

FILE No.

File-A-9

File # 256

STATE HIGHWAY DEPARTMENT OF OHIO  
BUREAU OF CONSTRUCTION

# SEC. A-1 - DELAWARE - MARYSVILLE ROAD

I.C.H. No. 238 PETITION No. 4269  
DELAWARE COUNTY  
DELAWARE TWP. MAY 1921

INDEX

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THE STANDARD SPECIFICATIONS OF THE STATE HIGHWAY DEPARTMENT OF OHIO IN FORCE ON DATE OF CONTRACT WILL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING OF TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS SHOWN ON THE PLAN AND ESTIMATES.

APPROVED: *W.C. Roberts*  
DATE, *June 27, 1921* RESIDENT ENGINEER

APPROVED: *Harry J. Wick*  
DATE, *July 28, 1921* DIVISION ENGINEER

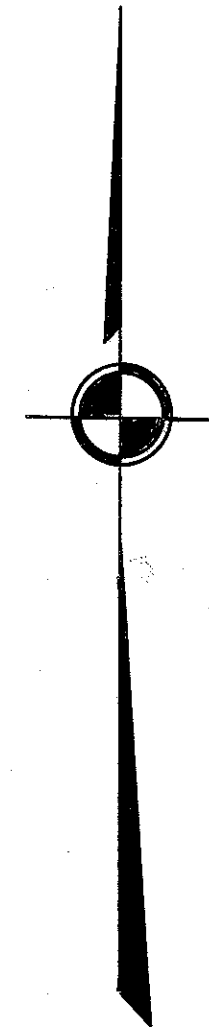
APPROVED: *Ethel S. Smith*  
DATE, *June 29, 1921* CHIEF HIGHWAY ENGINEER

APPROVED: *Leon C. Glenick*  
DATE, *6/29/21* STATE HIGHWAY COMMISSIONER

APPROVED: \_\_\_\_\_  
DATE, \_\_\_\_\_ DISTRICT ENGINEER  
BUREAU OF PUBLIC ROADS.

APPROVED: \_\_\_\_\_  
DATE, \_\_\_\_\_ CHIEF ENGINEER  
BUREAU OF PUBLIC ROADS.

APPROVED: \_\_\_\_\_  
DATE, \_\_\_\_\_ CHIEF OF BUREAU.



CONSTRUCTION BUREAU  
APR 13 1921  
GROUND PHOTOLAB

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

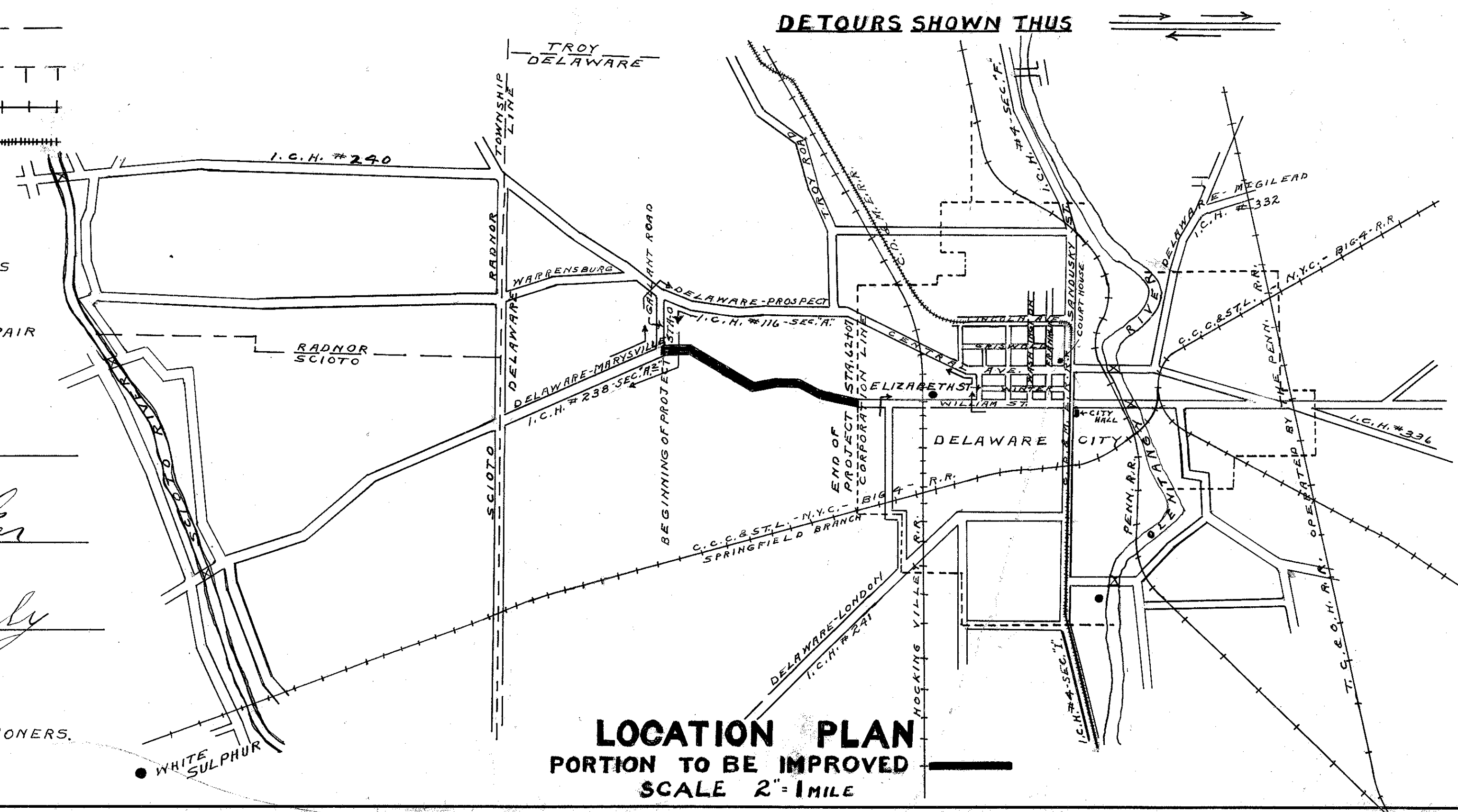
- CONVENTIONAL SIGNS**
- STATE LINE -----
  - COUNTY LINE -----
  - TOWNSHIP LINE -----
  - SECTION LINE -----
  - PROPERTY NOT FENCED -----
  - CENTER LINE -----
  - CITY OR VILLAGE LINE -----
  - FENCE -----
  - TELEPHONE OR TELEGRAPH T T T T T
  - STEAM RAILROAD + + + + +
  - ELECTRIC LINE = = = = =

WE, THE COMMISSIONERS OF DELAWARE COUNTY HEREBY APPROVE THESE PLANS AND CERTIFY THAT THE RIGHT-OF-WAY 60 FEET WIDE IS AVAILABLE FOR THE CONSTRUCTION, MAINTENANCE AND REPAIR OF THE ABOVE HIGHWAY.

*J. R. Smart*  
*E. L. Shoemaker*  
*C. M. Shively*

DATE, *June 27, 1921* COUNTY COMMISSIONERS.

DELAWARE 238 A-1  
1921

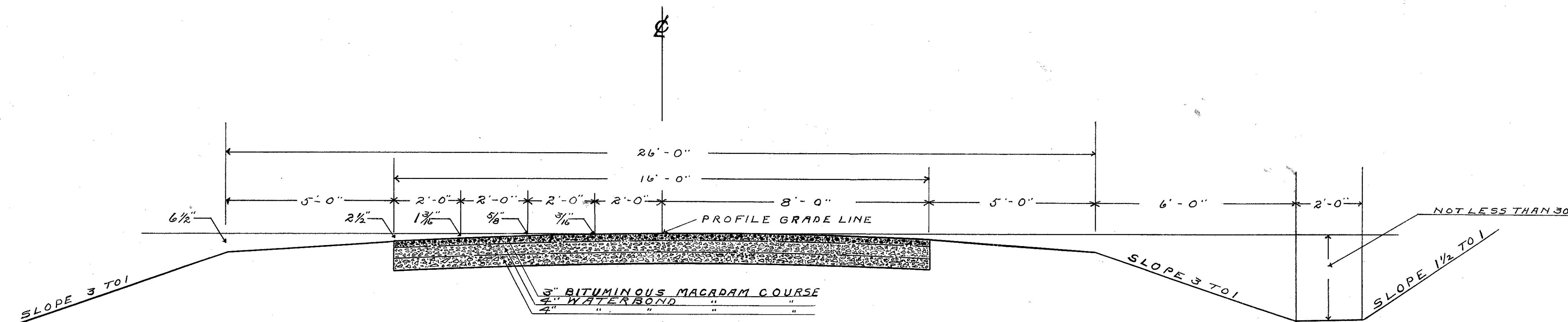


LOCATION PLAN  
PORTION TO BE IMPROVED  
SCALE 2"=1 MILE

## TYPICAL SECTIONS

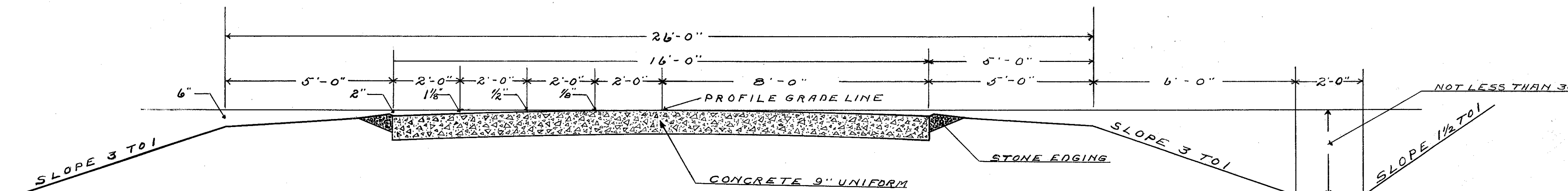
**NOTE**  
**AREA OF PAVEMENT**  
 STA. 0 TO STA. 62+07 = 11035.59 YDS.  
 ADD FOR CURVE WIDENING  
 STA. 5+26 = 116 " "  
 " 10+09 = 57 " "  
 " 30+64 = 148 " "  
 " 61+49 = 53 " "  
**TOTAL PAVEMENT** = 11409 " "  
**AREA OF FINE GRADING** = 11409 " "

REMOVE HEDGE BY ROOTS AND BURN  
 STA. 29+16 TO 32+50 = 334 LIN. FT.  
 THE B.C. AND E.C. OF ALL CURVES ARE REFERENCED IN WITH HUB STAKES SET AT RIGHT ANGLES TO THE TANGENT AND 25' DISTANT NORTH AND SOUTH FROM THE  $\phi$  LINE



### BITUMINOUS MACADAM TYPE - "A"

**NOTE**  
 ALL SLOPES ARE TO BE, AS SHOWN ON THIS SHEET - UNLESS OTHERWISE SHOWN ON THE CROSS-SECTIONS

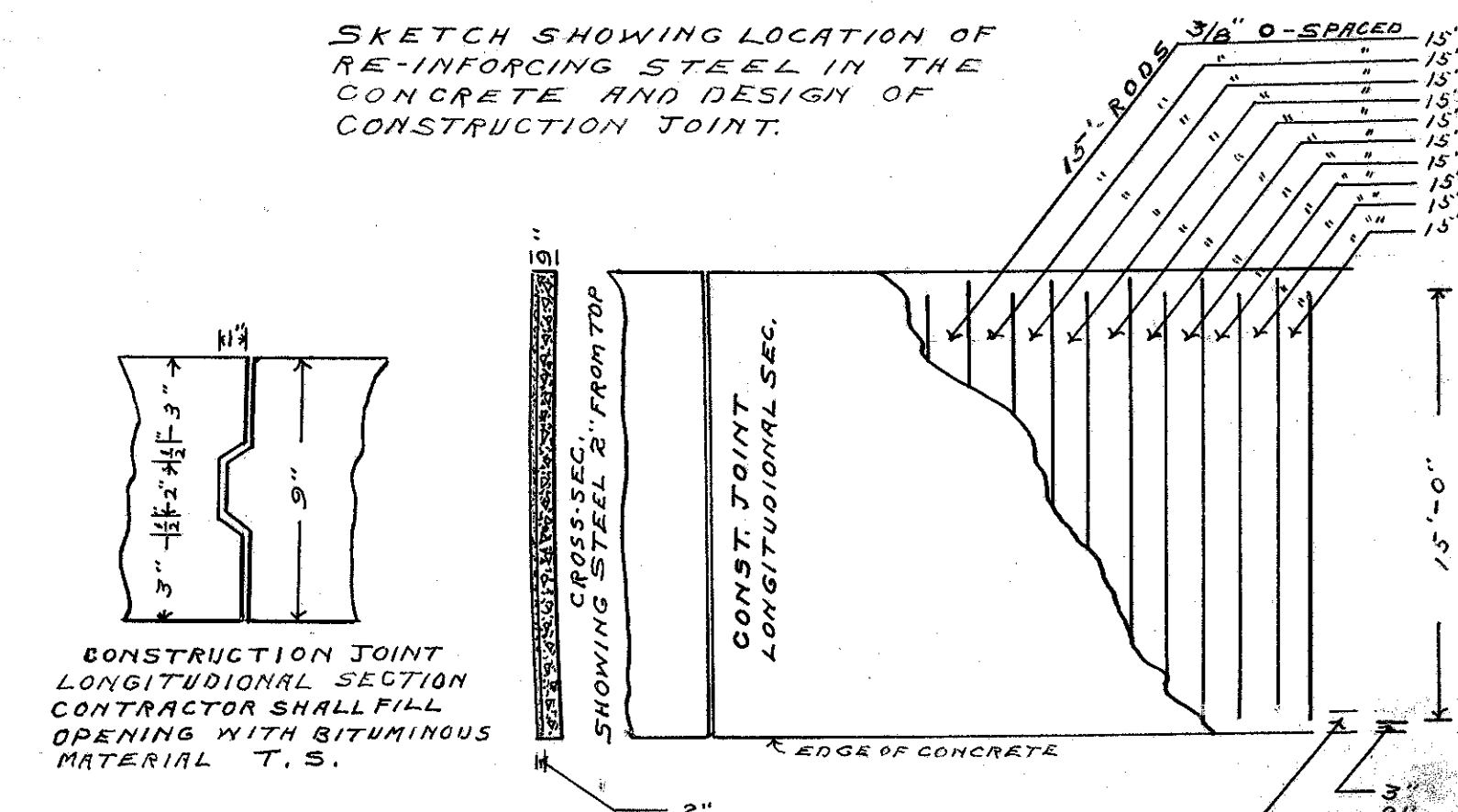


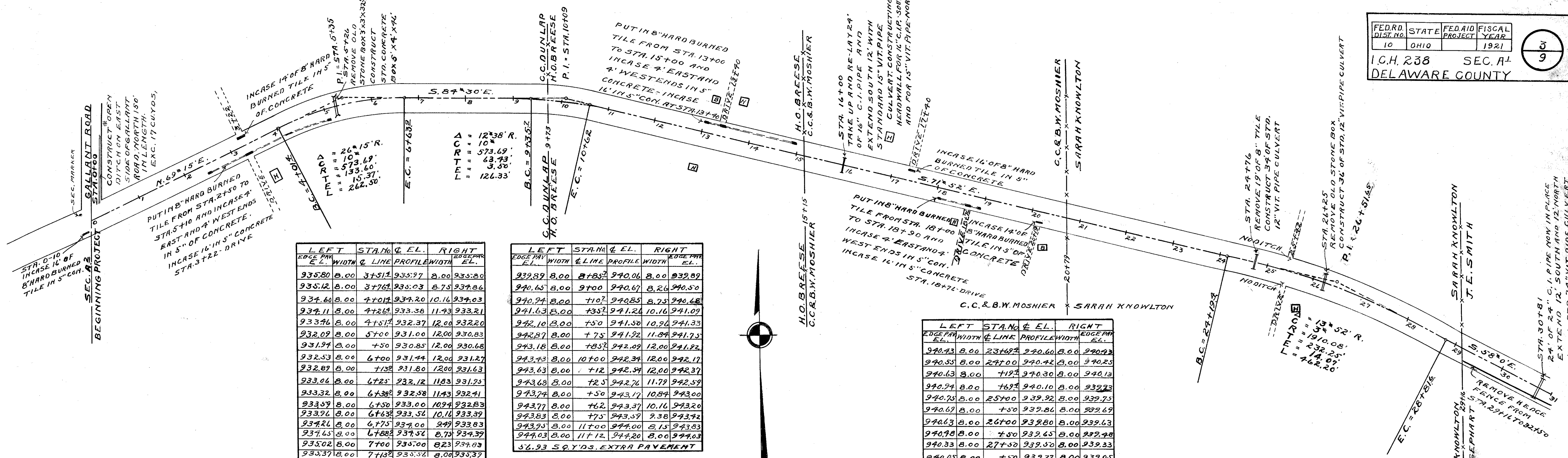
### CONCRETE TYPE - "B"

**NOTE**  
 LOOSE STONE EDGING 12" WIDE, 1" ABOVE AND 6" BELOW TOP OF PAVEMENT SHALL BE BUILT ALONG BOTH SIDES OF TYPE "B" AND ROLLED WITH A FARM ROLLER. THE STONE USED SHALL BE FROM 2 1/4" TO DUST. THE LENGTH OF THE LOOSE STONE EDGING EQUALS THE LENGTH OF THE CONCRETE PAVEMENT.

**NOTE**  
 EXCAVATION QUANTITIES WERE ORIGINALLY COMPUTED, USING 11" X 16" TEMPLAT TO CORRECT FOR 9" X 16" TEMPLAT. SUBTRACT 630 CU. YARDS FROM THE ORIGINAL TOTAL OF 5630 CU. YARDS, LEAVING A BALANCE OF 5000 CU. YARDS.

SKETCH SHOWING LOCATION OF RE-INFORCING STEEL IN THE CONCRETE AND DESIGN OF CONSTRUCTION JOINT.





LEFT EDGE PAV. E.L.	WIDTH	STA. NO. & LINE	EL. & PROFILE	RIGHT EDGE PAV. E.L.	WIDTH
935.80	8.00	3+51.2	935.77	8.00	935.80
935.12	8.00	3+76.2	935.03	8.75	934.84
934.60	8.00	4+01.2	934.20	10.16	934.03
934.11	8.00	4+26.2	933.38	11.43	933.21
933.46	8.00	4+51.2	932.37	12.00	932.20
932.09	8.00	5+00	931.00	12.00	930.83
931.94	8.00	+50	930.85	12.00	930.68
932.53	8.00	6+00	931.44	12.00	931.27
932.87	8.00	+132	931.60	12.00	931.63
933.04	8.00	6+25	932.12	11.83	931.75
933.32	8.00	6+38	932.58	11.43	932.41
933.59	8.00	6+50	933.00	10.94	932.83
933.76	8.00	6+63	933.54	10.16	933.39
934.21	8.00	6+75	934.00	9.99	933.83
934.65	8.00	6+88	934.54	8.75	934.39
935.02	8.00	7+00	935.00	8.23	934.83
935.37	8.00	7+13	935.54	8.00	935.39

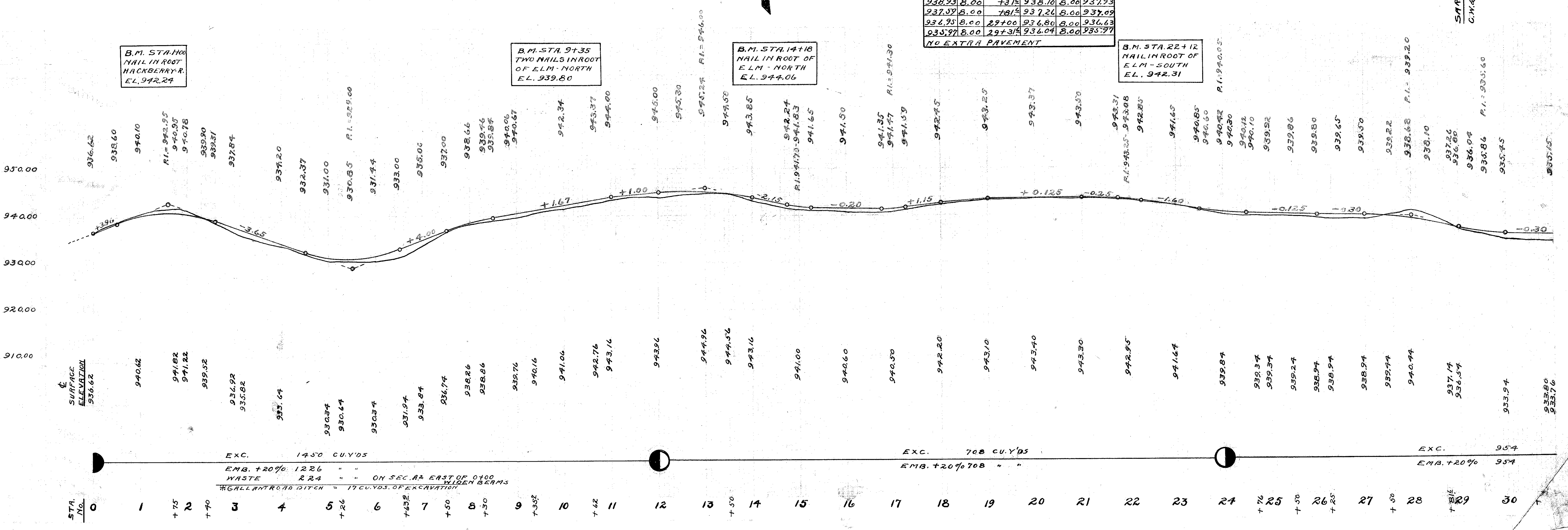
116.42 SQ. YDS. EXTRA PAVEMENT

LEFT EDGE PAV. E.L.	WIDTH	STA. NO. & LINE	EL. & PROFILE	RIGHT EDGE PAV. E.L.	WIDTH
939.89	8.00	8+85	940.06	8.00	939.89
940.65	8.00	9+00	940.67	8.26	940.50
940.94	8.00	+107	940.85	8.75	940.68
941.63	8.00	+352	941.26	10.16	941.09
942.10	8.00	+50	941.50	10.96	941.33
942.87	8.00	+75	941.92	11.84	941.75
943.18	8.00	+85	942.09	12.00	941.92
943.43	8.00	10+00	942.34	12.00	942.17
943.63	8.00	+12	942.54	12.00	942.37
943.68	8.00	+25	942.76	11.79	942.59
943.74	8.00	+50	943.17	10.84	943.00
943.77	8.00	+62	943.37	10.16	943.20
943.83	8.00	+75	943.59	9.38	943.42
943.95	8.00	11+00	944.00	8.15	943.83
944.03	8.00	11+12	944.20	8.00	944.03

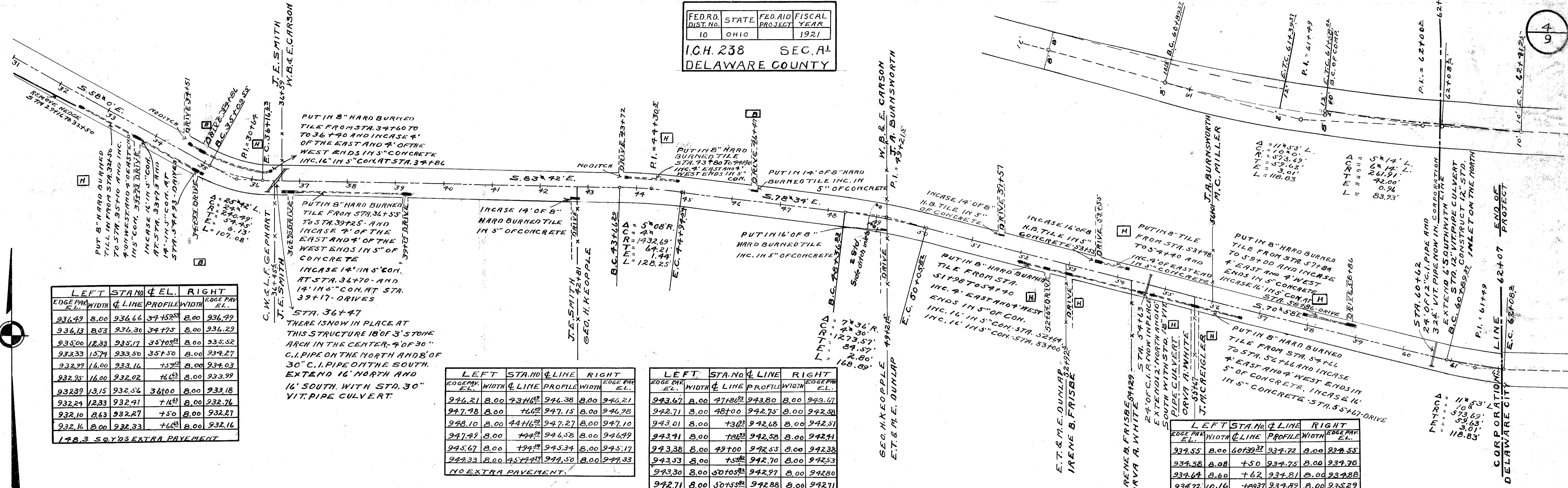
36.93 SQ. YDS. EXTRA PAVEMENT

LEFT EDGE PAV. E.L.	WIDTH	STA. NO. & LINE	EL. & PROFILE	RIGHT EDGE PAV. E.L.	WIDTH
940.43	8.00	23+67	940.60	8.00	940.43
940.55	8.00	24+00	940.42	8.00	940.25
940.63	8.00	+19	940.30	8.00	940.13
940.74	8.00	+62	940.10	8.00	939.73
940.75	8.00	25+00	939.92	8.00	939.75
940.67	8.00	+50	939.86	8.00	939.69
940.63	8.00	26+00	939.80	8.00	939.63
940.78	8.00	+50	939.65	8.00	939.48
940.33	8.00	27+50	939.50	8.00	939.33
940.05	8.00	+50	939.22	8.00	939.05
939.57	8.00	28+00	938.68	8.00	938.51
938.93	8.00	+31	938.10	8.00	937.93
937.97	8.00	+81	937.26	8.00	937.09
936.95	8.00	29+00	936.80	8.00	936.63
935.97	8.00	29+31	936.04	8.00	935.97

NO EXTRA PAVEMENT



FED. RD. DIST. NO. 10 STATE OHIO FED. AID PROJECT YEAR 1921  
 I.C.H. 238 SEC. A-1  
 DELAWARE COUNTY



LEFT EDGE PAV. EL.	WIDTH	CL. LINE	PROFILE	RIGHT EDGE PAV. EL.
936.49	8.00	936.66	37+53.25	936.79
936.13	8.53	936.30	37+75	936.29
935.00	12.33	935.17	37+95.25	935.52
933.33	13.74	933.50	35+50	934.27
932.99	14.00	933.16	75.25	934.03
932.75	16.00	932.02	76.25	933.99
932.39	13.15	932.54	36+00	933.18
932.24	12.33	932.41	7+16.25	932.76
932.10	8.63	932.27	+50	932.27
932.16	8.00	932.33	+68.25	932.16

178.3 SQ. YDS. EXTRA PAVEMENT

LEFT EDGE PAV. EL.	WIDTH	CL. LINE	PROFILE	RIGHT EDGE PAV. EL.
946.21	8.00	946.38	8.00	946.21
947.98	8.00	947.15	8.00	947.98
948.10	8.00	947.27	8.00	947.10
947.49	8.00	946.58	8.00	946.49
945.67	8.00	944.34	8.00	945.17
944.33	8.00	944.50	8.00	944.33

NO EXTRA PAVEMENT.

LEFT EDGE PAV. EL.	WIDTH	CL. LINE	PROFILE	RIGHT EDGE PAV. EL.
943.67	8.00	943.80	8.00	943.67
942.71	8.00	942.75	8.00	942.58
943.01	8.00	942.68	8.00	942.51
943.71	8.00	942.58	8.00	942.41
943.38	8.00	942.55	8.00	942.38
943.53	8.00	942.70	8.00	942.53
943.30	8.00	942.97	8.00	942.80
942.71	8.00	942.88	8.00	942.71

NO EXTRA PAVEMENT

LEFT EDGE PAV. EL.	WIDTH	CL. LINE	PROFILE	RIGHT EDGE PAV. EL.
934.55	8.00	934.72	8.00	934.55
934.58	8.08	934.75	8.00	934.70
934.64	8.60	934.81	8.00	934.88
934.72	10.16	934.89	8.00	935.29
934.83	10.77	935.00	8.00	935.53
934.98	12.00	935.15	8.00	936.24
935.16	12.00	935.33	8.00	936.42
935.39	11.60	935.51	8.40	936.43
935.83	10.53	936.00	9.47	936.46
		62+07		

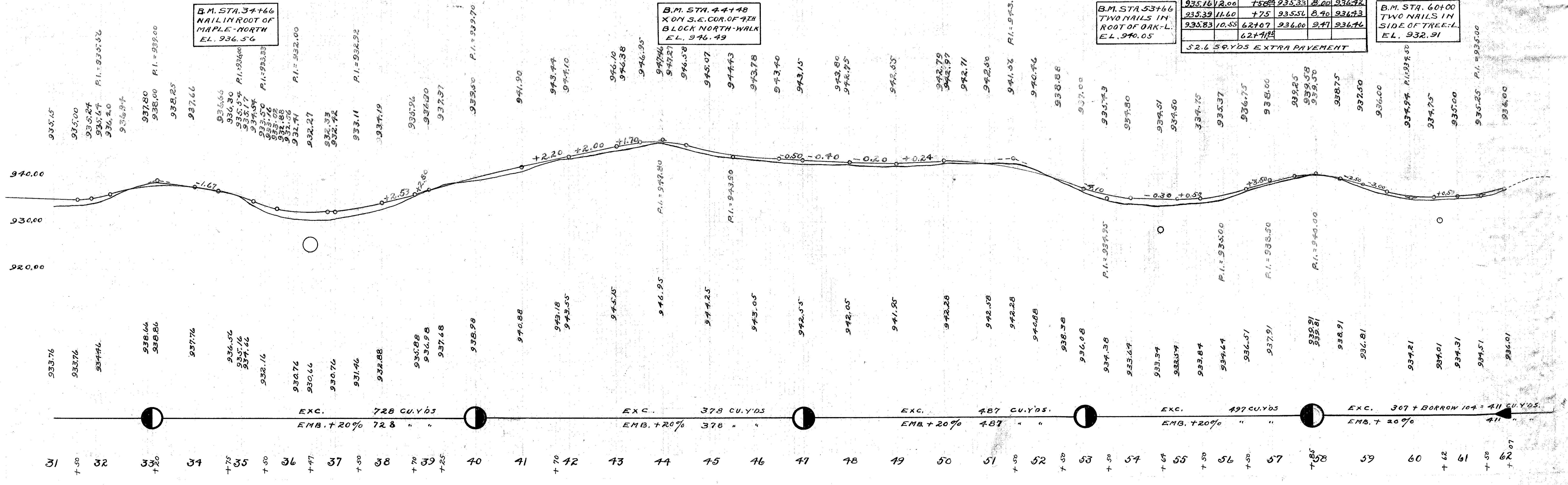
52.6 SQ. YDS. EXTRA PAVEMENT

B.M. STA. 37+66  
 NAIL IN ROOT OF  
 MAPLE-NORTH  
 EL. 936.56

B.M. STA. 44+48  
 X ON S.E. COR. OF 4TH  
 BLOCK NORTH-WALK  
 EL. 946.49

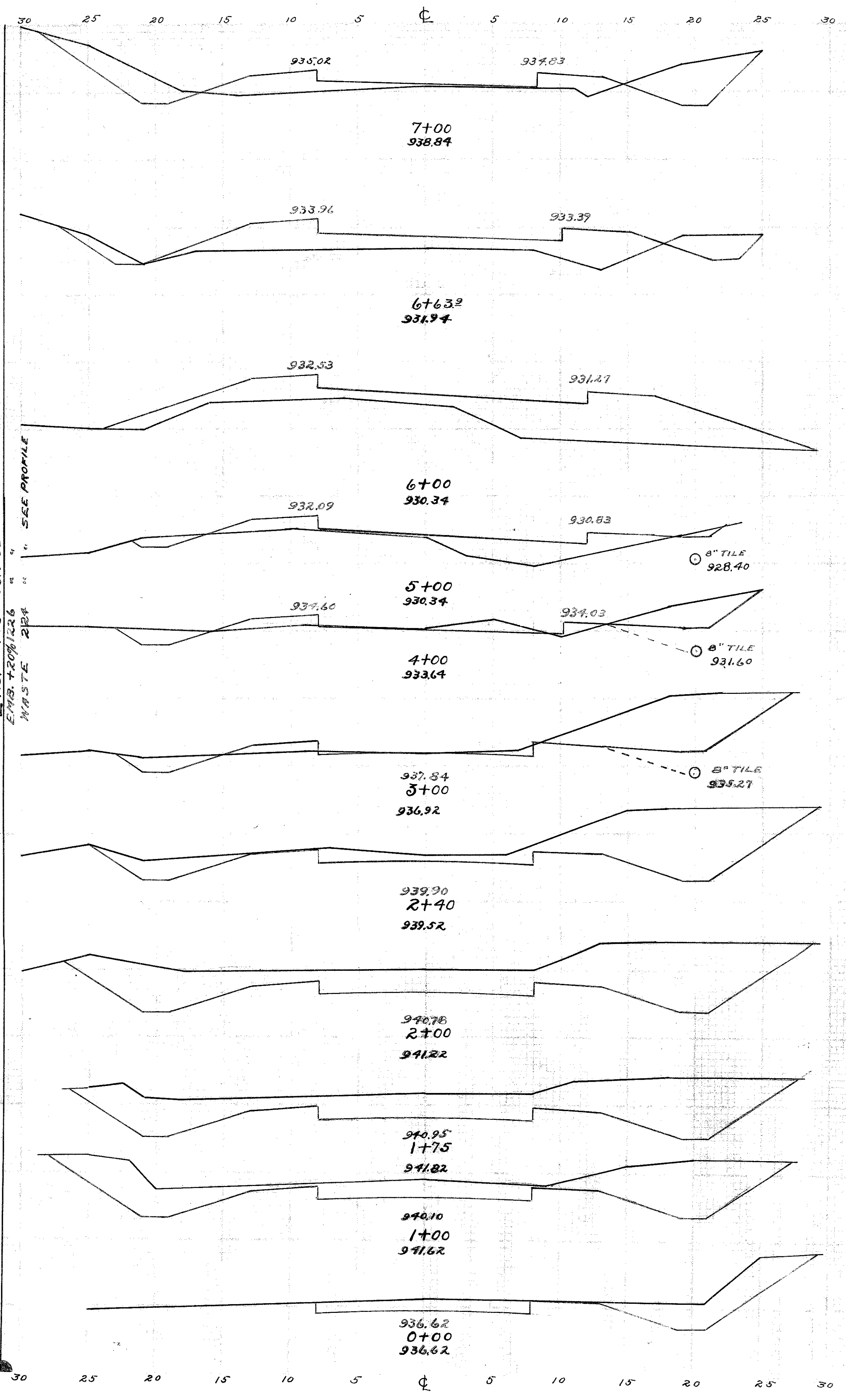
B.M. STA. 53+66  
 TWO NAILS IN  
 ROOT OF OAK-L.  
 EL. 940.05

B.M. STA. 60+00  
 TWO NAILS IN  
 SIDE OF TREE-L.  
 EL. 932.91

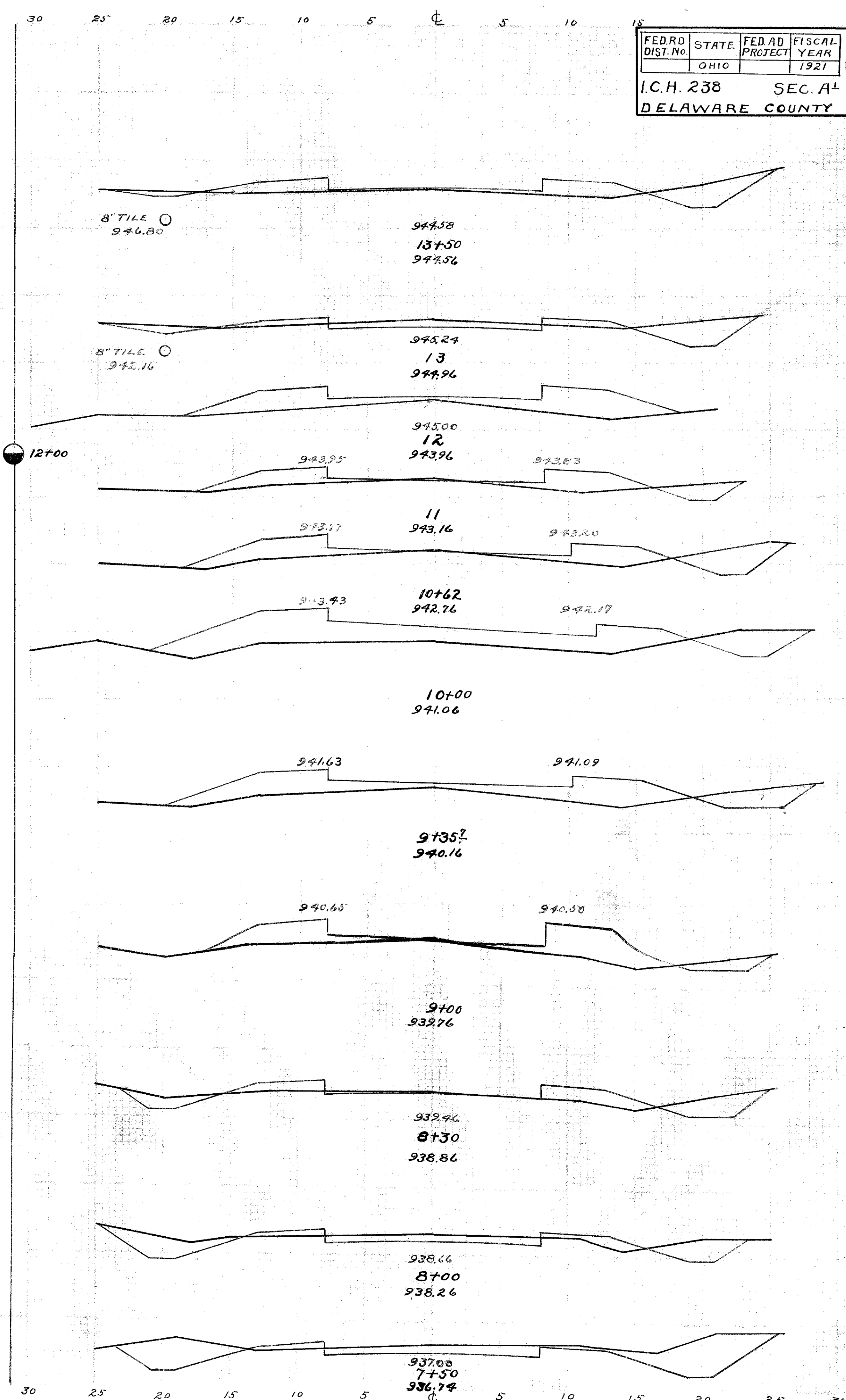


END CUT	AREA CUT	C.U. CUT	YDS CUT	END FILL	AREA FILL	C.U. FILL	YDS FILL
34	24	33	50				
15	50	8	168				
92	3	230					
6	32	50	76				
21	9	131	28				
50	6	169	4				
105		167					
120		107					
112		297					
102		248					
32							

EXC. 1450 CU YDS  
EMB. + 200/1236  
WASTE 284  
SEE PROFILE

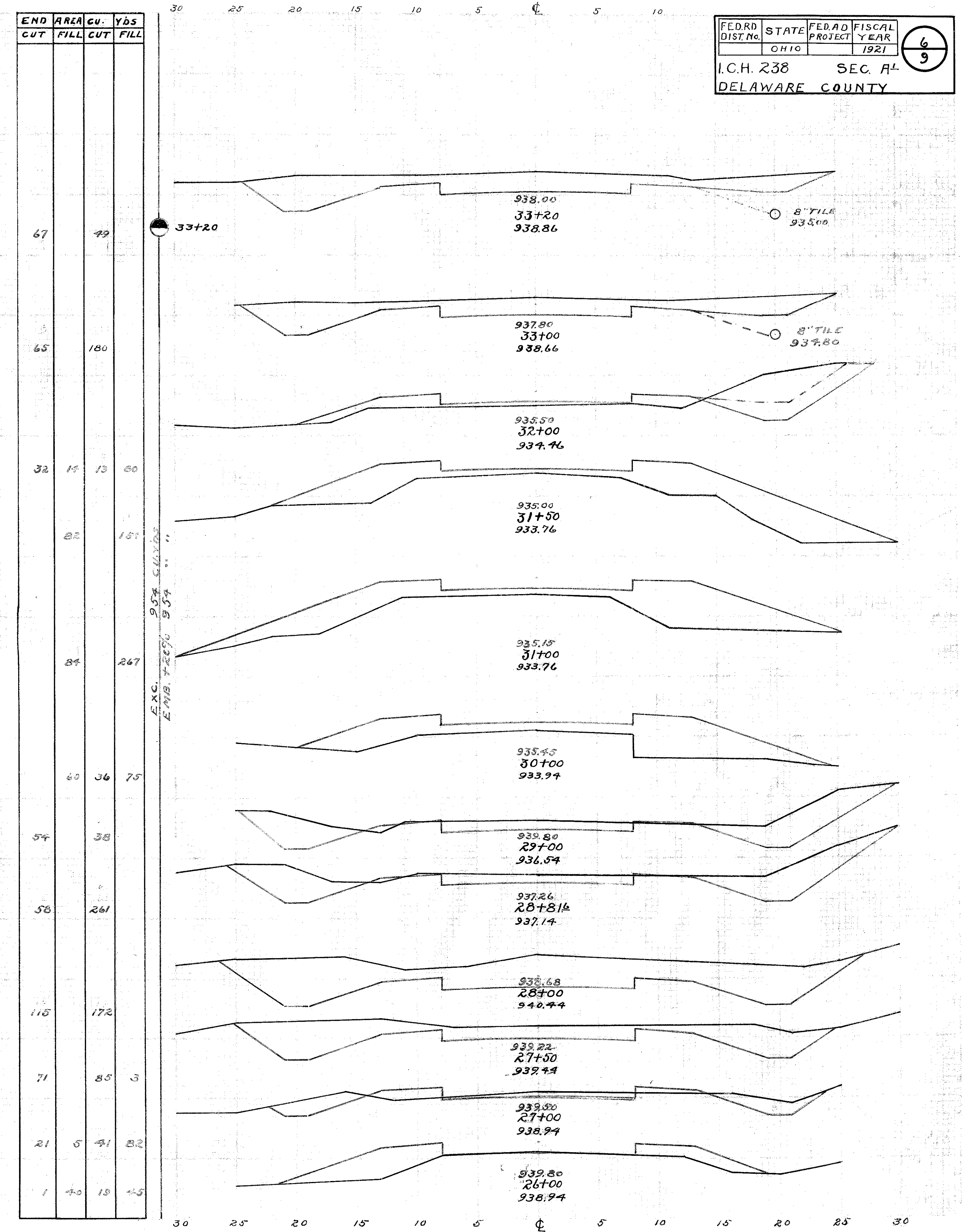
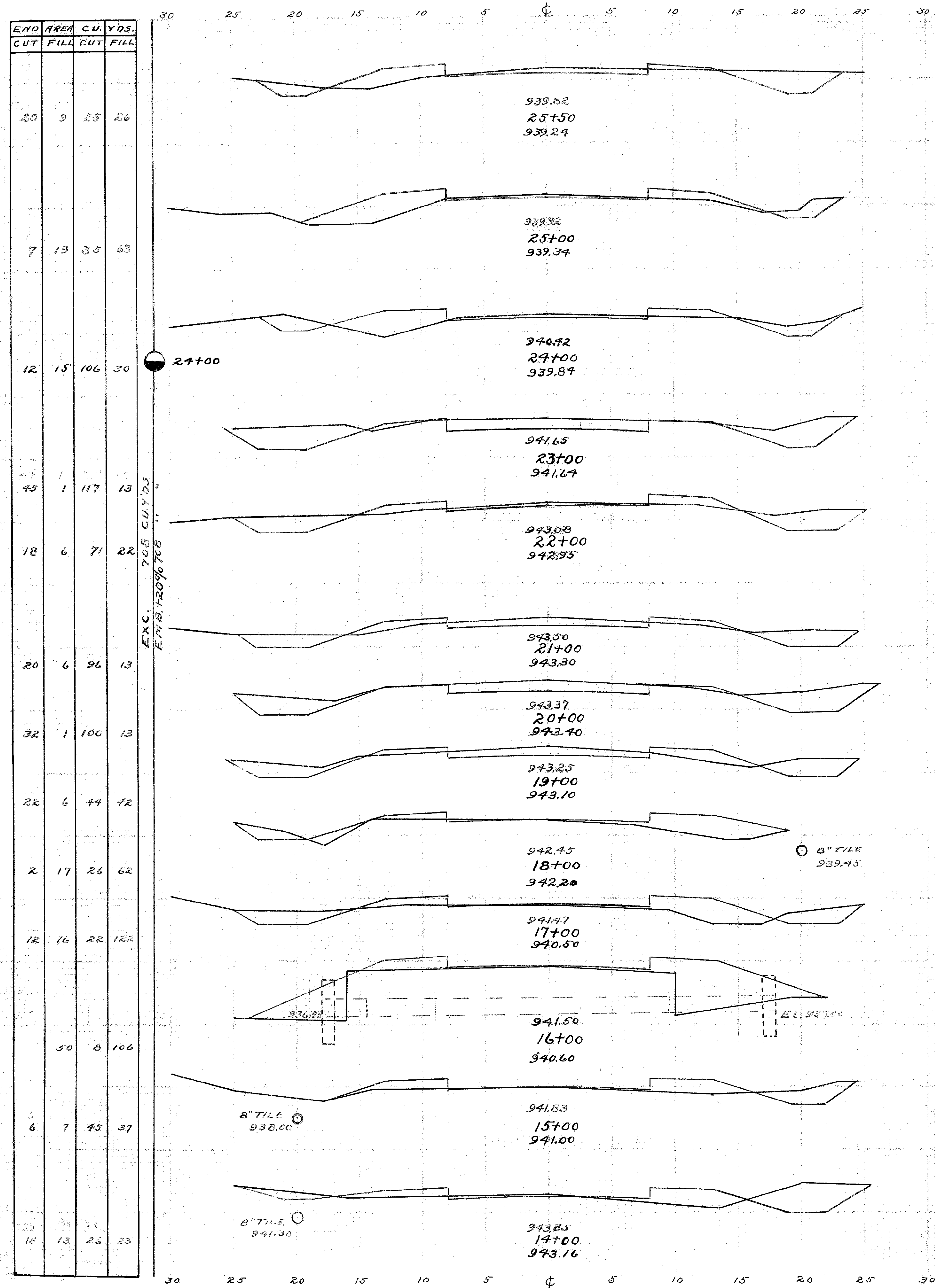


END CUT	AREA CUT	C.U. CUT	YDS CUT	END FILL	AREA FILL	C.U. FILL	YDS FILL
10	12	27	18				
0	6	20	89				
40	7	107					
4	18	9	29				
9	23	22	90				
10	56	20	120				
7	45	7	41				
4	17	23	38				
14	12	20	9				
22	4	59	7				
42	3	70	25				



FED. RD DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR	5 9
	OHIO		1921	

I.C.H. 238 SEC. A<sup>1</sup>  
DELAWARE COUNTY

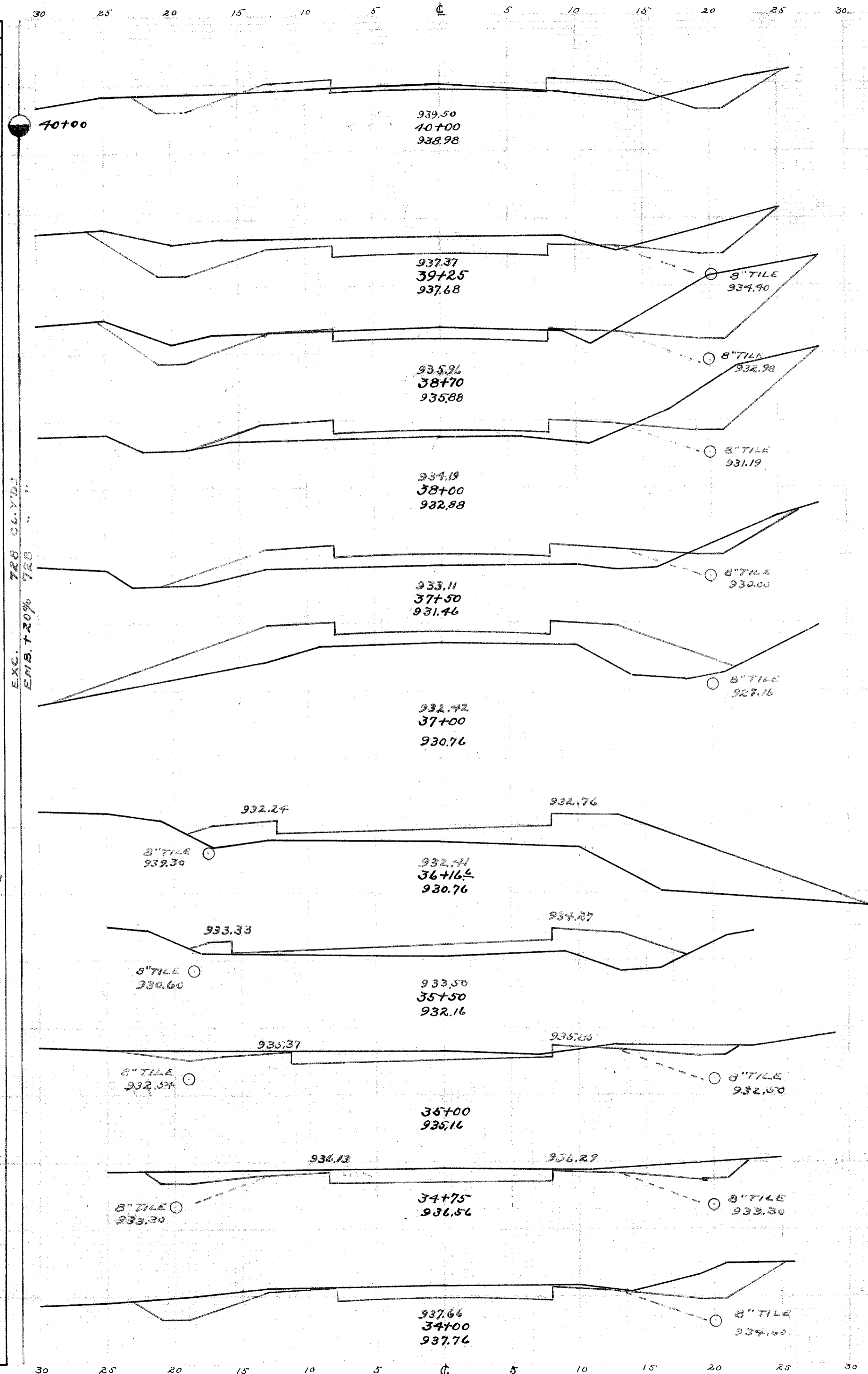


FED. RD. DIST. No.	STATE	FED. AID PROJECT	FISCAL YEAR
	OHIO		1921

I.C.H. 238 SEC. A1  
DELAWARE COUNTY

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9

END CUT	AREA FILL	CU. CUT	YDS FILL
16	10	132	8
79 (60)		130	2
68	2	124	32
28	23	31	53
5	36	2	102
74		241	
82		148	
38	8	19	
24		27	
35		110	
44		164	

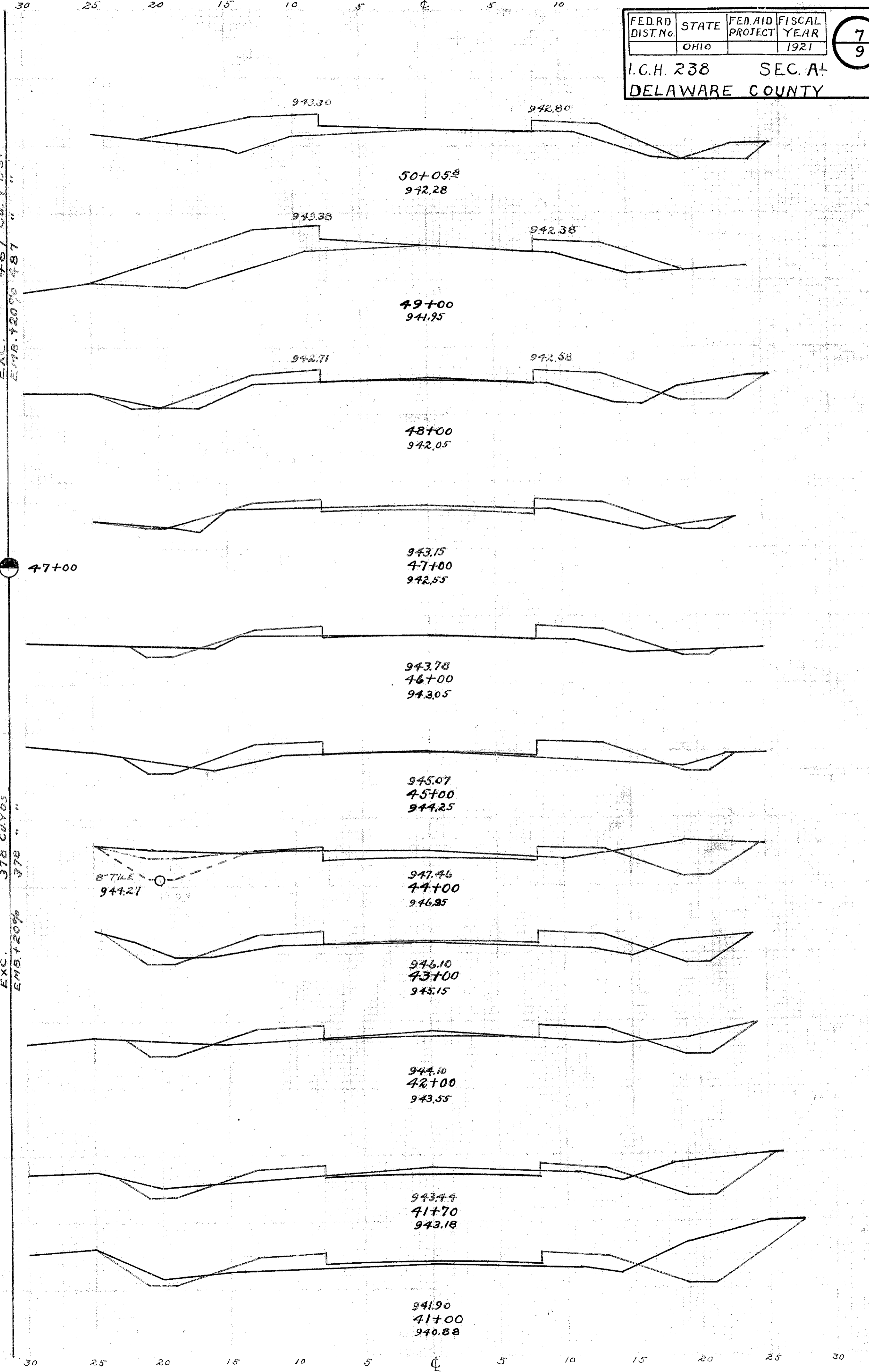


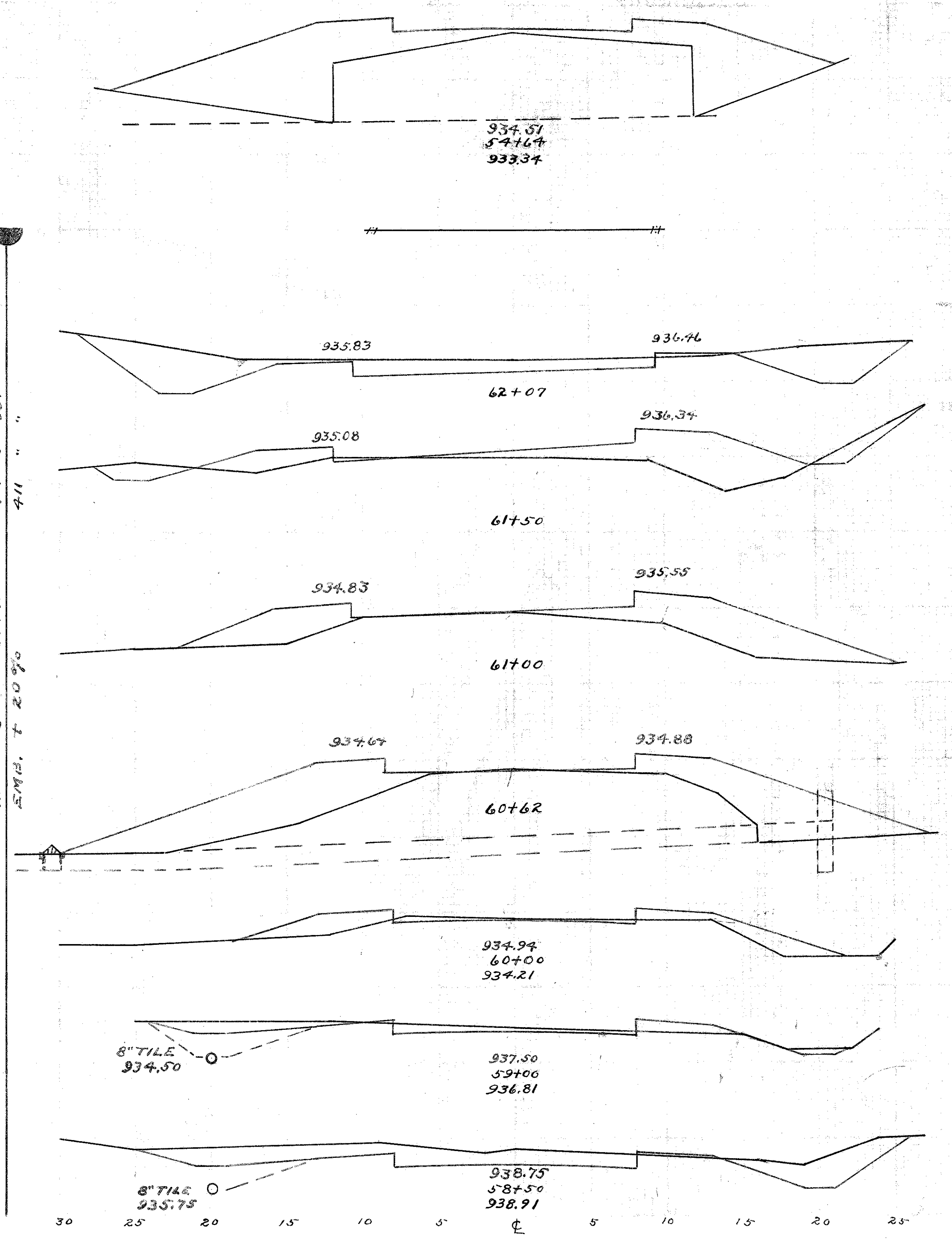
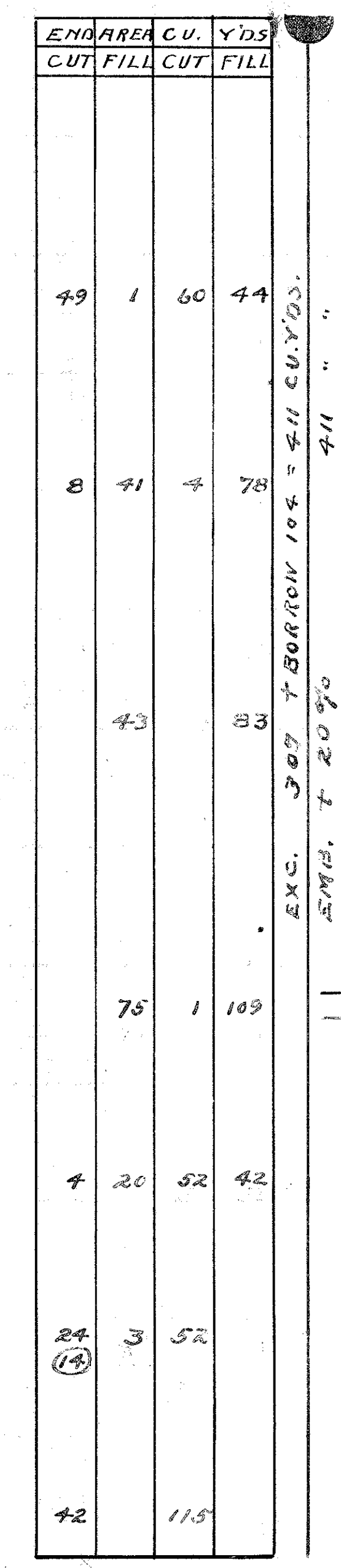
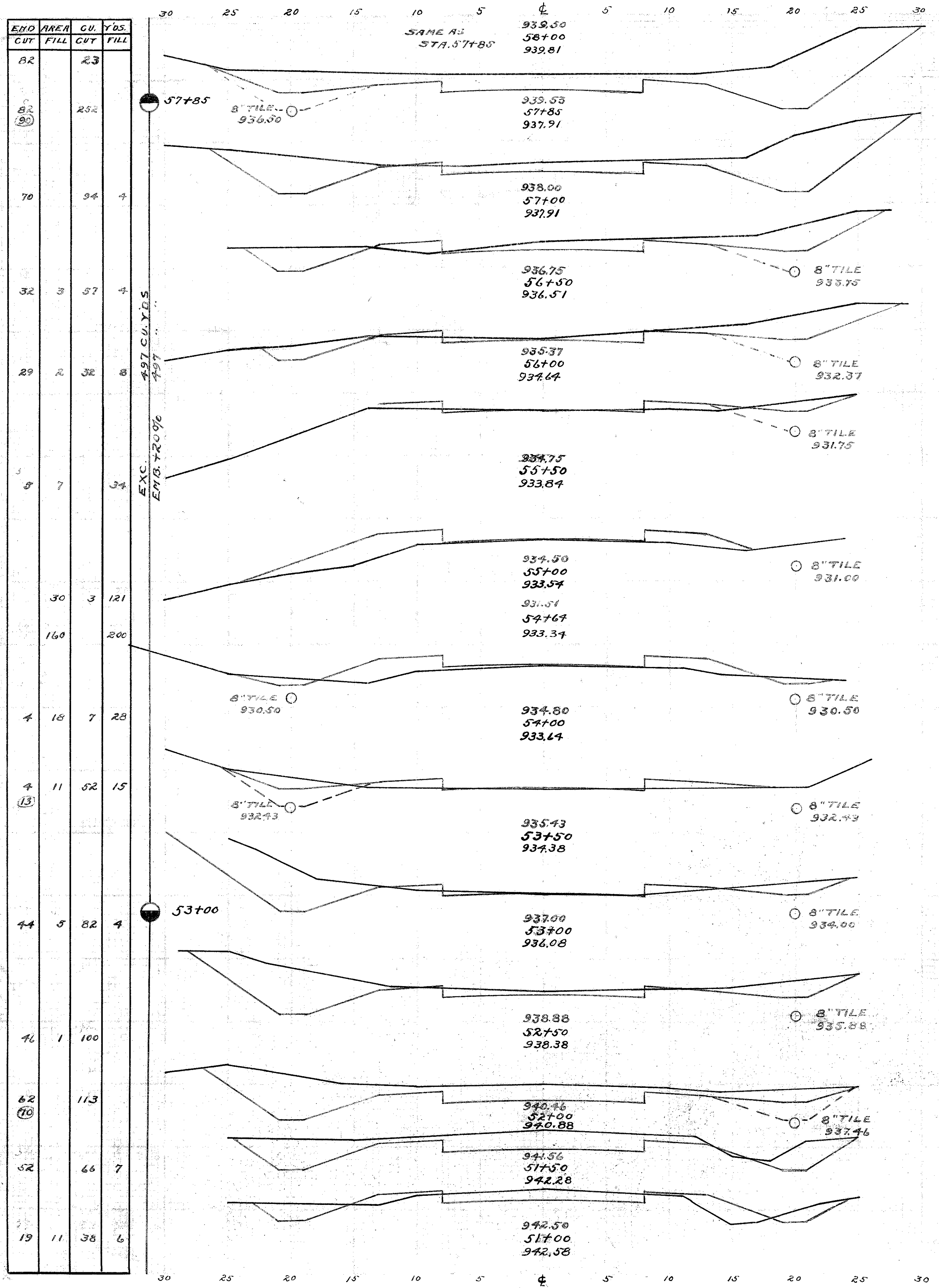
FED. RD. DIST. No.	STATE	FED. AID PROJECT	FISCAL YEAR
	OHIO		1921

I.C.H. 238 SEC. A-1  
DELAWARE COUNTY

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9

END CUT	AREA FILL	CU. CUT	YDS FILL
3	27	18	141
6	44	35	120
13	22	35	67
16	14	19	46
4	11	5	34
4	18	56	41
26 (27)	4	76	37
11	16	42	48
12	10	20	11
25	10	69	32
28	15	81	46



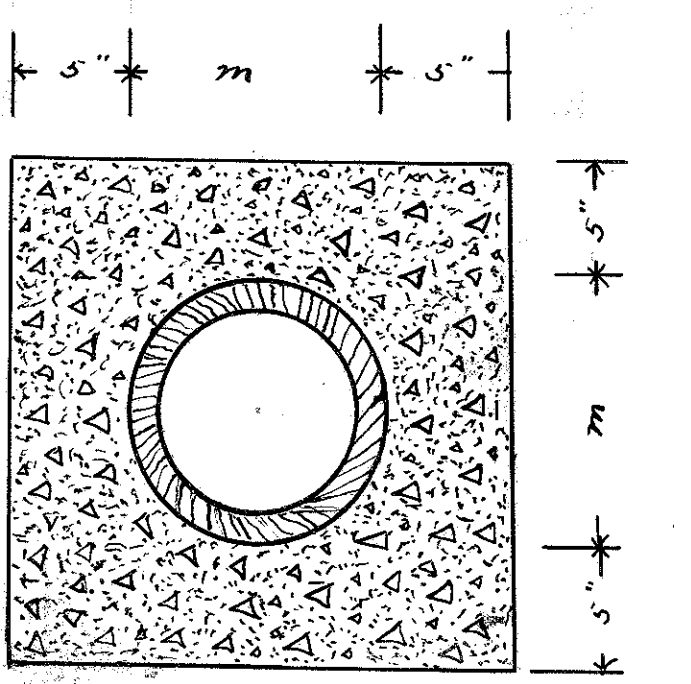




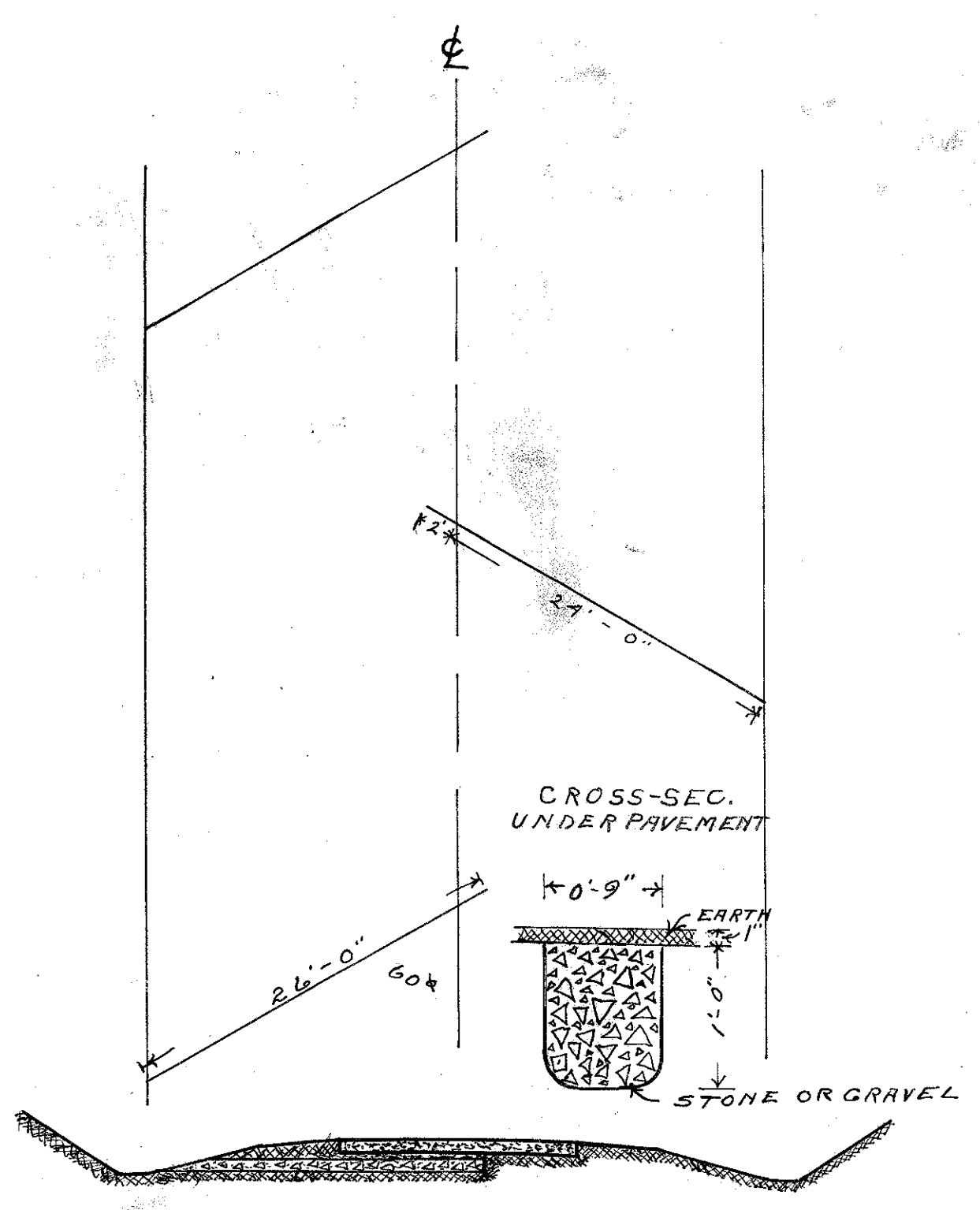
# SUMMARY OF QUANTITIES

STATION	TYPE	SIZE	EXCAVATION		CONCRETE		REINF.	VITRIFIED PIPE					C.I. PIPE RE-LAID		VIT. PIPE "T.S"		CONE GRATES		REMARKS	
			1-2-4	1-3-6	STEEL	12"		15"	18"	24"	30"	16"	12"X12"	18"X24"	12"	18"				
			CU.YD'S	CU.YD'S	CU.YD'S	LBS.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	HIGH	HIGH					
STRUCTURES UNDER 20 FT.																				
5+26	CONC. BOX	5'X4'X4'	53	33.0		1599														REMOVE OLD STONE BOX - CONSTRUCT NEW STD. BOX
16+00	V.P. INCASED	15"X36"	10	2.0	1.6	43		12					24							TAKE UP AND RELAY 24' OF 12" C.I.P. - EXT. 12' SOUTH WITH 15" VIT. PIPE
24+76	"	12"X39"	7	2.0	3.5	45	34													REMOVE 8" TILE - CONSTRUCT 12" STD. VIT. PIPE CULVERT
26+25	"	12"X36"	8	2.0	3.7	45	36													" OLD STONE BOX - CONSTRUCT 12" STD. VIT. PIPE CULVERT
30+81	"	24"X48"	13	1.8	5.2	40			22					1						24' OF 24" C.I.P. NOW IN. - EXT. 12' NORTH AND 12' SOUTH WITH 24" STD. VIT. PIPE CULV.
36+47	"	30"X62"	7	4.6	7.5	90					32									OLD ARCH AND C.I.P. 30" NOW IN. - EXT. 16' NORTH AND SOUTH WITH 30" STD. VIT. PIPE CULV.
54+63	"	18"X36"	5	2.7	3.4	55			22											24' OF 18" C.I.P. NOW IN. - EXT. 12' NORTH AND 10' SOUTH WITH 18" STD. VIT. PIPE CULV.
60+62	"	12"X55"	2	1.0	1.1	25	6							1						12" C.I.P. AND VIT. PIPE NOW IN. - EXT. WITH 12" VIT. PIPE 6' SOUTH - PUT IN DROP.
TOTAL			105	49.1	26.0	1940	76	12	22	22	32	24	1	1	1	1				

STATION	TO STATION	NORTH	SOUTH	TILE	INCASED	INCASED	TOTAL	TOTAL
				DRAINS	DRIVES	ENDS	TILE	CONC.
				8"	8"	8"	8"	1-3-6
				LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	CU.YD'S
0-10			SOUTH		16		16	1.28
2+50	5+10		SOUTH	236	16	8	260	1.92
3+22		NORTH			14		14	1.12
13+00	15+00	NORTH		176	16	8	200	1.92
17+40		NORTH			16		16	1.28
18+00	18+90		SOUTH	66	16	8	90	1.92
20+19			SOUTH		14		14	1.12
32+50	35+10		SOUTH	222	30	8	260	3.04
34+60	35+40	NORTH		156	16	8	180	1.92
36+55	39+25		SOUTH	234	28	8	270	2.88
42+09			SOUTH		14		14	1.12
43+80	44+90	NORTH		102		8	110	0.64
46+47		NORTH			14		14	1.12
49+12.5			SOUTH		16		16	1.28
51+57		NORTH			14		14	1.12
51+98	54+40		SOUTH	202	32	8	242	3.20
53+48	54+40	NORTH		72	16	4	92	1.60
54+66	56+66		SOUTH	176	16	8	200	1.92
57+84	59+00	NORTH		92	16	8	116	1.92
				1734	320	84	2138	32.32



CROSS-SECTION OF INCASED TILE  
M = SIZE OF TILE  
SCALE 1/4" = 1'



SPECIAL CROSS DRAINS - SPACED 25' APART ALTERNATING TO BE FILLED WITH STONE OR GRAVEL 1 1/2" TO 2 1/2"

SPECIAL DRAINS	STA. NO.	STA. NO.
0+25	28+40	
0+20	28+65	
0+75	28+90	
1+20	29+15	
1+25	31+40	
1+50	33+65	
1+75	33+90	
2+00	34+15	
2+25	34+40	
2+50	34+65	
2+75	34+90	
3+00	35+15	
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5+25	37+40	
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5+75	37+90	
6+00	38+15	
6+25	38+40	
6+50	38+65	
6+75	38+90	
7+00	39+15	
7+25	39+40	
7+50	39+65	
7+75	39+90	
8+00	40+15	
8+25	40+40	
8+50	40+65	
8+75	40+90	
9+00	41+15	
9+25	41+40	
9+50	41+65	
9+75	41+90	
10+00	42+15	
10+25	42+40	
10+50	42+65	
10+75	42+90	
11+00	43+15	
11+25	43+40	
11+50	43+65	
11+75	43+90	
12+00	44+15	
12+25	44+40	
12+50	44+65	
12+75	44+90	
13+00	45+15	
13+25	45+40	
13+50	45+65	
13+75	45+90	
14+00	46+15	
14+25	46+40	
14+50	46+65	
14+75	46+90	
TOTAL	1664	