

SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
6	7	8	9	11	12	23	24	51	52	59	XS		01/NHS	EXT	TOTAL				SHEET NO.
								0.39					0.39	644	00100	0.39	MILE	EDGE LINE, 4"	
								1.34					1.34	644	00104	1.34	MILE	EDGE LINE, 6"	
									0.73				0.73	644	00204	0.73	MILE	LANE LINE, 6"	
								0.32					0.32	644	00300	0.32	MILE	CENTER LINE	
								280					280	644	00400	280	FT	CHANNELIZING LINE, 8"	
								369					369	644	00404	369	FT	CHANNELIZING LINE, 12"	
								65					65	644	00500	65	FT	STOP LINE	
									88				88	644	00620	88	FT	CROSSWALK LINE, 12"	
								84					84	644	00700	84	FT	TRANSVERSE/DIAGONAL LINE	
									2				2	644	01300	2	EACH	LANE ARROW	
								2					2	644	01360	2	EACH	WRONG WAY ARROW	
								0.12					0.12	646	10000	0.12	MILE	EDGE LINE, 4"	
								0.09					0.09	646	10010	0.09	MILE	EDGE LINE, 6"	
								0.12					0.12	646	10200	0.12	MILE	CENTER LINE	
								580					580	646	10300	580	FT	CHANNELIZING LINE, 8"	
								17					17	646	10400	17	FT	STOP LINE	
									8				8	646	20300	8	EACH	LANE ARROW	
																		STRUCTURE OVER 20 FOOT SPAN (SFN 4302826)	
								LS		LS			LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	57
								365		365			365	202	22900	365	SY	APPROACH SLAB REMOVED	
								365		365			365	202	23500	365	SY	WEARING COURSE REMOVED	
								LS		LS			LS	503	11101	LS		CONFER DAMS AND EXCAVATION BRACING AS PER PLAN	
								201		201			201	503	21100	201	CY	UNCLASSIFIED EXCAVATION	
								166,098		166,098			166,098	509	10000	166,098	LB	EPOXY COATED STEEL REINFORCEMENT	
								939		939			939	509	26000	939	LB	GALVANIZED STEEL REINFORCEMENT	
								7,013		7,013			7,013	509	30020	7,013	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
								912		912			912	510	10001	912	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	
								429		429			429	511	34446	429	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
								72		72			72	511	34450	72	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
								36		36			36	511	43212	36	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER	
								118		118			118	511	45712	118	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT	
								1,353		1,353			1,353	512	10100	1,353	SY	SEALING OF CONCRETE SURFACES EPOXY-URETHANE	
								21		21			21	512	10600	21	FT	CONCRETE REPAIR BY EPOXY INJECTION	
								87		87			87	512	33000	87	SY	TYPE 2 WATERPROOFING	
								14,100		14,100			14,100	513	10201	14,100	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	
								7,914		7,914			7,914	513	20000	7,914	EACH	WELDED STUD SHEAR CONNECTORS	
								18,750		18,750			18,750	514	00050	18,750	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
								18,750		18,750			18,750	514	00056	18,750	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
								19,300		19,300			19,300	514	00060	19,300	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
								19,300		19,300			19,300	514	00066	19,300	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
								31		31			31	514	00504	31	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	
								11		11			11	514	10000	11	EACH	FINAL INSPECTION REPAIR	
								186		186			186	516	10010	186	FT	ARMORLESS PREFORMED JOINT SEAL	
								187		187			187	516	11210	187	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL	
								112		112			112	516	13900	112	SF	2" PREFORMED EXPANSION JOINT FILLER	
								24		24			24	516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14" x 14" x 2 5/8")	
								16		16			16	516	44201	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 12" x 3 5/8")	
								LS		LS			LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	
								225		225			225	518	21200	225	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
								240		240			240	518	40000	240	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
								80		80			80	518	40010	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
								3,100		3,100			3,100	SPECIAL	51900100	3,100	SF	COMPOSITE FIBER WRAP SYSTEM	
								106		106			106	519	11101	106	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	
								361		361			361	526	25010	361	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")	
								180		180			180	526	90030	180	FT	TYPE C INSTALLATION	
								944		944			944	SPECIAL	53013000	944	SF	FORM LINER	
								450		450			450	607	39900	450	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	
																		MAINTENANCE OF TRAFFIC	
													100	614	11110	100	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	

1 REVISED 07/28/25

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

JLM

REVIEWER

DWS 06/09/23

PROJECT ID

111005


SHEET

22

TOTAL

84



SFN	
4302826	
DESIGN AGENCY	
	
DESIGNER	CHECKER
YRY	JML
REVIEWER	
DWS	06/09/23
PROJECT ID	
111005	
SUBSET	TOTAL
2	30
SHEET	TOTAL
56	84

MODEL: Sheet PAPER:SIZE: 34x22 (in.) DATE: 7/24/2025 TIME: 2:31:18 PM USER: arenblday Q:\ODOT_D\1210121497A.00 - LAK-283-1434 Deck PID111005\111005\400-Engineering\Structures\SFN_4302826\Sheets\111005_SFN_4302826_S\0001.dgn

GENERAL NOTES:

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS
REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

A-1-20	REVISED 1-21-2022
AS-1-15	REVISED 1-20-2023
AS-2-15	REVISED 1-20-2023
EXJ-4-87	REVISED 1-20-2023
GSD-1-19	REVISED 1-20-2023
PCB-91	REVISED 7-17-2020
RM-4.2	REVISED 4-17-2020
SBR-3-20	REVISED 1-20-2023
VPF-1-90	REVISED 1-20-2023

DESIGN SPECIFICATIONS

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

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 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

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.0 KIPS/SQ.FT.

DESIGN DATA (FOR NEW COMPONENTS)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
CONCRETE REINFORCEMENT:
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI
(ALL SUPERSTRUCTURE AND SUBSTRUCTURE EXCEPT AS NOTED)
GFRP REINFORCEMENT (BRIDGE RAILIING)
STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

MONOLITHIC WEARING SURFACE

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

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

DESCRIPTION: 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 DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF THE HAMMER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING CONCRETE REINFORCEMENT 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 CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

MAXIMUM REMOVAL LIMITS: SOUND THE CONCRETE TO DETERMINE THE LIMITS OF THE CONCRETE TO BE REMOVED AND COMPARE THESE LIMITS TO THE AREAS SHOWN IN THE PLANS. IF NEW AREAS ARE DISCOVERED OR IF THE DIMENSIONS OF THE PLAN AREAS INCREASE BY MORE THAN 25% IN ANY DIRECTION, DOCUMENT THE AREAS AND NOTIFY THE ENGINEER FOR EVALUATION TWO WEEKS PRIOR TO REMOVAL. THE ENGINEER WILL DETERMINE IF PATCHING IN DISCRETE SECTIONS/STAGES IS NEEDED OR IF THE INSTALLATION OF TEMPORARY FALSEWORK IS REQUIRED.

DECK REMOVAL: THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS-FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING BEGINS, 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 CONCRETE REINFORCEMENT IN THE DECK SLAB. 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 ENGINEER. OBTAIN THE ENGINEER'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 (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 ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

CUT LINE CONSTRUCTION JOINT PREPARATION: 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.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. THE DEPARTMENT WILL NOT PERMIT HYDRAULIC HOE-RAM TYPE HAMMERS. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

MEASUREMENT AND 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, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 503, COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.



ITEM 510, DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN

DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL CONCRETE REINFORCEMENT ACCORDING TO ITEM 510 USING EPOXY GROUT, CMS 705.20. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

SEALER SHALL MATCH FEDERAL STANDARD COLOR FC#595B-27722 (BUFF, SEMIGLOSS) FOR ALL CONCRETE SURFACES EXCEPT AREAS ON THE BRIDGE PARAPET WITH FORMLINER, WHICH SHALL BE SEALED WITH A SEALER MATCHING FC#595B-26306 (TAUPE, SEMIGLOSS).

ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "AS-BUILT" DRAWINGS ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002, TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM:
PROPOSED INTERMEDIATE CROSSFRAMES

INSPECTION OF EXISTING STRUCTURAL STEEL

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES AND BEAMS OR GIRDERS ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO C&MS 511.07, BUT IT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION WITH ITEM 511, SUPERSTRUCTURE CONCRETE. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION ADMINISTRATION, BRIDGE CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

ITEM 514, FIELD PAINTING STRUCTURAL STEEL, FINISH COAT

THE FINISH COAT PAINT SHALL MATCH FEDERAL STANDARD COLOR FC#595B-15450 (LIGHT BLUE, GLOSS).

THE CONTRACTOR SHALL NOT OVERSPRAY ONTO THE CONCRETE DECK OR CONCRETE SUBSTRUCTURE COMPONENTS (BACKWALLS, ABUTMENTS AND PIERS). PAINTING SHALL BE CONFINED TO THE STRUCTURAL STEEL COMPONENTS, UTILITY SUPPORTS AND THE DRAINAGE SCUPPERS INCLUDING DOWNSPOUTS.

UTILITY CONDUITS SHALL NOT BE PAINTED. STEEL UTILITY SUPPORTS AND DRAINAGE SCUPPERS SHALL BE PAINTED.

ITEM 503, UNCLASSIFIED EXCAVATION,
AS PER PLAN -- NOTE REMOVED, NO
LONGER "AS PER PLAN"

SFN	
4302826	
DESIGN AGENCY	
DESIGNER	CHECKER
NRP	AMT
REVIEWER	
DWS 06/09/23	
PROJECT ID	
111005	
SUBSET	TOTAL
3	30
SHEET	TOTAL
57	84


STRUCTURE ESTIMATED QUANTITIES										
01/NHS	ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN SHEET NUMBER
1	202	11203	1	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1	3 / 30
365	202	22900	365	SQ YD	APPROACH SLAB REMOVED				365	
365	202	23500	365	SQ YD	WEARING COURSE REMOVED (3" THICK)				365	
1	503	11101	1	LUMP	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				1	3 / 30
201	503	21100	201	CU YD	UNCLASSIFIED EXCAVATION	133	68			
166098	509	10000	166098	POUND	EPOXY COATED STEEL REINFORCEMENT	15593	6490	144015		
7013	509	30020	7013	FT	NO. 4 DEFORMED GFRP REINFORCEMENT				7013	
939	509	26000	939	LB	GALVANIZED STEEL REINFORCEMENT	939				
912	510	10001	912	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	600	312			3 / 30
429	511	34446	429	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			429		
72	511	34450	72	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			72		
36	511	43212	36	CU YD	CLASS QC1 CONCRETE WITH QC/QA, PIER		36			
118	511	45712	118	CU YD	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT	118				
1353	512	10100	1353	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	250	651	452		
21	512	10600	21	FT	CONCRETE REPAIR BY EPOXY INJECTION	21				
87	512	33000	87	SQ YD	TYPE 2 WATERPROOFING	87				
14100	513	10201	14100	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			14100		3 / 30
7914	513	20000	7914	EACH	WELDED STUD SHEAR CONNECTORS			7914		
18750	514	00050	18750	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			18750		
18750	514	00056	18750	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			18750		
19300	514	00060	19300	SQ FT	FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT			19300		
19300	514	00066	19300	SQ FT	FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT			19300		
31	514	00504	31	MNHR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			31		
11	514	10000	11	EACH	FINAL INSPECTION REPAIR			11		
186	516	10010	186	FT	ARMORLESS PREFORMED JOINT SEAL				186	
187	516	11210	187	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			187		
112	516	13900	112	SQ FT	2" PREFORMED EXPANSION JOINT FILLER				112	
24	516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14"x14"x2 5/8")			24		14 / 30
16	516	44201	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12"x12"x3 5/8")			16		14 / 30
1	516	47001	1	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				1	4 / 30
225	518	21200	225	CU YD	POROUS BACKFILL WITH GEOTEXTILE FABRIC	225				
240	518	40000	240	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	240				
80	518	40010	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	80				
3100	SPECIAL	51900100	3100	SQ FT	COMPOSITE FIBER WRAP SYSTEM		3100			
106	519	11101	106	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN		106			4 / 30
361	526	25010	361	SQ YD	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")				361	
180	526	90030	180	FT	TYPE C INSTALLATION				180	
944	SPECIAL	53013000	944	SQ FT	FORM LINER			944		4 / 30
450	607	39900	450	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			450		

CALCULATED BY: AMT 4 / 2023
CHECKED BY: YRY 6 / 2023

ESTIMATED QUANTITIES
BRIDGE NO. LAK-283-1434
S.R. 44 UNDER LAKESHORE BLVD

SFN
4302826

DESIGN AGENCY



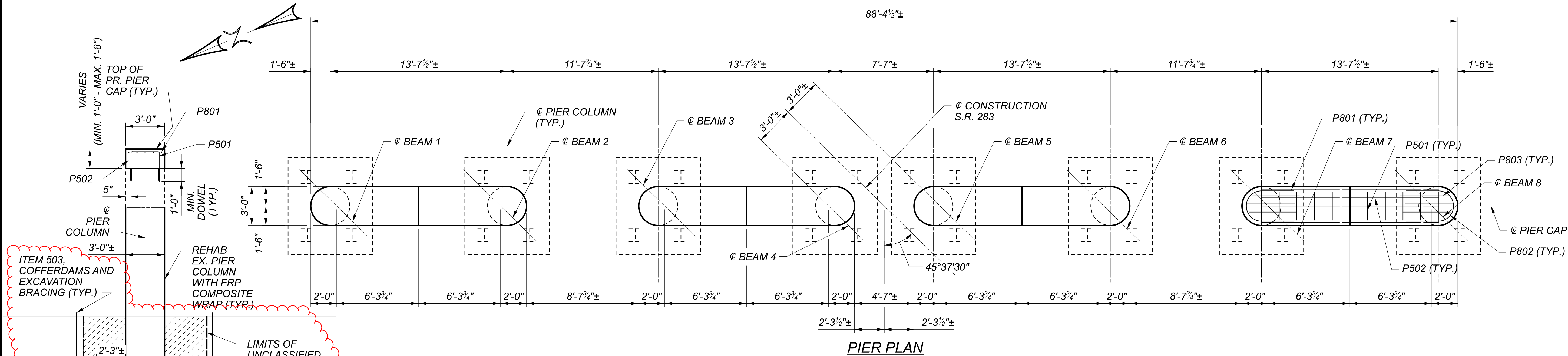
DESIGNER: NRP CHECKER: AMT

REVIEWER: DWS 06/09/23

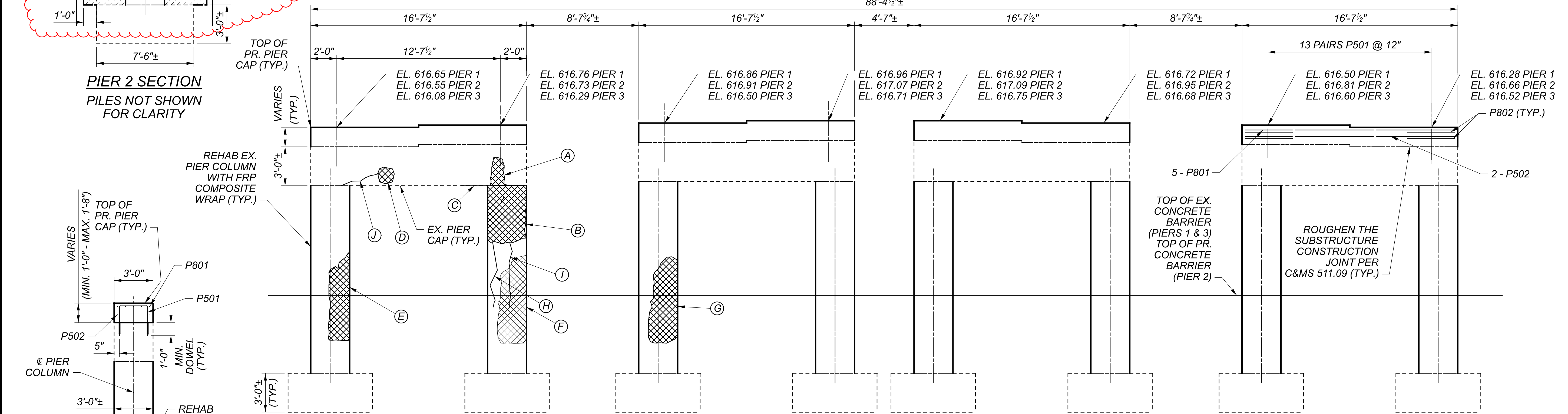
PROJECT ID: 111005

SUBSET: 5 TOTAL: 30

SHEET: 59 TOTAL: 84



PIER PLAN

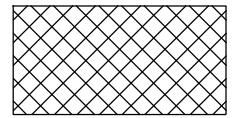


PIER ELEVATION
PILES NOT SHOWN FOR CLARITY

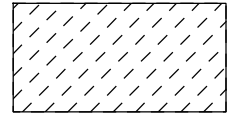
ESTIMATED PATCHING QUANTITIES			
KEY	LOCATION	FACING	AREA (SF)
A	PIER 1	WEST	1.5
B	PIER 1	WEST	16.0
C	PIER 1	BOT. CAP	4.0
D	PIER 3	EAST	1.0
E	PIER 3	WEST	12.0
F	PIER 3	WEST	18.0
G	PIER 3	WEST	18.0
TOTAL AREA MEASURED			70.5
TOTAL AREA ESTIMATED			106.0

ESTIMATED CRACK REPAIR QUANTITIES			
KEY	LOCATION	FACING	LENGTH (FT)
H	PIER 1	WEST	5.0
I	PIER 1	WEST	5.0
J	PIER 3	EAST	4.0
TOTAL AREA MEASURED			14.0
TOTAL AREA ESTIMATED			21.0

LEGEND



ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN



ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

NOTES:

- FOR GENEREAL NOTES, SEE SHEETS 3 AND 4 OF 30.
- FOR REINFORCING STEEL LIST, SEE SHEET 28 OF 30.
- REMOVE EXISTING COATING PER C&MS 512. SEAL ENDS, SIDES AND BOTTOM OF PIER CAPS. SEAL ALL EXPOSED COLUMN SURFACES.
- PROVIDE COMPOSITE FIBER WRAP SYSTEM PER PROPOSAL NOTE 519. WRAP SYSTEM WITH A MINIMUM CONFINING STRESS OF 0.15 KSI FOR THE FULL HEIGHT OF THE COLUMNS. PROTECT WITH URETHANE TOP COAT SEALER. WRAP PIERS 1 AND 3 COLUMNS TO THE TOP OF THE EXISTING BARRIER AND/OR GROUNDLINE. WRAP PIER 2 COLUMNS TO THE TOP OF THE EXISTING FOOTING.
- PATCH THE PIER COLUMNS TO RESTORE DAMAGED AND UNSOUND CONCRETE PRIOR TO APPLYING THE COMPOSITE FIBER WRAP SYSTEM. OCTOBER 2021 INSPECTION INDICATED SMALL, ISOLATED SPALLS ON PIERS. 106.0 SQ. FT OF PATCHING IS INCLUDED IN THE ESTIMATED QUANTITIES FOR ITEM 519 PATCHING CONCRETE STRUCTURE, AS PER PLAN.
- OCTOBER 2021 INSPECTION INDICATED SMALL, ISOLATED CRACKS ON PIERS. SEALING THE 21.0 FT OF CRACKS IS INCLUDED IN THE ESTIMATED QUANTITIES FOR ITEM 512 SEALING CRACKS BY EPOXY INJECTION.