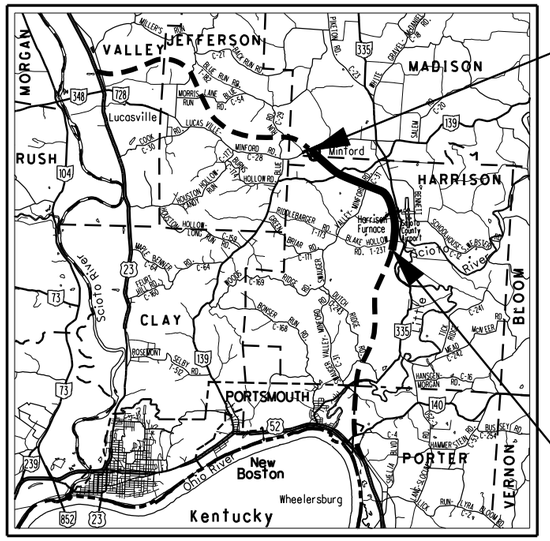


END PROJECT
STA. 536+15.00
SLM = 10.15

BEGIN PROJECT
STA. 353+00.00
SLM = 6.69

LOCATION MAP

LATITUDE: N 38°50'25" LONGITUDE: W 82°50'50"

SCALE IN MILES
0 1 2 3 4

N

PORTION TO BE IMPROVED
INTERSTATE & DIVIDED HIGHWAY
UNDIVIDED STATE & FEDERAL ROUTES
OTHER ROADS

DESIGN DESIGNATION SR823 (TR234 INTERCHANGE TO US 23 INTERCHANGE)

CURRENT ADT (2010)	19,800
DESIGN YEAR ADT (2030)	26,000
DESIGN HOURLY VOLUME (2030)	2600
DIRECTIONAL DISTRIBUTION	55%
T_D	7%
TRUCKS (24 HOUR B&C)	14%
DESIGN SPEED	70 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION	RURAL PRINCIPAL ARTERIAL

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:

HDR

HDR ENGINEERING, INC.
9987 CARVER RD, SUITE 200
CINCINNATI, OHIO 45242
513-984-7500

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

SCI-823-6.81
PART 3

MADISON & HARRISON TOWNSHIPS
SCIOTO COUNTY

PART 1 - EARTHWORK
PART 2 - SR 335 & BRIDGE NO. SCI-TR234-0122
PART 3 - BRIDGE NO. SCI-823-0837 L & R
PART 4 - BRIDGE NO. SCI-823-0917 L & R
PART 5 - PAVEMENT

INDEX OF SHEETS

ENGINEERS SEAL:
STRUCTURE SCI-823-0837
(KZF DESIGN)
SIGNED:
DATE:

ENGINEERS SEAL:
ROADWAY PLANS
(HDR ENGINEERING, INC.)
SIGNED:
DATE:

NOTE:
ITEMS THAT WILL BE PERFORMED UNDER SEPARATE PART WILL BE DENOTED BY THE ABBREVIATION "NIP" THROUGHOUT THE PLAN SET.

STANDARD CONSTRUCTION DRAWINGS		SUPPLEMENTAL SPECIFICATIONS
	SEE PART 1	SPECIAL PROVISIONS

PROJECT DESCRIPTION (PART 3)

CONSTRUCTION OF SR823 BRIDGE OVER SWAUGER VALLEY-MINFORD RD.

PROJECT EARTH DISTURBED AREAS

SEE PART 1

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 OF THE OHIO REVISED CODE.

2010 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 EXCEPT FOR THE SIDE ROADS AS DESCRIBED ON SHEET 9 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED _____
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. G990 (624)
PID NO. 19415
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
SCI-823-6.81
1
53

BENCHMARKS:

BM #1	RAILROAD SPIKE SET IN NORTH SIDE OF OAK TREE STA. 349+97, 190' RT., ELEV.=657.72 N = 302441.6358, E = 1868042.3000	BM #5	TOP OF CONCRETE MONUMENT WITH "X" STA. 365+16, 392' RT., ELEV.=643.18 N = 303912.6720, E = 1868182.1910	BM "A"	RAILROAD SPIKE SET IN WOOD POST ABOUT 170' WEST OF CENTERLINE STATION 10+23.46 (TR 234) AND 37' NORTH OF EXISTING CENTERLINE, ELEV.=719.57 N = 304731.6782, E = 1865592.4912
BM #2	RAILROAD SPIKE SET IN NORTH SIDE OF OAK TREE STA. 352+73, 330' RT., ELEV.=641.10 N = 302610.4334, E = 1868184.7478	BM #6	RAILROAD SPIKE SET IN WEST SIDE OF OAK TREE STA. 371+16, 488' RT., ELEV.=653.97 N = 304553.4892, E = 1868169.0902	BM "B"	CHISELED SQUARE ON EAST END OF RETAINING WALL STA. 371+76, 662' RT. ELEV.=609.96 N = 304654.2464, E = 1868325.0882
BM #3	TOP OF CONCRETE MILE MARKER POST No. 8 STA. 356+22, 389' RT., ELEV.=632.90 N = 302975.9477, E = 1868247.3226	BM #7	RAILROAD SPIKE SET IN WOOD FENCE POST STA. 381+08, 557' RT. ELEV.=646.20 N = 305547.9483, E = 1868000.8797		
BM #4	RAILROAD SPIKE SET IN SOUTHWEST CORNER OF RETAINING WALL STA. 363+83, 460' RT., ELEV.=622.55 N = 303781.7810, E = 1868266.1064	BM #8	RAILROAD SPIKE SET IN WOOD FENCE POST STA. 386+68, 558' RT.ELEV.=659.05 N = 306093.6216, E = 1867868.9028		

NOTE:
SR823, TR234 RAMPS, TR234, SR335, AND CR540 IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP)

G990 (624)
BEGIN PROJECT
PHASE - 1
STA 353+00.00
SLM = 6.69

PHASE-3
PID 77366
SCI-823-0.00
BY OTHERS

BRIDGE NO.
SCI-823-0727 L&R
NOT IN CONTRACT

BRIDGE NO.
SCI-TR234-0122
NOT IN PART

MATCH LINE STA. 390+00 SR 823

LEGEND:

= REMOVAL

PAVEMENT TO BE CONSTRUCTED IN OTHER PART

PAVEMENT TO BE CONSTRUCTED BY OTHERS, NOT IN CONTRACT

NOTES:

1. FOR HORIZONTAL CURVE DATA SEE HORIZONTAL CURVE DATA SHEET.
2. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED BEE
CHECKED JMB

SCHEMATIC PLAN - SR823
STA. 335+00.00 TO STA. 390+00.00

SCI-823-6.81

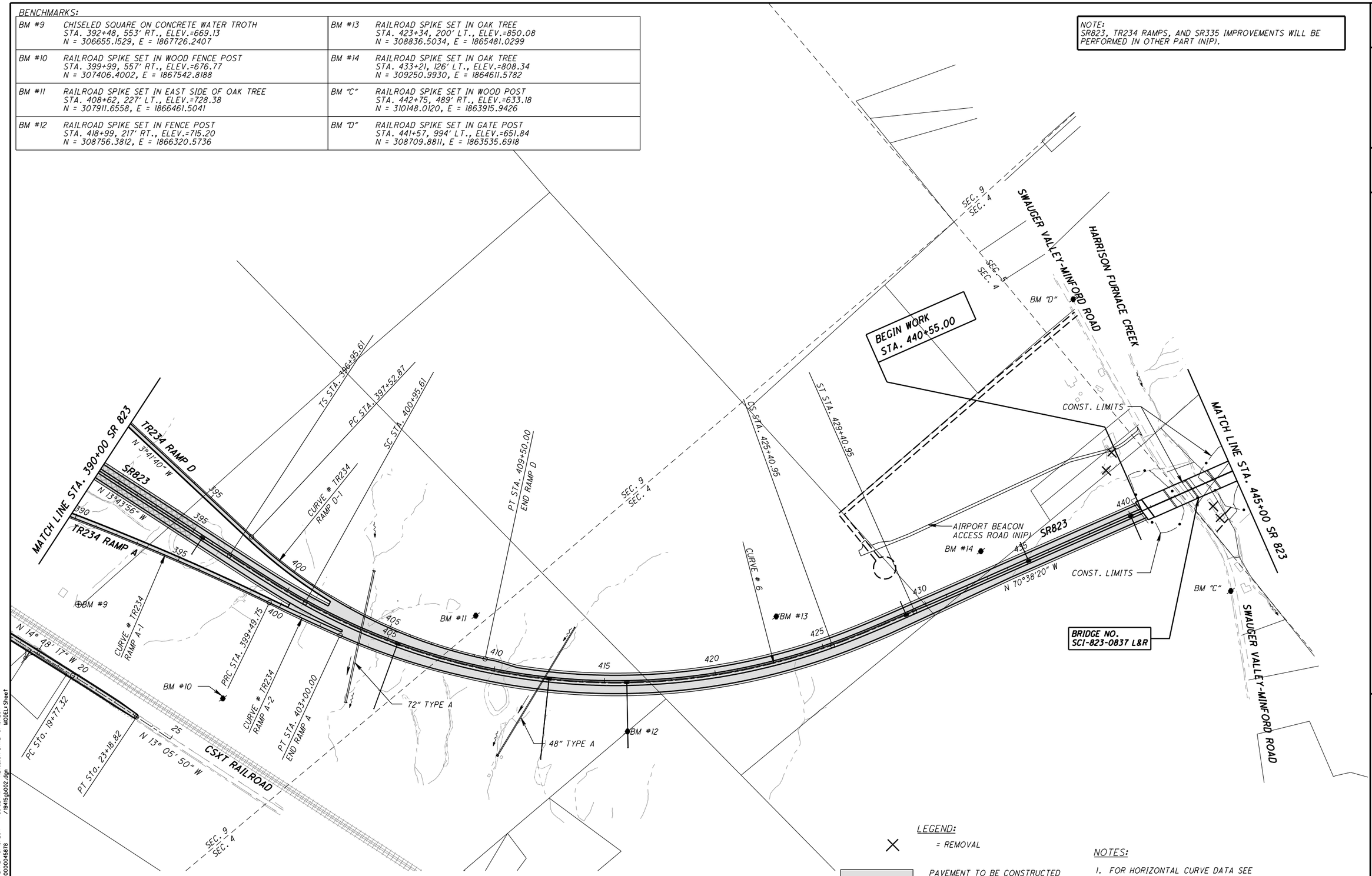
2
53

USER: CWahlbr PLOT DATE: 9/15/2011 713132 AM REVISION DATE: 9/15/2011 MODEL: Sheet
FILE:...\MHDR.CU00000000045878 /1845gd001.dgn

BENCHMARKS:

BM #9	CHISELED SQUARE ON CONCRETE WATER TROTH STA. 392+48, 553' RT., ELEV.=669.13 N = 306655.1529, E = 1867726.2407	BM #13	RAILROAD SPIKE SET IN OAK TREE STA. 423+34, 200' LT., ELEV.=850.08 N = 308836.5034, E = 1865481.0299
BM #10	RAILROAD SPIKE SET IN WOOD FENCE POST STA. 399+99, 557' RT., ELEV.=676.77 N = 307406.4002, E = 1867542.8188	BM #14	RAILROAD SPIKE SET IN OAK TREE STA. 433+21, 126' LT., ELEV.=808.34 N = 309250.9930, E = 1864611.5782
BM #11	RAILROAD SPIKE SET IN EAST SIDE OF OAK TREE STA. 408+62, 227' LT., ELEV.=728.38 N = 307911.6558, E = 1866461.5041	BM "C"	RAILROAD SPIKE SET IN WOOD POST STA. 442+75, 489' RT., ELEV.=633.18 N = 310148.0120, E = 1863915.9426
BM #12	RAILROAD SPIKE SET IN FENCE POST STA. 418+99, 217' RT., ELEV.=715.20 N = 308756.3812, E = 1866320.5736	BM "D"	RAILROAD SPIKE SET IN GATE POST STA. 441+57, 994' LT., ELEV.=651.84 N = 308709.8811, E = 1863535.6918

NOTE:
SR823, TR234 RAMPS, AND SR335 IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP).



LEGEND:

× = REMOVAL

PAVEMENT TO BE CONSTRUCTED IN OTHER PART

PAVEMENT TO BE CONSTRUCTED BY OTHERS, NOT IN CONTRACT

NOTES:

1. FOR HORIZONTAL CURVE DATA SEE HORIZONTAL CURVE DATA SHEET.
2. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED BEE
CHECKED JMB

SCHEMATIC PLAN - SR823
STA. 390+00.00 TO STA. 445+00.00

SCI-823-6.81

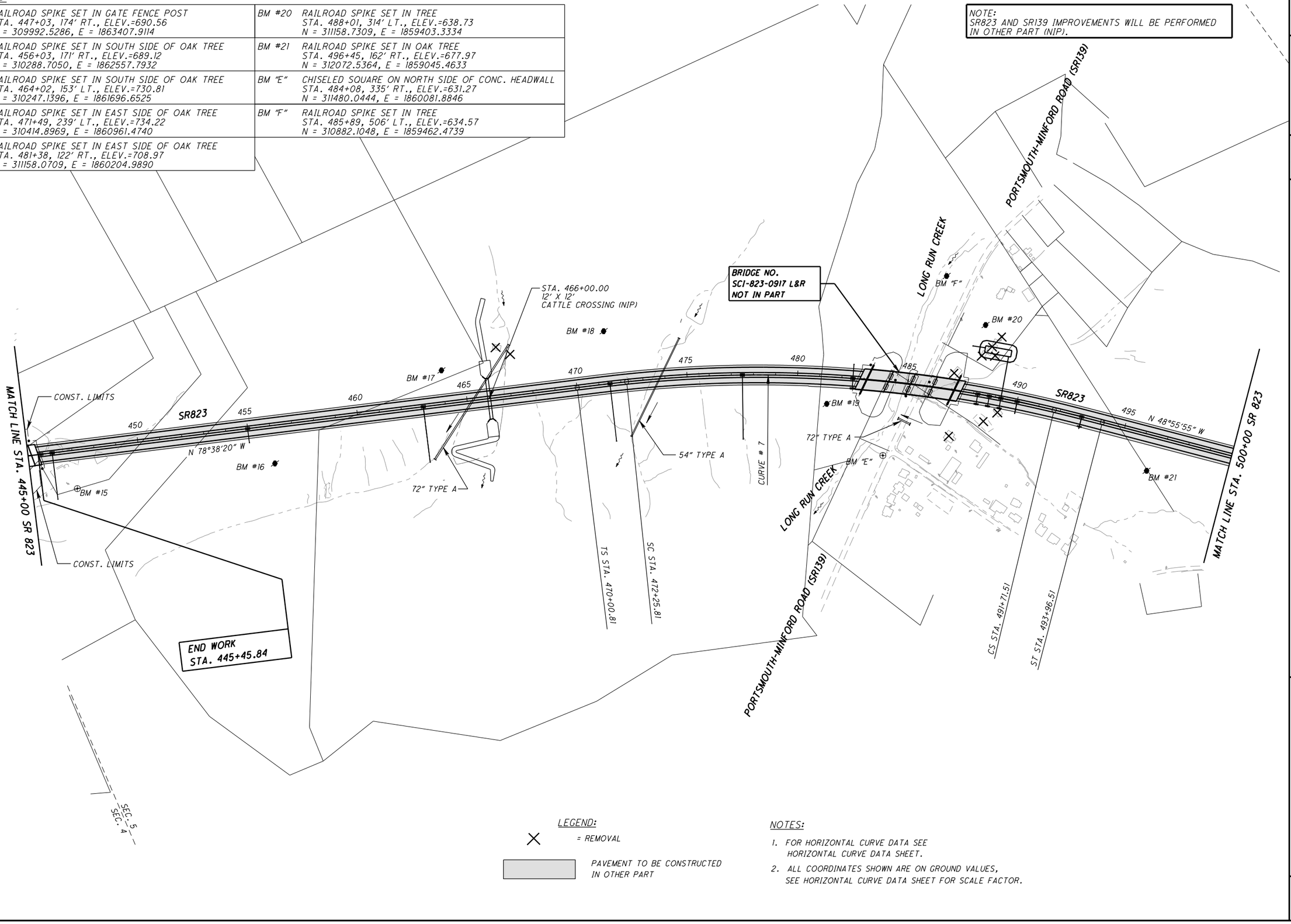
3
53

USER: CWahlbr PLOT DATE: 9/15/2011 7:38:32 AM REVISION DATE: 9/15/2011 MODEL: Sheet
FILE: ...\MHDR.CU0000000000045878 /1845gb002.dgn

BENCHMARKS:

BM #15	RAILROAD SPIKE SET IN GATE FENCE POST STA. 447+03, 174' RT., ELEV.=690.56 N = 309992.5286, E = 1863407.9114	BM #20	RAILROAD SPIKE SET IN TREE STA. 488+01, 314' LT., ELEV.=638.73 N = 311158.7309, E = 1859403.3334
BM #16	RAILROAD SPIKE SET IN SOUTH SIDE OF OAK TREE STA. 456+03, 171' RT., ELEV.=689.12 N = 310288.7050, E = 1862557.7932	BM #21	RAILROAD SPIKE SET IN OAK TREE STA. 496+45, 162' RT., ELEV.=677.97 N = 312072.5364, E = 1859045.4633
BM #17	RAILROAD SPIKE SET IN SOUTH SIDE OF OAK TREE STA. 464+02, 153' LT., ELEV.=730.81 N = 310247.1396, E = 1861696.6525	BM "E"	CHISELED SQUARE ON NORTH SIDE OF CONC. HEADWALL STA. 484+08, 335' RT., ELEV.=631.27 N = 311480.0444, E = 1860081.8846
BM #18	RAILROAD SPIKE SET IN EAST SIDE OF OAK TREE STA. 471+49, 239' LT., ELEV.=734.22 N = 310414.8969, E = 1860961.4740	BM "F"	RAILROAD SPIKE SET IN TREE STA. 485+89, 506' LT., ELEV.=634.57 N = 310882.1048, E = 1859462.4739
BM #19	RAILROAD SPIKE SET IN EAST SIDE OF OAK TREE STA. 481+38, 122' RT., ELEV.=708.97 N = 311158.0709, E = 1860204.9890		

NOTE:
SR823 AND SR139 IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP).



LEGEND:

× = REMOVAL

PAVEMENT TO BE CONSTRUCTED IN OTHER PART

NOTES:

1. FOR HORIZONTAL CURVE DATA SEE HORIZONTAL CURVE DATA SHEET.
2. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED BEE
CHECKED JMB

SCHEMATIC PLAN - SR823
STA. 445+00.00 TO STA. 500+00.00

SCI-823-6.81

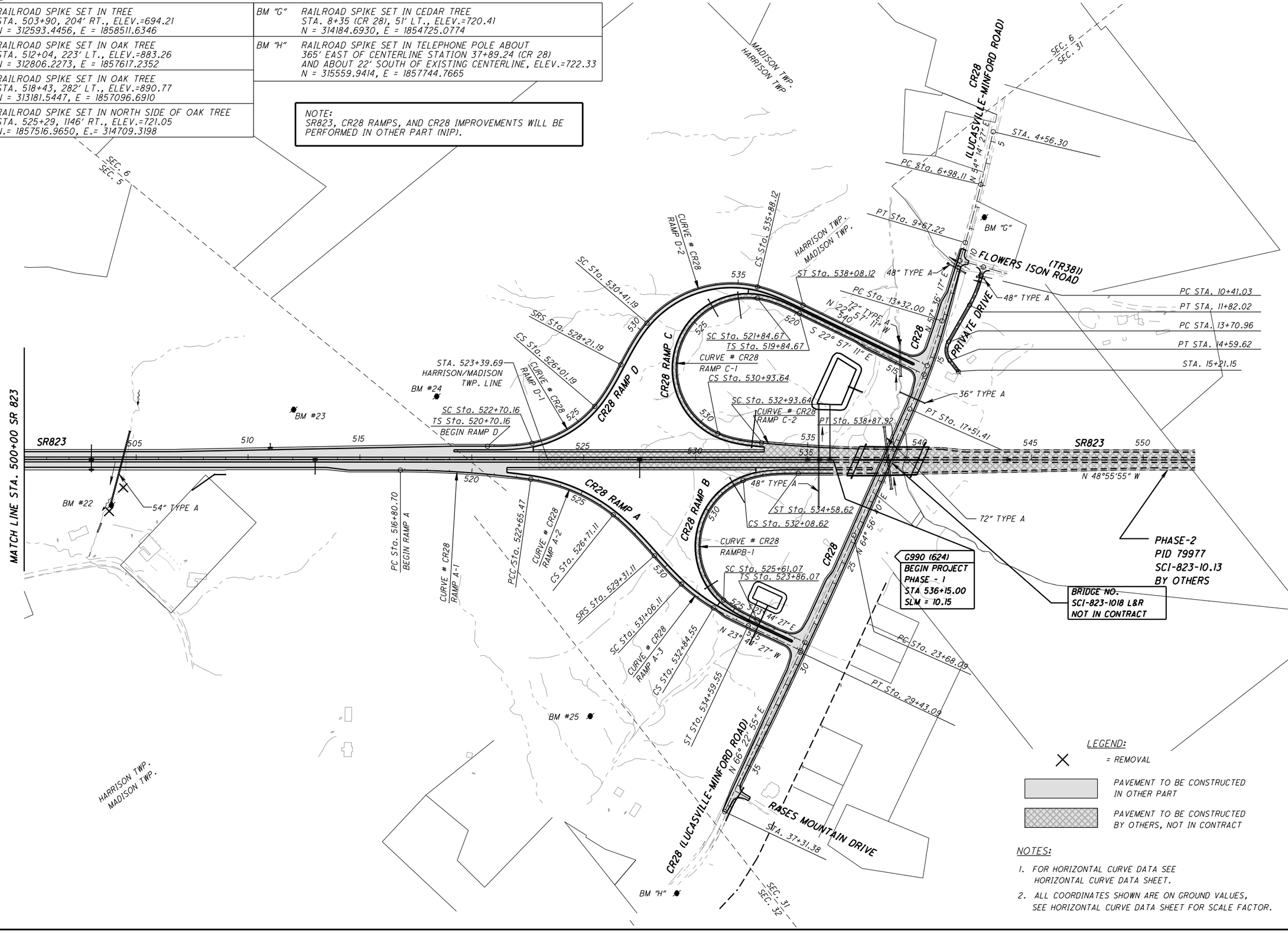
4
53

USER: cmohlbri PLOT DATE: 9/15/2011 7:38:38 AM REVISION DATE: 9/15/2011
FILES: ...\MNOR_CU\000000045878 /19415gb003.dgn MODEL: Sheet

BENCHMARKS:

BM #22 RAILROAD SPIKE SET IN TREE STA. 503+90, 204' RT., ELEV.=694.21 N = 312593.4456, E = 1858511.6346	BM "G" RAILROAD SPIKE SET IN CEDAR TREE STA. 8+35 (CR 28), 51' LT., ELEV.=720.41 N = 314184.6930, E = 1854725.0774
BM #23 RAILROAD SPIKE SET IN OAK TREE STA. 512+04, 223' LT., ELEV.=883.26 N = 312806.2273, E = 1857617.2352	BM "H" RAILROAD SPIKE SET IN TELEPHONE POLE ABOUT 365' EAST OF CENTERLINE STATION 37+89.24 (CR 28) AND ABOUT 22' SOUTH OF EXISTING CENTERLINE, ELEV.=722.33 N = 315559.9414, E = 1857744.7665
BM #24 RAILROAD SPIKE SET IN OAK TREE STA. 518+43, 282' LT., ELEV.=890.77 N = 313181.5447, E = 1857096.6910	
BM #25 RAILROAD SPIKE SET IN NORTH SIDE OF OAK TREE STA. 525+29, 1146' RT., ELEV.=721.05 N.= 1857516.9650, E.= 314709.3198	

NOTE:
SR823, CR28 RAMPS, AND CR28 IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP).



LEGEND:

X = REMOVAL

PAVEMENT TO BE CONSTRUCTED IN OTHER PART

PAVEMENT TO BE CONSTRUCTED BY OTHERS, NOT IN CONTRACT

NOTES:

1. FOR HORIZONTAL CURVE DATA SEE HORIZONTAL CURVE DATA SHEET.
2. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED BEE
CHECKED JMB

SCHEMATIC PLAN - SR823
STA. 500+00.00 TO STA. 555+00.00

SCI-823-6.81

5
53

USER: CWahlbr1 PLOT DATE: 9/15/2011 7:38:51 AM REVISION DATE: 9/15/2011
FILE:...\MHDR.CU0000000004578 /1845gb004.dgn MODEL: Sheet

HORIZONTAL CURVE DATA

ALIGNMENT	CURVE NO.	P.I. STATION	P.I. COORDINATES NORTH	P.I. COORDINATES EAST	P.I. C_{CI} STATION	P.I. C_{CI} COORDINATES NORTH	P.I. C_{CI} COORDINATES EAST	△	△ OR △ $_{CI}$	D_C	R OR R_{CI}	L_S OR L_{SI}	θ_S OR θ_{SI}	LT OR LT_1	ST OR ST_1	L_{S2}	θ_{S2}	LT_2	ST_2
SR823	CURVE #5	346+07.50	301,733.59	1,868,360.11	345+94.11	301,738.66	1,868,323.63	43°17'19.64" LT.	41°58'34.64" LT.	0°45'00.0"	7,639.44	175.00	0°39'22.5" LT.	116.67	58.33				
	CURVE #6	414+49.27	308,662.80	1,866,666.83	413+98.35	308,586.28	1,866,582.40	56°54'23.97" LT.	48°54'23.97" LT.	2°00'00.0"	2,864.79	400.00	4°00'00.0" LT.	266.73	133.40				
	CURVE #7	482+11.90	310,991.61	1,860,039.47	482+08.12	311,009.88	1,860,050.11	21°42'25.19" RT.	19°27'25.19" RT.	1°00'00.0"	5,729.58	225.00	1°07'30.0" RT.	150.00	75.00				
TR234	CURVE #1	14+27.25	304,800.62	1,866,158.43	13+86.05	304,805.97	1,866,114.13	40°05'33.00" LT.	30°11'32.71" LT.	6°00'00.0"	954.93	105.00	3°09'00.0" LT.	70.01	35.01	225.00	6°45'00.0" LT.	150.11	75.10
	CURVE #2	23+26.93	305,555.66	1,866,700.17	22+85.59	305,501.54	1,866,701.70	40°36'30.00" RT.	24°06'29.71" RT.	6°00'00.0"	954.93	225.00	6°45'00.0" RT.	150.11	75.10	325.00	9°45'00.0" RT.	216.99	108.63
TR234 RAMP A	CURVE #1	393+64.93	306,688.48	1,867,307.20				5°51'12.19" RT.		0°30'00.0"	11,459.16								
	CURVE #2	401+24.89	307,398.76	1,867,034.05				1°55'15.62" LT.		0°32'54.5"	10,446.37								
TR234 RAMP B	CURVE #1	371+73.52	304,518.99	1,867,747.48				8°05'30.33" RT.		1°00'00.0"	5,729.58								
TR234 RAMP C	CURVE #1	371+63.61	304,491.54	1,867,629.38	371+61.67	304,486.97	1,867,615.78	17°51'23.79" LT.	12°51'23.79" LT.	2°30'00.0"	2,291.83	200.00	2°30'00.0" LT.	133.35	66.68				
TR234 RAMP D	CURVE #1	403+66.60	307,578.02	1,866,914.20				31°07'31.70" LT.		2°36'00.0"	2,203.68								
CR28	CURVE #1	8+32.71	314,142.43	1,854,750.25				3°21'50.00" RT.		1°15'00.0"	4,583.66								
	CURVE #2	15+41.99	314,522.48	1,855,349.22				7°20'23.00" RT.		1°45'00.0"	3,274.04								
	CURVE #3	26+55.61	314,994.33	1,856,358.56				1°26'15.00" RT.		0°15'00.0"	22,918.31								
CR28 RAMP A	CURVE #1	519+73.56	313,515.69	1,857,214.36				7°59'30.83" RT.		1°22'00.0"	4,192.37								
	CURVE #2	525+50.54	313,952.26	1,856,835.67	524+73.20	313,893.83	1,856,886.35	40°10'22.38" RT.	30°25'22.38" RT.	7°30'00.0"	763.94	260.00	9°45'00.0" RT.	173.60	86.91				
	CURVE #3	531+98.00	314,623.96	1,856,826.67	531+95.64	314,620.79	1,856,812.06	22°58'25.78" LT.	11°35'55.78" LT.	6°30'00.0"	881.47	175.00	5°41'15.0" LT.	116.73	58.39				
CR28 RAMP B	CURVE #1	539+25.53	313,466.00	1,857,291.18	530+76.04	314,199.80	1,856,798.30	154°48'32.57" RT.	116°33'32.57" RT.	18°00'00.0"	318.31	175.00	15°45'00.0" RT.	117.13	58.76	250.00	22°30'00.0" RT.	168.03	84.58
CR28 RAMP C	CURVE #1	536+72.75	315,519.84	1,854,973.00	543+95.56	312,121.40	1,857,176.81	200°31'52.00" LT.	163°36'52.00" LT.	18°00'00.0"	318.31	200.00	18°00'00.0" LT.	134.03	67.30	200.00	18°55'00.0" LT.	130.91	70.63
	CURVE #2	535+91.00	314,507.12	1,855,933.51				5°26'51.27" LT.		0°55'00.0"	6,250.45								
CR28 RAMP D	CURVE #1	524+73.49	313,763.45	1,856,767.16	524+42.04	313,704.10	1,856,762.80	62°13'05.95" LT.	38°04'05.95" LT.	11°30'00.0"	498.22	200.00	11°30'00.0" LT.	133.62	66.92	220.00	12°39'00.0" LT.	147.04	73.68
	CURVE #2	534+17.71	313,399.52	1,855,826.45	533+45.89	313,505.77	1,855,871.44	88°11'49.21" RT.	62°53'49.21" RT.	11°30'00.0"	498.22	220.00	12°39'00.0" RT.	147.04	73.68				
PRIVATE DRIVE	CURVE #1	11+12.00	314,414.05	1,854,965.84				16°12'51.00" RT.		11°30'00.0"	498.22								
	CURVE #2	14+21.26	314,516.03	1,855,258.81				67°35'50.00" LT.		76°15'00.0"	75.14								
SR335	CURVE #1	2+56.17	305,186.24	1,868,348.28				30°12'19.08" RT.		9°30'00.0"	603.11								
	CURVE #2	7+26.05	305,657.37	1,868,270.81				4°25'31.60" LT.		2°30'00.0"	2,291.83								
	CURVE #3	21+48.08	307,035.53	1,867,920.17				1°42'27.09" RT.		0°30'00.0"	11,459.16								

HORIZONTAL CURVE DATA

ALIGNMENT	CURVE NO.	T_C OR T_{CI}	T, T_1,* OR T_S	L OR L_C OR L_{CI}	E OR E_S	T.S. STATION	T.S. COORDINATES NORTH	T.S. COORDINATES EAST	S.C./P.C. STATION	S.C./P.C. COORDINATES NORTH	S.C./P.C. COORDINATES EAST	C.S./P.T. STATION	C.S./P.T. COORDINATES NORTH	C.S./P.T. COORDINATES EAST	S.T. STATION	S.T. COORDINATES NORTH	S.T. COORDINATES EAST	SUPER ELEVATION e (FT/FT)
SR823	CURVE #5	2,930.69	3,119.08	5,596.84	579.69	314+88.42	299,020.40	1,866,821.52	316+63.42	299,172.96	1,866,907.26	372+60.26	304,593.37	1,867,660.58	374+35.26	304,763.52	1,867,619.69	0.028
	CURVE #6	1,302.74	1,753.66	2,445.33	396.24	396+95.61	306,959.26	1,867,083.12	400+95.61	307,345.43	1,866,979.17	425+40.95	309,102.85	1,865,386.45	429+40.95	309,244.18	1,856,012.34	0.065
	CURVE #7	982.31	1,211.09	1,945.70	104.73	470+00.81	310,590.11	1,861,182.07	472+25.81	310,666.09	1,860,970.29	491+71.51	311,640.55	1,859,296.99	493+96.51	311,787.25	1,859,126.40	0.036
TR234	CURVE #1	257.59	403.79	503.21	63.02	10+23.46	304,701.24	1,865,767.06	11+28.46	304,728.94	1,865,868.32	16+31.67	304,996.16	1,866,287.86	18+56.67	305,173.57	1,866,426.02	0.08
	CURVE #2	203.92	470.26	401.80	66.90	18+56.67	305,173.57	1,866,426.02	20+81.67	305,350.98	1,866,564.17	24+83.47	305,582.80	1,866,888.73	28+08.47	305,677.60	1,867,199.16	0.08
TR234 RAMP A	CURVE #1		585.85	1,170.68	14.97				387+79.08	306,165.97	1,867,572.15	399+49.75	307,235.29	1,867,096.91				NC
	CURVE #2		175.14	350.24	1.47				399+49.75	307,235.29	1,867,096.91	403+00.00	307,560.03	1,866,965.74				RC
TR234 RAMP B	CURVE #1		405.26	809.18	14.31				367+68.26	304,117.79	1,867,804.75	375+77.44	304,924.25	1,867,747.25				0.029
TR234 RAMP C	CURVE #1	258.22	460.16	514.26	28.85	367+03.45	304,037.88	1,867,706.48	369+03.45	304,234.53	1,867,670.11	374+17.72	304,720.99	1,867,506.65	376+17.72	304,899.70	1,867,416.90	0.061
TR234 RAMP D	CURVE #1		613.73	1,197.13	83.87				397+52.87	306,965.56	1,866,953.74	409+50.00	308,081.86	1,866,563.76				0.065
CR28	CURVE #1		134.59	269.11	1.98				6+98.11	314,063.78	1,854,641.03	9+67.22	314,214.54	1,854,863.90				
	CURVE #2		209.99	419.41	6.73				13+32.00	314,409.97	1,855,171.90	17+51.41	314,611.41	1,855,539.45				0.04
	CURVE #3		287.52	575.00	1.80				23+68.09	314,872.57	1,856,098.10	29+43.09	315,109.52	1,856,621.99				NC
CR28 RAMP A	CURVE #1		292.86	584.77	10.22				516+80.70	313,323.29	1,857,435.16	522+65.47	313,736.92	1,857,022.46				0.038
	CURVE #2	207.72	285.07	405.64	51.45				522+65.47	313,736.92	1,857,022.46	526+71.11	314,098.06	1,856,848.43	529+31.11	314,357.09	1,856,830.25	0.08
	CURVE #3	89.53	266.89	178.44	19.49	529+31.11	314,357.09	1,856,830.25	531+06.11	314,531.82	1,856,822.12	532+84.55	314,705.91	1,856,784.31	534+59.55	314,868.27	1,856,719.22	0.063
CR28 RAMP B	CURVE #1	514.98	1,539.46	647.55	1,169.21	523+86.07	314,875.18	1,856,671.39	525+61.07	314,709.78	1,856,726.71	532+08.62	314,363.79	1,856,310.14	534+58.62	314,501.11	1,856,103.28	0.08
CR28 RAMP C	CURVE #1	2,210.89	1,688.08	908.97	1,302.71	519+84.67	313,965.41	1,855,631.32	521+84.67	313,791.17	1,855,727.70	530+93.64	314,132.14	1,856,257.59	532+93.64	314,291.36	1,856,138.14	0.08
	CURVE #2		297.36	594.28	7.07				532+93.64	314,291.36	1,856,138.14	538+87.92	314,702.47	1,855,709.32				0.027
CR28 RAMP D	CURVE #1	171.89	403.33	331.03	88.00	520+70.16	313,498.48	1,857,071.24	522+70.16	313,619.28	1,856,912.30	526+01.19	313,678.70	1,856,592.80	528+21.19	313,614.75	1,856,382.80	0.079
	CURVE #2	304.70	596.52	546.93	201.17	528+21.19	313,614.75	1,856,382.80	530+41.19	313,550.80	1,856,172.79	535+88.12	313,753.51	1,855,694.06	538+08.12	313,948.81	1,855,593.82	0.079
PRIVATE DRIVE	CURVE #1		70.97	140.99	5.03				10+41.03	314,372.93	1,854,907.99	11+82.02	314,437.38	1,855,032.86				NC
	CURVE #2		50.30	88.65	15.28				13+70.96	314,499.50	1,855,211.30	14+59.62	314,566.26	1,855,261.62				NC
SR335	CURVE #1		162.76	317.95	20.83				0+93.40	305,060.73	1,868,451.90	4+11.35	305,346.85	1,868,321.87				0.080
	CURVE #2		88.55	177.02	1.71				6+37.50	305,569.99	1,868,285.17	8+14.51	305,743.38	1,868,249.74				0.053
	CURVE #3		170.77	341.51	1.27				19+77.32	306,870.43	1,867,963.81	23+18.82	307,201.85	1,867,881.48				NC

NOTES:

THE GROUND COORDINATE VALUES SHOWN HEREIN ARE CONVERTED FROM THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. THESE GROUND COORDINATES WERE ESTABLISHED BY DIVIDING THE GRID COORDINATE BY A COMBINED SCALE FACTOR OF 0.99996061457.

* THE BACK TANGENT LENGTH HAS BEEN GIVEN FOR UNEQUAL TANGENTS

CALCULATED LBD CHECKED JMB

HORIZONTAL CURVE DATA

SCI-823-6.81

LEGEND

(1) (2) NOT USED

(3) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) (NIP)

(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GALLONS/SQ YD) (NIP)

(5) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446) (NIP)

(6) ITEM 407 - TACK COAT (0.075 GALLONS/SQ YD) (NIP)

(7) ITEM 302 - 5" ASPHALT CONCRETE BASE, PG64-22 (NIP)

(7A) ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22 (NIP)

(7B) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22 (NIP)

(8) ITEM 408 - PRIME COAT (0.4 GALLONS/SQ YD) (NIP)

(9) ITEM 304 - 6" AGGREGATE BASE

(10) ITEM 304 - 8" AGGREGATE BASE (NIP)

(11) ITEM 204 - SUBGRADE COMPACTION & PROOF ROLLING (NIP)

(11A) ITEM 204 - SUBGRADE COMPACTION

(12) ITEM 422 - CHIP SEAL (NIP)

(13) ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN

(14) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH FABRIC WRAP, 707.31 (NIP)

(15) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH FABRIC WRAP, 707.31 (NIP)

(16) ITEM 605 - 6" ROCK CUT UNDERDRAINS, 707.31 (NIP)

(17) ITEM 605 - AGGREGATE DRAINS (NIP)

(18) ITEM 606 - GUARDRAIL, TYPE 5 (NIP)

(19) ITEM 609 - CURB, TYPE 4-C (NIP)

(20) ITEM 609 - 6" CONCRETE MEDIAN (NIP)

(21) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 (WITH 2-4" RACEWAY) (NIP)

(22) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 (WITH 2-4" RACEWAY) (NIP)

(23) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D (NIP)

(23A) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN (NIP)

(24) ITEM 659 - SEEDING AND MULCHING (NIP)

(25) ITEM SPECIAL - NOISE BARRIER (NIP)

(26) NOT USED

(27) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (NIP)

(28) ITEM 605 - 6" UNCLASSIFIED UNDERDRAIN WITH FABRIC WRAP (NIP)

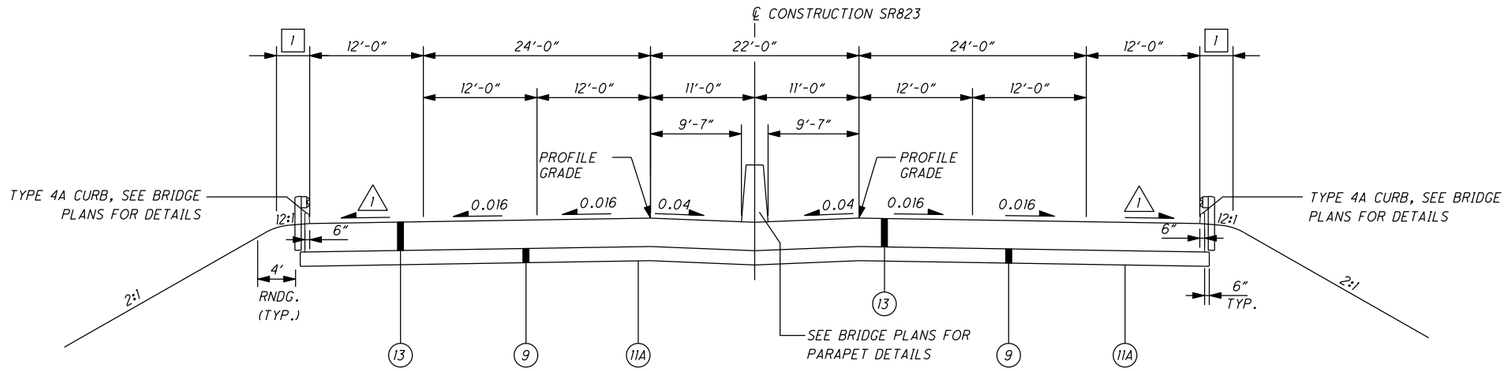
(29) ITEM 605 - 6" DEEP PIPE UNDERDRAIN WITH FABRIC WRAP (NIP)

(30) NOT USED

(31) ITEM 204 - GRANULAR MATERIAL, TYPE C (NIP)

NOTE:
ALL GUARDRAIL WORK WILL BE PERFORMED IN OTHER PART.

NOTE:
PERFORM ALL CURB AND BARRIER WORK SHOWN WITHIN THE LIMITS OF THE BRIDGE AND APPROACH SLABS. SEE BRIDGE PLANS.



APPROACH SLAB SECTION - SR823 OVER SWAUGER VALLEY-MINFORD ROAD

STA. 440+55.00 TO STA. 440+85.00 = 30.00 LF △1 VARIES FROM 0.04 TO 0.016 [1] VARIES FROM 8'-0" TO 3'-6"

SCI-823-0837 BRIDGE LIMITS

STA. 445+15.84 TO STA. 445+45.84 = 30.00 LF △1 VARIES FROM 0.016 TO 0.04 [1] VARIES FROM 3'-6" TO 8'-0"

APPROACH SLAB CONSTRUCTION QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNITS
204	SUBGRADE COMPACTION	640	SQ YD
304	AGGREGATE BASE	107	CU YD

QUANTITIES CARRIED TO SHEET 10

CALCULATED LBD CHECKED JMB

TYPICAL SECTIONS - SR823 APPROACH SLABS

SCI-823-6.81

USER: CWahlbri PLOT DATE: 9/15/2011 13930 AM REVISION DATE: 9/15/2011
FILE...4HOR.Cu0000000045878 /19415gy001.dgn MODEL: Sheet

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES OPERATING WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

COLUMBIA GAS OF OHIO
TIFFANY WOODYARD
843 PIATT AVENUE
CHILLICOTHE, OHIO 45601
(740) 772-9131

AMERICAN ELECTRIC POWER
PAUL PAXTON
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
(614) 883-6831

MINFORD TELEPHONE COMPANY
PAULA MCGRAW
PO BOX 181
MINFORD, OHIO 45653
(740) 820-2151

SPRINT COMMUNICATIONS, INC.
JOE THOMAS
11370 ENTERPRISE PARK DRIVE
SHARONVILLE, OHIO 45241
(513) 459-5761

TIME WARNER CABLE
TERRY ALLEN
3760 INTERCHANGE DRIVE
COLUMBUS, OHIO 43204-4131
(614) 255-6349

SCIOTO COUNTY SANITARY ENGINEERING
DARREN LEBRUN
602 SEVENTH STREET
PORTSMOUTH, OHIO 45662
(740) 355-8249

SCIOTO COUNTY REGIONAL WATER AUTHORITY
JONATHAN KING
PO BOX 310
LUCASVILLE, OHIO 45648
(740) 259-2301

PIKE NATURAL GAS COMPANY
ROBERT SEELING JR.
PO BOX 249
HILLSBORO, OHIO 45133
(937) 393-1901

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON NAD83 HORIZONTAL DATUM AND NAVD83 VERTICAL DATUM.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT OF WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED IN THE PLANS.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

COOPERATION BETWEEN CONTRACTORS

AT ANY TIME, THE DEPARTMENT MAY CONTRACT FOR OTHER WORK ON OR NEAR THE PROJECT.

SEPARATE CONTRACTORS WORKING WITHIN THE LIMITS OF THE PROJECT SHALL CONDUCT THEIR WORK WITHOUT INTERFERING WITH OR HINDERING THE PROGRESS OR COMPLETION OF WORK BEING PERFORMED BY OTHER CONTRACTORS AND SHALL COOPERATE WITH EACH OTHER AS DIRECTED BY THE ENGINEER.

STREAM CHANNEL EXCAVATION

STREAM CHANNEL EXCAVATION WITHIN "WATERS OF THE US" IS SUBJECT TO US ARMY CORPS OF ENGINEERS (USACE) REGULATORY JURISDICTION AND WILL REQUIRE AUTHORIZATION BY THE USACE VIA THE WATERWAY PERMITTING PROCESS (404/401). IN ACCORDANCE WITH THE APPLICABLE WATERWAY PERMITS (404/401) STREAM CHANNEL EXCAVATION CAN NOT EXCEED THE QUANTITIES AND/OR SURFACE AREA THAT HAS BEEN PERMITTED. THE WATERWAY PERMITS ARE ATTACHED TO THE CONSTRUCTION PLANS AS SPECIAL PROVISIONS AND WILL BE AVAILABLE IN THE PROJECT CONSTRUCTION OFFICE.

TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATIONS SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEANOUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

ADDITIONAL SOIL INFORMATION

THE SOIL PROFILE AND/OR STRUCTURE FOUNDATION INVESTIGATIONS SHEETS CONTAIN ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN. ADDITIONAL SUBSURFACE INVESTIGATION INFORMATION IS AVAILABLE FROM "ODOT DISTRICT 9."

EROSION CONTROL

ITEMS 601, 660, AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS AND TURF OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE 660 OR 670. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THESE ITEMS SHALL MEET REQUIREMENT OF 108.04.

SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL DISTURBED BY THE CONSTRUCTION OF THE BRIDGES AND APPROACH SLABS WHICH ARE OUTSIDE THE LIMITS OF ITEM 601 CRUSHED AGGREGATE SLOPE PROTECTION AND ITEM 670 SLOPE EROSION PROTECTION AS SHOWN ON SCD DM-4.1.

ITEM 616 - WATER

THE FOLLOWING ESTIMATED QUANTITY OF WATER HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO COMPLY WITH THE 404/401 WATERWAY PERMIT FOR USE AS ADDITIONAL DUST CONTROL WHEN WORKING WITHIN 100 FEET OF THESE PRESERVED WATERWAYS. THE STREAM IDENTIFICATION NUMBER AND APPROXIMATE LOCATION ARE LISTED IN TABLE BELOW. FOR A DETAILED LOCATION SEE THE WATERWAY PERMIT, AVAILABLE IN THE PROJECT CONSTRUCTION OFFICE.

STREAM #	APPROXIMATE LOCATION STATION
STREAM 20	443+50

616, WATER 90 M GAL

UTILITY LEGEND

ABBREVIATIONS:

— — — — — UNK UNKNOWN FUNCTION UTILITY PIPE

– – – – – – – – (DATUR) DEPICTED ACCORDING TO UTILITY RECORDS, NO ELECTRONIC INFORMATION WAS OBTAINED.

NAP NO ASSOCIATED PIPING FOUND FROM STRUCTURE TO ANY OTHER UTILITY OR STRUCTURE.

(FO) FIBER OPTIC

(AATFI) ABANDONED ACCORDING TO FIELD INSPECTION

(AATUR) ABANDONED ACCORDING TO UTILITY RECORDS

(DATFI) DEPICTED ACCORDING TO FIELD INSPECTION, NO ELECTRONIC INFORMATION WAS OBTAINED.

(QL-C) DEPICTED ACCORDING TO RECORD INFORMATION AND EXISTING ASSOCIATED UTILITY STRUCTURES. NO ELECTRONIC INFORMATION WAS OBTAINED.

(QL-D) DEPICTED ACCORDING TO RECORD INFORMATION. NO ELECTRONIC INFORMATION WAS OBTAINED. UTILITY END POINT

EOI END OF ELECTRONIC DESIGNATING INFORMATION

EORI END OF RECORD INFORMATION

JOURNAL ENTRY: TR234 RAMP D RENAMED SR335C

SUBSEQUENT TO THE COMPLETED PLANS, TR234 RAMP D (STA. 402+09.94 TO STA. 384+20.66) AND TR234 BETWEEN TR234 RAMP D AND SR335 (STA. 26+43.58 TO STA. 38+44.54) WAS JOURNALIZED AND SHALL NOW BE REFERRED TO AS SR335C.

CALCULATED LBD CHECKED JMB

GENERAL NOTES

SCI-823-6.81

USER: ldaornel PLOT DATE: 4/8/2012 21:04 PM REVISION DATE: 4/8/2012
FILE:...4\HDR.CU\000000004878 /1945gn001.dgn MODEL: Sheet

ITEM 614 MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT THE LOCATIONS SHOWN IN THIS MAINTENANCE OF TRAFFIC PLAN.

INCLUDE IN THE LUMP SUM FOR MAINTAINING TRAFFIC THE COST OF REPAIRING AND/OR REPLACING PAVEMENT AT EQUIPMENT CROSSINGS ON PUBLIC ROADS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 1 M GAL

TEMPORARY ROAD CLOSURE

THE CONTRACTOR SHALL USE FLAGGER OPERATIONS AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES TYPICAL APPLICATION TA-13 TO SET BEAMS ALONG SWAUGER VALLEY-MINFORD ROAD. A TEMPORARY ROAD CLOSURE OF FIFTEEN (15) MINUTES EVERY THIRTY (30) MINUTES SHALL BE PERMITTED TO SET THE BEAMS.

USER: CWohlbri PLOT DATE: 9/15/2011 7:39:43 AM REVISION DATE: 9/15/2011
FILE:...\MHDR.C\0000000045878 /9415mm001.dgn MODEL: Sheet

CALCULATED LBD CHECKED JMB

MAINTENANCE OF TRAFFIC GENERAL NOTES

SCI-823-6.81

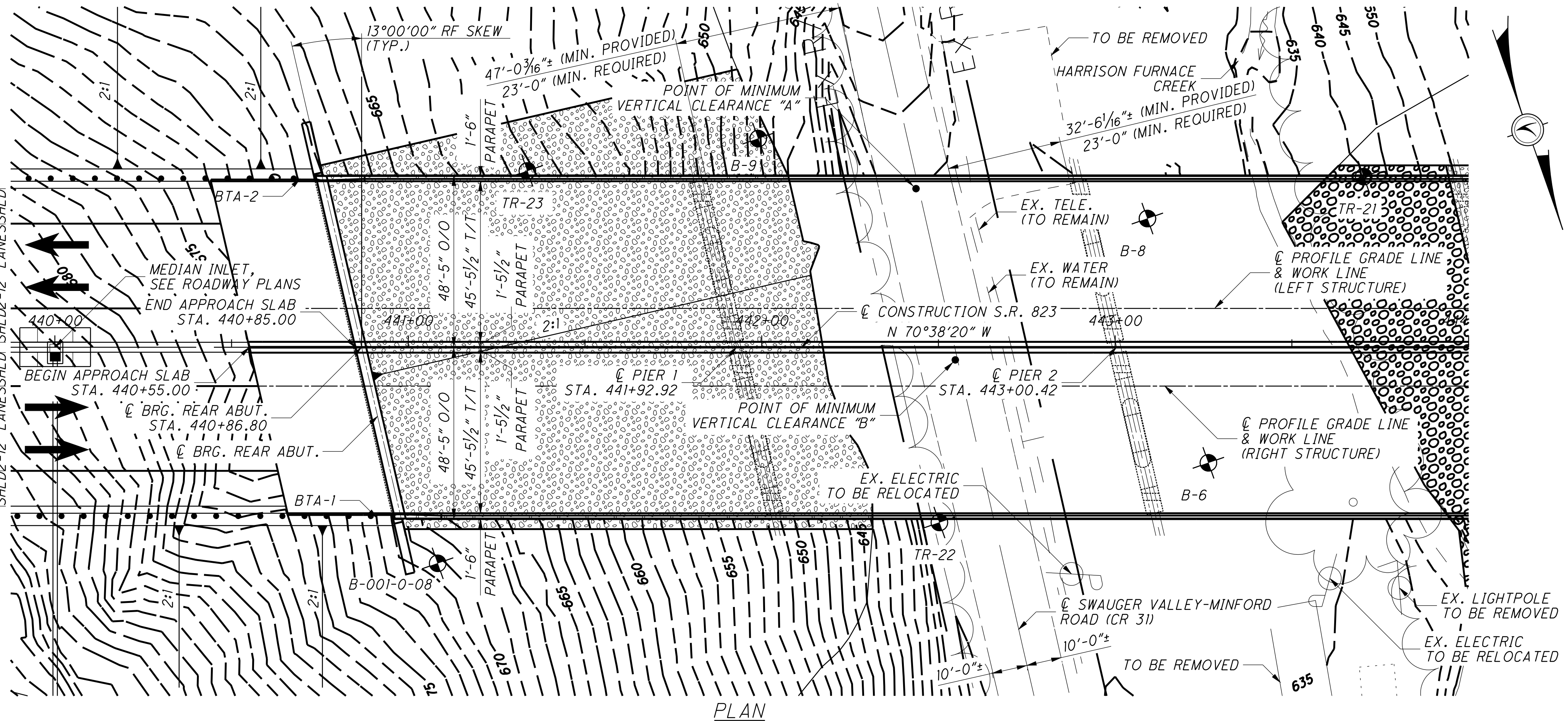
SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
			7	8	9	16	17												
																		ROADWAY	
			640											204	10000	640	SQ YD	SUBGRADE COMPACTION	
																		EROSION CONTROL	
						1864	1814							601	20000	3678	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION	
						149	146							601	32204	295	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER	
				90	1									616	10000	91	M GAL	WATER	
						2018	2521							670	00500	4539	SQ YD	SLOPE EROSION PROTECTION	
																		PAVEMENT	
			107											304	20000	107	CU YD	AGGREGATE BASE	
																		STRUCTURES (20' AND OVER)	
						LUMP	LUMP							503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING	
						LUMP	LUMP							503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	25
						177	170							503	22200	347	CU YD	UNCLASSIFIED EXCAVATION INCLUDING ROCK AND/OR SHALE	
						LUMP	LUMP							505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION	
						1600	1680							507	00200	3280	FT	STEEL PILES HP12X53, FURNISHED	
						1440	1520							507	00250	2960	FT	STEEL PILES HP12X53, DRIVEN	
						1440	1520							507	92200	2960	FT	PREBORED HOLES	
						32	32							507	93301	64	EACH	STEEL POINTS, OR SHOES, AS PER PLAN	15
						438646	442214							509	10000	880860	POUND	EPOXY COATED REINFORCING STEEL	
						2470	2470							512	10100	4940	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
						20	20							515	15051	40	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MOD. (72"), AS PER PLAN	35
						64	64							515	20000	128	EACH	INTERMEDIATE DIAPHRAGMS	
						10	10							516	13600	20	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	
						1534	1534							516	13900	3068	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	
						121	121							516	14021	242	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	15
						10	10							516	44000	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 1.72" THICK X 22" X 13" WITH 1.50" THICK X 26" X 15" LOAD PLATE	
						20	20							516	44100	40	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 2.75" THICK X 22" X 13" WITH 1.50" THICK X 26" X 15" LOAD PLATE	
						10	10							516	44200	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 3.78" THICK X 22" X 13" WITH 1.50" THICK X 24" X 16" LOAD PLATE AND HP 14X73 SHAPE WITH 1.75" THICK X 26" X 16" LOAD PLATE	
						107	107							518	21200	214	CU YD	POROUS BACKFILL WITH FILTER FABRIC	
						120	120							518	40000	240	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
						28	28							518	40010	56	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
						830	830							898	10201	1660	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN	15
						316	316							898	10709	632	SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN	15
						67	67							898	11000	134	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)	
						87	87							898	11001	174	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN	50
						718	738							898	20100	1456	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)	
						61	61							898	20150	122	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT)	
						241	241							898	20300	482	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)	

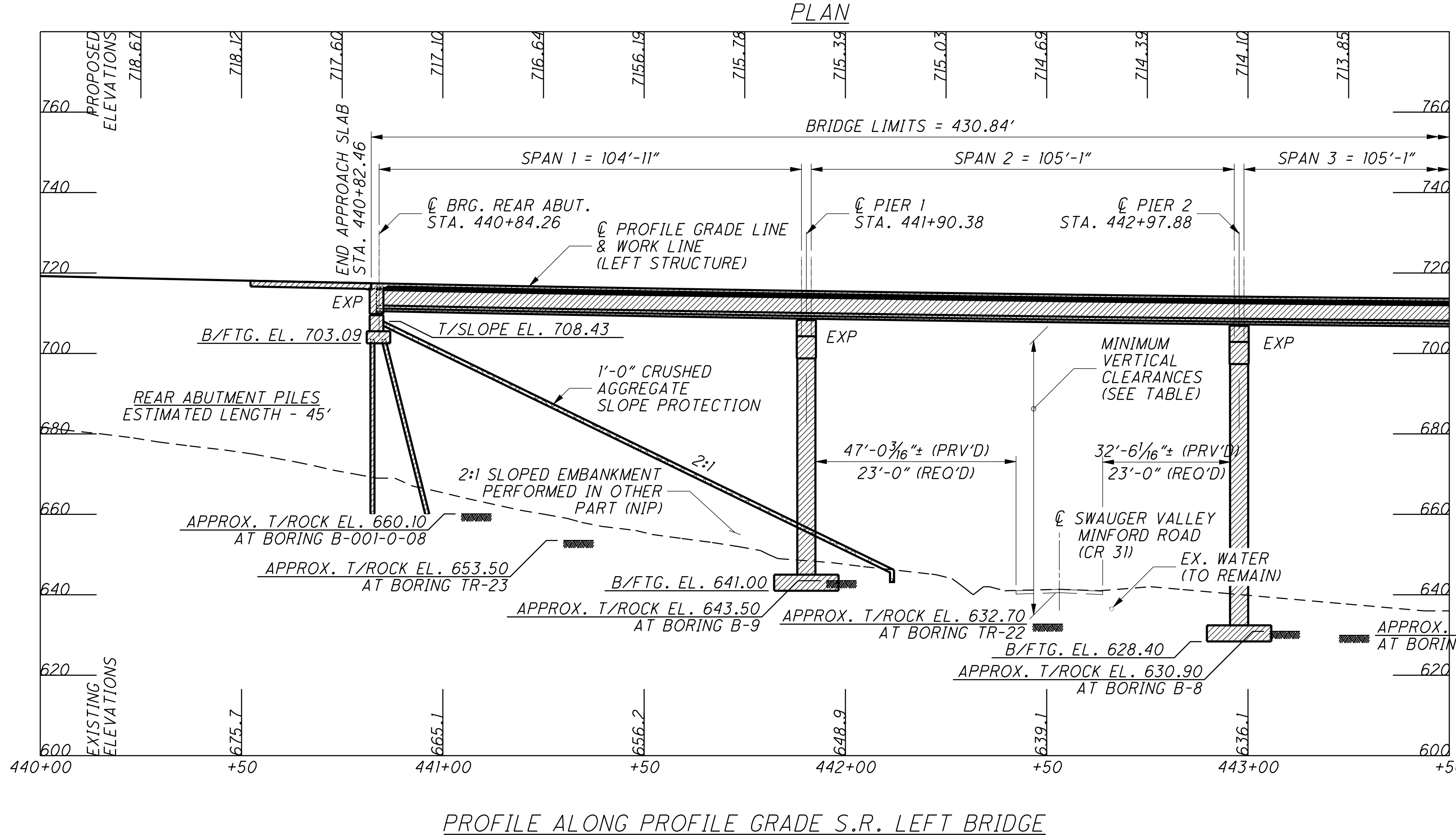
CALCULATED LBD
CHECKED JMB

GENERAL SUMMARY

SCI-823-6.81

USER: ldaornel PLOT DATE: 2/21/2012 9:44:10 AM REVISION DATE: 2/21/2012
FILE: ...4\HDR_CU0800000045878 /19415gg001.dgn MODEL: Sheet





PROFILE ALONG PROFILE GRADE S.R. LEFT BRIDGE

1400' VERTICAL CURVE DATA
PVI STA. = 442+00
PVI EL. = 704.89'
G1 = -4.50%
G2 = 1.50%

BENCHMARK DATA

BM #14 STA. 433+21, ELEV. 808.34, OFFSET 126' LT.
BM "C" STA. 442+75, ELEV. 633.18, OFFSET 489' RT.
BM "D" STA. 441+57, ELEV. 651.84, OFFSET 994' LT.
BM #15 STA. 447+03, ELEV. 690.56, OFFSET 174' RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS.

NOTES

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

DESIGN TRAFFIC:
2010 ADT = 21,200 2010 ADTT = 2,968
2030 ADT = 31,200 2030 ADTT = 4,368
DIRECTIONAL DISTRIBUTION = 50%

FOR THIS PROJECT, PERMITS FOR SECTIONS 401 AND 404 OF THE CLEAN WATER ACT, ARE BASED ON THE LIMITS OF TEMPORARY CONSTRUCTION FILL PLACED IN "WATERS OF THE UNITED STATES" AS SHOWN BELOW. IF EITHER OF THE LIMITS PROVIDED ARE EXCEEDED, THEN A 404/401 PERMIT MODIFICATION WILL BE REQUIRED. IF A PERMIT MODIFICATION IS REQUIRED, REFER TO SUPPLEMENTAL SPECIFICATION 832.09 FOR THE APPLICATION REQUIREMENTS.

PLAN AREA OF TEMPORARY FILL = 0.11 ACRES
TOTAL VOLUME OF TEMPORARY FILL MATERIAL = 261 CU. YD.

LEGEND

- SOIL BORING LOCATION
BTA-1 - BRIDGE TERMINAL ASSEMBLY, TYPE 1
BTA-2 - BRIDGE TERMINAL ASSEMBLY, TYPE 2
- ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION
- ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER

HYDRAULIC DATA

DRAINAGE AREA = 0.873 SQ. MILES = 558.9 ACRES
Q (50) = 493 CF/S Q (100) = 581 CF/S
V (50) = 6.5 FT/S V (100) = 6.9 FT/S
EL (50) = 638.2 EL (100) = 638.5
EL (OHWM) = 636.2

FIRST GUARDRAIL POST OFF BRIDGE LOCATIONS	
LOCATION	STATION
REAR ABUT.	440+69.39
FWD. ABUT.	445+09.65

TABLE OF VERTICAL CLEARANCES	
LOCATION	"A"
PROPOSED	66.33'
PREFERRED	15.0'

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS FOR LIVE LOAD PRESTRESSED CONCRETE I BEAMS (72" MODIFIED AASHTO TYPE 4) WITH COMPOSITE REINFORCED DECK ON SEMI-INTEGRAL ABUTMENTS AND T-TYPE PIERS

SPANS: 104'-11", 105'-1", 105'-1", 104'-11" C/C BEARINGS

ROADWAY: 45'-5 1/2" T/T BARRIER

LOADING: HS25 AND ALTERNATE MILITARY LOADING 60 PSF (FWS)

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: RIGHT FORWARD 13°00'00"

APPROACH SLABS: AS-1-81, 30 FT LONG (MODIFIED)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

COORDINATES: LATITUDE N 38°51'00"
LONGITUDE W 82°52'03"

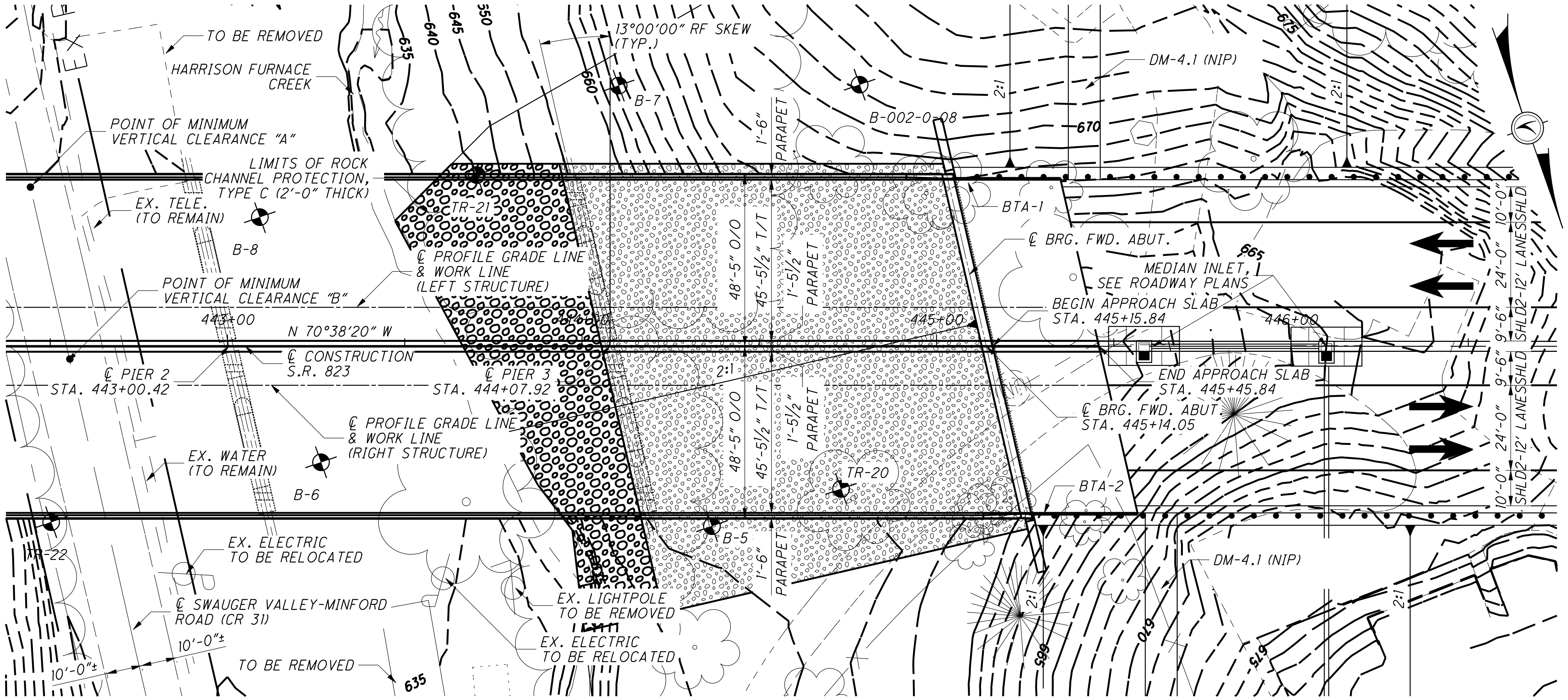
KZF DESIGN — DESIGN AGENCY — Architecture | Engineering | Interiors | Planning

DESIGNED	CHECKED	DRAWN	REVIEWED	DATE	STRUCTURE FILE NUMBER
DEF/RBK	DAT	RBK	BAA	06/24/11	7306458/7306466

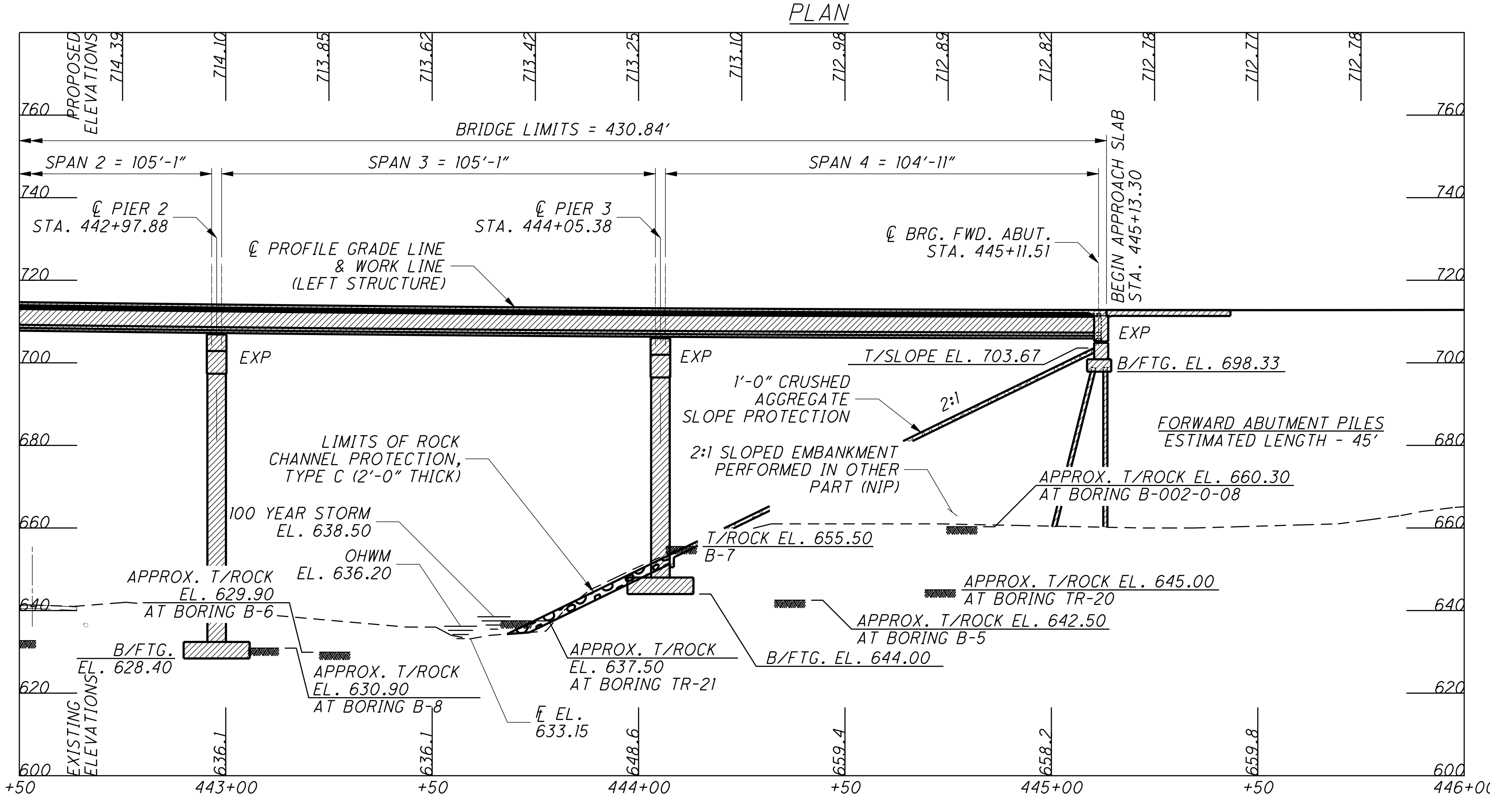
SCIOTO COUNTY
STA. 440+85.00
STA. 445+15.84

SITE PLAN
BRIDGE NO. SCI-823-0837 L
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PLAN



PROFILE ALONG PROFILE GRADE S.R. LEFT BRIDGE

1400' VERTICAL CURVE DATA
PVI STA. = 442+00
PVI EL. = 704.89'
G1 = -4.50%
G2 = 1.50%

BENCHMARK DATA

BM #14 STA. 433+21,	ELEV. 808.34,	OFFSET 126' LT.	
BM "C" STA. 442+75,	ELEV. 633.18,	OFFSET 489' RT.	
BM "D" STA. 441+57,	ELEV. 651.84,	OFFSET 994' LT.	
BM #15 STA. 447+03,	ELEV. 690.56,	OFFSET 174' RT.	

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS.

NOTES

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

DESIGN TRAFFIC:
2010 ADT = 21,200 2010 ADTT = 2,968
2030 ADT = 31,200 2030 ADTT = 4,368
DIRECTIONAL DISTRIBUTION = 50%

FOR THIS PROJECT, PERMITS FOR SECTIONS 401 AND 404 OF THE CLEAN WATER ACT, ARE BASED ON THE LIMITS OF TEMPORARY CONSTRUCTION FILL PLACED IN "WATERS OF THE UNITED STATES" AS SHOWN BELOW. IF EITHER OF THE LIMITS PROVIDED ARE EXCEEDED, THEN A 404/401 PERMIT MODIFICATION WILL BE REQUIRED. IF A PERMIT MODIFICATION IS REQUIRED, REFER TO SUPPLEMENTAL SPECIFICATION 832.09 FOR THE APPLICATION REQUIREMENTS.

PLAN AREA OF TEMPORARY FILL = 0.11 ACRES
TOTAL VOLUME OF TEMPORARY FILL MATERIAL = 261 CU. YD.

LEGEND

- (symbol) - SOIL BORING LOCATION
- BTA-1 - BRIDGE TERMINAL ASSEMBLY, TYPE 1
- BTA-2 - BRIDGE TERMINAL ASSEMBLY, TYPE 2
- (pattern) - ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION
- (pattern) - ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER

HYDRAULIC DATA

DRAINAGE AREA = 0.873 SQ. MILES = 558.9 ACRES
Q (50) = 493 CF/S Q (100) = 581 CF/S
V (50) = 6.5 FT/S V (100) = 6.9 FT/S
EL (50) = 638.2 EL (100) = 638.5
EL (OHWM) = 636.2

FIRST GUARDRAIL POST OFF BRIDGE LOCATIONS	
LOCATION	STATION
REAR ABUT.	440+69.39
FWD. ABUT.	445+09.65

TABLE OF VERTICAL CLEARANCES	
LOCATION	"A"
PROPOSED	66.33'
PREFERRED	15.0'

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS FOR LIVE LOAD PRESTRESSED CONCRETE I BEAMS (72" MODIFIED AASHTO TYPE 4) WITH COMPOSITE REINFORCED DECK ON SEMI-INTEGRAL ABUTMENTS AND T-TYPE PIERS

SPANS: 104'-11", 105'-1", 105'-1", 104'-11" C/C BEARINGS

ROADWAY: 45'-5½" T/T BARRIER

LOADING: HS25 AND ALTERNATE MILITARY LOADING 60 PSF (FWS)

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: RIGHT FORWARD 13°00'00"

APPROACH SLABS: AS-1-81, 30 FT LONG (MODIFIED)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

COORDINATES: LATITUDE N 38°51'00"
LONGITUDE W 82°52'03"

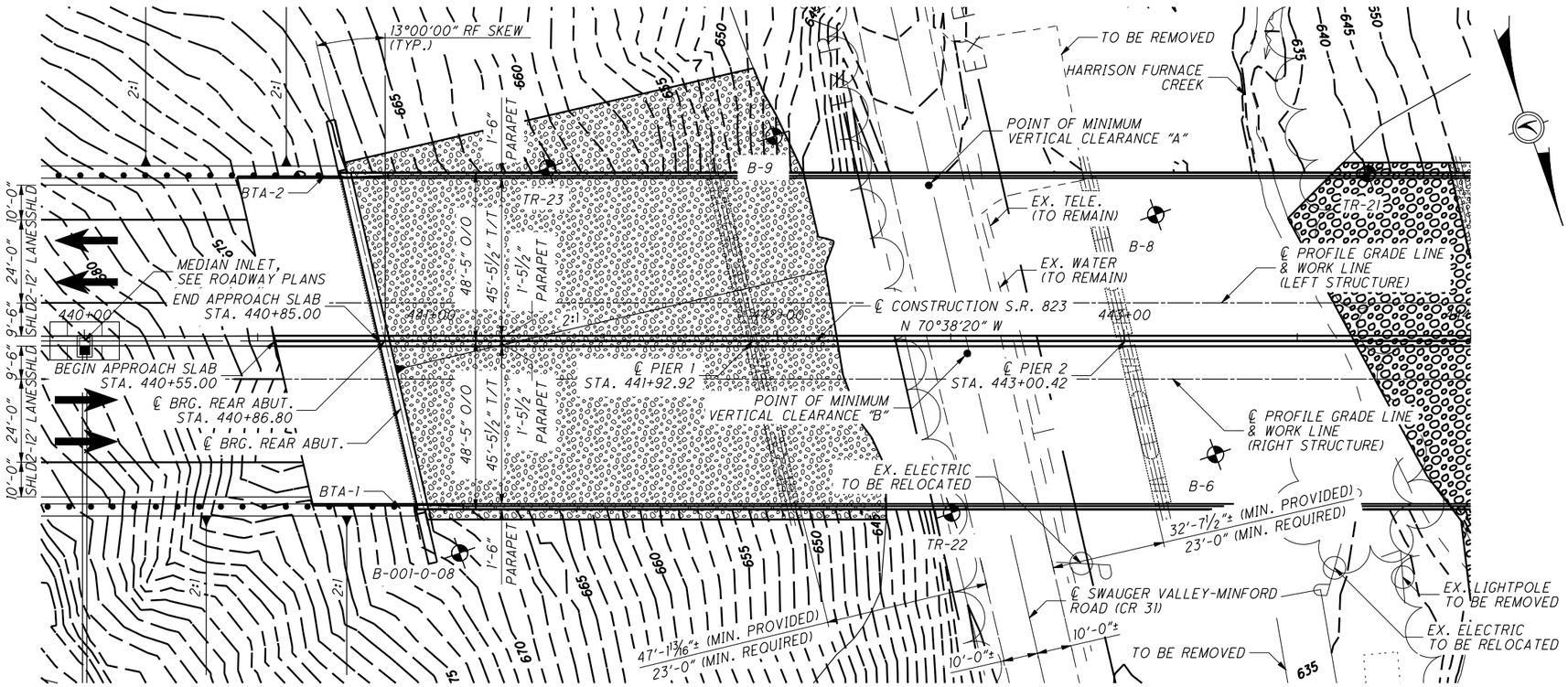
DESIGN AGENCY KZF DESIGN Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

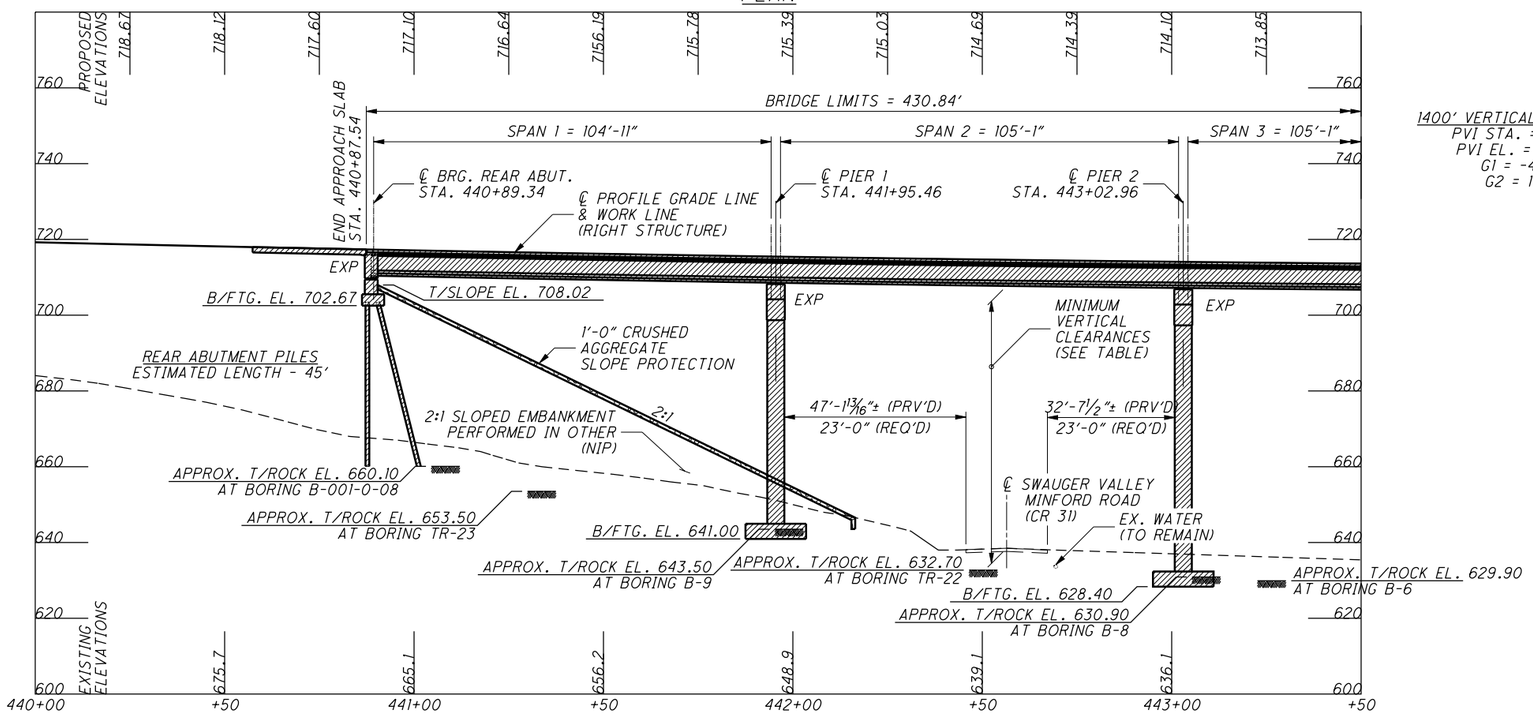
SCIOTO COUNTY
STA. 440+85.00
STA. 445+15.84

SITE PLAN
BRIDGE NO. SCI-823-0837 L
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PLAN



PROFILE ALONG PROFILE GRADE S.R. RIGHT BRIDGE

BENCHMARK DATA			
BM #14	STA. 433+21,	ELEV. 808.34,	OFFSET 126′ LT.
BM "C"	STA. 442+75,	ELEV. 633.18,	OFFSET 489′ RT.
BM "D"	STA. 441+57,	ELEV. 651.84,	OFFSET 994′ LT.
BM #15	STA. 447+03,	ELEV. 690.56,	OFFSET 174′ RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS.

NOTES

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

DESIGN TRAFFIC:
2010 ADT = 21,200 2010 ADTT = 2,968
2030 ADT = 31,200 2030 ADTT = 4,368
DIRECTIONAL DISTRIBUTION = 50%

FOR THIS PROJECT, PERMITS FOR SECTIONS 401 AND 404 OF THE CLEAN WATER ACT, ARE BASED ON THE LIMITS OF TEMPORARY CONSTRUCTION FILL PLACED IN "WATERS OF THE UNITED STATES" AS SHOWN BELOW. IF EITHER OF THE LIMITS PROVIDED ARE EXCEEDED, THEN A 404/401 PERMIT MODIFICATION WILL BE REQUIRED. IF A PERMIT MODIFICATION IS REQUIRED, REFER TO SUPPLEMENTAL SPECIFICATION 832.09 FOR THE APPLICATION REQUIREMENTS.

PLAN AREA OF TEMPORARY FILL = 0.11 ACRES
TOTAL VOLUME OF TEMPORARY FILL MATERIAL = 261 CU. YD.

LEGEND

- ⊕ BTA-1 - SOIL BORING LOCATION
- BTA-1 - BRIDGE TERMINAL ASSEMBLY, TYPE 1
- BTA-2 - BRIDGE TERMINAL ASSEMBLY, TYPE 2
- ▨ - ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION
- ▨ - ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER

HYDRAULIC DATA

DRAINAGE AREA = 0.873 SQ. MILES = 558.9 ACRES
Q (50) = 493 CF/S Q (100) = 581 CF/S
V (50) = 6.5 FT/S V (100) = 6.9 FT/S
EL (50) = 638.2 EL (100) = 638.5
EL (OHWM) = 636.2

FIRST GUARDRAIL POST OFF BRIDGE LOCATIONS	
LOCATION	STATION
REAR ABUT.	440+91.19
FWD. ABUT.	445+31.46

TABLE OF VERTICAL CLEARANCES	
LOCATION	"B"
PROPOSED	68.44′
PREFERRED	15.0′

1400′ VERTICAL CURVE DATA
PVI STA. = 442+00
PVI EL. = 704.89′
G1 = -4.50%
G2 = 1.50%

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS FOR LIVE LOAD PRESTRESSED CONCRETE I BEAMS (72" MODIFIED AASHTO TYPE 4) WITH COMPOSITE REINFORCED DECK ON SEMI-INTEGRAL ABUTMENTS AND T-TYPE PIERS

SPANS: 104′-11", 105′-1", 105′-1", 104′-11" C/C BEARINGS

ROADWAY: 45′-5½" T/T BARRIER

LOADING: HS25 AND ALTERNATE MILITARY LOADING 60 PSF (FWS)

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: RIGHT FORWARD 13°00'00"

APPROACH SLABS: AS-1-81, 30 FT LONG (MODIFIED)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

COORDINATES: LATITUDE N 38°51'00"
LONGITUDE W 82°52'03"

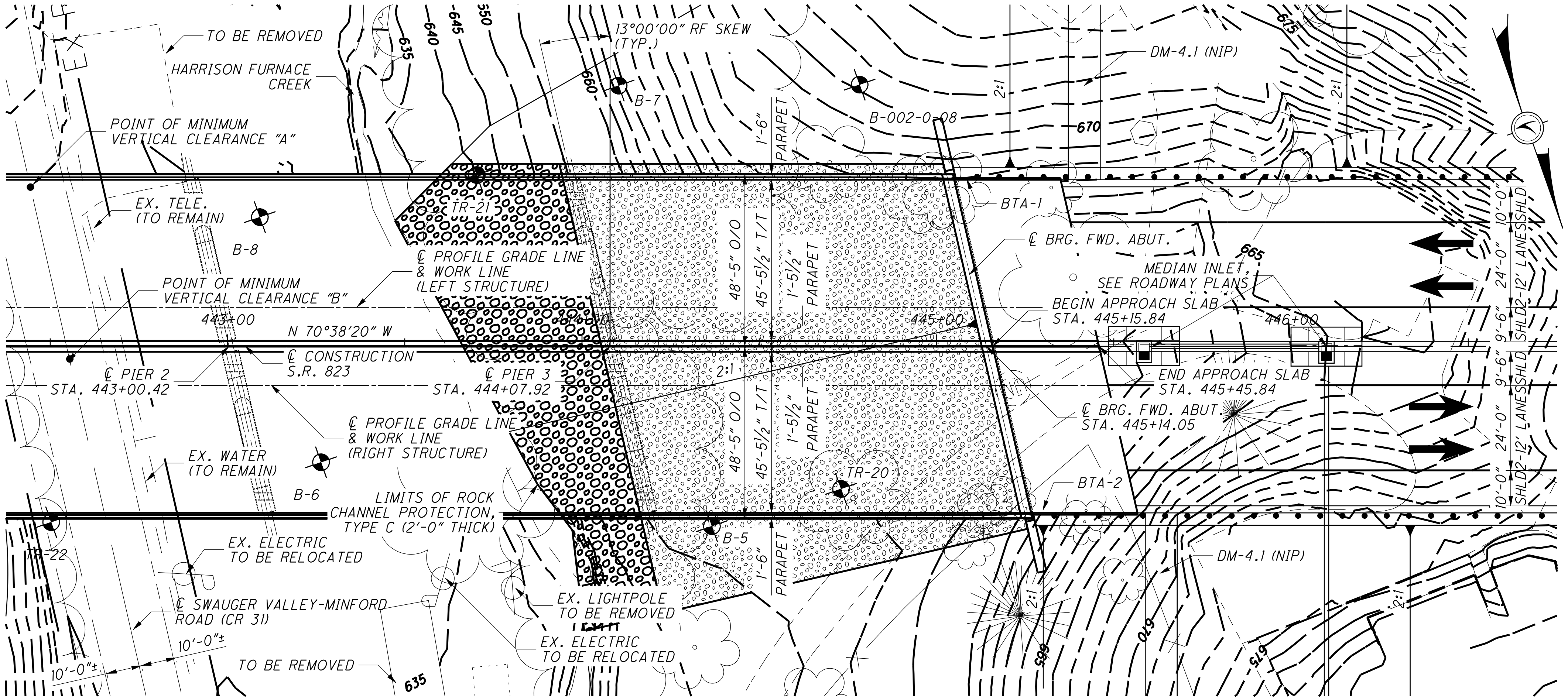
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
6200 Frantz Road, Suite 113, Dublin, Ohio 43016-4264
TEL 614.451.1811 FAX 614.451.3600 WEB www.kzfdesign.com

DESIGNED DEF/RBK | DRAWN RBK | REVIEWED BAA | DATE 06/24/11
CHECKED DAT | REVISED | STRUCTURE FILE NUMBER 7306458/7306466

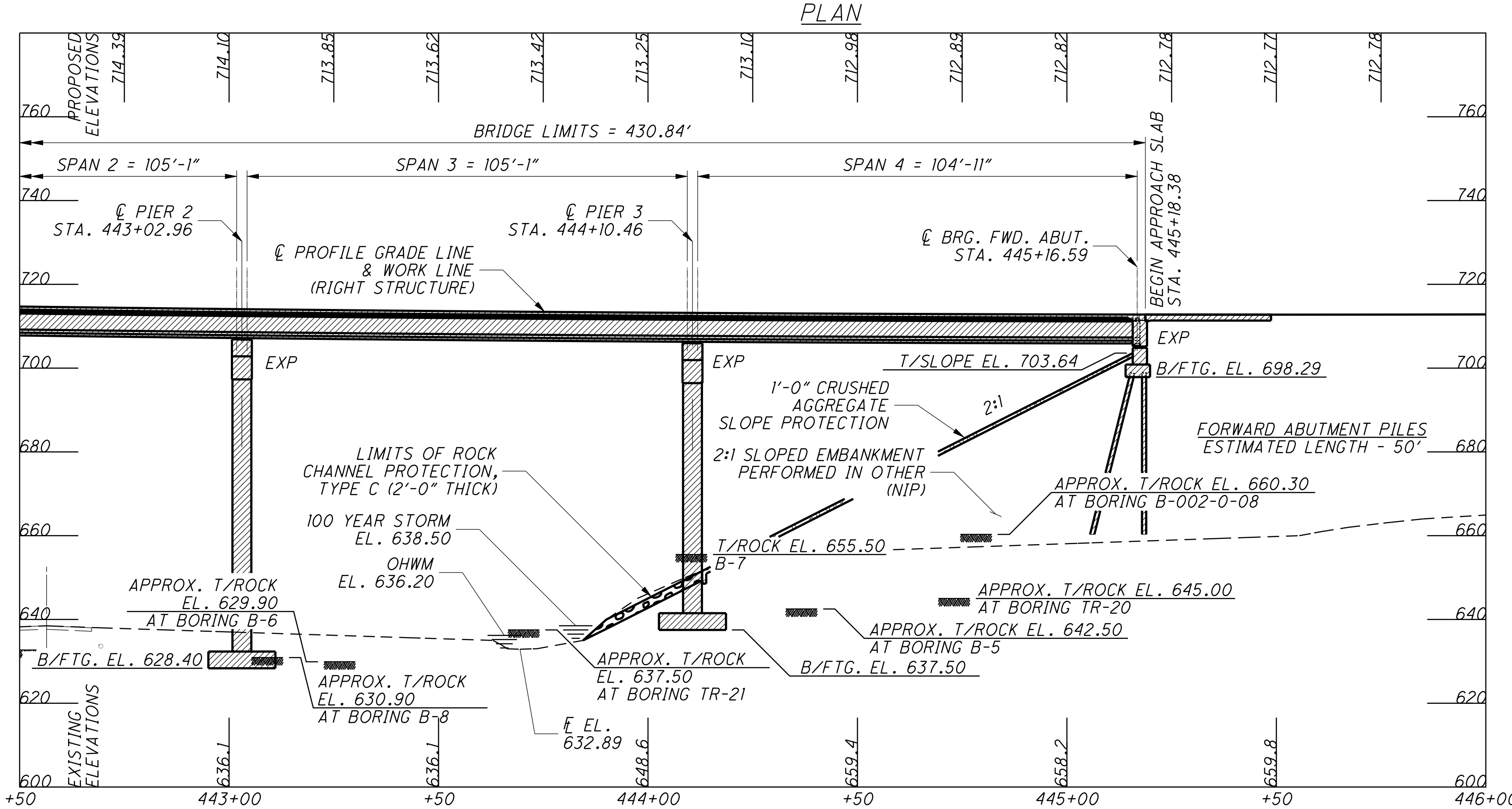
SCIOTO COUNTY
STA. 440+85.00
STA. 445+15.84

SITE PLAN
BRIDGE NO. SCI-823-0837 R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PLAN



PROFILE ALONG PROFILE GRADE S.R. RIGHT BRIDGE

1400' VERTICAL CURVE DATA
PVI STA. = 442+00
PVI EL. = 704.89'
G1 = -4.50%
G2 = 1.50%

BENCHMARK DATA

BM #14 STA. 433+21, ELEV. 808.34, OFFSET 126' LT.
BM "C" STA. 442+75, ELEV. 633.18, OFFSET 489' RT.
BM "D" STA. 441+57, ELEV. 651.84, OFFSET 994' LT.
BM #15 STA. 447+03, ELEV. 690.56, OFFSET 174' RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS.

NOTES

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

DESIGN TRAFFIC:
2010 ADT = 21,200 2010 ADTT = 2,968
2030 ADT = 31,200 2030 ADTT = 4,368
DIRECTIONAL DISTRIBUTION = 50%

FOR THIS PROJECT, PERMITS FOR SECTIONS 401 AND 404 OF THE CLEAN WATER ACT, ARE BASED ON THE LIMITS OF TEMPORARY CONSTRUCTION FILL PLACED IN "WATERS OF THE UNITED STATES" AS SHOWN BELOW. IF EITHER OF THE LIMITS PROVIDED ARE EXCEEDED, THEN A 404/401 PERMIT MODIFICATION WILL BE REQUIRED. IF A PERMIT MODIFICATION IS REQUIRED, REFER TO SUPPLEMENTAL SPECIFICATION 832.09 FOR THE APPLICATION REQUIREMENTS.

PLAN AREA OF TEMPORARY FILL = 0.11 ACRES
TOTAL VOLUME OF TEMPORARY FILL MATERIAL = 261 CU. YD.

LEGEND

- SOIL BORING LOCATION
BTA-1 - BRIDGE TERMINAL ASSEMBLY, TYPE 1
BTA-2 - BRIDGE TERMINAL ASSEMBLY, TYPE 2
- ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION
- ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER

HYDRAULIC DATA

DRAINAGE AREA = 0.873 SQ. MILES = 558.9 ACRES
Q (50) = 493 CF/S Q (100) = 581 CF/S
V (50) = 6.5 FT/S V (100) = 6.9 FT/S
EL (50) = 638.2 EL (100) = 638.5
EL (OHWM) = 636.2

FIRST GUARDRAIL POST OFF BRIDGE LOCATIONS	
LOCATION	STATION
REAR ABUT.	440+91.19
FWD. ABUT.	445+31.46

TABLE OF VERTICAL CLEARANCES	
LOCATION	"B"
PROPOSED	68.44'
PREFERRED	15.0'

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS FOR LIVE LOAD PRESTRESSED CONCRETE I BEAMS (72" MODIFIED AASHTO TYPE 4) WITH COMPOSITE REINFORCED DECK ON SEMI-INTEGRAL ABUTMENTS AND T-TYPE PIERS

SPANS: 104'-11", 105'-1", 105'-1", 104'-11" C/C BEARINGS

ROADWAY: 45'-5½" T/T BARRIER

LOADING: HS25 AND ALTERNATE MILITARY LOADING 60 PSF (FWS)

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: RIGHT FORWARD 13°00'00"

APPROACH SLABS: AS-1-81, 30 FT LONG (MODIFIED)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

COORDINATES: LATITUDE N 38°51'00"
LONGITUDE W 82°52'03"

KZF DESIGN — DESIGN AGENCY — Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

SCIOTO COUNTY
STA. 440+85.00
STA. 445+15.84

SITE PLAN
BRIDGE NO. SCI-823-0837 R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

A-1-69 REVISED 07-19-02 SBR-1-99 REVISED 07-19-02
AS-1-81 REVISED 07-19-02 SICD-1-96 REVISED 07-19-02
PSID-1-99 REVISED 04-20-07

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800 DATED 04-15-11
832 DATED 05-05-09
898 DATED 01-21-11

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION (2002) AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:
HS25 AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 LBS/FT^2

DESIGN DATA:
CONCRETE CLASS OSC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS OSC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI
STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50,000 PSI
STEEL H-PILES - ASTM A572 - YIELD STRENGTH 50,000 PSI

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7,000 PSI
COMPRESSIVE STRENGTH (RELEASE) - 5,000 PSI
PRESTRESSING STRAND:
AREA = 0.167 IN^2
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER

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

PILE DRIVING CONSTRAINTS:
PRIOR TO DRIVING PILES, CONSTRUCT THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. DO NOT BEGIN THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED.

CONSTRUCTION CONSTRAINTS:
FILL THE VOID CREATED BY EXCAVATING FOR THE ABUTMENT FOOTINGS WITH TYPE B GRANULAR MATERIAL, 703.16.C. AFTER THE FOOTING AND THE BREASTWALL HAVE BEEN CONSTRUCTED, FILL THE VOID BEHIND EACH ABUTMENT UP TO THE BEAM SEAT ELEVATION AND FROM THE BEAM SEAT UP ON A 1:1 SLOPE TO THE SUBGRADE ELEVATION PRIOR TO CONSTRUCTING THE BACKWALL AND SETTING THE BEAMS ON THE ABUTMENT. REFER TO EXCAVATION DIAGRAM ON SHEET 15/43.

AT PIER 1 (ONLY):
ALL INCIDENTAL WORK ASSOCIATED WITH EXCAVATING FOR AND CONSTRUCTING THE FOOTING FOR PIER 1 (ONLY) SHALL BE INCLUDED WITH ITEM 898 QC/QA CONCRETE, CLASS OCS1, SUBSTRUCTURE (FOOTING) FOR PAYMENT. THE INCIDENTAL WORK (AS DIRECTED BY THE ENGINEER) INCLUDES, BUT IS NOT LIMITED TO; EMBANKMENT PERFORMED BY OTHERS UNDER SEPARATE PART AND ROCK CHANNEL PROTECTION TYPE B WITH FILTER FABRIC PERFORMED BY OTHERS UNDER SEPARATE PART.

PILES TO BEDROCK:
DRIVE PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES TO A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR BY CONTACTING HARD BEDROCK AND THE PILE RECEIVING AT LEAST 20 BLOWS. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL. INSTEAD OF DRIVING TO REFUSAL, THE CONTRACTOR MAY PERFORM DYNAMIC LOAD TESTING ACCORDING TO C&MS 523 TO ESTABLISH A DRIVING CRITERIA FOR EACH PILE TYPE AND CAPACITY. ESTABLISH THE DRIVING CRITERIA TO ACHIEVE THE ULTIMATE BEARING VALUE GIVEN BELOW FOR THE PILES. PAYMENT FOR DYNAMIC LOAD TESTING PERFORMED AT THE CONTRACTOR'S OPTION IS INCLUDED IN THE UNTIL PRICE PAY ITEM FOR PILES DRIVEN.

THE ULTIMATE BEARING VALUE IS 148 TONS PER PILE FOR THE HP12x53 ABUTMENT PILES.

REAR ABUTMENT PILES:
32 PILES 50 FEET LONG, ORDER LENGTH

FORWARD ABUTMENT PILES:
32 PILES 45 FEET LONG, ORDER LENGTH

ITEM 507, STEEL POINTS OR SHOES, AS PER PLAN:
USE STEEL PILE POINTS TO PROTECT THE TIPS OF THE PROPOSED STEEL "H" PILING. FURNISH STEEL POINTS FROM THE FOLLOWING MANUFACTURES/SUPPLIERS: ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BLVD., CLIFTON, NEW JERSEY 07014, PHONE (973) 773-8400, (800) 526-9047, FAX: (973) 773-8442; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015, PHONE: (704) 821-8200, (888) 423-8721, FAX: (704) 821-8201; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417, PHONE: (201) 337-5748, FAX: (201) 337-9022; VERSA STEEL INC., 1618 N.E. FIRST AVE., PORTLAND, OREGON 97232, PHONE: (503) 287-9822, (800) 678-0814, FAX: (503) 287-7483; VERSABITE PILING ACCESORIES, 1704 TOWER INDUSTRIAL DR., MONROE, NORTH CAROLINA 28110, PHONE: (800) 280-9950, (704) 225-1566, FAX: (704) 225-1567; OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO DIRECTOR. THE MATERIAL USED FOR THE MANUFACTURING OF PILE POINTS SHALL CONFORM TO ASTM A27/A27M 65/35 - CLASS 2 - HEAT TREATED OR AASHTO M103/M103M 65/35 - HEAT TREATED. WELD THE PILE POINTS TO THE PILE IN ACCORDANCE WITH AWS D1.5 OR THE MANUFACTURERS WRITTEN WELDING PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED. SUBMIT A NOTARIZED COPY OF THE MILL TEST REPORT TO THE ENGINEER.

PILE SPLICES:
IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN CMS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION
262 RUTHERFORD BLVD.
CLIFTON, NEW JERSEY 07014

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE WELDING IS PERFORMED.

FOUNDATION BEARING PRESSURE:
PIERS 1 AND 3 FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 7.2 TONS PER SQUARE FOOT AND A MAXIMUM FACTORED LOAD PRESSURE OF 12.0 TONS PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 29.0 TONS PER SQUARE FOOT.

PIER 2 FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 7.2 TONS PER SQUARE FOOT AND A MAXIMUM FACTORED LOAD PRESSURE OF 11.9 TONS PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 29.0 TONS PER SQUARE FOOT.

FOOTINGS:
PLACE FOOTINGS IN BEDROCK AT THE ELEVATION SHOWN.

UTILITY LINES:
THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 898 - QC/QA CONCRETE, CLASS OSC2, SUPERSTRUCTURE, APPROACH SLAB, AS PER PLAN:
FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, QC/QA CONCRETE, CLASS OSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, AND WATERPROOFING. THE DEPARTMENT WILL MEASURE APPROACH SLABS BY THE NUMBER OF SQUARE YARDS. THE DEPARTMENT WILL INITIALLY PAY THE FULL BID PRICE TO THE CONTRACTOR UPON COMPLETING THE WORK. THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

ITEM 898 - QC/QA CONCRETE, CLASS OSC2, SUPERSTRUCTURE, (DECK), AS PER PLAN:
THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:
INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼" X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE, WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, ±, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, ±, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN (CONTINUED):
THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY-DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM	REQUIREMENT
THICKNESS, INCHES	D751	0.094±0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM	D751	700 X 700 (LONG. X TRANS.)
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS, MINIMUM	D751	9
BURST STRENGTH, PSI, MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 °F, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40°F, BEND AROUND ¼" MANDREL	D2136	NO CRACKING OF COATING

METHOD OF MEASUREMENT:
THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT:
THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

DECK PLACEMENT DESIGN ASSUMPTIONS:
THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 1.23 KIPS FOR A TOTAL MACHINE LOAD OF 9.8 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

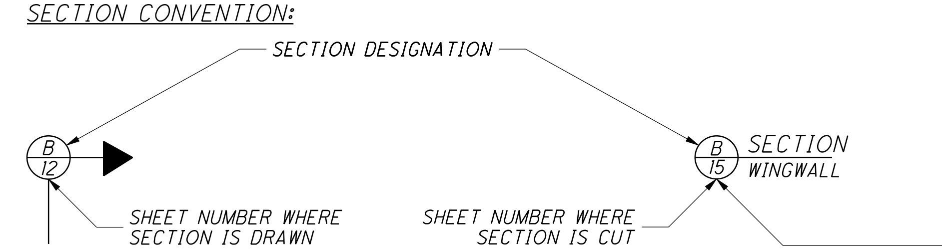
A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ABBREVIATION LIST:

N.F. =	NEAR FACE	P.E.J.F. =	PREFORMED EXPANSION JOINT FILLER
F.F. =	FAR FACE	P.C.P.P. =	PERFORATED CORRUGATED PLASTIC PIPE
E.F. =	EACH FACE	N.P.C.P.P. =	NON-PERFORATED CORRUGATED PLASTIC PIPE
TYP. =	TYPICAL	INV. =	INVERT
MIN. =	MINIMUM	FWD. =	FORWARD
STA. =	STATION	ABUT. =	ABUTMENT
SPA. =	SPACES	CONC. =	CONCRETE
CONST. =	CONSTRUCTION	EA. =	EACH
EL. =	ELEVATION	STD. =	STANDARD
C.I.P. =	CAST-IN-PLACE	DWG. =	DRAWING
BRG. =	BEARING	DIA. =	DIAMETER
EX. =	EXISTING	E.B. =	EASTBOUND
PROP. =	PROPOSED	W.B. =	WESTBOUND
A.P.P. =	AS PER PLAN	W.P. =	WORK POINT
R.A. =	REAR ABUTMENT	C/C =	CENTER TO CENTER
F.A. =	FORWARD ABUTMENT	STRUCT. =	STRUCTURE
O/O =	OUT TO OUT	TEMP. =	TEMPORARY
F/F =	FACE TO FACE	C.J. =	CONSTRUCTION JOINT
CLR. =	CLEAR	BTM. =	BOTTOM
LT. =	LEFT	T/T =	TOE TO TOE
RT. =	RIGHT		
EST. =	ESTIMATE		
EQ. =	EQUAL		

SECTION CONVENTION:



DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT	—	7306458/7306466	

GENERAL NOTES
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

CALCULATED BY: RBK DATE: 09/03/10
CHECKED BY: DAT DATE: 11/10/10

ESTIMATED QUANTITIES

	ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	SHT. REF.
	503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING				LUMP	
	503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP				15/43
	503	22200	177	CU YD	UNCLASSIFIED EXCAVATION INCLUDING ROCK AND/OR SHALE		177			
	505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
	507	00200	1600	FT	STEEL PILES HP12X53, FURNISHED	1600				
	507	00250	1440	FT	STEEL PILES HP12X53, DRIVEN	1440				
	507	92200	1440	FT	PREBORED HOLES	1440				
	507	93301	32	EACH	STEEL POINTS OR SHOES, AS PER PLAN	32				5/43
	509	10000	438646	POUND	EPOXY COATED REINFORCING STEEL	16511	188796	233340		
	512	10100	2470	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	101	1021	1348		
	515	15051	20	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MODIFIED (72"), AS PER PLAN			20		25-26/43
	515	20000	64	EACH	INTERMEDIATE DIAPHRAGMS			64		
	516	13600	10	SQ FT	1" PREFORMED EXPANSION JOINT FILLER				10	
	516	13900	1534	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	97		1252	185	
	516	14021	121	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	121				5/43
	516	44000	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 1.72" THICK x 22" x 13" WITH 1.50" THICK x 26" x 15" LOAD PLATE		10			
	516	44100	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 2.75" THICK x 22" x 13" WITH 1.50" THICK x 26" x 15" LOAD PLATE		20			
	516	44200	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 3.78" THICK x 22" x 13" WITH 1.50" THICK x 24" x 16" LOAD PLATE AND HP 14x73 SHAPE WITH 1.75" THICK x 26" x 16" LOAD PLATE	10				
	518	21200	107	CU YD	POROUS BACKFILL WITH FILTER FABRIC	107				
	518	40000	120	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	120				
	518	40010	28	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	28				
***	601	20000	1864	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION				1864	
***	601	32204	149	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER				149	
***	670	00500	2018	SQ YD	SLOPE EROSION PROTECTION	2018				
	898	10201	830	CU YD	OC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			830		5/43
	898	10709	316	SQ YD	OC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN			316		5/43
	898	11000	67	CU YD	OC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			67		
	898	11001	87	CU YD	OC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN			87		39/43
	898	20100	718	CU YD	OC/OA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		718			
	898	20150	61	CU YD	OC/OA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT)	61				
	898	20300	241	CU YD	OC/OA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)	77	164			

*** COST INCLUDED WITH EROSION CONTROL BID ITEM
TOTALS CARRIED TO GENERAL SUMMARY

ESTIMATED QUANTITIES
STRUCTURE SCI-823-0837 L

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
437 Grant Street, Suite 1100, Pittsburgh, PA 15219
TEL 412.261.2621 FAX 412.261.2660 Web www.kzfdesign.com

REVIEWED BAA DATE 06/24/11
STRUCTURE FILE NUMBER 7306458/7306466
DRAWN RBK REVISED
DESIGNED DEF/RBK CHECKED DAT

ESTIMATED QUANTITIES
BRIDGE NO. SCI-823-0837 L
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

c:\pwworking\pitt\d0361426\823_0837LEQ001.dgn

CALCULATED BY: RBK	DATE: 09/03/10
CHECKED BY: DAT	DATE: 11/10/10

ESTIMATED QUANTITIES

	ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	SHT. REF.
	503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING				LUMP	
	503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP				15/43
	503	22200	170	CU YD	UNCLASSIFIED EXCAVATION INCLUDING ROCK AND/OR SHALE		170			
	505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
	507	00200	1680	FT	STEEL PILES HP12X53, FURNISHED	1680				
	507	00250	1520	FT	STEEL PILES HP12X53, DRIVEN	1520				
	507	92200	1520	FT	PREBORED HOLES	1520				
	507	93301	32	EACH	STEEL POINTS OR SHOES, AS PER PLAN	32				5/43
	509	10000	442214	POUND	EPOXY COATED REINFORCING STEEL	16511	192363	233340		
	512	10100	2470	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	101	1021	1348		
	515	15051	20	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MODIFIED (72"), AS PER PLAN			20		25-26/43
	515	20000	64	EACH	INTERMEDIATE DIAPHRAGMS			64		
	516	13600	10	SQ FT	1" PREFORMED EXPANSION JOINT FILLER				10	
	516	13900	1534	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	97		1252	185	
	516	14021	121	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	121				5/43
	516	44000	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 1.72" THICK x 22" x 13" WITH 1.50" THICK x 26" x 15" LOAD PLATE		10			
	516	44100	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 2.75" THICK x 22" x 13" WITH 1.50" THICK x 26" x 15" LOAD PLATE		20			
	516	44200	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 3.78" THICK x 22" x 13" WITH 1.50" THICK x 24" x 16" LOAD PLATE AND HP 14x73 SHAPE WITH 1.75" THICK x 26" x 16" LOAD PLATE	10				
	518	21200	107	CU YD	POROUS BACKFILL WITH FILTER FABRIC	107				
	518	40000	120	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	120				
	518	40010	28	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	28				
***	601	20000	1814	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION				1814	
***	601	32204	146	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER				146	
***	670	00500	2521	SQ YD	SLOPE EROSION PROTECTION	2521				
	898	10201	830	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			830		5/43
	898	10709	316	SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN			316		5/43
	898	11000	67	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			67		
	898	11001	87	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN			87		39/43
	898	20100	738	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		738			
	898	20150	61	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT)	61				
	898	20300	241	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)	77	164			

*** COST INCLUDED WITH EROSION CONTROL BID ITEM
TOTALS CARRIED TO GENERAL SUMMARY

ESTIMATED QUANTITIES
STRUCTURE SCI-823-0837 R

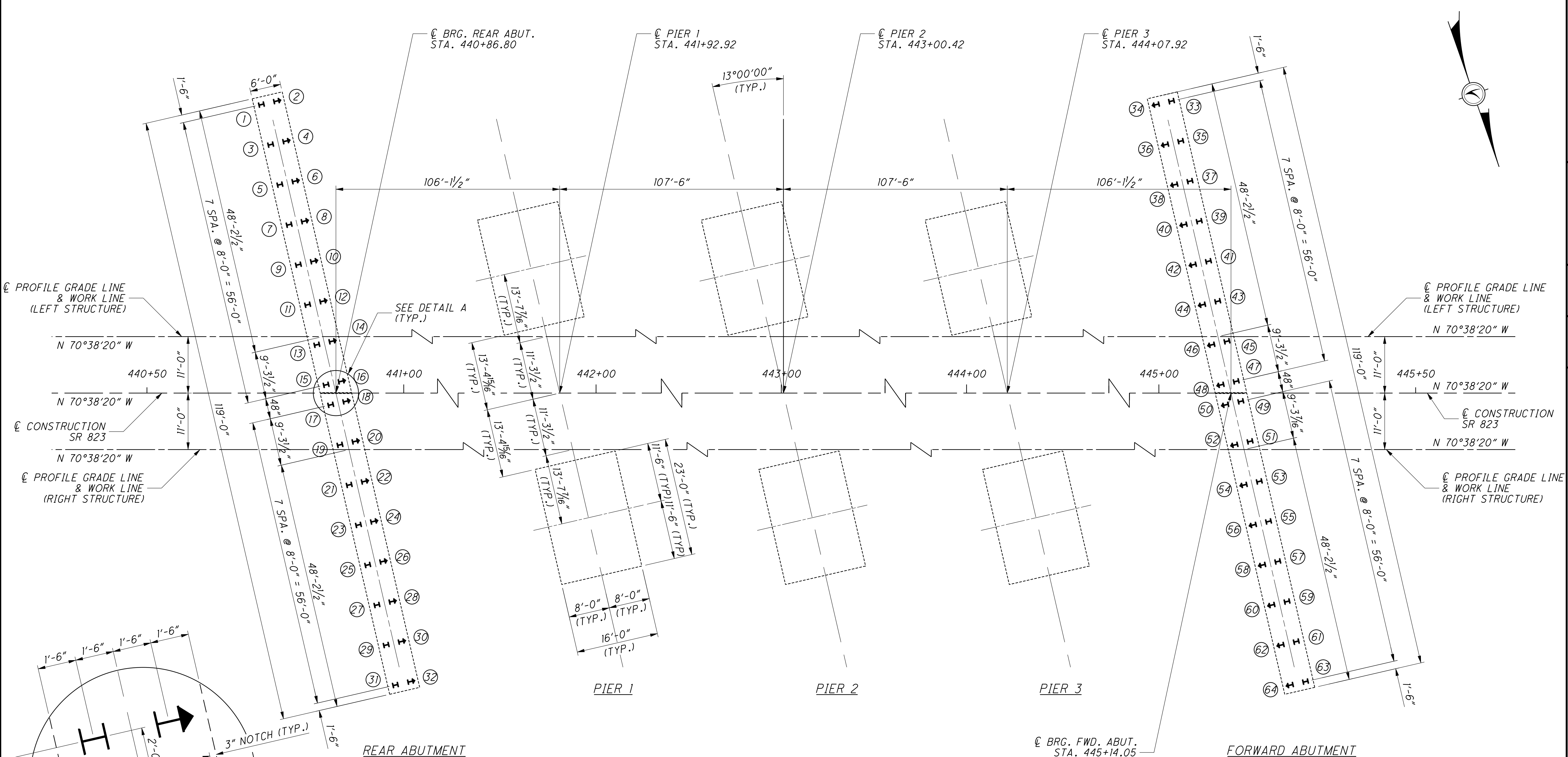
c:\pwworking\pitt\d0361426\823_0837REQ001.dgn

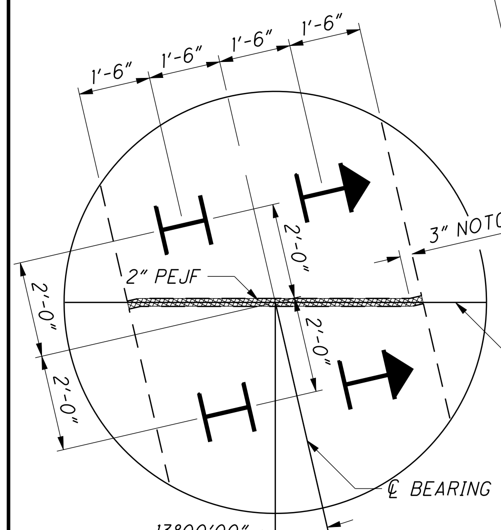
DESIGN AGENCY KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

ESTIMATED QUANTITIES
BRIDGE NO. SCI-823-0837 R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415





DETAIL A

LEGEND

H = VERTICAL PILE (HP12x53)

⊣ = PILE (HP12x53) BATTER 4:1

(xx) = PILE NUMBER

NOTES

1. OFFSET DISTANCES ARE MEASURED FROM ℄ CONSTRUCTION SR 823.

PILE LOCATION TABLE

PILE #	STATION	OFFSET	T/PILE EL.	PILE #	STATION	OFFSET	T/PILE EL.	PILE #	STATION	OFFSET	T/PILE EL.	PILE #	STATION	OFFSET	T/PILE EL.
1	440+72.29	56.18 LT	704.14	17	440+85.78	2.29 RT	703.73	33	445+02.46	56.85 LT	699.38	49	445+15.96	1.61 RT	699.35
2	440+75.21	56.85 LT	704.14	18	440+88.71	1.61 RT	703.73	34	444+99.54	56.18 LT	699.38	50	445+13.03	2.29 RT	699.35
3	440+74.09	48.38 LT	704.14	19	440+87.58	10.08 RT	703.73	35	445+04.26	49.06 LT	699.38	51	445+17.76	9.41 RT	699.35
4	440+77.01	49.06 LT	704.14	20	440+90.51	9.41 RT	703.73	36	445+01.34	48.38 LT	699.38	52	445+14.83	10.08 RT	699.35
5	440+75.89	40.59 LT	704.14	21	440+89.38	17.88 RT	703.73	37	445+06.06	41.26 LT	699.38	53	445+19.56	17.20 RT	699.35
6	440+78.81	41.26 LT	704.14	22	440+92.31	17.20 RT	703.73	38	445+03.14	40.59 LT	699.38	54	445+16.63	17.88 RT	699.35
7	440+77.69	32.79 LT	704.14	23	440+91.18	25.67 RT	703.73	39	445+07.86	33.47 LT	699.38	55	445+21.36	25.00 RT	699.35
8	440+80.61	33.47 LT	704.14	24	440+94.11	25.00 RT	703.73	40	445+04.94	32.79 LT	699.38	56	445+18.43	25.67 RT	699.35
9	440+79.49	25.00 LT	704.14	25	440+92.98	33.47 RT	703.73	41	445+09.66	25.67 LT	699.38	57	445+23.16	32.79 RT	699.35
10	440+82.41	25.67 LT	704.14	26	440+95.91	32.79 RT	703.73	42	445+06.74	25.00 LT	699.38	58	445+20.23	33.47 RT	699.35
11	440+81.29	17.20 LT	704.14	27	440+94.78	41.26 RT	703.73	43	445+11.46	17.88 LT	699.38	59	445+24.96	40.59 RT	699.35
12	440+84.21	17.88 LT	704.14	28	440+97.71	40.59 RT	703.73	44	445+08.54	17.20 LT	699.38	60	445+22.03	41.26 RT	699.35
13	440+83.08	9.41 LT	704.14	29	440+96.58	49.06 RT	703.73	45	445+13.26	10.08 LT	699.38	61	445+26.76	48.38 RT	699.35
14	440+86.01	10.08 LT	704.14	30	440+99.51	48.38 RT	703.73	46	445+10.33	9.41 LT	699.38	62	445+23.83	49.06 RT	699.35
15	440+84.88	1.61 LT	704.14	31	440+98.38	56.85 RT	703.73	47	445+15.06	2.29 LT	699.38	63	445+28.55	56.18 RT	699.35
16	440+87.81	2.29 LT	704.14	32	441+01.30	56.18 RT	703.73	48	445+12.13	1.61 LT	699.38	64	445+25.63	56.85 RT	699.35

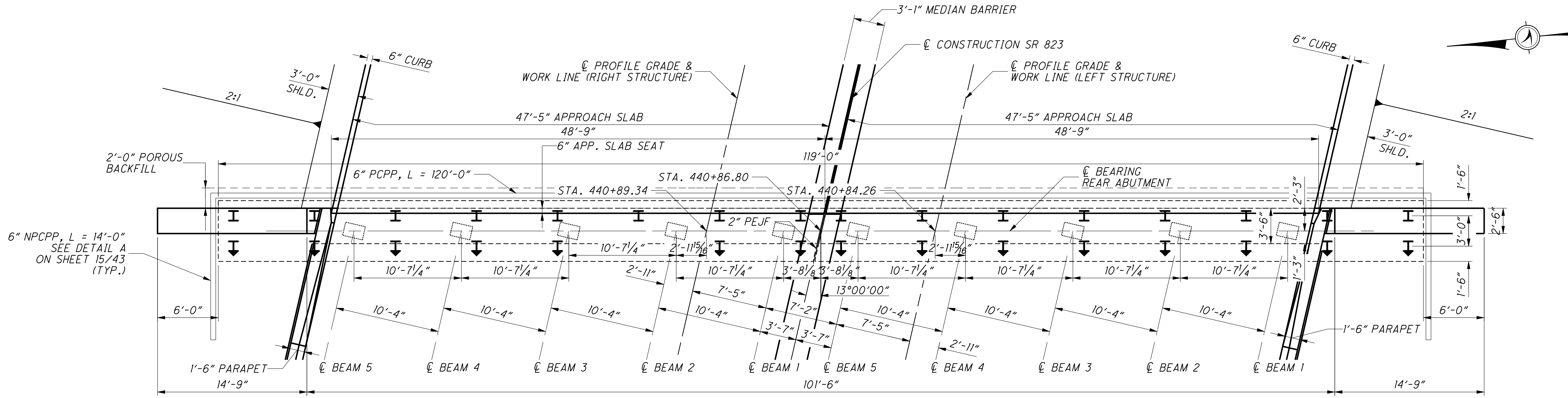
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED DEF/RBK | DRAWN RBK | REVIEWED BAA | DATE 06/24/11
CHECKED DAT | REVISED | STRUCTURE FILE NUMBER 7306458/7306466

FOUNDATION PLAN

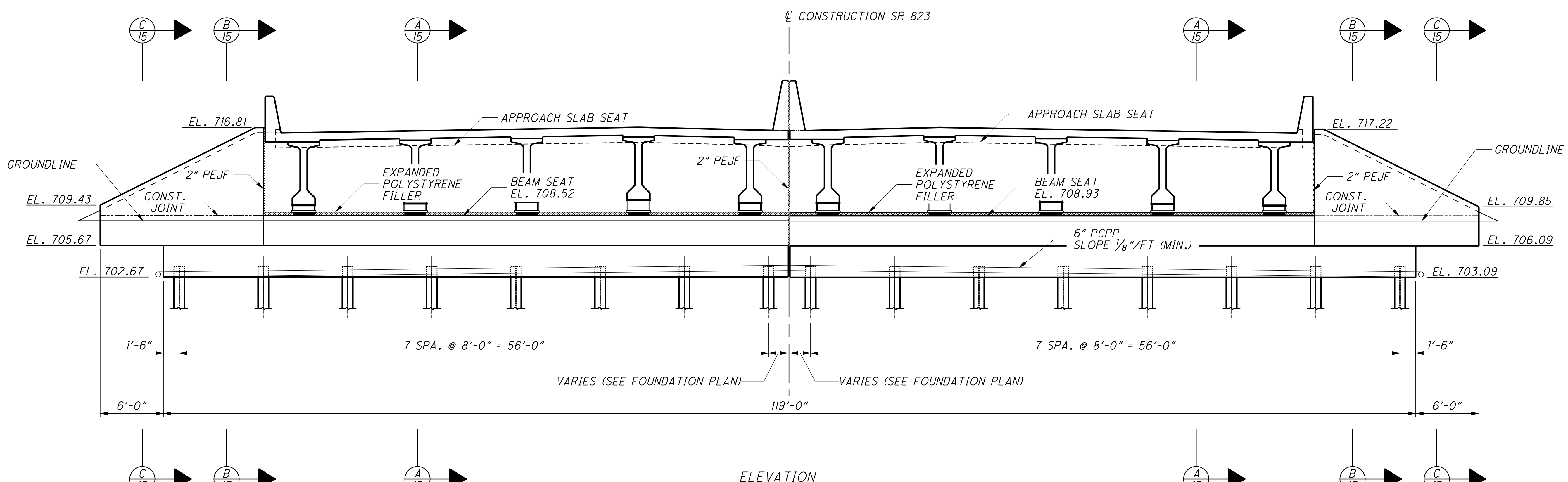
BRIDGE NO. SCI-823-0837 L/R

SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)



PLAN
BRIDGE NO. SCI-823-0837 L/R

LEGEND
- I = VERTICAL PILE (HP 12x53)
- ↧ = VERTICAL PILE (HP 12x53) BATTER 4:1



ELEVATION
BRIDGE NO. SCI-823-0837 L/R

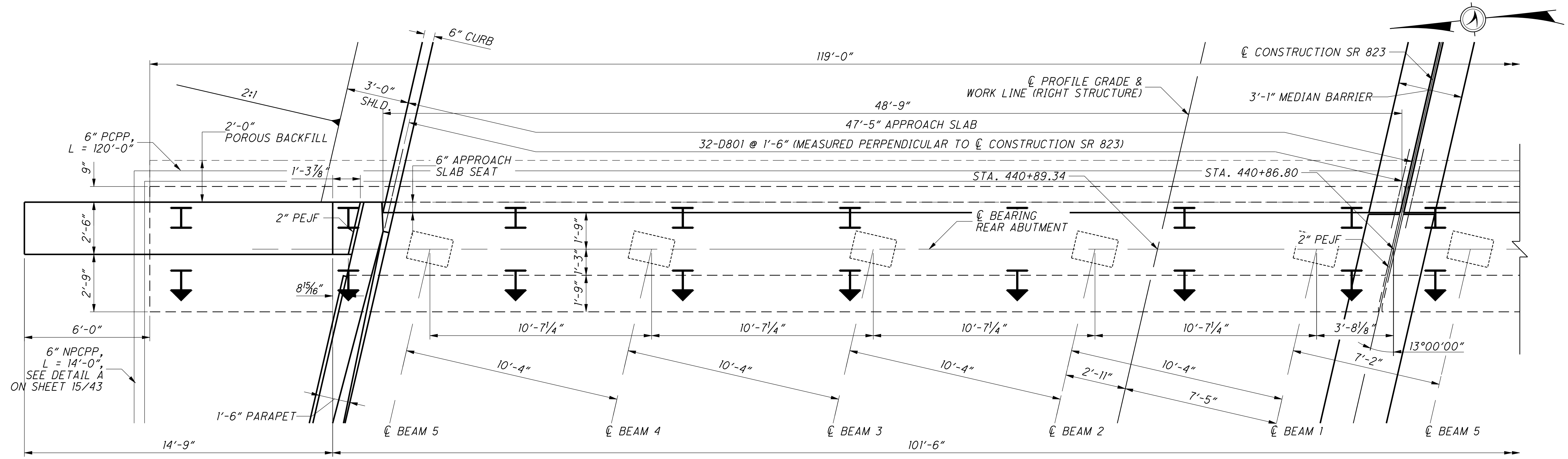
NOTES:
1. POLYSTYRENE SHALL BE PAID FOR UNDER ITEM 898 - QA/QC CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)
2. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

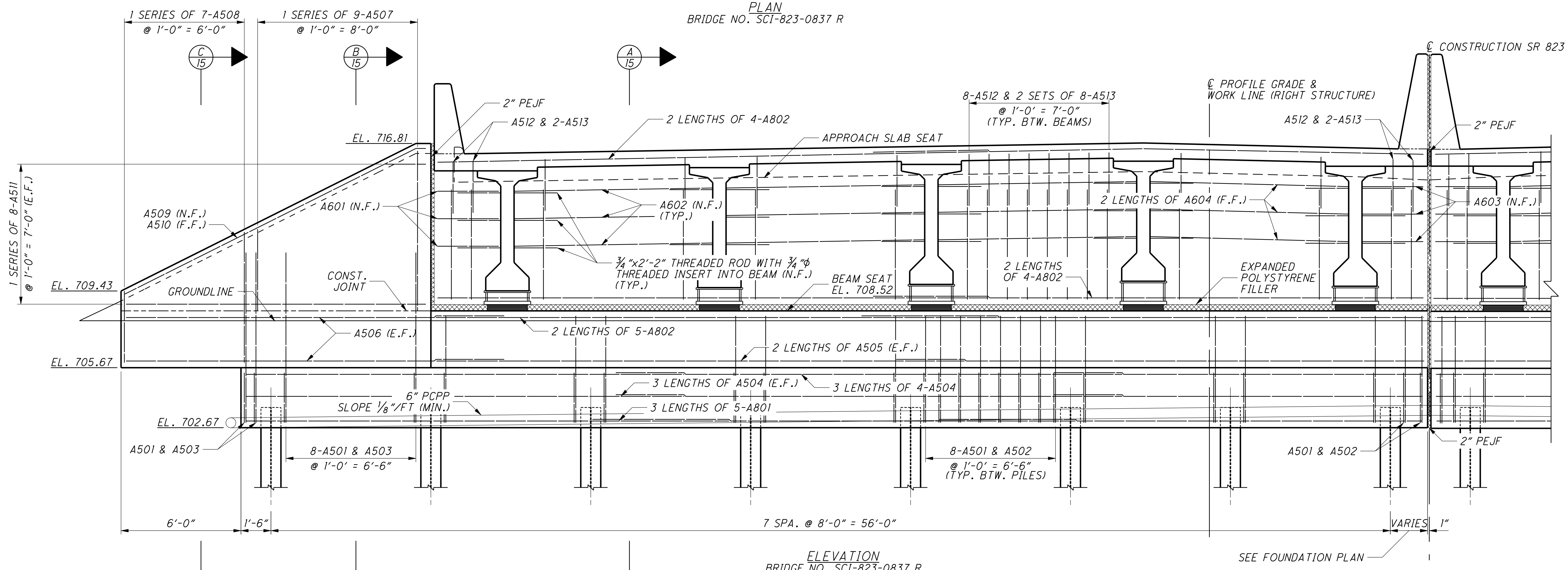
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

REAR ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PLAN
BRIDGE NO. SCI-823-0837 R



ELEVATION
BRIDGE NO. SCI-823-0837 R

NOTES:
1. POLYSTYRENE SHALL BE PAID FOR UNDER ITEM 898 - QA/QC CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)
2. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.
3. MIN. LAP FOR #5 BAR = 3'-5"
   MIN. LAP FOR #6 BAR = 4'-1"
   MIN. LAP FOR #8 BAR = 6'-10"
4. PLACE A512 & A513 BARS PARALLEL TO BEAMS.

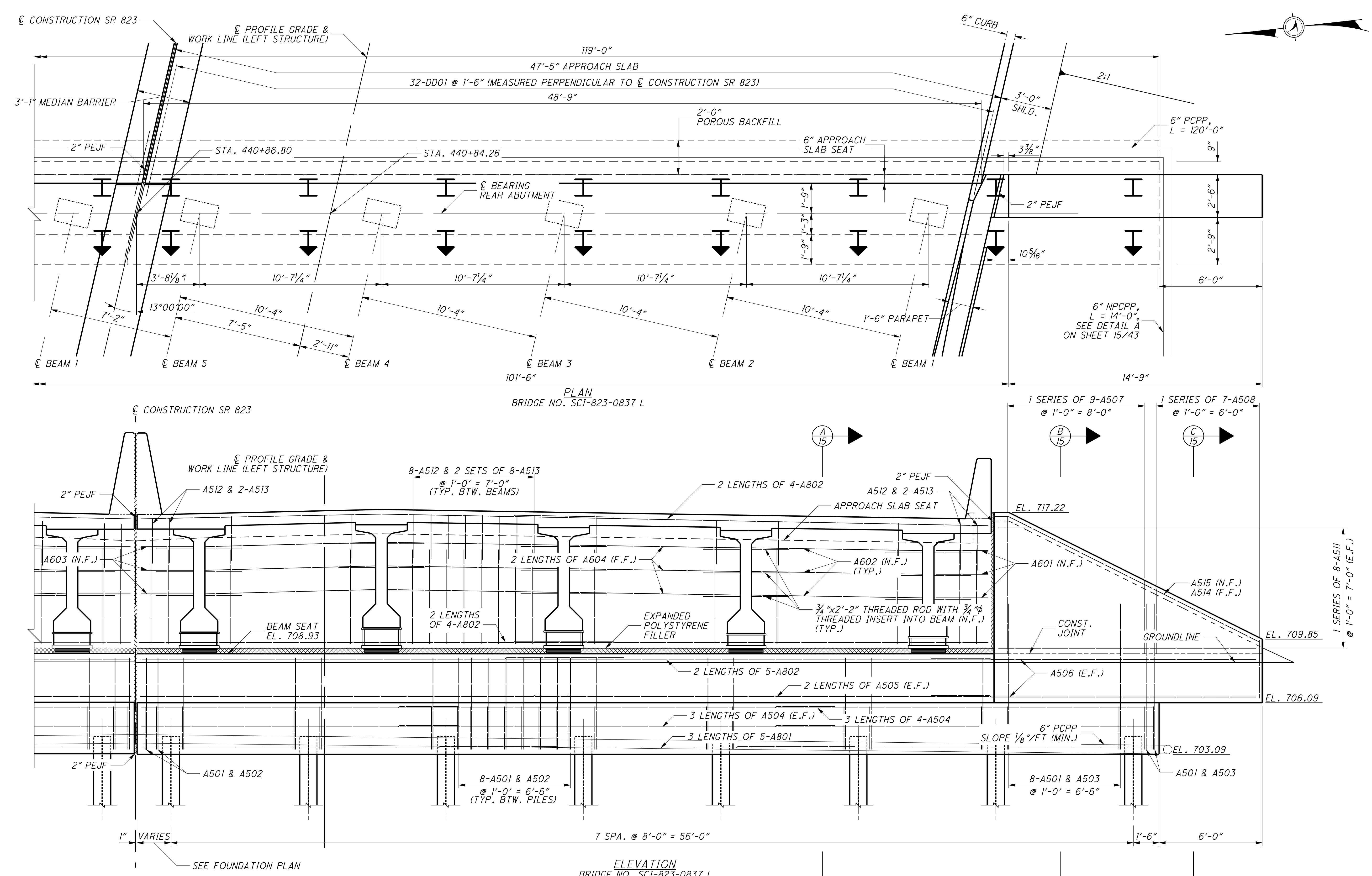
LEGEND
- = VERTICAL PILE (HP 12x53)
- = VERTICAL PILE (HP 12x53) BATTER 4:1

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

REAR ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



NOTES:

1. POLYSTYRENE SHALL BE PAID FOR UNDER ITEM 898 - QA/QC CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)
2. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.
3. MIN. LAP FOR #5 BAR = 3'-5"
   MIN. LAP FOR #6 BAR = 4'-1"
   MIN. LAP FOR #8 BAR = 6'-10"
4. PLACE A512 & A513 BARS PARALLEL TO BEAMS.

LEGEND

I = VERTICAL PILE (HP 12x53)

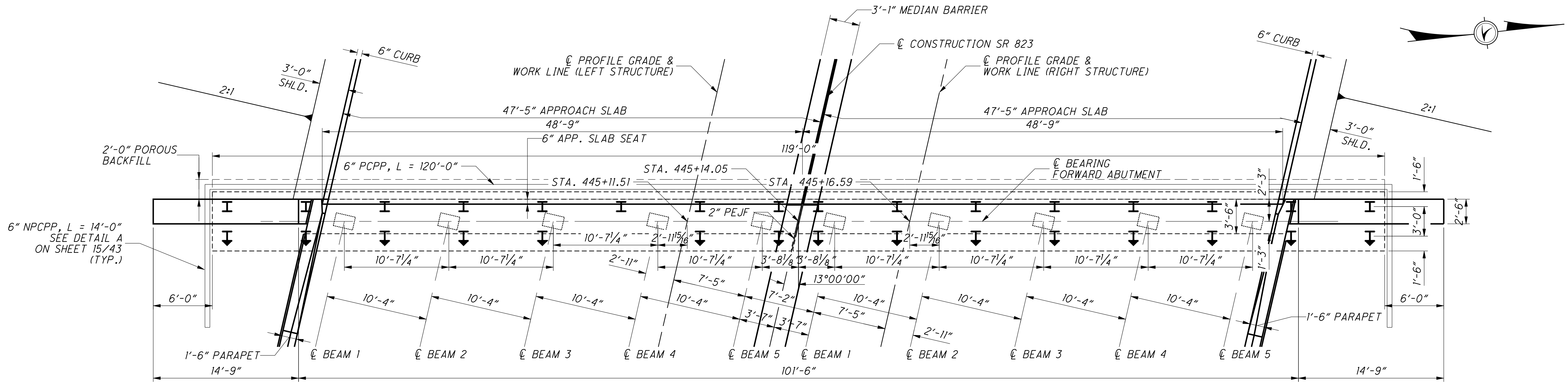
↧ = VERTICAL PILE (HP 12x53) BATTER 4:1

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

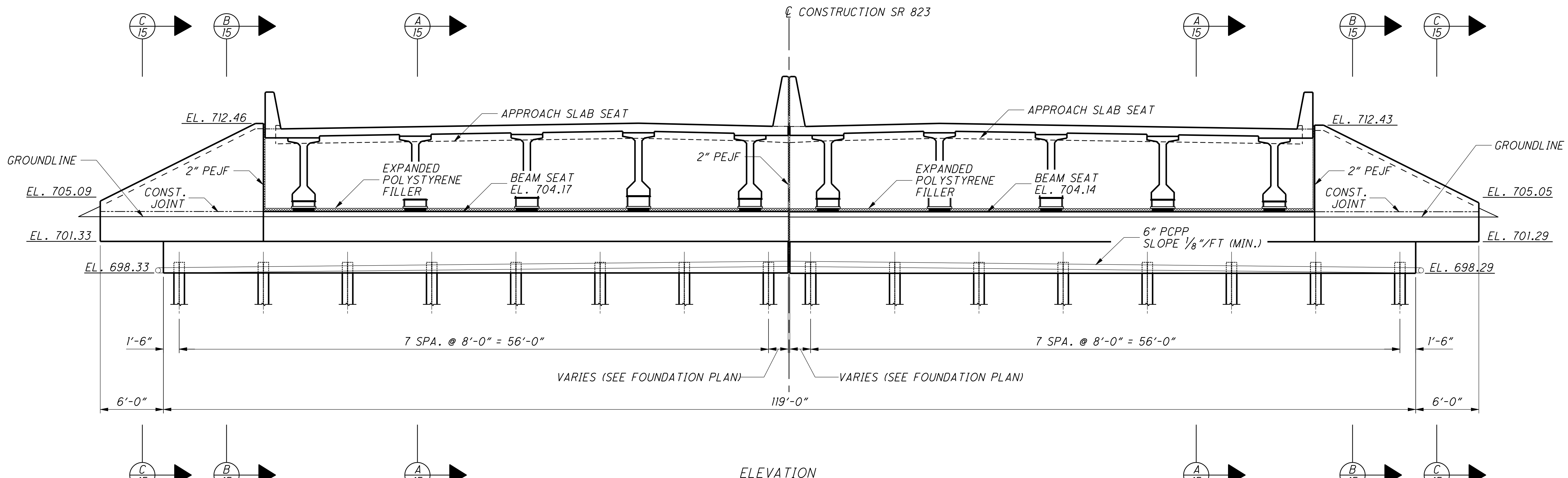
REAR ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PLAN
BRIDGE NO. SCI-823-0837 L/R

LEGEND
I = VERTICAL PILE (HP 12x53)
↧ = VERTICAL PILE (HP 12x53) BATTER 4:1



ELEVATION
BRIDGE NO. SCI-823-0837 L/R

NOTES:

1. POLYSTYRENE SHALL BE PAID FOR UNDER ITEM 898 - QA/QC CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)
2. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.

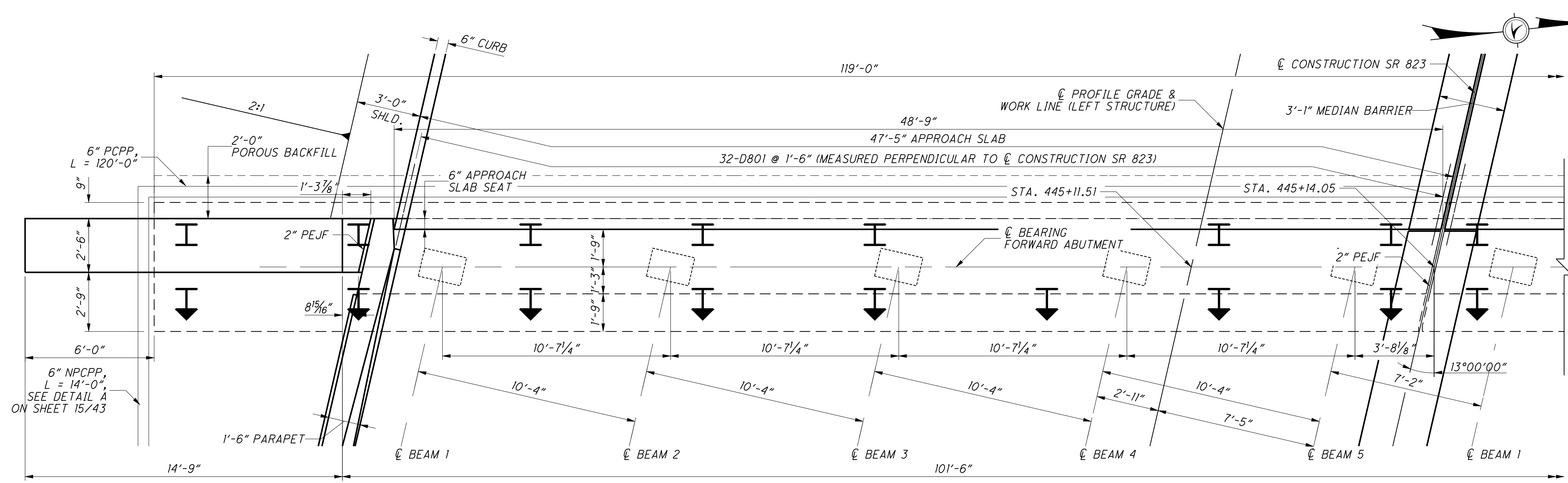
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

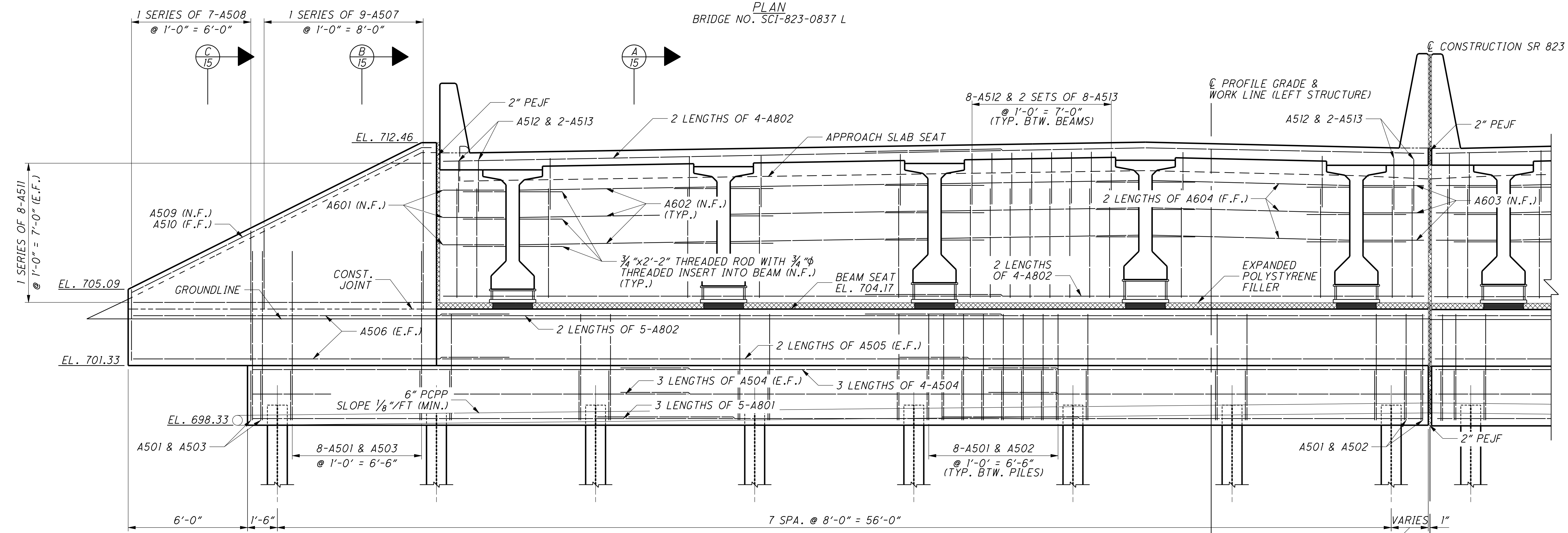
FORWARD ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

12/43



PLAN
BRIDGE NO. SCI-823-0837 L



ELEVATION
BRIDGE NO. SCI-823-0837 L

SEE FOUNDATION PLAN

C/15, B/15, A/15

LEGEND

- Ɪ = VERTICAL PILE (HP 12x53)
- Ɪ = VERTICAL PILE (HP 12x53) BATTER 4:1

NOTES:

1. POLYSTYRENE SHALL BE PAID FOR UNDER ITEM 898 - QA/QC CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)
2. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.
3. MIN. LAP FOR #5 BAR = 3'-5"
   MIN. LAP FOR #6 BAR = 4'-1"
   MIN. LAP FOR #8 BAR = 6'-10"
4. PLACE A512 & A513 BARS PARALLEL TO BEAMS.

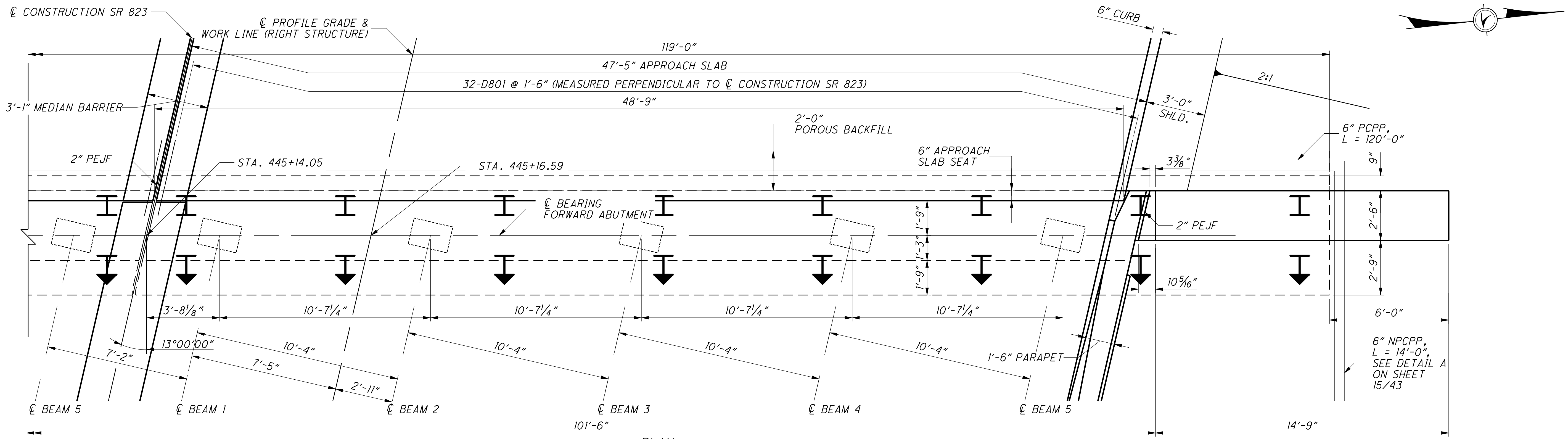
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11

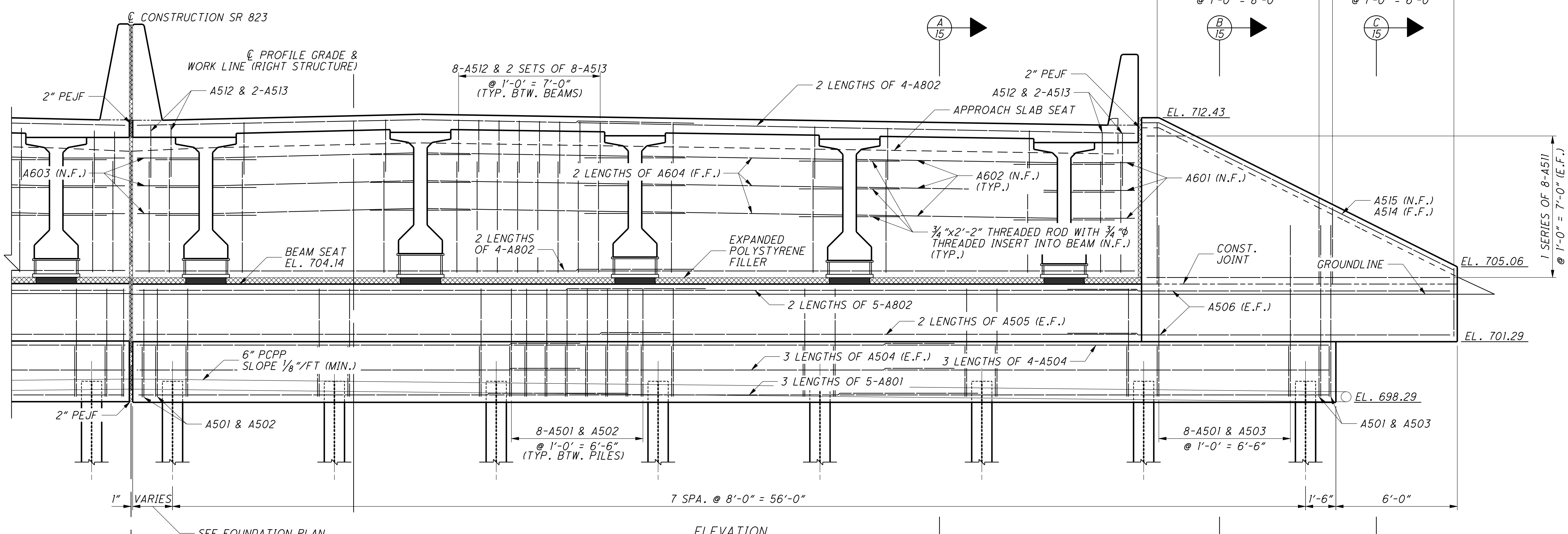
CHECKED	REVISED	STRUCTURE FILE NUMBER
DAT		7306458/7306466

FORWARD ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PLAN
BRIDGE NO. SCI-823-0837 R



ELEVATION
BRIDGE NO. SCI-823-0837 R

NOTES:

1. POLYSTYRENE SHALL BE PAID FOR UNDER ITEM 898 - QA/QC CONCRETE, CLASS QSC2, SUBSTRUCTURE (DECK)
2. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.
3. MIN. LAP FOR #5 BAR = 3'-5"
   MIN. LAP FOR #6 BAR = 4'-1"
   MIN. LAP FOR #8 BAR = 6'-10"
4. PLACE A512 & A513 BARS PARALLEL TO BEAMS.

LEGEND

- I = VERTICAL PILE (HP 12x53)
- ↧ = VERTICAL PILE (HP 12x53) BATTER 4:1

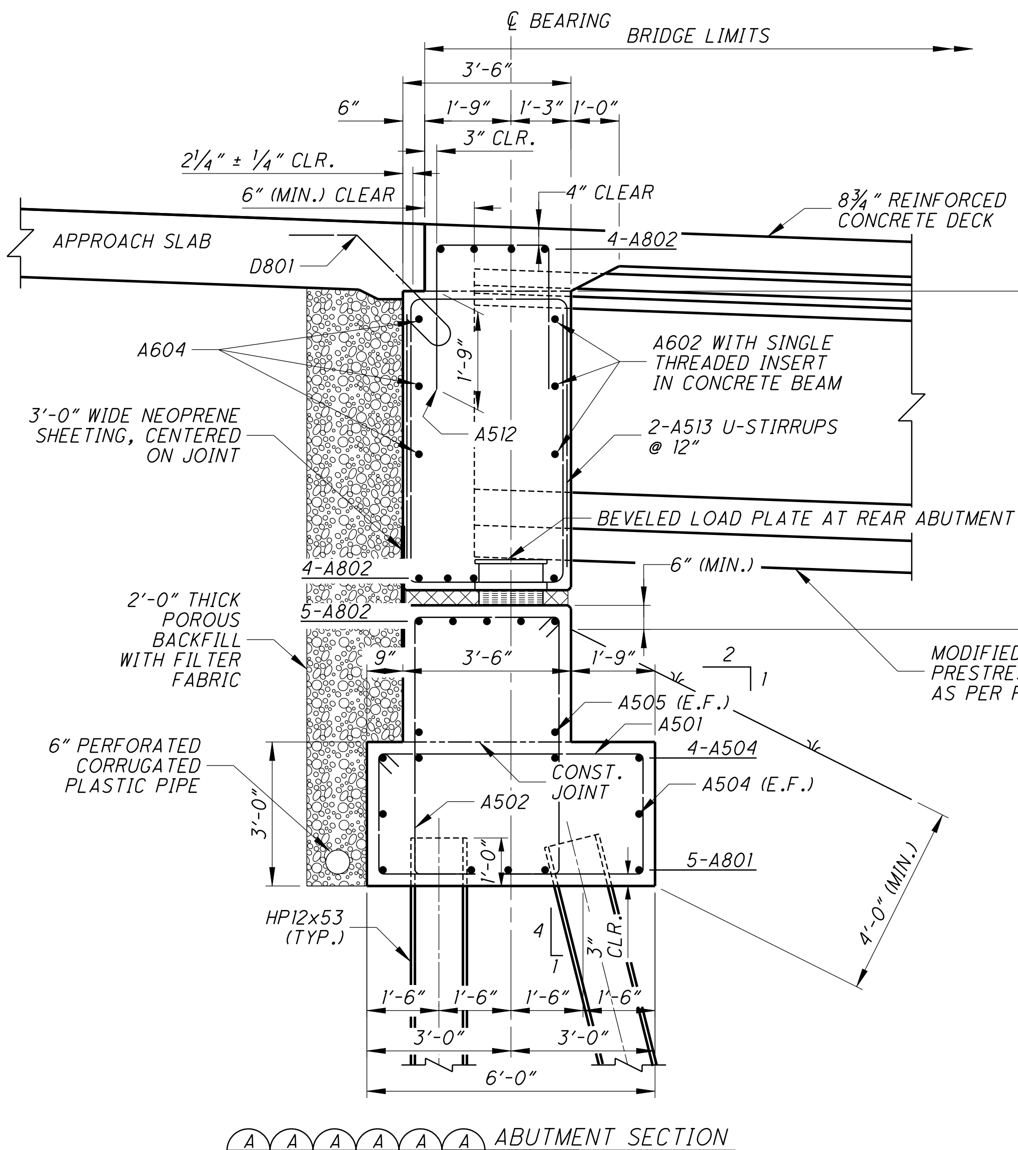
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

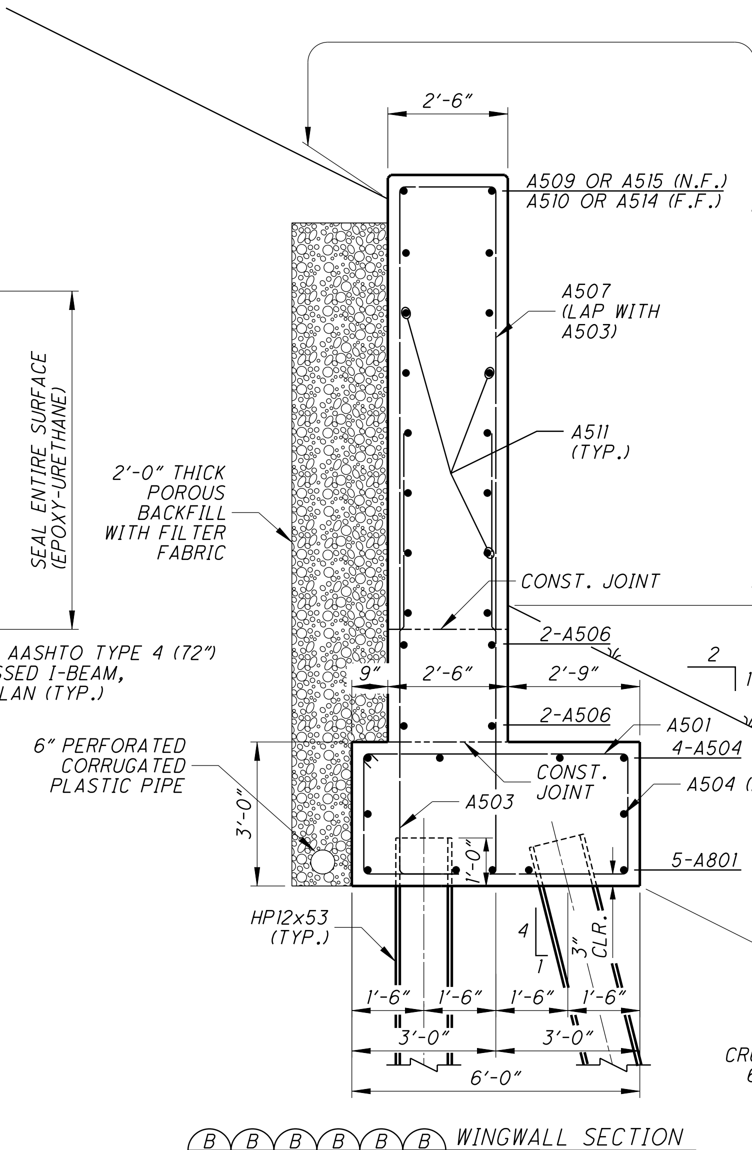
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

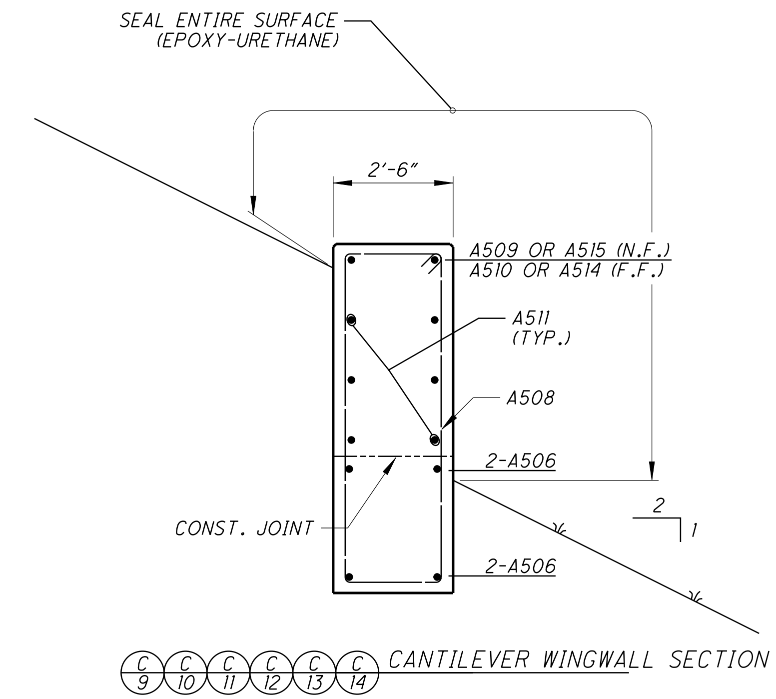
FORWARD ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

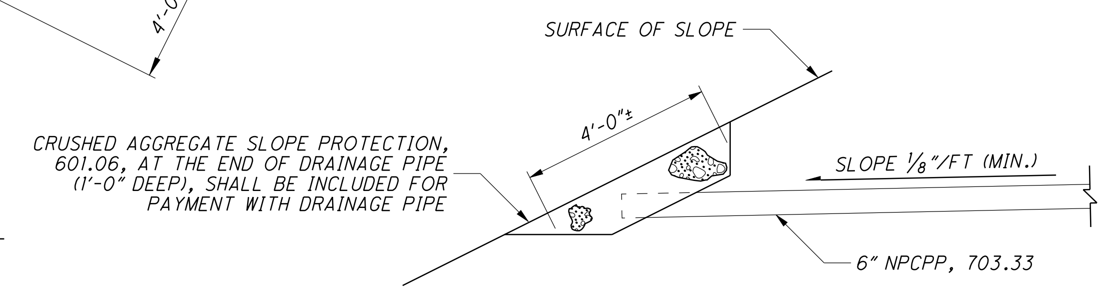
SCI-823-6.81
PID No. 19415

14/43

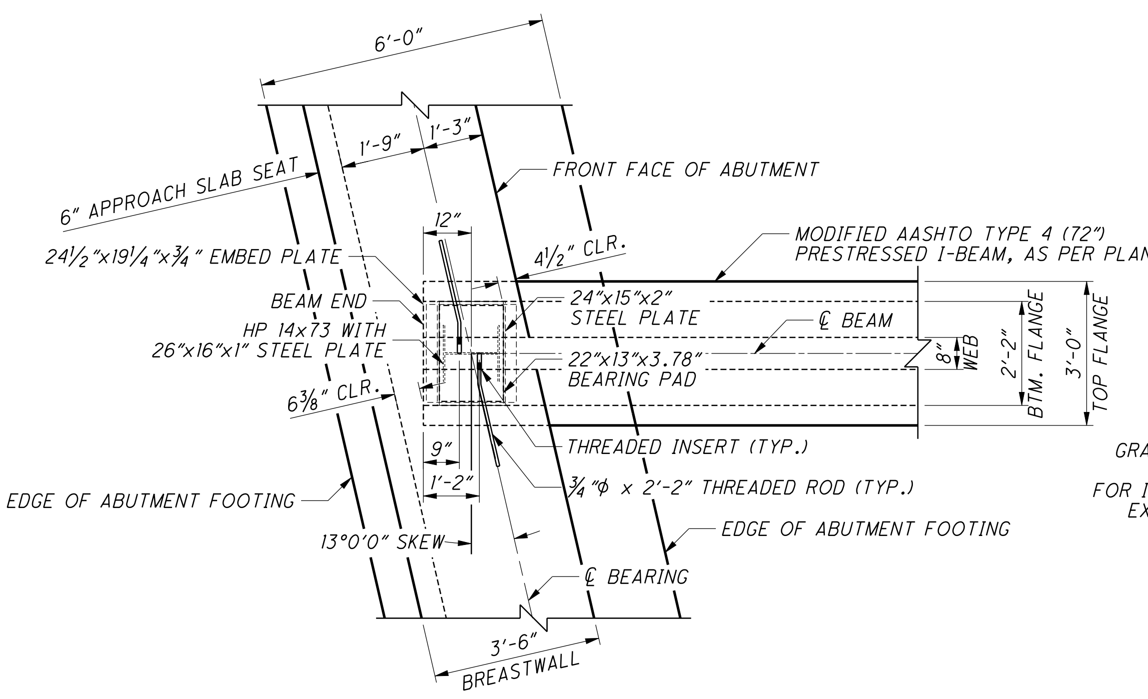




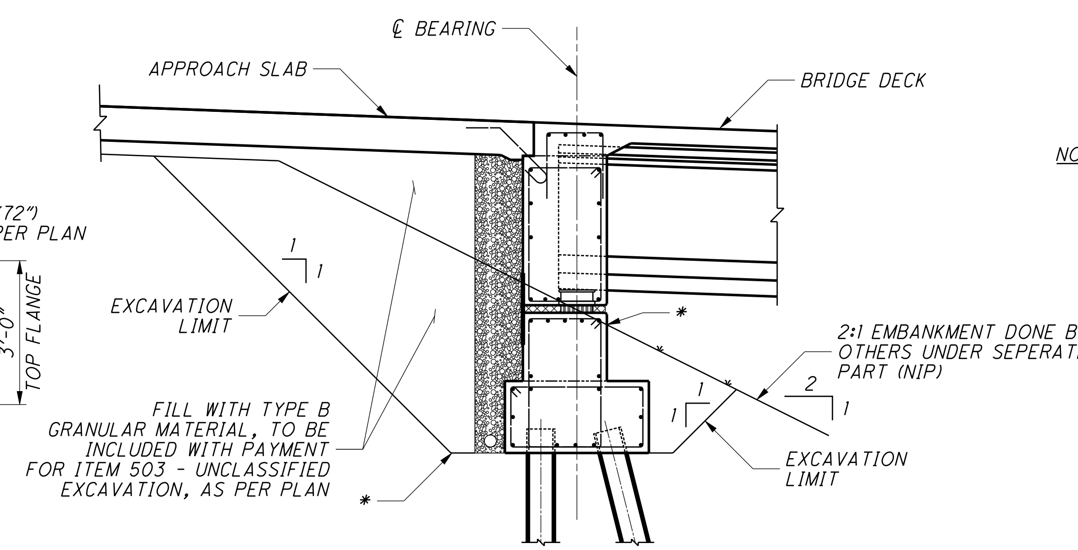




DETAIL A



PLAN DETAIL



* FOR ELEVATIONS REFER TO BRIDGE SITE PLAN SHEETS 1/43 , 2/43 , 3/43 & 4/43

EXCAVATION DIAGRAM

NOTES:

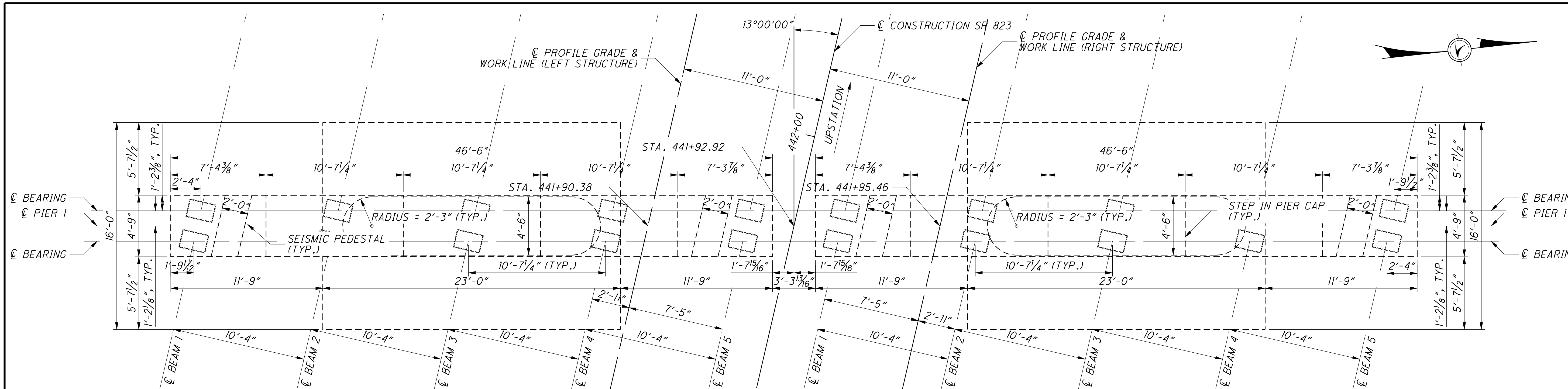
1. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
2. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.
3. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS AFTER THE DECK PLACEMENT IN THE ADJACENT SPAN IS COMPLETE. PROCEDURES THAT PLACE THE ABUTMENT DIAPHRAGM WITH THE DECK CONCRETE MAY BE APPROVED BY THE ENGINEER IF THE PLACEMENT SUBMITTAL CAN ASSURE THAT THE DECK CONCRETE IN THE ADJACENT SPAN WILL BE PLACED BEFORE CONCRETE IN THE DIAPHRAGM HAS REACHED ITS INITIAL SET. CONCRETE SHALL BE INCLUDED WITH ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN.
4. FOR ADDITIONAL ABUTMENT DETAILS, SEE ODOT STD. DWG. SICD-1-96
5. POLYSTYRENE SHALL BE INCLUDED FOR PAYMENT OF ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN.
6. PLACE A512 & A513 BARS PARALLEL TO BEAMS.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

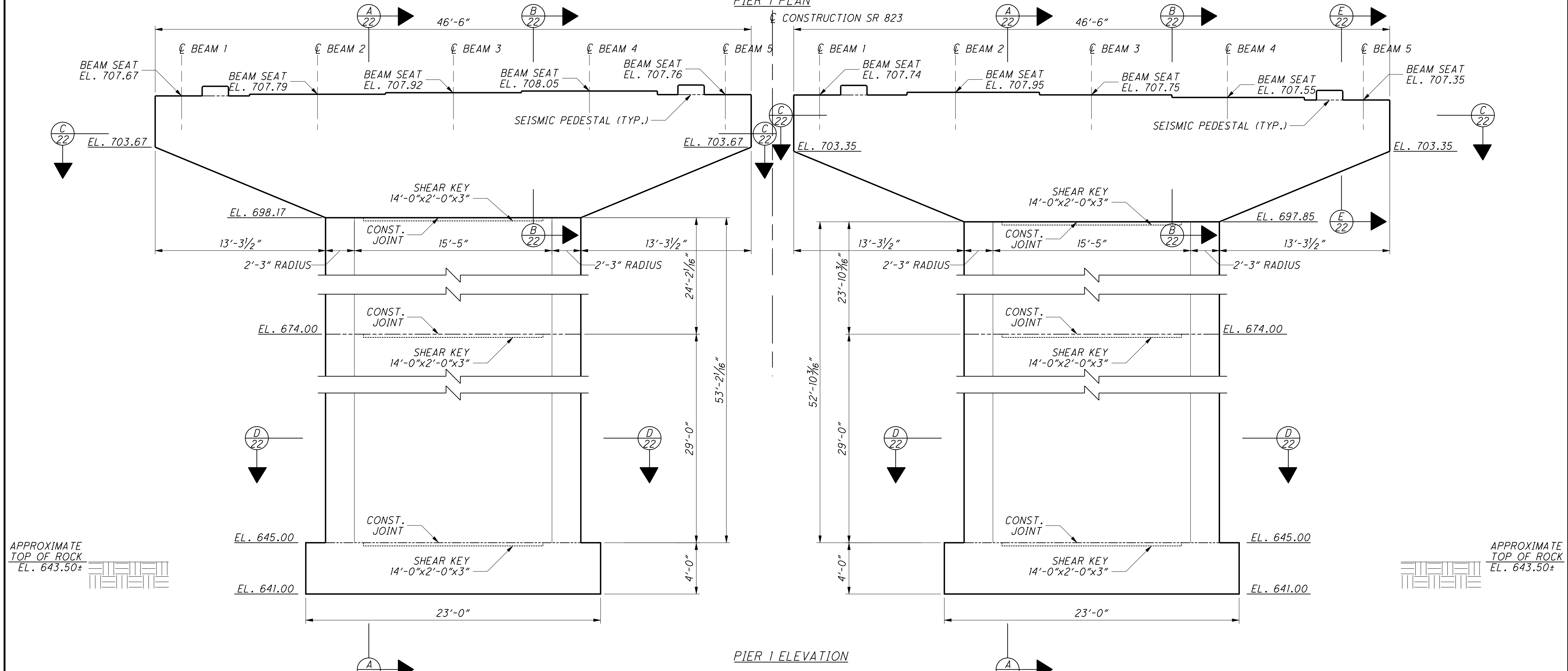
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

ABUTMENT DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PIER 1 PLAN



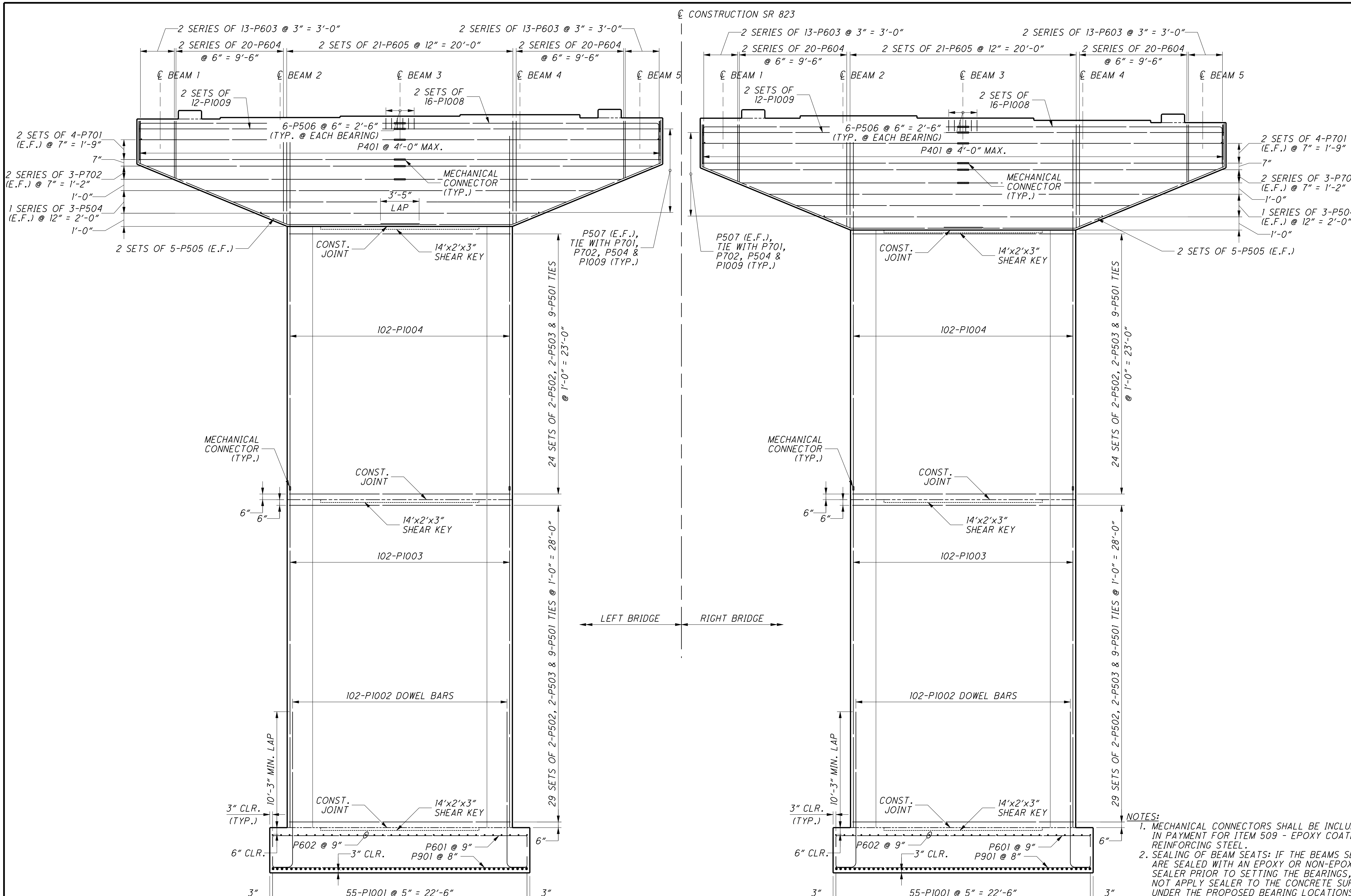
PIER 1 ELEVATION

DESIGN AGENCY: KZF DESIGN — Architecture | Engineering | Interiors | Planning

DESIGNED DEF/RBK	DRAWN RBK	REVIEWED BAA	DATE 06/24/11
CHECKED DAT	REVISED	STRUCTURE FILE NUMBER 7306458/7306466	

PIER 1 DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PIER 1 ELEVATION
REINFORCING SHOWN

NOTES:

1. MECHANICAL CONNECTORS SHALL BE INCLUDED IN PAYMENT FOR ITEM 509 - EPOXY COATED REINFORCING STEEL.
2. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.

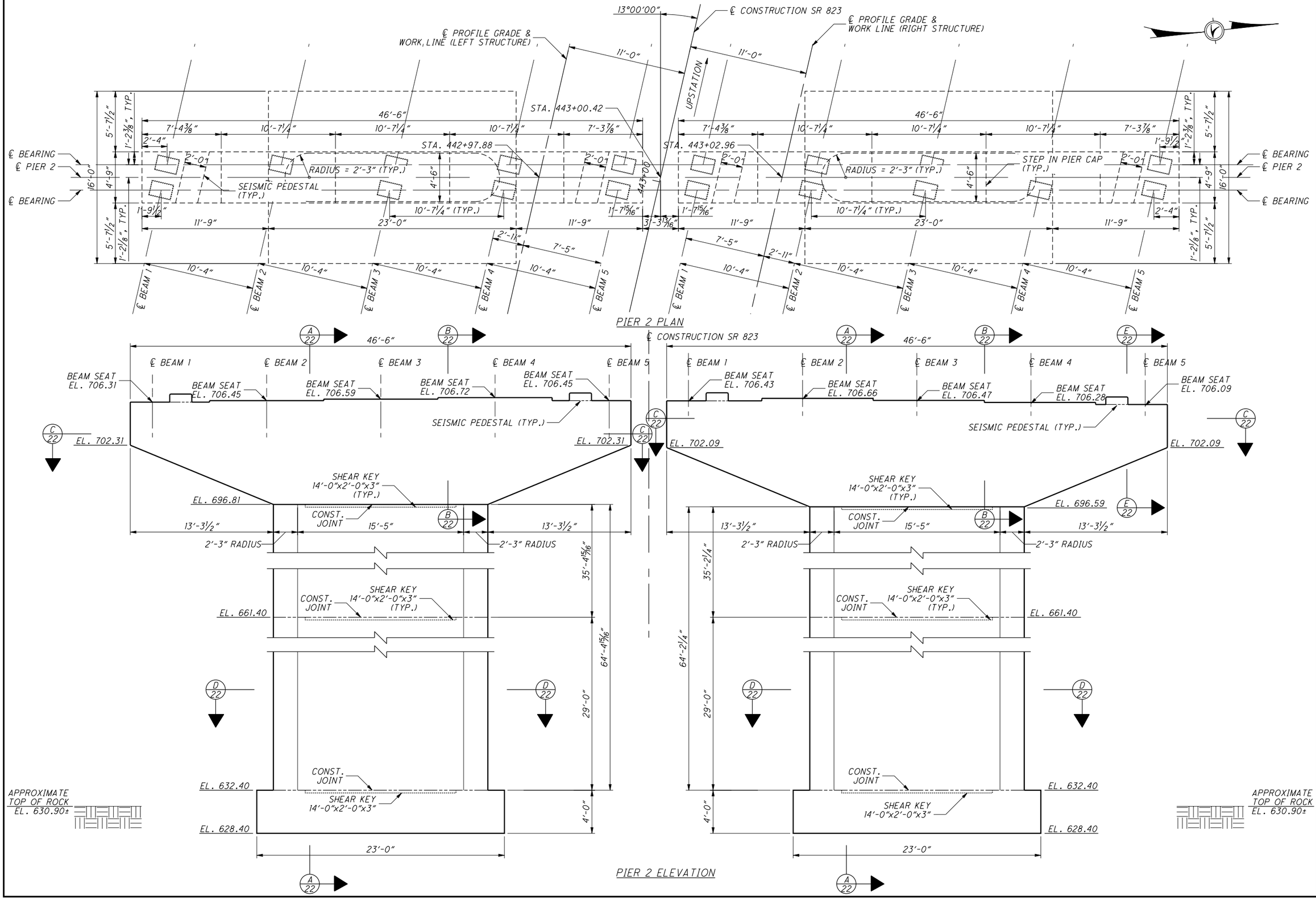
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PIER 1 DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

17/43

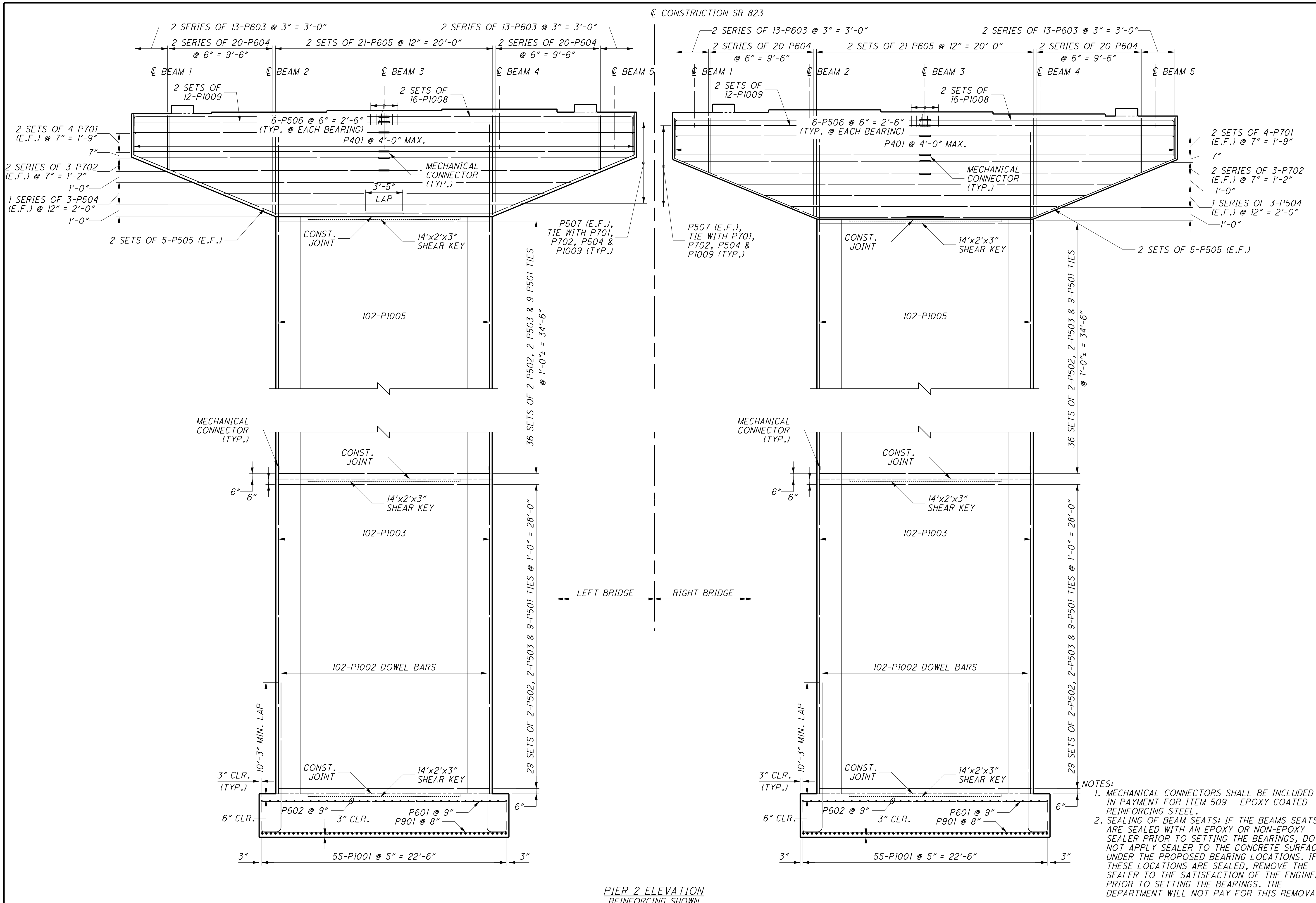


DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
614 West Superior Avenue, Suite 1242, Cleveland, Ohio 44113
TEL 216.241.2741 FAX 216.241.2600 WEB www.kzfdesign.com

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PIER 2 DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SMAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PIER 2 ELEVATION
REINFORCING SHOWN

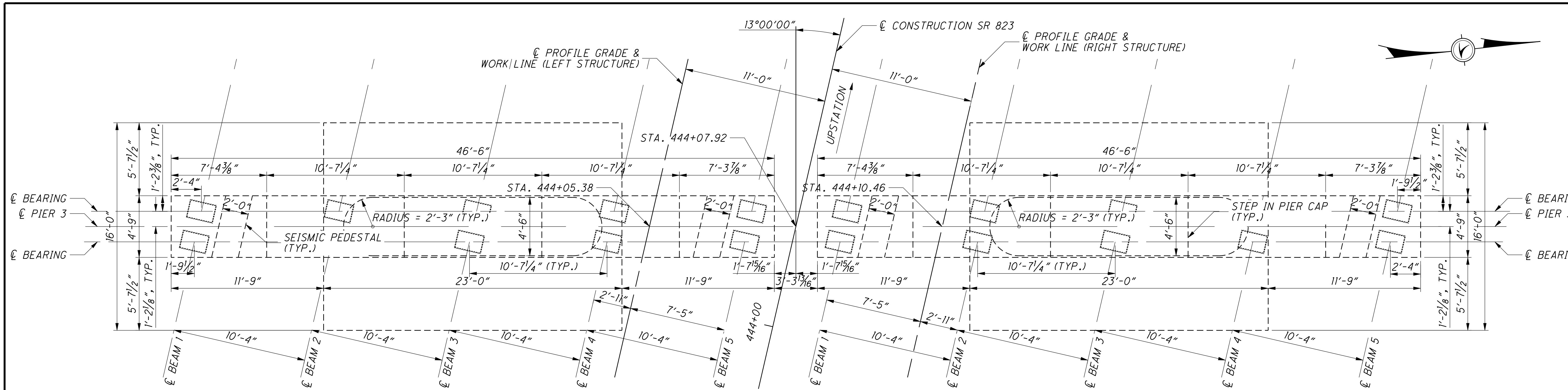
NOTES:
1. MECHANICAL CONNECTORS SHALL BE INCLUDED IN PAYMENT FOR ITEM 509 - EPOXY COATED REINFORCING STEEL.
2. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

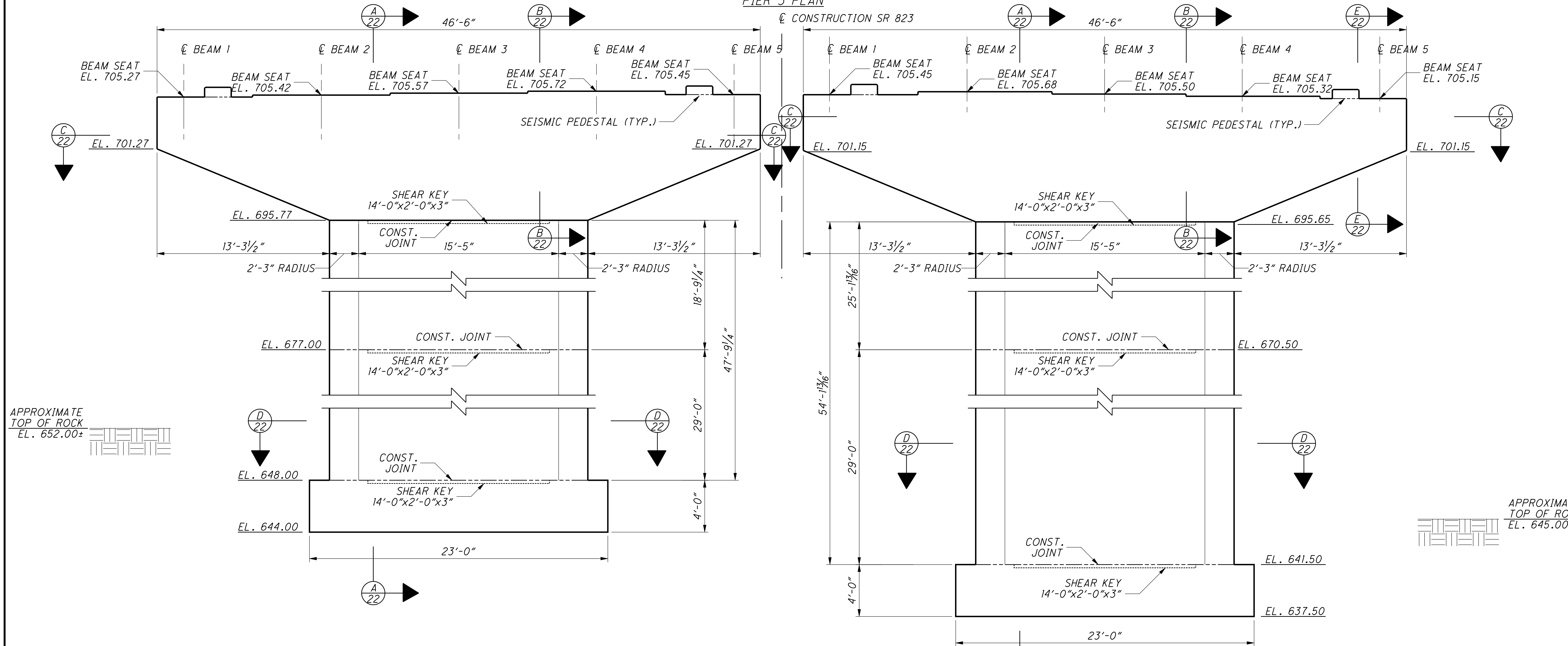
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PIER 2 DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PIER 3 PLAN



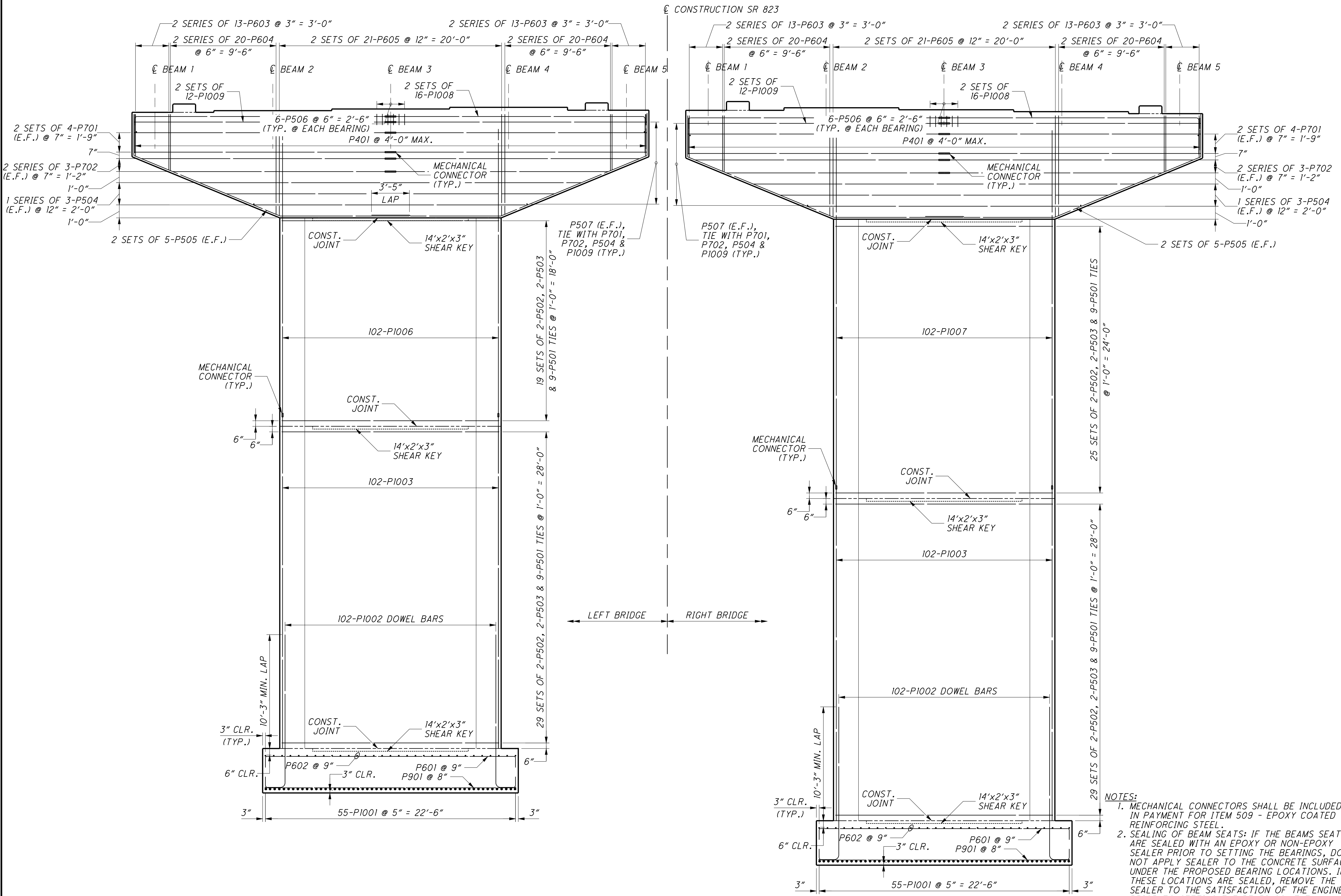
PIER 3 ELEVATION

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PIER 3 DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



PIER 3 ELEVATION
REINFORCING SHOWN

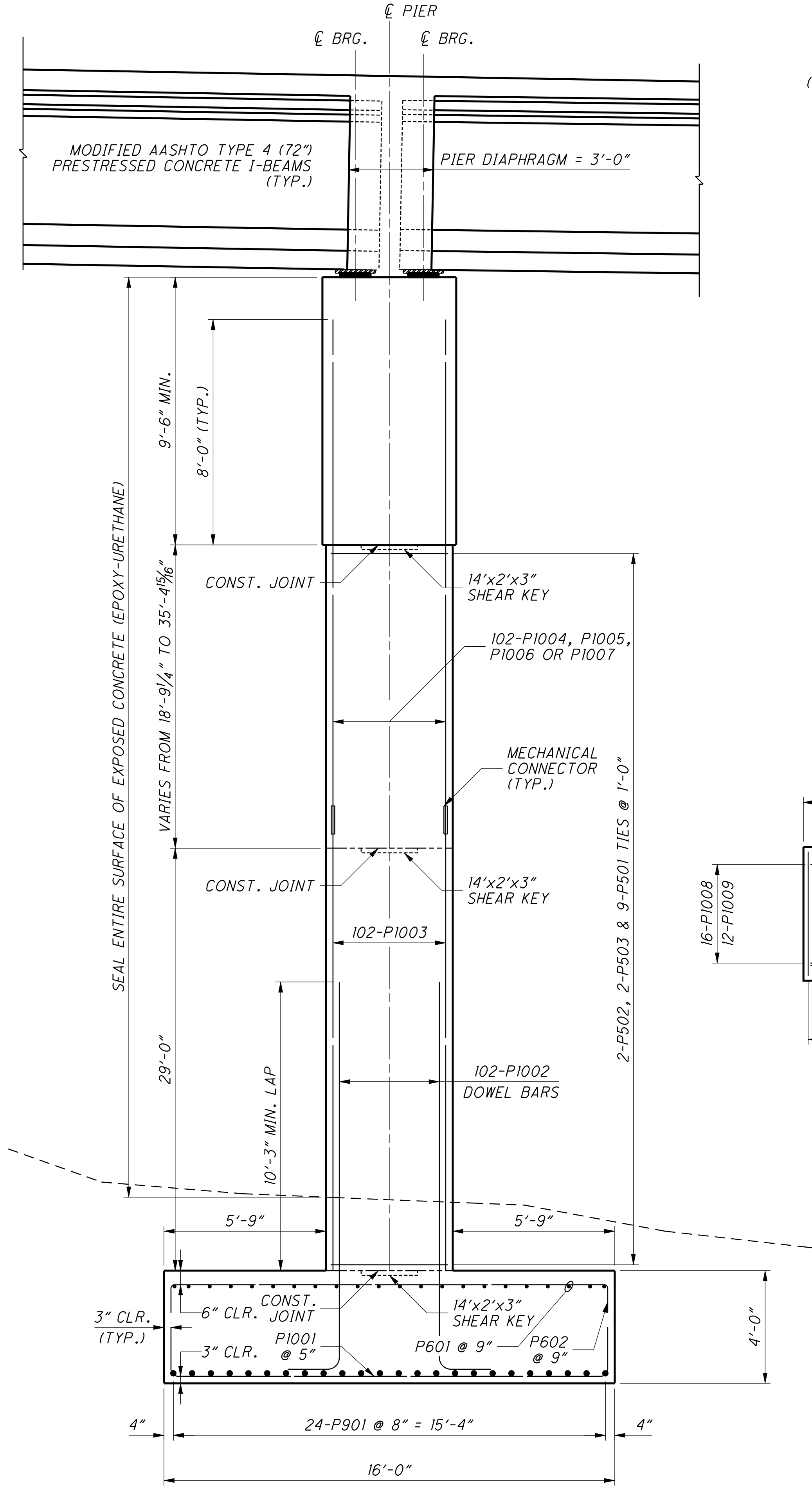
NOTES:
1. MECHANICAL CONNECTORS SHALL BE INCLUDED IN PAYMENT FOR ITEM 509 - EPOXY COATED REINFORCING STEEL.
2. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.36530 WEB www.kzf.com

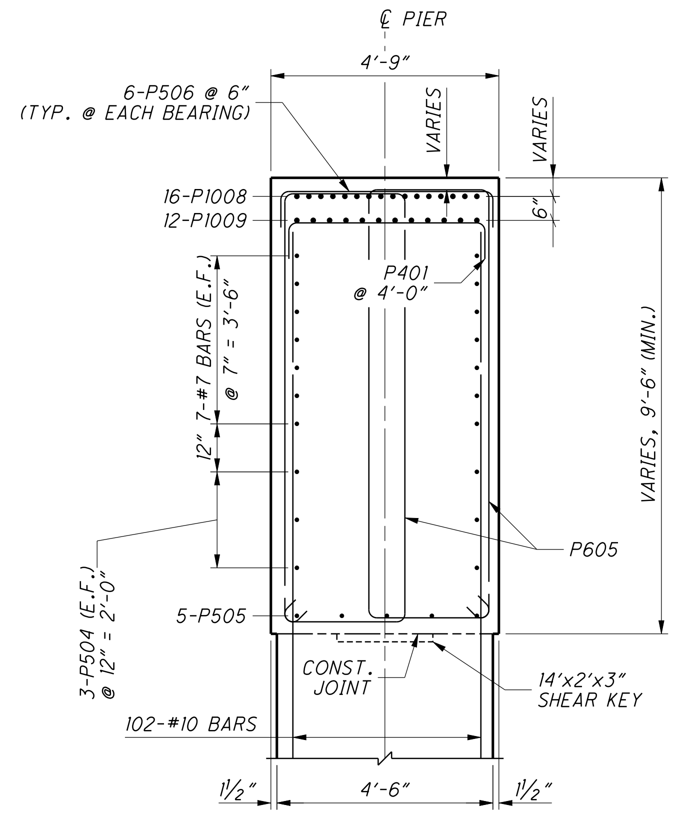
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PIER 3 DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

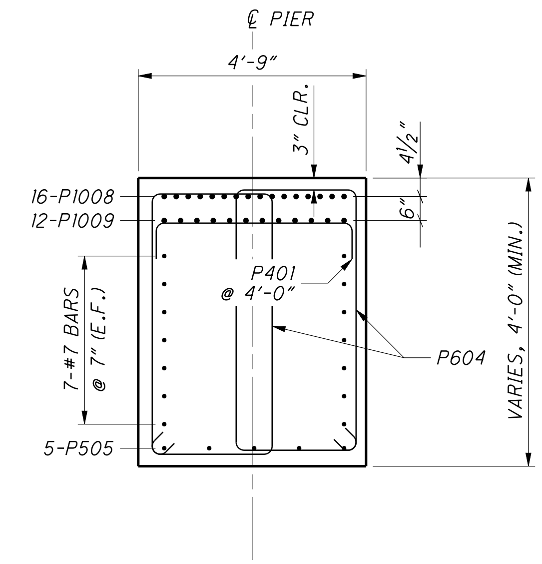
SCI-823-6.81
PID No. 19415



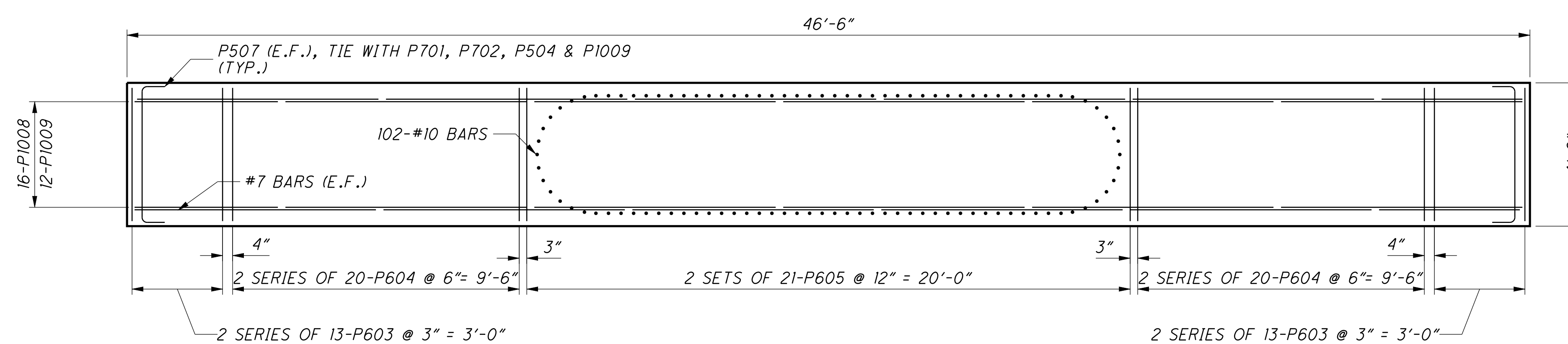
(A/16)(A/18)(A/20) PIER SECTION



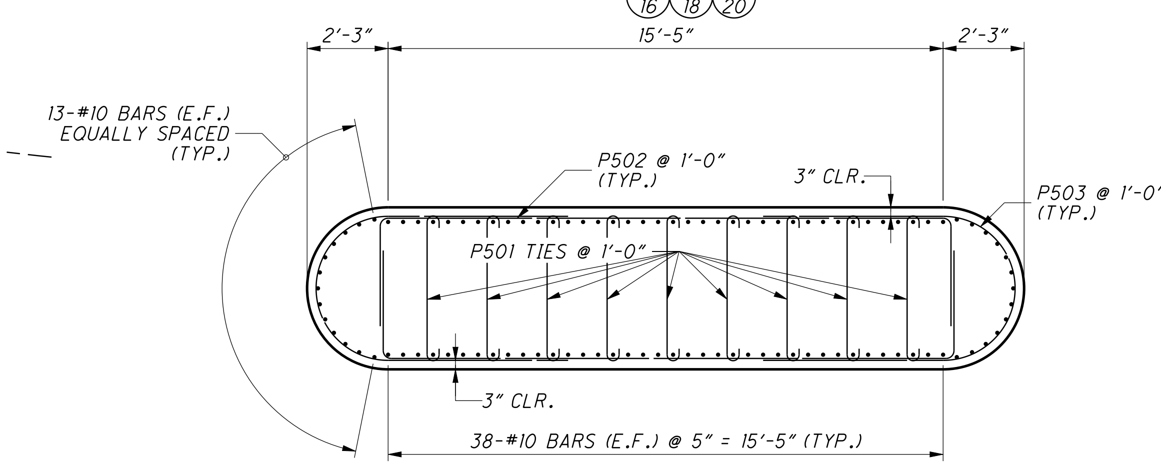
(B/16)(B/18)(B/20) PIER CAP SECTION



(E/16)(E/18)(E/20) CANTILEVER PIER CAP SECTION



(C/16)(C/18)(C/20) PIER CAP SECTION



(D/16)(D/18)(D/20) PIER COLUMN SECTION

NOTES:

1. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

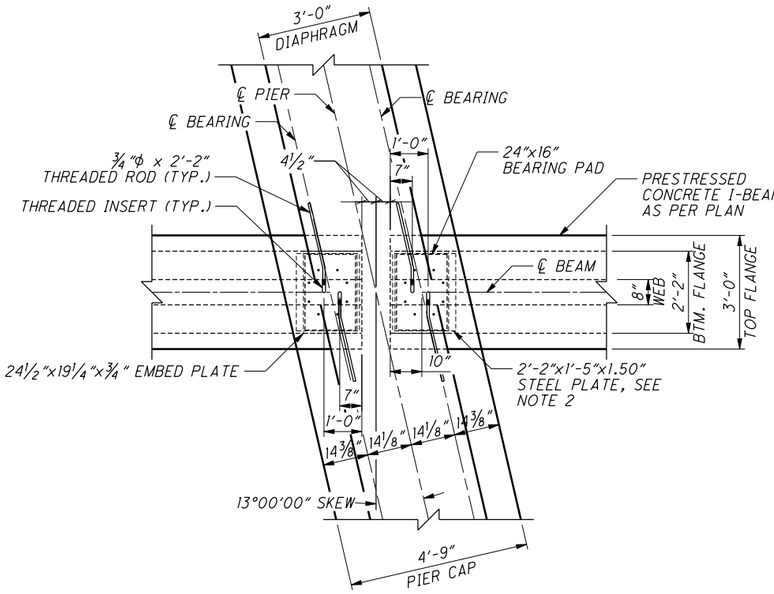
DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE
DEF/RBK	DAT	RBK		BAA	06/24/11

STRUCTURE FILE NUMBER 7306458/7306466

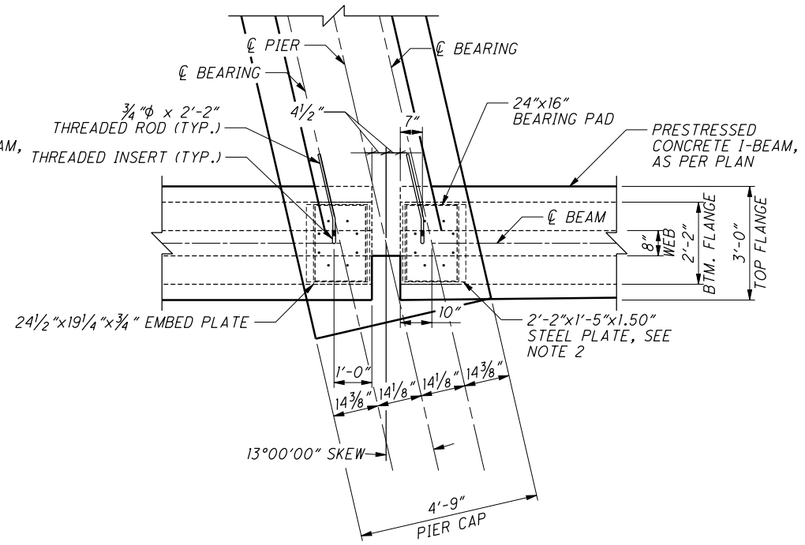
PIER DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

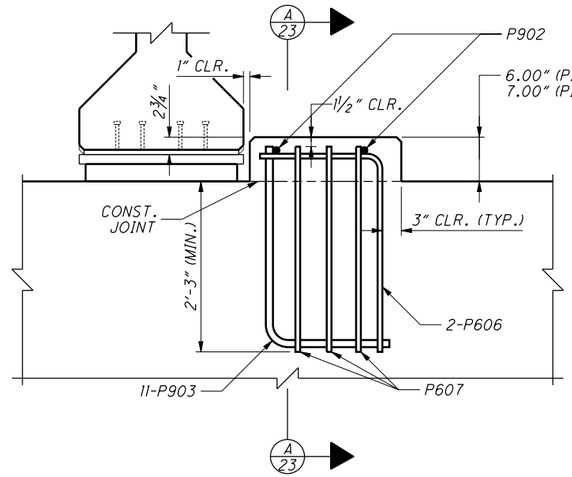
22/43



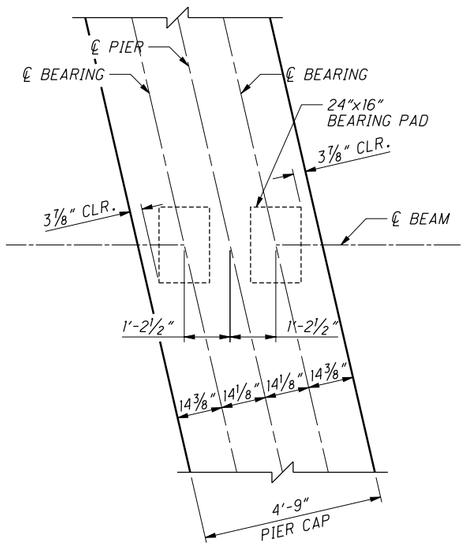
PLAN DETAIL
INTERIOR BEAM



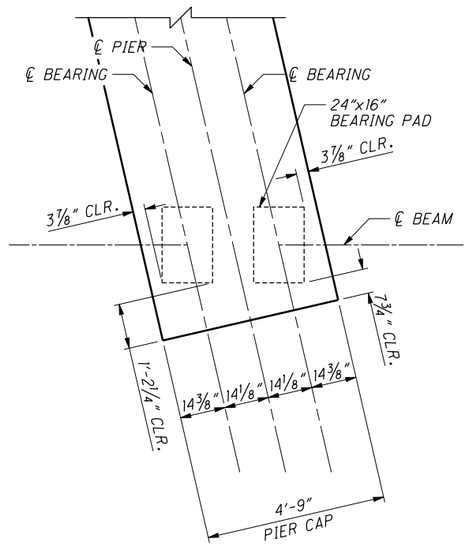
PLAN DETAIL
EXTERIOR BEAM



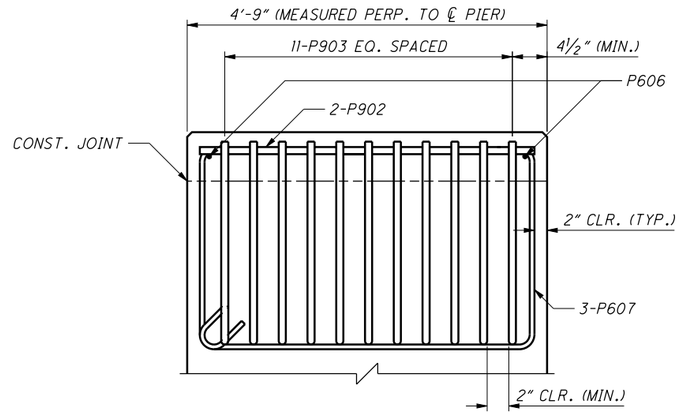
SEISMIC PEDESTAL DETAIL



PLAN DETAIL
INTERIOR BEAM



PLAN DETAIL
EXTERIOR BEAM



A 23 SECTION
SEISMIC PEDESTAL

NOTES:

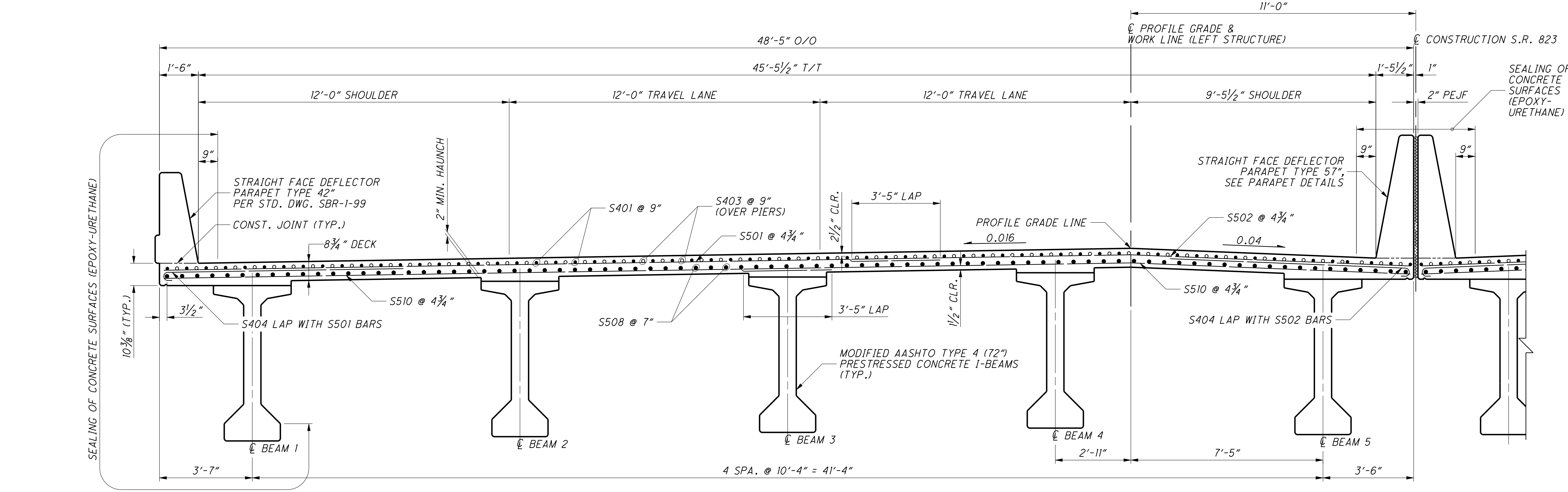
1. FOR ADDITIONAL SEISMIC PEDESTAL DETAILS, SEE ODOT STD. DWG. A-1-69
2. BEVELED PLATE AT PIER 1 BACK, PIER 1 FORWARD, & PIER 2 BACK BEARINGS. SEE BEARING DETAILS SHEET FOR ADDITIONAL DETAILS.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
6200 Frantz Road, Suite 200, Dublin, Ohio 43016
TEL 614.451.1811 FAX 614.451.3600 WEB www.kzfdesign.com

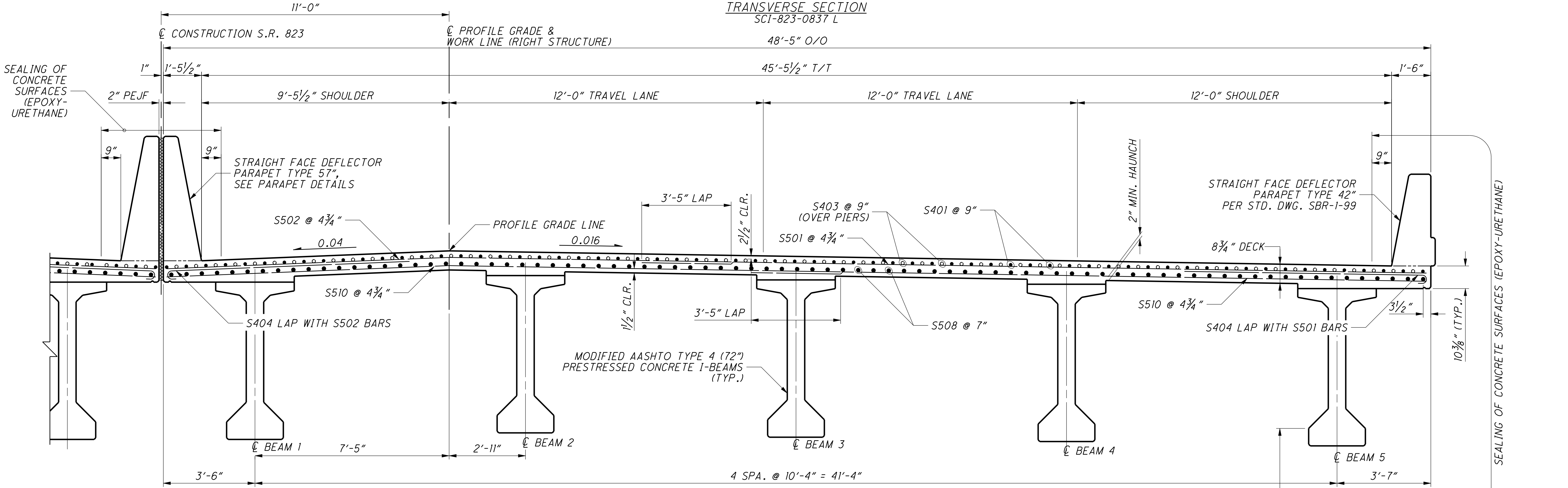
DESIGNED DEF/RBK
DRAWN RBK
REVIEWED BAA
DATE 06/24/11
CHECKED DAT
REVISED
STRUCTURE FILE NUMBER 7306458/7306466

PIER DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



TRANSVERSE SECTION
SCI-823-0837 L



TRANSVERSE SECTION
SCI-823-0837 R

NOTES:

1. MIN. LAP FOR #4 BAR = 2'-9"
2. MIN. LAP FOR #5 BAR = 3'-5"
3. FOR ADDITIONAL DETAILS ON DIAPHRAGMS, SEE DIAPHRAGM DETAIL SHEETS.
4. FOR ADDITIONAL DETAILS ON RAILINGS, SEE RAILING DETAIL SHEETS.

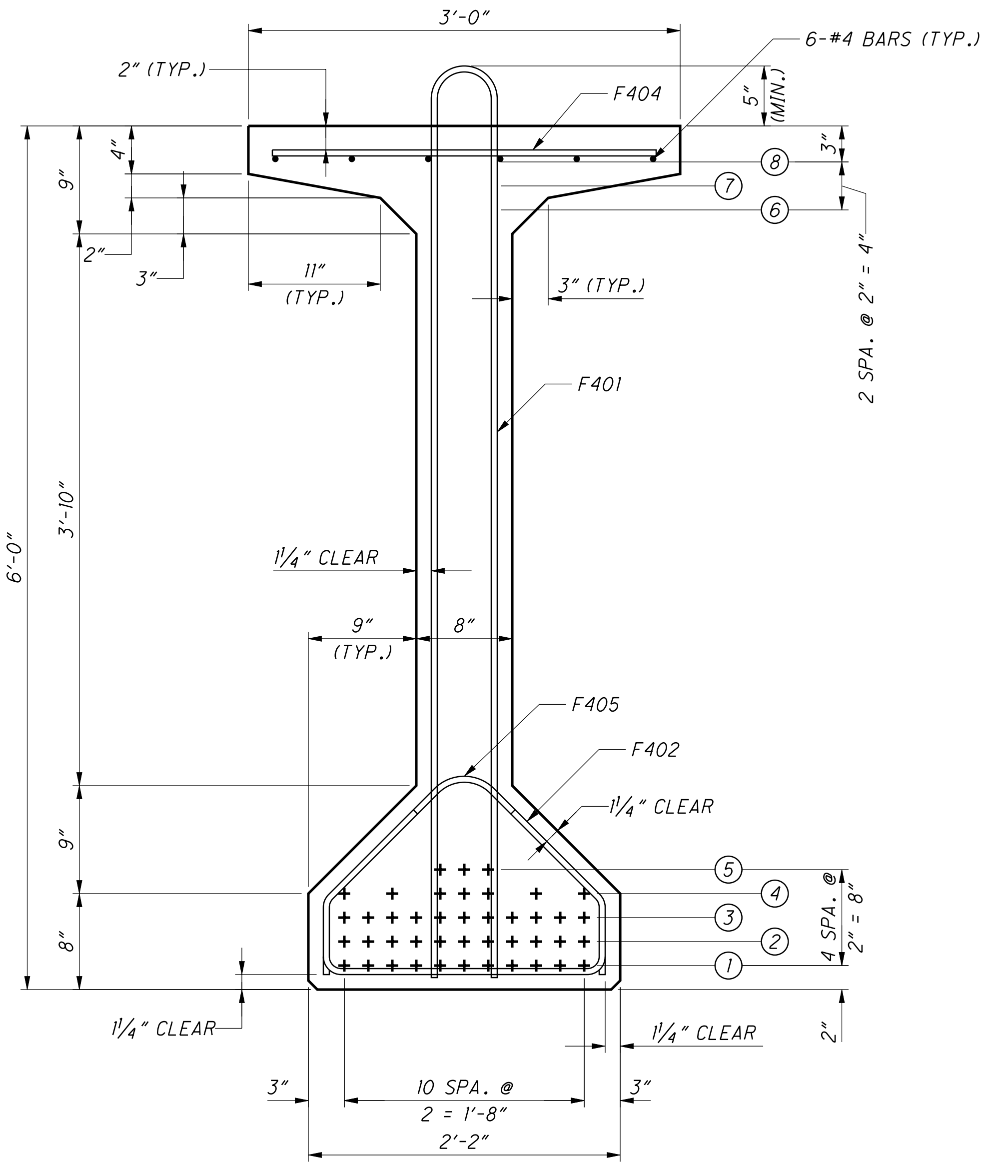
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

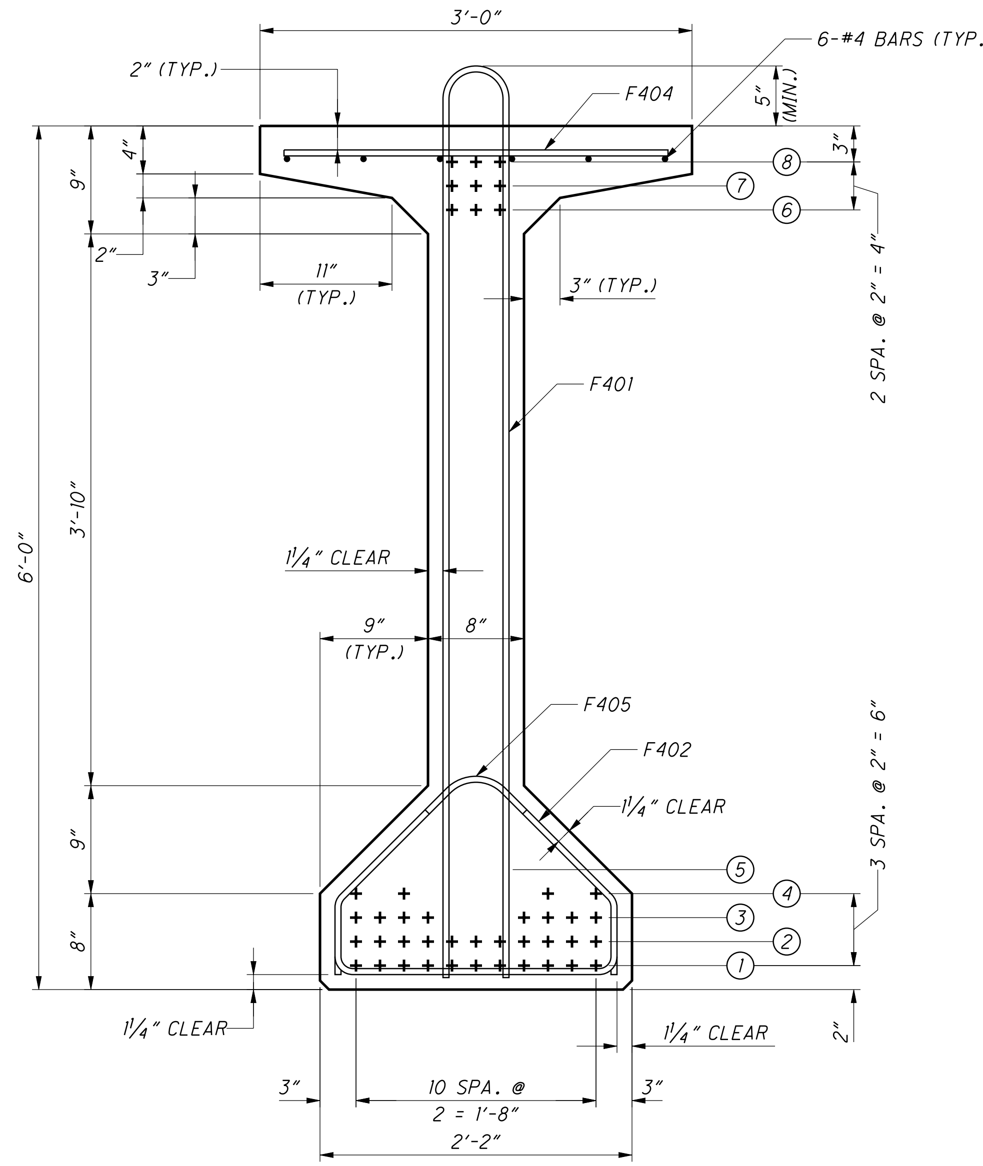
TRANSVERSE SECTION
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

24/43



MODIFIED AASHTO TYPE 4 (72")
MIDSPAN



MODIFIED AASHTO TYPE 4 (72")
BEAM END

		BEAM MARK	NUMBER OF STRANDS PER ROW – ROW NUMBER ①	②	③	④	⑤	⑥	⑦	⑧	TOTAL STRANDS	CONCRETE STRENGTHS f'ci	f'c	F401 BARS REQ'D	F402 BARS REQ'D	F404 BARS REQ'D	F405 BARS REQ'D
SCI-823-0837 L	SPANS 1, 2, 3, & 4	BEAM 1 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 1 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 2 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 2 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 3 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 3 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 4 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 4 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 5 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 5 (BEAM END)	11	11	8	4	-	3	3	3	43						
SCI-823-0837 R	SPANS 1, 2, 3, & 4	BEAM 1 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 1 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 2 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 2 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 3 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 3 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 4 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 4 (BEAM END)	11	11	8	4	-	3	3	3	43						
		BEAM 5 (MIDSPAN)	11	11	11	7	3	-	-	-	43	5	7	100	106	100	12
		BEAM 5 (BEAM END)	11	11	8	4	-	3	3	3	43						

NOTES:

1. SEE ODOT STD. DWG. PSID-1-99 FOR ADDITIONAL BEAM DETAILS, INCLUDING BENDING DIAGRAM FOR REINFORCING.

DESIGN AGENCY: KZF DESIGN — Architecture | Engineering | Interiors | Planning

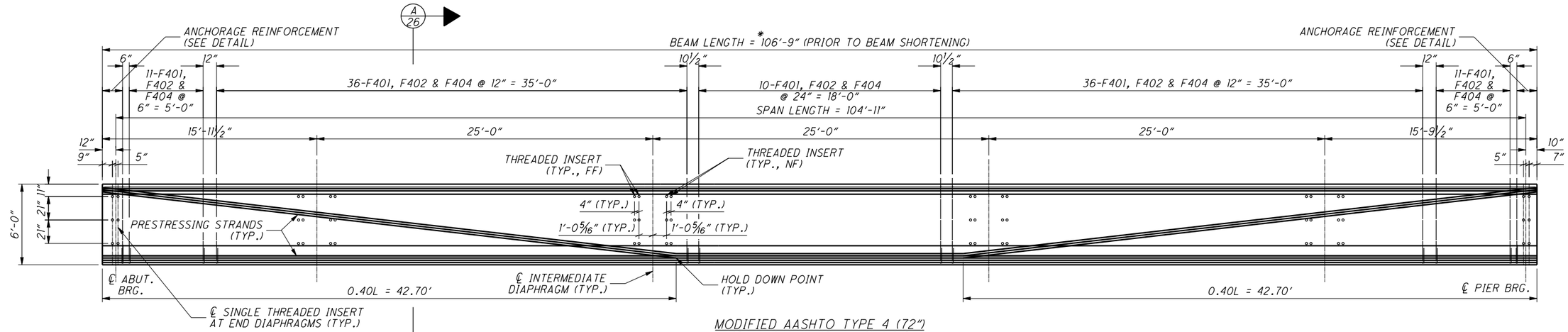
DESIGNED DEF/RBK | DRAWN RBK | REVIEWED BAA | DATE 06/24/11

CHECKED DAT | REVISED | STRUCTURE FILE NUMBER 7306458/7306466

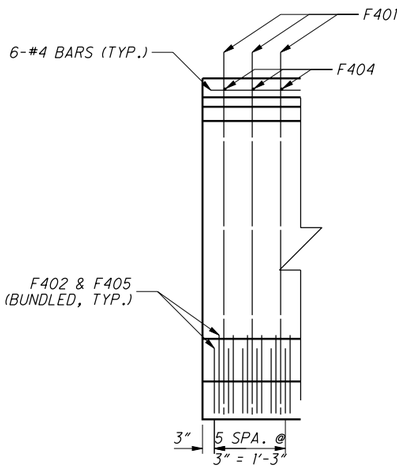
BEAM DETAILS

BRIDGE NO. SCI-823-0837 L/R

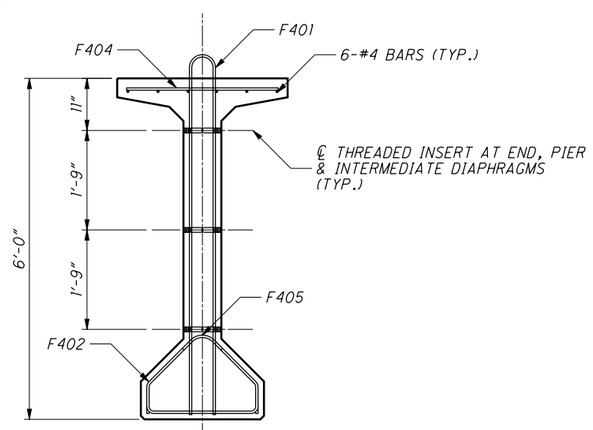
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)



MODIFIED AASHTO TYPE 4 (72")
SPAN 1 SHOWN, SPAN 4 SIMILIAR



ANCHORAGE REINFORCEMENT



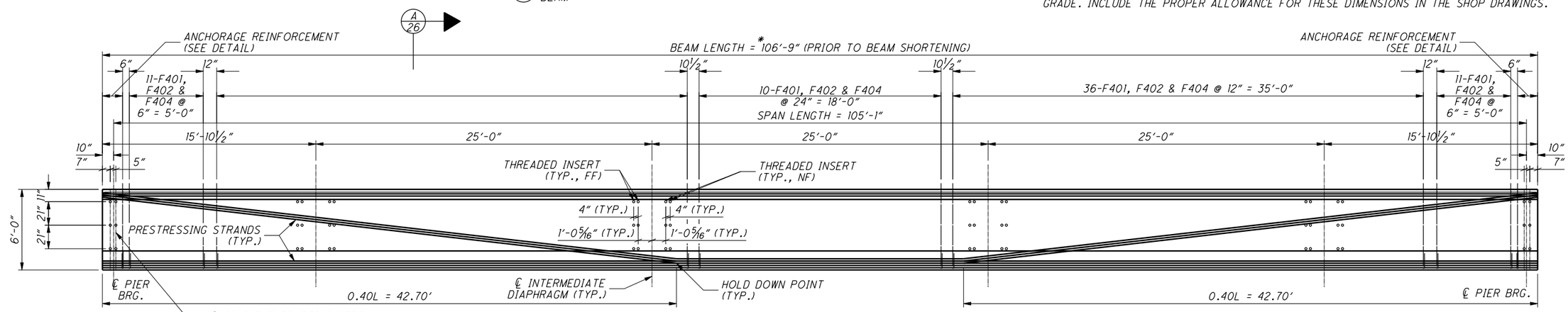
A 26 SECTION BEAM

	SCI-823-0837 L		SCI-823-0837 R	
	BEAM MARK	APPROXIMATE WEIGHT (LBS)	BEAM MARK	APPROXIMATE WEIGHT (LBS)
SPANS 1, 2, 3 & 4	BEAM 1	106,323	BEAM 1	106,323
	BEAM 2	106,323	BEAM 2	106,323
	BEAM 3	106,323	BEAM 3	106,323
	BEAM 4	106,323	BEAM 4	106,323
	BEAM 5	106,323	BEAM 5	106,323

INITIAL PRESTRESSING TENSION LOAD FOR LOW RELAXATION STRAND SHALL BE 33,818 LB/STRAND.

NOTES:

1. SEE ODOT STD. DWG. PSID-1-99 FOR ADDITIONAL BEAM DETAILS, INCLUDING BENDING DIAGRAM FOR REINFORCING.
2. FOR ADDITIONAL DETAILS ON LOCATIONS OF END, PIER & INTERMEDIATE DIAPHRAGMS, SEE FRAMING PLAN.
3. SHEAR REINFORCEMENT IN BEAMS SHALL BE PAID FOR UNDER ITEM 515 PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS.
4. OMIT THREADED INSERT ON EXTERIOR FACE OF EXTERIOR BEAMS.
5. THREADED INSERTS MAY BE MOVED SLIGHTLY WHERE NECESSARY TO AVOID REINFORCING STEEL AND PRESTRESSING STRANDS.
6. THREADED INSERTS SHOWN FOR INTERMEDIATE DIAPHRAGMS ARE FOR CAST-IN-PLACE CONCRETE DIAPHRAGMS. THE CONTRACTOR MAY CHOOSE GALVANZIED STEEL INTERMEDIATE DIAPHRAGMS INSTEAD, PER PSID-1-99, AND PROVIDE SLEEVED HOLES INSTEAD OF THREADED INSERTS.
7. NOTE TO FABRICATOR: THE DIMENSIONS MEASURED ALONG THE LENGTH OF THE BEAM, MARKED WITH A *, DO NOT CONTAIN AN ALLOWANCE FOR THE EFFECT OF LONGITUDINAL GRADE. INCLUDE THE PROPER ALLOWANCE FOR THESE DIMENSIONS IN THE SHOP DRAWINGS.



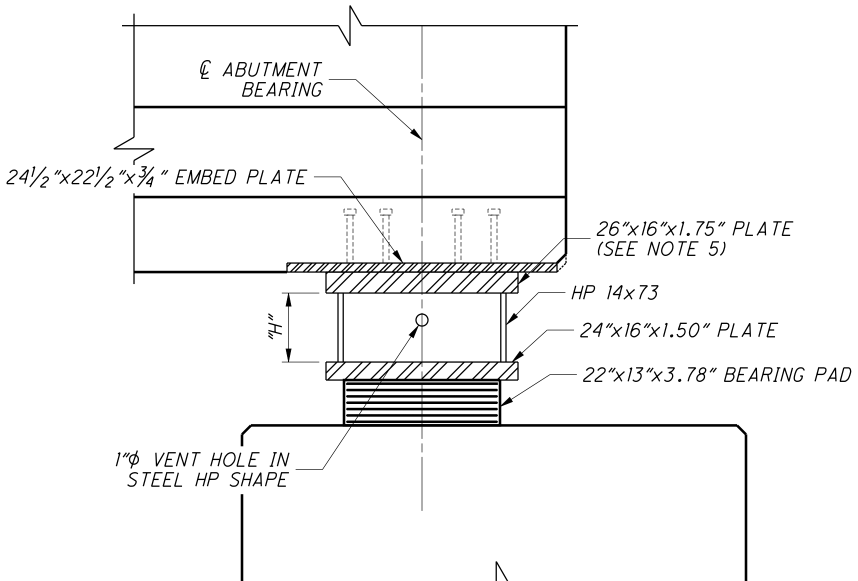
MODIFIED AASHTO TYPE 4 (72")
SPAN 2 SHOWN, SPAN 3 SIMILIAR

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
6200 Frantz Road, Suite 113, Dublin, Ohio 43016
TEL 614.451.1811 FAX 614.451.3600 WEB www.kzfdesign.com

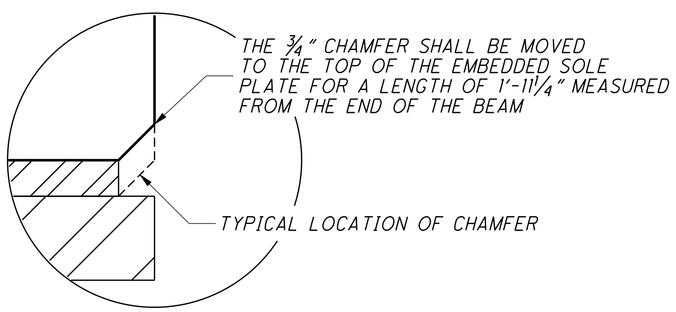
DESIGNED DEF/RBK | DRAWN RBK | REVIEWED BAA | DATE 06/24/11
CHECKED DAT | REVISED | STRUCTURE FILE NUMBER 7306458/7306466

BEAM DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SMAUGER VALLEY-MINFORD ROAD (CR 31)

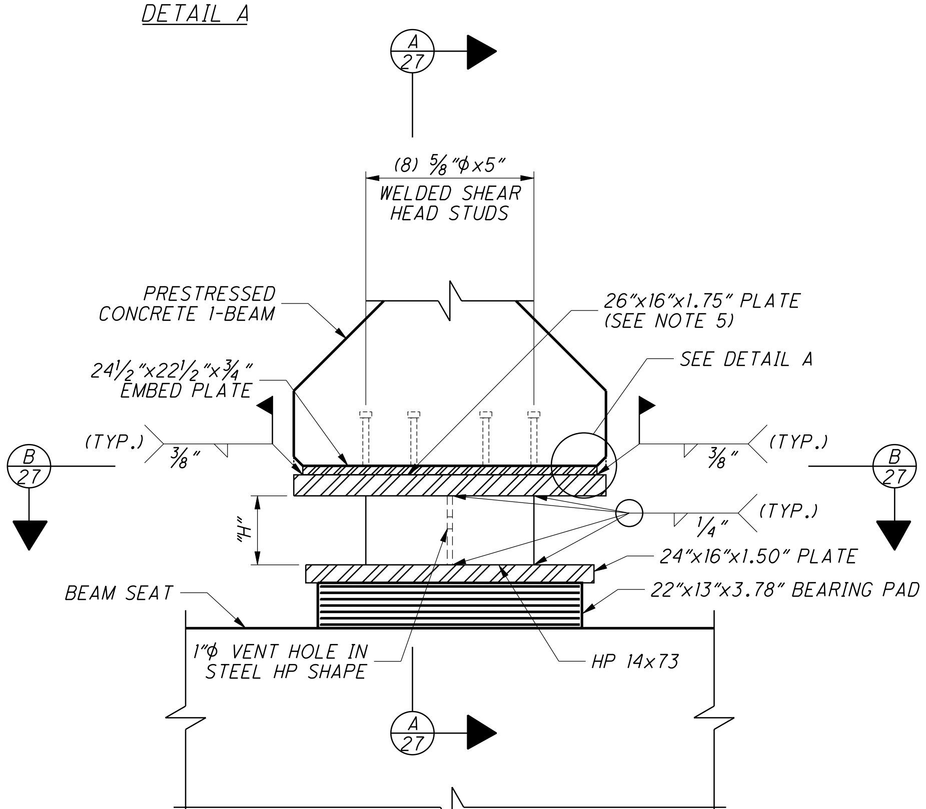
SCI-823-6.81
PID No. 19415



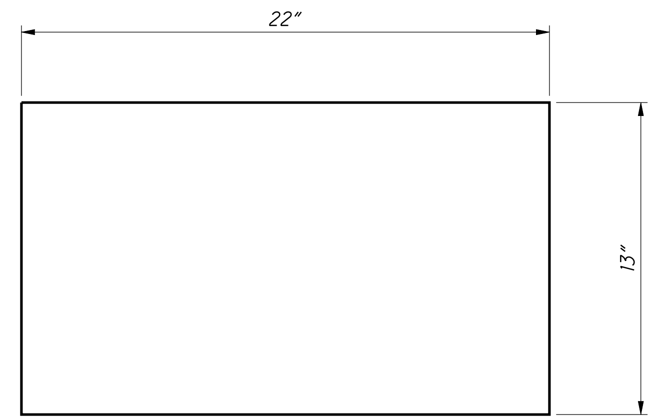
A/27 SECTION
REAR AND FORWARD ABUTMENTS

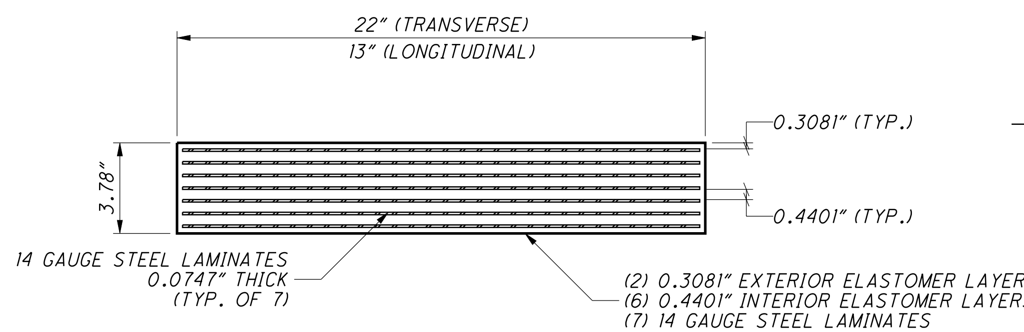


DETAIL A



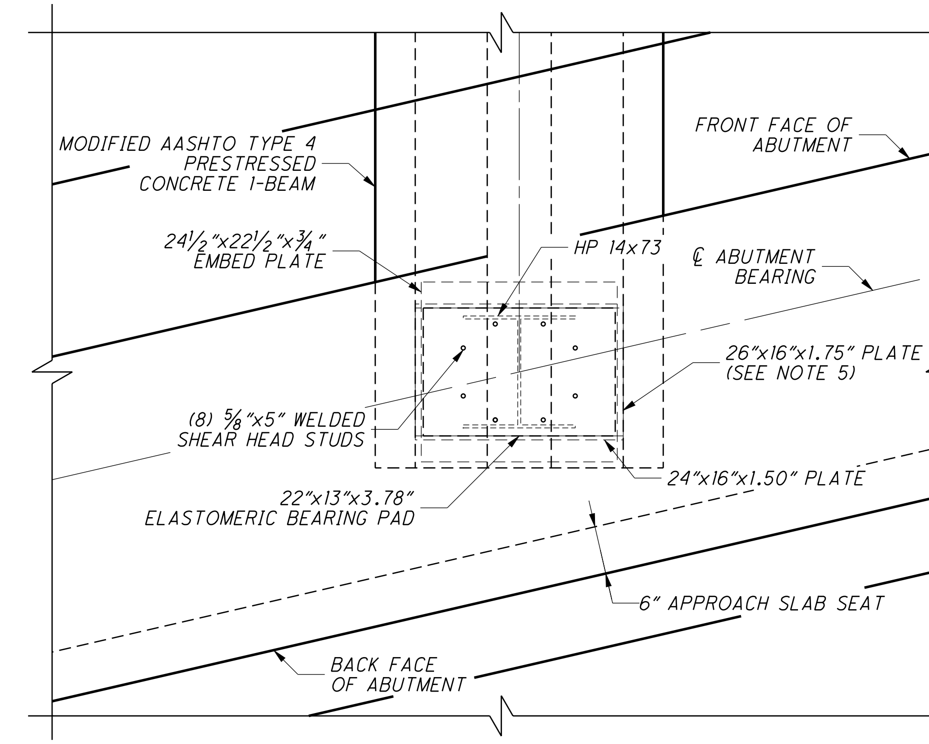
TYPICAL ELEVATION
REAR AND FORWARD ABUTMENTS



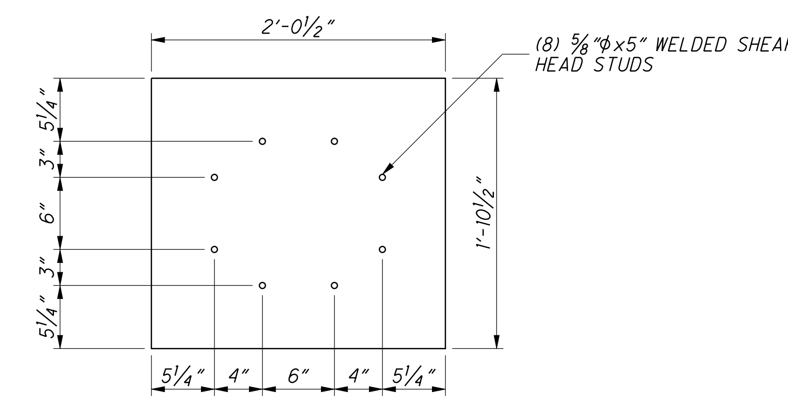


ELASTOMERIC BEARING PAD DETAIL
REAR AND FORWARD ABUTMENTS

		DIMENSION 'H'	
SCI-823-0837 L		REAR ABUTMENT	FORWARD ABUTMENT
	BEAM 1	4.97"	4.97"
	BEAM 2	6.37"	6.90"
	BEAM 3	7.78"	8.83"
	BEAM 4	9.19"	10.77"
	BEAM 5	5.62"	7.72"
SCI-823-0837 R		REAR ABUTMENT	FORWARD ABUTMENT
	BEAM 1	10.17"	8.07"
	BEAM 2	12.60"	11.03"
	BEAM 3	10.06"	9.01"
	BEAM 4	7.51"	6.99"
	BEAM 5	4.97"	4.97"



TYPICAL PLAN
REAR AND FORWARD ABUTMENTS



B/27 EMBEDDED PLATE DETAILS
REAR AND FORWARD ABUTMENTS

NOTES:

1. WELDING: CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300 °F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
2. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

   BEARINGS SHALL BE DESIGNED FOR THE FOLLOWING LOADS:

	ABUTMENTS
MAX. DEAD LOAD =	198 KIPS
MAX. LIVE LOAD =	75 KIPS
TOTAL DESIGN LOAD =	273 KIPS

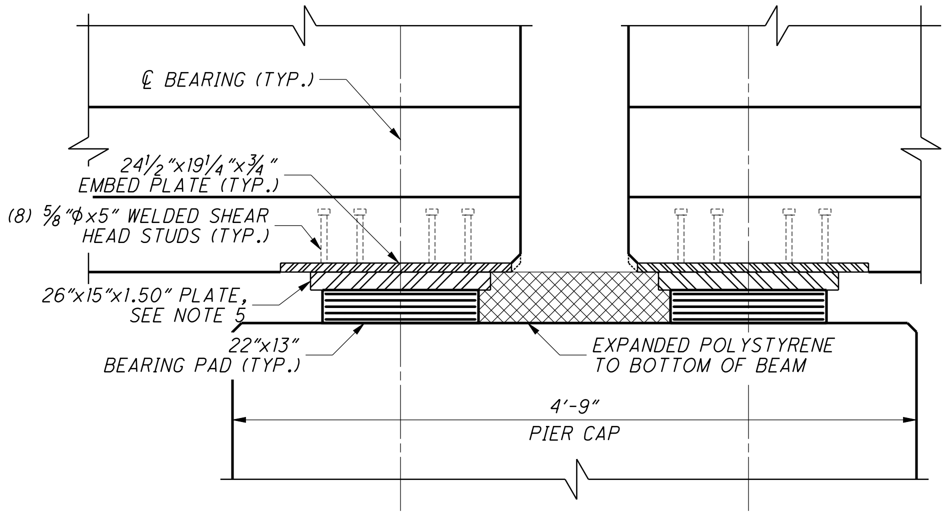
3. THE BOTTOM STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
4. BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ELASTOMERIC BEARING PAD, BOTTOM LOAD PLATE, HP SHAPE, TOP LOAD PLATE, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS AS DETAILED. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).
5. BEVELED PLATE AT REAR ABUTMENTS. SEE BEARING DETAILS SHEET FOR ADDITIONAL DETAILS.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

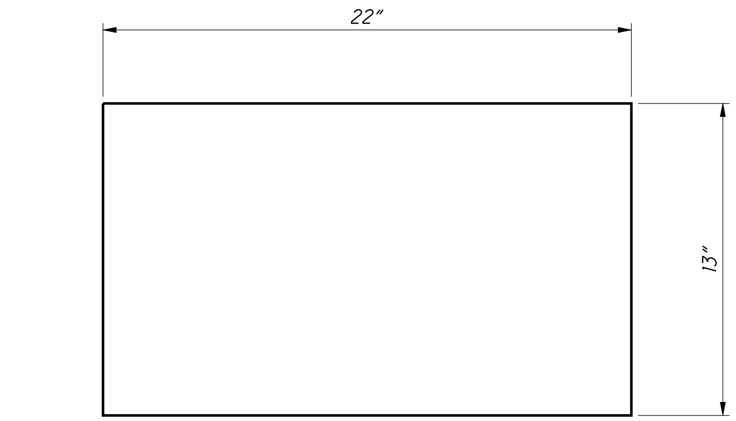
DESIGNED DEF/RBK | DRAWN RBK | REVIEWED BAA | DATE 06/24/11
CHECKED DAT | REVISED | STRUCTURE FILE NUMBER 7306458/7306466

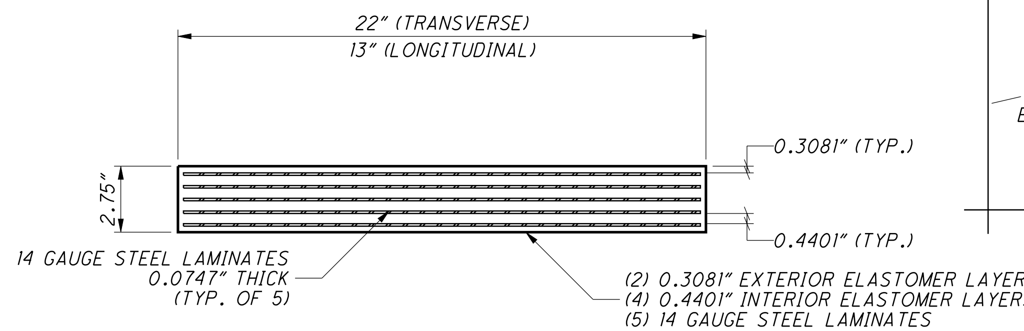
ABUTMENT BEARING DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

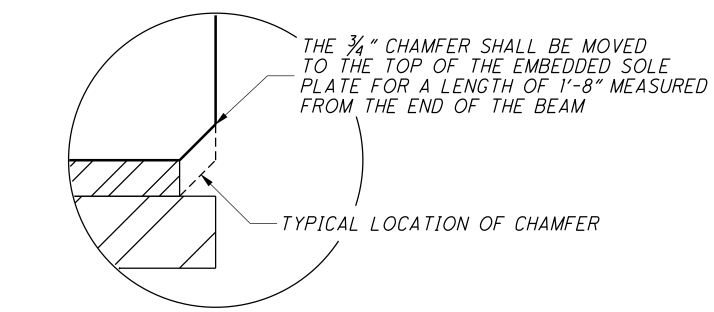


A/28 SECTION
PIERS 1, 2 & 3

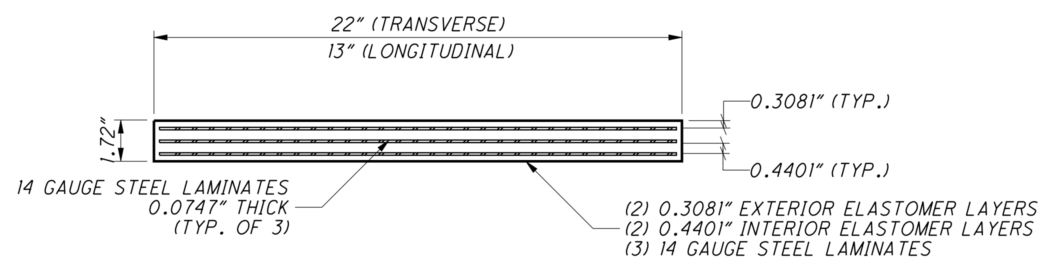




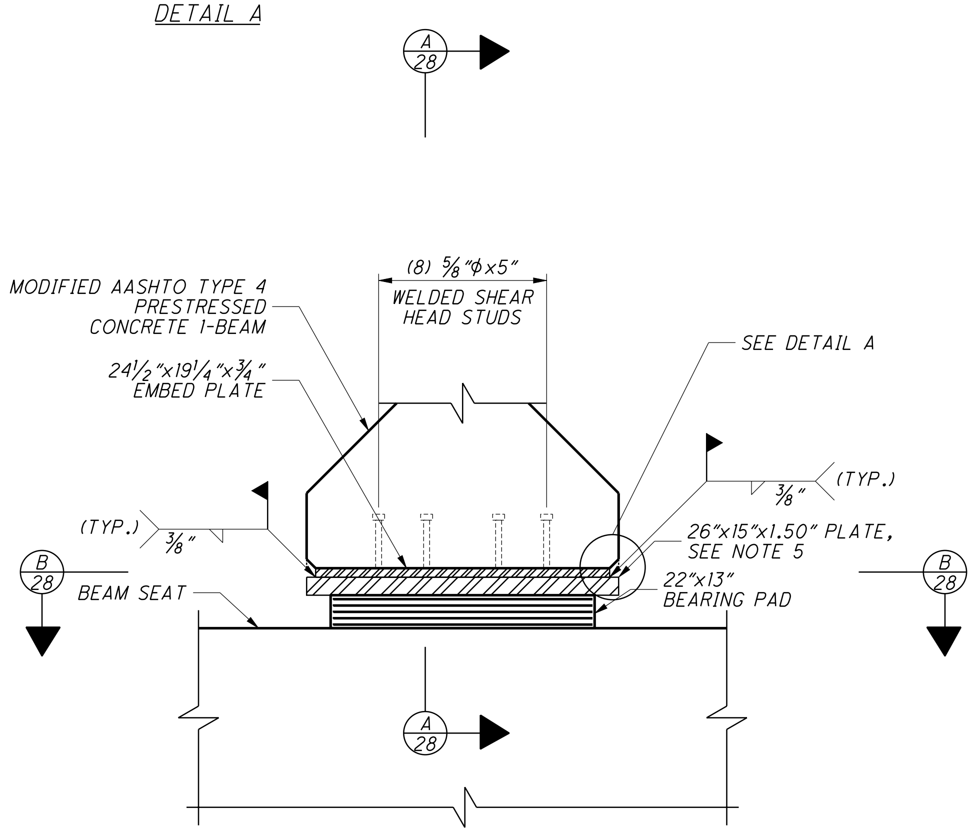
ELASTOMERIC BEARING PAD DETAIL
PIERS 1 & 3



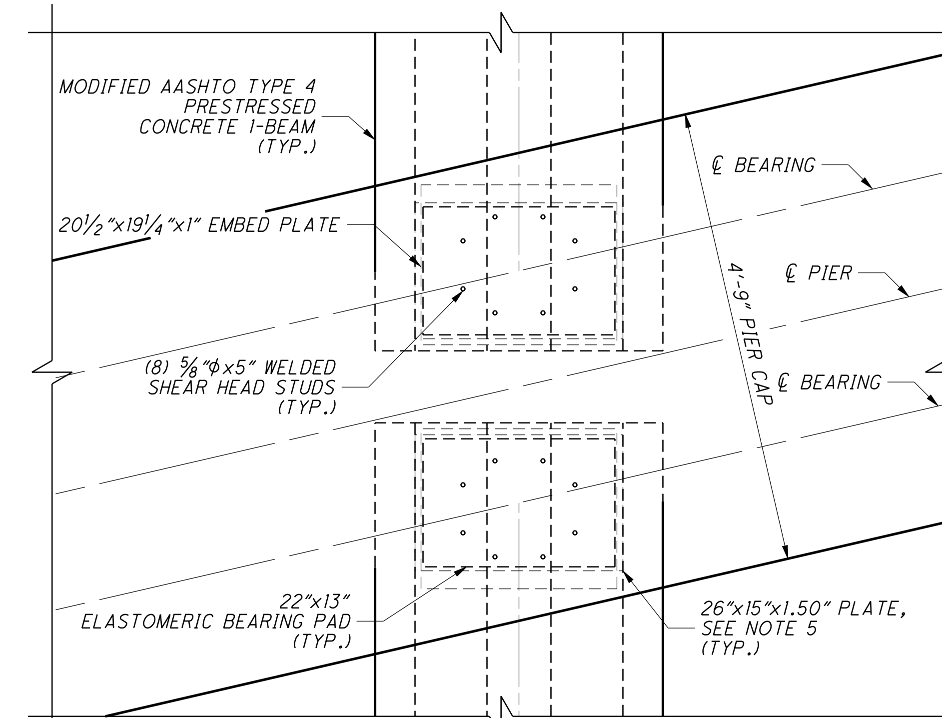
DETAIL A



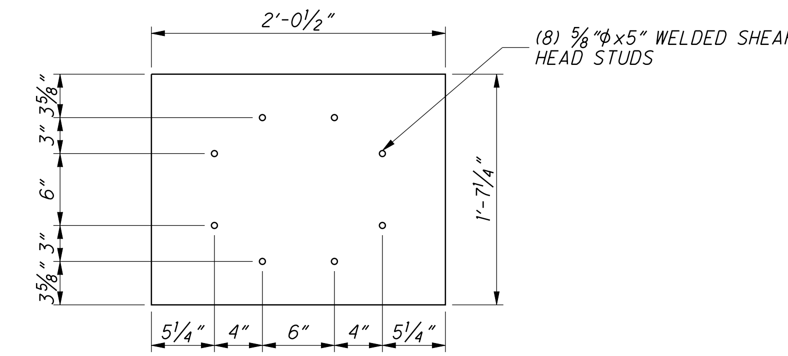
ELASTOMERIC BEARING PAD DETAIL
PIER 2



TYPICAL ELEVATION
PIERS 1, 2 & 3



TYPICAL PLAN
PIERS 1, 2 & 3



B/28 EMBEDDED PLATE DETAILS
PIERS 1, 2 & 3

NOTES:

1. WELDING: CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300 °F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES
2. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

   BEARINGS SHALL BE DESIGNED FOR THE FOLLOWING LOADS:

	PIERS 1 & 3	PIER 2
MAX. DEAD LOAD =	190 KIPS	181 KIPS
MAX. LIVE LOAD =	65 KIPS	62 KIPS
TOTAL DESIGN LOAD =	255 KIPS	243 KIPS

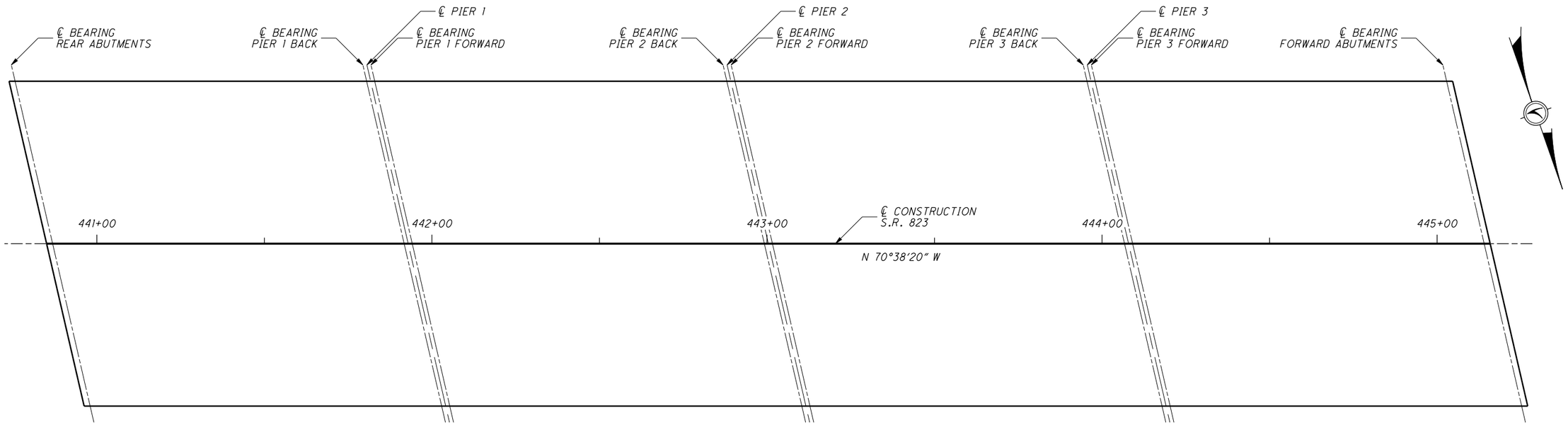
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
4. BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ELASTOMERIC BEARING PAD, LOAD PLATE, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS AS DETAILED. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES (NEOPRENE).
5. BEVELED PLATE AT PIER 1 BACK, PIER 1 FORWARD, & PIER 2 BACK BEARINGS. SEE BEARING DETAILS SHEET FOR ADDITIONAL DETAILS.
6. POLYSTYRENE SHALL BE INCLUDED FOR PAYMENT OF ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

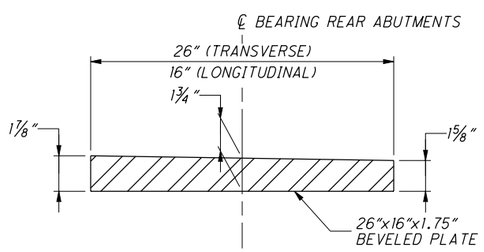
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PIER BEARING DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

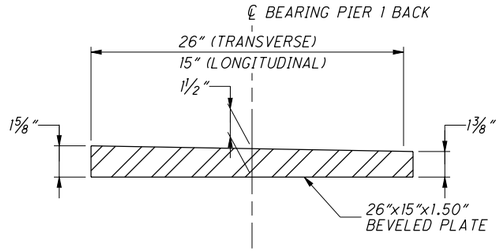
SCI-823-6.81
PID No. 19415



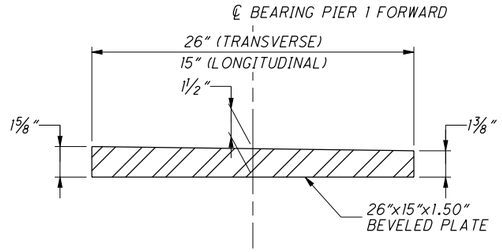
SCHEMATIC PLAN
SCI-823-0837 L/R



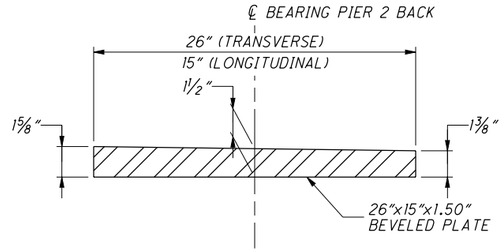
LOAD PLATE TYPICAL SECTION
BEVELED LOAD PLATE AT REAR ABUTMENTS



LOAD PLATE TYPICAL SECTION
BEVELED LOAD PLATE AT PIER 1 BACK



LOAD PLATE TYPICAL SECTION
BEVELED LOAD PLATE AT PIER 1 FORWARD



LOAD PLATE TYPICAL SECTION
BEVELED LOAD PLATE AT PIER 2 BACK

NOTES:
1. ALL STRUCTURAL STEEL SHALL BE ASTM A709, GRADE 50, GALVANIZED ACCORDING TO 711.02.
2. FOR ADDITIONAL DETAILS ON LOAD PLATES, SEE ABUTMENT AND PIER BEARING DETAILS.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
cincinnati | columbus | northern kentucky
TEL 513.621.6211 FAX 513.621.3600 WEB www.kzf.com

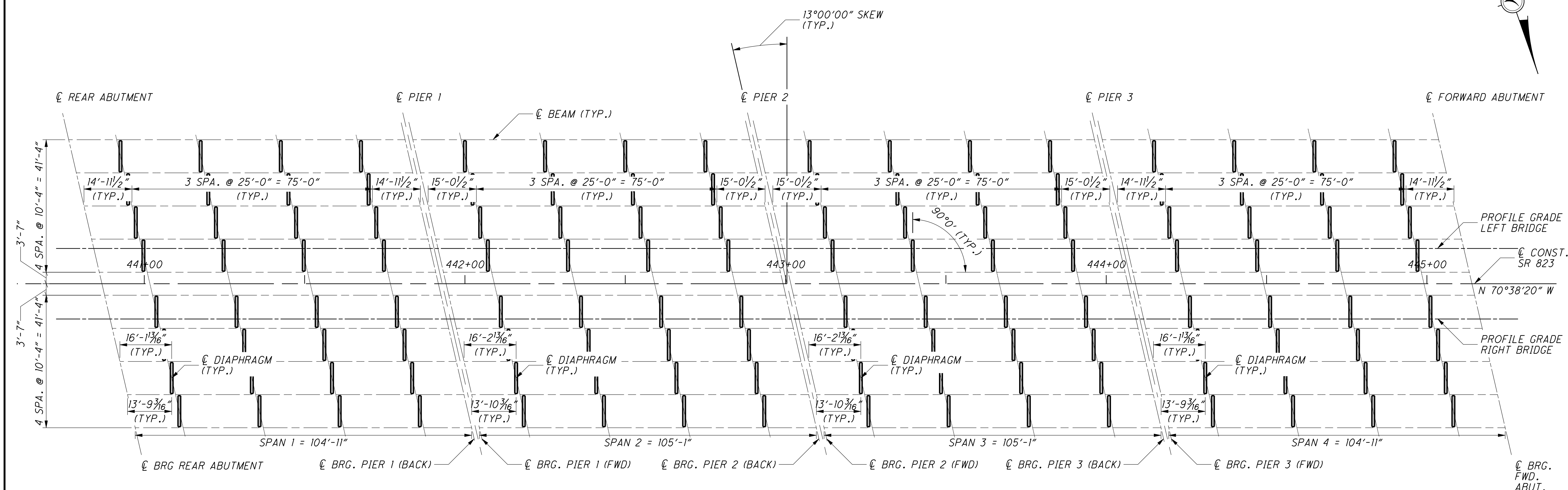
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

BEARING DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

29/43

39
53



FRAMING PLAN
SCI-823-0837 L/R

NOTES:

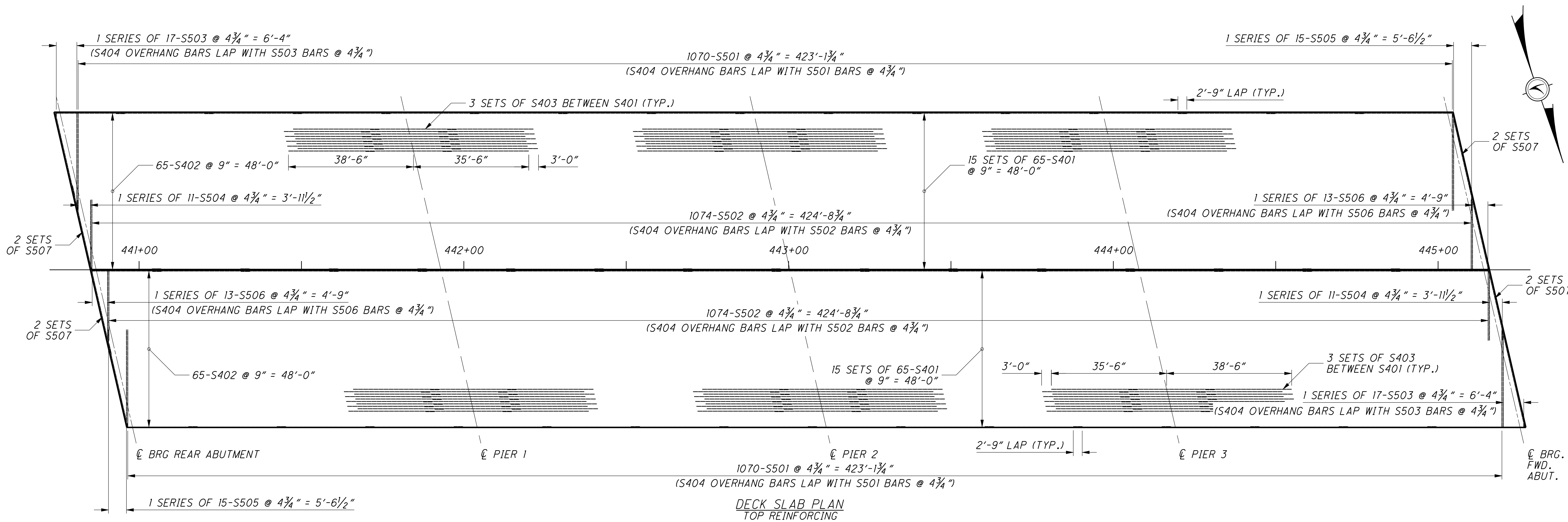
1. DO NOT PLACE THE DECK CONCRETE UNTIL ALL INTERMEDIATE DIAPHGRAMS HAVE BEEN PROPERLY INSTALLED.
2. INTERMEDIATE DIAPHRAGMS SHOWN ARE FOR CAST-IN-PLACE CONCRETE DIAPHRAGMS. THE CONTRACTOR MAY USE GALVANIZED STEEL INTERMEDIATE DIAPHRAGMS, PER STD. DWG. PSID-1-99.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

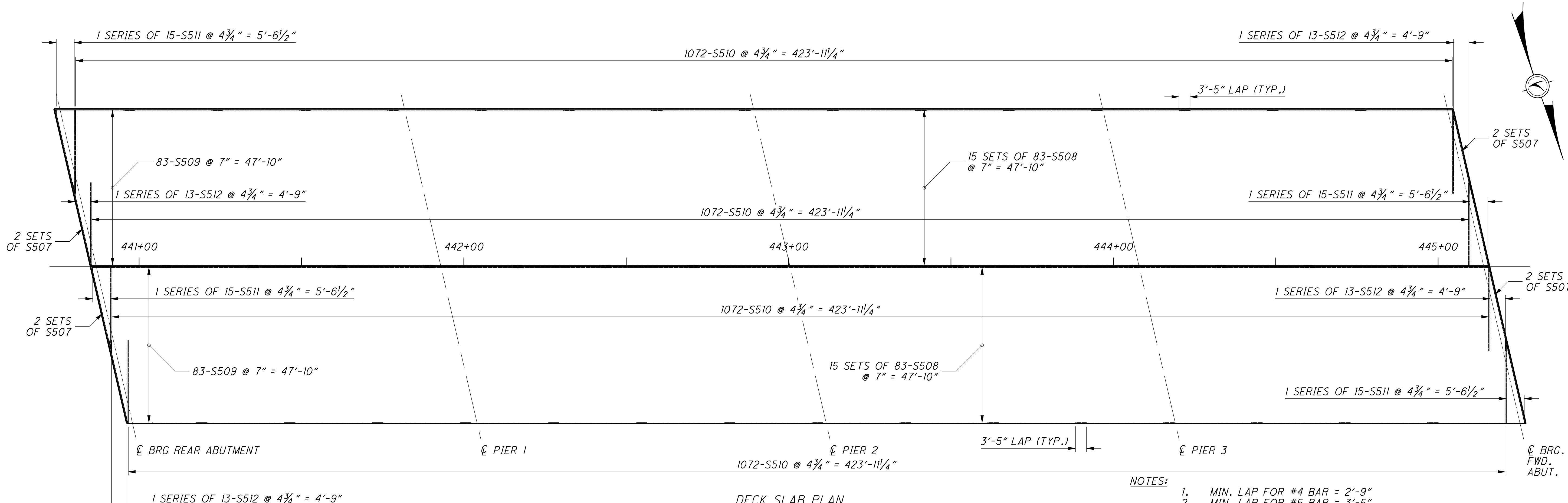
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

FRAMING PLAN
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415



DECK SLAB PLAN
TOP REINFORCING
SCI-823-0837 L/R



DECK SLAB PLAN
BOTTOM REINFORCING
SCI-823-0837 L/R

NOTES:

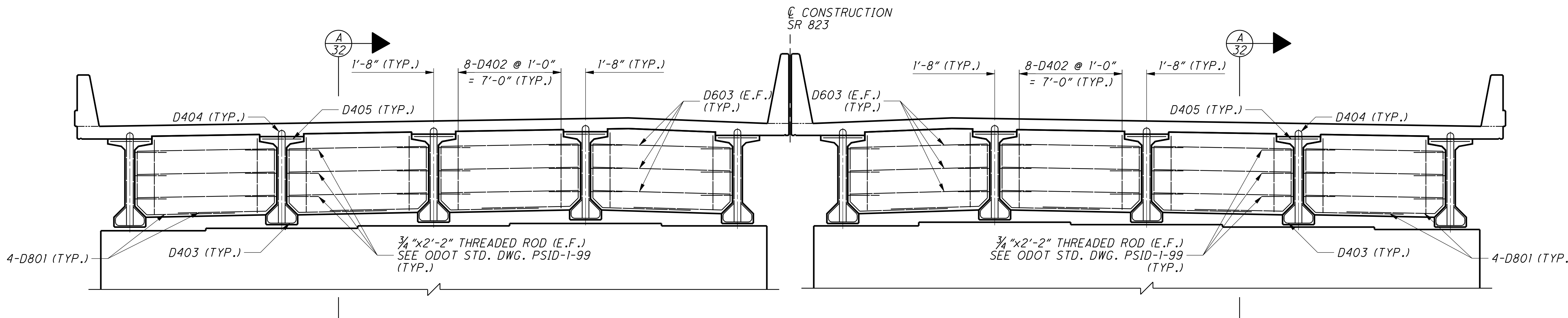
1. MIN. LAP FOR #4 BAR = 2'-9"
2. MIN. LAP FOR #5 BAR = 3'-5"
3. FOR ADDITIONAL DETAILS ON DECK REINFORCING, SEE TRANSVERSE DECK SECTION.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

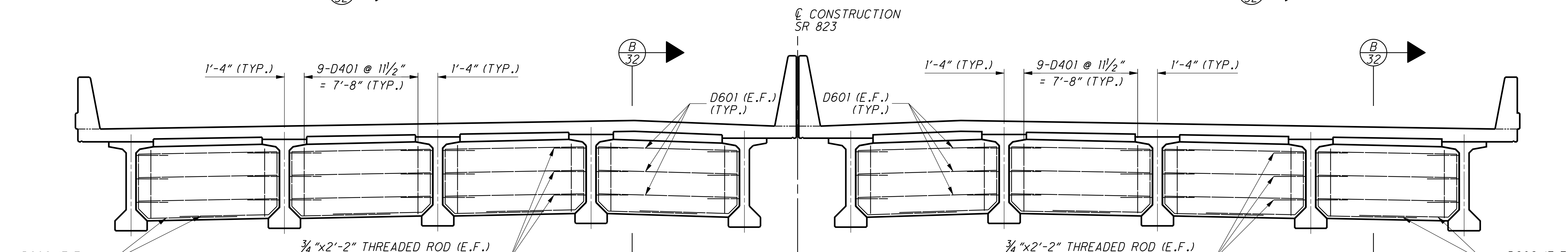
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

DECK PLAN
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

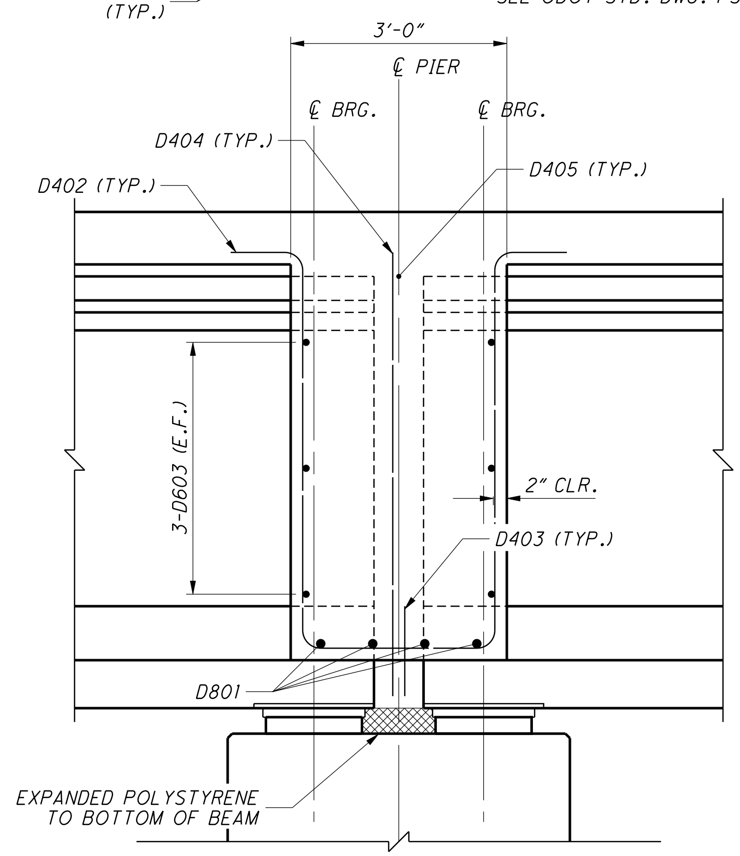
SCI-823-6.81
PID No. 19415



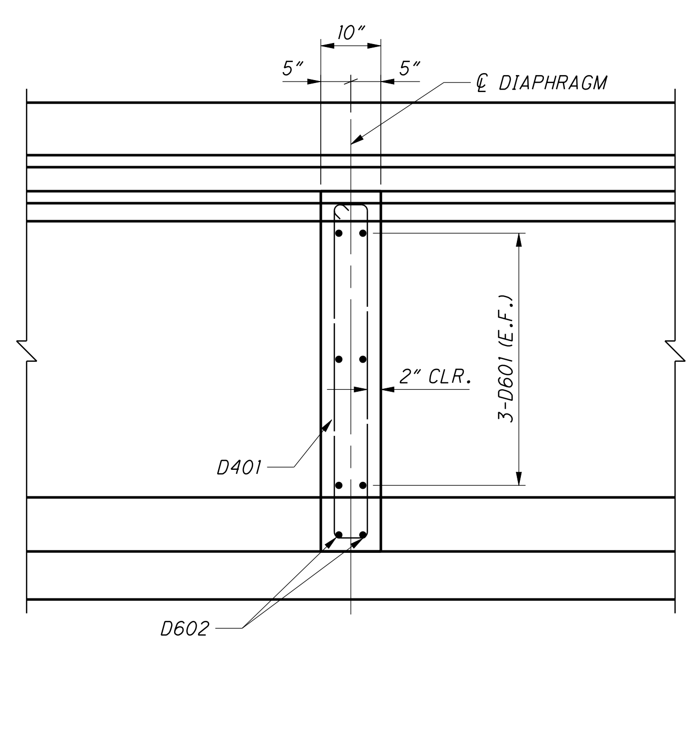
PIER DIAPHRAGM
SCI-823-0837 L/R



INTERMEDIATE DIAPHRAGM
SCI-823-0837 L/R



A/32 SECTION
EXPANSION PIER DIAPHRAGM
PIERS 1, 2 & 3



B/32 SECTION
INTERMEDIATE DIAPHRAGM

NOTES:

1. FOR ADDITIONAL DETAILS ON DIAPHRAGMS, SEE ODOT STD. DWG. PSID-1-99.
2. INTERMEDIATE DIAPHRAGMS SHOWN ARE FOR CAST-IN-PLACE CONCRETE DIAPHRAGMS. THE CONTRACTOR MAY USE GALVANIZED STEEL INTERMEDIATE DIAPHRAGMS, PER STD. DWG. PSID-1-99.
3. REINFORCING IN INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED WITH ITEM 515 - INTERMEDIATE DIAPHRAGMS FOR PAYMENT.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.36530 WEB www.kzf.com

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

DIAPHRAGM DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

TOP OF HAUNCH ELEVATIONS

SPAN 1

	SPAN LOCATION	CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 1 (BACK)
BEAM 1	STATION	440+76.43	440+89.54	441+02.66	441+15.77	441+28.88	441+42.00	441+55.11	441+68.23	441+81.34
	OFFSET	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.
	TOP OF HAUNCH ELEVATION	716.30'	716.07'	715.85'	715.63'	715.40'	715.15'	714.90'	714.65'	714.41'
BEAM 2	STATION	440+78.81	440+91.93	441+05.04	441+18.16	441+31.27	441+44.38	441+57.50	441+70.61	441+83.73
	OFFSET	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.
	TOP OF HAUNCH ELEVATION	716.42	716.19	715.97	715.75	715.52	715.28	715.03	714.78	714.53
BEAM 3	STATION	440+81.20	440+94.31	441+07.43	441+20.54	441+33.66	441+46.77	441+59.88	441+73.00	441+86.11
	OFFSET	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.
	TOP OF HAUNCH ELEVATION	716.53	716.31	716.09	715.87	715.64	715.40	715.16	714.91	714.66
BEAM 4	STATION	440+83.58	440+96.70	441+22.93	441+36.04	441+49.16	441+49.16	441+62.27	441+75.39	441+88.50
	OFFSET	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.
	TOP OF HAUNCH ELEVATION	716.65	716.43	716.21	715.99	715.76	715.53	715.28	715.03	714.79
BEAM 5	STATION	440+85.97	441+12.20	441+12.20	441+25.31	441+38.43	441+51.54	441+64.66	441+77.77	441+90.89
	OFFSET	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.
	TOP OF HAUNCH ELEVATION	716.35	716.13	715.92	715.70	715.47	715.23	714.99	714.74	714.50

SPAN 2

	SPAN LOCATION	CL PIER 1 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 2 (BACK)
BEAM 1	STATION	441+83.76	441+96.89	442+10.03	442+23.17	442+36.30	442+49.44	442+62.57	442+75.71	442+88.84
	OFFSET	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.
	TOP OF HAUNCH ELEVATION	714.37'	714.20'	714.04'	713.87'	713.70'	713.52'	713.33'	713.14'	712.95'
BEAM 2	STATION	441+86.15	441+99.28	442+12.42	442+25.55	442+38.69	442+51.82	442+64.96	442+78.09	442+91.23
	OFFSET	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.
	TOP OF HAUNCH ELEVATION	714.50	714.33	714.17	714.01	713.83	713.65	713.47	713.28	713.09
BEAM 3	STATION	441+88.53	442+01.67	442+14.80	442+27.94	442+41.07	442+54.21	442+67.34	442+80.48	442+93.61
	OFFSET	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.
	TOP OF HAUNCH ELEVATION	714.62	714.46	714.46	714.30	714.14	713.97	713.60	713.42	713.23
BEAM 4	STATION	441+90.92	442+04.05	442+17.19	442+30.32	442+43.46	442+56.59	442+69.73	442+82.86	442+96.00
	OFFSET	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.
	TOP OF HAUNCH ELEVATION	714.75	714.59	714.43	714.27	714.10	713.93	713.74	713.55	713.37
BEAM 5	STATION	441+93.30	442+06.44	442+19.57	442+32.71	442+45.84	442+58.98	442+72.11	442+85.25	442+98.39
	OFFSET	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.
	TOP OF HAUNCH ELEVATION	714.47	714.30	714.15	713.99	713.82	713.46	713.28	713.10	713.07

TOP OF HAUNCH ELEVATIONS

SPAN 3

	SPAN LOCATION	CL PIER 2 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 3 (BACK)
BEAM 1	STATION	442+91.26	443+04.39	443+17.53	443+30.67	443+43.80	443+56.94	443+70.07	443+83.21	443+96.34
	OFFSET	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.
	TOP OF HAUNCH ELEVATION	712.93	712.82	712.72	712.62	712.50	712.38	712.26	712.13	712.00
BEAM 2	STATION	442+93.65	443+06.78	443+19.92	443+33.05	443+46.19	443+59.32	443+72.46	443+85.59	443+98.73
	OFFSET	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.
	TOP OF HAUNCH ELEVATION	713.07	712.96	712.86	712.86	712.65	712.53	712.40	712.27	712.15
BEAM 3	STATION	442+96.03	443+09.17	443+22.30	443+35.44	443+61.71	443+74.84	443+74.84	443+87.98	444+01.11
	OFFSET	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.
	TOP OF HAUNCH ELEVATION	713.21	713.10	713.00	712.90	712.79	712.67	712.55	712.42	712.30
BEAM 4	STATION	442+98.42	443+11.55	443+24.69	443+37.82	443+50.96	443+64.09	443+77.23	443+90.36	444+03.50
	OFFSET	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.
	TOP OF HAUNCH ELEVATION	713.35	713.24	713.15	713.04	712.94	712.82	712.70	712.57	712.45
BEAM 5	STATION	443+00.80	443+13.94	443+27.07	443+40.21	443+53.34	443+66.48	443+79.61	443+92.75	444+05.89
	OFFSET	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.
	TOP OF HAUNCH ELEVATION	712.97	712.87	712.77	712.77	712.67	712.55	712.43	712.31	712.18

SPAN 4

	SPAN LOCATION	CL PIER 3 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG FWD ABUT
BEAM 1	STATION	443+98.76	444+11.87	444+24.99	444+38.10	444+51.22	444+64.33	444+77.45	444+90.56	445+03.68
	OFFSET	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.	33.92' LT.
	TOP OF HAUNCH ELEVATION	711.98	711.94	711.90	711.86	711.80	711.74	711.68	711.61	711.54
BEAM 2	STATION	444+01.15	444+14.26	444+27.37	444+42.87	444+53.60	444+66.72	444+79.83	444+92.95	445+06.06
	OFFSET	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.	23.58' LT.
	TOP OF HAUNCH ELEVATION	712.13	712.09	712.05	712.01	711.96	711.90	711.83	711.76	711.70
BEAM 3	STATION	444+03.53	444+16.65	444+27.37	444+42.87	444+55.99	444+69.10	444+82.22	444+95.33	445+08.45
	OFFSET	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.	13.25' LT.
	TOP OF HAUNCH ELEVATION	712.28	712.24	712.20	712.16	712.12	712.06	711.99	711.92	711.86
BEAM 4	STATION	444+05.92	444+19.03	444+32.15	444+45.26	444+58.37	444+71.49	444+84.60	444+97.72	445+10.83
	OFFSET	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.	2.92' LT.
	TOP OF HAUNCH ELEVATION	712.45	712.43	712.39	712.36	712.27	712.21	712.15	712.08	712.02
BEAM 5	STATION	444+08.30	444+21.42	444+34.53	444+47.65	444+60.76	444+73.87	444+86.99	445+00.10	445+13.22
	OFFSET	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.	7.42' RT.
	TOP OF HAUNCH ELEVATION	712.17	712.13	712.10	712.06	712.01	711.96	711.89	711.83	711.77

TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE I-BEAM HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

SCREED ELEVATIONS

SPAN 1

	SPAN LOCATION	CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 1 (BACK)
LEFT EDGE OF DECK	STATION	440+75.60	440+88.71	441+01.83	441+14.94	441+28.06	441+41.17	441+54.29	441+67.40	441+80.52
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	SCREED ELEVATION	716.99	716.76	716.54	716.31	716.08	715.84	715.59	715.34	715.09
PROFILE GRADE	STATION	440+84.26	441+10.49	441+10.49	441+23.60	441+36.71	441+49.83	441+62.94	441+76.06	441+89.17
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	717.41	717.19	716.98	716.75	716.53	716.29	716.05	715.80	715.55
RIGHT EDGE OF DECK	STATION	440+86.78	441+13.01	441+13.01	441+26.12	441+39.24	441+52.35	441+65.46	441+78.58	441+91.69
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	SCREED ELEVATION	716.93	716.71	716.49	716.27	716.05	715.81	715.57	715.32	715.08

SPAN 2

	SPAN LOCATION	CL PIER 1 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 2 (BACK)
LEFT EDGE OF DECK	STATION	441+82.93	441+96.07	442+09.20	442+22.34	442+35.47	442+48.61	442+61.74	442+74.88	442+88.02
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	SCREED ELEVATION	715.09	715.05	714.89	714.56	714.38	714.20	714.01	713.82	713.64
PROFILE GRADE	STATION	441+91.59	442+04.73	442+17.86	442+31.00	442+44.13	442+57.27	442+70.40	442+83.54	442+96.67
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	715.52	715.36	715.20	715.04	714.87	714.69	714.51	714.32	714.14
RIGHT EDGE OF DECK	STATION	441+94.11	442+07.25	442+20.38	442+33.52	442+46.65	442+59.79	442+72.92	442+86.06	442+99.19
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	SCREED ELEVATION	715.04	714.88	714.73	714.57	714.40	714.22	714.04	713.86	713.68

SCREED ELEVATIONS

SPAN 3

	SPAN LOCATION	CL PIER 2 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 3 (BACK)
LEFT EDGE OF DECK	STATION	442+90.43	443+03.57	443+16.70	443+29.84	443+42.97	443+56.11	443+69.24	443+82.38	443+95.52
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	SCREED ELEVATION	713.61	713.50	713.40	713.29	713.18	713.06	712.93	712.80	712.80
PROFILE GRADE	STATION	442+99.09	443+12.23	443+25.36	443+38.50	443+51.63	443+64.77	443+77.90	443+91.04	444+04.17
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	714.11	714.01	713.92	713.81	713.71	713.59	713.47	713.34	713.22
RIGHT EDGE OF DECK	STATION	443+01.61	443+14.75	443+27.88	443+41.02	443+54.15	443+67.29	443+80.42	443+93.56	444+06.69
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	SCREED ELEVATION	713.65	713.55	713.45	713.36	713.25	713.13	713.01	712.89	712.77

SPAN 4

	SPAN LOCATION	CL PIER 3 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG FWD ABUT
LEFT EDGE OF DECK	STATION	443+97.93	444+11.05	444+24.16	444+37.28	444+50.39	444+63.51	444+76.62	444+89.73	445+02.85
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	SCREED ELEVATION	712.66	712.62	712.58	712.53	712.48	712.42	712.35	712.28	712.21
PROFILE GRADE	STATION	444+06.59	444+19.70	444+32.82	444+45.93	444+59.05	444+72.16	444+85.28	444+98.39	445+11.51
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	713.21	713.17	713.13	713.09	713.04	712.99	712.92	712.86	712.80
RIGHT EDGE OF DECK	STATION	444+09.11	444+22.22	444+35.34	444+48.45	444+61.57	444+74.68	444+87.80	445+00.91	445+14.03
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	SCREED ELEVATION	712.75	712.72	712.68	712.64	712.60	712.54	712.48	712.42	712.36

SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

REVIEWED BAA | DATE 06/24/11
STRUCTURE FILE NUMBER 7306458/7306466
DRAWN RBK | REVISED
DESIGNED DEF/RBK | CHECKED DAT

TOP OF HAUNCH AND SCREED ELEVATIONS - LEFT BRIDGE
BRIDGE NO. SCI-823-0837 L
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

33/43

FINAL DECK SURFACE ELEVATIONS

SPAN 1

SPAN LOCATION		CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 1 (BACK)
LEFT EDGE OF DECK	STATION	440+75.60	440+88.71	441+01.83	441+14.94	441+28.06	441+41.17	441+54.29	441+67.40	441+80.52
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	FINAL DECK ELEVATION	716.99	716.72	716.47	716.22	715.98	715.75	715.52	715.30	715.30
PROFILE GRADE	STATION	440+84.26	441+10.49	441+10.49	441+23.60	441+36.71	441+49.83	441+62.94	441+76.06	441+89.17
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	FINAL DECK ELEVATION	717.41	717.16	716.90	716.66	716.43	716.20	715.98	715.76	715.55
RIGHT EDGE OF DECK	STATION	440+86.78	441+13.01	441+13.01	441+26.12	441+39.24	441+52.35	441+65.46	441+78.58	441+91.69
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	FINAL DECK ELEVATION	716.93	716.67	716.42	716.18	715.94	715.72	715.50	715.28	715.08

SPAN 2

SPAN LOCATION		CL PIER 1 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 2 (BACK)
LEFT EDGE OF DECK	STATION	441+82.93	441+96.07	442+09.20	442+22.34	442+35.47	442+48.61	442+61.74	442+74.88	442+88.02
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	FINAL DECK ELEVATION	715.05	714.85	715.25	714.47	714.28	714.11	713.95	713.79	713.64
PROFILE GRADE	STATION	441+91.59	442+04.73	442+17.86	442+31.00	442+44.13	442+57.27	442+70.40	442+83.54	442+96.67
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	FINAL DECK ELEVATION	715.32	715.32	715.13	714.95	714.77	714.60	714.44	714.29	714.14
RIGHT EDGE OF DECK	STATION	441+94.11	442+07.25	442+20.38	442+33.52	442+46.65	442+59.79	442+72.92	442+86.06	442+99.19
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	FINAL DECK ELEVATION	715.04	714.85	714.66	714.47	714.30	714.13	713.97	713.82	713.68

FINAL DECK SURFACE ELEVATIONS

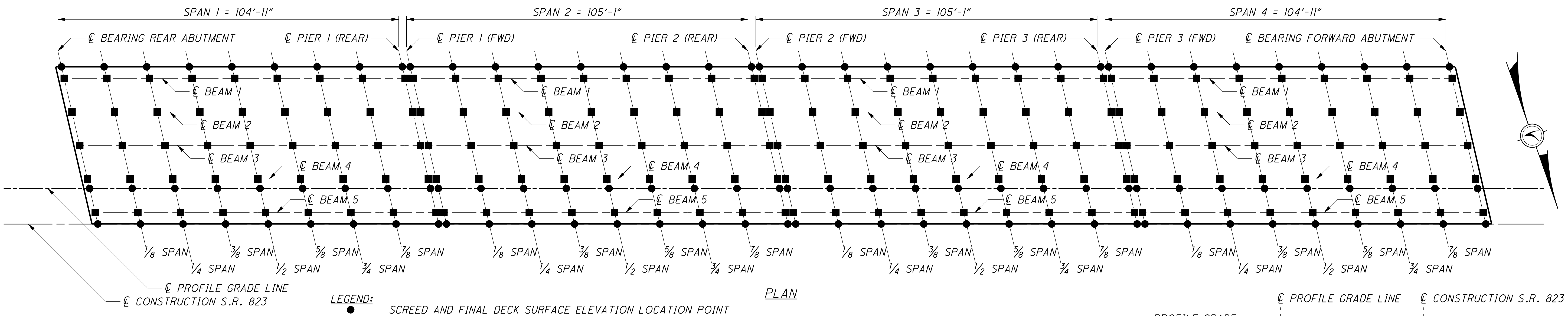
SPAN 3

SPAN LOCATION		CL PIER 2 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 3 (BACK)
LEFT EDGE OF DECK	STATION	442+90.43	443+03.57	443+16.70	443+29.84	443+42.97	443+56.11	443+69.24	443+82.38	443+95.52
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	FINAL DECK ELEVATION	713.61	713.47	713.33	713.20	713.08	712.97	712.87	712.77	712.68
PROFILE GRADE	STATION	442+99.09	443+12.23	443+25.36	443+38.50	443+51.63	443+64.77	443+77.90	443+91.04	444+04.17
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	FINAL DECK ELEVATION	714.11	713.98	713.85	713.72	713.61	713.50	713.40	713.40	713.22
RIGHT EDGE OF DECK	STATION	443+01.61	443+14.75	443+27.88	443+41.02	443+54.15	443+67.29	443+80.42	443+93.56	444+06.69
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	FINAL DECK ELEVATION	713.65	713.51	713.39	713.26	713.15	713.04	712.94	712.85	712.77

SPAN 4

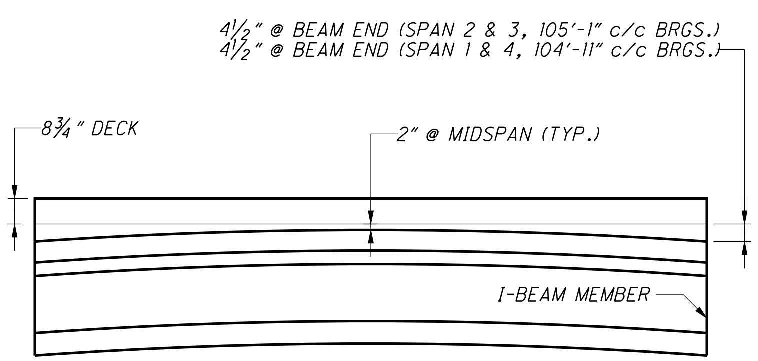
SPAN LOCATION		CL PIER 3 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG FWD ABUT
LEFT EDGE OF DECK	STATION	443+97.93	444+11.05	444+24.16	444+37.28	444+50.39	444+63.51	444+76.62	444+89.73	445+02.85
	OFFSET	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.	37.50' LT.
	FINAL DECK ELEVATION	712.68	712.58	712.50	712.44	712.38	712.33	712.28	712.24	712.21
PROFILE GRADE	STATION	444+06.59	444+19.70	444+32.82	444+45.93	444+59.05	444+72.16	444+85.28	444+98.39	445+11.51
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	FINAL DECK ELEVATION	713.21	713.13	713.06	713.00	712.94	712.89	712.85	712.82	712.80
RIGHT EDGE OF DECK	STATION	444+09.11	444+22.22	444+35.34	444+48.45	444+61.57	444+74.68	444+87.80	445+00.91	445+14.03
	OFFSET	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.	10.92' RT.
	FINAL DECK ELEVATION	712.75	712.68	712.61	712.55	712.50	712.45	712.41	712.38	712.36

FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.



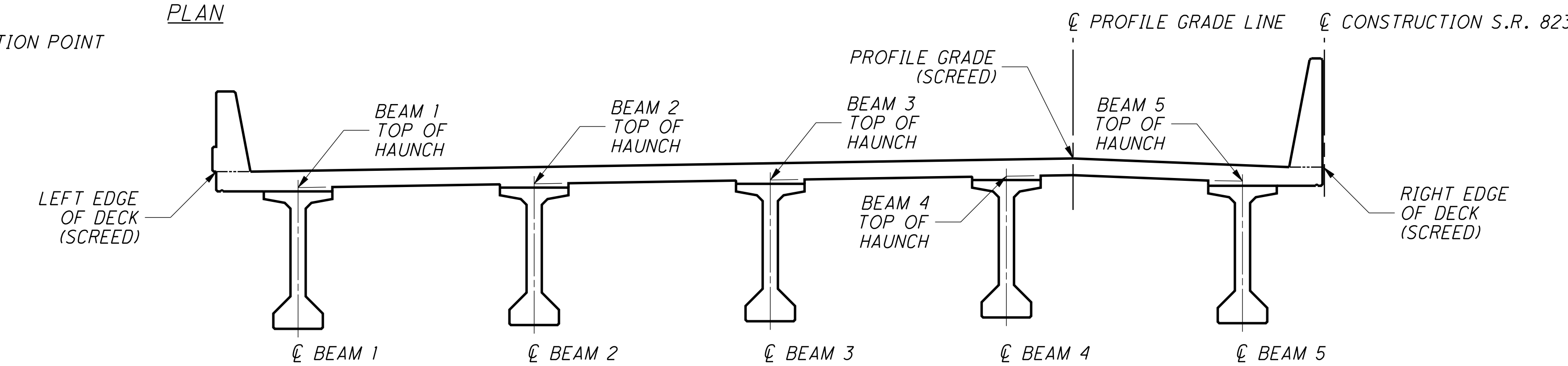
LEGEND:
- ● SCREED AND FINAL DECK SURFACE ELEVATION LOCATION POINT
- ■ TOP OF HAUNCH ELEVATION LOCATION POINT

PLAN



HAUNCH THICKNESS DIAGRAM

CALCULATED CAMBER AT TIME OF RELEASE IS 1⅝ INCHES.
CALCULATED CAMBER AT TIME OF ERECTION IS 2¹⁵⁄₁₆ INCHES.
CALCULATED LONG-TERM CAMBER IS 4¹⁄₁₆ INCHES.



TOP OF HAUNCH AND SCREED ELEVATION LOCATION POINTS
SCI-823-0837 L

NOTES:
1. SCREED ELEVATIONS ARE GIVEN AT 1/8 POINTS OF EACH SPAN MEASURED ALONG BEAM OR EDGE OF DECK.
2. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE TOPPING THICKNESSES SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING EVEN THOUGH DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
3. OFFSET DISTANCES ARE MEASURED FROM ℄ PROFILE GRADE LINE.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

DESIGNED DEF/RBK	DRAWN RBK	REVIEWED BAA	DATE 06/24/11
CHECKED DAT	REVISED	STRUCTURE FILE NUMBER 7306458/7306466	

FINAL DECK SURFACE ELEVATIONS - LEFT BRIDGE
BRIDGE NO. SCI-823-0837 L
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

TOP OF HAUNCH ELEVATIONS

SPAN LOCATION		SPAN 1 CL BRG REAR ABUT	SPAN 1 1/8 SPAN	SPAN 1 2/8 SPAN	SPAN 1 3/8 SPAN	SPAN 1 4/8 SPAN	SPAN 1 5/8 SPAN	SPAN 1 6/8 SPAN	SPAN 1 7/8 SPAN	SPAN 1 CL PIER 1 (BACK)	SPAN 2 CL PIER 1 (FWD)	SPAN 2 1/8 SPAN	SPAN 2 2/8 SPAN	SPAN 2 3/8 SPAN	SPAN 2 4/8 SPAN	SPAN 2 5/8 SPAN	SPAN 2 6/8 SPAN	SPAN 2 7/8 SPAN	SPAN 2 CL PIER 2 (BACK)
BEAM 1	STATION	440+87.62	441+00.74	441+13.85	441+26.97	441+40.08	441+53.20	441+66.31	441+79.43	441+92.54	441+94.96	442+08.09	442+21.23	442+34.36	442+34.36	442+60.63	442+73.77	442+86.90	443+00.04
	OFFSET	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.
	TOP OF HAUNCH ELEVATION	716.32	716.10	715.89	715.67	715.44	715.21	714.96	714.72	714.48	714.44	714.28	714.12	713.97	713.80	713.62	713.44	713.26	713.08
BEAM 2	STATION	440+90.01	441+03.12	441+16.24	441+29.35	441+42.47	441+55.58	441+68.70	441+81.81	441+94.93	441+97.34	442+10.48	442+23.61	442+36.75	442+36.75	442+63.02	442+76.15	442+89.29	443+02.43
	OFFSET	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.
	TOP OF HAUNCH ELEVATION	716.52	716.31	716.09	715.87	715.65	715.42	715.17	714.93	714.69	714.65	714.50	714.34	714.18	714.02	713.85	713.67	713.48	713.30
BEAM 3	STATION	440+92.39	441+05.51	441+18.62	441+31.74	441+44.85	441+57.97	441+71.08	441+84.20	441+97.31	441+99.73	442+12.86	442+26.00	442+39.13	442+39.13	442+63.02	442+78.54	442+91.68	443+04.81
	OFFSET	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.
	TOP OF HAUNCH ELEVATION	716.31	716.10	715.88	715.67	715.44	715.21	714.97	714.73	714.49	714.45	714.30	714.14	713.99	713.82	713.65	713.47	713.29	713.11
BEAM 4	STATION	440+94.78	441+07.89	441+21.01	441+34.12	441+47.24	441+60.35	441+73.47	441+86.58	441+99.70	442+02.11	442+15.25	442+28.38	442+41.52	442+54.66	442+65.40	442+80.93	442+94.06	443+07.20
	OFFSET	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.
	TOP OF HAUNCH ELEVATION	716.10	715.88	715.67	715.46	715.24	715.00	714.77	714.53	714.29	714.25	714.10	713.94	713.79	713.63	713.46	713.28	713.10	712.92
BEAM 5	STATION	440+97.17	441+10.28	441+23.39	441+49.62	441+49.62	441+62.74	441+75.85	441+88.97	442+02.08	442+04.50	442+17.63	442+30.77	442+43.91	442+57.04	442+70.18	442+83.31	442+96.45	443+09.58
	OFFSET	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.
	TOP OF HAUNCH ELEVATION	715.89	715.67	715.46	715.25	715.03	714.80	714.56	714.32	714.09	714.05	713.90	713.75	713.59	713.43	713.26	713.09	712.91	712.73

TOP OF HAUNCH ELEVATIONS

SPAN LOCATION		SPAN 3 CL PIER 2 (FWD)	SPAN 3 1/8 SPAN	SPAN 3 2/8 SPAN	SPAN 3 3/8 SPAN	SPAN 3 4/8 SPAN	SPAN 3 5/8 SPAN	SPAN 3 6/8 SPAN	SPAN 3 7/8 SPAN	SPAN 3 CL PIER 3 (BACK)	SPAN 4 CL PIER 3 (FWD)	SPAN 4 1/8 SPAN	SPAN 4 2/8 SPAN	SPAN 4 3/8 SPAN	SPAN 4 4/8 SPAN	SPAN 4 5/8 SPAN	SPAN 4 6/8 SPAN	SPAN 4 7/8 SPAN	SPAN 4 CL BRG FWD ABUT
BEAM 1	STATION	443+02.46	443+15.59	443+28.73	443+41.86	443+55.00	443+68.13	443+81.27	443+94.40	444+07.54	444+09.96	444+23.07	444+36.19	07+12.64	444+62.41	444+75.53	444+88.64	445+01.76	445+14.87
	OFFSET	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.	7.42' LT.
	TOP OF HAUNCH ELEVATION	713.05	712.95	712.86	712.76	712.65	712.54	712.42	712.29	712.17	712.16	712.12	712.09	712.05	712.01	711.95	711.89	711.83	711.77
BEAM 2	STATION	443+04.84	443+17.98	443+31.11	443+44.25	443+57.38	443+70.52	443+83.65	443+96.79	444+09.93	444+12.34	444+25.46	444+38.57	444+51.69	444+64.80	444+77.92	444+91.03	445+04.14	445+17.26
	OFFSET	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.	2.92' RT.
	TOP OF HAUNCH ELEVATION	713.28	713.18	713.08	712.99	712.88	712.77	712.65	712.53	712.41	712.40	712.36	712.33	712.29	712.25	712.19	712.13	712.07	712.01
BEAM 3	STATION	443+07.23	443+20.36	443+33.50	443+46.63	443+59.77	443+72.90	443+86.04	443+99.18	444+12.31	444+14.73	444+27.84	444+40.96	444+54.07	444+67.19	444+80.30	444+93.42	445+06.53	445+19.64
	OFFSET	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.	13.25' RT.
	TOP OF HAUNCH ELEVATION	713.09	712.99	712.90	712.80	712.70	712.59	712.47	712.35	712.23	712.22	712.18	712.15	712.11	712.07	712.02	711.96	711.90	711.84
BEAM 4	STATION	443+09.61	443+22.75	443+35.88	443+49.02	443+62.16	443+75.29	443+88.43	444+01.56	444+14.70	444+17.11	444+30.23	444+43.34	444+56.46	444+69.57	444+82.69	444+95.80	445+08.92	445+22.03
	OFFSET	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.	23.58' RT.
	TOP OF HAUNCH ELEVATION	712.90	712.80	712.71	712.62	712.51	712.40	712.29	712.17	712.05	712.04	712.00	711.97	711.94	711.90	711.85	711.79	711.73	711.68
BEAM 5	STATION	443+12.00	443+25.13	443+38.27	443+51.41	443+64.54	443+77.68	444+03.95	444+03.95	444+19.50	444+19.50	444+32.61	444+45.73	444+58.84	444+71.96	444+85.07	444+98.19	445+11.30	445+24.42
	OFFSET	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.	33.92' RT.
	TOP OF HAUNCH ELEVATION	712.71	712.61	712.52	712.43	712.33	712.22	712.11	711.99	711.87	711.86	711.83	711.80	711.76	711.73	711.68	711.62	711.56	711.51

TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE I-BEAM HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

SCREED ELEVATIONS

SPAN LOCATION		SPAN 1 CL BRG REAR ABUT	SPAN 1 1/8 SPAN	SPAN 1 2/8 SPAN	SPAN 1 3/8 SPAN	SPAN 1 4/8 SPAN	SPAN 1 5/8 SPAN	SPAN 1 6/8 SPAN	SPAN 1 7/8 SPAN	SPAN 1 CL PIER 1 (BACK)	SPAN 2 CL PIER 1 (FWD)	SPAN 2 1/8 SPAN	SPAN 2 2/8 SPAN	SPAN 2 3/8 SPAN	SPAN 2 4/8 SPAN	SPAN 2 5/8 SPAN	SPAN 2 6/8 SPAN	SPAN 2 7/8 SPAN	SPAN 2 CL PIER 2 (BACK)
LEFT EDGE OF DECK	STATION	440+86.82	440+99.92	441+13.03	441+26.15	441+39.26	441+52.38	441+65.49	441+78.61	441+91.72	441+94.14	442+07.27	442+20.41	442+33.55	442+46.68	442+59.82	442+72.95	442+86.09	442+99.22
	OFFSET	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.
	SCREED ELEVATION	716.93	716.71	716.49	716.27	716.04	715.81	715.56	715.32	715.08	715.04	714.88	714.72	714.56	714.40	714.22	714.04	713.86	713.67
PROFILE GRADE	STATION	440+89.34	441+02.45	441+15.56	441+41.79	441+41.79	441+54.91	441+68.02	441+81.14	441+94.25	441+96.67	442+09.80	442+22.94	442+36.08	442+49.21	442+62.35	442+75.48	442+88.62	443+01.75
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	717.31	717.09	716.88	716.66	716.44	716.20	715.96	715.72	715.48	715.44	715.28	715.13	714.97	714.80	714.63	714.45	714.27	714.09
RIGHT EDGE OF DECK	STATION	440+97.99	441+11.11	441+24.22	441+50.45	441+50.45	441+63.57	441+76.68	441+89.80	442+02.91	442+05.33	442+18.46	442+31.60	442+44.73	442+57.87	442+71.00	442+97.27	442+97.27	443+10.41
	OFFSET	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.
	SCREED ELEVATION	716.54	716.33	716.12	715.91	715.69	715.46	715.22	714.98	714.75	714.71	714.56	714.41	714.25	714.09	713.92	713.75	713.57	713.40

SCREED ELEVATIONS

SPAN LOCATION		SPAN 3 CL PIER 2 (FWD)	SPAN 3 1/8 SPAN	SPAN 3 2/8 SPAN	SPAN 3 3/8 SPAN	SPAN 3 4/8 SPAN	SPAN 3 5/8 SPAN	SPAN 3 6/8 SPAN	SPAN 3 7/8 SPAN	SPAN 3 CL PIER 3 (BACK)	SPAN 4 CL PIER 3 (FWD)	SPAN 4 1/8 SPAN	SPAN 4 2/8 SPAN	SPAN 4 3/8 SPAN	SPAN 4 4/8 SPAN	SPAN 4 5/8 SPAN	SPAN 4 6/8 SPAN	SPAN 4 7/8 SPAN	SPAN 4 CL BRG FWD ABUT
LEFT EDGE OF DECK	STATION	443+01.64	443+14.77	443+27.91	443+41.05	443+54.18	443+67.32	443+80.45	443+93.59	444+06.72	444+09.14	444+22.25	444+35.37	444+48.48	444+61.60	444+74.71	444+87.83	445+00.94	445+14.06
	OFFSET	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.	10.92' LT.
	SCREED ELEVATION	713.65	713.55	713.45	713.35	713.25	713.13	713.01	712.89	712.77	712.75	712.71	712.68	712.64	712.60	712.54	712.48	712.41	712.35
PROFILE GRADE	STATION	443+04.17	443+17.30	443+30.44	443+43.58	443+56.71	443+69.85	443+96.12	443+96.12	444+11.67	444+11.67	444+24.78	444+37.90	444+51.01	444+64.13	444+77.24	444+90.36	445+03.47	445+16.59
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	714.06	713.96	713.87	713.77	713.67	713.43	713.31	713.19	713.18	713.14	713.11	713.07	713.03	712.97	712.91	712.85	712.85	712.79
RIGHT EDGE OF DECK	STATION	443+12.83	443+25.96	443+39.10	443+52.23	443+65.37	443+78.50	443+91.64	444+04.77	444+20.33	444+20.33	444+33.44	444+46.56	444+59.67	444+72.78	444+85.90	444+99.01	445+12.13	445+25.24
	OFFSET	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.	37.50' RT.
	SCREED ELEVATION	713.37	713.28	713.19	713.09	713.00	712.89	712.77	712.65	712.54	712.53	712.49	712.47	712.43	712.39	712.35	712.29	712.23	712.18

SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

REVIEWED BAA DATE 06/24/11
STRUCTURE FILE NUMBER 7306458/7306466
DRAWN RBK REVISED
DESIGNED DEF/RBK CHECKED DAT

TOP OF HAUNCH AND SCREED ELEVATIONS - RIGHT BRIDGE
BRIDGE NO. SCI-823-0837 R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

35/43

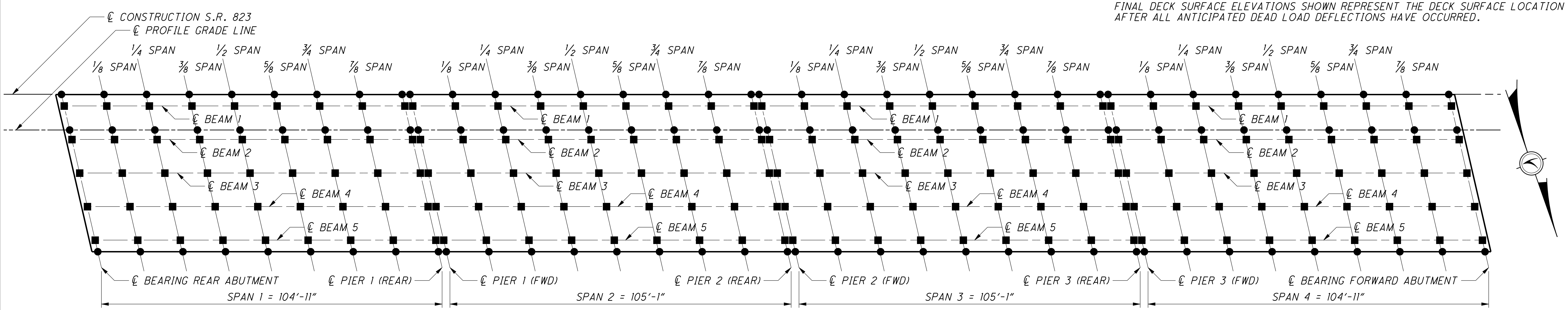
FINAL DECK SURFACE ELEVATIONS

SPAN LOCATION		SPAN 1									SPAN 2								
		CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 1 (BACK)	CL PIER 1 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 2 (BACK)
LEFT EDGE OF DECK	STATION	440+86.82	440+99.92	441+13.03	441+26.15	441+39.26	441+52.38	441+65.49	441+78.61	441+91.72	441+94.14	442+07.27	442+20.41	442+33.55	442+46.68	442+59.82	442+72.95	442+86.09	442+99.22
	OFFSET	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.
	FINAL DECK ELEVATION	716.93	716.67	716.42	716.18	715.94	715.71	715.49	715.28	715.08	715.04	714.84	714.65	714.47	714.30	714.13	713.97	713.82	713.67
PROFILE GRADE	STATION	440+89.34	441+02.45	441+15.56	441+41.79	441+41.79	441+54.91	441+68.02	441+81.14	441+94.25	441+96.67	442+09.80	442+22.94	442+36.08	442+49.21	442+62.35	442+75.48	442+88.62	443+01.75
	OFFSET	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′
	FINAL DECK ELEVATION	717.31	717.06	716.81	716.57	716.34	716.11	715.89	715.68	715.48	715.44	715.24	715.06	714.88	714.70	714.54	714.38	714.23	714.09
RIGHT EDGE OF DECK	STATION	440+97.99	441+11.11	441+24.22	441+50.45	441+50.45	441+63.57	441+76.68	441+89.80	442+02.91	442+05.33	442+18.46	442+31.60	442+44.73	442+57.87	442+71.00	442+97.27	442+97.27	443+10.41
	OFFSET	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.
	FINAL DECK ELEVATION	716.54	716.29	716.05	715.81	715.36	715.36	715.15	714.95	714.75	714.71	714.52	714.34	714.16	713.99	713.83	713.68	713.53	713.40

FINAL DECK SURFACE ELEVATIONS

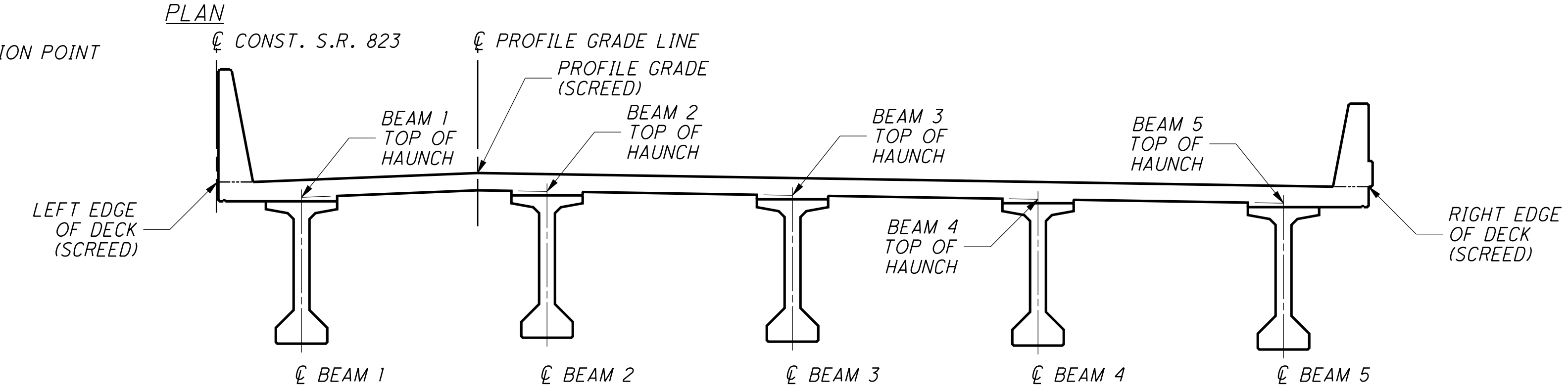
SPAN LOCATION		SPAN 3									SPAN 4								
		CL PIER 2 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL PIER 3 (BACK)	CL PIER 3 (FWD)	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG FWD ABUT
LEFT EDGE OF DECK	STATION	443+01.64	443+14.77	443+27.91	443+41.05	443+54.18	443+67.32	443+80.45	443+93.59	444+06.72	444+09.14	444+22.25	444+35.37	444+48.48	444+61.60	444+74.71	444+87.83	445+00.94	445+14.06
	OFFSET	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.	10.92′ LT.
	FINAL DECK ELEVATION	713.65	713.51	713.38	713.26	713.15	713.04	712.94	712.85	712.77	712.75	712.68	712.61	712.55	712.49	712.45	712.41	712.38	712.35
PROFILE GRADE	STATION	443+04.17	443+17.30	443+30.44	443+43.58	443+56.71	443+69.85	443+96.12	443+96.12	444+11.67	444+11.67	444+24.78	444+37.90	444+51.01	444+64.13	444+77.24	444+90.36	445+03.47	445+16.59
	OFFSET	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′	0′
	FINAL DECK ELEVATION	714.06	713.93	713.80	713.68	713.57	713.46	713.36	713.27	713.19′ RT.	713.18	713.10	713.03	712.97	712.92	712.88	712.84	712.81	712.79
RIGHT EDGE OF DECK	STATION	443+12.83	443+25.96	443+39.10	443+52.23	443+65.37	443+78.50	443+91.64	444+04.77	444+20.33	444+20.33	444+33.44	444+46.56	444+59.67	444+72.78	444+85.90	444+99.01	445+12.13	445+25.24
	OFFSET	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.	37.50′ RT.
	FINAL DECK ELEVATION	713.37	713.24	713.12	713.00	712.90	712.80	712.70	712.62	712.54	712.53	712.46	712.39	712.34	712.29	712.25	712.22	712.20	712.18

FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

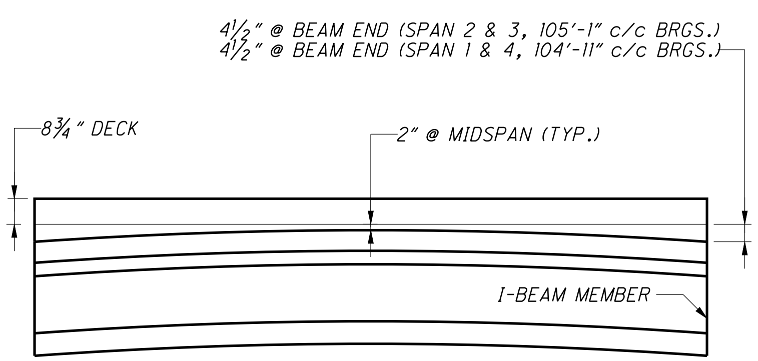


PLAN

LEGEND:
● SCREED AND FINAL DECK SURFACE ELEVATION LOCATION POINT
■ TOP OF HAUNCH ELEVATION LOCATION POINT



TOP OF HAUNCH AND SCREED ELEVATION LOCATION POINTS
SCI-823-0837 R



HAUNCH THICKNESS DIAGRAM

CALCULATED CAMBER AT TIME OF RELEASE IS 1⅝ INCHES.
CALCULATED CAMBER AT TIME OF ERECTION IS 2¹⁵⁄₁₆ INCHES.
CALCULATED LONG-TERM CAMBER IS 4¹⁄₁₆ INCHES.

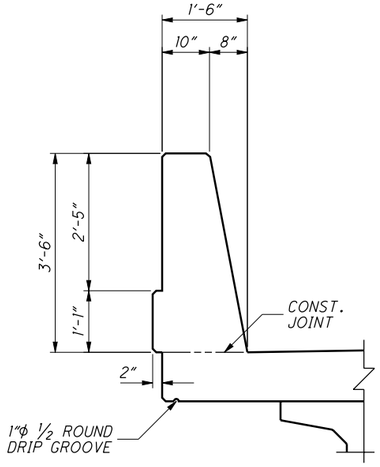
NOTES:
1. SCREED ELEVATIONS ARE GIVEN AT ⅛ POINTS OF EACH SPAN MEASURED ALONG BEAM OR EDGE OF DECK.
2. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE TOPPING THICKNESSES SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING EVEN THOUGH DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
3. OFFSET DISTANCES ARE MEASURED FROM ℄ PROFILE GRADE LINE.

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

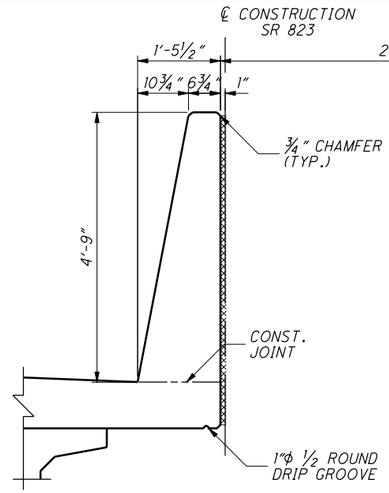
DESIGNED DEF/RBK | CHECKED DAT | DRAWN RBK | REVISED | REVIEWED BAA | DATE 06/24/11 | STRUCTURE FILE NUMBER 7306458/7306466

FINAL DECK SURFACE ELEVATIONS - RIGHT BRIDGE
BRIDGE NO. SCI-823-0837 R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

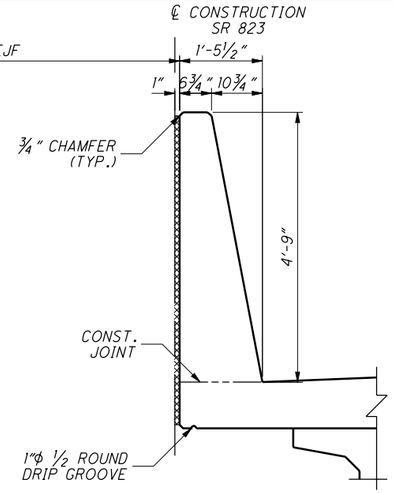
SCI-823-6.81
PID No. 19415



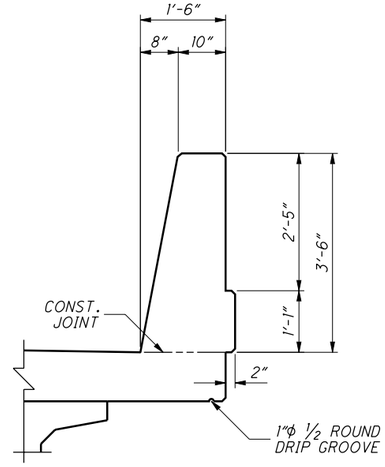
SOUTH PARAPET SECTION
SCI-823-0837 L



NORTH PARAPET SECTION
SCI-823-0837 L



SOUTH PARAPET SECTION
SCI-823-0837 R



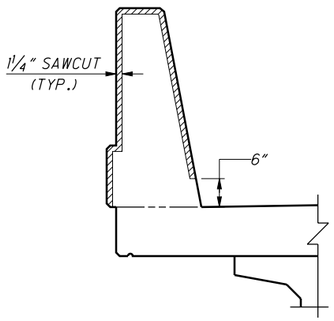
NORTH PARAPET SECTION
SCI-823-0837 R

SOUTH PARAPET SECTION
SCI-823-0837 L

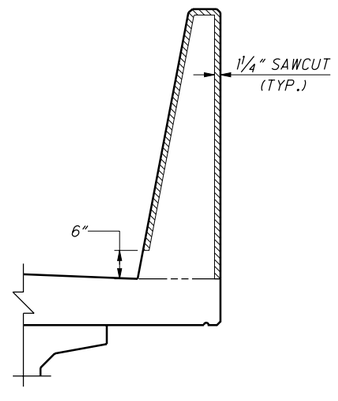
NORTH PARAPET SECTION
SCI-823-0837 L

SOUTH PARAPET SECTION
SCI-823-0837 R

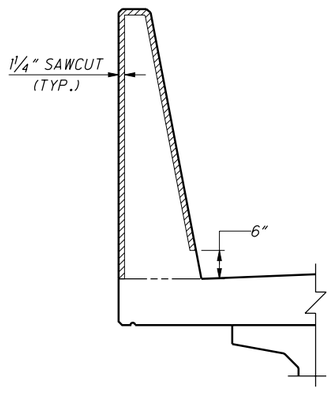
NORTH PARAPET SECTION
SCI-823-0837 R



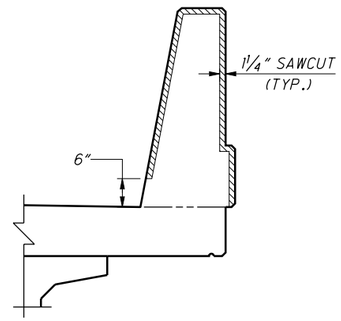
SOUTH PARAPET SECTION
SCI-823-0837 L



NORTH PARAPET SECTION
SCI-823-0837 L



SOUTH PARAPET SECTION
SCI-823-0837 R



NORTH PARAPET SECTION
SCI-823-0837 R

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
4020 Kinross Lakes Parkway, Suite 201, Richfield, Ohio 44286
TEL 330.659.4201 FAX 330.659.4202 WEB www.kzfdesign.com

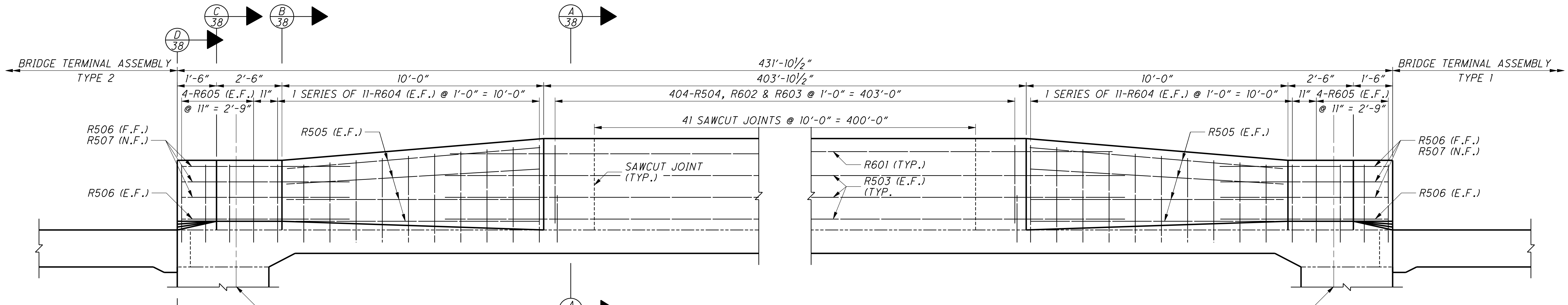
DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PARAPET DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

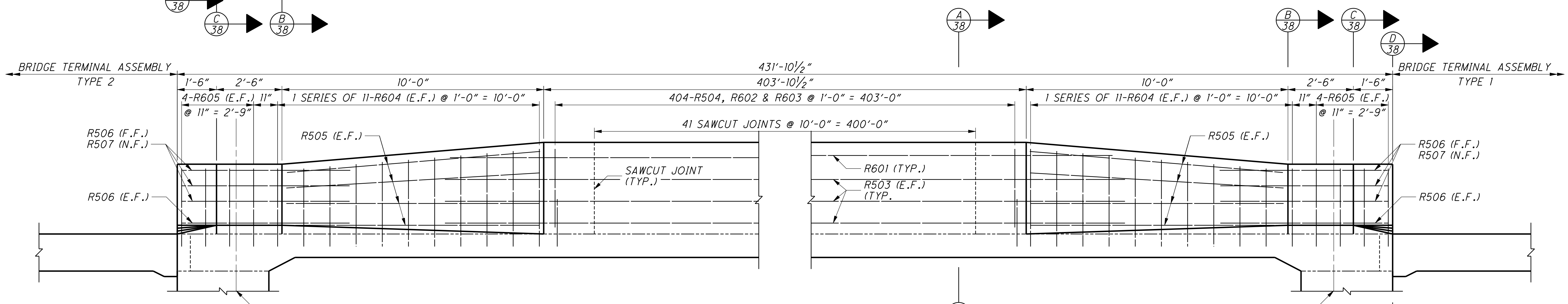
SCI-823-6.81
PID No. 19415

37 / 43

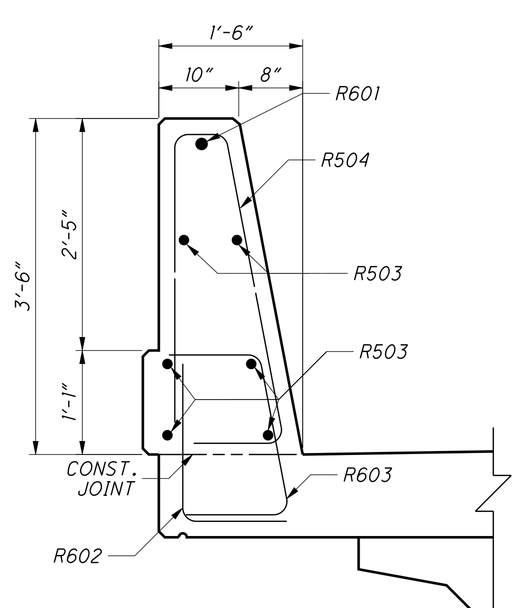
47
53



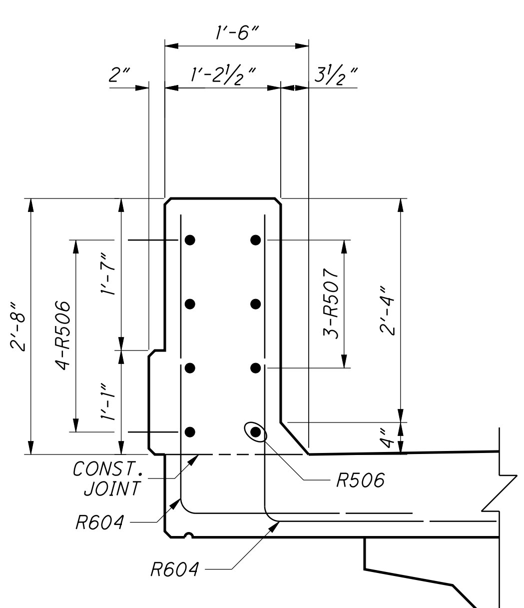
SOUTH PARAPET SECTION - LOOKING SOUTH
SCI-823-0837 L



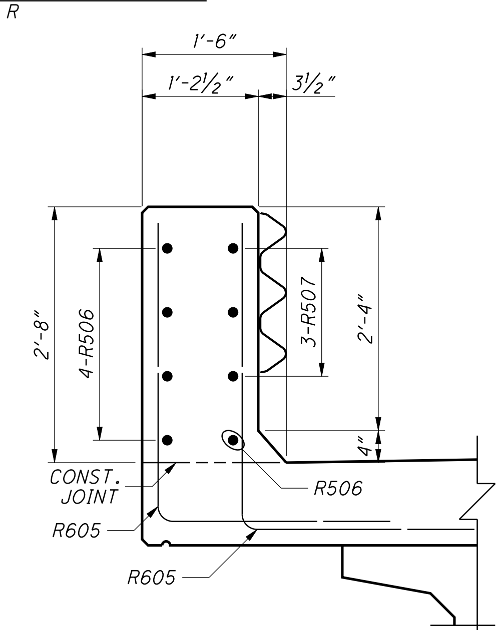
NORTH PARAPET SECTION - LOOKING NORTH
SCI-823-0837 R



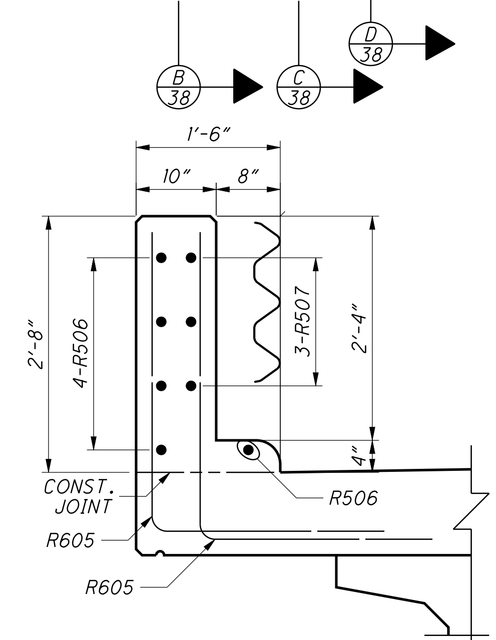
A 38 SECTION



B 38 SECTION



C 38 SECTION



D 38 SECTION

NOTES:

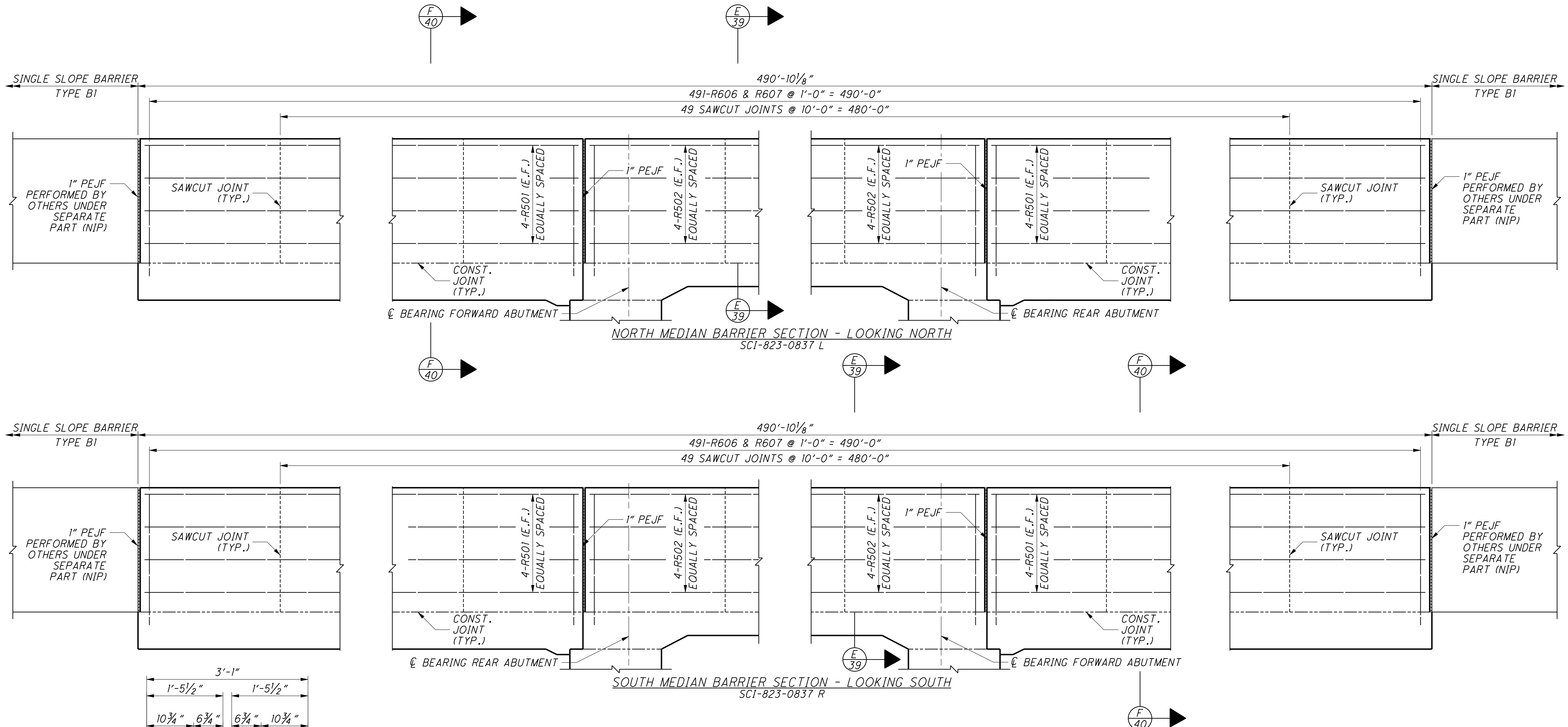
1. FOR ADDITIONAL DETAILS, SEE ODOT STD. DWG. SBR-1-99
2. MIN. LAP FOR #5 BAR = 3'-5"
3. MIN. LAP FOR #6 BAR = 4'-1"

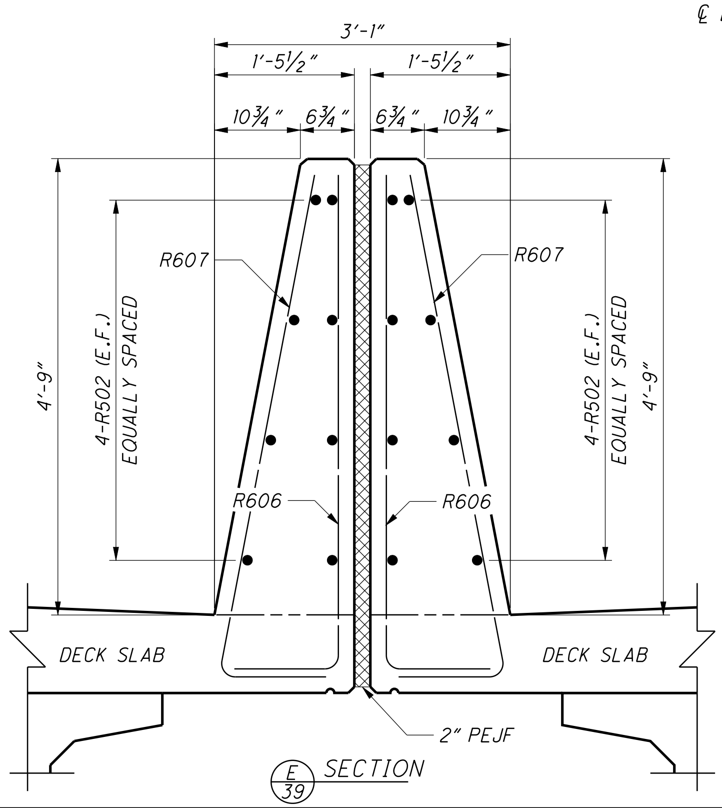
DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

PARAPET DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415





NOTES:

1. MIN. LAP FOR #5 BAR = 3'-5"

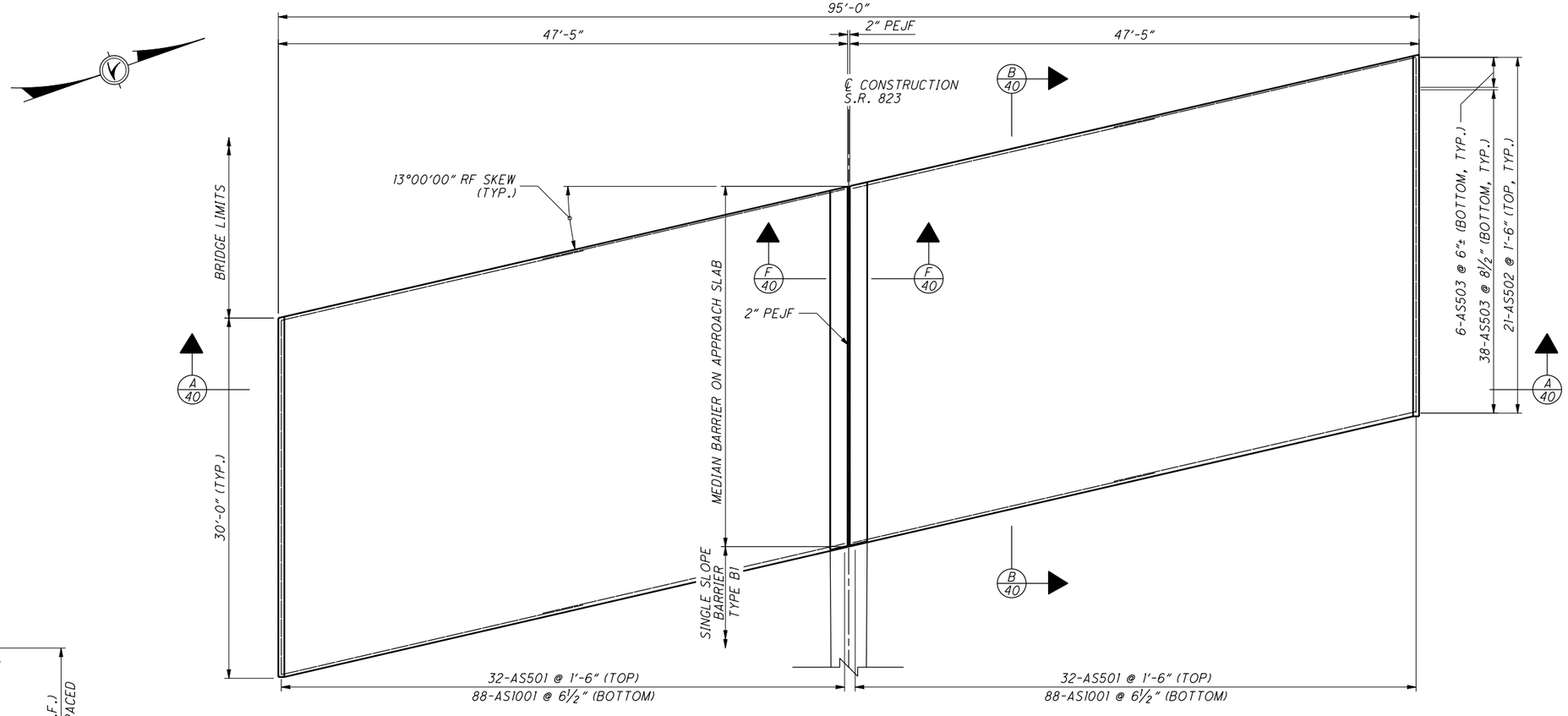
DESIGN AGENCY: KZF DESIGN — Architecture | Engineering | Interiors | Planning

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11

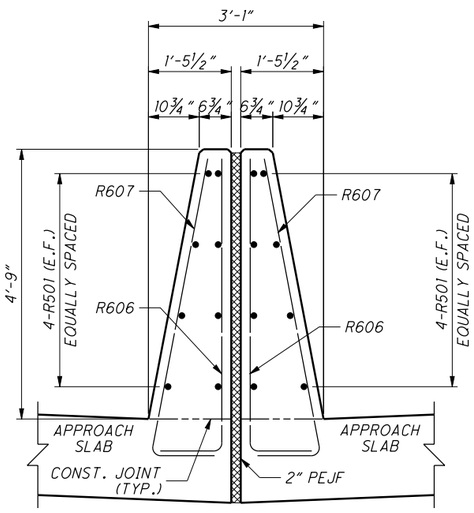
CHECKED	REVISED	STRUCTURE FILE NUMBER
DAT		7306458/7306466

MEDIAN BARRIER DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

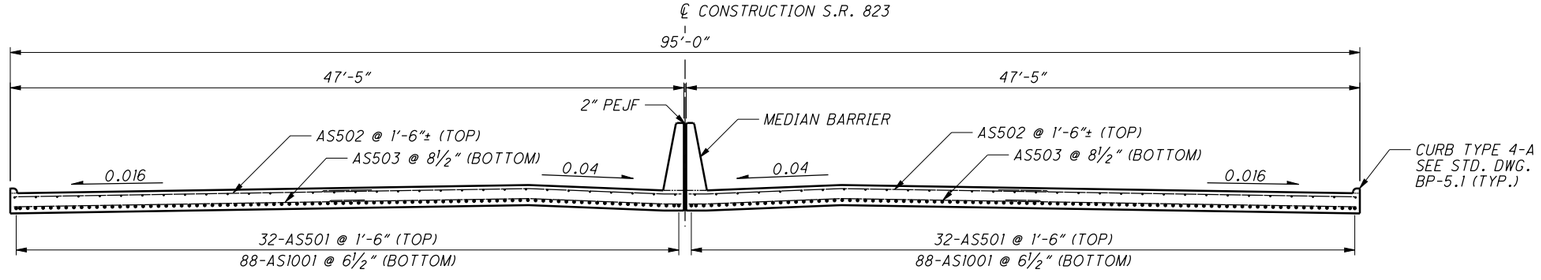
SCI-823-6.81
PID No. 19415



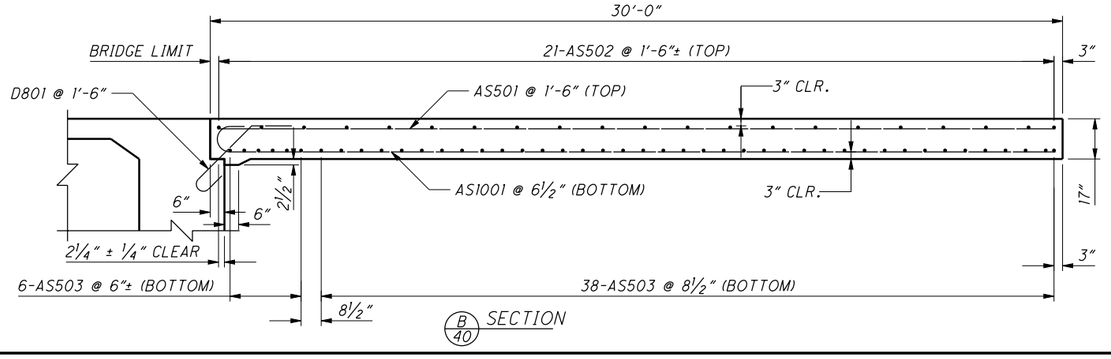
TYPICAL APPROACH SLAB PLAN
SCI-SR823-0837



F 39 F 40 SECTION



A 40 SECTION



B 40 SECTION

NOTES:

1. FOR ADDITIONAL DETAILS ON APPROACH SLAB, SEE ODOT STD. DWG. AS-1-81.
2. FOR ADDITIONAL DETAILS ON MEDIAN BARRIERS, SEE MEDIAN BARRIER DETAIL SHEETS.
3. REINFORCING STEEL IN APPROACH SLAB INCLUDED IN PAYMENT WITH ITEM 898 - OC/OA CONCRETE, CLASS OCS2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN.
4. MIN. LAP #5 TOP BAR = 3'-5"
   MIN. LAP #5 BTM. BAR = 2'-5"

DESIGN AGENCY
KZFDESIGN
Architecture | Engineering | Interiors | Planning
CONSULTANTS, INC.
TEL 513.621.2811 FAX 513.621.2600 WEB www.kzf.com

DESIGNED	DRAWN	REVIEWED	DATE
DEF/RBK	RBK	BAA	06/24/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DAT		7306458/7306466	

MODIFIED APPROACH SLAB DETAILS
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

40 / 43

50
53

MARK	NUMBER								LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS						
	LEFT STRUCTURE			TOTAL	RIGHT STRUCTURE			TOTAL					A	B	C	D	E	R	INC
	PIER 1	PIER 2	PIER 3		PIER 1	PIER 2	PIER 3												
PIER REINFORCING STEEL LIST																			
P401	13	13	13	39	13	13	13	39	5'-9"	150	150	2	0'-9"	4'-5"	0'-9"				
P501	477	585	432	1494	477	585	486	1548	4'-8"	7272	7535	17	4'-0"						
P502	106	130	96	332	106	130	108	344	21'-11"	7589	7864	2	3'-3"	15'-7 1/2"	3'-3"				
P503	106	130	96	332	106	130	108	344	17'-1"	5916	6129	24	4'-0"	7'-0"				2'-0"	
	2	2	2	6	2	2	2	6	24'-5"										
P504	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	549	549	STR							4'-10"
	3	3	3	3	3	3	3	3	34'-1"										
P505	10	10	10	30	10	10	10	30	29'-10"	933	933	13	11'-8"	13'-3 1/2"	5'-6"	3'-10"			
P506	30	30	30	90	30	30	30	90	5'-8"	532	532	2	0'-9"	4'-5"	0'-9"				
P507	22	22	22	66	22	22	22	66	11'-2"	769	769	2	3'-6"	4'-5"	3'-6"				
P601	22	22	22	66	22	22	22	66	24'-2"	2396	2396	2	1'-0"	22'-6"	1'-0"				
P602	31	31	31	93	31	31	31	93	17'-2"	2398	2398	2	1'-0"	15'-6"	1'-0"				
	4	4	4	12	4	4	4	12	12'-9"					3'-9"					
P603	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	3280	3280	3	2'-6"	TO					1 1/4"
	13	13	13	13	13	13	13	13	15'-3"					5'-0"					
	4	4	4	12	4	4	4	12	15'-5"					5'-1"					
P604	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	6969	6969	3	2'-6"	TO					2 1/2"
	20	20	20	20	20	20	20	20	23'-3"					9'-0"					
P605	42	42	42	126	42	42	42	126	23'-7"	4463	4463	3	2'-6'	9'-2"					
P606	4	4	4	12	4	4	4	12	4'-3"	77	77	1	1'-7"	2'-10"					
P607	6	6	6	18	6	6	6	18	9'-3"	250	250	3	1'-8"	2'-10"					
P701	16	16	16	48	16	16	16	48	23'-1"	2265	2265	STR							
	4	4	4	12	4	4	4	12	19'-6"										
P702	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	1539	1539	STR							1'-5"
	3	3	3	3	3	3	3	3	22'-4"										
P901	24	24	24	72	24	24	24	72	25'-1"	6140	6140	2	1'-7"	22'-6"	1'-7"				
P902	4	4	4	12	4	4	4	12	4'-6"	184	184	STR							
P903	22	22	22	66	22	22	22	66	4'-3"	954	954	1	1'-8"	2'-10"					
P1001	55	55	55	165	55	55	55	165	18'-6"	13135	13135	2	1'-10"	15'-6"	1'-10"				
P1002	102	102	102	306	102	102	102	306	15'-3"	20080	20080	1	1'-10"	13'-9"					
P1003	102	102	102	306	102	102	102	306	30'-0"	39502	39502	STR							
P1004	102	0	0	102	102	0	0	102	31'-2"	13679	13679	STR							
P1005	0	102	0	102	0	102	0	102	42'-5"	18617	18617	STR							
P1006	0	0	102	102	0	0	0	0	25'-9"	11302	0	STR							
P1007	0	0	0	0	0	0	102	102	32'-2"	0	14118	STR							
P1008	32	32	32	96	32	32	32	96	25'-11"	10706	10706	1	3'-3"	23'-0"					
P1009	24	24	24	72	24	24	24	72	23'-1"	7152	7152	STR							
									SUB-TOTAL	188796	192363	LBS							

MARK	NUMBER						LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS						
	LEFT STRUCTURE		TOTAL	RIGHT STRUCTURE		TOTAL					A	B	C	D	E	R	INC
	REAR	FORWARD		REAR	FORWARD												
ABUTMENT REINFORCING STEEL LIST																	
A501	60	60	120	60	60	120	16'-3"	2034	2034	3	5'-6"	2'-6"					
A502	50	50	100	50	50	100	16'-11"	1764	1764	3	3'-0"	5'-4"					
A503	10	10	20	10	10	20	20'-1"	419	419	2	9'-2"	2'-0"	9'-2"				
A504	18	18	36	18	18	36	22'-0"	826	826	STR							
A505	4	4	8	4	4	8	26'-6"	221	221	STR							
A506	4	4	8	4	4	8	18'-11"	158	158	STR							
	1	1	2	1	1	2	9'-9"				4'-0"		4'-0"				
A507	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	258	258	2	TO	2'-0"	TO				0'-6"
	9	9	9	9	9	9	17'-9"				8'-0"		8'-0"				
	1	1	2	1	1	2	10'-9"					3'-3"					
A508	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	201	201	3	2'-0"	TO					0'-6"
	7	7	7	7	7	7	16'-9"					6'-3"					
A509	0	1	1	1	0	1	16'-10"	18	18	19	16'-3"	6 1/2"	3 1/4"				
A510	0	1	1	1	0	1	17'-4"	18	18	19	16'-3"	1'-0"	0'-6"				
	2	2	4	2	2	4	2'-2"										
A511	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	SERIES OF	TO	286	286	STR							1'-10"
	8	8	8	8	8	8	15'-0"										
A512	36	36	72	36	36	72	8'-1"	607	607	2	2'-10"	2'-8"	2'-10"				
A513	72	72	144	72	72	144	14'-2"	2128	2128	2	5'-7"	3'-3"	5'-7"				
A514	1	0	1	0	1	1	16'-6"	17	17	19	16'-3"	1 5/8"	7/8"				
A515	1	0	1	0	1	1	17'-3"	18	18	19	16'-3"	0'-7"	3 1/2"				
A601	3	3	6	3	3	6	3'-2"	29	29	STR							
A602	12	12	24	12	12	24	9'-8"	348	348	STR							
A603	3	3	6	3	3	6	3'-1"	28	28	STR							
A604	6	6	12	6	6	12	26'-9"	482	482	STR							
D801	32	32	64	32	32	64	4'-8"	797	797	18	2'-10"	1'-0"	1'-0"				
A801	15	15	30	15	15	30	24'-3"	1942	1942	STR							
A802	26	26	52	26	26	52	28'-2"	3911	3911	STR							
							SUB-TOTAL	16511	16511	LBS							

NOTES:
1. ALL REINFORCING STEEL TO BE EPOXY COATED
2. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS
3. REFER TO ODOT CMS SEC. 509.05 FOR STANDARD BAR DIMENSIONS
4. ALL DIMENSIONS ARE OUT TO OUT

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
425 Metro Place North, Suite 300, Dublin, Ohio 43017
TEL 614.451.1811 FAX 614.451.3636 WEB www.kzfdesign.com

DESIGNED DEF/RBK
DRAWN RBK
CHECKED DAT
REVIEWED BAA
DATE 06/24/11
REVISED
STRUCTURE FILE NUMBER 7306458/7306466

REINFORCING STEEL LIST
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

MARK	LEFT STRUCTURE	RIGHT STRUCTURE	LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
INTERMEDIATE DIAPHRAGM REINFORCING STEEL LIST (FOR INFORMATION ONLY)													
D401	576	576	10'-10"	4168	4168	3	0'-6"	4'-8"					
D601	384	384	9'-4"	5383	5383	STR							
D602	256	256	10'-0"	3845	3845	13	3'-8"	0'-8"	0'-8"	5'-5"			
		SUB-TOTAL		13397	13397	LBS							

MARK	NUMBER: LEFT STRUCTURE TOP	LEFT STRUCTURE BOTTOM	TOTAL	RIGHT STRUCTURE TOP	RIGHT STRUCTURE BOTTOM	TOTAL	LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
DECK SLAB REINFORCING STEEL LIST																	
S401	975		975	975		975	30'-0"	19539	19539	STR							
S402	65		65	65		65	21'-9"	944	944	STR							
S403	576		576	576		576	26'-6"	10196	10196	STR							
S404	2174		2174	2174		2174	9'-7"	13917	13917	16	9'-3"						
S501	1070		1070	1070		1070	30'-0"	33480	33480	STR							
S502	1074		1074	1074		1074	21'-6"	24084	24084	STR							
	1		1	1		1	1'-3"										
S503	SERIES OF		SERIES OF	SERIES OF		SERIES OF	TO	264	264	STR							1'-8 1/2"
	17		17	17		17	28'-7"										
	1		1	1		1	3'-3"										
S504	SERIES OF		SERIES OF	SERIES OF		SERIES OF	TO	135	135	STR							1'-8 1/2"
	11		11	11		11	20'-4"										
	1		1	1		1	4'-3"										
S505	SERIES OF		SERIES OF	SERIES OF		SERIES OF	TO	254	254	STR							1'-8 1/2"
	15		15	15		15	28'-2"										
	1		1	1		1	0'-7"										
S506	SERIES OF		SERIES OF	SERIES OF		SERIES OF	TO	147	147	STR							1'-8 1/2"
	13		13	13		13	21'-1"										
S507	4	4	8	4	4	8	26'-5"	220	220	STR							
S508		1245	1245		1245	1245	30'-0"	38956	38956	STR							
S509		83	83		83	83	31'-9"	2749	2749	STR							
S510		2144	2144		2144	2144	25'-9"	57582	57582	STR							
		2	2		2	2	1'-3"										
S511		SERIES OF	SERIES OF		SERIES OF	SERIES OF	TO	413	413	STR							1'-8 1/2"
		15	15		15	15	25'-2"										
		2	2		2	2	4'-1"										
S512		SERIES OF	SERIES OF		SERIES OF	SERIES OF	TO	389	389	STR							1'-8 1/2"
		13	13		13	13	24'-7"										
							SUB-TOTAL	203271	203271	LBS							

MARK	LEFT STRUCTURE	RIGHT STRUCTURE	LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PIER DIAPHRAGM REINFORCING STEEL LIST													
D402	96	96	16'-4"	1047	1047	6	2'-8"	6'-0"	1'-0"				
D403	15	15	4'-10"	48	48	12A	0'-8 1/2"	0'-8 1/2"	0'-6 1/4"	1'-11 1/2"			
D404	15	15	13'-1"	131	131	24	0'-5 1/2"	6'-6"				2 1/4"	
D405	15	15	2'-8"	27	27	STR							
D603	72	72	9'-8"	1045	1045	STR							
D801	96	96	10'-10"	2777	2777	13	3'-8"	0'-8"	0'-8"	6'-4"			
		SUB-TOTAL		5076	5076	LBS							

NOTES:
1. ALL REINFORCING STEEL TO BE EPOXY COATED
2. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS
3. REFER TO ODOT CMS SEC. 509.05 FOR STANDARD BAR DIMENSIONS
4. ALL DIMENSIONS ARE OUT TO OUT

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.6530 WEB www.kzf.com

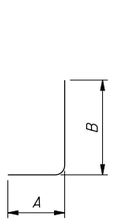
DESIGNED DEF/RBK | DRAWN RBK | REVIEWED BAA | DATE 06/24/11
CHECKED DAT | REVISED | STRUCTURE FILE NUMBER 7306458/7306466

REINFORCING STEEL LIST
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

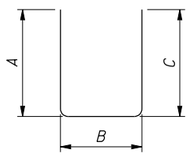
SCI-823-6.81
PID No. 19415

MARK	NUMBER						LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS						
	LEFT STRUCTURE		TOTAL	RIGHT STRUCTURE		TOTAL					A	B	C	D	E	R	INC
	INTERIOR	EXTERIOR		INTERIOR	EXTERIOR												
RAILING REINFORCING STEEL LIST																	
R501	16		16	16		16	29'-7"	494	494	STR							
R502	136		136	136		136	28'-7"	4054	4054	STR							
R503		96	96		96	96	28'-11"	2895	2895	STR							
R504		404	404		404	404	7'-5"	3125	3125	23	1'-1"	3'-2"	3'-0"			2 3/4"	
R505		16	16		16	16	10'-0"	167	167	STR							
R506		10	10		10	10	5'-6"	57	57	25	1'-8"	2'-5"	1'-5"	1 1/2"	5"		
R507		6	6		6	6	5'-6"	34	34	STR							
R601		16	16		16	16	29'-6"	709	709	STR							
R602		404	404		404	404	2'-8"	1618	1618	1	1'-1"	1'-9"					
R603		404	404		404	404	3'-7"	2174	2174	28	1'-9"	1'-1"	1'-1"				
		4	4		4	4	5'-3"					3'-0"					
R604		SERIES OF	SERIES OF		SERIES OF	SERIES OF	TO	374	374	1	2'-5"	TO					0'-1"
		11	11		11	11	6'-1"					3'-10"					
R605		16	16		16	16	5'-3"	132	132	1	2'-5"	3'-0"					
R606	491		491	491		491	6'-2"	4548	4548	1	1'-1"	5'-2"					
R607	491		491	491		491	6'-3"	4609	4609	11	1'-0"	5'-2"	1'-1"				
							SUB-TOTAL	24993	24993	LBS							

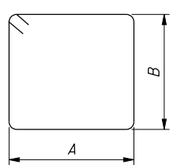
MARK	NUMBER						LENGTH	LEFT WEIGHT	RIGHT WEIGHT	TYPE	DIMENSIONS						
	LEFT STRUCTURE		TOTAL	RIGHT STRUCTURE		TOTAL					A	B	C	D	E	R	INC
	REAR	FORWARD		REAR	FORWARD												
APPROACH SLAB REINFORCING STEEL LIST (FOR INFORMATION ONLY)																	
AS501	32	32	64	32	32	64	29'-6"	1969	1969	STR							
AS502	42	42	84	42	42	84	25'-10"	2263	2263	STR							
AS503	88	88	176	88	88	176	25'-4"	4650	4650	STR							
AS1001	88	88	176	88	88	176	30'-11"	23414	23414	16	29'-6"						
							SUB-TOTAL	32297	32297	LBS							
							LEFT STRUCTURE TOTAL	438646		LBS							
							RIGHT STRUCTURE TOTAL	442214		LBS							



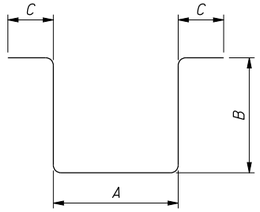
TYPE-1



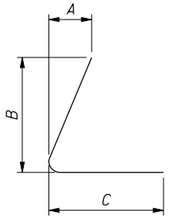
TYPE-2



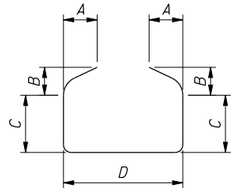
TYPE-3



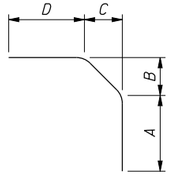
TYPE-6



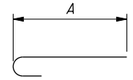
TYPE-11



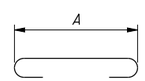
TYPE-12A



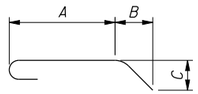
TYPE-13



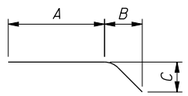
TYPE-16



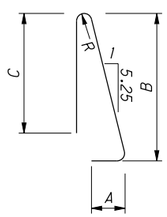
TYPE-17



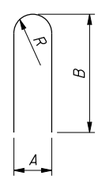
TYPE-18



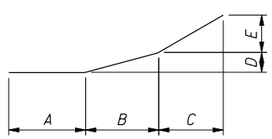
TYPE-19



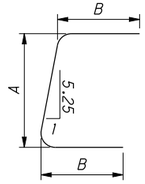
TYPE-23



TYPE-24



TYPE-25



TYPE 28

NOTES:
1. ALL REINFORCING STEEL TO BE EPOXY COATED
2. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS
3. REFER TO ODOT CMS SEC. 509.05 FOR STANDARD BAR DIMENSIONS
4. ALL DIMENSIONS ARE OUT TO OUT

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
6200 Riverside Drive, Suite D, Dublin, Ohio 43017
TEL 614.451.1811 FAX 614.451.3600 WEB www.kzf.com

DESIGNED DEF/RBK
DRAWN RBK
REVIEWED BAA
DATE 06/24/11
CHECKED DAT
REVISED
STRUCTURE FILE NUMBER 7306458/7306466

REINFORCING STEEL LIST
BRIDGE NO. SCI-823-0837 L/R
SR 823 OVER SWAUGER VALLEY-MINFORD ROAD (CR 31)

SCI-823-6.81
PID No. 19415

43 / 43

53
53