

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

TRU-5 / VAR-26.01 / VAR

**BRISTOL, FARMINGTON, JOHNSTON, KINSMAN,
MESOPOTAMIA, AND VERNON TOWNSHIP**

TRUMBULL COUNTY

PROJECT DESCRIPTION

IMPROVEMENT OF 4.94 MILES OF SR 5, 2.26 MILES OF SR 87 AND 4.04 MILES OF SR 88 BY PAVEMENT PLANING AND PLACING A FINE GRADED POLYMER OVERLAY.

EARTH DISTURBED AREAS

PROJECT EDA: N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EDA: 0.25 ACRES
NOTICE OF INTENT EDA: N/A (MAINTENANCE PROJECT)

2016 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.

SEE SHEET 2 FOR LOCATION MAP

LOCATION MAP

LATITUDE: 41°23'26" LONGITUDE: 80°56'46"

DESIGN DESIGNATION

	SR 5	SR 87	SR 88
CURRENT ADT (2018)	2807	4159	3228
TRUCKS (24 HOUR B&C)	5%	6%	11%

INDEX OF SHEETS:

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DESIGN FUNCTIONAL CLASSIFICATION:

SR 5/ SR 87 / SR 88: MINOR ARTERIAL / MINOR ARTERIAL / MAJOR COLLECTOR

NHS PROJECT: SR 5/ SR 87 / SR 88: NO / NO / NO

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE
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
2088 SOUTH ARLINGTON RD
AKRON, OH 44306

ENGINEERS SEAL:



SIGNED: *M. Andrasik*
DATE: 11/5/18

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	7/18/14	TC-65.11	7/21/17	800	10/19/18
BP-4.1	7/19/13	TC-71.10	1/19/18	832	1/17/14
DM-4.3	1/15/16			846	4/17/15
DM-4.4	1/15/16			897	1/16/15
MT-97.10	7/18/14				
MT-97.12	1/20/17				
MT-99.20	7/20/18				
MT-101.90	7/21/17				
MT-105.10	7/19/13				
TC-52.10	10/18/13				
TC-52.20	7/20/18				
TC-64.10	1/20/17				
TC-65.10	1/17/14				

APPROVED
DATE 11/6/18 DISTRICT DEPUTY DIRECTOR

APPROVED
DATE 12/20/18 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
E170(445)

PID NO.
100954

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

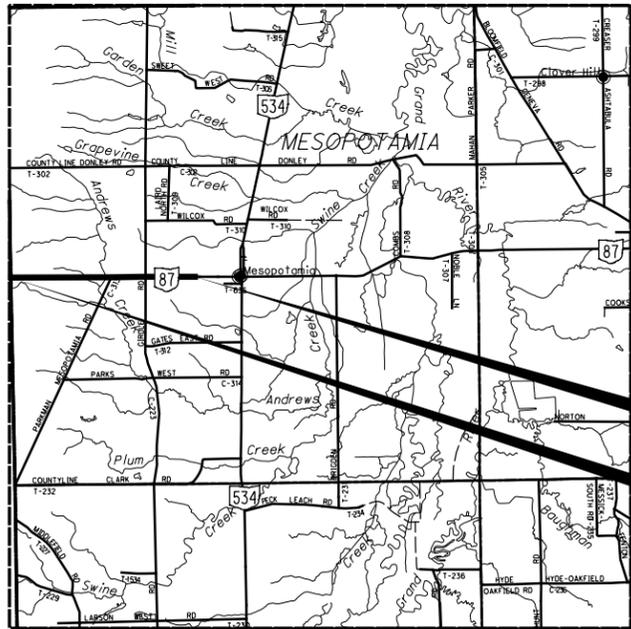
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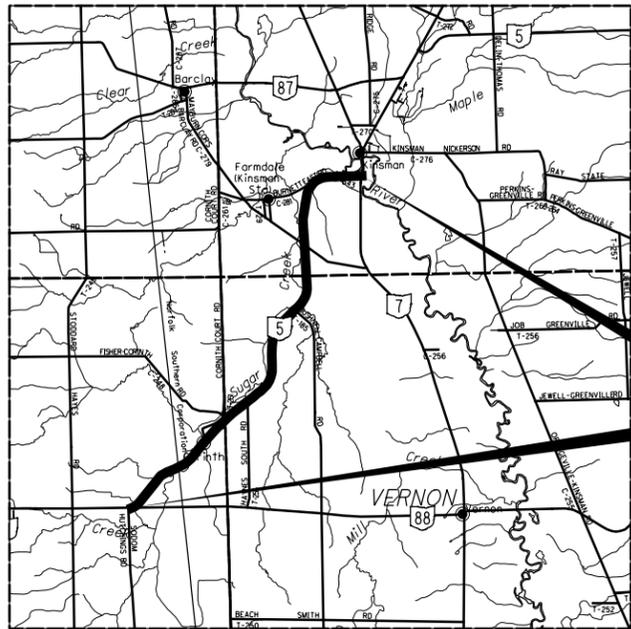
TRU - SR 5/VAR-26.00/VAR
190132 PID - 100954
Dist 4 2/21/2019

Contract Proposal Available @
www.contracts.dot.state.oh.us/home

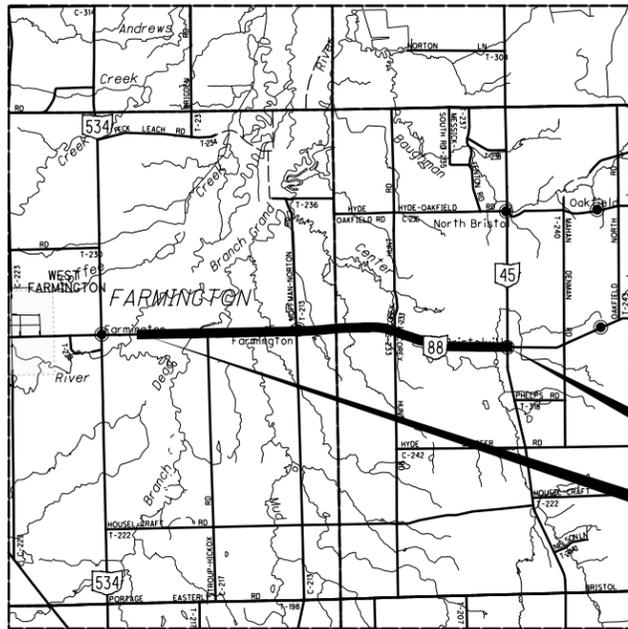
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TRU SR-87
 END PROJECT
 SLM 2.26
 BEGIN PROJECT
 SLM 0.00



TRU SR-5
 END PROJECT
 SLM 30.95
 BEGIN PROJECT
 SLM 26.01



TRU SR-88
 END PROJECT
 SLM 7.03
 BEGIN PROJECT
 SLM 2.99



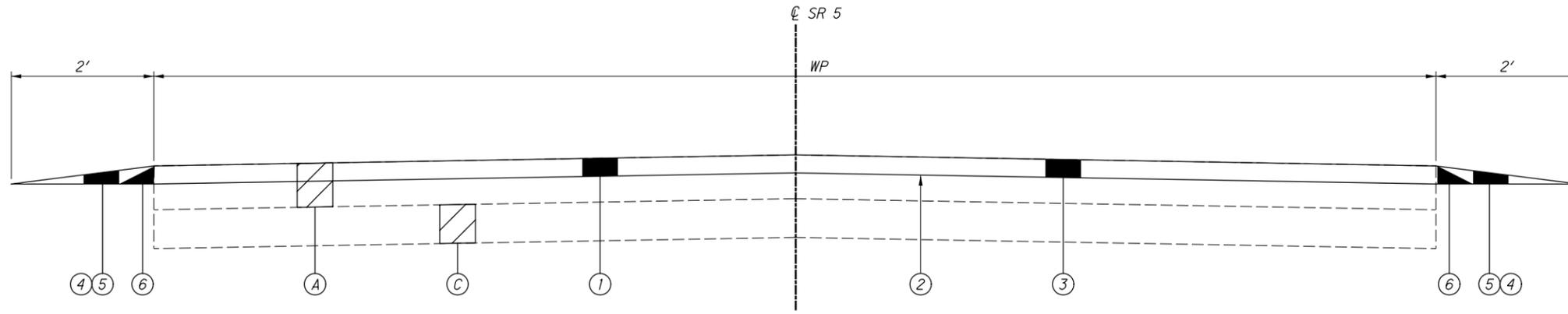
- PORTION TO BE IMPROVED
- INTERSTATE HIGHWAY
- FEDERAL ROUTES
- STATE ROUTES
- COUNTY & TOWNSHIP ROADS
- OTHER ROADS

CALCULATED
 CNC
 CHECKED
 MJA

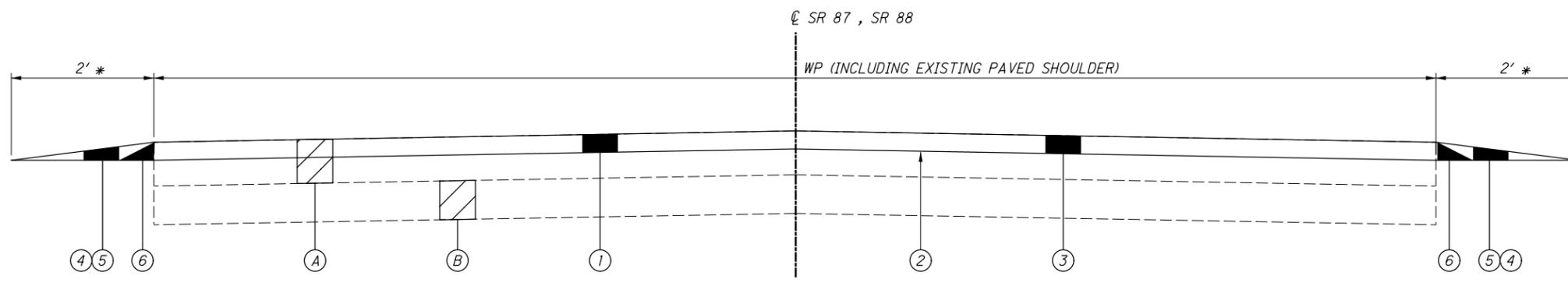
LOCATION MAPS & DESIGN DESIGNATIONS

**TRU-5 / VAR-
 26.01 / VAR**

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ROUTE	SLM		AVG WP (FT)	DISTANCE (MI)
	FROM	TO		
5	26.01	30.95	25	4.94



ROUTE	SLM		AVG WP (FT)	DISTANCE (MI)
	FROM	TO		
87	0.00	1.80	38	1.80
87	1.80	2.23	39	0.43
87	2.23	2.26	31	0.03
88	2.99	3.56	32	0.57
88	3.56	3.59	44	0.03
88	3.59	4.29	32	0.70
88	4.29	4.31	48	0.02
88	4.31	5.93	32	1.62
88	5.93	5.95	44	0.02
88	5.95	7.03	32	1.08

LEGEND

- ① 897, PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T= 1")
- ② 407, NON-TRACKING TACK COAT @ 0.08 GAL/SY
- ③ 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T = 1")
- ④ 408, PRIME COAT AS PER PLAN
- ⑤ 617, COMPACTED AGGREGATE AS PER PLAN
- ⑥ SAFETY EDGE, SEE SHEET 4 FOR DETAILS
- (A) EXISTING ASPHALT SURFACE
- (B) EXISTING ASPHALT BASE
- (C) EXISTING REINFORCED CONCRETE BASE

* NOTE: SAFETY EDGE, PRIME COAT, AND COMPACTED AGGREGATE SHALL NOT BE PLACED IN THE FOLLOWING CURBED SECTIONS ON SR 87:
 SLM 0.00 TO SLM 0.80 LT
 SLM 0.09 TO SLM 0.80 RT
 SLM 0.88 TO SLM 0.99 LT

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. 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).

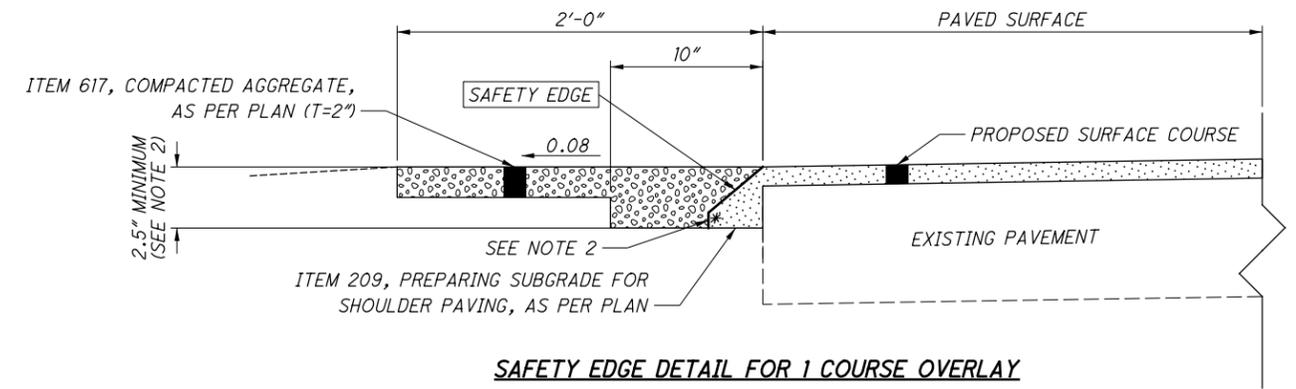
2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6". CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6".

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	424
		STA	CY		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN
5	2.5	26.01	TO	30.95	LT/RT	260.8 25.12
87	2.5	0.00	TO	0.09	RT	4.8 0.46
87	2.5	0.80	TO	0.88	LT	4.2 0.41
87	2.5	0.81	TO	0.99	RT	9.5 0.92
87	2.5	0.99	TO	2.26	LT/RT	67.1 6.46
88	2.5	2.99	TO	7.03	LT/RT	213.3 20.54
TOTALS CARRIED TO GENERAL SUMMARY						560 54



SAFETY EDGE DETAIL FOR 1 COURSE OVERLAY

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REVISED: 6/25/12

DISTRICT 4 - PLANNING & ENGINEERING
DESIGNED: MAC
REVIEWED: TJP
CHECKED: TJP
REVISION DATE: 06/25/12

SAFETY EDGE DETAIL (RESURFACING)

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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 IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 330-786-2267 MICHELLE CHANEY

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

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 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 5	26.01 TO 30.95	10 FT
SR 87	0.00 TO 2.26	11 FT
SR 88	2.99 TO 7.03	12 FT

INTERSECTIONS

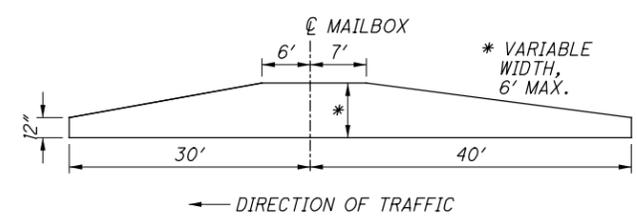
INTERSECTIONS WILL BE RESURFACED 10 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT UNLESS SHOWN OTHERWISE ON THE ASPHALT CONCRETE CALCULATIONS SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

DRIVEWAYS

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND THE EXISTING DRIVEWAYS. IF APPROVED BY THE ENGINEER, AN ASPHALT WEDGE WITH A MINIMUM WIDTH OF 4' MAY BE PLACED EITHER ON THE ROADWAY SHOULDER OR DRIVEWAY DEPENDENT UPON WHICH SIDE IS HIGH. A QUANTITY OF MAINLINE SURFACE COURSE ASPHALT HAS BEEN PROVIDED IN THE CALCULATIONS AND GENERAL SUMMARY TO PERFORM THIS ITEM OF WORK.

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 SHOULDER. 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 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B.



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.

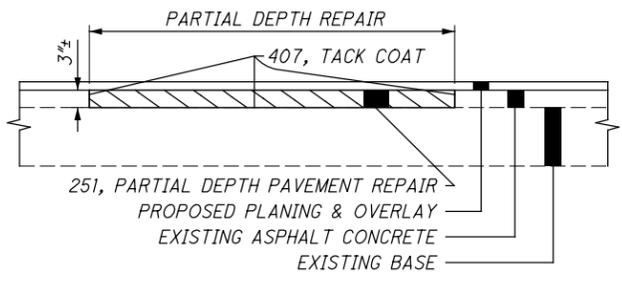
ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN

703.05 DO NOT USE ANY 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.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

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 I 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 MAINLINE 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:

- SR 5:
251, PARTIAL DEPTH PAVEMENT REPAIR (441), 1500 SQ. YD.
- SR 87:
251, PARTIAL DEPTH PAVEMENT REPAIR (441), 400 SQ. YD.
- SR 88
251, PARTIAL DEPTH PAVEMENT REPAIR (441), 800 SQ. YD.



ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 623.05 FOR MONUMENT BOXES, THE CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE OF THE CASTING) AND ADJUST THE CASTING TO GRADE (ACCORDING TO THE TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN PLACED.

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE WILL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

REUSE OF THE EXISTING CASTING WILL NOT BE PERMITTED, A NEW CASTING WILL BE SUPPLIED AND THE DISPOSAL OF THE EXISTING CASTING WILL BE INCIDENTAL TO THIS ITEM.

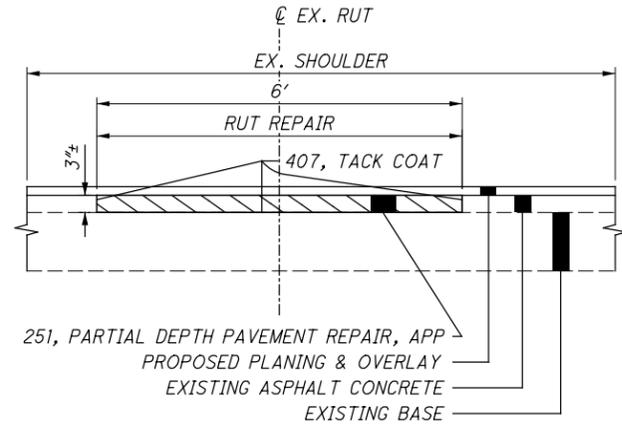
PAYMENT WILL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION OF THE NEW CASTING, AND ALL LABOR REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

ITEM 623, MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN, 10 EACH

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN (RUT REPAIR SR 87)

THIS ITEM SHALL BE USED TO REPAIR ALL EXISTING RUTTING ON BOTH SHOULDERS OF SR 87 FROM SLM 0.00 TO SLM 2.26. THE ITEM SHALL CONSIST OF REPAIRING ALL EXISTING LOCATIONS EXHIBITING RUTTING AS SHOWN IN THE DETAIL BELOW, AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2, (448). THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. 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. 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 (441), AS PER PLAN 15,911 SQ. YD.



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

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ITEM 202 REMOVAL, MISC.: EXPANSION JOINTS

THIS ITEM OF WORK SHALL CONSIST OF REMOVING THE EXISTING POLYMER MODIFIED ASPHALT EXPANSION JOINTS AT STRUCTURE TRU-88-0431.

ALL MATERIAL REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE PROJECT SITE.

PAYMENT SHALL BE MADE AT THE LUMP SUM PRICE FOR ITEM 202, REMOVAL, MISC.: EXPANSION JOINT INCLUDING ALL LABOR, MATERIAL, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

611- CATCH BASIN ADJUSTED TO GRADE

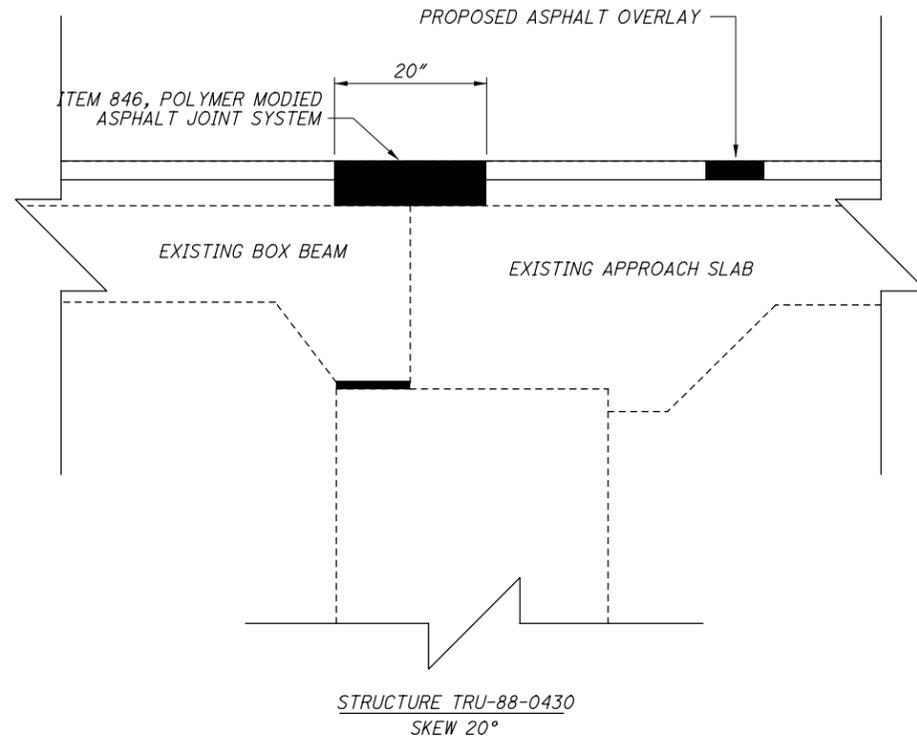
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED ON SR 87.

611, CATCH BASIN ADJUSTED TO GRADE, 5 EACH

846, POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AT STRUCTURE TRU-88-0430 AS SHOWN IN THE DETAIL BELOW.

846, POLYMER MODIFIED ASPHALT EXPANSION JOINT, 29 CF



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CALCULATED
CNC
CHECKED
MJA

GENERAL NOTES

**TRU-5 / VAR -
26.01 / VAR**

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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:

1. A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE 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. 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.
5. 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.
6. 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.
7. A QUANTITY OF 15 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.
8. 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.
9. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUCTD 6F.45; AND W6-3 [TWO-WAY TRAFFIC] PER OMUTCD 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.

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

- PHASE I: PLANED SURFACE SR 5
 614, WORK ZONE CENTERLINE, CLASS I, 4.94 MILE
 614, WORK ZONE STOP LINE, CLASS I, 50 FT
 614, WORK ZONE MARKING SIGN, (ALL PHASES SR 5) 30 EACH
- PHASE II- SURFACE COURSE SR 5
 614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 4.94 MILE
 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 50 FT
- PHASE I- PLANED SURFACE SR 87
 614, WORK ZONE CENTERLINE, CLASS I, 2.26 MILE
 614, WORK ZONE MARKING SIGN, (ALL PHASES SR 87) 6 EACH
- PHASE II - SURFACE COURSE SR 87
 614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 2.26 MILE
- PHASE I - PLANED SURFACE SR 88
 614, WORK ZONE STOP LINE, CLASS I, 16 FT
 614, WORK ZONE CENTERLINE, CLASS I, 4.04 MILE
 614, WORK ZONE MARKING SIGNS (ALL PHASES SR 88), 24 EACH
- PHASE II - SURFACE COURSE SR 88
 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 16 FT
 614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 4.04 MILE

TO BE USED AS DIRECTED BY THE ENGINEER:
 SR 5: 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT, 9.88 MILE
 SR 87: WORK ZONE EDGE LINE, CLASS III, 6" 642 PAINT, 4.52 MILE
 SR 88: WORK ZONE EDGE LINE, CLASS III, 6" 642 PAINT, 8.08 MILE

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.

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 \$1,000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

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.

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.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT PROJECTS D04-CHIP-FY2019 (PID 100793) AND TRU-7/305-17.02/23.97 (PID: 94118) MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

TRU-5 / VAR -
26.01 / VAR

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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN A NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING THE SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 20 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

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 INTERSECTION OF SR 45 AND SR 88. 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, 1 EACH
(1 EACH, POWERHEAD, 30FT)

CALCULATED
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MAINTENANCE OF TRAFFIC GENERAL NOTES

TRU-5 / VAR-
26.01 / VAR

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EDGE LINE											GENERAL SPEC: 640	CALCULATED		
											MATERIAL TYPE: 644	CNC		
CTY	ROUTE	FROM			TO			WHITE EDGE LINE, 6"			YELLOW EDGE LINE, 6"			COMMENTS
		TRUE LOG			TRUE LOG			TOTAL	HIGHWAY	RAMP	TOTAL	HIGHWAY	RAMP	
TRU	5	26.01		SR 88	30.95		SR 7	9.88						
TRU	87	0.00		GEAUGA COUNTY LINE	2.26		0.25 MILES WEST OF SR 534	4.52						
TRU	88	2.99		0.45 MILES EAST OF SR 534	7.03		SR 45	8.08						
TOTAL								22.48			0			

LANE LINE											
CTY	ROUTE	FROM			TO			TOTAL MILES	6" LANE LINE		COMMENTS
		TRUE LOG			TRUE LOG				DASHED	SOLID	
TOTAL											

CENTER LINE											
CTY	ROUTE	FROM			TO			TOTAL MILES	EQUIVALENT SOLID LINE		COMMENTS
		TRUE LOG			TRUE LOG						
TRU	5	26.01		SR 88	30.95		SR 7	4.94	7.22		
TRU	87	0.00		GEAUGA COUNTY LINE	2.26		0.25 MILES WEST OF SR 534	2.26	2.83		
TRU	88	2.99		0.45 MILES EAST OF SR 534	7.03		SR 45	4.04	3.78		
TOTAL								11.24	13.83		

AUXILIARY																						
CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE, 8" FT	CHANNEL LINE, 12" FT	STOP LINE FT	CROSS WALK LINES FT	TRANSVERSE DIAGONAL LINES		ISLAND MARKING SF	SYMBOL MARKINGS				LANE ARROWS				REDUCT. ARROW EACH	WORD ON PVMT ONLY		DOTTED LINES, 6" FT	COMMENTS
							WHITE FT	YELLOW FT		RxR EACH	SCHOOL		TURN LEFT EACH	TURN RIGHT EACH	THRU EACH	COMB. EACH	72" EACH		96" EACH			
											72"	96"										
TRU	SR 5 @ SR 5 TO SR 88	26.070			20																	
TRU	SR 5 @ BURNETT EAST RD	30.270																		335		
TRU	SR 5 @ SR 7	30.950			30																	
TRU	SR 87 @ SCHOOL	2.110										1										
TRU	SR 88 @ SR 45	7.021			16																	
TOTAL					66							1								335		

CALCULATED: CNC
 CHECKED: MJA
PAVEMENT MARKING SUB SUMMARY
TRU-5 / VAR - 26.01 / VAR
 14
 14