

OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION

ADDENDUM NO. 2

PROJECT NO. 39-17-01  
MAINLINE PAVEMENT RECONSTRUCTION  
MILEPOST 90.00 TO MILEPOST 95.90, EASTBOUND  
SANDUSKY COUNTY, OHIO

OPENING DATE: 2:00 P.M. (EASTERN TIME), OCTOBER 28, 2016

ALL BIDS MUST BE ELECTRONICALLY SUBMITTED THROUGH BID EXPRESS

ATTENTION OF BIDDERS IS DIRECTED TO:


QUESTIONS AND ANSWERS THROUGH 4:00 PM ON OCTOBER 24, 2016

MODIFICATIONS TO THE CONTRACT DOCUMENTS

Plan Sheets: 9, 11, 18, 19, 93, 94, 95, 96, 104, 106, 107, 240, 241, 242, 243, 244, 245, 246,  
249 and 257 of 272

Bid Schedule of Items and Estimated Quantities Worksheet

Issued by the Ohio Turnpike and Infrastructure Commission on October 25, 2016. Issuance authorized by Anthony D. Yacobucci, Chief Engineer, and Mark R. Musson, Director of Contracts Administration.

  
Anthony D. Yacobucci      10-24-16  
Date

  
Mark R. Musson      10/24/16  
Date

**OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION  
ADDENDUM NO. 2  
PROJECT NO. 39-17-01**

**QUESTIONS AND ANSWERS THROUGH 4:00PM ON OCTOBER 24, 2016**

**Q#21 Bid item 117- Shoulder Preparation, As Per Plan: since there is a new bid item (bid item 13- Embankment with RACP, As Per Plan), will there be need for performing the shoulder preparation (as described on plan sheet 9) in the areas where this item is to be placed since it will be covered with either one of the shoulder stone items?**

*A#21 This Addendum No. 2 removes Item 617 - Shoulder preparation from the Plans and Reference No. 117 on the Bid Schedule. This Addendum No. 2 adds Item 209 – Linear Grading, As Per Plan General Note to Plan Sheet 9 of 272, the General Summary Plan Sheet 104 of 272 and Reference No. 23A – Item 209 - Linear Grading, As Per Plan, 5.45 Miles on the Bid Schedule.*

**Q#25 Bid Item 208, Special – Reposition Elastomeric Expansion Bearing including Masonry Plate: this item requires the fillet welds between the bearing's upper load plate to be removed and then rewelded after the beam has been jacked and the bearing allowed to return to its undeformed state. What if any paint repair/touchup will be required on these 6 each beams/bearings?**

*A#25 Refer to the General Note on Plan Sheet 248 of 272 under "ITEM SPECIAL – REPOSITION ELASTOMERIC EXPANSION BEARING INCLUDING MASONRY PLATE (CONT.)" which provides as follows:*

*"WELDING AND CUTTING WORK TO BE PERFORMED IN A MANNER THAT CONTROLS THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACES TO A TEMPERATURE NOT TO EXCEED 300 DEGREES F, AS DETERMINED BY THE USE OF TEMPERATURE MONITORING DEVICES. ONCE THE BEARING HAS BEEN REPOSITIONED, THE MASONRY PLATE, LOAD PLATE, BEAM FLANGE AREA ADJACENT TO THE BEARING AND ANCHOR BOLTS SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH SP514A AND BE INCIDENTAL TO THIS ITEM. AVOID PAINTING THE SURFACE OF THE ELASTOMERIC PORTION OF THE BEARING BY MASKING."*

**Q#26 Bid item 101- Partial Depth Pavement Repair: please clarify the material to be used in the 251 Partial Depth Repairs that are to be performed Pre-Phase. The note on Sheet 11 states to use material specified in 251.03 of the ODOT C&MS but there is no asphalt material type specified. Typically this is given in the plan note for this item.**

*A#26 This Addendum No. 2 clarifies the asphalt materials to be used in the Pavement Repairs" General Note on Plan Sheet 11 of 272. The surface coarse shall be Item SP 404, Asphalt Concrete Surface Course Using Crushed Slag, PG 64-22 and the*

*intermediate course shall be Item SP 402 – Asphalt Concrete Base Course or Recycled Asphalt Concrete Base Course, PG 64-22.*

**Q#28** In looking at plan sheet 240/272 under notes # 3 it says “removal of existing approach slab is included under item 202- approach slab removed “. I cannot find a bid item for this in the proposal? This note is found on all sheets showing the approach slabs for bridges requiring removal and replacement. Please address.

*A#28 The removal of Approach Slabs is included in the Item 202 - Pavement Removed calculation as shown on Plan Sheet 110 of 272. This Addendum No. 2 revises the note 4 on Plan Sheets 240 through 246 of 272 from “Item 202 – Approach Slab Removed” to “Item 202 – Pavement Removed”.*

**Q#29** Addendum 1, questions Q#3 and Q#4 addressed bid items 77 and 78 and were answered that the quantities would be doubled. The revised bid form didn't show the quantity revisions. Can the owner/engineer please make the revisions to the proposal and/or electronic bid form?

*A#29 Yes. This Addendum No. 2 revises the quantities for Reference Nos. 77 and 78 as described in Addendum No. 1.*

**Q#30** Addendum #1, Q#10 revises the description for reference #51 to “Topsoil Furnished and Placed (For Slopes)” as well as the plan note on sheet 15. Is it the owner's intent and assumption that there is no available onsite topsoil material and that all topsoil must be furnished and imported from offsite sources?

*A#30 Yes.*

**Q#31** Plan sheets 93-96 provide details of the crossover at MP 90.0; Please clarify the intent of the 2<sup>nd</sup> paragraph. If it is required that part of the existing asphalt be removed and replaced to repair, should this be covered under Item 251 Partial Depth Repair or will asphalt wedging be required for smooth transitions for traffic?

*A#31 This Addendum No. 2 removes “This Item shall also be used for crossover pavement repairs, and as directed by the Chief Engineer” from the “Item 614 – Asphalt Concrete for Maintaining Traffic” General Note on Plan Sheet 19 of 272 and removes the same second Paragraph of the Notes on Plan Sheets 93 through 96 of 272.*

**Q#32** In looking at plan sheet 240/272 under notes # 3 it says “removal of existing approach slab is included under item 202 - approach slab removed “. I cannot find a bid item for this in the proposal? This note is found on all sheets showing the approach slabs for bridges requiring removal and replacement. Please address.

*A#32 Please see the response to Q#28.*

**Q#33** Plan sheet 18 “Guardrail Delineation” note- there are two consecutive sentences for which one says to use one-way delineators from MP 90.0 to 95.9 and the other says to use two-way delineators for the same distance. Does the owner want one-way or two-way delineators?

*A#33 One-way delineators shall be used for guardrail delineation. This Addendum No. 2 revises the “Guardrail Delineation” General Note on Plan Sheet 18 of 272.*

**Q#34** Standard drawing AS-1 shows 6” underdrains which are under the approaches and precast outlets to be included per note 13. The approach slab drawings on sheet 240-246 don’t show these underdrains and outlets, and from looking at plan sheets, the proposed underdrains for the roadway either start or outlet short of these approach slabs, nor does AS-1 or ODOT DM-1.1 show a detail. Are underdrains and outlets to be included at the approach slabs or not? If they are, then please provide a detail as to depth, width, and length required.

*A#34 Yes, these items are included with the cost of Item 526 – Reinforced Concrete Approach Slab (12”) in accordance with OTIC Standard Drawing AS-1, Note 13. The plan view for the Installation of the 6” underdrain is shown on OTIC Standard Drawing AS-1 and the profile is shown on OTIC Standard Drawing AS-2. No additional information is needed.*

**Q#35** Addendum 1 added a note to plan sheet 16 for “Warranty 1 Year Anniversary Walk Through MOT”. Proposal sheets OTC-GC-56 through GC-63 provide information on contractor payments and retainage. The owner’s walk-through with contractor-provided MOT will occur one year after the completion dates of the project (substantial and final). Will the owner still pay all retainage as per the general conditions or will the owner withhold retainage to cover this new requirement, and if so, will the owner please set up a separate pay item for this as to not withhold retainage for all other work completed?

*A#35 Yes, the retainage will be released in accordance with the General Conditions. The Commission will not hold retainage pending the Warranty Walk Through.*

**Q#36** Sheet 247/272 note for Item 601 Crushed Aggregate Slope Protection, APP says the commission will measure crushed aggregate by the number of cubic yards accepted in place. The bid item is in square yards and also listed on sheet 248 in square yards. Since the thickness of material varies, it makes sense that the bid item would be paid by the cubic yards. Please clarify how it is to be measured and adjust the bid item as necessary.

*A#36 This Addendum No. 2 modifies Item 601 – Crushed Aggregate Slope Protection, APP measurement from Square Yards to Cubic Yards. The quantity has been modified on Plan Sheets 249 and 257 of 272 and on the Bid Schedule. The average thickness of the slope protection is 18”, therefore the assumed quantity is 120 CY, 60 CY for the Westbound side and 60 CY for the Eastbound side.*

**Q#37 Bid item 14 - Excavation Including Embankment, As Per Plan: plan sheet insert 1 summary gives volumes and parameters. Note that the contractor will have to excavate the shear key for which the backfilling with rock is paid separately. This will result in the excavation being a greater quantity than the embankment. Will payment for the bid item be based on the amount of excavation removed or the volume of embankment going back into the slopes?**

*A#37 The excavation for the Shear key is incidental to the pay item for granular embankment, As Per Plan. The Excavation including Embankment, As Per Plan is measured and paid by the amount of excavation removed. This quantity is determined by surveyed cross sections.*

**Q#38 In the specifications SS861 (proposal page 427), there are six pages of notes and language about “plan preparation with proprietary geogrid as an alternate” giving options for the material as well as depth of cut and types of granular material. Plan sheet 13 and bid item 43 specify a particular geogrid. Which of these specifications/plan notes prevails on this project?**

*A#38 Follow Plan Sheet No. 13 of 272 and Reference No. 43 for this Project.*

**Q#39 It has been brought to our attention the Nexus pipeline may be scheduled for construction in 2017. Is it possible to verify this and also verify that the proposed location for the pipeline runs parallel to the turnpike on the south side of the turnpike Right-of-way limits?**

*A#39 At this time, no agreement has been made between Nexus and the Commission. If and when the Commission authorizes a third party's use of the right-of-way, the agreement will take any interference with the Pavement Replacement Project into account. The Proposed Right-of-Way Crossings for the pipeline are located at MP 91.3, MP 93.3 and MP 104.95 where a 36" Steel Gas Pipe will be directionally bored across the Commission's Property. The boring pits are proposed outside of the Commission's Right-of-Way, and the tentative depths are no less than 5' below the lowest elevation of the Right-of-Way.*

**Q#40 Is it possible to identify the exact dimension of the location of the pipeline off of the turnpike R/W limit and what the construction access R/W limits for the pipeline construction are? This could impact the credit for the fence cuts off of the R/W is why we are asking.**

*A#40 No. All relevant information concerning the proposed pipeline that the Commission possesses is described in the response to Q#39.*

**Q#41 Plan Insert Sheet 2- during what phase is this mill-fill work to be done?**

*A#41 During Phase 1 of the Project.*

**Q#42 Will a MTD be required for the Pavement Repair work as shown on Plan Insert Sheet 2? Also, will it be required to pave the left lane bridge approaches in Phase 3?**

*A#42 No, the MTD will not be required for Pavement Repairs and/or for the left lane bridge approaches; however, this change does not relieve the Contractor of the SP400s Smoothness Specification.*

Addendum No. 2 to Contract 39-17-01:

\_\_\_\_\_  
(Firm Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed Name)

Date: \_\_\_\_\_

CONSTRUCTION SPECIFICATIONS

THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION 2010 CONSTRUCTION AND MATERIALS SPECIFICATIONS AND THE SPECIAL PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS SHALL GOVERN THIS PROJECT EXCEPT FOR ITEMS RELATED TO GUARDRAIL AND STABILIZATION. GUARDRAIL AND STABILIZATION ITEMS ARE COVERED BY THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION 2016 CONSTRUCTION AND MATERIAL SPECIFICATIONS.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

QUEST COMMUNICATIONS  
4650 LAKEHURST COURT  
DUBLIN, OH 43016  
ATTN: CHRISTOPHER STRAYER  
OFFICE PH: (303) 886-1299  
HOME PH: (303) 383-8606

NORTHERN OHIO RURAL WATER  
2205 U.S. 20  
NORWALK, OH 44857  
(419) 668-7213

FRONTIER COMMUNICATIONS  
P.O. BOX 1804  
MARION, OH 43301  
(419) 660-8286

TOLEDO EDISON  
6099 ANGOLA RD.  
HOLLAND, OH 43528  
(419) 249-5019

COLUMBIA GAS OF OHIO  
1800 BROAD AVE.  
FINDLAY, OH 45840  
(800) 344-4077

AT&T COMMUNICATIONS  
15 PEACHTREE CENTER  
ATLANTA, GA 30328  
(800) 852-3786

SANDUSKY TWP. TRUSTEES  
2207 OAK HARBOR RD.  
FREMONT, OH 43420  
(419) 332-3810

NISOURCE  
(COLUMBIA GAS TRANSMISSION)  
1804 BROAD AVE.  
FINDLAY, OH 45840  
ANDY ALLISON  
(419) 788-6194

ELANTIC TELECOM  
5518 COEN RD.  
VERMILION, OH 44089  
(400) 967-1586

TIME WARNER CABLE  
129 S. MAPLE ST.  
PORT CLINTON, OH 43452  
(877) 772-2253

BUCKEYE CABLE SYSTEM  
5566 SOUTHWICK BOULEVARD  
TOLEDO, OH 43614  
(419) 724-9800

NISOURCE (COLUMBIA GAS OF OHIO)  
1800 BROAD AVE.  
FINDLAY, OH 45840  
ROBERT LANGFORD  
(419) 427-3227

LEVEL 3 COMMUNICATIONS  
1025 ELDORADO BLVD.  
OFFICE 33A-524  
BROOMFIELD, CO 80021  
(720) 888-7280  
TIM BOYKIN  
Tim.boykin@Level3.COM

JOB 8 LLC  
OSP ENGINEERING  
SPREAD NETWORKS, LLC  
800 WOODLANDS PARKWAY, SUITE 205  
RIDGELAND, MS 39157  
JOHN BRUCE  
(769) 216-8095

SANDUSKY COUNTY SANITARY ENGINEERS  
2100 COUNTRYSIDE DR.  
FREMONT, OH 43420  
(419) 332-9967

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

LCI INTERNATIONAL FIBER OPTIC AND MCI CABLES

EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THE FIBER OPTIC CABLE DURING THE EXISTING STRUCTURE REMOVAL AND NEW STRUCTURE CONSTRUCTION. THE CABLE LOCATION IS DEPICTED ON THE PLAN AND PROFILE SHEETS. ANY EXCAVATION ADJACENT TO THE CABLE FOR ANY REASON SHALL NOT BE PERFORMED WITHOUT LCI FIRST LOCATING THE CABLE. AFTER THE CABLE HAS BEEN LOCATED BY LCI, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12" OF THE CABLE DEPTH AS PROVIDED. LCI REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE CABLE.

THE CONTRACTOR SHALL ALSO BE AWARE OF THE EXISTING MCI CABLE WHEN EXCAVATING TO FORM THE PROPOSED OUTSIDE ROADWAY DITCHES. PARTICULAR AREA OF CONCERN FOR BOTH LCI AND MCI CABLES IS THE LEFT SIDE BETWEEN STA. 551+00 TO STA. 560+00, AND THE RIGHT SIDE BETWEEN STA. 567+00 AND 570+00. CABLES WERE PLOTTED FROM EXISTING AVAILABLE PLANS. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR DEPTH VERIFICATION PRIOR TO ANY EXCAVATION WORK, ESPECIALLY IN NON-ANTICIPATED WORK AREAS. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR TIME DELAY WAITING FOR DEPTH VERIFICATION FROM UTILITY COMPANIES.

PROJECT SURVEY

EXISTING ELEVATIONS SHOWN ON PAVEMENT ELEVATION TABLES, AND PLAN AND PROFILE SHEETS ARE AT THE RIGHT EDGE OF THE THIRD LANE (DIRECTION OF TRAFFIC) AND DERIVED FROM THE EXISTING THIRD LANE DESIGN PLANS. CONTRACTOR SHALL CONSTRUCT PROPOSED PAVEMENT TO MATCH EDGE OF EXISTING PAVEMENT AND INSURE DESIGN CROSS SLOPES AND SUPERELEVATION RATES ARE MET AS SHOWN ON THE PLANS. IN ADDITION, THE CONTRACTOR SHALL VERIFY ELEVATIONS AND CROSS SLOPES AS NECESSARY TO INSURE THAT NO WATER PONDING WILL OCCUR BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT FOR THE LENGTH OF THE PROJECT.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON NGVD29 DATUM.

AS-BUILT PLANS

THE AS-BUILT PLANS FROM THE ORIGINAL 1953 CONSTRUCTION, 3RD LANE WIDENING, DECK REPLACEMENT AND OTHER MODIFICATIONS, INCLUDING CROSS-SECTIONS, STANDARD DRAWINGS AND TURNPIKE SPECIFIC STANDARD DRAWINGS MAY BE INSPECTED IN THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION OFFICE LOCATED AT 682 PROSPECT STREET, BEREA, OHIO 44017, TELEPHONE (440) 234-2081.

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 LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ITEM 203 - EXCAVATION

THIS ITEM INCLUDES EXCAVATING THE EXISTING GRANULAR BASE UNDER THE LEFT, CENTER AND RIGHT LANES, APPROACH SLABS, FULL DEPTH EXCAVATION OF THE EXISTING RIGHT SHOULDER AFTER MILLING ASPHALT OVERLAY AND TRENCH EXCAVATION FOR AGGREGATE DRAIN. EXISTING GRANULAR BASE THICKNESS VARIES WITH AN ESTIMATED 6 INCHES THICK UNDER THE RIGHT AND CENTER LANES AND AN ESTIMATED 7 INCHES THICK UNDER THE LEFT LANE. THE EXCAVATION OF THE EXISTING SHOULDER, AFTER MILLING, INCLUDES APPROXIMATELY 12 TO 13 INCHES OF MATERIAL INCLUDING, BUT NOT LIMITED TO, CHIP AND SEAL, GRANULAR BASE AND EARTH. THESE THICKNESSES WERE DERIVED FROM THE EXISTING PLANS AND MAY VARY IN THE FIELD.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

RAMP RECONSTRUCTION

THE FOLLOWING QUANTITIES, ARE INCLUDED AS A CONTINGENCY, TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR PROVIDING A SMOOTH TRANSITION BETWEEN THE RESURFACING DONE BY OTHERS AND THE PROPOSED FULL DEPTH PAVEMENT BEING CONSTRUCTED ON RAMPS B AND C FOR THIS PROJECT.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, (2"±) 97 SQ. YD.  
ITEM SP 404 - ASPHALT CONCRETE SURFACE COURSE,  
USING CRUSHED SLAG, PG 70-22 (FR), (2") 6 CU. YD.

BENCHING OF SLOPES

ALTHOUGH CROSS-SECTIONS DO NOT INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATION, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. ALL SLOPED EMBANKMENT AREAS SHALL BE BENCHED AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05. SEE BENCHING DETAIL, SHEET 6.

PLAN STATIONING

UNLESS NOTED OTHERWISE, PLAN STATIONING CALL OUTS REFERENCE THE ALIGNMENT THAT THE ITEM IS ADJACENT TO IF THERE IS MORE THAN ONE ALIGNMENT SHOWN IN THE PLAN. PAVEMENT CALCULATIONS AND ROADWAY SUMMARIES USE THE ALIGNMENT FOR THE TRAVELED LANE SO THAT IN AN AREA THAT HAS RELOCATED LANES THOSE STATIONS ARE USED RATHER THAN THE RE-ESTABLISHED SURVEY BASELINE. THE EXCEPTIONS TO THIS ARE UNDERDRAINS AND APPROACH SLABS WHICH USE RE-ESTABLISHED SURVEY BASELINE STATIONING.

ITEM SPECIAL - SONIC ALERT NAP PATTERN (SNAP)

IN ADDITION TO THE LOCATIONS SHOWN IN THE PAVEMENT CALCULATIONS, SNAPS SHALL BE CONSTRUCTED ON THE EB AND WB MEDIAN SHOULDERS BETWEEN M.P. 89.6 AND M.P. 96.1.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM SPECIAL - SNAP ALERT PATTERN (SNAP).

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER.

ITEM SPECIAL - SONIC NAP ALERT PATTERN (SNAP) 13.0 MILES

ENDANGERED SPECIES - INDIANA BAT

THIS PROJECT IS WITHIN THE RANGE OF THE FEDERALLY ENDANGERED INDIANA BAT (MYOTIS SODALIS). THE ROOSTING HABITAT FOR THE INDIANA BAT CONSISTS OF LIVING OR DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES OR CAVITIES. THEREFORE, ANY UNAVOIDABLE CUTTING OF SUCH TREES OR SNAGS WILL BE PERFORMED ONLY AFTER SEPTEMBER 30 AND BEFORE APRIL 1. PRIOR TO ANY REHABILITATION/REMOVAL, THE UNDERSIDE OF THE EXISTING BRIDGE SHALL BE CAREFULLY EXAMINED FOR THE PRESENCE OF BATS, ESPECIALLY FROM APRIL 1 TO SEPTEMBER 30. IF ANY BATS ARE FOUND ROOSTING, ON THE UNDERSIDE OF A BRIDGE, THE UNITED STATES FISH AND WILDLIFE SERVICE, ECOLOGICAL SERVICES DIVISION, THE ODOT OFFICE OF ENVIRONMENTAL SERVICES AND ODOT DISTRICT 3 ENVIRONMENTAL SECTION SHALL BE CONTACTED OR PROVIDED WITH INFORMATION.

ITEM 201 - CLEARING AND GRUBBING

ALL TREES, BRUSH AND STUMPS SHALL BE REMOVED WITHIN THE CONSTRUCTION LIMITS AS SHOWN IN THE CONSTRUCTION PLANS AND/OR ALL AREAS WITHIN THIRTY FEET OF THE EDGE OF PAVEMENT. THIS WORK SHALL BE COMPLETED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING;

PAVEMENT TRANSITIONS

THE FOLLOWING CONTINGENCY QUANTITIES FOR ITEM SP 404 - ASPHALT CONCRETE SURFACE COURSE USING CRUSHED SLAG, PG 70-22 (FR) (1 1/2") AND ITEM 254 - PAVEMENT PLANING, VARIABLE DEPTH HAS BEEN INCLUDED IN THE PLANS FOR USE BY THE CHIEF ENGINEER FOR ADJUSTMENTS TO THE ROADWAY PROFILE IN ORDER TO ENSURE THAT THERE IS A SMOOTH TRANSITION BETWEEN THE PROPOSED SURFACE AND EXISTING PAVEMENT TO REMAIN. THE LIMITS FOR THIS WORK IS ANTICIPATED TO BE A TEN (10) FOOT LENGTH AT THE PROJECT ENDS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM SP 404 - ASPHALT CONCRETE SURFACE COURSE USING CRUSHED SLAG, PG 70-22 (FR) (1 1/2") AND ITEM 254 - PAVEMENT PLANING, VARIABLE DEPTH.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER.

ITEM SP 404 - ASPHALT CONCRETE SURFACE COURSE USING CRUSHED SLAG,  
PG 70-22 (FR) (1 1/2") 6 C.Y.  
ITEM 254 - PAVEMENT PLANING, VARIABLE DEPTH 134 S.Y.

ITEM 617 - SHOULDER PREPARATION, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 617.04 OF THE SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM THE FOLLOWING ADJACENT TO NEW PAVEMENT.

THE SUBGRADE SHALL BE PLACED IN 6" LIFTS (MAX) AND COMPACTED IN ACCORDANCE WITH ITEM 204 IMMEDIATELY PRIOR TO PLACING THE AGGREGATE AND AFTER THE SUBGRADE IS SHAPED OR BLADED TO MAKE A STRAIGHT VERTICAL EDGE WITH THE ADJACENT DIRT. THE ENTIRE THICKNESS OF AGGREGATE SHALL BE SUPPORTED ALONG THE OUTER EDGE WITH TOPSOIL AND FILL DIRT THAT IS CONSISTENT WITH THE FORE SLOPE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 617 - SHOULDER PREPARATION, AS PER PLAN AND SHALL INCLUDE ANY EXCAVATION, EMBANKMENT, LINEAR GRADING, SUBGRADE COMPACTION, PROOF ROLLING, ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS WORK.

ITEM 209 - LINEAR GRADING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 209.03 OF THE SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM THE FOLLOWING ADJACENT TO NEW PAVEMENT.

RECONSTRUCT THE FORESLOPE TO THE ORIGINAL CONDITION OR AS DIRECTED BY THE CHIEF ENGINEER USING 4" OF TOPSOIL FOR ANY DISTURBED EARTH AREAS NOT COVERED BY AGGREGATE IN ACCORDANCE WITH 659.11.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID PER MILE FOR ITEM 209 - LINEAR GRADING, AS PER PLAN AND SHALL INCLUDE ANY EXCAVATION, EMBANKMENT, LINEAR GRADING, SUBGRADE COMPACTION, PROOF ROLLING, ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS WORK.

1	ADDENDUM NO. 2	CLH	10/19/16
-	-	-	-
NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION**  
**GENERAL NOTES**

M.P. 90.00 TO M.P. 95.90 SANDUSKY COUNTY

**GPD GROUP**  
Civil, P.E., Survey, Plans & Utilities, Inc. 330-572-2100  
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: CLH	CHECKED: PJF	DATE: 08/26/16
DRAWN: CLH	IN CHARGE: MRG	SCALE: N.T.S.

PROJECT NO. 39-17-01 SHEET 9 OF 272

**ITEM 202 - GUARDRAIL REMOVED FOR SALVAGE, AS PER PLAN**

EXISTING GUARDRAIL, PLASTIC BLOCKS, THRIE BEAMS AND POSTS THAT ARE IN GOOD CONDITION WILL BE REMOVED, SALVAGED AND DELIVERED TO THE ELMORE MAINTENANCE BUILDING AT MP ???. THE SALVAGED MATERIALS ARE TO BE OFFLOADED AND PLACED AT THE DIRECTION OF OTIC MAINTENANCE. OTIC WILL SUPPLY FORKLIFT AND OPERATOR.

THE TABLE BELOW SHOWS THE APPROXIMATE LOCATIONS AND LENGTHS. THE ACTUAL LOCATIONS AND LENGTHS WILL BE DETERMINED BY THE ENGINEER PRIOR TO ANY GUARDRAIL REMOVAL. PAYMENT FOR ALL LABOR AND INCIDENTALS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT BID FOR ITEM 202, GUARDRAIL REMOVED FOR SALVAGE, AS PER PLAN

EASTBOUND MILE POST LOCATIONS (APPROXIMATE)	QTY.	DESCRIPTION	LENGTH (FT.)
90.2	11	GUARDRAIL PANELS	137.50
90.3	7	GUARDRAIL PANELS	87.50
90.5	30	GUARDRAIL PANELS	375.00
90.6	40	GUARDRAIL PANELS	500.00
90.7	5	GUARDRAIL PANELS	62.50
90.8	15	GUARDRAIL PANELS	187.50
91.0	6	GUARDRAIL PANELS	75.00
92.7	5	GUARDRAIL PANELS	62.50
93.3	17	GUARDRAIL PANELS	212.50
93.5	14	GUARDRAIL PANELS	175.00
94	21	GUARDRAIL PANELS	262.50
94.2	5	GUARDRAIL PANELS	62.50
94.6	11	GUARDRAIL PANELS	137.50
95	17	GUARDRAIL PANELS	212.50
95.3	15	GUARDRAIL PANELS	187.50
95.6	10	GUARDRAIL PANELS	125.00
95.8	17	GUARDRAIL PANELS	212.50
<b>TOTAL CARRIED TO GENERAL SUMMARY</b>	<b>246</b>	<b>GUARDRAIL REMOVED FOR SALVAGE, AS PER PLAN</b>	<b>3075.00</b>
<b>INCIDENTAL</b>	<b>ALL</b>	<b>PLASTIC G/R BLOCKS,(PART #24903)</b>	
<b>INCIDENTAL</b>	<b>5</b>	<b>ELEMENT G/R TRANSITION THRIE BEAM (PART #24115)</b>	
<b>INCIDENTAL</b>	<b>100</b>	<b>G/R POST (PART #24510)</b>	

**ITEM SP604 - CATCH BASIN, NO. CB-1**

EXISTING TOP OF GRATE ELEVATIONS FOR ALL STORM STRUCTURES SHALL BE FIELD MEASURED AND RECORDED BY THE CONTRACTOR PRIOR TO REMOVAL OF THE STRUCTURES.

PROPOSED CATCH BASINS SHALL BE INSTALLED AT APPROXIMATELY THE SAME TOP OF GRATE ELEVATIONS AS EXISTING WITH THE INVERT ELEVATIONS SHOWN IN THE PLANS. REPLACE OUTLET PIPES AS SHOWN IN PLANS OR AS DIRECTED BY ENGINEER. PROPOSED DRAINAGE PIPES SHALL BE CONNECTED TO EXISTING PIPES USING MASONRY COLLAR AS PER ODOT STANDARD DRAWING DM-1.1 WHEN DIRECTED BY THE CHIEF ENGINEER. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE PER EACH FOR ITEM SP604 - CATCH BASIN, NO. CB-1.

**ITEM 611 - PRECAST REINFORCED CONCRETE OUTLET, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEM 611 AND STANDARD DRAWING DM-1.1, THE BID PRICE FOR THIS ITEM SHALL INCLUDE THE PROVISION AND INSTALLATION OF THE ITEM 601 - TIED CONCRETE BLOCK MAT, TYPE 1 AS SHOWN ON STANDARD DRAWING DM-1.1.

**ITEM 601 - ROCK CHANNEL PROTECTION**

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER TO ADDRESS CHANNEL EROSION PROBLEMS WHICH MAY BECOME APPARENT DURING CONSTRUCTION.

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	200 C.Y.
ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	200 C.Y.

**CONNECTIONS TO PIPES OF DISSIMILAR MATERIALS**

PIPES OF DISSIMILAR MATERIALS OR INCOMPATIBLE ENDS SHALL BE JOINED USING A CONCRETE COLLAR AS PER STANDARD CONSTRUCTION DRAWING DM-1.1

**ITEM 604 - CATCH BASIN ADJUSTMENTS, GRATES AND CASTINGS, AS PER PLAN**

THE FOLLOWING CONTINGENCY ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES ON SHEET 108 FOR USE IN ADJUSTING, REPAIRING, AND/OR REBUILDING SHOULDER CATCH BASINS. FOR CATCH BASINS ADJUSTED TO GRADE THE CONTRACTOR SHALL REBUILD FROM THE TOP OF PRECAST STRUCTURE TO THE BOTTOM OF THE CASTING AT THE EXISTING GRADE. THE USE OF BRICK TO REBUILD THE CATCH BASIN SHALL BE PROHIBITED. THE CONTRACTOR SHALL SAWCUT PAVEMENT AROUND THE EXISTING CATCH BASIN, A MINIMUM OF 12" AROUND THE CASTING AND REMOVE THE CASTING AND SAWCUT ASPHALT CONCRETE. THE CONTRACTOR SHALL FORM AND POUR, USING CLASS "MS" CONCRETE, TO REBUILD THE CATCH BASIN TO SECURE CONCRETE TO THE EXISTING PRECAST STRUCTURE, THE CONTRACTOR SHALL INSTALL #4 DOWEL BARS, SPACED 12" O/C (3 PER SIDE UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER) IN ACCORDANCE WITH ITEMS 509 AND 510. THE DOWEL BARS SHALL BE IMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON-SHRINK NON-METALLIC GROUT THAT CONFORMS TO SP 952. THE CONTRACTOR SHALL USE FORMS SIZED TO CONFORM TO THE INTERIOR OF THE CATCH BASIN, AND THAT WILL INSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH. AFTER THE CASTING IS SET TO THE FINAL GRADE, THE AREA AROUND THE ADJUSTED CATCH BASIN CASTING SHALL BE BACK FILLED WITH CLASS "MS" CONCRETE TO THE EXISTING SURFACE. FOR CATCH BASINS ADJUSTED TO GRADE WITH DISTANCES FROM THE TOP OF THE PRECAST STRUCTURE TO THE BOTTOM OF THE CASTING THAT ARE GREATER THAN 12", THE SAME METHOD SHALL BE USED TO REBUILDING THE CATCH BASINS TO GRADE. FOR CATCH BASINS ADJUSTED TO GRADE WITH DISTANCES FROM THE TOP OF THE PRECAST STRUCTURE TO THE BOTTOM OF THE CASTING THAT ARE LESS THAN 4", THE SAME METHOD SHALL BE USED TO REBUILDING THE CATCH BASINS TO GRADE, EXCEPT THAT NO FORMS OR DOWELS ARE REQUIRED.

A CONTINGENCY QUANTITY OF CATCH BASIN GRATE AND CASTING, AS PER PLAN, HAS BEEN INCLUDED FOR USE AS DIRECTED BY THE CHIEF ENGINEER. THE REPLACEMENT GRATE AND CASTING SUPPLIED SHALL BE HEAVY DUTY.

ALL CONCRETE, DOWELS, DOWEL HOLES, GROUT, SAW CUTTING, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER EACH - ITEM 604 - CATCH BASIN ADJUSTED TO GRADE, 4" OR LESS, AS PER PLAN AND ITEM 604 - CATCH BASIN GRATE AND CASTING, AS PER PLAN.

OTIC STANDARD DRAWINGS CB-1, CB-2, CB-3, CB-4, AND CB-5 ARE PROVIDED FOR INFORMATION AS TO THE TYPES OF BASINS THAT MAY NEED ADJUSTMENT.

**ITEM 837 - LINER PIPE, AS PER PLAN**

LINER PIPE WRITTEN PROCEDURE SHALL COMPLY WITH MANUFACTURER'S RECOMMENDATIONS AND INCLUDE SLIP RAIL SYSTEM, PHASING OF GROUTING ANNULAR SPACE, LOCATIONS OF GROUT PORTS, EQUIPMENT TO BE USED, GUAGES AND PRESSURE MONITORING DEVICES ON PUMPS, ETC. A PRE-INSTALLATION MEETING WILL BE HELD AFTER SUBMITTAL APPROVAL AND PRIOR TO COMMENCING THIS WORK. THE LINER MANUFACTURER'S REPRESENTATIVE MUST BE ON SITE DURING GROUTING OPERATIONS.

SUPPLEMENTAL SPECIFICATION 837 LINER PIPE SHALL BE AMENDED AS FOLLOWS: 837.02 MATERIALS. THE LINER PIPE MATERIAL SHALL BE LIMITED TO 707.02, 707.42, SS937 OR SS938.

837.03 INSTALLATION. INSTALLATION SHALL BE ADHERED TO WITH THE FOLLOWING ADDITIONS: E. CONTRACTOR SHALL SUBMIT A WRITTEN INSTALLATION PROCEDURE FOR THE LINER PIPE FOR APPROVAL. THE CONTRACTOR SHALL ALSO PROVIDE: METHOD OF HOLDING THE LINER PIPE IN PLACE DURING THE GROUTING PROCEDURE TO INSURE THE LINER PIPE DOES NOT FLOAT; PROCEDURE FOR CONNECTING ALL LATERAL PIPES; A GROUT MIX DESIGN; THE GROUTING PROCEDURE SHALL BE APPROVED BY THE MANUFACTURE; THE CONTRACTOR SHALL SUPPLY AT LEAST FIVE VERIFIABLE PROJECTS WITH THE ENGINEER'S CONTACT NAME, ADDRESS AND PHONE NUMBER FOR EACH PROJECT WITH A SIMILAR SCOPE.

F. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE SPECIFIED PIPE WILL FIT INTO THE EXISTING CONDUIT AND VERIFY THE LENGTH PRIOR TO ORDERING THE LINER PIPE.

G. ALL EXISTING LATERAL PIPES OR UNDERDRAIN CONNECTIONS SHALL BE CONNECTED TO THE PROPOSED LINER PIPE. THESE CONNECTIONS MAY OR MAY NOT BE SHOWN OR SPECIFIED IN THE PLANS. THE CONTRACTOR SHALL VERIFY THE NUMBER, SIZE AND LOCATION OF ALL CONNECTING PIPES. LATERAL PIPES MAY NEED TO BE TRIMMED IN ORDER TO INSTALL THE LINER PIPE.

837.05 BASIS OF PAYMENT. PAYMENT FOR THE ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT REPRESENTS FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE ITEM OF WORK DESCRIBED IN THE SUPPLEMENTAL SPECIFICATION 837 LINER PIPE AND ABOVE.

**SPECIAL - SECURING MANHOLE LID**

ITEM SPECIAL - SECURING MANHOLE LID, SHALL BE USED TO SAFELY SECURE THE MANHOLE LID TO THE MANHOLE CASTING FOR TEMPORARY TRAFFIC CONTROL PURPOSES. THE MANHOLE LIDS ARE LOCATED IN THE MEDIAN/SHOULDER WITHIN PROJECT LIMITS AT LOCATIONS SHOWN IN ROADWAY SUBSUMMARY. SECURING OF MANHOLE LID SHALL CONSIST OF THE FOLLOWING: THE CONTRACTOR SHALL REMOVE THE MANHOLE LID AND REMOVE ANY DEBRIS FROM THE CASTING LIP THAT THE MANHOLE LID RESTS ON; THE CONTRACTOR SHALL RESEAT THE MANHOLE LID AND WELD THE LID TO THE FRAME; PRIOR TO COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE THE WELDS SECURING THE LID TO THE FRAME SO THAT CONTINUED ACCESS TO THE MANHOLE CAN BE MAINTAINED.

WELDING THE LID TO THE FRAME SHALL CONSIST OF FOUR 10" LONG FILLET WELDS LOCATED AT EACH QUADRANT OF THE MANHOLE. REMOVAL OF THE WELDS SHALL BE ACCOMPLISHED BY EITHER GRINDING OR AIR ARCING AND IN SUCH A MANNER SO AS NOT TO DAMAGE OR IMPAIR THE INTEGRITY OF THE LID AND/OR CASTING.

ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE UNIT BID PRICE PER EACH - ITEM SPECIAL - SECURING MANHOLE LID.

**PAVEMENT REPAIRS**

THE FOLLOWING QUANTITIES, ARE INCLUDED AS A CONTINGENCY, TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR PAVEMENT REPAIR MEASURES TO MAINTAIN TRAFFIC. CONTRACTOR SHALL FOLLOW ODOT CMS FOR ITEM 255, EXCEPT THAT PLACEMENT OF THE DOWEL BARS ARE NOT REQUIRED, CONCRETE SHALL BE CLASS FS, AND MAINTENANCE OF TRAFFIC COSTS INCURRED BY THE CONTRACTOR FOR THESE CURRENTLY UNKNOWN AND UNDEFINED PAVEMENT REPAIRS WILL BE COMPENSATED ON A TIME AND MATERIALS BASIS AS APPROVED BY THE CHIEF ENGINEER. DEPTH FOR PARTIAL REMOVAL WILL BE 5" (+/-) ASPHALT ON CONCRETE TO THE SURFACE OF THE CONCRETE BASE. REPLACEMENT MATERIALS ARE SPECIFIED IN 251.03 UNIT PRICES BID FOR THE ITEMS IMMEDIATELY BELOW SHALL NOT INCLUDE MAINTENANCE OF TRAFFIC COSTS.

**PRE-PLACEMENT TESTING/PRE-PLACEMENT MEETING**

IN COORDINATION WITH THE TESTING LAB, THE SUPPLIER SHALL BATCH A MINIMUM OF THREE (3) CUBIC YARDS OF CONCRETE USING A CLASS FS CONCRETE MIX DESIGN TO BE USED FOR PRE-PLACEMENT FIELD AND LABORATORY TESTING. THE CONCRETE SHALL BE DELIVERED TO THE JOB SITE TO SIMULATE JOB CONDITIONS, AS DIRECTED BY THE CHIEF ENGINEER. THE SIMULATION OF JOB CONDITIONS ARE TO INCLUDE BUT NOT LIMITED TO AIR TEMPERATURE DURING PLACEMENT AND CURE PERIOD WHICH WOULD ADVERSELY AFFECT THE CONCRETE STRENGTH HINDERING THE OPENING OF CLOSED LANES TO TRAFFIC. THE CONTRACTOR AND CONCRETE SUPPLIER WILL BE REQUIRED TO PERFORM THIS TEST POUR IN THE OVERNIGHT HOURS CONSISTENT WITH LANE CLOSURE RESTRICTIONS WHEN THE FULL DEPTH RIGID PAVEMENT REPLACEMENT WORK WILL TAKE PLACE. UPON COMPLETION OF THE ONSITE MATERIAL TESTING AT THE TIME OF DELIVERY, THE CONCRETE SHALL BE PLACED IN A SET OF FORMS TO SIMULATE THE RIGID FULL DEPTH RIGID PAVEMENT REPLACEMENT CONDITIONS. THE CONCRETE SHALL BE PLACED, CONSOLIDATED AND FINISHED AS WOULD BE EXPECTED FOR THE ACTUAL PAVEMENT REPLACEMENT WORK. THE SLAB IS TO BE CURED IN ACCORDANCE WITH THE ITEM 255 SPECIFICATIONS AND TESTING LAB BEAMS (6) AND CYLINDERS (6) SHALL BE CURED WITH THE SAME CONDITIONS AS THE TEST SLAB. THE CONTRACTOR SHALL DISPOSE OF ALL CONCRETE WASTE AND TEST SLAB OFF OF THE TURNPIKE RIGHT-OF-WAY UNLESS OTHERWISE APPROVED BY THE CHIEF ENGINEER. THE COST FOR COMPLYING WITH THIS REQUIREMENT SHALL BE IN ACCORDANCE WITH "BASIS OF PAYMENT."

SLUMP, AIR, YIELD AND TEMPERATURE SHALL BE CHECKED AT THE PLANT AND UPON ARRIVAL AT THE SITE. SIX (6) CYLINDERS AND SIX (6) BEAMS WILL BE MOLDED FOR PERIODIC TESTING AFTER FINAL PLACEMENT TO DETERMINE WHEN THE REQUIRED STRENGTH IS ACHIEVED. AT A MINIMUM, THE CONTRACTOR AND CONCRETE SUPPLIER IS TO PROVIDE A CLASS FS MIX DESIGN AND PERFORMANCE STANDARDS OF ACHIEVING A MODULUS OF RUPTURE 400 POUNDS PER SQUARE INCH WITHIN 4 HOURS OF FINAL PLACEMENT.

AS DIRECTED BY THE CHIEF ENGINEER, AN ADDITIONAL THREE (3) CUBIC YARD BATCHES SHALL BE PROVIDED BY THE SUPPLIER UNTIL THE CONCRETE MEETS SLUMP, AIR, YIELD, TEMPERATURE AND FLEXURAL STRENGTH REQUIREMENTS OF MODULUS OF RUPTURE OF 400 PSI TO ALLOW TRAFFIC TO USE THE REPAIRED AREA. THE OTIC SHALL PAY FOR ONLY ONE (1) TEST POUR OF 3 CUBIC YARDS OF FS CONCRETE. THE CONTRACTOR WILL BE REQUIRED TO CONTINUE PROVIDING TEST POURS UNTIL THE SPECIFICATIONS ARE MET HEREIN.

A PRE-PLACEMENT MEETING SHALL BE SCHEDULED AFTER REVIEW OF THE CONTRACTOR'S SUBMITTED PLACEMENT PROCEDURES AND PRIOR TO EACH MAJOR PLACEMENT. PRIOR TO THE PRE-PLACEMENT MEETING, AN APPROVED TEST MIX WITH CYLINDER BREAKS AT SEVEN (7) AND TWENTY-EIGHT (28) DAYS MUST BE PROVIDED.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 255 - FULL DEPTH REMOVAL AND RIGID REPLACEMENT.

THE SURFACE COURSE SHALL BE ITEM SP 404, ASPHALT CONCRETE SURFACE COURSE USING CRUSHED SLAG, PG 64-22. THE INTERMEDIATE COURSE SHALL BE ITEM SP 402 - ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR	544 SQ. YD.
ITEM 252 - FULL DEPTH PAVEMENT SAWING	160 FT.
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	512 SQ. YD.

1	ADDENDUM NO. 1	CLH	10/12/16
2	ADDENDUM NO. 2	CLH	10/19/16
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b>			
<b>GENERAL NOTES</b>			
M.P. 90.00 TO M.P. 95.90		SANDUSKY COUNTY	
<b>GPD GROUP</b> Glasco, Pyle, Schwaner, Burns & DeHaven, Inc. 330-572-2100 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101			
DESIGNED:	CLH	CHECKED:	PJF
DRAWN:	CLH	IN CHARGE:	MRG
DATE:		08/26/16	
SCALE:		N.T.S.	
<b>PROJECT NO. 39-17-01 SHEET 11 OF 272</b>			



# MAINTENANCE OF TRAFFIC NOTES

ITEM SP 622A – TEMPORARY PORTABLE BARRIER (WITH GLARE SCREEN)

ITEM SP 622A – TEMPORARY CONCRETE BARRIER (WITHOUT GLARE SCREEN)  
 THE CONTRACTOR SHALL REPLACE ANY DAMAGED TEMPORARY PORTABLE BARRIER WITHIN 24 HOURS OF A DAMAGING IMPACT. TO FACILITATE THIS PROMPT REPLACEMENT, AN ADDITIONAL THREE HUNDRED FEET OF EACH TYPE OF BARRIER SHALL BE ON THE PROJECT AT ALL TIMES.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN SHOWN FOR INFORMATIONAL PURPOSES ONLY. A LUMP SUM QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR REPLACEMENT OF TEMPORARY PORTABLE BARRIER.

ITEM SP 622A – TEMPORARY PORTABLE BARRIER, 32”  
 (WITH GLARE SCREEN) ..... 300 FEET

ITEM SP 622A – TEMPORARY CONCRETE BARRIER, 32”  
 (WITHOUT GLARE SCREEN) ..... 300 FEET

ITEM SPECIAL – “SNAP” MILL AND FILL

MAINTENANCE OF TRAFFIC ON THE MEDIAN SHOULDER AND PORTIONS OF THE OUTSIDE SHOULDER WILL REQUIRE THE EXISTING “SNAPS” TO BE MILLED AND FILLED OUTSIDE THE WORK LIMITS FOR TEMPORARY TRAFFIC CONTROL PURPOSES.

PAYMENT FOR THIS ITEM SHALL INCLUDE REMOVAL OF EXISTING “SNAPS” AND THE EXISTING PAVEMENT JOINT BY MILLING 1½” DEEP AND 5’ WIDE, TACK COATING ALL EXPOSED MILLED SURFACES, AND PAVING THE MILLED AREA WITH 1½” OF ITEM SP 404 – ASPHALT CONCRETE SURFACE COURSE, PG 64–22. ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL – “SNAP” MILL AND FILL.

ITEM SPECIAL – “SNAP” MILL AND FILL..... 2,510 FT

SUSPENSION OF WORK

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 630 – SIGNING MISC.: ADDITIONAL SIGNS WITH SUPPORTS AS DIRECTED BY THE CHIEF ENGINEER

WHEN ADDITIONAL SIGNING IS NEEDED TO MAINTAIN TRAFFIC, THE CONTRACTOR SHALL FURNISH THE SIGN OR SIGNS AS DIRECTED BY THE CHIEF ENGINEER. THESE SIGNS SHALL BE GROUND OR BARRIER MOUNTED AND MEET ALL THE SPECIFICATIONS OF THE PLAN, PROPOSAL AND CURRENT YEAR ODOT CMS. SIGN SUPPORTS AND HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 630 – SIGNING, MISC.: ADDITIONAL SIGNS WITH SUPPORTS, AS DIRECTED BY THE CHIEF ENGINEER.

ITEM 630 – SIGNING, MISC.: ADDITIONAL SIGNS WITH SUPPORTS,  
 AS DIRECTED BY THE CHIEF ENGINEER ..... 500 SQ FT

SCHEDULED DURATION OF WORK ZONES

THE FOLLOWING DEFINITIONS SHALL APPLY FOR THE DURATION OF WORK ZONE TYPES UTILIZED FOR THIS PROJECT:

LONG TERM STATIONARY ZONES: MORE THAN 5 DAYS, POST MOUNTED SIGNS, REFLECTORIZED TRAFFIC DRUMS. (RESURFACING PROJECTS, 3RD LANE PROJECTS, FULL DEPTH RECONSTRUCTION PROJECTS. ETC.)

INTERMEDIATE TERM STATIONARY ZONES: OVERNIGHT TO 5 DAYS; ROLL UP SIGNS ON X-FOOTPRINT SIGN STANDS, REFLECTORIZED TRAFFIC DRUMS. (FULL DEPTH PAVEMENT REPAIRS, ETC.)

SHORT TERM STATIONARY ZONES: FROM 1 TO 12 HOURS, SIGNS ON X-FOOTPRINT SIGN STANDS. 28” OR 42” CONES IN DAYTIME HOURS AND REFLECTORIZED 42” CONES OR TRAFFIC DRUMS AT NIGHTTIME. (CRACK SEALING OPERATIONS, RPM REFLECTOR REPLACEMENT, GUARDRAIL REPAIR, WASH-OUT REPAIRS, PAVEMENT BLOW-UPS, ETC.)

SHORT DURATION INTERMITTENT ZONES: LESS THAN 1 HOUR; APPROPRIATE TRUCK MOUNTED SIGNS. (SPRING CLEAN-UP, CATCH BASIN CLEANING, ETC.)

MOVING ZONES: SLOW MOVING CONTINUOUS OR MOVING WITH INTERMITTENT SHORT STOPS, SHADOW VEHICLE WITH A TRUCK MOUNTED ATTENUATOR (TMA) AND CHANGEABLE MESSAGE BOARD (CMB) OR APPROPRIATE SIGN. (SWEEPING OPERATIONS, WEED SPRAYING, ROADWAY POLICING, POTHOLE REPAIR, DELINEATOR CLEANING / REPAIR / REPLACEMENT, RPM CASTING INSTALLATION, LINE STRIPING, ETC.)

ALL INTERMEDIATE, SHORT TERM DURATION OR MOVING ZONES SHALL BE APPROVED BY THE CHIEF ENGINEER PRIOR TO FIELD ERECTION.

TRAFFIC CONTROL VEHICLES

THE FOLLOWING DEFINITIONS APPLY TO WORK ZONE TRAFFIC CONTROL VEHICLES FOR THIS PROJECT:

SHADOW VEHICLE: A VEHICLE LOCATED A SHORT DISTANCE BEHIND A MOVING OPERATION WITH A TRUCK MOUNTED ATTENUATOR (TMA) OR TOWABLE TRAILER MOUNTED ATTENUATOR (TTMA) AND CHANGEABLE MESSAGE BOARD (CMB) OR APPROPRIATE SIGN. THE VEHICLE SHALL MEET THE TMA/TTMA MANUFACTURER’S REQUIREMENTS FOR SIZE, WEIGHT, ETC.

BARRIER VEHICLE: AN UNOCCUPIED SHADOW VEHICLE, WITH OR WITHOUT A TMA/TTMA, PARKED WITHIN A STATIONARY WORK ZONE PRIOR TO A LOCALIZED WORK AREA. THE TRUCK’S BRAKE SHOULD BE SET, THE TRANSMISSION PLACED IN PARK OR GEAR, AND THE FRONT WHEELS TURNED AWAY FROM THE WORK AREA. IF A TMA/TTMA IS NOT USED THEN THE VEHICLE SHALL HAVE A GROSS VEHICLE WEIGHT OF AT LEAST 20,000 POUNDS.

MAINTAINING TRAFFIC NOTIFICATION

SINCE FUNCTIONAL TRAFFIC CONTROL IS A MAJOR CONCERN ON THIS PROJECT, IT IS ESSENTIAL THAT THE MOTORING PUBLIC BE ADEQUATELY FOREWARNED OF FUTURE LANE CLOSURES OR TRAFFIC CONSTRUCTIONS. THEREFORE, THE CONTRACTOR SHALL SUBMIT A WRITTEN SCHEDULE TO THE CHIEF ENGINEER AND RESPONSIBLE LAW ENFORCEMENT AGENCY (OHIO HIGHWAY PATROL) INDICATING THE LOCATIONS AND DATES OF THE LANE CLOSURES OR TRAFFIC CONSTRUCTIONS AT LEAST 48 HOURS PRIOR TO THE IMPLEMENTATION OF ANY SUCH TRAFFIC DISRUPTION.

THE CHIEF ENGINEER SHALL APPROVE THIS SCHEDULE PRIOR TO THE CONTRACTOR SUBMITTING THE WRITTEN SCHEDULE TO THE OHIO HIGHWAY PATROL.

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SP 641C – REMOVAL OF PAVEMENT MARKINGS  
 ALL EXISTING PAVEMENT MARKINGS WHICH ARE IN CONFLICT WITH THE PROPOSED MAINTENANCE OF TRAFFIC PAVEMENT MARKINGS ARE TO BE REMOVED AS PER SP641C – REMOVAL OF PAVEMENT MARKINGS.  
  
 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 641C. IN NO INSTANCE SHALL BLACKOUT TAPE BE USED. MEASUREMENT OF THIS ITEM SHALL BE IN ACCORDANCE WITH SP 641C 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 MAINTENANCE OF TRAFFIC GENERAL SUMMARY TO BE UTILIZED AS DIRECTED BY THE CHIEF ENGINEER.  
  
 SP 641C – REMOVAL OF PAVEMENT MARKING ..... 15.10 MILE

SP 621 – RAISED PAVEMENT MARKERS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR CONTINGENCY PURPOSES ONLY. THESE ITEMS ARE TO BE USED TO REPLACE OR REPAIR DAMAGED RAISED PAVEMENT MARKERS IN THE EASTBOUND AND WESTBOUND TURNPIKE LANES.

SP 621 RAISED PAVEMENT MARKER –  
 STIMSONITE MODEL 101 LPCR ..... 25 EACH

SP 621 REPLACEMENT PRISMATIC RETRO-REFLECTOR ..... 25 EACH

SP 621 REPLACEMENT RAISED PAVEMENT MARKER CASTING –  
 STIMSONITE MODEL 101 LPCR ..... 25 EACH

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GUARDRAIL DELINEATION  
 GUARDRAIL DELINEATION FROM MP 90.00 TO MP 95.90 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 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 DELINEATION.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE CHIEF ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616 – WATER ..... 1,500 M GAL

LANE CLOSURE RESTRICTION

THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION WILL NOT ALLOW THE CLOSURE OF THE TWO (2) TRAFFIC LANES WHICH ARE LOCATED ON THE OPPOSITE SIDE OF THE BASE REPLACEMENT WORK AFTER THE CONTRAFLOW TRAFFIC PATTERN IS IN OPERATION. THE CONTRACTOR SHALL SCHEDULE THEIR WORK SO THAT A LANE CLOSURE OF EITHER OF THESE TWO (2) LANES IS NOT REQUIRED DURING THE DURATION OF EACH PHASE OF CONSTRUCTION.

METHOD OF PAYMENT FOR MAINTAINING TRAFFIC

PAYMENT FOR THE MAINTENANCE OF TRAFFIC ITEMS INCLUDING DETOUR SIGNING AND LEVEL “2” TEMPORARY GROUND MOUNTED GUIDE SIGNS, UNLESS OTHERWISE SPECIFIED SEPARATELY, SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM SP614–MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK AS DETAILED IN THE PLANS.

SIGN COVERS AND OVERLAYS

THE CONTRACTOR SHALL COVER ALL PERMANENT SIGNS, OR PORTIONS THEREOF, AS REQUIRED BY THE PLANS. SIGN COVERS SHALL BE FURNISHED BY THE COMMISSION. THE CONTRACTOR SHALL RETURN THE SIGN COVERS TO THE COMMISSION AT THE END OF THE CONTRACT.

SIGN OVERLAYS FOR OVERHEAD SIGNS SHALL BE OF THE SAME COLOR AS THE BACKGROUND OF THE SIGN OR BE IN ACCORDANCE WITH ODOT OR OTC MAINTENANCE OF TRAFFIC SIGNING. THE SIGN OVERLAYS SHALL BE HIGH INTENSITY GRADE SHEETING (TYPE G) ON 0.080 INCH THICK ALUMINUM SECURELY RIVETED TO THE SIGN FACE, AND SHALL BE FURNISHED, INSTALLED AND REMOVED BY THE CONTRACTOR.

PAYMENT FOR ALL LABOR, MATERIAL AND EQUIPMENT ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM SP 614 – MAINTAINING TRAFFIC.

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 Date: Oct 21, 2016 Time: 11:50 am Path: -15707855  
 Technician: lblankship

1	ADDENDUM NO. 1	LOB	10/11/16
2	ADDENDUM NO. 2	LOB	10/19/16
NO.	REVISIONS	BY	DATE

## OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

**MAINTENANCE OF TRAFFIC NOTES**  
SHEET 3 OF 5 SANDUSKY COUNTY

GPD GROUP  
 Glass, Pyle, Schomer, Burns & DeHeaven, Inc.  
 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: ADG	CHECKED: LOB	DATE: 08/26/16	
DRAWN: ADG	IN CHARGE: MRG	SCALE: N.T.S.	

PROJECT NO. 39-17-01 SHEET 18 OF 272

# MAINTENANCE OF TRAFFIC NOTES

**ALTERNATE MAINTENANCE OF TRAFFIC PLANS**

IF THE CONTRACTOR SO ELECTS, HE OR SHE MAY PROPOSE AN ALTERNATE METHOD OR METHODS FOR MAINTAINING TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS AND SP 614 ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM.

IF THE CONTRACTOR ELECTS TO PROPOSE AN ALTERNATE MOT PHASE, SCHEME OR PLAN FROM THAT INCLUDED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PREPARE TO SCALE PLANS, EQUIVALENT TO THE LEVEL OF DETAIL OR MORE AS PROVIDED IN THE CONTRACT DOCUMENTS, WHICH ILLUSTRATE ALL ADVANCED WARNING AREA SIGNAGE, TRANSITION AREA(S) FOR TAPERS AND SHIFTS, SIGNAGE AND/ OR PAVEMENT MARKINGS, BUFFER SPACE, ACTIVITY OR WORK AREAS WHERE WORK IS TAKING PLACE, STAGING AREAS FOR WORKERS / MATERIALS / EQUIPMENT, AND TERMINATION AREA SHOWING TRAILING BUFFER SPACE AND TRANSITIONS OF TRAFFIC RETURNING TO NORMAL ALIGNMENT.

DETAILS OF ANY VARIATION FROM THE CONTRACT DOCUMENTS, SUCH AS THE PLACEMENT OF TEMPORARY PORTABLE BARRIER, TEMPORARY SHEETING, TEMPORARY BARRIER VEHICLES, TEMPORARY SIGNALS, TEMPORARY IMPACT ATTENUATORS, COVERING OF EXISTING SIGNAGE, REMOVAL OF PAVEMENT MARKINGS, ETC. SHOULD ALSO BE PROVIDED. BOTH MILEPOSTS AND STATIONS SHALL BE PROVIDED TO IDENTIFY ALL LOCATIONS OF SIGNS OR DEVICES.

THE PROPOSED ALTERNATE PLAN IS TO ADDRESS THE ENTIRE PROJECT AND/ OR ADJACENT PROJECT MOT PLANS AND ANY REQUIRED CORRECTIONS TO ALREADY EXISTING MOT. TRAFFIC FLOW ARROWS SHALL BE SHOWN ON THE PLANS TO CLEARLY INDICATE EACH LANE OF TRAFFIC MAINTAINED.

THE ALTERNATE MOT PLANS SHALL BE PREPARED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED AND REGISTERED IN THE STATE OF OHIO WHO IS KNOWLEDGEABLE ABOUT FUNDAMENTAL PRINCIPLES OF TEMPORARY TRAFFIC CONTROL AND WORK ACTIVITIES TO BE PERFORMED. ALTERNATE MOT PLANS SHALL BE SUBMITTED TO THE CHIEF ENGINEER FOR REVIEW AND APPROVAL.

THE CHIEF ENGINEER WILL REQUIRE A 14 DAY REVIEW PERIOD TO EVALUATE THE PROPOSED ALTERNATE MOT PLAN. NO ALTERNATE PLANS SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE CHIEF ENGINEER. ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH SP 614 AND ALL OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE CURRENT VERSION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION STANDARDS. ALL COSTS ASSOCIATED WITH THE PROPOSED ALTERNATE MOT PLAN WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

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

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

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

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

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

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

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

ANY IMPACT ATTENUATOR PLACED ON:

- NEW PAVEMENT
- PAVEMENT THAT IS NOT BEING REPLACED AS PART OF THIS PROJECT
- OR PAVEMENT ON AN ACCELERATION/DECELERATION RAMP

SHALL BE AN ANCHORLESS WATER-FILLED IMPACT ATTENUATOR. FURNISH AN ANCHORLESS WATER-FILLED IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARD'S WEB PAGE FOR ROADWAY STANDARDS APPROVED PRODUCTS.

IMPACT ATTENUATORS SHOWN AND QUANTIFIED IN THE PLANS ARE FOR THE PROPOSED MAINTENANCE OF TRAFFIC PHASE LAYOUTS. ADDITIONAL IMPACT ATTENUATORS UTILIZED FOR PHASE SETUP, CONSTRUCTION ACCESS POINTS AND ALTERNATIVE MAINTENANCE OF TRAFFIC METHODS NOT DETAILED IN THESE PLANS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SP 614 – MAINTAINING TRAFFIC AND SHALL INCLUDE THE COST OF THE ATTENUATOR, LABOR, MATERIALS AND EQUIPMENT NECESSARY TO SET, RESET AND REMOVE THE 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, MAINTAIN AND REMOVE COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. ANCHOR REMOVAL CAN CAUSE DAMAGE TO THE PAVEMENT SURFACE. PAYMENT SHALL INCLUDE REPAIRING ANY DAMAGE CAUSED DURING REMOVAL.

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

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, FOUR (4) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMB). TWO (2) OF THE SIGNS SHALL BE LOCATED NEAR THE PROJECT SITE, ONE FOR EACH DIRECTION OF TRAVEL, FOR THE DURATION OF THE PROJECT. TWO OF THE SIGNS SHALL BE LOCATED APPROXIMATELY TWENTY-FIVE (25) MILES OUTSIDE THE PROJECT LIMITS, ONE FOR EACH DIRECTION OF TRAVEL, AS DIRECTED BY THE ENGINEER FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED CLASS "A" PCMB 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. PCMB SHALL BE DELINEATED ON A PERMANENT BASIS IN ACCORDANCE WITH ODOT CMS 614.03.

THE PCMB LOCATIONS, LIMITS FOR THOSE LOCATIONS AND ALL ACTIVATION OF PCMB SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE CHIEF ENGINEER. THE PCMB SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE CHIEF ENGINEER, RELOCATE THE PCMB TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMB SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMB 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 REVERSE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CHIEF ENGINEER. A 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. PCMB FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMB 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 PCMB 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 PCMB UNIT SHALL CONTAIN A GPS DEVICE WHICH WILL SHOW IT'S LOCATION ON A MAP WHICH CAN BE VIEWED REMOTELY BY THE OTC COMMUNICATIONS CENTER. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE OTC COMMUNICATIONS CENTER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

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

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

THE PCMB 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 PCMB, 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 CONTRACT.

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 PCMB 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 FOUR (4) PORTABLE CHANGEABLE MESSAGE SIGNS, EACH SIGN FOR APPROXIMATELY 120 DAYS, FOR AN ESTIMATED TOTAL OF 480 DAYS.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 480 DAY

**ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC**

THIS ITEM SHALL CONSIST OF THE CONTRACTOR PROVIDING ITEM-614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. THIS ITEM SHALL BE USED FOR WEDGING PURPOSES TO AID IN TRANSITIONING TRAFFIC FROM NORMAL TO MILLED SURFACE AND BACK AT THE PERTINENT TOLL/SERVICE PLAZAS FOR EACH PART OF THE CONTRACT. SMOOTH TRANSITIONS BETWEEN MILLED SURFACES AND PAVED SURFACES SHALL BE MAINTAINED AT ALL TIMES AT TOLL/SERVICE PLAZA ENTRANCE/EXIT. AT NO TIME SHALL TRAFFIC BE SUBJECTED TO SUDDEN DIPS, DROP-OFFS 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.

A THIS ITEM SHALL ALSO BE USED FOR CROSSEVER PAVEMENT REPAIRS, AND AS DIRECTED BY THE CHIEF ENGINEER.

PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM INCLUDING PLACING AND REMOVING THE ASPHALT CONCRETE. THIS ITEM SHALL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC .....100 CU. YD.

**RECONSTRUCTED SHOULDER**

WHERE REQUIRED FOR THE MAINTENANCE OF RAMP TRAFFIC, A QUANTITY OF TEMPORARY PAVEMENT HAS BEEN PROVIDED TO ENSURE THAT SHOULDER PAVEMENT WILL SUPPORT TRAFFIC DURING CONSTRUCTION OPERATIONS. EXISTING RAMP AND ROADWAY SHOULDERS IMPACTED BY THE MAINTENANCE OF TRAFFIC SHALL BE RECONSTRUCTED TO THE SAME SLOPE AS THE EXISTING SHOULDER PAVEMENT.

RECONSTRUCTED SHOULDER SHALL BE AS PER THE SPECIFICATIONS OF ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A AND SHALL BE CONSTRUCTED TO THE SAME WIDTH AS THE EXISTING SHOULDER. THE RECONSTRUCTED SHOULDER SHALL REMAIN IN PLACE AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES.

ALL COSTS AND MATERIALS ASSOCIATED WITH SHOULDER RECONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A.

**ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN**

THIS ITEM SHALL BE AS PER SECTION 615 OF THE ODOT C&MS. IN ADDITION, PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS AND ALL OTHER WORK NECESSARY TO THE CONSTRUCTION AND PLACEMENT OF TEMPORARY PAVEMENT REQUIRED FOR THE MAINTENANCE OF TRAFFIC WHERE SPECIFIED IN THESE PLANS.

PER 254.05 PAVEMENT SURFACE TOLERANCES SHALL BE WITHIN 1/8 INCH PER TEN (10) FEET.

ALL COSTS FOR THE PLACEMENT OF THE TEMPORARY PAVEMENT, LABOR AND MATERIALS, REMOVAL AND RESTORATION AT PROJECT COMPLETION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.

IN ADDITION, ALL COSTS ASSOCIATED WITH MAINTENANCE OF TRAFFIC DRAINAGE ITEMS, LABOR AND MATERIALS, INCLUDING ANY TEMPORARY RELOCATION AND RESTORATION OF UTILITIES DISTURBED AND SITE RESTORATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.

1	ADDENDUM NO. 1	LOB	10/11/16
2	ADDENDUM NO. 2	LOB	10/19/16
NO.	REVISIONS	BY	DATE

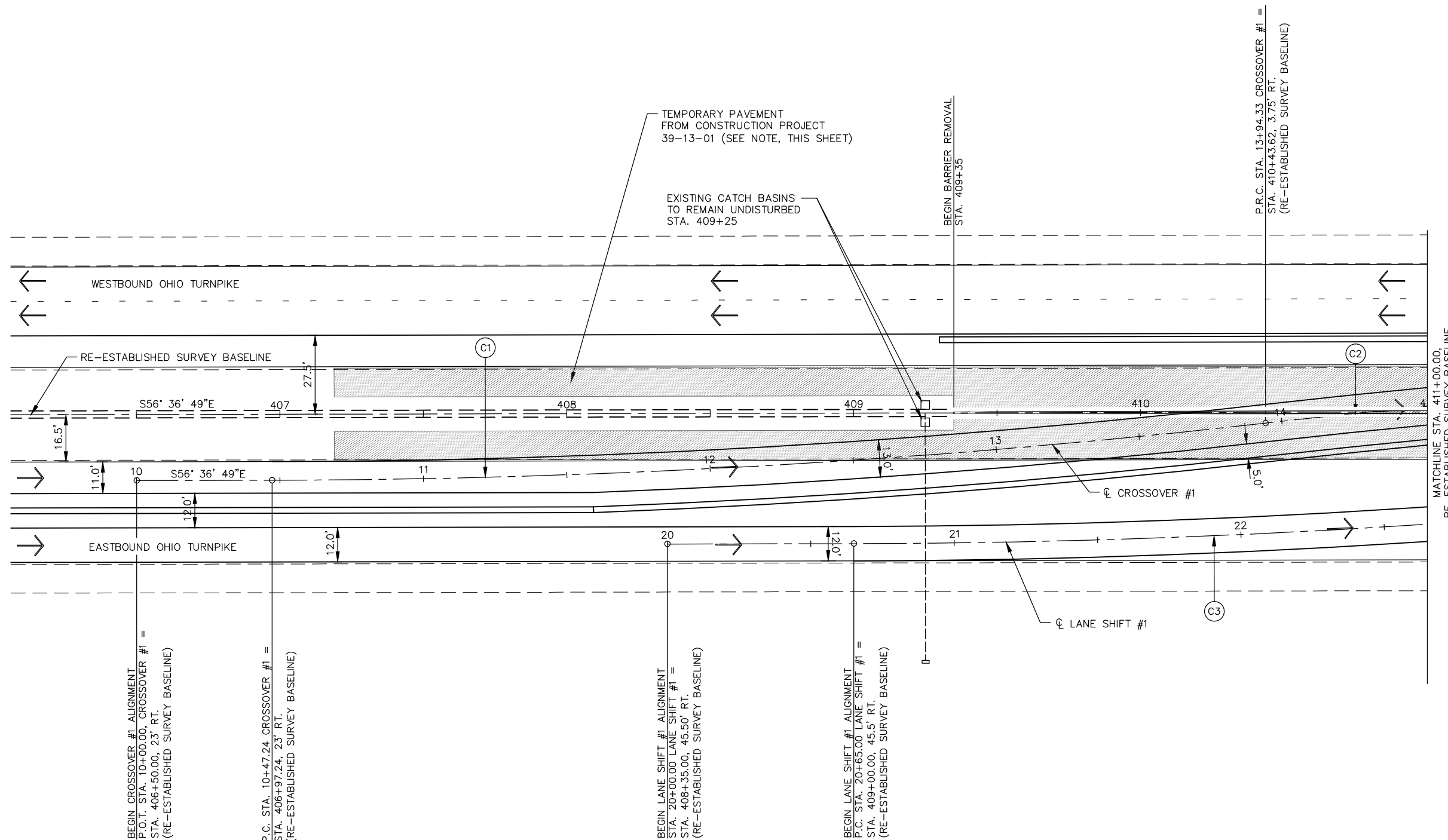
OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC NOTES  
SHEET 4 OF 5 SANDUSKY COUNTY

<span style="font-weight: bold; font-size: 1.1em;">GPD GROUP</span> <small>Glenn, Pyle, Schaefer, Burns &amp; DeHaven, Inc.</small>				<b>330-572-2100</b> <small>520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101</small>	
DESIGNED:	ADG	CHECKED:	LOB	DATE:	08/26/16
DRAWN:	ADG	IN CHARGE:	MRG	SCALE:	N.T.S.

PROJECT NO. 39-17-01 SHEET 19 OF 272

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Date: 04/24/2016 Time: 6:28 pm User: jrb



**CROSSOVER #1 GEOMETRIC PLAN**

**NOTE:**

THE EXISTING CROSSOVER PAVEMENT AND SLOTTED DRAIN WERE CONSTRUCTED AND REMAIN AS PART OF OTC CONSTRUCTION PROJECT 39-13-01. REFER TO WESTBOUND PAVEMENT CONSTRUCTION PROJECT 39-13-01 MAINTENANCE OF TRAFFIC PLANS FOR CROSSOVER TEMPORARY PAVEMENT ELEVATIONS AND DRAINAGE DETAILS.

THE CONTRACTOR SHALL PERFORM PAVEMENT REPAIRS TO THE CROSSOVER PAVEMENT AS DIRECTED BY THE CHIEF ENGINEER. PAYMENT FOR PAVEMENT REPAIRS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. SEE MAINTENANCE OF TRAFFIC NOTE, SHEET 49.

THE CONTRACTOR SHALL CLEAR DEBRIS FROM THE EXISTING CATCH BASINS AND TRENCH DRAIN AS DIRECTED BY THE CHIEF ENGINEER. ALL COSTS TO CLEAN AND REPAIR THE REMAINING TRENCH DRAIN SHALL BE INCIDENTAL TO AND INCLUDED WITH THE LUMP SUM CONTRACT BID ITEM FOR SP 614 - MAINTAINING TRAFFIC.

**C1 PROPOSED CURVE (CROSSOVER #1)**  
 P.I. STA. 12+20.97  
 $\Delta = 6^{\circ} 21' 43''$  (LT)  
 $D_c = 1^{\circ} 49' 58''$   
 $R = 3126.00'$   
 $T = 173.73'$   
 $L = 347.09'$   
 $E = 4.82'$   
 P.C. STA. 10+47.24  
 P.R.C. STA. 13+94.33

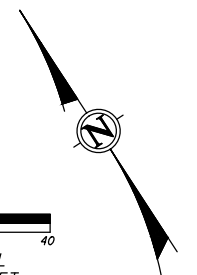
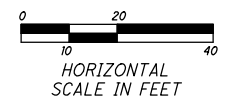
**C2 PROPOSED CURVE (CROSSOVER #1)**  
 P.I. STA. 15+68.06  
 $\Delta = 6^{\circ} 21' 43''$  (RT)  
 $D_c = 1^{\circ} 49' 58''$   
 $R = 3126.00'$   
 $T = 173.73'$   
 $L = 347.09'$   
 $E = 4.82'$   
 P.R.C. STA. 13+94.33  
 P.C. STA. 17+41.43

**C3 PROPOSED CURVE (LANE SHIFT #1)**  
 P.I. STA. 22+16.90  
 $\Delta = 5^{\circ} 34' 06''$   
 $D_c = 1^{\circ} 49' 58''$   
 $R = 3126.00'$   
 $T = 152.02'$   
 $L = 303.79'$   
 $E = 3.69'$   
 P.C. STA. 20+65.00  
 P.R.C. STA. 23+68.79

**LEGEND**

TEMPORARY PAVEMENT, AS PER PLAN (VARIABLE DEPTH OVERLAY)

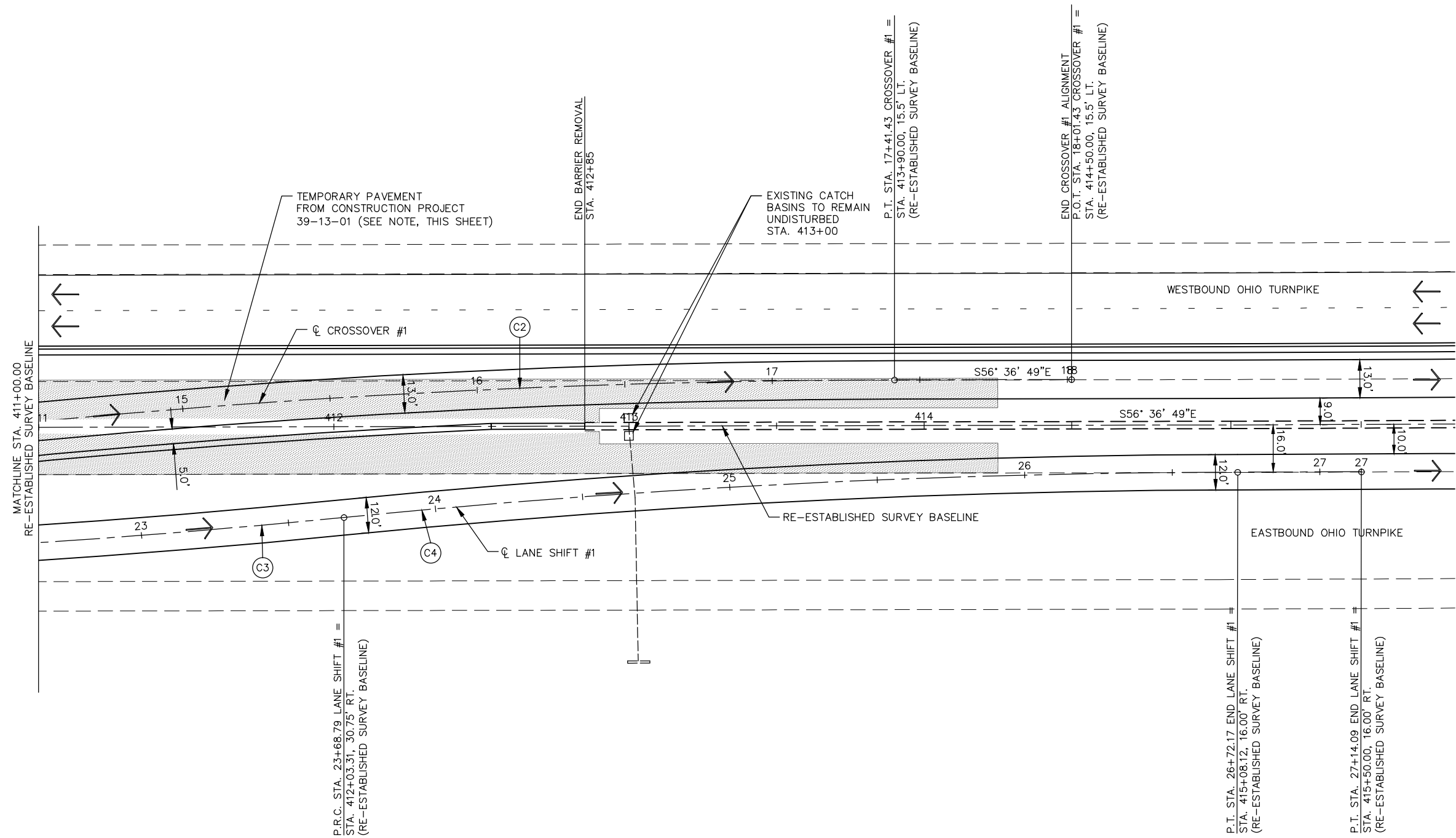
TRAFFIC FLOW ARROW



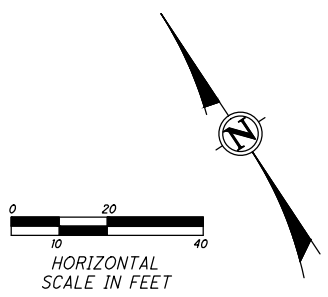
89

2	ADDENDUM NO. 2	LOB	10/19/16
-	-	-	-
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b>			
<b>MAINTENANCE OF TRAFFIC CROSSOVER GEOMETRIC PLAN DETAILS</b>			
M.P. 90.00 SANDUSKY COUNTY			
<b>GPD GROUP</b>			
<small>Glenn, Pyle, Schumacher, Burns &amp; Deffenbaugh, Inc. 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101</small>			
DESIGNED:	ADG	CHECKED:	LOB
DATE:	08/26/16	SCALE:	1"=20'
DRAWN:	MSS	IN CHARGE:	MRG
<b>PROJECT NO. 39-17-01 SHEET 93 OF 272</b>			

Technician: lblankenship



**CROSSOVER #1 GEOMETRIC PLAN**



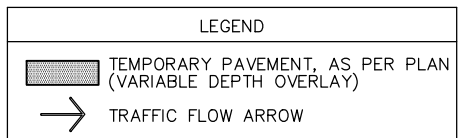
**NOTE:**

THE EXISTING CROSSOVER PAVEMENT AND SLOTTED DRAIN WERE CONSTRUCTED AND REMAIN AS PART OF OTIC CONSTRUCTION PROJECT 39-13-01. REFER TO WESTBOUND PAVEMENT CONSTRUCTION PROJECT 39-13-01 MAINTENANCE OF TRAFFIC PLANS FOR CROSSOVER TEMPORARY PAVEMENT ELEVATIONS AND DRAINAGE DETAILS.

THE CONTRACTOR SHALL PERFORM PAVEMENT REPAIRS TO THE CROSSOVER PAVEMENT AS DIRECTED BY THE CHIEF ENGINEER. PAYMENT FOR PAVEMENT REPAIRS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. SEE MAINTENANCE OF TRAFFIC NOTE, SHEET 19.

THE CONTRACTOR SHALL CLEAR DEBRIS FROM THE EXISTING CATCH BASINS AND TRENCH DRAIN AS DIRECTED BY THE CHIEF ENGINEER. ALL COSTS TO CLEAN AND REPAIR THE REMAINING TRENCH DRAIN SHALL BE INCIDENTAL TO AND INCLUDED WITH THE LUMP SUM CONTRACT BID ITEM FOR SP 614 - MAINTAINING TRAFFIC.

- C2 PROPOSED CURVE (CROSSOVER #1)**  
 P.I. STA. 15+68.06  
 $\Delta = 6^\circ 21' 43''$   
 $D_c = 1' 49' 58''$   
 $R = 3126.00'$   
 $T = 173.73'$   
 $L = 347.09'$   
 $E = 4.82'$   
 P.R.C. STA. 13+94.33  
 P.C. STA. 17+41.43
- C3 PROPOSED CURVE (LANE SHIFT #1)**  
 P.I. STA. 22+16.90  
 $\Delta = 5^\circ 34' 06''$   
 $D_c = 1' 49' 58''$   
 $R = 3126.00'$   
 $T = 152.02'$   
 $L = 303.79'$   
 $E = 3.69'$   
 P.C. STA. 20+65.00  
 P.R.C. STA. 23+68.79
- C4 PROPOSED CURVE (LANE SHIFT #1)**  
 P.I. STA. 25+20.48  
 $\Delta = 5^\circ 33' 38''$   
 $D_c = 1' 49' 58''$   
 $R = 3126.00'$   
 $T = 152.02'$   
 $L = 303.38'$   
 $E = 3.68'$   
 P.R.C. STA. 23+68.79  
 P.T. STA. 26+72.17



	ADDENDUM NO. 2	LOB	10/19/16
NO.	REVISIONS	BY	DATE

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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC CROSSOVER GEOMETRIC PLAN DETAILS

M.P. 90.00 SANDUSKY COUNTY

GPD GROUP

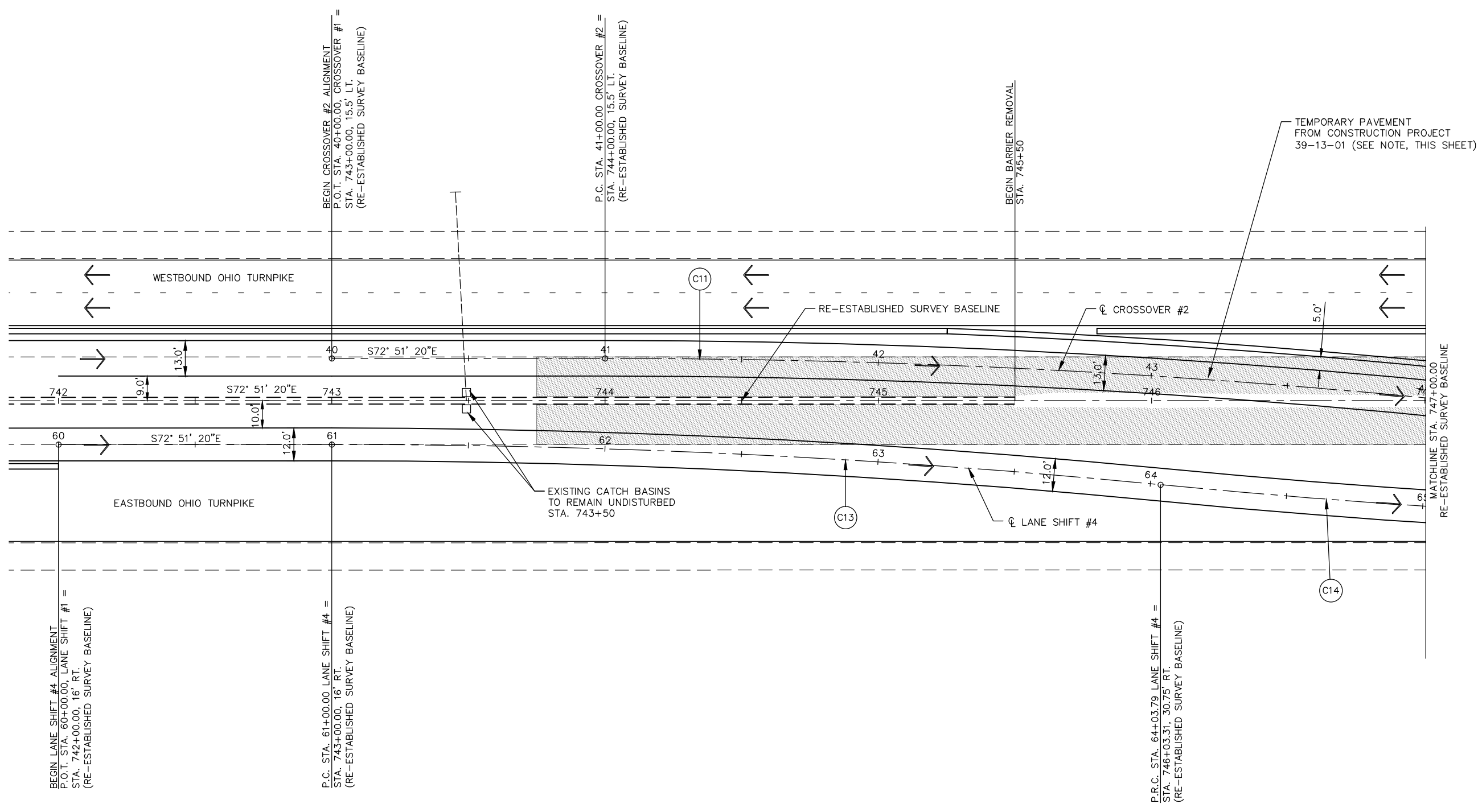
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: ADG	CHECKED: LOB	DATE: 09/26/16
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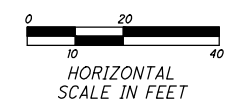
PROJECT NO. 39-17-01 SHEET 94 OF 272

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### CROSSOVER #2 GEOMETRIC PLAN



**NOTE:**

THE EXISTING CROSSOVER PAVEMENT AND SLOTTED DRAIN WERE CONSTRUCTED AND REMAIN AS PART OF OTIC CONSTRUCTION PROJECT 39-13-01. REFER TO WESTBOUND PAVEMENT CONSTRUCTION PROJECT 39-13-01 MAINTENANCE OF TRAFFIC PLANS FOR CROSSOVER TEMPORARY PAVEMENT ELEVATIONS AND DRAINAGE DETAILS.

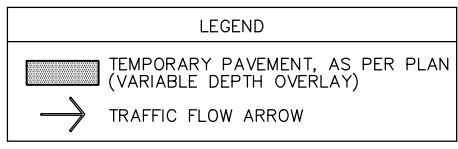
THE CONTRACTOR SHALL PERFORM PAVEMENT REPAIRS TO THE CROSSOVER PAVEMENT AS DIRECTED BY THE CHIEF ENGINEER. PAYMENT FOR PAVEMENT REPAIRS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. SEE MAINTENANCE OF TRAFFIC NOTE, SHEET 19.

THE CONTRACTOR SHALL CLEAR DEBRIS FROM THE EXISTING CATCH BASINS AND TRENCH DRAIN AS DIRECTED BY THE CHIEF ENGINEER. ALL COSTS TO CLEAN AND REPAIR THE REMAINING TRENCH DRAIN SHALL BE INCIDENTAL TO AND INCLUDED WITH THE LUMP SUM CONTRACT BID ITEM FOR SP 614 - MAINTAINING TRAFFIC.

(C11) PROPOSED CURVE (CROSSOVER #2)  
 P.I. STA. 42+73.73  
 $\Delta = 6^\circ 21' 43''$   
 $Dc = 1' 49' 58''$   
 $R = 3126.00'$   
 $T = 173.73'$   
 $L = 347.09'$   
 $E = 4.82'$   
 P.C. STA. 41+00.00  
 P.R.C. STA. 44+47.09

(C13) PROPOSED CURVE (LANE SHIFT #4)  
 P.I. STA. 62+52.02  
 $\Delta = 5^\circ 34' 05''$   
 $Dc = 1' 49' 58''$   
 $R = 3126.00'$   
 $T = 152.02'$   
 $L = 303.79'$   
 $E = 3.69'$   
 P.C. STA. 61+00.00  
 P.R.C. STA. 64+03.79

(C14) PROPOSED CURVE (LANE SHIFT #4)  
 P.I. STA. 65+55.81  
 $\Delta = 5^\circ 34' 05''$   
 $Dc = 1' 49' 58''$   
 $R = 3126.00'$   
 $T = 152.02'$   
 $L = 303.79'$   
 $E = 3.69'$   
 P.R.C. STA. 64+03.79  
 P.T. STA. 67+07.58



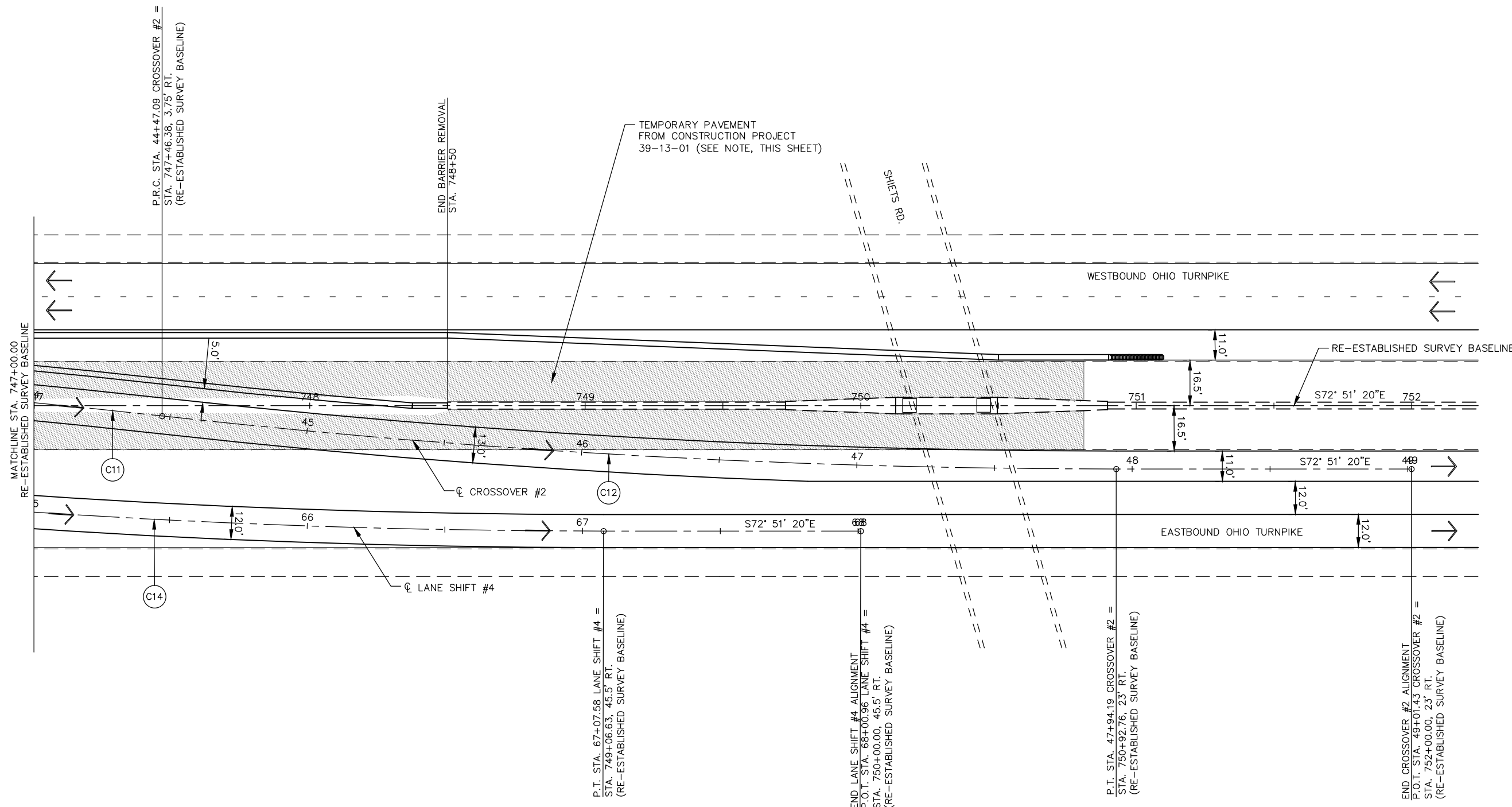
2		ADDENDUM NO. 2	LOB	10/19/16
-				
NO.	REVISIONS		BY	DATE

**OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**  
 MAINTENANCE OF TRAFFIC GEOMETRIC PLAN DETAILS  
 M.P. 90.00 SANDUSKY COUNTY

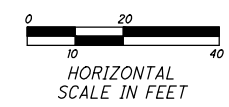
**GPD GROUP**  
Gilman, Pyle, Schommer, Barnes & DeHaven, Inc.  
 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: ADG	CHECKED: LOB	DATE: 09/26/16
DRAWN: DGD	IN CHARGE: MRG	SCALE: 1"=20'

**PROJECT NO. 39-17-01 SHEET 95 OF 272**



**CROSSOVER #2 GEOMETRIC PLAN**



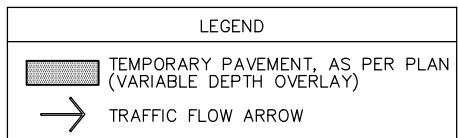
**NOTE:**

THE EXISTING CROSSOVER PAVEMENT AND SLOTTED DRAIN WERE CONSTRUCTED AND REMAIN AS PART OF OTIC CONSTRUCTION PROJECT 39-13-01. REFER TO WESTBOUND PAVEMENT CONSTRUCTION PROJECT 39-13-01 MAINTENANCE OF TRAFFIC PLANS FOR CROSSOVER TEMPORARY PAVEMENT ELEVATIONS AND DRAINAGE DETAILS.

THE CONTRACTOR SHALL PERFORM PAVEMENT REPAIRS TO THE CROSSOVER PAVEMENT AS DIRECTED BY THE CHIEF ENGINEER. PAYMENT FOR PAVEMENT REPAIRS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. SEE MAINTENANCE OF TRAFFIC NOTE, SHEET 19.

THE CONTRACTOR SHALL CLEAR DEBRIS FROM THE EXISTING CATCH BASINS AND TRENCH DRAIN AS DIRECTED BY THE CHIEF ENGINEER. ALL COSTS TO CLEAN AND REPAIR THE REMAINING TRENCH DRAIN SHALL BE INCIDENTAL TO AND INCLUDED WITH THE LUMP SUM CONTRACT BID ITEM FOR SP 614 - MAINTAINING TRAFFIC.

- C11 PROPOSED CURVE (CROSSOVER #2)**  
 P.I. STA. 42+73.73  
 Δ = 6° 21' 43"  
 Dc = 1' 49' 58"  
 R = 3126.00'  
 T = 173.73'  
 L = 347.09'  
 E = 4.82'  
 P.C. STA. 41+00.00  
 P.R.C. STA. 44+47.09
- C12 PROPOSED CURVE (CROSSOVER #2)**  
 P.I. STA. 46+20.82  
 Δ = 6° 21' 43"  
 Dc = 1' 49' 58"  
 R = 3126.00'  
 T = 173.73'  
 L = 347.09'  
 E = 4.82'  
 P.R.C. STA. 44+47.09  
 P.T. STA. 47+94.19
- C14 PROPOSED CURVE (LANE SHIFT #4)**  
 P.I. STA. 65+55.81  
 Δ = 5° 34' 05"  
 Dc = 1' 49' 58"  
 R = 3126.00'  
 T = 152.02'  
 L = 303.79'  
 E = 3.69'  
 P.R.C. STA. 64+03.79  
 P.T. STA. 67+07.58



2		ADDENDUM NO. 2	LOB	10/19/16
-				
NO.	REVISIONS		BY	DATE

**OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**

**MAINTENANCE OF TRAFFIC GEOMETRIC PLAN DETAILS**

M.P. 90.00 SANDUSKY COUNTY

**GPD GROUP**  
 Glenn, Pyle, Schomay, Burns & DeHaven, Inc.  
 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: ADG	CHECKED: LOB	DATE: 09/26/16
DRAWN: DGD	IN CHARGE: MRG	SCALE: 1"=20'

**PROJECT NO. 39-17-01 SHEET 96 OF 272**

Drawing File: G:\2013\20131115\mof\shhets\20131115\MOH004.dwg Layout: EASTERN GEOMETRIC PLAN  
 Date: Oct 24, 2016 Time: 3:03 pm PLOT: -4,712,8888  
 Technician: lblankenship

SHEET NUMBER														ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
9	10	11	12	13	14	15	107	108	109	111	112	INSERT 1	INSERT 2					
																	ROADWAY	
								24						201	LUMP	1	CLEARING AND GRUBBING	
								1360						202	24	EACH	CATCH BASIN OR INLET REMOVED	
								14883						202	1360	FT	PIPE REMOVED	
		3075												202	14883	FT	GUARDRAIL REMOVED	11
														202	3075	FT	GUARDRAIL REMOVED FOR SALVAGE, AS PER PLAN	
														202	9	EACH	HEADWALL REMOVED	
								3879						202	3879	FT	CURB REMOVED	
								398						202	398	FT	CONCRETE BARRIER REMOVED	
										120080				202	120080	SQ YD	PAVEMENT REMOVED	
										27284				203	30040	CU YD	EXCAVATION	
														203	1800	CU YD	ROADWAY EXCAVATION AND EMBANKMENT	
				1800										203	2597	CU YD	EMBANKMENT	
														203	1786	CU YD	EMBANKMENT WITH RACP, AS PER PLAN	4
														204	40509	CU YD	EXCAVATION INCLUDING EMBANKMENT, AS PER PLAN	INSERT 2
														203	20133	CU YD	BORROW	
														230	230	CU YD	GRANULAR MATERIAL, TYPE C	
														203	2862	CU YD	GRANULAR EMBANKMENT, AS PER PLAN (SHEAR KEY)	INSERT 2
														203	95	CU YD	GRANULAR EMBANKMENT, AS PER PLAN (NO. 8 AGGREGATE)	INSERT 2
				178				3566						204	3744	CU YD	EXCAVATION	
														204	970	SQ YD	GEOTEXTILE FABRIC, 712.09, TYPE A	
														7329	7329	SQ YD	GEOTEXTILE FABRIC, TYPE B	
														204	227	SQ YD	TYPE D GEOTEXTILE, 712.09	
														204	1863	SQ YD	SUBGRADE COMPACTION	
														209	5	MILE	LINEAR GRADING, AS PER PLAN	9
							5.45			1636				SP 519	221	SQ FT	PATCHING CONCRETE STRUCTURES	
														SP 519C	51	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
														526	1595	SQ YD	REINFORCED CONCRETE APPROACH SLAB, (T=12")	
										1595				SP 536	1029	SQ YD	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS	
														606	15201	FT	GUARDRAIL, TYPE MGS, USING LONG STEEL POSTS	
														8	8	EACH	ANCHOR ASSEMBLY, TYPE T, USING LONG STEEL POSTS	
														606	6	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1, USING LONG STEEL POSTS	
														606	8	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1, USING LONG STEEL POSTS, AS PER PLAN	10
														606	2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2, USING LONG STEEL POSTS	
														606	7	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2, USING LONG STEEL POSTS, AS PER PLAN	10
														606	12	EACH	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN	10
														609	5865	FT	ASPHALT CONCRETE CURB, TYPE 1, PG64-22	
														609	247	FT	CURB, TYPE 4-C	
														622	650	FT	CONCRETE BARRIER, TYPE B-50, AS PER PLAN	10
														622	4	EACH	CONCRETE BARRIER, END ANCHORAGE REINFORCED, TYPE B-50	
														622	4	EACH	CONCRETE BARRIER, END ANCHORAGE REINFORCED, TYPE D	
														622	8	EACH	CONCRETE BARRIER, END SECTION, TYPE D	
														622	163	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, (42"), AS PER PLAN	10
														622	87	FT	MEDIAN BARRIER WALL	
														861	227	SQ YD	GEOGRID FOR SUBGRADE STABILIZATION, AS PER PLAN, TENSAR TRIAX 160 GEOGRID	
														4030				
														SPECIAL	4030	CU YD	LIMESTONE SAND	INSERT 1

Drawing File: C:\2013\20131115\Roadway\Sheets\201311156001.dwg  
 Date: Oct 19, 2016 Time: 9:52 am  
 Technician: chuff

1	ADDENDUM NO. 1	CLH	10/11/16
2	ADDENDUM NO. 2	CLH	10/19/16
NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION**  
 GENERAL SUMMARY  
 M.P. 90.00 TO M.P. 95.90 SANDUSKY COUNTY

**GPD GROUP**  
 Glenn Pyle, Chairman, Burns & McDonnell, Inc.  
 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED:	CLH	CHECKED:	PJF	DATE:	08/26/16
DRAWN:	CLH	IN CHARGE:	MRG	SCALE:	N.T.S.

PROJECT NO. 39-17-01 SHEET 104 OF 272

SHEET NUMBER														ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.		
9	10	11	12	13	14	15	107	108	109	111	112	INSERT 1	INSERT 2							
																		<b>DRAINAGE - CONTINUED</b>		
								12										SPECIAL 12 EACH	12" PRECAST CONCRETE END SECTION	DR-1
								13										SPECIAL 13 EACH	15" PRECAST CONCRETE END SECTION	DR-1
								2										SPECIAL 2 EACH	18" PRECAST CONCRETE END SECTION	DR-1
								1										SPECIAL 1 EACH	42" PRECAST CONCRETE END SECTION	DR-1
					250													SPECIAL 250 FT	PIPE CLEANOUT, 12" TO 24"	
					250													SPECIAL 250 FT	PIPE CLEANOUT, 27" TO 42"	
																		SPECIAL 2 EACH	SECURING MANHOLE LID	
																			<b>PAVEMENT</b>	
				138565														206 138565 SQ YD	CEMENT STABILIZED SUBGRADE, 16" DEEP, AS PER PLAN	13
				134565														206 134565 SQ YD	LIME-KILN DUST STABILIZED SUBGRADE, 16" DEEP, AS PER PLAN	13
				3620														206 3620 TON	LIME-KILN DUST	13
				5590														206 5590 TON	CEMENT	
				8480														206 8480 GAL	CURING COAT	
				90														206 90 HOUR	TEST ROLLING	
																		251 544 SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	
																		252 28934 FT	FULL DEPTH PAVEMENT SAWING	
97														1000				254 1270 SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (T=2")	
134																		254 3330 SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH)	
																		255 512 SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	
																		SP 302 36521 CU YD	ASPHALT CONCRETE BASE, PG 64-22	
																		SP 304 28493 CU YD	AGGREGATE BASE	
																		SP 304 178 CU YD	GRANULAR MATERIAL	
																		SP 402 1577 CU YD	ASPHALT CONC. BASE COURSE OR RECYCLED ASPHALT CONC. BASE COURSE, PG64-22	
																		SP 402 4346 CU YD	ASPHALT CONC. BASE COURSE OR RECYCLED ASPHALT CONC. BASE COURSE, PG70-22 (FR)	
																		SP 403 136 CU YD	ASPHALT CONCRETE LEVELING COURSE, PG70-22	
																		SP 404 1352 CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG64-22	
																		SP 404 3793 CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG70-22 (FR)	
																		SP 404A 58807 FT	JOINT SEALER	
																		SP 407 23723 GALLON	TRACKLESS TACK	
																		423 23300 LB	CRACK SEALING, TYPE 1	
																		SP 617 9325 SQ YD	SHOULDER PREPARATION, AS PER PLAN	9
																		SP 617 704 CU YD	COMPACTED AGGREGATE	
																		SP 627 402 TON	STONE SHOULDER PROTECTION	
																		SPECIAL 18.86 MILE	SONIC NAP ALERT PATTERN (SNAP)	
																			<b>MAINTENANCE OF TRAFFIC</b>	
																			FOR MAINTENANCE OF TRAFFIC GENERAL SUMMARY SEE SHEET	21
																			<b>TRAFFIC CONTROL</b>	
																			FOR TRAFFIC CONTROL GENERAL SUMMARY SEE SHEET	190
																			<b>BRIDGE MAINTENANCE</b>	
																			FOR BRIDGE MAINTENANCE SUMMARIES SEE SHEET	249
																			<b>GENERAL</b>	
																		IB, ART.6 LUMP 1	PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND	
																		SP 119 LUMP 1	RAILROAD PROTECTIVE LIABILITY INSURANCE - NS	
																		SP 614 LUMP 1	MAINTAINING TRAFFIC	
																		SP 619 LUMP 1	FIELD OFFICE	
																		SP 623 LUMP 1	CONSTRUCTION LAYOUT SURVEY	
																		624 LUMP 1	MOBILIZATION	

9325  
704  
402

1	ADDENDUM NO. 1	CLH	10/12/16
2	ADDENDUM NO. 2	CLH	10/19/16
NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION**

**GENERAL SUMMARY**

M.P. 90.00 TO M.P. 95.90 SANDUSKY COUNTY

**GPD GROUP**  
Glenn Pyle, Chairman, Burns & McDonnell, Inc.  
530 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: CLH	CHECKED: PJF	DATE: 08/26/16
DRAWN: CLH	IN CHARGE: MRG	SCALE: N.T.S.

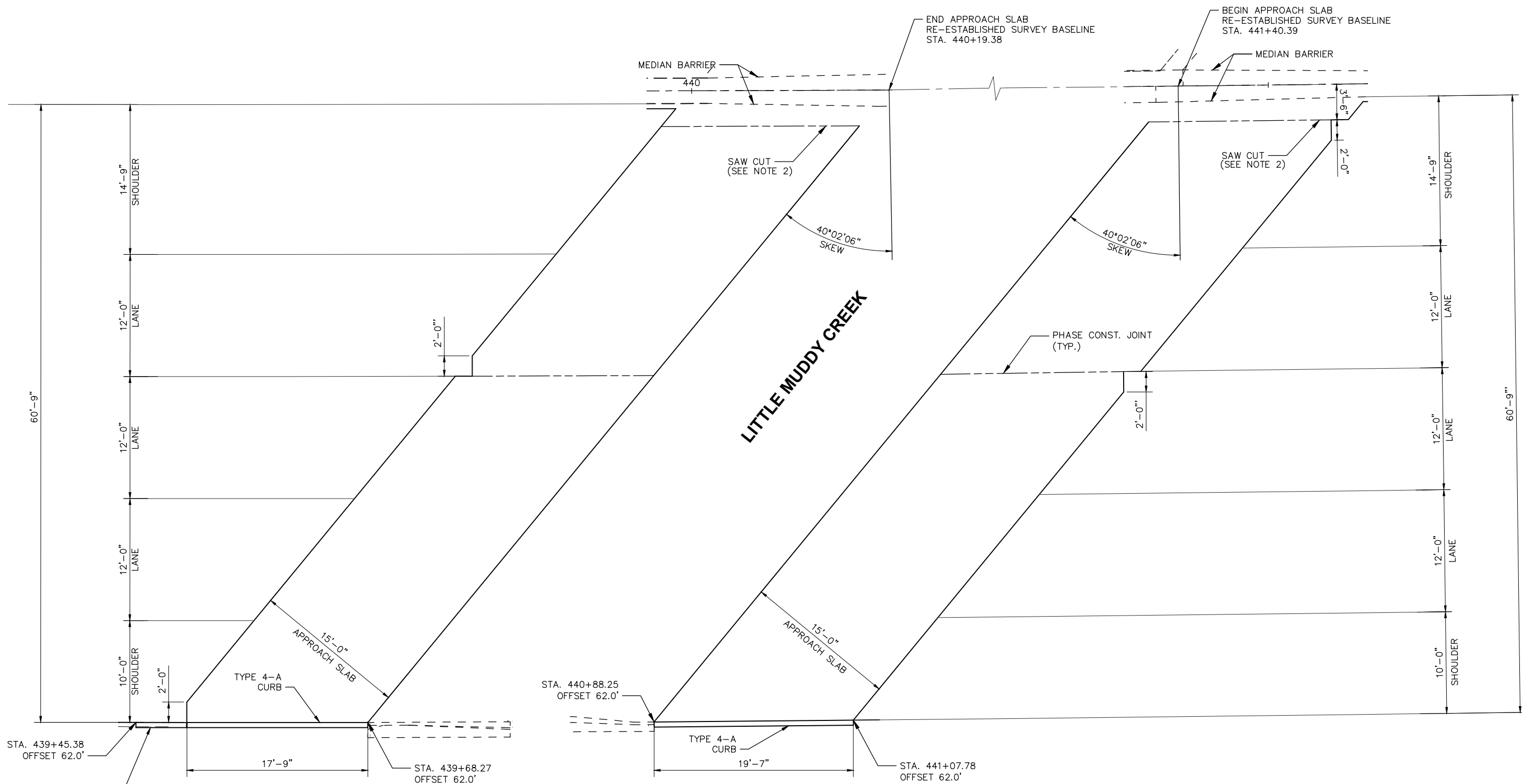
PROJECT NO. 39-17-01 SHEET 106 OF 272

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DATE: Oct 19, 2016 Time: 9:04 am PLOT: 1/27/2016  
Technician: chuff





Drawing File: c:\2013\20131115\structures\SAN080MDD01.dwg  
 Date: Oct 18, 2016 Time: 9:48 am  
 Layout: LITTLE MUDDY CREEK  
 Technician: chuff

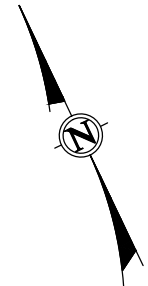


RE-ESTABLISHED  
 SURVEY BASELINE  
 CURVE DATA  
 PI STA. 433+43.02  
 $\Delta = 12^\circ 12' 05''$   
 $D_c = 00^\circ 20' 00''$   
 $R = 17,188.73'$   
 $T = 1837.16'$   
 $L = 3660.43'$   
 $E = 97.90'$   
 $e_{MAX} = 0.0156'$  Ft./Ft.  
 PC STA. 415+05.86  
 PT STA. 451+66.29

**APPROACH SLABS FOR BRIDGE OVER LITTLE MUDDY CREEK, M.P. 90.2**

**NOTES:**

- FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
- FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
- FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
- REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ~~ITEM 202 - PAVEMENT REMOVED~~ NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (1=12'). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
- FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
- TYPE 4-A INTEGRAL CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



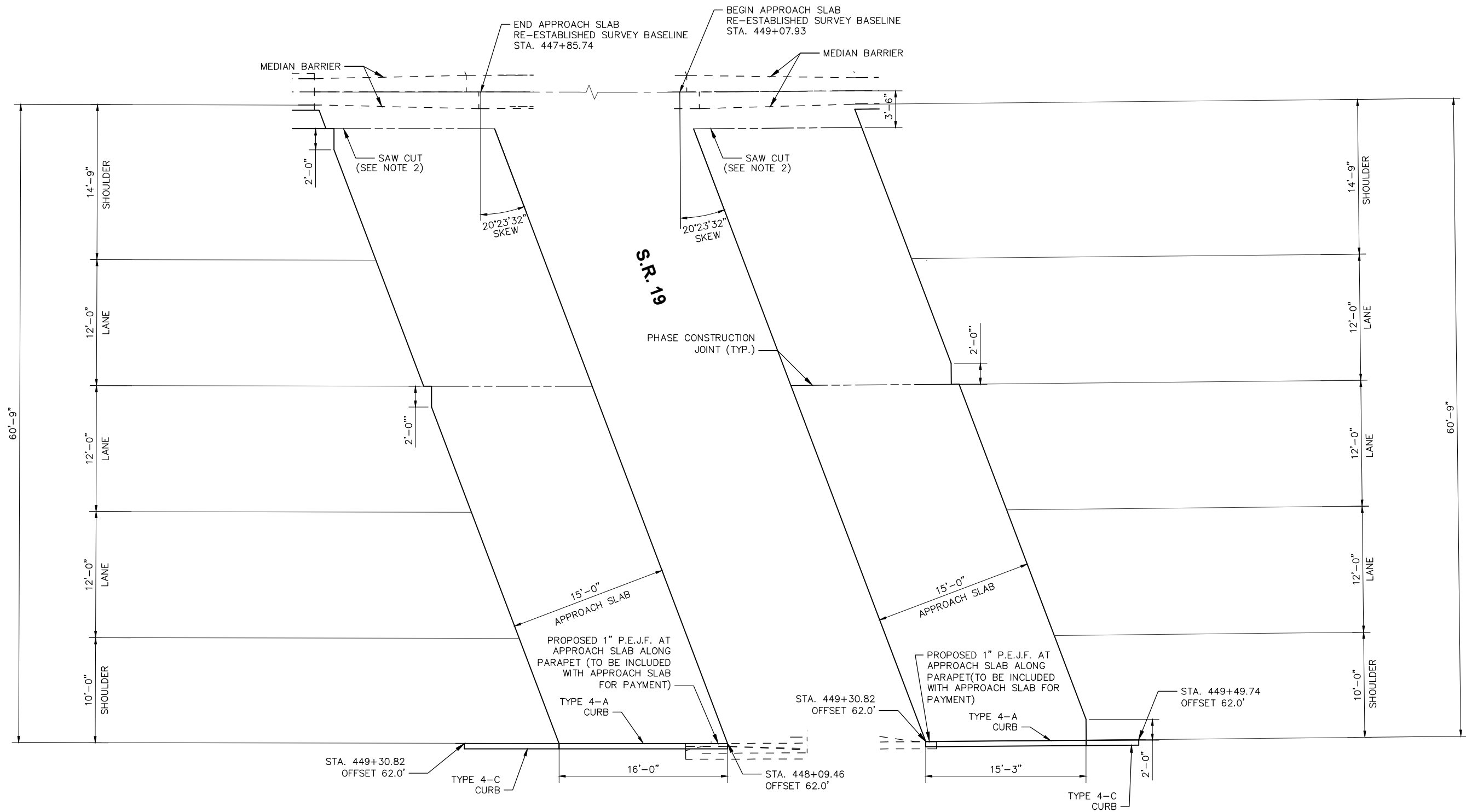
1	ADDENDUM NO. 2	SAT	10/18/16
-	-	-	-
NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE AND  
 INFRASTRUCTURE COMMISSION**  
**APPROACH SLAB DETAILS**  
 LITTLE MUDDY CREEK EAST BOUND LANES  
 M.P. 90.2 SANDUSKY COUNTY

**GPD GROUP**  
Glenn P. DeSantis, President & Chief Engineer, Inc.  
 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100

DESIGNED: EAF	CHECKED: TJW	DATE: 08/26/16
DRAWN: SAT	IN CHARGE: MRG	SCALE: N.T.S.

**PROJECT NO. 39-17-01 SHEET 240 OF 272**



**APPROACH SLABS FOR BRIDGE OVER S.R. 19, M.P. 90.3**

**NOTES:**

- FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
- FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
- FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
- REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ~~ITEM 202 - PAVEMENT REMOVED~~ NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (T=12'). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
- FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
- TYPE 4-A CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



1	ADDENDUM NO. 2	SAT	10/18/16
-	-	-	-
NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**

**APPROACH SLAB DETAILS**  
S.R. 19 EAST BOUND LANES  
M.P. 90.3 SANDUSKY COUNTY

**GPD GROUP**  
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100

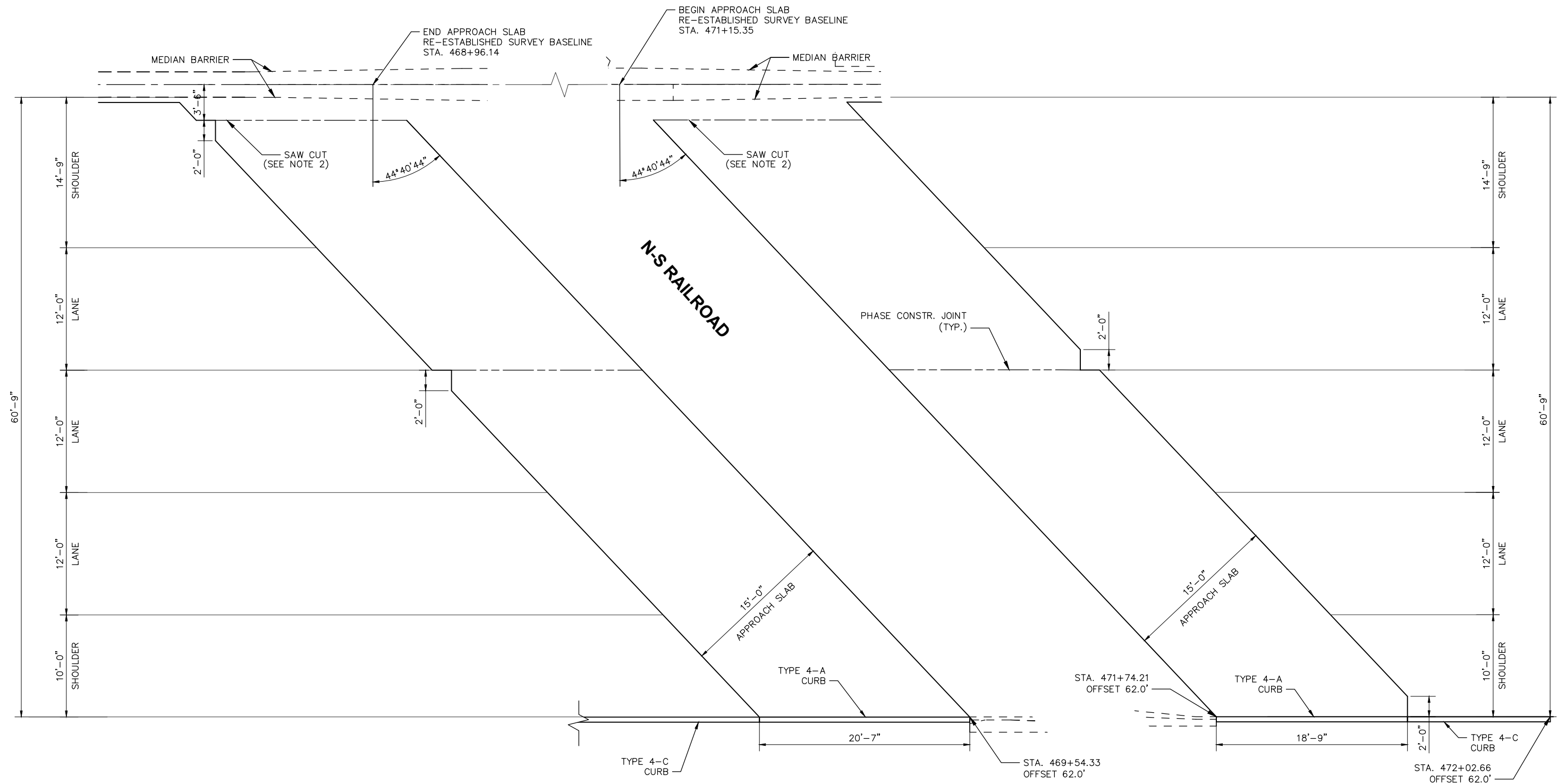
DESIGNED: EAF	CHECKED: TJW	DATE: 08/26/16
DRAWN: SAT	IN CHARGE: MRG	SCALE: N.T.S.

**PROJECT NO. 39-17-01 SHEET 241 OF 272**

Drawing File: c:\2013\20131115\structures\SAN080MD001.dwg  
 Date: Oct 18, 2016 Time: 9:49 am User: 15727653  
 Layout: S.R. 19  
 Technician: chuff

RE-ESTABLISHED SURVEY BASELINE CURVE DATA  
 PI STA. 433+43.02  
 $\Delta = 12^\circ 12' 05''$   
 $D_c = 00' 20' 00''$   
 $R = 17,188.73'$   
 $T = 1837.16'$   
 $L = 3660.43'$   
 $E = 97.90'$   
 $e_{MAX} = 0.0156' \text{ Ft./Ft.}$   
 PC STA. 415+05.86  
 PT STA. 451+66.29

Drawing File: c:\2013\20131115\structures\SAN080MD001.dwg  
 Date: Oct 18, 2016 Time: 9:52 am User: 15272653  
 Layout: N&S RAILROAD  
 Technician: chuff



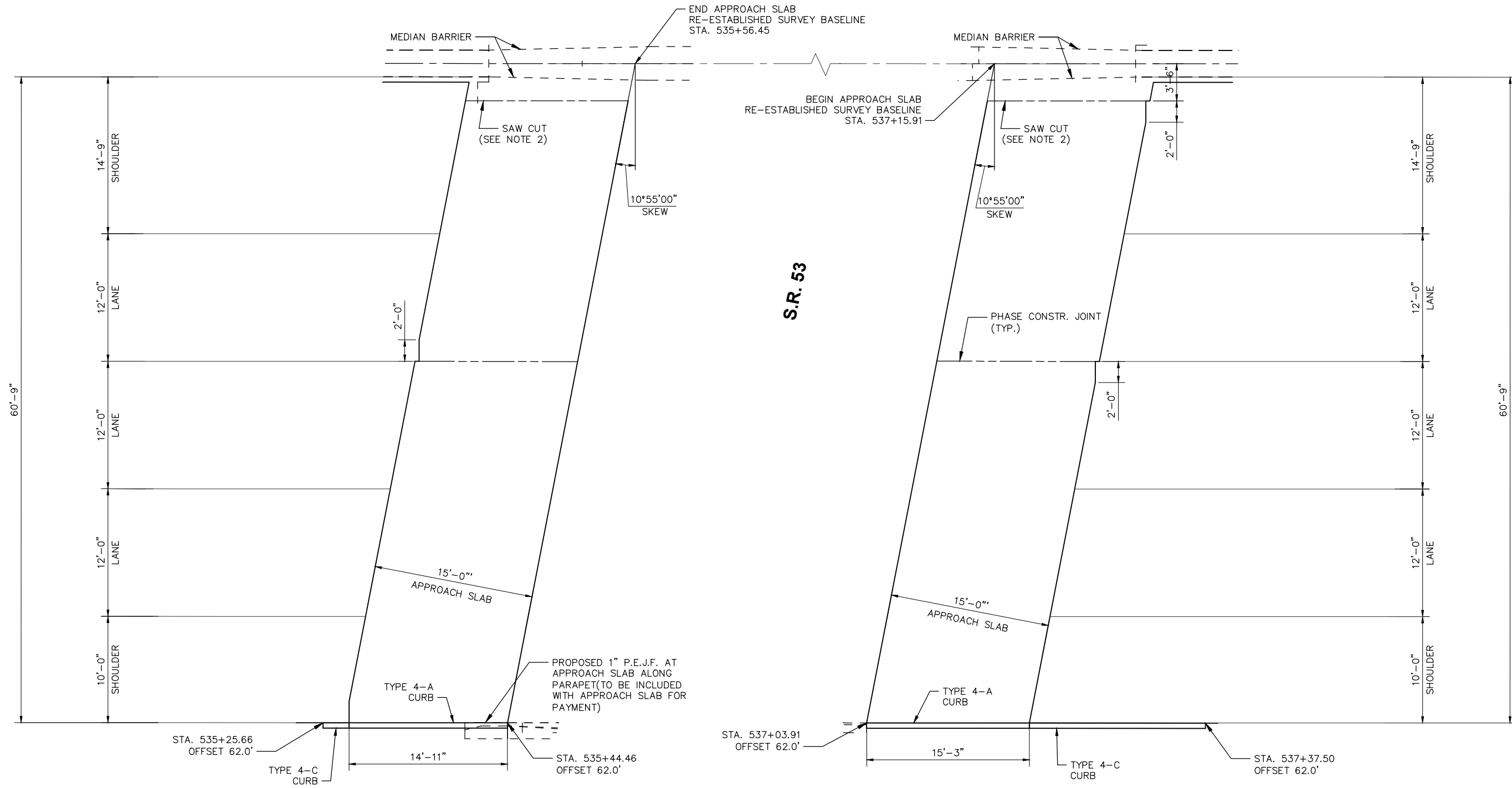
**APPROACH SLABS FOR BRIDGE OVER N-S RAILROAD, 90.7**

**NOTES:**

1. FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
2. FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
3. FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
4. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ~~ITEM 202 - PAVEMENT REMOVED~~ NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (1=12'). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
5. FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
6. TYPE 4-A CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



1	ADDENDUM NO. 2	SAT	10/18/16
-	-	-	-
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b> <b>APPROACH SLAB DETAILS</b> <b>NS RAILROAD EAST BOUND LANES</b> M.P. 90.7 SANDUSKY COUNTY			
<b>GPD GROUP</b> <small>Geotechnical &amp; Infrastructure Solutions, Division of Deltek, Inc.</small> 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100			
DESIGNED:	EAF	CHECKED:	TJW
DRAWN:	SAT	IN CHARGE:	MRG
		DATE:	08/26/16
		SCALE:	N.T.S.
<b>PROJECT NO. 39-17-01 SHEET 242 OF 272</b>			



**APPROACH SLABS FOR BRIDGE OVER S.R. 53, M.P. 92.0**

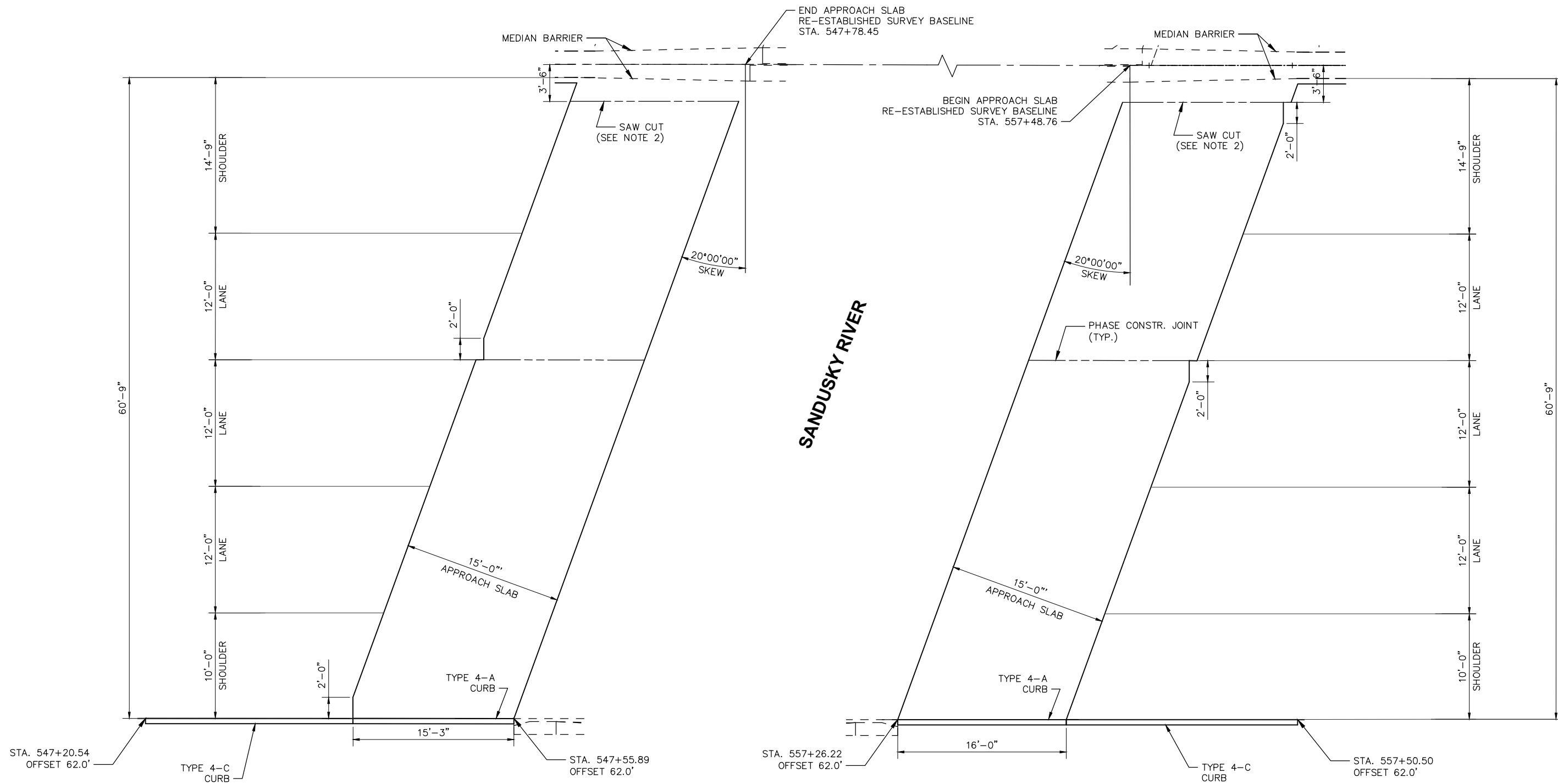
**NOTES:**

1. FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
2. FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
3. FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
4. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ~~(ITEM 202 - PAVEMENT REMOVED)~~ NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (1=12'). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
5. FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
6. TYPE 4-A CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



1	ADDENDUM NO. 2	SAT	10/18/16
-	-	-	-
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b>			
<b>APPROACH SLAB DETAILS</b>			
S.R. 53 EAST BOUND LANES			
M.P. 92.0 SANDUSKY COUNTY			
<b>GPD GROUP</b>			
<small>520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100</small>			
DESIGNED:	EAF	CHECKED:	TJW
DRAWN:	SAT	IN CHARGE:	MRG
		DATE:	08/26/16
		SCALE:	N.T.S.
<b>PROJECT NO. 39-17-01 SHEET 243 OF 272</b>			

Drawing File: c:\2013\20131115\structures\SAN080MD001.dwg  
 Date: Oct 18, 2016 Time: 9:53 am Plot: 15272433  
 Layout: S.R. 53  
 Technician: chuff



**APPROACH SLABS FOR BRIDGE OVER SANDUSKY RIVER, M.P. 92.3**

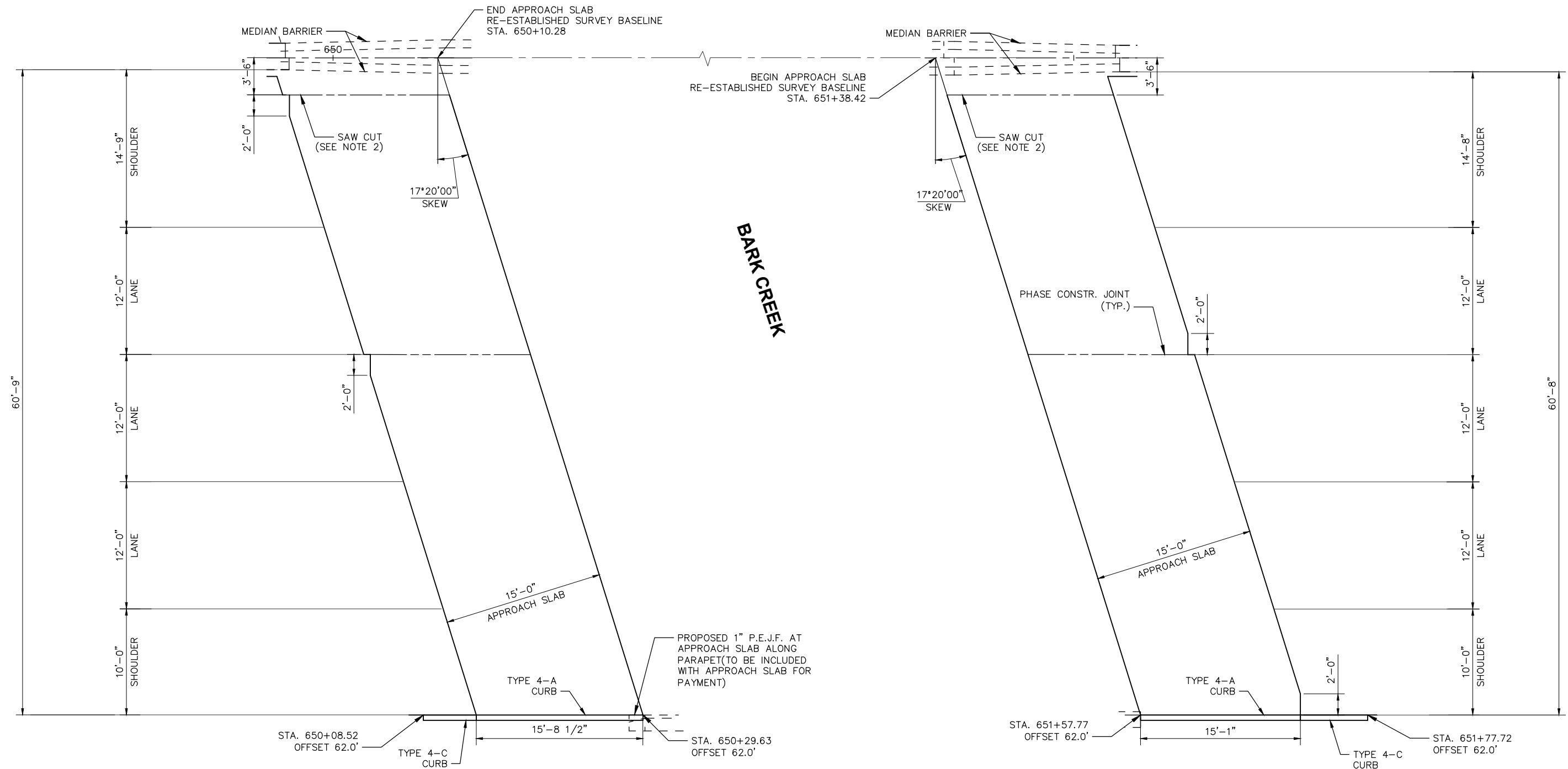
**NOTES:**

- FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
- FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
- FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
- REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER (ITEM 202 - PAVEMENT REMOVED) NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (T=12'). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
- FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
- TYPE 4-A INTEGRAL CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



1	ADDENDUM NO. 2	SAT	10/18/16
-	-	-	-
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b> <b>APPROACH SLAB DETAILS</b> <b>SANDUSKY RIVER EAST BOUND LANES</b> M.P. 92.3 SANDUSKY COUNTY			
<b>GPD GROUP</b> <small>Geotechnical &amp; Design Services, Inc.</small> 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100			
DESIGNED:	EAJ	CHECKED:	TJW
DRAWN:	SAT	IN CHARGE:	MRG
		DATE:	08/26/16
		SCALE:	N.T.S.
<b>PROJECT NO. 39-17-01 SHEET 244 OF 272</b>			

Drawing File: c:\2013\20131115\structures\SAN080MD001.dwg  
 Date: Oct 18, 2016 Time: 9:53 am Plot: 15272453  
 Layout: SANDUSKY RIVER  
 Technician: chuff



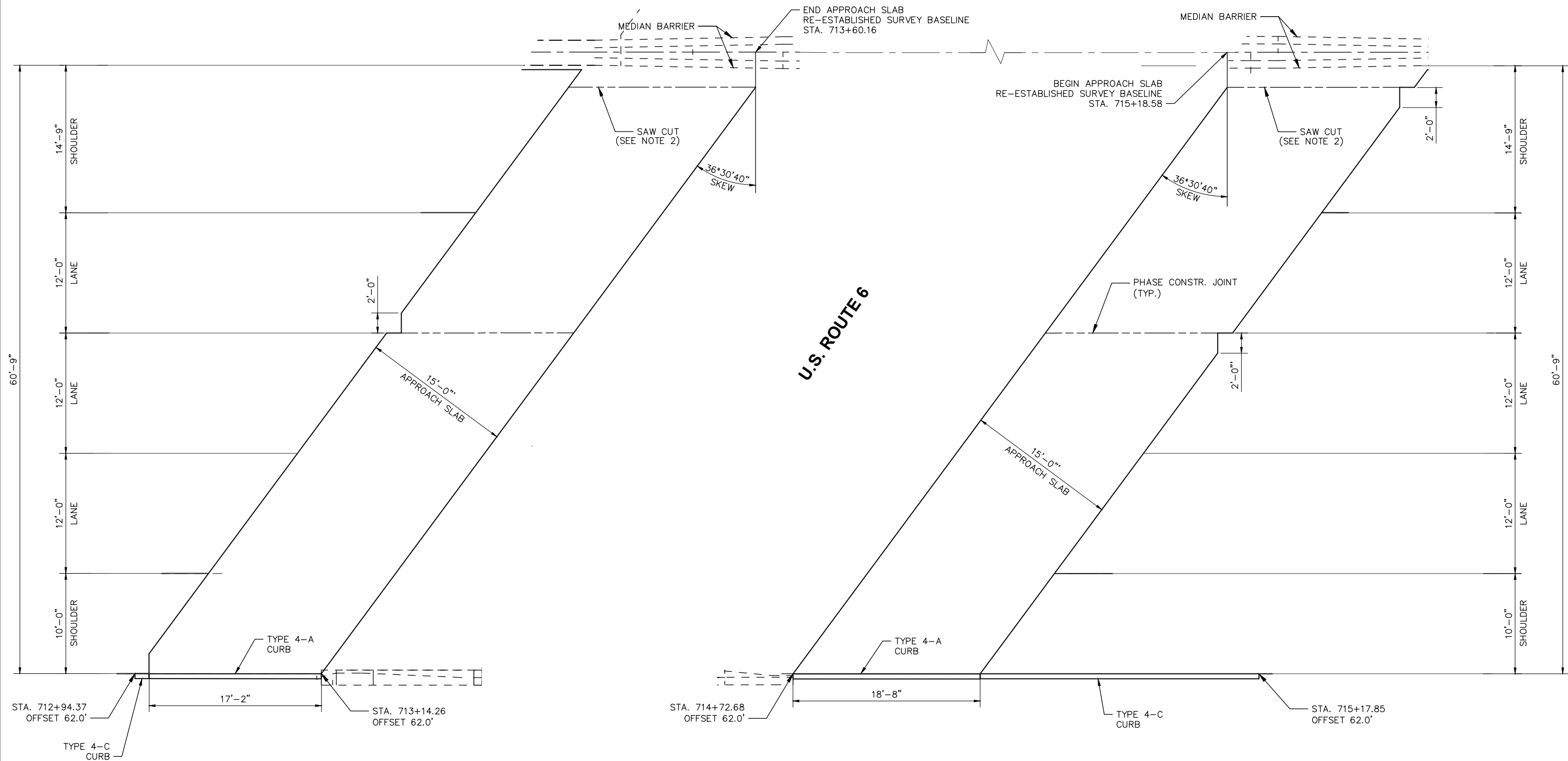
APPROACH SLABS FOR BRIDGE OVER BARK CREEK, M.P. 94.2

NOTES:

- FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
- FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
- FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
- REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ~~ITEM 202 - PAVEMENT REMOVED~~ NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (T=12'). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
- FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
- TYPE 4-A INTEGRAL CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



1	ADDENDUM NO. 2	SAT	10/18/16
-	-	-	-
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b> <b>APPROACH SLAB DETAILS</b> <b>BARK CREEK EAST BOUND LANES</b> M.P. 94.2 SANDUSKY COUNTY			
<b>GPD GROUP</b> <small>Geotechnical, Planning, Surveying, Inspection &amp; Data Services, Inc.</small> 520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100			
DESIGNED:	EAF	CHECKED:	TJW
DATE:	08/26/16	SCALE:	N.T.S.
DRAWN:	SAT	IN CHARGE:	MRG
PROJECT NO. 39-17-01 SHEET 245 OF 272			



**APPROACH SLABS FOR BRIDGE OVER U.S. ROUTE 6, M.P. 95.4**

**NOTES:**

1. FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
2. FOR DOWEL CONNECTION AT LONGITUDINAL JOINTS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP516B SHALL BE INCIDENTAL TO THIS WORK.
3. FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
4. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER **ITEM 202 - PAVEMENT REMOVED**. NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (T=12"). SEE ROADWAY GENERAL SUMMARY FOR QUANTITIES.
5. FOR PROPOSED ELEVATIONS, SEE SHEETS 180 - 186 .
6. TYPE 4-A INTEGRAL CURB IS INCLUDED IN THE COST OF THE APPROACH SLABS.



1	ADDENDUM NO. 2	SAT	10/18/16
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b>			
<b>APPROACH SLAB DETAILS</b>			
U.S. ROUTE 6 EAST BOUND LANES			
M.P. 95.4 SANDUSKY COUNTY			
<b>GPD GROUP</b>			
<small>Gilbert P. G. Schumaker, Director of Design</small>			
<small>520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100</small>			
DESIGNED:	EAJ	CHECKED:	TJW
DRAWN:	SAT	IN CHARGE:	MRG
DATE:		08/26/16	
SCALE:		N.T.S.	
<b>PROJECT NO. 39-17-01 SHEET 246 OF 272</b>			

Drawing File: c:\2013\20131115\structures\SAN080MPO01.dwg  
 Date: 08/18/2016 Time: 9:55 am  
 Layout: U.S. 6  
 Technician: chuff



STRUCTURE ESTIMATED QUANTITIES											
ITEM	LITTLE MUDDY CREEK MP 90.2	S.R. 19 MP 90.3	NS RR MP 90.7	S.R. 53 MP 92.0	BARK CREEK MP 94.2	U.S. R6 MP 95.4	GENERAL	TOTAL	UNIT	DESCRIPTION	AS PER PLAN SHEET
SP 202	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		LUMP	LUMP	PORTIONS OF STRUCTURE REMOVED	
SP 516A			326					326	LIN. FT.	CRACK REPAIR USING EPOXY INJECTION	
SP 516B	694	645	1759	864	657	790		5409	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	
SP 516G		18	20		9	12		60	EACH	REPLACE EXPANSION BEARING DEVICE	
SP 516G			15					15	EACH	REPLACE EXPANSION BEARING DEVICE, AS PER PLAN	247
SP 516H						9		9	EACH	REHABILITATION OF FIXED BEARING ASSEMBLY	
SP 516H			1	1				2	EACH	REHABILITATION OF FIXED BEARING ASSEMBLY, AS PER PLAN	247
SP 516K				15				16	EACH	REBUILD EXPANSION BEARING DEVICE	
SP 516M			10	2		5		17	EACH	RESET EXISTING ROCKER BEARING	
SP 519	100	50	202	50	150	50	243*	845	SQ. FT.	PATCHING CONCRETE STRUCTURES	
SP 527	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		LUMP	LUMP	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES	
SP 529			35	15				50	EACH	TRIM END OF STRUCTURAL STEEL MEMBER	
SP 533D	164	135	688	252	128	152		1519	FOOT	CONTINUOUS ELASTOMER SEAL IN PORTLAND CEMENT CONCRETE JOINT	
SP 536	181	179	338	224	197	242		1361	SQ. YD.	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS	
SP 536	1066	1026	1787	1265	1068	1293		7505	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	
601			120					120	CU. YD.	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	247
SPECIAL	5	5	10	5	5	5		35	SQ. YD.	PATCHING CONCRETE BRIDGE DECKS, TYPE B	247
SPECIAL					9			9	EACH	REPOSITION ELASTOMERIC EXPANSION BEARING	248
SPECIAL		6						6	EACH	REPOSITION ELASTOMERIC EXPANSION BEARING INCLUDING MASONRY PLATE	247
SPECIAL						12		12	EACH	PEDESTAL REPLACEMENT	248
SPECIAL			14					14	CU. YD.	VOID REPAIR UNDER ABUTMENT USING LOW STRENGTH MORTAR	248
SPECIAL			1					1	EACH	ABUTMENT BEARING PILE REPAIR	248

\* QUANTITY IS FOR BRIDGE PIER COLUMN REPAIRS AT MP 91.6, MP 93.0, AND MP 94.7, SEE SHEET 250 OF 272 FOR ADDITIONAL INFORMATION.

NOTES:  
1. FOR GENERAL NOTES, SEE SHEETS 247 & 248 .

Drawing File: c:\2013\20131115\structures\SAN090\_090201\Sheets\080\_090202\080001.dwg Layout: Model  
DATE: Oct 21, 2016 Time: 1:53 PM  
Technician: stony

1	ADDENDUM NO. 1	SAT	10/11/16
2	ADDENDUM NO. 2	SAT	10/21/16
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b>			
ESTIMATED QUANTITIES			
M.P. 90.2, 90.3, 90.7, 92.0, 94.2, 95.4 SANDUSKY COUNTY			
<b>GPD GROUP</b>			
<small>Glass, Pyle, Schuman, Burns &amp; DeHaven, Inc.</small>			
<small>520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2100</small>			
DESIGNED:	EAF	CHECKED:	TJW DATE: 08/26/16
DRAWN:	SAT	IN CHARGE:	MRG SCALE: N.T.S.
<b>PROJECT NO. 39-17-01 SHEET 249 OF 272</b>			

STRUCTURE ESTIMATED QUANTITIES - NS RR WESTBOUND LANES MP 90.7

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET
SP 202	LUMP	LUMP	PORTIONS OF STRUCTURE REMOVED				LUMP	75	
SP 516A	162	LIN. FT.	CRACK REPAIR USING EPOXY INJECTION	87				150	
SP 516B	487	LIN. FT.	SEALING OF CONSTRUCTION JOINTS			337			
SP 516G	5	EACH	REPLACE EXPANSION BEARING DEVICE		5				
SP 516G	15	EACH	REPLACE EXPANSION BEARING DEVICE, AS PER PLAN		15				247
SP 516M	8	EACH	RESET EXISTING ROCKER BEARING		8				
SP 519	104	SQ. FT.	PATCHING CONCRETE STRUCTURES	5	49			50	
SP 527	LUMP	LUMP	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP		
SP 529	20	EACH	TRIM END OF STRUCTURAL STEEL MEMBER			20			
SP 533D	344	FOOT	CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT			344			
601	60	CU. YD.	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	60					247
SPECIAL	5	SQ. YD.	PATCHING CONCRETE BRIDGE DECKS, TYPE B					5	247
SPECIAL	10	CU. YD.	VOID REPAIR UNDER ABUTMENT USING LOW STRENGTH MORTAR	10					248

STRUCTURE ESTIMATED QUANTITIES - NS RR EASTBOUND LANES MP 90.7

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET
SP 202	LUMP	LUMP	PORTIONS OF STRUCTURE REMOVED				LUMP	75	
SP 516A	164	LIN. FT.	CRACK REPAIR USING EPOXY INJECTION	89				150	
SP 516B	1272	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	121		874	127		
SP 516G	15	EACH	REPLACE EXPANSION BEARING DEVICE		15				
SP 516H	1	EACH	REHABILITATION OF FIXED BEARING ASSEMBLY, AS PER PLAN	1					
SP 516M	2	EACH	RESET EXISTING ROCKER BEARING		2				
SP 519	98	SQ. FT.	PATCHING CONCRETE STRUCTURES	44	4			50	
SP 527	LUMP	LUMP	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP		
SP 529	15	EACH	TRIM END OF STRUCTURAL STEEL MEMBER			15			
SP 533D	344	FOOT	CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT			344			
601	60	CU. YD.	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	60					247
SP 536	338	SQ. YD.	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS	60		254	24		
SP 536	1787	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	301		1205	281		
SPECIAL	5	SQ. YD.	PATCHING CONCRETE BRIDGE DECKS, TYPE B					5	247
SPECIAL	4	CU. YD.	VOID REPAIR UNDER ABUTMENT USING LOW STRENGTH MORTAR	4					248
SPECIAL	1	EACH	ABUTMENT BEARING PILE REPAIR	1					248

NOTES:  
1. FOR GENERAL NOTES, SEE SHEETS 247 & 248.

Drawing File: C:\2013\20131115\structures\SAN096\_09075\Sheets\080\_09075\EC0001.dwg Layout: Model  
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Technician: stony

1	ADDENDUM NO. 1	SAT	08/11/16
2	ADDENDUM NO. 2	SAT	08/21/16
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION</b>			
ESTIMATED QUANTITIES OHIO TURNPIKE OVER NS RAILROAD M.P. 90.7 SANDUSKY COUNTY			
<b>GPD GROUP</b> <small>Global Pylon Solutions, Bureau &amp; DeHaven, Inc.</small>			
520 South Main Street, Suite 2531, Akron, Ohio 44311		330-572-2100 Fax 330-572-2101	
DESIGNED: EAF	CHECKED: TJW	DATE: 08/26/16	
DRAWN: SAT	IN CHARGE: MRG	SCALE: N.T.S.	
<b>PROJECT NO. 39-17-01 SHEET 257 OF 272</b>			