

EROSION CONTROL

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.

FOR SEEDING AND MULCHING QUANTITIES, SEE SHEETS 411 - 416

ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN

THIS ITEM SHALL CONSIST OF CONSTRUCTING CONCRETE PAVED GUTTER AS PER STANDARD CONSTRUCTION DRAWING DM-2.1 AND THE DETAILS AS SHOWN ON SHEETS 53 - 54 AT THE LOCATIONS SHOWN IN THE PLANS. THE GUTTER SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN IN THE DETAIL. A SIDE CUTOFF WALL SHALL BE CONSTRUCTED AS SHOWN PER THE DETAIL FOR THE ENTIRE LENGTH OF THE GUTTER. END CUTOFF WALLS SHALL BE AS PER STANDARD DRAWING DM-2.1. PEJF (PERFORMED EXPANSION JOINT FILLER) SHALL BE PER CMS 516 AND IS INCLUDED IN THE COST OF THE PAVED GUTTER.

ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ABOVE-DESCRIBED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN.

WATER QUALITY

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS. ALL DITCHES LOCATED WITHIN LIMITS OF VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL AND NOT HAVE ROUNDING.

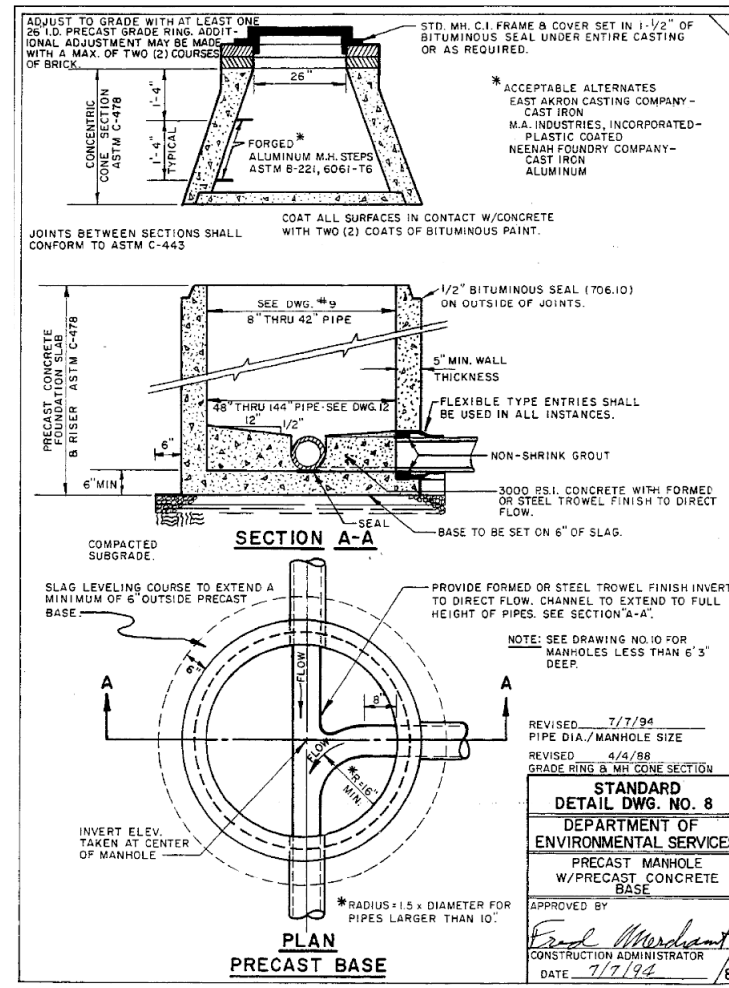
SANITARY SEWER

SUMMIT COUNTY D.O.E.S. SANITARY SEWER NOTES

ALL SEWER WORK ITEMS AND CONSTRUCTION SHALL CONFORM TO ODOT ITEM 611 AND THE SUMMIT COUNTY D.O.E.S. CONSTRUCTION AND MATERIAL SPECIFICATIONS AND APPLICABLE DETAILS. WHERE THERE IS CONTRADICTION, THE SUMMIT COUNTY D.O.E.S. SPECIFICATIONS WILL TAKE PRECEDENCE.

ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN (SANITARY)

THIS ITEM SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY FOR ADJUSTMENT OF THE SANITARY MANHOLES IN ACCORDANCE WITH ODOT ITEM 611 AND THE SUMMIT COUNTY DEPARTMENT OF ENVIRONMENT SERVICES (D.O.E.S.) DETAIL ON THIS SHEET.



CITY OF AKRON SANITARY SEWER NOTES

ALL SEWER WORK ITEMS AND CONSTRUCTION SHALL CONFORM TO ODOT ITEM 611 AND THE CITY OF AKRON CONSTRUCTION AND MATERIAL SPECIFICATIONS AND APPLICABLE DETAILS. WHERE THERE IS CONTRADICTION, THE CITY OF AKRON SPECIFICATIONS WILL TAKE PRECEDENCE.

ITEM 611 - MANHOLE NO. 3, AS PER PLAN (SANITARY)

THIS ITEM SHALL CONSIST OF CONSTRUCTING A SANITARY SEWER MANHOLE IN ACCORDANCE WITH ODOT ITEM 611 AND ODOT STANDARD CONSTRUCTION DRAWING MH-1.2 EXCEPT THAT A SEALED AND WATER-TIGHT LID MUST BE PROVIDED DUE TO THE PROXIMITY OF THE ADJACENT STREAM. THIS ITEM SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY FOR CONSTRUCTION OF THE SANITARY MANHOLES.

ENVIRONMENTAL

WETLAND IMPACTS/AVOIDANCE

FOR WETLAND IMPACTS, PLEASE REFER TO THE NOTE SHOWN ON SHEET 444.

TEMPORARY WETLAND IMPACT

TEMPORARY ACCESS FILLS IN WETLAND A MUST BE REMOVED ENTIRELY AND WETLAND A MUST BE RETURNED TO PRE-CONSTRUCTION CONTOURS. ANY TOPSOIL REMOVED FROM THE WETLAND WILL BE STOCKPILED AND REPLACED POST-CONSTRUCTION. THE AREAS SURROUNDING THE STOCKPILES ARE TO BE PROTECTED FROM SEDIMENT WITH THE USE OF PERIMETER CONTROL DEVICES SUCH AS EARTH, STRAW BALES OR SILT FENCES. THESE PERIMETER CONTROL DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. RESTORE ALL STOCKPILE AND PLACEMENT AREAS UPON COMPLETION OF THE PROJECT. ANY BARE AREAS WITHIN THE TEMPORARY WETLAND IMPACT BOUNDARIES WILL NEED TO BE RESEDED WITH A NATIVE, NON-INVASIVE SPECIES SEED MIX OR ERNMX-128 SEASONALLY FLOODED WILDLIFE FOOD MIX OR EQUIVALENT AT A SEEDING RATE OF 20 LB PER ACRE OR 1/2 LB PER 1,000 SQ FT.

BEST MANAGEMENT PRACTICES/SOIL EROSION AND SEDIMENTATION CONTROL

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN 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 COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

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 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.

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GENERAL NOTES

SUM-77 / 277 / 224
VARIOUS

REVISIONS		
NO.	DATE	DESCRIPTION
△	04/20/21	WETLAND NOTE REVISED

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1288

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 ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING, TEMPORARY OR 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. 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 RURAL OR ONE (1) MILE URBAN.

4. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (IN 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.

5. A QUANTITY OF 100 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.

6. 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.

7. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUTCD 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. AN ESTIMATED QUANTITY OF FIFTEEN (15) ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

8. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

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.

WINTER TIME LIMITATIONS
ALL RAMPS SHALL BE OPEN AND TRAFFIC SHALL BE MAINTAINED AS DESCRIBED IN THE SEQUENCE OF CONSTRUCTION AND AS DETAILED IN THE PLANS BETWEEN OCTOBER 15 AND APRIL 1. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$325 PER MINUTE PER LANE.

TIME LIMITATION ON A DETOUR

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT AS FOLLOWS:

ROAD OR RAMP CLOSURE	DURATION OF CLOSURE (CALENDAR DAYS)	DISINCENTIVE (\$ PER CALENDAR DAY)
WARNER RD.	TWICE - 30 DAYS EACH*	\$2,250
RAMP B	45 DAYS	\$16,250
RAMP B-1	45 DAYS	\$3,250
RAMP B-2	45 DAYS	\$16,500
RAMP C-1	45 DAYS	\$7,000
RAMP C-2	270 DAYS	\$5,250
RAMP D	45 DAYS	\$8,250
PHASE 2	270 DAYS**	\$16,500
PHASE 1B	30 DAYS	\$7,000
RAMP C	45 DAYS	\$4,000

* - TWO SEPARATE 30 DAY CLOSURES ARE PERMITTED FOR WARNER ROAD. ONE CLOSURE SHALL BE FOR THE BRIDGE WORK. THE SECOND CLOSURE SHALL BE TO LOWER THE ROAD. THE WARNER RD DETOUR SHALL NOT TAKE PLACE IN AUGUST OF ANY YEAR. THE CONTRACTOR SHALL COORDINATE THE WARNER RD CLOSURE WITH THE FIRESTONE COUNTRY CLUB. WARNER RD SHALL NOT BE CLOSED DURING ANY MAJOR GOLF EVENTS. EXPECTED DATES:

- 2021 - 6/18 THRU 6/28
- 2022 - 7/1 THRU 7/20
- 2023+ - TO BE DETERMINED

BRIDGESTONE GOLF CONTACT:
DON PADGETT III
EXECUTIVE DIRECTOR
BRIDGESTONE SENIOR PLAYERS
ADDRESS: 440. E WARNER ROAD
AKRON, OH 44319
PHONE: 330 245 2305
EMAIL: DPADGETT@PGATOURHQ.COM

** - THIS DETOUR SHALL BE IN EFFECT FOR PHASE 2 WHEN RAMP B-2 IS INACCESSIBLE TO NON-CONTRAFLOW NB 77 TRAFFIC.

DETOUR NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

LANE CLOSURES

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 \$10,000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

SEQUENCE OF CONSTRUCTION

SEE TABLE ON SHEET 74A FOR REVISED SEQUENCE OF CONSTRUCTION.

PRE-PHASE 1 (NO SHEETS PROVIDED)

1. UTILIZE ALLOWABLE LANE CLOSURES IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE CHART TO INSTALL THE FOLLOWING STORM CROSSINGS:

PIPE REFERENCE	SIZE	ALIGNMENT	STATION	SIDE
P-11	15"	CL I-77	425+00.00	LT
P-63	15"	CL I-77	427+40.00	LT
P-12	15"	CL I-77	428+50.00	LT
P-14	15"	CL I-77	432+50.00	LT
P-18	15"	CL I-77	444+10.00	LT
P-22	24"	CL I-77	458+10.00	RT
P-28	42"	BL I-77 SB	492+00.00	RT/LT
P-42	15"	BL I-77 SB	494+00.00	RT/LT

2. INSTALL ALL PROPOSED OVERHEAD SIGN STRUCTURES, FOUNDATIONS AND TEMPORARY GUIDE SIGNS. PROVIDE POSITIVE PROTECTION WHEN WORKING WITHIN THE CLEAR ZONE.

3. INSTALL TEMPORARY PAVEMENT ON I-77 NORTHBOUND BETWEEN STATIONS 504+32 AND 508+49 AND ON I-77 SOUTHBOUND BETWEEN STATIONS 505+70 AND 513+15 FOR USE IN PHASE 1.

PHASE 1 (SHEETS 128 TO 156)

1. SHIFT NB AND SB I-77 LANES ONTO THE OUTSIDE SHOULDERS.

2. CONSTRUCT THE NB I-77 CROSSOVER PAVEMENT, AND RECONSTRUCT THE MEDIAN AND INSIDE LANES OF I-77 NB AND SB INCLUDING INSIDE CONSTRUCTION OF STRUCTURES SUM-77-0802L (SB I-77 OVER WARNER RD.), SUM-77-0802R (NB I-77 OVER WARNER RD.), SUM-77-0810L (SB I-77 OVER TUSCARAWAS RIVER), AND SUM-77-810R (NB I-77 OVER TUSCARAWAS RIVER).

3. CLOSE THE OUTSIDE LANE OF RAMP A.

4. BEGIN CONSTRUCTION OF RAMP B-2 WHILE MAINTAINING ACCESS TO EXISTING RAMP B-2.

5. SHIFT RAMP C TRAFFIC ONTO THE OUTSIDE SHOULDER. CONSTRUCT THE INSIDE HALF OF THE RAMP, INCLUDING TEMPORARY PAVEMENT FOR MAINTAINING TRAFFIC IN THE NEXT PHASE.

6. CLOSE AND DETOUR RAMP C-2 TRAFFIC. CONSTRUCT RAMP C-2 INCLUDING STRUCTURE SUM-77-0927R (RAMP C-2 OVER I-77 NB). WHEN REMOVING OR SETTING BEAMS THE CONTRACTOR MAY CLOSE I-77 AND DETOUR TRAFFIC UTILIZING RAMP C, US 224, KELLY AVE. AND RAMP D NIGHTLY BETWEEN 12:00 AM AND 4:00 AM. THE DETOUR WILL UTILIZE 3 PCMS. PAYMENT SHALL BE INCLUDED IN ITEM 614 - MAINTAINING TRAFFIC. NIGHTLY SINGLE LANE CLOSURES SHALL BE PERMISSIBLE ON I-77 NB, CONTRACTOR SHALL FOLLOW ODOT PLCM REGARDING CLOSURE TIMES AND DURATIONS.

7. MAINTAIN TRAFFIC ON ALL OTHER RAMPS.

8. CLOSE AND DETOUR WARNER RD. TRAFFIC. CONSTRUCT WARNER RD. UNDER I-77.

REVISIONS		
NO.	DATE	DESCRIPTION
△	04/05/21	REVISED NOTE TO ALLOW DETOUR
△	04/20/21	REVISED SEQUENCE OF CONSTRUCTION

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4 COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT PROJECT SUM-76/77/8-08.42/09.77/00.00 (PID 102329) MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT AND SHALL HAVE PRIORITY TO THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS.

TO AVOID CONFLICTING WORK ZONES WITH THE ADJACENT PROJECT (PID 102329), THE SEQUENCE OF CONSTRUCTION WILL BE REVISED PER THE TABLE BELOW. A 24 FOOT LATERAL TRAFFIC SHIFT WILL BE REQUIRED TO PERFORM PHASES 2B AND 2D WHILE NORTHBOUND TRAFFIC IS IN THE PHASE 3 PATTERN. THE SHIFT WILL BE PER MT-102.10. THE ESTIMATED QUANTITIES BELOW ARE FOR THE TRAFFIC SHIFT:

ITEM 614 WORK ZONE EDGE LINE, CLASS I, 6" AS PER PLAN	1.5 MILE
ITEM 614 WORK ZONE LANE LINE, CLASS I, 6"AS PER PLAN	0.7 MILE
ITEM 614 WORK ZONE CHANNELZING LINE, CLASS I, 12" AS PER PLAN	4224 FT
ITEM 614 PORTABLE BARRIER, UNANCHORED	1800 FT
ITEM 614 OBJECT MARKER, ONE WAY	36 EACH
ITEM 614 BARRIER REFLECTOR, TYPE 1, 1 WAY	36 EACH

SEQUENCE OF CONSTRUCTION

PRECEDING PHASE	PHASE	DESCRIPTION	SUCCEEDING PHASE	ANTICIPATED CONSTRUCTION YEAR
BEGIN WORK	PRE-PHASE 1	STORM DRAINAGE CROSSINGS, TEMPORARY PAVEMENT, GUIDE SIGNS, OVERHEAD SIGN STRUCTURES, PROCUREMENT (I.E. STUCTURAL STEEL, NOISE BARRIER, ETC.)	1	2021
PRE-PHASE 1	1	CONSTRUCT CROSSOVER PAVEMENT, RECONSTRUCT THE MEDIAN AND INSIDE LANES OF I-77 NB & SB INCLUDING STRUCTURES.	PRE-PHASE 2	2021-2022
1	PRE-PHASE 2	INSTALL DMS SIGN ON I-77 AND REPLACE SIGN TRUSS ON I-277.	3	2022
PRE-PHASE 2	3*	CONSTRUCT OUTSIDE PORTION OF I-77 SB FOR THE ENTIRE LENGTH OF THE PROJECT. CONSTRUCT PHASE 3 CROSSOVERS.	1A	2022-2023
3	1A	RAMP B-2	1B	2023
1A	1B	LEFT SIDE OF I-77 NB BETWEEN STA. 469+50 AND 783+00.	1C	2023
1B	1C	INSIDE HALF OF THE I-77 NB PAVEMENT THROUGH THE I-277 INTERCHANGE.	2	2023
1B	2E	INSIDE PORTION OF MAINLINE I-77 NB FROM STA. 513+50 TO THE WATERLOO ROAD BRIDGE.	2	2023
1C/2E	2*	I-77 NB OUTSIDE PAVEMENT RECONSTRUCTION SOUTH OF THE I-277 INTERCHANGE.	4	2023-2024
2	4	SURFACE COURSE AND FINAL PAVMEENT MARKINGS.	COMPLETION	2024

* SHALL INCLUDE SUB-PHASES EXCEPT AS NOTED IN THE TABLE BELOW

PHASE	DESCRIPTION	CONSTRAINTS	ANTICIPATED CONSTRUCTION YEAR
2B	RAMP C-1, THE OUTSIDE PORTION OF I-77 NB IN THE AREA OF THE ACCELERATION LANE, OUTSIDE PORTIION OF I-277 EB IN THE AREA OF THE DECELERATION AREA	CONSTRUCTED WHILE THE RAMP IS CLOSED FOR PID 102329	2022
2C	OPENING RAMP C-1	DUE TO PID 102329, PHASE MAY NOT BE NEEDED	2022
2D	RAMP D, THE OUTSIDE PORTION OF I-77 NB IN THE AREA OF THE ACCELERATION LANE, OUTSIDE PORTION OF I-277 EB IN THE AREA OF THE DECELERATION AREA	CONSTRUCTED WHILE THE RAMP IS CLOSED FOR PID 102329	2022
2F	OPENING RAMP D	DUE TO PID 102329, PHASE MAY NOT BE NEEDED	2022
3	RAMP B	CONSTRUCTED WHILE THE RAMP IS CLOSED FOR PID 102329	2023

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/20/21	REVISED SEQUENCE OF CONSTRUCTION

PHASE 1A (SHEETS 171 TO 174)

1. MAINTAIN THE NB MOT FROM PHASE 1 EXCEPT AS INDICATED BELOW.
2. CONSTRUCT THE TEMPORARY SIGNAL AT THE KELLY AVE. AND US-224 WB RAMPS INTERSECTION FOR USE WHILE RAMP B-2 IS CLOSED AND TRAFFIC IS DETOURED.

3. CLOSE RAMP B-2 AND DETOUR TRAFFIC. CONSTRUCT RAMP B-2 FROM I-77 NB TO THE RAMP B GORE.

PHASE 1B (SHEETS 175 TO 180)

1. OPEN THE NEW RAMP B-2. CONTINUE CONSTRUCTION OF INSIDE NB-77 PAVEMENT.

PHASE 1C (SHEETS 181 TO 185)

1. SHIFT THE TEMPORARY EXIT TO RAMP B-2 TO THE SOUTH. CONSTRUCT THE REMAINDER OF THE RAMP B-2 GORE.

WINTER SHUTDOWN SEASON 1 (SHEETS 186 TO 190)

1. OPEN RAMP C-2.
2. AT THE END OF THE FIRST CONSTRUCTION SEASON, REOPEN WARNER RD. WITH THE FINAL PERMANENT PAVEMENT MARKINGS PLACED PER THE TRAFFIC CONTROL PLAN. MAINTAIN THE I-77 NB AND SB TRAFFIC IN THEIR PHASE 1 MOT LANE ARRANGEMENT.

PRE-PHASE 2 (NO SHEETS PROVIDED)

1. THE CONTRACTOR SHALL PRIORITIZE INSTALLING THE DMS TRUSS SIGN AT STATION 424+07 EARLY IN THE PHASE 2 CONSTRUCTION. THE INTENT IS TO UTILIZE THE DMS TRUSS TO ASSIST IN INFORMING THE TRAVELING PUBLIC OF CHANGES DUE TO MOT PATTERNS. THE CONTRACTOR SHALL UTILIZE A PCMS ASSEMBLY AT STATION 424+07 DURING PHASE 1 AND OVER WINTER BETWEEN PHASES 1 AND 2. THE PCMS ASSEMBLY SHALL BE EQUIPPED WITH A MODEM THAT SHALL BE PROVIDED BY CENTRAL OFFICE. ONCE THE DMS TRUSS HAS BEEN CONSTRUCTED AND THE ITS EQUIPMENT HAS BEEN RELOCATED AND IS COMPLETELY FUNCTIONAL, THE CONTRACTOR MAY REMOVE THE PCMS ASSEMBLY. ALL EQUIPMENT, LABOR, AND MATERIALS REQUIRED TO FURNISH, INSTALL, AND SUBSEQUENTLY REMOVE THE PCMS ASSEMBLY AND MODEM SHALL BE INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC.

PRE-PHASE 2 (SHEETS 200 TO 202)

1. CLOSE THE INSIDE LANE OF EB I-277/US-224. SHIFT THE SINGLE WB US-224 THRU LANE ONTO THE OUTSIDE EXISTING PAVEMENT. REMOVE AND REPLACE THE EXISTING MEDIAN BARRIER, MEDIAN PAVEMENT, AND OVER HEAD SIGN TRUSS.

PHASE 2 (SHEETS 203 TO 230)

1. MAINTAIN I-77 SB TRAFFIC IN THE PHASE 1 MOT LANE ARRANGEMENT. SHIFT THE INSIDE LANE OF I-77 NB INTO A CONTRAFLOW LANE ON THE SB SIDE OF I-77 USING THE NB CROSSOVERS CONSTRUCTED IN THE PREVIOUS PHASE. SHIFT THE RIGHT TWO LANES OF I-77 NB TO THE INSIDE SHOULDER AND LANES COMPLETED IN PHASE 1. CONSTRUCT THE I-77 NB OUTSIDE SHOULDER AND LANES FROM THE SOUTHERN PROJECT LIMITS TO THE RAMP C-1 GORE.
2. CLOSE AND DETOUR RAMP B TRAFFIC. CONSTRUCT RAMP B.

PHASE 2 CONT'D

3. SHIFT RAMP C TRAFFIC ONTO THE INSIDE SHOULDER AND TEMPORARY PAVEMENT CONSTRUCTED IN THE PREVIOUS PHASE. CONSTRUCT THE OUTSIDE HALF OF THE RAMP.
4. MAINTAIN TRAFFIC ON ALL OTHER RAMPS.

PHASE 2A (SHEETS 231 TO 237)

1. MAINTAIN PHASE 2 MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. REOPEN RAMP B.

3. SHIFT RAMP B-2 TRAFFIC ONTO THE INSIDE SHOULDER. CONSTRUCT THE OUTSIDE HALF OF RAMP B-2 FROM THE RAMP B GORE TO US-224/I-227 WB.

4. SHIFT US-224/I-227 WB TRAFFIC ONTO THE INSIDE SHOULDER.

5. CONSTRUCT THE OUTSIDE SHOULDER AND LANES OF US-224/I-227 WB FROM THE RAMP B-1 GORE TO THE WESTERN LIMITS OF CONSTRUCTION.

PHASE 2B (SHEETS 238 TO 242)

1. MAINTAIN PHASE 2A MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. SHIFT RAMP B-2 BACK TO ITS NORMAL ALIGNMENT.

3. SHIFT US-224/I-227 WB BACK TO ITS NORMAL ALIGNMENT.

4. CLOSE AND DETOUR RAMP C-1 TRAFFIC. CONSTRUCT RAMP C-1 AND THE I-77 NB OUTSIDE SHOULDER AND LANES FROM RAMP C-1 TO THE RAMP D GORE.

PHASE 2C (SHEETS 243 TO 246)

1. MAINTAIN PHASE 2B MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. REOPEN RAMP C-1.

PHASE 2D (SHEETS 247 TO 251)

1. MAINTAIN PHASE 2C MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. MODIFY THE SIGNAL TIMINGS OF THE EXISTING SIGNAL AT THE INTERSECTION OF S. MAIN ST. AND US-224 WB RAMPS WHEN RAMP D IS CLOSED AND TRAFFIC IS DETOURED.

3. CLOSE AND DETOUR RAMP D TRAFFIC. CONSTRUCT RAMP D AND OUTSIDE HALF OF THE APPROACH SLAB OF I-77 NB OVER E. WATERLOO RD.

PHASE 2E (SHEETS 252 TO 254)

1. MAINTAIN PHASE 2D MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. SHIFT I-77 NB TRAFFIC TO THE OUTSIDE SHOULDER AND LANES BETWEEN THE RAMP D GORE AND I-77 NB OVER E. WATERLOO RD. AND CONSTRUCT THE INSIDE HALF OF THE APPROACH SLAB OF I-77 NB OVER E. WATERLOO RD.

PHASE 2F (SHEETS 255 TO 260)

1. MAINTAIN PHASE 2E MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. RESTORE I-77 NB TRAFFIC TO THE PHASE 2 LANE ARRANGEMENT NORTH OF THE RAMP D GORE AND REOPEN RAMP D.

PHASE 2G (SHEETS 261 TO 266)

1. MAINTAIN PHASE 2F MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. CLOSE THE RIGHT LANE OF US-224 EB APPROACHING THE RAMP C GORE AND SHIFT RAMP C INTO THE CLOSED LANE. CONSTRUCT THE OUTSIDE SHOULDER AND LANES OF US-224 EB FROM RAMP C TO S. ARLINGTON ST.

PHASE 2H (SHEETS 267 TO 276)

1. MAINTAIN PHASE 2G MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. PLACE THE RIGHT LANE OF US-224 EB AND RAMP C-2 TO THEIR FINAL LANE ARRANGEMENT. REMOVE THE RAMP C TEMPORARY PAVEMENT.

3. SHIFT RAMP C TRAFFIC AT THE I-77 NB/RAMP C GORE ONTO THE OUTSIDE PAVEMENT. CONSTRUCT THE REMAINDER OF THE I-77 NB/RAMP C GORE.

PHASE 2I (SHEETS 277 TO 279)

1. THIS PHASE MAY OCCUR AT ANY POINT AFTER PHASE 2 WHEN THE S. ARLINGTON RD. TO I-77 NB RAMPS TEMPORARY PAVEMENT IS COMPLETE.
2. MAINTAIN PHASE 2 MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.

3. USING TEMPORARY PAVEMENT, SHIFT THE S. ARLINGTON RD. TO I-77 NB RAMPS ONTO I-77 NB. CONSTRUCT THE S. ARLINGTON RD. TO I-77 NB RAMP, GORE, AND PORTIONS OF I-77 NB OUTSIDE LANES.

PHASE 2J (SHEETS 280 TO 284)

1. MAINTAIN PHASE 2I MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. SHIFT THE S. ARLINGTON RD. TO I-77 NB RAMP TRAFFIC ONTO THE COMPLETED PAVEMENT AND REMOVE THE TEMPORARY PAVEMENT.

- WINTER SHUTDOWN SEASON 2 (NOT SHEETS PROVIDED)
1. AT THE END OF THE SECOND CONSTRUCTION SEASON, MAINTAIN THE I-77 SB LANES IN THE PHASE 2 LANE ARRANGEMENT. PLACE THE NB LANES IN THE PHASE 3 LANE ARRANGEMENT. REOPEN ALL RAMPS.
2. REMOVE THE NB CROSSOVERS AND RECONSTRUCT THE NB INSIDE SHOULDER FROM APPROXIMATELY STA. 371+50 TO STA. 372+57.
3. PRIOR TO PHASE 3, CONSTRUCT THE SB CROSSOVERS.

PHASE 3 (SHEETS 318 TO 346)

1. SHIFT I-77 NB TRAFFIC ONTO THE OUTSIDE NEWLY CONSTRUCTED PAVEMENT COMPLETED IN THE PREVIOUS PHASE. SHIFT THE INSIDE THIRD LANE OF I-77 SB INTO A CONTRAFLOW LANE ON THE NB SIDE OF I-77 USING THE SB CROSSOVERS CONSTRUCTED PRIOR TO THIS PHASE. SHIFT THE RIGHT TWO LANES OF I-77 SB TO THE INSIDE NEWLY CONSTRUCTED PAVEMENT COMPLETED IN PHASE 2. CONSTRUCT THE I-77 SB OUTSIDE SHOULDER AND LANES. RECONSTRUCT THE I-77 NB SHOULDER FROM APPROXIMATELY STA. 368+00 TO STA. 370+00.
2. CLOSE AND DETOUR RAMP B-1 TRAFFIC. CONSTRUCT RAMP B-1.
3. CLOSE THE OUTSIDE THIRD LANE OF US-224/I-277 EB. UTILIZE A DROP LANE AT THE US-224/I-277 EB AND RAMP A GORE. SHIFT RAMP A TRAFFIC TO THE INSIDE OF RAMP A. CONSTRUCT THE OUTSIDE HALF OF RAMP A AND INSTALL TEMPORARY PAVEMENT TO BE UTILIZED WITH PHASE 3B.

PHASE 3A (SHEETS 352 TO 358)

1. MAINTAIN PHASE 3 MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. REOPEN RAMP B-1.

PHASE 3B (SHEETS 359 TO 364)

1. MAINTAIN PHASE 3A MOT TRAFFIC PATTERNS EXCEPT AS INDICATED BELOW.
2. SHIFT RAMP A TRAFFIC ONTO THE OUTSIDE NEWLY CONSTRUCTED PAVEMENT AND TEMPORARY PAVEMENT COMPLETED IN PHASE 3. CONSTRUCT THE INSIDE OF RAMP A, THE RAMP A/US-224 EB/I-77 EB GORE, AND THE RAMP A/I-77 SB GORE.

POST PHASE 3B (NO SHEETS PROVIDED)

- AT ANY POINT AFTER PHASE 3B HAS BEEN COMPLETED UTILIZE A SHOULDER CLOSURE PER ODOT STANDARD CONSTRUCTION DRAWING MT-95.45 TO CLOSE THE OUTSIDE SHOULDER OF RAMP A FROM APPROXIMATE STATION 107+50 TO STATION 112+00. REMOVE THE TEMPORARY PAVEMENT USED IN A PREVIOUS PHASE, PERFORM FINAL GRADING, AND INSTALL THE REMAINDER OF THE MISSING GUARDRAIL.

PHASE 4 (SHEETS 393 TO 401)

1. CONSTRUCT FINAL PAVEMENT WEARING COURSE AND INSTALL ALL FINAL PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES UTILIZING ALLOWABLE LANE CLOSURES IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE CHART.
2. PLACE ALL LANES AND RAMPS INTO THEIR FINAL LANE CONFIGURATION.

3. CLOSE THE I-77 SB INSIDE LANE FROM STA. 368+00 TO STA. 373+00 IN ORDER TO REMOVE THE SOUTHERN SB CROSSOVER, RECONSTRUCT THE I-77 SB INSIDE SHOULDER, AND CONSTRUCT THE MEDIAN BARRIER. UPON COMPLETION, REOPEN ALL I-77 SB LANES.
4. REMOVE THE NORTHERN I-77 SB CROSSOVER UTILIZING SHOULDER CLOSURES IN ACCORDANCE WITH MT-95.45 AND PLACE FINAL GUARD RAIL.

REVISIONS		
NO.	DATE	DESCRIPTION
△	04/20/21	REVISED SEQUENCE OF CONSTRUCTION

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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.

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

- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6", AS PER PLAN**
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", AS PER PLAN**
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 12", AS PER PLAN**
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF 614.11:

- ALL CLASS 1 EDGE LINES, LANE LINES, AND DOTTED LINES SHALL BE 6 INCHES WIDE AND CHANNELIZING MARKINGS SHALL BE 12 INCHES WIDE.
- ALL CLASS 1 PAVEMENT MARKINGS SHALL BE SPRAY THERMOPLASTIC PER ODOT SPECIFICATION 648.
- ALL CLASS 1 PAVEMENT MARKINGS SHALL CONTAIN WET REFLECTIVE BEADS AT AN APPLICATION RATE PER ODOT SPECIFICATION TABLE 614.11-1.
- ALL CLASS 1 PAVEMENT MARKINGS SHALL NOT BE RECESSED.

PAYMENT FOR ALL MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO ACCOMPLISH THE ABOVE REQUIREMENTS SHALL BE INCLUDED WITH ITEM 614 - WORK ZONE PAVEMENT MARKING, CLASS 1, AS PER PLAN.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT PROJECT SUM-76/77-8-08.42/09.77/00.00 (PID 102329) MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT AND SHALL HAVE PRIORITY TO THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS (IT MAY BE NECESSARY TO REVERSE PHASES 2 AND 3 IN ORDER TO BETTER ALIGN WITH PID 102329). 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.

ITS MESSAGE BOARDS

THE EXISTING ITS MESSAGE BOARDS IN THE VICINITY OF THE PROJECT WILL BE UTILIZED TO PROVIDE SUPPLEMENTAL INFORMATION TO THE TRAVELING PUBLIC. THE CONTRACTOR WILL NOTIFY THE PROJECT ENGINEER ONE (1) WEEK IN ADVANCE OF ANY PHASE CHANGE ON I-77. THE PROJECT ENGINEER WILL COORDINATE WITH THE DISTRICT PUBLIC INFORMATION OFFICE TO GET THE ITS MESSAGE BOARDS ADJUSTED.

ITEM 614. MAINTAINING TRAFFIC. MISC.: RUMBLE STRIPS

THE RUMBLE STRIPS WILL BE PLACED AS SHOWN IN THE PLAN OR AS DIRECTED BY THE ENGINEER. RUMBLE STRIPS WILL BE INSTALLED EITHER ON TOP OF THE PAVEMENT USING HEAT-FUSED PREFORMED PLASTIC MATERIAL OR MILLED INTO THE PAVEMENT.

HEAT-FUSED PREFORMED PLASTIC RUMBLE STRIPS WILL BE FOUR (4) INCHES WIDE AND ONE HALF (0.5) INCH THICK IN PLACE. MILLED RUMBLE STRIPS WILL BE FOUR (4) INCHES WIDE AND ONE HALF (0.5) INCH INTO THE PAVEMENT. THE RUMBLE STRIPS WILL TRAVERSE THE TOTAL LANE WIDTH. THERE WILL BE TWO SECTIONS OF RUMBLE STRIPS. THE RUMBLE STRIPS MAY HAVE TO GO ACROSS TWO OR THREE LANES OF TRAFFIC.

THE FIRST RUMBLE STRIP SECTION SHOULD BE PLACED BEFORE THE ADVANCE WARNING DEVICES, THERE WILL BE TEN (10) TRANSVERSE STRIPS SIX (6) FEET APART. THE SECOND SECTION SHOULD BE PLACED A MINIMUM OF 250 FEET IN ADVANCE OF THE TRAFFIC CONDITION, THERE WILL BE TEN (10) TRANSVERSE STRIPS FIVE (5) FEET APART.

MATERIAL USED FOR THE RUMBLE STRIPS WILL BE 740.08 HEAT-FUSED PREFORMED PLASTIC MATERIAL, 125 MILS MINIMUM THICKNESS, ON THE ODOT APPROVED LIST. THE MANUFACTURERS RECOMMENDATIONS MUST BE FOLLOWED FOR INSTALLATION.

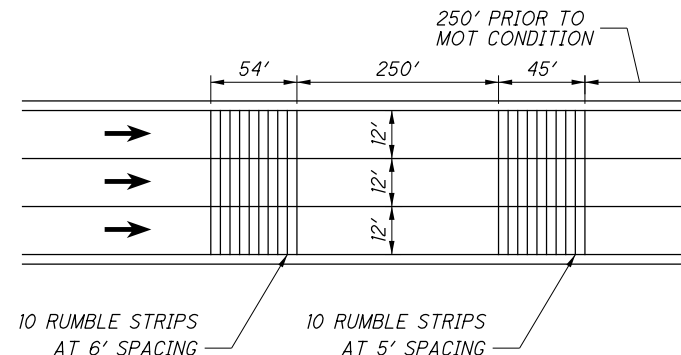
MILLED RUMBLE STRIPS, ALTHOUGH SELF-CLEANING TO A LIMITED EXTENT, SHOULD BE INSPECTED PERIODICALLY TO DETERMINE IF DEBRIS NEEDS TO BE REMOVED OR IF THEY NEED TO BE RE-MILLED.

RUMBLE STRIPS WILL BE REMOVED WHEN THEY ARE NO LONGER NEEDED AS DETERMINED BY THE ENGINEER. WHEN THE MILLED RUMBLE STRIPS ARE NO LONGER NEEDED, THE ENTIRE WIDTH OF THE LANE CONTAINING THE STRIPS WILL BE MILLED TO A DEPTH OF 1 1/4" AND RESURFACED WITH ITEM 448 ASPHALT CONCRETE SURFACE COURSE TYPE 1, PG 64-22.

A W8-H16-48 SIGN [RUMBLE STRIPS] WILL BE DUAL MOUNTED APPROXIMATELY 500 FEET IN ADVANCE OF THE RUMBLE STRIP INSTALLATION. THE PROVISION, ERECTION, MAINTENANCE AND REMOVAL OF THE SIGNS AND SUPPORTS WILL BE INCLUDED IN THE COST OF THE RUMBLE STRIPS.

THIS ITEM WILL BE PAID FOR BY THE FOOT AT ONE HALF (0.5) INCH THICKNESS FOR 740.08 HEAT-FUSED PREFORMED PLASTIC OR ONE HALF (0.5) INCHES OF MILLED THICKNESS. THIS WILL INCLUDE ALL LABOR MATERIALS AND EQUIPMENT FOR THE INSTALLATION, MAINTENANCE AND REMOVAL OF THE RUMBLE STRIPS.

ITEM SPECIAL - RUMBLE STRIPS 2,880 FOOT



RUMBLE STRIP PLACEMENT DETAIL
(NOT TO SCALE)

ITEM 614. MAINTAINING TRAFFIC. MISC.: "SNAP" MILL AND FILL

MAINTENANCE OF TRAFFIC ON THE MEDIAN SHOULDER WILL REQUIRE THE EXISTING "SNAPS" TO BE MILLED AND FILLED. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL OF THE FOLLOWING: REMOVAL OF THE EXISTING "SNAPS" BY MILLING 1 1/2" DEEP AND 2' WIDE; TACK COATING ALL EXPOSED MILLED SURFACES; AND PAVING THE MILLED AREA WITH 1 1/2" OF ITEM 422 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM TYPE A, (488). ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC, MISC.: "SNAP" MILL AND FILL.

ITEM 614 - MAINTAINING TRAFFIC, MISC.: "SNAP" MILL AND FILL 20,000 FT

ITEM 614. MAINTAINING TRAFFIC. MISC.: BRIDGE DECK AND PAVEMENT PATCHING

THIS WORK WILL BE AS DIRECTED BY THE ENGINEER AND WILL INCLUDE ALL ASSOCIATED MOT COSTS WITH THE ACTIVITY. THE COST FOR EACH ITEM SHALL BE \$1.00. THE FIXED AMOUNT SHOWN IN THE PROPOSAL IS INCLUDED (AS ANY OTHER BID ITEMS) IN THE TOTAL BID AMOUNT. THIS FIXED AMOUNT IS THE DEPARTMENT'S ESTIMATE OF THE TOTAL COST OF BRIDGE DECK AND PAVEMENT PATCHING WORK REQUIRED TO BE PERFORMED WITHIN THE WORK LIMITS AS DIRECTED BY THE ENGINEER. C&MS TABLE 104.02-2 DOES NOT APPLY TO REDUCTIONS IN THIS CONTRACT ITEM. FORCE ACCOUNT RECORDS SHALL BE KEPT TO TRACK AND ULTIMATELY DETERMINE THE AMOUNT OF THE PAY ITEM USED. THE WORK ITEM SHALL INCLUDE ALL WORK, AS DIRECTED BY THE ENGINEER, NEEDED TO RE-ESTABLISH A REASONABLY SAFE AND PASSABLE CONDITION OF THE DECK AND/OR PAVEMENT FOR THE DURATION OF THE REQUIRED UPCOMING MOT PHASES. THE CONTRACTOR SHALL MEET WITH THE ENGINEER TO ESTABLISH THE WORK AFTER EXECUTION OF THE CONTRACT. THE CONTRACTOR'S PROPOSED PHASING AND PHASING DURATIONS WILL ASSIST THE ENGINEER IN DETERMINING THE EXTENT OF THE WORK. THIS WORK IS ONLY INTENDED TO ESTABLISH A SAFE AND DRIVABLE CONDITION FOR THE DURATION OF THE PROJECT. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITIES OF 614.02B.

ITEM 614 - MAINTAINING TRAFFIC, MISC: BRIDGE DECK AND PAVEMENT PATCHING 100,000 EACH

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REVISIONS		
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SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
74	76	77	78	80	81	82	83	84	113	114	74A	01/IMS/PV							02/IMS/PV
MAINTENANCE OF TRAFFIC																			
							450					405	45	202	30700	450	FT	CONCRETE BARRIER REMOVED	
												1,674	167	202	35100	1,674	FT	PIPE REMOVED, 24" AND UNDER	
												1	1	202	58000	1	EACH	MANHOLE REMOVED	
												13	1	202	58100	13	EACH	CATCH BASIN REMOVED	
												1	1	202	58400	1	EACH	INLET ABANDONED	
												3	3	202	58500	3	EACH	CATCH BASIN ABANDONED	
												8	7	1	SPECIAL	20270000	8	FT	FILL AND PLUG EXISTING CONDUIT, 15"
												135	122	13	SPECIAL	20270000	135	FT	FILL AND PLUG EXISTING CONDUIT, 18"
							505					455	50	254	01000	505	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	
												99	11	302	46000	110	CY	ASPHALT CONCRETE BASE, PG64-22	
												585	65	411	10000	650	CY	STABILIZED CRUSHED AGGREGATE	
												19	2	441	50000	21	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
												584	58	611	04400	584	FT	12" CONDUIT, TYPE B	
												741	74	611	04600	741	FT	12" CONDUIT, TYPE C	
												28	3	611	05900	28	FT	15" CONDUIT, TYPE B	
												9	1	611	05901	10	FT	15" CONDUIT, TYPE B, AS PER PLAN, 706.02	
							10					74	7	611	06100	74	FT	15" CONDUIT, TYPE C	
												10	1	611	06100	10	FT	15" CONDUIT, TYPE C, 706.02	
												162	16	611	07400	162	FT	18" CONDUIT, TYPE B	
												218	22	611	07600	218	FT	18" CONDUIT, TYPE C	
												1	1	611	98370	1	EACH	CATCH BASIN, NO. 6	
												1	1	611	98410	1	EACH	CATCH BASIN, NO. 8	
												14	1	611	98470	14	EACH	CATCH BASIN, NO. 2-2B	
												1	1	611	99101	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN	
												1	1	611	99574	1	EACH	MANHOLE, NO. 3	
							850					765	85	614	11110	850	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
												1		SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL	
							42,950					160,394	17,821	614	11630	178,215	FT	INCREASED BARRIER DELINEATION	
												45	5	614	12381	50	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL), AS PER PLAN	
LS														614	12420	LS		DETOUR SIGNING	
												18	2	614	12470	18	EACH	WORK ZONE SPEED LIMIT SIGN	
												12	1	614	12484	13	EACH	WORK ZONE INCREASED PENALTIES SIGN	
												2		614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
												5,774	642	614	12801	6,416	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	
100												90	10	614	13001	100	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	
												36	313	614	13310	3,133	△ EACH	BARRIER REFLECTOR, TYPE 1, 1 WAY	
												210	23	614	13310	233	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL	
												216	24	614	13312	240	EACH	BARRIER REFLECTOR, TYPE 2, 1 WAY	
												36	361	614	13350	3,606	△ EACH	OBJECT MARKER, ONE WAY	
												135	15	614	18000	150	EACH	MAINTAINING TRAFFIC, MISC.: WORK ZONE RAISED PAVEMENT MARKERS ON PERMANENT CONCRETE SURFACES	
												90,000	10,000	614	18000	100,000	EACH	MAINTAINING TRAFFIC, MISC.: BRIDGE DECK AND PAVEMENT PATCHING	
												2,592	288	614	18030	2,880	FT	MAINTAINING TRAFFIC, MISC.: RUMBLE STRIPS	
												18,000	2,000	614	18030	20,000	FT	MAINTAINING TRAFFIC, MISC.: "SNAP" MILL AND FILL	
												130	14	614	18601	144	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	
												25.6	2.8	614	20011	28.4	△ MILE	WORK ZONE LANE LINE, CLASS I, 6", AS PER PLAN	
												27	24	614	20410	24	MILE	WORK ZONE LANE LINE, CLASS II, 6"	
												72.4	8	614	22011	80.4	△ MILE	WORK ZONE EDGE LINE, CLASS I, 6", AS PER PLAN	
												101,415	11,269	614	23011	112,684	△ FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", AS PER PLAN	
												39,025	4,336	614	24001	43,361	FT	WORK ZONE DOTTED LINE, CLASS I, AS PER PLAN	
												22,950	2,550	614	28000	25,500	FT	WORK ZONE GORE MARKING, CLASS II	

MAINTENANCE OF TRAFFIC GENERAL SUMMARY

SUM-77 / 277 / 224
VARIOUS

REVISIONS		
NO.	DATE	DESCRIPTION
△	04/20/21	REVISED SEQUENCE OF CONSTRUCTION

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1288

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SHEET NO.	202		202		SPECIAL		601		601		601		601		601		601		601		602		601	
	PIPE REMOVED, 24" AND UNDER FT		HEADWALL REMOVED EACH		FILL AND PLUG EXISTING CONDUIT, 24" FT		ROCK CHANNEL PROTECTION, TYPE A WITH FILTER CY		ROCK CHANNEL PROTECTION, TYPE B WITH FILTER CY		ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER CY		ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER CY		PAVED GUTTER, TYPE I-2 FT		CONCRETE MASONRY CY		RIPRAP, TYPE D SY					
908			1				26										2.4		8					
909			1					21									1.9							
916			1					40									4.4							
917			1														0.43							
918			1														0.31							
919	8		2		169					6.13				78		1.12								
920	8		2		139							2.22				1.12								
TOTALS CARRIED TO GENERAL SUMMARY																								
	16		9		308		26		61		7		3		78		11.7		8					
SHEET NO.	18" CONDUIT, TYPE A, 706.02 FT		24" CONDUIT, TYPE A, 706.02 FT		CONDUIT, BORED OR JACKED, 30", TYPE A, 748.06 FT		CONDUIT, MISC.: 30", TYPE A, 748.06, OPEN CUT FT		60" CONDUIT, TYPE A, 706.02 FT		66" CONDUIT, TYPE A, 706.02 FT		96" CONDUIT, TYPE A, 707.02, 707.03 OR 707.04 FT		FIELD PAVING OF EXISTING PIPE, 96" 707.02, 707.03 OR 707.04 FT		CONDUIT, FIELD PAVING OF PIPE, 96" 707.02, 707.03 OR 707.04 FT							
908												12												
909									16															
916													20		317		20							
917			10																					
918	7																							
919					156		24																	
920					138		22																	
TOTALS CARRIED TO GENERAL SUMMARY																								
	7		10		294		46		16		12		20		317		20							

CULVERT SUBSUMMARY	SUM-77 / 277 / 224	VARIOUS
CALCULATED CJC	CHECKED PJF	410 1288

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/20/21	ADDED RIPRAP, TYPE D ITEM & QTY

PROJECT DESCRIPTION

PROJECT CONSISTS OF THE FULL DEPTH RECONSTRUCTION OF 2.7 MILES OF I-77, INCLUDING AN ADDITIONAL THROUGH LANE, AND RECONSTRUCTION OF THE I-77/I-277/US-224 INTERCHANGE IN SUMMIT COUNTY. PROJECT ALSO INCLUDES THE RECONSTRUCTION OF THE RAMP C-2 BRIDGE OVER NORTHBOUND I-77, WIDENING OF THE I-77 BRIDGES OVER WARNER ROAD AND WIDENING AND REDECKING OF THE I-77 BRIDGES OVER THE TUSCARAWAS RIVER.

* LONGITUDE: W81° 29' 39.1"
 * LATITUDE: N41° 0' 22.3"

* LONGITUDE AND LATITUDE TO APPROX. CENTER OF PROJECT

BMP'S

POST-CONSTRUCTION STORM WATER BEST MANAGEMENT PRACTICES (BMP) FOR REDEVELOPMENT PROJECTS UTILIZING VEGETATED BIOFILTERS & VEGETATED FILTER STRIPS REQUIRE WATER QUALITY TREATMENT.

TREATMENT AREA REQUIRED = 0.200 x 120.12 EDA ACRES = 24.02 ACRES

PROPOSED VEGETATED BIOFILTERS & VEGETATED FILTER STRIPS TREAT A TOTAL AREA OF 24.05 ACRES OF CONTRIBUTING ODOT DRAINAGE AREA.

SEE SHEET 452 FOR BMP LOCATION TABLE.

LEGEND

- WETLAND AREA IMPACTED
- WETLAND AREA NOT TO BE DISTURBED
- ITEM 670 - DITCH EROSION PROTECTION (VEGETATED BIOFILTER PER DETAIL ON SHEET 55)
- ITEM 670 - SLOPE EROSION PROTECTION (VEGETATED FILTER STRIP W/ 4" ITEM 659 - TOPSOIL)
- ITEM 670 - DITCH EROSION PROTECTION

- ITEM 836 - SEEDING AND EROSION CONTROL W/ TURF REINFORCING MAT, TYPE 1
- ITEM 836 - SEEDING AND EROSION CONTROL W/ TURF REINFORCING MAT, TYPE 2
- ITEM 601 - ROCK CHANNEL PROTECTION
- TIED CONCRETE BLOCK
- ITEM 601 - RIPRAP
- CATCH BASIN No. 3A
- CATCH BASIN No. 3
- CATCH BASIN No. 8
- MANHOLE No. 3
- INLET No. 3
- INLET No. 3D

BEGIN PROJECT
 BEGIN WORK (SB)
 @ R/W & CONST. I.R. 77
 STA. 391+37.36
 S.L.M. 7.39

BEGIN WORK (NB)
 @ R/W & CONST. I.R. 77
 STA. 371+50.00
 E171(457)

BEGIN WORK
 @ CONST. ARLINGTON
 ROAD RAMP D
 STA. 71+69.06

END @ CONST.
 ARLINGTON
 ROAD RAMP D
 STA. 88+18.25

STRUCTURE NO.
 SUM-77-0744
 (NO WORK)

ITEM 832 - STORM WATER POLLUTION PREVENTION PLAN = LS
 ITEM 832 - EROSION CONTROL = 1,150,000 EACH
 ITEM 832 - STORM WATER POLLUTION PREVENTION INSPECTIONS = LS
 ITEM 832 - STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE = LS

QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY ON SHEETS 402 - 406.

WETLAND IMPACTS/AVOIDANCE

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR IMPACT THE REMAINING WETLANDS INDICATED ON THE PLAN. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS WITHIN THESE WETLANDS.

TO PROTECT AND DELINEATE THE BOUNDARY OF THE EXISTING REMAINING WETLANDS, TEMPORARY CONSTRUCTION FENCE AND FILTER FABRIC FENCE (1,800 LINEAR FEET, PAYMENT FOR THIS ITEM WILL BE MADE UNDER ITEM 832, EROSION CONTROL) SHALL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS WITHIN THE WETLANDS AREA BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES WITHIN THESE LIMITS AND ADJACENT AREA AND MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION.

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PROJECT DATA			
TOTAL AREA OF PROJECT (RIGHT OF WAY)	174.56 AC.	PRE-CONSTRUCTION RUNOFF COEFFICIENT	0.64
PROJECT EARTH DISTURBING ACTIVITIES	120.12 AC.	POST CONSTRUCTION RUNOFF COEFFICIENT	0.67
CONTRACTOR EARTH DISTURBING ACTIVITIES	1.00 AC.	IMPERVIOUS AREA FOR PRE-CONSTRUCTION	63.04 AC.
NOI EARTH DISTURBING ACTIVITIES	121.12 AC.	IMPERVIOUS AREA FOR POST CONSTRUCTION	73.67 AC.
SOIL DATA	SUMMIT COUNTY SOIL SURVEY (NRCS WEB SOIL SURVEY)		
IMMEDIATE RECEIVING STREAM(S) OR SURFACE WATER(S)	TUSCARAWAS RIVER		
SUBSEQUENT RECEIVING STREAM(S) OR SURFACE WATER(S)	MUSKINGUM RIVER		

REVISIONS		
NO.	DATE	DESCRIPTION
A	04/20/21	WETLAND NOTE REVISED

FOR GEOMETRIC PLAN, SEE SHEETS 13 -22
 FOR CURVE DATA, SEE SHEETS 23 -26

CALCULATED	ZJP	CHECKED	PJF
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PROJECT SITE PLAN

BEGIN TO STA. 396+00 I.R. 77

SUM-77 / 277 / 224

VARIOUS

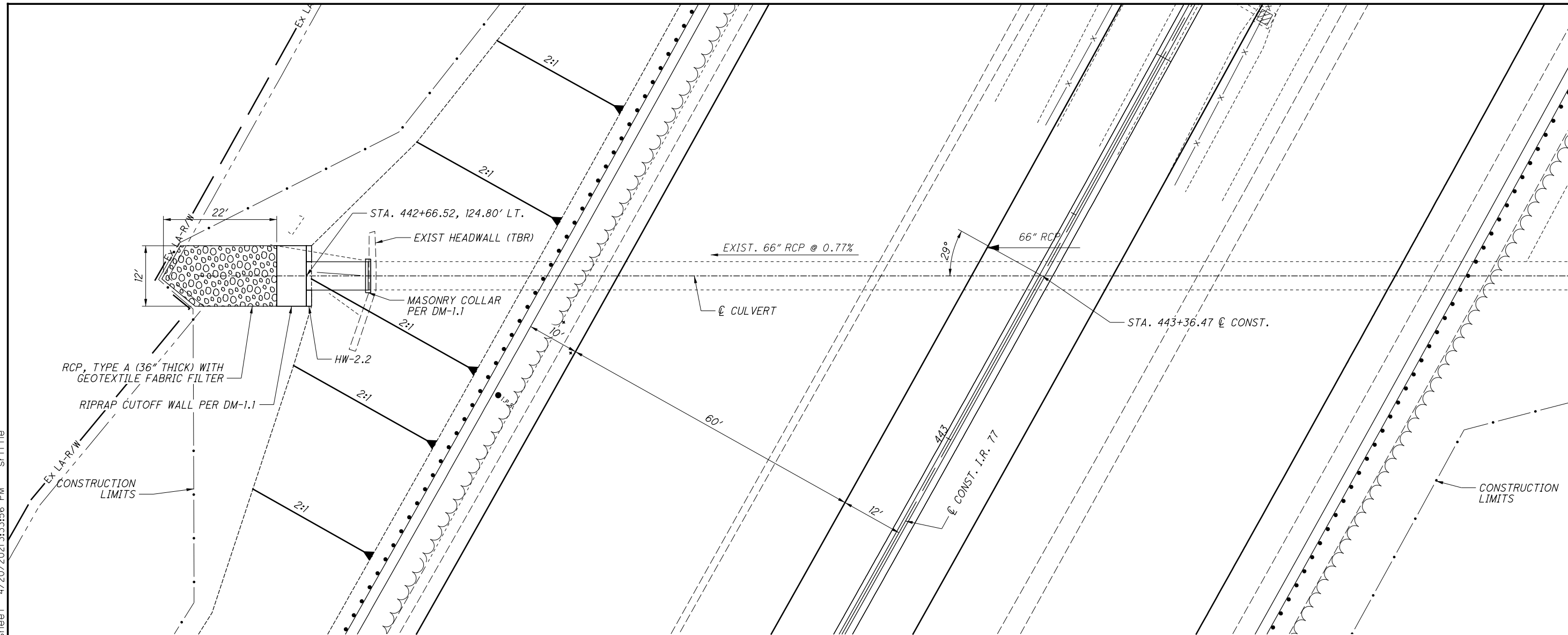
444

1288

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CALCULATED
SSR
CHECKED
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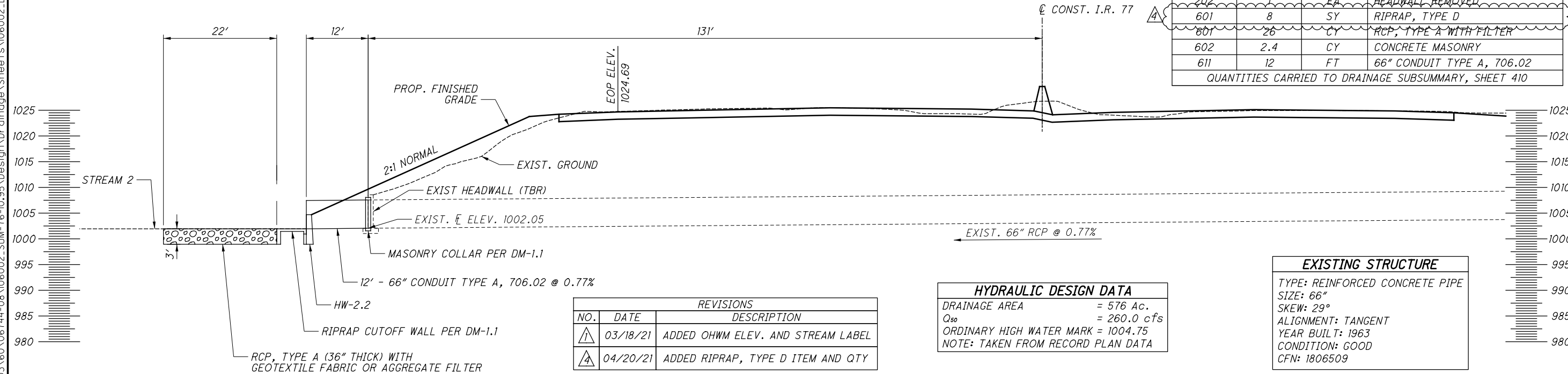
HORIZONTAL SCALE IN FEET
0 5 10 20



CULVERT DETAIL
177 STA. 443+36

NOTES:
1. NO WORK IS PROPOSED FOR THE INLET SIDE OF THE EXISTING CULVERT.

ESTIMATED QUANTITIES			
ITEM	QUAN	UNIT	DESCRIPTION
202	1	EA	HEADWALL REMOVED
601	8	SY	RIPRAP, TYPE D
601	26	CY	RCP, TYPE A WITH FILTER
602	2.4	CY	CONCRETE MASONRY
611	12	FT	66" CONDUIT TYPE A, 706.02
QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY, SHEET 410			



REVISIONS		
NO.	DATE	DESCRIPTION
1	03/18/21	ADDED OHWM ELEV. AND STREAM LABEL
2	04/20/21	ADDED RIPRAP, TYPE D ITEM AND QTY

HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 576 Ac.
Q ₅₀	= 260.0 cfs
ORDINARY HIGH WATER MARK	= 1004.75
NOTE: TAKEN FROM RECORD PLAN DATA	

EXISTING STRUCTURE	
TYPE:	REINFORCED CONCRETE PIPE
SIZE:	66"
SKEW:	29°
ALIGNMENT:	TANGENT
YEAR BUILT:	1963
CONDITION:	GOOD
CFN:	1806509

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VARIOUS