

LOCATION MAP

LATITUDE: 39°56'30" LONGITUDE: 83°27'04"



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

DESIGN DESIGNATION

CURRENT ADT (2023)	61,433
DESIGN YEAR ADT (2038)	65,500
DESIGN HOURLY VOLUME (2038)	6,550
DIRECTIONAL DISTRIBUTION	51%
TRUCKS (24 HOUR B&C)	15%
DESIGN SPEED	70 MPH
LEGAL SPEED	70 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
01 INTERSTATE (RURAL)	
NHS PROJECT	YES

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig

OHIO811.org
Before You Dig

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

PLAN PREPARED BY:
OHIO DEPT. OF TRANSPORTATION, DISTRICT 1
1885 NORTH MCCULLOUGH ST.
LIMA OHIO, 45801

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MAD-70-0.00

SUMMERFORD & DEER CREEK TOWNSHIPS

MADISON COUNTY

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FEDERAL PROJECT NUMBER

E250 (586)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

RESURFACING OF 8.71 MI. OF IR-70 BEGINNING AT THE CLARK COUNTY LINE AND ENDING EAST OF THE US-42 INTERCHANGE. ALSO, MINOR PAVEMENT REPAIR AND UPGRADE GUARDRAIL AS NEEDED.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.2 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.3 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED) *ROUTINE MAINTENANCE PROJECT

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 AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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

Anthony C. Turowski, P.E.
District 06 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-2.1	1/21/22	MGS-5.3	7/15/16	MT-98.21	7/21/23	TC-42.10	10/18/13		800-2023 7/18/25		
BP-2.2	1/15/21	MGS-6.1	1/19/18	MT-98.22	1/17/20	TC-42.20	10/18/13		807 1/17/25		
BP-2.5	7/19/24	MGS-6.2	7/18/25	MT-98.28	1/17/20	TC-52.10	10/18/13		808 7/19/24		
BP-3.1	1/19/24			MT-98.29	1/17/20	TC-52.20	1/15/21		821 4/20/12		
BP-6.1	7/19/13			MT-98.30	7/18/25	TC-61.10	4/21/23		832 7/18/25		
BP-9.1	1/18/19			MT-99.20	4/19/19	TC-65.10	1/17/14		850 7/21/23		
		MT-95.30	7/18/25	MT-101.70	7/19/24	TC-65.11	1/17/25		872 1/17/25		
DM-4.3	1/15/16	MT-95.31	7/18/25	MT-101.90	7/17/20	TC-71.10	7/18/25		873 4/16/21		
DM-4.4	1/15/16	MT-95.32	7/18/25	MT-102.20	4/19/19	TC-72.20	7/18/25		875 1/17/25		
		MT-95.40	7/18/25	MT-102.30	10/16/15				905 1/17/25		
		MT-95.50	7/21/17	MT-104.10	1/19/24				908 1/17/25		
MGS-2.1	7/18/25	MT-97.10	7/18/25	MT-105.10	1/17/20				921 7/19/24		
MGS-3.1	7/18/25	MT-97.12	7/18/25								
MGS-4.2	7/18/25	MT-98.10	1/17/20								
MGS-4.3	7/18/25	MT-98.11	1/17/20								
MGS-5.2	7/15/16	MT-98.20	4/19/19								

ENGINEER'S SEAL



DESIGN AGENCY



DESIGNER

TAB

REVIEWER

XXX MM-DD-YY

PROJECT ID

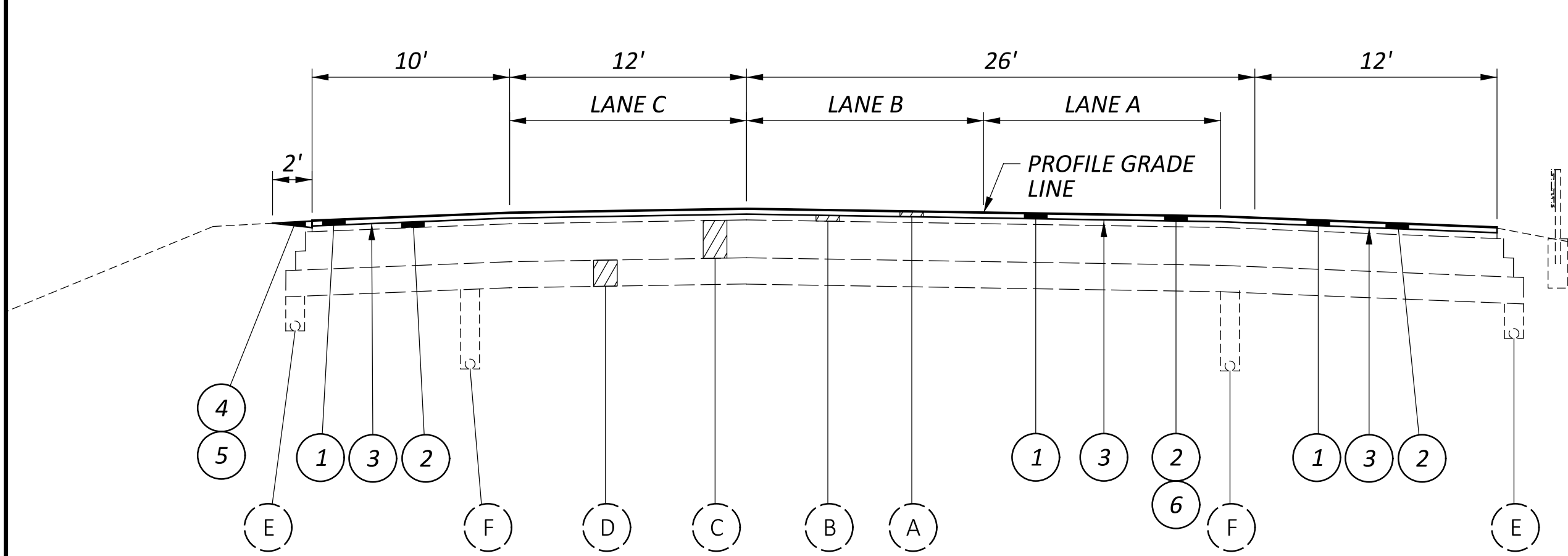
112880

SHEET

P.01

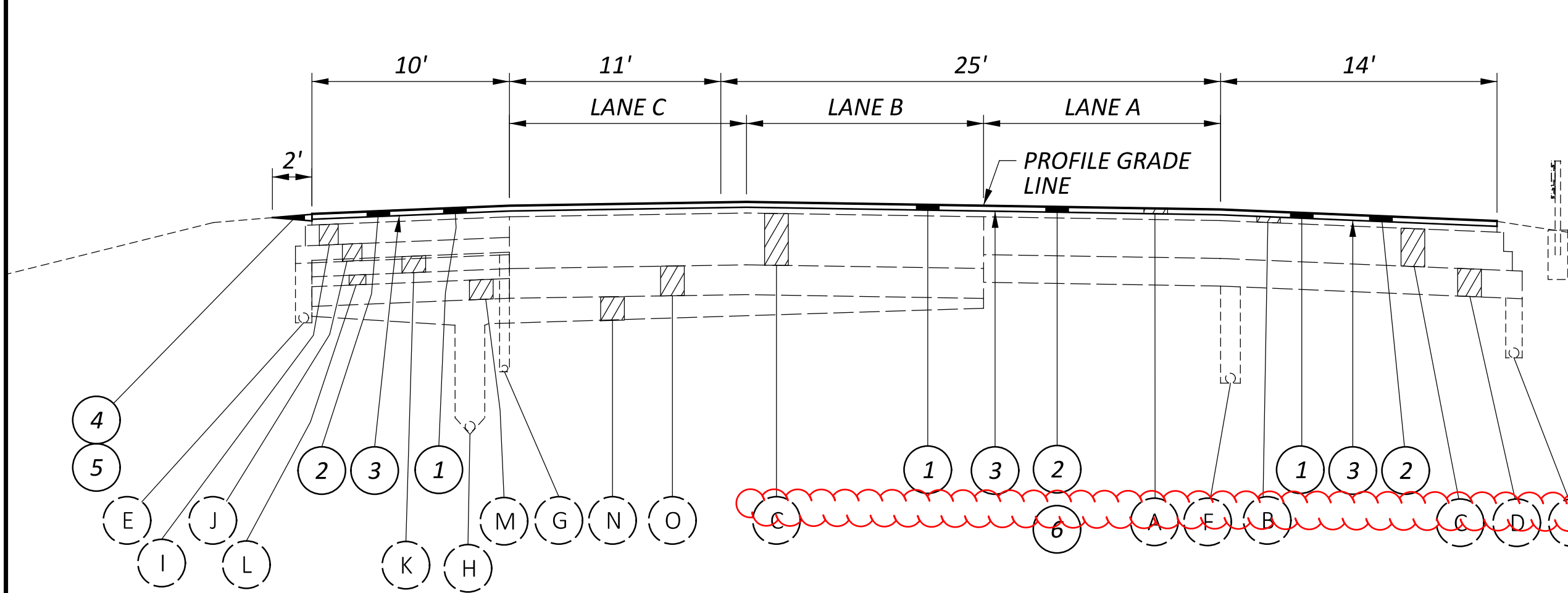
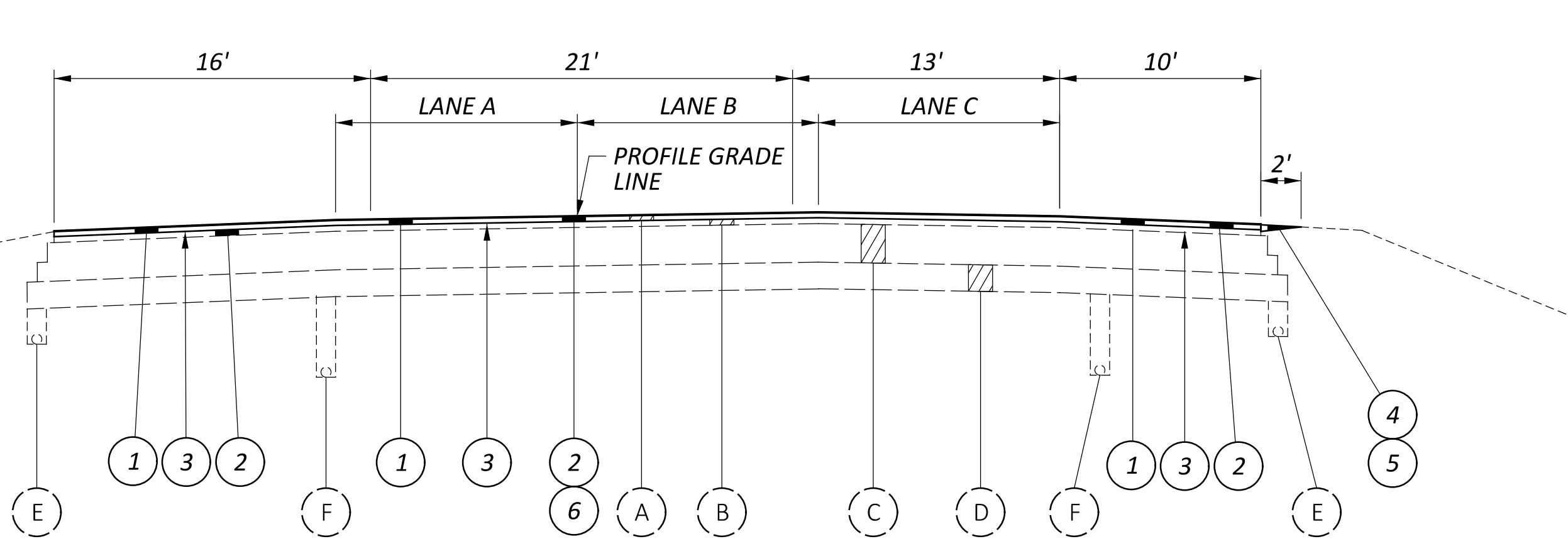
TOTAL

P.45



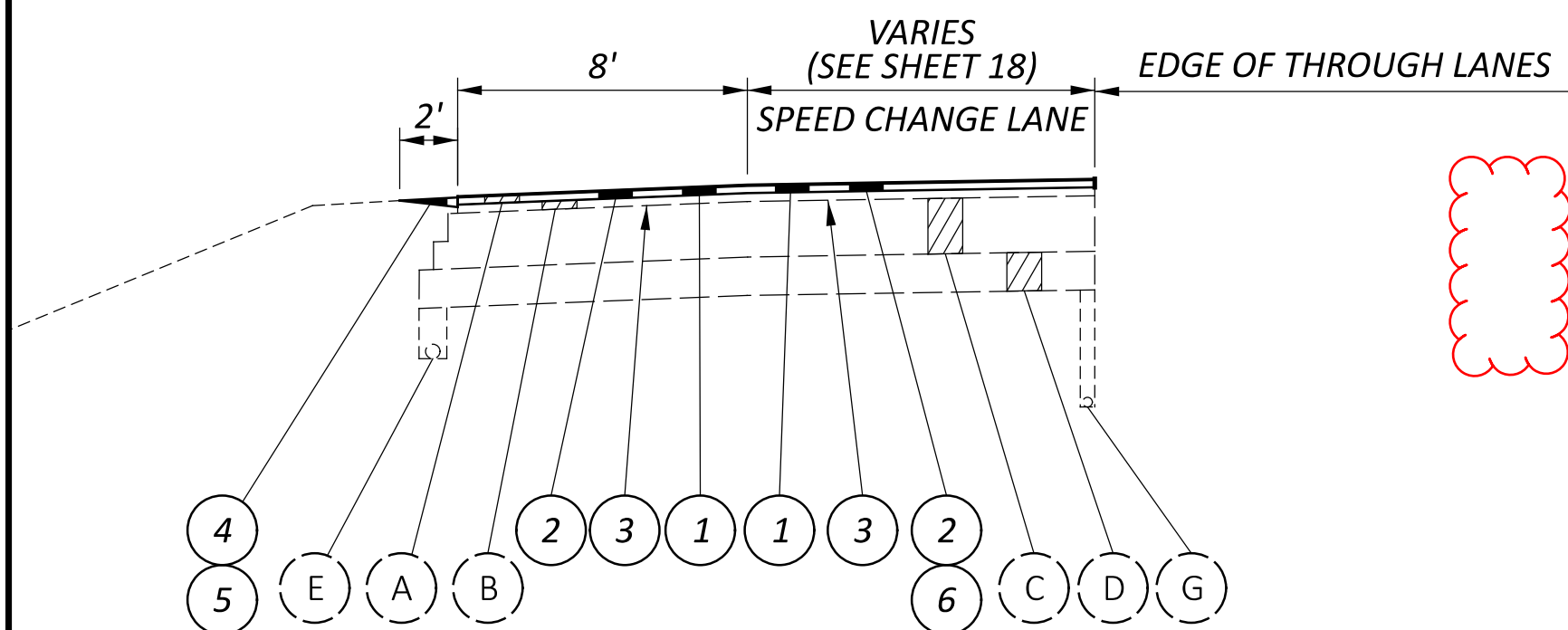
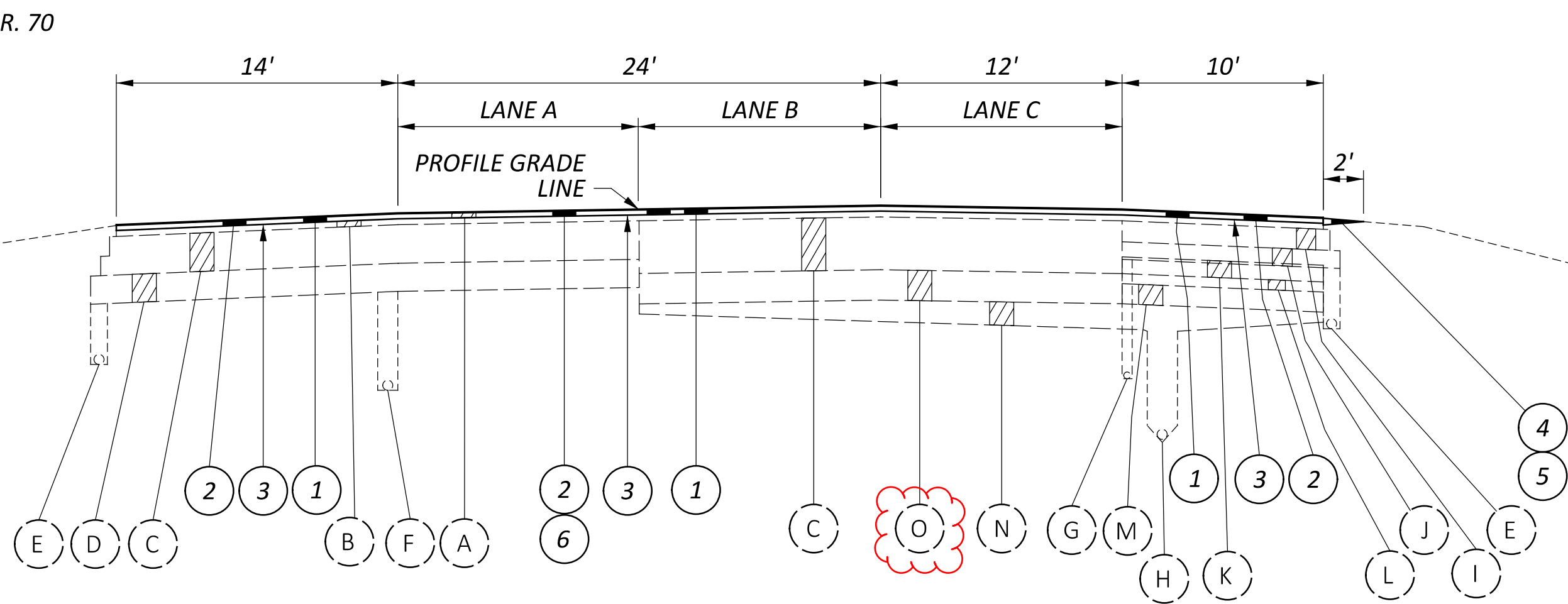
NORMAL SECTION - I.R. 70

APPLIES
STA. 26+50.00 TO STA. 38+00.00
STA. 73+00.00 TO STA. 82+75.00
STA. 170+50.00 TO STA. 182+50.00
STA. 236+75.00 TO STA. 241+75.66
STA. 241+75.66 TO STA. 248+00.00 (SUPERELEVATED SECTION)
STA. 335+00.00 TO STA. 346+50.00
STA. 373+50.00 TO STA. 384+50.00
STA. 449+75.00 TO STA. 459+18.40 (WB ONLY)



NORMAL SECTION - I.R. 70

APPLIES
STA. 0+00.00 TO STA. 26+50.00
STA. 38+00.00 TO STA. 73+00.00
STA. 82+75.00 TO STA. 170+50.00
STA. 182+50.00 TO STA. 236+75.00
STA. 248+00.00 TO STA. 281+74.46 (SUPERELEVATED SECTION)
STA. 281+74.46 TO STA. 335+00.00
STA. 346+50.00 TO STA. 373+50.00
STA. 384+50.00 TO STA. 427+49.53
STA. 427+49.53 TO STA. 437+18.40 (SUPERELEVATED SECTION)
STA. 437+18.40 TO STA. 448+44.70 (SUPERELEVATED SECTION)(WB ONLY)
STA. 448+44.70 TO STA. 449+75.00 (WB ONLY)



SPEED CHANGE LANE SECTION

APPLIES
STA. 19+50.00 TO STA. 23+00.00 (WB LANES)
STA. 21+25.00 TO STA. 33+25.00 (EB LANES)
STA. 74+00.00 TO STA. 86+00.00 (WB LANES)
STA. 112+00.00 TO STA. 115+50.00 (WB LANES)
STA. 113+00.00 TO STA. 125+00.00 (EB LANES)
STA. 84+50.00 TO STA. 88+00.00 (EB LANES)
STA. 432+50.00 TO STA. 443+77.93 (WB LANES)
STA. 436+75.00 TO STA. 437+18.40 (EB LANES)

NOTE: PROPOSED PAVEMENT CROSS SLOPES SHALL MATCH ALL EXISTING CROSS SLOPES.

PROPOSED LEGEND

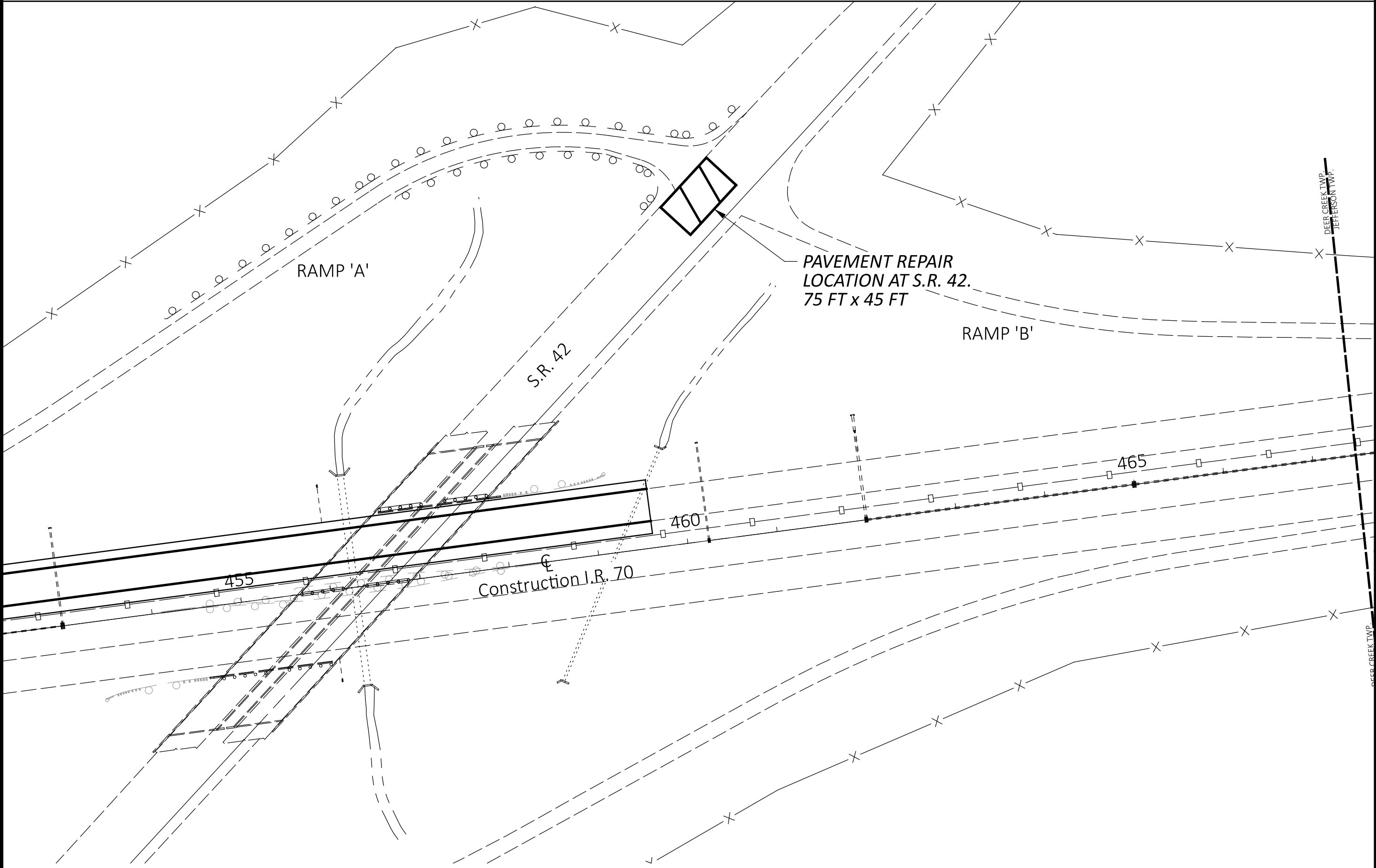
- 1 ITEM 254 - 1.75" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
- 2 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5M, TYPE A, (446)
- 3 ITEM 407 - NON-TRACKING TACK COAT (RATE PER CMS TABLE 407.06-1)
- 4 ITEM 617 - COMPACTED AGGREGATE (2" AVG. DEPTH)
- 5 ITEM 617 - SHOULDER PREPARATION
- 6 ITEM 441 - ANTI-SEGREGATION EQUIPMENT

EXISTING LEGEND

- | | |
|---|--|
| (A) 1.5"± ASPHALT CONCRETE SURFACE COURSE
0.25"± DOUBLE MICRO. | (I) 6.25"± ASPHALT CONCRETE BASE |
| (B) 1.75"± ASPHALT CONCRETE INTERMEDIATE COURSE | (J) VARIABLE DEPTH ASPHALT CONCRETE BASE |
| (C) 11.5"± ASPHALT CONCRETE BASE | (K) 5"± ASPHALT CONCRETE SURFACE COURSE |
| (D) 8"± AGGREGATE BASE | (L) BITUMINOUS AGGREGATE BASE |
| (E) 6" SHALLOW PIPE UNDERDRAIN (18" DEPTH) | (M) 5"± AGGREGATE BASE |
| (F) 6" SHALLOW PIPE UNDERDRAIN (30" DEPTH) | (N) 5"± ASPHALT CONCRETE BASE |
| (G) 4" SHALLOW PIPE UNDERDRAIN (18" DEPTH) | (O) RUBBLIZED AND ROLLED CONCRETE |
| (H) 6" SHALLOW PIPE UNDERDRAIN (DEPTH UNKNOWN) | |



PLAN VIEW FOR FULL DEPTH PAVEMENT REPAIR



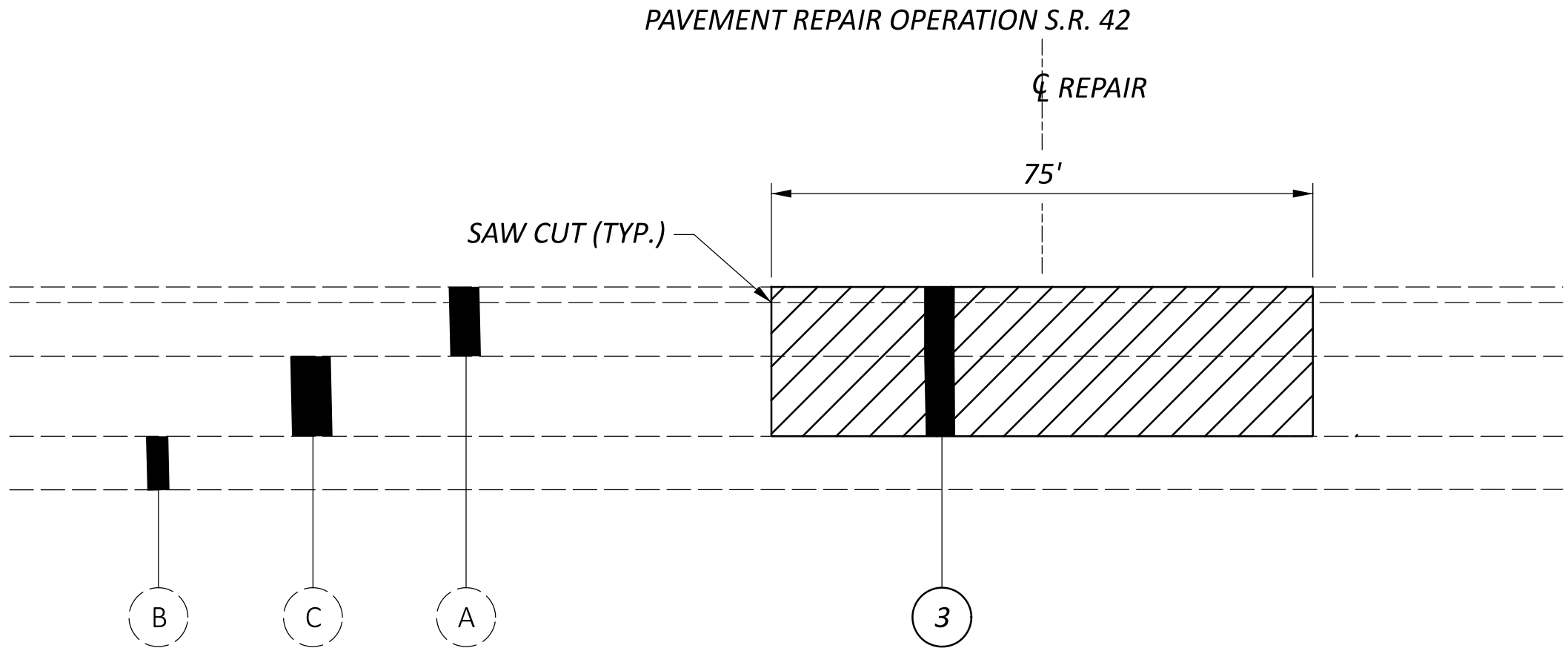
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, 15.25" = (75 FT) x (45 FT) x (1 SY/9 SF) = 375 SY

ITEM 255 - FULL DEPTH PAVEMENT SAWING = (75 FT + 45 FT) x (2) = 240 FT

ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS = 20 FT

QUANTITIES CARRIED TO SHEET GENERAL SUMMARY.

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, 15.25"



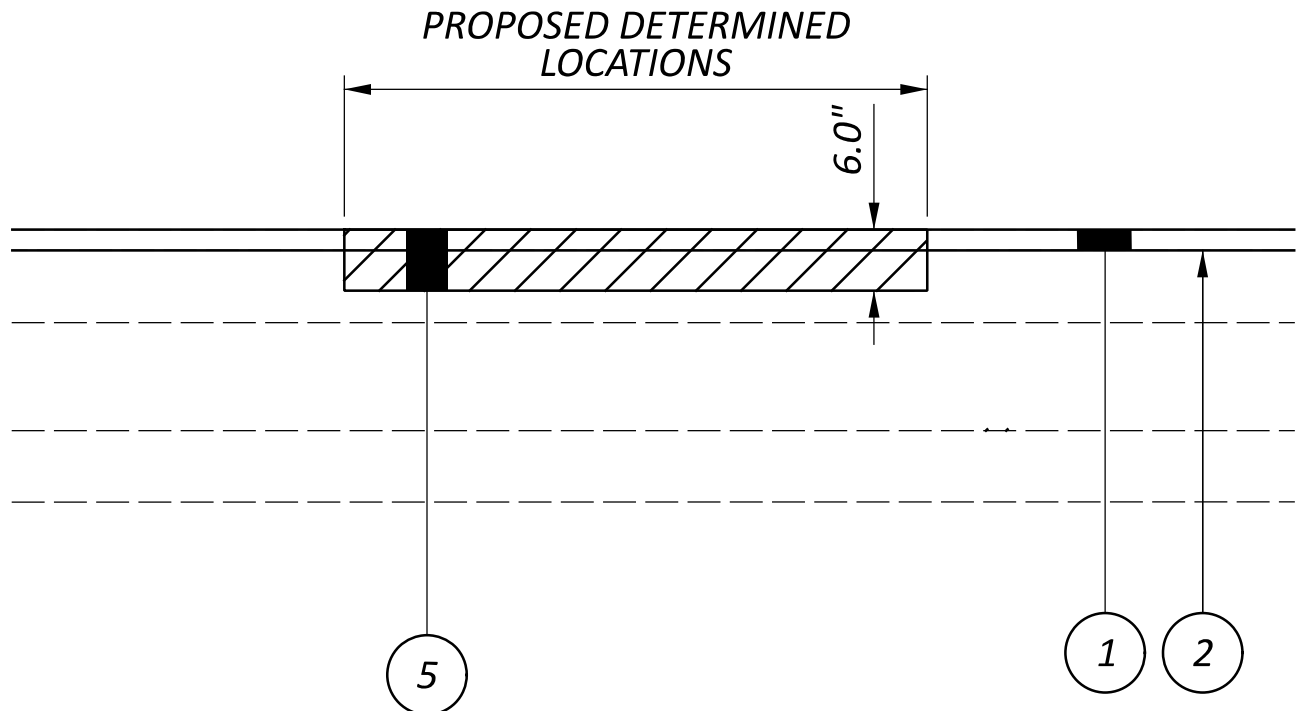
EXISTING LEGEND

- A ASPHALT CONCRETE
- B SUBBASE
- C 9"± CONCRETE BASE

PROPOSED LEGEND

- 1 ITEM 448 - 1-½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
- 2 ITEM 407 - NON-TRACKING TACK COAT (RATE PER C&MS TABLE 407.06-1)
- 3 ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, 15.25"
- 4 ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, (ASPHALT CONCRETE BASE), AS PER PLAN 4.5"
- 5 ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, (ASPHALT CONCRETE BASE), AS PER PLAN 6.0"

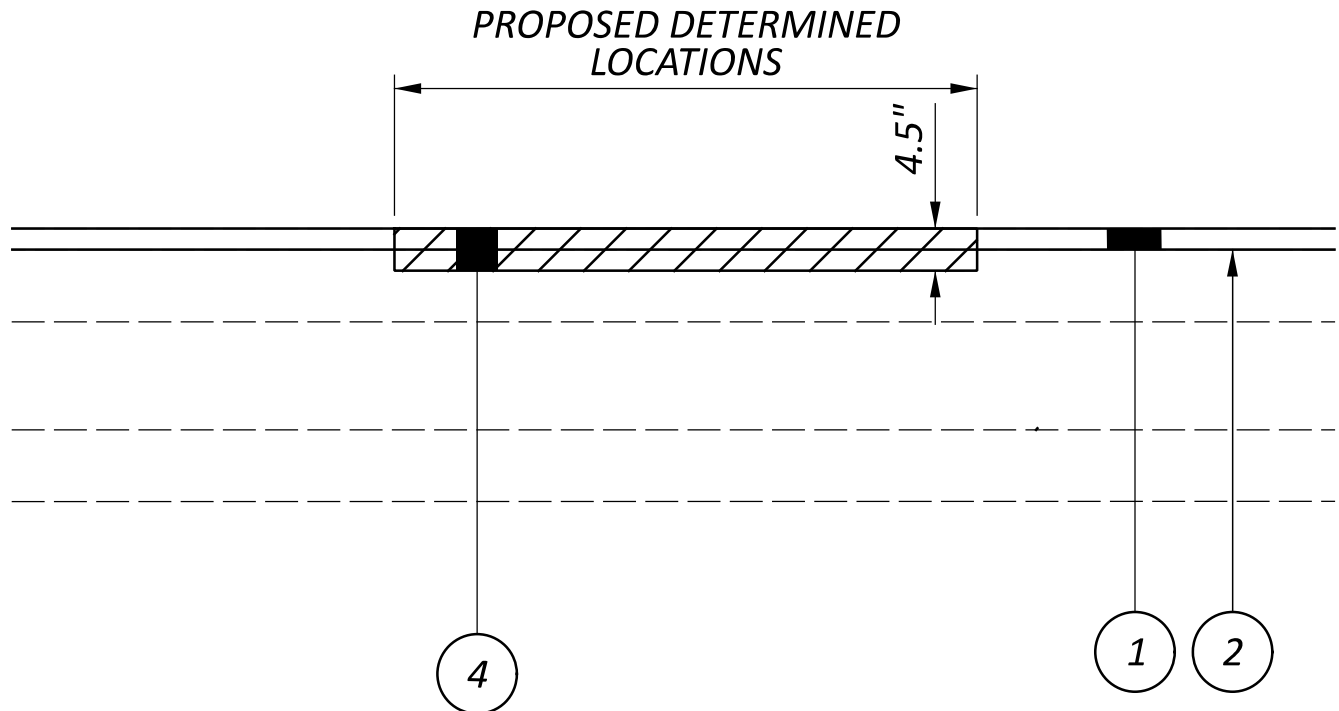
ITEM 251- PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 6.0"



NOTE: FOR MORE INFROMATION REGARDING ITEM 251- PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 6.0" SEE GENERAL NOTES.

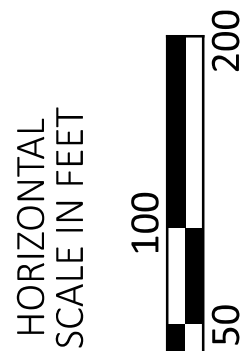
FOR LOCATIONS AND QUANTITIES SEE SHEETS P.21 - P.22.

ITEM 251- PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.5"



NOTE: FOR MORE INFROMATION REGARDING ITEM 251- PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.5" SEE GENERAL NOTES.

FOR LOCATIONS AND QUANTITIES, SEE SHEETS P.21 - P.22.



TYPICAL SECTIONS
FULL & PARTIAL PAVEMENT REPAIR

DESIGN AGENCY



DESIGNER

TAB

REVIEWER

XXX MM-DD-YY

PROJECT ID

112880

SHEET

P.08

TOTAL

P.45

CENTERLINE CONSTRUCTION:

THE INTENT OF THIS PROJECT IS THAT ALL WORK IS TO BE COMPLETED WITHIN THE EXISTING RIGHT OF WAY. ANY CENTERLINE SHOWN IN THIS PLAN IS TO BE CONSIDERED A CENTERLINE OF CONSTRUCTION ONLY AND NOT TO BE CONSTRUED AS THE ACTUAL GEOMETRIC ALIGNMENT OF THE ROADWAY. FOR THE MAJORITY OF THIS PLAN, MEASUREMENTS AND CALCULATIONS WILL BE PROVIDED USING COUNTY STRAIGHT LINE MILEAGE (SLM). THE SLM CONVERSION EQUATION ON THE SCHEMATIC GIVES THE RELATIVITY OF STATIONING TO SLM (AND VICE VERSA). ANY CENTERLINE STATIONING PROVIDED IS TO BE USED AS A REFERENCE OF PROJECT LENGTH ONLY AND SHALL NOT BE USED TO ESTABLISH PRECISE LOCATIONS OF ANY OTHER FEATURES SUCH AS/NOT LIMITED TO THE EXISTING RIGHTS OF WAY. ANY RIGHT OF WAY SHOWN IN THE PLAN IS A GRAPHICAL REPRESENTATION (OF SAID RIGHT OF WAY) CONFIRMING THAT THE PLANNED WORK HAS BEEN DETERMINED TO BE IN ODOT RIGHT OF WAY. IN THE EVENT THAT ANY ACTIVITIES DEVIATE FROM THE PLAN, THE CONTRACTOR MAY BE REQUIRED, PER THE ENGINEER, TO VERIFY THE RIGHT OF WAY LIMITS IN THE FIELD. PAYMENT FOR ANY RIGHT OF WAY VERIFICATION WILL BE INCLUDED UNDER THE LUMP SUM BID ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

REMOVAL ITEMS:

UNLESS OTHERWISE INSTRUCTED, ASPHALT, GUARDRAIL, AND ANY OTHER MISCELLANEOUS ITEMS DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

OVERHEAD STRUCTURES - VERTICAL CLEARANCE:

IT IS THE INTENT OF THIS PROJECT THAT THE EXISTING VERTICAL CLEARANCES AT OVERHEAD STRUCTURES ARE NOT TO BE REDUCED FROM EXISTING. THE CONTRACTOR SHALL USE GREAT CARE AT THESE LOCATIONS NOT TO ALTER THE CURRENT VERTICAL CLEARANCE.

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, 15.25":

THE REPAIR AREA SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE REMOVAL SHALL INCLUDE THE EXISTING ASPHALT CONCRETE LAYER (APPROXIMATELY 4.25" DEPTH) ALONG WITH THE 11" OF JOINTED CONCRETE PAVEMENT. THE REPLACEMENT SHALL INCLUDE 15.25" OF RIGID REPLACEMENT.

THIS ITEM OF WORK SHALL BE PERFORMED PER THE 255 SPECIFICATION AND AS SHOWN ON DETAIL SHEET P.8 AND STANDARD CONSTRUCTION DRAWING BP-2.5. THE REPAIR AREA SHALL BE FULLY REFILLED WITH PORTLAND CEMENT CONCRETE TO A LEVEL SURFACE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH PN 140 AND THE SHORT-TERM HOURLY CLOSURE WINDOW CONTRACT TABLE ON SHEET P.16.

FOR LOCATION AND CALCULATIONS, SEE SHEET NO. P.8.

A CONTIGENCY QUANTITY OF ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS HAS ALSO BEEN CARRIED TO THE GENERAL SUMMARY. THIS QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO ENSURE POSITIVE SUBSURFACE DRAINAGE AT THE FULL DEPTH PAVEMENT REPAIR ON SR-42.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.5" :

ALL REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE REPAIR AREAS SHALL CONSIST OF REMOVING 4.5 INCHES OF PAVEMENT AND PLACING 4.5 INCHES OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449). THE AVERAGE WIDTH SHALL NOT BE LESS THAN 4 FEET. FOR MORE INFORMATION SEE DETAIL ON SHEET P.8. WORK SHALL BE PERFORMED PRIOR TO RESURFACING AND REPAIR AREAS ARE TO BE INCLUDED IN GENERAL RESURFACING. NO MORE PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

FOR LOCATION AND QUANTITIES, SEE SHEETS P.21 - P.22.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 6.0" :

ALL REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE REPAIR AREAS SHALL CONSIST OF REMOVING 6.0 INCHES OF PAVEMENT AND PLACING 6.0 INCHES OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449). THE AVERAGE WIDTH SHALL NOT BE LESS THAN 4 FEET. FOR MORE INFORMATION SEE DETAIL ON SHEET P.8. WORK SHALL BE PERFORMED PRIOR TO RESURFACING AND REPAIR AREAS ARE TO BE INCLUDED IN GENERAL RESURFACING. NO MORE PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

FOR LOCATION AND QUANTITIES, SEE SHEETS P.21 - P.22.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, 1.75":

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE CONTRACTORS EQUIPMENT THAT MAY RESULT FROM THE PLANING OPERATION, INCLUDING DAMAGE CAUSED BY CASTINGS AND LOOP DETECTORS. THE DEPTH OF PLANING CLOSE TO THE CASTINGS SHALL BE AS DIRECTED; TO ACHIEVE A SMOOTH RIDING FINISHED PAVEMENT.

THIS ITEM INCLUDES MILLING OF CONCRETE PATCHES WHICH WERE PLACED BY OTHERS PRIOR TO THIS PROJECT. THE CONCRETE PATCH MILLING WILL BE PERFORMED WITH THE REST OF THE MILLING AND WILL NOT BE ITEMIZED OR PAID SEPARATELY.

BUTT JOINTS SHALL BE PROVIDED AT THE BEGINNING AND END OF PAVING LIMITS AND AT THE APPROACH SLABS OF ALL STRUCTURES NOT BEING PAVED.

AT NO TIME SHALL TRAFFIC BE EXPOSED TO PLANED PAVEMENT WITHIN THE TRAVELED WAY/LANE(S). AT NO TIME OUTSIDE OF THE WORK SHIFT SHALL THE SHOULDERS BE LEFT AT A HIGHER ELEVATION THAN THE DRIVING LANES. PLANED OUTSIDE SHOULDERS MAY BE EXPOSED TO TRAFFIC FOR FIVE (5) CALENDAR DAYS.

FAILURE TO COMPLY SHALL SUBJECT THE CONTRACTOR TO LIQUIDATED DAMAGES AS PER SECTION 108.07 OF C&MS.

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

ITEM 442 - ANTI-SEGREGATION EQUIPMENT:

PROVIDE ANTI-SEGREGATION EQUIPMENT FOR ALL COURSES OF UNIFORM THICKNESS IN ACCORDANCE WITH C&MS 401.12. THE QUANTITY FOR THIS ITEM IS IN CUBIC YARDS AND IS EQUAL TO THE AMOUNT OF SURFACE COURSE ON THE MAINLINE (EXCLUDING SHOULDERS) AND RAMPS/CD ROAD (INCLUDING SHOULDERS).

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN, (MAINLINE PAVING):

LOCATE LONGITUDINAL JOINTS IN SURFACE COURSE AS DESCRIBED IN C&MS 446.05 SUBJECT TO THE FOLLOWING REQUIREMENTS:

PLACE A SINGLE COLD LONGITUDINAL JOINT BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN.

WHEN LANES BECOME IN CONTACT WITH THE STRIPED GORE THEY ARE CONSIDERED TO BE ON THE RAMP AND COUNTED SEPARATELY FROM THE MAINLINE.

A COLD LONGITUDINAL JOINT IS PERMITTED BETWEEN THE MAINLANE AND SHOULDER FOR THIS PROJECT AS SPECIFIED IN C&MS 446.05. THIS INCLUDES ONE JOINT ALONG ONE OF THE TWO LINES THAT MAKE UP THE STRIPED GORE. ITEM 872 VRAM QUANTITES DO NOT INCLUDE THE STRIPED GORE LOCATIONS OR SHOULDER JOINTS AND IS NOT TO BE PLACED THERE.

ONE JOINT ALONG ONE OF THE TWO LINES THAT MAKE UP THE STRIPED GORE MAY BE A COLD JOINT. ADDITIONAL ITEM 872 VRAM QUANTITIES ARE INCLUDED FOR THESE LOCATIONS.



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 DURING CONSTRUCTION OPERATIONS = 1000 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 AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614 - WORK ZONE MARKING SIGN

THE FOLLOWING ESTIMATED QUANTITIES FOR "NO EDGE LINE" SIGNS (R4-1-18) HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF MT-101.90, 614.04 AND 614.11.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE MARKING SIGN = 20 EACH

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 AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. 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 PRE-PROGRAMMED 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 SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) 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.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (ASSUMING 4 PCMS FOR 5 MONTHS) = 20 SNMT

ITEM 614 - WORK ZONE PAVEMENT MARKING, CLASS III, 642 PAINT

WORK ZONE PAVEMENT MARKING SHALL BE PLACED TO REFLECT THE PROPOSED PAVEMENT MARKINGS A DETERMINED FROM THE PROPOSED MARKINGS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

614 - WORK ZONE PAVEMENT MARKINGS, CLASS 111, 642 PAINT				
LOCATION	EDGE LINE, 6"	LANE LINE, 6"	CHANNELIZNG LINE	DOTTED LINE
EB	MILE	MILE	FT	FT
I-70	16.51	16.51	2089	2167
WB				
I-70	17.35	17.35	2188	2761
TOTALS	33.86	33.86	4277	4928

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED AND TOTALS CARRIED TO GENERAL SUMMARY

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT 33.86 MI

ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT 33.86 MI

ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT 4277 FT

ITEM 614 - WORK ZONE DOTTED LINE, CLASS III, 12", 642 PAINT 4928 FT

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ITEM 808 - WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER	COUNTY-ROUTE-SECTION	DIRECTIONS
WZ-35852	MADISON-70-0.00	EB & WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ. WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

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

ITEM 808 - DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
(ASSUMING 10 DSL SIGN ASSEMBLIES FOR 5 MONTHS = 50 SNMT

SHORT DURATION RAMP CLOSURES

FOR THE PURPOSE OF PERFORMING THE REQUIRED PAVEMENT REPAIR WORK ON US-42 NEAR THE WESTBOUND ENTRANCE RAMP TO IR-70, THE CONTRACTOR IS PERMITTED TO CLOSE THE ENTRANCE RAMP WITH PRIOR APPROVAL FROM THE ENGINEER. THE RAMP MAY BE CLOSED AND DETOURED DURING THE HOURS LISTED IN THE RAMP CLOSURE RESTRICTION TABLE AND ARE SUBJECT TO DISINCENTIVE.

FOR ALL SERVICE RAMP CLOSURES LASTING MORE THAN 12 HOURS BUT LESS THAN 60 HOURS

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

- A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED DETOUR ROUTE.
- POSITIVE GUIDANCE ALONG THE DETOUR ROUTE WITH DETOUR SIGNS (M4-9 SERIES) IN ACCORDANCE WITH THE DETOUR SIGNS NOTE.

FOR ALL RAMP CLOSURES LASTING LESS THAN 12 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

- A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED DETOUR ROUTE.

WHEN CLOSING ENTRANCE RAMPS, CORRESPONDING LEAD-IN LANES AND TURN LANES SHALL ALSO BE CLOSED.

IF A DESIGNATED DETOUR ROUTE IS NOT PROVIDED IN THE PLANS, TRAFFIC SHALL BE DIRECTED TO THE NEXT INTERCHANGE, IF AVAILABLE, TO TURN AROUND. IF THE USE OF THE NEXT INTERCHANGE IS NOT POSSIBLE, AN ALTERNATIVE DETOUR ROUTE SHALL BE PROVIDED BY THE ENGINEER.

FOR CLOSURE PERIODS LESS THAN 72 HOURS, DETOUR SIGNS MAY BE PLACED ON TEMPORARY SIGN SUPPORTS IN ACCORDANCE WITH MT-105.10.

THE DESIGNATED DETOUR ROUTE AND RAMP CLOSURE RESTRICTION ARE SHOWN ON THE ALLOWABLE RAMP CLOSURE TABLE ON THIS SHEET.

Secondary Route: State Route 56 SLM along IR 70					
Ramp	Movement	No Closures Allowed		Detour Routes	
		Mon to Fri	Sat & Sun	Primary Route	Secondary Route
A	SR-56 to IR-70 WB	6AM-7PM	No Restriction	SR-56 to I-70 EB to US-42 NB (Ramp D) to I-70 WB (Ramp A)	SR-56 to I-70 EB to SR-29 WB (Ramp D) to I-70 WB (Ramp A)
B	IR-70 WB to SR-56	6AM-7PM	No Restriction	SR-56 to I-70 WB (Ramp A) to SR-54 SB (Ramp C) to I-70 EB (Ramp D) to SR-56 (Ramp D)	SR-56 to I-70 WB (Ramp A) to US-40 EB (Ramp F) to I-70 EB (Ramp G) to SR-56 (Ramp D)
C	SR-56 to IR-70 EB	6AM-7PM	No Restriction	SR-56 to I-70 WB (Ramp A) to SR-54 SB (Ramp C) to I-70 EB (Ramp D)	SR-56 to I-70 WB (Ramp A) to US-40 EB (Ramp F) to I-70 EB (Ramp G)
D	SR-56 TO IR-70 EB	6AM-7PM	No Restriction	I-70 EB to US-42 NB SR-56 (Ramp D) to I-70 WB (Ramp A) to SR-56 (Ramp B)	I-70 EB to SR-29 (Ramp D) to I-70 WB (Ramp A) to SR-56 (Ramp B)

Secondary Route: State Route 42 SLM along IR 70					
Ramp	Movement	No Closures Allowed		Detour Routes	
		Mon to Fri	Sat & Sun	Primary Route	Secondary Route
A	US-42 to IR-70 WB	5AM-9PM	8AM-7PM	US-42 to I-70 EB (Ramp C) to SR-29 WB (Ramp D) to I-70 WB (Ramp A)	US-42 NB to SR-29 EB to I-70 WB (Ramp A)
B	IR-70 WB to US-42	5AM-9PM	8AM-7PM	I-70 WB to SR-56 SB (Ramp B) to I-70 EB (Ramp C) to US-42 (Ramp D)	I-70 WB to SR-54 SB (Ramp C) to I-70 EB (Ramp D) to US-42 (Ramp D)
C	US-42 to IR-70 EB	5AM-9PM	8AM-7PM	US-42 NB to SR-29 EB to I-70 EB (Ramp C)	US-42 to I-70 WB (Ramp A) to SR-56 SB (Ramp B) to I-70 EB (Ramp C)
D	IR-70 EB to US-42	5AM-9PM	8AM-7PM	I-70 EB to SR-29 (Ramp D) to SR-29 WB to US-42	I-70 EB to SR-29 (Ramp D) to I-70 WB (Ramp A) to US-42 (Ramp B)

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WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOTSPECIFICATIONS.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN = 20 EACH

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS 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 SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

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 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

SHORT-TERM HOURLY CLOSURE WINDOW CONTRACT (PN 140)

DESCRIPTION OF CRITICAL WORK	HOURS TO COMPLETE	DISINCENTIVE \$ PER HOUR
CLOSURE OF RAMP B (I-70W TO US-42) BETWEEN THE HOURS OF 9PM THURSDAY THROUGH 5AM MONDAY TO PERFORM ALL WORK ASSOCIATED WITH PHASE 1 & PHASE 2. BOTH PHASE 1 & PHASE 2 SHALL BE COMPLETED IN ONE CONTINUOUS CLOSURE OF RAMP B NOT TO 80 HOURS IN TOTAL.	80 HOURS	\$1,000
CLOSURE OF RAMP A (US-42 TO I-70W) BETWEEN THE HOURS OF 9PM THURSDAY THROUGH 5AM MONDAY TO PERFORM ALL WORK ASSOCIATED WITH PHASE 1 & PHASE 2. PHASE 1 MUST BE COMPLETE PRIOR TO STARTING PHASE 2. THE US-42S TO I-70W MOVEMENT SHALL BE MAINTAINED DURING PHASE 2.	80 HOURS	\$500

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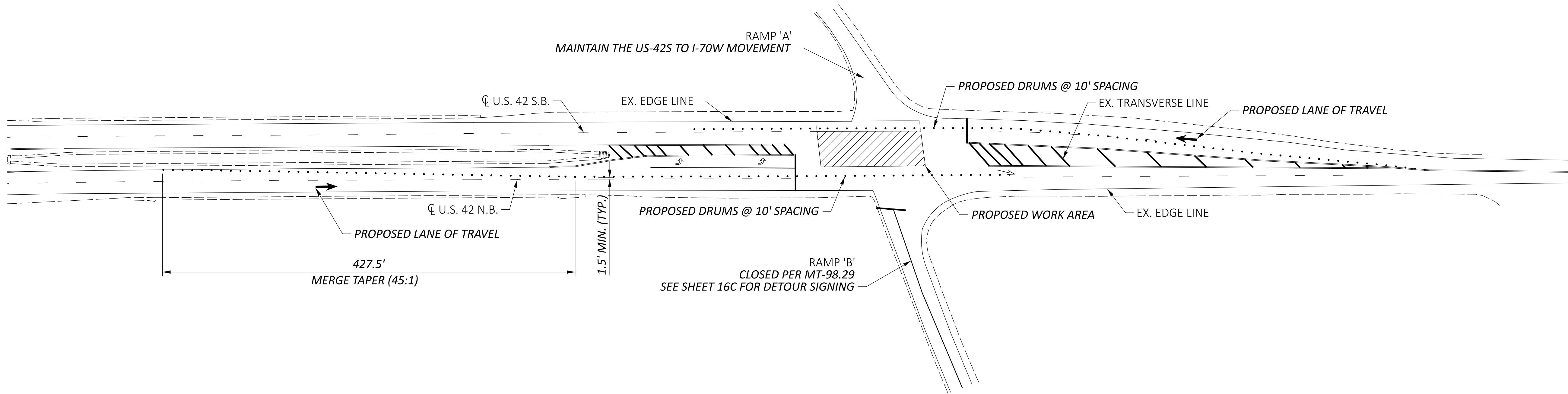
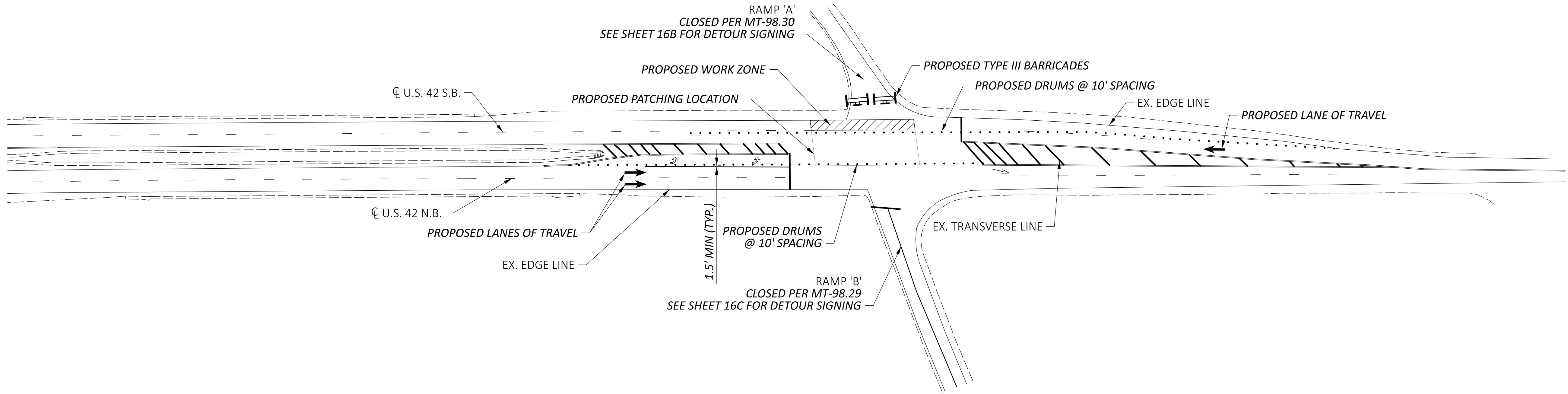
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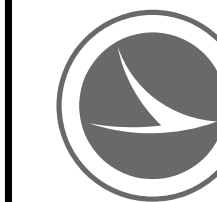
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MAINTENANCE OF TRAFFIC
U.S. ROUTE 42 FULL DEPTH REPAIR
BARREL PLACEMENT

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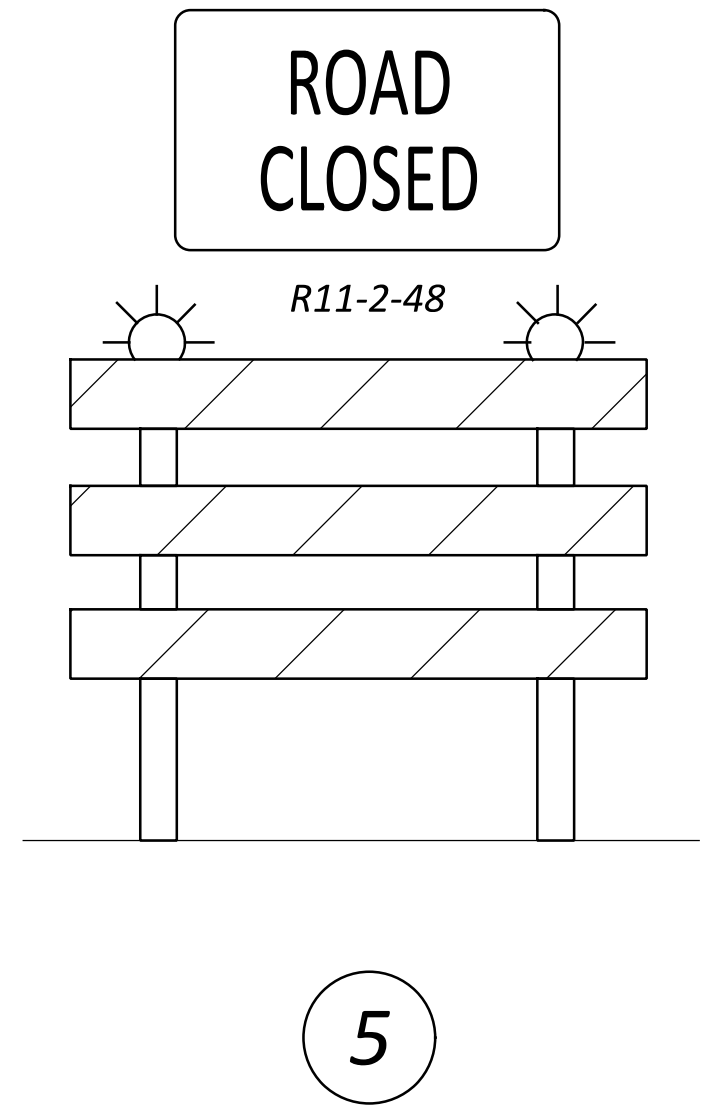
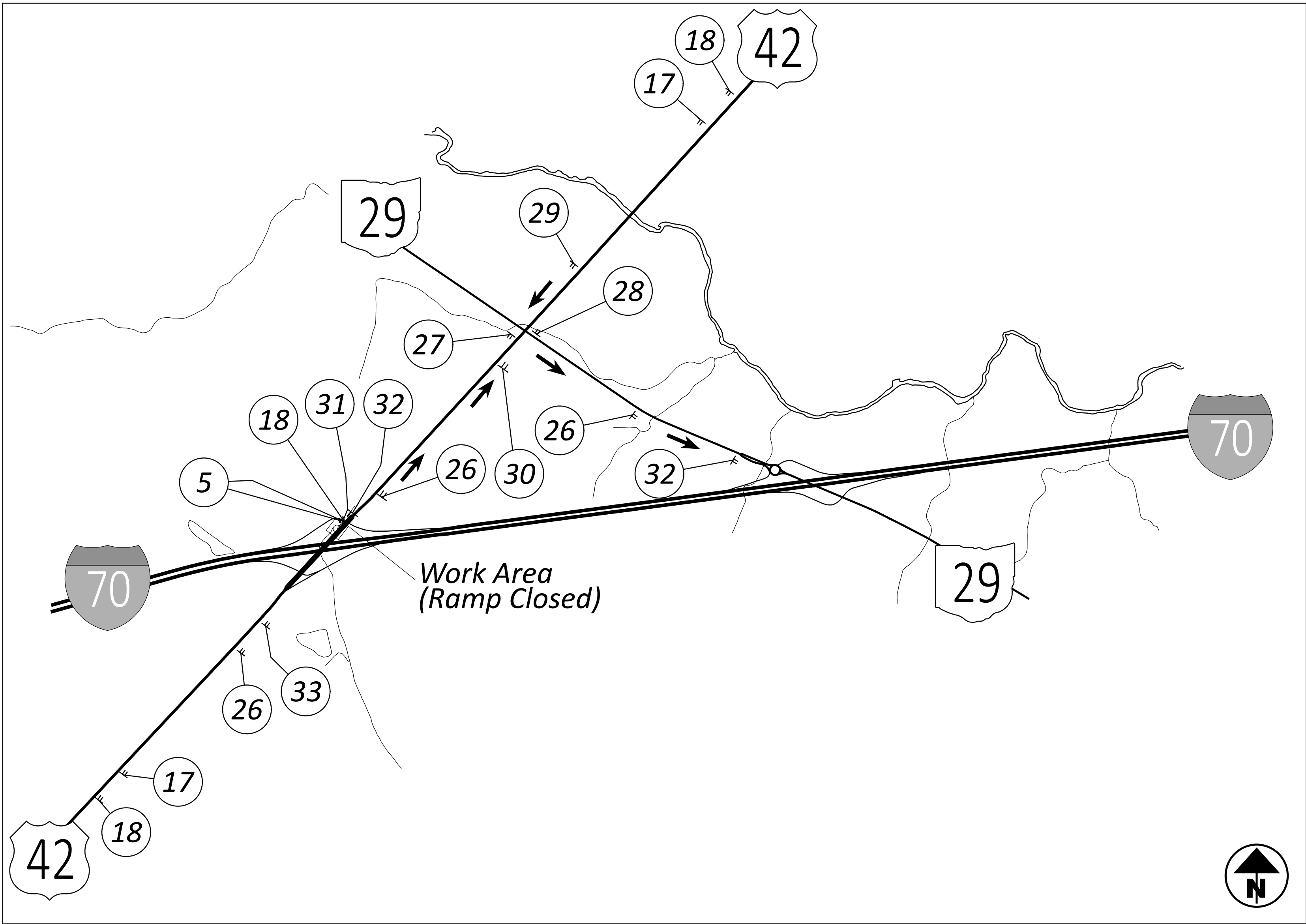
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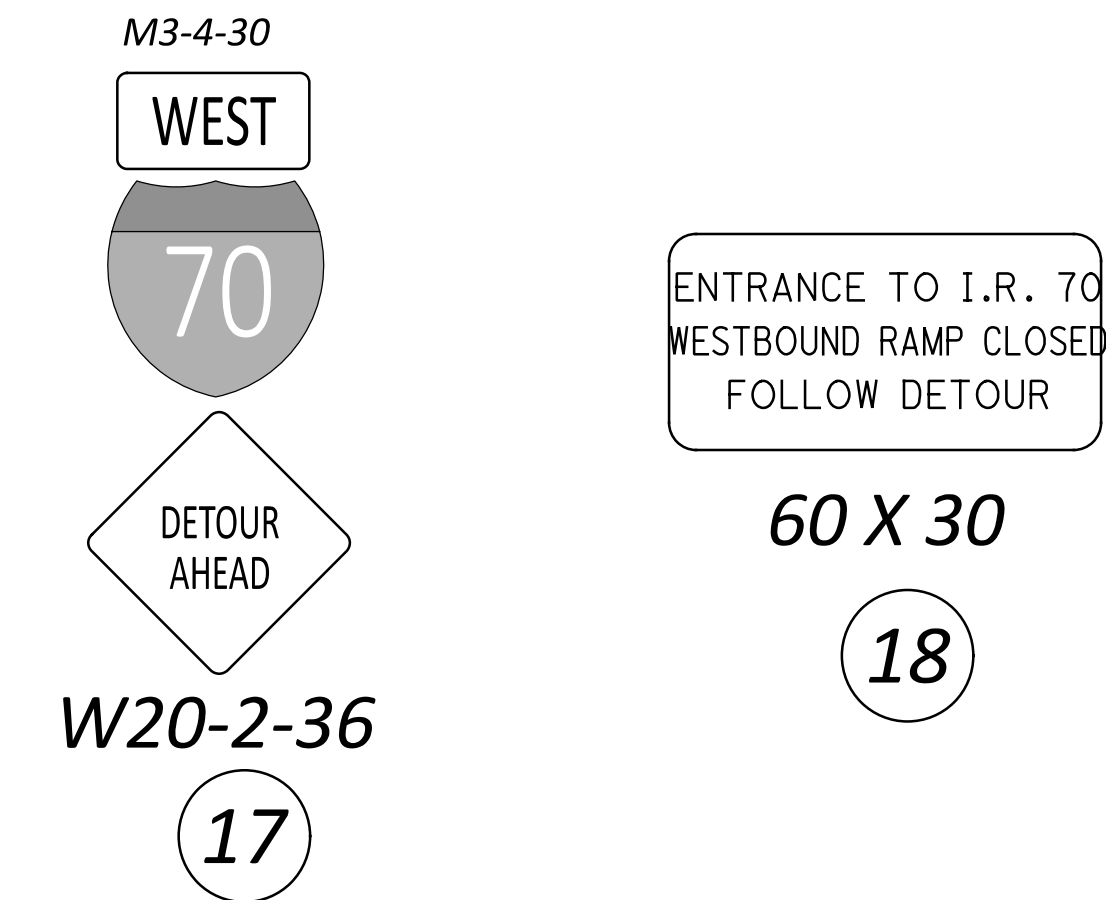
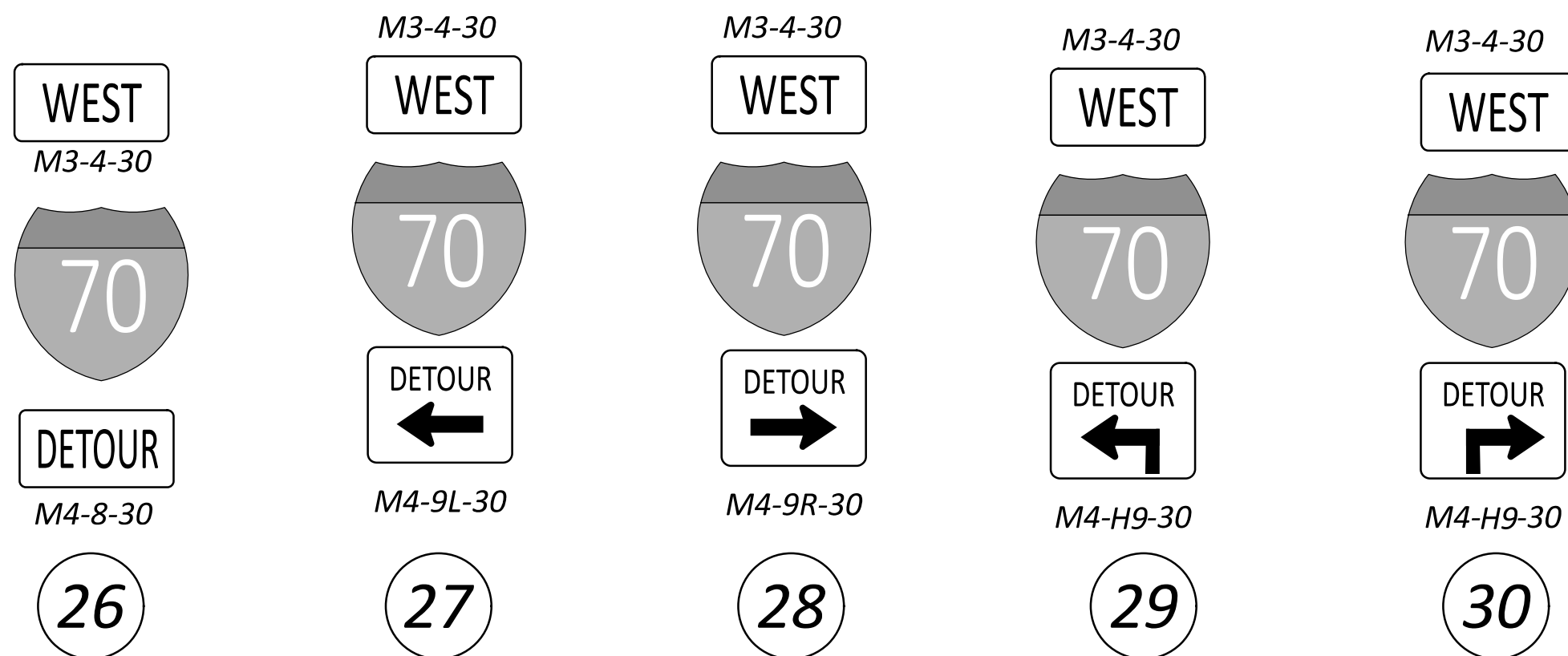
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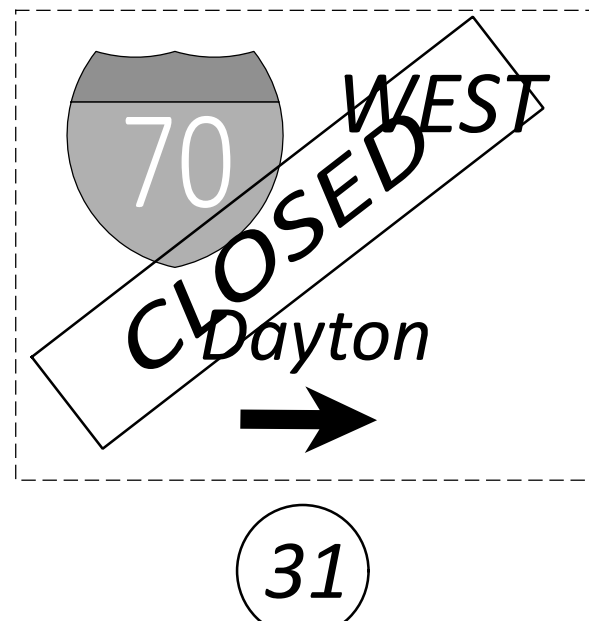


10' Type III Barricade
See SCD MT-101.60

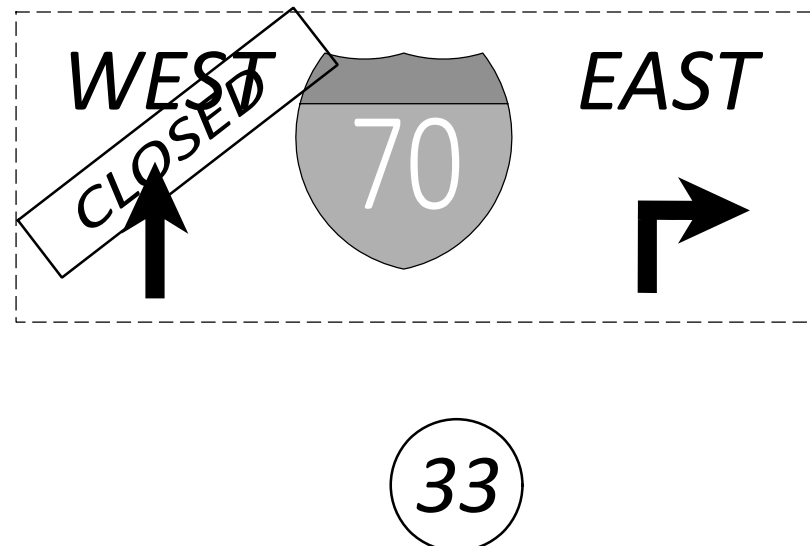
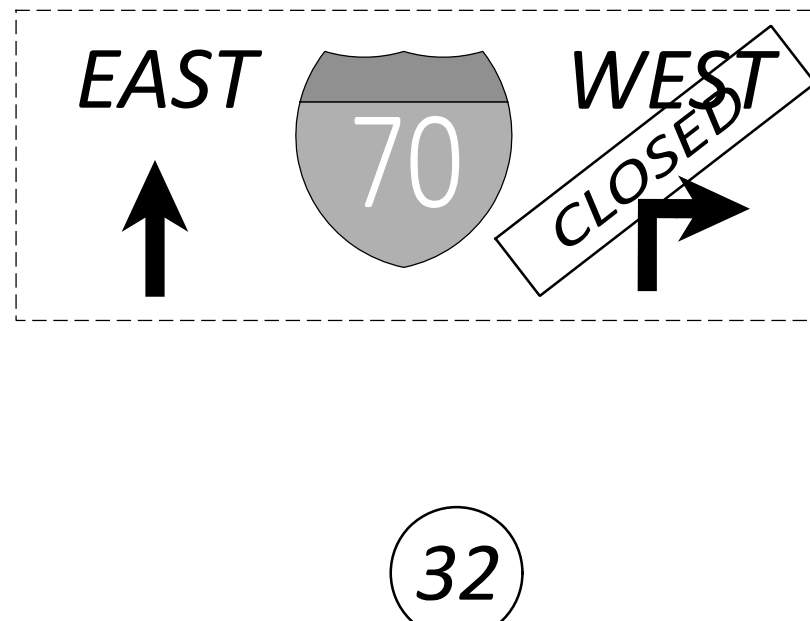


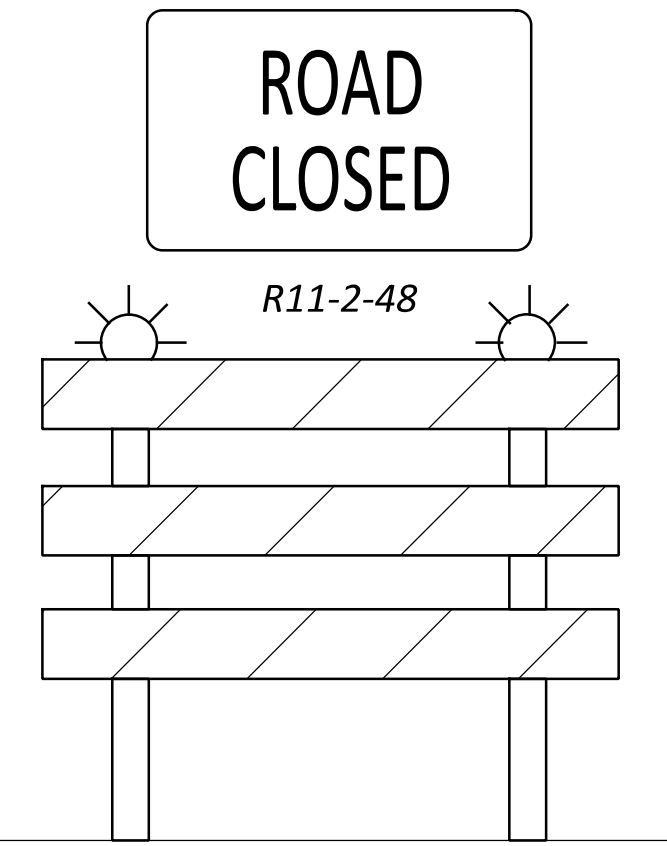
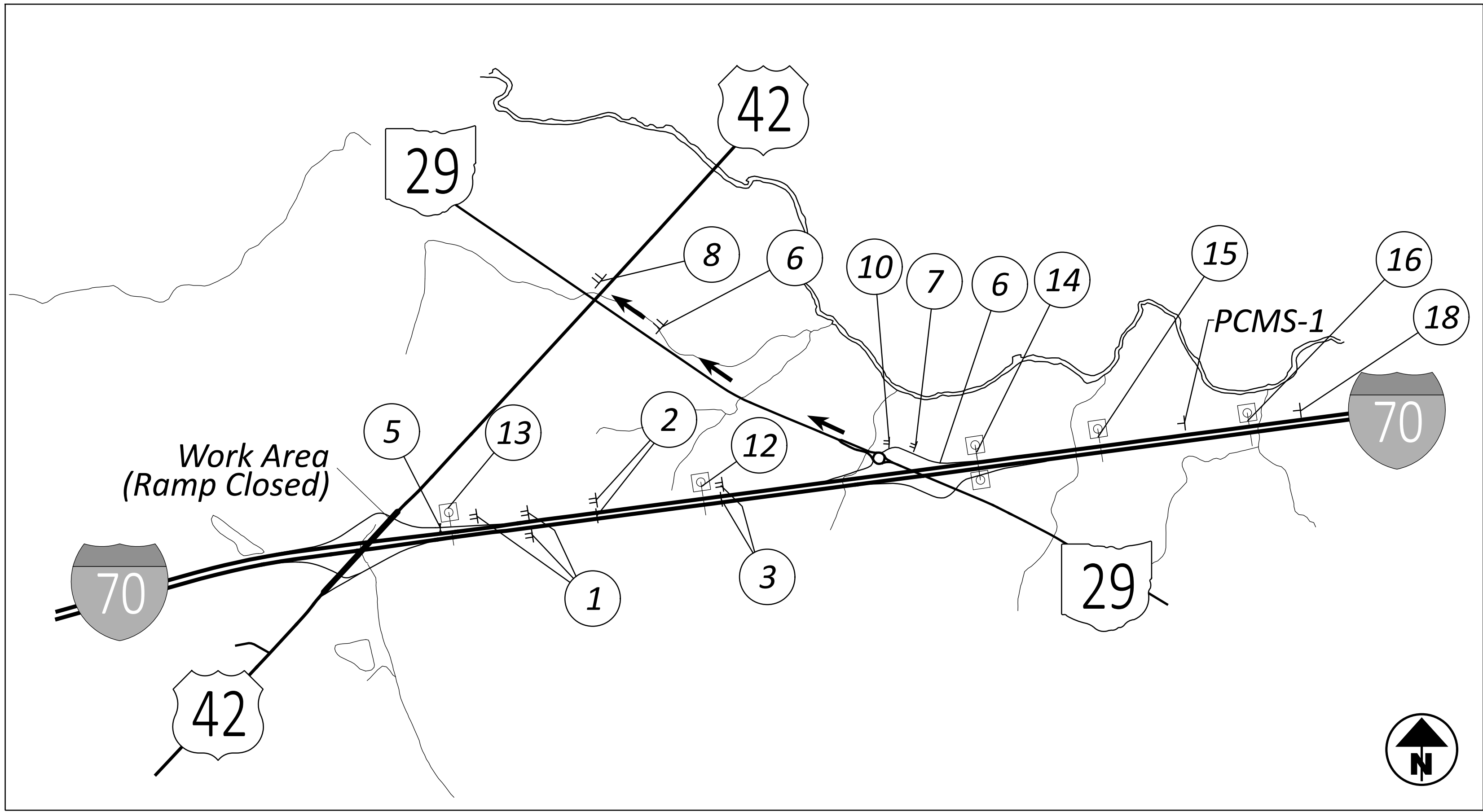
NOTE: THIS SHEET PROVIDES SIGNING DETAILS FOR THE PHASE 1 RAMP 'A' CLOSURE DETOUR ROUTE. SEE SHEET 16A FOR DRUM AND BARRICADE PLACEMENT AND PHASING DETAILS. THE INTERSECTION ENTRANCE RAMP AND TURN BAY CLOSURE SHALL FOLLOW SCD MT-98.30

DETOUR DESCRIPTION: U.S. 42 NORTHBOUND TRAFFIC IS TO CONTINUE NORTH PAST RAMP 'A' ON U.S. 42. TRAFFIC WILL THEN TURN RIGHT ON SR-29 AND CONTINUE SOUTHBOUND UNTIL THE I.R. 70 INTERCHANGE. U.S. 42 SOUTHBOUND TRAFFIC IS TO TURN LEFT ONTO SR-29 AND CONTINUE SOUTHBOUND UNTIL THE I.R. 70 INTERCHANGE.

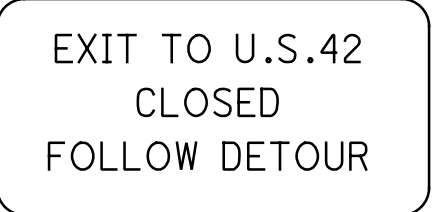
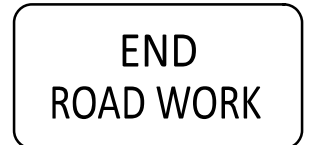
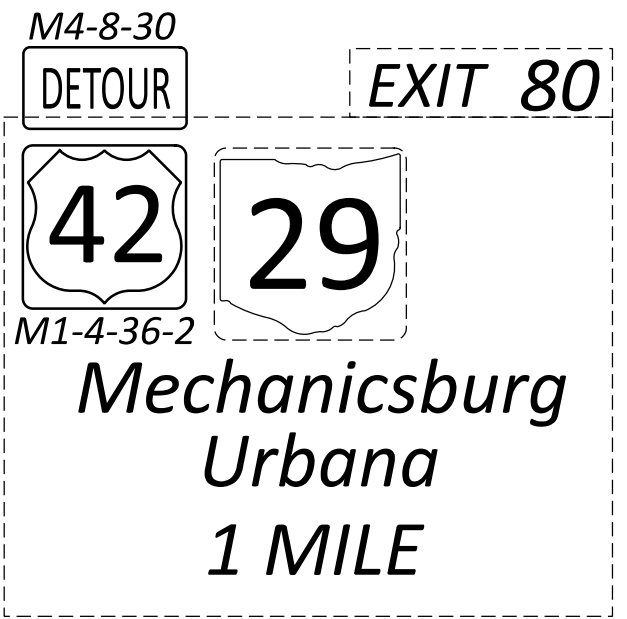
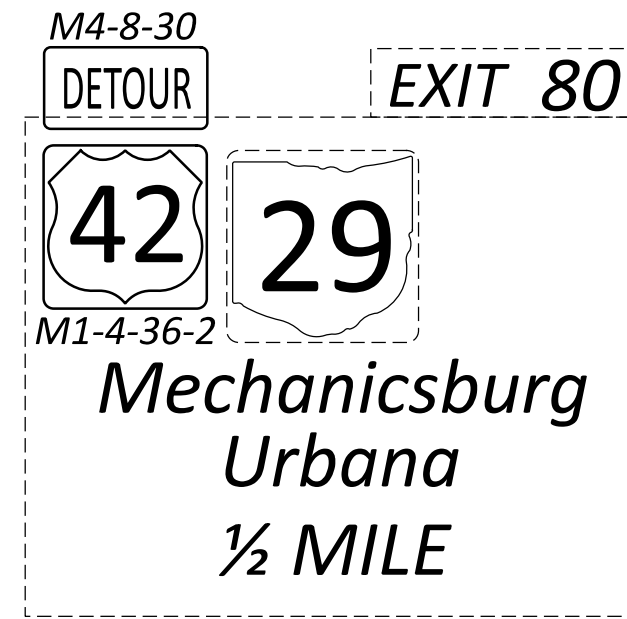
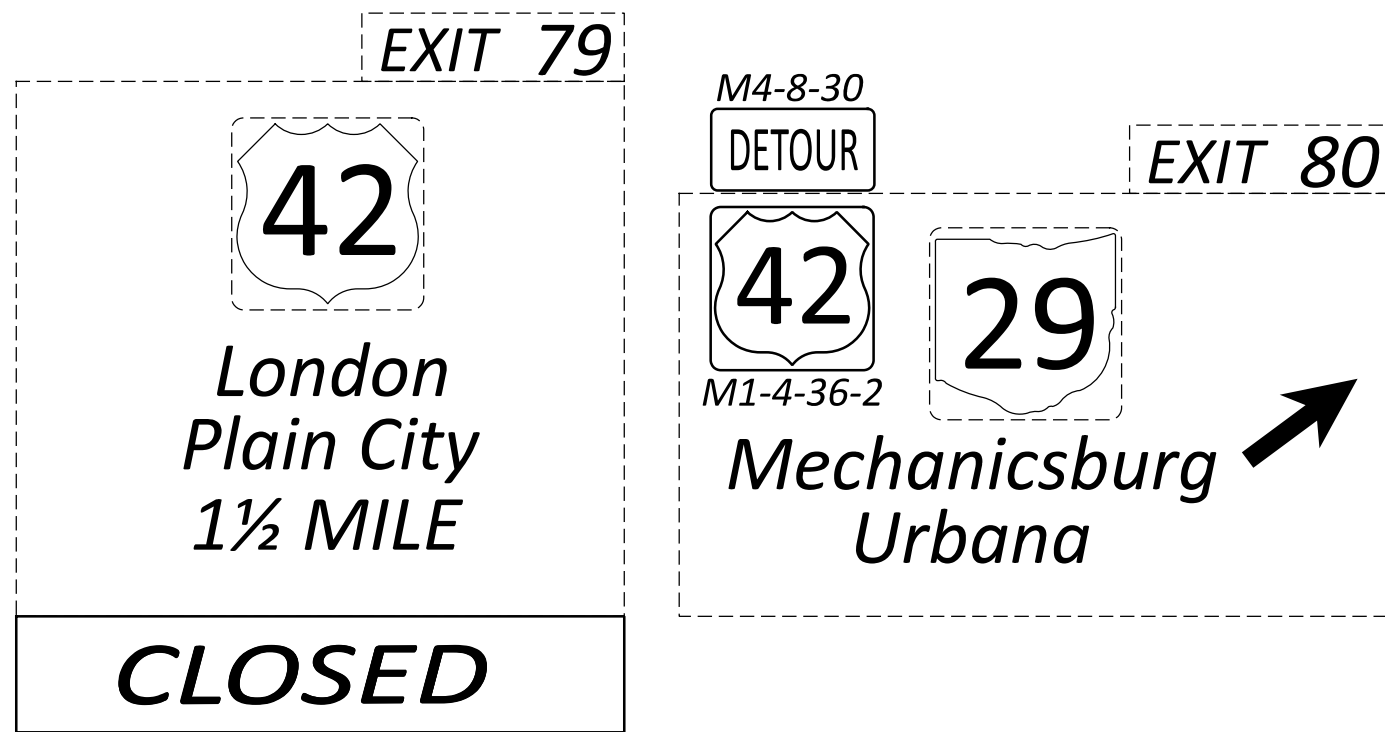
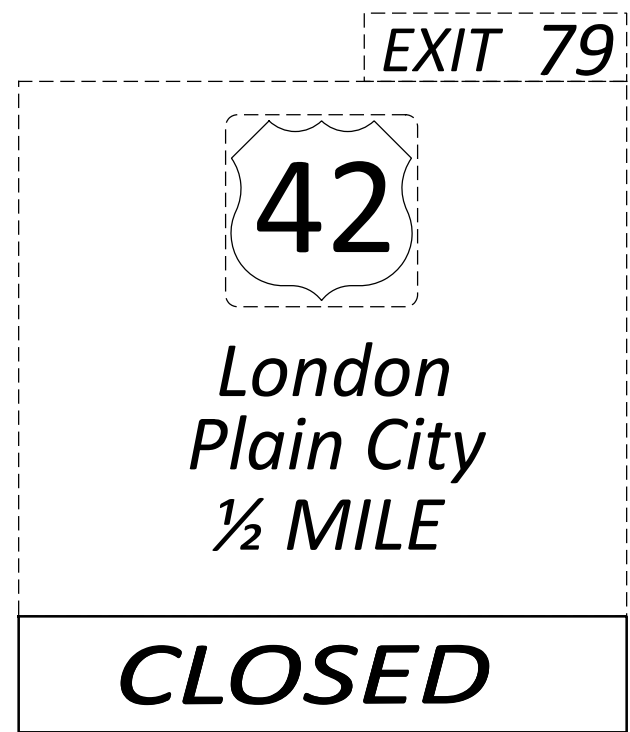
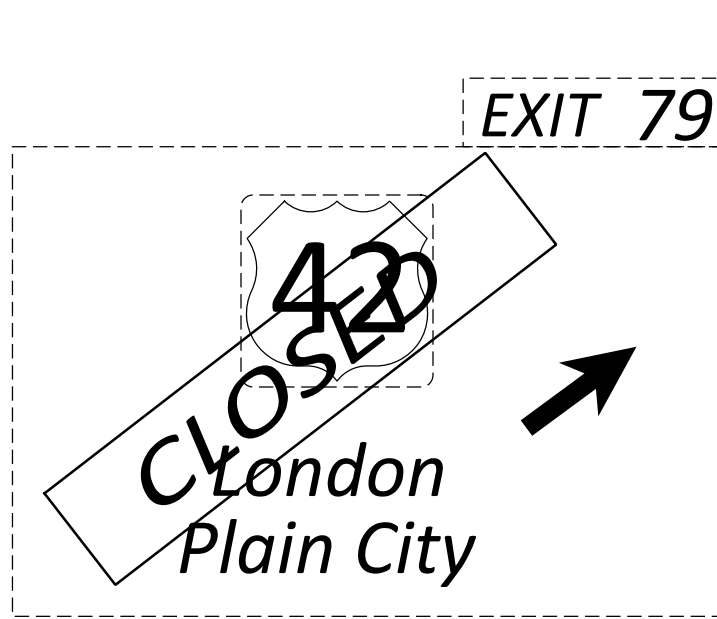
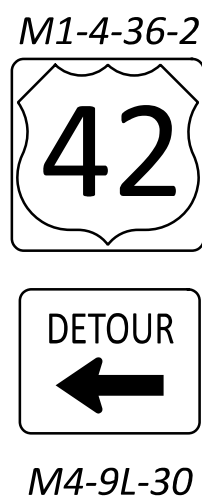
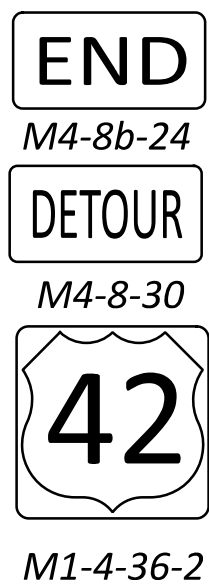
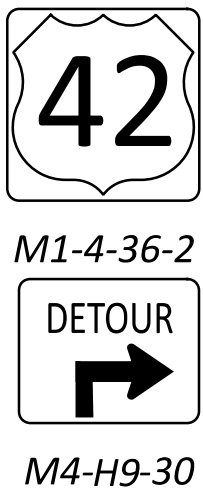


Both sides of Sign





10' Type III Barricade
See SCD MT-101.60



NOTE: THIS SHEET PROVIDES SIGNING DETAILS FOR THE RAMP 'B' CLOSURE DETOUR ROUTE. SEE SHEET 16A FOR PHASING DETAILS. DRUM AND BARRICADE PLACEMENT FOR THE RAMP CLOSURE SHALL BE AS DETAILED ON STANDARD DRAWING MT-098.29.

DETOUR DESCRIPTION: I.R. 70 WESTBOUND TRAFFIC IS TO TAKE EXIT 80 TO SR-29. TRAFFIC WILL THEN FOLLOW THE DETOUR ROUTE NORTH ON SR-29 UNTIL THE INTERSECTION WITH U.S. 42.

MAINTENANCE OF TRAFFIC
DETOUR U.S. 42
RAMP B CLOSURE

DESIGN AGENCY



DESIGNER	TAB
REVIEWER	XXX MM-DD-YY
PROJECT ID	112880
SHEET	TOTAL
P.16C	P.45

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.8	P.9						P.19	P.20	P.21	P.22	P.42		01/IMS						
																		ROADWAY	
	LS							7,473.75					LS	201	11000	LS		CLEARING AND GRUBBING	
								25					7,473.75	202	38001	7,473.75	FT	GUARDRAIL REMOVED, AS PER PLAN	P.11
								18					25	202	42207	25	EACH	ANCHOR ASSEMBLY REMOVED, AS PER PLAN	P.11
								90					18	202	47801	18	EACH	IMPACT ATTENUATOR REMOVED, AS PER PLAN	P.11
													90	203	20001	90	CY	EMBANKMENT, AS PER PLAN	P.11
								84.9					84.9	209	15000	84.9	STA	RESHAPING UNDER GUARDRAIL	
								3,687.5					3,687.5	606	15050	3,687.5	FT	GUARDRAIL, TYPE MGS	
								2,187.5					2,187.5	606	15550	2,187.5	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS	
								24					24	606	26050	24	EACH	ANCHOR ASSEMBLY, MGS TYPE B	
								1					1	606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
								21					21	606	26550	21	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
								24					24	606	35002	24	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
								2					2	606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
								18					18	606	60012	18	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
																		EROSION CONTROL	
								630					630	659	10001	630	SY	SEEDING AND MULCHING, AS PER PLAN	P.11
	0.09												0.09	659	20000	0.09	TON	COMMERCIAL FERTILIZER	
	0.13												0.13	659	31000	0.13	ACRE	LIME	
	4												4	659	35000	4	MGAL	WATER	
	1,000												1,000	832	30000	1,000	EACH	EROSION CONTROL	
																		DRAINAGE	
20													20	611	00510	20	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
																		PAVEMENT	
									1,124	1,340			2,464	251	01041	2,464	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.5"	P.10
								806	673				1,479	251	01041	1,479	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 6.0"	P.10
											338		338	254	01000	338	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1 ½"	
							602,113						602,113	254	01001	602,113	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, 1 ¾"	P.10
							12,042						12,042	254	01600	12,042	SY	PATCHING PLANED SURFACE	
375													375	255	16000	375	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, 15.25"	
240													240	255	20000	240	FT	FULL DEPTH PAVEMENT SAWING	
							51,180				31		51,211	407	20000	51,211	GAL	NON-TRACKING TACK COAT	
							15,238						15,238	442	00100	15,238	CY	ANTI-SEGREGATION EQUIPMENT	
							25,088						25,088	442	10000	25,088	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
											14		14	442	22100	14	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449)	
							1,094				6		1,100	617	10100	1,100	CY	COMPACTED AGGREGATE	
							19,700				93		19,793	617	20000	19,793	SY	SHOULDER PREPARATION	
							33.58						33.58	618	40600	33.58	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
							88,652						88,652	872	10000	88,652	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

TAB

REVIEWER

XXX MM-DD-YY

PROJECT ID


112880

SHEET

P.17

TOTAL

P.45

GENERAL SUMMARY	
DESIGN AGENCY	
	
DESIGNER	TAB
REVIEWER	XXX MM-DD-YY
PROJECT ID	112880
SHEET	TOTAL
P.18	P.45

PARTIAL DEPTH PAVEMENT REPAIR CALCULATIONS (EASTBOUND)															
ROUTE	DIRECTION	BEGIN	END	BEGIN	END	REPAIR			AVERAGE PAVEMENT WIDTH (SEE TYPICAL SECTIONS)				PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN	COMMENTS
						LENGTH	WIDTH	DEPTH	LANE				T = 4.5"	T = 6.0"	
		MM	MM	STA.	STA.	FT	FT	INCHES	A	B	C	RAMP	SY	SY	
70	EB	0.122	0.124	006+44.16	006+54.72	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	0.668	0.670	035+27.04	035+37.60	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	0.668	0.672	035+27.04	035+48.16	20	6	4.5			X		13.3		LONGITUDINAL JOINT
70	EB	0.708	0.729	037+38.24	038+49.12	111	4	4.5	X				49.3		LONGITUDINAL JOINT BETWEEN LANES A & B (POTHOLES FILLED W/ COLD PATCH)
70	EB	0.751	0.753	039+65.28	039+75.84	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	0.760	0.762	040+12.80	040+23.36	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	0.760	0.789	040+12.80	041+65.92	153	4	4.5	X				68.0		LONGITUDINAL JOINT BETWEEN LANES A & B (POTHOLES FILLED W/ COLD PATCH)
70	EB	0.940	0.942	049+63.20	049+73.76	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	1.048	1.050	055+33.44	055+44.00	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	1.094	1.098	057+76.32	057+97.44	20	12	4.5			X		26.7		VAROIOUS POTHOLES ARE DEEPER THAN THE SURFACE COURSE
70	EB	1.276	1.278	067+37.28	067+47.84	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	1.322	1.324	069+80.16	069+90.72	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	1.388	1.390	073+28.64	073+39.20	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	1.416	1.418	074+76.48	074+87.04	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	1.444	1.446	076+24.32	076+34.88	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	1.452	1.456	076+66.56	076+87.68	20	12	6.0	X	X	X			80.0	END REPAIR AT BRIDGE APPROACH SLAB
70	EB	1.483	1.487	078+30.24	078+51.36	20	12	6.0	X	X	X			80.0	BEGIN REPAIR AT BRIDGE APPROACH SLAB
70	EB	1.677	1.703	088+54.56	089+91.84	137	6	6.0			X			91.3	REPAIR AT RAMP ADJACENT TO CONCRETE
70	EB	1.881	1.887	099+31.68	099+63.36	30	12	6.0		X				40.0	REPAIR EXTENDS INTO APPROACH SLAB ON LANE 2
70	EB	1.881	1.885	099+31.68	099+52.80	20	12	6.0	X		X			53.3	END REPAIR AT BRIDGE APPROACH SLAB
70	EB	1.911	1.915	100+90.08	101+11.20	20	12	6.0	X	X	X			80.0	BEGIN REPAIR AT BRIDGE APPROACH SLAB
70	EB	2.031	2.033	107+23.68	107+34.24	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	2.145	2.149	113+25.60	113+46.72	20	12	6.0				X		26.7	BEGIN REPAIR WHERE CONCRETE RAMP ENDS
70	EB	2.249	2.251	118+74.72	118+85.28	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	2.400	2.402	126+72.00	126+82.56	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	2.487	2.489	131+31.36	131+41.92	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	2.524	2.526	133+26.72	133+37.28	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	2.676	2.678	141+29.28	141+39.84	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	2.864	2.866	151+21.92	151+32.48	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	2.960	2.962	156+28.80	156+39.36	10	12	4.5	X	X	X		40.0		TRANSVERSE CRACKING
70	EB	3.023	3.025	159+61.44	159+72.00	10	6	4.5		X	X		13.3		TRANSVERSE CRACKING
70	EB	3.383	3.408	178+62.24	179+94.24	132	12	4.5	X	X			352.0		LONGITUDINAL JOINT BETWEEN LANES A & B (POTHOLES FILLED W/ COLD PATCH)
70	EB	3.771	3.773	199+10.88	199+21.44	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	3.984	3.986	210+35.52	210+46.08	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	4.552	4.558	240+34.56	240+66.24	30	6	4.5			X		20.0		PASSENGER WHEEL PATH (POTHOLES FILLED W/ COLD PATCH)
70	EB	4.826	4.828	254+81.28	254+91.84	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	5.349	5.351	282+42.72	282+53.28	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	5.651	5.653	298+37.28	298+47.84	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	5.874	5.876	310+14.72	310+25.28	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	5.955	5.957	314+42.40	314+52.96	10	12	4.5		X	X		26.7		TRANSVERSE CRACKING
70	EB	6.181	6.183	326+35.68	326+46.24	10	12	4.5			X		13.3		TRANSVERSE CRACKING
70	EB	6.294	6.298	332+32.32	332+53.44	20	12	6.0	X	X	X			80.0	END REPAIR AT BRIDGE APPROACH SLAB
70	EB	6.328	6.332	334+11.84	334+32.96	20	12	6.0	X	X	X			80.0	BEGIN REPAIR AT BRIDGE APPROACH SLAB
70	EB	8.917	8.919	470+81.76	470+92.32	10	12	4.5	X	X	X		40.0		TRANSVERSE CRACKING
10% CONTINGENCY QUANTITY													116.9	61.1	QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER
TOTALS CARRIED TO GENERAL SUMMARY													1340	673	TOTALS CARRIED TO GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

TAB

REVIEWER

XXX MM-DD-YY

PROJECT ID

112880

SHEET

P.22

TOTAL

P.45

PAVEMENT MARKINGS					621			642		644	646		807										850						
ROUTE	FROM	TO	DESCRIPTION	DISTANCE		RAISED PAVEMENT MARKER REMOVED	RPM		REMOVAL OF PAVEMENT MARKING	REMOVAL OF PAVEMENT MARKING	SPEED MEASUREMENT MARKING	STOP LINE	LANE ARROW	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"		WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"	GROOVING FOR 6" RECESSED PAVEMENT MARKING (ASPHALT)	GROOVING FOR 6" RECESSED PAVEMENT MARKING (ASPHALT)	GROOVING FOR 12" RECESSED PAVEMENT MARKING (ASPHALT)	GROOVING FOR 6" RECESSED PAVEMENT MARKING (CONCRETE)	GROOVING FOR 12" RECESSED PAVEMENT MARKING (CONCRETE)	GROOVING FOR 6" RECESSED PAVEMENT MARKING (CONCRETE)
														WHITE	YELLOW				WHITE	YELLOW									
	SLM	MILE		FT	EACH		EACH	FT						EACH	EACH				FT	EACH									
MAINLINE (EB)																													
IR 70	0.00	0.60		0.60	3152.16	52.54	52.54												0.60	0.60	1.19			2.39					
IR 70	0.60	0.63	STRUCTURE OVER DEER CREEK	0.03	174.24									0.03	0.03	0.07										0.13			
IR 70	0.63	1.87		1.24	6547.20	109.12	109.12												1.24	1.24	2.48			4.96					
IR 70	1.87	1.90	STRUCTURE OVER SR-56	0.03	158.40									0.03	0.03	0.06										0.12			
IR 70	1.90	6.28		4.38	23126.40	385.44	385.44												4.38	4.38	8.76			17.52					
IR 70	6.28	6.31	STRUCTURE OVER DEER CREEK	0.03	158.40									0.03	0.03	0.06													
IR 70	6.31	8.28		1.97	10417.44	173.62	173.62			20.00									1.97	1.97	3.95			7.89			0.12		
MAINLINE (WB)																													
IR 70	0.00	0.60		0.60	3168.00	52.80	52.80												0.60	0.60	1.20			2.40					
IR 70	0.60	0.63	STRUCTURE OVER DEER CREEK	0.03	158.40									0.03	0.03	0.06											0.12		
IR 70	0.63	1.87		1.24	6547.20	109.12	109.12												1.24	1.24	2.48			4.96					
IR 70	1.87	1.90	STRUCTURE OVER SR-56	0.03	158.40									0.03	0.03	0.06										0.12			
IR 70	1.90	6.28		4.38	23126.40	385.44	385.44			20.00									4.38	4.38	8.76			17.52					
IR 70	6.28	6.31	STRUCTURE OVER DEER CREEK	0.03	158.40									0.03	0.03	0.06											0.12		
IR 70	6.31	8.71		2.40	12645.60	210.76	210.76												2.40	2.40	4.79			9.58					
S.R. 56 INTERCHANGE																													
RAMP A						22.00	12.00	10.00						0.25	0.25		120.00	158.00		0.11	960.00	950.00	0.11	950.00	960.00	0.50	120.00	158.00	
RAMP B						19.00	8.00	11.00	32.00		32.00						310.00	152.00			310.00	360.00		310.00	310.00	0.00	310.00	152.00	
RAMP C						20.00	11.00	9.00						0.23	0.15		439.00				549.00	482.00		549.00	549.00	0.38	439.00	0.00	
RAMP D						19.00	9.00	10.00	32.00		32.00			0.26	0.17		270.00	185.00			270.00	375.00		270.00	270.00	0.42	270.00	185.00	
U.S.R. 42 INTERCHANGE																													
RAMP A						28.00	11.00	17.00						0.34	0.25		418.00				502.00	883.00		883.00	502.00	0.59	418.00	0.00	
RAMP B						15.00	15.00		62.00	4.00	62.00	9.00		0.19	0.19		812.00				492.00	522.00		522.00	492.00	0.38	812.00	0.00	
RAMP C						11.00	11.00							0.32	0.31		464.00	232.00			930.00	1100.00		1100.00	930.00	0.62	464.00	232.00	
RAMP D						16.00	7.00	9.00	66.00	3.00	66.00	5.00		0.23	0.14		764.00	188.00			264.00	256.00		256.00	264.00	0.37	764.00	188.00	
U.S.R. 42 REPAIR																0.01	0.01												
SUBTOTALS						1628.84	1562.84	66.00	192.00	7	40.00	192.00	14	2.00	1.65	0.38	3597.00	915.00	16.81	16.81	33.72	4277.00	4928.00	67.33	4840.00	4277.00	4.00	3597.00	915.00
TOTALS CARRIED TO GENERAL SUMMARY						1629	1629		192	7	40	192	14	3.64	0.38		3597	915	33.61		33.72	4277	4928	67.33	4840	4277	4.00	3597	915

PAVEMENT MARKINGS SUBSUMMARY

DESIGN AGENCY



DESIGNER

TAB

REVIEWER

XXX MM-DD-YY

PROJECT ID

112880

SHEET

P.45

TOTAL

P.45