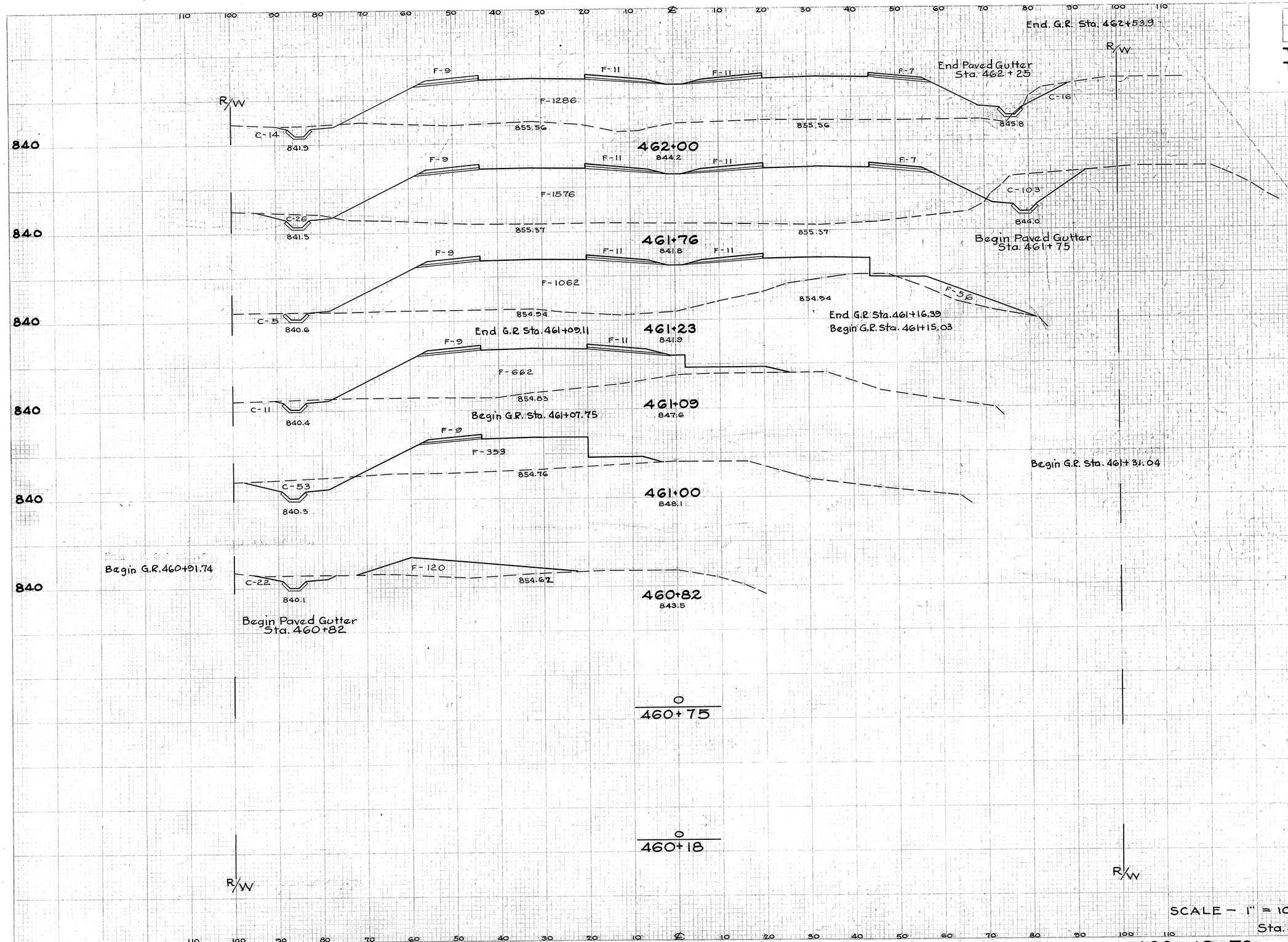
SCALE - 1" = 10'

CROSS SECTIONS STA. 456+00 TO STA. 460+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

90
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

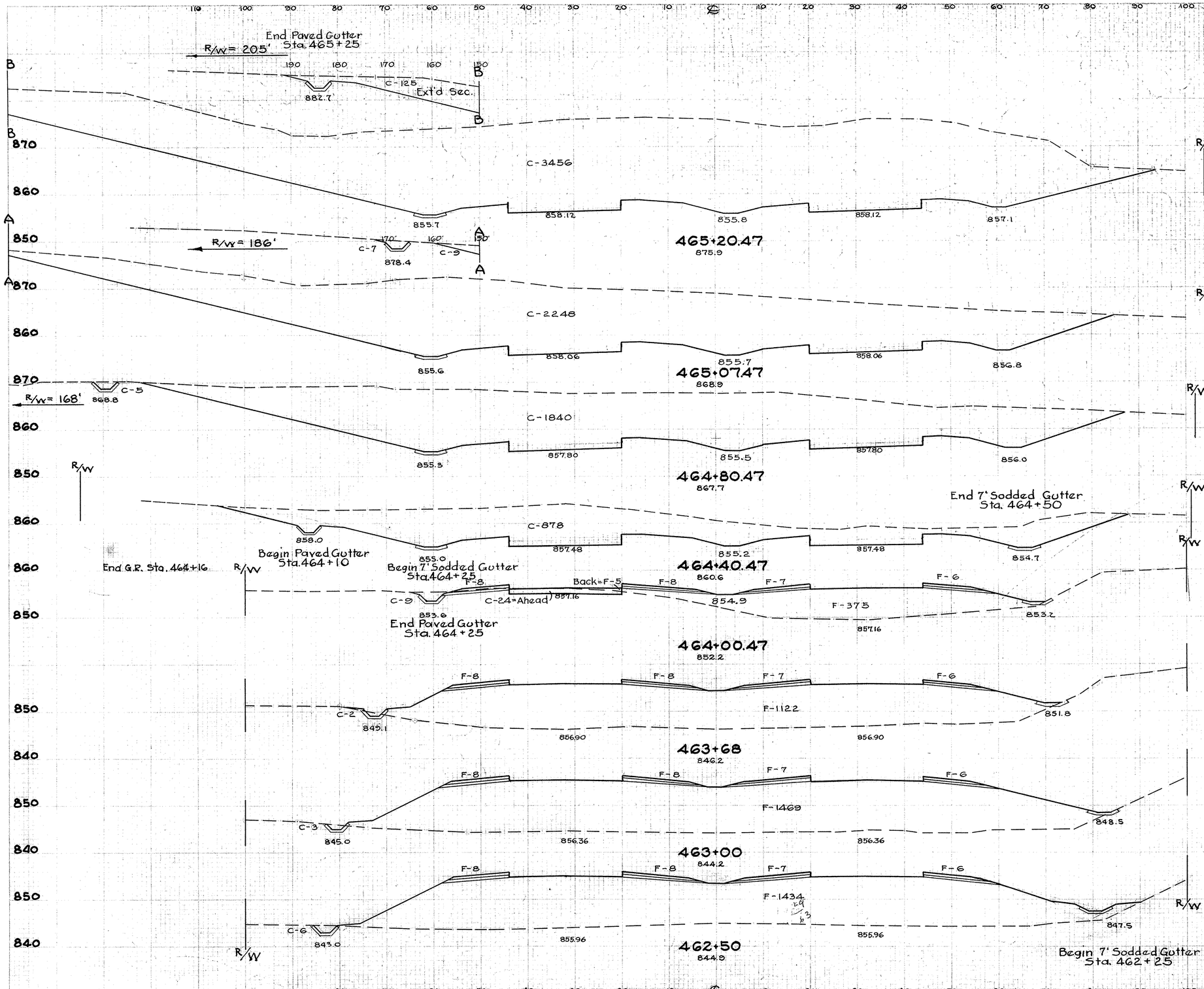


Seeding		End Area		Co. Yds	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
134		30	1324		
	388			71	1306
157		129	1614		
	875			131	2712
140		5	1149		
	166			4	475
74		11	682		
	68			11	174
61		53	362		
	150			25	161
89		22	120		
	405			3	162
0		0	0		
0				0	0
0		0	0		
	89			0	77
Sta. 460+00 89		0	230		

CROSS SECTIONS STA. 460+18 TO STA. 462+00

FED. ROD. DIVISION	STATE		TYPE FUNDS	91
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
	253		3581	0		
		343			1407	0
	222		2264	0		
		609			2054	0
	184		1845	0		
		744			2017	0
	151		878	0		
		560			675	299
Ahead	101		33	404		
Back			9	409		
		442			6	938
	144		2	1151		
		1054			6	3336
	135		3	1498		
		764			9	2742
	140		6	1463		
		761			34	2581
	134		30	1324		

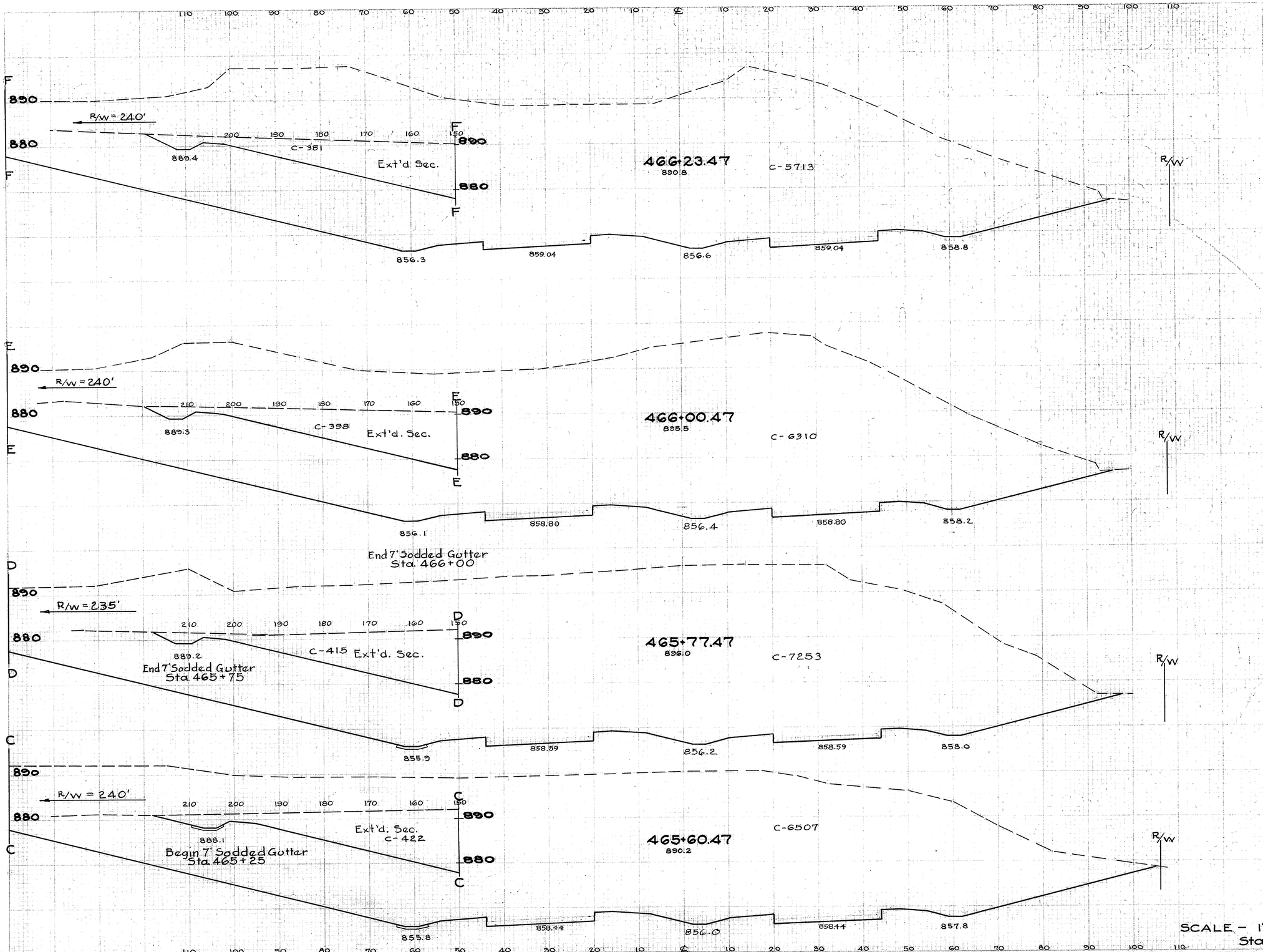
Excavation 86974 Cu. Yds.
Embankment 25104 Cu. Yds.
Seeding 25180 Sq. Yds.

CROSS SECTIONS STA. 462+50 TO STA. 465+20.47

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

92
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
296		6094	0		
	759			5453	0
298		6708	0		
	754			6123	0
292		7668	0		
	541			4595	0
281		6929	0		
	1187			7785	0
253		3581	0		

SCALE – 1" = 10'

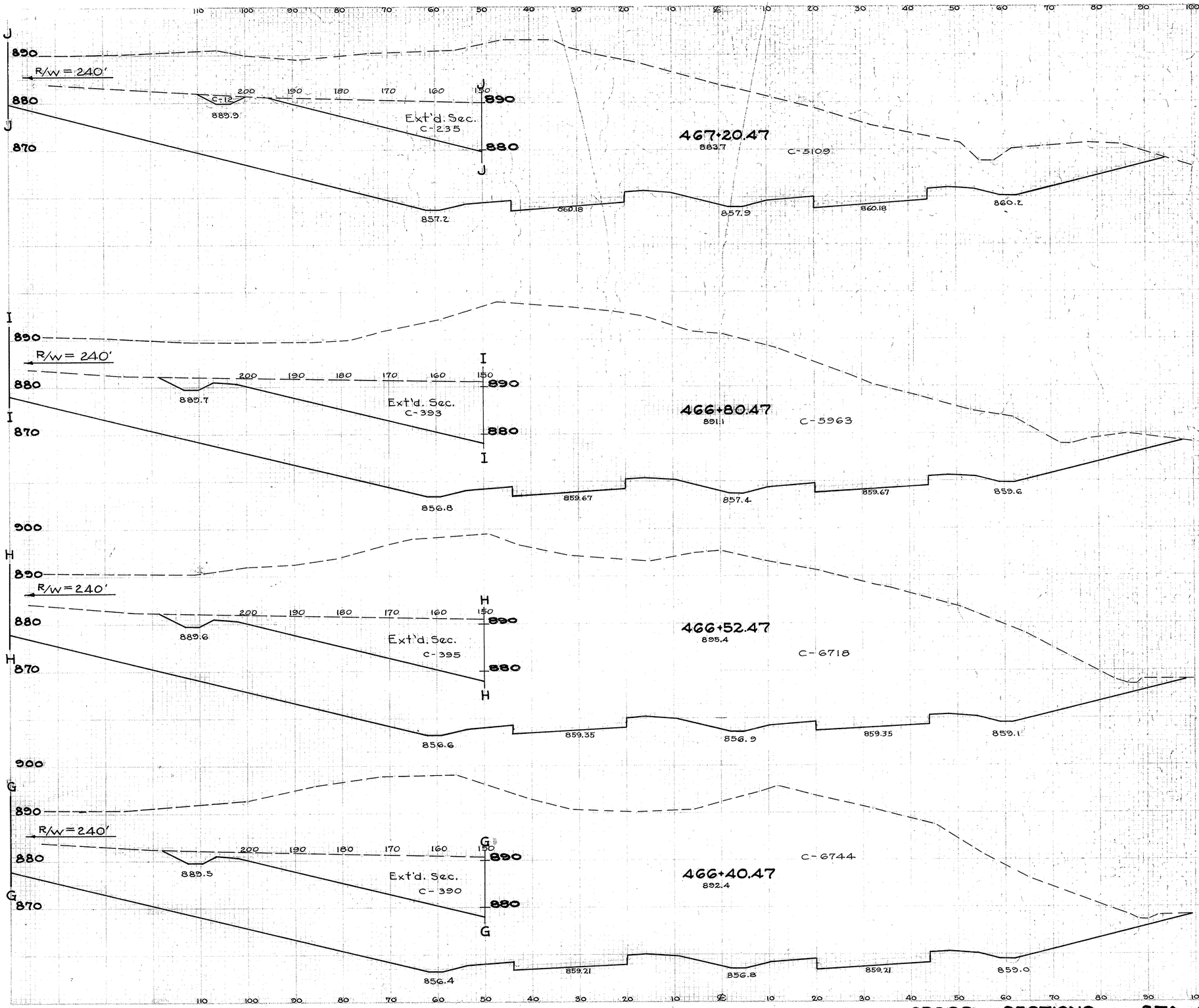
Sta. 465+20.47

CROSS SECTIONS STA. 465+60.47 TO STA. 466+23.47

PROJ. ED. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

93
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



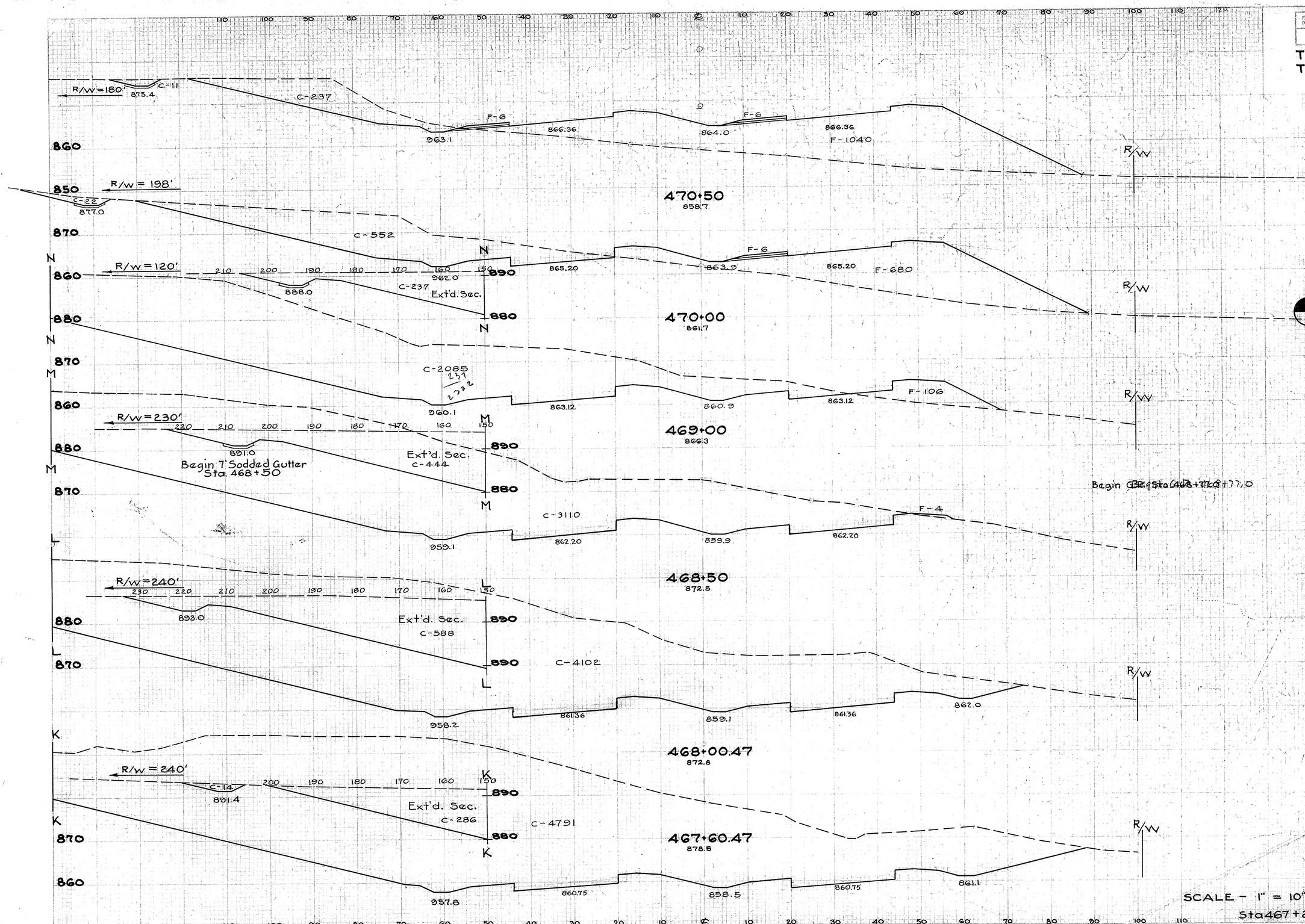
Seeding		End Area		Co. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
287		5356	0		
	1302			8676	0
299		6356	0		
	932			6984	0
300		7113	0		
	400			3166	0
300		7134	0		
	563			4164	0
Sta. 466+23.47 296		6094	0		

CROSS SECTIONS STA. 466+40.47 TO STA. 467+20.47

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

94
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

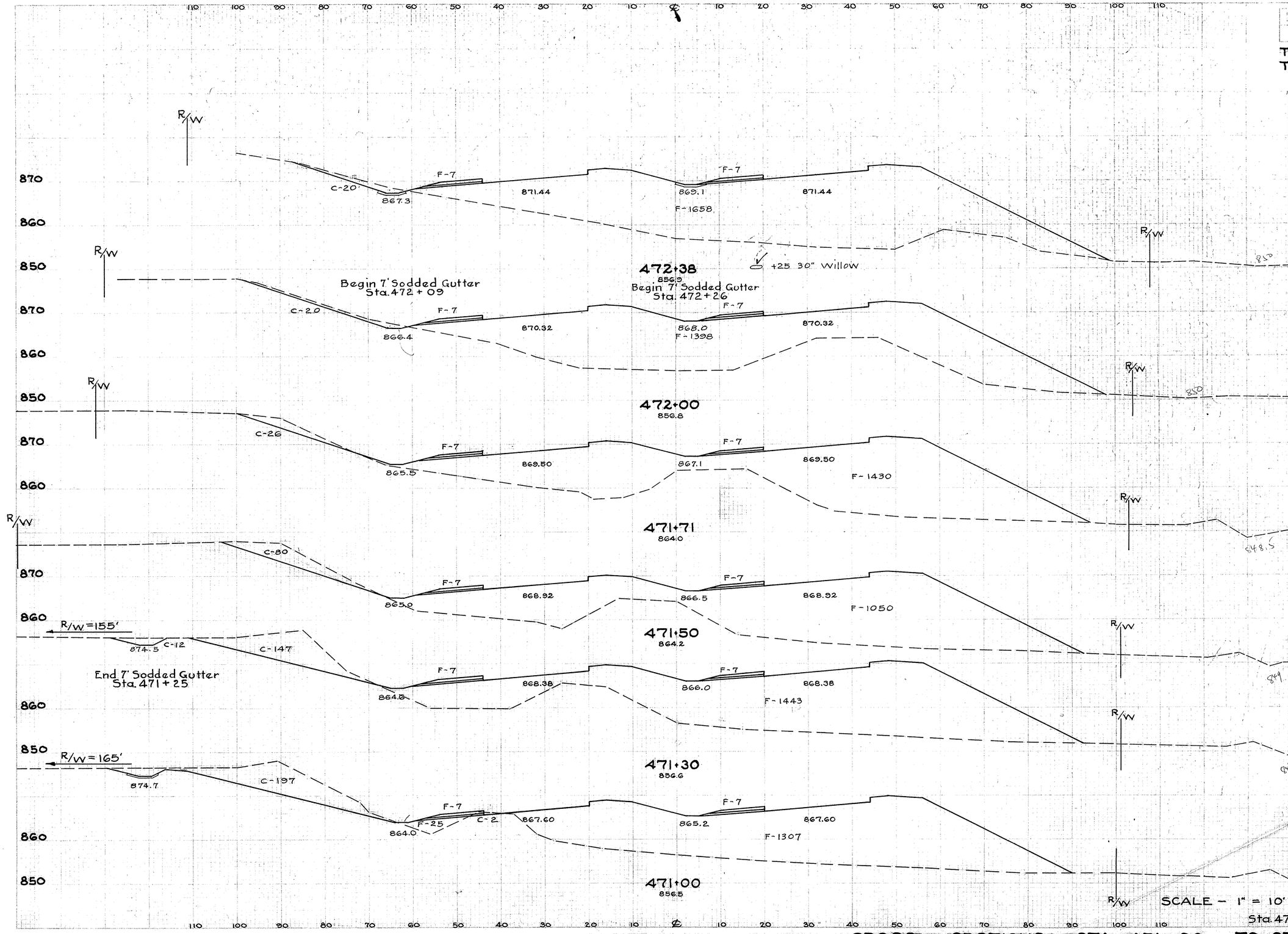


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
198		248	1052		
	1136			761	1610
211		574	686		
	2500			5363	1467
239		2322	106		
	1372			5441	102
255		3554	4		
	1500			7562	4
285		4690	0		
	1282			7245	0
292		5091	0		
	1287			7739	0
287		5356	0		

CROSS SECTIONS STA. 467+60.47 TO STA. 470+50

DIV.	CITY	SHEET	TYPE FUNDS	
2	OHIO	F-524(5)	POST WAR	95 / 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

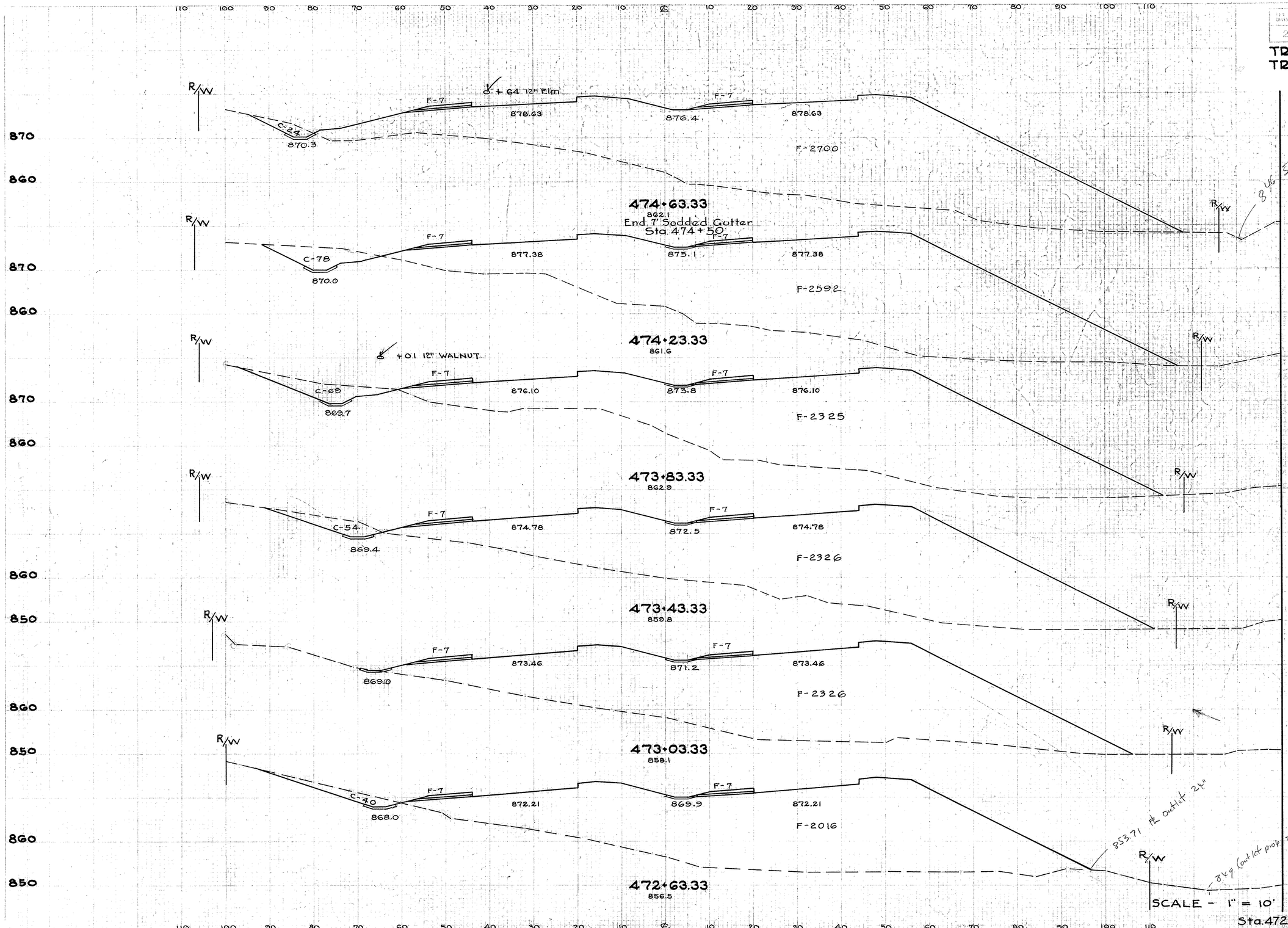


Sta.	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
470+50	198		248	1052		
		1086			414	2220
471	193		199	1346		
		642			199	1557
71	192		159	1457		
		404			89	934
71	172		80	1064		
		400			41	975
71	171		26	1444		
		554			25	1534
472	173		20	1412		
		695			28	2171
472	156		20	1672		

CROSS SECTIONS STA. 471+00 TO STA. 472+38

U.S. R.D. DIVISION	STATE	R.P.C.	TYPE FUNDS	96
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

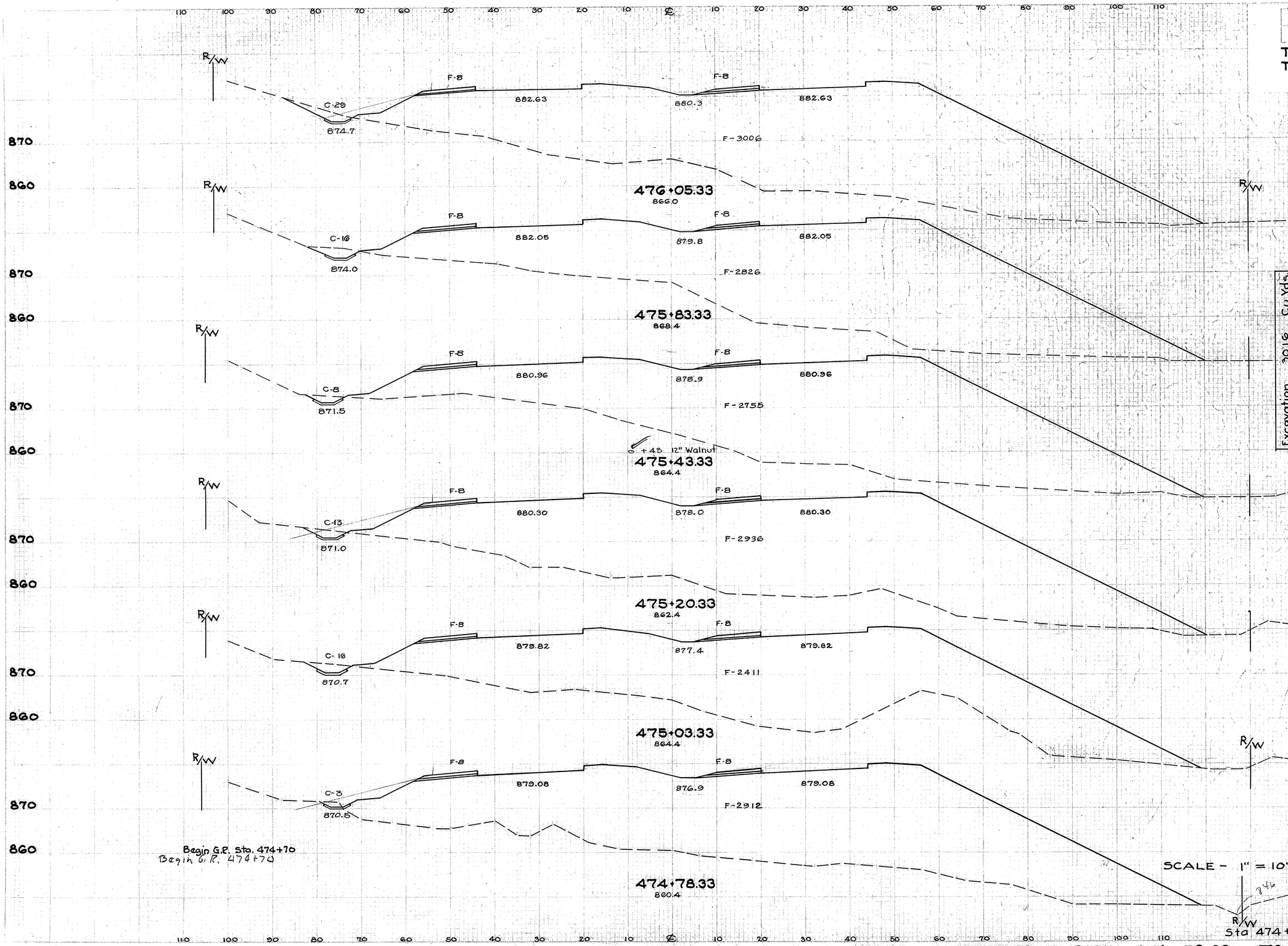


Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
186		24	2714		
	809			76	3941
178 +		78	2606		
	733			109	3663
152		69	2339		
	698			91	3466
162		54	2340		
	687			40	3468
147		0	2340		
	680			30	3236
159		40	2030		
	443			28	1738
156		20	1672		

CROSS SECTIONS STA. 472+63.33 TO STA. 474+63.33

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	97 / 154
2	OHIO	F-524(5)	POST WAR	

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



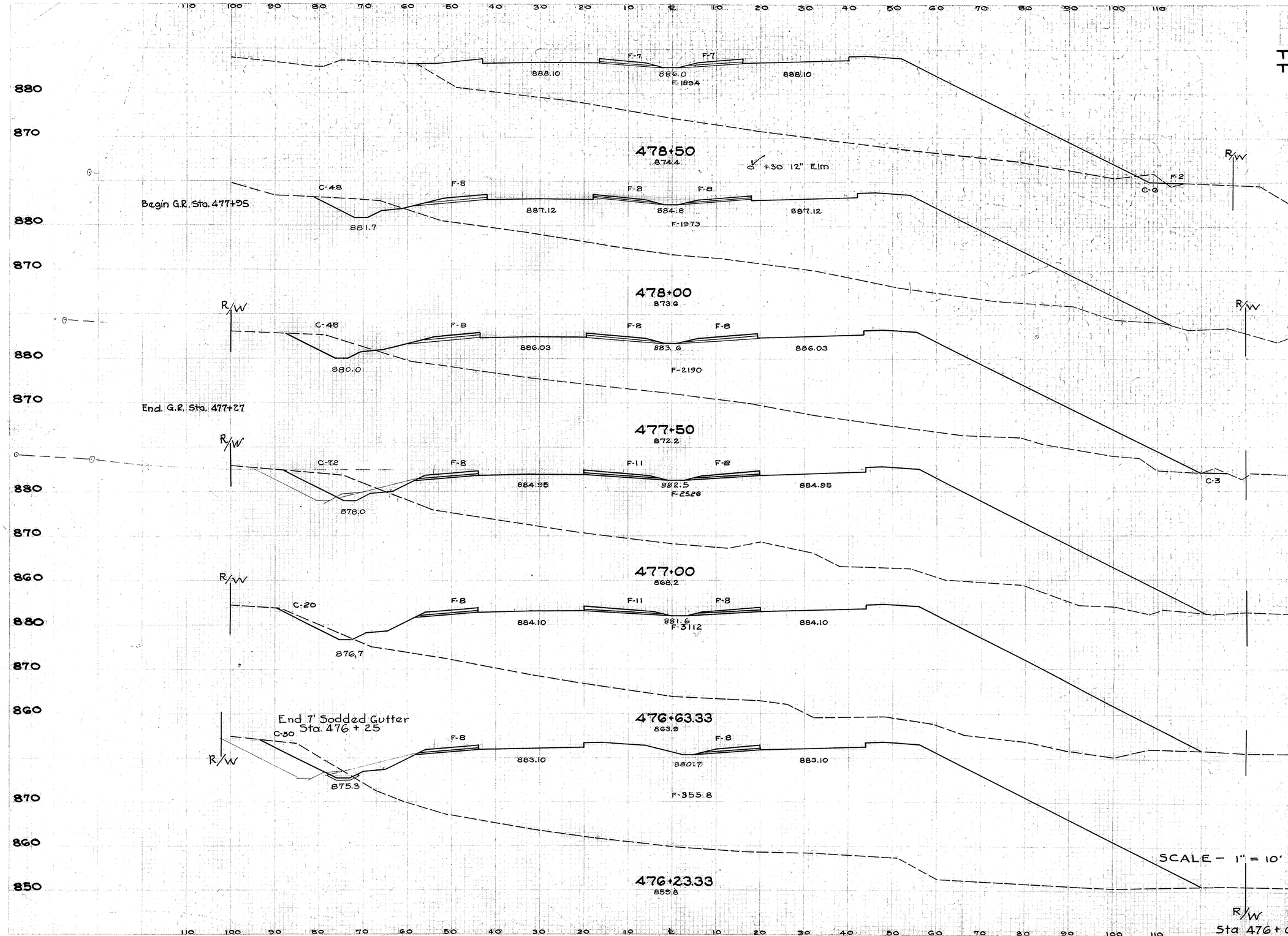
Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
186		29	3022		
	445			18	2389
178		16	2842		
	793			18	4158
179		8	2771		
	457			9	2438
179		13	2952		
	338			9	1693
179		16	2427		
	488			9	2479
172		3	2928		
	298			8	1567
186		24	2714		

Excavation 3016 Cu. Yds.
Embankment 8850 Cu. Yds.
Seeding 23,338 Sq. Yds.

CROSS SECTIONS STA. 474+78.33 TO STA. 476+05.33

2	2010	F-524(5)	TYPE FUNDS POST WAR	98 / 154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

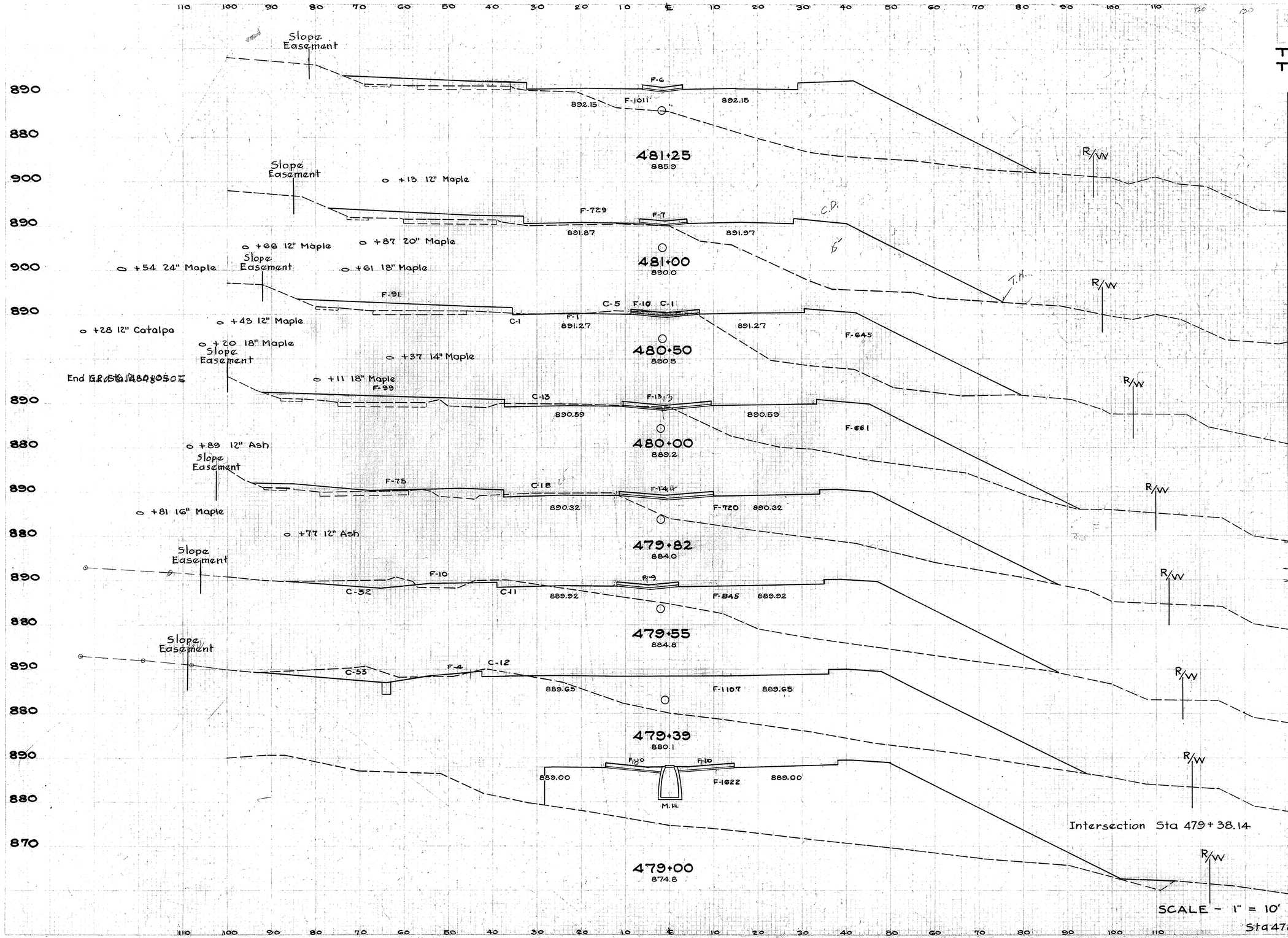


Seeding		End Area		Cu. Yds	
L.F.	S.Y.	Cut	Fill	Exc.	Emb
150		6	1910		
	906			50	3618
176		48	1997		
	1019			92	3899
191		51	2214		
	1064			114	4414
192		72	2553		
	784			63	3865
193		20	3139		
	851			52	4972
190		30	3574		
	376			26	2199
186		29	3022		

CROSS SECTIONS STA. 476 + 23.33 TO STA. 478+50

FED. RD. DIVISION			TYPE FUNDS	99
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



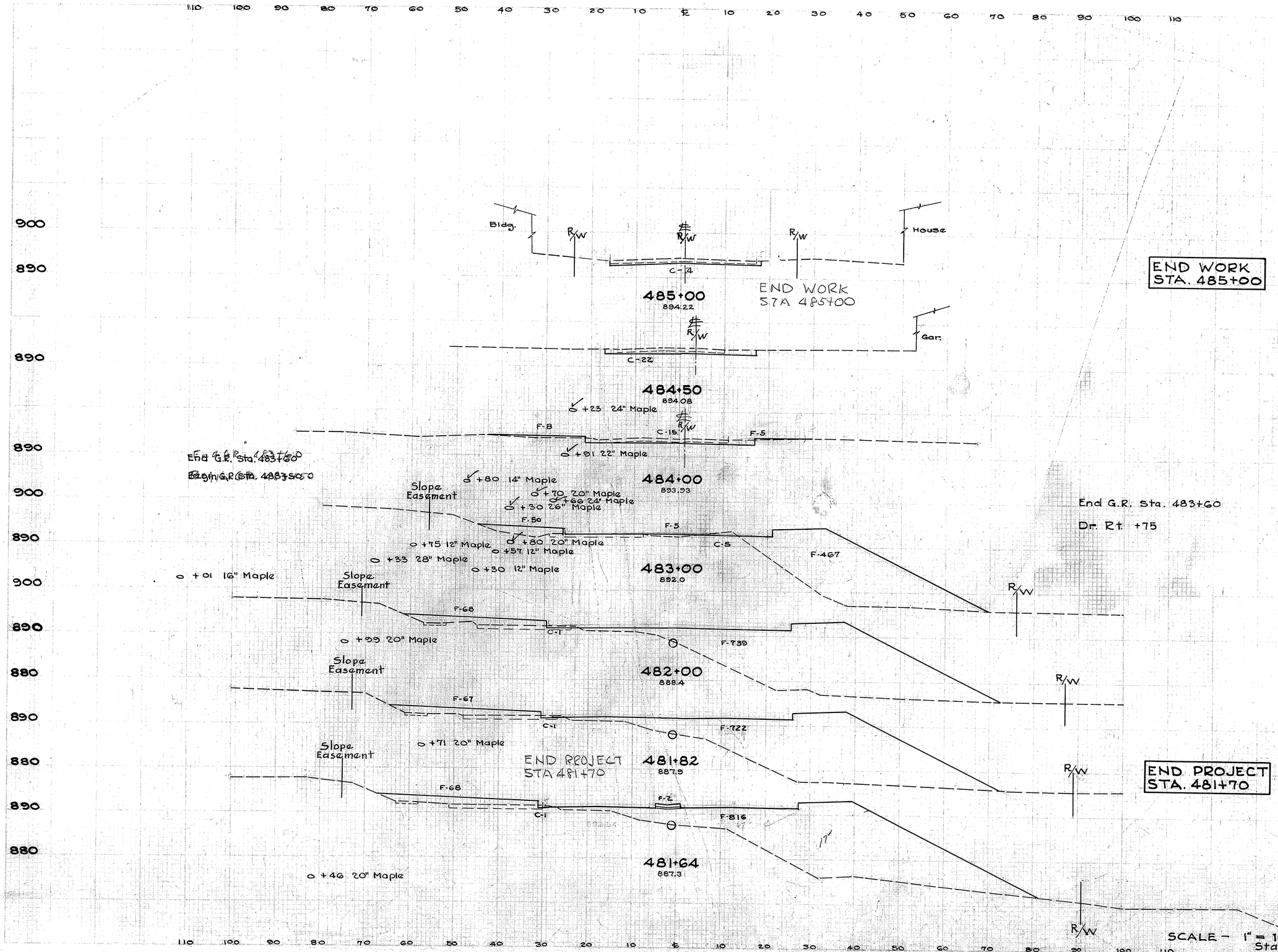
Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
127		0	1017		
	353			0	872
127		0	736		
	739			7	1373
139		7	747		
	828			19	1408
159		13	773		
	315			10	527
156		18	809		
	441			31	836
138		43	864		
	241			32	585
133		65	1111		
	546			47	1988
	1359			462	384
119		0	1642		
	747			6	3271
150		6	1810		

CROSS SECTIONS STA. 479+00 TO STA. 481 + 25

F-524(5)

TYPE FUNDS 100
POST WAR 154

TRUMBULL COUNTY
TRU - G2 - (4.59-9.67)



Seeding		End Area		Cu. Yds	
L.F.	S.Y.	Cut	Fill	Exc.	Emb
54		4	0		
	300			24	0
54		22	0		
	314			35	12
59		15	13		
	822			37	991
				0	0
89		5	522		
	1128			11	2460
114		1	807		
	221			1	532
107		1	789		
	227			1	558
120		1	886		
	535			1	1377
127		0	1017		

CROSS SECTIONS STA. 481+64 TO STA. 485+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

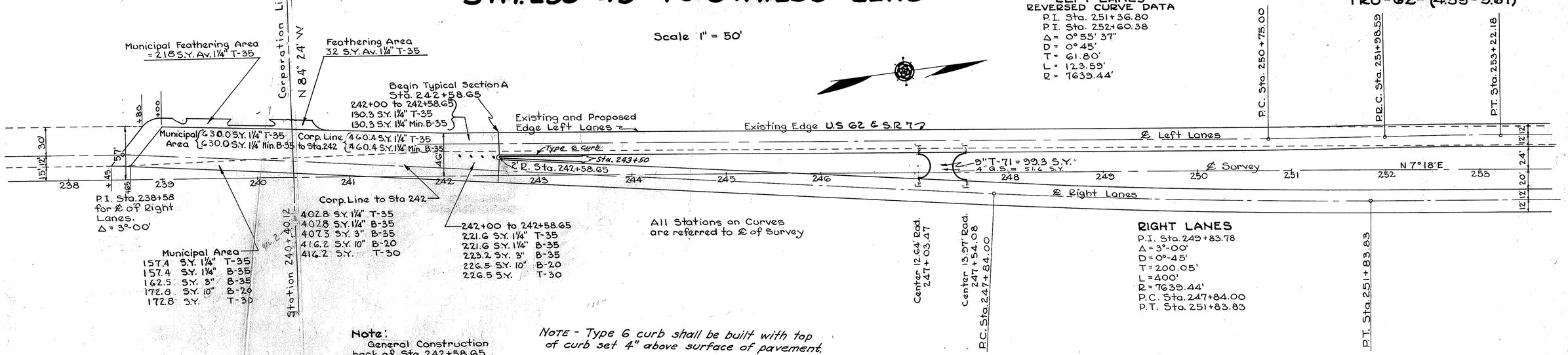
101
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

TRANSITION

STA. 238+45- TO STA. 253+22.18

Scale 1" = 50'



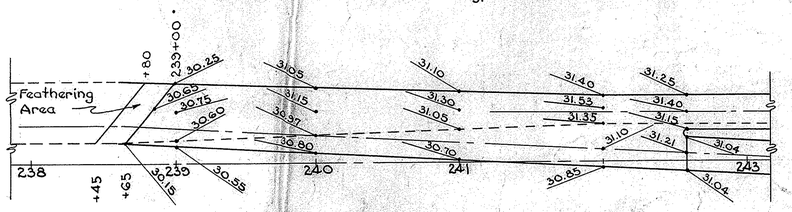
All Stations on Curves are referred to ℄ of Survey

LEFT LANES
REVERSED CURVE DATA
P.I. Sta. 251+36.80
P.I. Sta. 252+60.38
Δ = 0° 55' 37"
D = 0° 45'
T = 61.80'
L = 123.59'
R = 7639.44'

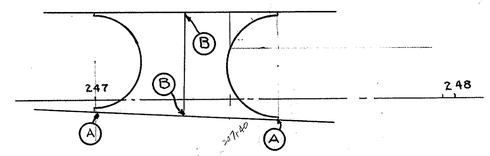
RIGHT LANES
P.I. Sta. 249+83.78
Δ = 3°-00'
D = 0°-45'
T = 200.05'
L = 400'
R = 7639.44'
P.C. Sta. 247+84.00
P.T. Sta. 251+83.83

Note:
General Construction back of Sta. 242+58.65 similar to left side of Typical Section A

NOTE - Type 6 curb shall be built with top of curb set 4" above surface of pavement.



PAVEMENT SURFACE ELEVATIONS
ADD 900' TO ALL ELEVATIONS SHOWN



JOINT DIAGRAM
Scale 1" = 20'

NOTE:
Ⓐ to Ⓐ Longitudinal joint without bars.
Ⓑ to Ⓑ Longitudinal joint

ESTIMATED QUANTITIES

Code	Station From	Station To	T-30 S.Y.	T-35 S.Y. 1¼"	T-35 S.Y. 1¼" Av.	B-35 S.Y. 1¼"	B-35 S.Y. 1¼" Min	B-35 S.Y. 3"	10" B-20 S.Y.	9" T-71 S.Y.	4" Gran. Slag S.Y.	Spec. Traff. Div. Ea.
Municipal	238+45	240+40.12	172.8	787.4	218.0	157.4	630.0	162.5	172.8			
9672	240+40.12	242+00	416.2	863.2	32.0	402.8	460.4	407.3	416.2			
9672	242+58	243+50										
9672	242+00	242+58.65	226.5	351.9		221.6	130.3	223.2	226.5			
9672	247+03.47	247+54.08								99.3	51.6	
*9672	242+17	242+53										4

NOTE: Above Quantities carried to Line Sheets except gran slag carried to sheet No. 7.

* Traffic Dividers will be placed on a line parallel to and 14' dist. Lt. of the ℄ of the right lanes.

TRANSITION DETAIL STA. 238+45 TO STA. 253+22.18

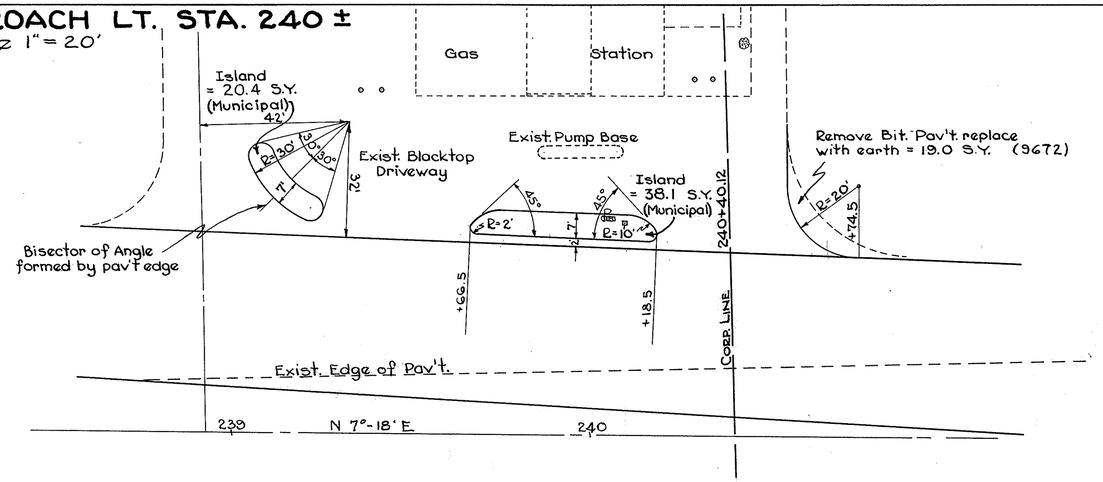
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

102/154

TRUMBULL COUNTY
TRU-62 (4.59-967)

APPROACH LT. STA. 240 ±

Scale 1" = 20'

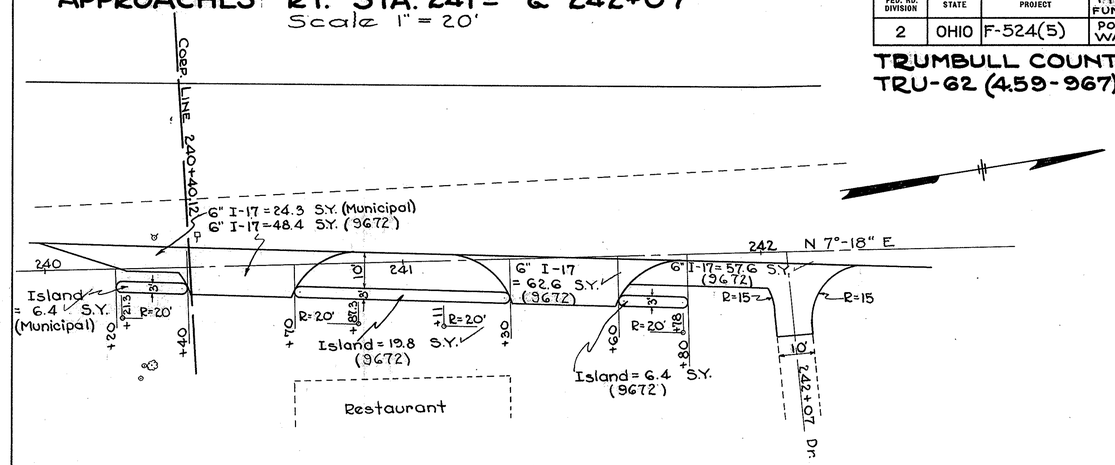


ESTIMATED QUANTITIES				
Code	Station From	Station To	I-21 12" S.Y.	E-8 REM. BIT. PAV'T. S.Y.
Municipal	239+05	239+25	20.4	
"	239+66.5	240+18.5	38.1	
9672	240+55	240+88		19.0
TOTALS			58.5	19.0

NOTE: Above Quantities carried to Line Sheets

APPROACHES RT. STA. 241 ± & 242+07

Scale 1" = 20'

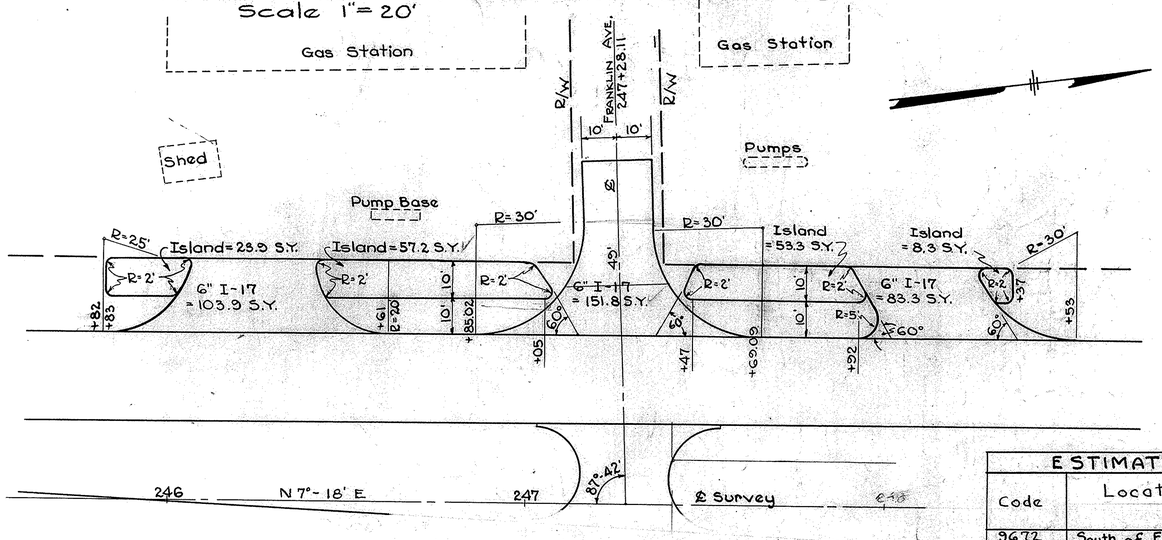


ESTIMATED QUANTITIES				
Code	Location	I-17 6" S.Y.	I-21 12" S.Y.	
Municipal	Restaurant Drive and Mail Box App.	24.3	6.4	
9672	Restaurant Drive	111.0	19.8	
9672	Dr. 242+07 North 242+0	31.0		
9672	Dr. 242+07 South 242+0	26.6	6.4	
TOTALS	Municipal	24.3	6.4	
TOTALS	9672	168.6	26.2	

NOTE: Above Quantities carried to Line Sheets

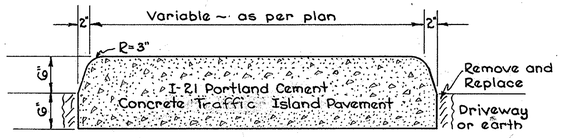
APPROACHES LT. STA. 246 ± & 247+28.11

Scale 1" = 20'



ESTIMATED QUANTITIES				
Code	Location	I-17 S.Y.	I-21 12" S.Y.	
9672	South of Franklin	103.9	81.1	
9672	Franklin Ave.	151.8		
9672	North of Franklin	83.3	61.6	
TOTALS		339.0	142.7	

NOTE: Above Quantities carried to Line Sheets



TYPICAL CROSS SECTION OF CONCRETE ISLANDS

Scale ~ 1" = 1'-0"

NOTE: Cost of removing existing earth or driveway material and the replacement and compaction of same with equal material shall be included in the unit price bid for Item I-21 12" Portland Cement Concrete Traffic Island Pavement.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

103/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

TRANSITION & INTERSECTION

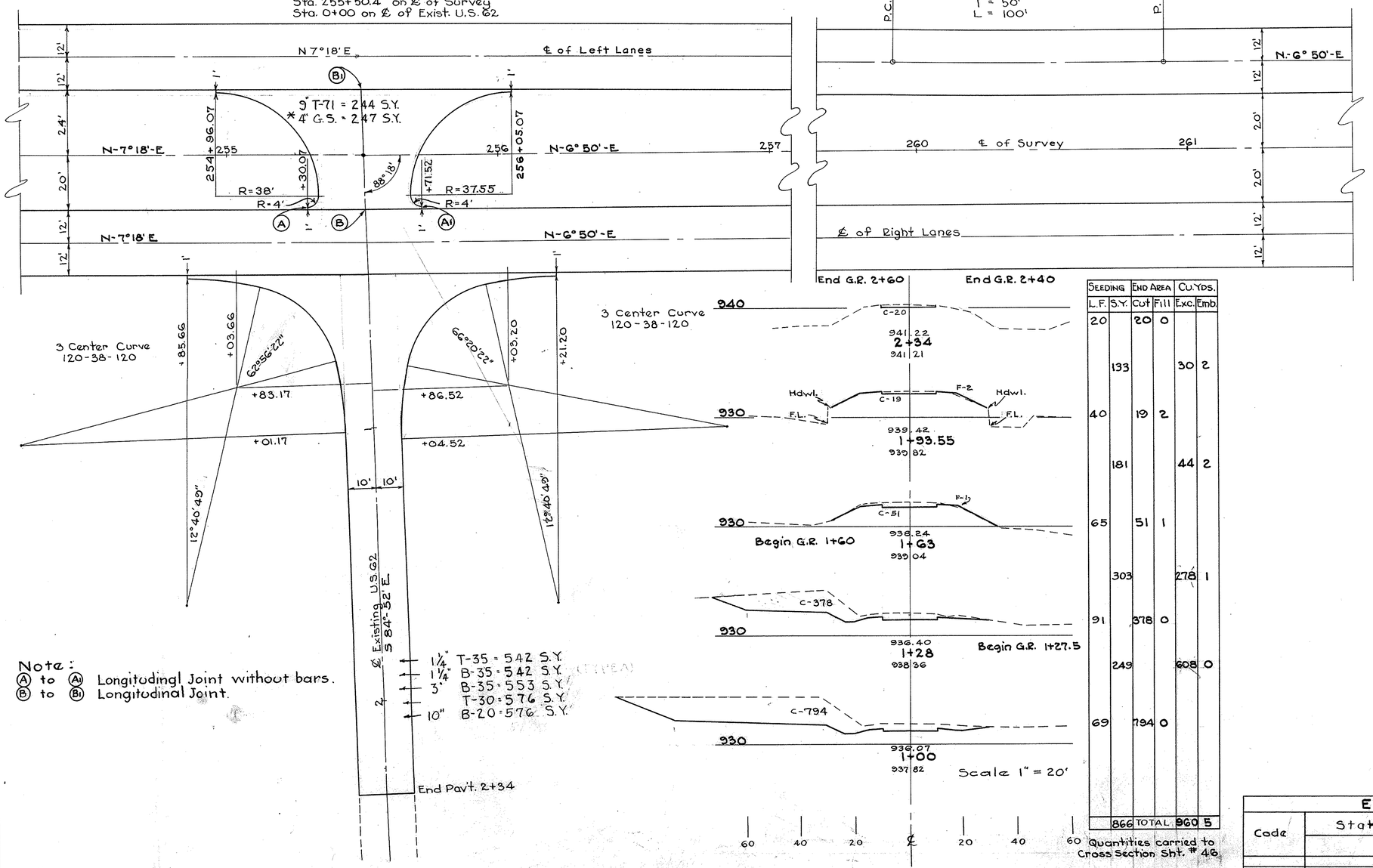
STA. 255+49.30 TO STA. 260+90.41 STA. 255+50.48

Scale 1" = 20'

P.I. Sta. 255+49.30
Δ = 0° 28' Lt.
NOTE: No deflection in ℄ of Left Lanes

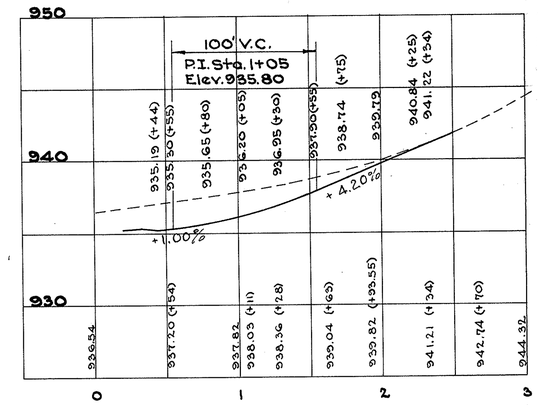
INTERSECTION
Sta. 255+50.4 on ℄ of Survey
Sta. 0+00 on ℄ of Exist. U.S. 62

CURVE DATA
Left Lane Only
P.I. Sta. 260+40.41
Δ = 0° 28' Lt.
D = 0° 28'
R = 12277.67
T = 50'
L = 100'



SEEDING		END AREA		CU. YDS.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
20		20	0		
	133			30	2
40		19	2		
	181			44	2
65		51	1		
	303			278	1
91		378	0		
	249			608	0
69		794	0		
	866	TOTAL		960	5

Quantities carried to Cross Section Sht. # 46



Note:
Ⓐ to Ⓐ₁ Longitodingl Joint without bars.
Ⓑ to Ⓑ₁ Longitodinal Joint.

ESTIMATED QUANTITIES									
Code	Station	T-30	T-35 S.Y.	B-20 S.Y.	B-35 S.Y.		T-71 S.Y.	G.S. S.Y.	
		S.Y.	1¼"	10"	1¼"	3"	9"	4"	
9672	Cross over 255+50						244	247	
9672	Intersection 255+50	576	542	576	542	553			

Above Quantities carried to Sheet No. 21
except Gran. Slag carried to Sheet No. 7.
*Gran. Slag to extend 1' beyond edge of T-71.

TRANSITION STA. 255+49.30 TO STA. 260+90.41 & INTERSECTION DETAIL STA. 255+50.48

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

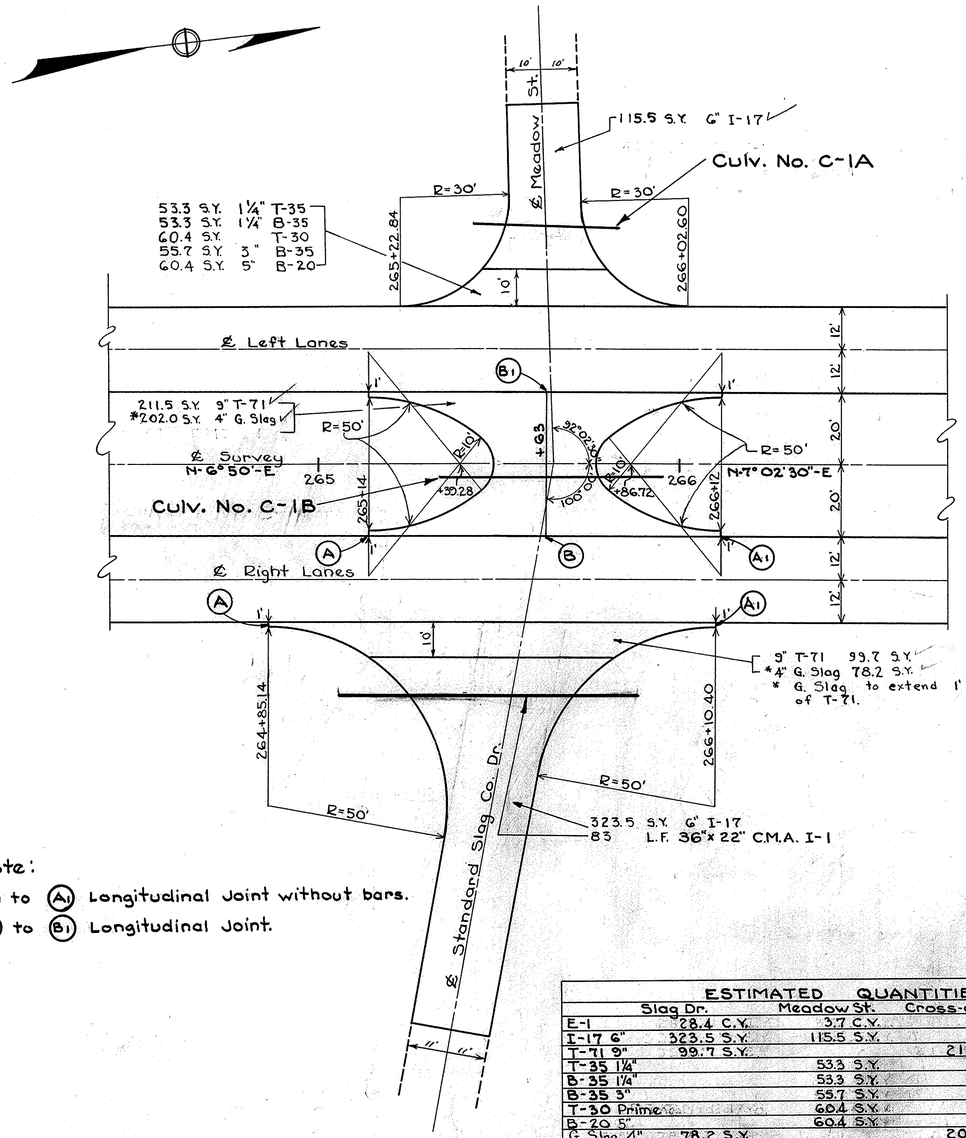
104/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

INTERSECTION STA. 265+65.22

Scale 1"=20'

P.I. Sta. 265+49.00
Δ=0°12' 30" Rt.



Note:

(A) to (A1) Longitudinal Joint without bars.

(B) to (B1) Longitudinal Joint.

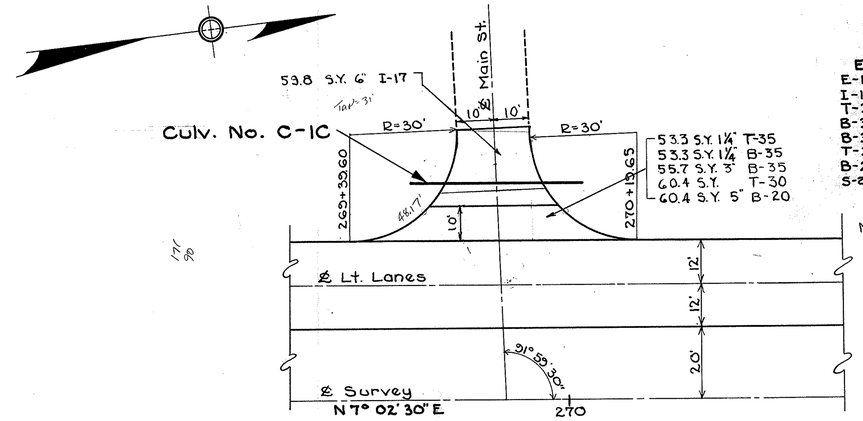
ESTIMATED QUANTITIES

	Slag Dr.	Meadow St.	Cross-over	Total
E-1	28.4 C.Y.	3.7 C.Y.		
I-17 6"	323.5 S.Y.	115.5 S.Y.		
T-71 9"	99.7 S.Y.		211.5 S.Y.	
T-35 1¼"		53.3 S.Y.		
B-35 1¼"		53.3 S.Y.		
B-35 3"		55.7 S.Y.		
T-30 Prime		60.4 S.Y.		
B-20 5"		60.4 S.Y.		
G. Slag 4"	78.2 S.Y.		202.0 S.Y.	
S-27 21"		40 L.F.		
I-1 36"x22" C.M.A.	83 L.F.			
S-27 15"			62 L.F.	

Note: All Quantities Carried to Line Sheet except Gran. Slag Carried to Sheet No. 7
E-1 Carried to Sheet No. 48

INTERSECTION STA. 269+82.20

Scale 1" = 20'



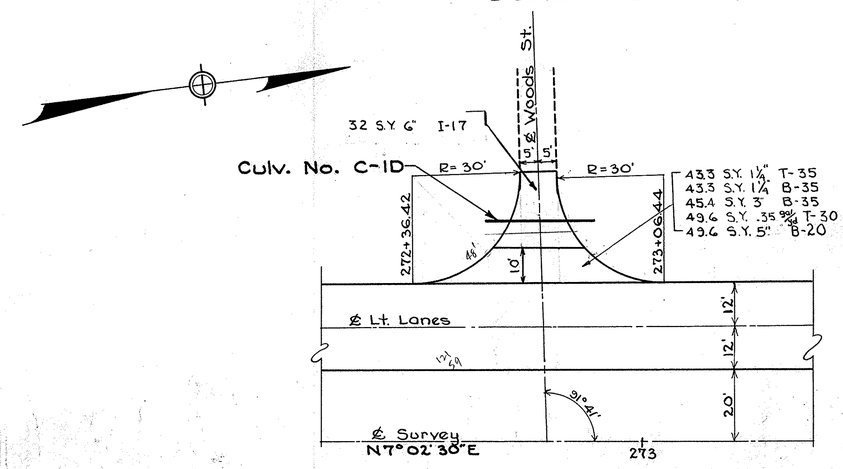
ESTIMATED QUANTITIES

E-1	5.3	C.Y.
I-17 6"	59.8	S.Y.
T-35 1¼"	53.3	S.Y.
B-35 1¼"	53.3	S.Y.
B-35 3"	55.7	S.Y.
T-30 Prime	60.4	S.Y.
B-20 5"	60.4	S.Y.
S-27 18"	48	L.F.

Note: All quantities carried to Line Sheet, except E-1 carried to X-Section Sht. # 48

INTERSECTION STA. 272+73.6

Scale 1" = 20'



ESTIMATED QUANTITIES

E-1	40	C.Y.
I-17 6"	32.0	S.Y.
T-35 1¼"	43.3	S.Y.
B-35 1¼"	43.3	S.Y.
B-35 3"	45.4	S.Y.
T-30 Prime	49.6	S.Y.
B-20 5"	49.6	S.Y.
S-27 18"	30	L.F.

Note: All quantities carried to line sheet except E-1 which is carried to Sht # 49.

INTERSECTION DETAILS

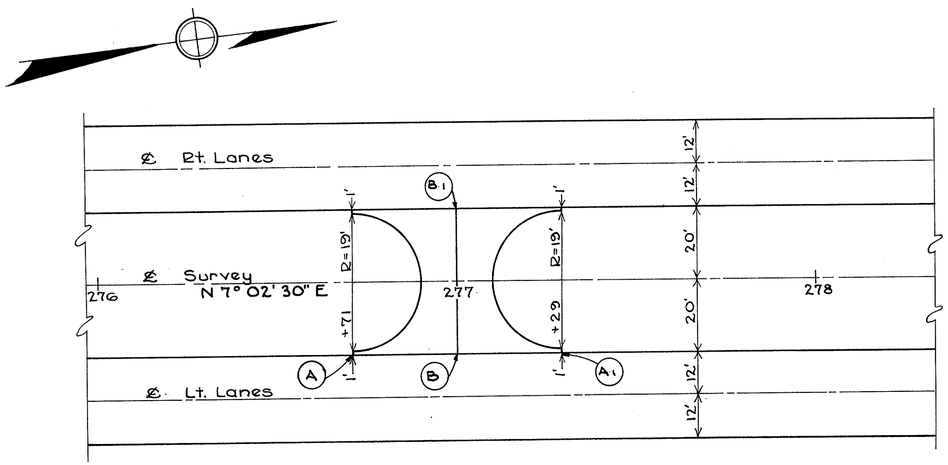
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

105
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

CROSS-OVER STA. 277+00

Scale 1" = 20'



Note:

(A) to (A1) Longitudinal Joint without bars.

(B) to (B1) Longitudinal Joint.

ESTIMATED QUANTITIES

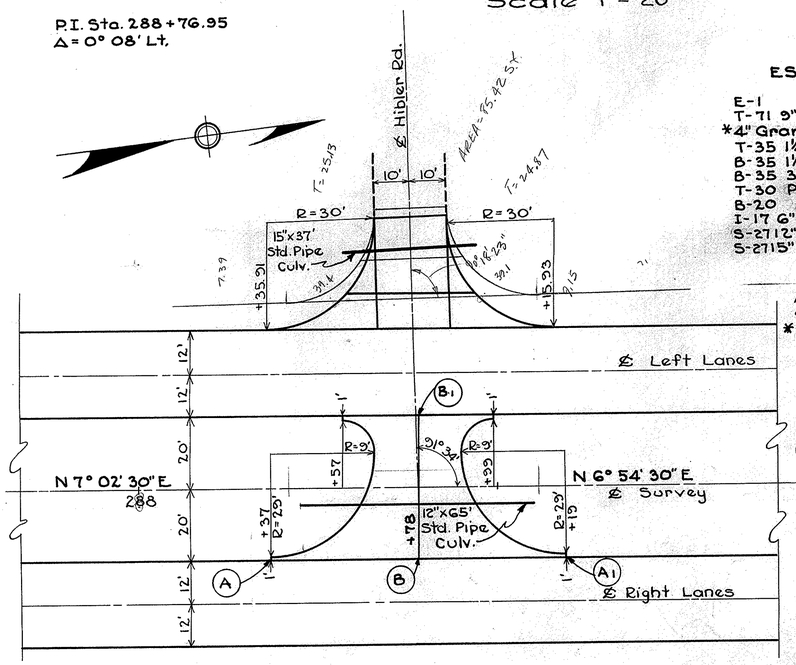
T-71 9"	131.8	S.Y.
*4" Gran. Slag	127.6	S.Y.

All quantities carried to line sheet except Gran. Slag carried to Sheet No. 7

INTERSECTION STA. 288+77.94

Scale 1" = 20'

P.I. Sta. 288+76.95
Δ = 0° 08' Lt.



ESTIMATED QUANTITIES

	Hibler	Cross-over	Total
E-1	12 C.Y.	10.0 C.Y.	
T-71 9"		159.4 S.Y.	
*4" Gran. Slag		148.7 S.Y.	
T-35 1¼"	54.4 S.Y.		
B-35 1¼"	54.4 S.Y.		
B-35 3"	56.8 S.Y.		
T-30 Prime	61.5 S.Y.		
B-20 5"	61.5 S.Y.		
I-17 6"	56.2 S.Y.		
S-27 12"		65 L.F.	
S-27 15"	37 L.F.		

All quantities carried to line sheet except Gran. Slag. carried to Sheet No. 7

*Gran. Slag to extend 1' beyond edge of T-71

E-1 Carried to Cross Section Sht. # 51

Note:

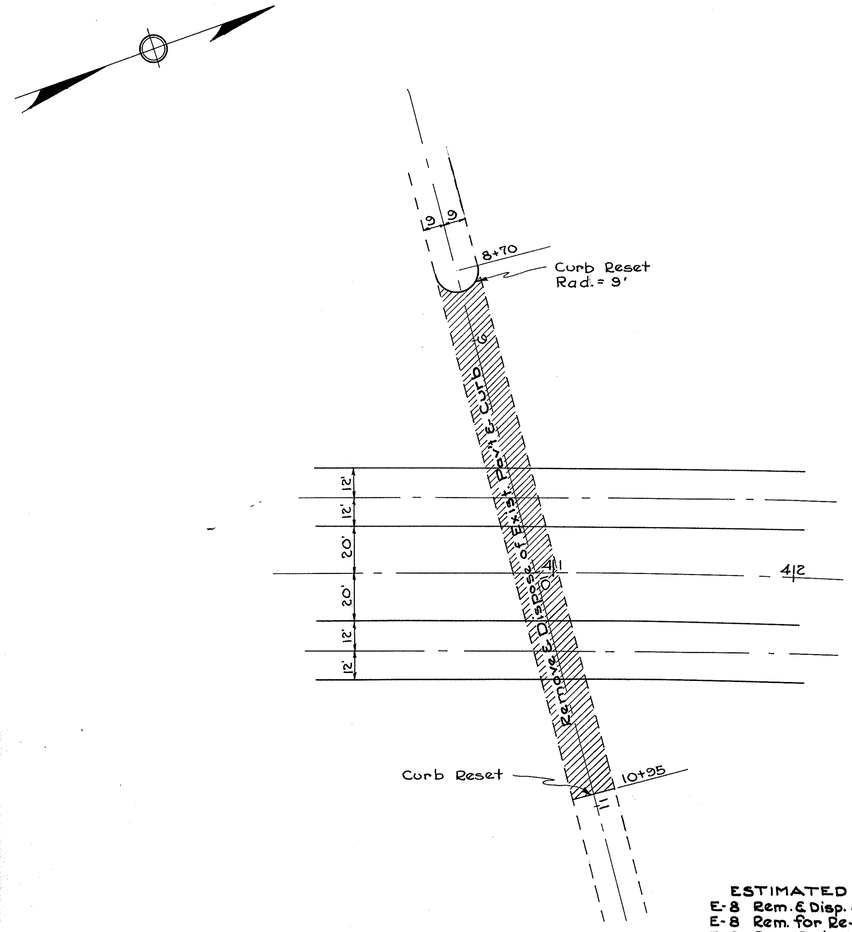
(A) to (A1) Longitudinal Joint without bars.

(B) to (B1) Longitudinal Joint.

ELM ST. STA. 410+93.0

Δ = 75° 03' 33"

Scale 1" = 30'



ESTIMATED QUANTITIES

E-8	Rem. & Disp. of Exist. Pav't.	436	S.Y.
E-8	Rem. for Re-use of Exist. Curb	46	L.F.
E-8	Rem. & Disp. of Exist. Curb	404	L.F.
I-11	Sandstone Curb Reset	46	L.F.

All Quantities carried to Line Sheet.

INTERSECTION DETAILS

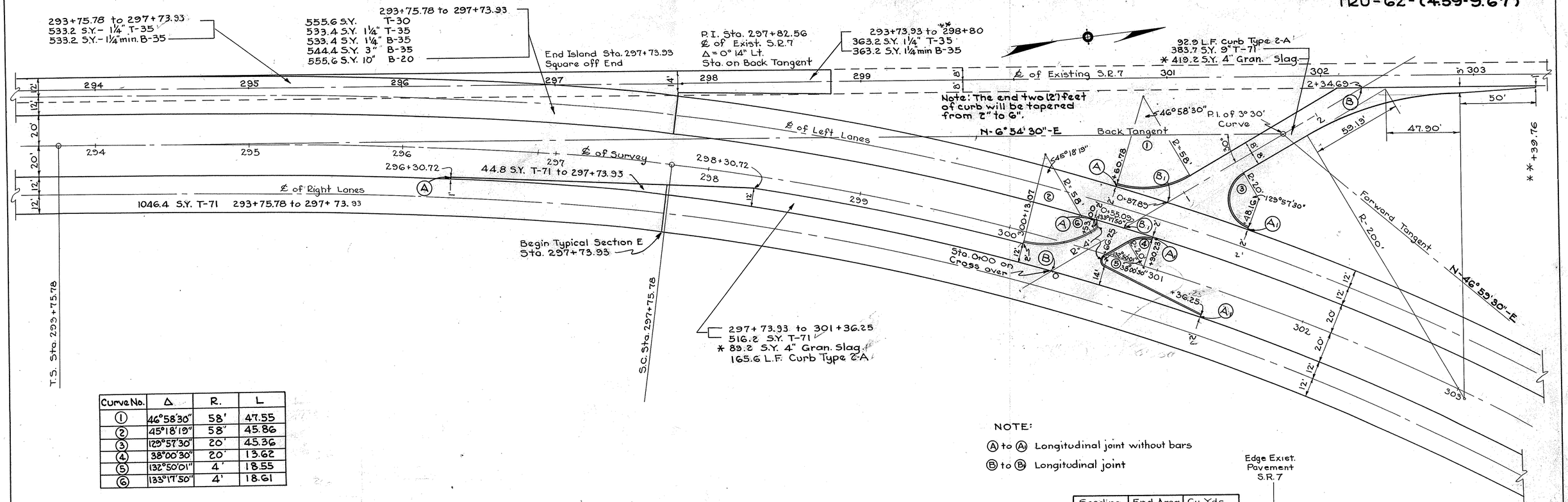
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

106/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

INTERSECTION STA. 300 + 54.15

Scale 1" = 30'

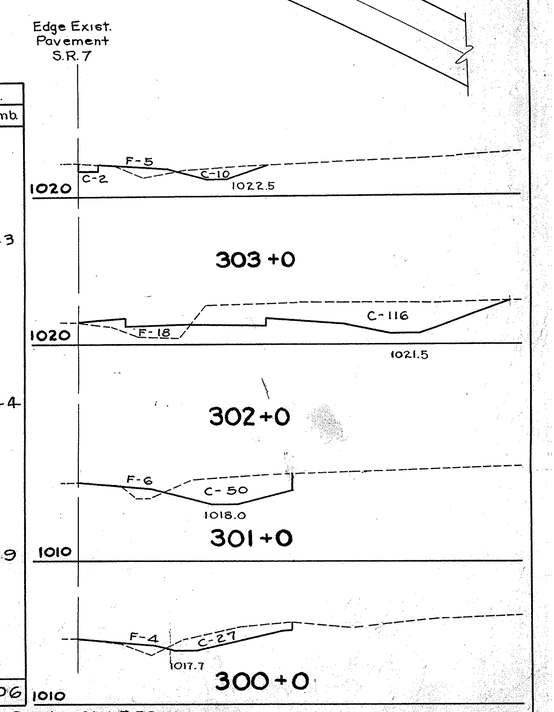


Curve No.	Δ	R.	L
1	46°58'30"	58'	47.55
2	45°18'19"	58'	45.86
3	129°57'30"	20'	45.36
4	38°00'30"	20'	13.62
5	132°50'01"	4'	18.55
6	133°17'50"	4'	18.61

NOTE:

A to A1 Longitudinal joint without bars

B to B1 Longitudinal joint



Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
34		12	5		
	472			237	43
51		116	18		
	450			307	44
30		50	6		
	333			143	19
30		27	4		
TOTALS	1255			687	106

Quantities Carried To Cross Section Sht. # 53

* Note: Granulated Slag to extend 1 foot beyond edge of T-71 on cross over.

** Note: Station on S.R.7.

All Quantities carried to line sheet except Gran. Slag carried to Sheet No. 7

ESTIMATED QUANTITIES

Code	Station From	Station To	T-30 S.Y.	T-35 S.Y. 1¼"	T-35 S.Y. 1¼"	B-35 S.Y. 1¼" Min.	B-35 S.Y. 3"	B-20 S.Y. 10"	T-71 S.Y. 9"	Gran. Slag S.Y. 4"	I-12 Type 2-A L.F.
9672	293+75.78	297+73.93	555.6	1066.6	533.4	533.2	544.4	555.6	1091.2		
9672	293+75.78	298+80.00		363.2		363.2					
TOTALS			555.6	1429.8	533.4	896.4	544.4	555.6	1091.2		
7221	297+73.93	301+36.25							516.2	89.2	165.6
7221	300+54.15	303+39.76	**						383.7	419.2	92.9
TOTALS									899.9	508.4	258.5

INTERSECTION STA. 300 + 54.15

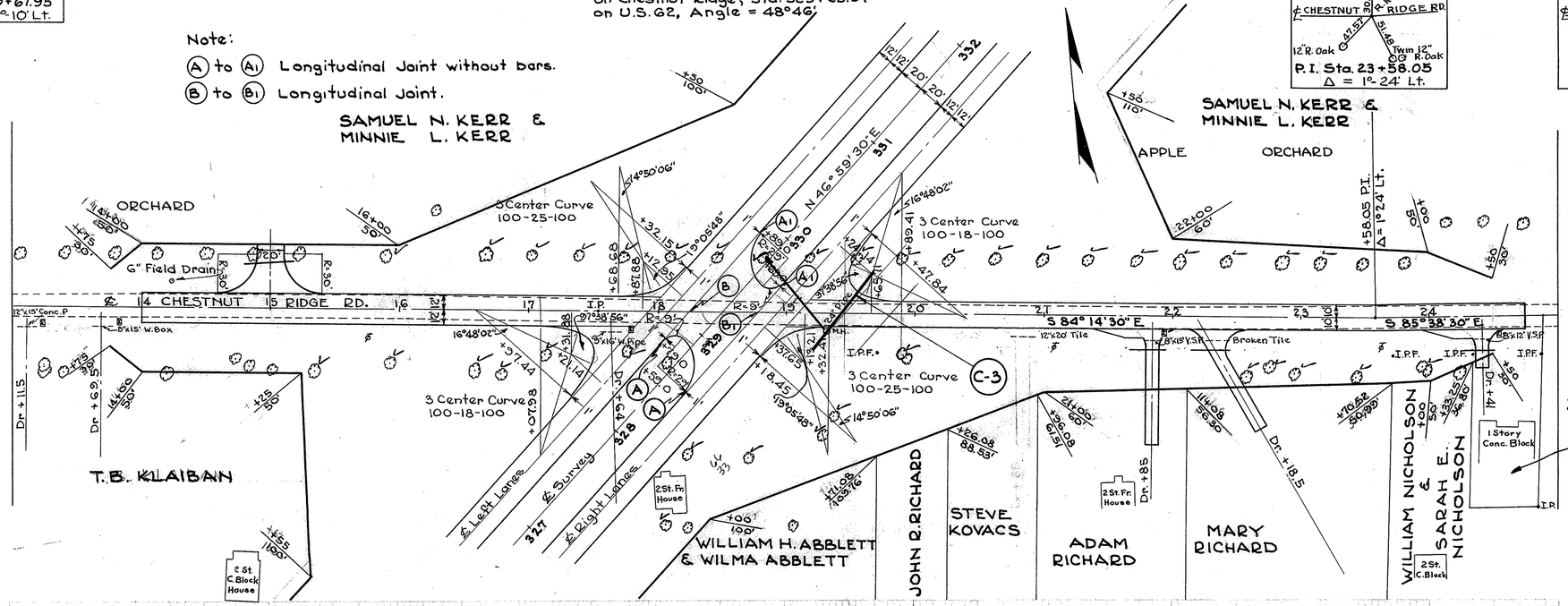
INTERSECTION STA. 329 + 23.97

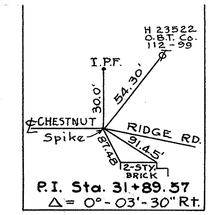
Scale 1" = 50'

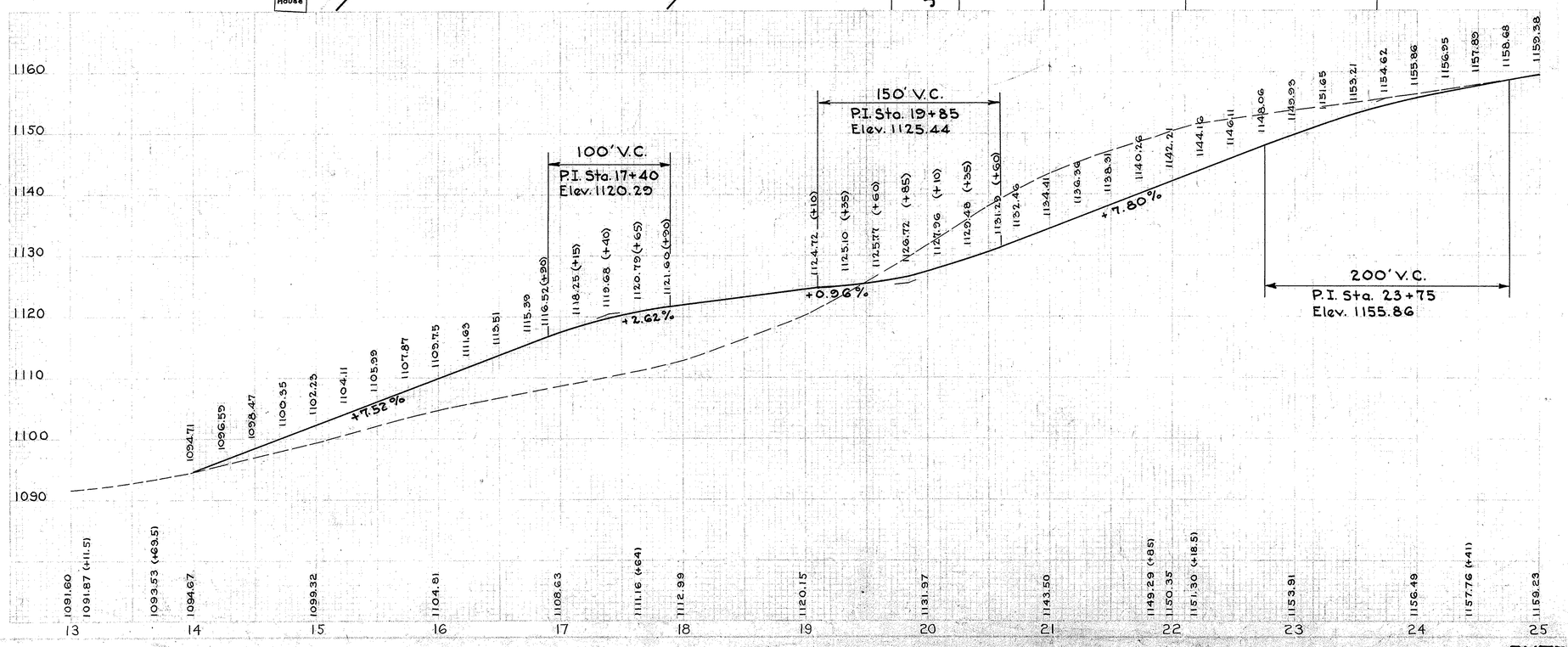
Intersection Sta. 18+49.67 on Chestnut Ridge, Sta. 329+23.97 on U.S. 62, Angle = 48°46'

Brick Posts
Drive
58.95
58.00
R.R. Spike
Chestnut Ridge Rd.
P.I. Sta. 9+67.95
Δ = 0°-10' Lt.

Note:
(A) to (A1) Longitudinal Joint without bars.
(B) to (B1) Longitudinal Joint.







2 OHIO F-524(5) POST WAR 107 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

PIPE REMOVAL				
STATION			E-12	
FROM	TO	SIDE	15" & Under L.F.	Over 15" L.F.
17+55	17+71	R	16	
20+75	20+95	R	20	
21+78	21+91	R	13	
24+34	24+46	R	12	
TOTAL			61	

APPROACHES												
		I-1	T-35	B-35		T-30	B-20	T-71	Spec.	I-17	I-1	Detail Sht.
		18"	1¼"	1¼"	3"	Prime Coat	5"	9"	G.S. 4"	6"	12"	
STATION	SIDE	L.F.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	L.F.	No.
329+23.97	L		1154	1154	1387	1852	1852					107
329+23.97	M							372.4	60.8			107
329+23.97	R		1373	1373	1406	1472	1472					107
* 21+85	R									129.0	28	10
* 22+18.5	R									118.3	30	10
* 24+41	R									62.4	24	10
* 15+00	L	38								127.4		
TOTALS		38	2527	2527	2793	3324	3324	372.4	60.8	437.1	82	

* Station on Chestnut Ridge Rd.

Note: Granulated Slag carried to Sheet No. 7

Scale { 1" = 50' Hor. / 1" = 10' Vert.

INTERSECTION STA. 329 + 23.97

Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.	Station	Elevation	Notes
		0	0					+07 14" Apple
							1158.0	R/W; 1158.0; R/W
						1150 + 75		+74 14" Apple
20						25+00	1159.23	
	539			228	0			
				1	0	Dr. Rt. 24+41		
								+43 12" Apple; +23 12" B.Oak; +13 12" Apple
77		123	0					R/W; C-80; C-43; R/W
						1150	1153.4; 1155.86; 1153.4	+84 12" B.Oak
								+81 12" Apple
	939			1224	0	24+00	1156.49	
								+46 12" B.Oak
92		538	0					R/W; C-538; R/W
						1150		+84 12" Apple; +76 12" B.Oak; +58 14" B.Oak
	1072			2374	0		1145.8; 1148.06; 1145.8	
				130	0	Dr. Rt. 22+18.5	23+00 1153.91	+41 12" Apple
101		744	0					R/W; C-744; R/W
						1150	1140.0; 1142.21; 1140.0	
	1333			3950	0			
				177	0	Dr. Rt. 21+85	22+00 1150.35	
139		1389	0					R/W; C-1389
						1140	1132.1; 1134.41; 1132.1	
	1489			3889	0		21+00 1143.50	+62 12" App.
								R/W = 99'
129		711	0					C-711
						1130	1125.1; 1127.43; 1125.1	+91 12" Apple; +21 14" Tw. W. Oak
								+55 14" Apple
	994			1335	104		20+00 1131.57	
								R/W = 210'; R/W = 139
						1120		F-56; C-10
							19+00 1120.15	+83 14" Apple; 1117.6
50		10	56					
	833			43	291			+09 12" App.
								R/W = 137'; F-101; R/W = 209'
100		13	101					C-13
						1110	1113.2	+75 12" Apple
							18+00 1112.99	
	1156			52	1154			End G.R. 17+10 +/0
								R/W 93'; F-522
108		15	522					C-8; C-7
						1100	1107.2; 1117.25; 1105.3	
							17+00 1108.63	+79 16" Maple; +47 18" Elm
	1094			57	1441			
								Begin G.R. 16+30; +27 16" Apple
89		16	256					R/W; C-8; F-256; C-8; Begin G.R. 16+14
						1100	1104.3; 1109.75; 1102.3	+03 12" App.
							16+00 1104.81	+88 12" W. Cherry
	911			202	667			
								+22 12" App.
75		93	104	4	0	1100		R/W; C-35; F-104; C-58; R/W; Dr. Lt. +00
							1098.0; 1102.23; 1098.0	
						1090		+86 12" App.
							15+00 1099.32	
	806			294	207			
								+20 18" B.Oak
70		66	8					F-5; C-22; F-3; C-22; C-22
						1090	R/W; 1092.4; 1094.71; 1092.8; R/W	
							End '7' Sodded Gutter Sta. 14+00; 14+00 1094.67	
				31	5			
		0	0				0	
Totals	11166			3991	3864		13+75	Quantities carried to 'X' section Sht. No. 59

Scale 1" = 10'

INTERSECTION STA. 329+23.97

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

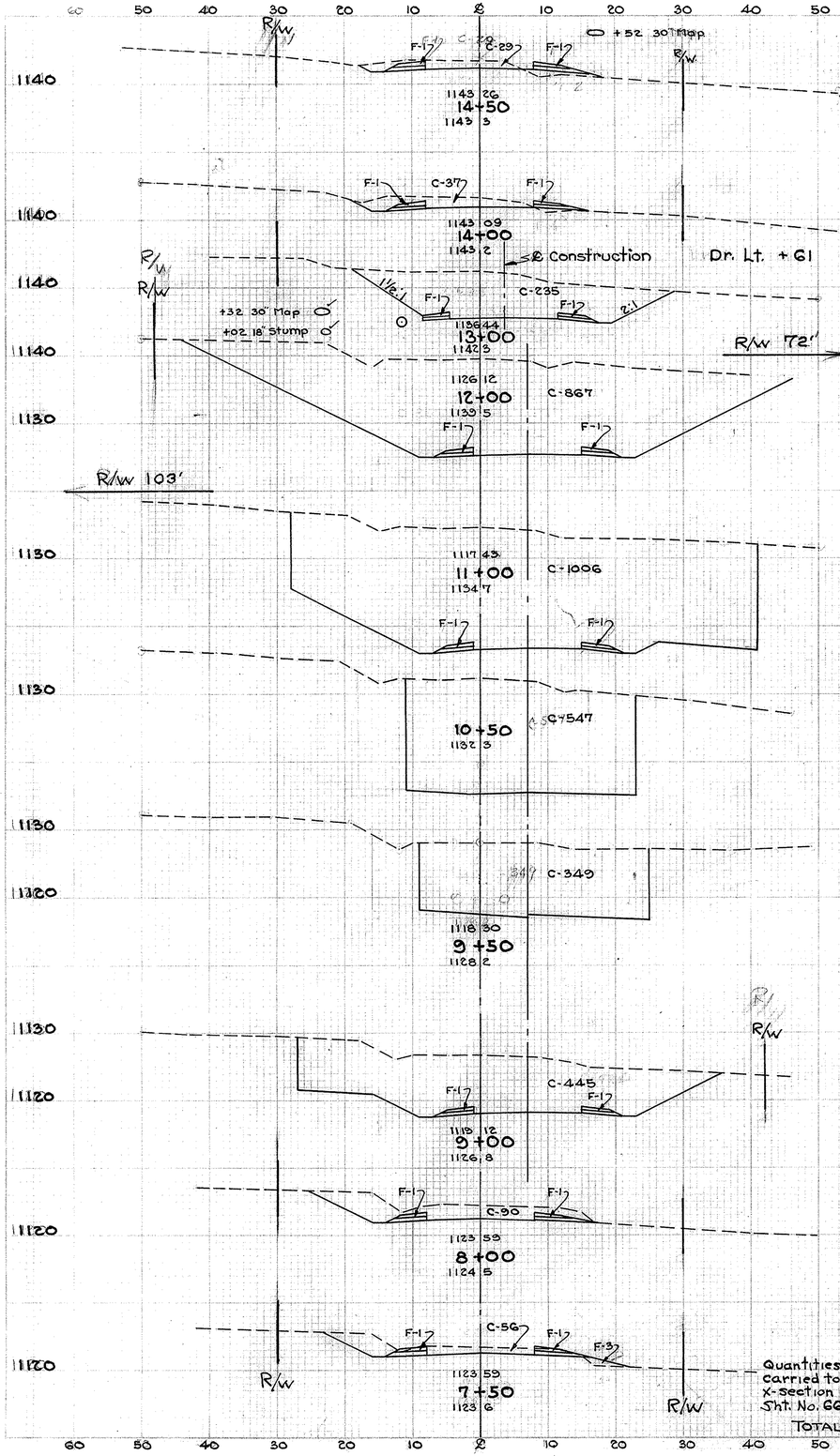
F.A.P. No.	Sheet	State	Project	Type Funds
2	44	OHIO	F-524(5)	POST WAR

108
154

INTERSECTION STA. 360 + 70.19

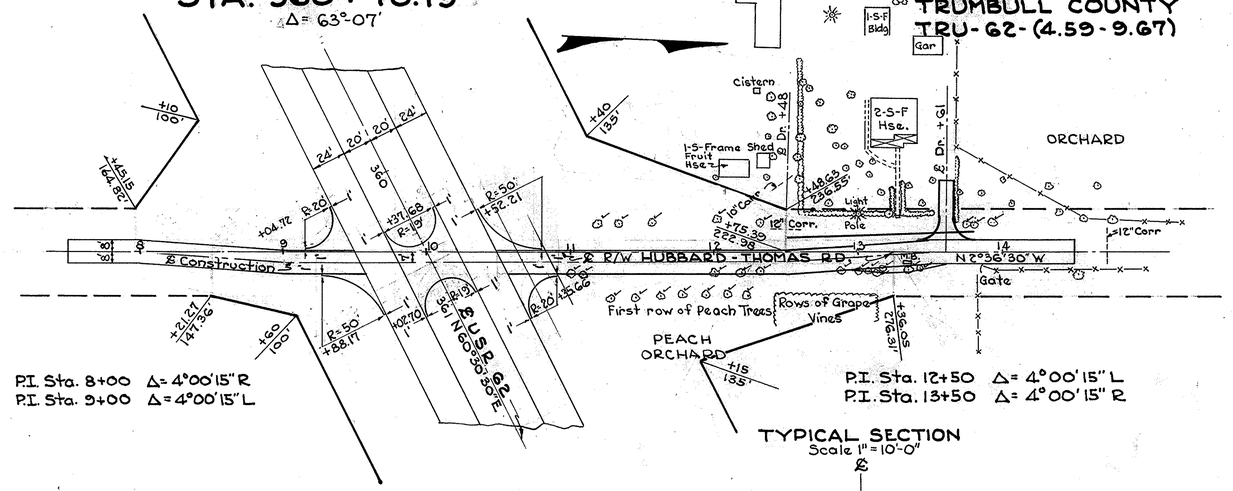
Δ = 63°-07'

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
41		29	4		
	225			61	6
40		37	2	26	0
	533			504	7
56		235	2		
	839			2041	7
95		867	2		
	844			3432	7
57		1006	2		
	158			1438	2
0		547	0		
	0			896	0
0		349	0		
	156			726	2
56		445	2		
	550			991	7
43		90	2		
	244			135	7
45		56	5		
	3548			10250	45
TOTALS					

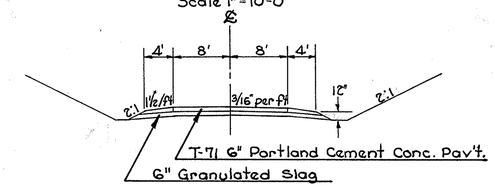
Quantities carried to X-section Sht. No. 66

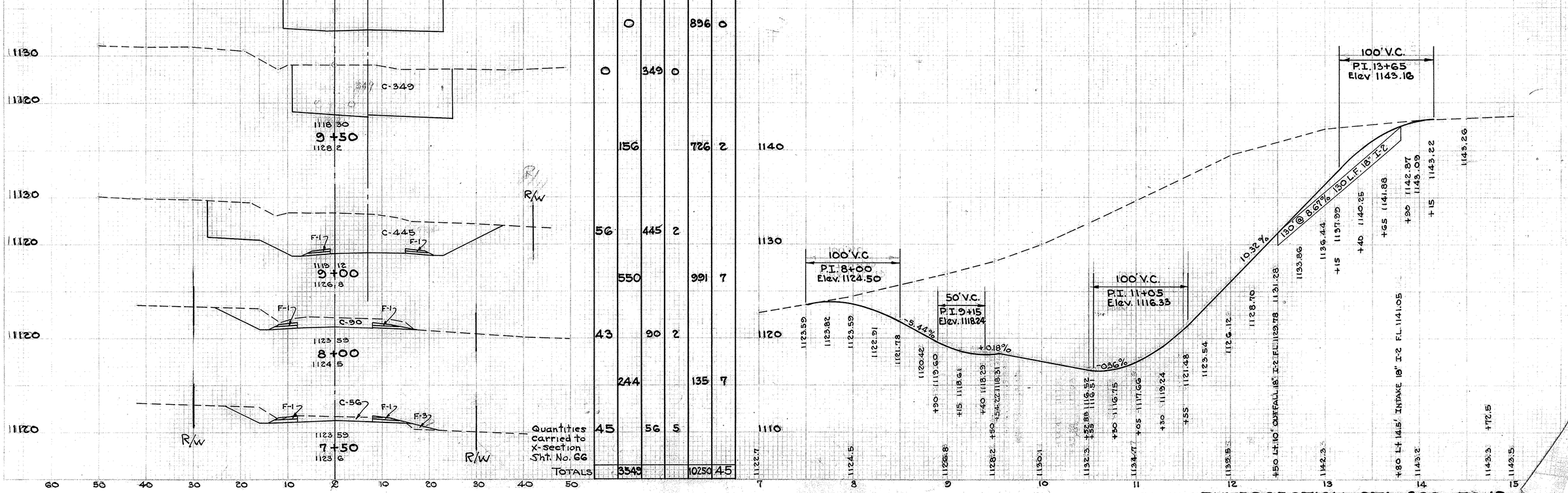


P.I. Sta. 8+00 Δ = 4°00'15" R
P.I. Sta. 9+00 Δ = 4°00'15" L

P.I. Sta. 12+50 Δ = 4°00'15" L
P.I. Sta. 13+50 Δ = 4°00'15" R

TYPICAL SECTION
Scale 1" = 10'-0"





INTERSECTION STA. 360 + 70.19

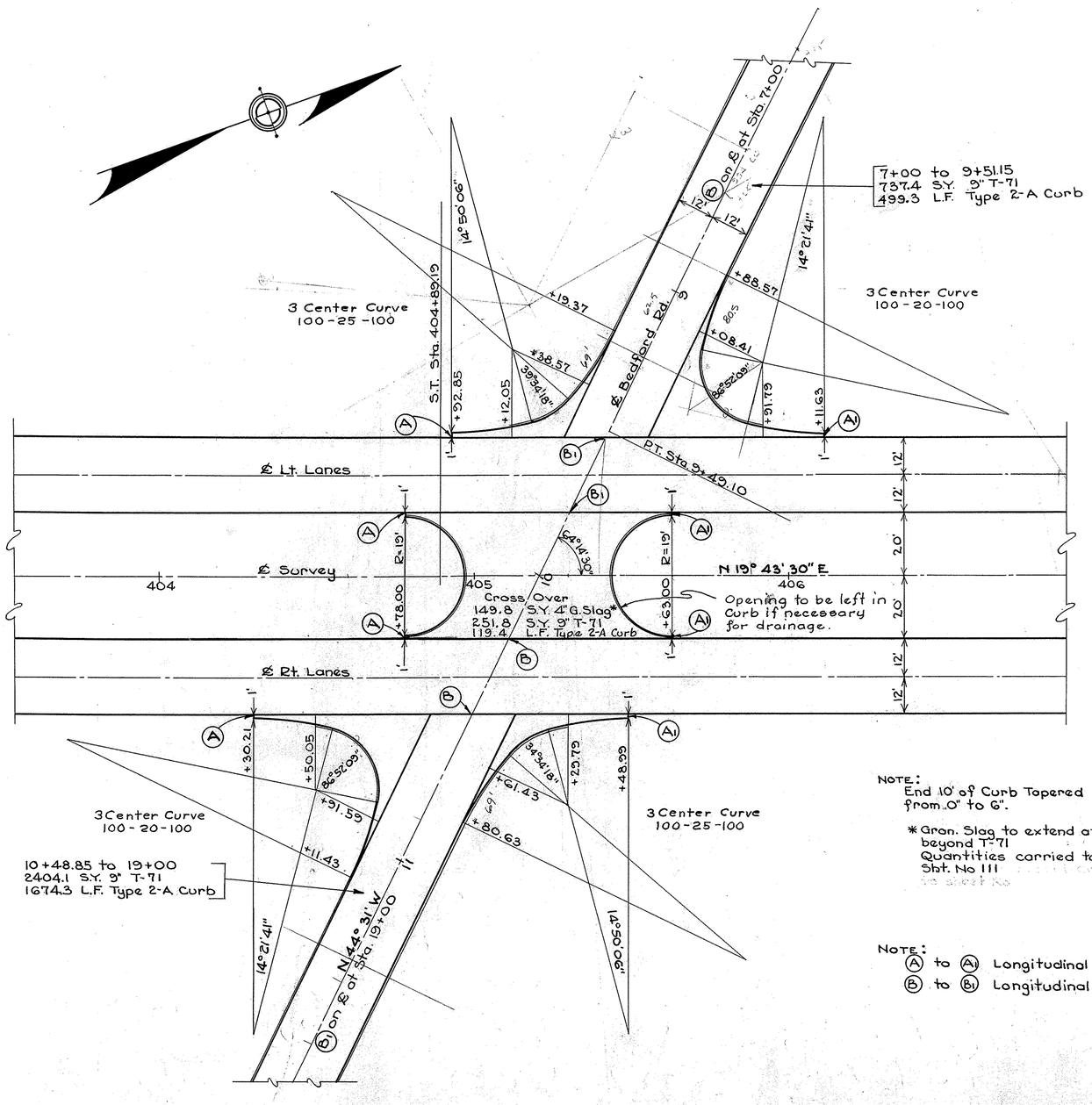
INTERSECTION STA. 405+20.92

Scale 1" = 20'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

110
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



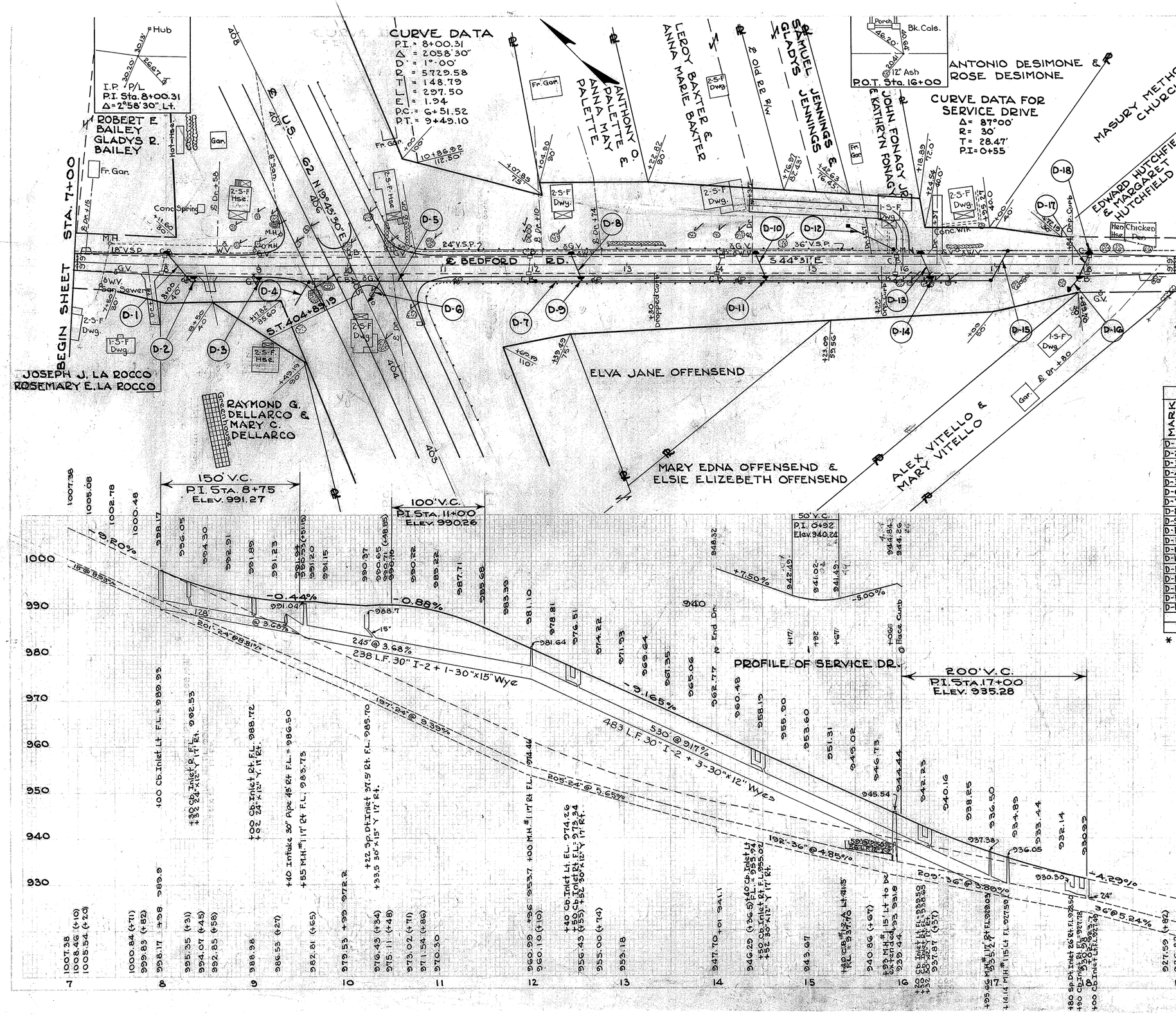
NOTE:
End 10' of Curb Tapered from 0" to 6".

* Gran. Slag to extend at least 1' beyond T-71
Quantities carried to Intersection Sht. No 111

NOTE:
Ⓐ to Ⓐ₁ Longitudinal joint without bars.
Ⓑ to Ⓑ₁ Longitudinal joint

FED. ROAD DIVISION	STATE	PROJECT		PAGE	
5	OHIO	F-524(5)	POST WAR	111 / 154	

TRUMBULL COUNTY
TRU - 62 (4.59-9.67)



GUARD RAIL			
STATION			I-15
FROM	TO	SIDE	L.F.
10+81	15+45	L	464
11+12	16+56	R	544
TOTAL			1008

PIPE REMOVAL						
STATION			E-12 18" & Und	Over 15"	I-16 C.B. Abd.	M.H. Abd.
FROM	TO	SIDE	L.F.	L.F.	EA.	EA.
	7+94	R			1	
7+92	8+00	L		8	1	
	9+95	R			1	
	9+99	L			1	
	11+94	R			1	
	11+96	L			1	
	13+99	R			1	
	14+01	L			1	
	15+92	R			1	
	15+93	L			1	1
17+09	17+19	L		10		
	18+00	R			1	
	18+03	L			1	
TOTALS				18	12	1

DRIVE APPROACHES							
		T-71	Spec	I-12	I-17		Detail
		9"	4" G.S.	Type 2-A	6"		Sheet
STATION	SIDE	S.Y.	S.Y.	L.F.	S.Y.		No.
405+20.92	L	737.4		4993			110
405+20.92	M	251.8	1498				110
405+20.92	R	2404.1		1674.3			110
* 7+15	L				10.0		10
* 7+78	R				62.2		10
* 8+46	R				21.1		10
*16+02	L				314.4		10
*16+37	L				71.1		10
*18+80	R				10.0		10
TOTAL		3393.3	1493.8	2293	488.8		

*Stations on Bedford Rd.
Note: Gran. Slag carried to Sht. No. 7

DRAINS																			
MARK	STATION		SIDE	I-2						I-5 for I-2				I-8					
				12"	15"	18"	24"	30"	36"	24"45° Curve	24"12" Wye	30"15" Wye	30"12" Wye	Spec. Slot Inlet	5p.Dt. Inlet	M.H. #1	C.B. I-2-A
	FROM	TO		L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
D-1	8+00	9+55	L-R			6	155				1	2			1		
D-2	8+30	8+32	R	2											1		
D-3	9+00	9+02	R	2											1		
D-4	9+40	9+55	R					28									1
D-5	9+55	12+00	R					238				1					1
D-6	10+22	10+34	R		21											1(c)*	
D-7	12+00	16+95	R					483					3				1
D-8	12+40	12+50	L-R	26											1		
D-9	12+50	12+52	R	2											1		
D-10	14+40	14+50	L-R	26											1		
D-11	14+50	14+52	R	2											1		
D-12	15+40	15+93	L	56													1
D-13	16+20	16+30	L-R	26											1		
D-14	16+30	16+32	R	2											1		
D-15	16+96	17+14	R-L					33	6								1
D-16	17+80	17+90	R		14											1(b)*	
D-17	17+90	18+00	R-L			26									1		
D-18	18+00		L				2								1		
TOTAL				144	35	32	157	782	6		1	2	1	3	11	2	5	1

* Variation of Spec. Ditch Inlet.

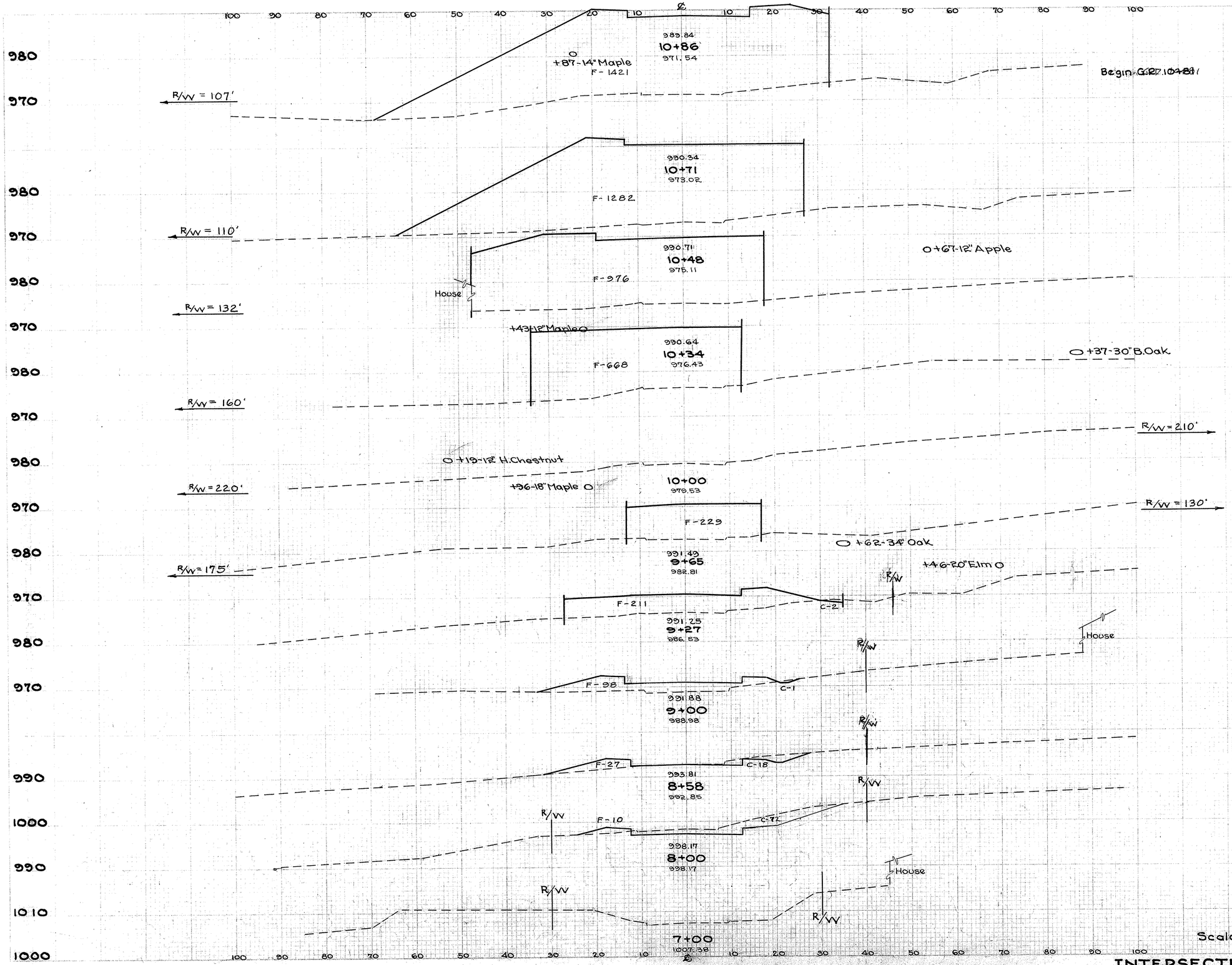
REMOVAL			
STATION			E-8 R.&D. Pav't.
FROM	TO	SIDE	S.Y.
7+00	9+10	L-R	443
16+25	19+00	L-R	580
TOTAL			1023

Scale { 1" = 50' Hor. / 1" = 10' Vert

INTERSECTION STA. 405+20.92

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	112
2	OHIO	F-524(5)	POST WAR	154

TRUMBULL COUNTY
TRU - 62-(4.59-9.67)



SEEDING L.F.	SEEDING S.Y.	END AREA Cut	END AREA Fill	CU. YDS. Exc.	CU. YDS. Emb.
89		0	1421		
	128			0	751
65		0	1282		
	171			0	1380
28		0	976		
	22			0	426
0		0	668		
				0	421
0		0	0		
				0	148
0		0	229		
	46			2	310
22		2	211		
	114			2	154
54		1	98		
	252			15	97
54		18	27		
				0	0
	325			125	40
47		72	10		
				87	0
	261			133	19
				0	0
0	0	0	0		

INTERSECTION STA. 405+20.92

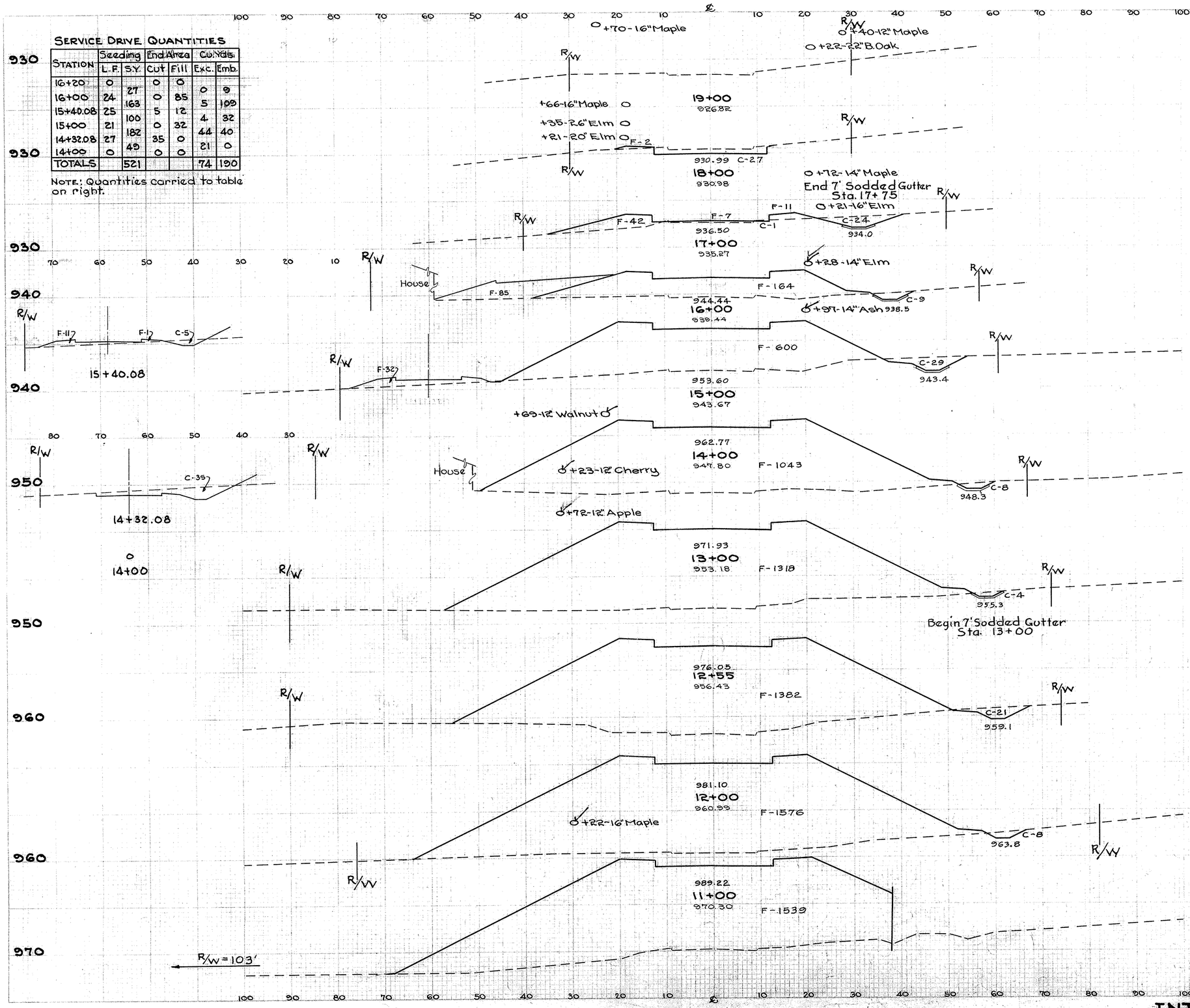
STATE		TYPE FUNDS	
OHIO	F-524(5)	POST WAR	113 / 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

SERVICE DRIVE QUANTITIES

STATION	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
16+20	0	27	0	0	0	9
16+00	24	163	0	85	5	109
15+40.08	25	100	5	12	4	32
15+00	21	182	0	32	44	40
14+32.08	27	49	35	0	21	0
14+00	0		0	0		
TOTALS		521			74	190

NOTE: Quantities carried to table on right.



	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
	0		0	0		
Dr. Rt. 18+80					0	0
		200			50	4
	36		27	2		
		522			96	115
Dr. Lt. 16+37					0	64
	58		25	60		
		678			63	415
Service Dr. Lt. 16+02		521			74	190
	64		9	164		
		872			70	1415
	93		29	600		
		1017			69	3043
	100		8	1043		
		1189			22	4373
	114		4	1318		
		590			21	2250
			21	1382		
		785			30	3013
	135		8	1576		
		1289			15	5769
	97		0	1539		
		145			0	767
Sta. 10+86	89		0	1421		
Totals		9127			874	25164

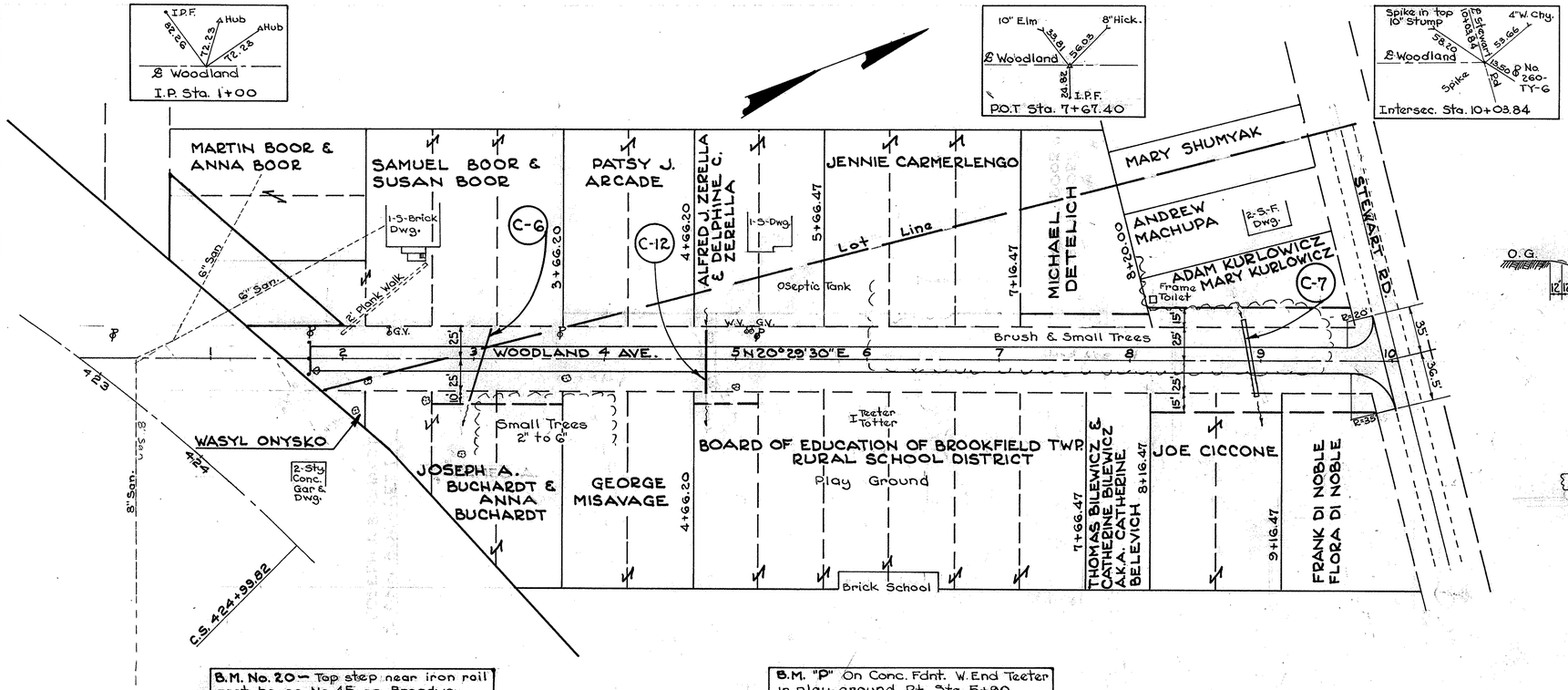
Scale 1" = 10'

Quantities carried to X-Section Sheet # 76

INTERSECTION STA. 405+20.92

OHIO	F-524(5)	TYPE FUNDS / POST WAR	114 / 154

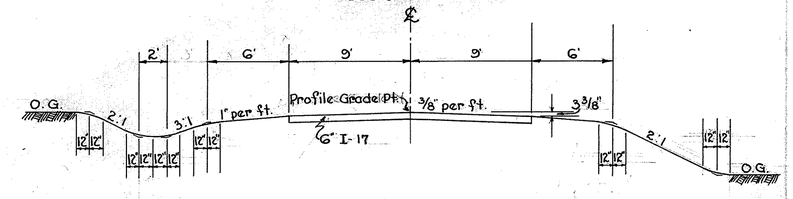
TRUMBULL COUNTY
TRU-62(4.59-9.67)



B.M. No. 20 – Top step near iron rail post house No. 45 on Broadway. Sta. 427+70 Elev. 904.84

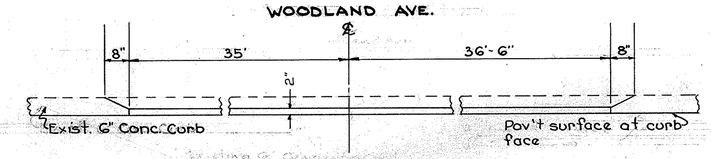
B.M. "P" On Conc. Fdnt. W. End Teeter in play ground Rt. Sta. 5+90 Elev. 926.10

TYPICAL SECTION
WOODLAND AVE.
Scale 3/16" = 1'-0"



STA. 1+75 to 9+93

WOODLAND AVE.



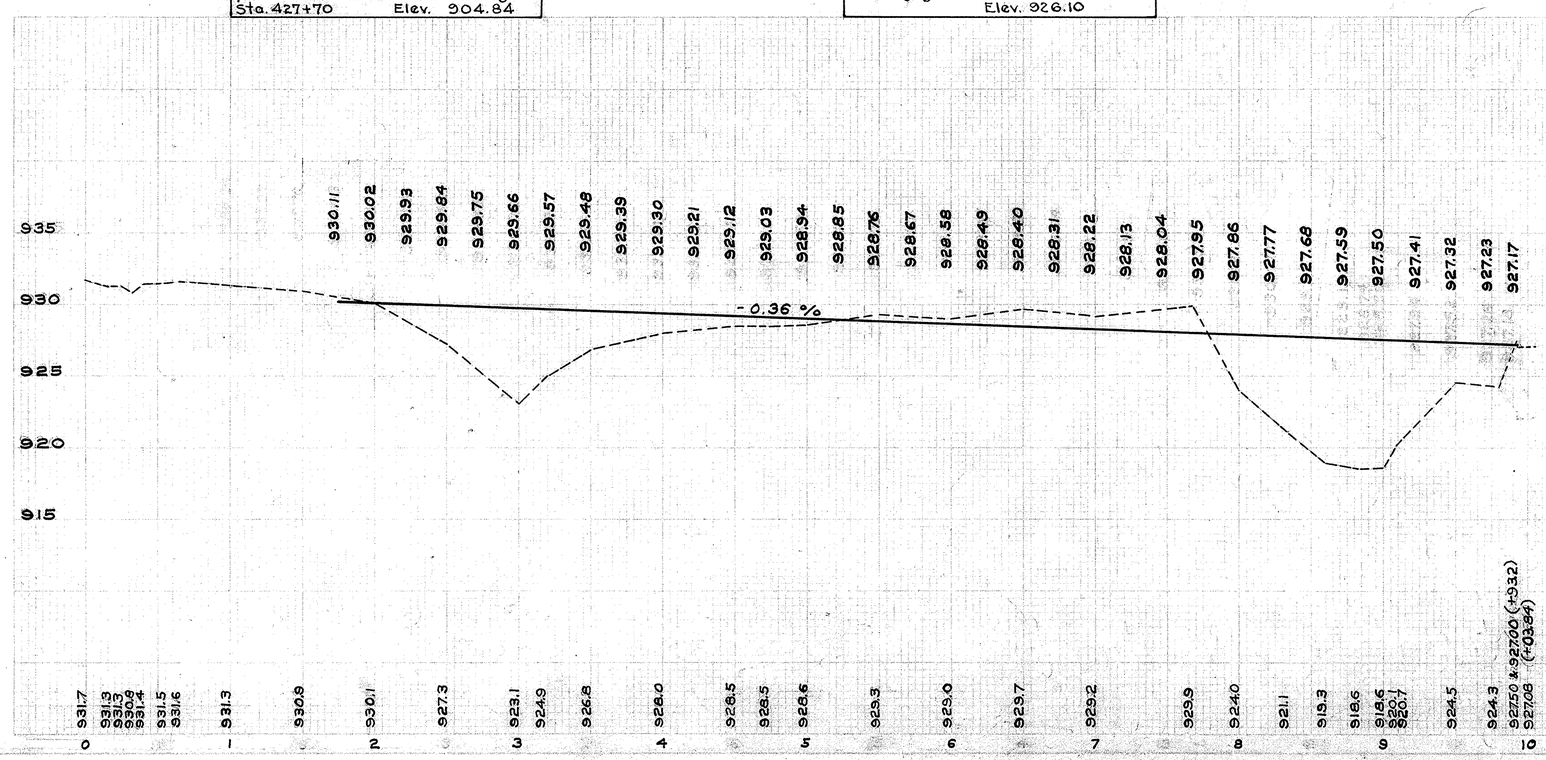
Detail of curb to be cut on south side of Stewart Rd.
Scale 1/2" = 1'-0"

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SH. NO.
C-6	3+06	Std. Pipe Culv.	18" x 58'	129
C-7	8+92	Std. Pipe Culv.	36" x 59'	130
C-12	4+78	Std Pipe Culv.	18" x 48'	143 A

REMOVAL			
STATION			E-8 Rem. & Disp. Portion of exist. Curb
FROM	TO	SIDE	L.F.
9+93		L-R	73
TOTAL			73

GUARD RAIL			
STATION			I-15 / I-15.13
FROM	TO	SIDE	L.F.
1+75		L-R	25
TOTAL			25

APPROACHES				
STATION			I-17 6"	Detail Sht. No.
FROM	TO	SIDE	S.Y.	
1+75	9+93	—	1669	117
TOTAL			1669	



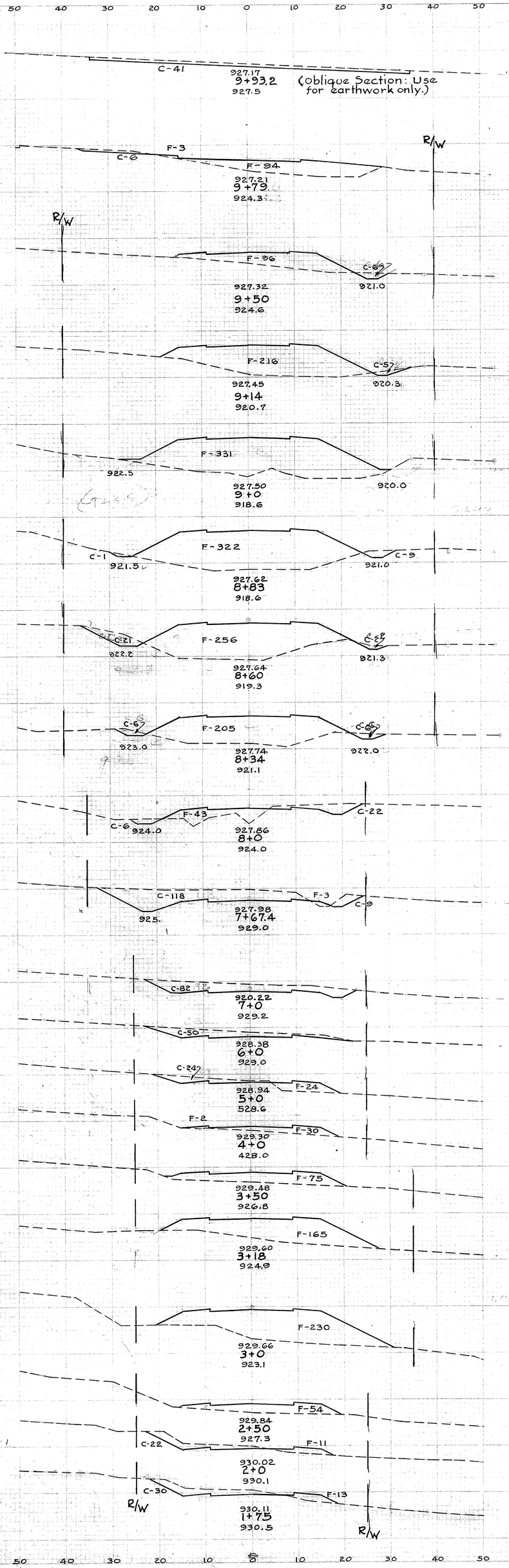
Scale { 1" = 50' Horiz. / 1" = 50' Vert.

SERVICE ROAD WOODLAND AVE., STA. 422 + 80.0

Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
0		41	0		
	47			12	25
60		6	97		
	177			6	104
50		6	96		
	210			7	208
55		5	216		
	92			1	142
63		0	331		
	122			3	206
66		10	322		
	169			14	246
66		23	256		
	186			17	222
68		12	205		
	185			25	156
35		28	43		
	145			94	28
45		127	3		
	322			261	4
41		82	0		
	456			244	0
41		50	0		
	450			137	44
40		24	24		
	400			44	104
32		0	32		
	200			0	99
40		0	75		
	15				142
45		0	165		
	90			0	132
45		0	230		
	217			0	263
33		0	54		
	184			21	60
33		22	11		
	92			24	11
33		30	13		

Quantities carried to X-section Sht. No. 83

Excavation	9110
Embankment	2196
Seeding	3759
	Cu. Yds.
	Cu. Yds.
	Sq. Yds.



WOODLAND AVE., STA. 422+80.0

FED. ROAD DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

TRUMBULL COUNTY
TRU-62(4.59-967)

115
154

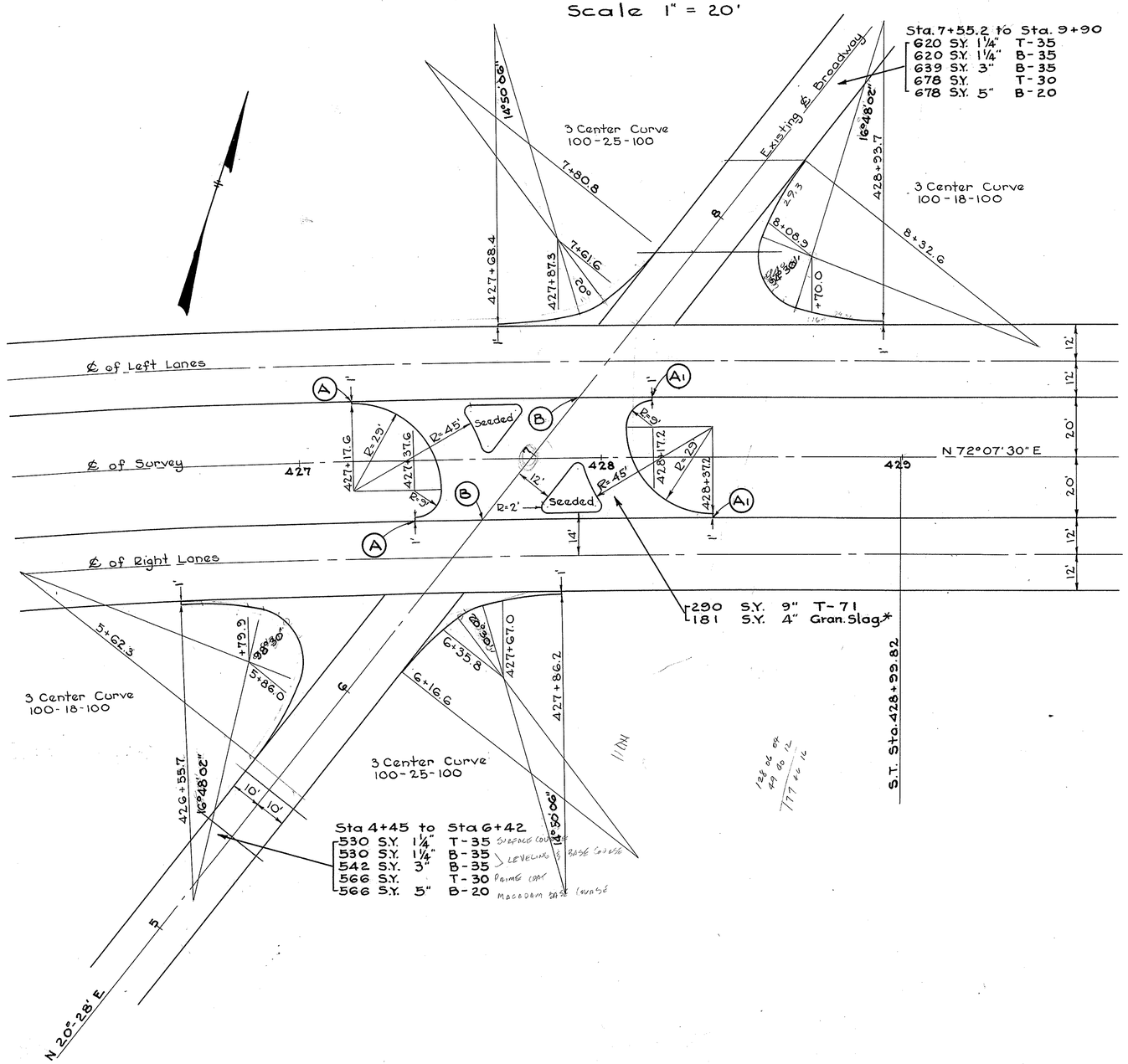
INTERSECTION STA. 427+77.09
EQUALS STA. 6+98.78 ON BROADWAY

Scale 1" = 20'

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

116 / 154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



ESTIMATED QUANTITIES								
Station		T-35	B-35		T-30	B-20	T-71	Spec.
From	To	1¼" S.Y.	1¼" S.Y.	3" S.Y.	S.Y.	5" S.Y.	9" S.Y.	4"-G.S. S.Y.
4+45	6+42	530	530	542	566	566		
Cross Over							290	181
7+55.2	9+90	620	620	634	663	663		
Totals		1150	1150	1176	1229	1229	290	181

All Quantities Carried to Line Sheet – except Gran. Slag Carried to Sheet No. 7.

* Gran. Slag to extend 1' beyond edge of T-71.

Note:

(A) to (A1) Longitudinal joint without bars.

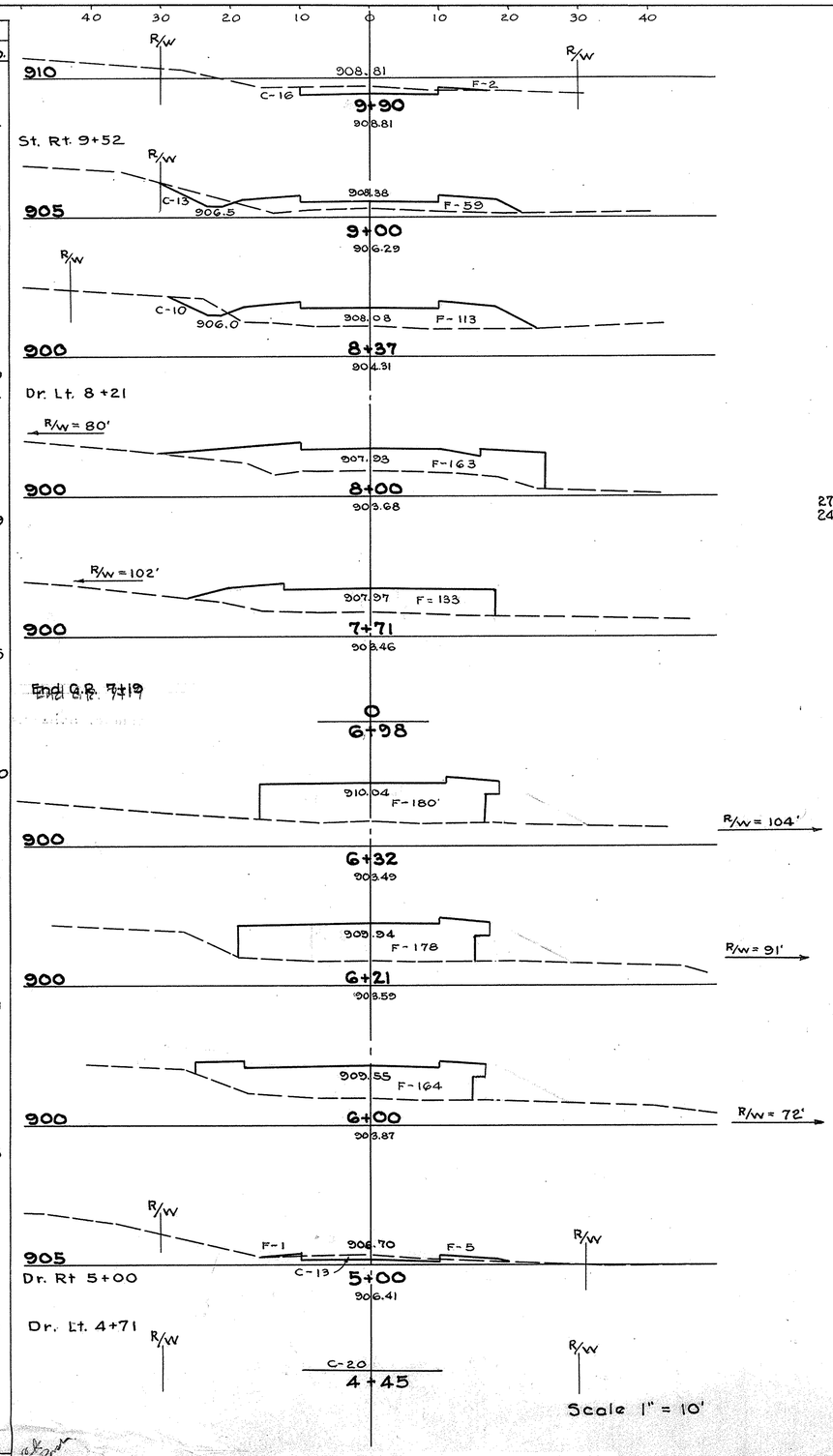
(B) to (B1) Longitudinal joint.

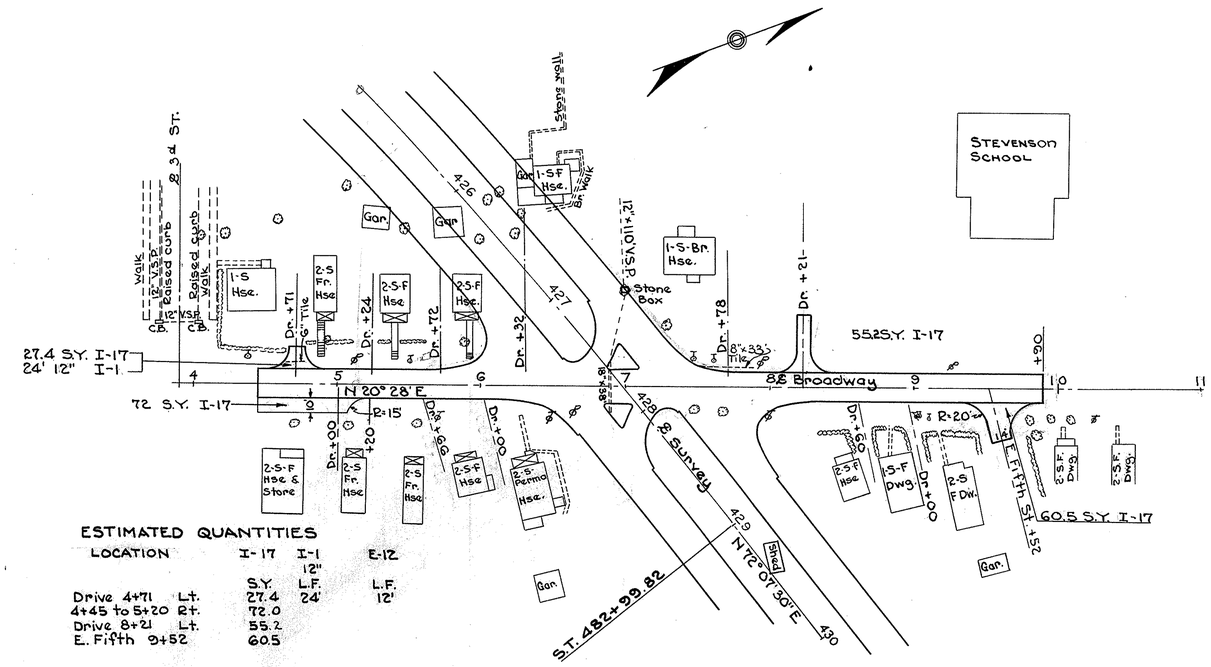
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

117
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
27		16	2		
	350			49	102
				0	0
43		13	59		
	243			27	201
55		10	113		
	175			7	189
				0	12
30		0	163		
	87			0	159
24		0	133		
				0	175
		0	0		
				0	220
8		0	180		
	9			0	73
7		0	178		
	25			0	133
14		0	164		
	278			24	315
36		13	6		
				0	0
	171			34	6
				0	0
20		20	0		
Totals	1338			141	1585

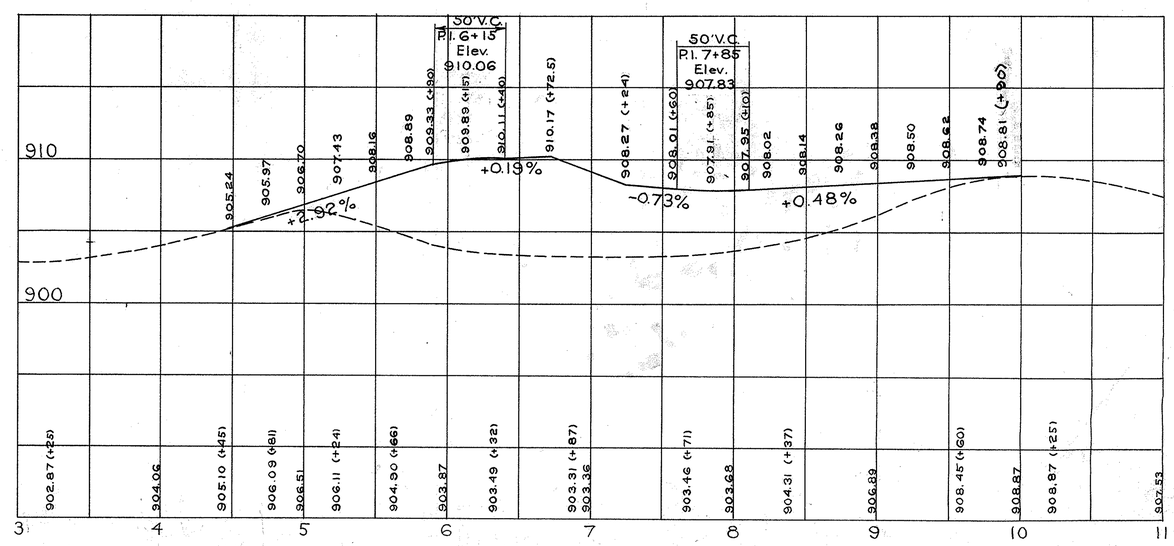




ESTIMATED QUANTITIES

LOCATION		I-17 S.Y.	I-1 12" L.F.	E-12 L.F.
Drive 4+71	Lt.	27.4	24'	
4+45 to 5+20	Rt.	72.0		
Drive 8+21	Lt.	55.2		
E. Fifth 9+52		60.5		

All Quantities carried to Line Sht. No. 31



INTERSECTION STA. 427+77.09

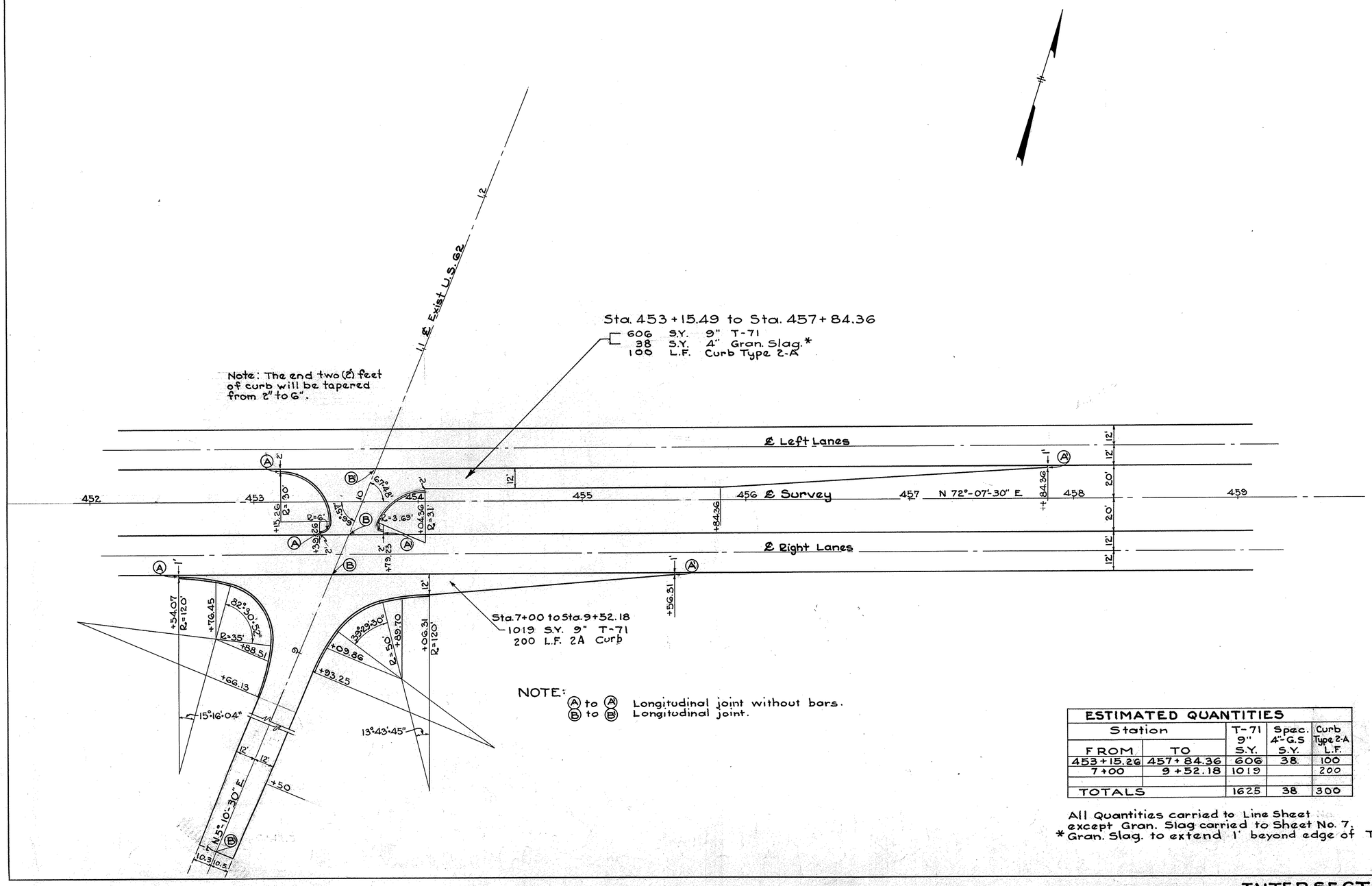
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

118
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

INTERSECTION STA. 453+66.10

Scale 1" = 30'

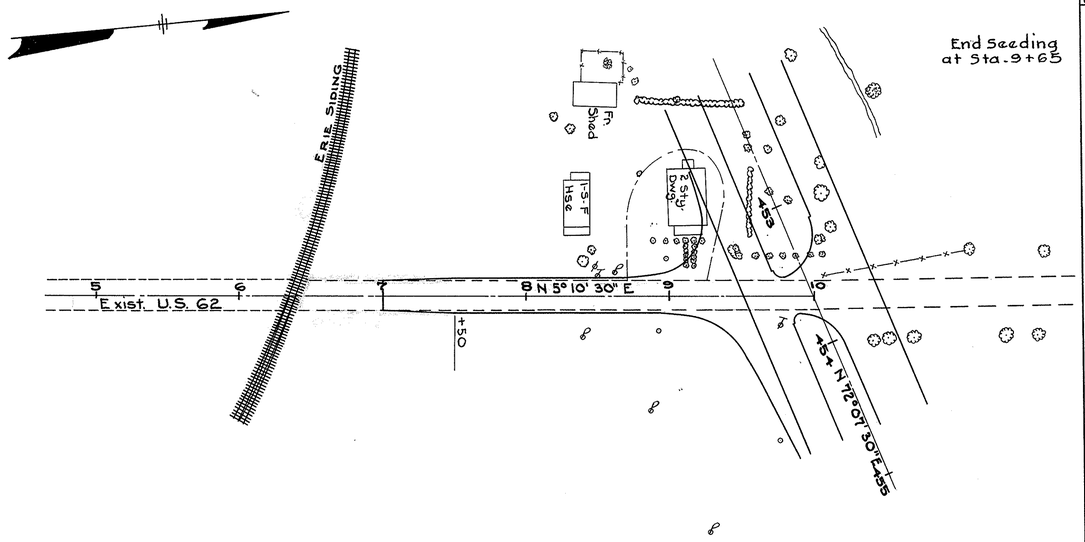


ESTIMATED QUANTITIES				
Station		T-71 9" S.Y.	Spec. 4"-G.S S.Y.	Curb Type 2-A L.F.
FROM	TO			
453+15.26	457+84.36	606	38.	100
7+00	9+52.18	1019		200
TOTALS		1625	38	300

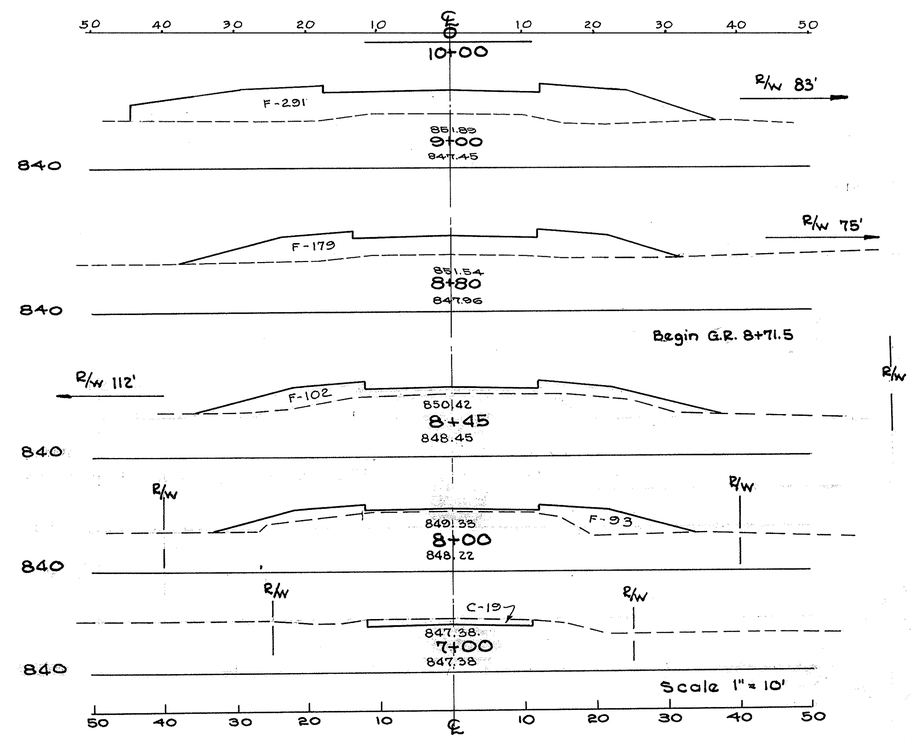
All Quantities carried to Line Sheet except Gran. Slag carried to Sheet No. 7.
* Gran. Slag. to extend 1' beyond edge of T-71

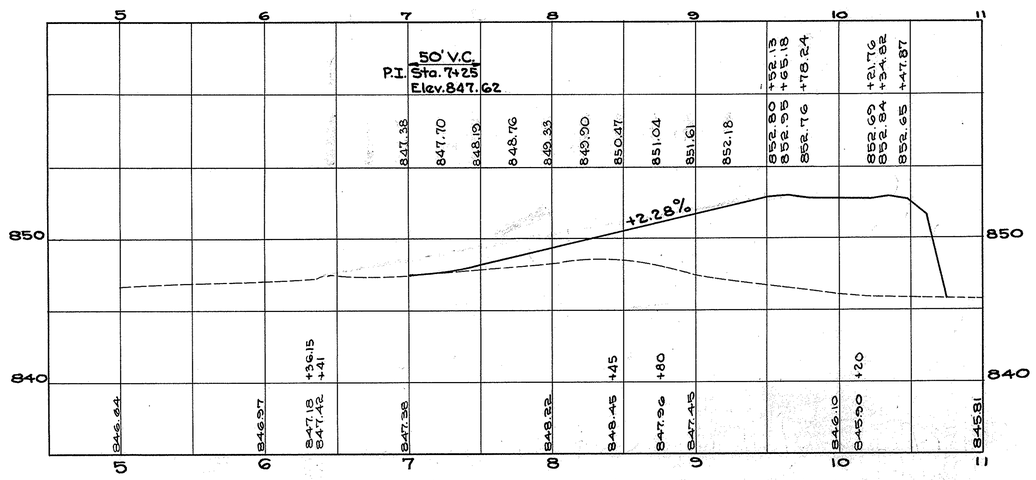
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	119 / 154
2	OHIO	F-524(5)	POST WAR	

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Seeding		End Area		Cu. Yds.	
L.F.	S.Y.	Cut	Fill	Exc.	Emb.
0		0	0		
	216			0	539
60		0	291		
	139			0	171
65		0	179		
	263			0	182
70		0	102		
	333			0	162
63		0	93		
	461			35	172
20		19	0		
Totals	1412			35	1226





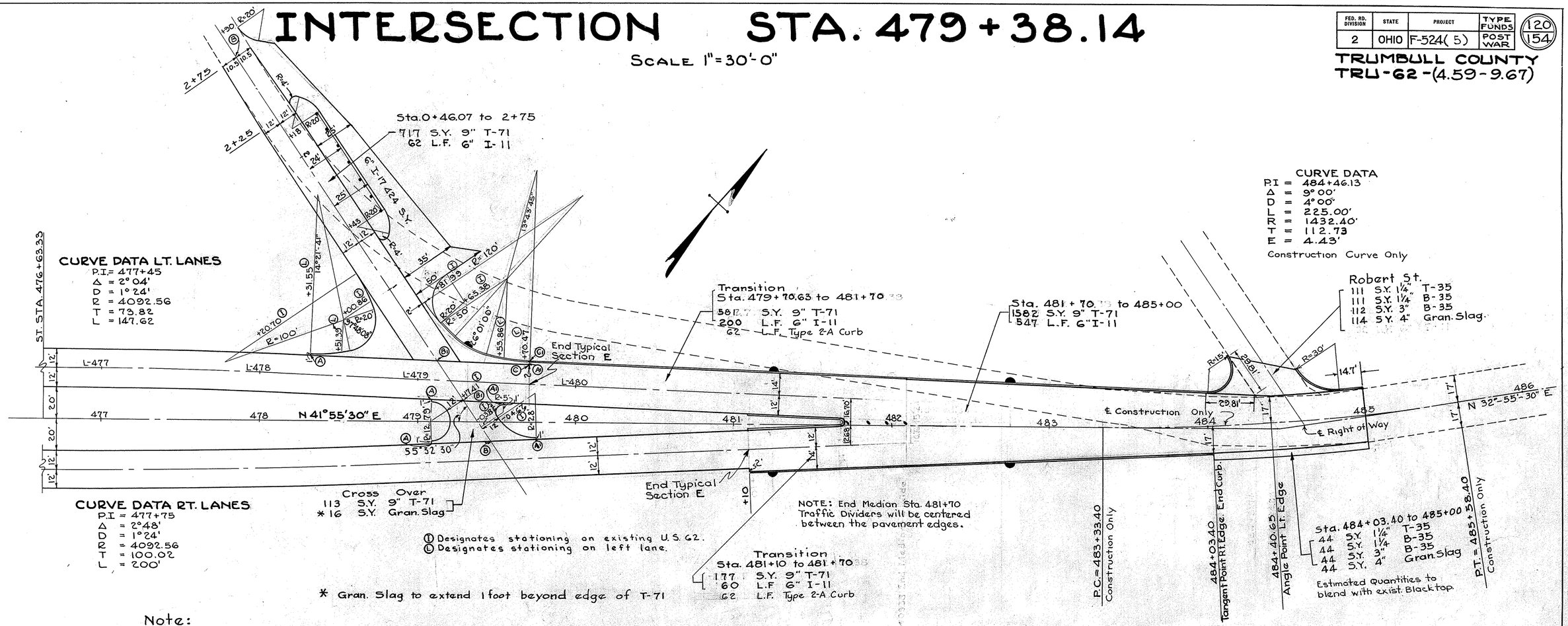
INTERSECTION STA 453+66.10

INTERSECTION STA. 479+38.14

SCALE 1" = 30'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-524(5)	POST WAR	120/154

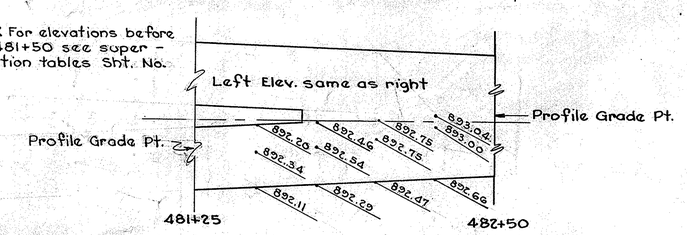
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Note:

Ⓐ to Ⓐ' Longitudinal Joint without Bars
Ⓑ to Ⓑ' Longitudinal Joint
Ⓒ to Ⓒ' Expansion Joint

NOTE: For elevations before Sta. 481+50 see super-elevation tables Sht. No. 41



PAVEMENT SURFACE ELEVATIONS

Deductions (5' each) for catch basins shown, are made in this table.

ESTIMATED QUANTITIES

Station From	Station To	Side	T-35 1¼" S.Y.	I-11 6" L.F.	B-35 1¼" S.Y.	B-35 3" S.Y.	T-71 9" S.Y.	SPEC. G. Slag 4" S.Y.	SPEC. Traffic Dividers E.a.	I-17 6" S.Y.	I-12 Type 2-A Curb L.F.
① 0+46.07	① 2+75	—		57			717			424	
479+70.63	481+70	L		195			581				62
481+10	481+70	R		55			177				62
481+70	482+00	—		60			187				
482+00	485+00	—		477			1395				
484+03.40	485+00	R	44		44	44		44			
Cross Over		M					113	16			
Robert St.		—	111		111	112		114			
481+73	482+09	M							4		
Totals			155	861	155	156	3170	174	4	424	124

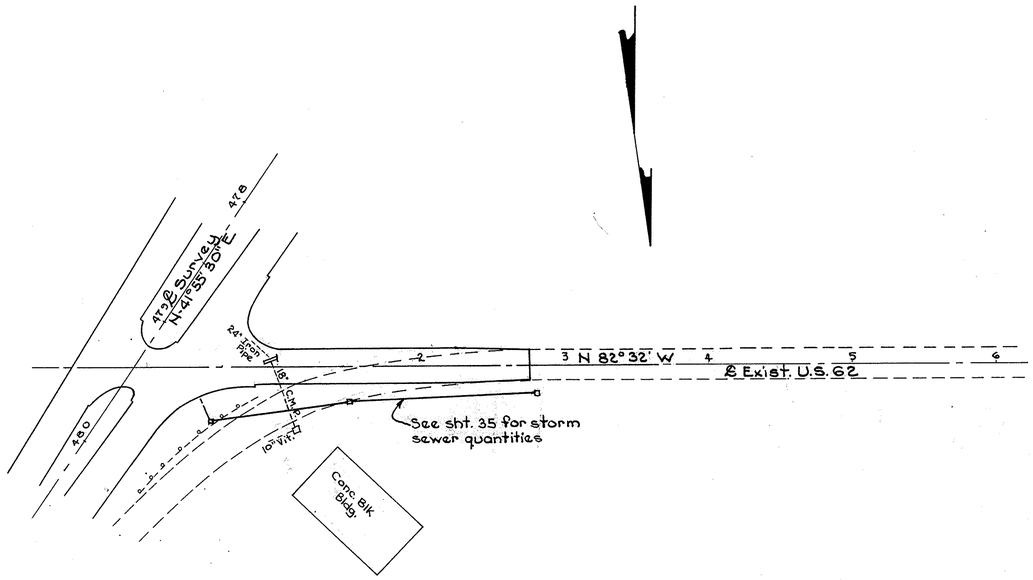
All above quantities carried to line sheets except Gran. Slag carried to sheet * 7

INTERSECTION STA. 479+38.14

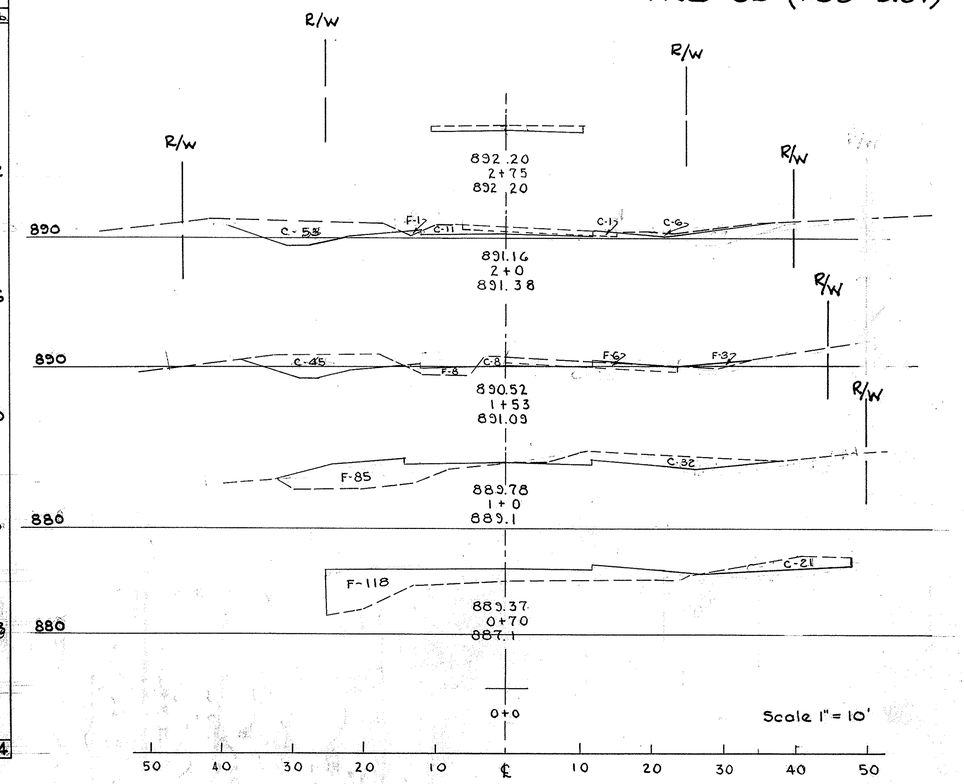
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

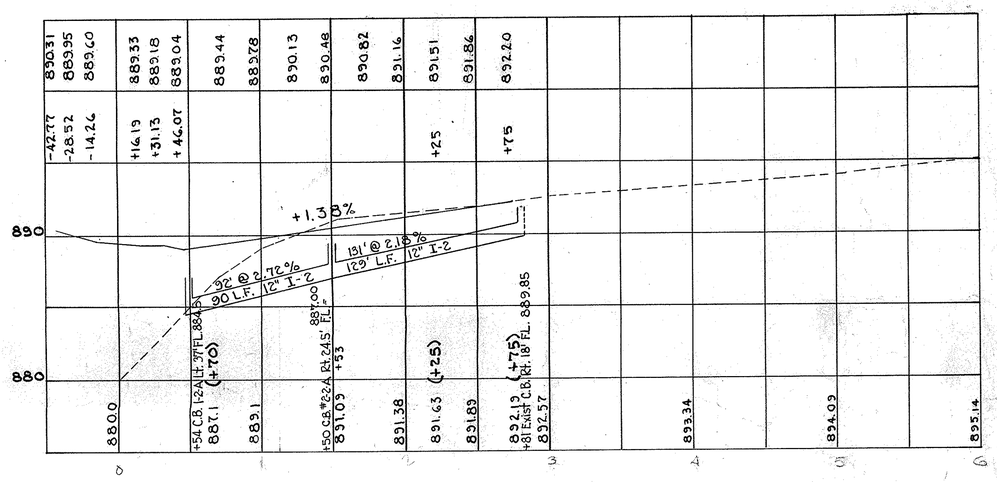
121
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



	Seeding L.F.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
	0		0	0		
		292			98	2
	70		71	1		
		366			108	16
	770		53	17		
		398			199	100
	65		32	85		
		167			30	113
	35		21	118		
		136			27	153
Start Seeding at Sta. 0+35	0		0	0		
Totals		1359			462	384





INTERSECTION STA. 479+38.14

DRAINAGE STRUCTURE C-1 CULVERT TR-62-49
STATION 260+28 DRAINAGE AREA 12 ACRES

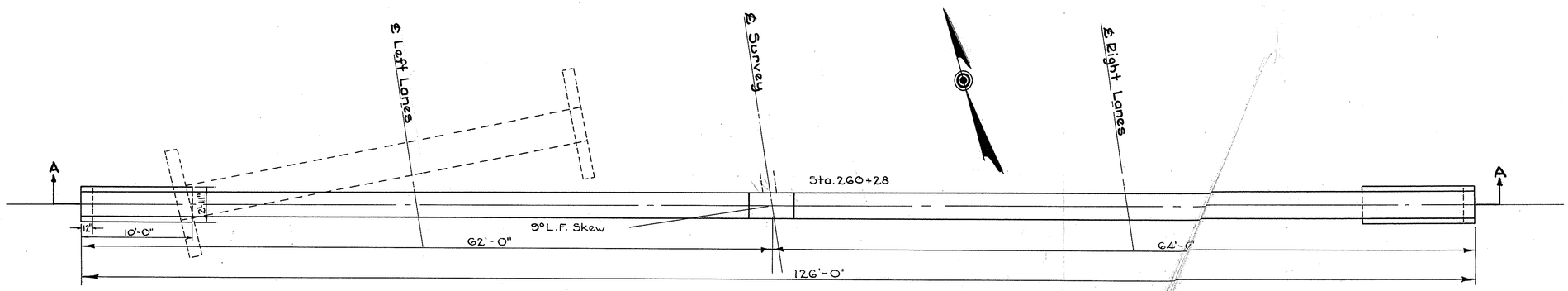
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

122/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

Scale 3/16" = 1'

Surveyed By F.P.I. Drawn By E.E.H. Checked By H.L.R.



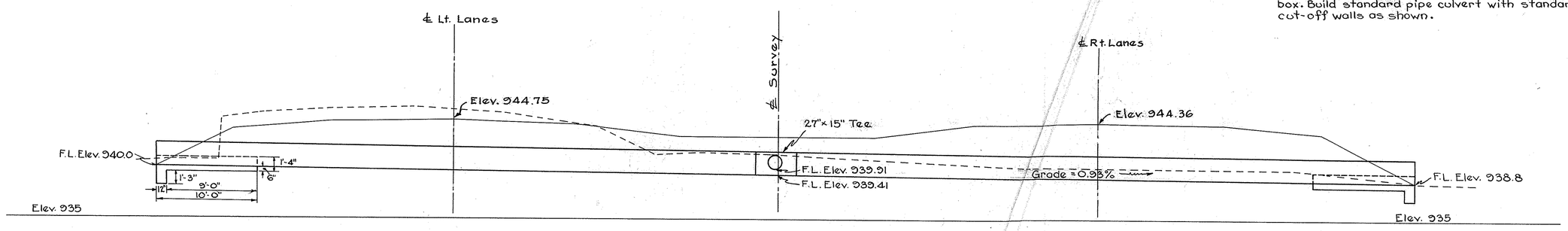
PLAN VIEW

CULVERT DATA

EXISTING: 2'×2'×36'-9" Stone and Conc. Box

PROPOSED

TYPE: Standard 27" pipe culvert with standard concrete cradles and cut-off wall on each end.
SIZE: 27"×126'
SKEW: 9° L.F.
STD. DRWGS: S-27 P.C.2, S-27 P.C.3
WORK REQ'D. Remove existing 2'×2'×36'-9" stone and concrete box. Build standard pipe culvert with standard cradles and cut-off walls as shown.



SECTION - A A

ESTIMATED QUANTITIES

S-24	Removal of Existing Structure	1 Lump
E-2	Excavation for Structures	140 C.Y.
S-27	27" Pipe for Roadway Culvert	122 L.F.
S-1	Concrete for Structures, Class "E"	2.39 C.Y.
I-5	27"×15" Tee Pipe Special	1 Ea.

DRAINAGE STRUCTURE C-2 CULVERT NO. TR-62-59

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

123
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

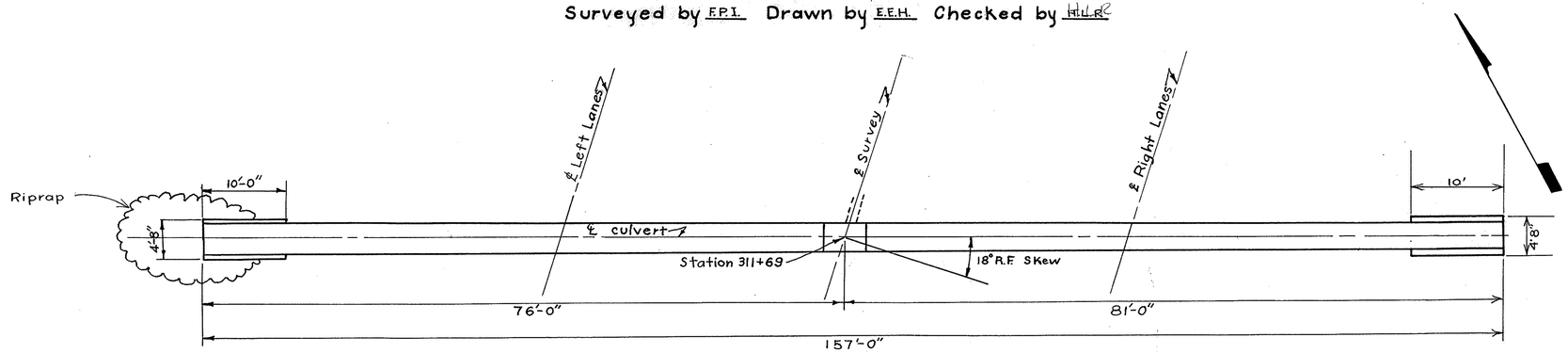
STATION 311+69 DRAINAGE AREA = 32 ACRES

Scale: 1" = 8'-0"

Surveyed by F.P.I. Drawn by E.E.H. Checked by H.L.R.

1047.29
1042.75
4.54

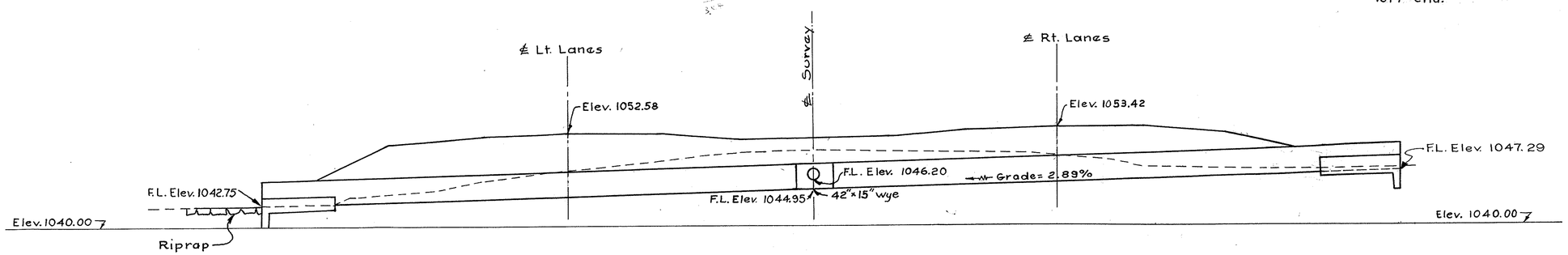
40/10 × 4.5 X



PLAN VIEW

CULVERT DATA

TYPE: Standard pipe culvert with standard cradles and cut-off walls. Rough riprap on left end only (for details see sheet 9)
SIZE: 42"×157'-0" @ 18° R.F. Skew.
STD. DRWG'S.: S-27 P.C.2 : S-27 P.C.3
WORK REQ'D: Build standard pipe culvert with standard concrete cradles and cut-off walls as shown. Place rough riprap on left end.



LONGITUDINAL SECTION ON CENTER LINE

ESTIMATED QUANTITIES

E-2	Excavation for structures.	97	C.Y.
S-1	Class "E" concrete for structures.	4.24	C.Y.
S-27	42" pipe for roadway culvert.	153	L.F.
I-5	42"×15" wye pipe special.	1	Each
I-10	Type "A" riprap (grouted).	15	S.Y.

DRAINAGE STRUCTURE C-3 CULVERT Nº TR 62-63
STATION 19+42.09 ON CHESTNUT RIDGE ROAD
DRAINAGE AREA 6A

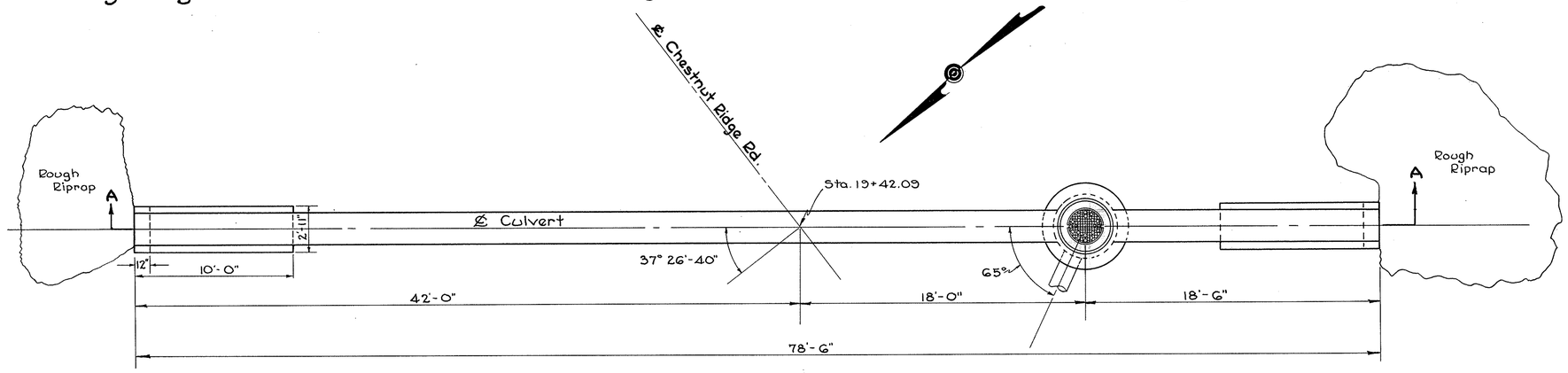
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

124/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

Scale 1/4" = 1'

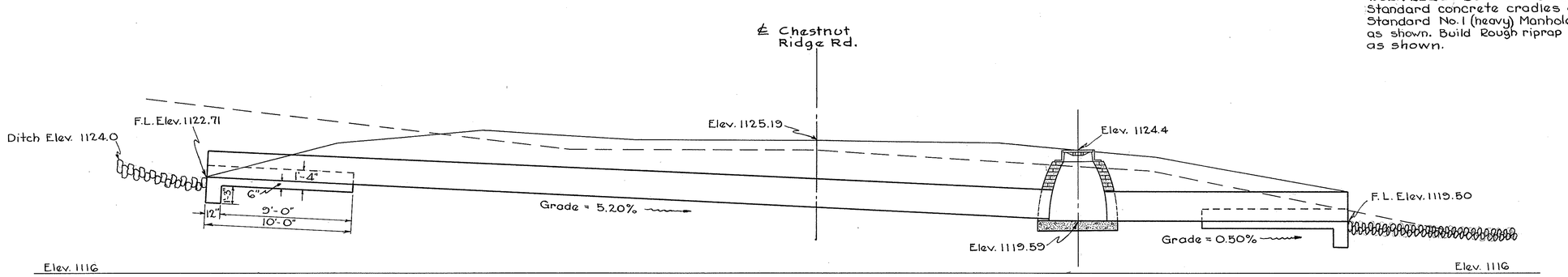
Surveyed By F.P.T. Drawn By T.J.R. Checked By E.T.F.



PLAN VIEW

CULVERT DATA

TYPE: Standard Pipe Culvert with Standard concrete cradles and cut-off walls, Standard No. 1 (heavy) Manhole, Rough riprap as shown 15" diameter pipe stub.
SIZE: 24" x 78'-6" @ 37° 26' 40" L.F. Skew
STD. DRWGS: S-27 P.C.2 S-27 P.C.3 I-8 M.H. No. 1
WORK REQ'D: Build Standard Pipe Culvert with Standard concrete cradles and cut-off walls, Standard No. 1 (heavy) Manhole with 15" Pipe stub as shown. Build Rough riprap on each end as shown.



SECTION A-A

ESTIMATED QUANTITIES

E-2	Excavation for Structures	37	C.Y.
S-1	Class "E" Concrete for Structures	2.15	C.Y.
S-27	24" Pipe for Roadway Culvert	74	L.F.
I-8	Standard Manhole (No.1)	1	Ea.
I-2	15" Pipe for Storm Sewers	3	L.F.
I-10	Type "A" Riprap (grouted)	24	S.Y.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

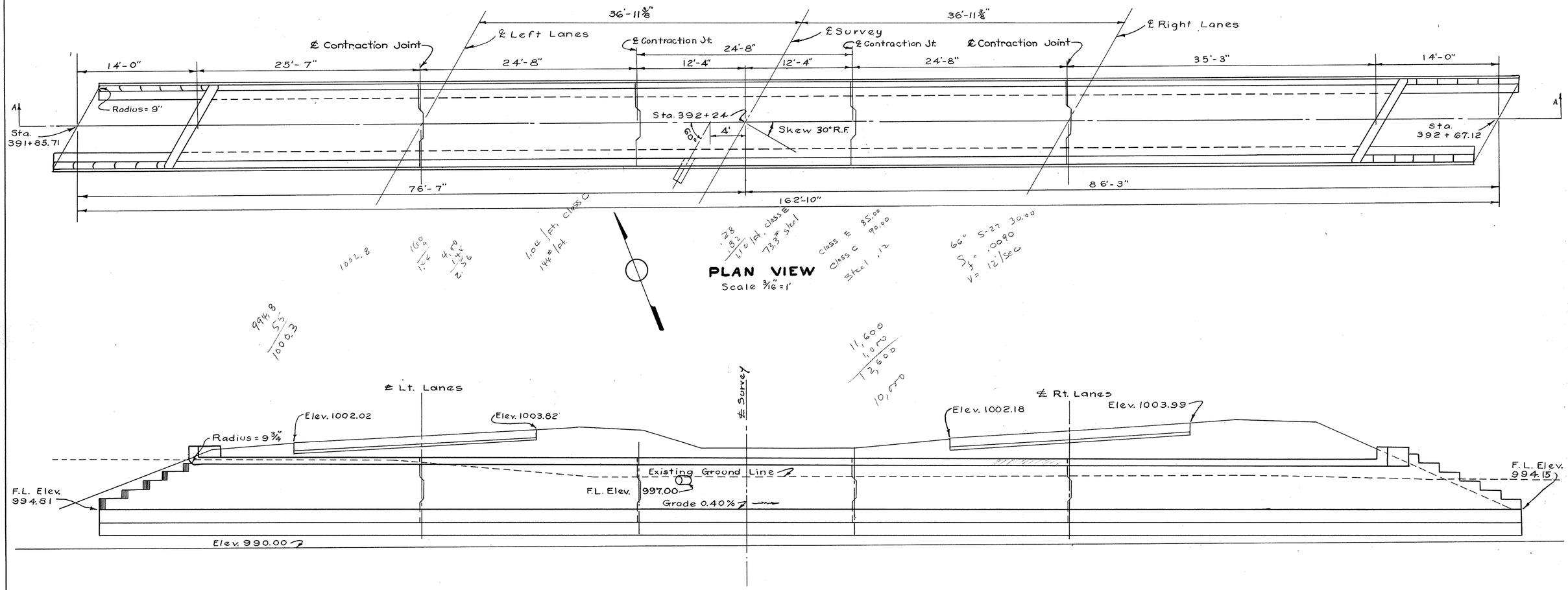
125/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

DRAINAGE STRUCTURE C-4 CULVERT NO. TR-62-74

STATION 392+24 DRAINAGE AREA 510 ACRES

SURVEYED BY F.P.T. DRAWN BY F.E.F. CHECKED BY H.L.R.



ESTIMATED QUANTITIES

E-2	Excavation for Structures	93	Cu. Yds.
E-3	Channel Excavation.	424	Cu. Yds.
S-1	Class "E" Concrete for Structures.	136.11	Cu. Yds.
S-4	Reinforcing Steel.	8510	lbs.
I-2	15" Pipe for Storm Sewers	3	L.F.

CULVERT DATA

TYPE: Standard Slab Top Culvert.
SIZE: 8'x5'x162'-10" @ 30° R.F.
STD. DRWGS.: STC-47.
WORK REQ'D: Build standard slab top culvert and excavate channel.

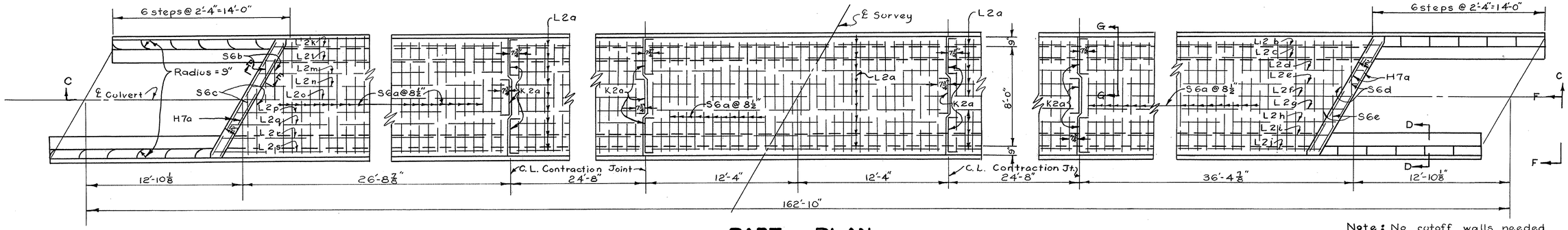
DRAINAGE STRUCTURE C-4 CULVERT NO. TR-62-74

STATION 392+24 DRAINAGE AREA 510 ACRES

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

126/154

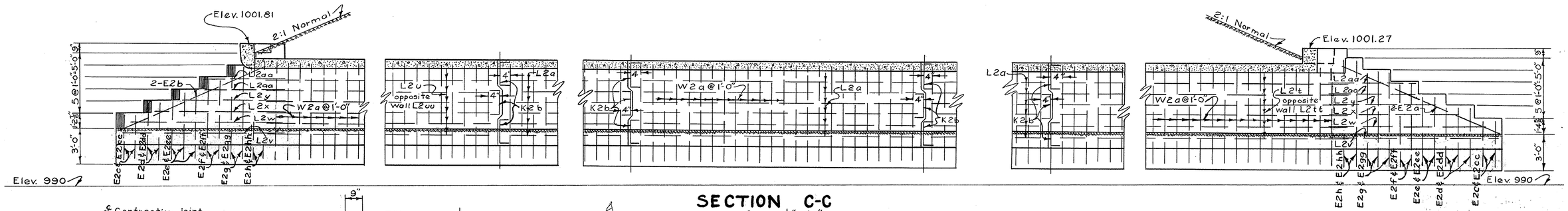
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



PART PLAN

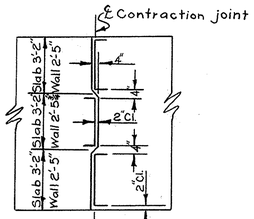
Scale: ¼" = 1'-0"

Note: No cutoff walls needed because of stone foundation.



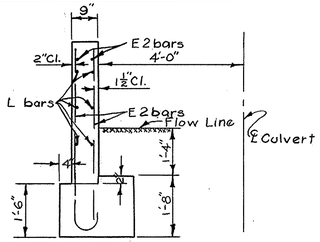
SECTION C-C

Scale: ¼" = 1'-0"



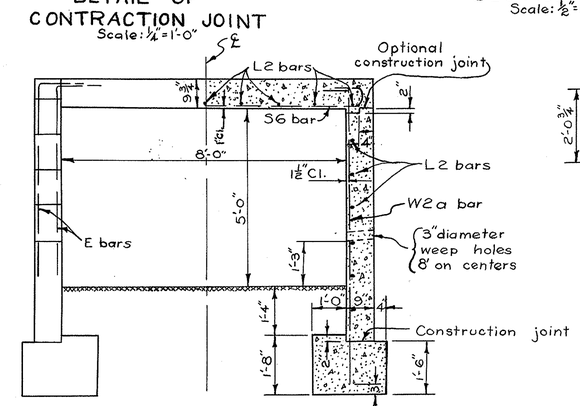
DETAIL OF CONTRACTION JOINT

Scale: ½" = 1'-0"



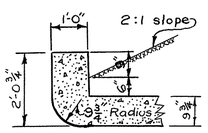
SECTION D-D

Scale: ½" = 1'-0"



VIEW F-F TYPICAL SEC. G-G

Scale: ½" = 1'-0"



SECTION E-E

Scale: ½" = 1'-0"

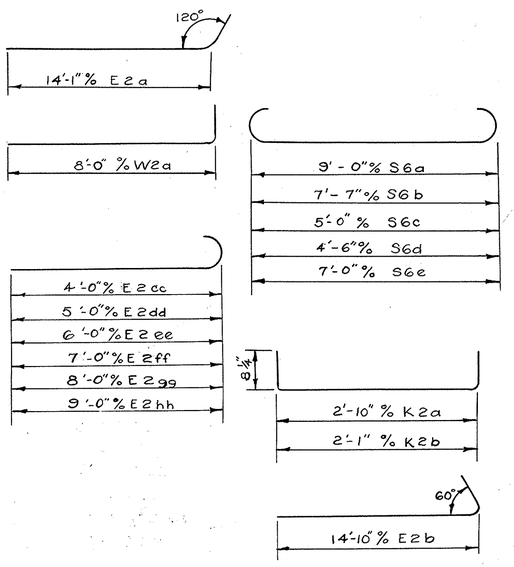
STEEL LIST

Mark	Location	Shape	Size	Number	Length	Weight
E2a	Wing Wall	Bent	½"φ	4	15'-0"	40
E2b	Wing Wall	Bent	½"φ	4	15'-9"	42
E2c	Wing Wall	Str.	½"φ	8	4'-0"	21
E2d	Wing Wall	Str.	½"φ	10	5'-0"	33
E2e	Wing Wall	Str.	½"φ	10	6'-0"	40
E2f	Wing Wall	Str.	½"φ	8	7'-0"	37
E2g	Wing Wall	Str.	½"φ	10	8'-0"	53
E2h	Wing Wall	Str.	½"φ	8	9'-0"	48
E2cc	Wing Wall	Bent	½"φ	8	4'-6"	24
E2dd	Wing Wall	Bent	½"φ	10	5'-6"	37
E2ee	Wing Wall	Bent	½"φ	10	6'-6"	43
E2ff	Wing Wall	Bent	½"φ	8	7'-6"	40
E2gg	Wing Wall	Bent	½"φ	10	8'-6"	57
E2hh	Wing Wall	Bent	½"φ	8	9'-6"	57
H7a	Head Wall	Str.	1"φ	4	10'-4"	110
K2a	Contr. Joints	Bent	½"φ	12	4'-2"	33
K2b	Contr. Joints	Bent	½"φ	24	3'-3"	52
L2a	Slab & Walls	Str. *	½"φ	63	24'-2"	1017
L2b	Slab	Str. *	½"φ	1	40'-0"	27
L2c	Slab	Str. *	½"φ	1	39'-3"	26
L2d	Slab	Str. *	½"φ	1	38'-6"	26
L2e	Slab	Str. *	½"φ	1	38'-0"	25
L2f	Slab	Str. *	½"φ	1	37'-3"	25
L2g	Slab	Str. *	½"φ	1	37'-0"	25

* Bend in field

STEEL LIST

Mark	Location	Shape	Size	Number	Length	Weight
L2h	Slab	Str. *	½"φ	1	36'-3"	24
L2i	Slab	Str. *	½"φ	1	35'-9"	24
L2j	Slab	Str. *	½"φ	1	35'-3"	23
L2k	Slab	Str. *	½"φ	1	25'-3"	17
L2l	Slab	Str. *	½"φ	1	25'-9"	17
L2m	Slab	Str. *	½"φ	1	26'-3"	18
L2n	Slab	Str. *	½"φ	1	27'-0"	18
L2o	Slab	Str. *	½"φ	1	27'-6"	18
L2p	Slab	Str. *	½"φ	1	28'-3"	19
L2q	Slab	Str. *	½"φ	1	28'-9"	19
L2r	Slab	Str. *	½"φ	1	29'-3"	20
L2s	Slab	Str. *	½"φ	1	30'-0"	20
L2t	Wall	Str.	½"φ	6	38'-3"	153
L2u	Wall	Str.	½"φ	6	24'-0"	96
L2tt	Wall	Str.	½"φ	6	33'-6"	135
L2uu	Wall	Str.	½"φ	6	28'-8"	115
L2v	Wing Wall	Str.	½"φ	4	14'-0"	37
L2w	Wing Wall	Str.	½"φ	4	13'-8"	37
L2x	Wing Wall	Str.	½"φ	4	11'-7"	31
L2y	Wing Wall	Str.	½"φ	4	9'-6"	25
L2aa	Wing Wall	Str.	½"φ	8	7'-0"	37
W2a	Wall	Bent	½"φ	274	8'-7"	1572
S6a	Slab	Bent	⅞"φ	182	10'-8"	3972
S6b	Slab	Bent	⅞"φ	2	9'-4"	38
S6c	Slab	Bent	⅞"φ	2	6'-8"	27
S6d	Slab	Bent	⅞"φ	2	6'-2"	25
S6e	Slab	Bent	⅞"φ	2	8'-8"	35
Re2a	Replacement	Str.	½"φ	1	8'-0"	
Re6a	Replacement	Str.	⅞"φ	1	8'-0"	
Re7a	Replacement	Str.	1"φ	1	8'-0"	
					TOTAL	8510



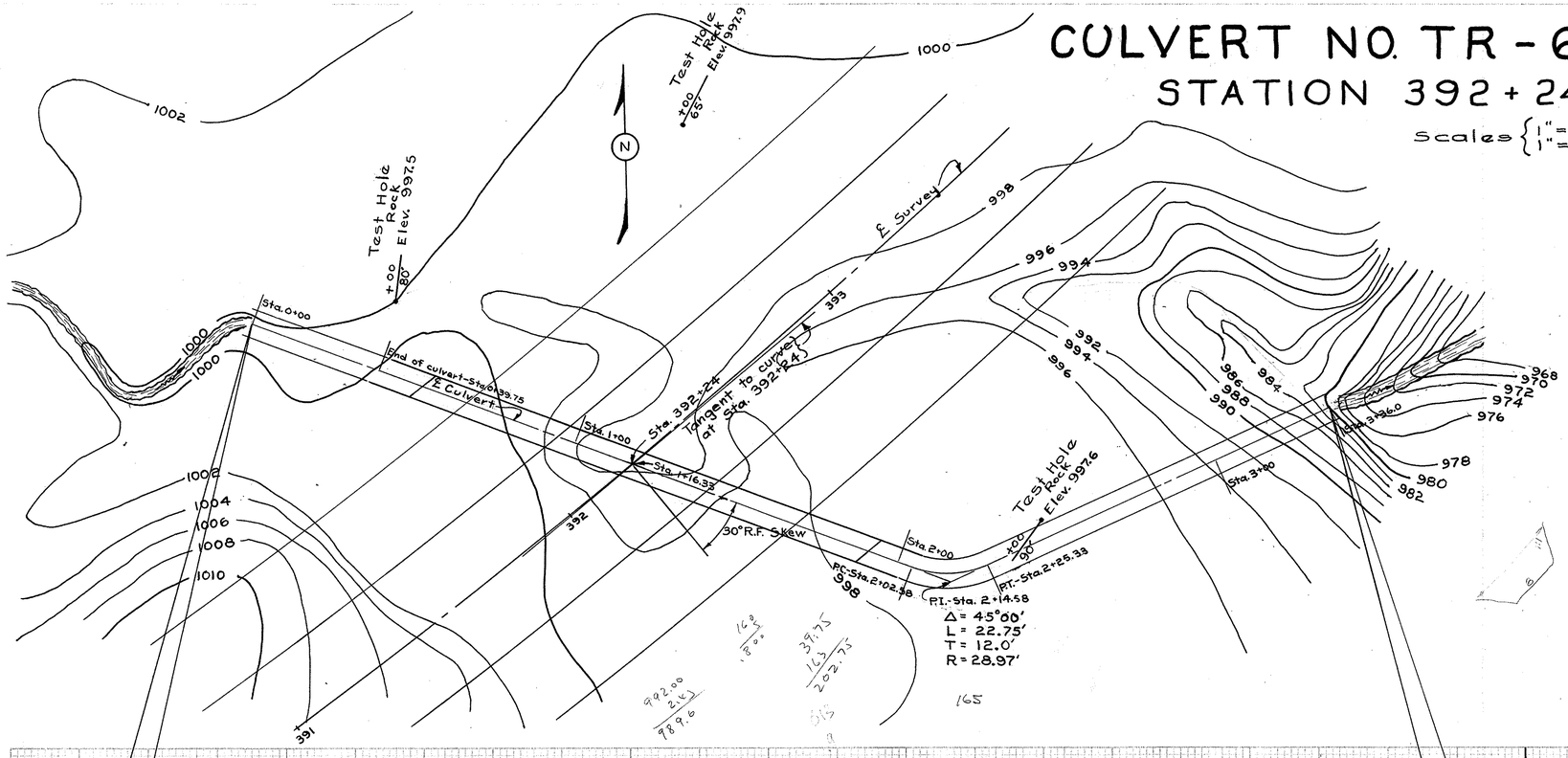
DRAINAGE STRUCTURE C-4

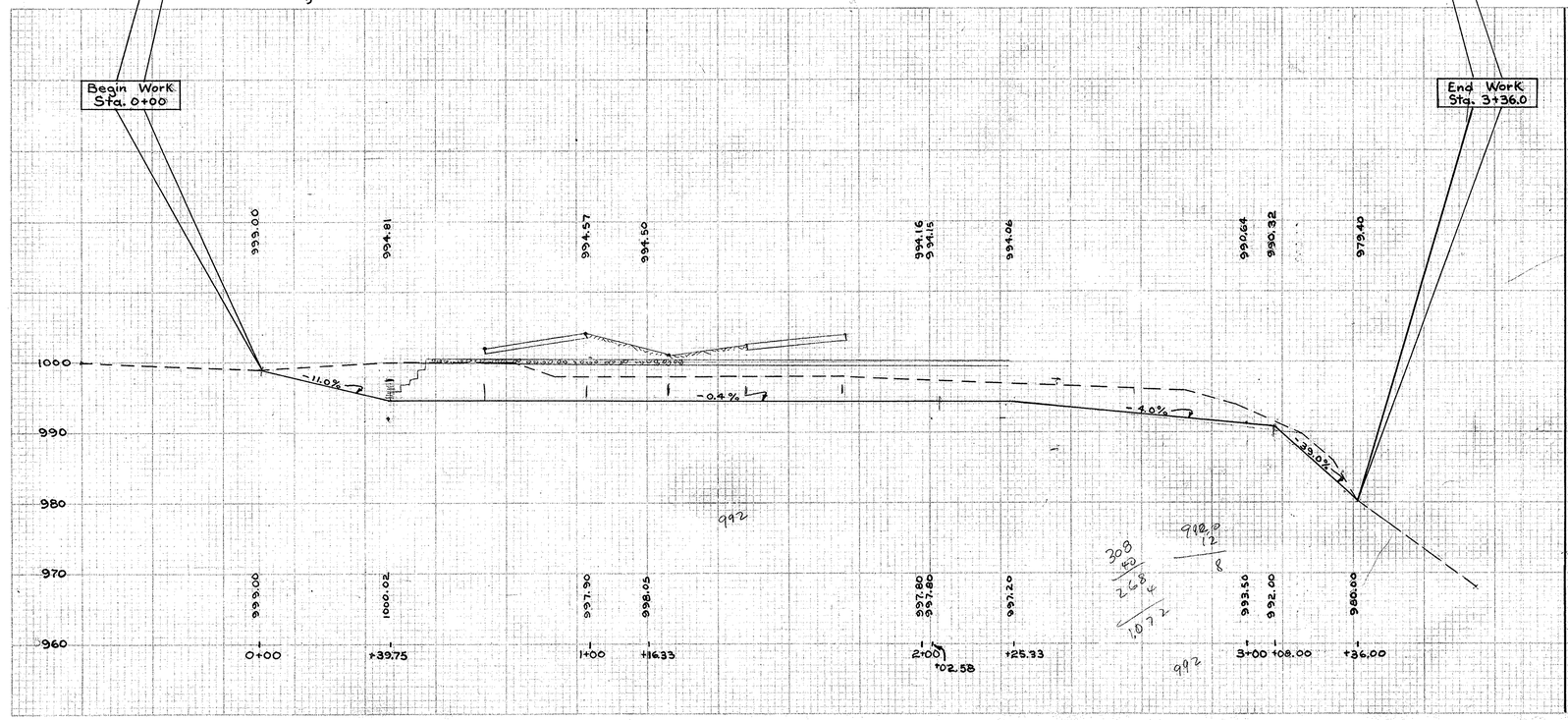
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	
5	OHIO	F-524(5)	POST WAR	127 / 154

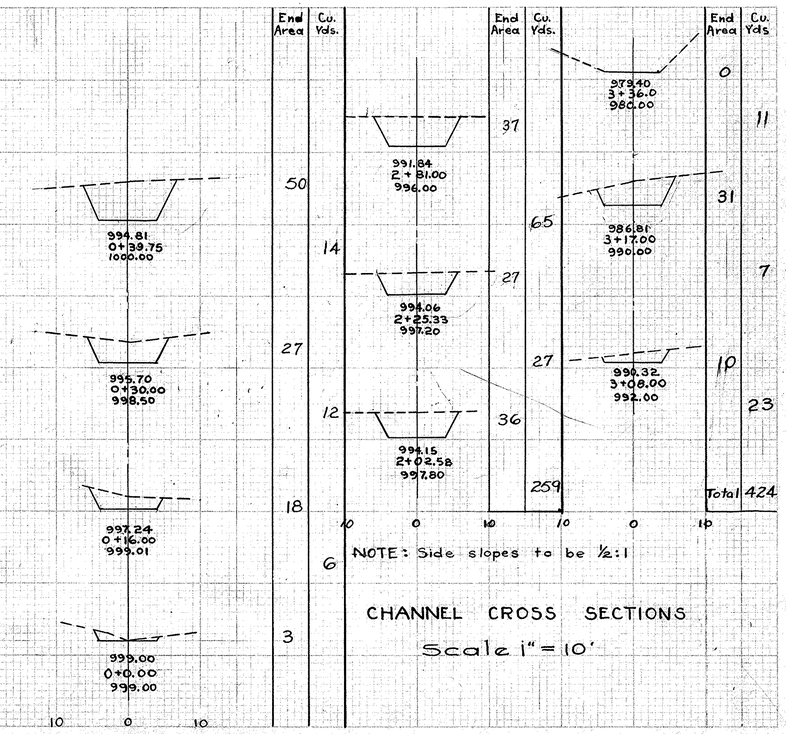
TRUMBULL COUNTY
TRU-62-(4.59-9.67)

CULVERT NO. TR-62-74
STATION 392+24

Scales { 1" = 20' (approx). Hor.
1" = 10' vertical







DRAINAGE STRUCTURE C-4 CHANNEL EXCAVATION

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

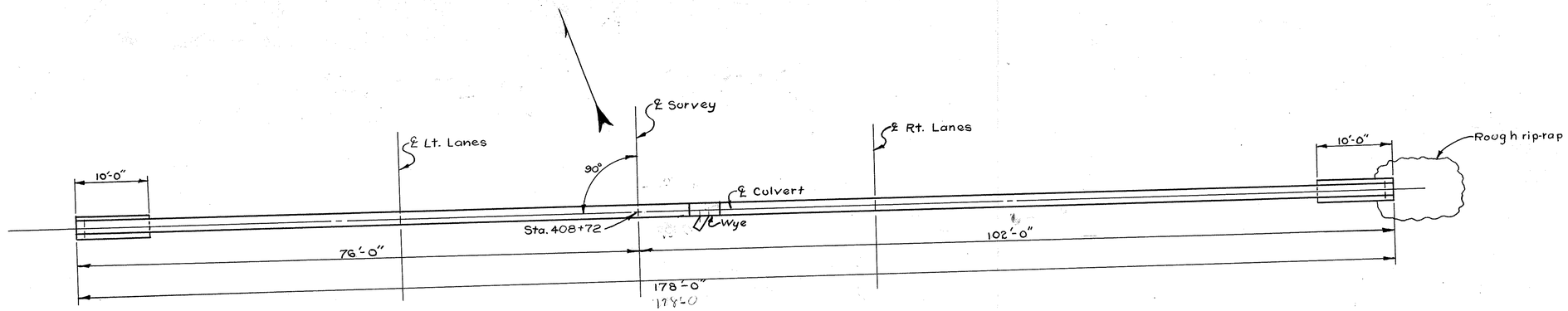
128/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

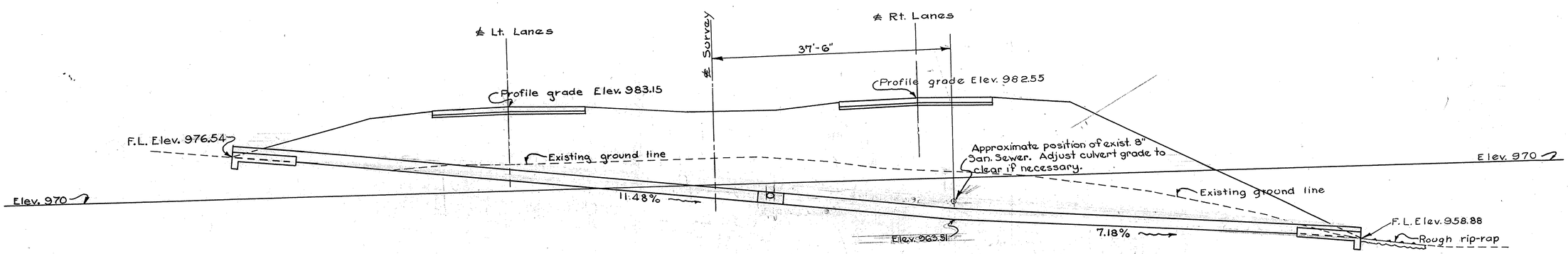
DRAINAGE STRUCTURE C-5 CULVERT NO. TR-62-77

STATION 408+72 DRAINAGE AREA 5.3 ACRES

SURVEYED BY F.R.T. DRAWN BY T.V.R. CHECKED BY E.T.F.



PLAN VIEW
Scale: 1/8" = 1'-0"



LONGITUDINAL SECTION ON CULVERT CENTER LINE
Scale: 1/8" = 1'-0"

ESTIMATED QUANTITIES

E-2	Excavation for Structures	55 Cu. Yds.
S-1	Concrete for structures (Class "E")	2.15 Cu. Yds.
S-27	21" Pipe for roadway culverts	174 Lin. Ft.
I-5	Pipe special (21" x 12" wye)	1 Each
I-10	Riprap Type "A" Grouted (Rough)	6 Sq. Yds.

CULVERT DATA

TYPE: Standard Pipe Culvert
SIZE: 21" by 178'-0" @ 0° Skew
STANDARD DRAWINGS: S-27 P.C. 2 ; S-27 P.C. 3
WORK REQUIRED: Build standard pipe culvert with concrete cradle & cut-off wall at each end and rip-rap at right end.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

129/154

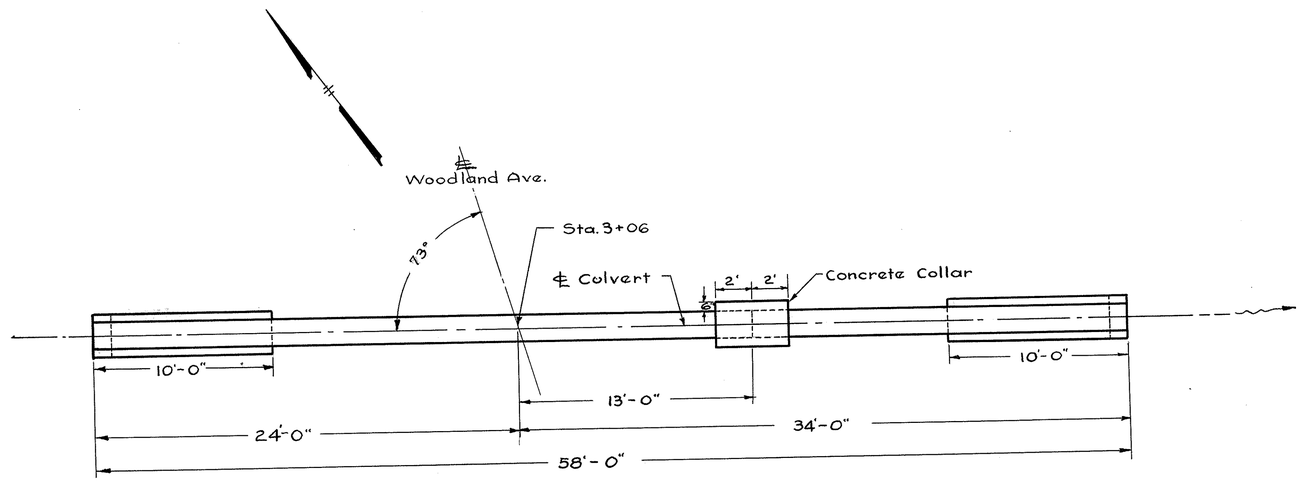
TRUMBULL COUNTY
TRU-62-(4.59-9.67)

DRAINAGE STRUCTURE C-6

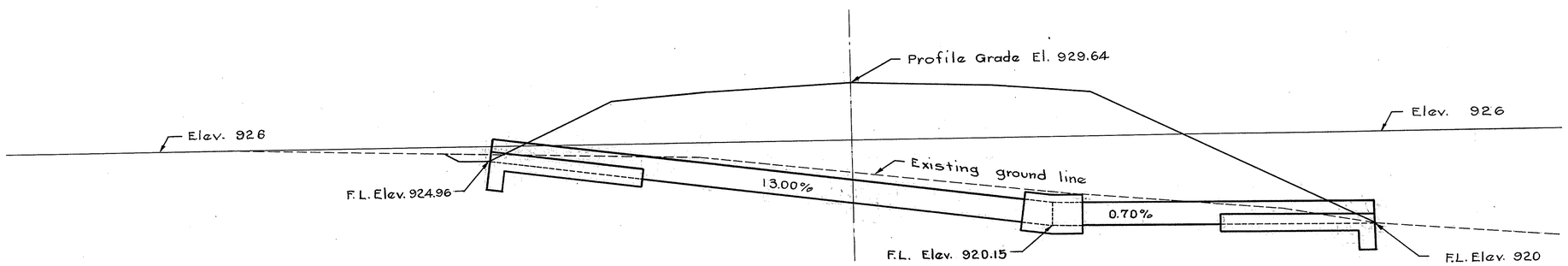
WOODLAND AVE. STATION 3+06

DRAINAGE AREA 5 ACRES

SURVEYED BY F.P.I. DRAWN BY S.A.S. CHECKED BY L.E.M.



PLAN VIEW
Scale 1" = 1/4"



LONGITUDINAL SECTION ON CULVERT CENTER LINE

Scale 1" = 1/4"

ESTIMATED QUANTITIES

E-2 Excavation for structures	14	Cu. Yd.
S-1 Concrete for structures (Class "E")	2.34	Cu. Yd.
S-27 18" Pipe for roadway culverts	58	Ft.

CULVERT DATA

TYPE: Standard Pipe Culvert
SIZE: 18" by 58'-0" @ 17° Skew L.F.
STANDARD DRAWINGS: S-27 P.C.2 ; S-27 P.C.3
WORK REQUIRED: Build standard pipe culvert with concrete cradle and cut-off wall at each end and concrete collar 21' from right end.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

130
154

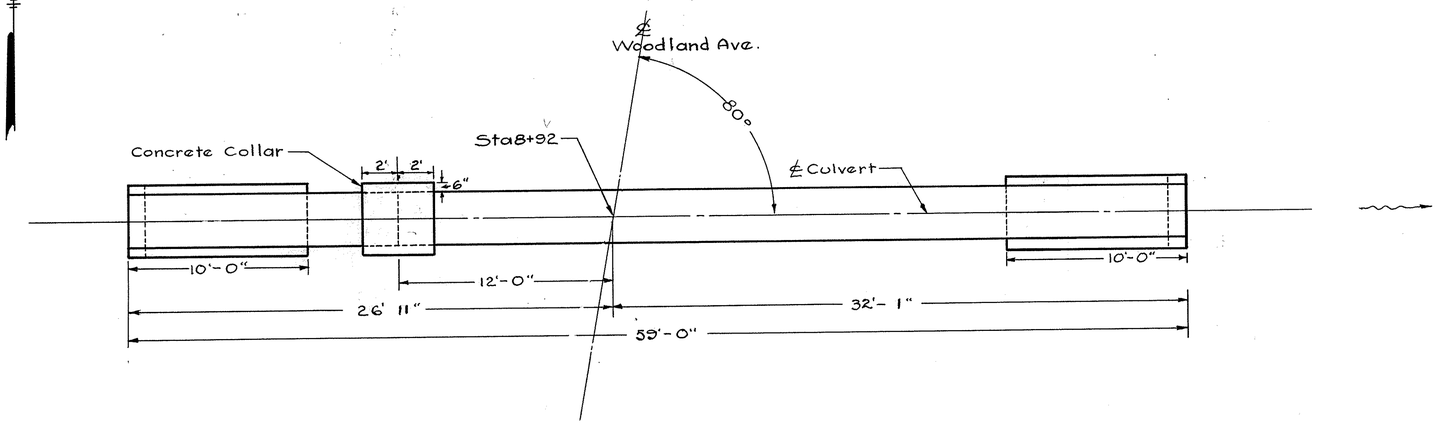
TRUMBULL COUNTY
TRU-62 (4.59-9.67)

DRAINAGE STRUCTURE C-7

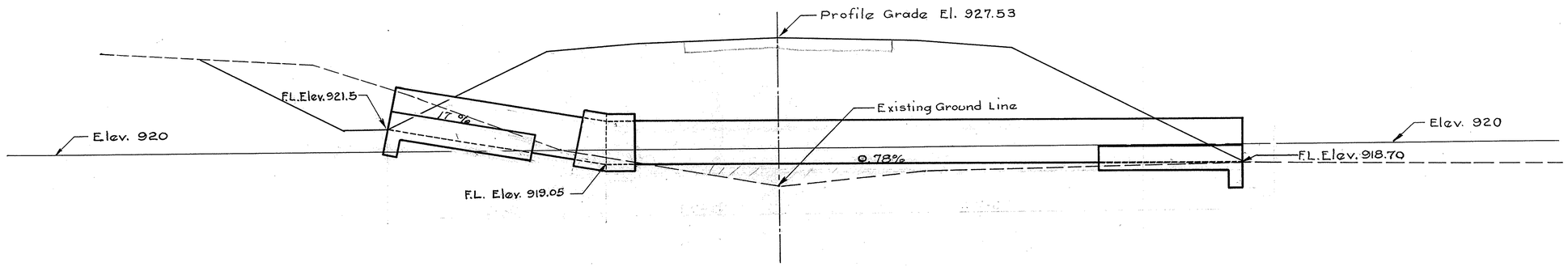
WOODLAND AVE. STATION 8+92

DRAINAGE AREA 40 ACRES

SURVEYED BY F.P.I. DRAWN BY S.A.S. CHECKED BY L.E.M.



PLAN VIEW
Scale-1/4"=1'



LONGITUDINAL SECTION ON CULVERT CENTER LINE

Scale 1/4"=1'

ESTIMATED QUANTITIES

E-2	Excavation for structures	7	Cu.Yd.
S-1	Concrete for structures (Class "E")	4.29	Cu.Yd.
S-27	36" Pipe for roadway culverts	59	L.F.

CULVERT DATA

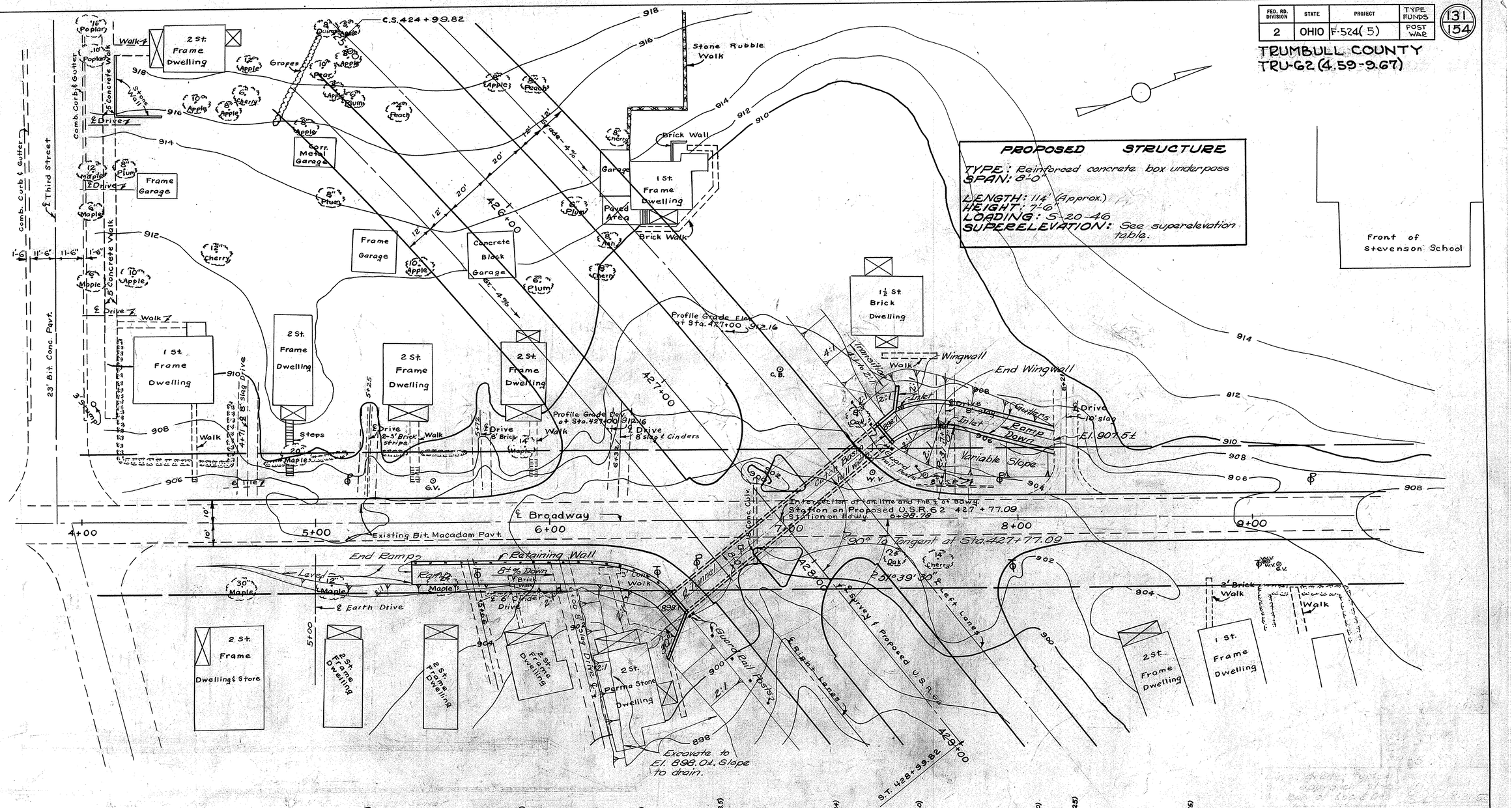
TYPE: Standard Pipe Culvert
SIZE: 36" by 59'-0" @ 10° Skew R.F.
STANDARD DRAWINGS: S-27 P.C.2 ; S-27 P.C.3
WORK REQUIRED: Build standard pipe culvert with concrete cradle and cut-off wall at each end and concrete collar 15' from left end.

Revised 10-17-51 JEW.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

131/154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. TR-62-81
PEDESTRIAN UNDERPASS UNDER U.S.R. 62
AT BROADWAY IN MASURY (UNINC.), OHIO
Trumbull Co. Sta. 427+77.09
SCALE: 1" = 20'

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
FPI	FEF	P.E.S.	P.E.S.	J.C.R.	C.H.A.
		BFG	WHA	1-6-51	

STRUCTURE C-8

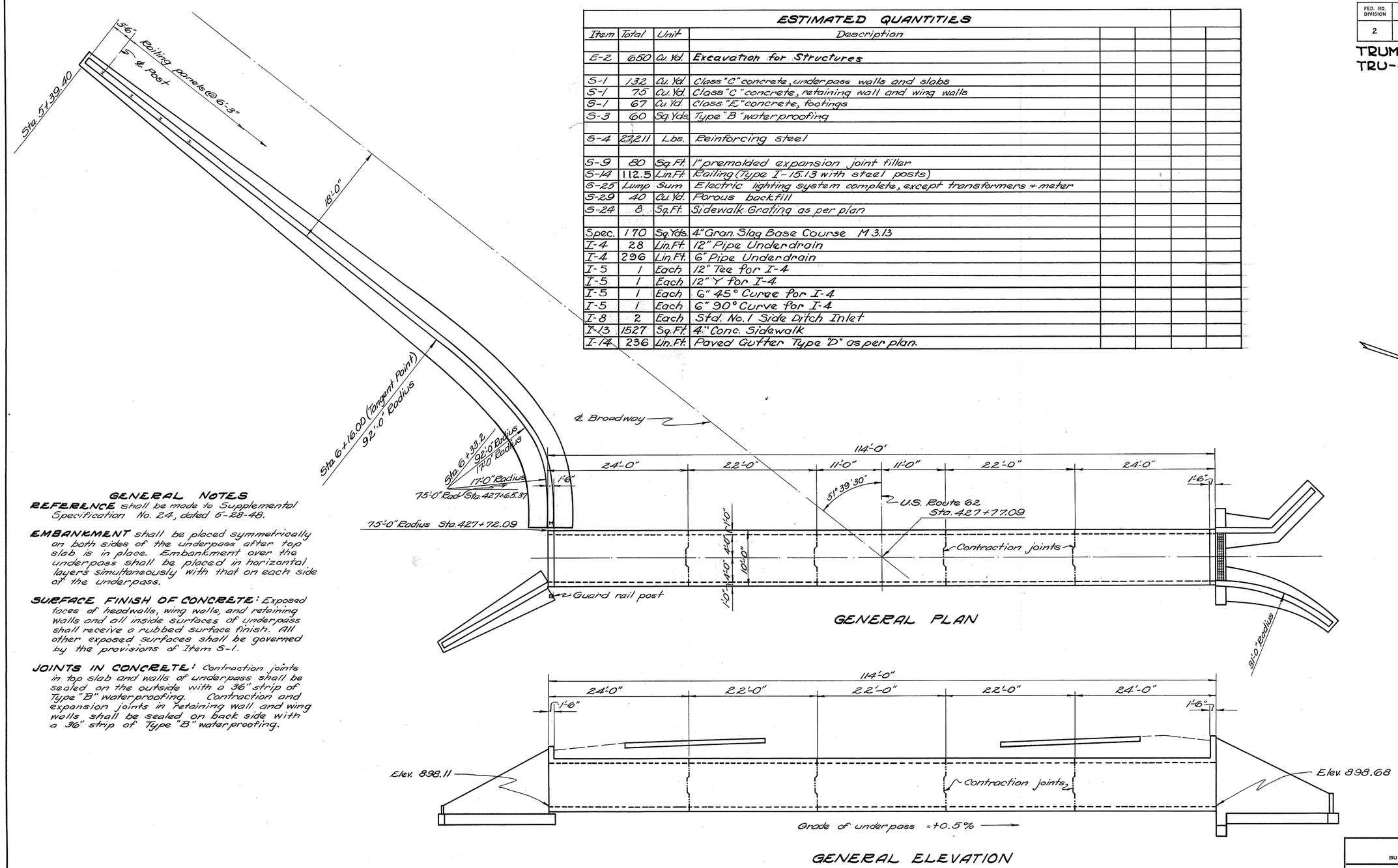
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

132
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

ESTIMATED QUANTITIES

Item	Total	Unit	Description
E-2	650	Cu. Yd.	Excavation for Structures
S-1	132	Cu. Yd.	Class "C" concrete, underpass walls and slabs
S-1	75	Cu. Yd.	Class "C" concrete, retaining wall and wing walls
S-1	67	Cu. Yd.	Class "E" concrete, footings
S-3	60	Sq. Yds.	Type "B" waterproofing
S-4	27,211	Lbs.	Reinforcing steel
S-9	80	Sq. Ft.	1" premolded expansion joint filler
S-14	112.5	Lin. Ft.	Railing (Type I-15.13 with steel posts)
S-25	Lump	Sum	Electric lighting system complete, except transformers + meter
S-29	40	Cu. Yd.	Porous backfill
S-24	8	Sq. Ft.	Sidewalk Grating as per plan
Spec.	170	Sq. Yds.	4" Gran. Slag Base Course M 3.13
I-4	28	Lin. Ft.	12" Pipe Underdrain
I-4	296	Lin. Ft.	6" Pipe Underdrain
I-5	1	Each	12" Tee for I-4
I-5	1	Each	12" Y for I-4
I-5	1	Each	6" 45° Curve for I-4
I-5	1	Each	6" 90° Curve for I-4
I-8	2	Each	Std. No. 1 Side Ditch Inlet
I-13	1527	Sq. Ft.	4" Conc. Sidewalk
I-14	236	Lin. Ft.	Paved Gutter Type "D" as per plan.



GENERAL NOTES

REFERENCE shall be made to Supplemental Specification No. 24, dated 5-28-48.

EMBANKMENT shall be placed symmetrically on both sides of the underpass after top slab is in place. Embankment over the underpass shall be placed in horizontal layers simultaneously with that on each side of the underpass.

SURFACE FINISH OF CONCRETE: Exposed faces of headwalls, wing walls, and retaining walls and all inside surfaces of underpass shall receive a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item S-1.

JOINTS IN CONCRETE: Contraction joints in top slab and walls of underpass shall be sealed on the outside with a 36" strip of Type "B" waterproofing. Contraction and expansion joints in retaining wall and wing walls shall be sealed on back side with a 36" strip of Type "B" waterproofing.

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

GENERAL PLAN & ELEVATION
NOTES & ESTIMATED QUANTITIES
Bridge No. TR-62-81
under U.S. ROUTE 62

TRUMBULL COUNTY
SECT. TRU-62(4.59-9.67) Sta. 427+77.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	HVL	[illegible]	DFG W.H.C.	1-6-51	

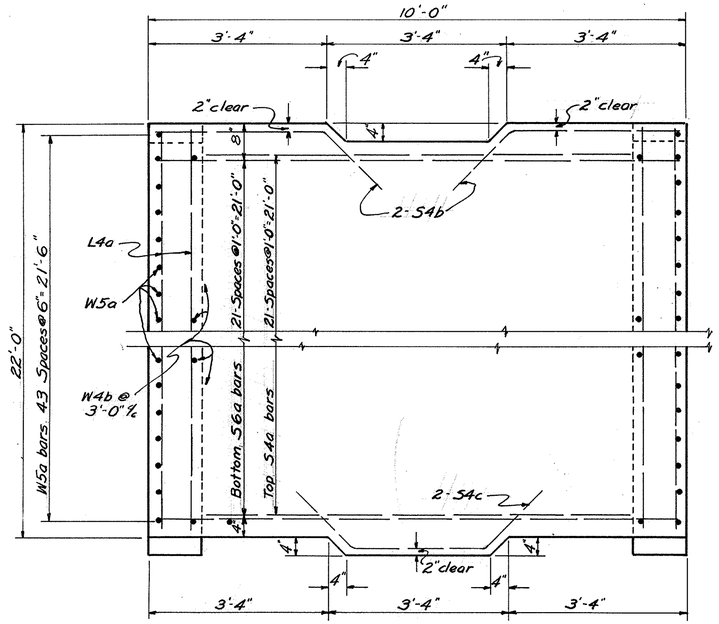
STRUCTURE C-8

EUGENE DIETZGEN CO. PRINTED ON IMPERIAL TRACING CLOTH FORM NO. RR-23

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F 524(5)	POST WAR

133
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



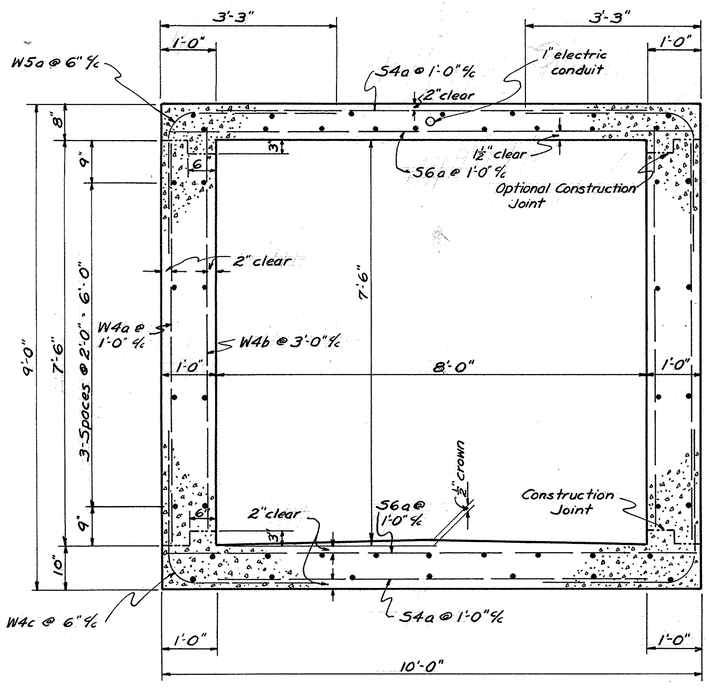
PLAN OF TOP SLAB

NOTES

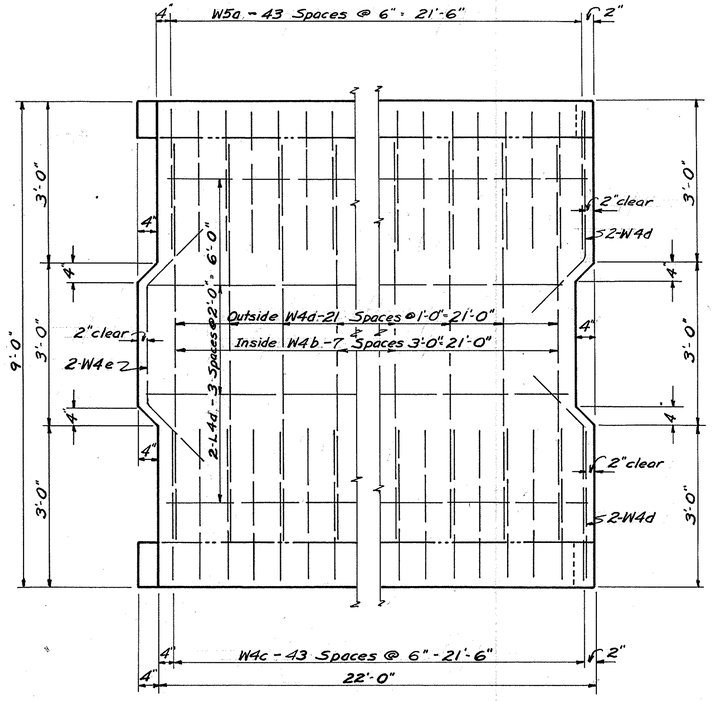
Bottom slab is same as top slab except that W4c bars replace W5a bars. See Sectional View

All longitudinal bars in walls and top and bottom slabs are L4a bars.

All reinforcement shall be 2" clear from surface of concrete unless otherwise shown.



SECTIONAL VIEW



SIDE VIEW

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

PEDESTRIAN UNDERPASS INTERIOR SECTIONS

BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62
TRUMBULL COUNTY
TRU-62-(4.59-9.67) Sta. 427+77.09

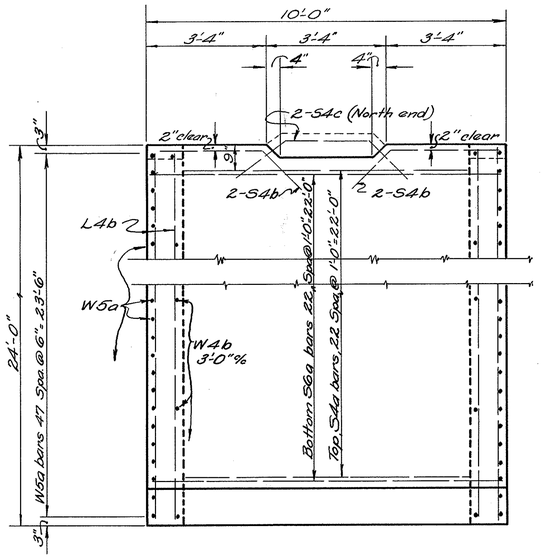
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	E.W.P.	[illegible]	BFG W.H.R.	1-6-51	

STRUCTURE C-8

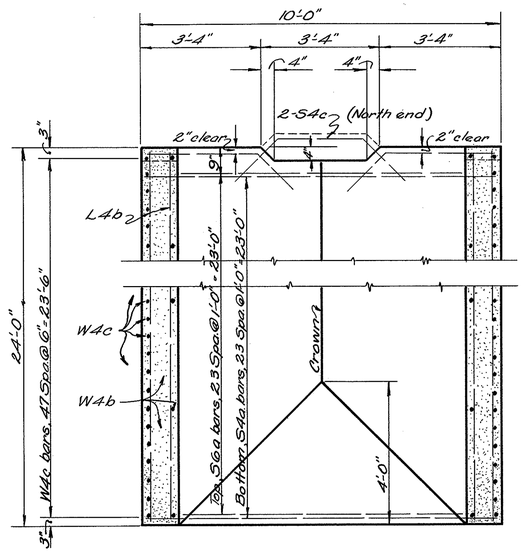
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

134
154

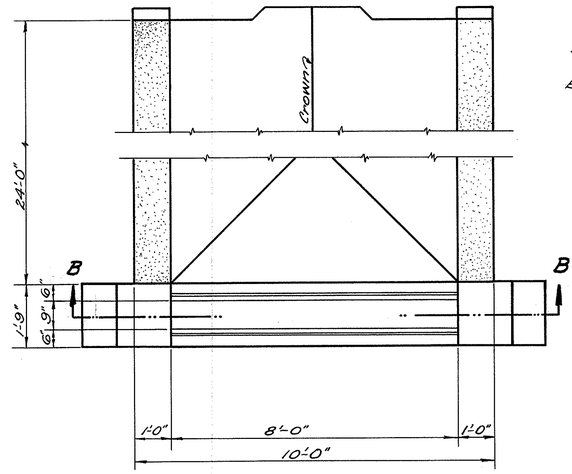
TRUMBULL COUNTY
TRU-62 (4.59-9.67)



PLAN OF TOP SLAB
SOUTH END SECTION

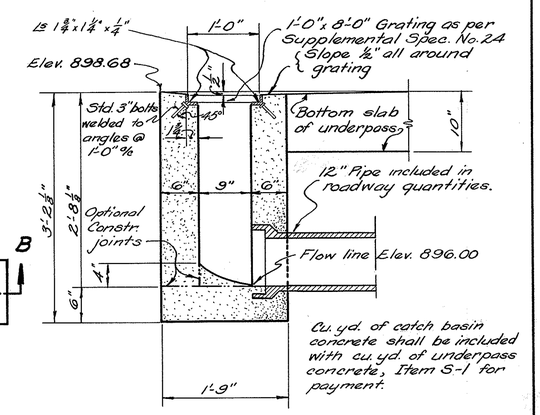


PLAN OF BOTTOM SLAB
SOUTH END SECTION

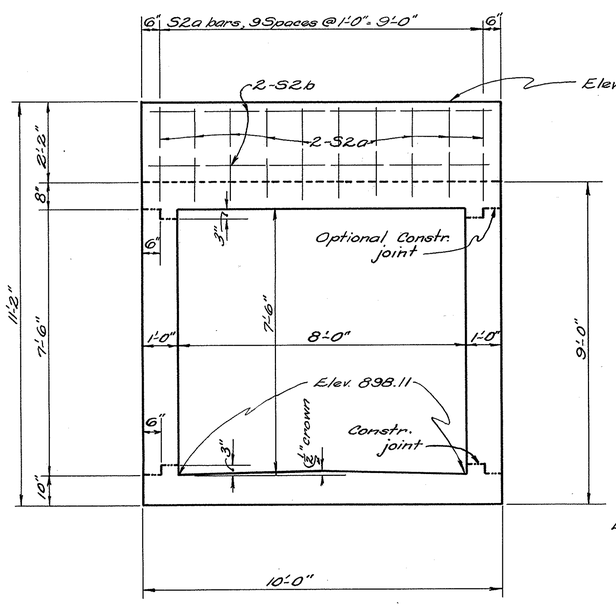


PLAN OF NORTH END SECTION
SHOWING CATCH BASIN

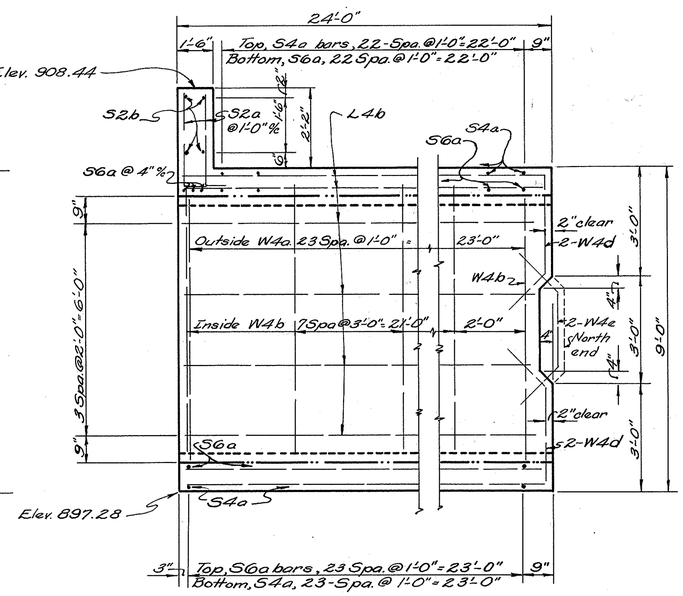
Angles and bolts for frame are included in Item SS-24, Sidewalk Grating for payment.



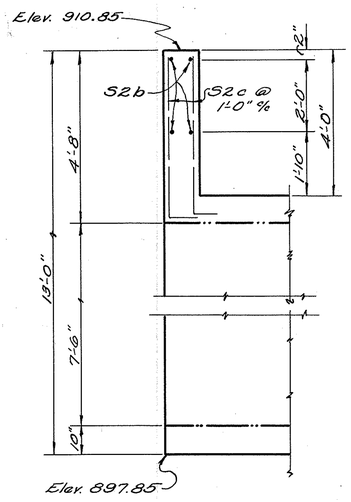
SECTION A-A



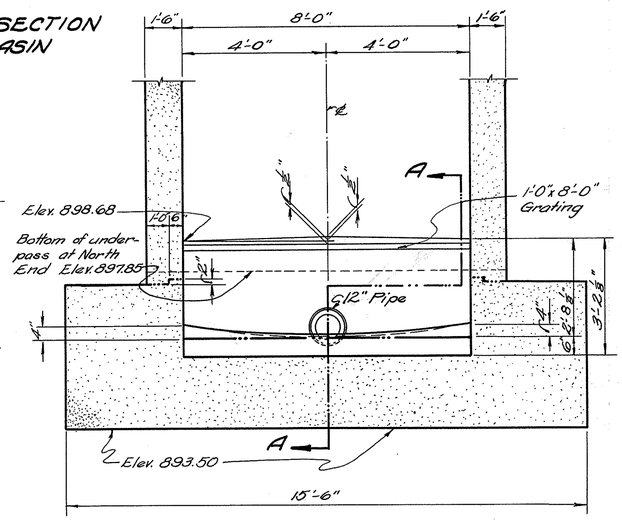
ELEVATION AT SOUTH END



SIDE VIEW AT SOUTH END



SIDE VIEW AT
NORTH END



SECTION B-B

Note All reinforcement shall be 2" clear from surface of concrete unless otherwise shown.
Reinforcement in End Sections and Interior Sections is same except as shown.
All longitudinal bars are L4b.

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

PEDESTRIAN UNDERPASS, END SECTIONS & CATCH BASIN
Bridge No. Tr-62-81
under U.S. ROUTE 62

Trumbull County
TRU-62 (4.59-9.67) Sta. 427+77.09

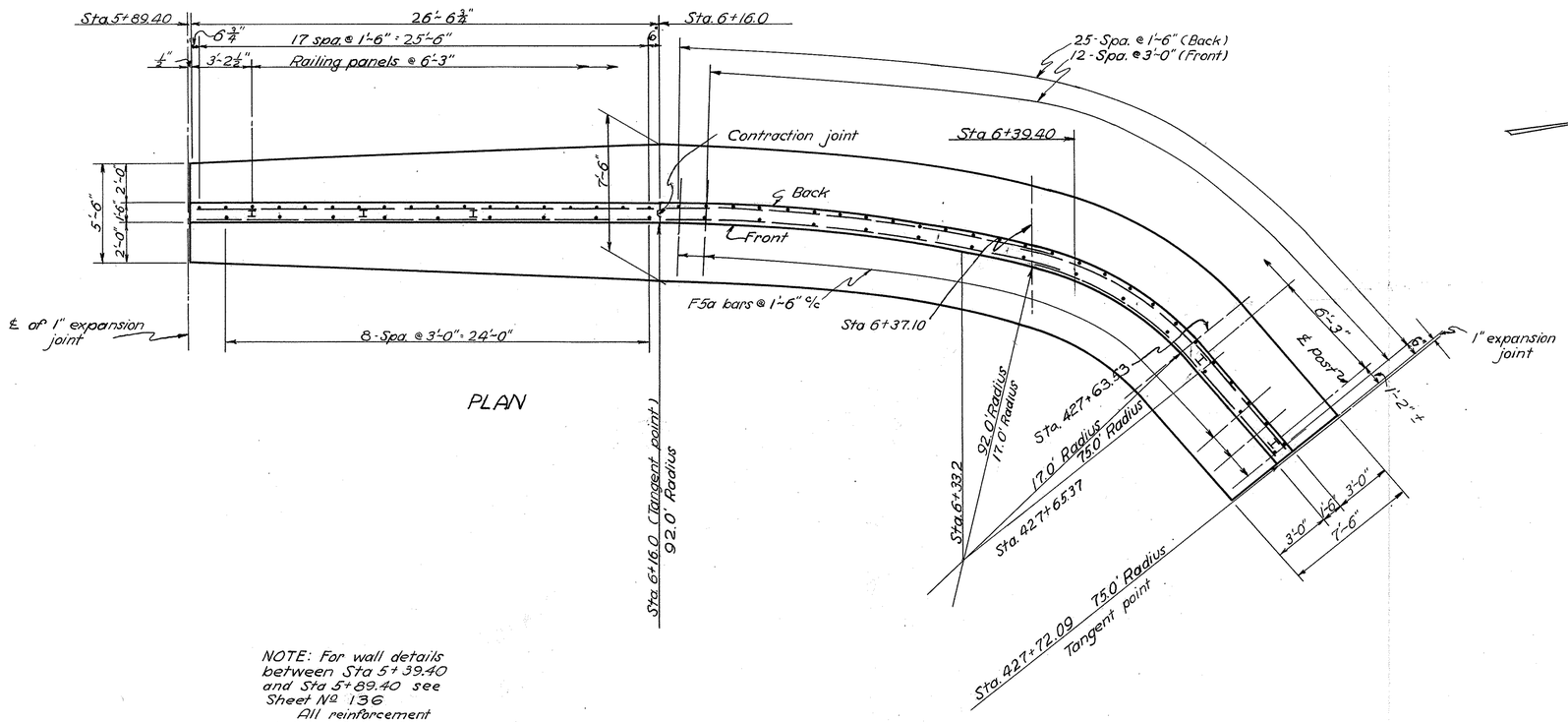
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	HVL		BFG WHC	1-6-51	

STRUCTURE C-8

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

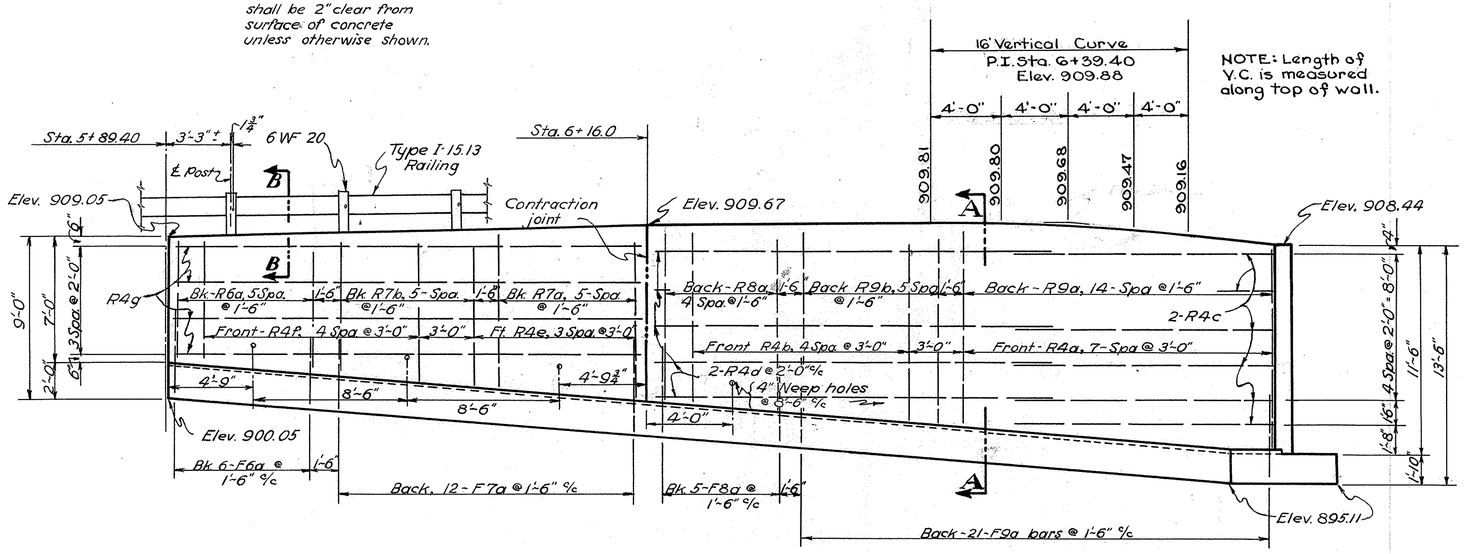
135
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



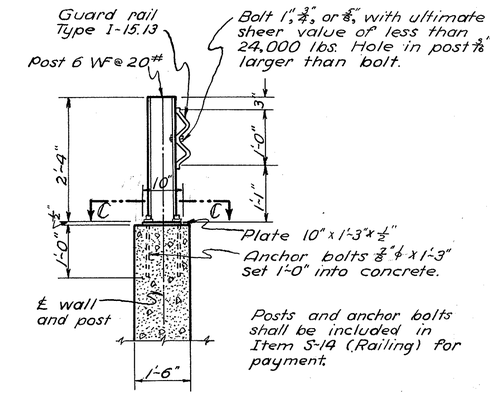
PLAN

NOTE: For wall details between Sta 5+39.40 and Sta 5+89.40 see Sheet No 136
All reinforcement shall be 2" clear from surface of concrete unless otherwise shown.

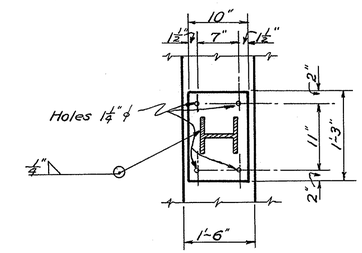


EAST ELEVATION

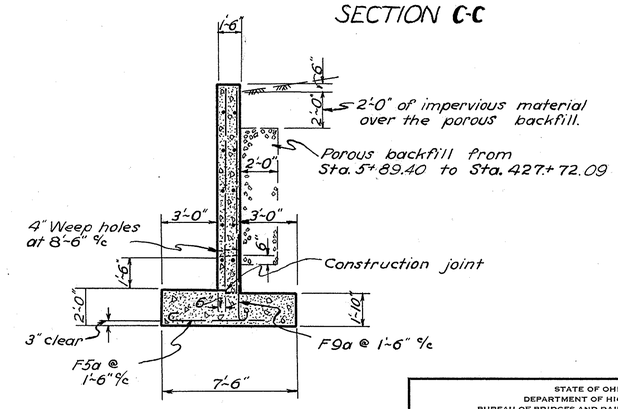
NOTE: Length of V.C. is measured along top of wall.



SECTION B-B



SECTION C-C



SECTION A-A

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

5/9

RETAINING WALL
STA. 5+89.40 TO STA. 427+72.09
BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62
TRUMBULL COUNTY
TRU-62-(4.59-9.67) STA. 427+77.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	RDH		BFG WHR	1-6-51	

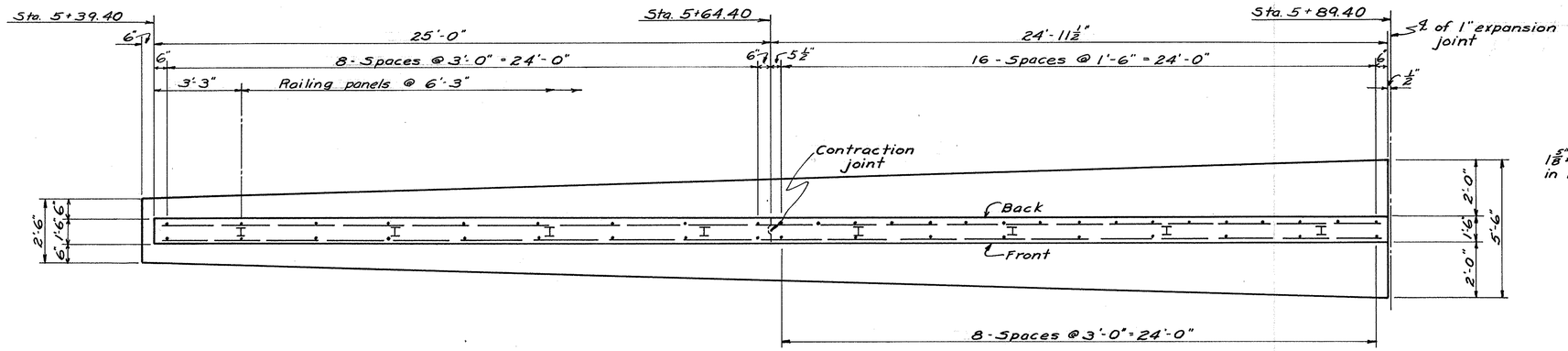
STRUCTURE C-8

EUGENE DIETZGEN CO. PRINTED ON IMPERIAL TRACING CLOTH FORM NO. BR-23

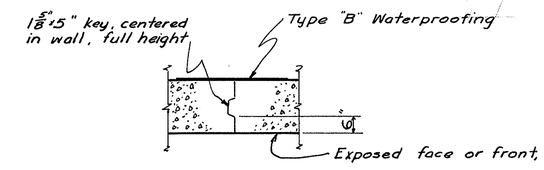
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

136/154

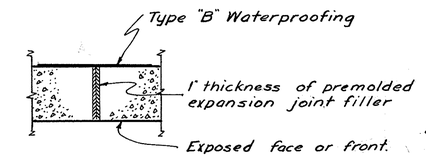
TRUMBULL COUNTY
TRU-62 (4.59-9.67)



PLAN

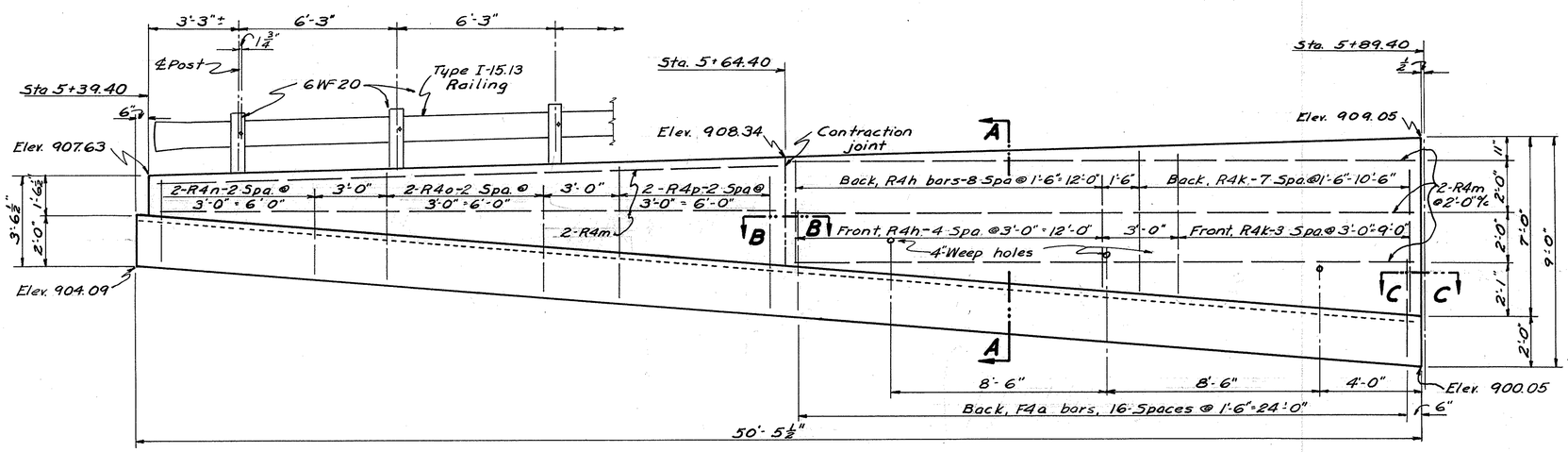


SECTION B-B
CONTRACTION JOINT

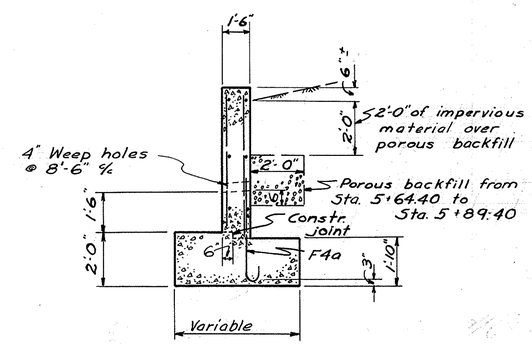


SECTION C-C
EXPANSION JOINT

NOTE: For wall details between Sta. 5+89.40 and Sta. 427+72.09 see Sheet No.
All reinforcement shall be 2" clear from surface of concrete unless otherwise shown.
For Railing Detail (Section B-B) see Sheet No.



EAST ELEVATION



SECTION A-A

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

6/9

RETAINING WALL
STA. 5+39.40 to STA. 5+89.40
BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62
TRUMBULL COUNTY
TRU-62-(4.59-9.67) STA. 427+77.09

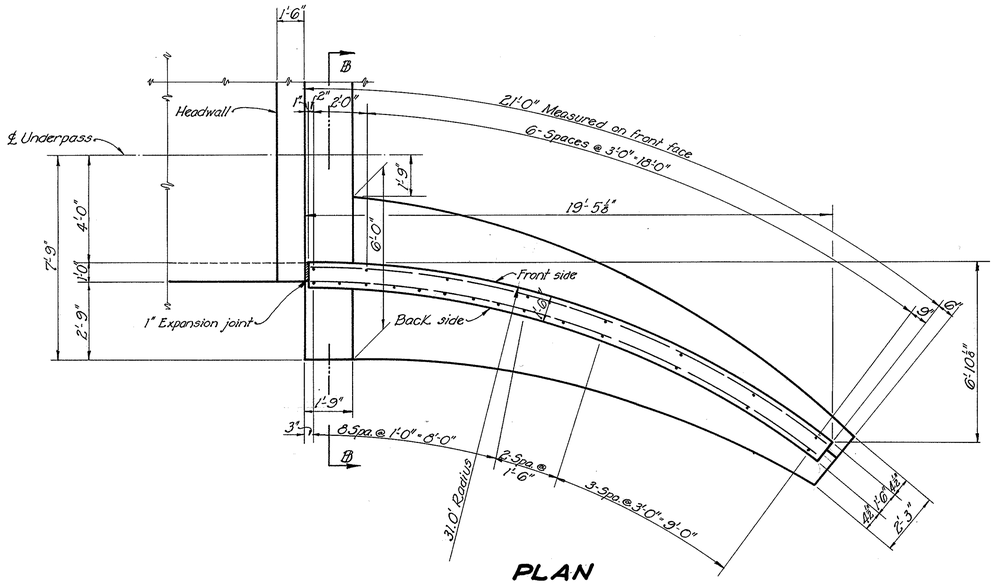
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	E.W.P.	CWK	BFG WHR	1-6-51	

STRUCTURE C-8

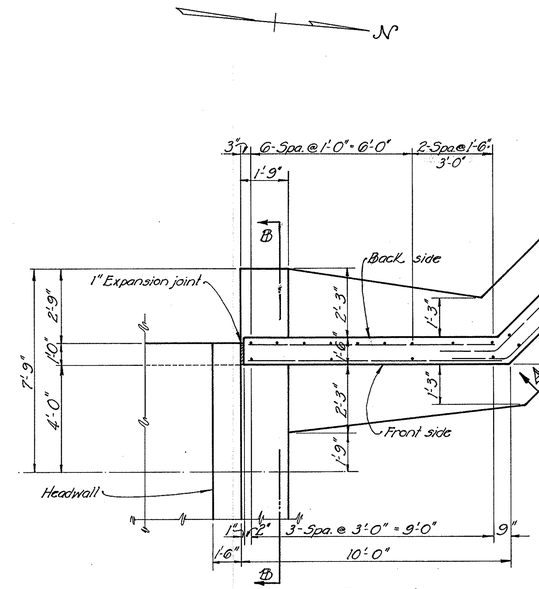
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

137/154

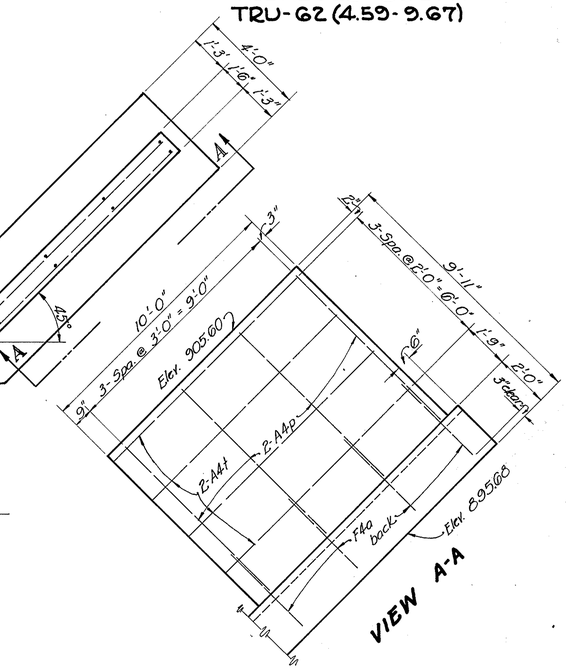
TRUMBULL COUNTY
TRU-62 (4.59-9.67)



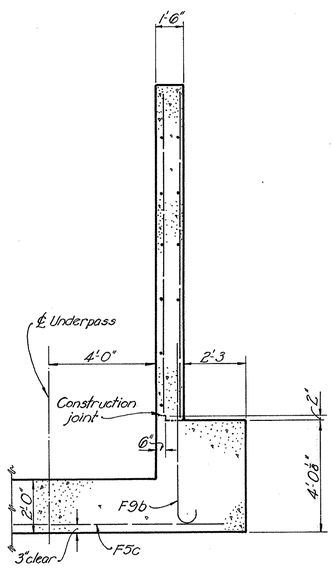
PLAN
NORTH EAST WING WALL



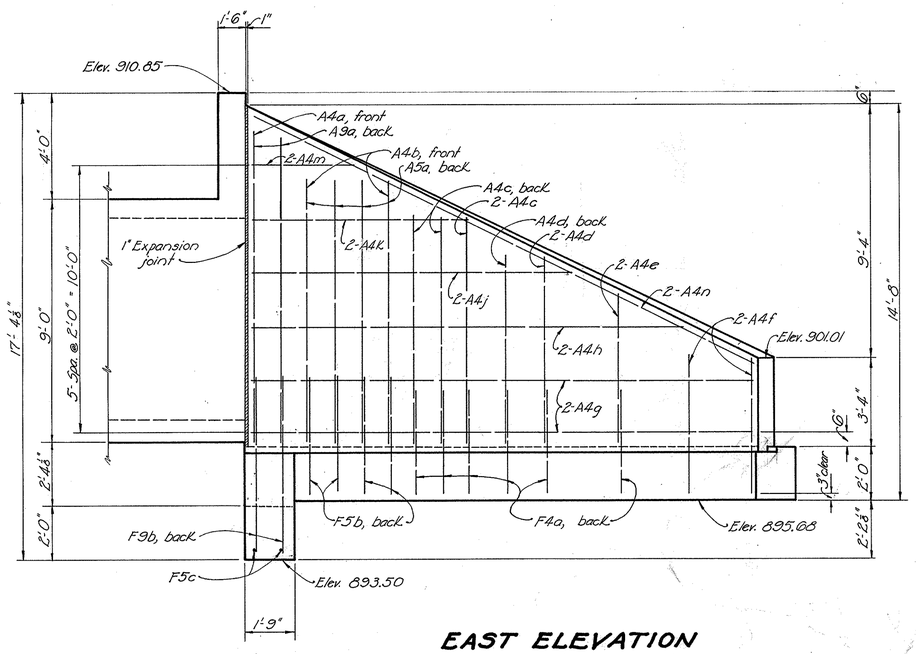
PLAN
NORTH WEST WING WALL



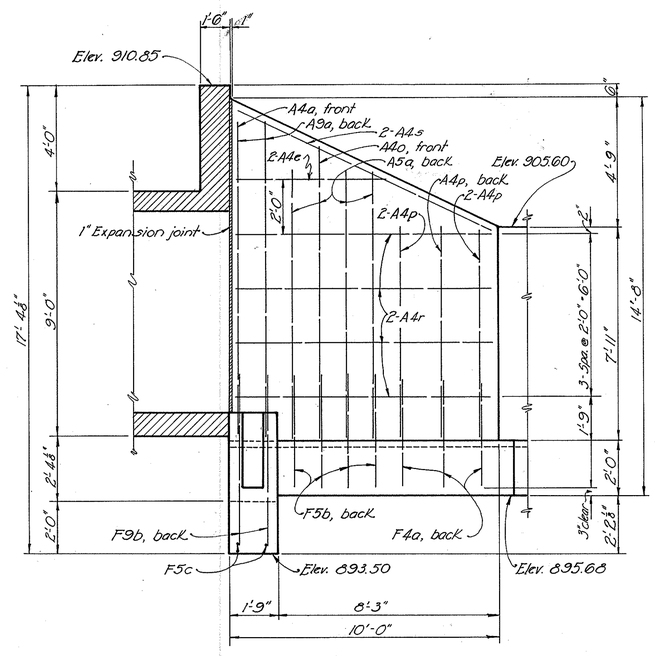
VIEW A-A



SECTION B-B
Catch Basin Not Shown



EAST ELEVATION
NORTH EAST WING WALL



EAST ELEVATION
NORTH WEST WING WALL

NOTE
All reinforcement shall be 2" clear from surface of concrete unless otherwise shown.

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

7/9

WING WALLS AT NORTH END BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62
TRUMBULL COUNTY
TRU-62-(4.59-9.67) STA. 427+77.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	D.J.M.	[illegible]	DFG W.H.R.	1-6-51	

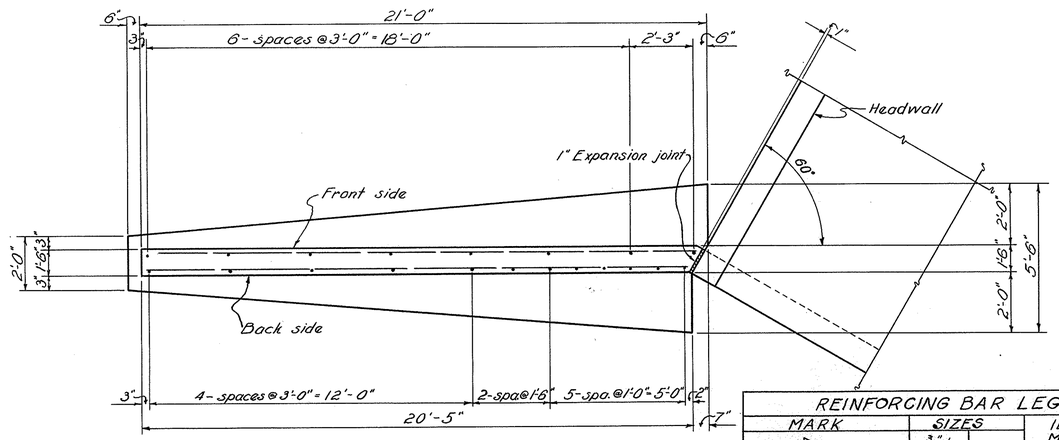
STRUCTURE C-8

EUGENE DIETZGEN CO. PRINTED IN IMPERIAL TRACING CLOTH FORM NO. 88-23

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F 524(5)	POST WAR

138
154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)



PLAN
SOUTHEAST WING WALL

N

REINFORCING BAR LEGEND

MARK	SIZES	
Location / Size / Mark	Sq. Only	1
	Sq. Plus Only	2
S 9 a	3/8"ø	4
F 4 d	1/2"ø	5
A 0 m	5/8"ø	6
	1"ø	7
	1"□	8
S = Superstructure	1 1/8"□	9
F = Footing	1 1/4"□	0
A = Abutment		

ILLUSTRATION OF MARKING SYSTEM

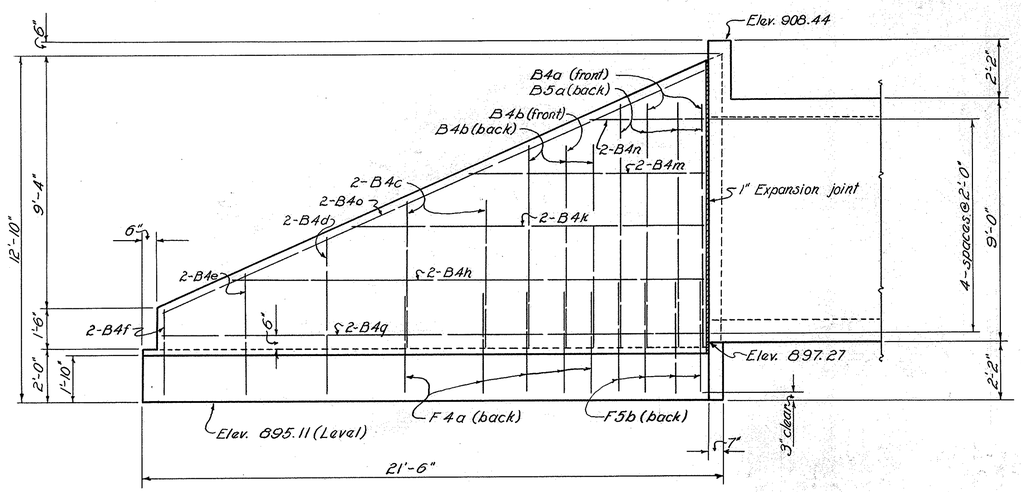
Bar S9a

"S" indicates a bar in the superstructure.

"9" indicates that the bar is 1 1/8" Square.

"a" denotes a specific bar.

NOTE: The bar size designations shown above do not correspond with the size designations given in the January 1, 1951 edition of the Construction and Material Specifications.

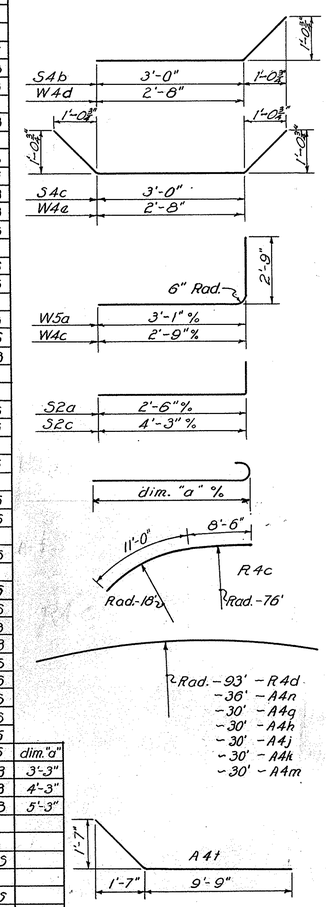


EAST ELEVATION
SOUTHEAST WING WALL

REINFORCING STEEL LIST

Mark	Size	No.	Length	Weight	Shp	
Interior & End Sections						
S6a	3/8"ø	232	9'-6"	4505	S	
S4a	5/8"ø	226	8'-0"	1885	S	
S4b	5/8"ø	32	4'-4"	145	B	
S4c	5/8"ø	16	5'-8"	95	B	
W5a	3/4"ø	456	5'-6"	3767	B	
W4a	5/8"ø	228	7'-3"	1724	S	
W4b	5/8"ø	84	7'-6"	657	S	
W4c	5/8"ø	456	5'-3"	2499	B	
W4d	5/8"ø	32	4'-0"	133	B	
W4e	5/8"ø	16	5'-4"	89	B	
L4a	5/8"ø	144	21'-6"	3228	S	
L4b	5/8"ø	96	23'-6"	2353	S	
S2a	1/2"ø	20	3'-1"	41	B	
S2b	1/2"ø	8	9'-6"	51	S	
S2c	1/2"ø	20	4'-10"	65	B	
Retaining Wall						
R9a	1 1/8"□	15	11'-0"	710	S	
R9b	1 1/8"□	6	10'-3"	265	S	
R8a	1"□	5	9'-6"	162	S	
R7a	1"ø	6	8'-9"	140	S	
R7b	1"ø	6	7'-9"	124	S	
R6a	7/8"ø	6	6'-9"	83	S	
R4a	5/8"ø	8	11'-0"	92	S	
R4b	5/8"ø	5	9'-6"	50	S	
R4c	5/8"ø	12	19'-6"	244	B	
R4d	5/8"ø	10	22'-0"	230	B	
R4e	5/8"ø	4	8'-6"	35	S	
R4f	5/8"ø	5	7'-0"	37	S	
R4g	5/8"ø	8	26'-0"	217	S	
R4h	5/8"ø	14	4'-3"	62	S	
R4k	5/8"ø	12	5'-8"	71	S	
R4m	5/8"ø	10	24'-6"	256	S	dim."a"
R4n	5/8"ø	6	3'-10"	24	B	3'-3"
R4o	5/8"ø	6	4'-10"	30	B	4'-3"
R4p	5/8"ø	6	5'-10"	37	B	5'-3"
Wing Walls at North End						
A9a	1 1/8"□	4	11'-9"	202	S	
A5a	3/4"ø	8	9'-9"	117	S	
A4a	5/8"ø	2	12'-0"	25	S	
A4b	5/8"ø	2	9'-9"	20	S	

Bending Diagrams



Mark	Size	No.	Length	Weight	Shp	
(Cont.)						
A4c	5/8"ø	4	8'-6"	35	S	
A4d	5/8"ø	3	7'-0"	22	S	
A4e	5/8"ø	4	5'-6"	23	S	dim."a"
A4f	5/8"ø	4	5'-7"	23	B	5'-0"
A4g	5/8"ø	4	20'-6"	86	B	
A4h	5/8"ø	2	16'-6"	34	B	
A4j	5/8"ø	2	12'-0"	25	B	
A4k	5/8"ø	2	8'-0"	17	B	
A4m	5/8"ø	2	3'-9"	8	B	
A4n	5/8"ø	2	22'-0"	46	B	
A4o	5/8"ø	1	10'-9"	11	S	
A4p	5/8"ø	13	7'-9"	105	S	
A4r	5/8"ø	8	9'-6"	79	S	
A4s	5/8"ø	2	10'-6"	22	S	
A4t	5/8"ø	8	12'-0"	100	B	
Southeast Wing Wall						
B5a	3/4"ø	4	9'-0"	54	S	
B4a	5/8"ø	2	9'-6"	20	S	
B4b	5/8"ø	4	7'-6"	31	S	
B4c	5/8"ø	4	5'-6"	23	S	
B4d	5/8"ø	2	6'-4"	13	B	5'-9"
B4e	5/8"ø	2	5'-1"	11	B	4'-6"
B4f	5/8"ø	2	3'-7"	7	B	3'-0"
B4g	5/8"ø	2	20'-0"	42	S	
B4h	5/8"ø	2	17'-6"	37	S	
B4k	5/8"ø	2	13'-0"	27	S	
B4m	5/8"ø	2	8'-6"	18	S	
B4n	5/8"ø	2	4'-0"	8	S	
B4o	5/8"ø	2	21'-9"	45	S	
Wall Footings						
F9a	1 1/8"□	21	6'-9"	610	B	5'-8"
F9b	1 1/8"□	4	8'-11"	153	B	7'-8"
F8a	1"□	5	6'-2"	105	B	5'-1"
F7a	1"ø	12	6'-2"	198	B	5'-1"
F6a	7/8"ø	6	5'-6"	67	B	4'-8"
F5a	3/4"ø	26	6'-2"	241	B	5'-6"
F5b	3/4"ø	12	4'-11"	89	B	4'-3"
F5c	3/4"ø	2	11'-0"	33	S	
F4a	5/8"ø	35	4'-5"	161	B	3'-10"
Replacement Bars						
RE9	1 1/8"□	1	7'-9"	33	S	
RE8	1"□	1	7'-4"	25	S	
RE7	1"ø	1	7'-4"	20	S	
RE6	7/8"ø	1	6'-11"	14	S	
RE5	3/4"ø	1	6'-6"	10	S	
RE4	5/8"ø	1	6'-1"	6	S	
RE2	1/2"ø	1	5'-8	4	S	

NOTES:
For details of footing key, see Sheet No. 6

All reinforcement shall be 2" clear from surface of concrete unless otherwise shown.

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

8/9

WING WALL AT SOUTH END
& STEEL LIST
BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62
TRUMBULL COUNTY
TRU-62-(4.59-9.67) STA. 427+77.09

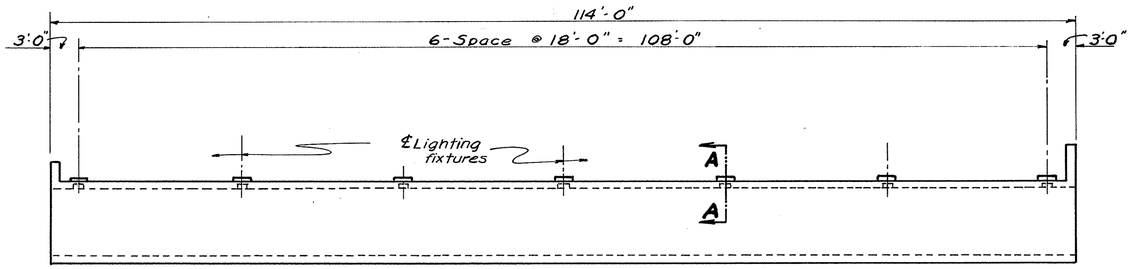
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	F.L.L.	CAB	BFG WHR	1-6-51	

STRUCTURE C-8

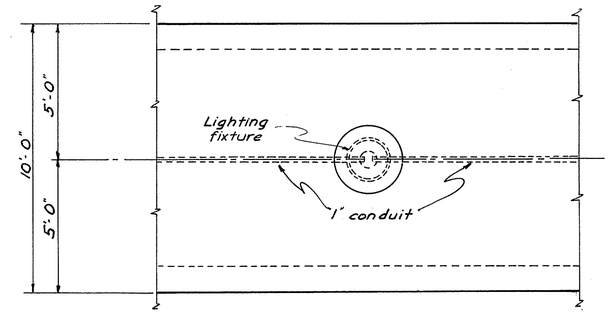
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

139
154

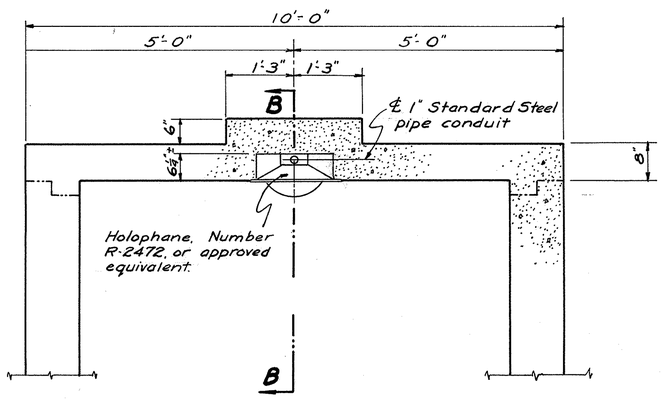
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



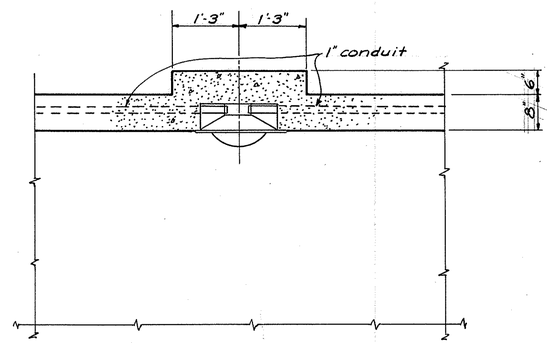
EAST ELEVATION



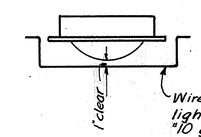
PART PLAN



SECTION A-A



SECTION B-B



Wire mesh guard at each lighting fixture. Wire shall be #10 guage (minimum) with 1" openings. Guard or portion there-of shall be removable for changing light bulbs.

NOTES: Reinforcing bars in top slab of underpass shall be bent in field where necessary to clear lighting fixtures.

Lamps shall be 150 watts.

Electrical wire shall be 12 gage minimum.

Electrical connection shall be made to a switch in the southwest corner of the basement of Stevenson School.

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

LIGHTING DETAILS
BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62

TRUMBULL COUNTY
TRU-62-(4.59-9.67) STA. 427+77.46

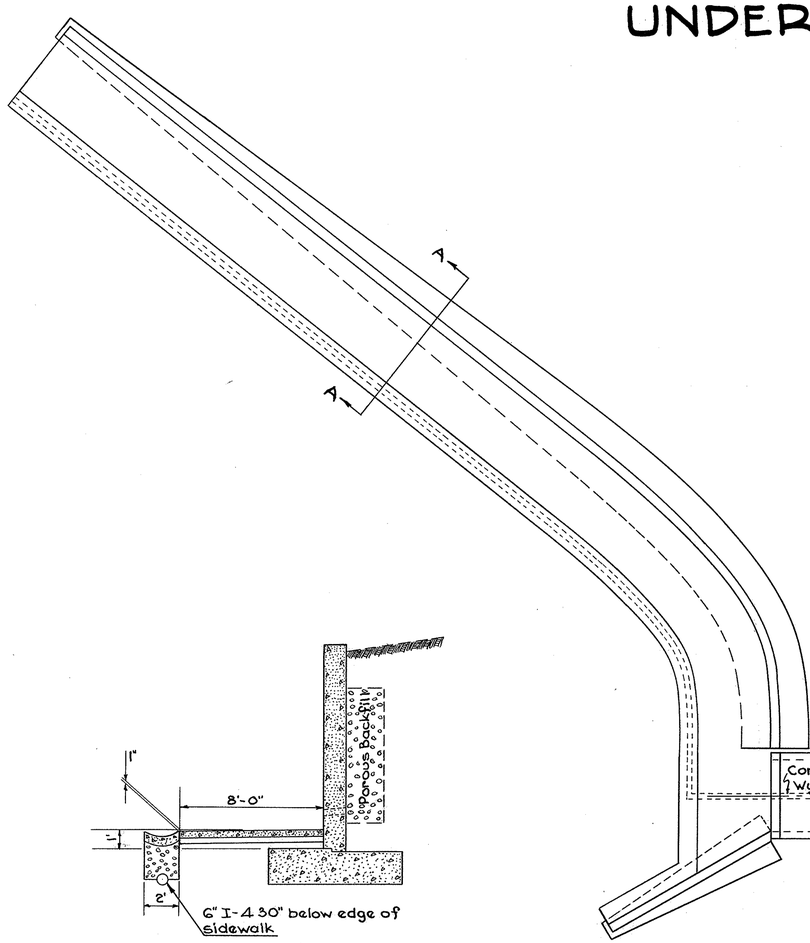
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.R.	C.R.	E.W.P.	[illegible]	BFG W.H.R.	1-6-51	

STRUCTURE C-8

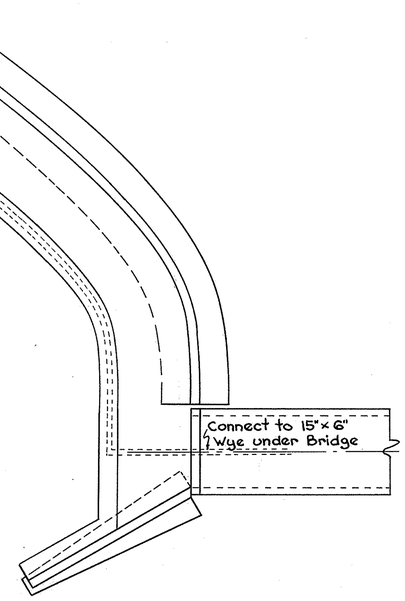
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

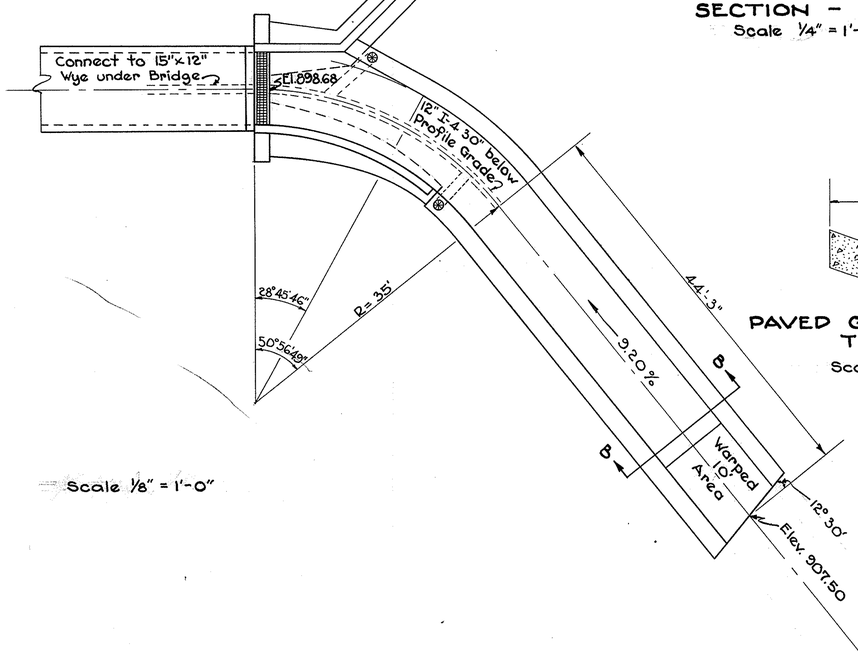
TRUMBULL COUNTY
TRU-62-(4.59-9.67)

RAMP DETAILS
BRIDGE NO. TR-62-81
UNDER U.S. ROUTE 62

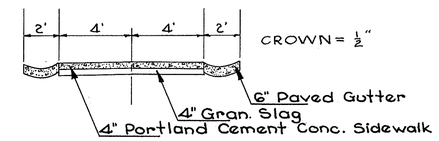


SECTION - A-A
Scale 1/4" = 1'-0"

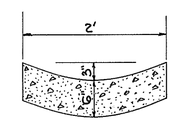




Scale 1/8" = 1'-0"



SECTION - B-B
Scale 1/4" = 1'-0"



PAVED GUTTER SECTION
TYPE-D
Scale 1" = 1'-0"

STRUCTURE C-8

DRAINAGE STRUCTURE C-9 CULVERT № TR-62-81

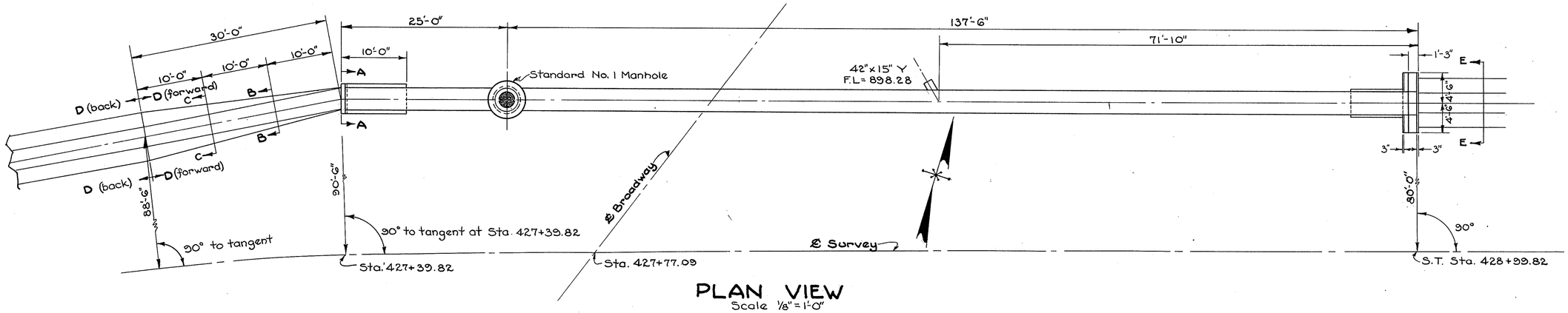
STATION 427+77.09 DRAINAGE AREA = 55 ACRES

SURVEYED BY F.P.I. DRAWN BY E.E.H. CHECKED BY H.L.R.

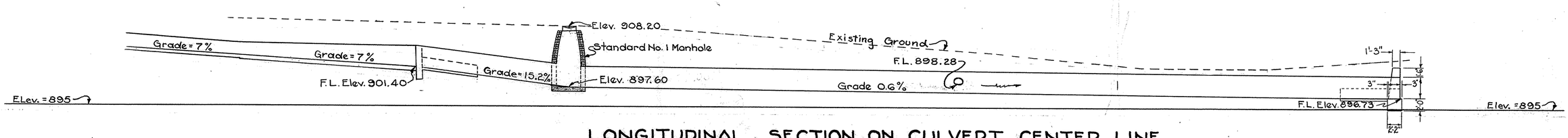
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

141/154

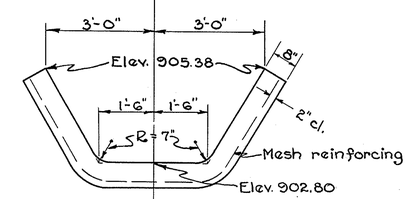
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



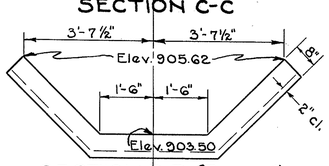
PLAN VIEW
Scale 1/8" = 1'-0"



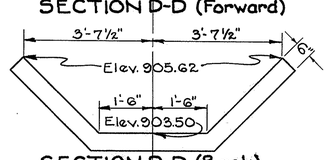
LONGITUDINAL SECTION ON CULVERT CENTER LINE
Scale 1/8" = 1'-0"



SECTION C-C

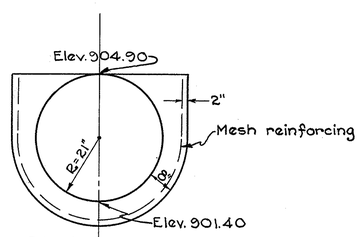


SECTION D-D (Forward)

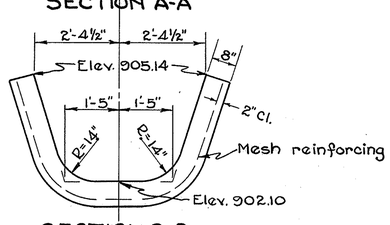


SECTION D-D (Back)

Scale 1/2" = 1'-0"



SECTION A-A

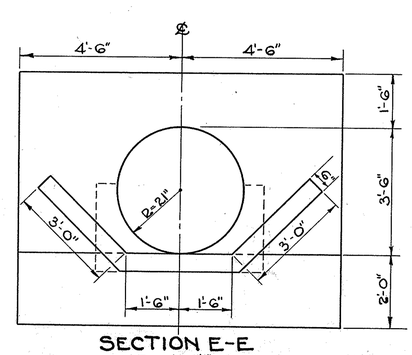


SECTION B-B

NOTE: Special gutter as detailed herein shall be paid for at the price bid per Lin. Ft. of I-14 Paved Gutter Type "B" See Line Sheet for Quantities.

CULVERT DATA

TYPE: Standard Pipe Culvert
SIZE: 42"×162'-6"
STD. DRWGS: I-8 M.H. No.1; S-27. P.C. 2&3
WORK REQUIRED: Build standard pipe culvert with concrete cradle and cut-off wall on left and concrete cradle and headwall on right. Build standard No. 1 manhole as shown.



SECTION E-E
Scale 1/2" = 1'-0"

ESTIMATED QUANTITIES

E-2	Excavation for structures	270 Cu.Yds.
I-5	42" x 15" Wye	1 Each
S-27	Pipe for roadway culverts (42")	155 Lin. Ft.
I-8	Manhole No. 1	1 Each
S-1	Concrete for structures (Class "E")	6.6 Cu.Yds.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(	POST WAR

142/154

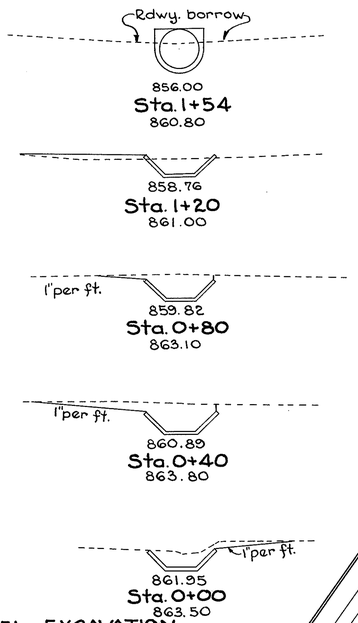
TRUMBULL COUNTY
TRU-62-(4.59-9.67)

DRAINAGE STRUCTURE C-10 CULVERT NO. TR-62-83

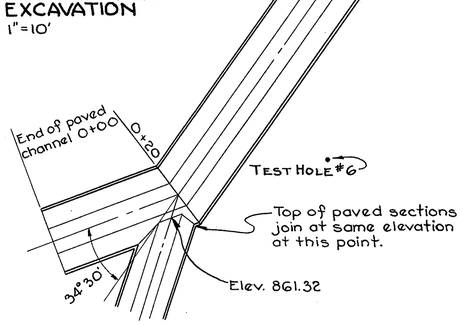
STA. 439+52 DRAINAGE AREA = 140 ACRES

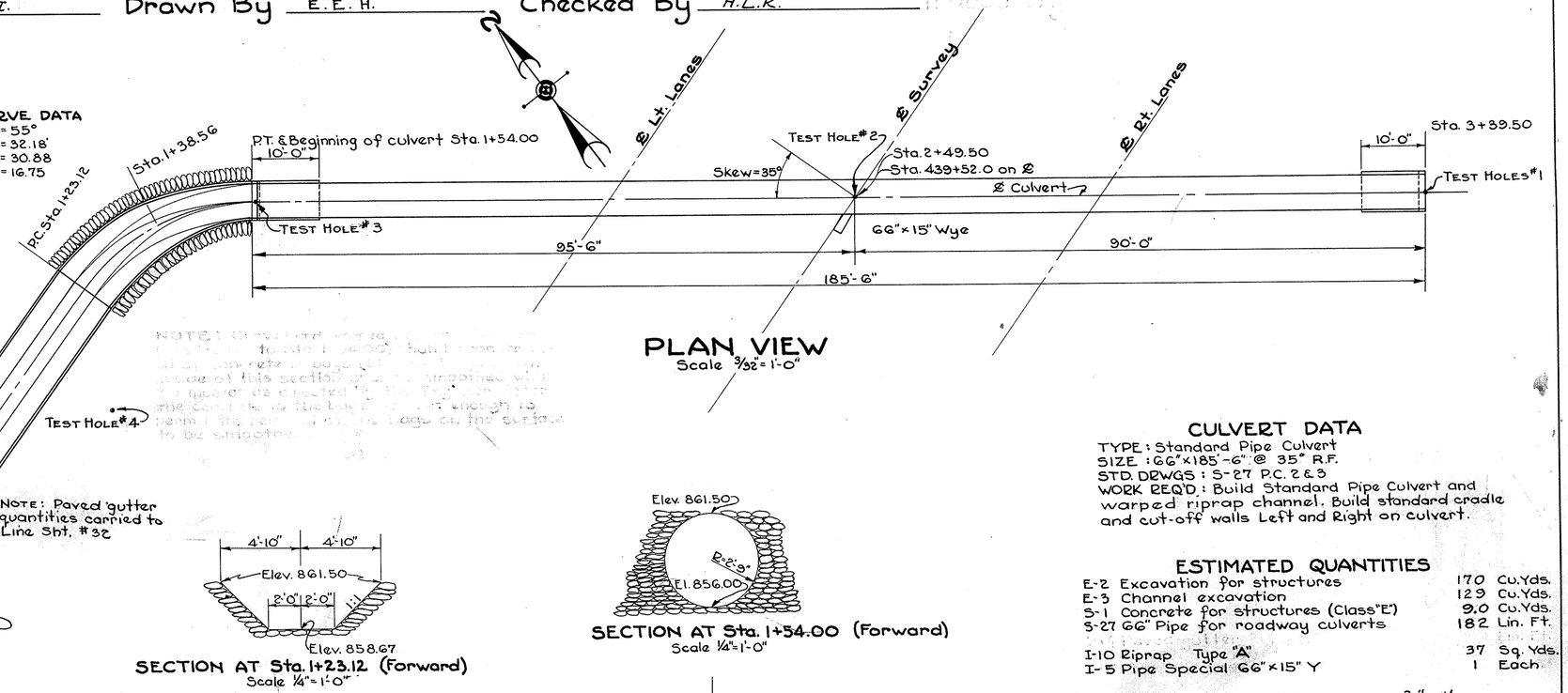
Surveyed By F.P.I. Drawn By E.E.H. Checked By H.L.R.

CUT E.A.	CUT C.Y.	FILL E.A.	FILL C.Y.
16		0	
	19		7
14		11	
	28		8
24		0	
	49		0
43		0	
	48		0
22		0	



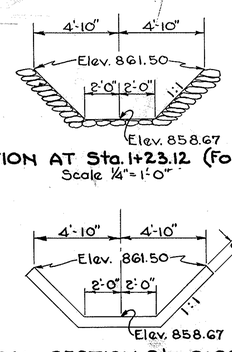
CHANNEL EXCAVATION
Scale 1" = 10'





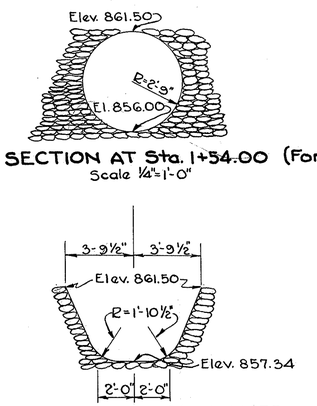
PLAN VIEW
Scale 3/32" = 1'-0"

NOTE: Paved gutter quantities carried to Line Sht. #32



SECTION AT Sta. 1+23.12 (Forward)
Scale 1/4" = 1'-0"

TYPICAL SECTION Sta. 0+00 to Sta. 1+23.12
Scale 1/4" = 1'-0"



SECTION AT Sta. 1+54.00 (Forward)
Scale 1/4" = 1'-0"

SECTION AT Sta. 1+38.56
Scale 1/4" = 1'-0"

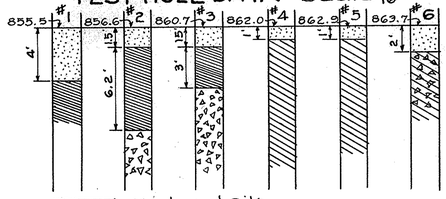
CULVERT DATA

TYPE: Standard Pipe Culvert
SIZE: 66" × 185'-6" @ 35° R.F.
STD. DRWGS: S-27 P.C. 2 & 3
WORK REQ'D.: Build Standard Pipe Culvert and warped riprap channel. Build standard cradle and cut-off walls Left and Right on culvert.

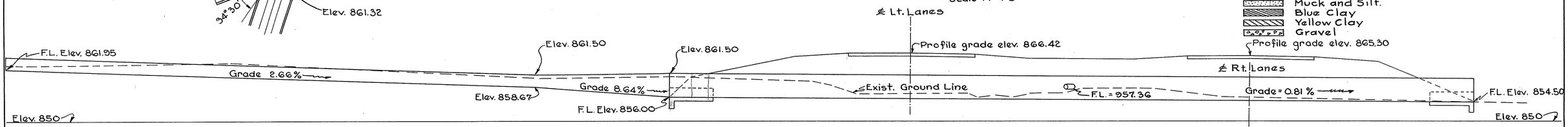
ESTIMATED QUANTITIES

E-2 Excavation for structures	170	Cu. Yds.
E-3 Channel excavation	129	Cu. Yds.
S-1 Concrete for structures (Class "E")	9.0	Cu. Yds.
S-27 66" Pipe for roadway culverts	182	Lin. Ft.
I-10 Riprap Type "A"	37	Sq. Yds.
I-5 Pipe Special 66" × 15" Y	1	Each

TEST HOLE DATA
Scale 3/16" = 1'



Muck and Silt.
Blue Clay
Yellow Clay
Gravel



LONGITUDINAL SECTION ON CULVERT AND CHANNEL CENTER LINE
Scale 3/32" = 1'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

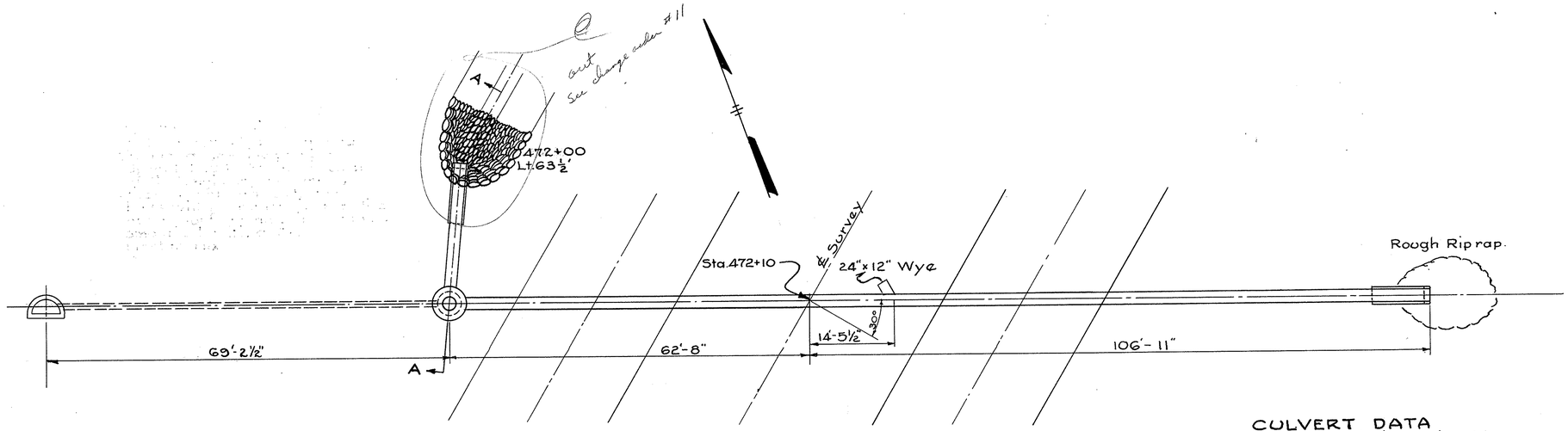
143
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

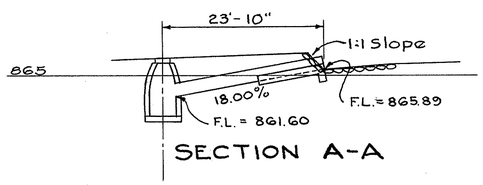
DRAINAGE STRUCTURE C-11 CULVERT № TR-62-89

STATION 472 + 10. DRAINAGE AREA = 10.6 A

SURVEYED BY F.P.I. DRAWN BY T.J.R. CHECKED BY E.T.F.



PLAN VIEW
Scale 3/32" = 1'-0"



SECTION A-A

NOTE: No Ditch from intake to manhole. Finish this section level at edge of berm elevation.

CULVERT DATA

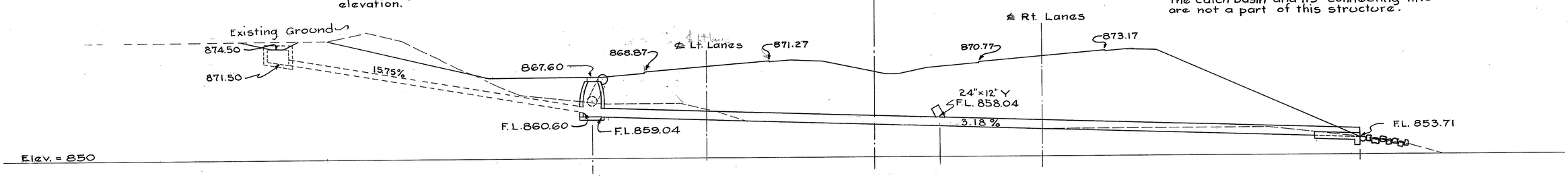
TYPE: Standard Pipe Culvert
SIZE: 24" × 193'-9" @ 30° R.F. Skew
ST'D. DRWGS.: I-8 M.H. No. 1; S-27 P.C. 2
WORK REQUIRED: Build Standard Pipe Culvert with Concrete cradle and cutoff wall each end. Build Manhole. Build Riprap as shown each end.

ESTIMATED QUANTITIES

E-2	Excavation for Structure	21	C.Y.
S-27	Pipe for roadway Culverts (24")	186	L.F.
I-8	Manhole No. 1	1	Ea.
I-5	Pipe Special (24" × 12" Y)	1	Ea.
I-10	Rough Riprap Type "A" (Grouted)	5	S.Y.
I-10	Riprap ~~Type "A"~~	16	S.Y.
S-1	Concrete for Structures (Class "E")	2.2	C.Y.

No 1 — 1.0 — See change order #11

The catch basin and its connecting line are not a part of this structure.



LONGITUDINAL SECTION ON CULVERT CENTER LINE
Scale 3/32" = 1'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

143A
154

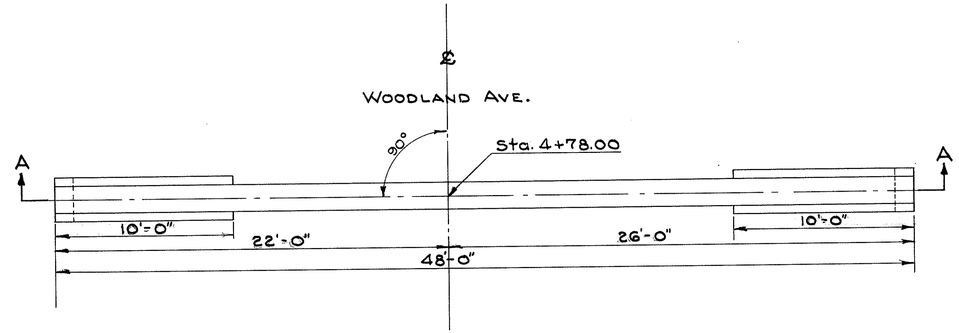
TRUMBULL COUNTY
TRU-62-(4.59-9.67)

DRAINAGE STRUCTURE C-12
WOODLAND AVE. STA. 4+78
DRAINAGE AREA 3 ACRES

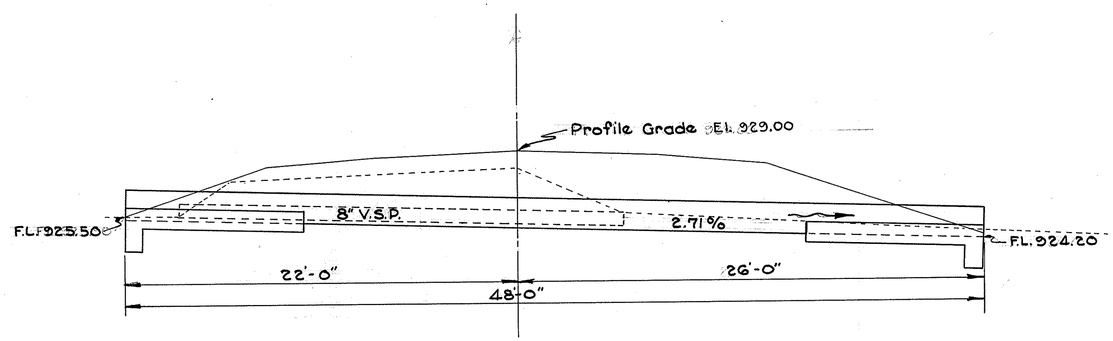
Surveyed By F.P.I. Drawn By L.E.M. Checked By E.T.F.
Scale 1/4" = 1'

SIDE ROAD CULVERTS AT MINOR INTERSECTIONS AND CROSSROADS

MARK	STRUCTURE No.	STATION	SIDE	I-1 12"	I-1 15"	I-1 18"	I-1 21"	TYPE	SHEET No.
C-1A	TR-62-50	265+65.22	L				40		21
C-1B	TR-62-50A	265+65.22	M		62				21
C-1C	TR-62-51	269+82.20	L			48			22
C-1D	TR-62-52	272+73.6	L			30			22
C-1E	TR-62-55	288+77.94	L		37				23
C-1F	TR-62-55A	288+77.94	M	65					23
C-3A	TR-62-68	360+70.19	L			56			27
C-3B	TR-62-68A	360+70.19	M	65					27
C-3C	TR-62-68B	360+70.19	R	52					27
TOTAL				182	99	134	40		



PLAN VIEW



SECTION A-A

ESTIMATED QUANTITIES

E-2	Excavation for Structure	13	C.Y.
E-3	Channel Excavation	2	C.Y.
S-1	Concrete for Structures (Class "E")	1.80	C.Y.
S-27	18" Pipe for Roadway Culverts	48	L.F.

CULVERT DATA

TYPE: Standard Pipe Culvert
SIZE: 18" x 48'-0"
SKEW: 0°-00'
STANDARD DRAWINGS: S-27 P.C.2 ; S-27 P.C.3
WORK REQUIRED: Build Standard Pipe Culvert with concrete cradle and cut-off wall at each end. Clean channel on the right.

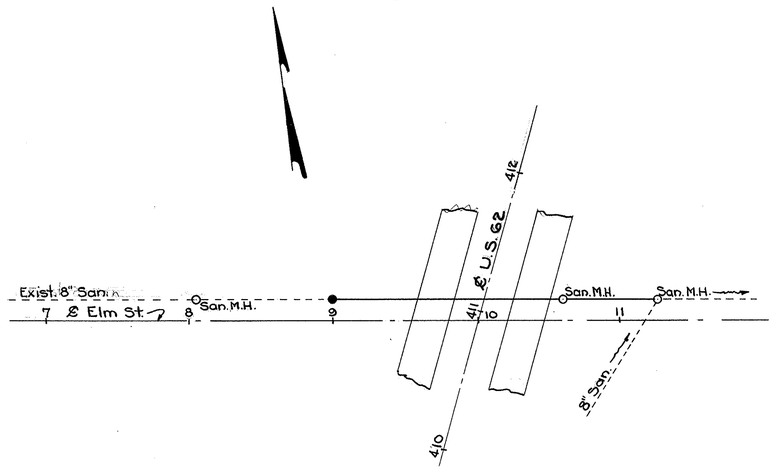
DRAINAGE STRUCTURES C-1A, C-1B, C-1C, C-1D, C-1E, C-1F, C-3A, C-3B, C-3C & C-12

2	OHIO	F-524 (5)	TYPE FUNDS / POST WAR	143 B / 154

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

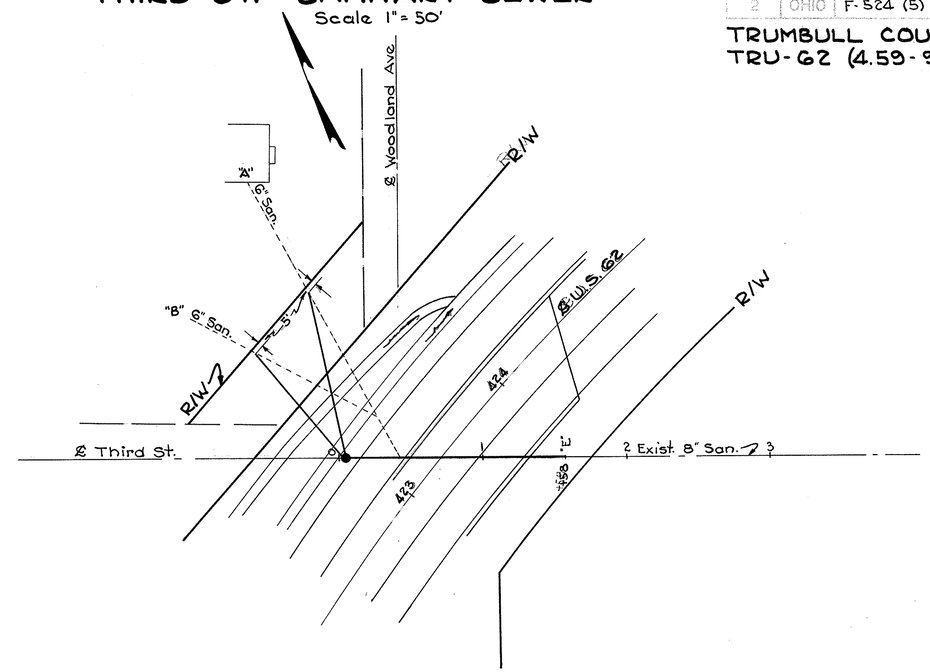
ELM ST. SANITARY SEWER

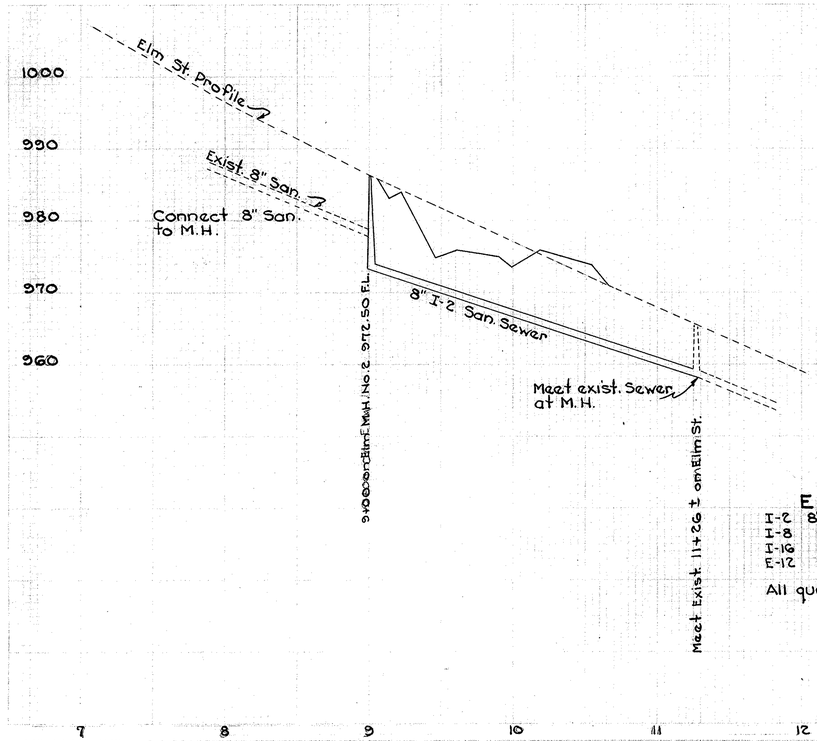
Scale 1" = 50'



THIRD ST. SANITARY SEWER

Scale 1" = 50'

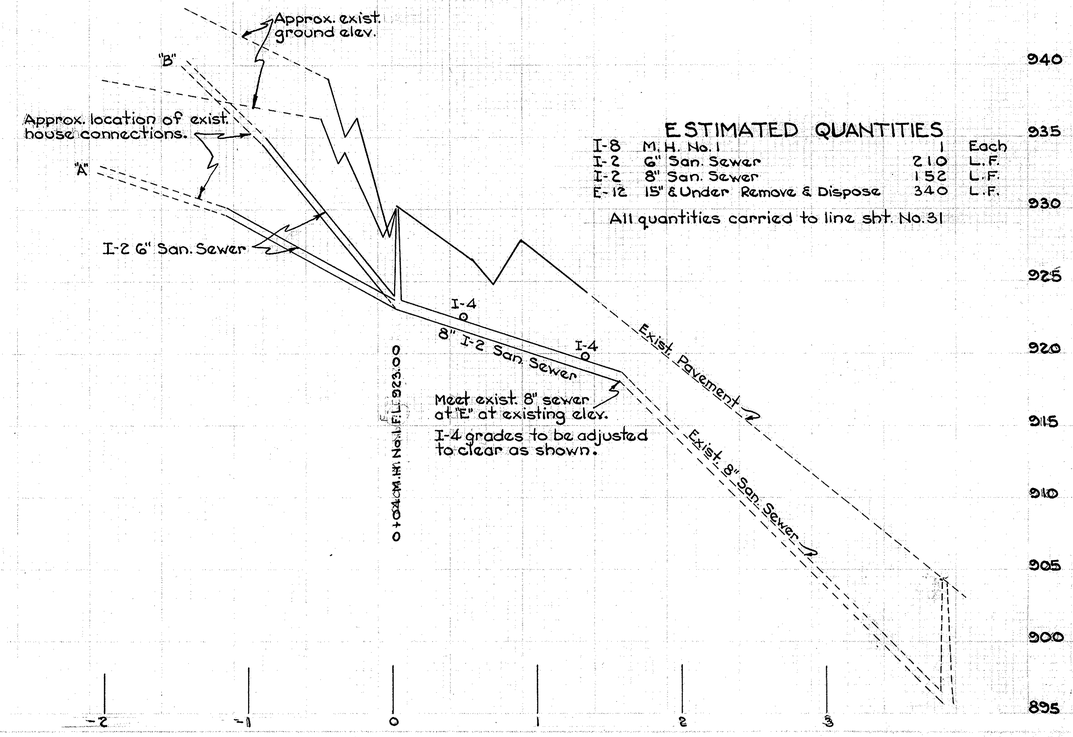




ESTIMATED QUANTITIES

I-2	8" Sanitary	221	L.F.
I-8	M.H. No. 2	1	Ea.
I-16	M.H. Abandoned	1	Ea.
E-12	15" and Under	226	L.F.

All quantities carried to line sht. No. 30



ESTIMATED QUANTITIES

I-8	M.H. No. 1	1	Each
I-2	6" San. Sewer	210	L.F.
I-2	8" San. Sewer	152	L.F.
E-12	15" & Under Remove & Dispose	340	L.F.

All quantities carried to line sht. No. 31

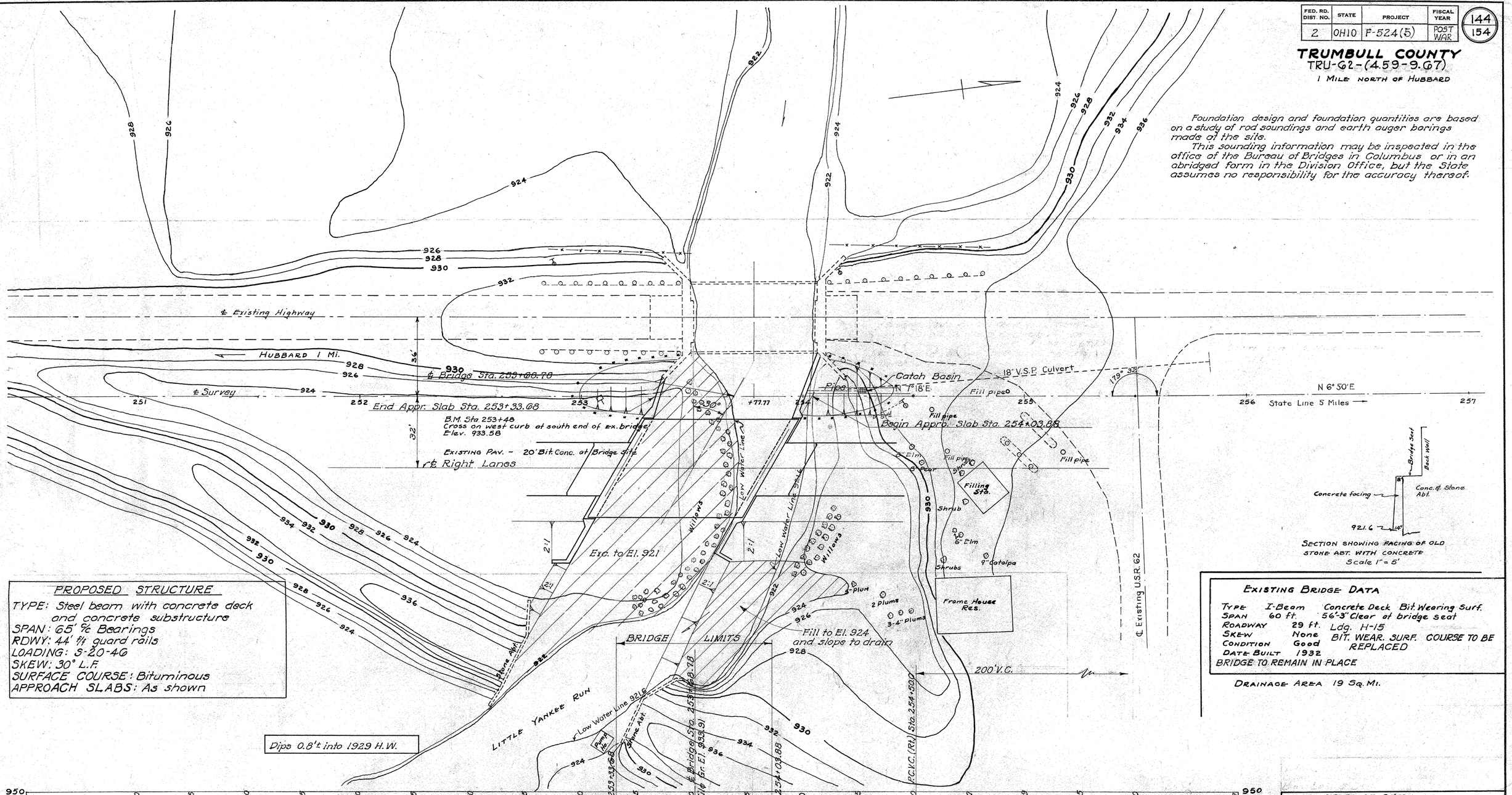
ELM ST. & THIRD ST. SANITARY SEWER

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-524(5)	POST WAR

144
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)
1 MILE NORTH OF HUBBARD

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



SECTION SHOWING FACING OF OLD STONE ABT. WITH CONCRETE
Scale 1" = 5'

PROPOSED STRUCTURE

TYPE: Steel beam with concrete deck and concrete substructure
SPAN: 65' ℄ Bearings
RDWY: 44' ℄ guard rails
LOADING: S-20-46
SKEW: 30° L.F.
SURFACE COURSE: Bituminous
APPROACH SLABS: As shown

EXISTING BRIDGE DATA

TYPE	I-Beam	Concrete Deck Bit. Wearing Surf.
SPAN	60 ft.	56'-3" Clear at bridge seat
ROADWAY	29 ft.	Ldg. H-15
SKEW	None	BIT. WEAR. SURF. COURSE TO BE REPLACED
CONDITION	Good	
DATE BUILT	1932	

BRIDGE TO REMAIN IN PLACE

DRAINAGE AREA 19 SQ. MI.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN
BRIDGE No. TR-62-48
OVER LITTLE YANKEE RUN

TRUMBULL COUNTY USR 62
SEC. TRU-62-(4.59-9.67)
SCALE 1" = 20' STA. 253+68.78

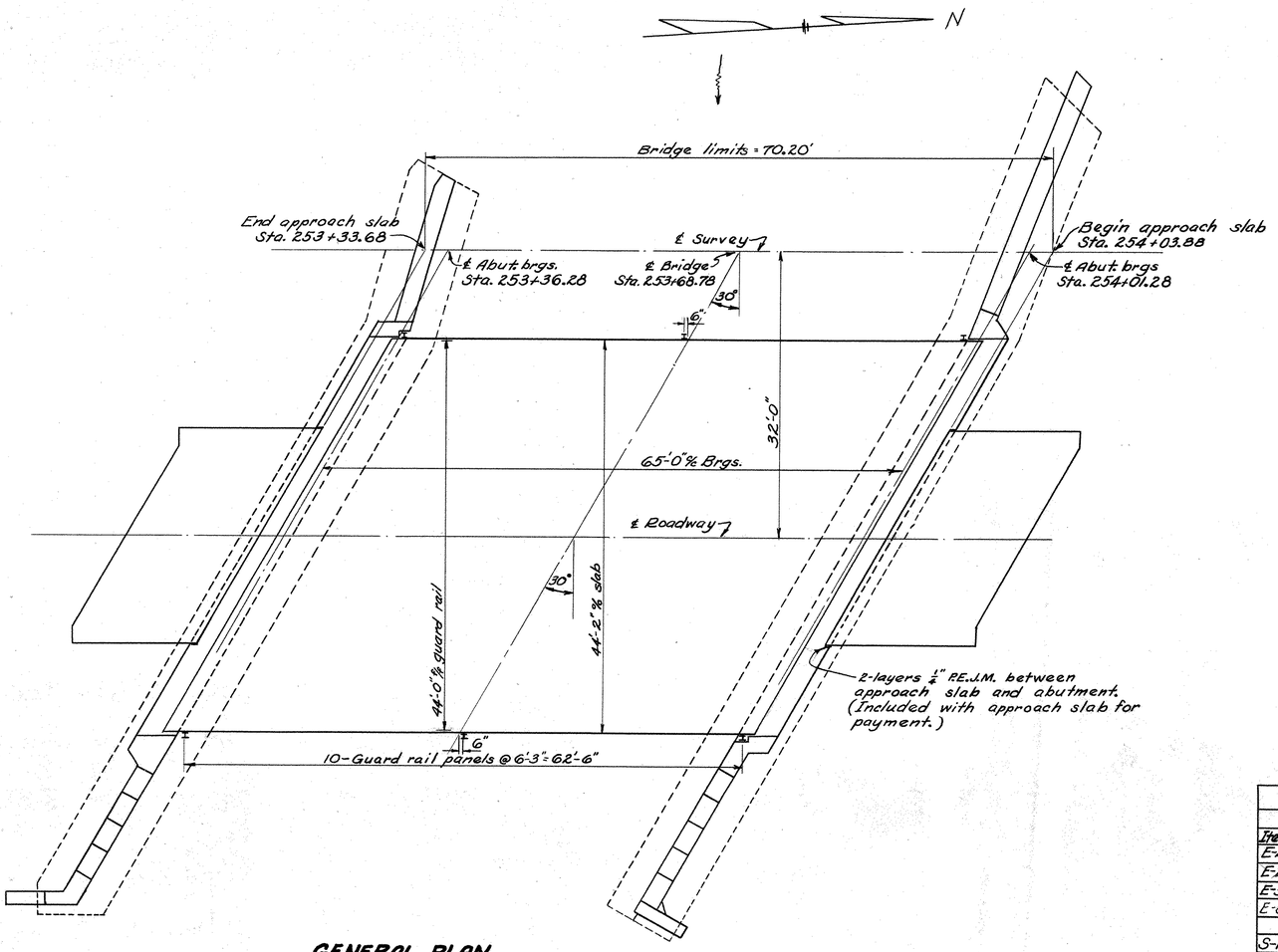
PRESENT TOPOGRAPHY		PROPOSED WORK		
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
S.V.	R.S.	R.E.S.	R.E.S.	G.V.S.	C.H.A.

BFG HHC 10-17-50

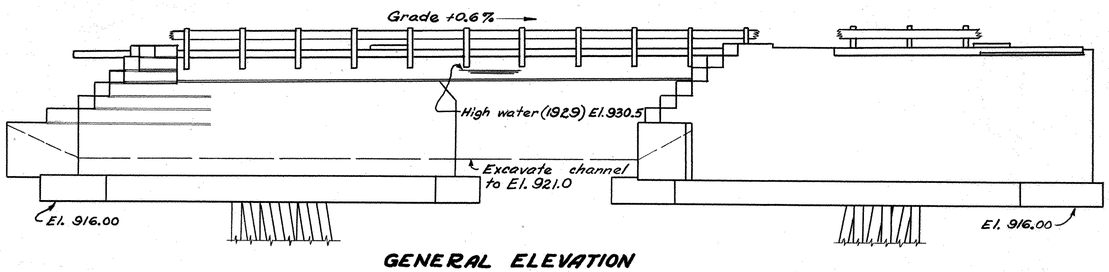
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

145
154

TRUMBULL COUNTY
TRU - 62 - (4.59 - 9.67)



GENERAL PLAN



GENERAL ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings SSB-1-47, revised 7-27-49, & CSB-5-50 dated 5-12-50.

PILING shall be driven to rock with a minimum bearing capacity of 30 Tons.

WELDING shall be Class "A" except as shown.

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

BITUMINOUS SURFACE COURSE on existing superstructure shall be removed. Type "C" waterproofing applied to existing concrete deck, and an asphaltic concrete surface course, Item T-35, placed with finished surface 1¼" above existing end finish plates.

ESTIMATED QUANTITIES

				Proposed New Bridge				Exist.		
Item	Total	Unit	Description	Superstr.	N. Abut.	S. Abut.	General	Superstr.	As Built	
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump S.			
E-2	~~366~~	Cu. Yds.	Unclassified excavation		191	175			C-17 F + 5	371
E-3	612	Cu. Yds.	Channel excavation				612		C-17 F − 390	222
E-8	202	Sq. Yds.	Removal of existing bituminous wearing surface course					202		
S-1	63	Cu. Yds.	Class "C" concrete, superstructure	63						
S-1	~~230~~	Cu. Yds.	Class "E" concrete, abutment walls		125	105			C-15 − 7	223
S-1	170	Cu. Yds.	Class "E" concrete, footings		90	80				
S-3	~~528~~	Sq. Yds.	Type "C" waterproofing	326				202	C-13 − 202	326
S-3	~~229~~	Lin. Ft.	Waterproofing, premolded sealing strip		129	100			C-13 − 4	225
S-4	~~33,526~~	Lbs.	Reinforcing steel	20,433	7,133	5,944	16		C-12 + 220	33746
S-7	~~140,900~~	Lbs.	Structural steel	140,900					C-12 − 656	140,244
S-8	~~140,900~~	Lbs.	Field painting of structural steel	140,900					C-12 − 656	140,244
S-9	92	Sq. Ft.	½" Premolded expansion joint filler		70	22				
S-14	140.40	Lin. Ft.	Railing (Type I-15.13 guard rail with steel posts)	140.40						
S-16	Lump	Sum	First test pile				Lump S.			
S-18	~~1005~~	Lin. Ft.	Steel piling, 12" BP @ 53#		480	525			C-12 + 150.3	1155.3
S-29	107	Cu. Yds.	Porous backfill		56	51				
T-35	44	Cu. Yds.	Asphaltic concrete surface course, Type A or C (70-80)	23				21		

Revised As-Built 1-5-55 JD AJC

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

GENERAL PLAN & ELEVATION
NOTES & EST. QUANTITIES
BRIDGE NO. TR-62-48
OVER LITTLE YANKEE RUN

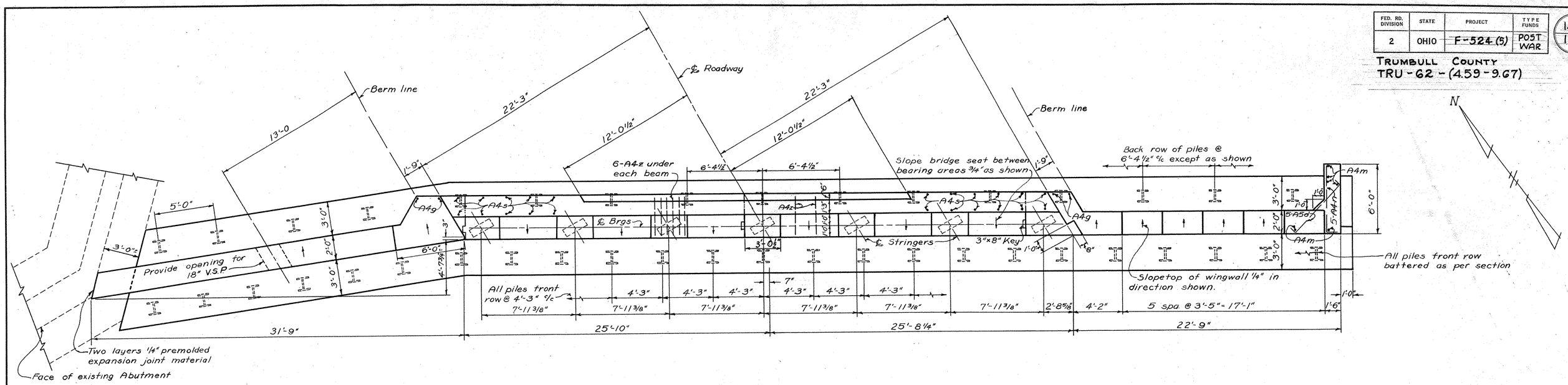
TRUMBULL COUNTY
SEC TRU-62-(4.59-9.67) STA 253+68.78

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.P.C.	R.P.C.	HWL	R.J.C.	BFG WHR	10-17-50	

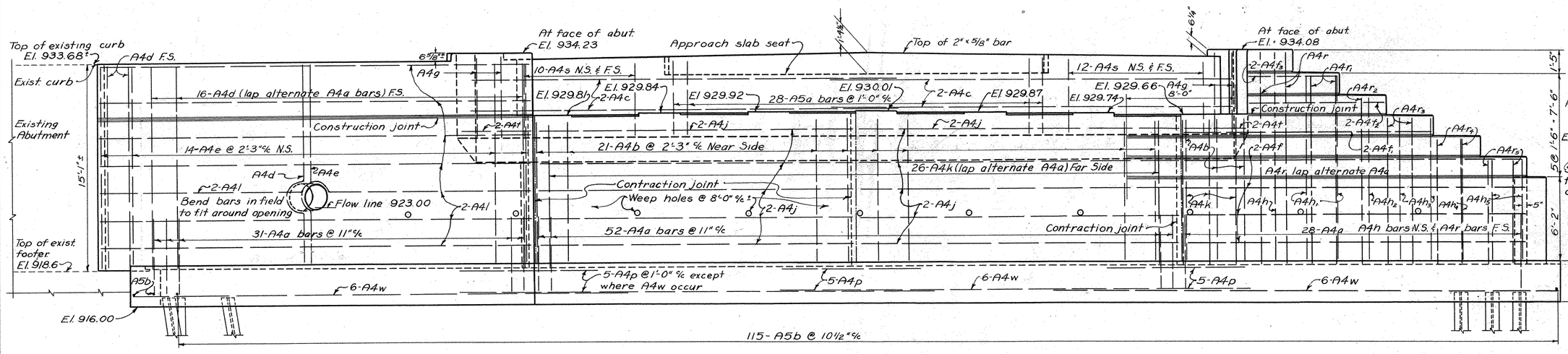
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

146
154

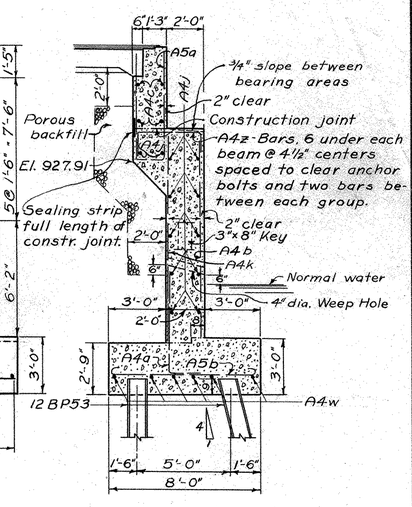
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



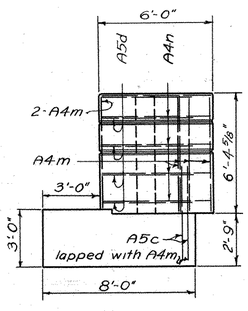
PLAN
End finish not shown



ELEVATION



SECTION ON CENTER LINE



END ELEVATION OF WING

Notes: WATERPROOFING - All joints in walls shall be waterproofed on back face as described in Item 5-3 "Waterproofing, premolded sealing strip."

POROUS BACKFILL, as shown, shall extend full length of abutment and wing.

Concrete above bridge seat construction joint shall not be placed until after steel work is erected. Steel end finish shall be used as a template for top of backwall.

Bars 2" clear from face of concrete except as noted

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

NORTH ABUTMENT DETAILS
BRIDGE NO TR-62-48
OVER LITTLE YANKEE RUN

TRUMBULL COUNTY
SEC. TRU-62-(4.59-9.67) STA 253+68.78

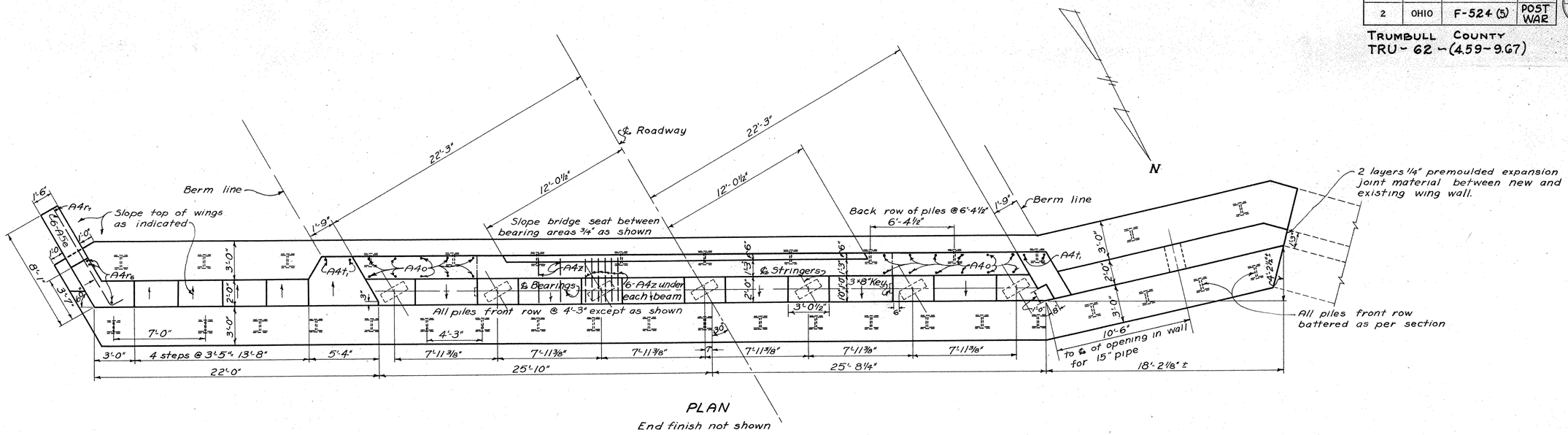
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.P.C.	R.P.C.	M.P.B.	R.J.C.	BRG WHR	10-17-50	

IN COMMERCIAL TRACING CLOTH - FORM NO. BR-23

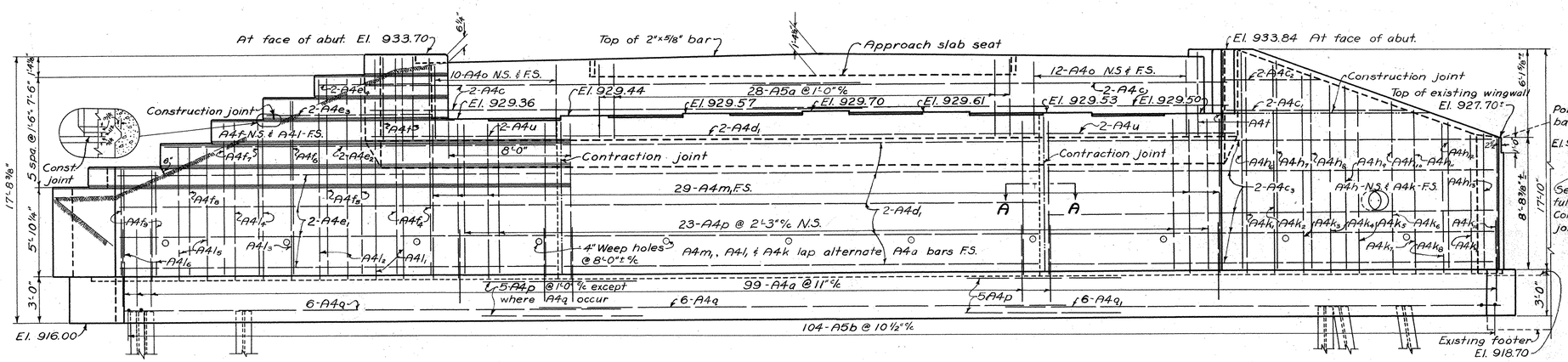
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

147/154

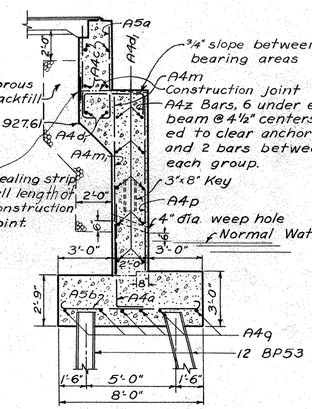
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



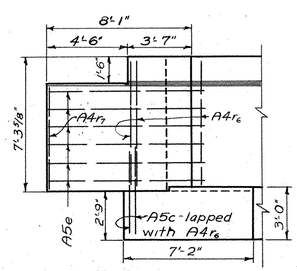
PLAN
End finish not shown



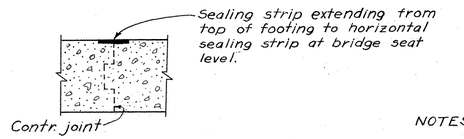
ELEVATION



SECTION ON CENTER LINE



END ELEVATION OF WING



SECTION A-A

NOTES: WATERPROOFING - All joints in walls shall be waterproofed on back face as described in Item 513 "Waterproofing, premolded sealing strip."

POROUS BACKFILL - as shown, shall extend full length of abutment and wings.

Concrete above bridge seat construction joint shall not be placed until after steel work is erected. Steel end finish shall be used as a template for top of backwall.

Bars 2" clear from face of concrete except as noted.

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

4/6

SOUTH ABUTMENT DETAILS
BRIDGE NO. TR-62-48
OVER
LITTLE YANKEE RUN

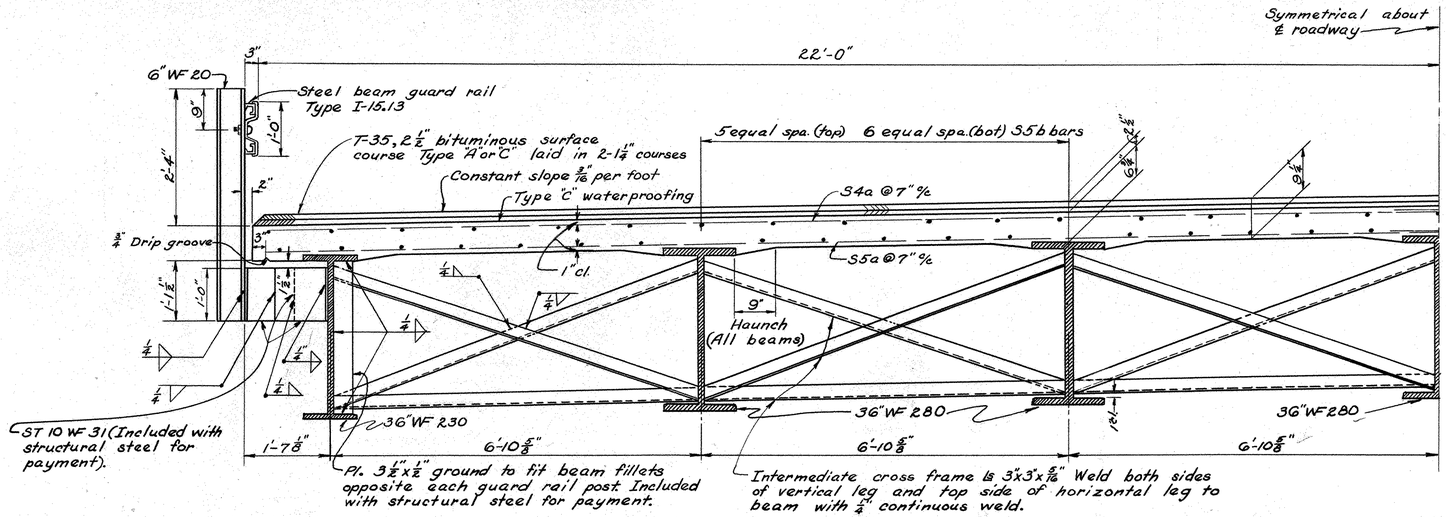
TRUMBULL COUNTY
SEC. TRU-62-(4.59-9.67) STA. 253+68.78

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.P.C.	R.P.C.	M.P.B.	R.J.C.	BFG W.H.R.	10-17-50	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

148
154

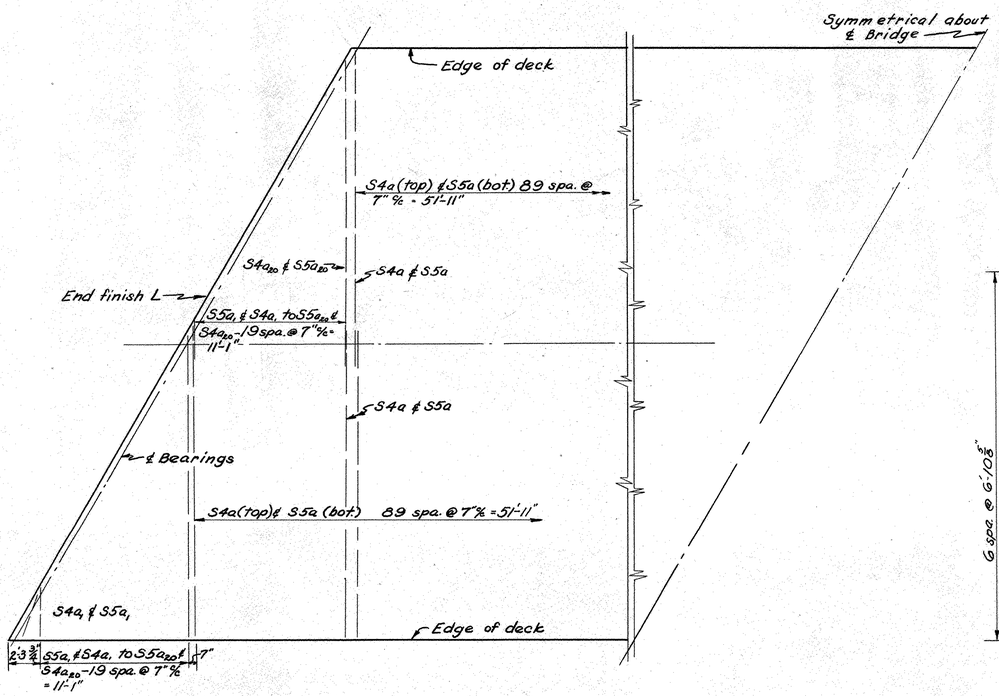
TRUMBULL COUNTY
TRU-62-(4.59-9.67)



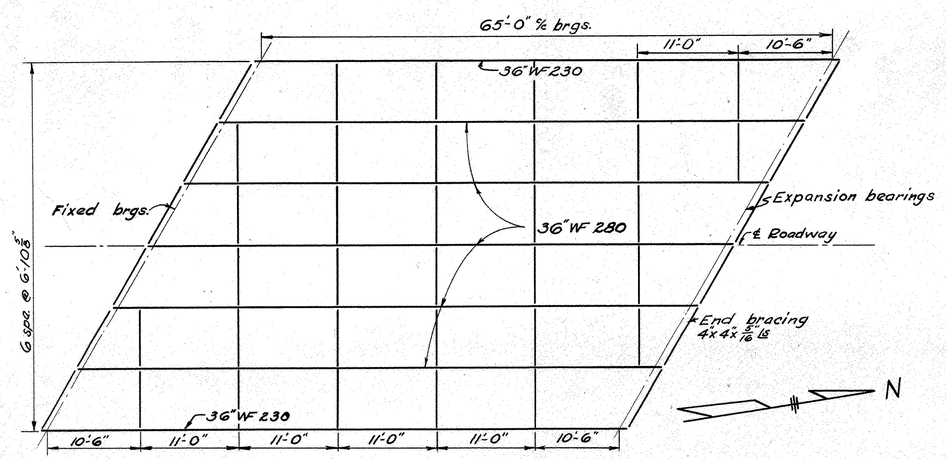
TRANSVERSE HALF SECTION

DEFLECTION AND CAMBER		
	Outside Beams	Inside Beams
Deflection due to weight of steel	1/4"	9/16"
Deflection due to remaining D.L.	5/8"	5/8"
Required Shop Camber	7/8"	7/8"

Note: For details of abutment bearings, see Std. Dwg. SSB-1-47, for end finish and end bracing see Std. Dwg. CSB-3-50.



REINFORCING STEEL DETAIL



STEEL FRAMING PLAN

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

SUPERSTRUCTURE DETAILS
BRIDGE NO. TR. 62-48
over LITTLE YANKEE RUN
TRUMBULL COUNTY
SEC. TRU-62-(4.59-9.67) STA 253+68.78

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RPC	RPC	HVL	RJC	DFG WHL	10-17-50	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

REINFORCING STEEL LISTS

SUPERSTRUCTURE

Mark	Size	No	Length	Weight	Shp.
S5a	3/4" ϕ	180	23'-1"	6241	Str.
S5a1	3/4" ϕ	6	3'-9"	34	Str.
S5a2	3/4" ϕ	4	4'-9"	29	Str.
S5a3	3/4" ϕ	4	5'-9"	35	Str.
S5a4	3/4" ϕ	4	6'-9"	41	Str.
S5a5	3/4" ϕ	4	7'-10"	47	Str.
S5a6	3/4" ϕ	4	8'-10"	53	Str.
S5a7	3/4" ϕ	4	9'-10"	59	Str.
S5a8	3/4" ϕ	4	10'-10"	65	Str.
S5a9	3/4" ϕ	4	11'-10"	71	Str.
S5a10	3/4" ϕ	4	12'-10"	77	Str.
S5a11	3/4" ϕ	4	13'-10"	83	Str.
S5a12	3/4" ϕ	4	14'-11"	90	Str.
S5a13	3/4" ϕ	4	15'-11"	96	Str.
S5a14	3/4" ϕ	4	16'-11"	102	Str.
S5a15	3/4" ϕ	4	17'-11"	108	Str.
S5a16	3/4" ϕ	4	18'-11"	114	Str.
S5a17	3/4" ϕ	4	19'-11"	120	Str.
S5a18	3/4" ϕ	4	20'-11"	126	Str.
S5a19	3/4" ϕ	4	21'-11"	132	Str.
S5a20	3/4" ϕ	4	22'-11"	138	Str.
S5b	3/4" ϕ	201	23'-8"	7148	Str.
S4a	5/8" ϕ	180	22'-11"	4302	Str.
S4a1	5/8" ϕ	6	3'-9"	23	Str.
S4a2	5/8" ϕ	4	4'-9"	20	Str.
S4a3	5/8" ϕ	4	5'-9"	24	Str.
S4a4	5/8" ϕ	4	6'-9"	28	Str.
S4a5	5/8" ϕ	4	7'-10"	33	Str.
S4a6	5/8" ϕ	4	8'-10"	37	Str.
S4a7	5/8" ϕ	4	9'-10"	41	Str.
S4a8	5/8" ϕ	4	10'-10"	45	Str.
S4a9	5/8" ϕ	4	11'-10"	49	Str.
S4a10	5/8" ϕ	4	12'-10"	54	Str.
S4a11	5/8" ϕ	4	13'-10"	58	Str.
S4a12	5/8" ϕ	4	14'-11"	62	Str.
S4a13	5/8" ϕ	4	15'-11"	66	Str.
S4a14	5/8" ϕ	4	16'-11"	71	Str.
S4a15	5/8" ϕ	4	17'-11"	75	Str.
S4a16	5/8" ϕ	4	18'-11"	79	Str.
S4a17	5/8" ϕ	4	19'-11"	83	Str.
S4a18	5/8" ϕ	4	20'-11"	87	Str.
S4a19	5/8" ϕ	4	21'-11"	91	Str.
S4a20	5/8" ϕ	4	22'-11"	96	Str.

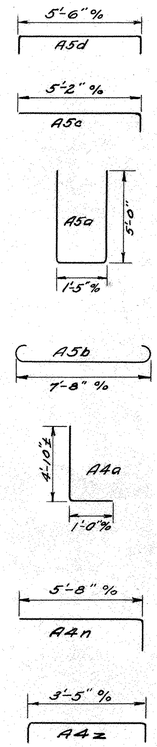
REPLACEMENT BARS

Re5	3/4" ϕ	1	6'-6"	10	Str.
Re4	5/8" ϕ	1	6'-1"	6	Str.

NORTH ABUTMENT

Mark	Size	No	Length	Weight	Shp.
A5a	3/4" ϕ	28	11'-0"	463	Bt.
A5b	3/4" ϕ	120	9'-0"	1622	Bt.
A5c	3/4" ϕ	2	6'-0"	18	Bt.
A5d	3/4" ϕ	5	7'-2"	54	Bt.
A4a	5/8" ϕ	111	5'-9"	666	Bt.
A4b	5/8" ϕ	24	10'-3"	257	Str.
A4c	5/8" ϕ	8	28'-4"	236	Str.
A4d	5/8" ϕ	16	14'-9"	246	Str.
A4e	5/8" ϕ	14	14'-3"	208	Str.
A4f	5/8" ϕ	8	25'-3"	211	Str.
A4f1	5/8" ϕ	2	17'-6"	36	Str.
A4f2	5/8" ϕ	2	9'-11"	21	Str.
A4f3	5/8" ϕ	2	6'-6"	14	Str.
A4g	5/8" ϕ	4	5'-6"	23	Str.
A4h	5/8" ϕ	1	14'-10"	15	Str.
A4h1	5/8" ϕ	2	13'-3"	28	Str.
A4h2	5/8" ϕ	1	11'-9"	12	Str.
A4h3	5/8" ϕ	2	10'-4"	22	Str.
A4h4	5/8" ϕ	1	8'-9"	9	Str.
A4h5	5/8" ϕ	2	7'-3"	15	Str.
A4j	5/8" ϕ	24	23'-6"	588	Str.
A4k	5/8" ϕ	29	10'-9"	325	Str.
A4l	5/8" ϕ	14	30'-3"	442	Str.
A4m	5/8" ϕ	6	6'-0"	38	Str.
A4n	5/8" ϕ	5	6'-5"	33	Bt.
A4p	5/8" ϕ	30	10'-0"	313	Str.
A4r	5/8" ϕ	2	15'-0"	31	Str.
A4r1	5/8" ϕ	2	13'-6"	28	Str.
A4r2	5/8" ϕ	1	12'-0"	13	Str.
A4r3	5/8" ϕ	2	10'-6"	22	Str.
A4r4	5/8" ϕ	2	9'-0"	19	Str.
A4r5	5/8" ϕ	2	7'-6"	16	Str.
A4s	5/8" ϕ	22	5'-0"	115	Str.
A4t	5/8" ϕ	4	3'-10"	16	Str.
A4w	5/8" ϕ	18	36'-3"	681	Str.
A4z	5/8" ϕ	54	4'-11"	277	Bt.

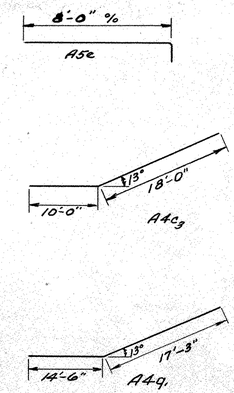
Shape



SOUTH ABUTMENT

Mark	Size	No	Length	Weight	Shp.
A5a	3/4" ϕ	28	11'-0"	463	Bt.
A5b	3/4" ϕ	104	9'-0"	1406	Bt.
A5c	3/4" ϕ	2	6'-0"	18	Bt.
A5e	3/4" ϕ	6	8'-10"	80	Bt.
A4a	5/8" ϕ	99	5'-9"	594	Bt.
A4a1	5/8" ϕ	2	12'-0"	25	Str.
A4a2	5/8" ϕ	2	6'-6"	14	Str.
A4a3	5/8" ϕ	10	28'-0"	292	Bt.
A4d	5/8" ϕ	12	31'-5"	393	Str.
A4e1	5/8" ϕ	8	29'-2"	243	Str.
A4e2	5/8" ϕ	2	26'-2"	55	Str.
A4e3	5/8" ϕ	2	10'-8"	22	Str.
A4e4	5/8" ϕ	2	7'-3"	15	Str.
A4f1	5/8" ϕ	2	14'-3"	30	Str.
A4f2	5/8" ϕ	2	12'-10"	27	Str.
A4f2	5/8" ϕ	1	11'-4"	12	Str.
A4f3	5/8" ϕ	2	9'-10"	21	Str.
A4f3	5/8" ϕ	1	8'-4"	9	Str.
A4f3	5/8" ϕ	2	6'-10"	14	Str.
A4h6	5/8" ϕ	1	14'-6"	15	Str.
A4h7	5/8" ϕ	1	13'-8"	14	Str.
A4h8	5/8" ϕ	1	12'-9"	13	Str.
A4h9	5/8" ϕ	1	11'-11"	12	Str.
A4h10	5/8" ϕ	1	11'-0"	11	Str.
A4h11	5/8" ϕ	1	10'-1"	11	Str.
A4h12	5/8" ϕ	1	9'-3"	10	Str.
A4h13	5/8" ϕ	1	8'-4"	9	Str.
A4k1	5/8" ϕ	1	14'-6"	15	Str.
A4k2	5/8" ϕ	1	13'-10"	14	Str.
A4k3	5/8" ϕ	1	13'-2"	14	Str.
A4k4	5/8" ϕ	1	12'-6"	13	Str.
A4k5	5/8" ϕ	1	11'-9"	12	Str.
A4k6	5/8" ϕ	1	11'-1"	12	Str.
A4k7	5/8" ϕ	1	10'-5"	11	Str.
A4k8	5/8" ϕ	1	9'-9"	10	Str.
A4k9	5/8" ϕ	1	9'-1"	9	Str.
A4k10	5/8" ϕ	1	8'-4"	9	Str.
A4l2	5/8" ϕ	2	14'-8"	31	Str.
A4l3	5/8" ϕ	2	13'-3"	28	Str.
A4l4	5/8" ϕ	1	11'-9"	12	Str.
A4l5	5/8" ϕ	2	10'-3"	21	Str.
A4l6	5/8" ϕ	2	8'-9"	18	Str.
A4l6	5/8" ϕ	2	7'-3"	15	Str.
A4m1	5/8" ϕ	29	10'-5"	315	Str.
A4o	5/8" ϕ	22	5'-0"	115	Str.
A4p	5/8" ϕ	43	10'-0"	448	Str.
A4q	5/8" ϕ	12	33'-6"	419	Str.
A4q1	5/8" ϕ	6	31'-9"	199	Bt.
A4r6	5/8" ϕ	3	6'-11"	22	Str.
A4r7	5/8" ϕ	1	5'-5"	6	Str.
A4t1	5/8" ϕ	4	5'-5"	23	Str.
A4u	5/8" ϕ	4	11'-7"	48	Str.
A4z	5/8" ϕ	54	4'-11"	277	Bt.

Shape



NOTE: The bar size designations shown above do not correspond with the size designations given in the January 1, 1951 edition of the Construction and Material Specifications.

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

6/6

REINFORCING STEEL LIST

BRIDGE NO. TR-62-48
OVER LITTLE YANKEE RUN
TRUMBULL CO. USR 62
TRU-62-(4.59-9.67) STA. 253+68.78

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RPC	RPC	HW	RJC	BFG WHC	10-17-50	

FED. RD. DIST. NO.	STATE	PROJECT	TYPE FUND'S
2	OHIO	F-524(5)	Post War

150/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)
4.2 MI. N.E. OF HUBBARD

NOTE:
Preserve trees along bank wherever possible. Stumps and roots of trees cut in structure area to be left in place.

Excavate to El. 835.5

℄ Bridge Sta. 460+44

Riprap

℄ Pier

End of Appr. Slab Sta. 459+76.61

Begin. of Appr. Slab Sta. 461+11.39

Conc. Gutter full width; depressed 9" at center.

Dumped Rock Fill in this area

Conc. Apron

Bench

Water's Edge

H.T. Tower

High Tension

Old Electric Ry. Emb.

Stone Abt.

Wooded Area

This area quite level Elev. 843±

N 72° 07' 30" E

0.5 Mi. to Ohio-Penna. State Line →

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

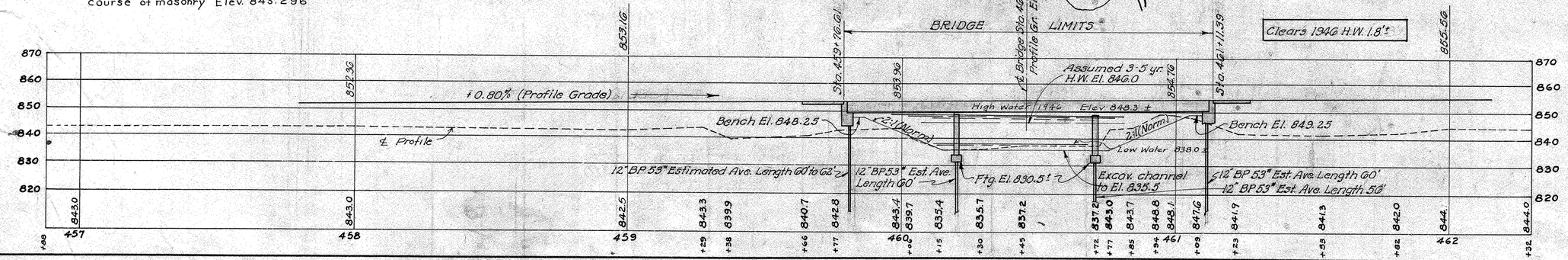
B.M. chiseled square N.W. corner W. abut. abanded Electric Ry. bridge 88' Rt. of Sta. 460+26 second course of masonry Elev. 845.296

PROPOSED STRUCTURE

TYPE: 3-span continuous steel beam with conc. deck and substructure.
SPAN: 40'-50'-40' % bearings.
ROADWAY: 2@44' ⅊ guardrails
LOADING: 5-20-46
SKEW: 20° R.F.
SURFACE COURSE: Bituminous
APPR. SLABS: As shown
ALIGNMENT: Tangent

EXISTING BRIDGE DATA (Tr-62-90)

TYPE: Creosoted timber-Steel Stringers
SPAN 35'-35'
ROADWAY: 30'-0"
SKEW: None
CONDITION: Good
DATE BUILT: 1932
(To remain)
LOCATION: .13 mile upstream on Existing U.S. 62



DRAINAGE AREA - 47 Sq Mi.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1/5

SITE PLAN
BRIDGE No. TR 62-87
OVER YANKEE CREEK

TRUMBULL Co. U.S.R. 62
SEC. TRU-62-(4.59-9.67)
SCALE 1" = 20' STA. 460+44

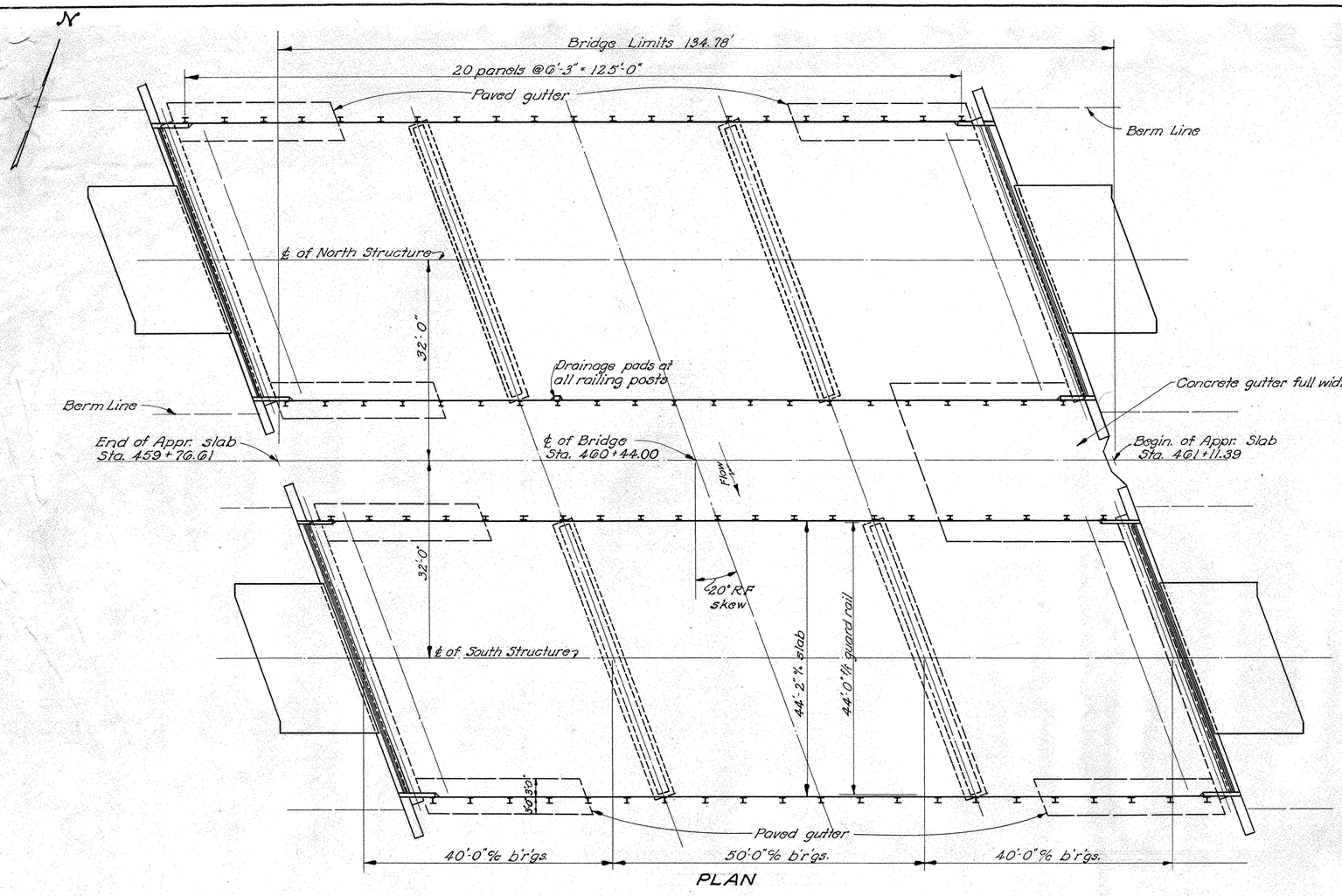
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
S.M.V.	R.S.	[illegible]	G.B.J.	P.E.S.	C.H.J.

BFG WHC 10-10-50

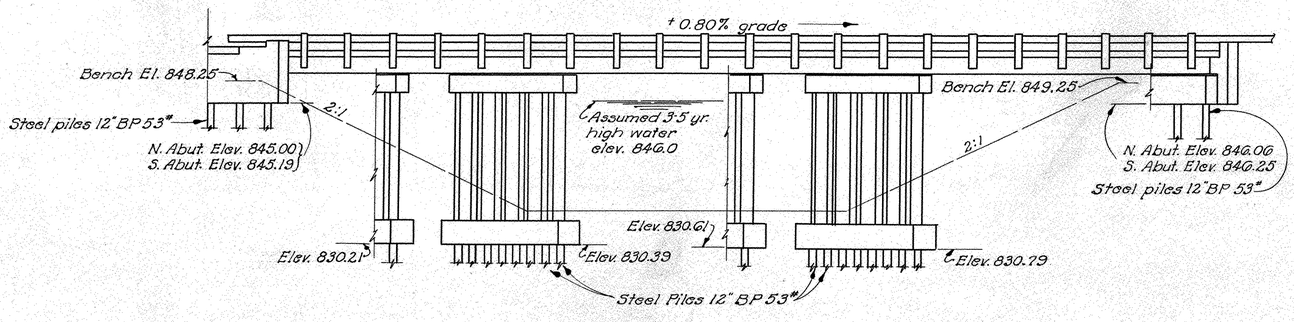
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

151
154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawing CSB-5-50, dated 5-12-50.

EXCAVATION quantity includes the removal of fill material between top of earth bench and bottom of abutment crossbeams.

PILING shall be driven to rock with a minimum bearing capacity of 35 tons at Abutments, 42 tons at Piers.

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

BITUMINOUS SURFACE COURSE 2½" Asphaltic concrete surface course Item T-35, laid in two 1¼" courses.

CONCRETE GUTTERS, except for full width gutter at East end, shall be 6' wide and 6" thick and shall be depressed 6" at the center. They shall extend from face of abutment down to El. 838.0± and shall be centered under edge of deck. Reinforcing bars ½"ϕ at 1'-0" centers both directions included in price per lin. ft.
The full-width gutter at the East end between the structures shall be 26' wide and 6" thick and shall be depressed 9" at the center. It shall extend from face of abutments and lower edge of concrete apron down to El. 838.0±. Reinforcing bars ½"ϕ @ 1'-0" centers both directions included in price per lin. ft.

BUMPER ANGLES as shown on CSB-5-50 shall be provided.

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superstr.	Piers	Abuts.	General	As Built	
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
E-2	~~951~~	Cu. Yd.	Unclassified excavation		187	164		C-17 +54	405
E-3	~~397~~	Cu. Yd.	Channel excavation				397	C-1-2-8 +1134	1531
S-1	~~274~~	Cu. Yd.	Class "C" concrete, superstructure	274				C-13 −0.4	273.6
S-1	~~203~~	Cu. Yd.	Class "C" concrete, abutments			203		C-13 −0.2	202.8
S-1	75	Cu. Yd.	Class "C" concrete, pier caps and columns		75				
S-1	79	Cu. Yd.	Class "C" concrete, pier footings		79				
S-3	1308	Sq. Yd.	Type "C" waterproofing	1308					
S-4	~~152,011~~	Lbs.	Reinforcing Steel	86,115	44,908	20,794	194	C-15 −194	151,817
S-7	~~255,600~~	Lbs.	Structural Steel	255,600				C-15 −457	255,143
S-8	~~255,600~~	Lbs.	Field painting of structural steel	255,600				C-15 −457	255,143
S-14	539.12	Lin. Ft.	Railing (Type 1-15.13 guard rail with steel posts)	539.12					
S-16	Lump	Sum	First test pile				Lump		
S-18	~~3,320~~	Lin. Ft.	Steel piling 12" BP @ 53 lb.		1856	1464		C-15 −225.9	3094.1
T-10	~~40~~	Sq. Yd.	Type "A" Riprap				40	C-15 +0.80	40.80
T-10	30	Cu. Yd.	Dumped rock fill				30		
T-14	166	Lin. Ft.	Concrete gutter 6'-0" wide				166		
T-14	29	Lin. Ft.	Concrete gutter 26'-0" wide				29		
T-35	93	Cu. Yd.	Asphaltic conc. surf. course Type "A" or "C" (T10-80)	93					

Revised As-Built 1-5-55 JD.J.

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

GENERAL PLAN & ELEVATION GENERAL NOTES & ESTIMATED QUANTITIES

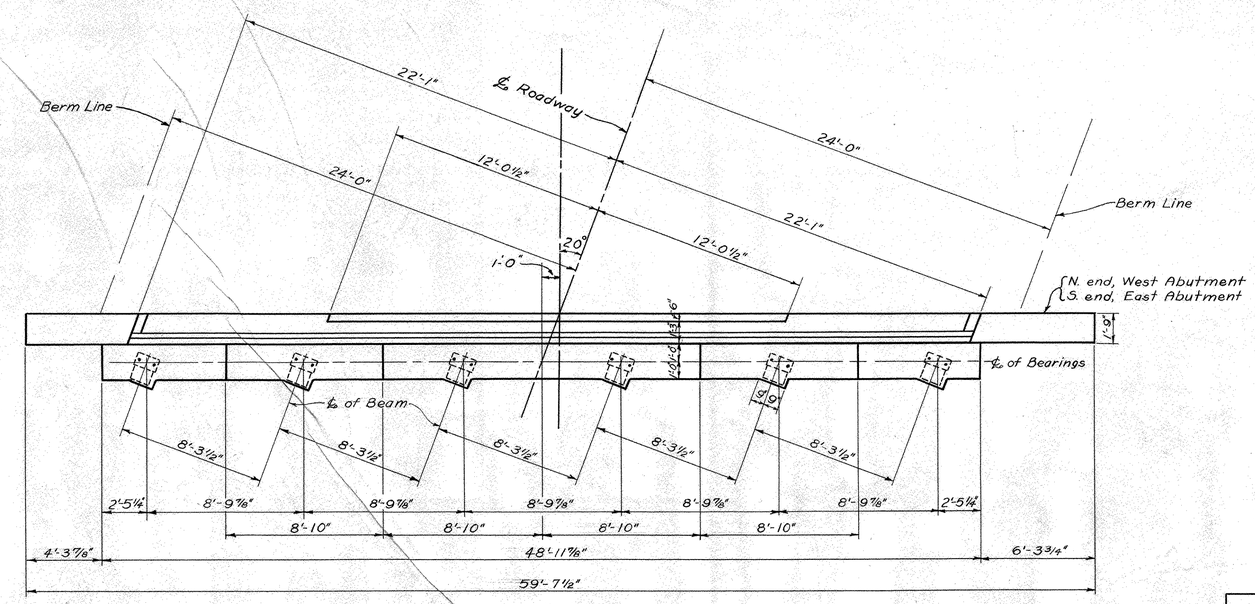
BRIDGE NO. TR-62-87
OVER YANKEE CREEK
TRUMBULL CO U.S.R. 62
SEC TRU-62-(4.59-9.67) STA. 460+44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.J.M.	D.J.M.	J.D.J.	R.J.C.	BFG W.H.C.	10-10-50	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

152/154

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

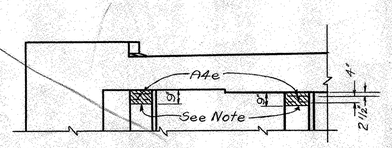


PLAN

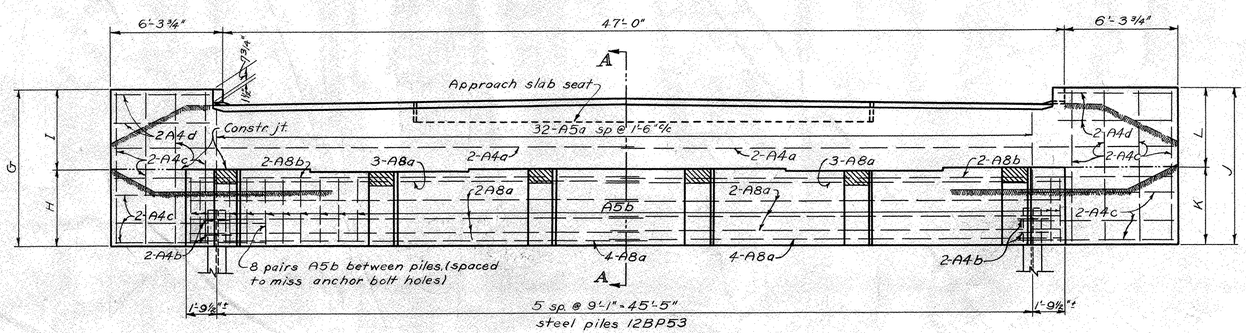
	South End A	B	C	D	E	North End F
West Abutment North Structure	849.93	849.76	849.86	849.84	849.68	849.81
West Abutment South Structure	850.12	849.94	850.05	850.02	849.87	850.00
East Abutment North Structure	850.97	850.80	850.90	850.88	850.71	850.84
East Abutment South Structure	851.16	850.98	851.09	851.06	850.91	851.04

ABUTMENT ELEVATION CHART
(Elevation given for each step @ ℄ of steel beam)

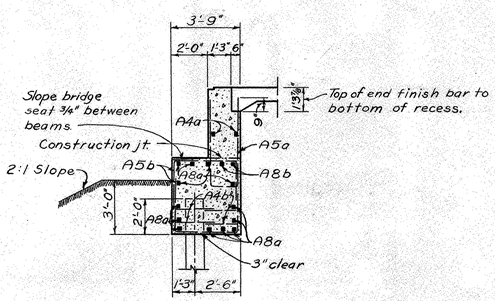
Structure	Top of N. End	Backwall S.E.	Base	G	H	I	J	K	L
N.W. Abutment	854.04	854.17	845.00	9'-2"	4'-11⅛"	4'-2⅞"	9'-0½"	4'-9¾"	4'-2¾"
S.W. Abutment	854.23	854.36	845.19	9'-2"	4'-11⅛"	4'-2⅞"	9'-0½"	4'-9¾"	4'-2¾"
N.E. Abutment	855.10	855.23	846.06	9'-0½"	4'-9⅜"	4'-3⅛"	9'-2"	4'-10⅞"	4'-3⅛"
S.E. Abutment	855.29	855.42	846.25	9'-0½"	4'-9½"	4'-3"	9'-2"	4'-10⅞"	4'-3⅛"



NOTE: Shaded areas on abutment face (9"x1'-6" centered at each stringer) shall be finished with particular care to provide plane surface at right angles with the grade of the structure, insuring full bearing for bumper angles.



ELEVATION



SECTION A-A

BRIDGE SEAT CONSTRUCTION PROCEDURE
Concrete above bridge seat construction joint shall not be placed until after steel work is erected. Steel end finish shall be used as a template for top of backwall.

NOTE: All earth fill around abutments shall be made full height of earth bench. Excavation shall then be made for abutment cap, after which piling shall be driven. If bottom forms for abutment cap are used, they shall be left in place.

NOTE: All reinforcing steel 2" clear except as noted.

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

ABUTMENT DETAILS

B.R. NO. TR-62-87
Over Yankee Creek

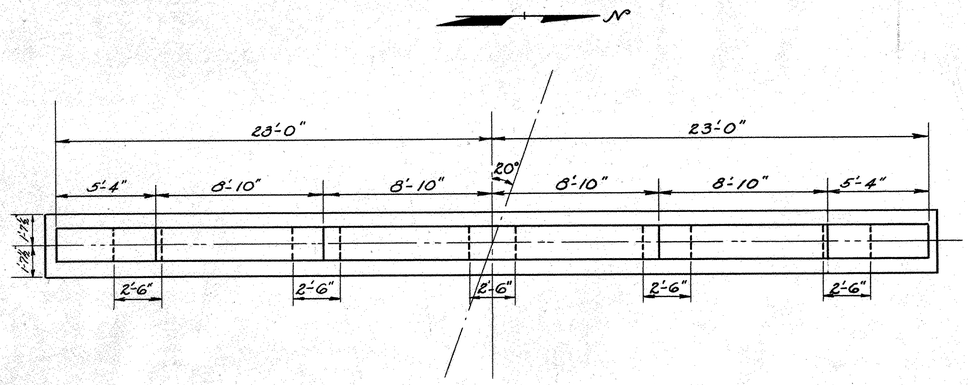
TRUMBULL CO. USR. 62
TRU-62-(4.59-9.67) STA. 460+44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.J.M.	D.J.M.	MPB	RJC	BFG WHC	10-10-50	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

15

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



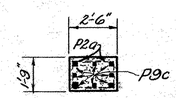
PLAN

SOUTH END — NORTH END

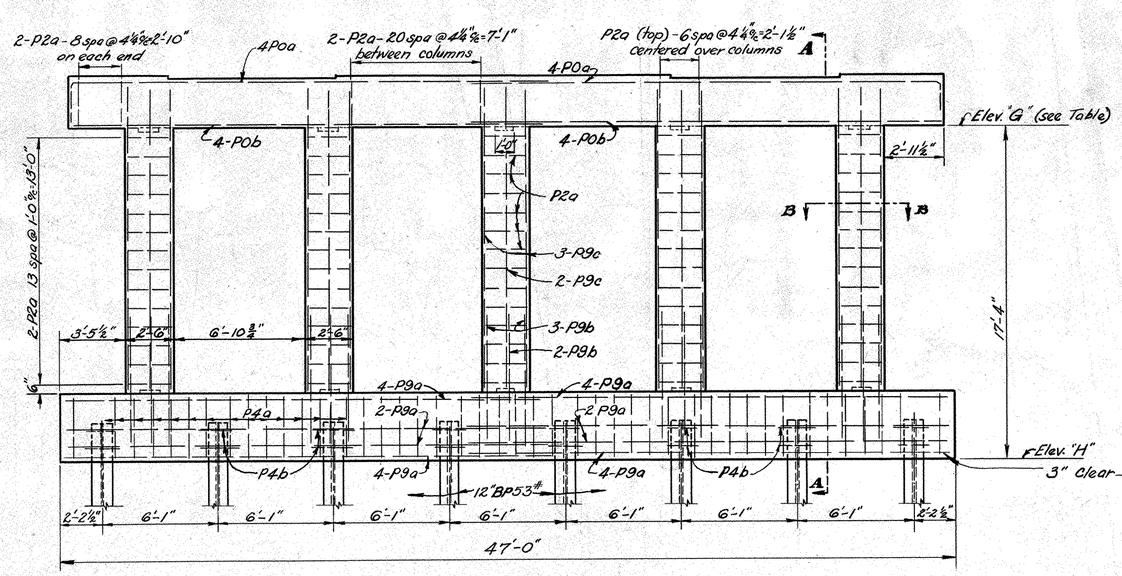
	A	B	C	D	E	F	G	H
West Pier North Structure	850.28	850.11	850.21	850.19	850.04	850.16	847.54	830.2
West Pier South Structure	850.47	850.29	850.40	850.38	850.22	850.35	847.72	830.3
East Pier North Structure	850.68	850.51	850.61	850.59	850.44	850.56	847.94	830.6
East Pier South Structure	850.87	850.69	850.80	850.78	850.62	850.75	848.12	830.7

PIER ELEVATION CHART

(Elevation given for each step @ ℄ of Steel Beam)

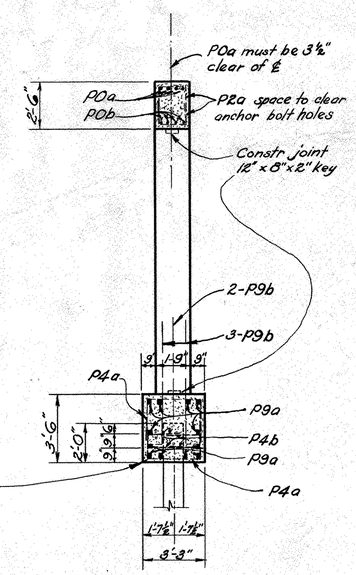


SECTION B-B



ELEVATION

NOTE: All reinforcing steel 2" clear except as shown.



SECTION A-A

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

PIER DETAILS

BR NO. TR-62-87
OVER YANKEE CREEK

TRUMBULL CO.
TRU-62-(4.59-9.67)

U.S.R. 62
STA. 460+44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISI
D.J.M.	D.J.M.	HVL	R.J.C.	BFG WHC	10-10-50	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

1/10

TRUMBULL COUNTY
TRU-62 (4.59-9.67)
S.H. 331

BEGIN SHEET STA. 238+00 — MATCH LINE STA. 254+00 — END SHEET STA. 270+00

Pt. O.L. No. 69 — Begin L.A. +91.50

GREAT LOT Nº 36
HUBBARD TWP.
T 3N, 1W

V. 14 P. 38
NORTHVUE PLAT

WADE ALLEN — CATHERINE E. WATSON — MODESTY J. PETTEN & ANGELA R. PETTEN — STANLEY KATILUS — GERALD BARR — CORA LIVINGSTON — JACK C. BOWIE & HAZEL J. BOWIE — JOHN MALINER & MARIE MALINER

U.S. 62 & S.R. 7

Begin Work Sta. 238+45

Begin Project F-524 Sta. 242+58.65

Village of Hubbard — O.L. G.S. — WADE S. ALLEN & GLADYS ALLEN
Deleted Per I.O.C. Dated 4/29/65 From R.N. Ricketts & C.W. Gray.

AMY ROORBACH — G.L. Nº 35 — HUBBARD MOTOR INN, INC. Vol. 876, Pg. 805 — TBA = 0.144 Ac. — CLARISSA J. MINGLIN

Note: Point of access for drive at Sta. 245+ 39.00 vacated by Directors Journal Volume 54 Page 423 dated May 13, 1969.
Added point of access 35' right of Sta. 247+26.00

JOHN R. HERREMA & HELEN A. HERREMA

LONGVILLE PLAT V. 3 P. 58 — IDA M. HIBLER — LAWRENCE G. EBINGER

MARVEL E. HIBLER — ROBERT FREIHEIT & MARIE K. FREIHEIT — EDWARD WALKER & MARY ELIZABETH WALKER — LLOYD K. ROSS & ELEANOR A. ROSS — CHARLES H. BROOKS & MARY G. BROOKS — HARRY F. McFARLAND & ARTHUR E. McFARLAND — JAMES LEE & MINERVA LEE — THOMAS E. & BERTHA E. THOMAS — MILLWARD T. & THOMAS T.

G.L. Nº 25 — G.L. Nº 36 — G.L. Nº 26 — G.L. Nº 35

CLARISSA J. MINGLIN — RUTH G. (MINGLIN) HOWELL — MARY K. MINGLIN — YOUNGSTOWN SHEET & TUBE CO. — STANLEY KAY, WILLIAM ALLEN, LELAND HOWE TRUSTEES - HUBBARD CO. JEHOVAH'S WITNESSES — LILLIAN PRITCHARD & JAMES PRITCHARD

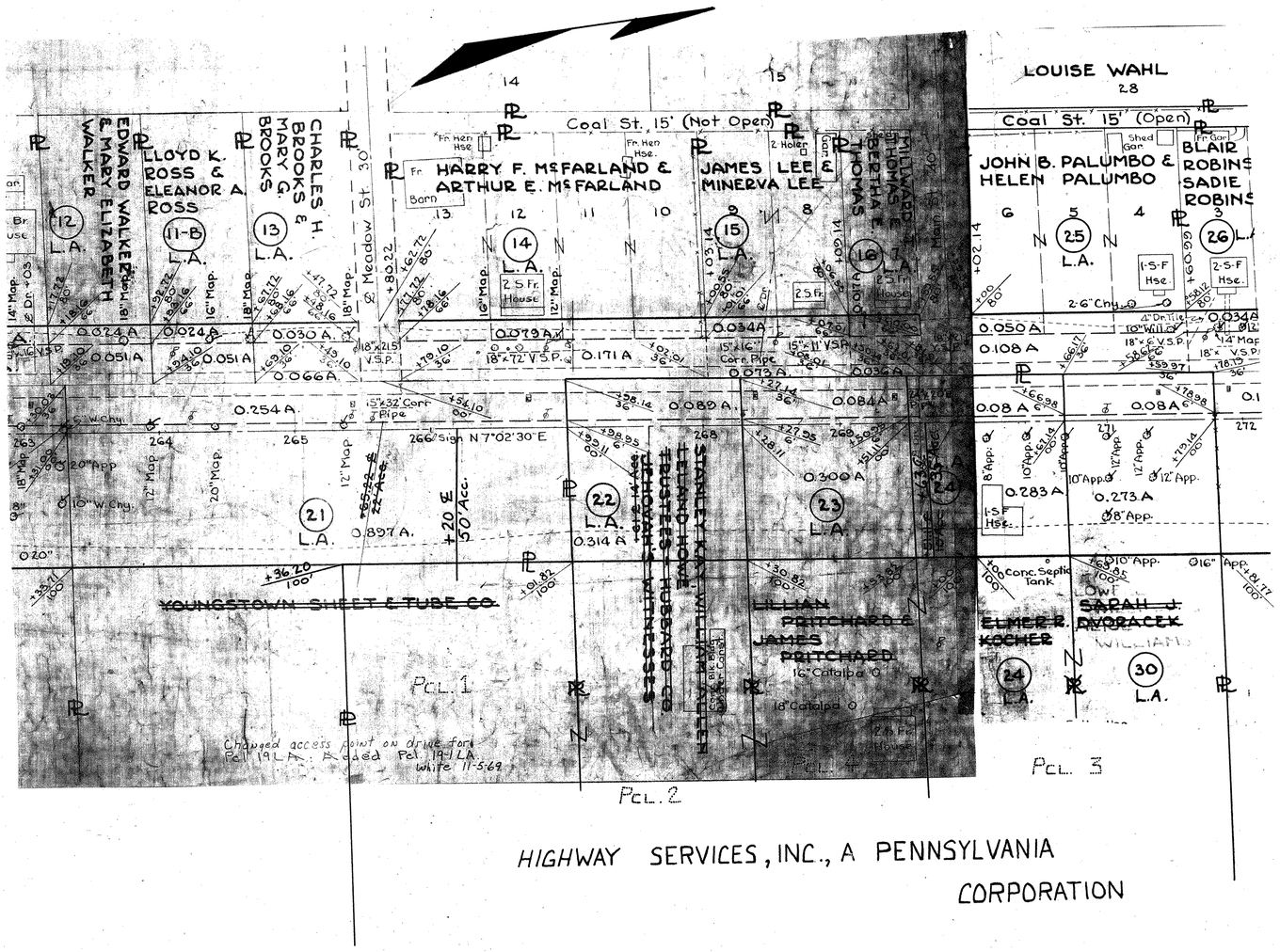
Changed access point on drive for Pcl. 19LA. Added Pcl. 19-1LA. White 11-5-69

RIGHT OF WAY STA. 238+00 TO STA. 270+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524 (5)	POST WAR

1A
10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



NOTE: POINTS OF ACCESS FOR DRIVES AT STA. 265 + 65.22 (RT.), STA. 267 + 61.00 (RT.), & STA. 269 + 51.11 (RT.) VACATED BY DIRECTORS JOURNAL, VOL. 58, PG. 722, DATED JULY 19, 1973

ADDED POINTS OF ACCESS STA. 266 + 20 (RT.) & STA. 269 + 63 (RT.)

HIGHWAY SERVICES, INC., A PENNSYLVANIA CORPORATION

0 10 25 50 100 150
SCALE IN FEET

SHEET COMPLETED 9-20-73

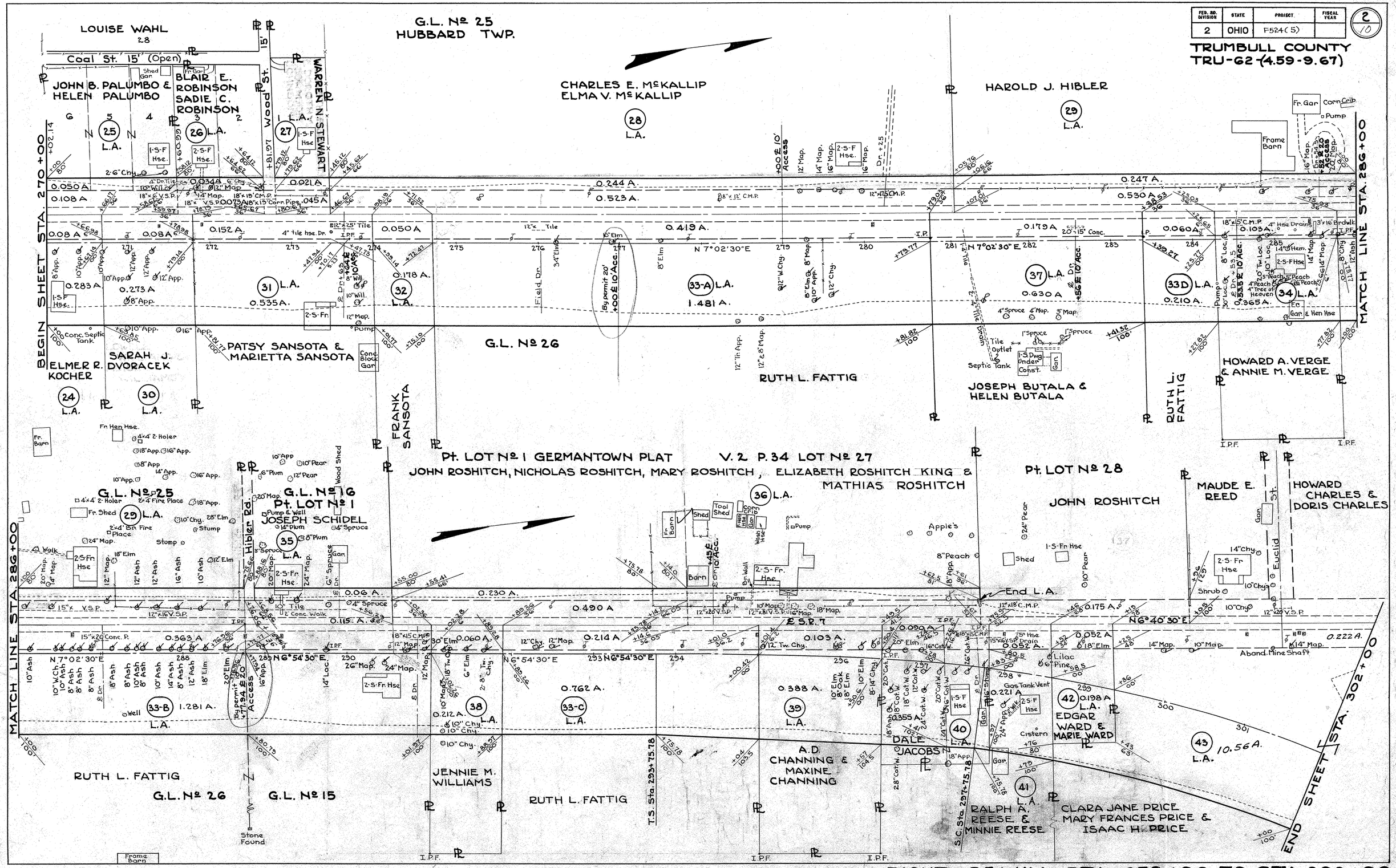
REVISIONS

TRUCK WORLD

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F524(5)	

2/10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

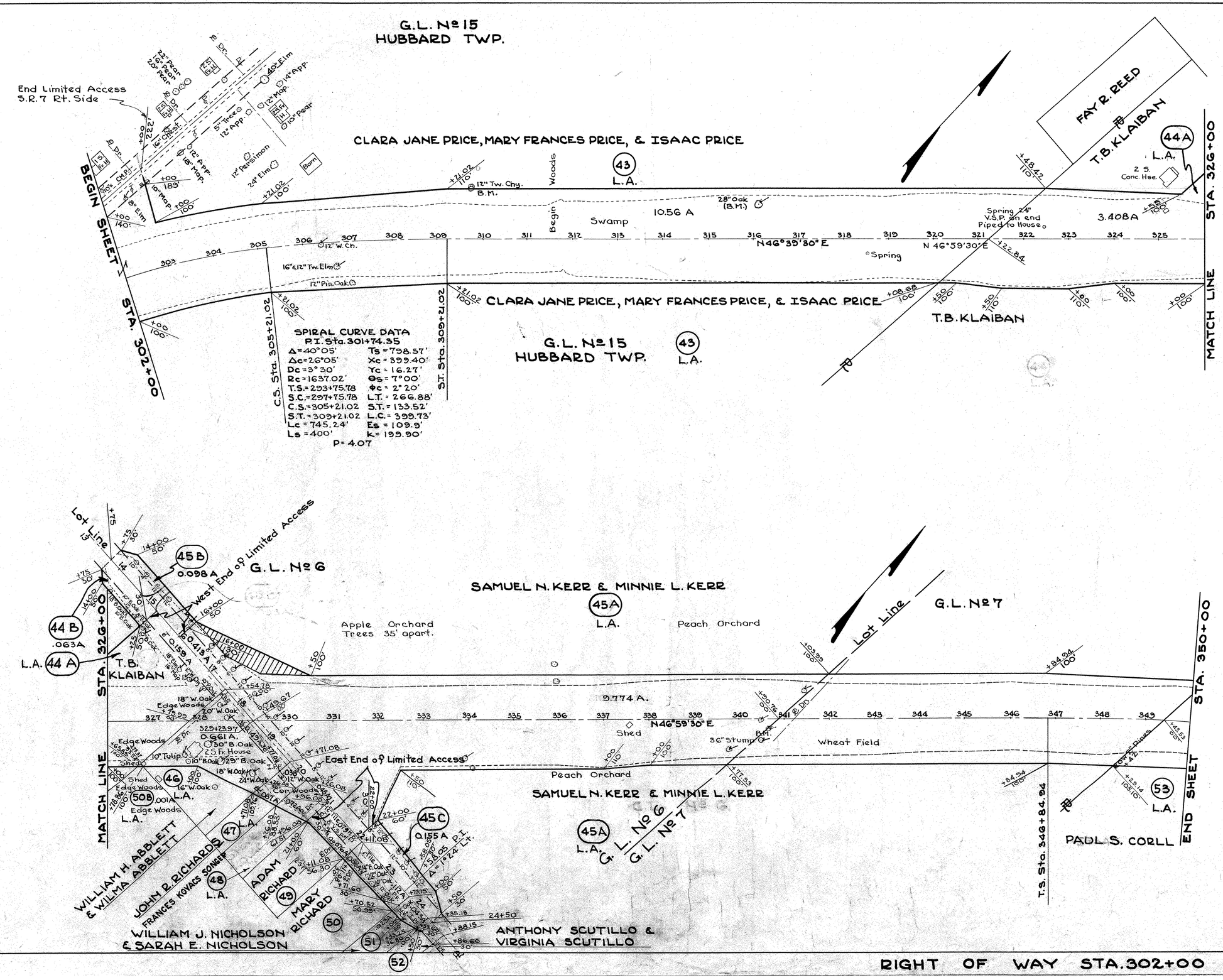


RIGHT OF WAY STA. 270+00 TO STA. 302+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-524(5)	

3/10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

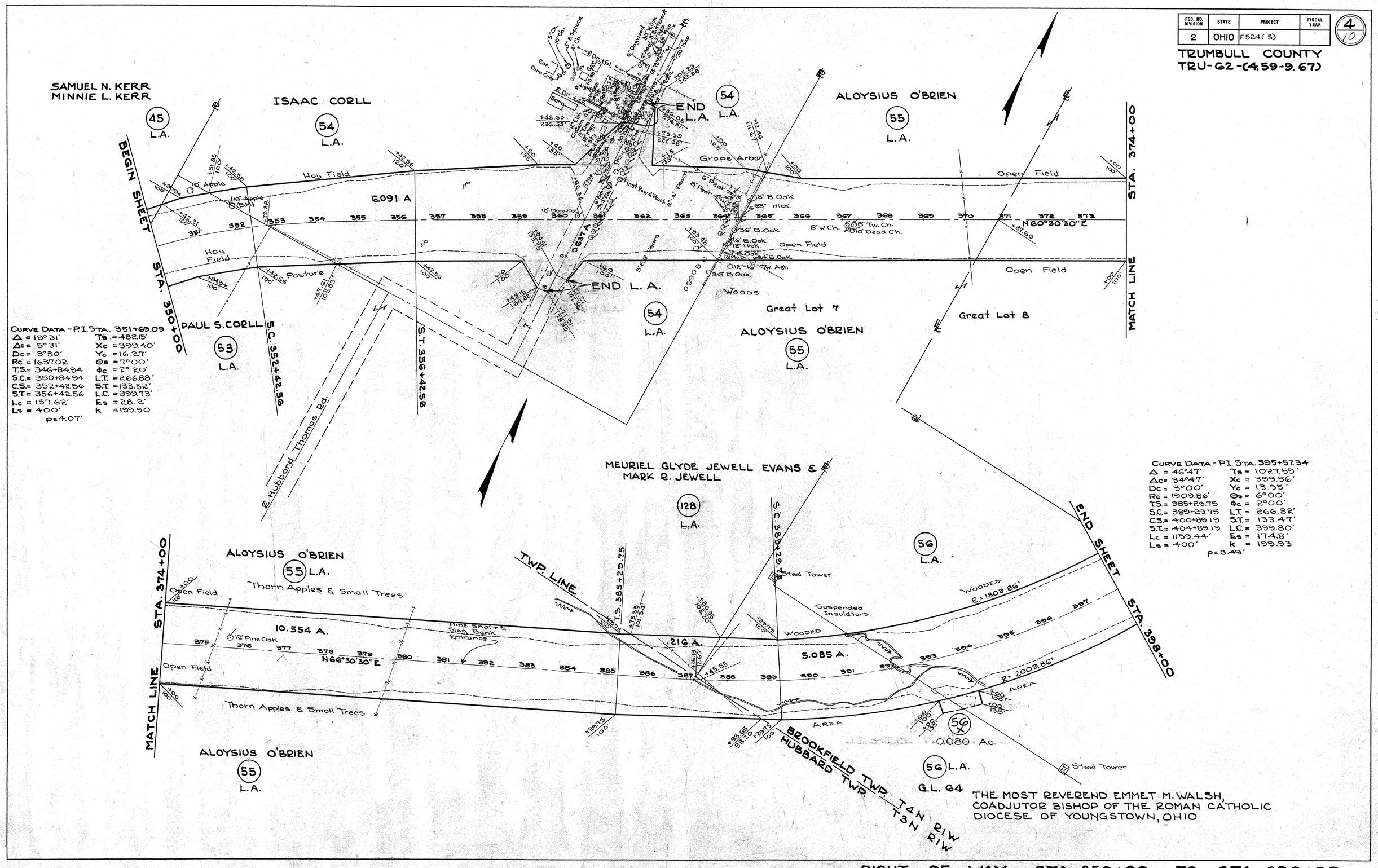


RIGHT OF WAY STA. 302+00 TO STA. 350+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F524(5)	

4/10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



Curve Data - P.I. Sta. 351+69.09

Δ = 18°31'	Ts = 482.15'
Δc = 5°31'	Xc = 399.40'
Dc = 3°30'	Yc = 16.27'
Rc = 1637.02	Θs = 7°00'
T.S. = 346+84.94	Φc = 2°20'
S.C. = 350+84.94	L.T. = 266.88'
C.S. = 352+42.56	S.T. = 133.52'
S.T. = 356+42.56	L.C. = 399.73'
Lc = 157.62'	Es = 2.8.2'
Ls = 400'	K = 199.90
p = 4.07'	

Curve Data - P.I. Sta. 395+57.34

Δ = 46°47'	Ts = 1027.59'
Δc = 34°47'	Xc = 399.56'
Dc = 3°00'	Yc = 13.95'
Rc = 1909.86'	Θs = 6°00'
T.S. = 385+29.75	Φc = 2°00'
S.C. = 389+29.75	L.T. = 266.82'
C.S. = 400+89.19	S.T. = 133.47'
S.T. = 404+89.19	L.C. = 399.80'
Lc = 1159.44'	Es = 17.4.8'
Ls = 400'	K = 199.93
p = 3.49'	

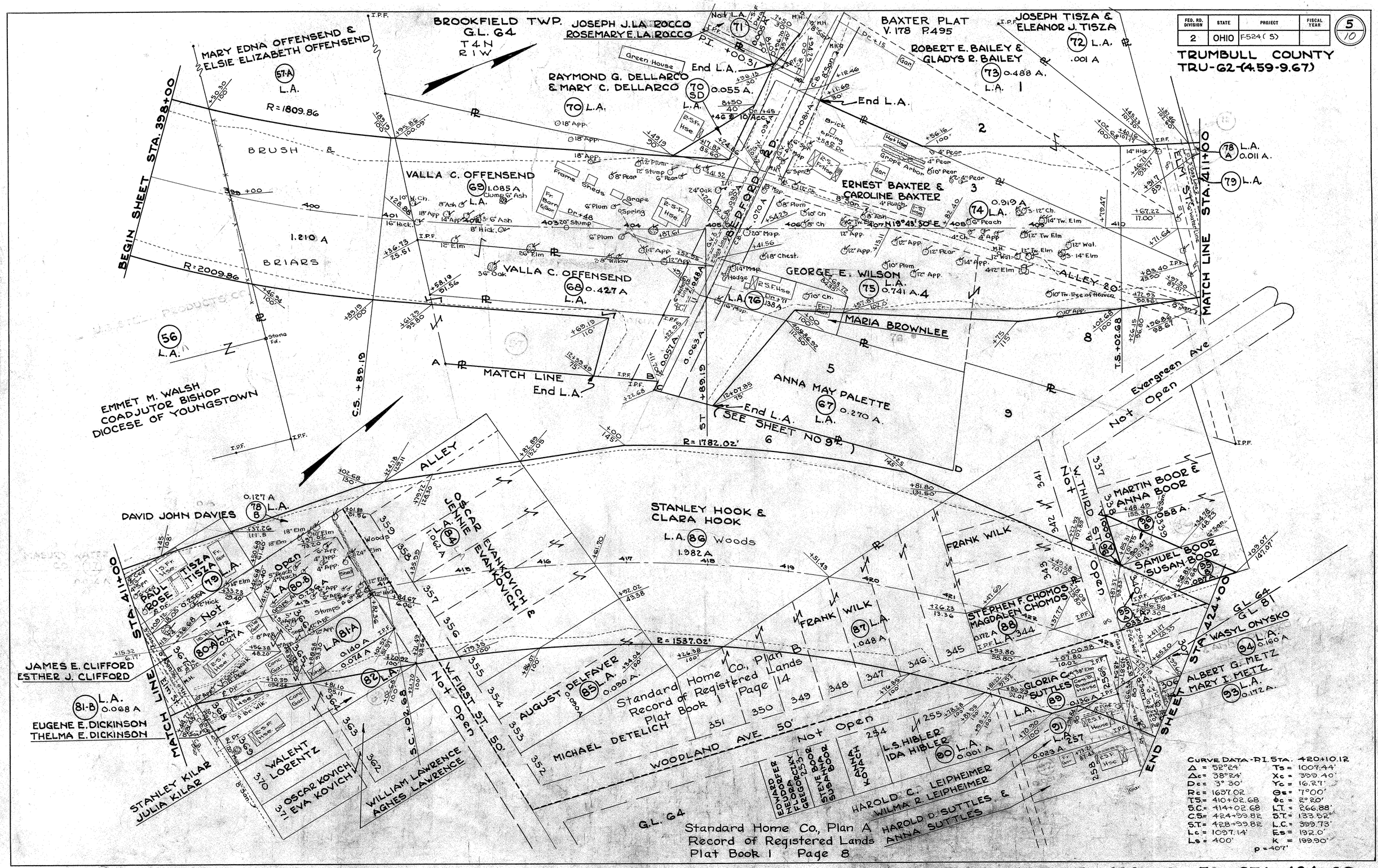
THE MOST REVEREND EMMET M. WALSH,
COADJUTOR BISHOP OF THE ROMAN CATHOLIC
DIOCESE OF YOUNGSTOWN, OHIO

RIGHT OF WAY STA. 350+00 TO STA. 398+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-524 (5)	

5/10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

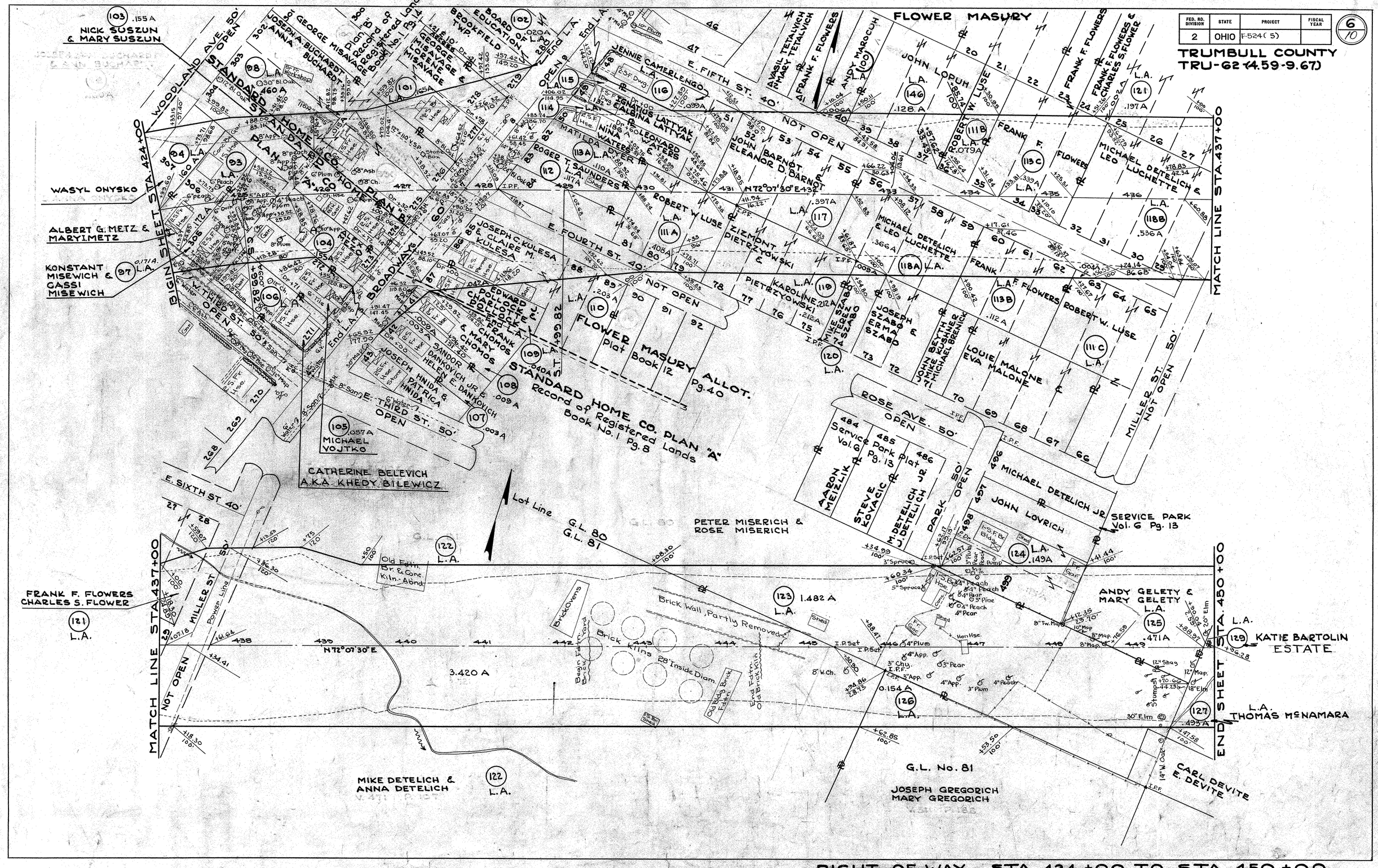


RIGHT OF WAY STA. 398+00 TO STA. 424+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-524(5)	

6/10

TRUMBULL COUNTY
TRU-62 (4.59-9.67)

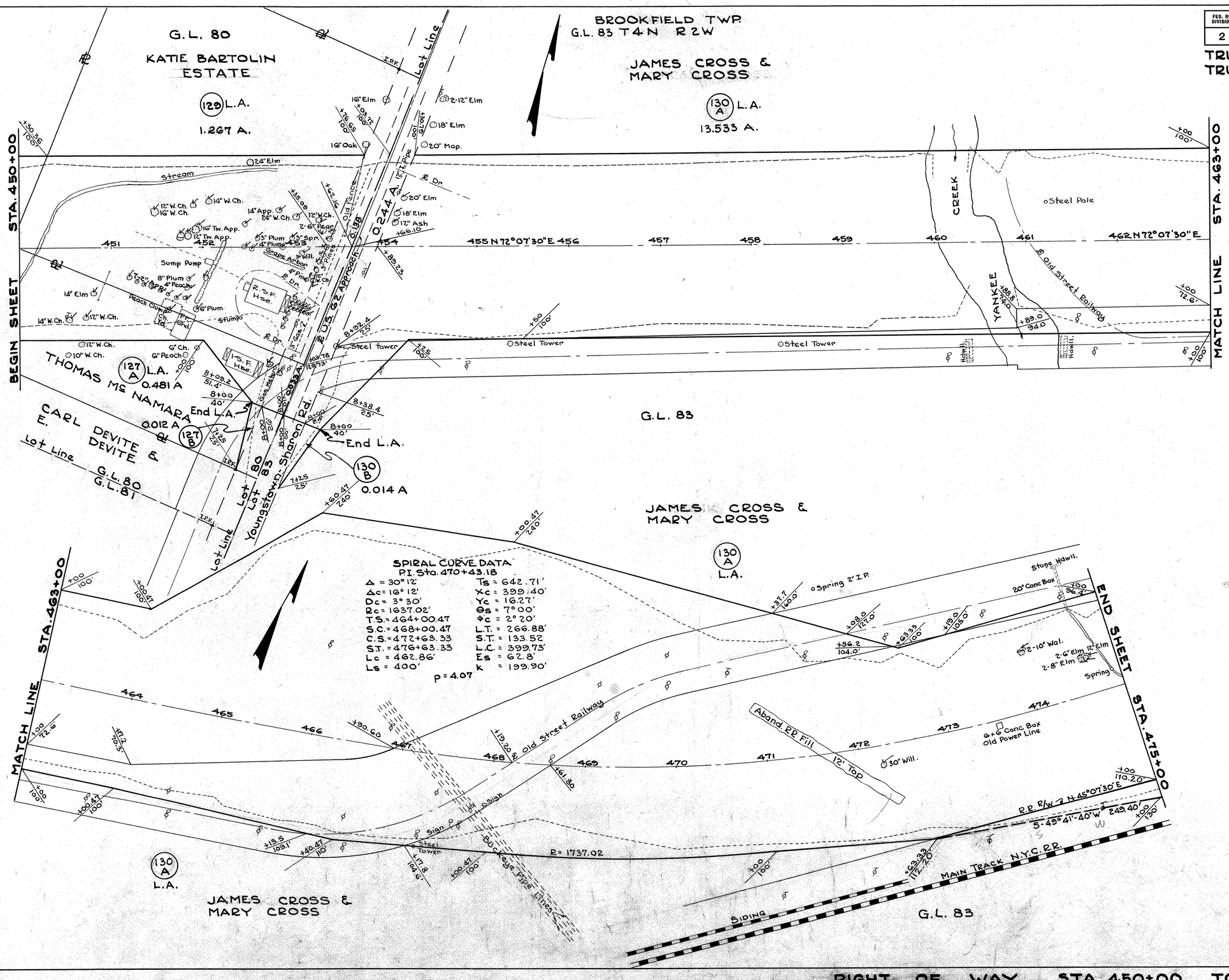


RIGHT OF WAY STA. 424+00 TO STA. 450+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-524 (5)	

7/10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)



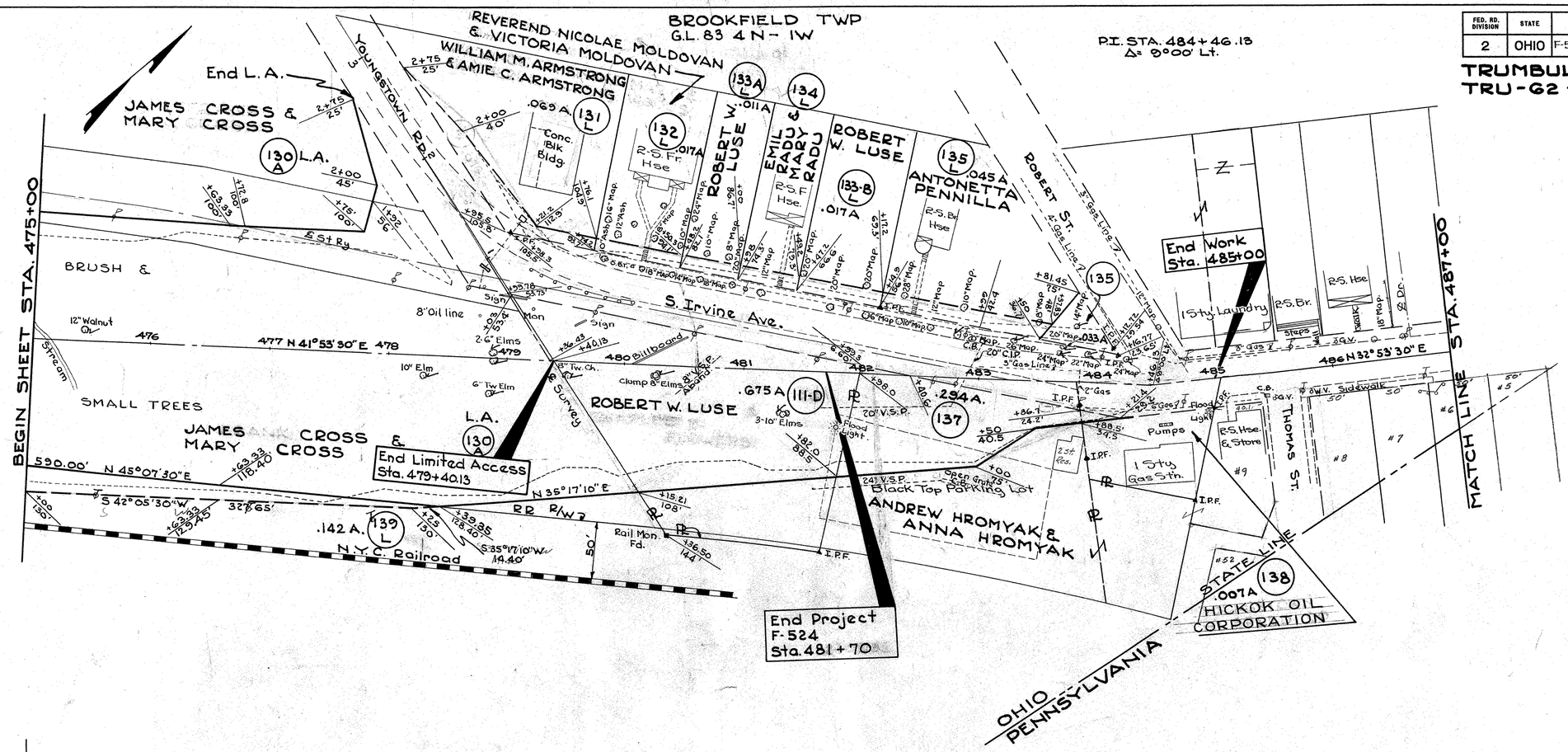
RIGHT OF WAY STA. 450+00 TO STA. 475+00

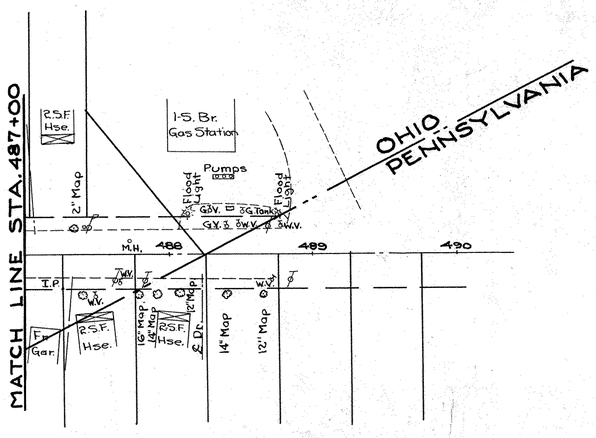
Location Plat Recorded 9-19-1957
V-11 - P 50

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-524 (5)	

8
10

TRUMBULL COUNTY
TRU-62 -(4.59-9.67)





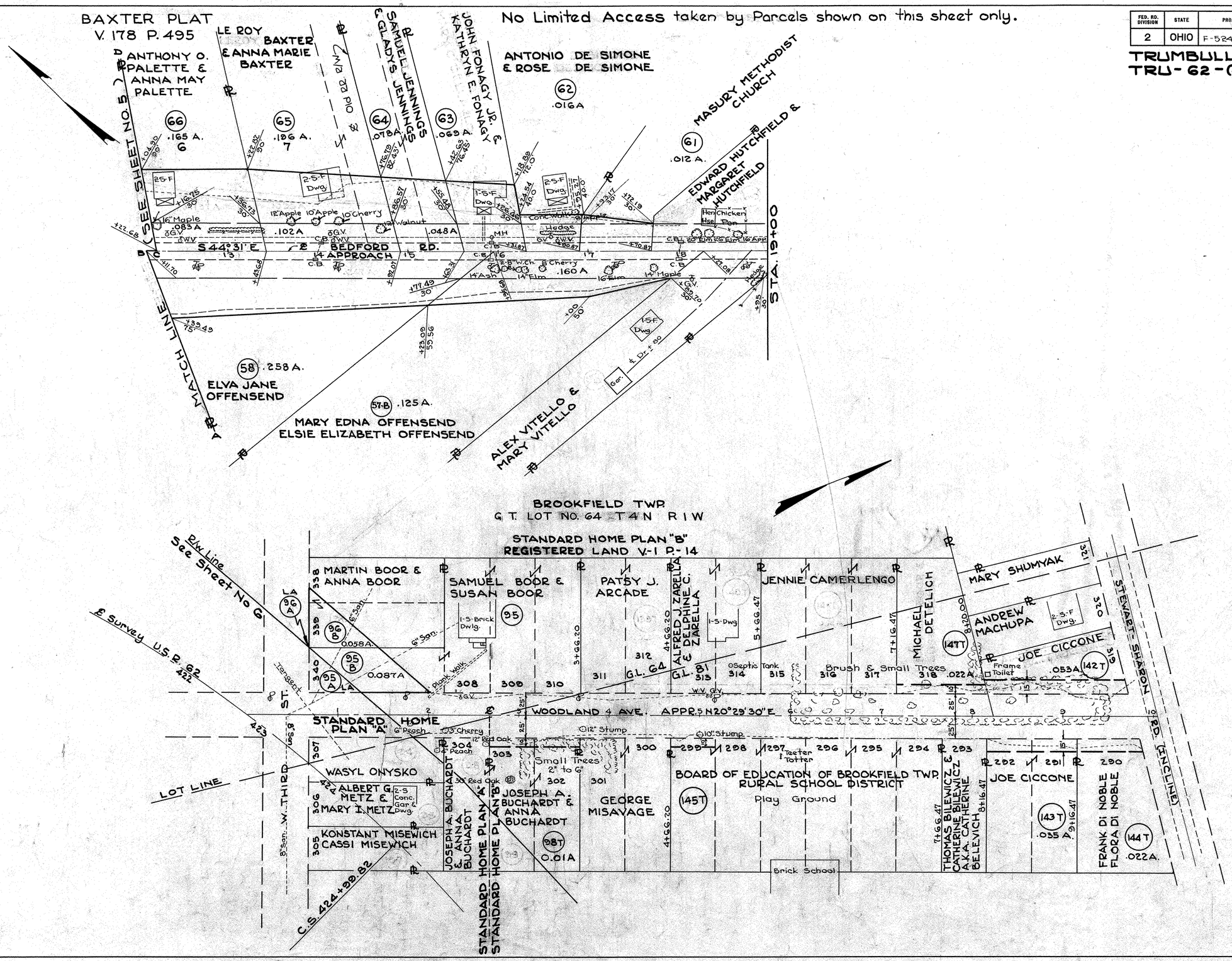
RIGHT OF WAY STA. 475+00 TO STA. 485+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

9/10

TRUMBULL COUNTY
TRU-62-(4.59-9.67)

No Limited Access taken by Parcels shown on this sheet only.



RIGHT OF WAY BEDFORD RD. & WOODLAND AVE.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-524(5)	POST WAR

14
154

TRU-62-(4.59-9.67)

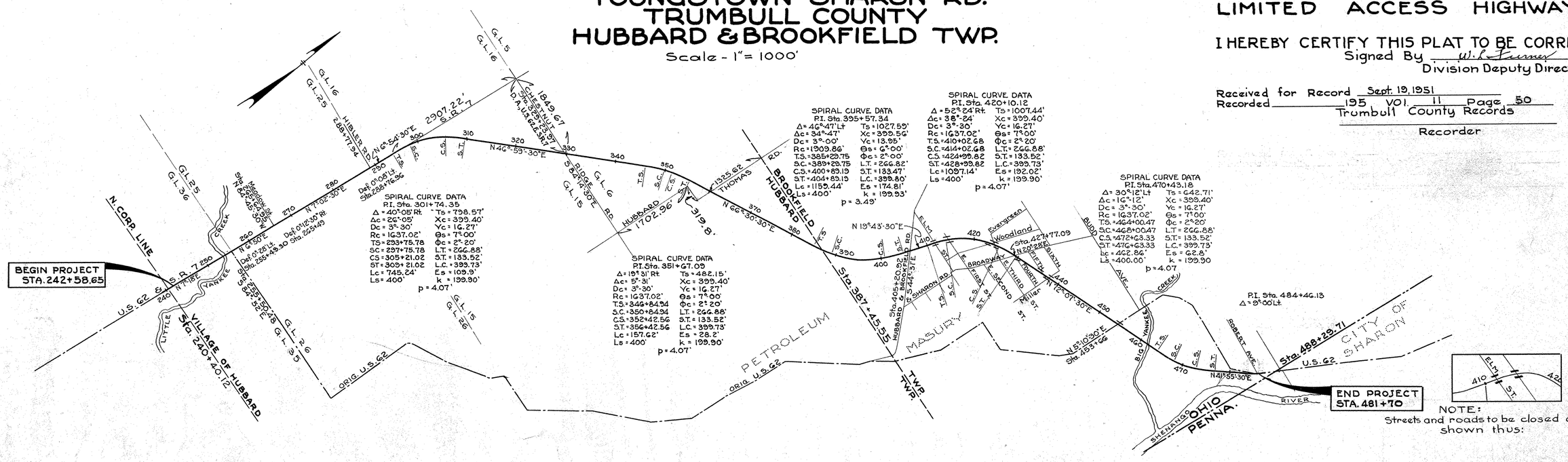
RELOCATION PLAT
TRU-62-(4.59-9.67)
YOUNGSTOWN-SHARON RD.
TRUMBULL COUNTY
HUBBARD & BROOKFIELD TWP.

Scale - 1" = 1000'

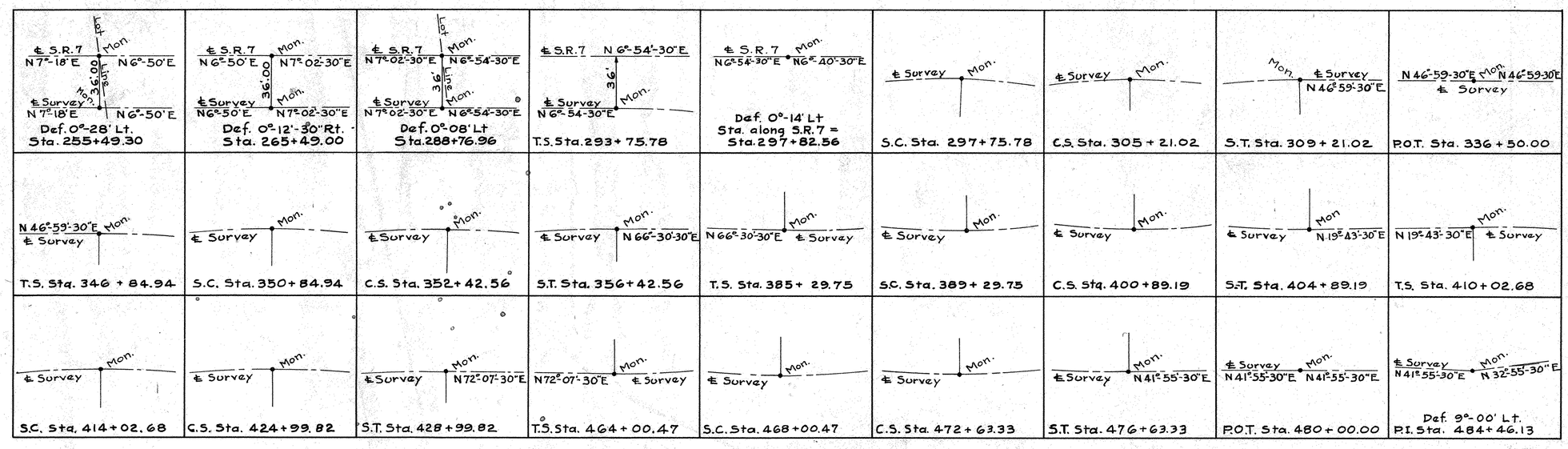
LIMITED ACCESS HIGHWAY

I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Signed By W. L. Turner
Division Deputy Director

Received for Record Sept. 19, 1951
Recorded 195 VOL. 11 Page 50
Trumbull County Records
Recorder



NOTE:
Streets and roads to be closed off shown thus:



CENTER LINE REFERENCE MONUMENTS WILL BE SET DURING CONSTRUCTION

Scale 1" = 1000'

RELOCATION PLAT