FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO		

LAKE COUNTY
LAK. 20 (14.24-16.28)

PAVEMENT CALCULATIONS & SUMMARY

CITY OF PAINESVILLE

T-35-1½" Asphaltic Concrete Surface Course Type "C"

Sta. 445+41.1 to Sta. 469+22.2 2381.1 x 31 ÷ 9 = 8202 Sq. Yds., 8202 x 1.5 ÷ 36 — 341.75 Cu. Yds.
1" Av., (1½"+ ½") ÷ 2 = 1, 5' wide, 2381.1 x 5 ÷ 9 = 1323 Sq. Yds., 1323 x 1.0 ÷ 36 — 36.75 Cu. Yds.
9525 Sq.Yds.-1½" & 1" Aver.

T-35-1" Asphaltic Concrete Surface Course Type "C"

Sta. 469+22.2	to	Sta. 524+44.0	=	5521.8 x 36 ÷ 9	=	22,087.20	Sq. Yds.
Sta. 527+60.0	to	Sta. 533+99.0	=	639 x 30 ÷ 9	=	2,130.00	
Sta. 534+70.0	to	Sta. 552+10.0	=	1740 x 30 ÷ 9	=	5,800.00	
Sta. 553+66.0	to	Sta. 570+56.0	=	1690 x 31 ÷ 9	=	5821.11	
Sta. 572+06.0	to	Sta. 595+27.0	=	2321 x 31 ÷ 9	=	7994.55	
Sta. 595+85.0	to	Sta. 598+00.3	=	215.3 x 24 ÷ 9	=	574.13	
				Total		44,406.99	Sq. Yds.

44,406.99 x 1 ÷ 36 = 1233.50 Cu. Yds.

T-35, 1", Summary Of Quantities Table = 2913.00 Sq. Yds. 2913.00 x 1 ÷ 36 = 80.92 Cu. Yds.
T-35, 1¼" Av., Summary Of Quantities Table = 3463 Sq. Yds., 3463 x 1.25 ÷ 36 = = 120.24 Cu. Yds.
T-35, ¾" Av., Summary Of Quantities Table = 363 Sq. Yds., 363 x 0.75 ÷ 36 = = 7.56 Cu. Yds. *Deduct-Bridge 6.0 cu. yds.
Total T-35 Type "C" *1820.72 USE 1815 Cu. Yds.

B-35 1½" Leveling Course (44,406.99 + 2913.00) x 1½ ÷ 36 = 1971.67 Cu. Yds — 1971.67 Cu. Yds
B-35, Extra Leveling Sta. 469+22.2 to Sta. 598+00.3 = 12,878.1 Ft.
350 Cu. Yds. per mile x 12,878.1 ÷ 5280 = 853.66 — 853.66 Cu. Yds

B-35-1½" Aver. Asphaltic Concrete Leveling Course
Sta. 469+22.2 to 533+99, 534+70 to 552+10, 553+66 to 598+00.3 = 12,651.1 ft.
12,651.1 x 5 x 1½ x 2 ÷ 12 x 27 = 585.88 cu. yds. — 585.88 Cu. Yds.** Deduct-Bridge 9 cu yds.
Total B-35 Leveling **3411.21 Cu. Yds. USE 3403 Cu. Yds.

T-30, Bituminous Tack Coat
(From Summary Of Quantities E-8 Removal of Exist. Wearing Course 16,610 Sq. Yds.
16,610 Sq. Yds. x 0.10 = 1661.0 Gals.
From Summary Of Quantities 5000 Sq. Yds., 5000 x 0.10 = 500.0 Gals.
2161.0 Gals. — USE 2149 Gals.
Deduct-Bridge 12
Net T-30 2149.0 Gals.

RURAL

T-35-Asphaltic Concrete Surface Course Type "C"
1¼" Ave., Summary of Quantities Table = 10 Sq. Yds. 10 x 1.25 ÷ 36 = 0.35 Cu. Yds.
¾" Ave., Summary of Quantities Table = 364 Sq. Yds. 364 x 0.75 ÷ 36 = 7.58 Cu. Yds.
7.93 Cu. Yds. USE 8 Cu. Yds.

T-30 Bituminous Tack Coat
From Summary of Quantities 374 Sq. Yds. 374 x 0.10 = 37.4 Gals. — USE 37 Gals.

SUMMARY OF QUANTITIES

	Sheet No.	Castings To Be Adjusted To Grade: Monument Boxes	Sanitary Manholes	Storm Manholes	Water Valves	B-T-35 2½" Asph. Concrete Course	T-35 1¼" Av. Asph. Conc. Surface Course	T-30 Bituminous Tack Coat	T-35 ¾" Av. Asph. Conc. Surface Course	E-8 Removal of Existing Wearing Course		
		Each	Each	Each	Each	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.		
City of Painesville	5	1	4	6	15			363	363	144		
	6	1	19	10	17		378	378		3995		
	7	1	14	13	14	1707	1297	3004		4205		
	8	2	12	8	7	529	1098	1627		4844		
	9	2	12	9	16	677	690	1367		3422		
	Total	7	61	46	69	2913	3463	*6739	363	16,610		
			107									
Rural	5							364	364			
	9						10	10				
	Total						10	374	364			

* NOTE: Use 5000 square yards. A tack coat shall not be applied to an existing bituminous surface.

GENERAL SUMMARY

Item	Unit	Project Total	City of Painesville	Rural	Description
T-35	Cu. Yds.	1823	1815	8	Asphaltic Concrete Surface Course, Type "C" (70-80)
B-35	Cu. Yds.	3403	3403		Asphaltic Concrete Leveling Course (70-80)
T-30	Gals.	2186	2149	37	Bituminous Tack Coat, as per plan
I-8	Each	7	7		Monument Boxes Adjusted to Grade
I-8	Each	107	107		Manholes Adjusted to Grade
I-8	Each	69	69		Water Valves Adjusted to Grade
I-8	Each	2	2		Monument Boxes, as per plan
E-8	Sq. Yds.	16,610	16,610		Removal and Disposal of Existing Wearing Course
B-70	Sq. Yds.	500	500		10" Portland Cement Concrete Base Course, as per plan.
E-8	Sq. Yds.	500	500		Removal and Disposal of Existing Pavement
E-1	Cu. Yds.	150	150		Roadway Excavation

ESTIMATED QUANTITIES: Quantities for items B-70, E-1, and E-8 (Pavement Removal) are estimated. These items shall be performed at the direction of the Engineer.

COMPACTED SUBGRADE: In lieu of the requirements of Sec. E-1.09, the subgrade for pavement replacement shall be compacted to a depth of 6 inches to the density requirements of Table III, Item E-1. Payment for subgrade compaction shall be included in the unit price bid for Item B-70 10" Portland Cement Concrete Base Course As Per Plan

REMOVED WEARING COURSE:-
Material to replace Removed Wearing Course is included in the Extra Leveling (350 Cu. Yds. per mile) provided. Pavement calculations provide B-35 material to replace Removed Wearing Course 5 feet adjacent to the Curb. The Engineer shall direct the amount and placement of the Extra Leveling

GENERAL NOTES

PROFILE:- The profile of the proposed surface course shall be approximately 1½" & 2½" above that of the existing pavement.

RESETTING CASTINGS:- This item shall be performed after completion of the leveling course and prior to the placing of the surface course. Compaction of the material around castings inaccessible to rollers shall be in accordance with the requirements of section T-35.19

FILLING MAJOR DEPRESSIONS:- Major depressions in existing pavement shall be filled and compacted with asphaltic concrete leveling material in advance of placing the regular leveling course. These depressions shall be filled in layers not to exceed 3 inches in depth when compacted.

TRAFFIC:- Traffic shall be maintained at all times. The length of one-way traffic zones shall be kept to a minimum consistent with the requirements of Section T-35.23.
The item of "Maintaining Traffic" shall include furnishing lights, signs, barricades and watchman, according to the requirements of section G-7.07 "Barricades, Danger and Warning Signs", to secure the safe flow of traffic twenty-four (24) hours daily.

UTILITIES:- All work required for Public or Private Utilities will be done by and at the expense of their respective owners unless otherwise noted in these plans.

ITEM B-70 - Hand finishing will be permitted as per Section T-71.211 of the Construction and Material Specifications. Cement shall meet the requirements of Section M-1.2 or Section M-1.4. In lieu thereof, see note in proposal for permissable cement substitution.

MONUMENT BOXES:- A quantity of two (2) monument boxes is provided in the General Summary for the replacement of any existing monument boxes which may be required. Type of boxes shall be the same as existing or equal.

MANHOLES RESET:- Manholes shall be adjusted to grade as per Standard Construction Drawing T-35. Class "C" Concrete to be used.

Rev. 4-16-54 W.J.C.