

DESIGN SPECIFICATIONS

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

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

EXJ-4-87 DATED 1/19/18

PROPOSED WORK

POR-43-1150 (OVER CUYAHOGA RIVER, CSXT, ABCR, FRANKLIN AVE)

- REPAIR UNSOUND AREAS OF DECK AND APPROACH SLABS
- SEAL DECK AND APPROACH SLABS WITH GRAVITY-FED RESIN
- PATCH ALL UNSOUND AREAS OF THE CONCRETE RAILING AND CURB
- REPLACE EPOXY-URETHANE SEALING ON CONCRETE RAILING, SIDEWALK, AND CURB
- REMOVE AND REPLACE THE EXISTING APPROACH SIDEWALK
- PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH **NON-EPOXY**
- RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS
- REMOVE AND REPLACE EXISTING ELASTOMERIC STRIP SEAL AT ALL JOINTS
- PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS
- CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE

POR-59-0101 (OVER TALLMADGE AVE AND WHEELING & LAKE ERIE RAILWAY)

- REPAIR UNSOUND AREAS OF DECK AND APPROACH SLABS
- SEAL DECK AND APPROACH SLABS WITH GRAVITY-FED RESIN
- PATCH ALL UNSOUND AREAS OF THE CONCRETE RAILING
- REPLACE EPOXY-URETHANE SEALING ON CONCRETE RAILING
- PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH **NON-EPOXY**
- RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS
- REMOVE AND REPLACE EXISTING ELASTOMERIC STRIP SEAL AT ALL JOINTS
- PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS
- CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE
- PATCH ALL UNSOUND AREAS OF THE FLOOR AND SEAL

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO 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 WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 516 - REFURBISHING BEARING DEVICES, 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 DEGREES FARENHEIT, 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.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 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 BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

ITEM SPECIAL - SEALING OF CONCRETE SURFACES WITH TEXCOTE - XL 70 BRIDGE COTE W/SILANE

THIS WORK SHALL INCLUDE SEALING OF THE CONCRETE SURFACES USING XL70 BRIDGE COTE W/SILANE AS PER THE MANUFACTURER'S RECOMMENDATIONS WITH THE FOLLOWING REQUIREMENTS.

MEET THE SURFACE PREPARATION REQUIREMENTS FOR NON-EPOXY SEALERS PER CMS 512.03.F.1 AND REMOVE ANY CURING COMPOUNDS PER THE MANUFACTURER'S RECOMMENDATIONS.

AT LEAST 5 DAYS BEFORE SEALING, PROVIDE THE ENGINEER THE SEALER MANUFACTURER'S WRITTEN REQUIREMENTS FOR APPLICATION EQUIPMENT, MIXING EQUIPMENT, MIXING PROCEDURES, MIXING TIME, STORAGE REQUIREMENTS, AND TECHNICAL AND SAFETY DATA SHEETS.

TINT SO THE FINAL COLOR IS FEDERAL COLOR STANDARD NO. 17778 - LIGHT NEUTRAL FOR PARAPETS ONLY. CLEAR COLOR IS TO BE USED FOR SIDEWALKS.

SAGS AND RUNS ARE NOT ACCEPTABLE IN THE SEALER.

THE DEPARTMENT WILL MEASURE THE SEALING OF CONCRETE SURFACES BY THE NUMBER OF SQUARE YARDS OF COATED AREA PROJECTED TO A TWO-DIMENSIONAL SURFACE.

THE DEPARTMENT WILL CONSIDER THE REMOVAL OF DUST, DIRT, OIL, WAX, CURING COMPOUNDS, EFFLORESCENCE, LAITANCE AND OTHER FOREIGN MATERIALS AS INCIDENTAL TO THE SURFACE PREPARATION OF THE CONCRETE SURFACE TO BE SEALED.

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 C&MS 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 A DISTANCE OF THE SEPARATION 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 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 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.

SPECIAL - PATCHING CONCRETE STRUCTURE, CURB REPAIR

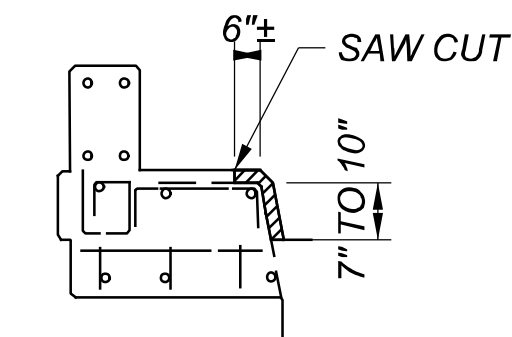
THIS ITEM WILL BE USED TO REPAIR THE DETERIORATED FACE OF THE CURB ON THE BRIDGE DECK AND/OR APPROACH SLABS. THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 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 BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR AND WILL BE PAID FOR PER FOOT.

- ITEM SPECIAL - PATCHING CONCRETE STRUCTURE, MISC., 160 FT

POR-43-1150 CURB



DETERIORATED AREAS TO BE REPAIRED

STRUCTURE GENERAL NOTES
 STRUCTURES: POR-43-1150, POR-59-0101
 OVER CSX TRANSPORTATION, OVER WHEELING & LAKE ERIE RAILWAY

SFN
 VARIOUS
 DESIGN AGENCY



DESIGNER	CHECKER
JAR	XXX
REVIEWER	
MJA	X/X/XX
PROJECT ID	101270
SUBSET	TOTAL
1	5
SHEET	TOTAL
P.18	22

ESTIMATED QUANTITIES


BRIDGE NO. / STRUCTURE FILE NO.										ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET	
								POR-43-1150 6701132 02/NHS/BR		201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN	18	
										180	30000	SF	WALK REMOVED		
										385	71200	SF	CONCRETE, MISC.; PARAPET REPAIR	19	
										5	71200	SF	CONCRETE, MISC.; PARAPET WALL REPAIR	19	
											25	71200	SF	CONCRETE, MISC.; LIGHT POLE BASE REPAIR	19
										160	81100	FT	CONCRETE, MISC.; CURB REPAIR	18	
										195	65	512	SEALING OF CONCRETE SURFACES (NON-EPOXY)		
										4403	3094	512	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN		
										1773	719	512	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		
										2218	2112	512	REMOVAL OF EXISTING PAVEMENT MARKING		
										1773	719	SPECIAL	SEALING OF CONCRETE SURFACES WITH TEXCOTE - XL 70 BRIDGE COTE W/SILANE	18	
										205	140	516	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS		
										14	16	516	REFURBISH BEARING DEVICE, AS PER PLAN	18	
										LS	LS	516	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	18	
										1750	200	519	PATCHING CONCRETE STRUCTURE, AS PER PLAN	18	
										66	15	519	PATCHING CONCRETE BRIDGE DECK - TYPE C		
											40	SPECIAL	STRUCTURES: CONCRETE SPALL REMOVAL	19	
										180		608	4" CONCRETE WALK		
										18		609	CURB, TYPE 6		

STRUCTURE ESTIMATED QUANTITIES
 STRUCTURES: POR-43-1150, POR-59-0101
 OVER CSX TRANSPORTATION, OVER WHEELING & LAKE ERIE RAILWAY

POR-43/43D-11.87/0.00

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 6/21/2022 TIME: 11:33:48 AM USER: jdurbin
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SFN
 VARIOUS
 DESIGN AGENCY



DESIGNER: JAR CHECKER: XXX
 REVIEWER: MJA X/X/XX
 PROJECT ID: 101270
 SUBSET TOTAL: 3 5
 SHEET TOTAL: P.20 22