

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

ADDENDUM NO. 3

PROJECT NO. 43-17-04
BRIDGE DECK REPAIR AND BRIDGE REMOVAL
OHIO TURNPIKE OVER QUARRY ROAD, M.P. 138.0
OHIO TURNPIKE OVER INACTIVE RAILROAD, M.P. 138.2
LORAIN COUNTY, OHIO

OPENING DATE:

PREVIOUSLY EXTENDED TO 2:00 P.M. (EASTERN TIME), DECEMBER 5, 2017

ATTENTION OF BIDDERS IS DIRECTED TO:

QUESTIONS RECEIVED THROUGH 1:00 PM ON NOVEMBER 30, 2017 -AND-

MODIFICATIONS TO THE CONTRACT DOCUMENTS

Project 43-17-04 – Plan Sheets 3 through 9, 14, and 17 through 21 of 50; Bid Schedule of Items for Ref. 3, 5, 8, 9, 9A, 9B, 15, 16, 26, 26A, 26B, 29A, 29B, 31A, 41, 49A

Issued by the Ohio Turnpike and Infrastructure Commission on November 30, 2017 by Anthony D. Yacobucci, Chief Engineer, and Mark R. Musson, Director of Contracts Administration.

Anthony D. Yacobucci

Date

Mark R. Musson

Date

ANSWERS TO QUESTIONS RECEIVED THROUGH 1:00 PM ON NOVEMBER 30, 2017:

- Q#9 Bid Item 86, Plan sheet 8 Item 614 PCMS APP note states in the first paragraph that the contractor shall furnish, install, maintain, and removed 2 each PCMS. However in the last paragraph of the note it states to provide 4 PCMS, each sign for approximately 2920 Days. Is the contractor supposed to provide 2 each or 4 each of these?
- A#9 This Addendum No. 3 revises the Item 614 Portable Changeable Message Sign, As Per Plan note on Plan Sheet 8 of 50 to read "...PROVIDE TWO (2) PORTABLE CHANGEABLE MESSAGE SIGNS, EACH SIGN FOR APPROXIMATELY 730 DAYS, FOR AN ESTIMATED TOTAL OF 1460 DAYS" and also revises the quantity in the same note from 2920 days to 1460 days. In addition, the quantity for Reference No. 86, Item 614, Portable Changeable Message Signs, As Per Plan, has been revised from 2920 days to 1460 days on Plan Sheet 6 of 50 and Reference No. 86.
- Q#10 Bid item 45, Item 407 Non-Tracking Tack Coat: Based on the combined resurfacing and full-depth replacement areas, the plan quantity of 14,510 gallons appears to be way overstated. Please review and revise this quantity.
- A#10 Per the latest update to the ODOT pavement design manual, the application rate for both the intermediate and surface course should be 0.055 gal/syd. With this change the new quantity should be 11,060 gallons of NON-TRACKING TACK COAT. This Addendum No. 3 revises the quantity for Reference No. 45, Item 407, Non-Tracking Tack Coat from 14,510 gallons to 11,060 gallons on Plan Sheet 5 of 50 and Bid Reference No. 45.
- Q#11 Given that this is a three year calendar project, there is no bid item for a zone person as there is on a typical Ohio Turnpike project. Please add a bid item and estimated quantity of hours.
- A#11 Per SP 614, the costs for the Zone Person and Zone Vehicle are considered incidental to Item 614. The Contractor will not need to provide a zone person nor a zone vehicle during the winter shut downs. The Commission will oversee the zones during the winter shut downs. The Contractor may be required to assist in maintaining the zone during the winter shutdown periods and will be compensated through a change order if such conditions exist.
- Q#12 Notes on Sheets 4 & 7 detail the SNAP Mill & Fill to be 5' wide using SP404 Asphalt Surface, using Crushed Stone, PG64-22 but the SNAP Mill & Fill Detail on Sheet 9 shows it to be 3' wide using 441 Asphalt Surface Course. This bid item is paid for by the "LF" and not by the "SQ YD". Which is the corrected method & material to use for the SNAP Mill & Fill?
- A#12 This Addendum No. 3 revises Plan Sheets 4, 7 and 9 of 50. On Plan Sheet 4 of 50, "USING CRUSHED STONE" was removed from the first paragraph of the ITEM SPECIAL SNAP MILL AND FILL note, and a quantity of "9788 feet" was added to the bottom of the note. On Plan Sheet 7 of 50, the ITEM SPECIAL SNAP MILL AND FILL note was removed from the plan sheet in its entirety. In addition, on Plan Sheet 9 of 50 the 3'-0" dimension in the SNAP MILL AND FILL DETAIL has been revised to "5'-0".

- Q#13 SNAP "Mill & Fill" bid item- plan quantity of 9788 FT appears to be enough to do two directions and two sides. From review of MOT schematics and notes, the contractor should only need to do the outside in Phase 1, and once in Phase 2 the inside will not have SNAPs to remove. Based on this, the quantity appears to be overstated. Please review and revise/clarify in an addendum.
- A#13 The quantity of 9,788 feet has been verified and is correct.
- Q#14 The excavation and embankment quantities appear to be overstated and cross-sections do not provide appropriate information to match plan quantities. Please provide calculations and/or quantity breakdowns for these bid items in an addendum.
- A#14 The excavation and embankment related to the roadway portion of the project can be found in the cross sections. There is additional excavation and embankment related to the MP 138.2 bridge removal as shown on Plan Sheets 24 and 38 of 50.
- Q#15 Bid item 58 has special "Drainage Board" material referenced as 611. No plan note or SP provisions are present. Please provide a detail of this material.
- A#15 A plan note for Item 611 Conduit, Misc.: Drainage Board is provided on Plan Sheet 23 of 50.
- Q#16 Plan sheet 3 shows an underdrain detail on the lower left part of the page which brings up the issue that this is referred to as part of the full depth pavement replacement detail on the same page. First of all, there is no bid item for Type 1 Aggregate Drain- does the proposed shallow or base underdrain serve the purpose? Second of all, if the owner does intend to install these outside of the full depth replacement typical section, then how would restoration be paid for? Please review and revise as needed.
- A#16 The Aggregate drains are not intended for use in the full depth pavement replacement sections of this project. Type 1 Aggregate drains as well as Type 2 Aggregate drains are shown in the plans. The Type 1 Aggregate drains should have been omitted from the plans as they are intended for use adjacent to new full depth concrete pavement therefore no restoration quantities have been included. The Plan Sheet 3 of 50 is modified through this Addendum No. 3 to include Type 2 Aggregate Drains and Underdrain Detail. After the existing surface course has been removed and prior to the proposed surface course being applied, the Type 2 Aggregate Drains should be installed at the direction of the Chief Engineer. Therefore, no restoration quantities have been included. Furthermore, an Aggregate Drains note on Plan Sheet 4 of 50 is added through this Addendum No. 3 to provide that the SP 404 Bituminous Shoulder Material (SP 404 Asphalt Concrete Surface course, PG 64-22) required for the repair of the shoulder and/or bringing the trench up to the milled surface is incidental to SP 605. The Plan Sheet 5 of 50 is modified through this Addendum No. 3 to include additional pay items.

- Q#17 According to the answer to question #2 in addendum #1, the median wall through the inlet at 294+60 is to be paid for as SP 604 Inlet, No. I-3850. There is currently no bid item for this. Please add this item.
- A#17 A bid item for this work has been added to the through this Addendum No. 3 at Reference No. 26B, Item SP 604, Inlet, No. 1-3B50 Double Grate.
- Q#18 Bid item #26, 832 Erosion Control- the bid form shows 57000 each. Are all contractors to bid this item at \$1.00/each per ODOT specification? Please note that the Bid Express web page does not have a fixed unit price shown as would normally be done whenever an 832 Erosion Control item is in a proposal.
- A#18 Reference No. 26, Item 832 Erosion Control shall be bid as \$1 each for a total of \$57,000.
- O#19 The Concrete Barrier Removed bid items are overstated. Please review and revise.
- A#19 The quantity for Reference No. 3, Item 202, Concrete Barrier Removed, is revised to 636 feet through this Addendum No. 3.
- Q#20 The Concrete Barrier Wall, Type B-50 bid item is overstated. Please review the bid item quantity.
- A#20 The quantity for Reference No. 16, Item 622, Concrete Barrier, Type B-50, As Per Plan, is revised to 771 feet through this Addendum No. 3.
- Q#21 Will the Zone Person be required to be on-site during winter shutdown periods on a continual 24 hour basis?
- A#21 See A#11.
- Q#22 Given that the mainline work zone will be set into a permanent zone, will the Zone Person be required to be on-site a continual 24 hour basis?
- A#22 During the time the Contractor has zones in place, with the exception of the winter shut downs, the Contractor is required to provide a Zone Person and a Zone Vehicle on a continual basis, 24 hours per day, 7 days per week. See A#11 for additional information.
- Q#23 If a contractor has more than one project for the Ohio Turnpike, can a Zone Person be shared between construction projects or does each project require a different Zone Person?
- A#23 No, the Contract Documents require that the Zone Person shall be on site 24 hours per day, 7 days per week.

- Q#24 The specification for Zone Person, under SP 614, states that the Zone Person..."(24 hours per day, 7 days per week), while they are in place, or as directed by the Chief Engineer." How are we to bid this item of work, 27-7 Zone Person or as directed by the Chief Engineer?
- A#24 See A#11 and A#22.
- Q#25 There is no bid item for Approach Slab Removed for either Structure at 138.0 or 138.2, where is the cost to remove these approach slabs be removed?
- A#25 The cost of all removals at both bridges, including the approach slabs, are included under Item SP 202 Portions of Structure Removed (Lump Sum).
- Q#26 On Plan Page 4/50, under the Note for Existing Subsurface Drainage, the note states that the estimated quantities have been included in the general summary; however, these items were never carried to the general summary. Please review and revise.
- A#26 These items were inadvertently left off of the General Summary. This Addendum No. 3 revises the General Summary on Plan Sheet 5 of 50 to include "Item 204, Excavation of Subgrade, 142 CY" and "Item 204, Embankment, 142 CY." In addition, the quantity of "Item SP 304, Aggregate Base" has been revised from 3074 CY to 3124 CY in the General Summary on Plan Sheet 5 of 50.
- Q#27 If the adjacent Turnpike resurfacing project beginning at Milepost 127.2 is completed in the summer of 2018 and Steps 1-2 along with the waiting period are complete, can Phase 1 Maintenance of Traffic be implemented?
- A#27 Phase 1 Maintenance of Traffic can possibly be implemented in 2018 if all provisions of the contract are fulfilled.
- O#28 Can Phase 2 (Steps 5 6) be put into place in the 2019 Construction Season?
- A#28 Phase 2 Maintenance of Traffic can possibly be implemented in 2019 if all provisions of the contract are fulfilled.
- Q#29 Can you tell me if you require steel bollards or bollard covers for this project? I will gladly supply a quote if you do.
- A#29 These items are not required.

ADDENDUM NO. 3 PROJECT NO. 43-17-04 PAGE 6

Receipt of Addendum No. 3

MODIFIED CONTRACT DOCUMENTS

With this Addendum No. 3, the Commission substitutes the enclosed materials for the following Contract Documents:

Plan Sheets 3 through 9, 14, 17 through 21 of 50; and

Additions to the Plan Drawings are called out with a cloud and deletions are marked with a revision triangle as thus:

With this Addendum No. 3, the Commission modifies the Bid Schedule of Items for the following Reference Numbers: 3, 5, 8, 9, 9A, 9B, 15, 16, 26, 26A, 26B, 29A, 29B, 31A, 41, 49A

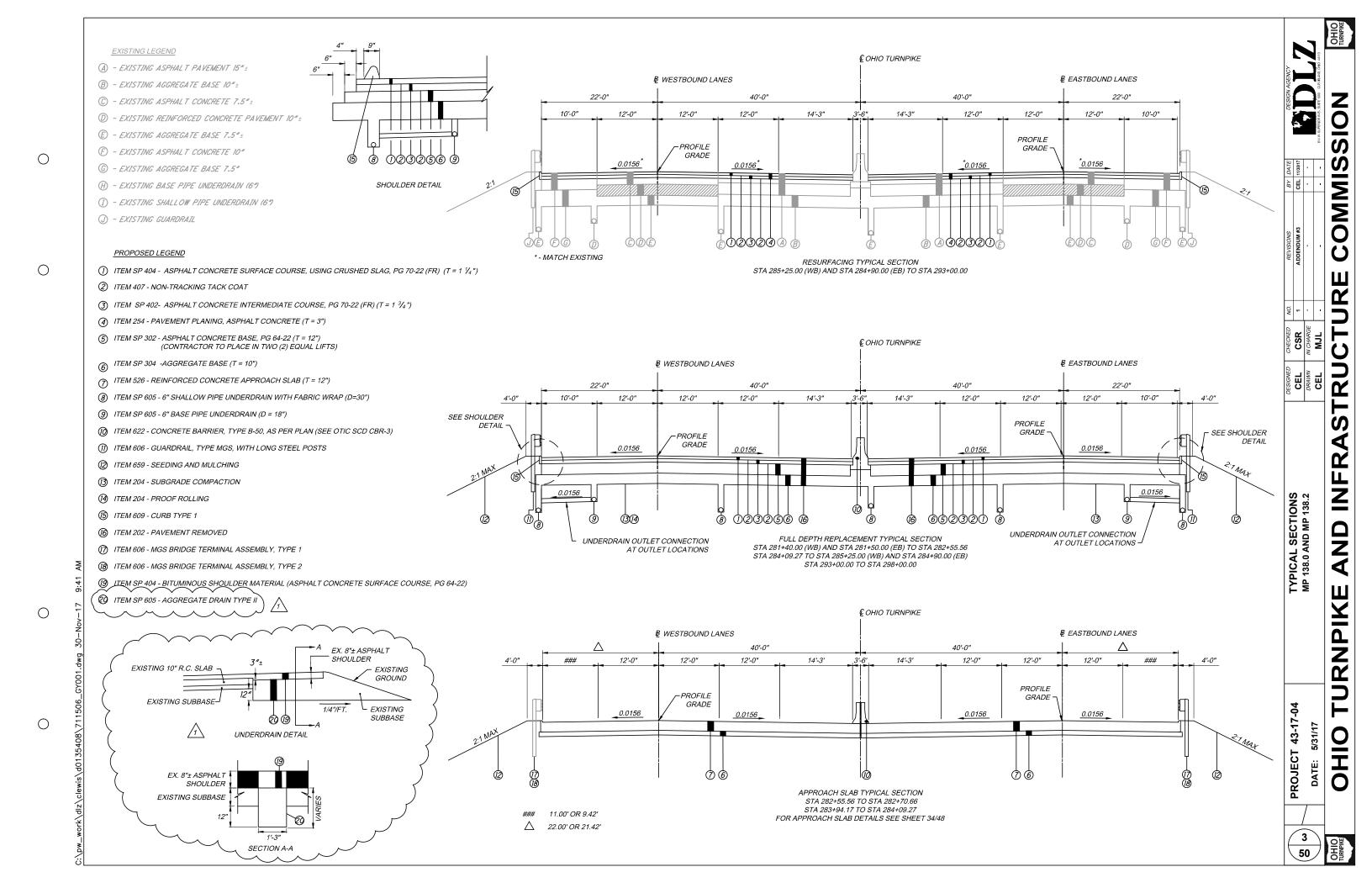
Project No. 43-17-04 is hereby acknowledged:

(Firm Name)

(Signature)

(Printed Name)

BIDDERS MUST RETURN THE ABOVE ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM NO. 3 WITH THEIR BID.



ATTN: MICHAEL JANSON 1910 W. MARKET ST., BLDG 1 AKRON, OH 44313

COLUMBIA GAS OF OHIO ATTN: ROBERT LANGFORD 1800 BROAD AVE. FINDLAY, OH 45840 RLANGFORD@NISOURCE.COM

330-830-7092 419-427-3227

NORTHERN OHIO RURAL WATER ATTN: BRYAN PUDER 419-668-7213 BPUDER@NORW.ORG

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EXISTING PLANS ENTITLED CONTRACT C-25 AND CONTRACT 77-97-02 PART A MAY BE INSPECTED AT THE OHIO TURNPIKE OFFICE.

ADDRESS: 682 PROSPECT STREET, BEREA, OHIO 44017. PHONE: 440-234-2081

SURVEYING

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88 GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83(2011) ELLIPSOID: GRS80

MAP PROJECTION LAMBERT CONFORMAL CONIC COORDINATE SYSTEM OHIO STATE PLANE - NORTH ZONE

COMBINED SCALE FACTOR: 1.00000000

ORIGIN OF COORDINATE SYSTEM:

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623

UNITS ARE IN U.S. SURVEY FEET.

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

ITEM 201 - CLEARING & GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID ITEM FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING:

204, PROOF ROLLING 32 HOUR

SEE PLAN SHEET NO 3 FOR ADDITIONAL INFORMATION.

ITEM 606 - GUARDRAIL, TYPE MGS, WITH LONG STEEL POSTS

IN ADDITION TO THE REQUIREMENTS FOR ITEM 606 GUARDRAIL, TYPE MGS AS STATED THE OHIO DEPARTMENT OF TRANSPORTATION'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, ITEM 606 -GUARDRAIL, TYPE MGS, AS PER PLAN SHALL BE FOUNDED USING LONG STEEL POSTS AS SHOWN IN THE OHIO DEPARTMENT OF TRANSPORTATION'S STANDARD DRAWINGS MGS-1.1. MGS-2.1.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT. DRILLED. OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OHIO TURNPIKE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES. SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE OHIO

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE THE OHIO TURNPIKE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING UD-1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE.

601, TIED CONCRETE BLOCK MAT, TYPE 1 25 SQ.YD. 605, AGGREGATE DRAINS 250 FT. 611, 6" CONDUIT, TYPE F 100 SPECIAL ITEM, PRECAST REINFORCED CONCRETE OUTLET FACH 605. 6" UNCLASSIFIED PIPE UNDERDRAINS 100 FT.

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST FACH 659, TOPSOIL 148 CU. YD. 1332 SQ. YD. 659. SEEDING AND MULCHING 659, REPAIR SEEDING AND MULCHING SQ. YD. 659, INTER-SEEDING 67 SQ. YD. 659, COMMERCIAL FERTILIZER .18 TON ACRES 659 LIME 28 659. WATER 3.78 M. GAL 832, EROSION CONTROL 000 EACH

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

AGGREGATE DRAINS

1. FULL DEPTH SAW CUT OR FULL DEPTH PAVEMENT PLANING OF EXISTING ASPHALT PAVEMENT IS REQUIRED WHERE EXISTING ASPHALT PAVEMENT IS TO BE REMOVED FOR THE INSTALLATION

2. TYPE II AGGREGATE DRAINS WILL BE INSTALLED AT EACH EXISTING ROADWAY JOINT WITHIN FULL DEPTH REPAIR AREAS, OR AS DIRECTED BY THE CHIEF ENGINEER (APPROX. SPACING = 61'-6" O/C) SP 404 BITUMINOUS SHOULDER MATERIAL (SP 404 - ASPHALT CONCRETE SURFACE COURSE, PG 64-22) REQUIRED FOR REPAIR OF THE SHOULDER AND/OR BRINGING THE TRENCH UP TO THE MILLED SURFACE, SHALL BE CONSIDERED INCIDENTAL TO SP 605.

SEE AGGREGATE DRAIN DETAIL ON SHEET 3.

ITEM SP 605 - AGGREGATE DRAINS, TYPE II

ITEM 451-FULL DEPTH REPAIRS

THE FOLLOWING CONTINGENCY ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE IN PERFORMING FULL DEPTH REPAIRS, AS DIRECTED BY THE CHIEF ENGINEER, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NEEDED TO COMPLETE THE FOLLOWING ITEMS.

ITEM SP 451 - FULL DEPTH PAVEMENT REPAIRS (ASPHALT)

426.67 SQ.YD

240 FOOT

FULL DEPTH PLAN REPAIR NOTES:

1. ALL FULL DEPTH REPAIRS EXCAVATED DURING A WORK SHIFT SHALL BE FILLED TO THE MILLED SURFACE DURING THAT SAME WORK SHIFT. NO REPAIR SHALL BE LEFT OPEN BEYOND THE END OF THE SHIFT. THE CONTRACTOR SHALL PLAN ITS OPERATIONS ACCORDINGLY.

2. ALL FULL DEPTH REPAIRS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE CHIEF ENGINEER

SOFT SUBGRADE

THE FOLLOWING CONTINGENCY ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR REPAIR OF SOFT SUBGRADE AS DIRECTED BY THE CHIEF ENGINEER FOR FULL DEPTH REPAIRS AND/OR SHOULDER RECONSTRUCTION:

ITEM 204 - EXCAVATION OF SUBGRADE	142 CU.YD.
ITEM 204 - EMBANKMENT	142 CU.YD.
ITEM 204 - SUBGRADE COMPACTION	426.67 SQ.YD.
ITEM 304 - AGGREGATE BASE	142 CU.YD.

ITEM SP 304 - AGGREGATE BASE

A CONTINGENCY QUANTITY OF 50 C.Y. IS INCLUDED IN THE ESTIMATED QUANTITIES TO BE USED, AS DIRECTED BY THE ENGINEER, FOR DRESSING BASE MATERIAL UNDER THE FULL DEPTH

ITEM SP 202B - CRACK REPAIRS

THE FOLLOWING CONTINGENCY ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR PAVEMENT CRACK REPAIR. THE CRACK REPAIR SHALL OCCUR PRIOR TO THE PLACEMENT OF THE ASPHALT LEVELING COURSE. CRACK REPAIR SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE

ITEM SP 202B-CRACK REPAIR, 1" OR LESS, USING SAND ASPHALT	3 CU.YD.
ITEM SP 202B-CRACK REPAIR, 1" OR LESS, USING HOT JOINT SEALER	100 GAL.
ITEM SP 202B-CRACK REPAIR, WIDER THAN 1" AND LESS THAN 1" IN DEPTH, USING ITEM SP 404 (PG 64-22)	3 CU.YD.
ITEM SP 202B-CRACK REPAIR, WIDER THAN 1" AND GREATER THAN 1" IN DEPTH, USING ITEM SP 402 (PG 64-22)	3 CU.YD.
ITEM SP 202B-3 CORNER CRACK REPAIR, USING ITEM SP 402 (PG 64-22)	3 CU.YD.
ITEM SP 202B-REPAIR EXISTING EXPANSION JOINT, USING ITEM SP 404 (PG 64-22)	6 CU.YD.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED. BY PLAN NOTE TO BE USED "AS DIRECTED BY THE CHIEF ENGINEER" UNLESS AUTHORIZED BY THE CHIEF ENGINEER. THE ACTUAL WORK LOCATION AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED IN THE FINAL CHANGE ORDER GOVERNING THE COMPLETION OF THIS **PROJECT**

ITEM SPECIAL - SNAP MILL AND FILL

MAINTENANCE OF TRAFFIC ON THE MEDIAN/LEFT SHOULDER, AND THE RIGHT SHOULDER(S) WILL REQUIRE THE EXISTING "SNAPS" TO BE MILLED AND FILLED. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL OF THE FOLLOWING: REMOVAL OF THE EXISTING "SNAPs" BY MILLING 1 1/2" DEEP AND 5' WIDE: TACK COATING ALL EXPOSED MILLED SURFACES: AND PAVING THE MILLED AREA WITH 1 1/2" OF ITEM SP 404 - ASPHALT CONCRETE SURFACE COURSE. PG 64-22. ALL LABOR. EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE-MENTIONED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL - "SNAP" MILL AND FILL

ADDITIONALLY, FOR EASTBOUND AND WESTBOUND, THE 5' WIDE SNAP MILL AND FILL SHALL BE CENTERED TO INCLUDE THE REMOVAL OF THE EXISTING SNAPS, THE AREA BETWEEN THE YELLOW/WHITE EDGE LINE AND THE EXISTING SNAPS. AND THE YELLOW/WHITE EDGE LINE. THE CONTRACTOR SHALL PLAN ITS OPERATIONS ACCORDINGLY TO COMPLETE THIS WORK. ADJUSTMENTS MAY BE MADE BY THE CHIEF ENGINEER TO ENSURE THAT THE YELLOW/WHITE EDGE LINE AND SNAP'S ARE REMOVED APPROPRIATELY.

ITEM SPECIAL - "SNAP" MILL AND FILL. 9788 FT

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GENERAL NOTES MP 138.0 AND MP 138.2

43-17 **PROJECT**

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ITEM NO.	QUANTITY	UNIT	ITEM DESCRIPTION	REFERENCE SHEET NO.
				0,122,110,
			ROADWAY	
201	LUMP	LUMP SUM	CLEARING AND GRUBBING	
202	7428	SY	PAVEMENT REMOVED	
202	636	FT	CONCRETE BARRIER REMOVED /1	
202	38	FT	PIPE REMOVED, 24" AND UNDER	
202	1106	FT	GUARDRAIL REMOVED /1	
202	8	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
202	342	FT	FENCE REMOVED	
203	1666	CY	EXCAVATION 1	
203	6831	CY	EMBANKMENT /1	
204	142	CY	EXCAVATION OF SUBGRADE /1	
204	142	CY	EMBANKMENT /1	
204	10966	SY	SUBGRADE COMPACTION	
606	1418	FT	GUARDRAIL, TYPE MGS, WITH LONG STEEL POSTS	
606	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
606	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
607	200	FT	FENCE, TYPE 47	
609	3003	FT	CURB, TYPE 1	
622	771	FT	CONCRETE BARRIER, TYPE B-50, AS PER PLAN	CBR-3
~~~~	<del></del>		20,707,277,277	OBN-0
			EROSION CONTROL	
	1		ENGGION CONTROL	
659	2	EACH	SOIL ANALYSIS TEST	
659	361	CY	TOPSOIL	
659	3252	SY	SEEDING AND MULCHING	
659	163	SY	REPAIR SEEDING AND MULCHING	<del> </del>
659	163	SY	INTER-SEEDING AND MOLOTING	<del> </del>
659	0.44	TON	COMMERCIAL FERTILIZER	<del> </del>
659	0.67	ACRE	LIME	<del> </del>
659	9.22	MGAL	WATER	<del> </del>
670	1920	SY	SLOPE EROSION PROTECTION	<del> </del>
832	57000	EACH	EROSION CONTROL	<del> </del>
032	37000	EACH	EROSION CONTROL	<del> </del>
	1		DRAINAGE	<del> </del>
	-	+	DIVATIVAGE	<del> </del>
601	25	SY	TIED CONCRETE BLOCK MAT, TYPE 1	
601			<del>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </del>	
SP 604	1	EACH	INLET, NO. 1-3B50 DOUBLE GRATE	CB-4
SP 605	2835	FT	6" SHALLOW PIPE UNDERDRAINS WITH FABRIC WRAP	
SP 605	2835	FT	6" BASE PIPE UNDERDRAINS	
SP 605	240	FI	AGGREGATE DRAINS TYPE II	
605	250	FT	AGGREGATE DRAINS  /1	
605	100	FT	6" UNCLASSIFIED PIPE UNDERDRAINS) /1  MANHOLE ADJUST TO GRADE	
611	1	EACH		
611	4	EACH	CATCH BASIN ADJUST TO GRADE	
SPECIAL	8 **	EACH	PRECAST REINFORCED CONCRETE OUTLET	
	i	1		

			GENERAL SUMMARY		1		J
ITEM NO.	QUANTITY	UNIT	ITEM DESCRIPTION	REFERENCE SHEET NO.	NCY.	`	1
			PAVEMENT		SIGNAGE		1
204	32	HR	PROOF ROLLING		∂E	. P	
254	10611	SY	PAVEMENT PLANING, ASPHALT CONCRETE		1		
SP 202B	3	CY	CRACK REPAIR, 1" OR LESS, USING SAND ASPHALT				
					DATE	30/17	•
SP 202B	100	GAL	CRACK REPAIR, 1" OR LESS, USING HOT JOINT SEALER  CRACK REPAIR, WIDER THAN 1" AND LESS THAN 1" IN DEPTH, USING ITEM SP 404 (PG		BY D	급.	-
SP 202B SP 202B	3	CY	64-22) CRACK REPAIR, WIDER THAN 1" AND GREATER THAN 1" IN DEPTH, USING ITEM SP 404		B	5	
SP 202B	3	CY	(PG 64-22)  3 CORNER CRACK REPAIR, USING ITEM SP 402 (PG 64-22)				
					Si	#3	
SP 202B	6	CY	REPAIR EXISTING EXPANSION JOINT, USING ITEM SP 404 (PG 64-22)		REVISIONS	ADDENDUM #3	
SP 302	3254	CY	ASPHALT CONCRETE BASE, PG 64-22		REV	ADDE	
SP 304	3124	CY	AGGREGATE BASE /1				
SP 402	987	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, PG 70-22 (FR)				
SP 404	705	CY	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70-22 (FR)			+	
SP 451	426.67	SY	FULL DEPTH PAVEMENT REPAIRS (ASPHALT)		NO.	- '	
407	11060	GALLON	NON-TRACKING TACK COAT /1		QĐ).	<b>–</b>	į
					СНЕСКЕГ	PAT	1
			TRAFFIC CONTROL		Ĕ	╬	•
					GNED		N. Care
SPECIAL	2.99	MILE	SONIC NAP ALERT PATTERN (SNAP)	TCR-13	DESK	CEL	1
SP 626	70	EACH	BARRIER REFLECTOR		$\vdash$		
642	1.25	MILE	EDGE LINE, 6"				
642	1.25	MILE	LANE LINE, 6"				
SP 641C	$\searrow$	MILE	REMOVAL OF PAVEMENT MARKING 1				
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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

ITEM NO.	QUANTITY	UNIT	ITEM DESCRIPTION	REFERENC SHEET NO
			STRUCTURES	
SP 202	LUMP	LUMP SUM	PORTIONS OF STRUCTURE REMOVED	22/50
203	126	CY	GRANULAR EMBANKMENT	22/50
SP 203	6561	CY	LIGHTWEIGHT FILL	
SP 203	9	EACH	SETTLEMENT PLATFORM	
SP 203	LUMP	LUMP SUM	TEMPORARY SURCHARGE EMBANKMENT	
204	2114	SY	GEOTEXTILE FABRIC, 712.09, TYPE D	
605	1203	FT	6" CONSTRUCTION UNDERDRAINS, 707.31	
611	256	FT	6" CONDUIT, TYPE F, 707.33	
611	2640	SF	CONDUIT, MISC.: DRAINAGE BOARD	23/50
SPECIAL	20	EACH	PRECAST REINFORCED CONCRETE OUTLET	
SP 509	2057	LB	EPOXY COATED REINFORCING STEEL, GRADE 60	
509	2007	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL	
516	36	EACH	RESET BEARING, AS PER PLAN	23/50
SP 516A	28	FT	CRACK REPAIR USING EPOXY INJECTION	20/00
SP 516B	798	FT	SEALING OF CONSTRUCTION JOINTS	
SP 516G	36	EACH	REPLACE EXPANSION BEARING DEVICE	
SP 519	386	SF	PATCHING CONCRETE STRUCTURE	
526	416	SY	REINFORCED CONCRETE APPROACH SLABS (T=12")	
SP 527	LUMP	LUMP SUM	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES	
SPECIAL	LUMP	LUMP SUM	STRUCTURES: SETTLEMENT MONITORING	23/50
SP 533D	241	FT	CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT	23/30
SP 536	2038	SY	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	
SP 536	320	SY	CONCRETE WEATHERPROOFING, PARAPETS	
SP 536	1059	SY	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	
			· ·	
848	1542	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (2" THICK)	
848	1542	SY	SURFACE PREPARATION USING HYDRODEMOLITION  MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
848	12	CY		
848	38	SY	HAND CHIPPING	
848	4	CY	TEST SLAB	
848	8	CY	FULL DEPTH REPAIR	
863	2318	SY	GEOGRID, TYPE P1	
863	1760	SY	GEOGRID, TYPE S1	
863	1174	CY	REINFORCED EMBANKMENT	
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∂₃	REFERENCE SHEET NO.	ITEM DESCRIPTION	UNIT	QUANTITY	ITEM NO.
AGEN					
NSI		MAINTENANCE OF TRAFFIC			
DE					
	7/50	SNAP" MILL AND FILL	FT	9788	SPECIAL
		VORK ZONE IMPACT ATTENUATOR	EACH	4	614
ᄪ		EPLACEMENT SIGN	EACH	5	614
BY DATE	8/50	ORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	DAY	1460	614
BY		VORK ZONE LANE LINE, CLASS I	MILE	1.14	614
		VORK ZONE EDGE LIN <del>E, C</del> LASS I	MILE	2.28	614
		VORK ZONE CHANNELIZING LINE, CLASS I	FT	33830	614
REVISIONS		EMOVAL OF PAVEMENT MARKINGS	MILE	2	SP 614C
OISIA		EPLACEMENT PRISMATIC RETRO-REFLECTOR	EACH	140	SP 621
RE		EMPORARY PORTABLE BARRIER (WITHOUT GLARE SCREEN) /1	FT	7360	SP 622A
		EMPORARY PORTABLE BARRIER, BRIDGE MOUNTED	FT	640	SP 622A
		IGNING MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER	SF	80	630
NO.					
-		SENERAL			
СНЕСКЕВ					
СНЕСКЕ		MAINTAINING TRAFFIC	LUMP SUM	LUMP	SP 614
Q.		IELD OFFICE	LUMP SUM	LUMP	SP 619
DESIGNED		CONSTRUCTION LAYOUT SURVEY	LUMP SUM	LUMP	SP 623
DE		10BILIZATION	LUMP SUM	LUMP	624
		REMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND	LUMP SUM	LUMP	IB.ART.6
		REINIUM FOR CONTRACT EN ORMANCE BOND AND LATMENT BOND	LOWI JOW	LOWI	ID.ANT.U
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PROJECT 43-17-04

DATE: 5/31/2017

OHIO TURNPIKE AND INFRASTRUCTURE 

GENERAL SUMMARY - 2

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COMMISSION

#### QUARRY ROAD (MP 138.0) AND INACTIVE RAILROAD (MP 138.2)

BOTH DIRECTIONS OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE FXISTING PAVEMENT AND PROPOSED PAVEMENT

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CLOSE THE LEFT LANE IN THE EASTBOUND AND WESTBOUND DIRECTION IN ACCORDANCE WITH OHIO TURNPIKE STANDARD DRAWINGS TCR-2, TCR-2.1, TCR-10 AND TCR-12.

SHIFT TWO LANES OF TRAFFIC AS SHOWN IN THE PLANS

PERFORM WORK IN THE INSIDE LANES.

CLOSE THE RIGHT LANE IN THE EASTBOUND AND WESTBOUND DIRECTION IN ACCORDANCE WITH OHIO TURNPIKE STANDARD DRAWINGS TCR-2. TCR-2.1. TCR-10 AND TCR-12.

SHIFT TWO LANES OF TRAFFIC AS SHOWN IN THE PLANS

PERFORM WORK IN THE OUTSIDE LANES.

#### MAINTAINING TRAFFIC

GENERALLY. THE CONTRACTOR SHALL CONDUCT HIS/HER OPERATIONS AS TO COMPLETE THE PROPOSED IMPROVEMENT WITH A MINIMUM OF HAZARD, DELAY AND INCONVENIENCE TO THE MOTORISTS USING THE HIGHWAY AFFECTED BY THE WORK DONE UNDER THIS CONTRACT

THE CONTRACTOR'S RESPONSIBILITY TO THE SAFETY OF THE MOTORING PUBLIC WHILE PERFORMING THE REQUIREMENTS OF THE CONTRACT SHALL BE IN ACCORDANCE WITH THESE TEMPORARY TRAFFIC CONTROL PLANS, THE SPECIFICATIONS AND SPECIAL PROVISIONS, THE CURRENT EDITION, LATEST REVISION OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (OMUTCD). IN ADDITION TO THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING SPECIFIC PROVISIONS ARE MANDATORY.

THE CONTRACTOR SHALL FURNISH FRECT MAINTAIN AND SUBSEQUENTLY REMOVE. ALL TRAFFIC CONTROL DEVICES AS PER SP 614 MAINTAINING TRAFFIC, AND THE DETOUR PLANS INCLUDING BARRICADES AND SIGNS IN ACCORDANCE WITH THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION (OTIC) STANDARD DRAWINGS AND OHIO DEPARTMENT OF TRANSPORTATION (ODOT) STANDARD CONSTRUCTION DRAWINGS AND THE OMUTCD.

#### LANE CLOSURE

ALL LANE CLOSURES SHALL BE IN ACCORDANCE WITH SP 614. THE OMUTCD AND APPLICABLE OTIC/ODOT STANDARD DRAWING(S).

OTIC TEMPORARY TRAFFIC CONTROL PHASE DATES, LANE REDUCTION TIME LIMITATIONS, AND LIQUIDATED DAMAGE CLAUSES ARE CONTAINED IN THE FOLLOWING SPECIAL PROVISIONS.

SP 103. CONSTRUCTION PHASING AND TIME OF COMPLETION SP 104, ACCESS TO TURNPIKE AND RESTRICTIONS SP 107, TIME OF ESSENCE - LIQUIDATED DAMAGES

#### MAINTENANCE OF TRAFFIC SYSTEMS

#### A. WHEN REQUIRED

WHENEVER ANY PART OF THE TRAVELED SURFACE IS BEING WORKED UPON OR IS OTHERWISE NOT SUITABLE FOR SAFE AND CONVENIENT USE BY VEHICLES, TRAFFIC CONTROL DEVICES SUFFICIENT TO PROTECT SUCH AREAS TO ASSURE THE SAFE AND CONVENIENT PASSAGE OF VEHICULAR TRAFFIC SHALL BE INSTALLED AND MAINTAINED. SUCH TRAFFIC CONTROL DEVICES AND THE MANNER IN WHICH THEY ARE USED SHALL BE CONSISTENT WITH THESE PLANS. SP 614. THE OMUTCO OR AS SHOWN IN THE OTIC/ODOI STANDARD DRAWING(S), AND SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL FOR EACH PARTICULAR SITUATION. WHENEVER THE ENGINEER DEEMS IT NECESSARY ESPECIALLY WHERE A GRADE, CURVE, OR MERGE CONDITIONS EXISTS, HE/SHE MAY DIRECT THAT ADDITIONAL OR ALTERNATIVE DEVICES BE USED.

#### B. CONDITIONS

DURING ALL PARTS OF THIS PROJECT, FLAGGERS, SIGNING, BARRICADES, FLASHING ARROWS, ETC. SHALL BE LOCATED AS INDICATED IN THE OMUTCD OR AS SHOWN IN THE OTIC/ODOT STANDARD DRAWING(S). TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.

#### C. ADVANCE WARNING SIGNS

ALL ADVANCE WARNING SIGNS FOR ANY CONDITION WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHENEVER THEY ARE NOT APPLICABLE.

## D. FLASHING ARROW REQUIREMENT

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORISTS SHALL BE WARNED AND DIRECTED BY THE CONTRACTOR THROUGH THE USE OF ONE FLASHING ARROW FOR EACH LANE CLOSED. ADDITIONALLY, THE PROVISIONS SET FORTH IN SP 614, THE OMUTCD AND THE APPLICABLE OTIC/ODOT STANDARD DRAWING(S) SHALL BE MET.

## F. FLAGGERS

THE CONTRACTOR SHALL FURNISH ADDITIONAL FLAGGERS AS DIRECTED BY THE ENGINEER.

#### F. MAINTENANCE OF TRAFFIC CONTROL ZONES

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SIGNS, DRUMS AND TEMPORARY PAVEMENT MARKINGS AT THE LOCATIONS DETAILED IN THE PLANS OR SPECIFIED IN THE OTIC/ODOT STANDARD DRAWINGS. THE CONTRACTOR SHALL IMMEDIATELY CORRECT ANY DEFICIENCY IN TRAFFIC ZONE ALIGNMENT, EQUIPMENT, NUMBER OF DEVICES OR PROCEDURE OF FLAG PERSONS WHICH IS BROUGHT TO HIS/HER ATTENTION BY THE **FNGINFFR** 

#### G. FAILURE TO COMPLY

IF THERE IS ANY FAILURE TO COMPLY WITH PROVISIONS FOR TRAFFIC CONTROL SET OUT IN THESE PLANS AND NOTES, OR WITH THE PROVISIONS OF SP 614, THE OMUTCD, OR AS SHOWN IN THE OTIC/ODOT STANDARD DRAWING(S), THE HIGHWAY IN THE VICINITY OF THE WORK AREA SHALL NOT BE CONSIDERED IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC. ANY FAILURE TO KEEP THE HIGHWAY, IN THE VICINITY OF THE WORK AREA, IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF THIS CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS.

#### MAINTENANCE OF TRAFFIC MATERIALS

### A. SIGNS

SIGN DIMENSIONS AND SPECIFICATIONS, INCLUDING LETTER SIZES SHALL BE AS PROVIDED IN THE OMUTCD, OR IN OTIC/ODOT STANDARD DRAWING(S). THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THE PROJECT

#### B. GUARDRAIL DELINEATION

GUARDRAIL DELINEATION SHALL CONSIST OF AKT CORPORATION MODEL 567 ONE-WAY DELINEATORS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. THE DELINEATORS SHALL BE SPACED 100' (MIN), WITH ALL GUARDRAIL RUNS HAVING NO LESS THAN TWO (2) DELINEATORS (ONE DELINEATOR ON THE BEGIN AND ONE ON THE END OF THE GUARDRAIL RUN

PAYMENT FOR GUARDRAIL DELINEATION SHALL BE INCLUDED WITH ITEM SP 614 MAINTAINING TRAFFIC. SUCH PAYMENT SHALL INCLUDE PROVIDING, INSTALLING, MAINTAINING, REPLACING DAMAGED DELINEATORS AND REMOVING, AS SPECIFIED, FOR THE ABOVE SAID GUARDRAIL DEI INFATION

#### C. TEMPORARY PORTABLE BARRIERS

ALL TEMPORARY PORTABLE BARRIERS SHOWN ON THE PLANS FOR MAINLINE TEMPORARY TRAFFIC CONTROL WILL BE AS PER SP 622A. THE SAME BARRIER CAN BE USED FOR THE VARIOUS PHASES. THE COST FOR TRANSPORTING, INSTALLING, MAINTAINING, REMOVAL AND STORING THE TEMPORARY PORTABLE BARRIER FOR EACH PHASE SHALL BE INCLUDED IN THE ORIGINAL UNIT COST OF SUPPLYING THE BARRIER FOR ITEM SP 622A

THE CONTRACTOR SHALL REPLACE ANY DAMAGED TEMPORARY PORTABLE BARRIER WITHIN 24 HOURS OF A DAMAGING IMPACT.

#### PAYMENT

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH SP 614, AS SHOWN IN THE OTIC/ODOT STANDARD DRAWING(S), ODOT CONSTRUCTION & MATERIAL SPECIFICATION (C&MS) AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OMUTCD. PAYMENT FOR MAINTENANCE OF TRAFFIC ITEMS, UNLESS OTHERWISE SPECIFIED SEPARATELY, SHALL BE PAID FOR UNDER THE LUMP SUM BID FOR ITEM SP 614 MAINTAINING TRAFFIC, WHICH SHAL INCLUDE ALL LABOR, EQUIPMENT MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THE WORK AS DETAILED IN THE PLAN.

### PERMANENT PAVEMENT MARKINGS

AFTER PLACING THE SURFACE COURSE, THE CONTRACTOR MAY PLACE PERMANENT PAVEMENT MARKINGS INSTEAD OF PLACING WORK ZONE PAVEMENT MARKINGS, WHICH SHALL BE NON-PERFORMED AT THESE LOCATIONS.

PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE AS INDICATED IN THE PLANS PRIOR TO OPENING THE ROADWAY TO TRAFFIC.

#### COVERING OF GROUND-MOUNTED SIGNS- GENERAL

WHEN REQUIRED BY OTHER ITEMS OR INCIDENTALLY TO SP 614 MAINTAINING TRAFFIC, COVER EXISTING GROUND-MOUNTED SIGNS WITH PLYWOOD OR OSB BLANKS (1/2" MINIMUM THICKNESS) COVERING 80% OF THE SIGN AREA AND ALL OF THE SIGN LEGEND. THE USE OF LOW QUALITY MATERIALS SUCH AS DUCT TAPE AND BLACK PLASTIC IS NOT PERMITTED.

## ITEM 630 - SIGNING MISC.: ADDITIONAL SIGNS. GROUND MOUNTED. AS DIRECTED BY THE ENGINEER

WHEN ADDITIONAL SIGNING IS NEEDED TO MAINTAIN TRAFFIC, THE CONTRACTOR SHALL FURNISH THE SIGN OR SIGNS AS DIRECTED BY THE ENGINEER. THESE SIGNS SHALL BE GROUND MOUNTED AND MEET ALL THE SPECIFICATIONS OF THE PLAN. PROPOSAL AND CURRENT YEAR

PAYMENT TOR THIS ITEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE COST TO FURNISH AND ERECT THE SIGN, INCLUDING DRIVING POSTS OR OTHER APPROVED METHODS OF SIGN SUPPORT, MAINTAINING THE SIGN AND REMOVAL OF THE SIGN. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 630, SIGNING MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER...... 80 SQ FT

#### ITEM 614 - REPLACEMENT SIGN

FLAT SHEET 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 CHIEF ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE CHIFF 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. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 614 REPLACEMENT SIGN 5 FACH

## CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY

#### SUSPENSION OF WORK

APPROPRIATE TRANSITIONS.

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, THE CHIEF ENGINEER WILL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS

# ITEM 614 - WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS. THE APPROVED LIST IS AVAILABLE AT THE "ROADWAY STANDARDS: PROPRIETARY ROADSIDE SAFETY DEVICES" WEB PAGE ON THE ODOT OFFICE OF ROADWAY ENGINEERING'S WEBSITE

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

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.

# WORK ZONE PAVEMENT MARKINGS

THE WORK ZONE PAVEMENT MARKINGS SHALL BE 4" WIDE, UNLESS NOTED OTHERWISE ON THE PLANS OR ODOT/OTIC STANDARD DRAWING. ITEM SP 641C - REMOVAL OF PAVEMENT MARKINGS SHALL BE UTILIZED FOR THE REMOVAL OF EXISTING PAVEMENT MARKINGS, THAT WERE PRESENT PRIOR TO THE START OF CONSTRUCTION THAT CONFLICT WITH THE WORK ZONE PAVEMENT MARKINGS AND FOR THE REMOVAL OF ITEM 614 - WORK ZONE PAVEMENT MARKINGS

ITEM SPECIAL - SNAP MILL AND FILL

NOTE REMOVED. SEE SHEET 4.



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ALL PAVEMENT MARKINGS WHICH CONFLICT WITH THE PROPOSED MAINTENANCE OF TRAFFIC PAVEMENT MARKINGS ARE TO BE REMOVED AS PER SP 641C - REMOVAL OF PAVEMENT

REMOVAL OF EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY EITHER GRINDING OR WATER BLAST AS APPROVED BY THE CHIEF ENGINEER, IN ACCORDANCE WITH SP 641 C. IN NO INSTANCE SHALL BLACKOUT TAPE BE USED. MEASUREMENT OF THIS ITEM SHALL BE IN ACCORDANCE WITH SP 641 C AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO REMOVE CONFLICTING PAVEMENT MARKINGS TO THE SATISFACTION OF THE CHIEF ENGINEER

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE UTILIZED AS DIRECTED BY THE CHIEF ENGINEER.

SP 641C - REMOVAL OF PAVEMENT MARKING .. . 2.0 MILE

#### SP 621 RAISED PAVEMENT MARKERS

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ALL RAISED PAVEMENT MARKER REFLECTORS WHICH ARE IN CONFLICT WITH THE PROPOSED MAINTENANCE OF TRAFFIC PAVEMENT MARKINGS ARE TO BE REMOVED. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR CONTINGENCY PURPOSES ONLY

SP 621 REPLACEMENT PRISMATIC RETRO-REFLECTOR .....140 EACH

#### INTERIM MAINTENANCE OF TRAFFIC - WINTER BETWEEN PHASE 1 AND PHASE 2

PRIOR TO SUSPENDING WORK FOR THE WINTER. THE CONTRACTOR SHALL

INSTALL THE TEMPORARY PORTABLE BARRIER REQUIRED FOR PHASE 2 RE-STRIPE THE FASTBOUND AND WESTBOUND PAVEMENT MARKINGS

ALL COSTS ASSOCIATED WITH THE ABOVE DESCRIBED TASKS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM SP 614 - MAINTAINING TRAFFIC

#### ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO (2) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS). TWO (2) OF THE SIGNS SHALL BE LOCATED NEAR THE PROJECT SITE, ONE FOR EACH DIRECTION OF TRAVEL, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED CLASS "A" PCMS UNITS MAINTAINED BY THE ODOT DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT.

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 SHALL BE DELINEATED ON A PERMANENT BASIS IN ACCORDANCE WITH ODOT CMS 614 03

THE PCMS LOCATIONS, LIMITS FOR THOSE LOCATIONS AND ALL ACTIVATION OF PCMS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE CHIEF ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE CHIEF 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. FACING AWAY FROM ALL TRAFFIC. AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC

THE CHIEF ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE TURNPIKE MAINTENANCE 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 CHIEF ENGINEER. LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRE-CONSTRUCTION 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 ACTIVATION, 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 CONTAIN A GPS DEVICE WHICH WILL SHOW ITS LOCATION ON A MAP WHICH CAN BE VIEWED REMOTELY BY THE OTIC COMMUNICATIONS CENTER. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE OTIC COMMUNICATIONS CENTER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

ALL PCMS UNITS SHALL BE EQUIPPED WITH RADAR THAT ENABLES THE MESSAGE BOARD TO DISPLAY THE SPEED OF THE APPROACHING VEHICLES.

WHEN A PCMS IS INITIALLY BROUGHT OUT TO THE PROJECT THE CONTRACTOR SHALL CONTACT THE OTIC COMMUNICATIONS CENTER WITH THE PCMS NUMBER AND LOCATION AT THAT TIME THE OTIC COMMUNICATIONS WILL VERIFY COMMUNICATION WITH THE PCMS.

WHEN A PCMS IS REPLACED OR RELOCATED THE CONTRACTOR SHALL CONTACT THE OTIC COMMUNICATIONS CENTER WITH THE PCMS NUMBER AND LOCATION.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF ODOT CMS 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 CHIEF ENGINEER TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON THEIR

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 CONTRACTOR SHALL ONLY BE PAID FOR PCMS UNITS WHEN THEY ARE IN OPERATION ON THE PROJECT AS SPECIFIED IN THE PLANS OR BY THE CHIEF ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER TO PROVIDE TWO (2) PORTABLE CHANGEABLE MESSAGE SIGNS, EACH SIGN FOR APPROXIMATELY 730 DAYS, FOR AN ESTIMATED TOTAL OF 1460 DAYS

1460 DAY

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN AS PER PLAN

LANE CLOSURE RESTRICTION

THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION WILL NOT ALLOW THE CLOSURE OF EITHER OF THE TWO (2) OPEN TRAFFIC LANES DURING PHASE 1, PHASE 2 OR DURING THE WINTER SHUTDOWN.

THE CONTRACTOR SHALL SCHEDULE ITS WORK SO THAT A LANE CLOSURE OF EITHER OF THESE TWO (2) LANES IS NOT REQUIRED DURING THE DURATION OF EACH PHASE OF CONSTRUCTION OR DURING THE WINTER SHUTDOWN.

TRAFFIC NOTES Р MAINTENANCE

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43-17 **PROJECT** DATE:



