



**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

ADDENDUM NO. 1

PROJECT NO. 59-20-01
REPAIRS AND RESURFACING
EASTBOUND AND WESTBOUND ROADWAYS
MILEPOST 80.50 TO MILEPOST 90.02
OTTAWA & SANDUSKY COUNTIES, OHIO

OPENING DATE:
2:00 P.M. (EASTERN TIME), DECEMBER 23, 2019

ATTENTION OF BIDDERS IS DIRECTED TO:

QUESTIONS RECEIVED THROUGH 10:00 AM ON DECEMBER 18, 2019

-AND-

MODIFICATIONS TO THE CONTRACT DOCUMENTS

Plan Sheet: 5 and 7 of 14

-and-

Updated OTIC Standard Drawings AS-1 and CB-1

Issued by the Ohio Turnpike and Infrastructure Commission through Jennifer L. Stueber, Esq., General Counsel.

Jennifer L. Stueber, Esq.,
General Counsel

12/18/2019
Date

ANSWERS TO QUESTIONS RECEIVED THROUGH 10:00 A.M. ON DECEMBER 18, 2019:

- Q#1 Bid Ref #4 – Portions of Structure Removed, APP – with the removal and replacement of the wall sections included in this pay item, the full sequence for each location is expected to take a week or so to complete. Multiple locations are expected to be performed concurrently. 1) What maintenance of traffic or traffic protections will be required during this process especially during non-working hours when the existing wall is removed, during the new wall placement, and before the new guardrail ends can be tied in? There are no temporary attenuators nor any temporary barrier wall items listed in the bid summary. 2) Can QC-2 concrete be used in lieu of Class S? 3) Can a spray cure be used in lieu of water cure?
- A#1 *If a hazard is created by removing guardrail and/or parapet wall then the Contractor shall protect the hazard. The Contractor shall submit, for approval by the Chief Engineer, its proposed means and method for protecting the hazard. All labor, equipment, materials and incidentals required to protect the hazard shall be considered incidental to Item SP 614, Maintaining Traffic, As Per Plan.*
QC-2 concrete will not be permitted to be used in lieu of Class S Concrete.
In lieu of water curing, concrete parapets may be cured in accordance with CMS 511.14 Method B, Membrane utilizing ChemMasters Silencure–A or an equivalent equal.
- Q#2 Bid Ref #26 – Reinforced Concrete Approach slabs (T=12”) app, the note (1) on sheet 3/14 says 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. Also, note #4 add a contingency quantity to patch concrete structures to repair the grade beams. 1) If its determined that the grade beam needs patched after removal of approach slab how is the Contractor supposed to patch the grade beam, allow for cure time for patching and pour new approach slab during the same shift? If the grade beam does need patching and the repair area needs to be left opened what traffic protections will be required?
- A#2 *If it is determined that the grade beam needs to be patched and the patching area is adjacent to a live lane of traffic, the contractor may utilize temporary steel road plate(s) to span the repair area. If the grade beam does not need patching, and the Contractor is not able to stage the Work (Note 2 Plan Sheet 3 of 14) the Contractor may use steel road plates to span the repair area that is adjacent to a live lane of traffic. The cost of providing steel road plates shall be considered incidental to Item SP 614, Maintaining traffic, As Per Plan.*
- Q#3 Plans show the existing guardrail to be removed and new guardrail to be installed. Is the contractor to assume the any guardrail removed needs to be reinstalled during the same shift?
- A#3 *During the upgrading of guardrail, no hazard shall be left unprotected during non-working hours. The Contractor shall submit, for approval by the Chief Engineer, its proposed means and method for protecting the hazard. All labor, equipment, materials and incidentals required to protect the hazard shall be considered incidental to Item SP 614, Maintaining Traffic, As Per Plan.*
- Q#4 Bid Ref #18 calls out SP 304 material, Due to the type of use on this project (all contingent), could the material be changed to standard ODOT 304?
- A#4 *The use of ODOT CMS Item 304 is acceptable as a replacement for OTIC Item SP 304 for Bid Reference No. 18, at no additional cost to the Commission. All applicable provisions of Item 304 of the Specifications shall apply.*

Q#5 In SP 627 stone shoulder Protection, #67 aggregate is specified. Can the specification be changed to use 57's instead of 67's?

A#5 *The use of #57 stone in place of #67 stone for Item SP 627, Stone Shoulder Protection is an acceptable replacement and can be provided at no additional cost to the Commission. Where appearing throughout the Contract Documents “#67” is supplemented with “or #57” through this Addendum No. 1.*

Q#6 On sheet 5/14, does note #5 apply for this project?

A#6 *Plan Sheet 5 of 14 has been reviewed and revised. Plan Note #5 has been removed. Revised Plan Sheet 5 of 14 has been included with this Addendum No. 1.*

Q#7 Please clarify the Required Construction Coordination Note on sheet 7/14. Is the Contractor for this project to assume if this project is in stage 1 for example and the Bridge Project needs right center and or right lane closed we will be required to open stage 1 lanes for them?

A#7 *Plan Sheet 7 of 14 has been reviewed and revised. The coordination note has been removed and is no longer applicable to this Project. Revised Plan Sheet 7 of 14 has been included with this Addendum No. 1.*

Q#8 Under SP 104 H. During all phases of construction the following will apply (reducing traffic to a single lane will not be permitted) -
Regarding Summer Weekends, it states noon on Friday through Sunrise on Monday for the period beginning Friday, May 29, 2020 through Sunrise Monday, August 31, 2020. Can the Contractor still have single lane closures on Friday, Saturday and Sunday nights if needed during this time period as long as we follow the permitted lane closures in Appendix B?

A#8 *Single lane closures will be permitted, if needed, during Friday, Saturday, and Sunday provided the request is in accordance with Appendix B - Permitted Lane Closure requirements and approved by the Chief Engineer.*

Recent updates have been made to OTIC Standard Drawings AS-1 and CB-1. The updated drawings are included with this Addendum No. 1

**Receipt of Addendum No. 1
Project No. 59-20-01 is hereby acknowledged:**

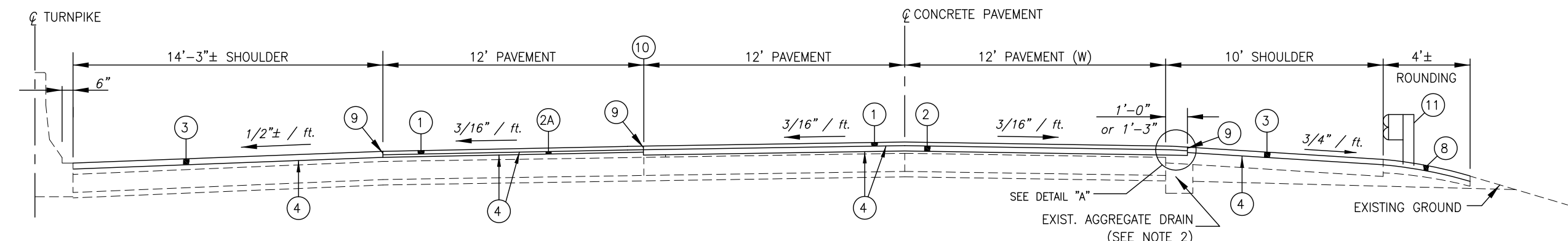
(Firm Name) _____

(Signature) _____

(Printed Name) _____

(Date) _____

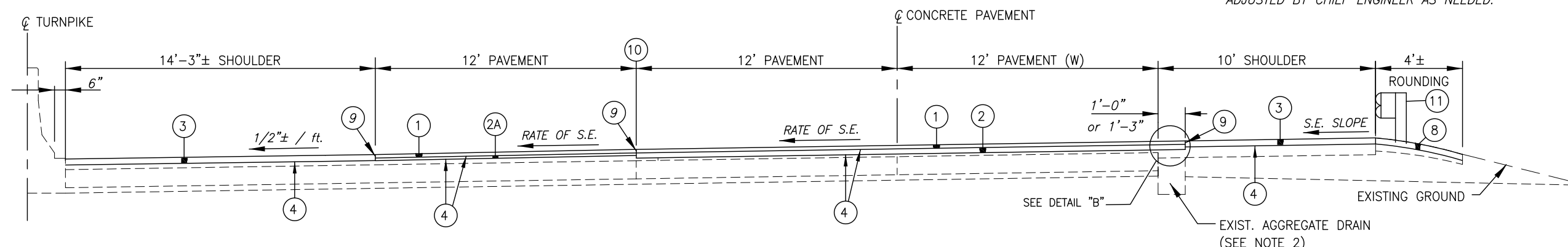
**BIDDERS MUST RETURN THE ABOVE ACKNOWLEDGEMENT
OF RECEIPT OF ADDENDUM NO. 1 WITH THEIR BID.**



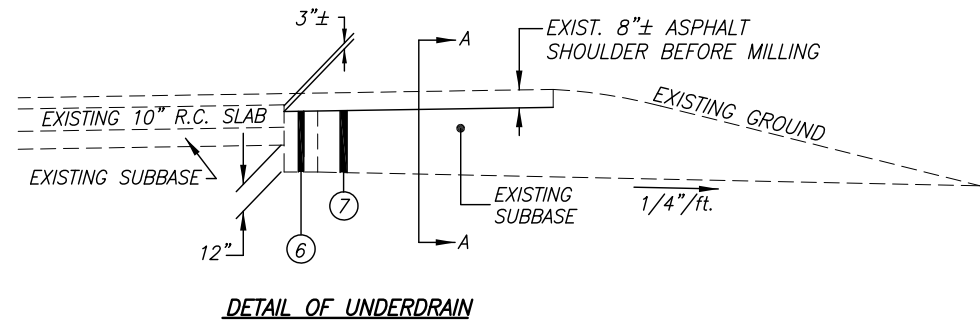
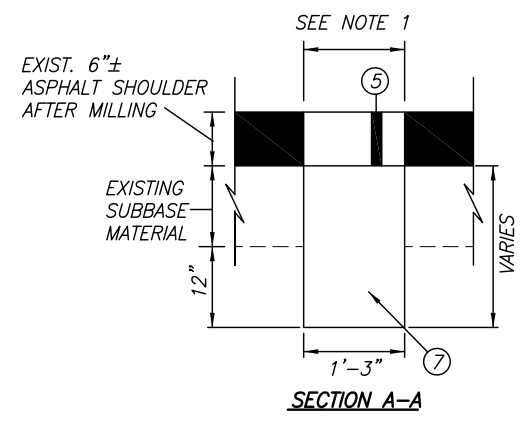
RESURFACING - NORMAL SECTION

LANE WIDTH VARIES (DECEL/ACCEL RAMP)
 (W) = 12' TO 48' EB-STA 391+24± TO STA 399+02±
 EB-STA 3+80± TO STA 5+31±
 EB-STA 6+28± TO STA 15+48±
 (W) = 12' TO 48' WB-STA 381+24± TO STA 391+24±
 WB-STA 391+24± TO STA 392+93±
 WB-STA 402+48± TO STA 410+65±

STATIONS PROVIDED FOR INFORMATION ONLY. LIMITS MAY BE ADJUSTED BY CHIEF ENGINEER AS NEEDED.



RESURFACING - SUPERELEVATED SECTION



LEGEND

- ① SP 404 1 1/4" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 76-22 (FR)
- ②A SP 403 3/4" ASPHALT CONCRETE LEVELING COURSE, USING CRUSHED STONE, PG 76-22 (FR)
- ② SP 402 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, USING CRUSHED STONE, PG 76-22 (FR)
- ③ SP 404 2" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22
- ④ 407 NON-TRACKING TACK COAT
- ⑤ SP 402 6" BITUMINOUS SHOULDER MATERIAL (SEE NOTE 2) (ASPHALT CONCRETE INTERMEDIATE COURSE, PG 64-22)
- ⑥ SP 605 AGGREGATE DRAIN TYPE I (SEE NOTE 2)
- ⑦ SP 605 AGGREGATE DRAIN TYPE II
- ⑧ 617 COMPACTED AGGREGATE (W/O GUARDRAIL) OR SP 627 STONE SHOULDER PROTECTION (W/ GUARDRAIL)
- ⑨ SP 404A JOINT SEALER
- ⑩ SPECIAL ASPHALT REJUVENATOR, POLYMER EMULSION
- ⑪ 606 GUARDRAIL, TYPE MGS, USING LONG STEEL POSTS

NOTES

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 OF EITHER TYPE I OR TYPE II DRAINS.
2. TYPE I AGGREGATE DRAINS WILL BE INSTALLED AS DIRECTED BY THE ENGINEER AND ADJACENT TO ALL NEW FULL DEPTH CONCRETE REPLACEMENT. ADJACENT TO FULL DEPTH REPLACEMENT THE EXISTING TYPE I DRAIN SHALL BE SAW CUT OR PAVEMENT PLANED FULL DEPTH OF SHOULDER; THE EXISTING DRAIN REMOVED AND REPLACED TO THE DEPTH INDICATED HEREON. 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)
3. RATE OF APPLICATION FOR NON-TRACKING TACK COAT MAY BE ADJUSTED BY CHIEF ENGINEER AS NEEDED.
4. SEE EXISTING TYPICAL SECTIONS AND PAVEMENT PLANING DETAILS FOR SHOULDER THICKNESS LIMITS.
5. CONTRACTOR TO FOLLOW EXISTING JOINT LINE FOR EXISTING PAVEMENT PLANING AND RESURFACING UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER.
6. THE USE OF SLAG OR RAP/MILLINGS FOR ITEM 617, COMPACTED AGGREGATE, IS PROHIBITED.

SEE SHEET 6 FOR DETAILS "A" AND "B"

59-20-01-004-006.DWG; 12/17/19 - 10:09am

DESIGN AGENCY	BY DATE	REVISIONS	NO.	DATE
	JJS 12/18/18			
		ADDENDUM NO. 1		
DESIGNED	CHECKED	IN CHARGE	ADY	
JJS	JJS	JJS		
DRAWN	CAM			
JJS	ADY			
TYPICAL SECTIONS ASPHALT OVERLAY SECTIONS				
PROJECT 59-20-01				
5 14				

59-20-01-007-008.DWG: 12/17/19 - 10:22am

SAFETY AND CONTINUITY OF OPERATIONS OF TRAFFIC ON THE OHIO TURNPIKE SHALL BE OF THE UTMOST IMPORTANCE AND SHALL AT ALL TIMES BE PROTECTED AND SAFEGUARDED. THE CONTRACTOR SHALL DAILY, NOT LATER THAN 12 O'CLOCK NOON, INFORM THE CHIEF ENGINEER AS TO HIS OPERATIONS AND METHOD OF WORK FOR THE FOLLOWING DAY. WHENEVER SUCH WORK, IN THE OPINION OF THE CHIEF ENGINEER, MAY AFFECT THE SAFETY OF TRAFFIC ON THE OHIO TURNPIKE, THE METHOD OF DOING SUCH WORK SHALL BE SUBMITTED TO THE CHIEF ENGINEER FOR APPROVAL, WITHOUT WHICH IT SHALL NOT BE COMMENCED OR PROSECUTED. ANY REQUEST FOR WORK INVOLVING LANE CLOSURE(S) MUST BE SUBMITTED ON AN APPROVED LANE CLOSURE REQUEST FORM SUPPLIED BY THE COMMISSION.

EXISTING UTILITIES

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE AND THE OWNERS OF ANY UNDERGROUND UTILITY FACILITY IN THE AREA FOR APPROPRIATE MARKING. THE CONTRACTOR SHALL BE AWARE THAT WITHIN THE PROJECT LIMITS, CENTURYLINK HAS FIBER OPTIC CABLES. THE CABLE RUNS ALONG THE NORTH RIGHT OF WAY.

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE EXISTING O.T.I.C. UNDERGROUND LIGHTING OR O.T.I.C. COMMUNICATIONS FACILITIES, THE CONTRACTOR SHALL NOTIFY O.T.I.C. DIVISION TRADES SUPERVISOR BASED ON LOCATION OF PROJECT AS INDICATED ON THE TITLE SHEET.

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 THE ITEM:

- ITEM SP 202B-CRACK REPAIR, 1" OR LESS, USING SAND ASPHALT 50 CU.YD.
- ITEM SP 202B-CRACK REPAIR, 1" OR LESS, USING HOT JOINT SEALER 3,000 GAL.
- ITEM SP 202B-CRACK REPAIR, WIDER THAN 1" AND LESS THAN 1" IN DEPTH, USING ITEM SP 404 (PG 64-22) 50 CU.YD.
- ITEM SP 202B-CRACK REPAIR, WIDER THAN 1" AND GREATER THAN 1" IN DEPTH, USING ITEM SP 402 (PG 64-22) 50 CU.YD.
- ITEM SP 202B-3 CORNER CRACK REPAIR, USING ITEM SP 402 (PG 64-22) 50 CU.YD.
- ITEM SP 202B-REPAIR EXISTING EXPANSION JOINT, USING ITEM SP 404(PG 64-22) 20 CU.YD.

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 50 CU.YD.
- ITEM 204 - EMBANKMENT 50 CU.YD.
- ITEM 204 - SUBGRADE COMPACTION 300 SQ.YD.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

PORTIONS OF STRUCTURE REMOVED, AS PER PLAN SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO REMOVE THE EXISTING BRIDGE TERMINAL ASSEMBLY, THE EXISTING BRIDGE PARAPET (ASSUME 10' MAX.) TO THE CONSTRUCTION JOINT AND CONSTRUCT NEW PARAPET TRANSITION AS PER MGS-3.1, MGS-3.2, DGSTR-1, DGSTR-2, DGSTR-3, AND DGSTR-4 TO ACCEPT THE PERTINENT BRIDGE TERMINAL ASSEMBLY AS DETAILED IN THESE PLANS. ANY ADDITIONALLY REQUIRED CONCRETE CURBING AND REINFORCING, AS SPECIFIED BY THE STANDARD DRAWINGS, SHALL BE INSTALLED AS WELL AND PAID FOR UNDER ITEM 609. THE CONTRACTOR SHALL VERIFY CONDITIONS OF GUARDRAIL TERMINATION AND CURBING PRIOR TO START OF WORK.

ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE PRICE BID FOR EACH ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN AND ITEM 609, CONCRETE CURB, TYPE 2-A, AS PER PLAN RESPECTIVELY.

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 MEET PAVEMENT SMOOTHNESS. A QUANTITY OF 2,800 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 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 REPAIRS.

ITEM SP 404A - JOINT SEALER

A CONTINGENCY QUANTITY OF 1,000 FOOT. IS INCLUDED IN THE ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER FOR SEALING BUTT JOINTS AND LOCATIONS WHERE EXISTING PAVEMENT AND PROPOSED PAVEMENT MEET.

ADDITIONALLY, A QUANTITY HAS BEEN INCLUDED IN THE PLANS TO SEAL THE LONGITUDINAL JOINT CREATED DURING PART WIDTH CONSTRUCTION AT THE PLAZA RAMPS.

ITEM 609 - ASPHALT CONCRETE CURB, PG 64-22, STANDARD TYPE 1

A QUANTITY OF 1,000 FOOT IS INCLUDED IN THE ESTIMATED QUANTITIES FOR USE FOR REPAIR/REPLACEMENT OF CURBING WITHIN PROJECT LIMITS OR AS DIRECTED BY THE CHIEF ENGINEER. THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, REMOVAL OF CURB, CLEANING, TACKING WITH NON-TRACKING TACK COAT AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE CONTRACTOR PROVIDING APPROXIMATELY 50 CU.YD. OF ITEM 614-ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. THIS ITEM SHALL BE USED FOR WEDGING PURPOSES TO AID IN TRANSITIONING TRAFFIC FROM NORMAL TO FINAL SURFACE AND BACK AT THE PERTINENT TOLL/SERVICE PLAZAS FOR EACH PART OF THE CONTRACT. SMOOTH TRANSITIONS BETWEEN SURFACES SHALL BE MAINTAINED AT ALL TIMES AT TOLL/SERVICE PLAZA ACCEL/DECEL. AT NO TIME SHALL TRAFFIC BE SUBJECTED TO SUDDEN DIPS, DROPOFFS, OR BUMPS. ASPHALT WEDGING OF TRANSITION AREAS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MT-101.90. MATERIAL SUPPLIED FOR THIS ITEM SHALL COMPLY WITH THE REQUIREMENTS OF 614.13.

PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM INCLUDING PLACING AND REMOVING THE ASPHALT CONCRETE WEDGES (WHEN NEEDED). THIS ITEM SHALL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 614-ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN.

ITEM 617/SP 627

THE FOLLOWING ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE, OR AS DIRECTED BY THE CHIEF ENGINEER, FOR ADDING NEW MATERIAL UNDER GUARDRAIL AND ALONG SELECTED ROADWAY LOCATIONS TO BRING THE AREA UP TO GRADE AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ITEM:

- ITEM 617-SHOULDER PREPARATION 30,870 SQ.YD.
- ITEM 617-COMPACTED AGGREGATE 2670 CU.YD.
- ITEM 617-WATER 50 M.GAL.
- ITEM SP 627-STONE SHOULDER PROTECTION 1,025 CU.YD.
- ITEM SPECIAL-REGRADING UNDER GUARDRAIL 12,300 SQ.YD. (*)

(*)- ITEM INCLUDED TO BE USED, AS DIRECTED BY THE CHIEF ENGINEER, TO LEVEL AREAS UNDER EXISTING AND PROPOSED GUARDRAIL LOCATIONS WHERE STONE SHOULDER PROTECTION IS MORE THAN 1" ABOVE THE EDGE OF THE SHOULDER PAVEMENT. ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NEEDED TO LOWER THE STONE SHOULDER PROTECTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM. ALL LOCATIONS WILL BE DELINEATED BY THE CHIEF ENGINEER.

ITEM 619 - FIELD OFFICE, AS PER PLAN

THE FIELD OFFICE PROVIDED SHALL MEET THE REQUIREMENTS OF ITEM 619, TYPE B FIELD OFFICE WITH THE FOLLOWING EXCEPTION(S):

-THE FIELD OFFICE WILL BE PAID AT THE CONTRACT LUMP SUM PRICE BID, WHICH SHALL BE FULL COMPENSATION FOR FURNISHING AND MAINTAINING FACILITIES, ALL UTILITIES, HEAT, ELECTRIC, TELEPHONES, INTERNET, WEEKLY CLEANING AND REMOVAL OF FACILITIES UPON COMPLETION OF THE CONTRACT.

ITEM SP 626 - BARRIER REFLECTOR

ITEM 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 FACE, THE APPROPRIATE NUMBER OF INSTALLED BARRIER 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) OR TYPE B (WHITE) SHALL CONSIST OF INSTALLING REFLECTORS AT GUARDRAIL AND/OR PARAPET WALL 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 CHIEF ENGINEER.

- ITEM SP 626-BARRIER REFLECTOR TYPE A 400 EACH
- ITEM SP 626-BARRIER REFLECTOR TYPE B 200 EACH

ITEM SPECIAL - ASPHALT REJUVENATOR, POLYMER EMULSION

THIS ITEM SHALL CONSIST OF SUPPLYING AND PLACING APPROXIMATELY 29,700 SQ.YD. OF A POLYMERIZED EMULSION. THE POLYMERIZED EMULSION SHALL BE JOINTBOND AS MANUFACTURED BY D & D EMULSIONS OR APPROVED EQUAL BY THE CHIEF ENGINEER.

FOR THE LONGITUDINAL JOINTS, THE POLYMERIZED EMULSION SHALL BE APPLIED 36" WIDE AND CENTERED ON THE LONGITUDINAL JOINT BETWEEN THE CENTER AND LEFT LANE. THE POLYMERIZED EMULSION SHALL BE PLACED AFTER THE SP 404 SURFACE COURSE IS COMPLETE AND IN PLACE (BOTH LANES PAVED) AND SHALL BE APPLIED TO THE LONGITUDINAL JOINT IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. CONTRACTOR SHALL ALSO PERFORM ANY MANUFACTURER RECOMMENDED TEST SECTIONS TO VERIFY APPLICATION RATE TO THE NEW PAVEMENT SURFACE AND THE EXISTING PAVEMENT AS WELL. ANY ADJUSTMENTS TO THE APPLICATION RATE WILL BE MADE BY THE MANUFACTURER BASED ON FIELD TESTING RESULTS.

CONTRACTOR SHALL ALSO APPLY THE POLYMER EMULSION PRIOR TO ANY FINAL STRIPING OR RE-STRIPING OPERATIONS.

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT PRICE PER SQ.YD. FURNISHED, INSTALLED AND ACCEPTED BY THE CHIEF ENGINEER, AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS, TEMPORARY TRAFFIC CONTROL, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

THE CONTRACTOR SHALL SUPPLY 2 PCMS FOR THE DURATION OF THE PROJECT. THE PCMS SHALL BE AN AMERICAN SIGNAL CMS-T333 LED PORTABLE FULL-MATRIX MESSAGE BOARD OR APPROVED EQUAL AND SHALL HAVE AS A MINIMUM THE FOLLOWING FEATURES & OPTIONS:

- FULL-MATRIX
- PORTABLE
- LED
- FOCUSING LENS TO COVER EACH INDIVIDUAL LED
- WIRELESS REMOTE CONTROL
- SOLAR-POWERED (W/AIMSTAR ADJUSTABLE SOLAR ASSEMBLY)
- NUMBER OF SOLAR PANELS: TWO (2)
- ONE (1), TWO (2), OR THREE (3) LINE MESSAGES
- EIGHTEEN INCH (18") CHARACTER DISPLAY
- FULL-SIZE KEYBOARD TERMINAL
- HANDHELD CONTROLLER WITH VT 100 CURSOR CONTROL COMMANDS
- LEGIBILITY DISTANCE (MOST CONDITIONS): ONE THOUSAND TWO-HUNDRED FIFTY FEET (1,250')
- INDIVIDUAL AND REMOVABLE POLYCARBONATE LENS FOR EACH ROW OF LED PANELS, WITH FLAT-BLACK SCREENING TO REDUCE GLARE
- TEMPERATURE RANGE: MINUS 30 DEGREES FARENHEIGHT TO ONE HUNDRED SIXTY-FIVE DEGREES FARENHEIGHT (-300 F TO 1650 F)
- TIRES: FIFTEEN INCHES (15")
- STEEL BATTERY ENCLOSURES
- NUMBER OF BATTERIES: SIX (6) EACH 12VDC
- BATTERY ENERGY: THIRTY (30) DAYS
- TRAILER LENGTH: ONE HUNDRED NINETY-SIX INCHES (196")
- TRAILER WIDTH: ONE HUNDRED TWENTY-SIX INCHES (126")
- HEIGHT FULLY RAISED: ONE HUNDRED SIXTY-TWO INCHES (162")
- HEIGHT IN TRANSPORT POSITION: ONE HUNDRED SEVEN INCHES (107")
- TRAILER DIMENSIONS: ONE HUNDRED NINETY-SEVEN INCHES LONG (197") X SEVENTY-NINE POINT TWO INCHES WIDE (79.2")
- PINTLE HITCH
- NTCIP COMPLIANT
- COMPATIBLE WITH GUI SOFTWARE CURRENTLY UTILIZED WITH EXISTING CMS-T333 MODELS OPERATING ON THE OHIO TURNPIKE (EASYHOST SOFTWARE)
- MODEM: PEPWAVE OR APPROVED 4G LTE COMPATIBLE WIRELESS MODEM

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGN BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE CHIEF ENGINEER. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE CHIEF ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE 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 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. THE SIGN SHALL HAVE TWO DIFFERENT MEMORIES [PROM AND RAM] AND CAPABILITY TO STORE UP TO 99 MESSAGES IN EACH MEMORY. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. IN ORDER TO CONVEY A MAXIMUM OF INFORMATION AT A SINGLE GLANCE, ONLY THREE LINE PRESENTATION FORMATS WITH A MAXIMUM OF THREE MESSAGE PHASES WILL BE PERMITTED. NORMALLY, ONLY A MAXIMUM OF TWO MESSAGE PHASES SHOULD BE EMPLOYED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF SP 614. 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.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR ITEM SP 614 - MAINTAINING TRAFFIC AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

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 WITH NON-TRACKING TACK COAT; AND PAVING THE MILLED AREA WITH 1 1/2" OF ITEM SP 404 - ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, 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.

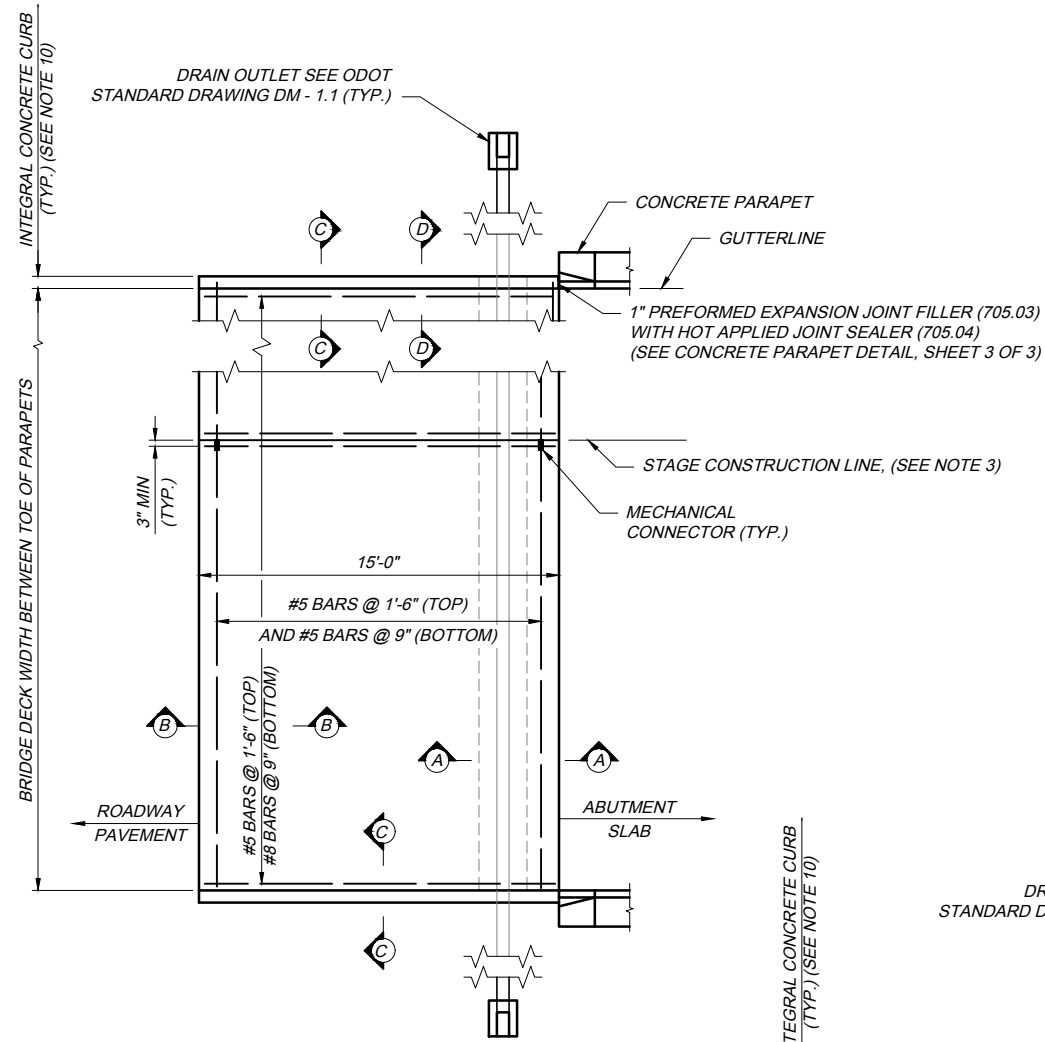
ADDITIONALLY, EASTBOUND AND WESTBOUND FOR BOTH STAGES, THE 5' WIDE SNAP MILL AND FILL SHALL BE CENTERED TO INCLUDE THE REMOVAL OF THE EXISTING SNAPS, THE AREA BETWEEN THE YELLOW/WHITE EDGE LINE AND THE EXISTING SNAPS, AND THE YELLOW/WHITE EDGE LINE. THE CONTRACTOR SHALL PLAN ITS OPERATIONS ACCORDINGLY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

REQUIRED CONSTRUCTION COORDINATION

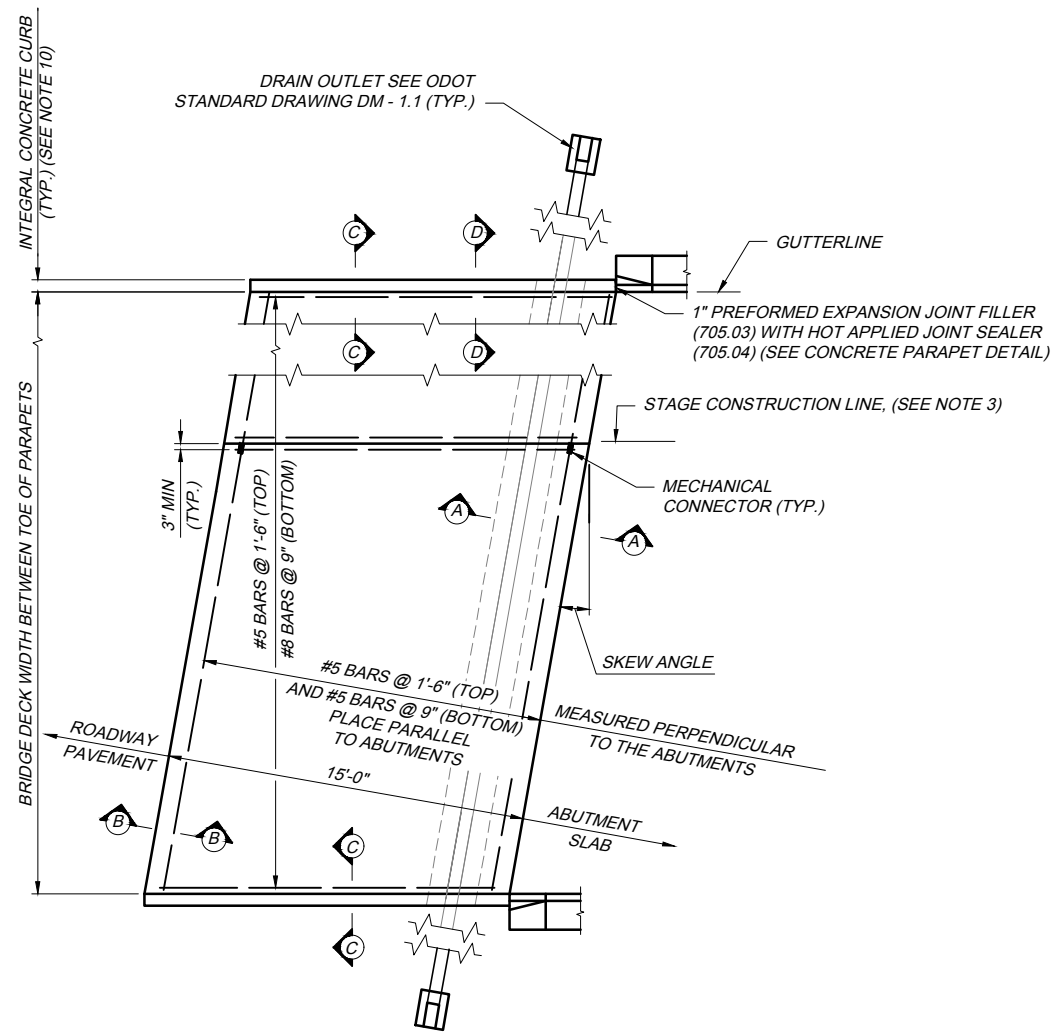
THE CONTRACTOR SHALL BE AWARE THAT IT IS EXPECTED THAT THE CONTRACTOR SHALL COOPERATE AND COORDINATE TEMPORARY TRAFFIC CONTROL ZONES WITH AN ADJACENT TURNPIKE BRIDGE PROJECT, 43-20-03 (LOCATED AT MP 91.1 AND MP 91.6). THE COST OF COORDINATING THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR THE COORDINATING AND PLANNING OF THE TEMPORARY TRAFFIC CONTROL ZONES.

DESIGN AGENCY		BY DATE	
REVISIONS		JJS 12/18/19	
ADDENDUM NO. 1			
NO.	DATE	BY	DATE
1		JJS	
CHECKED		CAM	
JJS		JJS	
DRAWN		ADY	
JJS		ADY	
GENERAL NOTES			
PROJECT 59-20-01			
7		14	

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



PLAN
(SHOWING NON-SKEWED APPROACH SLAB)

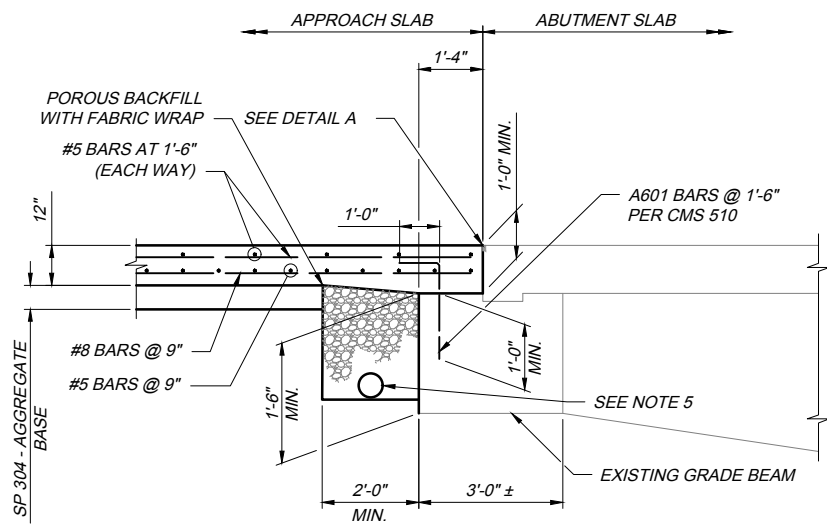


PLAN
(SHOWING SKEWED APPROACH SLAB)

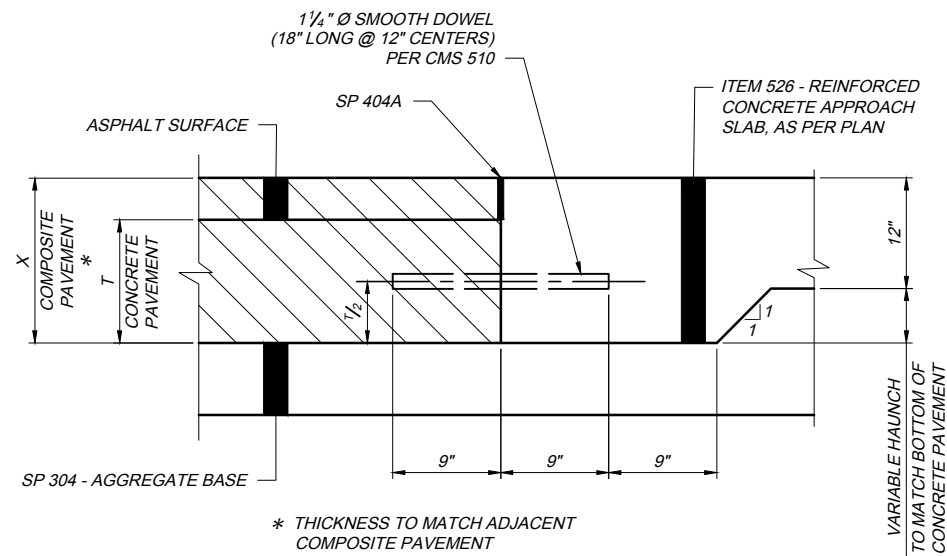
NOTES

- THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, CURBS IF ANY, ESTIMATED QUANTITIES, AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREIN. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.
- REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH SP 509. THE REINFORCING CLEARANCE TO THE CONCRETE SURFACE SHALL BE 3" UNLESS OTHERWISE SHOWN.
- LONGITUDINAL CONSTRUCTION JOINTS AND PERMISSIBLE CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CMS 509.07 AND 511.09. THE SURFACE SHALL BE TREATED IN ACCORDANCE WITH SP 516B AND AS DETAILED ON THE WIDENING DETAIL. PROVIDE 2'-6" LAP SPLICE OF REBARS OR PROVIDE MECHANICAL CONNECTORS PER CMS 509.07. A KEY WAY SHALL BE PROVIDED IN ACCORDANCE WITH CMS 511.09.
- THE CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT, ABUTMENT SLAB, AND BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED ON THE APPROACH PAVEMENT.
- 6" PERFORATED PIPE UNDERDRAIN WITH FABRIC WRAP PER SP 605 SHALL BE SLOPED AT 1/8" / FT. UNDER THE APPROACH SLAB THEN DRAINED WITH THE SAME PIPE MATERIAL AND BACKFILLED AT A 2% PREFERRED MINIMUM SLOPE ONTO THE ADJACENT EMBANKMENT. THE STONE SHALL BE IN ACCORDANCE WITH SP 605. PROVIDE A PRECAST REINFORCED CONCRETE OUTLET AND A TIED CONCRETE BLOCK MAT, TYPE 1 PER ODOT STANDARD DRAWING DM 1.1. THE UNDERDRAIN SHALL START AT THE MEDIAN AND DRAIN TOWARD THE OUTSIDE SHOULDER ON ALL MAINLINE APPROACH SLABS.
- BASE MATERIAL SHALL BE SP 304 - AGGREGATE BASE.
- SAW CUT A 1/2" X 2" GROOVE AND THEN APPLY A HOT JOINT SEALER PER CMS 705.04 (SEE DETAIL A, SHEET 3 OF 3).
- TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE 1/2" X 2" GROOVE. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT WHICH COMES INTO CONTACT WITH THE APPROACH SLAB (SEE DETAIL A, SHEET 3 OF 3).
- 1" PREFORMED EXPANSION JOINT FILLER SHALL BE PER CMS 705.03.
- CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT.
- APPROACH SLAB WIDTH SHALL EXTEND FROM GUTTER LINE TO GUTTER LINE AND BE 6" WIDER FOR EACH CURB BEYOND THE EDGE OF THE PARAPETS.
- REMOVAL OF EXISTING CURB FOR APPROACH SLAB WIDENING SHALL BE PER SP 202 AND THE REMOVAL SHALL BE INCIDENTAL TO THE COST OF ITEM 526.
- FRONT FACE OF CURB SHALL LINE UP WITH THE FRONT FACE OF THE GUARDRAIL PER ODOT STANDARD DRAWING MGS 3.1. IF CURB IS NOT REQUIRED ON THE APPROACH ROADWAY, THE CURB SHALL STILL MEET THE LENGTH AS REQUIRED ON ODOT STANDARD DRAWING MGS 3.1.
- THE DETERIORATED PORTIONS OF THE APPROACH SLAB SEAT SHALL BE RECONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THIS DETAIL OR AS DIRECTED BY THE CHIEF ENGINEER. REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH SP 202 - PORTIONS OF STRUCTURE REMOVED. PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID FOR SP 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN AND SHALL INCLUDE THE SP 202 REMOVAL.
- THE APPROACH SLAB SHALL BE WATER CURED WITH TWO LAYERS OF WET BURLAP FOR THE FIRST 24 HOURS OF THE 7 DAY CURING PERIOD. AFTER 24 HOURS, WHITE POLYETHYLENE SHEETING MAY BE APPLIED OVER THE PREVIOUS LAYERS OF WET BURLAP FOR THE REMAINDER OF THE CURING PERIOD. WATER SHALL BE CONTINUOUSLY APPLIED TO THE BURLAP AND THE BURLAP SHALL REMAIN WET DURING THE ENTIRE CURING PERIOD. ALL REQUIREMENTS FOR PLACING AND MAINTAINING THE SHEETING AND/OR BURLAP SHALL BE IN ACCORDANCE WITH CMS 511.14. STORAGE TANKS FOR CURING WATER SHALL BE ON SITE AND FILLED BEFORE CONCRETE PLACEMENT WILL BE PERMITTED TO START. STORAGE TANKS SHALL REMAIN ON SITE THROUGHOUT THE ENTIRE CURE PERIOD. THEY SHALL BE REPLENISHED, AS REQUIRED, WITH A SHUTTLE TANKER TRUCK OR A LOCAL WATER SOURCE SUCH AS A FIRE HYDRANT. CARE SHALL BE TAKEN TO AVOID THERMAL SHOCK OR EXCESSIVELY STEEP THERMAL GRADIENTS DUE TO THE USE OF COLD CURING WATER. CURING WATER SHALL NOT BE MORE THAN TWENTY (20)° F COOLER THAN THE CONCRETE, BECAUSE OF SURFACE TEMPERATURE STRESSES WHICH COULD CAUSE CRACKING.
- CURING CONCRETE DURING COLD WEATHER SHALL BE PER CMS 511.12.
- THE FOLLOWING ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN:
 - OTIC STANDARD DRAWING AS-1, ALL DETAILS
 - ALL JOINTS, INCLUDING MECHANICAL CONNECTORS, DOWEL HOLES, DOWELS, AND GROUT
 - GROOVE / SAW CUT AND JOINT SEALER
 - TYPE 'A' WATERPROOFING
 - 1" PREFORMED EXPANSION JOINT FILLER WITH JOINT SEALER
 - MEDIAN AND OUTSIDE BARRIERS / INTEGRAL CURBS
 - EPOXY COATED REINFORCING STEEL
 - 6" PERFORATED PIPE UNDERDRAIN WITH FABRIC WRAP, POROUS BACKFILL, PRECAST REINFORCED CONCRETE OUTLET AND A TIED CONCRETE BLOCK MAT, TYPE 1.
 - HIGH MOLECULAR WEIGHT METHACRYLATE (SP 516B)

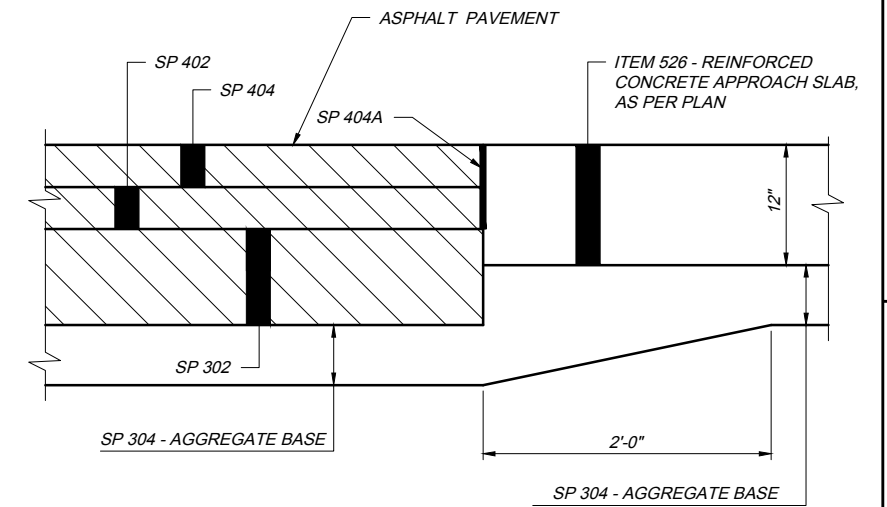
AS-1 2019.12.31.DWG: 12/18/19 - 8:47am



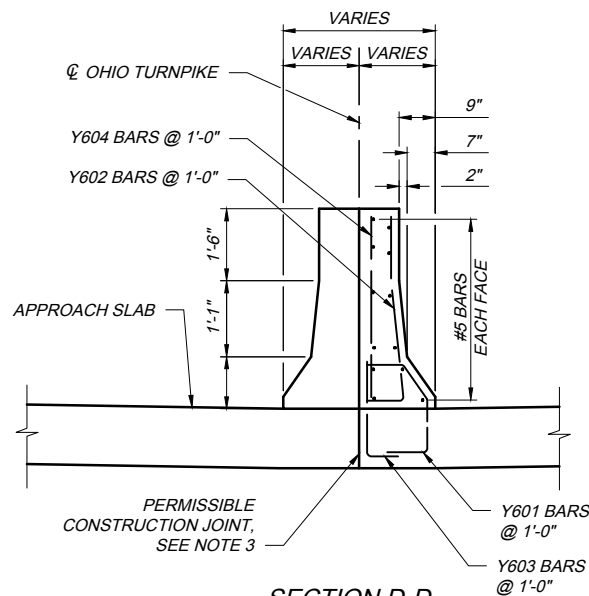
SECTION A-A



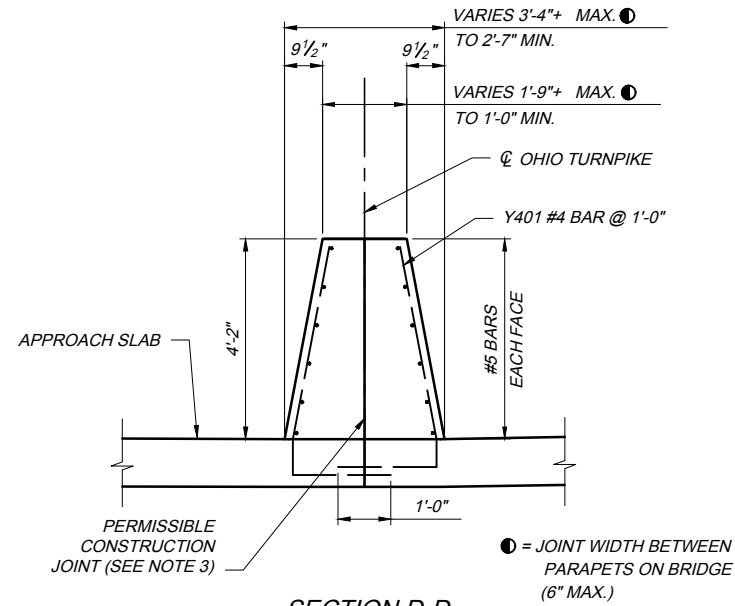
SECTION B-B
COMPOSITE PAVEMENT



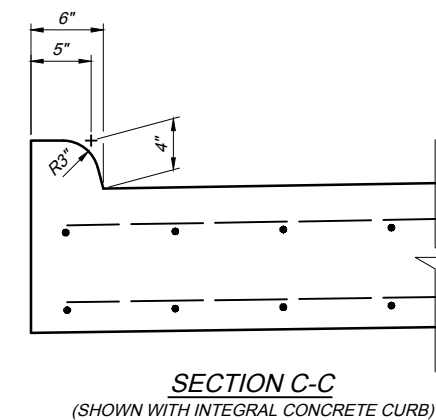
SECTION B-B
FLEXIBLE PAVEMENT



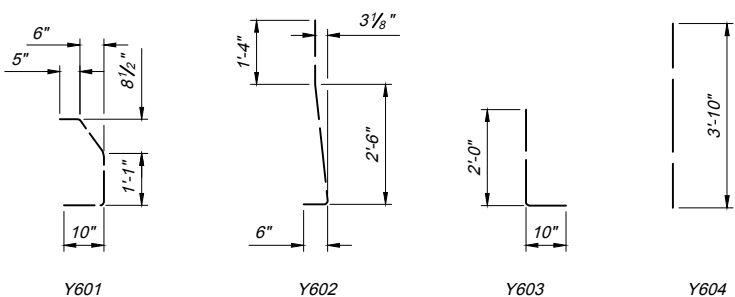
SECTION D-D
REINFORCING AND DIMENSIONS
SYMMETRICAL ABOUT CENTERLINE
(SHOWN WITH 50" NEW JERSEY BARRIER)



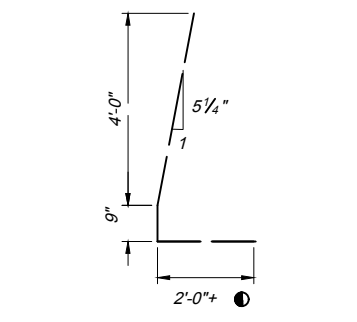
SECTION D-D
REINFORCING AND DIMENSIONS SYMMETRICAL ABOUT CENTERLINE
(SHOWN WITH 50" CONCRETE BARRIER, SINGLE SLOPE)



SECTION C-C
(SHOWN WITH INTEGRAL CONCRETE CURB)



BAR BENDING DIAGRAMS
(50" NEW JERSEY BARRIER)



BAR BENDING DIAGRAMS
(50" CONCRETE BARRIER, SINGLE SLOPE)

BAR BENDING DIAGRAMS
(GRADE BEAM)

NOTES
FOR NOTES, SEE SHEET 1 OF 3.
FOR DETAIL A, SEE SHEET 3 OF 3.

DATE: DECEMBER 31, 2019

STANDARD DRAWING

REINFORCED CONCRETE APPROACH SLAB

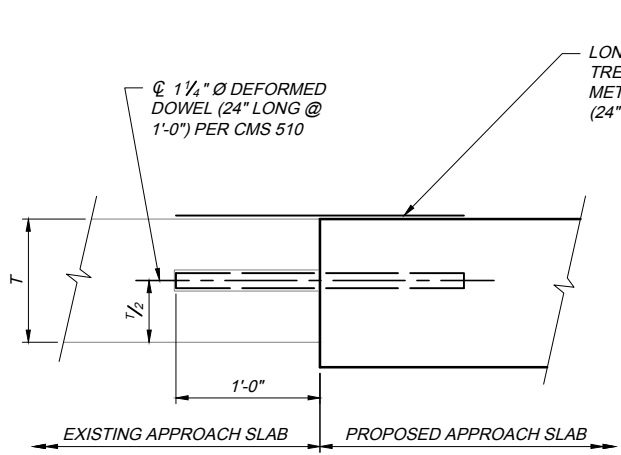
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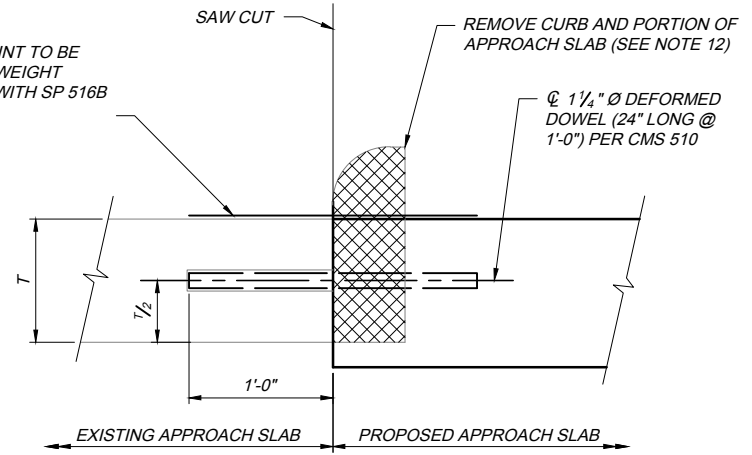
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

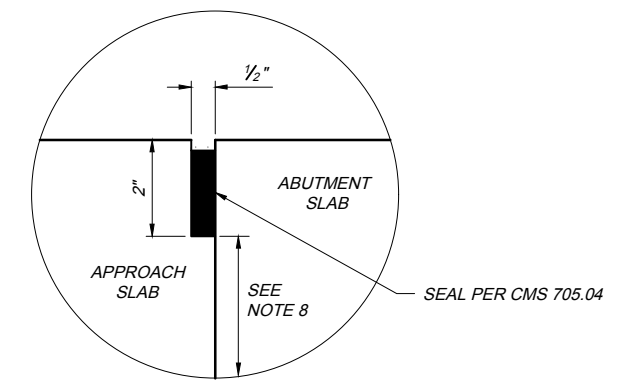
OHIO TURNPIKE



TRANSVERSE SECTION
(SHOWN WITHOUT INTEGRAL CONCRETE CURB)

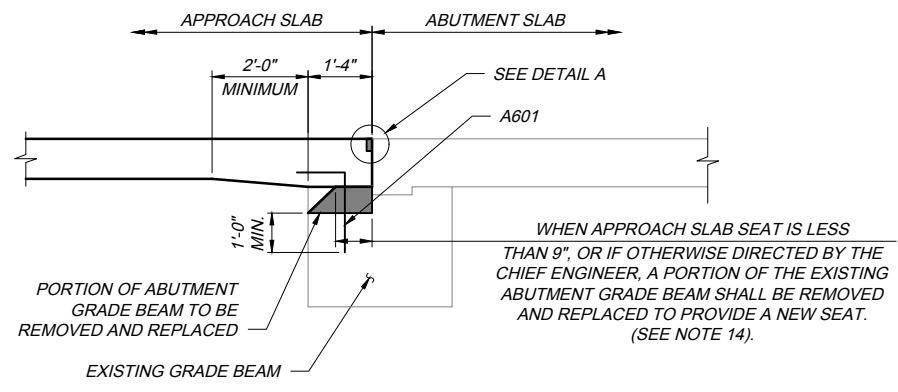


TRANSVERSE SECTION
(SHOWN WITH INTEGRAL CONCRETE CURB)

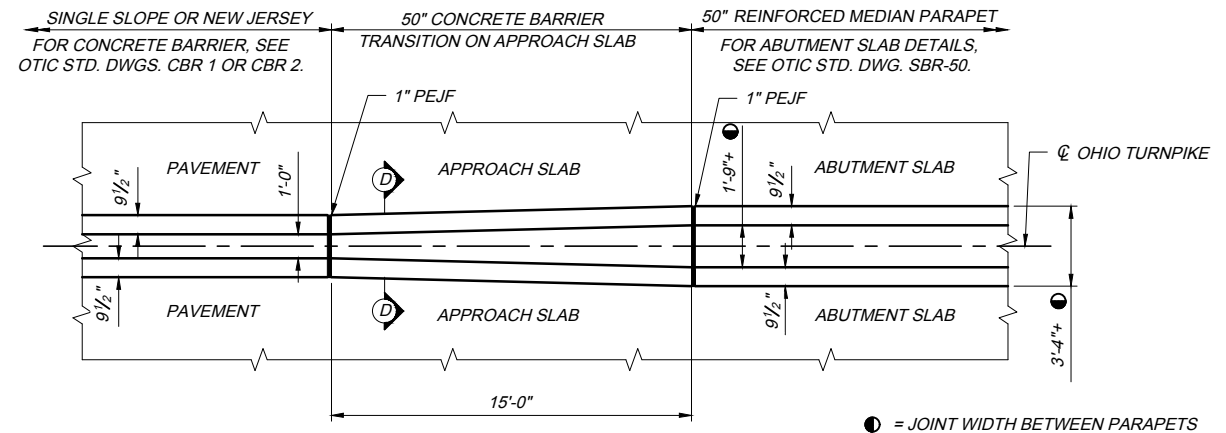


DETAIL A
(SEE NOTE 7)

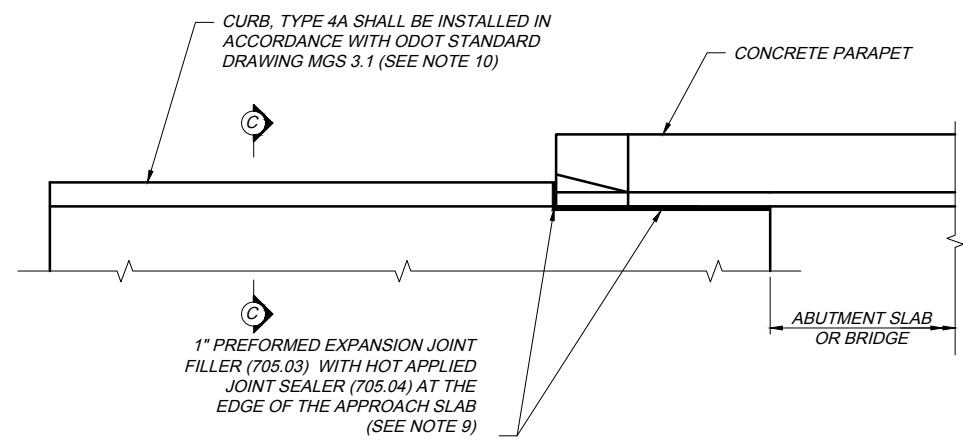
WIDENING DETAIL



APPROACH SLAB SEAT REPAIR DETAIL



MEDIAN BARRIER TRANSITION DETAIL



CONCRETE PARAPET DETAIL
(OUTSIDE EDGE OF APPROACH SLAB AT THE END OF CONCRETE PARAPET)

NOTES
FOR NOTES, SEE SHEET 1 OF 3.

AS-1 2019.12.31.DWG; 12/18/19 - 8:47am

DATE: DECEMBER 31, 2019

STANDARD DRAWING

REINFORCED CONCRETE APPROACH SLAB

AS-1

3 / 3

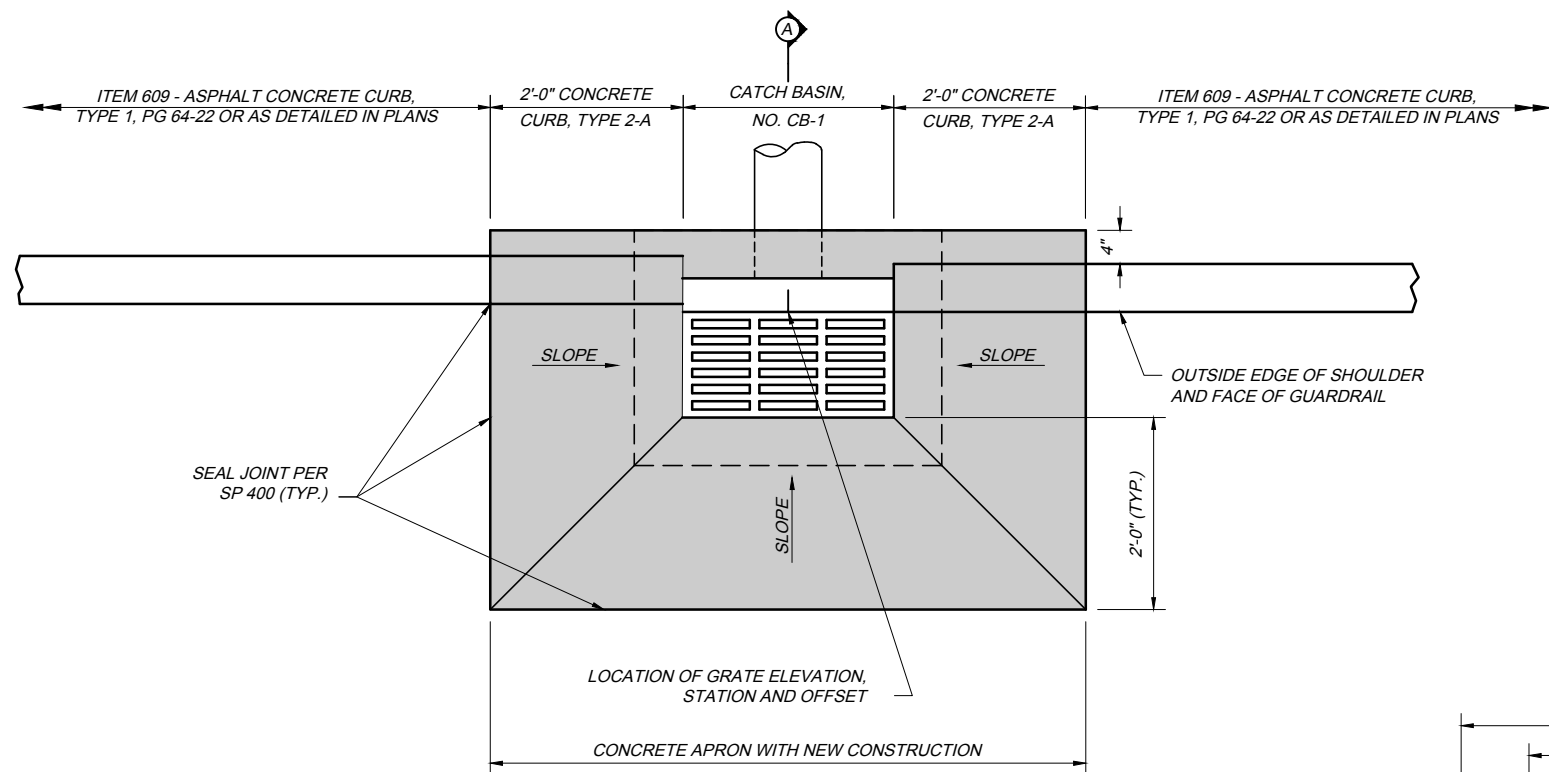
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

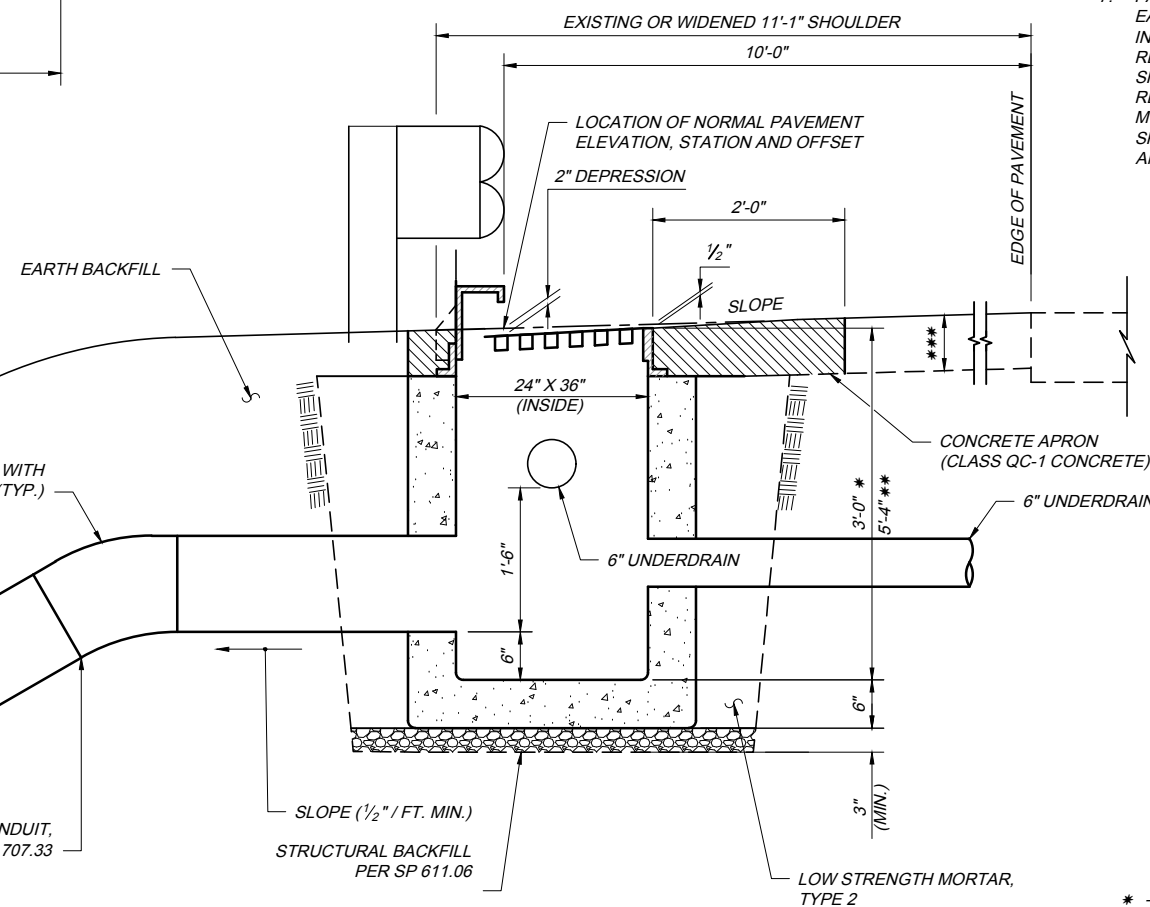
OHIO TURNPIKE

NOTES:

1. GRATE AND CASTING: THE GRATE AND CASTING SHALL BE A NEENAH FOUNDRY CO., MODEL NO. R-3246 (HEAVY DUTY), EAST JORDAN IRON WORKS, MODEL NO. 7030 (HEAVY DUTY) OR AN APPROVED EQUAL. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: **"DUMP NO WASTE"** AND **"DRAINS TO WATERWAY"**. TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". **"WATERWAY"** MAY BE SUBSTITUTED WITH **"STREAM"**, **"RIVER"**, **"LAKE"**, ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER. MASONRY BLOCKS SHALL NOT BE USED TO RAISE THE FRAME. THE BASE OF THE FRAME SHALL BE SET IN A FULL BED OF PORTLAND CEMENT MORTAR AND ADJUST IT TO CONFORM TO THE FINISHED SHOULDER ELEVATION AND SLOPE.
2. PRECAST CONSTRUCTION: THE STRUCTURE SHALL BE A PRECAST CONSTRUCTION MEETING SP 611.10 AND 706.13. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND REINFORCING SHALL BE SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE. THE STRUCTURE SHALL BE PLACED ON 3" OF COMPACTED STRUCTURAL BEDDING PER SP 611.06. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH ITEM 613 - LOW STRENGTH MORTAR, TYPE 2.
3. STEPS: PROVIDE STEPS WHERE THE DEPTH EXCEEDS 6". STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1
4. OPENING: ALL PENETRATIONS THROUGH PRECAST DRAINAGE STRUCTURES SHALL BE EITHER MANUFACTURED OR CORED. ENSURE PIPE OPENINGS ARE THE O.D. OF THE PIPE BEING SUPPLIED PLUS 2 MINIMUM. MORTAR OR GROUT THE VOIDS PER SP 611.10. PIPE SHALL BE TRIMMED FLUSH WITH INSIDE OF BASIN OR EXTEND INTO THE BASIN 1" MAX.
5. CONCRETE APRON: CAST A QC-1 CONCRETE APRON WITH TYPE 2A CURB FOR LIMITS SHOWN.
6. CONDUIT: THE CONDUIT SHALL BE SP 611 - 12" CONDUIT, TYPE F, 707.33 USING STANDARD BENDS WITH BANDING PER THE MANUFACTURERS' RECOMMENDATIONS. WHEN TWO DIFFERENT PIPE MATERIALS ARE CONNECTED, PROVIDE A MASONRY COLLAR PER ODOT STANDARD DRAWING DM-1.1.
7. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - CATCH BASIN, NO. CB-1 AND SHALL INCLUDE ALL MATERIALS, EXCAVATION, EMBANKMENT, REINFORCING STEEL, CASTINGS, RECONSTRUCTED PAVED SHOULDER AND/OR CONCRETE APRON WITH CONCRETE CURB, RECONSTRUCTED ADJACENT ASPHALT CURB, LOW STRENGTH MORTAR BACKFILL AND LABOR REQUIRED TO CONSTRUCT THE SP 611 - CATCH BASIN, NO. CB-1 AS SHOWN ABOVE, COMPLETE AND ACCEPTED.



PLAN VIEW



SECTION A-A

- * - DEPTH WITHOUT UNDERDRAIN (MINIMUM)
- ** - DEPTH WITH UNDERDRAIN (PREFERRED)
- *** - THICKNESS OF PAVEMENT (MINIMUM)

CB-1 2019.12.31.dwg: 12/16/19 - 8:25am