FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1940

10
10

SH. 153 SEC. H & F (PT.)
LAKE COUNTY

ROADWAY CALCULATIONS

ITEM E-1 ROADWAY EXCAVATION (UNCLASSIFIED)
AVERAGE DEPTH (USED) 0.60'

STATION FROM	STATION TO	CALCULATIONS	QUANITITY	UNIT
71+82.50	74+20	(237.5×4×.6) ÷ 27	21.11	Cu.Yds.
*74+20	74+70.4	(50×.6×3) ÷ 27	3.33	" "
74+20	74+70.4	(50×.6×1.5) ÷ 27	1.67	" "
75+05.4	77+00	(194.6×.6×4) ÷ 27	17.30	" "
77+00	81+00	(607×.7×1.07) ÷ 27	16.84	" "
81+00	83+63.27	(263.27×.6×4) ÷ 27	23.40	" "
*83+63.27	85+23.27	(160.0×.7×1.9) ÷ 27	7.88	" "
85+23.53	94+02.67	(879.14×.6×4) ÷ 27	78.15	" "
94+02.67	97+61.0	(358.33×.6×4) ÷ 27	31.85	" "
97+61.13	111+00	(1338.87×.6×4) ÷ 27	119.01	" "
*111+00	114+50	(560.0×.7×1.1) ÷ 27	15.97	" "
114+50	128+38.46	(1388.46×.6×4) ÷ 27	123.42	" "
* NOTE :- SEE SHEET No. 6		TOTAL	459.93	" "

ITEM E-4 BORROW (ESTIMATED)

69+50	128+38.46		200.0	Cu.Yds.
		TOTAL	200.0	" "

ITEM E-10 SEALING ONLY ON EDGE OF PAVEMENT

71+82.50	74+70.4	(LEFT SIDE	287.90	Lin.Ft.
74+20	74+70.4	RIGHT SIDE	50.4	" "
75+05.4	77+00	BOTH SIDES	389.2	" "
*77+00	81+00	LEFT SIDE	207.0	" "
*77+00	81+00	RIGHT SIDE	400.0	" "
81+00	83+63.27	BOTH SIDES	526.54	" "
83+63.27	85+23.27	" "	320.0	" "
85+23.53	94+02.67	" "	1758.28	" "
94+02.67	97+61.0	" "	716.66	" "
97+61.13	111+00	" "	2677.74	" "
*111+00	114+50	LEFT SIDE	270.0	" "
*111+00	114+50	RIGHT SIDE	290.0	" "
114+50	128+38.46	BOTH SIDES	2776.92	"
* NOTE :- SHEET No. 6		TOTAL	10,670.64	Lin.Ft.

PAVEMENT CALCULATIONS

ITEM T-30 BITUMINOUS PRIME COAT (OVER OLD PAVEMENT AREA) USING BITUMINOUS MATERIAL SEC. M-5.12 AE-3
APPLIED AT RATE OF 0.15 GALLONS PER SQ. YD. AND SAND COVER AT RATE OF 4 TO 7 LBS. PER SQ. YD.

69+50	71+82.5	(232.5×20) ÷ 9	516.67	Sq.Yds.
71+82.5	77+00	(517.5×16) ÷ 9	920.00	" "
77+00	81+00	(400.0×18.5) ÷ 9	822.22	" "
81+00	83+63.27	(263.27×16) ÷ 9	468.04	" "
83+63.27	85+28.27	(160.0×18.3) ÷ 9	325.33	" "
85+28.53	94+02.67	(879.14×16) ÷ 9	1562.91	" "
94+02.67	97+61.0	(358.33×16) ÷ 9	637.03	" "
97+61.13	111+00	(1338.87×16) ÷ 9	2380.21	" "
111+00	114+50	(350×184) ÷ 9	715.56	" "
114+50	128+38.46	(1388.46×16) ÷ 9	2468.37	" "
EXTRA AREA - LEROY-THOMPSON RD. INTER.			230.00	" "
		TOTAL	11,046.34	Sq.Yds.
M5.12-AE-3 = 11,046.34×0.15 = 1656.95 Gal.			1656.95	Gallons

ITEM I-19 1¼" INSULATION COURSE

71+82.50	74+20	(237.5×4) ÷ 9	105.55	Sq.Yds.
74+20	74+70.4	(50×3) ÷ 9	16.66	" "
74+20	74+70.4	(50×1.5) ÷ 9	8.33	" "
75+05.4	77+00	(194.6×4) ÷ 9	86.49	" "
* 77+00	81+00	(607×1.07) ÷ 9	72.17	" "
81+00	83+63.27	(263.27×4) ÷ 9	117.00	" "
83+63.27	85+23.27	(160×1.9) ÷ 9	33.78	" "
85+23.53	94+02.67	(879.14×4) ÷ 9	390.73	" "
94+02.67	97+61.0	(358.33×4) ÷ 9	159.25	" "
97+61.13	111+00	(1338.87×4) ÷ 9	595.05	" "
*111+00	114+50	(560×1.1) ÷ 9	68.44	" "
114+50	128+38.46	(1388.46×4) ÷ 9	617.09	" "
* NOTE :- SEE SHEET No. 6		TOTAL	2270.54	Sq.Yds.

ITEM B-35 2-3" ASPHALTIC CONCRETE BASE COURSES
NOTE :- AREA IS THE SAME AS ITEM I-19 (1¼" INSULATION CSE.)
SUMMARY OF STATIONING IS ALSO THE SAME AS ITEM I-19 FOR THIS ITEM

(2270.54×9×.5) ÷ 27		378.42	Cu.Yds.
	TOTAL	378.42	Cu.Yds.

ITEM B-35 ¾" MINIMUM THICKNESS ASPHALTIC CONCRETE LEVELING COURSE

69+50	128+38.46	GROSS LENGTH	5888.46	
		DEDUCTIONS	11.39	
		NET LENGTH	5877.07	
		(5877.07×20×0.0625) ÷ 27	272.09	Cu.Yds.
INTERSECTION - LEROY-THOMPSON Rd. (230×9×0.0625) ÷ 27			4.79	" "
				" "
ADD 200 CU.YDS. PER MILE FOR EXTER LEVELING COURSE			222.60	" "
		TOTAL	499.48	Cu.Yds.

ITEM B-35 ASPHALTIC CONCRETE BASE COURSE EXTRA MATERIAL FOR SUPERELEVATIONS

77+00	81+00	(400×18.5×.87 ÷ 2÷27)+(15×37×400÷27)	123.53	Cu.Yds.
TRANSITIONS		(300×16×.74÷4÷27)+(2×.24×300÷2÷27)	35.56	" "
83+63.27	85+28.27	(160×18.3×1.21 ÷2÷27)+(83×.71×160÷27)	69.10	" "
TRANSITIONS		(300×16×1.07÷4÷27)+(2×.57×300÷2÷27)	53.89	" "
94+02.67	97+61.00	358.33×16×.17 ÷ 2 ÷ 27	18.05	" "
TRANSITIONS		300×16×.17÷4÷27	7.56	" "
111+00	114+50	(350×18.4×.88÷2÷27)+(.8×.38×350÷27)	108.89	" "
TRANSITIONS		(300×16×.77÷4÷27)+(2×.27×300÷2÷27)	37.22	" "
				" "
		TOTAL	453.60	

ITEM T-35 1¼" ASPHALTIC CONCRETE SURFACE TYPE "A"

69+50	128+38.46	GROSS LENGTH	5888.46	
		DEDUCTIONS	11.39	
		NET LENGTH	5877.07	
		(5877.07×20×0.1042) ÷ 27	483.62	Cu.Yds.
INTERSECTION - LEROY-THOMPSON RD (230×9×0.1042) ÷ 27			7.99	" "
		TOTAL	461.61	Cu.Yds.

ITEM I-17 AGGREGATE FOR TRAFFIC BOUND SIDES APPROCHES

ESTIMATED 100.0 Cu.Yds.

LINE DATA

BEGINNING OF PROJECT	69+50.0
END OF PROJECT	128+38.46
GROSS LENGTH	5888.46 Lin.Ft.
DEDUCTIONS	11.39 " "
NET LENGTH	5877.07 " "

GENERAL SUMMARY

ITEM No.		QUANTITY	UNIT
	ROADWAY		
I-17	AGGREGATE FOR TRAFFIC BOUND SIDE APPROACHES	100	Cu.Yds.
E-1	ROADWAY EXCAVATION (UNCLASSIFIED)	460	Cu.Yds.
E-4	BORROW (ESTIMATED)	200	" "
E-10	SEALING (ONLY) EDGE OF EXIST. PAVEMENT	10,671	Lin.Ft.
I-9	STONE UNDERDRAIN (FRENCH DRAIN) No. 2	200	Lin.Ft.
	PAVEMENT		
I-19	1¼" INSULATION COURSE	2271	Sq.Yds.
B-35	ASPHALTIC CONC. BASE COURSE	832	Cu.Yds.
B-35	ASPHALTIC CONCRETE LEVELING COURSE	300	" "
T-30	BITUMINOUS PRIME COAT (SEC. M5.12-AE-3) INCL. SAND	1657	Gals.
T-35	ASPHALTIC CONCRETE SURFACE COURSE, TYPE "A"	462	Cu.Yds.
	MAINTAINING TRAFFIC INCLUDING LIGHTS, SIGNS, BARRICADES, AND WATCHMEN, 24 HR. SERVICE (ASPER PLAN)	LUMP	SUM