

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

PROJECT DESCRIPTION

SPOT PAVING AND PARTIAL DEPTH REPAIRS ON I-680 FROM SLM 0,00 - 7,30, INCLUDES MINOR REHAB TO 2 STRUCTURES.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: ESTIMATED CONTRACTOR EDA: NOTICE OF INTENT EDA:

N/A (MAINTENANCE PROJECT) N/A (MAINTENANCE PROJECT) N/A (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.

2019 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 EXCEPT AS NOTED ON SHEETS 5-7, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

CONFORMED SET

APPROVE DISTRICT DEPUTY DIRECTOR DATE 1/2

APPROVED DATE 3/25/2 DIRECTOR, DEPARTMENT OF TRANSPORTATION

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DESIGNER										
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REVIEWER										
MAC 6-7-21										
PROJECT ID										
91898										

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UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

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

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 621 - RAISED PAVEMENT MARKERS

THE FOLLIWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER FOR THE REMOVAL AND DISPOSAL OF EXISTING RAISED PAVEMENT MARKERS THAT ARE WITHIN THE LIMITS OF THE PAVEMENT REPAIRS AS NEEDED.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THIS WORK SHALL BE INCLUDED UNDER THE CONTRACT BID PRICE. QUANTITY THAT WILL BE CARRIED TO THE GENERAL SUMMARY:

621, RAISED PAVEMENT MARKER REMOVED 10 EA

PAVEMENT MARKINGS

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO BE USED AS DIRECTED BY THE PROJECT ENGINEER TO MATCH EXISTING PAVEMENT MARKINGS.

THE UNIT BID PRICES ON THESE PAY ITEMS WILL NOT BE ADJUSTED AS PER CMS 104.02.D.

ITEM 642 - EDGE LINE, 6" , TYPE 1	0.20 MILES
ITEM 642 - LANE LINE, 6" , TYPE 1	0.20 MILES
ITEM 642 - STOP LINE, TYPE 1	40 FT
ITEM 642 - CHANNELIZING LINE, 8", TYPE 1	400 FT
ITEM 642 - CHANNELIZING LINE, 12", TYPE 1	400 FT

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441) (SLM 0.00 - 7.31)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS ON MAINLINE AND RAMPS EXHIBITING SURFACE DETERIORATION AND PLACING TWO LIFTS OF ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE B. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'.

PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

TRANSVERSE JOINTS:

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 3,000 SY (T = 3") LONGITUDINAL JOINTS:

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 7,000 SY (T = 3")



RESURFACING

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO RESURFACE THE LOCATIONS LISTED BELOW FROM EDGE LINE TO EDGE LINE:

LOCATION 1

- SR 11 NB TO I-680 SB RAMP (SLM 10.25-10.42) (860' x 12')
 - ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,150 SYITEM 407 NON-TRACKING TACK COAT @ 0.08 GAL/SY, 92 GALLOCITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM,USTYPE B (448) (T = $1\frac{1}{2}$ "), 48 CY
 - ITEM 407 NON-TRACKING TACK COAT @ 0.05 GAL/SY, 58 GAL
 - ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 48 CY

LOCATION 2

- I-680 NB TO SR 711 RAMP (SLM 9.97-10.14) (815' x 12') ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,085 SY ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 87 GAL LOC, ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = 1½"), 45 CY (25')
 - ITEM 407 NON-TRACKING TACK COAT @ 0.05 GAL/SY, 54 GAL ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 45 CY
- I-680 SB TO SR 711 RAMP (SLM 0.00-0.27) (1560' x 12') ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 2,080 SY ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 167 GAL ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = 1½"), 87 CY
- ITEM 407 NON-TRACKING TACK COAT @ 0.05 GAL/SY, 104 GAL ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 87 CY

LOCATION 3

I-680 SB (SLM 4.06-4.20) (740' x 24')

- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,975 SY ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 158 GAL ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = $1\frac{1}{2}$ "), 83 CY
- ITEM 407 NON-TRACKING TACK COAT @ 0.05 GAL/SY, 99 GAL ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM,
- TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 83 CY

LOCATION 4

- I-680 NB TO SR 193 RAMP (SLM 9.94-10.11) (895' x 12') ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,195 SY ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 96 GAL ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = $1\frac{1}{2}$ "), 49 CY
 - ITEM 407 NON-TRACKING TACK COAT @ 0.05 GAL/SY, 60 GAL ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 49 CY
- I-680 SB TO SR 193 RAMP (SLM 0.00-0.22, 0.26-0.31) (1530' x 12') ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 2,040 SY ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 163 GAL ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = 1½"), 85 CY

ITEM 407 - NON-TRACKING TACK COAT @ 0.05 GAL/SY, 102 GAL ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 85 CY

- SR 193 TO I-680 NB RAMP (SLM 10.02-10.30) (825' x 12') ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,100 SY ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 88 GAL ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = $1\frac{1}{2}$ "), 46 CY
 - ITEM 407 NON-TRACKING TACK COAT @ 0.05 GAL/SY, 55 GAL ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 46 CY

ATION 5	
30 SB (SLM 5.76-6.02) (1375' x 12')	
ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,835 SY	
ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 147 GAL	
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = $1\frac{1}{2}$ "), 77 CY	
ITEM 407 - NON-TRACKING TACK COAT @ 0.05 GAL/SY, 92 GAL	
ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 77 CY	
ATION 6	
62 WB TO I-680 SB RAMP (SLM 0.00-0.17) (960' x 12')	
ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,280 SY	
ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 103 GAL	
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = $1\frac{1}{2}$ "), 54 CY	
ITEM 407 - NON-TRACKING TACK COAT @ 0.05 GAL/SY, 64 GAL	
ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, AS PER PLAN (448) (T = $1\frac{1}{2}$ "), 54 CY	
ATION 7	
80 NB/SB, STRUCTURE MAH-680-0687/0693 APPROACHES	
' BACK AT ENDS, ALL PAVEMENT BETWEEN STRUCTURES) (375' x 36')	
ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T = 3"), 1,500 SY	
ITEM 407 - NON-TRACKING TACK COAT @ 0.08 GAL/SY, 120 GAL	
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = $1\frac{1}{2}$ "), 63 CY	
ITEM 407 - NON-TRACKING TACK COAT @ 0.05 GAL/SY, 75 GAL	
ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B. AS PER PLAN (448) (T = 1½"), 63 CY	

GENERAL NOTE:





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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 PAVEMENT 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. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

4. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCA-VATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PRO-TECTED AS PER STANDARD CONSTRUCTION DRAWING MT-101.90.

5. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

6. 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.

7. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

8. A QUANTITY OF 20 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.

9. 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.

10. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUCTD 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 A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAIN-TENANCE OF TRAFFIC ON THIS PROJECT:

614, WORK ZONE MARKING SIGN,(ALL PHASES) 40 EACH

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER. TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALLALSO INSPECTALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REP-RESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISS-ING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE FOUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMIT-TED 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 REQUIRE-MENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$11,000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT THE FOLLOWING PROJECTS MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT.

MAH/TRU-422/VAR-1.90/VAR (PID 91900) MAH/POR-76/VAR-6.95/VAR (PID 102328) D04-BH-FY2022 (PID 103025)

THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. 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.

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 PER-MITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 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 ENFORCE-MENT 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).

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).

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSI-BILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CON-SIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

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 ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COM-MUNICATING 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.

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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT. THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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 WHICH SHALL BE RE-TURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

CITY OF YOUNGSTOWN (330-742-8890) MAHONING COUNTY ENGINEER (330-799-1581) TRUMBULL COUNTY ENGINEER (330-675-2640)

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINT-ENANCE 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 150 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) IN-CURRED 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.

DETOUR NOTIFICATION [CITY/COUNTY]

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND THE FOLLOWING ENTITIES 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.

В П NOT TRAFFIC ЧO MAINTENANCE



ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A PORTABLE 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 DISTANCE 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. PCMS TRAILERS SHOULD BE DELINEATED.

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 PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. 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 THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF. ADDITIONALLY WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE 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 CONTRACTOR. A LIST OF ALL PROPOSED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. 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 OF 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, DE-ACTIVATED 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 AREAS] ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 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 WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THEIR USE. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

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.

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

DESIGN AGENCY DESIGNER MJP REVIEWER MAC 6-7-21 PROJECT ID 91898 SHEET TOTAL P.4 9	MAINTENANCE OF TRAFFIC NOTES	
DESIGNER MJP REVIEWER MAC 6-7-21 PROJECT ID 91898 SHEET TOTAL P.4 9	DESIGN AGENCY	
DESIGNER MJP REVIEWER MAC 6-7-21 PROJECTID 91898 SHEET TOTAL P.4 9		
PROJECT ID 91898 SHEET TOTAL P.4 9	DESIGNER MJP REVIEWER MAC 6-7-21	
	91898 SHEET TOTAL P.4 9	

	RAMP CLOSURES													
	LOCATION	RAMPS IMPACTED	RAMP LENGTH (FEET)	RAMP AVERAGE WIDTH (FEET)	PERMITTED CLOSURE TIMES	DURATION	DETOUR ROUTE	APPROX. # PCMS	ADDITIONAL RESTRICTIONS / INFO	DISINCENTIVES (PER HOUR)				
	1	SR 11 NB TO I-680 SB	860	12	9:00 PM - 5:00 AM	2 NIGHTS	I-80 EB / SALT SPRINGS RD / MERIDIAN RD	4		\$8,000				
	2	I-680 NB TO SR 711	815	12	9:00 PM - 5:00 AM	2 NIGHTS	I-680 NB / MERIDIAN RD / I-680 SB	4	CAN'T CLOSE SR 711 RAMPS TOGETHER CLOSE RAMP FROM ELBEREN ST	\$10,000				
		I-680 SB TO SR 711	1560	12	9:00 PM - 5:00 AM	2 NIGHTS	I-680 SB / SR 193 NB / US 422 WB	5	CAN'T CLOSE SR 711 RAMPS TOGETHER CAN'T CLOSE WITH I-680 SB TO SR 193	\$5,000				
		I-680 NB TO SR 193	895	12	9:00 PM - 7:00 AM	2 NIGHTS	I-680 NB / SR 711 EB / US 422 EB	5	CAN'T CLOSE SR 193 RAMPS TOGETHER CAN'T CLOSE WITH I-680 NB TO SR 711	\$8,000				
	4	I-680 SB TO SR 193	1530	12	8:00 PM - 6:00 AM	2 NIGHTS	I-680 SB / EDWARDS ST / MARSHALL AVE / I-680 NB	5	CAN'T CLOSE SR 193 RAMPS TOGETHER	\$10,000				
		SR 193 TO I-680 NB	825	12	10:00 PM - 6:00 AM	2 NIGHTS	I-680 SB / EDWARDS ST / MARSHALL AVE	5	CAN'T CLOSE SR 193 RAMPS TOGETHER	\$10,000				
	6	US 62D WB TO I-680 SB	960	12	9:00 PM - 6:00 AM	2 NIGHTS	US 62 EB / SOUTH AVE	4		\$10,000				
MAH-680-00.00 MODEL: Sheet 1 PAPERSIZE: 17x11 (in.) DATE: 10/5/2021 TIME: 8:57:54 AM USER: mpalagan	pw://oheddc.pw.bentley.com/oheddc.pw-to2/Documents/01 Active Projects/Distinct 04/Mathoring/918981400-Engineering/MO1 Sheets/91898_MD011.dgn								PLACE PCMS 5 DAYS BEFORE O	CLOSURE:				

DETOUR PLAN







MAH-680-00.00



MAH-680-00.00

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

PCM	IS:	В	PCM	IS:
1.	RAMP TO I-680 NB CLOSED		1.	RAMP TO I-680 NB CLOSED
			2.	DETOUR FOLLOW I-680 SB
PCM	IS:	D	PCM	IS:
1.	DETOUR I-680 NB		1.	DETOUR I-680 NB
2.	USE EXIT 5 NOW		2.	TURN RIGHT
		E	PCM	IS:
B RSHA			1.	DETOUR TURN LEFT
			2.	TO I-680 NB

DETOUR PLAN

DESIGN AGENCY



MJP REVIEWER MAC 6-7-21 PROJECT ID 91898 SHEET TOTAL P.7 9

Γ		SHEET NUM.									PA	PART.		ITEM	GRAND					
										2	3	4		01/NFP/PV	02/NFP/BR	ITEM	EXT	TOTAL		
														1.000		832	30000	1.000	EACH	EROSION CONTROL
														.,				,,		
										7,000				7,000		251	01020	7,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (442) (LONGITUE
										3,000				3,000		251	01020	3,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (442) (TRANSVEI
										15,240				15,240		254	20000	15,240	GNI	PAVEMENT PLANING, ASPHALT CONCRETE (T= 3")
										1 221				1 221		407	20000	1 221	GAL	NON-TRACKING TACK COAT @ 0.03 GAL/ST
										.,				.,				.,		
										637				637		442	20001	637	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, T
										637				637		442	20250	637	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 M
										10				10		621	54000	10	EACH	
										0.2				0.2		642	00104	02	MILE	EDGE LINE 6" TYPE 1
										0.2				0.2		642	00204	0.2	MILE	LANE LINE, 6", TYPE 1
										400				400		642	00400	400	FT	CHANNELIZING LINE, 8", TYPE 1
										400				400		642	00404	400	FT	CHANNELIZING LINE, 12", TYPE 1
																	0.0500			
										40				40		642	00500	40	FI	
																				ST
																				FOR MAH-680-0042R ESTIMATED QUANTITIES
																				FOR MAH-680-0507 ESTIMATED QUANTITIES
											450			450		644	44440	450		
											150			150		614	11110	150	HOUR	
											40			40		614	12420	40	EACH	WORK ZONE MARKING SIGN
											20			20		614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
												12		12		614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER P
																614	11000	10		
	lgn													6		619	16010	6	MNTH	
	001.6													LUMP		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING
	66													LUMP		624	10000	LS		MOBILIZATION
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DESCRIPTION	SEE SHEET NO.	
ROSION CONTROL		
PAVEMENT DINAL JOINTS)		
RSE JOINTS)		
ГҮРЕ А (448), AS PER PLAN М, ТҮРЕ В (448)	2	
RAFFIC CONTROL		
		MARY
	9 9	SUM
TENANCE OF TRAFFIC		AL
OR ASSISTANCE		R N
		BNE
PLAN	4	U
INCIDENTALS		
		DESIGN AGENCY
		DESIGNER M. IP
		REVIEWER MAC 6-7-21
		PROJECT ID 91898
		P.8 9

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPOR-TATION OFFICIALS, 17TH EDITION AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXIST-ING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS 102.05, 105.02, AND 513.04*. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAIN-TIES DESCRIBED ABOVE AND UPON A PREBID EXAMI-NATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK

MAH-680-0042R (OVER MVSD) -PERFORM PATCHING ON ALL UNSOUND AREAS OF DECK AND APPROACH SLABS

MAH-680-0507 (OVER EDWARDS ST) -PERFORM PATCHING ON ALL UNSOUND AREAS OF DECK AND APPROACH SLABS



APPROACH SHOWN, TRAILING SIMILAR

	ESTIMATED QUAN													NTITIES							
		MAH-680-0042R 5006368 02/NFP/BR	MAH-680-0042R 5008368 02/NFP/BR 6006937 5006937 02/NFP/BR 02/NFP/BR			NO. / STRUCTURE FI	E NO.				ITEM	EXTENSION	UNIT	DESCRIF	PTION						
		29	60								519	12304	SY	PATCHIN	IG CONCRET	E BRIDGE DE	ECK - TYPE C				
						BRIDGE DECK													APPROACH		
						51)											519			
BRII NUM	DGE IBER		LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECKAREA	PATCHING CONCRETE BRIDGE DECK -								LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)	PATCHING CONCRETE BRIDGE DECK-			
		F	-T	FT	SQ YD	S								FT	FT	SQ YD		<u>SY</u>			
MVH-68	0-0041R	010	2 00	50.00	1177 78	23	6							25.00	50.00	138.80	FORW	2.26			
117-11-00	0 007111		2.00	00.00	1177.10	23.								25.00	50.00	138.89	REAR	2.78			
															• • •						
MAH-6	80-0508	160	0.00	90.00	1600.00	32.	0							25.00	90.00	250.00	FORW	12.50)		
														28.00	90.00	280.00	REAR	14.00)		
					TOTALS	50											TOTALS	33			

8:58:19 AM USER: mpalagar TIME 10/5/2021 ATE: 17x11 (in.) MAH-680-00.00 ZE

