FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (11)	POST WAR

1/103

DEL -42 -(12.21 -18.72)
MRW -42 (0.00 -1.11)

F-558 (11)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)
DELAWARE & MORROW COUNTIES
BROWN, OXFORD & WESTFIELD TOWNSHIPS
VILLAGE OF ASHLEY

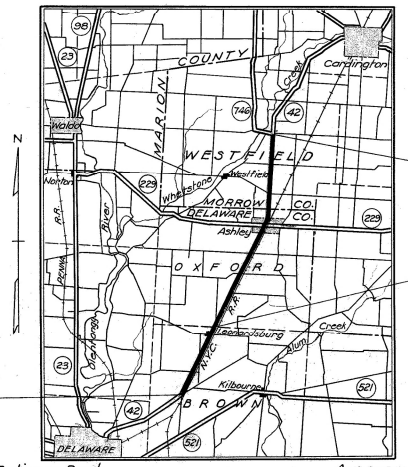
Filed A-13

LINE DATA

BEGIN PROJECT F-558 (11) RURAL & DEL-42-12.21 STA. 9 +92.9			
END DEL-42-12.21 STA. 145 +57.9 = STA. 0 +00 DEL-42-14.79			13,565.00 LIN. FT.
BEGIN DEL-42-14.79 STA. 0 +00			
END PROJECT F-558 (11) & WORK STA. 360 +15.6			36,015.60 LIN. FT.
GROSS LENGTH OF PROJECT & F-558 (11)			49,580.60 LIN. FT.
DEDUCT FOR MUNICIPAL STA. 181 +07.6 TO STA. 207 +97.7		2690.10 LIN. FT.	
DEDUCT FOR STATION EQUATIONS		3.07 LIN. FT.	2,693.17 LIN. FT.
NET LENGTH OF RURAL			46,887.43 LIN. FT.
			OR 8.880 MILES
ADD FOR TRANSITION STA. 8 +92.9 TO STA. 9 +92.9			100.00 LIN. FT.
NET LENGTH OF WORK, RURAL			46,987.43 LIN. FT.
			OR 8.899 MILES
GROSS LENGTH OF MUNICIPAL			2,690.10 LIN. FT.
NO DEDUCTIONS			
NET LENGTH OF MUNICIPAL			2,690.10 LIN. FT.
			OR 0.509 MILES
NET LENGTH OF PROJECT	49,577.53 LIN. FT.		OR 9.389 MILES
NET LENGTH OF WORK	49,677.53 LIN. FT.		OR 9.408 MILES

INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTIONS	2,3,4
GENERAL NOTES	5
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CALCULATIONS	8, 9, 9A
GENERAL SUMMARY	10
PLAN & PROFILE	11-43
GENERAL CROSS SECTIONS	44-76
GENERAL DETAILS	77, 78, 79
INTERSECTIONS, TRANSITIONS & CROSS SECTIONS	77, 80-91
MISCELLANEOUS DETAILS	79 & 103
STRUCTURES 20' SPAN & UNDER	92-102
SUPERELEVATION TABLES	103



END PROJECT
STA. 360 +15.6
END F-558 (11)

STA. 145 +57.9 BACK =
STA. 0 +00 AHEAD
F-558 (11)

BEGIN PROJECT
STA. 9 +92.9
BEGIN F-558 (11)

Delivery Point
Ashley

Average Haul
2.7 Miles

LOCATION PLAT

0 1 2 3 4 5 6
SCALE IN MILES

CONSTRUCTION BUREAU
MAY 10 1956
GROUND PHOTOLAB

The Standard Specifications of the State of Ohio Department of Highways, including changes and Supplemental Specifications listed in the proposal 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 O. Cameron
DATE 4-10-50 RESIDENT DIVISION DEPUTY DIRECTOR
APPROVED
DATE _____ CHIEF ENG'R. BUREAU OF MAINTENANCE
APPROVED
DATE _____ CHIEF ENG'R. BUREAU OF BRIDGES & R.R. CROSSINGS
APPROVED H. L. Peterson
DATE 6-8-50 CHIEF ENG'R. BUREAU OF LOCATION & DESIGN
APPROVED V. H. Chamberlin
DATE 6-9-50 FIRST ASST. DIRECTOR & CHIEF ENGINEER
APPROVED J. H. Miller
DATE 6-9-50 DIRECTOR OF HIGHWAYS

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CENTER LINE 120 121
PROPERTY LINE P/L
CITY OR VILLAGE LINE
FENCE LINE
STEAM RAILROAD
POLE LINE

PORTION TO BE IMPROVED
STATE HIGHWAYS
COUNTY ROADS
PLAN 1"=20', 1" = 50' & 1" = 200'
PROFILE VERTICAL 1" = 5' & 1" = 10'
PROFILE HORIZONTAL 1"=20', 1" = 50' & 1" = 200'
CROSS SECTIONS 1" = 5'

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL

_____ DISTRICT ENGINEER _____ DATE

APPROVED

_____ DIVISION ENGINEER _____ DATE

File No.		
	DELAWARE COUNTY	DEL-42-(12.21-18.72)
	MORROW COUNTY	MRW-42-(0.00-1.11)
	DATE OF LETTING	
	CONTRACT NO.	

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

G-8.07	2-7-50	I-8 C.B. No. 2-3 & 2-4	12-15-41	I-12	3-15-48	L-3A	4-1-50
I-1, 2, 3, 4 & 5	2-20-45	I-8 C.B. No. 2-5 & 2-6	5-1-47	SBC-45 Sh. 1 & 2	9-18-47	I-8 M.H. No. 1	5-1-47
I-8 I No. 1	3-1-39	I-8 C.B. No. 3	12-15-41	STC-47	9-18-47	L-1	4-1-50
I-8 C.B. No. 1-3 & 1-4	12-15-41	I-8 C.B. No. 3-A	12-15-41	S-27 P.C. 3	2-20-45	I-15 No. 1	3-1-47
I-8 C.B. 2-2A & B	12-15-41	I-8 C.B. No. 7	5-1-47	L-3	4-1-50	I-15 No. 2	6-17-49

SUPPLEMENTAL SPECIFICATIONS

5	5-28-48
T-171.19	Rev. 7-31-50
31	6-13-49
L-109.12	Rev. 7-15-50

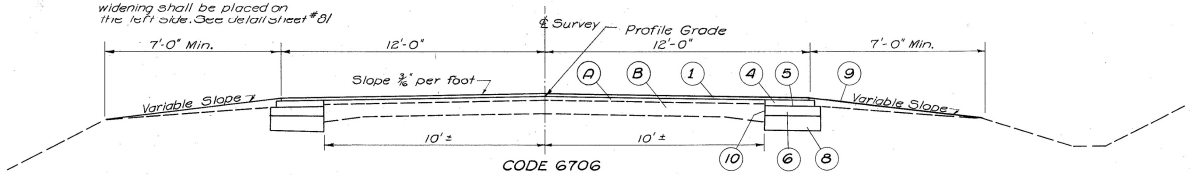
TYPICAL SECTION
TYPE T-35

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

2 / 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

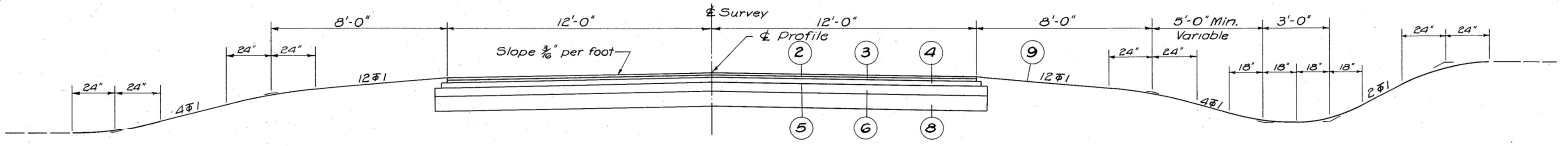
Note:
Within the limits of the curve at Sta. 14+22.46 all widening shall be placed on the left side. See detail sheet #81



CODE 6706

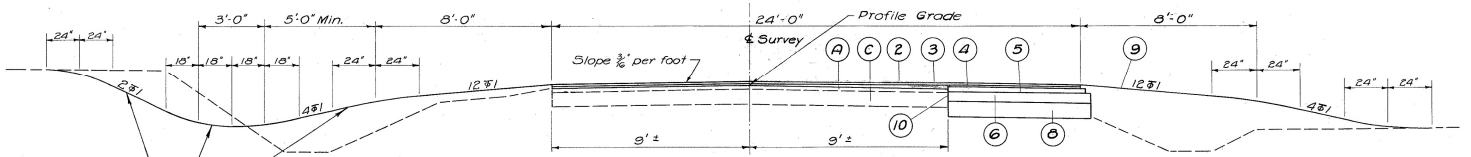
DEL-42-12.21 STA 9+92.9 TO STA 73+00 = 6307.1 LIN. FT. (RURAL)
STA 80+50 TO STA 145+57.9 = 6507.9 LIN. FT. (RURAL)

Note: The profile of the proposed surface course, Sta 19+34.6 to Sta 73+00 and Sta 80+50 to Sta 145+57.9, shall be approximately 1½" above the existing pavement. For profile of proposed surface course, Sta. 9+92.9 to Sta. 19+34.6, see sheet #81.



CODE 6201

DEL-42-13.40 STA 73+00 TO STA 80+50 = 750 LIN. FT. (RURAL)



CODE 6706

DEL-42-14.79 STA 0+00 TO STA 181+07.6 = 18,107.60 LIN. FT.
DEDUCT FOR STATION EQUATION = 3.07 LIN. FT.
NET LENGTH = 18,104.53 LIN. FT. (RURAL)
DEL-42-18.20 STA 181+07.6 TO STA 189+80 = 872.4 LIN. FT. (MUNICIPAL)
See Extra Course Detail, Sta. 188+00 to 189+80, Sheet #3.

Note: The profile of the proposed surface course, Sta. 0+00 to Sta 188+00, shall be approximately 2¼" above the existing pavement.

NOTE:-
For Special Slopes & Ditches See X-Sections.

Note: Drop berm 1½" below edge of pavement, except on high side of superelevated curves.

1	Item T-35	1½" Min. Asphaltic Concrete Surface Course, Type A (70-80)
2	Item T-35	1¼" Asp. Concrete Surface Course, Type A (70-80)
3	Item B-35	1" Min. Asp. Concrete Leveling Course
4	Item B-35	3" Asphaltic Concrete Leveling Course
5	Item T-30	Bituminous Prime Coat, Sec. M-5.7, RT-2 or RT-3
6	Item B-20	Waterbound Macadam Base Course, 5"
7	Item SS-5	4" Classified Emb. Material (Blanket Course) Grading "C" or "D" as per plan
8	Item SS-5	8" Classified Emb. Material (Blanket Course) Grading "C" or "D" as per plan
9	Item L-9	Seeding and Protecting, Type A
10	Item E-8	Sealing 3" B-35 Only
11	Item I-12	Modified Type 2 Combined Concrete Curb and Gutter
12	Item I-13	4" Concrete Sidewalk
A		Existing 2"± Asphaltic Concrete
B		Existing 9"-7"-7"-9"± P.C. Concrete
C		Existing 8"± P.C. Concrete
D		Existing 8"± Waterbound Macadam, Surface Treated

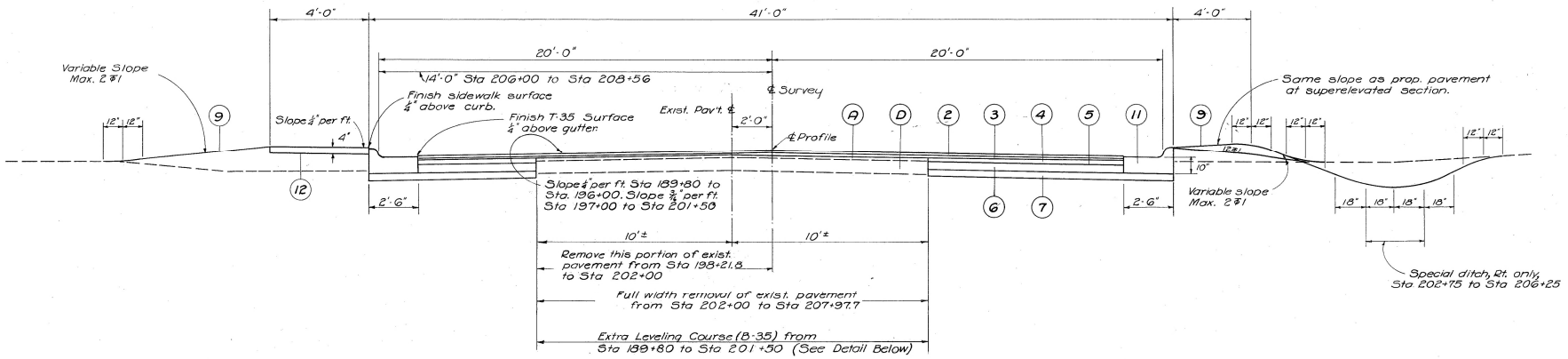
TYPICAL SECTIONS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-358(11)	POST WAR

3
103

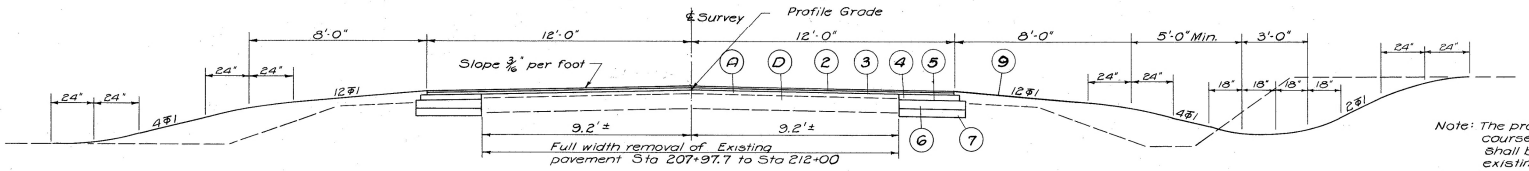
DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

TYPICAL SECTION
TYPE T-35



CODE 6201

DEL-42-18.36 STA 189+80 TO STA 207+97.7 = 1817.7 LIN. FT. (MUNICIPAL)
DEL-42-18.72 STA 207+97.7 TO STA 208+56 = 58.3 LIN. FT. (RURAL) LEFT ONLY

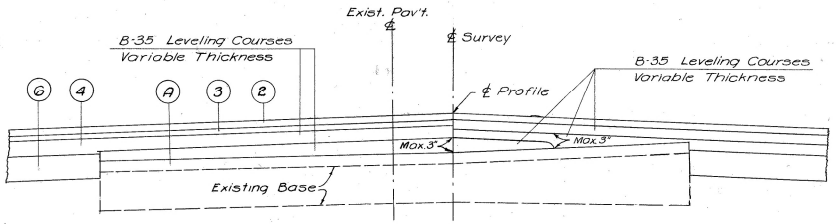


Note: The profile of the proposed surface course, Sta 212+00 to Sta 223+88.9 shall be approximately 2½" above the existing pavement.

CODE 6201

DEL-42-18.72 STA 207+97.7 TO STA 223+88.9 = 1591.2 LIN. FT. (RURAL)

NOTE:- For Special Ditches See Cross-Sections.



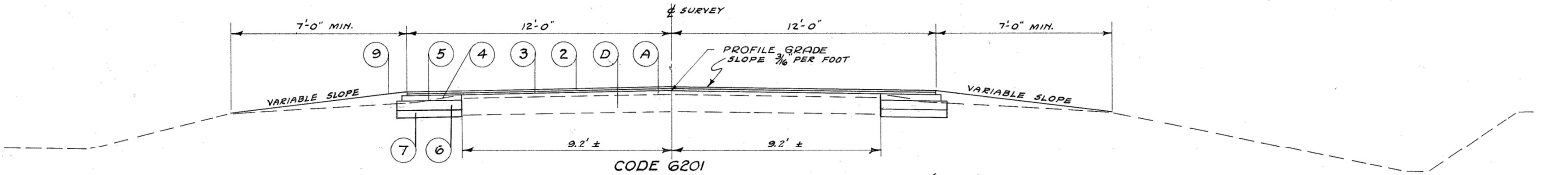
EXTRA COURSE DETAIL

TYPICAL SECTIONS

TYPICAL SECTIONS
TYPE T-35

FED. RD. DIVISION.	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-558(11)	POST WAR	4 / 105

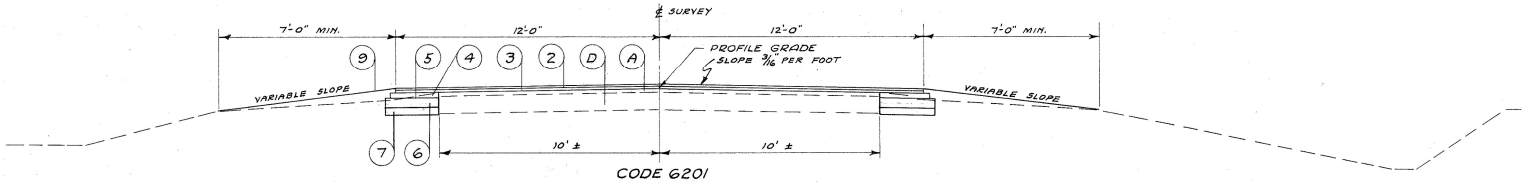
DEL - 42 - (12.21 - 18.72)
M.R.W - 42 - (0.00 - 1.11)



CODE G201

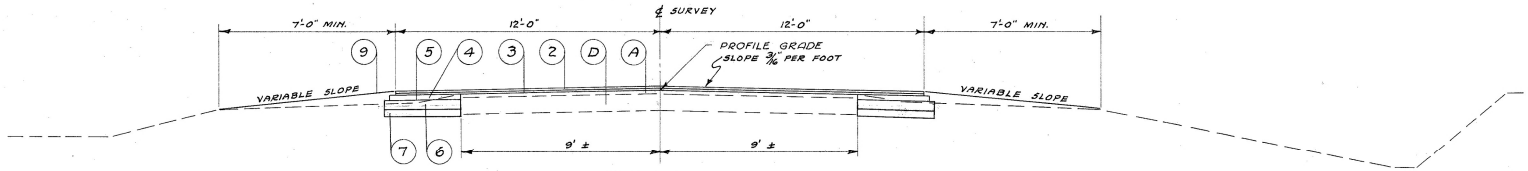
M.R.W-42-0.00 STA. 223+88.9 TO STA. 234+00 = 1,011.1 LIN. FT. (RURAL)

Note: The profile of the proposed surface Course, Sta 223+88.9 to Sta. 360+15.6, shall be approximately 2¼ inches above that of the existing pavement.



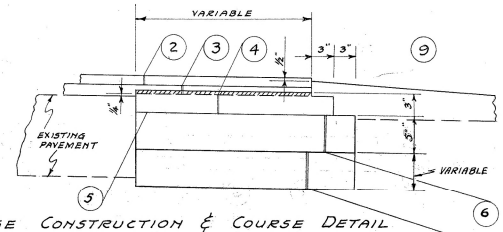
CODE G201

M.R.W-42-0.19 STA. 234+00 TO STA. 282+80 = 4,880 LIN. FT. (RURAL)



CODE G201

M.R.W-42-1.11 STA. 282+80 TO STA. 360+15.6 = 7,735.6 LIN. FT. (RURAL)



EDGE CONSTRUCTION & COURSE DETAIL

Note:-
Where the 3" leveling course in the widened area would finish more than ¼" above the edge of the existing pavement that portion below the dashed line shall be placed and compacted in a separate operation.
The hatched portion above the dashed line shall be placed simultaneously with the full width leveling course.

(2)	ITEM	T-35	1¼"	ASPHALTIC CONCRETE SURFACE COURSE, TYPE "A" (70-80)
(3)	ITEM	B-35	1" min.	ASPHALTIC CONCRETE LEVELING COURSE
(4)	ITEM	B-35	3"	ASPHALTIC CONCRETE LEVELING COURSE
(5)	ITEM	T-30		BITUMINOUS PRIME COAT
(6)	ITEM	B-20	5"	WATERBOUND MACADAM BASE COURSE
(7)	ITEM	55-5	4"	CLASSIFIED ENB. MATERIAL (BLANKET COURSE)
(9)	ITEM	L-9		SEEDING & PROTECTING, TYPE "A"
(A)	EXISTING		2" ±	ASPHALTIC CONCRETE
(D)	EXISTING		8" ±	WATERBOUND MACADAM, SURFACE TREATED

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

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DEL -42 -(12.21 -18.72)
MRW-42 -(0.00 -1.11)

GENERAL NOTES

TRAFFIC:-

Traffic shall be maintained at all times. The length of one way traffic zones shall be kept to a minimum consistent with the requirements of Sec. T-35.23. The item of "Maintaining Traffic" shall include the furnishing, erecting, maintaining and removing of all lights, signs and barricades as per the requirements of Sec. G-8.07 of the Construction and Material Specifications.

Between Sta. 72 +00 and Sta. 82 +00, DEL -42 -12.21 and between Sta. 197 +50 and Sta. 213 +00, DEL -42 -18.36 a temporary road within the right of way limits shall be provided during the removal of the existing pavement and the construction of the new sub-base and base courses. The roadway for all traffic lanes shall be 20 foot width of aggregate with at least 3 foot shoulders. The cost of constructing, maintaining and removing the temporary road, except the aggregate and the calcium chloride, shall be included in the lump sum bid for "Maintaining Traffic."

ESTIMATED:-

	RURAL CODE NO. 6201	MUNY CODE NO. 6201
Item T-10 Traffic Compacted Surface Course	1000 C. Yds.	661 C. Yd.
Item M-10 Calcium Chloride	40.5 Tons	27 Tons

Quantities carried to General Summary Sheet No. 10

PROFILE:-

Except where grade change occurs the profile of the proposed surface course shall be as noted on the typical sections.

FILLING MAJOR DEPRESSIONS:-

Major depressions in existing pavement shall be filled and compacted with asphaltic concrete leveling material in advance of placing the regular leveling course. The depressions shall be filled in layers not to exceed 3 inches in depth when compacted.

EMBANKMENT:-

In lieu of the requirements for full width construction under Item E-1.04 the embankment where traffic is maintained may be placed in part width construction.

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 on these plans. Attention is called to the note shown on the cross sections, relative to the existing water line within the Corporate limits of Ashley.

LOCATION OF DRIVEWAYS:-

The location of Driveways as shown may be moved at the direction of the engineer, provided no change in quantities is involved.

FIELD OFFICE:-

The contractor shall provide a field office having a minimum of 150 sq. ft. of floor space and shall conform with the requirements of Sec. S-0.01(b) of the construction and material specifications.

EXISTING DRAINS:-

Existing farm and house drains that are cut or intercepted by the new drainage shall be connected to the new roadway drainage system. Connections to be made where and as directed by the engineer.

Estimated Pipe for Connections, Item I-3 -

4" Estimated 15 Farm Drains @ 6' = 90 Lin. Ft.
6" Estimated 15 Farm Drains @ 6' = 90 Lin. Ft.
8" Estimated 15 Farm Drains @ 6' = 90 Lin. Ft.
} 80% to Rural Code No. 6706
20% to Muny Code No. 6706

4" Estimated 8 House Drains @ 6' = 48 Lin. Ft.
6" Estimated 8 House Drains @ 6' = 48 Lin. Ft.
8" Estimated 8 House Drains @ 6' = 48 Lin. Ft.
} 1/2 to Muny Code No. 6201
1/2 to Rural Code No. 6201

See Roadway Drainage Table "D" Sheet No. 7

L-9 SEEDING AND PROTECTING TYPE "A":-

Calculations for seeding Sta. 9 +92.9 to Sta. 145 +57.9 and Sta. 223 +88.9 to Sta. 360 +15.6 are shown on Sheets No. 8 & 9-A. Quantities for seeding Sta. 0 +00 to Sta. 189 +80 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 (10') from the work limits. From Sta. 189 +80 to Sta. 197 +00 quantities for seeding are to work limits only.

All areas outside these limits where the vegetative growth has been injuriously disturbed or destroyed by the contractor shall be restored and seeded by the contractor at his own expense, in accordance with the provisions of Item L-9.

COMMERCIAL FERTILIZER:-

Commercial fertilizer shall be applied to all areas having seeding or sodding, at the rate of 20 lbs. per 1000 sq. ft.

The soil shall be loosened to a depth of two inches (2").

CLASSIFIED EMBANKMENT MATERIAL:-

Classified embankment material used on this project shall meet the requirements of grading "C" or "D" except that the percent passing the No. 200 sieve shall be between 5 & 15 for grading "C" or between 5 & 20 for grading "D". The material need not meet the requirements of 33-5 as to percent pass the No. 50 sieve.

EARTHWORK:-

Watering embankments, benching, density requirements and the removal of sod from the shoulders will not be required from Sta. 9 +92.9 to Sta. 72 +50, Sta. 81 +00 to Sta. 145 +57.9 DEL -42-12.21 and Sta. 223 +88.9 to Sta. 360 +15.63 MRW - 42 - 0.00 - 1.11. However Item E-1 and Embankment shall include the thorough compaction of embankment in layers not to exceed 8 inches in compacted thickness, and shall include any operations of grading necessary to finish the shoulders and slopes substantially to the lines indicated on the Typical Sections. No provision of the Specifications will be waived for embankment which supports any portion of the new pavement or forms.

TREE REMOVAL:-

No tree shall be removed, even though specifically marked "To be Removed" on the plans, except by order of the engineer. Where a tree may be saved by minor grading it shall be done. The contractor shall take extreme care not to damage the trees to be left in place.

DESIGN SPEED = 60 M.P.H.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

6
105

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

SUMMARY OF TABLES

DRIVES, APPROACHES & EXTRA PAVEMENT "A"

Table or Sheet No.	E-1 Embankment	E-1 Roadway Excavation	E-8 Remove & Dispose Ex. Pavt.	E-8 Remove & Dispose Ex. Curb	E-12 Remove & Dispose Existing Pipe Lin. Ft. 12"	10"	8"	6"	I-1 Pipe for Driveways Lin. Ft. 12"	10"	8"	I-9 Stone Underdrains Lin. Ft.	I-12 Deduct for Type 2 Curb & Gutter Lin. Ft.	I-12 Conc. Curb & Gutter Type & Mod. Lin. Ft.	I-15 Guard Rail Tension Type Lin. Ft.	I-17 6" Aggregate Sq. Yds.	L-10 Sodding Sq. Yds.	T-70 Part. Conc. Pavt. Var. Thick. Sq. Yds.	T-71 Reinf. Part. Conc. Pavt. Var. Thick. Sq. Yds.	T-35 1½" Asp. Conc. Surf. Course Sq. Yds.	T-35 1¼" Asp. Conc. Surf. Course Sq. Yds.	T-35 Asp. Conc. Surf. Course Var. Thick. Cu. Yds.	B-35 3" Asp. Conc. Leveling Course Sq. Yds.	B-35 1" Asp. Conc. Leveling Course Sq. Yds.	B-35 Asp. Conc. Leveling Course Cu. Yds.	B-20 5" Water Mac. Base Course Sq. Yds.	SS-5 Class. Emb. Material Sq. Yds. 4"	8"	Deduct for Base Widening Lin. Ft.	Add for Base Widening Lin. Ft.	I-12 Conc. Curb & Gutter Type 2 Mod. Lin. Ft.	I-17 3" Aggregate Sq. Yds.
	Cu. Yds.	Cu. Yds.	Sq. Yds.	Lin. Ft.								Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Cu. Yds.	Sq. Yds.	Cu. Yds.	Sq. Yds.			DEL-42 122/14.78	DEL-42 12.21	Lin. Ft.	Sq. Yds.
RURAL CODE # 6706																																
11																																741.7
13																																
15																																86.4
16																49.0																
17					40				72							114.0	20															
18					36				48							122.0	10															
19					20				24							54.0	10															
20																74.0																
21						32				32						42.0	10			9.63				168.33								
25																31.0																
26			10.0			20	12			26						31.0	10				10			10		10						
27					20				26							31.0	10															
28					20				40							43.0	10															
29			27.2																	21.12	27.20			383.27		27.20						
30																58.0																
31																140.0																
32						27			36							149.0	10															
77		5.4										800							136.66		236.11		2.78	252.77		252.77	210.0	600			190.0
78												800				595.0																
80	174	40.0													192				94.42					88.64		88.64	222.0				
81	315	43.0																		29.67	55.56		242.70	55.56		55.56	741.7		100		
83																				22.13				331.02								
12															192																	
	To Cole's Sheet #8		To Recap 15" & Under = 227'														To Table "S-D"															
TOTALS	489	88.4	37.2		136	79	12		246	58		1600			384	1533.0	90		231.08	82.55	411.35		245.48	1289.59		434.17	1173.7	600	100		1018.1
MUNICIPAL CODE # 6706																																
33							20				26					157	10			8.33				139.10								
78												40																				
82																																
					To Recap												To Table "S-D"															
TOTALS							20				26	40				157	10			8.33	211.11	190.00		360.77		221.67						
MUNICIPAL CODE # 6201																													LT. RT.			
34			16.30	139.00									34.80			112.23	48	38.76														
35				129.84									120.30			46.66		76.22														
36			551.00										99.62			223.27		58.26														
37													85.99			33.50		45.26														
38													116.00			87.50		31.02														
82																					9.93		11.18	9.93		12.42	12.42					
87				272.45									291.13	105.50		13.10		3.75	11.00		430.52		109.42	82.22	19.56	109.42	109.42	*191.96	111.59		107.51
88			9.60										152.06								174.10	0.60	111.60		2.47	111.60	111.60		38.00		138.00
89													79.80								109.17	0.60	109.17	109.17		109.17	109.17				95.17
																	To Table "S-D"															
TOTALS			576.90	541.29									979.70	105.50		516.26	48	253.27	11.00		723.72	1.20	341.37	201.32	22.03	342.61	342.61	*362.55			360.68
																												NEW-42 0.19-1.11				
RURAL CODE # 6201																																
38																56.00		10.50													40.50	
39							47			48						62.40																
41												400			576						66.66			66.66					133			170.00
42																					48.34			48.34						97		
43																					23.89			23.89						53		30.00
78												70																				
82																					178.80		189.98	178.80		201.15	201.15					
13	17	2514	1666.7																		2000.00		2041.47	2000.00		2083.33		2083.33				
TOTALS	17	2514	1666.7				47			48		470			576	118.40		10.50			2317.69		2231.63	2317.69		2284.48	201.15	2083.33	133	150	40.50	200.00
							To Recap																									

△ Carried to Calculations Sta. 189+80 to Sta. 198+21.8, Sheet # 9
* Carried to Calculations Sta. 198+21.8 to Sta. 202+00, Sheet # 9
▪ Carried to Calculations of SS-5, Sheet #9

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

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DEL-42 - (12.21 - 18.72)
MRW-42 - (0.00 - 1.11)

SUMMARY of TABLES

ROADWAY DRAINAGE "D"

Sheet No.	E-12 Removal & Disposal of Existing Pipe Lin. Ft.										I-2 STORM SEWERS Pipe Under Pav't Lin Ft					Lin Ft			I-3 Pipe For Roadway Drainage Lin. Ft.							I-3 Pipe Under Drives Lin. Ft.				I-5 Pipe Specials For Storm Sewers Each														I-8 Catch Basins & Manholes Each								I-16 Inlets & Abandoned Each	Fire Cistern Abandoned Each	L-10 Sodding Sq Yds
	21"	22"	20"	18"	15"	13½"	12"	10"	8"	6"	4"	15"	12"	10"	6"	8"	12"	10"	8"	4"	21"	18"	12"	10"	8"	6"		12"	10"	8"	6"	8×12 T	8×8 T	6×10 T	6×8 T	4×8 T	12×21 T	8×21 Y	10×30 BEND	8×30 BEND	8×45 BEND	15×36 BEND	1 MH	#7	#3-A	#3	#2-5	#2-3	#2-28	#1-3	#1	C.B.	Inlets			
RURAL — CODE #6706																																																							
15																								199	436				74																	2									10
16									50															950	56				48																	1									5
17			12	12					151	24											24			144	65	12			20								1									1								1	15
18					12			20		90												12	18		230				20																	3								1	15
19																								107					35																										5
20																													14																	1									5
23					20	30		20		26												12	28	48	24																					1								2		10
25																								185					24																	1									10
26					28	84					108																																					1									
29							59		8			80												16							1															1								1	
30																								130					25																											10
31									176															200					50																											
32									8															29							1															1								1	10
5																					72			72	72																													
TOTALS			12	12	32	58	84	99	Recap 459	74	108	80									72	24	24	46	614	785	576		118	118	74	1	1				1				1	1		11				1	2	1			6		95
	Over 15" - 36'								To Recap 15" & Under - 783'												Recap																																								To Table "D"
MUNICIPAL — CODE #6706																																																							
33									48	298													4	362																					2								1	10
5																					18			18	18																													
TOTALS									48	298											18		4	380	18																				2								1	10
								15" & Under = 346'																																																	To Table "D"
MUNICIPAL — CODE #6201																																																						
33									20														20	24											2											2									
34							328		218							252		404							11													3			1				1	2							1	5
35									148	96								149																											1									5
36														114																										1				1									
37														65			257																																						
38														42		18																																						
89		8						70		393				50	63	36	128					8		306		32																					1		1				1		1	1	1		2		15
87																																																						1	
5																					24			24	24																													
TOTALS		8						398		541	334			50	284	36	146	252	257	555		24	8	326		80	35							2	1	2	3	1		1	1		1	2	6	1			1		1	1		3	1	25
		Over 15" - 8'							15" & Under = 1773'																																																		To Table "D"
RURAL — CODE #6201																																																						
38										16							88					8																											1								1	10
5																					24				24	24																													
TOTALS										16							88				32				24	24																													1	10
								To Recap 15" & Under - 16																																																		Recap		To Table "D"

SUMMARY OF TABLES

SUMMARY OF TABLES

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

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DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

STRUCTURES - 20' SPAN & UNDER "S"

Sheet No.	Station	Structure No.	E-2 Excavation For Structures	E-3 Channel Excavation	E-12 Remove & Dispose Ex. Pipe Lin. Ft.			I-3 Pipe for Rdwy Drainage Lin. Ft.			I-8 Catch Basins Each	I-10 Riprap Sq. Yds.		I-16 Inlets Abandoned	S-1 Conc. For Structures Cu. Yds.		S-4 Reinforcing Steel	S-22 Rem. Part Existing Structure	S-23 1¼" Dia. Dowel Holes	S-24 Rem. of Existing Structure	S-29 Porous Backfill	S-27 Pipe For Roadway Culverts Lin. Ft.					L-10 Sodding
			Cu. Yds.	Cu. Yds.	18"	15"	8"	18"	15"	6"	"22A"	Type A	Type B	Each	Class C	Class C	Lbs.	Cu. Yds.	Lin. Ft.	Lump Sum	Cu. Yds.	6"	36"	21"	18"	12"	Sq. Yds.
RURAL CODE #6706																											
93	24+31.00	DE-42-124	133.00	34.0				44				7.0			48.50		3212.0	22.27	67.5		10.0						65.0
94	21+51.65	DE-42-154	16.33												13.74		2113.0	1.81	40.0								35.9
95	38+51.04	DE-42-157	12.00												11.33		1475.0	1.06	32.0								30.0
96	60+93.80	DE-42-162	4.00												0.30		18.0	0.30	6.0							24	20.0
84	64+57.00	DE-42-163	14.00																	Lump Sum						60	20.0
97	87+87.30	DE-42-167	29.80	12.00								7.0			0.84		18.0	0.93	6.0				20				65.0
85	101+25.42	DE-42-169	12.00																	Lump Sum						56	30.0
85	101+25.42	DE-42-169A	13.00																	Lump Sum						60	20.0
98	116+69.60	DE-42-172	20.00												14.78		1891.0	1.60	40.0								58.0
99	148+05.8	DE-42-178	17.20									3.0								Lump Sum				62			42.0
100	167+55.3	DE-42-182	4.00				13				1				0.30		18.0	0.30	6.0							40	85.0
TOTAL RURAL CODE #6706			275.33	46.0			13	44			1	80.0			49.50	41.23	8745.0	28.27	197.5	Lump Sum	10.0		20	62		240	470.9
							To Recap	To Recap																			To Table "S-D"
MUNICIPAL CODE #6706																											
84	184+13	DE-42-185	12.00																	Lump Sum						40	20.0
101	186+82	DE-42-185A	8.00												0.30		18.0	0.30	6.0							24	17.0
87																		0.06									
TOTAL MUNICIPAL CODE #6706			20.00												0.30		18.0	0.36	6.0	Lump Sum						72	37.0
																											To Table "S-D"
RURAL CODE #6201																											
102	217+66.6	DE-42-191	3.00		12	29			8		1	3	1		0.90		18.0					20			28		20.0
						To Recap							To Recap														To Table "S-D"

EARTHWORK "E"

Sheet No.	Excavation Cu. Yds.	Embankment Cu. Yds.	Embankment +20% Cu. Yds.
RURAL CODE #6706			
8	3,405	1,683	2020
15	380	929	1115
16	648	839	1007
17	846	1017	1220
18	515	857	1028
19	602	799	959
20	1042	1021	1225
21	490	840	1008
22	626	672	807
23	587	1229	1475
24	904	744	893
25	928	635	762
26	1246	799	959
27	973	927	1112
28	682	812	975
29	1130	523	628
30	837	683	820
31	941	689	827
32	850	633	760
TOTALS	17,632	16,331	19,600
MUNICIPAL CODE #6706			
33	762	503	604
MUNICIPAL CODE #6201			
35	697	419	503
37	1384	383	460
TOTALS	2081	802	963
RURAL CODE #6201			
9A	6225	1547	1856
39	1553	256	307
40	710	548	658
TOTALS	8488	2351	2821

*SURPLUS RECAP

Sheet or Table No.		Excavation Cu. Yds.	Embankment Cu. Yds.	Embankment +20% Cu. Yds.
RURAL CODE #6706				
E		17,632	16,331	19,600
S	Channel + 30% Struct. Excavation	185		
	TOTALS	17,817	16,331	19,600
Borrow 19,600 - 17,817 = 1,783 Cu. Yds.				
MUNICIPAL CODE #6706				
E		762	503	604
S		10		
	TOTALS	772	503	604
SURPLUS 772 - 604 = 168 Cu. Yds				
MUNICIPAL CODE #6201				
E		2081	802	963
SURPLUS 2081 - 963 = 1118 Cu. Yds.				
RURAL CODE #6201				
E		8488	2351	2821
SURPLUS 8488 - 2821 = 5667 Cu. Yds.				

*Total SURPLUS = 5,170 Cu. Yds.

REMOVAL OF TREES & STUMPS

Sheet No.	Number
RURAL CODE #6706	
17	1
18	1
19	1
21	3
22	1
26	1
29	1
30	6
32	1
TOTALS	16
MUNICIPAL CODE #6706	
33	2
34	1
TOTAL	3
MUNICIPAL CODE #6201	
36	6
37	8
TOTALS	14
RURAL CODE #6201	
38	5
39	6
TOTALS	11

SIDEWALKS & STEPS "SW"

Sheet No.	E-8 Remove & Dispose Existing Sidewalk Sq. Ft.	I-13 4" Conc. Sidewalk Class "C" Sq. Ft.	I-13 Concrete Steps Class "C" Lin. Ft.
MUNICIPAL CODE #6201			
34	720.00	562.30	
35	780.52	522.00	
36	1187.60	1000.73	
37	1445.80	1210.94	
38	552.00	430.85	
79	202.00	148.00	94.0
87	2239.80	1672.25	
88	344.00	260.00	
89	316.50	264.00	
TOTALS	7788.22	6071.07	94.0
RURAL CODE #6201			
38		187.14	

SEEDING "SD"

Sheet No.	L-9 Area Sq. Yds.	L-10 Sodding Sq. Yds.	L-9 Fertilizer Lbs.
RURAL CODE #6706			
8	19,100	65.0	3419
15	4941	10.0	891
16	6461	5.0	1164
17	6502	71.0	1183
18	5340	55.0	971
19	5688	15.0	1026
20	4762	5.0	858
21	6105	50.0	1108
22	5922	—	1066
23	5815	75.0	1060
24	6589	—	1186
25	6593	60.0	1197
26	7229	68.0	1313
27	6876	10.0	1240
28	6712	10.0	1210
29	6938	42.0	1256
30	6529	10.0	1178
31	6051	83.0	1105
32	6160	20.0	1112
33	570	—	103
TOTALS	130,883	656.0	23,646
MUNICIPAL CODE #6706			
33	4535	57.0	830
MUNICIPAL CODE #6201			
34	632	53.0	127
35	653	—	117
36	78	358.0	78
37	1030	275.0	235
38	—	165.0	30
33	113	—	21
TOTALS	2526	851.0	608
RURAL CODE #6201			
38	465	40.0	91
39	7010	20.0	1265
* 40	2610	—	470
9-A	23644	—	4615
TOTALS	35,729	60.0	6,441
* To Sta. 223+88.9			

RECAP

Sheet or Table No.	I-3 Pipe for Rdwy Drain. Lin. Ft. 18"	E-12 Rem. & Disp. Ex. Pipe Lin. Ft. 6" Over 15"	E-12 Rem. & Disp. Ex. Pipe Lin. Ft. 15" & Under	I-16 Inlets Abandoned Each
RURAL CODE #6706				
S	44		13	
D	24		784	
A			227	
TOTALS	68		1024	
MUNICIPAL CODE #6706				
S				
D			346	
A			20	
TOTALS			366	
MUNICIPAL CODE #6201				
D				
A				
TOTALS				
RURAL CODE #6201				
S			29	1
D			16	1
A			47	
TOTALS			92	2

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

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DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

RURAL ~ CODE 6706

BASE AND LEVELING COURSES

DEL-42-12.21
Sta 9+92.9 to Sta 145+57.90 ~ from Typical Section — 13,565.00 Lin. Ft.
Deduct Sta 73+00 to Sta 80+50 — 750.00 Lin. Ft.
Gross section length ~ Base Widening — 12,815.00 Lin. Ft.
Base Widening ~ Both sides 12,815 x 2 — 25,630.00 Lin. Ft.
Deductions ~ From Table "A", sheet # 6 — 1173.70 Lin. Ft.
24,456.30 Lin. Ft.
Additions ~ From Table "A", Sheet # 6 — 100.00 Lin. Ft.
Net Length ~ Base Widening — 24,556.30 Lin. Ft.

DEL-42-14.79
Sta 0+00 to Sta 181+07.6 ~ From Typical Section — 18,107.60 Lin. Ft.
Deduct for Sta. Equation ~ From Typical Section — 3.07 Lin. Ft.
Deductions from Table "A", Sheet # 6 — 600.00 Lin. Ft.
603.07 Lin. Ft.
Net Length ~ Base Widening — 17,504.53 Lin. Ft.

Item B-35
3" Asphaltic Concrete Leveling Course
From Del-42-12.21 ~ 24,556.3 x 2.25 ÷ 9 — 6139.08 Sq. Yds.
From Del-42-14.79 ~ 17,504.53 x 6.25 ÷ 9 — 12,155.92 Sq. Yds.
From Table "A", Sheet # 6 — 411.35 Sq. Yds.
18,706.35 Sq. Yds.
18,706.35 x 3 ÷ 36 — 1558.86 Cu. Yds.
1" Asphaltic Concrete Leveling Course
Sta 0+00 to Sta 181+07.6 ~ From Typical Section — 18,107.60 Lin. Ft.
Deduct for Sta. Equations ~ From Typical Section — 3.07 Lin. Ft.
Net Length — 18,104.53 Lin. Ft.
18,104.53 x 24 ÷ 9 x 1 ÷ 36 — 1341.07 Cu. Yds.

From Table "A", Sheet # 6 — 245.48 Cu. Yds.
For Longitudinal & Crown Correction
@ 225 Cu. Yds. per Mile
225 x 18,104.53 ÷ 5280 — 773.78 Cu. Yds.
Total Item B-35 — 3919.19 Cu. Yds.

Item B-20
5" Waterbound Macadam Base Course
From Del-42-12.21 ~ 24,556.3 x 2.50 ÷ 9 — 6821.20 Sq. Yds.
From Del-42-14.79 ~ 17,504.53 x 6.50 ÷ 9 — 12,642.16 Sq. Yds.
To Item SS-5 — 19,463.36 Sq. Yds.
From Table "A", Sheet # 6 — 1,289.59 Sq. Yds.
Total Item B-20 — 20,752.95 Sq. Yds.

Item SS-5 ~ Classified Emb. Material
From Item B-20 — 19,463.36 Sq. Yds.
From Table "A", Sheet # 6 — 434.17 Sq. Yds.
19,897.53 Sq. Yds.
Total Item SS-5 19,897.53 x 8 ÷ 36 — 4421.67 Cu. Yds.

Item T-30 ~ Bituminous Prime Coat, Sec. M-5.7 RT 2 or 3
From Item B-20 ~ 20,752.95 x .35 — 7263.53
Total Item T-30 — 7263.53 Gals.

Item E-8 Sealing
From Del-42-12.21 Base Widening, Both Sides — 25,630.00 Lin. Ft.
From Del-42-14.79 ~ Net Length 18,107.60 ~ 3.07 — 18,104.53 Lin. Ft.
43,734.53 Lin. Ft.
Deductions From Table "Extra Pavement" Sheet # 81 — 741.7 Lin. Ft.
Deductions From Table "Extra Pavement" Sheet # 77 — 210.0 Lin. Ft.
951.70 Lin. Ft.
Total Item E-8 — 42,782.83 Lin. Ft.

SURFACE COURSES

DEL-42-12.21
Sta 9+92.9 to Sta 145+57.9 — 13,565.00 Lin. Ft.
Deduct Sta 73+00 to Sta 80+50 — 750.00 Lin. Ft.
Net Length — 12,815.00 Lin. Ft.

DEL-42-14.79
Net Length (from 1" B-35) — 18,104.53 Lin. Ft.

Item T-35
1½" Asphaltic Concrete Surface Course
From Del-42-12.21 ~ 12,815 x 24 ÷ 9 — 34,173.34 Sq. Yds.
From Table "A", Sheet # 6 — 231.08 Sq. Yds.
34,404.42 Sq. Yds.
34,404.42 x 1.5 ÷ 36 — 1433.52 Cu. Yds.
For Longitudinal & Crown Correction
@ 75 Cu. Yds. per mile 75 x 12,815 ÷ 5280 — 182.03 Cu. Yds.

1¼" Asphaltic Concrete Surface Course
From 1" Asp. Conc. Surface Course ~ 18,104.53 x 24 ÷ 9 x 1¼ ÷ 36 — 1676.35 Cu. Yds.

From Table "A", Sheet # 6 — 82.55 Cu. Yds.
Total Item T-35 — 3374.45 Cu. Yds.

ROADWAY EXCAVATION & EMBANKMENT ~ DEL-42-12.21

Item E-1 Roadway Excavation
From Typical Section, Sheet # , Depth 17½"
From Item B-20 ~ 6821.20 x 17.5 ÷ 36 — 3315.86 Cu. Yds.
From Table "A", Sheet # 6 — 88.40 Cu. Yds.
Total Item E-1 (Carried to Sheet "7A") — 3404.26 Cu. Yds.

Embankment
From Typical Section, Sheet # , Width 7' : Av. Depth 2¼"
From Base Widening, Net Lengh Berms — 24,556.3 Lin. Ft.
24,556.3 x 7 ÷ 9 x 2.25 ÷ 36 — 1193.71 Cu. Yds.
From Table "A", Sheet # 6 — 489.00 Cu. Yds.
Embankment (Carried to Sheet "7A") — 1682.71 Cu. Yds.
Embankment + 20 % (Carried to Sheet # 7A) — 2019.25 Cu. Yds.

ITEM E-11 WATER

From Table "E" Embankment — 16,331.00 Cu. Yds.
Deductions From Emb. Del-42-12.21 — 1,193.71 Cu. Yds.
15,137.29 Cu. Yds.
From Item SS-5 — 4,421.67 Cu. Yds.
19,558.96 Cu. Yds.
Total Item E-11 19,558.96 x 5 ÷ 1000 — 97.80 M Gals.

SEEDING AND PROTECTING ~ TYPE A ~ DEL-42-12.21

Item L-9 Seeding
From Embankment ~ 24,556.3 x 7 ÷ 9 — 19,099.34 Sq. Yds.
From Str. # DE-42-124 — 65.00 Sq. Yds.
Total Item L-9 Seeding (Carried to Sheet # 7A) — 19,164.34 Sq. Yds.

Item L-9 Fertilizer
19,164.34 x 9 ÷ 1000 x 20# — 3419 Lbs.
Total Item L-9 Fertilizer (Carried to Sheet "7A") — 3419 Lbs.

ITEM I-17 ~ AGGREGATE

From Table "A" Sheet # 6 1533 x 6 ÷ 36 — 255.5 Cu. Yds.
From Table "A" Sheet # 6 1018.1 x 3 ÷ 36 — 84.9 Cu. Yds.
340.4 Cu. Yds.
Total Item I-17 340.4 x 115% — 391.5 Cu. Yds.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS.
2	OHIO	F-558(11)	POST WAR

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

MUNICIPAL ~ CODE 6706

BASE AND LEVELING COURSES

Sta 181+07.6 to Sta 189+80, From Typical Section — 872.4 Lin. Ft.
Gross and Net Length — 872.4 Lin. Ft.

Item B-35
3" Asphaltic Concrete Leveling Course
872.4 × 6.25 ÷ 9 — 605.83 Sq. Yds.
From Table "A", Sheet #6 — 211.11 Sq. Yds.
816.94 Sq. Yds.

816.94 × 3 ÷ 36 — 68.08 Cu. Yds.

1" Asphaltic Concrete Leveling Course
872.4 × 24 ÷ 9 — 2326.40 Sq. Yds.
From Table "A", Sheet #6 — 190.00 Sq. Yds.
2516.40 Sq. Yds.

2516.40 × 1 ÷ 36 — 69.90 Cu. Yds.
For Grade Change ~ Sta 188+00 to 189+50 — 12.86 Cu. Yds.
For Longitudinal & Crown Correction @ 225 Cu. Yds./Mile
Sta. 181+07.6 to Sta. 188+00 = 692.4 ÷ 5280 × 225 — 29.48 Cu. Yds.
Total Item B-35 — 180.32 Cu. Yds.

Item B-20 5" Waterbound Macadam Base Course
872.4 × 6.50 ÷ 9 — 630.07 Sq. Yds.
From Table "A", Sheet #6 — 360.77 Sq. Yds.
Total Item B-20 — 990.84 Sq. Yds.

BASE AND LEVELING COURSES (CONT.)

Item SS-5 ~ 8" Classified Emb. Material
Total Item SS-5, From B-20 851.74 × 8 ÷ 36 — 189.28 Cu. Yds.

Item T-30 ~ Bituminous Prime Coat, Sec. M-5.7, RT 2 or 3
Total Item T-30, From B-20 851.74 × .35 — 298.10 Gals.

Item E-8 Sealing
Total Item E-8 872.4 × 2 — 1744.80 Lin. Ft.

SURFACE COURSE

Item T-35 1½" Asphaltic Concrete Surface Course
872.4 × 24 ÷ 9 — 2326.40 Sq. Yds.
From Table "A", Sheet #6 — 190.00 Sq. Yds.
2516.40 Sq. Yds.

Total Item T-35 (2516.40 × 1.25 ÷ 36) ÷ 8.33 Cu. Yds. From Table "A" Sheet #6 — 95.71 Cu. Yds.

ITEM E-11 WATER

From Table "E", Sheet #7A — 503.00 Cu. Yds.
From SS-5 — 189.28 Cu. Yds.
692.28 Cu. Yds.

Total Item E-11 692.28 × 5 ÷ 1000 — 3.5 M. Gals.

Item I-17, Total, From Table "A", Sheet #6 157 × 6 ÷ 36 × 115 % — 30.10 Cu. Yds.

MUNICIPAL ~ CODE 6201

BASE AND LEVELING COURSES

Sta 189+80 to Sta 198+21.8 (From Typical Section) — 841.8 Lin. Ft.
Base Widening 841.8 × 16 ÷ 9 — 1496.53 Sq. Yds.
Deductions
Left, From Table "A", Sheet #6 191.96 × 6 ÷ 9 — - 127.97 Sq. Yds.
Right, From Table "A", Sheet #6 111.59 × 10 ÷ 9 — - 123.99 Sq. Yds. — 1244.57 Sq. Yds.

Sta 198+21.8 to Sta 202+00 (From Typical Section) — 378.2 Lin. Ft.
Base Widening 378.2 × 28 ÷ 9 — 1176.62 Sq. Yds.
Deduct Right, From Table "A", Sheet #6 59 × 10 ÷ 9 — - 65.56 Sq. Yds. — 1111.06 Sq. Yds.

Sta 202+00 to Sta 206+00 (From Typical Section) — 400.0 Lin. Ft.
Full Width 400 × 36 ÷ 9 — 1600.00 Sq. Yds.

Sta 206+00 to Sta 207+97.7 (From Typical Section) — 197.7 Lin. Ft.
Full Width 197.7 × 30 ÷ 9 — 659.00 Sq. Yds.
Total — 4614.63 Sq. Yds.

Item B-20 5" Waterbound Macadam Base Course
From Total above — 4614.63 Sq. Yds.
From Table "A", Sheet #6 — 342.61 Sq. Yds.
Total Item B-20 — 4957.24 Sq. Yds.

Item SS-5 ~4" Classified Emb. Material
Sta 189+80 to Sta 207+97.7 (From Typical Section) — 1817.70 Lin. Ft.
Gross Length, Both Sides 1817.7 × 2 — 3635.40 Lin. Ft.
Deduct from Table "A", Sheet #6 (Base Widening & Curb) — - 580.41 Lin. Ft.
Add From Table "A", Sheet #6 (I-12, Type 2 #4) — 466.18 Lin. Ft. — 3521.17 Lin. Ft.
3521.17 × 2.5 ÷ 9 × 4 ÷ 36 — 108.68 Cu. Yds.
From Item B-20 4957.24 × 4 ÷ 36 — 550.80 Cu. Yds.
Total Item SS-5 — 659.48 Cu. Yds.

Item B-35
3" Asphaltic Concrete Leveling Course
From Total Above — 4614.63 Sq. Yds.
From Table "A", Sheet #6 — 341.37 Sq. Yds.
4956.00 Sq. Yds.

Total (3") 4956.00 × 3 ÷ 36 — 413.00 Cu. Yds.
From Table "A", Sheet #6 — 22.03 Cu. Yds.
From B-35~1" Asphaltic Leveling Course — 203.90 Cu. Yds.
For Grade Change, Sta 189+80 to Sta 201+50 — 188.20 Cu. Yds.
Total Item B-35 — 827.13 Cu. Yds.

Item T-30 Bituminous Prime Coat ~ Sec. M 5.7, RT 2 or 3
From B-20 4957.24 × .35 — 1735.0 Gals.
Total Item T-30 — 1735.0 Gals.

SURFACE AND LEVELING COURSES

Sta 189+80 to Sta 206+00 (From Typical Section) — 1620.0 Lin. Ft.
Full Width 1620 × 36 ÷ 9 — 6480.00 Sq. Yds.

Sta 206+00 to Sta 207+97.7 (From Typical Section) — 197.7 Lin. Ft.
Full Width 197.7 × 30 ÷ 9 — 659.00 Sq. Yds.
Total — 7139.00 Sq. Yds.

Item T-35 1¼" Asphaltic Concrete Surface Course
From Total Above — 7139.00 Sq. Yds.
From Table "A", Sheet #6 — 723.72 Sq. Yds.
7862.72 Sq. Yds.

7862.72 × 1¼ ÷ 36 — 273.01 Cu. Yds.
From Table "A", Sheet #6 — 1.20 Cu. Yds.
Total Item T-35 — 274.21 Cu. Yds.

Item B-35 1" Asphaltic Concrete Leveling Course
From Total Above — 7139.00 Sq. Yds.
From Table "A", Sheet #6 — 201.32 Sq. Yds.
7340.32 Sq. Yds.

Total Item B-35 7340.32 × 1 ÷ 36 — 203.90 Cu. Yds.
(to Base and Leveling Course)

ITEM I-12 MODIFIED TYPE 2 CURB & GUTTER

Sta 189+80 to Sta 207+97.7 (From Typical Section) — 1817.7 Lin. Ft.
Both Sides 1817.7 × 2 — 3635.40 Lin. Ft.
Add From Table "A", Sheet #6 — 360.68 Lin. Ft.
3996.08 Lin. Ft.
Deduct From Table "A", Sheet #6 — 979.70 Lin. Ft.
Total Item I-12, Type 2 — 3216.98 Lin. Ft.

ITEM I-17 6" AGGREGATE

From Table "A", Sheet #6 516.26 × 6 ÷ 36 — 86.04 Cu. Yds.
Total Item I-17 86.04 × 115 % — 98.95 Cu. Yds.

ITEM E-11 WATER

From Table "E" Embankment — 813.00 Cu. Yds.
From Item SS-5 — 666.23 Cu. Yds.
1479.23 Cu. Yds.

Total Item E-11 1479.23 × 5 ÷ 1000 — 7.4 M. Gals.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

9A
103

RURAL ~ CODE 6201

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

BASE AND LEVELING COURSES

I DEL-42-18.72
Sta. 207+97.7 to Sta. 223+88.9 (From Typical Section) 1591.2 Lin. Ft.
Net Length Both Sides 1591.2 x 2 — 3,182.4 Lin. Ft.

II MRW-42-0.00
Sta. 223+88.9 to Sta. 234+00 (From Typical Section) 1011.1 Lin. Ft.
Net Length Both Sides 1011.1 x 2 — 2,022.2 Lin. Ft.

III MRW-42-0.19
Sta. 234+00 to Sta. 282+80 (From Typical Section) 4880.0 Lin. Ft.
Gross Length Both Sides 4880 x 2 — 9,760.0 Lin. Ft.
Deduct From Table "A", Sheet #6 — 133.0 Lin. Ft.
Net Length — 9,627.0 Lin. Ft.

IV MRW-42-1.11
Sta. 282+80 to Sta. 360+15.6 (From Typical Section) 7735.6 Lin. Ft.
Gross Length Both Sides 7735.6 x 2 — 15,471.2 Lin. Ft.
Deduct From Table "A", Sheet #6 — 150.0 Lin. Ft.
Net Length — 15,321.2 Lin. Ft.

Item B-20 5" Waterbound Macadam Base Course
From I 3182.4 x 3.3 ÷ 9 — 1166.88 Sq. Yds.
From II 2022.2 x 3.3 ÷ 9 — 741.47 Sq. Yds.
From III 9627.0 x 2.5 ÷ 9 — 2674.17 Sq. Yds.
From IV 15,321.2 x 3.5 ÷ 9 — 5958.24 Sq. Yds.
} Total = 9373.88 To E-1 Calc.
From Table "A", Sheet #6 — 2284.48 Sq. Yds.
Add for full base, Sta. 207+97.7 to Sta. 212+00 = 402.3 x 18.4 ÷ 9 — 822.48 Sq. Yds.
Total Item B-20 — 13,647.72 Sq. Yds.

Item SS-5 "Classified Embankment Material"
From Item B-20 (13,647.72 - 2,083.33 (8")) x 4 ÷ 36 — 1284.93 Cu. Yds.
From Table "A" Sheet #6 2083.33 x 8 ÷ 36 — 462.96 Cu. Yds.
From Sta. 207+97.7 to Sta. 208+56 58.3 x 2 ÷ 9 x 4 ÷ 36 — 1.44 Cu. Yds.
Total Item SS-5 — 1,749.33 Cu. Yds.

Item T-30 Bituminous Prime Coat Sec. M-5.7, RT 2 or 3
From Item B-20 13,647.72 x .35 — 4776.70 Gals.
Total Item T-30 — 4,776.70 Gals.

Item B-35
3" Asphaltic Concrete Leveling Courses
From I & II 5204.6 x 3.05 ÷ 9 — 1763.78 Sq. Yds.
From III 9627.0 x 2.25 ÷ 9 — 2406.75 Sq. Yds.
From IV 15,321.2 x 3.25 ÷ 9 — 5532.66 Sq. Yds.
From Table "A", Sheet #6 — 2231.65 Sq. Yds.
From B-20 (full base) — 822.48 Sq. Yds.
12,757.32 Sq. Yds.
Total (3") = 12,757.32 x 3 ÷ 36 — 1,063.11 Cu. Yds.
From B-35 1" Asp. Conc. Leveling Course — 1,472.23 Cu. Yds.
Total Item B-35 — 2,535.34 Cu. Yds.

SURFACE AND LEVELING COURSES

DEL-42-18.72 TO MRW-42-2.56
Sta. 207+97.7 to Sta. 360+15.6 (From Typical Section) — 15,217.90 Lin. Ft.

Item T-35 1¼" Asphaltic Concrete Surface Course
15,217.90 x 24 ÷ 9 — 40,581.07 Sq. Yds.
From Table "A", Sheet #6 — 2,317.69 Sq. Yds.
42,898.76 Sq. Yds.
Total Item T-35 42,898.76 x 1.25 ÷ 36 — 1,489.54 Cu. Yds.

Item B-35 1" Asphaltic Concrete Leveling Course
From T-35 42,898.76 x 1 ÷ 36 — 1,191.63 Cu. Yds.
For Longitudinal and Crown Correction @ 100 Cu. Yds./Mile
Sta. 212+00 to Sta. 360+15.6 = 14,815.6 Lin. Ft.
14,815.6 ÷ 5,280 x 100 = — 280.60 Cu. Yds.
Total Item B-35(1") (To Base and Leveling Courses) — 1,472.23 Cu. Yds.

ROADWAY EXCAVATION & EMBANKMENT

Item E-1 Roadway Excavation
From Typical Section Sheet # 4 Depth = 14¼"
From Item B-20 9,373.88 x 14¼ ÷ 36 — 3,710.50 Cu. Yds.
From Table "A", Sheet # 6 — 2,514.00 Cu. Yds.
Total Item E-1 (Carried to Sheet # 7A) — 6,224.50 Cu. Yds.

Embankment
From Typical Section Sheet # 4 Width = 7', Av. Depth = 2⅝"
From II — 2,022.2 Lin. Ft.
From III — 9,627.0 Lin. Ft.
From IV — 15,321.2 Lin. Ft.
26,970.4 Lin. Ft.
26,970.4 x 7 ÷ 9 x 2⅝ ÷ 36 — 1,529.57 Cu. Yds.
From Table "A", Sheet # 6 — 17.00 Cu. Yds.
Total Embankment (Carried to Sheet # 7A) — 1,546.57 Cu. Yds.
Embankment + 20% (Carried to Sheet # 7A) — 1,856.00 Cu. Yds.

SEEDING AND PROTECTING

Item L-9 Seeding
From Embankment 26,970.4 x 7 ÷ 9 — 20,976.98 Sq. Yds.
Sta. 73+00 to Sta. 80+50 (DEL-42-12.21) 750 x (80-24) ÷ 9 — 4,666.67 Sq. Yds.
Total Item L-9 Seeding (Carried to Sheet # 7-A) = — 25,643.65 Sq. Yds.

Total Item L-9 Fertilizer - 25,643.65 x 9 ÷ 1000 x 20 (Carried to Sheet # 7-A) — 4,615.82 Lbs.

ITEM E-11 WATER

From Table "E" Embankment — 2,351.00 Cu. Yds.
Deduction from Embankment (This Sheet) — 1,529.57 Cu. Yds.
= 821.43 Cu. Yds.
From SS-5 (This Sheet) — 1,749.33 Cu. Yds.
= 2,570.76 Cu. Yds.
Total Item E-11 2,570.76 x 5 ÷ 1000 = — 12.85 M. Gals.

ITEM I-17 AGGREGATE

From Table "A" Sheet # 6 200 x 3 ÷ 36 — 16.7 Cu. Yds.
From Table "A" Sheet # 6 118.4 x 6 ÷ 36 — 19.7 Cu. Yds.
36.4 Cu. Yds.
Total Item I-17 - 36.4 x 115% = — 42.0 Cu. Yds.

GENERAL SUMMARY

ITEM	QUANTITIES RURAL CODE 6706	RURAL CODE 6201	TOTAL RURAL	MUNICIPAL CODE 6706	MUNICIPAL CODE 6201	TOTAL MUNY	GRAND TOTAL	UNIT	DESCRIPTION
									ROADWAY
E-1	17,632	8,488	26,120	762	2,081	2,843	28,963	Cu.Yd.	Roadway Excavation
E-8					542	542	542	Lin.Ft.	Removal & Disposal of Existing Curb
E-8	38	1,668	1,706		577	577	2,283	Sq.Yd.	Removal & Disposal of Existing Pavement
E-8					7,788	7,788	7,788	Sq.Ft.	Removal & Disposal of Existing Sidewalk
E-9	16	11	27	3	14	17	44	Each	Removal of Trees & Stumps
E-11	98	13	111	4	7	11	122	M.Gal.	Water
E-12	1,024	92	1,116	366	1,273	1,639	2,755	Lin.Ft.	Removal & Disposal of Pipe - 15" & Under
E-12	56	12	68		8	8	76	Lin.Ft.	Removal & Disposal of Pipe - Over 15"
I-1	58	48	106	26		26	132	Lin.Ft.	10" Pipe for Driveways
I-1	246		246				246	Lin.Ft.	12" Pipe for Driveways
I-2					553	553	553	Lin.Ft.	8" Storm Sewer
I-2					257	257	257	Lin.Ft.	10" Storm Sewer
I-2					252	252	252	Lin.Ft.	12" Storm Sewer
I-2					36	36	36	Lin.Ft.	6" Storm Sewer - Under Pavement
I-2					284	284	284	Lin.Ft.	10" Storm Sewer - Under Pavement
I-2	80		80		50	50	130	Lin.Ft.	12" Storm Sewer - Under Pavement
I-2	108		108				108	Lin.Ft.	15" Storm Sewer - Under Pavement
I-2		88	88		146	146	234	Lin.Ft.	8" Storm Sewer - Under Pavement
I-3	74		74				74	Lin.Ft.	6" Roadway Drainage under drives
I-3	118		118				118	Lin.Ft.	8" Roadway Drainage under drives
I-3	118		118				118	Lin.Ft.	10" Roadway Drainage under drives
I-3	72	32	104	18	24	42	146	Lin.Ft.	4" Roadway Drainage
I-3	576	24	600	18	35	53	653	Lin.Ft.	6" Roadway Drainage
I-3	1,785	24	1,809	380	80	460	2,269	Lin.Ft.	8" Roadway Drainage
I-3	614		614				614	Lin.Ft.	10" Roadway Drainage
I-3	46		46	4	326	330	376	Lin.Ft.	12" Roadway Drainage
I-3		8	8				8	Lin.Ft.	15" Roadway Drainage
I-3	68		68				68	Lin.Ft.	18" Roadway Drainage
I-3	24		24		8	8	32	Lin.Ft.	21" Roadway Drainage
I-5	2		2		8	8	10	Each	8" Pipe Special for Storm Sewers
I-5					2	2	2	Each	10" Pipe Special for Storm Sewers
I-5	1		1				1	Each	12" Pipe Special for Storm Sewers
I-5	1		1		1	1	2	Each	21" Pipe Special for Storm Sewers
I-5	1		1				1	Each	15" Pipe Special for Storm Sewers
I-8					1	1	1	Each	Standard No. 1 Side Ditch Inlet
I-8					1	1	1	Each	Standard No. 1-3 Catch Basin
I-8	1	1	2				2	Each	Standard No. 2-2A Catch Basin
I-8	1	1	2		1	1	3	Each	Standard No. 2-2B Catch Basin
I-8	2		2				2	Each	Standard No. 2-3 Catch Basin
I-8	1		1				1	Each	Standard No. 2-5 Catch Basin
I-8					1	1	1	Each	Standard No. 3 Catch Basin
I-8					6	6	6	Each	Standard No. 3-A Catch Basin
I-8	11		11	2	2	4	15	Each	Standard No. 7 Catch Basin
I-8					1	1	1	Each	Standard No. 1 Manhole
I-9	1,600	470	2,070	40		40	2,110	Lin.Ft.	Stone Underdrains No. 2
I-16	6	2	8	1	3	4	12	Each	Inlets Abandoned
I-13		187	187		6071	6071	6258	Sq.Ft.	4" Concrete Sidewalks
I-13					94	94	94	Lin.Ft.	Concrete Steps
I-15	384	576	960				960	Lin.Ft.	Guard Rail, Flexible Steel Plate Tension Type - Standard Strength or Steel Beam Type (Shallow)
I-16					1	1	1	Each	Fire Cistern Abandoned
I-17	392	42	434	30	99	129	563	Cu.Yd.	Side Approaches, Mail Box Turnouts & Berm Material.
L-9	130,898	35,729	166,627	4,555	2,526	7,081	173,708	Sq.Yd.	Seeding and Protecting, Type "A"
L-9	11.84	3.22	15.06	0.42	0.30	0.72	15.78	Tons	Commercial Fertilizer (10-6-4)
L-10	656	60	716	57	851	908	1,624	Sq.Yd.	Sodding
M-10		41	41		27	27	68	Tons	Calcium Chloride Delivered and Applied
T-10		1,000	1,000		661	661	1,661	Cu.Yd.	Traffic Compacted Surface Course
SS-5	4,422	1,750	6,172	190	660	850	7,022	Cu.Yd.	Classified Embankment Material - As Per Plan
I-8					3	3	3	Each	Grates Adjusted To Grade, as per plan (Sh. 79)
I-8					1	1	1	Each	Standard No. 1 Manhole, Heavy Casting Furnished and placed (Sh. 103)
									PAVEMENT
B-20	20,753	13,648	34,401	991	4,958	5,949	40,350	Sq.Yd.	5" Waterbound Macadam Base Course
B-35	3,920	2,536	6,456	181	828	1,009	7,465	Cu.Yd.	Asphaltic Concrete Leveling Course (70-80)
T-30	7,264	4,777	12,041	299	1,735	2,034	14,075	Gal.	Bituminous Prime Coat Sec. M-5.7 RT 2 or 3
T-35	3,375	1,490	4,865	96	275	371	5,236	Cu.Yd.	Asphaltic Concrete Surface Course Type "A" (70-80)
T-70		11	11		253	253	264	Sq.Yd.	Portland Cement Concrete Pavement (As Per Plan)
T-71					11	11	11	Sq.Yd.	8" Reinforced Portland Cement Concrete Pavement (As Per Plan)
E-8	42,783		42,783	1,745		1,745	44,528	Lin.Ft.	Sealing only
I-12		41	41		3,217	3,217	3,258	Lin.Ft.	Modified Type 2 Combination Curb & Gutter - As per Plan
I-12					106	106	106	Lin.Ft.	Modified Type 4 Combination Curb & Gutter - As per Plan
									STRUCTURES - 20' SPAN AND UNDER
E-2	276	3	279	20		20	299	Cu.Yd.	Excavation for Structures
E-3	46		46				46	Cu.Yd.	Channel Excavation
I-10	80	3	80				83	Sq.Yd.	Riprap, Type "B" Grouted
S-1	41.3	0.90	42.2	0.30		0.30	42.5	Cu.Yd.	Concrete for Structures, Class "C"
S-4	8,745	18	8763	18		18	8781	Lb.	Reinforcing Steel
S-22	28		28	1		1	29	Cu.Yd.	Removal of Portions of Existing Structure
S-23	198		198	6		6	204	Lin.Ft.	1¼" Dowel Holes
S-24	Lump		Lump	Lump		Lump	Lump	Lump	Removal of Existing Structures
S-27	240		240	72		72	312	Lin.Ft.	12" Pipe for Roadway Culverts
S-27		28	28				28	Lin.Ft.	18" Pipe for Roadway Culverts
S-27	62		62				62	Lin.Ft.	21" Pipe for Roadway Culverts
S-27	20		20				20	Lin.Ft.	36" Pipe for Roadway Culverts
S-29	10		10				10	Cu.Yd.	Porous Backfill
S-1	49.5		49.5				49.5	Cu.Yd.	Concrete for Structures Class "E"
S-27		20	20				20	Lin.Ft.	6" Pipe for Roadway Culverts

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (1)	POST WAR

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

10
103

Sta 9+92.9 F-558(11)
= Sta 9+92.9 FA-558A

TYPE FUNDS POST WAR

F-558(11) 11 103

DEL.-42 (12.21 - 18.72)
MRW.-42C0.00 - 1.11)

P.I. = 14 + 22.46
Δ = 32°-05 Lt.
D = 5°-00'
T = 392.52
R = 1146.3'
L = 641.66
E = 46.43

Begin Project Sta. 9+92.9

Begin Work Sta. 8+92.9

1+00

Begin Code +6705

DEL.-42-12.21

F-558(11)

℄ Side Road

20+00

DE-42-124

24+31 ℄ Bridge

30+00

N. 27°-32' E.

40+00

44+50

℄ R/W

49+50

50+00

DE-42-129

Sta 50+23 ℄ Bridge

57+68.2 ℄ Side Rd.

60+00

Sheet End

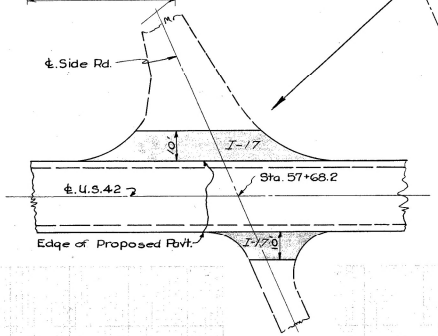
See Detail Below

STRUCTURES ~ 20' SPAN AND UNDER											
STRUCT. NO.	STATION	EXISTING STRUCTURE				PROP. STRUCT.			SHEET NO.	REMARKS
		TYPE	SIZE	LENGTH	DISPOSITION	TYPE	SIZE	LENGTH		
DE-42-124	24+31	STC	8'-6"	35.24	Extend	STC	8'-6"	19'-7½" Lt. 18'-10" Rt.	92 & 93	Extend South Abut. on Right
DE-42-129	50+23	STC	9'x6'	49.00	No Work Required by CONTRACTOR					Roadway = 38'

See Sheet #81 For Details of Curve Widening & Transition.

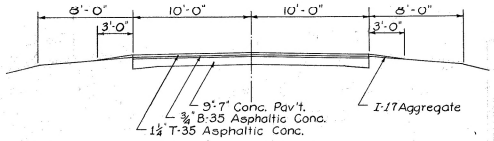
See Sheet #80 For Details of Extra Widening at Bridge.

Markers Will be Furnished and Erected, on the right, by the State before acceptance of this improvement.

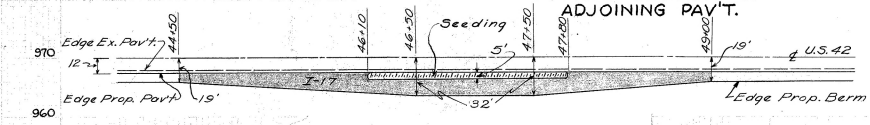


APPROACHES					
STATION					I-17 3" Aggregate Sq. Yds.
FROM	TO	Side	W	L	
57+68.2		Lt & Rt.	10'	80'	88.9
44+50	49+00	Rt.	Var.	450	652.8
TOTALS					741.7

B.M. 60' Rt. Sta. 24+47
NW Corner of H'dw'l, Tile under railroad
Elev. = 944.87



TYPICAL SECTION OF ADJOINING PAV'T.



DETAIL - TRUCK TURNOUT

* Note:- Fill or Scour Existing Ditch to Elevations shown hereon.

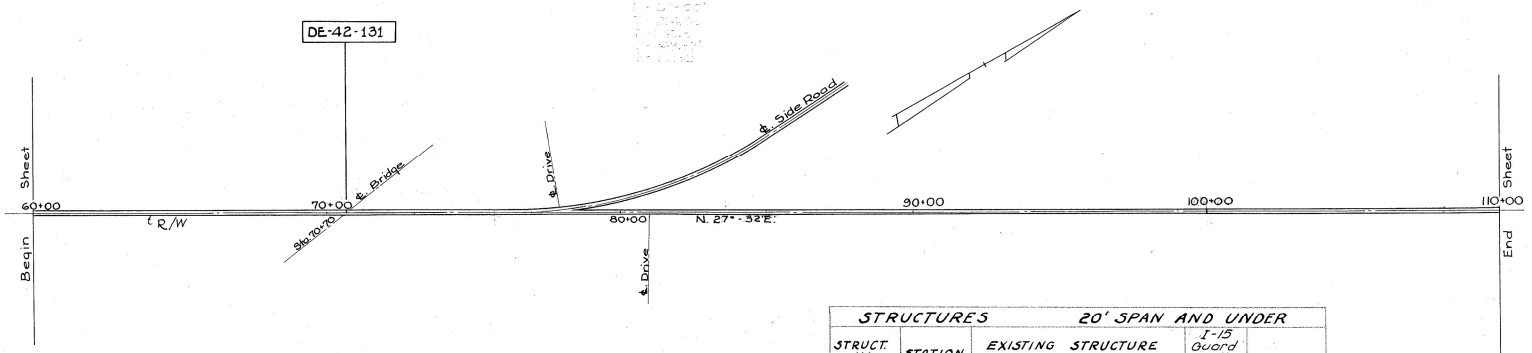
STA. 8+92.9 TO STA. 60+00

Sta 85+00 F-558(11)
= End FA-558A
= Sta 85+00 FA-558E

TYPE FUNDS POST WAR

F-558(11) 12 / 103

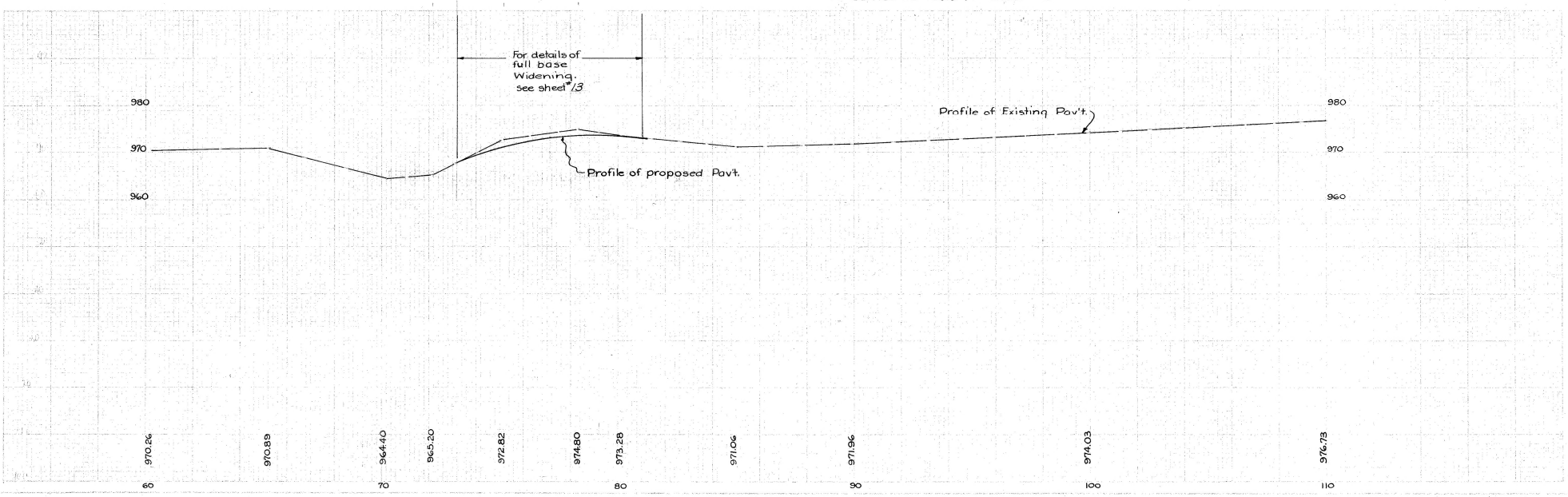
DEL.-42 (12.21 - 18.72)
MRW.-42 (0.00 - 1.11)



See Sheet*77 For Details of Intersection ℄ Drives.

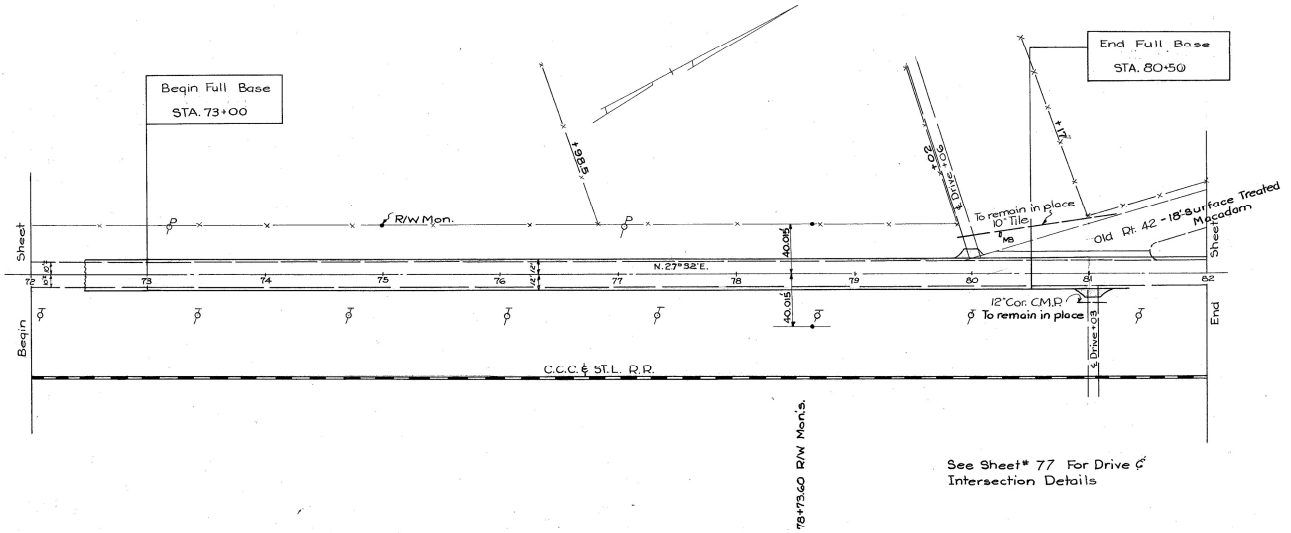
STRUCTURES 20' SPAN AND UNDER						
STRUCT. NO.	STATION	EXISTING STRUCTURE				I-15 Guard Rail L.F.
		TYPE	SIZE	LENGTH	DISPOSITION	
DE-42-131		PIPE	12"	37'-0"	NO WORK REQ'D	
DE-42-133	70+70	STC	5'x5'	51'-0"	NO WORK REQ'D	64
DE-42-135		PIPE	12"	41'-0"	NO WORK REQ'D	
DE-42-136		PIPE	24"	51'-3"	NO WORK REQ'D	
DE-42-139		PIPE	15"	42'-6"	NO WORK REQ'D	64
DE-42-144		PIPE	15"	42'-6"	NO WORK REQ'D	64
					* Totals	192

* Carried To Table 'A' Sheet #6



STA. 60+00 TO STA. 110+00

POST FUNDS 13
F-558(11) POST WAR 103
DEL.-42 (12.21 - 18.72)
MRW.-42 (0.00 - 1.11)

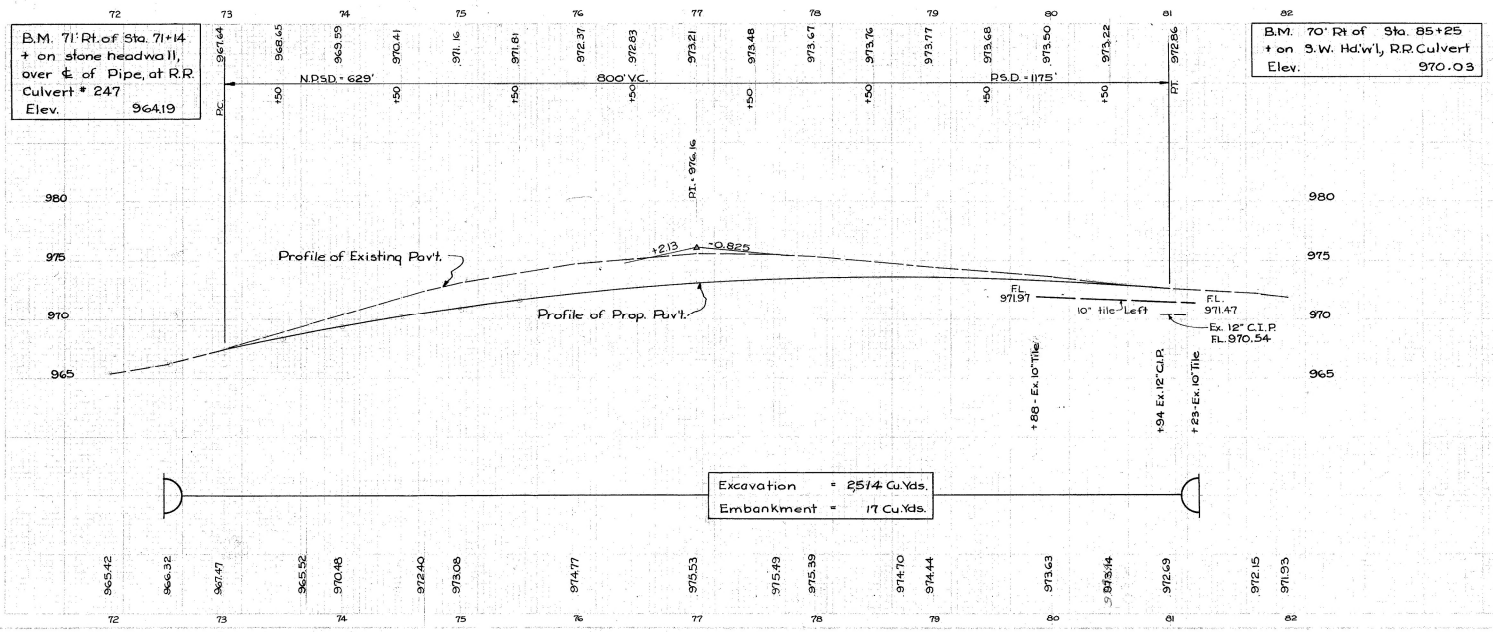


See Sheet* 77 For Drive ℄ Intersection Details

CALCULATIONS
FULL BASE & WIDENING

Begin Full Base Widening @ Sta. 73+00
End Full Base Widening @ Sta. 80+50
Gross & Net Length = 750 Lin. Ft.
Item E-8 Removal & Disposal of Existing 9-7-9 x 20' Concrete Pavement (With 2" Bit. Surface Course.)

(750 x 20 ÷ 9)	= 1666.67 Sq. Yds.
Item B-35 - 3" Leveling Course 750 x 24.5 ÷ 9	= 2041.67 Sq. Yds.
Item B-20 - 5" Base Course 750 x 25 ÷ 9	= 2,083.33 Sq. Yds.
Item SS-5-8" Classified Emk. Material Same as B-20	= 2,083.33 Sq. Yds.
Item T-35 1¼" Surface Course 750 x 24 ÷ 9	= 2,000.00 Sq. Yds.
Item B-35 1" Leveling Course Same as T-35	2,000.00 Sq. Yds.
Carried to Sheet* 6	

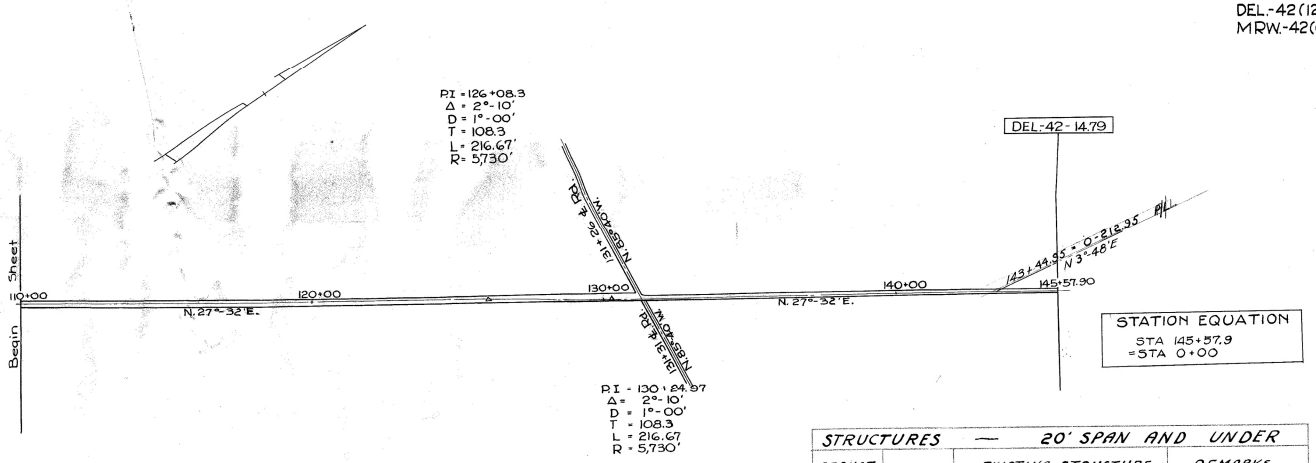


STA. 72+00 TO STA. 82+00

Sta 0+00 F-558(11) =
Sta 145+57.9 = End FA-558-E

F-558(11) TYPE FUNDS POST WAR 14 105

DEL.-42(12.21-18.72)
MRW.-42(0.00-1.11)

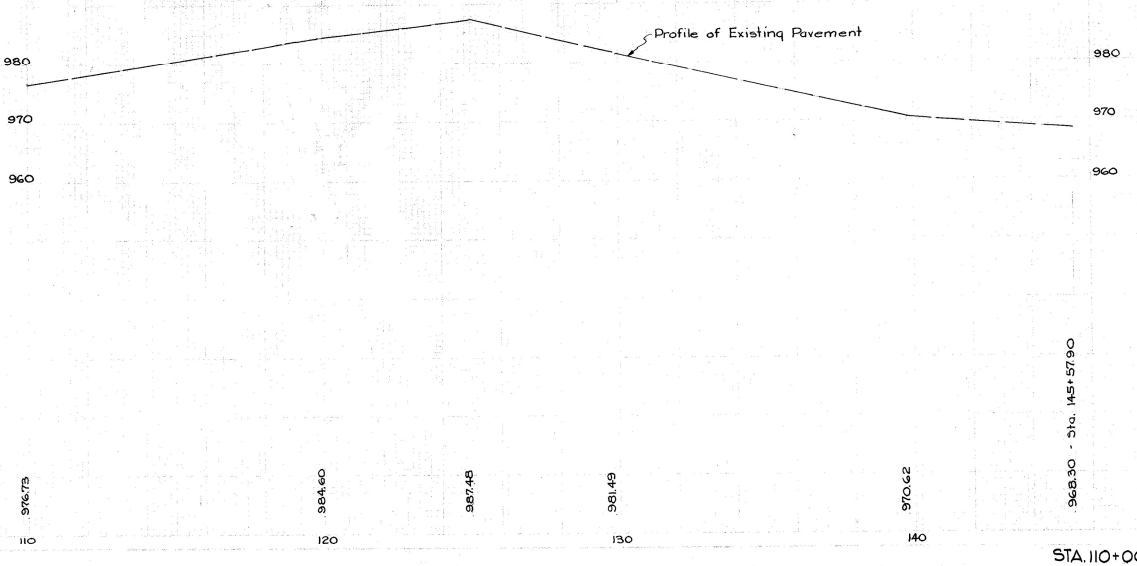


STATION EQUATION
STA 145+57.9
=STA 0+00

See Sheet# 77 For
Details of Intersections
& Transition.

STRUCTURES — 20' SPAN AND UNDER

STRUCT. NO.	STATION	EXISTING STRUCTURE. TYPE	SIZE	LENGTH	DISPOSITION	REMARKS
OE-42-149		PIPE	12"	46'-0"	NO WORK REQUIRED	

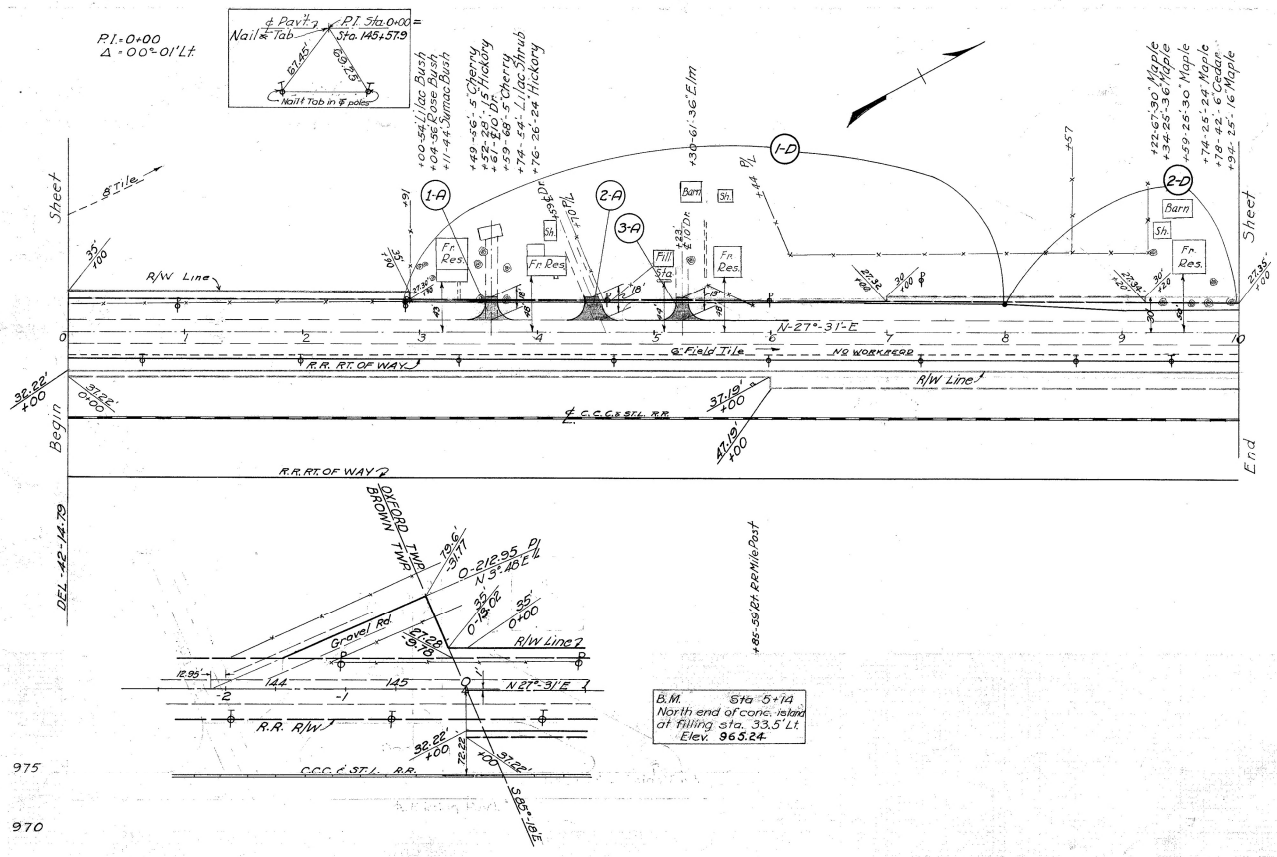


STA. 110+00 TO 145+57.90

DIVISION 2 | TYPE FUNDS 15 | POST WAR 105

2 OH10 F-558 (11)

DEL.-42(12.21-18.72)
M.RW.-42(0.00-1.11)



ROADWAY DRAINAGE

REF. No.	STATION FROM	STATION TO	SIDE	1-3 PIPE LIN. FT. 6"	1-3 PIPE LIN. FT. 8"	1-8 C.B. No. 7 EACH	1-3 PIPE UNDER DRIVES LIN. FT. 6"		1-D SODDING SQ. YDS.	REMARKS
1-D	2+88	8+00	LT.	436		1	74		10	C.B. AT STA 2+88
2-D	8+00	10+00	LT.		199	1				C.B. AT STA 8+00
		TOTAL		436	199	2	74		10	

DRIVES AND APPROACHES

REF. NO.	STATION	SIDE	I-17 6" thick Sq. Yds.			
1-A	3+61	Lt.	30.8			
2-A	4+59	Lt.	30.8			
3-A	5+23	Lt.	24.8			
TOTALS			86.4			

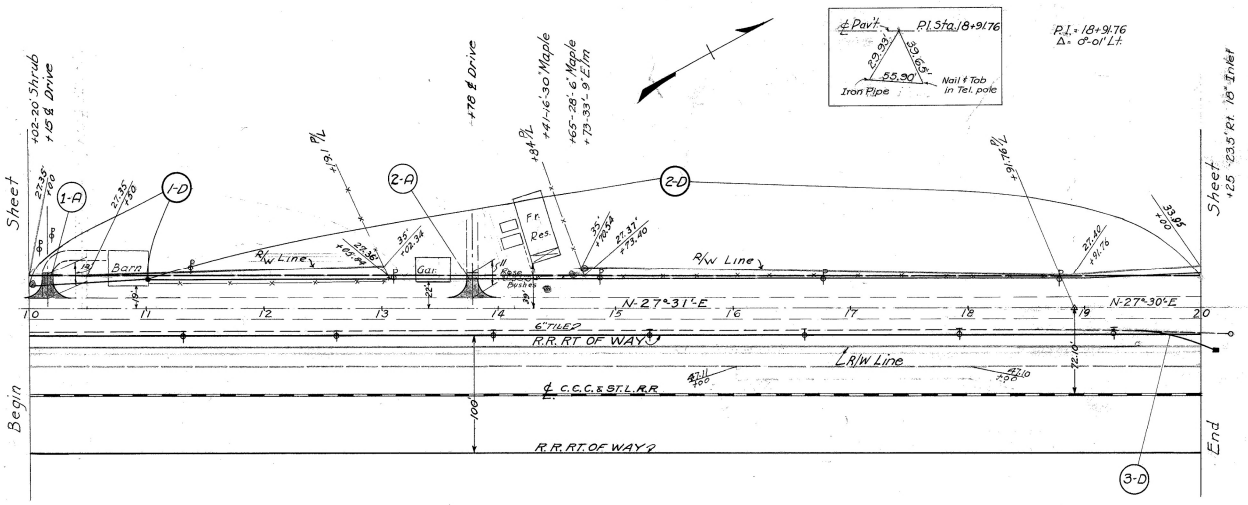
STA 0+00 to STA. 10+00

DIVISION 2 | TYPE FUNDS 16 | POST WAR 103

OHIO F-558(11)

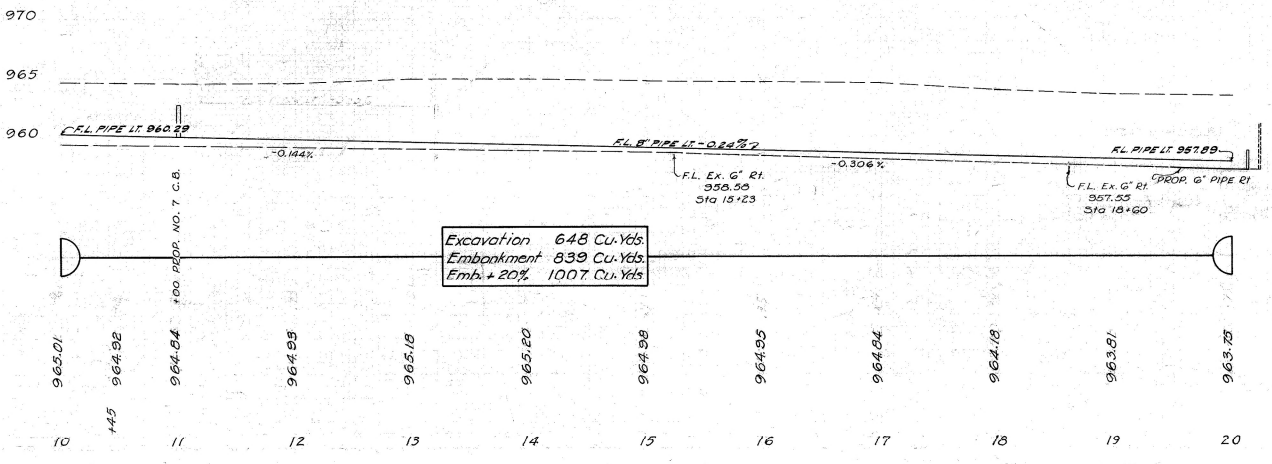
DEL.-42(12.21-18.72)

MRW.-42(0.00-1.11)



ROADWAY DRAINAGE											
REF. NO.	STATION		I-3 Pipe Lin. Ft.		I-3 Pipe Under Drives Lin. Ft.	E-18 Rem't Disp. Ex. Pipe Lin. Ft.	L-10 Sodding	I-8 Catch Basin No. 7		REMARKS
	FROM	TO	6"	8"	8"	6"	Sq. Yds.	Each		
1-D	10+00	11+00		75	24					Connect to #7 C.B.
2-D	11+00	20+00		875	24		5	1		At #7 C.B.
3-D	19+50	20+00	56'			50				Connect to Ex. 6" tile
TOTALS			56	950	48	50	5	1		

DRIVES AND APPROACHES					
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick		
			Sq. Yds.		
1-A	10+15	Lt.	26		
2-A	13+78	Lt.	23		
TOTALS			49		

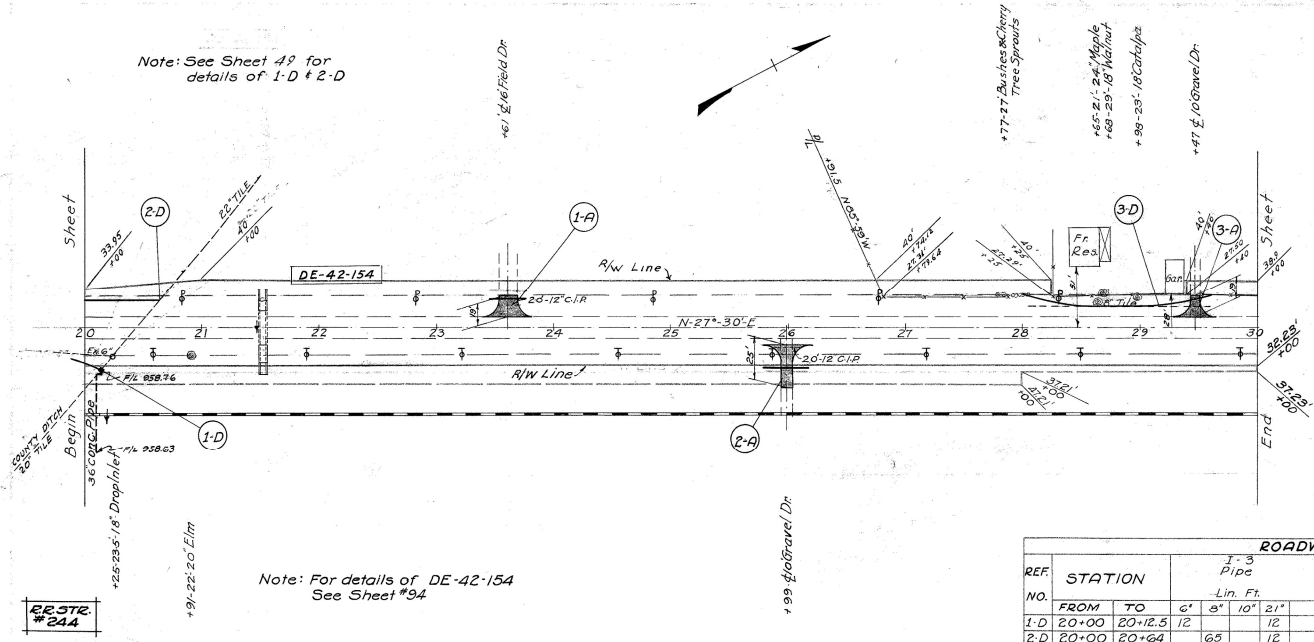


STA. 10+00 to STA. 20+00

DIVISION 2 OHIO F-558 (11)

TYPE FUNDS 17
POST WAR 105

DEL-42(12.21-18.72)
MRW-42(0.00-1.11)



Note: For details of DE-42-154 See Sheet #94

B.R. STR. #244

B.M.# Sta 20+11 +Cut Top West End 36" Conc. Pipe 40' Rt. Elev. 961.94

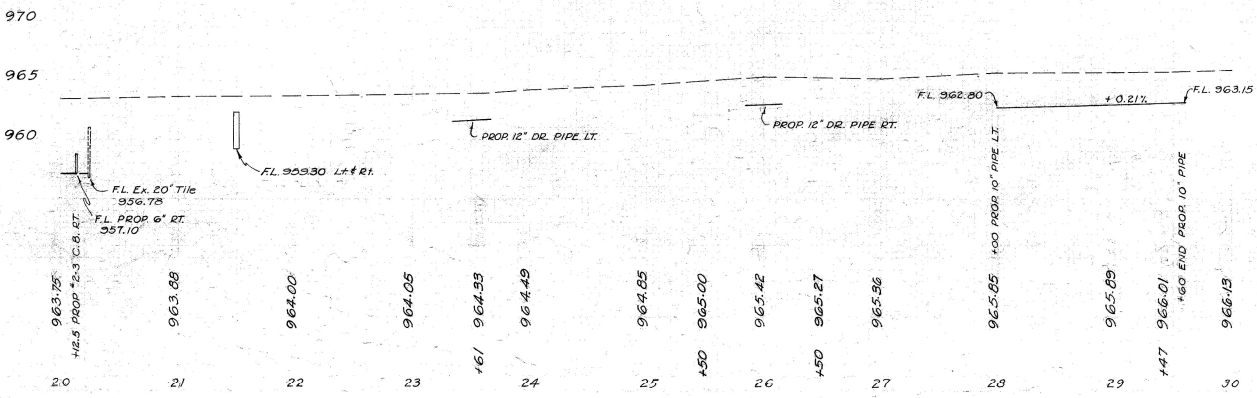
STRUCTURES – 20' SPAN AND UNDER										
STRUCTURE No.	STATION	PRESENT STRUCTURE				PROPOSED STRUC.			SHEET No.	REMARKS
		TYPE	SIZE	LENGTH	DISPOSITION	TYPE	SIZE	LENGTH		
DE-42-154	21+51.65	S.B.C.	5'-3"	28.1'	EXTEND	S.B.C.	5'-3"	19.5' Ct. Ea. Bk. & Ft.	94	

DRIVES AND APPROACHES							
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick	E-12 Pipe Rem. & Dispose 12"	I-1 Pipe For Driveways. 12"	L-10 Sodding	
			Sq. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.	
1-A	23+61	Lt.	43	20	32	10	
2-A	25+99	Rt.	39	20	40	10	
3-A	29+47	Lt.	32				
TOTALS			114	40	72	20	

ROADWAY DRAINAGE																		
REF. NO.	STATION		I-3 Pipe Lin. Ft.				I-3 Pipe Under Drives Lin. Ft.		E-12 Pipe Removed & Disposed of Lin. Ft.				I-8 Catch Basins #C-3"	I-16 Inlets Abandoned	I-5 Pipe Special for I-3 Pipe (2) on a "Y"	L-10 Sodding		REMARKS
	FROM	TO	6"	8"	10"	21"	10"		6"	8"	20"	22"	Each	Each	Each	Sq. Yds.		
1-D	20+00	20+12.5	12			12			24		12		1	1		5		Connect 12" 12' to C.B. - Prop. 21' to Ex. 20"
2-D	20+00	20+64		65		12						12			1			Connect 8" 12' to C.B. - Prop. 21' to Ex. 20"
3-D	28+00	29+60			144		20			151						10		Connect 8" to Pipe Special - Prop. 21' to Sq. 12"
																		See Sheet #50
TOTALS			12	65	144	24	20		24	151	12	12	1	1	1	15		

REMOVAL OF TREES & STUMPS			
STATION	SIDE	SIZE & KIND	No.
20+91	Rt.	20" Elm	1
		TOTAL	1

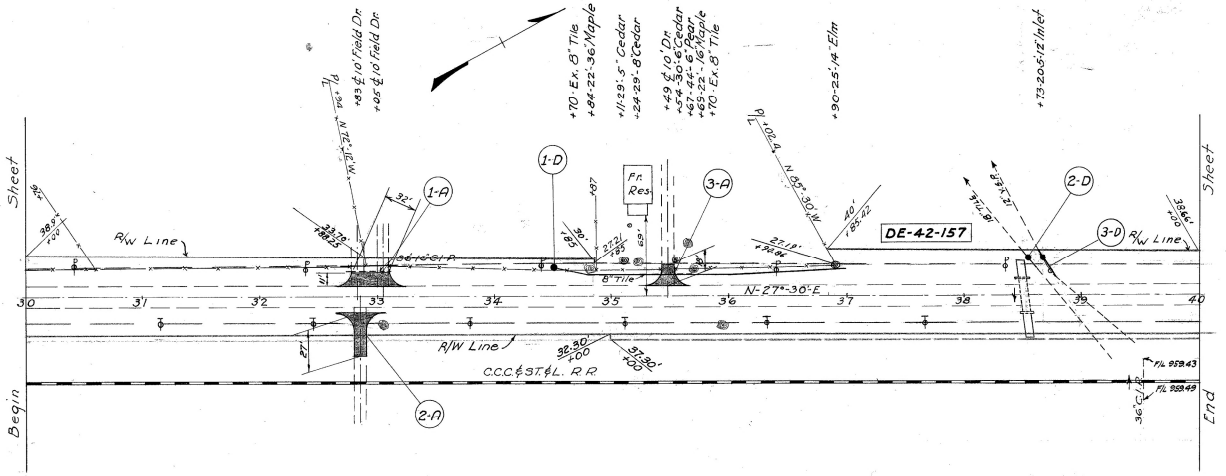
Excavation	846 Cu. Yds.
Embankment	1017 Cu. Yds.
Emb. +20%	1220 Cu. Yds.



STA. 20+00 to STA. 30+00

DIVISION 2 OHIO F-558(11) TYPE FUNDS 18 POST YEAR 108

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



Note: For Details of Str. DE-42-157
See Sheet #95

R.R. STR. #243

B.M. Sta. 39+53
54' Rt. (+)Cut in W. End
of 36" C.I.P. R.R. Culvert
Elev. 962.51

STRUCTURES – 20' SPAN AND UNDER

STRUCTURE Nº	STATION	PRESENT STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STRUC. TYPE	SIZE	LENGTH	SHEET Nº	REMARKS
DE-42-157	38+51.04	S.B.C	4'×2'	30.15'	Extend	S.B.C	4'×2'	181'-7"+ 23' 20'-1"+ Ext.	95	

ROADWAY DRAINAGE

REF. NO.	STATION FROM	STATION TO	I-3 Pipe Lin. Ft. 8"	18"	12"	I-3 Pipe Under Drives Lin. Ft. 8"	E-12 Pipe Removed & Disposed of Lin. Ft. 8"	18"	12"	I-8 Catch Basins No. 7 Each	L-10 Sodding Sq. Yds.	I-16 Inlets Abandoned Each	REMARKS
1-D	34+50	37+00	230			20	90			1	10		Connect to #7
2-D	38+56				12				12	1	5		Connect to #7
3-D	38+65				18				20	1		1	Connect to #7
TOTALS			230	12	18	20	90	12	20	3	15	1	

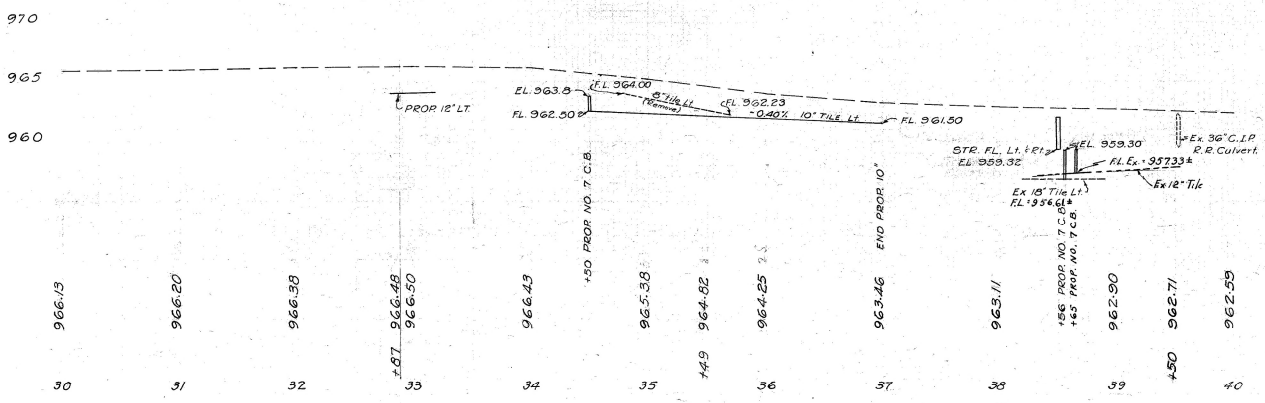
DRIVES AND APPROACHES

REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick Sq. Yds.	I-1 Pipe for Driveway 12" Lin. Ft.	E-12 Pipe Rem. & Disposed 12" Lin. Ft.	I-10 Sodding Sq. Yds.		
1-A	33+83 33+05	Lt.	50	48	36	10		
2-A	32+87	Rt.	41					
3-A	35+40	Lt.	31					
TOTALS			122	48	36	10		

REMOVAL OF TREES & STUMPS

STATION	SIDE	SIZE & KIND	NO.
35+95	Rt.	36" Elm	1
TOTAL			1

Excavation 515 Cu. Yds.
Embankment 857 Cu. Yds.
Emb. +20% 1028 Cu. Yds.

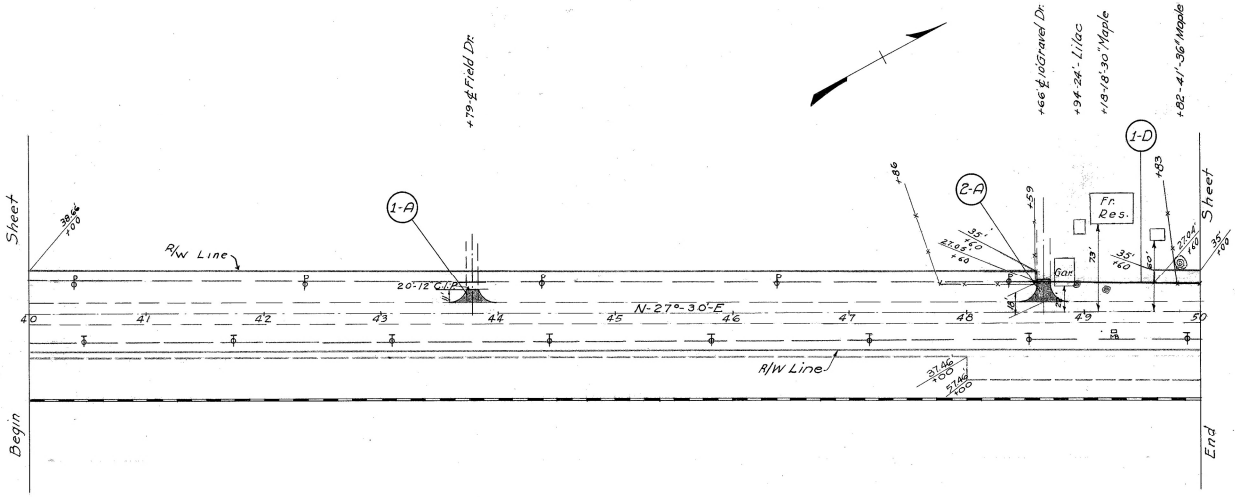


STA. 30+00 to STA. 40+00

DIVISION 2 OHIO F-558(11)

TYPE FUNDS 19 POST WAR 108

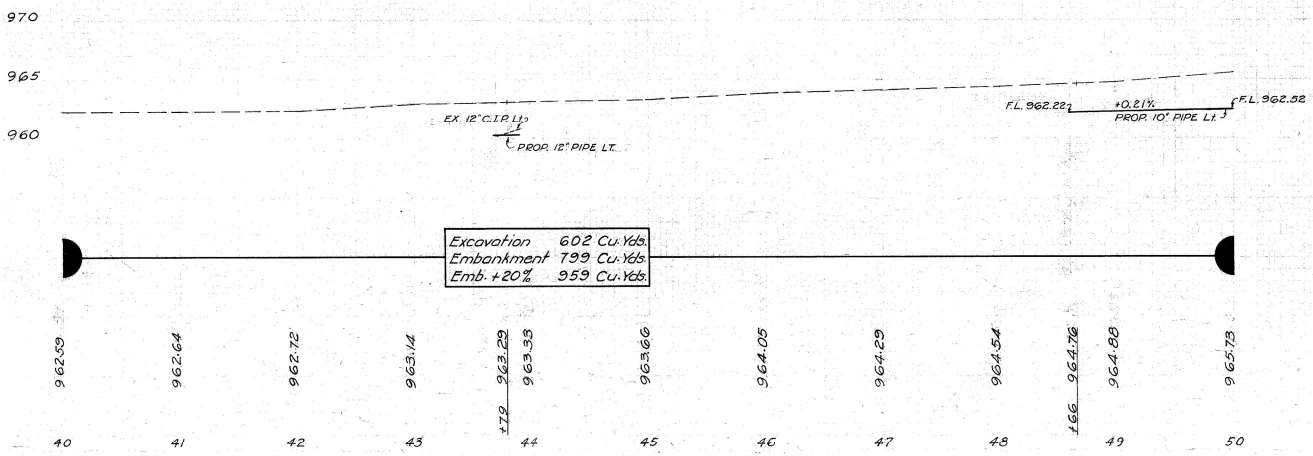
DEL.42-(12.21-18.72)
MRW-42(0.00-1.11)



ROADWAY DRAINAGE								
REF. NO.	STATION		I-3 Pipe Lin. Ft.	I-3 Pipe For Driveways Lin. Ft.	L-10 Sodding			REMARKS
	FROM	TO	10"	10"	Sq. Yds.			
1-D	48+58	50+00	107	35	5			
TOTALS			107	35	5			

DRIVES AND APPROACHES								
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick	I-1 Pipe For Driveways 12"	E-12 Pipe Rem. & Disposed 12"	L-10 Sodding		
			Sq. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.		
1-A	43+79	Lt.	23	24	20	10		
2-A	48+66	Lt.	31					
TOTALS			54	24	20	10		

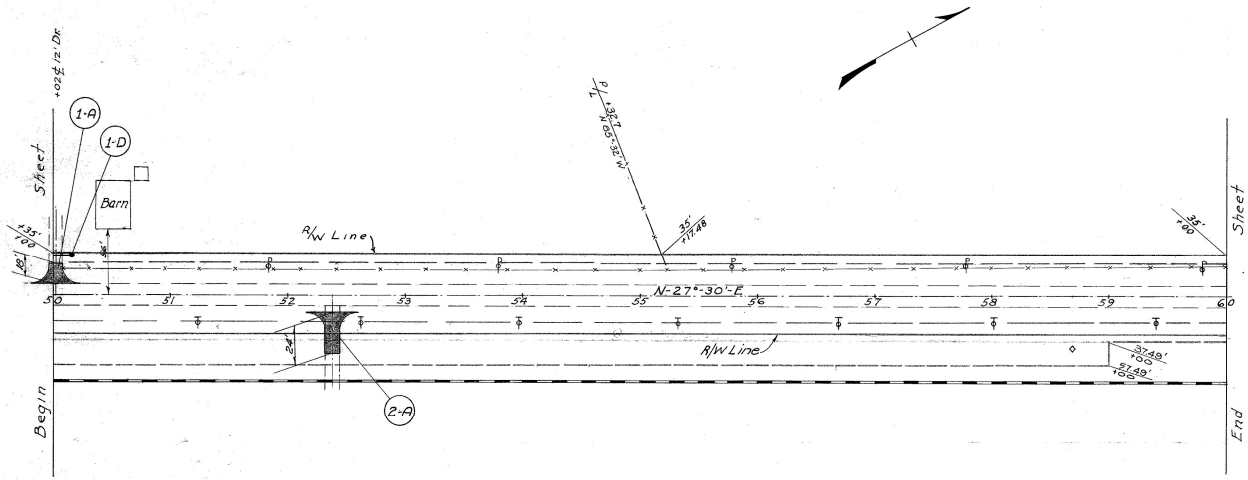
REMOVAL OF TREES & STUMPS			
STATION	SIDE	SIZE & KIND	No.
49+81	Lt.	24" Stump	1
		TOTAL	1



STA 40+00 to STA. 50+00

DIVISION 2 OHIO F-558(11) TYPE FUNDS 20 POST WAR 105

DEL.-42 (12.21-18.57)
MRW.-42-(0.00-1.11)



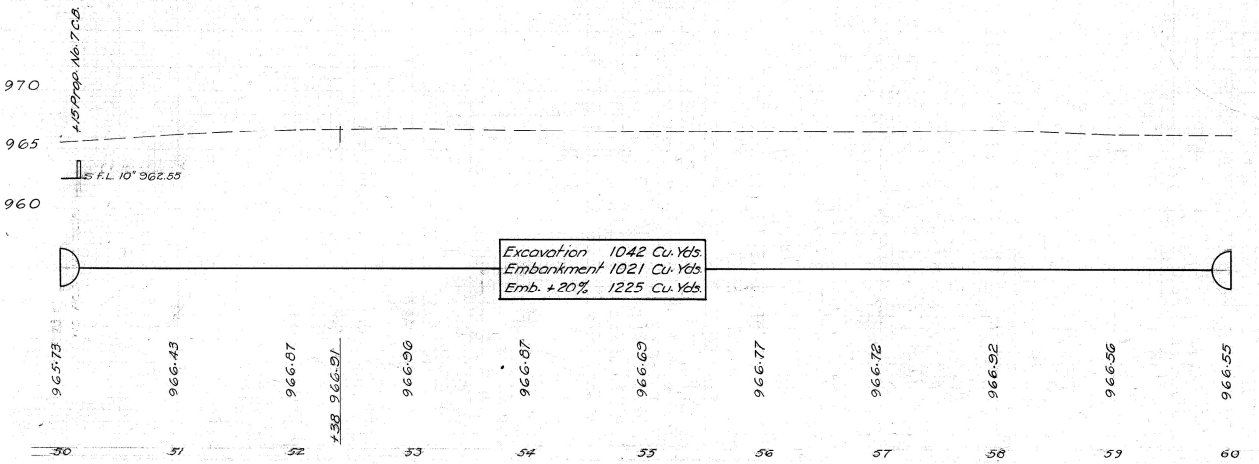
ROADWAY					DRAINAGE			
REF. NO.	STATION		I-3 Pipe for Driveways Lin. Ft.		I-8 Catch Basins No. 7	L-10 Sodding		REMARKS
	FROM	TO	10"		Each	Sq. Yds.		
1-D	50+00	50+15	14		1	5		Connect 10" Pipe to # 7 C.B.
TOTALS			14		1	5		

DRIVES AND APPROACHES						
REF. NO.	STATION	SIDE	I-17 Aggregate 6" Thick			
			Sq. Yds.			
1-A	50+02	Lt.	31			
2-A	52+38	Rt.	43			
TOTALS			74			

+38 ℄ 12' Field Dr.

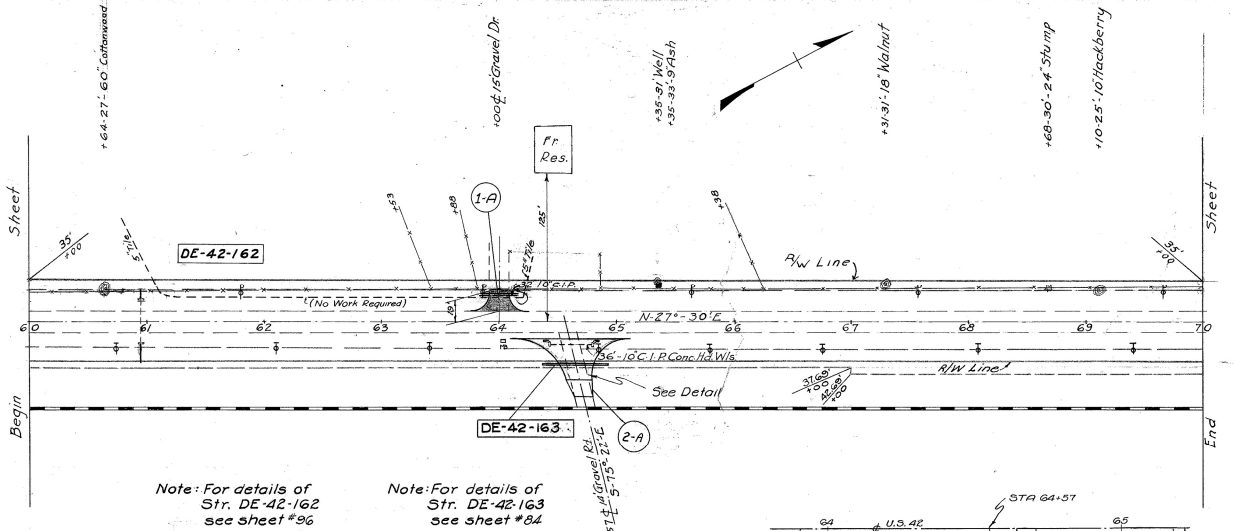
+68-44 2.2 Mile Post

B.M. Sta. 50+59
Top of Hinge Bolt on
Barn Door 56' Lt.
Elev. 966.07

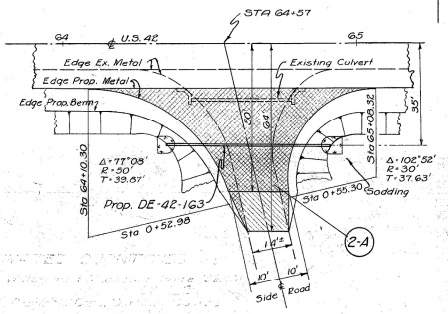


STA. 50+00 to STA. 60+00

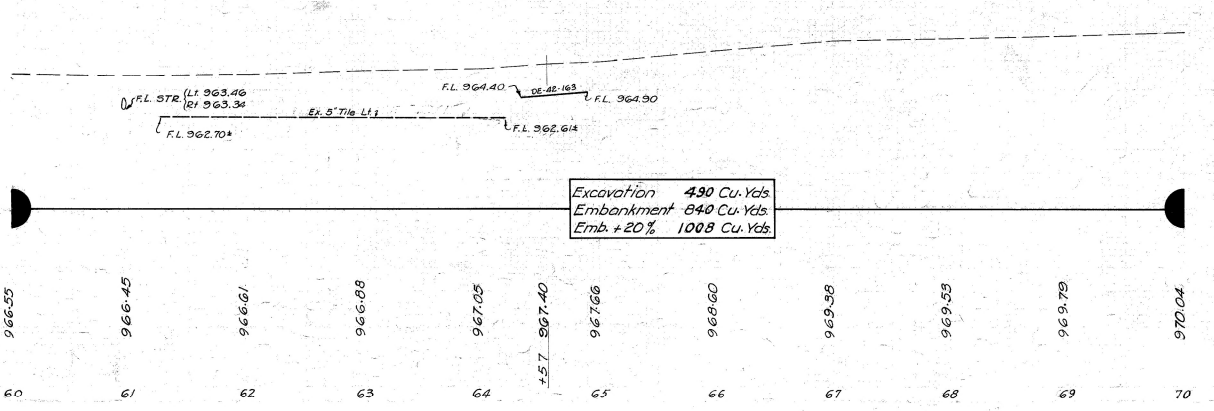
DIVISION 2 OHIO F-558 (11)
TYPE FUNDS 21
POST WAR 103
DEL.-42(12.21-18.57
MRW-42(0.00-1.11)



B.M. Sta 64+00
Top of door bolt on S.E. Corner of garage 149' Left.
Elev. 969.30



2"-T-35 Asp. Conc. Surface 2"-T-35 on 5"-B-20 Base



Excavation	490 Cu. Yds.
Embankment	840 Cu. Yds.
Emb. +20%	1008 Cu. Yds.

STA 60+00 to STA. 70+00

STRUCTURES - 20' SPAN AND UNDER

STRUCTURE No.	STATION	PRESENT STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STRUC. TYPE	SIZE	LENGTH	SHEET No.	REMARKS
DE-42-162	60+93.8	Pipe	12"	36.57'	Extend	Pipe	12"	61'-10"	96	
DE-42-163	64+57.0	Pipe	10"	36.00'	Remove	Pipe	12"	60'	84	

DRIVES AND APPROACHES

REF. NO.	STATION	SIDE	1-17 Aggregate 6" thick	1-1 Pipe For Driveways 10"	2'-12 Pipe Rem. & Disposed 10"	1-10 Sodding	7-35 Asphaltic Conc. Surface Course	B-20 5" W.B. Macadam Base Course
			Sq. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.	Cu. Yds.	Sq. Yds.
1-A	64+00	Lt.	42	32	32	10		
2-A	64+57	Rt.					9.63	168.33
TOTALS			42	32	32	10	9.63	168.33

REMOVAL OF TREES & STUMPS

STATION	SIDE	SIZE & KIND	No.
68+68	Lt.	24" Stump	1
69+10	Lt.	12" Hackberry	1
60+64	Lt.	60" Cottonwood	1
		TOTAL	3

DIVISION 2 | TYPE FUNDS FOAP WAR | 22 108

OHIO F-558(11)

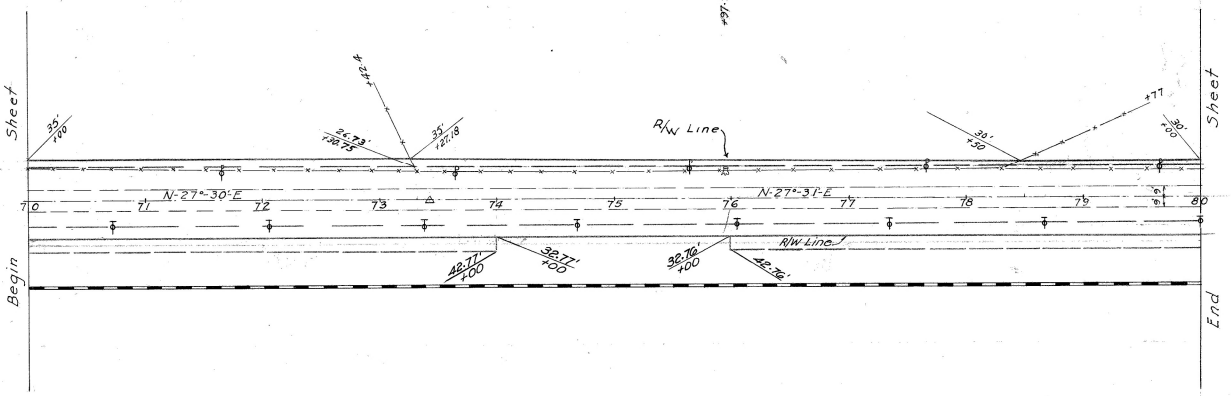
DEL.-42(12.21-18.72)
MRW.-42(000-1.11)

Nail & Tab in Power Pole
P.I. Sta 73+42.47
Nail & Tab
Nail & Tab in Tel. Pole

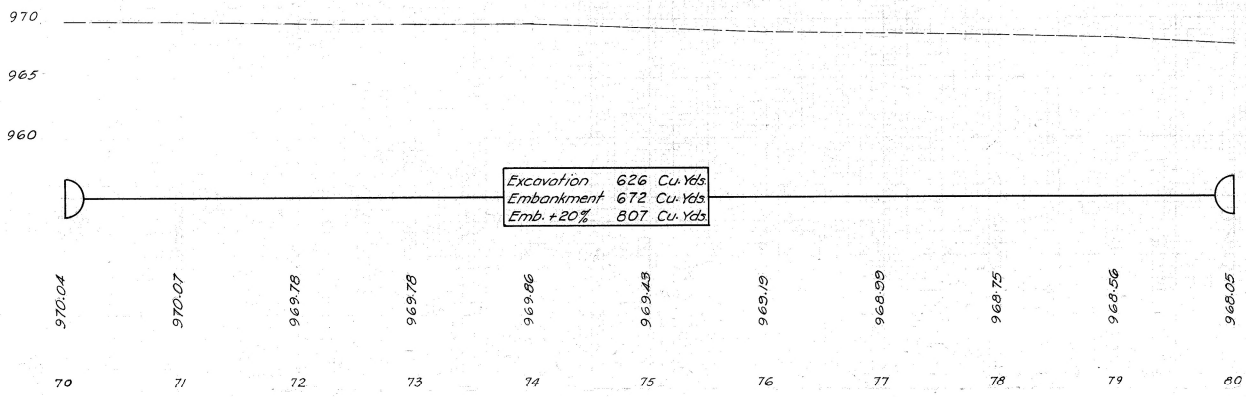
PI = 73+42.47
Δ = 00°-01' Rt.

+97.24-24" Stump

REMOVAL OF TREES & STUMPS			
STATION	SIDE	SIZE & KIND	NO.
75+97	Lt.	24" Stump	1
		TOTAL	1



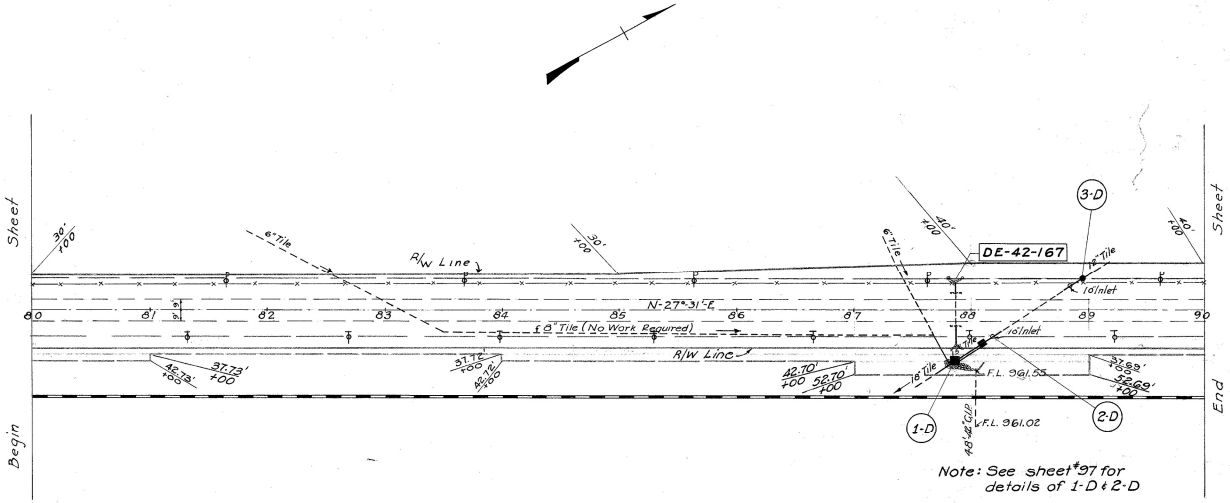
BM Sta. 77+44
Spike in Tel. Pole -110' Rt.
Elev. 968.61'



STA. 70+00 to STA. 80+00

DIVISION 2 OHIO F-558 (11) DEL.-42 (12.21 - 18.72) M.R.W.-42 (0.00 - 1.11)

TYPE FUNDS 23 POST WAR 105



Note: See sheet #97 for details of 1-D & 2-D

STRUCTURES — 20' SPAN AND UNDER

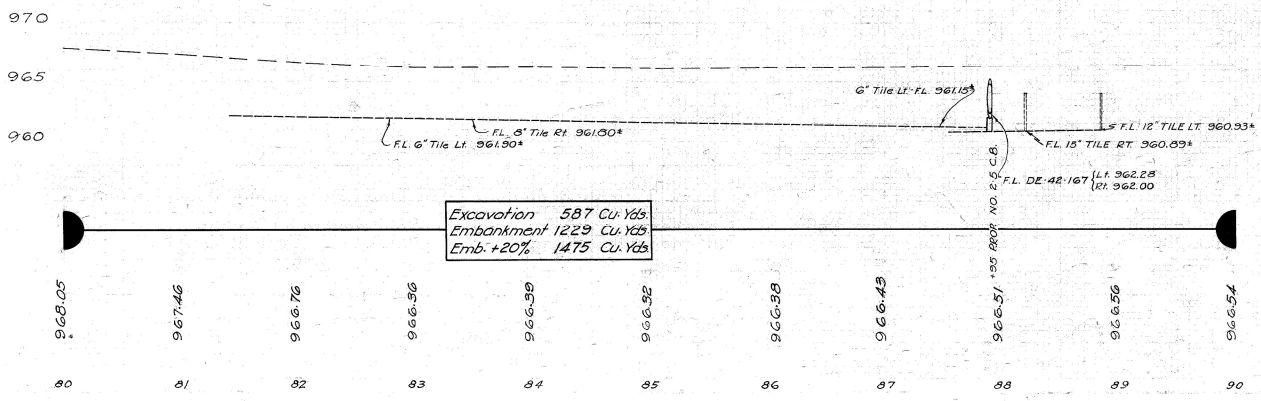
STRUCTURE Nº	STATION	PRESENT STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STRUC. TYPE	SIZE	LENGTH	SHEET Nº	REMARKS
DE-42-167	87+87.3	Pipe	36"	28'-0"	Extend	Pipe	36"	8'-0" Lt. 12'-0" Rt.	97	Special ditch on Rt.

Note: For details of Str. DE-42-167 see sheet #97

B.M. Sta 88+03 (+) Cut in west end of 42" C.I.P. R.R. Culvert #242 50' Rt. Elev. 965.42

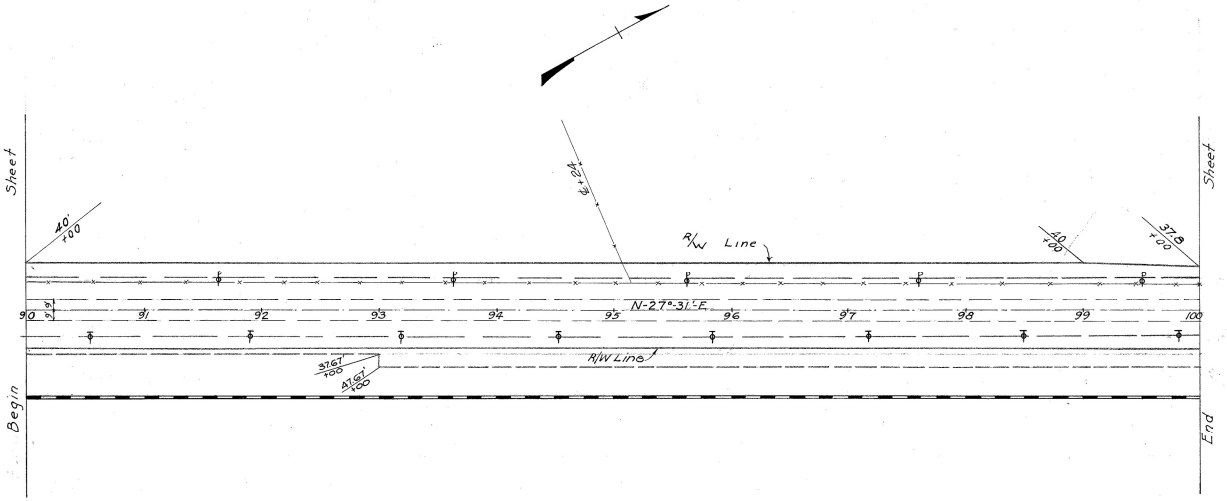
ROADWAY DRAINAGE

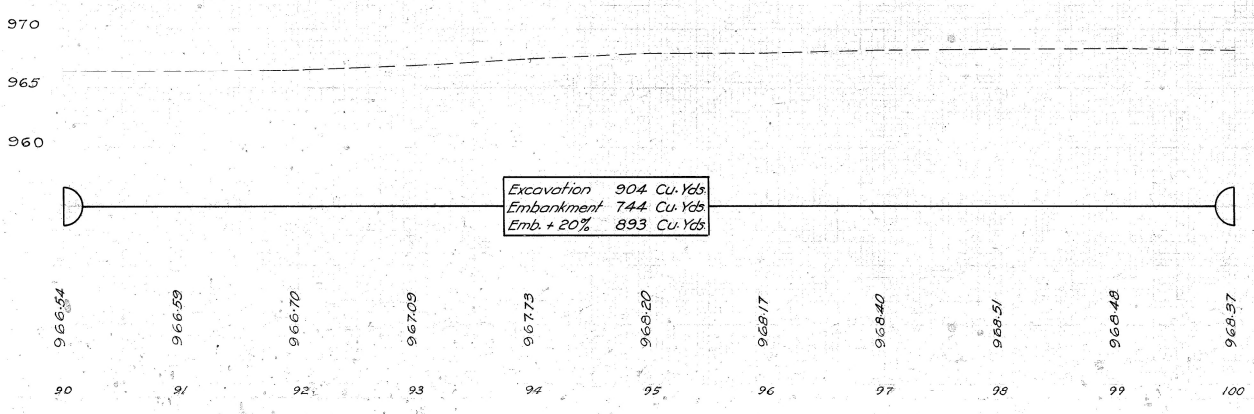
REF. NO.	STATION FROM	STATION TO	I-3 Pipe Lin. Ft. 8"	10"	12"	15"	E-12 Pipe Removed & Disposed of Lin. Ft. 8"	12"	15"	18"	I-8 Catch Basins Each 7	2-3*	2-5	I-5 Pipe Spec. for I-3 Pipe 8"-45° Bend Each	L-10 Sodding Sq. Yds.	I-16 Inlets Abandoned Each	REMARKS
1-D	87+68	87+87	24			12	26			20			1	1			Connect Prop 8" to Ex. 8"-Prop 8"-18" to 2-5-Prop 18" to Ex. 18"
2-D	87+87	88+09		48	16			8	30			1		1	5	1	Connect 10" Pipes to I-3 & 2-5-Prop 12 to Ex. 12"
3-D	88+95				12			12			1				5	1	Connect to "T.C.B. & Ex. 12" Pipe
TOTALS			24	48	28	12	26	20	30	20	1	1	1	1	10	2	



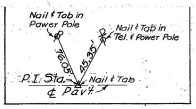
STA. 80+00 to STA. 90+00

DIVISION 2 OHIO F-558(11)
TYPE FUNDS POST WAR 2.4 108
DEL.-42(12.21-18.72)
M.R.W.-42(0.00-1.11)





STA. 90+00 to STA. 100+00



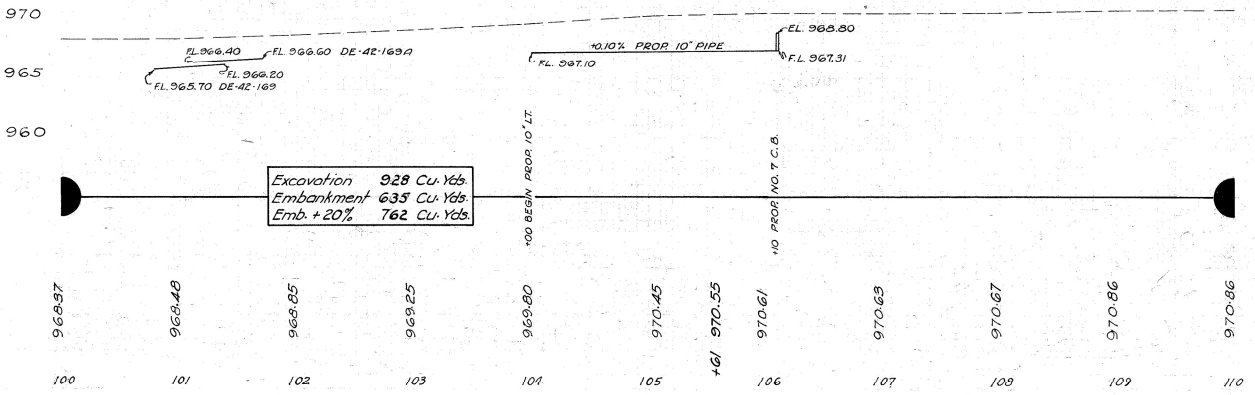
STATION EQUATION

P.I. Sta. 101+22.85 Back
= P.I. Sta. 101+25.42 Ahead
Δ = 0°01' Lt.
Deduct 2.57 Lin. Ft.

Note: For details of Str. DE-42-169 see sheet #85

Note: For details of Str. DE-42-169A see sheet #85

BM	Sta. 101 +37
+Cut, Top of West End Conc. Headwall - 21' Left	
Elev.	968.22



Excavation	928 Cu. Yds.
Embankment	635 Cu. Yds.
Emb. +20%	762 Cu. Yds.

DIVISION 2 OHIO F-558 (11)
TYPE FUNDS POST WAR 25 103

DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)

STRUCTURES ~ 20' SPAN AND UNDER

STRUC. NO.	STATION	EXISTING STRUCTURE				PROPOSED STRUC.			SHEET NO.	REMARKS
		TYPE	SIZE	LENGTH	DISPOSITION	TYPE	SIZE	LENGTH		
DE-42-169	101+25.42	Pipe	10"	36'0"	Remove	Pipe	12"	56'-0"	85	Lt. of ℄
DE-42-169A	101+25.42	Pipe	10"	34'0"	Remove	Pipe	12"	60'-0"	85	Rt. of ℄

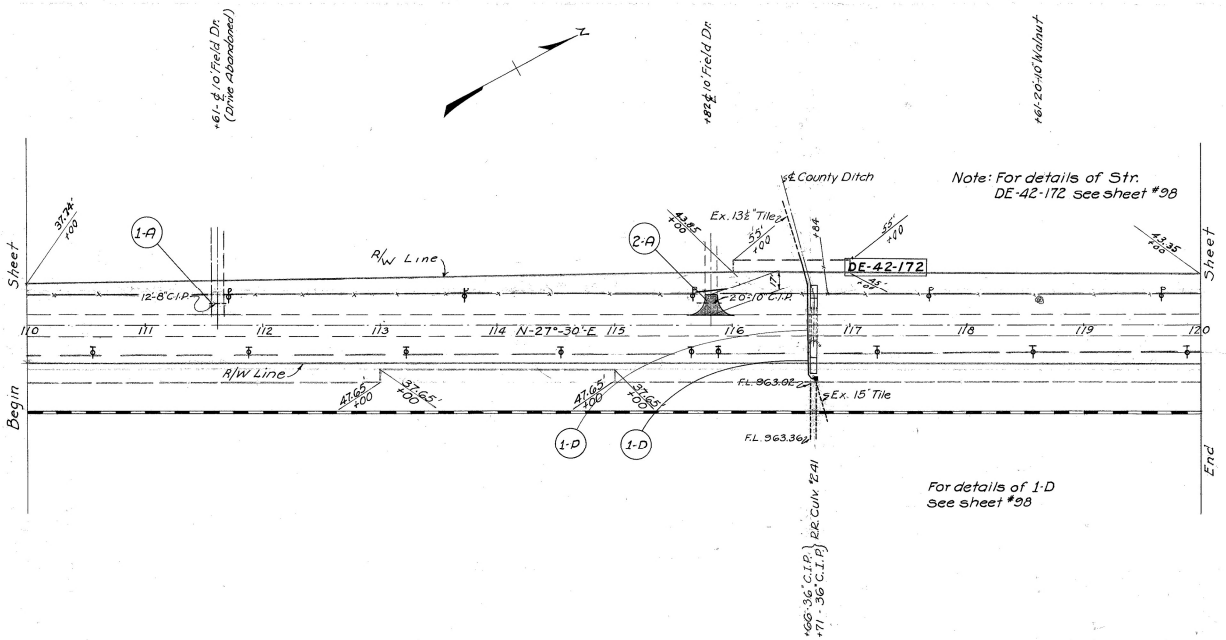
ROADWAY DRAINAGE

REF. NO.	STATION FROM	STATION TO	I-3 Pipe 10" Lin. Ft.	I-3 Pipe for Driveways 10" Lin. Ft.	I-8 Catch Basins No. 7 Each	L-10 Sodding Sq. Yds.			REMARKS
1-D	104+00	106+10	185	24	1	10			Connect Prop. 10" Pipe to #7
TOTALS			185	24	1	10			

DRIVES AND APPROACHES

REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick Sq. Yds.		
1-A	105+61	Lt.	31		
TOTALS			31		

STA. 100+00 to STA. 110+00



B.M. Sta 116+71
(+) Cut in top of west end of 36' C.I.P. 48' Left. North Pipe.
Elev. 966.01

REMOVAL OF TREES & STUMPS			
STATION	SIDE	SIZE & KIND	No
118+61	Lt.	12" Walnut	1
		TOTAL	1

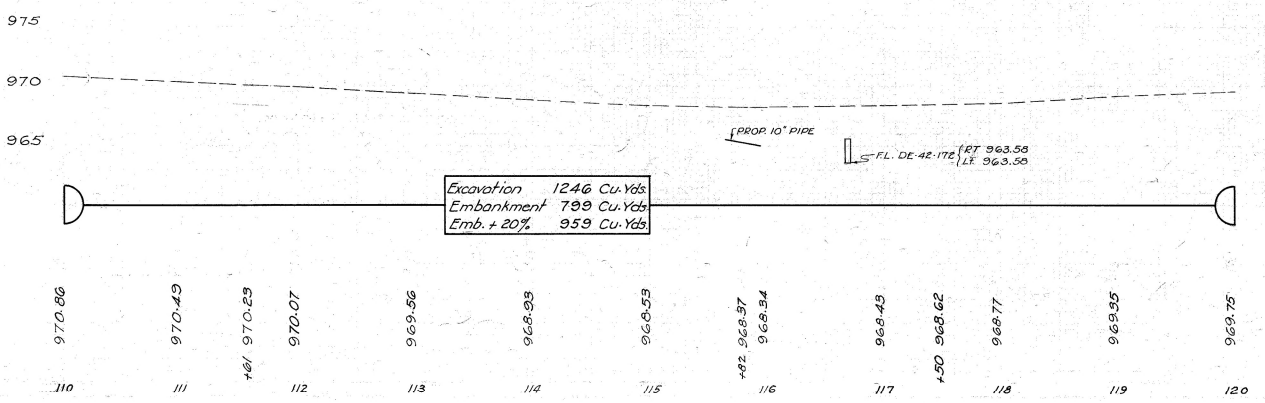
DIVISION 2 OHIO F-558 (11)
DEL.-42 (12.21-18.72)
MRW-42(0.00.-1.11)
TYPE FUNDS POST WAR 26 105

STRUCTURES - 20' SPAN AND UNDER										
STRUCTURE No.	STATION	PRESENT STRUCTURE				PROPOSED STRUC.			SHEET No.	REMARKS
		TYPE	SIZE	LENGTH	DISPOSITION	TYPE	SIZE	LENGTH		
DE-42-172	116+69.60	S.B.C.	5'×3'	28.10'	Extend	S.B.C.	5'×3'	128'-8" Lt. 171'-3" Rt.	98	

ROADWAY DRAINAGE									
REF. NO.	STATION		I-2 Pipe Under Pavement 15"	E-12 Pipe Removed & Disposed of Lin. Ft.		I-15 Catch Basins 2-2B	I-3 Pipe Spec. for 1-2 Pipe 15"x90° bend		REMARKS
	FROM	TO	Lin. Ft.	13½"	15"	Each	Each		
1-D	116+57.5 Lt.	116+71 Rt.	108	84	28	1	1		Connect to Ex. on Lt - to 2-2B on Rt.
TOTALS			108	84	28	1	1		

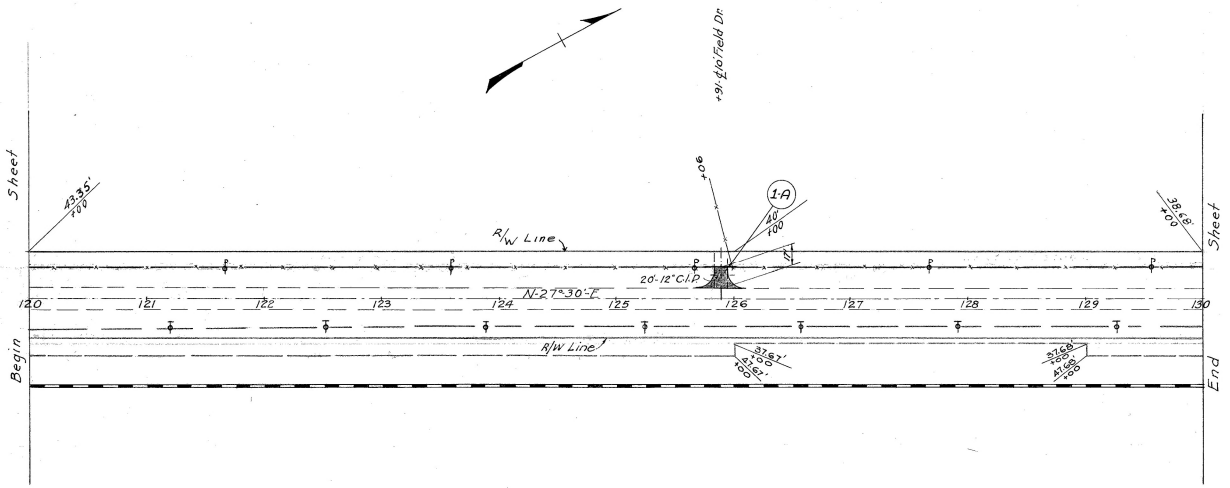
DRIVES AND APPROACHES								
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick	I-1 Pipe For Driveways 10"	E-12 Pipe Rem & Disposed Lin. Ft.		L-10 Sodding	
			Sq. Yds.	Lin. Ft.	8"	10"	Sq. Yds.	
1-A	111+61	Lt.			12			
2-A	115+82	Lt.	31	26		20	10	
TOTALS			31	26	12	20	10	

EXTRA PAVEMENT						
REF. NO.	STATION		35-5 8" Classified Embank. Material	B-20 5" Wat'bnd Mac. Base	B-35 3" Asphalt Conc. Base Course	E-8 Remove & Dispose Ex. Pav't.
	FROM	TO	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.
1-P	116+65		10	10	10	10
TOTALS			10	10	10	10

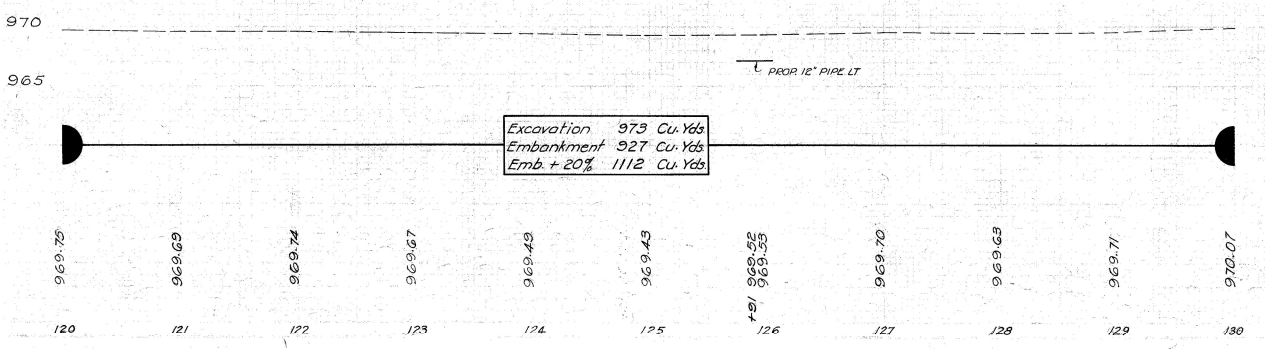


STA. 110+00 to STA. 120+00

DIVISION 2 OHIO F-558 (11)
TYPE FUNDS POST WAR 27 105
DEL.-42 (12.21 - 18.72
M.R.W.-42 (0.00 - 1.11)



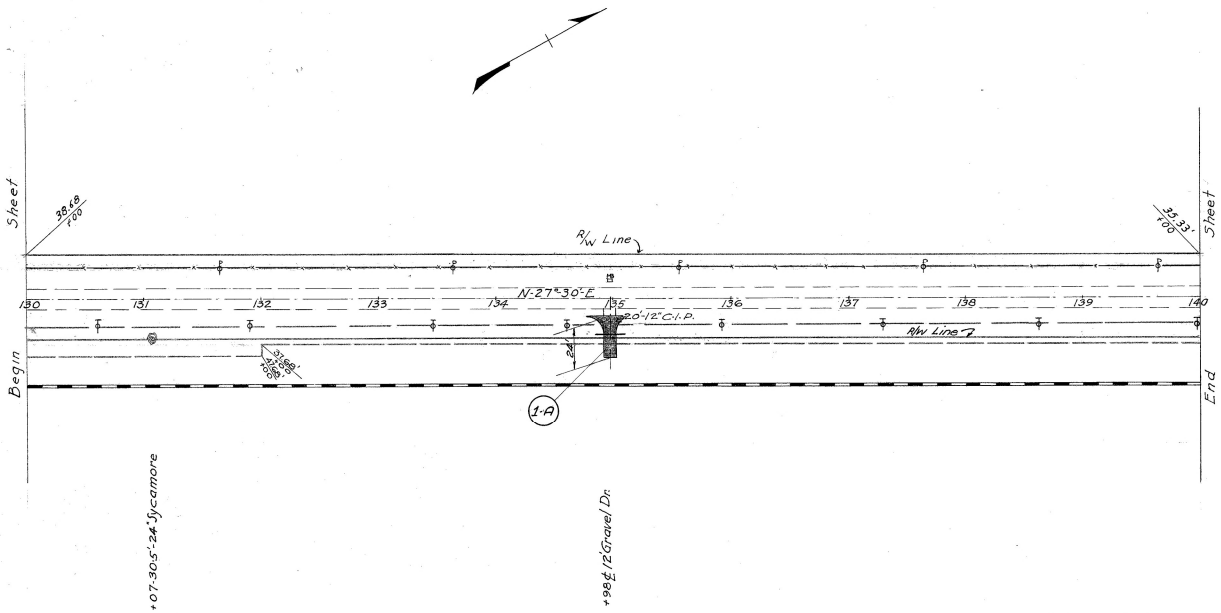
DRIVES AND APPROACHES							
REF. NO.	STATION	SIDE	1-17 Aggregate 6" thick	1-1 Pipe For Driveways 12"	E-12 Pipe Rem. & Disposed 12"	L-10 Sodding	
			Sq. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.	
1-A	125+91	Lt.	31	26	20	10	
TOTALS			31	26	20	10	



STA. 120+00 to STA. 130+00

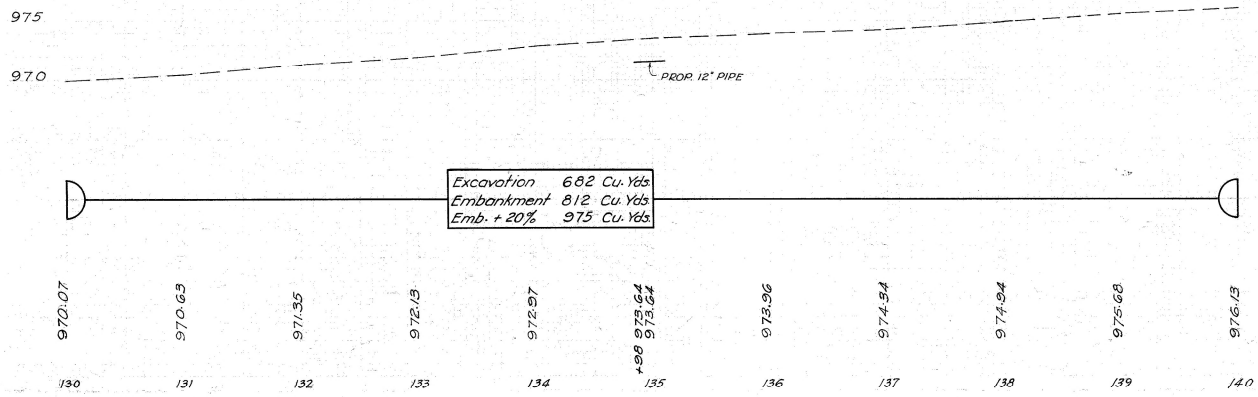
DIVISION 2 OHIO F-558(11) TYPE FUNDS 28 POST WAR 103

DEL.-42 (12.2/-18.72)
MRW.-42 (0.00-1.11)



DRIVES AND APPROACHES							
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick	I-1 Pipe For Driveways 12"	E-12 Pipe Rem. & Disposed 12"	L-10 Sodding	
			Sq. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.	
1-A	134+98	Rt.	43	40	20	10	
TOTALS			43	40	20	10	

BM Sta. 131+02
R.R. Spike in S.W. root of 24" Sycamore 30' Rt.
Elev. 969.18

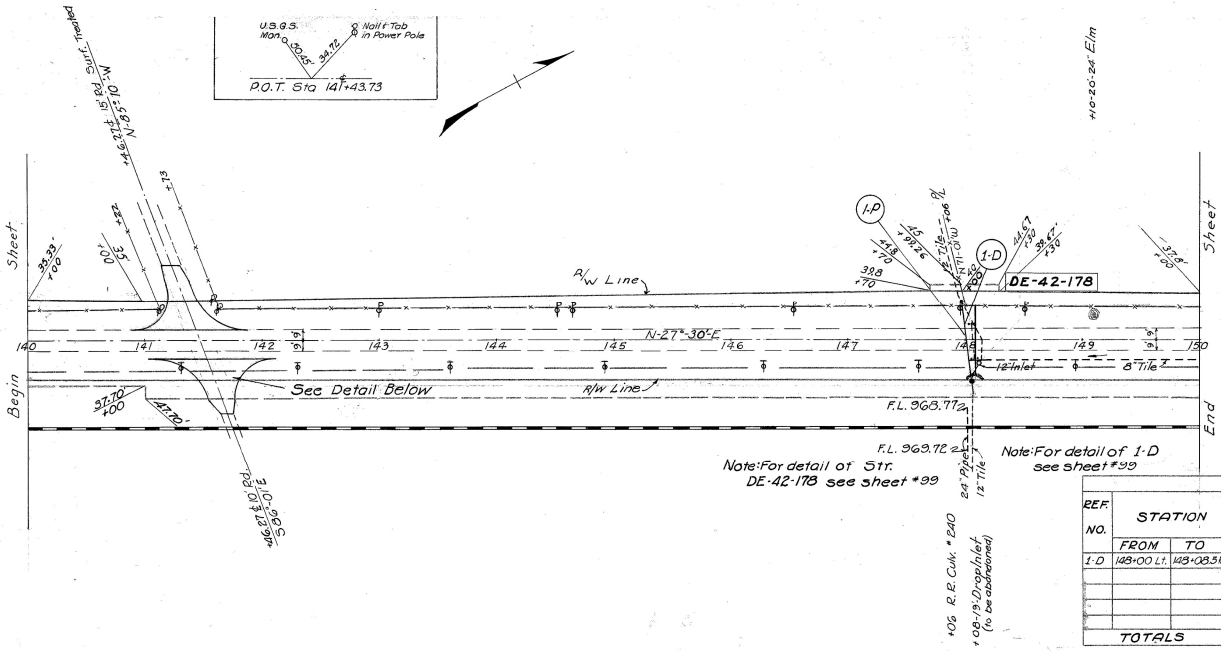


Excavation	682 Cu. Yds.
Embankment	812 Cu. Yds.
Emb. + 20%	975 Cu. Yds.

STA. 130+00 to STA. 140+00

DIVISION 2 OHIO F-55B (11) TYPE FUNDS POST WAR 29 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



STRUCTURES ~ 20' SPAN AND UNDER

STRUCTURE NO.	STATION	PRESENT STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STRUC. TYPE	SIZE	LENGTH	SHEET NO.	REMARKS
DE-42-178	148+08.5	Pipe with conc. hdwl.	20'	28.7'	Remove	Pipe	21"	2'	99	

APPROACHES & EXTRA PAVEMENT

REF. NO.	STATION FROM	STATION TO	T-35 Asphaltic Conc. Surf. Course Cu. Yds.	B-35 9"Agg. Conc. Lev. Course Sq. Yds.	B-20 5" W.B. Mac. Base Course Sq. Yds.	SS-5 8" Class Emb. Mat'l Sq. Yds.	E-8 Remove/Re. Ex. Pav't. Sq. Yds.
1-A	140+86.64	141+86.65	11.21		183.80		
2-A	141+09.12	142+09.48	9.91		172.27		
1-P	148+05.8			27.20	27.20	27.20	27.20
	TOTALS		21.12	27.20	383.27	27.20	27.20

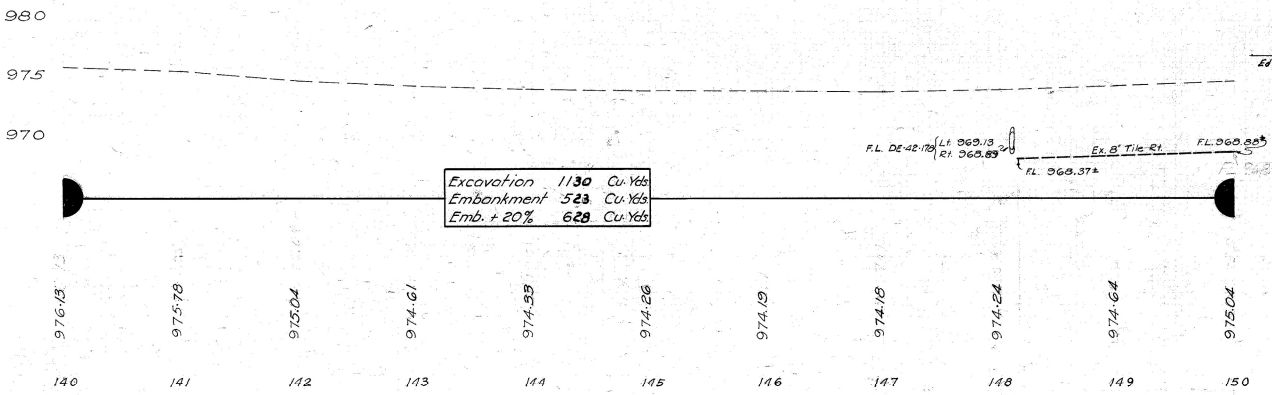
ROADWAY DRAINAGE

REF. NO.	STATION FROM	STATION TO	I-2 Pipe Under Pavement Lin. Ft. 12"	I-3 Pipe Lin. Ft. 8"	I-5 Pipe Spec. for I-E Pipe 12"x8" T Each	E-12 Pipe Removed & Disposed of Lin. Ft. 8"	E-12 Pipe Removed & Disposed of Lin. Ft. 12"	I-8 Catch Basins No. 7 Each	I-16 Inlets Abandoned Each	REMARKS
1-D	148+00 Lt.	148+08.5 Rt.	80	16	1	8	59	1	1	Connect to Ex. 12" on Lt. & No. 7 C.B. on Rt.
	TOTALS		80	16	1	8	59	1	1	

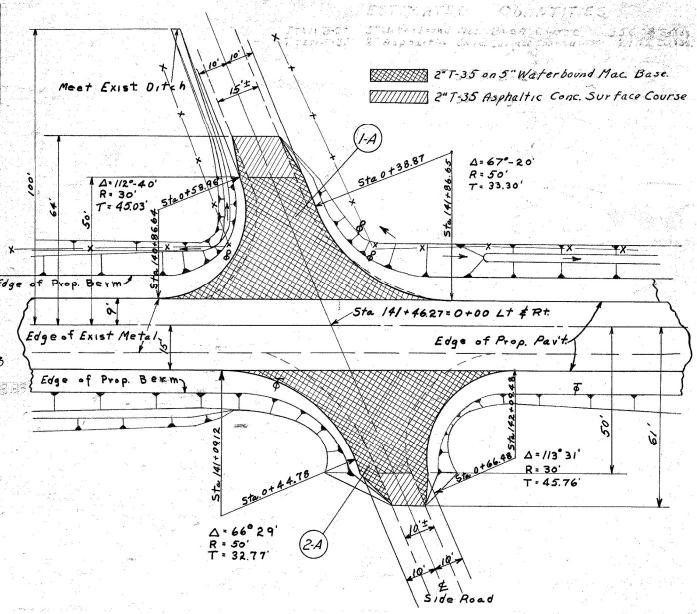
REMOVAL OF TREES & STUMPS

STATION	SIDE	SIZE & KIND	No.
149+10	Lt.	24" Elm.	1
		TOTAL	1

BM 141+09
USC&GS BM 34 Lt.
Elev. 976.58



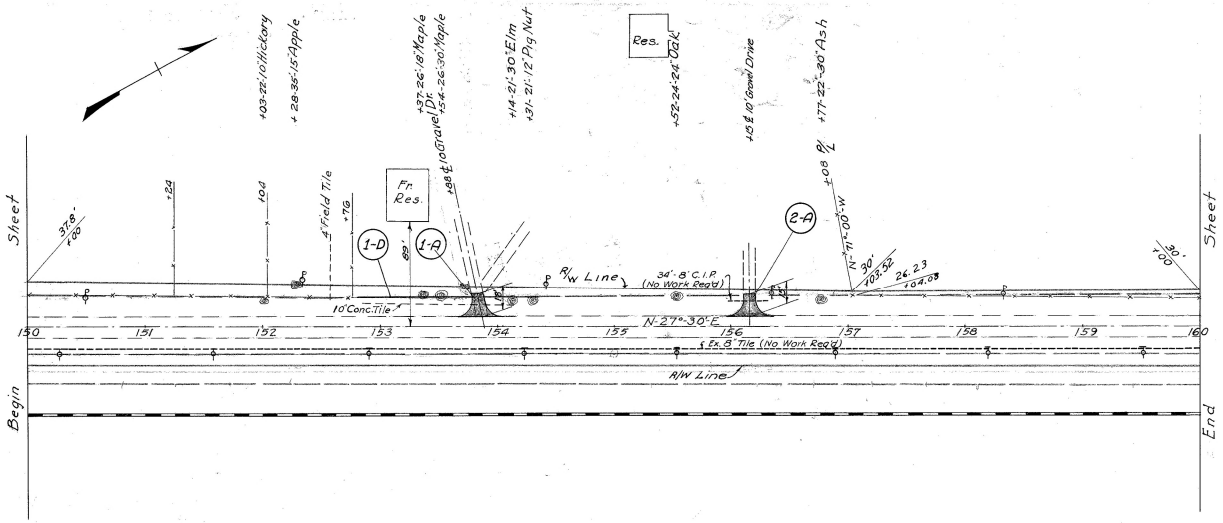
Excavation	1130	Cu. Yds.
Embankment	523	Cu. Yds.
Emb. + 20%	628	Cu. Yds.



STA. 140+00 to STA. 150+00

DIVISION 2 OHIO F-558(11) TYPE FUNDS 30 POST WAR 108

DEL.-42(12.21-18.72)
MRW.-42(0.00-1.11)



ROADWAY DRAINAGE

REF. NO.	STATION FROM	STATION TO	I-3 Pipe 10" Lin. Ft.	I-3 Pipe Under Driveways 10" Lin. Ft.	L-10 Sodding Sq. Yds.	REMARKS
1-D	152+80	154+35	130	25	10	Plug ends of Ex. 10" Conc. Pipe (Payment included in I-3)
		TOTALS	130	25	10	

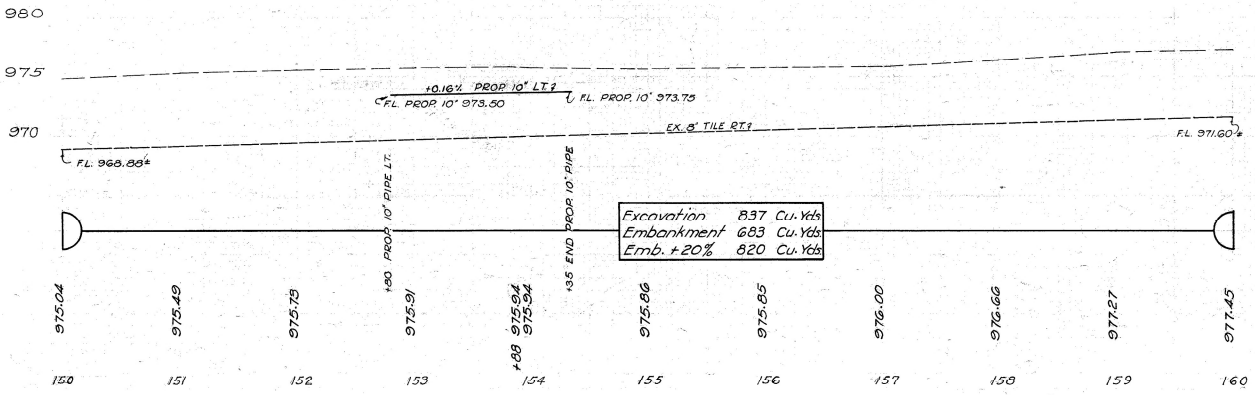
DRIVES AND APPROACHES

REF. NO.	STATION	SIDE	I-19 Aggregate 6" thick Sq. Yds.
1-A	153+88	Lt.	31
2-A	156+15	Lt.	27
	TOTALS		58

REMOVAL OF TREES & STUMPS

STATION	SIDE	SIZE & KIND	NO.
152+03	Lt.	12" Hickory	1
152+28	Lt.	15" Apple	1
153+37	Lt.	18" Maple	1
153+54	Lt.	30" Maple	1
154+12	Lt.	30" Elm	1
154+31	Lt.	12" Pig Nut	1
		Total	6

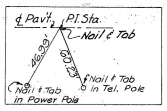
B.M. Sta 154+20
Conc. Nail in Power Pole
33' Left
Elev. 976.19



STA. 150+00 to STA. 160+00

DIVISION 2 OHIO F-558 (11)
TYPE FUNDS 31
POST WAR 108
DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)

EQUATION STATION
Sta 166+67.90 Ahead
= Sta 166+67.40 Back
Deduct 0.50 Lin. Ft.



Note: For details of Str. DE-42-182 see Sheet #100

STRUCTURES — 20' SPAN AND UNDER

STRUCTURE No.	STATION	PRESENT STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STRUC. TYPE	SIZE	LENGTH	SHEET No.	REMARKS
DE-42-182	167+55.3	Pipe	12"	30'-2"	Extend	Pipe	12"	32'-8" ± 16'-8" ±	100	

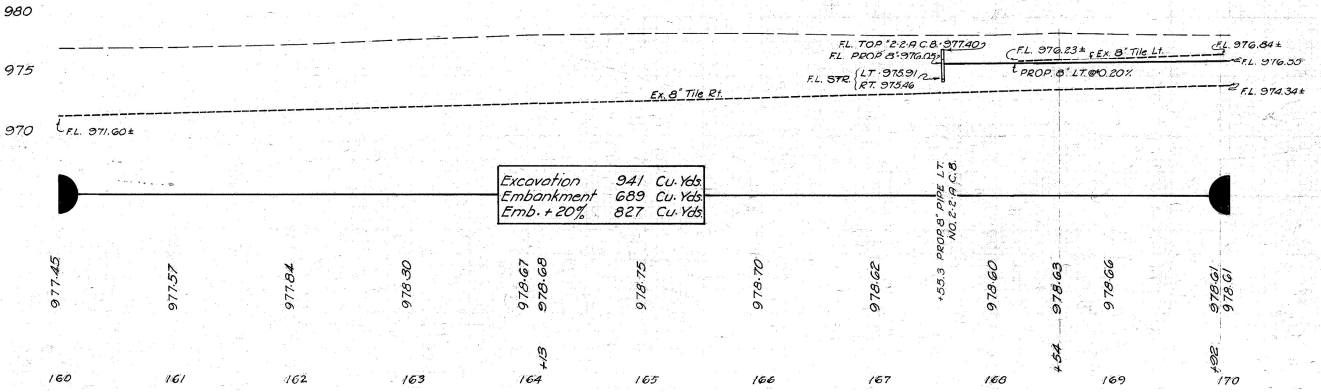
ROADWAY DRAINAGE

REF. NO.	STATION FROM	STATION TO	I-3 Pipe 6" Lin. Ft.	I-3 Pipe For Driveways 6" Lin. Ft.	E-12 Pipe Rem. & Disposed 8" Lin. Ft.			REMARKS
1-D	167+55.3	170+00	200	50	176			Connect to #2-2A C.B. Back
TOTALS			200	50	176			

DRIVES AND APPROACHES

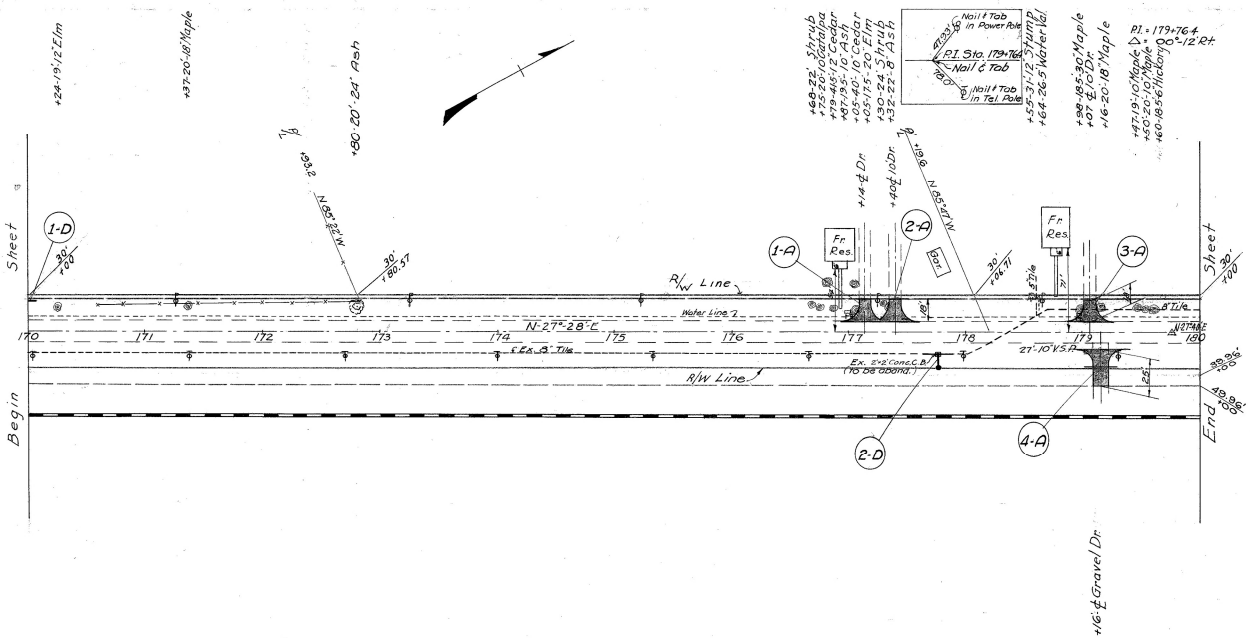
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick Sq. Yds.		
1-A	164+13	Lt.	40		
2-A	166+10	Lt.	24		
3-A	168+54	Lt.	45		
4-A	169+92	Lt.	31		
TOTALS			140		

B.M. Sta. 165+73
N.E. Cor. Porch Floor 5.1' Lt.
Elev. 977.32



STA. 160+00 to STA. 170+00

DIVISION 2 OHIO F-558 (11)
TYPE FUNDS 32
POST WAR 103
DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)

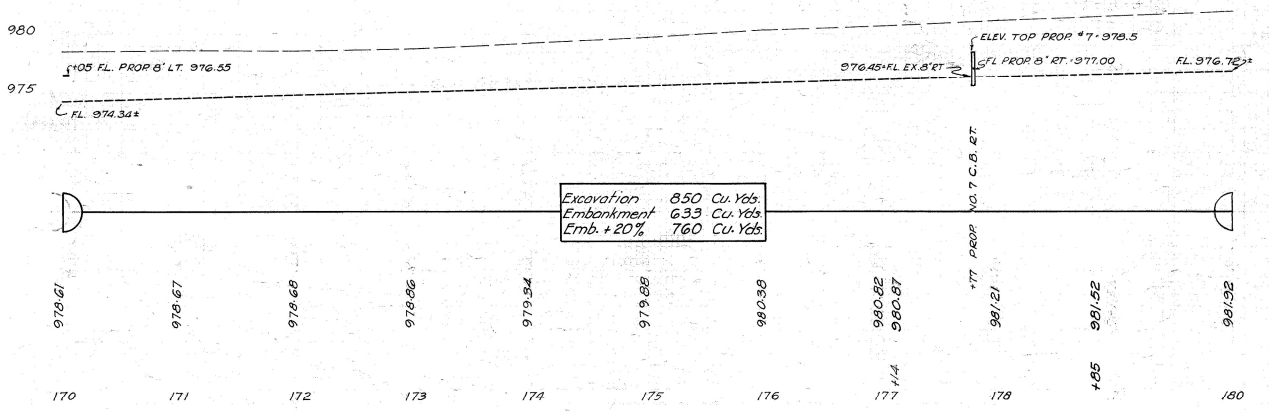


ROADWAY DRAINAGE										
REF. NO.	STATION		I-3 Pipe Lin. Ft.	I-5 Pipe Spec. for I-3 Pipe 8"×8" T	I-8 Catch Basins No. 7	I-16 Inlets Abandoned	E-12 Pipe Rem. & Disposed Lin. Ft.	L-10 Sodding	REMARKS
	FROM	TO	8"	Each	Each	Each	8"	Sq. Yds.	
1-D	170+00	170+05	5					5	
2-D	177+77		24	1	1	1	8	5	Connect Prop. 8" to #7 + Ex. 8"
TOTALS			29	1	1	1	8	10	

DRIVES AND APPROACHES							
REF. NO.	STATION	SIDE	I-17 Aggregate 6" thick	I-1 Pipe For Driveways 12"	E-12 Pipe Rem. & Disposed 10"	L-10 Sodding	
			Sq. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.	
1-A	177+14	Lt.	31				
2-A	177+40	Lt.	31				
3-A	179+07	Lt.	31				
4-A	179+16	Rt.	56	36	27	10	
TOTALS			149	36	27	10	

REMOVAL OF TREES & STUMPS			
STATION	SIDE	SIZE & KIND	NUMBER
178+55	Lt.	12" Stump	1
		TOTAL	1

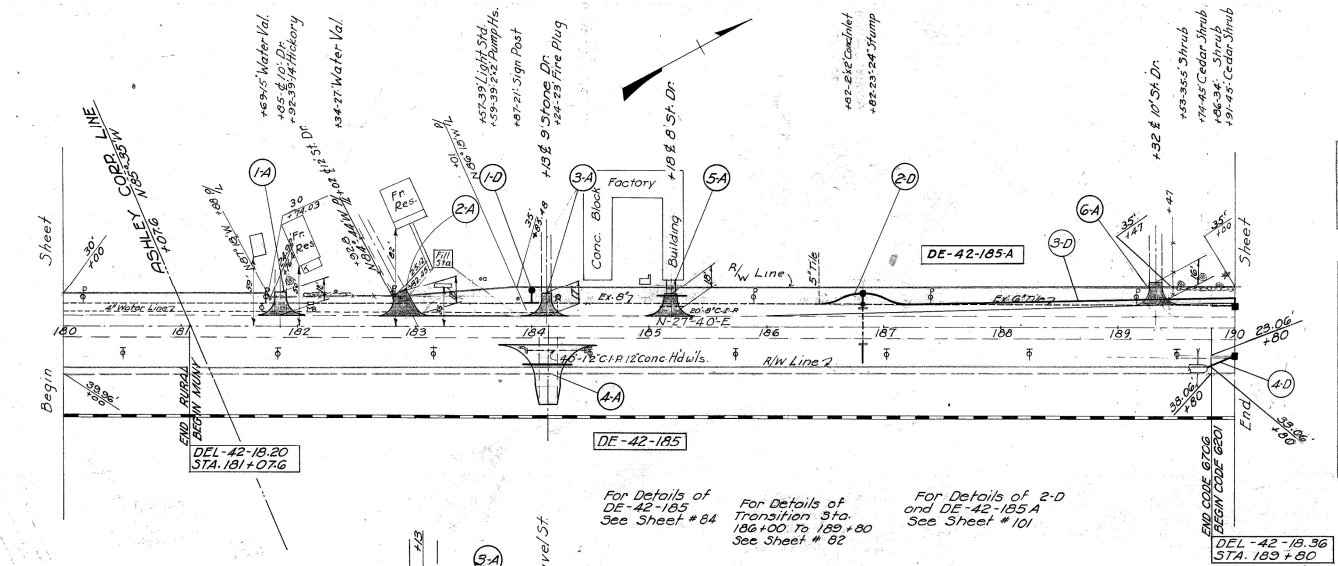
B.M. Sta. 178+80
S.E. Cor. Porch Floor 6.5' Lt.
Elev. 984.37



STA. 170+00 to STA. 180+00

DIVISION 2 OHIO F-558(11) DEL.-42(12.21-18.72) MRW-42(10.00-1.11)

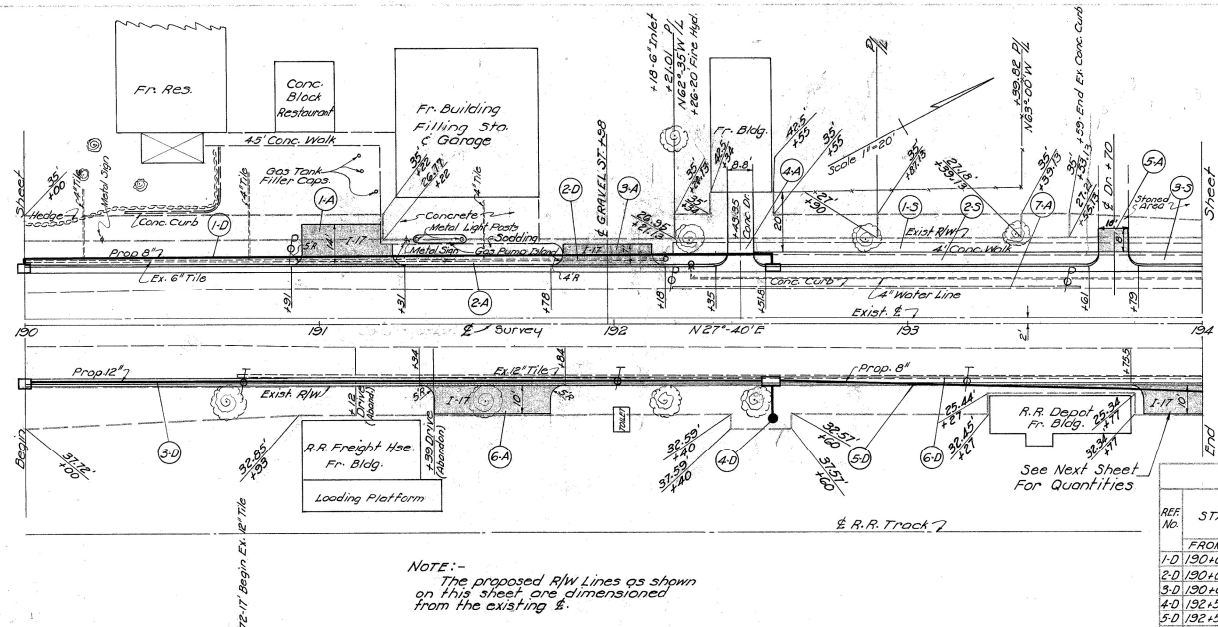
TYPE FUNDS 33 POST WAR 103


ASHLEY CORP. LINE N 85°32' W
ASHLEY
Sheet
Begin
End
Rural
DEL-42-18.20
STA. 181+07.6
DE-42-185
DE-42-185-A
Factory
Conc. Block
Building
Fr. Res.
Fill Sta.
Ex. 8" T
Ex. 6" Tile
R/W Line
5" Tile
46'-12" C.I.P. 12" Conc. H'd'wls.
R/W Line 2
Ex. 8" Water Line
Ex. 12" Water Line
Ex. 10" Water Line
Ex. 8" Water Line
Ex. 12" Water Line
Ex. 8" Water Line
Ex. 8" Water Line
Ex. 8

TYPE FUNDS 34
POST WAR 103

F-558(11)

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



NOTE:-
The proposed R/W Lines as shown on this sheet are dimensioned from the existing ℄.

APPROACHES & CURB

REF. NO.	STATION FROM	STATION TO	SIDE	T-70 PORTLAND CEMENT CONC. PAVT. VAR. THICK. SQ. YDS.	I-12 DEDUCT FOR TYPE 2 CURB & GUTTER LIN. FT.	I-17 6" AGGREGATE SQ. YDS.	DEPRESS. CURB LIN. FT.	E-8 REMOVE & DISPOSE OF EXIST. CURB LIN. FT.	L-10 SODDING SQ. YDS.	E-8 REMOVE & DISPOSE OF EX. DRIVE PAVEMENT SQ. YDS.
1-A	190+91	191+31	Lt.			46.66	40			
2-A	191+26	191+82	Lt.						48	
3-A	191+78	192+18	Lt.			23.34	40			
4-A	192+35	192+51.8	Lt.	28.55	16.80					16.30
5-A	193+61	193+79	Lt.	10.21	18.00	8.90				
6-A	191+34	191+84	Rt.			33.33	50			
7-A	192+20	193+59	Lt.					139.0		
		TOTALS		38.76	34.80	112.23	130	139.0	48	16.30

ROADWAY DRAINAGE

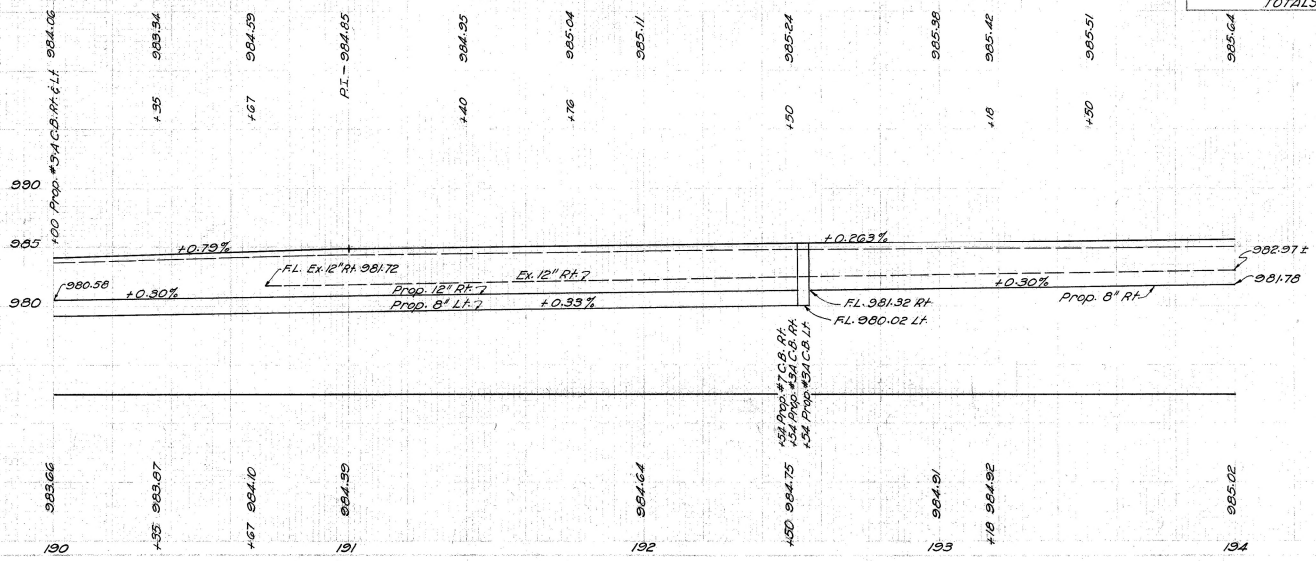
REF. NO.	STATION FROM	STATION TO	SIDE	I-2 PIPE FOR STORM SEWER LIN. FT. 12"	I-2 PIPE FOR STORM SEWER LIN. FT. 6"	I-3 PIPE FOR ROADWAY DRAINAGE LIN. FT. 6"	I-5 PIPE SPECIALS EACH 8"x90° BEND	I-5 PIPE SPECIALS EACH 4"x8" TEE	I-8 CATCH BASINS EACH #7	I-8 CATCH BASINS EACH #3-A	I-16 INLETS ABANDONED EACH	E-8 REMOVE & DISPOSE EXIST. TILE LIN. FT. 12"	E-8 REMOVE & DISPOSE EXIST. TILE LIN. FT. 6"	L-10 SODDING SQ. YDS.	REMARKS
1-D	190+00	192+54	Lt.		258		1	3		1					Connect to #3-A Ahead & Back
2-D	190+00	192+18	Lt.								1		218		
3-D	190+00	192+54	Rt.	252						1					Connect to #3-A Ahead & Back
4-D	192+54		Rt.			11			1					5	Connect to #7 C.B. & #3-A
5-D	192+54	194+00	Rt.		146										Connect to #3-A C.B.
6-D	190+72	194+00	Rt.									328			
		TOTALS		252	404	11	1	3	1	2	1	328	218	5	

SIDEWALKS

REF. NO.	STATION FROM	STATION TO	SIDE	E-8 REMOVAL & DISPOSAL OF EXIST. SIDEWALK SQ. FT.	I-13 4" CONCRETE SIDEWALK CLASS "C" SQ. FT.
1-S	192+20	194+00	Lt.	720.00	
2-S	192+47.8	193+65	Lt.		465.74
3-S	193+75	194+00	Lt.		96.56
	TOTAL			720.00	562.30

REMOVAL OF TREES & STUMPS

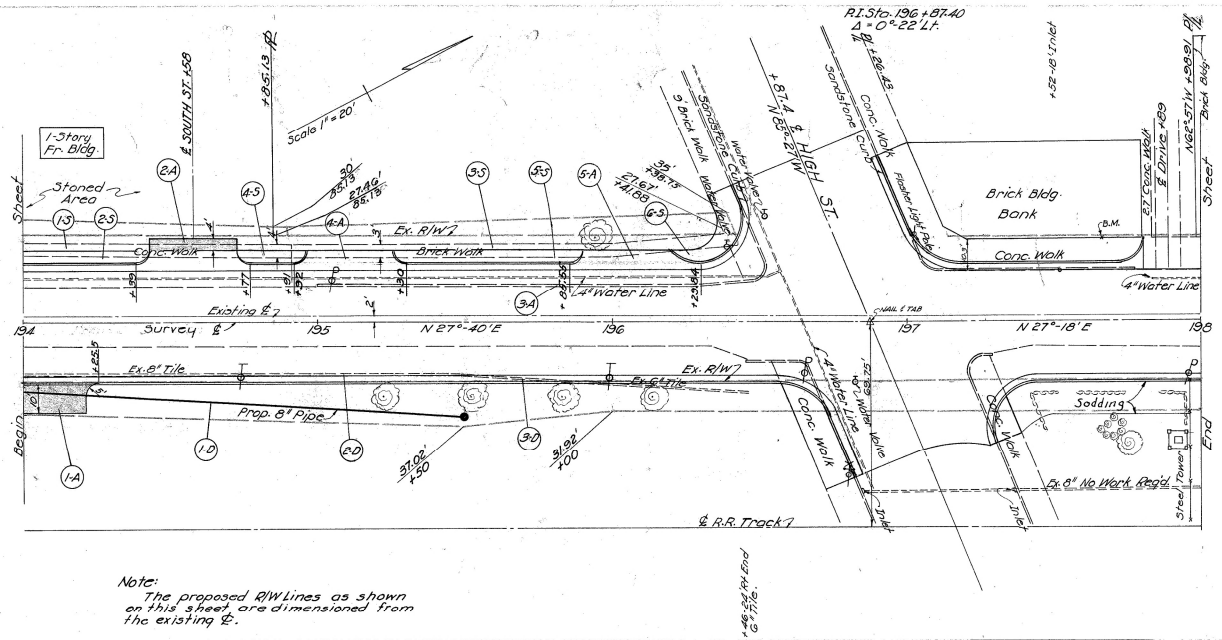
STATION	SIDE	SIZE & KIND	NUMBER
191+56	Rt.	36" Maple	1
		TOTAL	1



STA. 190+00 TO STA. 194+00

		TYPE FUNDS	35
	F-558 (11)	POST WAR	103

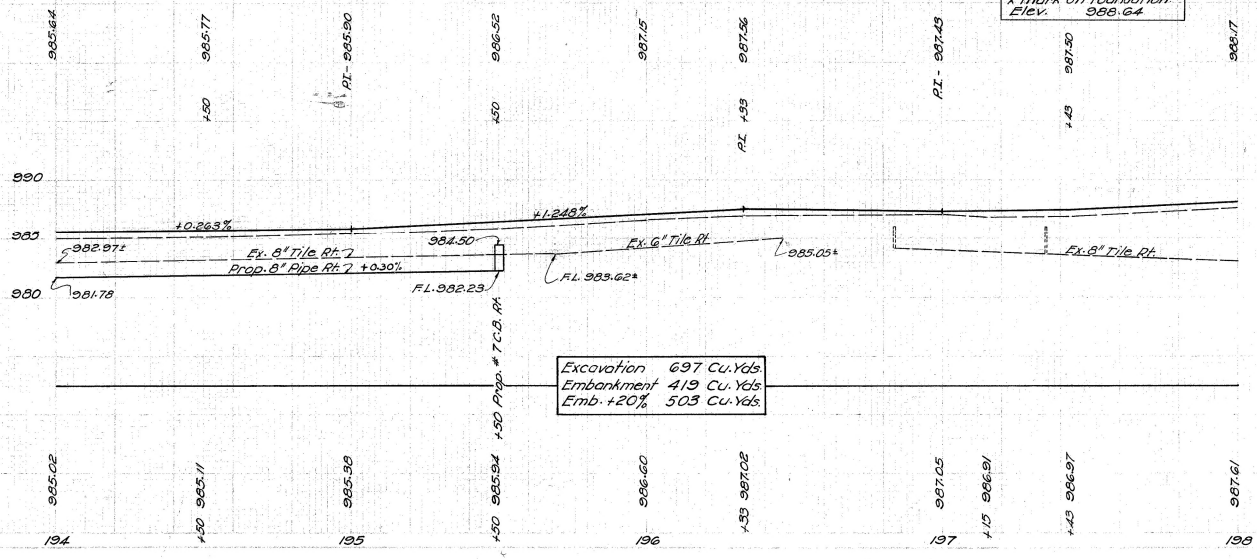
DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



Note:
The proposed R/W Lines as shown on this sheet are dimensioned from the existing ℄.

For Details of High St. Intersection See Sheet #87

B.M. Sta. 197+66
28.6' Lt. of ℄
18.6' So. of Northeast Cor. of Bank Bldg.
X mark on foundation.
Elev. 988.64



Excavation 697 Cu. Yds.
Embankment 419 Cu. Yds.
Emb. +20% 503 Cu. Yds.

APPROACHES & CURB

REF. No.	STATION FROM	STATION TO	SIDE	T-70 PORTLAND CEMENT CONC. PAVT. VAR. THICK. SQ. YDS.	I-12 DEDUCT FOR TYPE 2 CURB & GUTTER LIN. FT.	I-17 6" AGGREGATE SQ. YDS.	DEPRESSED CURB LIN. FT.	E-8 REMOVE & DISPOSE EXISTING CURB LIN. FT.	
1-A	194+05		Rt.			33.33	50.0		
2-A	194+58		Lt.	24.21	38.0	13.33			
3-A	195+00	196+29.84	Lt.					129.84	
4-A	194+92	195+30	Lt.	24.21	38.0				
5-A	195+85.55	196+29.84	Lt.	27.80	44.3				
		TOTAL		76.22	120.3	46.66	50.0	129.84	

ROADWAY DRAINAGE

REF. No.	STATION FROM	STATION TO	SIDE	E-12 REMOVE & DISPOSE OF EXIST. PIPE LIN. FT. 8"	E-12 6"	I-2 PIPE FOR STORM SEWER LIN. FT. 8"	I-8 CATCH BASINS EACH #7	L-10 SODDING SQ. YDS.		REMARKS
1-D	194+00	195+50	Rt.			149	1	5		Connect to # 7 C.B.
2-D	194+00	195+48	Rt.	148						
3-D	195+48	196+46	Rt.		26					
		TOTAL		148	26	149	1	5		

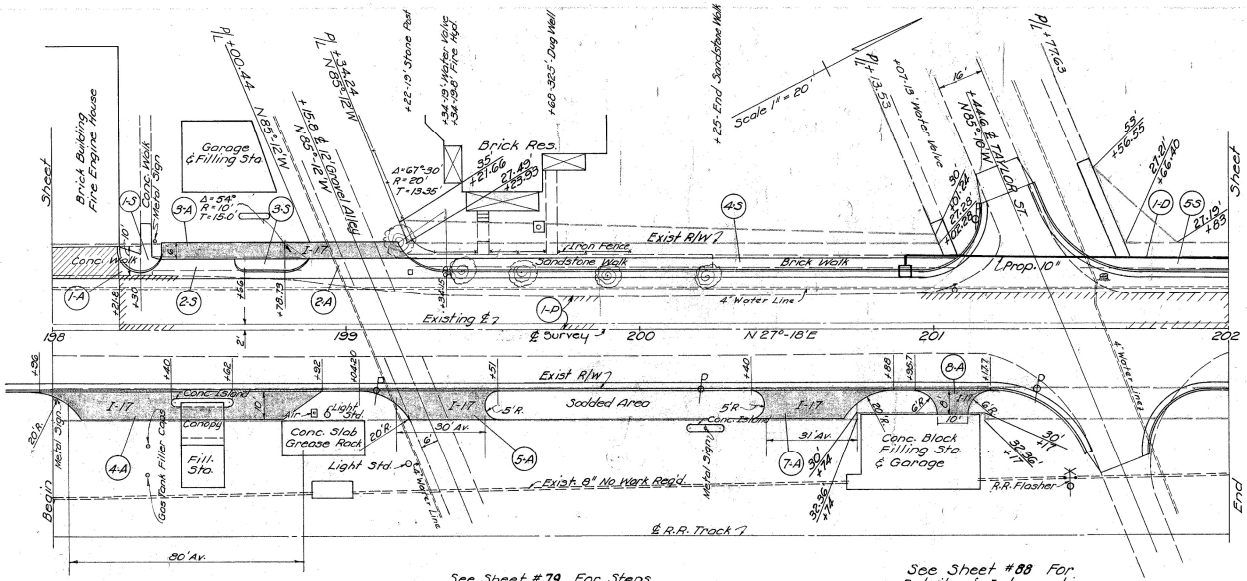
SIDEWALKS

REF. No.	STATION FROM	STATION TO	SIDE	E-8 REMOVE & DISPOSE OF EXIST. SIDEWALK SQ. FT.	I-13 4" CONC. SIDEWALK CLASS "C" SQ. FT.	
1-S	194+00	194+91	Lt.	364.00		
2-S	194+00	194+43	Lt.		168.56	
3-S	194+91	196+29.84	Lt.	416.52		
4-S	194+73	194+96	Lt.		85.12	
5-S	195+26	195+89.55	Lt.		247.32	
6-S	196+19.55	196+29.84	Lt.		21.00	
		TOTAL		780.52	522.00	

STA. 194+00 TO STA. 198+00

TYPE FUNDS 36
F-558(11) POST WAR 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



NOTE:-
Quantities for Sodding, Sta. 199+25 to Sta. 202+00 on Lt. and as shown on Rt, are calculated for the soil areas to work limits only. Quantities are shown in Table "D" Sheet # 7-A.

See Sheet # 79 For Steps & App. Sidewalk

NOTE:-
The proposed R/W Lines as shown on this sheet, are dimensioned from the existing ℄.

See Sheet # 88 For Details of Intersection at Taylor St.

DRIVES & APPROACHES

REF. NO.	STATION FROM	STATION TO	SIDE	T-70 PORTLAND CEMENT CONC. PAVT. SQ. YDS.	I-12 DEDUCT FOR TYPE 2 CURB & GUTTER LIN. FT.	I-17 6" AGGREGATE SQ. YDS.	DEPRESSED CURB LIN. FT.	L-10 SODDING SQ. YDS.	E-8 REMOVE & DISPOSE EXISTING PAVT SQ. YDS.
1-A	198+21.8	198+66	Lt.	25.06	44.20				
2-A	198+78.73	199+34.15	Lt.	33.20	55.42				
3-A	198+38	199+22	Lt.			56.00			
4-A	197+96	198+40	Rt.			88.89	44.0		
	198+62	198+92	Rt.				30.0		
5-A	199+04.2	199+51	Rt.			33.33	46.8		
7-A	200+40	200+88	Rt.			34.44	48.0		
8-A	200+95.7	201+17.7	Rt.			10.61	22.0		
1-P	198+21.8	202+00	Lt.						551
TOTALS				58.26	99.62	223.27	190.8		551

ROADWAY DRAINAGE

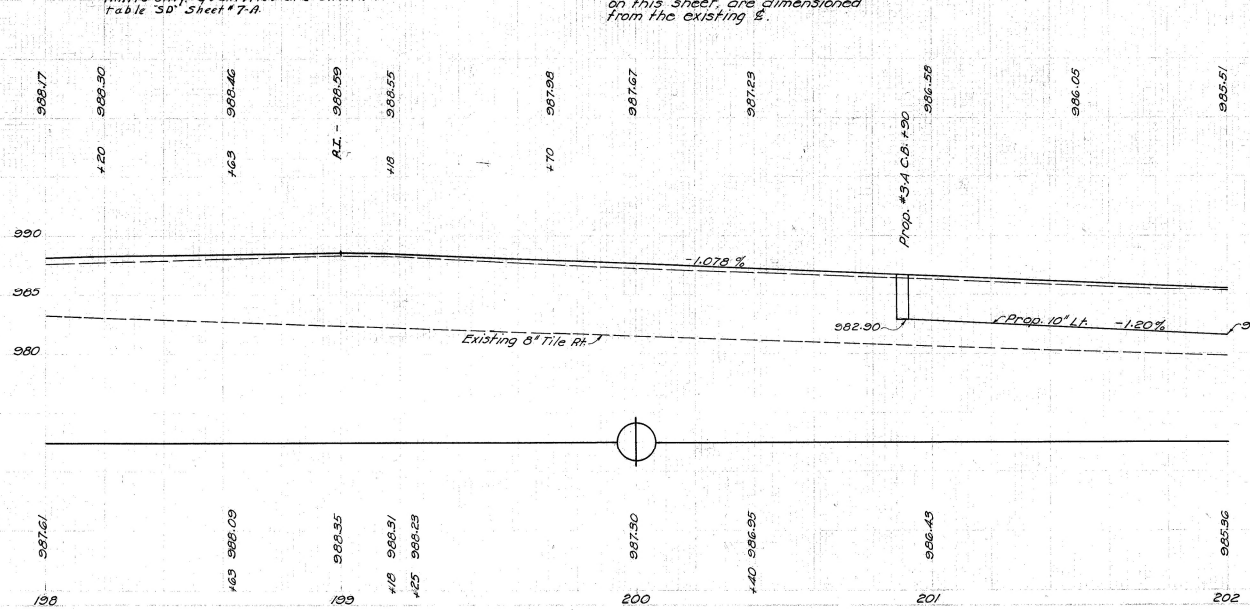
REF. NO.	STATION FROM	STATION TO	SIDE	I-2 STORM SEWER PIPE UNDER PAVEMENT LIN. FT. 10"	I-8 CATCH BASINS EACH #3-A	I-5 PIPE SPECIAL EACH 10"+90° Bend	REMARKS
1-D	200+90	202+00	Lt.	114	1	1	Connect 10" to # 3-A C.B.
TOTALS				114	1	1	

SIDEWALKS

REF. NO.	STATION FROM	STATION TO	SIDE	E-8 REMOVAL & DISPOSAL OF EXIST. SIDEWALK SQ. FT.	I-13 4" CONC. SIDEWALK, CLASS "C" SQ. FT.
1-S	198+21.8	198+37	Lt.	141.4	106.57
2-S	198+33.3	200+94.85	Lt.	1046.2	
3-S	198+62	198+86.73	Lt.		101.74
4-S	199+22	200+94.85	Lt.		675.94
5-S	201+70.88	202+00	Lt.		116.48
TOTALS				1187.6	1000.73

REMOVAL OF TREES & STUMPS

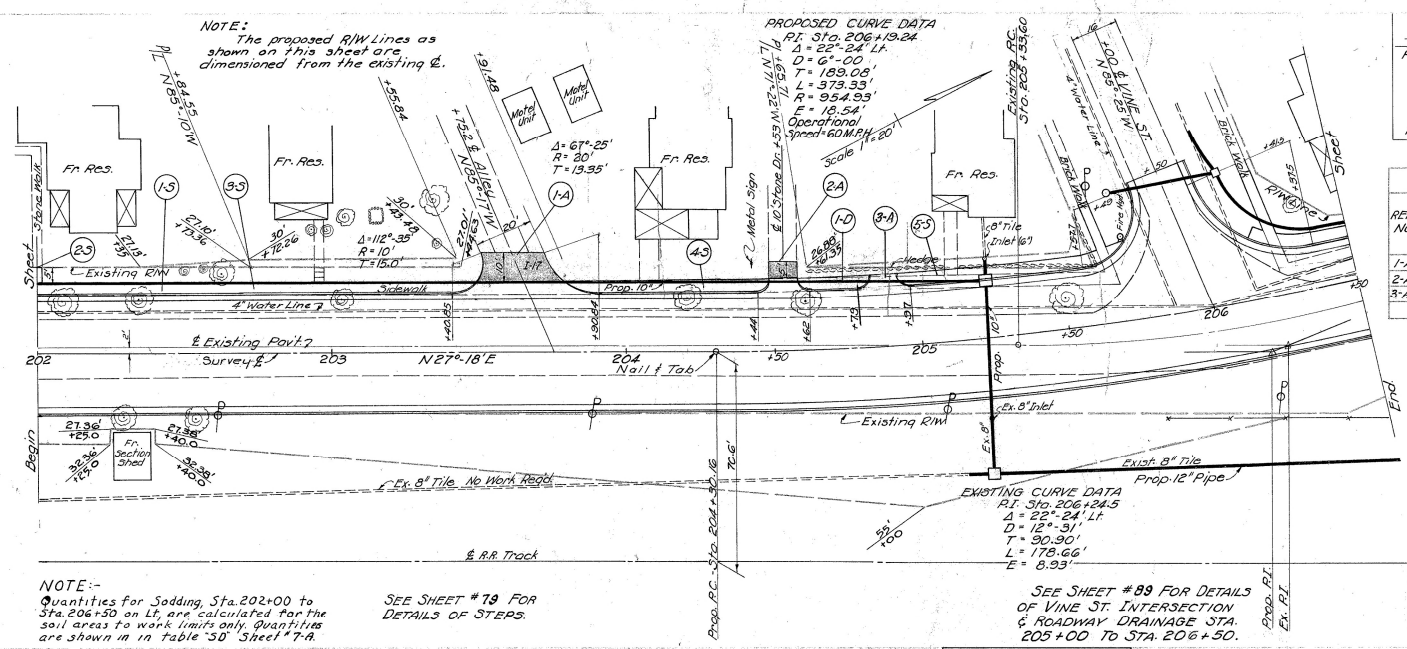
STATION	SIDE	SIZE & KIND	NUMBER
199+18	Lt.	26" Maple	1
199+39	Lt.	26" Maple	1
199+60	Lt.	26" Maple	1
199+89	Lt.	30" Maple	1
200+22	Lt.	36" Maple	1
201+58	Lt.	20" Stump	1
TOTAL			6



STA. 198+00 TO STA. 202+00

TYPE FUNDS 37
F-558(11) POST WAR 103

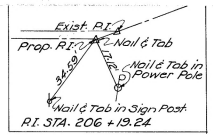
DEL -42 -(12.21-18.72)
MRW-42 -(0.00-1.11)



NOTE:-
Quantities for Sodding, Sta. 202+00 to Sta. 206+50 on Lt. are calculated for the soil areas to work limits only. Quantities are shown in in table "50' Sheet" T-A.

SEE SHEET # 79 FOR DETAILS OF STEPS.

SEE SHEET # 89 FOR DETAILS OF VINE ST. INTERSECTION & ROADWAY DRAINAGE STA. 205+00 TO STA. 206+50.



DRIVES AND APPROACHES

REF. No.	STATION	SIDE	T-70 PORTLAND CEMENT CONC. PAVT. VAR. THICK SQ. YDS.	I-12 DEDUCT FOR TYPE 2 CURB & GUTTER LIN. FT.	I-17 6" AGGREGATE SQ. YDS.	
1-A	203+75.2	Lt.	24.84	49.99	28.00	
2-A	204+53	Lt.	10.21	18.00	5.50	
3-A	204+88	Lt.	10.21	18.00		
TOTALS			45.26	85.99	33.50	

SIDEWALKS

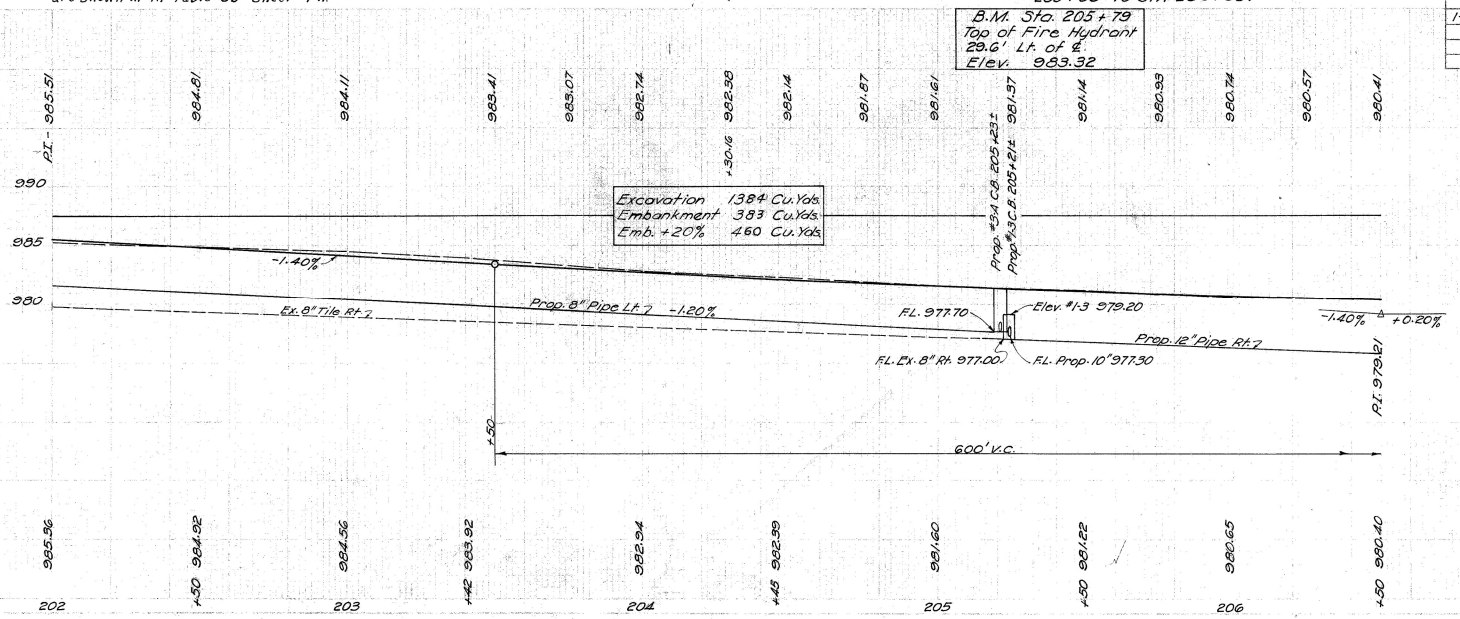
REF. NO.	STATIONS FROM	STATIONS TO	SIDE	E-8 REMOVAL & DISPOSAL OF EXIST. SIDEWALK SQ. FT.	I-13 4" CONCRETE SIDEWALK CLASS "C" SQ. FT.	
1-S	202+00	205+57.7	Lt.	1430.8		
2-S	202+00		Lt.	15.0	15.00	
3-S	202+00	203+48.85	Lt.		591.65	
4-S	203+78.84	204+48	Lt.		248.92	
5-S	204+58	205+57.7	Lt.		355.37	
TOTALS				1445.8	1210.94	

ROADWAY DRAINAGE

REF. No.	STATIONS FROM	STATIONS TO	SIDE	I-2 PIPE FOR STORM SEWER LIN. FT. 10"	10"	I-2 PIPE UNDER PAV'T LIN. FT. 10"	
1-D	202+00	205+23	Lt.		257		65
TOTAL					257		65

REMOVAL OF TREES & STUMPS

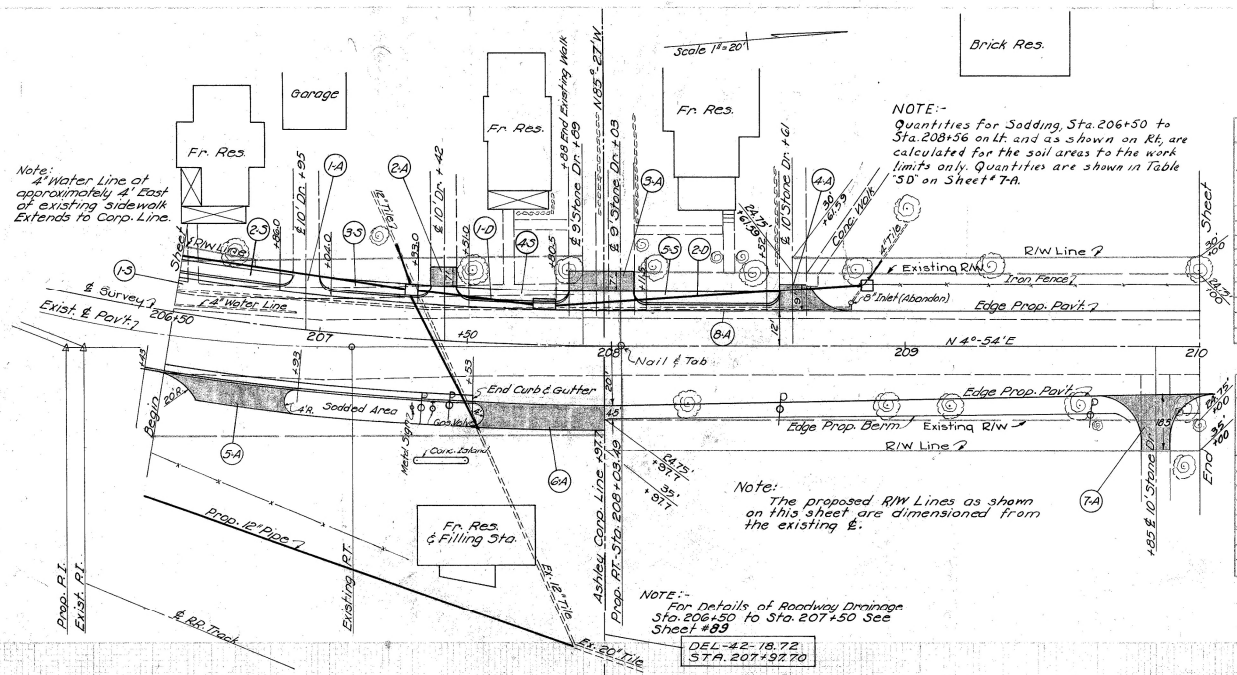
STATION	SIDE	SIZE & KIND	NUMBER
202+00	Lt.	30" Maple	1
202+29	Rt.	14" Walnut	1
202+34	Lt.	26" Maple	1
202+53	Rt.	12" Walnut	1
203+08	Rt.	24" Maple	1
204+21	Lt.	27" Maple	1
204+61	Lt.	30" Maple	1
205+50	Lt.	42" Elm	1
TOTAL			8



STA. 202+00 TO STA. 206+50

TYPE FUNDS | 38
F-558(11) | POST WAR | 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



DRIVES AND APPROACHES

REF. NO.	STATION	SIDE	I-70 PORT. CEMENT CONC. PAVT. VAR. THICK. SQ. YDS. MUNY	I-70 SQ. YDS. RURAL	I-12 DEDUCT FOR MODIFIED TYPE 2 CURB & GUTTER LIN. FT.	I-17 AGGREGATE 6" THICK. SQ. YDS. MUNY	I-17 SQ. YDS. RURAL	DEPRESS CURB LIN. FT.	L-10 SODDING SQ. YDS.	I-12 ADD FOR TYPE 2 CURB & GUTTER MODIFIED LIN. FT. RURAL
1-A	206+95	Lt.	10.21		18					
2-A	207+42	Lt.	10.21		18	8.0				
3-A	207+95 to 208+03	Lt.	10.60	9.00	31	10.0	9.0			
4-A	208+61	Lt.		1.50	4		15.5			
5-A	206+68	Rt.				32.0		50		
6-A	207+75.5	Rt.			45	97.5				
7-A	209+85	Rt.					31.5			
8-A	208+13 to 208+82	Lt.								40.5
TOTALS			31.02	10.50	116	87.5	56.0	50		40.5

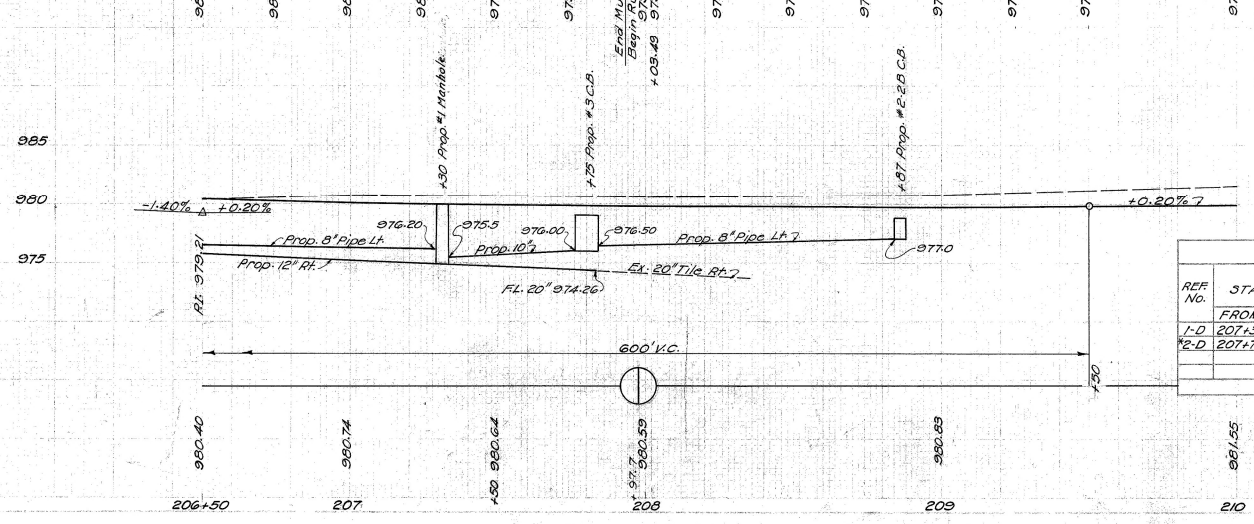
SIDEWALKS

REF. NO.	STATION FROM	STATION TO	SIDE	F-8 REMOVAL & DISPOSAL OF EXISTING SIDEWALK SQ. FT.	I-13 MUNICIPAL 4" CONC. SIDEWALK, CLASS "C" SQ. FT.	I-13 RURAL 4" CONC. SIDEWALK, CLASS "C" SQ. FT.
1-S	206+50	207+88	Lt.	552		
2-S	206+50	206+90	Lt.		156.57	
3-S	207+00	207+37	Lt.		131.14	
4-S	207+47	207+83	Lt.		143.14	
5-S	208+07.5	208+56	Lt.			187.14
TOTALS				552	430.85	187.14

REMOVAL OF TREES & STUMPS

STATION	SIDE	SIZE & KIND	NUMBER (RURAL)
208+26	Rt.	18" Catalpa	1
208+94	Rt.	12" Catalpa	1
209+15	Rt.	12" Catalpa	1
209+59	Rt.	12" Catalpa	1
209+95	Rt.	20" Catalpa	1
		TOTAL	5

NOTE:- Unless otherwise indicated all quantities shown are within the municipality of Ashley.



ROADWAY DRAINAGE

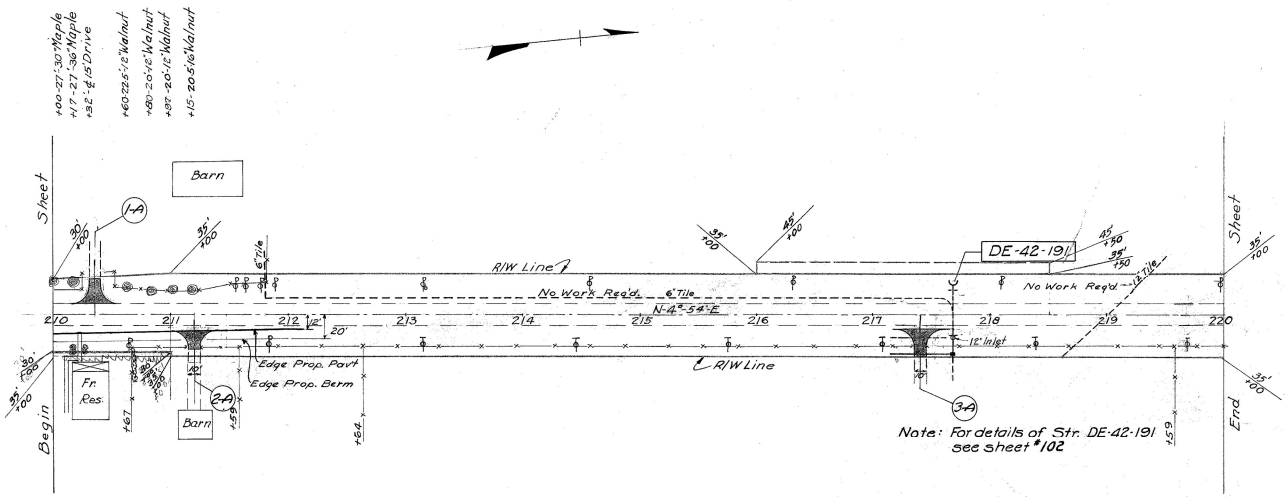
REF. NO.	STATION FROM	STATION TO	SIDE	I-2 PIPE UNDER PAVT. LIN. FT. MUNY 8"	10"	RURAL 8"	I-8 CATCH BASINS EACH MUNY	RURAL	*2-D	L-10 SODDING RURAL SQ. YDS.	E-12 REMOVAL & DISPOSAL OF EX. PIPE LIN. FT. RURAL 4"	I-16 INLETS ABANDONED RURAL EACH	I-5 PIPE SPECIALS EACH 6"x10"T	6"x8"T	I-3 PIPE LIN. FT. RURAL 4"	REMARKS
1-D	207+30	207+75	Lt.			42		1								Connect BACK TO # 2-S
*2-D	207+75	206+87	Lt.	18		88			1	10		16	1		1	8	BACK TO # 3 AHEAD TO # 2-2.8
TOTALS				18	42	88	1		1	10		16	1	1	1	8	

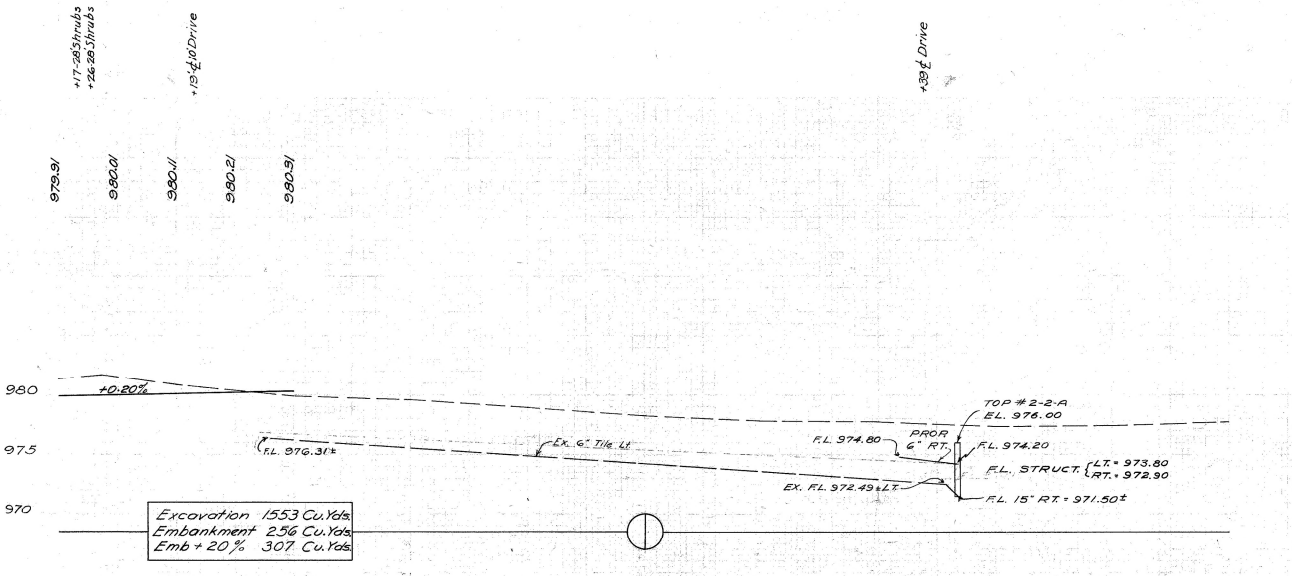
* Plug end of Existing 8" Pipe at abandoned Inlet. Cost Included in Unit Price bid for abandoned Inlet.

STA. 206+50 TO STA. 210+00

DIVISION 2 OHIO F-558(11) TYPE FUNDS 39 POST WAR 103

DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)





DRIVEWAYS

REF No.	STATION	SIDE	I-17 AGGREGATE SQ.YDS.	I-1 PIPE FOR DRIVES. LIN.FT.10"	E-12 PIPE REMOVED & DISPOSED 6' D.T.	L-10 SODDING SQ. YDS.
1-A	210+32	Lt.	30.8			
2-A	211+19	Rt.	30.8			
3-A	217+39	Rt.	30.8	48*	47	
TOTAL			62.4	48	47	

*to be connected to 2-2-A C.B.

STRUCTURES - 20' SPAN AND UNDER

STR. NO.	STATION	EXISTING STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STR. TYPE	SIZE	LENGTH	SHEET NO.	REMARKS
DE-42-191	217+66.6	Pipe	10"	27.58	Extend	Pipe	18"	20'Rt.-8'Lt.	102	

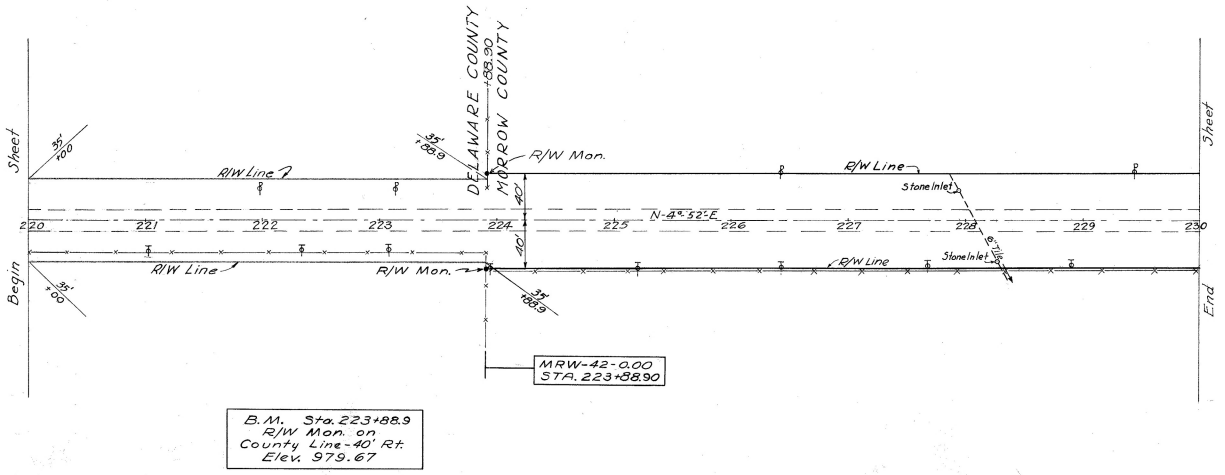
REMOVAL OF TREES AND STUMPS

STATION	SIDE	DESCRIPTION	NO.
210+00	26' Lt.	30" Maple	1
210+17	26' Lt.	36" Maple	1
210+60	20' Lt.	12" Walnut	1
210+80	20' Lt.	12" Walnut	1
210+97	20' Lt.	12" Walnut	1
211+15	20' Lt.	16" Walnut	1
TOTAL			6

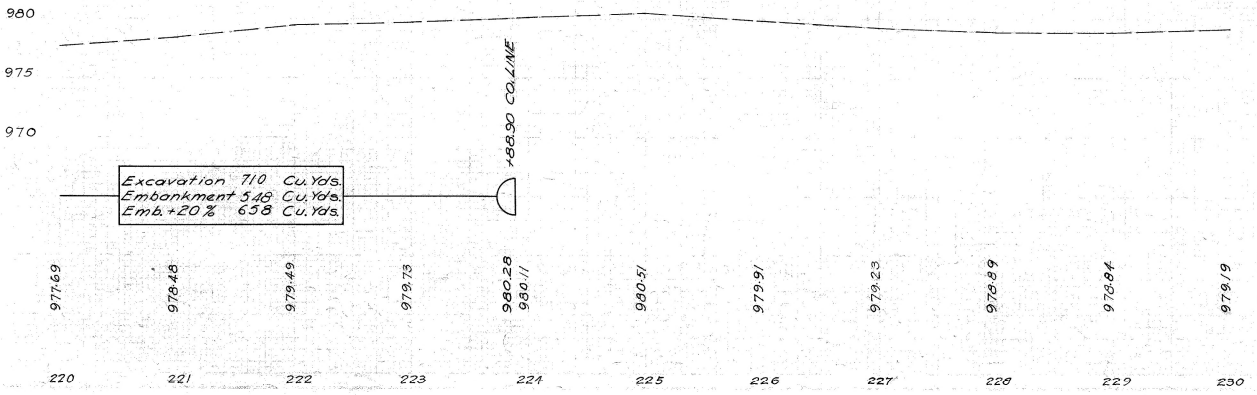
STA. 210+00 to STA. 220+00

DIVISION 2 OHIO F-558(11) TYPE FUNDS 40 POST WAR 103

DEL.-42(12.21-18.72)
MRW-42(0.00-1.11)



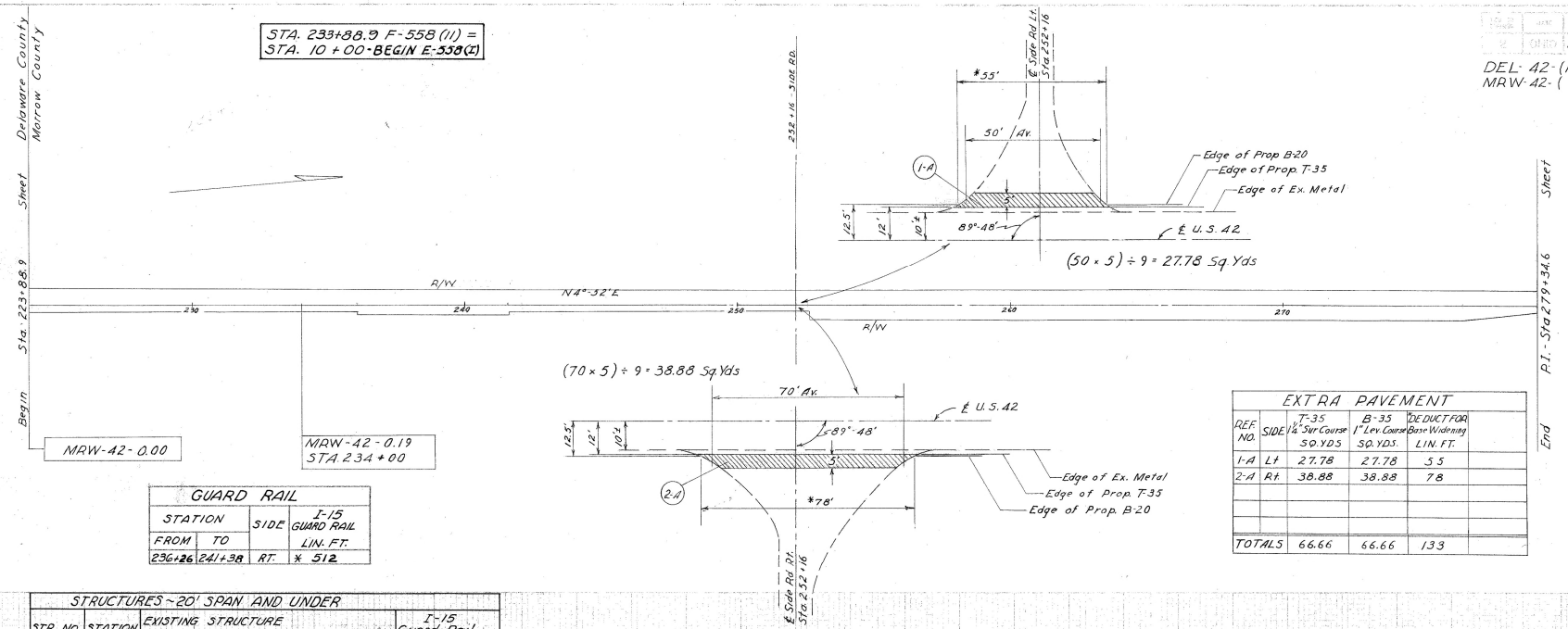
B. M. Sta. 223+88.9
R/W Mon. on
County Line-40' Rt.
Elev. 979.67



STA. 220+00 to STA. 230+00

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

STA. 233+88.9 F-558 (11) =
STA. 10+00-BEGIN E-558(2)



GUARD RAIL			
STATION		SIDE	I-15 GUARD RAIL
FROM	TO		LIN. FT.
236+26	241+38	RT.	* 512

EXTRA PAVEMENT					
REF. NO.	SIDE	T-35 1/4" Sur Course SQ. YDS	B-35 1" Lev. Course SQ. YDS.	DEDUCT FOR Base Widening LIN. FT.	
1-A	Lt.	27.78	27.78	55	
2-A	Rt.	38.88	38.88	78	
TOTALS		66.66	66.66	133	

STRUCTURES - 20' SPAN AND UNDER						
STR. NO.	STATION	EXISTING STRUCTURE				I-15 Guard Rail Lin. Ft.
		TYPE	SIZE	LENGTH	DISPOSITION	
MO-42-02	——	PIPE	18"	59'-10"	No Work Required	
MO-42-02A	——	PIPE	10"	60'	No Work Required	
MO-42-05	——	PIPE	15"	89'-6"	No Work Required	
MO-42-05A	——	PIPE	18"	74'-6"	No Work Required	
MO-42-05B	——	PIPE	30"	81'	No Work Required	
MO-42-07	——	Slab Top	6'x2'	47'	No Work Required	64
					* Total	64

* Carried To Table "A" Sheet #6

Note: For Details of Stone Underdrains, Typical Drives and Typical Mail Box Approaches See Sheet #77 (DEL-42-12.21, General Details)

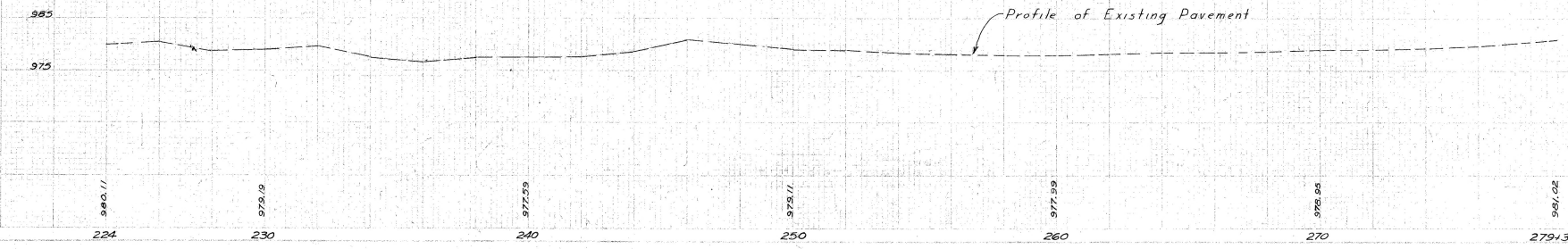
MRW-42-(0.00-1.11)

ESTIMATED QUANTITIES

Item I-9 Stone Underdrains 400 Lin. Ft.

Item I-17 - 3" AGGREGATE

5 Drives @ 10 Sq. Yds.	50 Sq. Yds.
4 Mail Box Approaches @ 30 Sq. Yds.	120 Sq. Yds.
TOTAL ITEM I-17	170 Sq. Yds.

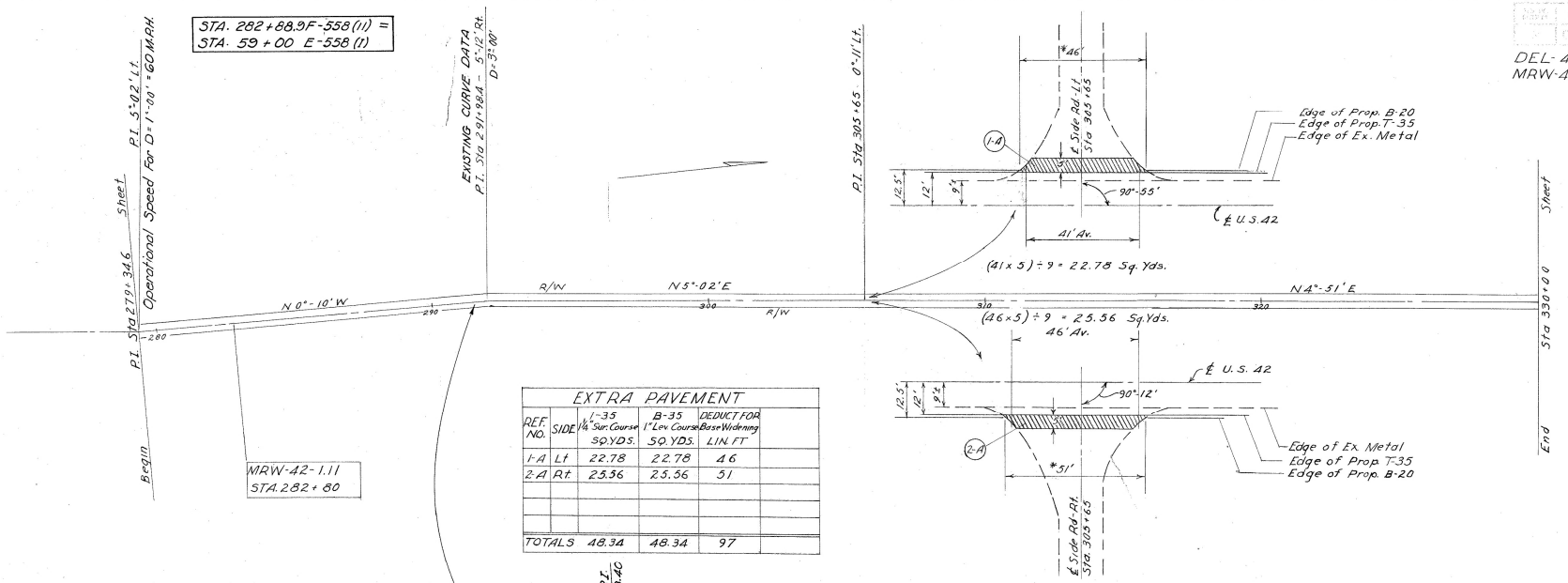


STA 223+88.9 To STA 279+34.6

STA. 282+88.9 F-558(11) =
STA. 59+00 E-558(1)

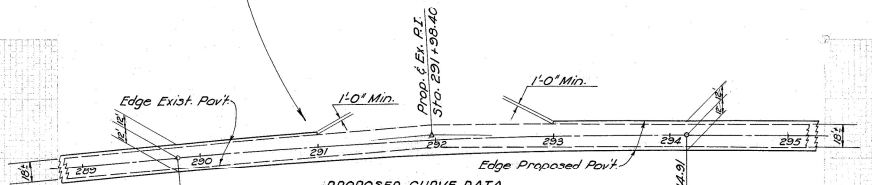
TYPE FUNDS: FOREST WAR
F-558(11)
42
103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



EXTRA PAVEMENT

REF. NO.	SIDE	1-35 ¼" Sur. Course SQ. YDS.	B-35 1" Lev. Course Base Widening SQ. YDS.	DEDUCT FOR LIN. FT.
1-A	Lt	22.78	22.78	46
2-A	Rt.	25.56	25.56	51
TOTALS		48.34	48.34	97



PROPOSED CURVE DATA
Δ = 5°-12' Rt.
D = 1°-12'
R = 4774.65'
T = 216.92'
L = 433.33'
E = 4.92'

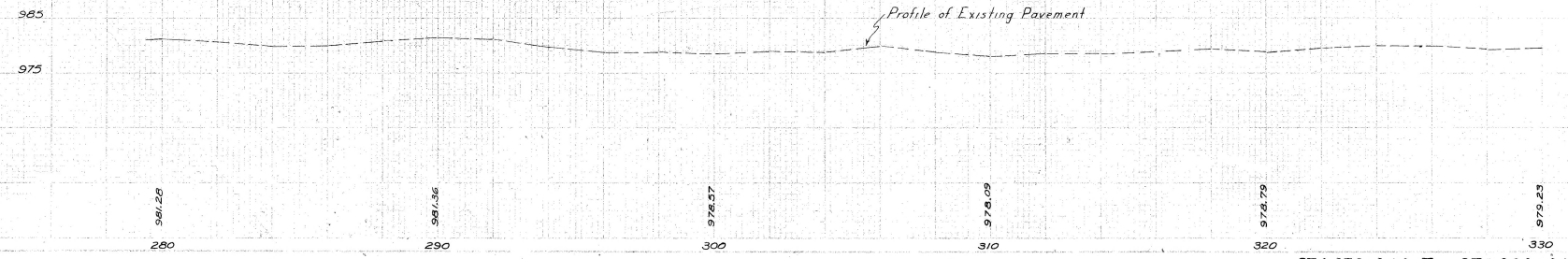
Max. Superelevation = 0.033' per foot
Operational Speed = 60 M.P.H.

Prop. P.C. Sta. 289+81.8
Prop. P.T. Sta. 294+14.91

NOTE:-
Pavement Quantities Included in Calculations Sheet # 9A.

STRUCTURES ~ 20' SPAN AND UNDER

STR. NO.	STATION	EXISTING STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	REMARKS
MO-42-11	——	PIPE	12"	58.5'	No Work Required	
MO-42-13	——	PIPE	12"	42'-6"	No Work Required	
MO-42-16	——	PIPE	30"	44'-6"	No Work Required	
MO-42-18	——	PIPE	12"	44'	No Work Required	

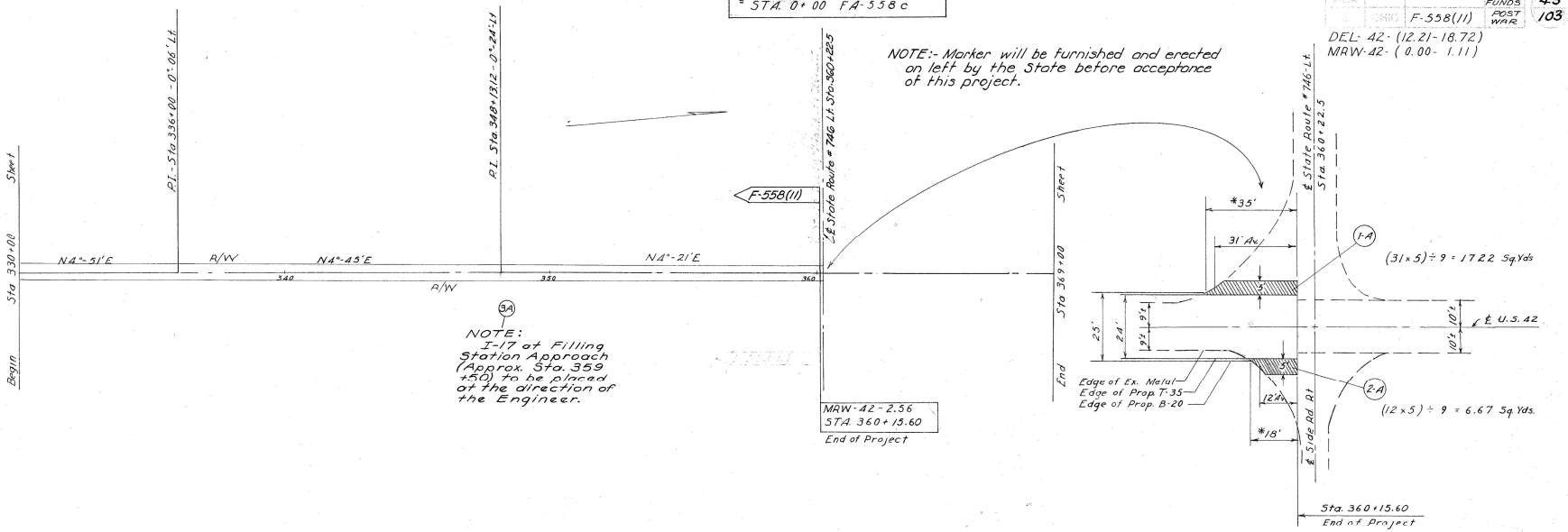


STA 279+34.6 To STA 330+00

STA. 360+15.60 - F-558(11)
= STA. 0+00 FA-558c

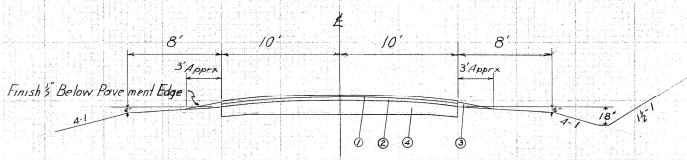
			TYPE FUNDS	43
				103
		F-558(11)	POST WAR	

DEL: 42-(12.21-18.72)
MRW-42-(0.00-1.11)



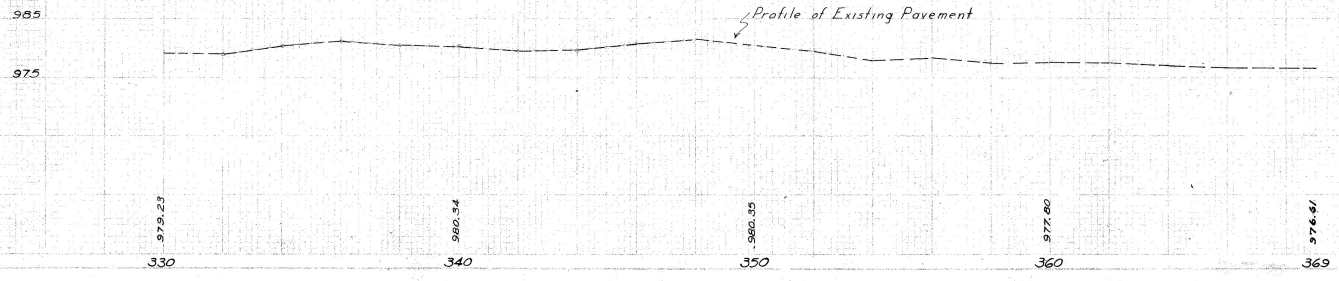
EXTRA PAVEMENT

REF No.	SIDE	T-35 1½" Sur. Course Sq. Yds	B-35 1" Lev. Course Sq. Yds	DEDUCT FOR Base Widening Lin. Ft.	I-17 3" Aggregate Sq. Yds.
1-A	Lt.	17.22	17.22	35	
2-A	Rt.	6.67	6.67	18	
3-A	Lt.				30
TOTALS		23.89	23.89	53	30



CROSS SECTION of ADJOINING PAVEMENT

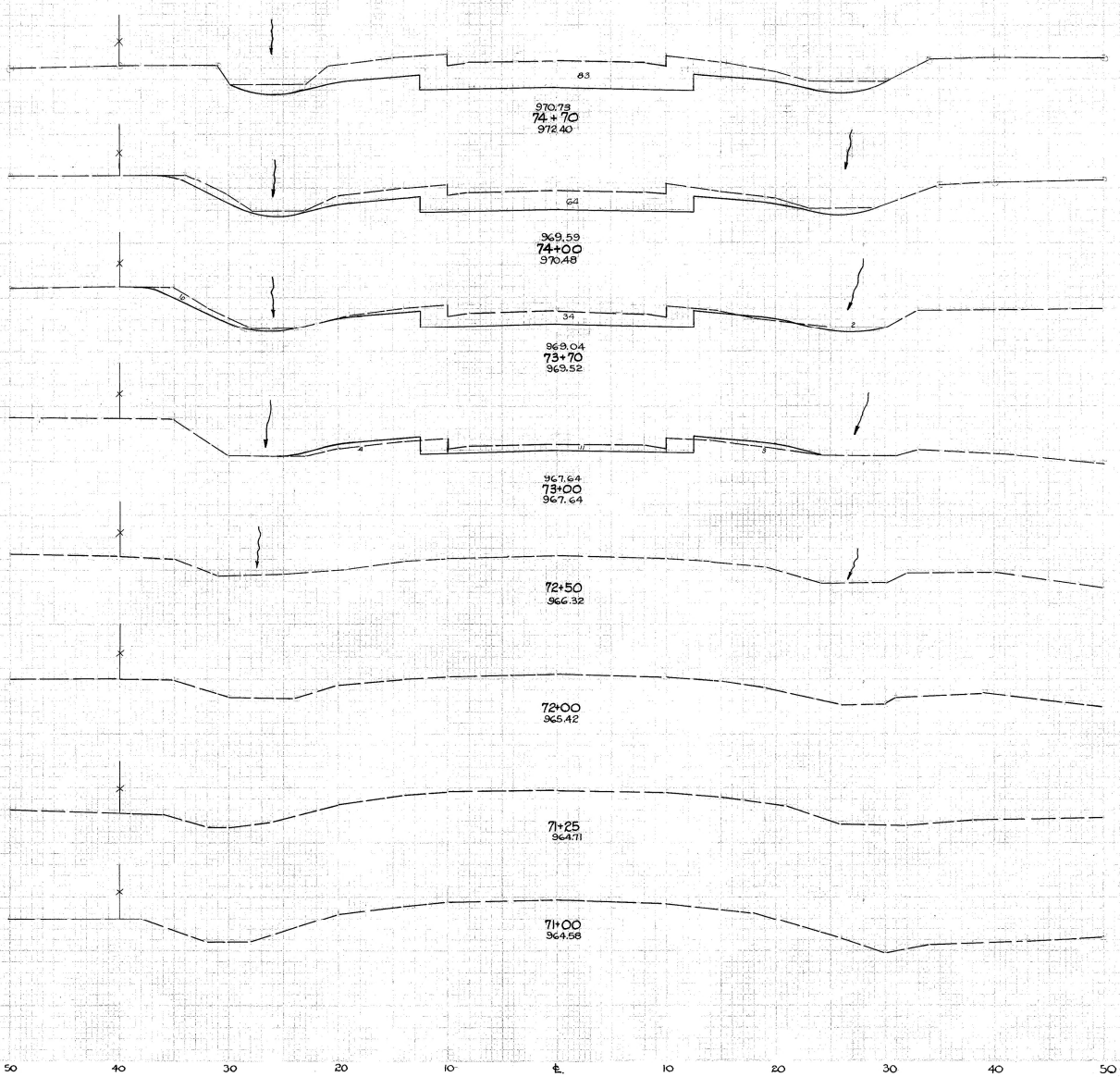
1 1½" Asphaltic Concrete Surface Course
2 1" " " Leveling Course
3 Aggregate For Traffic Bound Side Approaches & Berms
4 Existing 9'-7'-7'-9" Portland Cement Concrete Pavement ¾" Crown (Average)



STA. 330+00 To STA 369+00

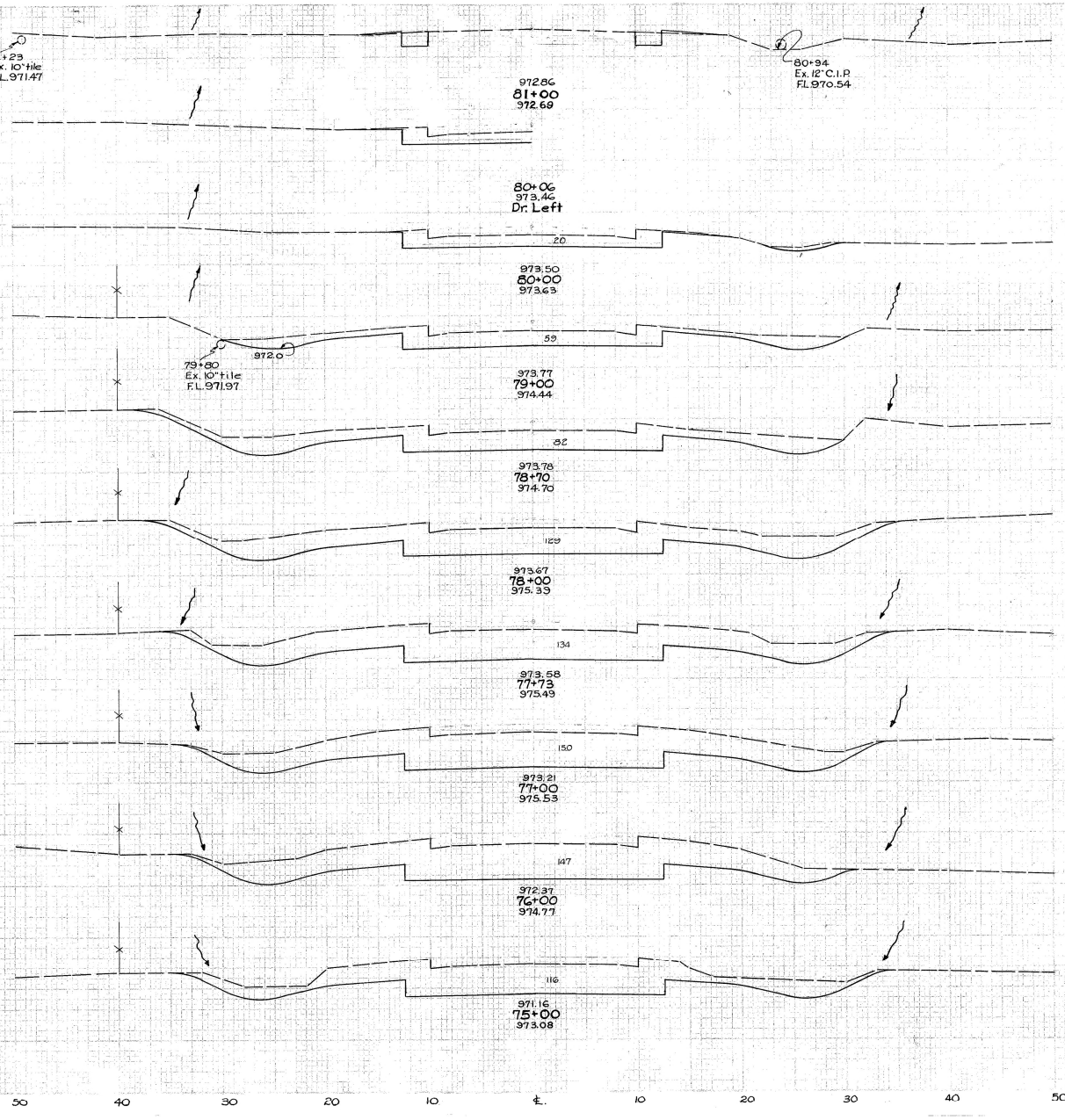
DIVISION	STATE	PROJECT	TYPE FUNDS	44
2	OHIO	F-558(11)	POST WAR	103

DEL.-42 (12.21 - 18.72)
MRW.-42 (0.00 - 1.11)



	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
	83	0		
			191	0
	64	0		
			59	0
	42	0		
			69	9
	11	7		
			7	7
Sta. 72+50 Begin Work	0	0		

Sta. 71+00 TO Sta. 74+70 DEL-42-12.21



DIVISION 2 OHIO F-558(11) TYPE FUNDS POST WAR

45
108

DEL.-42 (12.21 - 18.72)
MRW.-42(0.00 - 1.11)

End Work Sta. 80+75

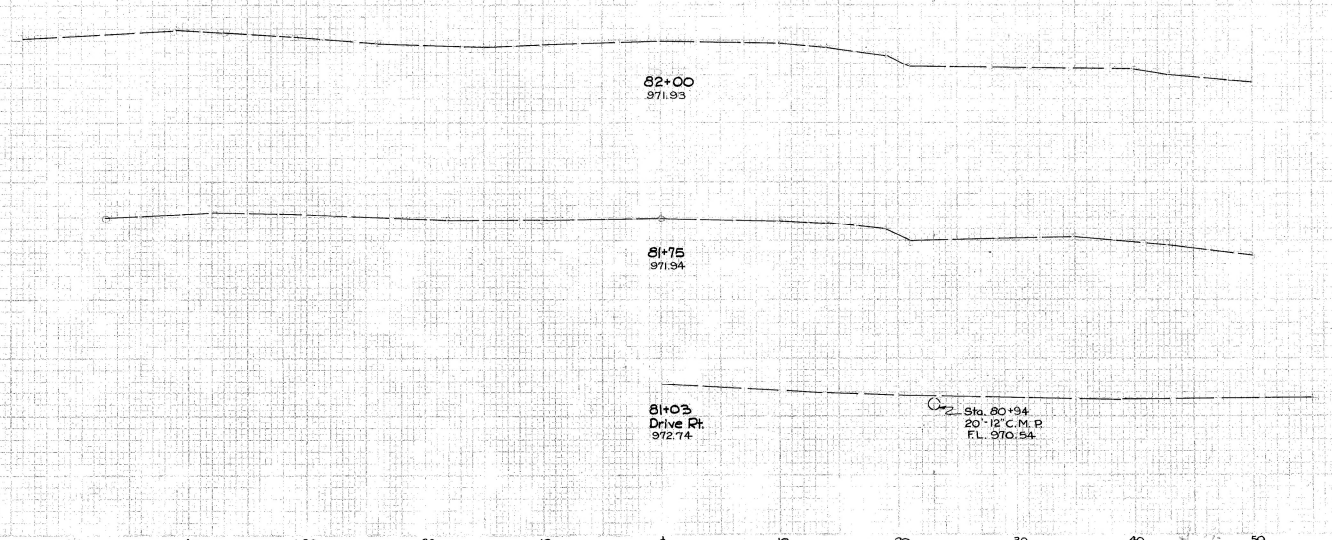
Excavation - 2514 Cu. Yds.
Embankment - 17 Cu. Yds.

	End Areas		Cu. Yds.	
	Cut	Fill	Cut	Fill
	0	0		1
80+50	12	2		
			31	0
	21	0		
			148	0
	59	0		
			78	0
	82	0		
			274	0
	129	0		
			132	0
	134	0		
			384	0
	150	0		
			550	0
	147	0		
			487	0
	116	0		
			111	0
Sta. 74+70	83	0		

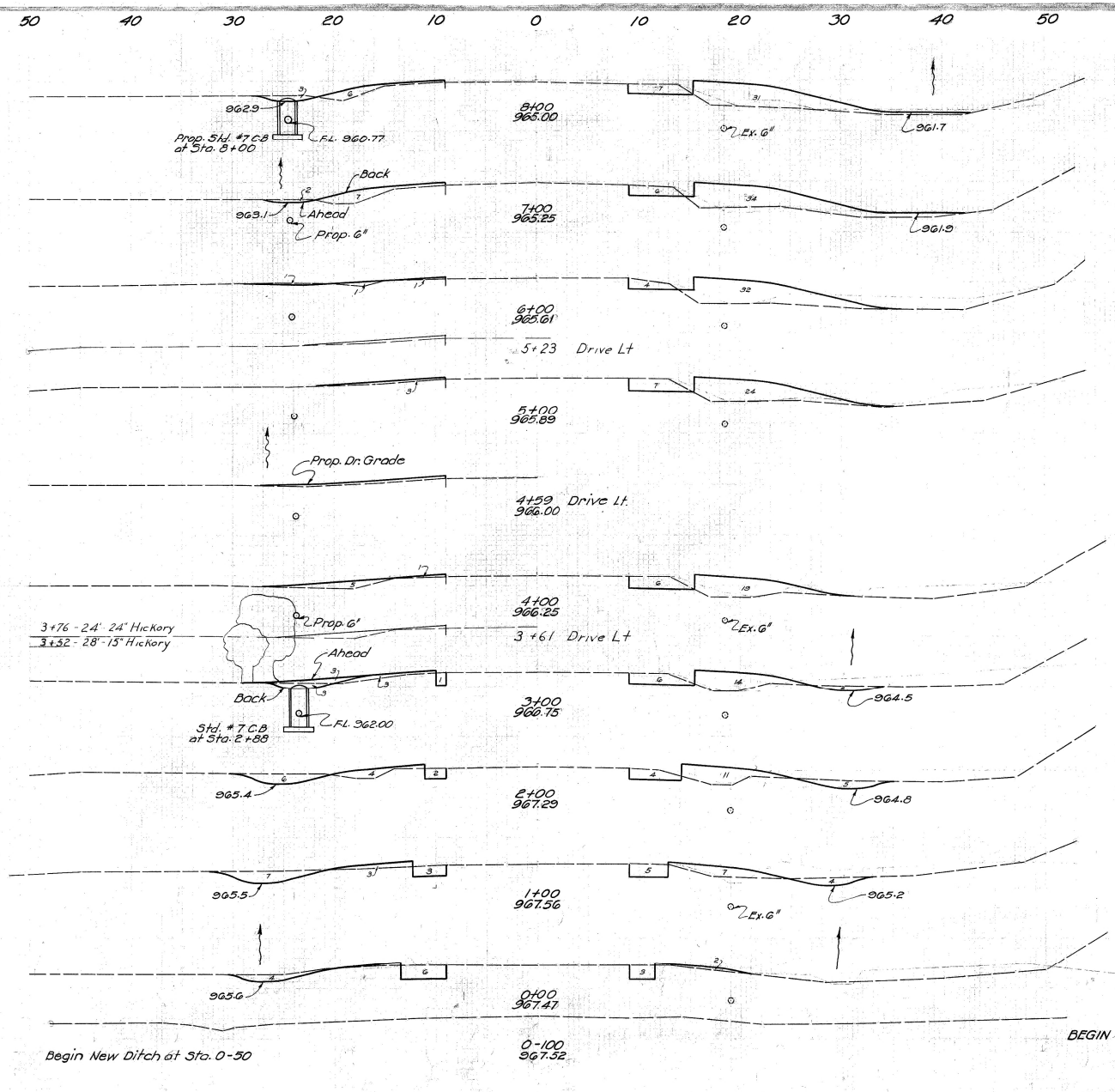
Sta. 75+00 TO Sta. 80+95 DEL-42-12.21

DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-558(11)	POST WAR	46 / 103

DEL.-42 (12.21 - 18.72)
MRW.-42 (0.00 - 1.11)



STA. 81+03 TO STA. 82+00



DIVISION 2 OHIO F.558(11) DEL.-42(12.21-18.72) MRW.-42(0.00-1.11)

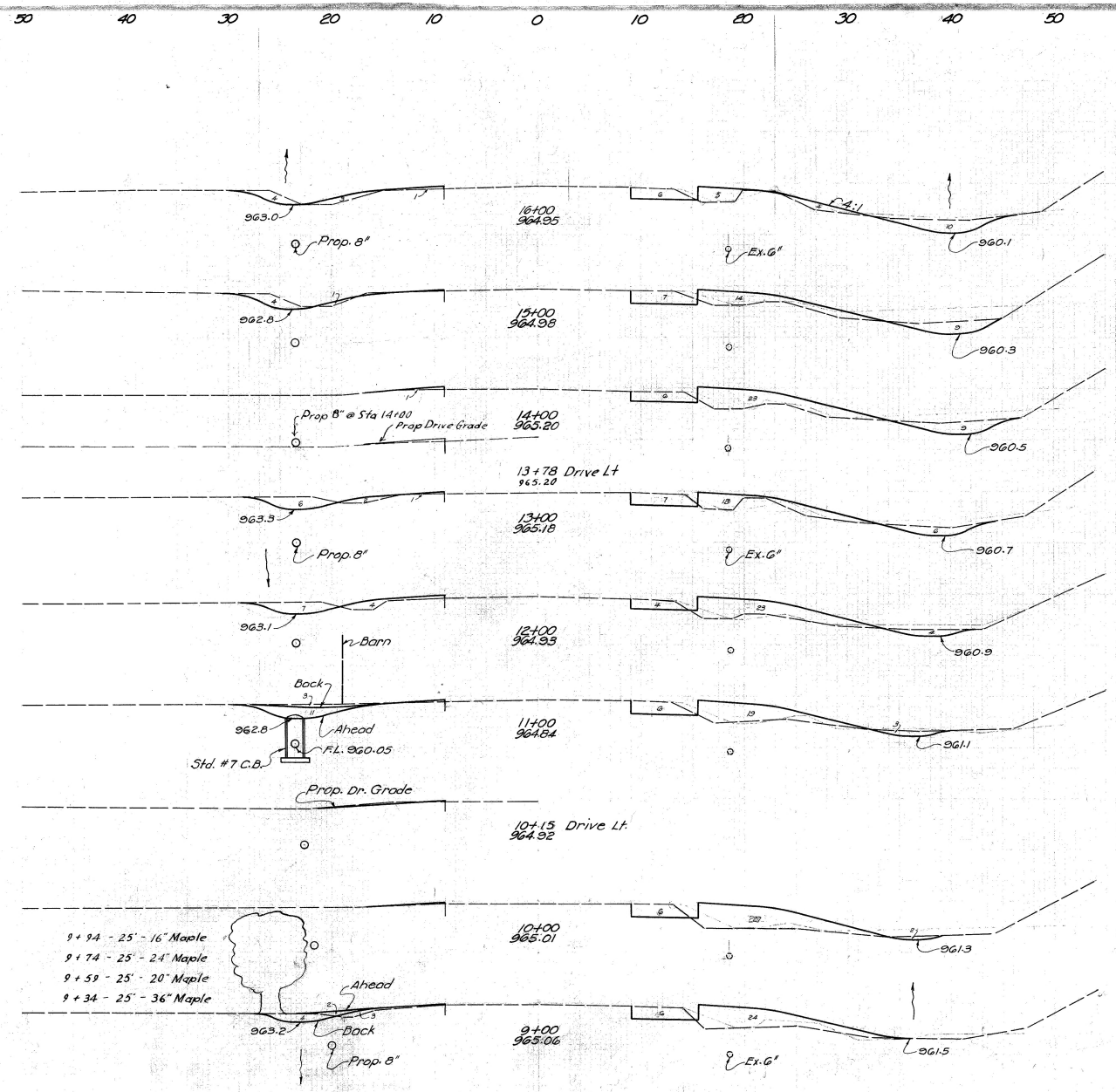
TYPE FUNDS POST WAR

47
103

	END AREAS CUT	END AREAS FILL	CU YDS. CUT	CU YDS. FILL
Sta. 8+00	10	37		
			33	144
Ahead	8	41		
Back	6	41		
			20	139
	5	34		
Add For Drive - Lt				1
			22	113
	7	27		
			24	96
Add For Drive - Lt				1
	6	25		
			28	83
Add For Drive - Lt				2
Ahead	9	20		
Back	12	17		
			54	59
	17	15		
			67	46
	19	10		
			59	22
BEGIN DEL-42-14.79 STA. 0+00	13	2		
Add for Ditch Lt.			10	

Excavation = 380 CU YDS
Emb. + 20% = 1115 CU YDS

STA. 0-1+00 TO STA. 8+00



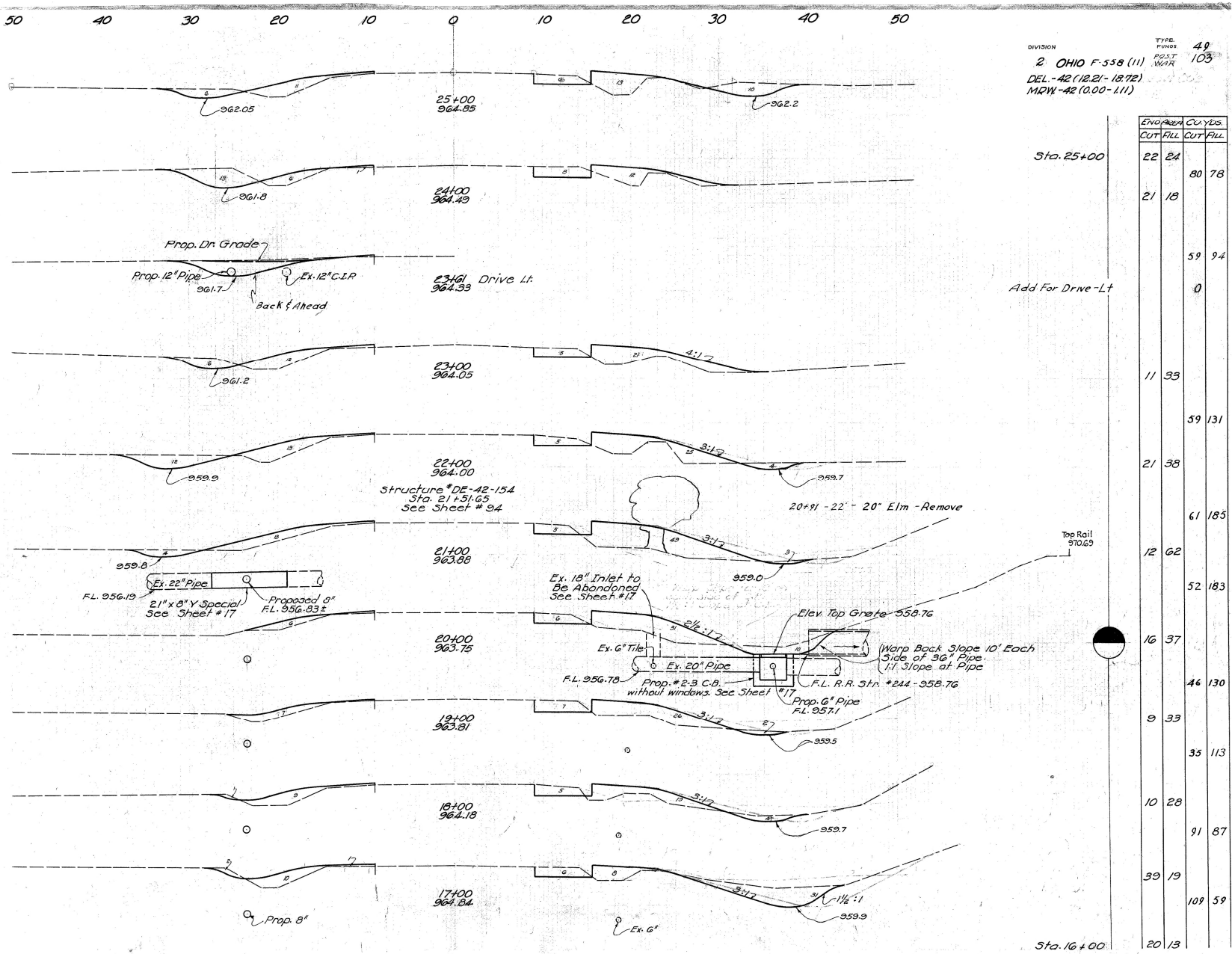
DIVISION 2 OHIO F-558(11) TYPE FUNDS POST WAR 48 103

DEL.-42(12.21-18.72)
MRW.-42(0.00-1.11)

Excavation = 648 Cu.Yds
Embankment = 839 Cu.Yds
Emb + 20% = 1007 Cu.Yds

END AREA		C.U. YDS.	
CUT	FILL	CUT	FILL
20	13		
		74	52
20	15		
		65	72
15	24		
		63	74
Add For Drive Lt			1
19	16		
		63	80
15	27		
		65	85
Ahead		20	19
Back		12	19
Add For Drive Lt			1
		37	85
8	27		
		26	104
Ahead		6	29
Back		10	27
		37	119
Sta. 8+00		10	37

STA. 9+00 TO STA. 16+00



DIVISION 2 OHIO F-558 (11)
TYPE. FUNDS POST WAR 49 103
DEL.-42 (12.21 - 18.72)
MRW.-42 (0.00 - 1.11)

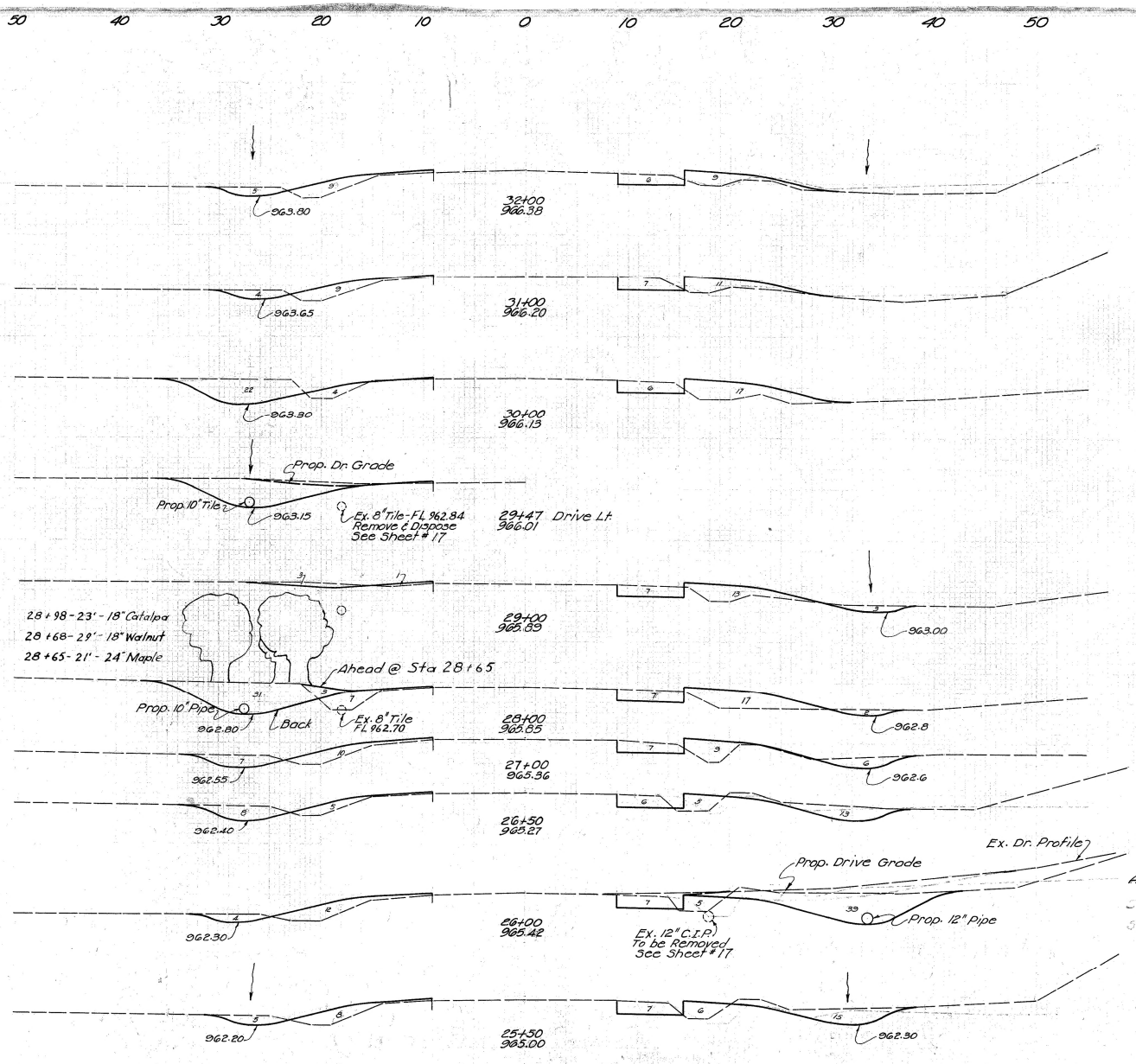
Sta. 25+00

Add For Drive-Lt

Sta. 16+00

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
22	24		
		80	78
21	18		
		59	94
		0	
11	33		
		59	131
21	38		
		61	185
12	62		
		52	183
16	37		
		46	130
9	33		
		35	113
10	28		
		91	87
39	19		
		109	59
20	13		

STA. 17+00 TO STA. 25+00



DIVISION 2 OHIO F-558 (11)
DEL.-42 (12.21-18.72)
M.R.W.-42 (0.00-1.11)

TYPE FUNDS 50
POST WAR 103

Add For Drive-Lt

Excavation 846 Cu.Yds.
Embankment 1017 Cu.Yds.
Emb +20% 1220 Cu.Yds.

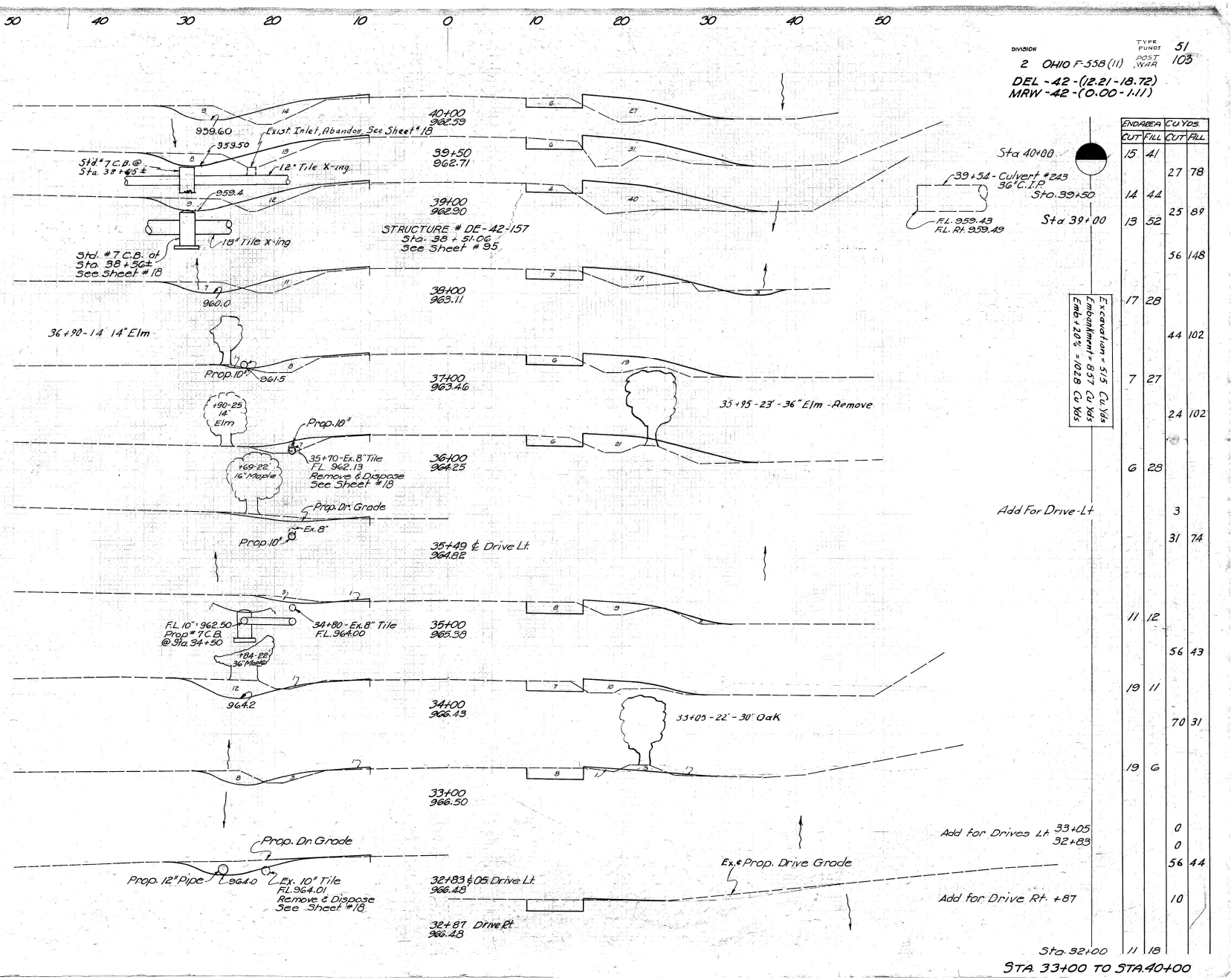
28+65 { Ahead / Back
28+00

Add for Drive Rt.

Sta. 25+00

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
11	18		
			41 70
11	20		
			72 76
28	21		
			0
			76 65
13	14		
			14 27
9	27		
40	24		
			96 58
40	24		111 80
20	19		
			44 27
27	10		
			72 25
			5
50	17		
			72 29
27	14		
			45 35
22	24		

STA. 25+50 TO STA. 32+00



DIVISION 2 OHIO F-538(11)

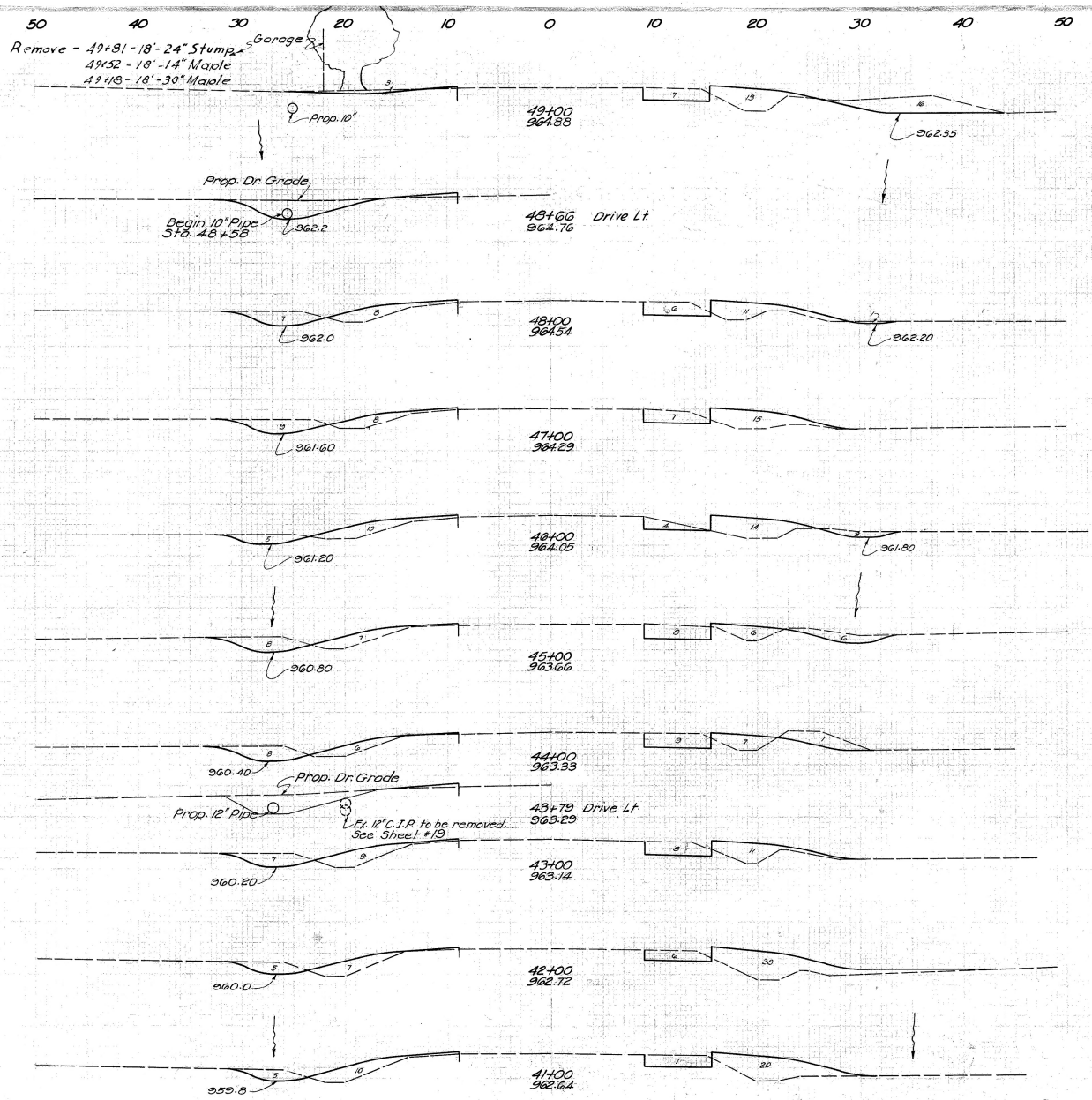
TYPE FUND POST WAR

51
103

DEL -42-(12.21-18.72)
MRW -42-(0.00-1.11)

ENDAREA		CU YDS.	
CUT	FILL	CUT	FILL
15	41		
		27	78
14	44		
		25	89
13	52		
		56	148
17	28		
		44	102
7	27		
		24	102
6	28		
		3	
		31	74
11	12		
		56	43
19	11		
		70	31
19	6		
		0	
		0	
		56	44
		10	
11	18		

STA. 33+00 TO STA. 40+00



DIVISION 2 OHIO F-558(11)

TYPE FUNDS POST MAR

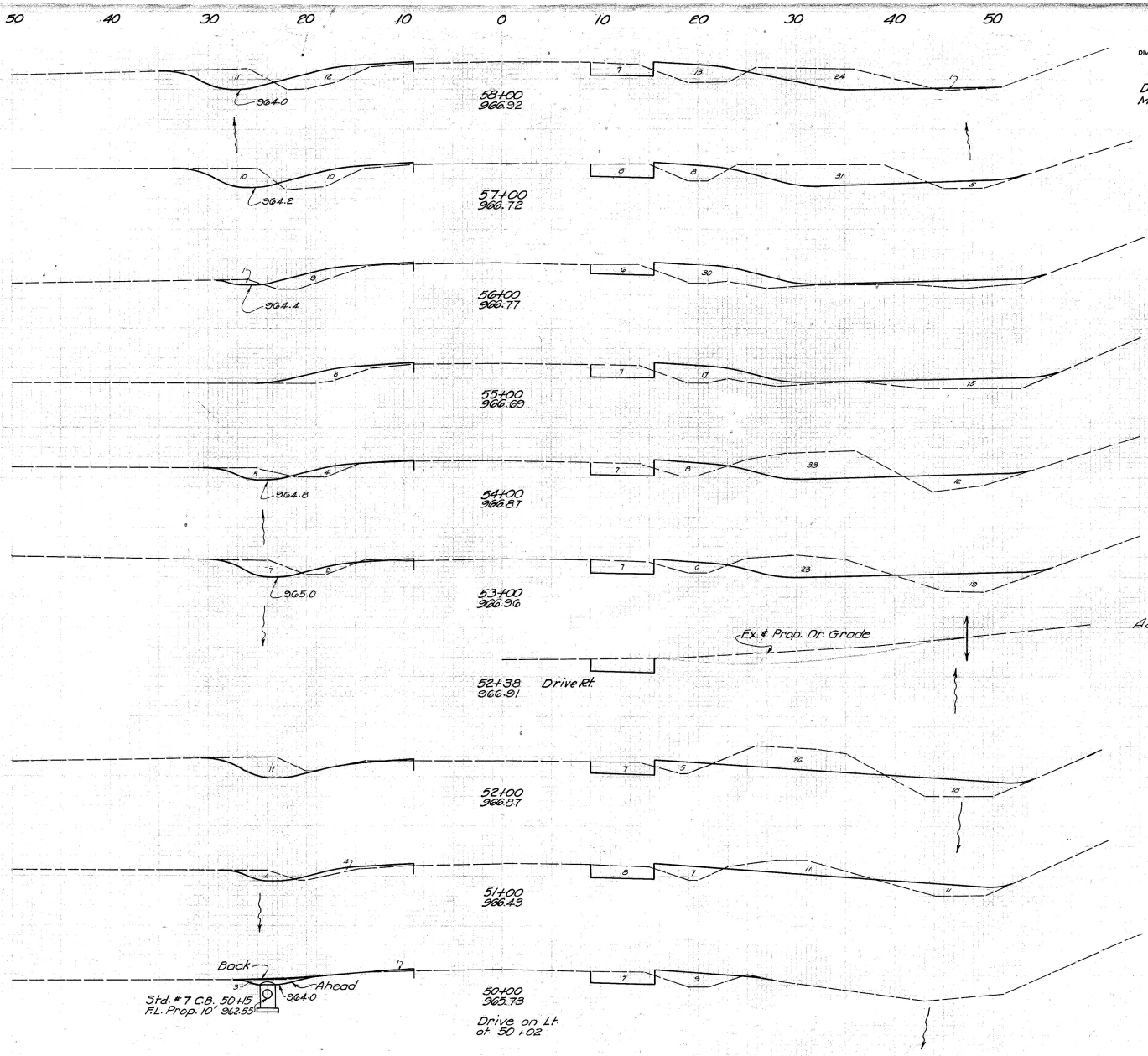
32
103

DEL -42-(12.21-18.72)
MRW-42-(0.00-1.11)

	END AREA CUT	END AREA FILL	CU YDS. CUT	CU YDS. FILL
Sta. 49+00	26	13		
Add for Drive Lt.			0	
			74	59
	14	19		
			56	78
	16	23		
			52	87
	12	24		
			63	69
	22	13		
			85	48
	24	13		
Add For Drive Lt.				1
			72	61
	15	20		
			48	102
	11	35		
			43	120
	12	30		
			50	131
Sta. 40+00	15	41		

Excavation = 602 Cu. Yds
Embankment = 799 Cu. Yds
Emb x 1.20 = 959 Cu. Yds

STA. 41+00 TO STA. 49+00



DIVISION 2 OHIO F-538(11)
DEL. .42 (12.21 - 18.72)
MR W. - 42 (0.00 - 1.11)

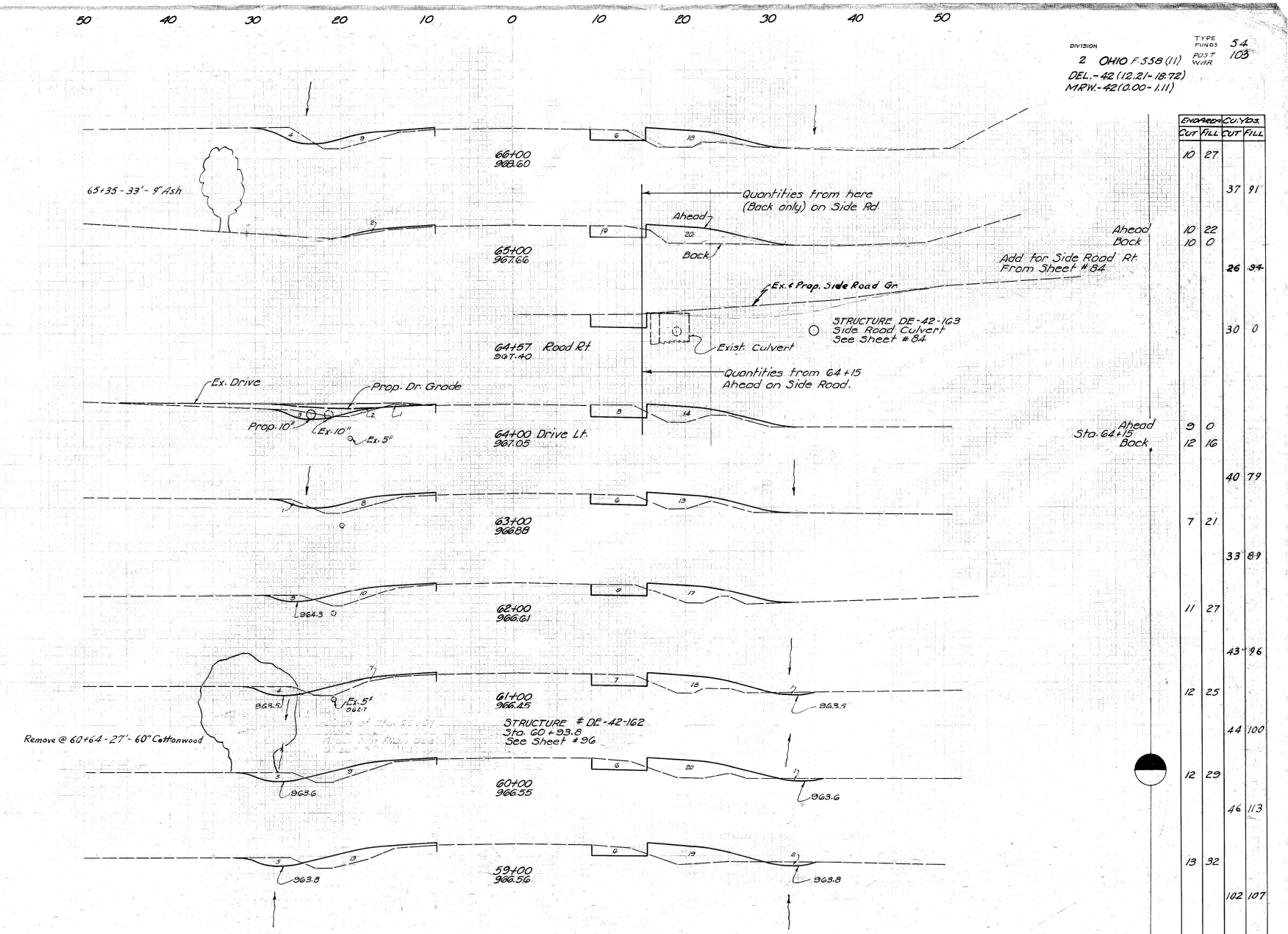
TYPE FUNDS POST WAR

53
103

Excavation = 1042 Cu Yds
Embankment = 1021 Cu Yds
Emb. + 20% = 1225 Cu Yds

	End Area		Cu Yds.	
	Cut	Fill	Cut	Fill
Sta. 58+00	42	26		
			169	91
Sta. 57+00	49	23		
			104	115
	7	39		
			26	146
	7	40		
			96	119
	45	24		
			152	94
	37	27		
Add For Drive-Rt.			12	
			150	93
	44	23		
			124	83
	23	22		
			61	59
Add For Drive-Lt.				1
Ahead	10	10		
Back	7	10		
			59	43
Sta. 49+00	25	13		

STA. 50+00 TO STA. 58+00

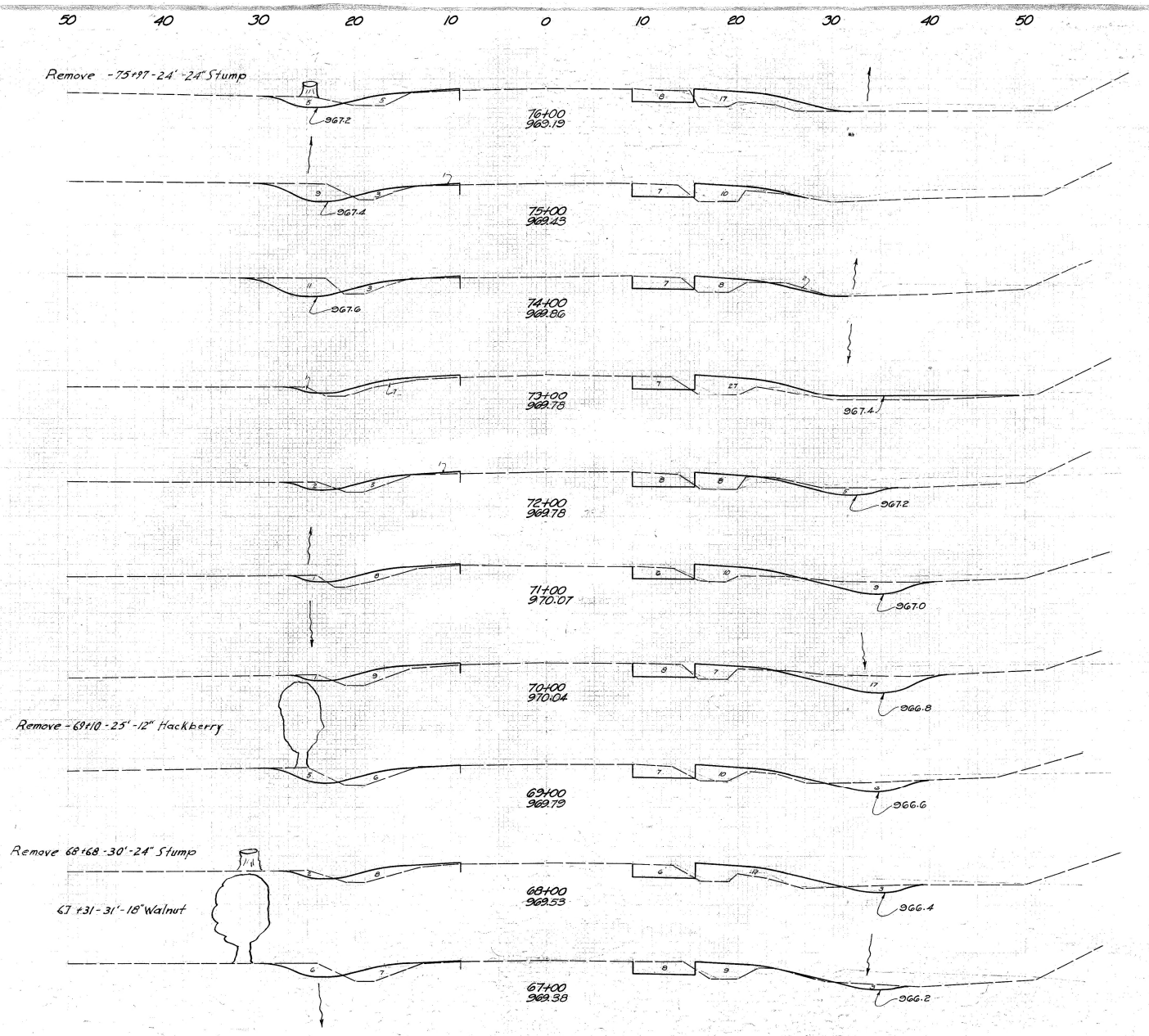


DIVISION 2 OHIO F.558(11)
DEL.-42(12.21-18.72)
M.R.W.-42(0.00-1.11)

TYPE FUNDS POST WAR 54 103

ENGINEERS		CU. YDS.	
CUT	FILL	CUT	FILL
10	27		
		37	91
Ahead 10	22		
Back 10	0		
		26	94
		30	0
Ahead 9	0		
Back 12	16		
		40	79
7	21		
		33	89
11	27		
		43	96
12	25		
		44	100
12	29		
		46	113
13	32		
		102	107
Sta. 58+00 42	26		

STA. 59+00 TO STA. 66+00



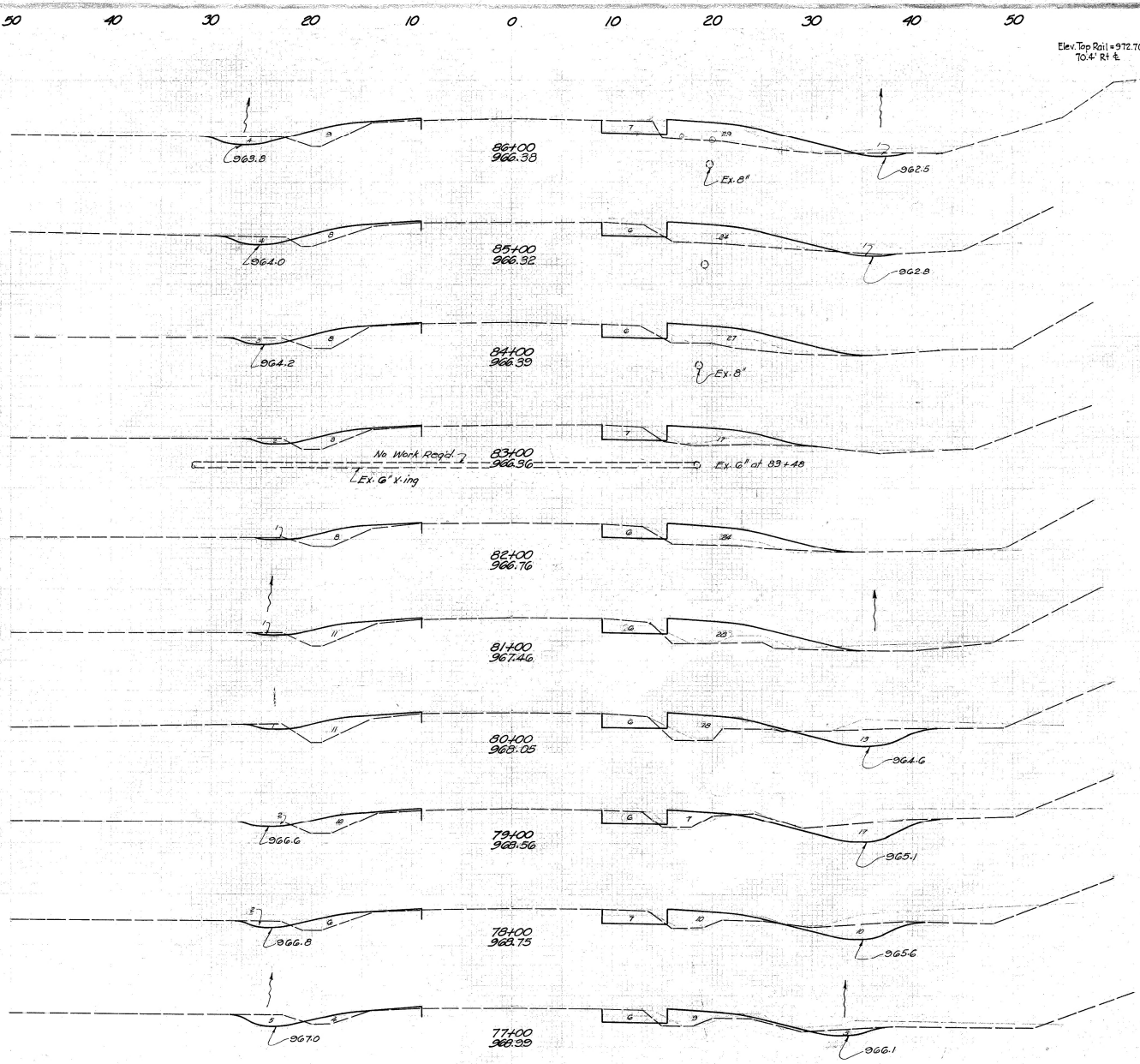
DIVISION 2 OHIO F-358 (11)
DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)

TYPE FUNDS POST WAR 55 103

Sta. 76+00	END AREA CUT	END AREA FILL	CU YDS. CUT	CU YDS. FILL
	13	22		
			54	67
	16	14		
			67	46
	20	11		
			52	83
	8	34		
			43	89
	15	14		
			57	59
	16	18		
			78	63
	26	16		
			81	59
	18	16		
			54	76
	11	25		
			52	76
	17	16		
			50	80
Sta. 66+00	10	27		

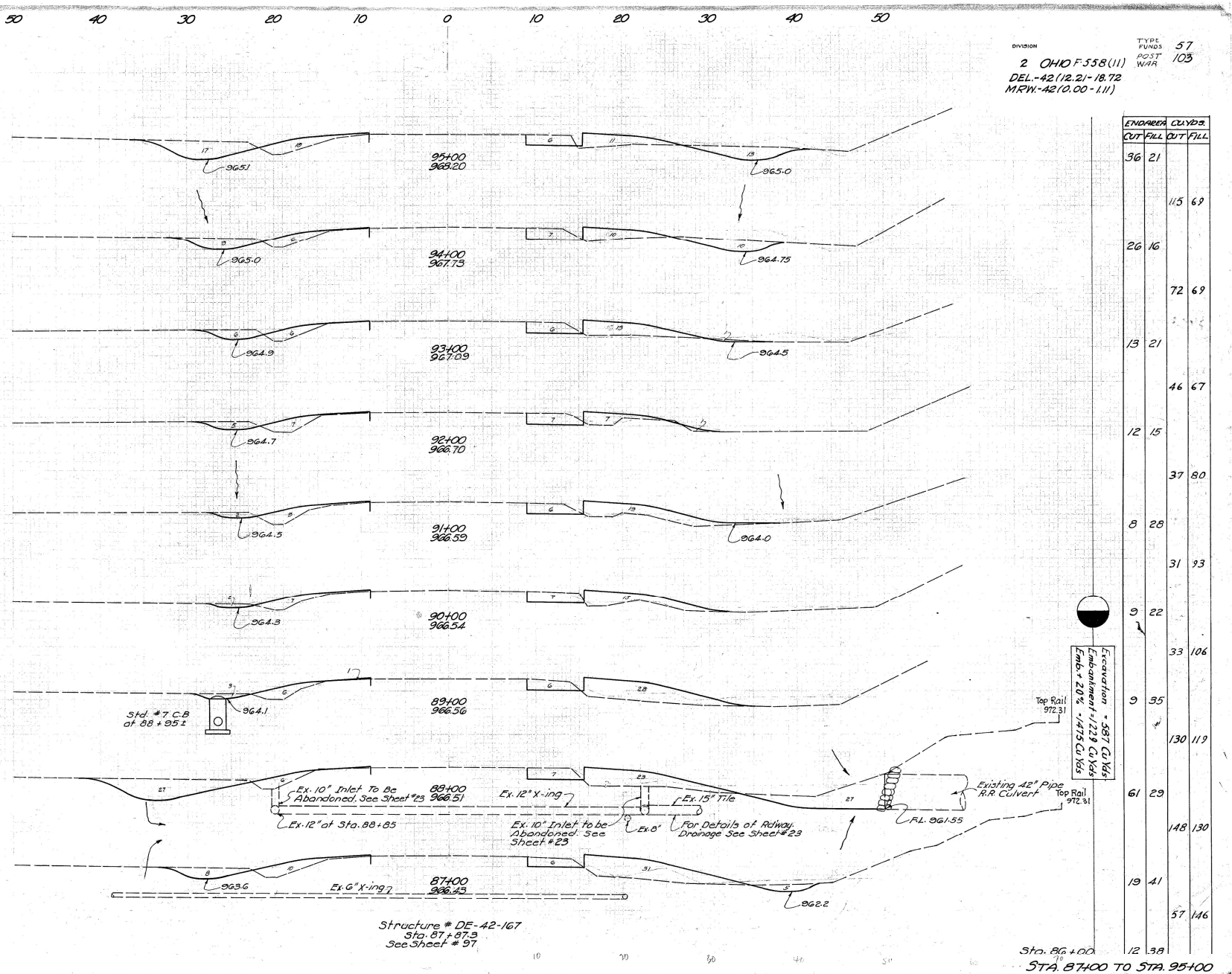
Excavation = 490 Cu Yds
Embankment = 840 Cu Yds
Emb + 20% = 1008 Cu Yds

STA. 67+00 TO STA. 76+00

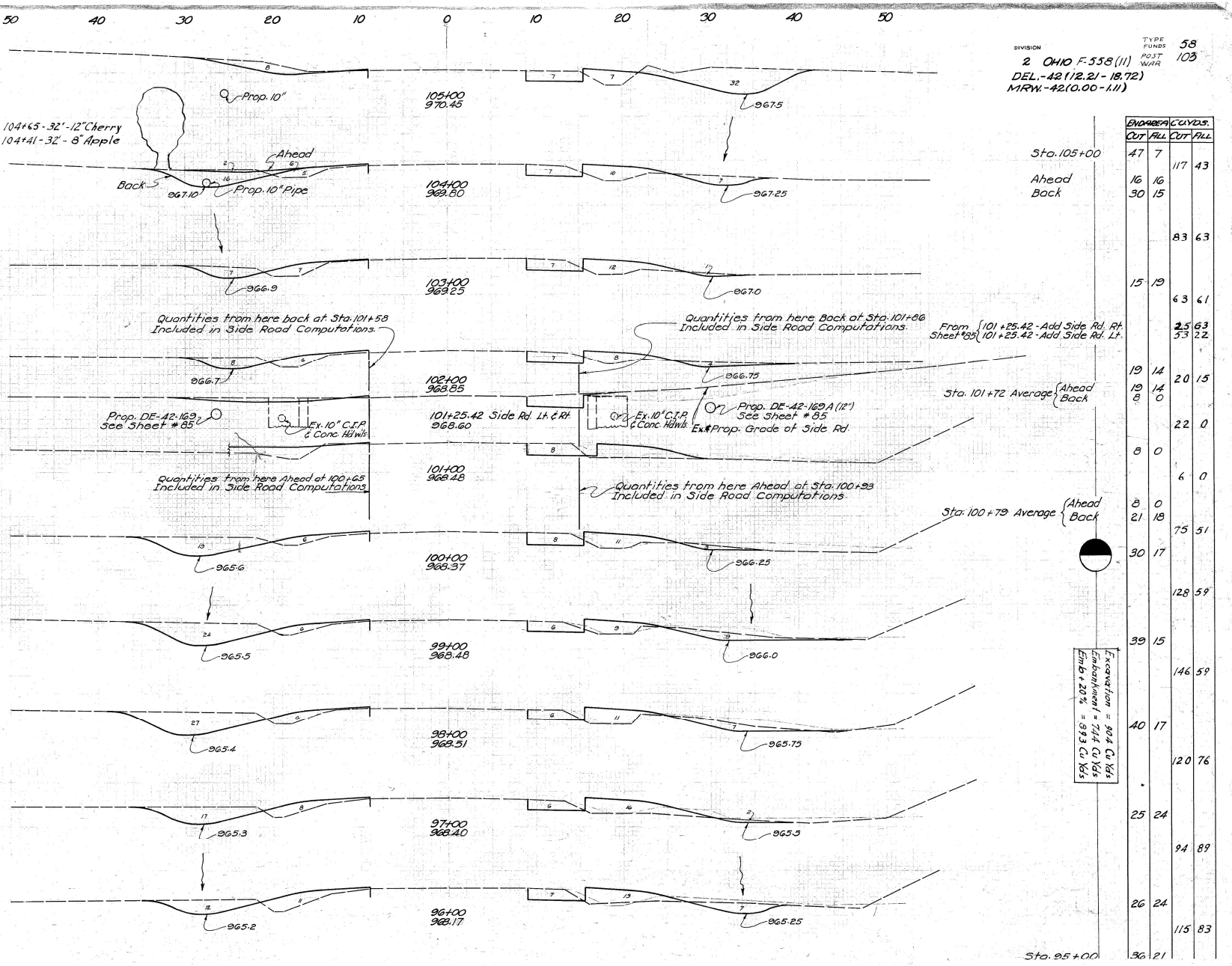


END AREA		CU YDS.	
CUT	FILL	CUT	FILL
12	38		
		43	130
11	32		
		37	124
9	35		
		33	111
9	25		
		30	106
7	32		
		26	131
7	39		
		50	126
20	29		
		83	85
25	17		
		81	61
19	16		
		61	54
14	13		
		50	65
13	22		

STA. 77+00 TO STA. 86+00



END AREA		CU YDS.	
CUT	FILL	CUT	FILL
36	21		
		115	69
26	16		
		72	69
13	21		
		46	67
12	15		
		37	80
8	28		
		31	93
9	22		
		33	106
9	35		
		130	119
61	29		
		148	130
19	41		
		57	146
12	38		



DIVISION 2 OHIO F-558(11) TYPE FUNDS POST WAR 58 103

DEL.-42(12.21-18.72)

MRW.-42(0.00-1.11)

Sta. 105+00

Ahead

Back

From Sheet #85 { 101+25.42 - Add Side Rd. Rt. / 101+25.42 - Add Side Rd. Lt.

Sta. 101+72 Average { Ahead / Back

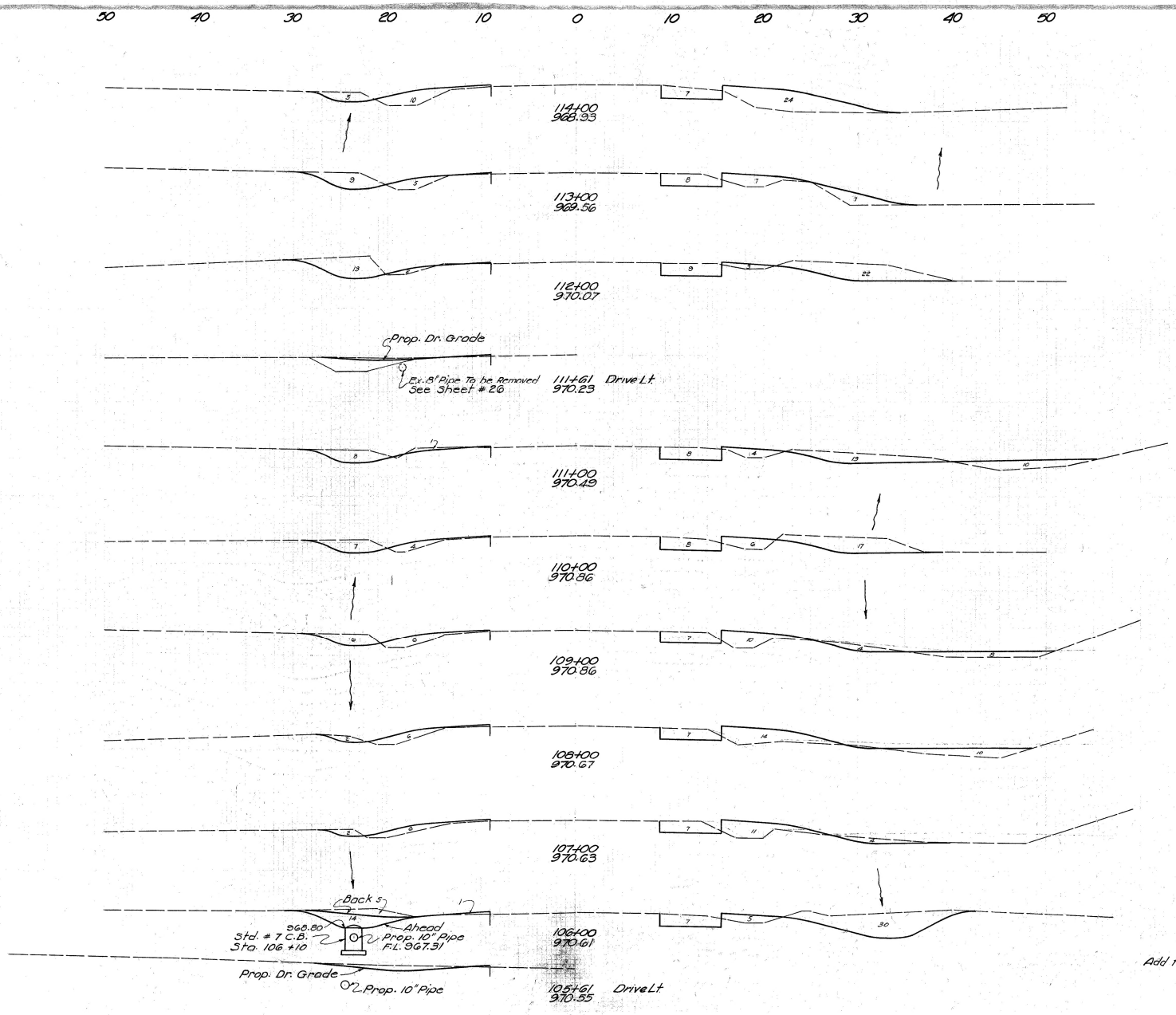
Sta. 100+79 Average { Ahead / Back

Sta. 95+00

Excavation = 904 Cu Yds
Emb + 20% = 893 Cu Yds

END AREA		CU YDS.	
CUT	FILL	CUT	FILL
47	7	117	43
16	16		
30	15		
		83	63
15	19		
		63	61
		25	63
		53	22
19	14	20	15
19	14		
8	0		
		22	0
8	0		
		6	0
8	0		
21	18		
		75	51
30	17		
		128	59
39	15		
		146	59
40	17		
		120	76
25	24		
		94	89
26	24		
		115	83
30	21		

STA. 96+00 TO STA. 105+00

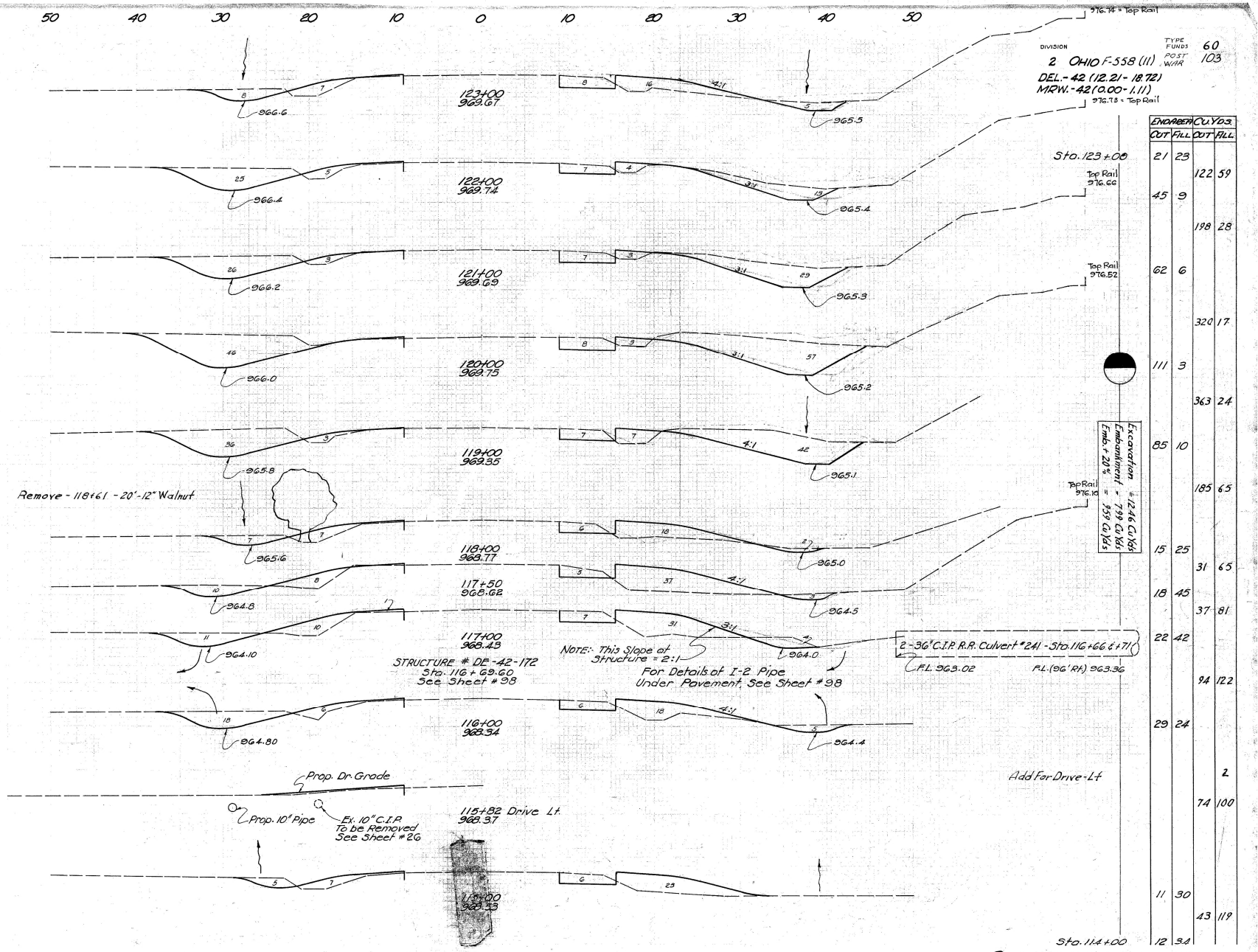


DIVISION 2 OHIO F-558(11)
TYPE FUNDS 59
POST WAA 103
DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)

	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
Sta. 114+00	12	34		
			54	98
	17	19		
			113	44
	44	5		
Add For Drive Lt			0	
			137	35
	30	14		
			113	44
	32	10		
			91	63
	17	24		
			48	100
	9	30		
			41	87
	13	17		
			119	43
Ahead	51	6		
Back	42	6		
Add for Drive Lt.			0	
			165	24
Sta. 105+00	47	7		

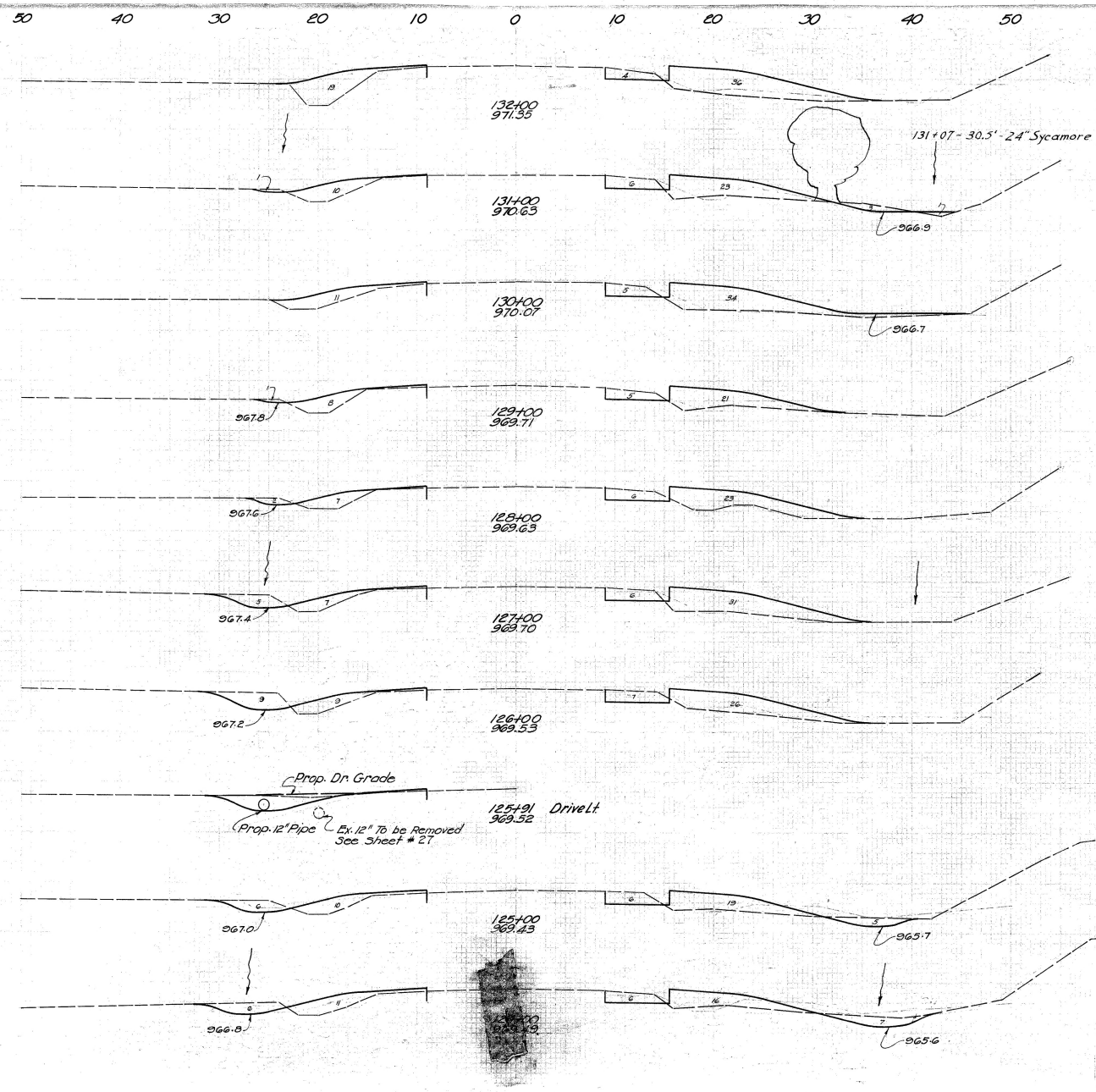
Excavation = 928 Cu Yds
Emb + 20% = 635 Cu Yds
762 Cu Yds

STA. 106+00 TO STA. 114+00



ENDAREA		CU YDS.	
CUT	FILL	CUT	FILL
21	23		
		122	59
45	9		
		198	28
62	6		
		320	17
111	3		
		363	24
85	10		
		185	65
15	25		
		31	65
18	45		
		37	81
22	42		
		94	122
29	24		
		2	
		74	100
11	30		
		43	119
12	34		

STA. 115+00 TO STA. 123+00



DIVISION 2 OHIO F-358(11)
DEL.-42 (12.21-18.72)
MRW.-42 (0.00-1.11)

TYPE FUNDS POST WAR 61 105

Sta. 132+00

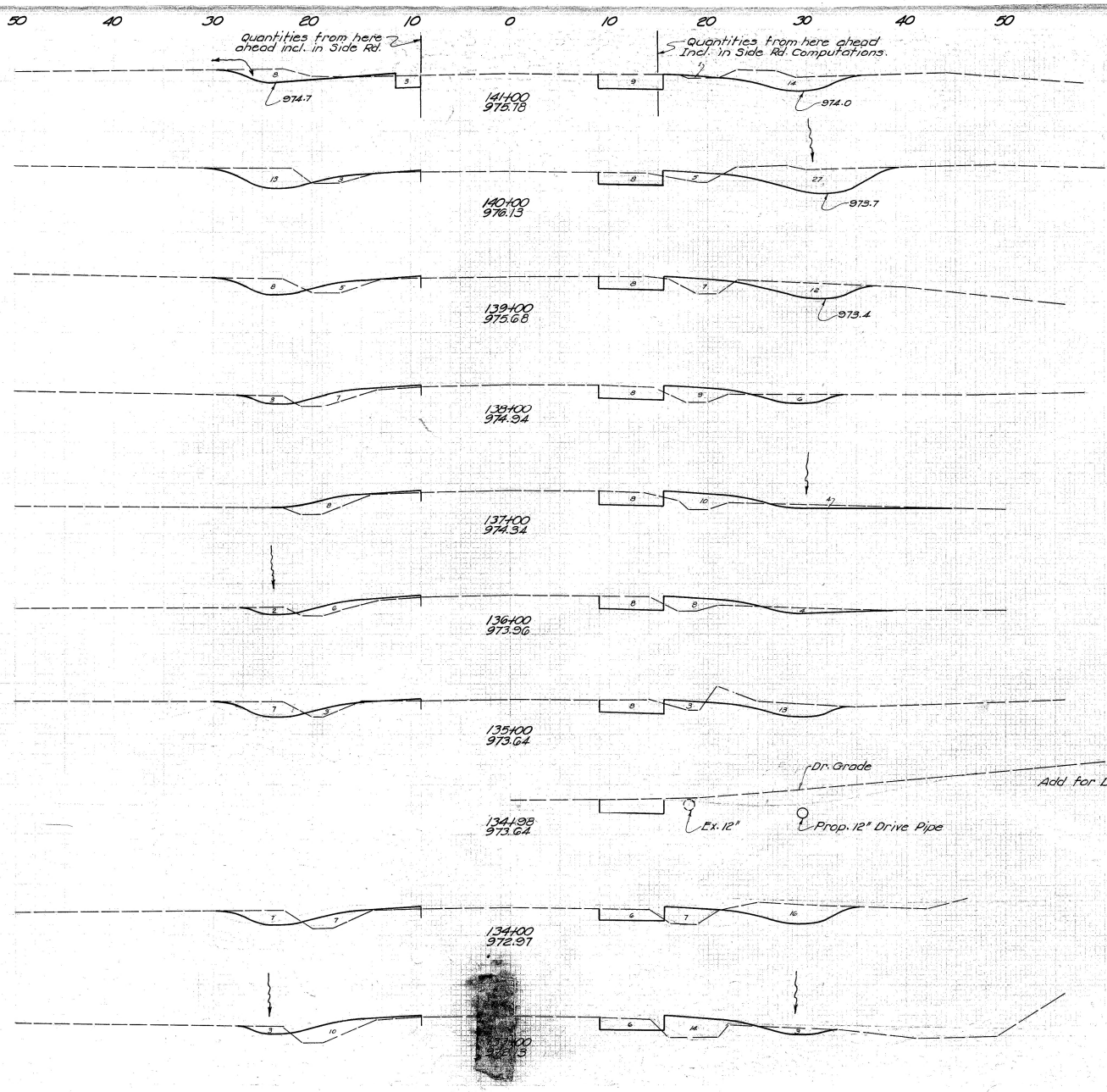
Excavation = 973 Cu. Yds
Emb. 120% = 1112 Cu. Yds

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
4	55		
		26	165
10	34		
		28	146
5	45		
		20	137
6	29		
		26	109
8	30		
		35	126
11	38		
		50	135
16	35		
		0	
		61	119
17	29		
		67	104
19	27		
		74	93
21	23		

Add For Drive Lt

Sta. 123+00

STA. 124+00 TO STA. 132+00



DIVISION 2 OHIO F-558(11)

TYPE FUNDS POST WAR 62 103

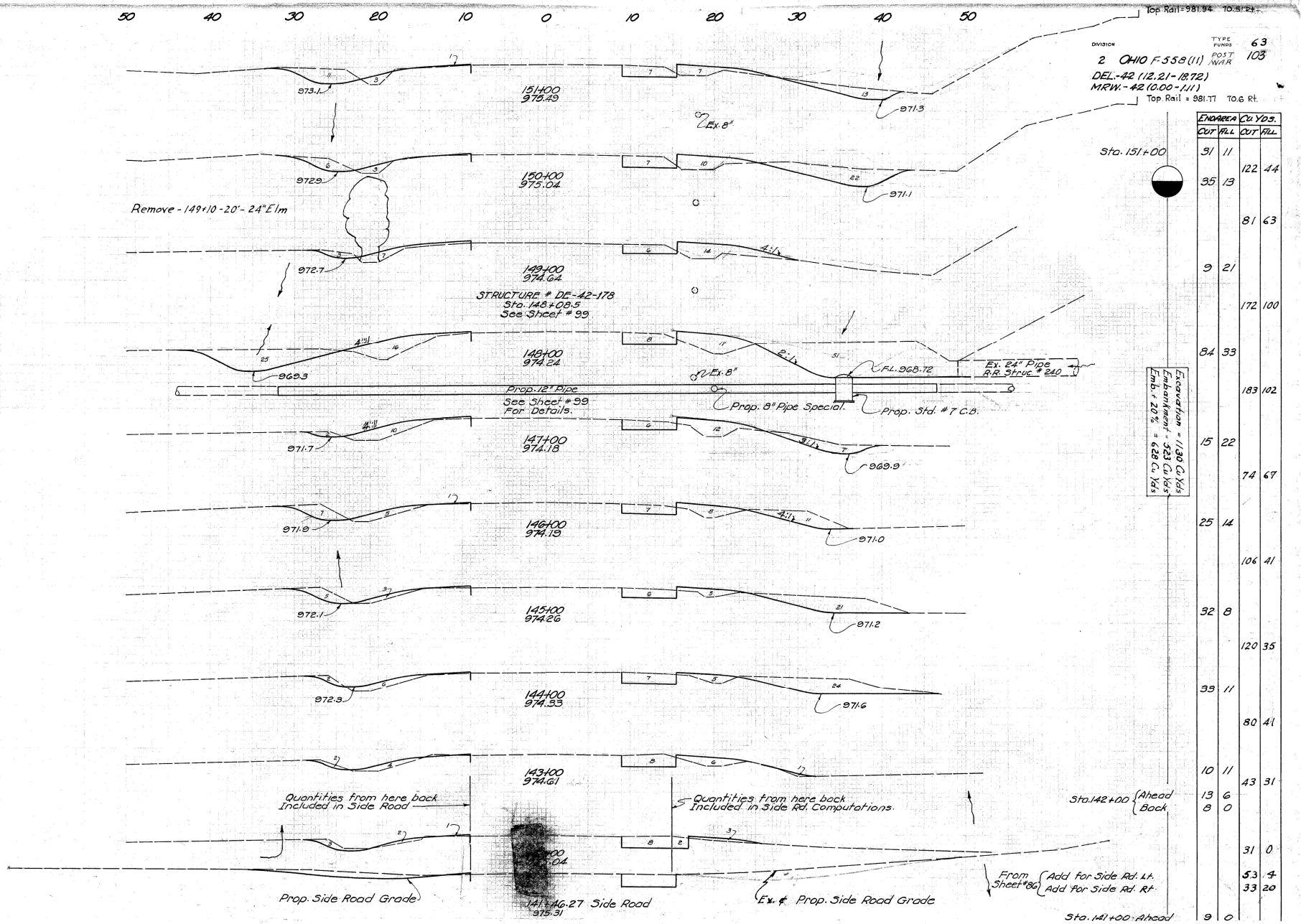
DEL.-42 (12.21-18.72)

MRW.-42 (0.00-1.11)

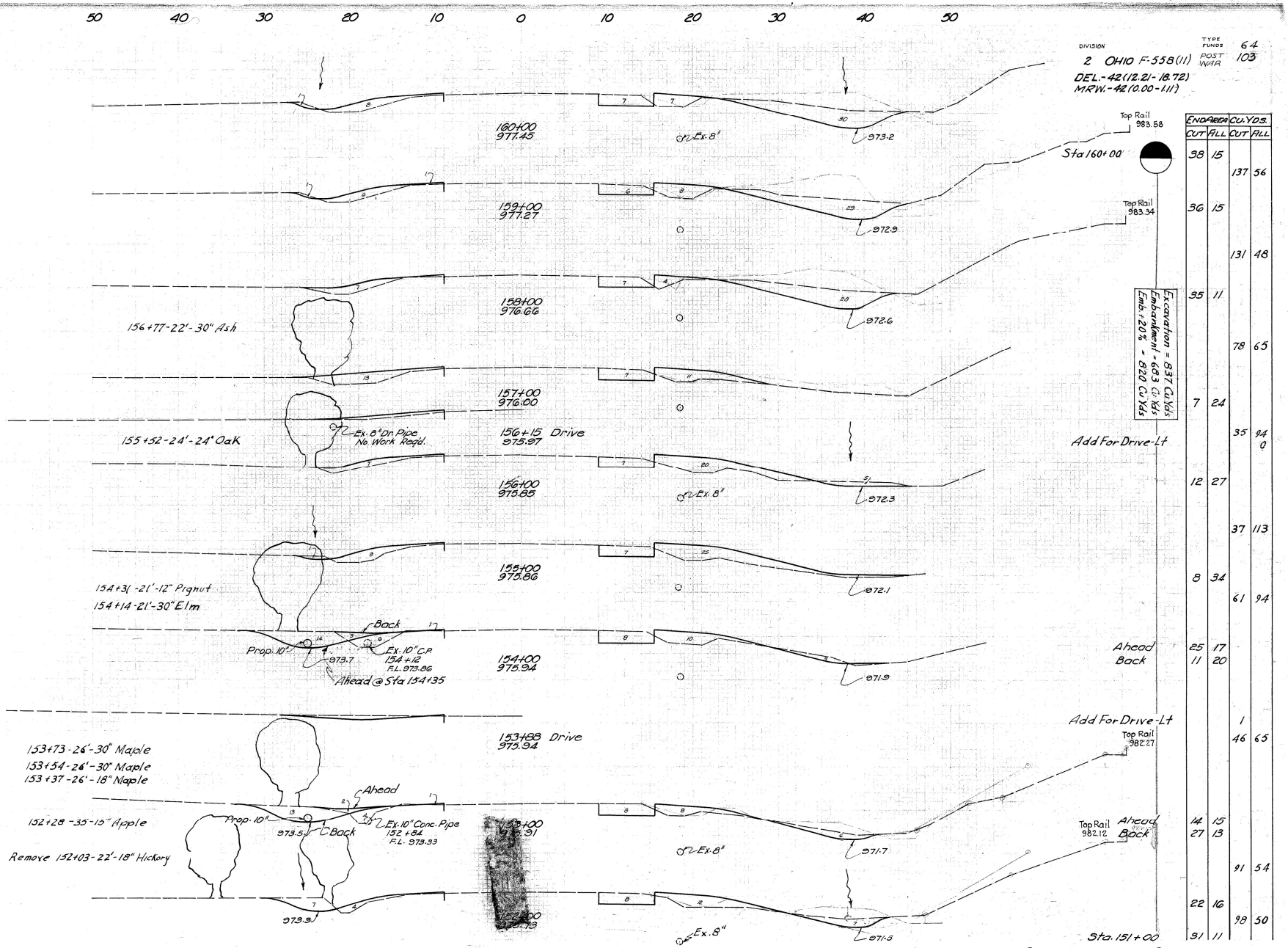
Excavation = 632 Cu. Yds
Embankment = 812 Cu. Yds
Emb. + 20% = 975 Cu. Yds

		END AREA OUT	END AREA FILL	CU. YDS. OUT	CU. YDS. FILL
Sta. 141+00	Ahead	9	0		
	Back	35	2	154	19
Sta. 140+00		48	8	141	37
		28	12	83	52
		17	16	54	63
		12	18	48	59
		14	14	78	37
		28	6	12	
				106	37
		29	14	76	70
		12	24	30	146
Sta. 132+00		4	55		

STA. 133+00 TO STA. 141+00

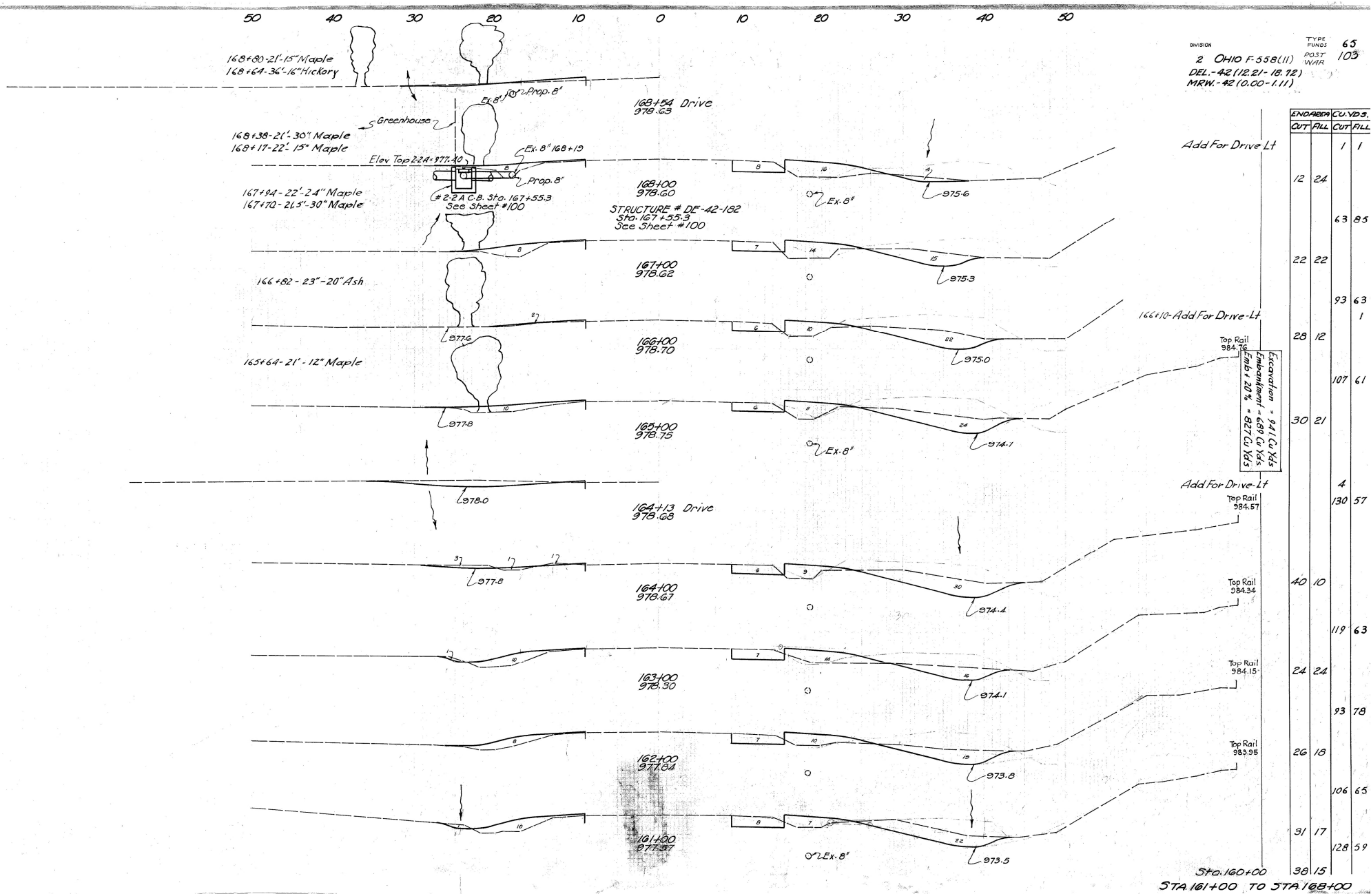


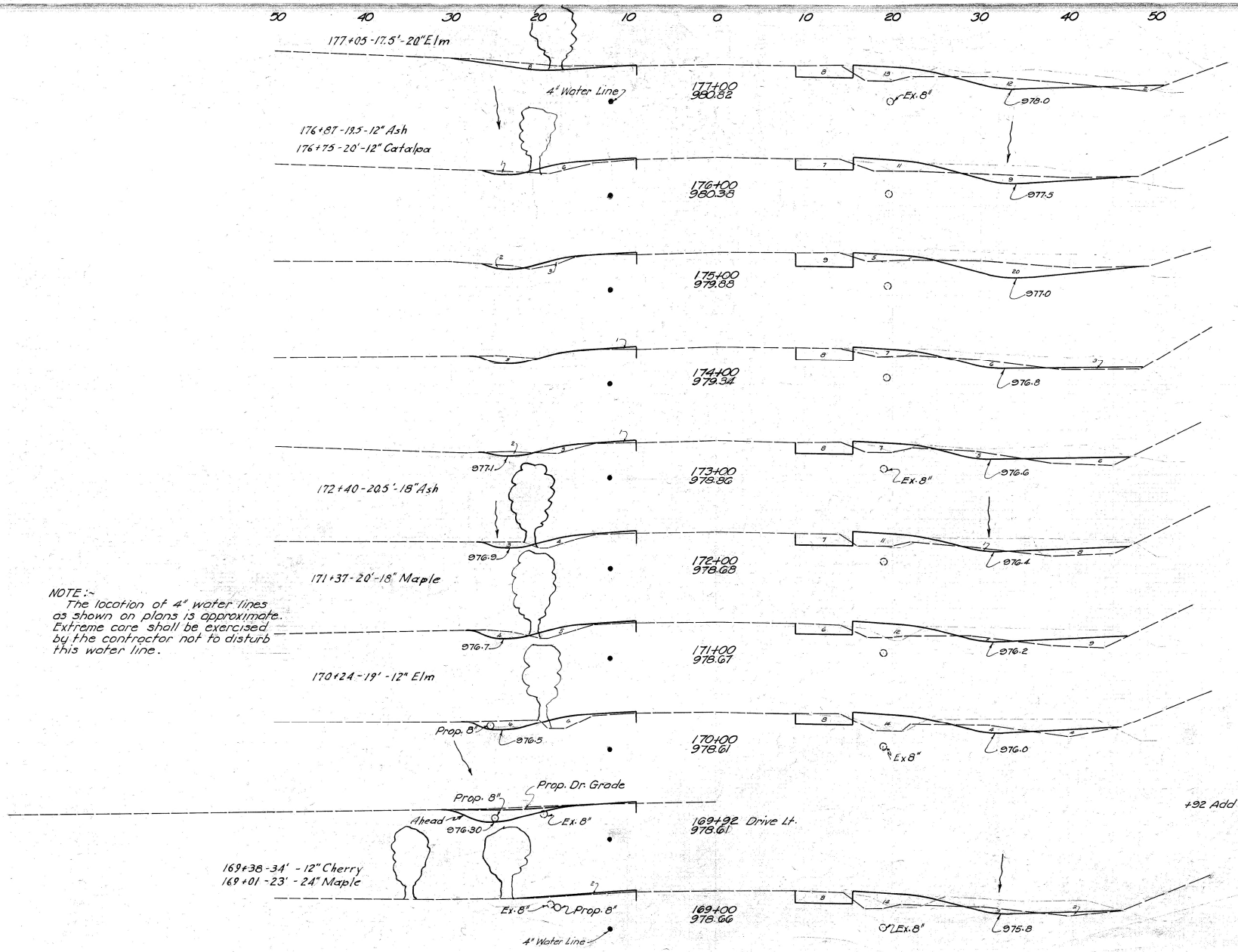
STA. 142+00 TO STA. 151+00



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
38	15		
		137	56
36	15		
		131	48
35	11		
		78	65
7	24		
		35	94
			0
12	27		
		37	113
8	34		
		61	94
25	17		
11	20		
		1	
		46	65
14	15		
27	13		
		91	54
22	16		
		98	50
31	11		

STA. 152+00 TO STA. 160+00


50 40 30 20 10 0 10 20 30 40 50
168+80-21'-15" Maple
168+64-36'-16" Hickory
Ex. 8" for Prop. 8"
℄ Greenhouse
168+38-21'-30" Maple
168+17-22'-15" Maple
Elev Top 2.2A = 977.40
Ex. 8" 168+19
Prop. 8"
2-2A C.B. Sta. 167+55.3
See Sheet #100
167+94-22'-24" Maple
167+70-21.5'-30" Maple
166+82-23"-20" Ash
165+64-21'-12" Maple
168+54 Drive
978.63
168+00
978.60
STRUCTURE # DF-42-182
Sta. 167+55.3
See Sheet #100
167+00
978.62
166+00
978.70
165+00
978.75
164+13 Drive
978.68
164+00
978.67
163+00
978.30
162+00
977.84
161+00
977.27
977.6
977.8
978.0
977.8
975.6
975.3
975.0
974.1
974.4
974.1
973.8
973.5
Ex. 8"
Add For Drive Lt
166+10-Add For Drive-Lt
Top Rail 984.76
Emb + 20% = 827 Cu Yds
Excavation = 941 Cu Yds
Add For Drive-Lt
Top Rail 984.57
Top Rail 984.34
Top Rail 984.15
Top Rail 983.95
Sta. 160+00
STA. 161+00 TO STA. 168+00
DIVISION 2 OHIO F-558(11)
DEL.-42(12.21-18.72)
MRW.-42(0.00-1.11)
TYPE FUNDS POST WAR 65 103
END AREA CUT FILL
CU. YDS. CUT FILL
1 1
12 24
63 85
22 22
93 63 1
28 12
107 61
30 21
4
130 57
40 10
119 63
24 24
93 78
26 18
106 65
31 17
128 59
38 15



NOTE :-
The location of 4" water lines as shown on plans is approximate. Extreme care shall be exercised by the contractor not to disturb this water line.

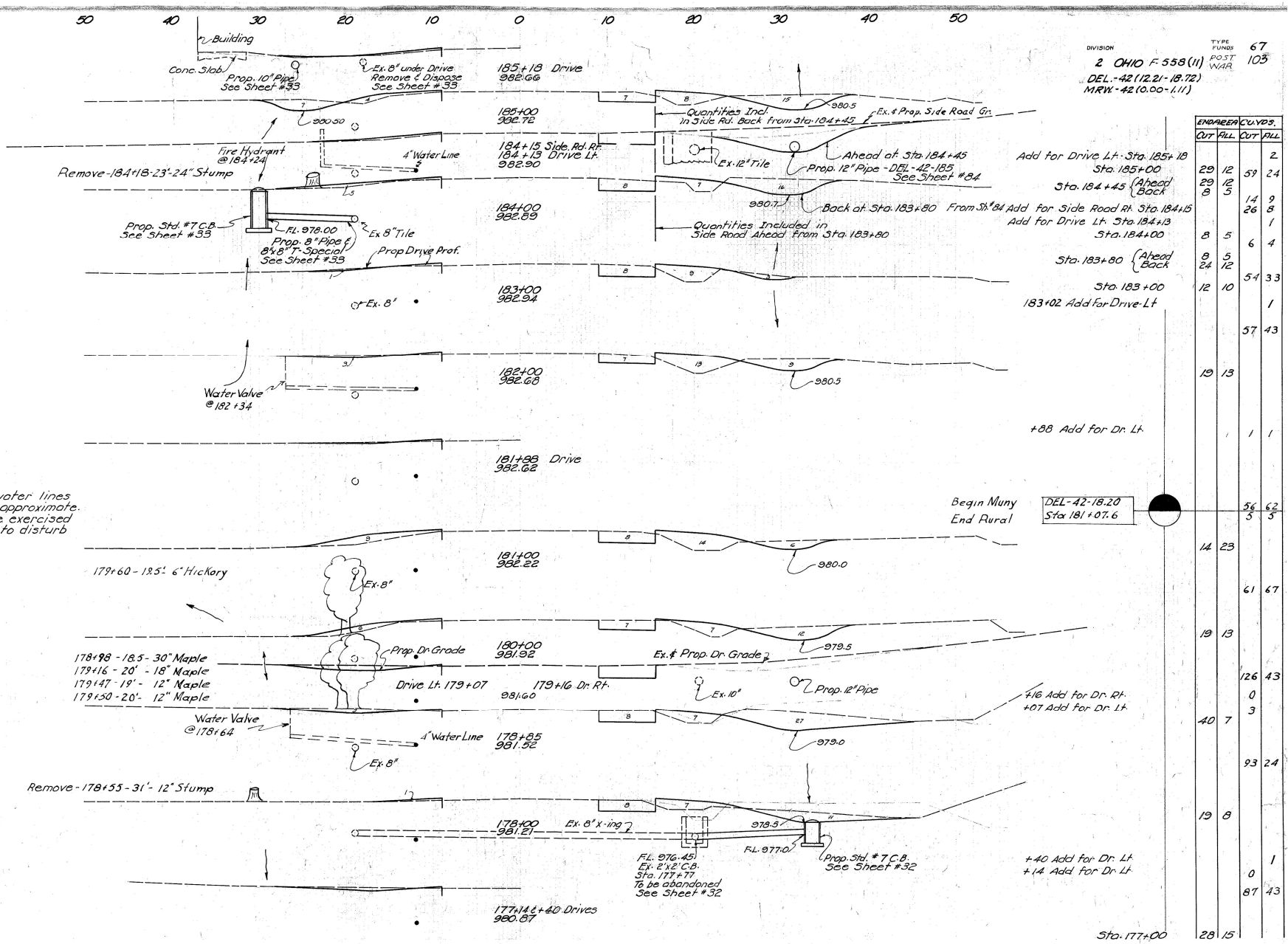
DIVISION 2 OHIO F-358(11)
DEL.-42(12.21-18.72)
MRW.-42(0.00-1.11)

TYPE FUNDS POST WAR
66
103

Excavation = 850 Cu Yds
Embankment = 633 Cu Yds
Emb.r 20% - 760 Cu Yds

	END AREA		CU YDS.	
	CUT	FILL	CUT	FILL
Sta. 177+00	28	15		
			83	59
	17	17		
			89	46
	31	8		
			93	35
	19	11		
			63	52
	15	17		
			48	74
	11	23		
			43	91
	12	26		
			56	93
	18	24		
+92 Add for Drive Lt.			0	
			54	78
	11	18		
			43	78
Sta. 168+00	12	24		

STA. 169+00 TO 177+00



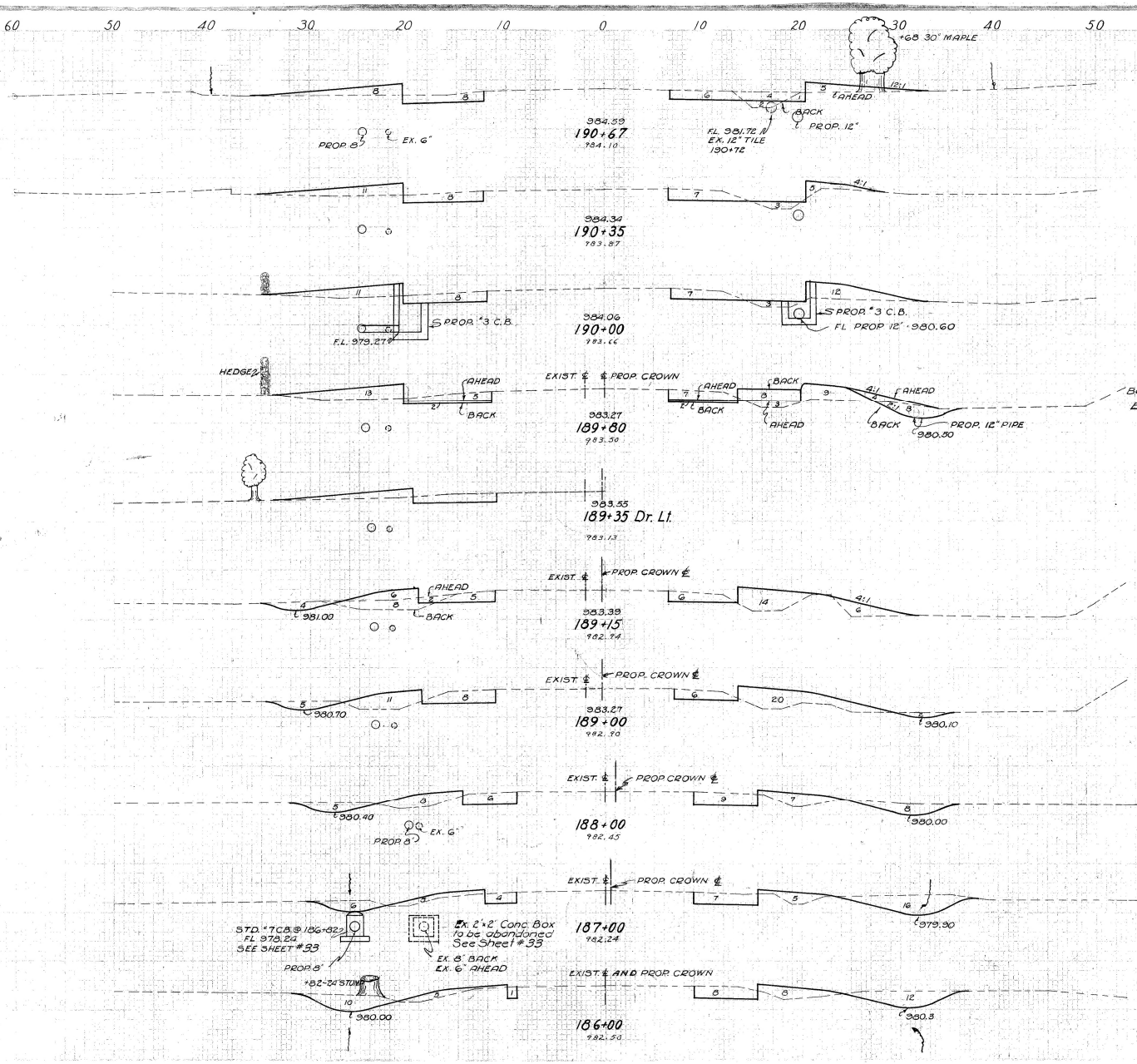
DIVISION 2 OHIO F-558(11) DEL.-42(12.21-18.72) MRW.-42(0.00-1.11)

TYPE FUNDS POST WAR

67
103

	ENDAREA CUT	ENDAREA FILL	CU.YDS. CUT	CU.YDS. FILL
Add for Drive Lt.-Sta. 185+18				2
Sta. 185+00	29	12	59	24
Sta. 184+45 Ahead	29	12		
Sta. 184+45 Back	8	5	14	9
Add for Side Road Rt. Sta. 184+15			26	8
Add for Drive Lt. Sta. 184+13				1
Sta. 184+00	8	5	6	4
Sta. 183+80 Ahead	8	5		
Sta. 183+80 Back	24	12		
Sta. 183+00	12	10	54	33
183+02 Add for Drive Lt				1
			57	43
	19	13		
+88 Add for Dr. Lt.			1	1
			56	62
			5	5
	14	23		
			61	67
	19	13		
			126	43
+16 Add for Dr. Rt.			0	
+07 Add for Dr. Lt.			3	
	40	7		
			93	24
	19	8		
+40 Add for Dr. Lt.				1
+14 Add for Dr. Lt.			0	
			87	43
Sta. 177+00	28	15		

STA. 177+14 TO STA. 185+00



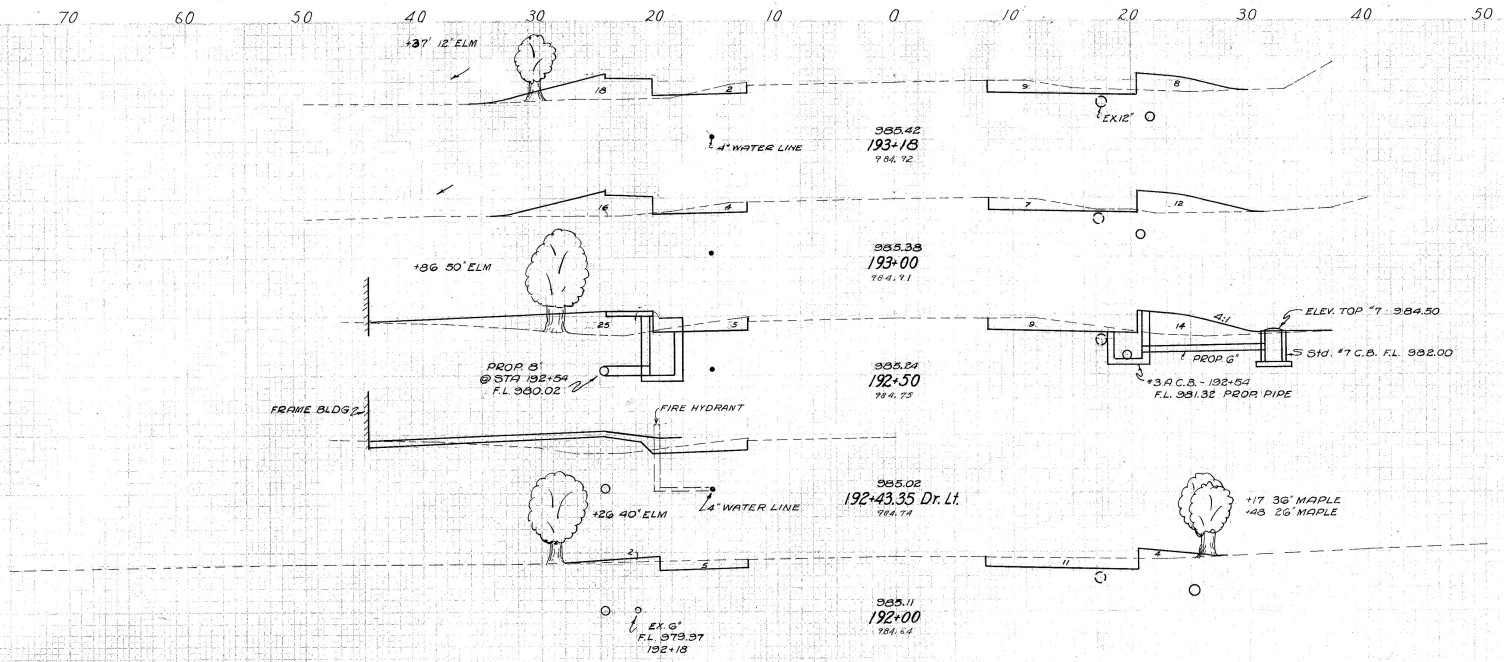
DIVISION 2 OHIO F-558(11) TYPE FUNDS POST WAR 68 103

DEL -42-(12.21-18.72)
MRW-42-(0.00-1.11)

		END AREA Cut	END AREA Fill	CU. YDS Cut	CU. YDS Fill
190+67	Ahead	19	13		
	Back	15	19		
				18	22
190+35		15	19		
				20	29
		15	26		
				13	21
Begin Code 6201					
End Code 6706					
189+80	Ahead	20	29		
	Back	24	33		
				47	71
Add For Drive.-Lt.					3
189+15	Ahead	15	26		
	Back	15	30		
				10	17
		21	31		
				91	87
		28	16		
				113	48
		33	10		
				119	43
		31	13		
				111	46
Sta 185+00		29	12		

Excavation = 762 Cu Yds
Embankment = 503 Cu Yds
Emb. + 20% = 604 Cu Yds

STA. 186+00 To STA. 190+61



DIVISION 2 OHIO F-558(11)

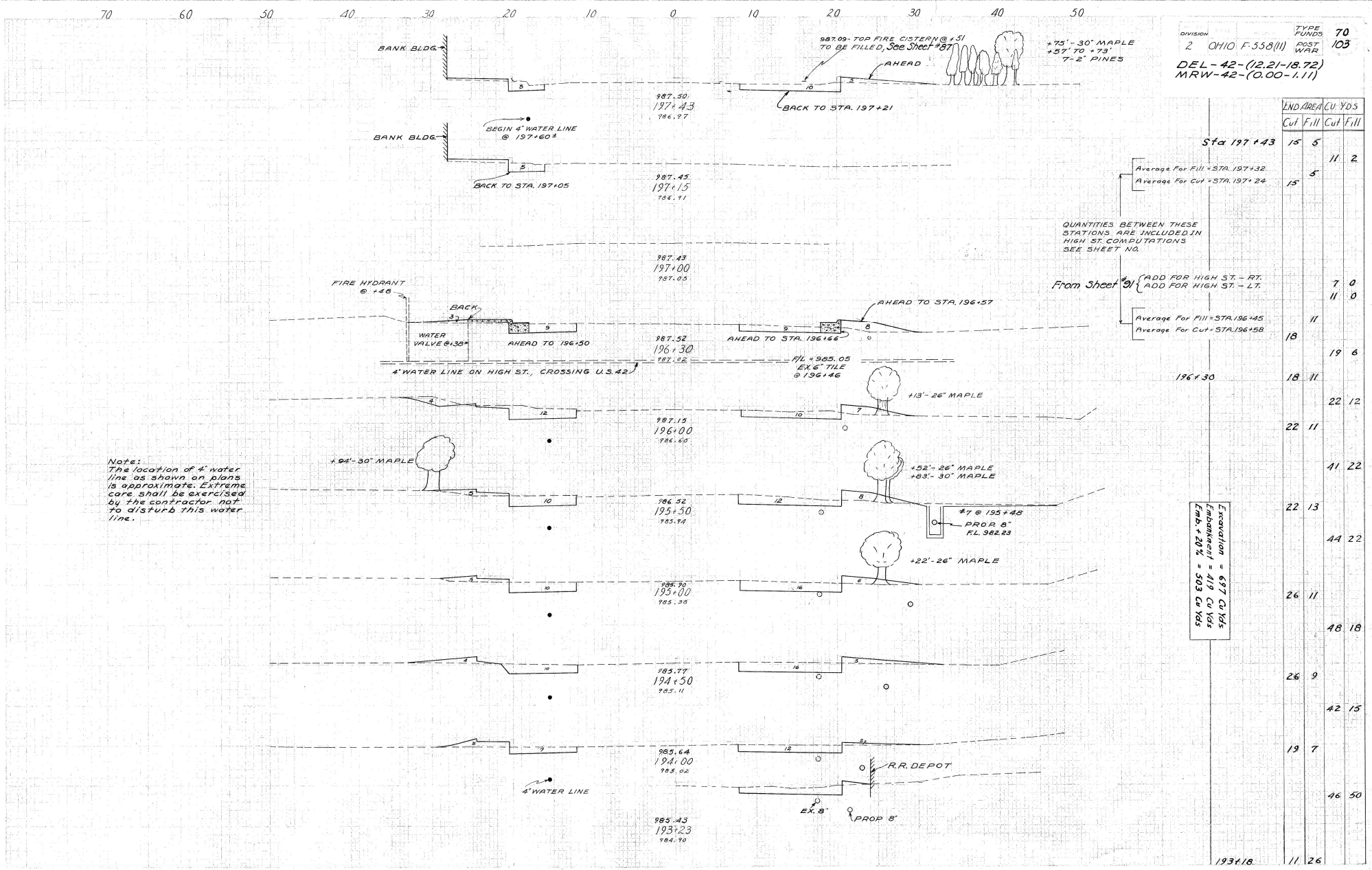
TYPE FUNDS 69
POST WAR 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

END AREA		CU. YDS.	
Cut	Fill	Cut	Fill
11	26		
		7	18
11	28		
		23	62
14	39		
		28	42
16	6		
		39	12
19	5		
		25	11
15	10		
		21	14
19	13		

Sta 190+67 Ahead

STA 191+00 TO STA. 193+18



DIVISION 2 OHIO F-558(11) TYPE FUNDS 70 POST WAR. 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

Note:
The location of 4" water line as shown on plans is approximate. Extreme care shall be exercised by the contractor not to disturb this water line.

Average For Fill = STA. 197+32
Average For Cut = STA. 197+24

QUANTITIES BETWEEN THESE STATIONS ARE INCLUDED IN HIGH ST. COMPUTATIONS SEE SHEET NO.

From Sheet #91 { ADD FOR HIGH ST. – RT. / ADD FOR HIGH ST. – LT.

Average For Fill = STA. 196+45
Average For Cut = STA. 196+58

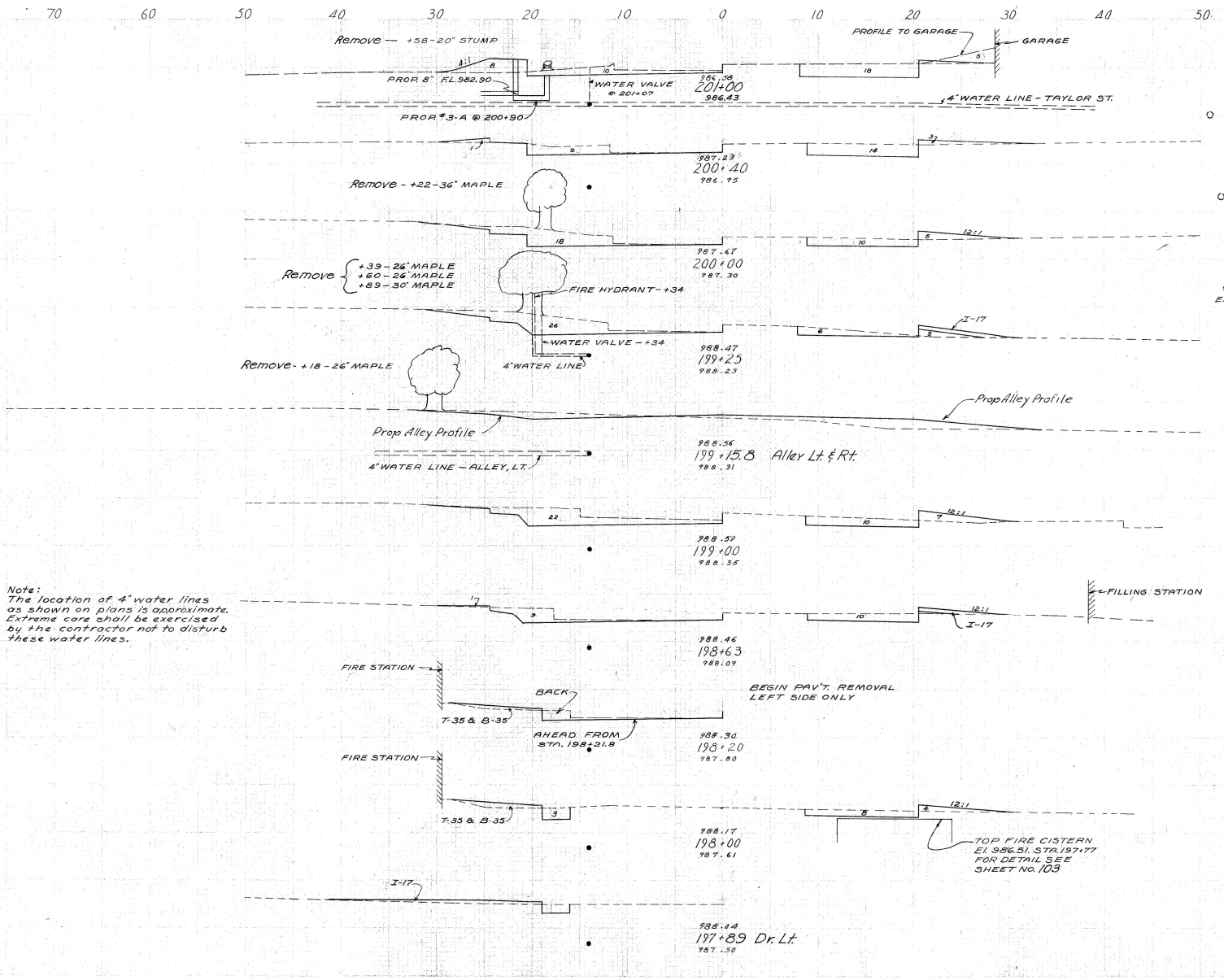
Excavation = 697 Cu Yds
Embankment = 419 Cu Yds
Emb. + 20% = 503 Cu Yds

	END AREA		CU. YDS.	
	Cut	Fill	Cut	Fill
Sta 197+43	15	5		
			11	2
	15	5		
			7	0
			11	0
		11		
	18			
			19	6
196+30	18	11		
			22	12
	22	11		
			41	22
	22	13		
			44	22
	26	11		
			48	18
	26	9		
			42	15
	19	7		
			46	50
193+18	11	26		

STA. 193+23 To STA 197+43

2 F-558(11) POST WAR

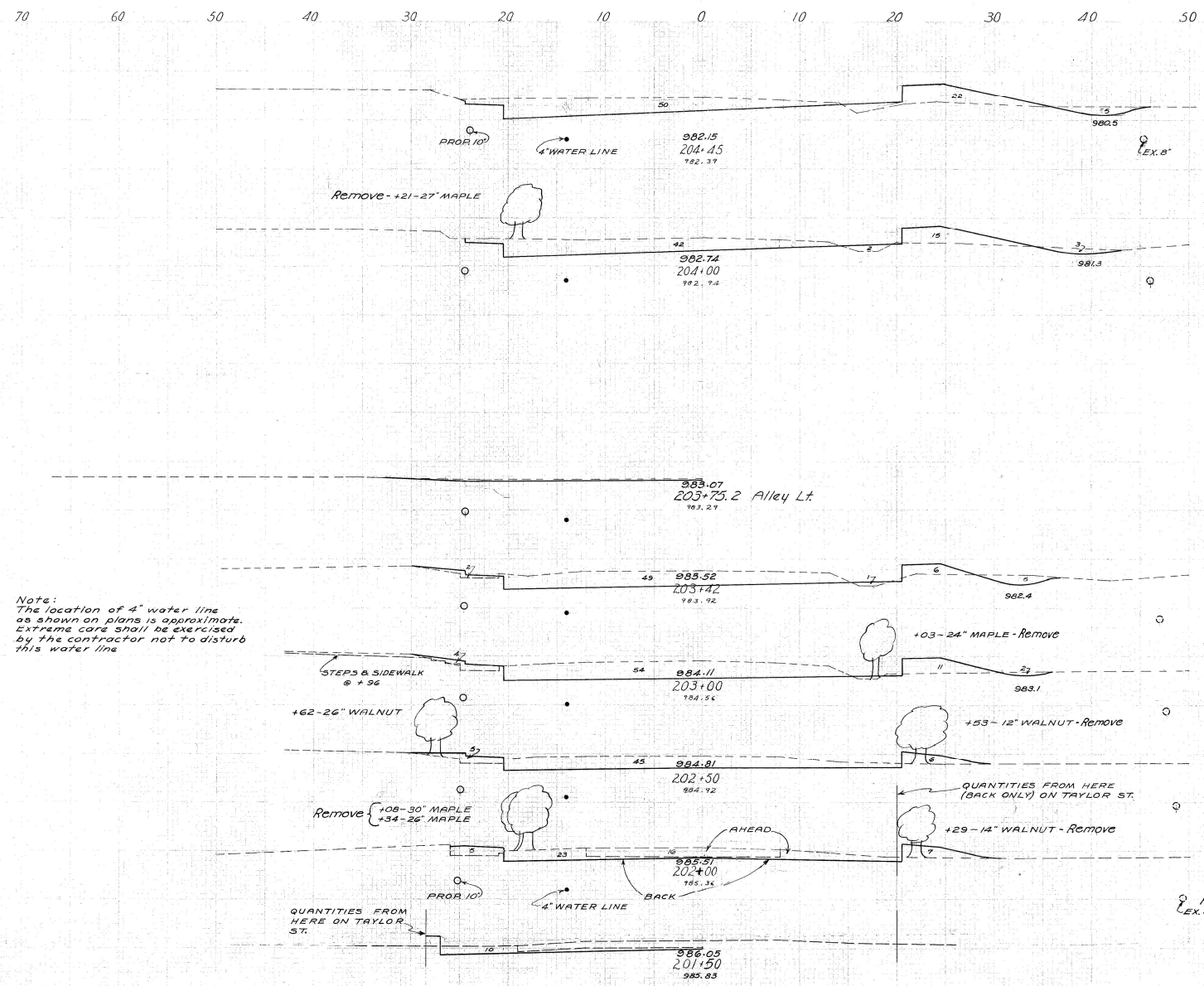
DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



	End Area Cut	End Area Fill	Cu. Yds Cut	Cu. Yds Fill
Sta 201+00	28	13		
			57	19
	23	4		
			38	7
	28	5		
			83	11
	32	3		
			30	5
Add For Alley Lt & Rt			2	3
	32	7		
			35	6
	19	1		
			35	6
	11	4		
			27	10
197+43	15	5		

Note:
The location of 4" water lines as shown on plans is approximate. Extreme care shall be exercised by the contractor not to disturb these water lines.

STA. 197+89 To STA. 201+00



Note:
The location of 4" water line as shown on plans is approximate. Extreme care shall be exercised by the contractor not to disturb this water line

2 F-558(11) POST WAR 72 103

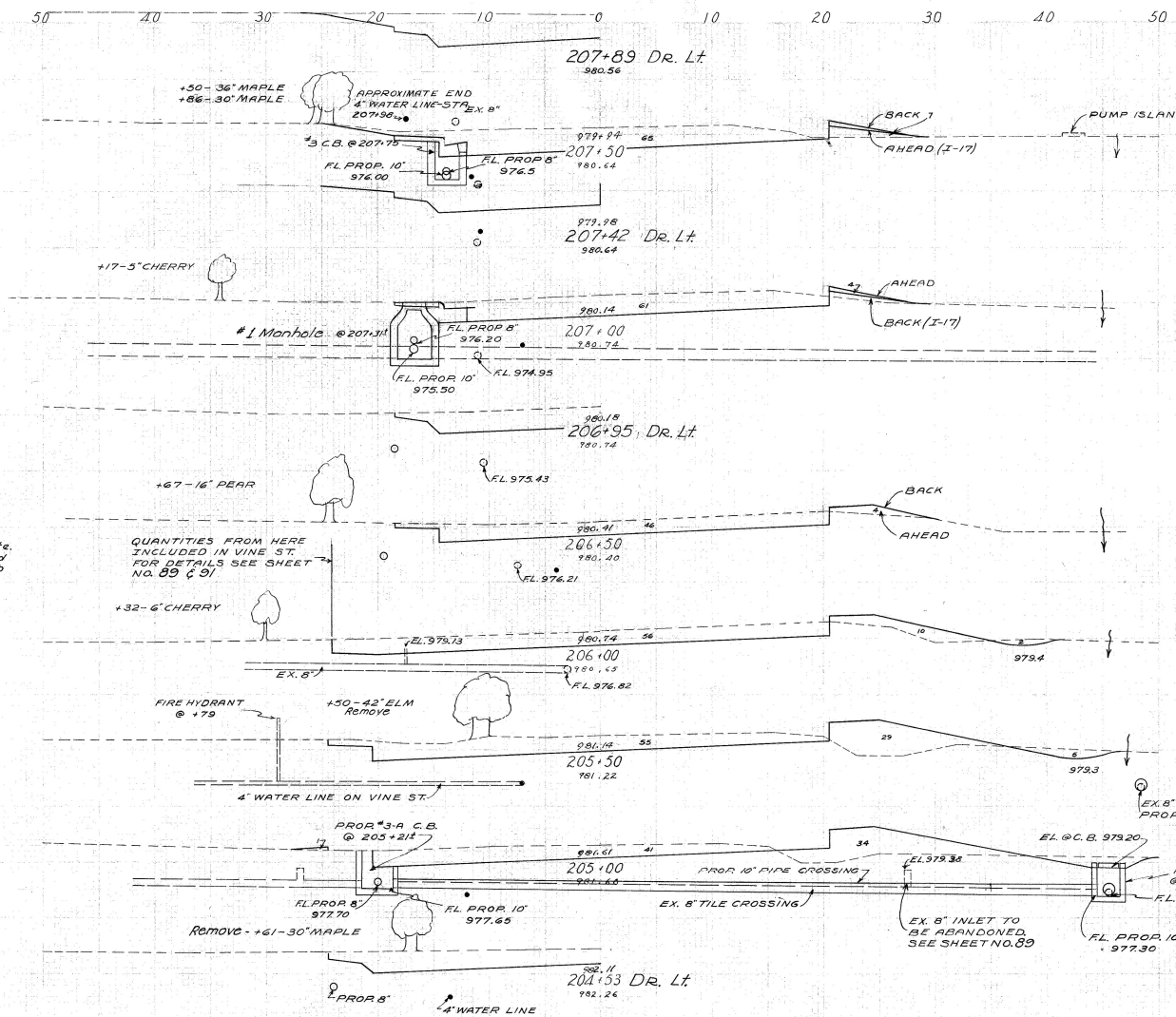
DEL - 42 - (12.21-18.72)
MRW - 42 - (0.00-1.11)

	END AREA Cut	END AREA Fill	CU YDS Cut	CU YDS Fill
Sta 204+45	55	22		
			83	33
	45	17		
			106	28
Add for Alley Lt			2	0
	54	9		
			86	19
	56	16		
			94	25
	45	11		
			78	22
AHEAD	39	12		
BACK	23	5		
			31	6
From Sheet #90 ADD FOR TAYLOR ST. LT.			6	11
EX. 8" ADD FOR TAYLOR ST. RT.			6	4
	10	1		
			35	13
Sta 201+00	28	13		

STA. 201+50 To STA 204+45

2 F-538(11) POST WAR 73 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

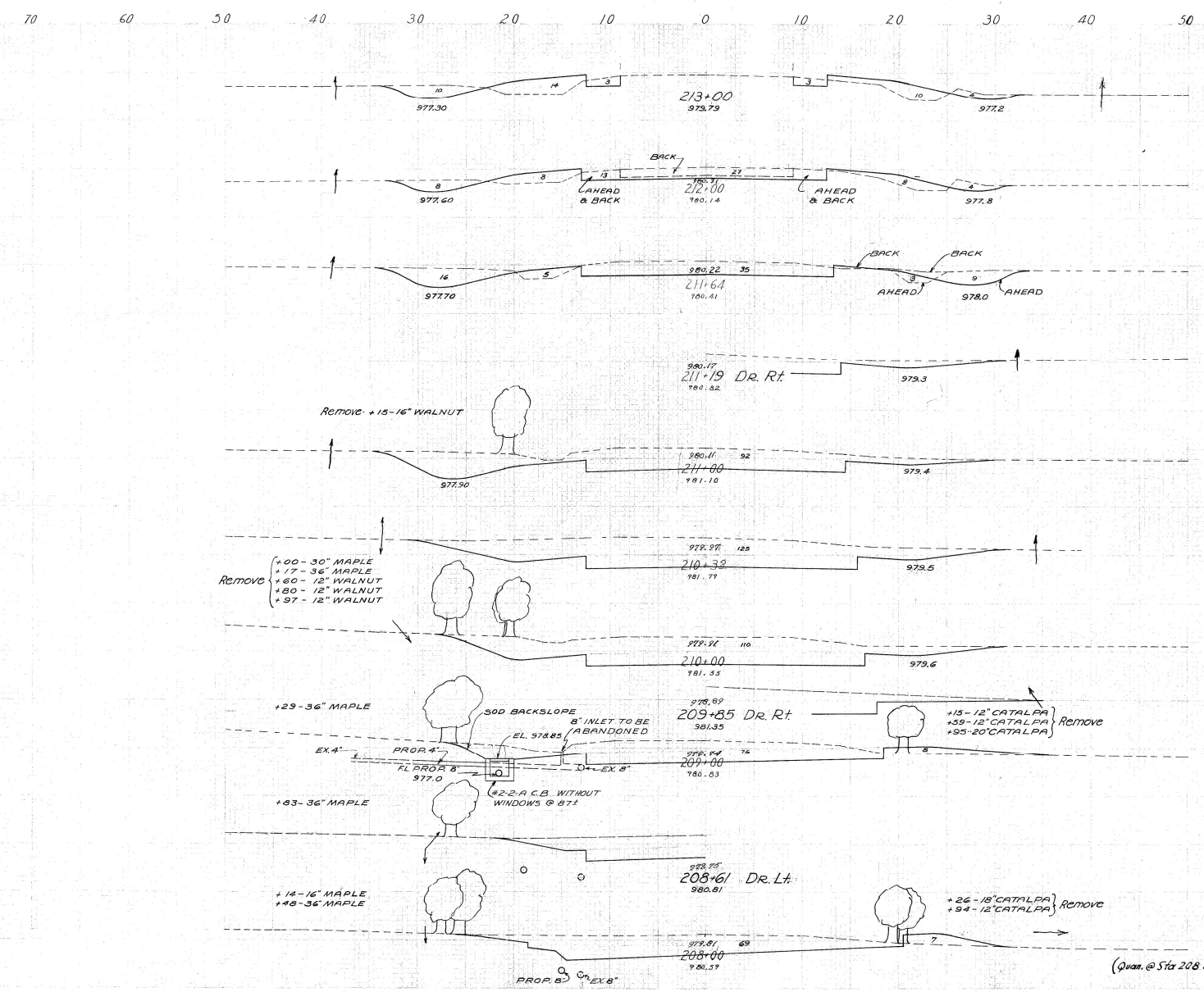


NOTE:
The location of 4" water lines as shown on plans is approximate. Extreme care shall be exercised by the contractor not to disturb these water lines.

	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
AHEAD	63	0		
BACK	65	7		
			17	10
Add For Drive Lt			0	0
AHEAD	61	4		
BACK	61	0		
			99	0
Add For Drive Lt			0	0
AHEAD	46	0		
BACK	46	4		
From Sheet #91 ADD FOR VINE			30	13
			96	13
	58	10		
			110	36
	60	29		
			94	60
	41	35		
Add For Drive Lt			0	0
			98	58
Sta 204+45	55	22		

Excavation = 1384 Cu Yds
Emb = 383 Cu Yds
Emb +20% = 460 Cu Yds

STA 204+53 To STA 207+89



2 F-558(11) POST WAR 74 108

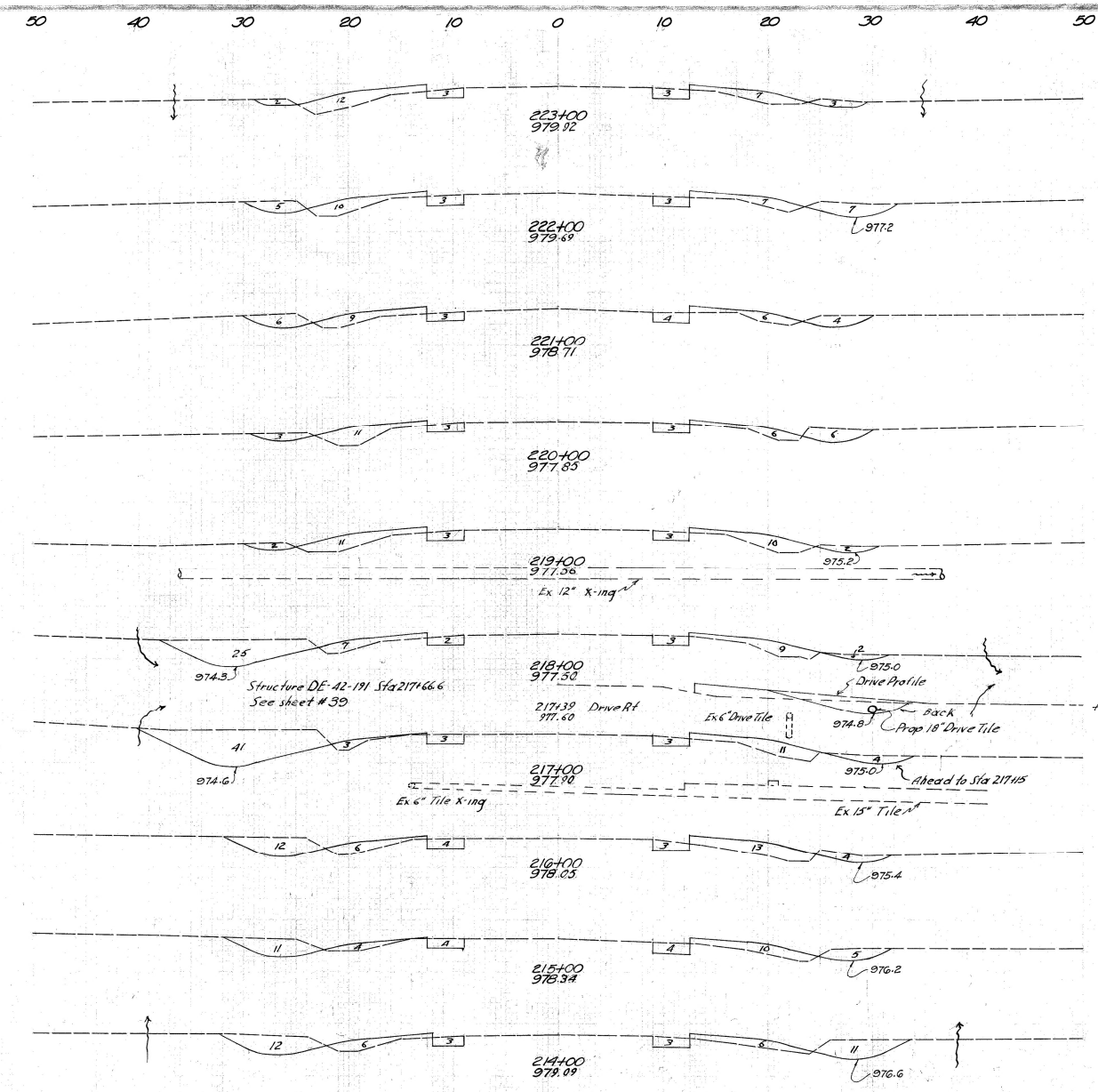
DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

		END AREA Cut	END AREA Fill	Cu. YDS Cut	Cu. YDS Fill
Sta 213+00		20	24		
				109	74
212+00	AHEAD	39	16		
	BACK	25	16		
				57	17
	AHEAD	60	9		
	BACK	51	6		
				170	7
Add for Drive-Rt				0	
		92	0		
				273	0
		125	0		
				139	0
		110	0		
				344	15
Add for Drive-Rt				3	
		76	8		
				269	28
Add for Drive-Lt				0	
		69	7		
Sta 207+50		65	0	118	6

Excavation = 1553 Cu Yds
Embankment = 256 Cu Yds
Embank. +20% = 307 Cu Yds

(Quan. @ Sta 208 used) Sta 207+97.7

STA 208+00 To STA 213+00



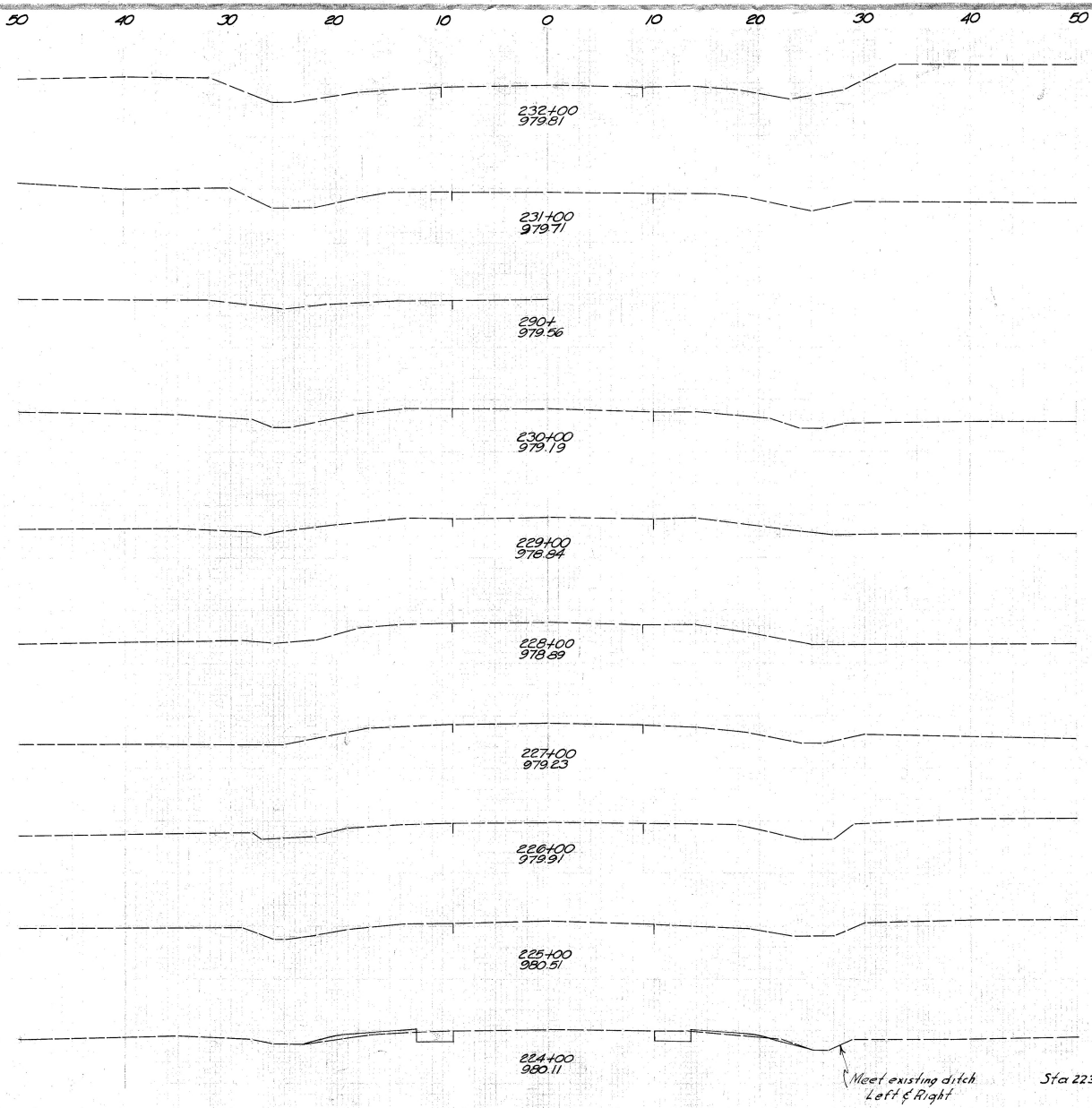
DIVISION 2 OHIO F-558(11) TYPE FUNDS POST WAR 75 103

DEL.-42(12.21-18.72)
MRW-42(0.00-1.11)

Excavation = 710 Cu Yds
Embankment - 548 Cu Yds
Emb x 20% = 658 Cu Yds

Sta	END AREA CUT	END AREA FILL	CU YDS. CUT	CU YDS. FILL
223+00	11	19		
			54	67
	18	17		
			65	59
	17	15		
			59	59
	15	17		
			46	70
	10	21		
			78	69
	32	16		
			154	56
			0	10
	51	14		
			137	61
	23	19		
			87	61
	24	14		
			98	48
	29	12		
			91	67
213+00	20	24		

STA. 214+00 TO STA. 223+00



DIVISION 2 OHIO F-558(11)

TYPE FUNDS POST WAR 76 103

DEL.-42 (12.21-18.72)
MRW.-42 (0.00.-1.11)

END AREAS		CU. YDS.	
CUT	FILL	CUT	FILL
7	3		
		30	36
11	19		

Sta 223+88.9 { Begin MRW-42-00.0
End DEL-42-18.76

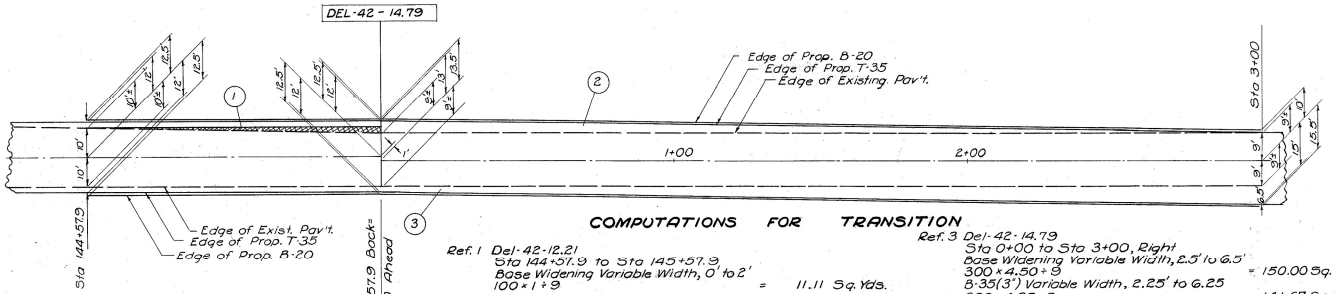
Sta 223+00

STA. 224+00 TO STA. 232+00

FED. RD. DIV/SION	STATE	PROJECT	TYPE, FUNDS
2	OHIO	F-558(11)	POST WAR

77 / 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



Note: Base Course, B-20, 2'6" wide and B-35 (3") Leveling Course 2'0" wide, on left, from Sta 144+57.9 to Sta. 145+57.9 is covered in Pavement Calculations on Sheet #8

COMPUTATIONS FOR TRANSITION

Ref. 1 Del-42-12.21
Sta 144+57.9 to Sta 145+57.9
Base Widening Variable Width, 0' to 2'
100 × 1 ÷ 9 = 11.11 Sq. Yds.

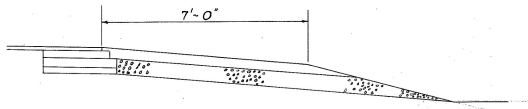
Ref. 2 Del-42-14.79
Sta 0+00 to Sta 3+00, Left
Base Widening, Variable Width, 1' to 4.5'
300 × 2.75 ÷ 9 = 91.665 Sq. Yds.
B-35 (3") Variable Width, 0.75 to 4.25'
300 × 2.50 ÷ 9 = 83.33 Sq. Yds.
Deduct for Base Widening = 300.00 Lin. Ft.

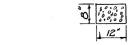
Ref. 3 Del-42-14.79
Sta 0+00 to Sta 3+00, Right
Base Widening Variable Width, 2.5' to 6.5'
300 × 4.50 ÷ 9 = 150.00 Sq. Yds.
B-35 (3") Variable Width, 2.25' to 6.25
300 × 4.25 ÷ 9 = 141.67 Sq. Yds.
Deduct for Base Widening = 300.00 Lin. Ft.

Ref. 1 Continued -
Leveling Course Variable Thickness 0" to 3/4"
100 x 24 ÷ 9 x 3/8" ÷ 36 = 2.78 Cu. Yds.

TRANSITION STA 144+57.9 TO STA 3+00

Note: The Stone Underdrains shall be spaced approximately 300' apart or as directed by the Engineer.

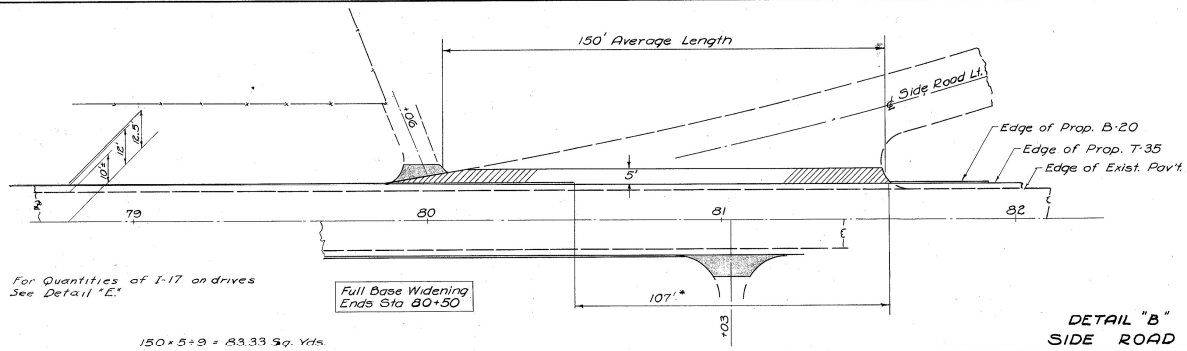




DETAIL OF STONE UNDERDRAINS

Item I-9 Estimated Stone Underdrains = 800 Lin. Ft.

DETAIL "A"

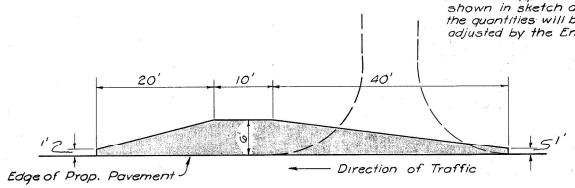


For Quantities of I-17 on drives See Detail "E."

150 × 5 ÷ 9 = 83.33 Sq. Yds.

DETAIL "B" SIDE ROAD

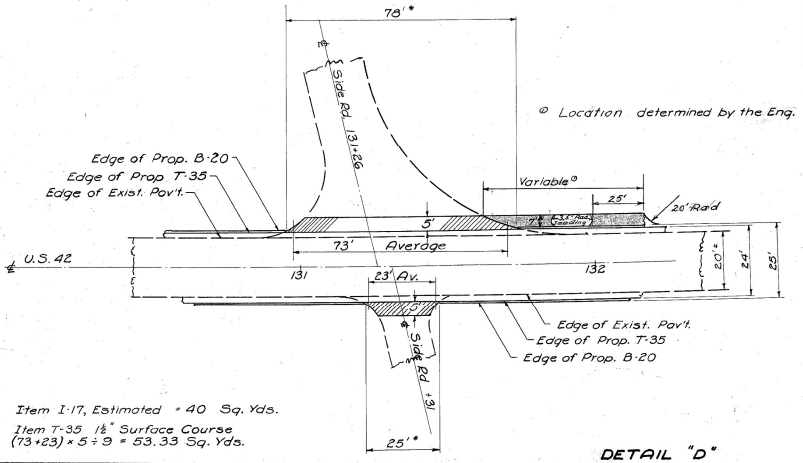
Note: Where feasible drives will be combined with mail box approaches as shown in sketch and the quantities will be adjusted by the Engineer.



MAIL BOX APPROACHES

Item I-17
1 Mail Box Approaches @ 30.0 Sq. Yds. = 30 Sq. Yds.

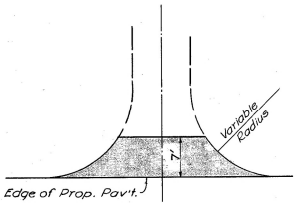
DETAIL "C"



Item I-17, Estimated = 40 Sq. Yds.

Item T-35 1½" Surface Course
(73+23) × 5 ÷ 9 = 53.33 Sq. Yds.

DETAIL "D"



TYPICAL DRIVE

Item I-17
12 Drives @ 10 Sq. Yds = 120 Sq. Yds.

DETAIL "E"

EXTRA PAVEMENT

Detail or Ref. No.	B-35 Leveling Course Cu. Yds.	T-35 1½" Surface Course Sq. Yds.	B-35 3" Leveling Course Sq. Yds.	B-20 5" Base Course Sq. Yds.	35-5 8" Class. Emb. Mat. Sq. Yds.	E-1 Roadway Excavation Cu. Yds.	*Deduct Base Widening Lin. Ft.	I-17 3" Aggregate Sq. Yds.	I-9 Stone Underdrn. Lin. Ft.
DEL-42-12.21									
1	2.78		11.11	11.11	11.11	5.40			
A									800
B		83.33					107		
C								30	
D		53.33					103	40	
E								120	
(a) Totals	2.78	136.66	11.11	11.11	11.11	5.40	210	190	800
DEL-42-14.79									
2			83.33	91.66	91.66		300		
3			141.67	150.00	150.00		300		
(b) Totals			225.00	241.66	241.66		600		
GRAND TOTAL			236.11	252.77	252.77				

T-35 1½" Min. Surface Course
I-17 3" thick
Extra B-20 5" Base Course

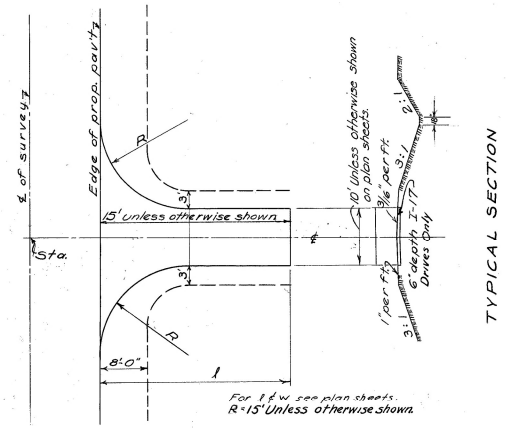
SUMMARY OF QUANTITIES

INTERSECTIONS AND GENERAL DETAILS ~ DEL-42-12.21

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (11)	POST WAR

78
103

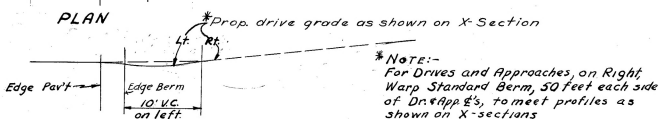
DEL-42-(12.21-18.72)
MOR-42-(0.00-1.11)



TYPICAL SECTION

For R & W see plan sheets.
R=15' Unless otherwise shown.

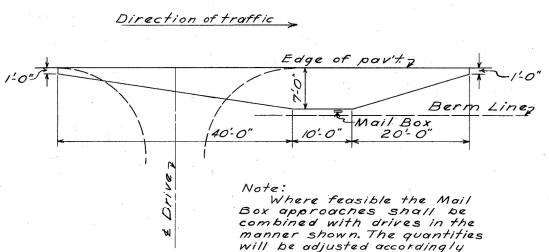
PLAN



SECTION on ℄ of DRIVE

*NOTE:-
For Drives and Approaches, on Right, Warp Standard Berm, 50 feet each side of Dr. & App.'s, to meet profiles as shown on X-sections

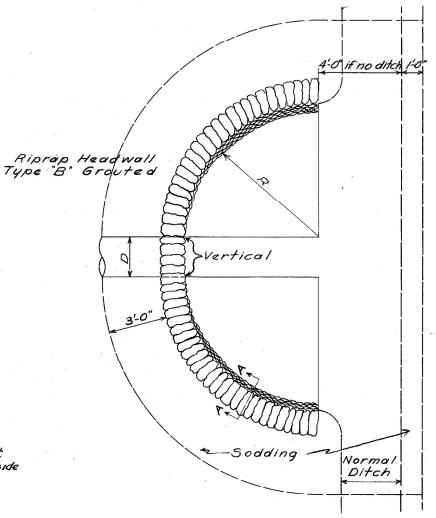
DETAIL of DRIVES & APPROACHES



Note:
Where feasible the Mail Box approaches shall be combined with drives in the manner shown. The quantities will be adjusted accordingly by the Engineer.

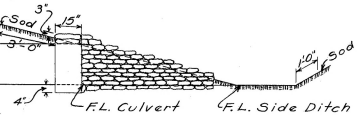
ITEM-I-17 17 Mail Box Approaches @ 35 Sq Yds = 595 Sq Yds
Quantity carried to sheet #6

DETAIL of MAIL BOX APPROACHES



PLAN

"D" Diameter of Pipe-Inches	"R" - Radius of Hdwl. - Feet
12"	3.5
18	4.5
21	5.0
36	7.5
42	8.5

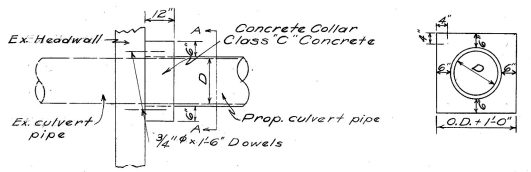


SECTION



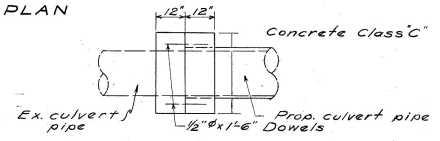
SECTION A-A

DETAIL of SODDING AND RIPRAP HEADWALL



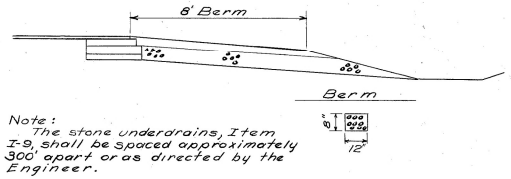
TYPE A PLAN

SECTION A-A



TYPE B PLAN

DETAIL of CONCRETE COLLAR



Note:
The stone underdrains, Item I-9, shall be spaced approximately 300' apart or as directed by the Engineer.

Average Length Underdrains = 11'
RURAL-Code 6706
From Typical Section - Length = 18,104.53 Lin.Ft.
ITEM I-9 = 18,104.53 x 2 ÷ 300 x 11 = 796.6 Use 800 Lin.Ft.
MUNICIPAL-Code 6706
From Typical Section - Length = 872.4 Lin.Ft.
ITEM I-9 = 872.4 x 2 ÷ 300 x 11 = 38.4 Use 40 Lin.Ft.
RURAL-Code 6201
From Typical Section - Length = 1,591.20 Lin.Ft.
ITEM I-9 = 1,591.20 x 2 ÷ 300 x 11 = 70 Lin.Ft.

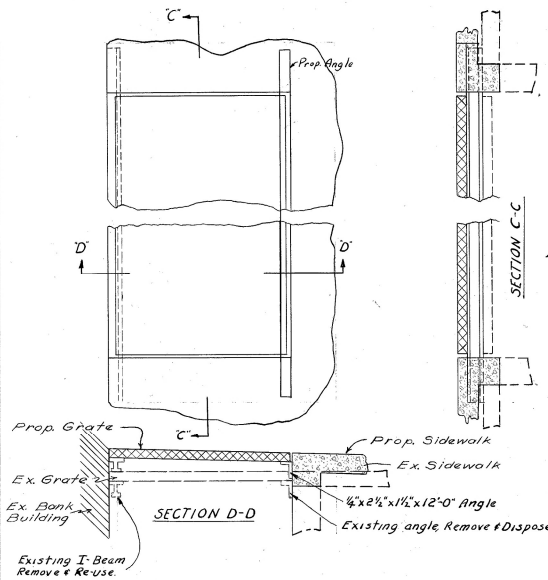
Quantities carried to sheet #6

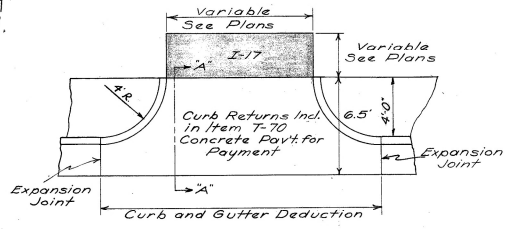
DETAIL of STONE UNDERDRAINS No. 2

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (11)	POST WAR

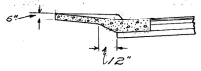
79
103

DEL-42 (12.21-18.72)
MRW-42 (0.00-1.11)



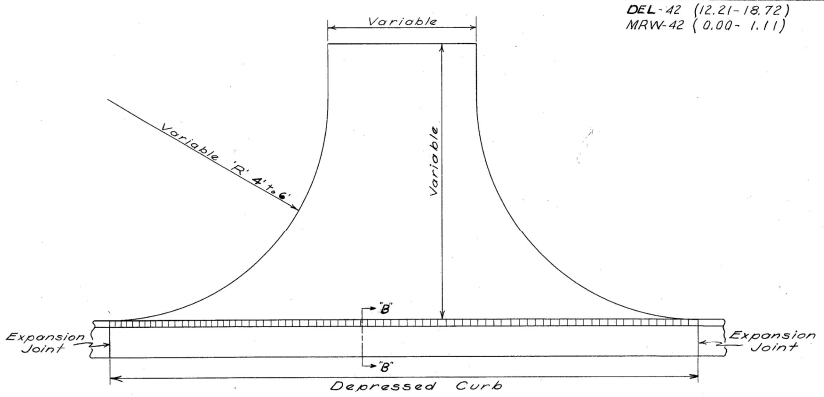


PLAN

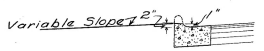


SECTION A-A

TYPICAL DETAILS-DRIVES & APPROACHES



PLAN

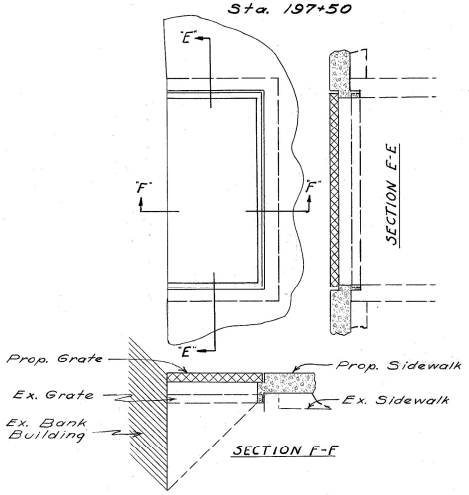


SECTION B-B

TYPICAL DETAILS-DRIVES & APPROACHES

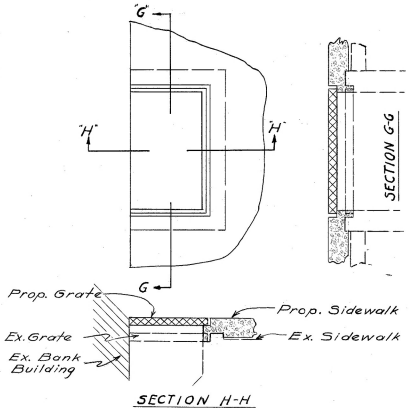
MIDDLE GRATE

Sta. 197+50



NORTH GRATE

Sta. 197+74

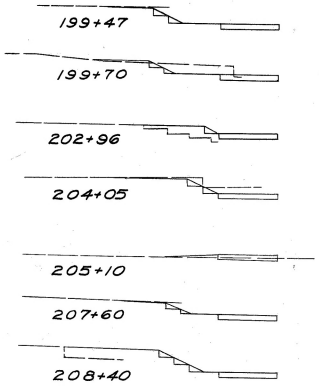


SOUTH GRATE

Sta. 197+43

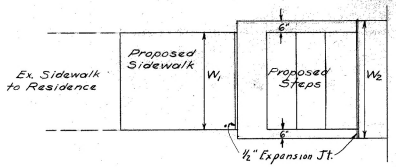
ITEM I-8 - Grates adjusted to grade
Carried to final summary sheet #10

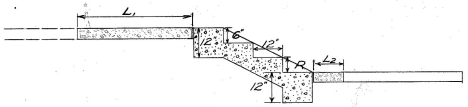
3 Each



CONCRETE STEPS & SIDEWALKS

Station	R	L_1	L_2	W_1	W_2	I-13 Sidewalks	I-13 Concrete Steps	E-8 Remove, Dispose Ex. Sidewalk
	In.	Ft.	Ft.	Ft.	Ft.	Sq. Ft.	Lin. Ft.	Sq. Ft.
199+47	6	2.0	2.5	4.0	5.0	18.0	15.0	16.0
199+70	6	3.0	2.5	4.0	5.0	22.0	15.0	40.0
202+96	6	4.0	0	3.0	4.0	12.0	8.0	14.0
204+05	6	4.0	0	7.0	8.0	28.0	24.0	67.0
205+10	0	4.0	0	4.0	—	16.0	—	37.0
207+60	3	2.0	1.5	3.0	4.0	12.0	12.0	12.0
208+40	6	9.0	1.0	4.0	5.0	40.0	20.0	16.0
				TOTALS		148.0	94.0	202.0

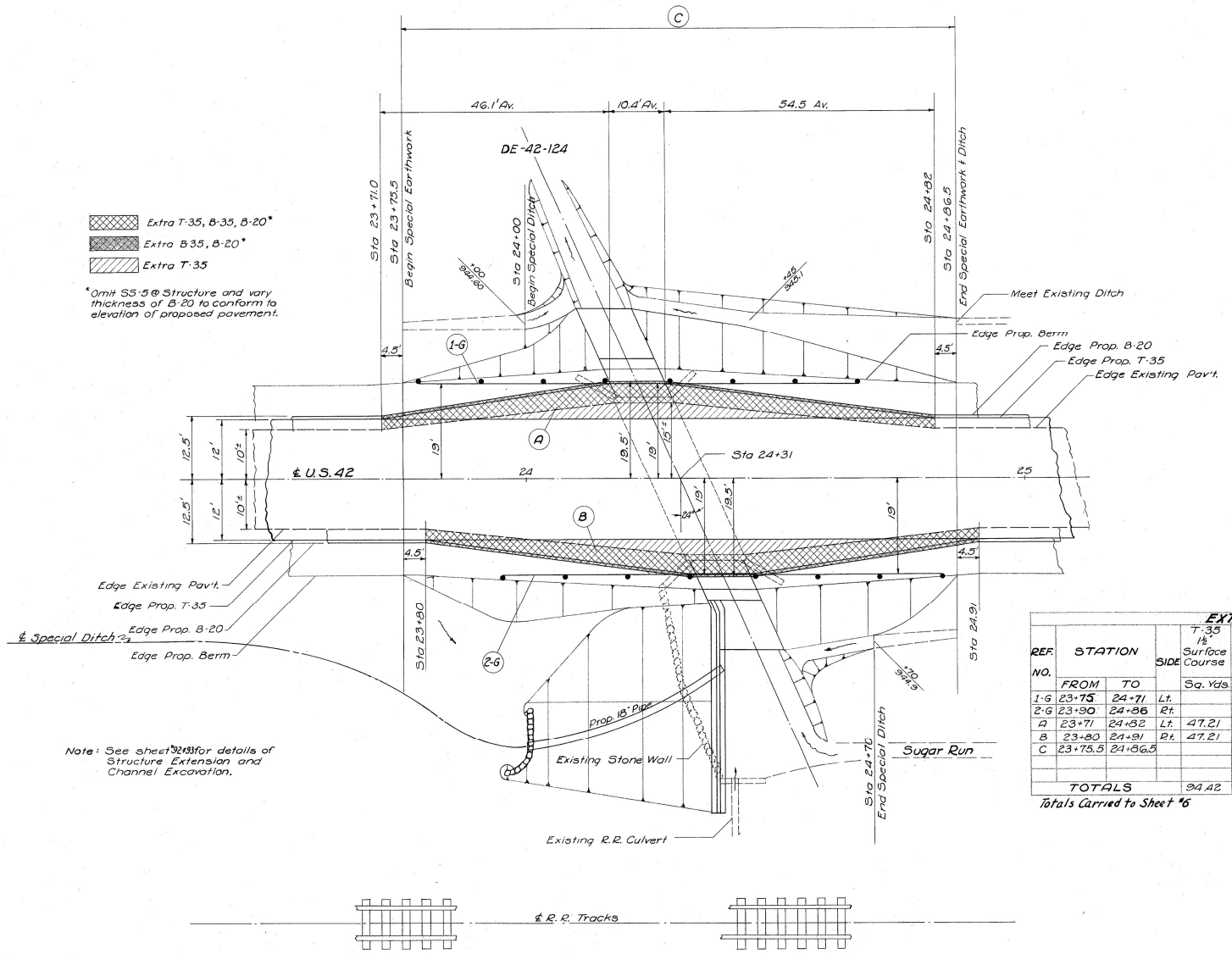




TYPICAL DETAILS
SIDEWALKS & CONCRETE STEPS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	80
2	OHIO	F-558(11)	POST WAR	103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



Note: See sheet *92 & 93 for details of Structure Extension and Channel Excavation.

COMPUTATIONS FOR EXTRA PAVEMENT

Ref. A
Sta 23+71 to Sta 24+82 - Left
Base Widening - Variable Width, 2.5' to 4.5'
[(46.1 × 54.5) × 3.5 + (10.4 × 4.5)] ÷ 9 = 44.32 Sq. Yds.
B-35 (3") Variable Width, 2.5' to 4.25'
[(100.6 × 3.25) + (10.4 × 4.25)] ÷ 9 = 41.24 Sq. Yds.
T-35 (1½") Variable Width, 0.0' to 7.0'
[(100.6 × 3.50) + (10.4 × 7)] ÷ 9 = 47.21 Sq. Yds.
Deduct for Base Widening = 111 Lin. Ft.

Ref. B
Sta. 23+80 to Sta 24+91 - Right
Base Widening, Same as Ref. A = 44.32 Sq. Yds.
B-35 (3"), Same as Ref. A = 41.24 Sq. Yds.
T-35 (1½"), Same as Ref. A = 47.21 Sq. Yds.
Deduct for Base Widening = 111 Lin. Ft.

EXTRA PAVEMENT

REF. NO.	STATION FROM	STATION TO	SIDE	T-35 1½" Surface Course Sq. Yds.	B-35 3" Leveling Course Sq. Yds.	B-20 5" Base Course Sq. Yds.	SS-5 B Class. Emb. Material Sq. Yds.	E-1 Roadway Excavat. Cu. Yds.	I-15 Guard Rail Lin. Ft.	Emb. Cu. Yds.	Deduct for Base Widening Lin. Ft.
1-G	23+75	24+71	Lt.						96		
2-G	23+90	24+86	Rt.						96		
A	23+71	24+82	Lt.	47.21	41.24	44.32	44.32				111
B	23+80	24+91	Rt.	47.21	41.24	44.32	44.32				111
C	23+75.5	24+86.5						40		174	
TOTALS				94.42	82.48	88.64	88.64	40	192	174	222

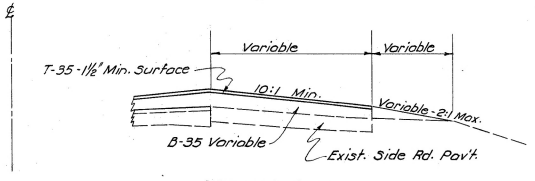
Totals Carried to Sheet *6

DEL-42-12.21 - EXTRA PAVEMENT DETAILS - STA 23+71 TO STA 24+91

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

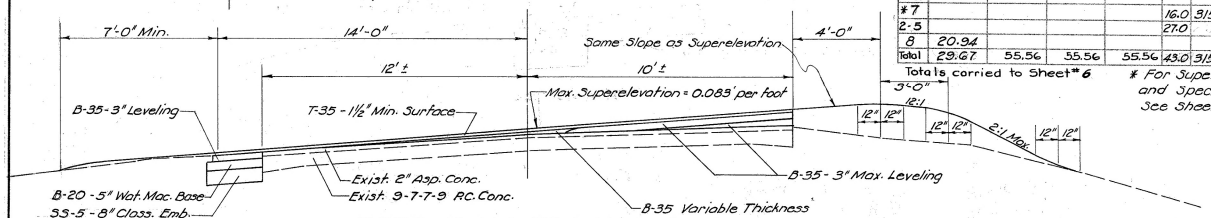
81/103

DEL.-42(12.21 - 18.72)
MRW-42(0.00 - 1.11)



SECTION A-A

EXISTING CURVE DATA
Δ = 32°-05'
D - 5°-00'
T = 329.52'
L = 641.66'
R = 1146.30'
E = 46.43'
Operational Speed 60 M.P.H.



TYPICAL SECTION - STA. 8+92.9 TO STA. 19+34.6

EXTRA PAVEMENT & ROADWAY EXCAVATION

Ref. No.	T-35 Surface Course	B-35 3" Leveling Course	B-20 5" Base Course	SS-5 8" Class. Emb. Mat.	E-1 Widng. Exc.	E-1 Emb.	Deduct Base Widening	Add Base Widening	B-35 Leveling Course
	Cu. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Cu. Yds.		Lin. Ft.	Lin. Ft.	Cu. Yds.
1	8.73							100	
2		22.22	22.22	22.22					
3		5.56	5.56	5.56					
4		5.56	5.56	5.56					
5		22.22	22.22	22.22					
6							741.7		
*7					16.0	9/5			242.7
2-5					27.0				
8	20.94								
Total	29.67	55.56	55.56	55.56	43.0	9/5	741.7	100	242.7

Total is carried to Sheet #6

* For Superelevation Sta. 8+92.9 To Sta. 19+34.6 and Special Ditch Sta. 14+50 ± To Sta. 24+00. See Sheet # 81 & 11

COMPUTATIONS TRANSITION

Notes:-
1. Base Course B-20 - 2'-6" Wide and Leveling B-35 (3") - 2'-3" Wide, on Left, from sta. 9+92.9 to sta. 19+34.6 and on Right from sta. 17+34.6 to sta. 19+34.6 is carried in Pavement Computations on Page #8

Ref. 1 Sta. 8+92.9 To Sta. 9+92.9
T-35 Variable width from 24' to 26'
Variable thickness 50'@ 1½" and 50'@ ¾" average.
50 × 25.5 ÷ 9 × 1½ ÷ 36 = 5.90 Cu. Yds.
50 × 24.5 ÷ 9 × ¾ ÷ 36 = 2.83 Cu. Yds.
Total 8.73 Cu. Yds.

Add for Base Widening = 100.0 Lin. Ft.

Ref. 2 Sta. 9+92.9 to Sta. 10+92.9
Base Widening - Width 2'
100' × 2 ÷ 9 = 22.22 Sq. Yds.

Ref. 3 Sta. 10+92.9 to Sta. 11+42.9
Base Widening - Variable width from 0' to 2'
50 × 1 ÷ 9 = 5.56 Sq. Yds.

Ref. 4 Same as Ref. 3 = 5.56 Sq. Yds.

Ref. 5 Sta. 17+34.6 to Sta. 19+34.6, Left
Base Widening, Variable width from 0' to 2'
200 × 1 ÷ 9
22.22 Sq. Yds. 55.56 Sq. Yds.

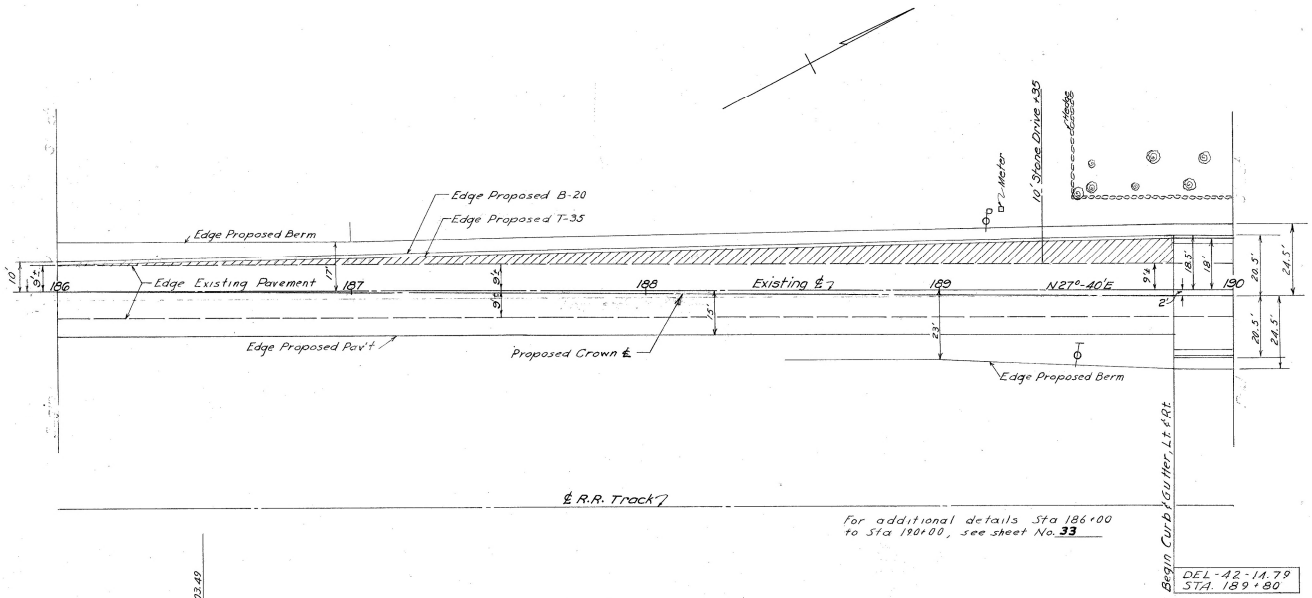
Ref. 6 Sta. 9+92.9 to Sta. 17+34.6 - Right Only
Deduct for Base Widening = 741.7 Lin. Ft.

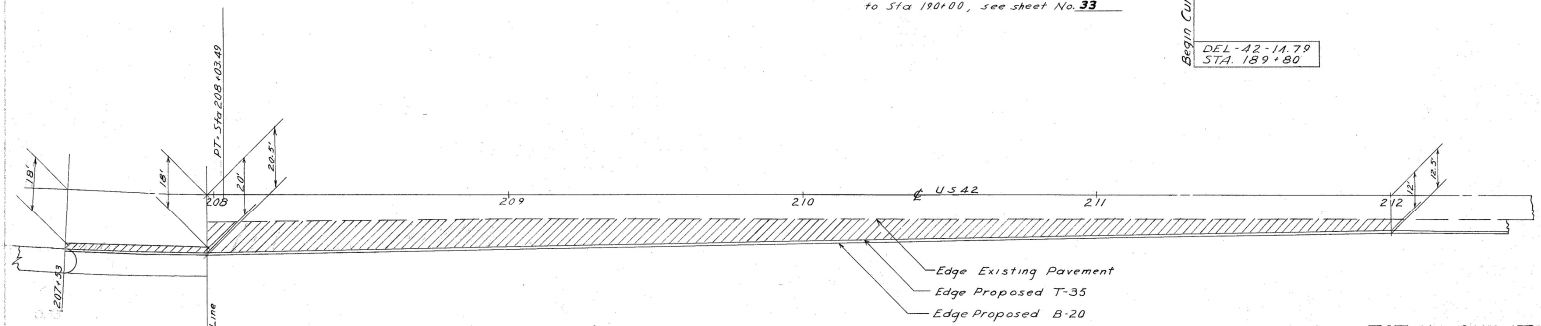
Ref. 2 to 5 Incl.
Item E-1 Roadway Excavation
55.56 × 17½ ÷ 36 = 27.0 Cu. Yds.

TRANSITION STA. 8+92.9 TO STA. 19+34.6 DEL-42-12.21

			TYPE FUNDS	82
		F-558-(11)	POST WAR	103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)





Computations For Transition (Left)

BASE WIDENING

5" B-20 Variable width from 1.00' to 9.50'
380 x 5.25 ÷ 9 = 221.67 Sq Yds

8"-SS-5 Same as B-20 = 221.67 Sq Yds

3"-B-35 Variable width from 0.75' to 9.25'
380 x 5.00 ÷ 9 = 211.11 Sq Yds

SURFACE WIDENING

1¼" T-35 Variable width from 0.00' to 9.00'
380 x 4.50 ÷ 9 = 190.00 Sq Yds

1" B-35 Same as T-35 = 190.00 Sq Yds

Computations For Transition -(Right)

BASE WIDENING

Municipal (Sta 207+53 to Sta 207+97.7)

5"-B-20 = 2.5' x 44.7 ÷ 9 = 12.42 Sq Yds
4"-SS-5 = Same as B-20 = 12.42 Sq Yds
3"-B-35 2.25 x 44.7 ÷ 9 = 11.18 Sq Yds

Rural (Sta. 207+97.7 to Sta 212+00)

5"-B-20 - Variable width from 0.5' to 8.50
402.3 x 4. ÷ 9 = 201.15 Sq Yds
4"-SS-5 - Same as B-20 = 201.15 Sq Yds.
3"-B-35 - Variable width from 0.25' to 8.25'
402.3' x 4.. ÷ 9 = 189.98 Sq Yds

SURFACE WIDENING

MUNICIPAL

1¼" T-35 = 2.0' x 44.7 ÷ 9 = 9.93 Sq Yds
1" B-35 = Same as T-35 = 9.93 Sq Yds

RURAL

1¼" T-35 - Variable width from 0.00 to 8.00'
402.3' x 4.00 ÷ 9 = 178.80 Sq Yds
1"-B-35 Same as T-35 = 178.80 Sq Yds

TOTAL QUANTITIES FOR TRANSITIONS (LT & RT)

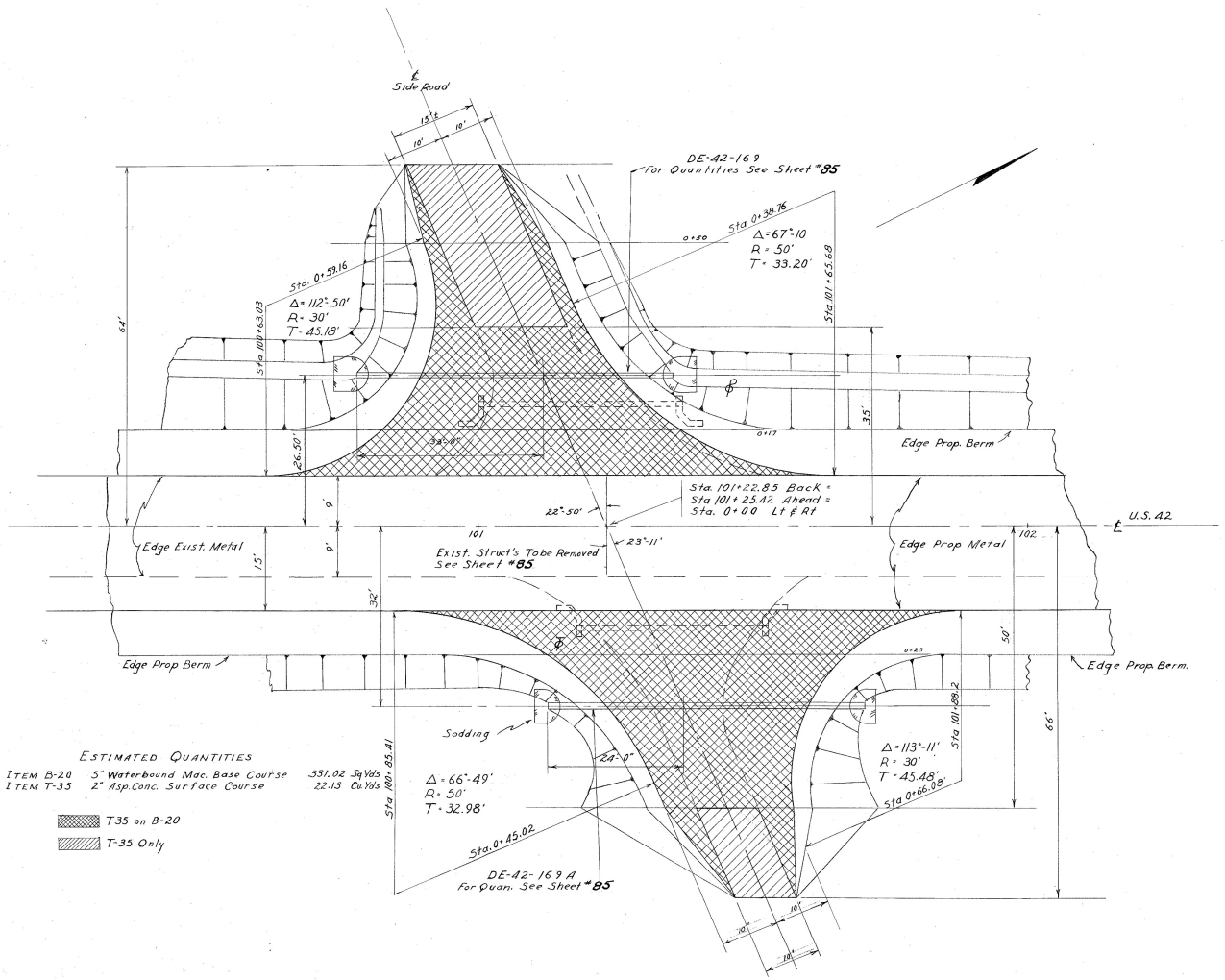
	5" B-20 WB MACADAM BASE COURSE Sq YDS	8" SS-5 CLASS E MB MATERIAL Sq YDS	3" B-35 ASPH CONC SUR COURSE Sq YDS	1¼" T-35 ASPH CONC SURF COURSE Sq YDS	1" B-35 ASPH CONC SURF COURSE Sq YDS	4" SS-5 CLASS E MB MAT'L FOUND. Sq YDS
MUNI. CODE #6201	12.42		11.18	9.93	9.93	12.42
MUNI CODE #6706	221.67	221.67	211.11	190.00	190.00	
RURAL CODE #6201	201.15		189.98	178.80	178.80	201.15

TRANSITIONS - STA 166+00 To 189+00 DEL-42 14.79
207+53 To 212+00 DEL-42-18.72

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (11)	POST WAR

83
103

DEL - 42 - (12.21 - 18.72)
MRW - 42 - (0.00 ; 1.11)

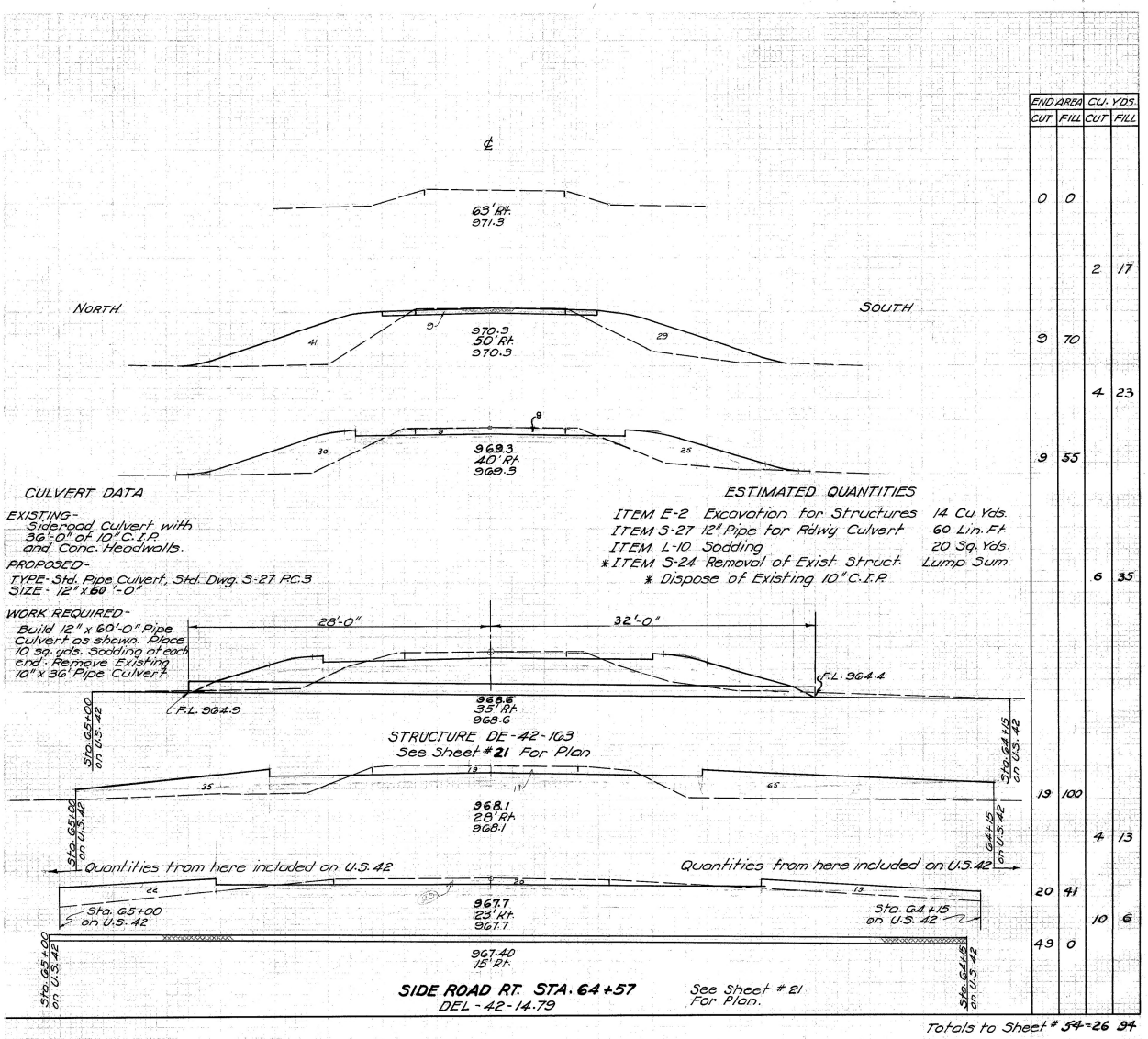


ESTIMATED QUANTITIES

ITEM B-20	5" Waterbound Mac. Base Course	331.02	Sq Yds
ITEM T-35	2" Asp. Conc. Surface Course	22.13	Cu Yds

T-35 on B-20
T-35 Only

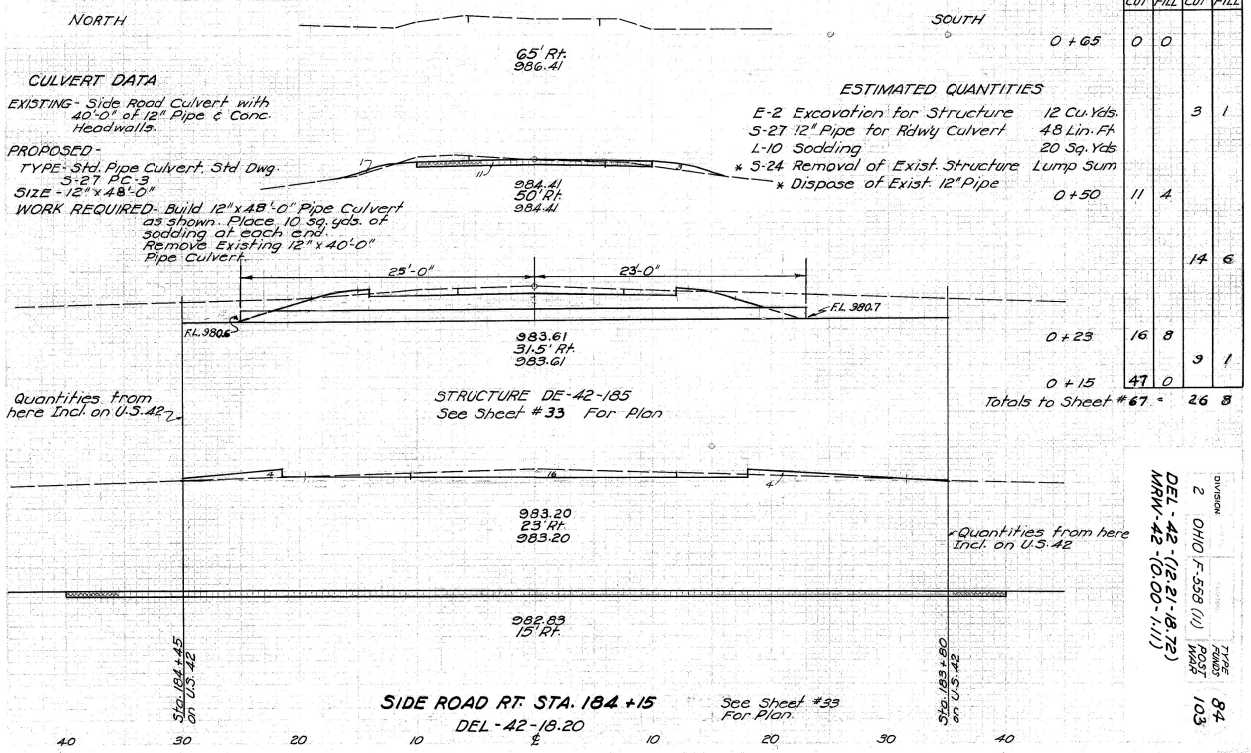
INTERSECTION STA. 101+25.42 DEL-42-14.79



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
		2	17
9	70		
		4	23
9	55		
		6	35
19	100		
		4	13
20	41		
		10	6
49	0		

Totals to Sheet # 54 = 26 94

NOTE:- All Sections are Parallel to U.S. 42. ℄ of Sections = ℄ of Side Road.



END AREA		CU. YDS.		
CUT	FILL	CUT	FILL	
0	0			0+65
		3	1	
				0+50
		14	6	
16	8			0+23
		3	1	
47	0			0+15

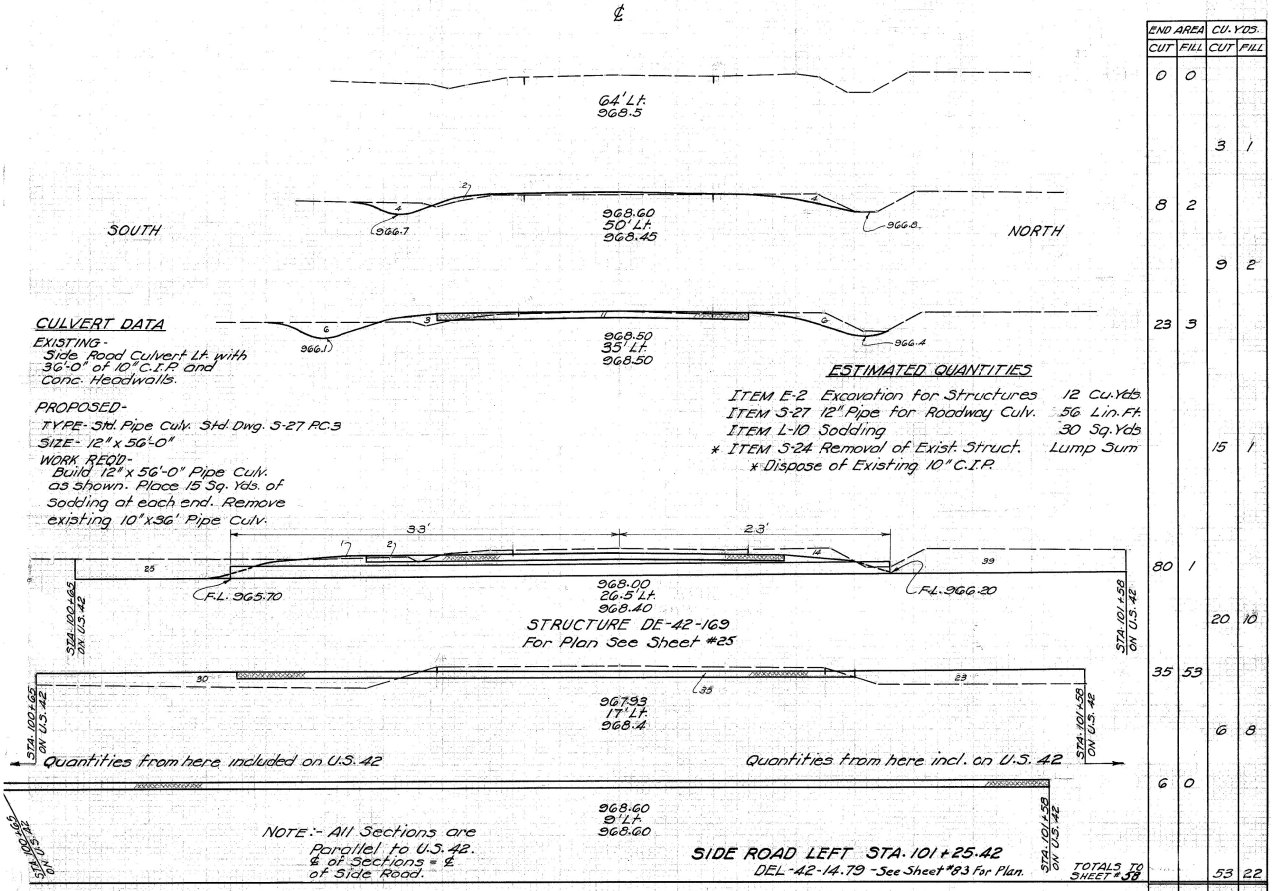
Totals to Sheet # 67 = 26 8

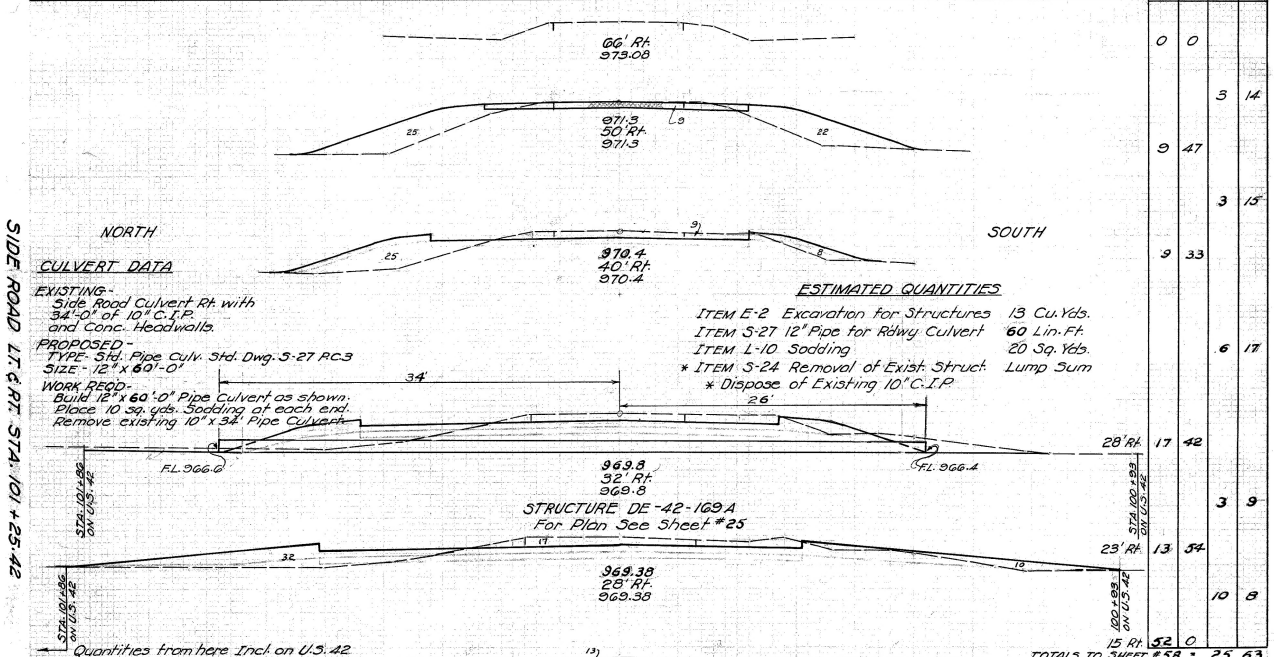
SIDE ROADS - STA. 64+57 & STA. 184+15

DEL-42-(12.21-18.72)
MARW-42-(10.00-1.11)

DIVISION 2 OHIO F-558 (11) POST WAR TYPE FUNDS

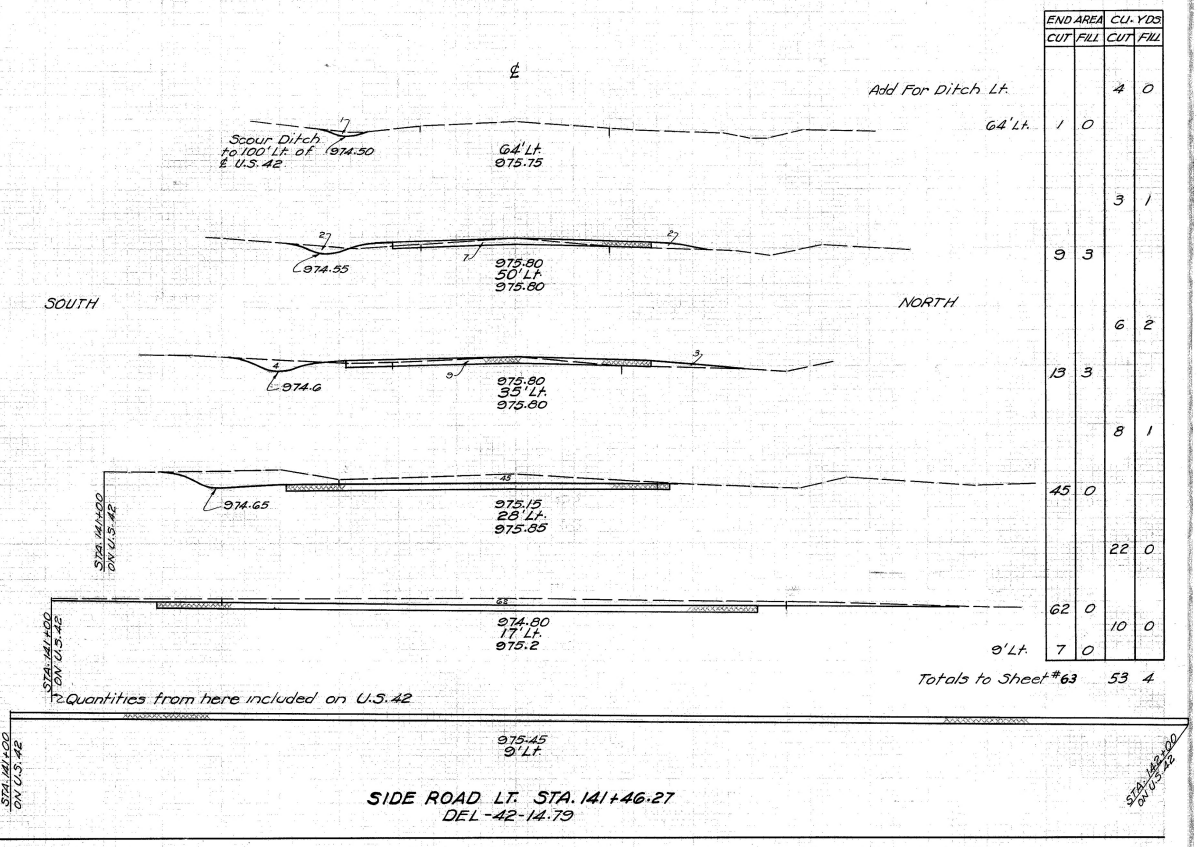
84
103





50 40 30 20 10 ℄ 10 20 30 40

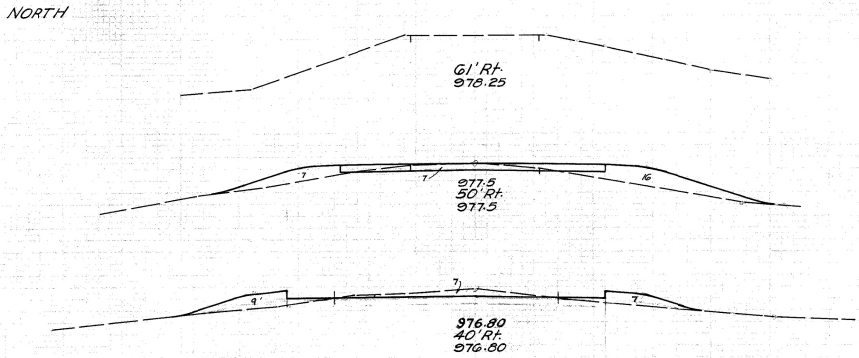
DIVISION 2 OHIO
F-558 (11)
POST WAR
TYPE FUNDS
DEL-42-(12.2-18.72)
MRW-42 (0.00-1.11)
85
103



	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
			4	0
64'Lt.	1	0		
			3	1
	9	3		
			6	2
	13	3		
			8	1
	45	0		
			22	0
	62	0		
			10	0
9'Lt.	7	0		
Totals to Sheet #63			53	4

SIDE ROAD LT. STA. 141+46.27
DEL-42-14.79

NOTE:-
All Sections are parallel to U.S. 42.
℄ of Sections = ℄ of Side Road.



	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
61'Rt.	0	0		
			2	5
50'Rt.	7	23		
			3	7
40'Rt.	7	16		
			14	7
23'Rt.	37	7		
			14	1
15'Rt.	58	0		
Totals to Sheet #63			33	20

SIDE ROAD RT. STA. 141+46.27
DEL-42-14.79

See Sheet #29 For Plan.

40 30 20 10 ℄ 10 20 30 40

SIDE ROAD LT. & RT. STA. 141+46.27

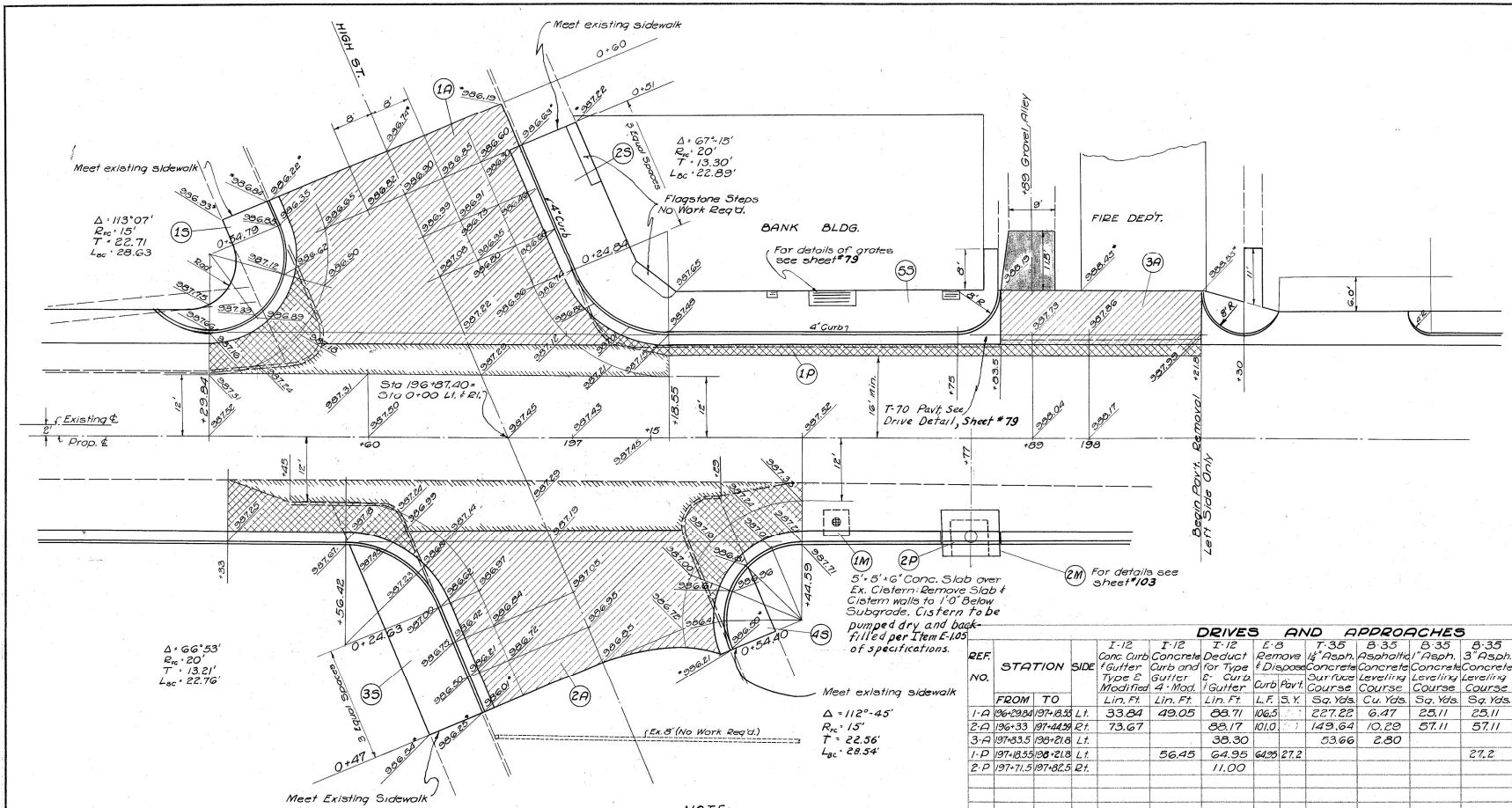
DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)
OHIO F-559 (11)
POST WAR FUNDS
TYPE
DIVISION 2

103 86

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

87
103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



NOTE:-
The price bid for Abandoning of Fire Cistern, Item I-16, shall include the necessary labor and material required to pump cistern dry and backfill.

Full Depth Course
T-35 & or B-35
B-35
* Existing Elevations
Scale: 1" = 10'

DRIVES AND APPROACHES

REF. NO.	STATION FROM	STATION TO	SIDE	I-12 Conc. Curb & Gutter Type 2 Modified	I-12 Concrete Curb and Gutter 4' Mod.	I-12 Deduct for Type 2 Curb & Gutter	E-8 Remove & Dispose Curb	E-8 Remove & Dispose Pav't.	T-35 1½" Asph. Concrete Surface Course	B-35 Asphaltic Concrete Leveling Course	B-35 1" Asph. Concrete Leveling Course	B-35 3" Asph. Concrete Leveling Course	B-20 5" Wat. Bound Macadam Base Course	55-5 4" Classified Subwork. Course	I-17 Aggregate 6" thick	T-70 Portland Cement Conc. Pav't Var. Depth	Deduct for Base Widening L.T.	Deduct for Base Widening R.T.
				Lin. Ft.	Lin. Ft.	Lin. Ft.	L.F.	S.Y.	Sq. Yds.	Cu. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Lin. Ft.	
1-A	196+29.84	197+18.55	Lt.	33.84	49.05	88.71	106.5		227.22	6.47	25.11	25.11	25.11	25.11			88.71	
2-A	196+33	197+44.59	Rt.	73.67		88.17	101.0		149.64	10.23	57.11	57.11	57.11	57.11				117.59
3-A	197+83.5	198+21.8	Lt.			38.30			53.66	2.80					13.10	3.75		
1-P	197+18.55	198+21.8	Lt.		56.45	64.95	64.95	27.2				27.2	27.2	27.2			103.25	
2-P	197+71.5	197+82.5	Rt.			11.00												
TOTALS				107.51	105.50	291.13	272.45	27.2*	430.52	19.56	82.22	109.42	109.42	109.42	13.10	3.75	191.96	117.59

*Included with Item E-1 (excavation) for payment.

SIDEWALKS

REF. NO.	STATION FROM	STATION TO	SIDE	E-8 Remove & Dispose of Exist. Sidewalk	I-13 Sidewalk 4" Conc. Class "C"
				Sq. Ft.	Sq. Ft.
1-S	196+29.84	0+60	Lt.	307.80	205.08
2-S	197+18.55	0+51	Lt.	484.0	490.17
3-S	196+56.42	0+97	Rt.	529.0	386.0
4-S	197+29	0+54.4	Rt.	261.0	99.0
5-S	197+18.55	197+83	Lt.	648.0	492.0
TOTALS				2239.80	1672.25

MISCELLANEOUS

REF. NO.	STATION	SIDE	(A) I-16 Fire Cistern Abandon.	(B) T-71 Reinforced Conc. Pavement Var. Depth	(C) 55-22 Remove & Dispose Cover
			Each	Sq. Yds.	Cu Yds
1-M	197+51	Rt.	1		
2-M	197+71	Rt.		11.00	0.06
TOTALS			1	11.00	0.06

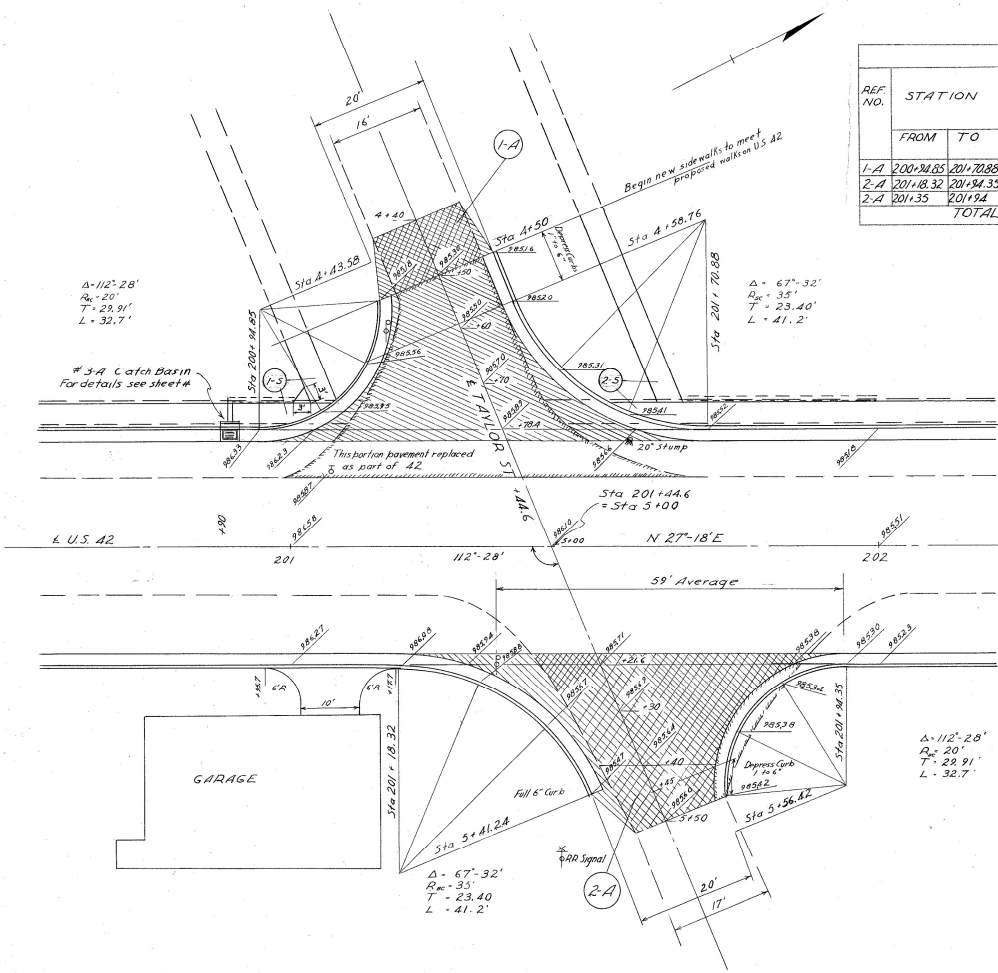
(A): Carried to Table "D" Sheet 7
(B): Carried to Table "A" Sheet 6
(C): Carried to Table "S" Sheet 7A

HIGH STREET INTERSECTION - STA 196+87.40

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OH10	F-558-(11)	POST WAR.

88
103

DEL-42 (12.21 - 18.72)
MRW-42 (0.00 - 1.11)



T-35 or T-35 on B-35
Full Depth Course
Pavement Removal

APPROACH - TAYLOR ST

REF. NO.	STATION FROM	STATION TO	SIDE	E-8 REMOVAL & DISPOSAL OF EXISTING PAVEMENT SQ YDS	I-12 MODIFIED TYPE II CONCRETE CURB&GUTTR LIN FT	I-12 DEDUCT FOR TYPE II CURB & GUTTER LIN FT	T-35 ½" ASPH CONCRETE SURFACE COURSE SQ YDS.	T-35 ASPH CONCRETE SURFACE COURSE VAR. THICK CU YDS	B-35 ASPH CONCRETE LEVELING COURSE VAR. THICK CU YDS	B-35 3" ASPH CONCRETE LEVELING COURSE SQ YDS	B-20 5" WATER BOUND MAC. BASE COURSE SQ YDS	33-3 4" CLASS. EMBANK. MATERIAL SQ YDS	DEDUCT FOR BASE WIDENING LIN FT
1-A	200+94.85	201+70.88	LT	*115.7	84	76.03	98	0.34		98	98	98	
2-A	201+18.32	201+94.35	RT	9.6	74	76.03	76.1	0.26	2.47	13.6	13.6	13.6	
2-A	201+35	201+94	RT										59
		TOTAL		96	158	152.06	174.1	0.60	2.47	111.6	111.6	111.6	59

* Included in Item E-1 (excavation) for payment

SIDEWALKS

REF. NO.	STATION FROM	STATION TO	SIDE	E-8 REMOVAL & DISPOSAL OF EXISTING SIDEWALK SQ FT.	I-13 MUNICIPAL 4" CONC. SIDEWALK CLASS "C" SQ FT
1-S	200+94.85	4+50	LT	104	80
2-S	4+50	201+70.88	LT	240	180
	TOTAL			344	260

DEL-42-18.36 TAYLOR ST. INTERSECTION STA 201+44.6

FED. RD. DIVISION	STATE	PROJECT	TYPE: FUND	
2	OHIO	F-558(11)	POST WAR	89 / 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

APPROACH ~ VINE STREET

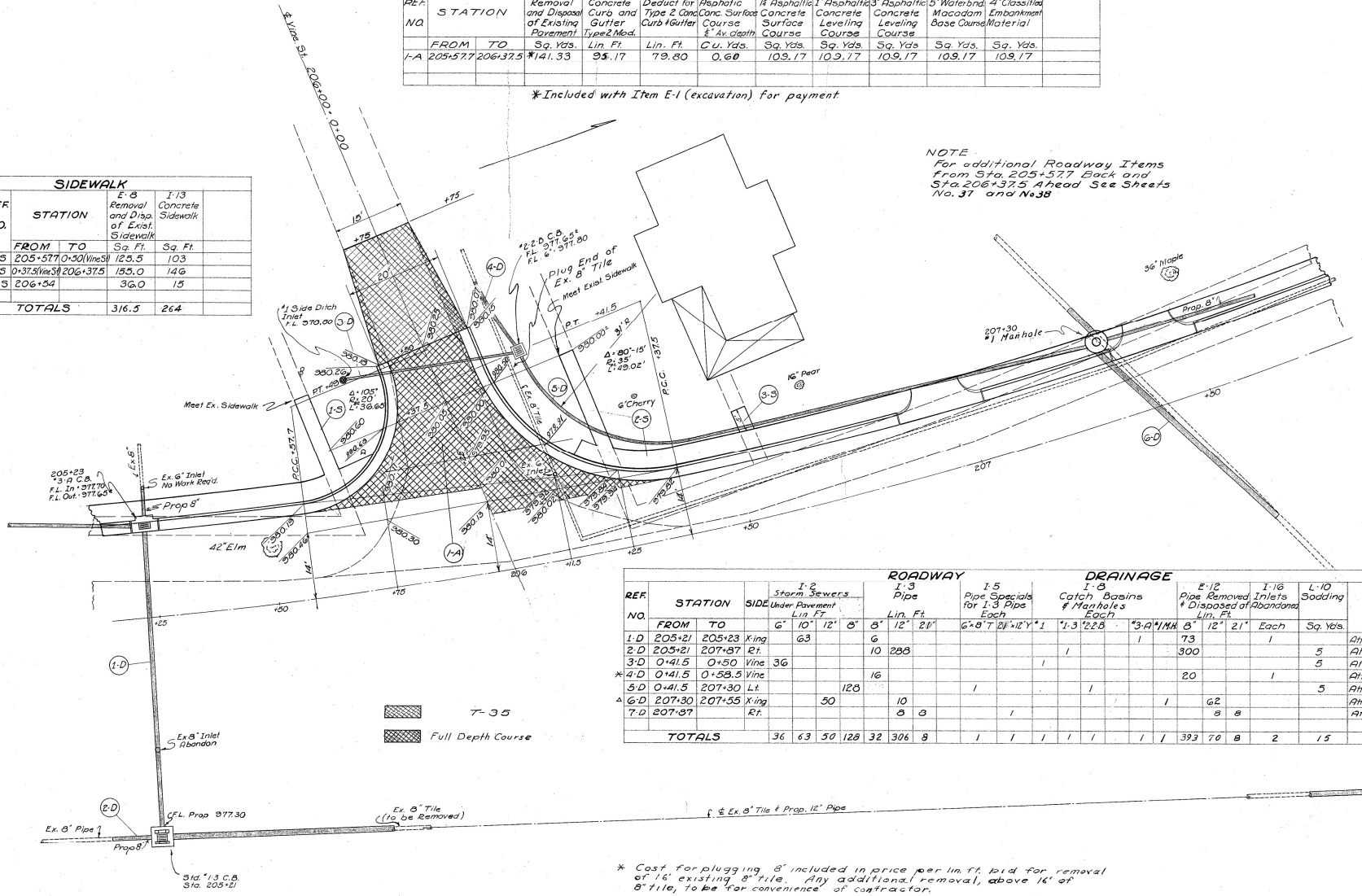
REF. NO.	STATION FROM	STATION TO	E-8 Removal and Disposal of Existing Pavement Sq. Yds.	I-12 Concrete Curb and Gutter Type 2 Mod. Lin. Ft.	I-12 Deduct for Type 2 Cond. Curb & Gutter Lin. Ft.	T-35 Asphaltic Conc. Surface Course 1" Av. depth Cu. Yds.	T-35 1½" Asphaltic Concrete Surface Course Sq. Yds.	B-35 1" Asphaltic Concrete Leveling Course Sq. Yds.	B-35 3" Asphaltic Concrete Leveling Course Sq. Yds.	B-20 5" Waterbnd. Macadam Base Course Sq. Yds.	SS-5 4" Classified Embankment Material Sq. Yds.
1-A	205+57.7	206+37.5	*141.33	95.17	79.80	0.60	109.17	109.17	109.17	109.17	109.17

*Included with Item E-1 (excavation) for payment.

SIDEWALK

REF. NO.	STATION FROM	STATION TO	E-8 Removal and Disp. of Exist. Sidewalk Sq. Ft.	I-13 Concrete Sidewalk Sq. Ft.
1-S	205+57.7	0+50 (Vine St)	125.5	103
2-S	0+37.5 (Vine St)	206+37.5	155.0	146
3-S	206+54		36.0	15
	TOTALS		316.5	264

NOTE
For additional Roadway Items From Sta. 205+57.7 Back and Sta. 206+37.5 Ahead See Sheets No. 37 and No. 38



ROADWAY DRAINAGE

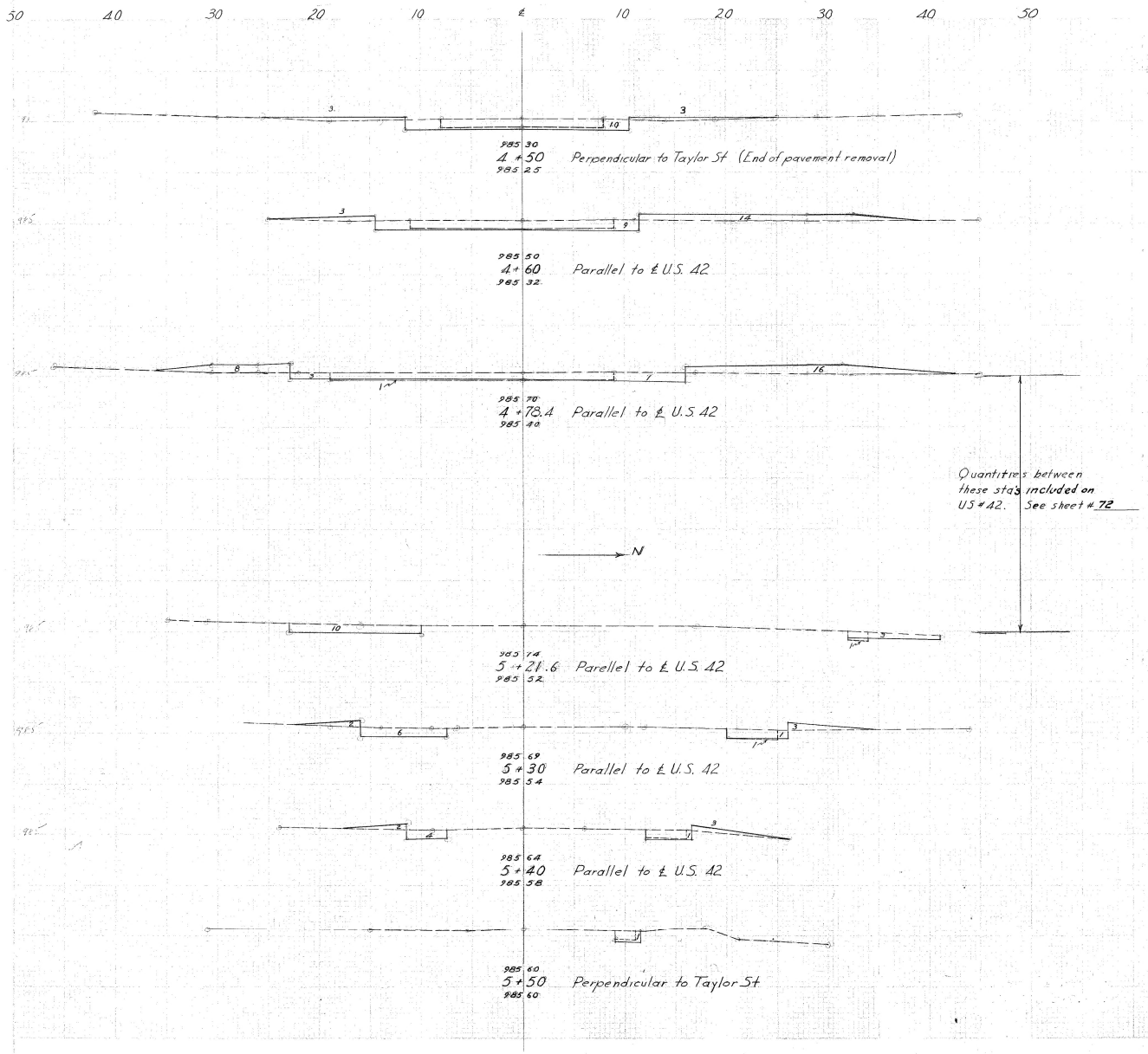
REF. NO.	STATION FROM	STATION TO	SIDE	I-2 Storm Sewers Under Pavement Lin. Ft. 6"	10"	12"	8"	I-3 Pipe Lin. Ft. 8"	12"	21"	I-5 Pipe Specials for I-3 Pipe Each 6"×8" T	12"×12" Y	*1	I-8 Catch Basins # Manholes Each #1-3	#2-2-8	*3-A	*MH	E-12 Pipe Removed & Disposed of Lin. Ft. 8"	12"	21"	I-16 Inlets Abandoned Each	L-10 Sodding Sq. Yds.	REMARKS
1-D	205+21	205+23	X-ing		63			6								1		73			1		Attach 8" & 10" to #3-A C.B.
2-D	205+21	207+87	Rt.					10	288					1				300				5	Attach 8" & 12" to #1-3 C.B.
3-D	0+41.5	0+50	Vine	36									1									5	Attach 6" to #1 C.B.
*4-D	0+41.5	0+58.5	Vine					16										20			1		Attach 6" & 8" to #2-2-8 C.B.
5-D	0+41.5	207+30	Lt.				128				1			1								5	Attach 8" to #2-2-8 C.B. - Pipe Spec. to Res.
Δ 6-D	207+30	207+55	X-ing			50			10							1			6	2			Attach 8" & 12" to #2-3 C.B.
7-D	207+87		Rt.						8	8			1						8	8			Attach 12" & Ex. 12" to Ex. 20"
	TOTALS			36	63	50	128	32	306	8	1	1	1	1	1	1	1	393	70	8	2	15	

* Cost for plugging 8" included in price per lin. ft. bid for removal of 16' existing 8" tile. Any additional removal, above 16' of 8" tile, to be "for convenience" of contractor.

Δ Build # 2-2B without windows.

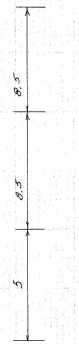
DEL-42-18.36 VINE STREET INTERSECTION ~ STA 206+00

DEL-42-(12.21-18.72)
MAW-42-(0.00-1.11)





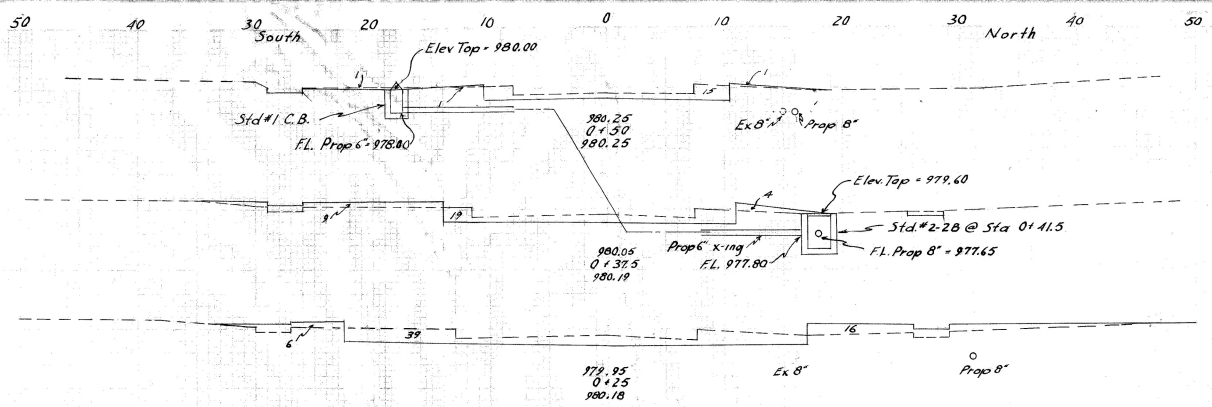
Total Lt of U.S. #42
To Sheet #72



Total Rt of U.S. #42
To Sheet #72

	END AREA		CU YDS	
	CUT	FILL	CUT	FILL
4+40		0	0	1.
4+50	10	6	3	4.
	9	11		
			3	6
	10	2.5		
			6	11
	13.	1		
			3.	1.0
	7	6		
			2	2
	5	3		
			1.	1.
	1	0	6	4

INTERSECTION - TAYLOR ST - STA 201+44.6 DEL 42-18.36



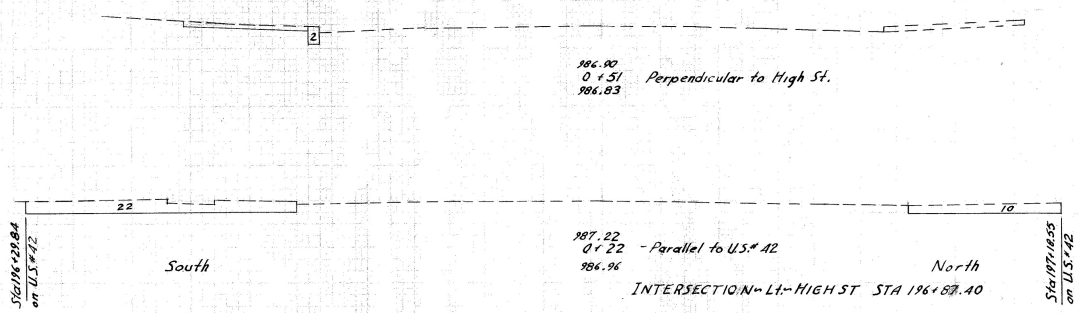
Quantities between 0+00 & 0+25 Included on U.S.#42 Sections

INTERSECTION-VINE ST.- STA 206+00 DEL-42-

DIVISION 2 OHIO F-558(11) TYPE FUNDS POST WAR 91 103

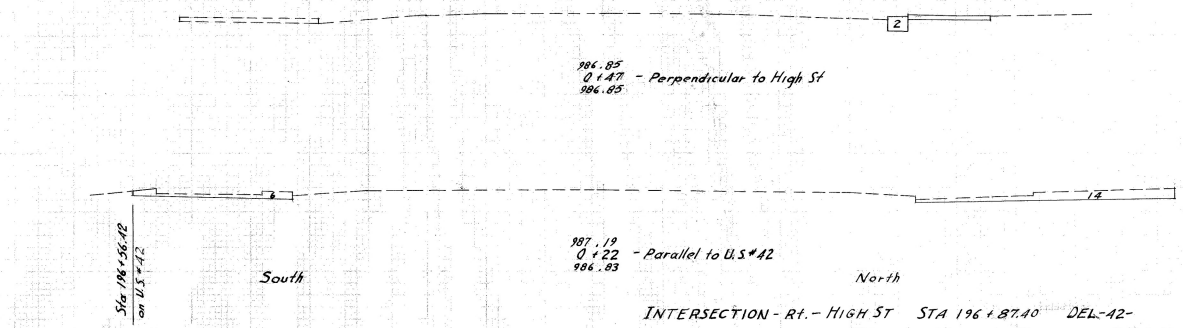
DEL-42- (12.21 - 18.72)
MAW-42- (0.00 - 1.11)

	End Area Cut	End Area Fill	Cu. Yds Cut	Cu. Yds Fill
Sta 0+75	0	0		
			7	1
Sta 0+50	16	2		
			8	4
Sta 0+37.5	19	13		
			15	8
Sta 0+25	39	22		
Totals To Sheet #73			30	13



INTERSECTION-Lt.-HIGH ST STA 196+87.40

Sta 0+60	0	0		
			1	0
Sta 0+51 South	2	0		
15'± Length of Prism			9	0
Sta 0+22-South	22	0		
Sta 0+24-North	0	0		
			1	0
Sta 0+22-North	10	0		
Totals To Sheet #70			11	0



INTERSECTION - Rt. - HIGH ST STA 196+87.40 DEL-42-

0+54.40	0	0		
			1	0
0+47-North	2	0		
15'± Length of Prism			5	0
0+22-North	14	0		
0+24-South	0	0		
			1	0
0+22-South	6	0		
Totals To Sheet #70			7	0

INTERSECTIONS - DEL-42-18.36

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

92
103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

CULVERT DATA

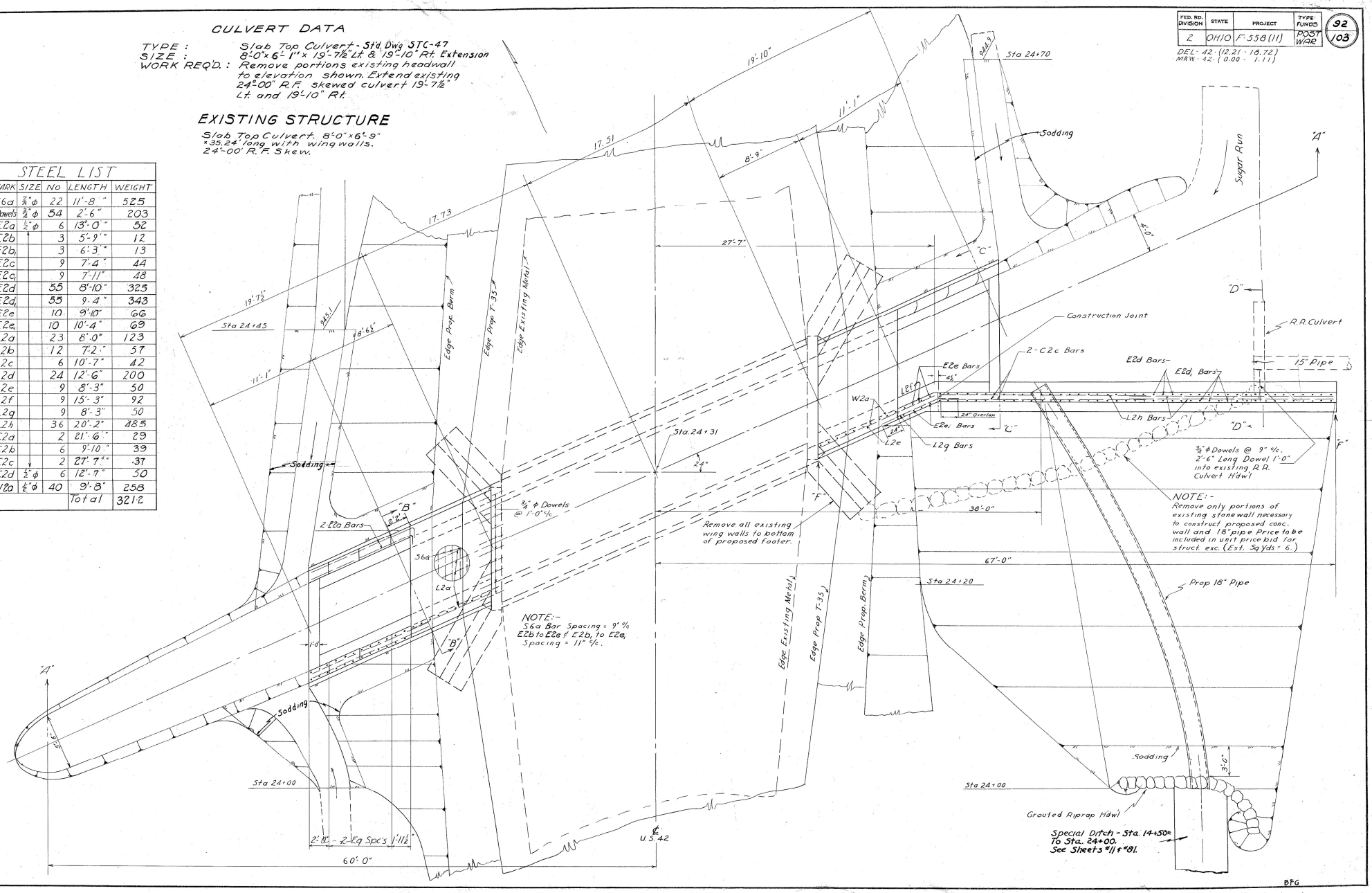
TYPE : Slab Top Culvert - Std. Dwg STC-47
SIZE : 8'-0" x 6'-1" x 19'-7½" Lt. & 19'-10" Rt. Extension
WORK REQ'D. : Remove portions existing headwall to elevation shown. Extend existing 24°-00" R.F. skewed culvert 19'-7½" Lt. and 19'-10" Rt.

EXISTING STRUCTURE

Slab Top Culvert, 8'-0" x 6'-9" x 35.24' long with wing walls. 24°-00' R.F. Skew.

STEEL LIST

MARK	SIZE	No	LENGTH	WEIGHT
S6a	⅞" ϕ	22	11'-8"	525
Dowels	¾" ϕ	54	2'-6"	203
E2a	½" ϕ	6	13'-0"	52
E2b		3	5'-9"	12
E2b$_1$		3	6'-3"	13
E2c		9	7'-4"	44
E2c$_1$		9	7'-11"	48
E2d		55	8'-10"	325
E2d$_1$		55	9'-4"	343
E2e		10	9'-10"	66
E2e$_1$		10	10'-4"	69
L2a		23	8'-0"	123
L2b		12	7'-2"	57
L2c		6	10'-7"	42
L2d		24	12'-6"	200
L2e		9	8'-3"	50
L2f		9	15'-3"	92
L2g		9	8'-3"	50
L2h		36	20'-2"	485
C2a		2	21'-6"	29
C2b		6	9'-10"	39
C2c		2	27'-7"	37
C2d	½" ϕ	6	18'-7"	50
W2a	½" ϕ	40	9'-8"	258
			Total	3212



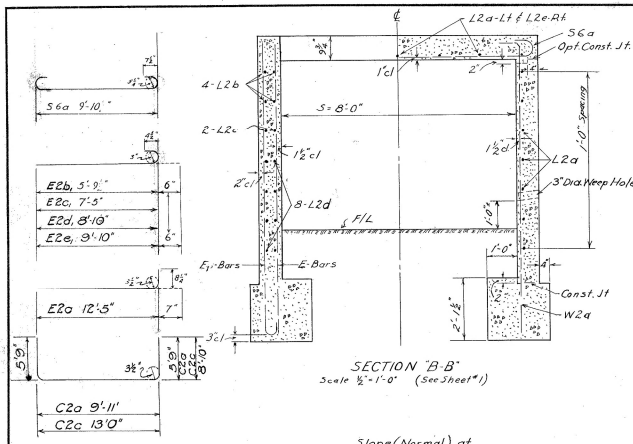
BFG

DEL-42-12.21 STRUCTURE DE42-124 STA 24+31 Sheet #1

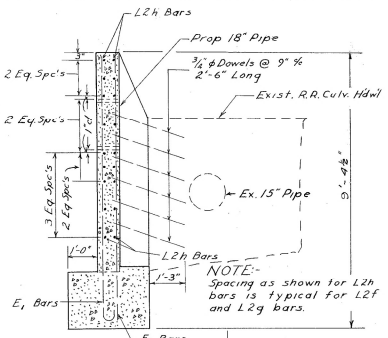
FED. RD. DIVISION	STATE	PROJECT	TYPE, FUNDS
2	OHIO	F-556(11)	POST WAR

93
103

DEL. 42-(12.21-18.72)
MRW-42-(0.00- 1.11)

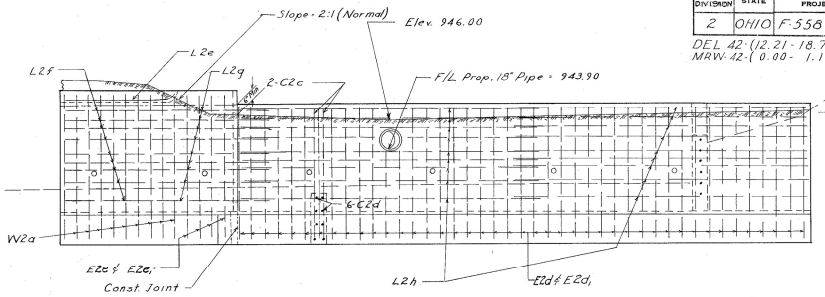


SECTION "B-B"
Scale ½"=1'-0" (See Sheet #1)



NOTE:-
Spacing as shown for L2h bars is typical for L2f and L2g bars.

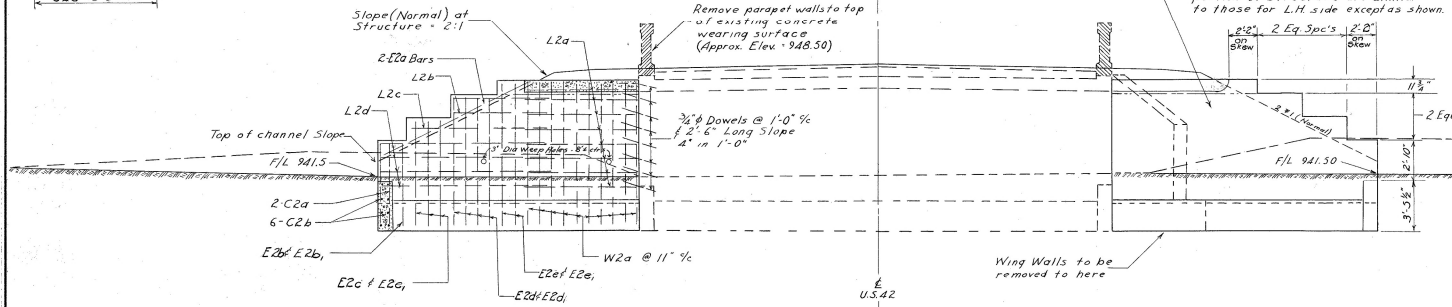
SECTION "D-D"
Scale ½"=1'-0" (See Sheet #1)



SECTION F-F
See Sheet #1

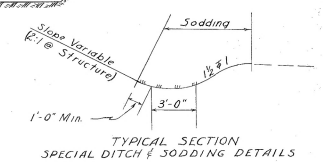
ESTIMATED QUANTITIES

ITEM E2	Excavation for Structures	133.00 Cu Yds
ITEM E3	Channel Excavation	34.00 Cu Yds
ITEM S-4	Reinforcing Steel	3212.00 Lbs
ITEM S22	Removal of Portions of Existing Structure	22.27 Cu. Yds
ITEM S23	1¼" Dowel Holes	67.5 Lin Ft.
ITEM L10	Sodding	65.00 Sq. Yds
ITEM I-10	Riprap, Type "B" Grouted	7.00 Sq Yds
ITEM I3	18" Pipe For Roadway Drainage	44.00 Lin. Ft.
ITEM S29	Porous Backfill	10.00 Cu. Yds
ITEM S1	Concrete For Structures, Class "E"	49.50 Cu. Yds

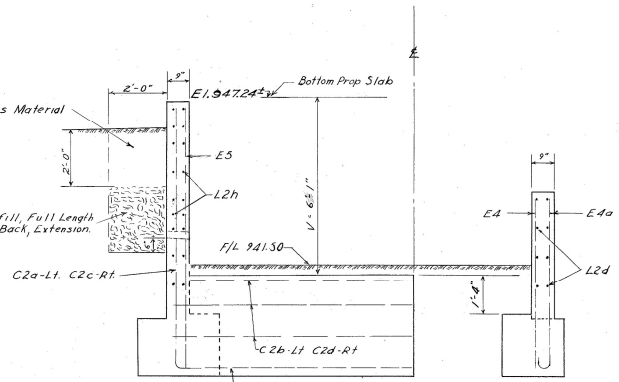


℄ U.S.42

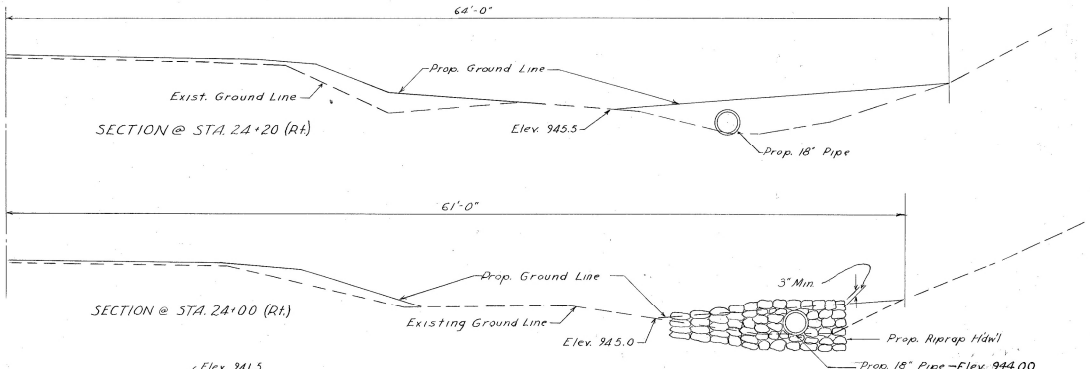
SECTION A-A
See Sheet #1



TYPICAL SECTION
SPECIAL DITCH & SODDING DETAILS

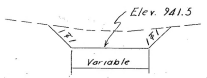


SECTION "C-C"
Scale ½"=1'-0" (See sheet #1)



SECTION @ STA. 24+20 (Rt.)

SECTION @ STA. 24+00 (Rt.)



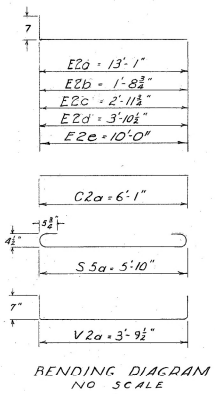
TYPICAL SECTION - CHANNEL

BFG

DEL-42-12.21 STRUCTURE DE-42-124 STA 24+31 Sheet #2

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	94
2	OHIO	F-558 (11)	POST WAR	103

DEL - 42 - (12.21 - 18.72)
MRW - 42 - (0.00 - 1.11)



BENDING DIAGRAM
NO SCALE

CULVERT DATA

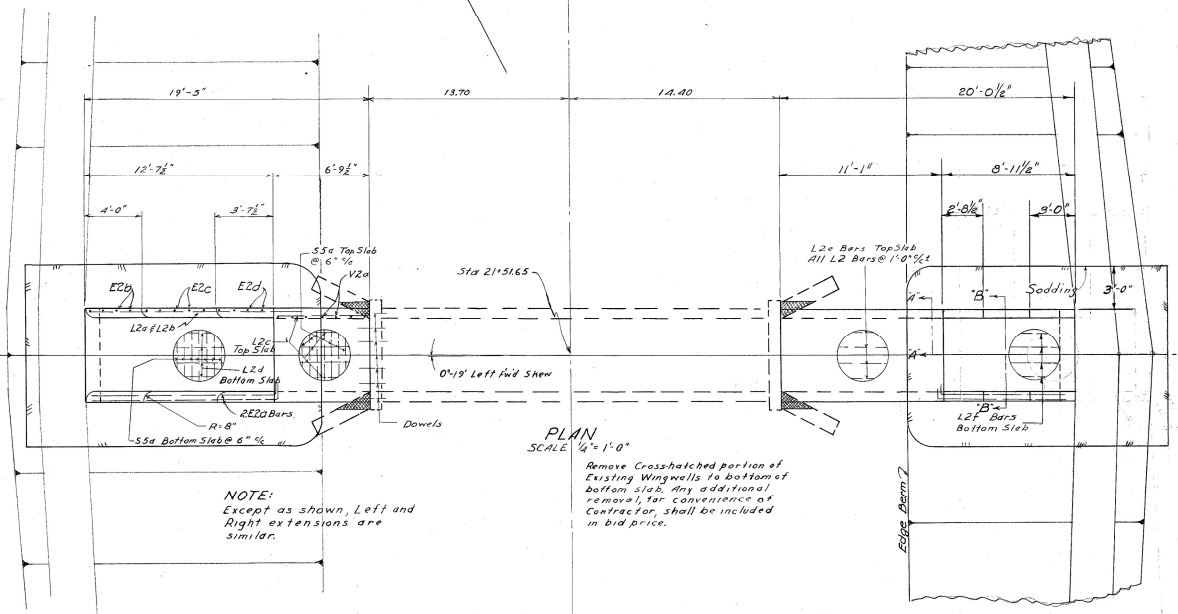
Type: Small Box Culvert, Std Dwg SBC 45
Size: 5'-3" x 19'-5" Lt and 24'-7" Rt Extension
Work Req'd: Remove portions of existing headwalls and wingwalls. Extend existing culvert 19'-5" on Lt and 24'-7" on Rt.

EXISTING CULVERT DATA

Small Concrete Box Culvert 5'x 3'x 28.10' with wingwalls

ESTIMATED QUANTITIES

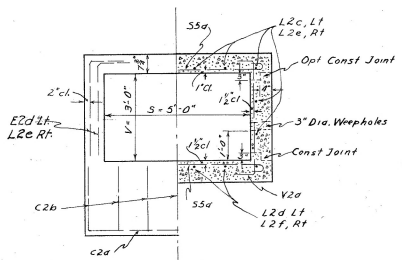
Item E2 Exc. for Structures	1633 Cu Yds
Item S1 Concrete for Structures Class "C"	13.74 Cu Yds
Item S4 Reinforcing Steel	2113 Lbs
Item S22 Rem. of portions of exist. struct.	1.81 Cu Yds
Item S23 1¼" Dowel Holes	40.00 Lin. Ft.
Item L10 Sodding	35.9 Sq Yds



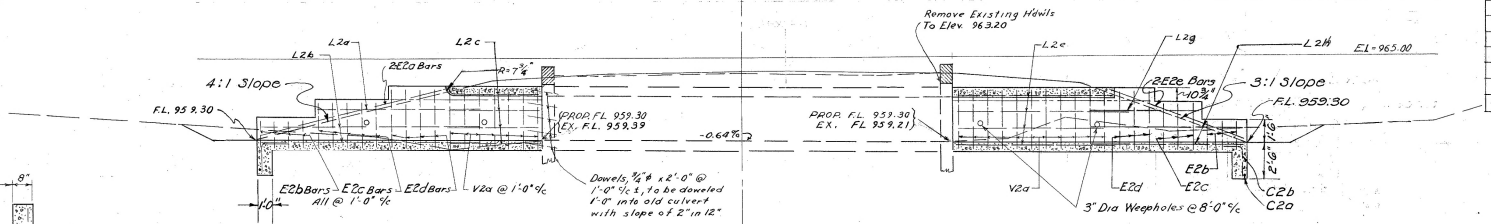
PLAN
SCALE 1/4" = 1'-0"

NOTE:
Except as shown, Left and Right extensions are similar.

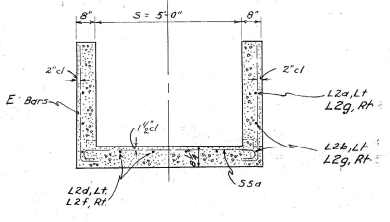
Remove Cross-hatched portion of Existing Wingwalls To bottom of bottom slab. Any additional removal for convenience of Contractor, shall be included in bid price.



VIEW C-C SECTION A-A
SCALE ½" = 1'-0"



SECTION on ℄
SCALE 1/4" = 1'-0"



SECTION B-B
SCALE ½" = 1'-0"

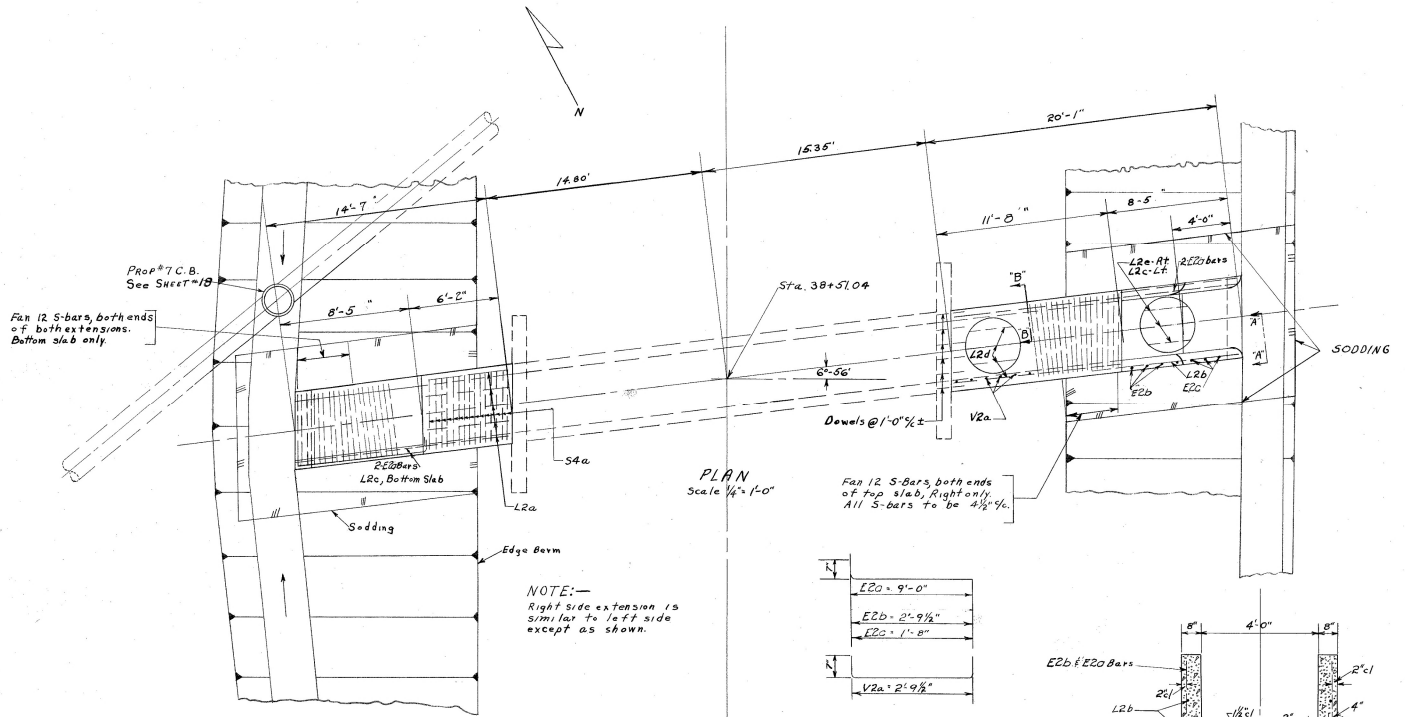
STEEL LIST				
Mark	Size	No	Length	Wg't
E2a	⅛" ϕ	4	13'-8"	35
E2b	"	14	2'-2⅝"	22
E2c	"	16	3-6¾"	39
E2d	"	14	4'-4½"	42
V2a	"	36	4'-11½"	120
L2a	"	2	10'-1"	14
L2b	"	4	14'-1"	38
L2c	"	12	6'-6½"	53
L2d	"	4	18'-11"	51
L2e	"	12	10'-9"	86
L2f	"	4	19'-9"	53
C2a	"	2	6'-1	8
C2b	⅛" ϕ	14	3'-3"	31
Dowels	¾" ϕ	40	2'-0"	120
S5a	¾" ϕ	124	7'-2"	1335
L2g	½" ϕ	2	7'-5½"	10
L2h	½" ϕ	4	10'-5½"	28
E-2e	½" ϕ	4	10'-7"	28
			TOTAL	2113

STRUCTURE DE-42-154 STA. 21+51.65

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (11)	POST WAR

95
103

DEL-42-(12.21-18.72)
MRW-42-(0.00- 1.11)



PLAN
Scale 1/4" = 1'-0"

NOTE:—
Right side extension is similar to left side except as shown.

Fan 12 S-Bars, both ends of top slab, Right only. All S-bars to be 4½" c/c.

BENDING DIAGRAM
NO SCALE

SECTION "C-C"
SCALE ½" = 1'-0"

CULVERT DATA
Type: Small Box Culvert, Std-Dwg SBC 4.5
Size: 4'x 2' x 14'-7" Lt and 20'-1" Rt Extension.
Work Reqd: Remove portions of existing headwalls to elevation shown. Extend Existing 6"-56' L.F. Skewed culvert 14'-7" on left and 20'-1" on Right.

EXISTING STRUCTURE
Small Concrete Box Culvert, 4'x 2'x 30.15'
No wing walls - 6"-56' L.F. Skew.

Item	E-2	Exc. For Structures	12.0 Cu Yds.
Item	S-1	Conc. For Struct.-Class'C'	11.33 Cu Yds.
Item	S-4	Reinforcing Steel	1475.00 Lbs.
Item	S-22	Rem. of Portions of Ex. Struct.	1.06 Cu Yds.
Item	S-23	1¼ Dowel Holes	32.00 Lin Ft.
Item	L-10	Sodding	30.00 Sq. Yds.

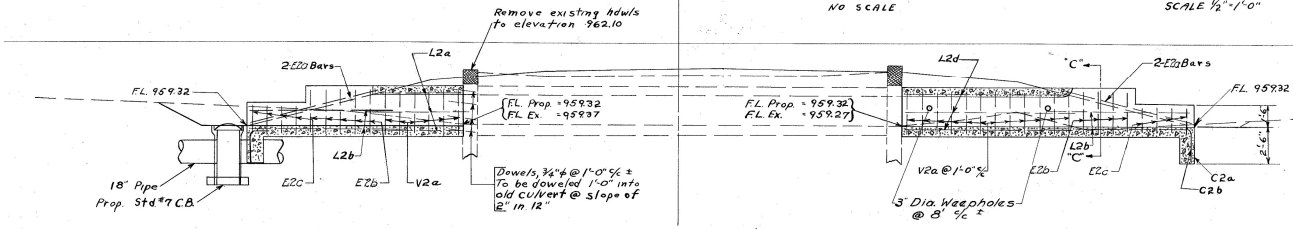
STEEL LIST

MARK	SIZE	No	LENGTH	Wg't
Dowels	¾" ϕ	32	2'-0"	96
S4a	⅝" ϕ	145	6'-0"	907
E2a	½" ϕ	8	9'-7"	51
E2b	"	18	3'-4½"	41
E2c	"	16	2'-3"	24
V2a	"	36	3'-11½"	96
L2a	"	9	5'-9"	35
L2b	"	8	9'-8"	52
L2c	"	3	14'-3"	29
L2d	"	9	11'-2"	67
L2e	"	3	19'-7"	40
C2a	"	2	4'-10½"	6
C2b	½" ϕ	14	3'-3"	31
Total				1475#

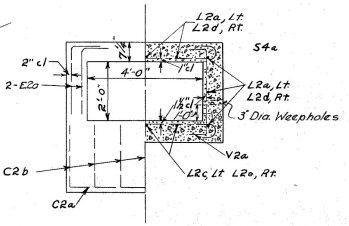
℄ SURVEY

Remove existing hdwls to elevation 962.10

Elev. Datum line 965.00



SECTION on ℄
Scale 1/4" = 1'-0"



VIEW "A-A" SECTION "B-B"
SCALE ½" = 1'-0"

STRUCTURE DEL-42-157 STA. 38+51.04

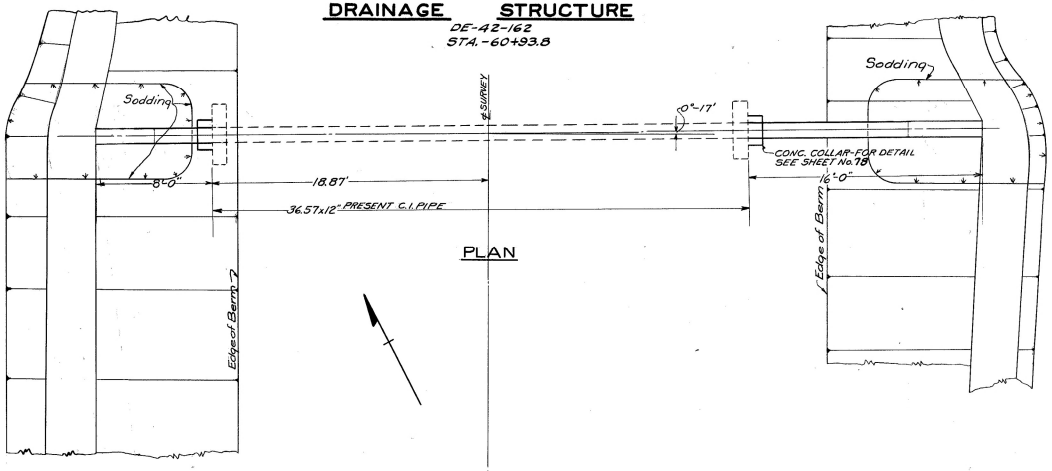
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

96
103

DEL.-42-(12.21-18.72)
MRW-42(10.00-1.11)

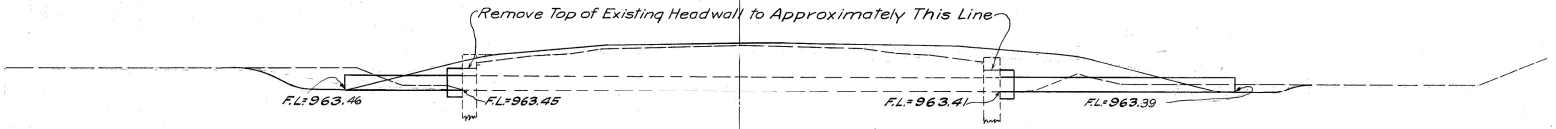
DRAINAGE STRUCTURE

DE-42-162
STA.-60+93.8



PLAN

Sta. 60+64-60" Cottonwood To be Removed.



CROSS SECTION

CULVERT DATA

Type: Pipe Culvert-Std. Dwg. S-27
Size: 12"x24' Extensions.
Work Reqd.: Remove Portion of Existing Hdwls. on Left And Right. Extend Existing Structure 16' Lin. Ft. on Rt. & 8' Lin. Ft. on Lt. With 12" Pipe.

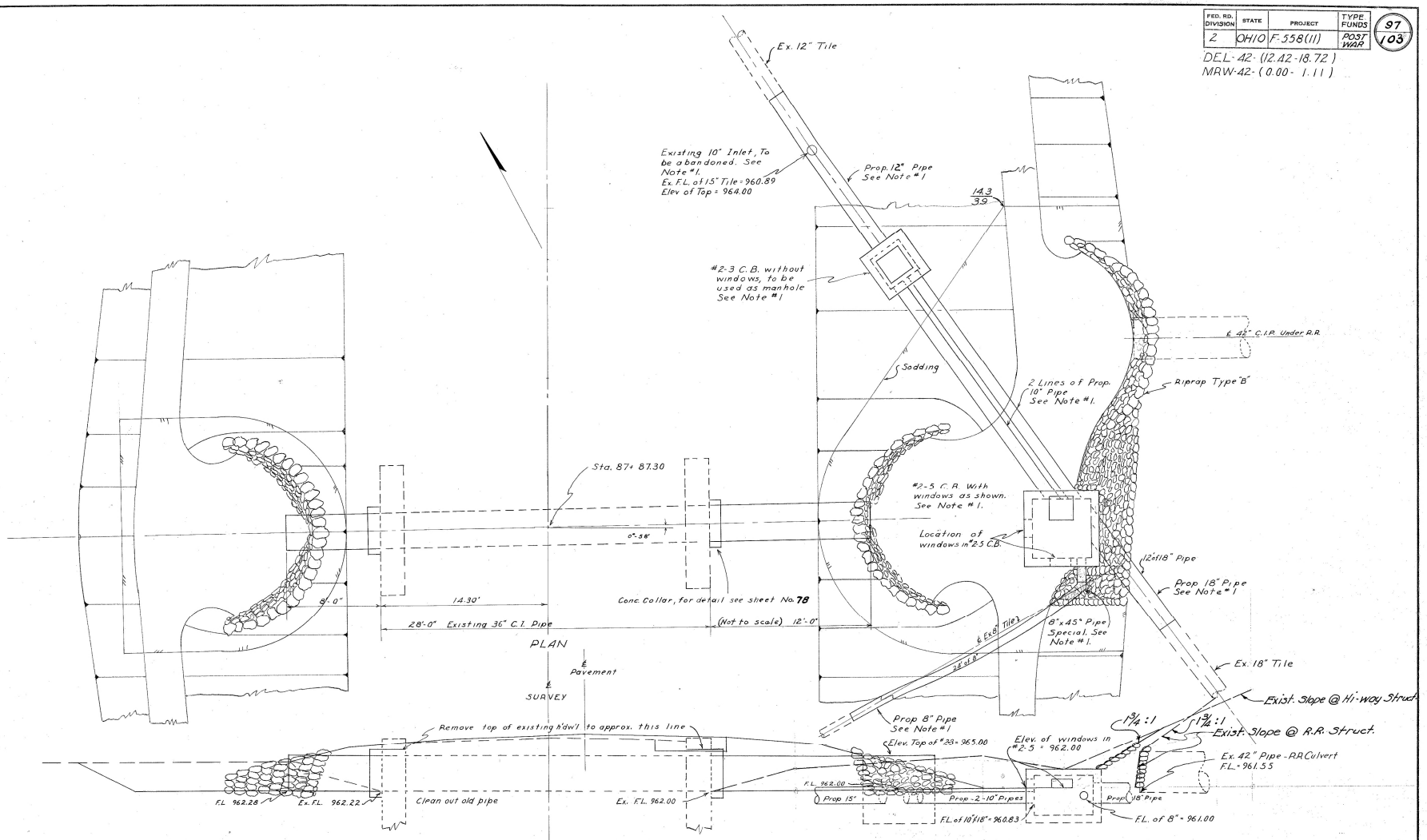
ESTIMATED QUANTITIES

Item E-2	Excavation	4 Cu. Yd.
Item S-27	12" Pipe	24 Lin. Ft.
Item S-1	Class "C" Concrete For Collars	0.3 Cu. Yd.
Item S-4	Reinforcing Steel (8-$\frac{3}{4}$"ø x 1'-6")	18 Lbs.
Item S-23	$\frac{1}{2}$" Dowel Holes	6 Lin. Ft.
Item S-22	Removal of Portions of Existing Structure. S-22	0.3 Cu. Yd.
Item L-10	Sodding	20.0 Sq. Yds.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

97
103

DEL-42-(12.42-18.72)
MRW-42-(0.00-1.11)



CROSS SECTION on ℄ Culvert

CULVERT DATA

TYPE: Pipe Culvert - Std Drawing S-27
SIZE: 36" x 2.0' Extension
WORK REQ'D: Remove portions of existing h'dw'ls on left and right. Extend existing structure 12 lin ft on Rt and 8' on Lt with 36" pipe. Build riprap h'dw'ls on Lt and Rt. Excavation and ripraping, special ditch on right.

ESTIMATED QUANTITIES

E-2	Excavation, Structure	29.8 Cu yds
E-3	Channel Excavation	12.0 Cu Yds.
S-27	36" Pipe	20.0 Lin ft
S-1	Class "C" Conc. for collars	0.84 Cu yd
S-4	Reinforcing Steel (8-¾" # @ 1'-6")	18 Lbs
S-23	1½ # Dowel Holes	6 Lin ft
S-22	Removal of Portions existing structure	0.93 Cu yd
L-10.	15" Riprap, Type "B"	70 Sq Yds
L-10	Sodding	65 Sq Yds

NOTE #1
See Sheet # 23 For Quantities.

STRUCTURE DE-42-16.7 STA. 87+87.30

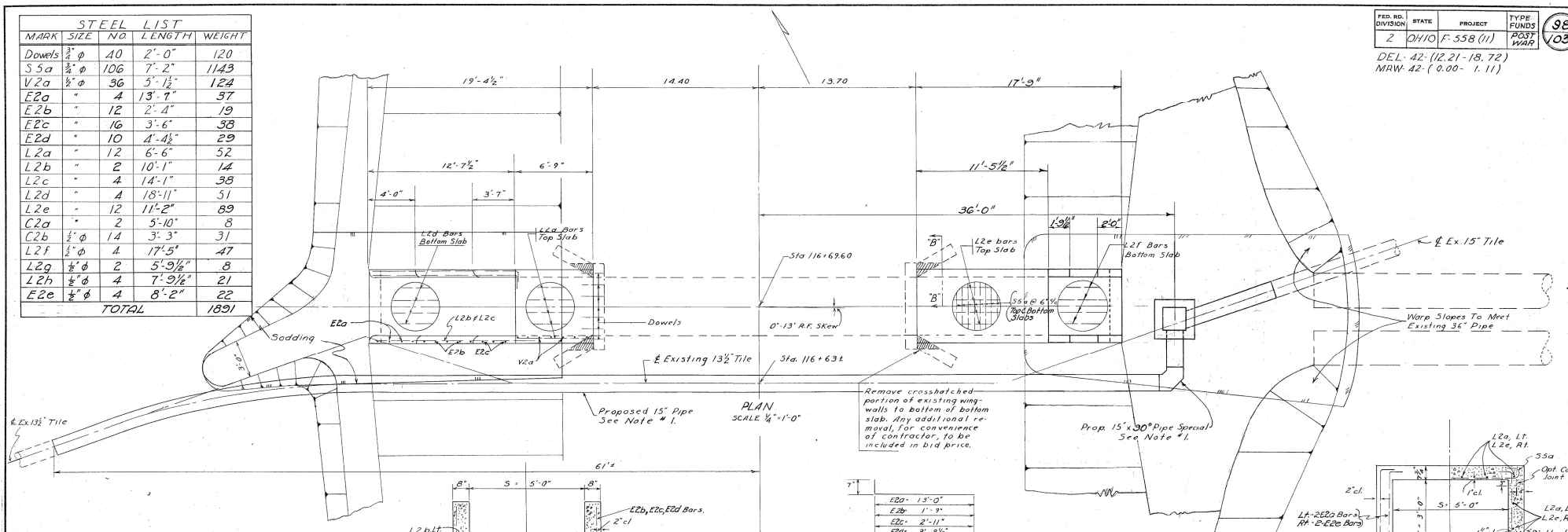
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558 (11)	POST MAR

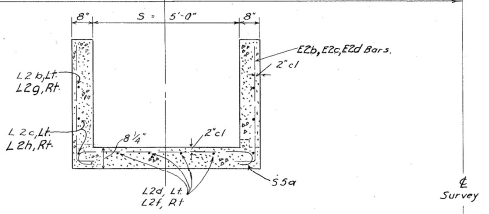
98
103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

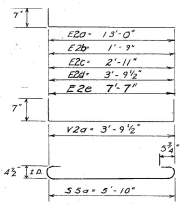
STEEL LIST

MARK	SIZE	NO.	LENGTH	WEIGHT
Dowels	3/4" ϕ	40	2'-0"	120
S5a	3/8" ϕ	106	7'-2"	1143
V2a	1/2" ϕ	36	5'-1 1/2"	124
E2a	"	4	13'-7"	37
E2b	"	12	2'-4"	19
E2c	"	16	3'-6"	38
E2d	"	10	4'-4 1/2"	29
L2a	"	12	6'-6"	52
L2b	"	2	10'-1"	14
L2c	"	4	14'-1"	38
L2d	"	4	18'-11"	51
L2e	"	12	11'-2"	89
C2a	"	2	5'-10"	8
C2b	1/2" ϕ	14	3'-3"	31
L2f	1/2" ϕ	4	17'-5"	47
L2g	1/2" ϕ	2	5'-3 1/2"	8
L2h	1/2" ϕ	4	7'-9 1/2"	21
E2e	1/2" ϕ	4	8'-2"	22
TOTAL				1891

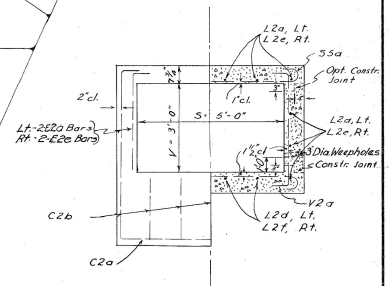




SECTION "C-C"
SCALE 1/2"=1'-0"



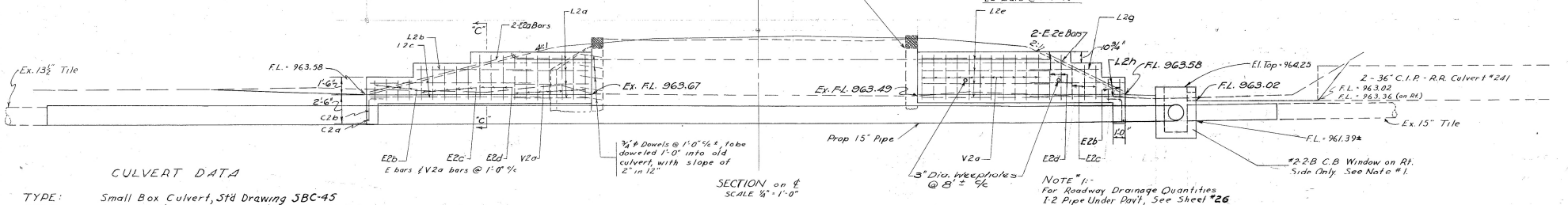
℄ Survey



VIEW A-A SECTION B-B
SCALE 1/2"=1'-0"

ESTIMATED QUANTITIES

ITEM E2	Excav For Structures (Includes channels)	20.0 Cu Yds.
ITEM S1	Conc. For Structures Class "C"	14.78 Cu Yds
ITEM S4	Reinforcing Steel	1891 Lbs
ITEM S22	Rem. of Portions of Exist. Struct.	1.60 Cu. Yds.
ITEM S23	Dowel Holes	40.0 Lin. Ft.
ITEM L10	Sodding	58.0 Sq. Yds.



SECTION on ℄
SCALE 1/8"=1'-0"

CULVERT DATA

TYPE: Small Box Culvert, Std Drawing SBC-45
SIZE: 5 x 3 x 19'-4 1/2" on left and 26'-1" on right, Extension.
WORK REQ'D: Remove portions of existing h'dw'ls and wingwalls. Extend existing culvert 19'-4 1/2" on left and 26'-1" on right.

NOTE "1":-
For Roadway Drainage Quantities I-2 Pipe Under Pavt, See Sheet #26

STRUCTURE # DE-42-172 STA. 116+69.60

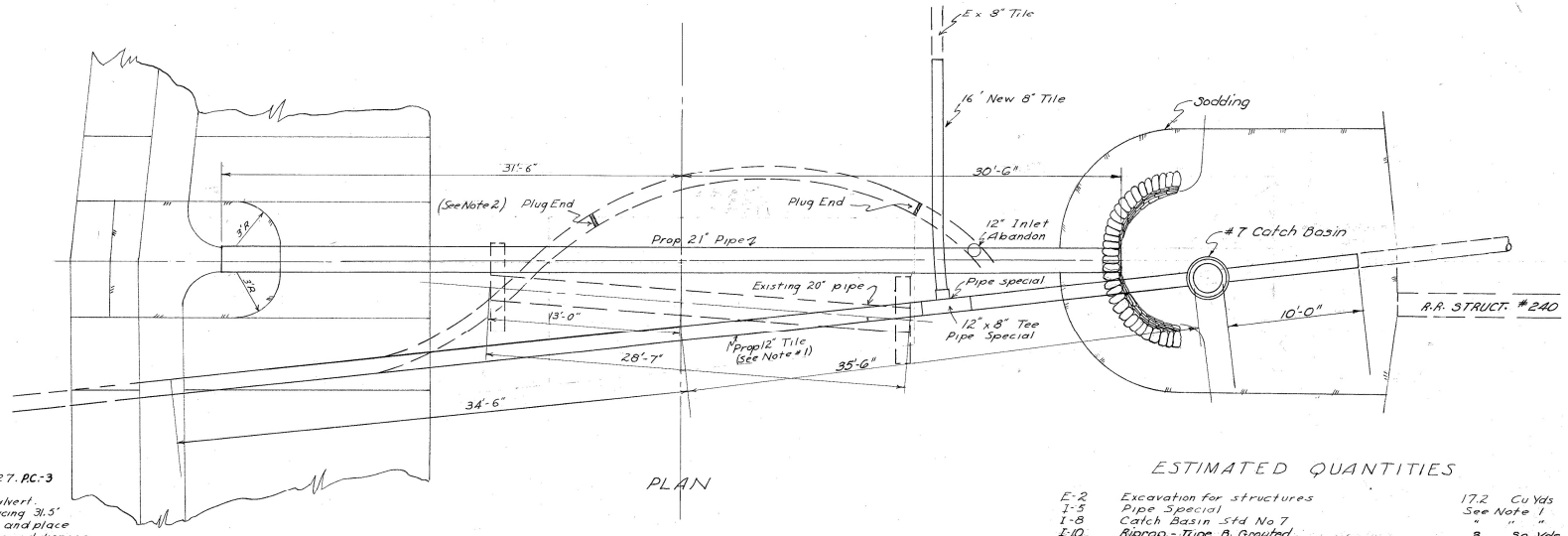
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F 558 (11)	POST WAR

99
103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

DE-42-178

STA 148+08.5



PLAN

CULVERT DATA

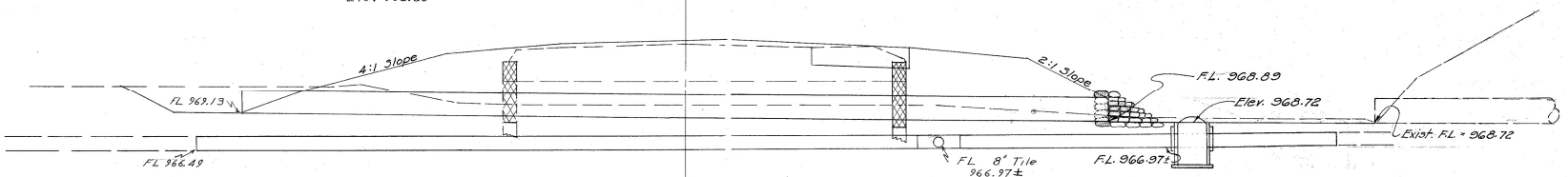
TYPE: Pipe Culvert Std Dwg S-27. PC-3
SIZE: 21" x 31'-6" Lt & 30'-6" Rt
WORK REQ'D: Remove existing 20" C.I.P. Culvert. Construct 21" x 62' Lg pipe culvert placing 31.5' on Lt of existing ℄ and 30.5' on Rt and place sod on both ends as shown. Remove and dispose portions of existing 12" tile & plug ends with V.S.P. pipe specials. Construct Std 12" pipe culvert 34'-6" on Lt. & connect to existing 12" tile, and 35'-5" on Rt. place #7 S.D. Catch Basin so that existing 12" pipe and proposed 12" pipe meet in Basin. Connect 8" tile to 12" pipe with pipe special as shown.

ESTIMATED QUANTITIES

E-2	Excavation for structures	17.2 Cu Yds
I-5	Pipe Special	See Note 1
I-8	Catch Basin Std No 7	" "
I-10	Riprap - Type B. Grouted	3 Sq. Yds.
S-27	21" Pipe for Roadway Culvert	62 Lin Ft
L-10	Sodding	42 Sq Yds
I-16	Inlets Abandoned	See Note 1
S-24	Removal of Existing Structure	Lump Sum
S5-5, B-20, B-35	Quantities Shown on Sheet #29	

℄ Survey

Remove cross hatched portions of headwalls to Elev 968.30



CROSS SECTION

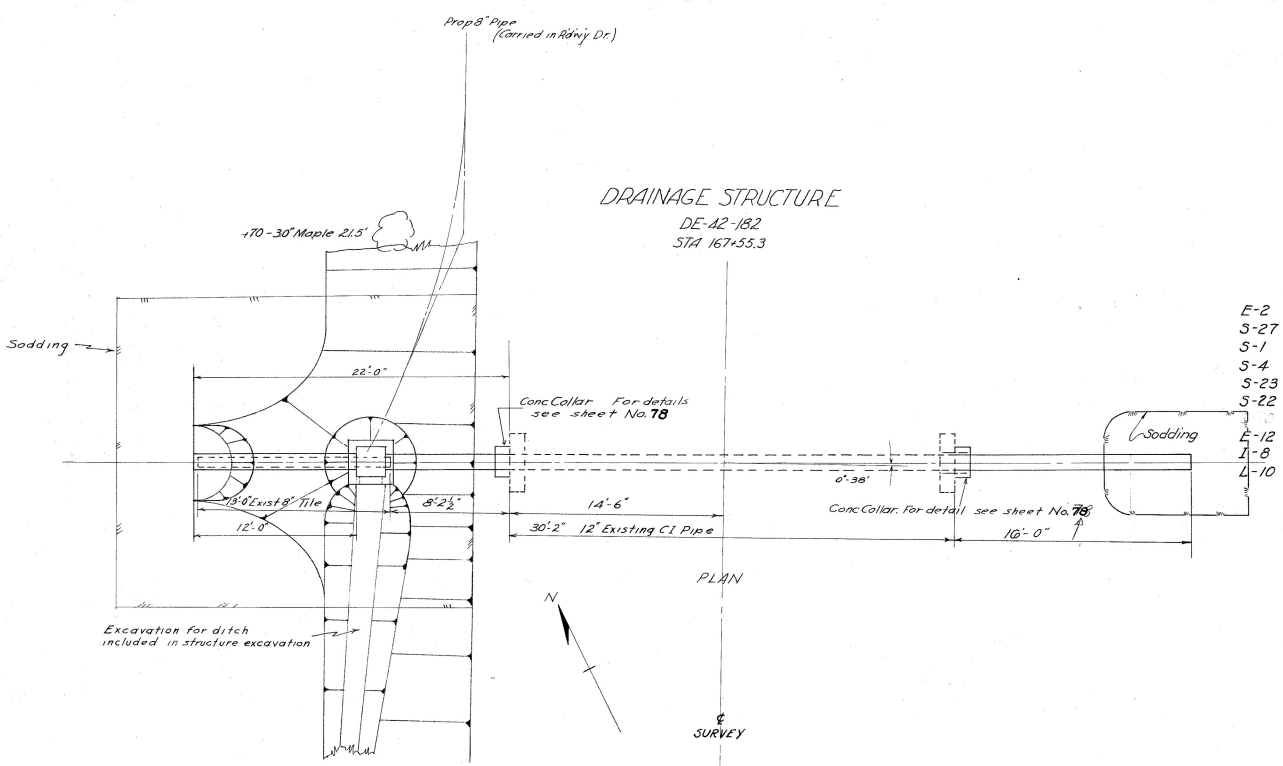
NOTES
1. for Roadway Drainage and Pipe Under Pavement Quantities, see sheet No 29
2. Payment for plugging pipes to be included in price bid for "Removal of Existing Structure"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-558 (11)	POST WAR	100 / 103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)

DRAINAGE STRUCTURE

DE-42-182
STA 167+55.3



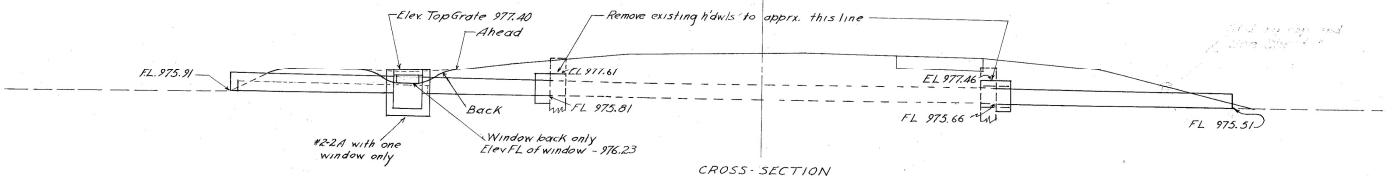
PLAN

ESTIMATED QUANTITIES

E-2	Excavation For Structures	4 Cu Yds
S-27	12" Pipe For Roadway Culvert	40 Lin Ft
S-1	Class "C" concrete for collars	0.3 Cu Yds
S-4	Reinforcing steel (8-¾"×1'-6" ϕ)	18 Lbs
S-23	1½" ϕ Dowel holes	6 Lin Ft
S-22	Removal portions existing structures	0.3 Cu Yds
E-12	Removal & Disposal 8" Tile	13 Lin Ft
I-8	#2-2A Catch basin (one window only)	1 Each
L-10	Sodding	85 Sq Yds

CULVERT DATA

TYPE: Pipe culvert Std Drawing S-27 PC-3
SIZE: 12" x 22'-0" Lt & 16'-0" Rt
WORK REQUIRED: Remove portions of existing headwalls. Extend existing structure 16'-0" on Rt. and 22'-0" on Lt. with 12" Pipe. Build # 2-2 A Catch Basin on Lt.

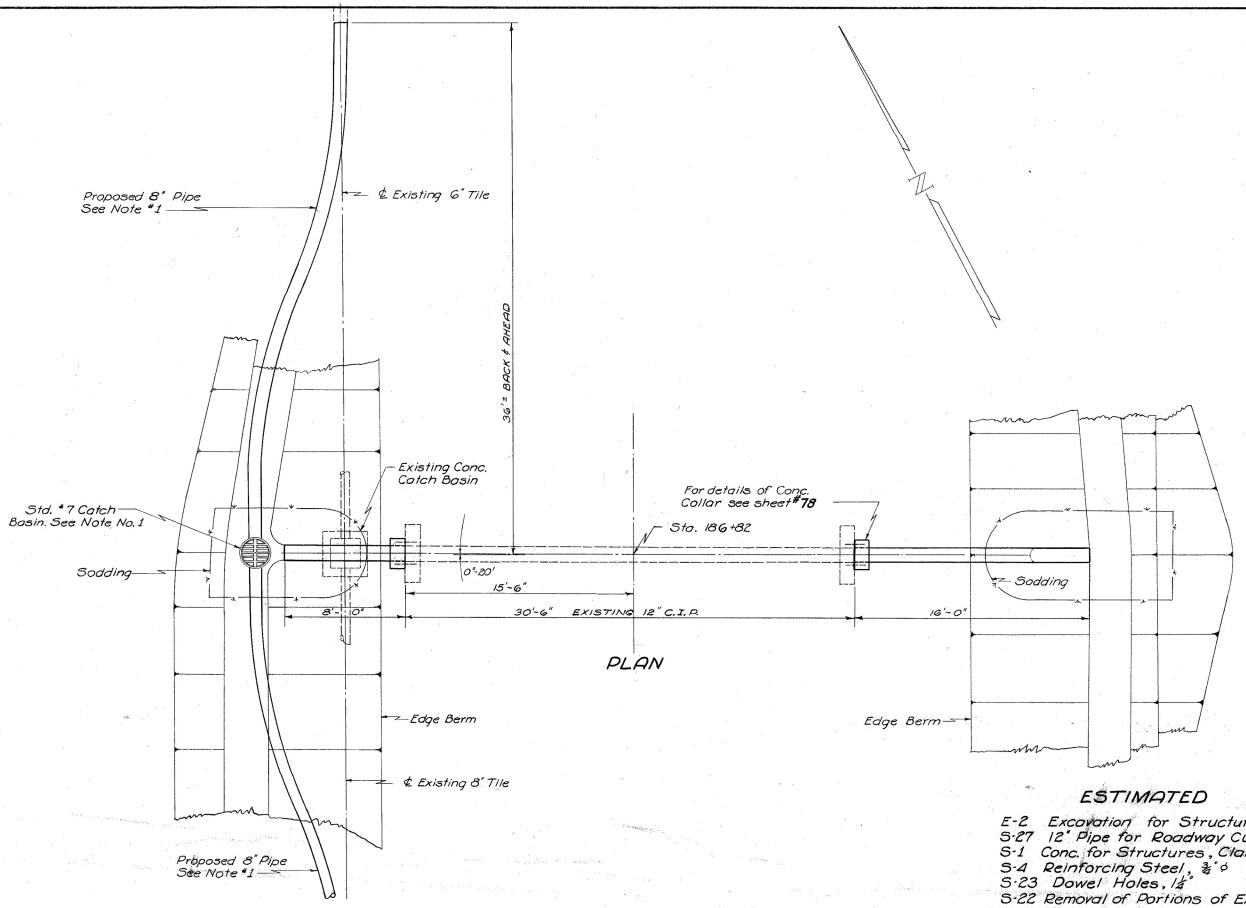


CROSS-SECTION

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-558(11)	POST WAR

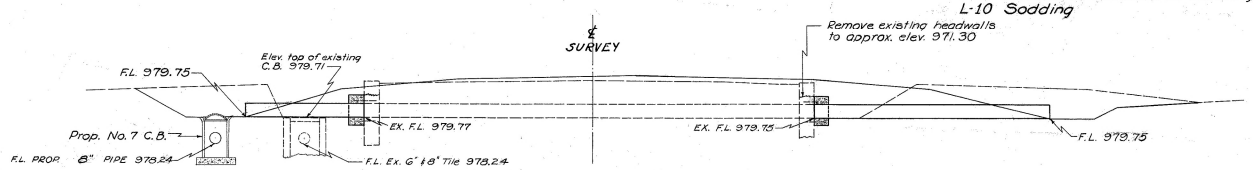
101
103

DEL-42-(12.21-18.72)
MRW-42-(0.00-1.11)



ESTIMATED QUANTITIES

E-2	Excavation for Structures	8	Cu. Yds.
S-27	12" Pipe for Roadway Culverts	24	Lin. Ft.
S-1	Conc. for Structures, Class C	0.3	Cu. Yds.
S-4	Reinforcing Steel, ⅜" ◊	18	Lbs.
S-23	Dowel Holes, 1½"	6	Lin. Ft.
S-22	Removal of Portions of Existing Structure	0.3	Cu. Yds.
L-10	Sodding	17	Sq. Yds.



SECTION ON ℄

Note #1: For Roadway Drainage Quantities see Sheet #33

CULVERT DATA

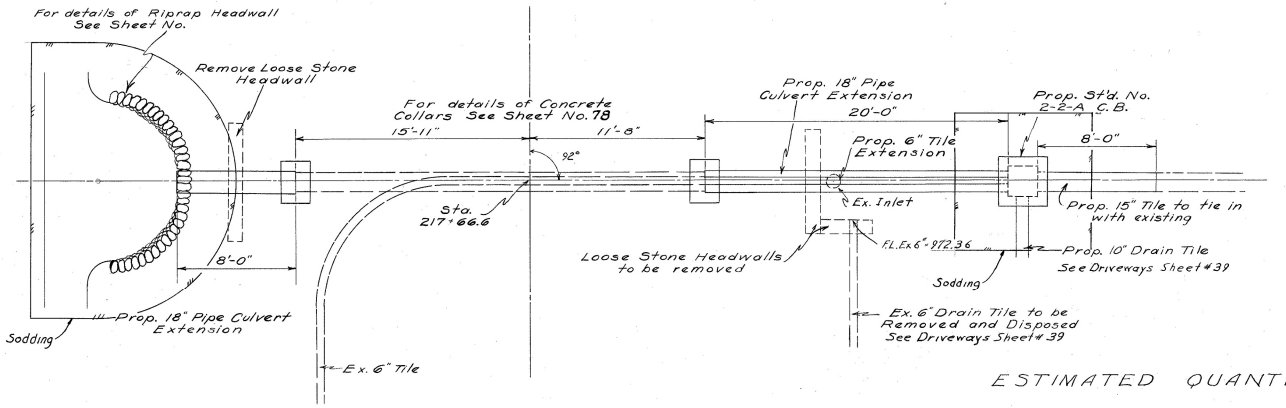
Type: Pipe Culvert, Std. Drawing S-27-P.C-3
Size: 12" × 24' Extension
Work Req'd.: Remove portions of existing headwall on left and right; existing structure to be extended 16' right and 8' left with 12" pipe. Sod as shown.

STRUCTURE DE-42-185A STA 186+82

FED. RD. DIVISION	STATE	PROJECT	TYPE FUND
2	OHIO	F-558(11)	POST WAR

102
103

DEL-42 (12.21-18.72)
MRW-42 (0.00-1.11)



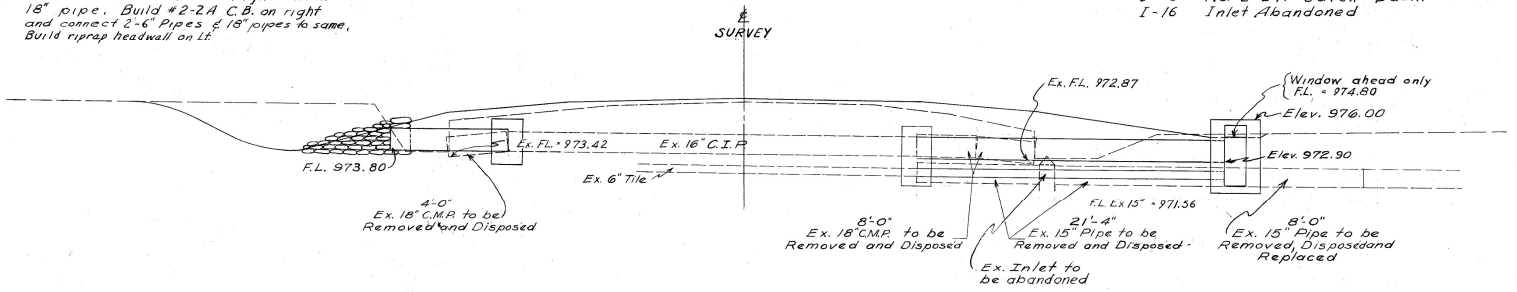
PLAN

CULVERT DATA

TYPE : Pipe Culvert - Std. Dwg. S-27, P.C.-3
SIZE : 18" x 8'-0" Lt. and 20'-0" Rt. Extension
WORK REQ'D : Remove loose stone headwalls on left and right. Remove 4' of 18" pipe on left and 8' of 18" pipe on right. Extend structure 8' on left and 20' on right with 18" pipe. Build #2-2A C.B. on right and connect 2-6" Pipes & 18" pipes to same. Build riprap headwall on Lt.

ESTIMATED QUANTITIES

E-2	Excavation	3	Cu. Yds
E-12	Removal of 15" Pipe	29	Lin. Ft.
E-12	Removal of 18" Pipe	12	Lin. Ft.
S-27	6" Pipe	20	Lin. Ft
I-3	15" Pipe	8	Lin Ft
I-10	Riprap Type B Grouted	3	Sq. Yds
S-1	Class "C" Concrete for Collars	0.9	Cu Yds.
S-4	Reinforcing Steel (8-½"ϕ x 1'-6")	18	Lbs
S-27	18" Pipe	28	Lin. Ft
L-10	Sodding	20	Sq Yds.
I-8	No. 2-2-A Catch Basin	1	Each
I-16	Inlet Abandoned	1	Each



SECTION ON ℄ OF PIPE CULVERT

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-558(11)	POST WAR	103 / 103

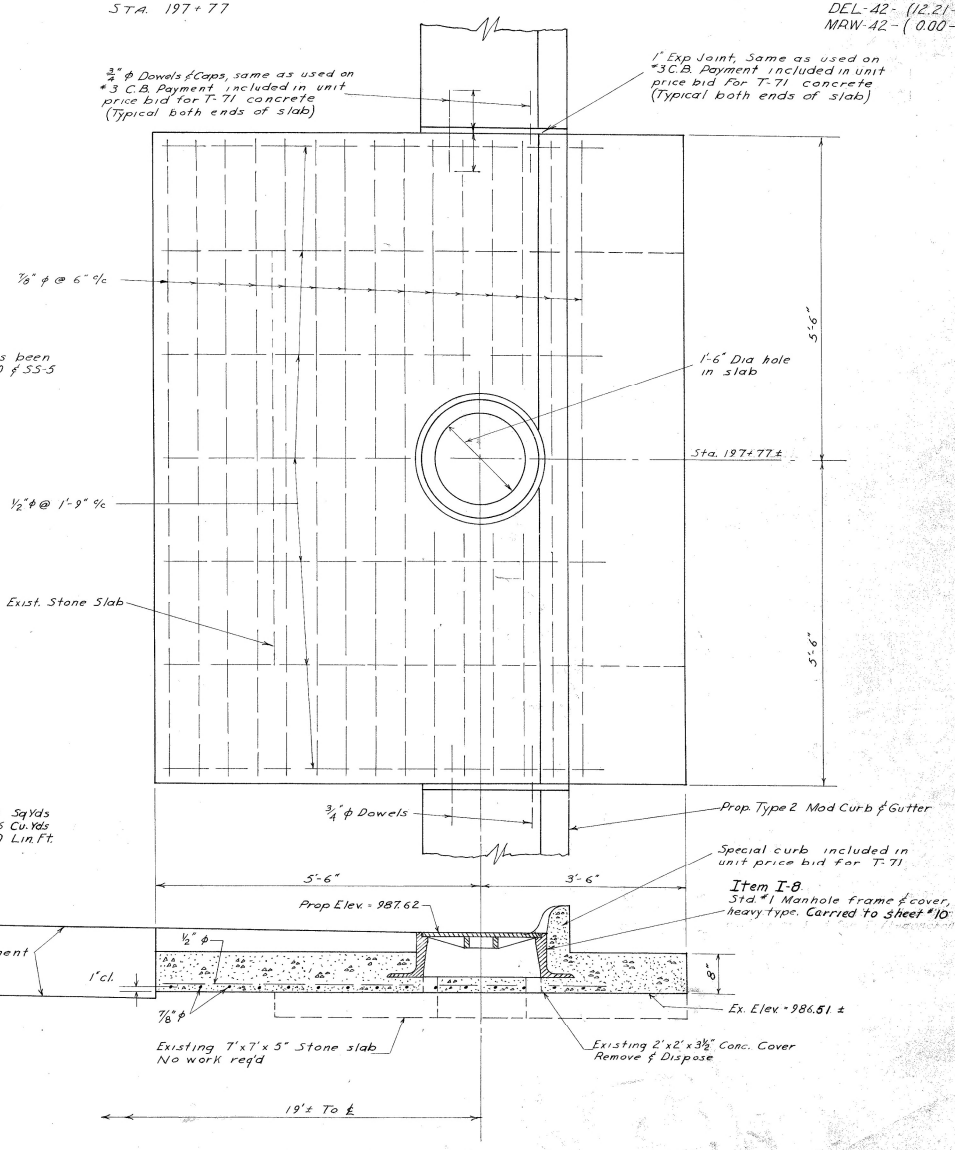
DEL-42- (12.21-18.72)
MRW-42-(0.00- 1.11)

P.C. STA 204+30.16 P.T. STA 208+03.49
Rate of Superelevation -.045% Degree of Curve-6°00'

Elevation Left Edge	Width	Deduct From ℄ Profile	Centerline Station	Centerline Profile Grade	Plus or Minus From Profile	Width	Elevation Right Edge
985.74	20.00	.31	201+50	986.05	-.31	20.00	985.74
985.47	↑	↑	+75	985.78	-.30	↑	985.48
985.18			202+00	985.51	-.28		985.23
984.85			+25	985.16	-.19		984.97
984.50		↓	+50	984.81	-.09		984.72
984.15		.31	+75	984.46	.02		984.48
983.78		.33	203+00	984.11	.16		984.27
983.39		.37	+25	983.76	.32		984.08
982.96		.45	+50	983.41	.48		983.89
982.51		.56	+75	983.07	.63		983.70
982.07		.67	204+00	982.74	.77		983.51
981.66		.82	+30.16	982.38	.87		983.25
981.26		.88	+50	982.14	.90		983.04
980.97		.90	+75	981.87	↑		982.77
980.71		↑	205+00	981.61			982.51
980.47			+25	981.37			982.27
980.24			+50	981.14			982.04
980.03		↓	+75	980.93			981.83
979.84	20.00	.90	206+00	980.74			981.64
980.11	14.00	.63	206+00	980.74			981.64
979.94	14.00	.63	+25	980.57			981.47
* 979.87	12.00	.54	+50	980.41			981.31
979.73	↑	↑	+75	980.27			981.17
979.60			207+00	980.14	↓		981.04
979.49		↓	+25	980.03	.90		980.93
979.40		.54	+50	979.94	.88		980.82
979.34		.63	+75	979.87	.84	↓	980.71
979.33		.48	208+00	979.81	.79	20.00	980.60
979.33		.47	+03.49	979.80	.79	19.93	980.59
979.34		.43	+25	979.77	.69	18.50	980.46
979.39		.35	+50	979.74	.60	18.00	980.34
979.46		.27	+75	979.73	.49	18.50	980.22
979.52		.22	209+00	979.74	.37	18.00	980.11
979.58		.19	+25	979.77	.25	17.50	980.02
979.62		↑	+50	979.81	.14	17.00	979.95
979.67			+75	979.86	.02	16.50	979.89
979.72			210+00	979.91	-.06	16.00	979.85
979.77			+25	979.96	-.14	15.50	979.82
979.82			+50	980.01	-.19	15.00	979.82
979.87			+75	980.06	-.22	14.50	979.84
979.92			211+00	980.11	-.22	14.00	979.87
979.97			+25	980.16	-.21	13.50	979.95
980.02			+50	980.21	-.20	13.00	980.01
980.07		↓	+75	980.26	-.19	12.50	980.07
980.12	12.00	.19	212+00	980.31	-.19	12.00	980.12

* See Vine St Intersection, Sheet #89 For elevations between these Stations.

DETAIL of FIRE CISTERN COVER
STA. 197+77



STEEL LIST			
SIZE	NO	LENGTH	WEIGHT
¾" ϕ	4	1'-3"	7.5
½" ϕ	7	7'-6"	35.0
⅞" ϕ	11	10'-9"	241.7
⅞" ϕ	8	4'-0"	65.4
		TOTAL	349.6 *

* Payment Included in unit price bid for T-71.

SUMMARY of QUANTITIES

ITEM T-71	Reinforced Concrete, Class "C"	11.0 Sq Yds
ITEM S-22	Remove & Dispose Conc. Cover	0.06 Cu. Yds
ITEM I-12	Deduct for Type 2 Curb & Gutter	11.0 Lin Ft.

SUPERELEVATION TABLE & DETAIL of FIRE CISTERN COVER STA. 197+77 Rev. 8-18-50