

## OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

## **ADDENDUM NO. 1**

## 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 19, 2018

## **MODIFICATIONS TO THE CONTRACT DOCUMENTS**

Plan Sheets: 39-18-02A - 38, 39, 56, 64, 66, 199, 208, 376, 378, 381, 428, 434, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697 and 698 of 727 39-18-02B - 21, 44 and 45 of 80

Special Provisions: SP 605

Bid Schedule of Items and Estimated Quantities Worksheet Ref. Nos. 17, 160A, 160B, 160C, 197, 348, 388, 388A, 389

Issued by the Ohio Turnpike and Infrastructure Commission on January 19, 2018 by Anthony D. Yacobucci, Chief Engineer, and Mark R. Musson, Director of Contracts Administration.

9-18 Anthony D. Yacobucci Date

fill

Mark R. Musson

Date

## ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 PM ON JANUARY 19, 2018:

- Q#1 We were wondering if there will be any type of deflection testing performed by a Falling Weight Deflectometer (FWD) for this project.
- A#1 No.
- Q#2 Is there a way to obtain a bid item list and plan holders list for this project without signing up with bid express?
- A#2 There is no cost to look at the plans, planholders list and estimated quantities through BidExpress.

# Q#3 In the contract documents, sheet OTIC-NB-1 shows a blank for the SBE goal. Is there no SBE goal or will OTIC provide what the SBE goal is?

A#3 Per the published notice, the applicable goal is 10%. The Notice to Bidders in BidExpress is modified accordingly.

## Q#4 OTIC bid form has bid items 158-160 repeated by bid item number, please get this corrected.

A#4 Yes, this Addendum No. 1 revised the duplicated bid items to Ref. No. 160A, Ref. No. 160B and Ref. No. 160C, respectively.

# Q#5 Bid item 147- 837 Backfill for Liner Pipe- this is listed in the proposal as by the linear foot. Normally this is paid by the cubic yard. Is this unit of measure correct?

- A#5 Yes, linear foot is correct. ODOT Supplemental Specification 837 Liner Pipe specifies Item 837 - Backfill for Liner Pipe to be paid using a per "Foot" unit of measure.
- Q#6 In the 39-18-02B portion of the plans there is 7,185 SY of "ITEM 255-FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT (USING RAPID REPAIR CONCRETE MIX MATERIAL)". The plan note regarding this item is found on page 21 of 80 and indicates that this item is set up as a contingency. Additionally, pages 41 to 43 depict shaded areas notes as "LIMITS OF POTENTIAL FULL DEPTH CONCRETE REPAIRS AND JOINT REPAIRS". These shaded areas when measured add up to approximately 6,150 SY, which would be approximately 85% of the total quantity of FULL DEPTH REPAIRS. Is it the owners intent to completely remove and replace the existing concrete pavement in the areas shaded? It makes a big difference in unit cost if these large areas are being completely removed and replaced, or if only separate individual joint repairs are being performed within the shaded areas (which affects number of dowels required, amount of baskets required, and amount of intermediate saw cuts are required as

# well as how traffic control will be handled). Please review this and provide more concise information on how this item is to be performed.

A#6 Full depth concrete repairs will be required throughout the entire TP 173 Interchange between the Toll Plaza and I-77. The shaded areas show where a majority of full depth repairs have been identified, however many of the isolated joint repairs could not be shown in the plans. At the beginning of the 2018 Construction Season, the Construction Manager will mark out all the full depth replacements and itemize the quantities for the Contractor.

This Addendum No. 1 revises the "PAVEMENT REPAIRS" General Note on Plan Sheet 21 of 80 to define "Full Depth Pavement Removal and Regid Replacement" and "Full Depth Pavement Joint Repair." The General Note also now provides seperate quantities for Item 255 – Full Depth Pavement Removal and Rigid Replacement (using Class QC MS Concrete) and Item 255 – Full Depth Pavement Joint Repair (using Class QC MS Concrete), and the concrete type has been changed from Rapid Repair Concrete to Class QC MS Concrete. The quantities have been added and/or revised on Plan Sheets 21 and 45 of 80 and Ref. Nos. 388, 388A and 389 on the Bid Schedule and Estimated Quantities Worksheet.

The General Note "TOLL PLAZA MP 173 RAMP REHABILITATION OPERATIONS" on Plan Sheet 24 of 80 limits the maximum length of any full depth repair to 60 feet or less at any one location, at any time, in order to use drums for MOT operations. With this in mind, any one full depth repair can range from a minimum of 6 feet for a joint repair to a maximum of 60 feet in length, at any specific location, on a partial width basis.

- Q#7 Please review reference #'s 158-159-160, they are used twice.
- A#7 See the response to Q#4.
- Q#8 Bid item 1340 Catch Basin #CB-1: 2 of the 5 basins do not have top of grate and invert information provided as was provided with the other 3 basins in the profile drawings. Please provide this information.
- A#8 This Addendum No. 1 revises the catch basin information by adding the top of grate and invert elevation to Plan Sheets 428 and 434 of 727.

# Q#9 Bid item #137, Catch Basin, #2-4 as per plan: subsummary on sheet 376 says to refer to plan sheet 37 to clarify "As Per Plan" note.

A#9 The "Catch Basin No 2-4, As Per Plan" General Note is located on Plan Sheet 38 of 727. This Addendum No. 1 revises the General Summary on Plan Sheet 378 of 727 and Ref. No. for "Catch Basin No 2-4, As Per Plan" to reference Plan Sheet No. 38.

- Q#10 Culvert Pipe Liner: Would OH Turnpike Commission add as an alternate Profile Wall HDPE Pipe meeting ODOT 707.35 on the above mentioned project? Profile Wall HDPE Pipe has been used as recently as last year on Turnpike Culvert Liner Pipes?
- A#10 Yes, this Addendum No. 1 revises the gereral note ITEM 837 LINER PIPE, AS PER PLAN on Plan Sheet 38 of 727 to include the ODOT 707.35 material.
- Q#11 The part B bid form for Project No. 39-18-02 lists the quantity for "609-CONCRETE MEDIAN" as 765 FT. The sub summary on page 49 of 80 lists the unit of measure in SY (Square Yards). It appears 765 SY would be correct, not 765 FT. Please clarify.
- A#11 Correct, the unit of measure for Item 609 Concrete Median is Square Yards. This Addendum No. 1 revises the General Summary Plan Sheet No. 44 of 80 and Reference No. 349 on the Bid Form and Estimated Quantities Worksheeet to specify SY as the unit of measure.
- Q#12 Plan sheet 581 shows an existing counterfort wall between the existing headwall and the existing dissipator wall (both which are to be removed). Please provide an existing cross-sectional detail of this wall.
- *A#12* The existing counterfort is approximately 7' long (by survey) 6' high and 12" thick (estimated).
- Q#13 In order for the 833 items to be quoted as resin based liner, the elevations of the culverts as compared to the elevations of the above highway must be known. This way a structural liner thickness can be engineered to successfully handle the above loads. Can this information be provided?
- *A#13* The approximate maximum depth of cover, measured from the surface to the crown of the culvert in both the EB and WB directions, are as follows:

Culvert MP 171.92 - 87" x 63" WB Cover = 8.6' +/-EB Cover = 8.3' +/-Culvert MP 173.99 - 65" x 40" and 64" x 43" WB Cover = 4.7' +/-EB Cover = 6.2' +/-Culvert MP 173.99 - 66" Dia. WB Cover = 45' +/-EB Cover = 11.5' +/-

- Q#14 Part 2 MOT notes give suggested sequences of operations for ramp work at the IR-77/SR-21 interchange but nowhere is it mentioned which construction season and/or any matchup with specific phases of Part 1 mainline MOT. Please verify if there are any restrictions and conditions or if part 2 work can take place anytime in the time duration of the contract.
- A#14 All 39-18-02 Part B Work shall be completed before the end of the 2018 construction season in accordance with SP 103 (D through H). The Ohio Turnpike and Infrastructure Commission has also obtained the necessary right of way permits from ODOT Districts 4 and 12 to complete the work on several of ODOT Ramps within this Toll Plaza, and all permitted work must be completed by the end of 2018.
- Q#15 SP605 specification for underdrains allows #8 limestone or gravel as granular backfill material. Underdrain details on plan sheet 584 show only "crushed carbonate stone" (limestone). Which of these prevails in regards to granular backfill material?
- A#15 The Granual backfill shall be Crushed Carbonate Stone only. This Addendum No. 1 deletes "or gravel" from Section A. of SP 605.
- Q#16 Bid item 17- Concrete Barrier Removed: plan sheet 381, reference R-85 calls out 17' for removal on sheet 447. The existing D-wall on the WB side under Black Road bridge is much longer than 17', and the quantity for new 622 D-Wall is much greater than 17'. Please review this and revise the quantity if and as needed.
- A#16 Correct, this Addendum No. 1 revises Item 202 CONCRETE BARRIER REMOVED to 72 FT. The quantity has been modified on Plan Sheets 376 and 381 of 727 and Ref. No. 17 on the Bid Schedule and Estimated Quantities Worksheet.
- Q#17 Bid item 109, SP 605- 6" Underdrain Pipe: There are over 20 locations on the westbound inside where these are called for to connect new underdrains to proposed outlets or existing barrier-style catch basins. These cross existing third lane pavement and/or existing inside shoulder pavement which are not scheduled to be rebuilt from station 48+50 through 223+71. Please provide a detail for restoration of existing affected pavements as well as pay quantities for selected pay items due to this unique situation (as compared to other pavement rebuild projects).
- A#17 Please see the General Note on Plan Sheet 38 of 727 providing for the requested quantities in the "PAVEMENT RESTORATION FOR UNDERDRAIN PIPE INSTALLATION."
- Q#18 Please review the approach slab removed items 13-16 (approach slabs removed types 1 -4) as per plan notes on plan sheet 33 and the notes specifying the type of removal on plan sheets 688-698. None of the removal pay items specified on sheets 688-698 seem to match

the notes on sheet 33 for the work that is required to be completed. Plan sheets 696 & 697 do not specify which item to pay the removal under. Please review the quantities for pay items 13-16 as well and revise as needed.

- A#18 This Addendum No. 1 revises the removal pay items specified on Plan Sheet 688 to 698 of 727 to match the notes on Plan Sheet 33 of 727. The quantities for Ref. No. 13 through 16 are correct.
- Q#19 MOT general note plan sheet 39 under phase 2, second to last paragraph: this phase allows the contractor to replace the eastbound approach slab at the west end of the Cuyahoga River bridge (MP 175.95, station 255+65) in 2 phases totaling 60 days. The zone is detailed on plan sheets 197 and 206 showing portable barrier protecting this work area. There is also another approach slab which is to be replaced on the east end of the bridge around station 288+50. There are no MOT notes specific to when this is to be replaced and the same phase 2 MOT scheme doesn't show portable barrier protecting this approach slab. Please review the MOT notes and plans and specify zone work, timeframes, and details for this east-end approach slab replacement at the eastbound side of the Cuyahoga River bridge.
- A#19 This Addendum No. 1 revises Plan Sheets 39, 56, 64, 199 and 208 of 727 to detail the work zone to replace the approach slab at MP 177.47 (STA 288+33) and the adjustes the quantity accordingly for Ref. No. 197 of the Bid Form and Estimated Quantities Worksheet.
- Q#20 There are bridge approach slabs which are to be removed and replaced full width on the eastbound side within the reconstruction limits (over IR-77 ramps, over IR-77, and over IR-271). Phase 6 shows that reconstruction of the outside two lanes and shoulder for the approaches can be performed then but there is no phase designation or plan details for reconstructing the third lane and median shoulder for these approaches. Please provide information when the inside phase of this work on the eastbound side can be performed.
- A#20 This Addendum No. 1 revises Plan Sheets 39, 56, and 66 of 727 to revise the sequence of construction, and include the anticipated quantities for Work Zone Impact Attenuators and 32" Portable Barrier (without Glare Screen) required for this Work in Reference No. 197 of the Bid Form and Estimated Quantities Worksheet. The Contractor shall replace the eastbound approach slabs, within the limits of the inside shoulder and inside lane at the mainline bridges over the I-77 ramps, I-77 and I-271 during Phase 3. Traffic shall be maintained as per TCR-14 near these structures.
- Q#21 Will OTIC please make available plans from past construction projects related to this corridor including (but not limited to) third lane construction, structure improvements, and interchange improvements?
- *A#21 Yes, the requested plans are provided with this Addendum #1.*

- Q#22 The MOT Project Construction Phasing Intent Note page 39/727 makes several references of phasing to perform temporary patching of bridge decks. I can find know other mention of this work in the plans, or a pay item to be paid for this item. If this work is required please supply information as to what a temporary patch is and how it will be paid for.
- A#22 This Addendum No. 1 revises Plan Sheet 39 of 727 to clarify the Work contemplated under Phases 2 and 5.

## MODIFIED CONTRACT DOCUMENTS

With this Addendum No. 1, the Commission substitutes the enclosed material for the following Contract Documents:

Plan Sheets:

39-18-02A: 38, 39, 56, 64, 66, 199, 208, 376, 378, 381, 428, 434, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697 and 698 of 727, and

39-18-02B: 21, 44 and 45 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-605 with deletions depicted with struckthrough text.

With this Addendum No. 1, the Commission modifies the Bid Schedule of Items for the following Reference Numbers: 17, 160A, 160B, 160C, 197, 348, 388, 388A, 389

Receipt of Addendum No. 1 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. 1 WITH THEIR BID.**

## SP 605 UNDERDRAINS

(<del>12-21-2017</del>**01-16-2018**)

Section 605 of the Specifications is amended as follows:

A. <u>605.02 Material</u>

Replace the first paragraph of 605.02 with the following:

Concrete, Class QC-Misc499	9 and 511
Reinforcing steel	509.02
Filter fabric, Type A	712.09

Backfill unclassified pipe underdrains, shallow pipe underdrains, deep pipe underdrains, base pipe underdrains, or rock cut underdrains with or without a filter fabric, construction underdrains and aggregate drains with granular material consisting of durable No. 8 Crushed Carbonate Stone (CCS)-or gravel. Use granular material with a maximum sodium sulfate soundness loss of 15 percent.

B. <u>605.02 (B.) Pipe for 605</u> Replace 605.02 (B.) with the following:

## C. <u>605.03 Pipe Underdrains Construction</u> Replace the third paragraph of 605.03 (A.) with the following:

When Rock is encountered during underdrain installation, the Chief Engineer shall be notified so that the Chief Engineer can decide whether the underdrain depths are to be maintained per plan or the underdrain depths are raised. The Underdrain Rock Excavation quantity will be field measured in Cubic Yards the payment shall be the difference or the loss in production to excavate rock instead of soil. The Contactor shall be paid for the actual Linear Feet of Underdrain installed plus the actual (Field Measured) Cubic Yards of Rock Excavation as determined by the Engineer in the field. This Underdrain Rock Excavation Pay Item shall also include the required method to remove the rock in order to install SP 605 and for the disposal of the rock material removed.

## D. <u>605.06 Underdrain Outlets</u>

Add the following paragraph after the first paragraph of this section:

The 6" Underdrain Outlet Pipe shall be constructed as detailed in the plans and there shall be no change in pipe size for the outlet. The aggregate with filter fabric for the outlet pipe shall be durable No. 8 or No. 57 size crushed carbonate stone in accordance with Section 703.01 of the Specifications. Under the pavement, the granular material shall be backfill the full width of the trench and to the full height of the trench. Outside of the pavement, the granular material shall be a backfill the full width of the trench. The remaining depth of the trench shall be backfilled with suitable embankment material according to Item 203 to a minimum depth of six (6") inches. When there is a conflict between the

## SPECIAL PROVISIONS

trench depth and the Item 203 depth, the item 203 minimum depth shall be used.

- E. <u>605.07 Aggregate Drains</u> Replace 605.07 with the following:
  - (1.) <u>Excavation</u>

Trenches for aggregate drains shall be excavated to the width and depth and at the locations shown on the Plans. The bottom of the trench adjacent to the concrete pavement shall generally follow the grade of the bottom of the slab, except that a uniform grade shall be provided between outlet trenches. Outlet trenches shall slope as shown on the Plans. The bottom of all trenches shall be free from loose particles of soil. The trenches shall be excavated so as to make a clean exposure of the granular pavement courses to be drained.

(2.) <u>Placing and Backfilling</u>

Aggregate for the drains shall be durable No. 57 size crushed carbonate stone in accordance with Section 703.01 of the Specifications. The remaining depth of the trench shall be backfilled with suitable embankment material according to Item 203. The aggregate shall be placed to the dimensions shown on the Plans.

F. <u>605.09 Basis of Payment</u> Replace 605.09 with the following:

Payment shall be made under:

<u>ltem</u>	<u>Unit</u>	Description
SP 605	Lin. Ft.	6" Shallow Pipe Underdrain, with Fabric Wrap (Depth)
SP 605	Lin. Ft.	6" Unclassified Pipe Underdrain, with Fabric Wrap (Depth)
SP 605	Lin. Ft.	6" Base Pipe Underdrain, with Fabric Wrap (Depth)
SP 605	Lin. Ft.	6" Deep Pipe Underdrain, with Fabric Wrap (Depth)
SP 605	Lin. Ft.	6" Underdrain Outlet Pipe
SP 605	C.Y.	Underdrain Rock Excavation
SP 605	Lin. Ft.	Aggregate Drain, Type I, with Fabric Wrap
SP 605	Lin. Ft.	Aggregate Drain, Type II, with Fabric Wrap
SP 605	Lin. Ft.	Aggregate Drain, Type I
SP 605	Lin. Ft.	Aggregate Drain, Type II

#### 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 707.35, 707.42 OR SS938

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 I INER 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.

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#### 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 ARFAS

#### 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

#### 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	<u>15,000 LBS</u>
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#### 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 - EULL 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

<u>50 CY</u>

## PAVEMENT RESTORATION FOR APPROACH SLAB TYPE A INSTALLATION

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT 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.

SP 302 - ASPHALT CONCRETE BASE, F	PG64-22 (13") (SHOULDER)	13 CY
SP 302 - ASPHALT CONCRETE BASE, F	PG64-22 (13")	22 CY

#### 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")

SP 402 - ASPHALT CONCRETE INTERN CONCRETE INTERMEDIATE CO SP 302 - ASPHALT CONCRETE BASE SP 304 - AGGREGATE BASE (9") (SHO ITEM 407 - NON-TRACKING TACK COA (APPLIED @ 0.06 GAL /SY)

ITEM 407 - NON-TRACKING TACK COA

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 SP 617 - COMPACTED AGGREGATE ITEM 617 - WATER SP 627 - STONE SHOULDER PROTEC

#### RESURFACING AT APPROACH SLABS

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 I ITEM SP 202B-CRACK REPAIR, 1" OR I ITEM SP 202B-CRACK REPAIR. WIDER USING ITEM SP 404 (PG 64-22)

ITEM SP 202B-CRACK REPAIR, WIDER USING ITEM SP 402 (PG 64-22)

ITEM SP 202B-3 CORNER CRACK REP ITEM SP 202B-REPAIR EXISTING EXPANSION JOINT, USING ITEM SP 404 (PG 64-22) 20 CY

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MEDIATE COURSE OR RECYCLED ASPHALT	<u> </u>
DURSE, PG64-22 (1-3/4")	10 CY
PG64-22 (8") (SHOULDER)	<u>45</u> CY
DULDER)	<u>50</u> CY
AT FOR INTERMEDIATE COURSE	
	<u>109</u> GAL
AT ( APPLIED @ 0.075 GAL /SY)	136 GAL

a cv

v	<u>9,100 SY</u>
	<u>760 CY</u>
	25 MGAL
TION	<u>380 CY</u>

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

ESS, USING SAND ASPHALT	20 CY
ESS, USING HOT JOINT SEALER	3,000 GAL
THAN 1" AND LESS THAN 1" IN DEPTH,	
	20 CY
THAN 1" AND GREATER THAN 1" IN DEPTH,	
	<u>20 CY</u>
AIR, USING ITEM SP 402 (PG 64-22)	<u>20 CY</u>

(			DESIGNED	CHECKED	.ON	REVISIONS	BY DATE	DESIGN AGENCY	
3	PRUJECI 39-18-02A	GENERAL NOTES	JMP	JMP	$\forall$	ADDENDUM NO. 1	JDC 1/18/18		
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OHIO	OHIO TUF	RUPIKE AND INFRAST			N N		MISS		4 IO
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## MOT PROJECT CONSTRUCTION PHASING INTENT NOTE

#### SEQUENCE OF CONSTRUCTION

THE INTENT OF THIS PROJECT IS TO RECONSTRUCT THE PAVEMENT OF THE OUTSIDE TWO (2) LANES AND OUTSIDE SHOULDER OF BOTH EASTBOUND AND WESTBOUND TRAFFIC ON THE OHIO TURNPIKE (I.R. 80) BETWEEN MILE POSTS 169.74 AND 176.34 ALONG WITH THE FULL RECONSTRUCTION OF THE WESTBOUND INSIDE LANE FROM MP 173.3 TO MP 176.34 WHILE MAINTAINING TWO (2) LANES OF TRAFFIC N EACH DIRECTION AT ALL TIMES.

EASTBOUND AND WESTBOUND TURNPIKE PAVEMENT REPLACEMENT WILL REQUIRE SEVERAL PHASES AS DETAILED ON THE M.O.T. PLAN SHEETS.

NHENEVER CROSSOVERS ARE USED FOR MAINTAINING TRAFFIC, THE CONTRACTOR SHALL MAINTAIN OTIC STANDARD CONSTRUCTION CLEARANCES AND A WORK ZONE LIGHTING SYSTEM AS PER O.D.O.T. TANDARD CONSTRUCTION DRAWING MT-100.00 SHALL BE INSTALLED. EACH CROSSOVER LIGHTING SYSTEM SHALL BE PAID FOR SEPARATELY UNDER ITEM 614 - WORK ZONE CROSSOVER LIGHTING SYSTEM.

THE FOLLOWING IS A BRIEF OUTLINE OF THE PROJECT CONSTRUCTION PHASING FOR THIS PROJECT:

#### PRE-PHASE 1 (2018):

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THE CONTRACTOR SHALL COMPLETE THE WORK REQUIRED TO REHABILIATE AND ESTABLISH THE MEDIAN CROSSOVER LOCATED BEYOND THE WEST END OF THE PROJECT AND IS REQUIRED FOR THE CONTRA FLOW TRAFFIC PATTERN. THE CONTRACTOR SHALL CONSTRUCT THIS PROPOSED MEDIAN CROSSOVER AT MP 168.80 DURING THIS PHASE.

THE CONTRACTOR SHALL PERFORM THE MILLING AND FILLING OF THE EXISTING SNAPS ALONG THE WESTBOUND OUTSIDE SHOULDER FROM MP 171.82 (STA. 971+00) TO MP 176.55 (STA. 235+00). THE CONTRACTOR SHALL ALSO PERFORM ANY REQUIRED MILLING AND FILLING OF EXISTING SNAPS ALONG THE WESTBOUND AND THE EASTBOUND OUTSIDE SHOULDERS NEAR THE ENTRANCE AND EXIT RAMPS TO GREAT LAKES AND TOWPATH SERVICE PLAZAS ALONG WITH THE ENTRANCE AND EXIT RAMPS TO TOLL PLAZA/EXIT 173. TRAFFIC WILL BE MAINTAINED AS PER THE APPROPRIATE OTIC STANDARD DRAWING. SEE PERMITTED CONSTRUCTION SEQUENCE GENERAL NOTE ON SHEET 40.)

THE CONTRACTOR SHALL RESURFACE THE INSIDE THIRD LANE AND SHOULDER FROM MP 169.10 (STA 831+00) TO MP 176.34 (STA, 223+71.59) IN THE EASTBOUND DIRECTION, THE CONTRACTOR SHALL ALSO RESURFACE THE INSIDE 3RD LANE AND SHOULDER FROM MP 169,10 (STA. 831+00) TO MP 172.02 (STA. 984+50) IN THE WESTBOUND DIRECTION PRIOR TO THE START OF PHASE 1 OPERATIONS. THE CONTRACTOR SHALL NOT INSTALL SNAPS AFTER THESE RESURFACING OPERATIONS DUE TO FUTURE MAINTENANCE OF TRAFFIC OPERATIONS. TRAFFIC WILL BE MAINTAINED AS PER THE APPROPRIATE OTIC TANDARD DRAWING. (SEE PERMITTED CONSTRUCTION SEQUENCE GENERAL NOTE ON SHEET 40.)

THE REPLACEMENT OF THESE SNAPS SHALL BE AT THE DIRECTION OF THE CHIEF ENGINEER DURING A SUBSEQUENT MAINTENANCE OF TRAFFIC PHASE OF THIS PROJECT.

THE CONTRACTOR MAY ALSO REPLACE ANY SECTIONS OF EXISTING MEDIAN BARRIER, MEDIAN GUARDRAIL. AND COMPLETE THE REHABILITATION OF THE EXISTING MEDIAN INLETS FROM MP 169.74 TO MP 176.34 IN THE EASTBOUND AND WESTBOUND DIRECTION DURING THIS PHASE OF CONSTRUCTION.

THE CONTRACTOR SHALL NOT HAVE OPPOSING LANE CLOSURES ADJACENT TO EACH OTHER DURING THIS PHASE AND SHALL PLAN HIS/HER OPERATIONS ACCORDINGLY TO AVOID THIS SITUATION. INTERNAL RAFFIC SHIFTS, AS PER THE APPROPRIATE OTIC STANDARD DRAWINGS, MAY BE REQUIRED TO COMPLETE THE WORK IN THIS PHASE.

#### PHASE 1 (2018):

THE PHASE 1 MAINTENANCE OF TRAFFIC DETAILS OUTLINE THE WORK REQUIRED TO CONSTRUCT THE TEMPORARY PAVEMENT IN THE WESTBOUND DIRECTION AT THE GREAT LAKES SERVICE PLAZA RAMPS. THE PHASE 1 MAINTENANCE OF TRAFFIC DETAILS ALSO OUTLINE THE WORK REQUIRED TO CONSTRUCT THE TEMPORARY PAVEMENT IN THE EASTBOUND DIRECTION AT THE TOWPATH SERVICE PLAZA RAMPS AND THE EASTBOUND RAMPS TO THE TOLL PLAZA/EXIT 173 AS REQUIRED FOR SUBSEQUENT MAINTENANCE OF TRAFFIC OPERATIONS. THE CONTRACTOR SHALL SCHEDULE THE RAMP GORE REHABILITATION WORK AND TEMPORARY PAVEMENT OPERATIONS SO THAT A DROPOFF OF GREATER THAN 3 INCHES DOES NOT REMAIN AT THE END OF EACH WORK DAY.

THE CONTRACTOR SHALL ALSO PERFORM THE WORK TO REMOVE THE EXISTING SLAG FROM MP 172.02 (STA. 984+50) TO MP 173.81 (STA. 37+75) ALONG THE WESTBOUND INSIDE THIRD LANE AND MEDIAN SHOULDER ÓURING THIS PHASE.

#### PHASE 2 (2018):

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THE PHASE 2 MAINTNENANCE OF TRAFFIC DETAILS OUTLINE THE WORK REQUIRED TO RECONSTRUCT THE WESTBOUND THIRD LANE FROM MP 173.30 (STA. 62+17) TO MP 176.34 (STA. 223+71.59) ALONG THE RESURFACING OF THE WESTBOUND INSIDE SHOULDER FROM MP 172.82 (STA. 37+75) TO MP 176.34 (STA. 223+71.59)

THE CONTRACTOR SHALL ALSO RESURFACE THE ENTIRE WESTBOUND AND EASTBOUND PAVEMENT FROM MP 176 34 (STA 223+71 59) TO MP 178 05 (STA 319+60) THE CONTRACTOR SHALL NOT PERFORM THIS RESURFACING WORK UNTIL AFTER THE MEDAIN CRÓSSOVERS AT THE EAST OF THE PROJECT NEAR MP 176.55 HAS BEEN CONSTRUCTED DUE THE INSIDE SHOULDER WORK REQUIRED TO INSTALL THIS CROSSOVER. THIS CROSSOVER AT MP 176.55 WILL REMAIN CLOSED UNTIL UTILIZED UNDER PHASE 4 OPERATIONS. THE CONTRACTOR SHALL BLOCK ACCESS TO THE CROSSOVER AS SHOWN ON SHEET 364A OF THE PLANS. IT IS ANTICIPATED THAT THIS RESURFACING WORK SHALL BE COMPLETED NEAR THE END OF THIS PHASE BY THE CONTRACTOR. TRAFFIC WILL BE MAINTAINED FOR THIS RESURFACING VORK AS PER THE APPROPRIATE OTIC STANDARD DRAWING.

THE PHASE 2 MAINTENANCE OF TRAFFIC DETAILS ALSO OUTLINE THE WORK REQUIRED TO RECONSTRUCT THE EXISTING RAMP PAVEMENT IN THE WESTBOUND DIRECTION AT THE GREAT LAKES ERVICE PLAZA RAMPS. THE PHASE 2 MAINTENANCE OF TRAFFIC DETAILS ALSO OUTLINE THE WORK EQUIRED TO RECONSTRUCT THE EXISTING RAMP PAVEMENT IN THE EASTBOUND DIRECTION AT THE

TOWPATH SERVICE PLAZA RAMPS AND THE EASTBOUND RAMPS TO THE TOLL PLAZA/EXIT 173 AS REQUIRED FOR SUBSEQUENT MAINTENANCE OF TRAFFIC OPERATIONS. THE CONTRACTOR SHALL SCHEDULE RAMP RECONSTRUCTION WORK OPERATIONS SO THAT A DROPOFF OF GREATER THAN 3 INCHES DOES NOT REMAIN AT THE END OF EACH WORK DAY.

THE PROPOSED RAMP RECONSTRUCTION WORK WILL IMPACT THE EXISTING LIGHTING SYSTEMS ALONG THE RAMPS FOR THE GREAT LAKES SERVICE PLAZA. THE TOWPATH SERVICE PLAZA AND THE TOLL PLAZA/EXIT 173. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY LIGHTING ALONG THE RAMPS IN THE AREAS WHERE THE EXISTING LIGHTS WILL NEED TO BE REMOVED AND REPLACED DUE TO THE RAMP RECONSTRUCTION WORK. THE CONTRACTOR SHALL SCHEDULE HIS/HER OPERATIONS SO THAT THE TEMPORARY LIGHTING IS IN PLACE AND OPERATIONAL PRIOR TO THE REMOVAL OF THE EXISTING LIGHTS.

THE CONTRACTOR SHALL ALSO PERFORM THE REPAIRS TO THE MSE WALL IN THE FASTBOUND DIRECTION DURING THIS PHASE. THIS WORK SHALL INCLUDE CONCRETE WEATHER PROOFING OF PARAPET, CONCRETE REPAIRS TO MSE PARAPET, AND REPAIRS TO MSE WALL.

THE CONTRACTOR SHALL ALSO COMPLETE THE WORK REQUIRED TO ESTABLISH THE MEDIAN CROSSOVER WHICH IS LOCATED ALONG THE EAST END OF THE PROJECT AND IS REQUIRED FOR THE CONTRA FLOW TRAFFIC PATTERN. THE CONTRACTOR SHALL CONSTRUCT THIS PROPOSED MEDIAN CROSSOVER AT MP 176.5 DURING THIS PHASE.

THE CONTRACTOR SHOULD ALSO REPLACE THE EXISTING OVERHEAD BRIDGE MOUNTED SIGNS DURING THIS PHASE WHILE THERE IS PROTECTED ACCESS WITHIN THE MEDIAN AREA.

THIS PHASE OF CONSTRUCTION WILL ALSO ALLOW THE CONTRACTOR TO COMPLETE THE PARTIAL REMOVAL AND REPLACEMENT OF THE EXISTING STRIP SEALS, REPAIRS TO EXISTING EXPANSION JOINTS, BRIDGE DECK PATCHING, REPLACEMENT OF A PORTION OF EXISTING ABUTMENT SLABS AND EXISTING APPROACH SLABS FOR THE MAINLINE BRIDGE STRUCTURES OVER INTERSTATE 77 AND THE INTERSTATE 77 RAMPS. THIS REPLACEMENT WORK WILL BE LIMITED TO A PORTION OF THE INSIDE LANE AND MEDIAN SHOULDER AS DETAILED IN THE PLANS FOR THESE BRIDGES.

THIS PHASE OF CONSTRUCTION WILL ALSO ALLOW THE CONTRACTOR TO COMPLETE THE REPLACEMENT OF THE EXISTING EASTBOUND APPROACH SLAB AT MP 176.95 (STA. 261+45) AND MP 177.47 (STA. 288+33) TO THE BRIDGE OVER THE CUYAHOGA RIVER. THIS WORK WILL BE CONSIDERED AN "INTERIM" PHASE 2 OPERATION AS SHOWN ON SHEETS 197 & 199 STEP1 AND 206 & 208 STEP 2 OF THE MAINTENANCE OF TRAFFIC PLANS. THE CONTRACTOR SHALL BE ALLOWED THIRTY (30) DAYS TO COMPLETE EACH PHASE OF THE PART WIDTH CONSTRUCTION OF THIS APPROACH SLAB DURING THIS INTERIM PHASE 2 OPERATION. THE CONTRACTOR WILL HAVE A TOTAL OF SIXTY (60) CONSECUTIVE CALENDAR DAYS TO COMPLETE THE RECONSTRUCTION OF THIS APPROACH SLAB. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS DURING PHASE 2 TO ACCOMMODATE THIS WORK.

THE CONTRACTOR MAY ALSO COMPLETE ANY NECESSARY REPAIRS TO TOP OF EXISTING ABUTMENT BACKWALLS OR APPROACH SLABS DURING THIS PHASE. TRAFFIC WILL BE MAINTAINED FOR THESE REPAIR OPERATIONS AS PER THE APPROPRIATE OTIC STANDARD DRAWING. (SEE PERMITTED CONSTRUCTION SEQUENCE GENERAL NOTE ON SHEET 40)

#### PHASE 2A (2018):

UNDER PHASE 2A, THE CONTRACTOR MUST COMPLETE THE RECONSTRUCTION OF THE RAMP PAVEMENT IN THE WESTBOUND DIRECTION AT THE GREAT LAKES SERVICE PLAZA RAMPS THE CONTRACTOR MUST ALSO COMPLETE THE RECONSTRUCTION OF THE RAMP PAVEMENT IN THE EASTBOUND DIRECTION AT THE TOWPATH SERVICE PLAZA RAMPS.

THE CONTRACTOR MUST COMPLETE ALL WORK OUTLINED IN PHASES 1, 2, AND 2A WITHIN THE FIRST CONSTRUCTION SEASON OF THIS PROJECT. THE CONTRA FLOW MAINTENANCE OF TRAFFIC PATTERN SHALL NOT REMAIN IN PLACE OVER THE WINTER.

THE CONTRACTOR SHALL RE-OPEN EXISTING MEDIAN CROSSOVERS IN ACCORDANCE WITH OTIC STANDARD CONSTRUCTION DRAWING TCB-3 PRIOR TO THE WINTER SHUTDOWN.

(END OF FIRST CONSTRUCTION SEASON)

#### PHASE 3 - INTERIM WORK PRIOR TO PHASE 6 (2018):

THE PHASE 3 MAINTENANCE OF TRAFFIC OPERATIONS INVOLVE THE WORK REQUIRED TO CONSTRUCT THE TEMPORARY PAVEMENT IN THE WESTBOLIND DIRECTION AT THE RAMPS TO TOUL PLAZA/EXIT 173 AS REQUIRED FOR SUBSEQUENT MAINTAINANCE OF TRAFFIC OPERATIONS. THE CONTRACTOR SHALL SCHEDULE THE RAMP GORE REHABILITATION WORK AND TEMPORARY PAVEMENT OPERATIONS SO THAT A DROPOFF OF GREATER THAN 3" DOES NOT REMAIN AT THE END OF EACH WORK DAY.

THE CONTRACTOR SHOULD CONSTRUCT THE WORK ZONE CROSSOVER LIGHTING SYSTEMS FOR THE PROPOSED MEDIAN CROSSOVERS AT MP 168.80 AND MP 176.50 PRIOR TO THE START OF PHASE 4 WORK.

THE CONTRACTOR SHALL ALSO INSTALL ALL PROPOSED GUARDRAIL AND GUARDRAIL END TREATMENTS WHICH ARE REQUIRED TO PROTECT EXISTING BLUNT END CONFLICT POINTS THAT WILL OCCUR DUE TO THE CONTRA FLOW MAINTENANCE OF TRAFFIC PATTERN. THE PROPOSED QUANTITIES AND LIMITS OF PROPOSED GUARDRAIL TO PROTECT THESE BLUNT ENDS ARE DENOTED IN THE ROADWAY PLANS FOR THIS PROJECT. THE CONTRACTOR SHALL INSTALL THIS PROPOSED GUARDRAIL AND PROPER END TREATMENTS PRIOR TO ESTABLISHING THE FULL CONTRA FLOW PATTERN UNDER PHASE 6. THE CONTRACTOR SHALL INSTALL ALL PROPOSED GUARDRAIL AND GUARDRAIL END TREATMENTS REQUIRED TO PROTECT BLUNT END CONFLICT POINTS FOR PHASE 4 AND 6 MAINTENANCE OF TRAFFIC PHASES DURING THE PHASE 3 OPERATIONS.

THE CONTRACTOR SHALL REPLACE THE EASTBOUND APPROACH SLABS, WITHIN THE LIMITS OF THE INSIDE SHOULDER AND LANE. AT THE MAINLINE BRIDGES OVER THE INTERSTATE 77 RAMPS. INTERSTATE 77 AND INTERSTATE 271 DURING THIS PHASE. RAFFIC SHALL BE MAINTAINED AS PER TCR-14 NEAR

THESE MAINLINE BRIDGES

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PHASE 4 (2020).

UNDER PHASE 4. THE CONTRACTOR SHALL ESTABLISH THE FULL WESTBOUND CONTRA FLOW MAINTENANCE OF TRAFFIC PATTERN FOR THE PROJECT FROM MP 169.74 TO MP 176.34. THE

RECONSTRUCTION OF THE REMAINING WESTBOUND PAVEMENT FOR THIS PROJECT WILL OCCUR UNDER THIS PHASE OF CONSTRUCTIO NEAR THE ENTRANCE AND EXI

THE CONTRACTOR MAY REPLA GUIDE SIGNS WILL NOT REQU NOT REQUIRE AN OVERLAY PR

PHASE 4A (2020):

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THE CONTRACTOR SHALL RES MARKINGS AND SIGNAGE AS T MAINTAINED AS DEPICTED IN TURNPIKE AND INFRASTRUCT

THE CONTRACTOR SHALL BLO PRIOR TO THE COMPLETION OF

#### PHASE 6 (2019):

UNDER PHASE 6, THE CONTRA MAINTENANCE OF TRAFFIC PA RECONSTRUCTION OF THE FA OF CONSTRUCTION INCLUDING ENTRANCE AND EXIT RAMPS T

NEAR THE ENTRANCE AND EXIT RAMPS TO THE GREAT LAKES SERVICE PLAZA AND TOLL PLAZA/EXIT 173.		<b>P</b>
THIS PHASE OF CONSTRUCTION WILL ALSO ALLOW THE CONTRACTOR TO COMPLETE THE PARTIAL REMOVAL AND REPLACEMENT OF THE EXISTING STRIP SEALS, REPAIRS TO EXISTING EXPANSION JOINTS, BRIDGE DECK PATCHING, REPLACEMENT OF A PORTION OF EXISTING ABUTMENT SLABS AND EXISTING APPROACH SLABS FOR THE MAINLINE BRIDGE STRUCTURES OVER THE MAINLINE INTERSTATE 77 PAVEMENT AND INTERSTATE 77 RAMPS, IN THE WESTBOUND DIRECTION WHILE ONLY ONE LANE OF WESTBOUND TRAFFIC IS LOCATED ON A PORTION OF THE INSIDE SHOULDER AND INSIDE LANE FROM MP 169.74 TO MP 176.34. THE CONTRACTOR WILL HAVE ACCESS TO THE EXISTING WESTBOUND OUTSIDE TWO LANES AND SHOULDER TO COMPLETE THE NECESSARY STRUCTURE WORK NOT COMPLETED UNDER PHASE 2.	DESIGN AGENCY The main aver consultants planes	NOI
THE CONTRACTOR SHALL ALSO COMPLETE THE WORK TO REMOVE THE EXISTING SLAG FROM MP 172.02 (STA. 984+50) TO MP 173.81 (STA. 37+75) ALONG THE WESTBOUND OUTSIDE LANES AND SHOULDER DURING THIS PHASE.	DATE 1/18/18 -	SS
THE CONTRACTOR SHOULD ALSO COMPLETE THE REMOVAL AND REPLACEMENT OF EXISTING OVERHEAD GUIDE SIGNS, IN THE WESTBOUND DIRECTION, PRIOR TO COMPLETION OF PHASE 4. THE EXISTING OVERHEAD GUIDE SIGNS WILL REMAIN IN PLACE UNTIL THE CONTRACTOR IS READY TO ERECT THE PROPOSED OVERHEAD GUIDE SIGNS.	BY JDC	MM
THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SO THAT AN EXISTING OVERHEAD GUIDE SIGN CAN BE REMOVED AND REPLACED WITHIN 24 HOURS OF REMOVAL. THE CONTRACTOR SHALL NOT REPLACE ADJACENT GUIDE SIGNS ON THE SAME DAY.	REVISIONS DENDUM NO. 1 -	0 C
THE CONTRACTOR MAY REPLACE THESE EXISTING GUIDE SIGNS ANYTIME DURING PHASE 4. EXISTING GUIDE SIGNS WILL NOT REQUIRE AN OVERLAY PRIOR TO REPLACEMENT. NEW GUIDE SIGNS WILL ALSO NOT REQUIRE AN OVERLAY PRIOR TO REPLACEMENT.	ADD	) Ш
THE EXISTING AND PROPOSED GUIDE SIGNS MAY BE REQUIRED TO BE COVERED BY THE CONTRACTOR AS SPECIFIED IN THE PLANS.	NO. 	Ц Ц
PHASE 4A (2020):	cked ARGE DB	
UNDER PHASE 4A, THE CONTRACTOR MUST COMPLETE THE RECONSTRUCTION OF THE WESTBOUND PAVEMENT NEAR THE ENTRANCE AND EXIT RAMPS TO THE GREAT LAKES SERVICE PLAZA AND TOLL PLAZA/EXIT 173.	P JN w w cher	<u>'</u> 0
THE CONTRACTOR SHALL RESTORE THE EXISTING MAINTENANCE CROSSOVERS, PLACE FINAL PAVEMENT MARKINGS AND SIGNAGE AS THE LAST OPERATIONS UNDER PHASE 4 AND 4A. TRAFFIC SHALL BE MAINTAINED AS DEPICTED IN THE MAINTENANCE OF TRAFFIC PLANS OR PER THE APPROPRIATE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION STANDARD DRAWING.	DESIG JMI DRAV PS	TRI
THE CONTRACTOR SHALL BLOCK ACCESS TO THE CROSSOVER AT MP 176.55 AS SHOWN ON SHEET 369 PRIOR TO THE COMPLETION OF THIS LAST CONSTRUCTION PHASE OF THE PROJECT.		AS
THE CONTRACTOR SHALL ALSO RE-OPEN ALL OTHER EXISTING MEDIAN CROSSOVERS IN ACCORDANCE WITH OTIC STANDARD DRAWING TCB-3.	с	R R
(END OF THIRD CONSTRUCTION SEASON)		느
PHASE 5 - INTERIM WORK PRIOR TO PHASE 4 (2019):	IRA ES	
THE CONTRACTOR MAY COMPLETE THE NECESSARY REPAIRS TO TOP OF EXISTING ABUTMENT BACKWALLS OR APPROACH SLABS DURING THIS PHASE. TRAFFIC WILL BE MAINTAINED FOR THESE REPAIR OPERATIONS AS PER THE APPROPRIATE OTIC STANDARD DRAWING. (SEE PERMITTED CONSTRUCTION SEQUENCE GENERAL NOTE ON SHEET 40.)	NCE OF 1 ERAL NOTE	DN
PHASE 6 (2019):	ENA GEN	∢
UNDER PHASE 6, THE CONTRACTOR SHALL ESTABLISH THE FULL EASTBOUND CONTRA FLOW MAINTENANCE OF TRAFFIC PATTERN FOR THE PROJECT FROM MP 169.74 TO MP 176.34. THE RECONSTRUCTION OF THE EASTBOUND PAVEMENT FOR THIS PROJECT WILL OCCUR UNDER THIS PHASE OF CONSTRUCTION INCLUDING THE PARTIAL RECONSTRUCTION OF THE MAINLINE PAVEMENT NEAR THE ENTRANCE AND EXIT RAMPS TO THE TOWPATH SERVICE PLAZA AND TOLL PLAZA/EXIT 173.	MAINTI	ЫКЕ
THIS PHASE OF CONSTRUCTION WILL ALSO ALLOW THE CONTRACTOR TO COMPLETE THE PARTIAL REMOVAL AND REPLACEMENT OF THE EXISTING STRIP SEALS, REPAIRS TO EXISTING EXPANSION JOINTS, BRIDGE DECK PATCHING, REPLACEMENT OF A PORTION OF EXISTING ABUTMENT SLABS AND EXISTING APPROACH SLABS FOR THE MAINLINE BRIDGE STRUCTURES OVER THE MAINLINE INTERSTATE 77 PAVEMENT AND INTERSTATE 77 RAMPS, IN THE WESTBOUND DIRECTION WHILE ONLY ONE LANE OF WESTBOUND TRAFFIC IS LOCATED ON A PORTION OF THE INSIDE SHOULDER AND INSIDE LANES FROM	A	JRNF
MP 169.74 TO MP 176.34. THE CONTRACTOR WILL HAVE ACCESS TO THE EXISTING WESTBOUND OUTSIDE TWO LANES AND SHOULDER TO COMPLETE THE NECESSARY STRUCTURE WORK NOT COMPLETE UNDER PHASE 6.	)-18-02, 7	Г
THE CONTRACTOR SHOULD ALSO COMPLETE THE REMOVAL AND REPLACEMENT OF EXISTING OVERHEAD GUIDE SIGNS, IN THE EASTBOUND DIRECTION, PRIOR TO THE COMPLETION OF PHASE 6. THE EXISTING OVERHEAD GUIDE SIGNS WILL REMAIN IN PLACE UNTIL THE CONTRACTOR IS READY TO ERECT THE PROPOSED OVERHEAD GUIDE SIGNS.	JECT 36	ЫN
THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SO THAT AN EXISTING OVERHEAD GUIDE CAN BE REMOVED AND REPLACED WITHIN 24 HOURS OF REMOVAL. THE CONTRACTOR SHALL NOT REPLACE ADJACENT GUIDE SIGNS ON THE SAME DAY.	PRO. DATE	0
THE CONTRACTOR MAY REPLACE THESE EXISTING GUIDE SIGNS ANYTIME DURING PHASE 6. EXISTING GUIDE SIGNS WILL NOT REQUIRE AN OVERLAY PRIOR TO REPLACEMENT. NEW GUIDE SIGNS WILL ALSO NOT REQUIRE AN OVERLAY PRIOR TO REPLACEMENT.	$\overline{)}$	
THE EXISTING AND PROPOSED GUIDE SIGNS MAY BE REQUIRED TO BE COVERED BY THE CONTRACTOR AS SPECIFIED IN THE PLANS.	727	OHIC

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MAINTAINING TRAFFIC CLASS A		Ŭ,	L S	Ζ
MAINTAINING TRAFFIC, CLASS A. TYPE I. AS PER PLAN	42	A	4H ⊒	
MAINTAINING TRAFFIC, CLASS A, TYPE II, AS PER PLAN	133, 231	L L L	I SE	
MAINTAINING TRAFFIC, CLASS A, TYPE III, AS PER PLAN	192	Ξ	5	
		MAI		
	41			
ENT MARKER-STIMSONITE MODEL 101 LPCR	41			
PRISMATIC RETRO-REFLECTOR	41			Ζ
RAISED PAVEMENT MARKER CASTING-STIMSONITE	41			
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						614		614	614	614	614	614	614	614	614	SP 622	SP 622	SP 626A	SP 626A	SP 614C
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P ≥	E /					MP/ R 24 EC1		NHI	NHI	ELL	NHI	ELL		(8") (8")			ON	L, VE	, XE	3 NEI
	NC N	LOCATION	STA	TION	SIDE	PIR		/E L	3E L (4"	3E L	(6" I	9" Y	N/N L/N/F	NNV INT	LOG	BAK REE	E SC	DDE	DEL	E PA KING
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			FROM	ТО		EACH		FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	FT
		PHASE 2 (CONTINUED)																		
		WESTBOUND																		
167-178	ELW	I-80	79+47	223+72	RT				14425											14425
		<i>I-80</i>	229+04	231+85	RT				281											281
		W B I ANF SHIFT #4																		
178-179	CHY	<i>I-80</i>	231+85	240+15	RT									830						 830
178-179	CZMY	<i>I-80</i>	231+85	240+15	RT														83	
178-179	CHW	<i>I-80</i>	231+85	240+15	RT								830				-	166		830
178-179	CHW	<i>I-00</i> <i>I-80</i>	231+85	240+15	RT								830		1			100		830
178-179	CZMW	<i>I-80</i>	231+85	240+15	RT													83		
185_186	FI VA	WESTBOUND	328+00	336+10	RT							840								840
105-100	LLIU	1-00	320,00	330140								040								040
		EASTBOUND																		
196-203	*RLL	INTERIM - STEP T	248+50	335+00	RT															8650
196-203	REL	<i>I-80</i>	248+50	335+00	RT															8650
197	TPB	1-80	258+50	263+00	RT	$\frac{1}{2}$											450			
(199	TPB	<i>I-80</i>	280+75	289+75	RT	1	$\mathbb{R}^{m}$										2 900	<u>}</u>		
	$\sim$		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				2													
196-197	CHY	<i>I-80</i>	248+50	258+00	RT									950			-		05	950
196-197	CZMII	<i>I-60</i> <i>I-80</i>	248+50	258+00	RT								950						95	950
196-197	CZMW	I-80	248+50	258+00	RT													190		
196-197	CHW	<i>I-80</i>	248+50	258+00	RT								950					05		950
196-197	CZIVIVV	1-80	248+50	258+00	RI													95		
197	ELY	<i>I-80</i>	258+00	261+45	RT					345										345
197	LLW	1-80	258+00	261+45	RT			345												345
197	ELW	1-80	258+00	261+45	RT				345											345
199-202	ELY	<i>I-80</i>	288+60	325+50	RT					3690										3690
199-202	LLW	<i>I-80</i>	288+60	325+50	RT			3690												3690
199-202	ELW	<i>I-80</i>	288+60	325+50	RT				3690											3690
202-203	СНҮ	<i>I-80</i>	325+50	335+00	RT									950						950
202-203	CZMY	<i>I-80</i>	325+50	335+00	RT														95	
202-203	CHW	<i>I-80</i>	325+50	335+00	RT								950		<u> </u>	 		400		950
202-203	CHW	I-80	325+50 325+50	335+00 335+00	RT RT								950					190		950
202-203	CZMW	<i>I-80</i>	325+50	335+00	RT													95		 
		EASTBOUND																		
205-212	REL	<i>I-80</i>	248+00	337+00	RT										1					8900
205-212	*RLL	I-80	238+75	337+00	RT															9825
205	*RLL	<i>I-80</i>	238+75	250+25	RT															1150
206	TPB	<i>I-80</i>	258+50	263+00	RT	1											450			
		······································	<u> </u>				$\square$									A.				
208	TPB	<i>I-80</i>	280+75	289+75	RT	1	₽										900	)		
205-206		L.80	238+75	258+00		~~~	1							1025				1		1925
205-206	CZMY	<i>I-80</i>	238+75	258+00	RT									1325					193	1323
205-206	CHW	<i>I-80</i>	238+75	258+00	RT								1925							1925
205-206	CZMW	<i>I-80</i>	238+75	258+00	RT								4025					386		1005
205-206	CHW	1-80	238+75	258+00		~~~~	L A						1925			Â	+	193		1920
		SHEET SUB	TOTALS			4		4,035	18,741	4,035		840	9,310	4,655			2,700	1,398	466	78,791
	TOTA	LS CARRIED TO MAINTENANCE OF TR	AFFIC GENERAL SUMM	ARY SHEET 56-57		4	<u>Г</u>	0.77	3.55	0.77		0.16	9,310	4,655			$\overline{\gamma}$	1,398	466	14.93
	/ 1				Y		1	MILES	MILES	MILES		MILES								MILES

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						614		614	614	614	614	614	614	614	614	SD 622	50 622	50 6261	SP 6264		SP 614C
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l 1S	Η̈́Η					NAC IUA IDS		5 P/	2 P/	PA	2 P/	PA	), 6 <sup>,</sup>	04.	1, 6 <sup>,</sup>	ARE ARE	10 10 10 10	DUC NA	(A)		10
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(	• • • •	EASTBOUND	• • • • • • • •				$\rightarrow$												1		
$\rightarrow$							$\square$										$\sim$	L			
	TPB	<i>I-80</i>	5+50	19+00	RT	1	<u> </u> }										1350	<u>}</u>			
	TPB	<i>I-80</i>	174+00	183+00	RT	1	$\mathcal{V}_{A}$										900		+ +		
		W B ENTRANCE RAMP				$\frac{1}{1}$	1 22														
220	CHW	<i>I-80</i>	43+25	48+50	RT								525							+	525
220-221	ELW	RAMP	73+00	56+50	LT				1650												1650
220	CHW	RAMP	71+75	66+50	LT					1007			525								525
220-221	ELY	KAMP	66+50	56+50	LT					1000											1000
													1								
		PHASE 4			-														+ +		
		WESTBOUND																			
243-244	*RLL	<i>I-80</i>	810+62	819+00	LT																838
243-244	*RLL	<i>I-80</i>	810+62	819+00	LT																838
243-274	REL	<i>I-80</i>	808+60	988+62	LT																18002
		1-80	0+00	223+72	LT																22372
245-247	*RLL	<i>I-80</i>	843+82	863+50	LT																1968
247	*RLL	<i>I-80</i>	859+50	863+50	LT																400
247	REL	<i>I-80</i>	859+50	860+50	LT																100
0.10	( ) 14/	1.00	705 - 00	001.00	1 7			000									-		+ +		
242	ELW FLW	<i>I-80</i> <i>I-80</i>	795+23	801+23				600	749										+ +		749
242-243	CHW	<i>I-80</i>	795+23	802+50	LT				740				727						1 1		727
242-243	CHW	<i>I-80</i>	800+23	802+28	LT								205								205
242-243	ELY	1-80	795+23	802+06	LT					683											683
243	ELW	1-80	806+17	810+62					445				166								445
243	CHW	<i>I-60</i> <i>I-80</i>	805+75	810+62	LT								400								487
243	ELY	1-80	805+54	810+62	LT					508											508
244-245	ELW	<i>I-80</i>	822+69	843+82	LT				2113												2113
244-257	ELY	<i>I-80</i>	822+69	988+62	LT					16593							-		+ +		16593
		1-80	0+00	8+60	LI					860									+ +		860
		W.B. ENTRANCE RAMP																			
247	RDL	<i>I-80</i>	860+50	863+50	LT																300
247-248	REL	RAMP	860+50	881+50	LT																2100
247-248	TPB	RAMP	863+65	881+25	LT												1760				
245-246	DLW	<i>I-80</i>	843+82	854+80	LT										1098						1098
245-247	ELW	RAMP	843+82	858+30	LT				1448	-									+ +	+	
246-247	CHW	<i>I-80</i>	854+80	862+30	LT								750							+	750
247	CZMW	1-80	858+30	862+30	LT													40			
247	CHW	RAMP	859+80	863+51	LT								371								371
247	CZMW	RAMP	859+80	863+51								050						37			250
247	CZMY	RAMP	863+51	866+01								250	+						25	—	250
247	ELW6	RAMP	858+30	866+01	LT						771										771
247	CZMW	RAMP	858+30	866+01	LT							L	1					77			
0.17.0.10	<b>F</b> (1)(		000+01	004.50					4540							 		ļ	<u> </u>		1540
241-248 247-248	ELVV FLY	RAMP RAMP	866+01	881+50 881+50					1549	1549		+	+						+ +		1549
	,																				
		WESTBOUND																			
247-249	TPB	<i>I-80</i>	862+80	897+05	LT	1											3425				
247-249	ELW	<i>I-80</i>	862+30	898+45	LT /	$+ \cdots$	L A		3615							A	$\longrightarrow$	$\downarrow$			3615
		SHEET SUB-	TOTALS		(	3	<u> }</u>	600	11,569	21,193	771	250	4,056		1098		7,435	154	25		89,676
	TOTA	LS CARRIED TO MAINTENANCE OF TRA	AFFIC GENERAL SUMM	7	3	<u>ן</u>	0.12	2.20	4.02	0.15	0.05	4,056		1,098			154	25		16.99	
						$\mu$	1	MILES	MILES	MILES	MILES	MILES									MILES

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32	33	34	35	36	37	38	381	382	383	384	385	386	387	389	393	397	400	585	680	681		TOTAL	UNIT	
																							<u> </u>	
																							<u> </u>	
050																					201	1		CLEARING AND GRUBE
658																					201	658	EACH	TREE REMOVED, 18"S
20																					201	20	EACH	TREE REMOVED, 30 3
30									65 109												SPECIAL	65 109		FENCELINE CLEARING
									00,100												OFLOIAL	00,700		
											12										202	12	FACH	HEADWALL REMOVED
												1									202	1	EACH	HEADWALL REMOVED
											636										202	636	FT	PIPE REMOVED, 24" AN
											175	16									202	191	FT	PIPE REMOVED, OVER
											5										202	5	EACH	CATCH BASIN OR INLE
									65,109												202	65,109	FT	FENCE REMOVED
							45,451														202	45,451	FT	GUARDRAIL REMOVEL
							334														202	334	SY	APPROACH SLAB REM
							1,014														202	1,014	SY	APPROACH SLAB REM
							330														202	330	SY	APPROACH SLAB REM
							338														202	338	SY	APPROACH SLAB REM
							$\rightarrow$																┥	
							701	<u> </u>							011.000	70.040					202	701	$\int FT$	
															211,288	72,846					202	284,134		PAVEMENT REMOVED,
																							+	
							31														202	31		
	20											/									202	20		
	20						5														202	- 20		PEMOVAL MISC : SICK
	18						5														202	18	FACH	REMOVAL MISC : MON
	10																				202			
			500							2.379											203	2.879	CY	EXCAVATION FOR SLC
										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 EMBANKM
		1,800																			203	1,800	CY	ROADWAY EXCAVATIC
				24,000																	203	24,000	CY	EXCAVATION OF SLAG
				24,000																	203	24,000	CY	DISPOSAL OF SLAG, A
		178																			204	178	CY	EXCAVATION
		227																			204	227	SY	GEOTEXTILE FABRIC,
		227													2,070						204	2,297	SY	SUBGRADE COMPACT
												1									SPECIAL	1	LUMP	SCOUR HOLE REMEDI.
																							<u> </u>	
		319,232																			206	319,232	SY	CEMENT STABILIZED S
		12,000																			206	12,000		CEMENT STABILIZED S
		14,010																			206	14,010		CEMENT
		19,030																			200	19,630	GAL	TEST POLUNC
		100			-																200	100		TEST KOLLING
																65 578					209	65.578	FT	LINER GRADING AS P
			5.000		+		5.760									00,070					209	10.760	FT	
			-,				727														SPECIAL	727	SY	CHANNEL CLEANOUT
			5,750																		SPECIAL	5,750	FT	CONCRETE CHANNEL
		360																			SP 304	360	TON	GRANULAR MATERIAL
				1																	503	1	LUMP	COFFERDAMS AND EX
												14									SP 516A	14	FT	CRACK REPAIR USING
																							<u> </u>	
				770																	518	770	CY	POROUS BACKFILL WI
						<b> </b>			<b> </b>												-	<u> </u>	<u> </u>	
	-											96					-				SP 519	96	SF	PATCHING CONCRETE
																	-					-		
								2,020													526	2,020		
								280													526	280		I YPE A INSTALLATION
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DESCRIPTION	REF.		4 IIO
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ROADWAY		Y.	
NING, AS PER PLAN	32	GENC	
ZE		GN A	
		DESI	
ZE AND CRUBBING	35		
			$  \Sigma  $
	50/		S
AS PER PLAN	581	7E '18	in
24"		DA: 1/18/	<u> </u>
T REMOVED		BY DLF	
			2
AS DED DI AN	22		
, AS FER FLAN		0.1	
OVED, TYPE 1, AS PER PLAN	33		$ \mathbf{O} $
OVED, TYPE 2, AS PER PLAN	33	DEND	()
OVED, TYPE 3, AS PER PLAN	33	ADC	
OVED, TYPE 4, AS PER PLAN	33		
PEMOVED			
AS PER PLAN	33	9 K	
		2 7 7	
	50/	KED ARGE	
), AS PER PLAN	581	UCH/ UCH/ UCH/	125
EQUINDATION REMOVED	33	5 <	
ITORING WELL ABANDONED	33	Г 🤹 Р 🖻	$\Box$
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PE EROSION PROTECTION		7	╏┝┷┷╴╽
ENT			[U]
N AND EMBANKMENT			∢
AS PER PLAN	36		
S PER PLAN	37		
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12.09, TYPE D		IAI	
ON ATION USING GRANULAR MATERIAL	583	MM	
		SU	
UBGRADE, 14 INCHES DEEP, AS PER PLAN	34	Ļ	IZ
UBGRADE, 16 INCHES DEEP		A.	
DI ANI	24	Ш Z	
	54	Ш	
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ER PLAN	34		<u> </u>
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CLEANOUT	35		
			l M
CAVATION BRACING, AS PER PLAN	37	Ε Σ	
		ю 6	
INJECTION		9-1°	'
TH GEOTEXTILE FABRIC		3( 22/1	O
		CT 12/2	$\mathbf{\Xi}$
SIRUCTURES		Щ.	III
TE APPROACH SLABS (T=15"), AS PER PLAN	33	Ϋ́Ε	
AS PER PLAN	33	Ч Ц	
		<b></b>	
AS PER PLAN	578		
		276	
		727	<b>N</b> S N N N N
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									SH	EET NUME	BER											GRAND		
32	33	34	35	36	37	38	381	382	383	384	385	386	387	389	393	397	400	585	680	681	ITEM	TOTAL	UNIT	
				490								70				-					518	560	FT	6" PERFORATED CORE
-				40										-							518	40	FT	6" NON-PERFORATED
				40																	SP 605	40	СҮ	TRENCH DRAIN, AS PE
														65,378							SP 605	65,378	FT	6" BASE PIPE UNDERD
														65,256							SP 605	65,256	FT	6" SHALLOW PIPE UND
														49,826							SP 605	49,826	FT	6" SHALLOW PIPE UND
-				+										0,029		+	-				57 605	0,029	F1	6 UNDERDRAIN OUTLE
					200																SP 605	200	FT	AGGREGATE DRAIN. T
					200																SP 605	200	FT	AGGREGATE DRAIN, T
				250																	SP 605	250	СҮ	UNDERDRAIN ROCK EX
											25										SP 611	25	FT	12" CONDUIT, TYPE B,
											386										SP 611	386	FT	12" CONDUIT, TYPE F, 7
											298										SP 611	298		15" CONDUIT, TYPE B, 1
						32					213										SP 611	245	FT	18" CONDUIT, TYPE A, I
-				+		02					210											240		
											20										SP 611	20	FT	24" CONDUIT, TYPE B,
											20										SP 611	20	FT	30" CONDUIT, TYPE A,
											125										SP 611	125	FT	30" CONDUIT, TYPE A,
											4										SP 611	4	FT	36" CONDUIT, TYPE A,
												24									SP 611	24	FT	36" CONDUIT, TYPE A,
-											640										00.014	640		
				-							040	8									SP 611	040 8	FT	54" CONDUIT, TYPE A
-				+								14									SP 611	14	FT	72" CONDUIT, TYPE A,
												8									SP 611	8	FT	CONDUIT, TYPE A, STR
																								64" (SPAN) X 43" (RIS
											641	258									SP 611	899	FT	CONDUIT MISC.: CURE
											641	2,086									SP 611	2,727	FT	CONDUIT MISC.: INTER
					20						1		15								SP 611	30	EACH	CATCH BASIN AD ILIST
					20						4		37								SP 611	39	EACH	CATCH BASIN ADJUST
													10								SP 611	10	EACH	CATCH BASIN ADJUST
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														134							SP 611	134	EACH	PRECAST REINFORCE
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																							2,1077	
											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
													3								SP 611	3	EACH	MANHOLE RECONSTRU
												223									833	223	FT	CONDUIT RENEWAL US
												220									000	220		87" SPAN X 63" RISE
												8									833	8	FT	CONDUIT RENEWAL US
																								64" SPAN X 43" RISE
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ERDRAIN, WITH FABRIC WRAP (30")				$\overline{\Omega}$
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REF NO.	SHEET NO.	STATION TO	STATION	SIDE	GUARDRAIL REM AS PER PLAI	CONCRETE BARRIER	GUTTER REMO	APPROACH SLAB REMC 1, AS PER PL/	APPROACH SLAB REMC 2, AS PER PLA	APPROACH SLAB REMC 3, AS PER PLA	APPROACH SLAB REMC 4, AS PER PLA	REMOVAL MISC. FOUNDATION REM	DITCH CLEANC	CHANNEL CLEAN	ROCK CHANNEL PRO TYPE C WITH FIL		REF NO.	SHEET NO.	STATION 1	O STATION	SIDE	GUARDRAIL REM AS PER PLAI	CONCRETE BARRIER	GUTTER REMO
		FROM	то		FT	FT	FT	SY	SY	SY	SY	EACH	FT	SY	СҮ	-			FROM	то		FT	FT	FT
P.01	112	850+00 0	865+20.5	17	531											-	P.57	130	50+10 9		17			
R-02	412	863+90.0	867+37.7	RT	348												R-58	439	52+89.6	56+93.7	RT	405		
R-03	414	874+21.8	889+67.3	RT	1,246												R-59	439	54+00.0	56+75.0	RT			
R-04	414	881+30.5 894+78 9	896+81.9 907+13.9	LT	1,365 1,235											-	R-60 R-61	439 439	54+01.0 56+00.8	63+25.9 57+00.4	RT	925 100		
R-06	416	895+91.6	910+06.6	LT	1,415											-	R-62	439	56+83.0	57+61.5	RT	100	79	
R-07	418	900+14.8		RT			31										R-63	439	57+55.5	61+28.3	LT	373		
R-08	418	911+37.3	917+40.0	RT	603											-	R-64	439	58+08.1	61+04.3	LT	297	<b> </b> '	<u> </u>
R-09 R-10	420	917+31.0	930+95.8 918+20.0	LT	1,305									110		-	R-65 R-66	439	62+00.0	64+00.0	RT	210	<u> </u>	
R-11	420	920+00.0	920+30.0	LT										60	2.2		R-67	439	62+75.0	66+75.0	LT	400		
R-12	420	926+15.0	926+90.0	LT	545								75			-	R-68	441	73+93.2	80+46.5	LT	654	<b> </b> '	<b> </b>
R-13 R-14	422	933+17.6 938+21.8	938+61.8 938+76.6	RI IT	545	55											R-69 R-70	441	74+02.3	76+40.3	LI RT	238	'	
R-15	422	938+57.9	939+13.5	RT		56										-	R-71	443	80+45.0	84+45.0	LT	400		
R-16	422	939+20.0	940+20.0	LT									100			-	R-72	443	84+65.9	93+57.9	RT	892	('	
R-17 R-18	424	945+40.2 947+76 5	959+25.2	RT	1,385											-	R-73 R-74	443	84+84.2 97+61 9	87+28.3 98+86 9	RT RT	245	'	
R-19	424	948+85.0	949+35.0	RT	1,010								50		27.8	-	R-75	445	98+13.1	99+78.7	LT	191		
R-20	424	950+00.0	952+50.0	LT									250		138.9		R-76	445	100+00.0		LT			
R-21	424	953+00.0	955+00.0	LT	120								200		111.1	-	R-77	445	100+45.0	102+45.0	RT	245	<u> </u>	
R-22 R-23	427	961+15.9 963+69.4	965+53.3 964+43.6	LT	438	75										-	R-78 R-79	445	100+46.0	102+90.7	LT	245 367	<u> </u>	<u> </u>
R-24	427	964+40.2	969+80.6	LT	541												R-80	445	105+30.4		LT			
R-25	427	965+50.9	966+26.3	RT		76										-	R-81	447	106+40.0	107+40.0	LT		'	<u> </u>
R-26 R-27	427	966+75.0 971+60.0	967+10.0	RI IT									35			-	R-82 R-83	447	106+57.3	110+29.7	RI RT	373	'	<u> </u>
R-28	429	976+64.7	981+46.3	RT	482								100			-	R-84	447	107+70.0	110+20.0	RT	100		A
R-29	429	979+34.6	983+66.3	LT	432												R-85	447 (	108+06.2	108+78.2	LT	(	72	
R-30	429	981+99.8	981+78.2	RT PT	1 189									223			R-86	447	107+74.4	112+35.6	LT	462	<u> </u>	
R-32	431	01+74.2	08+43.5	LT	670											-	R-88	447	110+16.9	110+86.9	RT	201	70	
R-33	433	08+66.9	08+91.9	LT					169								R-89	447	111+50.0	112+50.0	RT			
R-34	433	08+66.9	08+91.9	RT					100	165						-	R-90	449	120+00.0	144+00.0	RT	050	'	<b> </b>
R-35 R-36	433	09+84.7	13+86.8	LT	428				169								R-97 R-92	449	123+28.1	125+87.1	RT	259 645		<u> </u>
R-37	433	09+84.7	10+09.7	RT						165							R-93	451	140+11.2	148+93.4	RT	883		
R-38	433	10+78.3	14+42.4	RT	365											-	R-94	453	150+50.0	168+75.0	RT	1,825		<u> </u>
R-39 R-40	433	14+00.2 14+00.2	14+25.2 14+25.2	LT RT					169							-	R-95 R-96	455	162+00.0 164+65 2	164+00.0		1.252	'	<u> </u>
	433	17+48.2	17+73.2	LT					169							1	R-97	455	167+59.2	215+57.5		4,799		
R-42	433	17+32.6	21+20.7	LT	389											]	R-98	455	168+00.0	172+00.0	RT			
R-43	433	17+48.2 17+82.6	17+73.2	RT PT	152				169							-	R-99 R-100	455	174+00.0	177+100	RT DT		'	
R-45	435	25+29.5	39+21.0	RT	1,392											-	R-101	457	181+32.5	181+91.7	RT		<sup> </sup>	
R-46	435	29+75.1	38+94.4	LT	920												R-102	457	181+49.5	221+08.0	RT	3,959		
R-47	435	34+30.0	39+05.0	RT									475		264.0	-	R-103	457	183+00.0	215+25.0	LT	3,225	<b> </b> '	<u> </u>
R-48 R-49	437	36+65.0	38+65.0			109							200			-	R-104 R-105	462	216+00.0	216+37.5	RI RT	38	'	<u> </u>
R-50	437	39+19.5	40+27.8	RT		109										-	R-106	469	288+33.30	288+58.30	RT			
R-51	437	40+00.3	43+25.6	LT	326											-	R-107	422	938+73.3	944+04.5	LT	532		1
R-52 R-53	437	40+26.5 43+22.0	40+79.5	RT RT	53 428											-								
R-54	437	47+21.6	47+28.4	RT	720							2				-							<sup> </sup>	-
R-55	439	50+00.0	60+63.2	LT	1,064											]								
R-56	439	50+40.0	53+40.0	RT									300			-							'	
																-	<u> </u>							A
																]		Sl	JBTOTAL CO	LUMN 2	•	25,133 (	221	
					20.240	400	24		1.014	222			1 705	200		-		SI	UBTOTAL CO	LUMN 1		20,318	480	31
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OHIO TURNPIKE			601	SPECIAL	209	202	202 Эс	202 Эс	202 Je	
SION	entry and a second address and	DESIGN AGENCY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CHANNEL CLEANOUT	DITCH CLEANOUT	REMOVAL MISC.: SIGN FOUNDATION REMOVED	APPROACH SLAB REMOVED, TYF 4, AS PER PLAN,	APPROACH SLAB REMOVED, TYF 3, AS PER PLAN,	APPROACH SLAB REMOVED, TYF 2, AS PER PLAN,	APPROACH SLAB REMOVED, TYF 1, AS PER PLAN
	DLF 1/18/18	BY DATE	СҮ	SY	FT	EACH	SY	SY	SY	SY
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OM	381		240 544 784	334 393 727	3,975 1,785 5 760	3 2 5	338	330	1,014	334
8월 /	127		104	121	5,700	5	330	330	1,014	1 334



		2	
1128.77	EX. CB STA. 966+0	AIN OUTLET 00.00 RT. 1126.83 1126.92	EX. CB STA. 966+0 RIM 1127.55 INV. 18" SE \$2.8211
1127.80	1.7		9/17/211
1126.82		1126.82	1126.80
1125.77		1125.77	1125.79
1124.72	EX. CB STA. 968+	1124.72	8/ 17711 EX. CB STA. 968+6 RIM 1122.33 INV. 18" SE
1123.79	□ □ 61.3	1123.79	
	1120	LINE STA.969+00	1150 MATCH LINE STA. 969+00
428 727	РКОЈЕСТ 39-18-02А DATE: 12/22/17	PROFILE SHEET STA. 955+00 TO STA. 969+00	DESIGNED     CHECKED     NO     REVISIONS     BY     DATE       JMP     WDB     ADDENDUMNO.1     JDC     (1181)       DRAWN     IN CHARGE     -     -     -       MZP     WDB     -     -     -
JRNPIKE	OHIO TU	<b>RNPIKE AND INFRAS</b>	STRUCTURE COMMISSION

		1103.58 PROP. LT. PROFILE GRADE	1104.59	1105.60	1106.61		1107.62	1108.62	1109.59	1110.51	1111.39	1112.22	1113.01	1113.75	1114.46	1115.16	1115.86	1116.56	1117.26	1117.96	1118.66	1119.36	1120.06	1120.74
	1120							— CATCH 10+25	BASIN, I-3B5	0	CB NO. 1 STA. 13+25 RIM 1112.6 INV. 1107.8	5, 62' LT 3 70 12" E & N		CB NO. 1 STA. 13+50 RIM 1112.9 INV. 1108.1	), 62' LT 99 16 12" W				UNDERD STA. 17+ INV. 30" INV. 18"	0RAIN OUTL 63.00 LT. = 1114.98 = 1115.61	=7 -		<b>⋳</b> ─┬──	
4.8+00			OHIO T OVEI RAM	URNPIKE BF R CONNECT MP M.P. 172	RIDGE OR 2.4			N/G = 11 Æ 6" UD	107.48 (E) = 1102.8 RAIN OUTLET	3	WESTBOU	ND PROFILE				OHIO TU BRIDGE OVE 172	RNPIKE ER I-77 M.P. 2.5	1.40%						CATCH B
NE ST	1110		GRATE 1 INV. 1098	5, 62' LT 103.24 2.62 12" N				STA. 10+2 INV. 30" = INV. 18" =	28.00 LT. 1103.77 1104.40	2.20%	1.40%									UNDEF STA. 18 INV. 30	DRAIN OUT. 3+00.00 LT. " = 1116.24 CATCH BAS	LET		18+25 N/G = 111 Æ 6" UD (i
LCH LI				2.20%					CATCH B	ASIN 1-3850		25'-12" CON TYPE B @	IDUIT				Q 1-77			Æ 6"	N/G VD (E)&(W)	18+00 = 1119.65 = 1114.72	↓ 	
<u>MA</u>	1100				0.23 1.23		52		10+50 N/G = 110 Æ 6" UD (i	7.88 E) = 1103.23				STA 13+75 EV. 1114.11		AL CLEARAN IT "B" = 16.81 A 14+46.08)	E RAMI		₿ RAI					
		Q CONN	ECTOR —	-	<u>AL CLEARAN</u> 01NT "A" = 15 T STA 9+47		VC \$TA. 10+, LEV. 1108.23			.ET				ELL ELL		VERTIC AT POIN (0.T. ST	-					CT4 18+00	/. 1120.06	
	1090	- STA, 8+00 :V. 1103.58	RAMP 7. 8+95.16		VERTIC AT P	A. 9+82.09		STA. 10 INV. 30	)+25.00 LT. " = 1103.73	350.	00' VC													
		58 PVT .T. ELE DE	.59 ST	109	19	S]	.62	.62		PV15	6. 6	52	.01	.75	.46	.16	86	.56	26	96	99	36	90.	74
		1103. EX. L PRO GRA	1104	1105	1106		1107	1108	1109	1110	1111	1112	1113	1113	1114	1115	1115	1116	1117	1117	1118	1119	1120	1120
		1103.59 PROP. RT. PROFILE GRADE	1104.60	1105.61	1106.62		1107.63	1108.63	1109.60	1110.52	1111.40	1112.23	1113.02	1113.76	1114.47	1115.17	1115.87	1116.57	1117.27	1117.97	1118.67	1119.37	1120.07	1120.75
00+	1120											EASTBOU	VD PROFILE			OHIO TU BRIDGE OVE	RNPIKE R I-77 M.P.							
STA 8			OHIO TI OVEI	URNPIKE BF R CONNECT	RIDGE OR											172	.5							
1 INF	1110		RAM	MP M.P. 172	.4					2.02%	1.40%										CATCH BAS	NN, I-3C50	CATC	CH BASIN, I-
MATCH									— САТСН В, 10+50	ASIN, I-3B50				- 22		AAVCE 88)	<u><u></u><u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u>			Æ 6'	N/G UD (E)&(W)	= 1119.33 = 1114.72	→ N/G = <u>F</u> 6" L	1119.65 JD (E)&(W)
	1100			NCE 19.23 7.43)			0+25	CATCH 10+25	N/G = 110 Æ 6" UD (l BASIN, I-3B	7.88 <u>=) = 1103.23</u> <b>5</b> 0				/T STA 13+7 ELEV. 1114.1		0111 <u>11446</u> 01111 <u>1181 = 16</u> 0111 <u>1181 = 16</u> 0111 <u>114+46.0</u>	₩ ₽ RAMF		₽ RAN			TA 18+00	1120.06	
10.04a11		00 58		<u>2AL CLEARA</u> 201NT 'A" = 7 2.T. STA 9+4. 24MP		6	PVC \$TA. 1 ELEV. 1108	N/G = 1 Æ 6" Ul	1107.48 D (E) = 1102.8	33				14		VER: AT P. (0.T.						BACC S	ELEV.	
- 01/01/1 · fAM	1090	PVT STA. 8+ ELEV. 1103.	STA. 8+95.16	VERTI( AT H (( )		STA. 9+82.0				350. PVI S	00' VC TA. 12+00													
		1103.59 EX. RT. PROF. 3RADE	1104.60	1105.61	1106.62		1107.63	1108.63	1109.60	1110.52	1111.40	1112.23	1113.02	1113.76	1114.47	1115.17	1115.87	1116.57	1117.27	1117.97	1118.67	1119.37	1120.07	1120.75
333		8		9		10	0		11		12	1	.3		14		15		16		17	<u> </u>	18	



NOTE
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- FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING AS-1-15 AND STANDARD CONSTRUCTION DRAWING AS-2-15, TYPE A INSTALLATION (SHEETS 1,2, AND 14 OF 14).
- FOR DOWEL CONNECTION AT LONGITUDINAL JOINT BETWEEN EXISTING AND PROPOSED APPROACH SLABS. SEE TRANSVERSE SECTION DETAIL ON OTIC STANDARD DRAWING AS-1. TREATMENT OF JOINT PER SP 516B SHALL BE INCIDENTAL TO THIS WORK. THE DOWEL HOLES, DOWELS AND GROUT SHALL BE INCIDENTAL TO THE WORK.
- FOR BR-1 TRANSITION DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING BR-1-13 (SHEETS 5,7, 8 AND 9 OF 9) AND SHEET 712. NEW PARAPET IS INCLUDED UNDER ITEM SP 511B - CLASS 5 CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT.
- 4. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ITEM 202 APPROACH SLAB REMOVED TYPE 2, AS PER PLAN. NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (T=15"); AS PER PLAN.

FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 27.

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FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 27.

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)	-	-		WDB	MZP	MILE POST 172.3 SUMMIT COUNTY	UAIE: 12/22/17	>	フ
consultants advised	•	ı		IN CHARGE	DRAWN	110 I URNPIKE OVER UNIO I URNPIKE RAMP (I U/FRUM I-/ / 3B)		<b> </b> 39	27
	JDC 1/18/18	ADDENDUM NO.1	$\overline{\mathbb{A}}$	DLF	JPR	רטרעארע אר ראטאטו אבאם נייס די ומינידי מינוס איז מינידי מינוס איז מינידי איז מינידי איז מינידי מינידי מינידי איז מינידי איז מינידי איז		68	7.
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5. FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 27.

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5. FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 27.

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NOTES:

1. FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING AS-1-15 AND STANDARD CONSTRUCTION DRAWING AS-2-15, TYPE A INSTALLATION (SHEETS 1,2, AND 14 OF 14).

2. FOR DOWEL CONNECTION AT LONGITUDINAL JOINT BETWEEN EXISTING AND PROPOSED APPROACH SLABS, SEE TRANSVERSE SECTION DETAIL ON OTIC STANDARD DRAWING AS-1. TREATMENT OF JOINT PER SP 516B SHALL BE INCIDENTAL TO THIS WORK. THE DOWEL HOLES, DOWELS AND GROUT SHALL BE INCIDENTAL TO THE WORK.

3. FOR BR-1 TRANSITION DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING BR-1-13 (SHEETS 5,7, 8 AND 9 OF 9) AND SHEET 711. NEW PARAPET IS INCLUDED UNDER ITEM SP 511B - CLASS 5 CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT.

4. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ITEM 202 - APPROACH SLAB REMOVED (TYPE 2, ) SPER PLAN. NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, (T=15"), AS PER PLAN.

5. FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 27.

## PLAN, EASTBOUND

- 6. ALL LONGITUDINAL JOINTS SHALL BE SEALED PER SP 516B. THIS WORK SHALL BE INCIDENTAL TO ITEM 526.
- 7. THE PROPOSED ELEVATIONS NOTED ON THESE APPROACH SLAB DETAILS HAVE BEEN DEVELOPED FROM EXISTING SURVEY INFORMATION. THE PROPOSED ELEVATIONS REFLECT THE DESIGNERS CALCULATED ADJUSTMENTS TO THE EXISTING ELEVATIONS ALONG THE APPROACH SLABS. THE CONTRACTOR SHALL WORK WITH THE PROJECT ENGINEER AND THE OTIC PROJECT MANAGER TO CONFIRM THAT THESE PROPOSED ELEVATIONS PROVIDE A SMOOTH TRANSITION FROM THE EXISTIN OR PROPOSED PAVEMENT ON TO THE PROPOSED APPROACH SLABS IN THE FIELD. THE CONTRACTOR SHALL NOT POUR THE PROPOSED APPROACH SLABS UNTIL THE FINAL ADJUSTED PROPOSED ELEVATIONS, AS DETERMINED IN THE FIELD, HAVE BEEN APPROVED BY THE CHIEF ENGINEER. ALL WORK REQUIRED TO CONFIRM THESE PROPOSED ELEVATIONS SHALL BE CONSIDEF INCIDENTAL TO ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN.

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FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 27.

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- . FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING AS-1-15 AND STANDARD CONSTRUCTION DRAWING AS-2-15, TYPE A INSTALLATION (SHEETS 1,2, AND 14 OF 14).
- $\sim$ . REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ITEM 202 - APPROACH SLAB REMOVED, TYPE 1, AS PER PLAN, WEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLABS, (T=15") AND THEM 526 - TYPE ATMST PER PLAN.

B. FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 28

- ITEM 526.
- 5. THE PROPOSED ELEVATIONS NOTED ON THESE APPROACH SLAB DETAILS HAVE BEEN DEVELOPED FROM EXISTING SURVEY INFORMATION. THE PROPOSED ELEVATIONS REFLECT THE DESIGNERS CALCULATED ADJUSTMENTS TO THE EXISTING ELEVATIONS ALONG THE APPROACH SLABS. THE CONTRACTOR SHALL WORK WITH THE PROJECT ENGINEER AND THE OTIC PROJECT MANAGER TO CONFIRM THAT THESE PROPOSED ELEVATIONS PROVIDE A SMOOTH TRANSITION FROM THE EXISTING OR PROPOSED PAVEMENT ON TO THE PROPOSED APPROACH SLABS IN THE FIELD. THE CONTRACTOR SHALL NOT POUR THE PROPOSED APPROACH SLABS IN THE FIELD. THE CONTRACTOR SHALL NOT POUR THE PROPOSED APPROACH SLABS UNTIL THE FIELD. THE PROPOSED ELEVATIONS, AS DETERMINED IN THE FIELD, HAVE BEEN APPROVED BY THE CHIEF ENGINEER. ALL WORK REQUIRED TO CONFIRM THESE PROPOSED ELEVATIONS SHALL BE CONSIDERED INCIDENTAL TO ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15").

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NOTES:



## PLAN, EASTBOUND

NOTES:

1. FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING AS-1-15 AND STANDARD CONSTRUCTION DRAWING AS-2-15, TYPE A INSTALLATION (SHEETS 1,2, AND 14 OF 14).

 $\sim \Delta$ 2. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ITEM 202 - APPROACH SLAB REMOVED, TYPE 1, AS PER PLAN. NEW APPROACH SLAB IS INCLUDED UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLABS, (T=15") AND ITEM 526 - TYPE A INSTALLATION, AS PER PLAN.

3. FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 28.

- 4. ALL LONGITUDINAL JOINTS SHALL BE SEALED PER SP 516B. THIS WORK SHALL BE INCIDENTAL TO ITEM 526.
- 5. THE PROPOSED ELEVATIONS NOTED ON THESE APPROACH SLAB DETAILS HAVE BEEN DEVELOPED FROM EXISTING SURVEY INFORMATION. THE PROPOSED ELEVATIONS REFLECT THE DESIGNERS CALCULATED ADJUSTMENTS TO THE EXISTING ELEVATIONS ALONG THE APPROACH SLABS. THE CONTRACTOR SHALL WORK WITH THE PROJECT ENGINEER AND THE OTIC PROJECT MANAGER TO CONFIRM THAT THESE PROPOSED ELEVATIONS PROVIDE A SMOOTH TRANSITION FROM THE EXISTING OR PROPOSED PAVEMENT ON TO THE PROPOSED APPROACH SLABS IN THE FIELD. THE CONTRACTOR SHALL NOT POUR THE PROPOSED APPROACH SLABS UNTIL THE FINAL ADJUSTED PROPOSED ELEVATIONS, AS DETERMINED IN THE FIELD, HAVE BEEN APPROVED BY THE CHIEF ENGINEER. ALL WORK REQUIRED TO CONFIRM THESE PROPOSED ELEVATIONS SHALL BE CONSIDERED INCIDENTAL TO ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15").

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- APPROACH SLAB (T=15"), AS PER PLAN.

### DRAINAGE (CONTINUED)

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#### 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	<u>5 EACH</u>
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. REMOVAL OF THE PRECASE INLET TOPS SHOULD NOT BE REQUIRED. CARE SHALL BE TAKEN TO ENSURE THAT THE PRECAST TOPS ARE NOT DAMAGED DURING THE REPAIR/RECONSTRUCTION PROCESS. ANY DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE COMMISSION.

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.

### 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

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

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

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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

A

31,000 LBS

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:

TEM 617 - SHOULDER PREPARATION	<u>14,325 SY</u>
SP 617 - COMPACTED AGGREGATE	<u>1,330 CY</u>
TEM 617 - WATER	<u>45 MGAL</u>
SP 627 - STONE SHOULDER PROTECTION	<u>665 CY</u>

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

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

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:

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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.

### ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT

ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT

26,000 FT

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EMOVED	_		O
			$\overline{\mathbf{\Omega}}$
N AND EMBANKMENT		18	
		1/18/	<u> </u>
RADE		 DLF	$\geq$
12 00			Ζ
72.09 DN		. 1	
	20	SIONS	O
JBGRADE, 12 INCHES DEEP, AS PER FLAN JBGRADE, 16 INCHES DEEP	20	REVI	$ \mathcal{O} $
		AC	111
PLAN	20		
ER PLAN	20	< 7	$\Box$
		eckel MP Harg	
		DNI N N	$\cup$
, USING LONG STEEL POSTS		<i>ved</i> vv	$\overline{\Box}$
GS TYPE T		DESIG JM DRAI PS	$\overline{\mathbf{N}}$
ARRIER DESIGN, MGS TYPE A			
ASSEMBLY, TYPE 1			5
ASSEMBLY, TYPE 2			$\triangleleft$
			$\left  \right\rangle$
FEE(E1-31)			
		≿	7
		1AR	
	20	MML	$\cap$
ND ANCHORAGE, REINFORCED TYPE D, AS PER PLAN	20	รา	
ND SECTION, TYPE D, AS PER PLAN	20	ZAL	
NSTRUCTED TO GRADE		I N E	4
REMOVED AND RESET		GE	ш
TYPE A			$\overline{\mathbf{X}}$
	20		
DE STABILIZATION, AS FER FLAN, TENSAR TRIAX TOU GEOGRID	20		
FROSION CONTROL			Ζ
Encolor control			M
CTION, TYPE B WITH FILTER		2B	$\supset$
(MAT, TYPE 1		8-0	$\mathbf{F}$
		39-1 17	
		Г (	$\Box$
IG MULCHING	_	L12	-
		IC II	六
ER		PR DA	
		<b></b>	
BRIC FENCE		44	0 ₩
CHECK		80	ININ
	1		

									SH	EET NUME	BER									GRAND		
	18	19	20	21	22		23	24		47	48	49	51		53				//EM	TOTAL	UNIT	
			50																605	50	FT	AGGREGATE DRAIN, T
			50																 605	50	FT	AGGREGATE DRAIN, T
											45.000								 	45.000		
											15,600								 SP 605	15,600	F1	6 SHALLOW PIPE UNL
			12								1								 0.0.611	10	FACU	
			12								6								 SP 611	13	EACH	
				5							0								 SP 011	5	EACH	
				15							1								 SP 611	16	FACH	
				10							4								SP 611	4	FACH	CATCH BASIN ADJUST
											,									,	2/10//	
				5															SP 611	5	FACH	CATCH BASIN GRATE
				-							432								 SP 611	432	FT	6" CONDUIT, TYPE B, 7
											252								SP 611	252	FT	6" CONDUIT, TYPE F. 7
											16								SP 611	16	EACH	PRECAST REINFORCE
			2																SPECIAL	2	EACH	CATCH BASIN CLEANE
+																						
												422							252	422	FT	FULL DEPTH PAVEME
													14,420						254	14,420	SY	PAVEMENT PLANING,
													6,131						254	6,131	SY	PAVEMENT PLANING, J
													37,645						254	37,645	SY	PAVEMENT PLANING,
				1,500															254	1,500	SY	PAVEMENT PLANING, I
				1,440															254	1,440	SY	PAVEMENT PLANING, I
				$\sim$	$\square$															$\sim\sim\sim$		
				6,365	)														255 }	6,365	) SY }	FULL DEPTH PAVEMEN
				$\sim$																	1ml	CONCRETE)
			2	1,150	R														255	1,150	SY	
				15,250	$\mathcal{V}$														255	15,250	FT	FULL DEPTH PAVEMEN
				$\sim$	1															~~~~	-	
												5,279							 SP 302	5,279	CY	ASPHALT CONCRETE
												4,388							 SP 304	4,388	CY	AGGREGATE BASE
+												1,478	2,856						 SP 402	4,334	CY	ASPHALT CONCRETE I
				50									838						 SP 403	888	CY	ASPHALT CONCRETE
												965	2,450						 SP 404	3,415	CY	ASPHALT CONCRETE S
												3,127	11,393						 407	14,520	GAL	NON-TRACKING TACK
				01.000															 	24.000		
				31,000															 423	31,000	F1	CRACK SEALING, TYPE
+			-	11 205			-										+	├	 647	11 205		
+				14,325															 617	14,323	SY	SHOULDER PREPARA
_				45													-		 01/	40	IVI GAL	WAIER
				1 320								FOF							 CD 217	1 015		COMPACTED ACCEPT
+				1,000 66F								000					+	├	 SF 01/	756		
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+																	+					
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+						+	1										+				+	
+						-										1	+					
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+					9.00												+		 642	9.00	MILE	EDGE LINF. 6" TYPF 1
+					0.50											<u> </u>	+		 642	0.50	MILE	LANE LINF. 6" TYPE 1
+			-		2.500	+	1										+	+ +	 642	2.500	FT	
+			-		_,000 	+	1										+	+ +	 642	_,000 	FACH	LANE ARROW TYPE 1
+					3												+		 642	3	FACH	WORD ON PAVEMENT
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DESCRIPTION	REF.		HIO
DRAMACE		1940 -	OĒ
DRAINAGE		VCY	
PE 1, WITH FABRIC WRAP		AGEI	
PE 2, WITH FABRIC WRAP		ICN.	
ERDRAIN WITH FARRIC WRAP (30")		DES	
ICTED TO GRADE, AS PER PLAN	20		
D TO GRADE, AS PER PLAN	21	-	
ED TO GRADE, LESS THAN 4 , AS PER PLAN	21	18/18	J ()
D TO GRADE, 4 -12 , AS FER FLAN	21	∠ U	
	27	а <u>с</u> '	
ND CASTING, AS PER PLAN	21		
07.42			
7.41		-	
CONCRETE OUTLET		SNC ON M	()
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		<	1
PAVEMENT	_		IШ
7.04/////0			
T SAWING		9 K	
SPHALT CONCRETE (2")		< \	$\neg$
SPHALT CONCRETE (2.)		L SGE	
ORTLAND CEMENT CONCRETE (1")			
ORTLAND CEMENT CONCRETE (DEPTH_VARIES)	+	¢γ≧^	<sup>×</sup>
ORTLAND CEMENT CONCRETE, AS PER PLAN	21	<u>a</u> .	
A		JP GNE	ا <b>ب</b> ا
T REMOVAL AND RIGID REPLACEMENT (USING CLASS QC MS )		DESI DB	
T JOINT REPAIR (USING CLASS QC MS CONCRETE)			
T SAWING			( )
ASE, PG 64-22		-	
		-	
TERMEDIATE COURSE PG 76-22 (FR)			
EVELING COURSE. PG 76-22		≿	17
URFACE COURSE, USING CRUSHED SLAG, PG 76-22 (FR)		Ξ	
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COAT		5	
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TRAFFIC CONTROL		З, Э	
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KNER - STIMSUNITE MUDEL 101 LPCK		°N €	
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2". TYPE 1	-	AT AT	
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72", TYPE 1		<b> </b>	-
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