OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

ADDENDUM NO. 1

PROJECT NO. 59-17-02
REPAIRS AND RESURFACING
EASTBOUND AND WESTBOUND ROADWAYS
MILEPOST 136.00 TO MILEPOST 144.10
ERIE AND LORAIN, OHIO

OPENING DATE: 2:00 P.M. (EASTERN TIME), JANUARY 26, 2017

ALL BIDS MUST BE ELECTRONICALLY SUBMITTED THROUGH BID EXPRESS

ATTENTION OF BIDDERS IS DIRECTED TO:

QUESTIONS AND ANSWERS THROUGH 3:00PM ON JANUARY 20, 2017
-ANDMODIFICATION TO PLAN SHEETS 12 AND 13 OF 13
-ANDSUBSTITUTION OF STANDARD DRAWINGS AS-1, AS-2, AS-3, AS-4 AND AS-5
-ANDCHANGE TO THE BID FORM SCHEDULE OF ITEMS

Issued by the Ohio Turnpike and Infrastructure Commission on January 20, 2017. Issuance authorized by Anthony D. Yacobucci, Chief Engineer, and Mark R. Musson, Director of Contracts Administration.

Anthony D. Yacobucci

Date

Mark R. Musson

Date

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION ADDENDUM NO. 1 PROJECT NO. 59-17-02

QUESTIONS AND ANSWERS THROUGH 3:00 PM ON JANUARY 20, 2017

- Q#1 Please clarify type of Concrete and strengths required for Item SP 526 Class C Concrete, Approach Slab, using Type 1 Cement (12"). The description of the item and all Drawings Reference Class C Concrete. SP 526 Refers you to 526.02 that requires QC2 Concrete. Also SP 526 2. Acceptance Of Concrete discusses Strength Level is satisfactory if it equals or exceeds the specified strength. Please verify the classification of concrete and the specified strength level you are requiring.
- A#1 The reference to SP 526 CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12") in Plan Sheets 12 of 13 and 13 of 13 are revised through this Addendum No. 1 to specify Item 526 REINFORCED CONCRETE APPROACH SLABS (T=12"). The revised sheet 12 of 13, 13 of 13, and ESTIMATED QUANTITIES WORKSHEET incorporated into the Contract Documents with this Addendum No. 1. Additionally, OTIC Standard Drawings AS-1, AS-2, AS-3, AS-4, and AS-5 all dated 11/28/14 are rescinded and replaced with OTIC Standard Drawing AS-1, AS-2, AS-3, AS-4, and AS-5 dated July 5, 2016. The revised standard drawings have been included with this Addendum No. 1.
- Q#2 SP 526 Concrete Approach Slabs. Will you require the approaches to be mechanically grooved?
- A#2 Reference to SP 526 is removed from the estimated quantity sheet and the sub-summary sheet and replaced with ODOT CMS Item 526 through this Addendum No. 1. Accordingly, SP 526 in the Special Provisions is deleted in its entirety through this Addendum No. 1. Under ODOT CMS Item 526, the wearing surface shall be mechanically grooved longitudinally in accordance with Item 511.17.
- Q#3 Please provide the calculation sheet for the pavement planning and asphalt quantities, take off quantities from the plans do not match the bid quantities.
- A#3 The quantities for pavement planning and asphalt paving quantities have been reviewed and recalculated. The following revisions are incorporated into Plan Sheet 12 of 13, Schedule of Items and the Estimated Quantities Worksheet through this Addendum No. 1:

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (T=2") has been revised from 319,280 to 292,536.

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (T=3") has been revised from 255,760 to 263,506.

ITEM SP 403 – ASPHALT CONCRETE LEVELING COURSE, USING CRUSHED STONE, PG 76-22(FR) has been revised from 3,097 to 2,179.

ITEM SP 404 – ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22 has been revised from 9,847 to 10,617.

ITEM SP 402 – ASPHALT CONCRETE INTERMEDIATE COURSE, USING CRUSHED STONE, PG 76-22(FR) has been revised from 12,000 to 12,809.

ITEM SP 404 – ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG 76-22(FR) has been revised from 13,587 to 12,683.

ITEM SP 404A – JOINT SEALER has been revised from 89,222 to 91,900.

ITEM 407 - NON-TRACKING TACK COAT has been revised from 79,450 to 78,450.

- Q#4 The table on sheet 13 for approach slab replacements does give enough detail to accurately bid this item. Please provide which lane/lanes are to be replaced.
- A#4 The approach slab table has been revised to include a table indicating which lane the work is anticipated for this Project. The revised sheet 13 of 13 is incorporated into the Contract Documents with this Addendum No. 1.
- Q#5 Is there any information available concerning the lanes of travel the approach slab repairs are in. This information is important in estimating costs of this work.
- A#5 See response to Question #4.
- Q#6 Would the Commission please provide a pavement summary sheet to help clarify quantities for the OTC 59-17-02 Project?
- A#6 See Response to Questions #3.
- Q#7 The approach slab removal and replacement chart show only the station, leading and trailing ends, and the quantity for each respective. Given quantity is not inclusive of the complete approach slab and there are no details depicting the location at each approach slab to determine what lane the repair is in. Typically the project plans include a plan detail sheet for each approach slab for each structure. Will the Commission be adding this information by addendum to clarify.

A#7 See response to Question #4.

Addendum No. 1 to Contract 59-17-02:

	(Firm Name)
	(Signature)
	(Printed Name)
Date:	

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ESTIMATED QUANTITIES

PROJECT 59-17-02

	ESTIMATED		D					
		QUANTITY	1	ITEM DESCRIPTION				
	ITEM	TOTAL	UNIT					
	IB. ART.6	1		PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND				
*	202	1,000	FOOT	GUARDRAIL REMOVED FOR REUSE				
*	202	3,000		GUARDRAIL REMOVED				
	202	893.33		APPROACH SLAB REMOVED				
*	SP 202B	20		CRACK REPAIR, 1" OR LESS, USING SAND ASPHALT				
*	SP 202B	2,000		CRACK REPAIR, 1" OR LESS, USING HOT JOINT SEALER				
*	SP 202B SP 202B	20 20		CRACK REPAIR, WIDER THAN 1" AND LESS THAN 1" IN DEPTH, USING ITEM SP 404 (PG 64-22) CRACK REPAIR, WIDER THAN 1" AND GREATER THAN 1" IN DEPTH, USING SP 402 (PG 64-22)				
*	SP 202B	20		3 CORNER CRACK REPAIR, USING ITEM SP 402 (PG 64-22)				
*	SP 202B	20		REPAIR EXISTING EXPANSION JOINT, USING ITEM SP 404 (PG 64-22)				
*	204	490		EXCAVATION OF SUBGRADE				
*	204	50	CU.YD.	EMBANKMENT				
*	204	2,940	SQ.YD.	SUBGRADE COMPACTION				
**	254	292,536		PAVEMENT PLANING, ASPHALT CONCRETE (T=2")				
	254	263,506		PAVEMENT PLANING, ASPHALT CONCRETE (T=3")				
*	254	1,440		PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN				
**	SP 304	490		AGGREGATE BASE				
*	SP 403 SP 402	2,179		ASPHALT CONCRETE LEVELING COURSE, USING CRUSHED STONE, PG 76-22(FR) ASPHALT CONCRETE INTERMEDIATE COURSE, USING CRUSHED STONE, PG 64-22				
**	SP 402 SP 404	10,617		ASPHALT CONCRETE INTERMEDIATE COURSE, USING CRUSHED STONE, PG 64-22				
	SP 402	12,809		ASPHALT CONCRETE INTERMEDIATE COURSE, USING CRUSHED STONE, PG 76-22(FR)				
**		7 12.683		ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 76-22(FR)				
**	SP 404A	> 91,900	FOOT	JOINT SEALER				
**	407	78,450		NON-TRACKING TACK COAT				
	SP 451	440.00		FULL DEPTH PAVEMENT REPAIRS (ASPHALT)				
4	<u></u>	893.33		REINFORCED CONCRETE APPROACH SLABS (T=12")				
	SP 536	13,760		CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS				
*	SP 536	3,654		CONCRETE WEATHERPROOFING, PARAPETS				
*	604 604	5 5		CATCH BASIN, ADJUSTED TO GRADE, LESS THAN 4", AS PER PLAN CATCH BASIN, ADJUSTED TO GRADE, 4" - 12", AS PER PLAN				
*	604	5		CATCH BASIN, ADJUSTED TO GRADE, GREATER THAN 12", AS PER PLAN				
*	604	5		CATCH BASIN, GRATE AND CASTING, AS PER PLAN				
*	SP 605	1,000		AGGREGATE DRAINS, TYPE II				
*	606	3,000	FOOT	GUARDRAIL, TYPE MGS, USING LONG STEEL POSTS				
*	606	1,000		GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS				
*	609	1,000		ASPHALT CONCRETE CURB, TYPE I, PG 64-22				
	SP 614 SP 614	1 .000		MAINTAINING TRAFFIC, AS PER PLAN ZONE PERSON				
	614	4,680 100		ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN				
	614	17.30		WORK ZONE EDGE LINE, CLASS 1, 740.02 TYPE 1				
	614	17.30		WORK ZONE LANE LINE, CLASS 1, 740.02 TYPE 1				
	614	14,361		WORK ZONE CHANNELIZING LINE, CLASS 1, 740.02 TYPE 1				
	614	5,364		WORK ZONE CHANNELIZING LINE, CLASS 1, 740.06 TYPE 1				
*	617	37,100	SQ.YD.	SHOULDER PREPARATION				
*	617	3,000		COMPACTED AGGREGATE				
*	617	50	M. GAL.					
**	619 621	1 2,878		FIELD OFFICE, AS PER PLAN RAISED PAVEMENT MARKERS REMOVED				
**		2,878		RAISED PAVEMENT MARKERS REMOVED				
	SP 623	1		CONSTRUCTION LAYOUT SURVEY				
	624	1		MOBILIZATION				
*	SP 626	400		BARRIER REFLECTOR, TYPE A (WHITE)				
**	SP 626	200	EACH	BARRIER REFLECTOR, TYPE B (WHITE)				
**	5	3,880		BARRIER REFLECTOR, TYPE B (YELLOW)				
	SP 626A	1,440		CONSTRUCTION ZONE MARKERS, ONE WAY MODEL				
*	SP 627	1,450		STONE SHOULDER PROTECTION				
**	SP 641A SP 641C	0.60 19.65		TEMPORARY REMOVAL OF EXISTING PAVEMENT MARKINGS REMOVAL OF PAVEMENT MARKING				
**	642	37.80		6" WHITE LANE LINE, TYPE 1				
**	642	19.90		6" WHITE EDGE LINE, TYPE 1				
**	642	19.90		6" YELLOW EDGE LINE, TYPE 1				
	642	5,000		12" WHITE CHANNELIZING LINE, TYPE 1				
	642	5,000	FOOT	WHITE DOTTED LINE, 6" WHITE, TYPE 1				
	SPECIAL	2.00	MILE	SNAP MILL AND FILL				

^{*} CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY CHIEF ENGINEER (SEE GENERAL NOTES).

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EACH SECURING MANHOLE LID

SONIC NAP ALERT PATTERN (SNAP)

EACH AIR SPEED ZONE MARKINGS, AS PER PLAN

SQ.YD. PATCHING CONCRETE BRIDGE DECKS, TYPE B

EACH EXISTING CROSSOVER TO BE CLOSED/RE-OPENED, AS PER PLAN

^{**} PORTION OF THIS ITEM IS CONTINGENCY QUANTITY (SEE PLANS AND GENERAL NOTES).

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			SP 451
APPROX MILEPOST	LA	FULL DEPTH PAVEMENT REPIARS (ASPHALT)	
EB	RIGHT	CENTER	S.Y.
136.11	Х		26.67
136.13	Х		13.33
136.14	Х		13.33
136.19	Х		13.33
137.95		X	13.33
137.98	Х		26.67
139.58	Х		13.33
139.59	Х		13.33
140.3	X		13.33
140.58	X		40.00
143.99	Х	13.33	
WB			
136.1		X	26.67
136.19		X	40.00
138.63	Х		13.33
140.59	Х		26.67
140.61	Х	Х	40.00
141.22	Х	Х	26.67
141.51	Х		13.33
142.3	X		13.33
142.31	Х Х		26.67
142.35	X		13.33
		TOTAL	440.00

FIIII	DEDTH	REPAIR	NOTE	(C).
FULL	DEPIN	KEPAIK	NOIL	. 51:

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.

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		}	526	202]				
APPROX MILEPOST OF BRIDGE	APPROACH SLAB		REINFORCED CONCRETE APPROACH SLABS (T=12")	O APPROACH SLAB					
	LEAD	TRAIL	حببي	S.Y.	~~~		TED LANE		\searrow
E.B.				}	LEFT	CENTER	RIGHT	SHOULDER	
136.2	Х		41.67	41.67	Х	Х)
136.2		Х	76.67	76.67	Х	Х	Х	Х)
138	Х		40.00	40.00			Х	X)
138		Х	58.33	58.33	}	Х	Х	X	
138.2	Х		58.33	58.33	<u>}</u>	Х	Х	X)
138.2		Х	58.33	58.33	>	Х	Х	X)
140.2		Х	41.67	41.67	>	Х	Х)
W.B.					>)
136.2	Χ		76.67	76.67	> X	X	Χ	X	.)
136.2		X	76.67	76.67) X	X	Χ	X	, j
138		Х	76.67	76.67	> x	Х	Х	X	١ ١
138.2	Х		76.67	76.67	> x	Х	Χ	X	١ (
138.2		Х	76.67	76.67	> x	Х	Χ	Х	. 1
140.2	Х		58.33	58.33	> x	Х	Х		3/
140.2		Х	76.67	76.67	X	Х	Х	X	54
140.6	Х		41.67	41.67	}	X *	X *		5
					*- RAMP LANE AND RIGHT LANE			RIGHT LANE	5
		TOTAL	893.33	893.33	امر	منت		ىرىيىت	/

APPROACH SLAB REPAIR NOTE(S):

APPROACH SLAB REMOVAL AND REPLACEMENT PERFORMED DURING A WORK SHIFT SHALL BE
COMPLETED DURING THAT SAME WORK SHIFT. NO
REPAIR SHALL BE LEFT OPEN BEYOND END OF THE
SHIFT. ALL PLANNING, LABOR, EQUIPMENT, MATERIALS
AND INCIDENTALS NEEDED TO INSURE THE WORK IS COMPLETED DURING THE WORK SHIFT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM.

ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN THIS CONTINGENCY ITEM CONSISTS OF PAVEMENT PLANING OF CONCRETE APPROACH AND/OR ABUTMENT SLABS WITH DIAMOND BLADES ONLY. THIS QUANTITY IS INTENDED TO BE UTILIZED TO MÉET PAVEMENT SMOOTHNESS. A QUANTITY OF 1,440 SQ.YD. IS INCLUDED IN THE ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE CHIEF ENGINEER OR AS INDICATED IN THE PLANS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY FOR THE ABOVE MENTIONED WORK SHALL BE DEPENDENT ON AND IN ACCORDANCE WITH ITEM 254-PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN.

ITEM SP 626 - BARRIER REFLECTOR

TITEM SP 626-BARRIER REFLECTOR, TYPE B(YELLOW) SHALL CONSIST OF INSTALLING REFLECTORS ON THE MEDIAN CONCRETE BARRIER WALL AS SPECIFIED IN SP 626 EXCEPT THAT THE REFLECTORS SHALL BE INSTALLED AT A 25' NORMAL SPACING AND AT 10' SPACING IN ALL LOCATIONS WHERE THE MEDIAN SHOULDER NARROWS (MEDIAN BRIDGE PIERS AND SIGN FOUNDATIONS). UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL CAREFULLY REMOVE, SO AS NOT TO OVERLY DAMAGE THE BARRIER THE APPROPRIATE NUMBER OF INSTALLED BARRIÉR REFLECTORS SO THAT THE NUMBER AND SPACING COMPLY WITH THE REQUIREMENTS OF SP 626. THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE BARRIER REFLECTORS.

THIS ITEM SHALL ALSO CONSIST OF REMOVING EXISTING BARRIER REFLECTORS THAT ARE NOT PLACED AT THE APPROPRIATE LOCATION ON THE MEDIAN WALL AS SPECIFIED IN SP 626. THE COST OF REMOVAL SHALL BE CONSIDERED INCIDENTAL TO ITEM SP 626—BARRIER REFLECTOR, TYPE B.

ITEM SP 626—BARRIER REFLECTOR, TYPE A (WHITE) SHALL CONSIST OF INSTALLING REFLECTORS AT GUARDRAIL LOCATIONS IDENTIFIED BY THE CHIEF ENGINEER, WITHIN PROJECT LIMITS, THAT REQUIRE INSTALLATION, REPAIR, OR REPLACEMENT OF BARRIER REFLECTORS. FOR THIS PURPOSE, A CONTINGENCY QUANTITY IS INCLUDED IN THE ESTIMATED QUANTITIES FOR USE AS DIRECTED BY THE

ITEM SPECIAL — PATCHING CONCRETE BRIDGE DECKS, TYPE B
THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY LABOR, MATERIALS, AND EQUIPMENT
TO REPAIR, AT THE DIRECTION OF THE CHIEF ENGINEER, THE WEARING SURFACE OF CONCRETE
BRIDGE DECKS AND ABUTMENT SLABS, INCLUDING THE REMOVAL OF ALL LOOSE AND UNSOUND
CONCRETE, BITUMINOUS PATCHES, SURFACE PREPARATION, BONDING COAT AND THE MIXING,
PLACING, FINISHING, AND CURING OF THE MORTAR OR CONCRETE PATCHES. THIS ITEM SHALL BE
USED AT AREAS DESIGNATED IN THE PLAN OR AS DIRECTED BY THE ENGINEER TO REPAIR ISOLATED POTHOLES AND SCALING OF THE WEARING SURFACE ALONG JOINT ARMOUR, ETC.

MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

QUICK SETTING CONCRETE MORTAR - TYPE 1 OR 2, SHALL COMPLY WITH 705.21.
 CURING MATERIALS - TYPE B PATCHES SHALL COMPLY WITH 705.07.
 MATERIALS SHALL BE LISTED ON THE CURRENT ODOT QUALIFIED PRODUCTS LIST.

REMOVAL OF UNSOUND CONCRETE: THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIAL, EQUIPMENT, LABOR, AND INCIDENTALS TO PERMIT SOUNDING, INSPECTION OF THE DECK AND ABUTMENT SLAB WEARING SURFACES. THE CONTRACTOR'S SUPERINTENDENT SHALL ACCOMPANY THE CHIEF ENGINEER IN MAKING AN EXAMINATION TO MARK THE AREAS OF REPAIRS TO BE MADE. SOUNDING MAY HAVE TO BE DELAYED UNTIL THE DECK IS SUFFICIENTLY DRY TO PERMIT DETECTION OF ALL AREAS OF

THE PERIMETER OF ALL REMOVAL AREAS SHALL BE SAW CUT TO A DEPTH OF 1 INCH TO PRODUCE A VERTICAL OR SLIGHTLY UNDERCUT FACE. ADDITIONAL SAW CUTS MAY BE REQUIRED TO FACILITATE REMOVAL.

ALL UNSOUND CONCRETE INCLUDING ALL PATCHES OTHER THAN SOUND PORTLAND CEMENT CONCRETE AND ALL LOOSE AND DISINTEGRATED CONCRETE, SHALL BE REMOVED. THE UNSOL CONCRETE MAY BE REMOVED BY CHINPPING OR HAND DRESSING. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 35 POUND CLASS AND SHALL BE OPERATED AT AN ANGLE OF LESS THAN 45 DEGREES MEASURED FROM THE SURFACE OF THE DECK. CONCRETE SHALL BE REMOVED IN A MANNER THAT PREVENTS CUTTING, ELONGATING, OR DAMAGING REINFORCING STEEL. WHERE THE BOND BETWEEN THE CONCRETE AND A PRIMARY REINFORCING BAR HAS BEEN DESTROYED, OR WHERE MORE THAN ONE HALF OF THE PERIPHERY OF SUCH A BAR HAS BEEN EXPOSED THE ADJACENT CONCRETE SHALL BE REMOVED TO A DEPTH THAT WILL PROVIDE A MINIMUM 3/4 INCH CLEARANCE AROUND THE BAR EXCEPT WHERE OTHER REINFORCING BARS MAKE THIS IMPRACTICAL. REINFORCEMENT WHICH HAS BECOME LOOSE SHALL BE ADEQUATELY SUPPORTED AND TIED BACK INTO PLACE.

AFTER COMPLETION OF THE SECONDARY REMOVAL OPERATIONS, RE-SOUND THE DECK TO ENSURE THAT ONLY SOUND CONCRETE REMAINS.

MINIMIZE CONSTRUCTION JOINTS. CONSTRUCTION JOINTS SHALL ONLY BE PLACED ON THE PERIMETER OF THE REMOVAL AREAS.

POTENTIAL DELAMINATION.

CLEANING SHALL CLOSELY PRECEDE APPLICATION OF THE BONDING GROUT AND/OR THE PATCHING MATERIAL. THE SURFACE TO BE PATCHED AT THE EXPOSED REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING FOLLOWED BY AN AIR BLAST. IT MAY NECESSARY TO USE HAND TOOLS TO REMOVE SCALE FROM THE REINFORCING STEEL.

FOR TYPE B PATCHES, THE PREPARED SURFACE SHALL BE SURFACE DRY. ANY ADDITIONAL SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE PATCHING MATERIAL WHICH IS USED.

BONDING GROUT:

TYPE B PATCHES SHALL BE BONDED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

TYPE B PATCHING MATERIAL SHALL BE MADE USING QUICK SETTING CONCRETE MORTAR, TYPE 1 OR 2, 705.21. THE MORTAR SHALL BE MIXED AND PLACED AS PER MANUFACTURER'S RECOMMENDATIONS. COURSE AGGREGATE MAY BE ADDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS WHEN THE DEPTH OF THE PATCH EXCEEDS 1 INCH.

TYPE B PATCHES SHALL BE CURED IN ACCORDANCE WITH THE MANUFACTURER'S

MEASUREMENT AND PAYMENT:
THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE MEASURED AS
THE ACTUAL AREA OF BRIDGE DECK REPAIRED, IRRESPECTIVE OF DEPTH. THE QUANTITY
MEASURED SHALL INCLUDE ALL ACCESS, LABOR, TOOLS, MATERIALS, EQUIPMENT AND
INCIDENTALS NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR UNDER THE FOLLOWING CONTRACT ITEM (PAY ITEM):

SPECIAL - 56 SQ.YD. PATCHING CONCRETE BRIDGE DECKS, TYPE B

FINAL LOCATION OF PATCHING WILL BE PROVIDED TO THE CONTRACTOR BY THE CHIEF ENGINEER PRIOR TO COMMENCING THE PROJECT.

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NOTES

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SUB-SUMMARIES

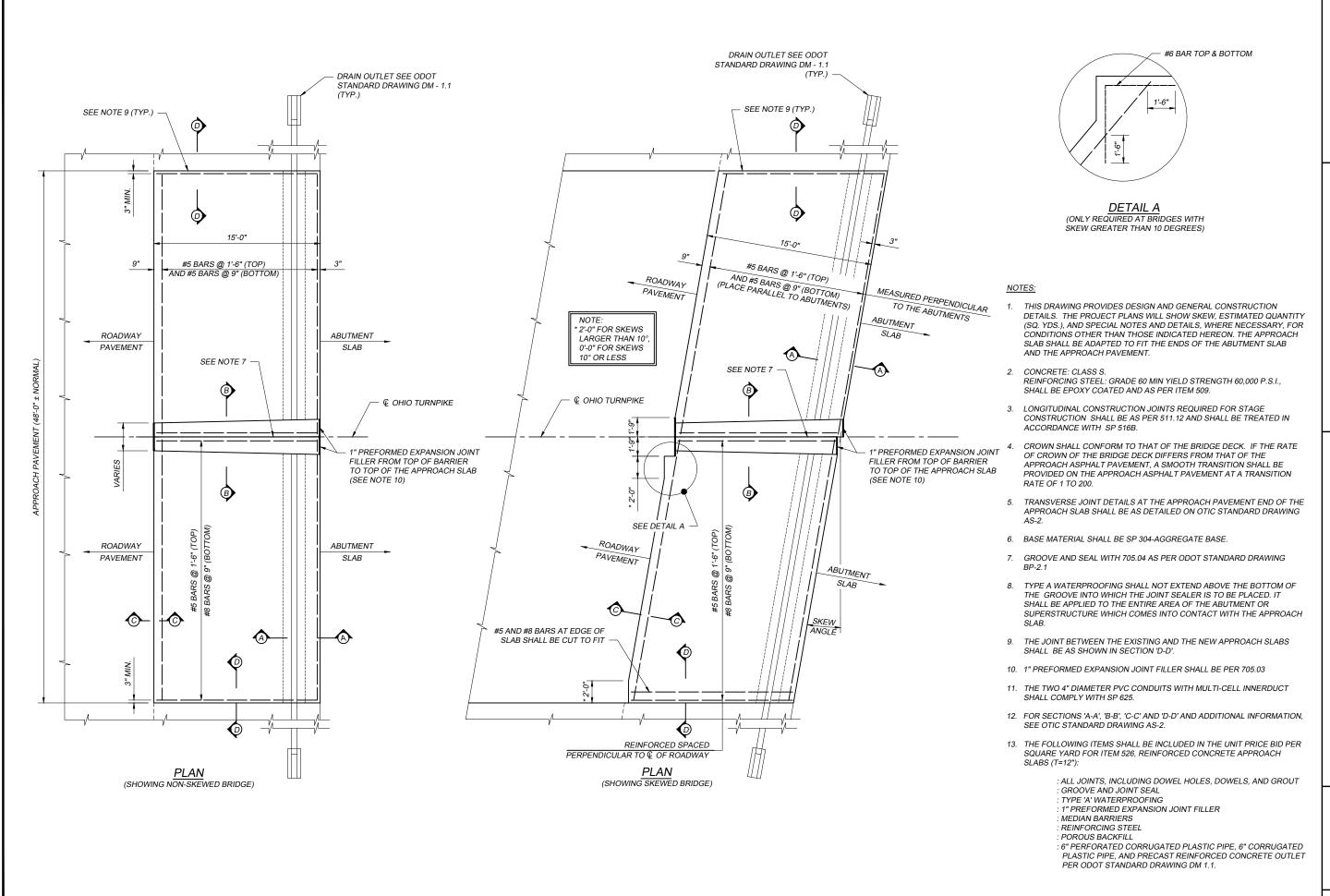
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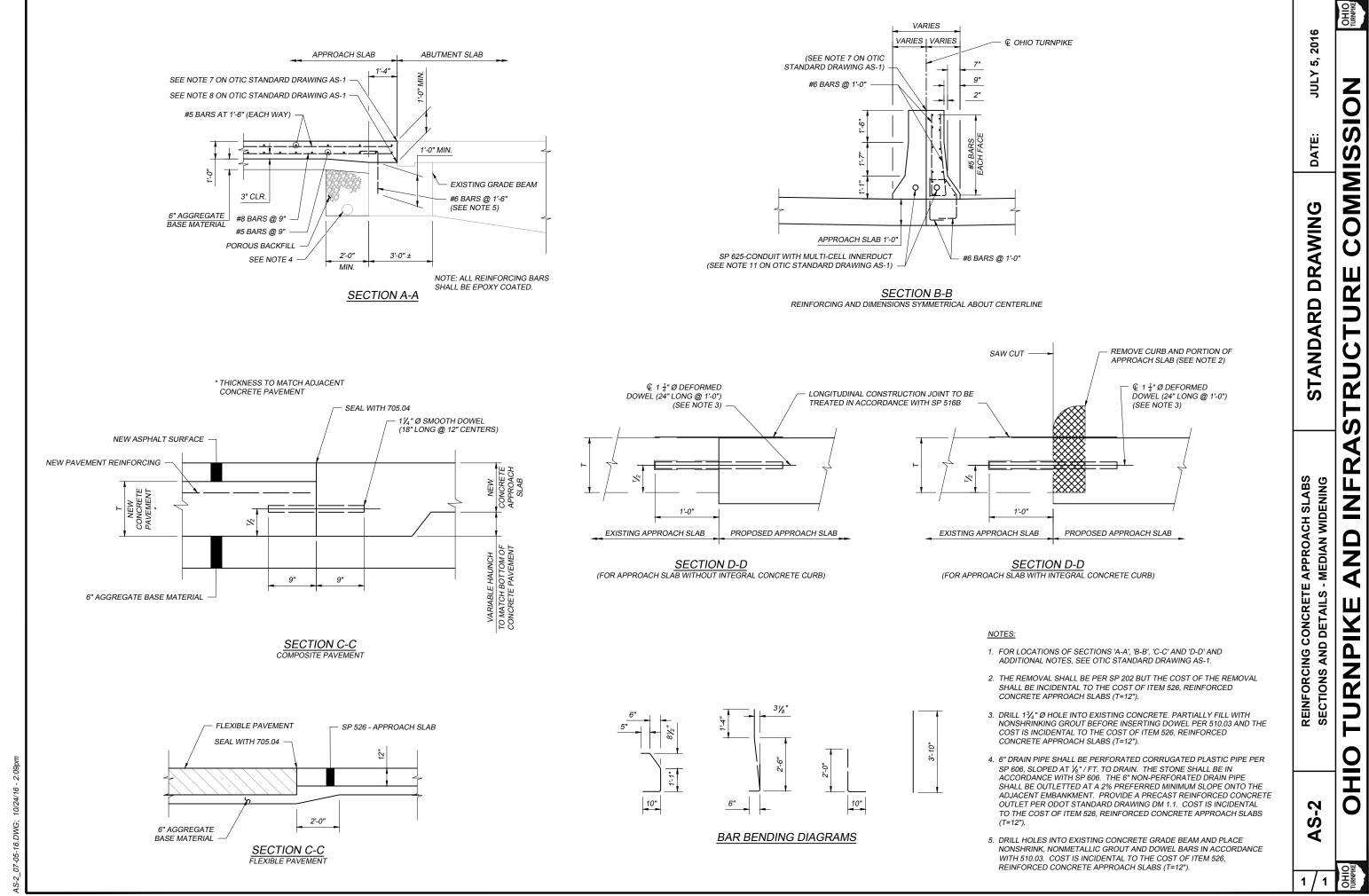
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REINFORCED CONCRETE APPROACH SLABS **MEDIAN WIDENING**



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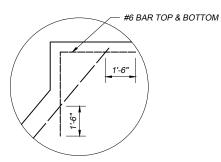
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DETAIL A (ONLY REQUIRED AT BRIDGES WITH SKEW GREATER THAN 10 DEGREES)

NOTES:

- THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, ESTIMATED QUANTITY (SQ. YDS.), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE ABUTMENT SLAB AND THE APPROACH PAVEMENT.
- 2. CONCRETE: CLASS S. REINFORCING STEEL: GRADE 60 MIN YIELD STRENGTH 60,000 P.S.I., SHALL BE EPOXY COATED AND AS PER ITEM 509.
- LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 511.12 AND SHALL BE TREATED IN ACCORDANCE WITH SP 516B.
- CROWN SHALL CONFORM TO THAT OF THE BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH ASPHALT PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED ON THE APPROACH ASPHALT PAVEMENT AT A TRANSITION
- TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE AS DETAILED ON OTIC STANDARD
- 6. BASE MATERIAL SHALL BE SP 304-AGGREGATE BASE.
- GROOVE AND SEAL WITH 705.04 AS PER ODOT STANDARD DRAWING
- 8. TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.
- 9. THE INTEGRAL CURB SHALL BE PROVIDED ON THE NEW APPROACH SLAB AS SHOWN IN SECTION 'D-D'.
- 10. 1" PREFORMED EXPANSION JOINT FILLER SHALL BE PER 705.03
- 11. THE TWO 4" DIAMETER PVC CONDUITS WITH MULTI-CELL INNERDUCT SHALL COMPLY WITH SP 625.
- 12. FOR SECTIONS 'A-A'. 'B-B'. 'C-C' AND 'D-D' AND ADDITIONAL INFORMATION, SEE OTIC STANDARD DRAWING AS-5.
- 13. THE FOLLOWING ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=12"):
 - : ALL JOINTS, INCLUDING DOWEL HOLES, DOWELS, AND GROUT : GROOVE AND JOINT SEAL

 - TYPE 'A' WATERPROOFING
 - : 1" PREFORMED EXPANSION JOINT FILLER
 - : MEDIAN BARRIERS
 - : REINFORCING STEEL

 - : POROUS BACKFILL : 6" PERFORATED CORRUGATED PLASTIC PIPE, 6" CORRUGATED PLASTIC PIPE, AND PRECAST REINFORCED CONCRETE OUTLET PER ODOT STANDARD DRAWING DM 1.1.

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APPROACH SLABS

WIDTH REPLACEMENT CONCRETE FULL REINFORCED

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NPIKE

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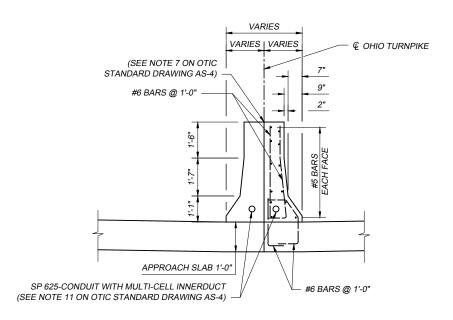
APPROACH SLAB ABUTMENT SLAB SEE NOTE 7 ON OTIC STANDARD DRAWING AS-4 NEW ASPHALT SURFACE SEE NOTE 8 ON OTIC STANDARD DRAWING AS-4 NEW PAVEMENT REINFORCING #5 BARS AT 1'-6" (EACH WAY) EXISTING GRADE BEAM #6 BARS @ 1'-6" (SEE NOTE 5) 3" CLR. SEE NOTE 4

NOTE: ALL REINFORCING BARS

SHALL BE EPOXY COATED.

SECTION C-C

CONCRETE PAVEMENT

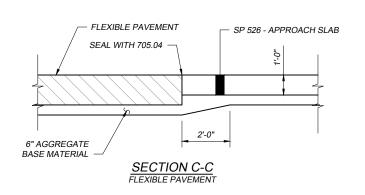


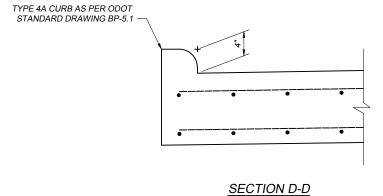
2'-0"

3'-0" ±

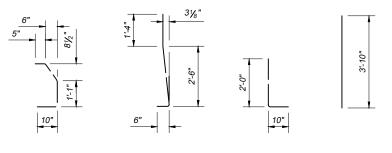
SECTION A-A

SECTION B-B REINFORCING AND DIMENSIONS SYMMETRICAL ABOUT CENTERLINE





6" AGGREGATE BASE MATERIAL



BAR BENDING DIAGRAMS

NOTES:

- 1. FOR LOCATIONS OF SECTIONS 'A-A', 'B-B', 'C-C' AND 'D-D' AND ADDITIONAL NOTES, SEE OTIC STANDARD DRAWING AS-4.
- 2. THE REMOVAL SHALL BE PER 202.05 OF THE ODOT CMS BUT THE COST OF THE REMOVAL SHALL BE INCIDENTAL TO THE COST OF SP 526.
- 3. DRILL 13/4" Ø HOLE INTO EXISTING CONCRETE. PARTIALLY FILL WITH NONSHRINKING GROUT BEFORE INSERTING DOWEL PER 510.03 AND THE COST IS INCIDENTAL TO THE COST OF SP 526 - APPROACH SLAB.
- 4. 6" DRAIN PIPE SHALL BE PERFORATED CORRUGATED PLASTIC PIPE PER SP 606, SLOPED AT $\frac{1}{2}$ " / FT. TO DRAIN. THE STONE SHALL BE IN ACCORDANCE WITH SP 606. THE 6" NON-PERFORATED DRAIN PIPE SHALL BE OUTLETTED AT A 2% PREFERRED MINIMUM SLOPE ONTO THE ADJACENT EMBANKMENT. PROVIDE A PRECAST REINFORCED CONCRETE OUTLET PER ODOT STANDARD DRAWING DM 1.1. COST IS INCIDENTAL TO THE COST OF ITEM 526, REINFORCED CONCRETE APPROACH SLABS
- 5. DRILL HOLES INTO EXISTING CONCRETE GRADE BEAM AND PLACE NONSHRINK, NONMETALLIC GROUT AND DOWEL BARS IN ACCORDANCE WITH 510.03. COST IS INCIDENTAL TO THE COST OF ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=12").

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6" AGGREGATE BASE MATERIAL

#8 BARS @ 9"

#5 BARS @ 9"

POROUS BACKFILL