

SUMMARY - OF - QUANTITIES

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1941

LAKE COUNTY
S.H.520 SEC. C (PT.)

Sheet No	Tree Removal	Tree Root Protect Riprap S.Y.	ROADWAY															Pav't. Removal Conc. Pavt. S.Y.	Remov. Conc. Curb & Gut L.F.	Resurf. Conc. Curb & Gut L.F.							
			Guard Rail		Drives & Approaches		Pipe Removal					Mail Box Approach	Storm Sewers														
			New L.F.	Remove Store L.F.	I-17 C.Y.	12" Pipe L.F.	4" to 12" L.F.	15" to 18" L.F.	C.M.P. 12" L.F.	Reuse 12" V.S.P.	I-17 C.Y.		I-8-C.B. N° 1-2	I-8-I-N° 1	C.M.P. 12"	Pipe Relaid 6" 12" 12"	C.M.P. Bends 14 1/2° 16 1/2° 20°				12" Pipe Under Pavt.	12" Pipe New	10" Pipe New				
3	25		312.5	273	24.3	122	361	20	20	48	96	3.2	1	5	305	48	96	1	2	1	114	100	14	1720			
4	40	3	287.5	177	96.6	60	314	40				9.6	1	5									1104	14	1360		
16					20.8																				262	170	
TOTAL	65	3	600	450	141.7	182	675	40	20	20	48	96	12.8	2	10	305	48	96	1	2	1	114	1204	14	3080	262	170

EARTHWORK				
Station From	Station To	Excavation	Embankment	Emb+35%
15+50	25+00	663	6,669	9,003
25+00	35+00	6866	109	147
35+00	45+00	3122	1,443	1,548
45+00	52+00	747	2,679	3,617
TOTAL		11,398	10,900	14,715

Mark	Sheet No	Station	Type	Size	STRUCTURES 20' SPAN AND UNDER																						
					Excavation		Pipe For Culverts			Pipe Specials			Removal Portions of Exist. Structure	Rip Rap S.Y.	I-8-C.B. N° 1-2	Removal Exist. Structure Lump											
					Structure C.Y.	Channel C.Y.	15" L.F.	18" L.F.	36" L.F.	18"x18"x12"	18"x18"x12"x12"	18" 12 1/2°					18" 30°										
1-C	11	23+49	Std. Pipe Culvert	18" x 154'	60		76	78																			
2-C	12	40+61.72	Std. Pipe Culvert	15" x 76'	25		76								4.5	1											
3-C	13	48+90.60	Std. Pipe Culvert	36" x 113'	90			113							34.0									Lump			
					175		76	78	113	1	1	1	1	Lump	47.5	1							Lump				

CALCULATIONS

Excavation 11,398 C.Y. - 85 C.Y. Rubbish Sta. 23+35 to 23+65 = 11,313 C.Y.

Pavement Removed - 3250 S.Y. x 7/36 = 632 C.Y.

Available For Embankment = 11,945 C.Y.

Emb. + 35% = 14,715 C.Y.

Borrow = 2,770 C.Y.

Water 5 gal. x 10,900 = 55 M.Gal.

Compaction of Subgrade = 6 M.Gal.

TOTAL = 61 M.Gal.

GENERAL - SUMMARY

ITEM NO	DESCRIPTION	QUANTITY	ITEM#	DESCRIPTION	QUANTITY
E-1	Roadway Excavation (Unclassified)	11,398 C.Y.	E-12	6" PIPE REMOVED FOR REUSE	48 L.F.
E-4	Borrow (Contractor to Furnish)	2,770 C.Y.	E-12	12" PIPE REMOVED FOR REUSE	96 L.F.
E-8	Removal and Disposal of Existing Pavement	3,080 S.Y.	E-8	Removal of Combination Curb & Gutter for Re-use	170 L.F.
E-8	Removal of Combination Curb and Gutter (Concrete)	92 L.F.	T-110	Aggregate for maintaining traffic	450 C.Y.
E-9	Trees Removed and Disposed of	65 Each	M-10	Calcium Chloride for maintaining traffic	10 Tons
I-1	12" Pipe for Driveways	182 L.F.			
I-2	10" Pipe for Storm Sewers	14 L.F.			
I-2	12" Pipe for Storm Sewers	1204 L.F.			
I-2	12" Corrugated Metal Pipe for Storm Sewers	305 L.F.			
I-2	12" Pipe under Pavement for Storm Sewers	114 L.F.			
I-5	12" Corrugated Metal Pipe 14 1/2° Bend (Pipe Special) for Storm Sewer	1 Each			
I-5	12" Corrugated Metal Pipe 16 1/2° Bend (Pipe Special) for Storm Sewer	2 Each			
I-5	12" Corrugated Metal Pipe 20° Bend (Pipe Special) for Storm Sewer	1 Each			
I-6	6" Pipe Relaid for Storm Sewer	48 L.F.			
I-6	12" Pipe Relaid for Storm Sewer	96 L.F.			
E-12	4" to 12" Pipe Removed and Stored (V.P.)	675 L.F.			
E-12	15" to 18" Pipe Removed and Stored (V.P.)	40 L.F.			
E-12	12" Corrugated Metal Pipe Removed and Stored	20 L.F.			
E-12	12" Steel Pipe Removed and Stored	20 L.F.			
I-8	Catch Basins N° 1-2	2 Each			
I-8	Inlets N° 1	10 Each			
I-15	Guard Rail Removed and Stored	450 L.F.			
I-15	Steel Beam Type Guard Rail Sec I-15.05 (without offset brackets)	600 L.F.			
I-17	Aggregate for Traffic Bound Side Approaches & mail boxes.	154.5 C.Y.			
I-112	Reset Combination Concrete Curb and Gutter	170 L.F.			
E-11	Water	61 M.Gal.			
PAVEMENT					
T-70	6" Portland Cement Concrete Pavement	696 S.Y.			
T-71	9"-7-7-9 Reinforced Concrete Pavement	8922 S.Y.			
STRUCTURES 20' SPAN AND UNDER					
E-2	Excavation For Structures	175 C.Y.			
S-22	Removal of Portions of Existing Structures	LUMP			
S-24	Removal of Existing Structure	LUMP			
S-27	15" Pipe for Roadway Culverts	76 L.F.			
S-27	18" Pipe for Roadway Culverts	78 L.F.			
S-27	36" Pipe for Roadway Culverts	113 L.F.			
I-5	18"x18"x12" Tee (Pipe Special) for Roadway Culverts.	1 Each			
I-5	18"x18"x12"x12" Cross (Pipe Special) for Roadway Culverts.	1 Each			
I-5	18"-12 1/2° Bend (Pipe Special) for Roadway Culverts.	1 Each			
I-5	18"-30° Bend (Pipe Special) for Roadway Culverts.	1 Each			
I-8	Catch Basin N° 1-2	1 Each			
I-10	Riprap Type A. Grouted	47.5 S.Y.			
ROADWAY CONTINUED					
E-305	Seeding and Protecting Roadway Areas	20988 S.Y.			
L-9	10-6-4 Commercial Fertilizer	3779 Pounds			
L-7	12" Riprap For Tree Protection	3 S.Y.			

PAVEMENT CALCULATIONS

9-7-7-9 Reinforced Concrete Pavement T-71
From Sta. 15+50 To Sta. 52+00 = 3650 Lin. Ft.

No Additions
No Deductions
Total 3650 x 22' = 8022 Sq. Yds.

6" Portland Cement Conc. Pavt. T-70
Intersection Sta. 26+66.65 = 230 Sq. Yds.
Intersection Sta. 44+48.62 = 239 Sq. Yds.
Intersection Sta. 46+60.50 = 227 Sq. Yds.
Total 696 Sq. Yds.