

REF. NO.	SHEET NO.	STATION TO STATION		SIDE	CADD GENERATED AREA																								202	202	202	202	202	203	407	424	442	606	606	606	606	606	611	611	621	621	622	622	644	807	807	807	807	807	807	807	850	850	850	897											
		FROM	TO		SF	FT	FT	EA	EA	EA	CY	GAL	CY	CY	EA	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA																																	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
		DESCRIPTION	DESCRIPTION		DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION																																	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION
LL-1	P.75	317+00.00	341+27.75	RT																																																																			
LL-2	P.75	323+22.84	341+12.08	RT																																																																			
ELY-1	P.75	323+22.84	340+95.75	RT																																																																			
CH-1	P.76	328+45.39	332+54.36	RT																																																																			
CH-2	P.76	328+45.39	332+54.36	RT																																																																			
CM-1	P.76	328+45.39	332+54.36	RT																																																																			
ELW-1	P.77	332+54.36	341+43.30	RT																																																																			
ELY-2	P.77	333+00.00	340+61.58	LT																																																																			
LL-3	P.77	333+00.00	340+27.29	LT																																																																			
LL-4	P.77	333+00.00	340+44.81	LT																																																																			
ELW-2	P.77	333+00.00	340+07.16	LT																																																																			
	P.77	333+07.13	340+61.81	LT	40331																																																																		
	P.77	333+07.13	341+60.20	RT	46348																																																																		
R-1	P.78	337+48.82	339+95.53	LT			195				1	1																																																											
GR-1	P.78	337+45.50	339+95.53	LT							18						195							1																																															
R-2	P.78	338+17.77	341+60.20	RT			308				1	1																																																											
GR-2	P.78	337+74.00	341+60.20	RT							29					308																																																							
ELW-3	P.79	340+07.16	341+73.23	LT																																																																			
LL-5	P.79	340+27.29	341+89.30	LT																																																																			
LL-6	P.79	340+44.81	342+03.64	LT																																																																			
BR-1	P.79	340+50.00	345+61.00	-																				2		131																																													
R-3	P.79	340+50.00	345+61.00	-																																																																			
ELY-3	P.79	340+61.81	342+17.74	LT																																																																			
ELY-4	P.79	340+95.75	342+44.45	RT																																																																			
LL-7	P.79	341+12.08	342+57.75	RT																																																																			
LL-8	P.79	341+27.75	342+71.04	RT																																																																			
ELW-4	P.79	341+43.30	342+85.06	RT																																																																			
	P.79	341+62.71	343+41.98	LT	6803								69	21	21																																																								
ELW-5	P.79	341+73.23	343+04.24	LT																																																																			
LL-9	P.79	341+89.30	343+15.05	LT																																																																			
LL-10	P.79	342+03.64	343+24.71	LT																																																																			
ELY-5	P.79	342+17.74	343+34.27	LT																																																																			
R-4	P.79	342+31.41	343+43.41	-																																																																			
	P.79	342+33.07	343+87.73	RT	5777																																																																		
D-1	P.79	342+41.51		RT								1																																																											
ELY-6	P.79	342+44.45	343+52.86	RT																																																																			
LL-11	P.79	342+57.75	343+62.23	RT																																																																			
LL-12	P.79	342+71.04	343+71.52	RT																																																																			
ELW-6	P.79	342+85.06	343+80.75	RT																																																																			
ELW-7	P.79	343+04.24	344+86.38	LT																																																																			
LL-13	P.79	343+15.05	344+95.82	LT																																																																			
LL-14	P.79	343+24.71	345+04.32	LT																																																																			
TOTALS CARRIED TO GENERAL SUMMARY							503	135	2	2	1	47	995	308	308	503	1	1	1	1	1	5	90	90	2	131	154	0.21	0.11	0.07	823	1.21	0.37	0.55	2.13	0.39	823	11030																																	

SUBSUMMARY SHEET
(SHEET 1 OF 3)

DESIGN AGENCY

Michael Baker INTERNATIONAL

DESIGNER
JTS

REVIEWER
KMD 10/31/23

PROJECT ID
111641

SHEET TOTAL
P.72 P.179

FRA-670-0.03

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 6/24/2024 TIME: 3:03:34 PM USER: kclckens
 p:\... \mb-us-pw-bentley.com\comb-us-pw-03\Documents\Columbus_OH\01_Projects\000T\Distri\164\400-Engineer\Roadway\Sheets\164_05002.dgn

REF. NO.	SHEET NO.	STATION TO STATION		SIDE	CADD GENERATED AREA	202	202	202	202	202	202	203	407	424	442	601	602	606	606	606	611	611	611	622	622	807	807	807	807	807	807	850	850	897		
		FROM	TO			SF	FT	FT	EA	EA	EA	EA	CY	GAL	CY	CY	CY	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
ELY-7	P.79	343+34.27	345+12.69	LT																																
ELY-8	P.79	343+52.86	345+28.76	RT																																
LL-15	P.79	343+62.23	345+36.85	RT																																
LL-16	P.79	343+71.52	345+44.85	RT																																
ELW-8	P.79	343+80.75	345+52.14	RT																																
	P.79	344+79.96	348+14.83	LT	15323.8								154	48	48																			1703		
ELW-9	P.79	344+86.38	347+52.23	LT																																
LL-17	P.79	344+95.82	347+70.17	LT																																
D-2	P.79	344+85.77	344+85.77	LT												1.33	0.25																			
LL-18	P.80	345+04.32	347+86.27	LT																																
ELY-9	P.80	345+12.69	348+02.00	LT																																
R-5	P.80	345+20.61	345+61.00	LT			40																													
	P.80	345+21.68	348+88.59	RT	17683.3								177	55	55																				1965	
ELY-10	P.80	345+28.65	348+31.84	RT																																
D-3	P.80	345+30.39	344+85.77	RT						1																										
D-4	P.80	345+68.24	345+30.39	RT																																
LL-19	P.80	345+36.85	348+46.93	RT																																
LL-20	P.80	345+44.85	348+61.79	RT																																
ELW-10	P.80	345+52.14	348+76.00	RT																																
ELW-11	P.80	347+52.23	356+26.32	LT																																
LL-21	P.80	347+70.17	356+42.08	LT																																
BR-2	P.80	347+75.00	357+15.00	RT																					2	22.9										
R-6	P.80	347+75.00	348+17.53	-			43																													
LL-22	P.80	347+86.27	356+57.92	LT																																
ELY-11	P.80	348+02.21	356+74.62	LT																																
D-5	P.80	348+16.67		RT						1																										
ELY-12	P.80	348+31.84	357+07.00	RT																																
LL-23	P.80	348+46.93	357+24.30	RT																																
LL-24	P.80	348+61.79	357+41.45	RT																																
ELW-12	P.80	348+76.20	357+58.55	RT																																
R-7	P.82	356+07.08	361+77.43	LT		576		1	1	1																										
GR-3	P.82	356+13.79	361+77.43	LT							51							547.5	1	1																
	P.82	356+15.80	378+27.54	LT	146856								1469	454	454																				16317	
ELW-13	P.82	356+26.32	378+27.54	LT																																
LL-25	P.82	356+42.08	399+15.00	LT																																
LL-26	P.82	356+57.92	378+27.54	LT																																
ELY-13	P.82	356+74.62	378+27.54	LT																																
R-8	P.82	356+88.50	357+15.00	-			20																													
	P.82	356+92.95	378+27.54	RT	151239								1513	467	467																				16804	
ELY-14	P.82	357+07.00	378+27.54	RT																																
LL-27	P.82	357+24.30	378+27.54	RT																																
LL-28	P.82	357+41.45	378+27.54	RT																																
TOTALS CARRIED TO GENERAL SUMMARY						576	103	1	1	1	2	51	3313	1024	1024	1.33	0.25	547.5	1	1	2	151	67	2	22.9	0.76	0.38	0.42	2.28	0.55	0.94	3.77	1.56	36789		

SUBSUMMARY SHEET
(SHEET 2 OF 3)

DESIGN AGENCY	Michael Baker International
DESIGNER	JTS
REVIEWER	KMD 10/31/23
PROJECT ID	111641
SHEET TOTAL	P.73 P.179

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	DATED (REVISED)	1/20/2023
AS-2-15	DATED (REVISED)	7/21/2023
EXJ-2-81	DATED (REVISED)	7/15/2022
EXJ-4-87	DATED (REVISED)	7/21/2023
GSD-1-19	DATED (REVISED)	1/15/2021
PCB-91	DATED (REVISED)	7/17/2020
RB-1-55	DATED (REVISED)	7/19/2013
SBR-1-20	DATED (REVISED)	7/21/2023

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED (REVISED)	1/21/2022
844	DATED (REVISED)	4/20/2018
848	DATED (REVISED)	1/15/2021

AND TO THE FOLLOWING PROPOSAL NOTES:

PN519	DATED (REVISED)	7/21/2017
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DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

VEHICULAR LIVE LOAD: HL-93

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
 REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
 STRUCTURAL STEEL - ASTM A709 GRADE (5):
 YIELD STRENGTH = 4 KSI

DECK PROTECTION METHOD:

2" LATEX MODIFIED CONCRETE OVERLAY ON SUPERSTRUCTURE.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02, AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK SHALL CONSIST OF THE REMOVAL OF CONCRETE DECK INCLUDING PARAPETS, RAILINGS, JOINTS, AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT THE PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS, AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF THE PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF THE DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK, IF HAND CHIPPING OR PRESERVATION OF REINFORCING STEEL IS NOT SPECIFIED AT THE LOCATION. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: WHERE HAND CHIPPING IS NOT SPECIFIED, THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISTEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN
 IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO C&MS 709.00.

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO REMOVE THE EXISTING JOINT SEALER AND REPLACE IN KIND. THE PROPOSED SEALER SHALL BE INSTALLED IN ONE CONTINUOUS STRIP FOR THE ENTIRE LENGTH OF THE BRIDGE JOINT

ITEM 516 - EXPANSION JOINT, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE THE EXISTING STRIP SEAL, WELD AND GRIND PLATE EXTENSIONS, AND REPLACE THE STRIP SEAL. ALL MATERIALS AND LABOR REQUIRED TO COMPLETE THE WORK AS DESCRIBED IN THESE PLANS SHALL BE INCLUDED WITH ITEM 516 - EXPANSION JOINT, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURE:

REMOVE AND REPAIR CONCRETE AS SHOWN ON THE PLANS PER ITEM 519 AS SPECIFIED IN THE C&MS. AN ADDITIONAL ESTIMATED QUANTITY OF 20 SQ. FT. HAS BEEN PROVIDED AS A CONTINGENCY TO BE DIRECTED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR THE WORK DESCRIBED IN C&MS 519 UNDER ITEM 519 - PATCHING CONCRETE STRUCTURE (SQ. FT.).

PRIOR TO THE SURFACE CLEANING SPECIFIED IN CM&S 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED STEEL REINFORCEMENT. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 848 - LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (VARIABLE THICKNESS):

PRIOR TO PLACING PROPOSED OVERLAY, THE PROJECT ENGINEER MUST DOCUMENT THE APPROXIMATE VARIABLE DEPTH LOCATIONS ON THE DECK AND TAKE PICTURES OF THESE LOCATIONS AND OTHER SIGNIFICANT FINDINGS. ADDITIONALLY, DOCUMENT THE AS BUILT OVERLAY THICKNESS AND TOTAL AMOUNT OF VARIABLE DEPTH USED. PROVIDE THIS DOCUMENTATION TO THE ODOT BRIDGE ENGINEER TO BE KEPT ON FILE FOR FUTURE POSSIBLE OVERLAYS.

SUGGESTED SEQUENCE OF CONSTRUCTION:

SEE STAGED CONSTRUCTION DETAIL SHEETS FOR SUGGESTED SEQUENCE OF CONSTRUCTION.

CUT LINE CONSTRUCTION JOINT PREPERATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

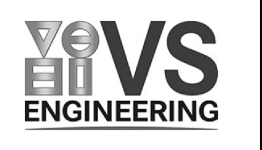
- ABUT. = ABUTMENT
- ADT = AVERAGE DAILY TRAFFIC
- ADTT = AVERAGE DAILY TRUCK TRAFFIC
- APP. = APPROACH
- BRGS. = BEARINGS
- B.F. = BACK FACE
- C/C = CENTER-TO-CENTER
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEAR
- C&MS = CONSTRUCTION & MATERIALS SPECIFICATIONS
- CONST. = CONSTRUCTION
- CY = CUBIC YARD
- DIA. = DIAMETER
- EA = EACH
- E.F. = EACH FACE
- EL. = ELEVATION
- EQ. = EQUAL
- EX. = EXISTING
- F.A. = FORWARD ABUTMENT
- FF = FRONT FACE
- F/F = FACE-TO-FACE
- F.F. = FAR FACE
- FWD. = FORWARD
- FWS = FUTURE WEARING SURFACE
- GFRP = GLASS FIBER REINFORCED POLYMER
- HW = HEADWATER
- KIPS = KILOPOUNDS
- KSF = KIPS PER SQUARE FOOT
- KSI = KIPS PER SQUARE INCH
- LT. = LEFT
- MAX. = MAXIMUM
- MIN. = MINIMUM
- N.F. = NEAR FACE
- OHWM = ORDINARY HIGH WATER MARK
- O/O = OUT-TO-OUT
- PCB = PORTABLE CONCRETE BARRIER
- PEJF = PREFORMED EXPANSION JOINT FILLER
- PROP. = PROPOSED
- PSF = POUNDS PER SQUARE FOOT
- R.A. = REAR ABUTMENT
- REQ'D = REQUIRED
- RT. = RIGHT
- SER. = SERIES
- SPA. = SPACES
- STD. = STANDARD
- STA. = STATION
- T/S = TOP OF SLOPE
- T/T = TOE-TO-TOE
- TYP. = TYPICAL
- U.N.O. = UNLESS NOTED OTHERWISE

ROCKERS AND BOLSTERS

THE FOLLOWING ARE THE MODEL NUMBERS FOR THE ROCKERS AND BOLSTERS FOR EACH SUPPORT

REAR ABUTMENT	B-150
FORWARD ABUTMENT	R-150

SFN	2504340
DESIGN AGENCY	
DESIGNER	BCB
CHECKER	DJK
REVIEWER	RDH 10/31/23
PROJECT ID	111641
SUBSET	TOTAL
2	18
SHEET	TOTAL
P.98	P.179



ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

- ABUT. = ABUTMENT
- ADT = AVERAGE DAILY TRAFFIC
- ADTT = AVERAGE DAILY TRUCK TRAFFIC
- APP. = APPROACH
- BRGS. = BEARINGS
- B.F. = BACK FACE
- BOT. = BOTTOM
- C/C = CENTER-TO-CENTER
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEAR
- C&MS = CONSTRUCTION & MATERIALS SPECIFICATIONS
- CONST. = CONSTRUCTION
- CY = CUBIC YARD
- DIA. = DIAMETER
- EA = EACH
- E.F. = EACH FACE
- EL. = ELEVATION
- EQ. = EQUAL
- E.S. = EACH SIDE
- EX. = EXISTING
- F.A. = FORWARD ABUTMENT
- FF = FRONT FACE
- F/F = FACE-TO-FACE
- F.F. = FAR FACE
- FWD. = FORWARD
- FWS = FUTURE WEARING SURFACE
- GFRP = GLASS FIBER REINFORCED POLYMER
- HW = HEADWATER
- KIPS = KILOPOUNDS
- KSF = KIPS PER SQUARE FOOT
- KSI = KIPS PER SQUARE INCH
- LT. = LEFT
- MAX. = MAXIMUM
- MIN. = MINIMUM
- N.F. = NEAR FACE
- OHWM = ORDINARY HIGH WATER MARK
- O/O = OUT-TO-OUT
- PCB = PORTABLE CONCRETE BARRIER
- PEJF = PREFORMED EXPANSION JOINT FILLER
- PROP. = PROPOSED
- PSF = POUNDS PER SQUARE FOOT
- R.A. = REAR ABUTMENT
- REQ'D = REQUIRED
- RT. = RIGHT
- SER. = SERIES
- SPA. = SPACES
- STD. = STANDARD
- STA. = STATION
- T/S = TOP OF SLOPE
- T/T = TOE-TO-TOE
- TYP. = TYPICAL
- U.N.O. = UNLESS NOTED OTHERWISE

ROCKERS AND BOLSTERS

THE FOLLOWING ARE THE MODEL NUMBERS FOR THE ROCKERS AND BOLSTERS FOR EACH SUPPORT

REAR ABUTMENT	B-150
FORWARD ABUTMENT	R-150

GENERAL NOTES
 BRIDGE NO. FRA-670-0021
 I-670 OVER MCKINLEY AVENUE

SFN	2504367
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
JMM	PJL
REVIEWER	
NCK	10/31/23
PROJECT ID	111641
SUBSET	TOTAL
3	20
SHEET	TOTAL
P.117	P.179

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	DATED (REVISED)	1/20/2023
AS-2-15	DATED (REVISED)	7/21/2023
BR-1-13	DATED (REVISED)	1/17/2014
EXJ-2-81	DATED (REVISED)	7/15/2022
EXJ-4-87	DATED (REVISED)	7/21/2023
GSD-1-19	DATED (REVISED)	1/15/2021
PCB-91	DATED (REVISED)	7/17/2020
RB-1-55	DATED (REVISED)	7/19/2013
SBR-1-20	DATED (REVISED)	7/21/2023
VPF-1-90	DATED (REVISED)	7/21/2023

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED (REVISED)	1/21/2022
844	DATED (REVISED)	4/20/2018
848	DATED (REVISED)	1/15/2021

AND TO THE FOLLOWING PROPOSAL NOTES:

PN519	DATED (REVISED)	7/21/2017
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DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
 NO FWS INCLUDED

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
 CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
 REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

DECK PROTECTION METHOD:

2" LATEX MODIFIED CONCRETE OVERLAY ON SUPERSTRUCTURE.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02, AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK SHALL CONSIST OF THE REMOVAL OF CONCRETE DECK INCLUDING PARAPETS, RAILINGS, JOINTS, AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT THE PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS, AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF THE PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF THE DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK, IF HAND CHIPPING OR PRESERVATION OF REINFORCING STEEL IS NOT SPECIFIED AT THE LOCATION. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: WHERE HAND CHIPPING IS NOT SPECIFIED, THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISTEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN:

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO C&MS 709.00.

ITEM 516 - ELASTOMERIC STRIP STEEL WITHOUT STEEL EXTRUSIONS, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO REMOVE THE EXISTING JOINT SEALER AND REPLACE IN KIND. THE PROPOSED SEALER SHALL BE INSTALLED IN ONE, CONTINUOUS STRIP FOR THE ENTIRE LENGTH OF THE BRIDGE JOINT.

ITEM 516 - REFURBISH BEARING DEVICE, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

A QUANTITY OF 5 EACH HAS BEEN PROVIDED AS A CONTINGENCY TO BE DIRECTED BY THE ENGINEER.

ITEM 516 - RESET BEARING DEVICES, AS PER PLAN:

FOLLOW THE PROVISIONS OF C&MS ITEM 516 EXCEPT THE CONTRACTOR SHALL FIELD VERIFY THE TILT OF ALL EXPANSION BEARINGS. IF A BEARING IS MEASURED TO BE BEYOND RECALL, DEFINED AS TITLED BEYOND 15 DEGREES, THE BEARING SHALL BE REFURBISHED. ADDITIONAL BEARING REFURBISHMENTS SHALL BE PAID FOR AT THE UNIT PRICE RATE FOR ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN.

ITEM 516 - STRUCTURAL STEEL EXPANSION JOINT, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE THE EXISTING JOINT, WELD AND GRIND PLATE EXTENSIONS, AND REPLACE THE STRIP SEAL. ALL MATERIALS AND LABOR REQUIRED TO COMPLETE THE WORK AS DESCRIBED IN THESE PLANS SHALL BE INCLUDED WITH ITEM 516 - STRUCTURAL STEEL EXPANSION JOINT, AS PER PLAN.

ITEM 519 - SPECIAL - COMPOSITE FIBER WRAP SYSTEM:

THERE MUST BE A MINIMUM OF 30 DAYS CURE TIME AFTER COMPLETION OF PATCHING WORK ON PIER COLUMNS PRIOR TO COMMENCING FIBER WRAPPING WORK. REFER TO PROPOSAL NOTE 519 FOR ITEM SPECIFICATIONS NOT GIVEN HEREIN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

REMOVE AND REPAIR CONCRETE AS SHOWN ON THE PLANS PER ITEM 519 AS SPECIFIED IN THE C&MS. AN ADDITIONAL ESTIMATED QUANTITY OF 960 SQ. FT. HAS BEEN PROVIDED AS A CONTINGENCY TO BE DIRECTED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR THE WORK DESCRIBED IN C&MS 519 UNDER ITEM 519 - PATCHING CONCRETE STRUCTURE (SQ. FT.).

PRIOR TO SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (CONT.):

THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AN ACCESS PLAN TO PERFORM THE REPAIRS, WHICH SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL AT LEAST 14 DAYS PRIOR TO WORK COMMENCING. AT NO TIME SHALL THE CONTRACTOR ENCROACH ON THE RAILROAD RIGHT-OF-WAY. THE COSTS ASSOCIATED WITH DEVELOPING THIS ACCESS PLAN, FURNISHING AND INSTALLING EQUIPMENT, MATERIALS, ALL LABOR, AND ANY OTHER NECESSARY WORK SHALL BE INCLUDED FOR PAYMENT WITH ITEM 519 - PATCHING CONCRETE STRUCTURES.

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

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

LOADS:
 56 KIP DEAD LOAD AT ABUTMENTS
 177 LIVE LOAD AT ABUTMENTS
 217 KIP DEAD LOAD AT PIERS
 322 KIP LIVE LOAD AT PIERS
 43 KIP DEAD LOAD AT HINGE
 NO JACKING UNDER LIVE LOAD AT HINGE ALLOWED

THE BRIDGE WILL BE CARRYING LIVE LOAD DURING JACKING OPERATIONS, EXCEPT AT THE HINGE. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, IF CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPERATION OF THE CONCRETE DECK FROM BEAMS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPERATE IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

SFN	2504375
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER	CHECKER
AJE	PJL
REVIEWER	
NCK	10/31/23
PROJECT ID	111641
SUBSET	TOTAL
4	45
SHEET	TOTAL
P.138	P.179

ITEM 848 - LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (VARIABLE THICKNESS MATERIAL ONLY):
 PRIOR TO PLACING PROPOSED OVERLAY, THE PROJECT ENGINEER MUST DOCUMENT THE APPROXIMATE VARIABLE DEPTH LOCATIONS ON THE DECK AND TAKE PICTURES OF THESE LOCATIONS AND OTHER SIGNIFICANT FINDINGS. ADDITIONALLY, DOCUMENT THE AS BUILT OVERLAY THICKNESS AND TOTAL AMOUNT OF VARIABLE DEPTH USED. PROVIDE THIS DOCUMENTATION TO THE ODOT BRIDGE ENGINEER TO BE KEPT ON FILE FOR FUTURE POSSIBLE OVERLAYS.

CONSTRUCTION CLEARANCE:
 MAINTAIN A CONSTRUCTION CLEARANCE OF * FEET HORIZONTALLY FROM THE CENTER OF THE TRACKS AND * FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL AND * FEET FROM THE CENTER OF THE TRACKS, AT ALL TIMES.

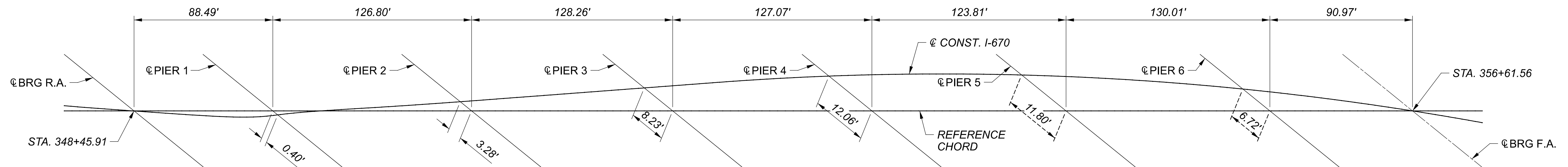
SUGGESTED SEQUENCE OF CONSTRUCTION:
 SEE STAGED CONSTRUCTION DETAIL SHEETS FOR SUGGESTED SEQUENCE OF CONSTRUCTION.

ABBREVIATIONS:
 THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

- ABUT. = ABUTMENT
- ADT = AVERAGE DAILY TRAFFIC
- ADTT = AVERAGE DAILY TRUCK TRAFFIC
- APP. = APPROACH
- BRGS. = BEARINGS
- B.F. = BACK FACE
- BOT. = BOTTOM
- C/C = CENTER-TO-CENTER
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEAR
- C&MS = CONSTRUCTION & MATERIALS SPECIFICATIONS
- CONST. = CONSTRUCTION
- CY = CUBIC YARD
- DIA. = DIAMETER
- EA = EACH
- E.F. = EACH FACE
- EL. = ELEVATION
- EQ. = EQUAL
- EX. = EXISTING
- F.A. = FORWARD ABUTMENT
- FF = FRONT FACE
- F/F = FACE-TO-FACE
- F.F. = FAR FACE
- FWD. = FORWARD
- FWS = FUTURE WEARING SURFACE
- GFRP = GLASS FIBER REINFORCED POLYMER
- HW = HEADWATER
- KIPS = KILOPOUNDS
- KSF = KIPS PER SQUARE FOOT
- KSI = KIPS PER SQUARE INCH
- LT. = LEFT
- MAX. = MAXIMUM
- MIN. = MINIMUM
- N.F. = NEAR FACE
- OHWM = ORDINARY HIGH WATER MARK
- O/O = OUT-TO-OUT
- PCB = PORTABLE CONCRETE BARRIER
- PEJF = PREFORMED EXPANSION JOINT FILLER
- PROP. = PROPOSED
- PSF = POUNDS PER SQUARE FOOT
- R.A. = REAR ABUTMENT
- REQ'D = REQUIRED
- RT. = RIGHT
- SER. = SERIES
- SPA. = SPACES
- STD. = STANDARD
- STA. = STATION
- T/S = TOP OF SLOPE
- T/T = TOE-TO-TOE
- TYP. = TYPICAL
- U.N.O. = UNLESS NOTED OTHERWISE

ROCKERS AND BOLSTERS
 THE FOLLOWING ARE THE MODEL NUMBERS FOR THE ROCKERS AND BOLSTERS FOR EACH SUPPORT

REAR ABUTMENT	R-100
PIER NO. 1	R-275 (G1 to G8) R-250 (G9 to G16)
PIER NO. 2	R-300 (G1 to G8) R-275 (G9 to G16)
PIER NO. 3	B-300 (G1 to G8) B-275 (G9 to G16)
PIER NO. 4	B-275
PIER NO. 5	R-300
PIER NO. 6	R-300 (G1 to G8) R-275 (G9 to G16)
FORWARD ABUTMENT	R-100

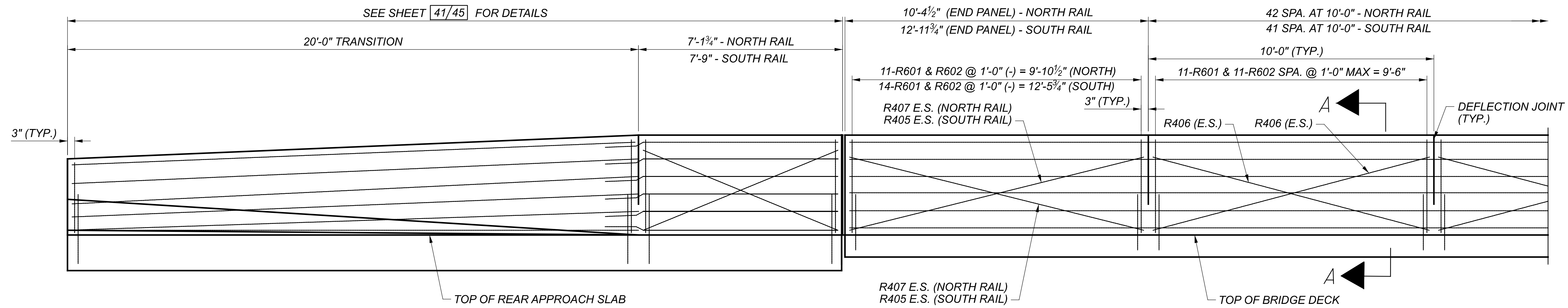


REFERENCE CHORD IS A LINE BETWEEN ABUTMENT BEARINGS. STA. 348+46.96 TO STA. 356+61.56

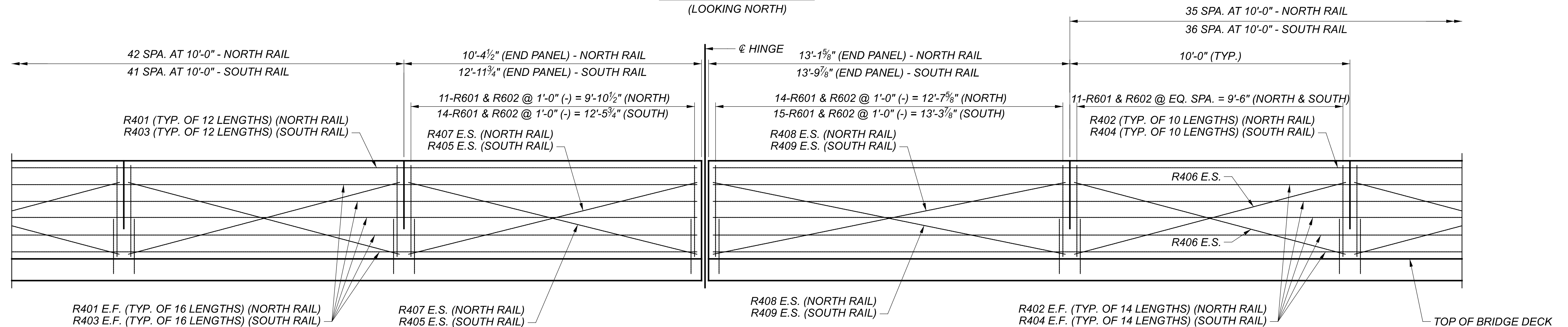
LAYOUT DIAGRAM

GENERAL NOTES
 BRIDGE NO. FRA-670-0031
 I-670 OVER CSXT, SCIOTO RIVER, EB RAMP TO I-670

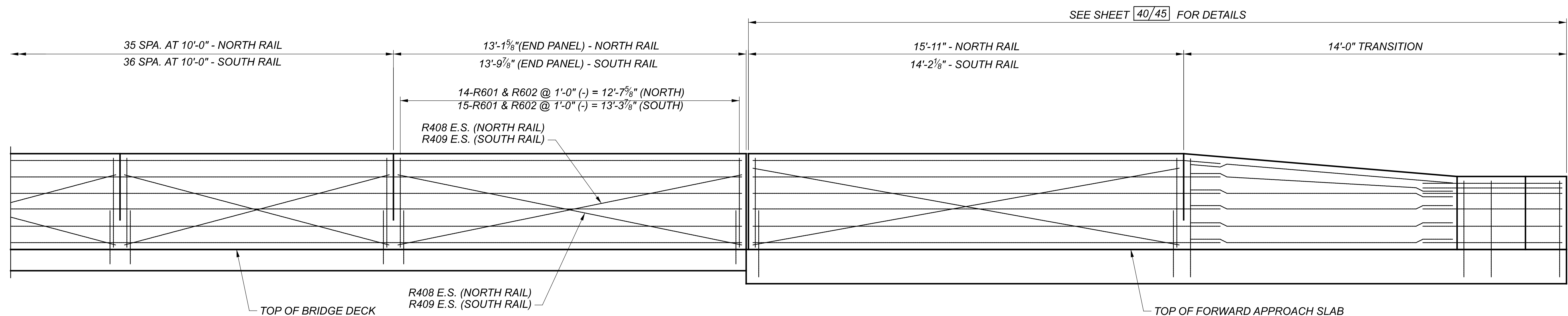
SFN	2504375
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	
PROJECT ID	111641
SUBSET	5
TOTAL	45
SHEET	P.139
TOTAL	P.179



PARTIAL ELEVATION
(LOOKING NORTH)



PARTIAL ELEVATION
(LOOKING NORTH)



PARTIAL ELEVATION
(LOOKING NORTH)

LAP SPLICE
#4 GFRP = 1'-1"

- NOTES:**
- SEE STANDARD DRAWING SBR-1-20 FOR ADDITIONAL DETAILS.
 - INSTALL VANDAL PROTECTION FENCE PER VPF-1-90 ON OUTSIDE PARAPETS FOR THE ENTIRE LENGTH OF SPAN 2. BASEPLATE SHALL BE (BP-6) POST SLEEVE SHALL BE PS-4. USE STRAIGHT 6'-0" HIGH FENCE.

SFN	2504375
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	NCK 10/31/23
PROJECT ID	111641
SUBSET	39
TOTAL	45
SHEET	P.173
TOTAL	P.179