## **LOCATION MAP**

LATITUDE: 39 °38'23" LONGITUDE: 81 °27'50"



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

#### **DESIGN DESIGNATION**

17,000
21,500
2,200
52.4%
20.0%
70
70
YES

## **DESIGN EXCEPTIONS**

NONE

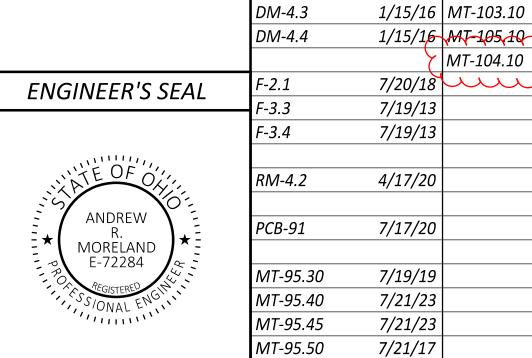
## ADA DESIGN WAIVERS

NONE



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

> PLAN PREPARED BY: OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 10



MT-99.60

1/19/24

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

WAS-77-17.13

AURELIUS TOWNSHIP WASHINGTON COUNTY

#### **INDEX OF SHEETS:**

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### FEDERAL PROJECT NUMBER

NON-FEDERAL

#### RAILROAD INVOLVEMENT

NONE

#### PROJECT DESCRIPTION

1,150 FT ROCKFALL HAZARD MITIGATION

#### EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: *34.5 ACRES* 3 ACRES ESTIMATED CONTRACTOR EARTH DISTURBED AREA: NOTICE OF INTENT EARTH DISTURBED AREA: 40 ACRES

#### LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

#### **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 10 Deputy Director

Director, Department of Transportation

ESIGN AGENCY



ESIGNER XXX MM-DD-Y ROJECT ID

120375

1/15/16 MT-105/10 1/17/20 07/21/23 MT-104.10 1/19/24 7/20/18

STANDARD CONSTRUCTION DRAWINGS

1/21/22

**SUPPLEMENTAL** 

**SPECIFICATIONS** 

01/19/24

**SPECIAL** 

**PROVISIONS** 

**UTILITIES** 

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

 $\sim$ 

AMERICAN ELECTRIC POWER (WAS-77 AND 7) 38831 SR 7

CLARKE SAUNDERS 614-312-5807

FRONTIER (WAS-77) 921 STEUBENVILLE AVE. CAMBRIDGE, OH 43725

REEDSVILLE, OH 45769

TRAVIS ART 740-432-6961

PIN OAK ENERGY PARTNERS (WAS-77) 388 SOUTH MAIN ST, SUITE 401 AKRON, OH 44311 888-748-0763

HORIZON (WAS-77 AND 7) 1123 GOODALE BOULEVARD, SUITE 550

COLUMBUS, OH 43212

STACIE STEARNS 614-570-4323

**KNOX ENERGY (WAS-77)** 17167 HUNKADORA RD. CALDWELL, OH 43724

JOSH SHOLTIS 740-891-1529

PURE WATER (WAS-77)

309 NORTH ST CALDWELL, OH 43724 740-732-6075

ODOT DISTRICT 10 (WAS-77 AND 7) 338 MUSKINGUM DRIVE MARIETTA, OH 45750

JOSH BOOHER 740-568-3961

CITY OF MARIETTA (WATER, SEWER, TRAFFIC) (WAS-7) 304 PUTNAM STREET, SUITE 5

MARIETTA, OH 45750 740-373-3515

CAS CABLE (WAS-7) 1525 DUPONT ROAD PARKERSBURG, WV 26101

KEITH LEONARD 304-488-6146

DOMINION (WAS-7) 320 SPRINGSIDE DRIVE AKRON, OH 44333

**ADAM KEARNS** 330-620-9127

AT&T (WAS-7)

160 NORTH SIXTH STREET ZANESVILLE, OH 43701

BARRETT TAMASOVICH 740-454-3552

RENO WATER AND SEWER (WAS-7) 170 MOUNT TOM ROAD MARIETTA, OH 45750

**RON TIDD** 740-373-8859

SUDDENLINK (WAS-7) 1737 EAST SEVENTH ST PARKERSBURG, WV 26101

BILL BROWN 304-865-4067

#### 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 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 THE 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.

	NOTIFICATIO	ON TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS AND PIO		
	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE		
RAMP & ROAD CLOSURES	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE		
	< 12 HOURS	4 CALENDAR DAYS PRIOR TO CLOSURE		
LANE CLOSURES &	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE		
RESTRICTIONS	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE		
START OF CONSTRUCT. & TRAFFIC PATTERN 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.

THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO): **ASHLEY RITTENHOUSE** FAX: (740) 373-3953 EMAIL: ASHLEY.RITTENHOUSE@DOT.OHIO.GOV

**DISTRICT PERMIT SECTION:** STEPHEN WELLS FAX: (740) 373-3953

EMAIL: STEPHEN.WELLS@DOT.OHIO.GOV

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION: FAX: (614) 728-4099 EMAIL: HAULING.PERMITS@DOT.OHIO.GOV

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF THE ABOVE MENTIONED ITEMS VIA MEDIA SOURCES.

#### ITEM 659 - SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

#### **ENDANGERED BAT HABITAT REMOVAL**

THIS 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 (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

#### **CLEARING AND GRUBBING**

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

#### **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 DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

#### SURVEYING POSITIONAL PARAMETERS

USE THE FOLLOWING VERTICAL AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

**VERTICAL POSITIONING** ORTHOMETRIC HEIGHT DATUM: NAVD88 GEOID: GEOID18

HORIZONTAL POSITIONING REFERENCE FRAME: NAD83 (2011) **ELLIPSOID: GRS80** MAP PROJECTION: LAMBERT CONFORMAL CONIC 1 PARALLEL COORDINATE SYSTEM: WASHINGTON COUNTY LDP PROJECTION SCALE FACTOR: 1.000031

#### UNITS:

FURNISH UNITS IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

#### RIGHT OF WAY STAKING

BEFORE BEGINNING WORK, ALL R/W SHALL BE STAKED PER CMS 623.07.

#### ITEM 203 - ROADWAY, MISC.: WASTE AREA AS BUILT SURVEY

ONCE THE TOPSOIL HAS BEEN REMOVED AND STOCKPILED FROM THE WASTE AREA, THE CONTRACTOR SHALL SURVEY THE EXISTING GROUND. ONCE THE EMBANKMENT, AS PER PLAN HAS BEEN COMPLETED THE CONTRACTOR SHALL COMPLETE AN AS-BUILT SURVEY OF THE WASTE AREA. THE CONTRACTOR SHALL THEN SUBMIT FOR VERIFICATION OF A VOLUME OF FILL TO ODOT FOR FINAL PAYMENT OF ITEM 203- EMBANKMENT AS PER PLAN.

THE SURVEY SHALL BE COMPLETED PER ODOT SURVEY AND MAPPING SPECIFICATIONS.

ALL EQUIPMENT, MATERIALS, INCIDENTALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER:

ITEM 203 - ROADWAY, MISC.: WASTE AREA AS BUILT SURVEY

ITEM 203 - ROADWAY, MISC.: HYDROLOGIST, AS PER PLAN

THIS WORK SHALL BE PER CMS 208.17, EXCEPT THAT PAYMENT FOR THE ABOVE WORK WILL BE PER EACH. WHERE ONE (1) WEEK IS AN EACH.

AN ESTIMATED 8 EACH (WEEKS) BEEN CARRIED TO THE GENERAL SUMMARY.

#### ITEM 203 - EMBANKMENT, AS PER PLAN

THIS WORK SHALL BE PER CMS 203, EXCEPT THAT HAULING OF MATERIALS FROM THE WAS-77-17.13 PROJECT TO THE WASTE AREA WILL BE INCLUSIVE.

PLACE EMBANKMENT TO A MAXIMUM ELEVATION OF 618 FEET AND NO CLOSER THAN 3 FEET TO WORK LIMIT LINE. SIDE SLOPES ARE TO BE PLACED AT 3:1.

ALL EQUIPMENT, MATERIALS, INCIDENTALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT **UNDER:** 

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ITEM 203 - EMBANKMENT, AS PER PLAN

#### WATERWAY WORK RESTRICTIONS

NOTE ADDED

NO PERMANENT OR TEMPORARY FILLS ARE PERMITED BELOW THE ORDINARY HIGH WATER MARK (OHWM) OF THE UNNAMED TRIBUTARY TO WEST FORK DUCK CREEK OR WITHIN THE TWO (2) WETLANDS THAT ARE PRESENT WITHIN CONSTRUCTION LIMITS AT THE RENO, OH WASTE AREA AS DEPICTED ON THE PLAN SHEETS. NO CONSTRUCTION ACTIVITIES OR ANCILLARY CONSTRUCTION (STAGING AREAS, WASTE LOCATONS, AND/OR BORROW LOCATONS) ARE PERMITTED WITHIN THE UNNAMED TRIBUTARY TO WEST FORK DUCK CREEK OR THE 2 WETLANDS UNTIL A WATERWAY PERMIT IS OBTAINED BY ODOT DISTRICT 10.

ESIGN AGENCY



ESIGNER ARM REVIEWER XXX MM-DD-ROJECT ID 120375

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A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION
SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING
PAVEMENT. MAINTAIN A MINIMUM LANE WIDTH OF 12 FEET DURING
CONSTRUCTION.

ITEM 614, MAINTAINING TRAFFIC

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS
SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT
TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE
CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT
IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME
FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE
PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF
TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN
PROGRESS.

CLOSE THE LANES OF IR 77 WITH DRUMS PER STANDARD CONSTRUCTION DRAWING MT-95.30. EXISTING PERMANENT EDGE LINE AND LANE LINE SHALL BE LEFT IN PLACE. PROVIDE A TEMPORARY EDGE LINE FOR THE TAPER USING REMOVABLE TAPE (CMS 740.06, TYPE I). WORK AREA LENGTHS ARE 1,500 FT RIGHT (NB), 1,025 FT LEFT (SB). THE CONTRACTOR IS PERMITTED TO STOP TRAFFIC PER SCD MT-99.60. DURING BLASTING OPERATIONS. TRAFFIC MAY BE STOPPED NO LONGER THAN 15 MINUTES AT A TIME.

CONSTRUCTION VEHICLES ON THE RIGHT (NB) SIDE OF THE PROJECT CAN USE THE MEDIAN CROSS OVER AT MILE MARKER 19.05 (NOB-77-1.45) FOR ENTRY TO THE LEFT (SB) LANE.

A WORK ZONE EGRESS WARNING SYSTEM SHALL BE PUT IN PLACE PER SCD MT- 103.10 WHEN TRUCKS ARE EXITING THE PROJECT.

CONSTRUCTION ACCESS POINTS SIGNAGE PER SCD MT-103.10 SHALL BE USED IN THE RIGHT (NB) AND LEFT (SB) LANES.

ALL CONSTRUCTION VEHICLES MUST BE EQUIPPED WITH A FLASHING LIGHT / OR FLASHING LIGHTS VISIBLE FROM 360° AROUND THE VEHICLE.

PLACE ADVANCE AND EXTRA ADVANCE WARNINGS SIGNS IN RIGHT (NB) AND LEFT (SB) LANES PER SCD MT-95.50.

INSTALL PORTABLE BARRIER AND AN IMPACT ATTENUATOR ALONG THE OUTSIDE PAVED SHOULDER WHERE IT MEETS THE GRASS, REFER TO STANDARD CONSTRUCTION DRAWING MT-95.45.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

#### **SEQUENCE OF CONSTRUCTION**

#### PHASE 1:

CLOSE BOTH OUTSIDE DRIVING LANES WITH DRUMS AND COMPLETE CLEARING AND GRUBBING OPERATIONS.

#### PHASE 2:

CLOSE RIGHT (NB) DRIVING LANE WITH DRUMS (TO STA. 927+00) AND PLACE BARRIER ON SHOULDER AS DESCRIBED ABOVE. CLOSE LEFT (SB) PASSING LANE PRIOR TO THE 19.05 MILE MARKER MEDIAN CROSS OVER TO THE 18.05 MILE MARKER. COMPLETE WORK ON THE RIGHT (NB) SIDE.

#### PHASE 3:

CLOSE LEFT (SB) DRIVING LANE WITH DRUMS AND PLACE BARRIER ON SHOULDER AS DESCRIBED ABOVE. COMPLETE WORK ON THE LEFT (SB) SIDE.

# ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING
A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT
ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S
APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM
THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

#### **WORK ZONE SPEED ZONES (WZSZs)**

THE FOLLOWING WORK ZONE SPEED LIMIT REVISION(S) FOR VWZSZS USING DSL SIGN ASSEMBLIES HAS BEEN APPROVED FOR USE ON THIS PROJECT:

WZSZ REVISION NUMBER	ROAD	BEGIN ZONE SLM	END ZONE SLM	DIRECTION	SPEED LIMIT (MPH)	SPECIFIC WARRANTING CONDITIONS & FACTORS
WZ-55308	WAS-77	16.77	NOB-77 -1.45	NB SB	55	DURING WORK ACTIVITY
					65	DURING NON-WORK ACTIVITY

WZSZs SHALL COMPY WITH TRAFFIC ENGINEERING MANUAL (TEM) 642-24.

USE OF DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THE APPROVED LIST, SUPPLEMENTAL SPECIFICATION 808 AND 908, AND STANDARD CONSTRUCTION DRAWING MT-104-10.

THE FOLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
2 x 1 SIGN / MILE FOR 2.31 MILES = 6 SIGNS
6 DSL SIGN ASSEMBLIES FOR 6 MONTHS
36 SIGN MONTHS CARRIED TO GENERAL SUMMARY

ITEM 614, SPEED ZONE AHEAD SYMBOL SIGN 4 W3-H5b SIGNS CARRIED TO THE GENERAL SUMMARY

ITEM 614, RESUME LEGAL SPEED SIGN 4 R2-1 SIGNS CARRIED TO THE GENERAL SUMMARY

# <u>ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS</u> <u>PER PLAN</u>

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE
PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR
AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN
SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES.
MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT
BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD
COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING
CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS
WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS
FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH
PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

PLACEMENT OF SIGNS SHALL BE PER SCD MT-99.60.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 12 SIGN MONTH ASSUMING 2 PCMS SIGNS FOR 6 MONTHS

#### **INTERIM COMPLETION DATE**

ALL WORK ON THE RIGHT SIDE (NORTH BOUND) OF IR 77 SHALL BE COMPLETE BY 7/1/25.

#### PROJECT COORDINATION

A CONCURRENT ASPHALT OVERLAY / CONCRETE JOINT REPAIR PROJECT (PID 96643) WILL BE WITHIN IN THE RIGHT (NORTH BOUND) LANES OF THIS PROJECT. THE ASPHALT OVERLAY WILL NOT BEGIN UNTIL 7/15/2025. CONCRETE JOINT REPAIR WORK MAY BEGIN BEFORE, IF WORK CAN BE COORDINATED BETWEEN PROJECTS AND IS APPROVED BY THE ENGINEER.

				614	614	614	614	622	
REF NO.	STATION		SIDE	WORK ZONE IMPACT ATTEN.	BARRIER REFLECTOR, TYPE 1	OBJECT MARKER, ONE WAY	WORK ZONE EDGE LINE CLASS I, 6" 740.06, TYPE I	PURTABLE	
	FROM	TO		EACH	EACH	EACH	MILE	FEET	
	NORTH BOUND IR 77								
	902+00	917+00	RT	1	30	30		1500	
	885+60	894+00	RT				0.16		
	SOUTH BO	UND IR 77							
	904+75	915+00	LT	1	21	21		1030	
	21+60	30+00	LT				0.16		
OTAL	S CARRIED TO	GENERAL SI	JMMARY	2	51	51	0.32	2,530	

ESIGN AGENCY



ARM
REVIEWER

XXX MM-DD-YY
PROJECT ID
120375

SHEET TOTAL
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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:** 

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR 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 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).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS. CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

- IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:
- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER. THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY

RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE

AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

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 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 THAT 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 128 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.

#### **CROSS OVER MAINTENANCE**

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE MEDIAN CROSS OVER AT THE 19.05 STATE MILE MARKER.

ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE C, AS PER PLAN (SIZE NO. 4s ARE TO BE USED)

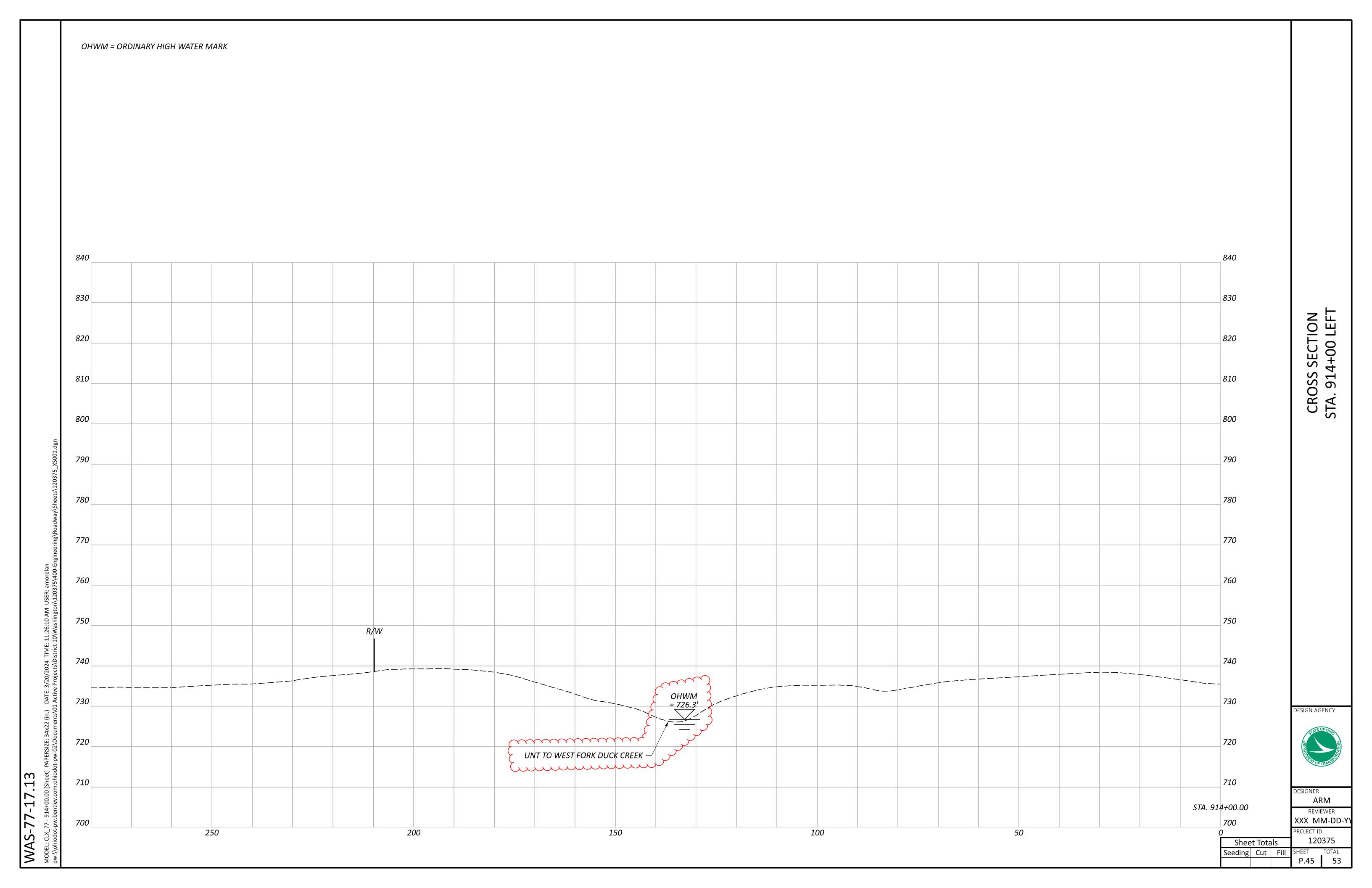
- 125 CY ITEM ADDED

ESIGN AGENCY



ESIGNER ARM REVIEWER XXX MM-DD-ROJECT ID 120375

P.4 53



HORIZONTAL SCALE IN FEET 0 100

PLAN - WASTE AREA

DESIGN AGENCY

designer ARM reviewer

XXX MM-DD-Y
PROJECT ID
120375

120375

SHEET TOTAL
P.52 53