

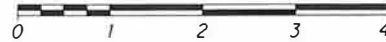
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LOCATION MAP

LATITUDE: 41°2'59" LONGITUDE: 81°20'50"

SCALE IN MILES



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

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:
RURAL PRINCIPAL ARTERIAL SLM 0.00 TO SLM 7.51
URBAN PRINCIPAL ARTERIAL SLM 8.15 TO SLM 8.50
NHS PROJECT -----YES

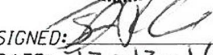
DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES	
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.	
	Call Before You Dig 1-800-362-2764
(Non-members must be called directly)	
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988	

PLAN PREPARED BY:
ODOT - DISTRICT 4 PLANNING & ENGINEERING
2088 SOUTH ARLINGTON RD.
AKRON, OH 44306

ENGINEERS SEAL:

SIGNED: 
DATE: 12-12-16

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	7/18/14	TC-41.20	10/18/13			800	1/20/17
BP-4.1	7/19/13	TC-52.10	10/18/13			821	4/20/18
		TC-64.10	7/17/15			832	1/17/14
DM-4.3	1/15/16	TC-65.10	1/17/14			843	4/18/03
DM-4.4	1/15/16	TC-65.11	7/18/14			921	4/20/18
		TC-71.10	1/17/14				
MT-95.31	7/18/14						
MT-95.32	7/18/14						
MT-97.10	7/18/14						
MT-97.12	7/18/14						
MT-99.20	7/19/13						
MT-101.90	7/17/15						
MT-105.10	7/19/13						
RM-1.1	7/18/14						

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

POR-43-0.00

SUFFIELD AND BRIMFIELD TOWNSHIPS PORTAGE COUNTY

INDEX OF SHEETS:

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PROJECT DESCRIPTION

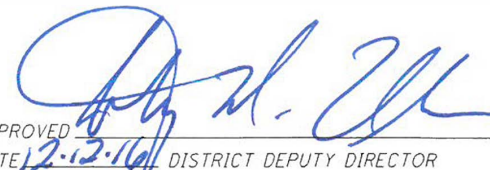
IMPROVING OF 7.86 MILES OF SR 43 IN PORTAGE COUNTY BY PLANING AND RESURFACING INCLUDING PARTIAL DEPTH REPAIRS AND MINOR BRIDGE REPAIRS.

PROJECT EARTH DISTURBED AREA: 4.56 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOI AREA: N/A (MAINTENANCE PROJECT)

2016 SPECIFICATIONS

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

I HEREBY APPROVED 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 
DATE 12-13-16 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

POR-43-0.00

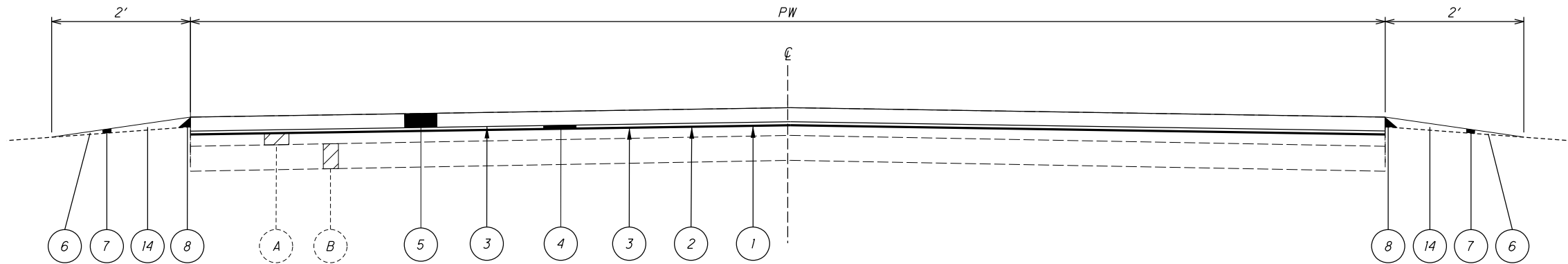
RAILROAD INVOLVEMENT
NONE

CONSTRUCTION PROJECT NO.

PID NO.
88893

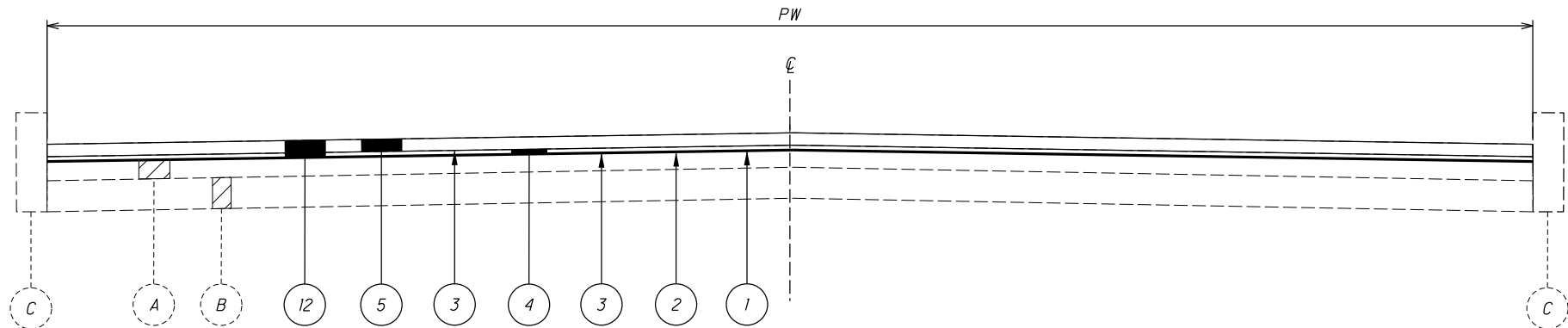
FEDERAL PROJECT NO.
E130(389)

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TYPICAL SECTION 1

TYPICAL SECTION #1				
ROUTE	SLM		LENGTH (MILES)	PW (FT)
	FROM	TO		
SR-43	0.00	2.07	2.07	25
SR-43	2.07	2.66	0.59	25
SR-43	2.82	3.56	0.74	26
SR-43	3.56	3.95	0.39	30
SR-43	3.95	4.99	1.04	31
SR-43	4.99	5.01	0.02	34
SR-43	5.01	7.51	2.50	31



TYPICAL SECTION 2

TYPICAL SECTION #2				
ROUTE	SLM		LENGTH (MILES)	PW (FT)
	FROM	TO		
SR-43	2.66	2.73	0.07	35
SR-43	2.75	2.82	0.07	35

LEGEND

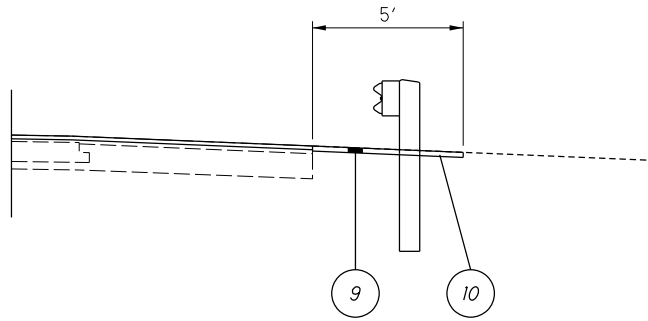
- 1 407, NON-TRACKING TACK COAT @ 0.09 GAL/SY
- 2 422, SINGLE CHIP SEAL, TYPE A
- 3 407, NON-TRACKING TACK COAT @ 0.06 GAL/SY
- ** 4 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448) (VARIES 1/2" TO 1 1/2")
- 5 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (446), AS PER PLAN (PG 70-22M) (T=1 1/4")
- 6 408, PRIME COAT, AS PER PLAN @ 0.40 GAL/SY
- 7 617, COMPACTED AGGREGATE, AS PER PLAN (T=2")
- 8 SAFETY EDGE, SEE SHEET 4 FOR DETAILS
- 9 209, LINEAR GRADING, AS PER PLAN
- 10 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448) UNDER GUARDRAIL, AS PER PLAN
- 11 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (446), AS PER PLAN (T=1 3/4")
- 12 254, PAVEMENT PLANING, ASPHALT CONCRETE (T=2")
- 13 254, PAVEMENT PLANING, ASPHALT CONCRETE (T=3")
- * 14 618, EDGE LINE RUMBLE STRIPE (ASPHALT CONCRETE) (SLM 0.00 TO SLM 2.07)

- A EXISTING ASPHALT CONCRETE SURFACE
- B EXISTING ASPHALT BASE
- C EXISTING CURB
- D EXISTING GUARDRAIL

* ONLY APPLIES TO SLM 0.00-2.07

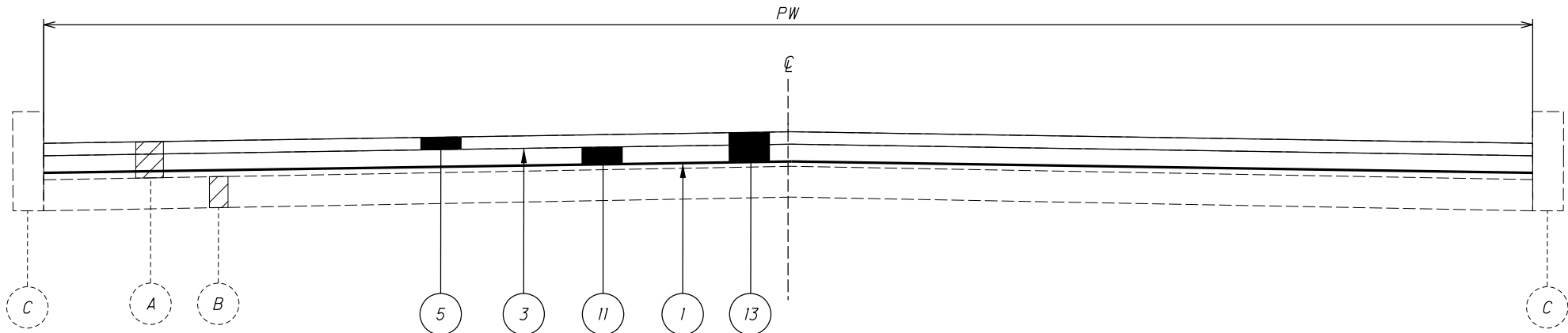
** TO BE USED ALONG SR 43 IN AN EFFORT TO RE-ESTABLISH THE CROWN (ASPHALT SHALL VARY 1/2" TO 1 1/2").

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TYPICAL SECTION 3

ROUTE	SLM		LENGTH (MILES)	LOCATION OF GUARDRAIL
	FROM	TO		
SR-43	1.19	1.24	0.05	L
SR-43	1.77	1.83	0.06	L
SR-43	1.83	1.87	0.04	R
SR-43	1.87	1.91	0.04	L/R
SR-43	1.91	1.92	0.01	L
SR-43	3.56	3.57	0.01	R
SR-43	3.57	3.61	0.04	L/R
SR-43	3.69	3.80	0.11	L
SR-43	3.95	4.00	0.05	L
SR-43	4.30	4.31	0.01	L
SR-43	4.31	4.61	0.30	L/R
SR-43	4.61	4.62	0.01	R
SR-43	4.84	4.99	0.15	L/R
SR-43	4.99	5.01	0.02	L
SR-43	5.71	5.75	0.04	L/R
SR-43	6.37	6.42	0.05	R



TYPICAL SECTION 4

ROUTE	SLM		LENGTH (MILES)	PW (FT)
	FROM	TO		
SR-43	8.15	8.26	0.11	68.5
SR-43	8.31	8.50	0.19	68.5

LEGEND
SEE SHEET 2 FOR LEGEND

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SAFETY EDGE (ASPHALT CONCRETE)

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETY SLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

- TRANSTECH SYSTEMS, INC.
1594 STATE STREET
SCHENECTADY, NY 12304
1-800-724-6306
WWW.TRANSTECHSYS.COM
- ADVANT-EDGE PAVING EQUIPMENT LLC
P.O. BOX 9163
NISKAYUNA, NY 12309-0163
518-280-6090
WWW.ADVANTAEDGEPAVING.COM
- CARLSON SAFETY EDGE END GATE
18425 50TH AVENUE EAST
TACOMA, WA 98446
253-875-8000

TROXLER ELECTRONIC LABORATORIES, INC.
3008 E. CORNWALLIS RD.
RESEARCH TRIANGLE PARK, NC 27709
1-877-TROXLER
WWW.TROXLERLABS.COM

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. THE MATERIAL REMOVED DURING THIS PROCESS SHOULD BE REMOVED IMMEDIATELY. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

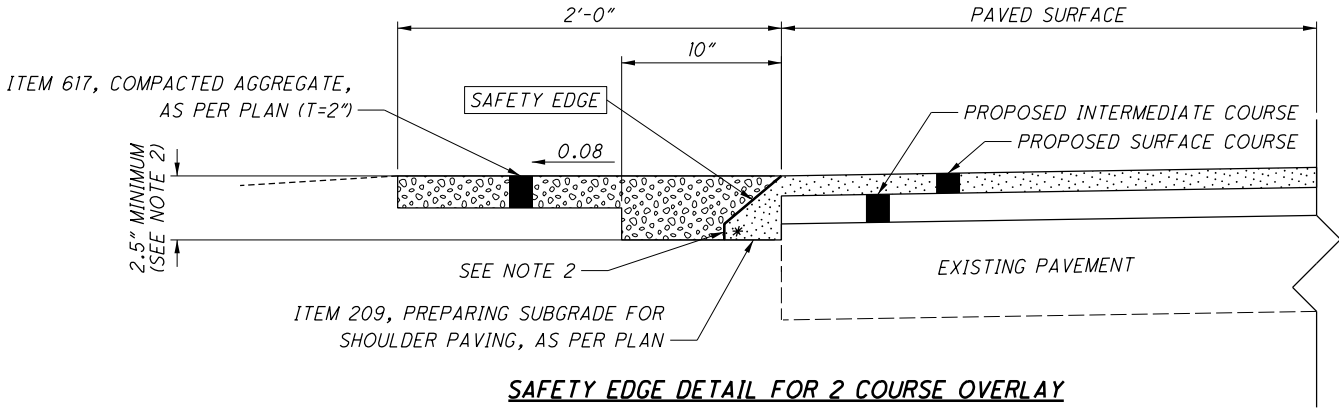
NOTES:

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
- 2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6". CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6".
- 3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

* 40° MAX

ESTIMATED QUANTITIES

ROUTE	SAFETY EDGE THICKNESS (IN.)	S.L.M TO S.L.M.			SIDE	209	441
						PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN (PG70-22M)
						STA	CY
43	2.5	0.00	TO	2.66	L/R	280.9	27.05
43	2.5	2.82	TO	7.51	L/R	495.3	47.69
TOTALS CARRIED TO GENERAL SUMMARY						777	75



SAFETY EDGE DETAIL FOR 2 COURSE OVERLAY

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UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 330-786-3145 KEN GREENE

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.

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

Aqua Ohio
ATTN: Jacob Flanary
870 3rd Street, NW.
Massillon, OH 44647
330-832-5764 EXT:50650

Enervest Operating L.L.C.
ATTN: Veronica Day
125 State Route 43
Hartville, OH 44632
330-587-1074

AT&T
The Ohio Bell Telephone Company
ATTN: Cindy Zuchegno
50 W. Bowery St.
4th Floor
Akron, OH 44308
330-384-3561

Level 3 Communications
ATTN: Marvin Muncy
106 S. Arlington Road
Akron, OH 44306
419-304-5190 Cell

PEP Drilling Company
ATTN: Brooks Yarbrough
2120 Brentwood Dr.
Akron, OH
330-697-4090

Buckeye Partners, L.P.
ATTN Tim Joseph
4911 East High Street
P.O. Box 542
Mantua, OH 44255
330-274-2470 ext. 100

Portage County Water Resources
County Administration Building, 3rd Floor
ATTN: Louie Munoz
449 South Meridian Street
Ravenna, OH 44266
330-297-3670

City of Akron
Water Distribution Division
ATTN: George Thomas
166 S. High St
Room 603
Akron, OH 44308
330-375-2690 ext. 6418

Ohio Edison
ATTN: David L. Miller
1910 W. Market Street
Building #1
Akron, OH 44313
330-436-4055

City of Kent Water and Water
Reclamation Division
930 Overholt Drive
PO Box 5192
Kent, OH 44240
330-678-8105

Range Resources - Appalachia, LLC
ATTN: Ed Haas
125 State Route 43
P.O. Box 550
Hartville, OH 44632

Dominion East Ohio
ATTN: Bryan D. Dayton
320 Springside Drive, Suite 320
Akron, OH 44333
Office: 330-664-2409

Sunoco Pipeline, LP
ATTN: JoMarie Jenkins
525 Fritztown Road
Sinking Spring, PA 19608
610-670-3256

Spellman Pipeline
ATTN: Mark Wetzel
9081 SR 250
Strausburg, OH 44680
330-878-5589

Time Warner Cable
ATTN: Carl Price
8385 Bavaria Road
Macedonia, OH 44056
330-963-3620 ext. 12165551169

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) (DRIVEWAYS), AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF PAVING ALL EXISTING DRIVEWAYS THAT DO NOT HAVE A CURB CUT OR ARE NOT PAVED AS AN INTERSECTION AS SHOWN ON THE ASPHALT CONCRETE PLAN SHEET. DRIVEWAYS ARE TO BE PAVED A DISTANCE OF 4 FT. FROM THE EDGE OF PAVED SHOULDER UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DRIVEWAYS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. ASPHALT CONCRETE AVERAGE THICKNESSES SHALL BE 2 IN. FOR AGGREGATE DRIVEWAYS (UNIMPROVED) AND 1 IN. FOR IMPROVED DRIVEWAYS. AGGREGATE DRIVEWAYS SHALL BE GRADED PRIOR TO PAVING SUCH THAT SURFACE DRAINAGE DOES NOT ENCROACH UPON THE PAVED SHOULDER. THE MAXIMUM PAVED WIDTH SHALL NOT EXCEED THAT ALLOWED FOR THROAT AND RADIUS FOR UNCURBED DRIVEWAYS AS PER STANDARD DRIVE DESIGN MANUAL. ALL GRADING, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE DRIVEWAYS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (448) (DRIVEWAYS), AS PER PLAN.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

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.

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

ROUTE	S.L.M. TO	S.L.M.	LANE WIDTH
SR 43	0.00	7.51	11'
SR 43	8.15	8.50	12'

INTERSECTIONS

INTERSECTIONS WILL BE RESURFACED 2 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE OR WITH THE MAINLINE PAVEMENT IF THIS CAN BE ACCOMPLISHED WITHOUT CHANGING THE VELOCITY AND DIRECTION OF THE PAVER. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE ASPHALT SURFACE COURSE.

LINEAR GRADING

SHOULDER WIDTH BEYOND THE LIMITS OF THE COMPACTED AGGREGATE WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE AND WILL BE PERFORMED ONLY IN THE AREAS NECESSARY. THIS WORK WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. THE AREAS FOR THE WORK WILL BE MARKED BY THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES WILL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY OTHER OPERATION.

GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF, OR ADDITION OF MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. EXCESS MATERIAL WILL BE WINDROWED ON THE SHOULDER. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

SEEDING AND MUCHING, FERTILIZER AND LIME WILL BE PERFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER THE LINEAR GRADING.

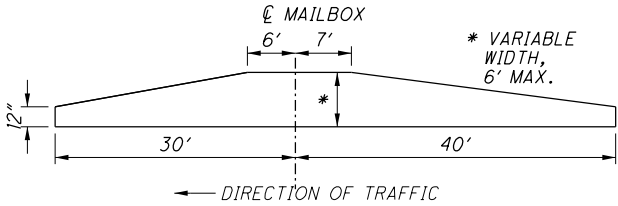
THE QUANTITY OF ITEM 209 IS NOT PERMITTED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

209, LINEAR GRADING, 298 STA.
659, SEEDING AND MULCHING, 16542 SQ YD
659, COMMERCIAL FERTILIZER, 2.24 TON
659, LIME, 3.42 ACRES
659, WATER, 89 M. GAL.

PAVED MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES WILL BE PAVED WITH ASPHALT CONCRETE AS PER TYPICAL SHOWN OR AS NEAR AS PRACTICAL. AGGREGATE APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS; IMPROVED APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS. THE CONTRACTOR SHALL PAVE THE MAILBOX APPROACHES WITH THE MAINLINE AND SHOULDERS, ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (446), AS PER PLAN (PG 70-22M).



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ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (DRIVEWAYS), AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF PAVING ALL EXISTING DRIVEWAYS THAT DO NOT HAVE A CURB CUT OR ARE NOT PAVED AS AN INTERSECTION AS SHOWN ON THE ASPHALT CONCRETE PLAN SHEET. DRIVEWAYS ARE TO BE PAVED A DISTANCE OF 4 FT. FROM THE EDGE OF PAVED SHOULDER UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DRIVEWAYS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. ASPHALT CONCRETE AVERAGE THICKNESSES SHALL BE 2 IN. FOR AGGREGATE DRIVEWAYS (UNIMPROVED) AND 1 IN. FOR IMPROVED DRIVEWAYS. AGGREGATE DRIVEWAYS SHALL BE GRADED PRIOR TO PAVING SUCH THAT SURFACE DRAINAGE DOES NOT ENCROACH UPON THE PAVED SHOULDER. THE MAXIMUM PAVED WIDTH SHALL NOT EXCEED THAT ALLOWED FOR THROAT AND RADIUS FOR UNCURBED DRIVEWAYS AS PER STANDARD DRIVE DESIGN MANUAL. ALL GRADING, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE DRIVEWAYS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (DRIVEWAYS), AS PER PLAN.

COMMUNITY NOTIFICATION

THE CONTRACTOR WILL ADVISE THE ODOT PROJECT ENGINEER A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST ALSO PROVIDE NOTIFICATION TO THE ODOT PROJECT ENGINEER A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO ANY LANE RESTRICTIONS OR CLOSURES. THE ODOT PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE ODOT DISTRICT PUBLIC INFORMATION OFFICER FOR USE TO NOTIFY EMERGENCY SERVICES AND THE PUBLIC A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF PROJECT CONSTRUCTION. INCLUDED IN THIS NOTIFICATION WILL BE THE PROPOSED LANE RESTRICTIONS, ROAD CLOSURES AND DETOURS REQUIRED BY THE PROJECT.

CITY OF AKRON PRECONSTRUCTION NOTIFICATION

THE AKRON WATERSHED DIVISION, MUST RECEIVE PRECONSTRUCTION NOTIFICATION. FURTHER, AT LEAST FIFTEEN (15) CALENDAR DAYS PRIOR TO THE BEGINNING OF ANY WORK INCLUDING INSTALLATION OF MAINTENANCE OF TRAFFIC SIGNAGE, STAGING OF EQUIPMENT AND/OR MATERIALS, ETC., WITHIN 1000 FEET OF MOGADORE RESERVOIR, THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE AKRON WATERSHED DIVISION.

INFORMATION REQUIRED AS PART OF THE PRECONSTRUCTION NOTIFICATION SHALL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS 2) CONTRACTOR AND ODOT, DISTRICT 4 CONSTRUCTION REPRESENTATIVE CONTACT INFORMATION 3) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE POR-43-0488 (SFN: 670151) BRIDGE REHABILITATION 4) ONE COPY OF THE CONSTRUCTION PLANS

THE CONTRACTOR SHALL COMPILE THE ABOVE PRECONSTRUCTION NOTIFICATION AND SUBMIT IT TO:

JESSICA GLOWCZEWSKI, SUPERINTENDENT AKRON WATERSHED DIVISION 1570 RAVENNA RD. KENT, OHIO 44240 JGLOWCZEWSKI@AKRONOHIO.GOV OFFICE (330) 678-0077 EXT. 437

A COPY OF THE NOTIFICATION SHALL BE PROVIDED TO THE ODOT PROJECT ENGINEER. THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE PRECONSTRUCTION NOTIFICATION.

MOGADOR RESERVOIR PUBLIC ACCESS

PUBLIC USE OF MOGADOR RESERVOIR SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE PUBLIC AND REMAINING MOGADOR RESERVOIR PROPERTY. ADVANCE NOTICE OF THE CONSTRUCTION SCHEDULE SHALL BE PROVIDED TO THE PROJECT ENGINEER AND THE CITY OF AKRON WATERSHED DIVISION BY THE CONTRACTOR NO LESS THAN FIFTEEN (15) CALENDAR DAYS PRIOR TO CONSTRUCTION ACTIVITIES. NOTICES SHALL ALSO BE POSTED IN AREAS THAT CAN BE EASILY SEEN BY USERS OF THE MOGADOR RESERVOIR FACILITIES.

BEST MANAGEMENT PRACTICES

WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER. SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL AND STANDARD DRAWINGS SHALL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.

ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBIT THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS/WETLANDS. AREAS DISTURBED BY THE PROJECT SHALL BE SEEDED/REVEGETATED AND MULCHED DURING CONSTRUCTION TO ENCOURAGE ESTABLISHMENT OF VEGETATION COVER, DECREASE EROSION AND PREVENT EROSION OF SEDIMENTS INTO WATERS OF THE UNITED STATES.

ALL WASTE MATERIALS GENERATED MUST BE IMMEDIATELY REMOVED TO AN UPLAND SITE. IMMEDIATE REMOVAL IS DEFINED BY THE UNITED STATES ARMY CORPS OF ENGINEERS AS DEPOSITING THE REMOVED MATERIALS DIRECTLY INTO A TRUCK AND REMOVING THE MATERIAL FROM THE SITE. PLACEMENT OF REMOVED MATERIALS INTO WETLANDS OR ON STREAM AND/OR RESERVOIR BANKS/CAUSEWAY EMBANKMENT EVEN TEMPORARILY IS CONSIDERED A FILL AND IS PROHIBITED.

CONSTRUCTION AND DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING MOGADOR RESERVOIR, WETLANDS OR OTHER WATERS OF THE UNITED STATES. ANY MATERIAL THAT DOES FALL INTO MOGADORE RESERVOIR, WETLANDS OR OTHER WATERS OF THE UNITED STATES SHALL BE IMMEDIATELY REMOVED.

PAINTING AND SEALING OPERATIONS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT OR OTHER MATERIALS USED TO REPAIR, CLEAN, PAINT, SEAL OR TREAT ANY STRUCTURE FROM ENTERING MOGADORE RESERVOIR, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

MOGADOR RESERVOIR AVOIDANCE

MOGADOR RESERVOIR, WHICH IS FED BY THE LITTLE CUYAHOGA RIVER, IS OWNED AND MAINTAINED BY THE CITY OF AKRON. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR IMPACT MOGADOR RESERVOIR. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT MOGADOR RESERVOIR AND ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED IN THE PLAN SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES AND/OR UTILITIES.

THE CONTRACTOR SHALL DEVELOP A SPILL CONTAINMENT AND CLEANUP PLAN PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES IN PROXIMITY OF THE RESERVOIR AND PARTICULAR ATTENTION SHALL BE GIVEN TO DRAINAGE WAYS, DITCHES, WETLANDS AND OPEN WATER AREAS. APPROPRIATELY DESIGNED EROSION CONTROLS SHALL BE UTILIZED AND ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY MAINTAINED UNTIL FINAL PROJECT SITE STABILIZATION IS ACHIEVED AND ACCEPTED BY THE ENGINEER. EQUIPMENT AND MATERIAL STAGING AREAS SHALL BE KEPT AWAY FROM MOGADOR RESERVOIR, WETLANDS, AND OTHER WATERS OF THE UNITED STATES TO THE EXTENT PRACTICABLE. IDLE EQUIPMENT, PETROCHEMICALS AND TOXIC/HAZARDOUS MATERIALS SHOULD NOT BE STORED IN PROXIMITY OF MOGADOR RESERVOIR, WETLANDS AND/OR OTHER WATERS OF THE UNITED STATES. ALL PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER AND UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DISCHARGE ANY PETROCHEMICALS AND/OR TOXIC AND HAZARDOUS MATERIALS.

ANY SPILLS OF FUELS, OILS, CHEMICALS OR OTHER TOXIC/HAZARDOUS MATERIALS SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR AND REPORTED TO THE PROJECT ENGINEER. IN EACH CASE WHERE THERE IS AN INCIDENT OF HAZARDOUS MATERIAL SPILL, DISCHARGE IN A REPORTABLE QUANTITY AND/OR ANY SPILL THAT COULD POSE A RISK TO SURFACE WATER OR GROUNDWATER, THE CONTRACTOR SHALL, AS SOON AS POSSIBLE, NOTIFY THE PROJECT ENGINEER AND THE FOLLOWING AGENCIES:

BRIMFIELD FIRE DEPARTMENT 1333 TALLMADGE RD. KENT, OH 44240 (330) 678-9244 -- EMERGENCY 911

BRIMFIELD TOWNSHIP POLICE DEPARTMENT, (330) 673-7716 --- EMERGENCY 911

CITY OF AKRON WATERSHED DIVISION OFFICE (330) 678-0077

OHIO EPA SPILL REPORTING - 24 HOUR EMERGENCY SERVICE 800-282-9378

PROVIDE AS MUCH OF THE FOLLOWING INFORMATION AS POSSIBLE:

- 1. TIME OBSERVED
- 2. LOCATION
- 3. MATERIAL RELEASED
- 4. PROBABLE SOURCE
- 5. VOLUME & DURATION
- 6. PRESENT & ANTICIPATED MOVEMENT OF CONTAMINANT
- 7. PERSONNEL ON SCENE
- 8. ACTIONS ALREADY INITIATED
- 9. PERSON(S) ON THE SCENE TO CONTACT

THE CONTRACTOR SHALL DEVELOP A SPILL CONTAINMENT AND CLEANUP PLAN PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES.

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 209, LINEAR GRADING AS PER PLAN, AND PAVING UNDER THE GUARDRAIL USING 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING AS PER PLAN, SHALL CONSIST OF EXCAVATING TOPSOIL, AND PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

- METHOD A:
- 1. SET GUARDRAIL POSTS
 - 2. PLACE ITEM 441

- METHOD B:
- 1. PLACE ITEM 441
 - 2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
 - 3. SET GUARDRAIL POSTS
 - 4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COM-PACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, (448), UNDER GUARDRAIL, AS PER PLAN.

CALCULATED	GAD	CHECKED	CNC
GENERAL NOTES			
POR-43-0.00			
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ENDANGERED BAT HABITAT REMOVAL

THE 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. FOR THE PURPOSES OF THIS NOTE, 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.

THE UNDERSIDE OF BRIDGE STRUCTURE NO. POR-43-0488 AND POR-43-0826 SHALL BE CAREFULLY EXAMINED FOR THE PRESENCE OF BATS, ESPECIALLY FROM APRIL 1 TO SEPTEMBER 30. IF ANY BATS ARE FOUND ROOSTING ON THE UNDERSIDE OF THE BRIDGE, ODOT-OES (614-466-7100) SHALL BE NOTIFIED AND THE US FISH AND WILDLIFE SERVICE, ECOLOGICAL SERVICES DIVISION SHALL BE CONTACTED OR PROVIDED WITH INFORMATION.

OPEN WATER/WETLANDS/STREAMS AVOIDANCE

NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE PERFORMED IN ANY OPEN WATER, WETLANDS, STREAMS OR OTHER WATERS OF UNITED STATES. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY OPEN WATER, WETLANDS, STREAMS OR OTHER WATERS OF THE UNITED STATES. NATURAL BUFFERS ADJACENT TO OPEN WATER, WETLANDS AND STREAMS SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE. EXISTING RIPARIAN HABITATS SHOULD BE MAINTAINED TO MAXIMUM EXTENT PRACTICABLE AND EQUIPMENT AND STAGING AREAS SHALL BE KEPT WELL AWAY FROM OPEN WATER, WETLANDS AND STREAMS TO THE EXTENT PRACTICABLE. ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBIT THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS/WETLANDS.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 422 SINGLE CHIP SEAL TIME RESTRICTIONS

THE CONTRACTOR IS REQUIRED TO HAVE A ONE (1) DAY WAITING PERIOD BETWEEN THE TIME THE INTERLAYER CHIP SEAL IS PLACED AND THE OVERLYING ASPHALT CONCRETE COURSE IS PLACED. AFTER THE WAITING PERIOD, THE CONTRACTOR HAS A MAXIMUM OF THREE (3) DAYS TO COVER UP THE CHIP SEAL.

ITEM 441- ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (446), AS PER PLAN (PG70-22M)

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED SR OR SRH ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

JOINT CORING AS PER 446.04 WILL NOT BE REQUIRED FOR ALL ASPHALT CONCRETE PLACED WITH COLD LONGITUDINAL JOINTS USING VOID REDUCING ASPHALT MEMBRANE (VRAM). THE CONTRACTOR WILL BE REQUIRED TO USE THE SAME COLD JOINT CONSTRUCTION TECHNIQUES, EQUIPMENT AND ROLLER PATTERNS USED ON THE REMAINDER OF PROJECT WHEN CONSTRUCTING ASPHALT CONCRETE IN THE VRAM SECTIONS. OBTAIN 10 MAT CORES FOR EACH LOT OF MATERIAL PER 446.04. PAY FACTORS FOR EACH LOT OF MATERIAL WILL BE DETERMINED PER TABLE 446.04-2.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

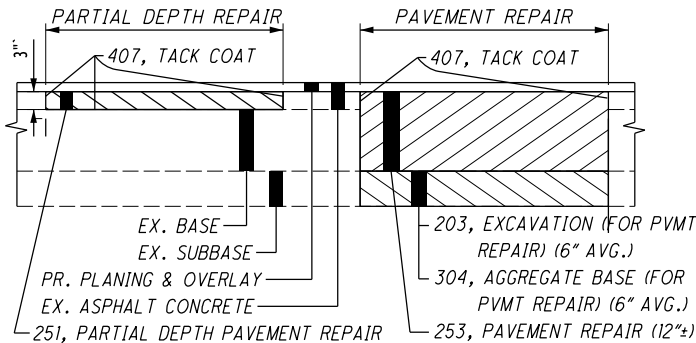
SIEVE	TOTAL PERCENT PASSING
1-1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (44I)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE 1 PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF SECTION PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
251, PARTIAL DEPTH PAVEMENT REPAIR (44I), 800 SQ. YD.

ITEM 253 - PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12"+ 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
253, PAVEMENT REPAIR, 800 SQ YD
255, FULL DEPTH PAVEMENT SAWING, 100 FT



ITEM 203 - EXCAVATION (FOR PAVEMENT REPAIR)

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
203, EXCAVATION (FOR PAVEMENT REPAIR) 134 CU YD

ITEM 304 - AGGREGATE BASE (FOR PAVEMENT REPAIR)

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
304, AGGREGATE BASE (FOR PAVEMENT REPAIR) 134 CU YD

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE

THERE ARE 7 EXISTING MONUMENT BOXES TO ADJUST TO GRADE. THE CONTRACTOR WILL BE PROVIDED A LOCATION LIST OF THE EXISTING MONUMENTATION WHICH ARE TO BE ADJUSTED TO GRADE. THE LIST MAY INCLUDE BOTH EXPOSED AND BURIED MONUMENTATION AND MAY ALSO INCLUDE SOME TIES TO AID IN RECOVERY.

623, MONUMENT BOX ADUSTED TO GRADE, 7 EACH

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO ADJUST ITEMS TO GRADE:

611, CATCH BASINS ADJUSTED TO GRADE, 15 EACH

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ITEM 690 SPEICAL - VOID REDUCING ASPHALT MEMBRANE (VRAM)

GENERAL. AS PART OF THIS PROJECT, THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT SECTIONS OF COLD LONGITUDINAL JOINTS USING VOID REDUCING ASPHALT MEMBRANE (VRAM) MATERIAL AT SPECIFIED LOCATIONS. PROVIDE ADDITIONAL CORES SAMPLES, LOOSE MIX SAMPLES AND LIQUID MATERIAL SAMPLES AS DIRECTED BY THE ENGINEER. CONSTRUCT ALL SURFACE COURSE COLD LONGITUDINAL JOINTS FROM SLM 0.00 TO SLM 2.73, SLM 2.75 TO SLM 7.51, SLM 8.15 TO SLM 8.26, AND SLM 8.31 TO SLM 8.50 USING VRAM MATERIAL AND CONFORMING WITH THE FOLLOWING REQUIREMENTS.

MATERIALS.
PROVIDE J-BAND PRODUCED BY ASPHALT MATERIALS, INC. OR OTHER APPROVED ASPHALT MATERIAL AS FOLLOWS:

PROVIDE A BASE ASPHALT MODIFIED WITH STYRENE-BUTADIENE DIBLOCK OR TRIBLOCK COPOLYMER WITHOUT OIL EXTENSION, OR A STYRENE-BUTADIENE RUBBER ELASTOMERS. DO NOT USE AIR BLOWN ASPHALT, ACID MODIFICATION, OR OTHER MODIFIERS.

Test	Test Requirement	Test Method
Dynamic shear @ 82°C (unaged), G*/sin δ, kPa	1.00 min.	AASHTO T 315
Creep stiffness @ -18°C (unaged), Stiffness (S), MPa m-value	300 max. 0.300 min.	AASHTO T 313
Ash, %	6.0 max.	AASHTO T 111
Elastic Recovery, 100 mm elongation, cut immediately, 25°C, %	58 min.	AASHTO T 301
Separation of Polymer, Difference in °C of the softening point (ring and ball)	3 max.	ASTM D7173, AASHTO T53
Migration of VRAM, %	50-75	ITM XYZ

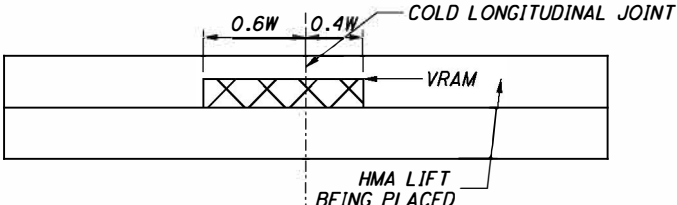
EQUIPMENT. WHEN A PRESSURE DISTRIBUTOR IS USED TO APPLY THE VRAM, EQUIP THE DISTRIBUTOR WITH A HEATING AND RECIRCULATING SYSTEM ALONG WITH A FUNCTIONING AUGER AGITATING SYSTEM OR VERTICAL SHAFT MIXER IN THE HAULING TANK TO PREVENT LOCALIZED OVERHEATING.

WHEN A MELTER KETTLE IS USED TO TRANSPORT AND APPLY THE VRAM, USE ONLY OIL JACKETED DOUBLE-BOILER MELTER KETTLES WITH AGITATING AND RECIRCULATING SYSTEMS. MATERIAL FROM THE KETTLE MAY BE DISPENSED THROUGH A PRESSURE FEED WAND WITH AN APPLICATOR SHOE OR THROUGH A PRESSURE FEED WAND INTO A HAND-OPERATED 'THERMAL PUSH CART.'

PREPARATION OF SURFACE. PRIOR TO PLACING VRAM, CLEAN THE PAVEMENT SURFACE AREA TO BE TREATED OF ALL FOREIGN MATERIALS DEEMED DETRIMENTAL BY THE ENGINEER. ONLY APPLY VRAM TO SURFACES THAT ARE DRY AND CLEANED OF ALL DUST, DEBRIS, AND ANY SUBSTANCES THAT WILL PREVENT THE VRAM FROM ADHERING. THE VRAM MAY BE PLACED BEFORE OR AFTER THE TACK COAT PLACEMENT. WHEN PLACED AFTER THE TACK COAT, ENSURE THE TACK COAT IS FULLY CURED PRIOR TO PLACEMENT OF THE VRAM.

APPLICATION OF VRAM. APPLY VRAM TO COLD LONGITUDINAL JOINTS UNDER SURFACE COURSES. ONLY APPLY VRAM WHEN THE PAVEMENT SURFACE TEMPERATURE AND THE AMBIENT TEMPERATURE ARE A MINIMUM OF 40°F AND RISING.

APPLY VRAM MATERIAL ON COLD LONGITUDINAL JOINT AS DETAILED BELOW:



APPLY VRAMP AT THE WIDTH AND APPLICATION RATE REQUIRED ACCORDING TO THE FOLLOWING TABLE:

VRAM Application Rate Table		
Overlay Thickness, (in.)	VRAM Width, "W", (in.)	Application Rate ^[1] , (lb/ft)
HMA Mixtures ^[2]		
1	15	0.95
1 ¼	15	1.09
1 ½	15	1.22
1 ¾	15	1.36
2	15	1.49
2 1/4	15	1.62
2 ½	15	1.76
2 ¾	15	1.89
3	15	2.03
3 1/4	15	2.16
3 ½	15	2.30
3 ¾	15	2.43
4	15	2.57
SMA Mixtures ^[2]		
1 ½	12	0.83
1 ¾	12	0.92
2	12	1.00

[1] THE APPLICATION RATE HAS A SURFACE DEMAND FOR LIQUID INCLUDED WITHIN IT. THE NOMINAL THICKNESS OF THE VRAM MAY TAPER FROM THE CENTER OF THE APPLICATION TO A LESSER THICKNESS ON THE EDGE OF THE APPLICATION. THE WIDTH AND WEIGHT/FOOT SHALL BE MAINTAINED.

[2] IN THE EVENT OF A JOINT BETWEEN AN SMA AND HMA MIXTURE, THE SMA APPLICATION RATE WILL BE USED.

APPLY VRAM IN A SINGLE PASS WITH A PRESSURE DISTRIBUTOR, MELTER KETTLE, OR HAND APPLIED FROM A ROLL, FOR ASPHALT COURSES UP TO 2 IN. (50 MM) IN THICKNESS. APPLY VRAM IN TWO PASSES FOR ASPHALT COURSES BETWEEN 2 AND 4 IN. (50 AND 100 MM) IN THICKNESS. ENSURE THE APPLIED WIDTH OF VRAM IS WITHIN 1.5 IN. (38 MM) OF THE WIDTH SPECIFIED. IF THE VRAM FLOWS MORE THAN 2 IN. (50 MM) FROM THE INITIAL PLACEMENT WIDTH, IMMEDIATELY STOP PLACEMENT OF VRAM AND PERFORM CORRECTIVE ACTIONS. COORDINATE THE APPLICATION OF VRAM AND PLACEMENT OF THE ASPHALT MIXTURE TO ENSURE THE CENTER OF THE VRAM APPLICATION IS WITHIN 2.0 IN. (50 MM) OF THE CENTER OF THE ASPHALT PAVEMENT COLD JOINT BEING CONSTRUCTED.

IF THE VRAM MATERIAL WILL BE EXPOSED TO TRAFFIC PRIOR TO CLOSING THE LONGITUDINAL JOINT, SHIFT THE LOCATION OF THE CENTERLINE OF THE VRAM MATERIAL ABOUT THE JOINT CENTERLINE SUCH THAT NO MORE THAN A NOMINAL 6 IN (152 MM) OF MATERIAL IS EXPOSED. DO NOT OPEN TO TRAFFIC IF WIDTH OF EXPOSED VRAM MATERIAL IS GREATER THAN 6 IN. (152 MM).

IF THE PAVING OPERATION ONLY ALLOWS VRAM TO BE PLACED ON ONE SIDE OF THE COLD LONGITUDINAL JOINT AT A TIME, COAT THE VERTICAL FACE OF THE COLD LONGITUDINAL JOINT WITH VRAM MATERIAL IN ADDITION TO THE REQUIREMENTS ABOVE. DO NOT SEAL THE FACE OF COLD LONGITUDINAL JOINTS AS REQUIRED PER 401.17 WHEN USING VRAM FOR THE COLD LONGITUDINAL JOINT.

FURNISH A BILL OF LADING FOR EACH TANKER SUPPLYING MATERIAL TO THE PROJECT. VERIFY THE APPLICATION RATE OF VRAM WITHIN THE FIRST 1000 FT. (305 M) OF THE DAY'S SCHEDULED APPLICATION LENGTH AND EVERY 6000 FT. (1829 M) THE REMAINDER OF THE DAY. FOR PROJECTS LESS THAN 3000 FT. (914 M), THE RATE WILL BE VERIFIED ONCE. PLACE A SUITABLE PAPER OR PAN AT A RANDOM LOCATION IN THE PATH OF THE PLACEMENT FOR THE VRAM. AFTER APPLICATION OF THE VRAM, PICK UP THE PAPER OR PAN AND OBTAIN THE WEIGHT OF MATERIAL. CALCULATE THE WEIGHT PER FOOT OF VRAM. ENSURE THE ACTUAL WEIGHT PER FOOT OF VRAM IS WITHIN 15 PERCENT OF THE TARGET WEIGHT/FOOT FROM THE VRAM APPLICATION RATE TABLE. REPLACE THE VRAM IN THE AREAS WHERE THE SAMPLES ARE TAKEN.

WHEN BEGINNING PLACEMENT OF A RUN OF VRAM, USE A SUITABLE RELEASE PAPER TO COVER PREVIOUS VRAM APPLICATION TO PREVENT DOUBLING UP OF THICKNESS OF VRAM.

THE VRAM MUST BE SUITABLE FOR CONSTRUCTION TRAFFIC TO DRIVE ON WITHOUT PICKUP OR TRACKING WITHIN 30 MINUTES OF PLACEMENT. IF PICKUP OR TRACKING OCCURS, IMMEDIATELY STOP PLACEMENT OF VRAM AND REPAIR DAMAGED AREAS.

PRIOR TO START OF PAVING, ENSURE THE PAVER END PLATE AND ANY GRADE CONTROL DEVICES ARE ADEQUATELY RAISED ABOVE THE FINISHED HEIGHT OF THE VRAM.

IMMEDIATELY STOP PLACEMENT OF ASPHALT MIXTURE AND VRAM IF FLUSHING IS NOTED IN THE ASPHALT SURFACE. DO NOT CONTINUE PLACEMENT OF THE ASPHALT MIXTURE UNTIL THE ISSUE IS CORRECTED.

METHOD OF MEASUREMENT. THE DEPARTMENT WILL MEASURE VRAM BY THE NUMBER OF FEET COMPLETED AND ACCEPTED IN PLACE.

BASIS OF PAYMENT. DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM 690, SPECIAL - VOID REDUCING ASPHALT MEMBRANE (VRAM), 44300 FT

CALCULATED
CNC
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GENERAL NOTES

POR-43-0.00

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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:
- SLM 0.00 TO SLM 7.51
1. A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT AND COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
- SLM 8.15 TO SLM 8.50
2. A MINIMUM OF TWO TEN FOOT LANES, ONE LANE IN EACH DIRECTION, SHALL BE MAINTAINED ON THE EXISTING PAVEMENT AND COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
3. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
4. 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.
5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS ONE (1) MILE.
6. ONLY DURING OFF-PEAK PERIODS (ie 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 O MUTCD 2C.28; W8-11 [UNEVEN LANES] PER O MUTCD 6F.45; AND W6-3 [TWO-WAY TRAFFIC] PER O MUTCD 6F.32. 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.
11. IR 76: TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

- THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:
- PHASE 1 - PLANED SURFACE
- 614, WORK ZONE CENTER LINE CLASS I, 642 PAINT, 0.49 MILE
- 614, WORK ZONE STOP LINE CLASS I, 642 PAINT, 200 FT
- 614, WORK ZONE CHANNELIZING LINE CLASS I, 642 PAINT, 1127 FT
- 614, WORK ZONE MARKING SIGNS (ALL PHASES) 27 EACH
- PHASE 2 - CHIP SEAL SURFACE
- 614, WORK ZONE CENTER LINE CLASS I, 642 PAINT, 7.51 MILE
- 614, WORK ZONE STOP LINE CLASS I, 642 PAINT, 57 FT
- 614, WORK ZONE CHANNELIZING LINE CLASS I, 642 PAINT, 172 FT
- PHASE 3 - ASPHALT CONCRETE INTERMEDIATE COURSE
- 614, WORK ZONE CENTER LINE CLASS I, 642 PAINT, 7.86 MILE
- 614, WORK ZONE STOP LINE CLASS I, 642 PAINT, 257 FT
- 614, WORK ZONE CHANNELIZING LINE CLASS I, 642 PAINT, 1127 FT
- PHASE 4 - ASPHALT CONCRETE SURFACE COURSE
- 614, WORK ZONE CENTER LINE CLASS III, 642 PAINT, 7.86 MILE
- 614, WORK ZONE STOP LINE CLASS III, 642 PAINT, 257 FT
- 614, WORK ZONE CHANNELIZING LINE CLASS III, 642 PAINT, 1127 FT
- TO BE USED AS DIRECTED BY THE ENGINEER
- 614, WORK ZONE EDGE LINE CLASS III, 642 PAINT, 15.72 MILE
- MILLED SURFACE
- THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A PLANED SURFACE SHALL BE 7 CONSECUTIVE CALENDAR DAYS.
- SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$2,000 FOR EACH DAY THE ABOVE DESCRIBED RESTRICTIONS ARE VIOLATED.
- LANE CLOSURE RESTRICTIONS (SR 43 AT IR 76 SLM 8.15-8.50)
- ALL LANES SHALL BE OPENED TO TRAFFIC DURING THE FOLLOWING TIMES:
- ALL WEEKDAYS AND WEEKENDS (6:00AM TO 7:00PM)
- SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$3000 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.
- LANE CLOSURES (IR 76)
- DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.
- THE CHART CAN BE FOUND AT:
<http://plcm.dot.state.oh.us>
- SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$3000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

- ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS)
- NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:
- | | |
|--------------|----------------|
| CHRISTMAS | FOURTH OF JULY |
| NEW YEARS | LABOR DAY |
| MEMORIAL DAY | THANKSGIVING |
- THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:
- | DAY OF HOLIDAY OR EVENT | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|------------------------------|--|
| SUNDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |
| MONDAY | 12:00N FRIDAY THROUGH 6:00 AM TUESDAY |
| TUESDAY | 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY |
| WEDNESDAY | 12:00N TUESDAY THROUGH 6:00 AM THURSDAY |
| THURSDAY | 12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY |
| THURSDAY (THANKSGIVING ONLY) | 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY |
| FRIDAY | 12:00N THURSDAY THROUGH 6:00 AM MONDAY |
| SATURDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |
- SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$3000 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.
- 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.
- 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.

- ITEM 632 - DETECTOR LOOP, AS PER PLAN
- THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-3146) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT THE FOLLOWING INTERSECTIONS:
- SR 43 AND WATERLOO RD
- SR 43 AND US 224
- SR 43 AND OLD FORGE RD
- SR 43 AND IR 76 RAMPS AD & DB
- SR 43 AND IR 76 RAMPS CA & BC
- LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS SPECIFIED BELOW. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT. ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10 AND THE LOOP SHALL BE PLACED AT THE SAME LOCATION AS THE EXISTING LOOPS.
- THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15E) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.
- 632 DETECTOR LOOP, AS PER PLAN, 18 EACH
- | | | |
|-----------|----------------------------------|-------------------|
| DECRPTION | SR 43 AND WATERLOO RD | SIZE |
| NB | RT LANE (S OF INTERSECT) | A.D.D. |
| SB | LT LANE (N OF INTERSECT) | A.D.D. |
| DECRPTION | SR 43 AND OLD FORGE RD | SIZE |
| NB | RT LANE (S OF INTERSECT) | A.D.D. |
| SB | LT LANE (N OF INTERSECT) | A.D.D. |
| DECRPTION | SR 43 AND US 224 | SIZE |
| NB | RT LANE (STOPBAR) | POWERHEAD (35 FT) |
| NB | LT TURN LANE (STOPBAR) | POWERHEAD (35 FT) |
| SB | LT TURN LANE (STOPBAR) | POWERHEAD (35 FT) |
| SB | RT LANE (STOPBAR) | POWERHEAD (35 FT) |
| DECRPTION | SR 43 AND IR 76 AT RAMPS AD & DB | SIZE |
| NB | RT LANE (S OF INTERSECT) | A.D.D. |
| NB | LT LANE (S OF INTERSECT) | A.D.D. |
| SB | LT TURN LANE | RECT. (30 FT) |
| SB | LT LANE (N OF INTERSECT) | A.D.D. |
| SB | RT LANE (N OF INTERSECT) | A.D.D. |
| DECRPTION | SR 43 AND IR 76 AT RAMPS CA & BC | SIZE |
| NB | RT LANE (S OF INTERSECT) | A.D.D. |
| NB | LT LANE (S OF INTERSECT) | A.D.D. |
| NB | LT TURN LANE | RECT. (30 FT) |
| SB | LT LANE (N OF INTERSECT) | A.D.D. |
| SB | RT LANE (N OF INTERSECT) | A.D.D. |

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SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE	CALCULATED	GAD	CHECKED	CNC
				4	5	7	7A	8	11	12	13	14	03/NHS/P V		EXT	TOTAL							
						134							134	203	10000	134	CY	ROADWAY					
					298								298	209	60200	298	STA	EXCAVATION (FOR PAVEMENT REPAIR)					
										83			83	209	60201	83	STA	LINEAR GRADING				5	
				777									777	209	72001	777	STA	LINEAR GRADING, AS PER PLAN				4	
						7							7	623	39500	7	EACH	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN					
																		MONUMENT BOX ADJUSTED TO GRADE					
					16,542								16,542	659	10000	16,542	SY	EROSION CONTROL					
					2.24								2.24	659	20000	2.24	TON	SEEDING AND MULCHING					
					3.42								3.42	659	31000	3.42	ACRE	COMMERCIAL FERTILIZER					
					89								89	659	35000	89	MGAL	LIME					
													1,000	832	30000	1,000	EACH	WATER					
																		EROSION CONTROL					
																		DRAINAGE					
													15	611	98630	15	EACH	CATCH BASIN ADJUSTED TO GRADE					
																		PAVEMENT					
													800	251	01000	800	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)					
													800	253	01000	800	SY	PAVEMENT REPAIR					
										2,875	556		3,431	254	01000	3,431	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=2")					
										12,056	195		12,251	254	01000	12,251	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3")					
													100	255	20000	100	FT	FULL DEPTH PAVEMENT SAWING					
													134	304	20000	134	CY	AGGREGATE BASE (FOR PAVEMENT REPAIR)					
													28,021	347				NON-TRACKING TACK COAT					
													6,900	408	10001	6,900	GAL	PRIME COAT, AS PER PLAN				7	
													124,820	2,112				SINGLE CHIP SEAL, TYPE A					
				75									4,753	81				ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN (PG70-22M)				7	
														</									

GENERAL SUMMARY

POR - 43 - 0.00



CALCULATED	
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POR-43-0.00



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EDGE LINE																			GENERAL SPEC:		640	
																			MATERIAL TYPE:		646	
CTY	ROUTE	TRUE LOG		FROM	TRUE LOG		TO	6" WHITE EDGE LINE			6" YELLOW EDGE LINE			COMMENTS								
		TOTAL	HIGHWAY		RAMP	TOTAL		HIGHWAY	RAMP													
POR	43	0.00		STARK CO. LINE	7.51		0.25 MILES SOUTH OF TALLMADGE ROAD	15.02		15.02												
POR	43	8.15		JUST SOUTH OF I.R. 76	8.50		JUST NORTH OF I.R. 76	0.70		0.70												
TOTAL								15.72		15.72			0									
LANE LINE																						
CTY	ROUTE	TRUE LOG		FROM	TRUE LOG		TO	TOTAL MILES	6" LANE LINE		COMMENTS											
		DASHED	SOLID																			
POR	43	8.15		JUST SOUTH OF I.R. 76	8.50		JUST NORTH OF I.R. 76	1.40		1.40												
TOTAL								1.40		1.40												
CENTER LINE																						
CTY	ROUTE	TRUE LOG		FROM	TRUE LOG		TO	TOTAL MILES	EQUIVALENT SOLID LINE		COMMENTS											
		DASHED	SOLID																			
POR	43	0.00		STARK CO. LINE	7.51		0.25 MILES SOUTH OF TALLMADGE ROAD	7.51		10.70												
POR	43	8.15		JUST SOUTH OF I.R. 76	8.50		JUST NORTH OF I.R. 76	0.35		0.70												
TOTAL								7.86		11.40												
AUXILIARY																						
CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE	STOP LINE	CROSS WALK LINES	TRANSVERSE DIAGONAL LINES		ISLAND MARKING	SYMBOL MARKINGS			LANE ARROWS					WORD ON PVMT ONLY		DOTTED LINES	COMMENTS		
						WHITE	YELLOW		RxR	SCHOOL		TURN LEFT	TURN RIGHT	THRU EACH	COMB. EACH	MERGE EACH						
										FT	FT						72"	96"			72"	96"
POR	S.R. 43 AT WATERLOO ROAD	2.466		27																		
POR	S.R. 43 AT U.S. 224	2.75	172	60								4										
POR	S.R. 43 AT FIELD HIGH SCHOOL	5.389									2											
POR	S.R. 43 AT OLD FORGE ROAD	6.574		30																		
POR	S.R. 43 AT I.R. 76 EB RAMPS	8.22	365	60								5										
POR	S.R. 43 AT I.R. 76 WB RAMPS	8.38	410	80								8										
POR	S.R. 43 AT SANCTUARY DR.	8.350	180									3										
TOTAL			1127	257							2	20										

PAVEMENT MARKING SUB SUMMARY

POR-43-0.00

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

843 DATED 04/18/2003

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

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

POR-43-0488 (MOGADORE DAM)
-PATCH ALL UNSOUND AREAS OF THE HEADWALLS
-SEAL ALL EXPOSED CONCRETE SURFACES OF THE HEADWALLS WITH EPOXY-URETHANE
-REPAIR EROSION AT THE FORWARD LEFT
-CLEARING AND GRUBBING 15' OF STRUCTURE TO REMOVE ALL VEGETATION
-PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

POR-43-0826 (OVER POR-76-0303)
-SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-PATCH ALL UNSOUND AREAS OF THE PARAPETS
-SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS WITH EPOXY-URETHANE
-REHABILITATE AND RESET THE EXISTING FORWARD AND REAR ABUTMENT BEARINGS
-CLEARING AND GRUBBING 15' OF STRUCTURE TO REMOVE ALL VEGETATION
-PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

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 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 601 -ROCK CHANNEL PROTECTION, TYPE B WITH FILTER

THIS WORK WILL CONSIST OF REPAIRING EROSION BY PLACING ROCK CHANNEL PROTECTION AT THE FORWARD LEFT OF STRUCTURE POR-43-0488. THE PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE B WITH FILTER, 3 CU. YD.

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25a) 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:

POR-43-0488 (2 APPROACH)
POR-43-0826 (2 APPROACH)

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

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 IDENTIFICATION SIGNS.

STRUCTURE POR-43-0826 (SFN:6702031) THE EXISTING SIGN SHOWS 0825. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 0826.

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 (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 F, 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 516, JACKING AND TEMPORARY SUPPORT OF SUPER-STRUCTURE, 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 CMS 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 THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 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.

DESIGN AGENCY ODOT DISTRICT 4 PLANNING & ENGINEERING		DATE 12/16/16	REVIEWED CNC	DRAWN PD	CHECKED CNC
STRUCTURE DETAILS POR-43-0488 & POR-43-0826		STRUCTURE FILE NUMBER			
POR-43-0.00 PID No. 88893		1 / 3			
		15 17			

CALC:	PD	DATE: 2/10/2016
CHECKED:		DATE:

DETAIL A
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE

DETAIL B
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET

DETAIL C
CONCRETE DECK WITH
DEFLECTOR PARAPET

DETAIL D
PRESTRESSED BOX BEAM DECK
WITH DEFLECTOR PARAPET

DETAIL E
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE

DETAIL F
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET

DETAIL G
CONCRETE DECK WITH
DEFLECTOR PARAPET

DETAIL H
PRESTRESSED BOX BEAM DECK
WITH OVER THE SIDE DRAINAGE

DETAIL I
PRECAST REINFORCED
CONCRETE BOX CULVERT

NOTES:

- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE
- DETAILS E, F, G AND H ALSO APPLY TO CONCRETE SLAB BRIDGES