

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## TRU-5-14.36

**FEDERAL PROJECT NUMBER**

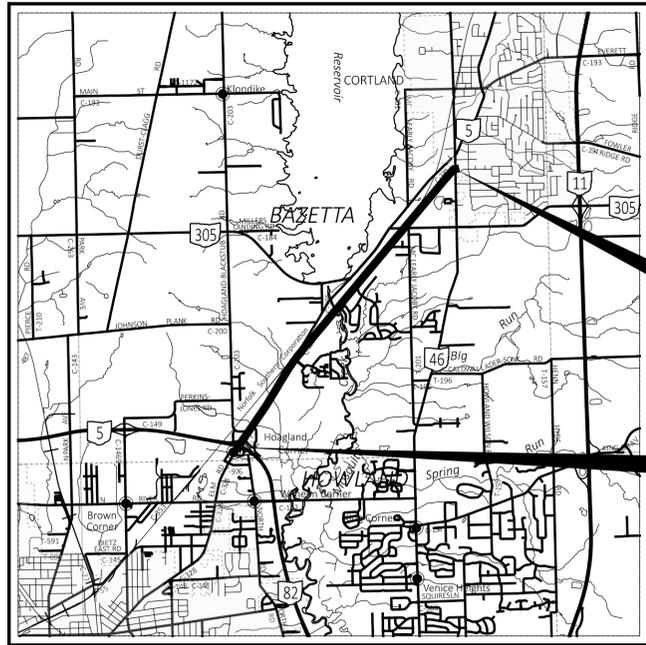
E230(182)

**RAILROAD INVOLVEMENT**

NONE

**PROJECT DESCRIPTION**

RESURFACING OF TRU SR 5 FROM SLM 14.36 TO 18.25.



END PROJECT:  
TRU-5 SLM 18.25

BEGIN PROJECT:  
TRU-5 SLM 14.36

**LOCATION MAP**

LATITUDE: 41°17'47" LONGITUDE: -80°45'21"



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

**DESIGN DESIGNATION**

**DESIGN FUNCTIONAL CLASSIFICATION:**

SR 5 (SLM 14.36-18.25) - RURAL PRINCIPAL ARTERIAL	
NHS PROJECT	NO
CURRENT ADT (2021)	16,470
TRUCKS (24 HOUR B&C)	275

**DESIGN EXCEPTIONS**

NONE

**ADA DESIGN WAIVERS**

NONE

### BAZETTA TOWNSHIP TRUMBULL COUNTY

**INDEX OF SHEETS:**

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**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA:	2.3 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.3 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)*

\*ROUTINE MAINTENANCE PROJECT

**2023 SPECIFICATIONS**

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS 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.

**DISTRICT DEPUTY DIRECTOR**

*Arthur G. Noiro Jr.*  
Arthur G. Noiro Jr., P.E.  
04

**DIRECTOR, DEPARTMENT OF TRANSPORTATION**

*John M. ...*

**UNDERGROUND UTILITIES**  
Contact Two Working Days  
Before You Dig

**OHIO811.org**  
Before You Dig

**OHIO 811. 8-1-1, or 1-800-362-2764**  
(Non members must be called directly)

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

STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
DM-4.3	1/15/16	TC-41.20	10/18/13		800-2023 SEE PROPOSAL	
DM-4.4	1/15/16	TC-42.10	10/18/13		821 4/20/12	
		TC-42.20	10/18/13		832 7/15/22	
BP-3.1	1/21/22	TC-52.10	10/18/13		897 1/16/15	
		TC-52.20	1/15/21		921 4/20/12	
MT-95.31	7/19/19	TC-64.10	7/16/21			
MT-95.32	4/19/19	TC-65.10	1/17/14			
MT-95.60	4/19/19	TC-65.11	7/15/22			
MT-95.61	4/19/19	TC-71.10	7/15/22			
MT-97.10	4/19/19	TC-82.10	7/19/19			
MT-97.12	1/20/17					
MT-99.20	4/19/19					
MT-101.90	7/17/20					
MT-105.10	1/17/20					

**ENGINEER'S SEAL**  
ROADWAY

TITLE SHEET

DESIGN AGENCY	
DESIGNER	AJN
REVIEWER	RMM 12-5-22
PROJECT ID	116525
SHEET	P.1
TOTAL	13

TRU-5-14.36

MODEL: Sheet PAPER: 34x22 (in.) DATE: 10/10/2023 TIME: 2:03:11 PM USER: rbisesi pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 04\Trumbull\116525\400-Engineering\Roadway\Sheets\116525\_GT001.dgn

**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, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

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	14.36	15.30	11'
SR 5	15.30	18.25	12'

**PAVEMENT MARKING DETAILS**

THE PAVEMENT MARKING DETAIL SHEETS HAVE BEEN SUPPLIED AS REFERENCE DOCUMENTS FOR THIS PROJECT AND ARE AVAILBLE ON THE ODOT FTP SITE AT <https://ftp.dot.state.oh.us/pub/contracts/Attach/> FOR THIS PROJECT. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

**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.

**RUMBLE STRIPES**

THE FOLLOWING ITEMS AND QUANTITIES HAVE BEEN PROVIDED TO INSTALL RUMBLE STRIPES ALONG THE FOLLOWING ROUTES:

EDGE LINE: SR 5: SLM 15.74 TO SLM 18.15 CENTERLINE: SR 5: SLM 15.74 TO SLM 18.15

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:  
ITEM 618 – RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE), 4.74 MILES  
ITEM 618 – RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE), 2.37 MILES

THE LONGITUDINAL JOINT PREPARATION PAY ITEM IS ONLY PROVIDED FOR THE LOCATIONS OF THE INSTALLATION OF THE CENTERLINE RUMBLE STRIPES. IN ALL OTHER AREAS WHERE JOINTS ARE REQUIRED THE CONTRACTOR SHALL FOLLOW CMS 401

**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 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.

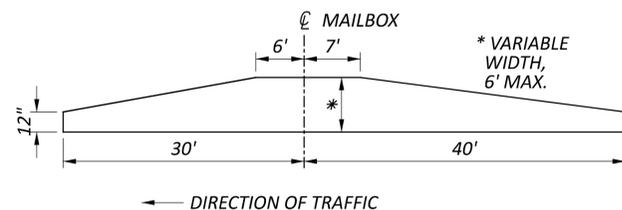
**DRIVEWAYS**

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 2' 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.

IN THE EVENT THAT THE ENGINEER DETERMINES ADDITIONAL WORK IS NECESSARY TO PROPERLY ADDRESS FIELD CONDITIONS, AN ITEM FOR WEARING COURSE REMOVED HAS BEEN PROVIDED. THE REMOVAL DEPTH IS DEPENDENT UPON THE ELEVATION DIFFERENCE AND ALLOW FOR 1"-2" OF COMPACTED ASPHALT MATERIAL TO BE PLACED.

**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. PAYMENT SHALL BE AS FOLLOWS: ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID FOR THE SPECIFIED MAINLINE SURFACE COURSE ASPHALT ITEM.



**ITEM 424- FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (448), AS PER PLAN**  
**ITEM 441- ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22, 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.

**LINEAR GRADING**

AREAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE OF PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE. THIS WORK WILL ONLY BE PERFORMED IN AREAS NECESSARY AND WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. 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 MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. 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 MUGHING, 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.

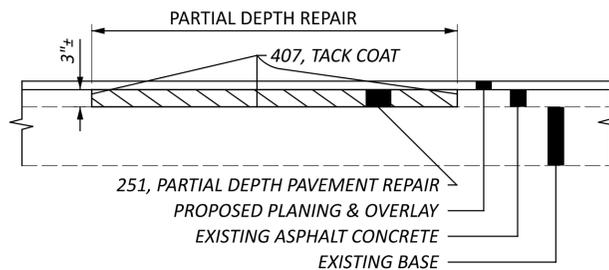
- ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:
- 209, LINEAR GRADING, 398 STA.
  - 659, SEEDING AND MULCHING, 11170 SQ YD
  - 659, COMMERCIAL FERTILIZER, 1.51 TON
  - 659, LIME, 2.32 ACRES
  - 659, WATER, 60.3 M. GAL.

**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. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE. 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), 700 SQ. YD.



**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 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 623 – MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 611.10.D FOR MANHOLES, 623.05 FOR MONUMENT ASSEMBLY, OR 638.18 FOR VALVE BOXES, THE CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (48" DIAMETER FOR STORM AND SANITARY MANHOLE CASTINGS, 24"-28" FOR VALVE BOXES AND MONUMENT ASSEMBLIES, AND 2' IN DIAMETER LARGER THAN THE CASTING DIAMETER FOR ANY CASTINGS THAT ARE LARGER THAN STANDARD MANHOLES SUCH AS TELECOMMUNICATION MANHOLE CASTINGS) AND REMOVE AND DISCARD THE EXISTING CASTING. INSTALL A NEW CASTING TO GRADE (ACCORDING TO TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN REPLACED.

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.

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

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

SR 5 (SLM 14.39-18.25):  
ITEM 623, MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN 4 EACH

