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:** 

AEP OHIO (DISTRIBUTION) 777 HOPEWELL DRIVE **HEATH. OHIO 43056** PAUL PAXTON ENGINEERING LIAISON COORDINATOR 740-348-5322 AEP SOLUTION CENTER: 800-277-2177 PTPAXTON@AEP.COM ALSO COPY: UBLANUSA@AEP.COM

AEP OHIO (TRANSMISSION) 8600 SMITH MILLS ROAD NEW ALBANY, OHIO 43054 MICHAEL CARR PUBLIC PROJECTS COORDINATOR 380-205-5072 TL PUBLICPROJECTS@AEP.COM

COLUMBIA GAS OF OHIO 3500 JOHNNY APPLESEED COURT COLUMBUS, OHIO 43231 ROB CALDWELL 614-818-2104 CELL: 614-370-1906 CUSTOMER SERVICE: 800-344-4077 DAMAGE PREVENTION: 866-632-6243 COLUMBIAGAS COLUMBUSENG@NISOURCE.COM ALSO COPY: RCALDWELL@NICSOURCE.COM

CITY OF COLUMBUS DIVISION OF WATER 910 DUBLIN ROAD COLUMBUS. OHIO 43215 614-645-7788

CITY OF COLUMBUS DIVISION OF SEWERAGE AND DRAINAGE 1250 FAIRWOOD AVENUE COLUMBUS, OHIO 43206 614-645-7102

CITY OF COLUMBUS DIVISION OF POWER 3500 INDIANOLA AVENUE COLUMBUS, OHIO 43214 614-645-7627

CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY 1355 MCKINLEY AVENUE BUILDING C COLUMBUS. OHIO 43222 CONTRACTOR LINE: 614-645-7756

### **EXISTING PLANS**

EXISTING PLANS ENTITLED FRA-70-16.75 (PID 114211), FRA-40-15.55 AKA FRA-70-15.14 (EAST FREEWAY, PID 114211), FRA-70-14.69, FRA-70-16.76, MAY BE INSPECTED IN THE ODOT DISTRICT 6 OFFICE AT 400 E. WILLIAM STREET, DELAWARE, OH 43015.

### **CONSTRUCTION NOISE**

FOR CONSTRUCTION ACTIVITY AT NELSON ROAD IN ORDER TO MINIMIZE NOISE IMPACTS, CONSTRUCTION EQUIPMENT WILL BE OPERATED IN COMPLIANCE WITH ALL LOCAL ORDINANCES AND REGULATIONS PERTAINING TO CONSTRUCTION USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL AGENCIES REGARDING PERTINENT ORDINANCES AND REGULATIONS.

#### **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.

#### SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

### FRA-70-16.76/16.83

PROJECT CONTROL **POSITIONING METHOD: MONUMENT TYPE: VERTICAL POSITIONING** 

TYPE B W/ "RII" CAP

ORTHOMETRIC HEIGHT DATUM: GEOID:

NAVD88 GEOID12B

ODOT VRS

HORIZONTAL POSITIONING REFERENCE FRAME:

NAD83(2011) **ELLIPSOID:** GRS80 **MAP PROJECTION:** LAMBERT CONFORMAL CONIC

COORDINATE SYSTEM: OHIO STATE PLANE (SOUTH ZONE) COMBINED SCALE FACTOR: .999955902 (GROUND TO GRID)

ORIGIN OF COORDINATE SYSTEM: 0,0,0

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.

### ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

AT A MINIMUM, REMOVE ALL VEGETATION PER THE LIMITS SHOWN ON SHEET 48. 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, AS PER PLAN. 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, AS PER PLAN.

### 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.

### **PERMITS**

WHEN EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT OF WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CITY OF COLUMBUS, DEPARTMENT OF PUBLIC SERVICE -PERMIT OFFICE BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. PHONE (614) 645-7497; FAX (614) 645-1876; EMAIL: colspermits@columbus.gov

### 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 172' AT THE FRA-70 LOCATION.

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

### **REVIEW OF DRAINAGE FACILITIES**

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM A VIDEO 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.

### ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

#### ITEM SPECIAL - PIPE CLEANOUT

THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. DISPOSE OF ALL MATERIAL PER 105.16 AND 105.17. CLEAN OUT TO THE APPROVAL OF THE ENGINEER.

CLEANOUT OF THE PIPE IS PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL, PIPE CLEANOUT. THIS PRICE INCLUDES THE COST FOR MATERIAL. EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

SEE SHEET 23 FOR ESTIMATED QUANTITIES INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL, PIPE CLEANOUT, 24" AND UNDER

#### ITEM 609 - COMBINATION CURB AND GUTTER. TYPE 2. AS PER PLAN

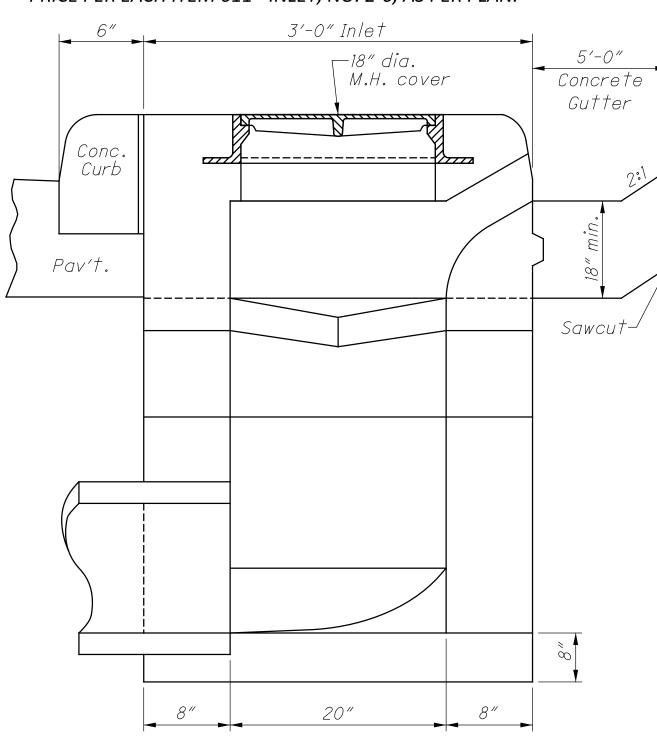
ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN SHALL FOLLOW THE SPECIFICATIONS AND STANDARD CONSTRUCTION DRAWINGS FOR ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2; EXCEPT AS DETAILED ON SHEET 3 OF THE PLANS.

PAYMENT FOR THE ABOVE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2. AS PER PLAN.

### ITEM 611 - INLET, NO. 2-6, AS PER PLAN

ITEM 611 - INLET, NO. 2-6, AS PER PLAN SHALL FOLLOW THE SPECIFICATIONS AND STANDARD CONSTRUCTION DRAWINGS FOR ITEM 611 - INLET, NO. 2-6; EXCEPT AS DETAILED ON SHEET 4 BELOW.

PAYMENT FOR THE ABOVE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH ITEM 611 - INLET, NO. 2-6, AS PER PLAN.



DETAIL - ITEM 611 - INLET, NO. 2-6, AS PER PLAN NOT TO SCALE

## NOTE

CONTRACTOR IS TO CLEAR ALL PRE AND POST CONSTRUCTION DEBRIS ON NELSON ROAD.

### ITEM 900 - RAILROAD FLAGGING SERVICES

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RAILROAD: FLAGGING OPERATIONS WITH NSRC.

COMPASS ESIGNER MBM REVIEWER JAH 05/05/23 ROJECT ID 112679

ESIGN AGENCY

P.04 48

			 SHEET NUM.	<b>-</b>				·		PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	S SH
FFICE CALC						12	23	36	38	01/IMS/14	1   L '	EXT	TOTAL	OINT I	DESCRIF LION	N N
LS										10	201	11001	10		ROADWAY CLEARING AND GRUBBING, AS PER PLAN	
LS							72			LS 72	201	23000	LS 72	SY	PAVEMENT REMOVED	1
							733			733	202	30000	733		WALK REMOVED	
							48			48	202	30700	48	FT	CONCRETE BARRIER REMOVED	1
							260			260	202	32000	260	FT	CURB REMOVED	
							260			260	202	32600	260	FT	GUTTER REMOVED	
							2			2	202	58200	2	EACH	INLET REMOVED	
							260			260	202	75000	260	FT	FENCE REMOVED	1
							72			72	253	01000	72	SY	PAVEMENT REPAIR	
							260			260	607	23000	260	FT	FENCE, TYPE CLT	
							778			778	608	10000	778		4" CONCRETE WALK	_
							260 260			260 260	609 609	12001 26000	260 260	FT FT	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN  CURB, TYPE 6	
															EDOSION CONTROL	
,000										5,000	832	30000	5,000	EACH	EROSION CONTROL  EROSION CONTROL	
															DRAINAGE	
		<del>       </del>		1			326			326	SPECIAL	20270110	326	FT	PIPE CLEANOUT, 24" AND UNDER	+
							15			15	202	35100	15	FT	PIPE REMOVED, 24" AND UNDER	1
							0.48			0.48	602	20000	0.48	CY	CONCRETE MASONRY	
							10			10	611	04600	10	FT	12" CONDUIT, TYPE C	1
							5			5	611	06100	5	FT	15" CONDUIT, TYPE C	
				1			2			2	611	98711	2	EACH	INLET, NO. 2-6, AS PER PLAN	-
															PAVEMENT	
						210				210	251	01000	210		PARTIAL DEPTH PAVEMENT REPAIR (441)	
26										826	254	01000	826		PAVEMENT PLANING, ASPHALT CONCRETE (1.25")	
0										260 62	255 407	20000 10000	260 62	FT GAL	FULL DEPTH PAVEMENT SAWING TACK COAT	
2 9										29	441	70000	29	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	+
															TRAFFIC CONTROL	
								39		39	621	00100	39	EACH	RPM	1
								42		42	621	54000	42	EACH	RAISED PAVEMENT MARKER REMOVED	
								0.44		0.44	642	00100	0.44		EDGE LINE, 4", TYPE 1 WHITE	
								0.27 0.63		0.27	642 642	00100 00200	0.27 0.63		EDGE LINE, 4", TYPE 1 YELLOW	
								0.03		0.63	042	00200	0.63	MILE	LANE LINE, 4", TYPE 1	1
							0.11			0.11	642	00300	0.11	MILE	CENTER LINE, TYPE 1	
								405		405	642	00400	405	FT	CHANNELIZING LINE, 8", TYPE 1	
															STRUCTURE OVER 20 FOOT SPAN (2505134)	
									LS	LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	
									500	500	423 516	00100	500	LB	CRACK SEALING, TYPE I	
									1	1	516	45305 46701	1		REFURBISH BEARING DEVICE, AS PER PLAN RESET BEARING, AS PER PLAN	
									LS	LS	516	47001	LS	_, (311	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	
	-+			1					686	686	517	75501	686	FT	BRIDGE RAILING REBUILT, AS PER PLAN	+
									17	17	518	12801	17		SCUPPER, MODIFICATION, AS PER PLAN	
									463	463	519	11100	463		PATCHING CONCRETE STRUCTURE	
									164 900	164 900	519 601	12304 21000	164 900		PATCHING CONCRETE BRIDGE DECK - TYPE C CONCRETE SLOPE PROTECTION	+
									756 325	756 325	601 601	27001 34400	756 325		DUMPED ROCK FILL, TYPE C, AS PER PLAN ROCK CHANNEL PROTECTION, WITH GROUT, TYPE C	
									130	130	607	30001	130		FENCE, SNOW, AS PER PLAN	
									3.289	3,289	848	10200	3.289	$\cdots$	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION 2 ¾" THICK	, , , , , , , , , , , , , , , , , , ,
				1					3,289 40	3,289 40	848 848	20000 30200	3,289 40		SURFACE PREPARATION USING HYDRODEMOLITION SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	_
	j l	I			1			1	71	71	848	50000	71		HAND CHIPPING	1
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									LS	LS	848	50100	LS		TEST SLAB	-

FRA-70-16.76/16.83



ESIGN AGENCY ESIGNER

GLG 05/05/23

SHEET TOTAL 48

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REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS: 848 DATED 01-15-21 858 DATED 04-20-18

#### **DESIGN SPECIFICATIONS:**

WORK PERFORMED ON THESE STRUCTURES CONFORM TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2021 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.

#### **EXISTING STRUCTURE VERIFICATION:**

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.5, 105.2, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

### **ASBESTOS NOTIFICATION:**

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST SURVEYED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION. ODOT SHALL PROVIDE A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS, OH 43216-1049 ASBESTOS PROGRAM OHIO EPA, DAPC 50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43125

THE SURVEY DETERMINED THAT THE FOLLOWING QUANTITY OF ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURES:

- 25 SF OF 1.5 IN WIDE PAINTED WHITE BLACK SEALENT/GASKET/GROMMET
- EASTERN ABUTMENT ONLY AT TRANSITION SEAM FROM VERTICAL ABUTMENT TO CONCRETE SLOPE.
- 128 LFT OF DRAINAGE PIPES WITHIN EASTERN & WESTERN ABUTMENTS
- THERE ARE A TOTAL OF 32 PIPES, 4 FT IN LENGTH.

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 6 OFFICE, 400 EAST WILLIAM STREET, DELAWARE, OHIO 43015.

BASIS FOR PAYMENT – THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 – PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

### **NORFOLK SOUTHERN RAILWAY NOTES:**

PRIOR TO COMMENCING WORK, THE CONTRACTOR MUST REQUEST FROM THE RAILROAD AND FOLLOW THE LATEST VERSION OF THE "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS." 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."

CONTRACTOR PROTECTION SERVICES SHALL BE DIRECT HIRED AND SCHEDULED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

THE MINIMUM TEMPORARY VERTICAL CLEARANCE SHALL BE 22'-0" ABOVE THE HIGHEST RAIL AND A MINIMUM HORIZONTAL CLEARANCE OF 14'-0" SHALL BE MAINTAINED AT ALL TIMES.

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

# <u>ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN</u>

THE CONTRACTOR IS RESPONSIBLE FOR SAWCUTTING AND REMOVING PORTIONS OF SLOPE PAVING INDICATED IN THE PLANS, AS WELL AS DEBRIS AND SEDIMENT ASSOCIATED WITH THE SLOPE PAVING FAILURES AND/OR NECESSARY TO BE REMOVED FOR SLOPE REPAIRS, SLOPE PAVING, CURB AND WALK RECONSTRUCTION, OR PAVEMENT REPAIRS.

THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING ANY DEBRIS FROM CONSTRUCTION ACTIVITIES ENTERING NELSON ROAD. IF ANY DEBRIS DOES ENTER NELSON ROAD THE CONTRACTOR SHALL REMOVE IT IMMEDIATELY AND IS RESPONSIBLE FOR ANY DAMAGES AS A RESULT OF ALLOWING CONSTRUCTION DEBRIS TO ENTER NELSON ROAD.

ITEM 516 - REFURBISH BEARING DEVICE, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN THE BRIDGE BEARING FOR BEAM 1 AT THE FORWARD ABUTMENT AS WELL AS IT'S CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARING, 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 BEARING TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARING IS VERTICALLY ALIGNED AT 60° F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARING ASSURE THE BEARING IS SHIMMED ADEQUATELY AND THAT THE BEAM AND/OR BEARING DEVICE ARE NOT "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL A NEW BEARING OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARING. 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 DEVICE, AS PER PLAN.

### **ITEM 516 - RESET BEARING, AS PER PLAN**

THE CONTRACTOR SHALL JACK BEAM 22 AT THE FORWARD ABUTMENT AND RESET THE BEARING TO A VERTICAL POSITION.

#### 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 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 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 517 - BRIDGE RAILING REBUILT, AS PER PLAN

THIS PAY ITEM IS INTENDED TO REMOVE AND REPLACE THE TOP PORTION OF THE EXISTING PARAPET TO THE DEPTH SHOWN ON SHEET 9/12, PER CMS 519.

REMOVE EXISTING REINFORCING STEEL ABOVE THE SAWCUT. PROVIDE 9" DEEP VERTICAL DOWEL HOLES, ON 12" C/C SPACING PER CMS 510. GROUT A 1'-6" LONG #6 RESTEEL BAR INTO EACH DOWEL HOLE USING NON-SHRINK, NON-METALLIC GROUT. A LONGITUDINAL #6 BAR SHALL BE PLACED AS SHOWN FOR THE FULL LENGTH OF THE PARAPET REPAIR. FIELD SPLICE THE LONGITUDINAL BAR AS PER CMS 509.07. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

REPLACE THE CONCRETE REMOVED FROM THE PARAPET WITH CLASS QC2 CONCRETE PER CMS 511. THE CONCRETE SHALL MATCH THE SHAPE OF THE SECTION REMOVED AS PART OF THIS PAY ITEM. PLACE VERTICAL JOINTS TO COINCIDE WITH EXISTING VERTICAL JOINTS IN THE PARAPET.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 517, BRIDGE RAILING REBUILT, AS PER PLAN.

#### ITEM 518 - SCUPPER, MODIFICATION, AS PER PLAN

THE CONTRACTOR SHALL PERMANENTLY PLUG THE DESIGNATED EXISTING SCUPPERS USING DECK PATCHING CONCRETE OR SUPERPLASTICIZED DENSE CONCRETE. IN ADDITION, THE CONTRACTOR SHALL REMOVE PORTIONS OF THE SCUPPER, STARTING AT A MAXIMUM OF 2" BELOW THE BOTTOM FACE OF THE ADJACENT BEAM FLANGE. ONCE THE PORTIONS OF THE SCUPPER ARE REMOVED, THE CONTRACTOR SHALL GRIND THE REMAINING WELDS SMOOTH AND PAINT OVER THE AREA WITH AN EPOXY-URETHANE COATING. ALL LABOR AND MATERIALS, INCLUDING THE DECK PATCHING CONCRETE, SUPERPLASTICIZED DENSE CONCRETE, AND EPOXY-URETHANE COATING REQUIRED TO PLUG THE EXISTING SCUPPERS ARE INCLUDED WITH ITEM 518 - SCUPPER. MODIFICATION. AS PER PLAN FOR PAYMENT.

#### ITEM 601 - DUMPED ROCK FILL, TYPE C, AS PER PLAN

THE CONTRACTOR SHALL FILL THE AREAS WHERE SLOPE PROTECTION REPLACEMENT WILL OCCUR WITH DUMPED ROCK FILL, TYPE C. THE CONTRACTOR SHALL CHOCK DUMPED ROCK FILL WITH #57 AGGREGATE PRIOR TO PLACEMENT OF THE 6" CONCRETE SLOPE PROTECTION.

#### <u>ITEM 607 - FENCE, SNOW, AS PER PLAN</u>

INSTALL ORANGE SNOW FENCE AROUND THE WETLAND PRIOR TO ANY CONSTRUCTION ACTIVITIES TO PREVENT ANY DISTURBANCE TO THE WETLAND DURING CONSTRUCTION. UPON THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES REMOVE THE SNOW FENCE.

			ECTI	NAATED OLIANITITIES SENI 2505124 (5DA 00070 16 7601 /D)	CALCULATED:	ERK	DATE:	9/7/2022
ESTIMATED QUANTITIES - SFN 2505132				IMATED QUANTITIES - SFN 2505134 (FRA-00070-16.760L/R)	CHECKED:	BCD	DATE:	9/12/2022
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	SUPER.	GENERAL	SEE SHEET
202	11203	-	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				2/12
423	00100	500	LB	CRACK SEALING, TYPE I			500	
516	45305	1	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	1			2/12
516	46701	1	EACH	RESET BEARING, AS PER PLAN	1			2/12
516	47001	-	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				2/12
517	75501	686	FT	BRIDGE RAILING REBUILT, AS PER PLAN		686		2/12
518	12801	17	EACH	SCUPPER, MODIFICATION, AS PER PLAN		17		2/12
519	11100	463	SF	PATCHING CONCRETE STRUCTURE	31	426	6	
519	12304	164	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C		164		
601	21000	900	SY	CONCRETE SLOPE PROTECTION			900	
601	27001	756	CY	DUMPED ROCK FILL, TYPE C, AS PER PLAN			756	2/12
601	34400	325	CY	ROCK CHANNEL PROTECTION, WITH GROUT, TYPE C			325	
607	30001	130	FT	FENCE, SNOW, AS PER PLAN	·····	<del>~~~~</del>	130	2/12
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848	10200	3,289	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, 2 3/4" THICK		3,289		
848	20000	3,289	SY	SURFACE PREPARATION USING HYDRODEMOLITION		3,289		
848	30200	40	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY		40		
848	50000	71	SY	HAND CHIPPING		71		
848	50100	-	LS	TEST SLAB				
848	50200	27	CY	FULL-DEPTH REPAIR		27		
848	50300	271	SY	WEARING COURSE REMOVED, ASPHALT			271	
848	50320	3,289	SY	EXISTING CONCRETE OVERLAY REMOVED, 1 3/4" NOMINAL		3,289		
848	50340	165	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY		165		
858	10000	5,022	SY	THIN POLYMER EPOXY OVERLAY		5,022		

DESIGN AGENCY

COMPASS
INFRASTRUCTURE GROUP

DESIGNER CHECKER
CAE ERK

REVIEWER
GLG 09/08/22

PROJECT ID
112679

SUBSET TOTAL
2 12

SHEET TOTAL
P.38 48