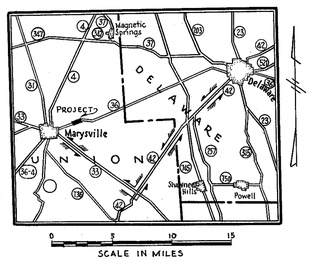
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

1/45

F-982 (1)

UNI-36-(12.77-13.03)

File F 3



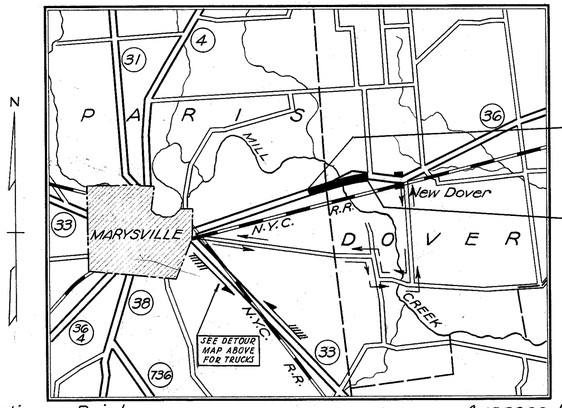
TRUCK DETOUR MAP

For passenger vehicle detour see Location Plat.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
UNI-36-(12.77-13.03)
UNION COUNTY
PARIS & DOVER TOWNSHIPS

LINE DATA

BEGIN PROJECT STA. 96+00
END PROJECT STA. 144+50
GROSS LENGTH OF PROJECT = 4850.0 LIN. FT.
DEDUCTIONS AND ADDITIONS = NONE.
NET LENGTH OF PROJECT = 4850 LIN. FT. OR 0.918 MILE.
ADD FOR LENGTH OF WORK
STA. 95+00 to STA. 96+00 = 100 LIN. FT.
STA. 144+50 to STA. 145+00 = 50 LIN. FT.
TOTAL LENGTH OF WORK = 5000.0 LIN. FT. OR 0.946 MILE



Delivery Point New Dover

LOCATION PLAT

Average Haul 0.85 Miles.

0 1 2 3
SCALE IN MILES

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 require the closing to traffic of the highway and that detours will be provided as indicated on the plans.

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

APPROVED _____
DATE 3-7-50 RESIDENT DIVISION DEPUTY DIRECTOR
APPROVED _____
DATE _____ CHIEF ENG'R. BUREAU OF MAINTENANCE
APPROVED _____
DATE 3-23-50 CHIEF ENG'R. BUREAU OF BRIDGES & R.R. CROSSINGS
APPROVED _____
DATE 3-24-50 CHIEF ENG'R. BUREAU OF LOCATION & DESIGN
APPROVED _____
DATE 3-24-50 FIRST ASS'T. DIRECTOR & CHIEF ENGINEER
APPROVED _____
DATE 3-24-50 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

TRUCK DETOUR SHOWN THUS
PORTION TO BE IMPROVED
PASSENGER CAR DETOUR SHOWN THUS
STATE HIGHWAYS
COUNTY ROADS
PLAN 1" = 50'
PROFILE VERTICAL 1" = 5'
PROFILE HORIZONTAL 1" = 50'
CROSS SECTIONS 1" = 5'

INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTION	2
GENERAL NOTES	3
SUMMARY	4
PLAN AND PROFILE	5-12
CROSS-SECTIONS	13-33
DETAIL SHEET	34
SUPER-ELEVATION TABLE	35
SPECIAL CROSS-SECTIONS	36
CHANNEL CROSS-SECTIONS	37
CULVERTS UNDER 20' SPAN	38-39
APPROACH SLABS.	40
BRIDGE OVER 20' SPAN	41-45

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS					
L-3	4-1-50	AS-1-47, AS-2-47	7-27-49		
T-1,2,3,4&5	2-20-45	C5B-1-47 (Sh 1&2)	8-25-49		
S-27 P.C.-3	2-20-45	L-3-A	4-1-50		
T-15 No.1	3-1-47	L-1	4-1-50		
T-15 No.2	6-17-49	I-14-G	2-1-47		
G-8.07	2-7-50				

SUPPLEMENTAL SPECIFICATIONS	
5	5-28-48
31	6-13-49

File No.	UNION COUNTY UNI-36-(12.77-13.03)
	DATE OF LETTING _____
	CONTRACT No. _____

CONSTRUCTION BUREAU MAY 17 1956 GROUND PHOTOLAB

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL:

_____ _____
DISTRICT ENGINEER DATE

APPROVED:

_____ _____
DIVISION ENGINEER DATE

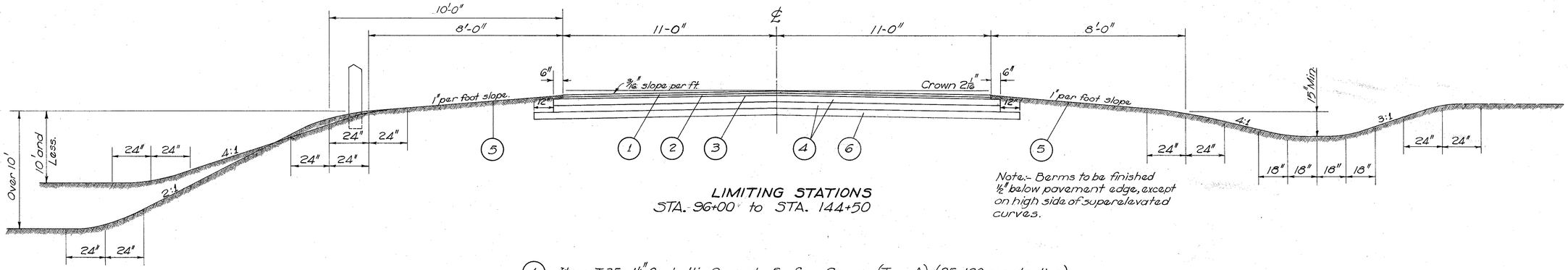
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	DOST WAR

2/45

UN-36-(12.77-13.03)

TYPICAL SECTION

TYPE T-35 ON B-20.



LIMITING STATIONS
STA. 96+00 to STA. 144+50

Note:- Berms to be finished ½" below pavement edge, except on high side of superelevated curves.

(1) Item T-35 1½" Asphaltic Concrete Surface Course (Type A). (85-100 penetration)

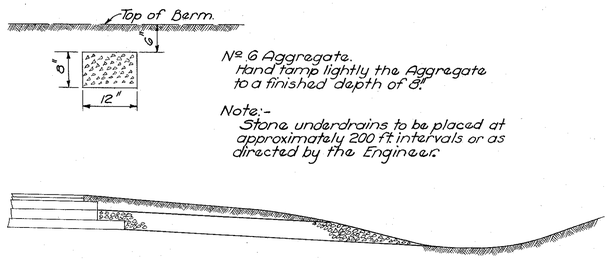
(2) Item B-35 1½" (Min. Thickness) Asphaltic Concrete Leveling Course.

(3) Item T-30 Bituminous Prime Coat. (using 0.35 gals. per sq. yd. Sec. M-5.7, RT-2 or 3).

(4) Item B-20 2-4" Waterbound Macadam Base Courses

(5) Item L-9 Seeding and Protecting, Type "A".

(6) Item SS-5 4" Classified Embankment Material Blanket Course. Grading "C" or "D" (as per plan)

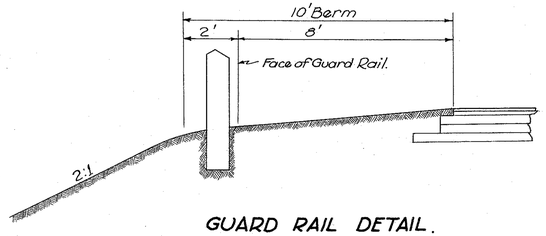


Nº 6 Aggregate.
Hand tamp lightly the Aggregate to a finished depth of 8".

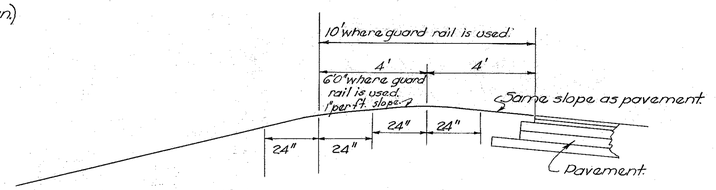
Note:-
Stone underdrains to be placed at approximately 200 ft. intervals or as directed by the Engineer.

STONE UNDERDRAINS Nº 2.

STA. 96+00 to STA. 124+10 & STA. 126+40 to STA. 144+50
Estimated Quantities 460 Lin. Ft. Item I-9



GUARD RAIL DETAIL.



DETAIL OF SHOULDER AT SUPERELEVATED SECTION.

Note:-
Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in that portion between the beginning of the transition and the point where the superelevation equals twice the crown.

FED. RD. DIST. NO.	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

3
45

UNI.-36-(12.77-13.03)

GENERAL NOTES.

Utilities: The contractor shall notify at least 48 hours before breaking ground, all Public Service Corporations having wires, poles, pipes, conduits, manholes, or other structures that may be affected by his operations. The Public Service Corporations will do all the necessary work incidental to this improvement.

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. 3-0.01(b) The contractor shall have a telephone installed & maintained during the construction of this project.

Tree Removal: No trees 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 approved grading it shall be done. The contractor shall take extreme care not to damage the trees to be left in place.

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.

Connecting Drains: Existing farm drains and house connections that are cut or intercepted by the new drainage system shall be connected to the new drainage system. Connections to be made where and as directed by the Engineer.

Estimated Pipe for Connections
6 House drains @ 10'each = 60 lin.ft. total 6" I-3 pipe

Trench Excavations: The excavation from pipe trenches, stone underdrains, etc. not needed for backfill shall be used in the roadway embankment to reduce borrow.

Seeding & Protecting Type "A": Quantities for seeding item L-9 are calculated for the soil area between lines ten (10) feet outside the work limits as shown on the cross sections or to the R/W line if such line is less than ten feet from the work limits. All areas outside these limits where the vegetative growth has been injuriously disturbed or destroyed by the contractor shall be restored and seeded in accordance with the provisions of item L-9 by the contractor at his own expense.

Commercial Fertilizer: (10-6-4) Commercial Fertilizer shall be applied to all areas having Seeding and Sodding at the rate of 20 lbs. per 1000 square feet.

Existing Pavement Removal: After existing pavement has been removed (Item I-8 see sheet 4 table "M") the old roadway shall be plowed, harrowed and dragged to a smooth grade, the old ditches filled and the entire area left in a neat condition. Cost of this work shall be included in price bid for pavement removal, Item E-8. Area shall be seeded and mulched Item L-9.

Item 88-5: The Grading "C" the percent passing the N°.200 sieve shall be 5 to 15 and the percent passing the N°.50 sieve shall be waived. The Grading "D" the percent passing the N°.200 sieve shall be 5 to 20 and the percent passing the N°.50 sieve shall be waived.

Guard Rail: Guard rail shall be flared to meet bridge railing in such amanner that the change in alignment of the guard rail will not exceed one (1) in ten(10).

The existing guard rail to be removed and disposed of shall become the property of the contractor and shall be disposed of by him.

Design Speed:- The design speed on this project is 60 miles per hour.

FED. RD. DIST. NO.	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

4/45

UNI-36-(2.77-13.03)

GUARD RAIL

SHEET NO.	I-15	SPECIAL REMOVE & DISPOSE
	LIN. FT.	LIN. FT.
8		416
9	562.5	1315
RECAP		
SUM	562.5	1731

DRAINAGE "D"

SHEET NO.	I-9 STONE UNDER-DRAINS LIN. FT.	I-3 PIPE LIN. FT. 6"	I-3 PIPE LIN. FT. 30"	I-3 PIPE UNDER PAVT. 30" LIN. FT.	I-3 PIPE OUTLET 30" LIN. FT.	L-10 SODDING SQ. YDS.	L-10 RIPRAP SQ. YDS.	I-14 PAVED GUTTER LIN. FT.	I-4 6" PIPE UNDERDRAIN LIN. FT.	I-4 8" PIPE OUTLET LIN. FT.
8		175	247	20		5	8			
9		251	386		20	16	5	15		
2	460									
3		60								
11									200	20
RECAP						21				
SUM	460	486	633	20	20		13	15	200	20

TREES & STUMPS TO BE REMOVED

SHEET NO.	E-9 REMOVAL OF TREES & STUMPS
8	1
9	4
10	8
11	25
RECAP	
SUM.	38

STRUCTURES - 20FT. SPAN & UNDER "S"

SHEET NO.	STATION	STRUCTURE NO.	E-2 EXCAV.	S-1 CONCRETE CLASS "C"	S-24 REMOVAL OF EXISTING STRUCTURE	S-27 PIPE FOR ROADWAY CULVERT LIN. FT.			I-2 12" PIPE UNDER PAVEMENT	L-10 SODDING	
			CU. YDS.	CU. YDS.	LUMP	24"	30"		LIN. FT.	SQ. YDS.	
38	110+88	UN-36-129	18	4.2	LUMP	70			80	12	
39	134+42	UN-36-134	5		LUMP		104			18	
8	117+37.5	UN-36-130			LUMP						
RECAP										30	
SUM.			23	4.2	LUMP	70	104		80		

APPROACHES "A"

SHEET NO	I-17 6" AGGREGATE SQ. YDS.	I-1 PIPE 12" LIN. FT.	E-12 REMOVAL & DISPOSAL OF LIN. FT. 8" C.I.P.	8"
6	212.4	48		80
7	34.1	22		
8	188.5	72	16	
9	250.4	44		
10	141.8			
11	151.0	28	16	
34	233.4			
RECAP			32	80
CAL.	1211.6			
SUM.		214		

GENERAL SUMMARY CODE-6201

ITEM	QUANTITY	UNIT	DESCRIPTION
			Roadway
E-1	17209	Cu. Yds.	Roadway Excavation.
E-4	18233	Cu. Yds.	Borrow
E-8	1593	Sq. Yds.	Removal and Disposal of Existing Pavement, as per plan.
E-8	44	Sq. Ft.	Removal and Disposal of Existing Sidewalk.
E-9	38	Each	Removal of Trees and Stumps.
E-11	157	M. Gals.	Water
E-12	112	Lin. Ft.	Pipe Removed and Disposed of. (Under 15")
I-4	200	Lin. Ft.	6" Pipe Underdrain.
I-1	214	Lin. Ft.	12" Pipe for Driveways.
I-3	486	Lin. Ft.	6" Pipe for Roadway Drainage.
I-2	80	Lin. Ft.	12" Storm Sewer Under Pavement.
I-3	633	Lin. Ft.	30" Pipe for Roadway Drainage.
I-3	20	Lin. Ft.	30" Pipe Under Pavement for Roadway Drainage.
I-3	20	Lin. Ft.	30" Pipe Outlet for Roadway Drainage.
I-4	20	Lin. Ft.	8" Pipe Outlet for Underdrains.
I-9	460	Lin. Ft.	Stone Underdrains, No 2.
I-10	13	Sq. Yds.	Riprap, Type "A".
I-13	19	Sq. Ft.	4" Concrete Sidewalk.
I-13	35	Lin. Ft.	Concrete Steps.
I-14	15	Lin. Ft.	Paved Gutter.
Special	1731	Lin. Ft.	Removal and Disposal of Existing Guard Rail
I-15	562.5	Lin. Ft.	Guard Rail, Steel Beam Type (Deep).
I-17	232	Cu. Yds.	Side Approaches, Mail Box Turnouts and Berm Material.
L-9	47,707	Sq. Yds.	Seeding and Protecting, Type "A".
L-9	4.30	Tons	Commercial Fertilizer (10-6-4)
L-10	100	Sq. Yds.	Sodding.
			Pavement
B-20	11762	Sq. Yds.	8" Waterbound Macadam Base Course. (2-4" Courses.)
T-30	4116	Gals.	Bituminous Prime Coat. Sec. M-5.7 RT.-2 or 3.
B-35	630	Cu. Yds.	Asphaltic Concrete Leveling Course. (85-100)
T-35	472	Cu. Yds.	Asphaltic Concrete Surface Course, Type "A" (85-100)
SS-5	1418	Cu. Yds.	Classified Embankment Material, As Per Plan
I-7	90	Sq. Yds	Reinforced Concrete Approach Slabs, As per plan.
S-3	90	Sq. Yds	Waterproofing, Type "C"
			Structures 20' Span and Under
E-2	23	Cu. Yds.	Excavation for Structures
S-1	4.2	Cu. Yds.	Concrete for Structures. Class "C"
S-24	Lump	Lump	Removal of Existing Structures.
S-27	70	Lin. Ft.	24" Pipe for Roadway Culverts.
S-27	104	Lin. Ft.	30" Pipe for Roadway Culverts.
			STRUCTURES OVER 20 FT. SPAN
			See Sheet No 42

MISCELLANEOUS "M"

SHEET NO.	E-8 REMOVAL OF EXISTING PAVT. SQ. YDS.	E-8 WALK REMOVED & DISPOSED OF SQ. FT.	I-13 CONCRETE WALK 4" SQ. FT.	I-13 CONCRETE STEPS LIN. FT.	L-10 SODDING SQ. YDS.	I-7 REINF. CONC. APPR. SLAB SQ. YDS.	S-3 WATERPROOFING TYPE "C" SQ. YDS.	T-35 -1½" ASPH. CONC. SURFACE CU. YDS.	B-35 -1½" ASPH. CONC. LEVELING CU. YDS.
8	326								
9	1260								
10	7								
11		44	19	35	3				
40						90.0	90.0	3.7	3.7
RECAP					3			3.7	3.7
CAL.									
SUM.	1593	44	19	35		90.0	90.0		

PAVEMENT "P"

SHEET NO.	T-35 1½" ASPHALTIC CONC. SURF. COURSE SQ. YDS.	B-35 1½" ASPHALTIC CONC. LEVELING COURSE SQ. YDS.	B-20 8" WATERBOUND MACADAM BASE COURSE SQ. YDS.	T-30 BITUMINOUS PRIME COAT GALS.
34	0.8	0.8	23.6	8
CAL.			23.6	8
RECAP	0.8	0.8		

EARTHWORKS

SHEET NO.	E-1 EXCAV.	EMB.	EMB. +20%
6	12551	175	210
7	1333	703	844
8	1154	5491	6589
9	280	12671	15205
10	47	6760	8112
11	1844	5641	6769
RECAP			
SUM.	17209	31441	37729

37729-17209-2287 = 18233 Cu. Yds. Borrow.
31441 x 0.005 = 157 M. Gals. Water

RECAP

TABLE	L-10 SODDING SQ. YDS.	E-12 REMOVAL & DISPOSAL OF 8"	12"	C.I.P.		T-35 -1½" ASPH. CONC. SURFACE CU. YDS.	B-35 -1½" ASPH. CONC. LEVELING C.U. YDS.
"D"	21						
"S"	30						
"M"	3					3.7	3.7
"A"		80		32			
ES *	46						
"P"						0.8	0.8
CAL.						4.5	4.5
SUM.	100	80		32			
		Under 15" = 112 Lin. Ft.					

* Estimated Quantities to be used at drive pipes and as directed by the Engineer.

PAVEMENT CALCULATIONS

Pavement Length - Sta. 96+00 to Sta. 123+96.65 = 2796.65 Lin. Ft.
Sta. 126+53.35 to Sta. 144+50 = 1796.65 Lin. Ft.
Total Length of Pavement = 4593.30 Lin. Ft.

B-20 8" WATERBOUND MACADAM BASE COURSE (2-4" COURSES)
4593.3 x 23 ÷ 9 = 11738.4 Sq. Yds.
Add from Table "P" 23.6 Sq. Yds.
Total B-20 11762.0 Sq. Yds.

SEEDING

SHEET NO.	L-9 SEEDING & PROTECTING TYPE A SQ. YDS.
6	7592
7	3192
8	8157
9	17569
10	4722
11	6475
TOTAL	47,707

47707 x 9 = 429,363 Sq. Ft.
Sodding is 100 x 9 = 900 Sq. Ft.
Total Area = 430,263 Sq. Ft.
Fertilizer at rate of 20# per 1000 Sq. Ft. = 4.30 Tons.

PAVEMENT CALCULATIONS CONT'D.

T-35 1½" ASPHALTIC CONCRETE SURFACE COURSE
4593.3 x 22 x 1½ ÷ (36 x 9) = 467.8 Cu. Yds.
Add from Table "R" 4.5 Cu. Yds.
Total T-35 472.3 Cu. Yds.

B-35 1½" ASPHALTIC CONCRETE LEVELING COURSE
4593.3 x 22 x 1½ ÷ (36 x 9) = 467.8 Cu. Yds.
Add from Table "R" 4.5 Cu. Yds.
Add for filling Voids in B-20
472.3 x ⅓ = 157.4 Cu. Yds.
Total B-35 629.7 Cu. Yds.

PAVEMENT CALCULATION'S CONT'D.

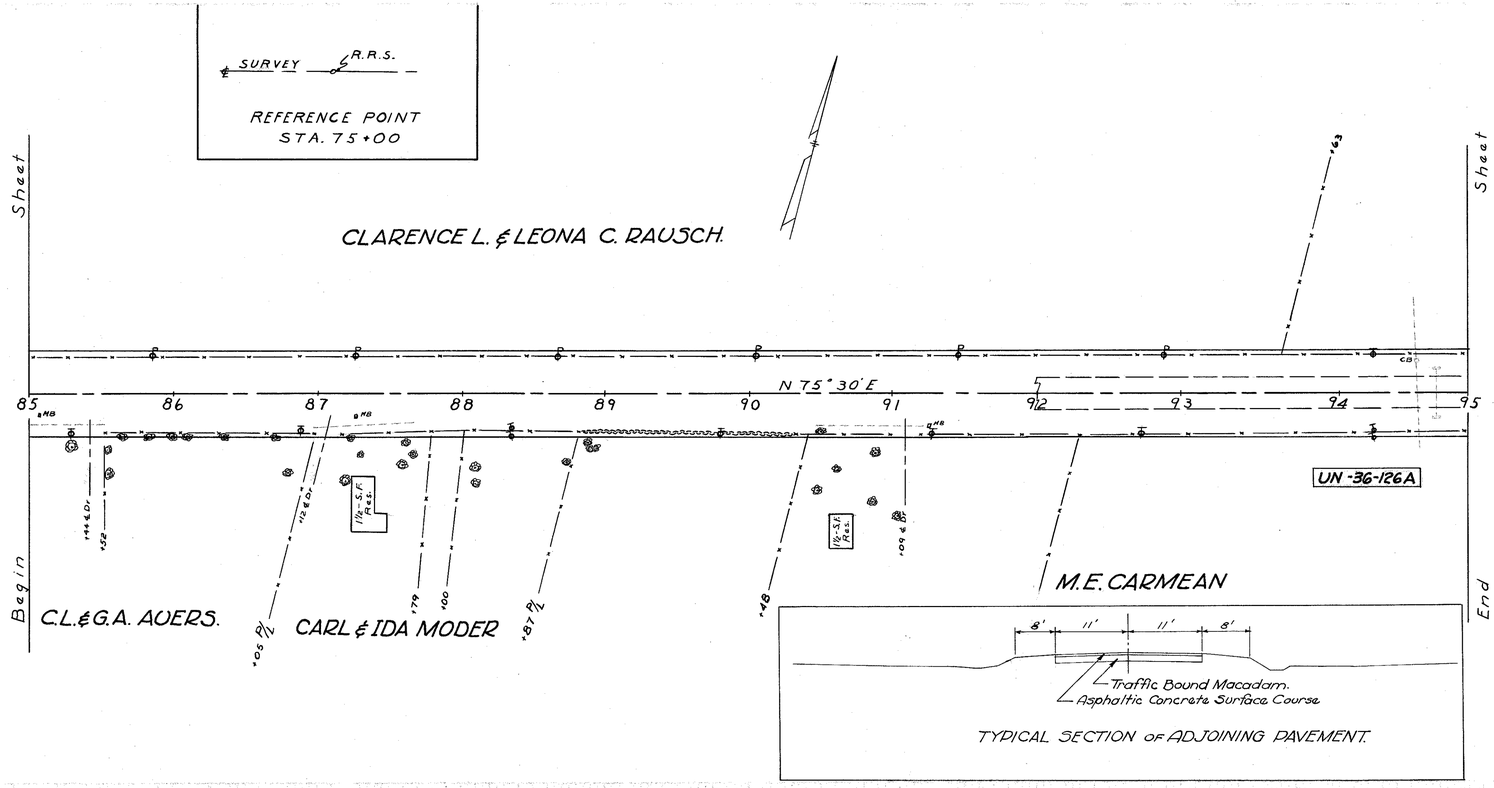
I-17 SIDE APPROACHES, MAIL BOX TURNOUTS & BERM MATERIAL
From Table "A" 1211.6 Sq. Yds.
1211.6 x 6 ÷ 36 x 115% =
Total I-17 - 6" Aggregate = 232 Cu. Yds.

SS-5 4" CLASSIFIED EMBANKMENT MATERIAL BLANKET COURSE.
4593.3 x 25 x 4 ÷ (36 x 9) =
Total SS-5. 1417.7 Cu. Yds.

T-30 BITUMINOUS PRIME COAT.
4593.3 x 23 ÷ 9 = 11738.4 Sq. Yds.
11,738.4 x 0.35 = 4108 Gals.
Add from Table "P" 8 Gals.
Total T-30 = 4116 Gals.

SUMMARY

DIVISION 2 OHIO F-982(1) TYPE FUNDS 5 POST WAR 45
UNI. 36 -(12.77-13.03)



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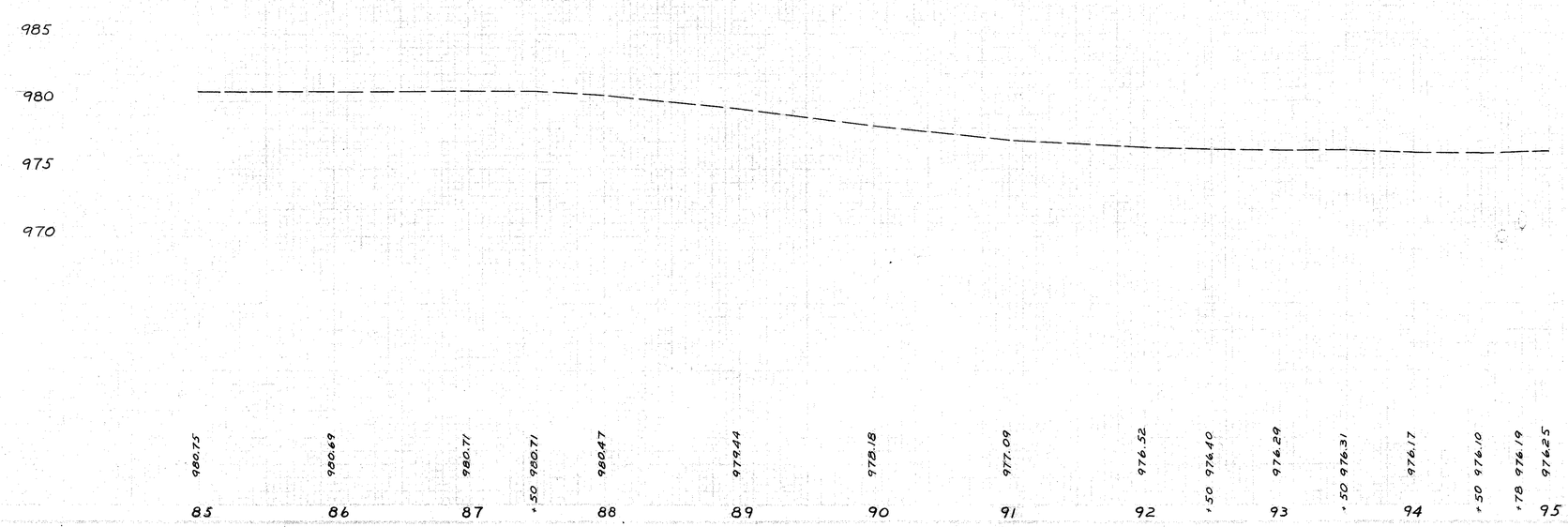
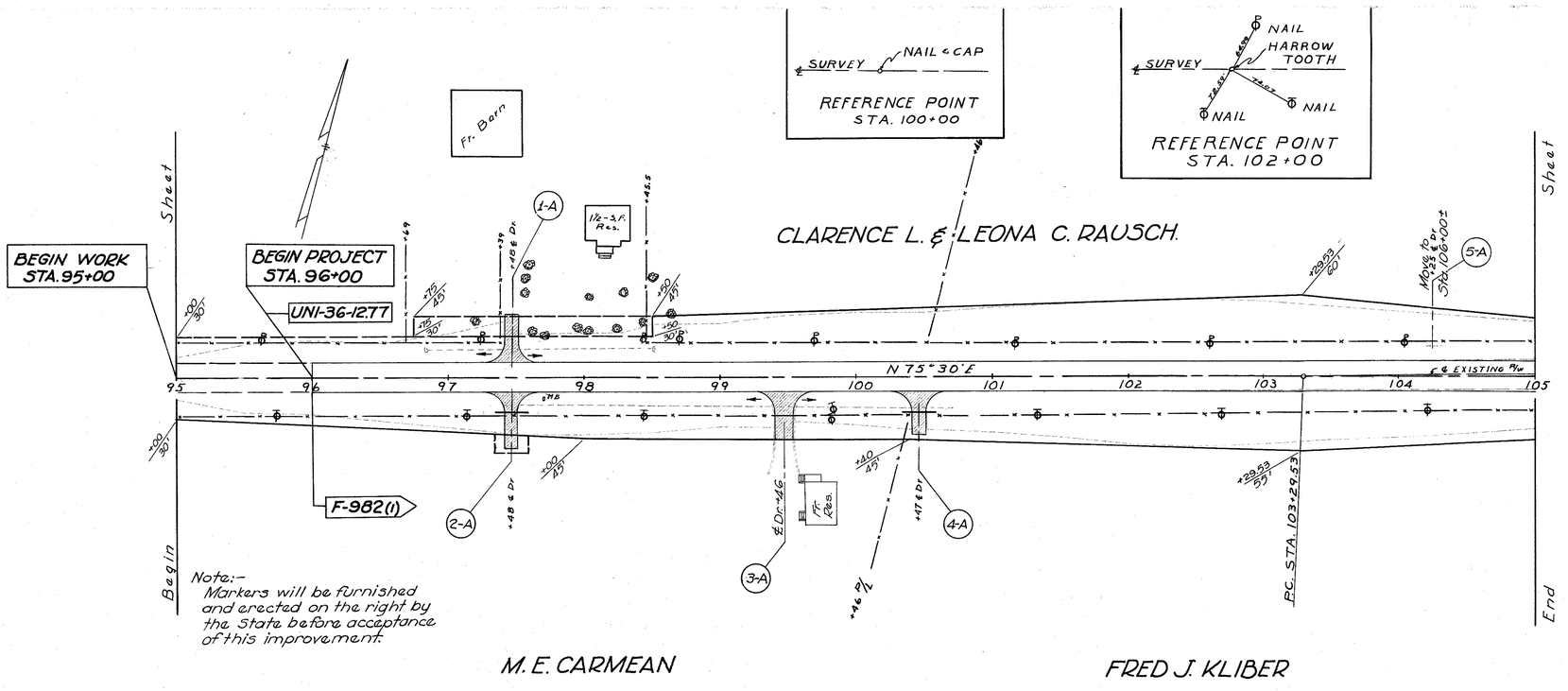


STA. 85+00 TO STA. 95+00

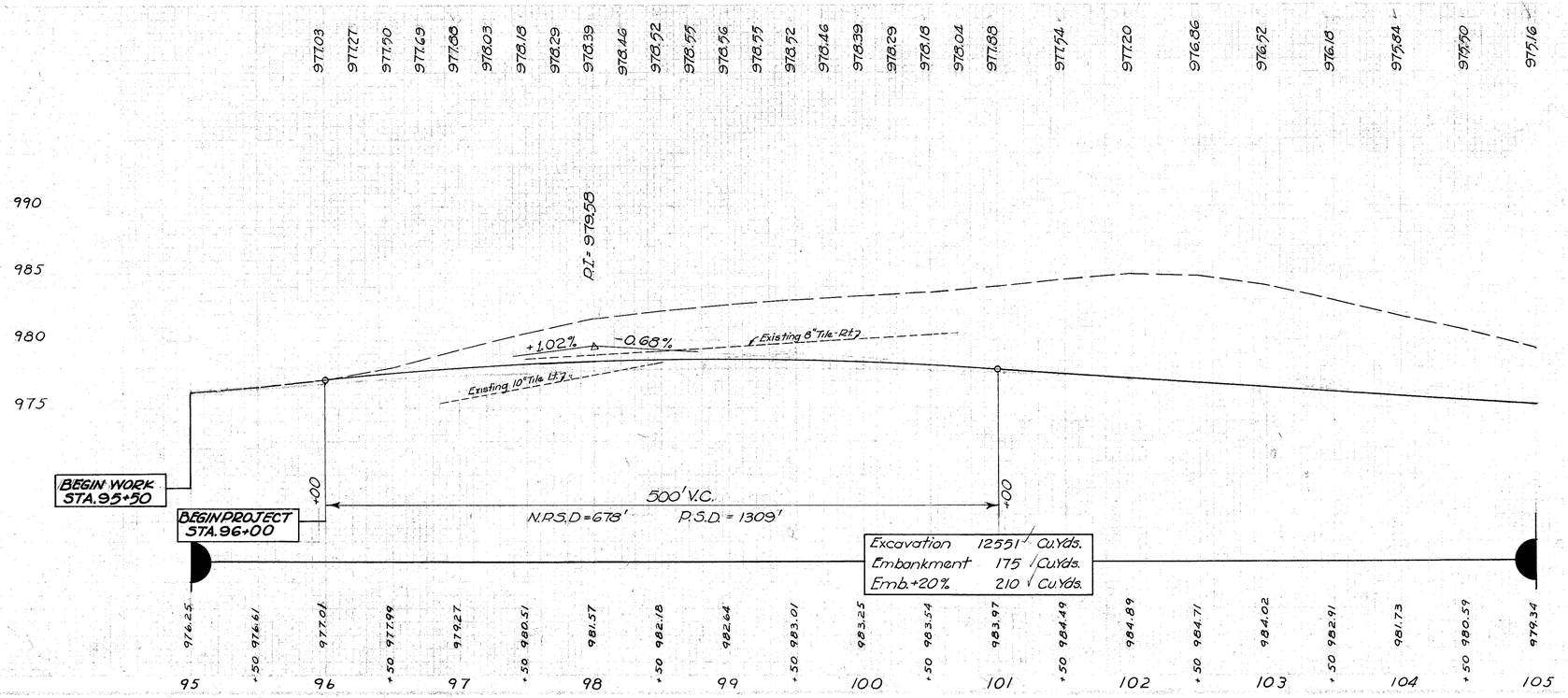
DIVISION 2 OHIO F-982(1) TYPE FUNDS POST WAR 6 45

UNI. 36 - (12.77 - 13.03)



DRIVES

REF. Nº	STATION	SIDE	Δ	W	L	R	I-17 6" AGG. SQ.YDS.	I-1 PIPE 12" LIN. FT.	E-12 REMOVE & DISPOSE - LIN. FT.		
											8"
1-A	97+48	Lt.	90	10	35	15	49.6				80
2-A	97+48	Rt.	90	10	41	15	56.3	24			
3-A	99+46	Rt.	90	13	35	15	61.3				
4-A	100+47	Rt.	90	10	31	15	45.2	24			
5-A	104+25	Lt.									
TOTAL							212.4	48			80

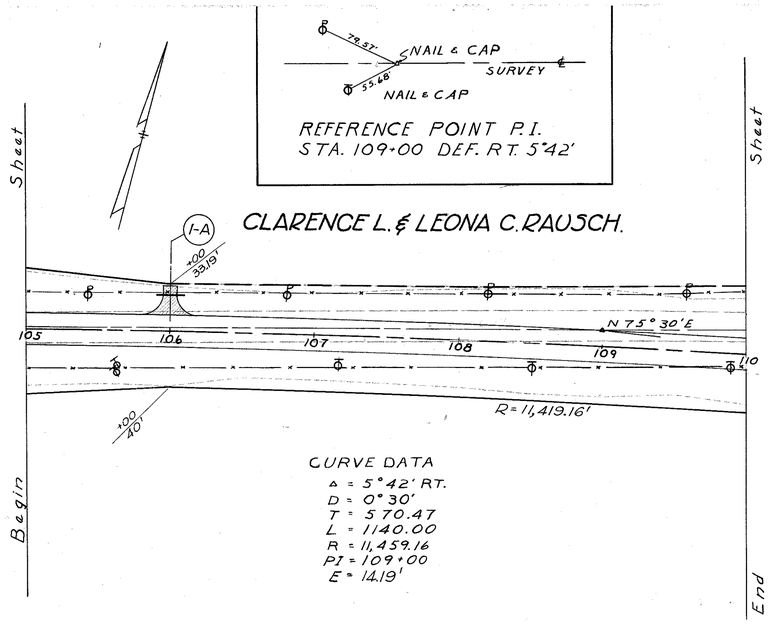


STA. 95+00 TO STA. 105+00

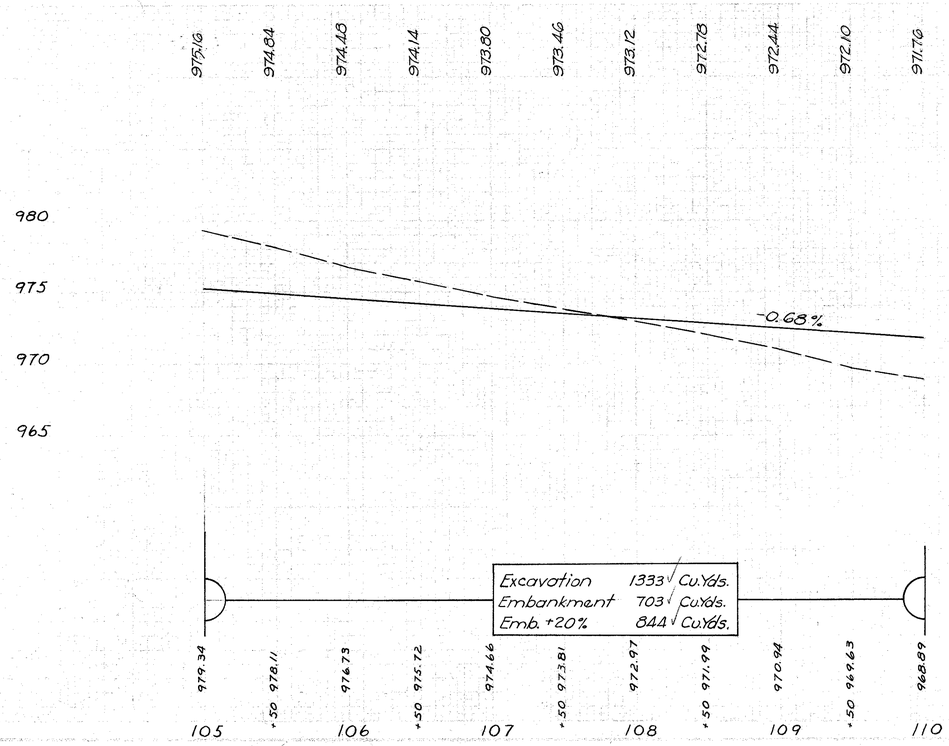
DIVISION 2 OHIO F-982(1) UNI. 36-(12.77-13.03)

TYPE FUNDS POST WAR

DRIVES								
REF. Nº	STATION	SIDE	Δ	W	L	R	I-17 6" AGG. SQ.YDS.	I-1 PIPE 12" LIN. FT.
1-A	106+00	LH.	90	10	21	15	34.1	22
TOTAL							34.1	22



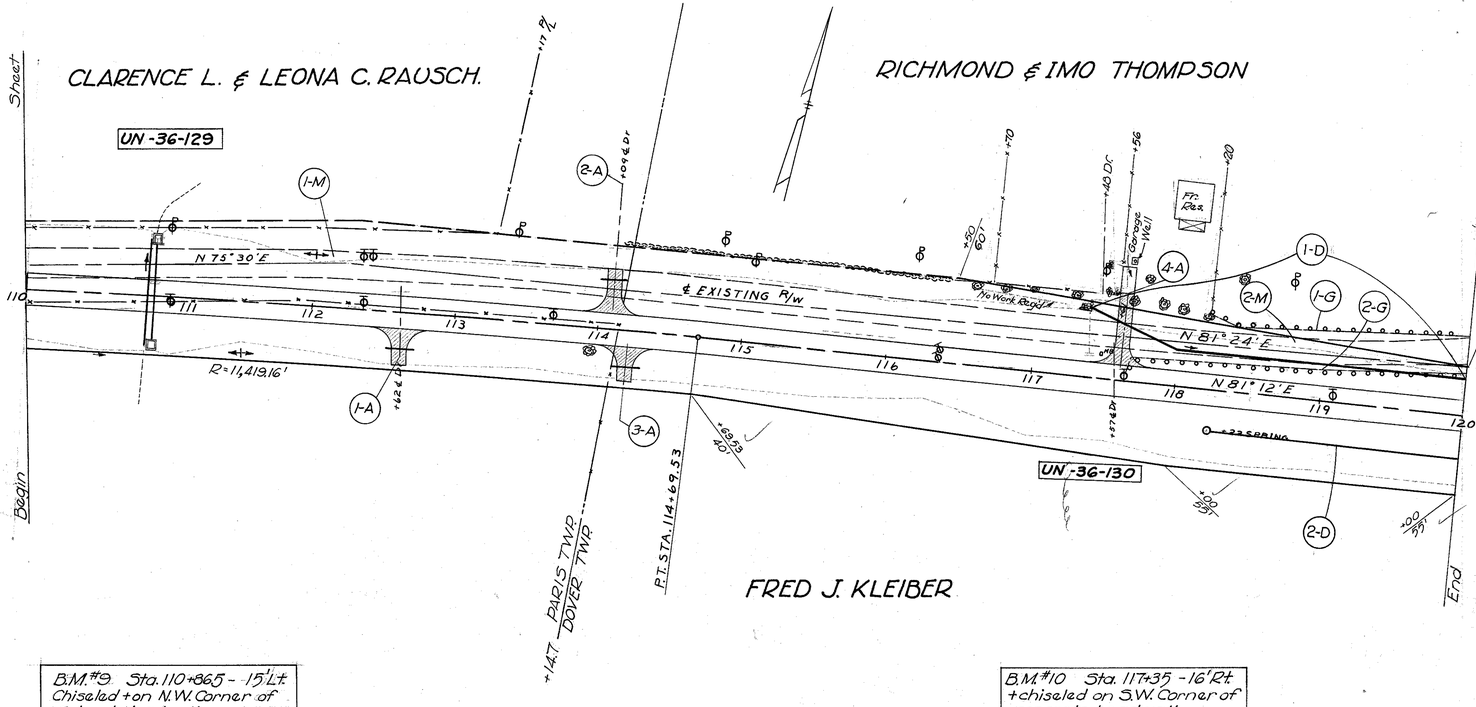
FRED J. KLEIBER



STA. 105+00 TO STA. 110+00

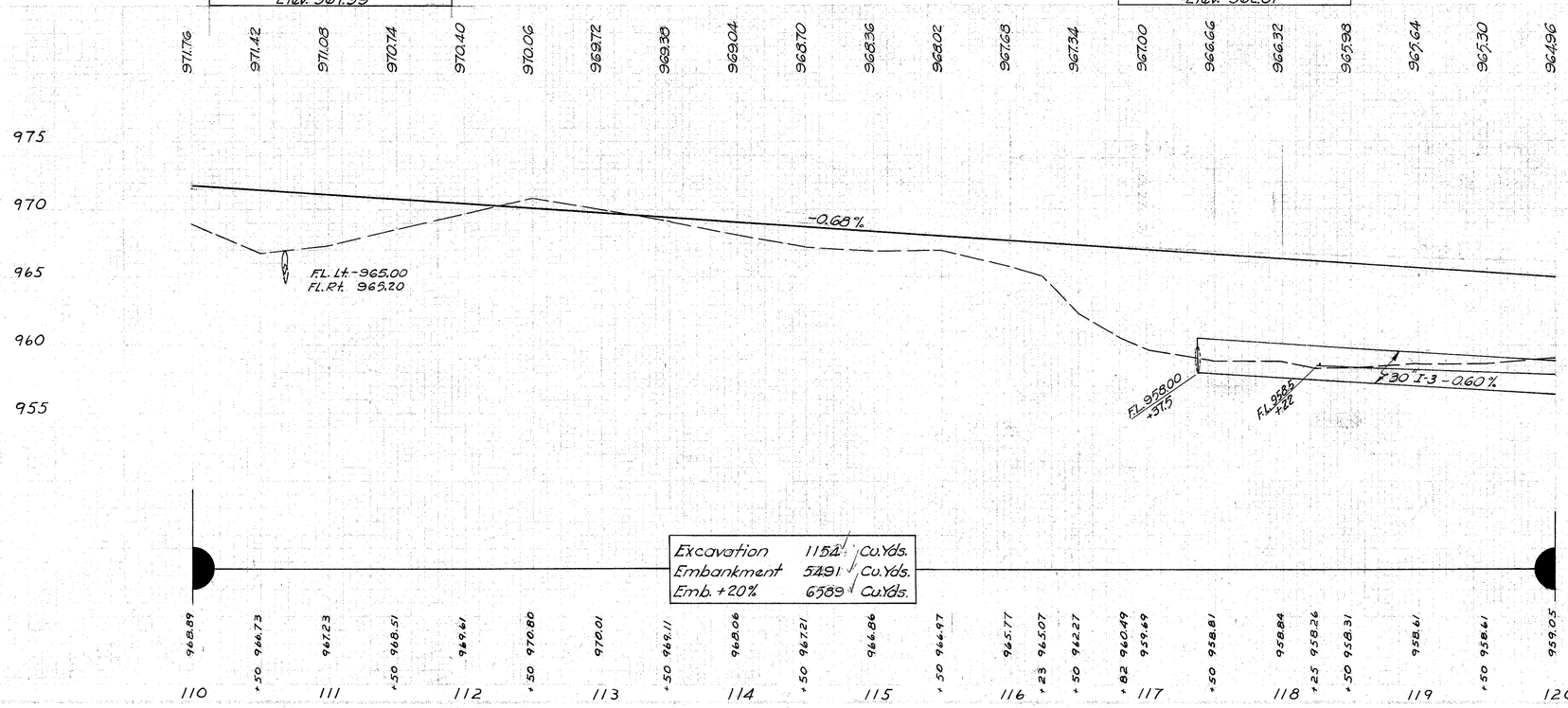
DIVISION 2 | OHIO F-982(1) | TYPE FUNDS POST WAR. | 8 45

UNI. 36-(12.77-13.03)



B.M.#9 Sta. 110+86.5 - 15' Lt.
Chiseled + on N.W. Corner of Culvert Headwall.
Elev. 967.99

B.M.#10 Sta. 117+35 - 16' Rt.
+ chiseled on S.W. Corner of concrete headwall.
Elev. 962.01



Excavation 1154 Cu.Yds.
Embankment 5491 Cu.Yds.
Emb. +20% 6589 Cu.Yds.

DRIVES

REF. N°	STATION	SIDE	Δ	W	L	R	I-17 6" AGG. SQ.YDS.	I-1 PIPE 12" LIN.FT.	E-12 REMOVE & DISPOSE-LIN.FT. 6"CIP	
1-A	112+62	Rt.	90	10	25	15	38.5	24	16	
2-A	114+09	Lt.	90	10	31	15	45.2	24		
3-A	114+22	Rt.	90	10	24	15	37.4	24		
4-A	117+61	Lt.	90	10	51	15	67.4			
TOTAL							188.5	72	16	

STRUCTURES-20' SPAN AND UNDER

STRUCTURE N°	STATION	PRESENT STRUCTURE TYPE	SIZE	LENGTH	DISPOSITION	PROPOSED STRUC. TYPE	SIZE	LENGTH	SHEET N°	REMARKS.
UNI-36-129	110+88	PIPE	15"	31.5	REMOVE	PIPE	24"	70.0	38	
UNI-36-130	117+37.5	PIPE	22"	34.0	REMOVE					

DRAINAGE

REF. N°	STATION FROM	STATION TO	SIDE	E-3 PIPE 30" LIN.FT.	I-3 PIPE UNDER PAVT. 30" LIN.FT.	L-10 SODDING SQ.YDS.	I-10 RIPRAP TYPE-A SQ.YDS.	I-3 PIPE 6" LIN.FT.
1-D	117+37.5	120+00	Lt.	247	20	5	8	
2-D*	118+25	120+00	Rt.					175
TOTAL				247	20	5	8	175

* Connect to existing spring.

TREES AND STUMPS TO BE REMOVED

Station	Side	Size & Kind	N°
113+96	Rt.	48" Elm	1
TOTAL			1

GUARD RAIL

REF. N°	STATION FROM	STATION TO	SIDE	SPECIAL REMOVAL & DISPOSAL OF LIN. FT.
1-G	118+20	120+00	Lt.	180
2-G	117+64	120+00	Lt.	236
TOTAL				416

MISCELLANEOUS

REF. N°	STATION FROM	STATION TO	SIDE	E-8 REMOVAL OF EXISTING PAV'T. SQ.YDS.
1-M	111+60	114+00	Lt.	71
2-M	117+65	120+00	Lt.	255
TOTAL				326

STA. 110+00 TO STA. 120+00

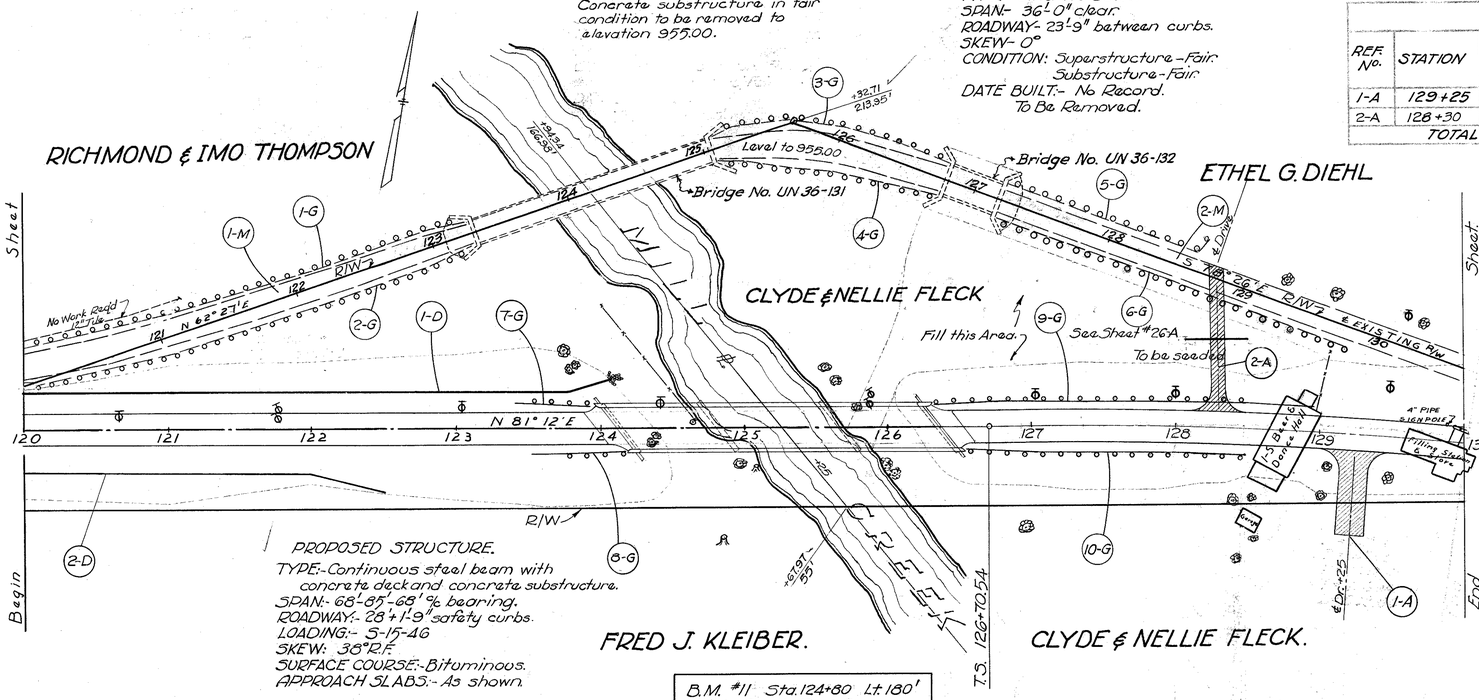
DIVISION 2 OHIO F-982(1) TYPE FUNDS POST WAR

9
45

UNI. 36-(12.77-13.03)

EXISTING BRIDGE DATA UNI-36-131
Concrete substructure in fair condition to be removed to elevation 955.00.

EXISTING BRIDGE DATA UNI-36-132
TYPE:- Concrete Beam
SPAN:- 36'-0" clear.
ROADWAY:- 23'-9" between curbs.
SKEW:- 0°
CONDITION: Superstructure - Fair
Substructure - Fair.
DATE BUILT:- No Record.
To Be Removed.



DRIVES

REF. No.	STATION	SIDE	Δ	W	L	R	I-17 6" AGG. SQ.YDS.	I-1 12" PIPE LIN.FT.
1-A	129+25	Rt.	90	20	52	15	126.3	
2-A	128+30	Lt.	90	10	102	15	124.1	44
TOTAL							250.4	44

DRAINAGE

REF Nº	STATION FROM	STATION TO	SIDE	I-3 PIPE 30" LIN.FT.	I-3 PIPE OUTLET 30" LIN.FT.	L-10 SODDING SQ.YDS.	I-10 RIPRAP SQ.YDS.	* I-14 PAVED GUTTER LIN.FT.	I-3 PIPE 6" LIN.FT.
1-D	120+00	124+05	Lt.	386	20	16	5	15	
2-D	120+00	122+50	Rt.						251
TOTAL				386	20	16	5	15	251

* For detail of paved gutter see sheet #37

TREES AND STUMPS TO BE REMOVED

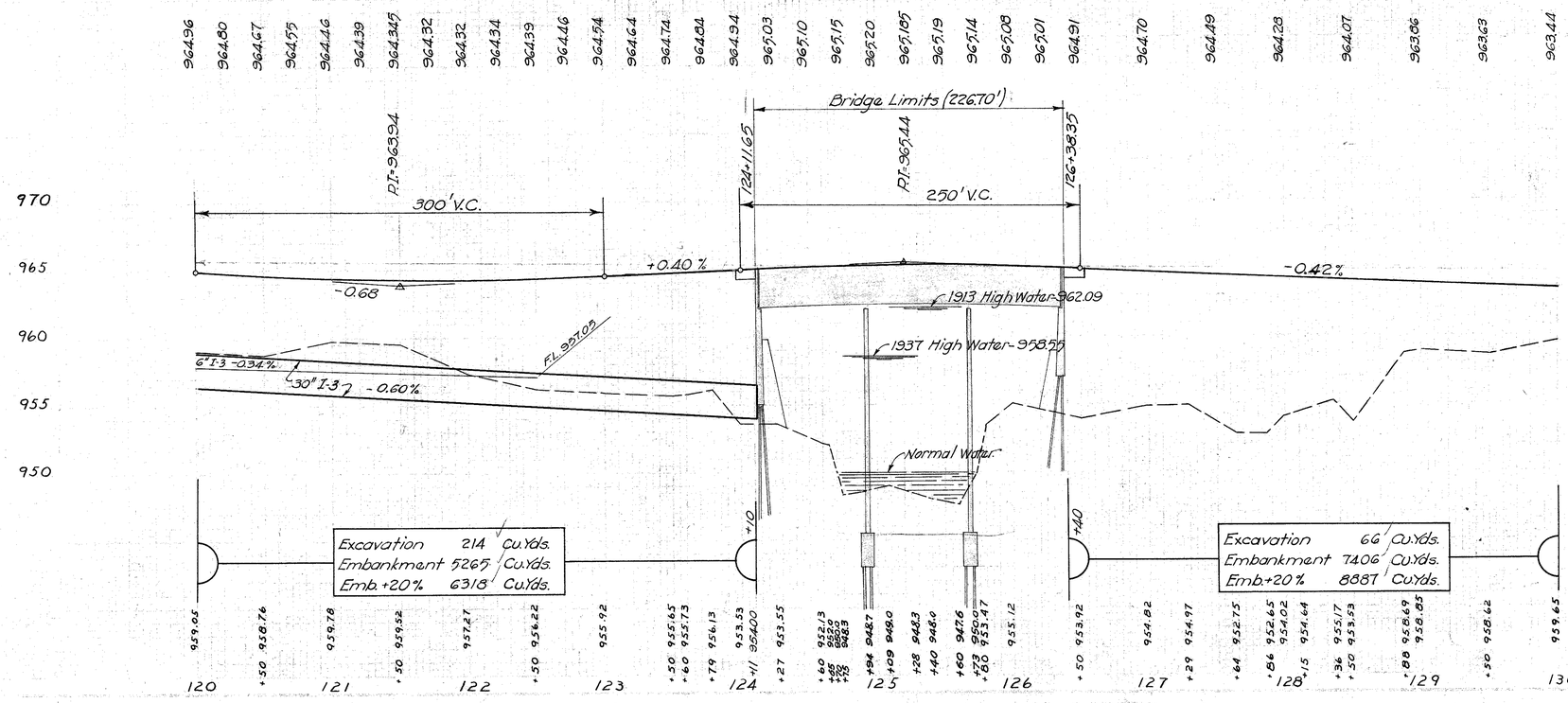
STATION	SIDE	SIZE & KIND	Nº
123+79	Lt.	15" Willow	1
+81	Lt.	18" Willow	1
129+03	Rt.	12" Elm	1
129+48	Rt.	20" Apple	1
TOTAL			4

GUARD RAIL

REF Nº	STATION FROM	STATION TO	SIDE	SPECIAL REMOVE & DISPOSE OF LIN.FT.	I-15 GUARD RAIL LIN.FT.
1-G	120+00	122+96	Lt.	310	
2-G	120+00	123+05	Lt.	320	
3-G	124+90	126+40	Lt.	155	
4-G	124+94	126+32	Lt.	140	
5-G	126+92	128+15	Lt.	135	
6-G	126+82	129+20	Lt.	255	
7-G	123+44	123+97	Lt.		50
8-G	123+55.5	124+18	Rt.		62.5
9-G	126+32	128+94.5	Lt.		262.5
10-G	126+56	128+43.5	Rt.		187.5
TOTAL				1315	562.5

MISCELLANEOUS

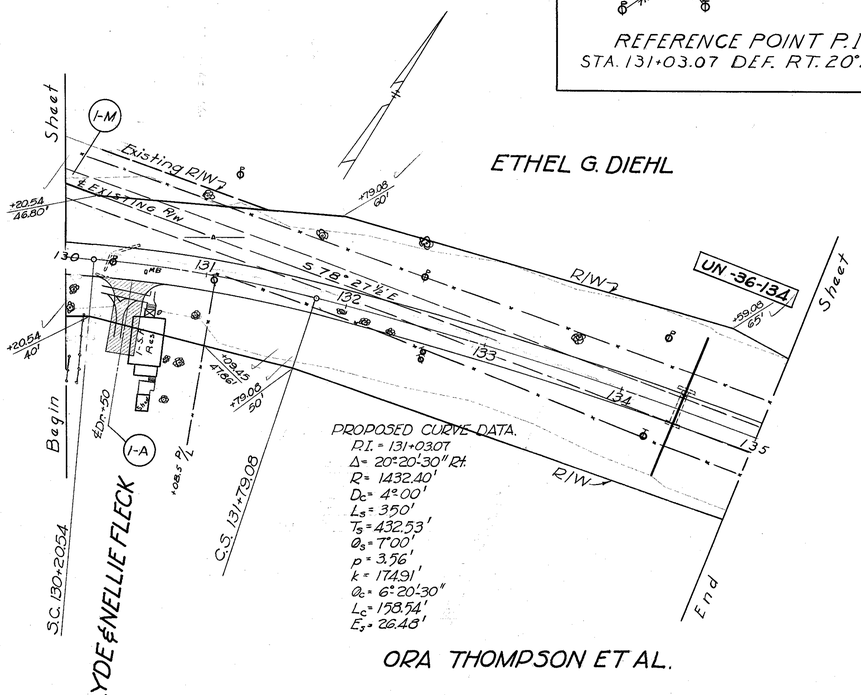
REF Nº	STATION FROM	STATION TO	SIDE	E-8 REMOVAL OF EXISTING PAVT. SQ.YDS.
1-M	120+00	122+95	Lt.	620
2-M	126+92	130+00	Lt.	640
TOTAL				1260



STA. 120+00 TO STA. 130+00

DIVISION 2 OHIO F-982(1) TYPE FUNDS POST WAR 10 45

UNI. 36 -(12.77-13.03)



STRUCTURES ~ 20' SPAN AND UNDER

STRUCTURE Nº	STATION	PRESENT STRUCTURES				PROPOSED STRUC.			SHEET Nº	REMARKS
		TYPE	SIZE	LENGTH	DISPOSITION	TYPE	SIZE	LENGTH		
UNI-36-134	134+42	PIPE	30"	27.5	REMOVE	PIPE	30"	104'	39	

DRIVES

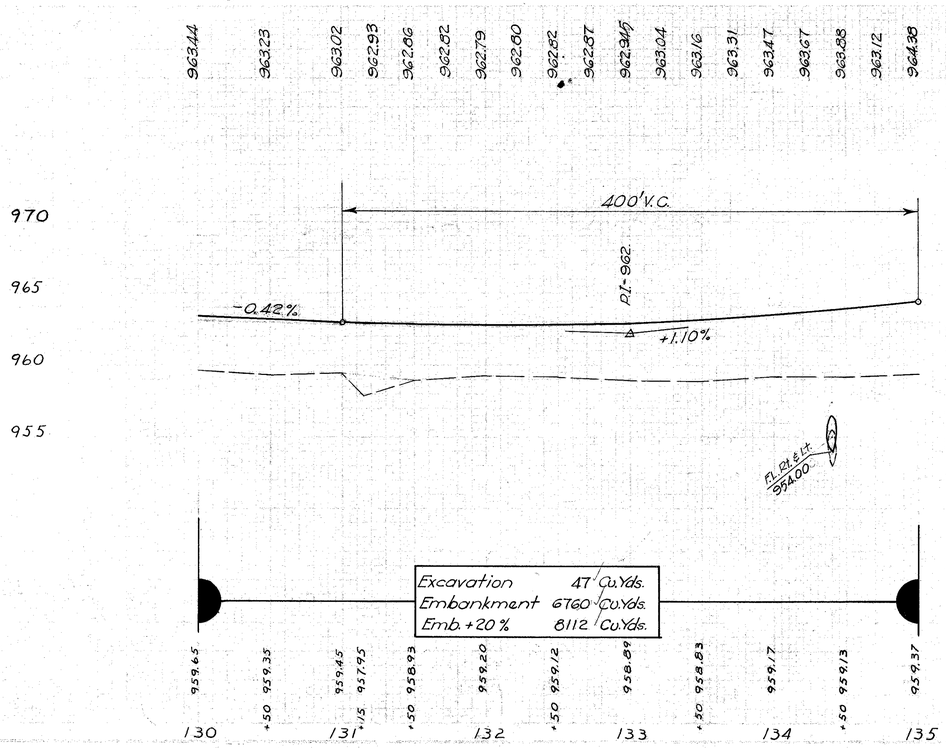
REF Nº	STATION	SIDE	Δ	W	L	R	I-17 6" AGG SQ. YDS.	
I-A	130+50	Rt.	90	20	59	15	141.8	
TOTAL							141.8	

TREES AND STUMPS TO BE REMOVED

STATION	SIDE	SIZE & KIND	Nº
130+07	Rt.	12" Hackberry	1
130+09	Rt.	14" Walnut	1
130+98	Rt.	26" Elm	1
131+72	Lt.	26" Maple	1
131+95	Rt.	26" Ash	1
132+15	Rt.	36" Sycamore	1
132+35	Rt.	30" Ash	1
133+97	Lt.	42" Maple	1
TOTAL			8

MISCELLANEOUS

REF. Nº	STATION FROM	STATION TO	SIDE	E-8 REMOVAL OF EXISTING PAVT. SQ. YDS.	
I-M	130+00	130+20	Lt.	7	
TOTAL				7	



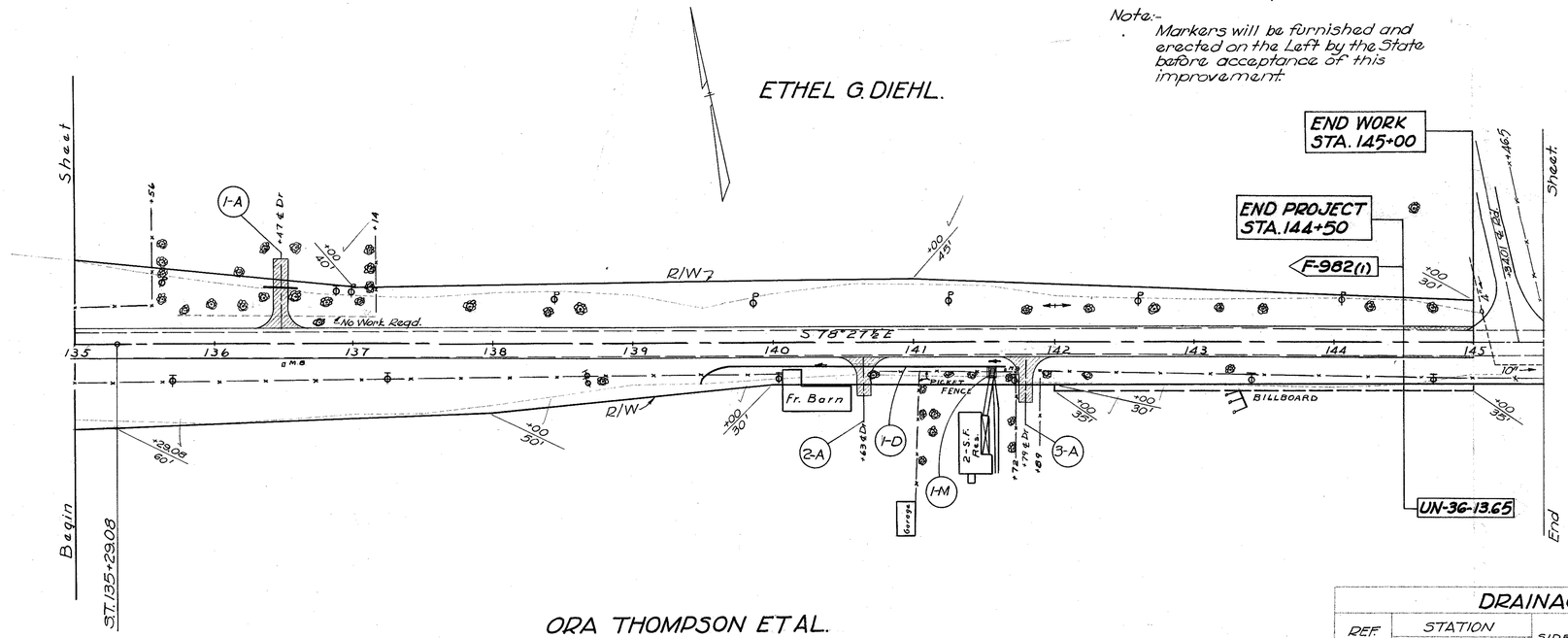
STA. 130+00 TO STA. 135+00

DIVISION 2 OHIO F-982(1)

TYPE FUNDS POST WAR 11 45

UNI. 3 6-(12.77-13.03)

Note:- Markers will be furnished and erected on the Left by the State before acceptance of this improvement.



DRIVES

REF. Nº	STATION	SIDE	Δ	W	L	R	I-17 6" AGG. SQ. YDS	I-1 12" PIPE LIN. FT.	E-12 REMOVE & DISPOSE OF 8" C.I.P. LIN. FT.
1-A	136+47	Lt.	90°	10	48	15'	64.0	28	
2-A	140+63	Rt.	90	10	27	15	40.7		16
3-A	141+79	Rt.	90	10	32	15	46.3		
TOTAL							151.0	28	16

MISCELLANEOUS

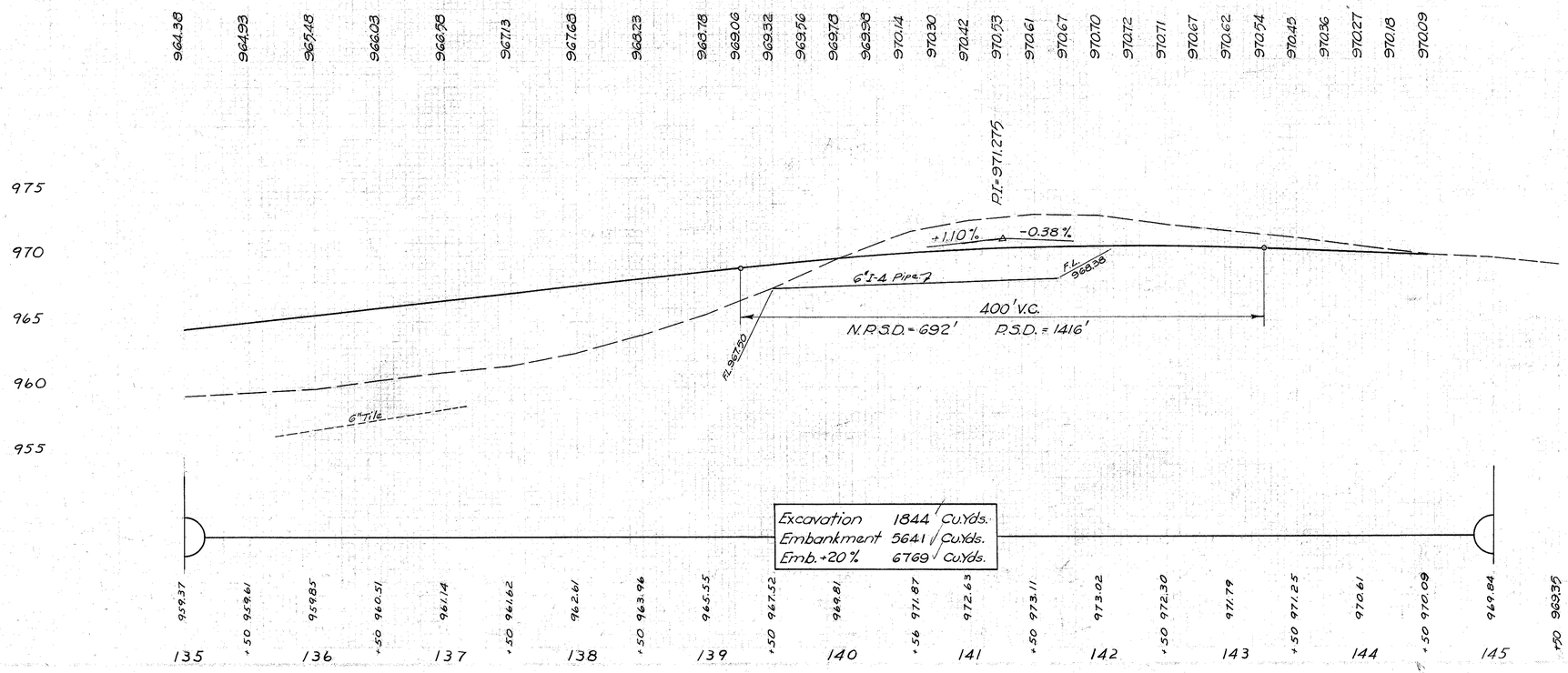
REF. Nº	STATION	SIDE	I-13 CONC. STEPS LIN. FT.	E-8 WALK REMOVED & DISPOSED OF SQ. FT.	I-13 4" CONC. WALK SQ. FT.	L-10 SODDING SQ. YDS.	
1-M	141+54	Rt.	35	44	19	3	
TOTAL			35	44	19	3	

DRAINAGE

REF. Nº	STATION FROM	STATION TO	SIDE	I-4 PIPE 6" LIN. FT.	I-4 PIPE OUTLET 8" LIN. FT.
1-D	139+50	141+66	Rt.	200	20
TOTAL				200	20

TREES AND STUMPS TO BE REMOVED

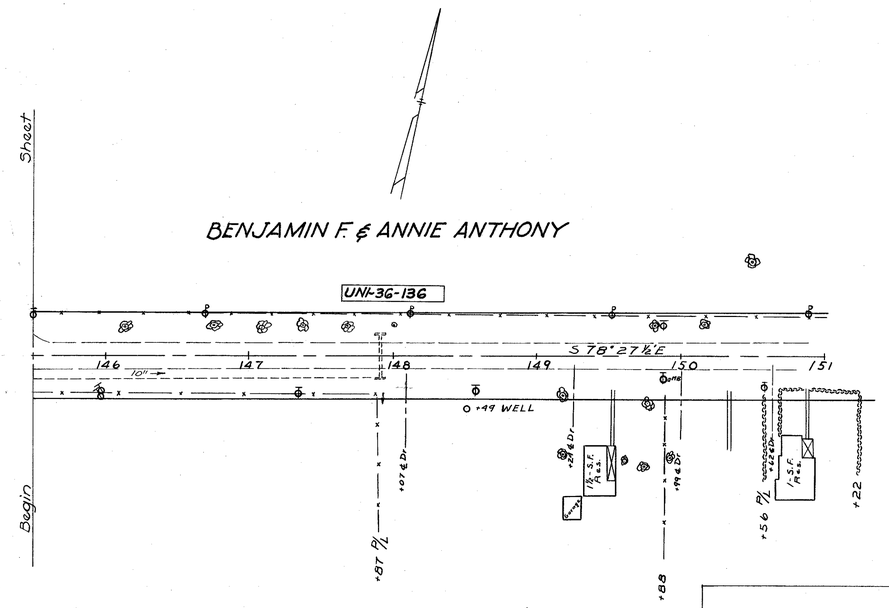
STATION	SIDE	SIZE & KIND	Nº
135+62	Lt.	16" Maple	1
135+78	Lt.	20" Maple	1
135+96	Lt.	24" Elm	1
136+18	Lt.	20" Maple	1
136+33	Lt.	14" Maple	1
136+57	Lt.	22" Maple	1
136+72	Lt.	18" Ash	1
136+79	Lt.	12" Ash	1
137+03	Lt.	12" Pine	1
137+82	Lt.	24" Catalpa	1
138+38	Lt.	12" Catalpa.	1
138+61	Lt.	26" Elm	1
138+77	Rt.	18" W. Cherry	1
140+10	Rt.	18" Ash	1
141+24	Rt.	36" Maple	1
141+42	Rt	24" Maple	1
141+80	Lt.	24" Maple	1
141+93	Rt.	36" Maple	1
142+23	Rt.	36" Maple	1
142+25	Lt.	26" Catalpa	1
142+71	Lt.	24" Maple	1
143+17	Lt.	24" Catalpa	1
143+25	Rt.	36" Maple	1
143+48	Lt.	26" Catalpa	1
144+24	Lt.	26" Maple	1
TOTAL			25



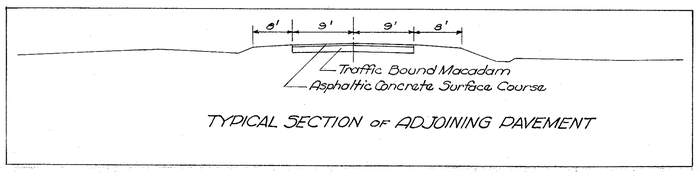
STA. 135+00 TO STA. 145+50

DIVISION 2 | TYPE FUNDS OHIO F-982(1) POST WAR | 12 45

UNI. 36 -(12.77-13.03)

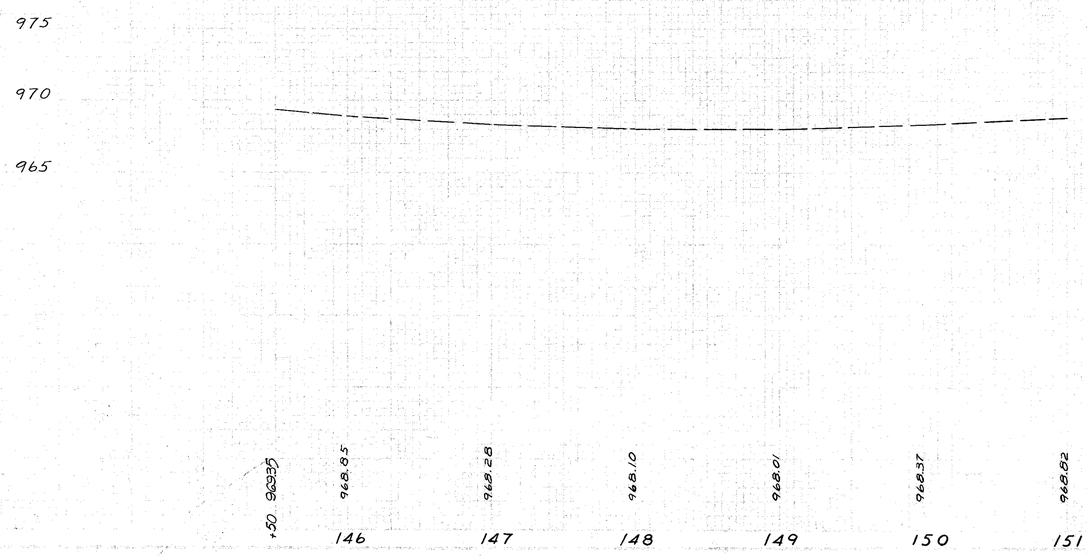


B.M.U.S.G. Elev. 974.36
South West Corner of School Grounds, New Dover, Ohio.



TYPICAL SECTION OF ADJOINING PAVEMENT

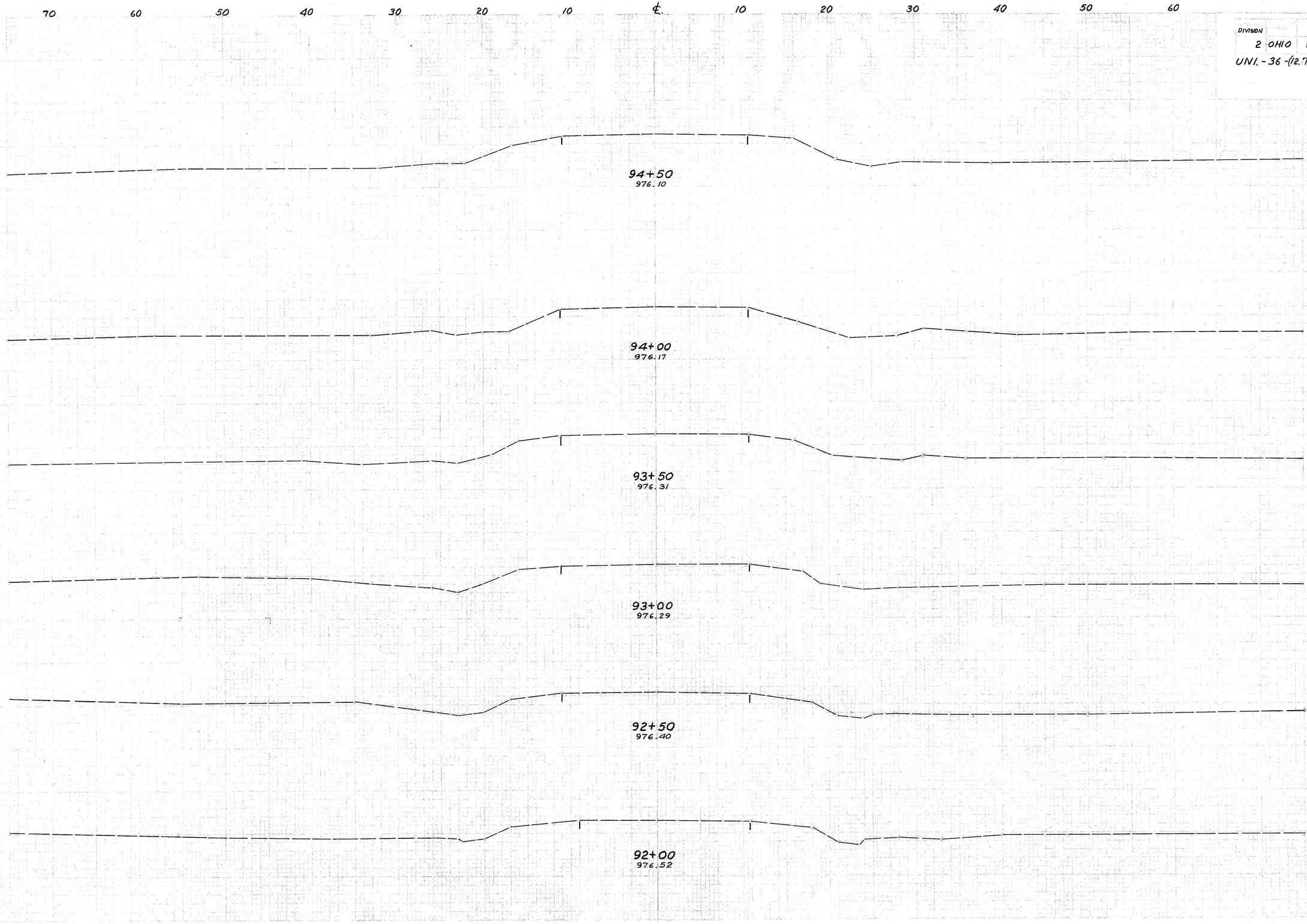
No work required on this sheet



STA. 145+50 TO STA. 151+00

DIVISION			TYPE FUNDS	13
2	OHIO	F-982(1)	POST WAR	45

UNI. - 36 -(12.77-13.03)



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

STA. 92+00 TO 94+50

DIVISION 2 OHIO F-382(1)

TYPE FUNDS 14
POST WAR 45

UNI. - 36 -(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

+20 - 41'-36" Oak

60 75

977.88
97+00
979.27

46 1% 12

977.50
96+50
977.99

4:1 11 31 4:1 10

977.03
96+00
977.01

Begin Project
Sta. 96+00

3:1 13 3:1 5

95+50
976.61

95+00
976.25

Begin Work
Sta. 95+00

15" V.S.P.

970.51 = F.L. 970.83 = F.L.

94+78
976.19

94+64.5

12" tile

94+64 C.B. 23' Lt.
F.L. = 969.45

94+65 - 24' Rt.
F.L. 10" tile = 969.53

50 40 30 20 10 ℄ 10 20 30 40 50

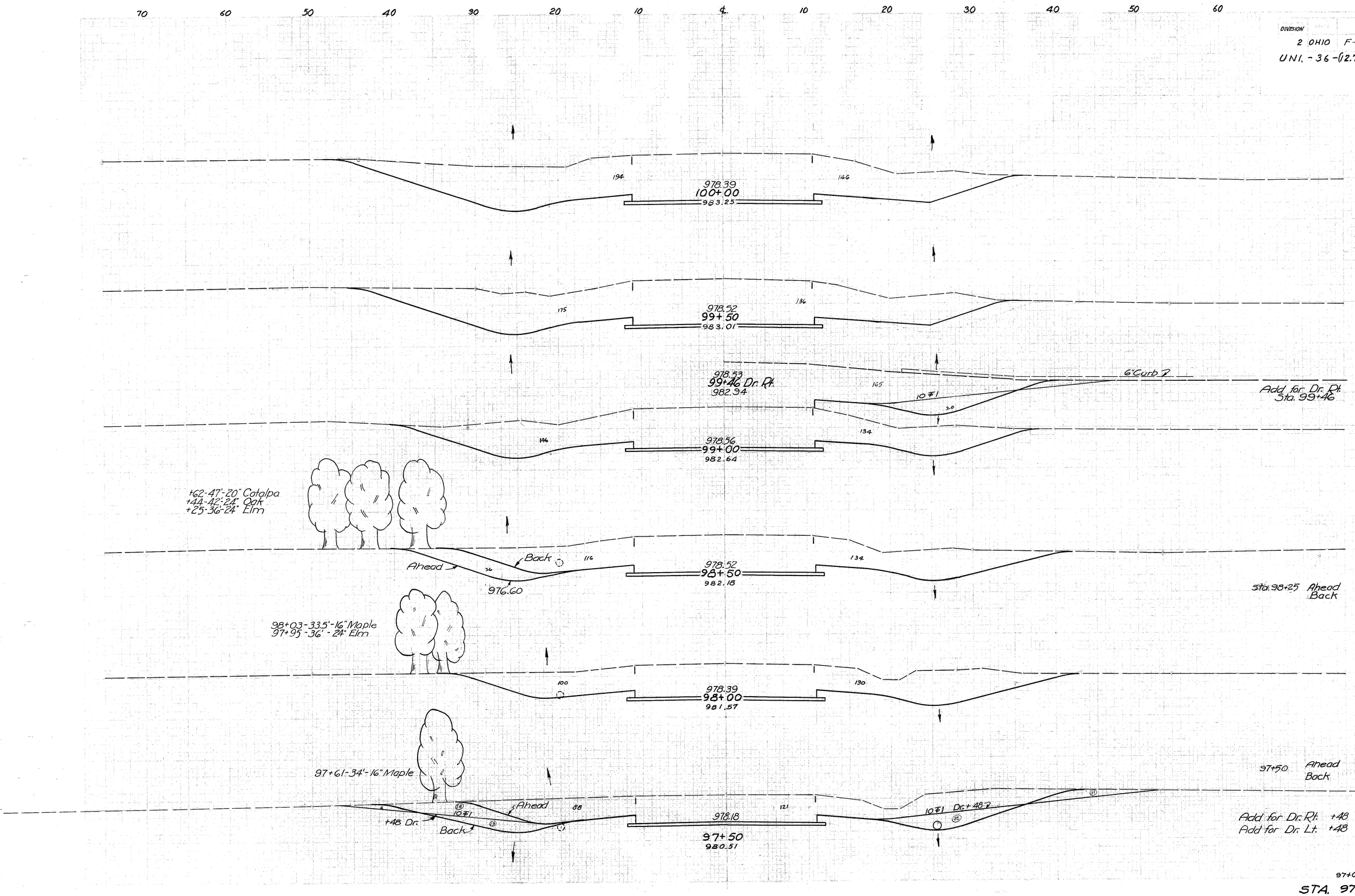
94+50

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
135	2		
		179	5
58	3		
		83	24
31	23		
		29	38
0	18		
		0	17
0	0		

STA. 94+78 TO 97+00

DIVISION			TYPE FUNDS	15
2	OHIO	F-982(1)	POST WAR	45

UNI. - 36 - (12.77 - 13.03)



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
340	2		
		603	4
311	2		
		547	4
		2	7
280	2		
		515	4
276	2		
		256	2
276	2		
250	2		
		222	2
230	2		
		407	4
209	2		
240	2		
		347	4
		4	8
		1	5
135	2		

STA. 97+50 TO 100+00

DIVISION 2 OHIO | TYPE FUNDS F-982(1) POST WAR | 16 45

UNI.-36-(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

976.52
103+00
984.02
331
301

976.86
102+50
984.71
355
300

977.20
102+00
984.89
351
305

977.54
101+50
984.49
316
251

977.88
101+00
983.97
274
202

978.18
100+50
983.54
227
174
20
2

Add for Dr. Rt. Sta. 100+47

100+00

50 40 30 20 10 ℄ 10 20 30 40 50

STA. 100+50 TO 103+00

Excavation 12551 Cu.Yds.
Embankment 175 Cu.Yds.
Emb.+20% 210 Cu.Yds.

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
632	2		
		1192	4
655	2		
		1220	4
662	2		
		1138	4
567	2		
		966	4
476	2		
		812	4
401	2		
		686	4
		1	7
340	2		

DIVISION 2 OHIO F-382(1) TYPE FUNDS POST WAR 17 45

UNI. - 36 -(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

Add for Drive Lt. 106+00

67 974.48 106+00 976.73 85

104 974.82 105+50 978.11 106

135 975.16 105+00 979.34 140

105+00

176 975.50 104+50 980.59 185

222 975.84 104+00 981.73 227

216 976.18 103+50 982.91 264

103+00

50 40 30 20 10 ℄ 10 20 30 40 50

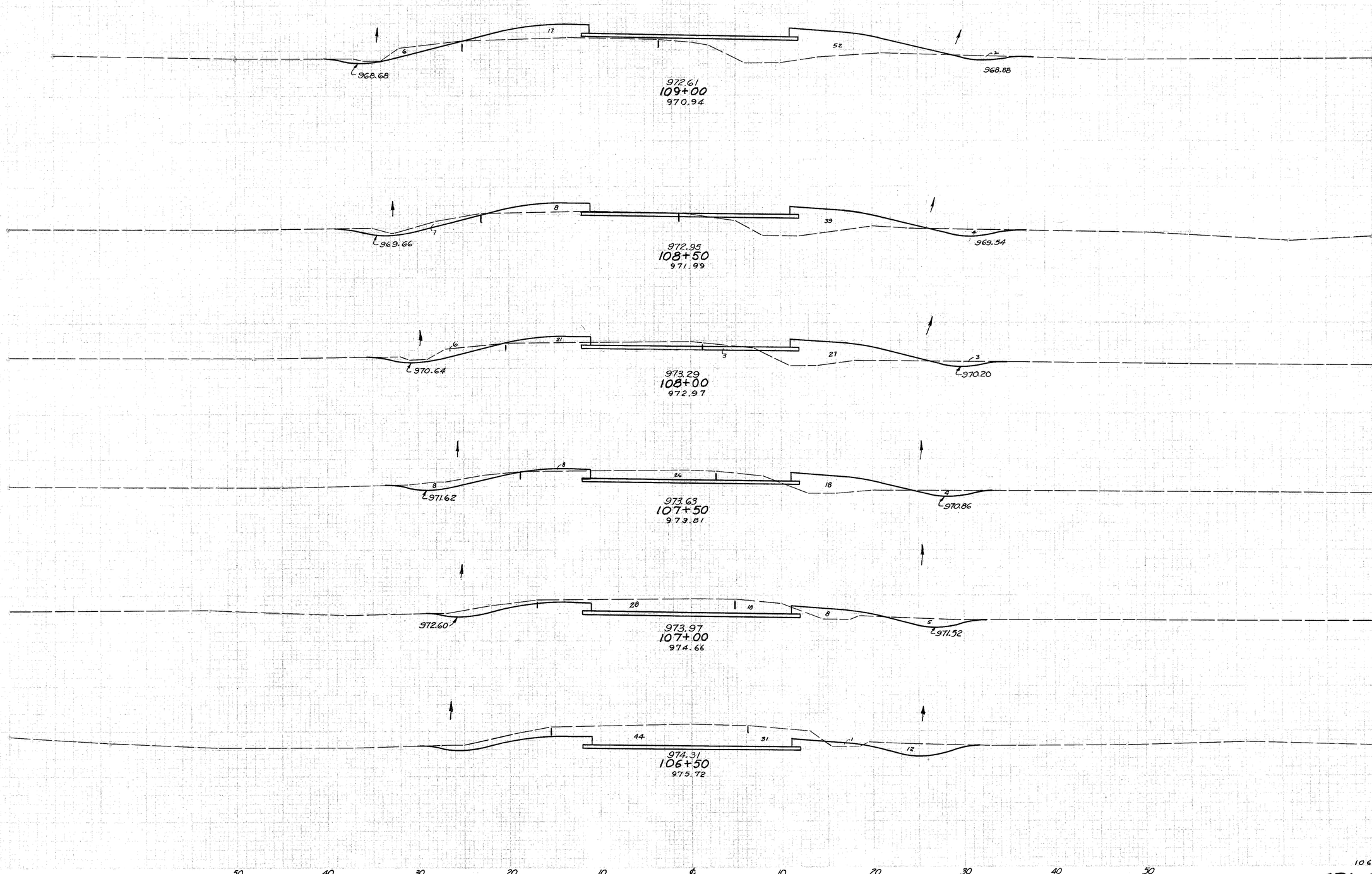
END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		0	5
152	2		
		335	4
210	2		
		449	4
275	2		
		589	4
361	2		
		750	4
449	2		
		916	4
540	2		
		1086	4
632	2		

STA. 103+50 TO 106+00

DIVISION 2 OHIO | TYPE FUNDS F-382(1) | POST WAR 18 45

UNI. - 36 - (12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
10	69		
		20	108
11	47		
		22	88
12	48		
		47	69
38	26		
		83	32
51	8		
		128	10
87	3		
		222	4
152	2		

Excavation 1333 Cu.Yds.
Embankment 703 Cu.Yds.
Emb.+20% 844 Cu.Yds.

106+00

50 40 30 20 10 ℄ 10 20 30 40 50

STA. 106+50 TO 109+00

DIVISION 2 OHIO F-982(1) TYPE FUNDS 19 POST WAR 45

UNI. - 36 - (12.77 - 13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

32 41 21

℄ 965.5

970.74
111+50
968.51

47 69

24

971.08
111+00
967.23

℄ 966.5

965.42

F.L. 965.00

971.16
110+88
966.96

UN-36-129

24" tile

F.L. 965.20

12" tile

15" V.S.D.

51 66

13

℄ 965.74

971.42
110+50
966.73

49 84

23

℄ 966.72

971.76
110+00
968.89

27 74

8

967.70

972.10
109+50
969.63

50 40 30 20 10 ℄ 10 20 30 40 50

END AREA		C.U. YDS.	
CUT	FILL	CUT	FILL
34	62		
		58	165
28	116		
		39	216
14	117		
		16	232
110+00			
3	133		
		10	219
8	103		
		17	160
109+00			
10	69		

STA. 109+50 TO 111+50

DIVISION 2 OHIO F-982(1) TYPE FUNDS POST WAR 20 45

UNI. - 36 -(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

113+96-15' 48" Elm

Add for Dr. Lt. Sta. 114+09

Add for Dr. Rt. Sta. 114+22

Drive +09

17 11 34 3 5

965.50

969.04
114+00
968.06

13 31 13 12

966.37

969.38
113+50
969.11

13 23 52

967.25

969.72
113+00
970.01

Add for Dr. Rt. Sta. 112+62

32 Drive +62 20

969.98
112+62 Dr. Rt.
970.80

16 9 60

968.12

970.06
112+50
970.80

3 25 4 5 7

970.40
112+00
969.61

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		0	11
		6	5
35	37		
		68	64
38	32		
		96	51
65	23		
		131	30
		0	6
76	9		
		84	36
14	30		
		45	85
111+50			
34	62		

50 40 30 20 10 ℄ 10 20 30 40 50

STA. 112+00 TO 114+00

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

DIVISION		PROJECT	TYPE FUNDS	21
2	OHIO	F-982(1)	POST WAR	45

UNI-36-(12.77-13.03)

116+63-56
22" Maple

959.90

967.34
116+50
962.27

961.00

967.52
116+23
965.07

962.00

967.68
116+00
965.77

962.87

968.02
115+50
966.97

963.75

968.36
115+00
966.86

964.62

968.70
114+50
967.21

End Area		Qu. Yds.	
Cut	Fill	Cut	Fill
32	190		
		34	150
36	110		
		30	80
34	77		
		89	115
62	47		
		94	87
39	47		
		80	79
47	38		
		76	70
35	37		

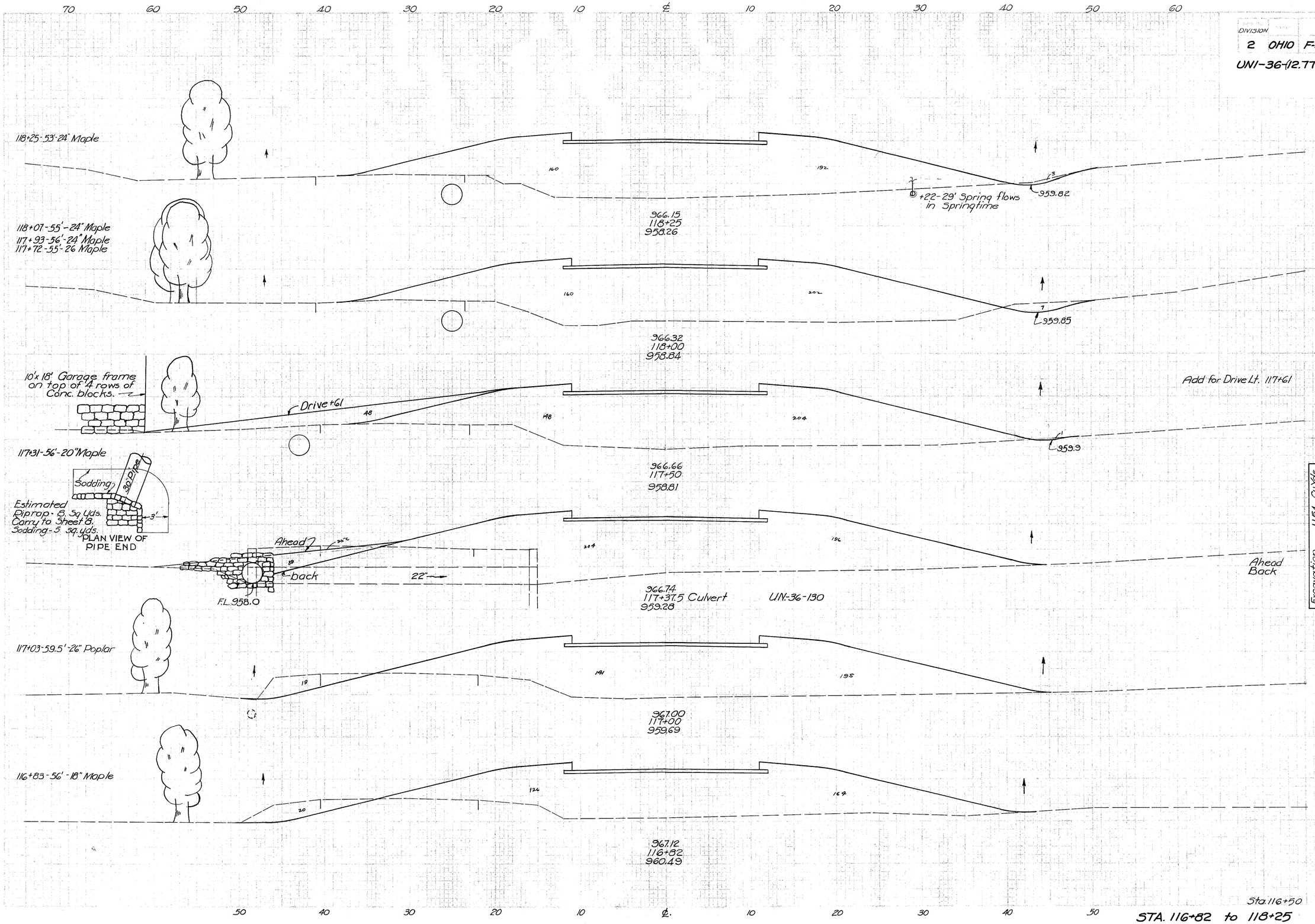
Sta. 114+00

50 40 30 20 10 ℄ 10 20 30 40 50

STA. 114+50 to 116+50

DIVISION			TYPE FUNDS	22
2	OHIO	F-982(1)	POST WAR	45

UNI-36-(12.77-13.03)



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
3	352		
		5	331
7	362		
		8	661
		19	0
1	352		
		6	183
25	439		
25	400		
		30	511
19	336		
		13	209
20	290		
		31	284
32	190		

Excavation 1154 Cu. Yds.
Embankment 5491 Cu. Yds.
Emb. +20% 6589 Cu. Yds.

STA. 116+82 to 118+25

DIVISION	COUNTY	PROJECT	TYPE FUNDS	
2	OHIO	F-982(1)	POST WAR	23 45

UNI-36-12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

188 66 43 959.55
964.46
121+00
959.78

203 79 30 959.60
964.67
120+50
958.76

152 78 27 959.65
964.96
120+00
959.05

143 137 20 959.70
965.30
119+50
958.61

143 135 9 959.75
965.64
119+00
958.61

143 146 15 959.80
965.38
118+50
958.31

50 40 30 20 10 ℄ 10 20 30 40 50

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
43	254		
		68	502
30	288		
		48	480
120+00			
22	230		
		39	468
20	275		
		27	512
9	278		
		22	544
15	309		
		8	306
3	352		

Sta. 118+25

STA. 118+50 to 121+00

DIVISION	STATE	PROJECT	TYPE FUNDS	
2	OHIO	F-982(1)	POST WAR	24 15

UNI-36-(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

3½:1 293 278 3½:1 955.45

964.78
123+60
955.73

4:1 305 291 4:1

964.74
123+50
955.65

4:1 277 260 4:1

964.54
123+00
959.92

294 202

964.39
122+50
956.22

216 162 0

964.32
122+00
957.27

957.0 150 38 15 20 959.50 0

964.34
121+50
959.62

50 40 30 20 10 ℄ 10 20 30 40 50

Sta. 121+00

STA. 121+50 to 123+60

	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
	2	583		
			1	218
	0	596		
			0	1049
	0	537		
	0	446		
			0	763
	0	378		
			19	594
	20	263		
			59	479
	43	254		

Excavation 214 Cu.Yds.
Embankment 5265 Cu.Yds.
Emb. +20% 6318 Cu.Yds.

DIVISION			TYPE FUNDS	
2	OHIO	F-982(1)	POST WAR	25 45

UNI-36-(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
Add from Sheet #37				104
126+40	48	532		
				153
124+10	21	581		
Add from Sheet #37				214
			6	
	13	575		
				448
			9	
	10	576		
				365
			4	
Sta. 123+60	2	583		

964.95
126+40 @ 38° R.F. Skew
955.22

952.0

BRIDGE

964.98
124+10 @ 38° Skew.
954.00

953.1

955.20

964.94
124+00
953.53

953.2

955.25

964.86
123+79
956.13

955.35

+81-42'-18" Willow } Remove
+79-41'-15" Willow }
123+74-52-26 Sycamore

STA. 123+79 to 126+40

DIVISION 2 OHIO PROJECT F-982(1) UNI.-36-(12.77-13.03)

TYPE FUNDS POST WAR

26
45

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

℄
964.28
128+00
954.02
318
312

℄
368
342
964.34
127+86
952.65

℄
383
304
964.43
127+64
952.75

℄
341
286
964.58
127+29
954.97

318
285
964.70
127+00
954.82

50 40 30 20 10 ℄ 10 20 30 40 50

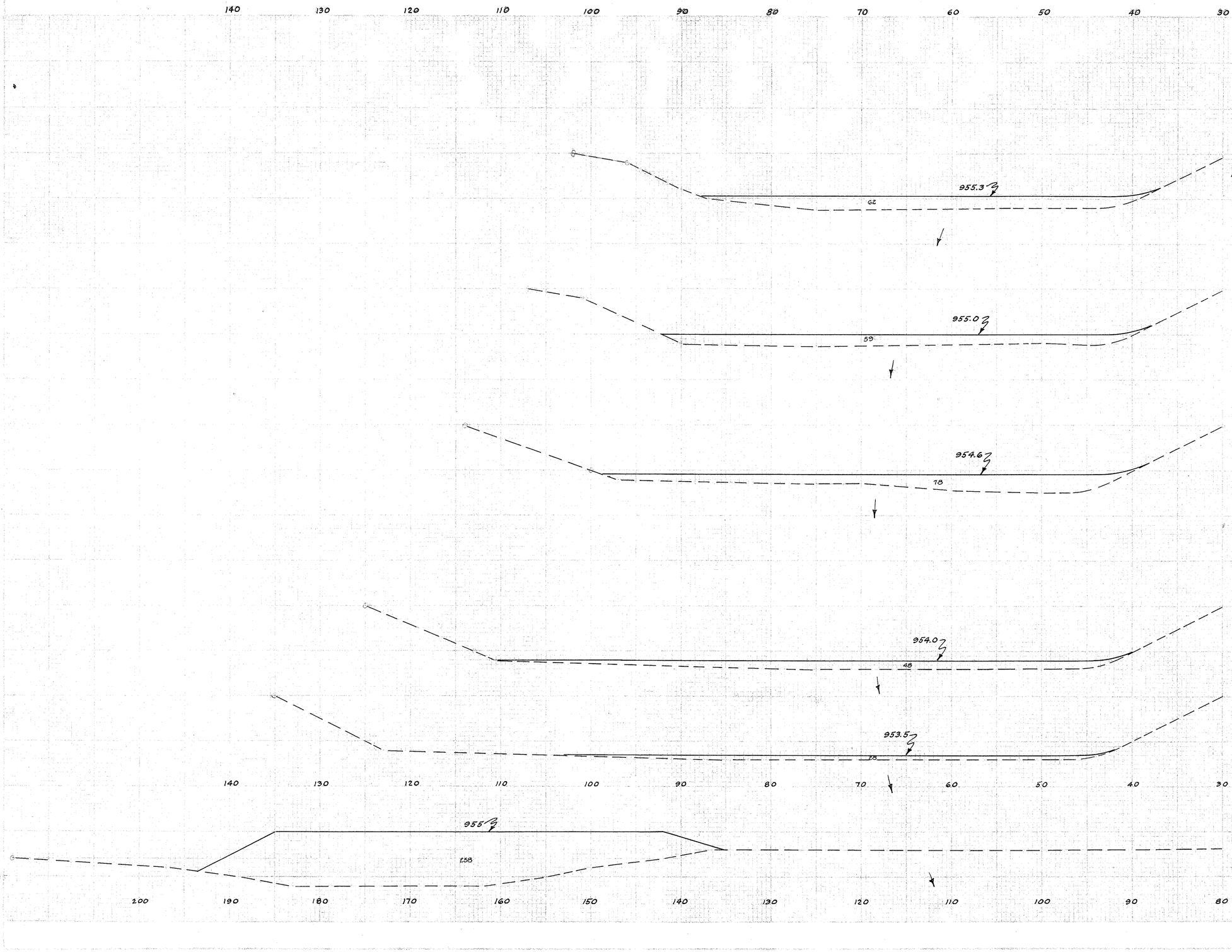
END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	630		
		0	347
0	710		
		0	569
0	687		
		0	852
0	627		
		0	661
0	603		
		54	1261
48	532		

126+40

STA. 127+00 TO 128+00

FOLD TO PREVIEW				
2	OHIO	F-982(1)	POST WAR	26A 45

UNI-36-(12.77-13.03)



	END AREA CUT	END AREA FILL	CU. YDS CUT	CU. YDS FILL
128+00 LT.	0	0		
	0	62		
			0	31
127+86 LT.	0	59		
			0	56
127+64 LT.	0	78		
			0	82
127+29 LT.	0	48		
			0	22
127+00	0	28		
			0	16
126+80 Ahead	0	14		
126+80 Back	0	14		
			0	101
126+60 LT.	0	258		
			0	96
126+40	0	0		

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

DIVISION 2 | OHIO | F-982(1) | TYPE FUNDS POST WAR | 27 / 45

UNI. - 36-(12.77-13.03)

4:1 183 126 4:1

957.0

963.86
129+00
958.85

129+03-26'-12" Elm - Remove
129+00-46'-12" Elm

3½ to 1 232 128 3½ to 1

956.8

963.91
128+88
958.69

3 to 1 352 331 221 3 to 1

956.1

964.07
128+50
953.53

Drive +30 Lt

2½ to 1 (274) 326 281 2½ to 1

955.9

964.13
128+36
955.17

128+37-51'-12" Elm
Add for Drive Lt +30

2 to 1 386 252 2 to 1

955.5

964.22
128+15
954.64

630+62=692

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	309		
		0	149
0	360		
		0	657
0	573		
		0	302
		0	147
0	607		
		0	473
0	608		
		0	361
0	692		

Excavation 66 Cu. Yds.
Embankment 7406 Cu. Yds.
Emb +20% 8887 Cu. Yds.

128+00

70 60 50 40 30 20 10 ℄ 10 20 30 40 50

STA. 128+15 TO 129+00

DIVISION 2 OHIO F-982(1) TYPE FUNDS POST WAR 28 45

UNI.-36-(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

131+72-35'-26" Maple - Remove

145 214

962.86
131+50
958.93

150 161

962.96
131+15
957.95

130+91-49'-27" Maple

126 70

130+98-36.5'-26" Elm Remove?

963.02
131+00
959.45

164 69

Porch House Drive +50 36

Add for Drive, Rt. 130+50

963.23
130+50
959.35

131 95

130+09-20'-14" Walnut - Remove
130+07-41'-20" Maple
130+07-27-12" Hackberry Remove

963.44
130+00
959.65

130+00

178 138 65

9585

Drive +29

129+48-31.5' 20" Apple Remove

963.65
129+50
958.62

Add for Drive, Rt. 129+25

129+00

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	359		
		0	434
0	311		
		0	141
0	196		
		0	20
		0	397
0	233		
		0	425
0	226		
		6	502
6	316		
		0	38
		6	579
0	309		

STA. 129+50 TO 131+50

DIVISION 2 OHIO F-982(1) UNI.-36-(12.77-13.03)

TYPE FUNDS 29
POST WAR 45

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

955.0

256

963.88
134+50
959.13

226

F.L. 954.0

30" C.I.P.

E1. 953.03

36" Iron pipe

E1. 953.28

30" Pipe

F.L. 954.0

963.80
134+42
959.09

℄ 954.5

257

963.47
134+00
959.17

206

133+57-22'-42" Maple-Remove

℄ 954.7

222

963.16
133+50
958.83

162

℄ 955.2

220

962.94
133+00
958.89

154

132+42-51'-27" Maple

202

962.82
132+50
959.12

163

132+35-16'-30" Ash-Remove

156

962.79
132+00
959.20

183

Remove
132+15'-35'-36" Sycamore
131+95'-11'-26" Ash-Remove

131+50

50 40 30 20 10 ℄ 10 20 30 40 50

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
1	482		
		1	157
7	576		
		7	808
2	463		
		11	785
10	384		
		10	702
1	374		
		1	685
0	365		
		6	652
6	339		
		6	647
0	359		

Excavation 47 Cu.Yds.
Emb. 6760 Cu.Yds.
Emb.+20% 8112 Cu.Yds.

STA. 132+00 TO 134+50

DIVISION 2 OHIO | F-982(1) | TYPE FUNDS POST WAR 30 45

UNL.-36-(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

133 211

967.13
137+50
961.62

137+10-41'-16" Walnut
137+03-305'-12" pine-Remove
136+79-30'-12" Ash-Remove

140 216

966.58
137+00
961.14

136+72-15'-18" Ash -Remove
136+57-33'-22" Maple.-Remove
136+33-335'-14" Maple-Remove

+47 Drive 10:1

58 133 227

Add for Drive Lt. 136+47

966.03
136+50
960.51

136+18-275'-20" Maple.-Remove
136+16-51'-12" Maple
135+96-27-24" Elm-Remove
135+78-24'-20" Maple-Remove

170 270

965.48
136+00
959.85

135+62-50'-18" Walnut
135+62-325'-16" Maple-Remove

203 295

957.0

964.93
135+50
959.61

254 293

956.0

964.38
135+00
959.37

135+00

134+50

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	344		
		0	648
0	356		
		0	663
		0	24
0	360		
		0	741
0	440		
		1	822
1	448		
		5	875
4	497		
		5	907
1	482		

STA. 135+00 TO 137+50

DIVISION 2 OHIO F-982(1) TYPE FUNDS POST WAR 31 45

UNI.-36-(12.77-13.03)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

+10-19'-18" Ash-Remove

97 45 15 1:10 Dr.

970.19
140+56
971.87

Add for Drive Rt. 140+63
Sta 140+56

Main Portion of Barn

Frame Barn

20 6 28 7

969.78
140+00
969.81

31 26 C. Pipe

969.32
139+50
967.52

85 75

968.78
139+00
965.55

Remove 7
138+77-26.5'-18" W. Cherry.

138+61-23.5'-26" Elm - Remove
138+38-24.5'-12" Catalpa - Remove

121 126

968.23
138+50
963.96

137+82-26'-24" Catalpa. - Remove

131 170

967.68
138+00
962.61

137+50

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		5	0
142	2		
		204	11
55	8		
		53	68
2	65		
			2 208
		0	160
			0 377
		0	247
			0 508
		0	301
			0 597
		0	344

Excavation 1844 cu.yds.
Embankment 5641 cu.yds.
Emb. + 20 % 6769 cu.yds.

50 40 30 20 10 ℄ 10 20 30 40 50

STA. 138+00 TO 140+56

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

DIVISION 2 OHIO | PROJECT F-982(1) | TYPE FUNDS 32 | POST WAR 45

UNI - 36 - (12.77 - 13.03)

145+00
969.84

END WORK STA. 145+00 — Sta. 145+00

END PROJECT STA. 144+50 — Sta. 144+50

970.09
144+50
970.04

144+24-25'-26" Maple-Remove

970.27
144+00
970.61

143+48-23.5'-26" Catalpa. - Remove
143+17-23.5'-24" Catalpa. - Remove

143+25-21'-36" Maple - Remove

970.62
143+00
971.79

142+71-23.5'-24" Maple - Remove
142+25-22'-26" Catalpa - Remove

142+23-21.5'-36" Maple - Remove
141+93-20.5'-36" Maple - Remove

970.70
142+00
973.02

Add for Drive Rt. 141+79'

141+80-22.5'-24" Maple. - Remove

141+68-27'-14" Maple
141+42-22'-24" Maple - Remove

House

Walk

970.61
141+50
973.11

141+24-21.5'-36" Maple - Remove
141+13-51'-14" Plum
141+05-34-30" Mulberry

970.42
141+00
972.63

140+56

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		39	10
42	11		
		90	17
55	7		
		180	35
42	12		
		363	26
154	2		
		10	0
		309	4
179	2		
		326	4
173	2		
		257	3
142	2		

50 40 30 20 10 ℄ 10 20 30 40 50

STA. 141+00 TO 145+00

DIVISION			TYPE FUNDS	33
2	OHIO	F-962(1)	POST WAR	45

UNI.-364(2.77-13.03)

50 40 30 20 10 ℄ 10 20 30 40 50

146+00
968.81

145+50
969.35

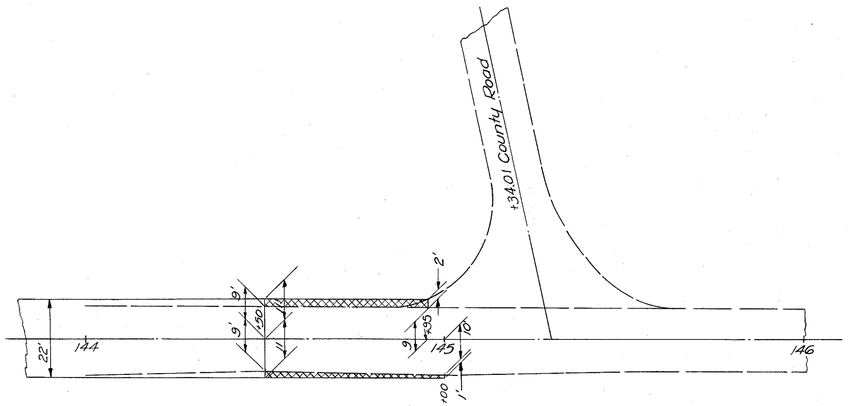
50 40 30 20 10 ℄ 10 20 30 40 50

STA. 145+50 TO 150+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

34
45

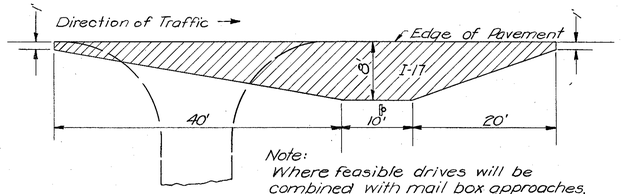
U.N.I.-36-12.77-13.03)



TRANSITION ~ WIDENING - STA. 144+50 to STA. 145+00

T-35 1½" Asphaltic Concrete Surface Course	0.8	Cu.Yds.
B-35 1½" Asphaltic Concrete Leveling Course	0.8	Cu.Yds.
T-30 Bituminous Prime Coat	8.0	Gals.
B-20 8" Waterbound Macadam Base Course	23.6	Sq.Yds.

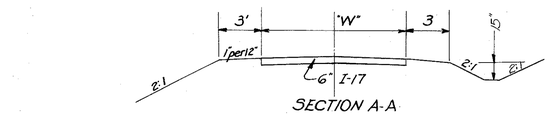
Carry to Sheet #4 Table "D"



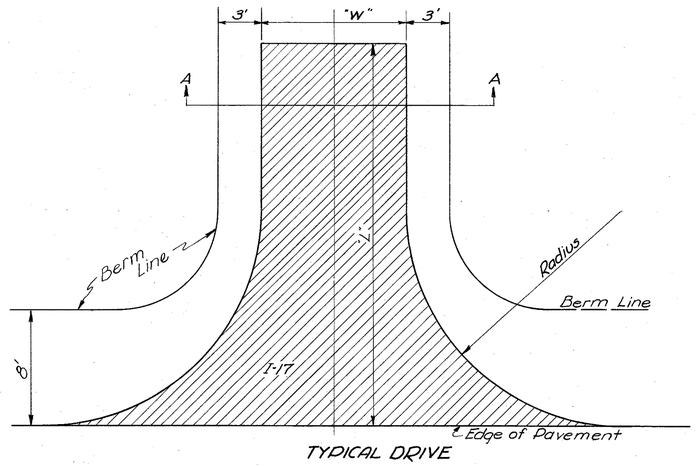
Note:
Where feasible drives will be combined with mail box approaches, in the manner shown, and the quantities adjusted by the Engineer.

TYPICAL MAIL BOX APPROACHES
ESTIMATED QUANTITIES

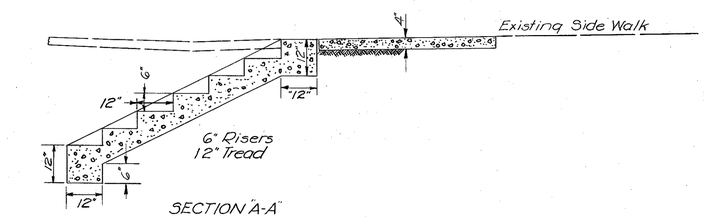
6 Mail Box Approaches @ 38.9 sq. yds. each = 233.4 sq. yds. I-17
Carry to sheet #4 Table "A"



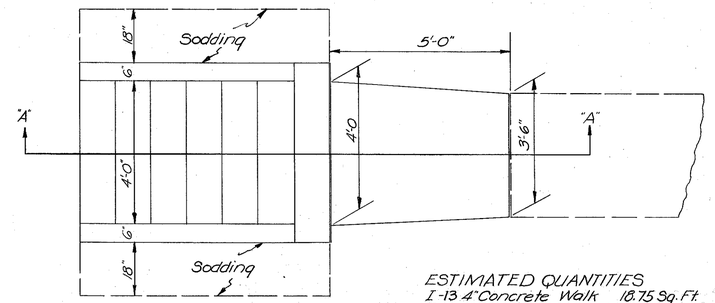
SECTION A-A



TYPICAL DRIVE



SECTION A-A



PLAN
Sta. 141+54

ESTIMATED QUANTITIES

I-13 4" Concrete Walk	16.75	Sq. Ft.
I-13 Concrete Steps	35.0	Lin. Ft.
L-10 Sodding	3.0	Sq. Yds.

Carry to sheet #11

MISCELLANEOUS DETAILS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

35/45

UNI.-36-(12.77-13.03)

SUPER ELEVATION TABLE

P.C.-103+29.53 — D 0°30' Rt. — P.T.-114+69.53

Elevation Lt. Edge	Width	Super Elevation	Station	℄ Elevation	Super Elevation	Width	Elevation Rt. Edge
977.03	11.0	0.00	102+00	977.20	0.00	11.0	977.03
976.88		0.02	+25	977.03			976.86
976.75		0.06	+50	976.86			976.69
976.63		0.11	+75	976.69			976.52
976.52		0.17	103+00	976.52			976.35
976.40		0.22	+25	976.35			976.18
976.29		0.28	+50	976.18			976.01
976.16		0.32	+75	976.01			975.84
976.01		0.34	104+00	975.84			975.67
975.84			+25	975.67			975.50
975.67			+50	975.50			975.33
975.50			+75	975.33			975.16
975.33			105+00	975.16			974.99
975.16			+25	974.99			974.82
974.99			+50	974.82			974.65
974.82			+75	974.65			974.48
974.65			106+00	974.48			974.31
974.48			+25	974.31			974.14
974.31			+50	974.14			973.97
974.14			+75	973.97			973.80
973.97			107+00	973.80			973.63
973.80			+25	973.63			973.46
973.63			+50	973.46			973.29
973.46			+75	973.29			973.12
973.29			108+00	973.12			972.95
973.12			+25	972.95			972.78
972.95			+50	972.78			972.61
972.78			+75	972.61			972.44
972.61			109+00	972.44			972.27
972.44			+25	972.27			972.10
972.27			+50	972.10			971.93
972.10			+75	971.93			971.76
971.93			110+00	971.76			971.59
971.76			+25	971.59			971.42
971.59			+50	971.42			971.25
971.42			+75	971.25			971.08
971.25			111+00	971.08			970.91
971.08			+25	970.91			970.74
970.91			+50	970.74			970.57
970.74			+75	970.57			970.40
970.57			112+00	970.40			970.23
970.40			+25	970.23			970.06
970.23			+50	970.06			969.89
970.06			+75	969.89			969.72
969.89			113+00	969.72			969.55
969.72			+25	969.55			969.38
969.55			+50	969.38			969.21
969.38			+75	969.21			969.04
969.21		0.34	114+00	969.04			968.87
969.02		0.32	+25	968.87			968.70
968.81		0.28	+50	968.70			968.53
968.58		0.22	+75	968.53			968.36
968.36		0.17	115+00	968.36			968.19
968.13		0.11	+25	968.19			968.02
967.91		0.06	+50	968.02			967.85
967.70		0.02	+75	967.85			967.68
967.51	11.0	0.00	116+00	967.68	0.00	11.0	967.51

SUPER-ELEVATION TABLE

T.S.-126+70.54 — D=4°00' Rt. — S.T.-135+29.08

Elevation Lt. Edge	Width	Super Elevation	Station	Profile Elevation	Super Elevation	Width	Elevation Rt. Edge
964.97	11.0	0.00	125+75	965.14	0.00	11.0	964.97
964.92		0.01	126+00	965.08			964.91
964.89		0.05	+25	965.01			964.84
964.86		0.12	+50	964.91			964.74
964.84		0.19	+70.54	964.82			964.65
964.85		0.34	127+05.54	964.68			964.51
964.86		0.50	+40.54	964.53			964.36
964.89		0.68	+75.54	964.38			964.21
964.93		0.86	128.+10.54	964.24			964.07
964.96		1.04	+45.54	964.09			963.92
964.99		1.22	+80.54	963.94			963.77
965.01		1.38	129+15.54	963.80			963.63
965.04		1.56	+50.54	963.65			963.48
965.07		1.69	+75	963.55			963.38
965.05		1.72	+85.54	963.50			963.33
965.05		1.78	130+00	963.44			963.27
964.98		1.80	+20.54	963.35			963.18
964.99		1.82	+25	963.34			963.17
964.88		1.82	+50	963.23			963.06
964.78		1.82	+75	963.13			962.96
964.70		1.82	131+00	963.02			962.85
964.56		1.80	+25	962.93			962.76
964.48		1.79	+50	962.86			962.69
964.43		1.78	+75	962.82			962.65
964.40		1.76	+79.08	962.81			962.64
964.30		1.68	132+14.08	962.79			962.62
964.28		1.65	+25	962.80			962.63
964.20		1.56	+49.08	962.81			962.64
964.10		1.38	+84.08	962.89			962.72
964.06		1.22	133+19.08	963.01			962.84
964.04		1.04	+54.08	963.17			963.00
964.08		0.86	+89.08	963.39			963.22
964.16		0.68	134+24.08	963.65			963.48
964.29		0.50	+59.08	963.96			963.79
964.48		0.34	+94.08	964.31			964.14
964.83		0.19	135+29.08	964.81			964.64
964.88		0.12	+50	964.93			964.76
965.09		0.05	+75	965.21			965.04
965.31	11.0	0.00	136+00	965.48	0.00	11.0	965.31

SUPER ELEVATION TABLES

End Area		Cu Yds.	
Cut	Fill	Cut	Fill
		30	0
136	0		
		33	0
223	0		
		391	0
279	0		
		392	0
326	0		
		495	0
417	0		
		801	0
384	0		
		65	0
203	0		
		80	0
Total		2287	0

Carry to Sheets # 4 & # 42

Estimated Cut for dressing Bridge end at Sta. 127+20

136

126+82
961.21

223

126+77
961.44

157 122

126+35
962.13

168 158

126+00
962.92

217 200

125+64
964.19

252 132

955.0
125+10
964.55

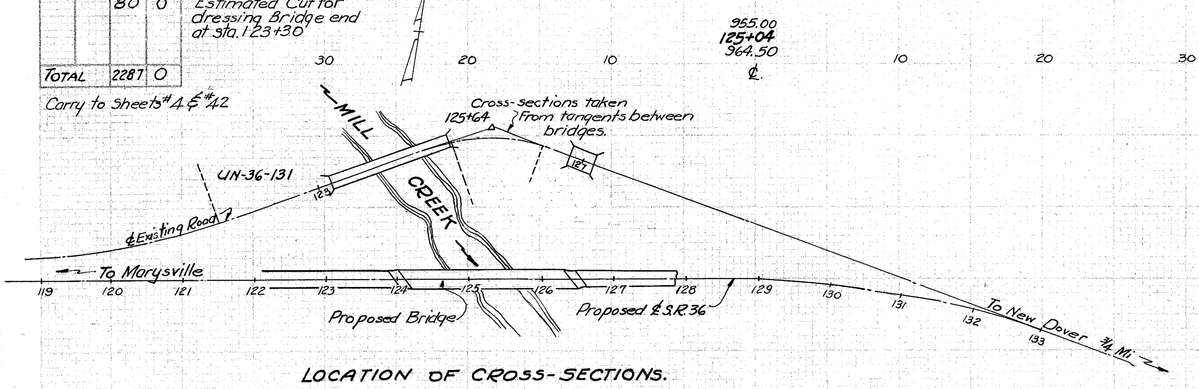
203

955.00
125+04
964.50

Estimated Cut for dressing Bridge end at Sta. 123+30

℄

30 20 10 ℄ 10 20 30 40 50



LOCATION OF CROSS-SECTIONS.

CROSS-SECTIONS BETWEEN BRIDGES.

UNI-36-(12.77-13.03)

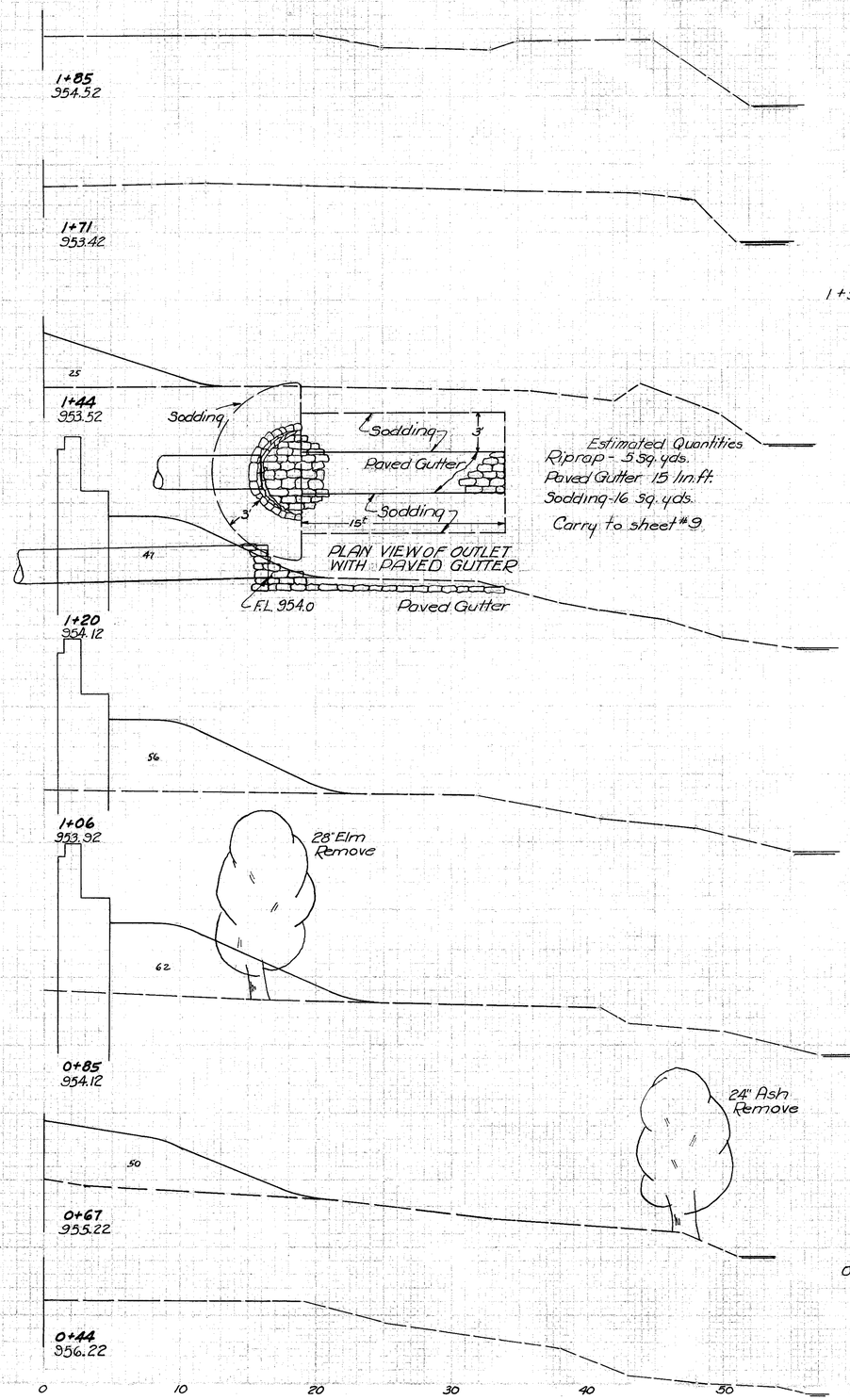
F-982(1) POST WAR

2

36
45

DIVISION 2 | OHIO | F-982(1) | TYPE FUNDS POST WAR | 37/45

UNI.-36-(12.77-13.03)

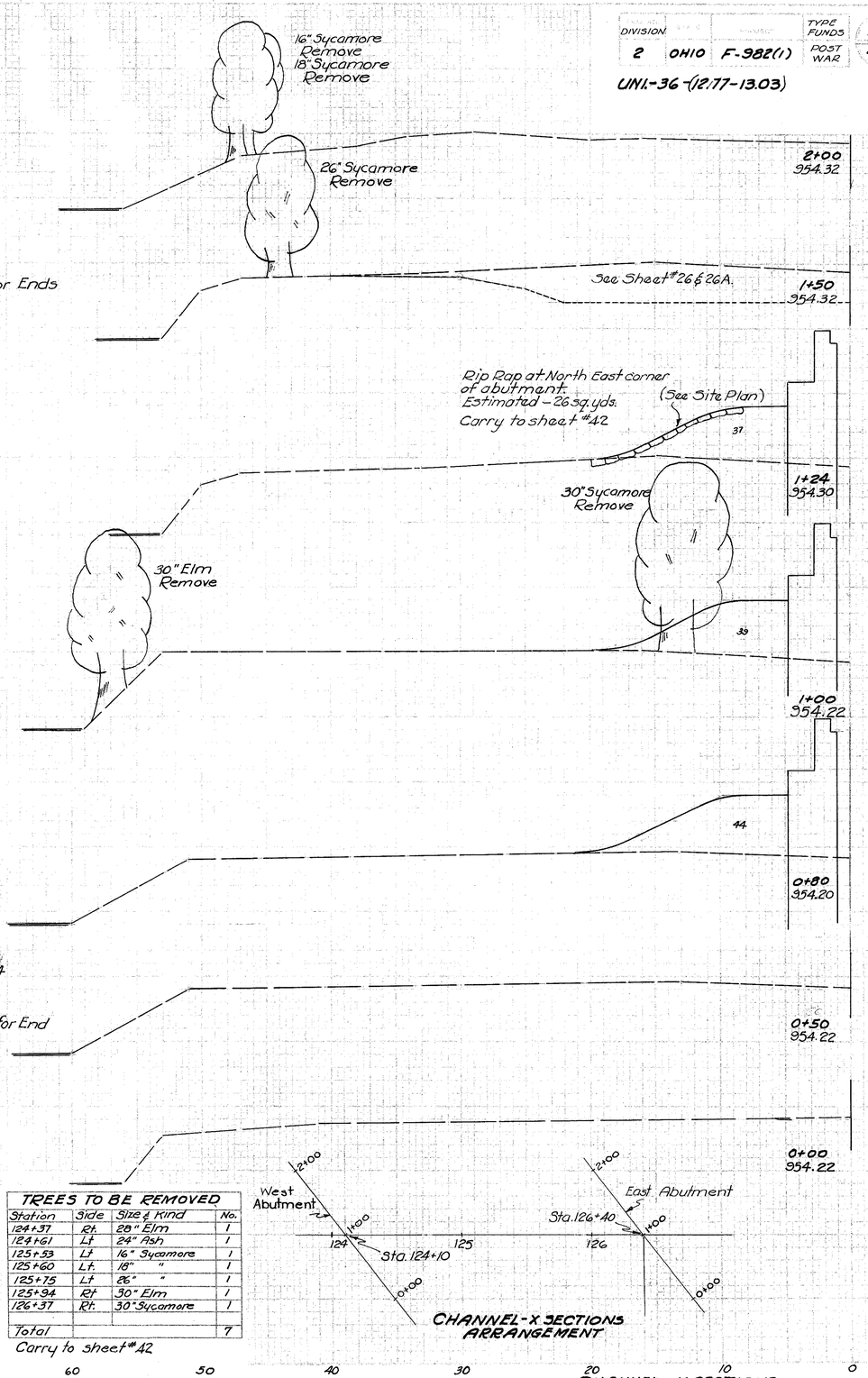


Estimated Quantities
Riprap - 5.5 sq. yds.
Paved Gutter 15 lin. ft.
Sodding - 16 sq. yds.
Carry to sheet #9

	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1+53	0	0		
			0	4
	0	25		
			0	32
	0	47		
			0	27
	0	56		
			0	46
	0	62		
			0	37
	0	50		
			0	7
0+59	0	0		
TOTAL			0	153

	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
			0	9
Add for Ends				
1+30	0	0		
			0	4
	0	37		
			0	34
	0	39		
			0	31
	0	44		
			0	5
	0	0		
0+74				
			0	21
Add for End				
TOTAL			0	104

Total 153 + 104 = 257 Cu. Yds.
Carry to sheet #25



TREES TO BE REMOVED			
Station	Side	Size & Kind	No.
124+37	Rt.	28" Elm	1
124+61	Lt.	24" Ash	1
125+53	Lt.	16" Sycamore	1
125+60	Lt.	18" "	1
125+75	Lt.	26" "	1
125+94	Rt.	30" Elm	1
126+37	Rt.	30" Sycamore	1
Total			7

Carry to sheet #42

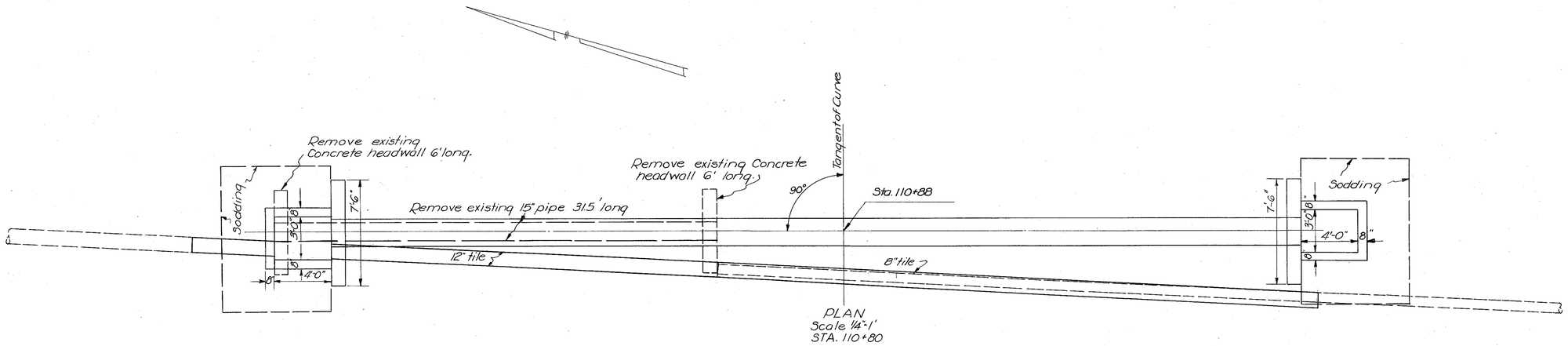
CHANNEL - X SECTIONS ARRANGEMENT

CHANNEL - X SECTIONS

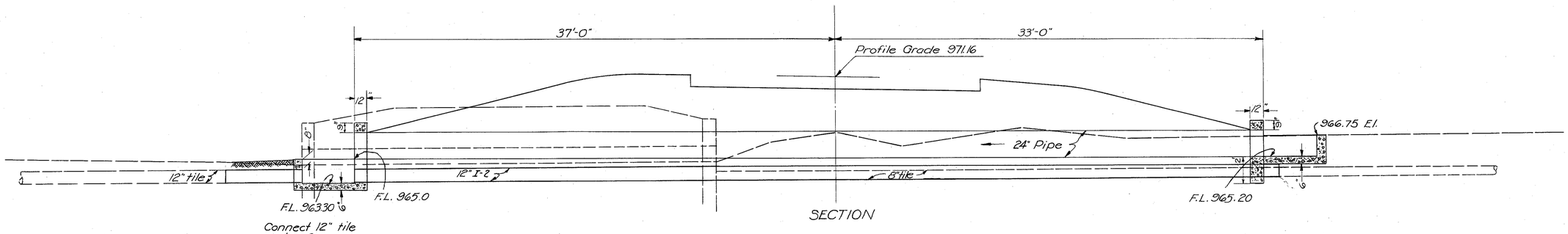
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

38
45

UNI.-36-(12.77-13.03)



PLAN
Scale 1/4"-1'
STA. 110+80



SECTION

CULVERT DATA

TYPE: Pipe Culvert Std. Dwg. No. S-27 RC.-3
SIZE: 24" x 70'-0"
WORK REQ'D.: Remove existing pipe culvert and concrete headwalls. Build 24" pipe culvert with concrete headwalls and concrete boxes as shown. Replace existing tile under pavement with new 12" pipe and connect into box at left.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	18	Cu. Yds.
S-24	Removal of Existing Structure		Lump Sum
S-27	24" Pipe for Roadway Culverts	70	Lin. Ft.
I-2	12" Pipe Under Pavement	80	Lin. Ft.
S-1	Concrete for Structures - Class "C"	4.2	Cu. Yds.
L-10	Sodding	12	Sq. Yds.

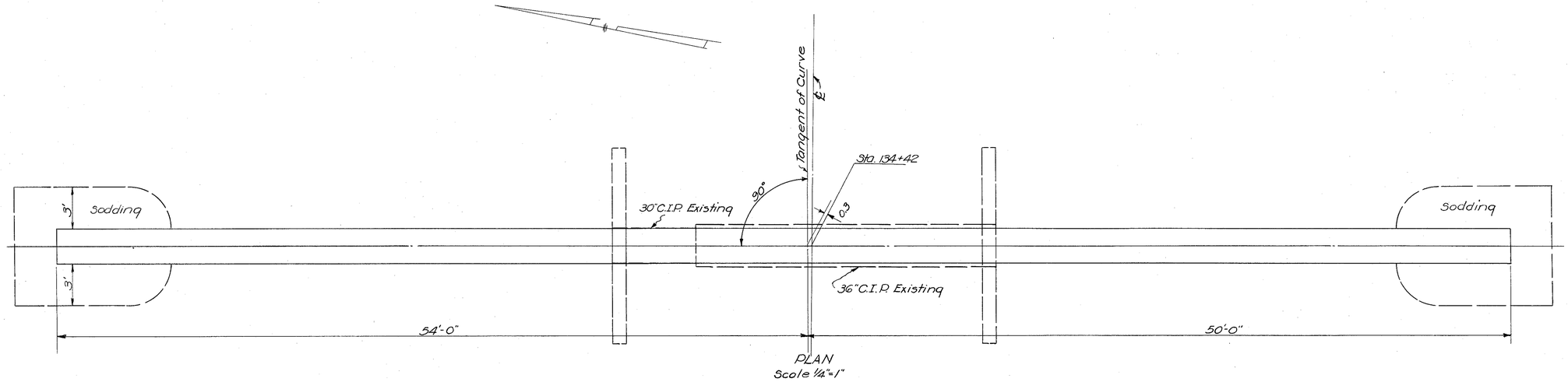
Note:
Removal of existing pipe included with Item I-2 Pipe Under Pavement for payment.

STRUCTURE UN-36-129

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

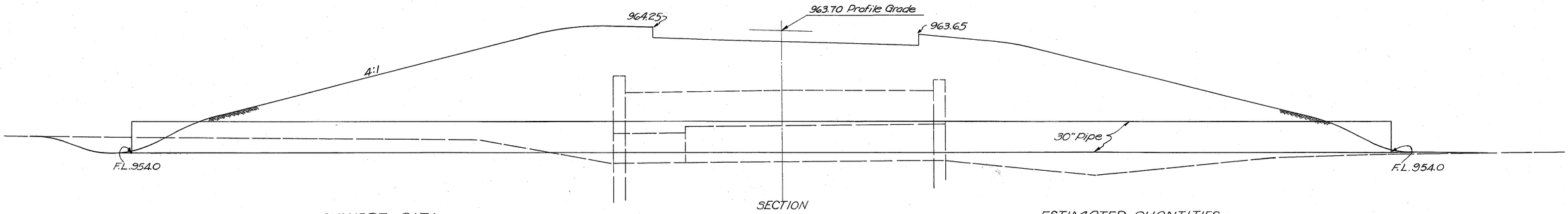
39
45

UNI.-36-(12.77-13.03)



PLAN
Scale 1/4"=1'

UN.-36-134



SECTION

CULVERT DATA

TYPE: Pipe Culvert ~ Std. Dwg. No. S-27 P.C.3
SIZE : 30" x 104' Lg.
WORK REQ'D. Remove existing culvert and concrete headwalls. Build new 30"x104' pipe culvert with sodding around ends as shown.

ESTIMATED QUANTITIES

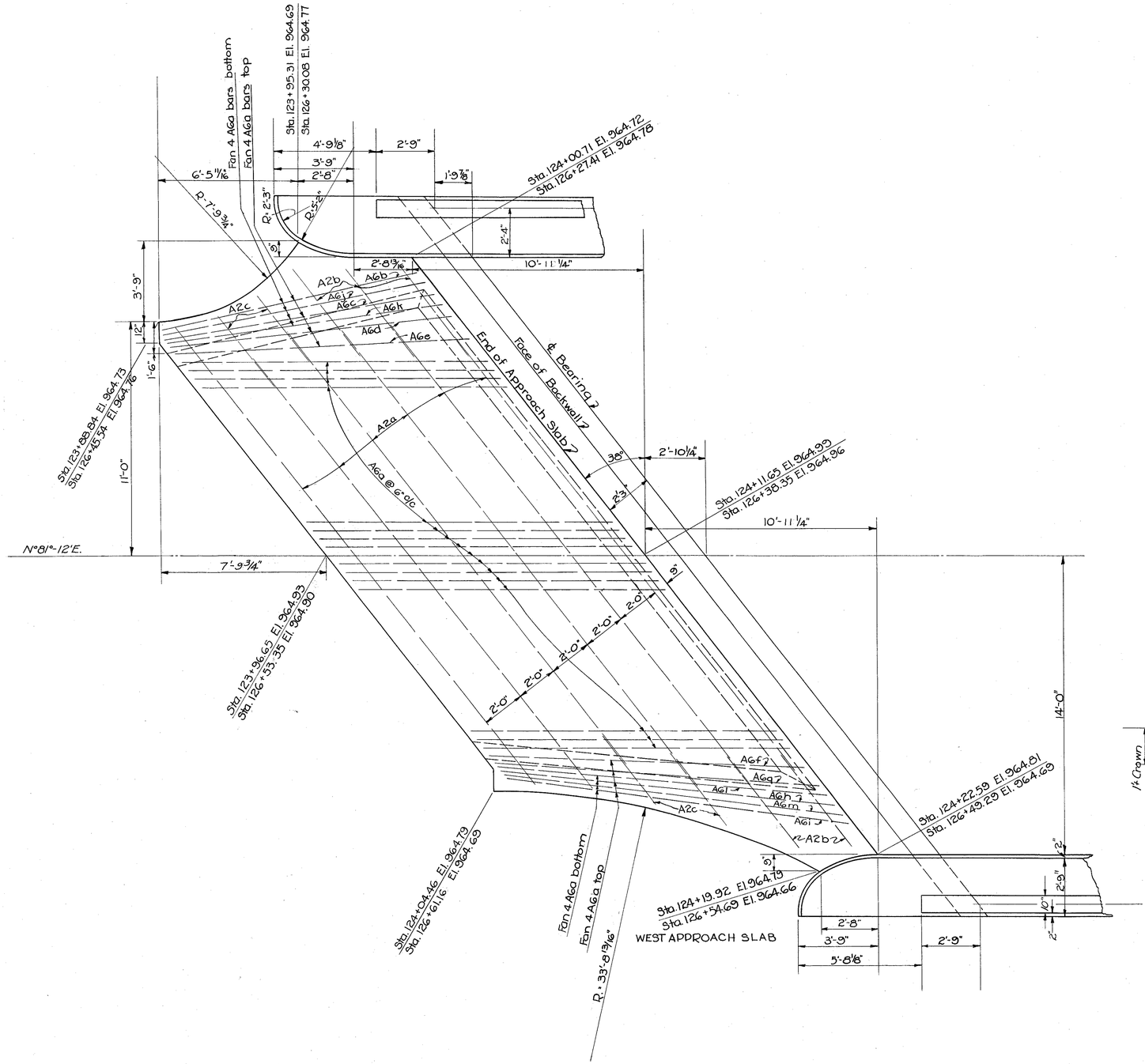
E-2	Excavation for Structures	5.0 Cu. Yds.
S-24	Removal of Existing Structures	Lump Sum
S-27	30" Pipe for Roadway Culverts	104.0 Lin Ft.
L-10	Sodding	18.0 Sq. Yds.

STRUCTURE No. UN.-36-134

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

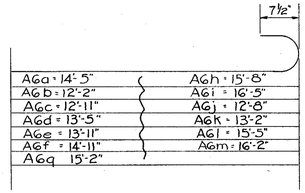
40
45

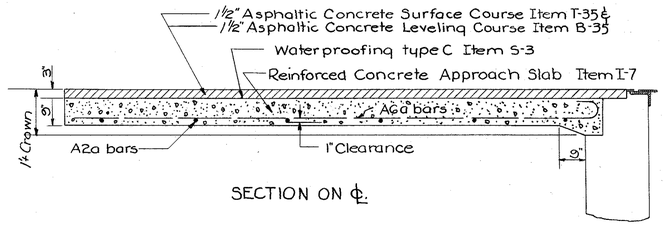
UNI.-36-(12.77-13.03)



STEEL LIST

Mark	Size	Shape	Number	Length	Wt.
A2a	½"ϕ	Str.	6	27'-6"	110
A2b	½"ϕ	Str.	5	5'-6"	18
A2c	½"ϕ	Str.	4	4'-0"	11
A6a	⅞"ϕ	Bent	47	15'-3"	1465
A6b			2	13'-0"	53
A6c			2	13'-9"	56
A6d			1	14'-3"	29
A6e			1	14'-9"	30
A6f			1	15'-9"	32
A6g			1	16'-0"	33
A6h			2	16'-6"	67
A6i			2	17'-3"	71
A6j			1	13'-6"	28
A6k			1	14'-0"	29
A6l			1	16'-3"	33
A6m	⅞"ϕ	Bent	1	17'-0"	35
Total					2100#





SECTION ON ℄

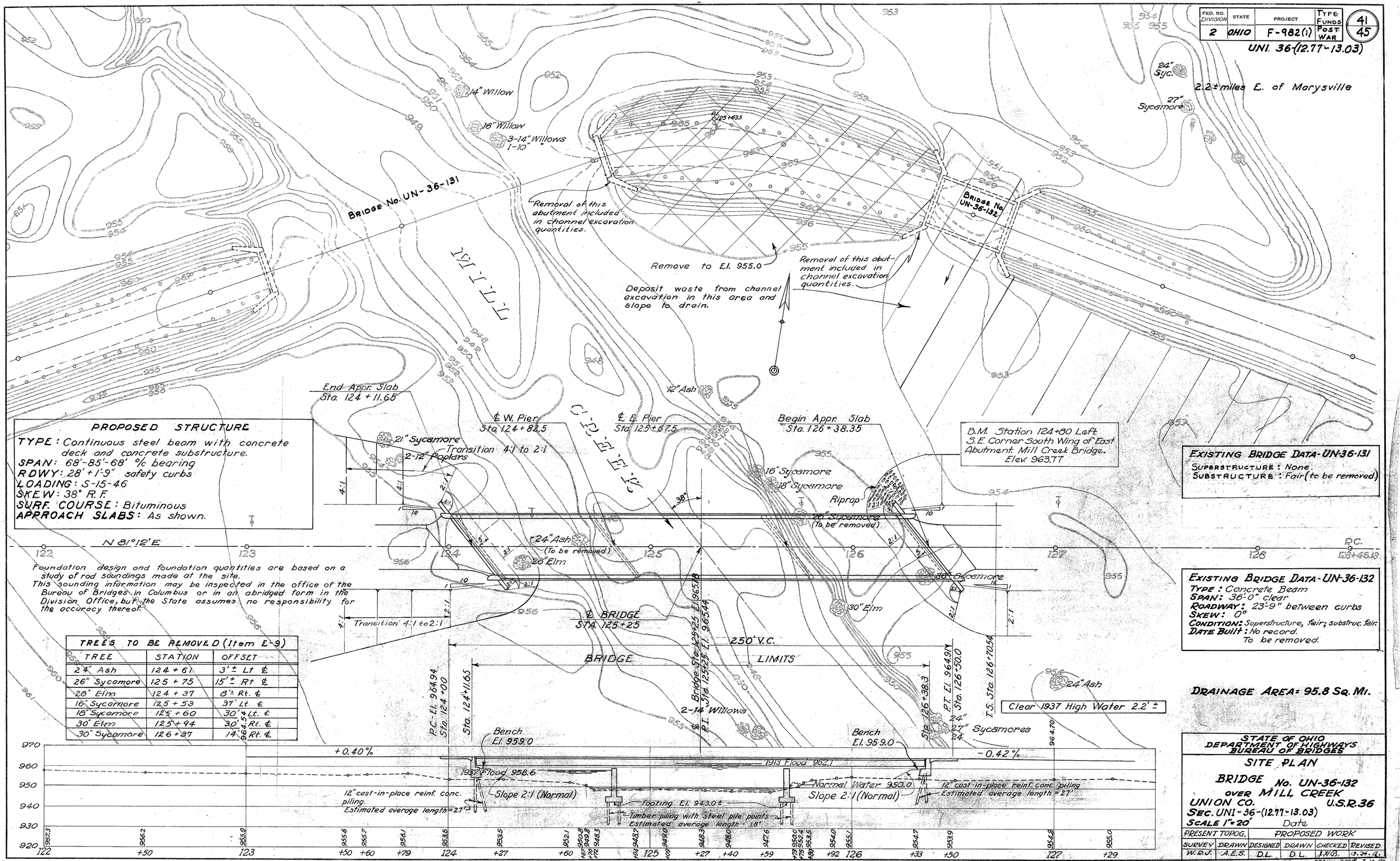
ESTIMATED QUANTITIES

Item I-7 Reinforeed Concrete Approach Slab 9"	90.0 Sq. Yds.
Item S-3 Waterproofing Type "C"	90.0 Sq. Yds.
Item T-35 1½" Asphaltic Concrete Surface Course	3.7 Cu. Yds.
Item B-35 1½" Asphaltic Concrete Leveling Course	3.7 Cu. Yds.

APPROACH SLABS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	41/45
2	OHIO	F-982(1)	POST WAR	

UNI. 36-(12.77-13.03)



PROPOSED STRUCTURE

TYPE: Continuous steel beam with concrete deck and concrete substructure.
SPAN: 68'-85'-68' °/c bearing
RDWY: 28'+1'-9" safety curbs
LOADING: S-15-46
SKEW: 38° R.F.
SURF. COURSE: Bituminous
APPROACH SLABS: As shown.

Foundation design and foundation quantities are based on a study of rod soundings made at the site.
This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.

TREES TO BE REMOVED (Item E-9)

TREE	STATION	OFFSET
24" Ash	124 + 61	3'± Lt ℄
26" Sycamore	125 + 75	15'± Rt ℄
28" Elm	124 + 37	8'± Rt. ℄
16" Sycamore	125 + 53	37' Lt. ℄
18" Sycamore	125 + 60	30' Lt. ℄
30" Elm	125 + 94	30' Rt. ℄
30" Sycamore	126 + 37	14' Rt. ℄

B.M. Station 124+80 Left. S.E. Corner South Wing of East Abutment. Mill Creek Bridge. Elev. 963.77

EXISTING BRIDGE DATA-UN-36-131
SUPERSTRUCTURE: None.
SUBSTRUCTURE: Fair (to be removed)

EXISTING BRIDGE DATA-UN-36-132
TYPE: Concrete Beam
SPAN: 36'-0" clear
ROADWAY: 23'-9" between curbs
SKEW: 0°
CONDITION: Superstructure, fair; substruc. fair.
DATE BUILT: No record.
To be removed.

DRAINAGE AREA = 95.8 SQ. MI.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE No. UN-36-132
OVER MILL CREEK
UNION CO. U.S.R. 36
SEC. UNI-36-(12.77-13.03)
SCALE 1" = 20' Date

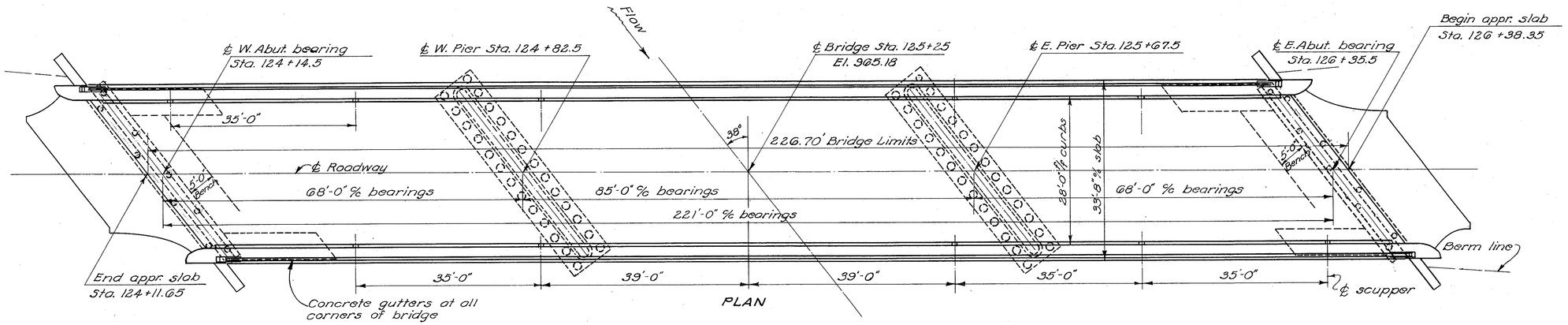
PRESENT TOPOG.		PROPOSED WORK			
SURVEY	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
W.R.J.	A.E.S.	D.L.	D.L.	J.H.B.	J.H.A.

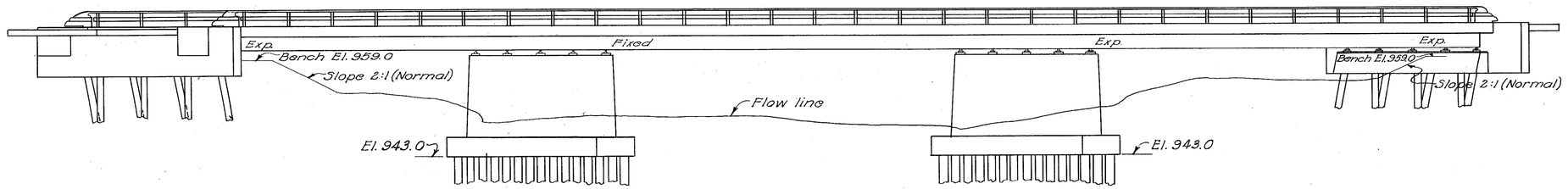
Revised 3-22-50 BFG W.H.R. 3-10-50

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

42
45

UNI-36-(12.77-13.03)





GENERAL NOTES

REFERENCE shall be made to Standard Drawing CSB-1-47, revised 8-25-49.

REMOVAL OF EXISTING BRIDGES
Superstructure of Bridge No. UN-36-131 collapsed March 3, 1950 and has been removed from the site.
Superstructure of Bridge No. UN-36-132 shall be removed.
Substructure of bridge No. UN-36-131 shall be removed to El. 955.0.
Substructure of bridge No. UN-36-132 shall be removed to 6" below proposed ground line and the ground in back of the East abutment dressed to 2:1 slope. Suitable waste masonry may be used as bank protection at the direction of the Engineer.

EXCAVATION quantity includes the removal of fill material between top of earth bench and bottom of abutment crossbeam.

PILING shall be driven to a minimum capacity of 20 tons at the piers and 26 tons at the abutments.

SURFACE FINISH OF CONCRETE
Fascias of deck, curbs and railing and posts shall receive a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item 54.

BITUMINOUS SURFACE COURSE
2½ Asphaltic concrete surface course, Item T-35, laid in two 1¼" courses.

CONCRETE GUTTERS shall be 6 feet wide and 6 inches thick, and shall be depressed 6 inches at the center. They shall extend from face of abutment down to existing ground and shall be centered under scuppers. Reinforcing bars ½"ø @ 1'-6" centers, both directions, included in price per linear foot.

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superstr.	Abuts.	Piers	General	As Built	
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
E-2	280	Cu. Yd.	Unclassified excavation		80	200			
E-3	2287	Cu. Yd.	Channel excavation				2287		
E-9	7	Each	Removal of trees within bridge limits				7		
S-1	197	Cu. Yd.	Class "C" concrete - superstructure	197					
S-1	103	Cu. Yd.	Class "E" concrete - abutments		103				
S-1	100	Cu. Yd.	Class "E" concrete - pier walls			100			
S-1	71	Cu. Yd.	Class "E" concrete - pier footings			71			
S-3	683	Sq. Yd.	Type "C" waterproofing	683					
S-4	60,603	Lb.	Reinforcing steel	46,555	9048	4938	62		
S-7	~~260720~~	Lb.	Structural steel	~~260,720~~				+ 189	260,909
S-8	~~260720~~	Lb.	Field painting of structural steel	~~260,720~~				+ 189	260,909
S-14	453	Lin. Ft.	Railing (steel with concrete end posts)	453					
S-16	Lump	Sum	First test pile (timber or concrete)				Lump		
S-18	~~940~~	Lin. Ft.	Timber piling (untreated)			~~940~~		+ 188	1128
S-18	~~486~~	Lin. Ft.	12" cast-in-place reinforced concrete piling		~~486~~			- 53	433
S-18	52	Each	Steel pile points			52			
S-24	Lump	Sum	Removal of existing structures				Lump		
S-29	444	Lin. Ft.	Subdrainage for wearing surface course	444					
I-10	~~26~~	Sq. Yd.	Type "A" riprap				~~26~~	+ 4	30
I-14	76	Lin. Ft.	Concrete gutter				76		
T-35	47	Cu. Yd.	Asphaltic concrete surface course, Type A or C	47					

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

GENERAL PLAN & ELEVATION
NOTES & ESTIMATED QUANTITIES
BRIDGE NO. UN-36-132
OVER MILL CREEK
UNION COUNTY STA-125+25
SEC. UNI-36 (12.77-13.03)

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.L.	D.L.	J.D.J.	N.E.Y.	BFG WHC	3-10-50	

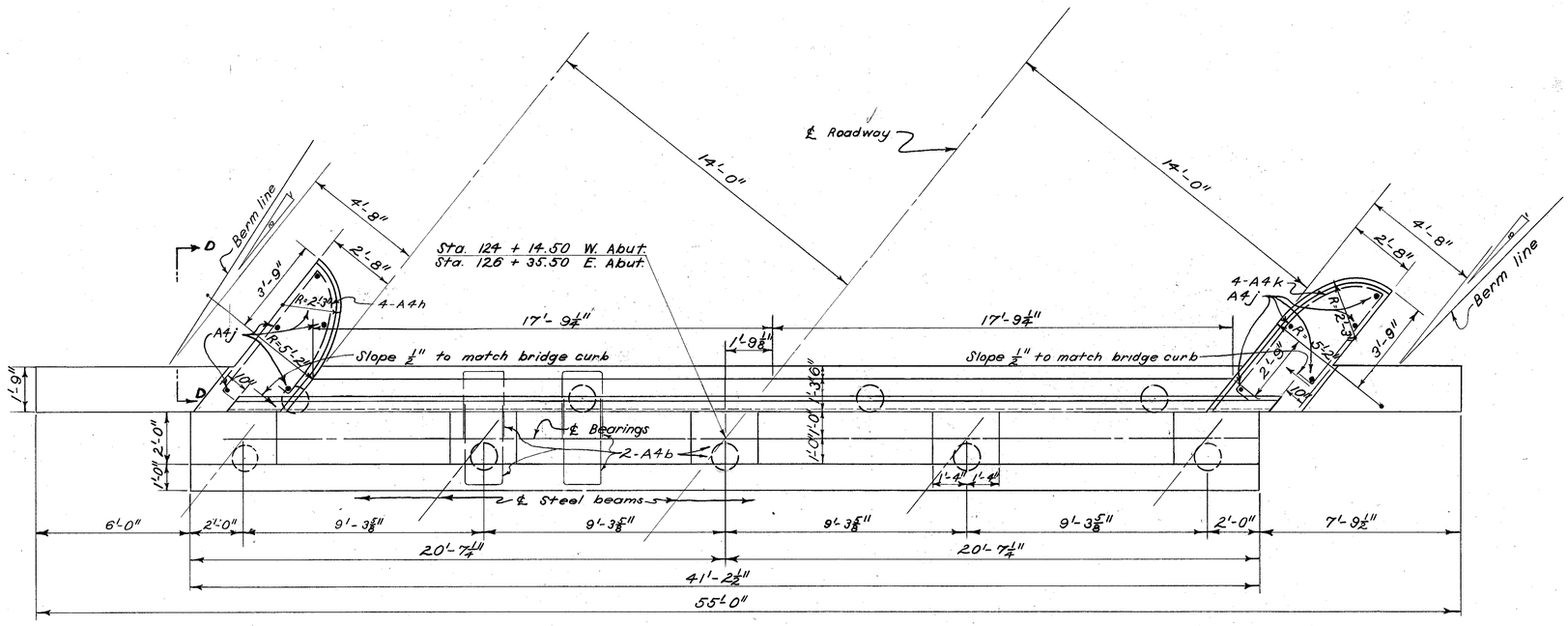
P.G.
Revised As-Built

EUGENE DIETZGEN CO. PRINTED ON IMPERIAL TRACING CLOTH FORM NO. 5525

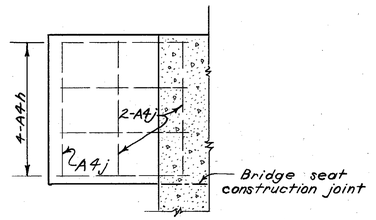
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

43/45

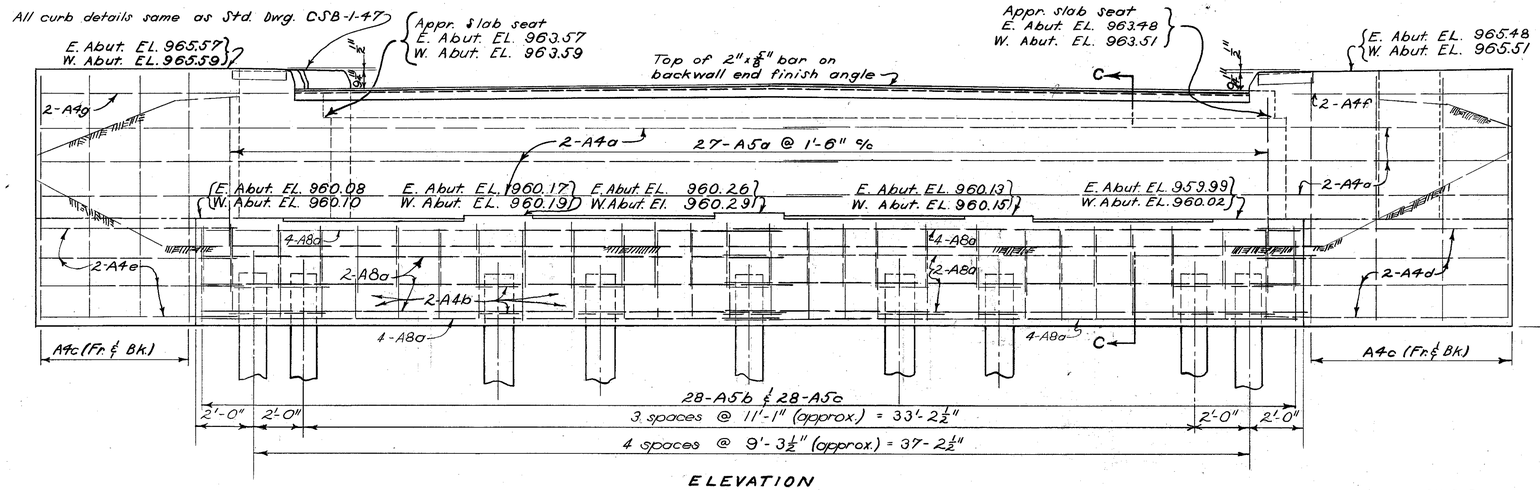
UNI-36-(12.77-13.03)



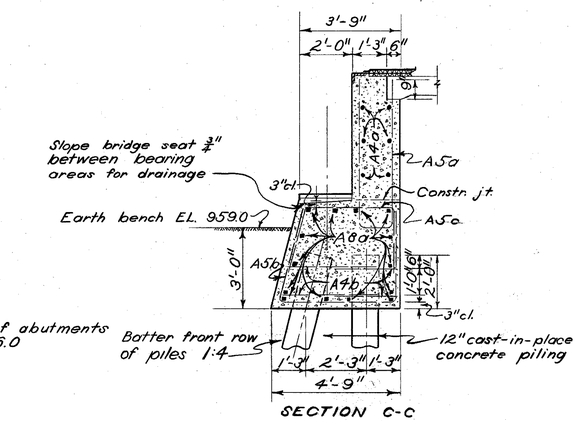
PLAN



SECTION D-D



ELEVATION



SECTION C-C

NOTES

REINFORCING STEEL CLEARANCE: All reinforcing shall be 2" clear from surface of concrete unless otherwise shown.

EARTH FILL around abutments shall be made full height of earth bench. Excavation shall then be made for abutment cap, after which piling shall be driven. If bottom forms for abutment cap are used, they shall be left in place.

BRIDGE SEAT PROCEDURE: Concrete above bridge seat construction joint shall not be placed until after steel work is erected. Steel end finish shall be used as a template for top of backwall.

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

ABUTMENT DETAILS

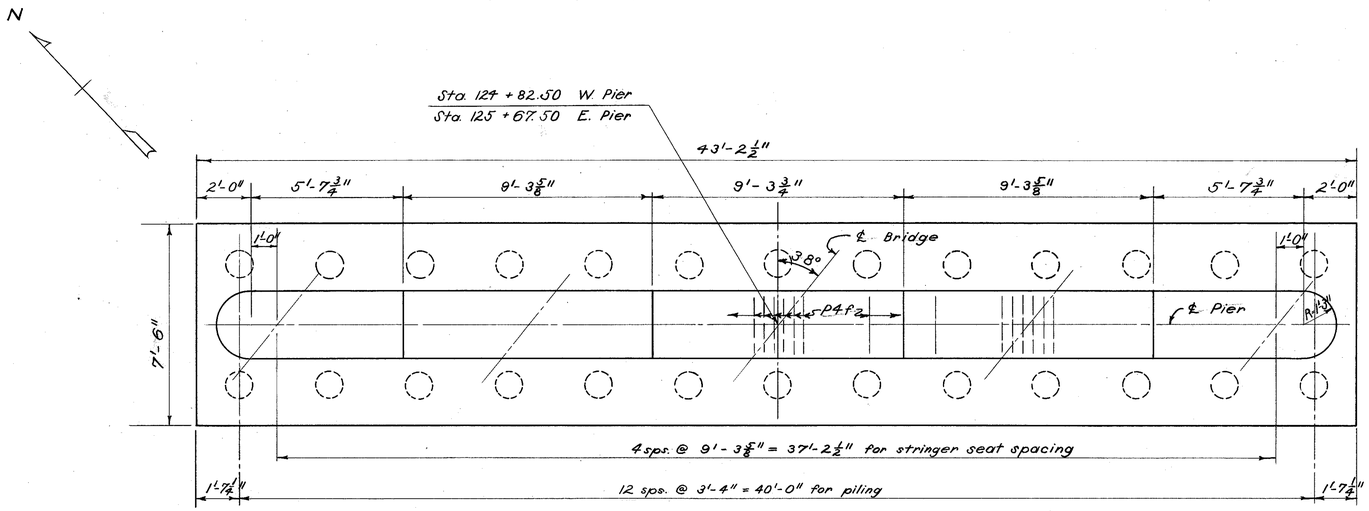
BRIDGE NO. UN-36-132
OVER MILL CREEK
UNION COUNTY SEC. UNI-36-(12.77-13.03)
S1A. 125+25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.L.	D.L.	E.J.S.	N.E.Y.	DFG WHB	3-10-50	

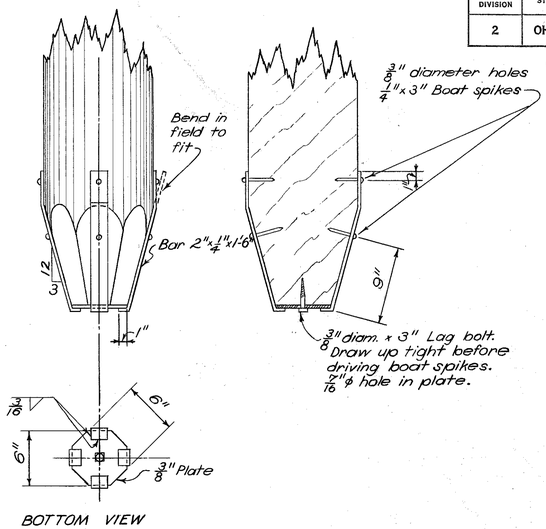
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

44
45

UNI-36-(12.77-13.03)

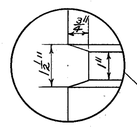


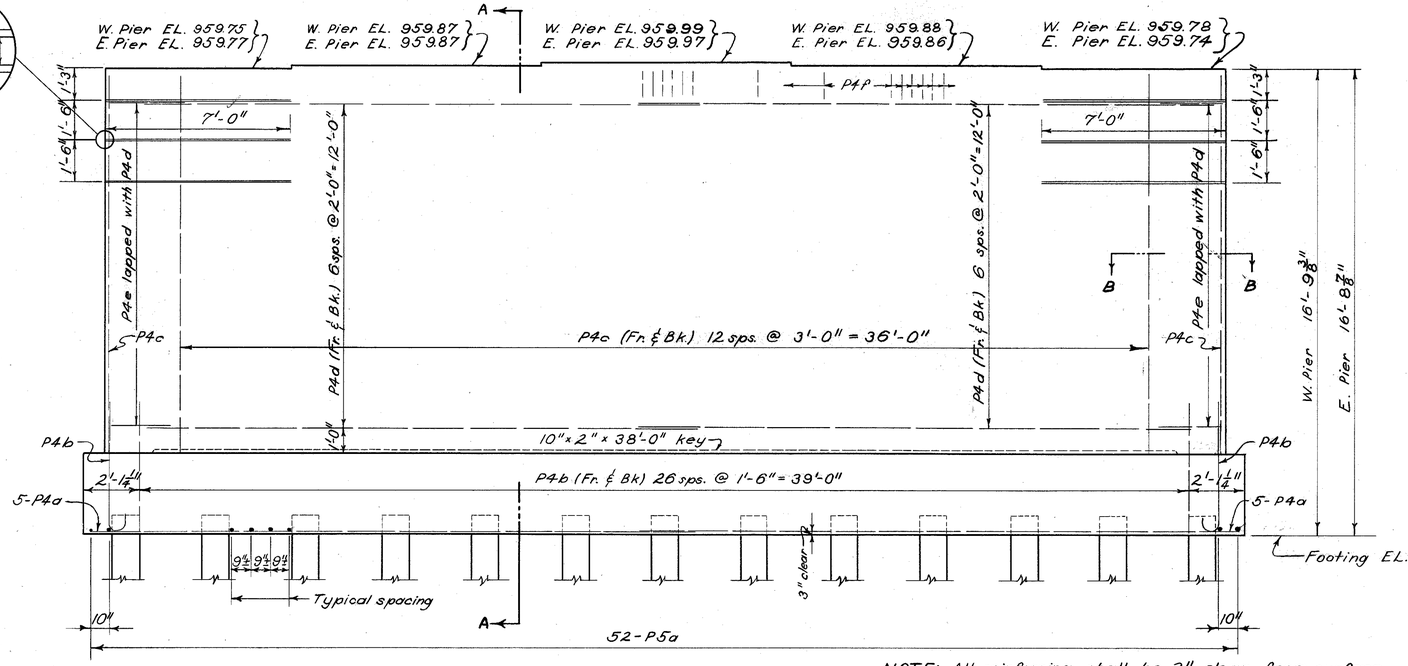
PLAN



BOTTOM VIEW

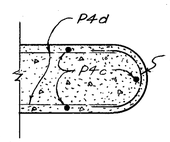
STEEL PILE POINT DETAIL



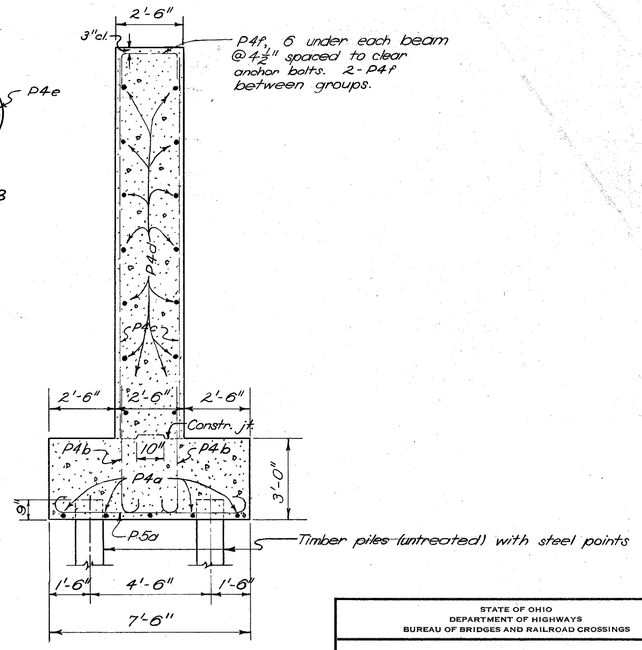


ELEVATION

NOTE: All reinforcing shall be 2" clear from surface of concrete unless otherwise shown.



SECTION B-B



SECTION A-A

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

PIER DETAILS

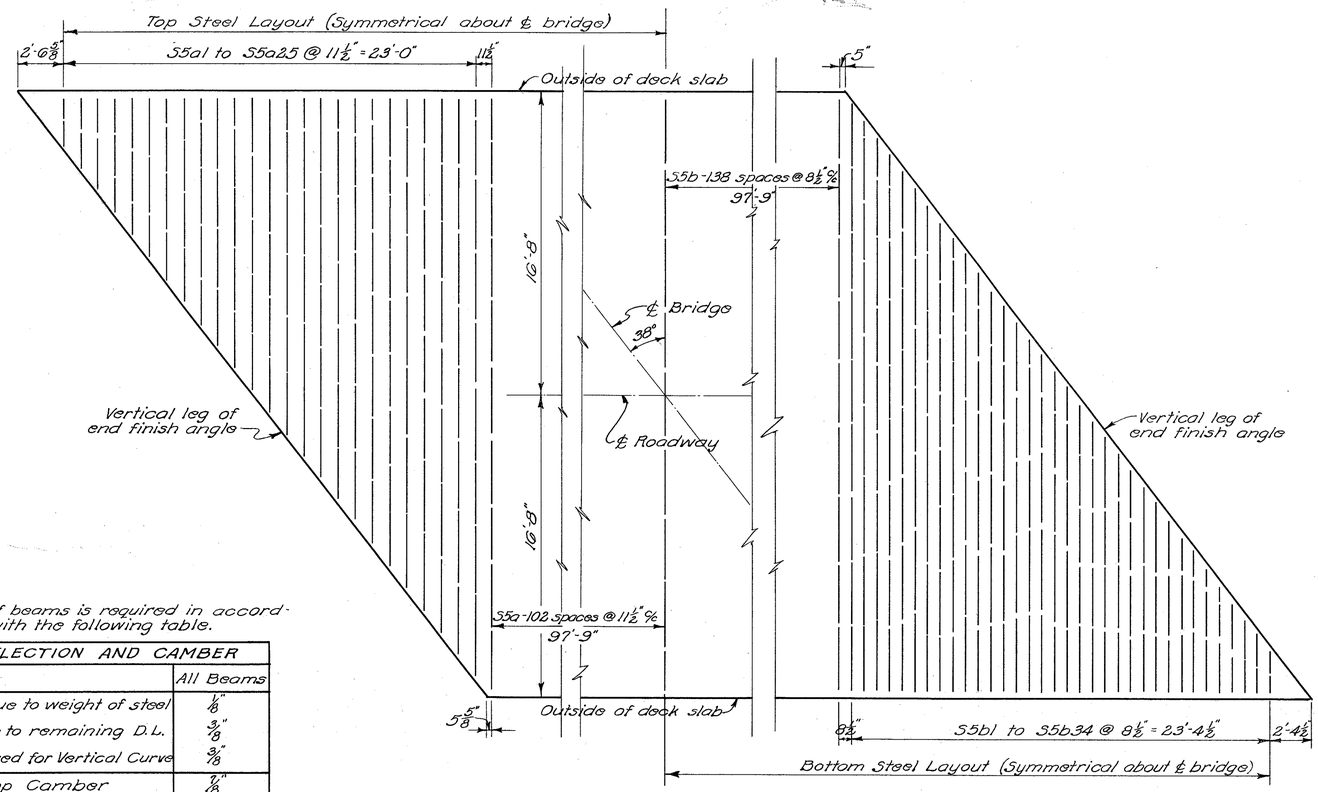
BRIDGE NO. UN-36-1.32
OVER MILL CREEK
UNION COUNTY SEC. UNI-36-(12.77-13.03)
STA. 125+25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.L.	D.L.	E.J.S.	N.E.Y.	DFG WHR	3-10-50	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-982(1)	POST WAR

45/45

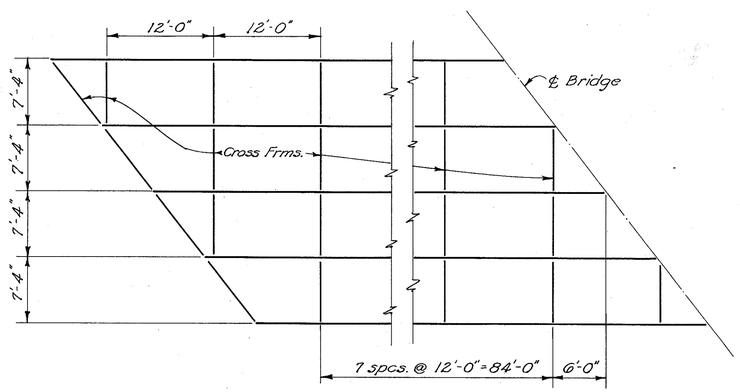
UNI-36-(12.77-13.03)



TRANSVERSE REINFORCING STEEL LAYOUT
(For longitudinal steel layout see Std. Dwg. CSB-1-47)

Cambering of beams is required in accordance with the following table.

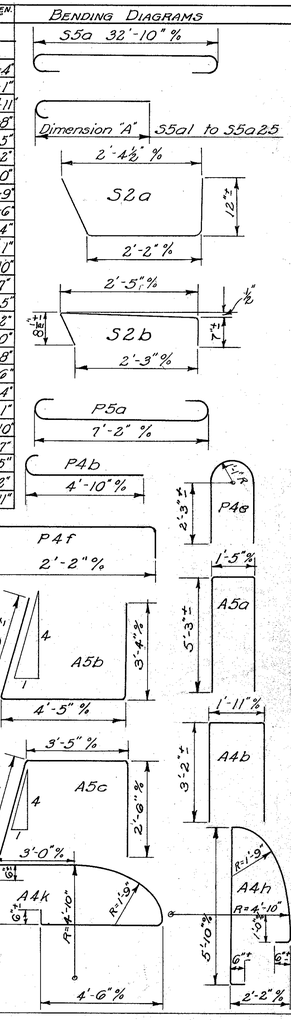
DEFLECTION AND CAMBER	
	All Beams
Deflection due to weight of steel	⅛"
Deflection due to remaining D.L.	⅜"
Camber required for Vertical Curve	⅜"
Required Shop Camber	⅞"



STRUCTURAL STEEL LAYOUT
(Symmetrical about ℄ bridge)

MARK	SIZE	NO.	LENGTH	WEIGHT	SHP	DIMEN A
Superstructure						
55a	¾"ϕ	205	34'-2"	10520	Bt.	
55a1	¾"ϕ	2	33'-0"	99	Bt.	32'-4
55a2	¾"ϕ	2	31'-9"	95	Bt.	31'-1
55a3	¾"ϕ	2	30'-7"	92	Bt.	29'-11
55a4	¾"ϕ	2	29'-4"	88	Bt.	28'-8
55a5	¾"ϕ	2	28'-1"	84	Bt.	27'-5
55a6	¾"ϕ	2	26'-10"	81	Bt.	26'-2
55a7	¾"ϕ	2	25'-8"	77	Bt.	25'-0
55a8	¾"ϕ	2	24'-5"	73	Bt.	23'-9
55a9	¾"ϕ	2	23'-2"	70	Bt.	22'-6
55a10	¾"ϕ	2	22'-0"	66	Bt.	21'-4
55a11	¾"ϕ	2	20'-9"	62	Bt.	20'-1
55a12	¾"ϕ	2	19'-6"	59	Bt.	18'-10
55a13	¾"ϕ	2	18'-3"	55	Bt.	17'-7
55a14	¾"ϕ	2	17'-1"	51	Bt.	16'-5
55a15	¾"ϕ	2	15'-10"	48	Bt.	15'-2
55a16	¾"ϕ	2	14'-8"	44	Bt.	14'-0
55a17	¾"ϕ	2	13'-4"	40	Bt.	12'-8
55a18	¾"ϕ	2	12'-2"	37	Bt.	11'-6
55a19	¾"ϕ	2	11'-0"	33	Bt.	10'-4
55a20	¾"ϕ	2	9'-9"	29	Bt.	9'-1
55a21	¾"ϕ	2	8'-6"	26	Bt.	7'-10
55a22	¾"ϕ	2	7'-3"	22	Bt.	6'-7
55a23	¾"ϕ	2	6'-1"	18	Bt.	5'-5"
55a24	¾"ϕ	2	4'-10"	15	Bt.	4'-2"
55a25	¾"ϕ	2	3'-7"	11	Bt.	2'-11"
55b	¾"ϕ	277	32'-9"	13,626	Str.	
55b1	¾"ϕ	2	32'-7"	98	Str.	
55b2	¾"ϕ	2	31'-8"	95	Str.	
55b3	¾"ϕ	2	30'-9"	92	Str.	
55b4	¾"ϕ	2	29'-10"	90	Str.	
55b5	¾"ϕ	2	29'-0"	87	Str.	
55b6	¾"ϕ	2	28'-1"	84	Str.	
55b7	¾"ϕ	2	27'-2"	82	Str.	
55b8	¾"ϕ	2	26'-3"	79	Str.	
55b9	¾"ϕ	2	25'-4"	76	Str.	
55b10	¾"ϕ	2	24'-5"	73	Str.	
55b11	¾"ϕ	2	23'-6"	71	Str.	
55b12	¾"ϕ	2	22'-7"	68	Str.	
55b13	¾"ϕ	2	21'-8"	65	Str.	
55b14	¾"ϕ	2	20'-10"	63	Str.	
55b15	¾"ϕ	2	19'-10"	60	Str.	
55b16	¾"ϕ	2	19'-0"	57	Str.	
55b17	¾"ϕ	2	18'-1"	54	Str.	
55b18	¾"ϕ	2	17'-2"	52	Str.	
55b19	¾"ϕ	2	16'-3"	49	Str.	
55b20	¾"ϕ	2	15'-4"	46	Str.	
55b21	¾"ϕ	2	14'-5"	43	Str.	
55b22	¾"ϕ	2	13'-6"	41	Str.	
55b23	¾"ϕ	2	12'-7"	38	Str.	
55b24	¾"ϕ	2	11'-8"	35	Str.	
55b25	¾"ϕ	2	10'-10"	33	Str.	
55b26	¾"ϕ	2	9'-11"	30	Str.	

BENDING DIAGRAMS



MARK	SIZE	NO.	LENGTH	WEIGHT	SHP
Superstructure (cont'd)					
55b27	¾"ϕ	2	9'-0"	27	Str.
55b28	¾"ϕ	2	8'-1"	24	Str.
55b29	¾"ϕ	2	7'-2"	21	Str.
55b30	¾"ϕ	2	6'-3"	19	Str.
55b31	¾"ϕ	2	5'-4"	16	Str.
55b32	¾"ϕ	2	4'-6"	14	Str.
55b33	¾"ϕ	2	3'-7"	11	Str.
55b34	¾"ϕ	8	2'-8"	8	Str.
55c	¾"ϕ	64	30'-0"	2884	Str.
54a	⅞"ϕ	424	2'9'-9"	13,157	Str.
54b	⅞"ϕ	48	34'-0"	1702	Str.
52a	½"ϕ	298	4'-0"	796	Bt.
52b	½"ϕ	298	3'-6"	694	Bt.
Piers					
P5a	¾"ϕ	104	8'-6"	1328	Bt.
P4a	⅞"ϕ	30	22'-6"	469	Str.
P4b	⅞"ϕ	112	5'-5"	633	Bt.
P4c	⅞"ϕ	56	13'-6"	788	Str.
P4d	⅞"ϕ	56	20'-6"	1198	Str.
P4e	⅞"ϕ	28	7'-11"	231	Bt.
P4f	⅞"ϕ	76	3'-8"	291	Bt.
Abutments					
A8a	1"ϕ	56	22'-1"	4204	Str.
A5a	¾"ϕ	54	11'-7"	939	Bt.
A5b	¾"ϕ	56	10'-10"	911	Bt.
A5c	¾"ϕ	56	8'-2"	687	Bt.
A4a	⅞"ϕ	24	28'-6"	714	Str.
A4b	⅞"ϕ	72	8'-0"	600	Bt.
A4c	⅞"ϕ	38	9'-2"	300	Str.
A4d	⅞"ϕ	16	10'-6"	175	Str.
A4e	⅞"ϕ	16	8'-9"	138	Str.
A4f	⅞"ϕ	4	7'-6"	31	Str.
A4g	⅞"ϕ	4	9'-9"	39	Str.
A4h	⅞"ϕ	8	11'-8"	97	Bt.
A4j	¾"ϕ	20	5'-0"	104	Str.
A4k	⅞"ϕ	8	12'-4"	103	Bt.
Replacement Bars					
REB	1"ϕ	1	7'-4"	25	Str.
RE3	¾"ϕ	2	6'-6"	20	Str.
RE4	⅞"ϕ	2	6'-1"	13	Str.
RE2	½"ϕ	1	5'-8"	4	Str.

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

SUPERSTRUCTURE DETAILS & STEEL LIST
BRIDGE NO. UN-36-132
OVER MILL CREEK
UNION COUNTY SEC UNI-36-(12.77-13.03)
STA. 125+23.5

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.L.	D.L.	J.D.J.	N.E.Y.	D.F.G. W.H.C.	3-10-50	