OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

ADDENDUM NO. 2

PROJECT NO. 39-18-02
PART A - MAINLINE PAVEMENT RECONSTRUCTION, MILEPOST 169.74 TO MILEPOST 176.34, SUMMIT AND CUYAHOGA COUNTIES, OHIO
PART B - INTERCHANGE 173 REPAIRS AND RECONSTRUCTION, MILEPOST 173, SUMMIT AND CUYAHOGA COUNTIES, OHIO

OPENING DATE:
2:00 P.M. (EASTERN TIME), FEBRUARY 1, 2018

ATTENTION OF BIDDERS IS DIRECTED TO:
ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 PM ON JANUARY 26, 2018

MODIFICATIONS TO THE CONTRACT DOCUMENTS

Plan Sheets: 39-18-02A - 13, 24, 25, 36, 38, 43, 100, 192, 193, 376, 378, 431, 586 and 588 of 727
39-18-02B – 20, 21, 22, 23, 44, 45, 46, 48, 49 of 80
-AND-
Special Provisions: SP112
-AND-
Bid Schedule of Items and Estimated Quantities Worksheet
Ref. Nos. 18, 47, 103, 104, 323, 329, 379, 380, 392 and 425

Issued by the Ohio Turnpike and Infrastructure Commission on January 26, 2018 by Anthony D. Yacobucci, Chief Engineer, and Mark R. Musson, Director of Contracts Administration.

Anthony D. Yacobucci 1-26-18 Date

Mark R. Musson 1/26/18 Date

ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 PM ON JANUARY 26, 2018:

Q#23 Would OH Turnpike Commission add as an alternate Solid Wall HDPE Pipe meeting ODOT 707.34 on the above mentioned project? Solid Wall HDPE Pipe has been used on Turnpike Culvert Liner Pipes and with the gradual bend in the pipe, fused HDPE pipe can be used to make the bend successfully. 63" OD Solid Wall Pipe has an ID of 58.9".

A#23 Yes, this Addendum No. 2 revises the General Note "ITEM 837 – LINER PIPE, AS PER PLAN" on Plan Sheet 38 of 727 to include the ODOT 707.34 material.

Q#24 Pavement repair notes on pg. 38 indicate the use of RRCM concrete for MOT repairs, would the Commission consider changing this to an asphalt repair item? This change was made on previous OTC reconstruction projects.

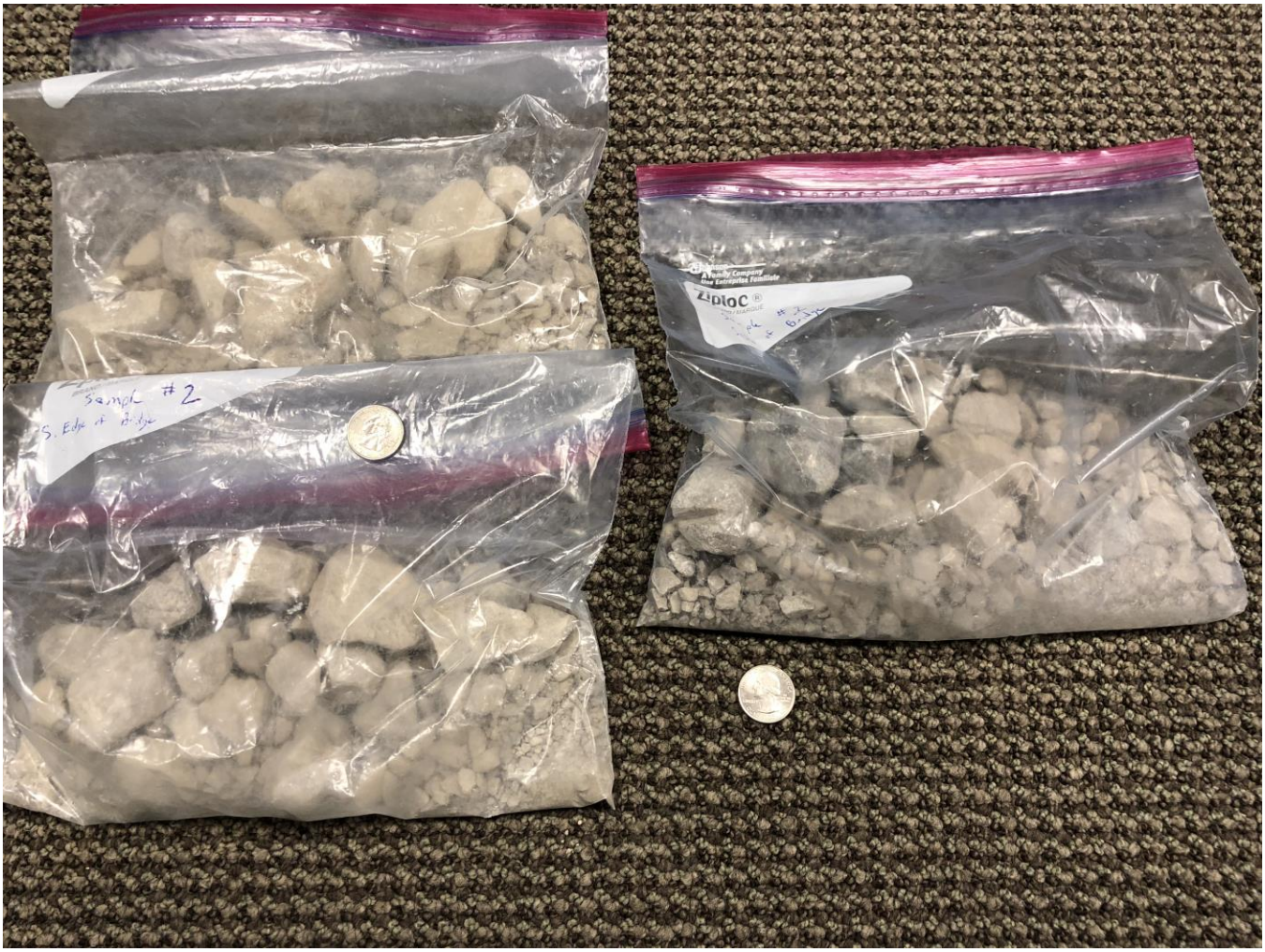
A#24 No, the Contractor can only close lanes based on the Permitted Lane Closure schedule. The Contractor will be able to close two lanes for an extended period only during limited times. As such, the Commission specified RRCM concrete for repairs to expedite the repair process and reopen a second lane to traffic.

Q#25 Would the Commission consider offering a potential dump site at either of the following two locations in the WB direction, specifically at MP 172.3 (area bound by I-77 & Toll Plaza 173 Ramps) or MP 172.5 (land located to the east of I-77)?

A#25 The Commission does not have the authority to approve either site for the proposed use. The land identified is Ohio Department of Transportation property.

Q#26 In regards to the Slag Removal item were any tests performed to give the contractor a better idea of the physical properties of this material? We are asking because on previous projects when slag removal was performed the existing slag had solidified over time and was very difficult to remove. Since this material is at such a significant depth and adjacent to bridge abutments that are not to be disturbed any additional information provided would be helpful.

A#26 Soil boring delineation was perform during the design phase of this Project and the Soil Boring logs are provided in the Appendix D of Special Provisions. Samples of the slag material recoved during the soil boring delineation were sent to the Edward C Levy Company for testing and these Analytical report with the results are provided in Appendix C of the Special Provisions. Three additional boring were performed one to two feet infront the soil nail wall along the right shoulder of the I-77 Northbound Entrance Ramp D. Slag was identified as the aggregate material used in the existing trench drain. A detail of the trench drain is provided on Plan Sheet 1 of 7 of the Plan Insert Sheet PIS-2 of the 39-18-02A Plan Set and the entire slag area is shown on Plan Sheet 36 of 80. After the Concrete shoulder was cored, the subgrade material was hand augured and three samples were provided to the Commission. A photo of the material is below. Samples of the boring material retrieved from the Westbound Lanes of the Ohio Turnpike that was given to the Edward C Levy Company for testing looked similar to the matieral in the Photo below. This information is provided in accordance with Instructions to Bidders Article 2.1.4.



Q#27 Please verify the unit of measure for Ref. #235

A#27 The unit of measure is correct and consistent with OTIC Standard Drawing TCB-3 and the General Note "ITEM SPECIAL – EXISTING CROSSOVER TO BE CLOSED/RE-OPEN" on Plan Sheet 40 of 727.

Q#28 Temporary pavements which are shown on plan sheets 135-138 have guardrail and appurtenances to be removed and reset. Are these guardrail items paid under line items or are they considered incidental to the temporary pavement item (bid item 219)?

A#28 Yes, the guardrail items pertaining to temporary pavement are paid separatedly and are itemized on Plan Sheets 56 and 79 of 727. The items are: Item 202 - Impact Attenuator, Removed and Reset and Item 202 - Guardrail Removed, As Per Plan.

Q#29 Concerning Ref 47 Porous Back Fill With Geotextile Fabric quantity of 770 CY. Contract documents state this item is to be performed along with the slag removal in the westbound lanes of structure 172.26. This item appears to be drastically overstated.

1) **Is porous backfill only required on this structure?**
2) **If this item is to be used on additional structures, it will also change the scope of the Lump Sum Cofferdams and Excavation Bracing APP Bid item.**
3) **If this item is to be used in other locations please detail the limits of additional Cofferdams required.**
4) **Please provide calculations for this bid item.**

A#29 1) *Yes. Porous backfill is only required on this structure.*
2) *No. This item will not be used on any other structures.*
3) *No. This item will not be used on any other structures.*
4) *Rear abutment: 25'H x 79'W = 1975.0 sf*
Rear retaining wall: (23.6'H + 1'H)/2 x 52'W = 639.6 sf
Forward abutment: 27.2'H x 79'W = 2148.8 sf
Rear retaining wall: (25.9'H + 1'H)/2 x 48'W = 638.4 sf

5401.8 sf x 2'/27 = 400 cy

Accordingly, this Addendum No. 2 revises the General Note "ITEM 203 – EXCAVATION OF SLAG, AS PER PLAN" on Plan Sheet 36 of 727, General Summary Plan Sheet 376 of 727, General Summary Plan Sheet 378 of 727 and the quantities for Ref. Nos. 47: Item 518 – Porous Backfill With Geotextile Fabric, Ref. No. 103: Item 518 – 6" Perforated Corrugated Plastic Pipe and Ref. No. 104: Item 58 – 6" Non-Perforated Corrugated Plastic Pipe on the Bid Form and Estimated Quantities Worksheet.

Q#30 Plan sheet 43 "Earthwork for Maintaining Traffic" note gives information-only quantities of excavation and embankment. Is this for all the temporary pavements and if so, please provide a breakdown by reference number and pavement area.

A#30 The following information is approximate and provided for information only:

Plan Sheet 123 – TP 173 EB Exit
Excavation = 84 CY
Embankment = 104 CY
Plan Sheet 123 – TP 173 EB Entrance
Excavation = 84 CY
Embankment = 201 CY
Plan Sheet 178, 179– East Crossover
Excavation = 5,230 CY
Plan Sheet 221 – TP 173 WB Entrance
Excavation = 122 CY
Plan Sheet 222 – TP 173 WB Exit
Excavation = 145 CY

Q#31 Plan sheet 192: Please verify if the 411 berm stone is to be incidental to the corresponding temporary pavement item (bid item 222) as well as please provide a thickness for installation.

A#31 The Item 411 – Stabilized Crushed Aggregate is incidental to the corresponding temporary pavement item. Note 1 on Plan Sheets 192 and 193 of 727 indicates that all proposed work indicated shall be included in the unit cost for Item 615 – Pavement for Maintaining Traffic, Class A, Type III, As Per Plan. The thickness of Item 411 – Stabilized Crushed Aggregate is 3-inches.

In addition, this Addendum No. 2 revises Plan Sheets 192 and 193 of 727 to add the minimum course thickness for the pavement buildup of Item 615 – Pavement for Maintaining Traffic, Class A, Type III, As Per Plan.

Q#32 Bid item 222 - temporary pavement type 3: Will seeding and mulching around newly constructed crossover be paid under the line items in erosion control or is this considered incidental to this bid item?

A#32 This Addendum No. 2 revises Note 1 on Plan Sheets 192 and 193 of 727 to clarify that seeding and mulching is included with this work.

Q#33 Bid item 220, Temporary Pavement, Class A Type 1: plan sheet 100 calls for 350' worth of incidental 12"B pipe to connect the slot drain to the existing median outlet.

1. **What depth is this 12"B to be installed?**
2. **Is there any restriction to type of pipe?**
3. **Can this pipe be filled-in-place instead of being removed when work is done so that restoration over the trench doesn't have to be done twice?**

A#33 1. From the trench drain connection, the proposed conduit shall be sloped down so that there is minimun of 9" between the top of the conduit to the bottom of the aggregate base. The conduit shall have a minimum pipe slope of .5 %.
2. Pipe materials is limited any conduit that meets the SP611, Type B material.
3. Yes, this Addendum No. 2 revises Note 5 on Plan Sheet 100 of 727.

Q#34 Bid Item 235 "Existing Crossover to be closed/reopened": the plan quantity is 11 "LS". Should this be 11 each? Please review and revise as necessary.

A#34 See the response to Q#27.

Q#35 Sheet 23 of 80 in the 39-18-02B Plans states that WZ impact attenuators shall be considered incidental to SP614 Maintaining Traffic, APP. However, bid item #417 is setup for 2 EA impact attenuators. Will the department please advise.

A#35 This Addendum No. 2 revises and clarifies the General Note "MAINTENANCE OF TRAFFIC GENEREL NOTES" on Plan Sheet 23 of 80.

Q#36 Note 3 on sheet 23 of 80 in the 39-18-02B Plans states that portable barrier is to be considered incidental to SP614. However, bid items #424 and #425 are setup as 1 LS portable barrier items. Will the department please advise.

A#36 This Addendum No. 2 replaces the entire Generel Note "ITEM 614 – WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARD (UNIDIRECTIONAL)" on Plan Sheet No. 23 of 80.

Q#37 Sheet 23 of 80 in the 39-18-02B Plans states that in regards to I-77 SB Exit/Entrance Ramps that "A minimum of one lane of traffic in each direction shall be maintained at all times, except for a period not to exceed 90 consecutive calendar days PER EACH ramp closure." However, SP103 Part D states that Interim Milestone is defined as 90 consecutive calendar days to complete all ramp closure work. Will the department please clarify with closure duration is correct?

A#37 This Addendum No. 2 revises the Generel Note "ITEM 614 – MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR FOR I-77 SB RAMPS B & C)" Plan Sheet 23 of 80 to match SP103D.

Q#38 Bid item 235 "Existing Crossover To Be Closed/Reopened": the plan quantity is 11 "LS". Should this be 11 each? Please review and revise as necessary.

A#38 See the response to Q#27.

Q#39 For reference number 235, are we to bid 1 Lump Sum or 11 Each?

A#39 See the response to Q#27.

Q#40 Bid items 378 and 379- both 6" pipe items in the proposal are specified as 707.41 and 707.42 types of pipe respectively. Will OTIC allow contractor to use 707.33 pipe as normally allowed for 6" drainage pipe?

A#40 Yes, this Addendum No. 2 revises General Summary Plan Sheet 45 of 80, Subsummary Plan Sheet 48 of 80, and Reference Nos. 378 and 379 on the Bid Form and Estimated Quantities Worksheet to combine Ref. No. 378 - SP 611 – 6"Couduit, Type B, 707.42 and Ref. Nos. 379: SP 611 – 6" Couduit, Type F, 707.41 to Ref. No. 378: SP 605 - Underdrain Outlet Pipe and holds Ref. No. 379 is reseved as no longer used. In addition, a Reference note was add to Plan Sheet 48 of 80 to provide "SEE 39-18-02A SHEET 584 OF 727 FOR UNDERDRAIN DETAILS".

Q#41 Bid item 373, Inlet Reconstructed to Grade, APP: The note calls for, when possible, rebuilding prior to pavement removal for specified depths using QC1 concrete and interior formwork to insure smooth interior surfaces. However, there is a note stating that the precast inlet tops should not be required. This doesn't make sense, as repair of interior walls should

require precast tops to be removed and reset. Please review and revise this detail as well as providing a detailed drawing.

A#41 This Addendum No. 2 revises the Generel Note "SP 611 – INLET RECONSTRUCTED TO GRADE, AS PER PLAN"on Plan Sheet 21 of 80 to remove and replace the precast top. If the interior wall is in good condition, the Contractor will only need to reset the new precast top in a bed of concrete.

Q#42 Bid item 372- "Manhole Reconstructed to Grade, APP"- notes on plan sheet 20 call for QC1 to be used on reconstructing anywhere from 7" to 24" worth, and the following notes say no brick allowed and not necessary to remove precast tops. The precast top removal note contradicts the intentions of how to rebuild interior walls. Please review and revise this note and if necessary provide a drawing describing owner intentions.

A#42 This Addendum No. 2 revises Generel Note "SP 611 – MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN" on Plan Sheet 20 of 80. If the manhole walls are not in good condition, the precast top will need to be removed and reset after the repair. If the manhole walls are in good condition, no work will be performed on the manhole.

Q#43 Bid items 372 and 373- can precast concrete risers and/or rings be allowed for reconstruction? These will provide a smooth interior surface that the note calls for.

A#43 This Addendum No. 2 revises the Generel Note "SP 611 – MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN" on Plan Sheet 20 of 80 to allow precast grade rings and risers to be used where practical for reconstruction of manholes only.

Q#44 Bid item 336- Linear Grading, As Per Plan: 8400' has been set up for backing up areas getting SP627 or SP304 berm. Typical sections for ramp reconstruction on plan sheet 4, and resurfacing on sheets 7,9,11,12 and 14-17 show either SP627 or SP617 berm to be placed. The owner quantity of 8400' appears to be greatly understated based on these typicals. Please review all linear grading and berm-related quantities and revise as necessary as well as providing quantity breakdowns of how much is to take place in reconstruction sections as opposed to resurfacing areas since reseeding and topsoil work are considered incidental by plan note on sheet 19.

A#44 No, the Item 209 – Linear Grading, As Per Plan note states "the contractor shall perform the following adjacent to new pavement and/or berm." This item will not be used in the resurfacing areas. Therefore, this work will only take place adjacent to new pavement as shown on Plan Sheets 31 through 34 of 80. The quantity provided is reasonable.

Q#45 Sheet 43 of the 39-18-02 Part A plans state that permanent traffic control should be restored after Phases 2 and 4. Should this instead read after Phases 3 and 5? Please advise.

A#45 No. This Addendum No. 2 revises the General Note on Plan Sheet 43 of 727 "METHOD OF PAYMENT FOR MAINTAINING TRAFFIC – WINTER SHUTDOWN" to identify "Phase 2 and 6".

Q#46 The Winter Shutdown Note #3 on sheet 43 states to remove temporary striping and restripe EB and WB pavement, "as detailed in the Phase XX sequence of construction." Will the department please advise as to what Phase XX refers to?

A#46 Yes, this Addendum No. 2 revises the General Note on Plan Sheet 43 of 727 "METHOD OF PAYMENT FOR MAINTAINING TRAFFIC – WINTER SHUTDOWN" to read "as detailed in the OTIC Annual Pavement Marking Operations – Long Line Quantities general note on Sheet 586."

Q#47 The Winter Shutdown Note on sheet 43 states to, "restore all permanent traffic control." Does this include rumble strips (SNAPS), RPMs, and signage?

A#47 No. The note reads "Restore all permanent traffic control which is required to peform the following tasks." There are also notes in the Sequence of Construction General Note which outline restrictions on installing SNAPS within certain limits of the project due to future maintenance of traffic operations. SNAPS will be installed at the direction of the Chief Engineer per the Sequence of Construction General Note.

RPMs that will not need to be removed due to future maintenance of traffic operations should be installed.

The Contractor will need to install pavement markings as outlined in the General Note on Plan Sheet 586 of 727 "OTIC Annual Pavement Marking Operations – Long Line Quantities" at the end of each of the three construction seasons.

The Contractor will also need to restore or replace any existing traffic control signs which were disturbed by his/her operations, particular to a certain construction season, before the winter shutdown.

Q#48 Bid item 169- Full Depth Pavement Sawing: plan sheet 13 calls for median shoulder to be rebuilt against existing median barrier. No sawcut is set up for a clean separation of pavement and barrier. Please consider adding quantity for sawcutting these areas and revise accordingly.

A#48 It is not necessary to sawcut when removing asphalt pavement which is adjacent to vertical concrete face. There is no interlock between the two materials. No additional quantity will be provided.

Q#49 Bid item 391- #304 Aggregate Base: no volume apparently is in the quantity for replaced approach slabs which are called out on plan sheet 22. Please review and revise this as needed.

A#49 Yes, this Addendum No. 2 revises General Note Plan Sheet 22 of 80, General Summary Plan Sheet 45 of 80, and Reference No. 392 on the Bid Form and Estimated Quantities Worksheet to add to the quantity for SP 304 – Aggregate Base.

Q#50 The current letting date of February 1, 2018 for this project is the same date as a sizeable ODOT bid letting. Given the complexity of this project, the number of outstanding unanswered prebid questions, and the current sale date, will the OTIC please delay this bid for one week?

A#50 No extension is warranted at this time.

Q#51 Bid items 322 "Concrete Barrier Removed" and 328 "Type D Geotextile, 712.09" are shown respectively in SY and CY which appear to be incorrect units of measure. Please review and revise to assumed corrected units of FT and SY.

A#51 This Addendum No. 2 revises the General Summary Plan Sheet 44 of 80, Ref. No. 323 on the Bid Form and Estimated Quantities Worksheet to change the unit of measure for Item 202 - Concrete Barrier Removed to "FT", and Ref. No. 329 on the Bid Form and Estimated Quantities Worksheet to change the unit of measure for Item 204 - Type D Geotextile, 712.09 to "SY".

Q#52 The Typical Section on Sheet 13 for the resurfacing of the Eastbound lanes/shoulders, the Typical Section on Sheet 25 for the resurfacing of the Westbound lanes/shoulder, and the bottom Typical Section on Sheet 24 for the resurfacing of both Eastbound & Westbound lanes/shoulder show the milling depth for the 3rd Lane to be 2" (callout 28) but the calculated quantities for 254 Pavement Planing and SP402 Intermediate, SP76-22 do not reflect this. Please review and clarify the resurfacing in the 3rd Lane.

A#52 This Addendum No. 2 revises Typical Section Plan Sheets 13, 24 and 25 of 727 to match the calculations in the Pavement Sub-summary.

Q#53 Sheet 10, Note 4 says that Non-Tracking Tack Coat is to be applied on each lift of SP302. Will the application of tack coat on the first lift of SP 302 be paid under Ref. 187 or 188? It looks like the calculated quantity for Tack Coat does not include the application between lifts of SP302.

A#53 The quantity for Ref. No. 188: Item 407 - Non-Tracking Tack Coat is calculated to include one application between each lift of SP 302, where 2 lifts are specified, as well as between the SP 302 and the SP 402.

Q#54 Please verify that Ref. # 322 should be measured in FT not SY.

A#54 See the response to Q#51.

Q#55 Please verify that Ref. #328 should be measured in SY not CY.

A#55 See the response to Q#51.

Q#56 Will OTC allow for construction vehicles/trucks to turn around at crossover openings provided that the Contractor follows temporary traffic control OTC Standards?

A#56 Yes, per the requirements of OTIC Standard Drawing TCR-1 No. 13.

Q#57 Will OTC allow for construction vehicles/ trucks to make a U-turn at the toll plazas? If yes, will a flagger be needed?

A#57 Yes, per the requirements of OTIC Standard Drawing TCR-1 No. 13. A flagger is required for this maneuver.

Q#58 The 60" liner pipe to be installed through the 72" CMP at MP 175.9 & 175.99 will not be possible due to the existing curvature of the pipe. Will the OTC consider an alternate option?

A#58 See the response to Q#23.

Q#59 On sheets 688-691 (Part A) the approach slab drawings show a sleeper slab with the approach slabs. On sheets 692-698 the drawings do not show sleeper slabs. All approach slabs on sheets 688-698 call for Type A Installation per drawing AS-2-15 which call for a sleeper slab. Will sleeper slabs be required on the approach slabs on sheets 688-698? If sleeper slabs are required on these approach slabs 6 of the 8 approach slabs on east bound (sheets 690, 691, 694, 695, and 698) do not have pavement replacement around them. How will the excavation and asphalt be paid for the 4' beyond the approach to install the sleeper slab?

A#59 Sleeper slabs are to be installed on the westbound and eastbound forward and rear approach slabs at the bridge over the I-77 Ramp, as shown on the Plan Sheets 688 through 691 of 727. Plan quantities for Type A installations are included for these approach slabs only. Excavation of the Type A Installation is included in the unit price bid for the item per AS-2-15.

This Addendum No. 2 revises General Note "PAVEMENT RESTORATION FOR APPROACH SLAB TYPE A INSTALLATION" on Plan Sheet 38 of 727, General Summary Plan Sheet 376 of 727, and Reference No. 18 on the Bid Form and Estimated Quantities Worksheet to add pavement removal.

Q#60 On sheet 22 (Part B), the note for Item 526 Reinforced Concrete Approach Slab calls for the approach slabs on ramps over I-77 to be constructed per OTC Standard Drawing AS-1. Standard AS-1 calls for a 15' approach slab. On sheet 4 the typical section calls for the

length to be 25'. Is it the intent of the Ohio Turnpike Commission to install these approach slabs per Standard Drawing AS-1 or to install these approach slabs, like Part A, per ODOT Standard Drawings AS-1-15 and AS-2-15?

A#60 Yes. The intent is to install these approach slabs, like Part A, per ODOT Standard Drawings AS-1-15 and AS-2-15.

Q#61 Sheet 586 outlines the "OTIC Annual Pavement Marking Operations – Long Line Quantities" requirements. The mileposts appear to be incorrectly stated in this note. Please provide the correct mileposts that the contractor will be responsible for the annual pavement marking operations. Also, can the Commission verify that the quantity given will cover the winter shutdown configuration as well as the striping required prior to implementing contra flow?

A#61 This Addendum No. 2 revises the General Note "OTIC ANNUAL PAVEMENT MARKING OPERATIONS – LONG LINE QUANTITIES" on Plan Sheet 586 of 727 to modify the mile post stationing. This Addendum No. 2 further revises the quantities of Ref. No. 295: Item 642 – Edge Line, 6", Type 1 and Ref. No. 296: Item 642 – Lane Line, 6", Type 1 on Plan Sheet 588 of 727, the Bid Schedule of Items and the Estimated Quantities Worksheet to cover the winter shutdown configuration as well as the striping required prior to implementing contra flow as described in the note.

Q#62 The Typical Sections on Sheet 4 of Part B indicate that the thickness of the SP402 is to be 1.75". The Pavement Subsummary on Sheet 49 calculates this quantity at 2.5". Which thickness is correct for the SP402 in the full depth reconstruction section?

A#62 This Addendum No. 2 revises General Summary Plan Sheet 45 of 80, Pavement Subsummary Plan Sheet 49 of 80, and Ref. No. 392 on the Bid Form and Estimated Quantities Worksheet to reflect the correct thickness of 1.75" for SP 402 – Asphalt Concrete Intermediate Course, PG 76-22 (FR).

Q#63 Plan sheet 39 calls for reconstruction for all four Great Lakes Service Plaza ramps to be completed in 2018 phases 2 and 2a. Phases 4/4a and 6/6a show the pavement between ramps and pavement from the west end of the job to the ramps being completed in this phase during the 2019 and 2020 seasons. Does the contractor have the option of completing these additional areas in 2018? The plan note on sheet 40 "Permitting Construction Sequencing" doesn't mention these Phase 4/4a/6/6a areas.

A#64 No. The Contractor does not have the option of completing these additional areas in 2018.

Q#65 Please review the need for Ref. Item 424 Item SP 622 for Part B because there is no proposed barrier wall between opposing traffic.

A#65 This Addendum No. 2 revises General Summary Plan Sheet No. 46 of 80 and Ref. No. 424 on the Bid Schedule of Items and Estimated Quantities Worksheet to remove Item SP 622 Portable Barrier, 32" (With Glare Screen) from Part B.

Q#66 How is slag water to be removed?

A#66 This Addendum No. 2 revises SP-112 to require phasing and specify the means for disposing of the slag water, provides and incorporates the agreement described SP-112, and revises Plan Sheet 431 to identify the location of the OTIC pump station.

MODIFIED CONTRACT DOCUMENTS

With this Addendum No. 2, the Commission substitutes the enclosed material for the following Contract Documents:

Plan Sheets:
Project No. 39-18-02A - 13, 24, 25, 36, 38, 43, 100, 192, 193, 376, 378, 431, 586 and 588 of 727 and Project No. 39-18-02B – 20, 21, 22, 23, 44, 45, 46, 48, 49 of 80 with additions to the Plan Drawings are called out with a cloud and deletions are marked with a revision triangle as thus:

Special Provisions: SP-112 with additions depicted with ***bold italicized*** text.

With this Addendum No. 2, the Commission modifies the Bid Schedule of Items for the following Reference Numbers: 18, 47, 103, 104, 323, 329, 379, 380, 392 and 425

Receipt of Addendum No. 2
Project No. 39-18-02 is hereby acknowledged:

(Firm Name) _____

(Signature) _____

(Printed Name) _____

(Date) _____

BIDDERS MUST RETURN THE ABOVE ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM NO. 2 WITH THEIR BID.

No provision of these Contract Documents acts to make the Commission, the Construction Inspectors or any other party other than the Contractor solely responsible for safety. Article 16 of the General Conditions – Indemnification applies to protect, indemnify, defend and hold harmless all parties referred to therein from any and all actions, damages, fines, suits, losses and any other expenses arising from the Contractor's failure to meet all safety requirements and/or provide a safe Work site.

G. Basis of Payment

Safety and health equipment, operations, training, and dedicated personnel will not be measured or paid separately, but are considered incidental to the Contract requirements.

SP 111 PROHIBITION ON USE OF SLAG

Slag may only be used as a construction material when it is incorporated as a coarse aggregate into Portland cement concrete and/or asphalt concrete mixes where such use is permitted in the following Special Provisions: SP 302, SP 400, SP 451, SP 511, SP 511A, SP 511B, SP 511C and SP 526.

All types of slag are prohibited for all other uses, including by way of example, but without limitation: aggregate base, pipe bedding, granular backfill, embankment, slope and channel protection, underdrains and all other uses where not incorporated into a specified concrete or asphalt mix.

SP 111 supersedes all applicable sections of the ODOT CMS, and all Supplemental Specifications that may allow the use of slag.

For purposes of this Provision, the term “slag” means air-cooled blast furnace slag, blast furnace slag, open-hearth slag or any other byproduct of the iron and steel making process.

SP 112 ENVIRONMENTAL POLLUTION CONTROL

A. General

The Contractor shall provide all equipment, materials, and labor necessary to prevent and/or clean up the spillover of construction operations onto adjacent property, roadways, and waterways. This shall include, but not be limited to, dust, mud, trash, night lighting, diesel fumes, petroleum products used to fuel/lubricate construction equipment, and any environmentally hazardous material.

The Contractor shall comply with all Federal, State and Local laws and regulations controlling pollution of the environment. It shall take appropriate or necessary precautions including, but not be limited to, those measures shown on the storm water pollution prevention plan (SWP3), to prevent pollution of streams, lakes, ponds, and reservoirs with slag leachate, fuels, oils, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

The Contractor shall submit a written proposal on specific environmental pollution control methods and measures to be employed. Work shall not commence until methods have been submitted and accepted by the Commission.

B. Dust Control

Dust control shall apply to all construction operations and materials that may become airborne as particulate matter. Such operations shall include, but not be limited to, earthwork, drilling, blasting, and any vehicular traffic related to the Project.

In the event a dangerous or unacceptable dusting situation occurs, the Commission has the option to either:

1. Direct the Contractor to immediately remedy the situation to the Chief Engineer's acceptance; or

2. Shut down the Contractor's operations and have the remedial Work performed by others, at the Contractor's expense; or

3. Shut down the Contractor's operations until an acceptable condition exists.

No extension of time shall be allowed, nor shall additional compensation to be paid for shut down required under the terms of this provision.

C. Mud Control

The Contractor shall include in its environmental pollution control proposal and/or SWP3 a plan for removal of mud on vehicles leaving the construction site. This proposal shall also include an action plan for cleaning of public roads and/or storm drains should mud and/or dirt be deposited on the roads by vehicles, erosion, or any construction activity.

D. Trash Control

The Contractor shall include in its environmental pollution control proposal and/or SWP3 a plan for containing trash on site, trash disposal methods on site, if permitted by law, and off-site disposal hauling schedule.

E. Lighting Control

All lighting for night operations shall be in accordance with SP 106. Night lighting shall be shielded from direct illumination of adjacent residences and the traveling public. Should night operation be anticipated, illumination control measures shall be included in the environmental pollution control proposals.

F. Diesel Fume Control

The Contractor shall minimize generation of diesel fumes by using the highest-grade diesel fuel available and keeping equipment in good operating condition through a documented preventive maintenance program. Documents for diesel fuel purchases and maintenance program shall be made available within one (1) day of request to Inspectors to verify compliance.

Any piece of equipment generating excess visible exhaust after a half-hour warm-up period is subject to being shut down by Inspectors until condition is corrected. No extension of time nor additional compensation will be paid for such a shut down.

G. Slag Leachate Control

Slag leachate Control shall apply to all construction operations and materials that involve any existing slag. Such operations shall include but not be limited to: Excavation, Hauling, Stockpiling, Material Handling, Disposal, and any operation which would have the potential to expose the site or adjacent properties to Slag Leachate Accumulation or runoff from rain water or other condition.

The Contractor is required to submit a Slag Leachate Control Plan for the Entire Project Limits and Operations including Excavation, Stockpiling, Material handling, hauling, Disposing and any other slag related operations. The Slag Leachate Control Plan shall include:

1. Site Containment Preventive Measures (e.g. berms, tarping, pump to temporary tank)
2. Site Preventative Details for Adjacent Property Runoff
3. Site Handling of Slag materials
4. Hauling of materials off site for proper disposal
5. Prohibition of Stockpiling of Slag Material on site
6. Operations and Handling of Contained Slag Leachate Water
    a. ***Work shall be phased in an effort to minimize the amount of runoff.***
    b. ***Runoff may be disposed of via the existing OTIC/City of Brecksville Agreement (see attached under cover dated October 27, 2009) allowing Leachate runoff to be pumped in Sewer District 13 facilities through the Noble Road Pumping Station provided the disposal meets the terms of the Agreement, which is incorporated herein by reference.***
    c. ***The Contractor may collect runoff and pump the slag water to the OTIC pump station as shown on Plan Sheet 431 of 727 if all the requirements are met with the existing OTIC/City of Brecksville agreement. Please note that there are flow restrictions to the City's sewer system of 43,200 gallons per day. If deposing of the leachate through the provided facilities, the Contractor shall manage his work in accordance with the Agreement and shall submit his means and methods for reducing the amount of stormwater collected and means for collecting and storing the water if greater than the 43,200 gallons per day.***
7. Emergency Measures Plan for response to release of Slag Leachate Runoff from site
8. All measures shall be compliant with the OEPA and Contract Documents

C. Measurement and Payment

Environmental pollution control measures will not be measured or paid for separately but are considered incidental to the normal construction activity being performed.

SP 113 STORM WATER POLLUTION PREVENTION PLAN (SWP3) MANAGEMENT
(03-30-16)

A. General

The Contractor shall provide SWP3 management services of the Ohio EPA permitted project. The management services shall include all SWP3 items required for compliance with the Ohio EPA's current General Permit to Discharge Storm Water Runoff from a Construction Site ("Ohio EPA Permit") and as required in these Specifications.

CUYAHOGA COUNTY SANITARY ENGINEER
ROBERT C. KLAIBER, Jr., P.E., P.S.
6100 West Canal Road - Valley View, Ohio 44125
(216) 443-8211 - Fax (216) 443-8236

Mr. Craig Mulichak, P.E.
URS Corporation
564 White Pond Drive
Akron, Ohio 44320-1100

October 27, 2009

Re: OTC Leachate Collection System Submittal of 7/13/2009 Plan review
CCSE# 08-046(1)

Dear Craig:

The plans and specifications described above are approval by the County. All of the modifications requested in the previous reviews have been made to CCSE satisfaction. Once the City approves the plans the County will be able to formally approve these plans.

A draft of a three party agreement based on previous agreements used by the County is attached for your consideration. A meeting to discuss the form and terms of such an agreement should be arranged after all parties have had a chance to review the attached. Once a similar agreement for service has been completed a permit can be issued for the construction of the planned improvements.

Until such time as the agreement is completed all copies of the approved plans will be retained by this office.

Should you have any questions or need more information please do not hesitate to call me at 216.443.8205, fax at 216.443.8276 or e-mail to wschneider@cuyahogacounty.us.

Very truly yours,

William Schneider

William Schneider, P.E.
Chief Engineer

cc: Victoria McCauley, P.E. Brecksville City Engineer
Mike Dever, Deputy to the Sanitary Engineer
Inspection File

AGREEMENT

This Agreement ("Agreement") made and entered into this ~i~- day of 2009, by and between the City of Brecksville, Ohio (hereinafter called the "CITY"), the Board of Commissioners of Cuyahoga County, Ohio (hereafter called "COUNTY") and the Ohio Turnpike Commission, Ohio (hereafter called "OTC").

WHEREAS, the CITY is authorized to execute this Agreement pursuant to Ordinance No. ~~??~~ and

WHEREAS, the COUNTY is authorized to execute this Agreement pursuant to Resolution No. ?? passed on?? ; and

WHEREAS, the COUNTY and CITY (Herein after collectively called the "DISTRICT")are also acting under authority of Revised Code Section *307.15,* Revised Code Chapter 6117 and Article XVIII of the Ohio Constitution; and

WHEREAS, the COUNTY, through the County Sanitary Engineer, provides sanitary sewer collection and disposal services to residents and business in the City of Brecksville, Ohio within Cuyahoga County Sewer District 13; and

WHEREAS, the OTC has requested that the rain and ground water runoff (hereinafter referred to as "leachate") from the slag fill used in construction of the I77/Ohio Turnpike interchange (herein after referred to as the Service Area) be pumped into facilities owned and operated by the County through the Noble Road Pump Station owned by in the City; and

WHEREAS, it is the desire of the DISTRICT to accept the pumped leachate flow from the Service area into its sanitary sewer system for transportation to the Northeast Regional Sewer District ("NEORSD") for treatment and disposal; and

WHEREAS, NEORSD has agreed to accept the leachate flow for treatment as witnesses by the approval letter dated August 19, 2008, and

NOW THEREFORE, IN CONSIDERATION OF the mutual covenants herein contained and other good and valuable consideration, the parties hereto agree as follows:

ARTICLE I: SERVICE AREA AND SERVICE

1.01 Subject to the approval of the NEORSD, the DISTRICT shall accept, receive and transport wastewater generated in and flowing from the Service Area detailed in Exhibit 1, provided the total average daily outflow from the SERVICE AREA does not exceed ~~43,200~~ gallons per day.

1.02 DISTRICT shall commence receiving and transporting leachate as set forth in Section 1.01, upon the completion of the construction by the OTC of a pumping station and force main connecting the SERVICE AREA to the sanitary sewer system, the issuance by the DISTRICT of all tap-in and other permits required by the DISTRICT, payment of tap-in fees by OTC to the DISTRICT, and

1.03 DISTRICT'S acceptance of leachate pursuant to this Agreement shall be governed by the rules and regulations of the COUNTY for wastewater transportation presently in effect and as hereafter adopted by COUNTY In consideration for access to the City's Sanitary Sewer System, DISTRICT shall charge the OTC a one-time lump sum tap-in fee as described in Article III of this Agreement.

1.04 DISTRICT'S acceptance of the leachate pursuant to this Agreement shall be in accordance with all applicable local, state and federal regulations and laws.

ARTICLE II: CONSTRUCTION

2.01 OTC shall construct and pay for all costs and expenses necessary to connect the sanitary sewer facilities constructed in the SERVICE AREA to the City's Sanitary Sewer System, including but not limited to all construction costs, engineering costs, inspection costs and service costs. Construction shall be in accordance with plans reviewed and approved by the County and the City, and plans shall be on file with the COUNTY and the CITY.

2.02 DISTRICT will cooperate and coordinate efforts needed to facilitate the connection with the

shall not be for surface water or storm water drainage other than that designated by the OEPA to be contaminated leachate.

3.09 There shall be no future connections of the sewers in the SERVICE AREA beyond that approved as part of this Agreement.

3.10 The cost of repair to the Noble Road station required, as determined by the County to be the result of the OTC leachate, shall be paid by the OTC upon presentation of an itemized invoice for the repairs.

ARTICLE IV: MODIFICATION; INTERPRETATIONS

4.01 This Agreement supersedes any and all prior agreements, communications, and representations, whether oral or written, made on behalf of the parties hereto. This Agreement contains the entire understanding between the parties and there are no promises, agreements, conditions, understandings, inducements, warranties, or representations, oral or written, express or implied, other than as set forth in this Agreement.

4.02 This Agreement may be modified only by written agreement executed by all parties hereto.

4.03 No covenant, agreement or condition of this Agreement shall be waived, altered or modified except by written instrument executed by the party against whom enforcement of such waiver, alteration or modification is sought. No waiver of any covenant, term or condition of this Agreement shall affect any other covenant, term or condition of this Agreement.

4.04 The failure of any party to insist upon strict performance of any of the covenants, conditions, or provisions of this Agreement, or to declare a breach for any violation thereof, shall not be construed as a waiver or relinquishment of the future right to insist upon the strict compliance with all of the covenant, condition, or provision if the violation is continued or repeated.

4.05 In the event any term or provision of this Agreement shall for an reason be held invalid, illegal

2.03 Construction shall be considered complete upon approval by all appropriate local, regional, state and federal regulatory agencies, including, without limitation, upon inspection and approval by the COUNTY and the CITY.

ARTICLE III: OPERATION, MAINTENANCE, RATES AND CHARGES

3.01 COUNTY shall be entitled to exact fees and charges from OTC in accordance with the rules, regulations and rate structures relating to wastewater collection and sanitary facility maintenance hereafter in effect or adopted.

3.02 DISTRICT shall charge a one-time lump sum tap-in fee of $?? to OTC as consideration for the DISTRICT providing access to the DISTRICT sanitary sewer system.

3.03 CITY shall also charge to OTC such charges in thousand cubic feet (MCF) for wastewater collection and transportation as are set by CITY by ordinance from time to time, which, as of the date of this Agreement, is $??/MCF. CITY shall be solely responsible for the billing and collection of these charges.

3.06 OTC shall operate and maintain the leachate sewer improvements in the SERVICE AREA in conformance with the requirements of the COUNTY's agreement with NEORSD. All charges for collection, transportation, and maintenance set out in this Agreement shall be in addition to charges per thousand cubic feet (MCF) for collection, transportation, treatment, and disposal set by NEORSD.

3.07 OTC shall, to the extent of its authority and control, operate the SERVICE AREA leachate system so that the peak flow does not exceed 43,200 gallons per day. Upon specific request, the OTC shall collect and provide to the DISTRICT, all flow monitoring data and calculations pertinent to this flow.

3.08 Parties hereto represent that the leachate system to be constructed pursuant to this Agreement

or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other term or provision hereof, and this Agreement shall be interpreted and construed as if such term or provision, to the extent the same have been held to be invalid, illegal or unenforceable, had never been contained herein.

ARTICLE V: GOVERNING LAW; REGULATIONS

5.01 This Agreement shall be governed and construed and its validity and effect shall be determined by the laws of the State of Ohio.

5.02 All parties understand and acknowledge that the sanitary sewer systems are subject to regulation by state and federal laws, rules and regulations and/or by the United States EPA or Ohio EPA. To the extent that any party hereto becomes subject to an order of any of the aforesaid regulator entities, this Agreement shall be interpreted and/or modified in a manner consistent with such laws, rules, and regulations to the extent that will reasonably allow the performance of the terms of this Agreement by all parties in a manner which will achieve compliance with any such order.

ARTICLE VI: TERM

6.01 This Agreement shall take full force and be in effect from the date of execution hereof for an initial term of ?? years and the same shall be perpetually renewed for a term of ?? years subject to its amendment or supplementation as mutually determined by the legislative authority of COUNTY and CITY. This agreement may be terminated by the DISTRICT upon notification to the OTC at least thirty (30) days in advance of the termination date in the event the SERVICE AREA is annexed to or otherwise becomes located within the municipal boundaries of CITY.

ARTICLE VII: NOTICES

7.01 Notice of cancellation of this Agreement shall be delivered by certified mail. All other notices required to be given under this Agreement shall be delivered by regular mail.

7.02 Notices to OTC required to be given under this Agreement shall be delivered to the following address:

Ohio Turnpike Commission
Ohio Turnpike Commission Administration Building
26100 Bagley Road
Ohio Turnpike Commission, OH 44138-1897

7.03 Notices to DISTRICT required to be given under this Agreement shall be delivered to the following address:

Board of Commissioners of Cuyahoga County
Cuyahoga County Administration Building
1219 Ontario Street, Fourth Floor
Cleveland, Ohio 44113

And an additional copy to:

Cuyahoga County Sanitary Engineer
6100 West Canal Road
Valley View, Ohio 44125

ARTICLE VIII: GENERAL

8.01 The parties expressly agree that the terms, covenants, and conditions made in this Agreement shall bind its respective commissioners, officers and officials for the term of this Agreement and they have authority to execute this Agreement.

8.02 The parties hereto agree that in performing the rights, duties and obligations under this Agreement, they must at all time act in good faith.

8.03 No party shall assign this Agreement, or any rights granted thereunder, without express written consent of the other party. Any assignment that is made or attempted to be made without

express written consent shall, at the option of the other party, be void and unenforceable.

8.04 This Agreement shall be executed in two (2) counterparts, each of which shall be deemed an original, but all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, this Agreement has been signed in duplicate by the CITY, COUNTY and OTC on this ___ day of_____,2009.

Signed and acknowledged in the presence of:

CITY OF BRECKSVILLE, OHIO

By: By:

_____ _____

OHIO TURNPIKE COMMISSION

By: By:

_____ _____

BOARD OF COMMISSIONERS OF CUYAHOGA COUNTY, OHIO

By:

_____

_____

_____

Approved for legal form and correctness:

OHIO TURNPIKE COMMISSION LEGAL COUNSEL

Approved as to form:

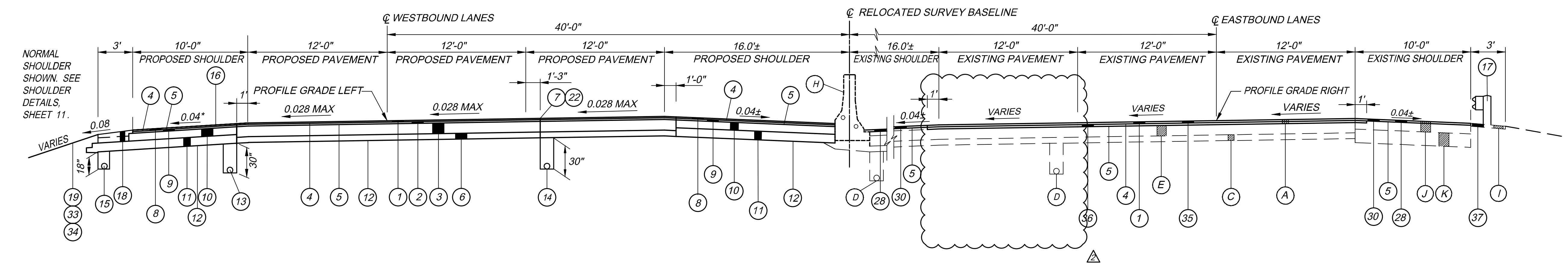
WILLIAM D. MASON,

Prosecuting Attorney Cuyahoga County, Ohio

By Joyce M. Dodrill

Assistant Prosecuting Attorney

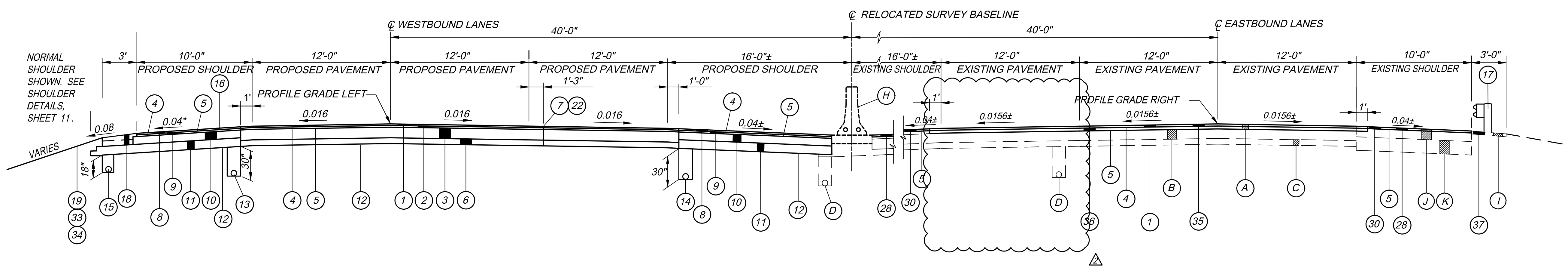
CITYOF BRECKSVILLE DIRECTOR OF LAW



* TRANSITION SLOPE FROM 0.04 TO 0.028 AT APPROACH SLABS (L=35')
STA 13+39.0 TO STA 13+74.0
STA 17+48.0 TO STA 17+83.0

3 LANE SUPERELEVATED SECTION (LEFT)

STA 984+50.00 TO STA 988+62.10 = 412.10 FT
STA 0+00.00 TO STA 1+00.00 = 100.00 FT
STATION EQATION: STA 1+00.00 (BACK) = STA 1+06.05 (AHEAD)
STA 1+06.05 TO STA 4+26.26 = 320.21 FT
STA 12+33.04 TO STA 14+00.50 (I-77 BRIDGE) = 167.46 FT
STA 17+72.25 (I-77 BRIDGE) TO STA 19+22.31 = 150.06 FT
STA 33+13.58 TO STA 37+75.00 = 461.42 FT



* TRANSITION SLOPE FROM 0.04 TO 0.016 AT APPROACH SLABS (L=65')
STA 7+65.8 TO STA 8+30.8
STA 9+73.2 TO STA 10+38.2

3 LANE NORMAL SECTION

STA 4+26.26 TO STA STA 8+67.17 (I-77 RAMP BRIDGE) = 440.91 FT
STA 10+09.47 (I-77 RAMP BRIDGE) TO STA 12+33.04 = 223.57 FT
STA 19+22.31 TO STA 33+13.58 = 1391.27 FT

FOR EXISTING AND PROPOSED LEGEND SEE SHEET 10.

160562-TYPICAL-SECTION.dwg; 1/25/18 - 4:01pm

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

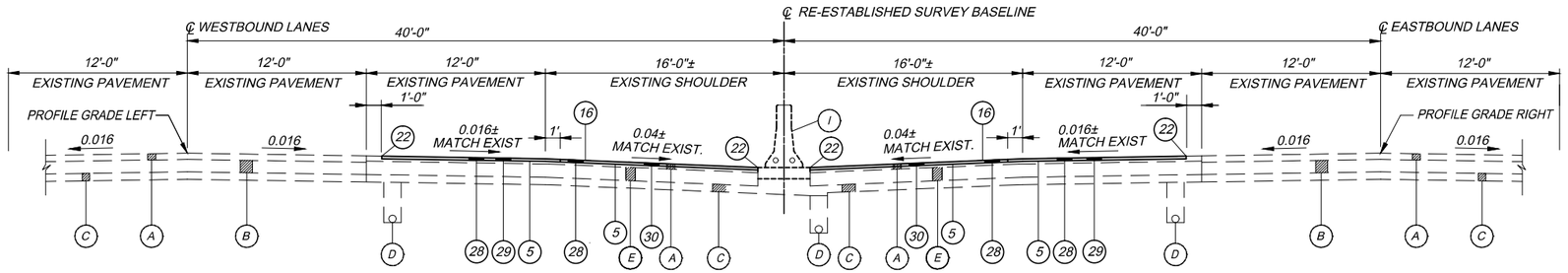
TYPICAL SECTIONS

PROJECT 39-18-02A
DATE: 12/22/17

DESIGNED	CHECKED
JMP	JMP
DRAWN	IN CHARGE
PSL	WDB

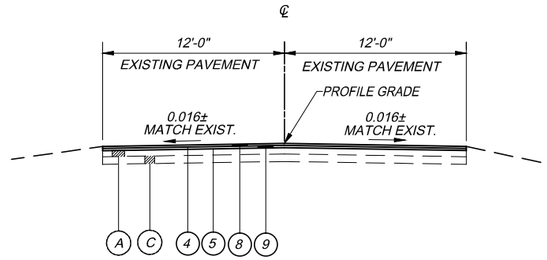
NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-
-	-	-	-

DESIGN AGENCY
CT consultants — engineers architects planners



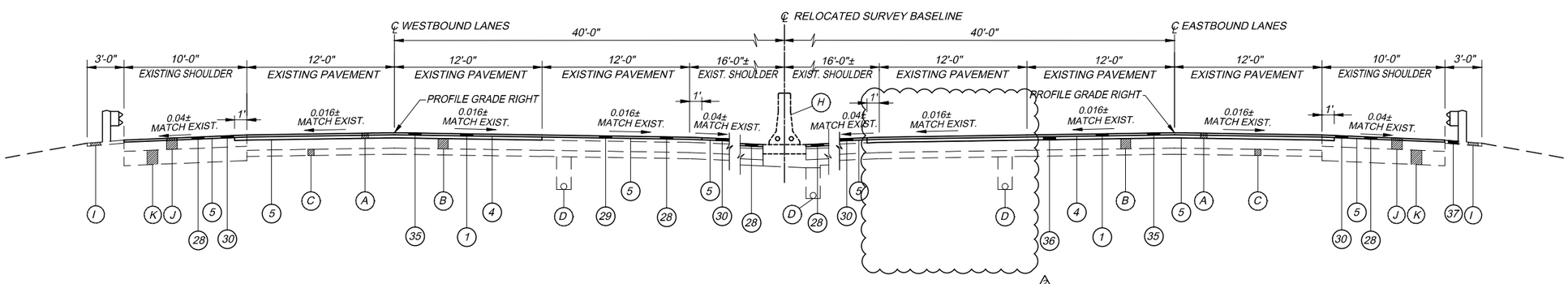
RESURFACING SECTION
INSIDE LANE AND MEDIAN SHOULDER

STA. 831+00+/- (MP 169.10) TO 846+18.04 = 1518.04 FT
STATION EQUATION: STA. 846+18.04 (BACK) = 845+30.17 (AHEAD)
STA. 845+30.17 TO STA. 863+90.00 = 1,859.83 FT



RESURFACING SECTION
MAINTENANCE FACILITY ACCESS DRIVE

M.P. 173.99 LT



RESURFACING SECTION

STA. 288+58.30 (CUYAHOGA RIVER BRIDGE) TO STA STA. 317+33.93 = 2,875.63 FT
STA. 317+32.00 TO STA STA. 319+60.00 = 228.00 FT

FOR EXISTING AND PROPOSED LEGEND SEE SHEET 10.

DESIGN AGENCY
T.Y. Lin International Alfred Benesch consultants — engineers architects planners

NO	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18

DESIGNED JMP | DRAWN PSL | CHECKED JMP | IN CHARGE WDB

TYPICAL SECTIONS

PROJECT 39-18-02A

DATE: 12/22/17

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

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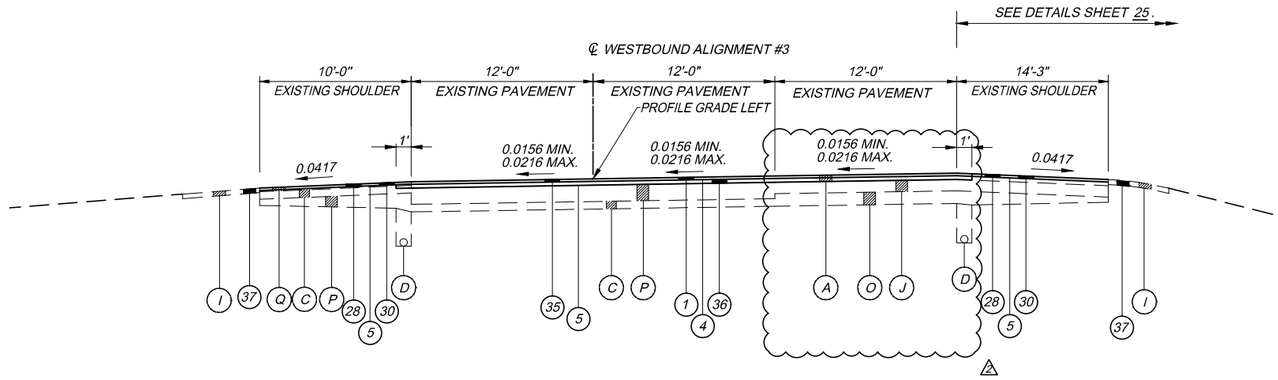
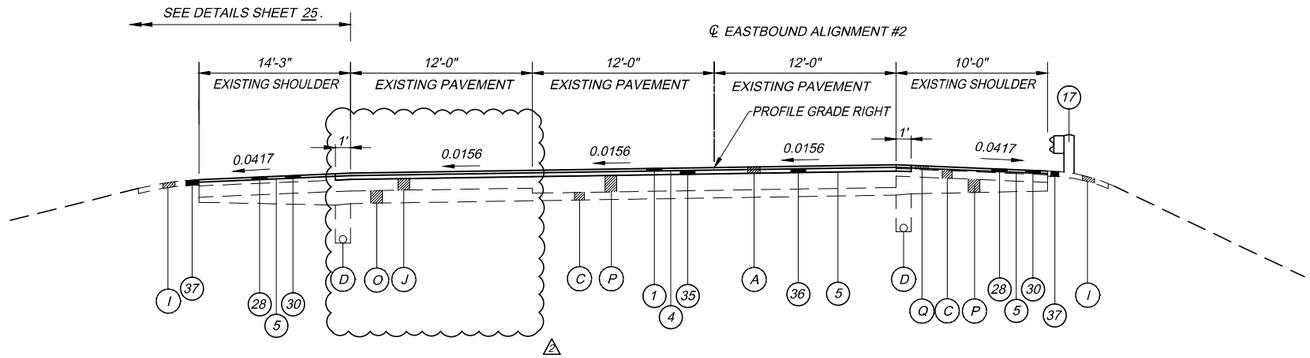


RESURFACING SECTION

WESTBOUND LANES

STATION EQUATION: STA. 223+71.60, 98' LT. RE-EST. SURVEY BASELINE (BACK) =
STA. 229+03.98, WB ALIGNMENT #3 (AHEAD)
STA. 229+03.98 TO STA. 261+44.32 (CUYAHOGA RIVER BRIDGE) = 3,240.34 FT



RESURFACING SECTION

EASTBOUND LANES

STATION EQUATION: STA. 223+71.60, 98' RT. RE-EST. SURVEY BASELINE (BACK) =
STA. 228+78.51, EB ALIGNMENT #2 (AHEAD)
STA. 228+78.51 TO STA. 261+44.32 (CUYAHOGA RIVER BRIDGE) = 3,265.81 FT

FOR EXISTING AND PROPOSED LEGEND SEE SHEET 10.

DESIGN AGENCY

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

DESIGNED JMP | DRAWN PSL | CHECKED JMP | IN CHARGE WDB

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TYPICAL SECTIONS

PROJECT 39-18-02A

DATE: 12/22/17

OHIO TURNPIKE

160562-TYPICAL-SECTION.dwg; 1/25/18 - 4:37pm

ROADWAY (CONTINUED)

ITEM 203 - EXCAVATION OF SLAG, AS PER PLAN (CONTINUED)

PAYMENT FOR EXCAVATING ALL SLAG SHALL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 203 - EXCAVATION OF SLAG, AS PER PLAN AND SHALL INCLUDE EXCAVATING ALL THE SLAG, PLACING THE SLAG INTO THE TRUCK, MANAGING ALL THE SLAG LEACHATE WATER AS DESCRIBED ABOVE AND IN ACCORANCE WITH SP 112, ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK REQUIRED TO REMOVE THIS EXISTING SLAG MATERIAL:

ITEM 203 - EXCAVATION OF SLAG, AS PER PLAN	24,000 CY
ITEM 203 - EMBANKMENT	24,000 CY
SP 605 - TRENCH DRAIN, AS PER PLAN	40 CY

EXISTING POROUS BACKFILL MATERIAL AND GEOTEXTILE FABRIC BEHIND THE ABUTMENTS AND WINGWALLS OF THE BRIDGE AT MP 172.26 THAT IS DISTURBED OR DAMAGED DURING SLAG REMOVAL OPERATIONS SHALL BE REPLACED AS DIRECTED BY THE CHIEF ENGINEER. THE NEW POROUS BACKFILL SHALL BE 2'-0" THICK AND SHALL EXTEND FROM THE BOTTOM OF THE EXCAVATION TO THE SUB-GRADE OF THE APPROACH SLAB

EXTEND NEW GEOTEXTILE FABRIC AROUND THE NEW POROUS BACKFILL FROM ITS LOWER LIMITS TO ITS UPPER LIMITS AND TURN IT UP/DOWN 6" ALONG THE BACK FACE OF THE WALL. REPLACE DAMAGED DRAIN PIPE USING 6" PERFORATED CORRUGATED PLASTIC PIPE AND 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK REQUIRED TO REPLACE EXISTING POROUS BACKFILL MATERIAL:

ITEM 518 - POROUS BACKFILL WITH GEOTEXTILE FABRIC	400 CY
ITEM 518 - 6" PERFORATED CORRUGATED PLASTIC PIPE	240 FT
ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE	20 FT

2

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE CONTRACTOR DESIGNING THE NECESSARY EXCAVATION BRACING TO REMOVE THE EXISTING SLAG AND PREPARING PLANS IN ACCORDANCE WITH ODOT CMS 501.05. THIS DESIGN SHALL SUPPORT THE SIDES OF THE EXCAVATIONS AS DESCRIBED ABOVE NEAR THE BRIDGE ABUTMENTS FOR THE MAINLINE BRIDGE M.P. 172.26. THE LOCATIONS AND APPROXIMATE LIMITS OF THE COFFERDAMS AND EXCAVATION BRACING ARE SHOWN ON THE PLAN AND PROFILE SHEETS 431 AND 433 OF 727 AND THE SLAG REMOVAL SUPPLEMENTAL INFORMATION PLAN INSERT SHEETS. THE TEMPORARY SUPPORT LOCATED BETWEEN THE CENTER AND THIRD (INSIDE) LANE MAY BE LEFT IN PLACE TO BE USED IN BOTH THE 2018 AND 2020 CONSTRUCTION SEASONS; HOWEVER, THIS TEMPORARY SUPPORT SHALL BE REMOVED AFTER THE 2020 WORK IS COMPLETE. PAYMENT FOR THE CONTRACTOR DESIGNED TEMPORARY SUPPORT OF EXCAVATION SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN AND SHALL INCLUDE THE CONTRACTOR PROVIDING THE DESIGN IN ACCORDANCE WITH ODOT CMS 501.05, ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE WORK AS DESCRIBED ABOVE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK REQUIRED TO REMOVE THIS EXISTING SLAG MATERIAL:

ITEM 503 -- COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	1 LUMP

ITEM 203 - DISPOSAL OF SLAG, AS PER PLAN

ALL SLAG SHALL BE HAULED AND DISPOSED OFF THE OHIO TURNPIKE RIGHT-OF-WAY BY THE CONTRACTOR. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL SLAG MATERIAL.

PRIOR TO THE DISPOSAL OF SLAG MATERIAL, SUBMIT TO THE COMMISSION AN EXECUTED COPY OF THE CONTRACT OR PERMISSION STATEMENT FROM THE PROPERTY OWNER. THE CONTRACT OR PERMISSION STATEMENT MUST INDICATE THAT THE SLAG IS NOT THE PROPERTY OF THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION. FURTHER, IT MUST EXPRESSLY STATE THAT THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION IS NOT A PARTY TO THE CONTRACT OR PERMISSION STATEMENT AND THAT THE CONTRACTOR AND PROPERTY OWNER WILL HOLD THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION HARMLESS FROM CLAIMS THAT MAY ARISE FROM THEIR CONTRACT OR PERMISSION STATEMENT.

CONTACTS FOR POTENTIAL SLAG DISPOSAL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

BOYAS EXCAVATING
ATTN.: ROCKY BUSA
11311 ROCKSIDE ROAD
VALLEY VIEW, OHIO
(216) 337-7160
BOYASEXCAVATING@GMAIL.COM

REPUBLIC SERVICES
ATTN.: GORDON FRYE
40195 BUTTERNUT RIDGE ROAD
ELYRIA, OHIO
(440) 653-1422
GFRYE@REPUBLICSERVICES.COM

WASTE MANAGEMENT
ATTN.: ANDY FEDERLE
(440) 396-9173
RFEDERLE@WM.COM

PAYMENT FOR DISPOSING OF SLAG SHALL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 203 - DISPOSAL OF SLAG, AS PER PLAN AND SHALL INCLUDE THE COST FOR HAULING, DISPOSAL FEES, ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - DISPOSAL OF SLAG, AS PER PLAN	24,000 CY

A PRELIMINARY INVESTIGATION SHOWED THAT APPLICATION OF CARBONIC ACID (CO2 INJECTED INTO WATER) TO HIGH PH SLAG DURING FREE-FALL NEUTRALIZED THE PH AND REDUCED PROPENSITY TO LEACH. FOR ADDITIONAL INFORMATION REFER TO APPENDIX C OF THE SPECIAL PROVISIONS FOR A COPY OF THE REPORT.

IF THE CONTRACTOR CHOOSES TO USE THE EXCAVATED SLAG AS MATERIAL AT SOME OTHER LOCATION OR TREAT THE SLAG FOR USE, HE/SHE ASSUMES ALL RESPONSIBILITY OF POTENTIAL LEACHATE ISSUES AND SHALL COORDINATE OPERATIONS WITH THE OHIO EPA AT THE FOLLOWING:

OHIO EPA
DIVISION OF SURFACE WATER
NORTHEAST DISTRICT OFFICE
ATTN.: BILL ZAWISKI
330.963.1134

DRAINAGE

REVIEW OF DRAINAGE FACILITIES

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

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

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

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

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE CHIEF ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE CHIEF ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

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

ITEM SP 605 - UNDERDRAIN ROCK EXCAVATION

BASED ON THE SUBSURFACE INVESTIGATION, THE CONTRACTOR MAY ENCOUNTER BEDROCK BETWEEN MILEPOSTS (MP) 172.7 TO MP 175.8. BEDROCK SHALL BE DEFINED AS SHALE AS DETERMINED BY THE COMMISSION'S REPRESENTATIVE. THE CONTRACTOR IS TO REFER TO THE GEOTECHNICAL REPORT TO REVIEW THE POSSIBLE EXTENT OF ROCK EXCAVATION. THE ROCK EXCAVATION QUANTITY IS PAYMENT FOR THE DIFFERENCE TO EXCAVATE ROCK INSTEAD OF SOIL. THEREFORE, THE CONTRACTOR SHALL BE PAID FOR ITEM SP605 PLUS THE EQUAL NUMBER OF CUBIC YARDS OF ITEM 203 - ROCK EXCAVATION FOR UNDERDRAIN INSTALLATION, APP. THIS PAY ITEM SHALL INCLUDE THE REQUIRED METHOD TO REMOVE THE ROCK TO INSTALL NEW CONSTRUCTION OR TO EXCAVATE TO THE DEPTHS SHOWN ON PLANS. MEASUREMENT FOR PAYMENT SHALL BE PER CUBIC YARD.

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

ITEM SP 605 - UNDERDRAIN ROCK EXCAVATION	250 CY

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE MADE BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. THE STUB SHALL MEET THE REQUIREMENTS OF 707 AND HAVE A MINIMUM LENGTH OF TWO FEET AND A MINIMUM WALL THICKNESS OF 0.064 INCHES.

THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE CHIEF ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THE FIELD WELDED JOINT, IF USED, SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.21.

A MASONRY COLLAR, AS PER STANDARD DRAWING, DM-1.1, WILL BE REQUIRED TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS PROVIDED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR SP 611.

EXISTING UNDERDRAINS

ALL EXISTING UNDERDRAINS ENCOUNTERED IN THE THIRD LANE AND AT THE PAVEMENT SAW CUT LOCATION SHALL NOT BE DISTURBED.

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NO	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	JDC	1/26/18
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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL NOTES

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DRAINAGE (CONTINUED)

ITEM 837 - LINER PIPE, AS PER PLAN

SUPPLEMENTAL SPECIFICATION 837 LINER PIPE SHALL BE AMENDED AS FOLLOWS:

837.02 MATERIALS. THE LINER PIPE MATERIAL SHALL BE LIMITED TO 707.34, 707.35, 707.42 OR SS938. 2

837.03 INSTALLATION. INSTALLATION SHALL BE ADHERED TO WITH THE FOLLOWING ADDITIONS:

G. 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.

H. 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. 1

EXCAVATION IN CHANNEL / DITCH AREAS

MATERIAL WHICH IS EXCAVATED FROM THE CHANNEL / DITCH AREA TO INSTALL NEW CULVERT PIPES AND PRECAST FLARED END SECTIONS, AND WHICH IS NOT SUITABLE FOR USE AS BEDDING, BACKFILL OR EMBANKMENT SHALL BE DISPOSED OF IN ACCORDANCE WITH SP-105 OR IN A WASTE SITES AREA, IF BEING UTILIZED BY THE CONTRACTOR. EXCESS MATERIAL SHALL NOT BE DUMPED INTO OR ADJACENT TO THE CHANNEL / DITCH AREAS.

SP 611 - CATCH BASIN, NO. 2-4, AS PER PLAN

CATCH BASIN, NO. 2-4, AS PER PLAN SHALL BE CONSTRUCTED PER ODOT SCD CB-1.2, EXCEPT THAT THE SIDE INLETS SHALL BE ELIMINATED.

SP 611 - ADDITIONAL DRAINAGE

THE FOLLOWING ADDITIONAL QUANTITIES ARE PROVIDED FOR ADDITIONAL DRAINAGE WORK AT THE DIRECTION OF THE CHIEF ENGINEER:

EXTEND THE EXISTING CULVERT AT THE NW CORNER OF THE EXISTING ACCESS DRIVEWAY TO BLACK ROAD AT M.P. 173.99 LT

SP 611 - 18" CONDUIT, TYPE B, 706.02	32 FT
SP 611 - CATCH BASIN, NO. 2-2B	1 EACH
ITEM SPECIAL - 18" PRECAST CONCRETE END SECTION	2 EACH

PAVEMENT

ITEM 423 - CRACK SEALING, TYPE IV

THIS ITEM SHALL CONSIST OF FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO APPLY CRACK SEALANT TO THE PROPOSED LONGITUDINAL PAVEMENT JOINTS BETWEEN PROPOSED PAVEMENT OF THE OUTER LANES AND EXISTING PAVEMENT OF THE INNER LANES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK DESCRIBED ABOVE:

ITEM 423 - CRACK SEALING, TYPE IV	15,000 LBS

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 FOR SHORT TERM REPAIRS, CONCRETE SHALL BE CLASS QC 1 FOR AREAS WHERE TRAFFIC CAN BE DIVERTED FOR 7 DAYS, AREAS THAT HAS TO BE OPENED TO TRAFFIC IN A TIMELY MANNER CONCRETE SHALL BE IN ACCORDANCE WITH ODOT 255.02A, 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.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR	1,000 SY
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	800 SY
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT (USING RAPID REPAIR CONCRETE MIX MATERIAL)	800 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	600 FT

ITEM SP 302 - BITUMINOUS AGGREGATE BASE, PG 64-22 (2 EQUAL LIFTS)

THE CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT SP302 ITEM IN TWO (2) EQUAL LIFTS WHEN SPECIFIED. THE CONTRACTOR SHALL ALSO BE REQUIRED TO APPLY ITEM 407 - NON-TRACKING TACK COAT (APPLIED @ 0.075 GAL./SQ.YD.) PRIOR TO CONSTRUCTING THE SECOND LIFT.

ITEM 252 - FULL DEPTH PAVEMENT SAWING

THE FOLLOWING ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE BY THE ENGINEER TO MAKE TRANSVERSE SAW CUTS WHERE PROPOSED FULL DEPTH PAVEMENT WILL MEET EXISTING PAVEMENT AT THE PROJECT LIMITS, INTERCHANGE RAMPS AND EXISTING BRIDGES.

ITEM 252 - FULL DEPTH PAVEMENT SAWING	1,000 FT

ITEM SP 403 - ASPHALT CONCRETE LEVELING COURSE, PG 76-22

THE FOLLOWING CONTINGENCY QUANTITY FOR ASPHALT CONCRETE LEVELING COURSE 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 INTERMEDIATE ASPHALT COURSES AND THE PROPOSED APPROACH SLABS. THE LEVELING COURSE SHALL BE PLACED PRIOR TO THE INSTALLATION OF ANY ASPHALT INTERMEDIATE OR SURFACE COURSE TO ADJUST THE PROFILE OF THE ROADWAY. THE THICKNESS OF THIS ASPHALT CONCRETE LEVELING COURSE IS ANTICIPATED TO VARY FROM 0" MINIMUM TO 1" MAXIMUM WITHIN SEVENTY FIVE (75) FEET OF THE APPROACH SLABS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM SP 403 - ASPHALT CONCRETE LEVELING COURSE, PG 76-22.

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

ITEM SP 403 - ASPHALT CONCRETE LEVELING COURSE, PG 76-22	50 CY

PAVEMENT RESTORATION FOR APPROACH SLAB TYPE A INSTALLATION

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT REMOVAL AND RESTORATION AT SLEEPER SLAB AND DRAINAGE WORK ASSOCIATED WITH TYPE A INSTALLATIONS IN EXISTING THIRD LANE AND INSIDE SHOULDERS AT THE I-77 RAMP BRIDGE.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN	55 SY
SP 302 - ASPHALT CONCRETE BASE, PG64-22 (13") (SHOULDER)	13 CY
SP 302 - ASPHALT CONCRETE BASE, PG64-22 (13")	22 CY

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PAVEMENT RESTORATION FOR UNDERDRAIN PIPE INSTALLATION

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF UNDERDRAIN OUTLETS IN EXISTING SHOULDER AREAS. PAVEMENT SHALL MATCH THE TYPICAL SHOULDER BUILDUPS AS SHOWN ON SHEET 11 .

SP 404 - ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG64-22 (1-1/2")	9 CY
SP 402 - ASPHALT CONCRETE INTERMEDIATE COURSE OR RECYCLED ASPHALT CONCRETE INTERMEDIATE COURSE, PG64-22 (1-3/4")	10 CY
SP 302 - ASPHALT CONCRETE BASE, PG64-22 (8") (SHOULDER)	45 CY
SP 304 - AGGREGATE BASE (9") (SHOULDER)	50 CY
ITEM 407 - NON-TRACKING TACK COAT FOR INTERMEDIATE COURSE (APPLIED @ 0.06 GAL /SY)	109 GAL
ITEM 407 - NON-TRACKING TACK COAT (APPLIED @ 0.075 GAL /SY)	136 GAL

THE ABOVE QUANTITY IS BASED ON A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

SP 617 - COMPACTED AGGREGATE
SP 627 - STONE SHOULDER PROTECTION

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

ITEM 617 - SHOULDER PREPARATION	9,100 SY
SP 617 - COMPACTED AGGREGATE	760 CY
ITEM 617 - WATER	25 MGAL
SP 627 - STONE SHOULDER PROTECTION	380 CY

RESURFACING AT APPROACH SLABS

WHEN MILLING AND RESURFACING OPERATIONS PRECEDE THE REPLACEMENT OF AN APPROACH SLAB, THE MILLING AND RESURFACING OPERATION SHALL BE SUSPENDED SEVENTY-FIVE FEET (75') FROM THE APPROACH SLAB. THIS AREA SHALL BE MILLED AND RESURFACED AT THE TIME OF THE APPROACH SLAB REPLACEMENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR COMPLIANCE WITH THIS SEQUENCE OF OPERATIONS.

ITEM SP 202B - CRACK REPAIRS

THE FOLLOWING CONTINGENCY ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR PAVEMENT CRACK REPAIR IN ACCORDANCE WITH OHIO TURNPIKE STANDARD DRAWINGS CJ-1 AND CJ-2 . THE CRACK REPAIR SHALL OCCUR PRIOR TO THE PLACEMENT OF THE ASPHALT LEVELING COURSE. CRACK REPAIR SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM:

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

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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL NOTES

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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 PACED 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.

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 ..... 300 CY

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

METHOD OF PAYMENT FOR MAINTAINING TRAFFIC

PAYMENT FOR THE MAINTENANCE OF TRAFFIC ITEMS INCLUDING LEVEL "3" 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.

ITEM SP 614 - MAINTAINING TRAFFIC..... LUMP SUM

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 OTIC 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 SP614 - MAINTAINING TRAFFIC.

ITEM 622 - CONCRETE PORTABLE BARRIER, 32", AS PER PLAN

THIS ITEM SHALL BE AS PER SECTION 622 OF THE SPECIFICATIONS AND AS SHOWN ON ODOT STANDARD DRAWING RM-4.2. THE BARRIER SHALL BE NEW AND LEFT IN PLACE UPON COMPLETION OF THE WORK.

THE UNIT PRICE BID FOR ITEM 622 - CONCRETE PORTABLE BARRIER, 32", AS PER PLAN SHALL INCLUDE ALL MATERIAL AND LABOR REQUIRED INCLUDING DELINEATORS. DELINEATORS SHALL MEET THE REQUIREMENTS OF SP 626.

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC ..... 450 CY

EMBANKMENT FOR MAINTAINING TRAFFIC ..... 5,600 CY

ITEM SP 626 - BARRIER REFLECTOR

ITEM SP 626 - BARRIER REFLECTOR, TYPE A (WHITE), SHALL CONSIST OF INSTALLING ONE-WAY REFLECTORS BETWEEN MP 106.54 TO MP 112.86 AT GUARDRAIL LOCATIONS IDENTIFIED BY THE CHIEF ENGINEER THAT REQUIRE INSTALLATION, REPAIR OR REPLACEMENT OF BARRIER REFLECTORS. FOR THIS PURPOSE, THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR THOSE LOCATIONS REQUIRING BARRIER REFLECTORS.

ITEM SP 626 - BARRIER REFLECTOR, TYPE A (WHITE) 50 EACH

ITEM SP 626 - BARRIER REFLECTOR, TYPE B SHALL CONSIST OF INSTALLING TWO-WAY REFLECTORS BETWEEN MP 169.90 TO MP 173.00 ON THE EXISTING MEDIAN CONCRETE BARRIER FROM MP 174.40 TO MP 175.50, LT, MP 174.80 TO MP 174.95, RT AND MP 175.30 TO MP 176.20, RT. THE REFLECTORS SHALL BE INSTALLED AND SPACED EVERY 100 FT ON TANGENT SECTIONS AND SPACED EVERY 50 FT ON CURVES. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM SP 626 - BARRIER REFLECTOR, TYPE B 525 EACH

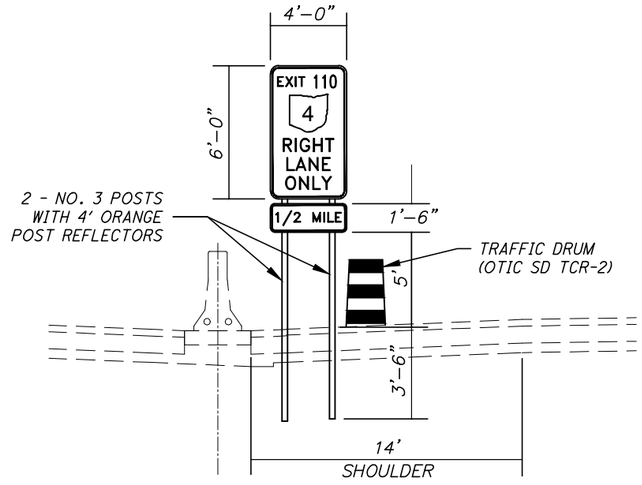
MOT SIGN SUPPORT INSTALLATION

WHERE NOTED IN THE PLANS THE MOT SIGN IS TO BE MOUNTED BESIDE THE MEDIAN BARRIER WALL ON TEMPORARY SUPPORTS AT THE PROPOSED LOCATIONS. THE SIGN SHALL BE INSTALLED USING THE "CLASS A" SUPPORT METHOD SHOWN ON ODOT SCD MT-105.10. ONLY NO. 3 POSTS SHALL BE USED.

FOUR DRUMS SHALL BE PLACED PRIOR TO THE SIGN INSTALLATION. THE DRUMS SHALL BE SPACED 50' FROM CENTER TO CENTER. THE FIRST DRUM SHOULD BE PLACED AGAINST THE MEDIAN BARRIER WALL. TAPER THE REMAINING THREE DRUMS SO THE LAST DRUM IS SET BESIDE THE SIGN INSTALLATION.

WHEN THE POSTS ARE REMOVED THE VACATED POST HOLES SHALL BE FILLED WITH CONCRETE.

PAYMENT FOR THE INSTALLATION AND REMOVAL OF MOT SIGN SUPPORT SHALL BE PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM SP 614 - MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO COMPLETE THIS WORK.



MOT MEDIAN WALL SIGN DETAIL

STRIP SEAL REMOVAL AND REPLACEMENT OPERATIONS

THE CONTRACTOR SHALL REMOVE AND REPLACE THE EXISTING STRIP SEALS ON ALL THE MAINLINE STRUCTURES. THE PARTIAL REPLACEMENT OF THE INSIDE LANE (3RD LANE) WILL OCCUR DURING PHASE 2, PHASE 4 OR PHASE 6, PRIOR TO THE TEMPORARY CONTRA FLOW LANE BEING OPENED TO TRAFFIC AS PART OF THE MAINTENANCE OF TRAFFIC SCHEME.

THE REPLACEMENT OF THE REMAINING SECTION OF THE STRIP SEAL SHALL BE REPLACED AFTER TRAFFIC HAS BEEN SHIFTED INTO THE CONTRA FLOW MAINTENANCE OF TRAFFIC SCHEME AS THE WORK CAN BE PERFORMED WITHIN THE WORK ZONE.

THE CONTRACTOR MUST SUBMIT A SCHEDULE OF OPERATIONS FOR THIS WORK TO THE CHIEF ENGINEER TWO (2) WEEKS PRIOR TO INITIATING THIS WORK. NO WORK SHALL BE INITIATED FOR THE REPLACEMENT OF THE STRIP SEALS WITHOUT THE WRITTEN APPROVAL BY THE CHIEF ENGINEER.

PAYMENT FOR ALL MAINTENANCE OF TRAFFIC ITEMS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM SP 614 - MAINTAINING TRAFFIC.

APPROACH SLAB REPLACEMENT OPERATIONS

THE APPROACH SLAB REPLACEMENT WORK, ASSOCIATED WITH EACH MAINLINE STRUCTURE, SHOULD BE CONSIDERED A CRITICAL PATH ITEM BY THE CONTRACTOR. THE CONTRACTOR SHOULD COMPLETE THE APPROACH SLAB REPLACEMENT WORK AS ONE OF THE INITIAL TASKS OF HIS OPERATIONS FOR THE COMPLETION OF THIS PROJECT.

METHOD OF PAYMENT FOR MAINTAINING TRAFFIC - WINTER SHUTDOWN

AFTER COMPLETION OF ALL PHASE 2 AND 6 CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL RESTORE ALL PERMANENT TRAFFIC CONTROL WHICH SHALL REQUIRE THE CONTRACTOR TO PERFORM THE FOLLOWING TASKS: 2

1. CLOSURE OF EXISTING MEDIAN BARRIER OPENINGS AT THE MOT CROSSOVER LOCATIONS PER OTIC STANDARD DRAWINGS.

2. REOPEN EXISTING MAINTENANCE CROSSOVERS IN ACCORDANCE WITH THE MAINTENANCE OF TRAFFIC NOTE FOR "ITEM SPECIAL - EXISTING CROSSOVER TO BE CLOSED/REOPENED"

3. REMOVE ANY TEMPORARY MOT AND EXISTING PAVEMENT MARKINGS PER SP 614C REMOVAL OF PAVEMENT MARKINGS AND RE-STRIPE THE EASTBOUND AND WESTBOUND PAVEMENT MARKINGS AS DETAILED IN THE OTIC ANNUAL PAVEMENT MARKING OPERATIONS - LONG LINE QUANTITIES GENERAL NOTE ON SHEET 586. 2

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

TURNPIKE INTERCHANGE RAMP RESTORATION

UPON COMPLETION OF THE RAMP CONSTRUCTION, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PAVEMENT USED ON THE RAMPS. THE EMBANKMENT REQUIRED TO PLACE THE TEMPORARY PAVEMENT AT THESE LOCATIONS SHALL REMAIN IN PLACE. THE CONTRACTOR SHALL REGRADE THE EMBANKMENT TO REMAIN AT A 12:1 SLOPE AWAY FROM THE ROADWAY WHILE MAINTAINING POSITIVE DRAINAGE.

PAYMENT FOR THE ABOVE WORK SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED WITH THE LUMP SUM PAY ITEM SP 614 - MAINTAINING TRAFFIC

ITEM SPECIAL SPEED MEASUREMENT MARKINGS, AS PER PLAN

THE CONTRACTOR SHALL INSTALL SPEED MEASUREMENT MARKINGS, AS DIRECTED BY THE CHIEF ENGINEER, PRIOR TO IMPLEMENTING CONTRAFLOW EACH CONSTRUCTION SEASON.

THE CONTRACTOR IS TO PLACE A PK NAIL APPROXIMATELY 5' FROM THE EDGE LINE AT 1/4 MILE INCREMENTS PER OTIC STANDARD DRAWING TC-2. THE CONTRACTOR SHALL INSTALL 24" X 48" ITEM 642, TYPE 1, WHITE MARKINGS ON THE SHOULDER PER OTIC STANDARD DRAWING TC-2. OTIC WILL SUPPLY THE CONTRACTOR WITH A FORM THAT SHALL BE FILLED OUT, SIGNED AND SEALED BY A REGISTERED OHIO PROFESSIONAL SURVEYOR.

THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY MAINTENANCE OF TRAFFIC NECESSARY TO LAY OUT AND INSTALL THE SPEED MEASUREMENT MARKINGS. THE CONTRACTOR SHALL INSTALL A R2-H15 48"X48" "SPEED ENFORCED BY AIRCRAFT" SIGN ON THE BARRIER WALL ¼ MILE PRIOR TO THE FIRST SPEED MEASUREMENT MARKING. THE CONTRACTOR IS TO MAINTAIN THIS SIGN, AND REMOVE THE SIGN AT THE COMPLETION OF THE PROJECT.

THE UNIT PRICE BID FOR ITEM 642 - SPEED MEASUREMENT MARKINGS, AS PER PLAN SHALL INCLUDE ALL MATERIAL, EQUIPMENT AND LABOR REQUIRED. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY:

ITEM SPECIAL - SPEED MEASUREMENT MARKINGS, AS PER PLAN. ..... 10 EACH

DESIGN AGENCY

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ADDENDUM NO. 2	2	DLF	11/28/18
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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
GENERAL NOTES

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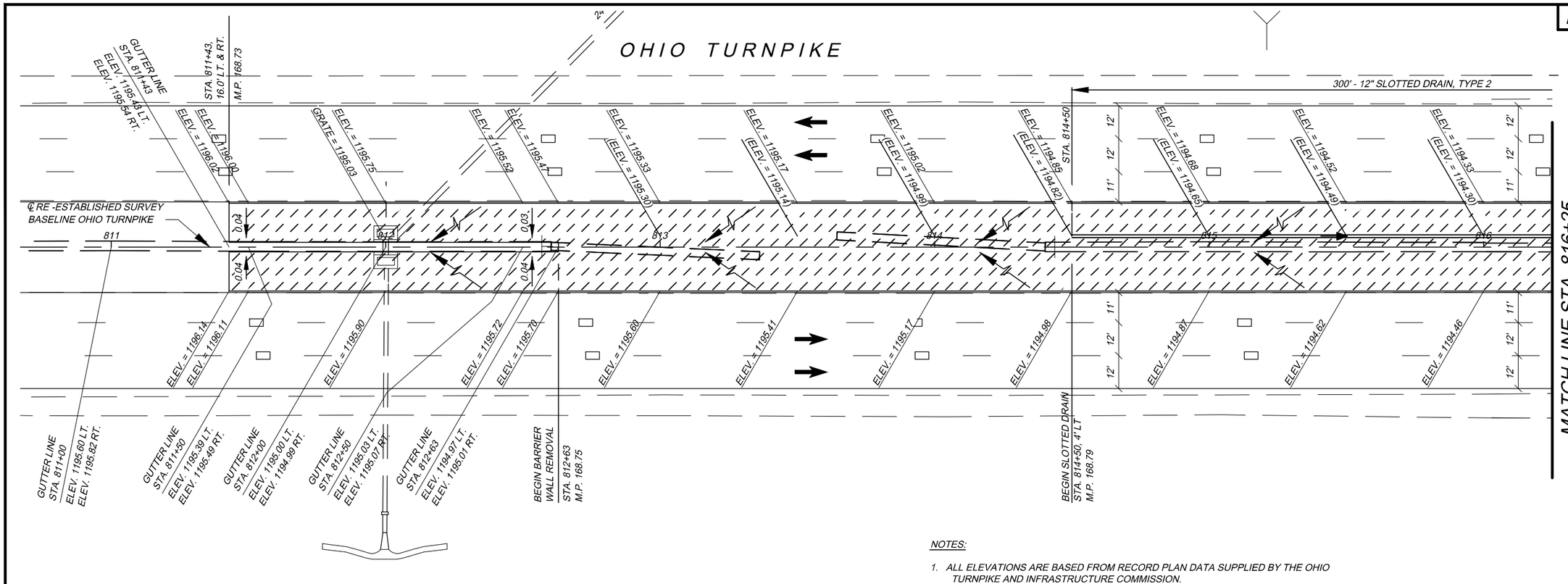
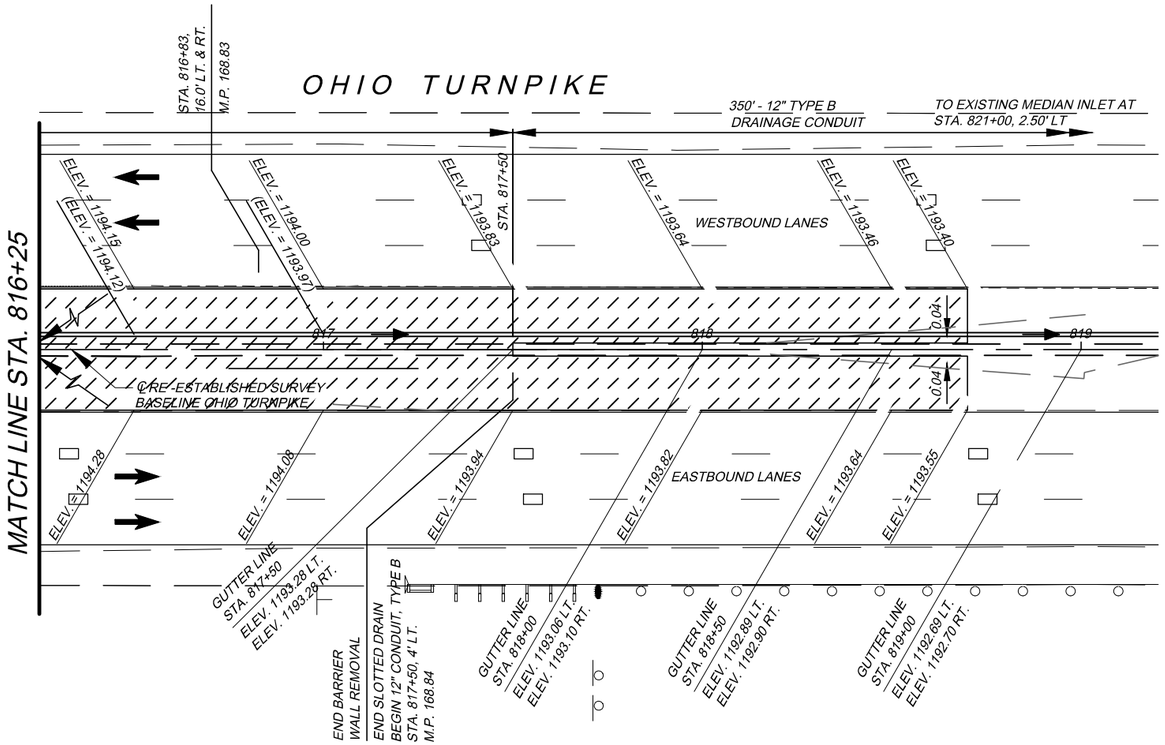
160562-MOT-GNOTES.dwg; 1/25/18 - 11:40am

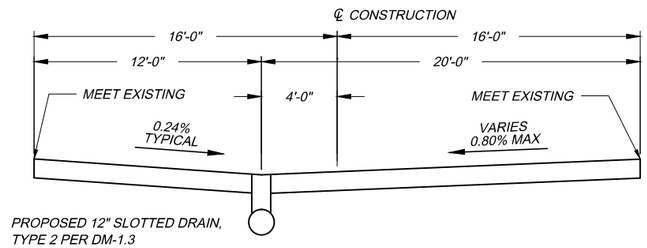
MP 168





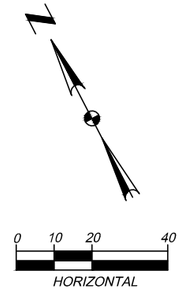
NOTES:

1. ALL ELEVATIONS ARE BASED FROM RECORD PLAN DATA SUPPLIED BY THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION.
2. THE INTENTION OF THE LISTED ELEVATIONS IS TO IDENTIFY THE EXISTING EDGE ELEVATIONS OF THE MEDIAN BARRIER WALL AND TO HELP ESTABLISH THE REQUIRED VARIABLE DEPTH FOR THE TEMPORARY PAVEMENT PLACEMENT REQUIRED TO PROMOTE DRIVER SAFETY THROUGH THE WORK ZONE AND PROVIDE POSITIVE ROADWAY DRAINAGE.
3. ALL ELEVATIONS ARE TO BE CONSIDERED AS RELEVANT TO THE EXISTING CONDITIONS AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING MEDIAN BARRIER WALL REMOVAL AND CROSSOVER CONSTRUCTION ACTIVITIES.
4. PAYMENT FOR INSTALLATION COMPLETE AND REMOVAL OF THE SLOTTED DRAIN, SHALL BE INCLUDED IN ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, TYPE 1, AS PER PLAN.
5. PAYMENT FOR THE COMPLETE INSTALLATION OF THE 12" CONDUIT, TYPE B REPAIR OF THE INSIDE SHOULDER PAVEMENT FOR THE INSTALLATION OF THIS CONDUIT AND THE SUBSEQUENT PLUGGING OF THE ENDS OF THIS CONDUIT AND FILLING THE CONDUIT WTIH LSM IN ACCORDANCE WITH ODOT CMS 613 SHALL BE INCLUDED IN ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, TYPE 1, AS PER PLAN. PLEASE NOTE THAT THIS 12" CONDUIT SHALL BE INSTALLED FROM APPROXIMATELY STA. 817+50 TO STA. 821+00 WHERE IT WILL OUTLET INTO AN EXISTING MEDIAN INLET. THIS PROPOSED CONDUIT MUST BE INSTALLED PRIOR TO THE RESURFACING. NO PART OF THE CONDUIT SHALL BE LEFT IN PLACE THAT DOES NOT HAVE A MINIMUM OF 9" OF COVER FROM THE BOTTOM OF THE SUBGRADE.
6. TRENCH DRAIN IS SHOWN AT 4' LT.
7. ALL PROPOSED WORK DEPICTED ON THIS SHEET SHALL BE INCLUDED IN THE COST OF ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, TYPE I, AS PER PLAN.



PROPOSED 12" SLOTTED DRAIN, TYPE 2 PER DM-1.3

TYPICAL
N.T.S.



LEGEND

- DRAINAGE FLOW ARROW
- GUTTER LINE STA. 359+50 ELEV. = 705.45 LT. ELEV. = 705.44 RT. — EXISTING ELEVATION INFORMATION
- (ELEV. = 706.19) — PROPOSED ELEVATION INFORMATION

* ELEVATIONS SHOWN ARE FROM RECORD PLANS

DESIGN AGENCY: consultants

NO	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
1	-	-	-
-	-	-	-

DESIGNED JMP | CHECKED JMP | IN CHARGE WDB
DRAWN JDC

PROJECT 39-18-02A
DATE: 12/22/17

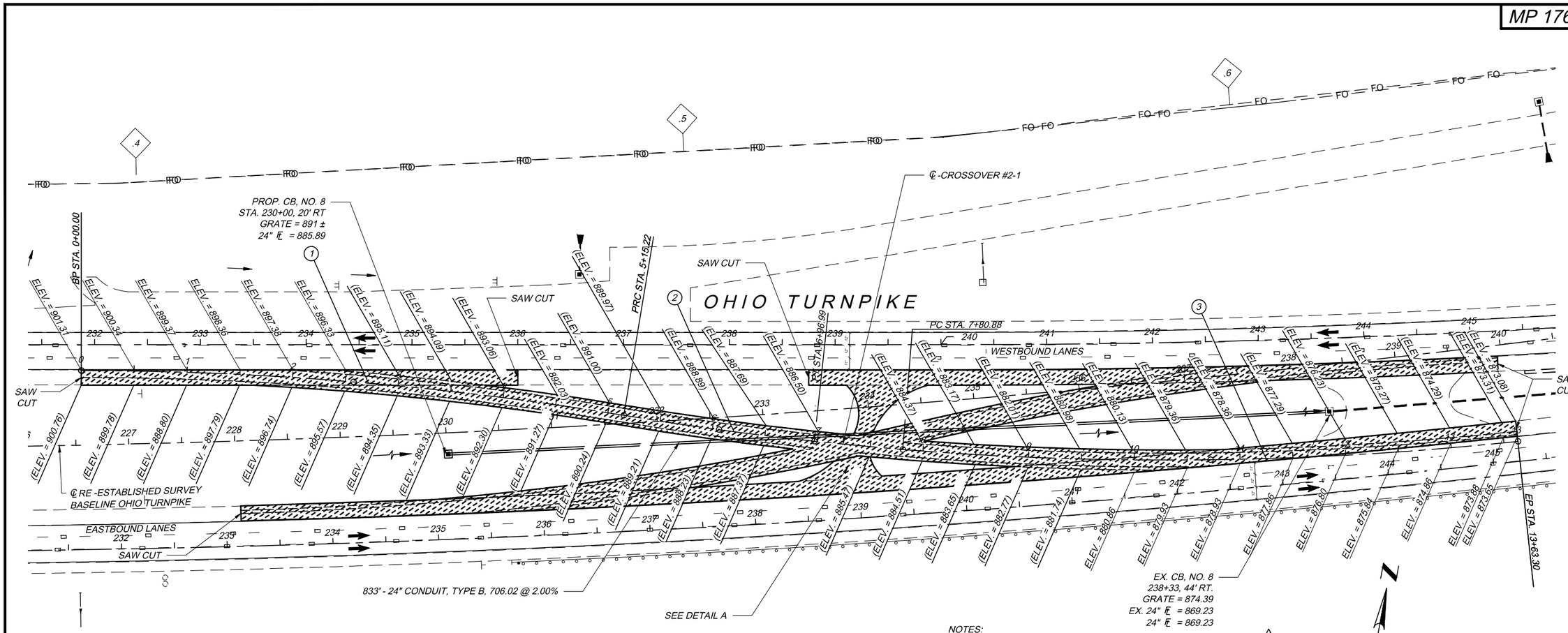
MAINTENANCE OF TRAFFIC PLAN - PRE-PHASE 1
ELEVATION DETAILS - CROSSOVER #1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

100
727

160562-MOTPH2-DET.dwg; 1/26/18 - 8:47am

MP 176



1. P.I. STA. 2+58.19
D = 9° 25' 53"
Dc = 1° 49' 50"
R = 3130.00
T = 258.19'
L = 515.22'
E = 10.63
C = 514.64
C. B. = N 83° 58' 24" E
e_{max} = 0.04
PC STA. 0+00.00
PT STA. 5+15.22

2. P.I. STA. 6+06.13
D = 3° 19' 38"
Dc = 1° 49' 50"
R = 3130.00
T = 90.91'
L = 181.77'
E = 1.32
C = 181.74
C. B. = N 87° 01' 31" E
e_{max} = 0.04
PC STA. 5+15.22
PT STA. 6+96.99

3. P.I. STA. 10+72.94
D = 10° 39' 41"
Dc = 1° 49' 50"
R = 3130.00
T = 292.05'
L = 582.42'
E = 13.60
C = 581.58
C. B. = N 78° 29' 43" E
e_{max} = 0.04
PC STA. 7+80.88
PT STA. 13+63.30

NOTES:

1. ALL PROPOSED WORK DEPICTED ON THIS SHEET, INCLUDING ALL NECESSARY EXCAVATION, EMBANKMENT, SEEDING AND MUCLHING, AND PROPOSED DRAINAGE, SHALL BE INCLUDED IN THE COST OF ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, TYPE III, AS PER PLAN.
2. ALL PROPOSED WORK DEPICTED ON THIS SHEET TO CONSTRUCT THIS CROSSOVER SHALL NOT BE REMOVED BY THE CONTRACTOR. THIS MEDIAN CROSSOVER SHALL REMAIN IN PLACE FOR FUTURE USE.

0 25 50 100
HORIZONTAL SCALE IN FEET

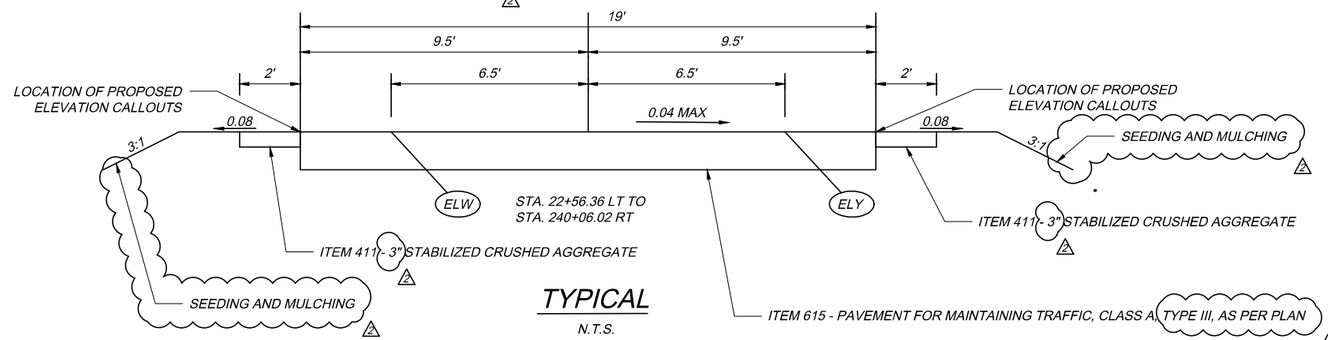
MINIMUM COURSE THICKNESS REQUIRED

ITEM SP 404 - 1-1/2 " ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22.

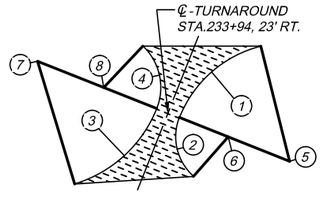
ITEM SP 402 - 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE OR RECYCLED ASPHALT CONCRETE INTERMEDIATE COURSE, PG 64-22.

ITEM SP 302 - 8" ASPHALT CONCRETE BASE, PG 64-22 (SHOULDER).

ITEM SP 304 - 9" AGGREGATE BASE (SHOULDER) (2 EQUAL LIFTS).



TYPICAL
N.T.S.



1. R = 78.27'
2. R = 34.74'
3. R = 84.67'
4. R = 37.60'
5. N. = 579373.9760, E. = 2225264.4984
6. N. = 579382.1987, E. = 2225221.7523
7. N. = 579407.7775, E. = 2225088.7792
8. N. = 579398.8848, E. = 2225135.0086

DETAIL A

LEGEND

- DRAINAGE FLOW ARROW
- ELEV. = 705.45 — EXISTING ELEVATION INFORMATION
- (ELEV. = 706.19) — PROPOSED ELEVATION INFORMATION

* ELEVATIONS SHOWN ARE FROM RECORD PLANS

DESIGN AGENCY: T transportation engineering consultants

NO	REVISIONS	BY	DATE
1	ADDENDUM NO. 2	JDC	1/26/18

DESIGNED: JMP
DRAWN: JDC
CHECKED: JMP
IN CHARGE: WDB

PROJECT 39-18-02A
DATE: 12/22/17

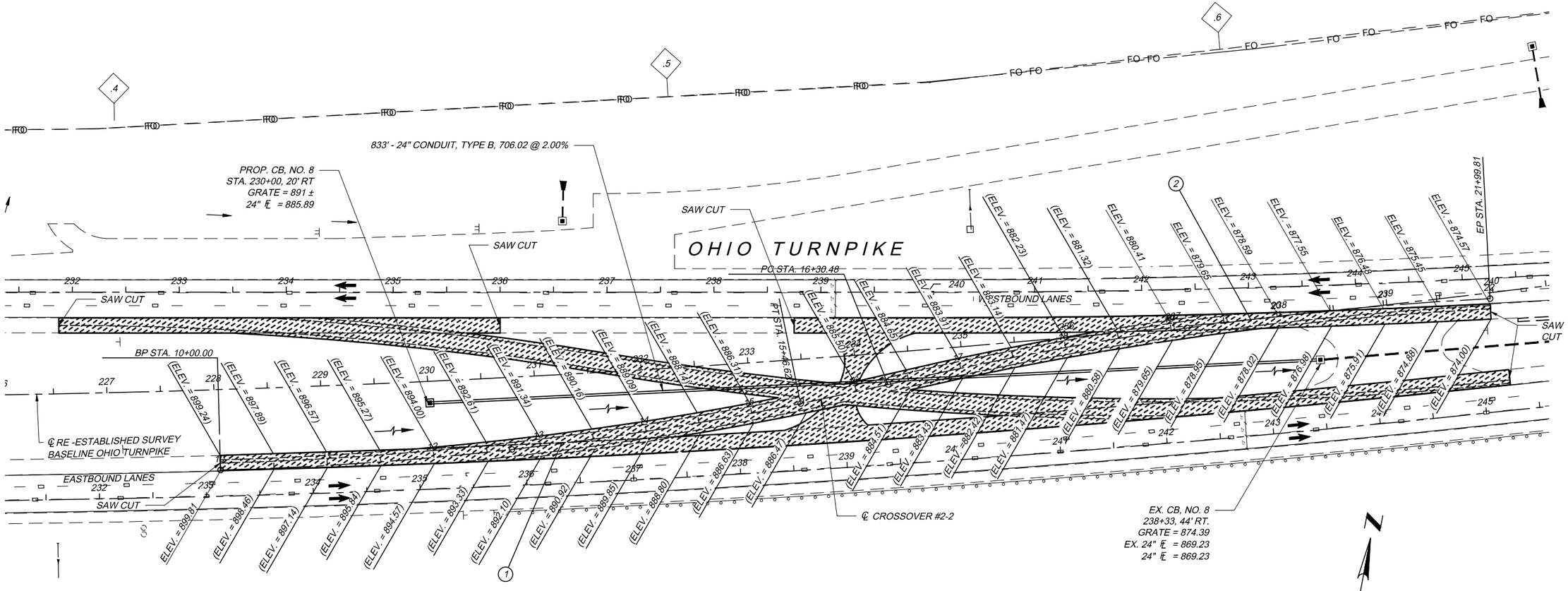
MAINTENANCE OF TRAFFIC PLAN - PHASE 2
ELEVATION DETAILS - CROSSOVER #2-1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

192
727

160562-MOTPH2-DET.dwg; 1/26/18 - 8:53am

MP 176



MINIMUM COURSE THICKNESS REQUIRED

ITEM SP 404 - 1-1/2 " ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22.

ITEM SP 402 - 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE OR RECYCLED ASPHALT CONCRETE INTERMEDIATE COURSE, PG 64-22.

ITEM SP 302 - 8" ASPHALT CONCRETE BASE, PG 64-22 (SHOULDER).

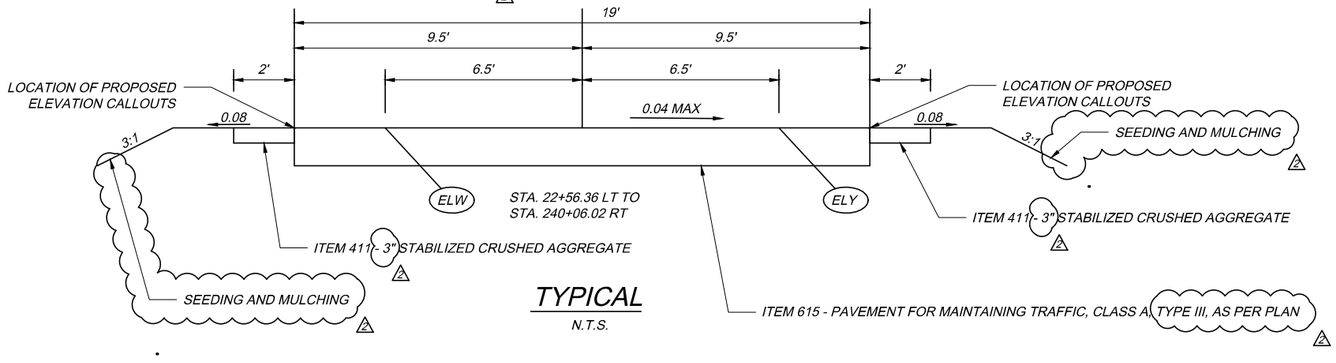
ITEM SP 304 - 9" AGGREGATE BASE (SHOULDER) (2 EQUAL LIFTS). △2

(1) *P.I. STA. 12+74.01*
D = 10° 00' 22"
Dc = 1° 49' 50"
R = 3130.00
T = 274.01'
L = 546.62'
E = 11.97
C = 545.92
C. B. = N 72° 44' 16" E
e_{max} = 0.04
PC STA. 10+00.00
PT STA. 15+46.62

(2) *P.I. STA. 19+15.93*
D = 10° 25' 19"
Dc = 1° 49' 50"
R = 3130.00
T = 285.45'
L = 569.33'
E = 12.99
C = 568.55
C. B. = N 71° 07' 57" E
e_{max} = 0.04
PC STA. 16+30.48
PT STA. 21+99.81

NOTES: △2

1. *ALL PROPOSED WORK DEPICTED ON THIS SHEET, INCLUDING ALL NECESSARY EXCAVATION, EMBANKMENT, SEEDING AND MULCHING, AND PROPOSED DRAINAGE, SHALL BE INCLUDED IN THE COST OF ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, TYPE III, AS PER PLAN.*
2. *ALL PROPOSED WORK DEPICTED ON THIS SHEET TO CONSTRUCT THIS CROSSOVER SHALL NOT BE REMOVED BY THE CONTRACTOR. THIS MEDIAN CROSSOVER SHALL REMAIN IN PLACE FOR FUTURE USE.*



TYPICAL
N.T.S.

LEGEND

DRAINAGE FLOW ARROW

ELEV. = 705.45 — *EXISTING ELEVATION INFORMATION*

(ELEV. = 706.19) — *PROPOSED ELEVATION INFORMATION*

* *ELEVATIONS SHOWN ARE FROM RECORD PLANS*

DESIGN AGENCY: T.Y. Lin International Gannett Fleming consultants

NO	REVISIONS	BY	DATE
△	ADDENDUM NO. 2	JDC	1/26/18

DESIGNED JMP | DRAWN JDC | CHECKED JMP | IN CHARGE WDB

PROJECT 39-18-02A
DATE: 12/22/17

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
ELEVATION DETAILS - CROSSOVER #2-2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

193
727

160562-MOTPH2-DET.dwg; 1/26/18 - 8:53am

SHEET NUMBER																					ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
32	33	34	35	36	37	38	381	382	383	384	385	386	387	389	393	397	400	585	680	681					
																								ROADWAY	
																					201	1	LUMP	CLEARING AND GRUBBING, AS PER PLAN	32
658																					201	658	EACH	TREE REMOVED, 18" SIZE	
119																					201	119	EACH	TREE REMOVED, 30" SIZE	
30																					201	30	EACH	TREE REMOVED, 48" SIZE	
									65,109												SPECIAL	65,109	FT	FENCELINE CLEARING AND GRUBBING	35
											12										202	12	EACH	HEADWALL REMOVED	
												1									202	1	EACH	HEADWALL REMOVED, AS PER PLAN	581
											636										202	636	FT	PIPE REMOVED, 24" AND UNDER	
											175	16									202	191	FT	PIPE REMOVED, OVER 24"	
											5										202	5	EACH	CATCH BASIN OR INLET REMOVED	
									65,109												202	65,109	FT	FENCE REMOVED	
							45,451														202	45,451	FT	GUARDRAIL REMOVED, AS PER PLAN	33
							334														202	334	SY	APPROACH SLAB REMOVED, TYPE 1, AS PER PLAN	33
							1,014														202	1,014	SY	APPROACH SLAB REMOVED, TYPE 2, AS PER PLAN	33
							330														202	330	SY	APPROACH SLAB REMOVED, TYPE 3, AS PER PLAN	33
							338														202	338	SY	APPROACH SLAB REMOVED, TYPE 4, AS PER PLAN	33
							△1														△1				
						△2	701														202	701	FT	CONCRETE BARRIER REMOVED	
						55									211,288	72,846					202	284,189	SY	PAVEMENT REMOVED, AS PER PLAN	33
																					△3				
							31														202	31	FT	GUTTER REMOVED	
												1									202	1	EACH	STRUCTURE REMOVED, AS PER PLAN	581
	20																				202	20	CY	PORTIONS OF STRUCTURES REMOVED, AS PER PLAN	33
							5														202	5	EACH	REMOVAL MISC.: SIGN FOUNDATION REMOVED	33
	18																				202	18	EACH	REMOVAL MISC.: MONITORING WELL ABANDONED	33
			500							2,379											203	2,879	CY	EXCAVATION FOR SLOPE EROSION PROTECTION	
										16,350					31,963	30,043					203	78,356	CY	EXCAVATION	
	700		300	24,000						3,949		60									203	29,009	CY	EMBANKMENT	
												110									203	110	CY	GRANULAR EMBANKMENT	
		1,800																			203	1,800	CY	ROADWAY EXCAVATION AND EMBANKMENT	
				24,000																	203	24,000	CY	EXCAVATION OF SLAG, AS PER PLAN	36
				24,000																	203	24,000	CY	DISPOSAL OF SLAG, AS PER PLAN	37
		178																			204	178	CY	EXCAVATION	
		227																			204	227	SY	GEOTEXTILE FABRIC, 712.09, TYPE D	
		227													2,070						204	2,297	SY	SUBGRADE COMPACTION	
												1									SPECIAL	1	LUMP	SCOUR HOLE REMEDIATION USING GRANULAR MATERIAL	583
		319,232																			206	319,232	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN	34
		12,000																			206	12,000	SY	CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	
		14,010																			206	14,010	TON	CEMENT	
		19,630																			206	19,630	GAL	CURING COAT, AS PER PLAN	34
		180																			206	180	HOUR	TEST ROLLING	
																65,578					209	65,578	FT	LINER GRADING, AS PER PLAN	34
			5,000				5,760														209	10,760	FT	DITCH CLEANOUT	
							727														SPECIAL	727	SY	CHANNEL CLEANOUT	35
			5,750																		SPECIAL	5,750	FT	CONCRETE CHANNEL CLEANOUT	35
		360																			SP 304	360	TON	GRANULAR MATERIAL	
				1																	503	1	LUMP	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	37
												14									SP 516A	14	FT	CRACK REPAIR USING INJECTION	
					△2																		△2		
				400																	518	400	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
												96									SP 519	96	SF	PATCHING CONCRETE STRUCTURES	
								2,020													526	2,020	SY	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN	33
								280													526	280	FT	TYPE A INSTALLATION, AS PER PLAN	33
												2									602	2	CY	CONCRETE MASONRY, AS PER PLAN	578

DESIGN AGENCY: engineers architects planners consultants

NO.	REVISIONS	BY	DATE
△1	ADDENDUM NO. 1	DLF	1/18/18
△2	ADDENDUM NO. 2	JDC	1/26/18
△3	-	-	-

DESIGNED: JMP
DRAWN: PSL
CHECKED: JMP
IN CHARGE: WDB

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL SUMMARY

PROJECT 39-18-02A

DATE: 12/22/17

376
727

OHIO TURNPIKE

160562-GEN-SUM.dwg; 1/25/18 - 4:52pm

SHEET NUMBER																						ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
32	33	34	35	36	37	38	381	382	383	384	385	386	387	389	393	397	400	585	680	681						
																									DRAINAGE	
				240								70										518	310	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
				20																		518	20	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE	
				40																		SP 605	40	CY	TRENCH DRAIN, AS PER PLAN	35
														65,378								SP 605	65,378	FT	6" BASE PIPE UNDERDRAIN, WITH FABRIC WRAP (18")	
														65,256								SP 605	65,256	FT	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP (24")	
														49,826								SP 605	49,826	FT	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP (30")	
														6,029								SP 605	6,029	FT	6" UNDERDRAIN OUTLET PIPE	
					200																	SP 605	200	FT	AGGREGATE DRAIN, TYPE 1, WITH FABRIC WRAP	
					200																	SP 605	200	FT	AGGREGATE DRAIN, TYPE 2, WITH FABRIC WRAP	
				250																		SP 605	250	CY	UNDERDRAIN ROCK EXCAVATION	
											25											SP 611	25	FT	12" CONDUIT, TYPE B, 706.02	
											386											SP 611	386	FT	12" CONDUIT, TYPE F, 707.33	
											298											SP 611	298	FT	15" CONDUIT, TYPE B, 706.02	
											37											SP 611	37	FT	18" CONDUIT, TYPE A, 706.02	
						32					213											SP 611	245	FT	18" CONDUIT, TYPE B, 706.02	
											20											SP 611	20	FT	24" CONDUIT, TYPE B, 706.02	
											20											SP 611	20	FT	30" CONDUIT, TYPE A, 706.02	
											125											SP 611	125	FT	30" CONDUIT, TYPE A, 707.33	
											4											SP 611	4	FT	36" CONDUIT, TYPE A, 706.02	
												24										SP 611	24	FT	36" CONDUIT, TYPE A, 707.33	
											648											SP 611	648	FT	36" CONDUIT, TYPE B, 706.02	
												8										SP 611	8	FT	54" CONDUIT, TYPE A, 706.02	
												14										SP 611	14	FT	72" CONDUIT, TYPE A, 706.02	
												8										SP 611	8	FT	CONDUIT, TYPE A, STRUCTURAL PLATE CORRUGATED STEEL PIPE ARCH, 707.03, 64" (SPAN) X 43" (RISE)	
											641	258										SP 611	899	FT	CONDUIT MISC.: CURED-IN-PLACE PIPE LINER, 30"	37
											641	2,086										SP 611	2,727	FT	CONDUIT MISC.: INTERNAL VIDEO INSPECTION	37
					20						4		15									SP 611	39	EACH	CATCH BASIN ADJUSTED TO GRADE, 4" OR LESS, AS PER PLAN	37
													37									SP 611	37	EACH	CATCH BASIN ADJUSTED TO GRADE, 4" TO 12", AS PER PLAN	37
													10									SP 611	10	EACH	CATCH BASIN ADJUSTED TO GRADE, GREATER THAN 12", AS PER PLAN	37
					5																	SP 611	5	EACH	CATCH BASIN GRATE AND CASTING, AS PER PLAN	37
														134								SP 611	134	EACH	PRECAST REINFORCED CONCRETE OUTLET	
											5											SP 611	5	EACH	CATCH BASIN, NO. CB-1	37
						1																SP 611	1	EACH	CATCH BASIN, NO. 2-2B	
											2											SP 611	2	EACH	CATCH BASIN, NO. 2-3	
											4											SP 611	4	EACH	CATCH BASIN, NO. 2-4, AS PER PLAN	38
											1											SP 611	1	EACH	CATCH BASIN, NO. 4	
											3											SP 611	3	EACH	CATCH BASIN, NO. 6	
												1										SP 611	1	EACH	MANHOLE, NO. 3, WITH 120 INCH BASE I.D.	
													3									SP 611	3	EACH	MANHOLE RECONSTRUCTED TO GRADE	
												223										833	223	FT	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 87" SPAN X 63" RISE ARCH	
												8										833	8	FT	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 64" SPAN X 43" RISE ARCH	
												318										833	318	FT	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 65" SPAN X 40" RISE ARCH	
												537										833	537	FT	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 66" ROUND CONDUIT	
												750										837	750	FT	PIPE LINER, 60" ID, 707.42 OR SS938, AS PER PLAN	38
												750										837	750	FT	BACKFILL FOR LINER PIPE	
											5											SPECIAL	5	EACH	12" PRECAST CONCRETE END SECTION	37
											2											SPECIAL	2	EACH	15" PRECAST CONCRETE END SECTION	37
						2					6											SPECIAL	8	EACH	18" PRECAST CONCRETE END SECTION	37
											1											SPECIAL	1	EACH	24" PRECAST CONCRETE END SECTION	37
											5											SPECIAL	5	EACH	30" PRECAST CONCRETE END SECTION	37

DESIGN AGENCY: transportation engineers architects planners consultants

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	JDC	1/18/18
2	ADDENDUM NO. 2	JDC	1/26/18
-	-	-	-

DESIGNED: JMP
DRAWN: PSL
CHECKED: JMP
IN CHARGE: WDB

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL SUMMARY

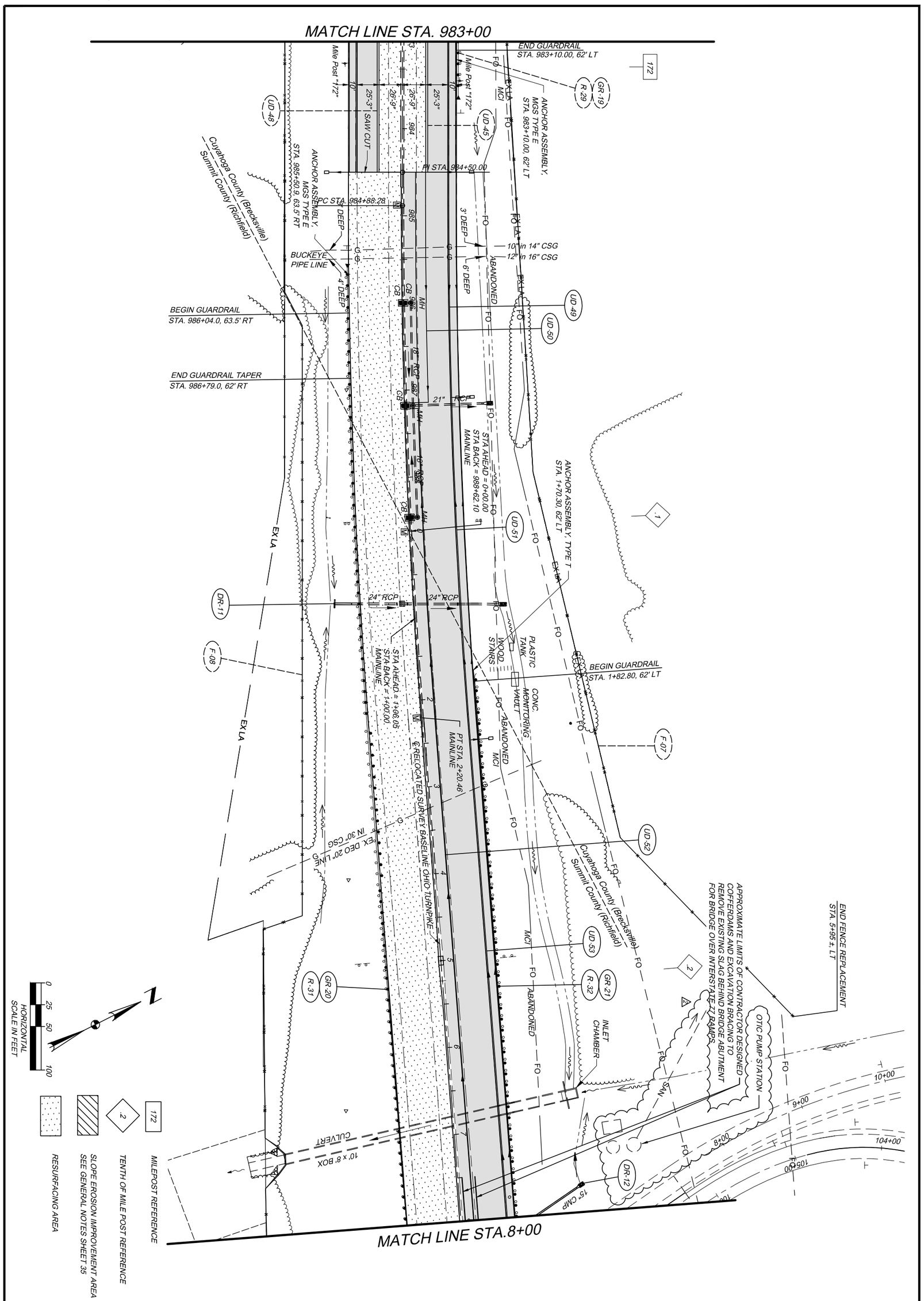
PROJECT 39-18-02A
DATE: 12/22/17

378
727

OHIO TURNPIKE

160562-GEN-SUM.dwg; 1/25/18 - 11:57am

160562-MASTER LAYOUT.dwg; 1/26/18 - 12:06pm



431 / 727	PROJECT 39-18-02A DATE: 12/22/17	PLAN SHEET STA. 983+00 TO STA. 8+00	DESIGNED JMP	CHECKED JMP	NO.	REVISIONS	BY / DATE
			DRAWN PSL	IN CHARGE WDB	2	ADDENDUM NO. 2	DLF 1/26/18

DESIGN AGENCY: your trusted advisor consultants — engineers architects planners

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

TRAFFIC CONTROL

ITEM 642 - PERMANENT PAVEMENT MARKINGS

PERMANENT PAVEMENT MARKING LOCATIONS SHALL BE DETERMINED BY REFERENCING THE BASE PAVEMENT JOINTS, AS SHOWN ON SHEET 611.

ITEM SP 621 - RAISED PAVEMENT MARKER

THIS ITEM SHALL BE INSTALLED IN ACCORDANCE WITH SP 621 WITH THE SPACING PER STANDARD DRAWING RPM-1, EXCEPT MAINLINE RPMs SHALL BE INSTALLED AT 80' SPACING IN TANGENT SECTIONS AND ALL CURVES..

ITEM SP 626 - BARRIER REFLECTORS

FOLLOWING COMPLETION OF THE PROJECT, NEW BARRIER REFLECTORS SHALL BE INSTALLED ON THE EXISTING MEDIAN WALL AND INSIDE SHOULDER BARRIER FROM:
MILE POST (MP) 169.74 (STA. 863+90) TO (MP) 172.10 (STA. 988+62)=(STA. 0+00), CENTERLINE
MP 172.10 (STA. 988+62)=(STA. 0+00) TO MP 173 (STA. 47+60), CENTERLINE
MP 174.45 (STA. 123+88) TO MP 175.55 (STA. 183+25), LT.
MP 174.80 (STA. 135+99) TO MP 175.95 (STA. 150+48), RT.
MP 175.30 (STA. 168+50) TO MP 176.20 (STA. 216+25), RT.

BARRIER REFLECTOR SPACING SHALL CONFORM TO SP 626. MATERIAL SPECIFICATIONS SHALL CONFORM TO SP 626.

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

SP 626 - BARRIER REFLECTOR, TYPE B 300 EACH

OTIC ANNUAL PAVEMENT MARKING OPERATIONS - LONG LINE QUANTITIES

THE CONTRACTOR SHALL PERFORM THE ANNUAL PAVEMENT MARKING INSTALLATION FOR EACH OF THE THREE (3) CONSTRUCTION SEASONS OF THIS PROJECT.

PRIOR TO IMPLEMENTING CONTRA FLOW DURING THE SECOND CONSTRUCTION SEASON, THE CONTRACTOR SHALL INSTALL PERMANENT PAVEMENT MARKINGS FOR THE NON-CONTRA FLOW OUTSIDE EDGE LINE AND THE OUTSIDE LANE LINES FROM MP 167.1 TO MP 178.37. ALL REMAINING EASTBOUND AND WESTBOUND LANE LINES AND EDGE LINES, INCLUDING THE INTERCHANGE PAVEMENT MARKINGS, SHALL BE COMPLETED BEFORE THE CONCLUSION OF THE FIRST CONSTRUCTION SEASON FROM MP 167.1 TO MP 178.37.

PRIOR TO IMPLEMENTING CONTRA FLOW DURING THE THIRD CONSTRUCTION SEASON, THE CONTRACTOR SHALL INSTALL PERMANENT PAVEMENT MARKINGS FOR THE NON-CONTRA FLOW OUTSIDE EDGE LINE AND THE OUTSIDE LANE LINES FROM MP 167.1 TO MP 178.37. ALL REMAINING EASTBOUND AND WESTBOUND LANE LINES AND EDGE LINES, INCLUDING THE INTERCHANGE PAVEMENT MARKINGS, SHALL BE COMPLETED BEFORE THE CONCLUSION OF THE SECOND CONSTRUCTION SEASON FROM MP 167.1 TO MP 178.37.

THE FOLLOWING QUANTITIES ARE PROVIDED, TO BE USED AS DIRECTED BY THE ENGINEER AND CARRIED TO THE GENERAL SUMMARY TO ADDRESS THIS ANNUAL PAVEMENT MARKINGS WORK.

ITEM 642 - 6" EDGE LINE, TYPE 1 (WHITE)	68 MILES
ITEM 642 - 6" EDGE LINE, TYPE 1 (YELLOW)	68 MILES
ITEM 642 - 6" LANE LINE, TYPE 1	136 MILES

ITEM 630 - SIGN ERECTED, FLAT SHEET, AS PER PLAN

THIS ITEM SHALL BE AS OUTLINED IN 630 EXCEPT THAT ALL SIGNS AND SUPPORTS TO BE INSTALLED SHALL BE PROVIDED BY THE COMMISSION, THE CONTRACTOR SHALL CONTACT THE CHIEF ENGINEER TO ARRANGE FOR PICKUP OF THE SIGN AND POST MATERIALS FOR THE PROJECT. ALL SIGNS SHALL BE INSPECTED BY THE COMMISSION STAFF IN THE PRESENCE OF THE CONTRACTOR PRIOR TO LOADING OF PROVIDED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE TRANSPORTATION OF THE MATERIALS PROVIDED TO THE JOB SITE. UPON ARRIVAL AT THE JOB SITE, THE TRANSPORTED SIGNING MATERIALS SHALL BE INSPECTED BY THE COMMISSION PERSONNEL TO ENSURE THAT NO DAMAGE OCCURRED DURING TRANSPORT. COSTS ASSOCIATED WITH THE PICK-UP OF THE SIGNS AND SUPPORTS, THE TRANSPORTATION TO THE PROJECT SITE AND ANY STORAGE COSTS UNTIL ERECTION SHALL BE CONSIDERED INCIDENTAL TO THE ITEM NECESSITATING THE WORK. THIS ITEM SHALL INCLUDE ALL LABOR AND MATERIAL COSTS NECESSARY TO INSTALL THE SIGNS AS SHOWN IN THE PLANS.

ALL COSTS ASSOCIATED WITH THIS ITEM SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 630 -SIGN ERECTED, FLAT SHEET, AS PER PLAN, EACH.

ITEM 630 - SIGN ERECTED, EXTRUSHEET, AS PER PLAN

THIS ITEM SHALL BE AS OUTLINED IN ITEM 630 EXCEPT THAT ALL EXTRUSHEET SIGNS TO BE REPLACED AS A PART OF THE PROJECT WILL BE PROVIDED BY THE COMMISSION. THE CONTRACTOR SHALL CONTACT THE CHIEF ENGINEER TO ARRANGE FOR A PICK-UP OF THE EXTRUSHEET SIGNS TO BE ERECTED. ALL EXTRUSHEET SIGNS PROVIDED SHALL BE INSPECTED BY THE COMMISSION STAFF IN THE PRESENCE OF THE CONTRACTOR PRIOR TO LOADING OF THE PROVIDED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE TRANSPORTATION OF THE MATERIALS PROVIDED TO THE JOB SITE. UPON ARRIVAL AT THE JOB SITE, THE TRANSPORTED SIGNING MATERIALS SHALL BE INSPECTED BY THE COMMISSION PERSONNEL TO ENSURE THAT NO DAMAGE OCCURRED DURING TRANSPORT. COSTS ASSOCIATED WITH THE PICK-UP OF THE SIGNS AND SUPPORTS, THE TRANSPORTATION TO THE PROJECT SITE AND ANY STORAGE COSTS UNTIL ERECTION SHALL BE CONSIDERED INCIDENTAL TO THE ITEM NECESSITATING THE WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE 17 FOOT MINIMUM CLEARANCE BETWEEN THE LANES OF THE OHIO TURNPIKE AND THE BOTTOM OF OVERHEAD SIGNS. ALL NEW SIGNS SHALL BE INSTALLED SUCH THAT A MINIMUM VERTICAL CLEARANCE IS PROVIDED ONCE THE SIGN IS INSTALLED AS SHOWN ON ODOT STANDARD CONSTRUCTION DRAWINGS. GROUND MOUNTED SIGNS SHALL BE INSTALLED AS PER TC-42.10.

THE CONTRACTOR SHALL PROVIDE MOUNTING CLIPS PER 2016 ODOT CONSTRUCTION AND MATERIAL SPECIFICATION ITEM 630 AND ODOT SUPPLEMENTAL SPECIFICATION 992 (04/18/2014).

THIS ITEM SHALL INCLUDE ALL LABOR AND MATERIAL COSTS NECESSARY TO INSTALL THE SIGNS AS SHOWN IN THE PLANS, AND SHALL INCLUDE BUT NOT BE LIMITED TO ALL LABOR, TEMPORARY TRAFFIC CONTROL, SIGN BACKING ASSEMBLIES, AND HARDWARE NECESSARY TO INSTALL THE SIGN.

ALL COSTS ASSOCIATED WITH THIS ITEM SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 630 - SIGN ERECTED, EXTRUSHEET, AS PER PLAN, EACH.

ITEM 631 - SIGN LIGHTING MISC.: REMOVE SIGN LIGHTING AND SIGN SERVICE

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL SIGN LIGHTING COMPONENTS FROM THE LUMINAIRES DOWN TO THE DISCONNECT SWITCH INCLUDING THE DISCONNECT SWITCH. ITEMS REMOVED AND DISPOSED OF SHOULD INCLUDE BUT NOT BE LIMITED TO LUMINAIRES AND SUPPORT ARMS, STRUCTURAL STEEL TUBE, AND SIGN WIRING.

TWO WEEKS PRIOR TO REMOVAL OF THE EXISTING SIGN THE CONTRACTOR SHALL CONTACT MIKE BERGSTROM AT 440-821-3368 OR Michael.bergstrom@ohioturnpike.orq. COMMISSION PERSONNEL WILL REMOVE THE DISCONNECT AND SIGN SERVICE. THEY WILL ALSO REMOVE ANY REMOTE BALLAST AND THEIR HOUSING.

ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE OF EACH FOR ITEM 631- SIGN LIGHTING AND SIGN SERVICE.

ITEM 620 - REMOVAL OF DELINEATOR

THIS ITEM SHALL BE AS OUTLINED IN ITEM 620. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING DELINEATORS LOCATED WITHIN THE PROJECT LIMITS FROM MP 169.74 TO MP 176.34.

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

ITEM 620 - REMOVAL OF DELINEATOR 150 EACH

ITEM 620 - DELINEATOR, POST MOUNTED, AS PER PLAN

THIS ITEM SHALL BE AS OUTLINED IN 620 EXCEPT THAT ALL DELINEATORS AND SUPPORTS TO BE INSTALLED SHALL BE PROVIDED BY THE COMMISSION. THE CONTRACTOR SHALL CONTACT THE CHIEF ENGINEER TO ARRANGE FOR PICKUP OF THE DELINEATORS AND POST MATERIALS FOR THE PROJECT. ALL DELINEATORS SHALL BE INSPECTED BY COMMISSION STAFF IN THE PRESENCE OF THE CONTRACTOR PRIOR TO LOADING OF PROVIDED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE TRANSPORTATION OF THE MATERIALS PROVIDED TO THE JOB SITE. UPON ARRIVAL AT THE JOB SITE, THE TRANSPORTED DELINEATOR MATERIALS SHALL BE INSPECTED BY COMMISSION PERSONNEL TO ENSURE THAT NO DAMAGE OCCURRED DURING TRANSPORT. COSTS ASSOCIATED WITH THE PICK- UP OF THE DELINEATORS AND SUPPORTS, THE TRANSPORTATION TO THE PROJECT SITE AND ANY STORAGE COSTS UNTIL ERECTED SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. THIS ITEM SHALL INCLUDE ALL LABOR AND EQUIPMENT COSTS NECESSARY TO INSTALL THE DELINEATORS AS SHOWN IN THE PLANS.

THE FOLLOWING ESTIMATIED QUANTITY HAS BEEN CARRIED TO THE TRAFFIC CONTROL GENERAL SUMMARY TO BE USED EVERY 0.1 MILES IN BETWEEN THE TENTH MARKERS:

ITEM 620 - DELINEATOR, POST MOUNTED, AS PER PLAN (GROUND MOUNTED) 169 EACH

ITEM 620 - DELINEATOR, POST MOUNTED, AS PER PLAN (SURFACE MOUNTED) 10 EACH

ITEM 621 - RAISED PAVEMENT MARKER REMOVED

RAISED PAVEMENT MARKERS SHALL BE REMOVED FROM THE OHIO TURNPIKE ON ALL LANES WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC ZONE. THE CONTRACTOR SHALL ONLY REMOVE THE EXISTING REFLECTORS OUTSIDE THE PROJECT LIMITS AS SHOWN IN THE PLANS.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY TO BE USED THROUGHOUT THE PROJECT AS DIRECTED BY THE ENGINEER.

ITEM 621 - RAISED PAVEMENT MARKER REMOVED 1010 EACH

ITEM 630 - SIGNING MISC.: MILEPOST AND TENTH MILEPOST SIGNS REMOVED

THIS ITEM SHALL BE AS OUTLINED IN ITEM 630. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MILE POST AND TENTH MILE POST SIGNS AND SUPPORTS WITHIN THE PROJECT LIMITS AS SHOWN ON THE PLAN SHEETS.

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

ITEM 630 - SIGNING MISC.: MILEPOST AND TENTH MILEPOST SIGNS REMOVED
150 EACH

ADDITIONAL PAVEMENT MARKINGS

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE TRAFFIC CONTROL GENERAL SUMMARY, AND ARE INCLUDED FOR USE AS DIRECTED BY THE ENGINEER FOR THE PURPOSE OF APPLYING PAVEMENT MARKINGS AND RPM'S WITHIN THE WORK LIMITS.

ITEM 642 - EDGE LINE, 6", TYPE 1 (WHITE)	1.00 MILES
ITEM 642 - EDGE LINE, 6", TYPE 1 (YELLOW)	1.00 MILES
ITEM 642 - LANE LINE, 6", TYPE 1	4.00 MILES
ITEM 621 - RAISED PAVEMENT MARKER REMOVED	180 EACH
SP 621 - RAISED PAVEMENT MARKER STIMSONITE MODEL 101 LPCR (WHITE)	180 EACH
SP 621 - RAISED PAVEMENT MARKER STIMSONITE MODEL 101 LPCR (YELLOW)	180 EACH
SP 626 - BARRIER REFLECTOR, TYPE B	100 EACH

EXISTING OVERHEAD SIGN SUPPORTS AND/OR FOUNDATIONS TO REMAIN

THE CONTRACTOR SHALL TAKE GREAT CARE TO NOT DAMAGE EXISTING SIGN SUPPORTS AND FOUNDATIONS TO REMAIN DURING CONSTRUCTION.

IF THE CHIEF ENGINEER HAS DETERMINED THAT THE EXISTING SIGN SUPPORT OR SIGN FOUNDATION HAS BEEN DAMAGED, THE CONTRACTOR SHALL REPLACE THE DAMAGED SIGN EQUIPMENT IN KIND, AS APPROVED BY THE CHIEF ENGINEER, AT THE CONTRACTOR'S COST.

ITEM SPECIAL - SPEED MEASUREMENT MARKINGS

IN ADDITION TO THE REQUIREMENTS OF OTIC SCD TC-2, THE CHIEF ENGINEER WILL PROVIDE THE SURVEYOR WITH THE OTIC "SPEED MEASUREMENT ZONE SURVEY" FORM. THIS FORM SHALL BE SEALED AND SIGNED BY A REGISTERED SURVEYOR PRIOR TO SUBMITTING IT TO THE COMMISSION, THIS IS THE ONLY FORM THAT WILL BE ACCEPTED. THE SHALL BE RETURNED TO THE OTIC TRAFFIC ENGINEER.

DESIGN AGENCY

NO	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18

DESIGNED JMP | DRAWN PSL | CHECKED JMP | IN CHARGE WDB

TRAFFIC CONTROL GENERAL NOTES

PROJECT 39-18-02A

DATE: 12/22/17

586
727

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

160562-TC-GNOTES.dwg; 1/26/18 - 11:23am

SHEET NUMBER												ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
586	587		595		596	599	600		614	617						
															TRAFFIC CONTROL	
150												620	150	EACH	REMOVAL OF DELINEATOR	586
169												620	169	EACH	DELINEATOR, POST MOUNTED, AS PER PLAN (GROUND MOUNTED)	586
10												620	10	EACH	DELINEATOR, POST MOUNTED, AS PER PLAN (SURFACE MOUNTED)	586
1,190												621	1,190	EACH	RAISED PAVEMENT MARKER REMOVED	586
			2,602									SP 621	2,602	EACH	REPLACEMENT PRISMATIC RETRO-REFLECTOR	
360			2,286									SP 621	2,646	EACH	RAISED PAVEMENT MARKER - STIMSONITE MODEL 101 LPCR	
										6		625	6	EACH	GROUND ROD	
400												SP 626	400	EACH	BARRIER REFLECTOR, TYPE B	586
									278.00			630	278.00	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4x7.7	
									40			630	40	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8x18	
									58			630	58	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W12x30	
									18			630	18	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
									6			630	6	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
					18							630	18	EACH	SIGN, SINGLE FACED, MILE MARKER, AS PER PLAN	587
						52	12		256			630	320	EACH	SIGN ERECTED, FLAT SHEET, AS PER PLAN	586
									21	36		630	57	EACH	SIGN ERECTED, EXTRUSHEET, AS PER PLAN	586
										56		630	56	EACH	SIGN ATTACHMENT ASSEMBLY	
										8		630	8	EACH	SIGN BACKING ASSEMBLY	
										6		630	6	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
										6		630	6	EACH	OVERHEAD SIGN SUPPORT, TYPE 12.30, DESIGN 10	
									198			630	198	EACH	SIGN POST REFLECTOR	
	132											630	132	EACH	TENTH MILEPOST SIGN ERECTED, AS PER PLAN	587
						54			241			630	295	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
						54			222			630	276	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
									21			630	21	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
									6			630	6	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
							12					630	12	EACH	REMOVAL OF STRUCTURE MOUNTED SIGN AND DISPOSAL	
										6		630	6	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30	
										35		630	35	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
150												630	150	EACH	SIGNING MISC.: MILEPOST AND TENTH MILEPOST SIGNS REMOVED	586
										2		630	2	EACH	SIGNING MISC.: REMOVE SIGN FLASHERS	587
										2		630	2	EACH	SIGNING MISC.: REMOVE FOR REUSE SIGN FLASHER CONTROLLER	587
										2		630	2	EACH	SIGNING MISC.: INSTALL SIGN FLASHERS AND FLASHER CONTROLLER	587
										18		631	18	EACH	SIGN LIGHTING MISC.: REMOVE SIGN LIGHTING AND SIGN SERVICE	586
	2													2		
138.00			7.69									642	145.69	MILE	EDGE LINE, 6", TYPE 1	
140.00												642	140.00	MILE	LANE LINE, 6", TYPE 1	
			19,290									642	19,290	FT	DOTTED LINE, 6", TYPE 1	
			31,080									642	31,080	FT	CHANNELIZING LINE, 12", TYPE 1	
			20									SPECIAL	20	EACH	SPEED MEASUREMENT MARKER	586

DESIGN AGENCY: transportation engineering consultants — engineers architects planners

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-
-	-	-	-
-	-		

DESIGNED JMP | DRAWN PSL | CHECKED JMP | IN CHARGE WDB

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TRAFFIC CONTROL GENERAL SUMMARY

PROJECT 39-18-02A

DATE: 12/22/17

588 / 727

OHIO TURNPIKE

160562-TC-GEN-SUM.dwg; 1/26/18 - 11:30am

ROADWAY (CONTINUED)

ITEM 209 - DITCH CLEANOUT

THIS ITEM SHALL CONSIST OF FIELD SURVEY, CLEARING, EXCAVATION AND EMBANKMENT AS NECESSARY TO RE-ESTABLISH THE CROSS SECTION OF THE EXISTING DITCHES AS DIRECTED BY THE CHIEF ENGINEER. EXISTING DITCH CENTERLINE ELEVATIONS SHALL BE FIELD MEASURED AND RECORDED BY THE CONTRACTOR PRIOR TO PERFORMING ANY WORK ON THE DITCHES. PROPOSED ELEVATIONS FOR THE RE-ESTABLISHED DITCH SHALL BE SUBMITTED AND REVIEWED BY THE CHIEF ENGINEER BEFORE WORK MAY COMMENCE. THIS SHALL BE DONE TO ENSURE THE DITCH CLEANOUT ACCOMPLISHES POSITIVE DRAINAGE.

PAYMENT FOR THIS ITEM WILL BE AT UNIT BID PRICE PER FOOT FOR ITEM 209 - DITCH CLEANOUT AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS ITEM. ALL MAINTENANCE OF TRAFFIC NECESSARY TO COMPLETE THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO SP 614 - MAINTAINING TRAFFIC.

THE FOLLOWING CONTINGENCY QUANTITY IS PROVIDED IN THE GENERAL SUMMARY IN ADDITION TO THAT CALLED OUT ELSEWHERE FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 209 - DITCH CLEANOUT	500 FT

SOFT SUBGRADE

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

ITEM 204 - EXCAVATION OF SUBGRADE	2400 CY
ITEM 204 - EMBANKMENT	2400 CY
ITEM 204 - SUBGRADE COMPACTION	3600 SY

EROSION CONTROL

SEEDING AND MULCHING

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

ITEM 659 - SOIL ANALYSIS TEST	2 EACH
ITEM 659 - TOPSOIL	1,250 CY
ITEM 659 - SEEDING AND MULCHING	11,200 SY
ITEM 659 - REPAIR SEEDING AND MULCHING	560 SY
ITEM 659 - INTER-SEEDING	560 SY
ITEM 659 - COMMERCIAL FERTILIZER	1.52 TON
ITEM 659 - LIME	2.40 ACRES
ITEM 659 - WATER	70 M GAL

ITEM 659 - TOPSOIL IS ONLY APPLICABLE WHEN TOPSOIL IS PHYSICALLY REMOVED FROM THE SLOPES AND MOVED TO A CONSTRUCTED TOP SOIL STOCK PILE SOLELY FOR THE PURPOSE OF TEMPORARY STORAGE PRIOR TO REUSE. SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF- WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON AN ASSUMED LIMIT 10' BEYOND THE EDGE OF THE OUTSIDE SHOULDER FOR THE LENGTH OF THE PROJECT, A WIDTH OF 20' PER RUNNING FOOT OF DITCH CLEANOUT, SLOPE REPAIR AREAS, AND ON THE SLOPES WHERE DRAIN PIPE PLACEMENT OCCURS. FOR THE PURPOSES OF THE DRAIN PIPE PLACEMENT AREA CALCULATIONS, A WIDTH OF 30' AND A LENGTH OF 37' WAS ASSUMED FOR EACH OF THE PIPE PLACEMENT AREAS AND A WIDTH OF 10' AND A LENGTH OF 10' WAS ASSUMED FOR EACH OF THE UNDERDRAIN OUTLETS.

ITEM 832 - PERIMETER FILTER FABRIC FENCE
ITEM 832 - FILTER FABRIC DITCH CHECK

IN ACCORDANCE WITH ALL APPLICABLE PORTIONS OF SS 832, THE FOLLOWING ITEMS HAVE BEEN ADDED TO THE ESTIMATED QUANTITIES FOR USE BY THE CONTRACTOR FOR PROJECT EROSION CONTROL PURPOSES. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE, FOR APPROVAL BY THE CHIEF ENGINEER, A PLAN LAYOUT INDICATING WHERE THE EROSION CONTROL ITEMS WILL BE INSTALLED WITHIN PROJECT LIMITS. ALL PLANNING, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED FOR COMPLETING THE INSTALLATION OF THE SPECIFIED ITEMS SHALL BE INCLUDING IN THE BID PRICE FOR EACH ITEM.

THE BOTTOM OF THE FENCE SHALL BE BURIED 6" BELOW THE GROUND. THE FENCE SHALL BE HIGH ENOUGH TO RETAIN SEDIMENT LADEN WATER AND ADEQUATELY SUPPORTED TO PREVENT COLLAPSE OR BURSTING. THE GROUND ELEVATION OF THE FENCE SHALL BE HELD CONSTANT EXCEPT THAT THE END ELEVATION SHALL BE RAISED TO PREVENT FLOW AROUND THE END OF THE FENCE.

THE FILTER FABRIC SHALL BE MAINTAINED TO BE FUNCTIONAL. THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, REPAIR AND/OR REPLACEMENT OF THE FILTER FABRIC.

ITEM 832 - PERIMETER FILTER FABRIC FENCE	8,000 FT
ITEM 832 - FILTER FABRIC DITCH CHECK	500 FT

QUANTITIES PROVIDED ARE APPROXIMATE AND MAY BE ADJUSTED BY THE CHIEF ENGINEER IN ORDER TO INSURE PLAN INTENT IS MET.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT STANDARD DRAWINGS RM-4.5 AND RM-4.6 AND SECTION 622 OF THE SPECIFICATIONS WITH THE FOLLOWING EXCEPTIONS:

A CONCRETE FOUNDATION AND AGGREGATE BASE FOR THIS BARRIER SHALL BE CONSTRUCTED AS SHOWN ON THE TYPICAL SECTIONS. THE FOUNDATION SHALL MATCH THE SIZE AND SHAPE OF THE FOUNDATION SHOWN ON ODOT STANDARD DRAWING RM-4.6 AND SHALL EXTEND ALONG THE ENTIRE LENGTH OF THE NON-REINFORCED CONCRETE BARRIER WITH DOWELING SIZED AND SPACED IN ACCORDANCE WITH THE DOWELING DETAIL ON ODOT STANDARD DRAWING RM-4.5. THE AREA BETWEEN THE BOTTOM OF FOOTING AND THE TOP OF THE AGGREGATE BASE SHALL BE FILLED WITH COMPACTED SP 304. THE MINIMUM DEPTH OF SP 304 - AGGREGATE BASE BELOW THE FOUNDATION SHALL BE 6" THICK.

ONE INCH PREFORMED EXPANSION JOINT MATERIAL SHALL BE PLACED BETWEEN THE NEW CONCRETE BARRIER AND FOUNDATION WHERE THE IT BUTTS AGAINST EXISTING CONCRETE BRIDGE PIERS OR EXISTING WALLS.

UNSEALED CONTRACTION JOINTS SPACED AT 10 FT. O/C (MAX.) SHALL BE CONSTRUCTED THROUGHOUT THE UNREINFORCED SECTION OF FOOTER AND CONCRETE BARRIER. ALL JOINTS SHALL BE UNIFORMLY SPACED. IF THE BARRIER THICKNESS IS REDUCED AT A BRIDGE PIER, THE CONTRACTION JOINTS SHALL BE PLACED AT THE CENTER OF THE BRIDGE PIERS. THESE JOINTS WILL DICTATE A SHORTER CONTRACTION JOINT SPACING. JOINTS SHALL NOT BE PLACED IN THE 14 FT END SECTIONS.

IN LIEU OF THE CURING COMPOUNDS SPECIFIED IN SECTION 622.07 OF THE SPECIFICATIONS, THE CONCRETE BARRIER SHALL BE CURED AND SEALED IN ACCORDANCE WITH SECTION 511.14 OF THE SPECIFICATIONS, METHOD B, MEMBRANE UTILIZING CHEMMASTERS SILENCURE-A OR AN APPROVED EQUAL. MATERIAL APPLICATION SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. ALL OTHER PROVISIONS OF SECTION 622 OF THE SPECIFICATIONS SHALL APPLY. THE CURING AGENT SHALL NOT BE USED AS A FINISHING AID FOR RUB FINISH.

THE LOCATION AND LENGTH OF THE CONCRETE BARRIER TO BE CONSTRUCTED OR REPLACED AND THE REMOVAL OF GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE CHIEF ENGINEER. NO HAZARD SHALL BE LEFT UNPROTECTED. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THE CHIEF ENGINEER IS ASSURED OF SAID COMPLIANCE.

PAYMENT FOR ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NEEDED TO COMPLETE THE WORK AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT FOR ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN.

ITEM 622 - CONCRETE BARRIER END ANCHORAGE, REINFORCED TYPE D, AS PER PLAN
ITEM 622 - CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN

THE END ANCHORAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT STANDARD DRAWING RM-4.5. THE END SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT STANDARD DRAWING RM-4.6.

IN LIEU OF THE CURING COMPOUNDS SPECIFIED IN SECTION 622.07 OF THE SPECIFICATIONS, THE CONCRETE BARRIER SHALL BE CURED AND SEALED IN ACCORDANCE WITH SECTION 511.14 OF THE SPECIFICATIONS, METHOD B, MEMBRANE UTILIZING CHEMMASTERS SILENCURE-A OR AN APPROVED EQUAL. MATERIAL APPLICATION SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. ALL OTHER PROVISIONS OF SECTION 622 OF THE SPECIFICATIONS SHALL APPLY. ALL OTHER PROVISIONS OF SECTION 622 OF THE SPECIFICATIONS SHALL APPLY. THE CURING AGENT SHALL NOT BE USED AS A FINISHING AID FOR RUB FINISH.

PAYMENT FOR ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS TO COMPLETE THE WORK AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER END ANCHORAGE, REINFORCED TYPE D, AS PER PLAN AND PER EACH ITEM 622 - CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN.

DRAINAGE

REVIEW OF DRAINAGE FACILITIES

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

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

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

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

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE CHIEF ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE CHIEF ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

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

SPECIAL - CATCH BASIN CLEANED

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING CATCH BASINS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER SP 105. ALL CATCH BASINS SPECIFIED SHALL BE CLEANED OUT TO THE SATISFACTION OF THE CHIEF ENGINEER.

CLEANOUT OF THE CATCH BASINS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR SPECIAL - CATCH BASIN CLEANED, EACH. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL DISPOSAL, EQUIPMENT, LABOR AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

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

SPECIAL - CATCH BASIN CLEANED	2 EACH

ITEM 601 - ROCK CHANNEL PROTECTION

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

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	10 CY
ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	10 CY

CONNECTIONS TO PIPES OF DISSIMILAR MATERIALS

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

△2 SP 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

THE FOLLOWING ITEM HAS BEEN INCLUDED IN THE SUB-SUMMARIES FOR USE IN ADJUSTING, REPAIRING AND/OR REBUILDING MANHOLES. ALL APPLICABLE PORTIONS OF SP 611 SHALL APPLY WITH THE FOLLOWING MODIFICATIONS AS NOTED HEREIN. THE CONTRACTOR SHALL INSPECT THE INTERIOR OF THE MANHOLE PRIOR TO COMMENCING ANY WORK SO THAT THERE IS A CLEAR UNDERSTANDING OF WHAT NEEDS TO BE REPAIRED/RECONSTRUCTED. THE REPAIR/RECONSTRUCTION HEIGHT WILL VARY FROM 7" TO 24". THE CONTRACTOR SHALL SUBMIT, FOR APPROVAL, ITS METHOD FOR REMOVAL AND CLEANING OUT AREAS WITHIN THE MANHOLE THAT REQUIRE REPAIR/RECONSTRUCTION. UPON COMPLETION OF REMOVAL OF THE DEFECTIVE MATERIAL, THE CAVITIES CREATED SHALL BE FORM AND POUR, USING CLASS QC-1 CONCRETE. THE USE OF BRICK TO PERFORM THE REPAIR/RECONSTRUCTION SHALL BE PROHIBITED. THE CONTRACTOR SHALL USE FORMS, SIZED TO CONFORM TO THE INTERIOR OF THE MANHOLE THAT WILL ENSURE A SMOOTH INTERIOR FINISH WHERE PRACTICAL.

ALTERNATELY, PRECAST CONCRETE GRADE RINGS OR RISERS MAY BE USED WHERE PRACTICAL.

ALL PLANNING, SAWCUTTING, CONCRETE, GROUT, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE ITEM.

SP 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	12 EACH

OTIC AND ODOT STANDARD DRAWINGS ARE PROVIDED FOR INFORMATION.

SP 605 - AGGREGATE DRAINS

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

SP 605 - AGGREGATE DRAIN, TYPE 1, WITH FABRIC WRAP	50 FT
SP 605 - AGGREGATE DRAIN, TYPE 2, WITH FABRIC WRAP	50 FT

DESIGN AGENCY: T&T Consultants — engineers architects planners

NO	REVISIONS	BY	DATE
△2	ADDENDUM NO. 2	DLF	1/26/18

DESIGNED JMP | DRAWN KPA | CHECKED WDB | IN CHARGE WDB

PROJECT 39-18-02B
DATE: 12/22/17

GENERAL NOTES

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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

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DRAINAGE (CONTINUED)

SP 611 - CATCH BASIN ADJUSTMENTS, GRATES AND CASTINGS, AS PER PLAN

THE FOLLOWING ITEMS HAVE BEEN INCLUDED 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 2' AROUND THE CASTING, UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER, THEN REMOVE THE CASTING AND SAWCUT MATERIAL. THE CONTRACTOR SHALL FORM AND POUR, USING CLASS QC-1 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 EMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON SHRINK NON METALLIC GROUT THAT CONFORMS TO 705.20. THE CONTRACTOR SHALL USE FORMS, SIZED TO CONFORM TO THE INTERIOR OF THE CATCH BASIN THAT WILL ENSURE 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 QC-1 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 LESS THAN 4", THE SAME METHOD SHALL BE USED TO REBUILD THE CATCH BASINS TO GRADE, EXCEPT THAT NO FORMS OR DOWELS ARE REQUIRED.

THE EXISTING GRATE AND CASTING SHALL BE REUSED UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER. 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 SAWCUTTING, CONCRETE, DOWELS, DOWEL HOLES, GROUT, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE ITEMS:

SP 611 - CATCH BASIN, ADJUSTED TO GRADE, 4" - 12", AS PER PLAN
SP 611 - CATCH BASIN, ADJUSTED TO GRADE, GREATER THAN 12", AS PER PLAN
SP 611 - CATCH BASIN GRATE AND CASTING, AS PER PLAN

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

SP 611 - CATCH BASIN ADJUSTED TO GRADE, LESS THAN 4", AS PER PLAN	5 EACH
SP 611 - CATCH BASIN GRATE AND CASTING, AS PER PLAN	5 EACH

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO ADJUST EXISTING CATCH BASINS TO GRADE WITHIN THE RESURFACING LIMITS:

SP 611 - CATCH BASIN ADJUSTED TO GRADE, 4" - 12", AS PER PLAN	15 EACH

OTIC AND ODOT STANDARD DRAWINGS ARE PROVIDED FOR INFORMATION AS TO THE TYPES OF BASINS THAT MAY NEED ADJUSTMENT.

SP 611 - INLET RECONSTRUCTED TO GRADE, AS PER PLAN

THE FOLLOWING ITEM IS INCLUDED FOR USE IN ADJUSTING, REPAIRING AND/OR REBUILDING CONCRETE MEDIAN INLETS. ALL APPLICABLE PORTIONS OF SP 611 SHALL APPLY WITH THE FOLLOWING MODIFICATIONS AS NOTED HEREIN. THE CONTRACTOR SHALL PERFORM THE REPAIRS/RECONSTRUCTION PRIOR TO PAVEMENT REMOVAL WHERE POSSIBLE. THE CONTRACTOR SHALL INSPECT THE INTERIOR OF THE INLET PRIOR TO COMMENCING ANY WORK SO THAT THERE IS A CLEAR UNDERSTANDING OF WHAT NEEDS TO BE REPAIRED/RECONSTRUCTED. THE REPAIR/RECONSTRUCTION HEIGHT WILL VARY FROM 7" TO 24". THE CONTRACTOR SHALL SUBMIT, FOR APPROVAL, ITS METHOD FOR REMOVAL AND CLEANING OUT AREAS WITHIN THE INLET THAT REQUIRE REPAIR/RECONSTRUCTION. UPON COMPLETION OF REMOVAL OF THE DEFECTIVE MATERIAL, THE CAVITIES CREATED SHALL BE FORM AND POUR, USING CLASS QC-1 CONCRETE. THE USE OF BRICK TO PERFORM THE REPAIR/RECONSTRUCTION SHALL BE PROHIBITED. THE CONTRACTOR SHALL USE FORMS, SIZED TO CONFORM TO THE INTERIOR OF THE INLET THAT WILL ENSURE A SMOOTH INTERIOR FINISH WHERE PRACTICAL.

REPLACEMENT OF THE PRECAST INLET TOPS IS REQUIRED.

ALL TEMPORARY TRFFIC CONTROL FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO SP 614. ALL PLANNING, SAWCUTTING, CONCRETE, GROUT, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER SP 611 - INLET RECONSTRUCTED TO GRADE, AS PER PLAN.

OTIC AND ODOT STANDARD DRAWINGS ARE PROVIDED FOR INFORMATION AS TO THE TYPES OF BASINS THAT MAY NEED ADJUSTMENTS.

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PAVEMENT

ITEM 423 - CRACK SEALING, TYPE IV

THIS ITEM SHALL CONSIST OF FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO APPLY CRACK SEALANT TO ALL TRANSVERSE AND LONGITUDINAL PAVEMENT JOINTS AND CRACKS IN AREAS NOT BEING RESURFACED OR REPLACED AS DIRECTED BY THE ENGINEER.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK DESCRIBED ABOVE:

ITEM 423 - CRACK SEALING, TYPE IV	31,000 LBS

PAVEMENT REPAIRS

FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT SHALL BE DEFINED AS REPLACING ONE OR MORE SLABS AND FULL DEPTH PAVEMENT JOINT REPAIR SHALL BE DEFINED AS REPLACING THE JOINT WITH A MINIMUM LENGTH OF SIX FEET.

THE FOLLOWING QUANTITIES ARE INCLUDED AS A CONTINGENCY TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR PAVEMENT REPAIR MEASURES. CONTRACTOR SHALL FOLLOW ODOT CMS FOR ITEM 255, THESE AREAS HAVE TO BE OPENED TO TRAFFIC IN A TIMELY MANNER, AND CONCRETE SHALL BE IN ACCORDANCE WITH ODOT 255.02A.

FULL DEPTH PAVEMENT SAWING IS PROVIDED TO SAW CUT AROUND THE PERIMETER OF THE REPAIR AREA AS WELL AS FOR MID-SLAB SAW CUTS TO FACILITATE PART WIDTH CONSTRUCTION.

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT (USING CLASS QC MS CONCRETE)	6,365 SY
ITEM 255 - FULL DEPTH PAVEMENT JOINT REPAIR (USING CLASS QC MS CONCRETE)	1,150 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	15,250 FT

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SP 403 - ASPHALT CONCRETE LEVELING COURSE, PG 76-22

THE FOLLOWING CONTINGENCY QUANTITY FOR ASPHALT CONCRETE LEVELING COURSE 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 INTERMEDIATE ASPHALT COURSES AND THE PROPOSED APPROACH SLABS. THE LEVELING COURSE SHALL BE PLACED PRIOR TO THE INSTALLATION OF ANY ASPHALT INTERMEDIATE OR SURFACE COURSE TO ADJUST THE PROFILE OF THE ROADWAY. THE THICKNESS OF THIS ASPHALT CONCRETE LEVELING COURSE IS ANTICIPATED TO VARY FROM 0" MINIMUM TO 1" MAXIMUM WITHIN SEVENTY FIVE (75) FEET OF THE APPROACH SLABS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR SP 403 - ASPHALT CONCRETE LEVELING COURSE, PG 76-22.

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

SP 403 - ASPHALT CONCRETE LEVELING COURSE, PG 76-22	50 CY

SP 617 - COMPACTED AGGREGATE
SP 627 - STONE SHOULDER PROTECTION

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

ITEM 617 - SHOULDER PREPARATION	14,325 SY
SP 617 - COMPACTED AGGREGATE	1,330 CY
ITEM 617 - WATER	45 MGAL
SP 627 - STONE SHOULDER PROTECTION	665 CY

ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN

THIS CONTINGENCY ITEM CONSISTS OF PAVEMENT PLANING OF CONCRETE APPROACH AND/OR ABUTMENT SLABS WITH DIAMOND BLADES ONLY. THIS QUANTITY IS INTENDED TO BE UTILIZED TO MEET PAVEMENT SMOOTHNESS.

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

THE FOLLOWING QUANTITY OF IS INCLUDED IN THE ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE CHIEF ENGINEER OR AS INDICATED IN THE PLANS.

ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN	1,440 SY

ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, (DEPTH VARIES)

THIS ITEM IS FOR USE AT BUTT JOINTS WITH PORTLAND CEMENT CONCRETE PAVEMENT WHICH WILL NOT BE RESURFACED, IN ACCORDANCE WITH THE PAVEMENT TRANSITION DETAILS.

THE FOLLOWING QUANTITY OF IS INCLUDED IN THE ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE CHIEF ENGINEER OR AS INDICATED IN THE PLANS.

ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, (DEPTH VARIES)	1,500 SY

ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT

THIS ITEM SHALL INCLUDE FURNISHING AND PLACING A 30" WIDE ASPHALT PAVEMENT REINFORCEMENT AT ALL TRANSVERSE JOINTS OR CRACKS AND ALL LONGITUDINAL JOINTS OR CRACK ON THE INTERCHANGE RAMPS AS DIRECTED BY THE CHIEF ENGINEER. NO PAVEMENT REINFORCEMENT WILL BE USED ON LONGITUDINAL JOINTS BETWEEN THE INTERCHANGE RAMPS AND THEIR SHOULDERS. THE ASPHALT PAVEMENT REINFORCEMENT SHALL BE "GLASGRID - CG200" AS MANUFACTURED BY SAINT-GOBAIN TECHNICAL FABRICS OR APPROVED EQUAL. THE ASPHALT PAVEMENT REINFORCEMENT GRID SHALL BE INSTALLED AS PER THE RECOMMENDATIONS OF THE MANUFACTURER. THE UNIT PRICE BID PER LINEAR FEET FOR ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TACK COAT AND OTHER INCIDENTALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK REQUIRED TO INSTALL THE ASPHALT PAVEMENT REINFORCEMENT:

ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT	26,000 FT

DESIGN AGENCY

REVISIONS

NO.		BY	DATE
1	ADDENDUM NO. 1	JDC	1/18/18
2	ADDENDUM NO. 2	DLF	1/26/18

DESIGNED JMP
DRAWN KPA
CHECKED WDB
IN CHARGE WDB

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL NOTES

PROJECT 39-18-02B

DATE: 12/22/17

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OHIO TURNPIKE

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LIGHTING

SPECIAL - MAINTAIN EXISTING LIGHTING

IN ANTICIPATION OF THE NEED TO ELIMINATE A PORTION OF THE EXISTING LIGHTING CIRCUIT WITH THIS CONSTRUCTION, THIS ITEM CONSIST OF REROUTING EXISTING (THREE NO. 4 AWG, 5000V) LIGHT CIRCUIT FOR HIGH MAST LIGHT TOWER "HML14", AS SHOWN ON SHEET 32 COORDINATED SO EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF OTIC, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING LIGHT TOWER "HML14" TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY OTIC REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF OTIC, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL FROM SERVICE OF THIS LIGHTING DURING A TIME WHEN THE ROADWAY LIGHTED BY IT IS OPEN TO TRAFFIC THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE FOLLOWING ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY: AND HAS BEEN ADDED TO THE GENERAL SUMMARY:

SPECIAL - MAINTAIN EXISTING LIGHTING	1 LUMP

TRAFFIC CONTROL

SP 621 - RAISED PAVEMENT MARKER - STIMSONITE MODEL 101LPCR
ITEM 642 - PERMANENT PAVEMENT MARKINGS

THE CONTRACTOR SHALL USE THE ITEMS SUPPLIED TO RE-STRIPE THE INTERCHANGE RAMPS TO MATCH EXISTING CONDITIONS. ALL LABOR, EQUIPMENT, SURVEYING/REFERENCING, MATERIALS AND INCIDENTALS NEEDED TO COMPLETE THE ITEMS SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

SP 621 - RAISED PAVEMENT MARKER - STIMSONITE MODEL 101LPCR (WHITE)	125 EACH
SP 621 - RAISED PAVEMENT MARKER - STIMSONITE MODEL 101LPCR (YELLOW)	225 EACH
ITEM 642 - EDGE LINE, 6", TYPE 1 (WHITE)	4.50 MILE
ITEM 642 - EDGE LINE, 6", TYPE 1 (YELLOW)	4.50 MILE
ITEM 642 - LANE LINE, 6", TYPE 1 (WHITE)	0.50 MILE
ITEM 642 - CHANNELIZING LINE, (WHITE) 12", TYPE 1	2,500 FT
ITEM 642 - LANE ARROW, TYPE 1	9 EACH
ITEM 642 - WORD ON PAVEMENT, 72", TYPE 1	3 EACH

BRIDGE MAINTENANCE

ITEM 202 - APPROACH SLAB REMOVED, AS PER PLAN
ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN

ITEM 202 - APPROACH SLAB REMOVED, AS PER PLAN SHALL INCLUDE IN-PLACE SALVAGE OF THE EXISTING 48 - No. 8 DOWEL BARS AT 18" +/- SPACING (EMBEDDED IN THE BACK WALL AT EACH APPROACH SLAB) FOR INCORPORATION IN THE NEW WORK. BARS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH OTIC STANDARD CONSTRUCTION DRAWING AS-1.

THE FOLLOWING ITEMS HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR REMOVAL AND REPLACEMENT OF THE EXISTING APPROACH SLABS (LEADING AND TRAILING ENDS) FOR THE CONNECTOR RAMP OVER I-77, UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER. THE WORK SHALL INCLUDE ALL PLANNING, LABOR, EQUIPMENT, SAW CUTTING, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM:

ITEM 202 - APPROACH SLAB REMOVED, AS PER PLAN	440 SQ.YD.
ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN	440 SQ.YD.
SP 304 - AGGREGATE BASE	147 CU. YD. 2

THE REMOVAL AND REPLACEMENT OF THE APPROACH SLAB SHALL INCLUDED THE CONCRETE MEDIAN AND TYPE 2-A OR TYPE 4-A CURB THAT IS PART OF THE APPROACH SLAB.

THE REMOVAL AND REPLACEMENT OF THE APPROACH SLAB SHALL BE LIMITED TO THE PHASE THAT THE CONTRACTOR IS WORKING IN ONLY. NO WORK ON THE ADJACENT SLAB WILL BE PERMITTED OUT OF PHASE. CONTRACTOR SHALL PLAN ITS OPERATIONS ACCORDINGLY.

SP 536 - CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS
SP 536 - CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS

UNLESS NOTED OTHERWISE, SP 536-CONCRETE WEATHERPROOFING, NON-EPOXY, SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF THE BRIDGES:
- -PARAPET SURFACES AND SLAB SIDE EDGES
- -THE BOTTOM SURFACE OF THE SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRINGER FLANGE. (OUTSIDE ONLY)
- -APPROACH SLABS AND MEDIAN BARRIERS AND PARAPETS ON THE APPROACH SLABS.
- -DECK SLABS AND THE MEDIAN PARAPETS ON THEM.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

SP 536 - CONCRETE WEATHERPROOFING, DECK, ABUTMENTS SLABS AND APPROACH SLABS	3,375 SY
SP 536 - CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS	990 SY

DESIGN AGENCY: consultants

NO	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-
-	-	-	-
-	-	-	-

DESIGNED: JMP | CHECKED: WDB | IN CHARGE: WDB
DRAWN: KPA

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC GENERAL NOTES

PROJECT 39-18-02B
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OHIO TURNPIKE

160562-Gen-Notes.DWG; 1/25/18 - 11:13am

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE, GRADE, AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF PART OR ALL OF THE GUARDRAIL ALONG THE RAMPS SHALL AT ALL TIMES BE AS DIRECTED BY THE CHIEF ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIALS ARE ON SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THE PROJECT UNTIL SUCH TIME THAT THE CHIEF ENGINEER IS ASSURED OF SAID COMPLIANCE. THE CONTRACTOR SHALL PLAN ITS WORK ACCORDINGLY.

2. OBJECT MARKERS FOR PORTABLE BARRIER (PB) SHALL BE INSTALLED IN ACCORDANCE WITH ODOT STANDARD DRAWING MT-101.70 AND SHALL BE CONSIDERED INCIDENTAL TO SP 622.

3. ALL PORTABLE BARRIER SHOWN ON THE PLANS FOR TEMPORARY TRAFFIC CONTROL WILL BE AS PER SP 622. THE SAME BARRIER CAN BE USED FOR THE VARIOUS PHASES. THE COST FOR TRANSPORTING, INSTALLING, SHIFTING, RE-SETTING, MAINTAINING, REMOVAL AND STORING THE PORTABLE BARRIER FOR EACH PHASE SHALL BE INCLUDED IN THE ORIGINAL UNIT COST OF SUPPLYING THE PORTABLE BARRIER FOR ITEM SP 622. GLARE SCREENS SHALL BE INSTALLED ON PORTABLE BARRIER AS SPECIFIED IN THE PLANS AND SPECIFICATIONS. PAYMENT OF THE GLARE SCREENS SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION SPECIAL - GLARE SCREENS AND BE CONSIDERED INCIDENTAL TO ITEM SP 622. 2

4. ALL TRAFFIC CONTROL DEVICES, DRUMS, TRAFFIC CONTROL SIGNS, FLASHING ARROW PANELS, FLAGGERS, ETC., AS SHOWN AND LOCATED ON THE MAINTENANCE OF TRAFFIC PLANS AND/OR STANDARD DRAWINGS, SHALL BE INCORPORATED FOR THE VARIOUS TYPES OF WORK AREAS UNDER NORMAL TRAFFIC CONDITIONS. IF SPECIAL TRAFFIC CONDITIONS EXIST, THE MAINTENANCE OF TRAFFIC PLANS MAY HAVE TO BE MODIFIED. HOWEVER, NO MODIFICATIONS TO THE MAINTENANCE OF TRAFFIC PLANS SHALL BE MADE UNLESS APPROVED BY THE CHIEF ENGINEER IN WRITING PRIOR TO FIELD IMPLEMENTATION.

5. THE CONTRACTOR SHALL IMMEDIATELY CORRECT ANY DEFICIENCY IN TRAFFIC ZONE ALIGNMENT, EQUIPMENT, NUMBER OF DEVICES OR PROCEDURE OF FLAG PERSONS WHICH IS BROUGHT TO HIS/HER ATTENTION BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A QUALIFIED ZONE PERSON ON THE SITE, AVAILABLE, AND IN RADIO CONTACT AT ALL TIMES WHENEVER WORK ZONE IS SET AND SUITABLY EQUIPPED TO PROPERLY MAINTAIN, REPLACE OR ADJUST ANY TRAFFIC CONTROL DEVICES.

6. ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE NEW AT THE START OF THE PROJECT.

DETOUR SIGNING

ALL WORK ZONE DEVICES REQUIRED FOR THE DETOUR ROUTES SHALL BE FURNISHED, ERECTED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. IN ADDITION ALL COSTS ASSOCIATED WITH THE TEMPORARY OVERLAYS SHOWN IN THE PLANS AND SUPPORTS SHOWN WITHIN THE PLAN SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR SP 614 - MAINTAINING TRAFFIC, AS PER PLAN, UNLESS SEPARATELY ITEMIZED.

PAYMENT FOR ALL THE WORK ASSOCIATED WITH THE DETOUR ROUTES SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR SP 614 - MAINTAINING TRAFFIC, AS PER PLAN.

SP 614 - MAINTAINING TRAFFIC, AS PER PLAN

THE REQUIREMENTS OF SP 614 - MAINTAINING TRAFFIC ARE MODIFIED AS FOLLOWS;

A. ANY TEMPORARY TRAFFIC CONTROL ZONES IMPACTING TRAFFIC AT EXIT 173 TOLL PLAZA EXIT/ENTRANCE RAMPS, SHALL USE THE APPROPRIATE TURNPIKE AND ODOT STANDARD DRAWINGS AND/OR DETAILS TO ENSURE SAFE AND CONTINUOUS TRAFFIC FLOW TO AND FROM THE PLAZA EXIT/ENTRANCE RAMPS AT ALL TIMES. ANY ADJUSTMENTS TO THE ZONE(S) SHALL BE SUBJECT TO THE APPROVAL OF THE CHIEF ENGINEER.

B. THE CONTRACTOR SHALL COVER ALL PERMANENT SIGNS, OR PORTIONS THEREOF, AS REQUIRED BY THE PLANS AND/OR AS DIRECTED BY THE CHIEF ENGINEER, INCLUDING ALL SPEED LIMIT SIGNS, THAT MAY CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNING. SIGN COVERS WILL BE FURNISHED BY THE COMMISSION. THE CONTRACTOR SHALL RETURN THE SIGN COVERS TO THE COMMISSION AT THE END OF THE CONTRACT.

C. FOR OVERHEAD SIGN(S) THAT REQUIRE COVERING, SIGN OVERLAYS SHALL BE OF THE SAME COLOR AS THE BACKGROUND OF THE SIGN AND SHALL BE HIGH INTENSITY GRADE SHEETING (TYPE G) ON 0.080 INCH THICK ALUMINUM SECURELY RIVETED TO THE SIGN FACE. ALL SIGN COVERS FOR OVERHEAD SIGNS SHALL BE FURNISHED, INSTALLED AND REMOVED BY THE CONTRACTOR. APPROPRIATE TRAFFIC CONTROL SHALL BE USED FOR INSTALLATION AND REMOVAL OF SPECIFIED OVERLAYS.

ITEM 614 - WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARD (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. 2

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. 2

ITEM 614 - MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR FOR I-77 SB RAMPS B & C)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 90 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 28 . 2

ITEM 614 - MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H14) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTIFICATION TIME TABLE IN SP 614. AT THE APPROVAL OF THE CHIEF ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLAT SHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN ONE WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H14 SIGN SHALL BE CHANGED TO "OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION".

ITEM 614 - NOTICE OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE NOTIFICATION TIME TABLE IN SP 614 TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT 4 PUBLIC INFORMATION OFFICE (PIO) AND THE DISTRICT 12 PUBLIC INFORMATION OFFICE. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE IN SP 614.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF THE CONTRACTOR PROVIDING APPROXIMATELY 100 CY OF ITEM 614-ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. THIS ITEM SHALL BE USED FOR WEDGING PURPOSES TO AID IN TRANSITIONING TRAFFIC FROM NORMAL TO FINAL SURFACE AND BACK AT THE PERTINENT TOLL/SERVICE PLAZAS FOR EACH PART OF THE CONTRACT. SMOOTH TRANSITIONS BETWEEN SURFACES SHALL BE MAINTAINED AT ALL TIMES AT TOLL/SERVICE PLAZA ACCEL/DECEL. AT NO TIME SHALL TRAFFIC BE SUBJECTED TO SUDDEN DIPS, DROPOFFS, OR BUMPS. ASPHALT WEDGING OF TRANSITION AREAS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MT-101.90. MATERIAL SUPPLIED FOR THIS ITEM SHALL COMPLY WITH THE REQUIREMENTS OF 614.13.

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

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). THE FOUR (4) SIGNS SHALL BE LOCATED NEAR THE PROJECT SITE FOR USE AS DIRECTED BY THE CHIEF ENGINEER OR AS SHOWN ON THE PLANS. 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 PREFERRED LOCATION OF PCMB SHALL BE BEHIND THE GUARDRAIL. 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 REVISE 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 ITS LOCATION ON A MAP WHICH CAN BE VIEWED REMOTELY BY THE OTIC COMMUNICATIONS CENTER. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE OTIC COMMUNICATIONS CENTER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

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

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

WHEN A PCMB IS REPLACED OR RELOCATED THE CONTRACTOR SHALL CONTACT THE OTIC 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 INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR SP 614 - MAINTAINING TRAFFIC, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

DESIGN AGENCY: T transportation engineers consultants

NO	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	JDC	1/26/18
-	-	-	-
-	-	-	-
-	-	-	-

DESIGNED JMP | DRAWN KPA | CHECKED WDB | IN CHARGE WDB

PROJECT 39-18-02B

DATE: 12/22/17

MAINTENANCE OF TRAFFIC GENERAL NOTES

23 / 80

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

160562-Gen-Notes.DWG; 1/25/18 - 11:14am

SHEET NUMBER																						ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
	18	19	20	21	22		23	24		47	48	49	51		53											
																									ROADWAY	
												23,197										202	23,197	SY	PAVEMENT REMOVED, AS PER PLAN	2
										11,998												202	11,998	FT	GUARDRAIL REMOVED, AS PER PLAN	19
										550												202	550	FT	GUARDRAIL REMOVED AND RESET, BARRIER DESIGN, AS PER PLAN	19
												759										202	759 △2	SY	CONCRETE MEDIAN REMOVED	
												260										202	260	FT	CONCRETE BARRIER REMOVED	
												5,086										203	5,086	CY	EXCAVATION	
		1,800																				203	1,800	CY	ROADWAY EXCAVATION AND EMBANKMENT	
		178																				204	178	CY	EXCAVATION	
			2,400																			204	2,400	CY	EXCAVATION OF SUBGRADE	
			2,400																			204	2,400 △2	CY	EMBANKMENT	
		227																				204	227	SY	TYPE D GEOTEXTILE, 712.09	
		227	3,600																			204	3,827	SY	SUBGRADE COMPACTION	
		27,000																				206	27,000	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP, AS PER PLAN	20
		12,000																				206	12,000	SY	CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	
		1,260																				206	1,260	TON	CEMENT	
		2,100																				206	2,100	GAL	CURING COAT, AS PER PLAN	20
		40																				206	40	HOUR	TEST ROLLING	
			500																			209	500	FT	DITCH CLEANOUT	
		8,400																				209	8,400	FT	LINEAR GRADING, AS PER PLAN	20
		360																				SP 304	360	TON	GRANULAR MATERIAL	
										10,638												606	10,638	FT	GUARDRAIL, TYPE MGS, USING LONG STEEL POSTS	
										225												606	225	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS, USING LONG STEEL POSTS	
										18												606	18	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
										1												606	1	EACH	ANCHOR ASSEMBLY, BARRIER DESIGN, MGS TYPE A	
										9												606	9	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
										7												606	7	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
										25												606	25	FT	GUARDRAIL REBUILT	
										17												SP 606A	17	EACH	ANCHOR ASSEMBLY, TYPE E (ET-31)	
										163												609	163	FT	CURB, TYPE 4-C	
												1,423										609	1,423 △1	FT	CURB, TYPE 6	
												765										609	765	SY	CONCRETE MEDIAN	
										229												622	229	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	20
										1												622	1	EACH	CONCRETE BARRIER END ANCHORAGE, REINFORCED TYPE D, AS PER PLAN	20
										1												622	1	EACH	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN	20
	42																					623	42	EACH	MONUMENT BOX RECONSTRUCTED TO GRADE	
	3																					623	3	EACH	MONUMENT ASSEMBLY REMOVED AND RESET	
										133												SP 626	133	EACH	BARRIER REFLECTOR, TYPE A	
		227																				861	227	SY	GEOGRID FOR SUBGRADE STABILIZATION, AS PER PLAN, TENSAR TRIAX 160 GEOGRID	20
																									EROSION CONTROL	
			10																			601	10	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
			10																			601	10	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
											29											601	29	SY	TIED CONCRETE BLOCK MAT, TYPE 1	
			2																			659	2	EACH	SOIL ANALYSIS TEST	
			1,250																			659	1,250	CY	TOPSOIL	
			11,200																			659	11,200	SY	SEEDING AND MULCHING	
			560																			659	560	SY	REPAIR SEEDING AND MULCHING	
			560																			659	560	SY	INTER-SEEDING	
			1.52																			659	1.52	TON	COMMERCIAL FERTILIZER	
			2.40																			659	2.40	ACRE	LIME	
			70																			659	70	M GAL	WATER	
			8,000																			832	8,000	FT	PERIMETER FILTER FABRIC FENCE	
			500																			832	500	FT	FILTER FABRIC DITCH CHECK	

DESIGN AGENCY: consultants — engineers, architects, planners

NO.	REVISIONS	BY	DATE
△1	ADDENDUM NO. 1	DLF	1/18/18
△2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-

DESIGNED: JMP | DRAWN: PSL | CHECKED: JMP | IN CHARGE: WDB

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL SUMMARY

PROJECT 39-18-02B

DATE: 12/22/17

44 / 80

OHIO TURNPIKE

160562-GEN-SUM.dwg; 1/25/18 - 11:31am

SHEET NUMBER																					ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
18	19	20	21	22		23	24		47	48	49	51		53											
																								DRAINAGE	
		50																			605	50	FT	AGGREGATE DRAIN, TYPE 1, WITH FABRIC WRAP	
		50																			605	50	FT	AGGREGATE DRAIN, TYPE 2, WITH FABRIC WRAP	
										15,600											SP 605	15,600	FT	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP (30")	
		12								1											SP 611	13	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	20
										6											SP 611	6	EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN	21
			5																		SP 611	5	EACH	CATCH BASIN ADJUSTED TO GRADE, LESS THAN 4", AS PER PLAN	21
			15							1											SP 611	16	EACH	CATCH BASIN ADJUSTED TO GRADE, 4"-12", AS PER PLAN	21
										4											SP 611	4	EACH	CATCH BASIN ADJUSTED TO GRADE, GREATER THAN 12", AS PER PLAN	21
			5								2										SP 611	5	EACH	CATCH BASIN GRATE AND CASTING, AS PER PLAN	21
										684										2	SP605	684	FT	UNDERDRAIN OUTLET PIPE	
										~~252~~											~~SP 611~~	~~252~~	~~FT~~	~~6" CONDUIT, TYPE F, 707.41~~	
										16											SP 611	16	EACH	PRECAST REINFORCED CONCRETE OUTLET	
		2																			SPECIAL	2	EACH	CATCH BASIN CLEANED	20
																								PAVEMENT	
											422										252	422	FT	FULL DEPTH PAVEMENT SAWING	
												14,420									254	14,420	SY	PAVEMENT PLANING, ASPHALT CONCRETE (2")	
												6,131									254	6,131	SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25")	
												37,645									254	37,645	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE (1")	
			1,500																		254	1,500	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE (DEPTH VARIES)	
			1,440																		254	1,440	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN	21
				1																					
			6,365																		255	6,365	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT (USING CLASS QC MS CONCRETE)	
			1,150	1																	255	1,150	SY	FULL DEPTH PAVEMENT JOINT REPAIR (USING CLASS QC MS CONCRETE)	
			15,250																		255	15,250	FT	FULL DEPTH PAVEMENT SAWING	
											5,279										SP 302	5,279	CY	ASPHALT CONCRETE BASE, PG 64-22	
				147	2						4,388										SP 304	4,535	CY	AGGREGATE BASE	
											1,034	2,856	2								SP 402	3,890	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, PG 76-22 (FR)	
			50									838									SP 403	888	CY	ASPHALT CONCRETE LEVELING COURSE, PG 76-22	
											965	2,450									SP 404	3,415	CY	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 76-22 (FR)	
											3,127	11,393									407	14,520	GAL	NON-TRACKING TACK COAT	
			31,000																		423	31,000	FT	CRACK SEALING, TYPE IV	
			14,325																		617	14,325	SY	SHOULDER PREPARATION	
			45																		617	45	M GAL	WATER	
			1,330								585										SP 617	1,915	CY	COMPACTED AGGREGATE	
			665								91										SP 627	756	CY	STONE SHOULDER PROTECTION	
			26,000																		SPECIAL	26,000	FT	ASPHALT PAVEMENT REINFORCEMENT	
																								LIGHTING	
				1																	SPECIAL	1	LUMP	MAINTAIN EXISTING LIGHTING	
																								TRAFFIC CONTROL	
				350																	SP 621	350	EACH	RAISED PAVEMENT MARKER - STIMSONITE MODEL 101 LPCR	
				9.00																	642	9.00	MILE	EDGE LINE, 6", TYPE 1	
				0.50																	642	0.50	MILE	LANE LINE, 6", TYPE 1	
				2,500																	642	2,500	FT	CHANNELIZING LINE, 12", TYPE 1	
				9																	642	9	EACH	LANE ARROW, TYPE 1	
				3																	642	3	EACH	WORD ON PAVEMENT, 72", TYPE 1	

DESIGN AGENCY: transportation consultants — engineers architects planners

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	JDC	1/18/18
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-

DESIGNED: JMP
DRAWN: PSL
CHECKED: JMP
IN CHARGE: WDB

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL SUMMARY

PROJECT 39-18-02B

DATE: 12/22/17

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OHIO TURNPIKE

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SHEET NUMBER																					ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
	18	19	20	21	22		23	24		47	48	49	51		53										
																								BRIDGE MAINTENANCE	
					440																202	440	SY	APPROACH SLAB REMOVED, AS PER PLAN	22
															100						511	100	FT	CONCRETE, MISC.: REPAIR OF RAISED MEDIAN	
															4,860						516B	4,860	FT	SEALING OF CONCRETE CONSTRUCTION JOINTS	
					440																526	440	SY	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN	22
					3,375																SP 536	3,375	SY	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	
					990																SP 536	990	SY	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS	
															18						SPECIAL	18	SY	PATCHING CONCRETE BRIDGE DECKS, TYPE B	
																								MAINTENANCE OF TRAFFIC	
							100														614	100	CY	ASPHALT CONCRETE FOR MAINTAINING PAVEMENT	
								2													614	2	EACH	WORK ZONE IMPACT ATTENUATOR FOR 24" HAZARD (UNIDIRECTIONAL)	
								13.50													SP 614B	13.50	MILE	WORK ZONE WHITE EDGE LINE, 4 INCH	
								13.50													SP 614B	13.50	MILE	WORK ZONE YELLOW EDGE LINE, 4 INCH	
								7,500													SP 614B	7,500	FT	WORK ZONE CHANNELIZING LINE, 8 INCH	
								1.50													SP 614B	1.50	MILE	WORK ZONE LANE LINE, 4 INCH	
								9.00													SP 614C	9.00	MILE	REMOVAL OF PAVEMENT MARKING	
								350													621	350	EACH	RAISED PAVEMENT MARKER REMOVED	
																					~~SP 622~~	~~1~~	~~LUMP~~	~~PARTABLE BARRIER, 32" (WITH GLARE SCREEN)~~ 2	
																					SP 622	1	LUMP	PARTABLE BARRIER, 32" (WITHOUT GLARE SCREEN)	
																								GENERAL	
																					IB,ART.6	1	LUMP	PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND	
																					SP 614	1	LUMP	MAINTAINING TRAFFIC, AS PER PLAN	23
																					SP 623	1	LUMP	CONSTRUCTION LAYOUT SURVEY	
																					624	1	LUMP	MOBILIZATION	

DESIGN AGENCY: engineers architects planners consultants

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	JDC	1/26/18

DESIGNED: JMP
DRAWN: PSL
CHECKED: JMP
IN CHARGE: WDB

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

GENERAL SUMMARY

PROJECT 39-18-02B

DATE: 12/22/17

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REFERENCE NO.	STATION		LOCATION	601	SP 605	SP 605		SP 611
				TIED CONCRETE BLOCK MAT, TYPE 1	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP (30")	UNDERDRAIN OUTLET PIPE		PRECAST REINFORCED CONCRETE OUTLET
	FROM	TO		SY	FOOT	FOOT		EACH
UD-1	20+03	22+45	RAMP C		235			
UD-2	20+03	22+45	RAMP C		237			
UD-3	20+03	21+39	RAMP C	1.8	136	55		1
UD-4	10+00	11+38	RAMP C	1.8	988	38		1
UD-5	14+85	19+95	RAMP C		988	22		
UD-6	10+00	19+95	RAMP C		988			
UD-7	8+31	9+95	RAMP C	1.8	164	46		1
UD-8	8+25	9+95	RAMP C		170			
UD-9	10+05	11+38	RAMP C	1.8	135	30		1
UD-10	26+70	7+90	CONN/RAMP C	1.8	81	10		1
UD-11	26+75	28+42	CONNECTOR	1.8	162	42		1
UD-12	105+68	106+27	RAMP B		59			
UD-13	7+92	28+42	CONN/RAMP C	1.8	254	49		1
UD-14	105+68	31+55	RAMP B/CONN		567			
UD-15	105+68	31+70	RAMP B/CONN		582			
UD-16	99+77	105+54	RAMP B	1.8	624	45		1
UD-17	99+77	105+49	RAMP B		570			
UD-18	99+77	105+45	RAMP B		546			
UD-19	96+60	99+63	RAMP B		321			
UD-20	96+60	99+63	RAMP B		301			
UD-21	96+60	99+63	RAMP B	1.8	292	44		1
UD-22	1086+20	1089+25	I-77/RAMP B		305			
UD-23	1086+20	1089+25	I-77/RAMP B		305			
UD-24	28+49	31+21	CONNECTOR		263	10		
UD-25	28+49	31+21	CONNECTOR		256	30		
UD-26	31+64	34+00	CONNECTOR		236			
UD-27	32+00	36+69	CONNECTOR		455			
UD-28	31+28	36+58	CONNECTOR		427	106		
UD-29	1089+28	1096+50	I-77/RAMP B		725			
UD-30	1089+25	1096+50	I-77/RAMP B		725			
UD-31	1089+30	1091+65	I-77/RAMP B		235			
UD-32	1089+30	1091+65	I-77/RAMP B		235			
UD-33	36+75	38+26	CONNECTOR		136	15		
UD-34	34+15	36+95	CONNECTOR	1.8	280	10		1
UD-35	33+00	37+26	CONNECTOR	1.8	426	10		1
UD-36	37+05	38+50	CONNECTOR	1.8	145	10		1
UD-37	37+30	38+70	CONNECTOR	1.8	140	10		1
UD-38	36+70	38+20	CONNECTOR		135			
UD-39	42+58	44+05	CONNECTOR		147			
UD-40	42+61	44+05	CONNECTOR		139	15		
UD-41	44+13.5	48+50	CONNECTOR		319	10		
UD-42	42+69	44+13.5	CONNECTOR		139	10		
UD-43	42+74	44+20	CONNECTOR		141	10		
UD-44	42+77	44+20	CONNECTOR	1.8	133	10		1
UD-45	44+05	44+98	CONNECTOR	1.8	83	10		1
UD-46	44+05	44+98	CONNECTOR		88	15		
UD-47	44+20	45+63	CONNECTOR	1.8	133	10		1
UD-48	44+20	45+63	CONNECTOR		138	12		
UD-49	37+68		CONNECTOR		70			
UD-50	43+25		CONNECTOR		70			
UD-51	31+29	33+00	CONNECTOR		171			
TOTALS CARRIED TO GENERAL SUMMARY				29	15,600	684		16

SHALLOW PIPE UNDERDRAIN NOTE(S):

1. CONTRACTOR SHALL INSTALL NEW SHALLOW PIPE UNDERDRAINS, WITHIN ROADWAY LIMITS, IN SAME LOCATION AND AT THE DEPTH SPECIFIED IN THE PLANS.
2. DURING INSTALLATION OF NEW SHALLOW PIPE UNDERDRAIN, CONTRACTOR WILL ENCOUNTER EXISTING SHALLOW PIPE UNDERDRAIN AT PROPOSED LOCATION. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING SHALLOW PIPE UNDERDRAIN EITHER PRIOR TO OR DURING THE INSTALLATION OF THE NEW SHALLOW PIPE UNDERDRAIN. ALL DEBRIS GENERATED BY THE REMOVAL PROCESS, INCLUDING BUT NOT LIMITED TO THE PIPE ITSELF, SHALL BE DISPOSED OF IN ACCORDANCE WITH SP 105.
3. PROPOSED SHALLOW PIPE UNDERDRAIN SHALL INCLUDE ALL INCIDENTALS, INCLUDING BUT NOT LIMITED TO, PIPE BENDS, ANGLES AND CONNECTION PIECES, NEEDED TO COMPLETE THE WORK AS SPECIFIED IN THE PLANS.
4. PROPOSED UNDERDRAINS THAT CROSS THE CONNECTOR RAMP SHALL BE INSTALLED PART WIDTH. CONTRACTOR TO PLAN OPERATIONS ACCORDINGLY.

REFERENCE NO.	STATION		LOCATION	SP 611			
				MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	INLET RECONSTRUCTED TO GRADE, AS PER PLAN	CATCH BASIN, ADJUSTED TO GRADE, 4"-12", AS PER PLAN	CATCH BASIN, ADJUSTED TO GRADE, GREATER THAN 12", AS PER PLAN
	FROM	TO		EACH	EACH	EACH	EACH
D-3	42+71	43+47	CONN.		1		
D-4	43+47	44+13.5	CONN.		1		
D-5	44+13.5	45+25	CONN.		1		
D-6	44+05	44+13.5	CONN.				1
D-7	44+13.5	44+20	CONN.				
D-8	44+20		CONN.			1	
D-9	37+04	37+34	CONN.				1
D-10	36+70	37+04	CONN.		1		
D-11	36+70		CONN.				1
D-12	33+00	34+18.4	CONN.				
D-13	31+28	33+00	CONN.				
D-14	28+49	31+28	CONN.				
D-15	26+75	27+85	CONN.				
D-15A	27+85	28+49	CONN.				
D-16	26+75	7+50	CONN./RAMP C				
D-17	33+00		CONN.	1			
D-18	32+00	31+31.4	CONN.				
D-19	31+31.4		CONN.		1		
D-20	31+28		CONN.				1
D-21	28+51.4		CONN.		1		
D-22	27+85		CONN.				
D-23	8+21.5		RAMP C				
TOTALS CARRIED TO GENERAL SUMMARY				1	6	1	4

DRAINAGE NOTE(S):

1.- GENERAL INFORMATION ON EXISTING DRAINAGE STRUCTURES PROVIDED FOR INFORMATION. ALL EXISTING CONDITIONS TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING ANY WORK. THESE ITEMS ARE TO REMAIN IN PLACE.
2.- CONTRACTOR TO MATCH EXISTING GRADES AND ENSURE THAT FINAL PAVEMENT SURFACE DRAINS TO DRAINAGE STRUCTURE. ALL SURVEY WORK NEEDED SHALL BE CONSIDERED INCIDENTAL TO SP 623. FOR ADDITIONAL INFORMATION, SEE REFERENCE AND INFORMATION SHEETS.

SEE 39-18-02A SHEET 584 OF 727 FOR UNDERDRAIN DETAILS

DESIGN AGENCY

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-
-	-	-	-
-	-	-	-

DESIGNED JMP | CHECKED JMP | DRAWN PSL | IN CHARGE WDB

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

SUBSUMMARIES AND MISCELLANEOUS NOTES

PROJECT 39-18-02B

DATE: 12/22/17

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OHIO TURNPIKE

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MAINLINE STATION TO STATION		SIDE	LENGTH	PAVEMENT WIDTH (AVG)	GRADED SHOULDER WIDTH (AVG)	SURFACE AREA	AREA BY COMPUTER	202	202	202	252	203	SP 302	SP 304		SP 402	SP 404	SP 407		SP 609	609	622	622	622	SP 617	SP 627
								PAVEMENT REMOVED, AS PER PLAN	CONCRETE MEDIAN REMOVED	CONCRETE BARRIER REMOVED	FULL DEPTH PAVEMENT SAWING	EXCAVATION (T=6"+/- MAINLINE PAVT. T=3"+/- SHOULDERS W/ GR T=6"+/- SHOULDER W/OUT GR T=13"+/- UNDER CONCRETE MEDIAN)	ASPHALT CONCRETE BASE, PG64-22 (8")	AGGREGATE BASE (6")	AGGREGATE BASE (15")		ASPHALT CONCRETE INTERMEDIATE COURSE, PG76-22 (FR) (1-3/4")	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG76-22 (FR) (1-1/2")	NON - TRACKING TACK COAT (APPLIED @ 0.06 GAL./S.Y.)	NON - TRACKING TACK COAT (APPLIED @ 0.075 GAL./S.Y.)	CURB, TYPE 6	10" CONCRETE MEDIAN	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	CONCRETE BARRIER END ANCHORAGE, REINFORCED TYPE D, AS PER PLAN	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN	COMPACTED AGGREGATE (T=6") (WITHOUT GUARDRAIL)	STONE SHOULDER PROTECTION (T=3") (WITH GUARDRAIL)
			FT	FT	FT	SF	SF	SY	SY	FT	FT	CY	CY	CY	CY	CY	CY	GAL	GAL	FT	SY	FT	EACH	EACH	CY	CY
RAMP C																										
07+33.52	14+82.44		748.9	34.00	5.00	32953		2,829				675	647	499		146	118	170	212						107	10
14+82.44	21+38.77		656.3	34.00	5.00	22316		2,479			34	591	567	438		128	103	149	186						122	
RAMP B																										
1089+25.00	1090+84.15	SB	159.1	22.00	5.00	796		389				71	90	71		31	16	23	29	41					12	2
1090+84.15	1092+53.81	SB	169.7	33.50	5.00	5684		650				112	145	112		33	26	38	47	162						8
1092+53.81	1096+55.43	SB	401.6	22.00	5.00	2009		982				178	228	178		78	41	59	74						38	
96+55.43	106+27.10	SB	971.7	34.00	5.00	33037		3,671			34	876	840	648		189	153	220	275						158	6
CONNECTOR RAMP																										
26+46.89	38+45.68		1198.8	67.00	5.00	5994		8,924	466			1,813	2,013	1,532	195	233	372	535	669	907	467				126	49
42+68.07	43+77.99		109.9	67.00	5.00	7365		818	43			166	185	140	18	21	34	49	61	218	43					11
43+77.99	44+99.18	LT	121.2	23.50	5.00	606		330	47			86	73	57	20	24	13	19	24	39	48				8	3
43+77.99	45+63.71	RT	185.7	23.50	5.00	4365		485	72			131	112	88	31	36	20	29	36	56	73				14	2
44+99.18	45+86.77	LT	87.6	34.50	5.00	2945	2945	336	34			80	77	59	15	17	14	20	25		35					
45+63.71	46+34.15	RT	70.4	34.50	5.00	2195	2195	270	27			64	62	48	12	14	11	16	20		28					
45+86.77	47+00.00	LT	113.2	34.50	5.00	2350	2350	434	44		35	103	99	77	19	22	18	26	33		45					
46+34.15	47+00.00	RT	65.9	34.50	5.00	1270	1270	252	26		35	60	58	45	11	13	11	15	19		26					
RAMP D																										
1088+85.0	1091+45.0		260.0	12.00		3120		347		260	284	80	83	77		51	14	21	26			229	1	1		
TOTALS CARRIED TO GENERAL SUMMARY								23,197	759	260	422	5,086	5,279	4,388		1,034	965	3,127		1,423	765	229	1	1	585	91

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	DLF	1/26/18
-	-	-	-
-	-	-	-

DESIGNED JMP
DRAWN PSL
CHECKED JMP
IN CHARGE WDB

DESIGN AGENCY

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

PAVEMENT SUBSUMMARY

PROJECT 39-18-02B
DATE: 12/22/17

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OHIO TURNPIKE

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