

COMPUTATIONS & SUB-SUMMARY

FED. RD. DIVISION	STATE	PROJECT	16 212
2	OHIO		

LAKE COUNTY
LAK-44-722

EARTHWORK			
STATION	E - 1 ROADWAY EXCAVATION	EMBANKMENT PLUS 20%	
		CU. YDS.	CU. YDS.
FROM	TO		
36+99.10	40+00	1,980	194
40+00	50+00	3,592	3,343
50+00	60+00	1,229	4,933
60+00	70+00	14,014	32,711
70+00	80+00	36,436	26,524
80+00	90+00	69,445	0
90+00	100+00	21,033	23,130
100+00	110+00	40,528	1,416
110+00	120+00	36,134	11,886
120+00	130+00	8,877	31,796
130+00	140+00	841	40,045
140+00	150+00	1,352	26,036
150+00	160+00	1,739	12,635
160+00	164+00	735	3,502
FRONTAGE ROAD LT.		3,423	2,902
CONNECTOR		197	30
FRONTAGE ROAD RT.		4,440	3,918
BLACKBROOK ROAD		228	455
S.R. 283		2,302	25,813
RAMP "A"		1,224	172
RAMP "A" SPUR		27	1,027
RAMP "B"		14,256	33,601
RAMP "C"		4,025	25,867
RAMP "D"		4,467	377
TEMPLE AVENUE		2,763	10
OLIVE STREET		4,653	199
HEADLANDS ROAD		1,344	1,864
WEST PARK ROAD		59	257
EAST PARK ROAD		51	253
MORTON SALT CO. ROAD		29	150
ACCESS ROAD		179	1,661
S.R. 44, 94± to 101±		4,000*	4,800
TOTAL		285,602	292,067

* Unsuitable material thru rubbish dump area.
See General Note, Sheet 14

ITEM	SPECIAL (DUMP AREA)
	HOURS FILL COMPACTION TIME
	USING HEAVY PNEUMATIC ROLLER 4 HRS.
	SEE GENERAL NOTE, SHEET 14

E-1, COMPACTED SUBGRADE	
PAVEMENT (T-71)	88,220 S.Y.
PAVEMENT (T-35)	3,966 S.Y.
FLEXIBLE PAVEMENT	18,182 S.Y.
PAVED SHOULDERS (B-21)	24,948 S.Y.
APPROACH SLABS (I-7)	340 S.Y.
TOTAL	135,656 S.Y.

L-9 SEEDING & PROTECTING		
STATION	AREA	
	FROM	TO
		S.Y.
36+99.10	40+00	3,571
40+00	50+00	10,576
50+00	60+00	9,337
60+00	70+00	11,606
70+00	80+00	12,837
80+00	90+00	14,668
90+00	100+00	13,682
100+00	110+00	13,728
110+00	120+00	14,066
120+00	130+00	13,642
130+00	140+00	14,643
140+00	150+00	13,407
150+00	160+00	12,389
160+00	164+00	6,244
FRONTAGE ROAD LT.		10,859
CONNECTOR		1,254
FRONTAGE ROAD RT.		13,454
BLACKBROOK ROAD		1,517
S.R. 283		9,290
RAMP "A"		1,008
RAMP "A" SPUR		779
RAMP "B"		9,748
RAMP "C"		8,483
RAMP "D"		2,458
TEMPLE AVENUE		2,537
OLIVE STREET		6,035
HEADLANDS ROAD		5,148
WEST PARK ROAD		613
EAST PARK ROAD		938
MORTON SALT CO. ROAD		229
TOTALS		238,746

E-4 GRANULAR BORROW	
DUMP AREA STA. 94± - STA. 101±	1,600 C.Y.
SEE GENERAL NOTE, SHEET 14	

L-9 COMMERCIAL FERTILIZER	
SEEDING AREA	= 238,746 S.Y.
SODDING AREA	= 4,310 S.Y.
SPECIAL SODDING AREA	= 230 S.Y.
TOTAL (SQUARE YARDS)	= 243,286 S.Y.
FERTILIZER @ 20LBS. PER 1000 SQ. FT.	= 21.90 TONS

E-II, WATER M-GAL.	= VOL. X 5 / 1000
EMBANKMENT	292,067 C.Y.
I-22	24,010 C.Y.
I-18	3,839 C.Y.
B-19	4,612 C.Y.
TOTAL VOLUME	324,528 C.Y.
M-GALLONS	1,623

E-4, BORROW	
EMBANKMENT PLUS 20%	292,067 C.Y.
E-1 ROADWAY EXCAVATION	285,602 C.Y.
E-3 CHANNEL EXCAVATION	2,399 C.Y.
TOTAL EXCAVATION	288,001 C.Y.
UNSUITABLE FOR EMB.	4,000 C.Y.
TOTAL EXC. AVAILABLE FOR EMB.	284,001 C.Y.
REQUIRED E-4 BORROW	8,066 C.Y.
LESS E-4 GRANULAR BORROW	1,600 C.Y.
E-4 BORROW	6,466 C.Y.

SHEET NO.	SS-18 FENCE, TYPE "A" LIN. FT.	I-10 DUMPED ROCK CHANNEL PROTECTION CU. YDS.
	203	1596
204	2849	12
205	2815	10
206	2520	5
207	1580	4
208	1529	11
209	704	
210	1500	10
211	2007	10
212	2133	
TOTAL	19,233	62

LENGTH OF SHOULDERS TO BE TREATED WITH CALCIUM CHLORIDE

S.R. 283	1,900 L.F.
HEADLANDS ROAD	1,813 L.F.
TOTAL LENGTH	3,713 L.F.

ITEM SPECIAL, MIXING CALCIUM CHLORIDE AND CRUSHED AGGREGATE = 3713 X 4 X 1/9 = 1651 S.Y.

ITEM M-10, CALCIUM CHLORIDE FOR STABILIZED SHOULDERS
1651 X 2.1 ÷ 2000 = 1.74 TON.