FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

1 76

F.A.P. No. F-41(5)

TRUMBULL COUNTY
TRU-422-(0.00- 2.06)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
TRU-422-(0.00-2.06)
TRUMBULL COUNTY
SOUTHINGTON TOWNSHIP

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
CORPORATION LINE
STEAM RAILROAD

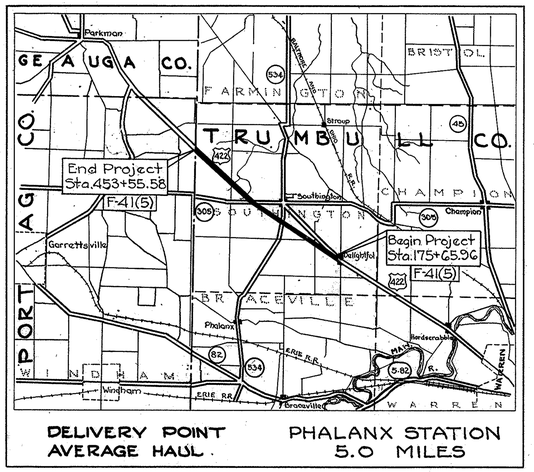
INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTIONS	2-3
GENERAL NOTES & DETAILS	4-9
SUMMARY	10-12
PLAN AND PROFILE	13-29
CROSS SECTIONS	30-52
APPROACHES	53-61
CULVERTS	62-76

LINE DATA

BEGIN PROJECT & WORK	STA. 175+65.96
END PROJECT & WORK	STA. 453+55.58
ADDITIONS OR DEDUCTIONS	NONE
NET LENGTH OF PROJECT	27,789.62 L.F.
OR	5.263 MILES

STA. 175+65.96 F-41(4) = STA. 175+65.96 F-41(5)
STA. 453+55.58 F-41(5) = STA. 102+01.26 F.A.P. 245(2)



DELIVERY POINT — PHALANX STATION
AVERAGE HAUL — 5.0 MILES

LOCATION MAP

Scale 1" = 2 Mi.

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS

SCALES

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

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

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.

The Right of Way for this improvement will be provided by the State of Ohio.

Approved E.W. Moore
Date 10-22-48 Division Deputy Director

Approved _____
Date _____ Chief Engineer, Bureau of Maintenance

Approved G. P. Logue
Date 11-5-48 Chief Engineer, Bureau of Bridges & R.R. Crossings

Approved George J. Thormyer
Date 11/10/48 Chief Engineer, Bureau of Location & Design

Approved Frank L. McWilliam
Date 11-10-48 First Ass't. Director & Chief Engineer

Approved Earl L. Reab
Date 11-10-48 Director of Highways

CONSTRUCTION BUREAU
NOV 7 1955
GROUND PHOTOLAB

RECOMMENDED FOR APPROVAL — DATE

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED — DATE

DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

STANDARD DRAWINGS

DRAWING Nº	DATE	DRAWING Nº	DATE
L-3	2-1-47	I-15 No. 1	3-1-47
I-1,2,3,4&5	2-20-45	I-15 No. 2	2-1-47
I-8 C.B. 1-2A&B	12-15-41	I-15 No. 4	2-1-47
I-8 No. 7	5-1-47	I-15 No. 5	2-1-47
S-27 P.C. 2	3-15-48	I-15 No. 6	2-1-47
S-27 P.C. 3	2-20-45	I-15 No. 7	2-1-47
SBc-45	9-18-47	I-15 No. 9	2-1-47
LBc-45	9-18-47	I-14 G	2-1-47
G-8.07	2-1-47		

SUPPLEMENTAL SPECIFICATIONS

SPECIFICATION Nº	DATE	SPECIFICATION Nº	DATE
SS-142	Rev. 3-24-41		
M-103.12	7-1-41		

377

FILE Nº	TRUMBULL COUNTY TRU-422-(0.00-2.06) DATE OF LETTING _____ 194_ CONTRACT Nº _____

FIELD BOOK NO.S.
G22-G23 & G61 to G68 Incl.

PUBLIC UTILITIES WITHIN RIGHT OF WAY
The Ohio Public Service
The Warren Telephone Co.

TYPICAL SECTIONS

T - 33

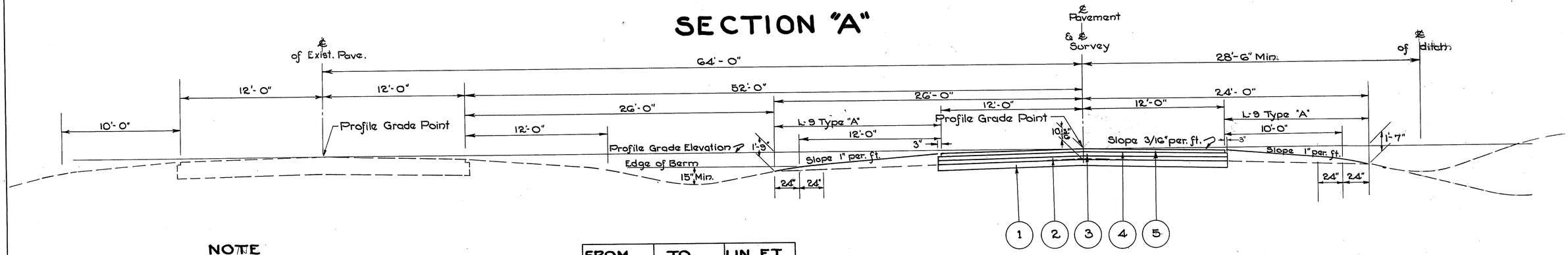
SCALE ½"=1'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

2/76

TRUMBULL COUNTY
TRU.-422-(0.00-2.06)

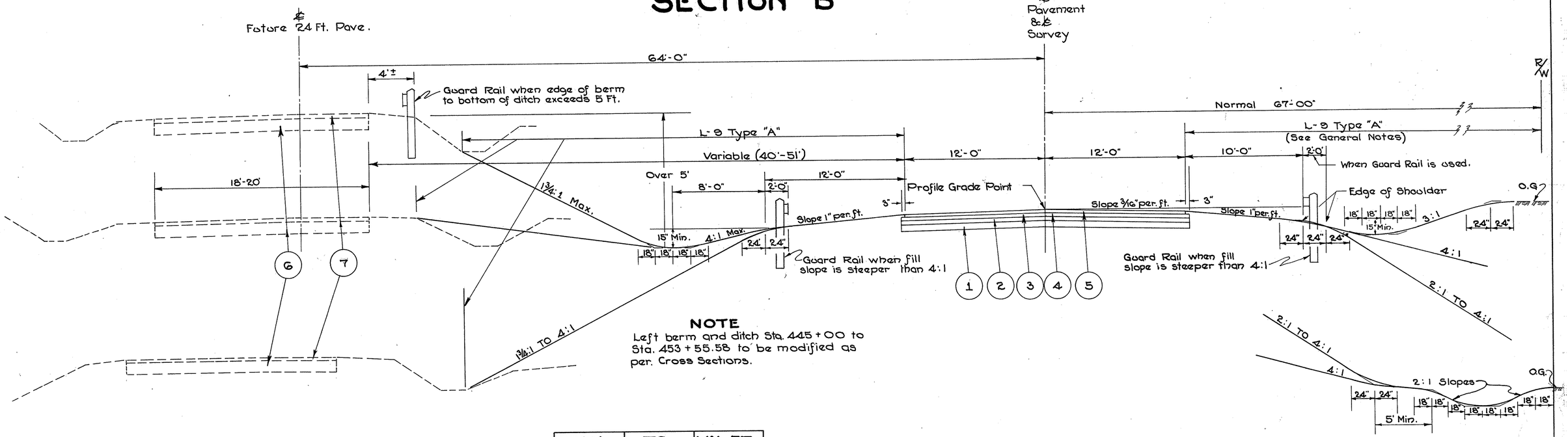
SECTION "A"



NOTE
Berms shall be finished 1" below all pavement edges.

FROM	TO	LIN. FT.
175+65.96	345+00	16934.04

SECTION "B"



NOTE
Left berm and ditch Sta. 445+00 to Sta. 453+55.58 to be modified as per. Cross Sections.

FROM	TO	LIN. FT.
345+00	377+00	3200.00
388+50	453+55.58	6505.58

DETAIL OF DITCH AT TOE OF SLOPES

Design Speed - 70 M.P.H.

W.D.M. & G.F.J.

TYPICAL SECTIONS

Field Book No's
622-623 & 661 to 668 Incl.

PUBLIC UTILITIES WITHIN RIGHT OF WAY
The Ohio Public Service
The Warren Telephone Co.

TYPICAL SECTIONS

T-33

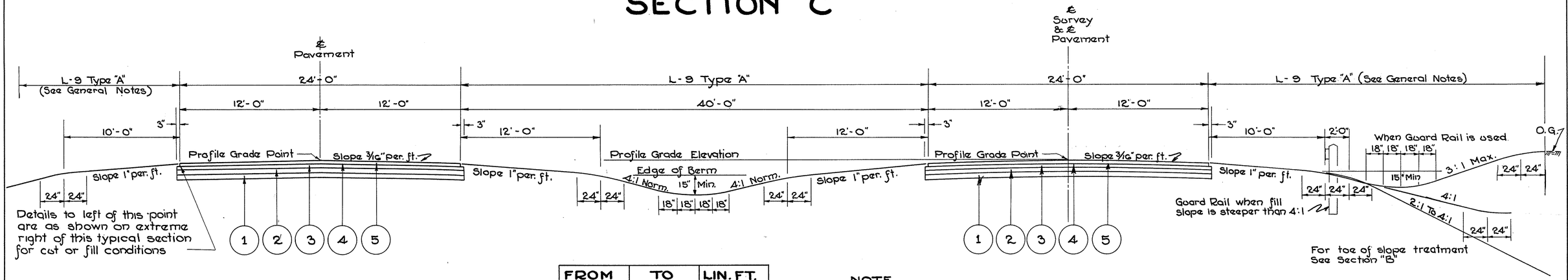
SCALE 1/4"=1'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

3
76

TRUMBULL COUNTY
TRU.-422-(0.00-2.06)

SECTION "C"



FROM	TO	LIN. FT.
377+00	388+50	1150

NOTE
Berms shall be finished 1" below all pav't edges

SPECIAL GRANULATED SLAG GRADE B, BASE COURSE

STATION FROM	STATION TO	TYPICAL SECTION	LIN. FT. COMPACTED DEPTH IN INCHES 8"	18
175+65.96	176+50	A	84.04	
176+50	177+50	A		100
177+50	185+00	A	750.00	
185+00	189+00	A	400.00	
189+00	242+00	A	5300.00	
242+00	246+50	A	1450.00	
246+50	275+00	A	2850.00	
275+00	280+00	A	500.00	
280+00	327+75	A	4775.00	
327+75	332+00	A	425.00	
332+00	345+00	A	1300.00	
345+00	352+50	B	750.00	
352+50	358+50	B	600.00	
358+50	377+00	B	1850.00	
377+00	382+50	C	550.00	
382+50	388+50	C	600.00	
388+50	394+50	B	600.00	
394+50	414+00	B	1950.00	
414+00	421+00	B	700.00	
421+00	434+00	B	1300.00	
434+00	441+00	B	700.00	
441+00	453+55.58	B	1255.58	
Total			27,689.62	100.00

W.D.M. & G.F.J.

PAVEMENT LEGEND

1. Special Granulated Slag (Grade B) Base Course. See table at left for compacted depths.
2. 4" B-20 Waterbound Macadam Base Course.
3. 4" B-20 Waterbound Macadam Base Course.
4. T-30 Bituminous Prime Coat (See. M-5.7 RT-2 or 3) using 0.35 gallons per sq. yd.
5. 3" T-33 Bituminous Macadam Surface Course, Type "A" using Sec. M-5.7, RT-11 or 12 for first and second penetration and RT-8 or 9 for seal coat.
6. Existing Macadam Pavement 15" Depth.
7. Existing 2½" Minimum Asphaltic Concrete.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

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TRUMBULL COUNTY
TRU-422(0.00-2.06)

GENERAL NOTES

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 transitions from excavation to embankment slopes shall be blended with the surrounding terrain as directed by the Engineer.

REMOVAL OF EXISTING PAVEMENT :-

After the existing pavement has been removed (Item E-8) the old roadway shall be plowed, harrowed and dragged to a smooth grade, the old ditches filled and the entire area left in neat condition. Cost of this work shall be included in the unit price bid for pavement removal, item E-8. Areas shall then be seeded and mulched, item L-9. Pavement removal shall be incorporated into the fill in lieu of borrow as directed by the Engineer. The cost of the removal of the existing Pav't. Sta.375+50 to Sta.389+50 shall be included in the price bid per Cubic Yard of E-1 Excavation (Unclassified.)

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 inches, loose measurement, the width shall be the width of the pavement plus 18 inches on each side of the pavement.

TRENCH ROLLER :-

In narrow base widening areas inacessible to the standard width rollers the necessary compaction shall be obtained with a trench roller meeting the requirements of Sec. G-7.01.

GRANULATED SLAG (GRADE B) BASE COURSE:-

The granulated slag base shall be sprinkled sufficiently to lubricate the particals, then rolled in 5" Max. Depth Compacted Courses with a trench roller or a 3-E or a 3-F roller meeting the requirements of Sec.G-7.01. weighing not less than 7 tons or more than 10 tons. Rolling shall conform to the third and fourth paragraphs of Sec. B-20.05.

Should the subgrade become soft and mixed through this course the contractor shall without additional cost, remove the material, reshape and compact the subgrade and replace the materials removed with clean aggregate which shall be rolled until compacted satisfactorily and uniformly with the surrounding surface. The finished subgrade shall conform to the requirements set forth in the last sentence of Sec.B-20.06. The yardage to be paid for shall be the number of sq. yds. of granulated slag as specified in place, compacted, complete and accepted. Payment for water is included in the unit price bid for Granulated Slag Base Course.

TREE AND STUMP REMOVAL :-

Payment for removal of all trees and stumps within the limits of the project as marked by the Engineer is included in the unit price bid for Item E-1 Roadway Excavation unclassified. No tree shall be removed unless specifically marked for removal by the Engineer.

I-15 GUARD RAIL :-

Guard rail posts shall be placed 16 feet on centers on tangents and radii of 300 feet or more. Where the radius is less than 300 feet the posts shall be spaced at 8 feet on centers. Guard rail, when called for on the plans, along the existing pavement must be placed before any excavation is done adjacent to the pavement. The guard rail proposed for along the existing pavement shall be placed to secure a uniform appearance in relation to the existing pavement. If steel beam type (shallow) is used the post spacing shall be 12'-6"

I-9 STONE UNDERDRAINS :-

In the final finishing of slopes and ditches, care shall be exercised that the exposed ends of the I-9 drains be left free of earth cover that would impede free drainage.

PIPE SPECIALS :-

Deductions for pipe specials shown on this plan are as follows :-

SIZE	PIPE (ROUND) WYES		CURVES
	CARRY LINE	SPUR	
6"	1'	1'	1'
12"	3'	1'	
15" TO 21"	4'	1'	
24" & Over	4'	2'	

DRIVEWAYS :-

Driveways and mail box approaches not shown on the plan but for which quantities have been estimated on the Driveway and Mail Box Approach Details shall be constructed at locations as directed by the Engineer. The locations of such driveways and mail box approaches shall be determined by conference between the property owner concerned and the Engineer. Before proceeding with the construction of any such driveways, or mail box approaches, the property owner is to furnish the Engineer a written statement to the effect that he concurs in the location. The General Summary includes the following items which are to be used only as indicated above.

E-1	Roadway Excavation	500 C.Y.
I-9	No. 1 Stone Underdrain - Type A	300 L.F.
I-17	Side Approaches, Mailbox Turnouts and berm material	2000 S.Y.
I-1	12" Pipe for Driveways	400 L.F.
I-1	15" Pipe for Driveways	350 L.F.
I-1	18" Pipe for Driveways	150 L.F.

ITEM L-9 SEEDING AND PROTECTING, TYPE A, L-9 10-6-4 COMMERCIAL FERTILIZER AND L-9 AGRICULTURE GROUND LIMESTONE :-

L-9, Type "A" shall be omitted on areas to be sodded.

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 right-of-way line if such line is less than ten feet from the work limits where Typical Section C applies; as stated above on the right side and to the work limits shown on the left side where Typical Section "B" applies; and between work limits shown where section "A" applies.

WORK AT ABANDONED SITES :-

The following work within the right-of-way shall be performed by the contractor at locations where buildings have been removed from the right-of-way :- Foundations, Buildings, Cisterns, Wells and Septic Tanks shall be removed to a line at least 2 feet below the proposed finished grade and the concrete floors broken up into pieces whose areas do not exceed one square foot and the entire hole filled with acceptable earth according to E-1.05 as directed by the Engineer.

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

TRANSITION PAVEMENT STA. 175+65.96 TO STA. 181+68.12 :-

The plan calls for the removal of the transition pavement which is to be built under contract F-41 (4) but if the north lane of this project is built before the transition pavement is built under contract F-41 (4) there will be no need of the transition and it will not be built. The removal of the same will then be non-performed on this contract.

STRUCTURE AND CHANNEL EXCAVATION :-

All available and suitable structure and channel excavation shall be used in the embankment in lieu of borrow.

TRAFFIC AND WORK PROCEDURE :-

Two way traffic shall be maintained at all times. The contractor shall arrange his operations so that traffic inconvenience will be held to a minimum. For this purpose the construction procedure outlined below is to be followed except that any other method of procedure suggested by the contractor may be used if satisfactory to the Director.

1-Construct north lane from Sta. 175+65.96 to 345+00.
2-Build north lane Sta. 345+00 to end of project.
3-Build south lane Sta. 375+50 to 389+50 and at culvert C-10

PIPE CULVERTS :-

Length of concrete cradles under C.M.P. culverts may be so shortened at the time of construction if so directed by the Engineer.

Final quantities shall be reflected in final change order.

MONUMENTS :-

All monuments within the limits of the project shall be adjusted to the new grade by the contractor as directed by the Engineer.

Cost of adjusting monuments is included in the unit price bid for item E-1 Roadway Excavation.

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. The private waterline at Sta. 383± must be kept in operation at all times and to be adjusted to a final grade by the Contractor. The cost of all labor and materials to be included in the price bid for E-1 excavation unclassified.

FERTILIZER :-

If the contractor is unable to secure the fertilizer called for on the plans, he shall state so in writing and request that he is permitted to furnish a substitute formula and he shall state the formula or formulae which he is able to obtain. The contractor will give in this letter the names of at least three reliable fertilizer dealers or manufacturers which he has contacted. No substitution shall be made unless approved by the Engineer.

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 square yard of sodding. Commercial fertilizer and agricultural ground limestone to be used on all sodded areas per Sec. L-9.11.

OPTIONAL METHOD OF HOLDING MULCH IN PLACE:-

The method of tying down the mulching material as shown on Standard Drawing L-3 may be replaced over suitable areas, as directed by the use of a Seaman Pulvi-Mixer machine or equal, to incorporate the mulching material with the soil. Any area not treated with the machine shall have the mulching material secured by the usual method shown in the Standard Drawing.

ACCESS :-

Access to all properties abutting this improvement shall be provided and maintained at all times by the Contractor.

SPECIAL NOTES ON PLAN :-

For other notes see sheets #6, #7, #8

CROSS OVERS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

5
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TRUMBULL COUNTY
TRU-422-(0.00-2.06)

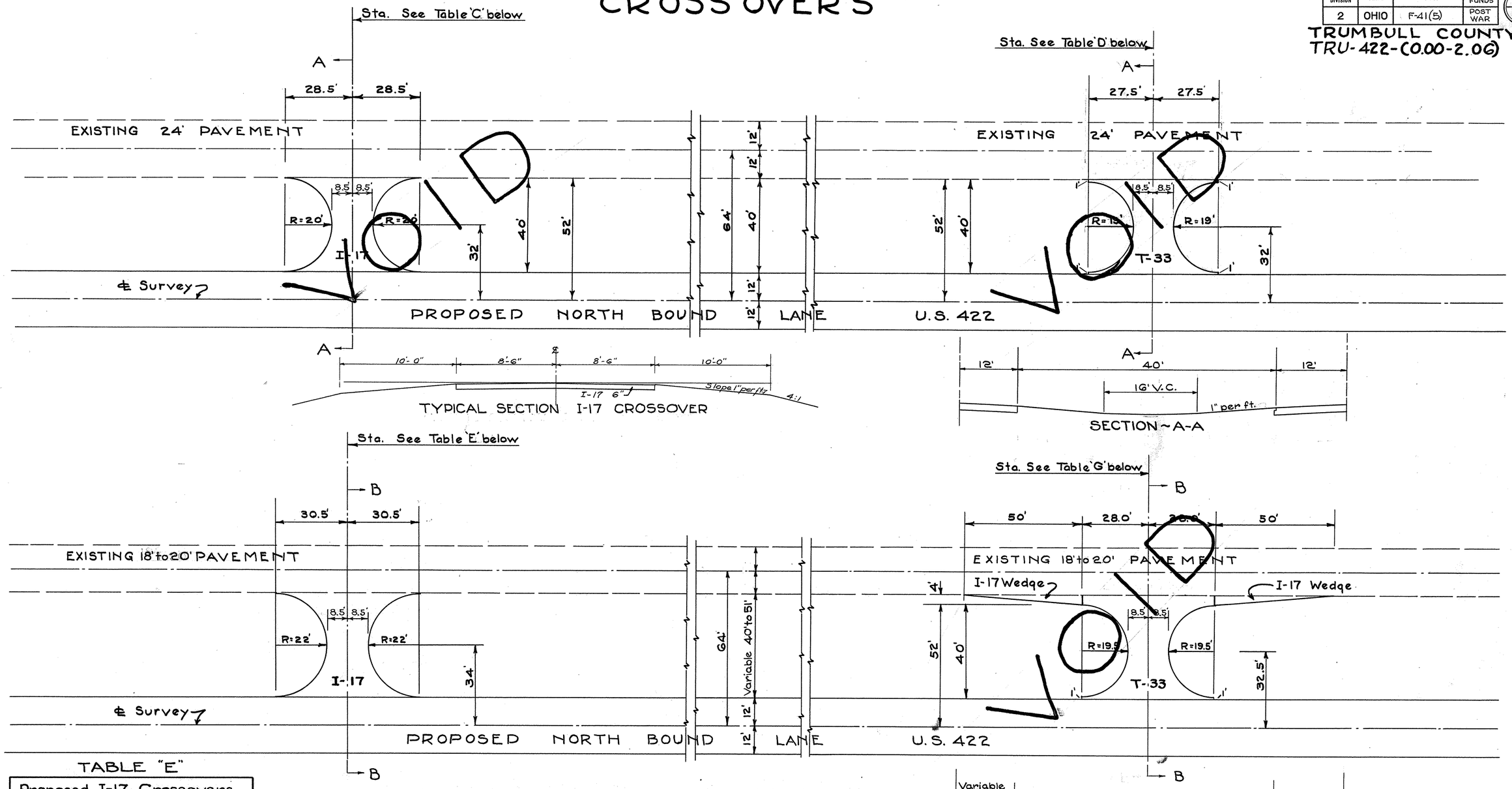


TABLE "E"

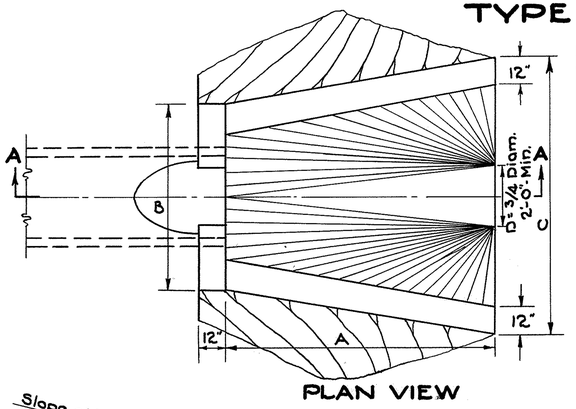
Proposed I-17 Crossovers	
Sta. 349+75	Sta. 452+00
Sta. 359+00	
Sta. 376+00	
Sta. 385+20	
Sta. 392+39	
Sta. 407+15	
Sta. 413+00	
Sta. 421+00	
Sta. 424+91	
Sta. 433+00	
Sta. 443+50	
Sta. 448+92	

ESTIMATED QUANTITY (EACH)
I-17 Side Approaches, Mail Box Turnouts & Berm Material = 129 Sq. Yds.
13 Crossovers = 1677 Sq. Yds Total

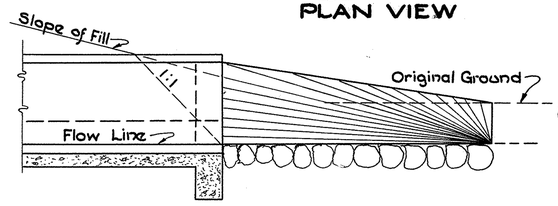
TYPICAL MEDIAN CROSSOVERS

RIPRAP DETAIL FOR PIPE CULVERT ENDS

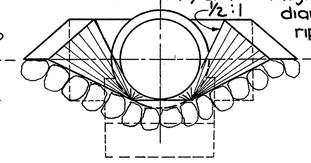
TYPE 1



PLAN VIEW



SECTION A-A



END VIEW

Pipe Diam. inches	A	B	C	D	Riprap One End S.Y.
15	4'-3"	4'-3"	6'-6"	2'-0"	2.5
18	5'-0"	4'-8"	7'-0"	2'-0"	3.0
21	6'-0"	5'-1"	7'-6"	2'-0"	4.0
24	6'-9"	5'-6"	8'-0"	2'-0"	5.5
27	7'-6"	5'-11"	8'-6"	2'-0"	7.0
30	8'-6"	6'-4"	9'-0"	2'-0"	8
33	9'-9"	6'-8"	9'-6"	2'-0"	10
36	10'-0"	7'-1"	10'-3"	2'-3"	12
39	10'-9"	7'-6"	11'-0"	2'-6"	13
42	11'-9"	7'-11"	11'-9"	2'-6"	15
48	13'-3"	8'-9"	13'-0"	3'-0"	19

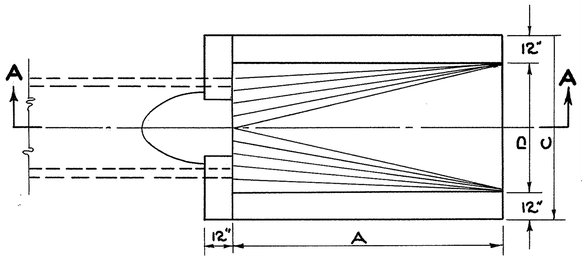
Pipe Diam. inches	A	C	D	Riprap One End S.Y.
54	15'-0"	9'-3"	7'-3"	19
60	16'-6"	10'-1"	8'-1"	23
66	18'-3"	10'-11"	8'-11"	28
72	19'-9"	11'-8	9'-8"	33
78	21'-6"	12'-6	10'-6"	38
84	23'-0	13'-4	11'-4"	44
90	24'-6"	14'-2	12'-2"	50
96	26'-3"	15'-0"	13'-0"	57
102	27'-9"	15'-9	13'-9"	64
108	29'-3"	16'-7"	14'-7"	72

~ NOTES ~

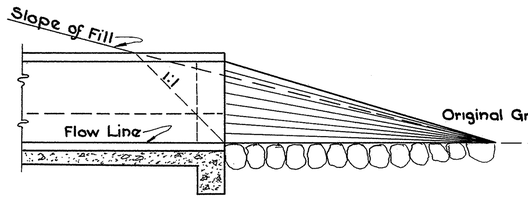
Riprap shall be 12" type "B" grouted or concrete in bags in accordance with Spec. Item I-10.04 or I-10.05

Where metal pipe is used, one foot of cradle and a cut-off wall shall be placed at inlet & outlet ends. End section of such pipe culverts shall be not less than 10 long for pipes of 15" to 48" diameters inclusive, and not less than two diameters long for pipes over 48" in dia. For culverts other than metal, cradle lengths shall be not less two pipe diameters. All portions of riprap requiring earth support shall be backed with earth in accordance with Spec. Item I-10.04

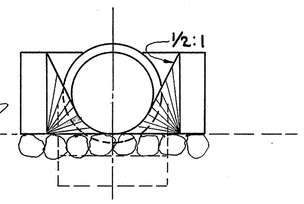
TYPE 2



PLAN VIEW



SECTION A-A

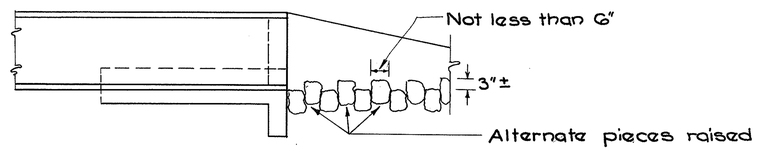


END VIEW

Pipe Diam. Inches	A	C	D	Riprap One End S.Y.
15	4'-3"	4'-0"	2'-0"	2.0
18	5'-0"	4'-6"	2'-6"	2.5
21	6'-0"	4'-10"	2'-10"	3.5
24	6'-9"	5'-3"	3'-3"	4.0
27	7'-6"	5'-8"	3'-8"	5
30	8'-6"	6'-0"	4'-0"	7
33	9'-3	6'-6	4'-6"	8
36	10'-0"	6'-10	4'-10	9
39	10'-9"	7'-3"	5'-3"	10
42	11'-9"	7'-8"	5'-8"	12
48	13'-3"	8'-6"	6'-6"	15

Pipe Diam. Inches	A	C	D	Riprap One End S.Y.
54	15'-0"	9'-3"	7'-3"	19
60	16'-6"	10'-1"	8'-1"	23
66	18'-3"	10'-11"	8'-11"	28
72	19'-9"	11'-8	9'-8"	33
78	21'-6"	12'-6	10'-6"	38
84	23'-0	13'-4	11'-4"	44
90	24'-6"	14'-2	12'-2"	50
96	26'-3"	15'-0"	13'-0"	57
102	27'-9"	15'-9	13'-9"	64
108	29'-3"	16'-7"	14'-7"	72

ROUGHENED RIPRAP



~ NOTE ~ This detail shall be used where roughened 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 "B" Rip Rap.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

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TRUMBULL COUNTY
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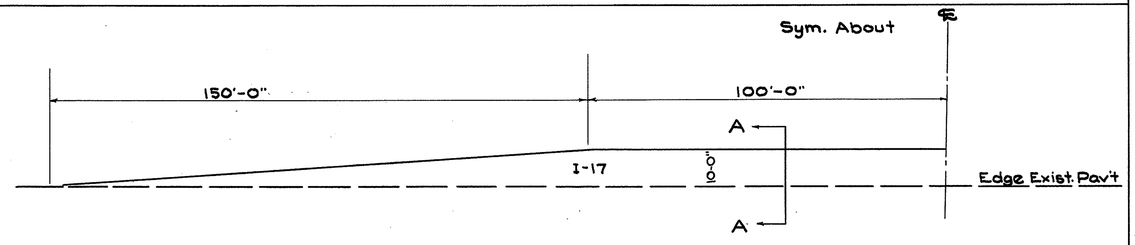
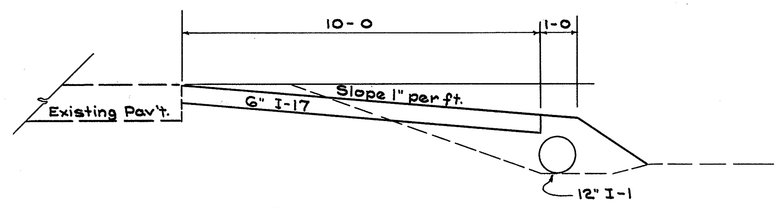




SECTION A-A

LOCATIONS EMERGENCY TURNOUTS					
STATION			I-17		I-1 Lin. ft.
FROM	TO	SIDE	S.Y.		12"
359+50	364+50	L	385		400
394+50	399+50	L	385		350
424+50	429+50	L	389		375
Total			1167		1125

4 4

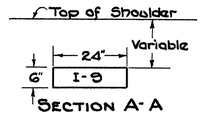
DETAIL EMERGENCY TURNOUTS

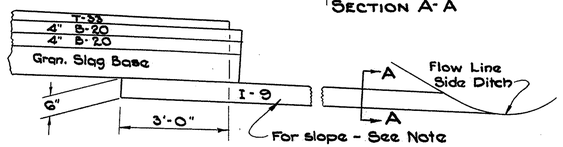
I-9 NO. 1 STONE UNDERDRAINS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

7
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

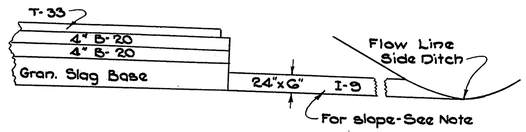




Use this type where possible

Scale ½" = 1'

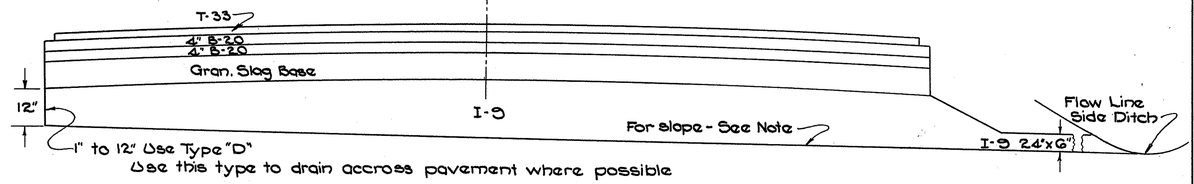
TYPE - A



Use this type where type "A" can not be used.

Scale ½" = 1'

TYPE - B



1" to 12" Use Type "D"
Use this type to drain across pavement where possible

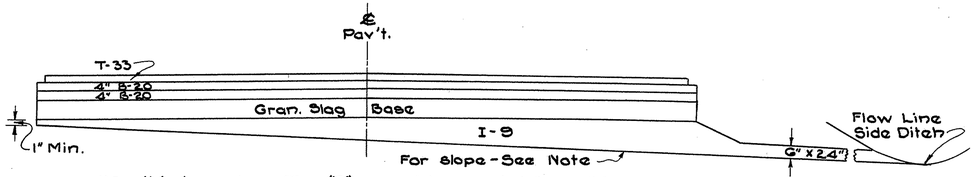
Scale ½" = 1'

TYPE - C

NOTE :- I-9 Flow Line Grade

Desired Grade	1" per. foot
Desired Min. Slope	½" " "
Absolute Min. Slope	¼" " "

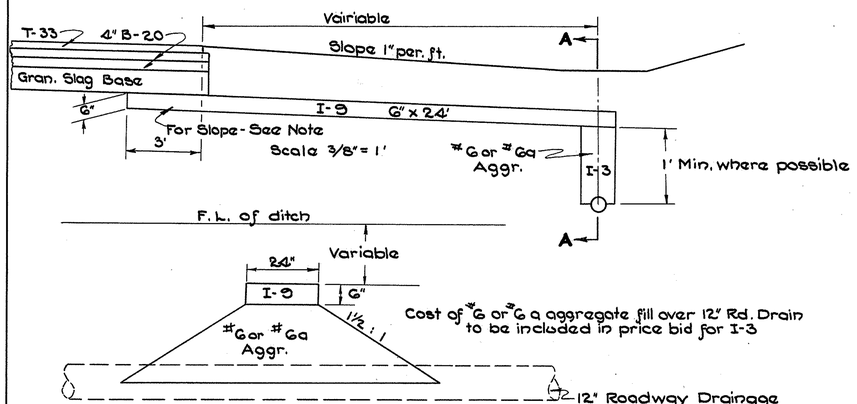
Grade to be directed by the Engineer.



Use this type where Type "C" can not be used. Where this type of I-9 is used, the drain shall be constructed after fine grading of subgrade is completed.

Scale 3/8" = 1'

TYPE - D



Cost of #6 or #6a aggregate fill over 12' Rd. Drain to be included in price bid for I-3

Scale ½" = 1'

TYPE - E

* From Sheets #4 & #8

NOTES

I-9 No. 1 Stone Underdrains of the types detailed shall be placed at low points and at 50' intervals at the locations indicated in the following table & at driveways and approaches, all as directed by the Engineer.

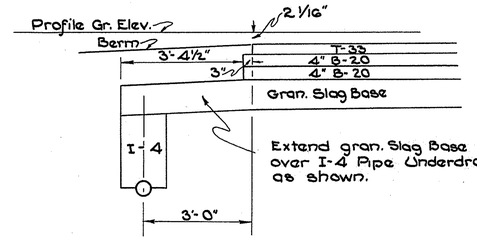
LOCATION OF TYPES OF I-9 STONE UNDERDRAINS

STATION FROM	STATION TO	LEFT LANE LEFT EDGE TYPE A	B	C	D	E	LEFT LANE RIGHT EDGE TYPE A	B	C	D	E	RIGHT LANE LEFT EDGE TYPE A	B	C	D	E	RIGHT LANE RIGHT EDGE TYPE A	B	C	D	E
181+00	183+50												X					X			
183+50	185+00																		X		
185+00	194+00																	X			
194+00	210+00												X					X			
210+00	213+00												X				X				
213+00	221+00												X					X			
221+00	225+00												X				X				
225+00	232+50												X					X			
232+50	235+00																		X		
235+00	239+00																	X			
239+00	241+00												X					X			
241+00	248+00																	X			
248+00	258+50												X					X			
258+50	259+50												X				X				
259+50	262+00																		X		
262+00	264+00																			X	
264+00	268+00												X					X			
268+00	274+00																	X			
274+00	276+00												X					X			
276+00	279+00																	X			
279+00	298+00												X					X			
298+00	306+50																	X			
306+50	308+00												X					X			
308+00	325+00																		X		
325+00	326+00												X					X			
328+00	333+00																	X			
346+00	348+00												X					X			
348+00	351+00												X				X				
351+00	368+00																	X			
374+00	377+50												X								
377+00	383+50			X																	
383+50	388+50	X						X													
377+50	382+50																	X			
382+50	389+00												X					X			
389+00	391+00																	X			
391+00	392+50												X					X			
392+50	394+50																	X			
394+50	402+50												X					X			
402+50	405+00												X					X			
409+50	414+00												X					X			
414+00	421+00																	X			
421+00	433+50												X					X			
433+50	441+00																	X			
441+00	445+00												X					X			
445+00	448+00															X		X			
448+00	451+00															X					X
451+00	453+00															X	X				

ESTIMATED QUANTITIES L.F.

	TYPE A	B	C	D	E
ROADWAY	404	7845	7160	1920	132
DRIVEWAYS	648*				
APPROACHES	972				
TOTALS	2024	7845	7160	1920	132

I-4 PIPE UNDERDRAIN



Detail for drainage of granulated slag base where 6" pipe underdrain is used

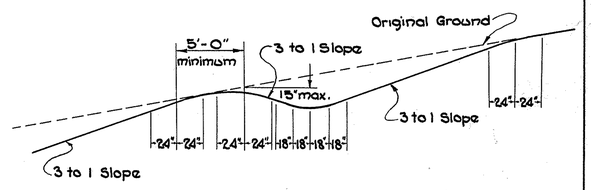
TYPICAL SECTION

Scale ½" = 1'

ESTIMATED QUANTITIES OF EXTRA GRANULATED SLAG BASE

8" Depth	=	2927 S.Y.
18" Depth	=	75 S.Y.

INTERCEPTING DITCHES



Additional intercepting ditches as detailed above shall be constructed at locations as directed by the Engineer. The yardage measured shall be paid for at the unit price bid per. cubic yard for E-1 Roadway Excavation Unclassified.

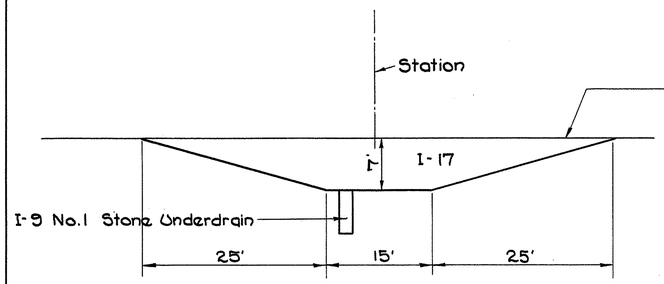
DETAILS

DRIVE AND MAIL BOX APPROACHES

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

8
76

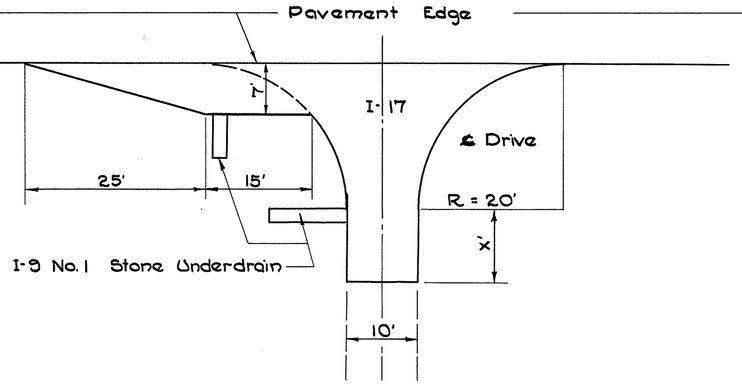
TRUMBULL COUNTY
TRU-422(0.00-2.06)



MAIL BOX APPROACH

Station	Side	I-9 Lin. Ft.	
360+40	R	12	
368+54	R	12	
Total		24	

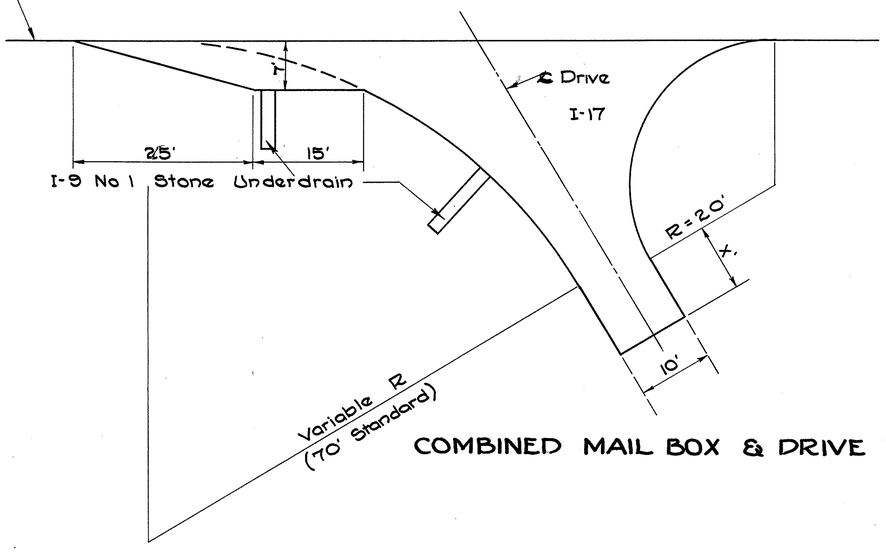
Total to Sheet #7



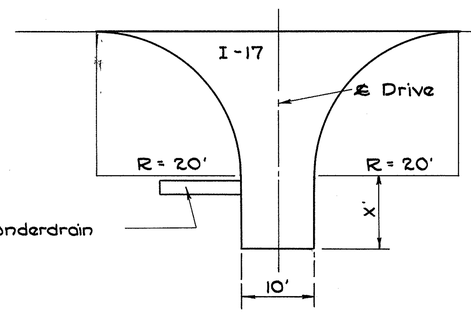
COMBINED MAIL BOX & DRIVE APPROACH

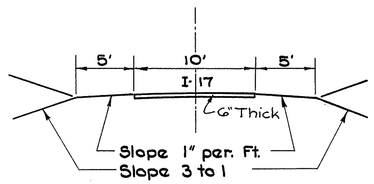
Station	Side	X Length in Feet	I-9 Lin.Ft.		Station	Side	X Length in Feet	I-9 Lin. Ft.	
347+09	R	30	24		443+53	R	18	24	
349+42	R	35	24		448+91	R	10	24	
351+20	R	35	24		450+36	R	10	24	
384+00	R	20	24		407+15	R	40	24	
413+00	R	140	24						
418+65	R	35	24						
424+91	R	43	24		Totals			264	

Total to Sheet #7



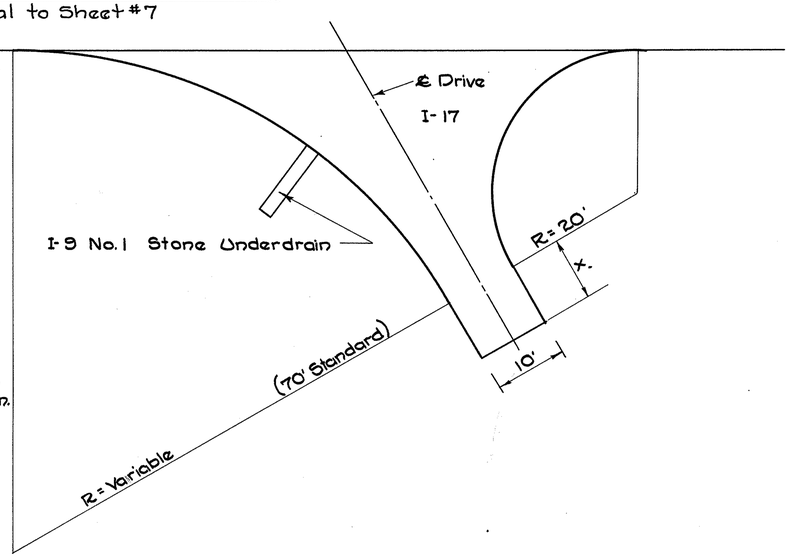
COMBINED MAIL BOX & DRIVE





TYPICAL SECTION FOR DRIVES

Driveways & Mail Box Approaches shall be combined where feasable.
Driveways shall be constructed as shown above unless detailed otherwise in the plan.
Underdrains shall be constructed from the low point of driveways and mail box approaches to the ditch as directed by the Engineer.



Station	Side	X Length in Feet	I-9 Lin. Ft.		
356+04	R	43	12		
365+91	R	18	12		
385+20	L	105	12		
392+39	L	22	12		
453+10	R	10	12		
Totals			60		Total to Sheet #7

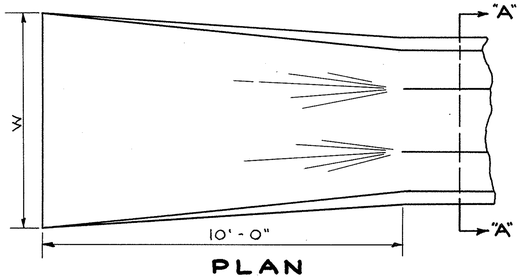
TYPICAL DRIVE & MAIL BOX APPROACHES

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

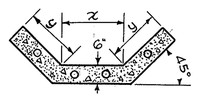
9
76

TRUMBULL COUNTY
TRU-422(0.00-2.06)

PAVED GUTTER DETAILS

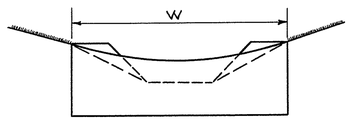


PLAN

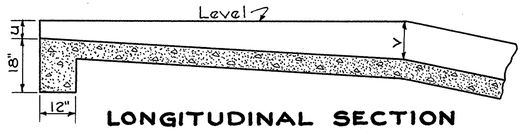


SECTION "A-A"

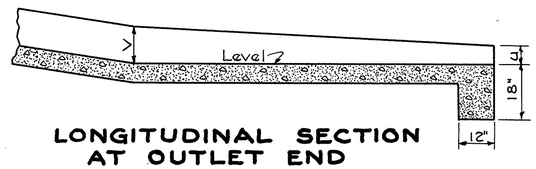
4-½"ϕ bars 3'-6" @ each joint. Cost to be included in price bid per Lin. Ft of Paved Gutter.



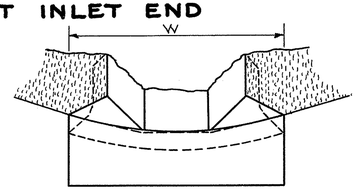
END VIEW AT INLET END



LONGITUDINAL SECTION AT INLET END



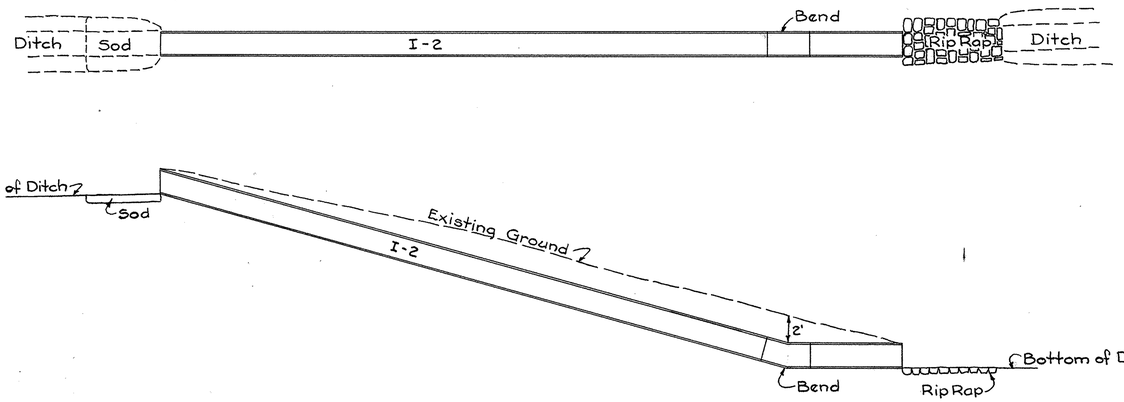
LONGITUDINAL SECTION AT OUTLET END



END VIEW AT OUTLET END

DIMENSIONS							
Station		Side	x	y	V	U	W
From	To						
416+95	418+44	R	2'-0"	1'-6"	1'-0¾"	0'-8"	6'-0"

DETAIL OF OUTLET PIPE IN DITCH ELIMINATION AREAS



DETAILS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

10/76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

RECAPITULATION

ROADWAY

SHEET NO.		E-8 PAV'T. REMOVAL	E-12 REM. & STORE 15"Ø UNDER	E-12 REM. & STORE 15"Ø OVER	SPEC. GRAN. SLAG GRADE B BASE COURSE DEPTH INCHES 5"	8"	18"	B-20 4" W.B. MAC. BASE	B-20 8" W.B. MAC. BASE	T-33 ASPH. CONC.	B-35 ASPH. CONC.	T-35 ASP. CONC SURFACE TYPE A	T-30 BIT. PRIME COAT	I-1 PIPE FOR DRIVES L.F. 12"	15"	18"	I-2 OUTLET PIPE 15"	21"	I-3 ROADWAY DRAINAGE PLAIN 12"	15"	18"	UNDER APPR. 12"	POROUS BACKFILL FULL DEPTH 12"	15"	18"	I-4 PIPE UNDERDRAIN & L.F. PLAIN	OUTLET	I-5 PIPE SPECIALS FOR I-2 15"×12½° BEND EA.	21"×12½° BEND EA.	FOR I-3 12" 30° BEND EA.	15" 30° BEND EA.	FOR I-4 6" WYES EA.	6" 45° BEND EA.			SHEET NO.
		S.Y.	L.F.	L.F.				S.Y.	S.Y.	S.Y.	C.Y.	C.Y.	S.Y.																							
4														400	350	150																				4
6														1125																						6
7						2927	75																													7
13		1252			647			647		639			647												1068										13
15					624				624	622			624																						15
16		8			244				244	244			240																						16
17		244			760				760	750			760																						17
19																									1520	20							2	2	19
20		828	403		1215				1215	1118			1215	24								24		221	1641	10							1	2	20
21			16											36	40																1				21
22			20											24											2288								1	1	22
23			81		1845				1845	1832			1845	24	44		53			100	125				307	10	1				1			1	23
24																42		42			12							1							24
25			16											24						8					1140	10	1						1	2	25
26			30	15										26		44				12	12								1						26
27			20												24																				27
28			54												24					30			24	200											28
29		608	156																				96	889											29
SUB-TOTAL		2940	796	15	5335		2927	75	647	4688	5205			5331	1683	482	236	53		42	170	169		144	1310		7964	50	2	1	2		1	5	8	
FROM STRUCTURES				48		43.3			59.3		2.14	2.14	38																						
TO CALCULATIONS					5335	2970.3	75		4747.3	5205			5369																						
TO SUMMARY		2940	796	63				647			2.14	2.14		1683	482	236	53		42	170	169		144	1310		7964	50	2	1	2		1	5	8	

A9473

ROADWAY (CONT.)

SHEET NO.	I-8 NO. 7 C.B. EA.	I-8 NO. 1-2A C.B EA.	I-9 NO. 1 STONE UNDERDRAIN TYPE A L.F.	B L.F.	C L.F.	D L.F.	E L.F.	I-14 PAVED GUTTER L.F.	I-15 GUARD RAIL FLEX. ST PLATE L.F.	REMOVE & STORE L.F.	I-16 C.B ABANDON EA.	I-17 6" COMP. S.Y.	L-10 SODDING DITCHES S.Y.	I-10 RIP RAP TYPE B PLAIN S.Y.	ROUGH S.Y.	I-21 TRAFFIC ISLAND PAV'T. CONC. S.Y.	
4												2000					
5												1677					
6												1167					
7			2024	7845	7160	1920	132										
13																	
15																	
16																	
17																	
19																	
20											3	191				117	
21									964			219	48				
22									1196			92	94				
23	1	2							992	239		240	971		8		
24									460	160		66	318		2.5		
25									496			104					
26								149	1076			313	687				
27									475			107	526				
28	2								197			79	768				
29												192	78				
SUB-TOTAL	3	2	2024	7845	7160	1920	132	149	5856	399	3	6447	3490		10.5	117	
FROM STRUCTURES		1										6447		61			
TO CALCULATIONS																	
TO SUMMARY	3	3	2024	7845	7160	1920	132	149	5856	399	3		3490	61	10.5	117	

~ EARTHWORK & SEEDING ~

SHEET NO.	STATION FROM	STATION TO	EXCAVATION CU.YDS.	EMBANKMENT CU.YDS.	EMB. + 26% CU.YDS.	SEEDING S.Y.
13	175+65.96	194+00	1515	1162	1464	5298
14	194+00	219+00	1398	1583	1995	7222
15	219+00	243+00	1342	1520	1915	6933
16	243+00	267+00	1342	1520	1915	6933
17	261+00	291+00	1342	1520	1915	6933
18	291+00	315+00	1342	1520	1915	6933
19	315+00	339+00	1342	1520	1915	6933
20	339+00	345+00	601	606	764	3052
20	345+00	351+00	921	1324	1668	5344
21	351+00	363+00	1223	9844	12404	12886
22	363+00	375+00	17759	410	517	12313
23	375+00	387+00	12925	25295	31872	19304
24	387+00	399+00	12802	11023	13889	16320
25	399+00	411+00	12332	1239	1561	11905
26	411+00	423+00	9291	21693	27333	14139
27	423+00	435+00	19719	2086	2628	13271
28	435+00	447+00	3540	7023	8849	12084
29	447+00	453+55.58	1238	223	281	3923
4			500			
SUB-TOTALS			102474	91111	114800	171726
DEDUCT I-10						- 3490
TO GENERAL SUMMARY			102474			168236

Embankment + 26% 114800 C.Y.
Excavation 102474 C.Y.
Borrow 12326 C.Y.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

11 76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

RECAPITULATION (con't.)

STRUCTURES 20' SPAN AND UNDER

Struct. No.	Detailed on Sheet No.	Type and Size	Station	Spec. Gran. Slag S.Y. Depth inches 8"	B-20 S.Y. 8" 2-Courses W.B. Macadam	T-30 S.Y. Bit Prime Coat	B-35 C.Y. Asph. Conc. Type "A"	T-35 C.Y. Asph. Conc. Type "A"	S-1 (C.Y.) Conc. for Structures Class "C"	S-1 (C.Y.) Conc. for Structures Class "E"	S-2 Patching S.F.	S-4 Reinf. Steel Lbs.	S-22 Rem. Portion Struct. C.Y.	S-23 Dowel Holes Each	S-24 Rem. Exist. Struct. Lump	S-27 L.F. Pipe for Roadway Culverts 12"	15"	18"	36"	S-27 L.F. Corr. Metal Arch with Integ. Base 18"x11"	I-10 S.Y. Rip Rap 12" Type "B" Grouted Plain	Rough	I-8 No. 1-2A C.B. Each	I-5 Pipe Specials for S-27 Each Wyes 15"x36"	E-2 Exc. for Struct. C.Y.	E-3 Chann. Exc. C.Y.	E-12 L.F. Remove & Store Over 15"
C-1	62	Std. Pipe Culvert 36"x52'	261+55		16	16	.67	.67		3.32									52		9					52		48
C-2	63	Std. Pipe Culvert Ext. 12"x89'6"	348+19.25							1.08			.75			88							1			1	10	
C-3	20	C.M. Arch with Int. Base 18"x42'	349+75																42									
C-4	64,65	Std. Small Box Culv. Ext. 4'x4'x115'-8 3/4"	353+50.4						50.3			5675	2.2	16											42	10	
C-5	21	C.M. Arch with Int. Base 18"x52'	359+00																52									
C-6	23	C.M. Arch with Int. Base 18"x42'	376+00																42									
C-7	66,67,68	Std. Lge. Box Culvert 8'x6'x216'-7"	380+15						231.8			31135	46													237	10	
C-8	63	Std. Pipe Culvert 18"x84'	380+20.4							1.8								84								23		
C-9	23	C.M. Arch with Int. Base 18"x42'	385+20																42									
C-10	69	Std. Pipe Culvert 36"x159'	389+79.2	43.3	43.3	22	1.47	1.47		3.32					Lump				155		12		1			122	84	
C-11	24	C.M. Arch with Int. Base 18"x42'	392+39																42									
C-12	70,71	Std. Small Box Culv. Ext. 6'x3'x101'-6 1/4"	402+73.2						51.8			6980	3.9	16												70	66	
C-13	25	C.M. Arch with Int. Base 18"x46'	407+15																46									
C-14	72,73	Std. Lge. Box Culv. Ext. 7'x5'x137'-10 1/2"	417+34						122.2		30	22565	3.3	28												105	10	
C-15	26	C.M. Arch with Int. Base 18"x42'	421+00																42									
C-16	27	C.M. Arch with Int. Base 18"x42'	424+91																42									
C-17	74,75,76	Std. Small Box Culvert 5'x4'x119'-2"	437+00						57.4			7025									40					100	17	
C-18	28	C.M. Arch with Int. Base 18"x42'	443+50																42									
D-1	24	Exist. Pipe Culvert 18"x31.7'	394+42										1															
SUB-TOTAL				43.3	59.3	38	2.14	2.14	513.5	9.52	30	73390	57.15	60	Lump	88		84	207	392	61		1	1	752	207	48
TO ROADWAY				43.3	59.3	38	2.14	2.14													61		1					48
STRUCTURE SUMMARY									513.5	9.52	30	73390	57.15	60	Lump	88		84	207	392				1	752	207		

CALCULATIONS

SPECIAL GRANULATED SLAG (GRADE "B") BASE COURSE

RIGHT LANE
STA. 175+65.96 to STA. 453+55.58 = 27,789.62 Lin. Ft.

LEFT LANE
STA. 377+00 to STA. 388+50 = 1150.00 Lin. Ft.
28,939.62 Lin. Ft. (8" & 18" depth)
Total Lgth. 24.5' Width 100.00 Lin. Ft. (18" depth)
Total Lgth. 24.5' Width 28,839.62 Lin. Ft. (8" depth)

TRANSITION
STA. 375+50 to STA. 377+00 = 150 Lin. Ft.
STA. 388+50 to STA. 389+50 = 100 Lin. Ft.
Total Lgth. 21.5 Ave. Width 250 Lin. Ft. (8" depth)

(28,839.62 × 24.5) ÷ 9 = 78,507.85 S.Y.
(250.00 × 21.5) ÷ 9 = 597.22 S.Y.
Total 79,105.07 S.Y. (8" depth)
(100.00 × 24.5) ÷ 9 = 272.22 S.Y.
Total 272.22 S.Y. (18" depth)

TOTALS

	DEPTH 5"	8"	18"
Calculations		79,105.07	272.22
From Sheet #10	5335	2,970.30	75.00
Total Sq. Yds.	5335	82,075.37	
To General Summary	5335	82,075	347

8" WATERBOUND MACADAM BASE COURSE

From Granulated Slag Calculation 79,105.07 S.Y.
272.22 S.Y.
79,377.29 S.Y.
From Sheet No. 10 4,747.30 S.Y.
Total 84,124.59 S.Y.
To General Summary = 84,125 S.Y.

T-33 BITUMINOUS MACADAM SURFACE COURSE

From Gran. Slag Calculation 28,939.62 L.F. @ 24' Width
From Gran. Slag Calculation 250.00 L.F. @ 21' Width
28,939.62 × 24 ÷ 9 = 77,172.32 S.Y.
250.00 × 21 ÷ 9 = 583.33 S.Y.
From Sheet No. 10 = 5,205.00 S.Y.
Total 82,960.65 S.Y.
To General Summary = 82,961 S.Y.

T-30 BITUMINOUS PRIME COAT

From Gran. Slag Calculation 84,124.59 S.Y. 8" W.B. Mac.
From Sheet No. 10 647.00 S.Y. 4" W.B. Mac.
Total Area W.B. Mac. 84,771.59 S.Y.
84,771.59 S.Y. T-30 @ 0.35 Gal. per sq. yd = 29,670 Gals.
To General Summary = 29,670 Gals.

I-17 APPROACHES AND BERM MATERIAL

647 S.Y. @ 6" compacted depth = 1074.5 C.Y.
1074.5 + 40% for compaction (gran. slag est.) = 1504.3 C.Y.
To General Summary = 1504 C.Y.

L-9 COMMERCIAL FERTILIZER (10-6-4) & AGRICULTURAL LIMESTONE

L-9, Seeding from Sheet No. 10 = 171,726 S.Y. × 9 = 1,545,534 S.F.

Fertilizer @ 20 lbs. per 1000 S.F.
1,545,534 S.F. × 20 / 1000 × 2000 = 15.45 Tons
To General Summary = 15.45 Tons

Limestone @ 100 lbs. per 100 S.F.
1,545,534 S.F. × 100 / 1,000 × 2,000 = 77.25 Tons
To General Summary = 77.25 Tons

E-11 WATER

Embankment = 91,111 C.Y.
Compaction in Subgrade = 16,002 C.Y.
107,113 C.Y.
107,113 × 5 gal. per cu. yd = 535,565 Gals.
To General Summary = 536 M. Gals.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

12/76

TRUMBULL COUNTY
TRU-422(0.00-2.06)

GENERAL SUMMARY

ITEM No		QUANTITY CODE No. 5251	UNIT	DESCRIPTION
				ROADWAY
E-1		102474	C.Y.	ROADWAY EXCAVATION
E-4		12326	C.Y.	BORROW
E-8		2940	S.Y	REMOVAL AND DISPOSAL OF EXISTING PAVEMENT
E-12		796	L.F.	PIPE REMOVED AND STORED, 15" AND UNDER
E-12		63	L.F.	PIPE REMOVED AND STORED, OVER 15"
E-11		536	MGAL	WATER
I-1		1683	L.F.	12" PIPE FOR DRIVEWAYS
I-1		482	L.F.	15" PIPE FOR DRIVEWAYS
I-1		236	L.F.	18" PIPE FOR DRIVEWAYS
I-2		53	L.F.	15" PIPE FOR STORM SEWER OUTLETS
I-2		42	L.F.	21" PIPE FOR STORM SEWER OUTLETS
I-3		170	L.F	12" PIPE FOR ROADWAY DRAINAGE
I-3		169	L.F.	15" PIPE FOR ROADWAY DRAINAGE
I-3		144	L.F.	12" PIPE FOR ROADWAY DRAINAGE UNDER APPROACHES
I-3		1310	L.F.	12" PIPE FOR ROADWAY DRAINAGE WITH POROUS BACKFILL
I-4		7964	L.F.	6" PIPE UNDERDRAINS
I-4		50	L.F.	6" PIPE FOR UNDERDRAIN OUTLETS
I-5		2	EA.	15" PIPE SPECIAL FOR STORM SEWERS
I-5		1	EA.	21" PIPE SPECIAL FOR STORM SEWERS
I-5		2	EA.	12" PIPE SPECIALS FOR ROADWAY DRAINAGE
I-5		13	EA.	6" PIPE SPECIALS FOR UNDERDRAINS
I-5		1	EA.	15" PIPE SPECIAL FOR ROADWAY DRAINAGE
I-8		3	EA.	STANDARD NO.7 CATCH BASINS
I-8		3	EA.	STANDARD NO 1-2A CATCH BASINS
I-10		71.5	S.Y.	12" GROUT FILLED TYPE "B" RIP RAP
I-14		149	L.F.	PAVED GUTTER, AS PER PLAN
I-15		399	L.F.	GUARD RAIL REMOVED AND STORED
I-16		3	EA.	INLETS ABANDONED
I-17		1504	C.Y.	SIDE APPROACHES, MAIL BOX TURNOUTS AND BERM MATERIAL
L-9		168236	S.Y.	SEEDING AND PROTECTING, TYPE "A"
L-9		15.45	TONS	COMMERCIAL FERTILIZER (10-6-4)
L-10		3490	S.Y.	SODDING
L-9		77.25	TONS	AGRICULTURAL GROUND LIMESTONE
I-9		2024	L.F.	STONE UNDERDRAIN, TYPE "A", AS PER PLAN
I-9		7845	L.F.	STONE UNDERDRAIN, TYPE "B", AS PER PLAN
I-9		7160	L.F.	STONE UNDERDRAIN, TYPE "C", AS PER PLAN
I-9		1920	L.F.	STONE UNDERDRAIN, TYPE "D", AS PER PLAN
I-9		132	L.F.	STONE UNDERDRAIN, TYPE "E", AS PER PLAN
I-15		5856	L.F.	GUARD RAIL, FLEXIBLE STEEL PLATE TENSION TYPE, STANDARD STRENGTH OR STEEL BEAM TYPE (SHALLOW)

ITEM No.		QUANTITY CODE No. 5251	UNIT	DESCRIPTION
				STRUCTURES 20' SPAN AND UNDER
E-2		752	C.Y.	EXCAVATION FOR STRUCTURES
E-3		207	C.Y.	CHANNEL EXCAVATION
S-1		513.5	C.Y.	CLASS "C" CONCRETE FOR STRUCTURES
S-1		9.5	C.Y.	CLASS "E" CONCRETE FOR STRUCTURES
S-2		30	S.F.	PATCHING CONCRETE STRUCTURES
S-4		73390	LBS	REINFORCING STEEL
S-22		57	C.Y.	REMOVAL OF PORTIONS OF EXISTING STRUCTURES
S-23		60	EA.	DOWEL HOLES
S-24		Lump	LUMP	REMOVAL OF EXISTING STRUCTURES
S-27		88	L.F.	12" PIPE FOR ROADWAY CULVERTS
S-27		84	L.F.	18" PIPE FOR ROADWAY CULVERTS
S-27		207	L.F.	36" PIPE FOR ROADWAY CULVERTS
S-27		392	L.F.	CORRUGATED METAL ARCH WITH INTEGRAL BASE, 18" SPAN x 11" RISE (SS-142)
				SECTION M-6.4(a) FOR ROADWAY CULVERT
I-5		1	EA.	36" PIPE SPECIAL FOR ROADWAY COLVERTS
				PAVEMENT
SPECIAL		5335	S.Y.	5" GRANULATED SLAG (GRADE "B") BASE COURSE SS M-103.12
SPECIAL		82075	S.Y.	8" GRANULATED SLAG (GRADE "B") BASE COURSE SS M-103.12
SPECIAL		347	S.Y.	18" GRANULATED SLAG (GRADE "B") BASE COURSE SS M-103.12
B-20		647	S.Y.	4" WATERBOUND MACADAM BASE COURSE
B-20		84,125	S.Y.	8" WATERBOUND MACADAM BASE COURSE (2 4" COURSES)
T-30		29,670	GALS.	BITUMINOUS PRIME COAT, SEC. M-5.7, RT-2 or 3,
T-33		82961	S.Y.	3" BITUMINOUS MACADAM SURFACE COURSE, TYPE "A"
B-35		2.1	C.Y.	ASPHALTIC CONCRETE LEVELING COURSE (70-80 OR 85-100)
T-35		2.1	C.Y.	ASPHALTIC CONCRETE SURFACE COURSE, TYPE "A" (70-80 or 85-100)
I-21		117	S.Y.	9" PORTLAND CEMENT CONCRETE TRAFFIC ISLAND PAVEMENT.

SHEET NO.	STATE	PROJECT	TYPE FUNDS	13 / 76
2	OHIO	F-41(5)	POST WAR	

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

℄ 169+70.22
℄ 169+53.95
Rr.

10"Apple
31.18°
℄ Survey P.C.C. STA. 175+65.96
4.52
28.13°
8" Apple
10" Apple

S 48°-42' W
35.48

HOWARD E. SIMPSON

P.T. 175+65.96 & P.C.C. (Temporary)

178+39.13

179+97.86

Lot 49

LENA D. FOWLER

LEO & RUTH ROBINSON

Sta. 182+60.04
+28.25
C.H. 123
+21.83

Lot 47

T'kd. Hub
℄ Survey P.O.T. STA. 180+00
Ang. 15
33.05'
T'kd. Hub
T'kd. Hub

IDA PINTER

N 84°-44' W. Rr.

LAUREL C, CLARE C, & HAROLD E. LEIBY

174'-24" R.C.P.

12" R.C.P.

N 66°-00 W

℄ of Survey

169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193

D2

D1

A1

A2

LEO & RUTH ROBINSON
N 85°-20 W

N 48°-54 E
39.13

LENA D FOWLER

RUSSELL & RUBY BONNELL

N 4°-54' E
+37.86 Rr.

C.H. 123

16" C.M.P.

N 48°-42' E.
16" CINDER
Rr.

+70.92 Rr.

EQUATION STATION
Sta. 175+65.96 of F-41 (4) =
Sta 175+65.96 of F-41 (5)

CURVE DATA
P.I. Sta. 159+72.68
Δ = 12°-48' Lt
D = 0° 24'
T = 1606.72
L = 3200.00
E = 89.81
R = 14323.95

F-41 (5)

Note:- Marker to be furnished and erected on right at sta. 175+65.96 by State Forces before acceptance of this project.

BEGIN PROJECT ℄
BEGIN F-41 (5)
STA. 175+65.96
TRU-422-5.26

HOWARD E. SIMPSON

Lot 47

LAUREL C, CLARE C, & HAROLD E. LEIBY

℄ Survey

10' 24'-0" 12' 8' 8' 12' 24'-0" 10'
1'-8" 1'-8"
T-33 Surface

TYPICAL SECTION
ADJOINING PAVEMENT
STA. 175+65.96
Scale 1" = 20'

B.M. Nº 21A Spk. 10" Apple
125' Right Sta. 175+00
Elev. 946.76

SCALES
PLAN - 1" = 100'
PROFILE HOR. - 1" = 100'
VERT. - 1" = 10'

Lot 49

B.M. Nº 23 X On S.E. Cor. 1st Step of Church Rt. of Sta. 183+15
Elev. 942.42

B.M. No. 24 Spk. 12" Pin Oak
300' Lt. Sta. 190+00
Elev. 928.08

935.01 935.37 935.73 936.09 936.45 936.81 937.17 937.53 937.89 938.25 938.61 938.97 939.33 939.69 940.05 940.41 940.77 941.10 941.38 941.60 941.76 941.86 941.91 941.90 941.84 941.72 941.54 941.30 941.01 940.69 940.37 940.06 939.70 939.50 939.26 939.03 938.83 938.64 938.48 938.34 938.22 938.12 938.04 937.98 937.95 937.93 937.94 937.95 938.01 938.08 938.17

950
940
930

Meet Existing Pavement
+0.72%
-0.64%

Exist. Profile 10¾" Below Proposed Profile

Note: Connect I-4 to Existing 6" I-4

15' Lt & 15' Rt. 534' @ 0.40% 6" x 534' I-4

15' Lt. 935.87
15' Rt. 935.96

15' Lt. El. 933.73
15' Rt. El. 933.82
+66

600' V.C.
P.I. Sta. 180+00
Elev. 942.93

2000' V.C.
P.I. Sta. 194+00
Elev. 933.97

Excavation	1515	Cu. Yds.
Embankment	1162	Cu. Yds.
Seeding	5298	Sq. Yds.

169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194

LINE SHEET STA. 169+00 TO 194+00

DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-4 6"		
D-1	175+66	181+00	15' LT.	534		
D-2	175+66	181+00	15' RT.	534		
Totals				1068		

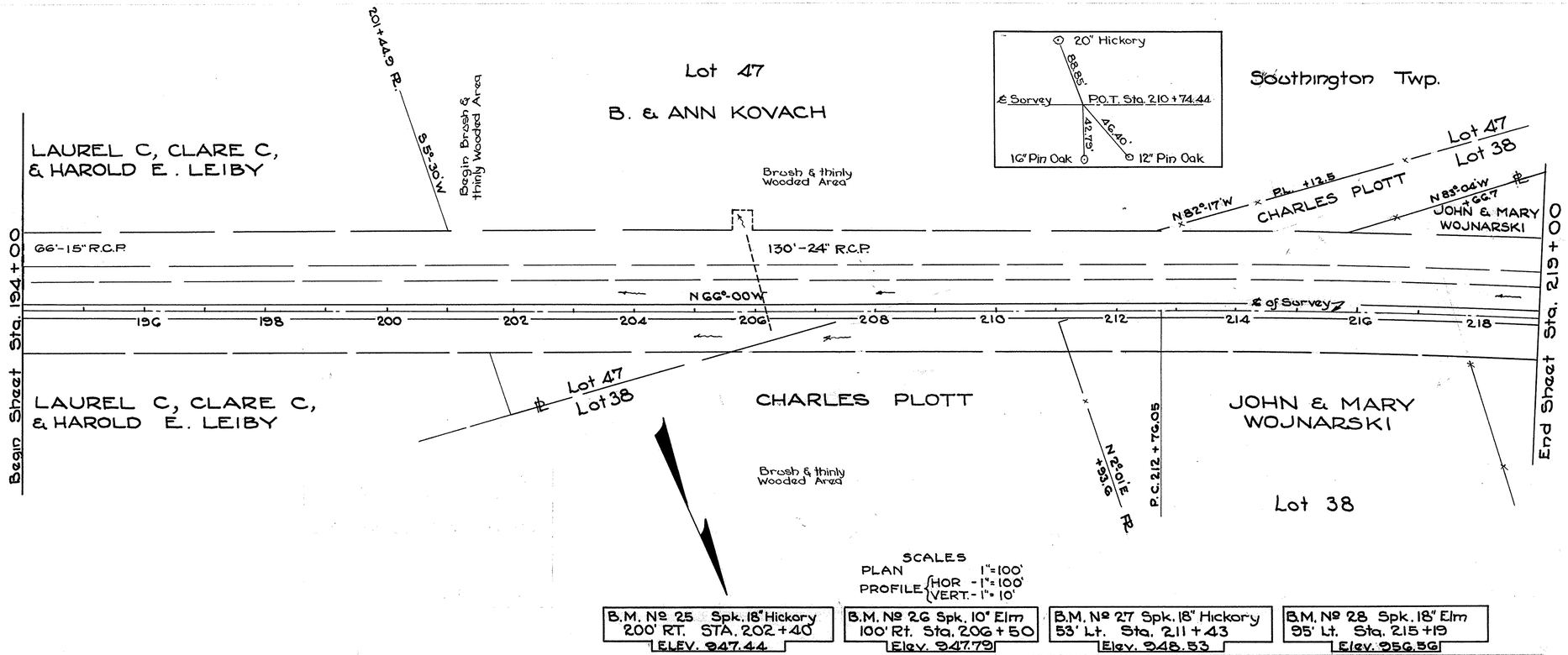
APPROACHES

MARK	STATION	SIDE	E-8 Rems & Disp. S.Y.	T-30 S.Y.	T-33 S.Y.	B-20 S.Y.	Spec. 5"GS S.Y.			Detail Sheet No.
A-1	175+65.96	Lt.	12.52							53
A-2	182+60.04	Both		647	639	647	647			54
Totals			1252	647	639	647	647			

FED. HWY. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

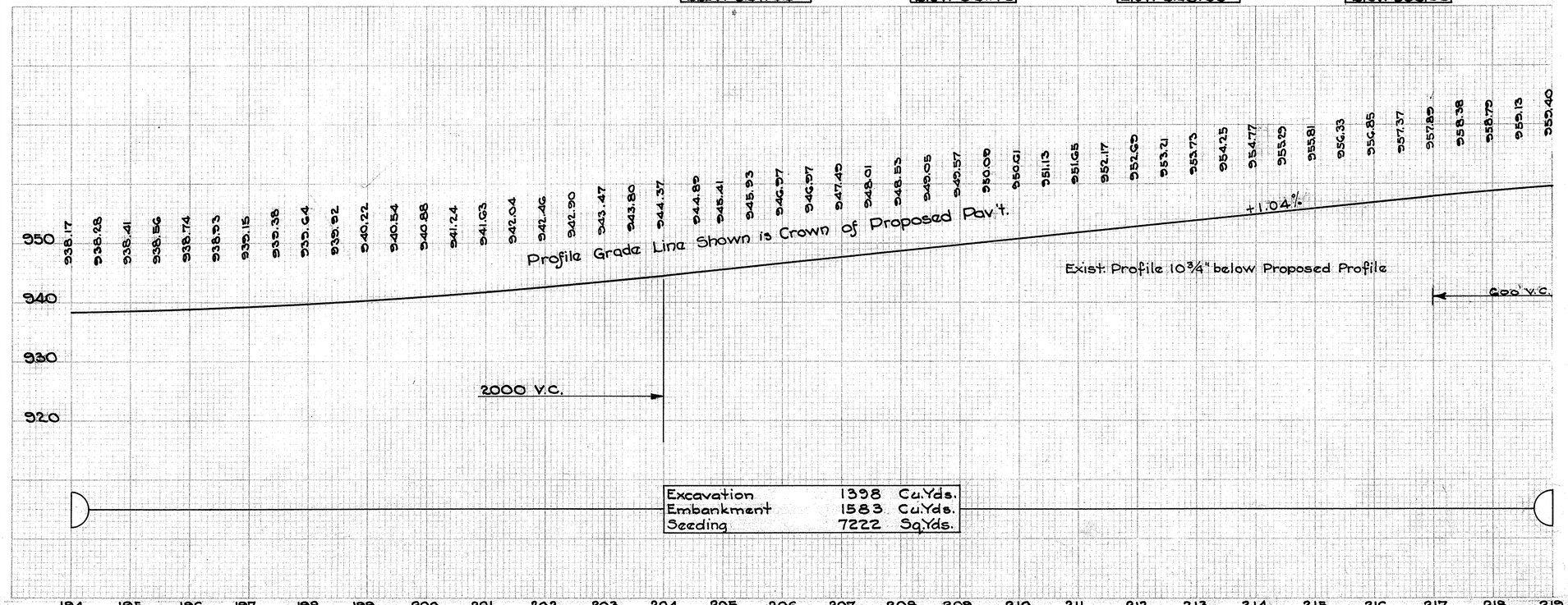
14
76

TRUMBULL COUNTY
TRU-422 (0.00-2.06)



SCALES
PLAN 1"=100'
PROFILE { HOR - 1"=100'
VERT. - 1"=10'

B.M. Nº 25 Spk. 18" Hickory	B.M. Nº 26 Spk. 10" Elm	B.M. Nº 27 Spk. 18" Hickory	B.M. Nº 28 Spk. 18" Elm
200' RT. STA. 202+40	100' Rt. Sta. 206+50	53' Lt. Sta. 211+43	95' Lt. Sta. 215+19
ELEV. 947.44	Elev. 947.79	Elev. 948.53	Elev. 956.56



Excavation	1398	Cu.Yds.
Embankment	1583	Cu.Yds.
Seeding	7222	Sq.Yds.

LINE SHEET STA. 194+00 TO 219+00

FED. HIGHWAY DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

15
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

Lot 38

HENRY I. & OTTO W. HURD

Tk'd Hob — 36.27 — Tk'd Hob
I. Pipe — 51.67
RI. STA. 242+42.83
Tk'd Hob

+27.66 R. Lot 36 Lot 38

N 66°-00' W — N 42°-35'-50" W

CARL L. & FRANCES KONOLD

Lot 47
Lot 38

C.H. 2

A-1

Thickly Wooded Area

150'-30" R.C.P.

126' 24" R.C.P

℄ of Survey

END SHEET STA. 243+00

BEGIN SHEET STA. 219+00

220 222 224 226 228 230 232 234 236 238 240 242

Thickly Wooded Area

Open field

N 0°-28' E
14' CINDER
R.
℄ 220+31.33

HENRY I. & OTTO W. HURD

HALLIE J. HARDMAN

CARL L. & FRANCES KONOLD

S 87° 36' E R.
℄ 239+08

N 5°-51' E R. 239+27.66

REF. - P.O.C. - STA. 220+31.33
℄ — ¾" IRON — SURVEY
150.00 ℄ CO.
1984 — 80°
10000 ROAD
19.03 — 50°

RI = 242+42.83
Δ = 23°-24'10" Rt.
D = 0°-24'
T = 5850.70'
L = 2966.78'
R = 14323.95
E = 303.95

SCALES
PLAN — 1" = 100'
PROFILE { HOR. - 1" = 100' / VERT. - 1" = 10'

B.M. Nº 29 Spk. 15" PIN OAK
250' LEFT STA. 222+75
ELEV. 958.78

Lot 38

B.M. Nº. 30 Spk. 18" PIN OAK
90' RIGHT STA. 227+90
ELEV. 958.18

B.M. No. 31 Spk. 18" Twin Hickory
140' Rt. Sta. 235+00
Elev. 945.40

B.M. Nº 32 Spk. 15" Elm
100' Rt. STA. 240+00
Elev. 943.22

960
950
940
930

959.40 959.55 959.72 959.77 959.76 959.67 959.51 959.28 958.97 958.63 958.25 957.85 957.61 957.27 956.93 956.55 956.25 955.91 955.57 955.23 954.89 954.55 954.21 953.87 953.53 953.19 952.85 952.51 952.17 951.83 951.49 951.15 950.81 950.47 950.13 949.79 949.45 949.11 948.77 948.43 948.09 947.75 947.41 947.07 946.73 946.39 946.05 945.71 945.37

Profile Grade Line Shown is Crown of Proposed Pav't. -0.68%

Existing Profile 10¾" below Proposed Profile

600' V.C.
P.I. Sta. 220+00
Elev. 961.01

Excavation	1342	Cu.Yds.
Embankment	1520	Cu.Yds.
Seeding	6933	Sq.Yds.

219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243

APPROACHES

MARK	STATION	SIDE	T-30 S.Y.	T-33 S.Y.	B-20 S.Y.	Spec. 5'G.S. S.Y.	Detail Sheet No.
A-1	220+31.33	Both	624	622	624	624	55
Totals			624	622	624	624	

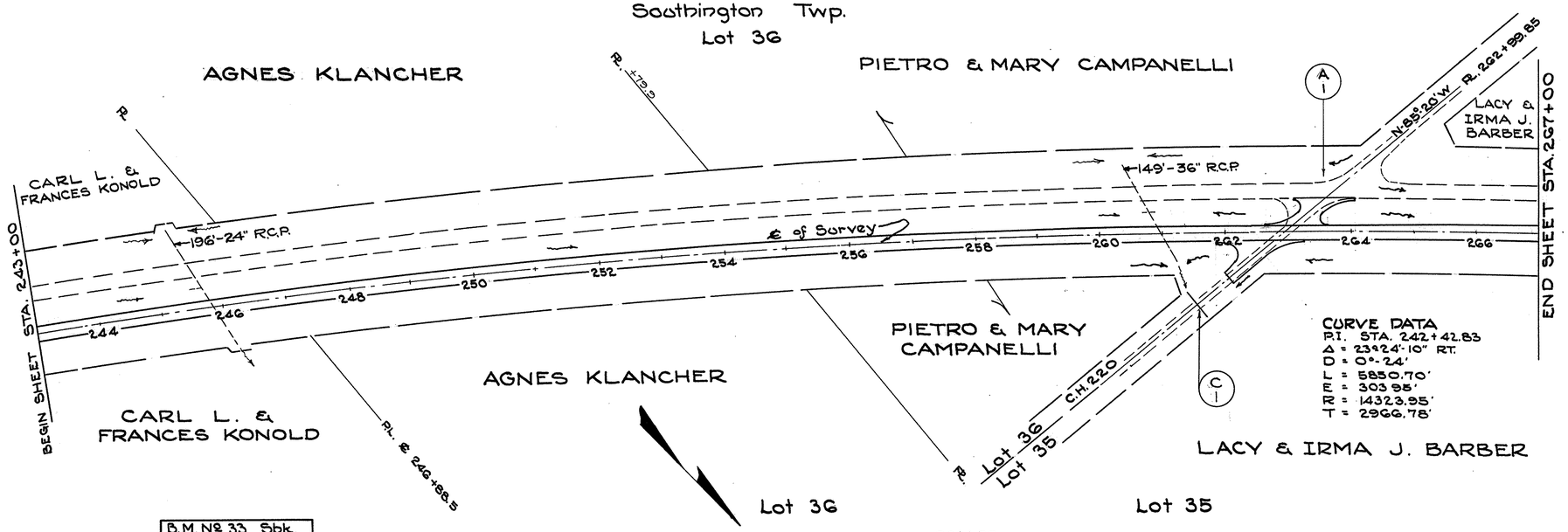
LINE SHEET STA. 219+00 TO 243+00

SECT. SHEET	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

16
76

TRUMBULL COUNTY
TRU-422(0.00-2.06)

Southington Twp.
Lot 36



CURVE DATA
P.I. STA. 262+42.83
Δ = 23°24'-10" RT.
D = 0°-24'
L = 5850.70'
E = 303.95'
R = 14323.95'
T = 2966.78'

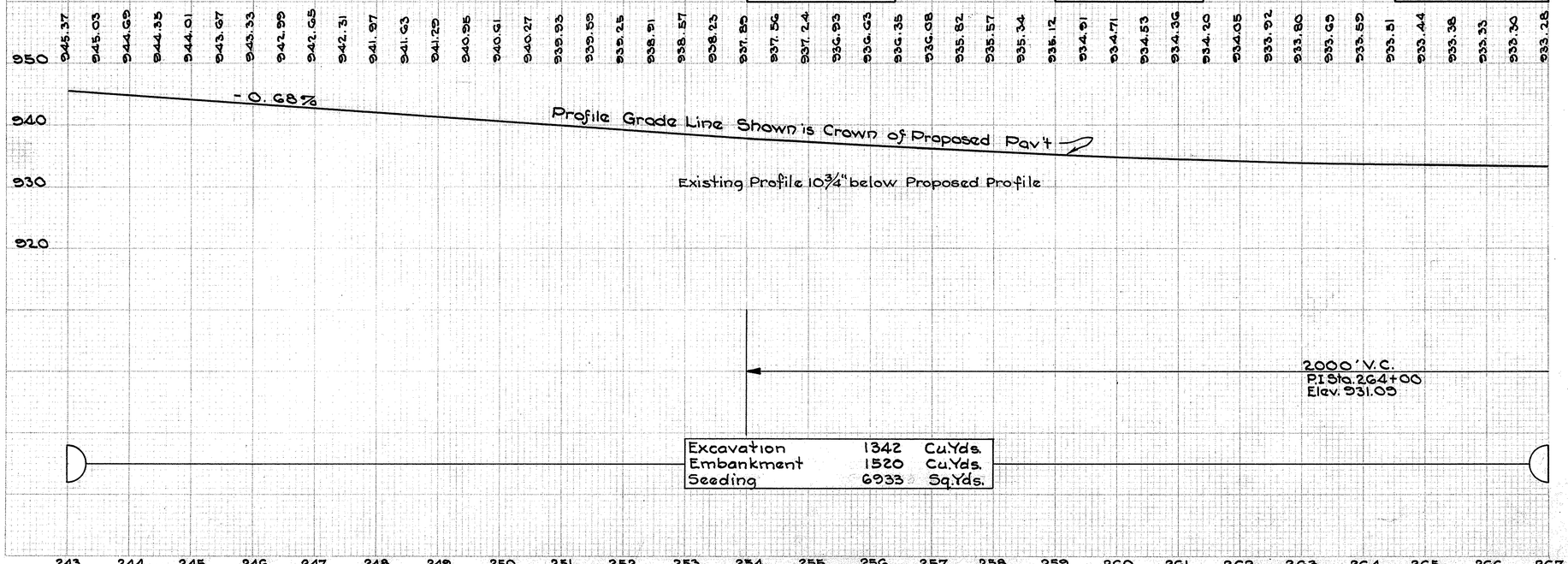
SCALES
PLAN - 1"=100'
PROFILE { HOR - 1"=100'
VERT - 1"=10'

B.M. Nº 33 Spk.
8" Cherry 150' Lt.
Sta. 245+90
Elev. 940.45

B.M. Nº 34 Spk.
20" Oak, 70' Rt.
Sta. 255+30
Elev. 939.82

B.M. No. 35 Spk.
18" Elm. 95' Rt.
Sta. 260+40
Elev. 930.65

B.M. Nº 36 Spk.
24" Hickory, 125' Rt
Sta. 266+50
Elev. 939.04



Excavation	1342	Cu.Yds.
Embankment	1520	Cu.Yds.
Seeding	6933	Sq.Yds.

STRUCTURES 20' SPAN & UNDER

MARK	STATION	SIDE	TYPE	SIZE	DETAIL SHEET NO.
C-1	261+55	R	Std. Pipe Culv.	36" x 52-0	62

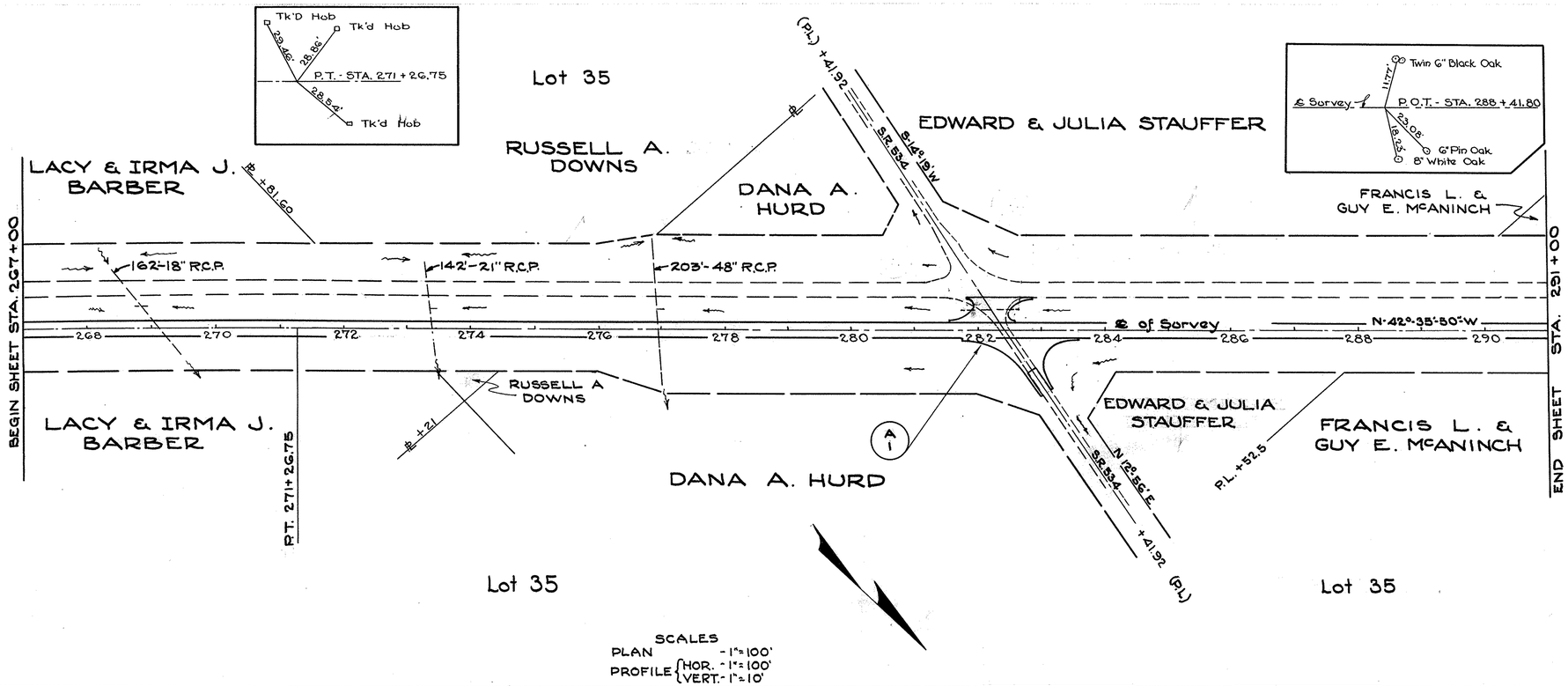
APPROACHES

MARK	STATION	SIDE	E-8 Rem. & Disp. S.Y.	T-30 S.Y.	T-33 S.Y.	D-20 S.Y.	Spec. 5" G.S. S.Y.	Detail Sheet No.
A-1	262+99.85	Both	8.0	240	244	244	244	56
Totals			8.0	240	244	244	244	

LINE SHEET STA. 243+00 To 267+00

			TYPE FUNDS	
2	OHIO	F-41(5)	POST WAR	17 / 76

TRUMBULL COUNTY
TRU-422-(0.00 To 2.06)



SCALES
PLAN - 1" = 100'
PROFILE { HOR. - 1" = 100'
VERT. - 1" = 10'

B.M. Nº 39 Spk.
Power Pole 22.5' Rt.
Sta. 283 + 40
Elev. 936.52

B.M. Nº 40 Spk.
8" Pin Oak 75 Rt.
Sta. 287 + 70
Elev. 946.68

950
940
930
920

933.28 933.27 933.27 933.29 933.32 933.36 933.41 933.48 933.56 933.65 933.75 933.87 934.00 934.14 934.29 934.45 934.61 934.77 934.93 935.09 935.25 935.41 935.57 935.73 935.89 936.05 936.21 936.37 936.53 936.69 936.85 937.01 937.17 937.33 937.49 937.65 937.81 937.97 938.13 938.20 938.35 938.38 938.37 938.30 938.19 938.02 937.81 937.54 937.23

+0.32%

Profile Grade Line Shown is Crown of Proposed Pav't

Existing Profile 10 3/4" below Proposed Profile

2000' V.C.

600' V.C.
P.I. Sta. 289+00
Elev. 939.09

Excavation	1342 Cu.Yds.
Embankment	1520 Cu.Yds.
Seeding	6933 Sq.Yds.

267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291

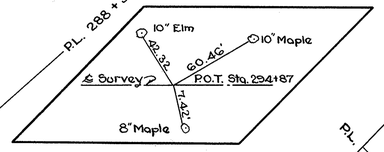
APPROACHES

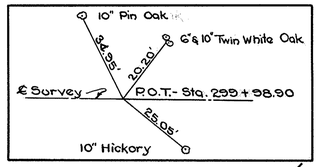
MARK	STATION	SIDE	E-8 Rem. & Disp. S.Y.	T-30 S.Y.	T-33 S.Y.	B-20 S.Y.	Spec. 5'G.S. S.Y.		Detail Sheet No.
A-1	282+41.92	Both	244	760	750	760	760		57
TOTAL			244	760	750	760	760		

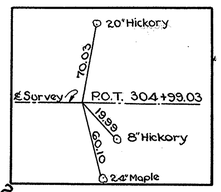
LINE SHEET STA. 267+00 To 291+00

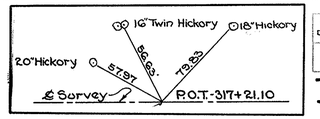
Southington Twp.
Lot 35

FRANCIS L. & GUY E. McANINCH









FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

18
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

IVAN A. HERNER

JAMES E. GUTHRIE

P.L. 254+47.2

Lot 35
Lot 26

309+44.5 P.L.
Lot 24
Lot 26

205'-30" R.C.P.

255' 36" R.C.P.

201'-27" R.C.P.

BEGIN SHEET - STA. 291+00

END SHEET STA. 327+00

N-42°-35'-50"W

℄ of Survey

N-42°-35'-50"W

292 294 296 298 300 302 304 306 308 310 312 314

FRANCIS L. & GUY E. McANINCH

H.H. GUTHIEL & IDA GUTHIEL

IVAN A. HERNER

JAMES E. GUTHRIE

294+47.2 P.L.

P.L. 298+13.6

Lot 35
Lot 26

Lot 26

P.L. 309+44.5

Lot 24
Lot 26

SCALES
PLAN - 1"=100'
PROFILE {HOR. - 1"=100'
{VERT.- 1"= 10'

B.M. Nº 41 Spk.
Twin Hickory 85' Rt.
Sta. 292 + 50
Elev. 937.29

B.M. Nº 42 Spk.
15" Pin Oak, 125 Rt.
Sta. 298+40
Elev. 930.85

B.M. Nº 43 Spk.
15" Maple 120 Rt.
Sta. 303 + 50
Elev. 918.92

B.M. Nº. 44 Spk.
24" Maple 100' Rt.
Sta. 306+ 60
Elev. 919.68

950
940
930
920

937.23 936.86 936.45 936.01 935.57 935.13 934.69 934.25 933.81 933.37 932.93 932.49 932.05 931.61 931.17 930.73 930.29 929.85 929.41 928.97 928.54 928.12 927.73 927.35 926.98 926.64 926.31 925.93 925.70 925.42 925.16 924.91 924.69 924.48 924.28 924.11 923.95 923.80 923.68 923.57 923.47 923.37 923.27 923.17 923.07 922.97 922.87 922.77 922.67

-0.88%

Profile Grade Line Shown is Crown of Proposed Pavement

-0.20%

Existing Profile 10 3/4" below Proposed Profile

600' V.C.

1000' V.C.
P.I. = 305 + 50
Elev. = 924.57

Excavation	1342	Cu.Yds
Embankment	1520	Cu.Yds.
Seeding	6933	Sq.Yds.

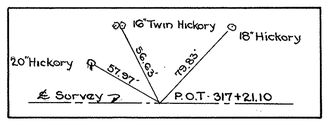
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315

HIGHWAY PLAN-PROFILE PLATE 5
THE FREDERICK POST CO., CHICAGO

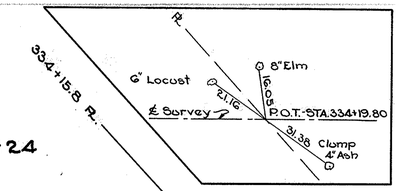
LINE SHEET STA. 291+00 TO 315+00

DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-41(5)	POST WAR	19 / 76

TRUMBULL COUNTY
TRU-422 (0.00- 2.06)



Southington Twp.
Lot 24



SCALES
PLAN - 1"=100'
PROFILE HOR - 1"=100'
VERT. - 1"=10'

B.M. №45 Spk.
20"Cucumber 125'Rt.
Sta.315+30
Elev. 912.56

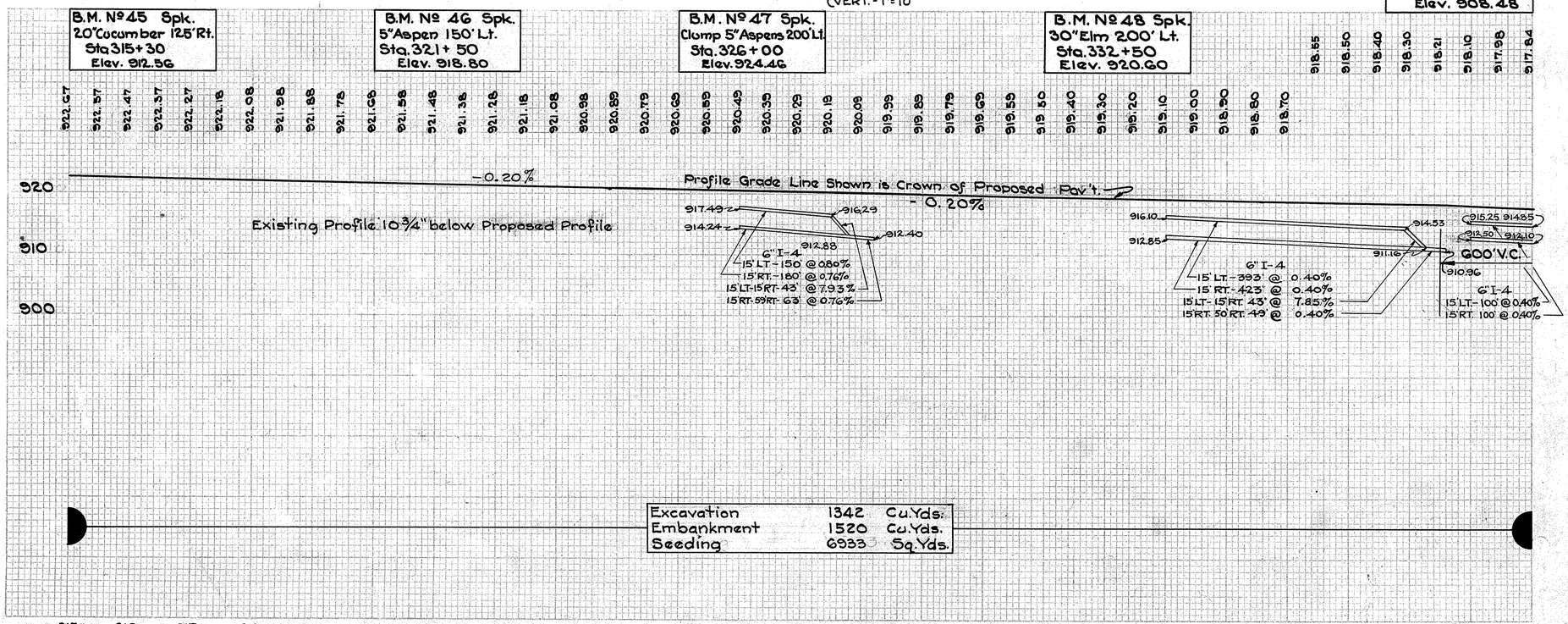
B.M. № 46 Spk.
5"Aspen 150' Lt.
Sta.321+50
Elev. 918.80

B.M. №47 Spk.
Clump 5"Aspens 200'Lt.
Sta.326+00
Elev. 924.46

B.M. №48 Spk.
30"Elm 200' Lt.
Sta.332+50
Elev. 920.60

B.M. №49 X
Howl. S.W. Cor. Cul.
200'Rt. Sta. 337+70
Elev. 908.48

922.67 921.57 922.47 922.37 922.27 922.18 922.08 921.98 921.88 921.78 921.68 921.58 921.48 921.38 921.28 921.18 921.08 920.98 920.89 920.79 920.69 920.59 920.49 920.39 920.29 920.19 920.09 919.99 919.89 919.79 919.69 919.59 919.50 919.40 919.30 919.20 919.10 919.00 918.90 918.80 918.70 918.55 918.50 918.40 918.30 918.21 918.10 917.98 917.84



Excavation	1342	Cu.Yds.
Embankment	1520	Cu.Yds.
Seeding	6933	Sq.Yds.

DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-4 6"	I-4 6" Outlet	I-5 for I-4 E-6a. 6"×45° Bend	I-5 for I-4 E-6a. 6" Y. Ea.
D-1	326+00	327+80	15' RT.	179			1
D-2	326+00	327+50	15 LT	149		1	
D-3	327+50	328+24	15'LT. To 55'RT	96	10		
D-4	333+00	337+23	15' Rt	422			1
D-5	333+00	336+93	15'-Lt	392		1	
D-6	336+93	337+58	15'Lt to 50'Rt	82	10		
D-7	338+00	339+00	15' Rt	100			
D-8	338+00	339+00	15' Lt	100			
Totals				1520	20	2	2

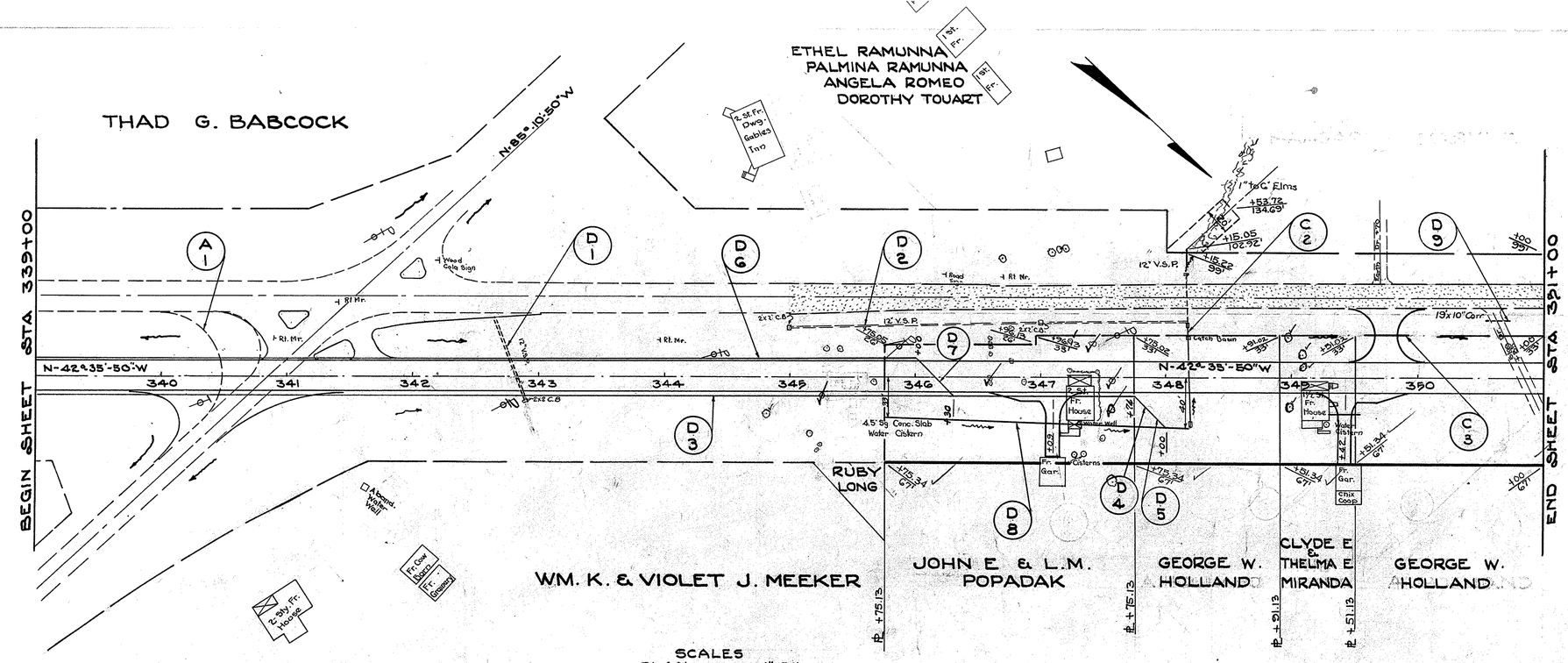
HIGHWAY PLAN-PROFILE PLATE 5
THE FREDERICK POST CO., Chicago

LINE SHEET STA. 315+00 TO 339+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

20
76

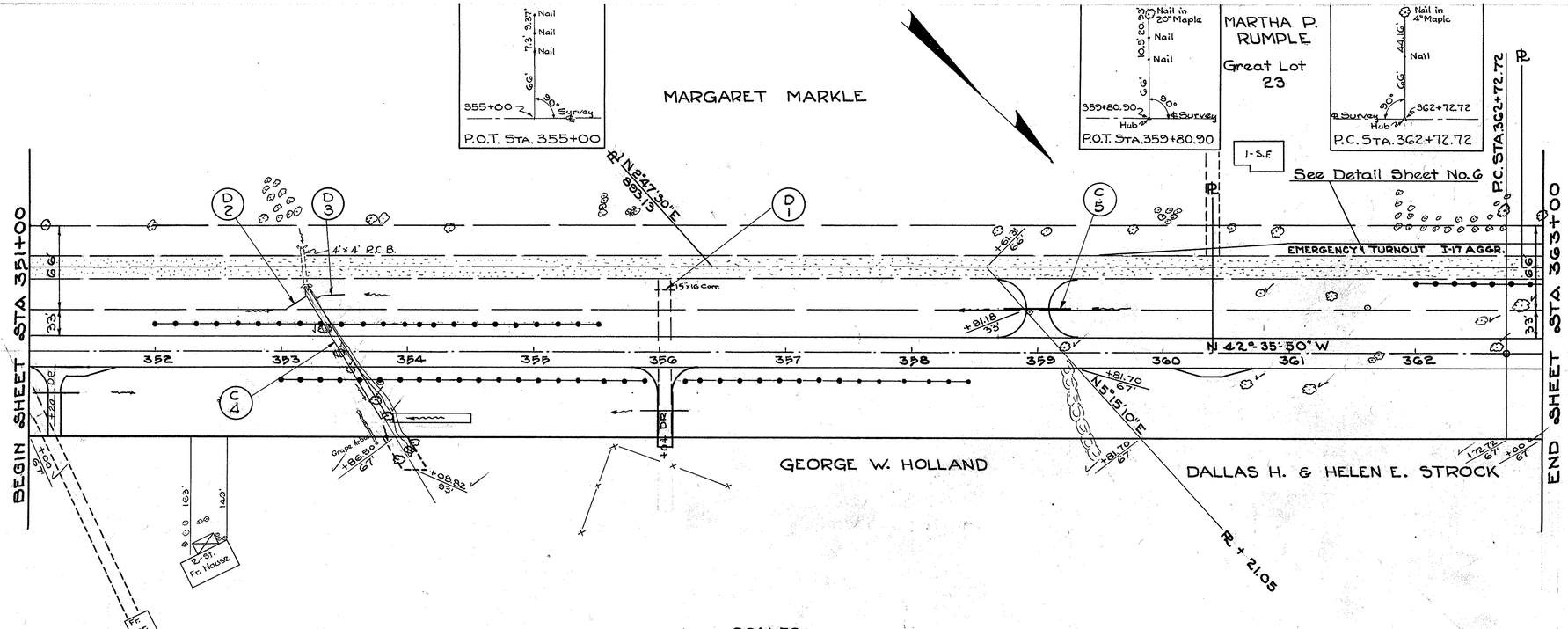
TRUMBULL COUNTY
TRU-422 (0.00- 2.06)


THAD G. BABCOCK
ETHEL RAMUNNA
PALMINA RAMUNNA
ANGELA ROMEO
DOROTHY TOUART
N-85°-10'-50"W
N-42°-35'-50"W
BEGIN SHEET STA 339+00
END SHEET STA 351+00
2-St. Fr. Dwg. "Gables Inn"
1-St. Fr.
1-St. Fr.
Wood Gate Sign
Rt. Mr.
Rt. Mr.
Rt. Mr.
Road
Rt Mr.
12" V.S.P.
12" V.S.P.
2x2 C.B.
2x2 C.B.
2x2 C.B.
15"x15" C.B.
15"x15" C.B.
Catch Basin
19"x10" Corr.
19"x10" Corr.
1"-6" Elms
+53.72
134.69
+15.05
102.92
+15.22
93.
+13.60
38
+13.60
38
+13.60
38

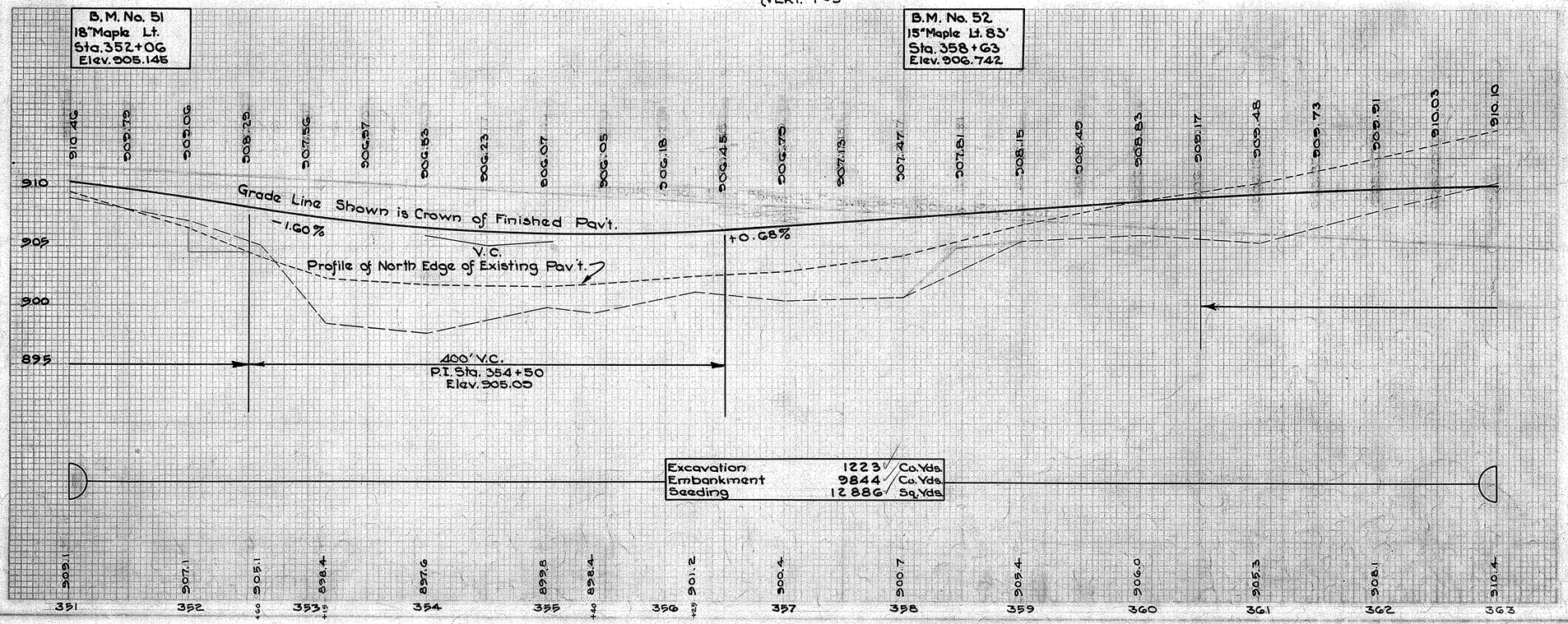
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

21
76

TRUMBULL COUNTY
TRU-422(0.00-2.06)



SCALES
PLAN - 1" = 50'
PROFILE { HOR. - 1" = 50'
VERT. - 1" = 5'



PIPE REMOVAL

MARK	STATION FROM	STATION TO	SIDE	E-12 Lin.ft. 15" & UNDER	
D-1	356+04		L	16	
Totals				16	

STRUCTURES 20' SPAN & UNDER

MARK	STATION	TYPE	SIZE	DETAIL SHEET NO.
C-4	353+50.4	Small Box Culv. Ext.	4x4x115'-8¾	G4 & G5
C-5	359+00	C.M. Arch with Int. Base	18" x 52'	

I-15 GUARD RAIL

	STATION From	STATION To	SIDE	I-15		
	352+00	355+52	22' Lt.	352		
	353+00	355+88	22' Rt.	288		
	356+20	358+44	22' Rt.	224		
	362+00	363+00	55' Lt.	100		
Totals				964		

DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-3 L.F. 12"	I-3 L.F. 15"	I-5 Spec. For I-3 30° Bend 15"	
D-2	353+00	353+20	L	20			
D-3	353+27	353+49	L	20	20	1	
Totals				20	20	1	

GUTTERS

	STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.	
	353+88	354+50	R	7'	48	
Totals					48	

DRIVES & M.B. APPROACHES

STATION	SIDE	I-17 S.Y.	I-1 L.F. 12"	I-1 L.F. 15"	DETAIL SHEET NO.
351+20	R	99	36'		8
356+04	R	89		40	8
360+40	R	31			8
Totals		219	36	40	

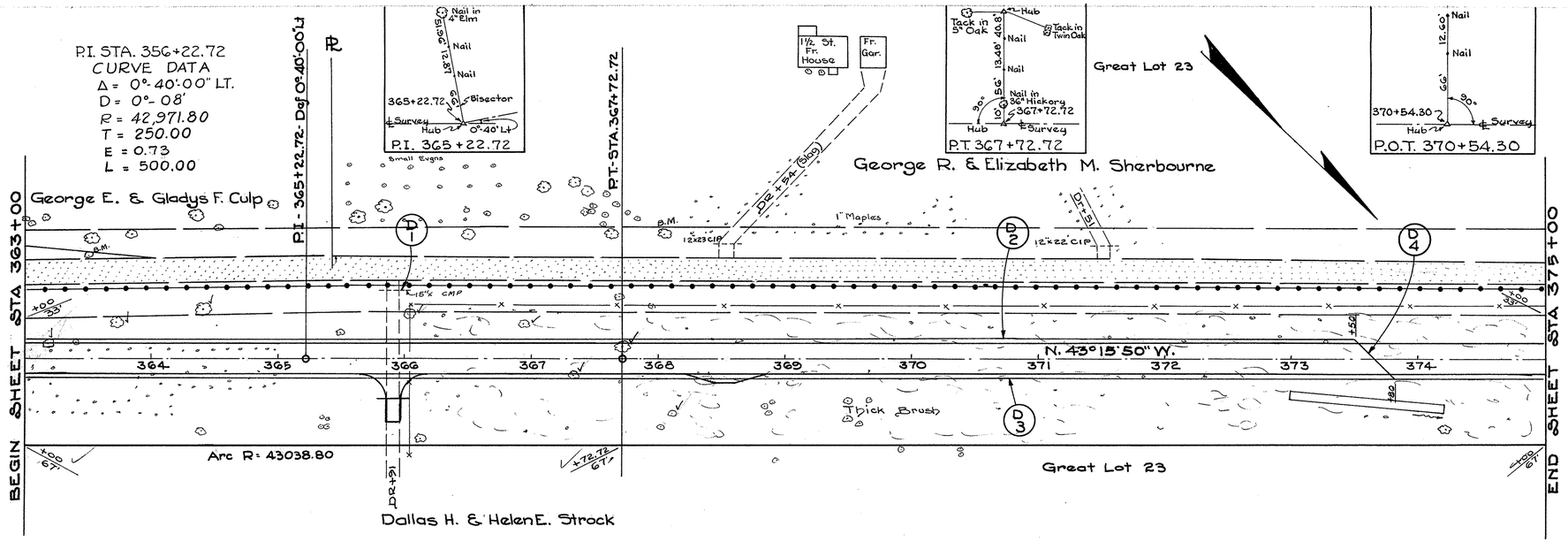
LINE SHEET STA 351+00 To 363+00

DIVISION	STATE		TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

22
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

P.I. STA. 356+22.72
CURVE DATA
Δ = 0°-40'-00" LT.
D = 0°-08'
R = 42,971.80
T = 250.00
E = 0.73
L = 500.00



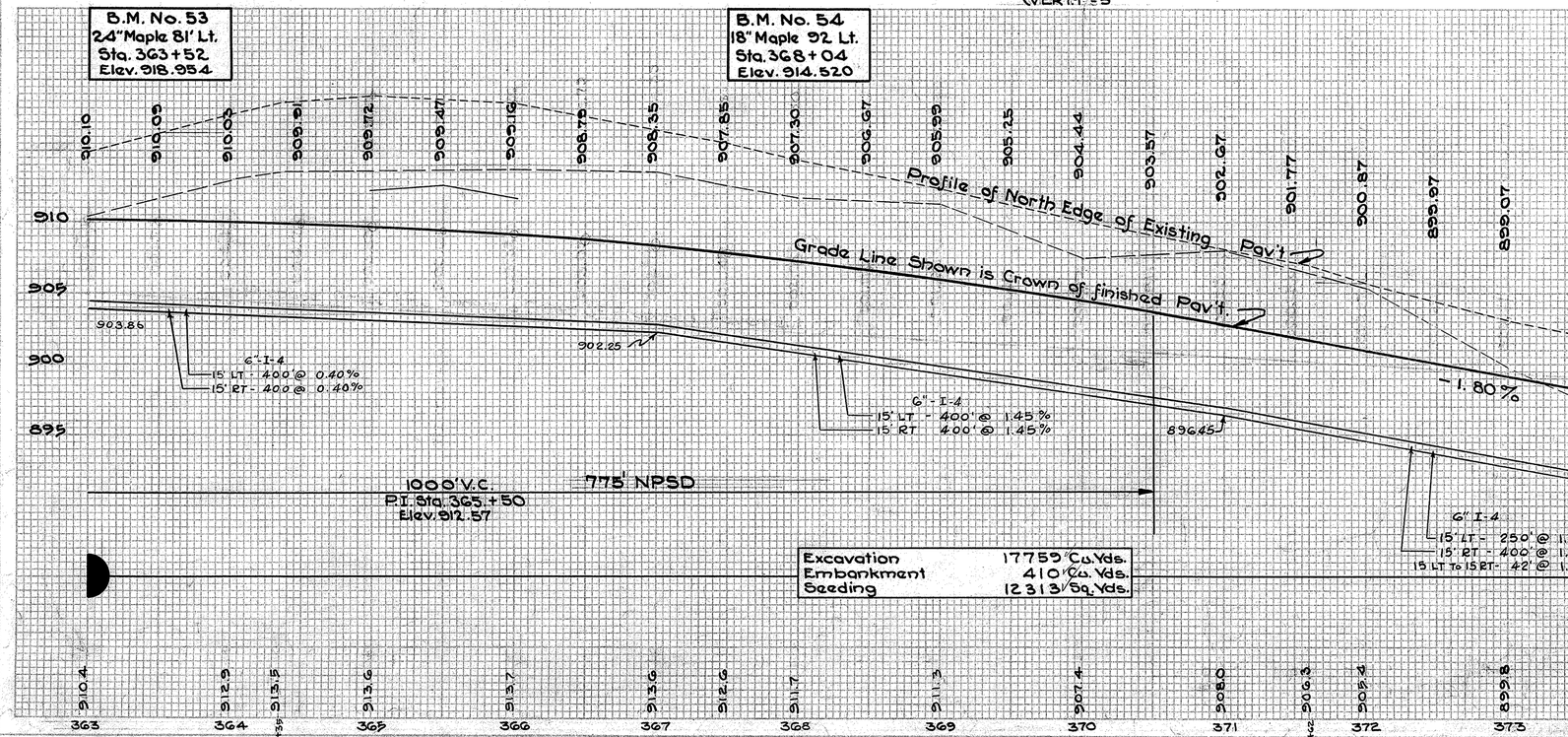
DRAINS

Mark	STATION FROM	STATION TO	SIDE	I-4 6"	I-55 pac. for I-4 6" 45° Gang	I-55 pac. for I-4 6" Y
D-2	363+00	373+50	15' Lt.	1049	1	
D-3	363+00	375+00	15' Rt	1199		1
D-4	373+50	373+80	15' Lt. 15' Rt.	40		
Totals				2288	1	1

I-15 GUARD RAIL

STATION FROM	STATION TO	SIDE	I-15 I-15
363+00	374+96	Lt.	1196
Total			1196

SCALES
PLAN - 1"=50'
PROFILE {HOR. 1"=50' VERT. 1"=5'



PIPE REMOVAL

MARK	Station FROM	Station TO	SIDE	E-12 L.F. 15" & UNDER
D-1	365+91		L	20
Total				20

GUTTERS

STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.
373+00	374+20	R	7'	94
Total				94

DRIVES & M.B. APPROACHES

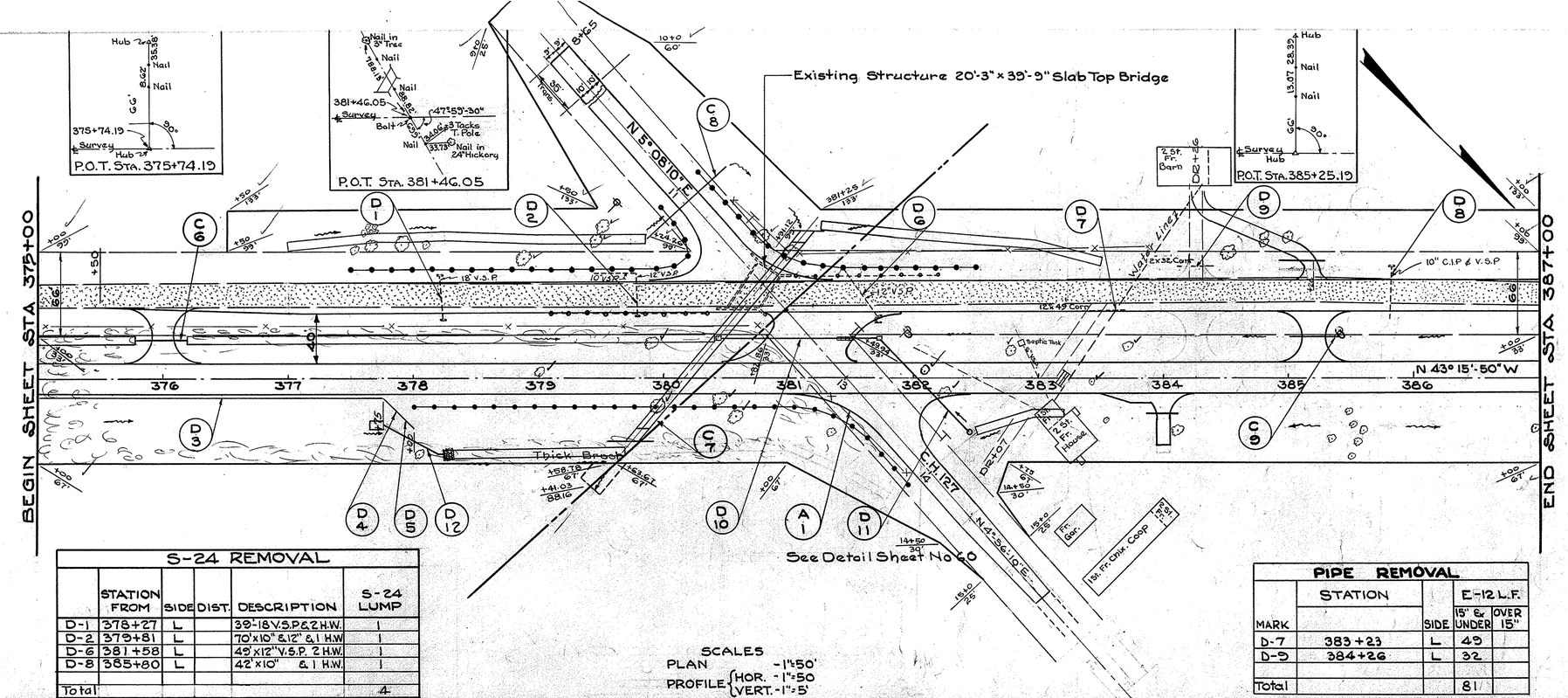
STATION	SIDE	I-17 S.Y.	I-1 L.F. 12"		DETAIL SHEET NO.
365+91	R	61	24		8
368+54	R	31			8
Totals		92	24		

LINE SHEET STA 363+00 To 375+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

23
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)



DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-2 Outlet Pipe 15" L.F.	I-3 Ridwy Dr. 12" L.F.	I-3 Ridwy Dr. 15" L.F.	I-4 L.F. 6"	I-4 L.F. 6" Outlet Pipe	I-8 I-2A C.B. Ea.	I-8 #7 Inlet Ea.	I-5 for I-2 15"x28" Band Ea.	I-5 for I-4 6"x48" Band Ea.
D-3	375+00	377+75	R				274				-	1
D-4	377+75	377+93	R				33					
D-5	377+93	378+00	R					10				
D-10	380+42	381+68	L			125			2			
D-11	381+68	382+40	R+L		100					1		
D-12	377+75	378+25	R	53							1	
Totals				53	100	125	307	10	2	1	1	1

STRUCTURES 20' SPAN & UNDER

MARK	STATION	TYPE	SIZE	DETAIL SHEET NO.
C-7	380+15	Large Box Culvert	8'4"G' X 21'6"-7"	66, 67 & 68
C-9	385+20	C.M. Arch with Inv. Base	18"X 42"	
C-6	376+00	C.M. Arch with Inv. Base	18"X 42"	
C-8	380+25 Lt.	Culvert Pipe	18"X 84'	63

S-24 REMOVAL

	STATION FROM	SIDE	DIST.	DESCRIPTION	S-24 LUMP
D-1	378+27	L		39'-18" V.S.P. & 2 H.W.	1
D-2	379+81	L		70' X 10" & 12" & 1 H.W.	1
D-6	381+58	L		49' X 12" V.S.P. 2 H.W.	1
D-8	385+80	L		42' X 10" & 1 H.W.	1
Total					4

PIPE REMOVAL

MARK	STATION	SIDE	E-12 L.F. 15" & UNDER	E-12 L.F. OVER 15"
D-7	383+23	L	49	
D-9	384+26	L	32	
Total			81	

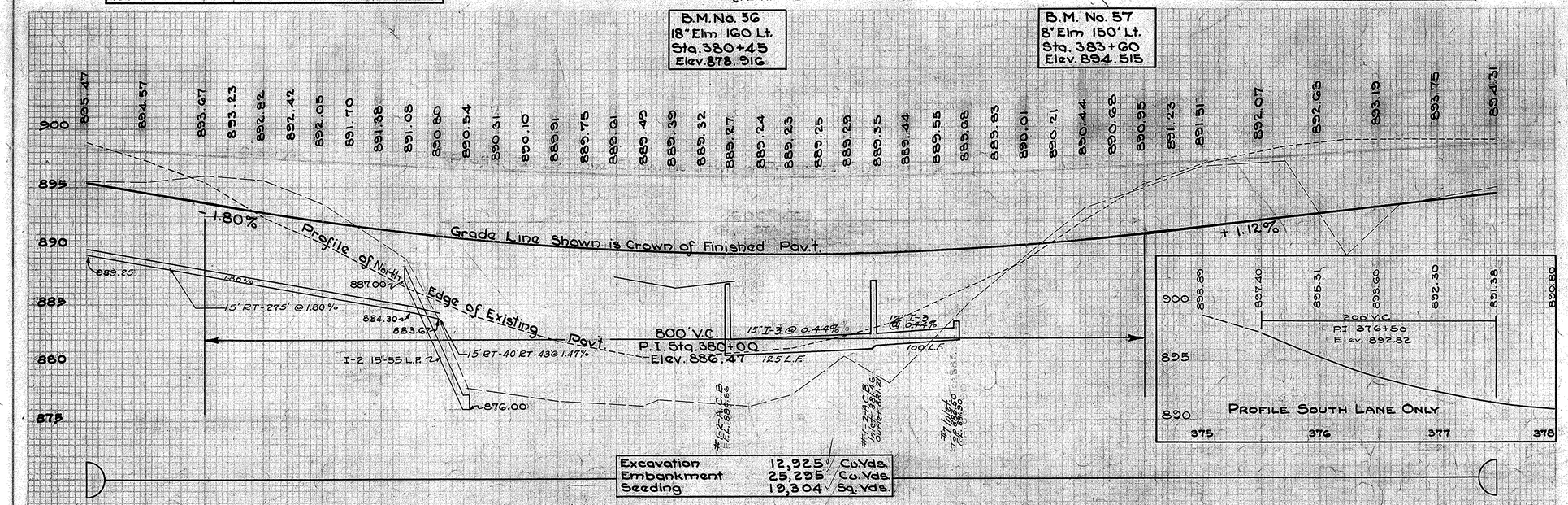
I-15 GUARD RAIL

MARK	STATION FROM	STATION TO	SIDE	I-15 L.F.	I-15 L.F. Remv. & Store
	377+50	380+00	L	320	
	378+00	381+92	R	416	
	380+26	382+55	L	256	
	379+09	380+35	L		126
	381+06	382+19			113
Totals				992	239

SCALES
PLAN - 1"=50'
PROFILE { HOR. - 1"=50 / VERT. - 1"=5'

B.M. No. 56
18" Elm 160 Lt.
Sta. 380+45
Elev. 878.916

B.M. No. 57
8" Elm 150' Lt.
Sta. 383+60
Elev. 894.515



Excavation	12,925	Cu.Yds.
Embankment	25,295	Cu.Yds.
Seeding	19,304	Sq.Yds.

GUTTERS

MARK	STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.	I-10 RipRap S.Y.
	375+00	380+40	L	7	391	
	377+00	379+86	L	7	226	
	377+65	377+75	R	7	8	
	378+35	379+68	R	7	103	
	382+41	383+20	R	7	61	
	381+19	383+50	L	7	182	
	378+25	378+35	R	7		8
Totals					971	8

DRIVES

STATION	SIDE	I-17 S.Y.	I-1 L.F. 12"	I-1 L.F. 15"	DETAIL SHEET NO.
384+00	R	82	24		8
385+20	L	158		44	8
Totals		240	24	44	

APPROACHES

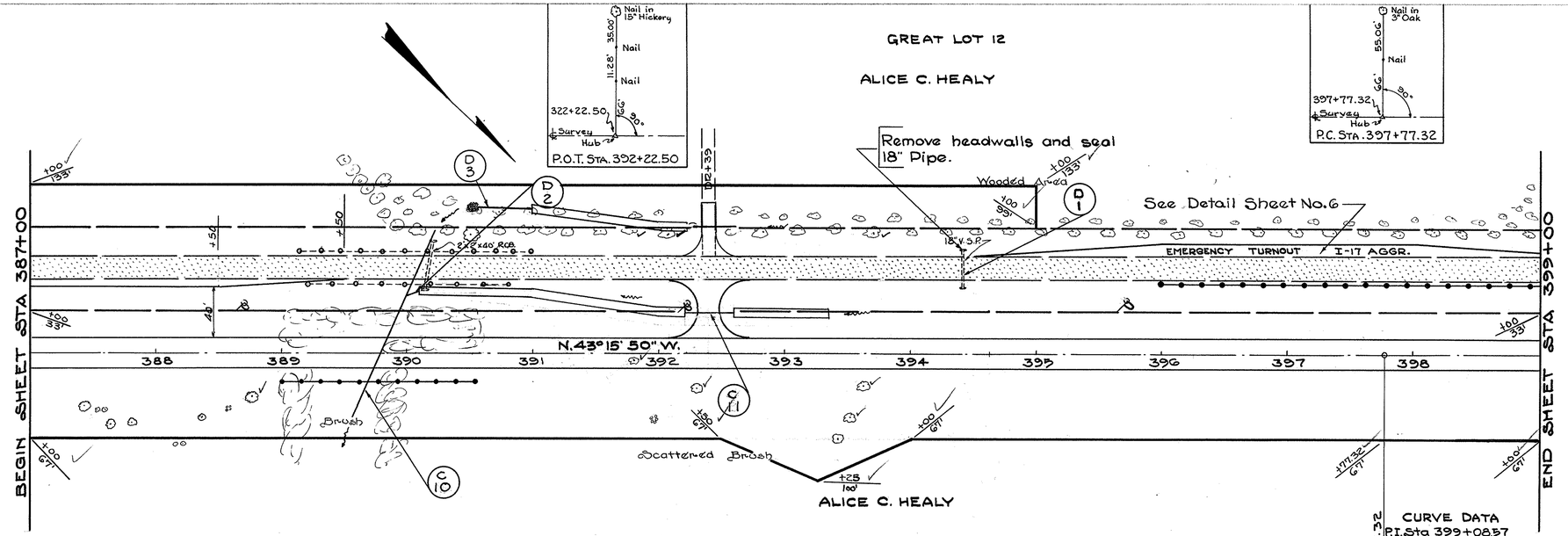
MARK	STATION	SIDE	T-30 S.Y.	T-33 S.Y.	B-20 S.Y.	Spec. 5" G.S. S.Y.		Detail Sheet No.
A-1	381+45.91	Both	1845	1832	1845	1845		60
Totals			1845	1832	1845	1845		

LINE SHEET STA 375+00 TO 387+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

24
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



S-22 REMOVAL				
MARK	STATION	SIDE	DESCRIPTION	S-22 REMOVAL C.U.YDS
D-1	394+42	L	Headwalls	1
Totals				1

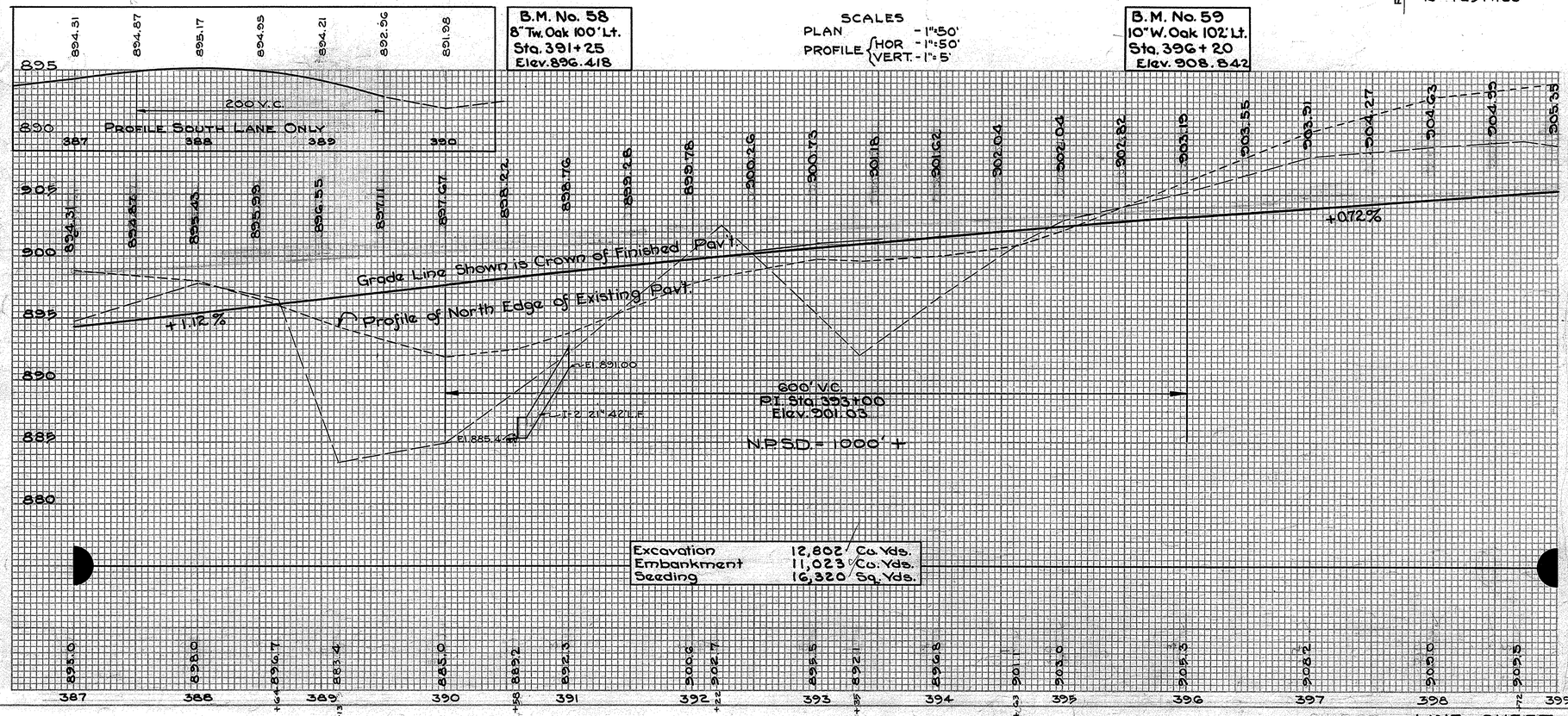
I-15 GUARD RAIL					
MARK	STATION FROM	STATION TO	SIDE	I-15 L.F. I-15	I-15 L.F. Rem. & Store
	389+00	390+60	R	160	
	396+00	399+00	L	300	
	389+20	390+80	L		160
Totals				460	160

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SHEET NO.
C-10	389+79.2	Culvert Pipe	36"x159'-0"	69
C-11	392+39	CM. Arch with Int. Base	18"x42'-0"	

DRAINS								
MARK	STATION FROM	STATION TO	SIDE	I-3 L.F. 12"	I-3 L.F. 15"	I-10 Rip-Rap S.Y. Type B	I-2 Outlet 21" L.F.	I-5 for I-2 21"x18" Bend Ea.
D-2	390+04	390+14	L		12			
D-3	390+58	391+00	L			2.5	42	1
Totals					12	2.5	42	1

GUTTERS					
MARK	STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.
	390+14	392+18	L	7	159
	392+60	393+35	L	7	58
	391+00	392+30	L	7	101
Totals					318

DRIVES				
STATION	SIDE	I-17 S.Y.	I-1 L.F. 18"	DETAIL SHEET NO.
392+39	L	66	42	8
Totals		66	42	



B.M. No. 58
8" Tw. Oak 100' Lt.
Sta. 391+25
Elev. 896.418

SCALES
PLAN - 1"=50'
PROFILE { HOR - 1"=50'
VERT. - 1"=5'

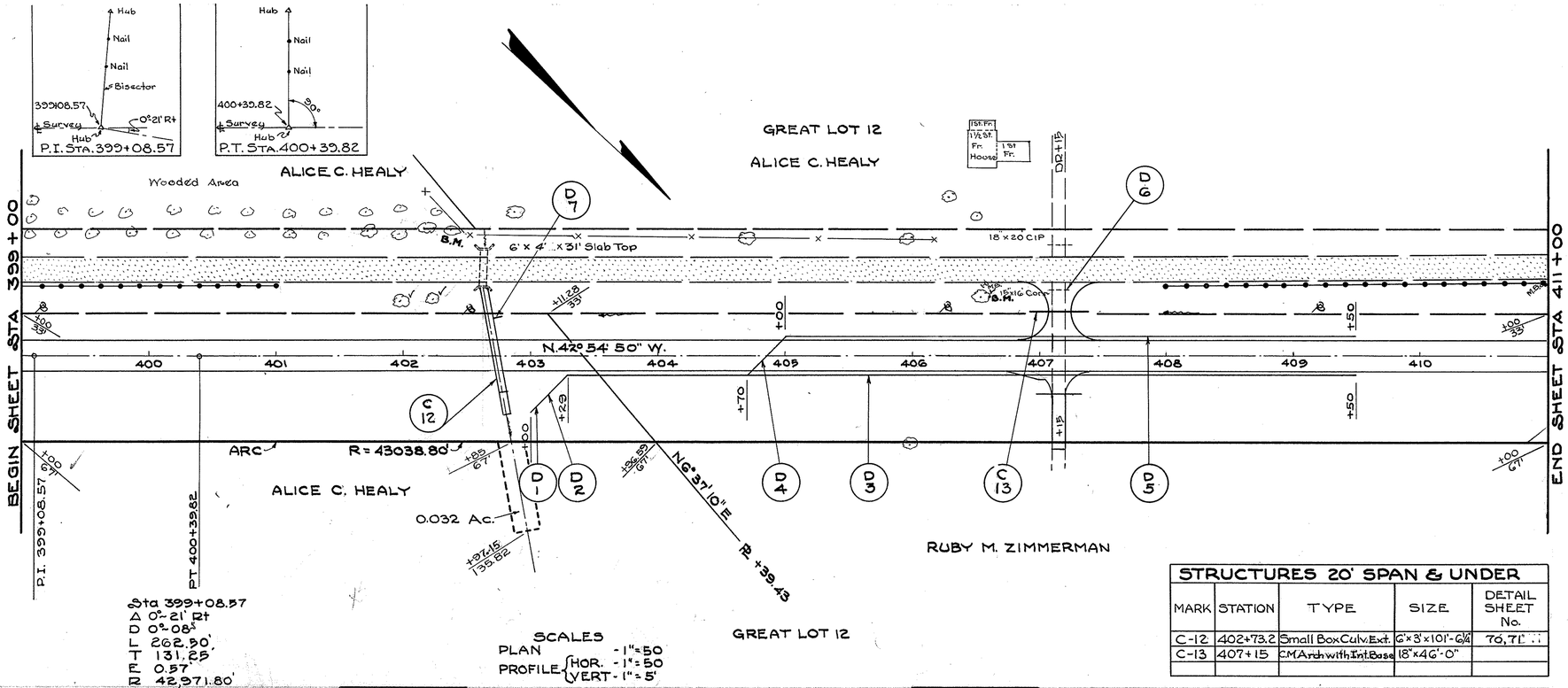
B.M. No. 59
10" W. Oak 102' Lt.
Sta. 396+20
Elev. 908.842

Excavation	12,802 Cu. Yds.
Embankment	11,023 Cu. Yds.
Seeding	16,320 Sq. Yds.

LINE SHEET STA 387+00 To 399+00

PROJ. NO. DIVISION	STATE		TYPE FUNDS	25
2	OHIO	F-41(5)	POST WAR	76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



Sta 399+08.57
Δ 0° 21' Rt
D 0° 08'
L 262.30'
T 131.25'
E 0.57'
R 42,971.80'
P.I. Sta. 399+08.57

SCALES
PLAN - 1" = 50
PROFILE { HOR. - 1" = 50 / VERT - 1" = 5'

DRAINS

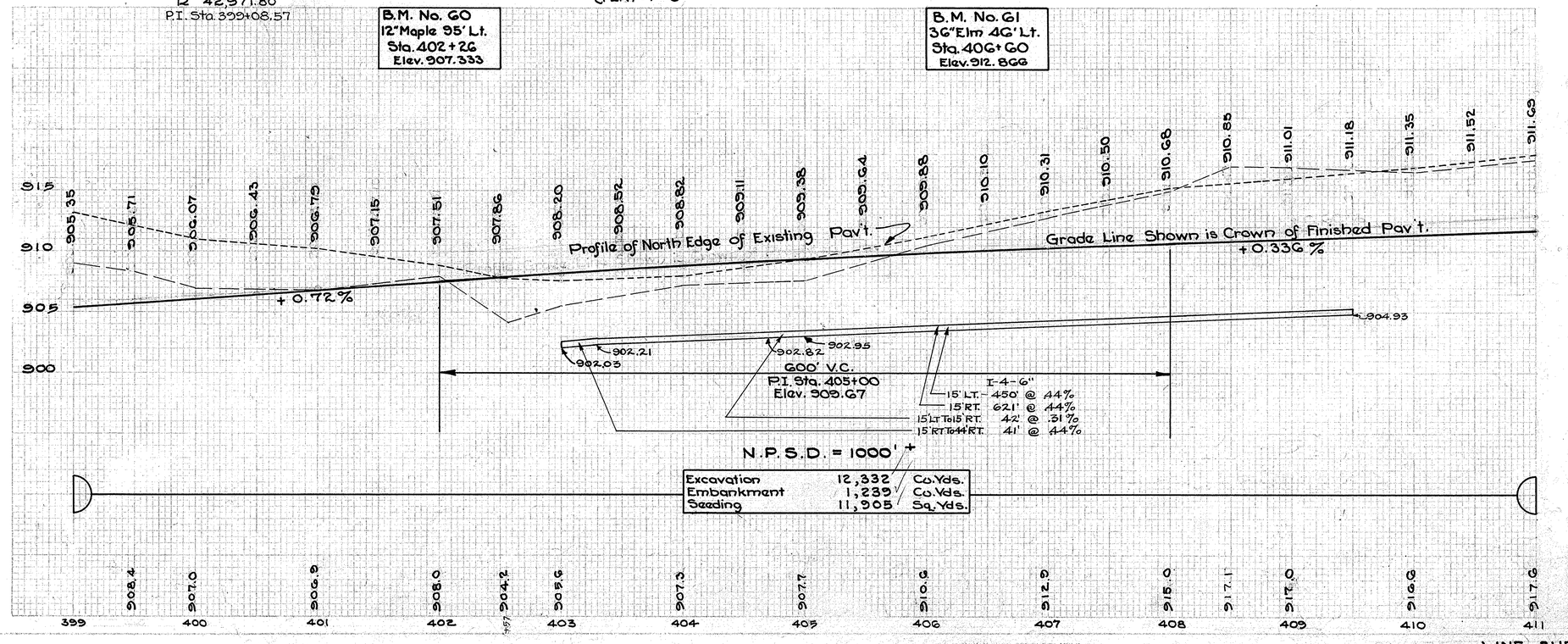
MARK	STATION FROM	STATION TO	SIDE	I-4 6"	I-4 6" Outlet	I-3 12"	I-5 Spec. for I-4 6" 45° Bend	I-5 Spec. for I-4 6" "Y"
D-1	403+00	403+07	R		10'			
D-2	403+07	403+29	R	31				
D-3	403+29	409+50	R	619			1	1
D-4	404+70	405+00	R	40			1	
D-5	405+00	409+50	L	450				
D-7	402+72	402+80	L			8		
Totals				1140	10	8	2	1

STRUCTURES 20' SPAN & UNDER

MARK	STATION	TYPE	SIZE	DETAIL SHEET No.
C-12	402+73.2	Small Box Culv. Ext.	6'x3'x101'-6¼"	70, 71
C-13	407+15	C.M. Arch with Int. Base	18"x46'-0"	

I-15 GUARD RAIL

MARK	STATION FROM	STATION TO	SIDE	I-15 L.F.		
	399+00	400+56	L	136		
	408+00	411+00	L	300		
				496		



Excavation	12,332	Cu. Yds.
Embankment	1,239	Cu. Yds.
Seeding	11,905	Sq. Yds.

DRIVES

STATION	SIDE	I-17 S.Y.	I-1 L.F. 12"	DETAIL SHEET NO.
407+15	R	104	24	8
Totals		104	24	

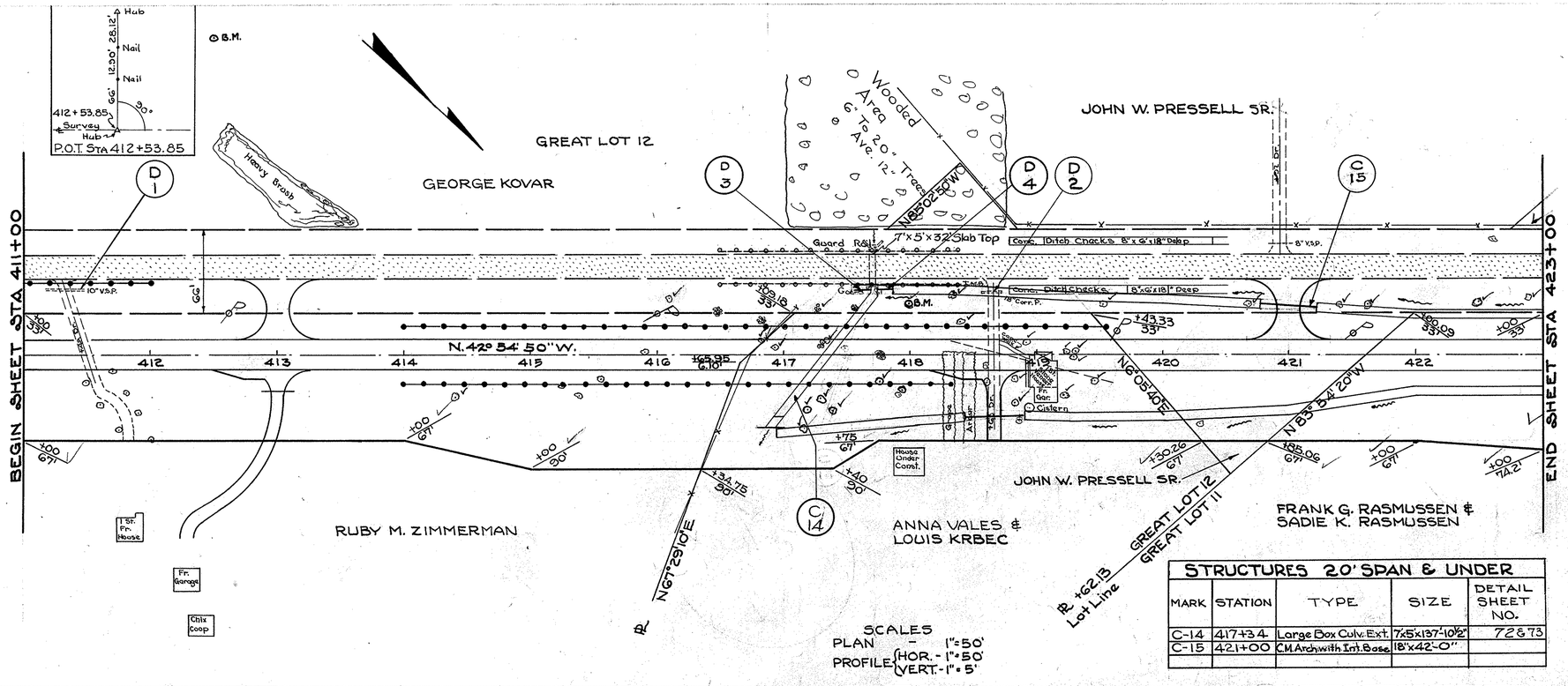
PIPE REMOVAL

MARK	STATION FROM	STATION TO	SIDE	E-12 L.F. 15" UNDER	E-12 L.F. OVER 15"
D-6	407+15		L	16	
Total				16	

LINE SHEET STA 399+00 To 411+00

DIVISION	STATE		TYPE FUNDS	
2	OHIO	F-41(5)	POST WAR	26 76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)



SCALES
PLAN - 1"=50'
PROFILE { HOR. - 1"=50'
VERT. - 1"=5'

STRUCTURES 20' SPAN & UNDER

MARK	STATION	TYPE	SIZE	DETAIL SHEET NO.
C-14	417+34	Large Box Culv. Ext.	7'x5'x137'-10½"	72 & 73
C-15	421+00	C.M. Arch with Int. Base	18'x42'-0"	

DRIVES

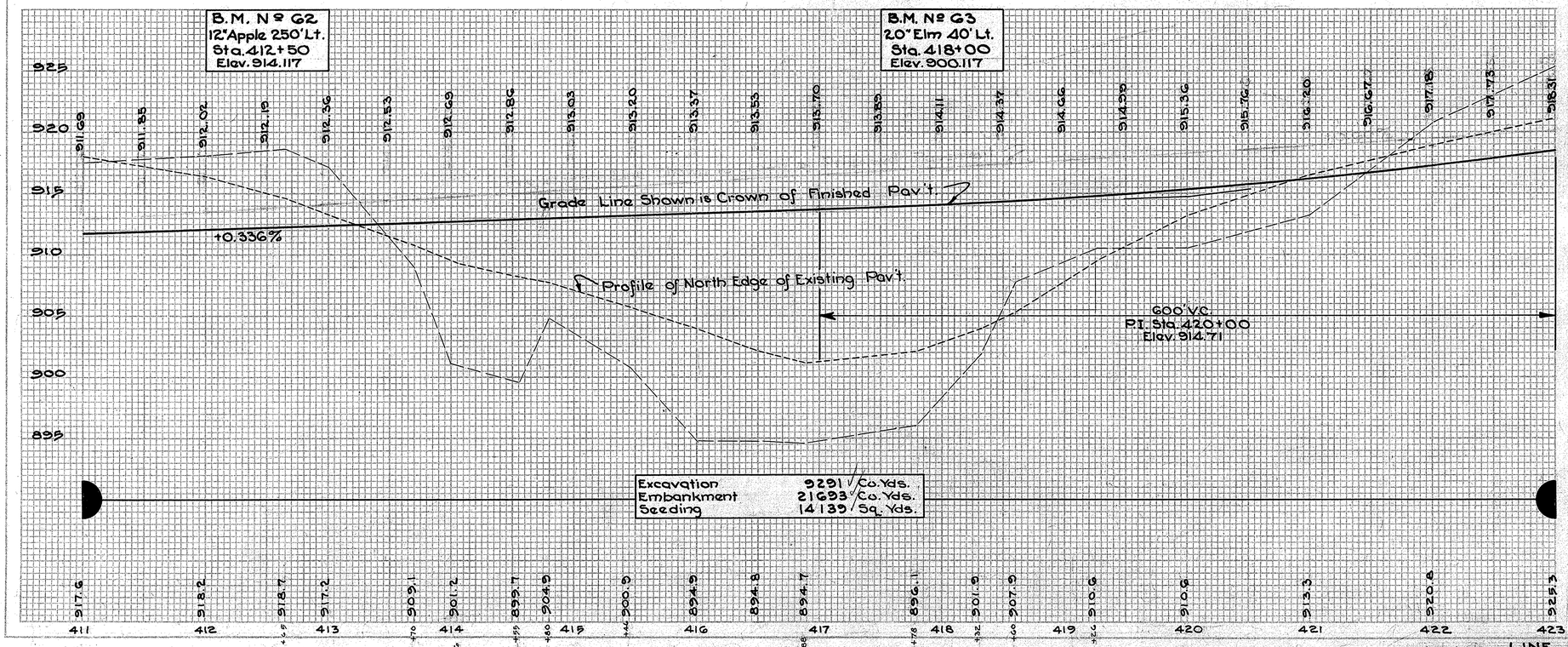
STATION	SIDE	I-17 S.Y.	I-1 L.F. 12"	I-1 L.F. 15"	I-1 L.F. 18"	DETAIL SHEET NO.
413+00	R	215	26			8
418+65	R	98			44	8
Totals		313	26		44	

PIPE REMOVAL

MARK	STATION FROM	STATION TO	SIDE	E-12 Lin ft. 15" & UNDER	E-12 Lin ft. OVER 15"
D-1	411+32		L	30	
D-2	418+65		L		15
Totals				30	15

I-15 GUARD RAIL

MARK	STATION FROM	STATION TO	SIDE	I-15 L.F.
	411+00	412+00	Lt.	100
	414+00	419+44	Lt.	544
	414+00	418+32	Rt.	432
				1076



Excavation	9291 / Co. Yds.
Embankment	21693 / Co. Yds.
Seeding	14139 / Sq. Yds.

DRAINS

MARK	STATION FROM	STATION TO	SIDE	I-3 L.F. 12"	I-3 L.F. 15"	I-5 for I-3 Ea. 12"x30° Bend	I-5 for I-3 Ea.
D-3	417+54	417+65	L	12		1	
D-4	417+75	417+87	L		12		
Totals				12	12	1	

GUTTERS

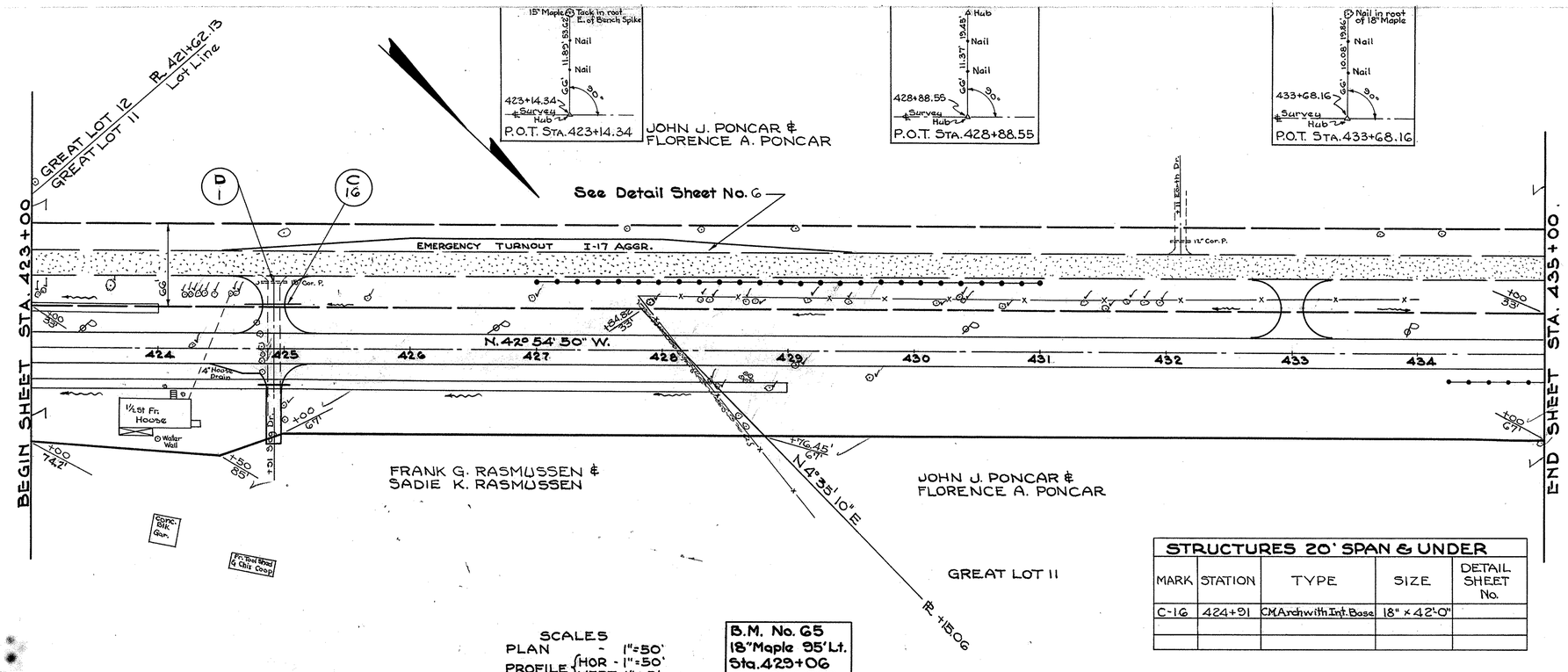
MARK	STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.	L.F. I-14 Pav'd Gutter
	417+87	420+79	L.	7	227	
	421+21	423+00	L.	7	139	
	418+87	423+00	R.	7	321	
	416+95	418+44	R	7		149
Totals					687	149

LINE SHEET STA 411+00 To 423+00

DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

27
76

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

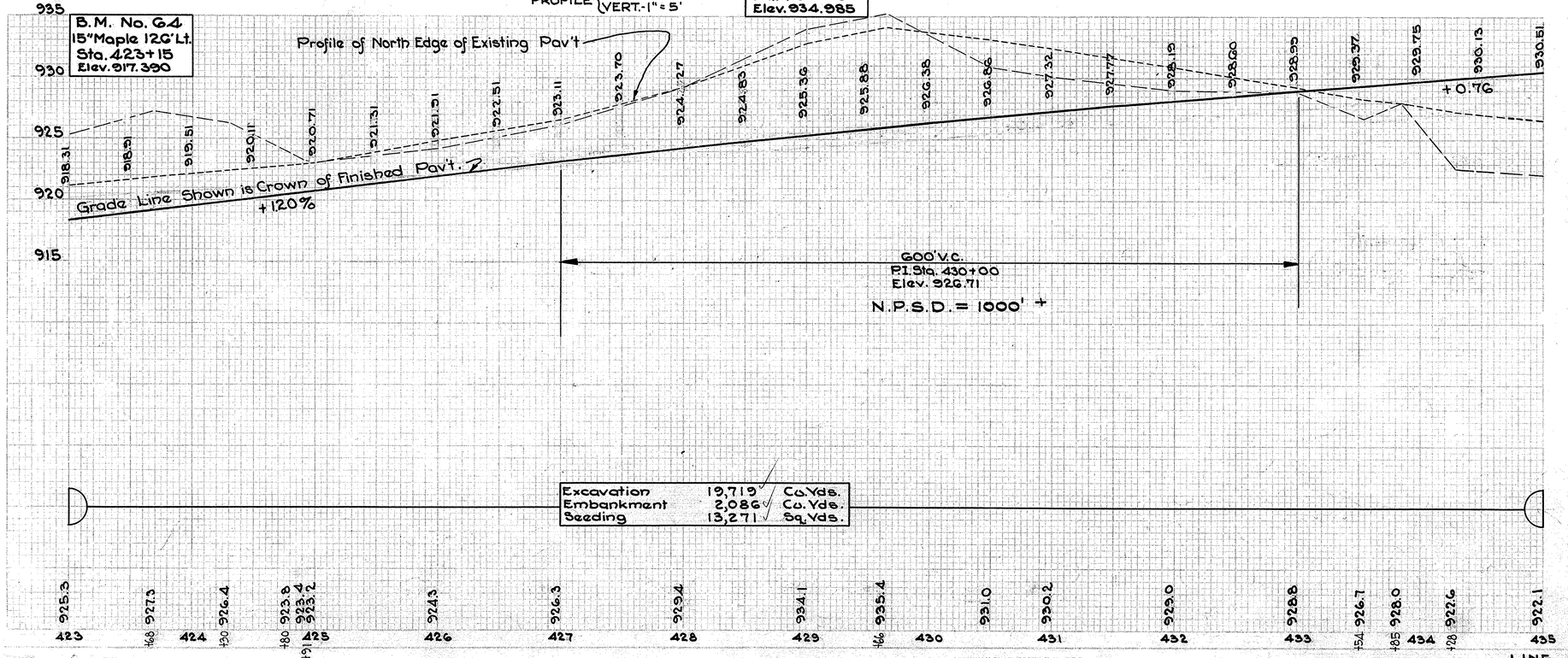


SCALES
PLAN - 1"=50'
PROFILE { HOR - 1"=50' / VERT. - 1"=5'

B.M. No. G5
18" Maple 95' Lt.
Sta. 429+06
Elev. 934.985

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SHEET No.
C-16	424+91	CM Arch with Int. Base	18" x 42'-0"	

I-15 GUARD RAIL					
MARK	STATION FROM	STATION TO	SIDE	I-15 L.F.	
	427+00	431+00	L	400	
	434+25	435+00	R	75	
Totals				475	



Excavation	19,719	Cu.Yds.
Embankment	2,086	Cu.Yds.
Seeding	13,271	Sq.Yds.

PIPE REMOVAL				
MARK	STATION	SIDE	E-12 L.F. 15" & UNDER	
D-1	424+91		20	
Totals			20	

GUTTERS					
MARK	STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.
	423+00	424+00	L	7	78
	423+00	424+79	R	7	139
	425+03	429+00	R	7	309
Totals					526

DRIVES				
STATION	SIDE	I-17 S.Y.	I-1 L.F. 15"	DETAIL ~~SHEET~~ NO.
424+91	R	107	24	8
Totals		107	24	

LINE SHEET STA. 423+00 To 435+00

SECT. NO. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

28
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

P.I. STA. 442+12.65
CURVE DATA
Δ = 2°-01'-55" LT.
D = 0°-16'
R = 21,485.90
T = 381.03
E = 3.38
L = 761.98

P.C. Sta. 438+31.62

P.I. Sta. 442+12.65

P.R.C. Sta. 445+93.60

BEGIN SHEET STA. 435+00

P.C. - STA. 438+31.62

P.I. - STA. 442+12.65

P.R.C. - STA. 445+93.60

END SHEET - STA. 447+00

GREAT LOT 11

JOHN J. PONCAR & FLORENCE A. PONCAR

ANNA HEJL

N. 42° 54' 50" W.

N 85° 23' 45" W

R=21,552.90'

R=21,418.90'

ARC

12"X31½"

5'x3'x30'4"

C.M.P.

3" House Drain

2 St. Fr. Barn

Frame Milk House

Conc. Tank Septic Tank

2 St. Fr. Res.

4'x4' Cast Iron

Wall Conc. Slab

15" Conc.

Fr. Bldg.

Fr. Bldg.

Exist. Pav't.

Hub
Nail
Survey

DRAINS								
MARK	STATION From	STATION To	SIDE	I-3 Por. Bk'fl. 12" L.F.	I-3 U.A. 12" L.F.	I-3 Plain 12" L.F.		
D-2	445+00	447+00	L	200				
D-3	443+40	443+94	R		24	30		
Totals				200	24	30		

I-15 GUARD RAIL				
STATION FROM	STATION TO	SIDE	I-15 L.F. NEW	
435+00	436+97	R	197	
Total			197	

B.M. No. G7
12" Maple 93' Lt.
Sta. 446+65
Elev. 952.565

SCALES
PLAN - 1"=50'
PROFILE {HOR. - 1"=50' / VERT. - 1"=5'

GREAT LOT 11

B.M. No. G6
30" Elm 100' Lt.
Sta. 438+60
Elev. 927.883

Grade Line Shown is Crown of finished Pav't.

Profile of North Edge of Existing Pav't.

+ 0.76

600 V.C.
P.I. Sta. 440+00
Elev. 934.31

12" I-3 Porous Bk'fl @ 1.40%
200 L.F.

12" I-3 @ 2.44%
30'-I-3 P.B.F.
24'-I-3 U.A.

Excavation	3540 Cu. Yds.
Embankment	7023 Cu. Yds.
Seeding	12084 Sq. Yds.

STRUCTURES 20' SPAN & UNDER				
MARK	STATION	TYPE	SIZE	DETAIL SHEET NO.
C-17	437+00	Small Box Culvert	5'x4'x115'-4"	74, 75 & 76
C-18	443+50	C.M. Arch with Int. Base	18"x42'-0"	

PIPE REMOVAL			
MARK	STATION	SIDE	E-12 L.F. 15" & UNDER
D-1	443+50		54
Totals			54

GUTTERS					
MARK	STATION FROM	STATION TO	SIDE	L-10 WIDTH	S.Y.
	436+59	443+40	R	7'	530
	443+94	447+00	R	7'	238
Totals					768

DRIVES					
STATION	SIDE	I-17 S.Y.	I-1 L.F. 15"	DETAIL SHEET NO.	
443+53	R	79	24	8	
Totals		79	24		

LINE SHEET STA. 435+00 To 447+00

DIVISION	STATE		TYPE FUNDS	29
2	OHIO	F-41 (5)	POST WAR	76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

P.I. STA. 449+74.63
CURVE DATA
Δ = 2°-01'-55" RT.
D = 0°-16'
R = 21,485.90
T = 381.03
E = 3.38
L = 761.98

EQUATION STATION
Sta. 453+55.58 End F-41 (5)
= Sta. 102+01.26 F.A.P. 245 (2)

F-41 (5)

Note:- Marker to be furnished and erected on right by State Forces before acceptance of this project.

BEGIN SHEET STA. 447+00

END SHEET STA. 459+00

P.I. STA. 449+74.63

P.T. STA. 453+55.58

PORTAGE CO. LINE
GREAT LOT 11

JOHN W. PRESSEL SR.

JOHN W. PRESSELL SR.

PAUL W. BENES & MARY ELEANOR BENES

ANNA HEJL

ANNA HEJL

N 47°-05'-10" E

N 42°-54'-50" W.

R = 21,440.90

ARC

END PROJECT & END F-41 (5)
STA. 453+55.58
TRU-422-0.00

TYPICAL SECTION ADJOINING PAVEMENT
Scale 1" = 10'

DRAINS									
MARK	STATION FROM	STATION TO	SIDE	I-3 Por. Bk fl. 12" L.F.	I-3 U.A. 12" L.F.				I-8 No. 7 C.B.
D-1	447+00	453+35	L	587	48				2
D-2	448+00	451+50	R	302	48				
TOTALS				889	96				2

PIPE REMOVAL				
MARK	STATION FROM	STATION TO	SIDE	E-12 L.F. 15"ø UNDER
D-3	448+62	450+02	L	140
D-4	450+36			16
Totals				156

DRIVES				
MARK	STATION	SIDE	I-17 S.Y.	DETAIL SHEET NO.
	448 +92	R	70	8
	450 +36	R	70	8
	453 +10	R	52	8
TOTAL			192	

GUTTERS						
MARK	STATION FROM	STATION TO	SIDE	L-10 WIDTH	L-10 S.Y.	
	447+00	448+00	R	7'	78	
Totals					78	

APPROACHES				
MARK	STATION	SIDE	E-8 Rem. & Disp. S.Y.	Detail Sheet No.
A-1	450+58.86	LT.	608	53
Totals			608	

B.M. No. G8
24" Black Oak 38' Rt.
Sta. 454+66
Elev. 955.722

B.M. No. G9
16" Black Oak 41' Rt.
Sta. 455+36
Elev. 958.406

SCALES
PLAN -1"=50'
PROFILE {HOR. -1"=50' / VERT. -1"=5'

Profile of North Edge of Existing Pav't.

Grade Line Shown is Crown of Finished Pav't.

+0.39%

350 L.F. 12" I-3 Por. Bk fl. @ 0.92%

635 L.F. 12" I-3 Por. Bk fl. @ 1.40%

800' V.C.

P.I. Sta. 449+00
El. 956.27

+1.0 #7 Inlet

+3.5 No. 7 Inlet

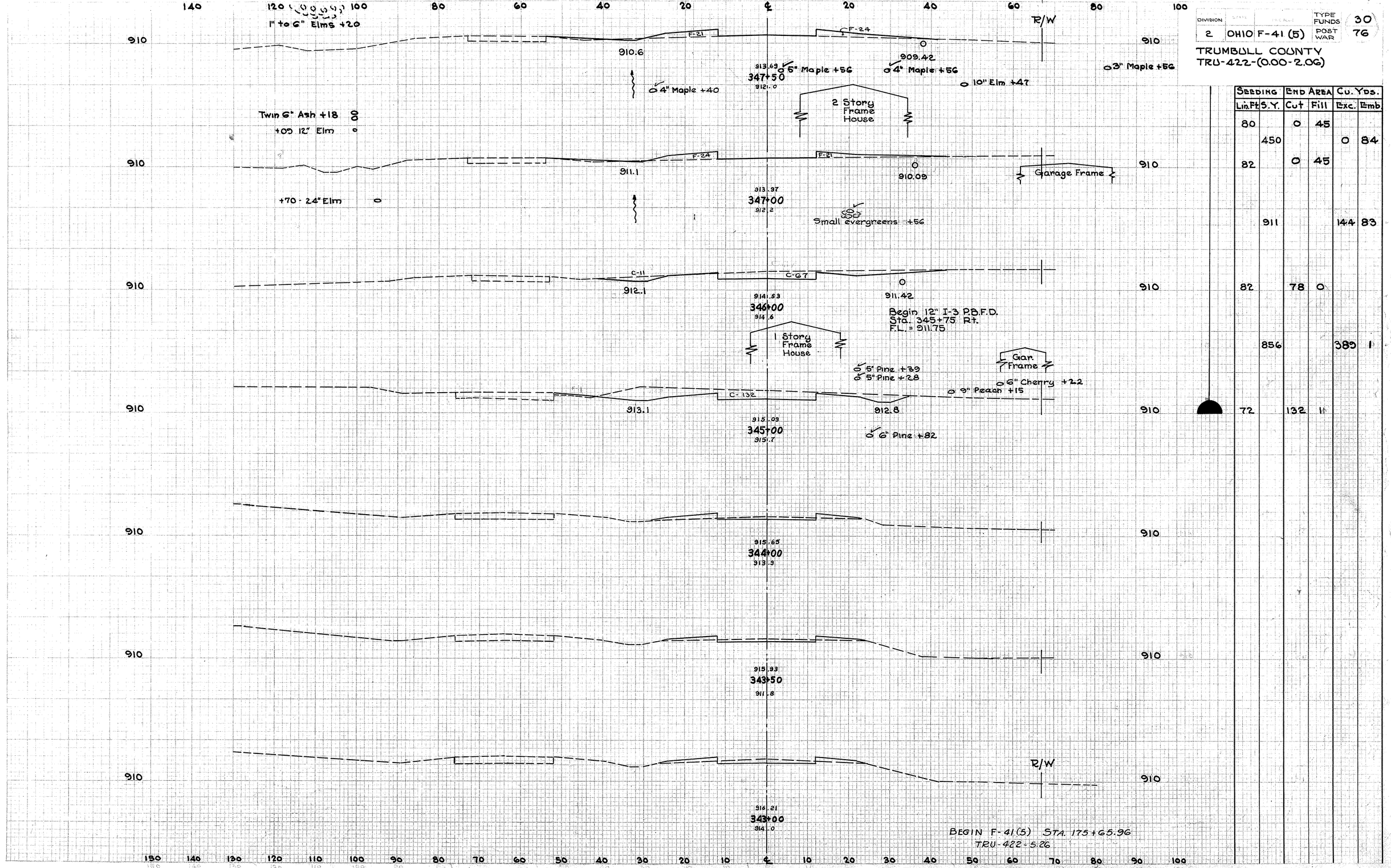
Excavation	1238	Cu. Yds.
Embankment	223	Cu. Yds.
Seeding	3923	Sq. Yds.

LINE SHEET STA. 447+00 To 459+00

DIVISION			TYPE FUNDS	30
2	OHIO	F-41 (5)	POST WAR	76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

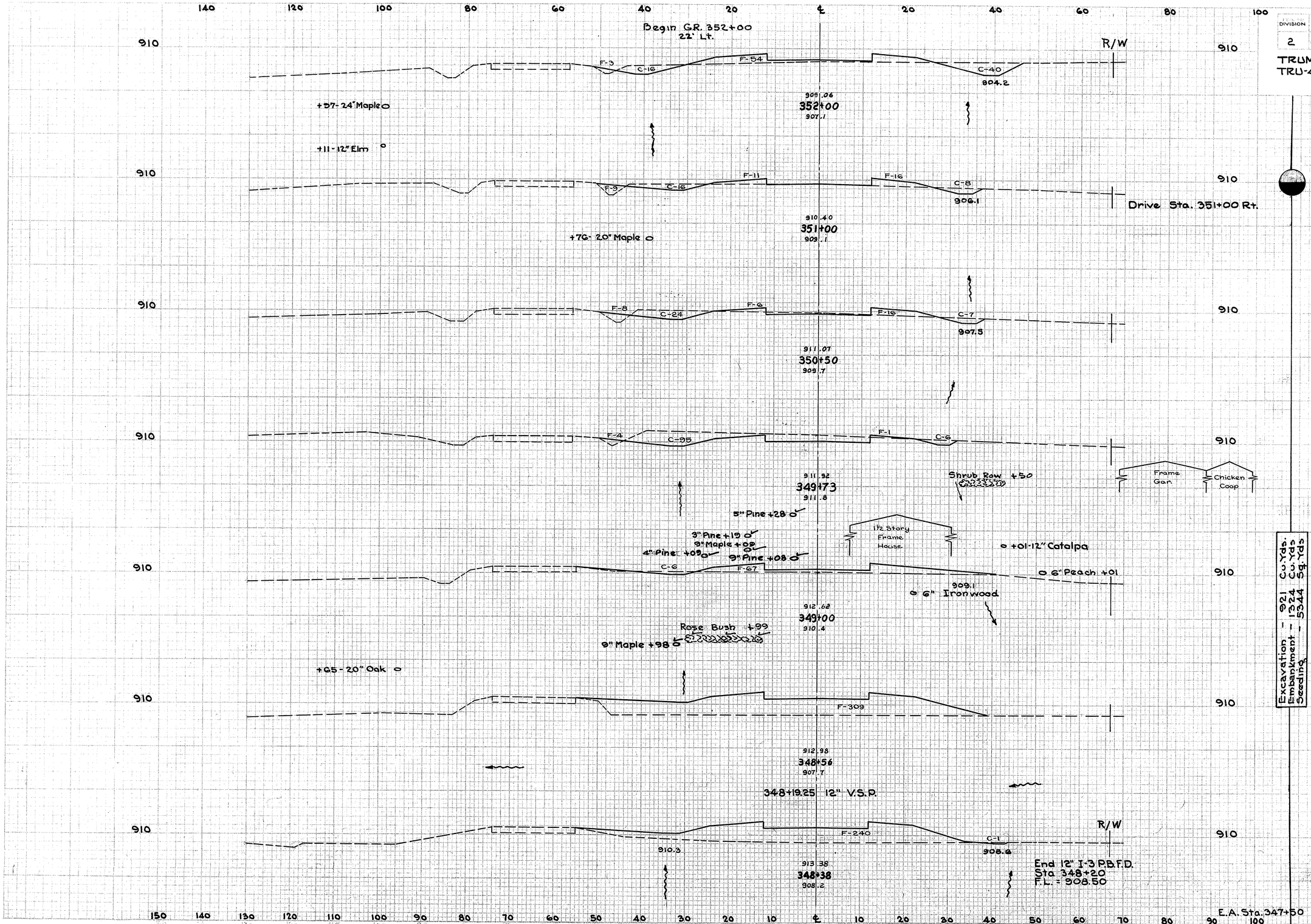
Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
80		0	45		
	450			0	84
82		0	45		
	911			144	83
82		78	0		
	856			385	1
72		132	11		



CROSS SECTIONS STA. 343+00 - 347+50

DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-41(5)	POST WAR	31 76

TRUMBULL COUNTY
TRU-422(0.00-2.06)



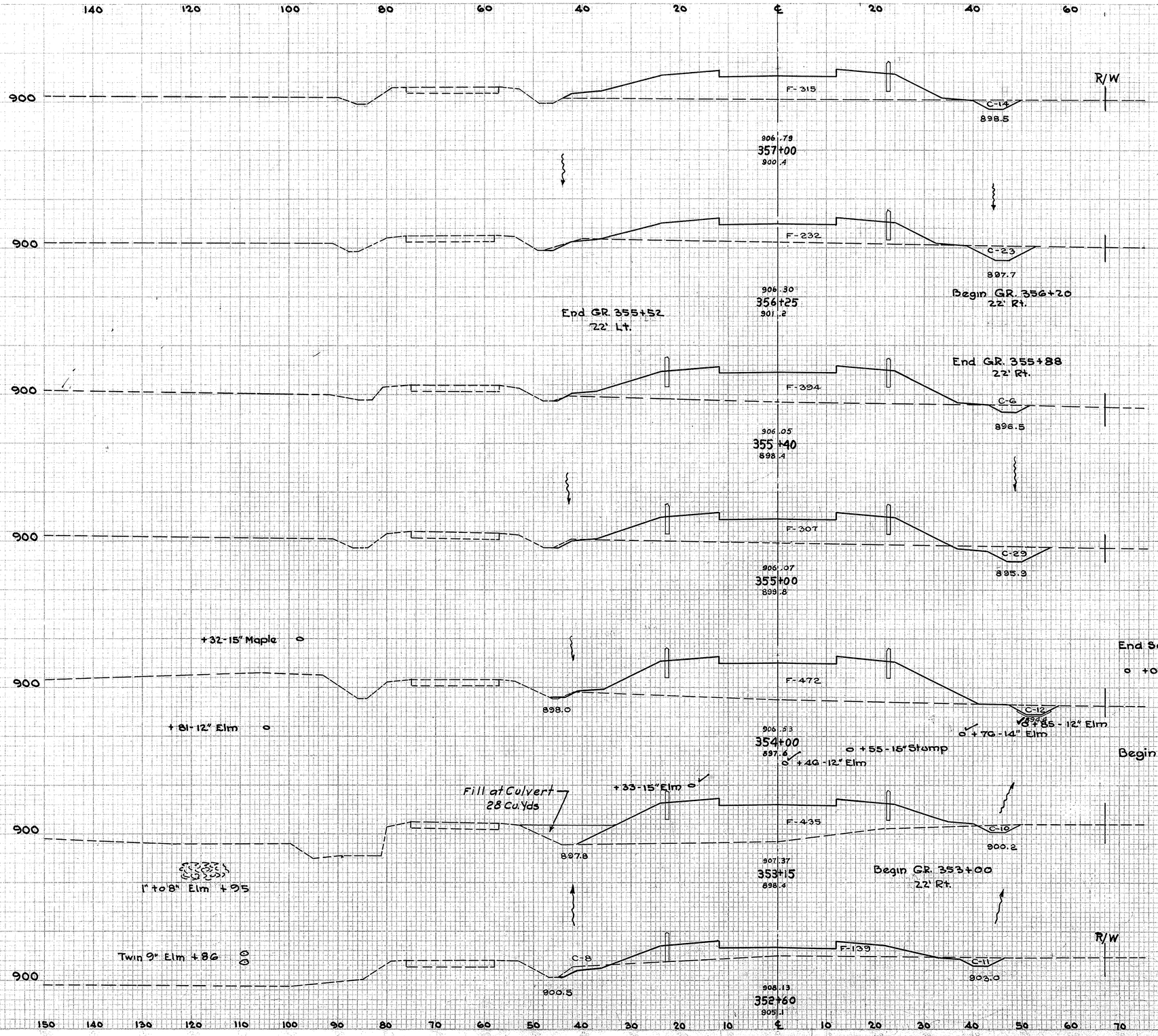
Seeding		End Area		Cu. Yds.	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
94		56	57		
	978			148	172
82		24	36		
	456			51	61
82		31	30		
	672			188	50
75		101	5		
	625			143	96
79		5	67		
	394			4	301
82		0	309		
	168			1	183
86		1	240		
	812			1	465
80		0	45		

Excavation - 921 Cu.Yds.
Embankment - 1324 Cu.Yds
Seeding - 5344 Sq.Yds

CROSS SECTIONS STA 348+00 - 352+00

DIVISION			TYPE FUNDS	
2	OHIO	F-41 (5)	POST WAR	32 76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



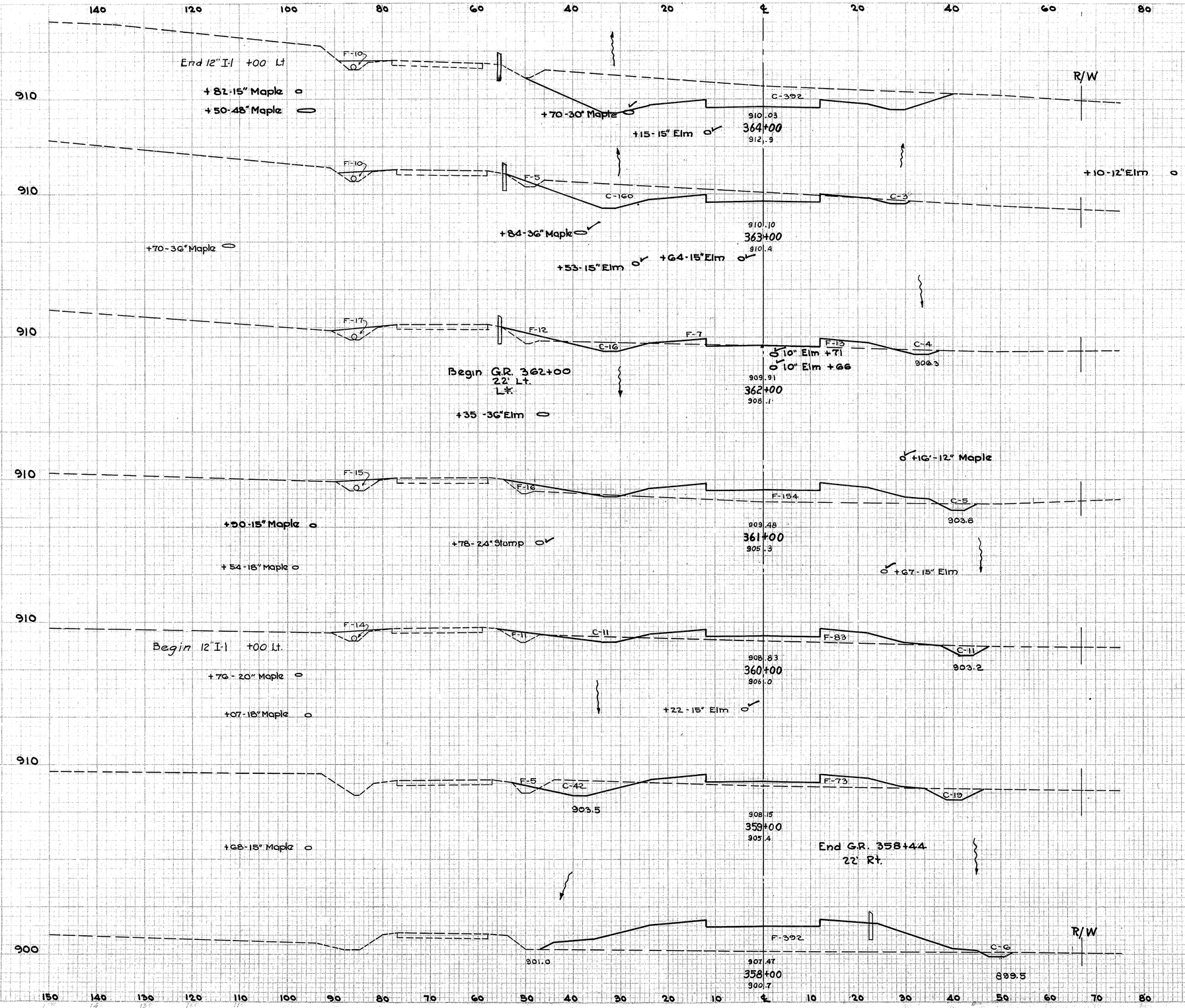
Excavation - 1223 Cu. Yds.
Embankment - 9844 Cu. Yds.
Seeding - 12886 Sq. Yds.

Seeding Lin. Ft.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
99		14	315		
	838			42	760
102		23	232		
	957			46	985
					48
101		6	394		
	458			26	559
105		29	307		
	1178			76	1443
107		12	472		
	968			35	1428
					28
98		10	435		
	587			30	585
94		19	139		
	627			83	218
94		56	57		

CROSS SECTIONS STA. 352+60 - 357+00

DIVISION	STATE		TYPE FUNDS	
2	OHIO	F-41(5)	POST WAR	33 76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

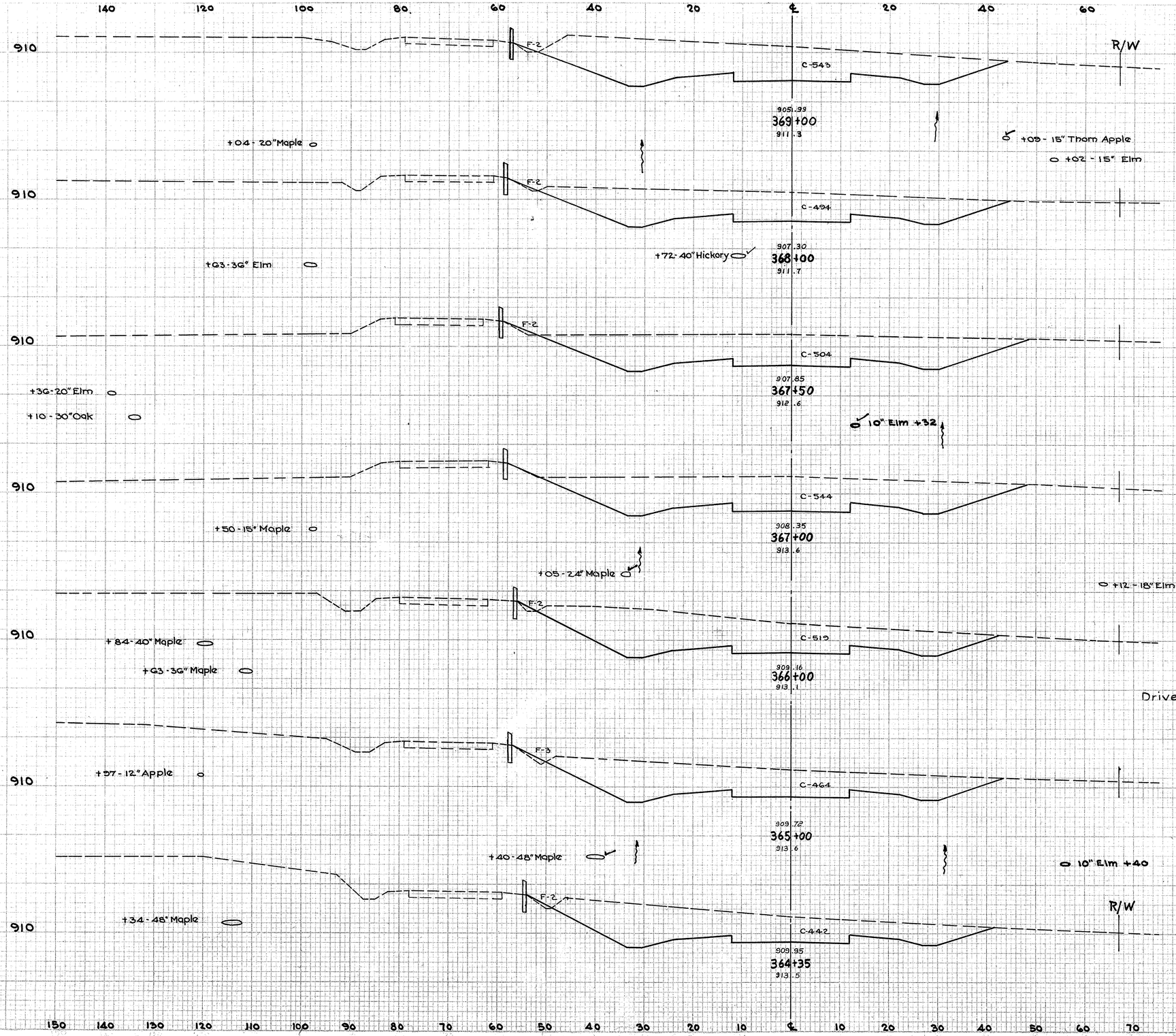


Seeding		End Area		Cu. Yds	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
90		392	10		
	933			1028	46
78		163	15		
	906			339	319
85		20	49		
	989			46	433
93		5	185		
	1044			50	543
95		22	108		
	1111			154	344
105		61	78		
	1139			124	870
100		6	392		
	1106			24	1309
99		7	315		

CROSS SECTIONS STA. 358+00-364+00

DIVISION 2 | OHIO | F-41(5) | TYPE FUNDS 34 | POST WAR 76

TRUMBULL COUNTY
TRU-422 (0.00-2.0G)



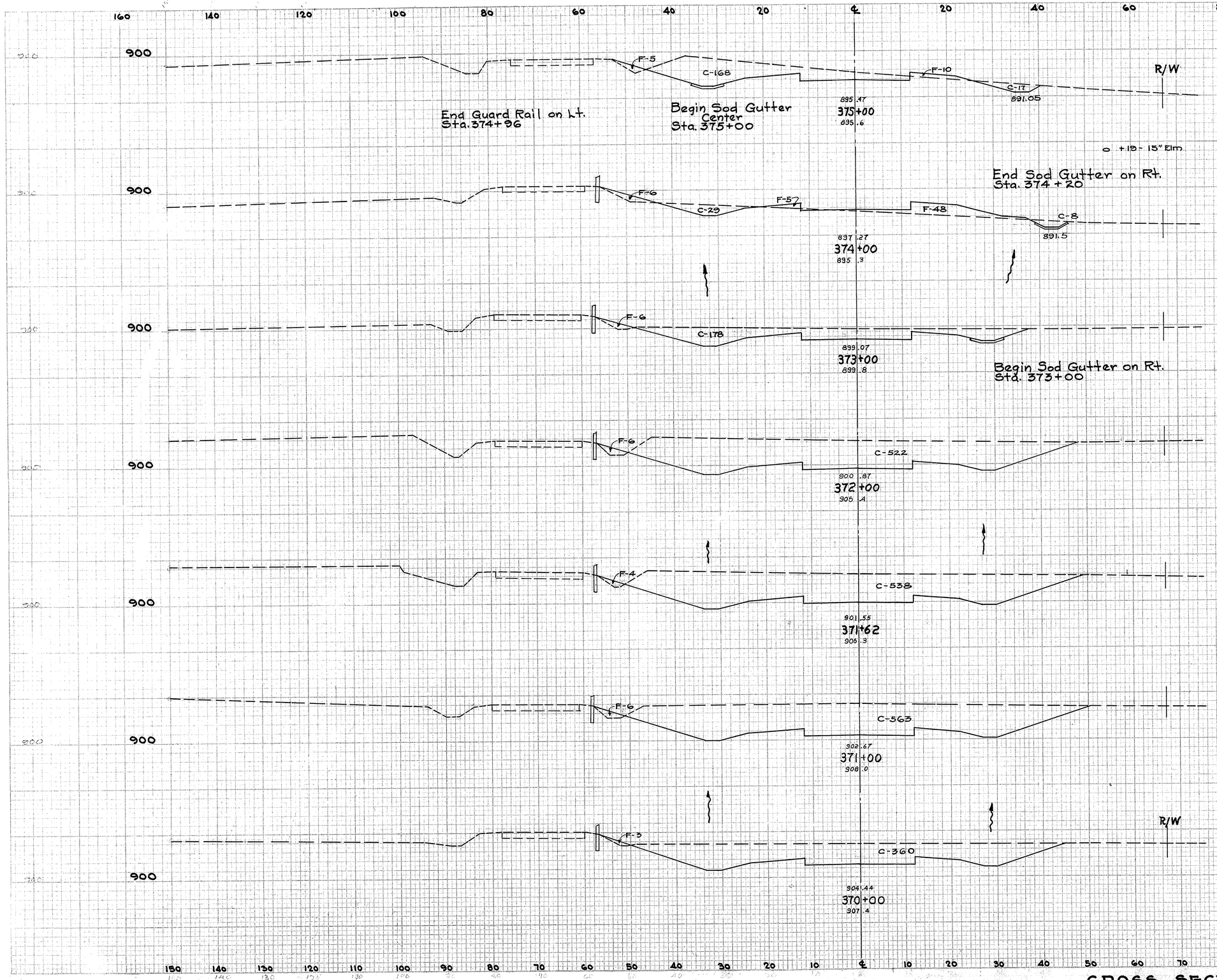
Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
92		543	2		
	1028			1920	7
93		494	2		
	531			924	4
98		504	2		
	542			971	2
97		544	0		
	1044			1969	4
91		519	2		
	1017			1820	9
92		464	3		
	637			1091	6
90		442	2		
	350			540	8
90		392	10		

Excavation - 17759 Cu. Yds.
Embankment - 410 Cu. Yds.
Seeding - 12313 Sq. Yds.

CROSS SECTIONS STA. 364+35 - 369+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	35
2	OHIO	F-41(5)	POST WAR	76

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

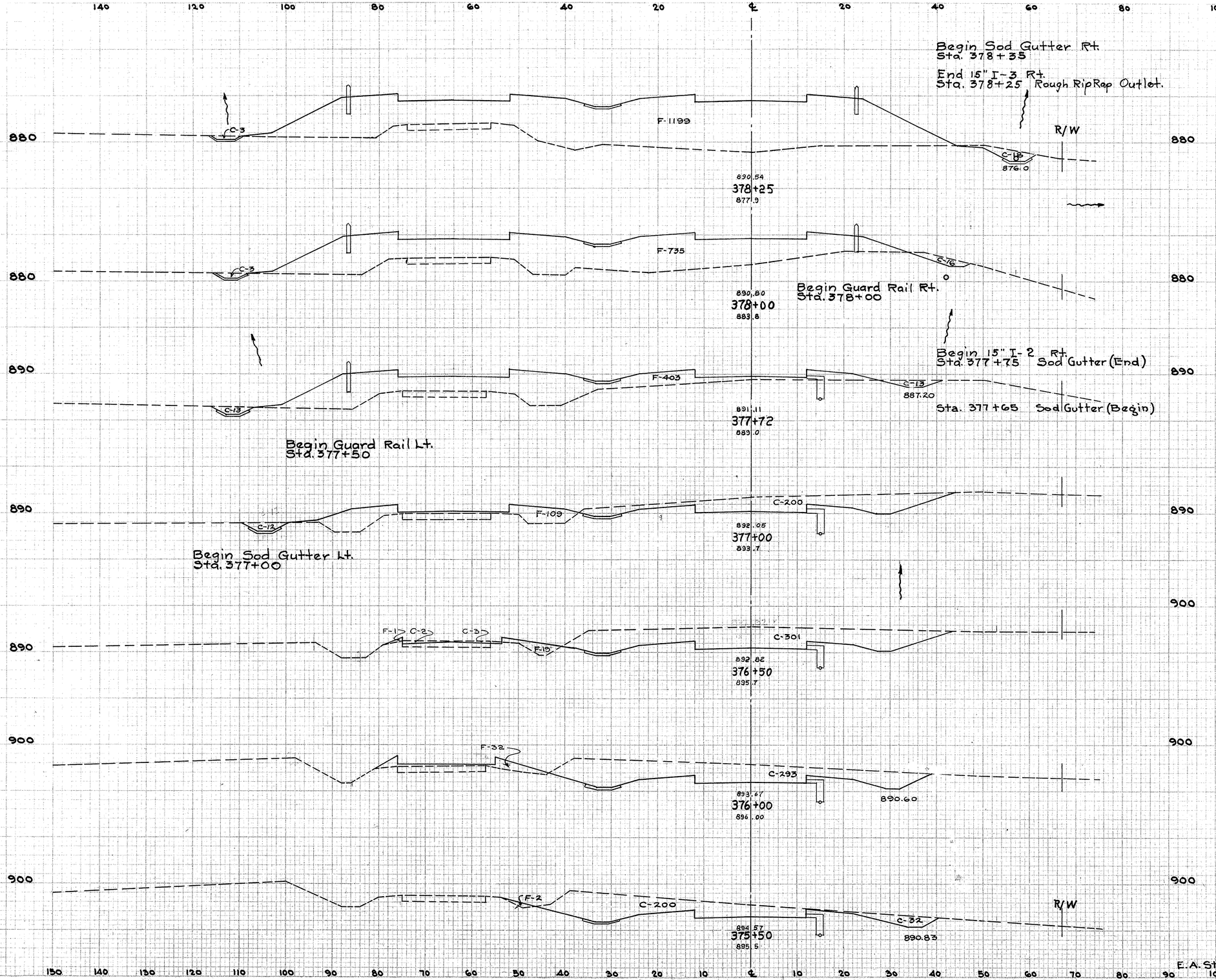


Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
92		185	15		
	1050			411	137
97		37	59		
	1017			398	120
86		178	6		
	1017			1296	22
97		522	6		
	410			746	7
97		538	4		
	672			1264	12
98		563	6		
	1039			1709	17
89		360	3		
	1006			1672	9
E.A. Sta 369+00	92		543	2	

CROSS SECTIONS STA. 370+00-375+00

DIVISION			TYPE FUNDS	36
2	OHIO	F-41(5)	POST WAR	76

TRUMULL COUNTY
TRU-422 (0.00 - 2.06)



Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
155		21	1109		
	410			19	895
140		19	735		
	426			23	590
134		26	403		
	1048			318	683
128		212	109		
	578			480	120
80		306	20		
	417			555	48
70		293	32		
	422			486	32
82		232	2		
	483			386	16
92		185	15		

CROSS SECTIONS STA. 375+50 - 378+25

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

37
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

R/W

160 140 120 100 60 40 20 ℄ 20 40 60 80 100

880

R/W C-8 877.8 F-1320 C-17 879.0

869.38
381+83
878.3

880

C-9 876.3 F-1226 R/W 880 C-23 878.2

869.29
381+46
880.6

Begin Sod Gutter
Sta. 381+19

+00-30" Elm

880

C-11 874.5 F-1427 R/W 880 C-11 876.0

869.23
381+00
877.3

From Sheet #61
Intersection Sta. 381+45.51

See Sheet No 61 for Additional E-1 for County Road Approach Rt. & Lt.

+82-18" Elm

880

F-1657 880 C-12 875.4

Begin G.R. 380+26 Lt
End Sod Gutter Sta. 379+86
End G.R. 380+00

869.25
380+63
876.3

End Sod Gutter
Sta. 380+40

880

C-6 879.9 F-1397 880 C-8 874.2

869.45
379+86
876.9

880

C-4 879.95 F-1427 880

889.50
379+73
876.3

+52-15" Cherry
+45-24" Oak
+91-36" Elm
+95-36" Elm

End Sod Gutter Sta. 379+68

R/W

880

C-146 980.18 +0012" Elm F-1290 R/W 880 C-7 875.2

+87-24" Ash

889.91
379+00
876.8

170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100

E.A. Sta. 378+25

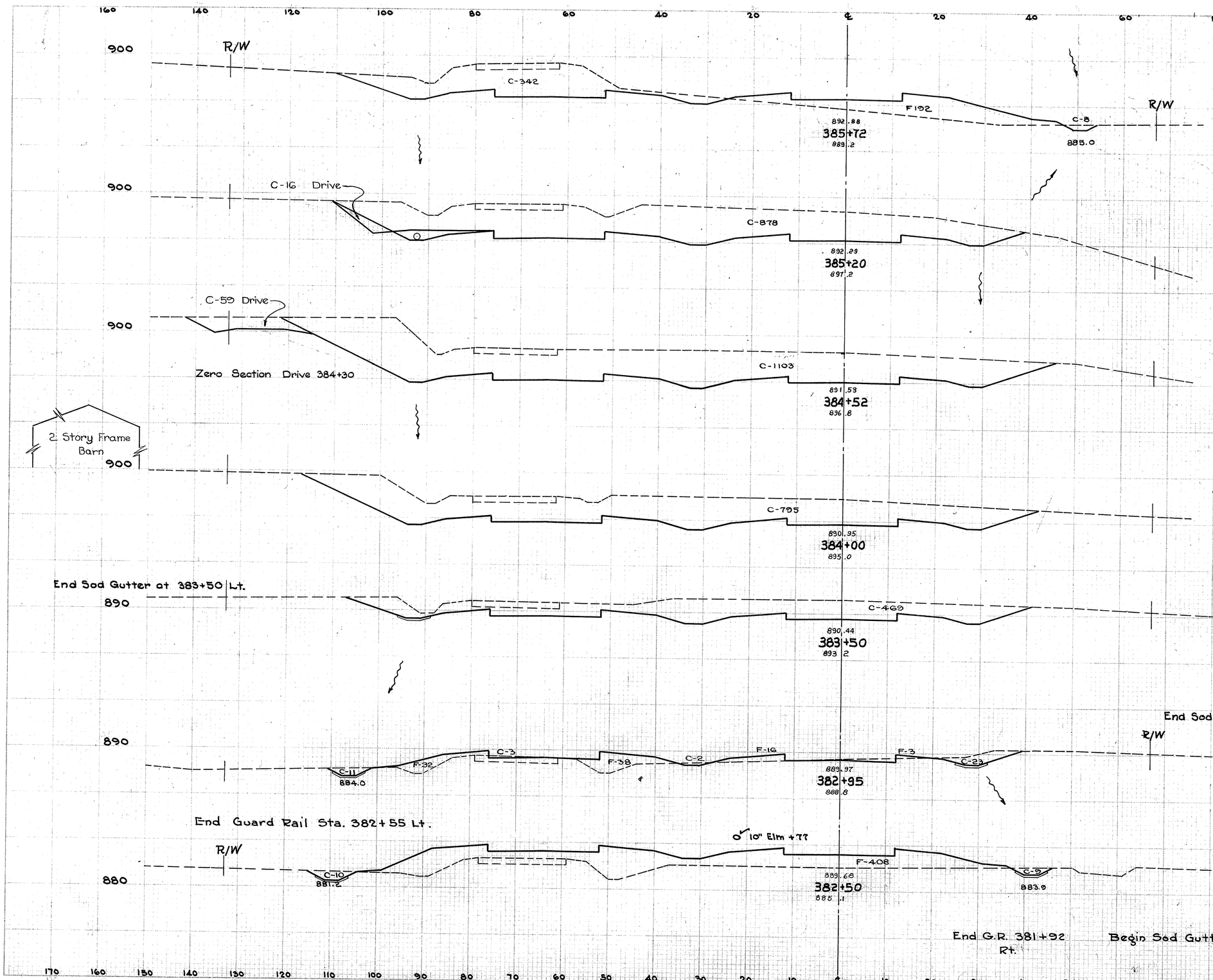
Excavation 12925 Cu. Yds.
Embankment 25295 Cu. Yds.
Seeding 19304 Sq. Yds.

Seeding Lin. Ft.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
154		25	1320		
	551			39	1745
114		32	1226		
	598			46	2260
	2126			250	1606
120		22	1427		
	514			23	2113
130		12	1657		
	1198			52	4355
150		14	1397		
	215			4	680
147		4	1427		
	1269			212	3673
166		153	1290		
	1337			242	3458
155		21	1199		

CROSS SECTIONS STA. 379+00- 381+83

FED. AID DIVISION	STATE	PROJECT	TYPE FUNDS	SHEET NO.	TOTAL SHEETS
2	OHIO	F-41 (5)	POST WAR	38	76

TRUMBULL COUNTY
TRU-422-(0.00 - 2.06)

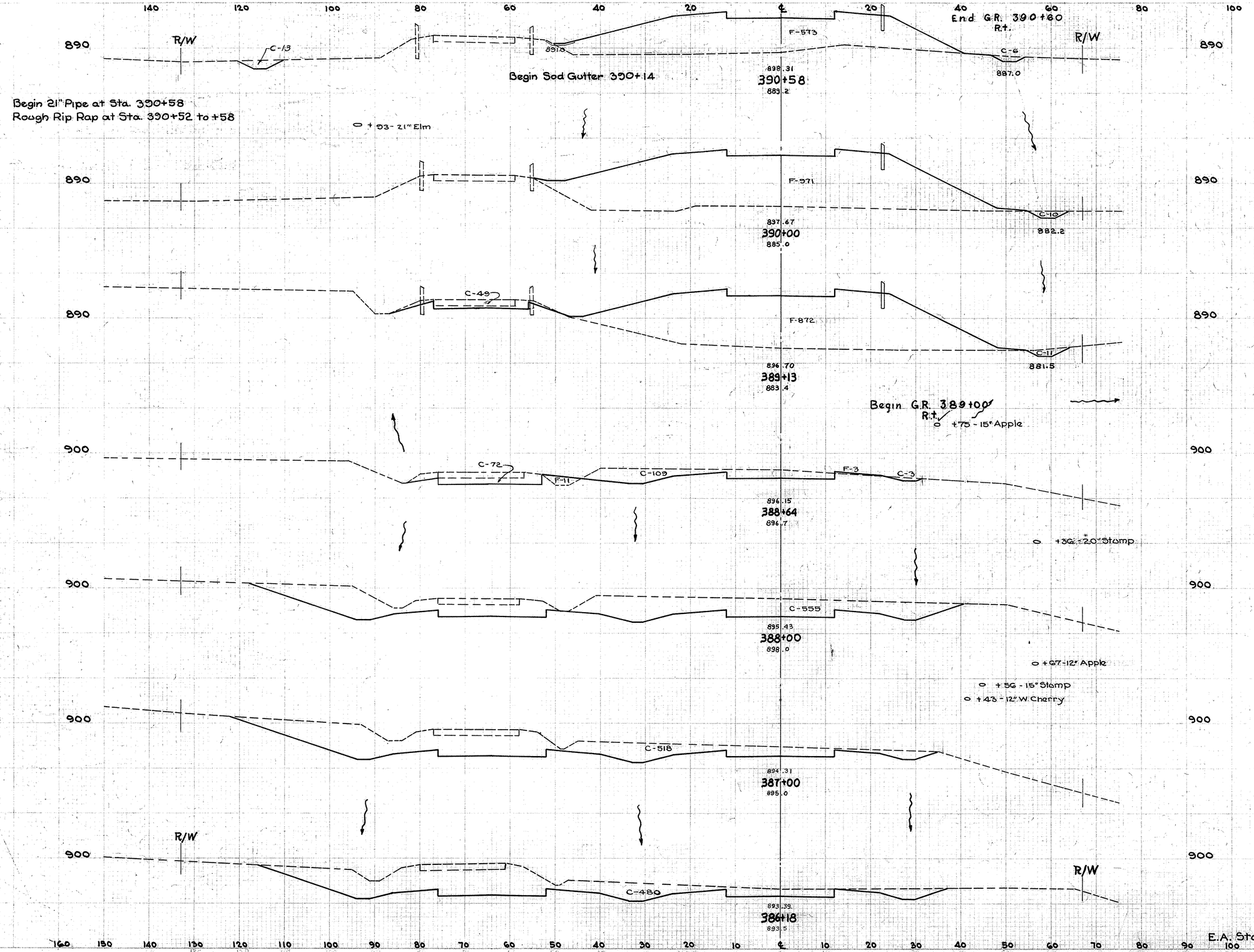


Seeding		End Area		Cu. Yds.	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
135		350	192		
	766			1202	185
130		878	0		
Drive +20 Lt.				118	
	1065			2495	0
152		1103	0		
	844			1928	0
140		795	0		
Drive Rt. 384+00				23	23
	725			1171	0
121		469	0		
	746			524	91
End Sod Gutter at 383+20 Rt.					
123		45	89		
	645			53	414
135		19	408		
	1076			54	2144
154		25	1320		

CROSS SECTIONS STA 382+50 TO 384+72

FED. ROAD DIVISION	STATE	PROJECT	TYPE FUNDS	39
2	OHIO	F-41 (5)	POST WAR	76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

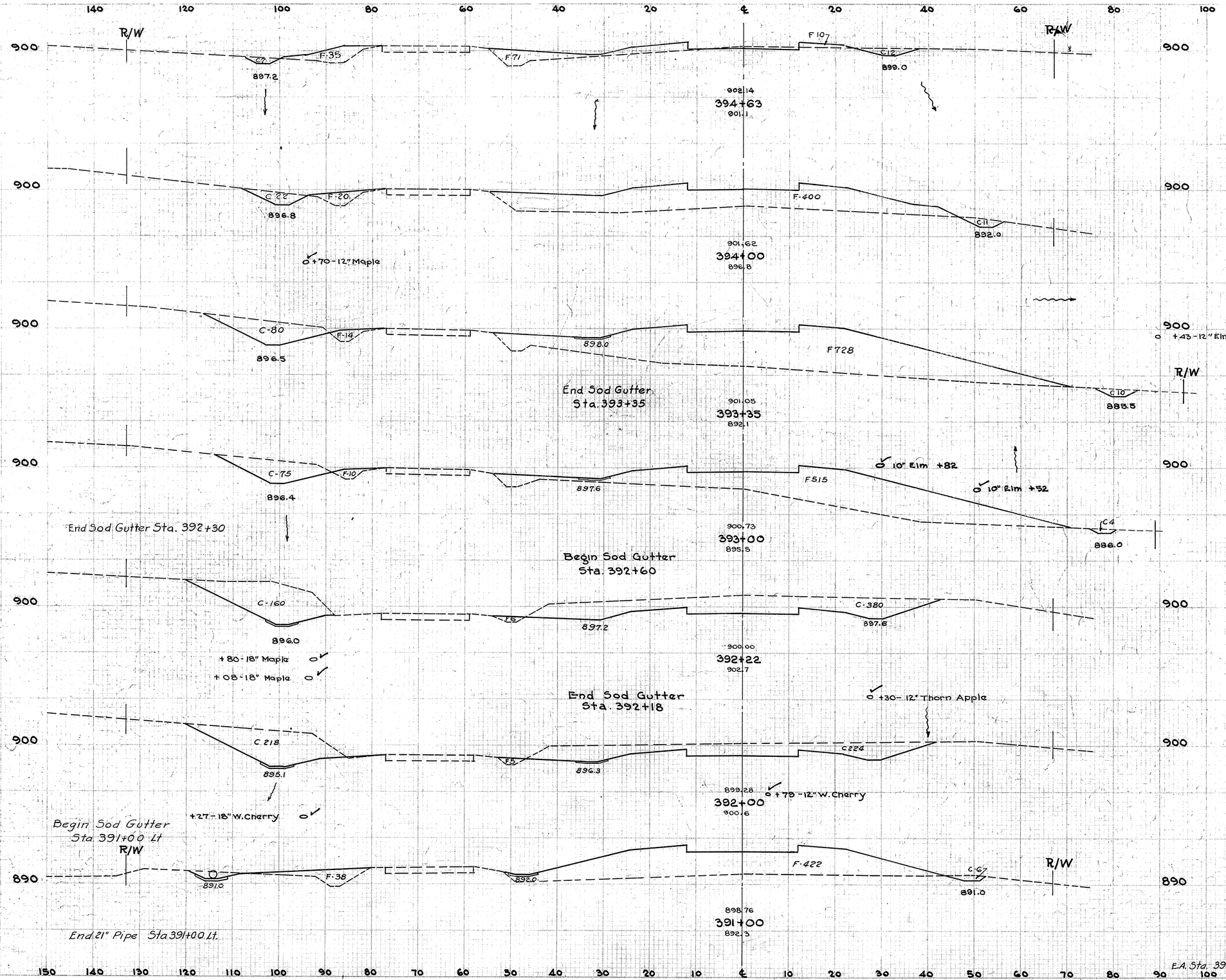


Seeding		End Area		Cu. Yds	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
102		19	573		
	690			31	1658
112		10	971		
	1083			113	2969
112		60	872		
	495			221	804
70		184	14		
	725			876	17
134		555	0		
	1472			1987	0
131		518	0		
	1175			1515	0
127		480	0		
	670			707	164
135		350	192		

CROSS SECTIONS STA 386+18 - 390+58

FED. AID DIVISION	STATE	PROJECT	TYPE FUNDS	40
2	OHIO	F-41(5)	POST WAR	76

TRUMBULL COUNTY
TRU-422 (0.00-2.06)



Seeding		End Area		Cu. Yds.	
Lin. Ft	S.Y.	Cut	Fill	Exc.	Emb.
123		27	116		
	938			70	626
145		33	420		
	1192			148	1400
185		90	742		
	704			116	821
177		79	525		
	1382			894	767
142		540	6		
	346			400	4
141		442	5		
	1617			848	861
150		16	460		
	588			27	803
102		19	573		

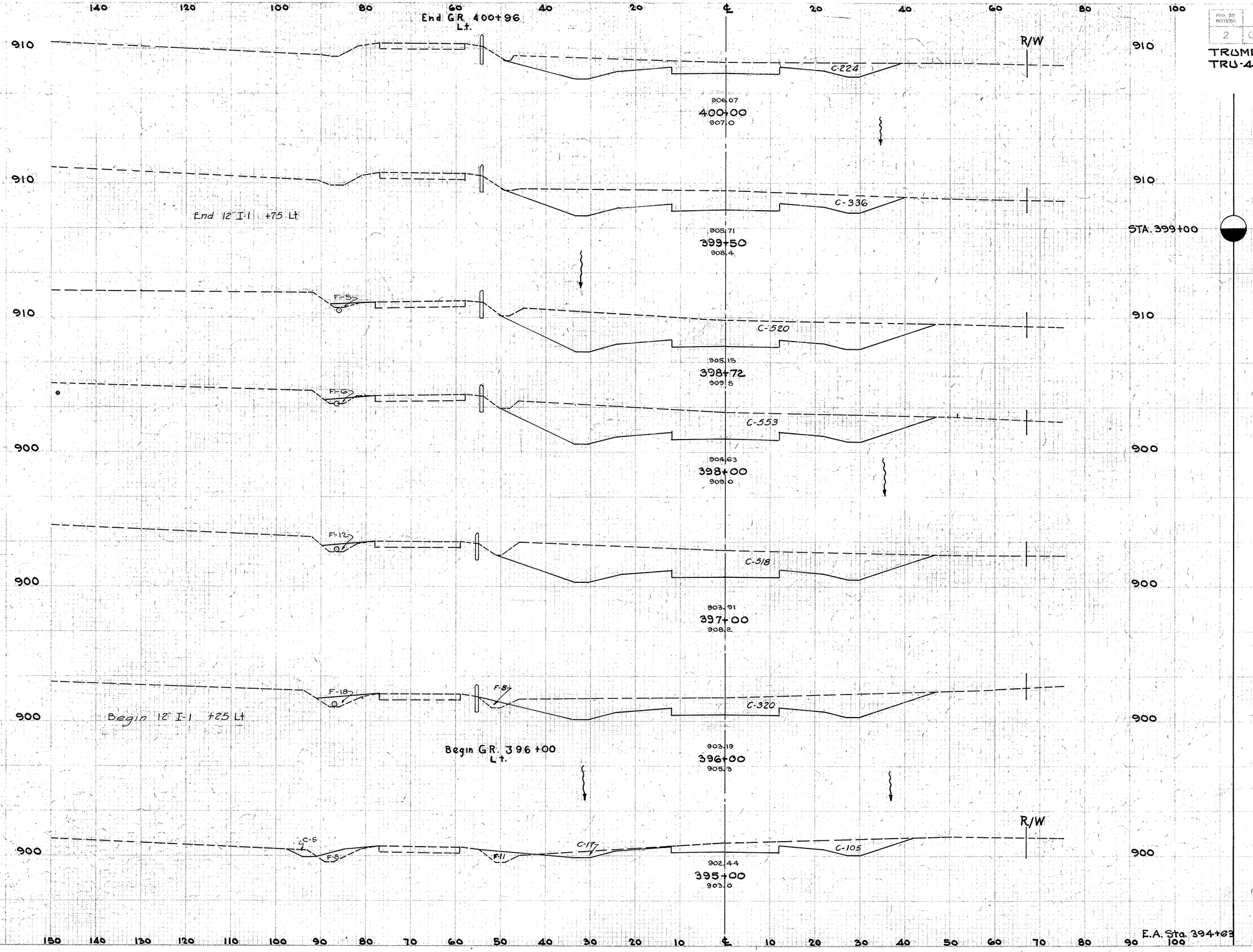
Excavation 12802 Cu. Yds.
Embankment 11023 Cu. Yds.
Seeding 16320 Sq. Yds.

CROSS SECTIONS STA. 391+00 - 394+63

FED. AID DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

41
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)



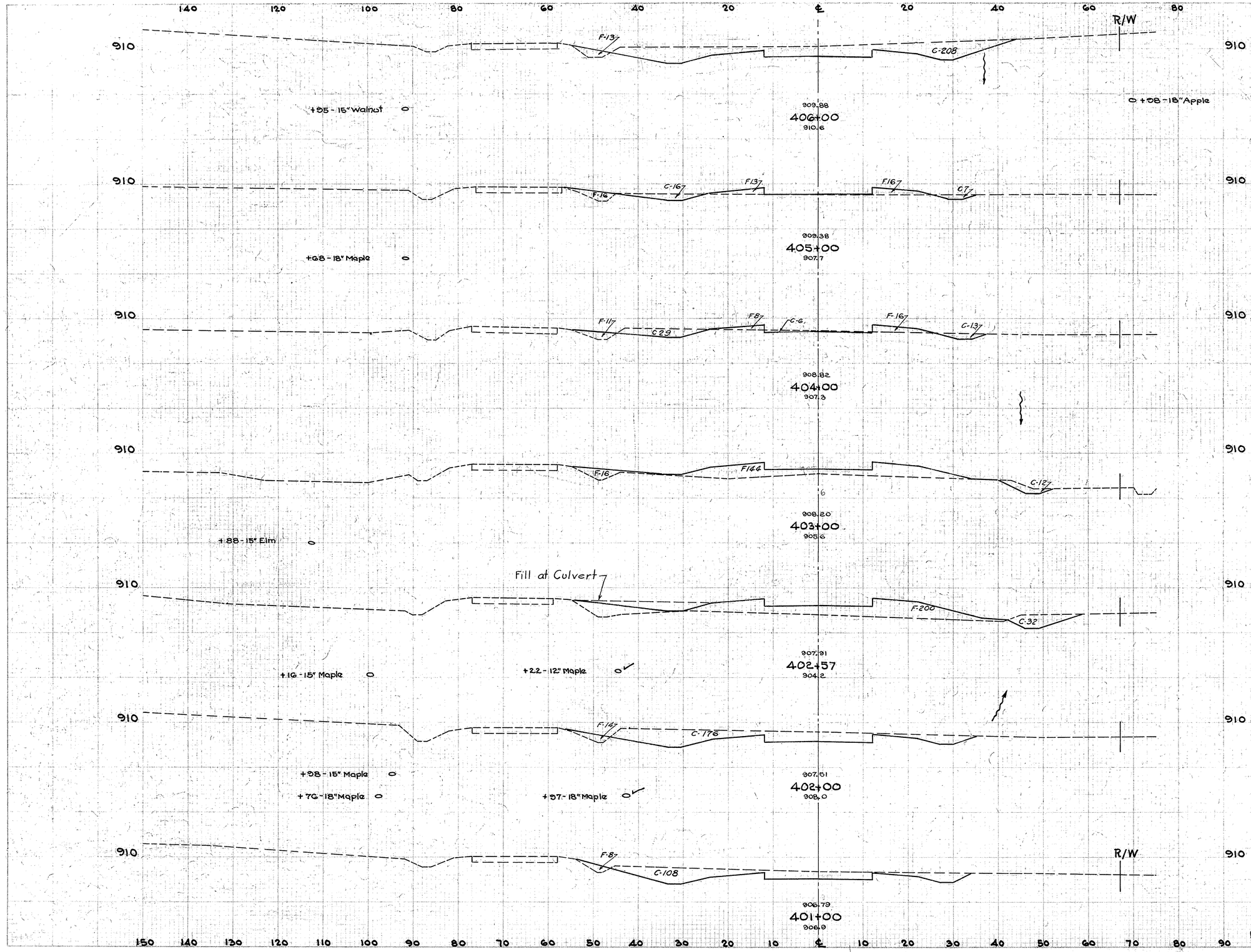
Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
85		224	0		
	483			519	0
89		336	0		
	797			1236	0
95		520	5		
	760			1404	14
95		533	6		
	1044			1946	33
93		518	12		
	1044			1552	70
95		320	26		
	1011			828	83
87		127	19		
	432			105	93
123		27	116		

CROSS SECTIONS STA. 395+00-400+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

42
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)



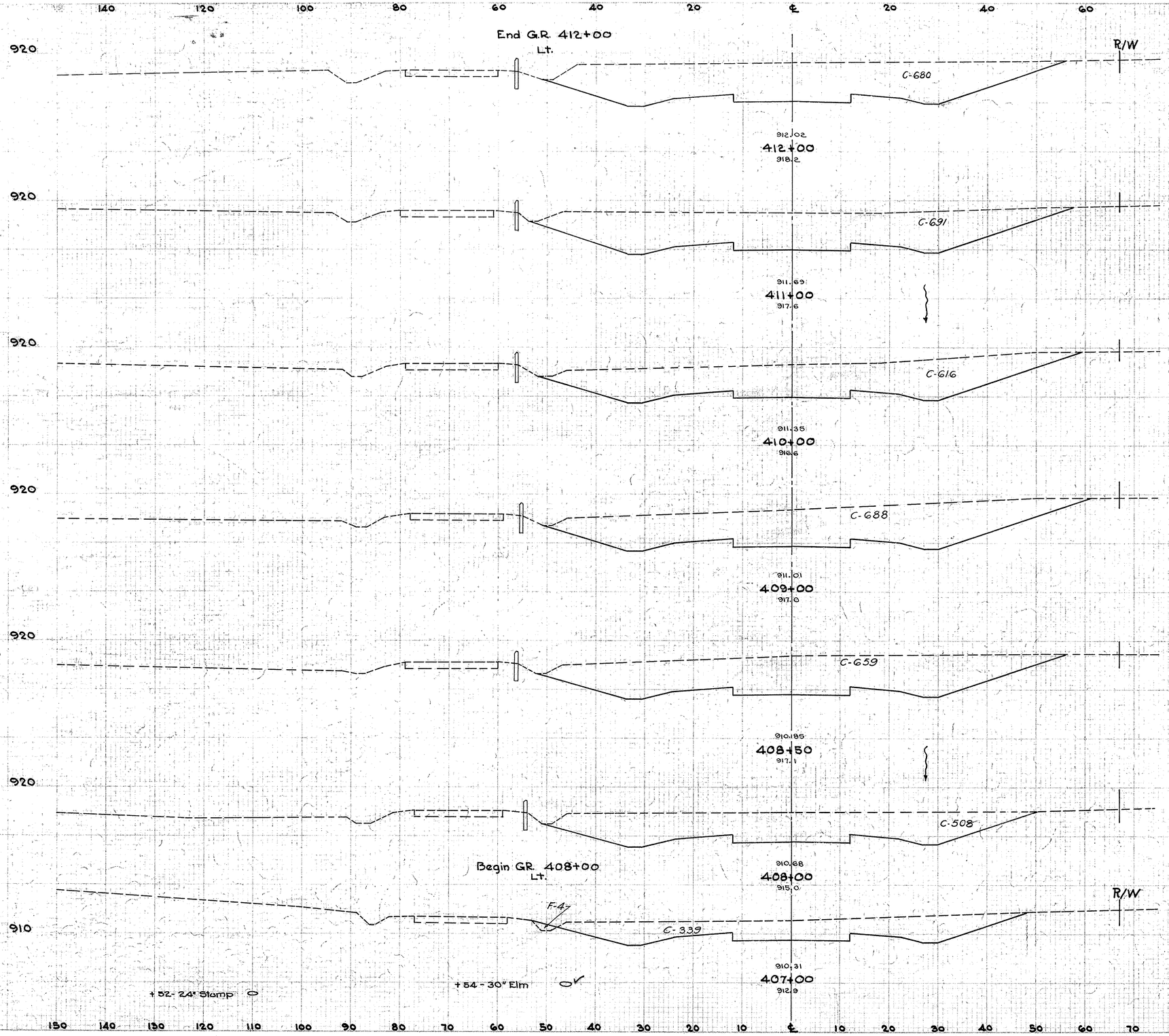
Excavation — 12332 Cu.Yds.
Embankment — 11239 Cu.Yds.
Seeding — 11905 Sq.Yds.

Seeding		End Area		Cu. Yds.	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
90		208	13		
	933			428	107
78		23	45		
	894			131	148
83		48	35		
	1011			113	361
99		13	160		
	490			36	287
106		32	200		16
	589			219	226
80		176	14		
	883			526	41
79		108	8		
	911			615	15
85		224	0		

CROSS SECTIONS STA. 401+00 - 406+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	43
2	OHIO	F-41 (5)	POST WAR	76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

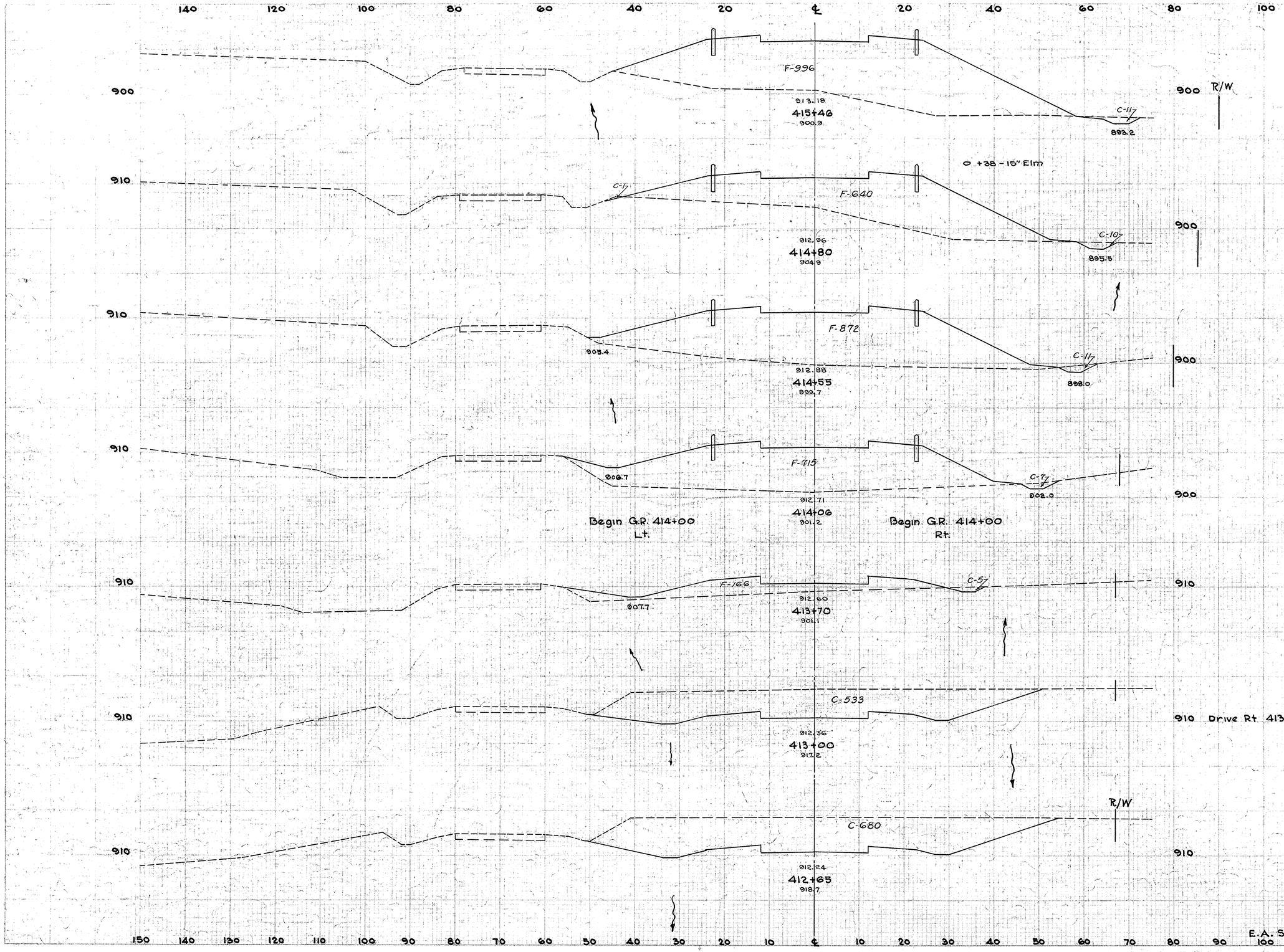


Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
105		680	0		
	1178			2539	0
107		691	0		
	1200			2420	0
109		616	0		
	1222			2415	0
111		688	0		
	597			1247	0
104		659	0		
	564			1081	0
99		508	0		
	1089			1569	7
97		339	4		
	1039			1013	31
90		208	13		

CROSS SECTIONS STA. 407+00 - 412+00

FED. ROAD DIVISION	STATE	PROJECT	TYPE FUNDS	44
2	OHIO	F-41(5)	POST WAR	76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)



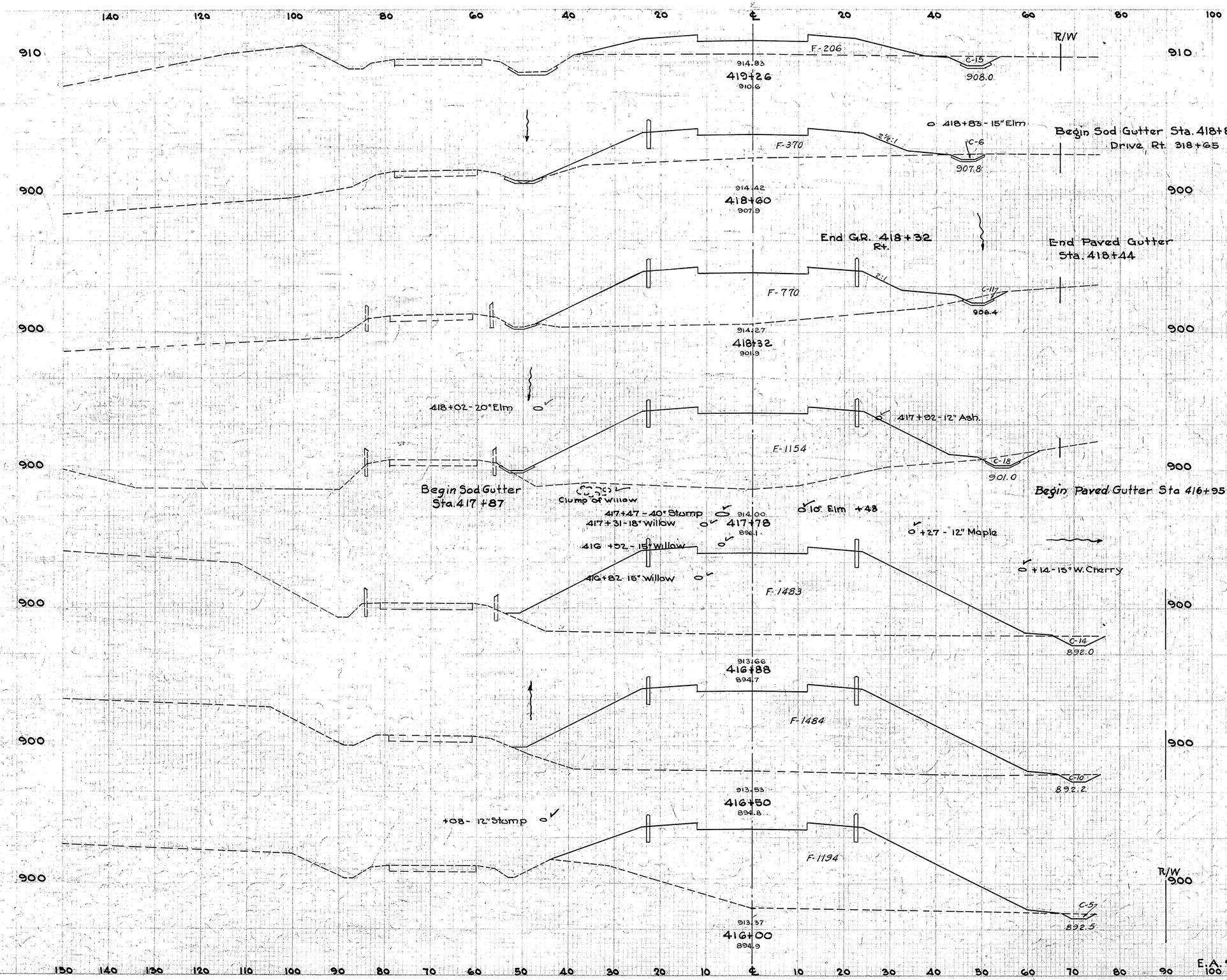
Seeding		End Area		Cu. Yds.	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
124		11	996		
	887			27	2000
118		11	640		
	32			10	700
113		11	872		
	591			16	1440
104		7	715		
	382			8	587
87		5	166		
	723			697	215
99		533	0	200	
	391			786	0
102		680	0		
	748			1637	0
105		680	0		

CROSS SECTIONS STA. 412+65 - 415+46

FED. RD DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

45
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
102		15	206		65
	741			26	704
100		6	370		
	325			9	591
109		11	770		
	672			29	1924
115		18	1154		
	1225			53	4396
130		14	1483		
	547			18	2088
129		10	1484		
	713			14	2480
128		5	1194		
	756			16	2190
124		11	996		

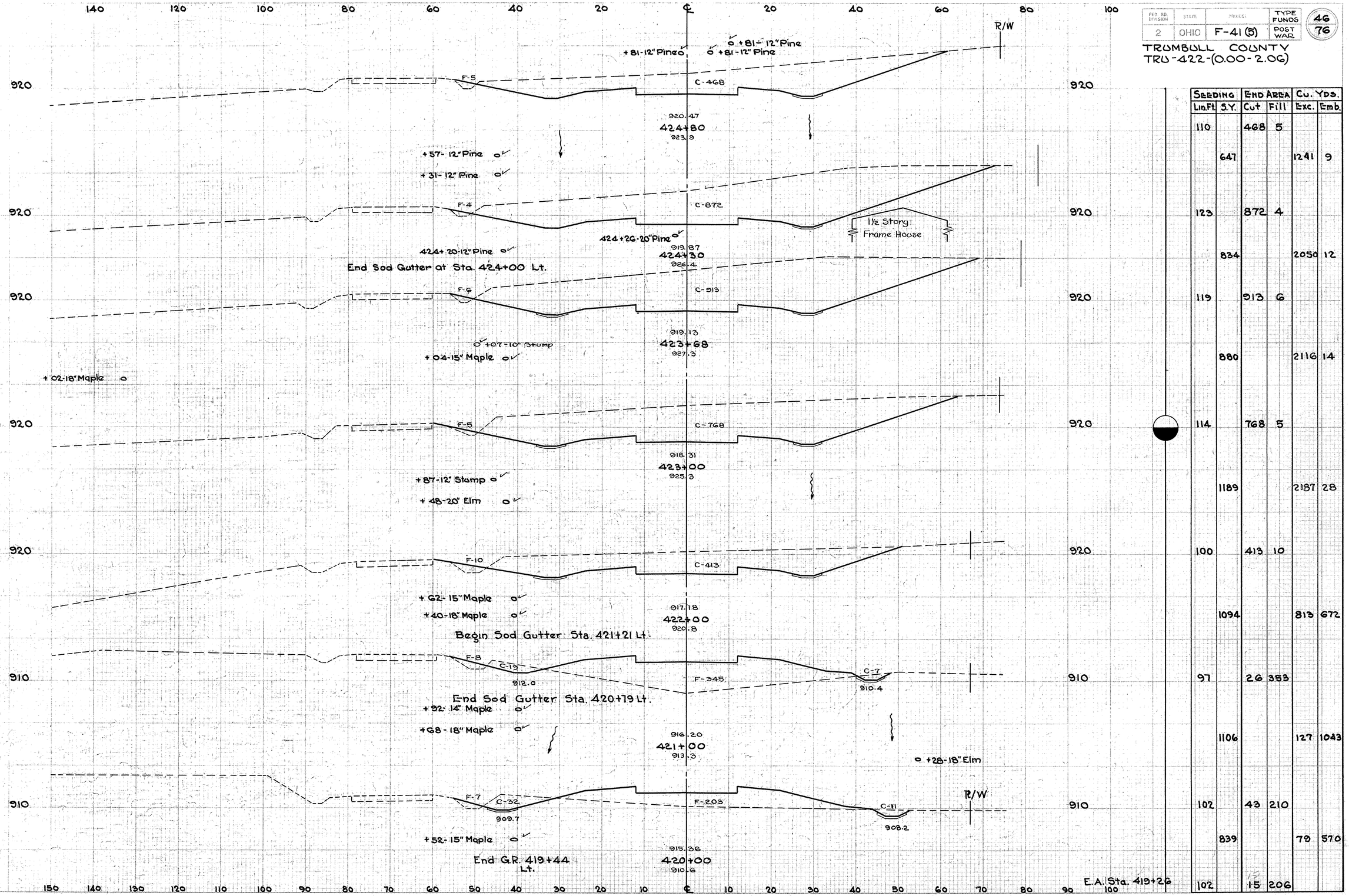
Excavation - 9291 Cu.Yds.
Embankment - - 21693 Cu.Yds.
Seeding - - - 14139 Sq.Yds.

CROSS SECTIONS STA. 416+00 - 419+26

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

46
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

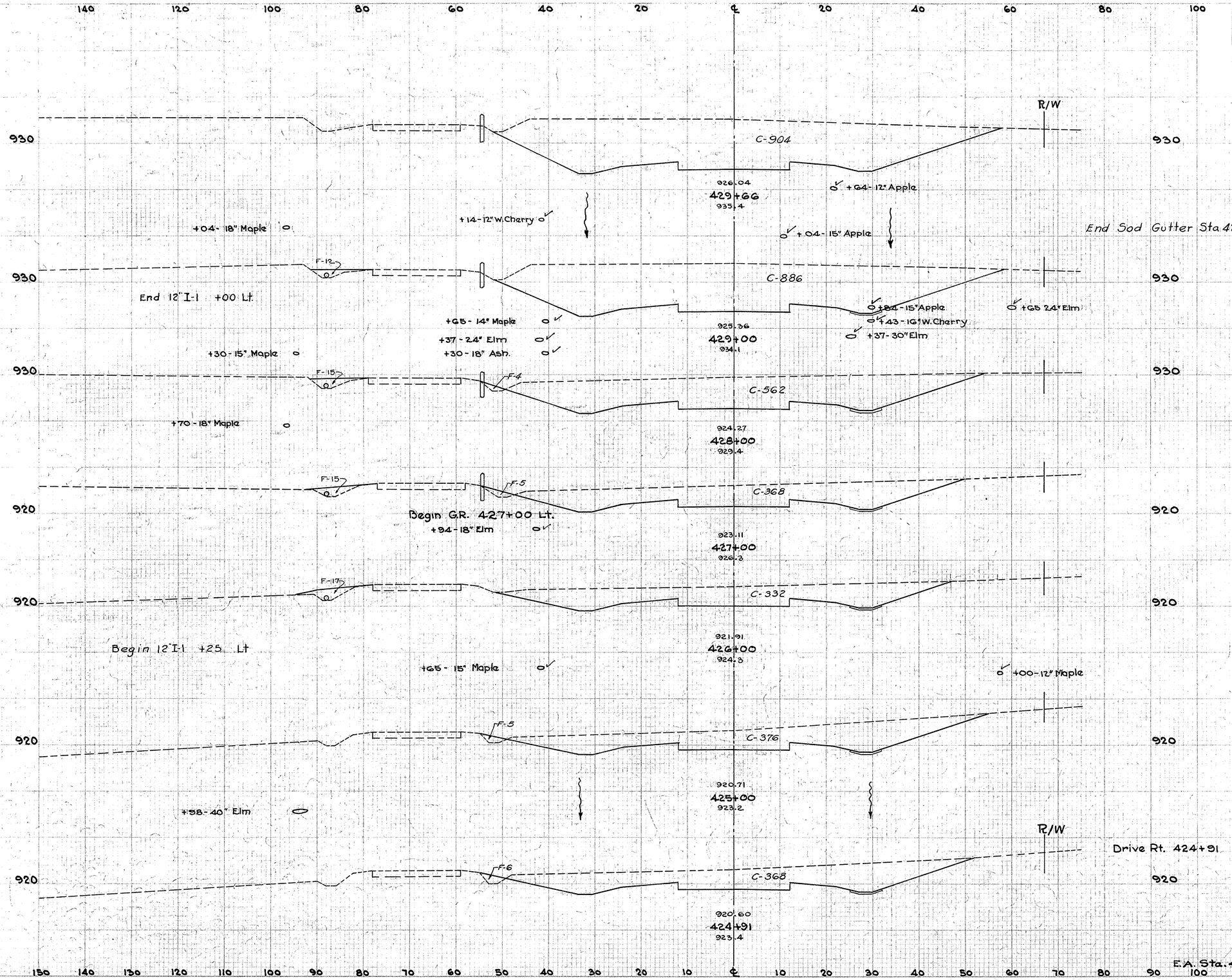


Seeding		End Area		Cu. Yds.	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
110		468	5		
	647			1241	9
123		872	4		
	834			2050	12
119		913	6		
	880			2116	14
114		768	5		
	1189			2187	28
100		413	10		
	1094			813	672
97		26	353		
	1106			127	1043
102		43	210		
	839			79	570
102		15	206		

CROSS SECTIONS STA. 420+00-424+80

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	47
2	OHIO	F-41 (5)	POST WAR.	76

TRUMBULL COUNTY
TRU. 422 (0.00-2.06)



Seeding		End Area		Cu. Yds.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.
108		904	0		
	785			2188	15
106		886	12		
	1156			2691	50
102		562	15		
	1111			1722	56
98		368	15		
	1072			1296	55
95		332	17		
	1100			1311	41
103		376	5		
	102			124	2
				53	
100		368	6		
	128			170	2
110		468	5		

Excavation - 19176 Cu. Yds.
Embankment - 2086 Cu. Yds.
Seeding - 13271 Sq. Yds.

CROSS SECTIONS STA. 424+91 - 429+66

FED. RD DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

48
76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

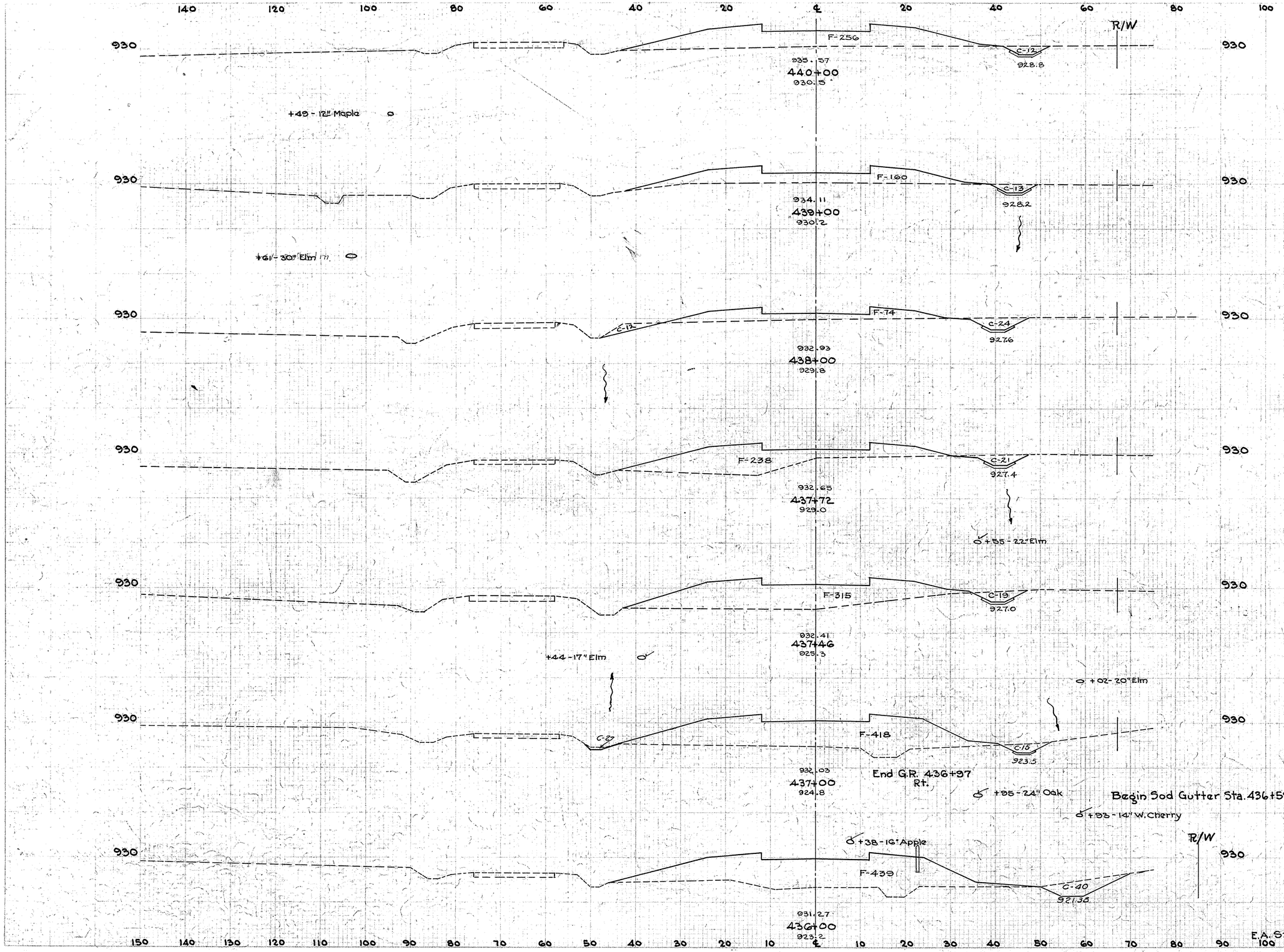
SEEDING Lin.Ft.	SEEDING S.Y.	END AREA Cut	END AREA Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
105		15	464		
	840			31	1159
105		8	405		
	454			36	384
85		37	77		
	293			35	107
85		24	110		
	492			123	117
79		99	7		
	900			554	22
83		200	5		
	983			1043	19
94		363	5		
	533			785	10
98		485	5		
	961			2160	8
108		904	0		

E.A. Sta. 429+66

CROSS SECTIONS STA. 430+50 - 435+00

FED. RD DIVISION	STATE	PROJECT	TYPE FUNDS	49 / 76
2	OHIO	F-41(5)	POST WAR	

TRUMBULL COUNTY
TRU-422 (0.00-2.06)



Excavation 3540 Cu.Yds.
Embankment 7023 Cu.Yds.
Seeding 12084 Sq.Yds.

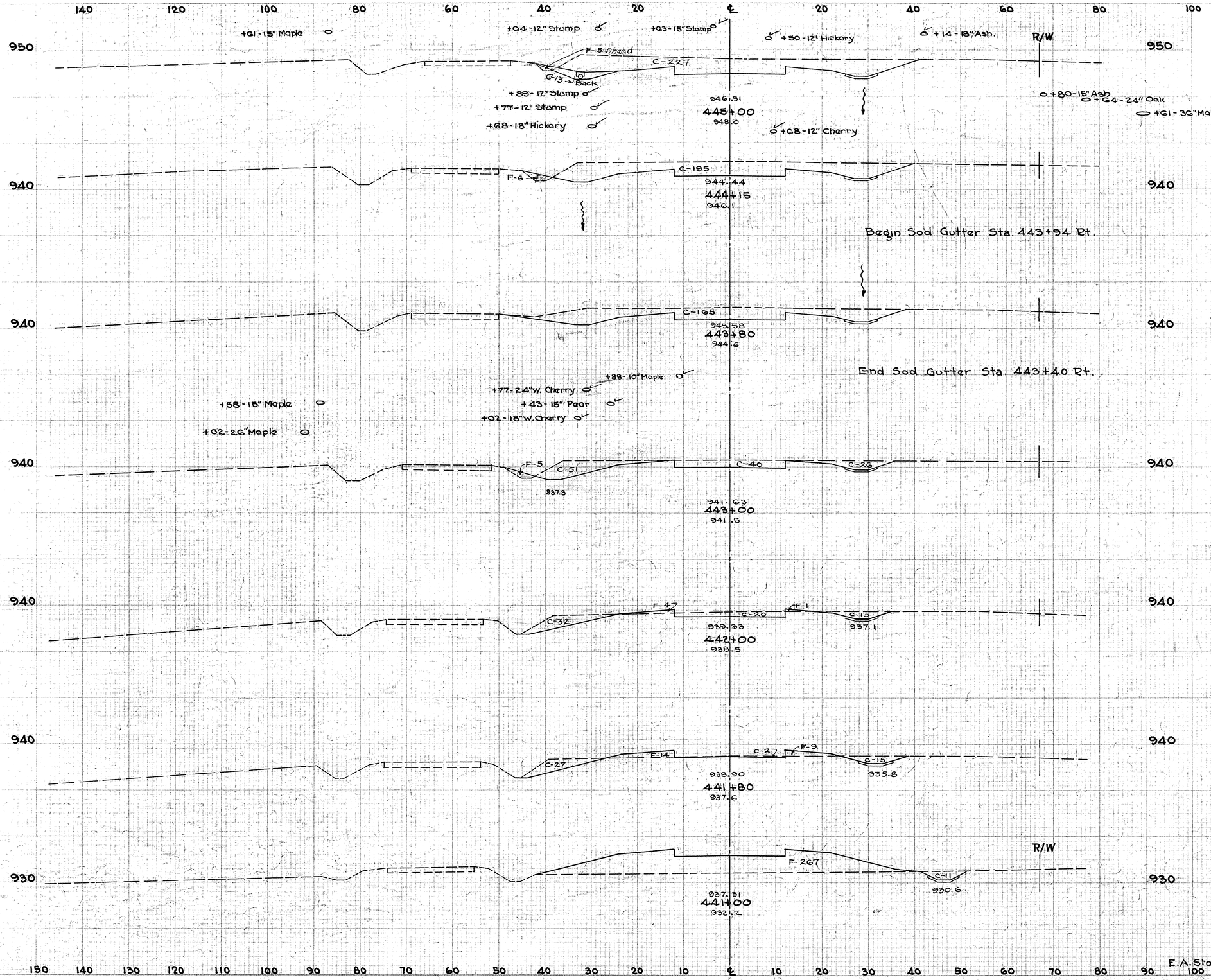
Seeding Lin.Ft.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
98		12	256		
	1178			46	770
96		13	169		
	1061			91	433
95		36	74		
	296			30	162
95		21	238		
	273			19	266
94		19	315		
	562			31	631
126		17	426		
	1383			106	1602
123		40	439		
	1267			102	1672
105		15	464		

CROSS SECTIONS STA. 436+00 - 440+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

50
76

TRUMBULL COUNTY
TRU-422(0.00-2.06)



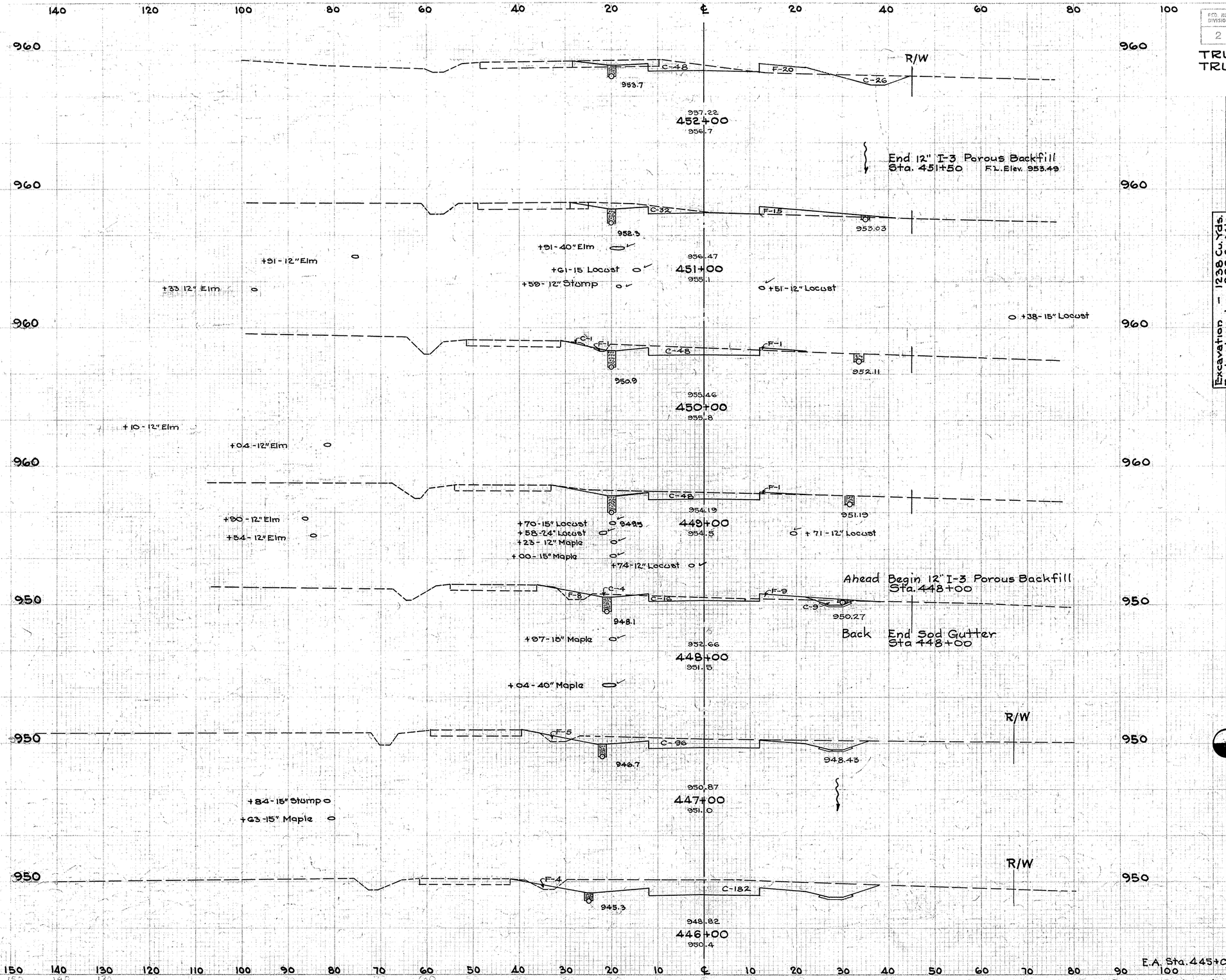
	Seeding		End Area		Cu. Yds.	
	Lin. Ft	S.Y.	Cut	Fill	Exc.	Emb.
Forward	75		227	5		
Backward			240	3		
		713			685	14
	76		195	6		
		301			233	4
	79		165	0		
		693			418	7
	77		117	5		
		850			341	19
	76		67	5		
		173			41	10
	80		44	23		
		773			82	430
	94		11	267		
		1067			43	969
	98		12	256		

CROSS SECTIONS STA. 441+00 - 445+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

51
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



Excavation 1238 Cu.Yds.
Embankment 1223 Cu.Yds.
Seeding 3923 Sq.Yds.

Seeding		End Area		Cu. Yds.	
Lin.Ft.	S.Y.	Cut	Fill	Exc.	Emb.
60		74	20		
	650			196	65
57		32	15		
	606			150	32
52		49	2		
	578			180	6
52		48	1		
	594			126	33
55		20	17	Ahead	
		29	17	Back	
	650			232	41
62		96	5		
	711			515	17
66		182	4		
	783			757	17
75		227	5		

CROSS SECTIONS STA. 446+00 - 452+00

FED. DIV.	STATE	PROJECT	TYPE FUNDS	52
2	OHIO	F-41(5)	POST WAR	76

TRUMBULL COUNTY
TRU-422-(0.00 - 2.06)

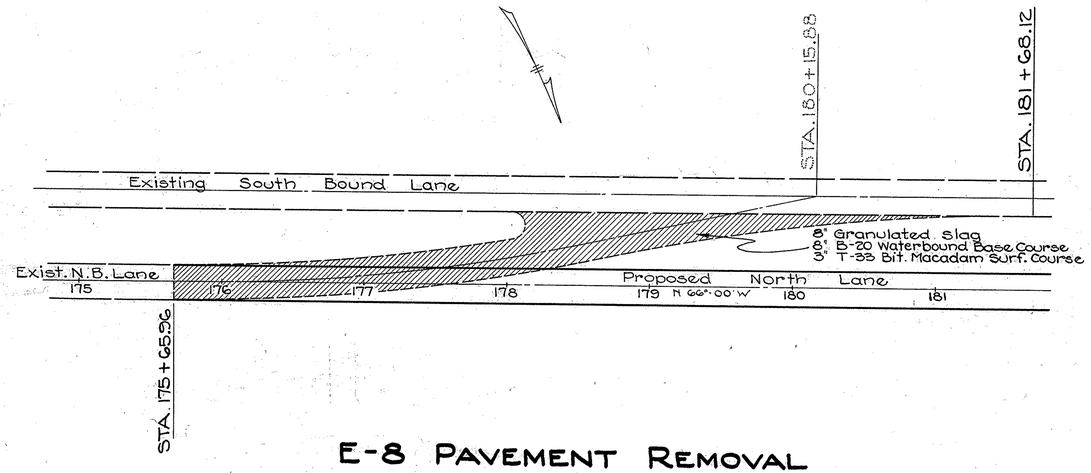
SEEDING		END AREA		CU. YDS.	
Lin. Ft.	S.Y.	Cut	Fill	Exc.	Emb.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

53
76

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

APPROACHES

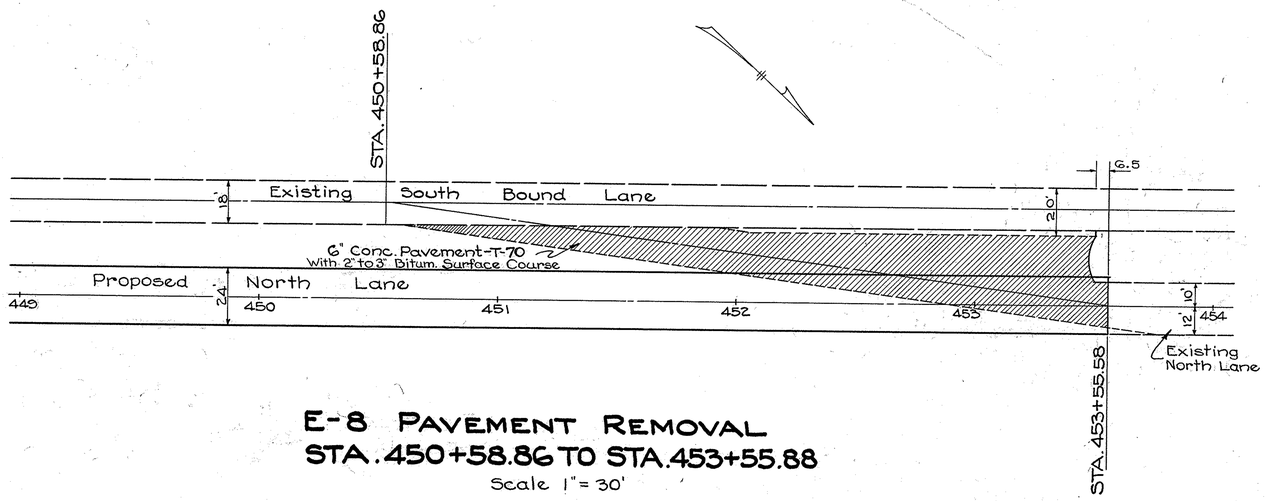


E-8 PAVEMENT REMOVAL
STA. 175+65.96 TO STA. 181+68.12

Scale 1"=50'

ESTIMATED QUANTITIES

LOCATION	E-8 REMOVAL OF EXISTING PAVT. SQ.YDS.	
STATION	BIT. MAC. FULL DEPTH	CONCRETE
175+65.96	1252	
450+58.86		608
TOTAL	1252	608



E-8 PAVEMENT REMOVAL
STA. 450+58.86 TO STA. 453+55.88

Scale 1"=30'

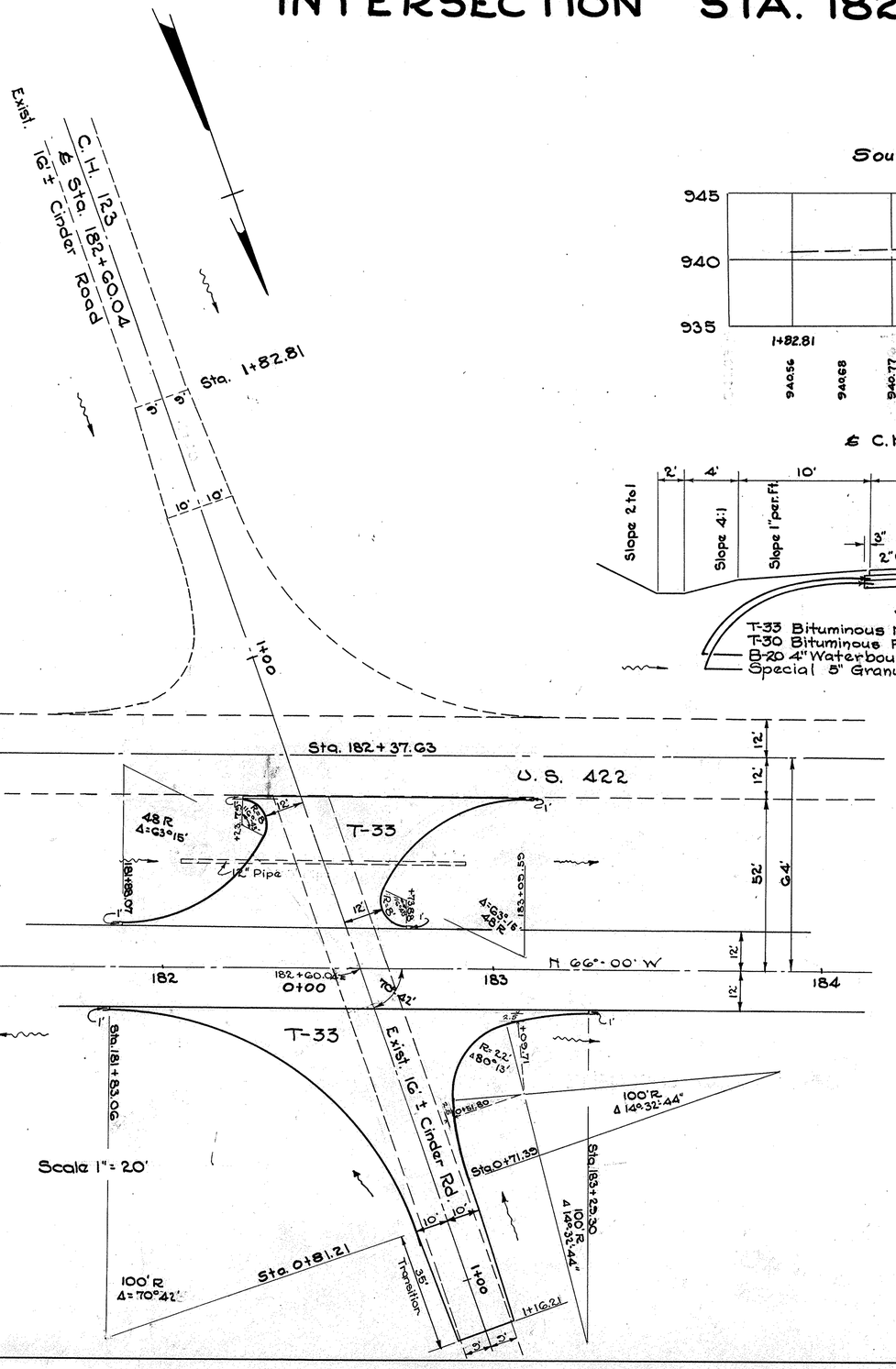
REMOVAL OF APPROACHES

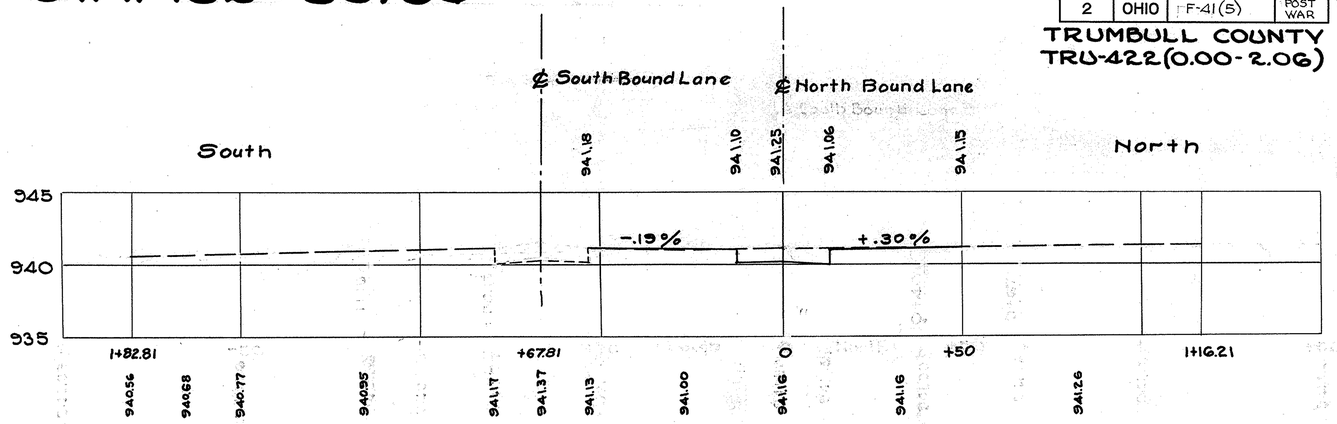
INTERSECTION STA. 182+60.04

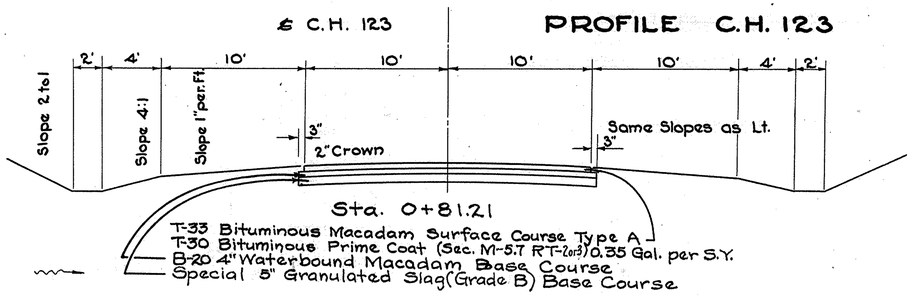
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

54
76

TRUMBULL COUNTY
TRU-422(0.00-2.06)



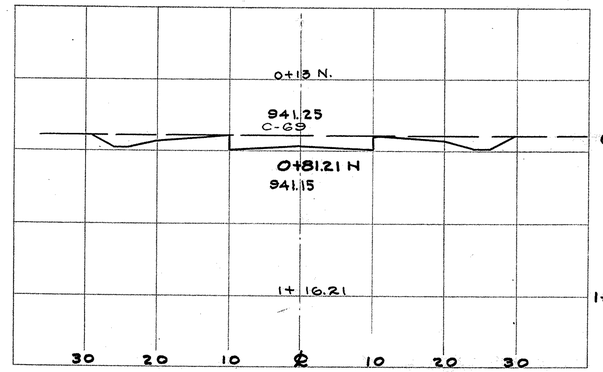




ESTIMATED QUANTITIES

E-1	Excavation	413 Cu.Yds.
T-33	Bituminous Macadam Surface Course	639 Sq.Yds.
T-30	Bituminous Prime Coat (Sec. M-5.7 RT-2 or 3)	647 Sq.Yds.
B-20	4" Waterbound Macadam Base Course	647 Sq.Yds.
Spec.	5" Granulated Slag (Grade B) Base Course	647 Sq.Yds.

(Areas Planimetered)



CROSS SECTIONS C. H. 123

	END AREA		Cu. Yds.	
	Cut.	Fill	Exc.	Emb.
0+13 N	147			
			273	
0+81.21	69			
			56	
1+16.21	18			
Additional Excavation Sta. 0+12.71 To 0+55.10			84	
Total			413	

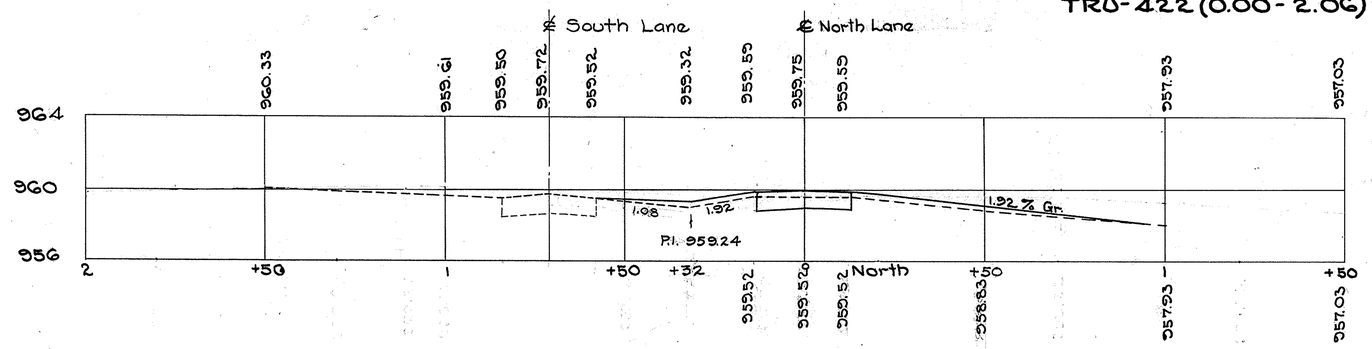
INTERSECTION DETAIL STA. 182+60.04

INTERSECTION STA. 220+31.33

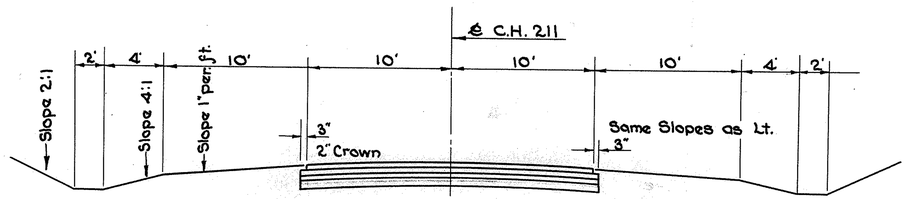
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

55
76

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

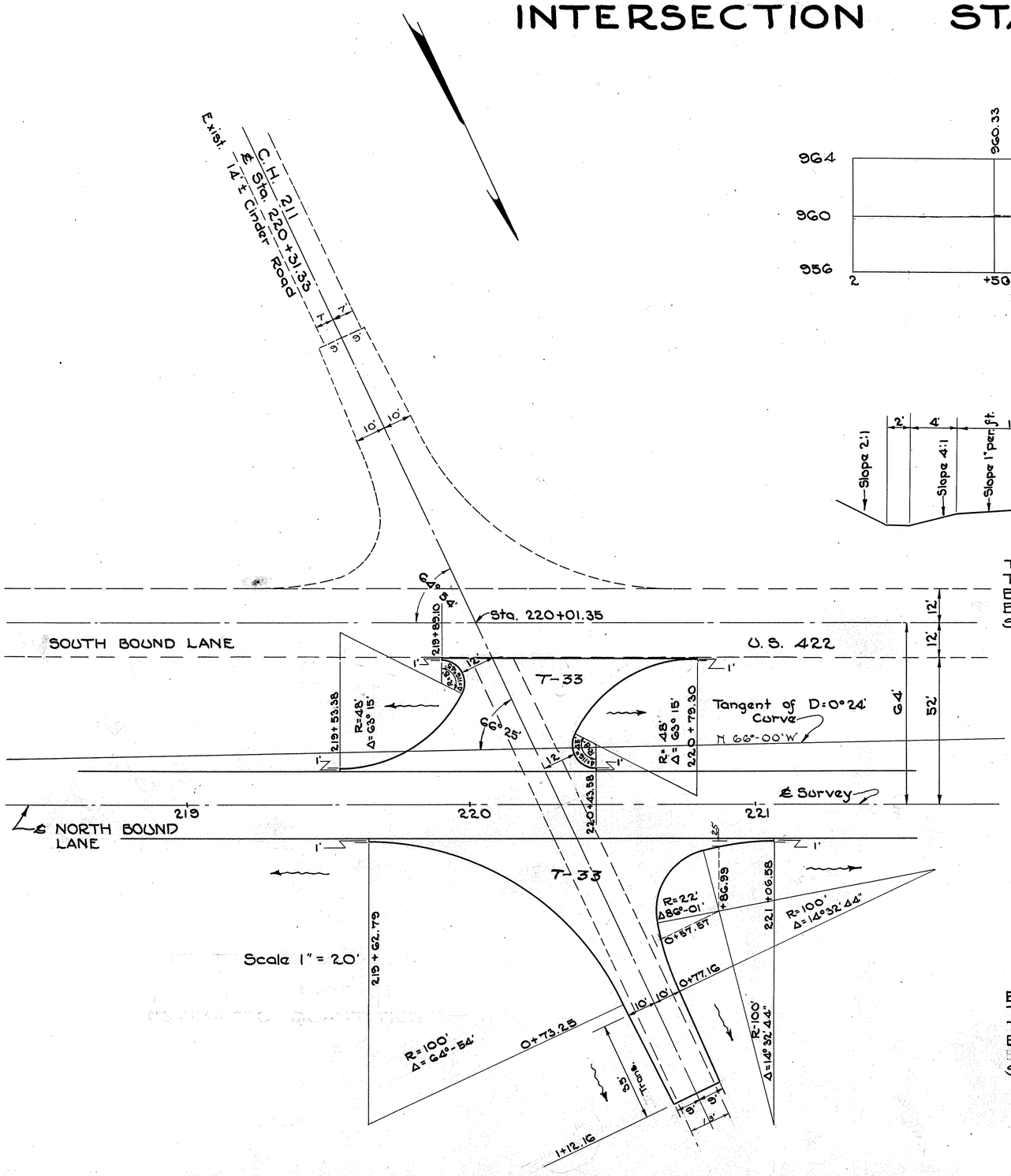


PROFILE C.H. 211



Sta. 0+77.16

T-33 Bituminous Macadam Surface Course, Type A
T-30 Bituminous Prime Coat (Sec. M-5.7 RT-2 or 3) 0.35 gal. per sq.yd.
B-20 4" Waterbound Macadam Base Course
B-20 4" Waterbound Macadam Base Course
Special 5" Granulated Slag (Grade B) Base Course
(Areas Planimetered)



ESTIMATED QUANTITIES

E-1 Excavation	274 Cu.Yds.
T-33 Bit. Mac. Surf. Course Type A	622 Sq.Yds.
T-30 Bit. Prime Coat (Sec. M-5.7 RT-2 or 3)	624 Sq.Yds.
B-20 8" W.B. Mac. Base Course (2-4" courses)	624 Sq.Yds.
Spec. 5" Granulated Slag (Grade B) Base Course	624 Sq.Yds.

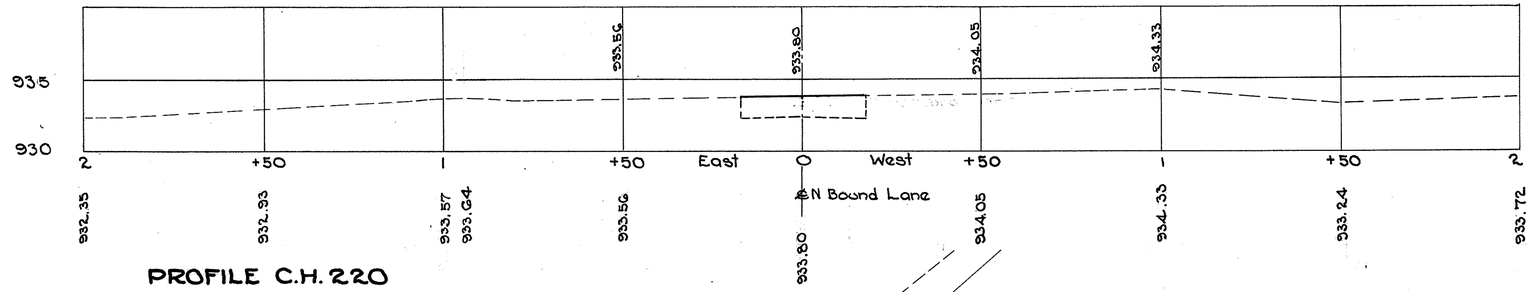
INTERSECTION DETAIL STA. 220+31.33

INTERSECTION STA. 262 + 99.85

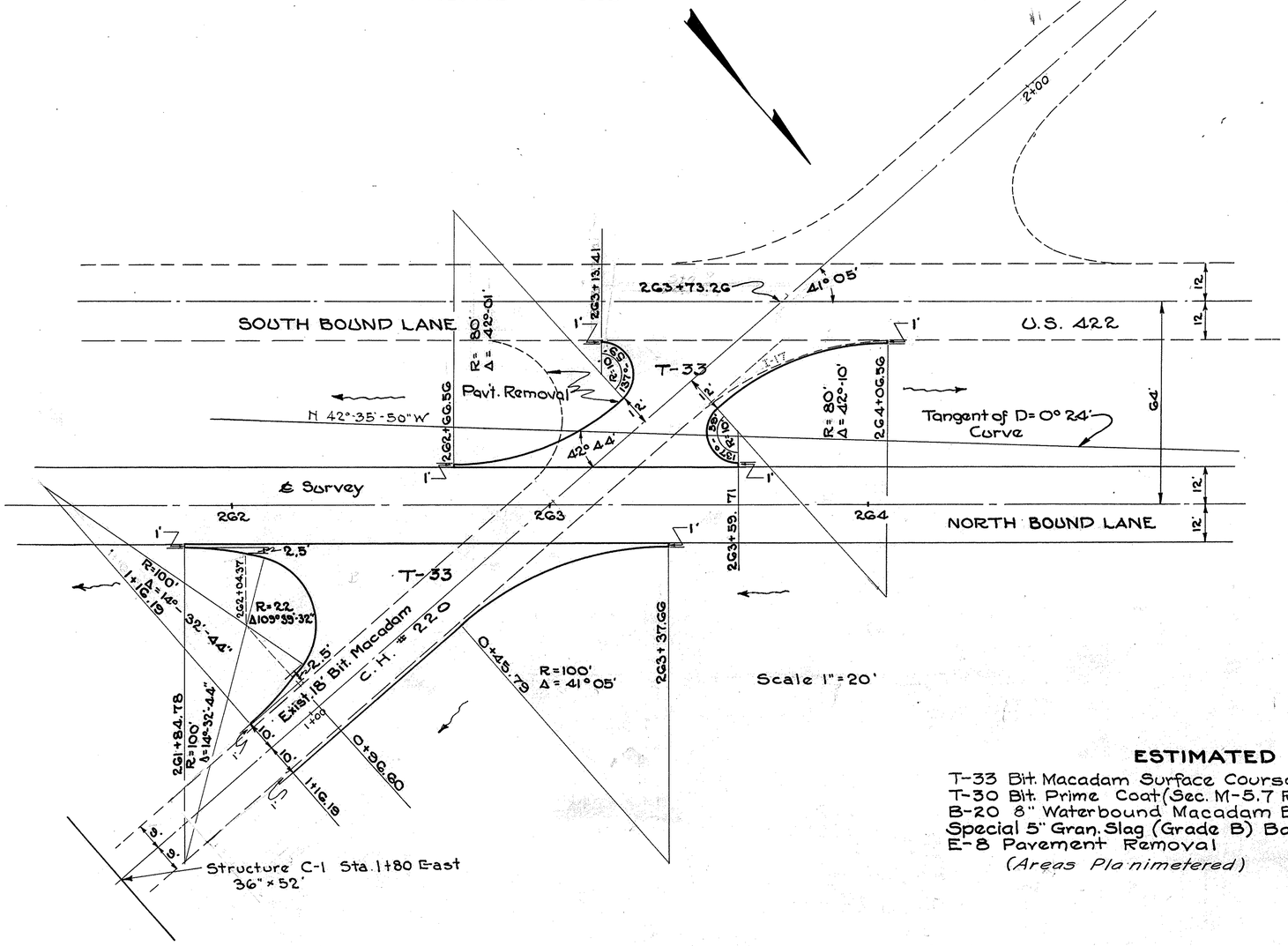
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

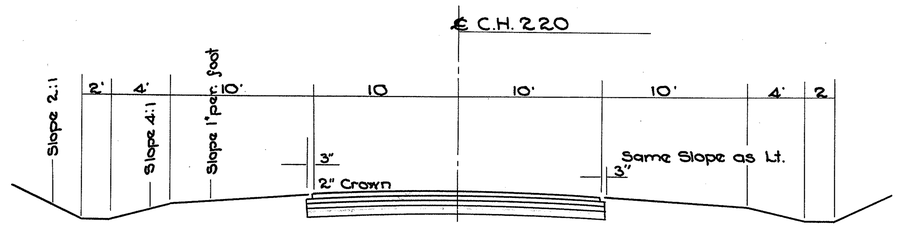
5G 7G

TRUMBULL COUNTY
TRU-422(0.00-2.06)



PROFILE C.H. 220





ESTIMATED QUANTITIES

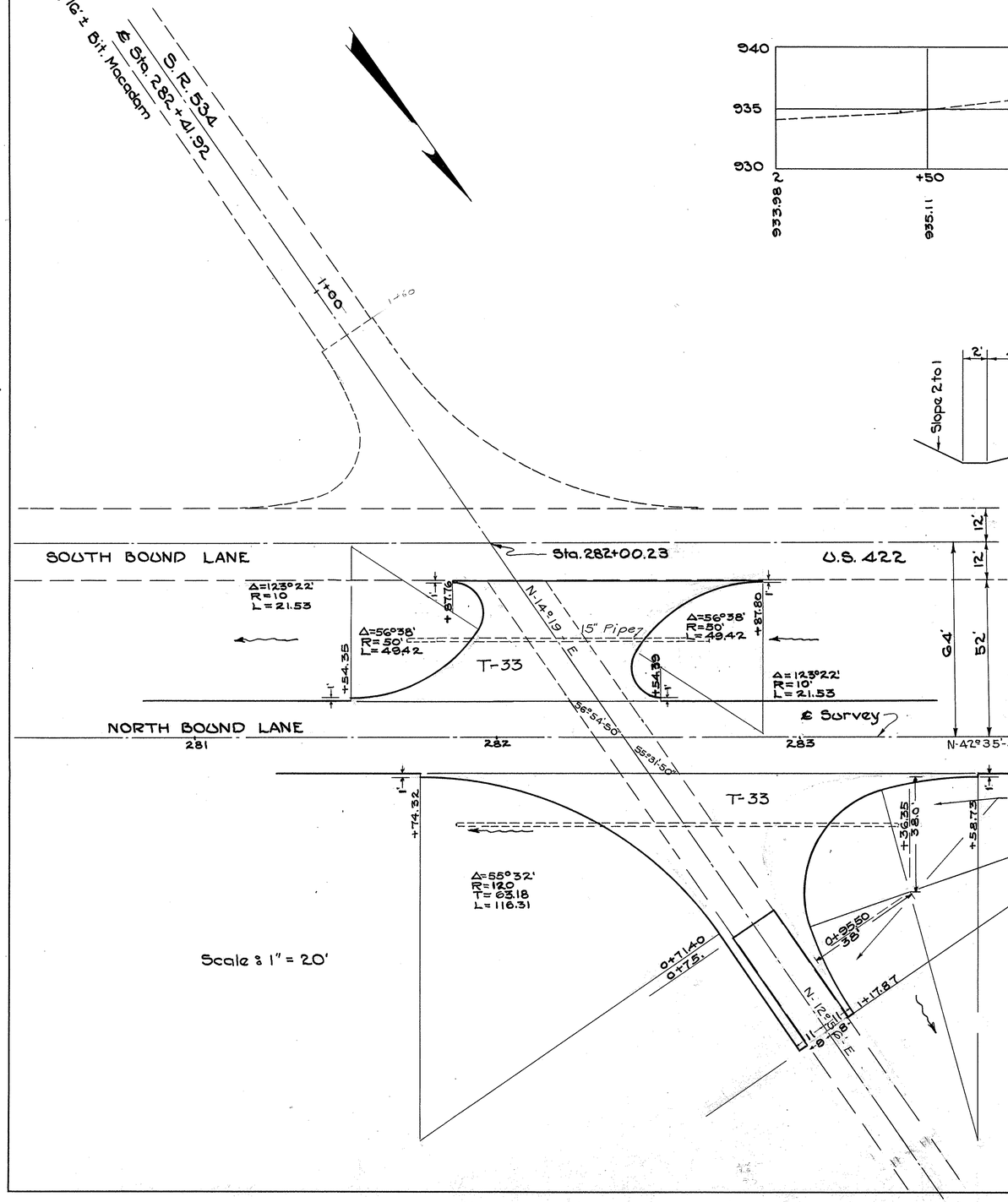
T-33 Bit. Macadam Surface Course Type A	=	240 Sq. Yds.
T-30 Bit. Prime Coat (Sec. M-5.7 RT-2 or 3)	=	244 Sq. Yds.
B-20 8" Waterbound Macadam Base Course (2-4" Courses)	=	244 Sq. Yds.
Special 5" Gran. Slag (Grade B) Base Course	=	244 Sq. Yds.
E-8 Pavement Removal		8 Sq. Yds.
(Areas Planimetered)		

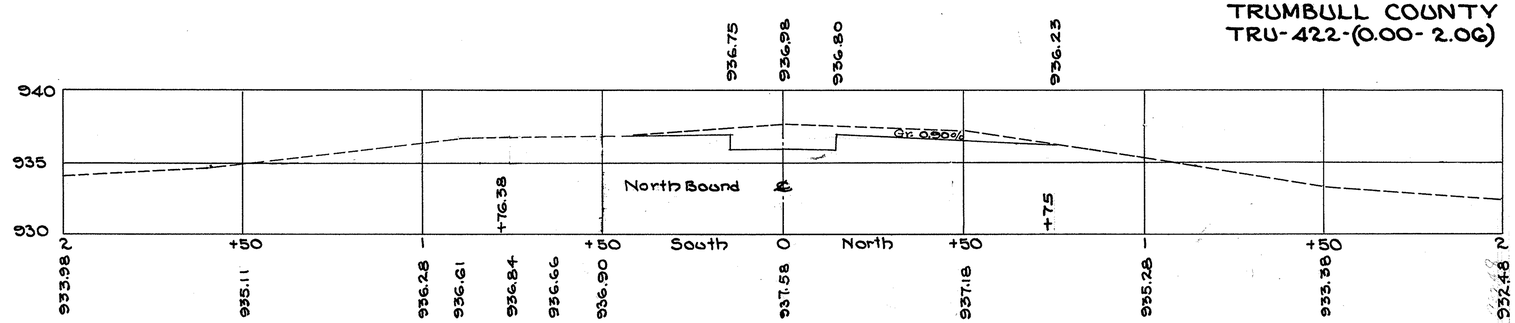
INTERSECTION STA. 282+41.92

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

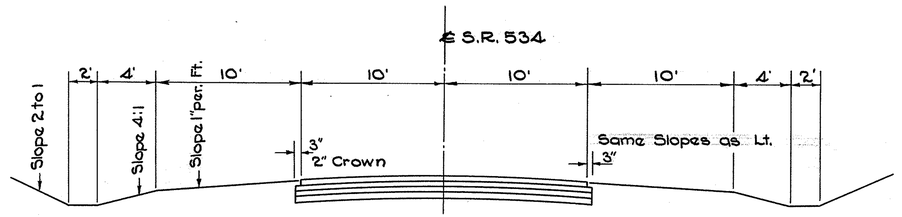
57
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)





PROFILE S.R. 534



T-33 Bituminous Macadam Surface Course TYPE A
T-30 Bituminous Prime Coat (Sec. M-5.7 RT-2 or 3) 0.35 gal per sq. yd.
B-20 4" Waterbound Macadam Base Course
B-20 4" Waterbound Macadam Base Course
Special 5" Granulated Slag (Grade B) Base Course

ESTIMATED QUANTITIES

E-1	Excavation	252 Cu.Yds.
E-8	Rem. and Disp. Exist. Pav't.	244 Sq.Yds.
T-33	Bit. Mac. Surf. Course	750 Sq.Yds.
T-30	Bit. Prime Coat (Sec. M5.7 RT-2 or 3)	760 Sq.Yds.
B-20	8" W.B. Mac. Base Course (24' Courses)	760 Sq.Yds.
Spec.	5" G.S. (Gr. B.) Base Course	760 Sq.Yds.

(Areas Planimetered)

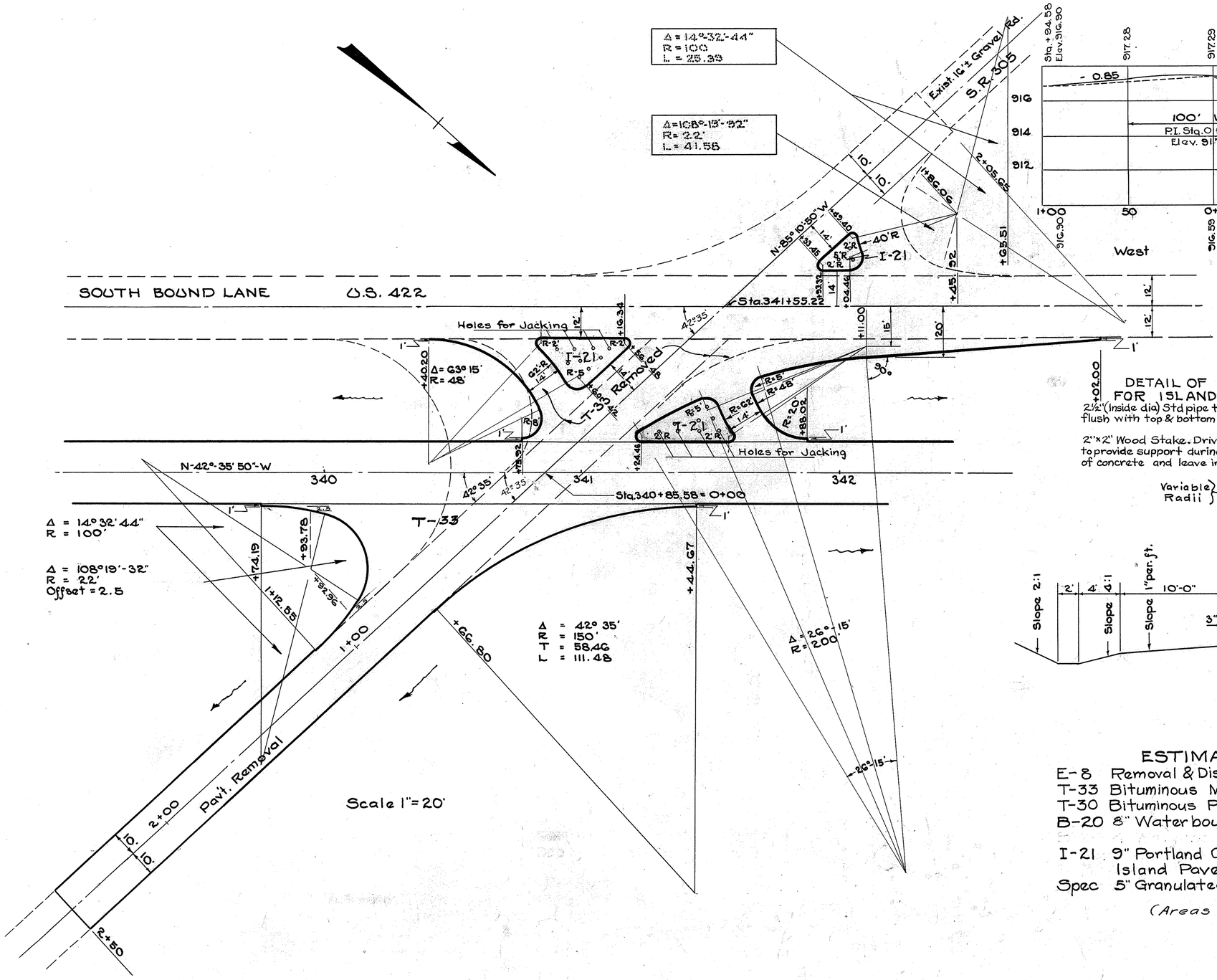
INTERSECTION DETAIL STA. 282+41.92

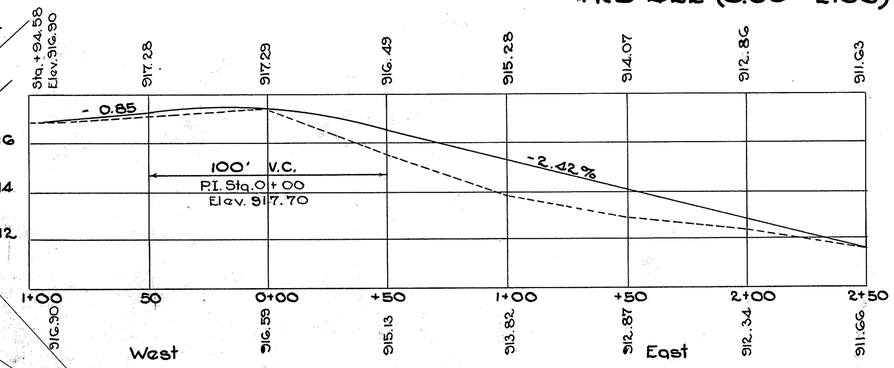
INTERSECTION STA. 340 + 85.58

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

58
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)





PROFILE S.R. 305
Scale 1" = 30'

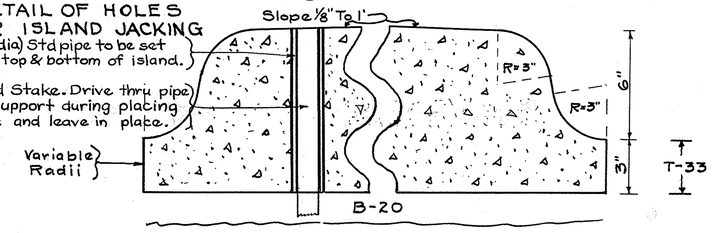
DETAIL OF SECTION OF I-21 CONCRETE ISLAND

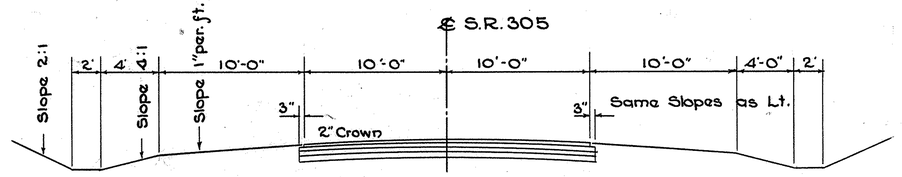
Scale 3"=1'

DETAIL OF HOLES FOR ISLAND JACKING

2½"(Inside dia) Std pipe to be set flush with top & bottom of island.

2"x2" Wood Stake. Drive thru pipe to provide support during placing of concrete and leave in place.





Sta. 1+12.55

ESTIMATED QUANTITIES

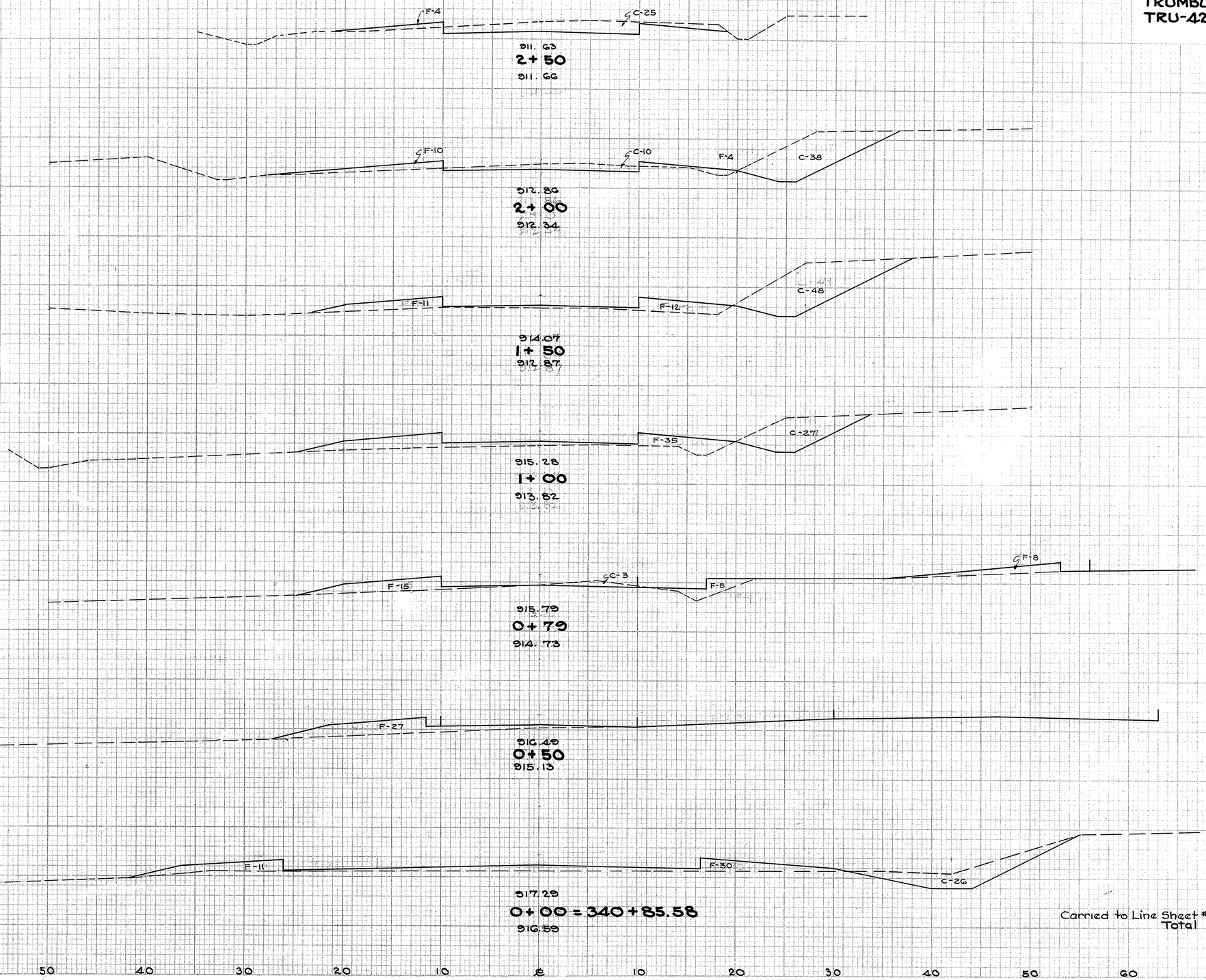
E-8	Removal & Disposal of Existing Pavement	828 Sq.Yds.
T-33	Bituminous Macadam Surface Course Type A	1118 Sq.Yds.
T-30	Bituminous Prime Coat (Sec. M-5.7 RT-2 or 3)	1215 Sq.Yds.
B-20	8" Waterbound Macadam Base Course (2-4" Course)	1215 Sq.Yds.
I-21	9" Portland Cement Concrete Traffic Island Pavement	117 Sq.Yds.
Spec	5" Granulated Slag (Grade B) Base Course	1215 Sq.Yds.

(Areas Planimetered)

INTERSECTION STA. 340 + 85.58

DIVISION	STATE	PROJECT	TYPE FUNDS	59
2	OHIO	F-41(5)	POST WAR	76

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)



Seading		End Area		Cu. Yds.	
L.F.	Sq. Yds.	Cut	Fill	Exc.	Emb.
39		25	4		
	202			68	17
66		48	14		
	361			89	35
64		48	23		
	342			70	54
59		27	35		
	98			12	26
25		3	31		
	82			2	31
26		0	27		
	144			24	63
26		26	41		
	1319			265	226

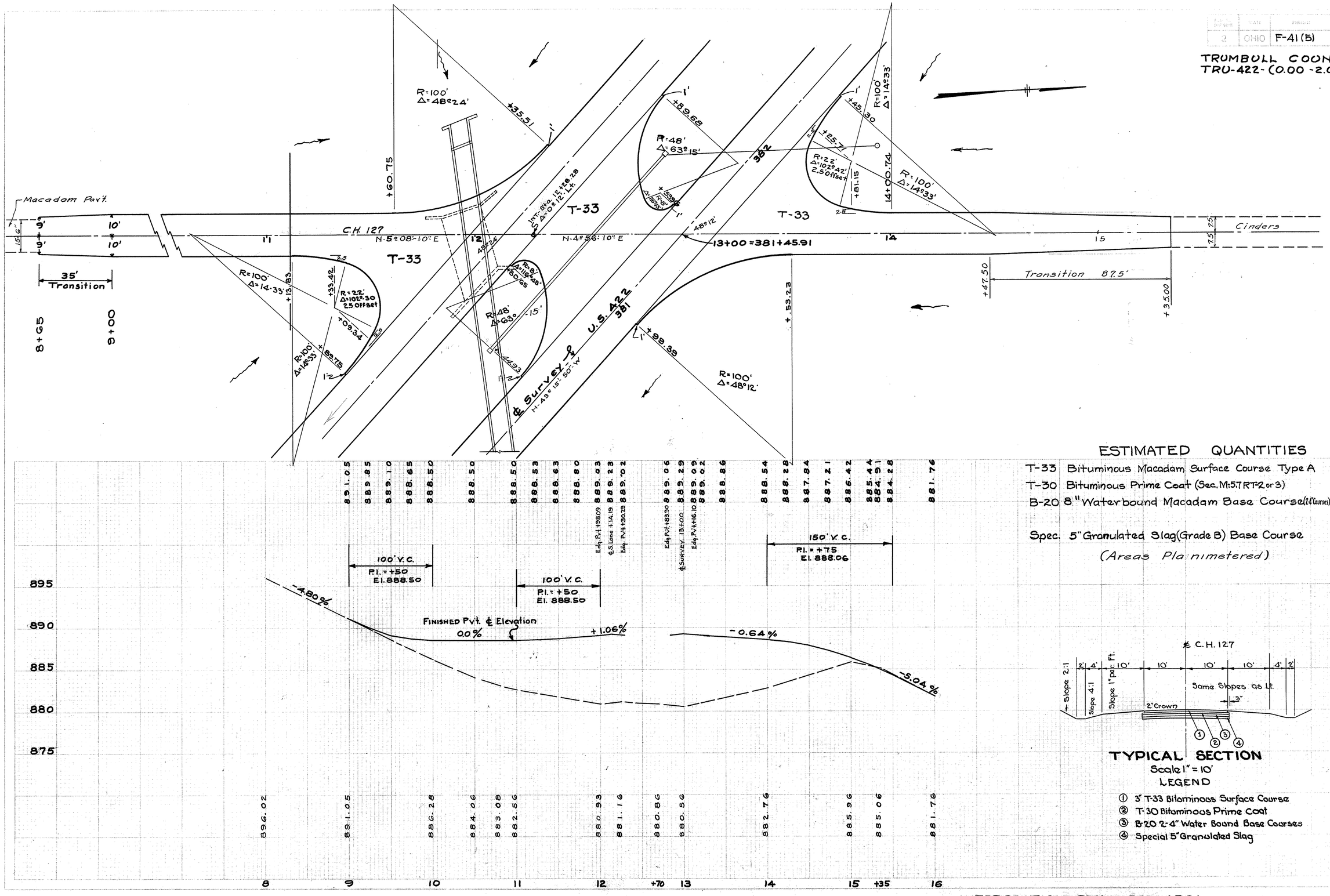
Carried to Line Sheet #20
Total

INTERSECTION STA. 340+85.58

2	OHIO	F-41(5)	TYPE FUNDS POST WAR

60
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



ESTIMATED QUANTITIES

T-33	Bituminous Macadam Surface Course Type A	1832 Sq.Yds.
T-30	Bituminous Prime Coat (Sec. M:5.7 RT-2 or 3)	1845 Sq.Yds.
B-20	8" Waterbound Macadam Base Course (2-4" Courses)	1845 Sq.Yds.
Spec.	5" Granulated Slag (Grade B) Base Course	1845 Sq.Yds.

(Areas Planimetered)

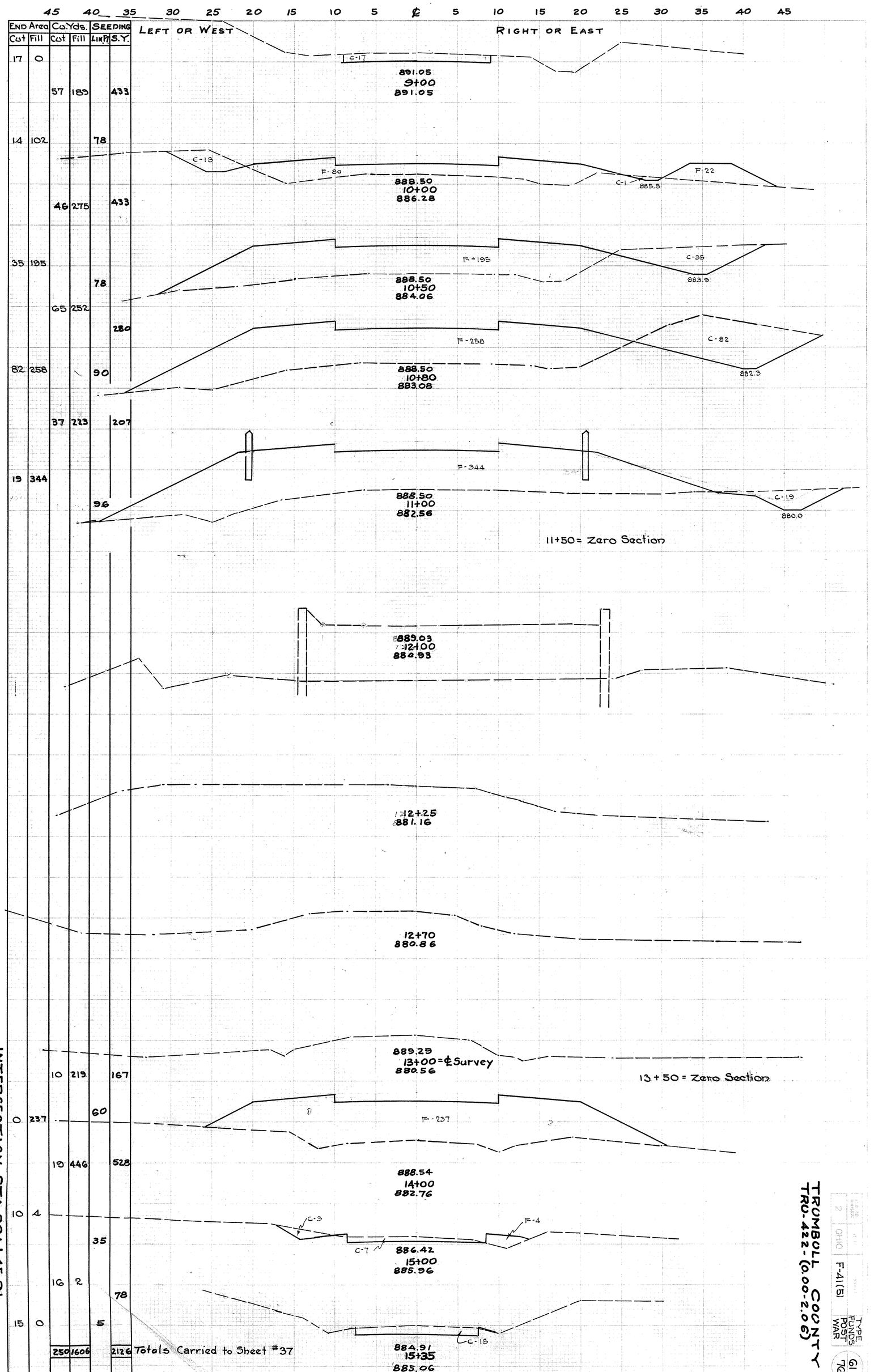
TYPICAL SECTION

Scale 1" = 10'

LEGEND

① 3" T-33 Bituminous Surface Course
② T-30 Bituminous Prime Coat
③ B-20 2-4" Water Bound Base Courses
④ Special 5" Granulated Slag

INTERSECTION - STA. 381+45.91



TRUMBULL COUNTY
TRU-422-(0.00-2.06)

		OHIO	F-41(5)	

TYPE FUNDS ROAD WAR

61
76

FED. RD. DIVISION	STATE	PROJECT	TYPE FONDS
2	OHIO	F-41-(5)	POST WAR

62/76

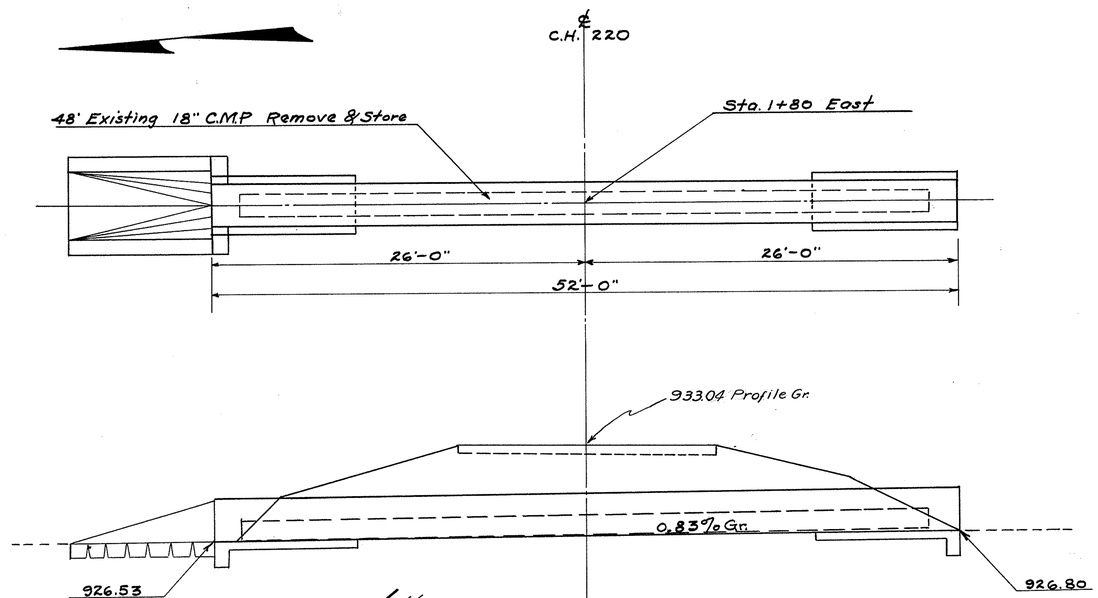
TROMBULL COUNTY
TRU-422-(0.00-2.06)

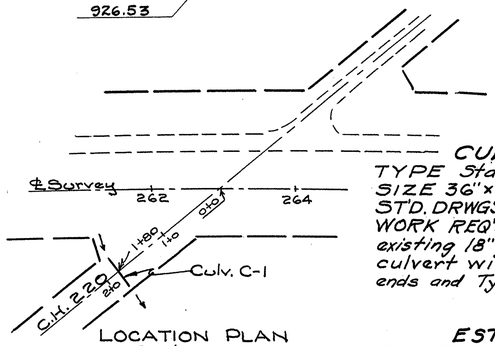
DRAINAGE STRUCTURE C-1
CULVERT NO. TR-422-36A

STATION 261+55 RT. DRAINAGE AREA=90 ACRES

Scale 1"=5'

SURVEYED BY F.P.I. DRAWN BY G.F.J. CHECKED BY L.E.M.





LOCATION PLAN
Scale 1" = 100'

CULVERT DATA

TYPE Std pipe culvert
SIZE 36" x 52' @ 0° Skew
ST'D. DRWGS. S-27 P.C. 2&3
WORK REQ'D. Remove existing pavement & existing 18" C.M.P. Build 36"x52' std pipe culvert with std. cradles & cut off walls both ends and Type B grouted RipRap at outlet end.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	52 Cu.Yds.
E-12	Over 15" removed and stored	48 Lin.Ft.
S-1	Class E concrete for structures	3.32 Cu.Yds.
S-27	36" Pipe for roadway culverts.	52 Lin Ft.
I-10	12" Type B grout filled RipRap	9 Sq.Yds.
B-20	8" Waterbound Mac.(2)Courses	16 Sq.Yds.
T-30	Bituminous Prime Coat	16 Sq.Yds.
B-35	1¼" Asp. Conc. Leveling Course	0.67 Cu.Yds.
T-35	1¼" Asp. Conc. Surf. Course Type A	0.67 Cu.Yds.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F 41-(5)	POST WAR

63/76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

DRAINAGE STRUCTURE C-8

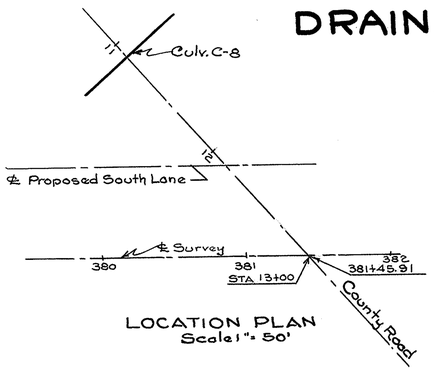
CULVERT NO. TR-422-14

STATION 380+20 LT.

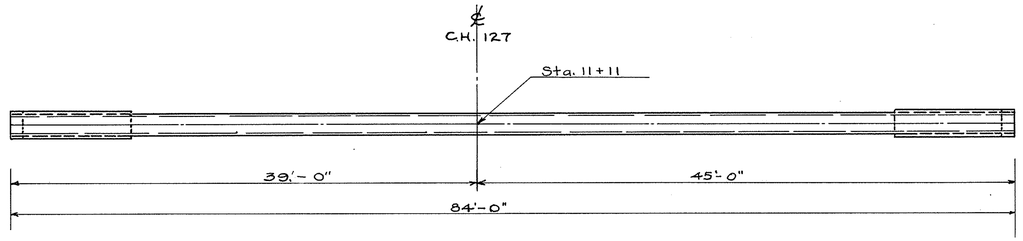
DRAINAGE AREA = 3 ACRES

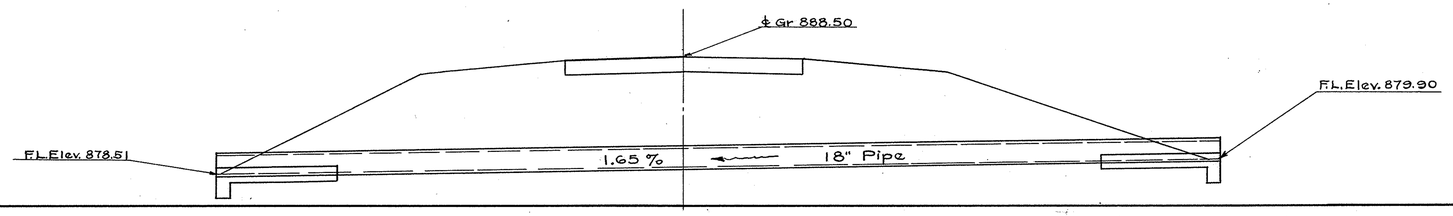
Scale 1" = 6'

Surveyed by F.P.I. Drawn by G.F.J. Checked by L.E.M.



LOCATION PLAN
Scale 1" = 50'





CULVERT DATA

TYPE Standard Pipe Culvert
SIZE 18" x 84'-0" @ 0° Skew
STD. DRWGS. S-27, P.C. 2 & 3
WORK REQ'D Build Std. 18" Culvert with std. cradles at each end

ESTIMATED QUANTITIES

E-2 Excavation for structures 23 Cu.Yds.
S-1 Class E. concrete for structures 1.8 Cu.Yds.
S-27 18" pipe for roadway culverts 84 Lin.Ft.

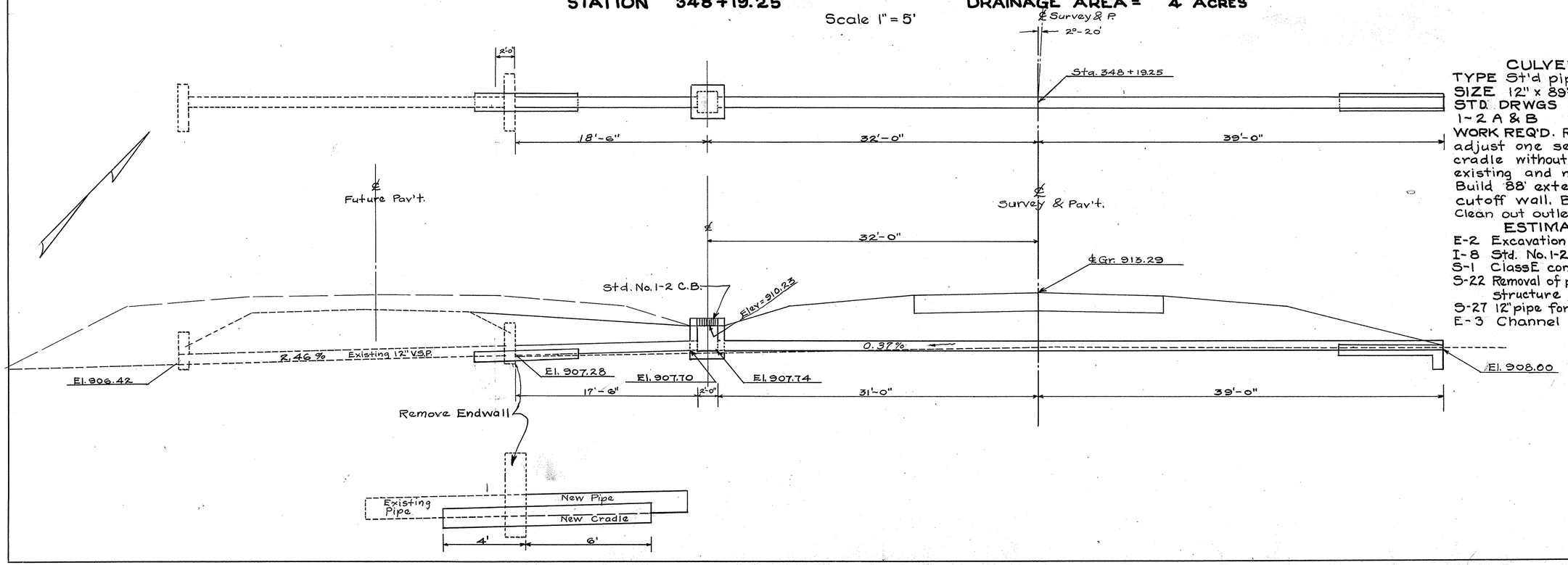
DRAINAGE STRUCTURE C-2

CULVERT NO. TR-422-20A

STATION 348+19.25

DRAINAGE AREA = 4 ACRES

Scale 1" = 5'



CULVERT DATA

TYPE Std'd pipe culvert extension
SIZE 12" x 89'-6" @ 2°20' Rt. Fwd. Skew
STD. DRWGS S-27 PC 2 & 3, I-8 C.B. 1-2 A & B
WORK REQ'D. Remove endwall and adjust one section of pipe. Build std. cradle without cutoff wall under existing and new pipe (See detail). Build 88' extension with cradle and cutoff wall. Build Std. No. 1-2 A. C.B. Clean out outlet channel

ESTIMATED QUANTITIES

E-2 Excavation for structures 1 Cu.Yd.
I-8 Std. No. 1-2 A. C.B. 1 Each
S-1 Class E concrete for structures 1.05 Cu.Yds.
S-22 Removal of portion of existing structure 0.75 Cu.Yds.
S-27 12" pipe for roadway culverts 88 Lin.Ft.
E-3 Channel Excavation (Est) 10 Cu.Yd.

DRAINAGE STRUCTURE C-4 CULV. NO. TR-422-19

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

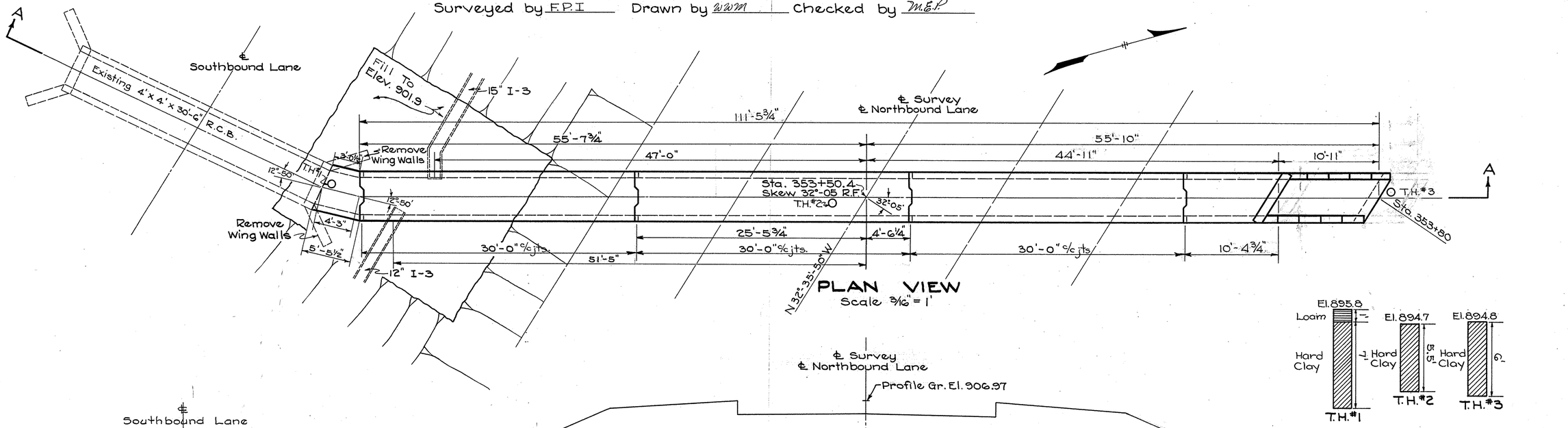
64/76

TRUMBULL COUNTY
TRU-422 - (0.00-2.06)

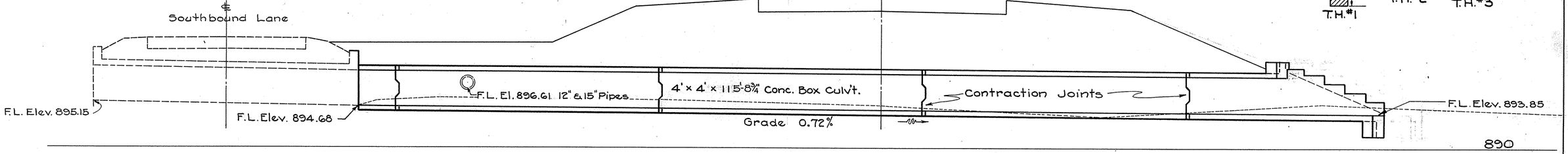
STATION 353+50.4 DRAINAGE AREA 125 Ac.

Scale- As Indicated

Surveyed by E.P.I Drawn by WWM Checked by M.E.P



PLAN VIEW
Scale 3/16" = 1'



SECTION A-A
Scale 3/16" = 1'

CULVERT DATA

TYPE: Standard concrete small box culvert extension

SIZE: 4'×4'×115'-8¾" @ 32°-05' R.F. Skew

STD. DRWGS: SBC-45

WORK REQD: Remove wing walls on North end of existing structure as shown. Extend with new structure as shown, doweling new and existing structures together. Clean channel right and left.

ESTIMATED QUANTITIES

E-2	Excavation for structures	42	C.Y.
E-3	Channel excavation (estimated)	10	C.Y.
S-1	Class "C" concrete for structures	50.3	C.Y.
S-4	Reinforcing steel	5675	Pounds
S-22	Removal of portion of existing structure	2.2	C.Y.
S-23	Dowel holes	16	Each

DRAINAGE STRUCTURE C-4 CULV. No. TR-422-19

STA. 353+50.4 DRAINAGE AREA 125 Ac.

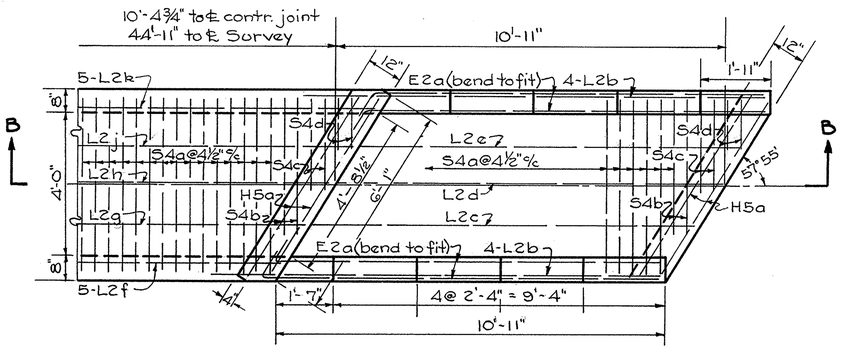
Scales - As Indicated

SURVEYED BY FPI DRAWN BY WWM CHECKED BY M.E.J.

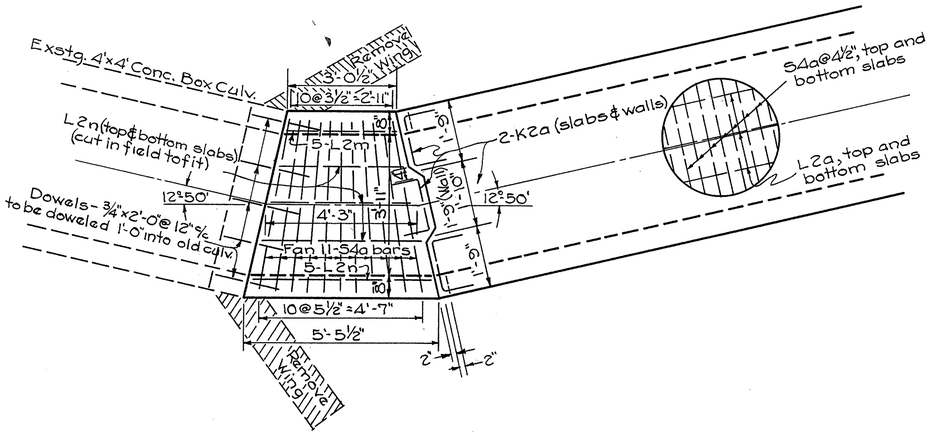
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

65/76

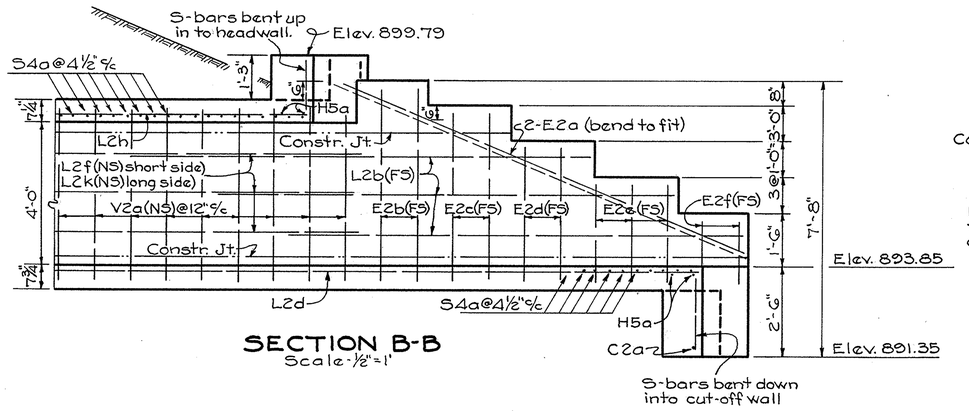
TRUMBULL COUNTY
TRU-422(0.00-2.06)



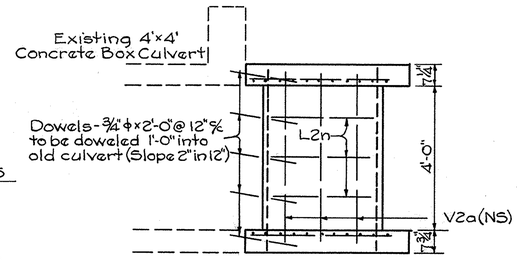
PLAN DETAIL
Scale - ½" = 1'



PLAN DETAIL
Scale - ½" = 1'



SECTION B-B
Scale - ½" = 1'



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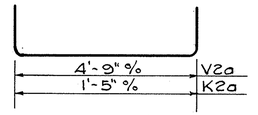
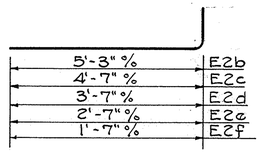
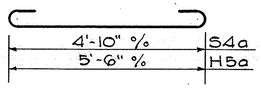
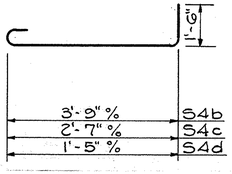
Scale - ½" = 1'









STEEL LIST

Mark	Spacing	Location	Shape	Size	No.	Length	Weight
L2a	As shown	Barrel	S	½"ϕ	48	29'-6"	946
L2b	" "	Wing Walls	S	½"ϕ	8	12'-9"	68
L2c	" "	Bottom Slab	S	½"ϕ	1	20'-1"	13
L2d	" "	" "	S	½"ϕ	1	20'-9"	14
L2e	" "	" "	S	½"ϕ	1	21'-5"	14
L2f	" "	Walls	S	½"ϕ	5	8'-6"	28
L2g	" "	Top Slab	S	½"ϕ	1	9'-2"	6
L2h	" "	" "	S	½"ϕ	1	9'-10"	7
L2j	" "	" "	S	½"ϕ	1	10'-6"	7
L2k	" "	Walls	S	½"ϕ	5	11-2"	37
L2m	" "	Transition Section	S	½"ϕ	5	2'-11"	10
L2n	" "	Transition Section	S	½"ϕ	11	4'-11"	36
V2a	12"%	Walls	B	½"ϕ	211	5'-11"	474
E2a	As shown	Wing Walls	S	½"ϕ	4	12'-7"	34
E2b	12"%	" "	B	½"ϕ	3	5'-10"	12
E2c	12"%	" "	B	½"ϕ	5	5'-2"	17
E2d	12"%	" "	B	½"ϕ	4	4'-2"	11
E2e	12"%	" "	B	½"ϕ	5	3'-2"	11
E2f	12"%	" "	B	½"ϕ	5	2'-2"	7
C2a	As shown	Cut-off Wall	S	½"ϕ	1	6'-0"	4
K2a	As shown	Contr. Jts.	B	½"ϕ	96	2'-7"	165
S4a	4½"%	Slab & Ends	B	⅝"ϕ	571	6'-0"	3577
S4b	4½"%	" "	B	⅝"ϕ	4	5'-8"	24
S4c	4½"%	" "	B	⅝"ϕ	4	4'-6"	19
S4d	4½"%	" "	B	⅝"ϕ	4	3'-4"	14
H5a	As shown	Slab Ends	B	¾"ϕ	4	6'-10"	43
Dowels	12"%	Connection	S	¾"ϕ	16	2'-0"	48
RE2		Replacement	S	½"ϕ	2	4'-0"	5
RE4		"	S	⅝"ϕ	2	4'-6"	9
RE5		"	S	¾"ϕ	2	5'-0"	15
				Total			5675

DRAINAGE STRUCTURE C-7 CULV. NO. TR-422-14A

STATION 380+15 DRAINAGE AREA 0.78 SQ.MI.

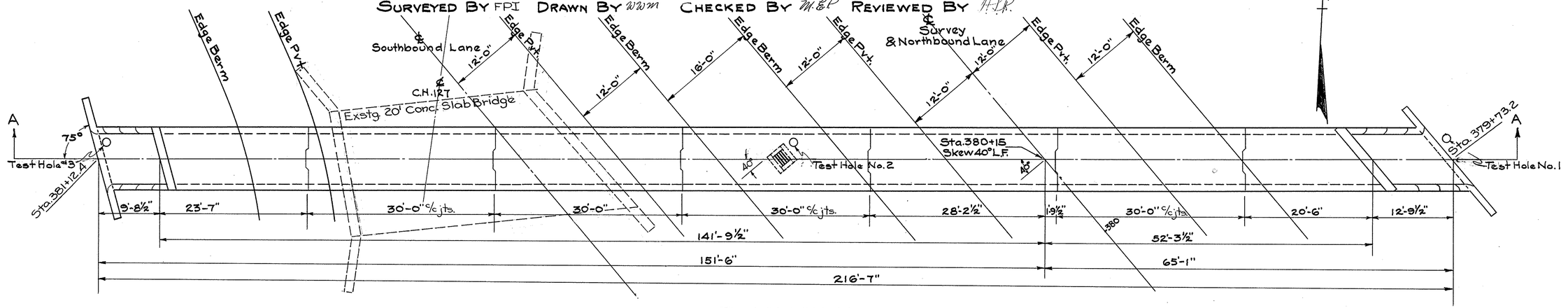
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

66/76

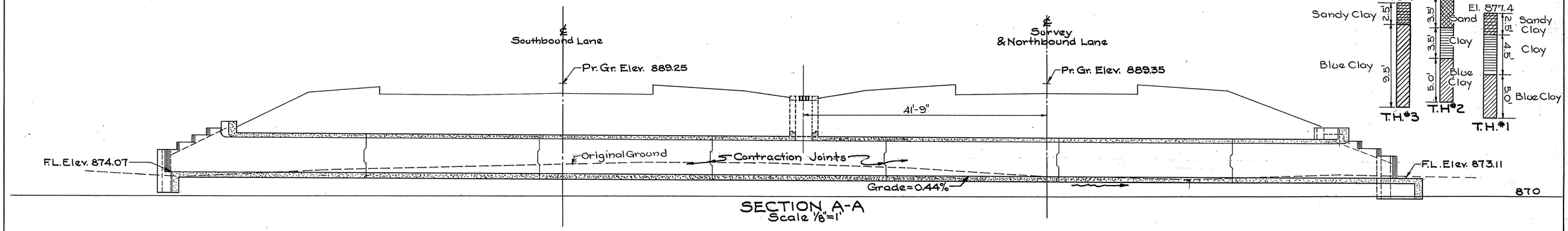
TRUMBULL COUNTY
TRU-422-(0.00-2.06)

Scales — As Indicated

SURVEYED BY FPI DRAWN BY WWM CHECKED BY M.E.P. REVIEWED BY H.H.R.



PLAN VIEW
Scale 1/8"=1'



SECTION A-A
Scale 1/8"=1'

CULVERT DATA

TYPE: Standard concrete large box culvert
SIZE: 8'-0" x 6'-0" x 216'-7" @ 40°-00' L.F. Skew
STD. DRWG: LBC-45
WORK REQ'D: Remove superstructure of existing bridge TR-422-14A. Build new 8'-0" x 6'-0" x 216'-7" large box culvert as shown. Clean channel at ends of structure.

ESTIMATED QUANTITIES

E-2	Excavation for structures.	237 C.Y.
E-3	Channel excavation (estimated)	10 C.Y.
S-1	Class "C" concrete for structures	231.8 C.Y.
S-4	Reinforcing steel	31,135 Pounds
S-22	Removal of portion of existing structure.	46 C.Y.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

67
176

DRAINAGE STRUCTURE C-7

CULV. NO. TR-422-14 A

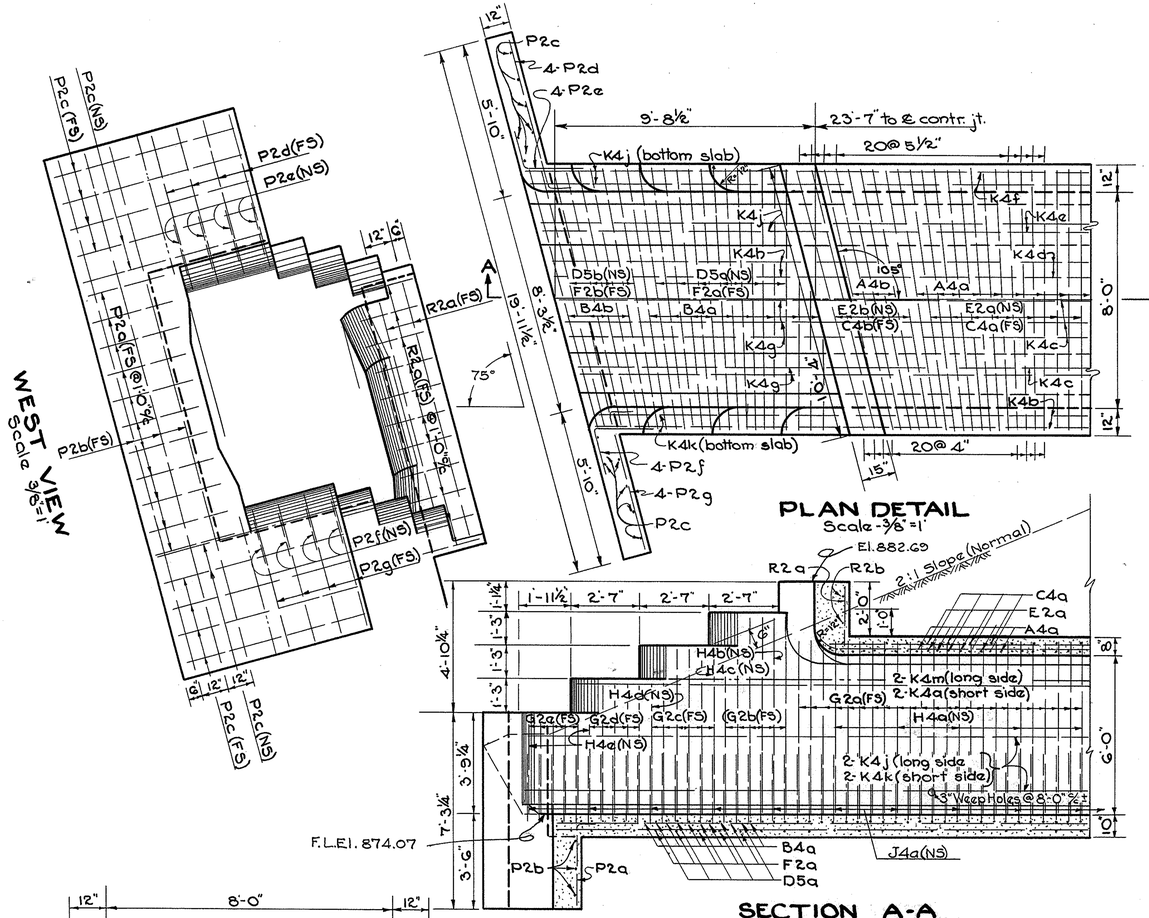
STATION 380+15

DRAINAGE AREA = 0.78 SQ. MI.

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

Scales - As Indicated

SURVEYED BY FPI DRAWN BY WWM CHECKED BY M.E.P. REVIEWED BY H.L.M.



DRAINAGE STRUCTURE C-7 CULV. NO. TR-422-14A

STATION 380+15 DRAINAGE AREA = 0.78 SQ. MI.

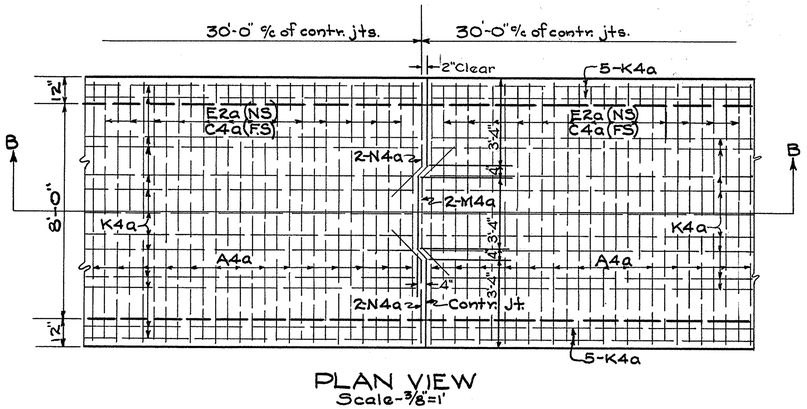
Scales- As Indicated

SURVEYED BY FPI DRAWN BY WDM CHECKED BY M.E.P. REVIEWED BY H.L.K.

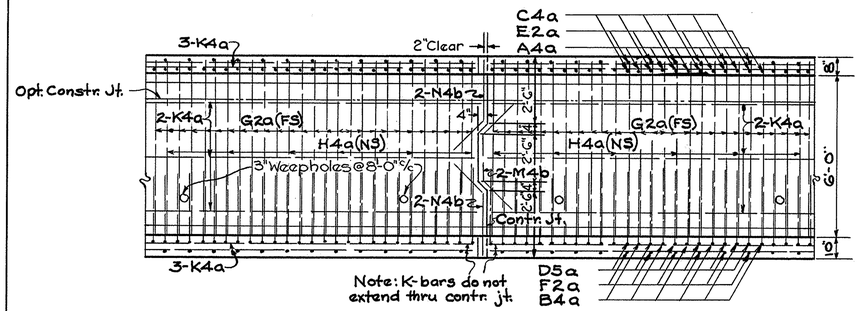
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

68/76

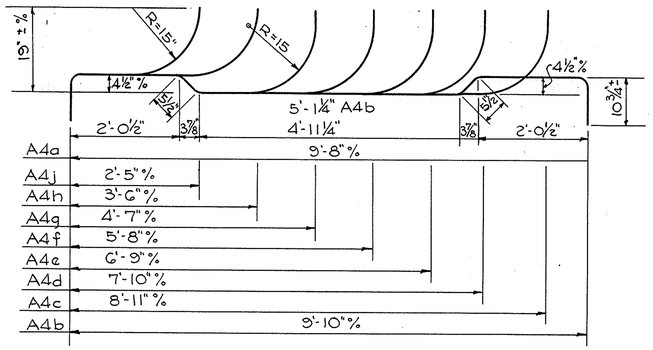
TRUMBULL COUNTY
TRU-422-(0.00-2.06)



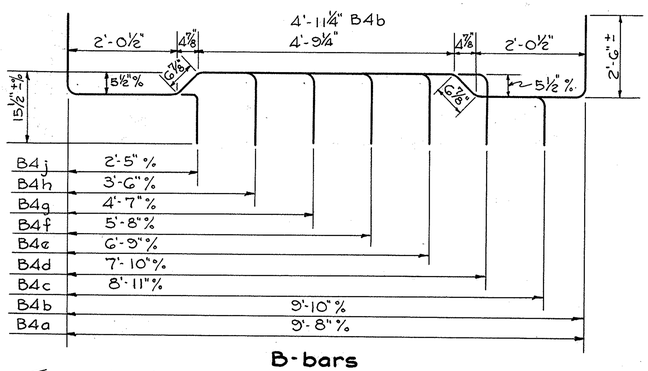
PLAN VIEW
Scale-3/8"=1'



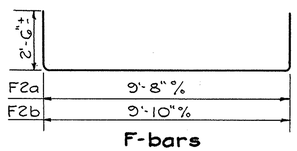
SECTION B-B
Scale-3/8"=1'



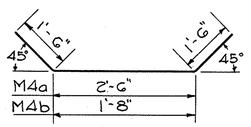
A-bars



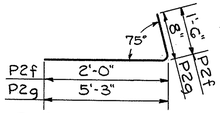
B-bars



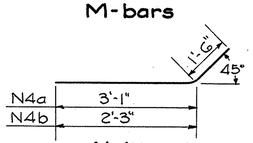
F-bars



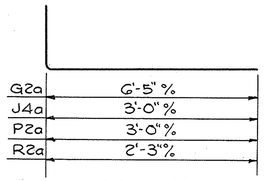
M-bars



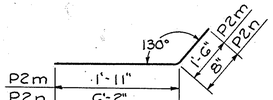
P2f & P2g bars



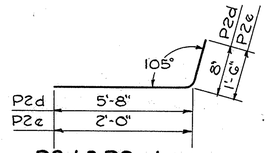
N-bars



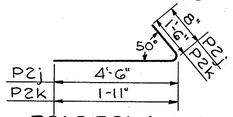
G2a, J4a, P2a & R2a bars



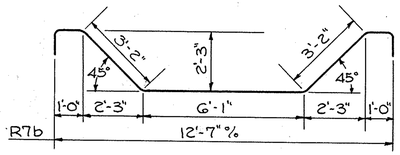
P2m & P2n bars

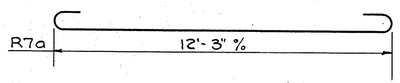


P2d & P2e bars



P2j & P2k bars





STEEL LIST

Mark	Location	Shape	Size	No.	Spcng	Length	Weight
A4a	Top Slab	Bent	⅝" ϕ	206	11"%	11'-5"	2455
A4b	" "	"	⅝" ϕ	3	11"%	11'-7"	36
A4c	" "	"	⅝" ϕ	1		10'-9"	11
A4d	" "	"	⅝" ϕ	1		9'-8"	10
A4e	" "	"	⅝" ϕ	1		8'-7"	9
A4f	" "	"	⅝" ϕ	1		7'-6"	8
A4g	" "	"	⅝" ϕ	1		6'-5"	7
A4h	" "	"	⅝" ϕ	1		5'-0"	5
A4j	" "	"	⅝" ϕ	1		3'-11"	4
B4a	Bottom Slab	Bent	⅝" ϕ	231	11"%	14'-9"	3557
B4b	" "	"	⅝" ϕ	4	11"%	14'-11"	62
B4c	" "	"	⅝" ϕ	1		12'-0"	13
B4d	" "	"	⅝" ϕ	1		11'-4"	12
B4e	" "	"	⅝" ϕ	1		10'-3"	11
B4f	" "	"	⅝" ϕ	1		9'-2"	10
B4g	" "	"	⅝" ϕ	1		8'-1"	8
B4h	" "	"	⅝" ϕ	1		7'-0"	7
B4j	" "	"	⅝" ϕ	1		5'-6"	6
C4a	Top Slab	Str.	⅝" ϕ	204	11"%	9'-6"	2023
C4b	" "	"	⅝" ϕ	5	11"%	9'-6"	50
D5a	Bottom Slab	"	¾" ϕ	229	11"%	9'-6"	3270
D5b	" "	"	¾" ϕ	4	11"%	9'-6"	58
E2a	Top Slab	"	½" ϕ	204	11"%	9'-6"	1295
E2b	" "	"	½" ϕ	5	11"%	9'-6"	32
F2a	Bottom Slab	Bent	½" ϕ	229	11"%	14'-6"	2205
F2b	" "	"	½" ϕ	4	11"%	14'-7"	39
G2a	Walls	Bent	½" ϕ	844	5½"%	7'-0"	3946
G2b	Wing Walls	Str.	½" ϕ	26	5½"%	7'-3"	126
G2c	" "	"	½" ϕ	26	5½"%	6'-0"	104
G2d	" "	"	½" ϕ	24	5½"%	4'-9"	76
G2e	" "	"	½" ϕ	22	5½"%	3'-6"	51
H4a	Walls	Str.	⅝" ϕ	170	2'-3½"%	6'-0"	1065
H4b	Wing Walls	"	⅝" ϕ	6	2'-3½"%	7'-0"	44
H4c	" "	"	⅝" ϕ	4	2'-3½"%	5'-9"	24
H4d	" "	"	⅝" ϕ	4	2'-3½"%	4'-6"	19
H4e	" "	"	⅝" ϕ	8	2'-3½"%	3'-3"	27
J4a	" "	Bent	⅝" ϕ	192	2'-3½"%	3'-9"	752
K4a	Barrel & Wall	Str.	⅝" ϕ	192	As Shown	29'-6"	5913
K4b	Top Slab & Cutoff	"	⅝" ϕ	4	" "	21'-9"	91
K4c	Top Slab	"	⅝" ϕ	5	" "	22'-3"	116
K4d	" "	"	⅝" ϕ	2	" "	23'-1"	48
K4e	" "	"	⅝" ϕ	4	" "	23'-8"	99
K4f	" "	"	⅝" ϕ	2	" "	24'-2"	50
K4g	Bottom Slab	"	⅝" ϕ	5	" "	32'-3"	168
K4h	" "	"	⅝" ϕ	3	" "	32'-10"	103
K4j	Walls & Slab	"	⅝ ϕ	12	" "	33'-5"	419
K4k	" "	"	⅝" ϕ	6	" "	31'-4"	196
K4m	" "	"	⅝" ϕ	4	" "	31'-7"	132
K4n	Top Slab	"	⅝" ϕ	2	" "	16'-9"	35
K4p	" "	"	⅝" ϕ	2	" "	17'-5"	36
K4q	" "	"	⅝" ϕ	2	" "	18'-7"	39
K4r	" "	"	⅝" ϕ	1	" "	19'-9"	21
K4s	" "	"	⅝" ϕ	2	" "	20'-5"	43
K4t	Bottom Slab	"	⅝" ϕ	2	" "	34'-10"	73
K4u	" "	"	⅝" ϕ	2	" "	30'-2"	63
K4v	Bottom Slab & Walls	"	⅝" ϕ	6	" "	28'-1"	176
K4w	" " "	"	⅝" ϕ	6	" "	36'-2"	227
K4x	Walls	"	⅝" ϕ	2	" "	25'-2"	53
M4a	Contr. Joint	Bent	⅝" ϕ	24	As Shown	5'-5"	136
M4b	" "	"	⅝" ϕ	24	" "	4'-7"	115
N4a	" "	"	⅝" ϕ	48	" "	4'-7"	230
N4b	" "	"	⅝" ϕ	48	" "	3'-9"	188
P2a	Cut-off Wall	Bent	½" ϕ	24	12"%	3'-7"	57
P2b	" "	Str.	½" ϕ	3	12"%	19'-6"	39
P2c	Turnback	"	½" ϕ	24	12"%	6'-11"	111
P2d	"	Bent	½" ϕ	4	12"%	6'-3"	17
P2e	"	"	½" ϕ	4	12"%	3'-5"	9
P2f	"	"	½" ϕ	4	12"%	3'-5"	9
P2g	"	"	½" ϕ	4	12"%	5'-10"	16
P2h	Cut-off Wall	Str.	½" ϕ	3	12"%	21'-9"	44
P2j	Turnback	Bent	½" ϕ	4	12"%	5'-1"	14
P2k	"	"	½" ϕ	4	12"%	3'-4"	9
P2m	"	"	½" ϕ	4	12"%	3'-4"	9
P2n	"	"	½" ϕ	4	12"%	6'-9"	18
P7a	Cut-off Wall	Str.	1" ϕ	3	3"%	21'-9"	174
R2a	Headwall	Bent	½" ϕ	24	12"%	2'-10"	45
R2b	"	Str.	½" ϕ	2	12"%	12'-3"	16
R2c	"	"	½" ϕ	2	12"%	10'-0"	13
R7a	"	Bent	1" ϕ	2	As Shown	14'-7"	78
R7b	"	"	1" ϕ	2	" "	16'-3"	90
Dowels	Inlet	Str.	¾" ϕ	12	12"%	2'-0"	36
RE2	Replacement	Str.	½" ϕ	4		4'-0"	11
RE4	"	"	⅝" ϕ	4		4'-6"	19
RE5	"	"	¾" ϕ	4		5'-0"	30
RE7	"	"	1" ϕ	4		6'-0"	64
						TOTAL	31135

Sheet 3 of 3

DRAINAGE STRUCTURE C-7

DRAINAGE STRUCTURE C-10 CULV'T. NO. TR-422-12 A

STATION 389+79.2 DRAINAGE AREA 74 Ac.

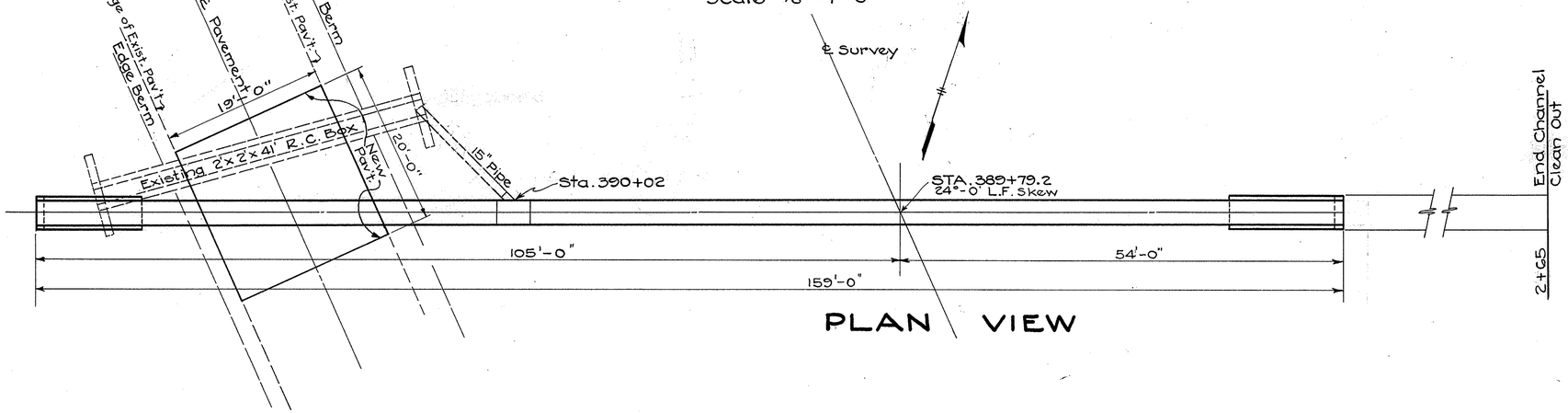
Surveyed by E.P.I. Checked by E.A.G. Drawn by G.F.J.

Scale 1/8" = 1'-0"

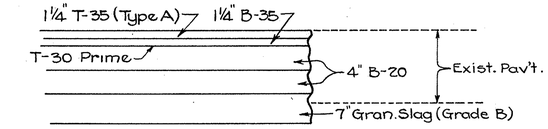
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

(69) 76

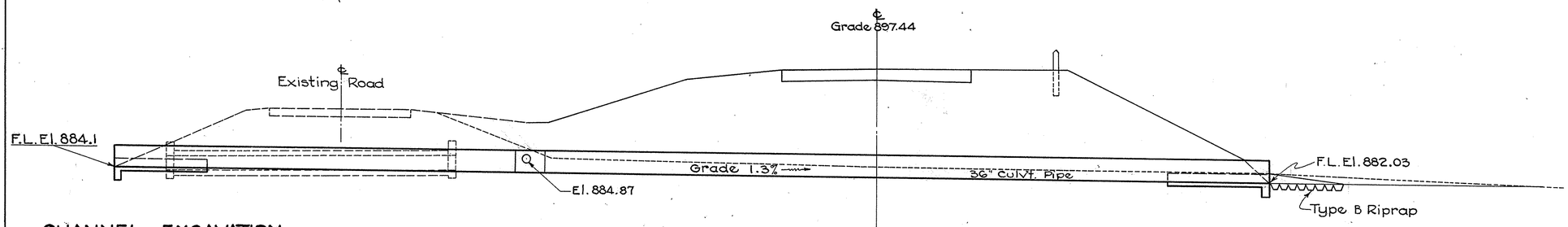
TRUMBULL COUNTY
TRU-422-0.00-2.06



PLAN VIEW



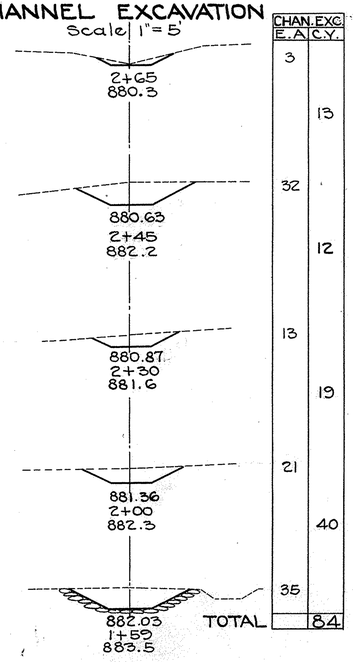
DETAIL OF REPLACEMENT PAVEMENT
Scale 1" = 1'



LONGITUDINAL VIEW

CHANNEL EXCAVATION

Scale 1" = 5'



CHAN. EXC. E.A	C.Y.
3	
	13
32	
	12
13	
	19
21	
	40
35	
TOTAL	84

CULVERT DATA

TYPE: Standard pipe culvert with standard cradles, cut-off walls & riprap (outlet end)
SIZE: 36" x 159'-0" @ 24° L.F. Skew
STD. DRWG'S: S-27 P.C. 2, 3
WORK REQ'D: Build standard pipe culvert with concrete cradles and cut-off walls as shown. Riprap outlet end as shown. Remove existing 2'x2'x41' R.C. Box Culvert at sta. 390+07. Clean outlet channel as shown on sections.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	122	C.Y.
E-3	Channel Excavation	84	C.Y.
I-5	36"x 15" Wye Pipe Special	1	Each
I-10	12" Grout filled Type B Riprap	12	S.Y.
S-1	Class E Concrete for Structures	3.32	C.Y.
S-24	Removal of Existing Structure	1	Lump
S-27	36" Pipe for Roadway Culvert	155	L.F.
T-35	1¼" Asphaltic Concrete Surf. Course (Type A)	1.47	C.Y
B-35	1¼" Asphaltic Concrete Leveling Course	1.47	C.Y.
B-20	8" Waterbound Mac. Base Course (2-4" Crs's)	43.3	S.Y.
SPEC.	8" Granulated Slag (Grade B) Base Course	43.3	S.Y.
T-30	Bituminous Prime Coat	22	S.Y.

DRAINAGE STRUCTURE C-12 CULV. NO. TR-422-10

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

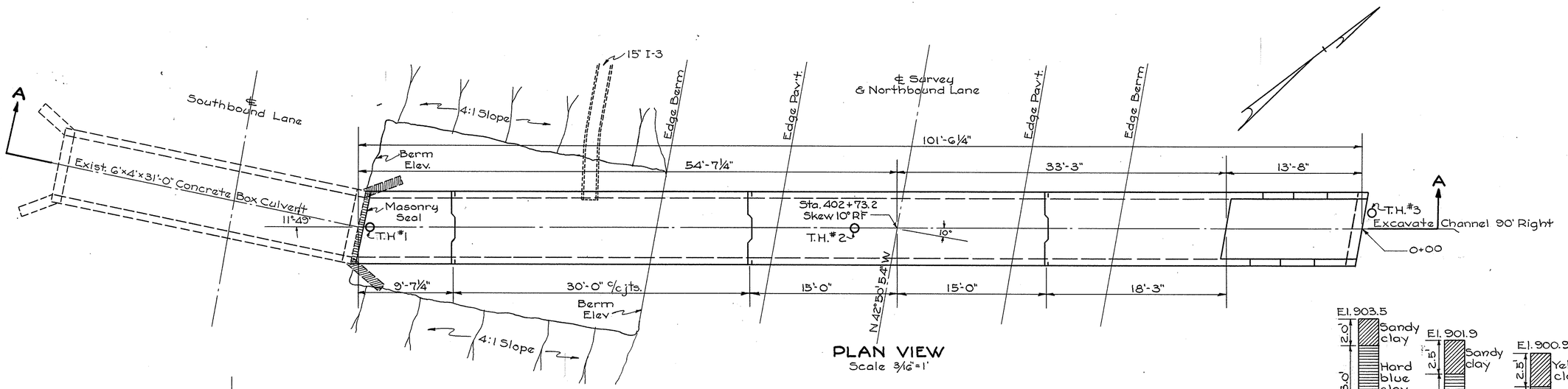
70/76

TRUMBULL COUNTY
TRU-422(0.00-2.06)

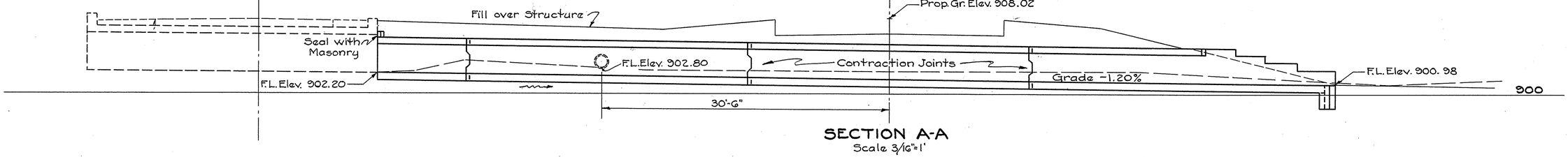
STATION 402+73.2 DRAINAGE AREA = 105AC.

Scales - As Indicated

SURVEYED BY FPI DRAWN BY WWM CHECKED BY H.L.R.



PLAN VIEW
Scale 3/16"=1'



SECTION A-A
Scale 3/16"=1'

CULVERT DATA

TYPE: Standard concrete small box culvert extension

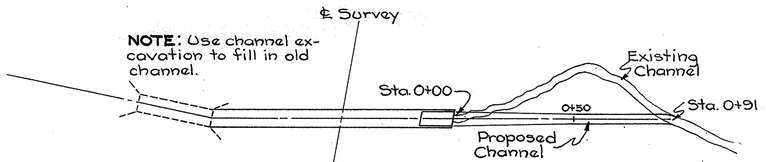
SIZE: 6'-0"x3'-0"x101'-6¼" @ 10°-00' RF skew

STD. DRWG: SBC-45

WORK REQD: Remove wings on East end of existing structure. Extend with new structure as shown, doweling old and new culverts together. Excavate channel 90° right as shown. Seal gap between old and new structures with masonry as shown, cost to be included in price bid per cu. yd. for concrete.

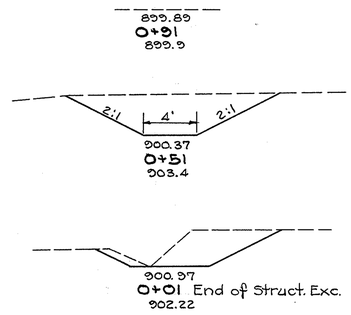
ESTIMATED QUANTITIES

E-2	Excavation for structures	70	C.Y.
E-3	Channel excavation	66	C.Y.
S-1	Class "C" concrete for structures	51.8	C.Y.
S-4	Reinforcing steel	6990	Pounds
S-22	Removal of portion of existing structure	3.9	C.Y.
S-23	Dowel holes	16	Each



PLAN OF CHANNEL EXCAVATION
Scale-1"=30'

CHANNEL EXCAVATION (RT.)
Scale - 3/16"=1'



E.A.	C.Y.
0	
	22
30	
	44
17	
Total	66

0+00 = End of Structure on Right

DRAINAGE STRUCTURE C-12 CULV. NO. TR-422-10

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

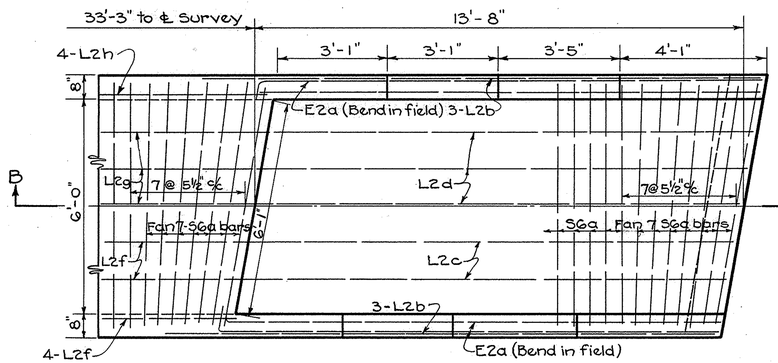
71/76

TRUMBULL COUNTY
TRU-422 (0.00-2.06

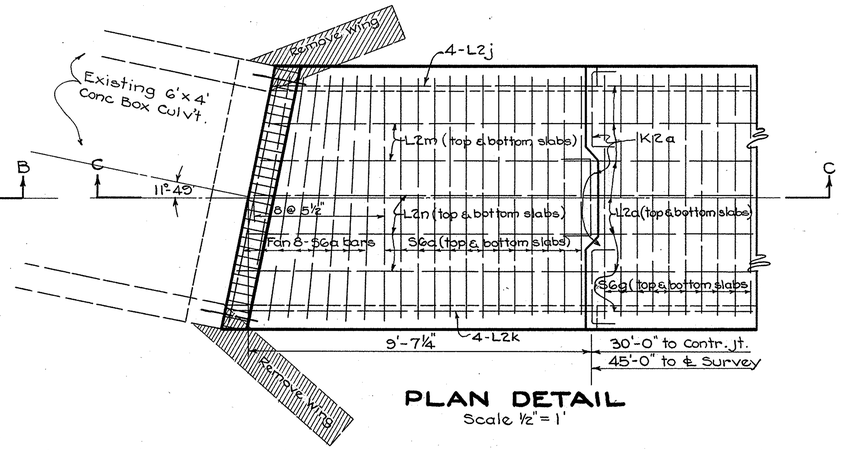
STATION 402+73.2

DRAINAGE AREA 105 AC.

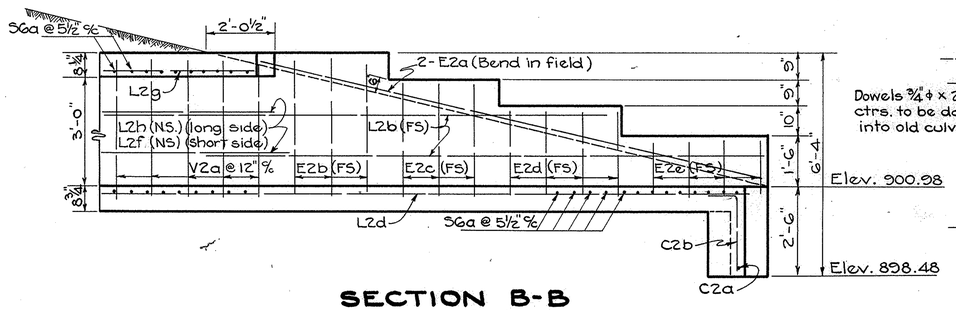
SURVEYED BY FPI CHECKED BY MEP DRAWN BY WWM



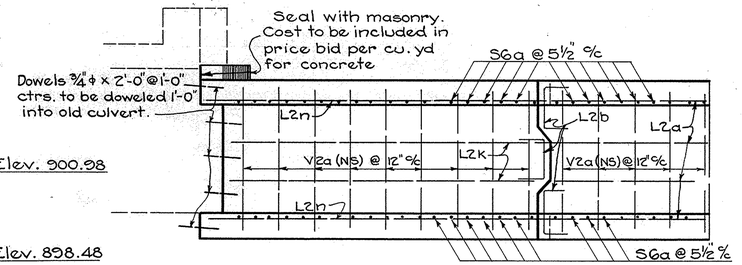
PLAN DETAIL
Scale ½" = 1'



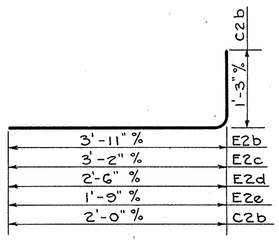
PLAN DETAIL
Scale ½" = 1'

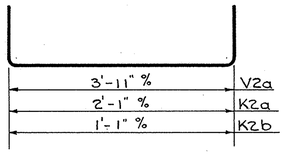


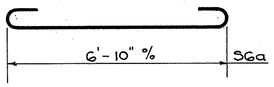
SECTION B-B
Scale ½" = 1'



SECTION C-C
Scale ½" = 1'







STEEL LIST

MARK	LOCATION	SHAPE	SIZE	NO.	SPACING	LENGTH	WEIGHT
L2b	Walls	Str.	½" ϕ	6	As shown	15'-6"	62
L2c	Bottom Slab	Str.	½" ϕ	2	As shown	31'-1"	42
L2d	Bottom Slab	Str.	½" ϕ	3	As shown	31'-5"	63
L2f	Walls & Slab	Str.	½" ϕ	6	As shown	17'-7"	70
L2g	Top Slab	Str.	½" ϕ	3	As shown	17'-11"	36
L2h	Walls	Str.	½" ϕ	4	As shown	18'-5"	49
L2a	Barrel	Str.	½" ϕ	36	As shown	29'-6"	709
L2j	Wall	Str.	½" ϕ	4	As shown	8'-5"	22
L2k	Wall	Str.	½" ϕ	4	As shown	9'-9"	26
L2m	Slabs	Str.	½" ϕ	4	As shown	8'-8"	23
L2n	Slabs	Str.	½" ϕ	6	As shown	9'-5"	38
E2b	Wings	Bent	½" ϕ	6	12" %	4'-6"	18
E2a	Wings	Str.	½" ϕ	4	As shown	15'-0"	40
E2c	Wings	Bent	½" ϕ	6	12" %	3'-9"	15
E2d	Wings	Bent	½" ϕ	7	12" %	3'-1"	15
E2e	Wings	Bent	½" ϕ	9	12" %	2'-4"	14
V2a	Walls	Bent	½" ϕ	176	12" %	5'-1"	597
C2a	Cut-off wall	Str.	½" ϕ	1	As shown	6'-11"	5
C2b	Cut-off wall	Bent	½" ϕ	8	12" %	3'-2"	17
K2a	Contr. Joint	Bent	½" ϕ	36	As shown	3'-3"	78
K2b	Constr. Joint	Bent	½" ϕ	36	As shown	2'-3"	54
S6a	Slabs	Bent	¾" ϕ	403	5½" %	8'-2"	4949
Dowels	Connection	Str.	¾" ϕ	16	1'-0"	2'-0"	48
						TOTAL	6990

DRAINAGE STRUCTURE C-14 CULV. No. TR-422-07

STA. 417+34 DRAINAGE AREA 209 AC.

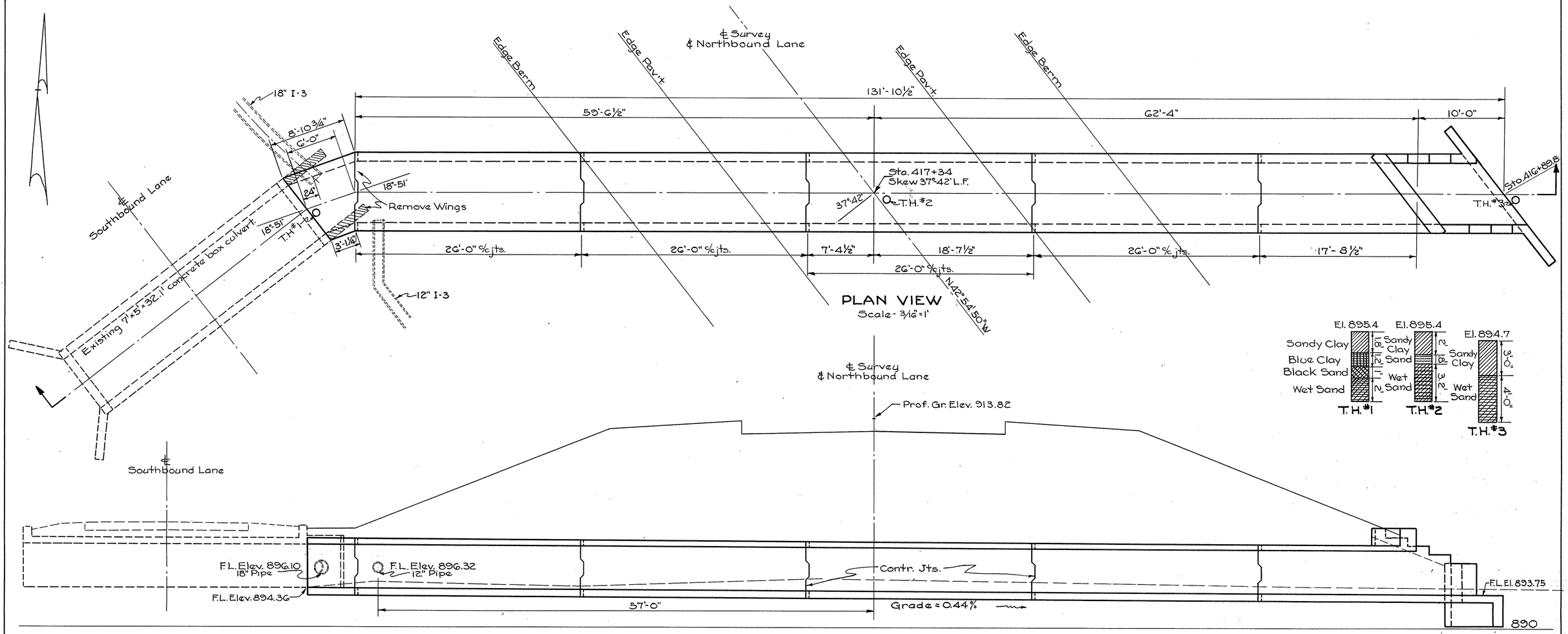
Scales - As Indicated

SURVEYED BY FPI DRAWN BY [illegible] CHECKED BY H.L.R.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

72/76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)



CULVERT DATA

TYPE: Standard concrete large box culvert extension

SIZE: 7'-0" x 5'-0" x 137'-10 1/2" @ 37°42' L.F. Skew

STD. DRWG: LBC-45

WORK REQD: Remove wings on East end of existing structure. Extend with new culvert as shown, doweling new and existing structures together. Clean channel 50' right. Patch outlet end of existing structure.

ESTIMATED QUANTITIES

E-2	Excavation for structures	105	C.Y.
E-3	Channel excavation (estimated)	10	C.Y.
S-1	Class "C" concrete for structures	122.2	C.Y.
S-4	Reinforcing steel	22,565	Pounds
S-22	Removal of portion of existing structure	3.3	C.Y.
S-23	Dowel holes	28	Each
S-2	Patching concrete structures	30	S.F.

DRAINAGE STRUCTURE C-14 CULV. NO. TR-422-07

STATION 417 + 34 DRAINAGE AREA 209 Ac.

Scale~ as shown

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

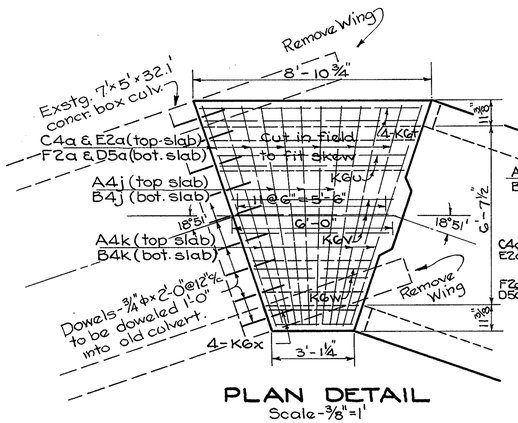
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

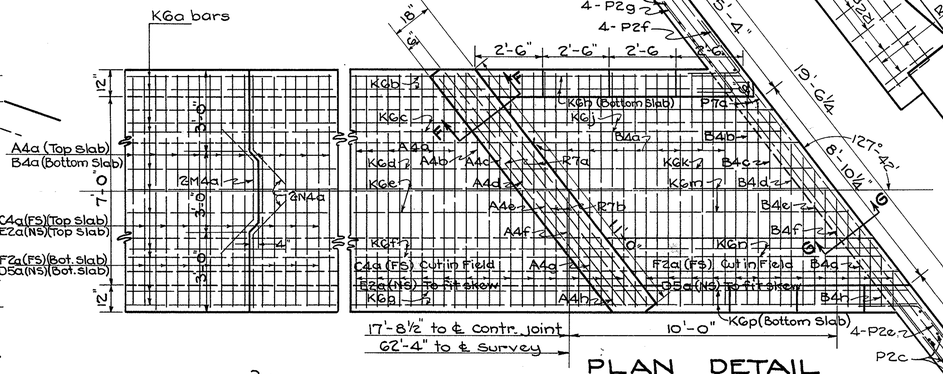
73/76

STEEL LIST

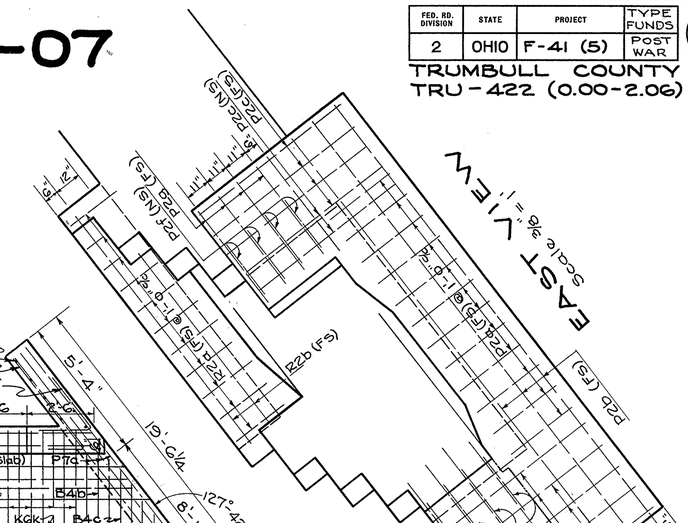
Mark	Location	Shape	Size	No.	Spacing	Length	Weight
A4a	Top Slab	Bent	5/8" ϕ	141	10" c/c	10'-5"	1534
A4b	" "	"	5/8" ϕ	1	10" c/c	9'-11"	10
A4c	" "	"	5/8" ϕ	1	10" c/c	9'-0"	9
A4d	" "	"	5/8" ϕ	1	10" c/c	8'-0"	8
A4e	" "	"	5/8" ϕ	1	10" c/c	6'-10"	7
A4f	" "	"	5/8" ϕ	1	10" c/c	5'-10"	6
A4g	" "	"	5/8" ϕ	1	10" c/c	4'-4"	5
A4h	" "	"	5/8" ϕ	1	10" c/c	3'-3"	3
A4j	Trans. Sect.	"	5/8" ϕ	3	10" c/c	9'-11"	30
A4k		"	5/8" ϕ	3	as shown	10'-2"	32
B4a	Bottom Slab	Bent	5/8" ϕ	153	10" c/c	14'-1"	2249
B4b	" "	"	5/8 ϕ	1	10" c/c	11'-9"	12
B4c	" "	"	5/8 ϕ	1	10" c/c	10'-11"	11
B4d	" "	"	5/8 ϕ	1	10" c/c	9'-10"	10
B4e	" "	"	5/8 ϕ	1	10" c/c	8'-9"	9
B4f	" "	"	5/8 ϕ	1	10" c/c	7'-9"	8
B4g	" "	"	5/8 ϕ	1	10" c/c	6'-1"	6
B4h	" "	"	5/8 ϕ	1	10" c/c	5'-0"	5
B4j	Trans. Sect.	"	5/8 ϕ	3	10" c/c	13'-7"	43
B4k	" "	"	5/8 ϕ	3	as shown	13'-10"	43
C4a	Top Slab	Str.	5/8" ϕ	147	10" c/c	8'-6"	1304
D5a	Bottom Slab	"	3/4" ϕ	159	10" c/c	8' 6"	2031
E2a	Top Slab	"	1/2" ϕ	147	10" c/c	8' 6"	834
F2a	Bottom Slab	Bent	1/2" ϕ	159	10" c/c	13'-9"	1460
G2a	Walls	Bent	1/2" ϕ	600	5" c/c	5'-11"	2372
G2b	Wing walls	Str.	1/2" ϕ	12	5" c/c	6'-3"	50
G2c	" "	"	1/2" ϕ	12	5" c/c	5' 3"	42
G2d	" "	"	1/2" ϕ	12	5" c/c	4'-3"	34
G2e	" "	Str.	1/2" ϕ	12	5" c/c	3'-3"	26
H4a	Walls	Str.	5/8" ϕ	117	2'-1" c/c	5'-0"	610
H4b	Wing Walls	"	5/8" ϕ	2	2'-1" c/c	6'-0"	13
H4c	" "	"	5/8" ϕ	2	2'-1" c/c	5'-0"	10
H4d	" "	"	5/8" ϕ	4	2'-1" c/c	4'-0"	17
H4e	" "	"	5/8" ϕ	3	2'-1" c/c	3'-0"	9
J4a	Walls	Bent	5/8" ϕ	128	2'-1" c/c	3'-11"	524
K6a	Barrel	Str.	7/8" ϕ	120	as shown	25'-6"	6261
K6b	Top Slab	"	7/8" ϕ	2	" "	13'-10"	57
K6c	" "	"	7/8" ϕ	2	" "	15'-2"	62
K6d	" "	"	7/8" ϕ	1	" "	16'-6"	34
K6e	" "	"	7/8" ϕ	2	" "	17'-2"	70
K6f	" "	"	7/8" ϕ	2	" "	18'-10"	77
K6g	" "	"	7/8" ϕ	2	" "	20'-0"	82
K6h	Bot. Slab+Walls	"	7/8" ϕ	4	" "	23'-10"	195
K6J	Bottom Slab	"	7/8" ϕ	2	" "	25'-2"	103
K6K	" "	"	7/8" ϕ	1	" "	26'-6"	54
K6m	" "	"	7/8" ϕ	2	" "	27'-2"	111
K6n	" "	"	7/8" ϕ	2	" "	28'-10"	118
K6p	Bot. Slab+Walls	"	7/8" ϕ	4	" "	30'-0"	246
K6r	Wall	"	7/8" ϕ	2	" "	21'-4"	87
K6s	"	"	7/8" ϕ	2	" "	28'-1"	115
K6t	Trans. Sect.	"	7/8" ϕ	8	" "	8'-1"	132
K6u	" "	"	7/8" ϕ	4	" "	6'-11"	57
K6v	" "	"	7/8" ϕ	6	" "	5'-3"	64
K6w	" "	"	7/8" ϕ	4	" "	4'-1"	33
K6x	" "	Str.	7/8" ϕ	8	" "	2'-11"	48
M4a	Contr. Joint	Bent	5/8" ϕ	20	as shown	5'-1"	106
M4b	" "	"	5/8 ϕ	20	" "	4'-3"	89
					" "		
N4a	Contr. Joint	Bent	5/8" ϕ	40	" "	4'-2"	174
N4b	" "	"	5/8 ϕ	40	as shown	3'-4"	139
P2a	cut-off wall	Bent	1/2" ϕ	12	12" c/c	3'-7"	29
P2b	" " "	Str.	1/2" ϕ	3	12" c/c	19'-2"	38
P2c	Turnbacks	Str.	1/2" ϕ	12	12" c/c	6'-8"	53
P2d	"	Bent	1/2" ϕ	4	11" c/c	6'-3"	17
P2e	"	"	1/2" ϕ	4	11" c/c	3'-4"	9
P2f	"	"	1/2" ϕ	4	11" c/c	3'-3"	9
P2g	"	"	1/2" ϕ	4	11" c/c	4'-10"	13
P7a	cut-off wall	Str.	1" ϕ	3	4" c/c	19'-2"	154
R2a	Headwall	Bent	1/2" ϕ	11	12" c/c	2'-10"	21
R2b	"	Str.	1/2" ϕ	2	12" c/c	10'-8"	14
Dowels	Connection	Str	3/4" ϕ	28	12" c/c	2'-0"	84
RE2	Replacement	Str.	1/2" ϕ	2		4'-0"	5
RE4	"	"	5/8" ϕ	2		4'-6"	9
RE5	"	"	3/4" ϕ	2		5'-0"	15
RE6	"	"	7/8" ϕ	2		5'-6"	23
RE7	"	"	1" ϕ	2		6'-0"	32
R7a	Headwall	Bent	1" ϕ	2	12" c/c	12'-10"	69
R7b	"	"	1" ϕ	2	4" c/c	15'-1"	81
						TOTAL	22565



PLAN DETAIL
Scale-⅜"=1'



PLAN DETAIL
Scale-⅜"=1'


EAST ELEV.
Scale ⅜"=1'
P2d (FS)
P2e (NS)
P2d (FS)
P2e (NS)
P2b (FS)
P2a (FS)
P2a (NS)
P2b (NS)
P2c (FS)
P2c (NS)
P2d (FS)
P2d (NS)
P2e (FS)
P2e (NS)
P2f (FS)
P2f (NS)
P2g (FS)
P2g (NS)
12"
12"
12"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

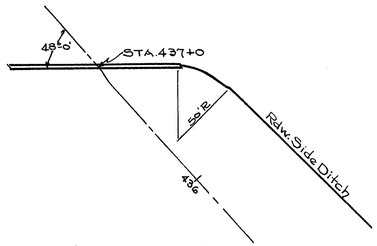
74
76

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

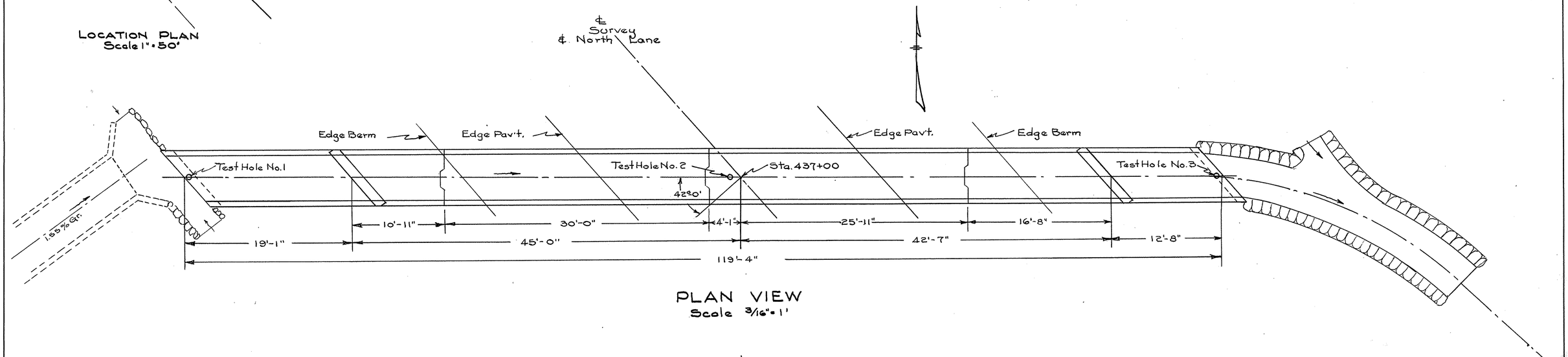
DRAINAGE STRUCTURE C-17 CULV. NO. TRU-422-03

STATION 437+00 DRAINAGE AREA 301 AC.

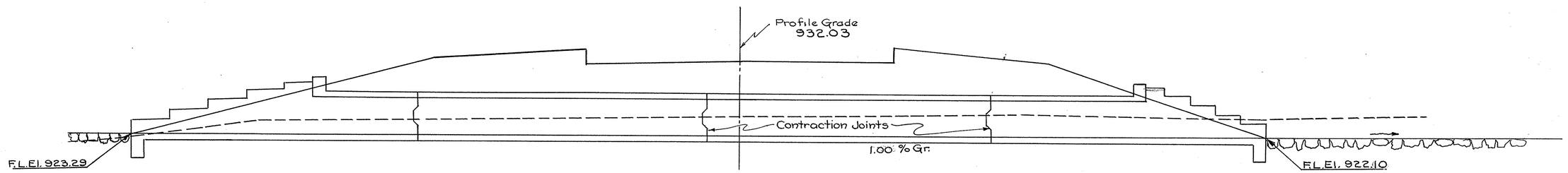
Surveyed By F.P.I. Drawn By T.R.P. Checked By M.E.P.



LOCATION PLAN
Scale 1" = 50'

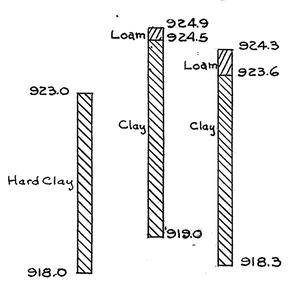


PLAN VIEW
Scale 3/16" = 1'



LONGITUDINAL SECTION ON C.L.
Scale 3/16" = 1'

TEST HOLE DATA
CULVERT STA. 437+00



CULVERT DATA

TYPE	Standard Conc. Box Culvert. 64'-1" left and 55'-3" right
SIZE	5'x 4'x 119'-4" Skew 42° L.F.
STD. DRWGS.	SBC-45.
WORK REQ'D.	Build new concrete box culvert. Excavate channel 15' right. Place rip rap at ends of culvert as shown.

ESTIMATED QUANTITIES

E-2	Excavation for structures	100	C.Y.
E-3	Channel excavation	17	C.Y.
S-1	Class "C" concrete for structures	57.4	C.Y.
S-4	Reinforcing steel	7025	LBS
I-10	12" grout filled type "B" rip rap	40	S.Y.

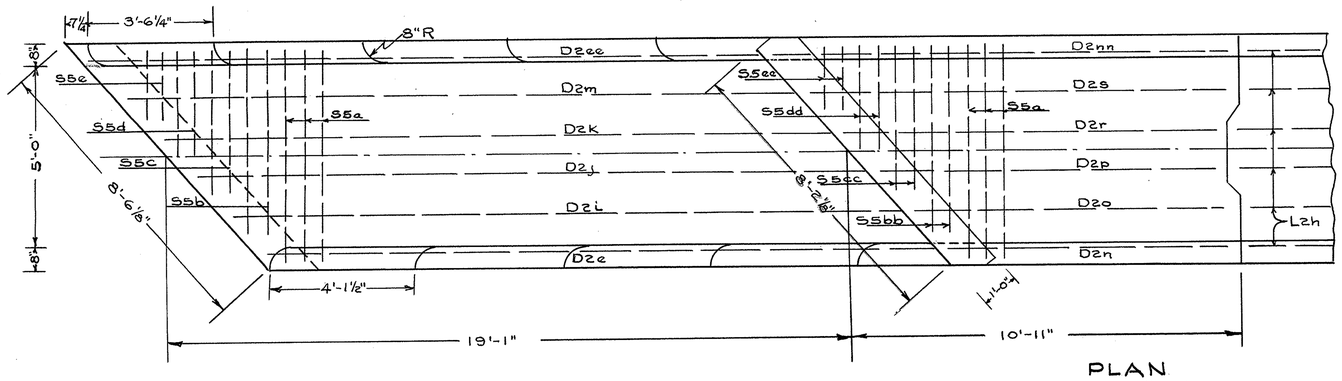
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

75
76

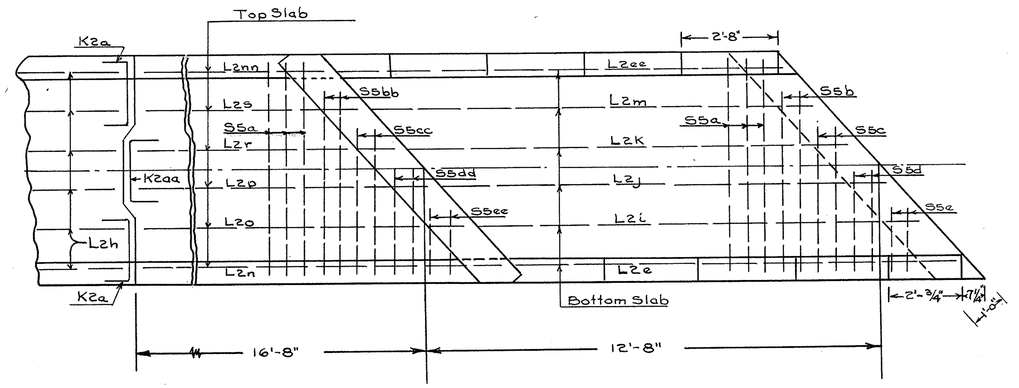
TRUMBULL COUNTY
TRU-422 (0.00-2.06)

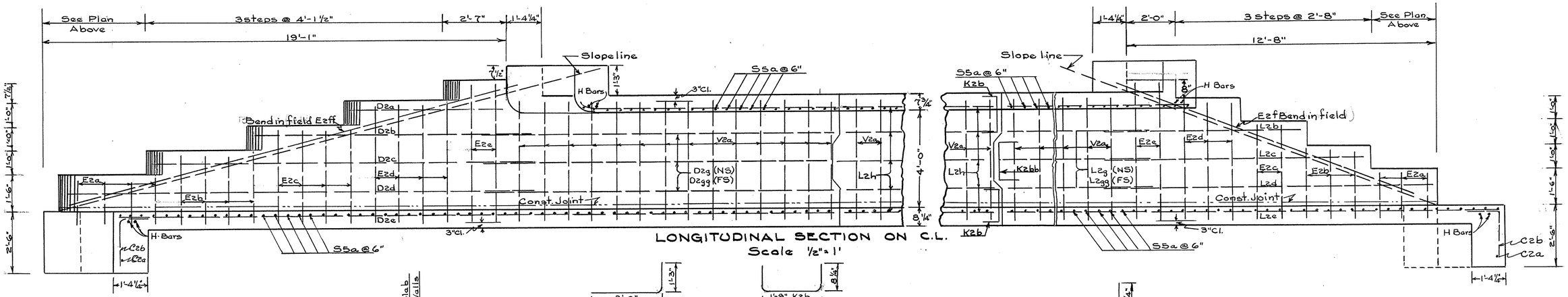
DRAINAGE STRUCTURE C-17
STATION 437+00

CULV. NO. TRU-422-03
DRAINAGE AREA 301 AC.

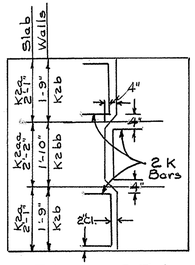


PLAN
Scale 1/2" = 1'

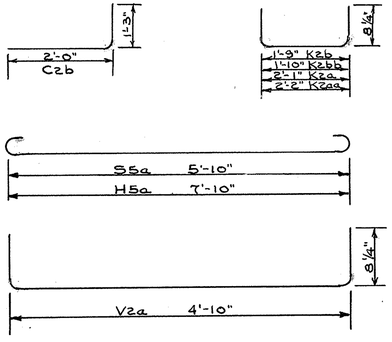


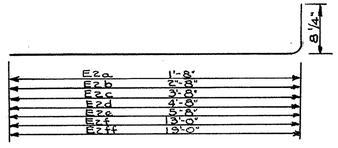


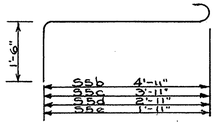
LONGITUDINAL SECTION ON C.L.
Scale 1/2" = 1'

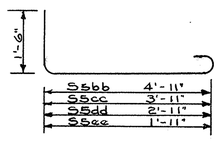


DETAIL OF CONTRACTION JOINT









FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-41(5)

TRUMBULL COU
TRU-422(0.00-2.

DRAINAGE STRUCTURE C-17
STATION 437+00

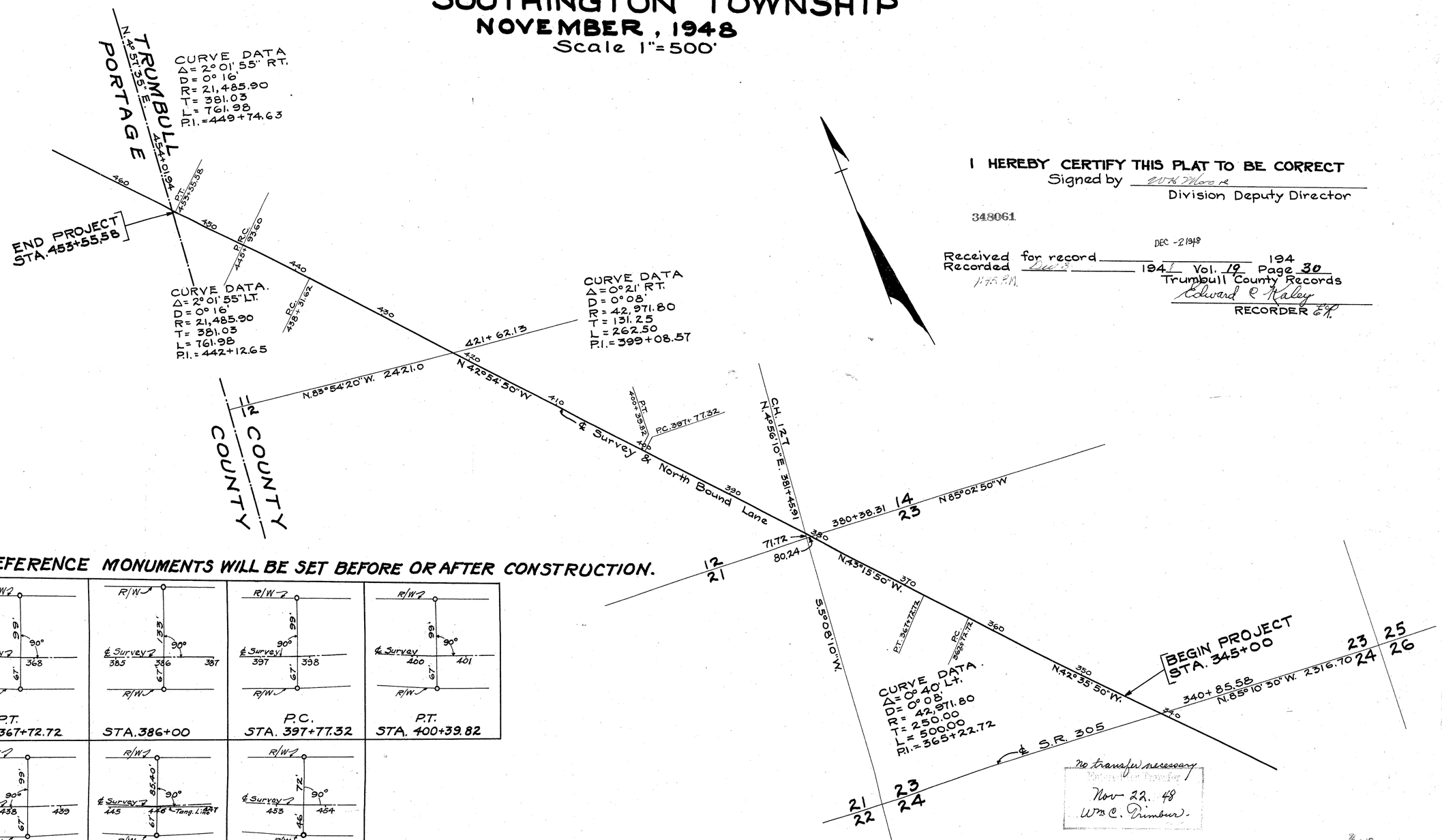
COLV. NO. TRU-422-03
DRAINAGE AREA 301 AC

STEEL LIST

Mark	Spacing	Number	Size	Shape	Length	Weight
L2b	1'-0"	2	½" ϕ	Str.	8'-2"	11
L2c	"	2	"	"	10'-9"	14
L2d	"	2	"	"	13'-6"	18
L2e	"	1	"	"	31'-3"	21
L2ee	"	1	"	"	26-5"	18
L2g	"	3	"	"	20'-0"	40
L2gg	"	3	"	"	14'-8"	29
L2h	"	36	"	"	29'-6"	709
L2i	"	1	"	"	30'-2"	20
L2j	"	1	"	"	29'-3"	19
L2k	"	1	"	"	28'-5"	19
L2m	"	1	"	"	27'-5"	18
L2n	"	1	"	"	18'-8"	12
L2nn	"	1	"	"	13'-10"	9
L2o	"	1	"	"	17'-10"	12
L2p	"	1	"	"	16'-10"	11
L2r	"	1	"	"	15'-10	11
L2s	"	1	"	"	14'-10"	10
K2a	"	24	"	Bent	3'-3"	52
K2aa	"	12	"	"	3'-4"	27
K2b	"	24	"	"	2'-11"	47
K2bb	"	12	"	"	3'-0"	24
E2a	1'-0"±	14	"	"	2'-3"	21
E2b	"	14	"	"	3'-3"	30
E2c	"	12	"	"	4'-3"	35
E2d	"	14	"	"	5'-3"	49
E2e	"	8	"	"	6'-1"	33
E2f	"	4	"	"	13'-7"	36
E2ff	"	4	"	"	19'-7"	52
S5a	0'-6"	390	¾" ϕ	"	7'-2"	4200
S5b	"	4	"	"	6'-11"	42
S5c	"	4	"	"	5'-11"	36
S5d	"	4	"	"	4'-11"	30
S5e	"	4	"	"	3'-11"	24
D2a	1'-0"±	2	½" ϕ	Str.	6'-4"	8
D2b	"	2	"	"	11"-6"	15
D2c	"	2	"	"	15'-6"	21
D2d	"	2	"	"	19'-3"	26
D2e	"	1	"	"	26'-9"	18
D2ee	"	1	"	"	31'-8"	21
D2g	"	3	"	"	9'-2"	18
D2gg	"	3	"	"	13'-11"	28
D2i	"	1	"	"	27'-10"	19
D2j	"	1	"	"	28'-8"	19
D2K	"	1	"	"	29'-6"	20
D2m	"	1	"	"	30'-8"	20
D2n	"	1	"	"	7'-10"	5
D2nn	"	1	"	"	12'-8"	8
D2o	"	1	"	"	8'-9"	6
D2p	"	1	"	"	9'-6"	6
D2r	"	1	"	"	10'-6"	7
D2s	"	1	"	"	11'-8"	8
H5a	"	8	¾ ϕ	Bent	9'-0"	108
V2a	1'-0"	178	½" ϕ	"	6'-0	713
C2a		2	"	Str.	7'-8"	10
C2b	1'-0"	14	"	Bent	3'-2"	30
S5bb	0'-6"	4	¾" ϕ	"	6'-11"	42
S5cc	"	4	"	"	5'-11"	36
S5dd	"	4	"	"	4'-11"	30
S5ee	"	4	"	"	3'-11"	24
RE2		2	½" ϕ	Str.	4'-0"	5
RE5		2	¾" ϕ	"	5'-0"	15
TOTAL						7025

422-TRU-0.00

LOCATION PLAN
WARREN - BURTON ROAD
TRU-422-(0.00-2.06)
TRUMBULL COUNTY
SOUTHINGTON TOWNSHIP
NOVEMBER, 1948
Scale 1"=500'



CENTER LINE REFERENCE MONUMENTS WILL BE SET BEFORE OR AFTER CONSTRUCTION.

I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Signed by W.K. Moore
Division Deputy Director

348061

Received for record DEC -2 1948
Recorded Dec. 3 1948 Vol. 19 Page 30
1:15 P.M. Trumbull County Records
Edward P. Raley
RECORDER E.R.

No transfer necessary
Nov 22. 48
Wm C. Dimbur.

#816

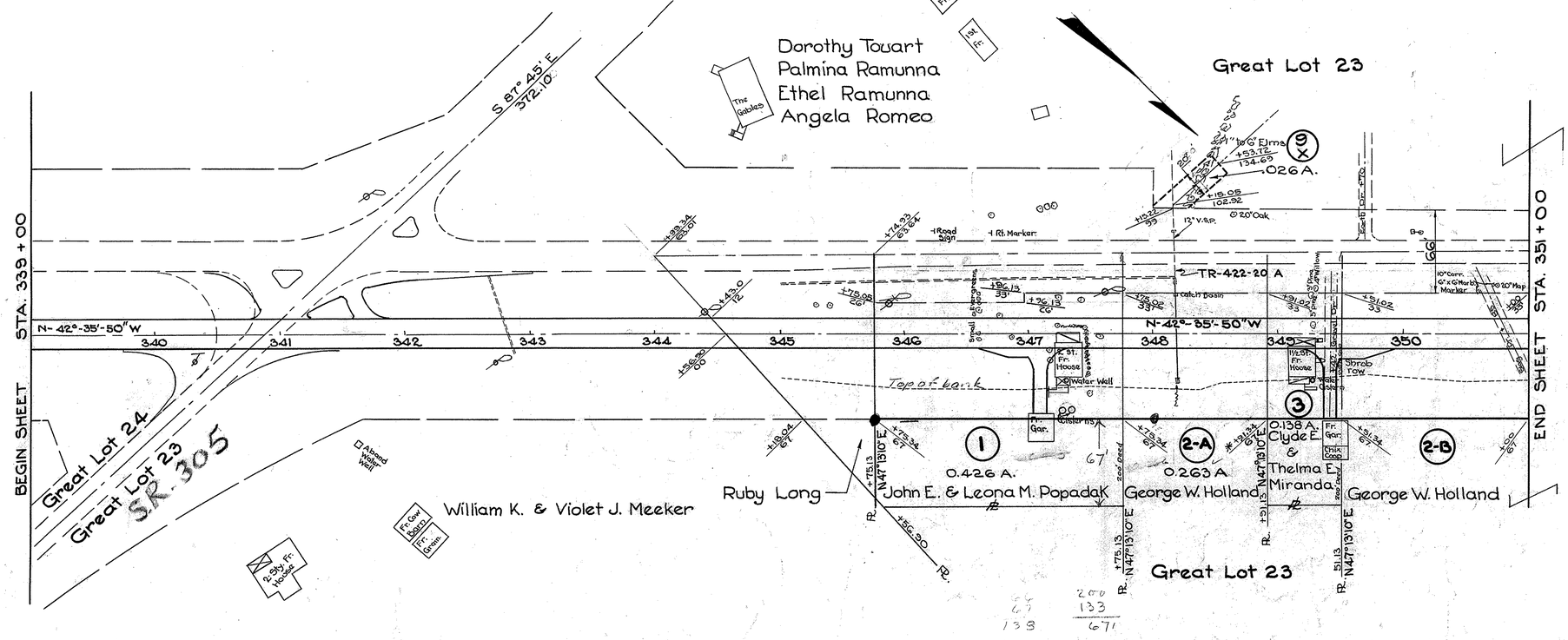
Vol 11 Page 37

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41-(5)	POST WAR

1/5

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

SOUTHINGTON TWP
T. 5N - R. 5W


BEGIN SHEET STA. 339+00
END SHEET STA. 351+00
N-42°-35'-50"W
S 87° 45' E 372.10
Dorothy Tovart
Palmina Ramunna
Ethel Ramunna
Angela Romeo
The Gables
Great Lot 23
Great Lot 24
Great Lot 23
SR 305
William K. & Violet J. Meeker
Ruby Long
John E. & Leona M. Popadak
0.426 A.
George W. Holland
0.263 A.
Clyde E. & Thelma E. Miranda
0.138 A.
George W. Holland
Great Lot 23
TR-422-20 A
Catch Basin
Shrub row
Top of bank
Abnd. Water Well
2 Sty. Fr. House
Fr. Gar. Barn
Fr. Gar. Grain
1½ St. Fr. House
Fr. Gar.
Cistern
Drive
Road Sign
Rt. Marker
Spring
Stream
Fence
Ditch
Telephone
Pole
Guy
Wire
Hedge
Shed
Fr. Gar.
Concr. Gar.
Concr. Gar.
Fr. Gar.
Concr. Gar.
Concr. Gar.
Conc

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

2/5

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

George E. & Gladys F. Culp

CURVE DATA
Δ = 0°-40' 00" Lt.
D = 0°- 08'
R = 42,971.80
T = 250.00'
E = .73
L = 500.00

P.I. - 365+22.72 - Dat 0°-40'-00" Lt.

P.T. STA. 367+72.72

Great Lot 23

George R. & Elizabeth M. Sherbourne

1½ St. Fr. House
Conc. Slab
Fr. Gar.

Dr. + 54 (Slag)

12' x 23' C.I.P.

22' x 12" C.I.P.

Small Evergreens 8'± C. to C.

BEGIN SHEET STA. 363+00

END SHEET STA. 375+00

N 43° 15' 50" W

Brush & 1" to 8" Trees

12" Maple Trees 3" to 4" Apart

Arc R= 43038.80

Dallas H. & Helen E. Strock

4
4.781 A. in Lot 23
0.305A. in Lot 14
5.086A. Total

Great Lot 23

3

+90.96 Rosemary Kovar
264.00
14 0.123 A

6A 1.181 A. Total
0.141 A. in Lot 21
1.040 A. in Lot 12

George R. & Elizabeth M. Sherbourne

Alice C. Healy

Great Lot 21
N 85° 02' 50" W
Great Lot 12

Great Lot 23

N 5° 05' 10" E

Top of cut for drive

Barn

R/W

5 0.354 A.

Guard Rail-Metal Ribbon-Wood Post

4-Man Bolted Sign

12" x 32' Corr.

10" C.I.P. & V.S.P.

N 43° 15' 50" W

4 5.086 A.
(4.781 A. in lot 23
0.305 A. in lot 14)

TR-422-14A2

Brush & 1" to 8" Trees

6-B 5.017 A.

Dallas H. & Helen E. Strock

0.019 A.

Alice C. Healy

Great Lot 23
Great Lot 14

Great Lot 14

Great Lot 12

(Deep Swale)

R=459.91

Rev. 11/22/48

RIGHT OF WAY SHEET STA. 363+00 TO 387+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUND
2	OHIO	F-41 (5)	POST WAR

3/5

TRUMBULL COUNTY
TRU-422-(0.00-2.0G)

Great Lot 12

ALICE C. HEALY

Wooded Area 1" to 20" Trees

6A

1.040 A. in Lot 12
0.141 0.141 A. in Lot 21
1.181 1.181 A. Total

BEGIN SHEET STA. 387+00

END SHEET STA. 399+00

TR-422-12A

Exist. 2'x 2' x 40' Col.

Brush & 1" to 5" Elm Trees

N43°15'50"W

388 389 390 391 392 393 394 395 396 397 398

R/W

Arc. R=42904.80'

P.C. 397+77.32

CURVE DATA
Sta. 399+08.57
Δ 0°-21' Rt.
D 0°-08'
T 262.50'
T 131.25
E 0.57'
R 42971.80

ALICE C. HEALY

6B

5.017 Ac.

Great Lot 12

GEORGE KOVAR

Great Lot 12

Wooded Area

BEGIN SHEET STA. 399+00

END SHEET STA. 411+00

TR-422-10

20'x18' C.I.P.

Mail Box

16'x15' Corr.

N43°15'50"W

400 401 402 403 404 405 406 407 408 409 410

R/W

Arc. R=42904.80'

P.T. 400+33.82

Wooded Area 1" to 15" trees Average 10"

N69°37'10"E R.=+39.43

RUBY M. ZIMMERMAN

7

Great Lot 12

ALICE C. HEALY

6BX

.032 Ac.

Rev. 11/3/48

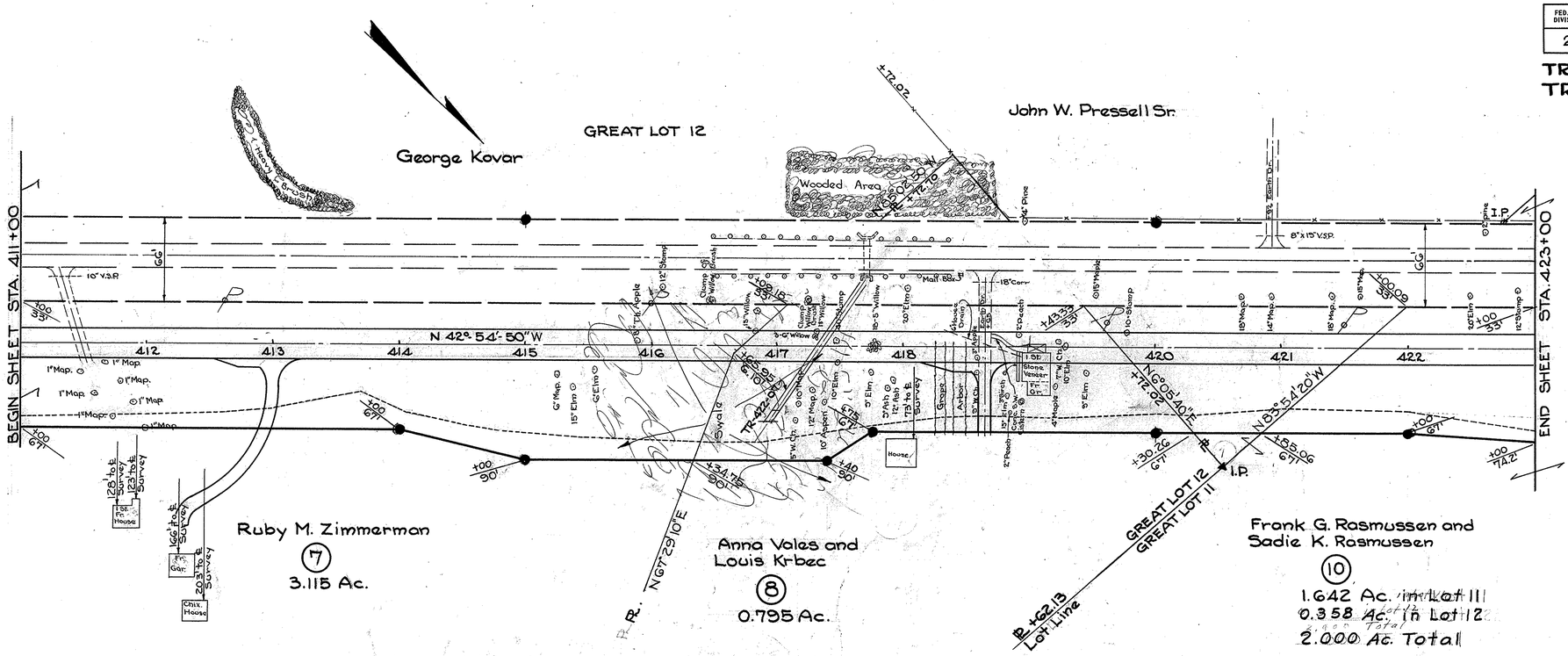
RIGHT OF WAY SHEETS STA. 387+00 TO 411+00

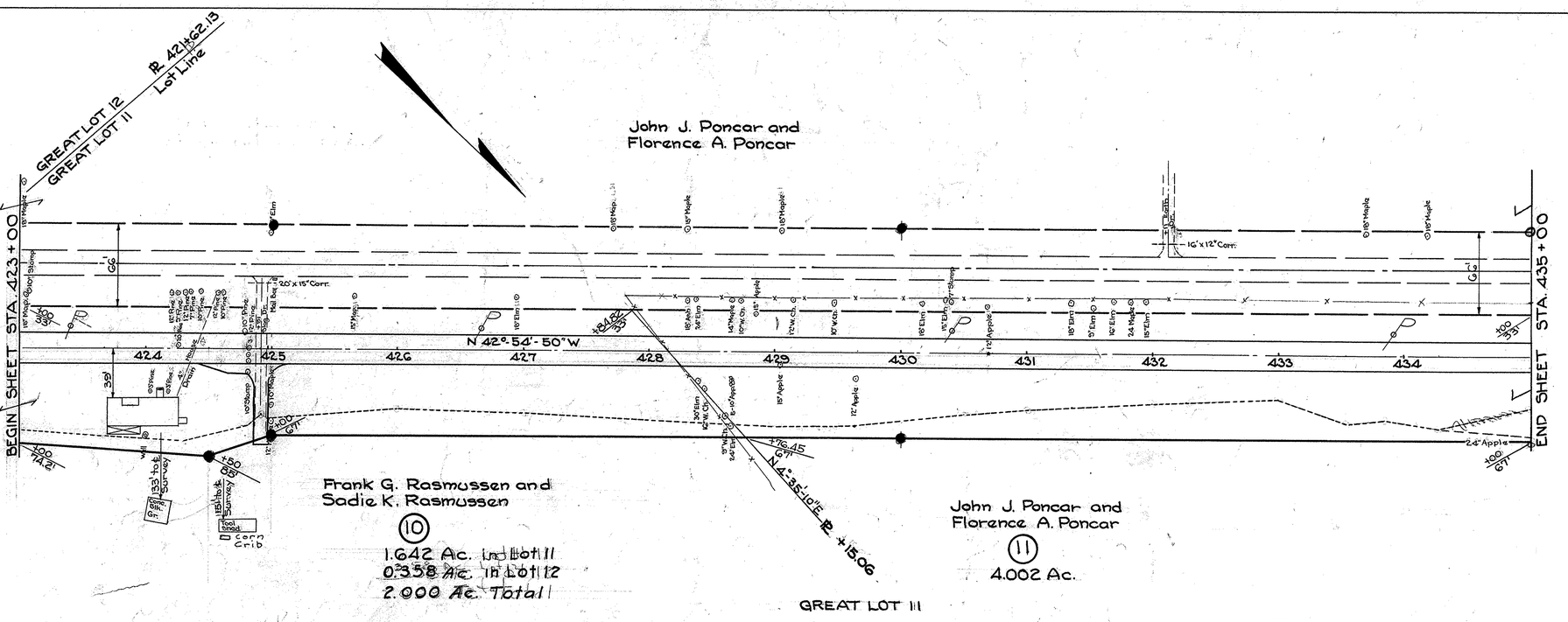
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

4/5

TRUMBULL COUNTY
TRU-422(0.00-2.06)

4





Rev. 11/3/48

RIGHT OF WAY SHEET STA. 411+00 TO 435+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

5/5

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

CURVE DATA
Δ = 2°-01'-55" LT.
D = 0°-16'
R = 21,485.90
T = 381.03
E = 3.38
L = 761.98

GREAT LOT 11

John J. Poncar and
Florence A. Poncar

BEGIN SHEET STA. 435+00

P.C. - STA. 439+31.62

P.I. - STA. 442+12.65

P.T. STA. 445+93.60

END SHEET STA. 447+00

N-42°-54'-50"W

TR-422-03

ARC R=21552.90'

R=21418.90'

* 3" House Drain

1½ Sty. Fr. House

2 sty. Fr. Barn

Well Conc. Slab.

Walk

N85° 23' 45" W

Josef Fink
12A
0.459 Ac.

John J. Poncar and
Florence A. Poncar
11
4.002 Ac.
GREAT LOT 11

CURVE DATA
Δ = 2°-01'-55" RT.
D = 0°-16'
R = 21,485.90
T = 381.03
E = 3.38
L = 761.98

John W. Pressell Sr.

PORTAGE CO. LINE
TRUMBULL CO. LINE
GREAT LOT 11

BEGIN SHEET STA. 447+00

P.I. STA. 449+74

P.T. STA. 453+55.58

P.T. STA. 102+01.26

N47°05' 10" E

ARC R=21440.90

N4°57' 35" E
GREAT LOT 11

1½ St. Fr. House

Water Well & Pump

2 St. Fr. House

Paul W. Benes and
Mary Eleanor Benes
13
0.258 Ac.

* Josef Fink
12B
0.246 Ac.

12A
0.459 Ac.

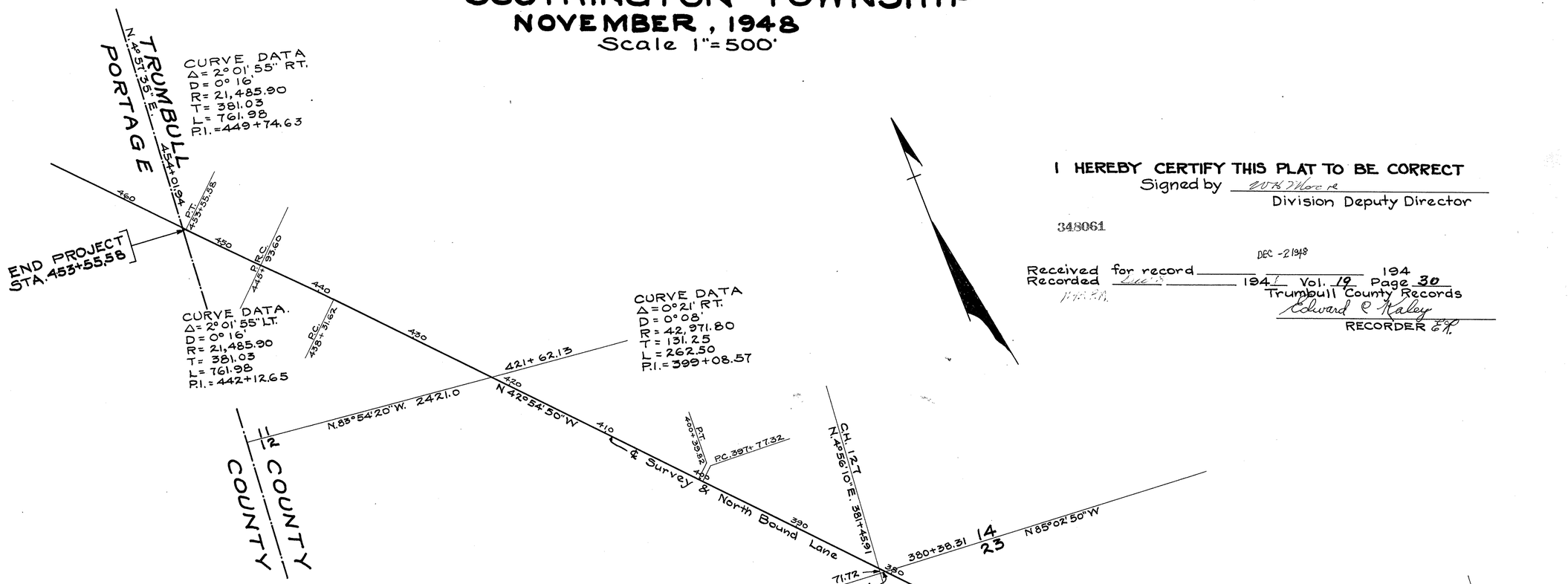
* Revised 12/10/48

Rev. 11/3/48

RIGHT OF WAY SHEET STA. 435+00 TO 454+00

422-TRU-0.00

LOCATION PLAN
WARREN - BURTON ROAD
TRU-422-(0.00-2.06)
TRUMBULL COUNTY
SOUTHINGTON TOWNSHIP
NOVEMBER, 1948
Scale 1"=500'



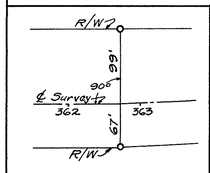
I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Signed by Walter Moore
Division Deputy Director

348061

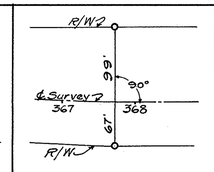
DEC -2 1948

Received for record _____ 194_
Recorded Dec 3 1948 194 Vol. 19 Page 30
Trumbull County Records
Edward P. Raley
RECORDER

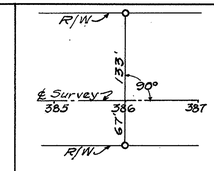
CENTER LINE REFERENCE MONUMENTS WILL BE SET BEFORE OR AFTER CONSTRUCTION.



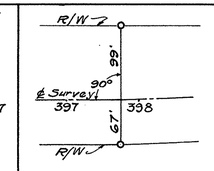
P.C.
STA. 362+72.72



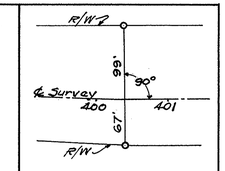
P.T.
STA. 367+72.72



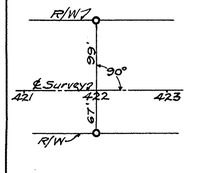
STA. 386+00



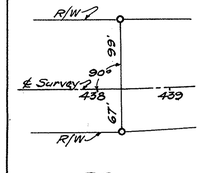
P.C.
STA. 397+77.32



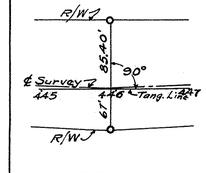
P.T.
STA. 400+39.82



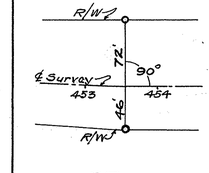
STA. 422+00



P.C.
STA. 438+31.62



P.R.C.
STA. 445+93.60



P.T.
STA. 453+55.58

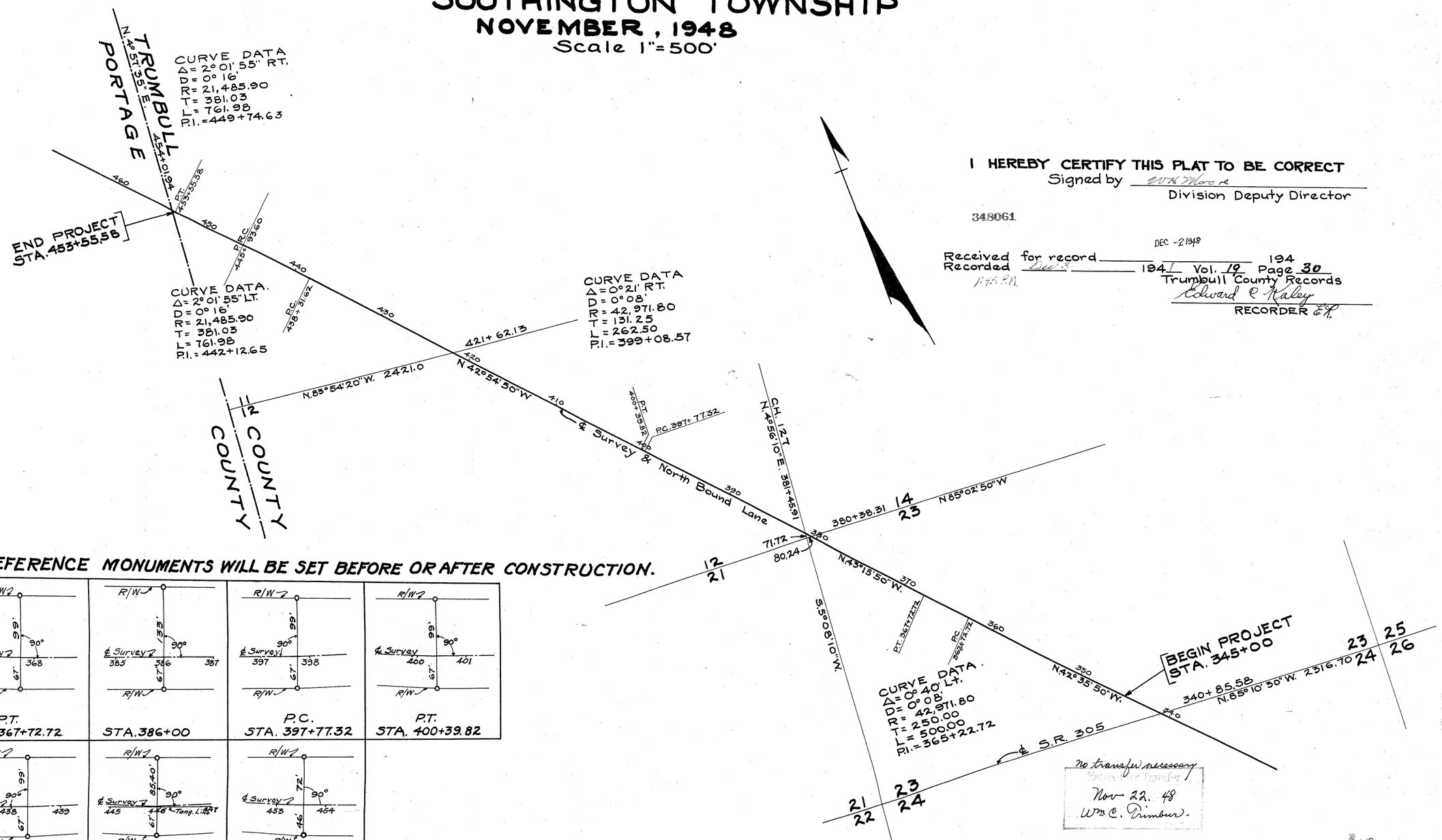
No transfer necessary
Nov 22. 48
Wm C. Dimbur.

#912

Vol 11 Page 37

422-TRU-0.00

LOCATION PLAN
WARREN - BURTON ROAD
TRU-422-(0.00-2.06)
TRUMBULL COUNTY
SOUTHINGTON TOWNSHIP
NOVEMBER, 1948
Scale 1"=500'



CENTER LINE REFERENCE MONUMENTS WILL BE SET BEFORE OR AFTER CONSTRUCTION.

I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Signed by W.K. Moore
Division Deputy Director

348061

Received for record DEC -2 1948
Recorded Dec. 3 1948 Vol. 19 Page 30
1:15 P.M. Trumbull County Records
Edward P. Raley
RECORDER E.R.

No transfer necessary
Nov 22. 48
Wm C. Dimbur.

#816

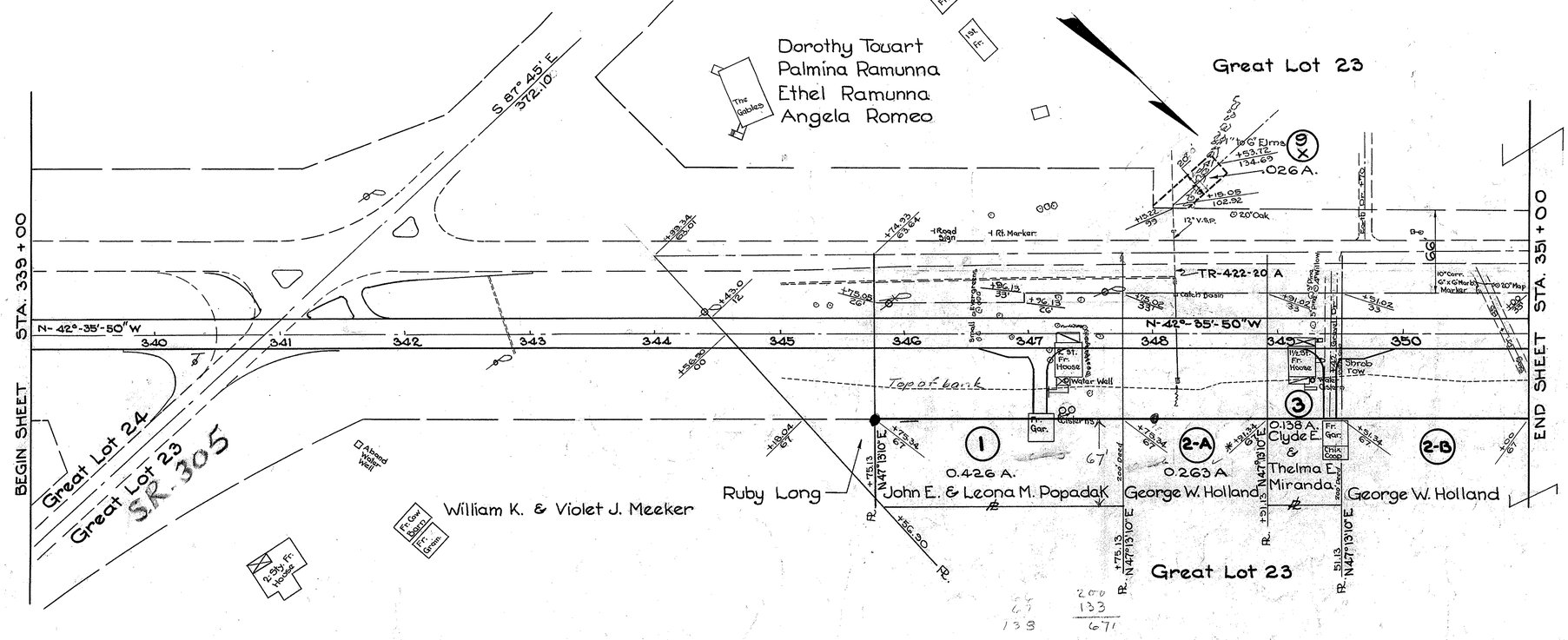
Vol 11 Page 37

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41-(5)	POST WAR

1/5

TRUMBULL COUNTY
TRU-422 (0.00 - 2.06)

SOUTHINGTON TWP
T. 5N - R. 5W


BEGIN SHEET STA. 339+00
END SHEET STA. 351+00
N-42°-35'-50"W
S 87° 45' E 372.10
Dorothy Tovart
Palmina Ramunna
Ethel Ramunna
Angela Romeo
The Gables
Great Lot 23
Great Lot 24
Great Lot 23
SR 305
William K. & Violet J. Meeker
Ruby Long
John E. & Leona M. Popadak
0.426 A.
George W. Holland
0.263 A.
Clyde E. & Thelma E. Miranda
0.138 A.
George W. Holland
Great Lot 23
TR-422-20 A
Catch Basin
Shrub row
Top of bank
Abnd. Water Well
2 Sty. Fr. House
Fr. Gar. Barn
Fr. Gar. Grain
1½ St. Fr. House
Fr. Gar.
Cistern
Drive
Road Sign
Rt. Marker
Spring
Stream
Fence
Ditch
Telephone
Pole
Guy
Wire
Hedge
Shed
Fr. Gar.
Concr. Gar.
Concr. Gar.
Fr. Gar.
Concr. Gar.
Concr. Gar.
Conc

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41 (5)	POST WAR

2/5

TRUMBULL COUNTY
TRU-422 (0.00-2.06)

George E. & Gladys F. Culp

CURVE DATA
Δ = 0°-40' 00" Lt.
D = 0°- 08'
R = 42,971.80
T = 250.00'
E = .73
L = 500.00

P.I. - 365+22.72 - Dat 0°-40'-00" Lt.

P.T. STA. 367+72.72

Great Lot 23

George R. & Elizabeth M. Sherbourne

1½ St. Fr. House
Conc. Slab
Fr. Gar.

Dr. + 54 (Slag)

12' x 23' C.I.P.

22' x 12" C.I.P.

Small Evergreens 8'± C. to C.

BEGIN SHEET STA. 363+00

END SHEET STA. 375+00

N 43° 15' 50" W

Brush & 1" to 8" Trees

12" Maple Trees 3" to 4" Apart

Arc R= 43038.80

Dallas H. & Helen E. Strock

4
4.781 A. in Lot 23
0.305 A. in Lot 14
5.086 A. Total

Great Lot 23

+90.96 Rosemary Kovar
264.00
14 0.123 A

6A 1.181 A. Total
0.141 A. in Lot 21
1.040 A. in Lot 12

George R. & Elizabeth M. Sherbourne

Great Lot 23

Great Lot 21
N 85° 02' 50" W

Great Lot 12

Alice C. Healy

Top of cut for drive

Barn

R/W

5 0.354 A.

Guard Rail-Metal Ribbon-Wood Post

4 5.086 A.
(4.781 A. in lot 23
0.305 A. in lot 14)

TR-422-14A2

Brush & 1" to 8" Trees

0.019 A.

6-B 5.017 A.

Dallas H. & Helen E. Strock

Alice C. Healy

Great Lot 23

Great Lot 14

Great Lot 14

Great Lot 12

(Deep Swale)

Rev. 11/22/48

RIGHT OF WAY SHEET STA. 363+00 TO 387+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUND
2	OHIO	F-41 (5)	POST WAR

3/5

TRUMBULL COUNTY
TRU-422-(0.00-2.0G)

Great Lot 12

ALICE C. HEALY

Wooded Area 1" to 20" Trees

6A

1.040 A. in Lot 12
0.141 0.141 A. in Lot 21
1.181 1.181 A. Total

BEGIN SHEET STA. 387+00

END SHEET STA. 399+00

TR-422-12A

Exist. 2'x 2' x 40' Col.

Brush & 1" to 5" Elm Trees

N43°15'50"W

388 389 390 391 392 393 394 395 396 397 398

R/W

Arc. R=42904.80'

P.C. 397+77.32

CURVE DATA
Sta. 399+08.57
Δ 0°-21' Rt.
D 0°-08'
T 262.50'
T 131.25
E 0.57'
R 42971.80

ALICE C. HEALY

6B

5.017 Ac.

Great Lot 12

GEORGE KOVAR

Great Lot 12

Wooded Area

BEGIN SHEET STA. 399+00

END SHEET STA. 411+00

TR-422-10

20'x18' C.I.P.

Mail Box

16'x15' Corr.

N43°15'50"W

400 401 402 403 404 405 406 407 408 409 410

R/W

Arc. R=42904.80'

P.T. 400+33.82

Wooded Area 1" to 15" trees Average 10"

N69°37'10"E R.=+39.43

RUBY M. ZIMMERMAN

7

Great Lot 12

ALICE C. HEALY

6BX

.032 Ac.

Rev. 11/3/48

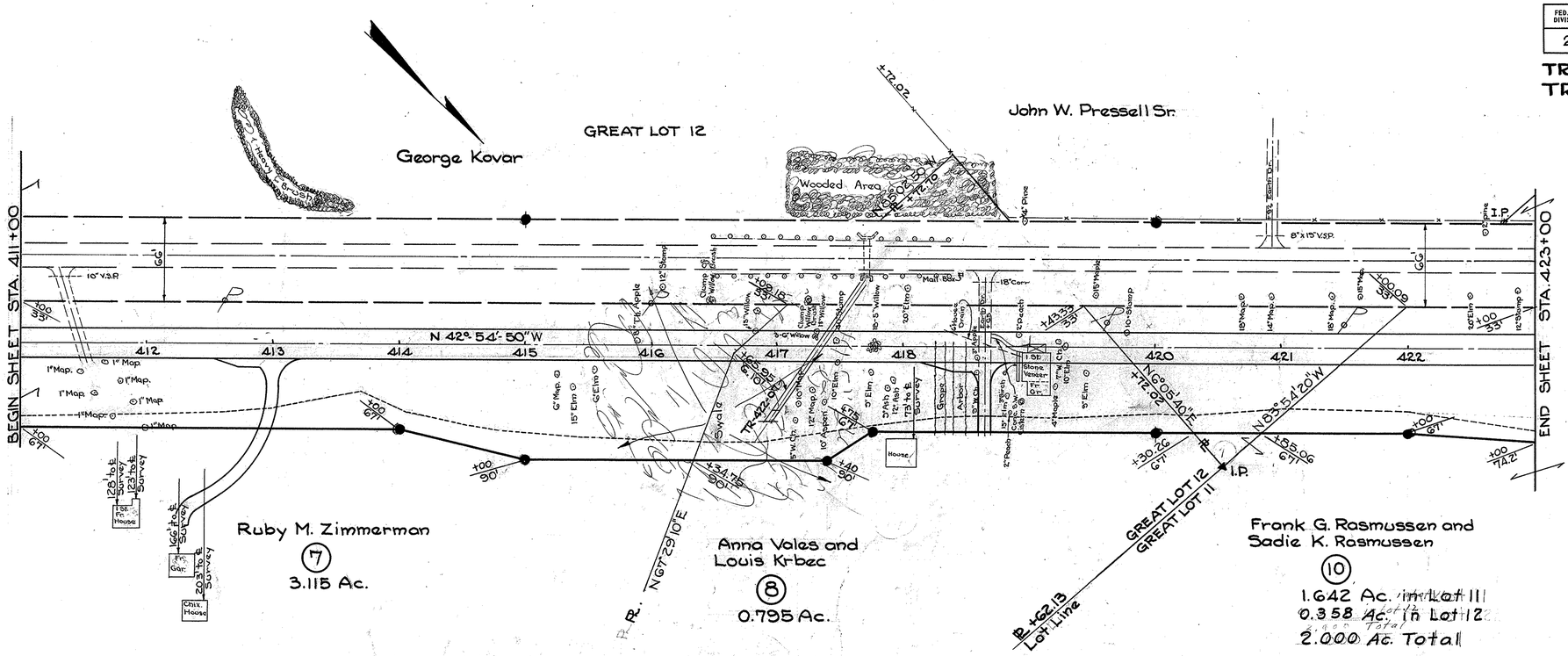
RIGHT OF WAY SHEETS STA. 387+00 TO 411+00

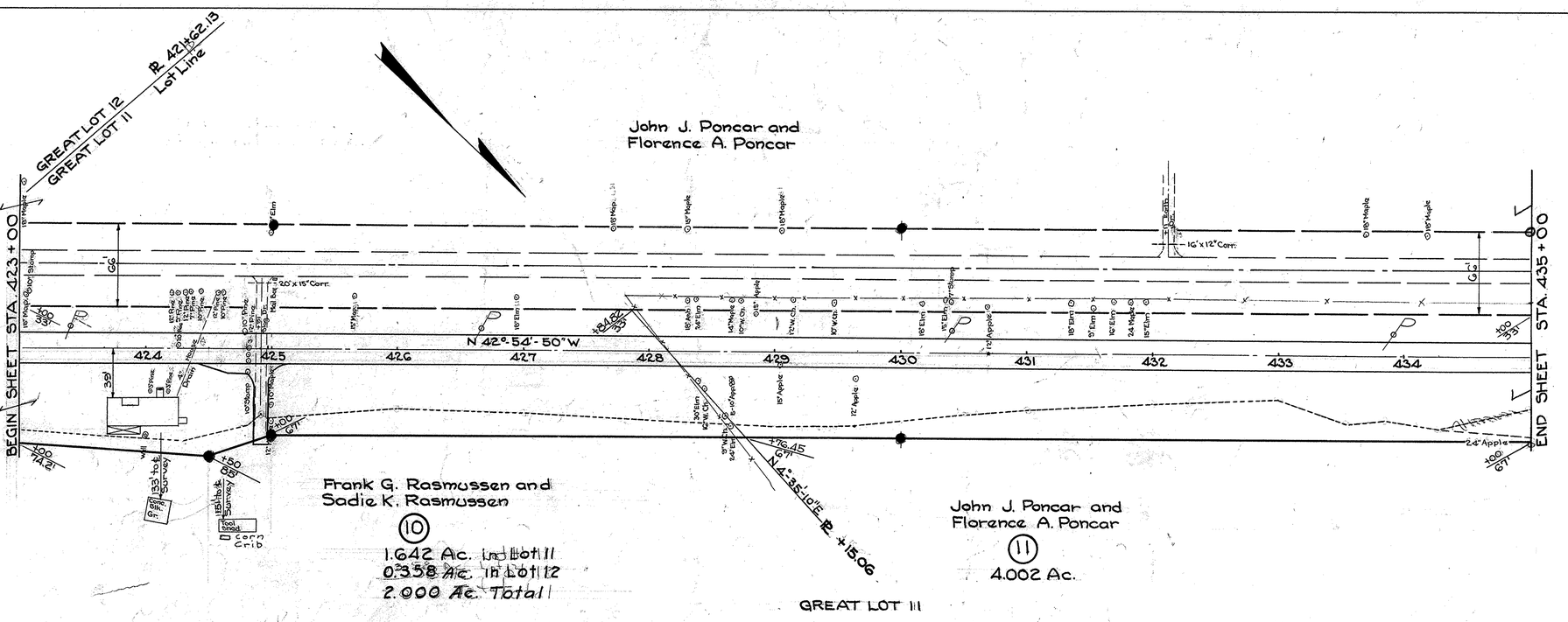
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

4/5

TRUMBULL COUNTY
TRU-422(0.00-2.06)

4





Rev. 11/3/48

RIGHT OF WAY SHEET STA. 411+00 TO 435+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-41(5)	POST WAR

5/5

TRUMBULL COUNTY
TRU-422-(0.00-2.06)

CURVE DATA
Δ = 2°-01'-55" LT.
D = 0°-16'
R = 21,485.90
T = 381.03
E = 3.38
L = 761.98

GREAT LOT 11

John J. Poncar and
Florence A. Poncar

BEGIN SHEET STA. 435+00

P.C. - STA. 439+31.62

P.I. - STA. 442+12.65

P.T. STA. 445+93.60

END SHEET STA. 447+00

N-42°-54'-50"W

TR-422-03

ARC R=21552.90'

R=21418.90'

* 3" House Drain

1½ Sty. Fr. House

2 sty. Fr. Barn

Well Conc. Slab.

Walk

N85° 23' 45" W

Josef Fink
12A
0.459 Ac.

John J. Poncar and
Florence A. Poncar
11
4.002 Ac.
GREAT LOT 11

CURVE DATA
Δ = 2°-01'-55" RT.
D = 0°-16'
R = 21,485.90
T = 381.03
E = 3.38
L = 761.98

John W. Pressell Sr.

PORTAGE CO. LINE
TRUMBULL CO. LINE
GREAT LOT 11

BEGIN SHEET STA. 447+00

P.I. STA. 449+74

P.T. STA. 453+55.58

P.T. STA. 102+01.26

N47°05' 10" E

ARC R=21440.90

N4°57' 35" E
GREAT LOT 11

1½ St. Fr. House

Water Well & Pump

2 St. Fr. House

Paul W. Benes and
Mary Eleanor Benes
13
0.258 Ac.

* Josef Fink
12B
0.246 Ac.

12A
0.459 Ac.

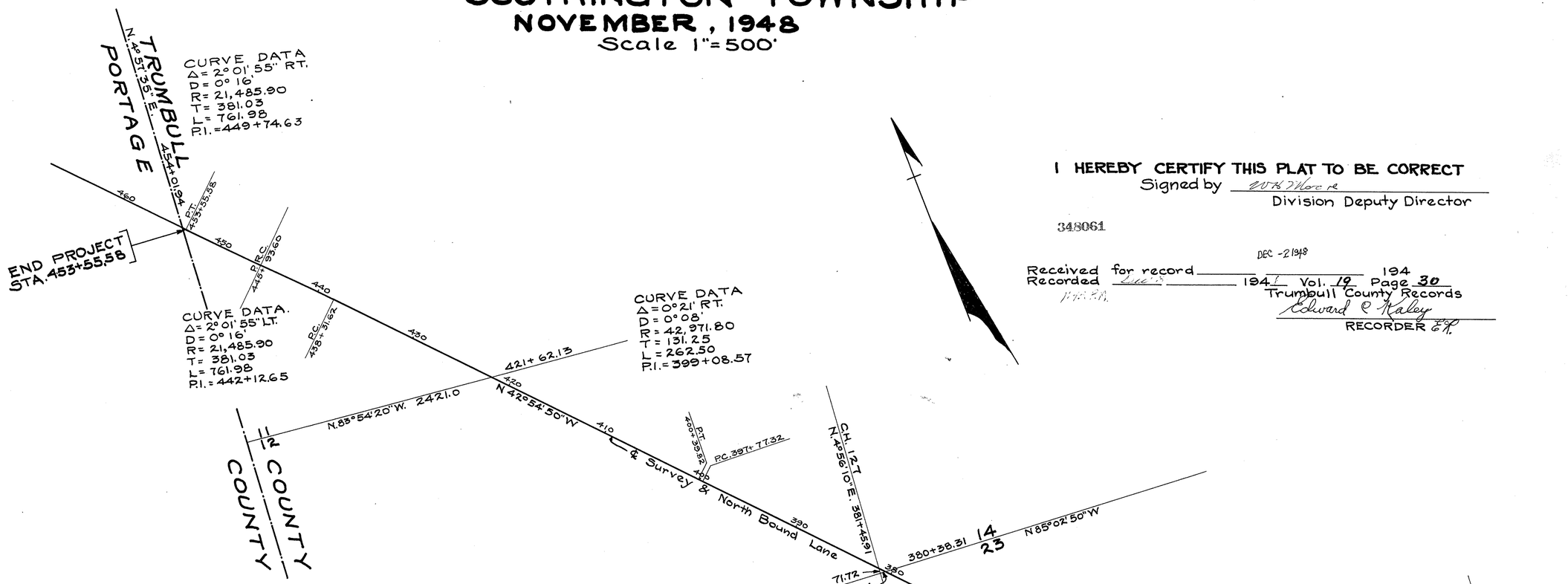
* Revised 12/10/48

Rev. 11/3/48

RIGHT OF WAY SHEET STA. 435+00 TO 454+00

422-TRU-0.00

LOCATION PLAN
WARREN - BURTON ROAD
TRU-422-(0.00-2.06)
TRUMBULL COUNTY
SOUTHINGTON TOWNSHIP
NOVEMBER, 1948
Scale 1"=500'



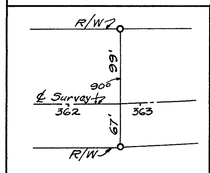
I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Signed by Walter Moore
Division Deputy Director

348061

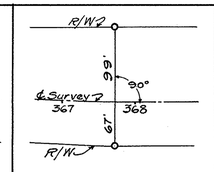
DEC -2 1948

Received for record _____ 194_
Recorded Dec 3 1948 194 Vol. 19 Page 30
Trumbull County Records
Edward P. Raley
RECORDER

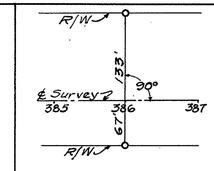
CENTER LINE REFERENCE MONUMENTS WILL BE SET BEFORE OR AFTER CONSTRUCTION.



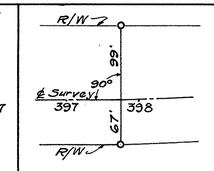
P.C.
STA. 362+72.72



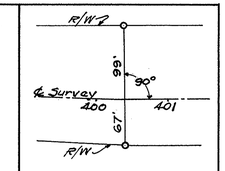
P.T.
STA. 367+72.72



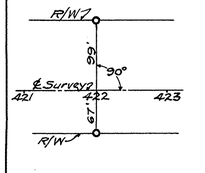
STA. 386+00



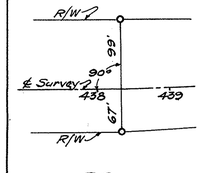
P.C.
STA. 397+77.32



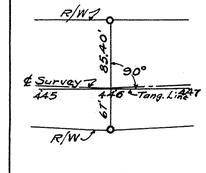
P.T.
STA. 400+39.82



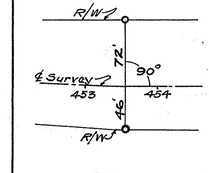
STA. 422+00



P.C.
STA. 438+31.62



P.R.C.
STA. 445+93.60



P.T.
STA. 453+55.58

No transfer necessary
Nov 22. 48
Wm C. Dimbur.

#912

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