

RECEIVED
APR 25 1966

RECEIVED
MAY 23 1966

LINE DATA

WAY-3-14.72 & WAY-76-12.04	
BEGIN PROJECT STA 773+72.81 TO	
EQUATION STA 798+24.13 BACK	2,451.32 LIN. FT.
EQUATION STA 798+17.97 AHEAD TO	
END PROJECT STA 981+00	18,282.03 LIN. FT.
TOTAL FOR PROJECT	=20,733.35 L.F. OR 3.926 MILES
ADD FOR APPROACH	
STA 769+05.86 TO STA 773+72.81	466.95 LIN. FT.
STA 981+00 TO STA 984+00	300.00 LIN. FT.
FROM SIDE ROADS (SEE SHEET 2)	16,913.66 LIN. FT.
TOTAL LENGTH OF WORK	38,413.96 L.F. OR 7.275 MILES

COUNTY ROAD 19 S-1511-(1)	
BEGIN PROJECT STA 74+75 TO	
END PROJECT STA 93+25	1,850.00 LIN. FT.
TOTAL FOR PROJECT & LENGTH OF WORK S-1511-(1)	1,850 L.F. OR .350 MILES

TOTAL LENGTH OF PROJECTS WAY-3-14.72 & WAY-76-12.04 & S-1511-(1)	22,583.35 L.F. OR 4.277 MI.
TOTAL LENGTH OF WORK WAY-3-14.72 & WAY-76-12.04 & S-1511-(1)	40,263.96 L.F. OR 7.625 MI.

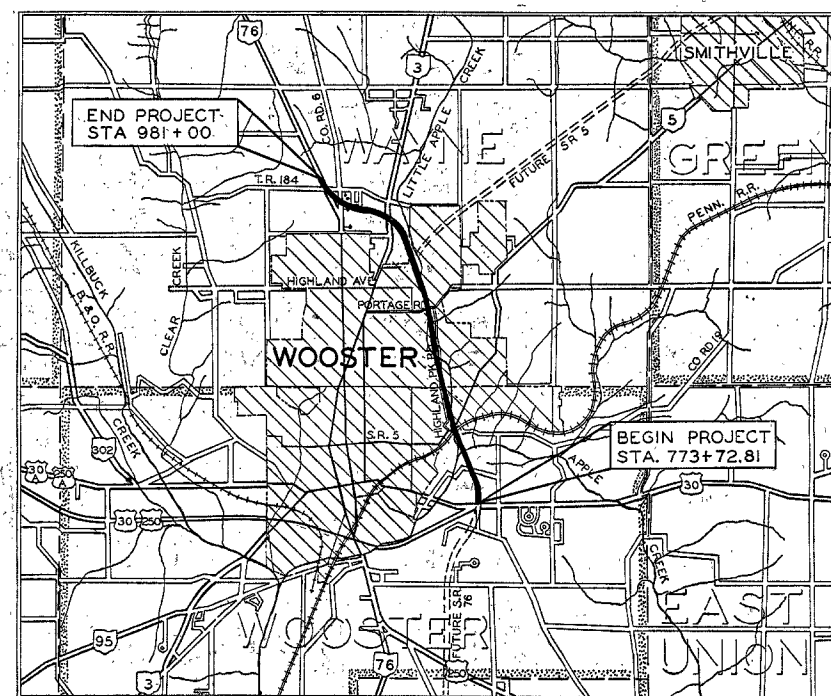
CONVENTIONAL SIGNS

COUNTY LINE	---
TOWNSHIP LINE	----
SECTION LINE	-----
CORPORATION LINE	-----
CENTER LINE	-----
FENCE LINE	-x-x-x-
POLE LINE	-----
RAILROAD	+++++
GUARD RAIL	-----
DRAIN PIPE	-----
RIGHT OF WAY LINE	-----
LIMITED ACCESS LINE	-----
TREE REMOVAL	⊗ ⊗ ⊗ ⊗
TELEPHONE	⊗
POWER	⊗
R/W	-----
LA	-----

INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC PLAN AND DESIGN DESIGNATION	2-5
TYPICAL SECTIONS	6-17
GENERAL NOTES	18-20
GENERAL SUMMARY	21-23
CALCULATIONS	24-25
SUMMARY OF TABLES	26-33
SPECIAL CONSTRUCTION DETAILS	34-35
PLAN AND PROFILE	36-59
CROSS SECTIONS	60-138
U. S. ROUTE 30 INTERCHANGE	139-162
EXIST. STATE ROUTE 5 INTERCHANGE	162A, 162B, 162C, 162D, 163-171, 171A, 171B, 171C, 171D, 171E, 171F, 172-177, 177A, 177B, 178-180, 180A.
RELOCATED ROUTE 5 INTERCHANGE	181-207
STATE ROUTE 3 INTERCHANGE	208-211
LOCAL ROADS	212-236
RAMP AND TAPER DETAILS	237-239
SUPERELEVATION TABLES	240-266
PENN. RAILROAD RELOCATION	267-271
LITTLE APPLE CREEK RELOCATION	271A, 271B, 271C, 271D, 271E, 272-380
STRUCTURES 20' AND UNDER	382-385, 387-402
SPECIAL CONSTRUCTION DETAILS	403
SANITARY AND WATER LINES	404-411
TRAFFIC CONTROL DEVICES	412-421
STILLING BASINS	422-443
APPROACH SLABS	444-459
STRUCTURES OVER 20 FT. SPAN	460-462
RIGHT-OF-WAY AND FENCE PLAN	463-482
	483-500
	501-510
	511
	512-515, 517-583, 583A, 584-651 (SHEET 516 NOT USED)
	652-693

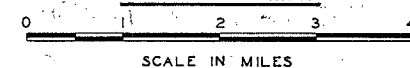
GRADE SEPARATION WITH THE PENN. R.R. CO.



DELIVERY POINT
AVERAGE HAUL FROM SIDING

PENNSYLVANIA R.R. WOOSTER
1.5 MILES

LOCATION MAP



PORTION TO BE IMPROVED
STATE & FEDERAL HIGHWAYS
OTHER ROADS
PROPOSED HIGHWAYS

SCALES

PLAN 1" = 50'
PROFILE - HORIZONTAL 1" = 50'
PROFILE - VERTICAL 1" = 10'
CROSS SECTIONS 1" = 10'

STANDARD DRAWINGS

GR-1	6-1-65	SP-53	6-30-61	MH-1A	6-1-65	BP-3	6-1-65	SD-2-64	11-25-64	801	2-2-65	816	8-6-65
BP-1	6-1-65	MC-4	6-1-65	MH-1	6-1-65	BP-4	6-1-65	BR-1-65	2-1-65	808	7-14-65	825	4-22-65
BP-2	6-1-65	CB-2-3&2-4	6-1-65	BP-7	6-1-65	BP-5	6-1-65	AS-1-54	8-10-65	809	4-30-65	1001	9-2-65
BP-6	6-1-65	CB-2-2A&B	6-1-65	MC-5	6-1-65	MH-2	6-1-65			810	5-10-65		
F-1	6-1-65	CB-3A	6-1-65	GR-2A	9-1-65	FACI-1	6-1-65			811	3-29-65		
F-2	6-1-65	CB-6	6-1-65	GR-6	6-1-65	FACI-2	6-1-65						
F-3	6-1-65	I-1	6-1-65	L-1	6-1-65	FSB-1-62	1-15-63			814	3-16-66		
MC-3	6-1-65	I-2	6-1-65	MC-1	6-1-65	SD-1-63	11-12-63			815	8-6-65		
HW-E	6-1-65	I-2A	6-1-65	MC-6	6-1-65								

STATE OF OHIO DEPARTMENT OF HIGHWAYS

WAY-3-14.72 WAY-76-12.04

CITY OF WOOSTER

WOOSTER & WAYNE TOWNSHIPS WAYNE COUNTY

S-1511 (1)
ON COUNTY ROAD 19

1965 SPECIFICATIONS

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

THE RIGHT-OF-WAY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: D.H. Ginner
DATE: 3-16-66 DIVISION DEPUTY DIRECTOR

APPROVED: C.H. Altrater
DATE: 4-25-66 ENGINEER OF BRIDGES

APPROVED: R.D. Ricketts
DATE: 5-2-66 ENGINEER OF LOCATION & DESIGN

APPROVED: P.E. Shultz
DATE: 5-2-66 DEPUTY DIRECTOR OF DESIGN & CONSTRUCTION

APPROVED: T.H. Broun
DATE: 5-5-66 DEPUTY DIRECTOR OF RIGHT OF WAY

APPROVED: E.W. Wilson
DATE: 5-6-66 DEPUTY DIRECTOR OF PLANNING & PROGRAMMING

APPROVED: _____
DATE: _____ FIRST ASSISTANT DIRECTOR

APPROVED: P.E. Maschke
DATE: 5/16/66 DIRECTOR OF HIGHWAYS

APPROVED: W. Wilson
DATE: 5/16/66 MAYOR, CITY OF WOOSTER

PREPARED AND RECOMMENDED BY
SHAFFER PARRETT & ASSOCIATES
CONSULTING ENGINEERS
MANSFIELD OHIO WOOSTER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DIVISION ENGINEER

DATE

FILE NO.

WAY-3-14.72
WAY-76-12.04

DATE OF LETTING

CONTRACT NO.

MODIFIED
APR 25 1977
REVISION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

2
693

LINE DATA FOR APPROACHES

U.S. 30
Begin Work Sta. 1520+00
End Work Sta. 1565+00
Length of Work 4,500.00 Lin. Ft.

COUNTY ROAD 19
Begin Work Sta. 23+25
End Work Sta. 29+66
Length of Work 641.00 Lin. Ft.

RELOCATED S.R. 5
Begin Work Sta. 5+50
Equation Sta. 28+92.84 = Sta. 34+33.37
End Work Sta. 39+00
Length of Work 2,809.97 Lin. Ft.

PORTAGE ROAD
Begin Work Sta. 40+25
Equation Sta. 40+78.36 = 40+79.38 Ahd
End Work Sta. 61+75
Length of Work 2,148.98 Lin. Ft.

HIGHLAND AVENUE
Begin Work Sta. 110+00
End Work Sta. 117+19.38
Length of Work 719.38 Lin. Ft.

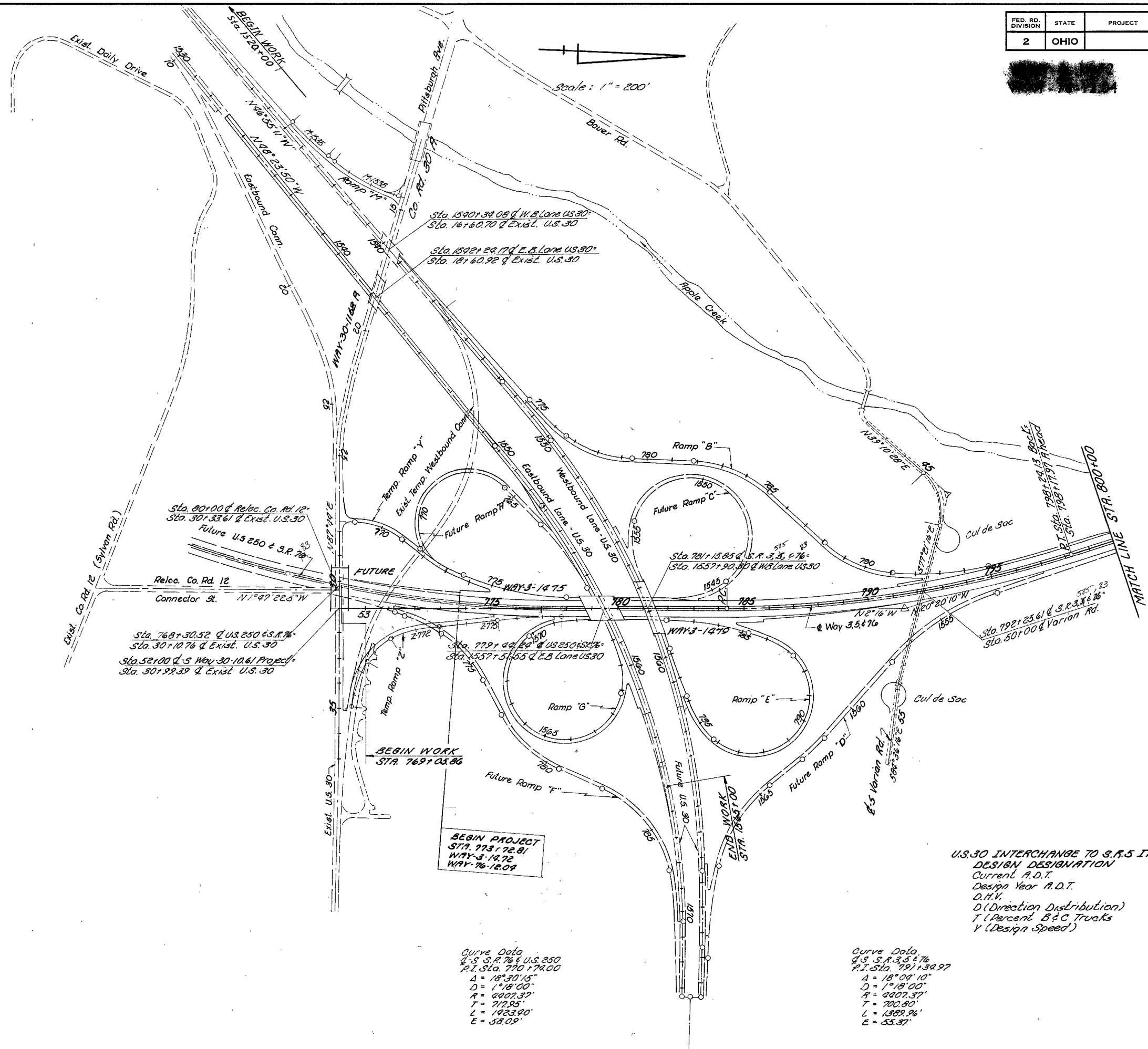
S.R. 3
Begin Work Sta. 58+75
End Work Sta. 66+00
Length of Work 2,725.00 Lin. Ft.

FRIENDSVILLE ROAD
Begin Work Sta. 12+00
Suspend Work Sta. 13+57.84
Resume Work Sta. 13+97.08
End Work Sta. 17+50
Length of Work 510.76 Lin. Ft.

MILLTOWN ROAD WEST
Begin Work Sta. 18+00
Suspend Work Sta. 19+88.73
Resume Work Sta. 20+29.66
End Work Sta. 26+00
Length of Work 759.07 Lin. Ft.

PENNSYLVANIA RAILROAD RELOCATION
Begin Work Sta. 7062+00
End Work Sta. 7083+00
Length of Work 2100.00 Lin. Ft.

Total length 16,913.66 Lin. Ft.
or 3.203 Miles



U.S. 30 INTERCHANGE TO S.R. 5 INTERCHANGE
DESIGN DESIGNATION
Current A.D.T. 6,102
Design Year A.D.T. 13,750
D.H.V. 2,060
D (Direction Distribution) 1,236
T (Percent B & C Trucks) 12.6 %
V (Design Speed) 60 M.P.H.

Curve Data
G.S. S.R. 76 & U.S. 250
P.I. Sta. 770+74.00
Δ = 18°30'15"
D = 1°18'00"
R = 4407.37'
T = 712.95'
L = 1923.90'
E = 38.09'

Curve Data
G.S. S.R. 3.5 & 76
P.I. Sta. 791+34.97
Δ = 18°09'10"
D = 1°18'00"
R = 4407.37'
T = 700.80'
L = 1389.96'
E = 55.37'

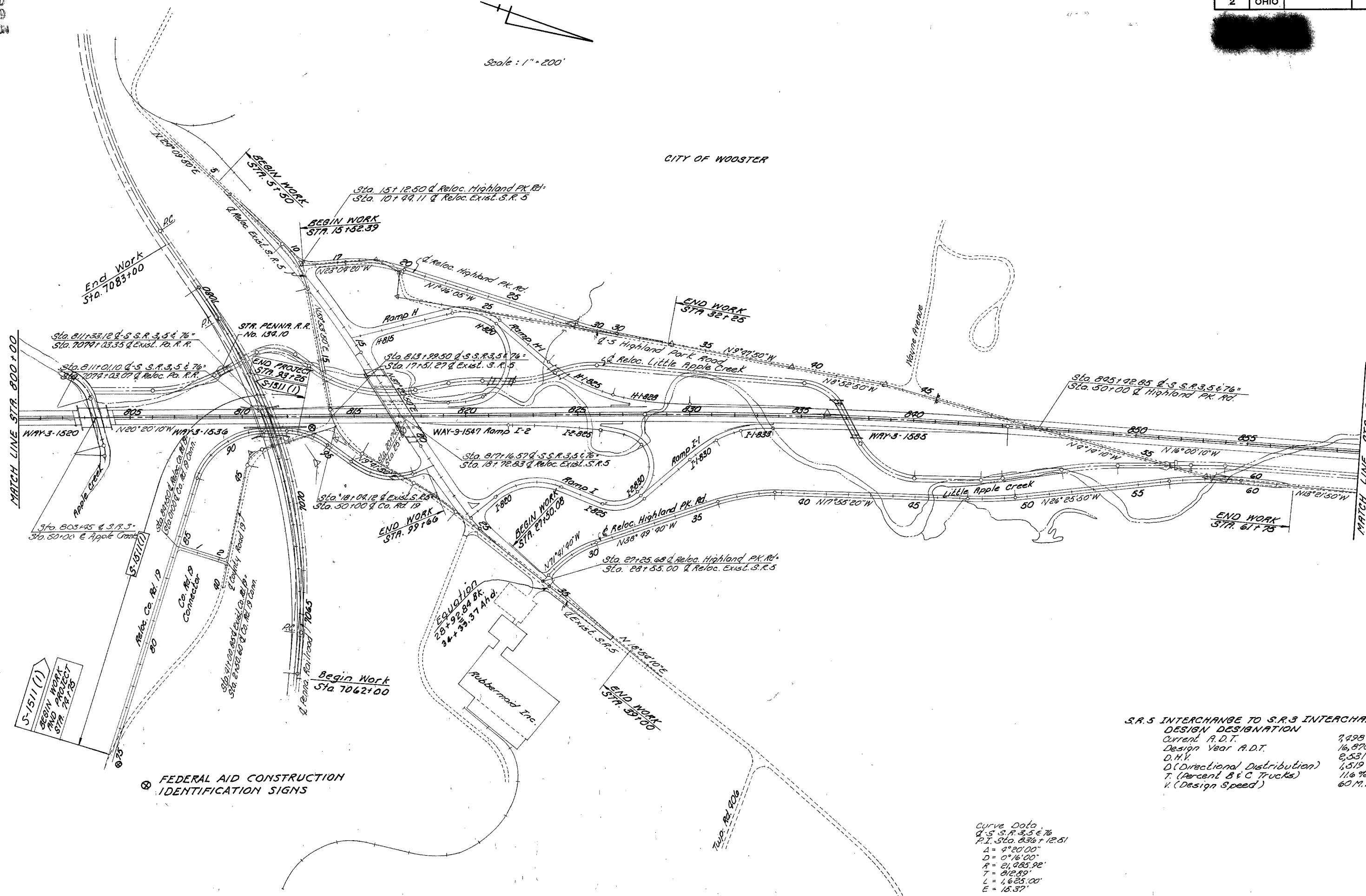
MODIFIED
APR 25 1979
REVISION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

3
623

Scale: 1" = 200'

CITY OF WOOSTER



FEDERAL AID CONSTRUCTION
IDENTIFICATION SIGNS

S.R. 5 INTERCHANGE TO S.R. 3 INTERCHANGE	
DESIGN DESIGNATION	
Current A.D.T.	7,498
Design Year A.D.T.	16,870
D.H.V.	2,531
D (Directional Distribution)	1,519
T (Percent B & C Trucks)	11.6%
V (Design Speed)	60 M.P.H.

Curve Data
d.s. S.R. 3, S.R. 5
P.I. Sta. 836+12.51
 $\Delta = 4^\circ 20' 00''$
 $D = 0^\circ 16' 00''$
 $R = 21,885.92'$
 $T = 812.89'$
 $L = 1,625.00'$
 $E = 15.37'$

Rev. 5-10-66

MODIFIED
APR 25 1968
REVISION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

4
693

Scale: 1" = 200'

MATCH LINE STA. 860+00

MATCH LINE STA. 920+00

CITY OF WOOSTER

CITY OF WOOSTER

WAYNE TOWNSHIP

Southbound Lane

Little Apple Creek

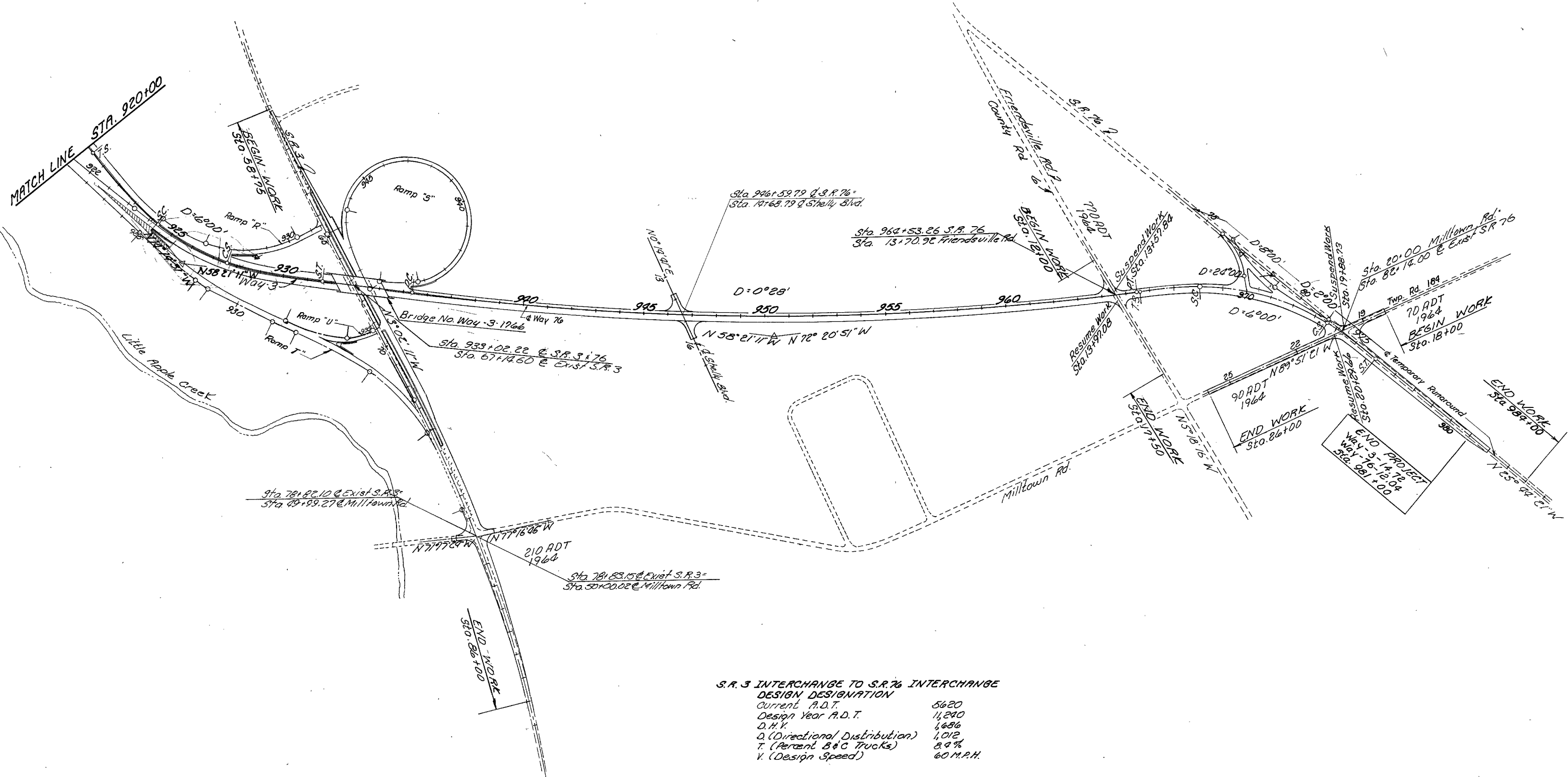
CITY OF WOOSTER

MICROFILMED
APR 25 1974
FED. HIGHWAY ADMIN.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

5
623

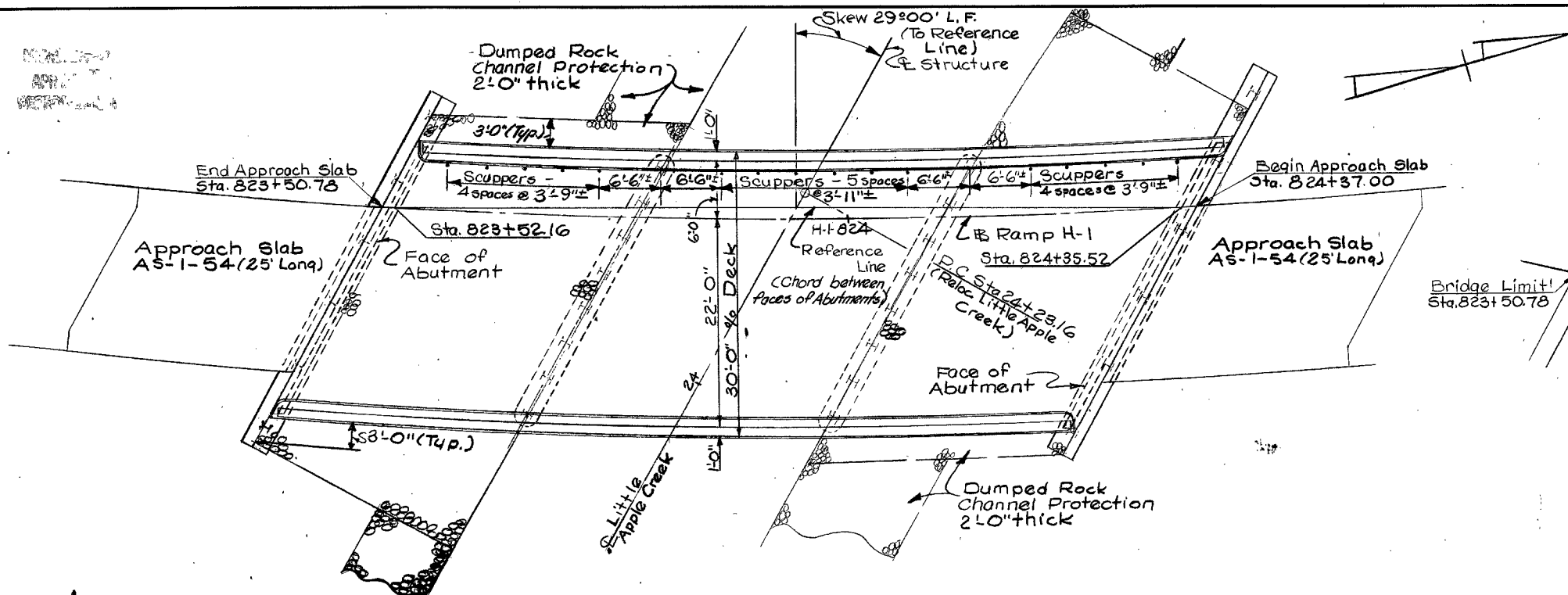
Scale: 1" = 200'



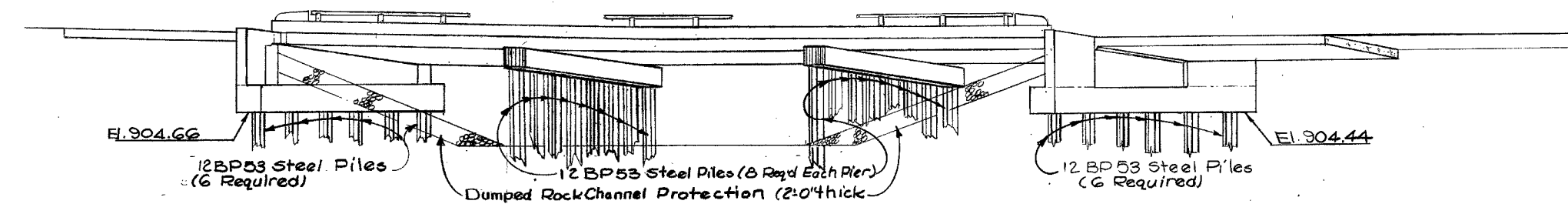
S.R. 3 INTERCHANGE TO S.R. 76 INTERCHANGE

DESIGN DESIGNATION	
Current A.D.T.	5420
Design Year A.D.T.	11,240
D.H.K.	1,686
D. (Directional Distribution)	1,012
T. (Percent B+C Trucks)	8.4%
V. (Design Speed)	60 M.P.H.

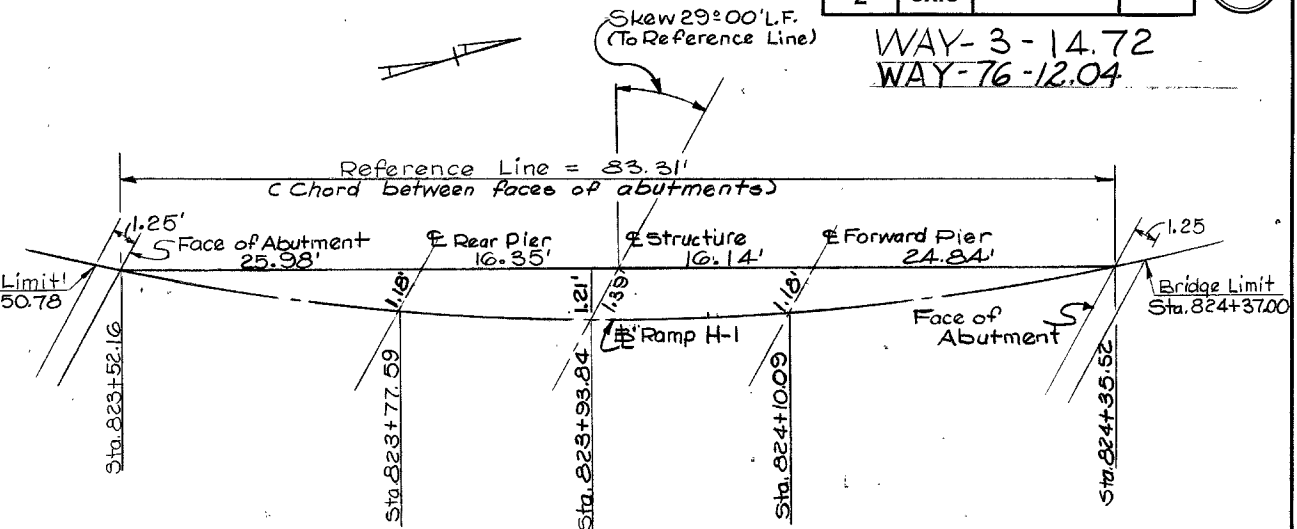
WAY-3-14.72
WAY-76-12.04



GENERAL PLAN



GENERAL ELEVATION



LAYOUT DIAGRAM

~ GENERAL NOTES ~

REFERENCE shall be made to Standard Drawings BR-1-65 (sheet 1) revised 11-24-65, AS-1-54 revised 8-10-65 and Supplemental Specification 808 dated 7-14-65, & 825 dated 4-22-65.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.

Design Loading: OF-400 (57)
Concrete Class C: basic unit stress - 1,333 p.s.i.
Concrete Class E: basic unit stress - 1,133 p.s.i.
Structural Steel: ASTM A36, basic unit stress - 20,000 p.s.i.

Reinforcing Steel: ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress - 20,000 p.s.i.

PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade after which excavation shall be made for the abutments and piles driven.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments.

PILES shall be driven to a minimum bearing capacity of 25 tons per pile for the abutments and 26 tons per pile for the piers.

MACHINE FINISH: At the Contractor's option, the concrete deck may be finished by the use of a finishing machine.

ESTIMATED QUANTITIES

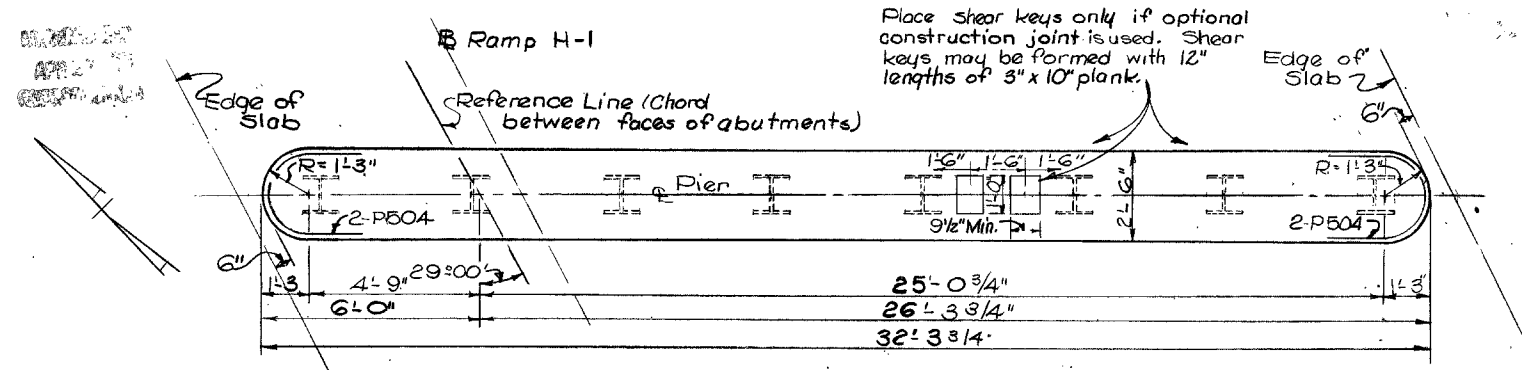
ITEM	QUANTITY	UNIT	DESCRIPTION	ABUT.	PIER	SUPER	GENERAL	AS BUILT
503	96	Cu.Yds.	Unclassified Excavation	96				
505	Lump	Sum.	First Test Pile				Lump	
507	720	Lin.Ft.	Steel Piles, 12 BP 53	240	480			
509	44,176	Lbs.	Reinforcing Steel	4,829	2,774	36,573		
511	140	Cu.Yds.	Class "C" Concrete, Superstructure, and Pier Caps		12	134		
511	52	Cu.Yds.	Class "E" Concrete, Abutments	52				
517	168.69	Lin.Ft.	Bridge Railing, Type I			168.69		
518	19	Cu.Yds.	Porous Backfill	19				
518	16	Each	Scuppers, 4" x Cast iron or Wrought iron Pipe			16		
601	353	Cu.Yds.	Dumped Rock Channel Protection				353	
808	146	Units	Water-Reducing, Set-Retarding Admixture		12	134		
825	278	sq.yds.	Concrete Surface Treatment					

SHAFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

GENERAL PLAN AND ELEVATION
EST. QUANTITIES AND GEN. NOTES
BRIDGE NO. WAY-3-RAMP H-1
OVER LITTLE APPLE CREEK
WAYNE COUNTY S.R. 3
STA. H-1-823+50.78 TO STA. H-1-824+37.00
SCALE DATE

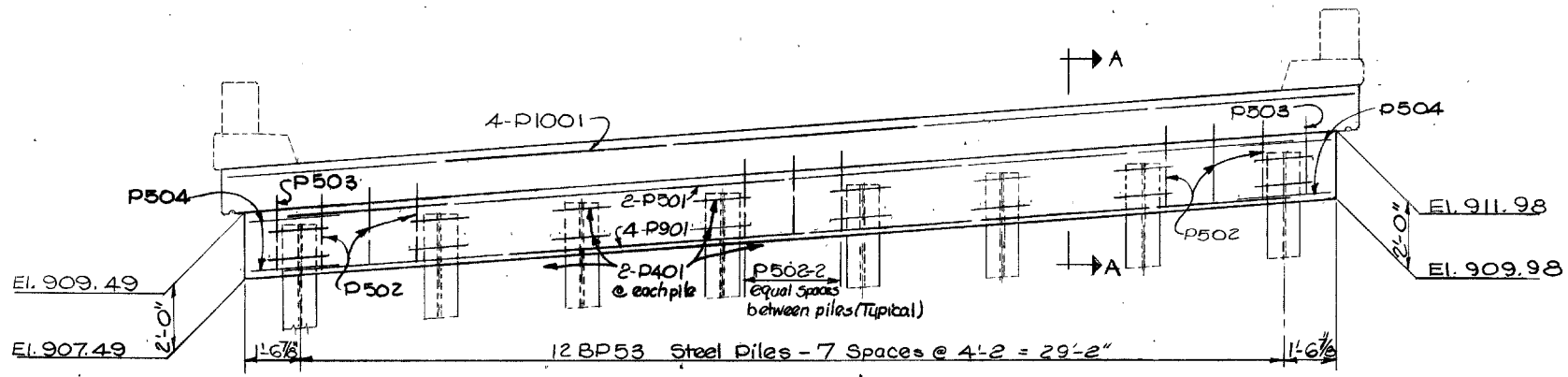
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
F.H.S.	R.J.M.		REY	TK	3/8/66	

WAY-3-14.72
WAY-76-12.04

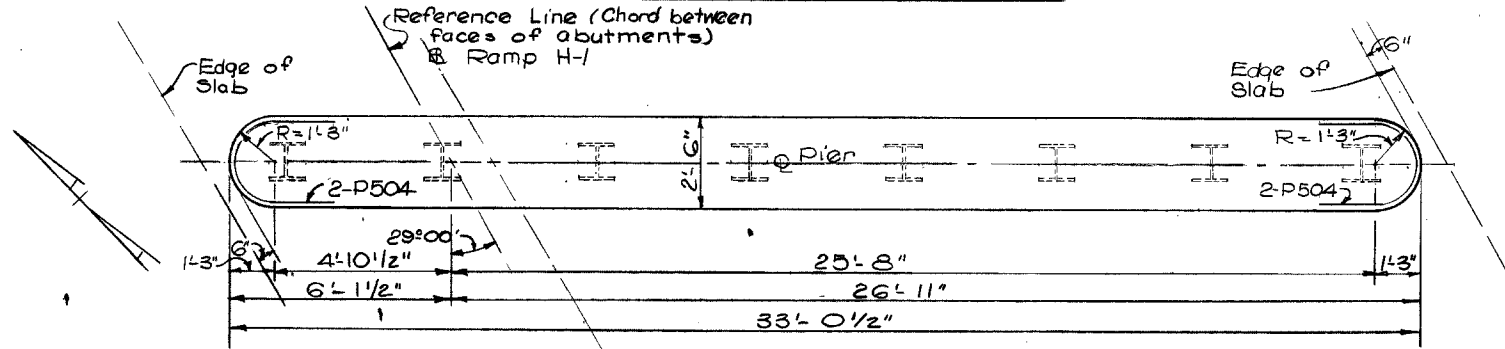


PLAN - REAR PIER

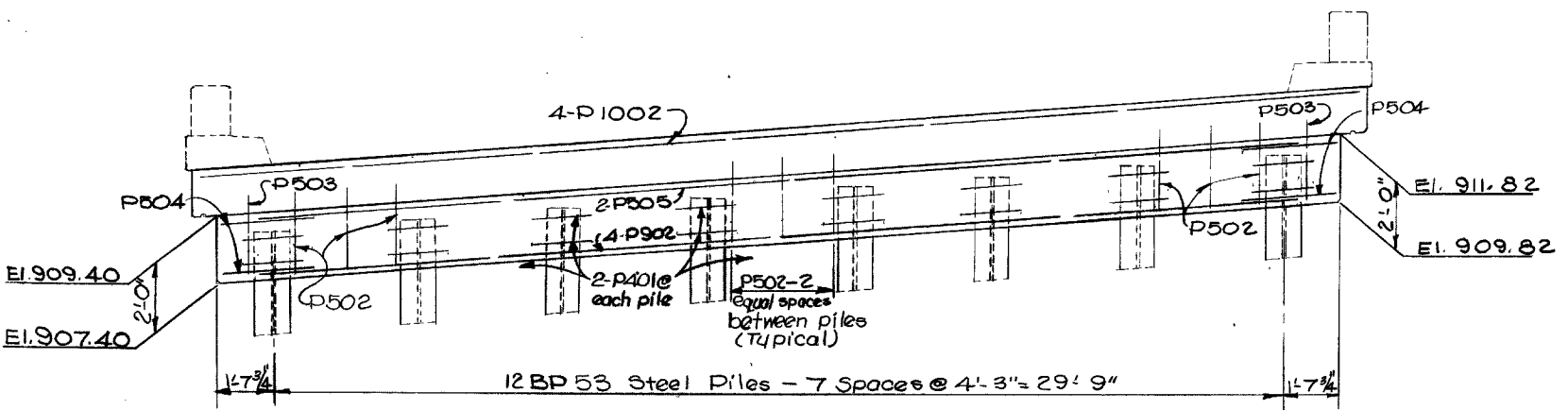
Construction joint to be provided in case of machine finishing of concrete deck; otherwise joint is optional



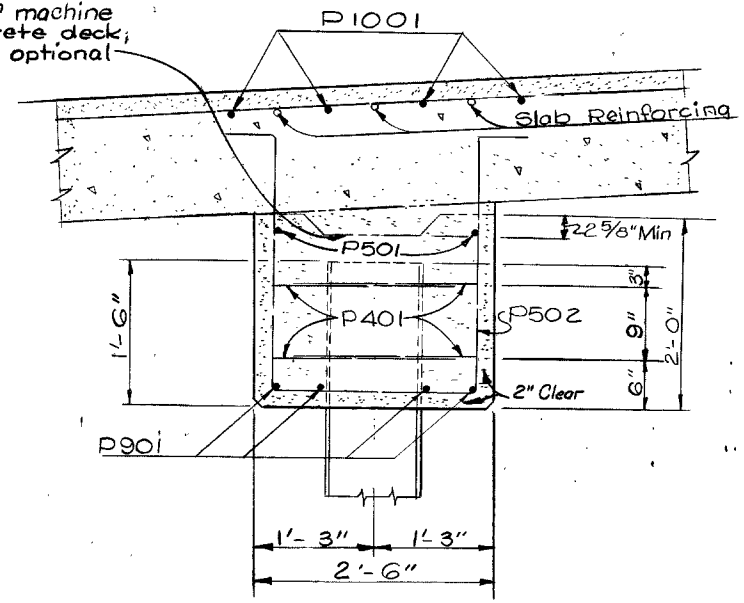
ELEVATION - REAR PIER



PLAN - FORWARD PIER



ELEVATION - FORWARD PIER



SECTION A-A

~ NOTES ~

- CONCRETE shall be Class "C"
- HORIZONTAL CONSTRUCTION JOINT between the top of the pier cap and bottom of slab will be permitted if keys, as shown are provided at the top of the cap. If such a joint is not provided, the concrete in the slab and cap shall be placed in a continuous operation.
- FALSEWORK SUPPORT: The pier cap shall not be used to support falsework for the deck slab.
- PILE PAINTING: The exposed portion of the piles shall be painted in accordance with Item 514, applying two coats as per Sections 708.06, 708.09 or 708.08 and two coats as per Section 708.12.
- PAYMENT FOR PILES per lin. ft. includes payment for the pile painting. The elevation of cut-off, as per Section 507.13 shall be considered as 1'-6" above the bottom of the concrete cap.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

PIER DETAILS
BRIDGE NO. WAY-3-RAMP H-1
OVER LITTLE APPLE CREEK
WAYNE COUNTY S.R. 3
STA H-1-823+50.78 TO STA H-1-824+37.00
SCALE DATE

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
F.H.S.	P.J.M.		8/22	W.K.	3/8/66	

WAY-3-14.72
WAY-76-12.04

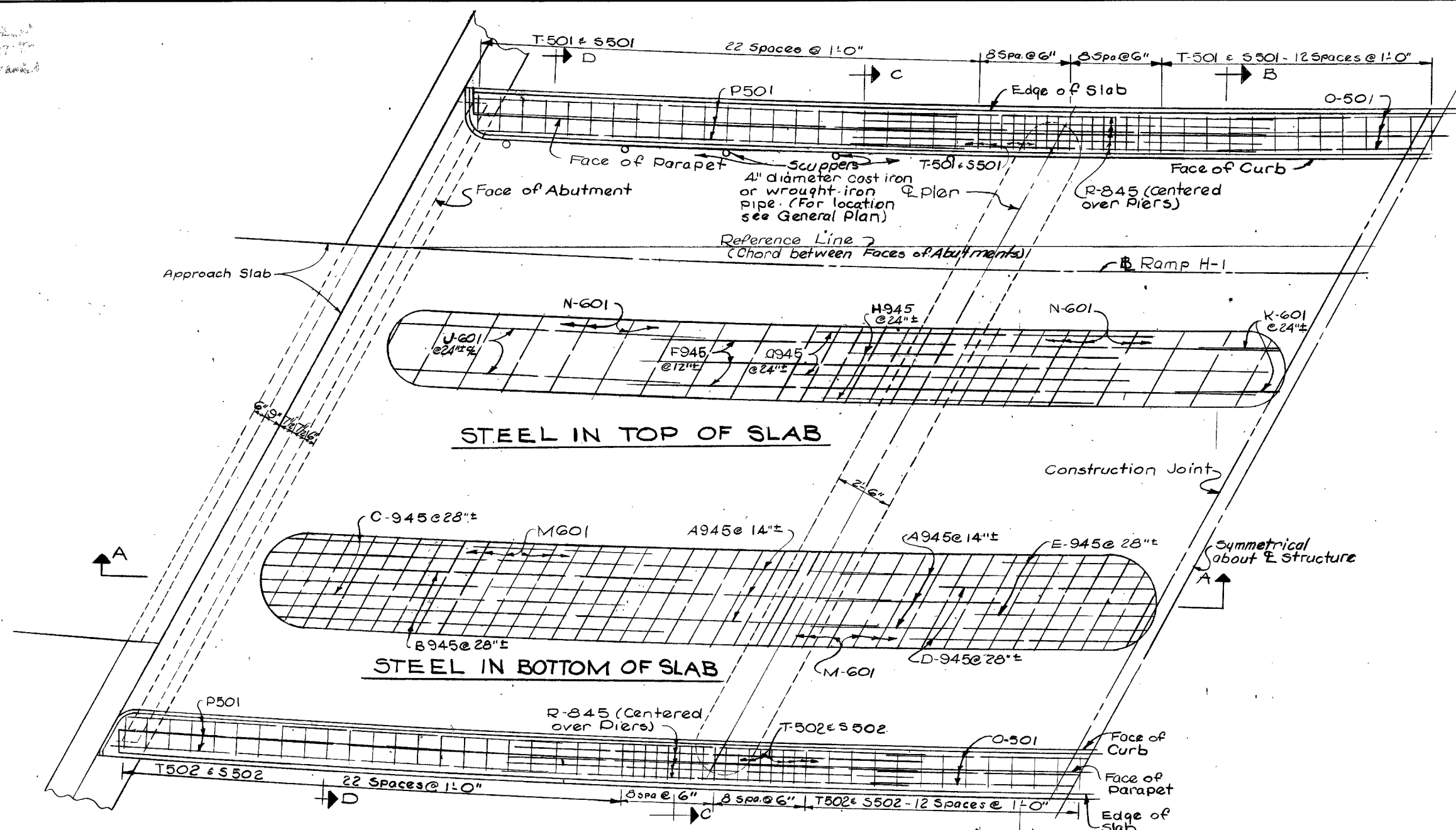
~NOTES~

CONCRETE shall be Class "C"

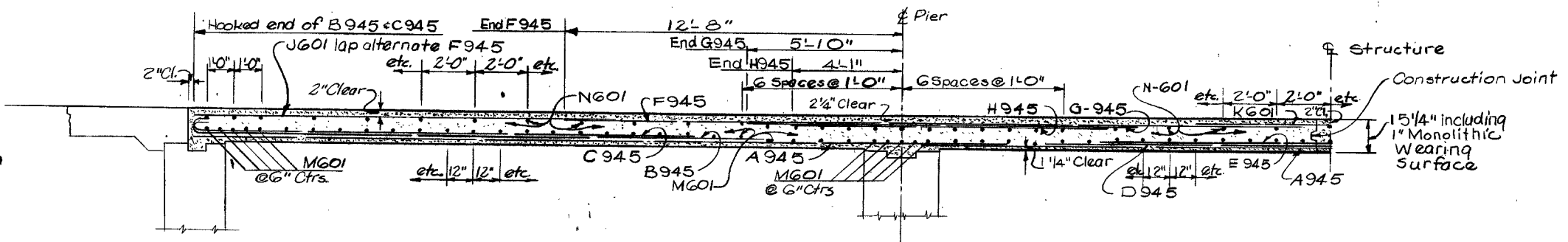
CAMBER of $\frac{1}{800}$ of the span shall be provided in each span (in addition to any required for conformance with the profile of the highway) to allow for dead load deflection. This is the amount of camber required before falsework is released. To obtain this, proper allowance shall be made for the deflection of falsework members.

CURBS shall be placed after the shoring under the slab has been released sufficiently to permit the slab spans to attain full dead load deflection.

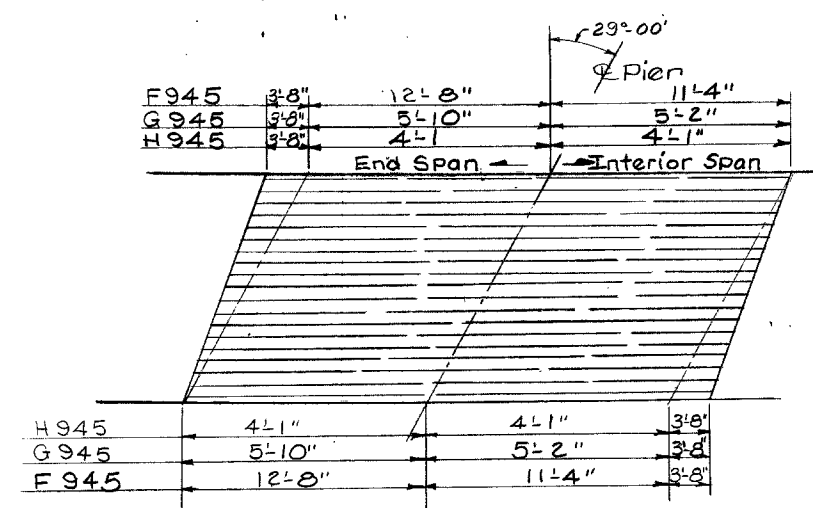
CONSTRUCTION JOINTS: One construction joint in the bridge slab shall be placed 6"± off the transverse centerline of the middle span in order to miss transverse reinforcing bars. One longitudinal joint on the centerline of structure, will be permitted. Horizontal construction joints shall be placed between each curb and the top of the slab and the parapet wall and the top of the curb.



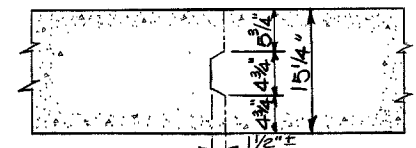
PART PLAN - SLAB REINFORCING



SECTION A-A



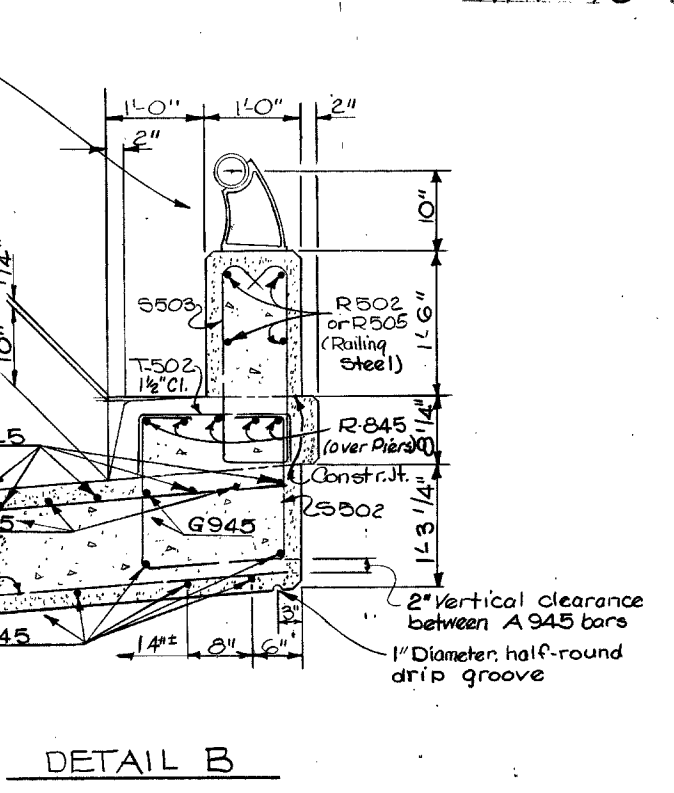
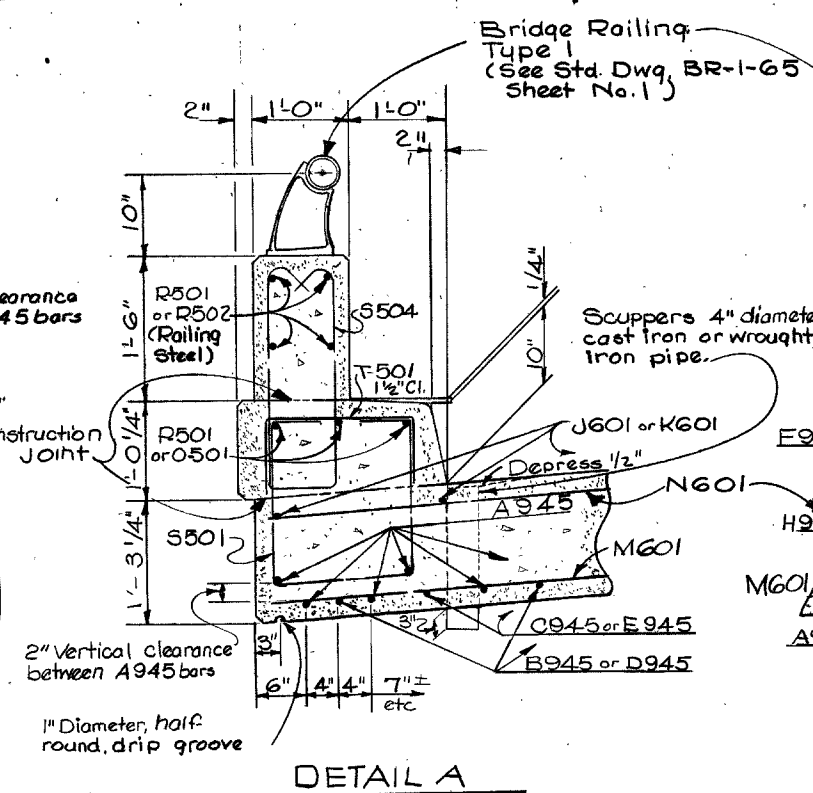
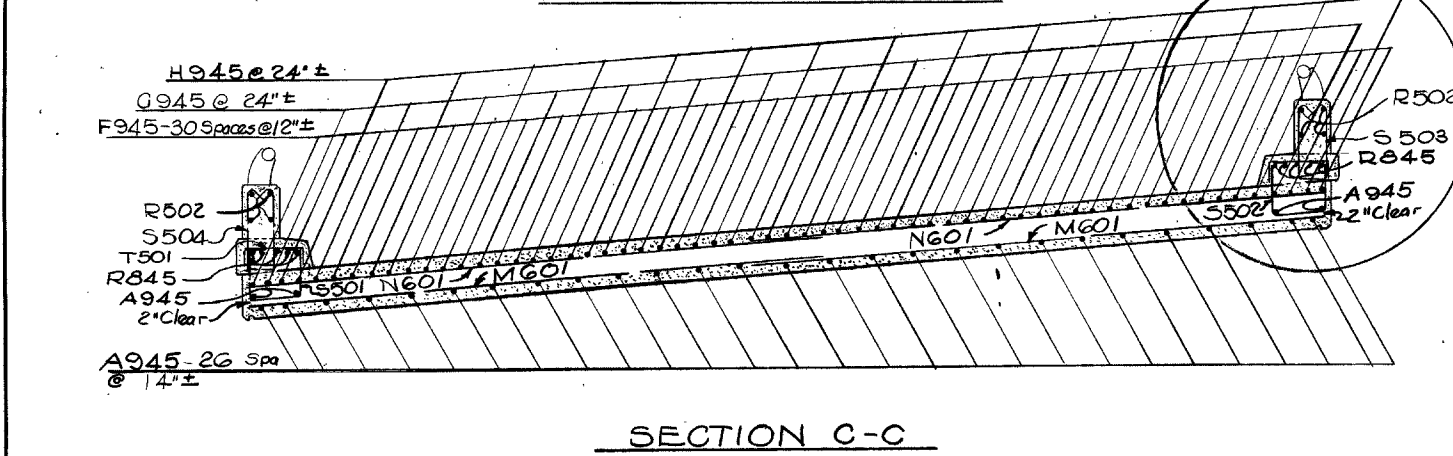
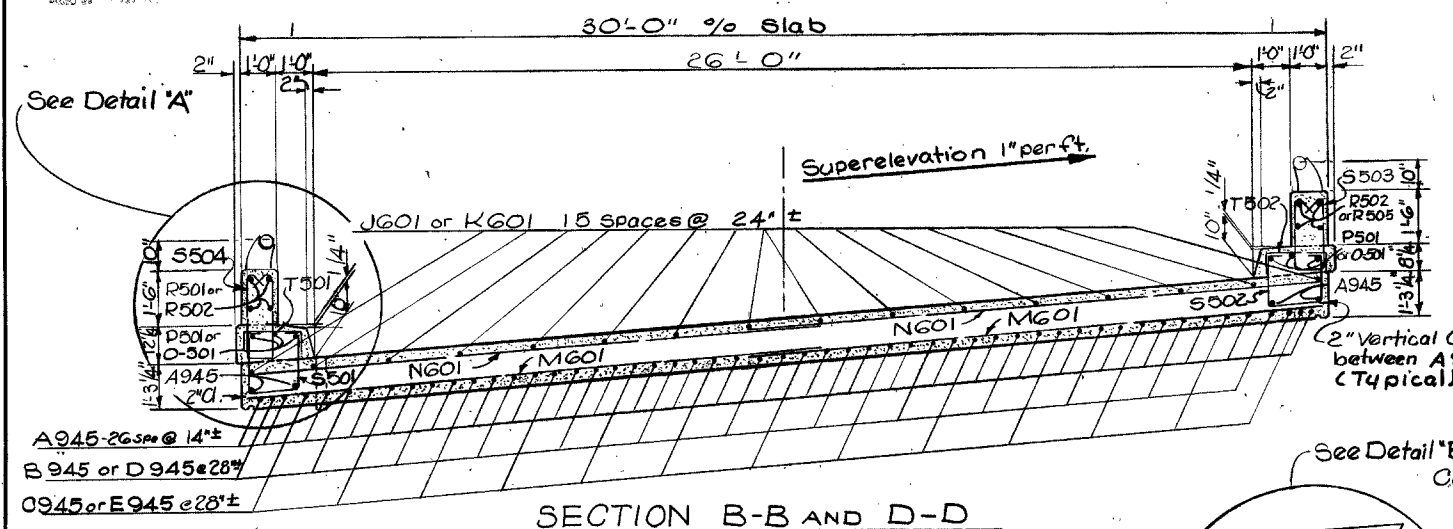
PLACEMENT DIAGRAM FOR F 945, G 945 AND H 945 OVER PIERS



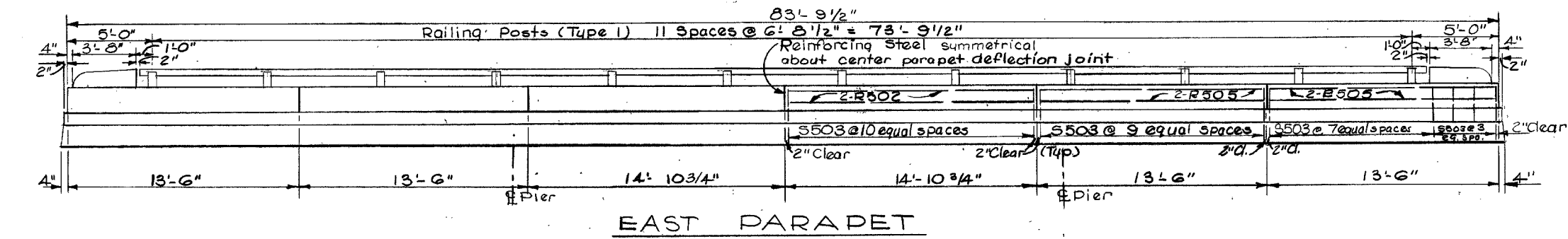
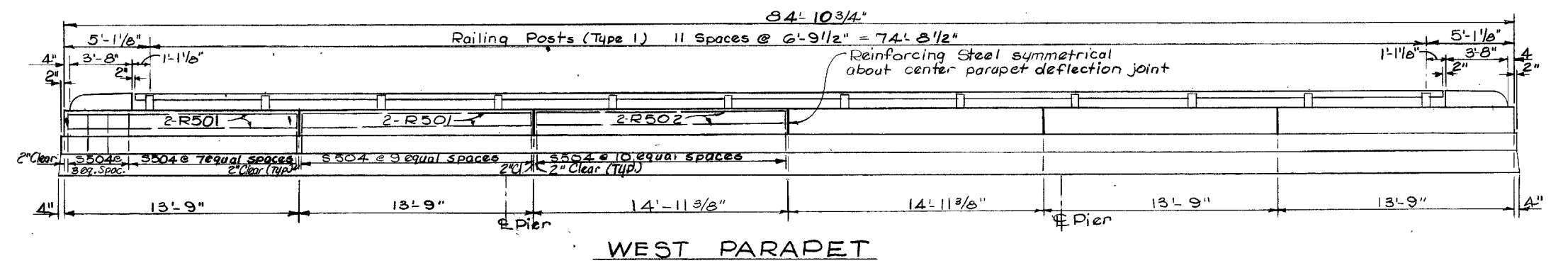
CONSTRUCTION JOINT DETAIL (See Note)

SHAFFER, PARRETT AND ASSOCIATES Consulting Engineers MANSFIELD, OHIO.					
SLAB REINFORCING DETAILS					
BRIDGE NO. WAY-3-RAMP H-1 OVER LITTLE APPLE CREEK					
WAYNE COUNTY S.R. 3 STA. H-1-823+50.78 TO STA. H-1-824+37.00					
SCALE	DRAWN	TRACED	CHECKED	REVIEWED	DATE
F.H.S.	P.J.M.		3/8/66		3/8/66

WAY-3-14.72
WAY-76-12.04



Note:
For additional railing, end post and parapet deflection joint details see Standard Drawing BR-1-G5 sheet No.1.



SHAFFER, PARRETT AND ASSOCIATES Consulting Engineers MANSFIELD, OHIO.							
SLAB REINFORCING, RAILING AND PARAPET DETAILS BRIDGE NO. WAY-3-RAMPH-1 OVER LITTLE APPLE CREEK WAYNE COUNTY S.R. 3 STA. H-1-823+50.78 TO STA. H-1-824+57.00 SCALE							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
F.H.S.	P.J.M.				3/8/66		

