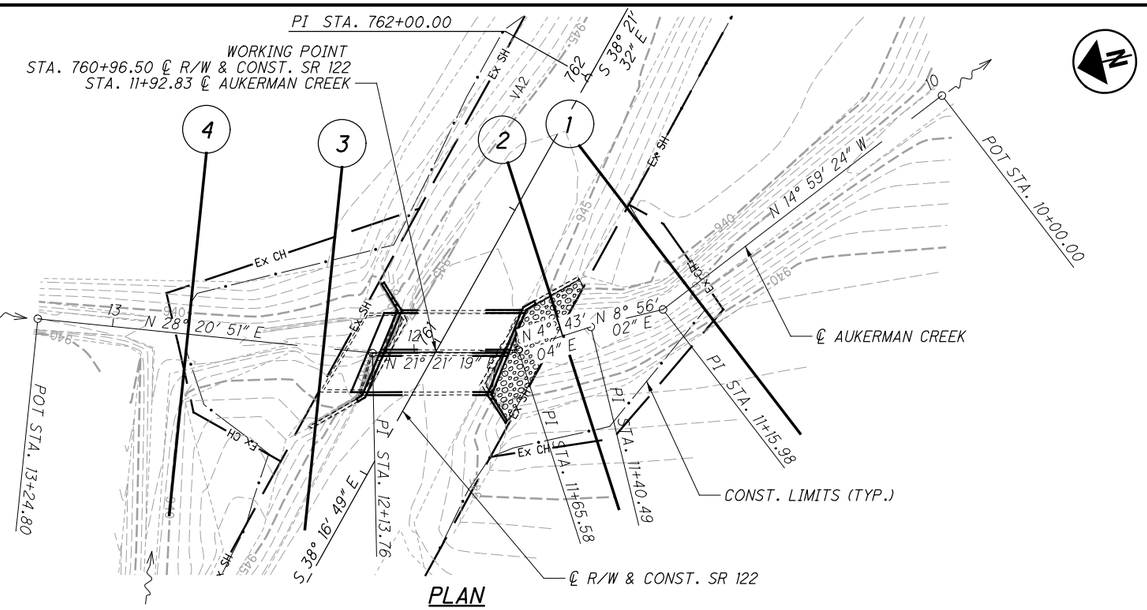
SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
6	7	11	15	20	25	35	49	53	70				01/STR/BR		EXT	TOTAL			SHEET NO.
																		ROADWAY	
													LS	201	11000	LS		CLEARING AND GRUBBING	
		910											910	202	23000	910	SY	PAVEMENT REMOVED	
		165											165	202	32500	165	FT	CURB AND GUTTER REMOVED	
		704											704	202	38000	704	FT	GUARDRAIL REMOVED	
			240	515			168		49				972	203	10000	972	CY	EXCAVATION	
			261	185									446	203	20000	446	CY	EMBANKMENT	
		212.5											212.5	606	13000	212.5	FT	GUARDRAIL, TYPE 5	
		300											300	606	15050	300	FT	GUARDRAIL, TYPE MGS	
		100											100	606	15100	100	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
		5											5	606	26150	5	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	
		1											1	606	26550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
		4											4	606	35141	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	6
		165											165	609	18000	165	FT	COMBINATION CURB AND GUTTER, TYPE 3	
																		EROSION CONTROL	
263													263	659	00300	263	CY	TOPSOIL	
2,360													2,360	659	10000	2,360	SY	SEEDING AND MULCHING	
0.32													0.32	659	20000	0.32	TON	COMMERCIAL FERTILIZER	
0.49													0.49	659	31000	0.49	ACRE	LIME	
13													13	659	35000	13	MGAL	WATER	
													10,000	832	30000	10,000	EACH	EROSION CONTROL	
																		DRAINAGE	
40													40	605	31100	40	FT	AGGREGATE DRAINS	
		282											282	605	11100	282	FT	6" SHALLOW PIPE UNDERDRAINS	
		55											55	611	00510	55	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
20													20	611	01400	20	FT	6" CONDUIT, TYPE E	
		1											1	611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
																		PAVEMENT	
		1,289											1,289	204	10000	1,289	SY	SUBGRADE COMPACTION	
		255											255	301	46000	255	CY	ASPHALT CONCRETE BASE, PG64-22	
		221											221	304	20000	221	CY	AGGREGATE BASE	
		194											194	407	10000	194	GAL	TACK COAT	
		90											90	441	50000	90	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
																		TRAFFIC CONTROL	
					5								5	621	00100	5	EACH	RPM	
					5								5	621	54000	5	EACH	RAISED PAVEMENT MARKER REMOVED	
					34.5								34.5	630	03100	34.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
					1								1	630	08600	1	EACH	SIGN POST REFLECTOR	
					1.34								1.34	630	80101	1.34	SF	SIGN, FLAT SHEET, AS PER PLAN	6
					3								3	630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
					3								3	630	86002	3	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
					0.2								0.2	646	10010	0.2	MILE	EDGE LINE, 6"	
					0.11								0.11	646	10200	0.11	MILE	CENTER LINE	
																		STRUCTURE OVER 20 FOOT SPAN (PRE-122-1441)	
													LS	202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	34
													LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	7
						415							415	503	21100	415	CY	UNCLASSIFIED EXCAVATION	
						13,497							13,497	509	10001	13,497	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	34
						445							445	510	10000	445	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
						7							7	511	46010	7	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
						14							14	511	46510	14	CY	CLASS QC1 CONCRETE, FOOTING	
						5							5	511	46610	5	CY	CLASS QC1 CONCRETE, HEADWALL	
						66							66	511	47011	66	CY	CLASS QC1 CONCRETE, CULVERT, AS PER PLAN	34
						2							2	511	53010	2	CY	CLASS QC1 CONCRETE, MISC.: APRON	
						140							140	512	10100	140	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
						250							250	512	33000	250	SY	TYPE 2 WATERPROOFING	
						140							140	512	33010	140	SY	TYPE 3 WATERPROOFING	
						146							146	516	13600	146	SF	1" PREFORMED EXPANSION JOINT FILLER	
						45							45	601	32100	45	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
						56.25							56.25	606	15350	56.25	FT	GUARDRAIL, TYPE MGS WITH SOCKETED POSTS	

CALCULATED MDS
CHECKED JAH

GENERAL SUMMARY

PRE-122-14.41/17.69

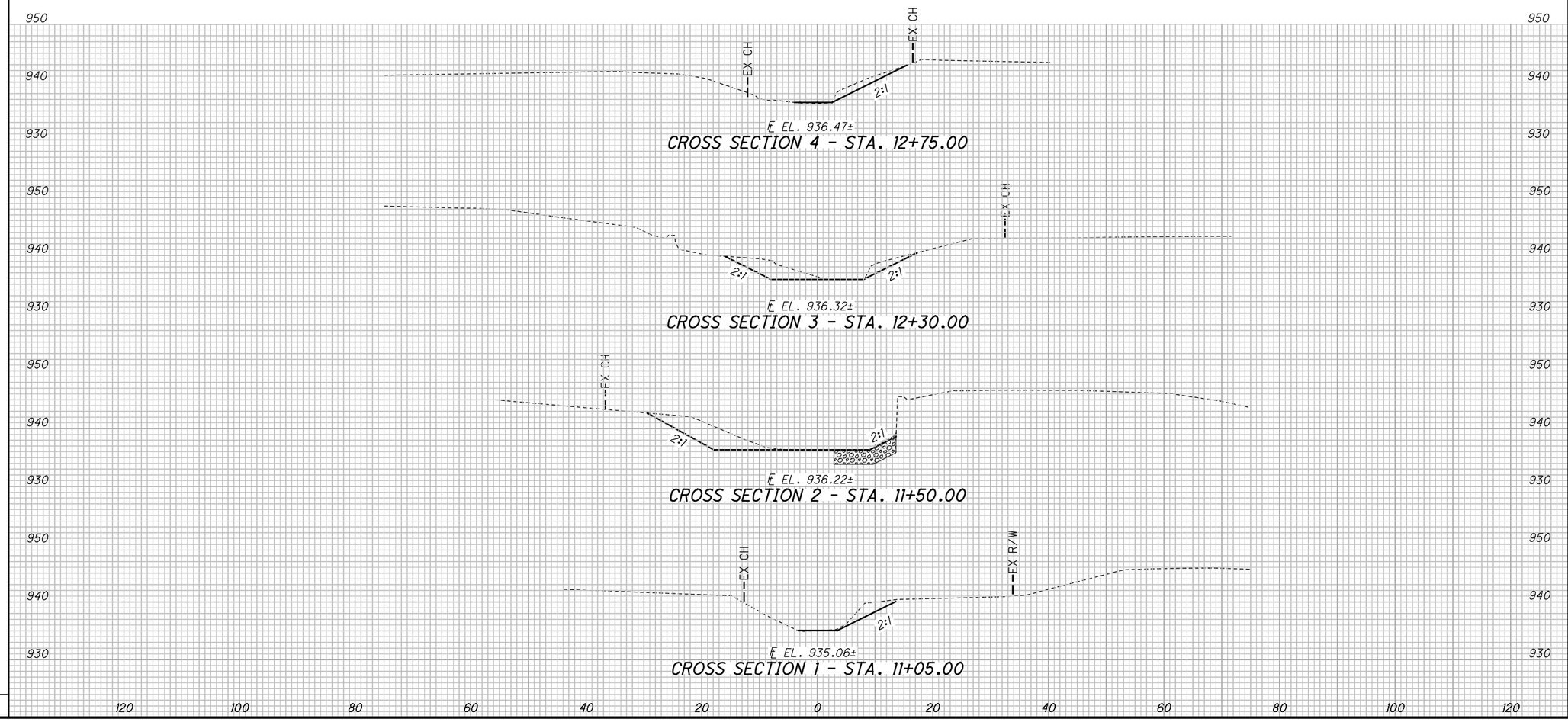
SEEDING	
END WIDTH	SQ. YDS.



PLAN

NOTES:

1. CHANNEL EXCAVATION/CLEARING LIMITS FROM APPROXIMATELY STA. 11+05.00 TO STA. 12+75.00 ALONG ℄ AUKERMAN CREEK. A QUANTITY OF 120 CY OF CUT WILL BE REQUIRED TO PERFORM THIS WORK AND IS INCLUDED IN PAY ITEM 203 - EXCAVATION.
2. THE SEDIMENT AND DEBRIS IN THE EXISITNG DRAINAGE STRUCTURE NEEDS CLEANED OUT. DISPOSE OF ALL MATERIAL PER 105.16 AND 105.17. CLEAN OUT TO THE APPROVAL OF THE ENGINEER. A QUANTITY OF 43 CY HAS BEEN ESTIMATED FOR THE WESTERN CELL. A QUANTITY OF 5 CY HAS BEEN ESTIMATED FOR THE EASTERN CELL. A TOTAL QUANTITY OF 48 CY HAS BE INCLUDED IN PAY ITEM 203 - EXCAVATION FOR THE REMOVAL AND DISPOSAL OF SEDIMENT AND DEBRIS FROM WITHIN THE DRAINAGE STRUCTURE.
3. DO NOT DISTURB EXISTING ROCK CHANNEL PROTECTION LOCATED ALONG AUKERMAN CREEK SIDE SLOPES WITHIN THE EXISTING CHANNEL EASEMENT. FOR LOCATION OF NEW ROCK CHANNEL PROTECTION AT INLET OF THE CULVERT SEE SHEET 1 OF 16.
4. THE ORDINARY HIGH WATER MARK IS AT ELEVATION 938.5.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMK
CHECKED JPC

CHANNEL CROSS SECTIONS
AUKERMAN CREEK STA. 11+05 TO STA. 12+75

PRE-122-14.41/17.69

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	DATED (REVISED)	07/17/2015
AS-2-15	DATED (REVISED)	01/18/2019
DBR-3-11	DATED (REVISED)	07/15/2011
EXJ-4-87	DATED (REVISED)	01/19/2018

AND THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

844	DATED (REVISED)	04/20/2018

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, 2004, INCLUDING REVISIONS THROUGH JULY 2018.

DESIGN LOADING:
HS20-44 (CASE II) AND THE ALTERNATE MILITARY LOADING.
FUTURE WEARING SURFACE (FWS) OF 0 PSF

DESIGN DATA:
CONCRETE QC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE QC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM 60,000 PSI YIELD STRENGTH.
PROPOSED STRUCTURAL STEEL - ASTM A709 GRADE 50 YIELD STRENGTH 50,000 PSI

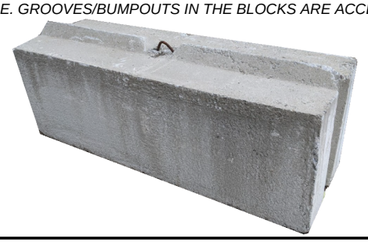
DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
SEAL CONCRETE SURFACES USING SOLUBLE REACTIVE SILICATE (SRS)

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:
THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

SEE THE REMOVAL PLANS ON 5 AND 6 OF 19 FOR ADDITIONAL DETAILS.

J-WEIR CONCRETE BLOCKS

CONCRETE BARRIER BLOCK (OR CONCRETE BARRICADE, DEPENDING ON THE CONCRETE COMPANY) SHOULD BE USED FOR THE J-WEIR BLOCKS. THE BLOCKS ARE 2'X2'. THE PLANS DEPICT A 3' LENGTH, BUT LONGER LENGTHS CAN BE UTILIZED IF THE 3' LENGTH IS NOT AVAILABLE. GROOVES/BUMPOUTS IN THE BLOCKS ARE ACCEPTABLE.



PROTECTION OF STEEL SUPPORT SYSTEMS:
BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF 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. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB 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 DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS:
THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM, STEEL GIRDER, ETC), 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 DIRECTOR. OBTAIN THE DIRECTORS APPROVAL BEFORE PERFORMING REPAIR.

DECK REMOVALS - COMPOSITE DECK DESIGNS - STEEL SUPERSTRUCTURES:
DUE TO THE PRESENCE OF WELDED STUDS TO THE EXISTING STRUCTURAL STEEL, SUBMIT A DETAILED PROCEDURE OF THE DECK REMOVAL TO THE ENGINEER AT LEAST 7 DAYS BEFORE CONSTRUCTION BEGINS. DEPARTMENT ACCEPTANCE IS NOT REQUIRED. THE PROCEDURE SHALL INCLUDE ALL DETAILS, EQUIPMENT AND METHODS TO BE USED FOR REMOVAL OF THE CONCRETE OVER THE FLANGES AND AROUND THE STUDS. REPLACE OR REPAIR MAIN STEEL AND STUDS 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 DIRECTOR. OBTAIN THE DIRECTOR'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.

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 CMS 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 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN:
REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:
THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, 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 SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 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 CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE ABUTMENT JACKING ASSEMBLIES. ALL SUBSTRUCTURES SHALL BE JACKED SIMULTANEOUSLY. PRIOR TO JACKING, THE EXISTING BEAM ENDS AT THE ABUTMENTS SHALL BE CLEANED FREE FROM RUST AND PREPARED FOR PAINT TOUCH UP PER CMS 514 AND INCLUDED WITH ITEM 514 - FIELD PAINTING, MISC.: BEAMS ENDS AT ABUTMENTS FOR PAYMENT.

SEE THE PIER JACKING PLANS ON 9 AND 10 OF 19 FOR ADDITIONAL DETAILS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM 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.

ITEM 514 - FIELD PAINTING, MISC.: BEAMS ENDS AND REPAIR:
THIS WORK CONSISTS OF CLEANING AND PAINTING THE LAST 4 FT. OF THE EXISTING EXTERIOR STEEL BEAMS AT EACH ABUTMENT. IN ADDITION, IF ANY END CROSSFRAME MEMBERS OR STEEL FROM THE MOMENT PLATE REPAIRS NEEDS CLEANED AND PAINTED, AFTER JACKING HAS OCCURRED THIS WORK SHALL BE INCLUDED. THE COLOR SHALL REMAIN THE SAME AS THE EXISTING BEAMS AND THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE COLOR AND REPAIR LOCATIONS FROM THE ENGINEER.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE PAINT SYSTEM SHALL BE OZEU. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 514 - FIELD PAINTING, MISC.: BEAMS ENDS AND REPAIR.

ITEM 844 - PATCHING CONCRETE WITH GALVANIC ANODE PROTECITON, AS PER PLAN:
PRIOR TO THE SURFACE CLEANING SPECIFIED 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 BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 519 - SPECIAL - COMPOSITE FIBER WRAP SYSTEM:
I. DESCRIPTION:

THIS WORK CONSISTS OF PREPARING EXISTING SOUND CONCRETE SURFACES AND DESIGNING THE SYSTEM TO MEET THE REQUIREMENTS IN THE PLANS, FURNISHING AND INSTALLING FIBER REINFORCED POLYMER (FRP) COMPOSITE WRAP SYSTEMS TO REPAIR OR RETROFIT EXISTING CONCRETE MEMBERS AT THE LOCATIONS SHOWN IN THE PLANS. FIBER SYSTEMS MUST BE CARBON (CFRP).

II. MATERIALS:

FURNISH FRP COMPOSITE WRAP SYSTEMS THAT HAVE BEEN EVALUATED BY THE INTERNATIONAL CODE COUNCIL EVALUATION SERVICE (ICC-ES) IN ACCORDANCE WITH AC125 - ACCEPTANCE CRITERIA FOR CONCRETE AND REINFORCED AND UNREINFORCED MASONRY STRENGTHENING USING FIBER- REINFORCED, COMPOSITE SYSTEMS. SELECT FROM PRODUCTS LISTED UNDER EVALUATION REPORTS CSI - DIVISION 03 01 00 MAINTENANCE OF CONCRETE, PROVIDED ON THE ICC-ES WEBSITE: WWW.ICC-ES.ORG.

ALL SYSTEM COMPONENTS DELIVERED TO THE PROJECT SHALL BE LABELED IN ACCORDANCE WITH THE FRP SYSTEM'S ICC-ES EVALUATION REPORT SECTION 7.0.

III. SUBMITTALS:

PROVIDE THE FOLLOWING INFORMATION TO THE ENGINEER.

A. ENGINEERED DRAWINGS IN ACCORDANCE WITH CMS 501.05.B. AS A MINIMUM, ACCEPTABLE DRAWINGS SHALL INCLUDE:

1. IDENTIFICATION OF THE FRP SYSTEM USING THE PRODUCT NAMES OF EACH OF THE CONSTITUENT MATERIALS.

2. DESIGN DATA FOR THE FRP SYSTEM INCLUDING: MINIMUM ULTIMATE TENSILE STRENGTH; MINIMUM TENSILE MODULUS AND CORRESPONDING ELONGATION; AND LAYER THICKNESS.

3. GOVERNING SPECIFICATION FOR FRP SYSTEM DESIGN.

4. PLAN, ELEVATION AND CROSS-SECTIONAL VIEWS OF THE CONCRETE MEMBERS AS NECESSARY TO COMPLETELY DESCRIBE THE WORK.

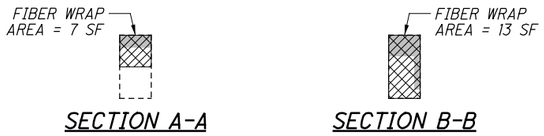
DESIGN AGENCY
fishbeck
FISHBECK
1353 REED HARTMAN HWY
SUITE 300
CINCINNATI, OH 45241
(513) 469-2370

DESIGNED	DRAWN	REVIEWED	DATE
TTK	JMK	JBD	9/2/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPC		6802168	

GENERAL NOTES 1
BRIDGE NO. PRE-122-1769
SR 122 OVER AUKERMAN CREEK

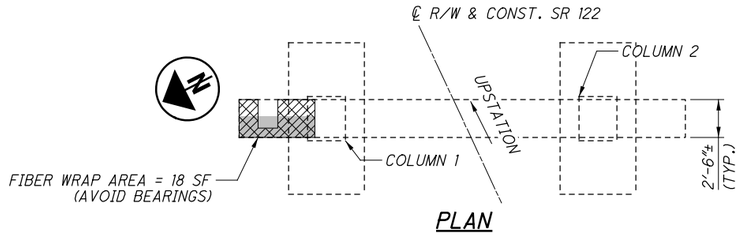
PRE-
122-14.41/17.69
PID No. 102767

SUMMARY OF ITEM 519 FIBER WRAP QUANTITY				
LOCATION	UNIT	MEASURED	ESTIMATING FACTOR	TOTAL
EAST FACE	SF	140	1.5	210
WEST FACE	SF	170	1.5	255
ENDS	SF	20	1.5	30
TOP	SF	18	1.5	27
COLUMN 1	SF	93	1.5	140
TOTAL	SF	441	1.5	662

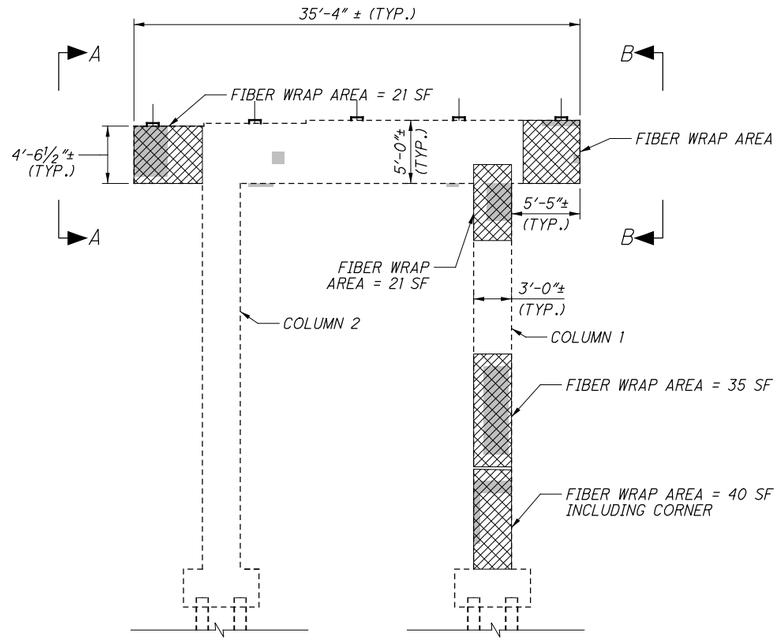


SECTION A-A

SECTION B-B

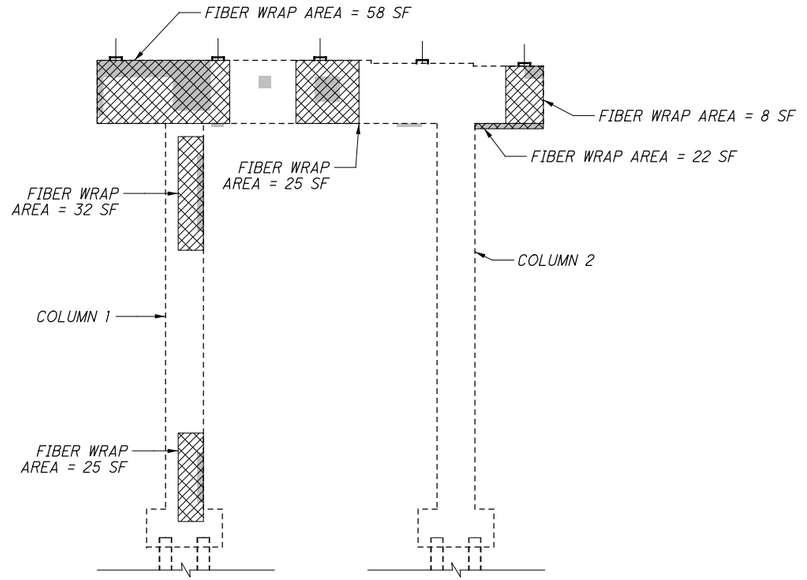


PLAN



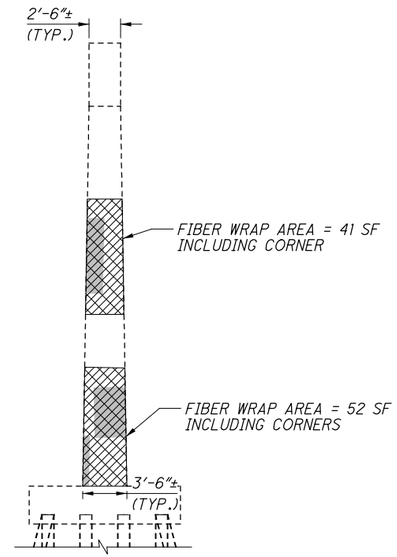
LOOKING DOWNSTATION

(EAST FACE)



LOOKING UPSTATION

(WEST FACE)



COLUMN 1

NOTES:

1. ONCE THE CONCRETE REPAIRS HAVE ACHIEVED THE SPECIFIED CURE AND STRENGTH, THE CROSSFRAME REMOVAL AND JACKING OPERATION CAN OCCUR TO REPAIR THE CONCRETE DIRECTLY BENEATH THE BEARINGS. DO NOT LOWER THE SUPERSTRUCTURE ONTO THE BEARING AREAS UNTIL THE BEARINGS HAVE BEEN REPLACED AND THE SPECIFIED CURE TIME AND STRENGTH HAVE BEEN ACHIEVED. SEE SHEET 7 OF 19 FOR CURE TIME AND STRENGTH.
2. AFTER THE CONCRETE HAS ACHIEVED 30 DAYS CURE TIME, THE FIBER WRAP SYSTEM MAY BE INSTALLED.
3. MEASURED AREAS TO BE REPAIRED ARE APPROXIMATE WITH AREAS ABOVE EXISTING GROUND SHOWN.
4. AFTER ALL THE FIBER WRAPPING IS COMPLETE AND THE JACKING ASSEMBLIES HAVE BEEN REMOVED, SEAL THE ENTIRE PIER 1 CAP AND BOTH PIER 1 COLUMNS DOWN TO ELEVATION 812.50, WHICH IS 2 FEET ABOVE THE OHWM, WITH EPOXY-URETHANE, FEDERAL COLOR 17778.

LEGEND:

= APPROXIMATE AREA OF COMPLETED CONCRETE REPAIR

= APPRXOIMATE AREA TO BE FIBER WRAPPED PER ITEM 519 - SPECIAL - COMPOSITE FIBER WRAP SYSTEM

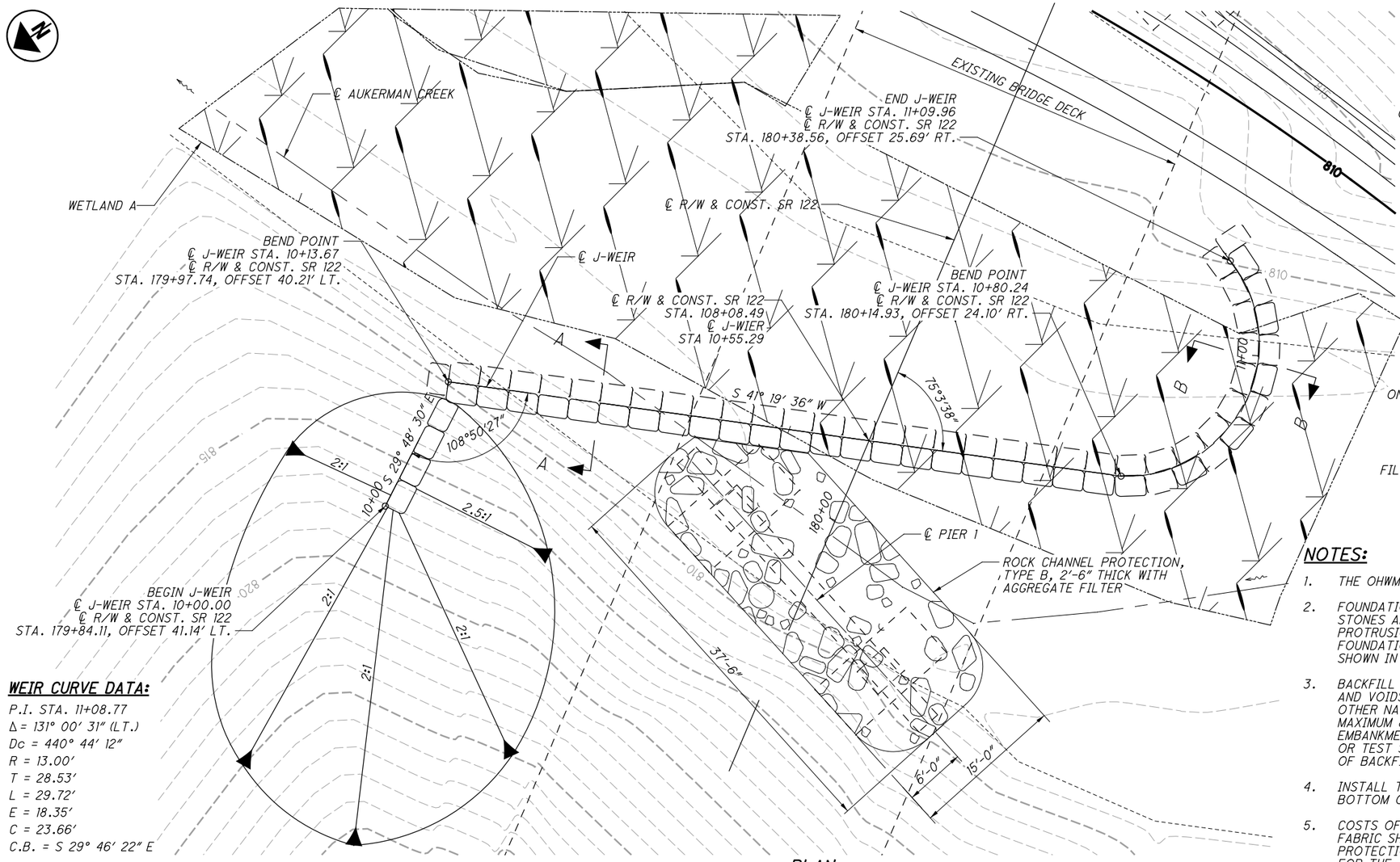
DESIGN AGENCY
fishbeck
FISHBECK
1353 REED HARTMAN HWY
SUITE 101
CINCINNATI, OH 45241
(513) 469-2370

DESIGNED	DRAWN	REVIEWED	DATE
AJE	AJE	JBD	9/2/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPC		6802168	

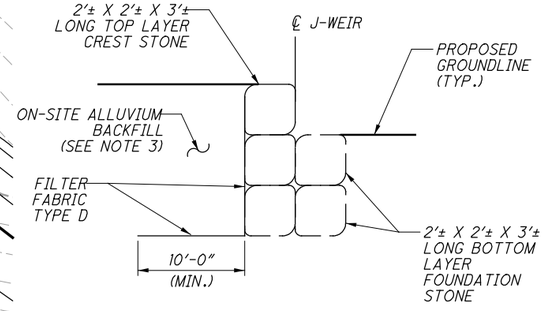
PIER 1 FIBER WRAP DETAILS

BRIDGE NO. PRE-122-1769
SR 122 OVER AUKERMAN CREEK

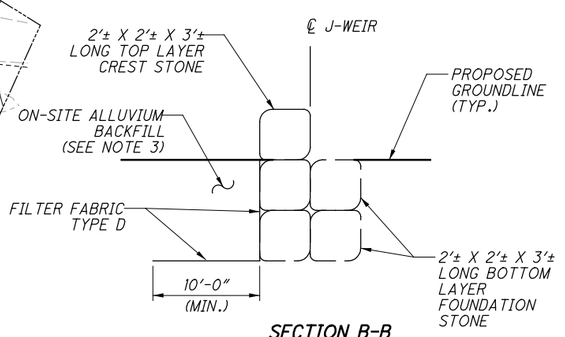
PRE-
122-14.41/17.69
PID No. 102767



PLAN



SECTION A-A



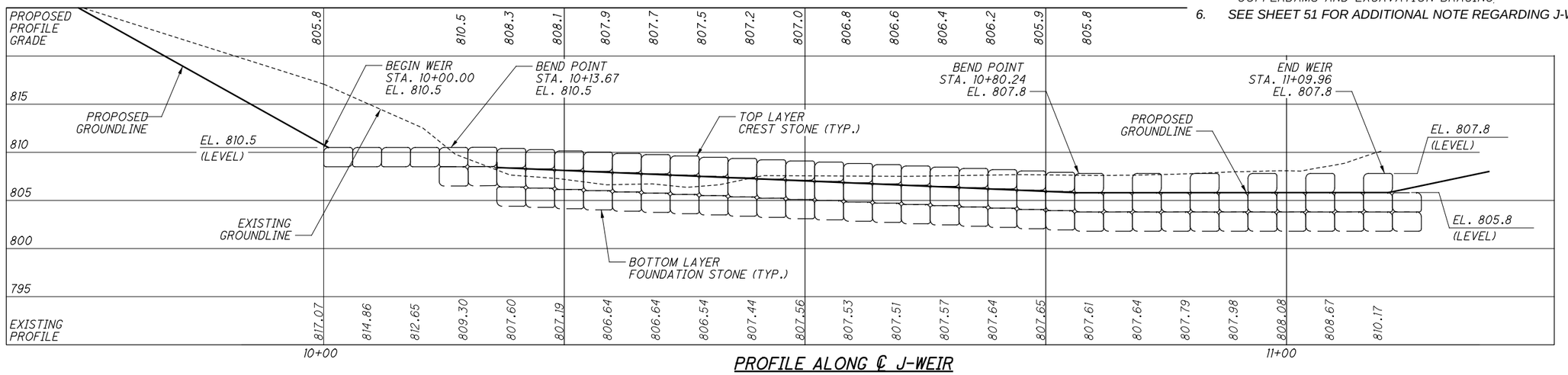
SECTION B-B

NOTES:

1. THE OHWM ELEVATION IS 810.50±.
2. FOUNDATION STONES PLACED TO PROVIDE FOUNDATION FOR THE CREST STONES ALONG THE J-WEIR, FOR A DEPTH OF AT LEAST TWO TIMES THE PROTRUSION HEIGHT. THE CREST STONES SHALL BE SUPPORTED BY THE FOUNDATION STONES WITH THE CREST STONES SET TO THE ELEVATIONS SHOWN IN THE PROFILE VIEW.
3. BACKFILL THE EXCAVATION FOR THE FOUNDATION STONES AND FILL GAPS AND VOIDS BETWEEN THE FOUNDATION ROCKS WITH ON-SITE ALLUVIUM OR OTHER NATURAL SOIL FROM PROJECT EXCAVATION. PLACE THE BACKFILL IN MAXIMUM 8 INCH LOOSE LIFTS AND COMPACT ACCORDING TO ITEM 203 EMBANKMENT, AT 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY OR TEST SECTION MAXIMUM. PERFORM COMPACTION TESTING ON EACH LIFT OF BACKFILL PLACED.
4. INSTALL THE FILTER FABRIC FROM THE PROPOSED GROUNDLINE TO THE BOTTOM OF THE FOUNDATION STONE THEN 10' MINIMUM UPSTREAM.
5. COSTS OF EXCAVATION AND BACKFILL FOR J-WEIR, STONES, AND FILTER FABRIC SHALL BE INCLUDED IN WITH PAY ITEM 601 - ROCK CHANNEL PROTECTION, MISC.: J-WEIR. TEMPORARY BRACING OR DEWATERING FOR THE J-WEIR INSTALLATION SHALL BE INCLUDED IN PAY ITEM 503 - COFFERDAMS AND EXCAVATION BRACING.
6. SEE SHEET 51 FOR ADDITIONAL NOTE REGARDING J-WEIR BLOCKS.

WEIR CURVE DATA:

P.I. STA. 11+08.77
Δ = 131° 00' 31" (LT.)
Dc = 440° 44' 12"
R = 13.00'
T = 28.53'
L = 29.72'
E = 18.35'
C = 23.66'
C.B. = S 29° 46' 22" E



PROFILE ALONG ℄ J-WEIR

DESIGN AGENCY
fishbeck
FISHBECK
1353 REED HARTMAN HWY
SUITE 200
CINCINNATI, OH 45241
(513) 469-2370

DESIGNED	DRAWN	REVIEWED	DATE
PWS	JMK	JBD	9/2/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPC		6802168	

J-WEIR PLAN AND PROFILE
BRIDGE NO. PRE-122-1769
SR 122 OVER AUKERMAN CREEK

PRE-
122-14.41/17.69
PID No. 102767

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69
70

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