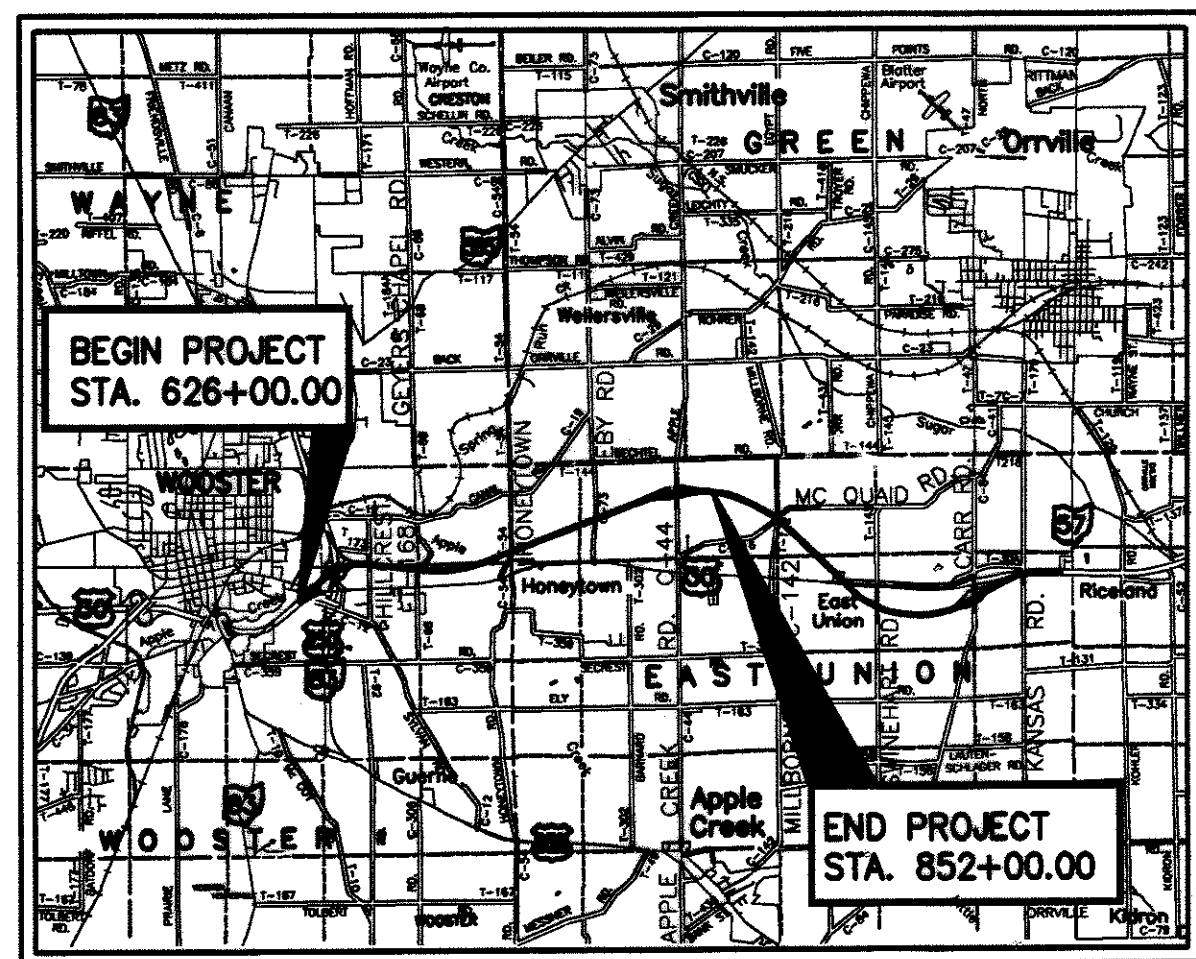


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION WAY 30-11.86

## WOOSTER TOWNSHIP AND EAST UNION TOWNSHIP WAYNE COUNTY



LOCATION MAP

LATITUDE: 40° 48' 00" N LONGITUDE: 81° 52' 30" W



PORTION TO BE IMPROVED  
 FEDERAL ROUTES   
 STATE ROUTES   
 OTHER ROUTES

**DESIGN DESIGNATION**

CURRENT ADT (2006)	17720
DESIGN YEAR ADT (2026)	23180
DESIGN HOURLY VOLUME (2026)	2086
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	21%
DESIGN SPEED	70 MPH
LEGAL SPEED	65 MPH
FUNCTIONAL CLASSIFICATION	RURAL FREEWAY
NHS PROJECT	YES

**DESIGN EXCEPTIONS**

APPLE CREEK ROAD

DESIGN FEATURE	APPROVAL DATES	SHEET NUMBERS
STOPPING SIGHT DISTANCE (APPLE CREEK ROAD C.R. 44)	2-21-03	5, 366-374

**STRUCTURES**

**INDEX OF SHEETS**

TITLE SHEET	1	PLAN AND PROFILE & QUANTITIES - EBY ROAD	357-360, 359A
SCHEMATIC PLAN	2-6	CROSS SECTIONS - EBY ROAD	361-365
GEOMETRIC	7-10	PLAN AND PROFILE & QUANTITIES - APPLE CREEK ROAD	366-374, 366A
TYPICAL SECTIONS	11-26	CROSS SECTIONS - APPLE CREEK ROAD	375-397
GENERAL NOTES	27-30, 30A	PLAN AND PROFILE & QUANTITIES - APPLE CREEK SERVICE ROAD	398-399
MAINTENANCE OF TRAFFIC	31-53	CROSS SECTIONS - APPLE CREEK SERVICE ROAD	400-401
GENERAL SUMMARY	54-58, 56A	PLAN AND PROFILE & QUANTITIES - APPLE CREEK ROAD INTERCHANGE RAMP	402-417
SUB-SUMMARIES	59-63	CROSS SECTIONS - APPLE CREEK ROAD INTERCHANGE RAMP	418-431
QUANTITY CALCULATIONS	64-67	MEDIAN CROSSOVER DETAILS	432-433
PAVEMENT CALCULATIONS	68-72	INTERSECTION DETAILS	434-456
PROJECT SITE PLAN	73-85	MISCELLANEOUS DETAILS	456A
SUPERELEVATION TABLES	86-107	DRIVEWAY QUANTITIES AND DETAILS	457-458
PLAN AND PROFILE & QUANTITIES - U.S. 30/U.S. 250 INTERCHANGE RAMP	108-134	DRIVEWAY PROFILES	459-466, 466A
CROSS SECTION LAYOUTS	135, 136	UNDERDRAIN SUB-SUMMARY	467-473
CROSS SECTIONS - U.S. 30/U.S. 250 INTERCHANGE RAMP	137-181	DRAINAGE DETAILS	474-477
PLAN AND PROFILE & QUANTITIES - U.S. 30	182-218	CULVERT DETAILS	478-500, 478A, 500A
CROSS SECTIONS - U.S. 30	219-305	STORM SEWER PROFILES	501-508
PLAN AND PROFILE & QUANTITIES - HILLCREST ROAD	306-311	INSTRUMENTATION PLAN	508A
CROSS SECTIONS - HILLCREST ROAD	312-316	TRAFFIC CONTROL PLANS	509-560, 524A
PLAN AND PROFILE & QUANTITIES - GEYERS CHAPEL ROAD	317-319	LIGHTING	561-585, 576A
CROSS SECTIONS - GEYERS CHAPEL ROAD	320-323	RETAINING WALLS	586-613, 613A, 613B
PLAN AND PROFILE & QUANTITIES - HONEYTOWN ROAD	324-334	STRUCTURES (OVER 20')	614-676
CROSS SECTIONS - HONEYTOWN ROAD	335-356	RIGHT OF WAY	677-741, 730A, 736A
		SOIL BORINGS	

SHEETS NOT USED: 25, 90, 101, 127

**SPECIAL PROVISIONS**

DATE: _____
-------------

**STANDARD CONSTRUCTION DRAWINGS**

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS			
BP-2.1	07-28-00	GR-4.2	04-18-03	DM-1.1	07-18-03	ICD-1-82	07-19-02	MT-95.30	04-19-02	TC-22.20	01-19-01		
BP-2.2	07-28-00	GR-5.3	04-18-03	DM-1.2	07-19-02			MT-95.31	04-19-02	TC-41.10	01-19-01	802	07-19-02
BP-2.3	07-28-00	GR-6.1	04-18-03	DM-1.4	07-19-02	SICD-1-96	07-19-02	MT-95.40	07-18-03	TC-41.20	01-19-01	832	02-12-03
BP-3.1	07-28-00	GR-6.2	04-18-03	DM-2.1	07-20-01			MT-97.10	04-19-02	TC-41.40	01-18-02	833	02-12-03
BP-4.1	07-28-00			DM-3.1	07-19-02	HL-10.12	04-19-02	MT-98.17	10-18-02	TC-41.50	07-18-03	836	12-06-01
BP-5.1	07-28-00	LA-1.2	07-28-00	DM-4.1	07-19-02	HL-10.31	07-20-01	MT-98.18	10-18-02	TC-42.10	01-19-01	846	04-19-02
BP-6.1	07-28-00			DM-4.3	07-19-02	HL-20.11	04-19-02	MT-101.60	10-18-02	TC-42.20	04-20-01	856	10-18-02
BP-9.1	07-28-00	RM-1.1	04-18-03	DM-4.4	07-19-02	HL-20.21	04-19-02	MT-101.70	10-18-02	TC-51.11	04-20-01	864	07-11-00
		RM-4.2	04-18-03	DM-5.1	07-19-02	HL-30.11	04-19-02	MT-102.10	10-18-02	TC-52.10	04-20-01	894	10-18-02
F-2.1	07-28-00	RM-4.4	04-18-03			HL-30.21	04-19-02	MT-102.20	10-18-02	TC-52.20	04-20-01	908	04-18-03
F-3.1	07-28-00	RM-4.5	04-18-03	HW-1.1	07-20-01	HL-30.22	04-19-02	MT-105.10	10-18-02	TC-61.10	01-19-01	954	09-09-97
F-3.3	07-28-00			HW-2.1	07-19-02	HL-40.10	04-19-02	MT-105.11	10-18-02	TC-65.10	10-19-01	1027	04-11-02
F-3.4	07-28-00	CB-1.1	07-19-02	HW-2.2	07-19-02	HL-50.11	07-20-01			TC-65.11	10-19-01		
		CB-1.2	07-19-02			HL-50.21	04-19-02	TC-7.65	07-18-03	TC-65.12	10-19-01		
GR-1.1	04-18-03	CB-2.2	07-19-02	MH-1.2	07-19-02	HL-60.11	07-20-01	TC-12.30	01-19-01	TC-71.10	04-19-02		
GR-2.1	04-18-03	CB-3.1	07-19-02			HL-60.21	07-20-01	TC-18.24	01-18-02	TC-72.20	01-19-01		
GR-2.3	04-18-03	CB-3.3	07-19-02	AS-1-81	07-19-02	HL-60.31	07-20-01	TC-21.10	01-19-01				
GR-3.1	04-18-03	CB-3.4	07-19-02	GSD-1-96	07-19-02			TC-21.20	01-19-01				
GR-3.2	04-18-03			SBR-1-99	07-19-02	MT-35.10	04-20-01	TC-21.40	01-18-02				

**PROJECT DESCRIPTION**

CONSTRUCTION OF 4.28 MILES OF FOUR LANE DIVIDED FREEWAY BEGINNING AT THE EXISTING U.S. 250/ S.R. 83 AND U.S. 30 INTERCHANGE AT THE WEST END OF THE PROJECT AND ENDING APPROXIMATELY 3350' EAST OF APPLE CREEK ROAD. THE PROJECT INCLUDES LIGHTING AND THE ADDITION AND ELIMINATION OF SEVERAL RAMPS AT THE U.S. 250/S.R. 83 AND U.S. 30 INTERCHANGE; CONSTRUCTION OF STRUCTURES T.R. 168 (HILLCREST ROAD) OVER U.S. 30, U.S. 30 OVER APPLE CREEK, C.R. 54 (HONEYTOWN ROAD) OVER U.S. 30, AND C.R. 44 (APPLE CREEK ROAD) OVER U.S. 30.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA	207 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	3 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA	210 ACRES

**2002 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.

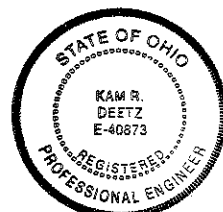
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY, AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON THE MAINTENANCE OF TRAFFIC PLANS.

WHEREVER WAY-30-11.83 APPEARS ON THESE PLANS IT SHALL BE UNDERSTOOD AS WAY-30-11.86.

**UNDERGROUND UTILITIES**

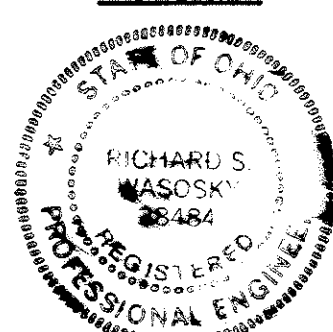
TWO WORKING DAYS BEFORE YOU DIG  
 CALL...1-800-362-2764 (Toll Free)  
 OHIO UTILITIES PROTECTION SERVICE  
 NON-MEMBERS MUST BE CALLED DIRECTLY

APPROVED Thomas M. O'Leary DISTRICT DEPUTY DIRECTOR  
 DATE 8/25/03  
 APPROVED Gordon Proctor DIRECTOR, DEPARTMENT OF TRANSPORTATION  
 DATE 9.8.03



Kam R. Deffy 8/21/03  
DATE

**ROADWAY**



Richard S. Masoski 08/21/03  
DATE

PLAN PREPARED BY: **EUTHENICS INC.** CONSULTING ENGINEERS  
 925 Keynote Circle, Cleveland, Ohio

040042 Part A

WAY 30-11.86/16.14 CONTRACT C  
 040044  
 DIST 3  
 PID-258880  
 2/4/2004

1:1 PLOT

1:1 PLOT

FEDERAL PROJECT NO.  
**G000(628)**

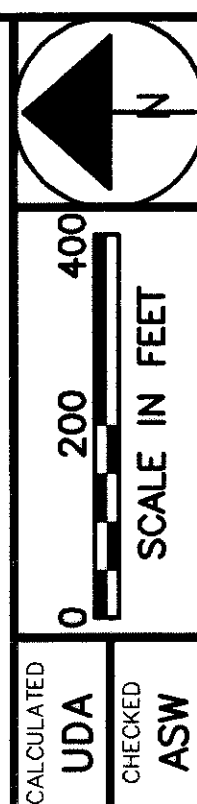
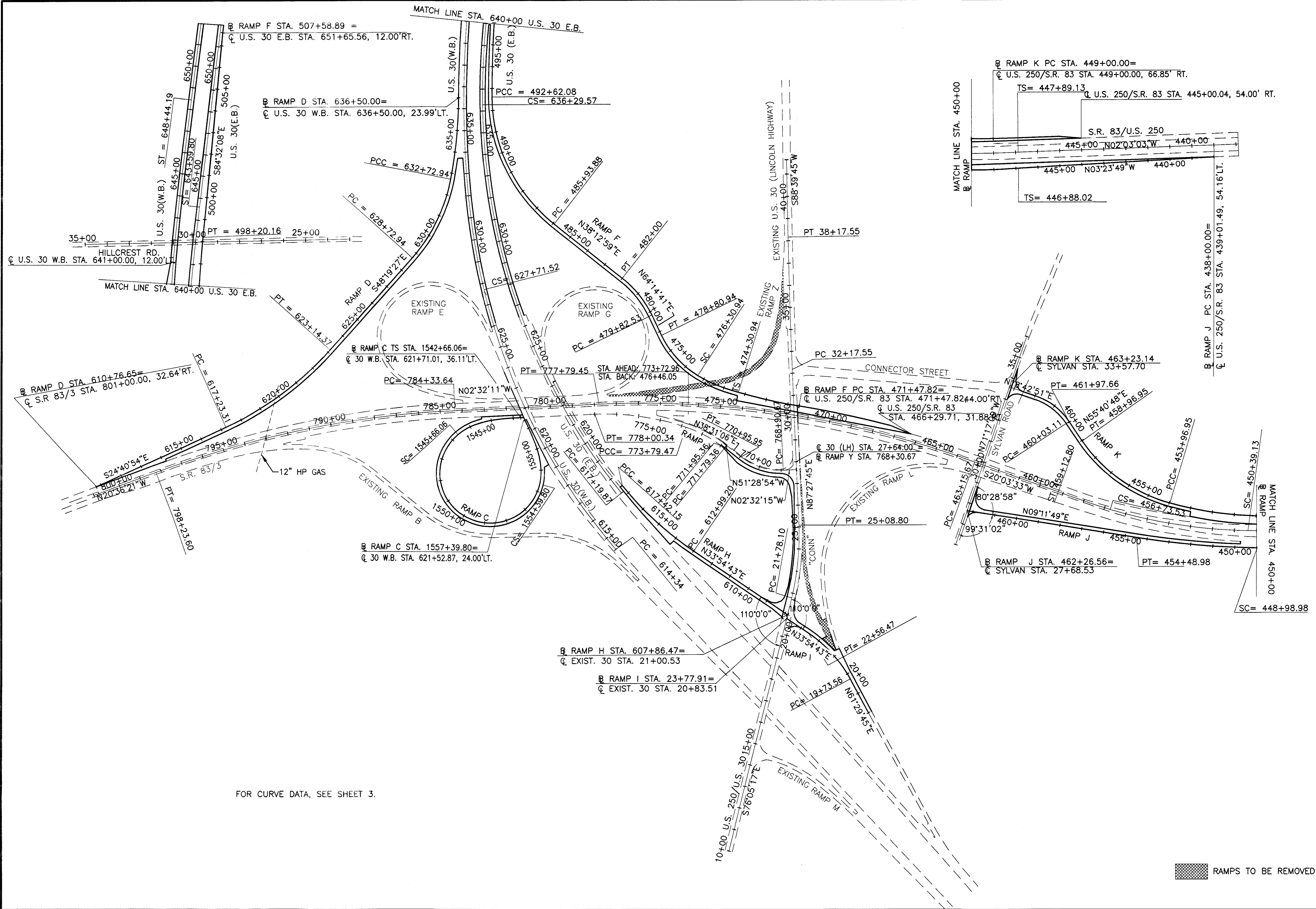
PID NO.  
**16285**

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT  
**NONE**

**WAY-30-11.86**

1  
741



CALCULATED  
LDA  
CHECKED  
ASW

**RAMP SCHEMATIC PLAN  
WEST END OF PROPOSED U.S. 30**

**WAY-30-1183**

RAMP H

PI STA. 615+22.46 Δ = 17°43'05" D <sub>c</sub> = 04'00'00" RT. R = 1432.39' T = 223.26' L = 442.95' E = 17.29' e <sub>max</sub> = 0.065	PI STA. 617+42.99 Δ = 00°02'03" D <sub>c</sub> = 02'01'01" RT. R = 2840.79' T = 0.84' L = 1.69' E = 0.00' e <sub>max</sub> = 0.065
--	---

RAMP F

PI STA. 472+89.56 Δ = 07°04'41" D <sub>c</sub> = 02'30'00" RT. R = 2291.83' T = 141.74' L = 283.12' E = 4.38' e <sub>max</sub> = 0.040	PI STA. 475+54.10 R = 440.74' L <sub>s</sub> = 200.00' Q <sub>s</sub> = 15°30'00" LT = 123.16' ST = 77.96' x = 198.28' y = 20.83' k = 80.50' P = 4.80' T <sub>s</sub> = 272.40' E <sub>s</sub> = 44.37'	PI STA. 477+59.40 Δ = 32°30'00" D <sub>c</sub> = 13'00'00" RT. R = 440.74' T = 128.46' L = 250.00' E = 18.34' e <sub>max</sub> = 0.080	PI STA. 480+93.18 Δ = 26°05'47" D <sub>c</sub> = 12'00'00" LT. R = 477.46' T = 110.65' L = 217.47' E = 12.65' e <sub>max</sub> = 0.083	PI STA. 489+52.75 Δ = 51°47'06" D <sub>c</sub> = 07'45'00" RT. R = 739.30' T = 358.87' L = 668.20' E = 82.50' e <sub>max</sub> = 0.083	PI STA. 495+41.33 Δ = 05°27'51" D <sub>c</sub> = 00'58'45" RT. R = 5851.87' T = 279.25' L = 558.08' E = 6.66' e <sub>max</sub> = 0.029
---	--	---	---	---	---

RAMP Y

PI STA. 769+97.94 Δ = 41°03'22" D <sub>c</sub> = 20'00'00" RT. R = 286.48' T = 107.27' L = 205.28' E = 19.42'	PI STA. 772+96.45 Δ = 20°00'40" D <sub>c</sub> = 10'00'00" LT. R = 572.96' T = 101.09' L = 200.11' E = 8.85'	PI STA. 775+92.30 Δ = 21°02'37" D <sub>c</sub> = 05'00'00" LT. R = 1145.92' T = 212.83' L = 420.87' E = 19.60'
---	--	--

RAMP J

PI STA. 448+28.71 R = 1391.35' L <sub>s</sub> = 210.97' Q <sub>s</sub> = 04°20'38" LT = 140.69' ST = 70.36' x = 210.85' y = 5.33' k = 105.46' P = 1.33' T <sub>s</sub> = 368.29' E <sub>s</sub> = 1.58'	PI STA. 451+74.46 Δ = 08°15'00" D <sub>c</sub> = 01'30'00" RT. R = 3819.72' T = 275.48' L = 550.00' E = 9.92' e <sub>max</sub> = 0.040
--	---

RAMP C

PI STA. 1544+70.74 R = 229.18' L <sub>s</sub> = 300.00' Q <sub>s</sub> = 37°30'00" LT = 204.68' ST = 104.27' x = 287.40' y = 63.47' k = 147.88' P = 16.11' T <sub>s</sub> = 13.14' E <sub>s</sub> = 20.29'	PI STA. 1552+23.54 Δ = 218°26'06" D <sub>c</sub> = 25'00'00" LT. R = 229.18' T = 657.48' L = 873.74' E = 925.46' e <sub>max</sub> = 0.078	PI STA. 1555+44.07 R = 229.18' L <sub>s</sub> = 300.00' Q <sub>s</sub> = 37°30'00" LT = 204.68' ST = 104.27' x = 287.40' y = 63.47' k = 147.88' P = 16.11' T <sub>s</sub> = 13.14' E <sub>s</sub> = 64.24'
---	--	---

RAMP I

PI STA. 21+17.81 Δ = 27°35'02" D <sub>c</sub> = 09°45'00" LT. R = 587.65' T = 144.25' L = 282.91' E = 17.45' e <sub>max</sub> = 0.061
--

RAMP CONNECTOR CURVE DATA

PI STA. 24+12.82 Δ = 25°58'00" D <sub>c</sub> = 08'00'00" LT. R = 716.20' T = 165.13' L = 324.58' E = 18.79' e <sub>max</sub> = 0.061'
---

RAMP K

PI STA. 451+50.40 Δ = 17°23'36" D <sub>c</sub> = 03'30'00" RT. R = 1637.02' T = 250.40' L = 496.95' E = 19.04' e <sub>max</sub> = 0.051	PI STA. 456+57.62 Δ = 40°00'00" D <sub>c</sub> = 08'00'00" RT. R = 716.20' T = 260.67' L = 500.00' E = 45.96' e <sub>max</sub> = 0.064	PI STA. 461+03.91 Δ = 36°57'56" D <sub>c</sub> = 19'00'00" LT. R = 301.56' T = 100.80' L = 194.56' E = 16.40' e <sub>max</sub> = 0.070
--	---	---

RAMP D

PI STA. 620+23.11 Δ = 23°38'34" D <sub>c</sub> = 04'00'00" LT. R = 1432.39' T = 299.80' L = 591.07' E = 31.04' e <sub>max</sub> = 0.057	PI STA. 630+77.97 Δ = 31°00'00" D <sub>c</sub> = 07'45'00" LT. R = 739.30' T = 205.03' L = 400.00' E = 27.90' e <sub>max</sub> = 0.083	PI STA. 634+61.99 Δ = 10°22'09" D <sub>c</sub> = 02'45'00" LT. R = 2083.48' T = 189.05' L = 377.06' E = 8.56' e <sub>max</sub> = 0.043
--	---	---

S.R. 83/U.S. 250

PI STA. 449+55.82 R = 2291.83' L <sub>s</sub> = 250.00' Q <sub>s</sub> = 03°07'30" LT = 166.69' ST = 83.36' x = 249.93' y = 4.54' k = 124.99' P = 1.14' T <sub>s</sub> = 572.98' E <sub>s</sub> = 1.35'	PI STA. 453+58.37 Δ = 15°51'36" D <sub>c</sub> = 02'30'00" RT. R = 2291.83' T = 319.24' L = 634.40' E = 22.13'	PI STA. 457+56.89 R = 2291.83' L <sub>s</sub> = 250.00' Q <sub>s</sub> = 03°07'30" LT = 166.69' ST = 83.36' x = 249.93' y = 4.54' k = 124.99' P = 1.14' T <sub>s</sub> = 572.98' E <sub>s</sub> = 44.49'	PI STA. 471+95.54 Δ = 22°35'44" D <sub>c</sub> = 01'18'03" LT. R = 4404.20' T = 879.86' L = 1736.86' E = 87.03'	PI STA. 791+34.44 Δ = 18°04'10" D <sub>c</sub> = 01'18'00" LT. R = 4407.37' T = 700.80' L = 1389.96' E = 55.37'
--	--	---	---	---

EXISTING U.S. 30

PI STA. 23+44.60 Δ = 16°26'58" D <sub>c</sub> = 04°58'27" LT. R = 1151.87' T = 166.50' L = 330.70' E = 11.97'	PI STA. 35+17.56 Δ = 01°12'00" D <sub>c</sub> = 00°12'00" RT. R = 28647.89' T = 300.01' L = 600.00' E = 1.57'
---	---

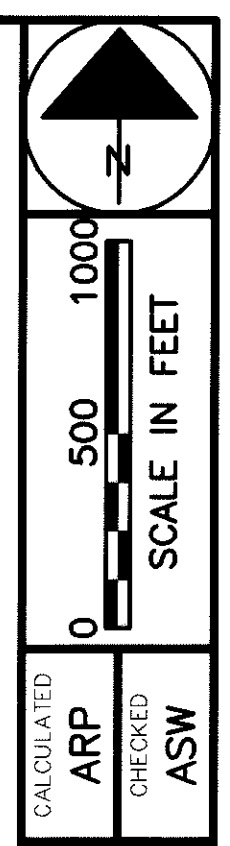
U.S. 30 E.B.

PI STA. 627+11.73 Δ = 38°11'38" D <sub>c</sub> = 02'00'00" RT. R = 2864.79' T = 991.86' L = 1909.70' E = 166.84' e <sub>max</sub> = 0.066	PI STA. 638+73.36 R = 2864.79' L <sub>s</sub> = 730.22' Q <sub>s</sub> = 07°18'08" LT = 487.23' ST = 243.79' x = 729.04' y = 30.99' k = 364.91' P = 7.75' T <sub>s</sub> = 1558.49' E <sub>s</sub> = 245.86'
--	---

U.S. 30 W.B.

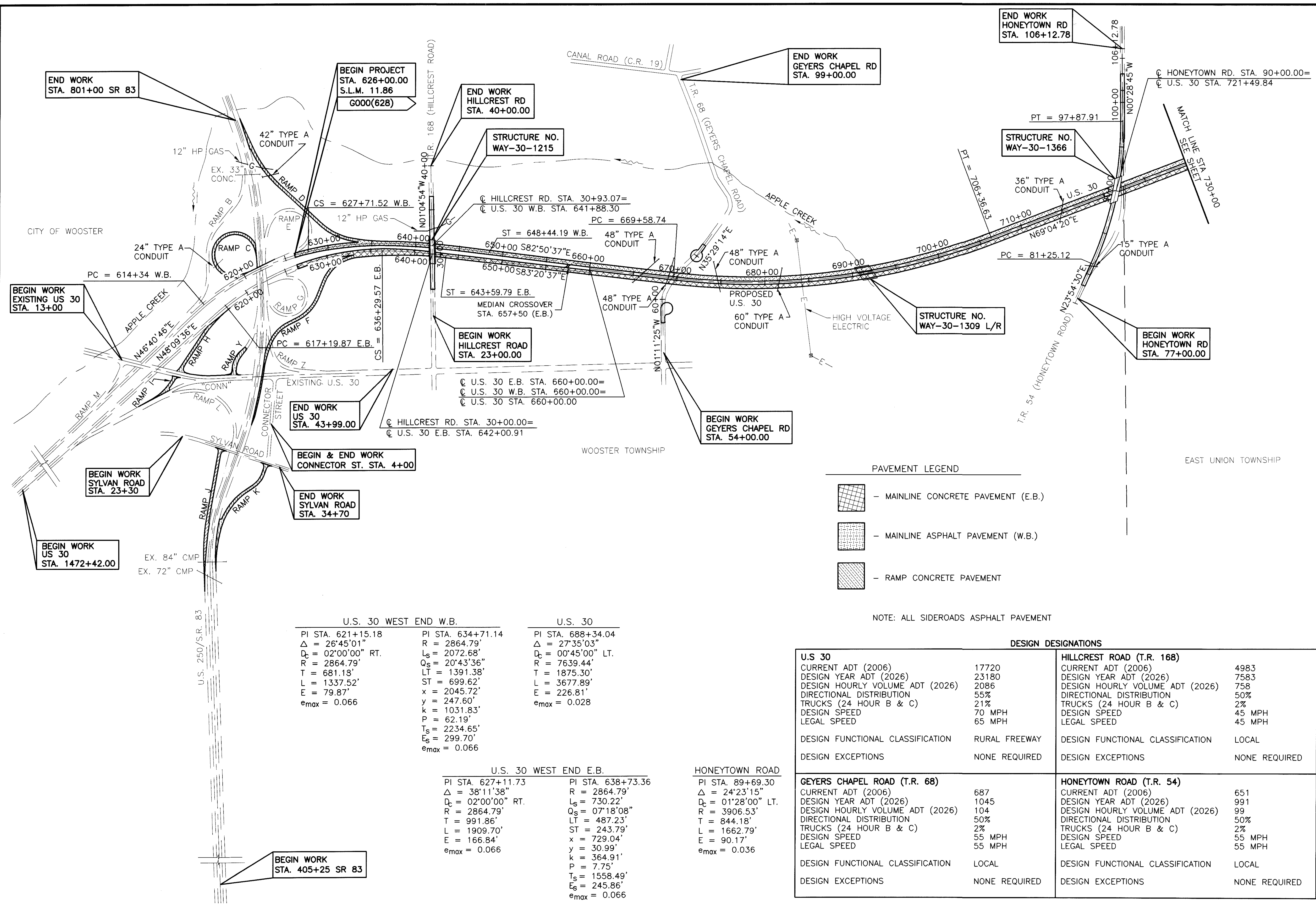
PI STA. 621+15.18 Δ = 26°45'01" D <sub>c</sub> = 02'00'00" RT. R = 2864.79' T = 681.18' L = 1337.52' E = 79.87' e <sub>max</sub> = 0.066	PI STA. 634+71.14 R = 2864.79' L <sub>s</sub> = 2072.68' Q <sub>s</sub> = 20°43'36" LT = 1391.38' ST = 699.62' x = 2045.72' y = 247.60' k = 1031.83' P = 62.19' T <sub>s</sub> = 2234.65' E <sub>s</sub> = 299.70'
---	---

C:\JUBS\470\HIGHWAY\MISC\4705604A.DWG PJK 3/23/03 PLOT 1/20



**SCHEMATIC PLAN & DESIGN DESIGNATION**

**WAY-30-1183**



**PAVEMENT LEGEND**

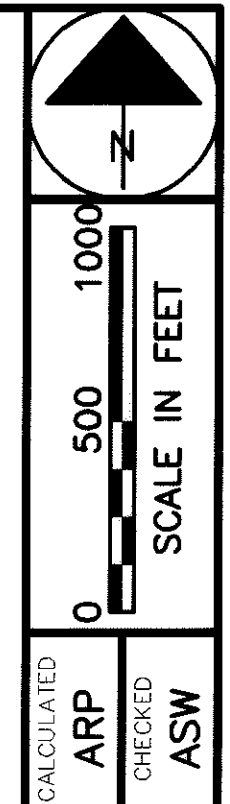
	- MAINLINE CONCRETE PAVEMENT (E.B.)
	- MAINLINE ASPHALT PAVEMENT (W.B.)
	- RAMP CONCRETE PAVEMENT

NOTE: ALL SIDEROADS ASPHALT PAVEMENT

<b>U.S. 30 WEST END W.B.</b>		<b>U.S. 30</b>	
PI STA. 621+15.18	PI STA. 634+71.14	PI STA. 688+34.04	
$\Delta = 26'45''01''$	$R = 2864.79'$	$\Delta = 27'35''03''$	
$D_c = 02'00''00''$ RT.	$L_s = 2072.68'$	$D_c = 00'45''00''$ LT.	
$R = 2864.79'$	$Q_s = 20'43''36''$	$R = 7639.44'$	
$T = 681.18'$	$LT = 1391.38'$	$T = 1875.30'$	
$L = 1337.52'$	$ST = 699.62'$	$L = 3677.89'$	
$E = 79.87'$	$x = 2045.72'$	$E = 226.81'$	
$e_{max} = 0.066$	$y = 247.60'$	$e_{max} = 0.028$	
	$k = 1031.83'$		
	$P = 62.19'$		
	$T_s = 2234.65'$		
	$E_s = 299.70'$		
	$e_{max} = 0.066$		
<b>U.S. 30 WEST END E.B.</b>		<b>HONEYTOWN ROAD</b>	
PI STA. 627+11.73	PI STA. 638+73.36	PI STA. 89+69.30	
$\Delta = 38'11''38''$	$R = 2864.79'$	$\Delta = 24'23''15''$	
$D_c = 02'00''00''$ RT.	$L_s = 730.22'$	$D_c = 01'28''00''$ LT.	
$R = 2864.79'$	$Q_s = 07'18''08''$	$R = 3906.53'$	
$T = 991.86'$	$LT = 487.23'$	$T = 844.18'$	
$L = 1909.70'$	$ST = 243.79'$	$L = 1662.79'$	
$E = 166.84'$	$x = 729.04'$	$E = 90.17'$	
$e_{max} = 0.066$	$y = 30.99'$	$e_{max} = 0.036$	
	$k = 364.91'$		
	$P = 7.75'$		
	$T_s = 1558.49'$		
	$E_s = 245.86'$		
	$e_{max} = 0.066$		

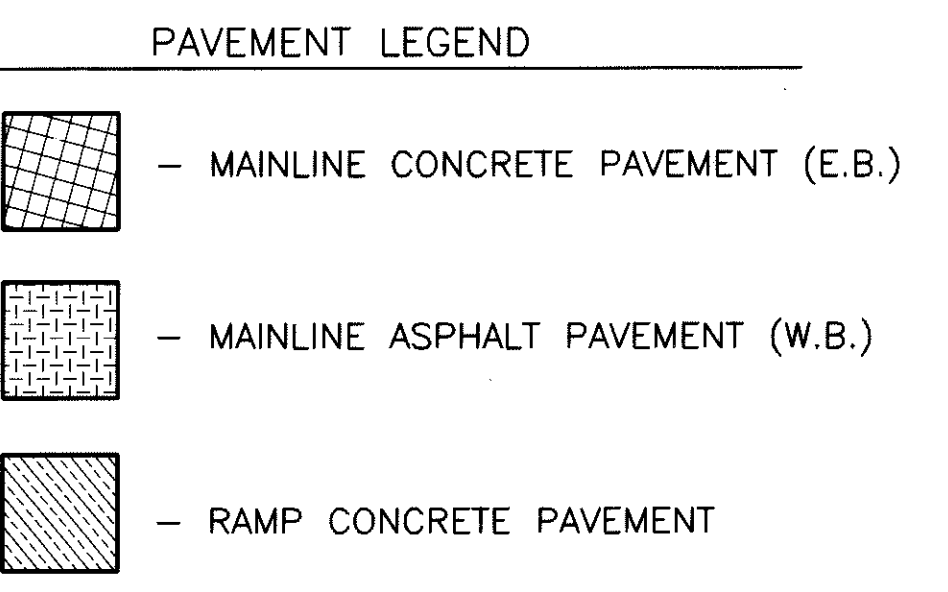
DESIGN DESIGNATIONS			
<b>U.S. 30</b>		<b>HILLCREST ROAD (T.R. 168)</b>	
CURRENT ADT (2006)	17720	CURRENT ADT (2006)	4983
DESIGN YEAR ADT (2026)	23180	DESIGN YEAR ADT (2026)	7583
DESIGN HOURLY VOLUME ADT (2026)	2086	DESIGN HOURLY VOLUME ADT (2026)	758
DIRECTIONAL DISTRIBUTION	55%	DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B & C)	21%	TRUCKS (24 HOUR B & C)	2%
DESIGN SPEED	70 MPH	DESIGN SPEED	45 MPH
LEGAL SPEED	65 MPH	LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION	RURAL FREEWAY	DESIGN FUNCTIONAL CLASSIFICATION	LOCAL
DESIGN EXCEPTIONS	NONE REQUIRED	DESIGN EXCEPTIONS	NONE REQUIRED
<b>GEYERS CHAPEL ROAD (T.R. 68)</b>		<b>HONEYTOWN ROAD (T.R. 54)</b>	
CURRENT ADT (2006)	687	CURRENT ADT (2006)	651
DESIGN YEAR ADT (2026)	1045	DESIGN YEAR ADT (2026)	991
DESIGN HOURLY VOLUME ADT (2026)	104	DESIGN HOURLY VOLUME ADT (2026)	99
DIRECTIONAL DISTRIBUTION	50%	DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B & C)	2%	TRUCKS (24 HOUR B & C)	2%
DESIGN SPEED	55 MPH	DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH	LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION	LOCAL	DESIGN FUNCTIONAL CLASSIFICATION	LOCAL
DESIGN EXCEPTIONS	NONE REQUIRED	DESIGN EXCEPTIONS	NONE REQUIRED

P:\JOB5 470\HIGHWAY\MISC\470GSD1A.DWG) PJK 7/31/03 PLOT 1"=500' IMP.



**SCHEMATIC PLAN & DESIGN DESIGNATION**

**WAY-30-11.83**



NOTE: ALL SIDEROADS ASPHALT PAVEMENT

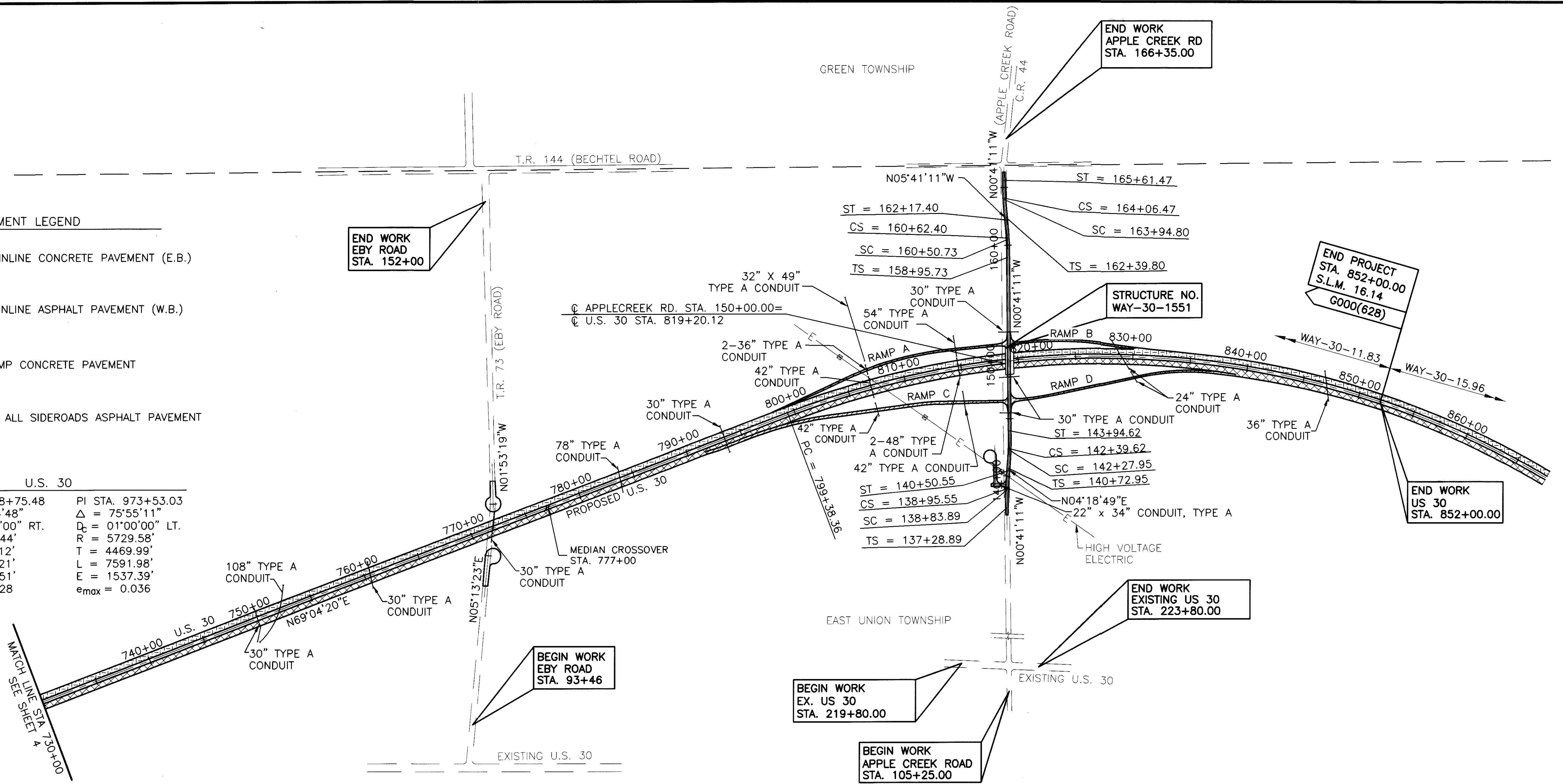
**U.S. 30**

PI STA. 848+75.48	PI STA. 973+53.03
$\Delta = 65^{\circ}44'48''$	$\Delta = 75^{\circ}55'11''$
$D_c = 00^{\circ}45'00''$ RT.	$D_c = 01^{\circ}00'00''$ LT.
R = 7639.44'	R = 5729.58'
T = 4937.12'	T = 4469.99'
L = 8766.21'	L = 7591.98'
E = 1456.51'	E = 1537.39'
$e_{max} = 0.028$	$e_{max} = 0.036$

**C.R. 44 (APPLECREEK RD.)**

PI STA. 138+32.23	PI STA. 138+89.72	PI STA. 139+47.22	PI STA. 141+76.29	PI STA. 142+33.78	PI STA. 142+91.29
R = 1909.86'	$\Delta = 00^{\circ}21'00''$ RT	R = 1909.86'	R = 1909.86'	$\Delta = 00^{\circ}21'00''$ LT	R = 1909.86'
Ls = 155.00'	$D_c = 03^{\circ}00'00''$	Ls = 155.00'	Ls = 155.00'	$D_c = 03^{\circ}00'00''$	Ls = 155.00'
Qs = 02'19'30"	R = 1909.86'	Qs = 02'19'30"	Qs = 02'19'30"	R = 1909.86'	Qs = 02'19'30"
LT = 103.34'	T = 5.83'	LT = 103.34'	LT = 103.34'	T = 5.83'	LT = 103.34'
ST = 51.67'	L = 11.67'	ST = 51.67'	ST = 51.67'	L = 11.67'	ST = 51.67'
x = 154.97'	E = 2.34'	x = 154.97'	x = 154.97'	E = 2.34'	x = 154.97'
y = 2.10'	$e_{max} = 0.062$	y = 2.10'	y = 2.10'	$e_{max} = 0.062$	y = 2.10'
k = 77.50'		k = 77.50'	k = 77.50'		k = 77.50'
P = 0.52'		P = 0.52'	P = 0.52'		P = 0.52'
Ts = 160.90'		Ts = 160.90'	Ts = 160.90'		Ts = 160.90'
Es = 2.34'		Es = 2.34'	Es = 2.34'		Es = 2.34'
$e_{max} = 0.062$		$e_{max} = 0.062$	$e_{max} = 0.062$		$e_{max} = 0.062$

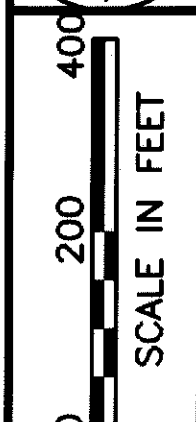
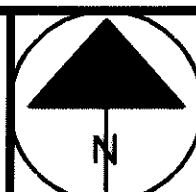
PI STA. 159+99.07	PI STA. 160+56.56	PI STA. 161+14.07	PI STA. 163+43.14	PI STA. 164+00.63	PI STA. 164+58.14
R = 1909.86'	$\Delta = 00^{\circ}21'00''$ LT	R = 1909.86'	R = 1909.86'	$\Delta = 00^{\circ}21'00''$ RT	R = 1909.86'
Ls = 155.00'	$D_c = 03^{\circ}00'00''$	Ls = 155.00'	Ls = 155.00'	$D_c = 03^{\circ}00'00''$	Ls = 155.00'
Qs = 02'19'30"	R = 1909.86'	Qs = 02'19'30"	Qs = 02'19'30"	R = 1909.86'	Qs = 02'19'30"
LT = 103.34'	T = 5.83'	LT = 103.34'	LT = 103.34'	T = 5.83'	LT = 103.34'
ST = 51.67'	L = 11.67'	ST = 51.67'	ST = 51.67'	L = 11.67'	ST = 51.67'
x = 154.97'	E = 2.34'	x = 154.97'	x = 154.97'	E = 2.34'	x = 154.97'
y = 2.10'	$e_{max} = 0.062$	y = 2.10'	y = 2.10'	$e_{max} = 0.062$	y = 2.10'
k = 77.50'		k = 77.50'	k = 77.50'		k = 77.50'
P = 0.52'		P = 0.52'	P = 0.52'		P = 0.52'
Ts = 160.90'		Ts = 160.90'	Ts = 160.90'		Ts = 160.90'
Es = 2.34'		Es = 2.34'	Es = 2.34'		Es = 2.34'
$e_{max} = 0.062$		$e_{max} = 0.062$	$e_{max} = 0.062$		$e_{max} = 0.062$



**DESIGN DESIGNATIONS**

<b>EBY ROAD (C.R. 73)</b>	
CURRENT ADT (2006)	499
DESIGN YEAR ADT (2026)	760
DESIGN HOURLY VOLUME ADT (2026)	76
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B & C)	2%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION	LOCAL
DESIGN EXCEPTIONS	NONE REQUIRED
<b>APPLE CREEK ROAD (C.R. 44)</b>	
CURRENT ADT (2006)	4911
DESIGN YEAR ADT (2026)	7473
DESIGN HOURLY VOLUME ADT (2026)	747
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B & C)	2%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
DESIGN EXCEPTIONS	APPROVAL DATE SHEET NOS.
DESIGN FEATURE	2/24/03 336-374
STOPPING SITE DISTANCE	

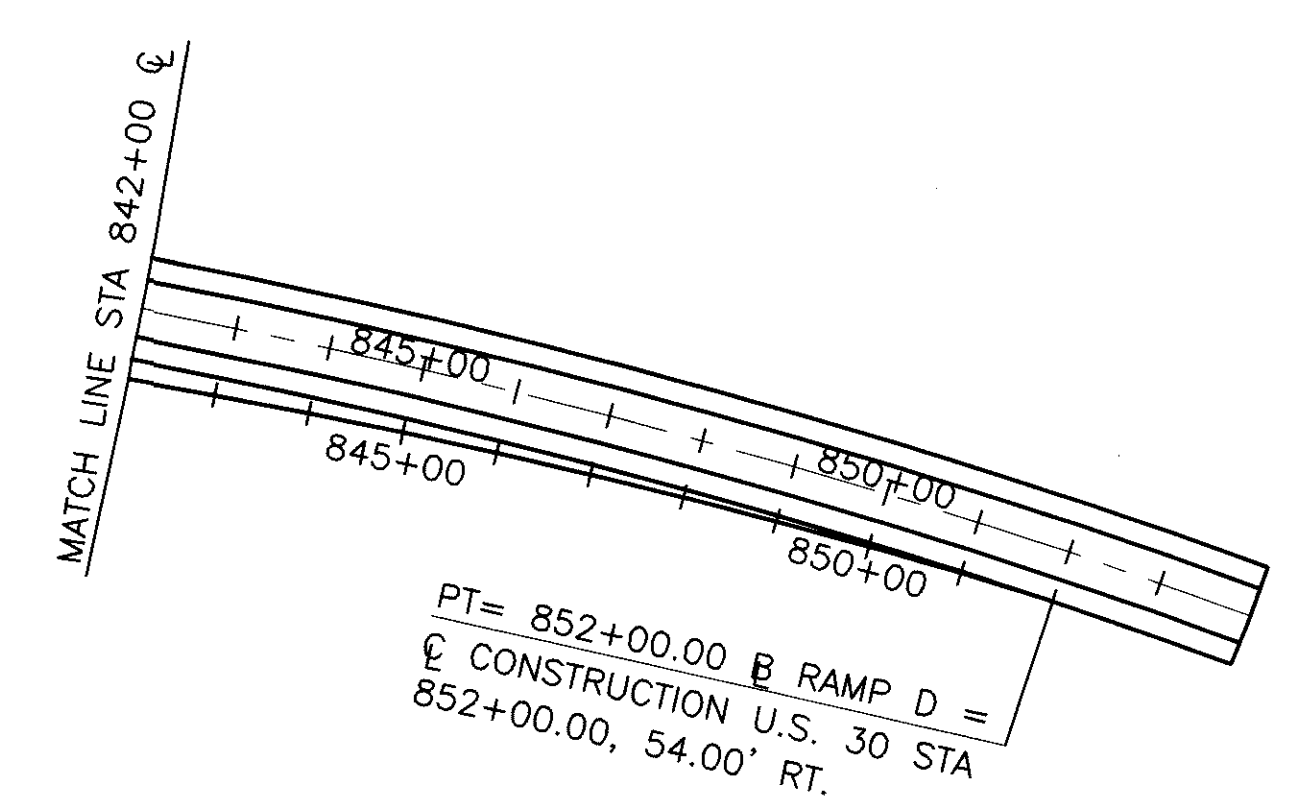
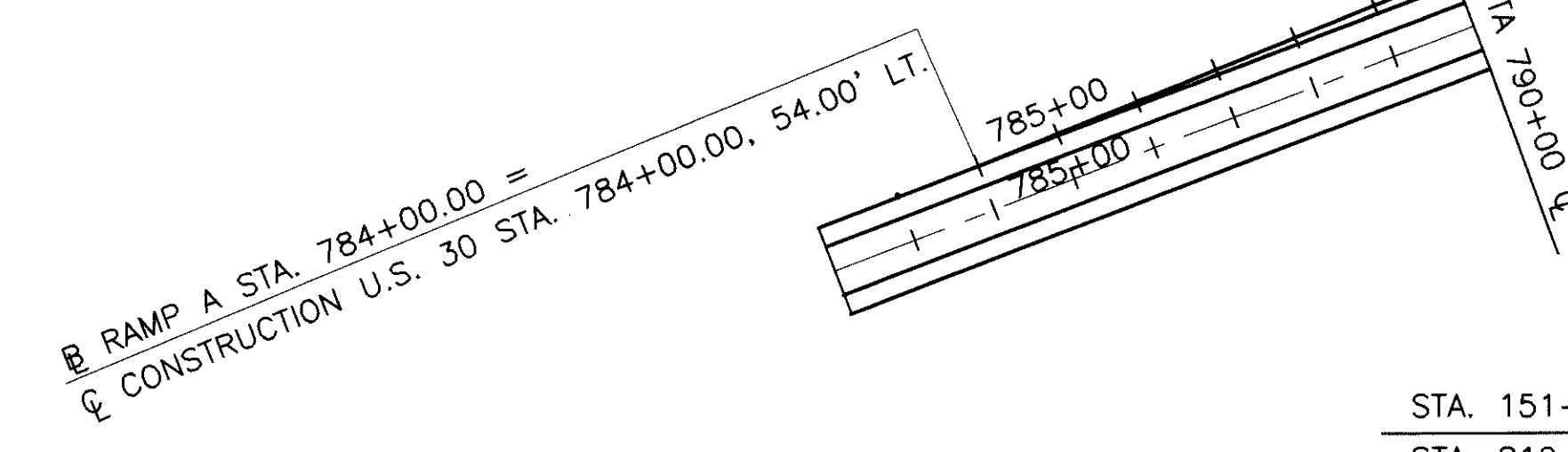
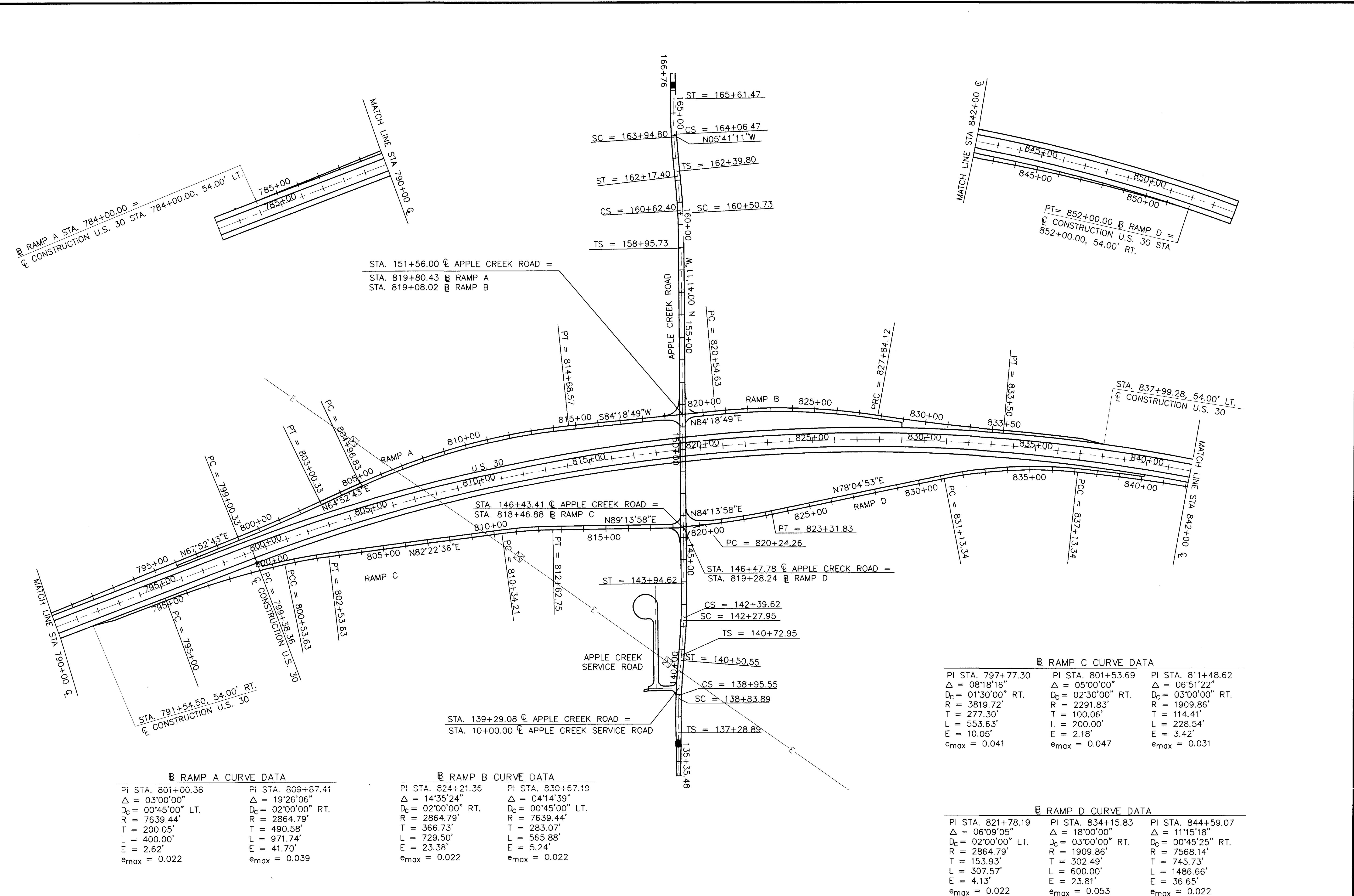
JUN 7/23/03 PLOT 1"=500' IMP.  
(F:\JOBS\470\HIGHWAY\MISC\4705501B.DWG)



CALCULATED  
UDA  
CHECKED  
ASW

# RAMP SCHEMATIC PLAN APPLE CREEK ROAD INTERCHANGE

## WAY-30-1183



**RAMP A CURVE DATA**

PI STA. 801+00.38	PI STA. 809+87.41
$\Delta = 03^{\circ}00'00''$	$\Delta = 19^{\circ}26'06''$
$D_c = 00^{\circ}45'00''$ LT.	$D_c = 02^{\circ}00'00''$ RT.
R = 7639.44'	R = 2864.79'
T = 200.05'	T = 490.58'
L = 400.00'	L = 971.74'
E = 2.62'	E = 41.70'
$e_{max} = 0.022$	$e_{max} = 0.039$

**RAMP B CURVE DATA**

PI STA. 824+21.36	PI STA. 830+67.19
$\Delta = 14^{\circ}35'24''$	$\Delta = 04^{\circ}14'39''$
$D_c = 02^{\circ}00'00''$ RT.	$D_c = 00^{\circ}45'00''$ LT.
R = 2864.79'	R = 7639.44'
T = 366.73'	T = 283.07'
L = 729.50'	L = 565.88'
E = 23.38'	E = 5.24'
$e_{max} = 0.022$	$e_{max} = 0.022$

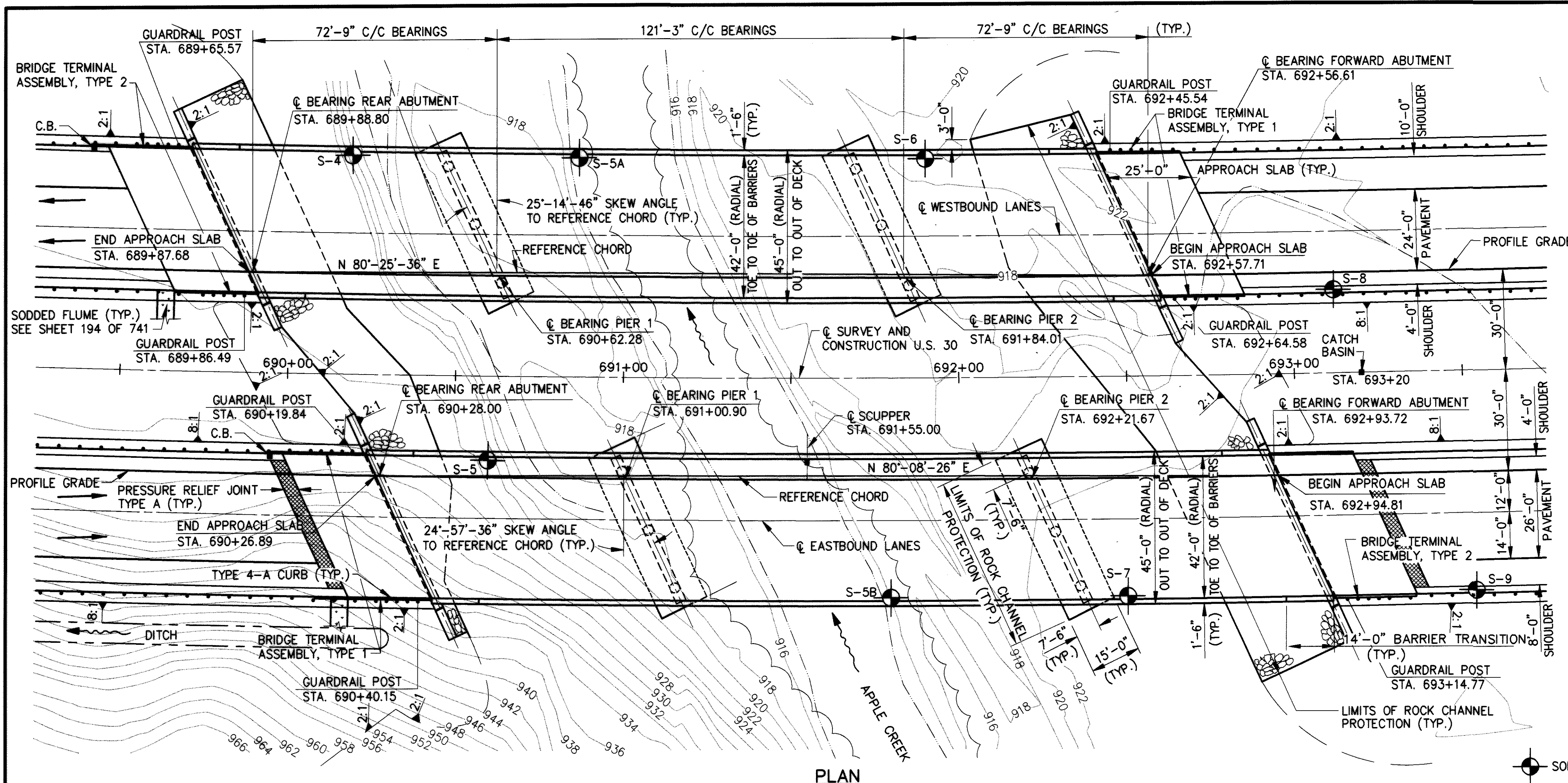
**RAMP C CURVE DATA**

PI STA. 797+77.30	PI STA. 801+53.69	PI STA. 811+48.62
$\Delta = 08^{\circ}18'16''$	$\Delta = 05^{\circ}00'00''$	$\Delta = 06^{\circ}51'22''$
$D_c = 01^{\circ}30'00''$ RT.	$D_c = 02^{\circ}30'00''$ RT.	$D_c = 03^{\circ}00'00''$ RT.
R = 3819.72'	R = 2291.83'	R = 1909.86'
T = 277.30'	T = 100.06'	T = 114.41'
L = 553.63'	L = 200.00'	L = 228.54'
E = 10.05'	E = 2.18'	E = 3.42'
$e_{max} = 0.041$	$e_{max} = 0.047$	$e_{max} = 0.031$

**RAMP D CURVE DATA**

PI STA. 821+78.19	PI STA. 834+15.83	PI STA. 844+59.07
$\Delta = 06^{\circ}09'05''$	$\Delta = 18^{\circ}00'00''$	$\Delta = 11^{\circ}15'18''$
$D_c = 02^{\circ}00'00''$ LT.	$D_c = 03^{\circ}00'00''$ RT.	$D_c = 00^{\circ}45'25''$ RT.
R = 2864.79'	R = 1909.86'	R = 7568.14'
T = 153.93'	T = 302.49'	T = 745.73'
L = 307.57'	L = 600.00'	L = 1486.66'
E = 4.13'	E = 23.81'	E = 36.65'
$e_{max} = 0.022$	$e_{max} = 0.053$	$e_{max} = 0.022$

K:\W 3/21/03 PLOT 11200  
(C:\JOBENV\703\HIGHWAY\Misc\4709p05.dwg)



PLAN

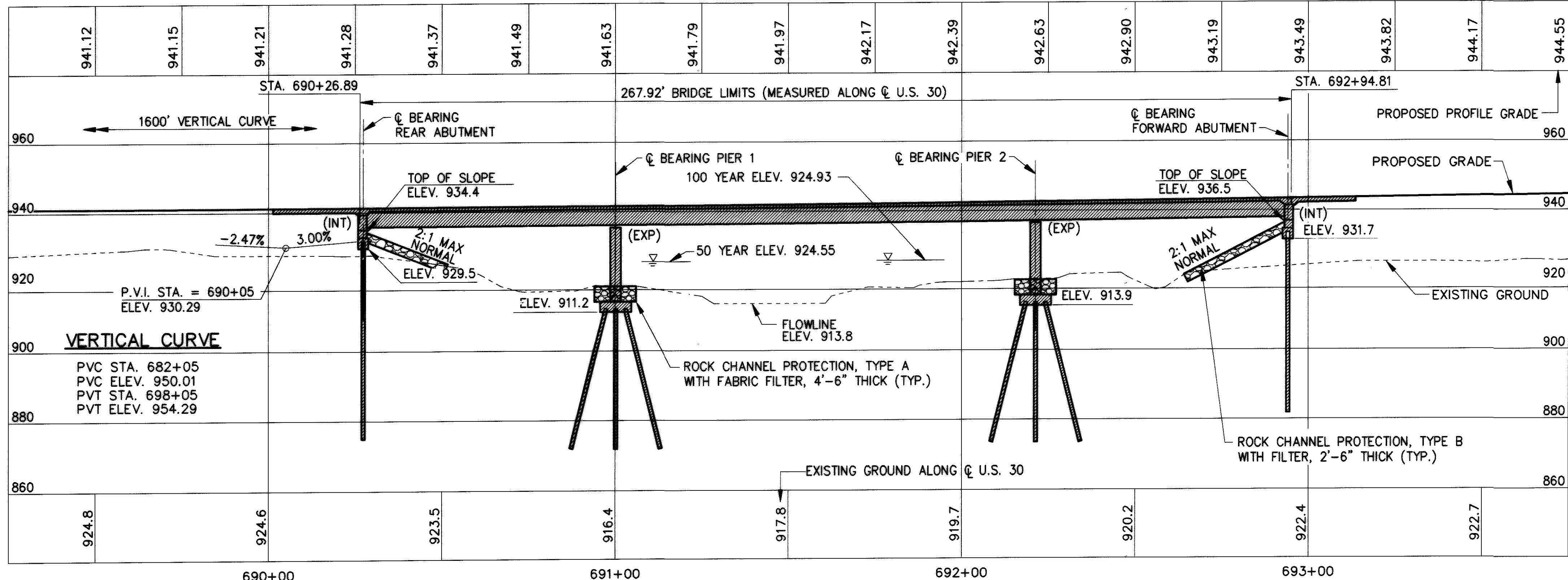


TEMPORARY BENCHMARK	
REFERENCE MONUMENT	STA. 680+96.09, 92.46' RT., @ CONSTRUCTION U.S. 30 ELEV. 950.45
REFERENCE MONUMENT	STA. 695+85.78, 150.77' RT., @ CONSTRUCTION U.S. 30 ELEV. 924.67

U.S. 30 CURVE DATA		TRAFFIC DATA	
PI STA.	688+34.04	2006 -	17,720 A.D.T.
$\Delta$	$27^{\circ}-35'-03''$		3,720 A.D.T.T.
$D_c$	$00^{\circ}-45'-00''$ LT.	2026 -	23,180 A.D.T.
R	7639.44'		4,870 A.D.T.T.
T	1875.30'		
L	3677.89'		
E	226.81'		
$e_{max}$	0.028		

HP 10 X 42 PILES		
LOCATION	ESTIMATED LENGTH	
	WESTBOUND	EASTBOUND
REAR ABUTMENT	50 FEET	58 FEET
PIER 1	45 FEET	58 FEET
PIER 2	44 FEET	53 FEET
FORWARD ABUTMENT	43 FEET	48 FEET

HYDRAULIC DATA		
DESIGN FREQUENCIES	50 YEAR	100 YEAR
DISCHARGE FT <sup>3</sup> /S	5,950	6,400
VELOCITY FT/S	7.52	7.66
HIGH WATER ELEV.	924.55	924.93
HIGH WATER CLEARANCE FT	11.31	10.93
DRAINAGE AREA	26.5 MI <sup>2</sup>	



SECTION ON PROFILE GRADE EASTBOUND LANES

**EARTHWORK**

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

**NOTES:**

- ① SEE SHEET [221] FOR THE SECTION ON PROFILE GRADE WESTBOUND LANES.
- ② FOR TYPE A PRESSURE RELIEF JOINT DETAILS SEE ODOT STANDARD DRAWING BP-2.3

**PROPOSED STRUCTURE**

TYPE:	CONTINUOUS COMPOSITE WELDED STEEL GIRDER (ASTM A572, METALIZED AND TOP COAT PAINTED) WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE WITH INTEGRAL ABUTMENTS
SPANS:	72'-9", 121'-3" AND 72'-9" C/C BEARINGS ALONG REFERENCE CHORD
ROADWAY:	42'-0" TOE TO TOE OF BARRIERS
LOADING:	HS25, CASE II AND THE ALTERNATE MILITARY LOADING
SKUEW:	24°-57'-36" RIGHT FORWARD, TO REFERENCE CHORD (EB) 25°-14'-46" RIGHT FORWARD, TO REFERENCE CHORD (WB)
WEARING SURFACE:	MONOLITHIC CONCRETE
APPROACH SLABS:	AS-1-81 (25'-0")
ALIGNMENT:	0°-45'-00" LEFT
SUPERELEVATION:	0.028 FT. PER FT.
LATITUDE:	40°-47'-55" N (EB)      40°-47'-55" N (WB)
LONGITUDE:	81°-53'-14" W (EB)      81°-53'-15" W (WB)

DESIGN AGENCY  
**EUTENEUCS INC.**  
CONSULTING ENGINEERS  
CLEVELAND, OHIO

DATE  
9-02  
REVIEWED  
RAB  
STRUCTURE FILE NUMBER  
8502013/8502021

DRAWN  
KJW  
REVISED  
KJW  
CHECKED  
GFH

WAYNE COUNTY  
STA. 690+26.89 to  
STA. 692+94.83 (EB)

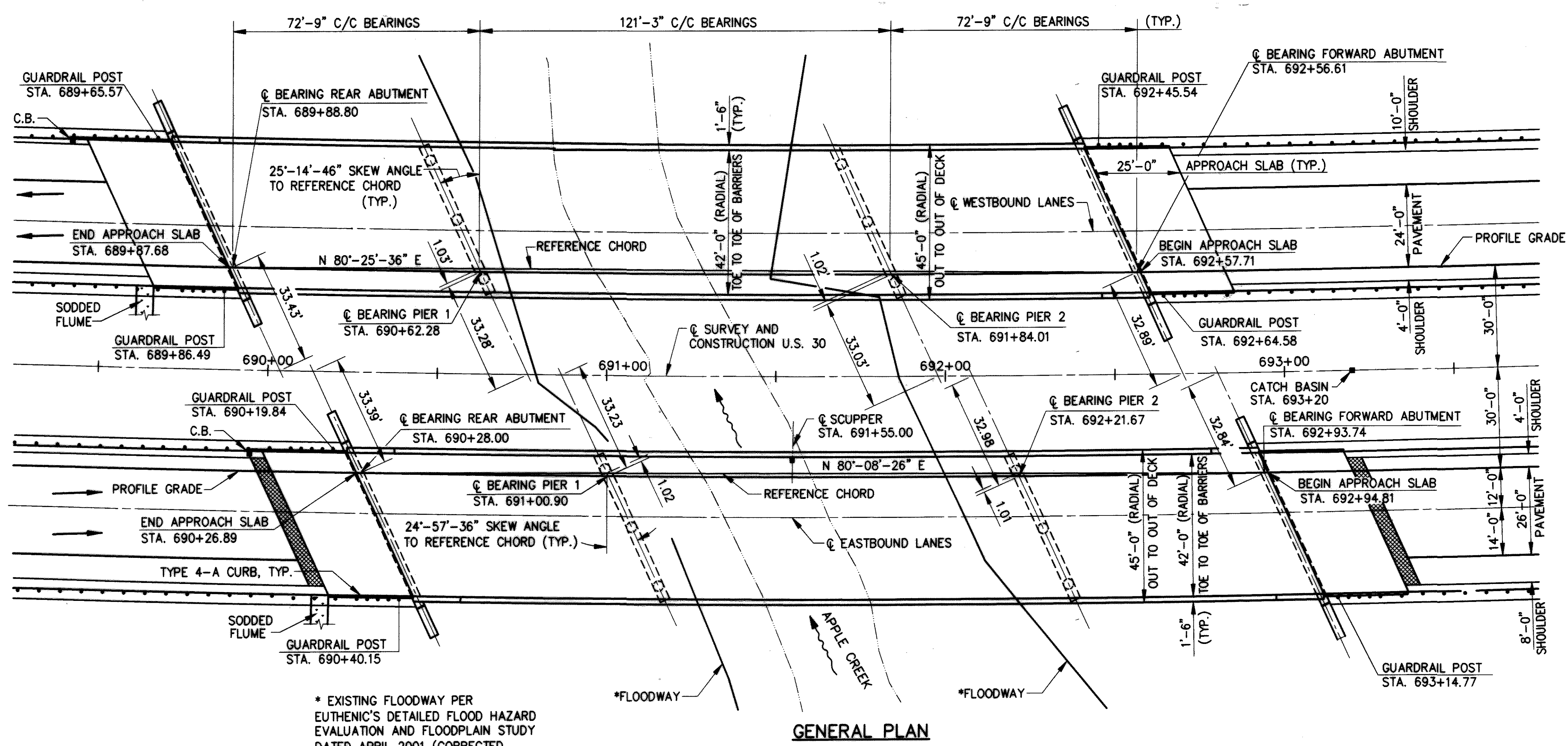
**SITE PLAN**  
BRIDGE NO. WAY-30-1309 L/R  
U.S. 30 OVER APPLE CREEK

**WAY-30-1183**

1/21

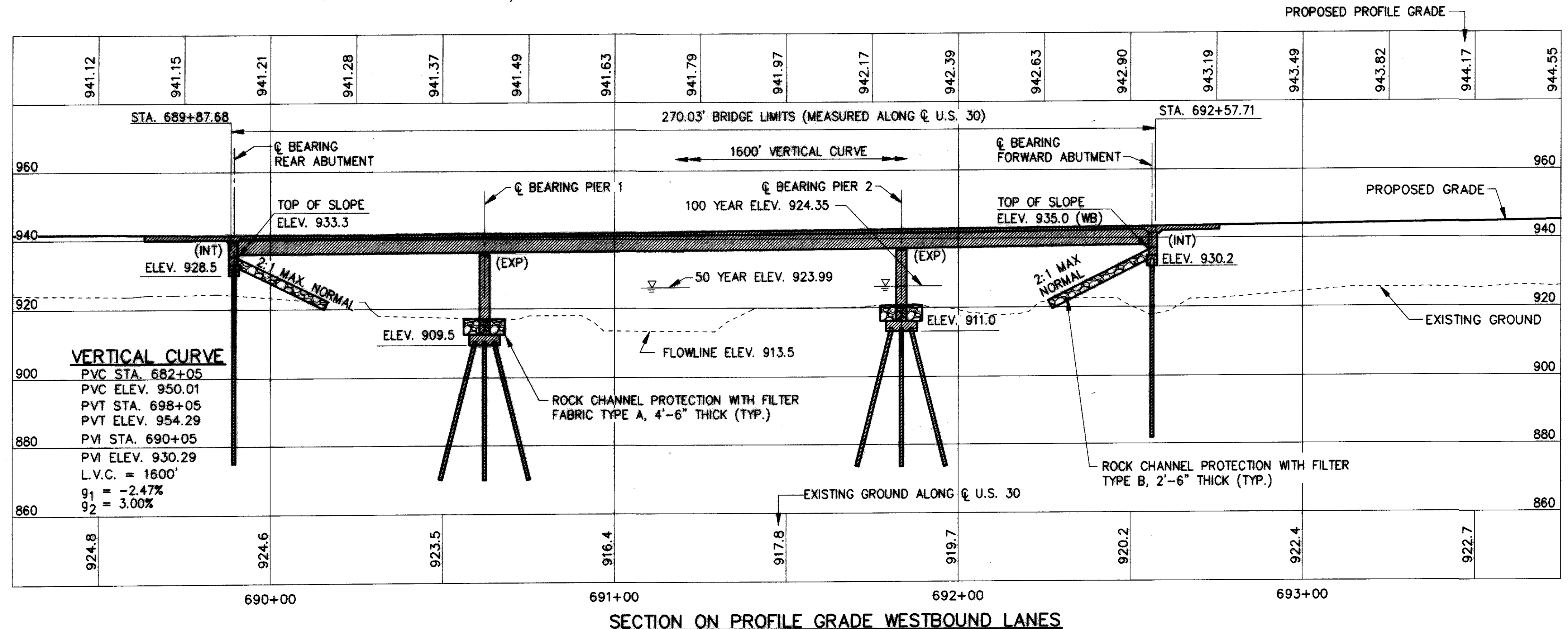
629  
741

I:\WORK\170\BRIDGE\04\SPNXX\705P04.DWG JLN 8/18/03 PLOT 1:20



\* EXISTING FLOODWAY PER  
EUTHENIC'S DETAILED FLOOD HAZARD  
EVALUATION AND FLOODPLAIN STUDY  
DATED APRIL 2001 (CORRECTED  
EFFECTIVE FLOODWAY ANALYSIS)

**GENERAL PLAN**



HYDRAULIC DATA		
DESIGN FREQUENCIES	50 YEAR	100 YEAR
DISCHARGE FT <sup>3</sup> /S	5,950	6,400
VELOCITY FT/S	7.52	7.66
HIGH WATER ELEV.	923.99	924.35
HIGH WATER CLEARANCE FT	10.90	10.54
DRAINAGE AREA	26.5 MI <sup>2</sup>	

**NOTES:**

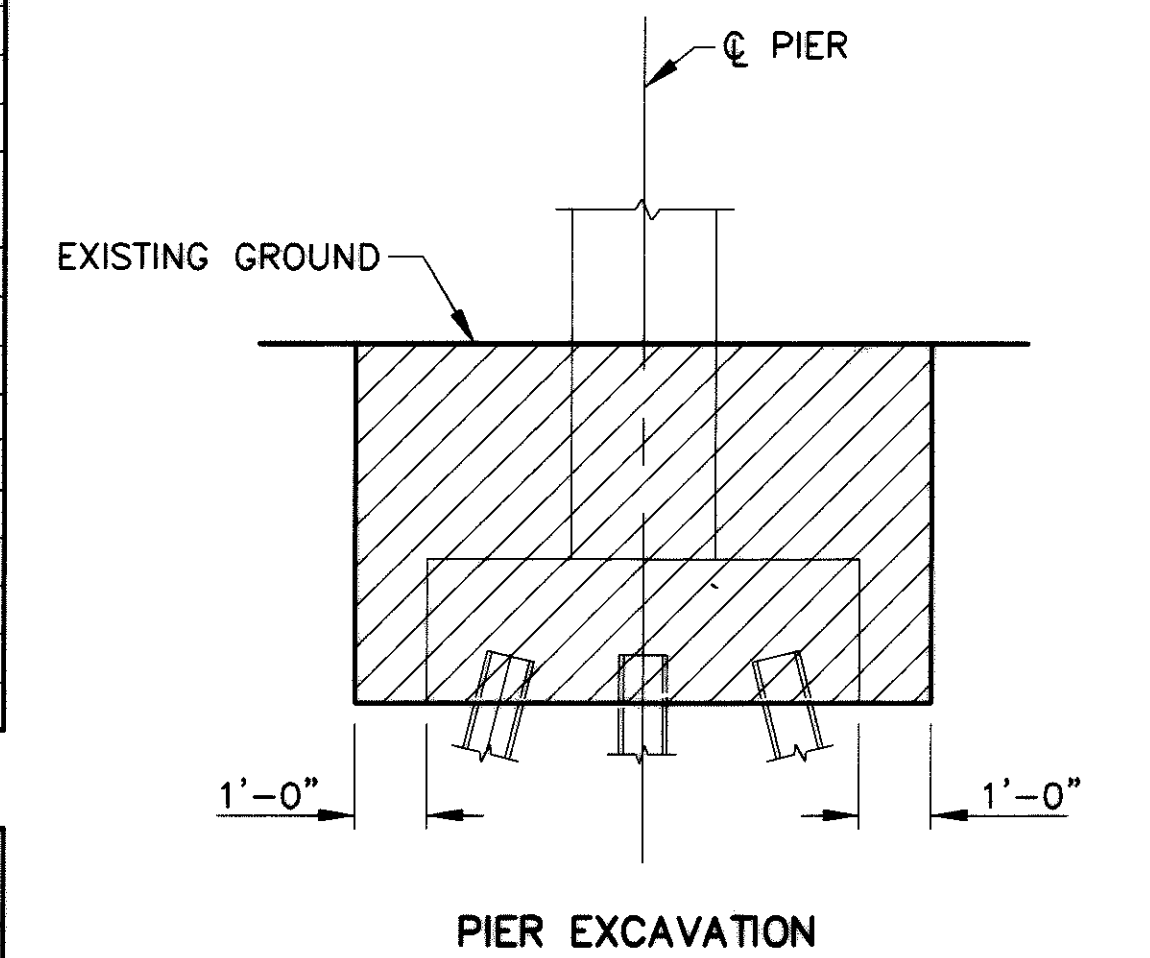
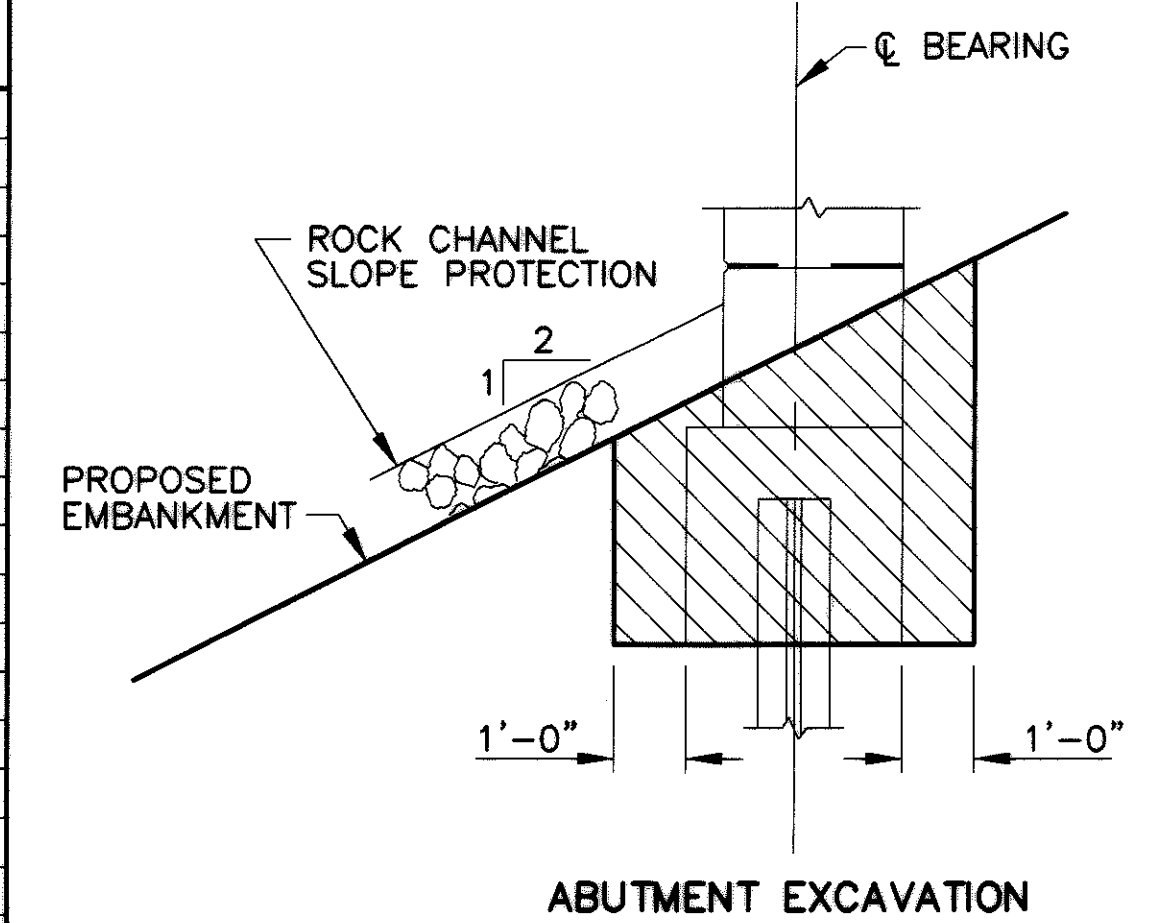
① STRUCTURE FOR MAINTAINING TRAFFIC, AS PER PLAN

A TEMPORARY BRIDGE OVER APPLE CREEK SHALL SPAN THE DELINEATED FLOODWAY SHOWN ON THE GENERAL PLAN ON THIS SHEET. NO ABUTMENTS, PIERS OR FILL SHALL BE CONSTRUCTED WITHIN THE FLOODWAY. THE ELEVATION OF THE LOWEST BEAM SHALL BE SET ABOVE THE 100 YEAR STORM ELEVATION OF 924.93.

I:\JOBS\470\BRIDGE\04\DWG\4700P04.DWG GFH 8/27/02 PLOT 1:20



CALC. BY: KJW		DATE: 4-02		ESTIMATED QUANTITIES - WAY-30-1309L (WESTBOUND)				CHK'D. BY: RSY		DATE: 4-02	
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENT		PIER	SUPER-STRUCTURE	GENERAL	AS PER PLAN SHEET NUMBERS	
					REAR	FWD					
502	11101	LUMP		STRUCTURE FOR MAINTAINING TRAFFIC, AS PER PLAN					LUMP	[2/21]	
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP	LUMP	LUMP			[GN 1]	
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP		
507	00100	3,248	FT.	STEEL PILES HP10X42, FURNISHED	550	473	2,225				
507	00150	3,248	FT.	STEEL PILES HP10X42, DRIVEN	550	473	2,225				
509	10000	177,930	POUND	EPOXY COATED REINFORCING STEEL	5,213	5,210	27,557	139,950			
511	41001	81	CU. YD.	CLASS C CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN			81			[GN 2]	
511	44101	60	CU. YD.	CLASS C CONCRETE, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN	30	30				[GN 2]	
511	46501	108	CU. YD.	CLASS C CONCRETE, FOOTING, AS PER PLAN	27	27	54			[GN 2]	
511	50100	84	CU. YD.	CLASS HP CONCRETE, BRIDGE DECK (PARAPET)				84			
513	10081	LUMP		STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN, A572				LUMP		[GN 2]	
513	20000	4,980	EACH	WELDED STUD SHEAR CONNECTORS				4,980			
514	00400	LUMP		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT				LUMP			
516	13200	104	SQ. FT.	1/2" PREFORMED EXPANSION JOINT FILLER	52	52					
516	13600	140	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	70	70					
516	13900	4	SQ. FT.	2" PREFORMED EXPANSION JOINT FILLER	2	2					
516	14015	141	FT.	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	71	70				[GN 1]	
516	44101	10	EACH	ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 2.27" x 15" x 25", WITH 2" x 16" x 26" LOAD PLATE (SEE PROPOSAL NOTE)			10			[18/21]	
518	21231	LUMP		POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN	LUMP	LUMP				[GN 2]	
518	40000	164	FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	82	82					
518	40010	49	FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	24	25					
526	25000	238	SQ. YD.	REINFORCED CONCRETE APPROACH SLABS (T=15")					238		
601	32004	265	CU. YD.	ROCK CHANNEL PROTECTION, TYPE A WITH FABRIC FILTER			265				
601	32100	418	CU. YD.	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	176	242					
864	10100	999	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	31	32	255	681			
894	10000	395	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY				395			

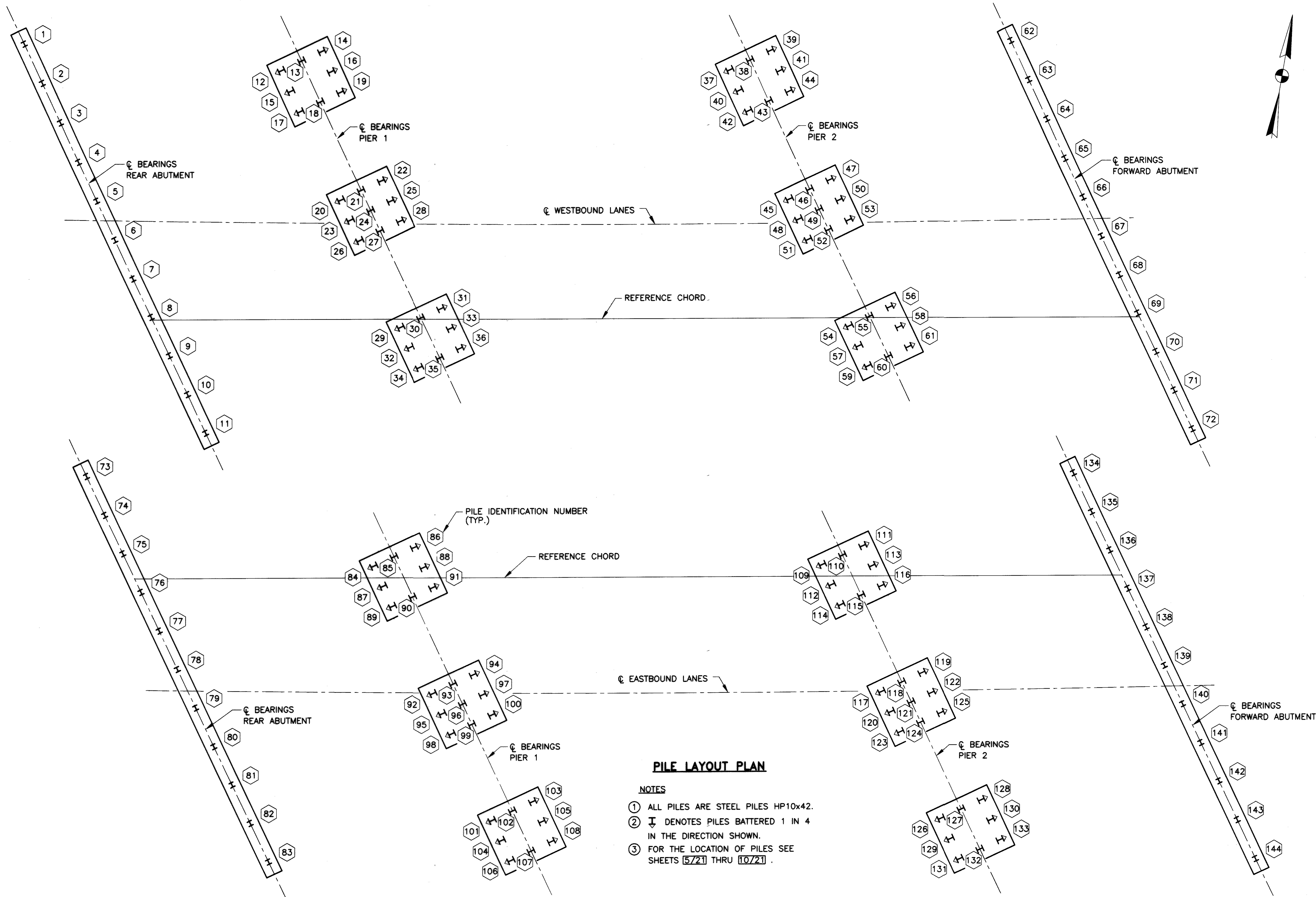


LIMITS OF UNCLASSIFIED EXCAVATION

CALC. BY: KJW		DATE: 4-02		ESTIMATED QUANTITIES - WAY-30-1309R (EASTBOUND)				CHK'D. BY: RSY		DATE: 4-02	
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENT		PIER	SUPER-STRUCTURE	GENERAL	AS PER PLAN SHEET NUMBERS	
					REAR	FWD					
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP	LUMP	LUMP			[GN 1]	
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP		
507	00100	3,941	FT.	STEEL PILES HP10X42, FURNISHED	638	528	2,775				
507	00150	3,941	FT.	STEEL PILES HP10X42, DRIVEN	638	528	2,775				
509	10000	177,301	POUND	EPOXY COATED REINFORCING STEEL	5,212	5,223	27,140	139,726			
511	41001	78	CU. YD.	CLASS C CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN			78			[GN 2]	
511	44101	60	CU. YD.	CLASS C CONCRETE, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN	30	30				[GN 2]	
511	46501	108	CU. YD.	CLASS C CONCRETE, FOOTING, AS PER PLAN	27	27	54			[GN 2]	
511	50100	84	CU. YD.	CLASS HP CONCRETE, BRIDGE DECK (PARAPET)				84			
513	10081	LUMP		STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN, A572				LUMP		[GN 2]	
513	20000	4,980	EACH	WELDED STUD SHEAR CONNECTORS				4,980			
514	00400	LUMP		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT				LUMP			
516	13200	103	SQ. FT.	1/2" PREFORMED EXPANSION JOINT FILLER	52	51					
516	13600	138	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	69	69					
516	13900	4	SQ. FT.	2" PREFORMED EXPANSION JOINT FILLER	2	2					
516	14015	140	FT.	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	70	70				[GN 1]	
516	44101	10	EACH	ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 2.27" x 15" x 25", WITH 2" x 16" x 26" LOAD PLATE (SEE PROPOSAL NOTE)			10			[18/21]	
518	12200	1	EACH	SCUPPER, INCLUDING SUPPORTS				1			
518	21231	LUMP		POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN	LUMP	LUMP				[GN 2]	
518	40000	164	FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	82	82					
518	40010	50	FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	25	25					
526	25000	238	SQ. YD.	REINFORCED CONCRETE APPROACH SLABS (T=15")					238		
601	32004	265	CU. YD.	ROCK CHANNEL PROTECTION, TYPE A WITH FABRIC FILTER			265				
601	32100	344	CU. YD.	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	99	245					
864	10100	982	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	28	28	246	680			
894	10000	394	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY				394			

JUN 8/4/03 PLOT11  
F:\JOBS\470\BRIDGE\04\DWG\470E004.DWG

F:\DBS\476\BRIDGE\04\DWG\476R1.PLAJWG GFH 5-29-02 PLOT18



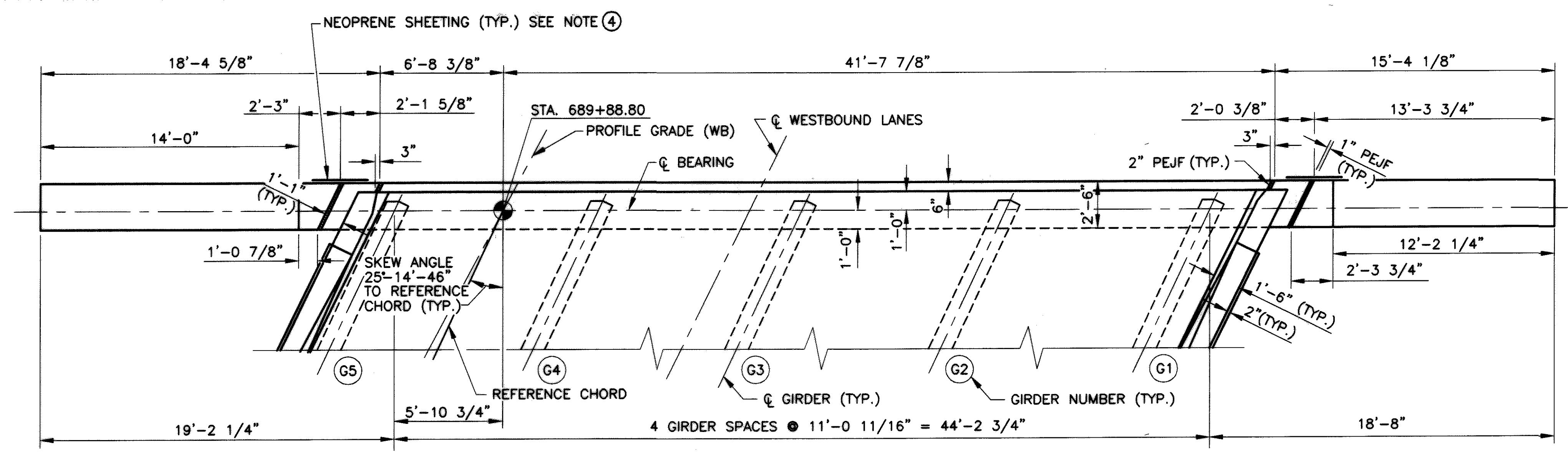
**PILE LAYOUT PLAN**

- NOTES**
- ① ALL PILES ARE STEEL PILES HP10x42.
  - ② ↯ DENOTES PILES BATTERED 1 IN 4 IN THE DIRECTION SHOWN.
  - ③ FOR THE LOCATION OF PILES SEE SHEETS 5/21 THRU 10/21.

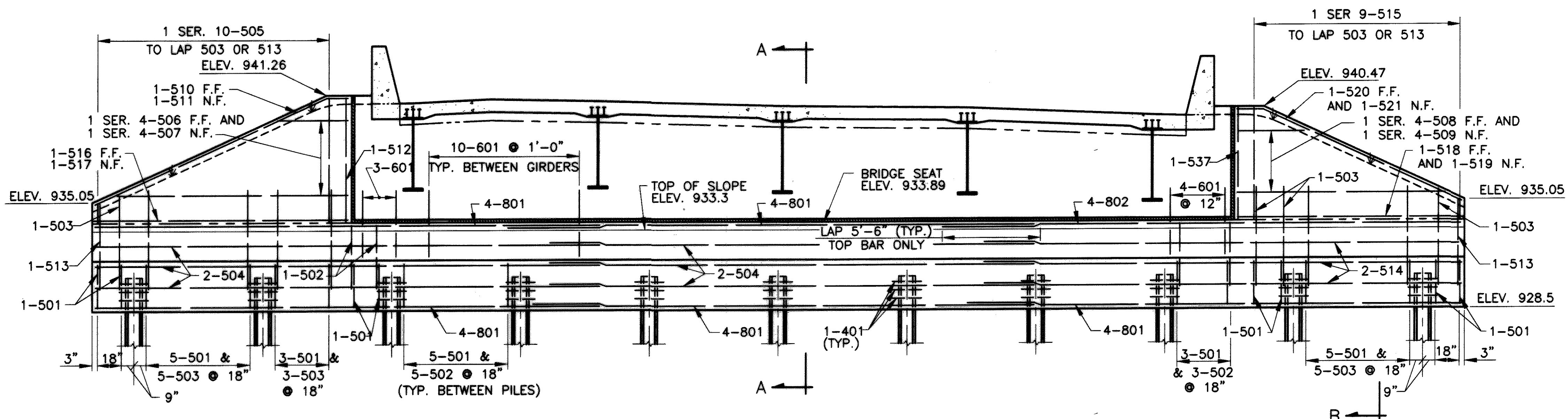
**WAY-30-1183**

4 / 21

632  
741

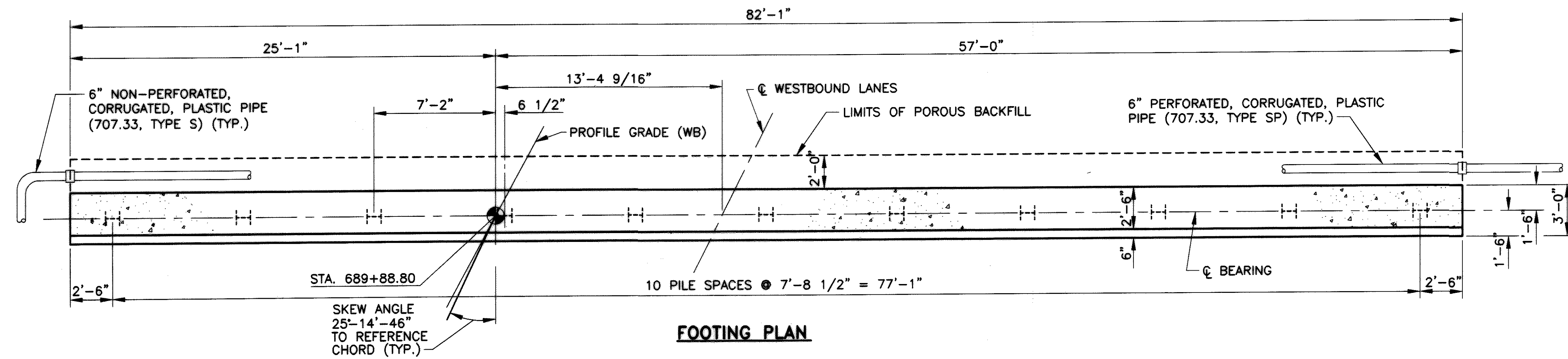


**PLAN**



**ELEVATION**

MINIMUM LAP LENGTHS (UNLESS OTHERWISE NOTED)	
NO. 5 BAR	= 2'-0"
NO. 8 BAR	= 4'-0"

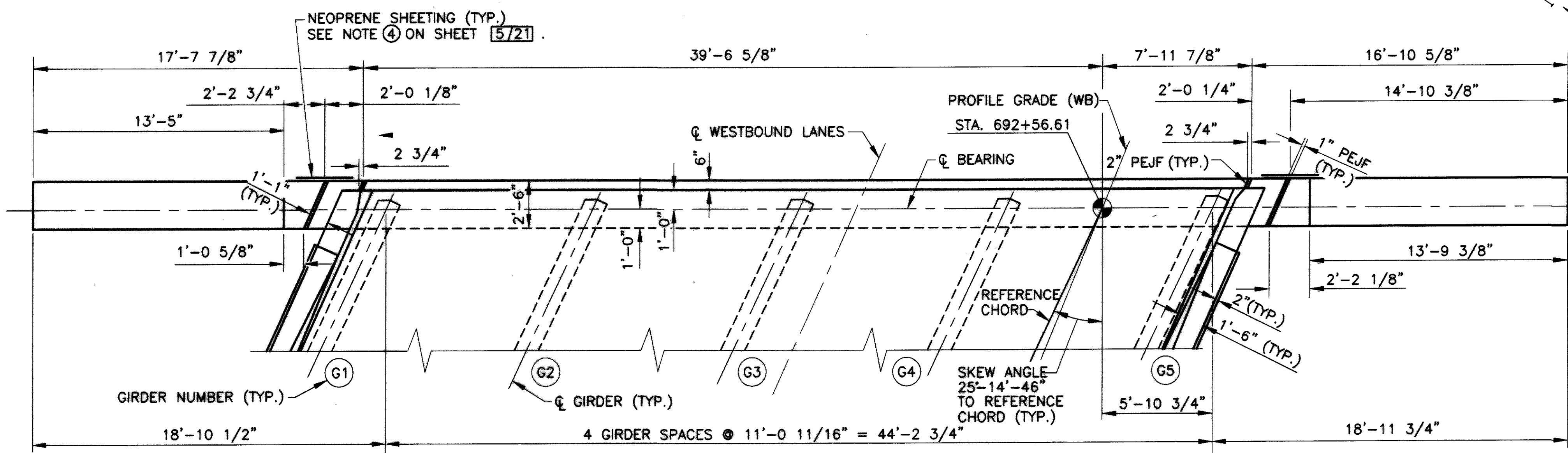


**FOOTING PLAN**

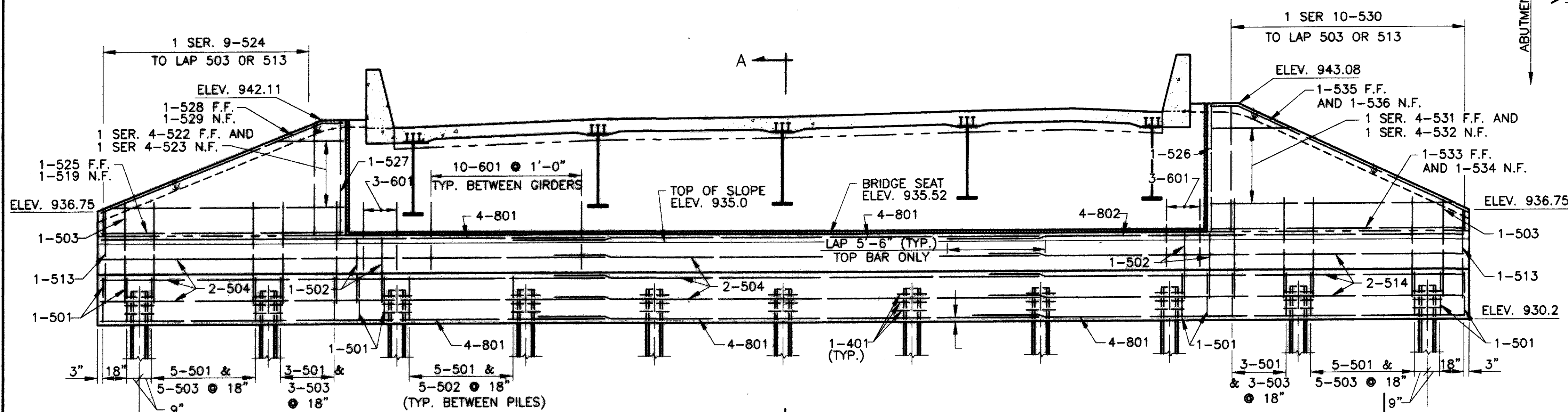
**NOTES:**

- ① ALL REINFORCING BARS SHALL BE PREFIXED A (ABUTMENT).
- ② FOR REINFORCING SCHEDULE SEE SHEET [19/21](#).
- ③ ALL PILES ARE HP 10X42.
- ④ FOR ADDITIONAL DETAILS SEE ODOT STANDARD DRAWING ICD-1-82 WITH REVISIONS DATED 4-20-01.
- ⑤ POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE WINGWALLS.
- ⑥ FOR SECTION A-A AND B-B SEE SHEET [6/21](#).
- ⑦ FOR TOP OF PAVEMENT ELEVATIONS ALONG CENTERLINE BEARING SEE SCREED TABLE ON SHEET [14/21](#).
- ⑧ FOR PILE IDENTIFICATION NUMBERS SEE SHEET [4/21](#).

GFH 2/19/03 PLOD14 F:\OBSS\470\BRIDGE\04\dwg\470ABT04A.DWG

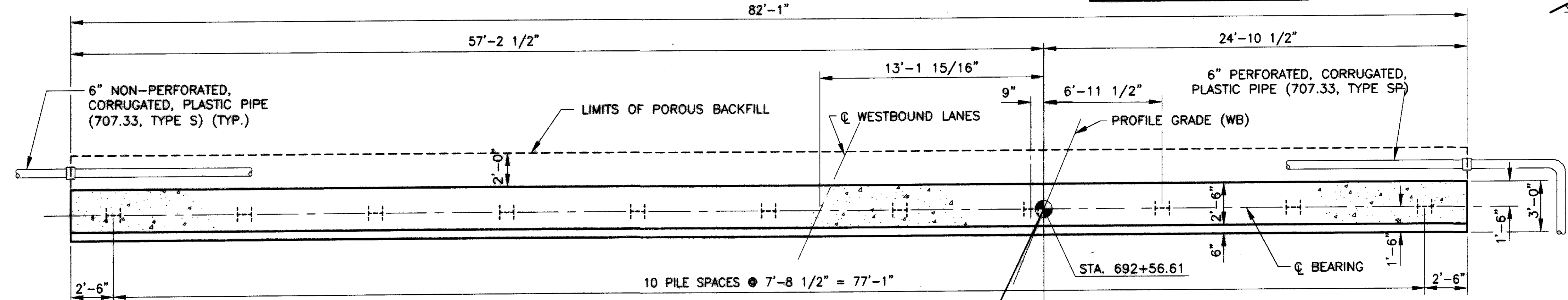


**PLAN**

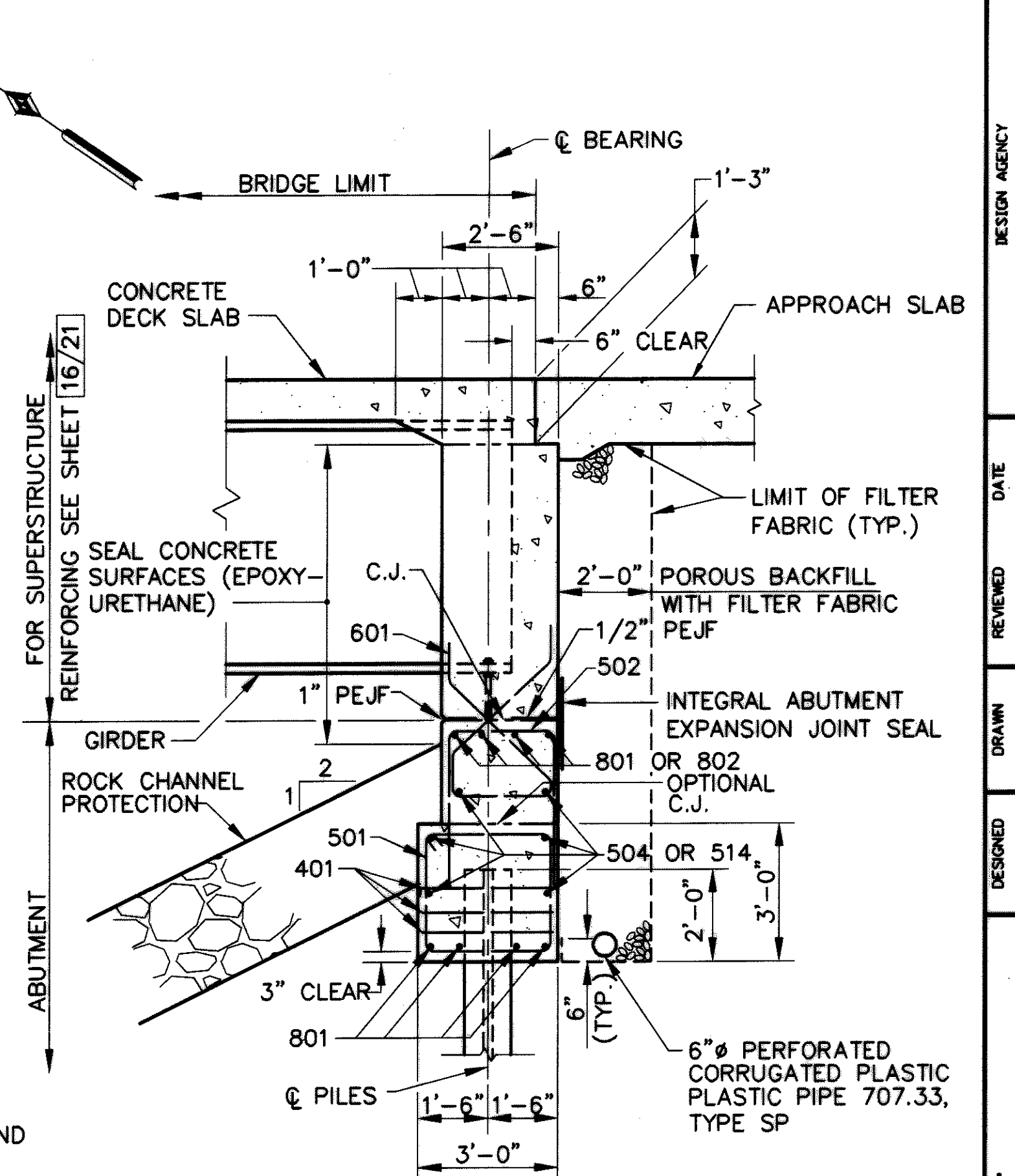


**ELEVATION**

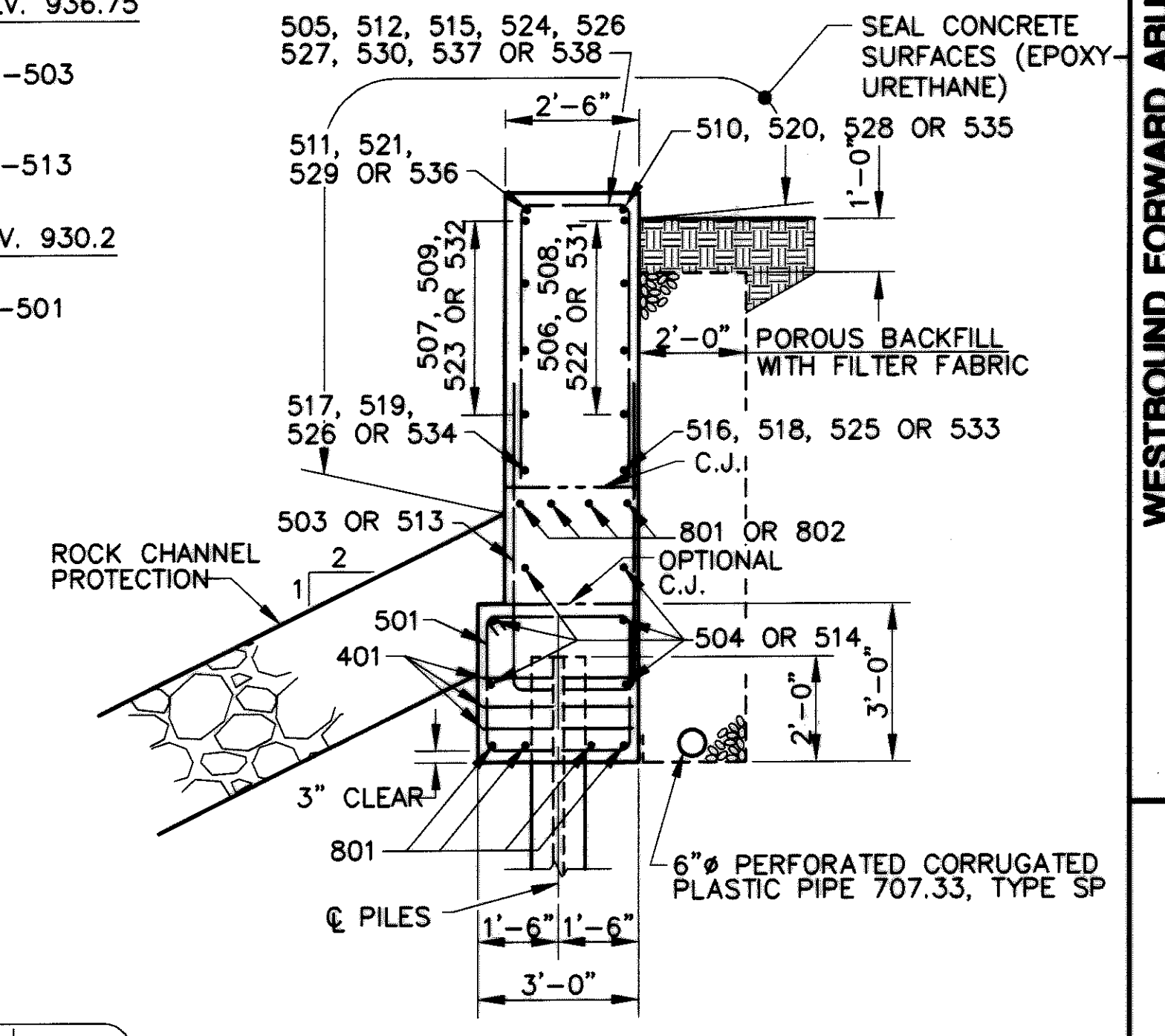
**MINIMUM LAP LENGTHS  
 (UNLESS OTHERWISE NOTED)**  
 NO. 5 BAR = 2'-0"  
 NO. 8 BAR = 4'-0"



**FOOTING PLAN**



**SECTION A-A**

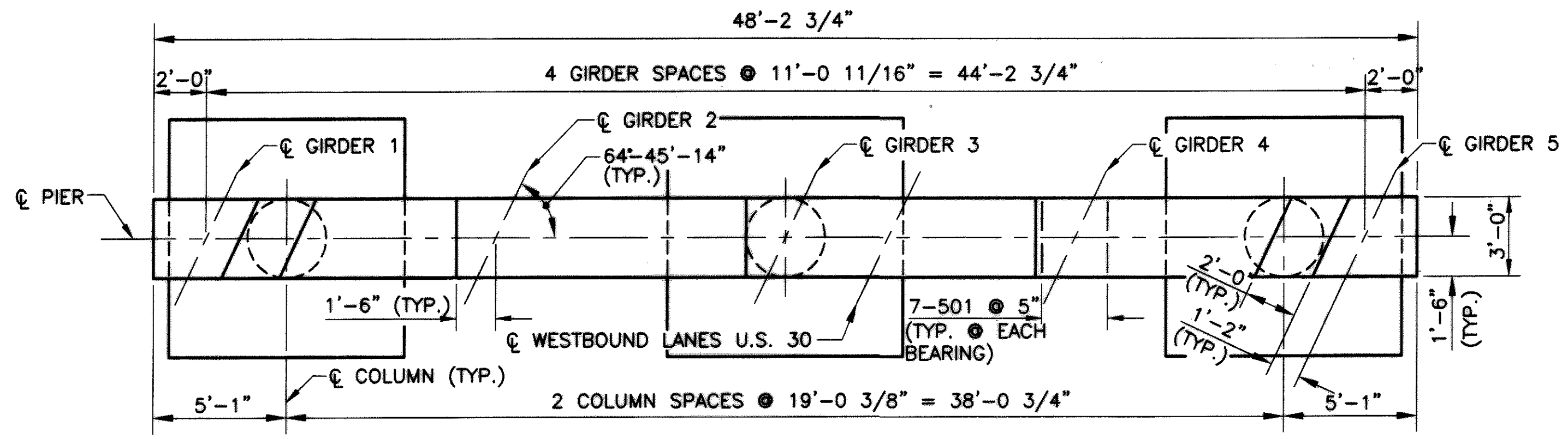


**SECTION B-B**

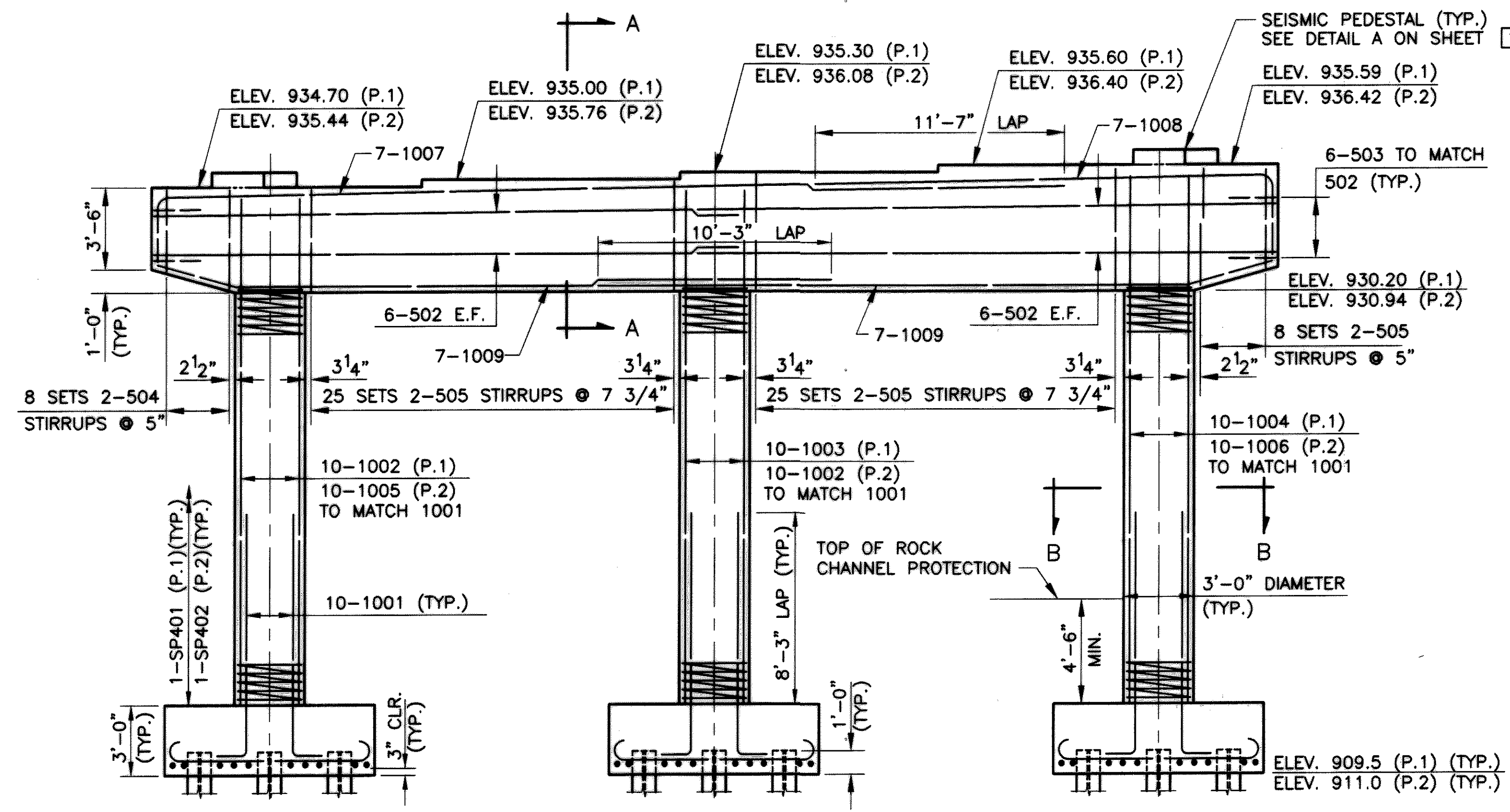
**NOTES:**

① FOR NOTES SEE SHEET 5/21.

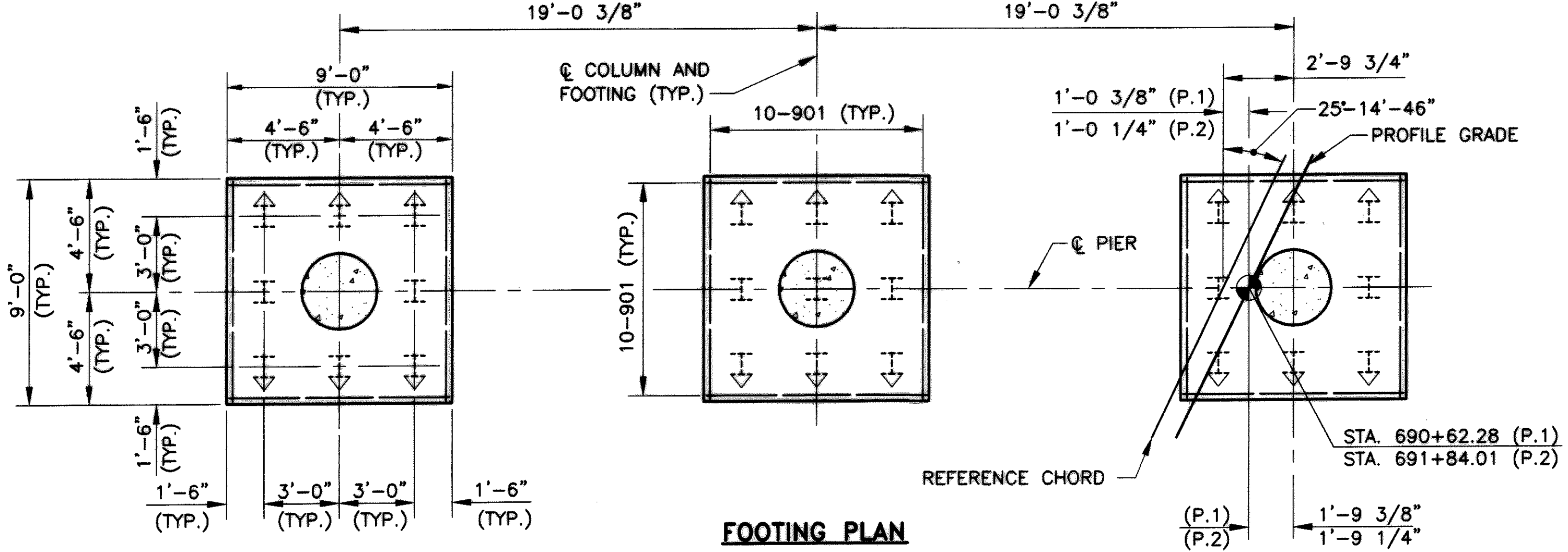
F:\JOBS\170\BRIDGE\04\30\0470\B0404R.DWG  
 GFH 2/20/03 PLOT14



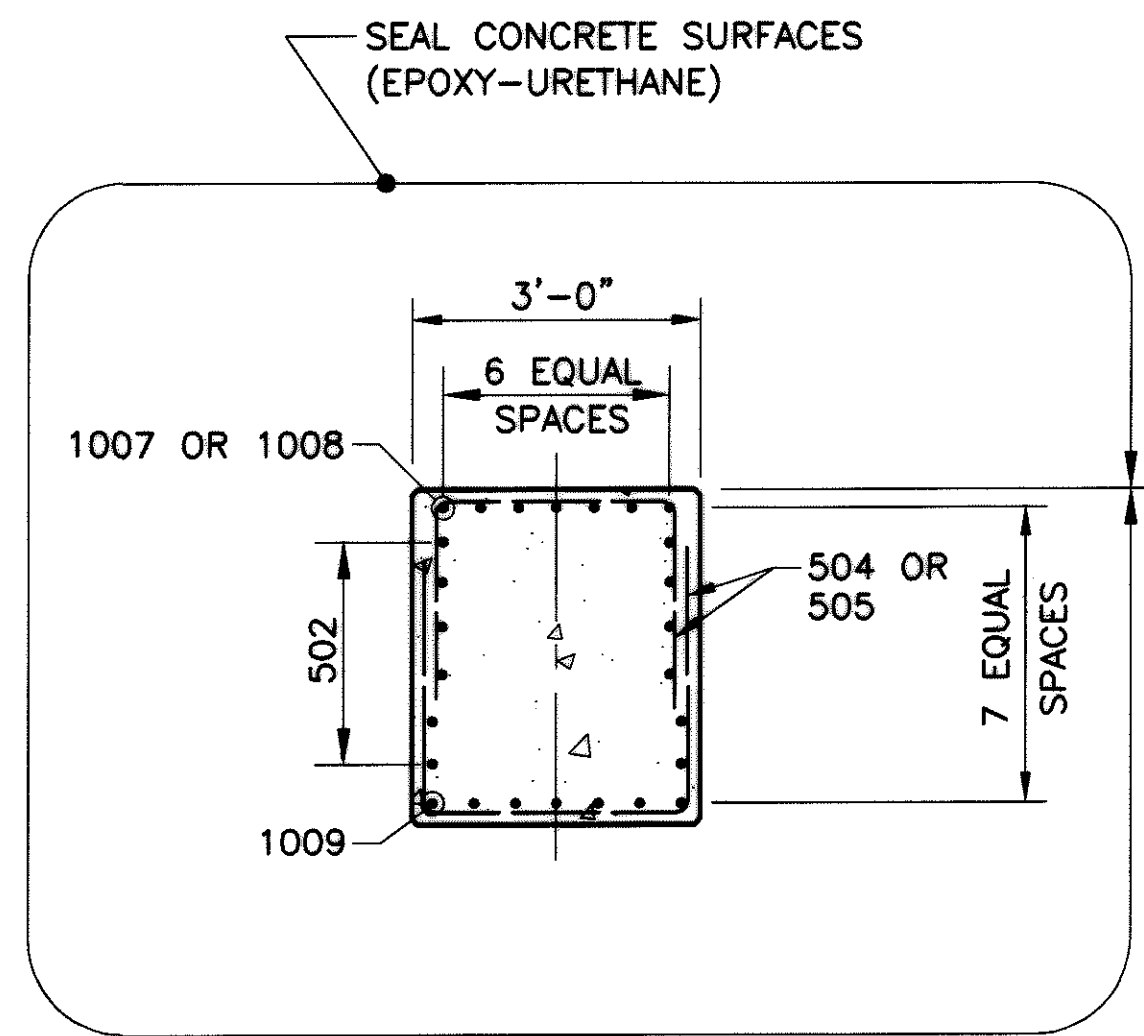
**PLAN**



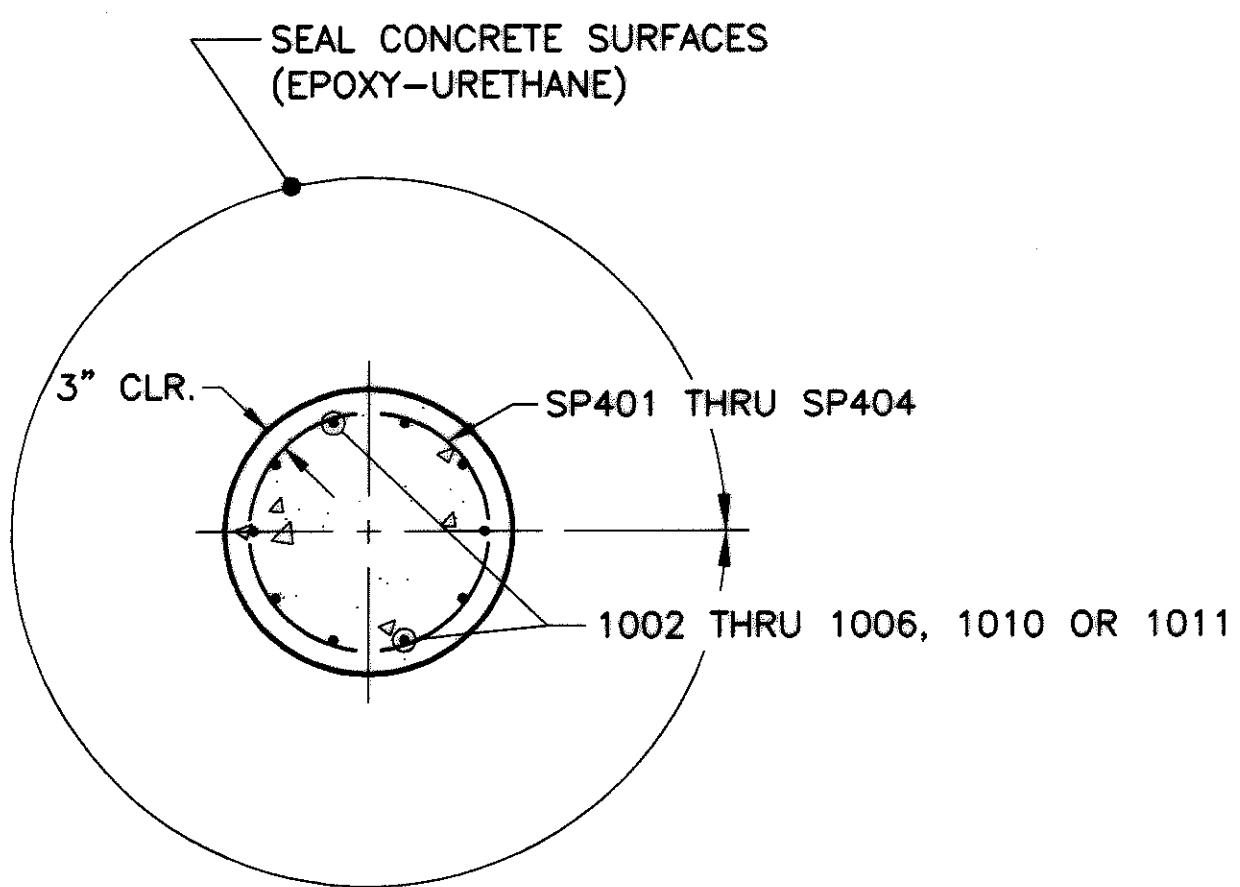
**ELEVATION**



**FOOTING PLAN**



**SECTION A-A**



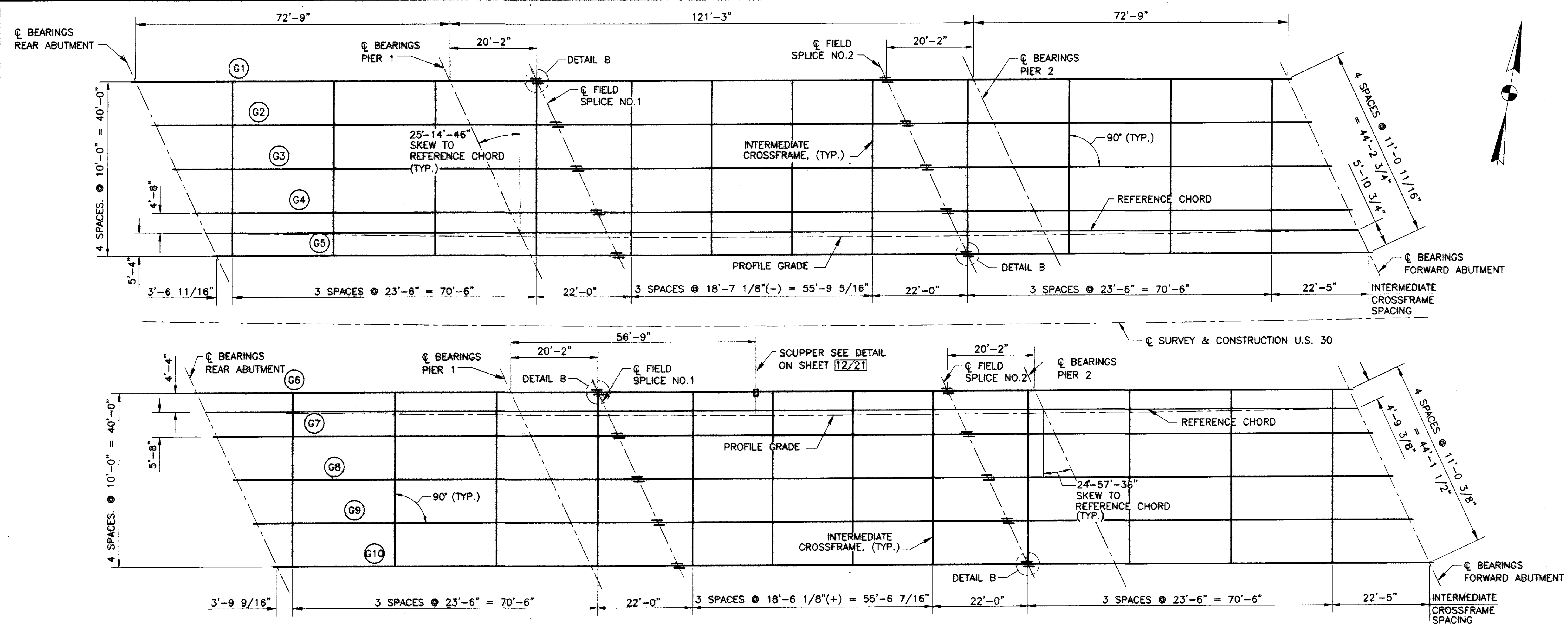
**SECTION B-B**

**MINIMUM LAP LENGTH**  
 NO. 5 BAR = 2'-0"

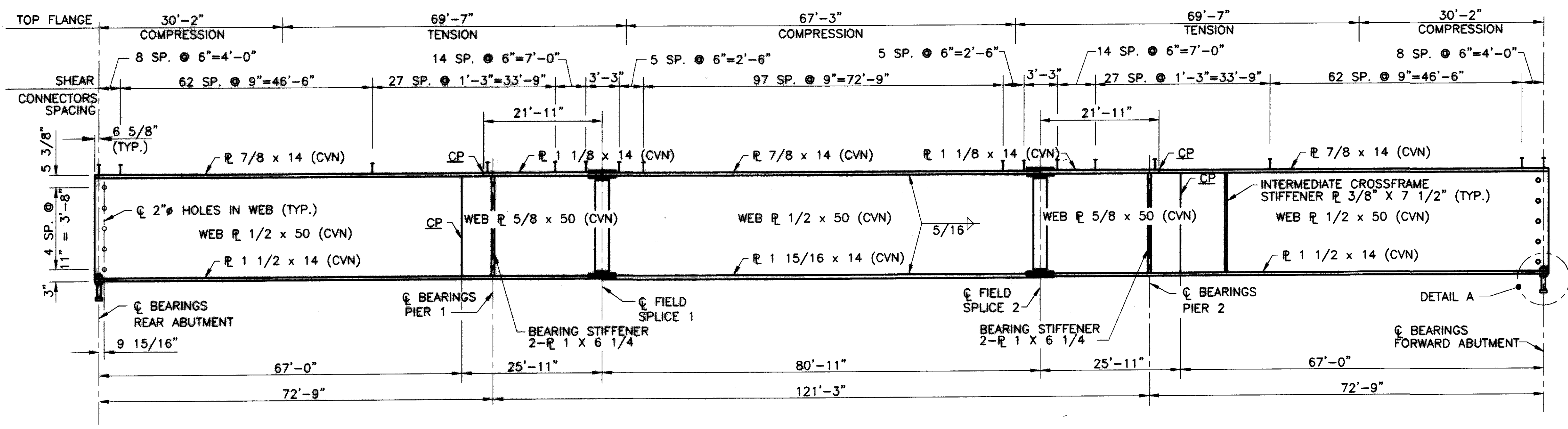
**NOTES:**

- ① ALL REINFORCING BARS SHALL BE PREFIXED P (PIER), UNLESS OTHERWISE NOTED.
- ② FOR ELASTOMERIC BEARING DETAILS SEE SHEET **18/21**.
- ③ FOR REINFORCING SCHEDULE SEE SHEET **20/21**.
- ④ ⚡ DENOTES PILES BATTERED 1 TO 4 IN THE DIRECTION SHOWN.
- ⑤ COLUMN SPIRAL REINFORCEMENT SHALL BE EMBEDDED A MINIMUM OF 2" INTO PIER CAP CONCRETE.
- ⑥ SURFACE UNDER BEARINGS: SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER THE BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN 1/16 INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.
- ⑦ FOR PILE IDENTIFICATION NUMBERS SEE SHEET **4/21**.
- ⑧ FOR BRIDGE LAYOUT DIMENSIONS SEE GENERAL PLAN ON SHEET **2/21**.

F:\JBS\470\BRIDGE\WAY\DWG\470P104L.DWG GFH 2/20/03 PLDT14



**FRAMING PLAN**

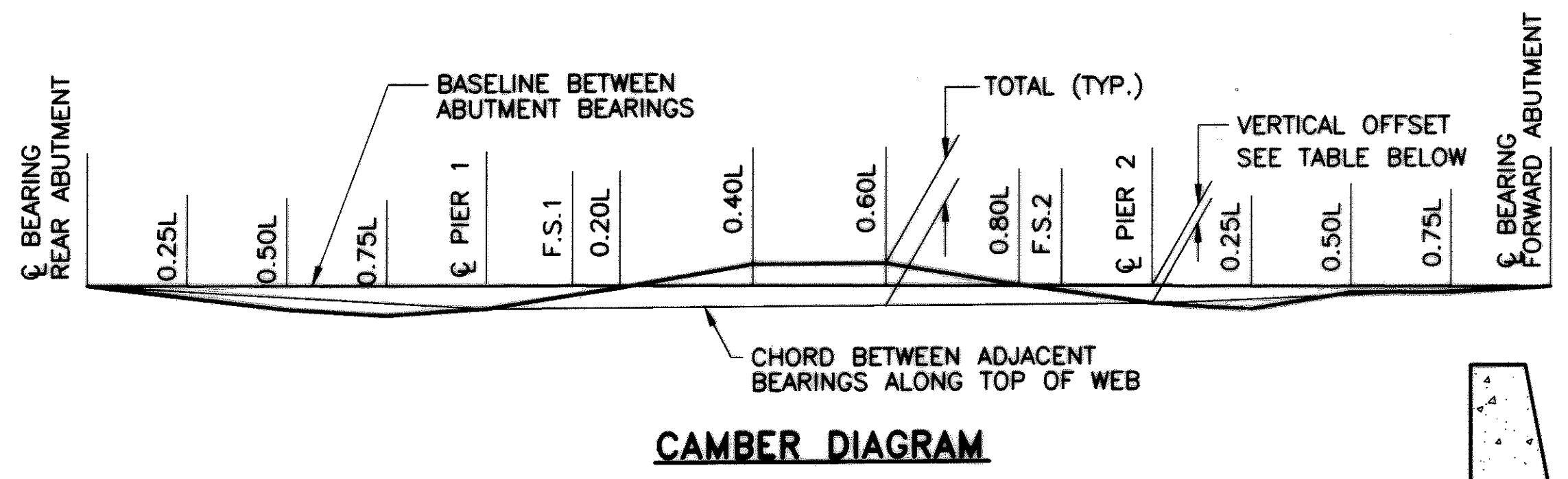
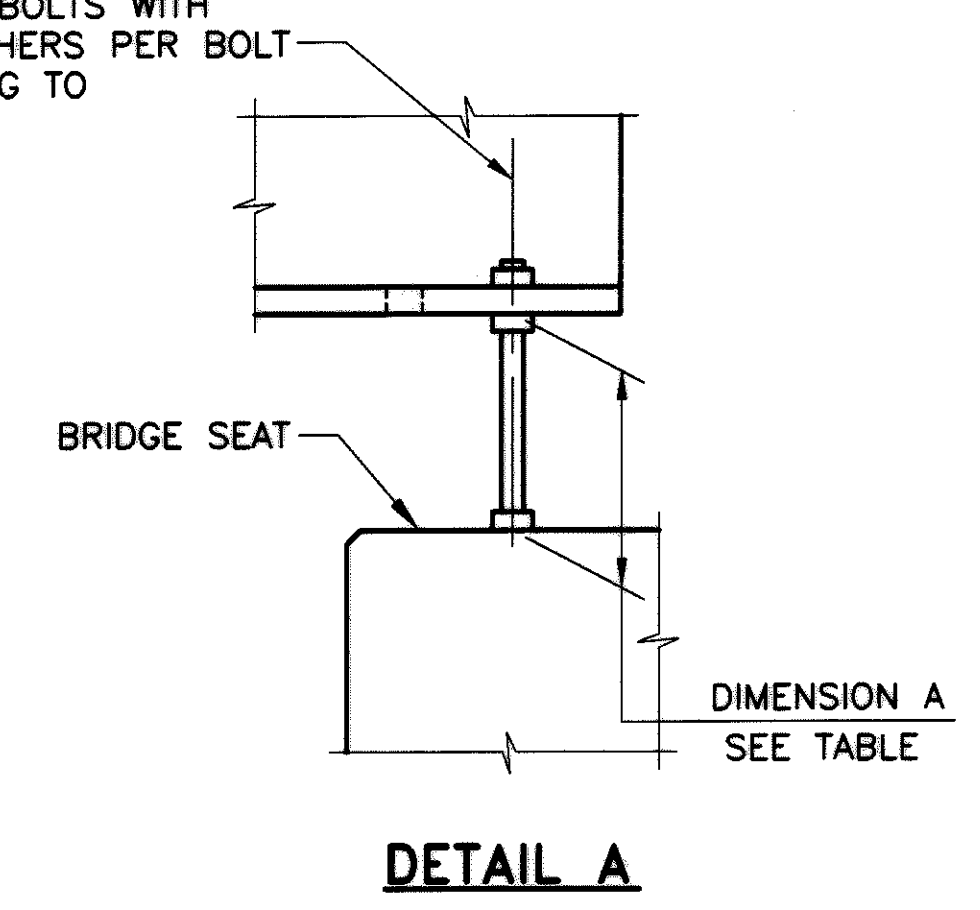
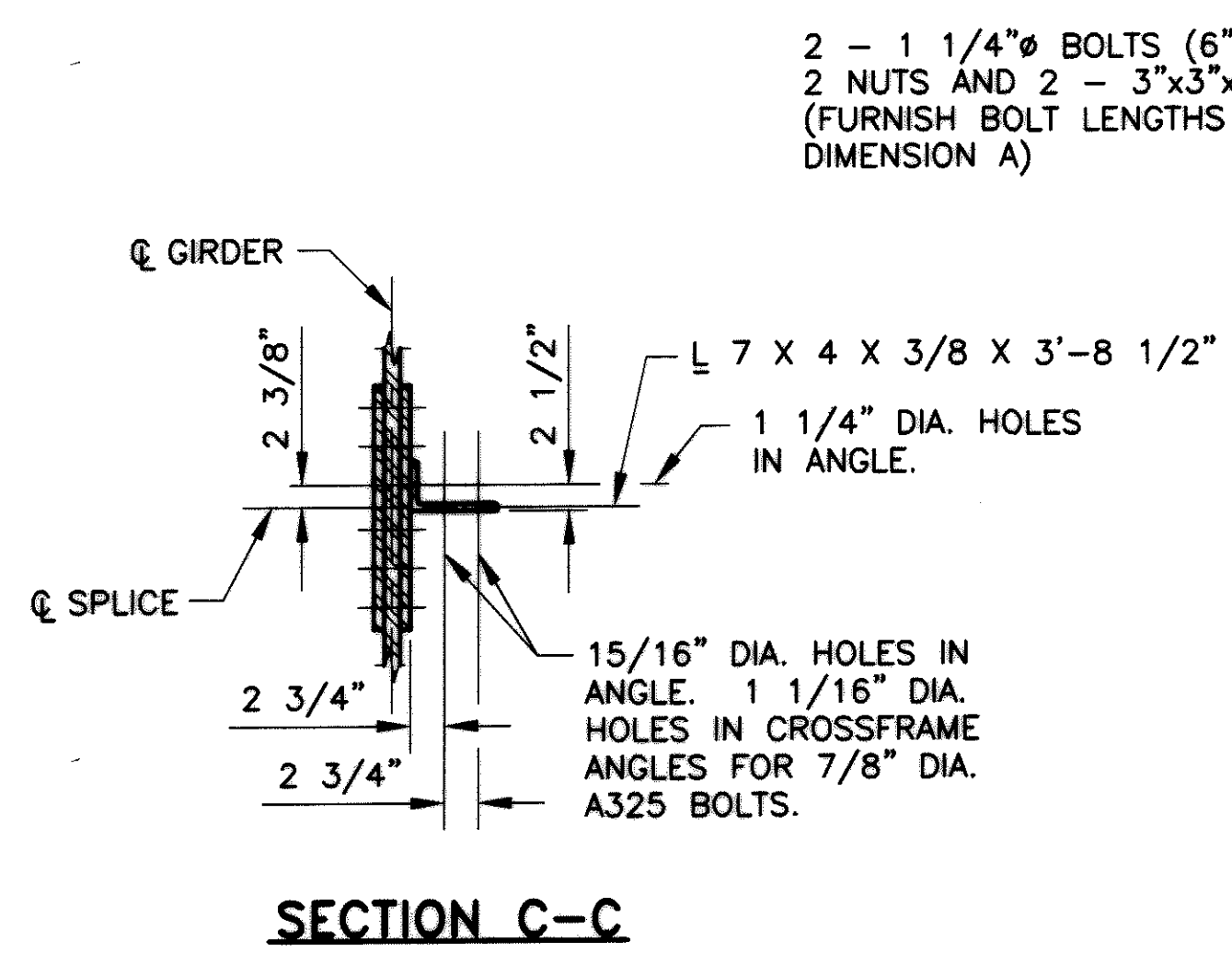
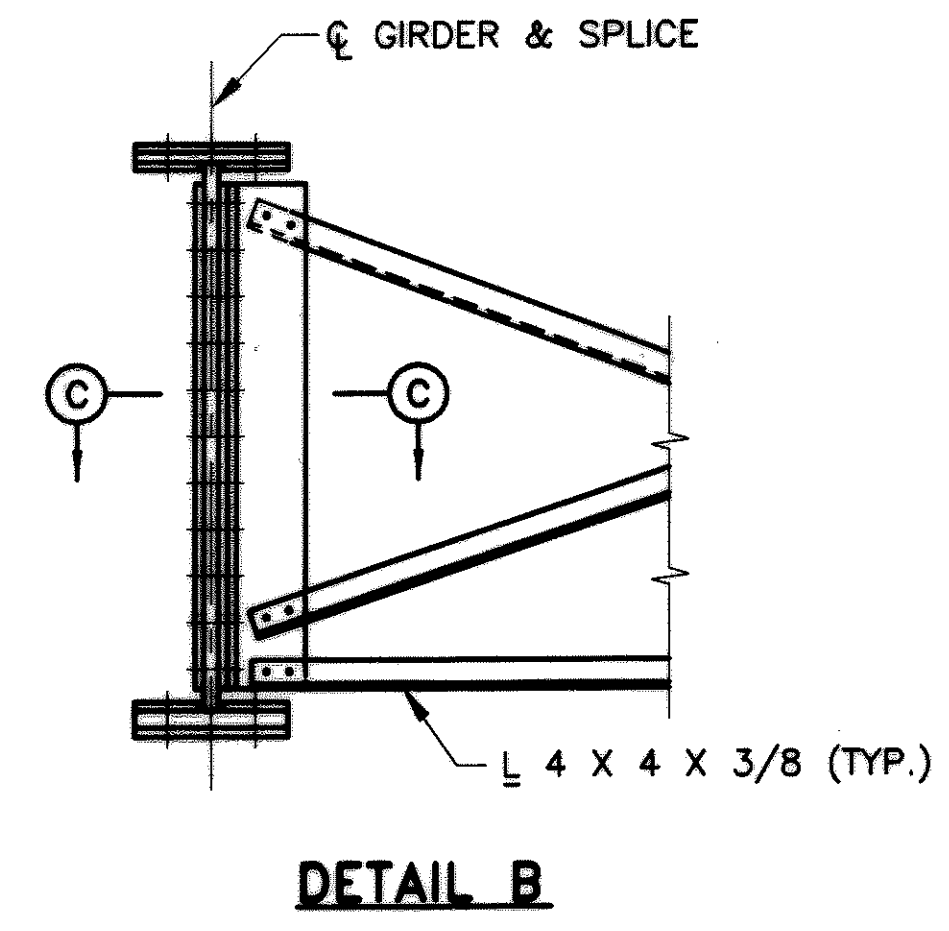
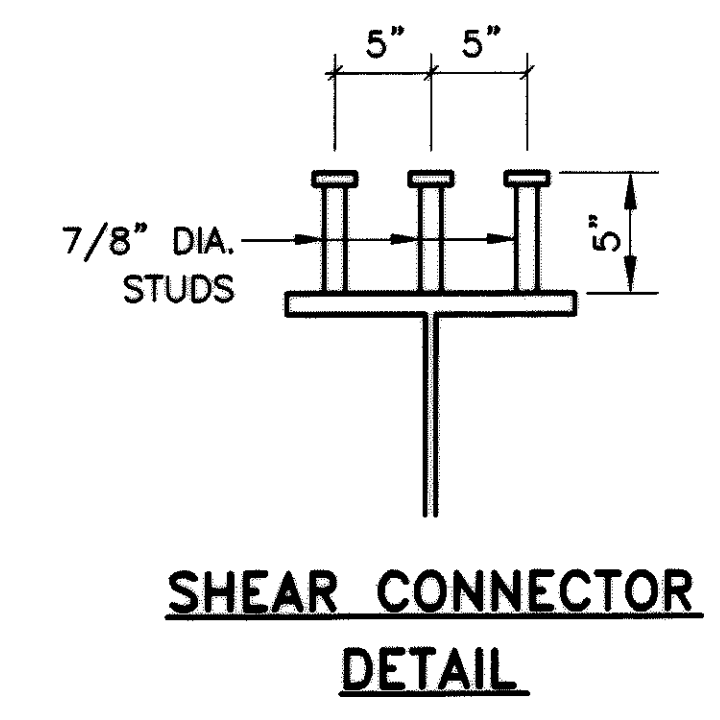
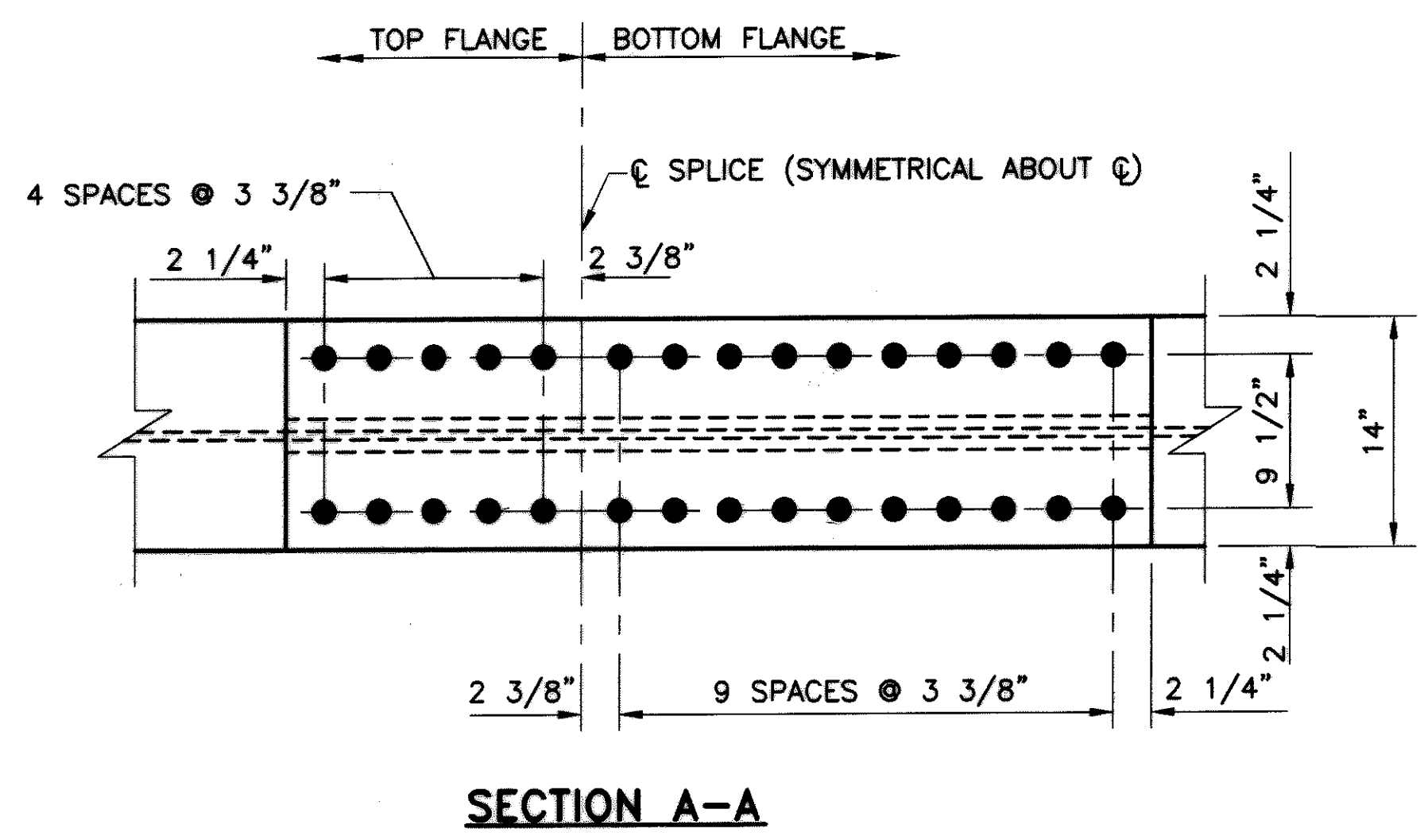
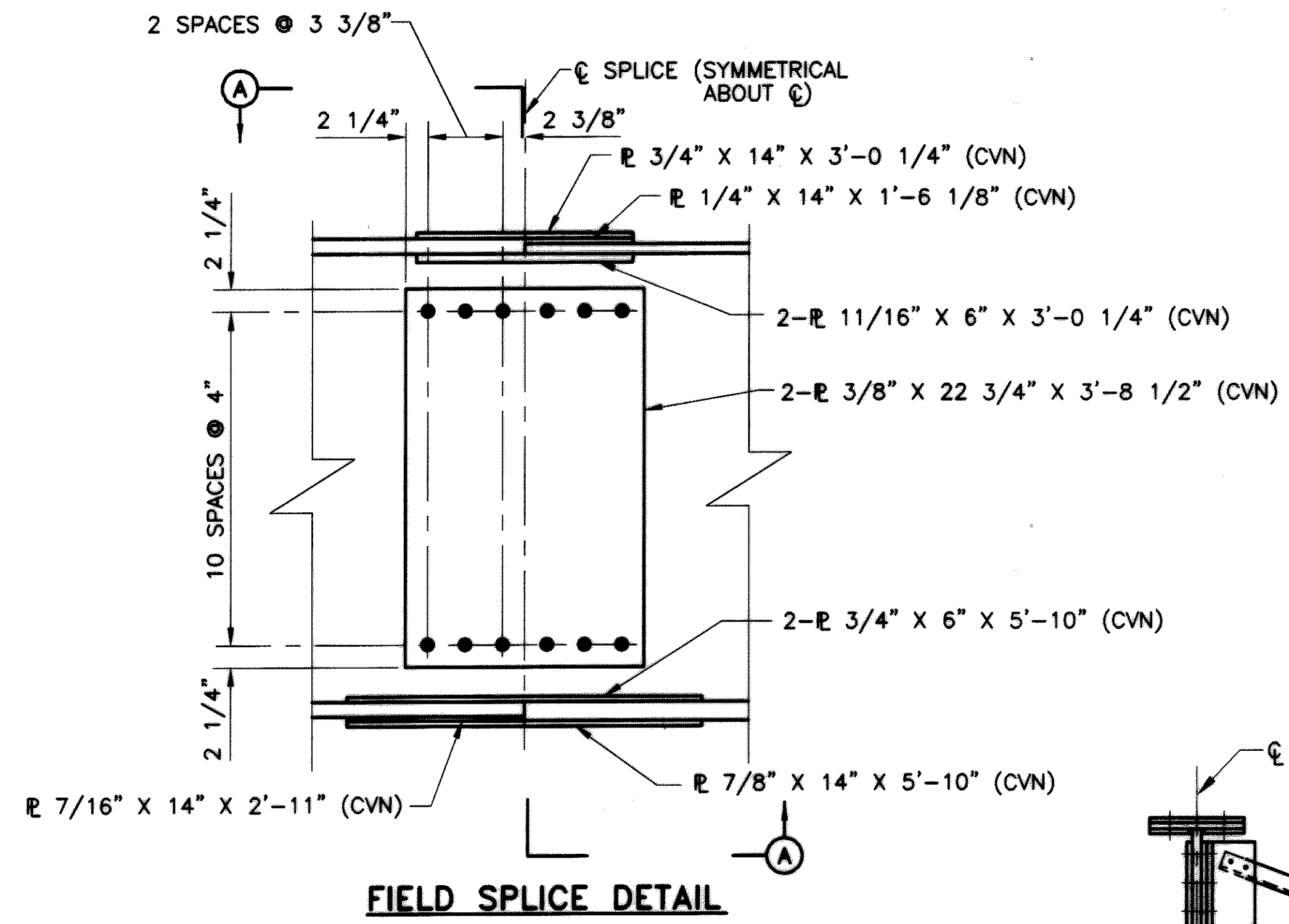


**TYPICAL GIRDER ELEVATION**

- NOTES:**
- 1 **WELDED ATTACHMENT:** WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT SMALLER THAN 1/4" FOR THICKNESSES UP TO 3/4" AND 5/16" FOR GREATER THAN 3/4" THICK.
  - 2 **CHARPY V-NOTCH TOUGHNESS:** WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
  - 3 **INTERMEDIATE CROSSFRAMES** SHALL BE TYPE 4 WITH L4x4x3/8 ANGLES. SEE OHIO STANDARD DRAWING GSD-1-96 FOR ADDITIONAL NOTES AND DETAILS.
  - 4 **WELD REINFORCEMENT** FOR FULL PENETRATION JOINT WELDS SHALL BE REMOVED BY GRINDING IN THE DIRECTION OF THE MAIN STRESSES.
  - 5 **FOR STIFFENER NOTES** SEE ODOT STANDARD DRAWING GSD-1-96 SHEET 2 OF 3.
  - 6 **FOR BEARING DETAILS** SEE SHEET **18/21**.
  - 7 **FOR SPLICE DETAILS** SEE SHEET **12/21**.
  - 8 **FOR DETAIL A AND DETAIL B** SEE SHEET **12/21**.
  - 9 **PAYMENT FOR DRILLING HOLES** IN GIRDER WEBS INCLUDED WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 4, A572, AS PER PLAN.

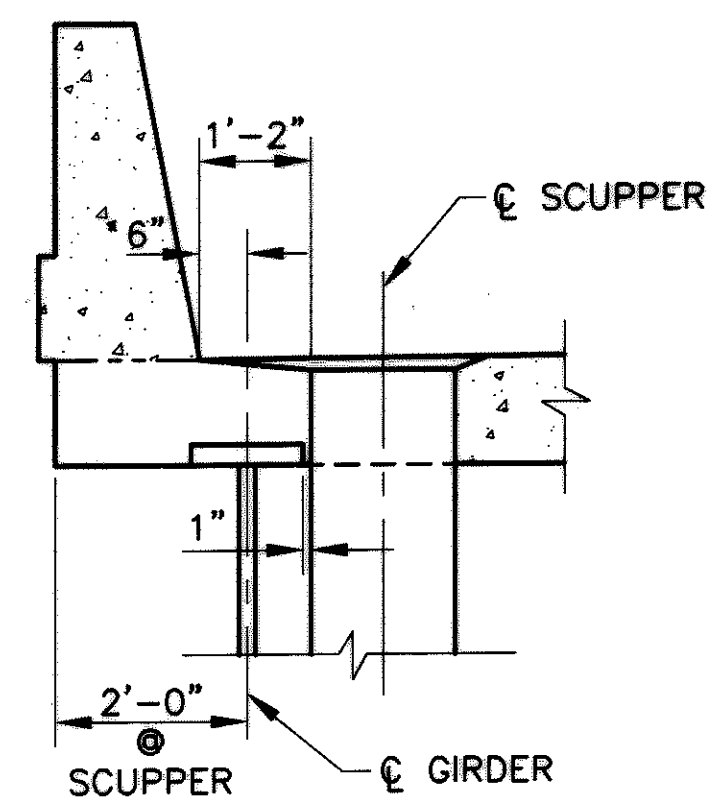
CP = COMPLETE JOINT PENETRATION WELD

V:\030512\03.DWG F:\JOBS\170\BRIDGE\04\DWG\478\F04.DWG GFH 2/20/03 PLDT1182



VERTICAL OFFSET		
GIRDER NO.	PIER NO. 1	PIER NO. 2
<b>WESTBOUND</b>		
G1 THRU G4	-3 1/4"	-3 1/4"
G5	-2 7/16"	-2 7/16"
<b>EASTBOUND</b>		
G6 THRU G9	-3 3/16"	-3 3/16"
G10	-2 3/8"	-2 3/8"

NOTE: NEGATIVE VALUES INDICATE DIMENSIONS BELOW THE BASELINE BETWEEN ABUTMENT BEARINGS.



**SCUPPER DETAIL**  
FOR ADDITIONAL DETAILS SEE ODOT STD. DWG. GSD-1-96 SHEET 3/3

DIMENSION A					
<b>WESTBOUND</b>	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5
REAR ABUT.	1'-0"	1'-3 3/8"	1'-6 13/16"	1'-10 5/16"	1'-9 1/4"
FORWARD ABUT.	1'-0"	1'-3 15/16"	1'-7 15/16"	2'-0"	1'-11 3/8"
<b>EASTBOUND</b>	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10
REAR ABUT.	1'-0"	1'-3 5/8"	1'-7 1/16"	1'-10 11/16"	1'-6 3/8"
FORWARD ABUT.	1'-0"	1'-4 1/16"	1'-8 1/16"	2'-0 1/8"	1'-7 15/16"

**NOTES:**

- ① HIGH STRENGTH BOLTS, TYPE 1, SHALL BE 1 1/8" DIAMETER A325, GALVANIZED, UNLESS OTHERWISE NOTED.
- ② FOR DEFLECTION AND CAMBER TABLES SEE SHEET [13/21].
- ③ FOR ADDITIONAL NOTES SEE SHEET [17/21].

PLDT 18  
GFH 8-30-02

F:\JOBS\170 BRIDGE\WAY-30\1183\WAY-30-1183.DWG

**DEFLECTION AND CAMBER (WESTBOUND)**

GIRDER 1	SPAN 1					SPAN 2					SPAN 3					
	R.A.	0.25L	0.50L	0.75L	PIER 1	FS1	0.20L	0.40L	0.60L	0.80L	FS2	PIER 2	0.25L	0.50L	0.75L	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	13/16"	15/16"	1 13/16"	1 13/16"	15/16"	13/16"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-3/4"	-3/4"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	-1/16"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-1/4"	-5/16"	0"	1/2"	9/16"	1 3/8"	1 3/8"	9/16"	1/2"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 2	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	1"	1 1/8"	2 3/16"	2 3/16"	1 1/8"	1"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-3/4"	-3/4"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	-1/16"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	11/16"	3/4"	1 3/4"	1 3/4"	3/4"	11/16"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 3	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	1"	1 1/8"	2 3/16"	2 3/16"	1 1/8"	1"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-3/4"	-3/4"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	-1/16"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	11/16"	3/4"	1 3/4"	1 3/4"	3/4"	11/16"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 4	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	1"	1 1/8"	2 3/16"	2 3/16"	1 1/8"	1"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-3/4"	-3/4"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	-1/16"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	11/16"	3/4"	1 3/4"	1 3/4"	3/4"	11/16"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 5	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	13/16"	15/16"	1 13/16"	1 13/16"	15/16"	13/16"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-3/4"	-3/4"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	1/16"	1/16"	1/16"	0"	1/16"	1/16"	1/8"	1/8"	1/16"	1/16"	0"	1/16"	1/16"	1/16"	0"
TOTAL CAMBER	0"	0"	-1/8"	-1/4"	0"	5/8"	11/16"	1 9/16"	1 9/16"	11/16"	5/8"	0"	-1/4"	-1/8"	0"	0"

L = SPAN LENGTH

**DEFLECTION AND CAMBER (EASTBOUND)**

GIRDER 6	SPAN 1					SPAN 2					SPAN 3					
	R.A.	0.25L	0.50L	0.75L	PIER 1	FS1	0.20L	0.40L	0.60L	0.80L	FS2	PIER 2	0.25L	0.50L	0.75L	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	13/16"	15/16"	1 13/16"	1 13/16"	15/16"	13/16"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-11/16"	-11/16"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	0"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	1/2"	9/16"	1 7/16"	1 7/16"	9/16"	1/2"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 7	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	1"	1 1/8"	2 3/16"	2 3/16"	1 1/8"	1"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-11/16"	-11/16"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	0"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	11/16"	3/4"	1 13/16"	1 13/16"	3/4"	11/16"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 8	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	1"	1 1/8"	2 3/16"	2 3/16"	1 1/8"	1"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-11/16"	-11/16"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	0"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	11/16"	3/4"	1 13/16"	1 13/16"	3/4"	11/16"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 9	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	1"	1 1/8"	2 3/16"	2 3/16"	1 1/8"	1"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-11/16"	-11/16"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	0"	0"	0"	0"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
TOTAL CAMBER	0"	-1/16"	-3/16"	-5/16"	0"	11/16"	3/4"	1 13/16"	1 13/16"	3/4"	11/16"	0"	-5/16"	-3/16"	-1/16"	0"
GIRDER 10	SPAN 1					SPAN 2					SPAN 3					
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	3/16"	3/16"	3/8"	3/8"	3/16"	3/16"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	1/8"	1/16"	-1/8"	0"	13/16"	15/16"	1 13/16"	1 13/16"	15/16"	13/16"	0"	-1/8"	1/16"	1/8"	0"
ADJUSTMENT DUE TO VERTICAL CURVE	0"	-3/16"	-1/4"	-3/16"	0"	-7/16"	-1/2"	-11/16"	-11/16"	-1/2"	-7/16"	0"	-3/16"	-1/4"	-3/16"	0"
ADJUSTMENT DUE TO HORIZONTAL CURVE	0"	1/16"	1/16"	1/16"	0"	1/16"	1/16"	1/8"	1/8"	1/16"	1/16"	0"	1/16"	1/16"	1/16"	0"
TOTAL CAMBER	0"	0"	-1/8"	-1/4"	0"	5/8"	11/16"	1 5/8"	1 5/8"	11/16"	5/8"	0"	-1/4"	-1/8"	0"	0"

L = SPAN LENGTH

**NOTES:**

- ① FOR CAMBER DIAGRAM AND VERTICAL OFFSETS SEE SHEET **[T2/21]**.
- ② DEFLECTIONS AND ADJUSTMENTS ARE GIVEN TO THE NEAREST 1/16 INCH. NEGATIVE VALUES INDICATE DIMENSIONS BELOW THE CHORD LINES.

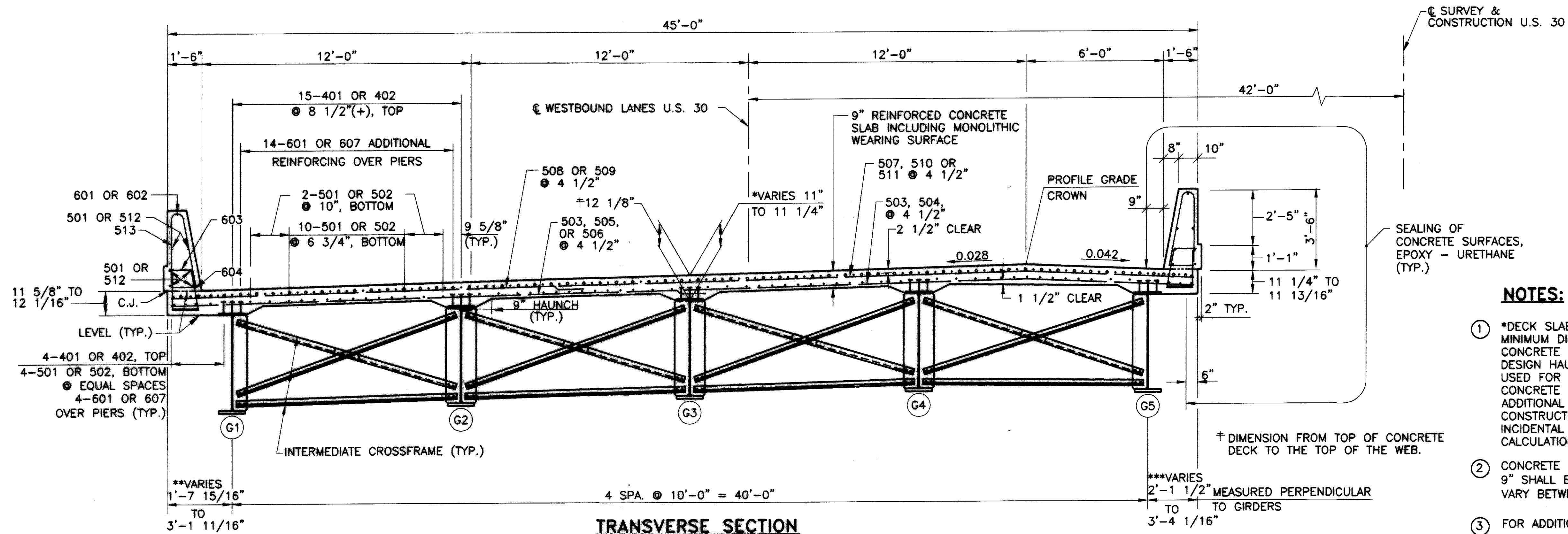
V:\0851212.DWG  
 F:\\_DBS\470\BRIDGE\_04\DWG\47051212.DWG  
 PLOT18  
 RSY 4-11-02



**SCREED TABLE**

SPAN NO.	LOCATION	LEFT CURB LINE		G1		G2		G3		G4		PROFILE GRADE CROWN		G5		RIGHT CURB LINE	
		STATION	SCREED	STATION	SCREED	STATION	SCREED	STATION	SCREED	STATION	SCREED	STATION	SCREED	STATION	SCREED	STATION	SCREED
SPAN 1	0.00 L	689+70.88	940.14	689+71.70	940.19	689+76.65	940.47	689+81.58	940.76	689+86.51	941.05	689+88.80	941.18	689+91.41	940.96	689+91.77	940.93
	0.25 L	689+89.39	940.18	689+90.04	940.22	689+94.97	940.51	689+99.88	940.80	690+04.77	941.09	690+07.20	941.23	690+09.66	941.03	690+10.15	940.99
	0.50 L	690+07.88	940.22	690+08.38	940.25	690+13.28	940.54	690+18.17	940.84	690+23.04	941.13	690+25.58	941.29	690+27.91	941.09	690+28.52	941.04
	0.75 L	690+26.35	940.27	690+26.72	940.29	690+31.60	940.58	690+36.46	940.88	690+41.31	941.18	690+43.94	941.34	690+46.15	941.16	690+46.86	941.10
SPAN 2	0.00 L	690+44.80	940.34	690+45.07	940.36	690+49.92	940.66	690+54.76	940.96	690+59.59	941.26	690+62.28	941.43	690+64.40	941.25	690+65.18	941.19
	FS1	-	-	690+65.41	940.51	690+70.23	940.83	690+75.05	941.13	690+79.85	941.44	-	-	690+84.63	941.43	-	-
	0.20 L	690+69.36	940.53	690+69.53	940.54	690+74.35	940.86	690+79.15	941.17	690+83.95	941.47	690+86.70	941.65	690+88.73	941.47	690+89.57	941.40
	0.40 L	690+93.88	940.74	690+93.99	940.74	690+98.77	941.08	691+03.55	941.39	691+08.31	941.70	691+11.08	941.88	691+13.06	941.68	691+13.93	941.61
	0.60 L	691+18.37	940.89	691+18.45	940.89	691+23.20	941.23	691+27.95	941.54	691+32.68	941.86	691+35.43	942.04	691+37.40	941.85	691+38.25	941.78
	0.80 L	691+42.82	940.98	691+42.91	940.99	691+47.63	941.32	691+52.34	941.64	691+57.04	941.95	691+59.74	942.14	691+61.73	941.96	691+62.54	941.89
SPAN 3	FS2	-	-	691+47.03	941.01	691+51.75	941.34	691+56.45	941.66	691+61.14	941.97	-	-	691+65.82	941.98	-	-
	0.00 L	691+67.23	941.09	691+67.37	941.10	691+72.06	941.42	691+76.74	941.74	691+81.40	942.06	691+84.01	942.24	691+86.06	942.08	691+86.79	942.02
	0.25 L	691+85.52	941.24	691+85.71	941.25	691+90.38	941.57	691+95.03	941.90	691+99.68	942.22	692+02.19	942.40	692+04.31	942.23	692+04.95	942.17
	0.50 L	692+03.78	941.42	692+04.06	941.44	692+08.70	941.77	692+13.33	942.09	692+17.95	942.42	692+20.35	942.59	692+22.55	942.41	692+23.09	942.36
	0.75 L	692+22.03	941.60	692+22.40	941.63	692+27.02	941.96	692+31.62	942.29	692+36.22	942.62	692+38.49	942.78	692+40.80	942.59	692+41.22	942.56
	1.00 L	692+40.25	941.78	692+40.74	941.82	692+45.34	942.15	692+49.92	942.48	692+54.49	942.82	692+56.61	942.97	692+59.04	942.77	692+59.32	942.75

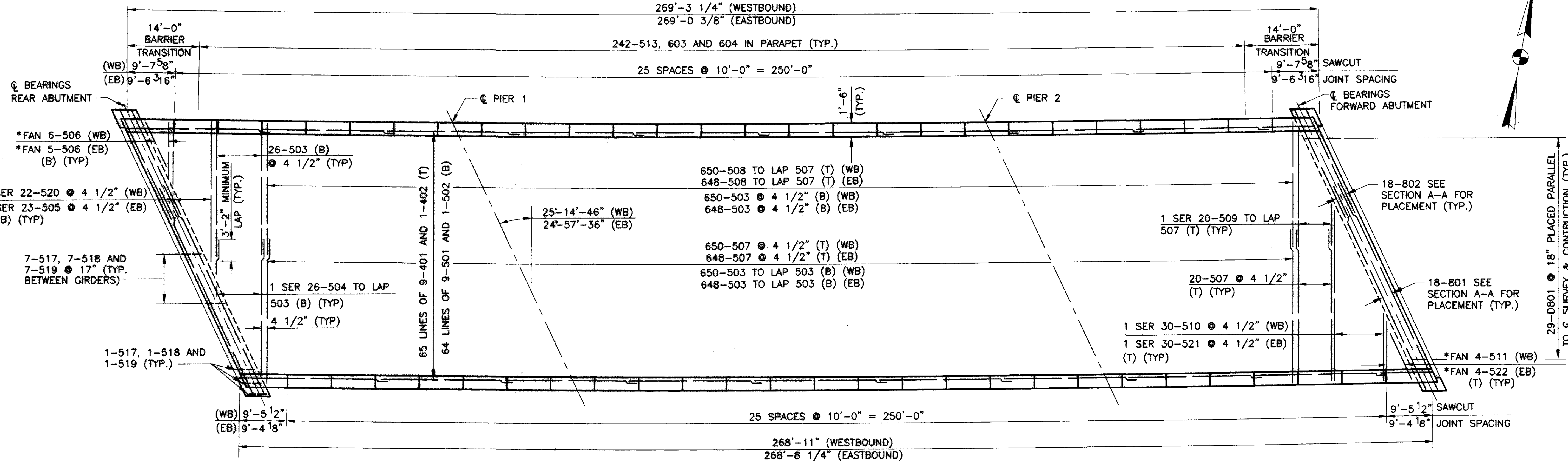
SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.



- NOTES:**
- \*DECK SLAB DEPTH FOR CONCRETE QUANTITY: THE MINIMUM DIMENSION SHOWN FROM THE TOP OF THE CONCRETE DECK TO THE TOP OF THE FLANGE, MINUS THE DESIGN HAUNCH THICKNESS OF 2 INCHES, HAS BEEN USED FOR COMPUTING THE DECK CONCRETE QUANTITIES. CONCRETE REQUIRED TO FILL THE HAUNCHES, INCLUDING ADDITIONAL OR LESS MATERIAL REQUIRED DUE TO HAUNCH CONSTRUCTION TOLERANCES, SHALL BE CONSIDERED AS INCIDENTAL AND WILL NOT BE INCLUDED IN THE QUANTITY CALCULATIONS FOR PAYMENT.
  - CONCRETE DECK HAUNCH WIDTH: A HAUNCH WIDTH OF 9" SHALL BE USED. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 1'-0".
  - FOR ADDITIONAL REINFORCING OVER PIERS SEE DETAIL ON SHEET [16/21].
  - TRANSVERSE DIMENSIONS MEASURED RADIALLY, EXCEPT AS NOTED.
  - ALL REINFORCING STEEL BAR MARKS SHALL BE PREFIXED "S" (SUPERSTRUCTURE) UNLESS OTHERWISE NOTED.

**HORIZONTAL OFFSETS TO EDGE OF SLAB (PERPENDICULAR TO BEAMS)**

	SPAN 1					SPAN 2					SPAN 3					
	REAR ABUT. & BEARING	0.25	0.5	0.75	PIER	FS1	0.2	0.4	0.6	0.8	FS2	PIER	0.25	0.5	0.75	FWD ABUT. & BEARING
**	3'-1 11/16"	2'-9 5/8"	2'-6 1/8"	2'-3 1/8"	2'-0 5/8"	1'-10 1/2"	1'-10 1/8"	1'-8 9/16"	1'-7 15/16"	1'-8 1/4"	1'-8 3/8"	1'-9 1/2"	1'-11"	2'-1 1/16"	2'-3 11/16"	2'-6 13/16"
***	2'-2 9/16"	2'-6 1/16"	2'-9 1/16"	2'-11 1/2"	3'-1 7/16"	3'-2 15/16"	3'-3 3/16"	3'-4"	3'-3 7/8"	3'-2 7/8"	3'-2 5/8"	3'-0 15/16"	2'-10 7/8"	2'-8 1/4"	2'-5 1/8"	2'-1 1/2"

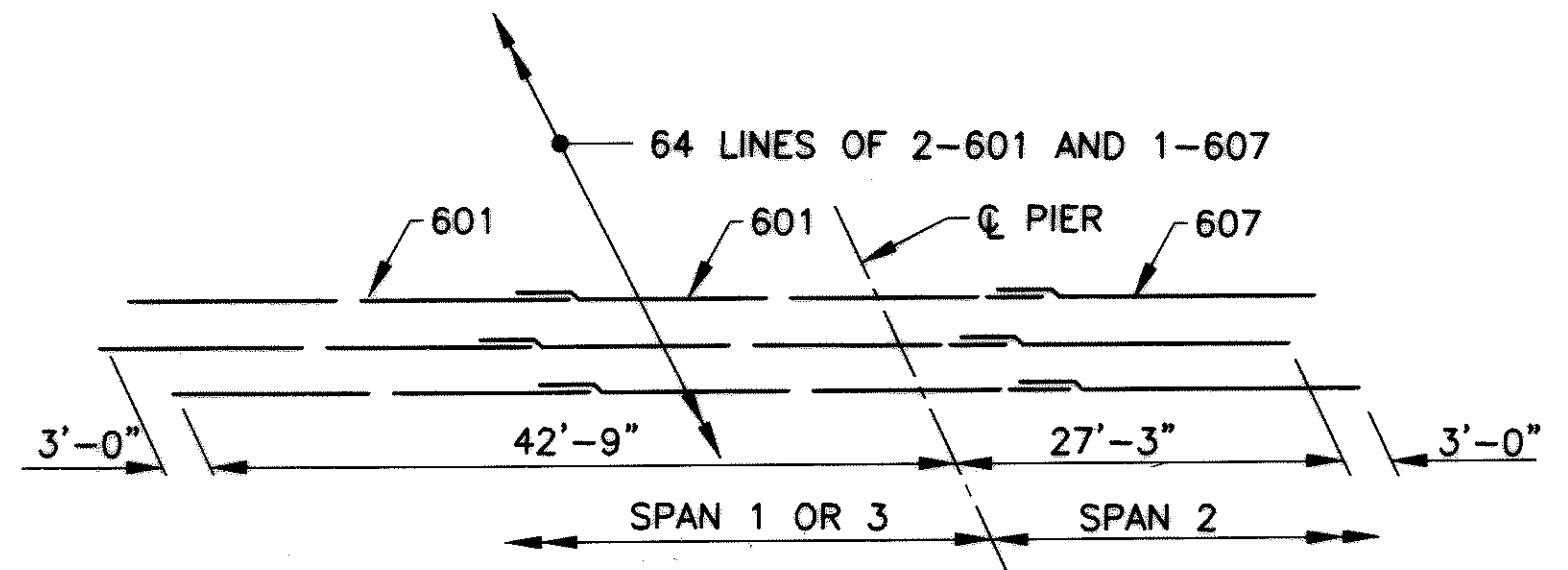
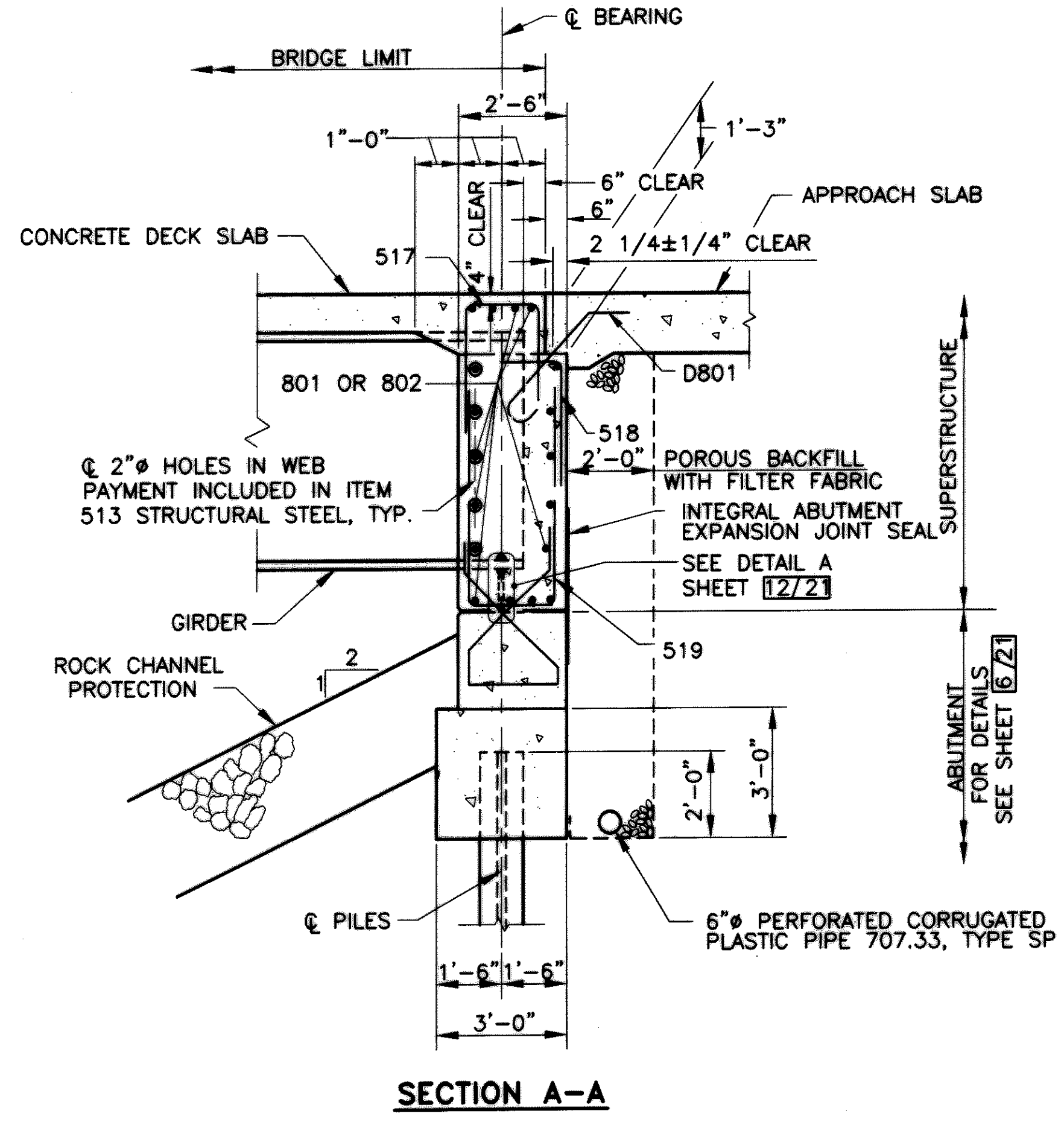


**DECK REINFORCING PLAN**

NOTE: ALL TRANSVERSE REINFORCING IS PERPENDICULAR TO AND SPACED ALONG REFERENCE CHORD, EXCEPT AS NOTED.

\* 4 1/2" SPACING MEASURED ALONG GIRDERS G1, G5, G6 OR G10.

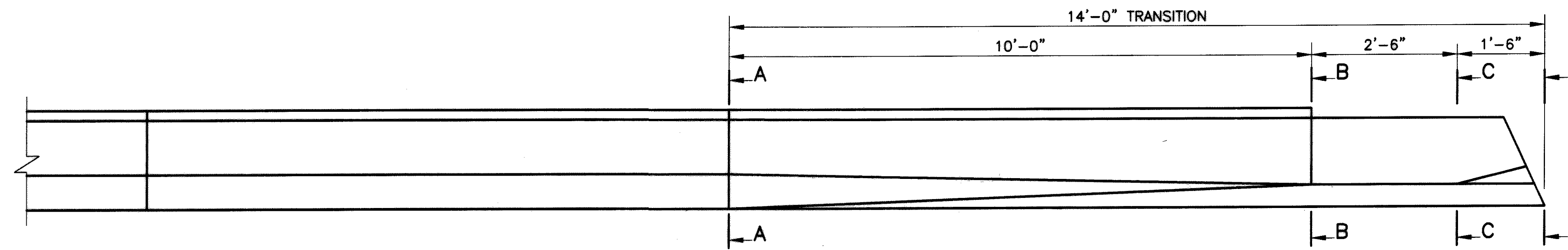
MINIMUM LAP LENGTHS	
NO. 4 BAR	= 1'-7"
NO. 5 BAR	= 2'-5"
NO. 6 BAR	= 3'-10"
NO. 8 BAR	= 4'-11"



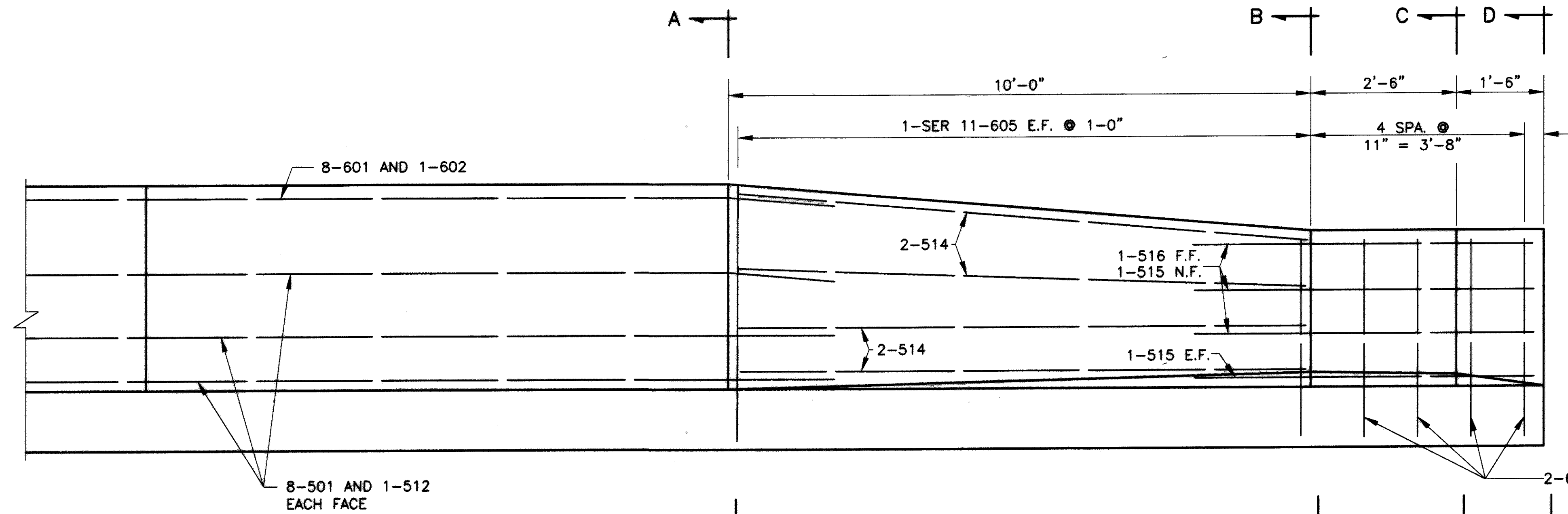
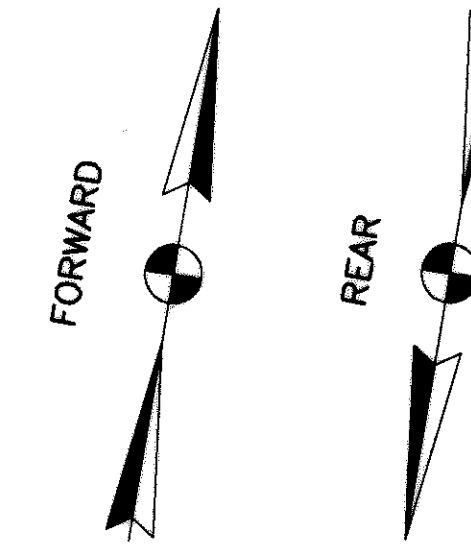
**NOTES:**

- THE CONCRETE ENCASEING STRUCTURAL STEEL MEMBERS SUPPORTED IN INTEGRAL TYPE ABUTMENTS SHALL BE PLACED BEFORE ACTUAL DECK CONCRETE IS PLACED. THE CONCRETE SHALL HAVE AT LEAST 48 HOURS OF SET TIME BEFORE THE DECK CONCRETE IS PLACED.
- FOR SPACING OF REINFORCING STEEL IN THE SLAB SEE SHEETS [14/21] AND [15/21].
- ALL REINFORCING STEEL BAR MARKS SHALL BE PREFIXED "S" (SUPERSTRUCTURE) UNLESS OTHERWISE NOTED.
- FOR REINFORCING STEEL LIST SEE SHEET [21/21].
- FOR PARAPET ELEVATION AND PARAPET TRANSITION DETAILS SEE SHEET [17/21].

W:\JOBS\470\BRIDGE\04\DWG\470SLB04.DWG  
 KJW 4/24/02 PLOT 1:12  
 W:\30501.DWG

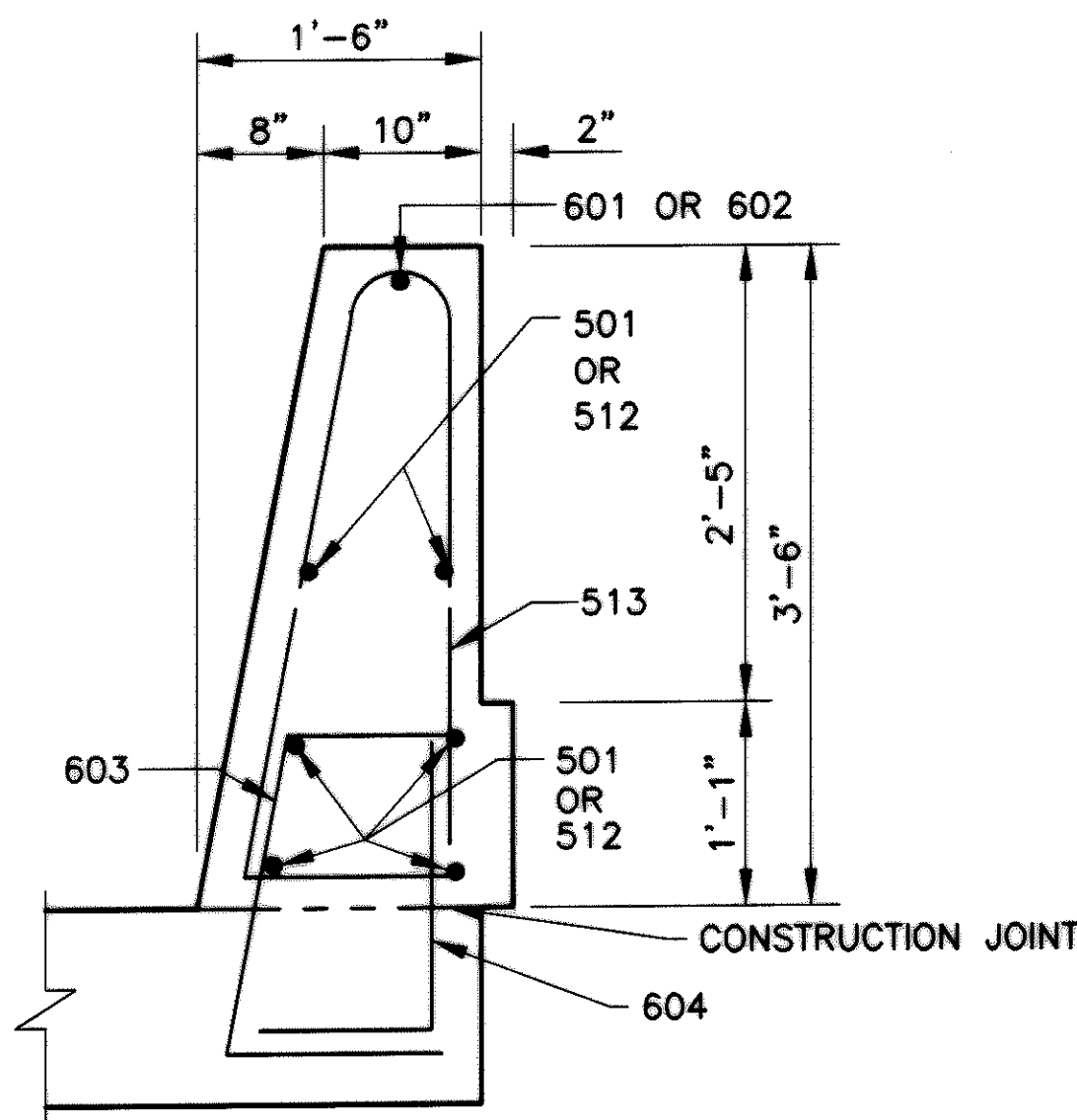


**PARTIAL PLAN - L.F. AND R.R.**  
(L.R. AND R.F. SIMILAR)

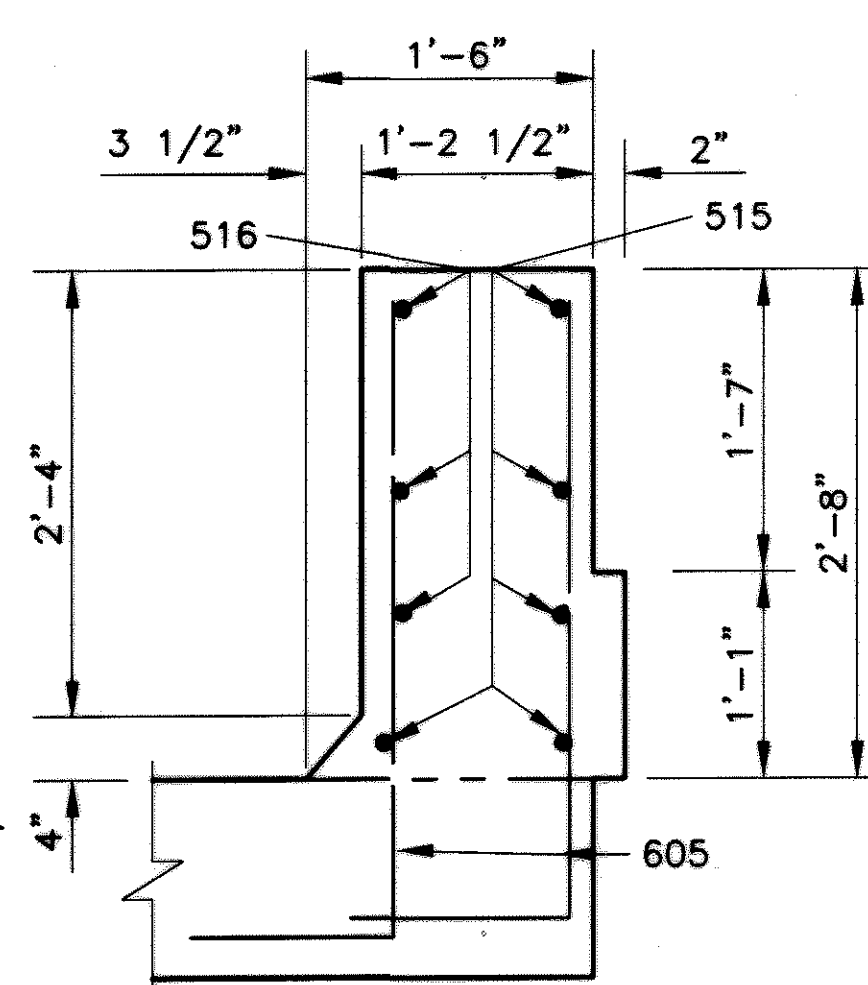


**PARTIAL PARAPET ELEVATION**  
TYPICAL @ BOTH ABUTMENTS

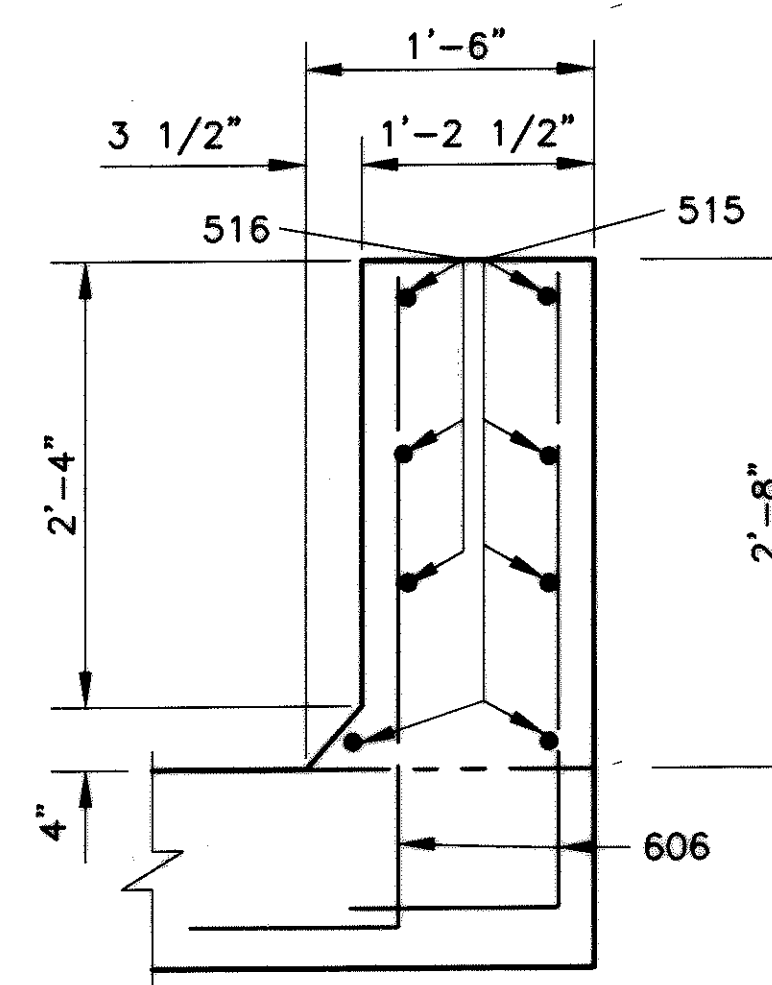
MINIMUM LAP LENGTHS	
NO. 5 BAR	= 2'-0"
NO. 6 BAR	= 2'-4"



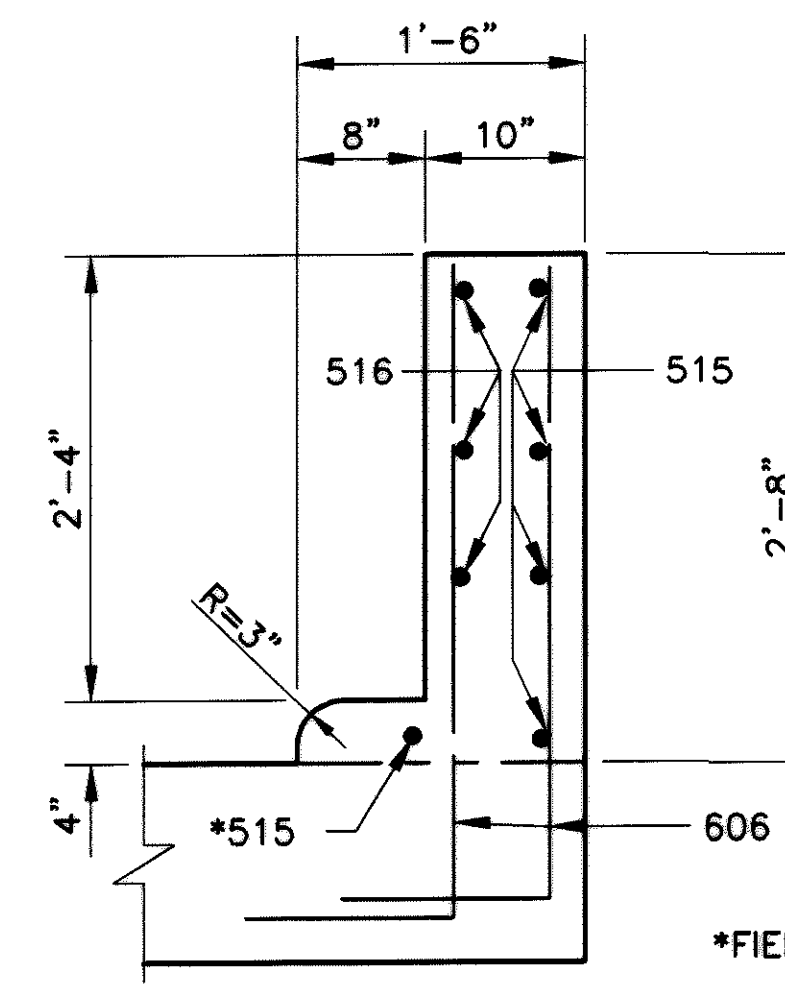
**SECTION A-A**



**SECTION B-B**



**SECTION C-C**



**SECTION D-D**

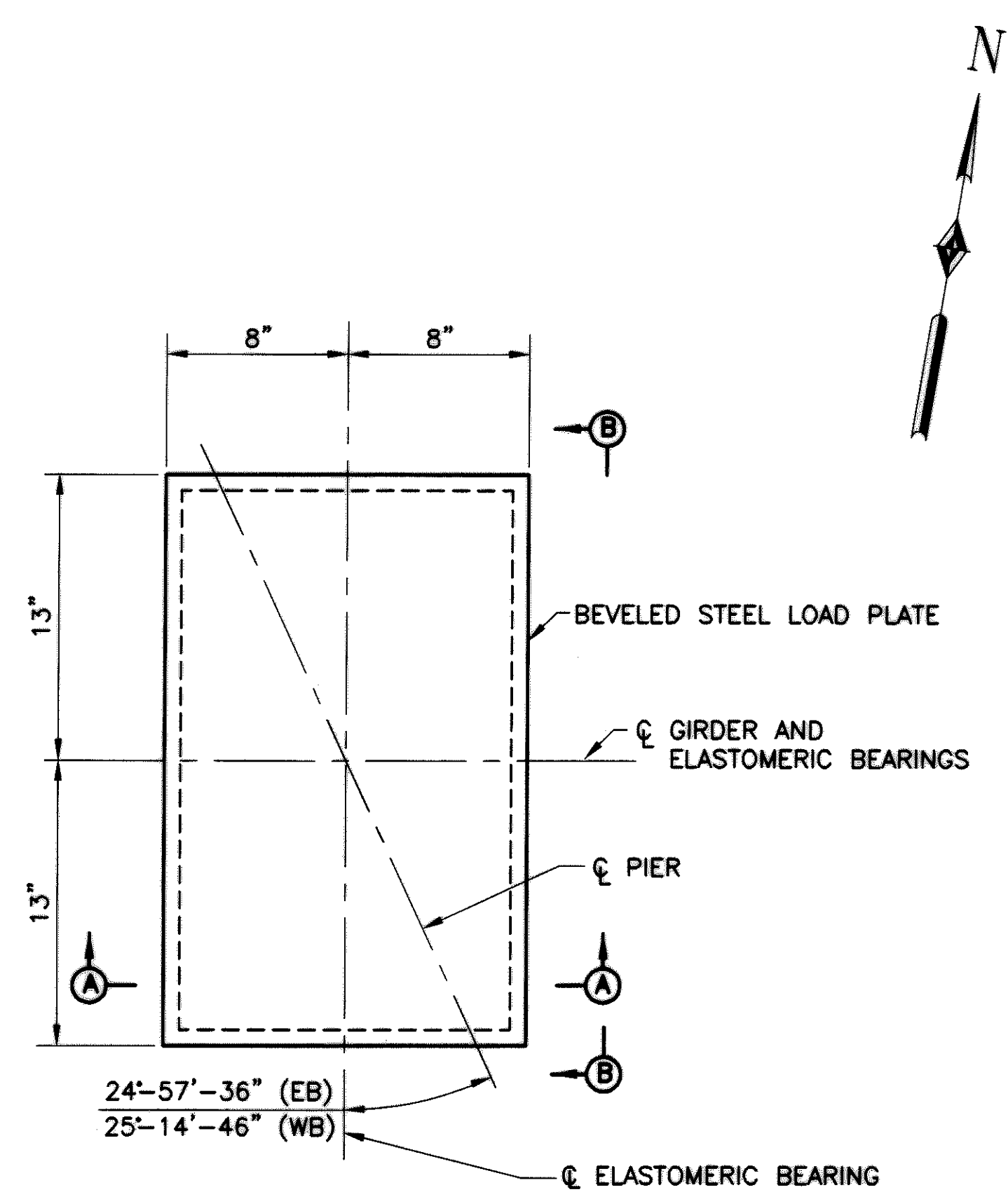
\*FIELD BEND IF NECESSARY

**NOTES**

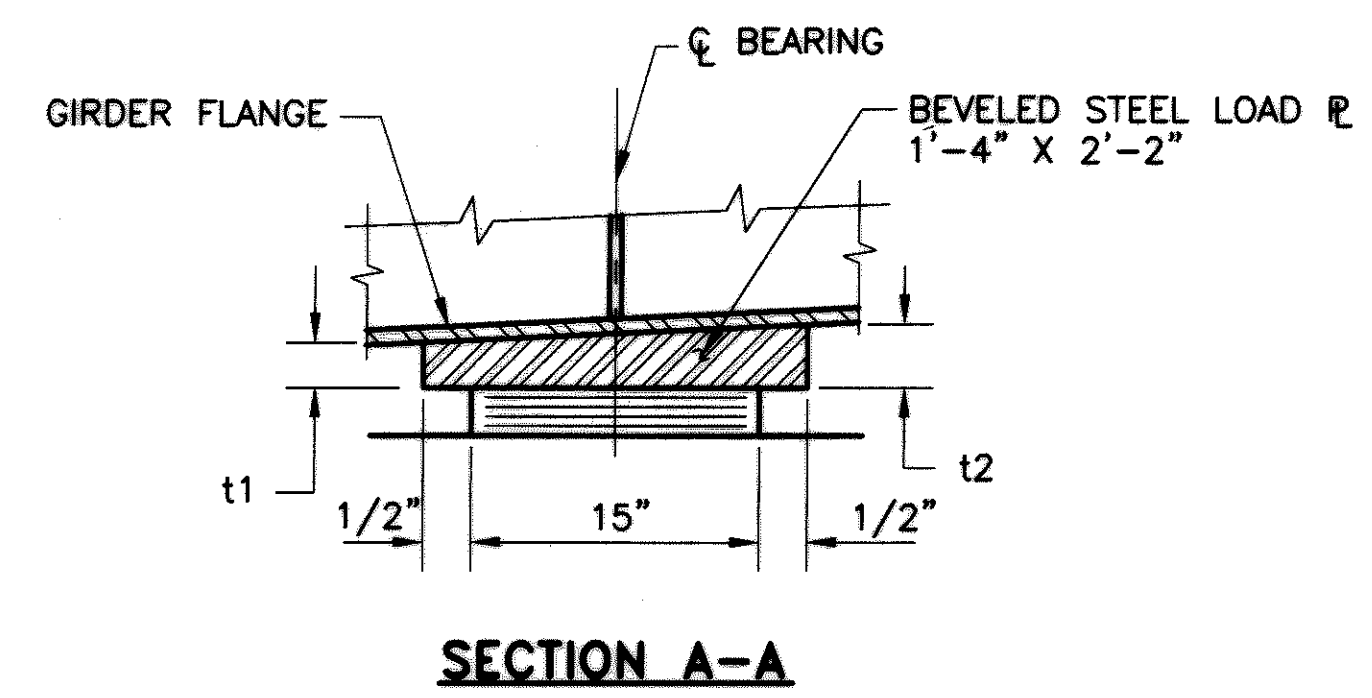
- FOR ADDITIONAL NOTES SEE SHEET 16/21.
- FOR ADDITIONAL NOTES AND DETAILS SEE ODOT STANDARD DRAWING SBR-1-99.
- FOR BRIDGE TERMINAL ASSEMBLY DETAILS SEE ODOT STANDARD DRAWING GR-3.1M AND GR-3.2M.

GFH 2/20/03 PLDIT12667

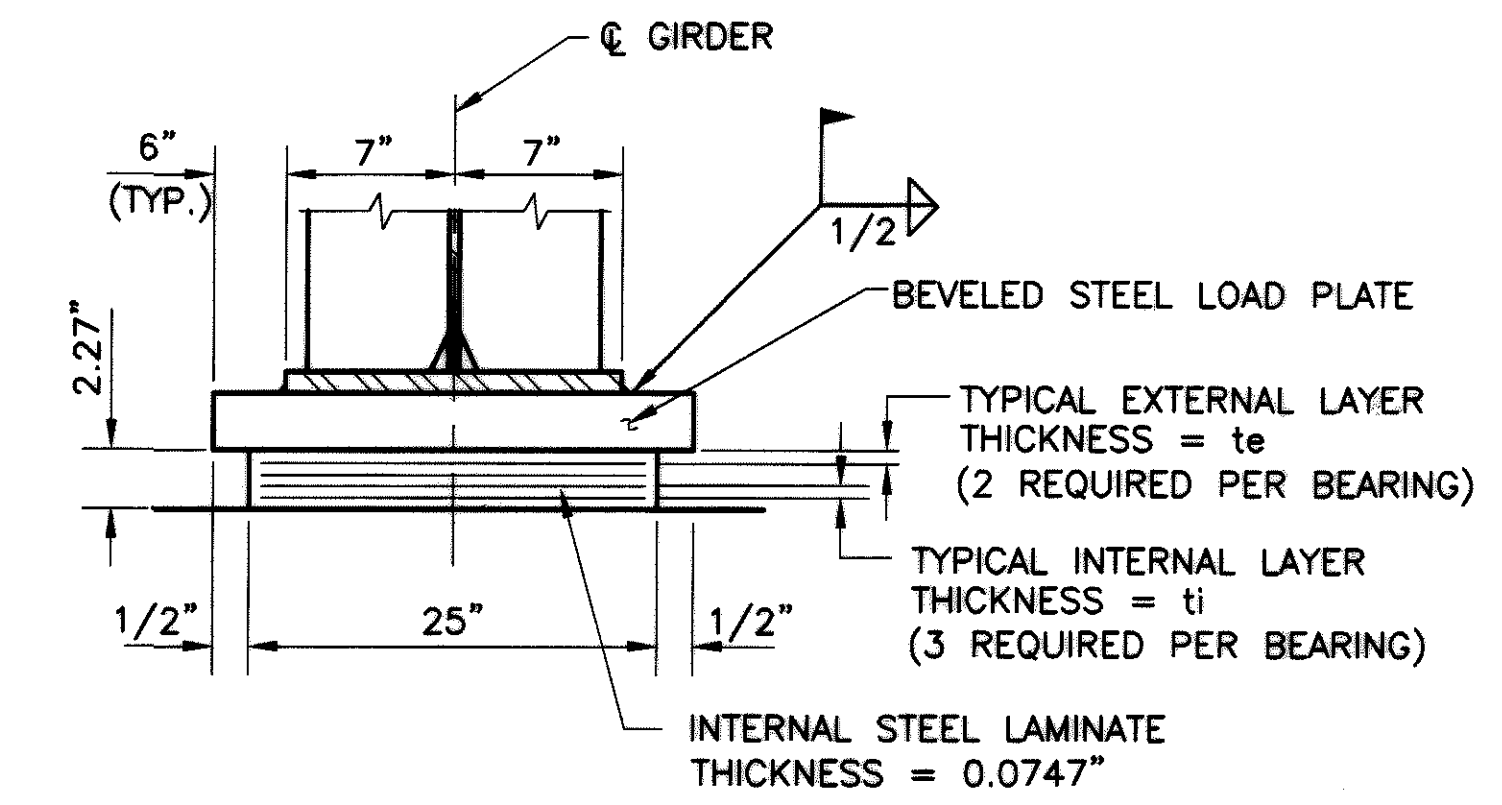
F:\DBS\470\BRIDGE\4\4\4\70PE04.DWG



**EXPANSION BEARING AT PIERS**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

- ① **ELASTOMERIC BEARINGS:** ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED IN ARTICLE 18.7.4.5 OF THE AASHTO DOCUMENT LISTED ABOVE. BEARINGS WERE DESIGNED UNDER SECTION 14.6.6 OF SECTION 14, BEARINGS, DIVISION I, DESIGN. TESTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARINGS, EACH.
- ② **LOAD PLATE:** THE STEEL LOAD PLATE (A572) SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. WELDING OF THE LOAD PLATE TO THE SUPERSTRUCTURE (A572) SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- ③ **BASIS OF PAYMENT:** THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, TESTING, METALIZING AND PAINTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR THE APPROPRIATE ITEM 516, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN.

LAMINATED ELASTOMERIC BEARINGS												
LOCATION	BEARING DIMENSIONS						STEEL LOAD PLATE			DEAD LOAD	LIVE LOAD WITHOUT IMPACT	TOTAL
	L	W	t <sub>i</sub>	t <sub>e</sub>	T	N	LENGTH X WIDTH	t <sub>1</sub>	t <sub>2</sub>			
PIER 1 (EB)	15"	25"	0.45"	0.31"	2.27"	4	16" X 26"	2"	2 1/8"	240 k	116 k	356 k
PIER 2 (EB)	15"	25"	0.45"	0.31"	2.27"	4	16" X 26"	2"	2 3/16"	240 k	116 k	356 k
PIER 1 (WB)	15"	25"	0.45"	0.31"	2.27"	4	16" X 26"	2"	2 1/16"	240 k	116 k	356 k
PIER 2 (WB)	15"	25"	0.45"	0.31"	2.27"	4	16" X 26"	2"	2 1/8"	240 k	116 k	356 k

N = NO. OF STEEL LAMINATES  
 T = TOTAL THICKNESS OF ELASTOMERIC BEARING

GFH 5/29/02 PLOT111  
 F:\JD85\70\BRIDGE\04\INDG\7\LEBR4.DWG

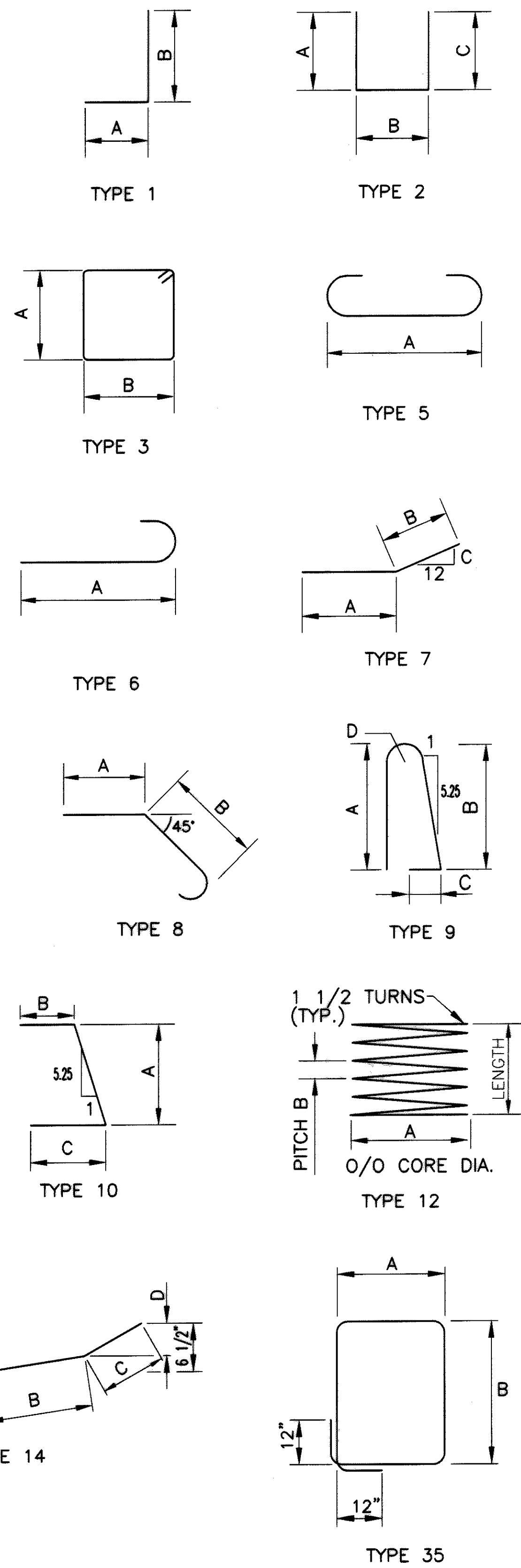


MARK	NUMBER			LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	REAR	FWD	TOTAL								
ABUTMENTS (EASTBOUND) - CONTINUED											
A531		1	1	4'-2"							3'-2"
		SER	SER	TO	37	STR.					
		4	4	13'-8"							
		1	1	5'-4"							
A532		SER	SER	TO	42	STR.					3'-2"
		4	4	14'-10"							
A533		1	1	14'-7"	15	STR.					
A534		1	1	15'-9"	16	STR.					
A535		1	1	15'-11"	17	7	15'-1"	10"	5 1/16"		
A536		1	1	17'-1"	18	7	15'-1"	2'-0"	5 1/16"		
A537	1		1	14'-11"	16	2	6'-5"	2'-4"	6'-5"		
A538		1	1	16'-1"	17	2	7'-0"	2'-4"	7'-0"		
A601	47	47	94	10'-9"	1,518	13					
A801	20	20	40	30'-0"	3,204	STR.					
A802	4	4	8	32'-9"	700	STR.					
TOTAL					10,435	lbs.					

MARK	NUMBER			LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	PIER 1	PIER 2	TOTAL								
PIER (WESTBOUND)											
SP401	3		3	17'-8"	944	12	2'-6"	4 1/2"			
SP402		3	3	16'-11"	906	12	2'-6"	4 1/2"			
P501	35	35	70	4'-5"	322	2	1'-0"	2'-8"	1'-0"		
P502	24	24	48	25'-0"	1,252	STR.					
P503	12	12	24	6'-3"	156	2	2'-0"	2'-6"	2'-0"		
P504	16	16	32	8'-7"	286	2	3'-1"	2'-8"	3'-1"		
P505	116	116	232	9'-7"	2,319	2	3'-7"	2'-8"	3'-7"		
P601	4	4	8	4'-2"	50	1	1'-7"	2'-9"			
P602	6	6	12	12'-8"	228	35	2'-11"	2'-9"			
P901	60	60	120	11'-2"	4,556	5	8'-8"				
P902	10	10	20	4'-0"	272	1	1'-7"	2'-9"			
P1001	30	30	60	12'-8"	3,270	1	11'-0"	1'-10"			
P1002	10	10	20	21'-8"	1,865	STR.					
P1003	10		10	22'-3"	957	STR.					
P1004	10		10	22'-7"	972	STR.					
P1005		10	10	20'-11"	900	STR.					
P1006		10	10	21'-11"	943	STR.					
P1007	7	7	14	41'-5"	2,495	1	2'-6"	39'-3"			
P1008	7	7	14	22'-5"	1,350	1	2'-6"	20'-3"			
P1009	14	14	28	29'-2"	3,514	7	25'-8"	3'-7"	3 3/8		
TOTAL					27,557	lbs.					

MARK	NUMBER			LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	PIER 1	PIER 2	TOTAL								
PIER (EASTBOUND)											
SP403	3		3	17'-1"	923	12	2'-6"	4 1/2"			
SP404		3	3	15'-4"	829	12	2'-6"	4 1/2"			
P501	35	35	70	4'-5"	322	2	1'-0"	2'-8"	1'-0"		
P502	24	24	48	25'-0"	1,252	STR.					
P503	12	12	24	6'-3"	156	2	2'-0"	2'-6"	2'-0"		
P504	16	16	32	8'-7"	286	2	3'-1"	2'-8"	3'-1"		
P505	116	116	232	9'-7"	2,319	2	3'-7"	2'-8"	3'-7"		
P601	4	4	8	4'-2"	50	1	1'-7"	2'-9"			
P602	6	6	12	12'-8"	228	35	2'-11"	2'-9"			
P901	60	60	120	11'-2"	4,556	5	8'-8"				
P902	10	10	20	4'-0"	272	1	1'-7"	2'-9"			
P1001	30	30	60	12'-8"	3,270	1	11'-0"	1'-10"			
P1002	20		20	21'-8"	1,865	STR.					
P1003	NOT USED										
P1004	NOT USED										
P1005	10		10	20'-11"	900	STR.					
P1006	NOT USED										
P1007	7	7	14	41'-5"	2,495	1	2'-6"	39'-3"			
P1008	7	7	14	22'-5"	1,350	1	2'-6"	20'-3"			
P1009	14	14	28	29'-2"	3,514	7	25'-8"	3'-7"	3 3/8		
P1010		10	10	19'-4"	832	STR.					
P1011		20	20	20'-0"	1,721	STR.					
TOTAL					27,140	lbs.					

**BENDING DIAGRAMS**



**NOTES:**

① FOR NOTES SEE SHEET 19/21

DESIGN AGENCY  
**EUTHELIAS INC.**  
 CONSULTING ENGINEERS  
 CLEVELAND, OHIO

DATE  
 9-02

REVISION  
 RAB  
 STRUCTURE FILE NUMBER  
 8502013/8502021

DRAWN  
 K.J.W.  
 REVISION

DESIGNED  
 K.J.W.  
 CHECKED  
 G.F.H.

**REINFORCING STEEL LIST**  
 BRIDGE NO. WAY-30-1309 L&R  
 U.S. 30 OVER APPLE CREEK

**WAY-30-1183**

20 / 21

648  
 741

F:\JOBS\170\BRIDGE\04\DWG\470R\04B.DWG  
 GFH 9-6-02 PLOT11

MARK	NUMBER			LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	REAR	FWD	TOTAL								
SUPERSTRUCTURE (WESTBOUND)											
S401			585	30'-0"	11,723	STR					
S402			65	13'-2"	572	STR					
S501			672	30'-0"	21,027	STR					
S502			64	20'-9"	1,385	STR					
S503			1352	24'-1"	33,961	STR					
			2	4'-0"							
S504			SER.	TO	748	STR					9 3/8"
			26	23'-7"							
S505	NOT USED										
S506			12	6'-4"	79	STR					
S507			690	29'-0"	20,870	STR					
S508			650	18'-10"	12,768	STR					
			2	3'-0"							
S509			SER.	TO	443	STR					9 5/8"
			20	18'-3"							
			2	4'-11"							
S510			SER.	TO	1,043	STR					9 3/4"
			30	28'-5"							
S511			8	4'-1"	34	STR					
S512			12	25'-5"	318	STR					
S513			484	7'-5"	3,744	9	3'-0"	3'-2"	1'-1"	2 3/4"	
S514			32	10'-0"	334	STR					
S515			20	5'-6"	115	STR					
S516			12	5'-6"	69	14	1'-8"	2'-5"	1'-5"	5"	
S517			68	8'-3"	585	2	4'-9"	1'-8"	2'-1"		
S518			68	5'-0"	355	1	1'-6"	3'-8"			
S519			68	11'-1"	786	2	4'-7"	2'-2"	4'-7"		
			2	7'-7"							
S520			SER.	TO	717	STR					9 1/4"
			22	23'-8"							
S601			272	30'-0"	12,256	STR					
S602			2	24'-0"	72	STR					
S603			484	3'-11"	2,847	10	1'-11"	1'-1"	1'-1"		
S604			484	2'-10"	2,060	1	1'-1"	1'-11"			
			8	4'-1"				3'-3"			
S605			SER.	TO	595	1	1'-0"	TO			1"
			11	4'-11"				4'-1"			
S606			32	4'-2"	200	1	1'-0"	3'-3"			
S607			128	20'-8"	3,973	STR					
D801			58	5'-2"	800	8	1'-5"	2'-10"			
S801			36	33'-0"	3,172	STR					
S802			36	23'-11"	2,299	STR					
					139,950	lbs.					

MARK	NUMBER			LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	REAR	FWD	TOTAL								
SUPERSTRUCTURE (EASTBOUND)											
S401			585	30'-0"	11,723	STR					
S402			65	13'-2"	572	STR					
S501			672	30'-0"	21,027	STR					
S502			64	20'-9"	1,385	STR					
S503			1348	24'-1"	33,860	STR					
			2	4'-0"							
S504			SER.	TO	748	STR					9 3/8"
			26	23'-7"							
			2	7'-1"							
S505			SER.	TO	748	STR					9 1/4"
			23	24'-1"							
S506			10	6'-4"	66	STR					
S507			688	29'-0"	20,810	STR					
S508			648	18'-10"	12,729	STR					
			2	3'-0"							
S509			SER.	TO	443	STR					9 5/8"
			20	18'-3"							
S510	NOT USED										
S511	NOT USED										
S512			12	25'-5"	318	STR					
S513			484	7'-5"	3,744	9	3'-0"	3'-2"	1'-1"	2 3/4"	
S514			32	10'-0"	334	STR					
S515			20	5'-6"	115	STR					
S516			12	5'-6"	69	14	1'-8"	2'-5"	1'-5"	5"	
S517			68	8'-3"	585	2	4'-9"	1'-8"	2'-1"		
S518			68	5'-0"	355	1	1'-6"	3'-8"			
S519			68	11'-1"	786	2	4'-7"	2'-2"	4'-7"		
S520	NOT USED										
			2	4'-3"							
S521			SER.	TO	1,004	STR					9 3/4"
			30	27'-10"							
S522			8	3'-8"	31	STR					
S601			272	30'-0"	12,256	STR					
S602			2	24'-0"	72	STR					
S603			484	3'-11"	2,847	10	1'-11"	1'-1"	1'-1"		
S604			484	2'-10"	2,060	1	1'-1"	1'-11"			
			8	4'-1"				3'-3"			
S605			SER.	TO	595	1	1'-0"	TO			1"
			11	4'-11"				4'-1"			
S606			32	4'-2"	200	1	1'-0"	3'-3"			
S607			128	20'-8"	3,973	STR					
D801			58	5'-2"	800	8	1'-5"	2'-10"			
S801			36	33'-0"	3,172	STR					
S802			36	23'-11"	2,299	STR					
					139,726	lbs.					

**NOTES:**

- ① FOR ADDITIONAL NOTES SEE SHEET 19/21.
- ② FOR BENDING DIAGRAMS SEE SHEET 20/21.

GFH 2/20/03 PLOT11

F:\JOBS\470\BRIDGE\04\DWG\47BRD4C.DWG