FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1938

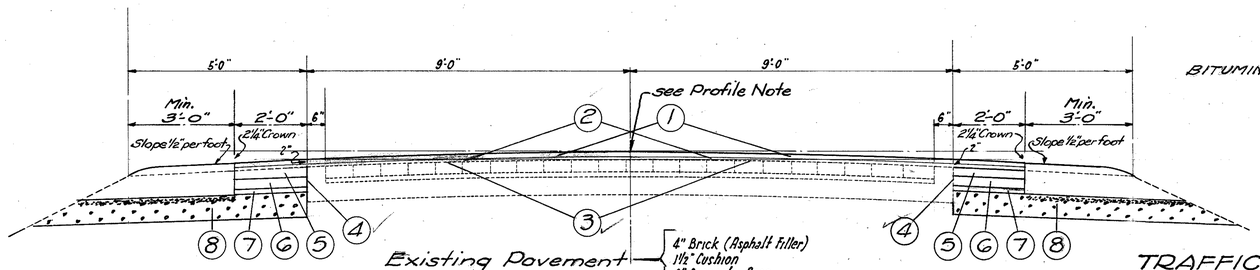
2/3

PAINESVILLE - EUCLID ROAD
S.H. 520 SEC. WILLOWICK (PT.)
LAKE COUNTY.

TYPICAL SECTION.

SCALE 1/2" = 1'

TYPE T-35



TYPICAL SECTION
Station 0+65 to Station 43+30.96 = 4265.96 Lin.Ft.

PAVEMENT CALCULATIONS

Pavement Length
Begin Project 0+65
End Project 43+30.96
No Additions or Deductions
Net Length of Project 4265.96 Lin.Ft.
or .807 Miles.

ITEM E-1, Roadway Excavation (Unclassified)
Avrg. depth 9/10 ft. width 2 ft. each side.
Computations (4265.96 x 4 x 9/10) ÷ 27 = 379. Cu.Yds. Use 400 Cu.Yds.

ITEM E-10, Sealing (only) of Edges of existing Pavement.
using Bituminous Material, Sec. M-5.12, AE-3
applied at rate of .15 gal. per sq.yd.
Computations 4265.96 x 2 = 8531.92 Cu.Yds. Use 8550 Lin.Ft.

ITEM I-9, 10"x8" Stone Underdrains (French Drain) No. 2
(placed as directed by Engineer)
Estimated (500 Lin.Ft per mile) x .807 = 404 Lin.Ft. Use 400 Lin.Ft.

ITEM I-19, 1 1/4" Insulation Course 2 ft wide, each side.
Computations (4265.96 x 4) ÷ 9 = 1890. Sq.Yds Use 1900 Sq.Yds.

ITEM B-35, 3" Asphaltic Concrete 1st. Base Course
2 ft wide, each side.
Computations (4265.96 x 4 x .25) ÷ 27 = 158. Cu.Yds. Use 160 Cu.Yds.

ITEM B-35, 3" Asphaltic Concrete 2nd. Base Course
Quantity same as 1st Base Course 158. Cu.Yds. Use 160 Cu.Yds.

ITEM T-30, Bituminous Prime Coat (over old pavement area)
using, Bituminous Material, Sec. M-5.12, AE-3
applied at rate of .15 gal. per sq.yd. and
cover with sand at rate of 4 to 7 lbs. per sq.yd.
Bituminous Material (4265.96 x 18) ÷ 9 = 8531.92 x .15 = 1279. Gal's. Use 1300 Gal's.

ITEM B-35, 1" Minimum Thickness, Asphaltic Concrete Leveling Course.
Computations (4265.96 x 22 x .083) ÷ 27 = 288.5 Cu.Yds.
Add. material for crown reduction, etc. 100.0 " "
Total 388.5 Cu.Yds. Use 400 Cu.Yds.

ITEM T-35, 1" Asphaltic Concrete Surface Course (Type B)
Computations (4265.96 x 22 x .083) ÷ 27 = 288.5 Cu.Yds Use 300 Cu.Yds.

ITEM E-4 Estimated volume of Borrow (Contractor to furnish) in addition to material supplied from Roadway Excavation, to build up Shoulders as indicated on Typical Section = 100 Cu.Yds.

(1) ITEM T-35, 1" Asphaltic Concrete Surface Course (Type B)

(2) ITEM B-35, 1" Minimum Thickness, Asphaltic Concrete Leveling Course.

(3) ITEM T-30, Bituminous Prime Coat (over old pav't area) using Bituminous Material, Sec. M-5.12, AE-3 applied at rate of .15 gal. per sq.yd. and cover with sand at rate of 4 to 7 lbs. per sq.yd.

(4) ITEM E-10, Sealing (only) of Edges of existing Pavement. using Bituminous Material, Sec. M-5.12, AE-3 applied at rate of .15 gal. per sq.yd.

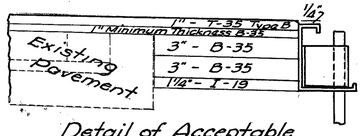
(5) ITEM B-35, 3" Asphaltic Concrete, 2nd. Base Course.

(6) ITEM B-35, 3" Asphaltic Concrete, 1st. Base Course.

(7) ITEM I-19, 1 1/4" Insulation Course

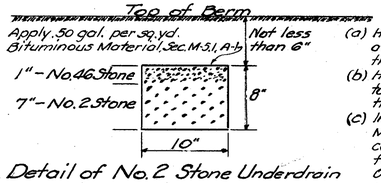
(8) ITEM I-9, 10"x8" Stone Underdrains (French Drain) No. 2 (placed as directed by Engineer)

Note- Asphalt penetration 70-80, shall be used in the B-35 and T-35 Compositions.



Detail of Acceptable Steel Form

Note: The forms shall be braced in a manner to prevent lateral or vertical movement.



Detail of No. 2 Stone Underdrain

(a) Hand tamp lightly the No. 2 Stone to a finished depth of 7" before placing the No. 46 Stone.
(b) Hand tamp lightly the No. 46 Stone to a finished depth of 1" before placing the Bituminous Material.
(c) In the application of the Bituminous Material the surface shall be covered the full width of trench forming an impervious mat. Omit Bituminous application on area under pavement.

GENERAL NOTES

BITUMINOUS PRIME COAT, Item T-30, of Bituminous Material, Sec. M-5.12 AE-3 applied by distributor or by brooms at the rate of .15 Gal. per sq.yd. and sand cover uniformly spread at the rate of from 4 to 7 pounds per sq.yd. After the bituminous material is applied all material not required to give a uniform coating to the surface, shall be swept into all cracks and open joints before the sand cover is placed.

Payment for sand cover is included in the price per gallon for Bituminous Material.

TRAFFIC - Traffic shall be maintained at all times to the satisfaction of the Division Engineer. The item of maintaining shall include furnishing lights, signs, barricades and watchmen necessary to secure the unimpeded flow of traffic twenty four (24) hours daily.

EARTHWORK - All suitable material resulting from Roadway Excavation (Unclassified) shall be used to raise the Roadway Shoulders as indicated on the Typical Section and in accordance with Item E-1.07 of the General Specifications.

EMBANKMENT - Watering embankment and density requirements as referred to in Paragraph E-1.05 of the General Specifications, will not be required on this project.

PROFILE - The Profile of the Asphaltic Concrete Surface shall be approximately 2" above that of the existing pavement.

FORMS - Side Forms, set to the line and grade established by the Engineer, will be required.

PAVEMENT - The designed depths of the Bituminous Concrete courses shown on the plans are subject to adjustment according to the ratio of volume to weight as indicated in the Specification for the Item.

GENERAL SUMMARY

ITEM NO.	ITEM	QUANTITY		UNIT
	ROADWAY			
E-1	Roadway Excavation (Unclassified)		400.	Cu.Yds.
E-10	Sealing (only) of Edges of existing Pavement.		8550.	Lin.Ft.
I-9	10"x8" Stone Underdrains (French Drain) No. 2		400	Lin.Ft.
E-4	Borrow (Contractor to furnish)		100	Cu.Yds.
	PAVEMENT			
I-19	1 1/4" Insulation Course		1900	Sq.Yds.
B-35	Asphaltic Concrete Base Course (Laid in two courses)		320	Cu.Yds.
B-35	1" Minimum Thickness, Asphaltic Concrete Leveling Course		400	Cu.Yds.
T-30	Bituminous Prime Coat (Sec M-5.12 AE-3)		1300	Gal's
T-35	1" Asphaltic Concrete Surface Course (Type B)		300	Cu.Yds.
	Maintaining Traffic, including lights, signs, barricades and watchmen, twenty four service (As per plan)	Lump	Sum	