STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

WAY-3-14.72
WAY-83-13.79

CITY OF WOOSTER
WOOSTER TOWNSHIP
WAYNE COUNTY

DESIGN DESIGNATION

	S.R. 3 & 83	S.R. 83
Current ADT (1995)	= 14,180	4,220
Design Year ADT (2015)	= 21,270	6,300
DHV	= 2,127	630
D	= 55%	55%
T	= 8%	10%
V (Design Speed)	= 55 MPH *	55 MPH & 45 MPH *
Legal Speed	= 55 MPH	55 MPH & 45 MPH
Functional Classification	= Urban Freeway	Urban Arterial

* See Design Exceptions, Sheet 2

CONVENTIONAL SIGNS

County Line
Township Line
Section Line
Corporation Line —or—
Fence Line(existing) —x—x— (proposed) —x—x—
Center Line
Trees, Stumps, (to be removed)
Utility Poles: Telephone, Power, Light

Limited Access (only) —LA—
Right of Way (only) —RW—
Limited Access & Right of Way —LA&RW—
Existing Right of Way
Property Line —P— (in existing fence) —P—x
Railroad —or—
Guardrail (existing) (proposed)

INDEX OF SHEETS

LINE DATA

S.R. 3 & S.R. 83
BEGIN WORK: STA. 777+58.06
END WORK: STA. 924+94.41 = 14736.35 LIN. FT.

S.R. 83
BEGIN WORK: STA. 924+94.41
END WORK: STA. 989+40 = 6445.59 LIN. FT.

N.B.L. U.S.R. 250 & S.R. 83
BEGIN WORK: STA. 773+69
END WORK: STA. 777+58.06 = 389.06 LIN. FT.

S.R. 585
BEGIN WORK: STA. 6+00
END WORK: STA. 37+75= 3175'
3175' -540.53' (STA. EQUATION) = 2634.47 LIN. FT.

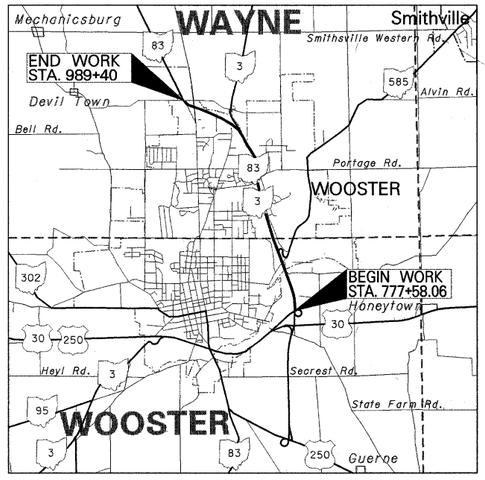
PORTAGE RD.
BEGIN WORK: STA. 45+60
END WORK: STA. 53+80 = 820 LIN. FT.

TOTAL WORK LENGTH = 25025.47 LIN. FT. OR 4.74 MILES

Plan Prepared By:
DISTRICT 3
PRODUCTION

Project WAY-3-14.72, WAY-83-13.79
Date of Letting ___ 19 Contract No. ___

SEAL



LOCATION MAP
SCALE IN MILES
0 1 2 3 4

USGS QUADRANT NO. N4045 - W8152.5/7.5 WOOSTER, OHIO
LONGITUDE N40 -47' -49" *
LATITUDE W81 -54' -46"
* LONGITUDE AND LATITUDE AT APPROXIMATE BEGINNING OF WORK

Portion to be Improved
State & Federal Routes
Other Roads

SCALES
Plan 0 50 100
Profile Horizontal 0 5 10, Vertical 0 5 10
Cross Section Horzt 0 5 10, Vertical 0 5 10

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL SPECIFICATIONS

801	3-23-95	
802	3-23-95	
815	7-17-95	
820	6-14-95	
910	7-17-95	
931	7-17-95	
933	7-17-95	
942	6-14-95	
944	12-7-95	

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-1.1	2-21-92	CB-5	11-10-83	GR-1.2	10-30-92	MC-9.3	10-30-92	TC-32.10	9-1-92	TC-52.20	4-3-79			MT-98.16	6-24-93
BP-2.1	10-28-94	CB-6	5-1-79	GR-1.3	2-21-92	MC-9.4	10-30-92	TC-32.11	9-1-92	TC-61.10	4-5-82	SD-1-69	6-12-69	MT-99.10	11-14-86
BP-2.2	10-28-94	I-2	12-18-84	GR-2.1	5-6-91	MC-10	5-1-76	TC-35.10	8-29-84	TC-65.10	2-1-90	VPF-1-90	3-24-93	MT-105.10	7-1-92
BP-2.4	2-21-92	F-1	11-10-83	GR-3.1	5-6-91	MC-11	8-1-78	TC-41.10	8-29-84	TC-65.11	2-1-90	MT-95.30	10-10-88	MT-105.11	7-1-92
BP-2.5	2-21-92	F-2	5-1-76	GR-3.2	5-6-91	TC-7.65	3-1-79	TC-41.20	6-21-94	TC-65.13	2-1-90	MT-95.31	10-10-88	MT-101.60	7-1-92
BP-3.1	2-21-92	F-3	5-1-76	GR-4.1	5-6-91	TC-21.10	9-1-92	TC-41.50	6-21-94	TC-71.10	9-10-91	MT-95.32	8-25-89		
BP-8.1	10-28-94	F-4	11-10-83	GR-4.2	5-6-91	TC-21.40	9-1-92	TC-42.10	8-19-77	TC-72.20	2-26-82	MT-95.40	10-1-92		
BP-5.1	10-28-94	F-5	5-1-76	GR-8.1	1-31-94	TC-21.41	9-1-92	TC-42.20	3-26-79	PCB-91	4-24-92	MT-98.12	6-24-93	HL-50.11	5-1-87
CB-2-2-A&B	5-1-79	F-6	5-1-76	I-2A	12-18-84	TC-22.10	9-1-92	TC-51.11	9-30-94	EXJ-4-87	1-20-94	MT-98.13	6-24-93	HW-4A	4-1-80
CB-2-3&2-4	5-1-79	I-3C & D	4-1-80	MC-4	7-26-76	TC-22.20	9-1-92	TC-51.12	1-3-94	AS-1-81	9-15-94	MT-98.14	6-24-93		
CB-3A	5-1-79	GR-1.1	5-6-91	MC-9.2	5-6-91	TC-31.21	9-1-92	TC-52.10	4-3-79	FSB-1-62	1-15-63	MT-98.15	6-24-93		

SURFACE TRANSPORTATION PROGRAM
PID 8300

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 in accordance with the provisions of Section 5511.02, Revised Code of Ohio.

1995 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, 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 the maintenance and safety of traffic will be set forth on the plans and estimates.

Approved Mary McGrath P.D.
Date 4-2-96 District Deputy Director

Approved
Date 4/17/96 Director, Department of Transportation

DESIGN FILE: $$$$$.DGN\FILESPECIFICATIONS$$$$$
WORKSTATION: $TERMINAL$ DATE: $$$$$DATE$$$$$
WAY-3/83-14.72/3.79
963575
224PGS
07-31-96
DIST. 03

FHWA REGION	STATE	PROJECT	
5	OHIO		

2
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WAY-3-14.72
WAY-83-13.79

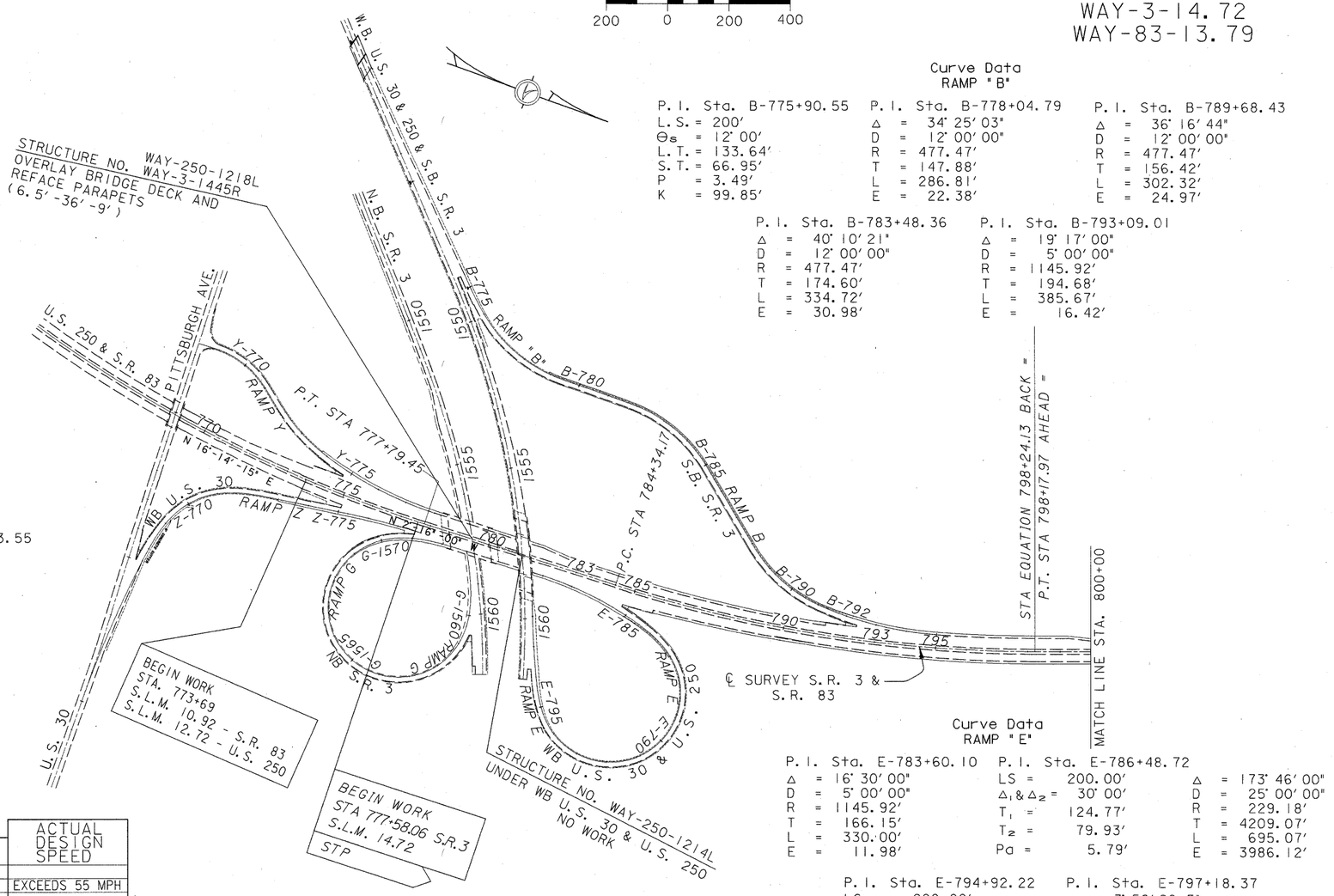
SCHEMATIC PLAN

DESIGN EXCEPTIONS

APPROVED
11-3-94

	REQUIRED	AS DESIGNED
OUTSIDE GRADED SHOULDER WIDTH	15′	12′
WAY-3-1445R (WAY-250-1218L) LATERAL CLEARANCE FROM EDGE OF SPEED CHANGE LANE	10′	9′
WAY-83-1395B LATERAL CLEARANCE FROM INSIDE EDGE PAVEMENT TO MEDIAN SAFETY PARAPET	4′	1.5′
HORIZONTAL CLEARANCE FROM OUTSIDE EDGE OF PAVEMENT TO FACE OF SAFETY SHAPE PARAPET ON EXISTING RETAINING WALL AND RAILROAD ABUTMENT	15′	8′ S.B.L. 9′ N.B.L.
HORIZONTAL CLEARANCE FROM INSIDE EDGE OF PAVEMENT TO MEDIAN BARRIER ON S.R. 83	4′	1.5′
HORIZONTAL CLEARANCE FROM INSIDE EDGE OF PAVEMENT TO EXISTING CONCRETE MEDIAN ON RAMP H & I	3′	1′

SCALE
200 0 200 400



Curve Data RAMP "B"

P.I. Sta. B-775+90.55
L.S. = 200′
Θs = 12° 00′
L.T. = 133.64′
S.T. = 66.95′
P = 3.49′
K = 99.85′

P.I. Sta. B-778+04.79
Δ = 34° 25′ 03"
D = 12° 00′ 00"
R = 477.47′
T = 147.88′
L = 286.81′
E = 22.38′

P.I. Sta. B-789+68.43
Δ = 36° 16′ 44"
D = 12° 00′ 00"
R = 477.47′
T = 156.42′
L = 302.32′
E = 24.97′

P.I. Sta. B-783+48.36
Δ = 40° 10′ 21"
D = 12° 00′ 00"
R = 477.47′
T = 174.60′
L = 334.72′
E = 30.98′

P.I. Sta. B-793+09.01
Δ = 19° 17′ 00"
D = 5° 00′ 00"
R = 1145.92′
T = 194.68′
L = 385.67′
E = 16.42′

Curve Data RAMP "G"

P.I. Sta. G-1559+99.28
L.S. = 300′
Θs = 37° 30′ 00"
L.T. = 204.68′
S.T. = 104.27′
P = 16.11′
K = 147.89′
Δ = 220° 55′ 08"
D = 25° 00′ 00"
R = 229.15′
L = 883.68′

P.I. Sta. G-1570+83.55
L.S. = 300′
Θs = 37° 30′ 00"
L.T. = 204.68′
S.T. = 104.27′
P = 16.11′
K = 147.89′

Curve Data RAMP "E"

P.I. Sta. E-783+60.10
Δ = 16° 30′ 00"
D = 5° 00′ 00"
R = 1145.92′
T = 166.15′
L = 330.00′
E = 11.98′

P.I. Sta. E-786+48.72
LS = 200.00′
Δ1&Δ2 = 30° 00′
T1 = 124.77′
T2 = 79.93′
Pa = 5.79′

P.I. Sta. E-794+92.22
LS = 200.00′
Δ1&Δ2 = 27° 00′
T1 = 130.57′
T2 = 73.20′
Pa = 6.65′

P.I. Sta. E-797+18.37
Δ = 3° 58′ 20.5"
D = 2° 00′ 00"
R = 2864.79′
T = 99.35′
L = 198.62′
E = 1.72′

Curve Data

P.I. Sta. 770+74.00
Δ = 18° 30′ 15"
D = 1° 18′ 00"
R = 4407.37′
T = 717.95′
L = 1423.40′
E = 58.09′
SUPERELEVATION = .031%
EXCEEDS DESIGN SPEED

Curve Data

P.I. Sta. 791+34.97
Δ = 18° 04′ 10"
D = 1° 18′ 00"
R = 4407.37′
T = 700.80′
L = 1389.96′
E = 55.37′
SUPERELEVATION = .031%
EXCEEDS DESIGN SPEED

VERTICAL CURVE TABLE

	STA. PVI	L (FT)	G1 (%)	G2 (%)	SSD	ACTUAL DESIGN SPEED
	(MAINLINE)					
FREEWAY 55 MPH DESIGN	780+50	1600	+1.00	-3.92	>550	EXCEEDS 55 MPH
	794+33	400	-3.92	-2.86		
	804+50	600	-2.86	+0.76		
	872+00	400	+0.76	+1.10		
	894+75 TO 898+00 SB	GRAPHIC GRADE				
	901+00 SB	400	+2.72	+0.30		
	916+50 SB	800	+0.30	+3.80		
	928+00 SB	200	+3.80	+3.96		
	894+75 TO 898+00 NB	GRAPHIC GRADE				
	892+00 NB	400	-0.96	+1.44		
	918+78 NB	400	+1.44	+3.80		
ARTERIAL 45 MPH N.B.L. 55 MPH S.B.L.	931+00	200	+3.96	+3.72		
	937+00	200	+3.72	+3.80		
	960+50	400	+3.80	+0.92		
	973+00	800	+0.92	-1.48		
	980+00	300	-1.48	-0.48		

DESIGN FILE: $$$$$$.DGNFILESPECIFICATIONS$$$$$$
WORKSTATION: STERMINALS DATE: $$$$$DATE$$$$$$

SCHEMATIC PLAN

FHWA REGION	STATE	PROJECT	
5	OHIO		

3
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WAY-3-14.72
WAY-83-13.79

SCALE
200 0 200 400

Curve Data
RAMP "H"
P. I. Sta. H-819+38.16
Δ = 54°05' 43"
D = 27°05' 31"
R = 211.49'
L = 199.67'
T = 107.98'
E = 25.97'

Curve Data
RAMP "H-1"
P. I. Sta. H-1-824+91.56
Δ = 26°16' 57"
D = 8°00' 00"
R = 716.20'
L = 328.53'
T = 167.21'
E = 19.26'

Curve Data
RAMP "H-1"
P. I. Sta. H-1-828+27.30
Δ = 13°53' 06"
D = 4°00' 00"
R = 1432.39'
L = 347.12'
T = 174.42'
E = 10.58'

AKRON RD. (S.R. 585)
CLASSIFICATION: URBAN ARTERIAL
LEGAL SPEED: 35 M.P.H.
DESIGN SPEED: 35 M.P.H.
ADT = 25500

Curve Data
RAMP "H-21"
P. I. Sta. H-2-820+25.82
L. S. = 150.00'
Θs = 22° 30' 00"
L. T. = 100.82'
S. T. = 50.57'
P = 4.88'
K = 74.62

P. I. Sta. H-2-823+75.45
Δ = 115°06' 49"
D = 30°00' 00"
R = 190.99'
L = 383.71'
T = 300.45'
E = 165.02'

6+00 BEGIN WORK
9 AKRON ROAD
10
℄ WAYNE AVENUE
20
25
STA 10+44.11 ℄ AKRON RD
STA 15+12.50 ℄ WAYNE AVENUE
STA 18+72.83 ℄ S.R. 585
STA 817+16.57 ℄ S.R. 3 & 83
STRUCTURE NO. WAY-3-1552 WR (BOX CULVERTS)
OVER LITTLE APPLE CREEK (NO WORK)
STRUCTURE NO. WAY-3-1554 WR
OVERLAY DECK AND NEW SAFETY PARAPETS
(3.5'-18'-5.5')
LITTLE APPLE CREEK
STRUCTURE NO. WAY-3-1536
UNDER CONRAIL R.R. NO WORK
STA H-813+65.15 RAMP "H"
STA 14+54.70 S.R. 585
H-815
H-820
15
SB S.R. 585
H-1-825
STRUCTURE NO. WAY-3-1585 (BOX CULVERT)
OVER LITTLE APPLE CREEK
NO WORK
℄ SURVEY S.R. 3 & S.R. 83
N 16°-00'-10" W
MATCH LINE STA. 860+00
830 835 840 845 850 855
STRUCTURE NO. WAY-3-1520
OVERLAY DECK AND
NEW SAFTEY PARAPETS
(7'-24' 10')
LITTLE APPLE CREEK
LIMITS OF CORP. CITY OF WOOSTER
805 810 815 820
I-2-825
MATCH LINE STA. 800+00
N 20°-20'-10" W
TOWNSHIP
WOOSTER
95
WOOSTER CANAL RD.
STA 100+00 CANAL RD.
STA 21+50.00 S.R. 585
NB S.R. 585
P.C. STA 827+99.62
I-1-830
I-820
I-825 OSB-2-1
P.T. STA 844+24.62
LITTLE APPLE CREEK
℄ SURVEY S.R. 3 & S.R. 83
APPLE CREEK
STA 812+23.77
WAY-585-0000L
STRUCTURE NO. WAY-3-1547
UNDER S.R. 585 (AKRON ROAD)
OVERLAY DECKS AND REFACE PARAPETS LT
(4'-24'-1')
25 S.R. 585
30
℄ HIGHLAND PARK RD.
STA I-818+56.89 RAMP "I"
STA 24+25 ℄ S.R. 585
35
37+75 END WORK
STA 27+25.68 ℄ HIGHLAND PK. RD.
STA 28+55.00 ℄ S.R. 585

Curve Data
P. I. Sta. 836+12.51
Δ = 4° 20' 00"
D = 0° 16' 00"
R = 21,485.92
T = 812.89'
L = 1,625.00'
E = 15.37'
SUPERELEVATION = N.C.
EXCEEDS DESIGN SPEED

STATION EQUATION
S.T. STA. 28+92.84 BK. RELOC. S.R. 585
STA. 34+33.37 AHD. EXIST. S.R. 585

Curve Data
RAMP "I"
P. I. Sta. I-821+70.05
Δ = 62°18' 08"
D = 20°00' 00"
R = 286.48'
L = 311.51'
T = 173.16'
E = 48.27'

P. I. Sta. I-826+12.99
Δ = 63°39' 02"
D = 33°36' 16"
R = 170.50'
L = 189.41'
T = 105.82'
E = 30.17'

Curve Data
RAMP "I-1"
P. I. Sta. I-1-831+76.83
Δ = 41°37' 48"
D = 16°00' 00"
R = 358.10'
Lc = 110.19'
Ls = 150.00'
Ts = 212.02'
Es = 25.19'
LT = 100.23'
ST = 50.21

Curve Data
P. I. Sta. I-2-823+89.27
Δ = 6°16' 19"
D = 1°30' 00"
R = 3819.72'
L = 418.13'
T = 209.27'
E = 5.73'

Curve Data
RAMP "I-2"
P. I. Sta. I-2-827+33.88
Δ_S = 39°41' 50"
Δ_1 = 1°30' 00"
Δ_2 = 38°11' 50"
LS = 200.00'
D_1 = 1°30' 00"
R_1 = 3819.72"
D_2 = 38°11' 50"
R_2 = 150.00'
Θ_S = 36°41' 50"
Pa = 10.52'
T_1 = 135.75'
T_2 = 72.58'

P.I. Sta. I-2-829+55.19
Δ = 92°37' 58"
D = 38°11' 50"
R = 150.00'
L = 242.51'
T = 157.06'
E = 67.18'

DESIGN FILE: $$$$$.DGNFILESPECIFICATIONS$$$$$$
WORKSTATION: $TERMINAL$ DATE: $$$$$DATE$$$$$

FHWA REGION	STATE	PROJECT	
5	OHIO		

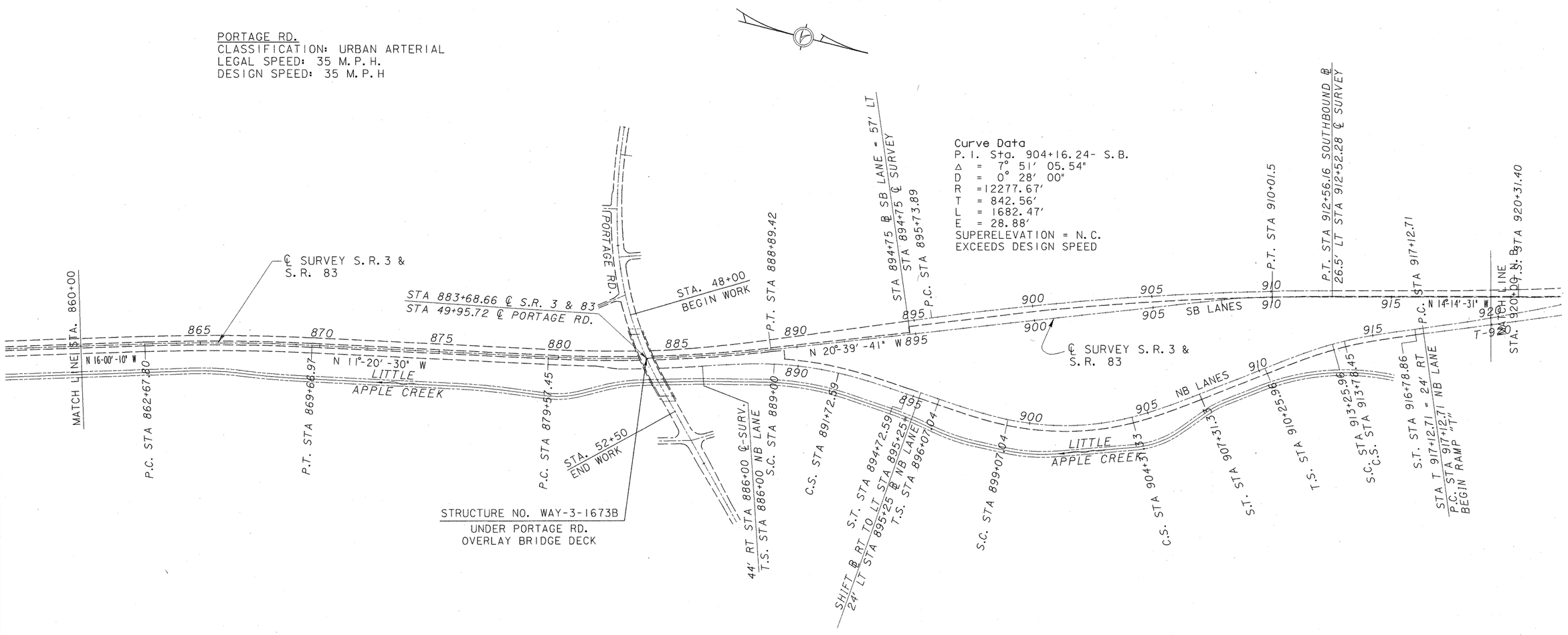
4
224

WAY-3-14.72
WAY-83-13.79

SCHEMATIC PLAN

SCALE
200 0 200 400

PORTAGE RD.
CLASSIFICATION: URBAN ARTERIAL
LEGAL SPEED: 35 M.P.H.
DESIGN SPEED: 35 M.P.H



Curve Data
P. I. Sta. 904+16.24- S.B.
Δ = 7° 51' 05.54"
D = 0° 28' 00"
R = 12277.67'
T = 842.56'
L = 1682.47'
E = 28.88'
SUPERELEVATION = N.C.
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 866+17.58
Δ = 4° 39' 40" RT.
D = 0° 40' 00"
R = 8594.37'
T = 349.78'
L = 699.17'
E = 7.11'
SUPERELEVATION = .016 MAX.
ACTUAL DESIGN SPEED

Curve Data
P. I. Sta. 884+24.47
Δ = 9° 19' 11"
D = 1° 00' 00"
R = 5729.58'
T = 467.02'
L = 931.97'
E = 19.00'
SUPERELEVATION = .024½
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 890+40.64 N.B.
Δ = 22° 54' 12.80"
D = 4° 00' 00"
R = 1432.39'
L_c = 272.59'
L_s = 300.00'
T_s = 440.64'
E_s = 31.76'
θ_s = 6° 00' 00"
LT = 200.12'
ST = 100.10'
X = 299.67'
Y = 10.46'
SUPERELEVATION = .083 MAX.
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 901+89.07 N.B.
Δ = 41° 12' 52.80"
D = 5° 00' 00"
R = 1145.92'
L_c = 524.29'
L_s = 300.00'
T_s = 582.03'
E_s = 81.83'
θ_s = 7° 30' 00"
SUPERELEVATION = .083 MAX.
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 913+53.38 N.B.
Δ = 14° 06' 00"
D = 4° 00' 00"
R = 1432.49'
L_c = 52.50
L_s = 300.00'
T_s = 327.91
E_s = 13.55'
θ_s = 6° 00' 00"
LT = 200.12'
ST = 100.10'
X = 299.67'
Y = 10.46'
SUPERELEVATION = .083 MAX.
EXCEEDS DESIGN SPEED

DESIGN FILE: $$$$$.DGNFILESPECIFICATION$$$$$$
WORKSTATION: $TERMINAL$ DATE: $$$$$DATE$$$$$$

FHWA REGION	STATE	PROJECT	
5	OHIO		

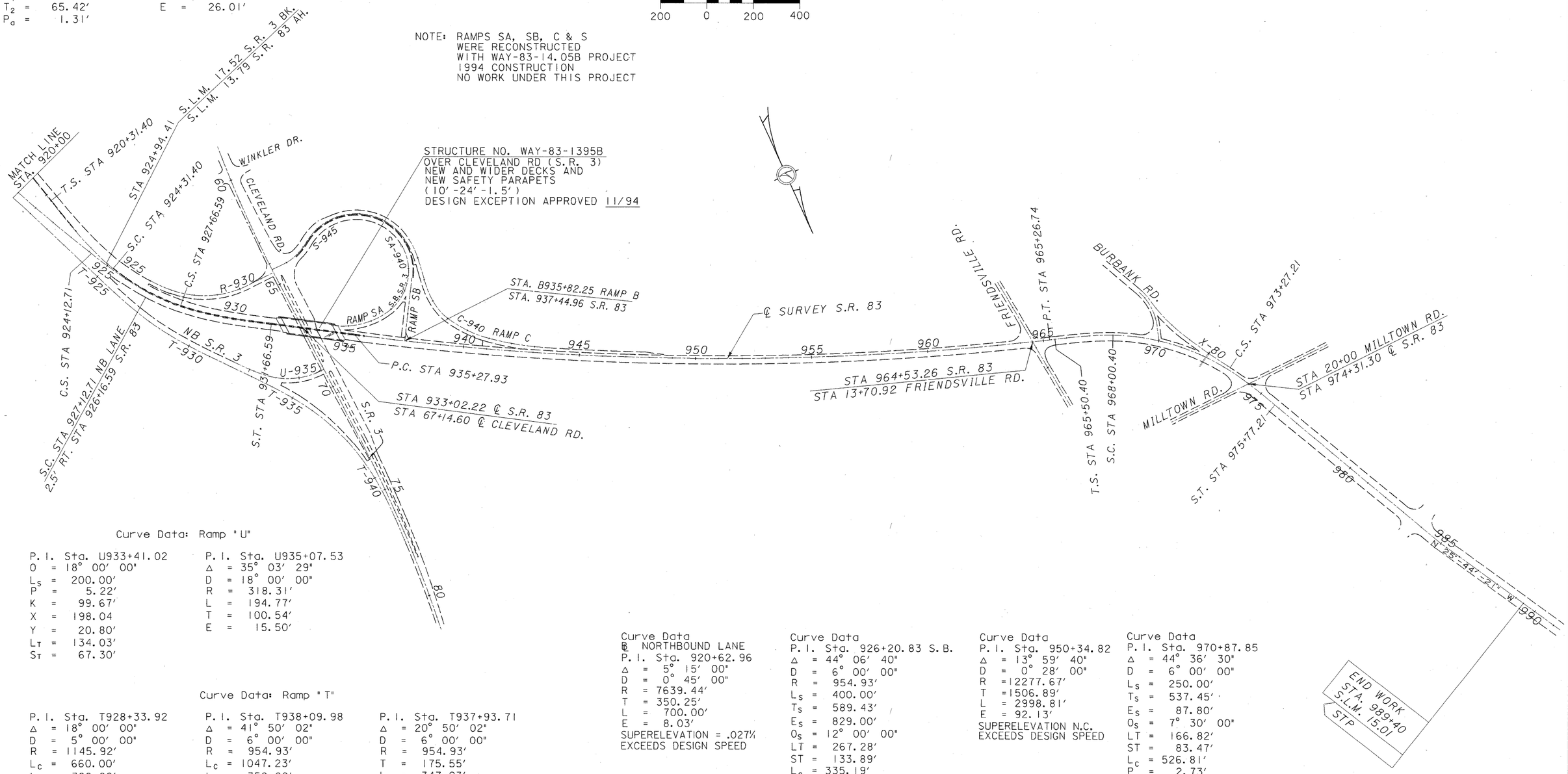
5
224

WAY-3-14.72
WAY-83-13.79

SCHEMATIC PLAN

SCALE
200 0 200 400

NOTE: RAMPS SA, SB, C & S
WERE RECONSTRUCTED
WITH WAY-83-14.05B PROJECT
1994 CONSTRUCTION
NO WORK UNDER THIS PROJECT



STRUCTURE NO. WAY-83-1395B
OVER CLEVELAND RD (S.R. 3)
NEW AND WIDER DECKS AND
NEW SAFETY PARAPETS
(10'-24'-1.5')
DESIGN EXCEPTION APPROVED 11/94

Curve Data: Ramp "R"

P. I. Sta. R926+85.45
Δ = 15° 00' 00"
O_S = 6° 00' 00"
Δ_1 = 4° 30' 00"
Δ_2 = 10° 30' 00"
T_1 = 85.45'
T_2 = 65.42'
P_a = 1.31'

P. I. Sta. R928+98.20
Δ = 39° 48' 43.5"
D = 14° 00' 00"
R = 409.26'
L = 284.37'
T = 148.20'
E = 26.01'

Curve Data: Ramp "U"

P. I. Sta. U933+41.02
O = 18° 00' 00"
L_S = 200.00'
P = 5.22'
K = 99.67'
X = 198.04
Y = 20.80'
L_T = 134.03'
S_T = 67.30'

P. I. Sta. U935+07.53
Δ = 35° 03' 29"
D = 18° 00' 00"
R = 318.31'
L = 194.77'
T = 100.54'
E = 15.50'

Curve Data: Ramp "T"

P. I. Sta. T928+33.92
Δ = 18° 00' 00"
D = 5° 00' 00"
R = 1145.92'
L_C = 660.00'
L_S = 300.00'
O_S = 7° 30' 00"
T_S = 331.93'
E_S = 17.60'

P. I. Sta. T938+09.98
Δ = 41° 50' 02"
D = 6° 00' 00"
R = 954.93'
L_C = 1047.23'
L_S = 350.00'
O_S = 10° 30' 00"
T_S = 541.82'
E_S = 73.09'

P. I. Sta. T937+93.71
Δ = 20° 50' 02"
D = 6° 00' 00"
R = 954.93'
T = 175.55'
L = 347.23'
E = 16.00'

Curve Data
℄ NORTHBOUND LANE
P. I. Sta. 920+62.96
Δ = 5° 15' 00"
D = 0° 45' 00"
R = 7639.44'
T = 350.25'
L = 700.00'
E = 8.03'
SUPERELEVATION = .027%
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 926+20.83 S.B.
Δ = 44° 06' 40"
D = 6° 00' 00"
R = 954.93'
L_S = 400.00'
T_S = 589.43'
E_S = 829.00'
O_S = 12° 00' 00"
LT = 267.28'
ST = 133.89'
L_C = 335.19'
P = 6.97'
K = 199.71'
SUPERELEVATION .083% MAX.
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 950+34.82
Δ = 13° 59' 40"
D = 0° 28' 00"
R = 12277.67'
T = 1506.89'
L = 2998.81'
E = 92.13'
SUPERELEVATION N.C.
EXCEEDS DESIGN SPEED

Curve Data
P. I. Sta. 970+87.85
Δ = 44° 36' 30"
D = 6° 00' 00"
L_S = 250.00'
T_S = 537.45'
E_S = 87.80'
O_S = 7° 30' 00"
LT = 166.82'
ST = 83.47'
L_C = 526.81'
P = 2.73'
K = 127.93'
SUPERELEVATION .083% MAX.
EXCEEDS DESIGN SPEED

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
5	OHIO		

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224

WAY-3-14.72
WAY-83-13.79

STRUCTURE GENERAL NOTES

DESIGN SPECIFICATIONS:

THE MODIFIED PORTONS OF THIS STRUCTURE REHABILITATION CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1992 INCLUDING THE 1993, 1994 AND 1995 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

HS20-44 CASE II AND THE ALTERNATE MILITARY LOADING

DESIGN STRESSES:

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I.

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.

REINFORCING STEEL - ASTM A615, A616 OR A617 - GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.

STRUCTURAL STEEL - ASTM A709 GRADE 36 MINIMUM YIELD STRENGTH 36,000 P.S.I.

SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615.

DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL, TOP AND BOTTOM MATS.

MICRO-SILICA MODIFIED CONCRETE OVERLAY.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

HIGH PERFORMANCE CONCRETE - COMPRESSIVE STRENGTH 4500 P.S.I.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO THE CONSTRUCTION AND MATERIAL SPECIFICATION (CMS SECTIONS 102.05, 105.02 AND 513.02).

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR, HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

EXISTING STRUCTURE PLANS:

THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT ODOT DISTRICT 3 OFFICE, 906 NORTH CLARK STREET, ASHLAND, OHIO.

REPLACEMENT OF THE EXISTING REINFORCING STEEL:

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MEDE UNUSEABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSEABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE OF 100 POUNDS IS INCLUDED IN ITEM 509 FOR THIS PURPOSE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, DECK EDGES AND ABUTMENTS:

THIS ITEM OF WORK SHALL BE USED TO REMOVE DECK EDGES, PORTIONS OF THE ABUTMENTS, PORTIONS OF DECK SLAB AND ANY OTHER AREAS INDICATED IN THE PLANS.

THE CONCRETE SHALL BE REMOVED BY A HYDRAULIC SPLITTING METHOD. A LINE OF HOLES SHALL BE DRILLED ALONG THE REMOVAL LINE AND A HYDRAULIC SPLITTER USED AS PER MANUFACTURER'S RECOMMENDATIONS. THIRTY-FIVE (35) AND FIFTEEN (15) POUND JACKHAMMMERS SHALL BE USED FOR THE FINAL FINISH WORK. A HOE RAM, CONCRETE CRUSHER, OR OTHER SIMILAR IMPACT DEVICES WILL NOT BE PERMITTED TO DO ANY OF THE WORK. CONCRETE SHALL BE REMOVED IN A MANNER THAT PREVENTS CUTTING, ELONGATING, OR DAMAGING OF THE EXISTING REINFORCING STEEL TO BE PRESERVED. IF THE EXISTING REINFORCING STEEL DESIGNATED FOR PRESERVATION IS DAMAGED DURING REMOVAL OPERATIONS, DOWELLED REINFORCING STEEL SHALL BE ADDED AT THE CONTRACTOR'S EXPENSE. CARE SHOULD BE TAKEN NOT TO CRACK THE DECK, IF THE DECK IS CRACKED IT SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT UNIT PRICE BID PER CUBIC YARD FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, DECK EDGES AND ABUTMENTS, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT:

ALL DOWEL HOLES SHALL BE GROUTED WITH AN EPOXY MORTAR.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 510 - DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RECONSTRUCTION):

THIS ITEM SHALL BE USED AS PER DETAILS IN THE PLAN FOR STRUCTURE NO. WAY-250-12.18L AND WAY-3-1520.

NOT MORE THAN 48 HRS. PRIOR TO PLACING THE CONCRETE, ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND, INCLUDING EXPOSED REINFORCING AND STRUCTURAL STEEL SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND OTHER CONTAMINATES DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

IMMEDIATELY BEFORE THE CONCRETE IS PLACED ALL ADJACENT CONCRETE SURFACES SHALL BE COVERED WITH A THIN LAYER OF BONDING GROUT. THE BONDING SHALL CONSIST OF EQUAL PARTS BY VOLUME OF PORTLAND CEMENT AND SAND, MIXED WITH ENOUGH WATER TO FORM A SLURRY OF PAINT-LIKE CONSISTANCY WHICH SHALL BE SUCH AS TO ALLOW IT TO BE APPLIED WITH A STIFF BRUSH OR BROOM TO EXISTING CONCRETE SURFACES IN AN EVEN COATING THAT WILL NOT RUN OR PUDDLE. THE GROUT SHALL BE APPLIED FOR A DISTANCE IN ADVANCE OF THE PLACEMENT OF THE CONCRETE AND SHALL NOT DRY.

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD FOR CONCRETE, THE COARSE AGGREGATE SHALL BE LIMESTONE.

QUANTITIES PER CUBIC YARD
(USING NO. 8 LIMESTONE)

AGGREGATE FINE (LB)	AGGREGATE COARSE (LB)	AGGREGATE TOTAL (LB)	CEMENT CONTENT	WATER/CEMENT RATIO
1591	1127	2718	715	0.40

AIR CONTENT: 8 % PLUS OR MINUS 2 %

HIGH RANGE WATER REDUCER (SUPERPLASTICIZER) MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE DOSAGE RATE WILL BE DETERMINED BY THE CONTRACTOR BASED ON THE MANUFACTURER'S RECOMMENDATION TO ACHIEVE THE DESIRED WORKABILITY LEVEL.

HIGH RANGE WATER REDUCER SHALL CONFORM TO 705.12, ASTM-C494 TYPE F AND SHALL NOT CONTAIN CALCIUM CHLORIDE.

TYPE A OR D CHEMICAL ADMIXTURE CONFORMING TO 705.12, ASTM-C494 AND NOT CONTAINING CHLORIDE SHALL BE ADDED TO THE CONCRETE AT THE PLANT.

ALL ADDITIVES, INCLUDING AIR ENTRAINMENT, SHALL BE MANUFACTURED BY THE SAME COMPANY AND CERTIFIED AS COMPATIBLE BY THE MANUFACTURING CO.

THE CEMENT CONTENT SHALL BE MAINTAINED AND A MAXIMUM WATER-CEMENT RATIO OF 0.40 SHALL NOT BE EXCEEDED. THE SLUMP OF THE CONCRETE DELIVERED TO THE JOB SITE SHALL BE 1½" PLUS OR MINUS ½". THE SUPERPLASTICIZED ADMIXTURE SHALL BE ADDED AT THE JOB SITE AND MIXED A MINIMUM OF FIVE (5) MINUTES. AFTER THE SUPERPLASTICIZER HAS BEEN ADDED THE SLUMP SHALL BE 6½" PLUS OR MINUS ½". THE CONTRACTOR SHALL FURNISH A VOLUMETRIC DISPENSER FOR THE SUPERPLASTICIZER.

CONCRETE MIXTURES CONTAINING A HIGH RANGE WATER REDUCER SHALL MEET THE SAME REQUIREMENTS FOR ENTRAINED AIR CONTENT, MAXIMUM STRENGTH, AND MAXIMUM WATER-CEMENT RATIO AS REQUIRED FOR THE RESPECTIVE GRADE OF CONCRETE WITHOUT A HIGH RANGE WATER REDUCER.

SAMPLING AND TESTING FOR ENTRAINED AIR CONTENT AND MINIMUM STRENGTH SHOULD BE TAKEN FROM THE CONCRETE THAT HAS BEEN TREATED WITH A HIGH RANGE WATER REDUCER.

CURING SHALL BE IN ACCORDANCE WITH 511.14 TYPE A WATER CURING.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT UNIT PRICE BID PER CUBIC YARD FOR ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RECONSTRUCTION) WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 517 - RAILING FACED, AS PER PLAN:

1¼ INCH DIAMETER HOLES, 6 INCHES DEEP (MIN.), SHALL BE DRILLED AS SHOWN ON THE PLANS. THE HOLES SHALL BE THOROUGHLY CLEANED OF ALL DUST AND DELETERIOUS MATERIAL. DOWEL HOLES SHALL BE AS PER ITEM 510 - DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT.

ALL LOOSE AND UNSOUND CONCRETE IN THE AREA OF THE PARAPET TO BE FACED SHALL BE REMOVED. ALL REMAINING SOUND CONCRETE ON THE TOP AND ROADWAY SIDE OF THE EXISTING PARAPET SHALL BE MACHINE SCARAFIED ¼ INCH DEEP. THE MINIMUM THICKNESS OF THE PROPOSED FACING SHALL BE 4 INCHES. ALL REINFORCING STEEL SHALL BE EPOXY COATED AS PER 509. EPOXY COATED REINFORCING STEEL WHICH IS DAMAGED DUE TO CUTTING, BENDING OR FOR ANY OTHER REASON SHALL BE REPAIRED AS PER 509. CONCRETE COVER FOR ALL REINFORCING STEEL SHALL BE 2 INCHES. THE CONCRETE SURFACES TO BE FACED SHALL BE THOROUGHLY DRENCHED WITH CLEAN WATER AND ALLOWED TO DRY TO A DAMP CONDITION JUST BEFORE THE CONCRETE IS PLACED.

THE EXISTING DEFLECTION JOINTS SHALL BE EXTENDED COMPLETELY THROUGH THE PROPOSED FACING AND SHALL BE MADE BY FORMING OR SAW CUTTING THE HARDENED CONCRETE WITHIN 3 DAYS AFTER IT IS PLACED. THE ¼ INCH JOINTS SHALL BE SEALED ¾ INCHES DEEP (MIN.) WITH AND IMPREGNATED, PRECOMPRESSED, EXPANDING FOAM SEALANT TAPE KNOWN AS WILL-SEAL AS MANUFACTURED BY ILLBROOK/USA INC., MINNEAPOLIS, MINNESOTA; A LOW DENSITY CLOSED CELL, CROSS-LINKED ETHYLENE VINYL ACETATE FOAM KNOWN AS EVAZOTE 50 AS MANUFACTURED BY E-POXY INDUSTRIES, INC., RAVENA, NEW YORK OR E.V.A. AS MANUFACTURED BY THERMAL-CHEM INC., ELK GROVE, ILLINOIS; OR AN APPROVED EQUAL.

THIS WORK SHALL INCLUDE THE FURNISHING OF ALL LABOR, EQUIPMENT AND MATERIALS CONSISTING OF CONCRETE, REINFORCING STEEL, JOINT SEALANT GROUT, DOWEL HOLES AND INCIDENTALS NECESSARY TO ACCOMPLISH THE ABOVE MENTIONED REMOVALS AND WORK TO FACE THE EXISTING PARAPET. PAYMENT WILL BE MADE AT THE PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
517	LIN. FT.	RAILING FACED, AS PER PLAN

CONTINGENCY QUANTITIES:

SPECIFIC LOCATIONS AND USAGE OF THE ESTIMATED QUANTITIES SET UP ON THIS PLAN TO BE USED "AS DIRECTED BY THE ENGINEER" SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT. ESTIMATED QUANTITIES OF MATERIALS SHALL NOT BE ORDERED FOR DELIVERY TO THE PROJECT UNLESS AUTHORIZED BY THE ENGINEER.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

1 / 2

STRUCTURE GENERAL NOTES

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DRA	DRA		DM	GLC	2/96	

DESIGN FILE: c:\dgn\way3-83\strnote.dgn
WORKSTATION: %logname% DATE: 13-MAR-1996

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
5	OHIO		

163A
224

WAY-3-14.72
WAY-83-13.79

STRUCTURE GENERAL NOTES

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

THIS ITEM SHALL BE USED AS PER DETAILS IN THE PLAN FOR STRUCTURE NO. WAY-3-1520 AND WAY-83-1395B.

THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS, AND EQUIPMENT TO RAISE OR REPOSITION ANY EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND OPERATION OF AN ADEQUATE JACKING SYSTEM, INCLUDING ANY TEMPORARY OR PERMANENT SUPPORTS NECESSARY TO PERFORM THE WORK DESCRIBED IN THE PROJECT PLANS. THREE (3) SETS OF JACKING PLANS, WHICH INCLUDE THE INFORMATION DESCRIBED IN THIS NOTE, SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL AT LEAST THIRTY (30) DAYS BEFORE THE ACTUAL WORK IS TO BEGIN. THE PLANS SHALL BE PREPARED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER.

JACKING SUBMITTALS SHALL INCLUDE AT LEAST THE FOLLOWING:

1. THE SIGNATURE AND NUMBER , OR PROFESSIONAL SEAL, OF THE REGISTERED PROFESSIONAL ENGINEER WHO PREPARED THE SUBMITTAL.
2. CALCULATIONS AND ANALYSIS OF THE STRUCTURE TO DETERMINE AND DEFINE THE ACTUAL LOADING APPLIED AT THE CONTRACTOR'S SELECTION JACKING POINTS.
3. A DRAWING SHOWING THE PHYSICAL AND DIMENSIONAL POSITION OF THE JACKS WITH RESPECT TO THE STRUCTURE INCLUDING CLEARANCES AND CENTER OF LIFT.
4. A SCHEMATIC LAYOUT OF JACKS, CHECK VALVES, PUMPS WITH 3 WAY RETRACTOR VALVE, PRESSURE GAGES, FLOW CONTROL VALVES, ETC. IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL JACKS FOR EACH ABUTMENT OR PIER SHALL BE CONNECTED TOGETHER. ALL JACKS AT EACH ABUTMENT OR PIER SHALL BE THE SAME SIZE.
5. ANALYSIS CALCULATIONS OF THE STRESSES INDUCED OR CREATED IN THE STRUCTURE AND ANY TEMPORARY OR PERMANENT SUPPORTS. DESIGN CALCULATIONS FOR ANY TEMPORARY OR PERMANENT SUPPORTS.
6. PHYSICAL DIMENSIONS, MATERIALS, AND FABRICATION DETAILS OF ANY TEMPORARY OR PERMANENT SUPPORTS. HORIZONTAL AND VERTICAL MOVEMENT RESTRAINT SHALL BE PROVIDED.
7. A STEP BY STEP PROCEDURE DETAILING ALL STEPS IN THE JACKING OPERATION.
8. METHOD OF ATTACHMENT TO STRUCTURAL MEMBER. WELDING TO TENSION AREAS WILL NOT BE PERMITTED.

THE ENTIRE SYSTEM INCLUDING JACKS SHALL HAVE 20% MORE CAPACITY THAN REQUIRED BASED ON CALCULATED LOADS.

FOR LIFTS GREATER THAN 1", JACKS SHALL HAVE LOCKING NUTS TO POSITIVELY LOCK AND SUPPORT THE STRUCTURE DURING THE LIFT.

JACKS SHALL HAVE A SWIVEL LOAD CAP, A DOMED PISTON HEAD OR SOME OTHER DEVICE TO PROTECT AGAINST THE EFFECTS OF SIDE LOAD ON THE JACK.

JACKS ALONE SHALL NOT BE USED TO SUPPORT LOADS EXCEPT DURING THE ACTUAL JACKING OPERATION. TEMPORARY SUPPORTS, BLOCKING OR OTHER METHODS APPROVED BY THE DIRECTOR SHALL BE USED.

SINGLE ACTING RAMS WITH NO OVER-TRAVEL PROTECTION SYSTEM SHALL NOT BE USED.

SPARE EQUIPMENT SHALL BE AVAILABLE ON SITE FOR THE REQUIRED STRUCTURE RAISING TO PROCEED IN THE EVENT OF A BREAKDOWN. A LIST OF SPARE EQUIPMENT SHALL BE PROVIDED TO THE ENGINEER.

AT A MINIMUM, A JACKING OPERATION SHALL LIFT ALL BEAMS AT ANY ONE ABUTMENT OR PIER SIMULTANEOUSLY. THE ONLY EXCEPTION IS THE SITUATION WHERE WORK INVOLVES REPLACING OR REHABILITATING INDIVIDUAL BEARINGS; NO PERMANENT SHIMMING IS REQUIRED AND THE HEIGHT OF THE LIFT SHALL NOT EXCEED 1/4 INCH.

MAXIMUM DIFFERENTIAL JACKING HEIGHT BETWEEN ANY ADJACENT ABUTMENTS OR PIERS SHALL BE 1" OR LESS.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, THE JACKING OPERATION SHALL IMMEDIATELY CEASE AND APPROVED SUPPORTS SHALL BE INSTALLED. THE CONTRACTOR SHALL THEN ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. ANY BEAMS THAT SEPARATE FROM THE DECK SHALL BE EPOXY INJECTED FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH THE PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS SHALL BE BORNE BY THE CONTRACTOR.

THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER THAT THE BRIDGE BEARINGS ARE FULLY SEATED BETWEEN ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUITABLE MEANS OF REPAIR, SUBJECT TO THE APPROVAL OF THE ENGINEER, WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

THE JACKING OPERATION SHALL BE DIRECTED BY A PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR. FAILURE TO HAVE A PROFESSIONAL ENGINEER PRESENT SHALL BE CAUSE FOR CEASING JACKING OPERATIONS.

PAYMENT SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN AND SHALL INCLUDE ALL NECESSARY TOOLS, LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

DESIGN FILE: c:\dgn\way3-83\strnote.dgn
WORKSTATION: %logname% DATE: 13-MAR-1996

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

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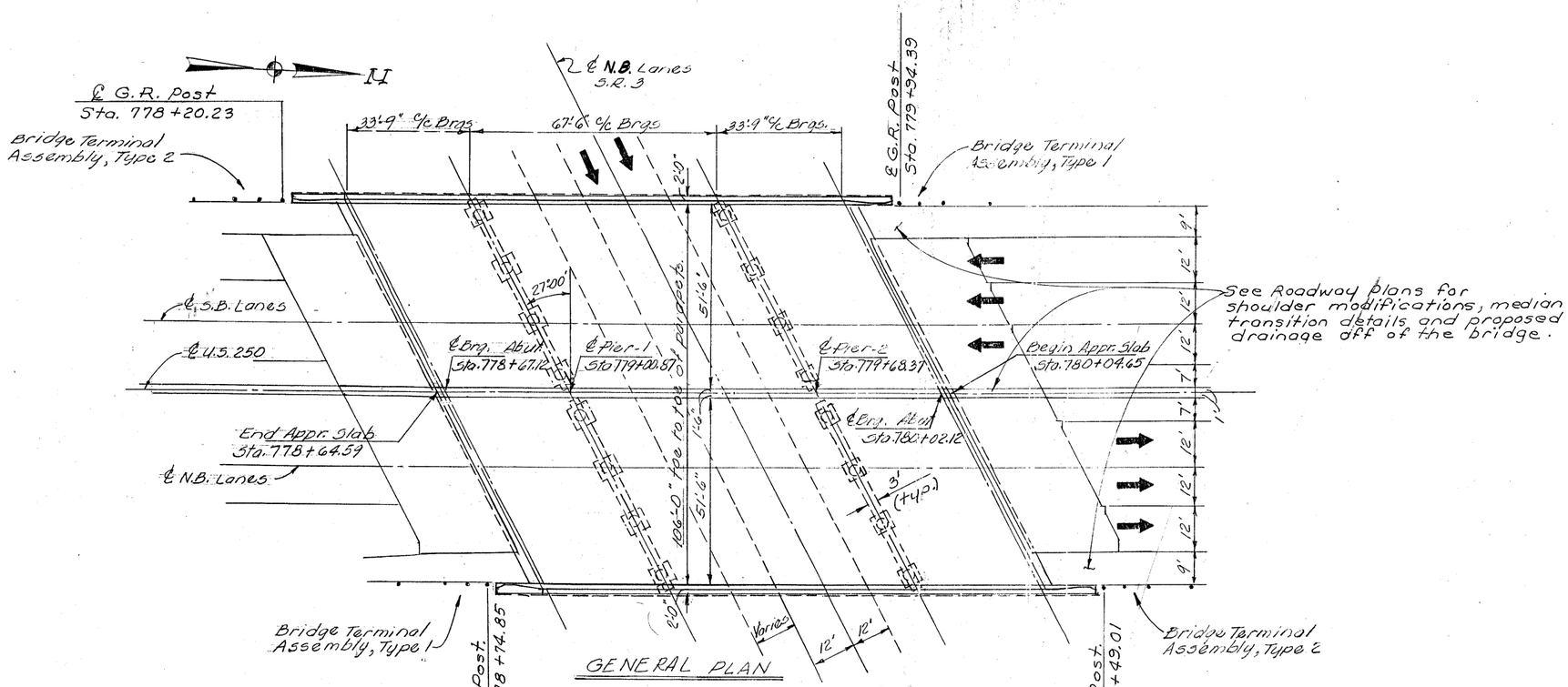
STRUCTURE GENERAL NOTES

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
DRA	DRA		DM	TC	2/96	

FHWA REGION	STATE	PROJECT	
5	OHIO		

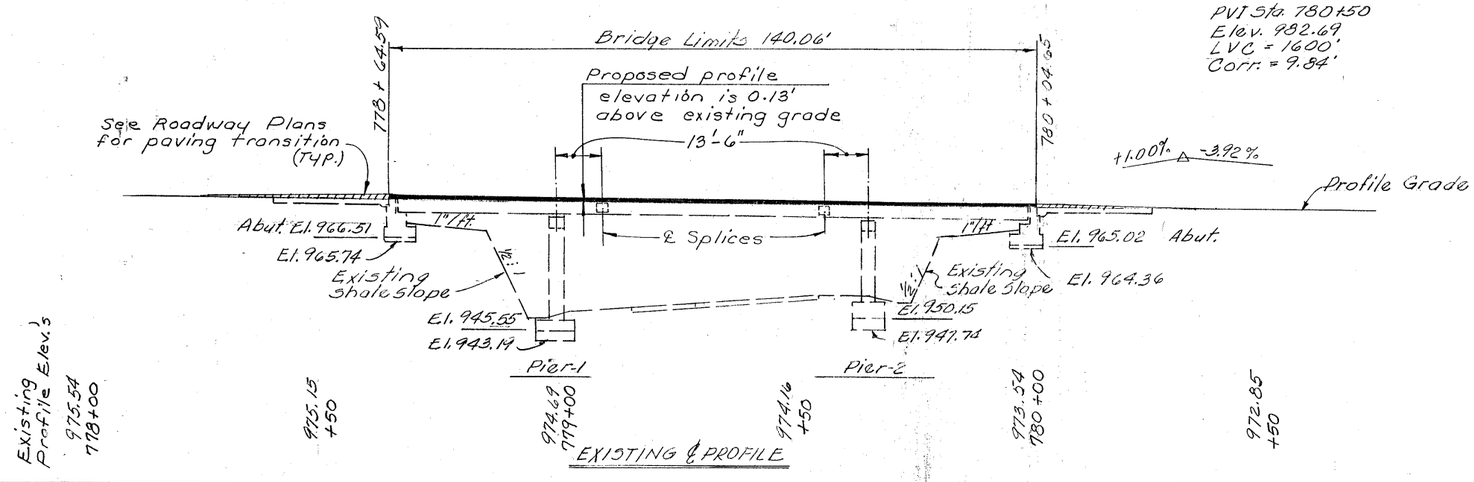
164/224

WAY-3-14.72
WAY-83-13.79



GENERAL PLAN

SEE SHEET 1A/7 FOR PHASED CONSTRUCTION DETAILS AND TRAFFIC MAINTENANCE REQUIREMENTS.



EXISTING & PROFILE

EXISTING STRUCTURE

TYPE: Continuous steel beam with reinforced concrete deck and substructure.

SPANS: 33'-9", 67'-6", 33'-9" ℄ Bearings.

ROADWAY: 108' f/f parapets with 6'-0" raised median.

LOAD FREQUENCY: CF2000(57)

SKEW: 27°-00' R.F.

WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-54 (25' long, modified.)

ALIGNMENT: Tangent

SUPERELEVATION: .031'/ft.

PROPOSED STRUCTURE MODIFICATION

PROPOSED WORK: 1¾" micro-silica modified concrete overlay, seal expansion joints with strip seals, face existing concrete parapet with safety shape, remove median curb and guardrail and install 2 safety parapets 1'-5" wide with 2" open joint to meet proposed safety barrier installed as a roadway item, seal median joint with a neoprene seal, Plug scuppers, apply concrete sealer and paint structural steel.

TYPE: Continuous steel beam with reinforced concrete deck and substructure.

SPANS: 33'-9", 67'-6", 33'-9" ℄ Bearings.

ROADWAY: 106'-0" toe to toe of parapets with 3'-0" median safety barrier.

LOADING: HS 20-44

SKEW: 27°-00' R.F.

WEARING SURFACE: Monolithic micro-silica modified concrete.

APPROACH SLABS: AS-1-54 (25' long, modified)

ALIGNMENT: Tangent

SUPERELEVATION: .031'/ft.

SFN: 8500606

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

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GENERAL PLAN AND PROFILE.
BRIDGE NO. WAY-250-R18 L
OVER S.R.3
WAYNE COUNTY U.S. 250
STA. 778+64.59
780+04.65

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
ULH	[illegible]		DFT	RLE	1-31-92	

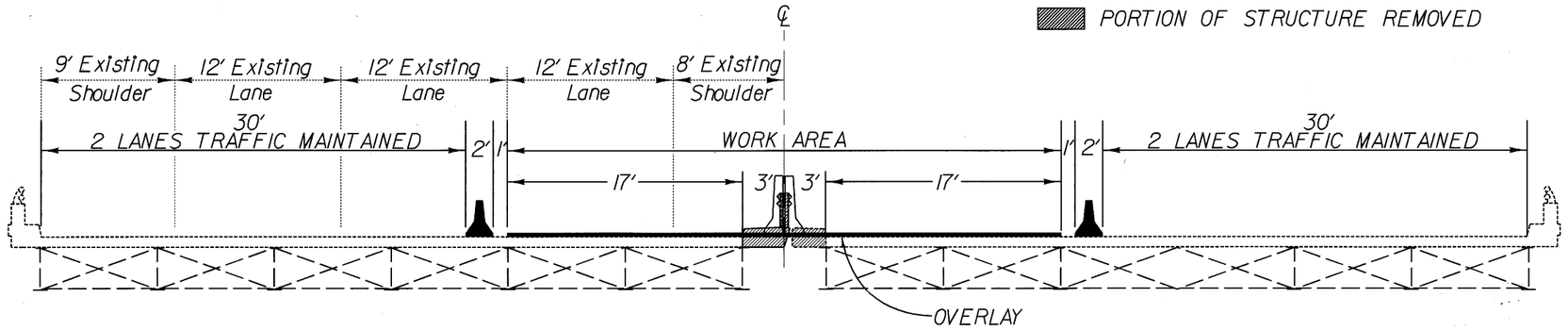
084233

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
5	OHIO		

165
224

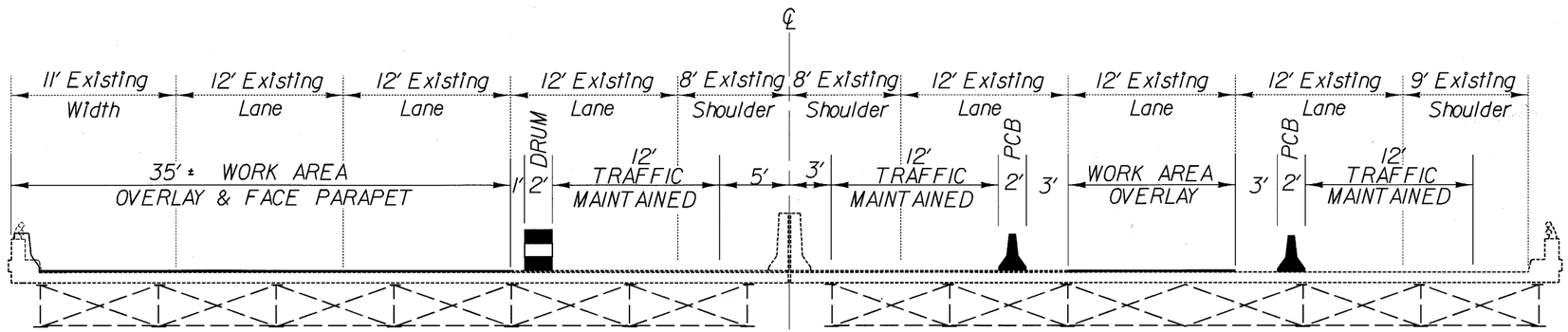
WAY-3-14.72
WAY-83-13.79

Existing Lane Configuration Symmetrical About ℄

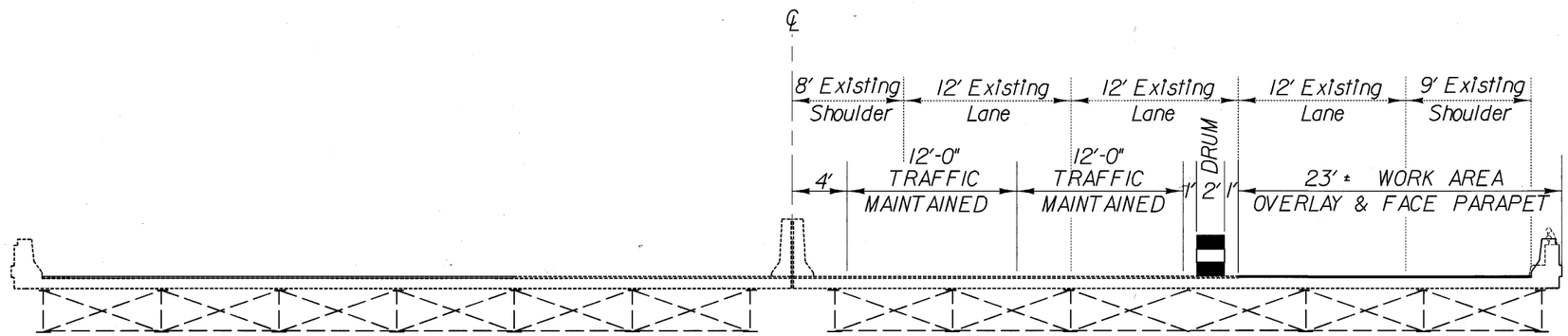


PHASE A

For additional notes and details see sheet 133-135.



PHASE B



PHASE C

DESIGN FILE: c:\dgn\way3-83\way3mot.dgn
WORKSTATION: nbenedic DATE: 28-SEP-1995

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

1A / 7

PHASE CONSRUCTION AND TRAFFIC MAINTENANCE DETAILS BRIDGE NO. WAY-250-1218L OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
TF	TF			CN 3-15-95	

FHWA REGION	STATE	PROJECT	
5	OHIO		

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WAY-3-14.72
WAY-83-13.79

GENERAL NOTES

REFERENCE

SHALL BE MADE TO STANDARD DRAWINGS:

PCB-91	DATED	4-24-92
BP-5.1	DATED	10-28-94
GR-1.1	DATED	5-6-91
GR-1.2	DATED	10-30-92
GR-3.1	DATED	5-6-91
GR-3.2	DATED	5-6-91
EXJ-4-87	DATED	1-20-94, SHEETS 4 & 5

AND TO SUPPLEMENTAL SPECIFICATIONS:

815	DATED	7-17-95
910	DATED	7-17-95

PAINTING OF EXISTING STRUCTURAL STEEL:

IN ADDITION TO THE SURFACE AREA OF THE STEEL STRINGERS TO BE PAINTED, AN ADDITIONAL THIRTY PERCENT OF THIS AMOUNT HAS BEEN ADDED TO THE SQUARE FOOT TOTALS TO ACCOUNT FOR INCIDENTALS SUCH AS CROSSFRAMING, BEARINGS AND EXPANSION SYSTEMS. CAULKING AS PER PROPOSAL NOTE IS REQUIRED IN THE OPEN AREA BETWEEN ABUTTING WEBS AND BOTTOM BEAM FLANGES AT EACH SPLICE LOCATION.

PAINT:

THE COLOR OF THE FINISH COAT SHALL BE BLUE.

MAINTENANCE OF TRAFFIC:

IN ADDITION TO PHASED CONSTRUCTION DETAILS SHOWN ON THIS PLAN, SEE ROADWAY PLANS FOR TRAFFIC MAINTENANCE NOTES AND QUANTITIES. PORTABLE CONCRETE BARRIERS ON THE BRIDGE DECK DO NOT HAVE TO BE ANCHORED TO THE DECK.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM SHALL BE USED AS PER DETAILS IN THE PLAN FOR STRUCTURE NO. WAY-250-1218L.

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING ALUMINUM RAILING, MOUNTING BRACKETS AND MEDIAN GUARDRAIL. THE ALUMINUM RAILING AND MOUNTING BRACKETS SHALL BE STACKED NEATLY ALONG THE RIGHT-OF-WAY FOR SUBSEQUENT PICKUP BY STATE FORCES. THIS ITEM SHALL ALSO BE USED TO CUT AND REMOVE THE SCUPPER PIPES AND SUPPORT BARS, GRIND SUPPORT BARS FLUSH WITH WEB, AND PLUG AND FILL SCUPPER BOXES WITH SUITABLE CONCRETE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT LUMP SUM PRICE BID FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSAARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN.:

IN ADDITION TO THE NOTES AS SHOWN ON STANDARD DRAWING EXJ-4-87 SHEET 5 OF 5 SHEETS. THE FOLLOWING SHALL APPLY: JOINTS IN RETAINERS SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTTWELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS WHICH WILL BE IN CONTACT WITH THE SEAL GLAND AND/OR JOINT ARMOR SHALL BE GROUND SMOOTH. WELDS IN THE JOINT ARMOR THAT WILL BE IN CONTACT WITH THE STEEL RETAINERS SHALL ALSO BE GROUND FLUSH. THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-0" BETWEEN JOINTS. ALL STEEL SHALL BE ASTM A709, GRADE 36. EXPANSION JOINTS SHALL BE TOPCOATED COST TO TOPCOAT SHALL BE INCLUDED UNDER ITEM 815 - FIELD PAINTING OF EXISTING STEEL (FINISH COAT, SYSTEM OZEU). ARMOR LENGTHS SHALL SATISFY PHASED CONSTRUCTION REQUIREMENTS.

MEASUREMENT FOR PAY PURPOSES SHALL BE BASED ON THE LINEAR FOOT OF SEALED JOINT SYSTEM, MEASURED HORIZONTALLY ALONG THE JOINT CENTERLINES AND BETWEEN THE OUTER LIMITS OF THE FABRICATED JOINT. FURNISHED AND PLACED, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE JOINT IN PLACE, WHICH INCLUDES THE REMOVAL OF THE EXISTING CURB PLATES AND TRIMMING THE EXISTING TOO ANGLE, HORIZONTAL EXTENSION OF THE SUPPORT ARMOR, ANCHOR PLATES, STEEL FILL BARS, STEEL RETAINERS AND ELASTOMERIC STRIP SEAL GLANDS AS PER DETAILS SHOWN ON THE PLANS. PAYMENT SHALL BE MADE PER LINEAR FOOT FOR ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN.

ITEM SPECIAL - SEALING OF CONCRETE SURFACES:

A NON-EPOXY CONCRETE SEALER SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES: ALL SIDES, TOP AND ENDS OF PARAPET, DECK SLAB FASCIA, UNDERSIDE OF DECK TO FASCIA BEAM FLANGE, FACES OF BACKWALLS, BEAM SEATS AND ALL EXPOSED SURFACES OF ABUTMENT WINGWALLS AND BREASTWALLS TO THE GROUND SURFACE. ALSO ALL EXPOSED VERTICAL SURFACES OF THE PIERS INCLUDING THE UNDERSIDE OF THE PIER CAPS, SEE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS AND APPLICATION PROCEDURES.

ITEM SPECIAL - CONTINUOUS SEAL IN CONCRETE JOINT (J.A.M.), 2 INCH:

DESCRIPTION:

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A CONTINUOUS PRESSURIZED ELASTOMER SEAL WITHIN A CONCRETE JOINT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

REQUIREMENTS:

THE SEAL SHALL BE A CODE 5070W AS SHOWN ON THE PLANS AND SUPPLIED BY THE JEENE TECHNOLOGY CO. OF MICHIGAN, 1900 CHICAGO DRIVE, GRAND RAPIDS, MICHIGAN. THE SEAL SHALL BE EXTRUDED POLYCHLOROPRENE, MEETING THE FOLLOWNG REQUIREMENTS:

PROPERTY	ASTM	REQUIREMENTS
HARDNESS, TYPE A DUROMETER	D-2240 (MODIFIED)	55±5 POINTS
ELONGATION @ BREAK MIN.	D-412	250%
TENSILE STRENGTH, MIN.	D-412	2,000 P.S.I.
OVEN AGING, 70 HR. @ 212°F	D-573	
HARDNESS, TYPE-A DUROMETER (POINTS CHANGE)		0 TO +10
ELONGATION, LOSS MAX.		20%
TENSILE STRENGTH, LOSS, MAX.		20%
COMPRESSION SET, 70 HR. @ 212°F MAX.	D-395 METHOD B (MODIFIED)	40%
OZONE RESISTANCE 20% STRAIN, 300 PPHM, IN AIR @104°F (WIPED WITH TOLUENE TO REMOVE CONTAMINATION)	D-1149	NO CRACKS
OIL SWELL, 70 HR. @ 212°F WEIGHT CHANGE, MAX.	ASTM OIL 3	45%
HIGH TEMPERATURE RECOVERY, 70 HR. @ 212°F 50% DEFLECTION, MIN.	D-2628-81	85%
LOW TEMPERATURE RECOVERY, 70 HR. @ 212°F 50% DEFLECTION, MIN.	D-2628-81	83%
LOW TEMPERATURE RECOVERY, 72 HR. @ 14°F 50% DEFLECTION, MIN.	D-2628-81	88%

THE ADHESIVE (ADE-52) SHALL HAVE THE FOLLOWING PROPERTIES:

EPOXY BASE, DOUBLE COMPONENT, THIXOTROPIC PASTE, RESISTS DILUTE ACIDS, ALKALIS, SOLVENTS, GREASES, OILS, MOISTURE, SUNLIGHT AND WEATHERING. TEMPERATURES UP TO 200°F DO NOT WEAKEN BOND INTERFACES. AT ROOM TEMPERATURES (68°F), A STRONG BOND WILL DEVELOP WITHIN 24 HOURS.

POT LIFE	40 MINUTES @ 68°F
TENSILE STRENGTH; MIN.	4140 P.S.I.
SOLIDS HARDNESS	5 MOHS
FLASH POINT	>200°F
AXIAL COMPRESSION	8760 P.S.I.
COMPLETE CURE	7 DAYS @ 68°F

AT HIGH AMBIENT TEMPERATURES THE CURE WILL BE ACCELERATED

ADHESIVE ADE-52 APPLICATION CHART

PROFILE	WIDTH	FEET P/POUND	FEET P/KIT
2540 W	1"	6	108
3550 W	1.1/2"	5	90
5070 W	2"	4	72
6080 W	2.1/2"	3.1/2	63
8097 W	3"	3	54

CERTIFICATION:

CERTIFIED COPIES OF THE QUALIFICATION TEST RESULTS INDICATING THAT THE TESTED MATERIALS COMPLY WITH THE PROVISIONS OF THE ABOVE, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

RESTRICTIONS:

1. ALL INSTALLATIONS MUST BE PERFORMED UNDER THE SUPERVISION AND RESPONSIBILITY OF A TECHNICIAN EITHER PROVIDED DIRECTLY BY THE MANUFACTURER, AUTHORIZED CONTRACTOR, OR OWNER AUTHORIZED-TRAINED CREW.
2. THE ADHESIVE ADE-52 DOES NOT BOND ON DAMP OR HUMID SURFACES. NO INSTALLATION MAY BE PERFORMED IN RAINY WEATHER.
3. ALL SURFACES MUST BE COMPLETELY DRY PRIOR TO APPLYING ADHESIVE.

INSTALLATION:

1. PREPARATION:
   a. THE PRE-FORMED SEAL MUST BE CUT TO THE CORRECT LENGTH OF THE APPROPRIATE GAP FOR INSTALLATION. CARE SHOULD BE TAKEN TO EXTEND THE SEAL TO ITS FULL LENGTH BUT NOT TO EXERT EXCESS TENSION. IT SHOULD BE REMEMBERED THAT THE MATERIAL IS ELASTIC AND IMPROPER STRETCHING DURING LENGTH MEASUREMENT COULD CAUSE THE SEAL TO BE EITHER LONGER OR SHORTHER THAN THE DESIRED GAP LENGTH.
   b. AFTER SEAL LENGTH IS DETERMINED, BOTH ENDS MUST BE PLUGGED (AIR TIGHT) AND AIR VALVE INSTALLED.
   c. BEFORE MIXING THE ADHESIVE ADE-52, AIR MUST BE PUMPED INTO THE SEAL TO ASSURE THAT THERE ARE NO LEAKS PRIOR TO MIXING AND APPLICATION OF THE ADE-52.
2. ADHESIVE ADE-52:
   a. ADE-52 IS A VERY POWERFUL BONDING AGENT, WITH A FASTSETTING FACTOR, (POT LIFE 30 MINUTES).
   b. THE PROPORTIONS OF THE ADHESIVE TO BE MIXED MUST BE ONE PART COMPONENT C TO ONE PART R OR ACCORDING TO SPECIFIC MANUFACTURERS INSTRUCTIONS.
   c. THE ADHESIVE MUST BE MIXED "ONLY" AFTER ALL PREPARATION OF GAP AND SEAL ARE TOTALLY FINISHED. (CHECKED AND CONFIRMED).
   d. TOTAL TIME AVAILABLE FOR WORKING WITH ADE-52 FROM TIME OF MIXING IS AN AVERAGE OF 30 MINUTES AT TEMPERATURES FROM 62°F TO 75°F. AT LOWER TEMPERATURES THE CURE OR SET-UP TIME WILL BE SOMEWHAT EXTENDED AND AT HIGHER TEMPERATURES THE TIME WILL BE SOMEWHAT DIMINISHED.
3. JOINT INSTALLATION IN THE GAP:
   a. APPLY ADHESIVE TO THE INNER WALLS OF THE CONCRETE, AS EVENLY AS POSSIBLE, WITHOUT LEAVING BLANK SPOTS. IN THE SAME MANNER, APPLY ADHESIVE TO THE OUTSIDE WALLS OF THE SEAL.
   b. AS THE ADHESIVE IS APPLIED TO THE SEAL WALLS (ON BOTH SIDES), THE SEAL SHOULD BE GRADUALLY INSERTED INTO THE GAP, IN ORDER NOT TO LEAVE SECTIONS OF GLUED SEAL OUTSIDE THE JOINT AND SUSCEPTIBLE TO INTRUSION OF FOREIGN MATTER.
4. PRESSURIZATION:

   THE PRESSURIZATION OF THE SEAL IS DONE THROUGH A VALVE THAT CONVEYS COMPRESSED AIR INTO THE PRE-FORMED SEAL WHOSE ENDS WERE PREVIOUSLY CLOSED, CAUSING THE SEAL TO EXPAND AGAINST THE JOINT'S CONCRETE WALLS. AFTER THE ADHESIVE HAS CURED FOR 24 HOURS, THE VALVE CLAMP IS REMOVED, ALLOWING THE COMPRESSED AIR TO BLEED OFF, THEREBY REESTABLISHING THE ISOBARIC BALANCE.

MEASUREMENT AND PAYMENT:

PAYMENT FOR ACCEPTED QUANTITIES SHALL BE BASED ON THE LENGTH OF JOINT MEASURED ALONG THE CENTERLINE OF THE SEAL COMPLETE IN PLACE AND ACCEPTED. THE PAYMENT SHALL INCLUDE THE COST OF FURNISHING AND PLACING SEALS, ADHESIVE AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THIS WORK ACCORDING TO THE PLANS AND THIS SPECIFICATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER LINEAR FOOT.

ITEM	UNIT	DESCRIPTION
SPECIAL	LIN. FT.	CONTINUOUS SEAL IN CONCRETE JOINT (J.A.M.), 2 INCH

PROPOSED WORK (TO BE PERFORMED ACCORDING TO PHASED CONSTRUCTION)

1. REMOVE THE FOLLOWING:
   a. THE CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING ALUMINUM RAILING AND MOUNTING BRACKETS AND STACK IT NEATLY ALONG THE RIGHT-OF-WAY FOR SUBSEQUENT PICK-UP BY STATE FORCES.
   b. THE GREATER PORTION OF THE SAFETY CURBS.
   c. THE UPPER PORTIONS OF THE WINGWALLS AS SHOWN ON THE PLANS.
   d. MEDIAN GUARDRAIL, MEDIAN PAVEMENT AND DECK BELOW IT.
   e. CUT AND REMOVE SCUPPER PIPES AND SUPPORT BARS, PLUG AND FILL SCUPPER BOXES WITH SUITABLE CONCRETE.
2. FACE EXISTING PARAPETS TO PROVIDE SAFETY SHAPE, MODIFY WINGWALLS, CONSTRUCT NEW MEDIAN DECK AND PARAPETS.
3. SEAL EXPANSION JOINTS WITH STRIP SEALS.
4. PROVIDE 1¾" MICRO-SILICA MODIFIED CONCRETE OVERLAY TO DECKS.
5. INSTALL THE CONTINUOUS PRESSURIZED SEAL TO THE MEDIAN PARAPET JOINT OPENING.
6. SEAL DESIGNATED CONCRETE SURFACES.
7. PAINT ALL STRUCTURAL STEEL.
8. COMPLETE REMAINING CONTRACT ITEMS.

(IT IS NOT INTENDED THAT THE ABOVE LISTED WORK OCCUR IN SEQUENTIAL ORDER AS LISTED)

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GENERAL NOTES

BRIDGE NO. WAY-250-1218L
OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	GFJ	-	2-1-93 JAM	JS	1-25-95	

DESIGN FILE: c:\dgn\way3-83\way3a.dgn
WORKSTATION: %logname% DATE: 13-MAR-1996

FHWA REGION	STATE	PROJECT	
5	OHIO		

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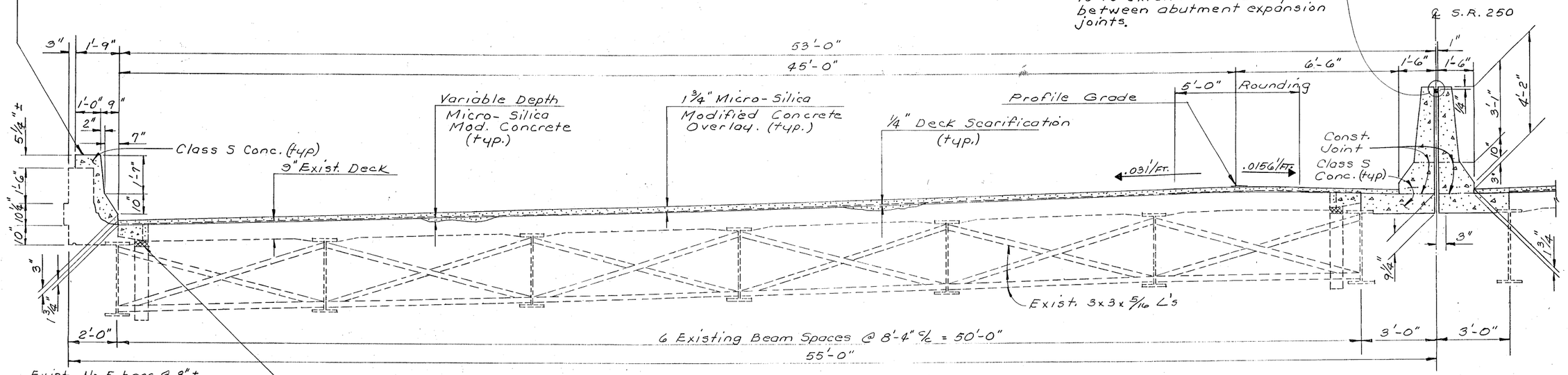
WAY-3-14.72
WAY-83-13.79

See Structural General Notes for specification covering Item 517, Railing; Faced, as per plan. (typ)

See General Notes, Sheet 2/7 for specification covering Item Special - Continuous Pressurized Elastomeric Seal in a Concrete Joint. This seal is to extend continuously between abutment expansion joints.

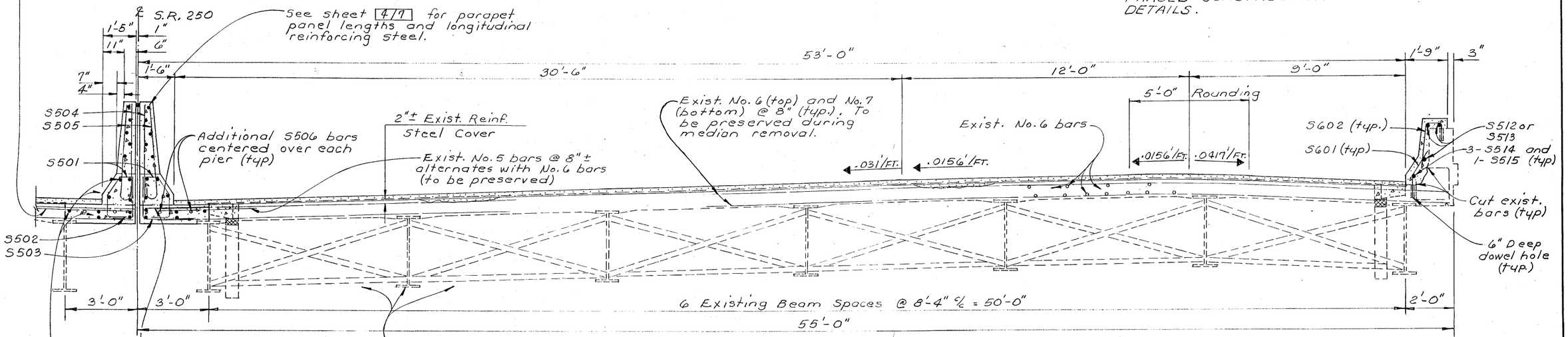


Exist. No. 5 bars @ 8" ± alternates with No. 6 bars (to be preserved)

See Sheet 4/5 Bridge No. WAY-3-1673B for detail to plug and partially remove scupper. (typ.)

SOUTHBOUND SECTION

SEE SHEET 1A/2 FOR PHASED CONSTRUCTION DETAILS.



NORTHBOUND SECTION

NOTE: Dimensions shown at median and exterior parapets are typical.

S514, S515, S506 and S507 shall be lapped 2'-5" minimum.

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TRANSVERSE SECTION
BRIDGE No. WAY-250-12.18L OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	FO		JAM	JS	1-25-95	

FHWA REGION	STATE	PROJECT	
5	OHIO		

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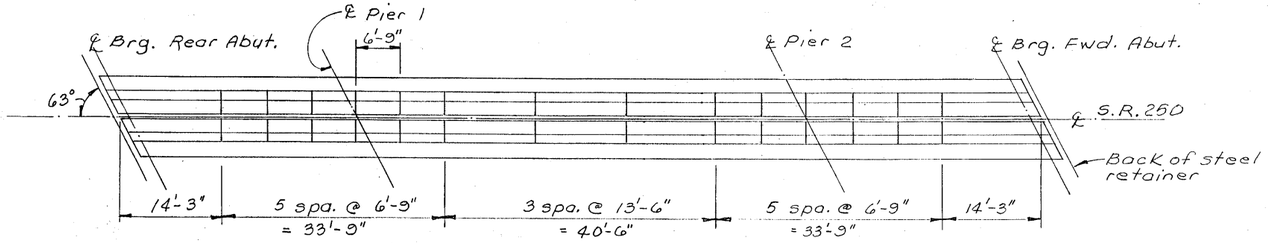
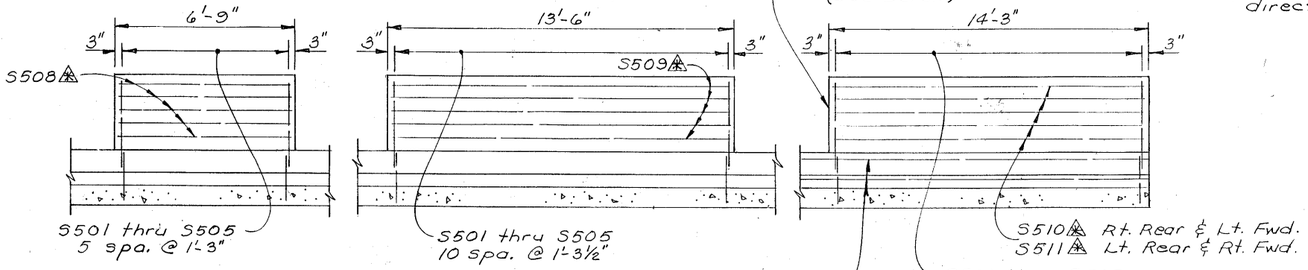
WAY-3-14.72
WAY-83-13.79

⊗ Remove rail and brackets for pick-up by state forces.

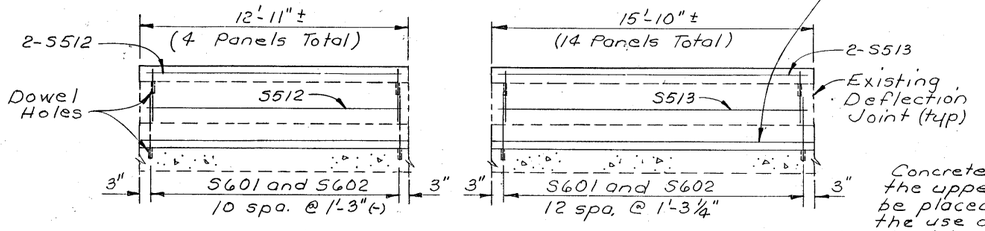


MEDIAN PARAPET DEFLECTION JOINT SPACING
(Measured along ℄, not to scale)

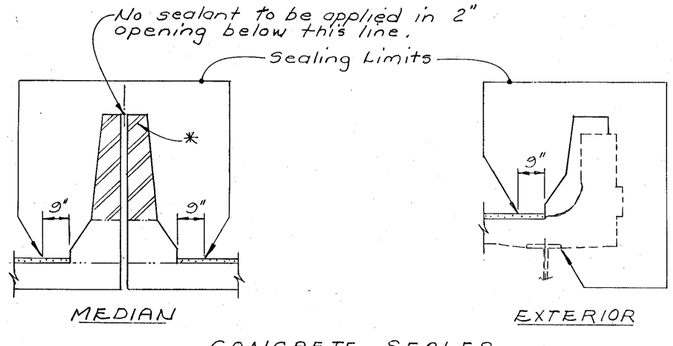


⚠ Stagger between each face (both parapets)

MEDIAN PARAPET PANELS



EXISTING PARAPET PANELS



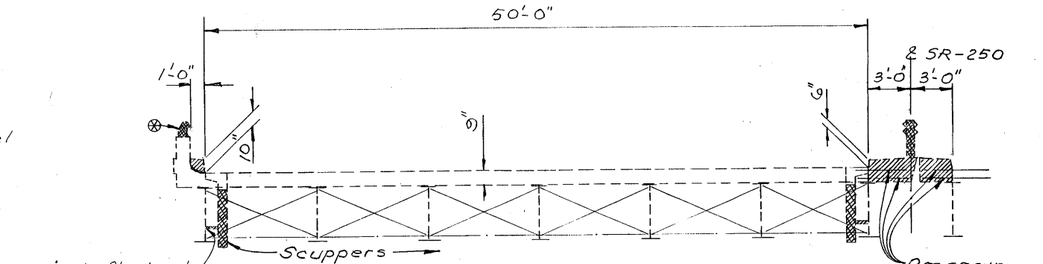
CONCRETE SEALER APPLIED TO PARAPETS AND DEFLECTION JOINT DETAIL

Concrete median parapets above the upper construction joint shall be placed in alternate sections by the use of bulkheads. Closing sections shall be placed after removal of bulkheads and after placement of expansion joint filler. Exposed edges of the filler shall be flush with the surface of concrete and shall be free of mortar.

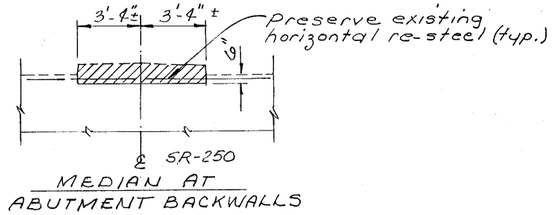
* ¼" Preformed Expansion Joint Filler. Included with concrete for payment. Material may be either ¼" gray sponge rubber or ¼" gray cellular polyvinyl chloride (PVC) sponge. Sponge rubber filler shall conform to AASHTO M-153, Type-1. Density of PVC sponge shall not be less than 20 lbs. per cu. ft.

INDICATES AREAS TO BE REMOVED UNDER ITEM 202- PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

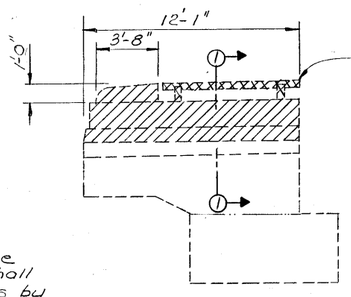
Indicates areas to be removed under Item 202- Portions of Structure Removed, Deck Edges And Abutment, As Per Plan.



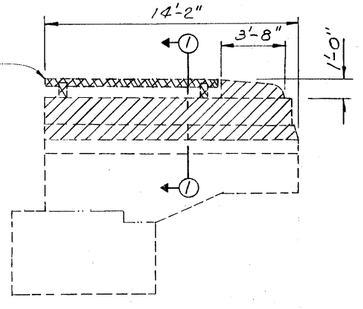
HALF-DECK SECTION



MEDIAN AT ABUTMENT BACKWALLS

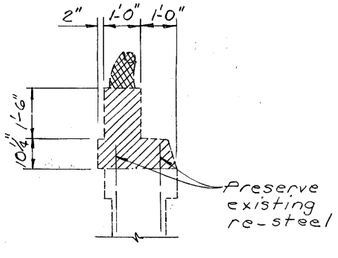


Lt. Fwd. Abut. and Rt. Rear Abut.



Lt. Rear Abut. and Rt. Fwd. Abut.

WINGWALL ELEVATIONS



SECTION 1-1 (Typ.)

See sheet 1A 7 for phased construction details.

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PARAPET DETAILS AND REMOVALS
BRIDGE No. WAY-250-1218L
OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	FO		JAM	JS	1-25-95	

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FHWA REGION	STATE	PROJECT	
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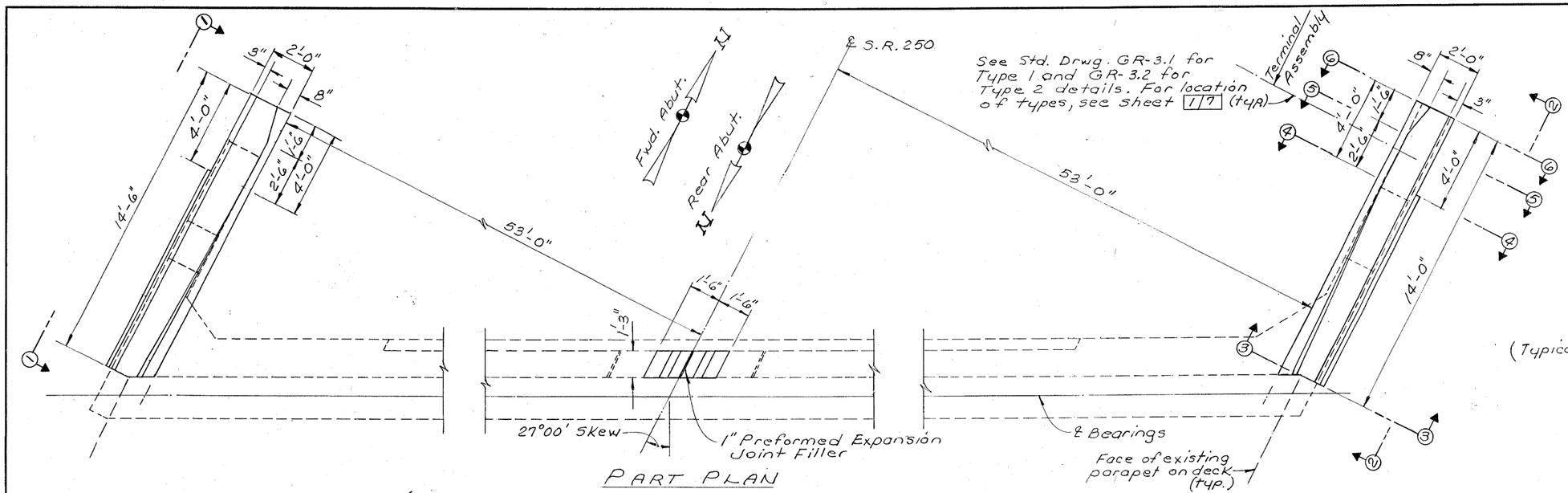
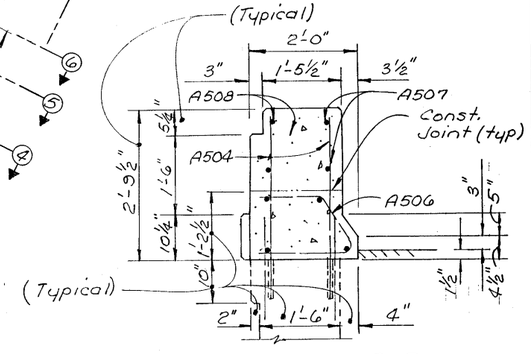
WAY-83-13.79

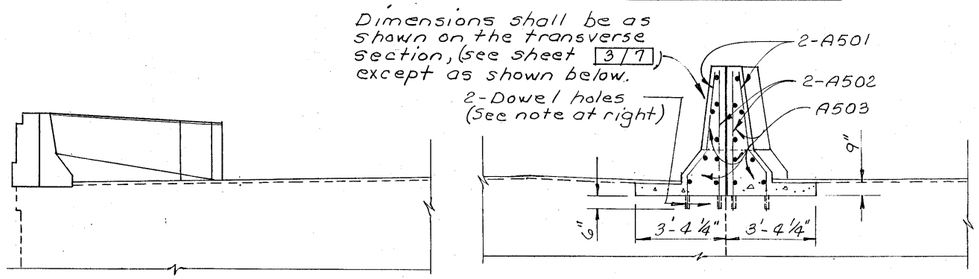


PART PLAN



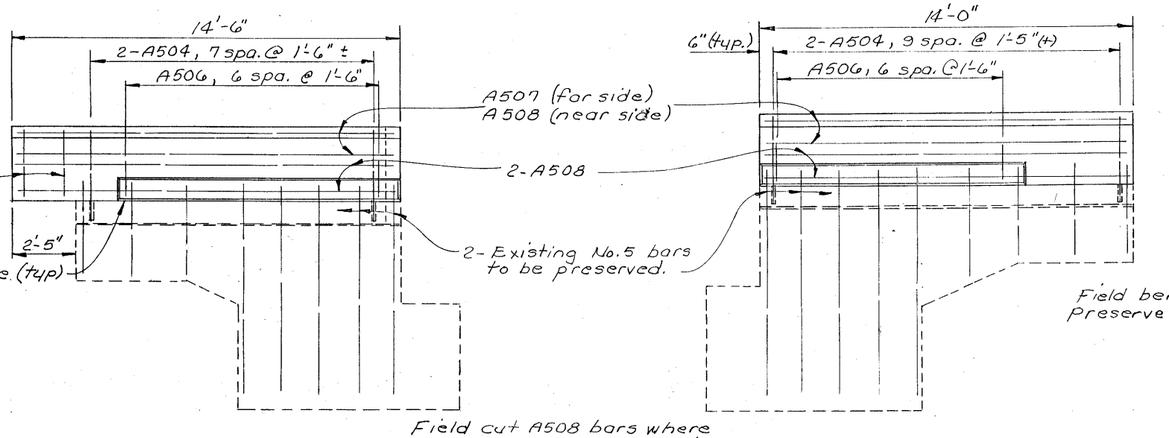
SECTION ④-④

Dimensions shall be as shown on the transverse section, (see sheet 37) except as shown below.



PART ELEVATION
(Fwd. Abutment Shown)

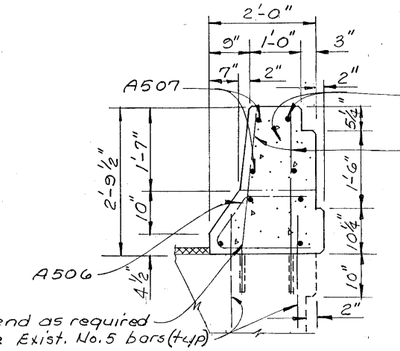
SECTION ⑤-⑤



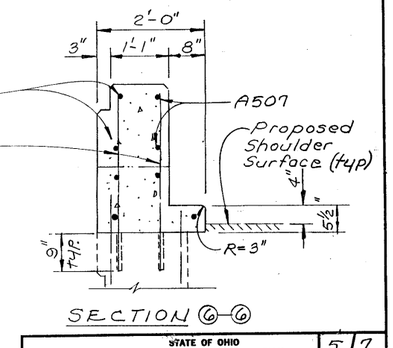
MEDIAN PARAPET
(on abutment)

VIEW ①-①

VIEW ②-②



SECTION ③-③



SECTION ⑥-⑥

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

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ABUTMENT DETAILS
BRIDGE No. WAY-250-1218L
OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	FO		JAM	JS	4-2-93	

FHWA REGION	STATE	PROJECT	
5	OHIO		

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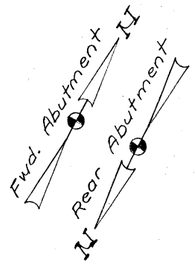
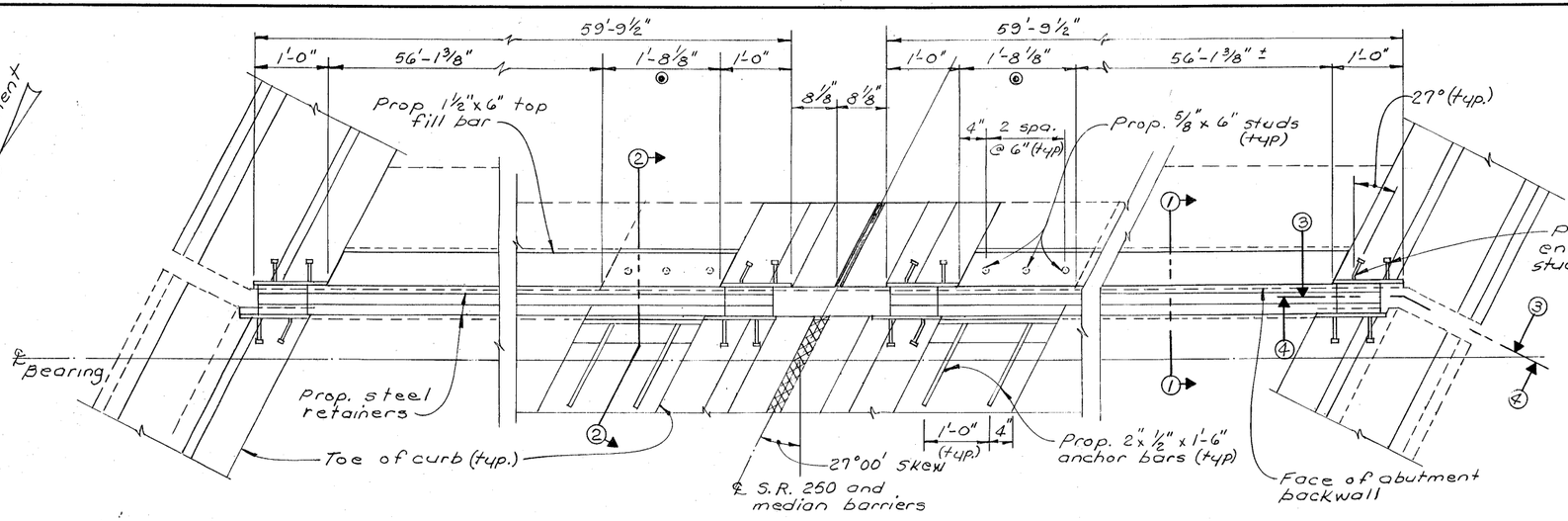
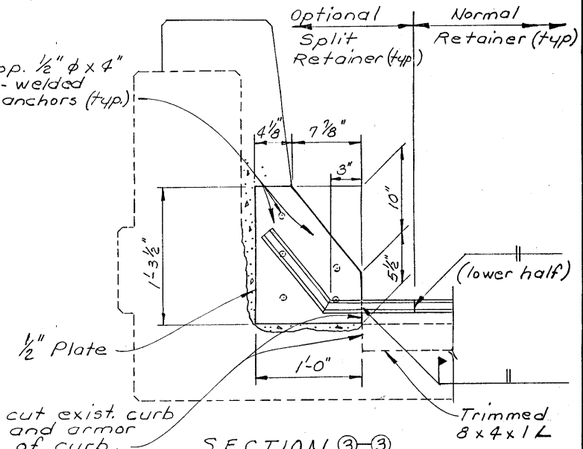
WAY-3-14.72
WAY-83-13.79

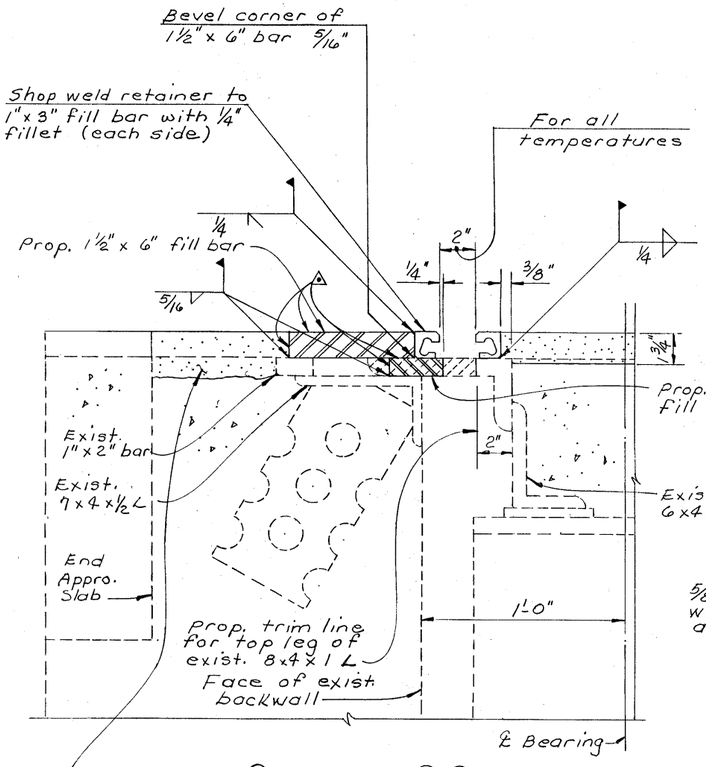




PART PLAN

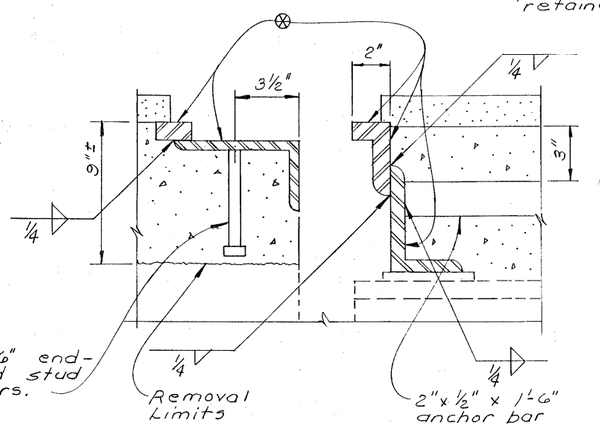


SECTION ③-③



SECTION ①-①

⊛ The armor edges marked by this symbol shall be shop beveled 5/16" for field welding to the existing. The welds on the top surfaces shall be ground flush prior to placement of the finish fill bars and retainers.



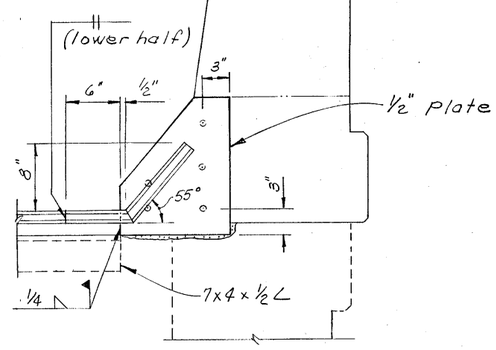
SECTION ②-②

The hatched armor ports shown above are to be an extension of the existing armor identified in the section to the left. The proposed fill bars and steel retainers are not shown above but are to be a continuation of those shown in Section ①-①.

The steel retainers and elastomeric strip seal glands shall be Type SSE with 300A glands as manufactured by the D.S. Brown Co., Type "E" with 5-300E glands by the Watson-Bowman and Acme Corp. or an approved alternate. The seal movement rating shall be 3".

See Standard Drawing EXJ-4-87 sheets 4 and 5 for split retainer details and notes, also seal and installation requirements. The height of the retainer however shall be 1½" instead of 2".

See the General Notes for the pay item description for the Expansion Joint Modifications.



SECTION ④-④

(Details shown in above sections are similar for median parapets.)

△ The fill bar edges marked by this symbol shall be shop beveled 5/16" for field welding during Phase B Construction. The welds on the top surface shall be ground flush.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

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EXPANSION JOINT MODIFICATIONS
BRIDGE No. WAY-250-1218L
OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	FO		JAM	JS	1-25-95	

80433

FHWA REGION	STATE	PROJECT	
5	OHIO		

171
224

WAY-3-14.72
WAY-83-13.79

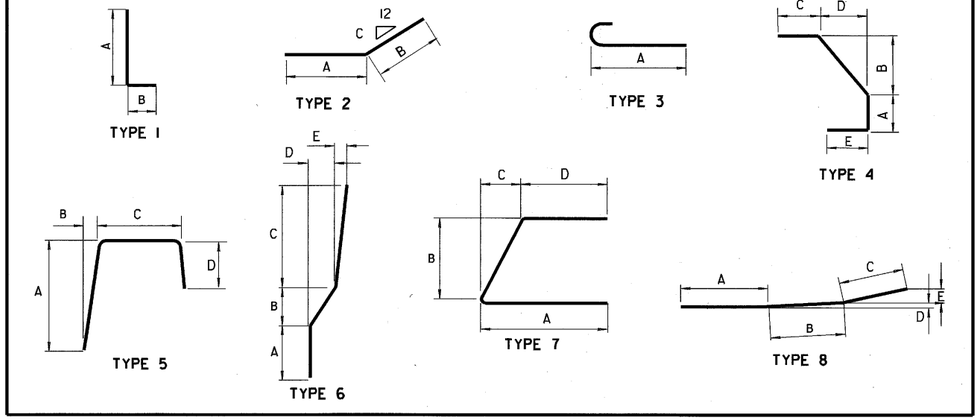
REINFORCING STEEL LIST

MARK	NUMBER REAR	NUMBER FWD	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
ABUTMENTS													
A501	4	4	8	5'-3"	44	6	1'-4"	8½"	2'-11"	8"	4"		
A502	4	4	8	5'-0"	42	STR.							
A503	16	16	32	1'-0"	33	STR.							
A504	36	36	72	3'-4"	250	STR.							
A505	4	4	8	2'-5"	20	STR.							
A506	14	14	28	3'-4"	97	7	1'-7"	10"	7"	1'-0"			
A507	4	4	8	13'-8"	114	8	9'-11"	2'-4"	1'-5"	1½"	5"		
A508	12	12	24	14'-2"	355	STR.							
				TOTAL	955								
SUPERSTRUCTURE													
S501			234	3'-1"	752	4	1'-0"	8½"	6"	7"	10"		
S502			117	2'-7"	315		1'-11"	10"					
S503			117	3'-11"	478		1'-11"	2'-2"					
S504			234	4'-0"	976	STR.							
S505			234	4'-7"	1119	3	4'-0"						
S506			62	34'-11"	2258	STR.							
S507			18	39'-0"	732	STR.							
S508			100	6'-5"	669	STR.							
S509			30	13'-2"	412	STR.							
S510			10	13'-3"	138	STR.							
S511			10	14'-1"	147	STR.							
S512			12	12'-7"	✲157	STR.							
S513			42	15'-6"	✲679	STR.							
S514			6	35'-0"	✲219	STR.							
S515			2	38'-11"	✲ 81	STR.							
S601			226	2'-2"	✲735	2	9"	1'-5"	8½				
S602			226	2'-10"	✲962	5	1'-9"	2½"	8"	9"			
S603			206	2'-8"	825	STR.							
				TOTAL	8821								

✲ SHOWN FOR INFORMATION PURPOSES ONLY.
PAYMENT IS INCLUDED UNDER ITEM 517 - RAILING, FACED AS PER PLAN
ALL REINFORCING STEEL IS TO BE EPOXY COATED.

LEGEND: STR. = STRAIGHT

BENDING DIAGRAMS



ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.
202	11201	LUMP		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	LUMP		LUMP	
202	11301	55	CU. YD.	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, DECK EDGES AND ABUTMENTS	6		49	
509	15840	9876	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	955		8821	100
510	10000	88	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	88			
511	34401	70	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RECONSTRUCTION)	11		59	
SPECIAL	51267504	1255	SQ. YD.	SEALING OF CONCRETE SURFACES (NON-EPOXY) (SEE PROPOSAL NOTE)	261	511	483	
815	00050	22400	SQ. FT.	SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			22400	
815	00056	22400	SQ. FT.	FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			22400	
815	00060	22400	SQ. FT.	FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			22400	
815	00066	22400	SQ. FT.	FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			22400	
815	00500	14	LIN. FT.	CAULKING			14	
815	00504	50	MAN-HOUR	GRINDING FINS, TEARS, SLIVERS			50	
516	11211	239	LIN. FT.	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (SEE PROPOSAL NOTE)			239	
SPECIAL	51614120	137	LIN. FT.	CONTINUOUS SEAL IN CONCRETE JOINT (J.A.M.), 2 INCH ••			137	
516	13600	14	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	14			
517	76201	273	LIN. FT.	RAILING FACED, AS PER PLAN			273	
SPECIAL	51922006	1580	SQ. YD.	MICRO SILICA MODIFIED CONCRETE OVERLAY (1¾" THICK) (SEE PROPOSAL NOTE)	18		1562	
SPECIAL	51922100	30	CU. YD.	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS) (SEE PROPOSAL NOTE)			30	
SPECIAL	51922200	1	CU. YD.	FULL DEPTH REPAIR (SEE PROPOSAL NOTE)			1	
SPECIAL	51922300	LUMP		TEST SLAB (SEE PROPOSAL NOTE)			LUMP	

•• DENOTES 100% STATE FUNDS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

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ESTIMATED QUANTITIES
REINFORCING STEEL LIST
BRIDGE NO. WAY-250-1218L
OVER SR-3

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
FO	GFJ	-	2-1-93 JAM	JS	1-25-95	

DESIGN FILE: c:\dgn\way3-83\way3a.dgn
WORKSTATION: %logname% DATE: 13-MAR-1996