

**ITEM 614, MAINTAINING TRAFFIC**

**TR-77**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON TR-77, EXCEPT FOR A PERIOD NOT TO EXCEED 120 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 12. A DISINCENTIVE SHALL BE ASSESSED ACCORDING TO THE LANE VALUE CONTRACT TABLE.

PAYMENT FOR THE ERECTION, MAINTENANCE AND REMOVAL FOR THE DETOUR SIGNING SHALL BE MADE PER ITEM 614- DETOUR SIGNING.

**SR-48**

A MINIMUM OF 2 LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON SR-48 BY USE OF THE EXISTING PAVEMENT EXCEPT AS NOTED IN THE PERMITTED LANE CLOSURE TIME NOTE.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

|              |                |
|--------------|----------------|
| CHRISTMAS    | FOURTH OF JULY |
| NEW YEARS    | LABOR DAY      |
| MEMORIAL DAY | THANKSGIVING   |

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

| DAY OF HOLIDAY OR EVENT | TIME ALL LANES MUST BE OPEN TO TRAFFIC                     |
|-------------------------|--|
| SUNDAY                  | 12:00N FRIDAY THROUGH 6:00AM MONDAY                        |
| MONDAY                  | 12:00N FRIDAY THROUGH 6:00AM TUESDAY                       |
| TUESDAY                 | 12:00N MONDAY THROUGH 6:00AM WEDNESDAY                     |
| WEDNESDAY               | 12:00N TUESDAY THROUGH 6:00AM THURSDAY                     |
| THURSDAY                | 12:00N WEDNESDAY THROUGH 6:00AM FRIDAY (THANKSGIVING ONLY) |
| FRIDAY                  | 6:00AM WEDNESDAY THROUGH 6:00AM MONDAY                     |
| FRIDAY                  | 12:00N THURSDAY THROUGH 6:00AM MONDAY                      |
| SATURDAY                | 12:00N FRIDAY THROUGH 6:00AM MONDAY                        |

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

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 TIMEFRAME, 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.

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]

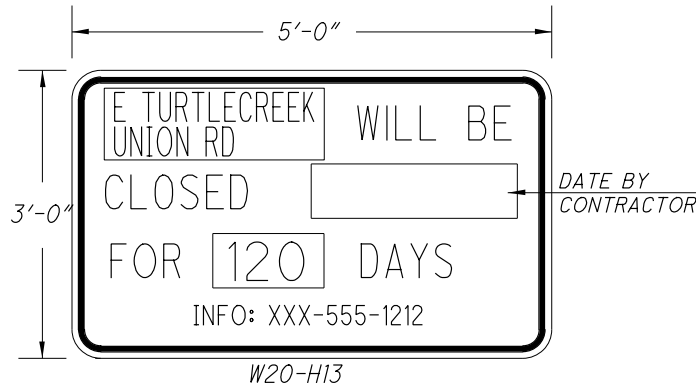
THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC

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.

NOTICE OF CLOSURE SIGN TIME TABLE  
ITEM DURATION SIGN DISPLAYED OF CLOSURE TO PUBLIC

|                     |                        |                                   |
|---------------------|------------------------|-----------------------------------|
| RAMP &              | >=2 WEEKS              | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| ROAD                | > 12 HOURS & < 2 WEEKS | 7 CALENDAR DAYS PRIOR TO CLOSURE  |
| CLOSURES < 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.



PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING AND REMOVING THE SIGNS INCLUDING SUPPORTS.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

ON NORTHBOUND TR-77 JUST WEST OF THE INTERSECTION WITH RAMPS A AND C.

ON SOUTHBOUND TR-77 JUST EAST OF THE INTERSECTION WITH DEERFIELD ROAD.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

|   |            |
|---|------------|
| 410, TRAFFIC COMPACTED SURFACE, TYPE B        | 6 CU. YD.  |
| 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC | 10 CU. YD. |
| 616, WATER                                    | 4 M. GAL.  |

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.

**SR-48 MEDIAN ACCESS**

IF NECESSARY, MEDIAN ACCESS SHALL CONFORM TO ODOT SCD MT-103.10. THE COST TO CONSTRUCT AND MAINTAIN THIS ACCESS IS TO BE INCLUDED IN ITEM 614 - MAINTAINING TRAFFIC.

**CLEARANCE NOTICE FOR SR-48 TRAFFIC**

ANY WORK (FALSEWORK, TRAFFIC PROTECTION, CONTAINMENT, ETC.) OVER LIVE TRAFFIC BY THE CONTRACTOR THAT REDUCES THE EXISTING VERTICAL CLEARANCE IS PROHIBITED UNLESS 30 DAYS ADVANCED NOTICE IS PROVIDED WITH NEW PROPOSED VERTICAL CLEARANCES. THE CONTRACTOR SHALL PROVIDE FIELD MEASUREMENTS BEFORE ALLOWING TRAFFIC UNDERNEATH. IF ANY WORK IS TO OCCUR BELOW 14'-6", THEN SIGNS ON THE STRUCTURE AND ADVANCE WARNING SIGNS SHALL BE INSTALLED A MINIMUM OF 2 WEEKS PRIOR TO PERFORMING SUCH WORK. SIGNING SHALL BE IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (OMUTCD) AND THE OHIO "TRAFFIC ENGINEERING MANUAL" (TEM). NO WORK OVER TRAFFIC SHALL OCCUR WITH A VERTICAL CLEARANCE LESS THAN 14'-0". LOWERING THE VERTICAL CLEARANCE DURING CONSTRUCTION IS CONSIDERED THE CONTRACTOR'S MEANS AND METHODS OF ACCOMPLISHING THE WORK, AND THEREFORE THE STATE IS NOT RESPONSIBLE FOR ANY DAMAGE FROM VEHICULAR IMPACTS THAT MAY RESULT AS PER 107.10.

**PERMITTED LANE CLOSURE TIMES**

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PERMITTED LANE CLOSURE NOTE. THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 8 WORK ZONE TRAFFIC CONTROL ENGINEER. SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED IN THE LANE. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED. PERMITTED LANE CLOSURES SHALL ONLY BE ALLOWED DURING THE TIMES SPECIFIED IN THE LANE VALUE CONTRACT TABLE INCLUDED IN THESE PLANS. NO LANE OR SHOULDER CLOSURE SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.

SHORT TERM LANE CLOSURES ARE NOT PERMITTED ON SOUTHBOUND SR-48 FROM 6 AM TO 9 AM, ON NORTHBOUND SR-48 FROM 3 PM TO 7 PM, AND NORTH AND SOUTHBOUND UP AND OVER (@ TR-77 RAMPS) FROM 6 AM TO 9 PM.

SHORT DURATION CLOSURES OF 2 LANES ON SR-48 FOR THE ERECTION AND REMOVAL OF BEAMS SHALL BE PER ODOT SCD MT-99.60.

LANE VALUE CONTRACT TABLE

| DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED | RESTRICTED TIME PERIOD | TIME UNIT | DISINCENTIVE \$ PER TIME UNIT |
|--|------------------------|-----------|-------------------------------|
| NB SR-48 FROM MM 10 TO MM 11                       | 3 PM TO 7 PM           | 1 MINUTE  | \$120                         |
| SB SR-48 FROM MM 11 TO MM 10                       | 6 AM TO 9 AM           | 1 MINUTE  | \$120                         |
| SR-48 UP AND OVER @ TR-77 RAMPS                    | 6 AM TO 9 PM           | 1 MINUTE  | \$120                         |
| TR-77 (ROAD CLOSURE)                               | 120 DAYS               | 1 DAY     | \$3,700                       |

**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 TIMEFRAMES 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 & PIO              |
| RAMP & ROAD CLOSURES                            | >= 2 WEEKS            | 21 CALENDAR DAYS PRIOR TO CLOSURE        |
|   | > 12HOURS & < 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.

**EXTRA ADVANCE WARNING SIGNS**

AN EXTRA ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS, TWO W20-5 (RIGHT /LEFT LANE CLOSURE AHEAD) SIGNS WITH W16-3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED WARNING LIGHTS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE EXTRA ADVANCE WARNING SIGN GROUPS AS SHOWN ON TRAFFIC SCD MT-95.50 AT THE FOLLOWING DISTANCES IN ADVANCE OF THE LANE TAPERS WITH THE APPROPRIATE W16-3A DISTANCE PLATES:

- 1) LANE TAPER AT STATION 537+76, PHASES 1A & 4; PROVIDE A SIGN GROUP AT 2 MILES.
- 2) LANE TAPER AT STATION 537+68, PHASES 2 & 5; PROVIDE A SIGN GROUP AT 2 MILES.

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

**SEQUENCE OF CONSTRUCTION**

PHASE 1A  
INSTALL THE NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-95.40 AND/OR MT-95.50 AND AS SHOWN IN THE PLANS, AND CLOSE THE LEFT LANE OF NORTHBOUND AND SOUTHBOUND SR-48 AT NELSON DRIVE.

CONSTRUCT THE ADDITIONAL PERMANENT LENGTH OF THE SOUTHBOUND LEFT TURN LANE AND THE TEMPORARY MEDIAN PAVEMENT USING ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC (MEDIAN ONLY). REMOVE THE EXISTING PAVED SHOULDER AND REPLACE IT WITH THE TEMPORARY PAVEMENT. USE PORTABLE BARRIER TO PROTECT THE WORKZONE AND ENSURE THAT THE TEMPORARY DRAINAGE ITEMS ARE INSTALLED AND FUNCTIONING CORRECTLY IN THE MEDIAN BEFORE REMOVING THE TEMPORARY TRAFFIC CONTROL DEVICES AND BEGINNING THE NEXT PHASE.

PHASE 1B  
THE BARRIER GUARDRAIL PROTECTING THE CENTER PIERS UNDER THE BRIDGE SHALL BE UPGRADED DURING THIS PHASE USING SHOULDER CLOSURES PER SCD MT-95.45. THE SAME TYPE OF CLOSURE SHALL BE USED TO PROTECT WORKERS UNDER THE BRIDGE WHEN THE ABUTMENTS ARE BEING REMOVED/REPLACED, HOWEVER, THEY SHALL NOT BE PLACED CONCURRENTLY WITH THE MEDIAN WORK.

PHASE 2  
INSTALL THE NECESSARY TRAFFIC CONTROL DEVICES PER SCD MT-95.40 AND AS SHOWN IN THE PLANS AND CLOSE THE RIGHT LANE OF SR-48 NORTHBOUND AND CONSTRUCT THE TEMPORARY LOON USING ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC.

USE PORTABLE BARRIER TO PROTECT THE WORKZONE AND ENSURE THAT THE TEMPORARY DRAINAGE ITEMS ARE INSTALLED AND FUNCTIONING CORRECTLY IN THE RIGHT SIDE DITCH BEFORE REMOVING THE TEMPORARY TRAFFIC CONTROL DEVICES AND RE-OPENING THE INTERSECTION FOR MODIFIED TRAFFIC OPERATIONS.

PHASE 3  
UPON COMPLETION OF THE LOON, TR-77 SHALL BE CLOSED FROM RAMP A TO DEERFIELD ROAD AND THE DETOUR SHALL BE PLACED INTO EFFECT AS INDICATED IN THE PLANS. CONDUCT DEMOLITION AND PROPOSED CONSTRUCTION ACTIVITIES ON THE BRIDGE AND THE ROADWAY WHILE CLOSED TO TRAFFIC. ENSURE COMPLETION OF THIS WORK BEFORE BEGINNING THE NEXT PHASE.

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES PER SCD MT-97.11 AND CONSTRUCT THE WIDENING PORTION OF TR-77 FOR PAVED SHOULDERS ON THE RIGHT AND CURB WITH SHARED-USE PATH ON THE LEFT. BUILD ONE SIDE AT A TIME AND RESTORE THE ROAD TO AN OPERATIONAL STATUS AT THE END OF EACH WORKING DAY. THE USE OF FLAGGERS IN THIS MANNER WILL ALSO APPLY TO PLANING AND RESURFACING ACTIVITIES. THIS WORK TO BE CONCURRENT WITH THE BRIDGE WORK.

UPON COMPLETION OF THIS PHASE, RE-OPEN TR-77 TO NORMAL OPERATING CONDITION AND REMOVE THE DETOUR ROUTE.

PHASE 4  
INSTALL THE NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-95.40 AND AS SHOWN IN THE PLANS, AND CLOSE THE LEFT LANE OF NORTHBOUND AND SOUTHBOUND SR-48.

REMOVE THE TEMPORARY PAVEMENT FROM THE MEDIAN AND RE-CONSTRUCT THE PERMANENT PAVED SHOULDERS TO COMPLETE THE LEFT TURN LANE AND TO RESTORE THE PAVED SHOULDER ON THE RIGHT SIDE OF THE MEDIAN. COMPLETE THE MEDIAN GRADING AND THE INSTALLATION OF FINAL DRAINAGE ITEM TO WORKING CONDITION BEFORE REMOVING THE TRAFFIC CONTROL ITEMS AND REOPENING THE ROADWAY.

PHASE 5  
INSTALL THE NECESSARY TRAFFIC CONTROL DEVICES PER SCD MT-95.40 AND AS SHOWN IN THE PHASE 5 PLANS AND CLOSE THE RIGHT LANE OF SR-48 NORTHBOUND AND REMOVE THE TEMPORARY LOON PAVEMENT, TEMPORARY DRAINAGE APPURTENANCES AND RESTORE THE PERMANENT PAVED SHOULDERS AS SHOWN IN THE PLANS.

PERFORM ANY FINISH GRADING, APPLICATION OF PAVEMENT MARKINGS, SIGNING AND ANY OTHER INCIDENTALS BEFORE RE-OPENING SR-48 TO FULL NORMAL OPERATIONS.

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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING 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.

**ITEM 615 - ROADS FOR MAINTAINING TRAFFIC, LUMP SUM**

THE FOLLOWING QUANTITIES RELATED TO ITEM - 615 ROADS FOR MAINTAINING TRAFFIC HAVE BEEN INCLUDED FOR INFORMATION ONLY:

|  |             |
|--|-------------|
| 203, EXCAVATION                                    | 241 CU. YD. |
| 203, EMBANKMENT                                    | 309 CU. YD. |
| 411, STABILIZED CRUSHED AGGREGATE                  | 11 CU. YD.  |
| 606, GUARDRAIL, TYPE MGS                           | 67.5 FT     |
| 606, ANCHOR ASSEMBLY TYPE T                        | 2 EA.       |
| 611, 12" CONDUIT, TYPE B                           | 115 FT.     |
| 611, CATCH BASIN, NO. 2-2B                         | 2 EA.       |
| 611, MANHOLE, NO. 3                                | 1 EA.       |
| 630, REMOVAL OF GROUND MOUNTED SIGN AND REERECTION | 4 EA.       |
| 690, SPECIAL - MAILBOX REMOVED AND RESET           | 3 EA.       |

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

|            |            |
|------------|------------|
| 616, WATER | 14 M. GAL. |
|------------|------------|

**ITEM 690, SPECIAL - MAILBOX REMOVED AND RESET**

THIS ITEM SHALL CONSIST OF THE TEMPORARY REMOVAL AND RELOCATION OF 3 MAILBOXES ON NELSON ROAD TO FACILITATE CONSTRUCTION OF THE TEMPORARY LOON. UPON REMOVAL OF THE LOON, CONTRACTOR SHALL REPLACE MAILBOXES IN THEIR ORIGINAL LOCATION.

PAYMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC.

**TRENCH FOR WIDENING**

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

**OVERNIGHT TRENCH CLOSING**

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

**DRUM REQUIREMENTS**

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AT THE TIME OF ARRIVAL ON THE PROJECT. ANY DRUMS BROUGHT ON THE PROJECT, WHICH HAVE PREVIOUSLY BEEN USED ELSEWHERE, WILL NOT BE ACCEPTED.

PAYMENT FOR DRUMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

**ITEM 614, REPLACEMENT DRUM**

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 125 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

**WORK ZONE MARKINGS AND SIGNS**

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE BETWEEN PHASES AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

|  |          |
|--|----------|
| 614, WORK ZONE LANE LINE, CLASS I, 6", (WHITE) | 0.24 MI. |
|--|----------|

**EXISTING MARKINGS**

CONTRACTOR SHALL COVER EXISTING CONFLICTING MARKINGS AS NECESSARY IN AREAS NOT BEING RESURFACED. OTHERWISE THE CONTRACTOR SHALL ENSURE THE CONFLICTING MARKINGS ARE REMOVED BEFORE THE BEGINNING OF EACH PHASE. IN AREAS NOT BEING RESURFACED, CONTRACTOR SHALL USE REMOVABLE TAPE.

PAYMENT SHALL BE INCLUDED IN LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

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.

THE PROBABLE PCMS LOCATIONS ON SR-48 ARE INDICATED ON THE MAINTENANCE OF TRAFFIC PLAN SHEETS AND WILL REMAIN FOR THE DURATION OF THE PROJECT. SIGNS SHALL ALSO BE PLACED AT THE CLOSURE ENDS OF TR-77. 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.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 4 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

G:\DE\clients\0001\079059\_WAR-48-1154\00816\Design\WOT\Sheets\00816\_MN002.dgn Sheet 2/3/2022 4:15:44 PM keatingm

ITEM 614 - DETOUR SIGNING

SIZE AND PLACEMENT OF DETOUR SIGNS SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01. DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

\* APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).

\* AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.

\* EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.

\* AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

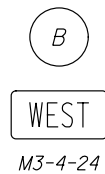
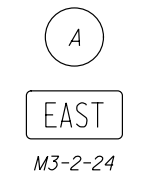
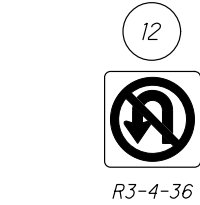
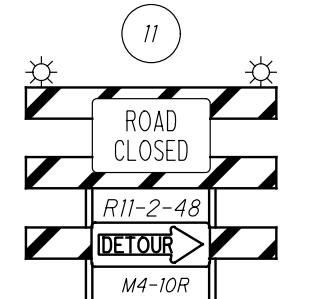
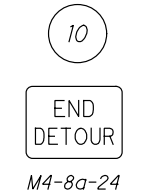
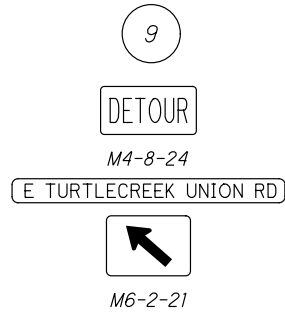
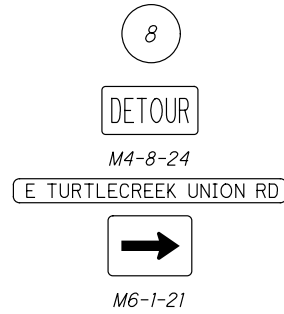
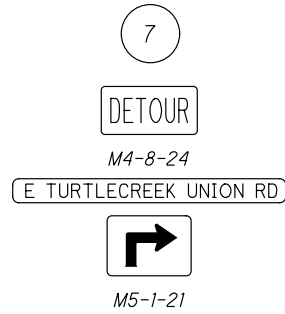
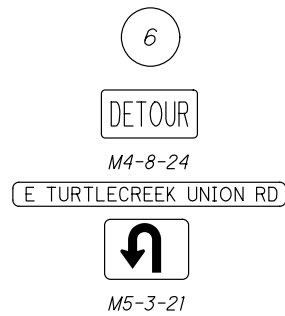
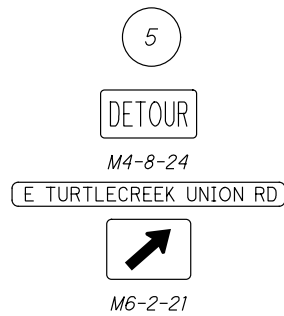
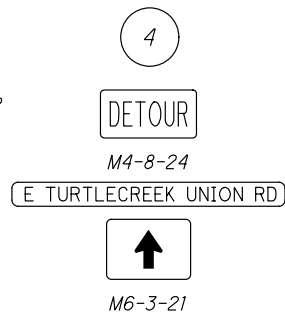
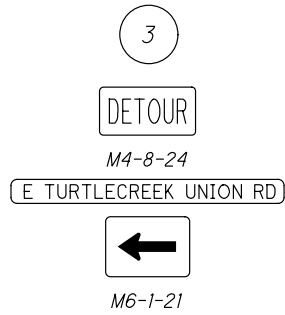
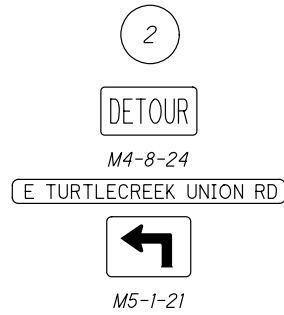
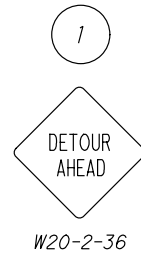
DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

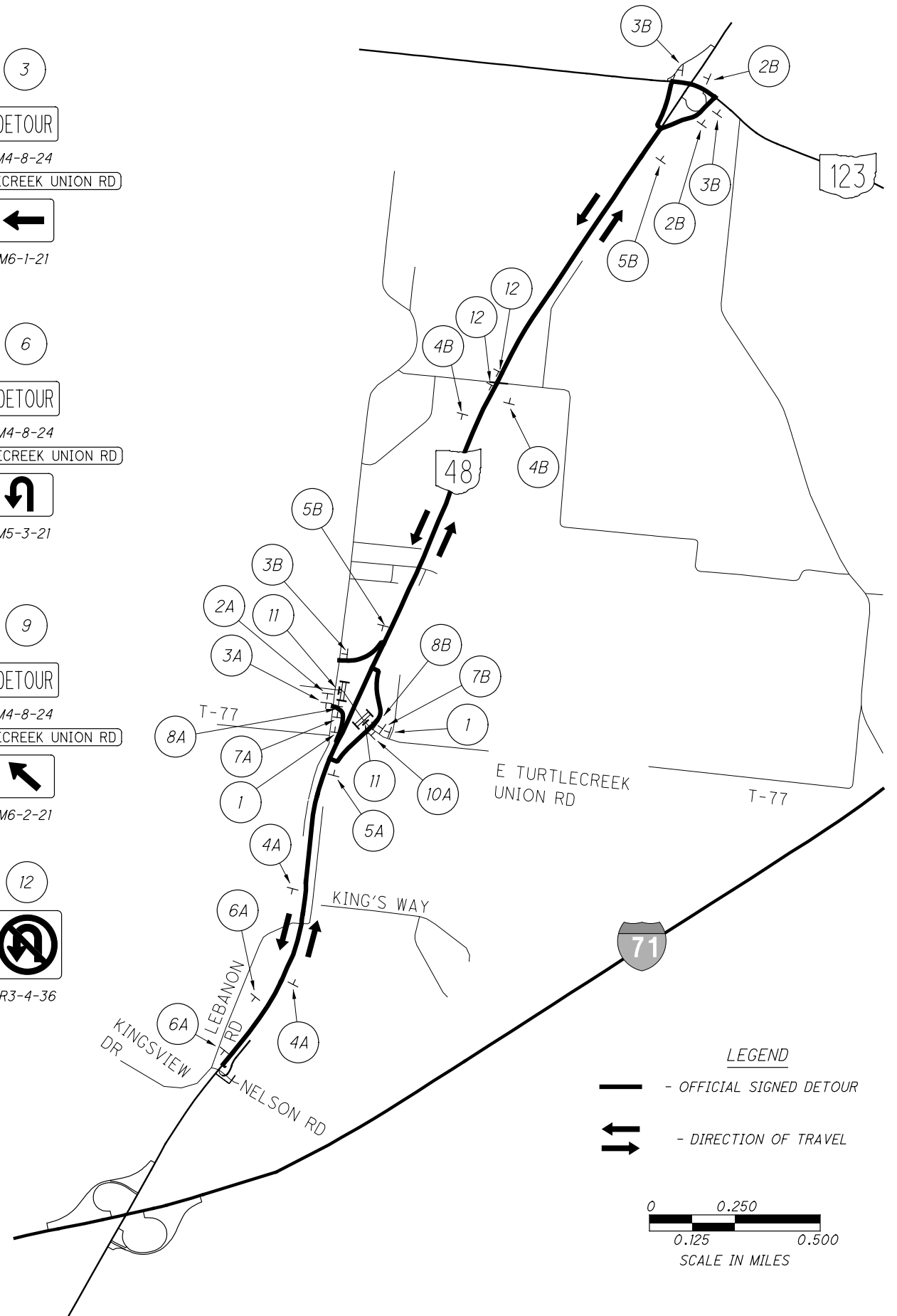
PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - DETOUR SIGNING LUMP SUM



TYPE III BARRICADES  
W/ TYPE A FLASHING LIGHTS



CALCULATED  
MDK  
CHECKED  
MS

0 20 40  
HORIZONTAL  
SCALE IN FEET

MAINTENANCE OF TRAFFIC  
DETOUR MAP

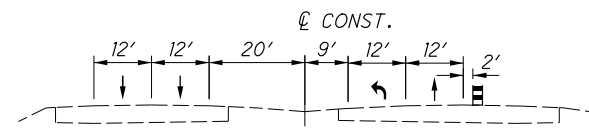
WAR-48-11.54  
PART 1



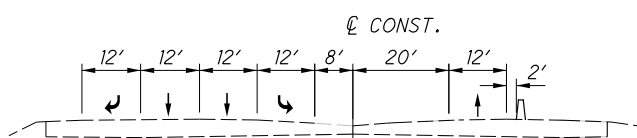
**LEGEND**

- WORK AREA
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PERMANENT PAVEMENT
- DRUMS
- COVER/REMOVE EXISTING MARKINGS
- DIRECTION OF TRAVEL
- PORTABLE BARRIER
- UNIDIRECTIONAL IMPACT ATTENUATOR (TYP)
- TYPE III BARRICADE

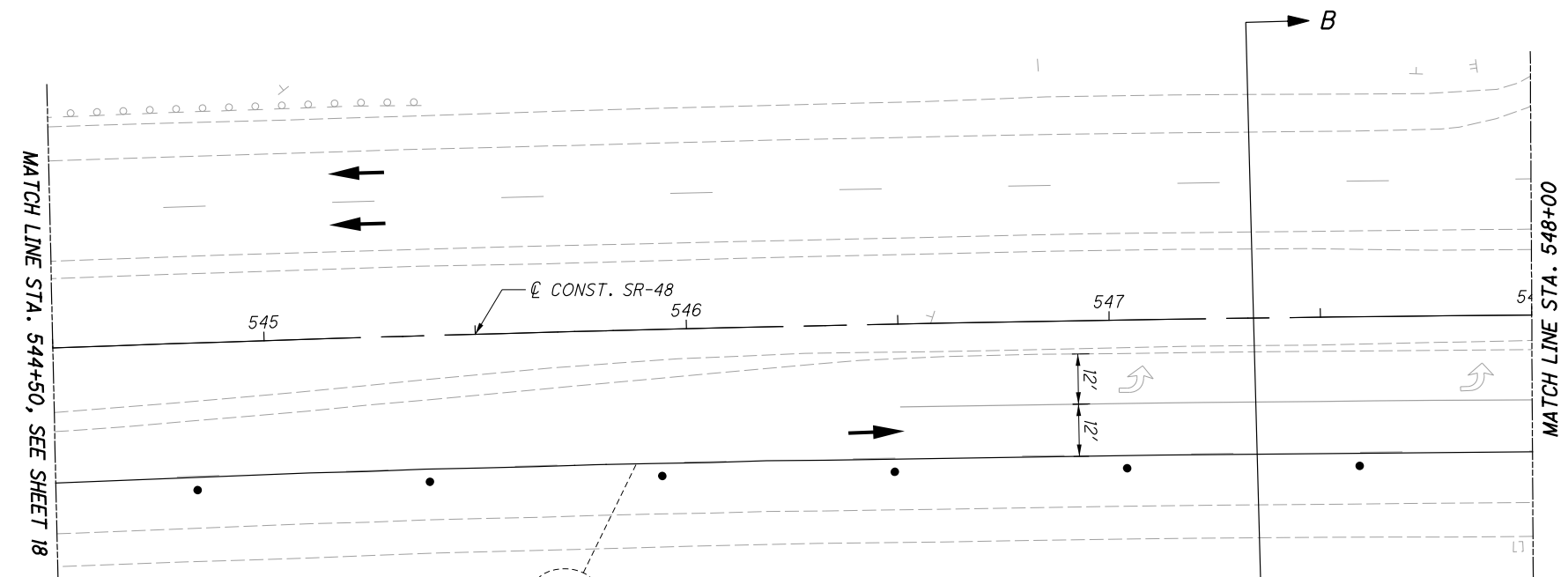
NOTE: THE USE OF TEMPORARY TRAFFIC CONTROL DEVICES SHOWN IS APPLICABLE TO BOTH PHASE 2 AND PHASE 5 EXCEPT THAT PHASE 2 IS FOR THE INSTALLATION OF ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC AND TEMPORARY DRAINAGE ITEMS; PHASE 5 IS FOR THE REMOVAL OF THOSE ITEMS, THE RESTORATION OF PERMANENT PAVED SHOULDERS, AND FINAL GRADING.



**SECTION B-B**



**SECTION C-C**

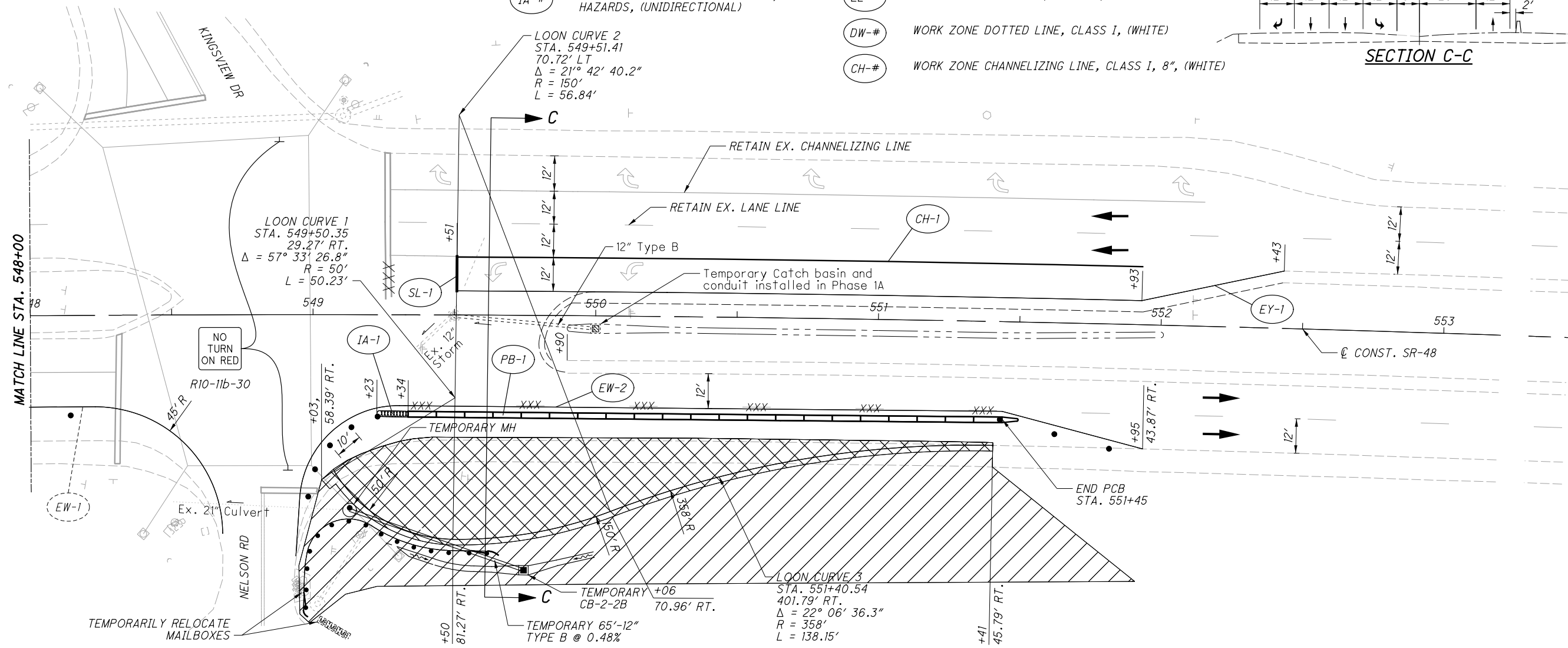


- WORK ZONE ARROW
- PORTABLE BARRIER, UNANCHORED
- WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
- WORK ZONE EDGE LINE, CLASS I, 4", (YELLOW)
- WORK ZONE EDGE LINE, CLASS I, 4" (WHITE)
- WORK ZONE DOTTED LINE, CLASS I, (WHITE)
- WORK ZONE CHANNELIZING LINE, CLASS I, 8", (WHITE)

LOON CURVE 2  
 STA. 549+51.41  
 70.72' LT  
 $\Delta = 21^\circ 42' 40.2''$   
 $R = 150'$   
 $L = 56.84'$

LOON CURVE 1  
 STA. 549+50.35  
 29.27' RT.  
 $\Delta = 57^\circ 33' 26.8''$   
 $R = 50'$   
 $L = 50.23'$

LOON CURVE 3  
 STA. 551+40.54  
 401.79' RT.  
 $\Delta = 22^\circ 06' 36.3''$   
 $R = 358'$   
 $L = 138.15'$



NO TURN ON RED

TEMPORARILY RELOCATE MAILBOXES

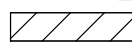
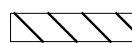


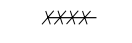

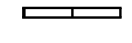
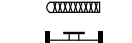

G:\DE\Clients\079059\_WAR-48-1154\00816\Design\WOT\Sheets\00816\_MT007.dgn Sheet 2/4/2022 10:31:36 AM zara

**MAINTENANCE OF TRAFFIC PHASES 2 & 5**

**WAR-48-11.54 PART 1**

G:\DE\Clients\0001\079059\_WAR-48-1154\00816\Design\DOT\Sheets\00816\_MT010.dgn Sheet 2/3/2022 4:37:07 PM keatingm

- LA-# WORK ZONE ARROW
- PB-# PORTABLE BARRIER, UNANCHORED
- IA-# WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
- EY-# WORK ZONE EDGE LINE, CLASS I, 4", (YELLOW)
- EL-# WORK ZONE EDGE LINE, CLASS I, 4" (WHITE)
- DW-# WORK ZONE DOTTED LINE, CLASS I, (WHITE)
- CH-# WORK ZONE CHANNELIZING LINE, CLASS I, 8", (WHITE)

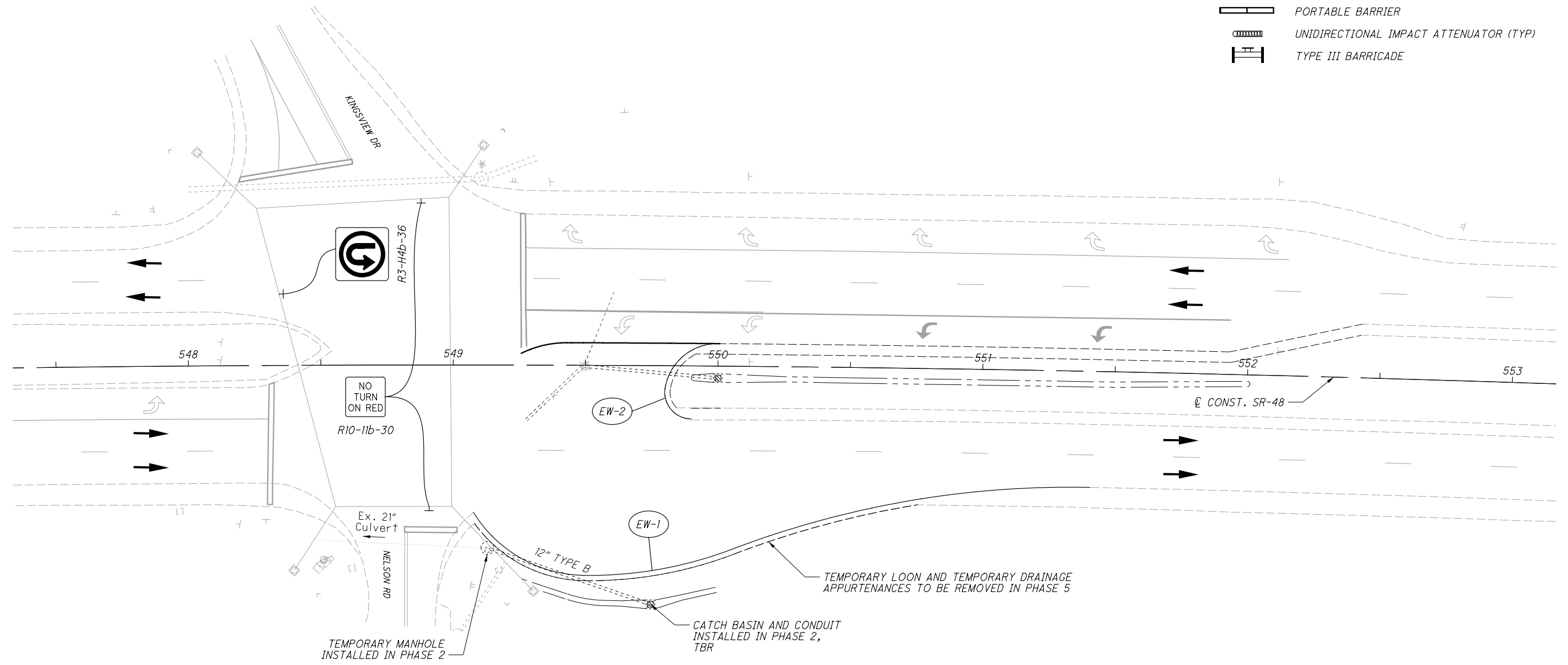
- LEGEND**
-  WORK AREA
  -  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
  -  PERMANENT PAVEMENT
  -  DRUMS
  -  COVER/REMOVE EXISTING MARKINGS
  -  DIRECTION OF TRAVEL
  -  PORTABLE BARRIER
  -  UNIDIRECTIONAL IMPACT ATTENUATOR (TYP)
  -  TYPE III BARRICADE

CALCULATED  
KWA

CHECKED  
MS




HORIZONTAL SCALE IN FEET



**MAINTENANCE OF TRAFFIC  
PHASE 3**

**WAR-48-11.54  
PART 1**