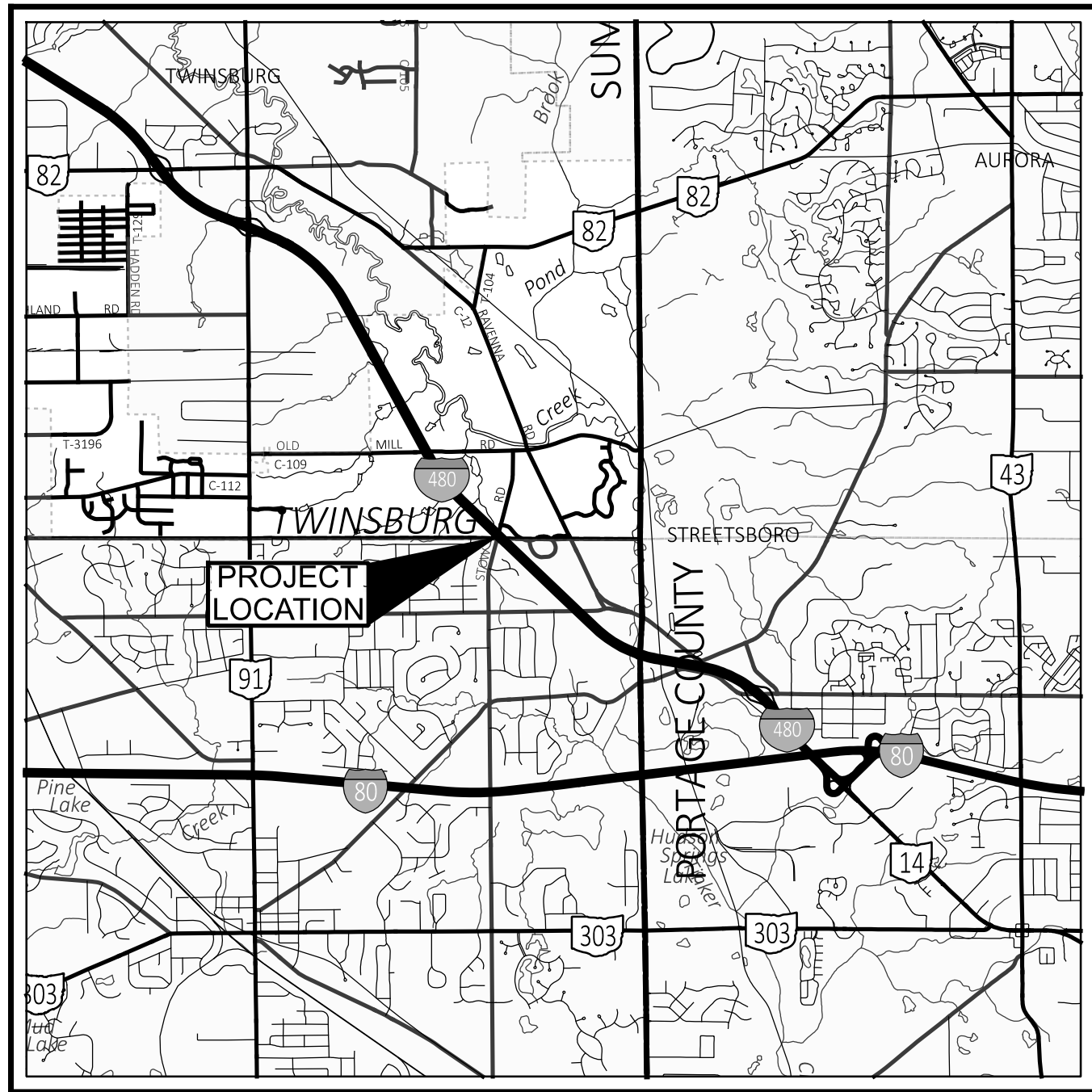


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

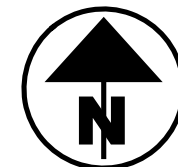
## SUM-480-07.45 L/R

CITY OF HUDSON  
TWINSBURG TOWNSHIP  
SUMMIT COUNTY



**LOCATION MAP**

LATITUDE: 41°16'36.3" LONGITUDE: 81°24'35.3"



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

**DESIGN DESIGNATION**

	<u>IR-480</u>	<u>STOW ROAD</u>
OPENING YEAR ADT (2026)	43,500	5,900
DESIGN YEAR ADT (2046)	47,500	6,500
DESIGN HOURLY VOLUME (2023)	4,800	650
DIRECTIONAL DISTRIBUTION	0.54	0.60
TRUCKS (24 HOUR B&C)	0.10	0.03
DESIGN SPEED	70 MPH	45 MPH
LEGAL SPEED	65 MPH	40 MPH

DESIGN FUNCTIONAL CLASSIFICATION:  
I.R. 480: URBAN INTERSTATE    STOW RD.: URBAN COLLECTOR  
 NHS PROJECT ----- YES

**DESIGN EXCEPTIONS**

NONE

**ADA DESIGN WAIVERS**

NONE REQUIRED

**UNDERGROUND UTILITIES**  
Contact Two Working Days  
Before You Dig

**OHIO811.org**  
Before You Dig

OHIO 811, 8-1-1, or 1-800-362-2764  
(Non members must be called directly)

PLAN PREPARED BY:  
 COMPASS INFRASTRUCTURE GROUP  
 2800 CORPORATE EXCHANGE DRIVE, SUITE 100  
 COLUMBUS, OH 43231

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ENGINEER'S SEAL  
ROADWAY

ENGINEER'S SEAL  
BRIDGE

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/19/24	MGS-1.1	7/16/21	AS-1-15	1/20/23	MT-95.30	7/19/19	TC-41.10	7/19/13	800-2023	7/19/24		
BP-5.1	7/15/22	MGS-2.1	1/19/18	AS-2-15	7/21/23	MT-95.40	7/21/23	TC-41.20	10/18/13	807	1/21/22	ASBESTOS INSPECTIONS	
BP-9.1	1/18/19	MGS-3.1	1/19/18			MT-95.50	7/21/17	TC-42.20	10/18/13	808	7/19/24	7/1/24	
DM-1.1	7/17/20	MGS-3.2	1/18/13	CS-1-08	1/15/21	MT-99.20	4/19/19	TC-52.10	10/18/13	809	7/19/24		
DM-1.2	7/16/21	MGS-4.2	7/19/13			MT-99.30	1/17/20	TC-52.20	1/15/21	821	4/20/12		
DM-4.1	7/17/20	MGS-4.3	1/18/13	PCB-91	7/17/20	MT-101.60	4/21/23	TC-61.30	7/19/24	832	7/19/24		
DM-4.3	1/15/16	MGS-5.2	7/15/16			MT-101.70	7/19/24	TC-65.10	1/17/14	850	7/21/23		
DM-4.4	1/15/16	MGS-5.3	7/15/16	SBR-1-20	7/19/24	MT-101.75	7/21/23	TC-65.11	1/19/24	873	4/16/21		
		MGS-6.1	1/19/18			MT-101.90	7/17/20			875	1/18/19		
F-1.1	7/19/13					MT-102.10	7/21/23			908	10/20/17		
F-2.1	7/20/18	RM-4.2	7/19/24			MT-102.30	10/16/15			921	7/19/24		
F-3.1	7/19/13					MT-103.10	1/21/22						
F-3.3	7/19/13					MT-104.10	1/19/24						
F-3.4	7/19/13					MT-105.10	1/17/20						

**FEDERAL PROJECT NUMBER**

E201218

**RAILROAD INVOLVEMENT**

NONE

**PROJECT DESCRIPTION**

REHABILITATION OF I.R. 480 BRIDGES (LEFT AND RIGHT) OVER STOW ROAD. WORK INCLUDES RAISING THE PROFILE GRADE OF I.R.480 TO PROVIDE ADEQUATE VERTICAL CLEARANCE ON STOW ROAD, SUPER-STRUCTURE REPLACEMENT, GUARDRAIL, L/A FENCING, AND RESURFACING STOW ROAD.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: 3.4 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 EXCEPT FOR THE SIDE ROADS AS DESCRIBED ON SHEET 25 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

**DISTRICT DEPUTY DIRECTOR**

Arthur G. Noiro Jr., P.E.  
 04

**DIRECTOR, DEPARTMENT OF TRANSPORTATION**

Pamela Boratyn  
 Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY

COMPASS  
INFRASTRUCTURE GROUP

DESIGNER  
MBM

REVIEWER  
SSR 06/14/24

PROJECT ID  
111186

SHEET TOTAL  
1 131

SUM-480-07.45 L/R

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 1/3/2025 TIME: 9:44:27 AM USER: kkuibus Z:\Projects\10013-SUM-480\11186\400-Engineering\Roadway\Sheets\11186\_ST001.dgn

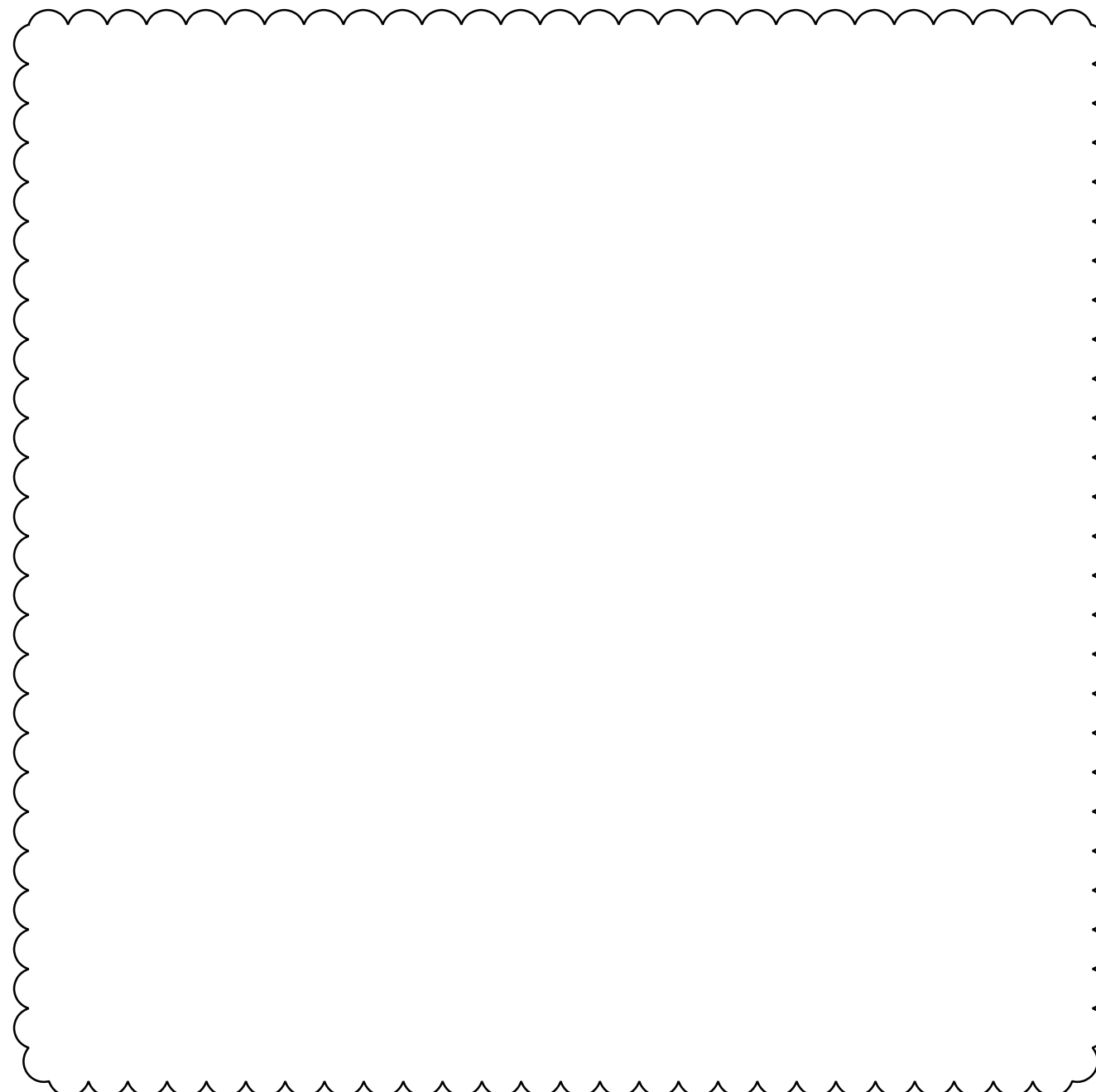
**ITEM 614, MAINTAINING TRAFFIC**

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS 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. ON I.R.-480, A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC. IT IS PERMISSIBLE TO KEEP ONE LANE OF TRAFFIC OPEN ONLY DURING NON-PEAK HOURS. THE CONTRACTOR IS REQUIRED TO MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION DURING THE FOLLOWING TIMES:

MONDAY - FRIDAY 6:00 AM TO 9:00 AM  
 MONDAY - FRIDAY 3:00 PM TO 7:00 PM

FOR LANE CLOSURES DURING OFF-PEAK PERIODS, THE CONTRACTOR SHALL INSTALL, REMOVE, AND RESET ALL TRAFFIC CONTROL DEVICES NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE, AND AS PER ODOT SCD'S MT-95.30, MT-95.40 AND MT-101.90. CONFLICTING SIGNS SHALL BE COVERED OR REMOVED. PAYMENT FOR THESE LANE CLOSURES SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614-MAINTAINING TRAFFIC.



3. THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-2208), SUMMIT COUNTY (330-643-2850) THE CITY OF HUDSON (330-342-1770) AND TWINSBURG TOWNSHIP (330-425-4497) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE STOW ROAD 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.

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

NEW YEAR'S (OBSERVED) MEMORIAL DAY  
 FOURTH OF JULY (OBSERVED) LABOR DAY  
 GENERAL/REGULAR ELECTION DAY (NOV.) THANKSGIVING  
 CHRISTMAS (OBSERVED)

**ITEM 614, MAINTAINING TRAFFIC (CONTINUED)**

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

DAY OF HOLIDAY	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 12: AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM 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).

**LANE VALUE CONTRACT TABLE**

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
2 LANES OF SUM IR 480 FROM MM37 TO MM41	06:00 - 09:00 M-F 15:00 - 19:00 M-F	EACH HOUR	\$10,000

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

6. NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD 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 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.

**NOTICE OF CLOSURE SIGN TIME TABLE**

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

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A

**ITEM 614, MAINTAINING TRAFFIC (CONTINUED)**

MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

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

**SEQUENCE OF CONSTRUCTION**

NOTE: THE FINAL PAVEMENT SURFACE COURSE SHALL BE PLACED IN THE FINAL MOT PHASE.

**PRE-PHASE**

1. REMOVE EXISTING OUTSIDE SHOULDER PAVEMENT AND CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC ALONG OUTSIDE SHOULDER OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND FOR USE IN PHASES 1 AND 2. MAINTAIN ONE EXISTING LANE IN EACH DIRECTION USING SHORT TERM LANE CLOSURES IN ACCORDANCE WITH SCD MT-95.30 AND THE LATEST PERMITTED LANE CLOSURE SCHEDULE (PLCS).

2. REMOVE EXISTING INSIDE SHOULDER PAVEMENT AND CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC ALONG INSIDE SHOULDER OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND FOR USE IN PHASES 2 AND 3. MAINTAIN ONE EXISTING LANE IN EACH DIRECTION USING SHORT TERM LANE CLOSURES IN ACCORDANCE WITH SCD MT-95.30 AND THE LATEST PERMITTED LANE CLOSURE SCHEDULE (PLCS).

**PHASE 1**

1. SHIFT BOTH LANES OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC TO THE OUTSIDE OF EACH BOUND. THE OUTSIDE LANES OF EACH BOUND WILL BE REQUIRED TO USE THE OUTSIDE SHOULDER.

2. DETOUR STOW ROAD TRAFFIC.

3. CONSTRUCT INSIDE PORTIONS OF ROADWAY AND BRIDGE IMPROVEMENTS ALONG I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND.

**PHASE 2**

CONTRACTOR SHALL NOT IMPLEMENT PHASE 2 PRIOR TO APRIL 1ST.

1. KEEP THE OUTSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND IN ITS CURRENT PATTERN.

2. SHIFT THE INSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC TO THE INSIDE OF EACH BOUND. THE INSIDE LANES OF EACH BOUND WILL BE REQUIRED TO USE THE INSIDE SHOULDER.

3. CONSTRUCT MIDDLE PORTIONS OF ROADWAY AND BRIDGE IMPROVEMENTS ALONG I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND.

**SEQUENCE OF CONSTRUCTION (CONTINUED)**

**PHASE 3**

1. KEEP THE INSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND IN ITS CURRENT PATTERN.

2. SHIFT THE OUTSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC TO BE ADJACENT TO THE INSIDE LANE OF THEIR RESPECTIVE BOUND.

3. CONSTRUCT OUTSIDE PORTIONS OF ROADWAY AND BRIDGE IMPROVEMENTS ALONG I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND.

**FINAL**

1. MILL AND RESURFACE STOW ROAD PAVEMENT AND PLACE STOW ROAD FINAL PAVEMENT MARKINGS. OPEN STOW ROAD TO TRAFFIC ONCE ALL IMPROVEMENTS ARE COMPLETE.

3. PLACE I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC BACK ITS ORIGINAL PATTERN.

4. MILL AND RESURFACE I.R.-480 EASTBOUND LANES AND SHOULDERS FROM STATION 364+90 TO STATION 405+70. MILL AND RESURFACE I.R.-480 WESTBOUND LANES AND SHOULDERS FROM STATION 382+80 TO STATION 423+60. MILL AND RESURFACE THE EXISTING MEDIAN U-TURN AT STA. 388+00. PLACE I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND FINAL SURFACE COURSE. MAINTAIN ONE LANE IN EACH DIRECTION, IN ITS ORIGINAL PATTERN, USING SHORT TERM LANE CLOSURES IN ACCORDANCE WITH SCD MT-95.30 AND THE LATEST PERMITTED LANE CLOSURE SCHEDULE (PLCS).

5. COMPLETE INSTALLATION OF ALL I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND PERMANENT PAVEMENT MARKINGS AND SIGNS.

**TRENCH FOR WIDENING (SPEED LIMIT > 45 MPH)**

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. AS SHOWN ON MT-101.90. PLACEMENT OF PROPOSED BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE 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 THE APPROVAL OF THE ENGINEER. THE BASE WIDENING ON THIS PROJECT WILL BE COMPLETED TO A DEPTH OF 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF THE WORK DAY. NO TRENCH WILL BE LEFT OPEN OVERNIGHT. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING WILL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

**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:

ITEM 616, WATER 7 M. GAL.



**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 NO.	COUNTY-ROUTE-SECTION	DIRECTION
WZ-26214	SUM-480-07.45	EB
WZ-26214	SUM-480-07.45	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 OMTUCD PART 6.

**WORK ZONE SPEED ZONES (WZSZS) (CONTINUED)**

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, 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 36 SIGN MNTH (ASSUMING 2 DSL SIGN ASSEMBLIES FOR 18 MONTHS)

**EXTRA ADVANCE WARNING SIGNS**

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

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.

**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 ODOT SPECIFICATIONS.

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 **8 EACH**  
 WORK ZONE INCREASED PENALTIES SIGNS SHALL BE PLACED AT LOCATIONS SHOWN IN THE PLANS.

**FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

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

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

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

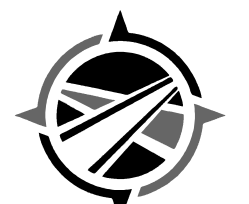
THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

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

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

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

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



**ITS MESSAGE BOARDS**

THE EXISTING ITS MESSAGE BOARDS IN THE VICINITY OF THE PROJECT WILL BE UTILIZED TO PROVIDE SUPPLEMENTAL INFORMATION TO THE TRAVELING PUBLIC. THE CONTRACTOR WILL NOTIFY THE PROJECT ENGINEER ONE (1) WEEK IN ADVANCE OF ANY PHASE CHANGE. THE PROJECT ENGINEER WILL COORDINATE WITH THE DISTRICT 4 PUBLIC INFORMATION OFFICER AT 330-786-2208 FOR ITS MESSAGE BOARD ADJUSTMENTS.

**ITEM 614 – MAINTAINING TRAFFIC MISC.: SAFETY REPAIRS**

FOR IMPACT ATTENUATORS OR GUARDRAIL DAMAGED BY THE MOTORING PUBLIC, THE CONTRACTOR SHALL FOLLOW THE PROCESS OUTLINED IN 107.15. IF NO ACCIDENT REPORT IS AVAILABLE, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FROM THE VARIOUS POSSIBLE RESPONDING AGENCIES THAT NO ACCIDENT REPORT IS AVAILABLE. FOR INCIDENTS WITH AN ACCIDENT REPORT AVAILABLE, BUT THE OWNER OR INSURANCE COMPANY IS NON-RESPONSIVE, COPIES OF THE COMMUNICATION SHALL BE SUBMITTED TO THE PROJECT PER 107.15B. FOR BOTH CONDITIONS LISTED ABOVE, THE ENGINEER SHALL DETERMINE THE SAFETY ITEMS THAT MAY BE REPAIRED AND THE SAFETY ITEMS THAT SHALL BE REPLACED. THE WORK WILL BE AS DIRECTED BY THE ENGINEER AND WILL INCLUDE ALL MAINTENANCE OF TRAFFIC COSTS ASSOCIATED WITH THE ACTIVITY. THE COST FOR EACH ITEM SHALL BE \$1.00. THE FIXED AMOUNT SHOWN IN THE PROPOSAL IS INCLUDED (AS ANY OTHER BID ITEMS) IN THE TOTAL BID AMOUNT. THIS FIXED AMOUNT IS THE DEPARTMENT'S ESTIMATE OF THE TOTAL COST FOR THE REPAIR OR REPLACEMENT OF SAFETY ITEMS WITHIN THE WORK LIMITS AS DIRECTED BY THE ENGINEER. CMS TABLE 104.02-2 DOES NOT APPLY TO REDUCTIONS IN THIS CONTRACT ITEM. FORCE ACCOUNT RECORDS SHALL BE KEPT TO TRACK AND ULTIMATELY DETERMINE THE AMOUNT OF THE PAY ITEM USED. THIS ITEM SHALL INCLUDE PAYMENT FOR ALL WORK, INCIDENTALS, AND ALL ASSOCIATED COSTS FOR THE REPAIR OR REPLACEMENT OF DAMAGED SAFETY ITEMS AS DIRECTED BY THE ENGINEER.

ITEM 614 – MAINTAINING TRAFFIC MISC.: SAFETY REPAIRS,  
100,000 EACH

**ALTERNATE MAINTENANCE OF TRAFFIC PLANS**

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLANS SHALL BE PLACED IN EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE ODOT DISTRICT CONSTRUCTION ENGINEER.

**PERMITTED LANE CLOSURE SCHEDULE (PLCS)**

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE AT: [HTTPS://WWW.TRANSPORTATION.OHIO.GOV/WPS/PORTAL/GOV/ODOT/WORKING/DATA-TOOLS/RESOURCES/PERMITTED-LANE-CLOSURE](https://www.transportation.ohio.gov/wps/portal/gov/odot/working/data-tools/resources/permitted-lane-closure)

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURE(S) SHALL MATCH MONTH OF PLCS USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.

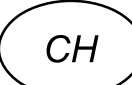


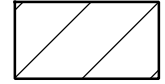











(FOR EXAMPLE: IF THE SALE DATE FOR THE PROJECT WAS MARCH OF 2021, THE MONTHLY PUBLISHED SCHEDULES FOR EACH APPLICABLE PLCS SEGMENT WOULD BE DECEMBER 2019 TO NOVEMBER 2020. IF THIS WAS A THREE-YEAR PROJECT, YEAR THREE WOULD STILL BE USING THE DECEMBER 2019 TO NOVEMBER 2020 MONTHLY SCHEDULES. IF THE PROJECT DESIRED TO CLOSE TWO LANES IN JUNE 2021, REFERENCE WOULD BE MADE TO THE JUNE 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S). IF THE SAME TWO LANES WERE DESIRED TO BE CLOSED AGAIN IN JULY 2021, REFERENCE WOULD BE MADE TO THE JULY 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S).)

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER ODOT AUTHORITY. EXISTING MOT EXCEPTIONS THAT HAVE ALREADY BEEN APPROVED IN ACCORDANCE TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY AND STANDARD PROCEDURE ARE DETAILED IN THE APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PLAN NOTE.

ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

**MAINTENANCE OF TRAFFIC LEGEND**

 CH	WORK ZONE CHANNELIZING LINE		PAVEMENT BUILT IN PREVIOUS PHASE
 CHV	WORK ZONE CHEVRON MARKING		PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
 ELW	WORK ZONE EDGE LINE, WHITE		WORK ZONE
 ELY	WORK ZONE EDGE LINE, YELLOW		DIRECTION OF TRAVEL
 IA	WORK ZONE IMPACT ATTENUATOR		WORK ZONE CHEVRON MARKING
 PB	32" PORTABLE BARRIER		32" PORTABLE BARRIER
 PMT	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN		WORK ZONE IMPACT ATTENUATOR
			WORK ZONE DRUMS

ISL = INSIDE LANE  
 OSL = OUTSIDE LANE  
 PB = PORTABLE BARRIER

