

LOCATION MAP

LATITUDE: 40 °49'34" LONGITUDE: -82°57'21"



PORTION TO BE IMPROVED	-----	=====
INTERSTATE HIGHWAY	-----	=====
FEDERAL ROUTES	-----	=====
STATE ROUTES	-----	=====
COUNTY & TOWNSHIP ROADS	-----	=====
OTHER ROADS	-----	=====

DESIGN DESIGNATION

CURRENT ADT (2023)	-----	15,000
DESIGN YEAR ADT (2043)	-----	19,000
DESIGN HOURLY VOLUME (2043)	-----	1,700
DIRECTIONAL DISTRIBUTION	-----	50%
TRUCKS (24 HOUR B&C)	-----	3.4%
DESIGN SPEED	-----	70 MPH
LEGAL SPEED	-----	70 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	NON-INTERSTATE FREEWAY	

NHS PROJECT ----- YES

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig

OHIO811.org

Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764

(Non members must be called directly)

PLAN PREPARED BY:



STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CRA-30-08.42

CITY OF BUCYRUS
CRAWFORD COUNTY

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FEDERAL PROJECT NUMBER

E190636

RAILROAD INVOLVEMENT

NORFOLK SOUTHERN RAILROAD

PROJECT DESCRIPTION

REHABILITATION OF THE DUAL BRIDGES THAT CARRY US-30 OVER NORFOLK SOUTHERN TRACKS IN BUCYRUS, OHIO GREAT LAKES DIVISION, MP S-64.25



EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	5.74 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	1.28 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	7.02 ACRES

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

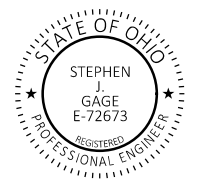

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPREMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE CLOSURE OF THE RAMPS WITH DETOURS PROVIDED AS DESCRIBED ON SHEETS 12 - 18 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES


Robert Weaver
District 03 Deputy Director


Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	MGS-3.2	1/18/13	MT-101.60	1/17/25	TC-65.10	1/17/14	AS-1-15	7/17/15	800-2023	1/17/25
BP-5.1	1/17/25	MGS-5.2	7/15/16	MT-101.70	7/19/24	TC-65.11	1/17/25	AS-2-15	1/18/19	807	1/17/25
BP-9.1	1/18/19	MGS-6.1	1/19/18	MT-101.75	7/21/23	TC-72.20	1/17/25	SBR-1-20	7/17/20	808	7/19/24
				MT-101.90	7/17/20			SICD-1-21	1/21/22	821	4/20/12
CB-2-2B	7/19/24	MH-3	7/19/24	MT-102.20	4/19/19			SICD-2-14	1/15/21	832	7/19/24
CB-3A	1/17/25							VPF-1-90	7/20/18		
		MT-95.30	7/19/19	MT-104.10	1/19/24			HL-50.21	7/15/22	850	7/21/23
DM-1.1	1/17/25	MT-95.50	7/21/17	MT-105.10	1/17/20					873	4/16/21
DM-1.2	1/17/25	MT-95.70	7/21/23							874	4/17/20
DM-4.4	1/15/16	MT-95.82	7/19/13	RM-4.1	1/17/20					875	1/17/25
										908	1/17/25
										921	7/19/24
F-3.1	7/19/13			TC-41.20	10/18/13						
HW-2.2	7/20/18	MT-98.20	4/19/19	TC-42.20	10/18/13						
MGS-1.1	1/17/25	MT-98.29	1/17/20	TC-52.10	10/18/13						
MGS-2.1	1/17/25	MT-99.30	1/17/20	TC-52.20	1/15/21						
MGS-3.1	1/19/18	MT-100.00	1/19/24	TC-61.30	7/19/24						

ENGINEER'S SEAL	ENGINEER'S SEAL
ROADWAY	BRIDGE
	



ROUNDING

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

UTILITIES

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

GAS:
TC ENERGY
1738 W. ROMICK PKWY
FINDLAY, OHIO 45840
CELL: 231-676-8295
EMAIL: John_kegley@tcenergy.com

CITY OF BUCYRUS
JEFF WAGNER
590 S. SANDUSKY AVE
BUCYRUS, OHIO 44820
419-562-6767 EXT. 221

LUMEN
TIM BOWSER
175 ASHLAND RD
P.O. BOX 3555
MANSFIELD, OHIO 44907
419-755-7956

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

WORK LIMITS

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

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND, OHIO.

SURVEY PARAMETERS:

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE NORTH ZONE
COMBINED SCALE FACTOR: 1.00009520
ORIGIN OF COORDINATE SYSTEM:

OHIO NORTH ZONE NORTHING = 0.000

EASTING = 0.000

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET, USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE PLAN SHEET NO. 87 FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING 3 HOUR.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 60 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
OBSTRUCTION EVALUATION GROUP
10101 HILLWOOD PARKWAY
FORT WORTH, TX 76177
FAX: (817) 222-5920
HTTP://CEAAA.FAA.GOV

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS AND CARRIED TO THE GENERAL SUMMARY.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2	EACH
659, TOPSOIL	536	CU. YD.
659, SEEDING AND MULCHING	4823	SQ. YD.
659, REPAIR SEEDING AND MULCHING	484	SQ. YD.
659, COMMERCIAL FERTILIZER	0.65	TON
659, LIME	1.00	ACRES
659, WATER	52	M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

ENVIRONMENTAL

1. ODOT SHALL UTILIZE A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST TO CONDUCT AN ASBESTOS SURVEY OF THE CRA-US30-8.42 (L&R) STRUCTURES. THE RESULTS OF THE ASBESTOS SURVEY WILL BE SHARED WITH ODOT DISTRICT ENVIRONMENTAL STAFF SO THAT A PLAN NOTE DISCUSSING THE RENOVATION OF THE STRUCTURE AND ASBESTOS ABATEMENT (IF NECESSARY) CAN BE DEVELOPED.

2. THE CONTRACTOR MUST SUBMIT THE OEPA DEMOLITION/ RENOVATION ONLINE FORM TO THE OEPA WITHIN 10 BUSINESS DAYS PRIOR TO DEMOLITION.

RAILROAD

ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS", AND THE CURRENT EDITION OF THE PUBLIC IMPROVEMENT PROJECTS MANUAL.

THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SUBMITTALS, DETAILING MEANS AND METHODS OF THE PROPOSED WORK, IN ACCORDANCE WITH THE PUBLIC PROJECT MANUAL.



THE FOLLOWING CONTACT INFORMATION FOR THE NS RAILROAD IS SHOWN ON THESE PLANS:

ELDRIDGE W. CHAMBERS
SENIOR ENGINEER - PUBLIC IMPROVEMENTS
NORFOLK SOUTHERN CORPORATION
650 PEACHTREE STREET, NW, BOX 45
ATLANTA, GA 30308
(470) 463-6307 (o)
Eldridge.Chambers@nscorp.com

THE CONTRACTOR WILL NEED TO SUBCONTRACT APPROVED THIRD PARTY PROVIDER OF PROTECTIVE SERVICES ("FLAGGING") TO BE PRESENT FOR ALL WORK ABOVE OR ADJACENT TO THE RAILROAD RIGHT-OF-WAY.

THE CONTRACTOR WLL BE REQUIRED TO PROTECT THE RAILROAD TRACKS BY VARIOUS MEANS INCLUDING FILTER FABRIC BALLAST PROTECTION, TIMBER CRANE MATS OVER THE RAILS DURING DEMOLITION, AND TIMBER LAGGING ON THE BOTTOM CHORD OF BRIDGE BEAMS.

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 10/2/2025 TIME: 4:33:20 PM USER: USER712839
 pw:\wsp-us-pw.bentley.com:wsp-us-pw-02\Documents\OH - OHIO Projects\105571400-Engineering\Roadway\Sheets\105571_GG002.dgn

<div style="text-align: center;">  <p>ADDENDUM 1 10/02/2025</p> </div> <div style="text-align: center; font-size: 2em; font-weight: bold;">GENERAL SUMMARY</div>	
DESIGN AGENCY	
	
DESIGNER	
DDS	
REVIEWER	
SJG 06/25/25	
PROJECT ID	
105571	
SHEET	TOTAL
93	174

<div style="text-align: center;">  <p>ADDENDUM 1 10/02/2025</p> </div> <div style="text-align: center; font-size: 2em; font-weight: bold;">TRAFFIC CONTROL SUBSUMMARY</div>	
DESIGNER AGENCY	
	
DESIGNER	
DDS	
REVIEWER	
SJG 05/29/25	
PROJECT ID	
105571	
SHEET	TOTAL
99	174

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15 DATED (REVISED) 07-17-2015
AS-2-15 DATED (REVISED) 01-18-2019
SBR-1-20 DATED (REVISED) 07-17-2020
SICD-1-21 DATED (REVISED) 01-21-2021
SICD-2-14 DATED (REVISED) 01-15-2021
VPF-1-90 DATED (REVISED) 07-20-2018

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 DESIGN LOAD: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

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

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.

DECK PLACEMENT DESIGN ASSUMPTIONS

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.65 KIPS.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

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

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.

CONSTRUCTION CLEARANCE

MAINTAIN A CONSTRUCTION CLEARANCE OF 13 FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 22 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL, AND 5.5 FEET FROM THE CENTER OF TRACKS, AT ALL TIMES.

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

DESCRIPTION: THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, CONCRETE BRIDGE RAILINGS, METAL 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 USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

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 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 (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 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.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. 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 REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, 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 REINFORCING STEEL 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.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. REMOVAL ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO BRIDGE DECK, PARAPETS, GUARDRAILS, SCUPPERS, DESIGNATED INTERMEDIATE CROSSFRAMES, END CROSSFRAMES, SPLICE COMPONENTS ON BEAM FLANGES, DRILLED HOLES IN BEAM WEBS, ROCKER AND BOLSTER BEARING DEVICES, PORTIONS OF ABUTMENTS, ABUTMENT BACKFILL, AND DRAINAGE CONDUITS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

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 CMS 511.10, 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 CLASS QC2 CONCRETE, BRIDGE DECK. 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 510 - DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT, AS PER PLAN

PRIOR TO DRILLING DOWEL HOLES IN ABUTMENT AND PIER SEATS, CONTRACTOR SHALL LOCATE EXISTING REBAR VIA ELECTRO-MAGNETIC PULSE, GPR, OR OTHER SUITABLE REBAR DETECTION METHODS.

ITEM 512 - SPECIAL - URETHANE TOP COAT SEALER

THIS ITEM SHALL CONSIST OF THE APPLIATION OF A URETHANE TOP COAT SEALER OVER CONCRETE SURFACES PREVIOUSLY TREATED WITH A COMPOSITE FIBER WRAP SYSTEM. THE COLOR OF THE SEALER SHALL BE AMS-595A-STD 17778 (LIGHT NEUTRAL) AND THE MATERIAL SHALL MEET THE REQUIREMENTS OF CMS 512.02. THE MATERIAL SUPPLIER MUST VERIFY THAT THE COATING IS COMPATIBLE WITH THE INSTALLED FIBER WRAP SYSTEM. THE TOP COAT SEALER SHALL BE APPLIED IN ACCORDANCE WITH CMS 512.03 AFTER SATISFACTORY INSTALLATION, TESTING, AND REPAIR OF THE FIBER WRAP SYSTEM ARE COMPLETE.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF SEALER BY SQUARE YARD AREA OF SURFACES COATED. THE DEPARTMENT WILL PAY FOR ALL EQUIPMENT, TOOLS, MATERIALS, AND LABOR NECESSARY TO COMPLETE THIS WORK AT THE CONTRACT UNIT PRICE FOR ITEM 512 SPECIAL - URETHANE TOP COAT SEALER.

RAILROAD SUBMITTAL

AFTER CONSTRUCTION OF THE NEW BEARING SEATS ON THE ABUTMENTS AND PIERS, THE CONTRACTOR SHALL SUBMIT TO THE DESIGNATED RAILROAD ENGINEER SURVEYED AS-BUILT BEAM SEAT ELEVATIONS AND TOP OF RAIL ELEVATIONS FOR REVIEW AND VERIFICATION OF PROPOSED MINIMUM VERTICAL CLEARANCES AT LEAST 30 DAYS PRIOR TO FINAL POSITIONING OF THE BRIDGE BEAMS. THE CONTRACTOR SHALL INCORPORATE THE REQUIRED SUBMITTAL INTO THE PROJECT SCHEDULE TO MINIMIZE DELAYS IN CONSTRUCTION. REFER TO APPENDIX E, SECTION 5.6.2.a(i) OF THE NORFOLK SOUTHERN PUBLIC PROJECTS MANUAL FOR ADDITIONAL INFORMATION ON SUBMITTAL REQUIREMENTS.

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN

THE COLOR OF THE FINISH COAT SHALL BE AMS-595A-STD 16440 (LIGHT GULL GRAY)

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

THIS WORK CONSISTS OF RAISING AND TEMPORARILY SUPPORTING THE EXISTING STRUCTURAL STEEL WHILE SUBSTRUCTURE MODIFICATIONS FATIGUE RETROFITS AND ZONE PAINTING WORK IS COMPLETED. AFTER THE EXISTING DECK IS REMOVED, AND PRIOR TO PLACEMENT OF THE NEW DECK, THE CONTRACTOR SHALL SUFFICIENTLY JACK AND TEMPORARILY SUPPORT THE SUPERSTRUCTURE SUCH THAT THE TEMPORARY FALSEWORK AND ENCASEMENT SYSTEM FOR THE RETROFITS AND PAINTING OF THE BRIDGE CAN BE COMPLETED WHILE MEETING MINIMUM CLEARANCE REQUIREMENTS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05. IN ADDITION TO PAINTING OF THE STRUCTURAL STEEL, ALL SUBSTRUCTURE WORK TO THE BEAM SEATS SHALL BE COMPLETED WHILE THE BRIDGE IS TEMPORARILY SUPPORTED. AFTER COMPLETION OF ALL WORK, THE BRIDGE SHALL BE LOWERED ONTO THE NEW BEARINGS. AFTER THE BRIDGE IS SET ON THE NEW BEARINGS, THE CONTRACTOR CAN PROCEED WITH INSTALLATION OF THE CONCRETE DECK. 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 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN CMS 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 625 - STRUCTURE GROUNDING SYSTEM

THE CONTRACTOR SHALL PROVIDE A STRUCTUE GROUNDING SYSTEM IN ACCORDANCE WITH STANDARD DRAWING HL-50.21 FOR THE VANDAL PROTECTION VENCING INSTALLED OVER SPAN 2 FOR THE LEFT AND RIGHT BRIDGES.

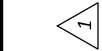
ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

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: FATIGUE RETROFIT PLATES.

ABBREVIATIONS:

ABUT. = ABUTMENT
APPROX. = APPROXIMATE
ASS'Y. = ASSEMBLY
BRG. = BEARING
C/C = CENTER TO CENTER
C.J. = CONSTRUCTION JOINT
CLR. = CLEAR
CVN. = DENOTES MATERIAL MEETS CHARPY V-NOTCH TESTING REQUIREMENTS
CONST. = CONSTRUCTION
DIA. = DIAMETER
DWG. = DRAWING
E.F. = EACH FACE
EL. = ELEVATION
EST. = ESTIMATE
EX. = EXISTING
F.A. = FORWARD ABUTMENT
F.F. = FAR FACE
FWD. = FORWARD
LT. = LEFT
MAX. = MAXIMUM
MIN. = MINIMUM
N.E. = BEDROCK NOT ENCOUNTERED
N.F. = NEAR FACE
N.P.C.P.P. = NON-PERFORATED CORRUGATED PLASTIC PIPE
O/O = OUT TO OUT
P.C.P.P. = PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
P.F.J. = PRECOMPRESSED FOAM JOINT
PROP. = PROPOSED
R.A. = REAR ABUTMENT
RT. = RIGHT
SER. = SERIES
SHLDR. = SHOULDER
SPA. = SPACES
STA. = STATION
STD. = STANDARD
T/T = TOE TO TOE
T/S = TOP OF SLOPE
TYP. = TYPICAL
D.S. = DOWN STATION
U.N.O. = UNLESS NOTED OTHERWISE
U.S. = UP STATION



SFN	1701444
SFN	1701479
DESIGN AGENCY	
wsp	
DESIGNER	CHECKER
TNL	CEJ
REVIEWER	
PJL	08/20/25
PROJECT ID	105571
SUBSET	TOTAL
3	43
SHEET	TOTAL
133	174