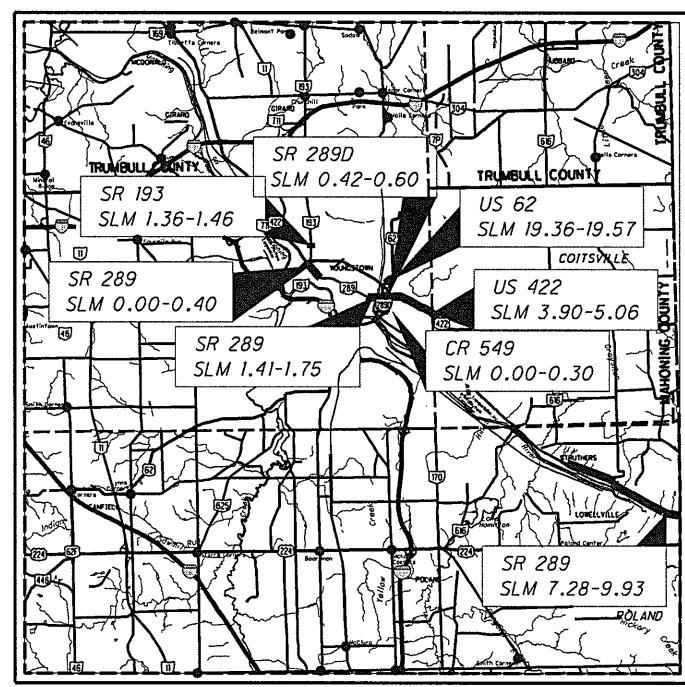


STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION
**MAH / TRU-62 /
 VAR-19.36 / VAR**

CITY OF YOUNGSTOWN
 VILLAGE OF LOWELLVILLE
 POLAND TOWNSHIP
 MAHONING COUNTY



LOCATION MAP

LATITUDE: 41°06'40" LONGITUDE: 80°39'55"



PORTION TO BE IMPROVED

INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCIPAL ARTERIAL - MAH-422 (3.90-5.06)
 URBAN FREEWAY AND EXPRESSWAY - MAH-62 (19.36-19.57)
 URBAN MINOR ARTERIAL - MAH-193 (1.36-1.46)
 URBAN MINOR ARTERIAL - MAH-289 (0.00-0.40, 1.41-1.75, 7.28-9.93)
 URBAN MINOR ARTERIAL - MAH-289D (0.42-0.60)
 URBAN MAJOR COLLECTOR - MAH-549 (0.00-0.30)
 NHS PROJECT YES (US 422)
 NHS PROJECT YES (US 62)
 NHS PROJECT NO (SR 193)
 NHS PROJECT NO (SR 289)
 NHS PROJECT NO (CR 549)

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
 Contact Two Working Days
 Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
 (Non-members must be called directly)

PLAN PREPARED BY:
 ODOT - DISTRICT 4
 2088 SOUTH ARLINGTON ROAD
 AKRON, OH 44306

ENGINEERS SEAL:

SIGNED: *Matthew A. Chaney*
 DATE: 11-29-19

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	7/18/14	MT-104.10	10/16/15	800-2019 1/17/20	WPC 12/20/19
BP-3.2	1/18/19	MT-105.10	7/19/13	821 4/20/12	
BP-5.1	1/18/19	MT-110.10	7/19/13	832 10/19/18	
				875 1/18/19	
DM-4.3	1/15/16	TC-41.20	10/18/13	921 4/20/12	
DM-4.4	1/15/16	TC-42.10	10/18/13	826 1/15/16	
		TC-42.20	10/18/13	897 1/15/16	
MT-95.31	4/19/19	TC-52.10	10/18/13		
MT-95.32	4/19/19	TC-52.20	7/20/18		
MT-95.50	7/21/17	TC-65.10	1/17/14		
MT-98.10	1/20/17	TC-65.11	7/21/17		
MT-98.20	4/19/19	TC-71.10	1/19/18		
MT-98.30	7/19/19	TC-82.10	1/18/19		
MT-99.20	4/19/19				
MT-101.90	7/21/17				
MT-102.20	4/19/19				

INDEX OF SHEETS:

TITLE SHEET	1
TYPICAL SECTIONS	2-4
GENERAL NOTES	5-6
MAINTENANCE OF TRAFFIC	7-8
GENERAL SUMMARY	9-10
CURB RAMP SUBSUMMARY	11-12
RAISED PAVEMENT MARKER SUBSUMMARY	13
PAVEMENT MARKING SUBSUMMARY	14
PAVEMENT CALCULATIONS	15-19
STRUCTURES	20-26

PROJECT DESCRIPTION

RESURFACING OF MAH 62 FROM 19.36 TO 19.57, MAH US 422 FROM 3.90 TO 5.06, MAH SR 193 FROM 1.36 TO 1.46, SR 289 FROM 0.00 TO 0.40 AND 1.41 TO 1.75 AND 7.28 TO 9.93. MAH SR 289 REROUTE ONTO CR 554 (N FRUIT ST) FROM 0.00 TO 0.30. MAH SR 289D FROM 0.42 TO 0.60. INCLUDES MINOR BRIDGE WORK TO 8 STRUCTURES. NORFOLK SOUTHERN RAILROAD ON SR 289 AT 3.60, UNKNOWN ABANDONED RAILROAD ON SR 289 AT 0.40.

EARTH DISTURBED AREAS

PROJECT EDA: N/A (MAINTENANCE PROJECT)
 ESTIMATED CONTRACTOR EDA: N/A (MAINTENANCE PROJECT)
 NOTICE OF INTENT EDA: N/A (MAINTENANCE PROJECT)

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: *Matthew A. Chaney*
 DATE: 12/31/19 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
 DATE: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

I:\ProjectData\MAH\96556_422_3.90\Design\Roadway\Sheets\96556_G1001.dgn Sheet 11/27/2019 7:54:14 AM mpa/agan

FEDERAL PROJECT NO. **E150(679)**
 PID NO. **96556**
 CONSTRUCTION PROJECT NO. _____
 RAILROAD INVOLVEMENT **NORFOLK SOUTHERN**
MAH / TRU-62 / VAR-19.36 / VAR
 1/26

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. ON 2 AND 3 LANE SECTIONS: A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING AND COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

FOUR LANE SECTIONS: A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT AND COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES.

6. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (i.e. ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.

7. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

8. A QUANTITY OF 20 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

9. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

10. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; AND W8-11 [UNEVEN LANES] PER OMUTCD 6F.45. PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614-MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE I - PLANED SURFACE
 614, WORK ZONE CENTER LINE, CLASS I, 5.34 MILE
 614, WORK ZONE STOP LINE, CLASS I, 381 FT
 614, WORK ZONE LANE LINE, CLASS I, 6", 4.78 MILE
 614, WORK ZONE MARKING SIGN, (ALL PHASES) 36 EACH

PHASE II - INTERMEDIATE COURSE
 614, WORK ZONE CENTER LINE, CLASS I, 2.39 MILE
 614, WORK ZONE STOP LINE, CLASS I, 347 FT
 614, WORK ZONE LANE LINE, CLASS I, 6", 4.78 MILE

PHASE III - SURFACE COURSE
 614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 5.34 MILE
 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 381 FT
 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT 4.78 MILE

TO BE USED AS DIRECTED BY THE ENGINEER
 614, WORK ZONE EDGE LINE, CLASS III, 4.32 MILE
 6" 642 PAINT

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 7 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$1500 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERNS CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

DROPOFFS

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND SIDE STREET APPROACHES/DRIVEWAYS GREATER THAN 1.25 INCH. THE CONTRACTOR SHALL PLACE A 12:1 ASPHALT WEDGE FOR ALL RESULTING ELEVATION DIFFERENCES GREATER THAN 1.25 INCH PRIOR TO OPENING TO TRAFFIC. THE PAVING OF INTERSECTION APPROACHES AND DRIVEWAYS, PER THE NOTES ON SHEET 5, SHALL BE PERFORMED WITHIN 7 DAYS OF MAINLINE SURFACE COURSE BEING APPLIED AND A DROPOFF BEING CREATED BETWEEN THE NEW SURFACE COURSE AND THE MILLED/EXISTING SIDE ROAD OR DRIVEWAY SURFACE. THE CONTRACTOR MAY ELECT TO PLACE A 12:1 ASPHALT WEDGE IN LIEU OF COMPLETING THE PAVING, HOWEVER THE ASPHALT CONCRETE USED FOR THE WEDGE SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 1/2 MAINTAINING TRAFFIC AND SHALL INCLUDE THE REMOVAL OF THE WEDGE BEFORE THE INTERSECTION/DRIVEWAY IS PAVED.

INTERIM START DATE (SR 289, SLM 7.28 - 9.93)

THE CONTRACTOR SHALL NOT BEGINS ANY WORK ON SR 289 FROM SLM 7.28 - 9.93 UNTIL JULY 20, 2020. SHOULD THE CONTRACTOR FAIL TO MEET THE APPLICABLE REQUIREMENTS, A DISINCENTIVE IN THE AMOUNT OF \$5,000 SHALL BE ASSESSED PER DAY OF WORK PERFORMED OUTSIDE OF THESE REQUIREMENTS.

TEMPORARY PAVEMENT WEDGES

TEMPORARY PAVEMENT WEDGES SHALL BE PROVIDED AT ALL TIMES WHERE TRAFFIC IS REQUIRED TO TRAVEL FROM OR ONTO A SURFACE OF A DIFFERENT ELEVATION IN THE DIRECTION OF TRAVEL (JOINTS, MANHOLES, CATCH BASINS, VALVE BOXES, MONUMENT BOXES, ETC.). THE TAPER RATE OF THE TEMPORARY PAVEMENT WEDGES SHALL BE AS PER THE REQUIREMENTS IN THE CHART BELOW. TEMPORARY PAVEMENT WEDGES SHALL BE REMOVED PRIOR TO PLACING THE SPECIFIED PAVEMENT COURSE. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID ITEM FOR ITEM 614 - MAINTAINING TRAFFIC.

SPEED		DURATION	
		7 DAYS OR LESS	MORE THAN 7 DAYS
LESS THAN 45MPH	45MPH OR GREATER	36:1	60:1
		60:1	120:1

I:\ProjectData\MAH\96556_422_3_90\Design\Roadway\Sheets\96556_MN001.dgn Sheet 2/28/2020 9:44:59 AM mchaney

CALCULATED
AJS
CHECKED
MAC

MAINTENANCE OF TRAFFIC GENERAL NOTES

MAH / TRU-62 /
VAR-19.36 / VAR

I:\ProjectData\MAH\96556_422_3.90\Design\Roadway\Sheets\96556_G0001.dgn Sheet 2 1/10/2020 12:54:10 PM mpalagan

SHEET NUM.											PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	7	8	13	14	15	16	17	18	19	01/NHS/P V	02/S>2/P V	03/NHS/P V/YOUN	04/S>2/P V/YOUN						
PAVEMENT																				
4,750											200	2,300	1,500	750	251	01000	4,750	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
						12,997	9,905			35,449			35,449	22,902	254	01000	58,351	SY	PAVEMENT PLANING, ASPHALT CONCRETE	
						1,948	1,968	3,418	1,016	5,295	467	3,968	5,296	3,914	407	20000	13,645	GAL	NON-TRACKING TACK COAT	
								944	240		118	1,066			408	10001	1,184	GAL	PRIME COAT, AS PER PLAN	6
						271	207			739			739	478	424	10001	1,217	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE A, AS PER PLAN	6
									1,321				1,321		441	50101	1,321	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN	6
									471		216	255			442	10051	471	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (446), AS PER PLAN (PG70-22M	5
								260	67		33	294			617	10101	327	CY	COMPACTED AGGREGATE, AS PER PLAN	6
								223						223	826	10041	223	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), FIBER TYPE C, AS PER PLAN	5
						542	413			1,981			1,981	955	826	10500	2,936	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), FIBER TYPE C	
								396	5,657	1,347	661	6,343		396	875	10000	7,400	LB	LONGITUDINAL JOINT ADHESIVE	
								5,347	37,972	11,282	5,181	44,073		5,347	897	01010	54,601	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A	
WATER WORK																				
	23											10	5	8	638	10801	23	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	6
TRAFFIC CONTROL																				
						176						176			621	00100	176	EACH	RPM	
						141						141			621	54000	141	EACH	RAISED PAVEMENT MARKER REMOVED	
						4.32					0.5	3.82			646	10010	4.32	MILE	EDGE LINE, 6"	
						4.78					0.16	0.26	2.32	2.04	646	10110	4.78	MILE	LANE LINE, 6"	
						5.34					0.08	2.78	1.16	1.32	646	10200	5.34	MILE	CENTER LINE	
								315				315			646	10300	315	FT	CHANNELIZING LINE, 8"	
						1,228					375	400	453	646	10310	1,228	FT	CHANNELIZING LINE, 12"		
						381					59	312	10	646	10400	381	FT	STOP LINE		
						1,044					629	415		646	10500	1,044	FT	CROSSWALK LINE		
						229					145	84		646	10600	229	FT	TRANSVERSE/DIAGONAL LINE		
								18					9	9	646	20300	18	EACH	LANE ARROW	
						2					2				646	20400	2	EACH	WORD ON PAVEMENT, 72"	
STRUCTURE REPAIRS																				
																			FOR MAH-289-0154 ESTIMATED QUANTITIES	22
																			FOR MAH-289-0857 ESTIMATED QUANTITIES	22
																			FOR MAH-289D-0007 ESTIMATED QUANTITIES	22
																			FOR MAH-289D-0057 ESTIMATED QUANTITIES	22
																			FOR MAH-422-0496 ESTIMATED QUANTITIES	22
																			FOR MAH-422-0755 ESTIMATED QUANTITIES	22
																			FOR MAH-616-0688 ESTIMATED QUANTITIES	22
MAINTENANCE OF TRAFFIC																				
						300					300				614	11110	300	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		36									36				614	12460	36	EACH	WORK ZONE MARKING SIGN	
		20											20		614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
						10					10				614	18601	10	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
		9.56									0.32	0.52	4.64	4.08	614	20010	9.56	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
		4.78									0.16	0.26	2.32	2.04	614	20560	4.78	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
		7.73									0.16	2.91	2.32	2.34	614	21000	7.73	MILE	WORK ZONE CENTER LINE, CLASS I	
		5.34									0.08	2.78	1.16	1.32	614	21550	5.34	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
		4.32									0.5	3.82			614	22360	4.32	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
		728										94	624	10	614	26000	728	FT	WORK ZONE STOP LINE, CLASS I	
		381										59	312	10	614	26610	381	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
INCIDENTALS																				
											LS				614	11000	LS		MAINTAINING TRAFFIC	
											12				619	16010	12	MNTH	FIELD OFFICE, TYPE B	
											LS				623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS				624	10000	LS		MOBILIZATION	

CALCULATED	AJS	CHECKED	MAC
GENERAL SUMMARY			
MAH / TRU - 62 / VAR - 19.36 / VAR			
10 26			

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD DRAWING AND SUPPLEMENTAL SPECIFICATIONS:

SS 843 DATED 04/18/03

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

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 WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK:

- MAH-289-0154 (OVER RR, CRAB CREEK, ANDREWS AVE)
 - PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE, INCLUDING THE APPROACH SLABS
 - REPAIR TRIPPING HAZARD WHERE APPROACH SIDEWALK MEETS SIDEWALK ON LEFT OF STRUCTURE
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE
 - SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY-FED RESIN
 - REPLACE DAMAGED APPROACH GUARDRAIL AT REAR
 - CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION
 - NEW STRUCTURE IDENTIFICATION SIGNS

- MAH-289-0857 (GRAYS RUN)
 - PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE, INCLUDING THE APPROACH SLABS
 - SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY-FED RESIN
 - REPAIR TRIPPING HAZARD WHERE APPROACH SIDEWALK MEETS SIDEWALK ON EITHER SIDE STRUCTURE
 - REPAIR SLOPE PROTECTION AT FORWARD RIGHT ABUTMENT
 - CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION
 - NEW STRUCTURE IDENTIFICATION SIGNS

- MAH-616-0588 (DRY RUN)
 - SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY-FED RESIN

- MAH-289D-0007 (HIMROD AVE OVER US62 & SR7)
 - PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE, INCLUDING THE APPROACH SLABS
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE, INCLUDING RAILING, CURB, AND FLOOR. SEAL WITH EPOXY-URETHANE
 - REMOVE ALL SPALLED AREAS FROM BOTTOM OF DECK FLOOR AND SEAL WITH EPOXY-URETHANE
 - CLEAN SCUPPERS AND VEGETATION GROWTH AT DECK EDGES
 - CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

- MAH-289D-0057 (OAK ST OVER US62 & SR7)
 - CLEAN SCUPPERS AND VEGETATION GROWTH AT DECK EDGES
 - REPLACE THE TOPS OF BACKWALLS
 - REMOVE ALL SPALLED AREAS FROM BOTTOM OF DECK FLOOR AND SEAL WITH EPOXY-URETHANE
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE
 - REPAIR SLOPE PROTECTION AT REAR LEFT
 - REMOVE AND REPLACE ASPHALT OVERLAY ON DECK AND APPROACH SLABS
 - REMOVE DEBRIS FROM SLIDING PLATE EXPANSION JOINT
 - REPLACE MISSING AND DAMAGED ALUMINUM RAIL AT BOTH SIDES
 - CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION INCLUDING ON VPF
 - NEW STRUCTURE IDENTIFICATION SIGNS

- MAH-422-0496 (OVER LINCOLN PARK)
 - PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE, INCLUDING THE APPROACH SLABS
 - SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY-FED RESIN
 - REPAIR EXPANSION JOINT SEALS
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE, INCLUDING RAILING, AND SEAL WITH EPOXY-URETHANE
 - REPAIR EROSION AT FORWARD AND REAR RIGHT
 - REPAIR SLOPE PROTECTION AT FORWARD AND REAR
 - REPLACE OLD AND DAMAGED GUARDRAIL AT ALL FOUR CORNERS OF STRUCTURE
 - CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

- MAH-422-0755 (DRY RUN)
 - SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY-FED RESIN



CLEARING AND GRUBBING

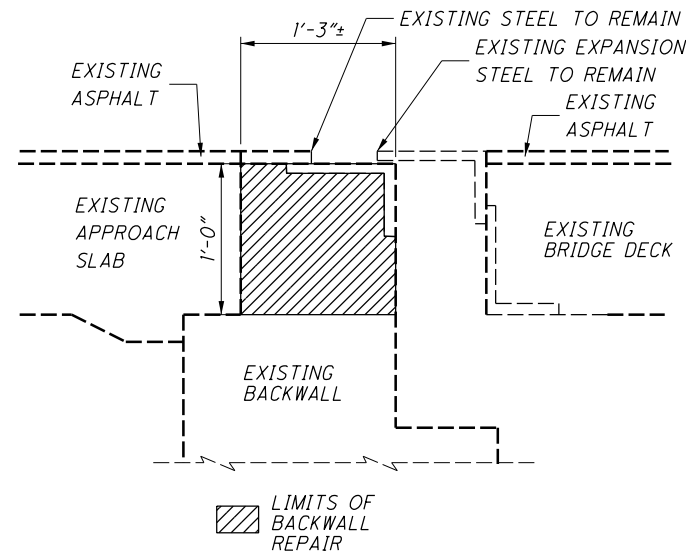
ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID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

ITEM 511 - CONCRETE MISC.: BACKWALL REPAIR

THIS ITEM OF WORK CONSISTS OF THE REMOVAL OF ALL UNSOUND CONCRETE AT BOTH ABUTMENT BACKWALLS OF STRUCTURE MAH-289D-0057 TO THE LIMITS SHOWN BELOW OR AS DIRECTED BY THE ENGINEER. THE PREPARATION OF THE SURFACE, FORMS, TEMPORARY SUPPORTS OF THE EXPANSION JOINT, AND PLACING CLASS QC 1 CONCRETE, SUBSTRUCTURE.

TEMPORARY SUPPORTS OF THE EXPANSION JOINT WILL BE USED TO MAINTAIN THE PROPER ALIGNMENT AND GRADE OF THE JOINT DURING REMOVAL AND REPLACEMENT OF BACKWALL CONCRETE. THE COST OF THIS TEMPORARY SUPPORT WILL BE INCIDENTAL TO THIS ITEM.

PAYMENT WILL BE MADE AT THE CONTRACT PRICE PER CU. YD. FOR ITEM 511 - CONCRETE MISC.: BACKWALL REPAIR WHICH WILL INCLUDE ALL MATERIALS AND LABOR INCLUDING REMOVAL AND DISPOSAL OF THE EXISTING CONCRETE REQUIRED TO MAKE THIS WORK COMPLETE.



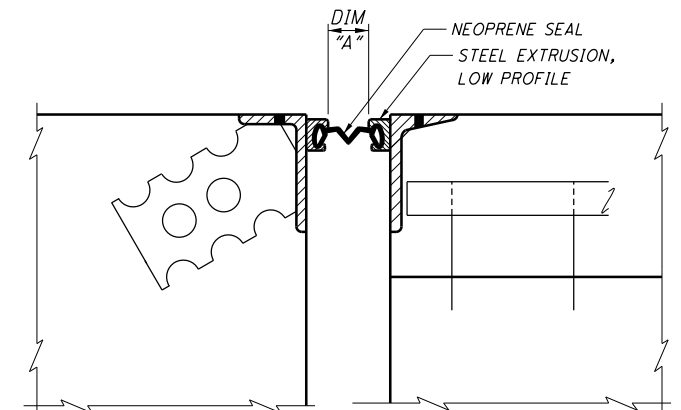
LINCOLN PARK

ACCESS TO ALL LINCOLN PARK FACILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. TEMPORARY CONSTRUCTION FENCING WILL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT LINCOLN PARK AND THE PUBLIC. APPROPRIATE SIGNAGE WILL BE INSTALLED TO ALERT USERS OF LINCOLN PARK OF CONSTRUCTION ACTIVITIES, IF IN PROXIMITY TO RECREATIONAL FACILITIES OR FEATURES. THE CONTRACTOR SHALL BE REQUIRED TO CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT AND THE CITY OF YOUNGSTOWN PARKS & RECREATION DEPARTMENT (DAWN TURNAGE, 330-742-8712) PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. AT LEAST ONE (1) DAY PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM ODOT AND THE CITY OF YOUNGSTOWN PARKS AND RECREATION DEPARTMENT OF THE PROPOSED ACCESS POINT(S) TO PERFORM THE PROPOSED MAINTENANCE ACTIVITIES BENEATH THE STRUCTURE AND THE ACCESS POINT(S) SHALL BE AGREED UPON BEFORE ANY SUCH WORK CAN BE PERFORMED.

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN

THIS ITEM WILL INCLUDE THE REMOVAL AND REPLACEMENT OF THE EXISTING SEALS FROM EDGE TO EDGE OF STRUCTURE MAH-422-0496 DECK. UPON REMOVAL OF THE SEAL, THE CONTRACTOR WILL ATTEMPT TO MATCH THE REPLACEMENT SEAL AS CLOSELY AS POSSIBLE WITH THE EXISTING SEAL SO AS TO PROVIDE A SNUG, WATERTIGHT SEAL. THE EXISTING SEAL WILL BE FIELD MEASURE PRIOR TO ORDERING MATERIAL.

THIS WORK WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 516, ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN. THIS PRICE WILL INCLUDE THE REMOVAL OF THE EXISTING SEAL, LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS REQUIRED TO REPLACE THE SEAL.



DIMENSION A

TEMPERATURE, °F	ATB-7-2755
30°	2 5/8"
40°	2 3/8"
50°	2 1/8"
60°	1 7/8"
70°	1 5/8"
80°	1 3/8"
90°	1 1/8"

ITEM 518 - SCUPPER MISC.: CLEANOUT

THIS WORK WILL CONSIST OF REMOVING ALL DEBRIS FROM ON TOP AND INSIDE OF THE SCUPPERS. SCUPPER CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 518, SCUPPER MISC.: CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

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.

I:\ProjectData\MAH\96556_422_3_90\Design\Structures\MAH289_0007L\Sheets\96556_0390CGN001.dgn Sheet 1 2/28/2020 10:12:25 AM mchoney

DESIGNED AJS	CHECKED MAC	DRAWN AJS	REVIEWED MAC	DATE 11/20/19	DESIGN AGENCY ODOT --- DISTRICT 4 PLANNING & ENGINEERING
STRUCTURE GENERAL NOTES					
MAH-289-0154, MAH-289-0857, MAH-289D-0007, MAH-289D-0057, MAH-422-0496, MAH-422-0755, MAH-616-0588					
MAH / TRU - 62 / VAR - 19.36 / VAR PID No. 96556					
1 / 7					
20 26					

EROSION REPAIR

THE FOLLOWING ITEMS WILL BE USED TO REPAIR THE EROSION THAT HAS OCCURED AT THE REAR ABUTMENT OF STRUCTURE MAH-289-0154 AND AT THE FORWARD AND REAR OF STRUCTURE MAH-422-0496 AS DIRECTED BY THE PROJECT ENGINEER:

MAH-289-0154
ITEM 601, DUMPED ROCK FILL, TYPE B, 7 CY

MAH-422-0496
ITEM 203, BORROW, 15 CY
ITEM 601, DUMPED ROCK FILL, TYPE B, 10 CY
ITEM 601, CRUSHED AGGREGATE SLOPE PROTECTION, 20 CY

SIDEWALK CORRECTIONS

THE ITEMS LISTED FOR STRUCTURES MAH-289-0154 AND MAH-289-0857 SHALL BE USED AS DIRECTED BY THE ENGINEER TO REPAIR THE EXISTING CURB AND SIDEWALK AT THE APPROACHES OF THE STRUCTURE.

MAH-289-0154
ITEM 202, WALK REMOVED, 40 SF
ITEM 202, CURB REMOVED, 10 FT
ITEM 608, 6" CONCRETE WALK, 40 SF
ITEM 609, CURB, TYPE 7, 10 FT

MAH-289-0857
ITEM 202, WALK REMOVED, 50 SF
ITEM 202, CURB REMOVED, 10 FT
ITEM 608, 6" CONCRETE WALK, 50 SF
ITEM 609, CURB, TYPE 7, 10 FT

SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE BOTTOM DECK FLOOR OF STRUCTURES MAH-289D-0007 AND MAH-289D-0057 WITHOUT SOUNDING. AFTER SPALLED CONCRETE AREAS HAVE BEEN REMOVED, REMOVAL AREAS WILL BE SEALED WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).

CONCRETE SPALL REMOVAL WILL BE PAID FOR AT THE UNIT BID PRICE FOR SPECIAL - STRUCTURE MISC.: CONCRETE SPALL REMOVAL. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

MAH-289D-0007
SPEC, STRUCTURES: CONCRETE SPALL REMOVAL, 50 SQ YD
512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 50 SQ YD

MAH-289D-0057
SPEC, STRUCTURES: CONCRETE SPALL REMOVAL, 50 SQ YD
512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 50 SQ YD

CONCRETE SLOPE PROTECTION REPAIR

THIS WORK WILL CONSIST OF REMOVING AND REPLACING A SLAB OF THE CONCRETE SLOPE PROTECTION UNDER STRUCTURE MAH-289D-0057 WITH ITEM 613, LOW STRENGTH MORTAR BACKFILL AND ITEM 601, CONCRETE SLOPE PROTECTION.

PLACE THE LOW STRENGTH MORTAR BACKFILL TO FILL ALL EROSION UNDER THE OLD CONCRETE SLOPE PROTECTION AND THEN PLACE NEW CONCRETE SLOPE PROTECTION SLABS PER CMS 601.07 AS DIRECTED BY THE PROJECT ENGINEER.

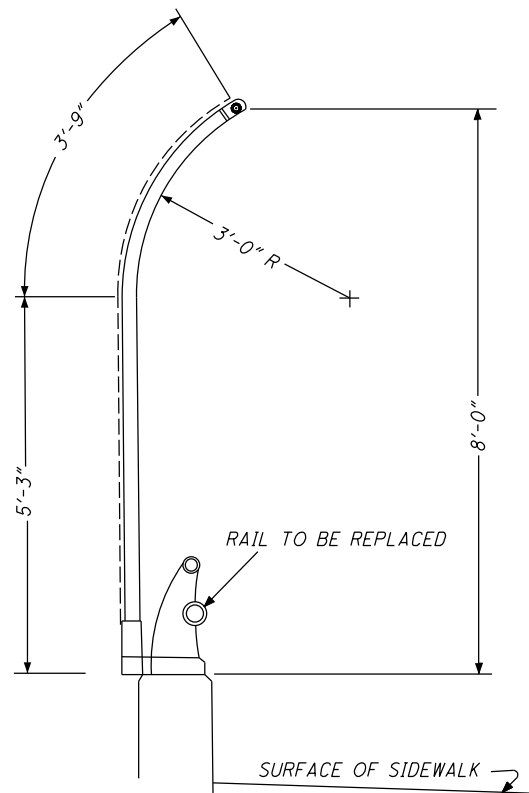
CONCRETE SLOPE PROTECTION REPLACEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 601, CONCRETE SLOPE PROTECTION AND ITEM 613, LOW STRENGTH MORTAR BACKFILL. REMOVAL OF EXISTING CONCRETE SLOPE PROTECTION WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 202, CONCRETE SLOPE PROTECTION REMOVED. THE PRICE FOR EACH ITEM WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 202, CONCRETE SLOPE PROTECTION REMOVED, 63 SY
ITEM 601, CONCRETE SLOPE PROTECTION, 63 SY
ITEM 613, LOW STRENGTH MORTAR BACKFILL, 125 CY

SPECIAL - STRUCTURES: REPLACE ALUMINUM RAIL

THIS ITEM WILL CONSIST OF THE REPLACEMENT OF THE MISSING AND DAMAGED RAILING OF THE VANDEL PROTECTION FENCE ON STRUCTURE MAH-289D-0057. THE ACTUAL SECTIONS NEEDED WILL BE FIELD MEASURED PRIOR TO ORDERING MATERIAL.

THIS WORK WILL BE PAID FOR AT THE UNIT PRICE BID FOR SPECIAL - STRUCTURES: REPLACE ALUMINUM RAIL. THIS PRICE WILL INCLUDE THE LABOR, EQUIPMENT, MATERIAL, RAILING AND INCIDENTALS REQUIRED TO REPLACE THE RAILING.



CORRECTING BRIDGE IDENTIFICATION SIGN NUMBERS:

SOME OF THE EXISTING BRIDGE NUMBER SIGNS HAVE INCORRECT BRIDGE NUMBERS ON THEM. THE FOLLOWING BRIDGE NUMBERS ARE THE CORRECT ONES AND WILL BE USED ON THE NEW BRIDGE IDENTIFICATIONS SIGNS.

STRUCTURE MAH-289-0154 (SFN:5004942) THE EXISTING SIGN SHOWS 0155. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 0154.

STRUCTURE MAH-289D-0057 (SFN:5009510) THE EXISTING SIGN SHOWS 0053. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 0057.

STRUCTURE/CULVERT IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

MAH-289-0154 (TWO APPROACHES)
MAH-289-0857 (TWO APPROACHES)
MAH-289D-0057 (TWO APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

GUARDRAIL REPLACEMENT

THE FOLLOWING ITEMS WILL BE USED TO REPLACE EXISTING PIECES OF GUARDRAIL THAT ARE DAMAGED, ROTTED, OR OUTDATED AT STRUCTURES MAH-289-0154 AND MAH-422-0496 AS DIRECTED BY THE PROJECT ENGINEER:

MAH-289-0154
202, GUARDRAIL REMOVED 50 FT
606, GUARDRAIL, TYPE MGS 50 FT

MAH-422-0496
202, GUARDRAIL REMOVED 125 FT
202, BRIDGE TERMINAL ASSEMBLY REMOVED, 4 EA
606, GUARDRAIL, TYPE MGS 125 FT
606, BRIDGE TERMINAL ASSEMBLY, TYPE 2, 4 EA

STREAM AVOIDANCE - MAH-289-1.54, MAH-616-5.88, MAH-422-4.96 AND MAH-422-7.55

UNDER NO CIRCUMSTANCES SHALL ANY EQUIPMENT (LIFT, BACKHOE, EARTH MOVING EQUIPMENT, ETC.) AND/OR MATERIALS ENTER THE STREAM(S) AT MAH-289-1.54, MAH-616-5.88, MAH-422-4.96 AND MAH-422-7.55. NO FILL MATERIAL (INCLUDING TEMPORARY FILLS) SHALL BE PLACED BELOW THE IDENTIFIED ORDINARY HIGH WATER MARK (OHWM) OF THE STREAM(S). THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ALL CONSTRUCTION MATERIALS, WASTE MATERIALS, WATER CHEMICALS OR OTHER SUBSTANCES USED TO CONSTRUCT THE PROJECT FROM ENTERING THE STREAM(S).

TREE CUTTING/REMOVAL PROHIBITED

THE MAH-289-1.54, MAH-289-8.57, MAH-289D-0.07, MAH-289D-0.57 AND MAH-422-4.96 BRIDGES ARE LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. TREE TRIMMING IS PERMITTED AT THESE LOCATIONS AS DIRECTED BY THE PROJECT ENGINEER, HOWEVER, NO TREES SHALL BE REMOVED AT THIS LOCATION. A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

I:\ProjectData\MAH\96556_422_3.90\Design\Structures\MAH289_0007L\Sheets\96556_0390CGN001.dgn Sheet 2 2/28/2020 10:12:30 AM mchoney

DESIGN AGENCY ODOT --- DISTRICT 4 PLANNING & ENGINEERING	DATE 11/20/19	REVIEWED MAC	DRAWN AJS	DESIGNED AJS	CHECKED MAC	STRUCTURE FILE NUMBER	MAH-289-0154, MAH-289-0857, MAH-422-0496, MAH-422-0755, MAH-616-0588
STRUCTURE GENERAL NOTES							
MAH-289-0154, MAH-289-0857, MAH-289D-0007, MAH-289D-0057, MAH-422-0496, MAH-422-0755, MAH-616-0588							
MAH / TRU-62 / VAR-19.36 / VAR PID No. 96556							
2 / 7							
21 26							

CALC: AJS DATE: 7/17/2019
 CHECKED: MAC DATE: 11/26/2019

ESTIMATED QUANTITIES

BRIDGE NO. / STRUCTURE FILE NO.							ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
MAH-289-0154 5004942 06/S>2/BR	MAH-289-0857 5005086 06/S>2/BR	MAH-289D-0007 5009472 05/NHS/BR	MAH-289D-0057 5009510 05/NHS/BR	MAH-422-0496 5005493 05/NHS/BR	MAH-422-0755 5005531 05/NHS/BR	MAH-616-0588 5006015 05/NHS/BR					
LS	LS	LS	LS	LS			201	11000		CLEARING AND GRUBBING	
40	50						202	30000	SF	WALK REMOVED	
10	10						202	32000	FT	CURB REMOVED	
			63				202	32800	SY	CONCRETE SLOPE PROTECTION REMOVED	
			1890				202	23500	SY	WEARING COURSE REMOVED	
50				125			202	38000	FT	GUARDRAIL REMOVED	21
				4			202	47000	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	21
				15			203	40000	CY	BORROW	
			171				407	13900	GAL	TACK COAT, 702.13	
			114				407	20000	GAL	NON-TRACKING TACK COAT	
			40				424	10001	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE A, AS PER PLAN	
			16				511	71100	CY	CONCRETE, MISC.: BACKWALL REPAIR	
100		150	200	200			512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
5032	232			4204	387	503	512	73500	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
				128			516	01301	FT	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN	20
							516	14600	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: CLEANOUT OF EXPANSION JOINTS	
		6	4	17			518	12500	EACH	SCUPPER, MISC.: CLEANOUT	
100		100	150	200			519	11101	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	20
51	6	3		42			519	12304	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C	
		50	50				SPECIAL	53000800	SY	STRUCTURES: CONCRETE SPALL REMOVAL	
			72				SPECIAL	53001300	FT	STRUCTURES: REPLACE ALUMINUM RAIL	21
			63				601	21000	SY	CONCRETE SLOPE PROTECTION	
7				10			601	26000	CY	DUMPED ROCK FILL, TYPE B	
				20			601	20010	CY	CRUSHED AGGREGATE SLOPE PROTECTION	
	10						601	32100	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
50				125			606	15050	FT	GUARDRAIL, TYPE MGS	21
				4			606	35100	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	21
40	50						608	13000	SF	6" CONCRETE WALK	
10	10						609	28000	FT	CURB, TYPE 7	
			125				613	41200	CY	LOW STRENGTH MORTAR BACKFILL	
15	15		15				630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
2	2		2				630	80100	SF	SIGN, FLAT SHEET, 730.20	
2	2		2				630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
2	2		2				630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
			79				856	10000	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	

DESIGN AGENCY
 ODOT --- DISTRICT 4
 PLANNING & ENGINEERING

REVIEWED DATE 09/20/18
 MAC
 STRUCTURE FILE NUMBER

DRAWN AJS
 REVISED CMR

DESIGNED AJS
 CHECKED MAC

ESTIMATED QUANTITIES
 MAH-289-0154, MAH-289-0857, MAH-289D-0007, MAH-289D-0057,
 MAH-422-0496, MAH-422-0755, MAH-616-0588

I:\ProjectData\MAH\96556_422_3.90\Design\Structures\MAH289_0007L\Sheets\96556_0390CE0001.dgn Sheet 2/28/2020 10:12:30 AM mchoney

