

LOCATION MAP

LATITUDE: 39°32'30" LONGITUDE: 84°21'30"



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

DESIGN DESIGNATION

	22.55 to 23.43	23.43 to 24.47	24.47 to 24.94	24.94 to 25.69
CURRENT ADT (2021)	11,500	11,500	11,500	11,500
DESIGN YEAR ADT (2033)	12,000	12,000	12,000	12,000
DESIGN HOURLY VOLUME (2033)	1,200	1,400	1,200	1,200
DIRECTIONAL DISTRIBUTION	0.54	0.55	0.57	0.56
TRUCKS (24 HOUR B&C)	0.1	0.11	0.11	0.12
DESIGN SPEED	50 MPH (35 MPH CURBED SECTION)			
LEGAL SPEED	50 MPH (35 MPH CURBED SECTION)			
DESIGN FUNCTIONAL CLASSIFICATION:	03 PRINCIPAL ARTERIAL (URBAN)			
NHS PROJECT	YES			

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig



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

City of Middletown is a Non-Member

PLAN PREPARED BY:  
CITY OF MIDDLETOWN  
ENGINEERING DEPARTMENT  
ONE DONHAM PLAZA  
MIDDLETOWN, OHIO 45042

ENGINEERS SEAL:



SIGNED: *Gabriel Bitar*  
DATE: 10/21/2020

STANDARD CONSTRUCTION DRAWINGS		SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/17/20	CITY STANDARD DRAWINGS		800	1/15/21
		ST001	5/1/19	821	4/20/12
		ST004	8/13/19	832	10/19/18
MT-95.30	7/19/19			875	1/18/19
MT-95.31	7/19/19			921	4/20/12
MT-95.32	4/19/19				
MT-95.45	1/17/20				
MT-95.50	7/21/17				
MT-97.12	1/20/17				
MT-99.20	4/19/19				
MT-105.10	1/17/20				
MT-101.90	7/17/20				
TC-65.10	1/17/14				
TC-65.11	7/21/17				
TC-71.10	1/19/18				
TC-82.10	7/19/19				

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

BUT - SR 73 - 22.55

CITY OF MIDDLETOWN

BUTLER COUNTY

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2-3
TYPICAL SECTIONS	4
GENERAL NOTES	5
MAINTENANCE OF TRAFFIC NOTES	6
GENERAL SUMMARY	7
SUBSUMMARIES	8-11
CALCULATIONS	12
PLAN SHEETS	13-30

PROJECT DESCRIPTION

RESURFACING OF 3.14 MILES OF S.R. 73 FROM S.R. 4 (NELBAR/GERMANTOWN ROAD) INTERSECTION TO THE CITY LIMITS AT BUTLER / WARREN COUNTY LINE

PROJECT EARTH DISTURBED AREA:	N/A *
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	N/A *
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A *

\* (MAINTENANCE PROJECT)

2019 SPECIFICATIONS

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

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

APPROVED: *Tony K Capbell*  
DATE: 12/14/2020 DISTRICT DEPUTY DIRECTOR

APPROVED: \_\_\_\_\_  
DATE: \_\_\_\_\_ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E 190798

PID NO. 107126

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

BUT - SR 73 - 22.55

H:\Engineering\Projects\ODOT 2021 Urban Paving Program PID 107126\107126\Design\Sheets (DWG-pdf-markup)\107126\_GT001.DWG

UTILITIES

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

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.

WATER AND SANITARY  
CITY OF MIDDLETOWN  
BRIAN ADAMS  
ONE DONHAM PLAZA  
MIDDLETOWN, OH 45042  
(513) 425-7766

TELEPHONE  
AT&T-OHIO  
HOWARD LAUDERMILK  
3233 WOODMAN DRIVE  
DAYTON, OH 45420  
(937) 296-3588

ELECTRIC  
DUKE ENERGY-ELECTRIC  
AMANDA BRAUN  
PO BOX 960, ROOM 467 ANNEX  
CINCINNATI, OHIO 45201  
(513) 458-3804

AT&T TRANSMISSION  
C/O MCG FIBER  
CHAD HARKNESS  
155 COMMERCE PARK DRIVE  
SUITE #1  
WESTERVILLE, OH 43082  
(614) 392-2873

GAS  
DUKE ENERGY-GAS  
MARK BRANSCUM  
139 E. 4TH STREET  
CINCINNATI, OHIO 45202  
(513) 287-2517

CABLE  
CHARTER COMMUNICATIONS  
KENT RIEGER  
11252 CORNELL PARK DR.  
CINCINNATI, OHIO 45202  
(513) 386-5499

EXISTING PLANS

EXISTING PLANS ENTITLED WAR-73-22.57 / WAR-73-0.00 AND BUT-73-36.253 / WAR-73-00.000 MAY BE INSPECTED IN THE ODOT DISTRICT 8 OFFICE IN LEBANON, OHIO.

STATIONING AND LOCATIONS

THE HORIZONTAL ALIGNMENT AND STATIONING INDICATED ON THESE PLANS ARE A RECREATION OF THE EXISTING SR-73 CENTERLINE BASED ON EXISTING PLANS.

STATIONING AND LOCATIONS INDICATED ON THE PLANS ARE APPROXIMATE. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD AS DIRECTED BY THE ENGINEER.

CITY STANDARDS AND NOTES

THE STANDARDS SHOWN IN THE CITY ROADWAY STANDARDS AND SANITARY AND STORM SEWER STANDARDS ARE TO BE CONSIDERED THE MINIMUM REQUIREMENTS. SEAL ASPHALT PAVEMENT EDGES PER ODOT ITEM 401.15 (HOT APPLIED JOINT SEALER, 4" UNIFORM WIDTH).

ADDITIONALLY SEAL ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.

PAYMENT FOR JOINT SEALER SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 441.

MODIFICATIONS TO THESE STANDARDS TO BE ONLY AS DIRECTED BY THE ENGINEER.

WORK LIMITS

THE WORK LIMITS FOR PHYSICAL CONSTRUCTION ARE TO THE BACK OF CURB OR TO THE EDGE OF THE EXISTING SHOULDER. 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.

PROTECTING CITY STREETS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE CITY STREETS FROM EXCESS ASPHALT, ASPHALT EMULSIONS AND TAR DEPOSITS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED AS DIRECTED BY THE ENGINEER OR LABELED CONTINGENCY UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

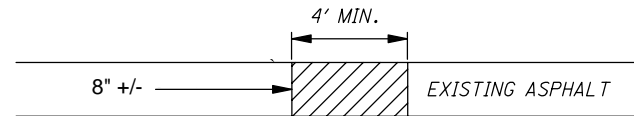
CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, OPERATION OF POWER-OPERATED CONSTRUCTION-TYPE DEVICES TIMES SHALL BE IN ACCORDANCE WITH LOCAL NOISE ORDINANCES, IN ADDITION, DO NOT OPERATE ANY DEVICE AT ANY TIME IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

ITEM 253 - PAVEMENT REPAIRS, AS PER PLAN

THIS WORK SHALL CONSIST OF FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT AS SHOWN HEREIN, AT THE DIRECTION OF THE ENGINEER. THIS OPERATION SHALL BE PERFORMED PRIOR TO PLANING OF THE ROAD.

THE ENGINEER WILL DESIGNATE THE LOCATION AND LIMITS OF AREAS TO BE REPAIRED UNDER THIS ITEM ONLY AFTER HE/SHE HAS DETERMINED THAT THE REPAIR CANNOT BE MADE UNDER "ITEM 254 - PATCHING PLANED SURFACES", WHERE APPLICABLE. THE PAVEMENT SHALL BE REMOVED IN A MANNER SUCH THAT NEAT VERTICAL FACES ARE ESTABLISHED FOR THE ENTIRE PERIMETER OF THE REPAIR AREA. ANY NEAT VERTICAL FACE (INCLUDING SAW CUTTING) SHALL BE INCLUDED IN THE COST OF THIS ITEM.



THIS ITEM SHALL COVER  
ITEM 202 - PAVEMENT REMOVED, ASPHALT  
ITEM 301 - BITUMINOUS AGGREGATE BASE

WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 253.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 1500 CY

ITEM 254 - PAVEMENT PLANING ASPHALT CONCRETE, AS PER PLAN

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY INTERMEDIATE COURSE PRIOR TO REOPENING TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID FOR RESPECTIVE ITEMS. A DISINCENTIVE IN THE AMOUNT OF \$3,300 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

ITEM 254 - PATCHING PLANED SURFACES

PATCH AREAS OF THE PLANED SURFACE THAT THE ENGINEER DESIGNATES TO HAVE SPALLING OR DISLODGED UNSOUND PAVEMENT.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 254 - PATCHING PLANED SURFACE 6780 SY

ITEM 611 - MANHOLE ADJUSTED TO GRADE  
ITEM 611 - CATCH BASIN ADJUSTED TO GRADE

THIS WORK SHALL CONSIST OF ADJUSTING EXISTING MANHOLES AND CATCH BASINS TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER.

A QUANTITY HAS BEEN CALCULATED IN THE SUB-SUMMARIES AND CARRIED TO THE GENERAL SUMMARY.

ITEM 621 - RAISED PAVEMENT MARKERS REMOVED, AS PER PLAN

AN ESTIMATED QUANTITY OF 552 EACH HAS BEEN CARRIED TO THE GENERAL SUMMARY. EXISTING RAISED PAVEMENT MARKERS SHALL NOT BE REMOVED UNLESS MILLING IS INTENDED WITHIN TWO CALENDAR DAYS.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

VEHICLE LOOP DETECTORS SHALL BE INSTALLED IN THE INTERMEDIATE COURSE BEFORE THE SURFACE COURSE OF THE OVERLAY IS PAVED. THE INSTALLATION OF POURED EPOXY INSULATED SPLICES BETWEEN THE LOOP DETECTOR WIRES AND THE LOOP DETECTOR LEAD IN CABLE SHALL BE CONSIDERED AS INCIDENTAL TO THIS ITEM OF WORK. NO SEPARATE PAYMENT FOR THESE SPLICES WILL BE MADE. NO PAYMENT SHALL BE MADE FOR ANY LOOP NOT INSTALLED ACCORDING TO SPECIFICATIONS.

INSTALLATION OF POURED EPOXY INSTALLED SPLICES BETWEEN THE LOOP DETECTOR WIRES AND THE EXISTING LOOP DETECTOR LEAD IN CABLE SHALL BE CONSIDERED AS INCIDENTAL TO THIS ITEM OF WORK. NO SEPARATE PAYMENT FOR THESE SPLICES WILL BE MADE.

DETECTOR LOOPS SHALL BE PLACED IN ACCORDANCE WITH ODOT TRAFFIC ENGINEERING MANUAL SECTION 420-5.2, DETECTION OF MOTORCYCLES AND BICYCLES.

THIS WORK SHALL BE PERFORMED AT THE INTERSECTION OF S.R. 73 AND BREIEL BLVD. FOR FURTHER DETAILS SEE SHEET 25.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 632 - DETECTOR LOOP, AS PER PLAN 12 EACH  
ITEM 632 - DETECTOR LOOP TIE IN 12 EACH

ITEM 638 - VALVE BOXES ADJUSTED TO GRADE

THE CONTRACTOR SHALL RESET EXISTING VALVE BOXES TO ESTABLISHED GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE.

A QUANTITY HAS BEEN CALCULATED IN THE SUB-SUMMARIES AND CARRIED TO THE GENERAL SUMMARY.

ITEM 875 - LONGITUDINAL JOINT ADHESIVE

IT IS EXPECTED THAT PAVING WILL RESULT IN COLD JOINTS. ITEM 875 LONGITUDINAL JOINT ADHESIVE SHALL BE APPLIED TO EACH COLD JOINT.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CALCULATED IN THE SUB-SUMMARY BASED ON APPLICATION RATE OF 1 LB PER 4 FEET, AND CARRIED TO THE GENERAL SUMMARY.

SURFACE SMOOTHNESS REQUIREMENTS FOR PAVEMENTS

PROPOSAL NOTE (PN 420) SHALL APPLY TO THIS PROJECT.

COST OF ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO MEET THIS SPECIFICATION SHALL BE INCLUDED IN THE CONTRACT UNIT OR LUMP SUM PRICE FOR THE APPLICABLE PAVEMENT ITEMS.

MANHOLES AND VALVES ADJUSTED TO GRADE (PRIVATELY OWNED)

ALL MANHOLES AND VALVES ENCOUNTERED IN AREAS THAT REQUIRE GRADE ADJUSTMENT WILL BE PERFORMED PRIOR TO THE APPLICATION OF THE SURFACE COURSE BY THE UTILITY OWNER. CONTACT THE UTILITY OWNER 2 WEEKS PRIOR TO WHEN THE ADJUSTMENTS ARE TO BE COMPLETED.

H:\Engineering\Projects\DDOT 2021 Urban Paving Program PID 107126\107126.Design\Sheets\107126\_GN001.DWG

CITY OF MIDDLETOWN  
DIVISION OF ENGINEERING  
ROBERT E. NICOLLS, P.E.



GENERAL NOTES

BUT - SR 73 - 22.55