FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	1/8
2	OHIO			

TUS~250~0.24

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
TUS-250-0.24
TUSCARAWAS COUNTY
FRANKLIN TOWNSHIP

PART 2
For Part 1 see plans for Sta. 62 (0.91-1.11)

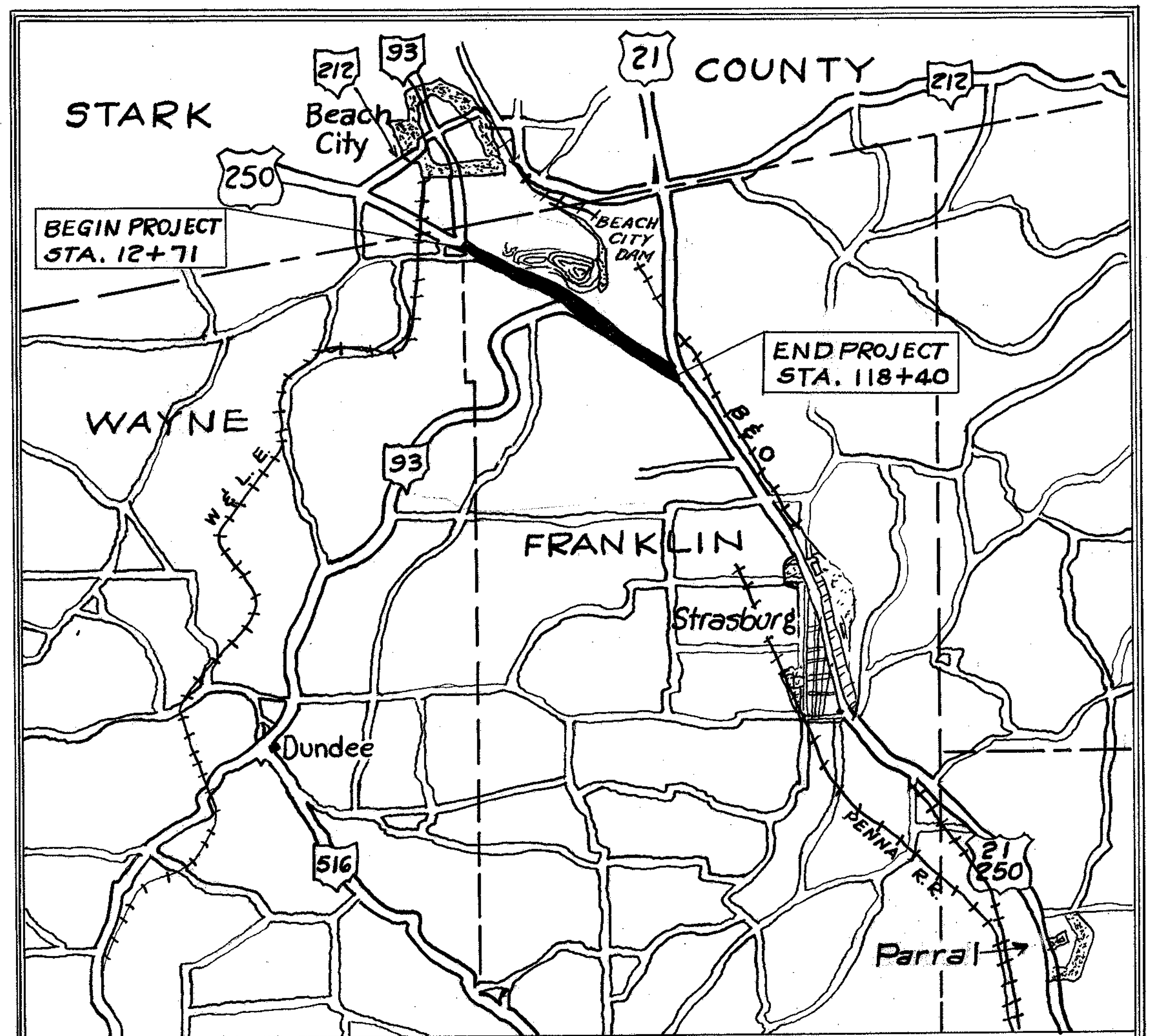
CONVENTIONAL SIGNS

CENTER LINE
CORPORATION LINE
TOWNSHIP LINE
RAILROADS

INDEX OF SHEETS

LINE DATA

BEGIN PROJECT	STA. 12+71
END PROJECT	STA. 118+40
NET LENGTH OF PROJECT = 10569	Lin. Ft. or 2.001 Mi.



DELIVERY POINT = BEACH CITY
AVERAGE HAUL FROM SIDING = 2 MILES

LOCATION PLAN
Scale 1" = 1 Mile

PORTION TO BE IMPROVED
FEDERAL HIGHWAYS
STATE HIGHWAYS
OTHER ROADS

SCALES

PLAN	1" = 100'
PROFILE HORIZONTAL	1" = 100'
PROFILE-VERTICAL	1" = 10'

The Standard Specifications of The State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for maintenance and safety of traffic will be as set forth in these plans and estimates.

The right of way for this improvement will be provided by The State of Ohio.

Approved [signature]
Date 3-8-54 Division Deputy Director.

Approved [signature]
Date 3-10-54 Deputy Director of Planning & Programming

Approved [signature]
Date 2-27-51 Engineer of Bridges

Approved [signature]
Date 3-5-54 Engineer of Location & Design

Approved [signature]
Date 3-8-54 Deputy Director of Design & Construction

Approved [signature]
Date 3-10-54 First Assistant Director

Approved [signature]
Date 3-10-54 Director of Highways

FILE Nº.	TUS-250~0.24
	DATE OF LETTING
	CONTRACT Nº.

STANDARD DRAWINGS

T-35	10-1-52		

SUPPLEMENTAL SPECIFICATION

10	Rev 7-6-53		

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

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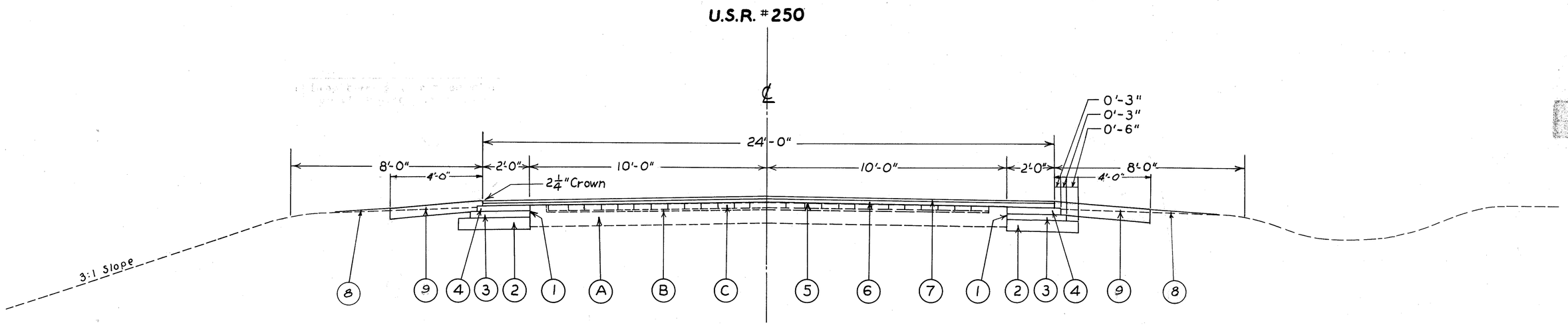
TUS-250-0.24

TYPICAL SECTION

TYPE T-35

SCALE $\frac{1}{2}$"=1'-0"



NOTE: For Pavement Details at beginning and end of project see Sheets 5 and 8.

KEY

(A) — Existing 7" Reinforced Concrete Base.

(B) — Existing $\frac{3}{4}$" Cushion.

(C) — Existing 3" Brick.

(1) — B-35 - Sealing Vertical Face of Existing Pavement.

(2) — I-22 - 6" Subbase, Grading "C" or "D"

(3) — B-35 - 3" Asphaltic Concrete Base Course. (70-80)

(4) — B-35 - 3" Asphaltic Concrete Leveling Course. (70-80)

(5) — T-30 - Bituminous Tack Coat Using 0.10 gal. per Sq.-yd. Sec. M-5.5 MS-2 or SS-1 or Sec M-5.2, RC-1 or RC-2 (See proposed note)

(6) — B-35 - 1$\frac{1}{4}$" min. Asphaltic Concrete Leveling Course. (70-80)

(7) — T-35 - 1$\frac{1}{4}$" Asphaltic Concrete Surface Course, Type A. (70-80)

(8) — E-1 - Embankment.

(9) — SS-10- 6" Stabilized Shoulder

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FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

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8

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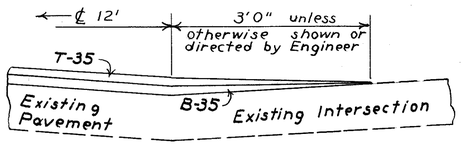
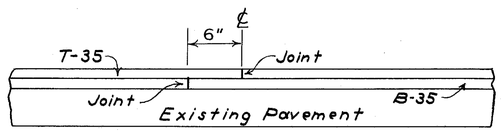
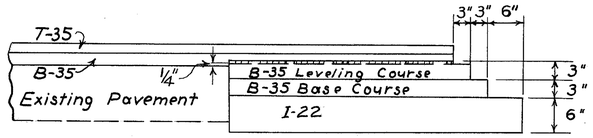
DETAILS & GENERAL NOTES



FEATHERING DETAIL AT INTERSECTIONS



METHOD OF LAPPING LONGITUDINAL JOINTS



WIDENING DETAIL

Where the 3 inch leveling course in the widened area would finish more than $\frac{1}{4}$ inch above the edge of the existing pavement, that portion below the dashed line shall be placed and compacted in a separate operation. The hatched portion above the dashed line shall be placed simultaneously with the full width leveling course.

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 Sec. T-35.23. The item of "Maintaining Traffic" shall include furnishing lights, all signs, barricades, and watchmen according to requirements of Sec. G-7.07 Barricades, Danger and Warning Signs, to secure the flow of traffic twenty-four (24) hours daily.

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

FILLING MAJOR DEPRESSIONS:- Major depressions in existing pavement shall be filled and compacted with bituminous 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.

EXTRA LEVELING MATERIAL:- The asphallic concrete leveling course thickness shall maintained by the use of extra leveling material where necessary.

BRIDGE SCUPPER DRAINAGE:- Openings through the new T-35 & B-35 shall be cut to meet the existing scuppers through the bridge floor. Care shall exercised in placing asphaltic concrete at the scuppers to provide adequate drainage. Cost of this operation shall be included in the unil price bid for asphaltic concrete.

BITUMINOUS CONCRETE BASE COURSE:- Base course may be constructed of Type "A" surface course composition.

EARTHWORK:- Watering embankments, benching, density requirements and the removal of sod from the shoulder will not be required for placing embankment.
in layers not exceeding eight (8) inches compacted thickness, and shall include any operations of grading necessary to finish the shoulders and slopes substantially to the lines indicated on the typical sections. No provisions of the Specifications will be waived for embankment which supports any portion of the new pavement or forms.

I-17 GRADING REQUIREMENTS:- The grading requirements for material passing the № 200 mesh sieve, as specified in Sec. I-17.02, may be modified as follows: Passing 200 Mesh 10% to 20%, provided compaction is obtained in accordance with Sec. I-17.02.

SUBGRADE COMPACTION-
In lieu of the requirements of Sec. E-1.09(a), the subgrade under the widening shall be compacted for a depth of 6 inches to the density requirements in Table III Item E-1. Payment therefor shall be included in unit price bid for Item E-1 Roadway Excavation.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

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SUMMARY OF QUANTITIES

PAVEMENT CALCULATIONS

Length of Pavement: Sta. 12+71 to Sta. 118+40 = 10569 Lin. Ft.
Area of Pavement = 10569 x 24 ÷ 9 = 28184 Sq. Yds.
Extra Pavement = = 1519 Sq. Yds.
Total Area of Pavement = 29,703 Sq. Yds.

Item B-35 Sealing Vertical Face of Existing Pavement
Sta. 13+85 to Sta. 60+20 on Lt. = 4635 Lin. Ft.
Sta. 13+85 to Sta. 60+20 on Rt. = 4635 Lin. Ft.
Sta. 63+28 to Sta. 113+83 on Lt. = 5055 Lin. Ft.
Sta. 63+28 to Sta. 76+60 on Rt. = 1332 Lin. Ft.
Sta. 78+30 to Sta. 113+83 on Rt. = 3553 Lin. Ft.
Sta. 116+72 to Sta. 118+63 on Rt. = 191 Lin. Ft.
Total Sealing = 19,401 Lin. Ft.

Item E-1
Sta. 13+90 (Avg.) to Sta. 60+20 on Lt. = 4630 Lin. Ft.
Sta. 13+90 (Avg.) to Sta. 60+20 on Rt. = 4630 Lin. Ft.
Sta. 63+28 to Sta. 113+78 (Avg.) on Lt. = 5050 Lin. Ft.
Sta. 63+28 to Sta. 76+60 on Rt. = 1332 Lin. Ft.
Sta. 78+30 to Sta. 113+78 (Avg.) on Rt. = 3548 Lin. Ft.
Sta. 116+77 (Avg.) to Sta. 118+40 (Avg.) on Rt. = 163 Lin. Ft.
Length of Widening (Avg.) = 19353 Lin. Ft.
Widening Excavation = 19353 x 3 x 1 ÷ 27 = 2150 Cu. Yds.
Stabilized Shoulder Excavation = 9562 x 2 x 4 x .35 ÷ 27 = 992 Cu. Yds.
Total Excavation = 3,142 Cu. Yds.

Item T-30
Area of Tack Coat = 10569-308 (Bridge) = 10261 x 20 ÷ 9 = 22802 Sq. Yds.
Extra Tack Coat = 1820 Sq. Yds.
Total Area of Tack Coat = 24622 Sq. Yds.
Total Tack Coat = 24622 x 0.1 = 2,462 Gals.

Item I-22
Total I-22 = 19353 x 3 x 0.5 ÷ 27 = 1,075 Cu. Yds.

Item B-35 Base
Total B-35 Base = 19353 x 2.5 x 0.25 ÷ 27 = 448 Cu. Yds.

Item B-35 Leveling
3" Leveling = 19353 x 2.25 x 0.25 ÷ 27 = 403 Cu. Yds.
1¼" Leveling = 29703 x 1¼ ÷ 36 = 1031 Cu. Yds.
Extra Leveling = 2.00 Mi. x 200 = 400 Cu. Yds.
Total Leveling = 1,834 Cu. Yds.

Item T-35
Total T-35 = 29703 x 1¼ ÷ 36 = 1,031 Cu. Yds.

Item SS-10
Estimated for Drives, Roads and Mail Box Approaches = 150 Cu. Yds.
Stabilized Shoulders Sta. 13+85 to Sta. 60+20 = 4635 Lin. Ft.
Sta. 63+28 to Sta. 76+70 = 1342 Lin. Ft.
Sta. 78+00 to Sta. 113+85 = 3585 Lin. Ft.
Length of Stabilized Shoulder = 9562 Lin. Ft.
Volume of Stabilized Shoulder = 9562 x 2 x 4 x .5 ÷ 27 = 1417 Cu. Yds.
Total Volume of SS-10 = 1417 + 150 = 1567 Cu. Yds. Use 1570 Cu. Yds.

EXTRA PAVEMENT

Totals of Sheet No.	Surface Sq. Yds.	Tack Coat Sq. Yds.	
5	171	224	
6	34	34	
7	114	152	
8	1200	1410	
Grand Totals	1519	1820	

GENERAL SUMMARY

ITEM	QUANTITY	UNIT	DESCRIPTION
E-1	3,142	Cu. Yds.	Roadway Excavation as per plan.
B-35	19,401	Lin. Ft.	Sealing Vertical Face of Existing Pavement.
SS-10	1,570	Cu. Yds.	Stabilized Crushed Aggregate Shoulders and Approaches
T-30	2,462	Gals.	Bituminous Tack Coat, as per plan
I-22	1,075	Cu. Yds.	Subbase Grading C or D
B-35	448	Cu. Yds.	Asphaltic Concrete Base Course (70-80).
B-35	1,834	Cu. Yds.	Asphaltic Concrete Leveling Course (70-80).
T-35	1,031	Cu. Yds.	Asphaltic Concrete Surface Course, Type A, (70-80).
S-3	822	Sq. Yds.	Waterproofing, Type C.
	Lump	Lump	Maintaining Traffic, including Lights, Signs, Barricades and Watchmen Twenty four (24) Hours Daily.

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EXTRA PAVEMENT

Station From	Station To	Side ℄	Surface Sq.Yds.	Tack Coat Sq.Yds.	Remarks
12+71	13+97	R.&L.	171	224	S.R. 93 Intersection
TOTALS			171	224	

2	OHIO			6 8

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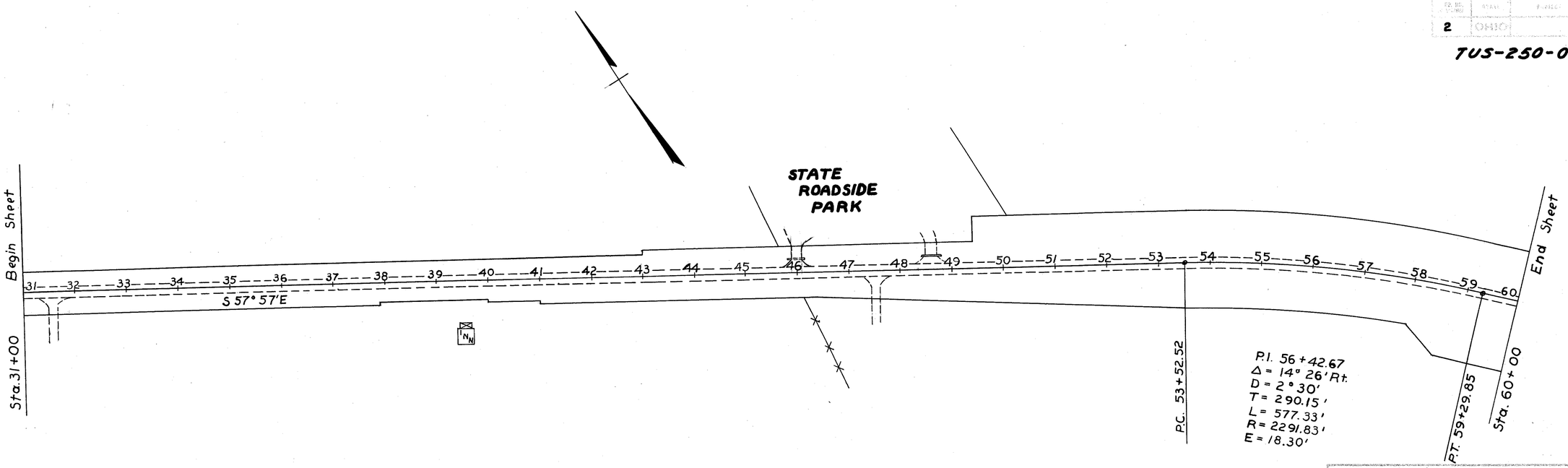
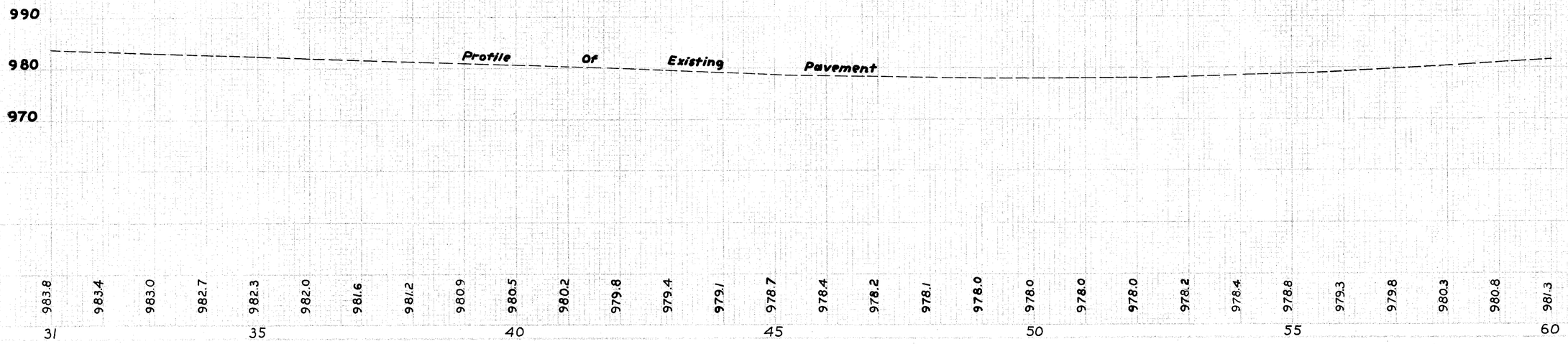


EXTRA PAVEMENT

Station		Side	Surface	Tack Coat	Remarks
From	To	%	Sq. Yds	Sq. Yds	
45+75	46+25	Lt.	17	17	Road Side Park Appr.
48+35	48+85	Lt.	17	17	Road Side Park Appr.
TOTALS			34	34	



	STATE	PROJECT		SHEET NUMBER
2				7 8

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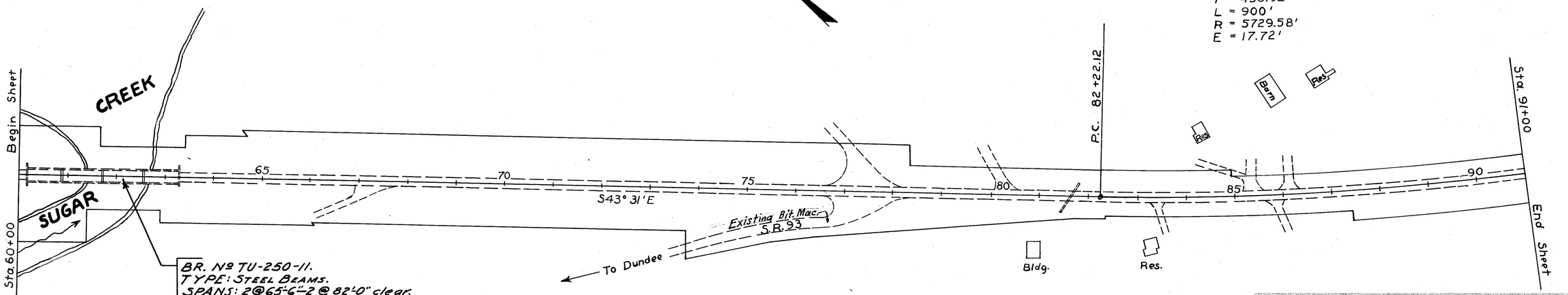
P.I. = 86+73.04
Δ = 9° 00' Lt.
D = 1° 00'
T = 450.92'
L = 900'
R = 5729.58'
E = 17.72'



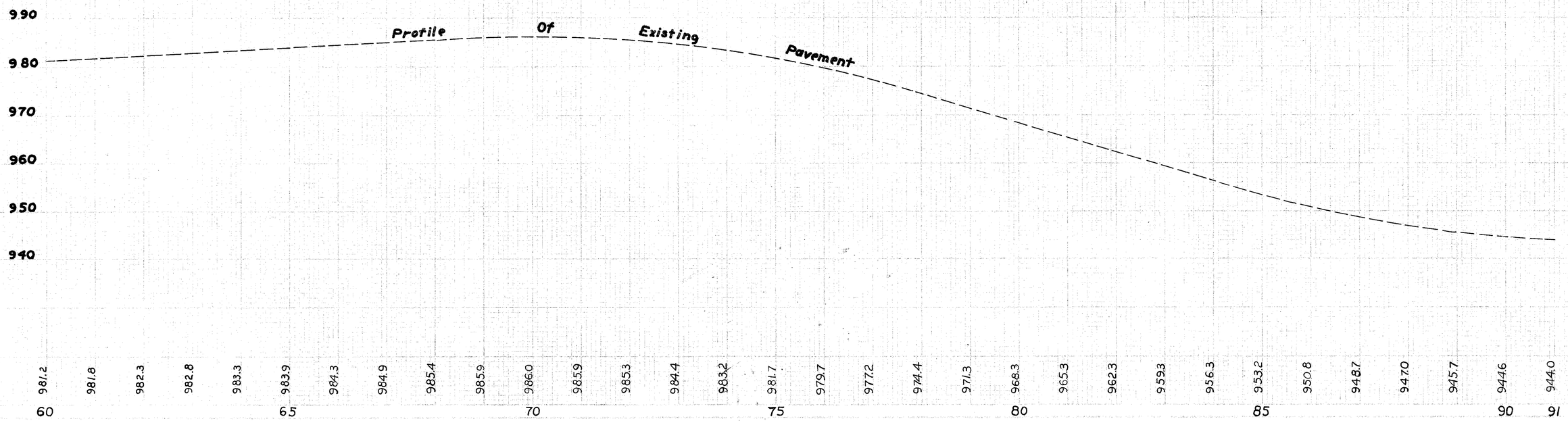
BR. Nº TU-250-11.
TYPE: STEEL BEAMS.
SPANS: 2@65'-6"-2@82'-0" clear.
ROADWAY: 24'-0".
LOADING: H-15-33.
WEARING SURFACE: 3" BRICK

WATERPROOFING BRIDGE DECK
822 SQ. YDS.

NOTE: Waterproofing carried direct to GENERAL SUMMARY

EXTRA PAVEMENT

STATION From	STATION To	Side &	Surface Sq. Yds	Tack Coat Sq. Yds.	Remarks
76+60	78+30	Lt.	57	57	Appr. to Dam
76+60	78+30	Rt.	57	95	S.R. 93 Appr.
TOTALS			114	152	



TUS-250-0.24

EXTRA PAVEMENT					
Station		Side	Surface	Tack Coat	Remarks
From	To	℄	Sq.Yds.	Sq.Yds.	
113+71	118+61	R.℄L.	1200	1410	U.S.21 Intersection.
TOTALS			1200	1410	

Begin Sheet
P.T. 91+22.12
Sta. 91+00
S 52°31'E
P.C. 108+05.08
P.I. 110+46.78
Δ = 2°25' Lt.
D = 0°30'
T = 241.70'
L = 483.33
R = 11459.16'
E = 2.55'
P.T. 112+88.41
S 54° 56'E
Res
U.S. 21 To Massillon
Existing T-35 Surface
Gas Sta.
P.C. 118+13.73
P.T. 120+81.33
U.S. 21 ℄ 250
S 28°16'E
To Strasburg
P.I. 119+49.90
Δ = 26°40' Rt.
D = 9° 57.9'
T = 136.27'
L = 267.60'
R = 574.96'
STA. 118+40
END PROJECT
TUS-250-2.24
U.S. 21
Resurface to this line
Existing T-35 Surface
U.S. 21 ℄ 250
PAVEMENT DETAIL STA. 113+71 TO STA. 118+61