

ITEM 622 - PORTABLE BARRIER PLACEMENT (I-76 / I-77)

DURING THE PLACEMENT OF THE PORTABLE BARRIER, TRAFFIC WILL BE PROHIBITED FROM OCCUPYING THE TRAVEL LANE ADJACENT TO THE BARRIER. THE BARRIER WILL BE PLACED AT NIGHT PER THE WORK HOUR RESTRICTION NOTE AND IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE CHART. THE CLOSURE OF THE ADJACENT LANE WILL BE PER THE STANDARD DRAWING MT-95.30. THE CONTRACTOR WILL SUBMIT A PLAN TO THE ENGINEER FOR APPROVAL SEVEN (7) DAYS IN ADVANCE OF THE PLANNED LANE CLOSURE. WORK WILL NOT BEGIN UNTIL APPROVAL OF THE PLANS HAS BEEN GRANTED. ALL COSTS INVOLVED IN PLACING THE PORTABLE CONCRETE BARRIER WILL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM 622 PORTABLE CONCRETE BARRIER.

614 WORK ZONE PAVEMENT MARKINGS, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 614.II, ALL CLASS 1 EDGE LINES, LANE LINES, CENTER LINES AND DOTTED LINES SHALL BE 6 INCHES WIDE AND CHANNELIZING MARKINGS SHALL BE 8 INCHES WIDE. THE APPLICATION RATES FOR THE 6 INCH LINES SHALL BE 1.5 TIMES THE RATES SPECIFIED FOR 4 INCH LINES IN TABLE 614.II-1.

ITS MESSAGE BOARDS (I-76 / I-77)

THE EXISTING ITS MESSAGE BOARDS IN THE VICINITY OF THE PROJECT WILL BE UTILIZED TO PROVIDE SUPPLEMENTAL INFORMATION TO THE TRAVELING PUBLIC. THE CONTRACTOR WILL NOTIFY THE PROJECT ENGINEER ONE (1) WEEK IN ADVANCE OF ANY PHASE CHANGE. THE PROJECT ENGINEER WILL COORDINATE WITH EITHER LISA BOSE AT 330-786-4817 OR BRENT KOVACS AT 330-786-2208 TO GET THE ITS MESSAGE BOARDS ADJUSTED.

ITEM 614 - BUSINESS ENTRANCE (M4-H15) SIGN, AS PER PLAN (LOCAL)

THE BUSINESS ENTRANCE (M4-H15) SIGN SHOULD BE PROVIDED AT EACH TEMPORARILY RELOCATED COMMERCIAL DRIVEWAY FOR WHICH THE RELOCATION IS NOT OBVIOUS TO THE MOTORIST. THE PROJECT ENGINEER SHALL DETERMINE WHETHER OR NOT THE DRIVEWAY RELOCATION IS, OR IS NOT, OBVIOUS AND WHETHER OR NOT A SIGN SHOULD BE PROVIDED. ONLY ONE SIGN PER BUSINESS SHALL BE PERMITTED. THE SIGN SHALL BE 36 INCH X 48 INCH IN SIZE WITH TYPE G OR TYPE H ORANGE RETROREFLECTIVE SHEETING. THE SIGN LEGEND SHALL BE PLACED ON BOTH SIDES OF THE SIGN (BACK TO BACK). THE SIGN SHALL HAVE THE STANDARD M4-H15 LEGEND WITH THE WORD "BUSINESS" ON THE TOP LINE, EXCEPT UNDER UNUSUAL CIRCUMSTANCES WHERE IT MAY NOT BE INTUITIVE THAT A DRIVEWAY SERVES A SPECIFIC BUSINESS. IN SUCH UNUSUAL CASES, THE ACTUAL BUSINESS NAME MAY BE SUBSTITUTED FOR THE WORD "BUSINESS".

THE SIGN SHALL BE MOUNTED ON TWO NO. 3 POSTS OR ON TEMPORARY POSTS IN ACCORDANCE WITH SCD MT-105.10 AND IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE SIGN SHALL BE CLEARLY VISIBLE AND SHALL CLEARLY IDENTIFY THE LOCATION OF THE DRIVEWAY. THE SIGN SHOULD BE POSITIONED AT 90 DEGREES TO THE DIRECTION(S) OF TRAFFIC. THE SIGN MAY NEED TO BE MOVED FOR EACH PHASE OF THE MAINTENANCE OF TRAFFIC OPERATIONS.

PAYMENT FOR ALL COSTS ASSOCIATED WITH MANUFACTURING, MOUNTING, RELOCATING, AND REMOVING THE SIGN, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN THE CONTRACT PRICE PER EACH FOR ITEM 614-BUSINESS ENTRANCE SIGN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM.

ITEM 614 BUSINESS ENTRANCE SIGN, AS PER PLAN 20 EACH

ITEM 614 - COVERING OF SIGNS (I-76 / I-77)

THE CONTRACTOR WILL COVER ANY EXISTING AND/OR PROPOSED SIGN INSTALLATION WHICH IS IN CONFLICT WITH THE MAINTENANCE OF TRAFFIC PLANS. THE SIGNS SHALL BE COVERED IN SUCH A MANNER AS TO AVOID DAMAGING THE SIGN WHEN THE COVER IS REMOVED. THE COVER SHALL BE TOTALLY OPAQUE AND COVERS THE ENTIRE SIGN FACE. THE USE OF ADHESIVE TAPE APPLIED DIRECTLY TO THE SIGN FACE IS STRICTLY PROHIBITED. THE CONTRACTOR WILL PROVIDE ALL OF THE "CLOSED" PLAQUES NECESSARY. THE OVERLAY MAY BE RIVETED TO THE SIGN. THE CONTRACTOR SHALL PROVIDE ALL OF THE PLAQUES, SIGNS, AND SIGN PANELS NECESSARY.

UNLESS SEPARATELY ITEMIZED IN THE PLAN, THE LUMP SUM PRICE BID FOR ITEM 614-MAINTAINING TRAFFIC SHALL INCLUDE ALL COSTS NECESSARY TO COVER AND/OR MODIFY CONFLICTING SIGN INSTALLATIONS.

ITEM 625 - LIGHT POLE MISC.: REMOVE, SALVAGE AND RE-ERECT MEDIAN LIGHT POLE WITH RECONSTRUCTION OF MEDIAN FOUNDATION (I-76 / I-77)

CONTRACTOR SHALL REMOVE AND SALVAGE THE EXISTING MEDIAN LIGHT POLE AND LUMINAIRE. THE SALVAGED ITEMS SHALL BE STORED BY THE CONTRACTOR FOR THE DURATION OF THE NEED FOR THE CROSSOVER THROUGH THE MEDIAN. THE FOUNDATION SHALL BE REMOVED TO A DEPTH OF 12" BELOW PROPOSED GUTTER AND PER REQUIREMENTS OF ODOT CMS 202. THE CONTRACTOR SHALL CONSTRUCT A NEW 24" X 10' DEEP FOUNDATION, INCLUDING NEW PULL BOX, ANCHOR BOLTS AND MOUNTING PLATE, ADJACENT TO THE EXISTING FOUNDATION TO REMAIN BELOW GRADE. THE FOUNDATION AND PULL BOX SHALL BE CONSTRUCTED PER SCD HL-20.13. THE SALVAGED POLE AND LUMINAIRE SHALL BE RE-INSTALLED ON THE NEW FOUNDATION AND CONNECTED TO THE EXISTING LIGHTING CIRCUITRY. ALL MATERIALS AND LABOR REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 625 LIGHT POLE MISC.: REMOVE, SALVAGE AND RE-ERECT MEDIAN LIGHT POLE WITH RECONSTRUCTION OF MEDIAN FOUNDATION. CONTRACTOR SHALL MAINTAIN EXISTING LIGHTING CIRCUIT, UNTIL NEW CIRCUIT IS INSTALLED.

CONSTRUCTION ACCESS POINTS

THE CONTRACTOR SHALL USE THE DESIGNED CONSTRUCTION ACCESS POINTS SHOWN ON SHEETS 196, 201, 206, AND 211, FOR PHASE 1, STAGE 1 AND STAGE 2 OF BOTH WOLF LEDGES AND GRANT STREET BRIDGE CONSTRUCTION. FOR ACCESS INTO THE CONSTRUCTION ZONE DURING THESE PHASES, THREE LANES SHALL BE MAINTAINED MONDAY - FRIDAY, 6 AM TO 8 AM AND 3 PM TO 6 PM. ONE LANE CAN BE CLOSED ANY TIME ON SATURDAY AND SUNDAY.

CONSTRUCTION RESTRICTIONS

THE FOLLOWING DISCUSSION OF CONSTRUCTION SEQUENCING RESTRICTIONS IS PROVIDED FOR THE CONTRACTOR'S BENEFIT WHEN PLANNING HIS/HER CONSTRUCTION WORK TASK SEQUENCING. ITEMS UNDER PERMITTED SEQUENCING ARE NON-BINDING AND COULD BE MODIFIED BY THE CONTRACTOR IF AN ALTERNATE MAINTENANCE OF TRAFFIC METHOD IS SELECTED, ANY APPROVED ALTERNATE MUST INCLUDE THESE RESTRICTIONS.

- RESTRICTIONS
1. THE LOCAL STREET CONSTRUCTION MUST BE COMPLETED TO THE POINT THAT BROADWAY TRAFFIC CAN BE PLACED ONTO THE WIDENED/RELOCATED MAIN STREET BEFORE PHASE 2 CAN BEGIN.
 2. EXCEPT FOR THE 2 WEEK DETOUR FOR THE CONSTRUCTION OF THE TIE-IN FOR RAMP W-5, WB EXIT TO DOWNTOWN (RAMP W-5A AND W-5) SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
 3. RAMP W-5 MUST BE COMPLETED AND OPEN BEFORE BEGINNING PHASE 3.
 4. EXISTING RAMP W-9 SHALL NOT BE CLOSED UNTIL THE NEW RAMP W-9 IS COMPLETE AND OPEN.
 5. WOLF LEDGES PARKWAY MUST BE COMPLETED AND OPEN TO TRAFFIC BEFORE CONSTRUCTION WHICH RESTRICTS LANES CAN BEGIN ON GRANT STREET.
 6. PHASE 2 SHALL NOT BEGIN UNTIL STRUCTURES SUM-76-1075 (WOLF LEDGES) AND SUM-76-1085 (GRANT STREET) ARE COMPLETE.
 7. BUILDING DEMOLITION WORK, INCLUDING RESTORATION OF THE SITES, SHALL BE COMPLETED BY SEPTEMBER 30, 2016.
 8. WORK ON WOLF LEDGES AND GRANT STREET THAT REQUIRES AND TRAFFIC CONTROL ON I-76 SHALL NOT BEGIN BEFORE AUGUST 1, 2016.
 9. THERE ARE ADJACENT BRIDGES, WITHIN CLOSE PROXIMITY TO WOLF LEDGES AND GRANT STREET THAT WILL ALSO BE UNDER CONSTRUCTION DURING THE FALL OF 2016. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT CONTRACTORS TO MAKE SURE THE I-76 CONSTRUCTION ZONES FOR THIS PROJECT MATCH IN AND DO NOT CONFLICT WITH THE ZONES FOR THE ADJACENT PROJECTS.
 10. THE WOLF LEDGES AND GRANT STREET STRUCTURES AND APPROACH ROADWAY WORK SHALL BE COMPLETE AND OPEN TO TRAFFIC BY OCTOBER 31, 2017.
 11. PHASE 2 SHALL BE COMPLETED BY AUGUST 31, 2018.
 12. PHASE 3 SHALL BE COMPLETED BY AUGUST 31, 2019.

DATES PROVIDED ABOVE SHALL BE CONSIDERED INTERIM COMPLETION DATES AND SHALL BE SUBJECT TO DISINCENTIVE PENALTY IN THE AMOUNT OF \$1,500 PER DAY THAT THE WORK IS NOT COMPLETE BEYOND INTERIM COMPLETION DATE.

ITEM 630 - SIGNING MISC.: REMOVE, SALVAGE AND RE-ERECT CONCRETE MEDIAN BARRIER-MOUNTED MILE MARKER (I-76 / I-77)

CONTRACTOR SHALL REMOVE AND SALVAGE THE EXISTING BARRIER-MOUNTED MILE MARKER PER REQUIREMENTS OF ODOT CMS 202. THE CONTRACTOR SHALL STORE THE EXISTING SIGNS FOR THE DURATION OF THE NEED FOR THE CROSSOVER THROUGH THE MEDIAN. THE EXISTING MOUNTING AND POST SHALL BE REMOVED AND REPLACED WITH NEW MOUNTING AND POST PER DETAILS ON SHEET 1135. ALL MATERIALS AND LABOR REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 630 SIGNING MISC.: REMOVE, SALVAGE AND RE-ERECT CONCRETE MEDIAN BARRIER-MOUNTED MILE MARKER.

MAINTENANCE OF TRAFFIC AND ACCESS TO PROPERTIES

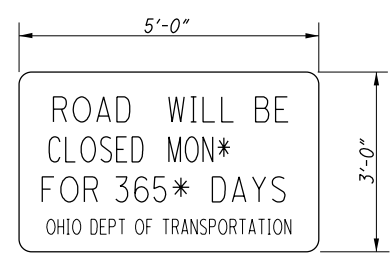
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC AND ACCESS TO PROPERTIES.

| | |
|--|--------|
| ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B | 500 CY |
| ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C | 500 CY |
| ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC | 100 CY |

DRIVES TO REMAIN OPEN AT ALL TIMES UNLESS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. DRIVEWAY ACCESS MUST BE MAINTAINED AT ALL TIMES USING PARTIAL WIDTH CONSTRUCTION.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT 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.



W20-H14-60
* CONTRACTOR SHALL USE ACTUAL CLOSURE DATE AND DURATION.

THE COST OF THE NOTICE OF CLOSURE SIGN IS CONSIDERED TO BE INCIDENTAL TO AND INCLUDED IN ITEM 614 - MAINTAINING TRAFFIC.

| REV. BY | DATE | DESCRIPTION |
|----------------|---------|------------------------------------|
| KMK | 4/18/16 | COMPLETION DATE FOR GRANT AND WOLF |
| MEP | 2/12/16 | A.C. FOR MOT QUANTITY REVISION |
| DATE COMPLETED | | |

LIMITATION OF STREET CLOSURES

THE CONTRACTOR SHALL COMPLETE ALL CONSTRUCTION AND SAFETY ITEMS AND HAVE THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC WITH IN THE CALENDER DAYS SPECIFIED.

DESCRIPTION OF LOCATION COMPLETION DAYS

PHASE 1, STAGE 1A
BROADWAY STREET AND MILLER AVENUE CLOSURE: 10 CALENDAR DAYS

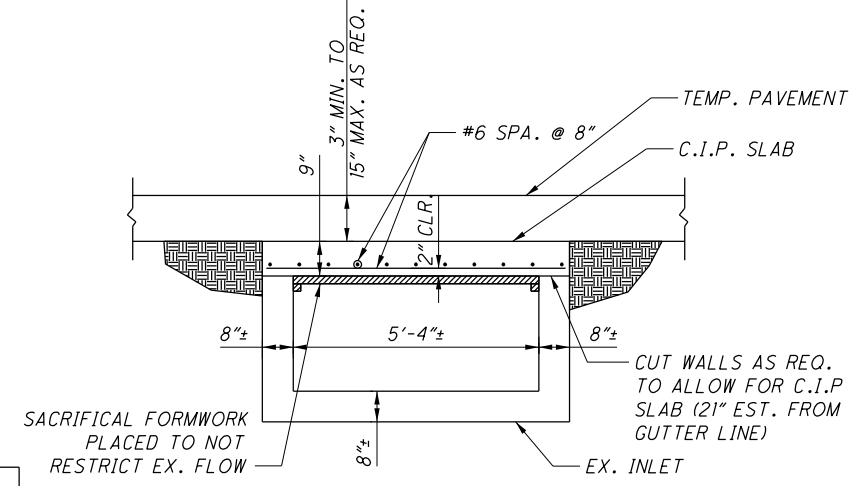
PHASE 1, STAGE 1B
BROADWAY STREET AND MILLER AVENUE CLOSURE: 10 CALENDAR DAYS

PHASE 1, STAGE 1C
YALE STREET CLOSURE: 21 CALENDER DAYS

PHASE 2
BROADWAY STREET AND THORNTON INTERSECTION AVENUE CLOSURE: 14 CALENDAR DAYS. NO CLOSURE OF THE BROADWAY/THORNTON INTERSECTION MAY TAKE PLACE UNTIL RAMP W-5 (WB TO NB) BRIDGE IS COMPLETE AND PAVEMENT COMPLETED TO STA 575+75+/- SO THAT THIS MOVEMENT CAN BE OPENED TO TRAFFIC AFTER THE 14 DAY INTERSECTION CLOSURE. THE EXISTING RAMP E MUST REMAIN OPEN PRIOR TO THIS CLOSURE.

ITEM 611 - INLET MISC.: REMOVE, PROTECT AND RECONSTRUCT BARRIER MEDIAN INLET (I-76 / I-77)

CONTRACTOR SHALL SAWCUT THE EXISTING BARRIER MEDIAN INLET TO A DEPTH OF 21" BELOW PROPOSED GUTTER AND PER REQUIREMENTS OF ODOT CMS 202. THE CONTRACTOR SHALL PROTECT THE EXISTING PIPE INVERT WITH A CONCRETE SLAB AND BACKFILL WITH PROPOSED SHOULDER PAVEMENT SECTION FOR THE DURATION OF THE NEED FOR THE CROSSOVER THROUGH THE MEDIAN. THE SLAB SHALL BE AS PER DETAIL SHOWN. CONCRETE SHALL BE CMS ITEM 511, CLASS OC1 MISC. WITH 4 KSI DESIGN STRENGTH. REINFORCING SHALL BE PER CMS ITEM 509 NO SEPARATE PAYMENT WILL BE MADE FOR TIME, CONCRETE AND REBAR AND OTHER MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK AS IT IS INCIDENTAL OT THIS ITEM. THE EXISTING INVERT AND ONE SEGMENT OF EXISTING PIPE SHALL BE REMOVED AND REPLACED PER SCD I-2.4. WHEN THE TIME COMES TO REPLACE THE MEDIAN BARRIER WITH NEW BARRIER THE EXISTING MEDIAN INLET MUST BE REMOVED AND THE NEW MEDIAN INLET RECONSTRUCTED IN IT'S ORIGINAL LOCATION AS APPROVED BY THE ENGINEER. ALL MATERIALS, LABOR, AND EQUIPMENT REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 611 INLET MISC.: REMOVE, PROTECT AND RECONSTRUCT BARRIER MEDIAN INLET.



DETAIL FOR ITEM 611 - INLET MISC.: REMOVE, PROTECT AND RECONSTRUCT BARRIER MEDIAN INLET (I-76 / I-77)

I:\Projects\Main_Broadway\STRUCTURES\SUM-76-10.85 (Grant Street)\Sheets\076_1085GN003.dgn 4/18/2016 1:50:36 PM Kyle_koppes

ITEM SPECIAL TEMPORARY UTILITY SUPPORT
 THIS WORK INCLUDES ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTAL ITEMS NECESSARY TO TEMPORARILY SUPPORT THE TWELVE (12) EXISTING AT&T CONDUITS SUPPORTED BY THE EXISTING SUM-76-1085 BRIDGE. PRIOR TO PROJECT COMMENCEMENT AT&T IS ANTICIPATED TO HAVE COMPLETED THE PROCESS OF ADDING SLACK INTO THE EXISTING LINES IN A NEWLY CONSTRUCTED MANHOLE NEAR THE NORTH END OF THE EXISTING STRUCTURE SUCH THAT THE LINES CAN BE RELOCATED AS SHOWN IN THESE PLANS. FOLLOWING THIS ADDITION IT IS ANTICIPATED THERE WILL BE ENOUGH SLACK IN THE EXISTING LINES SUCH THAT THEY CAN BE TEMPORARILY RELOCATED DURING BRIDGE REMOVAL AND CONSTRUCTION AND INCORPORATED TO THEIR PROPOSED LOCATION WITHOUT ADDITIONAL SPLICING. THE CONTRACTOR MAY INCREASE THE SLACK IN THE LINES BY EXPOSING THE EXISTING CABLE WITHIN THE 458'± LIMITS BETWEEN EXISTING MANHOLES AS SHOWN ON THE TEMPORARY UTILITY SUPPORT DETAIL SHEETS AS NECESSARY. THE EXPOSURE OF THIS CABLE AND ITS REPLACEMENT IN KIND, INCLUDING ANY NECESSARY PAVEMENT REMOVALS AND BACKFILLING OPERATIONS SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM PRICE BID. SHOULD THIS EXPOSURE NOT PROVIDE ENOUGH SLACK, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. ~~AS THIS STRUCTURE IS NOT CRITICAL TO THE PROJECT MAINTENANCE OF TRAFFIC PLAN ONCE THE ABUTMENTS ARE REMOVED, AT&T SHALL BE RESPONSIBLE FOR ANY DELAY COSTS INCURRED BY THE CONTRACTOR DUE TO THE NEED TO SPLICE ADDITIONAL CABLE ONTO THE EXISTING LINES IF NECESSARY AFTER EXPOSING THE CABLE BETWEEN MANHOLES.~~

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, TEMPORARILY SUPPORTING AND REINSTALLING THE EXISTING CONDUIT DUCTS ON THE SUM-76-1085 BRIDGE. NO WORK BY THE CONTRACTOR THAT DIRECTLY IMPACTS THE AT&T CONDUITS SHALL BE COMPLETED WITHOUT AT&T PERSONNEL PRESENT ON-SITE. IN ORDER TO FACILITATE THIS REPRESENTATION THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AT&T PERSONNEL THREE (3) WORKING DAYS IN ADVANCE OF ANY PLANNED WORK TO THE AT&T FACILITIES. THIS WORK IS ANTICIPATED TO INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING:

- REMOVING THE EXISTING SPLIT CASINGS AND UNDERGROUND CONCRETE CONDUIT BOXES WITHIN THE 458' LIMIT TO FACILITATE CABLE RELOCATION.
- RELOCATING THE EXISTING CABLE TO THE TEMPORARY SUPPORT BRIDGE TAKING CARE TO SUPPORT THE CABLES AT 10' C/C MAXIMUM.
- RELOCATING THE EXISTING CABLE FROM THE TEMPORARY SUPPORT BRIDGE TO THE FINAL LOCATION ON THE NEW SUM-76-1085 BRIDGE TAKING CARE TO SUPPORT THE CABLES AT 10' C/C MAXIMUM.
- INSTALLING NEW SPLIT CASINGS AND SUPPORT HARDWARE AROUND THE RELOCATED CABLES AS WELL AS INSTALLING NEW UNDERGROUND CONCRETE CONDUIT BOXES REMOVED FOR RELOCATION WITHIN THE 458' LIMIT. THE UNDERGROUND CONCRETE CONDUIT BOXES AS REQUIRED WITHIN THE 458' LIMIT ARE TO BE PROVIDED BY AT&T.

PRIOR TO ANY WORK IMPACTING THE AT&T FACILITIES NOTIFY THE FOLLOWING:
 VERN LUNTSFORD - INSPECTOR CONSTRUCTION
 AT&T OHIO
 1100 E. WATERLOO ROAD ROOM A-45
 AKRON, OH 44306-3804
 (330) 384-3610 (OFFICE)
 (330) 212-5732 (MOBILE)

THE PROPOSED SEQUENCE OF CONSTRUCTION IN ORDER TO TEMPORARILY SUPPORT THE CONDUITS SHALL BE AS FOLLOWS. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE PROJECT MAINTENANCE OF TRAFFIC RESTRICTIONS AND SEQUENCES. SHOULD THE CONTRACTOR ELECT A DIFFERENT MEANS AND METHOD THAT VARIES FROM THE FOLLOWING, IT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IN ACCORDANCE WITH CMS 501:

1. REMOVE THE EXISTING DECK, PARAPET, BACKWALL AND ANY APPROACH PAVEMENT NECESSARY TO EXPOSE THE BURIED CONDUIT WITHIN THE LIMITS SHOWN ON THE TEMPORARY BRIDGE DETAIL SHEETS.
2. INSTALL TEMPORARY DRILLED SHAFTS TO SUPPORT THE TEMPORARY BRIDGE
3. REMOVE A PORTION THE EXISTING MEDIAN BARRIER AS REQUIRED AND INSTALL THE TEMPORARY CENTER PIER ON A DRILLED SHAFT. PROTECT THIS PIER WITH PORTABLE CONCRETE BARRIER AS SHOWN IN THE MOT PLANS
4. INSTALL TEMPORARY BRIDGE. (THE WORK OF STEPS 2 THRU 4 CAN BE COMPLETED CONCURRENT WITH OR PRIOR TO STEP 1)
5. REMOVE SPLIT CASINGS ON CONDUITS AND SUPPORT ASSEMBLIES AND RELOCATE CONDUITS TO TEMPORARY BRIDGE USING PIPE SLINGS. PROVIDE ADDITIONAL SUPPORTS AT THE TEMPORARY CENTER SHAFT TO WRAP CONDUIT AROUND SHAFT.

6. WHEN NO LONGER REQUIRED TO SUPPORT THE EXISTING CONDUIT REMOVE THE EXISTING BEAMS A & B.
7. REMOVE EXISTING ABUTMENTS AND BUILD PROPOSED ABUTMENTS UP TO THE BEAM SEAT.
8. REMOVE AND REBUILD THE PIER CAP IN ACCORDANCE WITH MOT REQUIREMENTS (NOTE THIS CAN BE COMPLETED CONCURRENTLY WITH STEP 7)
9. ERECT PROPOSED BEAMS A & B AND SUPPORT Laterally UNTIL EVERY CROSSFRAME CONNECTION IS MADE.
10. COMPLETE ALL CROSSFRAME AND UTILITY SUPPORT CONNECTIONS AND INSTALL CONDUIT IN PROPOSED LOCATIONS INCLUDING NEW SUPPORT ASSEMBLIES AND SPLIT CASINGS.
11. WHEN NO LONGER REQUIRED TO SUPPORT THE CONDUITS, THE TEMPORARY BRIDGE MAY BE REMOVED.
12. WHEN NO LONGER REQUIRED TO SUPPORT THE TEMPORARY BRIDGE, REMOVE THE TEMPORARY DRILLED SHAFTS TO 2'-0" MINIMUM BELOW THE PROPOSED SUBGRADE ELEVATION.

AS A PART OF THIS ITEM THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL HIS MEANS AND METHODS FOR REMOVING THE EXISTING BEAMS, ERECTING THE TEMPORARY BRIDGE, ERECTING THE PERMANENT STEEL AND SUBSEQUENTLY REMOVING THE TEMPORARY BRIDGE. THE METHODS USED BY THE CONTRACTOR SHALL BE DOCUMENTED ON THE ERECTION DRAWINGS WITH ALL SUPPORTING STABILITY CALCULATIONS SUBMITTED IN ACCORDANCE WITH CMS ITEMS 501 AND 513. THE CONTRACTORS ATTENTION IS DIRECTED TO THE REQUIREMENTS FOR STABILITY OF STEEL BEAMS DURING ERECTION (CMS 513.26). THE BEAMS ON THIS BRIDGE SHALL BE STABILIZED DURING ERECTION BY USE OF FALSEWORK, TEMPORARY BRACING, COMPRESSION FLANGE STIFFENING TRUSS OR BY USE OF A HOLDING CRANE UNTIL EVERY OTHER CROSSFRAME ON BEAMS A AND B IS INSTALLED.

AS A PART OF THIS ITEM THE CONTRACTOR SHALL PROVIDE A TEMPORARY BRIDGE TO SUPPORT THE EXISTING CONDUITS. THIS TEMPORARY BRIDGE SHALL BE AS SHOWN ON THE TEMPORARY BRIDGE DETAILS AND SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

INCLUDED IN THIS ITEM IS THE COST OF FURNISHING, TRANSPORTING, ERECTING AND REMOVING THE COMPLETE TEMPORARY BRIDGE SUPERSTRUCTURE, INCLUDING ALL FRAMING, BEARING DEVICES AND ALL OTHER INCIDENTALS REQUIRED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS AND THESE SPECIFICATIONS. ALL REMOVALS INCLUDING THE REMOVAL OF THE TEMPORARY DRILLED SHAFTS AND SUPPORTS SHALL BE IN ACCORDANCE WITH CMS ITEM 202 REQUIREMENTS.

THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH SHOP DRAWINGS FOR APPROVAL IN ACCORDANCE WITH CMS 501.

THESE REQUIREMENTS ARE FOR A FULLY ENGINEERED CLEAR SPAN TEMPORARY BRIDGE AND SHALL BE REGARDED AS MINIMUM STANDARDS FOR DESIGN AND CONSTRUCTION. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH CMS 513.

THE PRE-ENGINEERED TEMPORARY TRUSS BRIDGE SHALL BE MANUFACTURED BY ONE OF THE FOLLOWING OR AN APPROVED EQUAL:

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|--|--|
| ACROW BRIDGE 181 NEW ROAD #202 PARSIPPANNY, NJ 07054 PHONE: 973-244-0080 www.acrow.com | MABEY BRIDGE 6770 DORSEY ROAD ELKRIDGE, MD 21075 PHONE: 410-379-2800 www.mabey.com |
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THE BRIDGE MANUFACTURER SHALL HAVE BEEN IN THE BUSINESS OF DESIGN AND FABRICATION OF BRIDGES FOR A MINIMUM OF 5 YEARS AND PROVIDE A LIST OF 10 SUCCESSFUL BRIDGE PROJECTS OF SIMILAR CONSTRUCTION EACH HAVING BEEN IN SERVICE FOR AT LEAST 3 MONTHS FOR APPROVAL BY THE ENGINEER.

THE DESIGN OF THIS STRUCTURE SHALL CONFORM TO THE "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 6TH EDITION AND THE ODOT LRFD BRIDGE DESIGN MANUAL, 2007.

THE DESIGN LOADING OF THIS STRUCTURE SHALL BE A NOMINAL (UNFACTORED) 150 POUNDS PER FOOT FOR THE CONDUITS AND CABLES. THE DESIGNER SHALL ALSO ACCOUNT FOR ALL CONSTRUCTION AND ERECTION LOADS. WIND LOADS SHALL BE PER ASSHTO LRFD REQUIREMENTS.

IN ADDITION TO VERTICAL LOADS THE BRIDGE SHALL BE DESIGNED TO ACCOMMODATE A MAXIMUM TEMPERATURE RISE OF 60°F AND A FALL OF 90°F WITH AN ASSUMED SETTING TEMPERATURE OF 60°F.

THE TEMPORARY TRUSS BRIDGE SHALL BE NO WIDER THAT 10'-3" IN ORDER TO UTILIZE THE TEMPORARY SHAFTS SHOWN IN THE PLANS. SHOULD THE TRUSS BE WIDER THE MANUFACTURER SHALL BE RESPONSIBLE FOR REDESIGN OF THE TEMPORARY SHAFTS TO ACCOMMODATE THE TRUSS. THE MINIMUM CLEAR SPANS SHALL BE AS SHOWN IN THE TEMPORARY BRIDGE DETAIL SHEETS.

THE BOTTOM CHORD OF THE TRUSS SHALL BE NO LOWER THAN THE ELEVATIONS SHOWN ON THE TEMPORARY BRIDGE DETAIL SHEETS AND SHALL MAINTAIN 17'-6" MINIMUM VERTICAL CLEARANCE BELOW THE SUPPORTED CONDUITS AT ALL TIMES OVER ACTIVE TRAFFIC. THE MANUFACTURER SHALL DETERMINE THE REQUIRED TRUSS DEPTH TO ACCOMPLISH THE REQUIRED SPANS.

ALL CHORD MEMBERS SHALL COMPLY WITH THE REQUIREMENTS OF CMS 513 AND ASTM A719 AND SHALL MEET THE AASHTO LRFD MINIMUM THICKNESS REQUIREMENTS. ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL UTILIZE HIGH STRENGTH ASTM A325 BOLTS WITH ASTM A563 GRADE C NUTS AND ASTM F436 WASHERS AND SHALL BE INSTALLED IN ACCORDANCE WITH CMS 513. ALL SHOP WELDING SHALL BE IN ACCORDANCE WITH THE CURRENT AASHTO/ AWS CODE AND CMS SECTION 513.

ALL WORKMANSHIP, FABRICATION AND SHOP CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF CMS SECTION 513. THE TEMPORARY BRIDGE SHALL BE FABRICATED BY A FABRICATOR WHO IS CURRENTLY CERTIFIED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION TO HAVE THE PERSONNEL, ORGANIZATION, EXPERIENCE, CAPABILITY AND COMMITMENT TO PRODUCE FABRICATED STRUCTURAL STEEL FOR THE CATEGORY "MAJOR STEEL BRIDGES" AS SET FORTH IN THE AISC CERTIFICATION PROGRAM WITH FRACTURE CRITICAL ENDORSEMENT. QUALITY CONTROL SHALL BE IN ACCORDANCE WITH PROCEDURES OUTLINED FOR AISC CERTIFICATION.

THE TEMPORARY BRIDGE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M111 - ASTM A123. OR THE MANUFACTURE SHALL DEMONSTRATE A MEANS OF CORROSION PROTECTION.

THE TEMPORARY BRIDGE SHALL BE DELIVERED AND REMOVED FROM THE PROJECT SITE AT A LOCATION AS DIRECTED BY THE ENGINEER. WHEN NO LONGER NEEDED ON THE PROJECT THE TEMPORARY BRIDGE SHALL BE THE PROPERTY OF THE CONTRACTOR. HAULING PERMITS AND FREIGHT CHARGES ARE CONSIDERED INCIDENTAL ITEMS TO THE TEMPORARY BRIDGE AND SHALL BE INCLUDED IN THE BID PRICE. ALL REMOVALS SHALL BE PER ITEM 202 PROVISIONS AND SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM PRICE BID.

THE MANUFACTURER SHALL INDICATE IN THE SHOP DRAWING SUBMITTAL, THE ACTUAL LIFTING WEIGHTS, ATTACHMENT POINTS AND ALL NECESSARY INFORMATION TO INSTALL THE BRIDGE.

THE BRIDGE MANUFACTURER SHALL PROVIDE A WARRANTY FOR THE STEEL STRUCTURE TO BE FREE OF DESIGN, MATERIAL AND WORKMANSHIP DEFECTS FOR A PERIOD OF THREE (3) YEARS FROM THE DATE OF DELIVERY TO THE PROJECT SITE.

THE TEMPORARY DRILLED SHAFTS SHALL CONFORM TO THE MINIMUM REQUIREMENTS SHOWN IN THE PLANS AND TO THE REQUIREMENTS OF CMS ITEM 524. SHAFTS SHALL BE SOCKETED A MINIMUM 6' INTO ROCK AS SHOWN IN THE PLANS. IN ADDITION TO THE SHAFT CONCRETE AND REINFORCING THE EMBEDDED ANCHOR RODS, BASE PLATE AND DISTRIBUTION BEAM SHALL ALSO BE FURNISHED AND INSTALLED PER PLANS AND CMS ITEM 513 REQUIREMENT. ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS REQUIRED TO FURNISH, INSTALL AND REMOVE THE TEMPORARY DRILLED SHAFTS SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED FOR PAYMENT WITH ITEM SPECIAL - STRUCTURE MISC: TEMPORARY UTILITY SUPPORT.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID PRICE FOR ITEM SPECIAL - STRUCTURE, MISC.: TEMPORARY UTILITY SUPPORT. WHERE PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL DESIGN, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AND SUBSEQUENT REMOVAL AND DISPOSAL IN CONFORMANCE WITH THESE REQUIREMENTS, PERTINENT PROVISIONS OF THE CMS AND TO THE SATISFACTION OF THE ENGINEER.

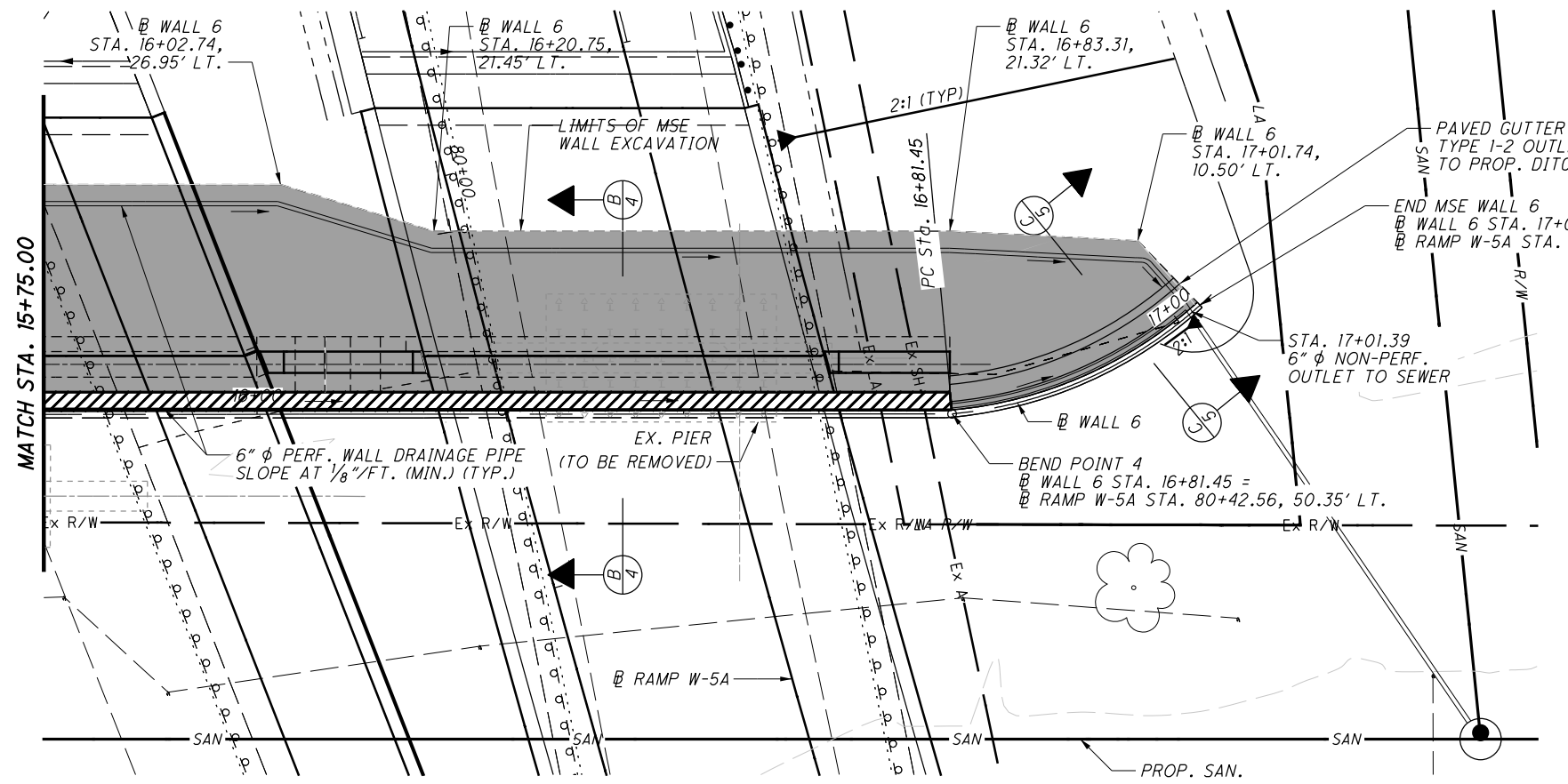
| | | |
|---------|---------|---|
| KMK | 4/18/16 | ADDED TO AT&T DUCT NOTE |
| JEM | 4/6/16 | MODIFIED NOTES IN RESPONSE TO PRE-BID QUESTIONS |
| REV. BY | DATE | DESCRIPTION |
| | | |
| | 5/37 | |
| 1509 | | |
| 1822 | | |



| | |
|-----------------------|---------|
| DATE | 7/14 |
| REVIEWED | BKL |
| DRAWN | DEB |
| DESIGNED | DEB |
| CHECKED | TES |
| STRUCTURE FILE NUMBER | 7703104 |

GENERAL NOTES - 4 OF 4
 BRIDGE NO. SUM-76-1085
 GRANT STREET OVER I-76

SUM-76-10.00
 PID No. 77269

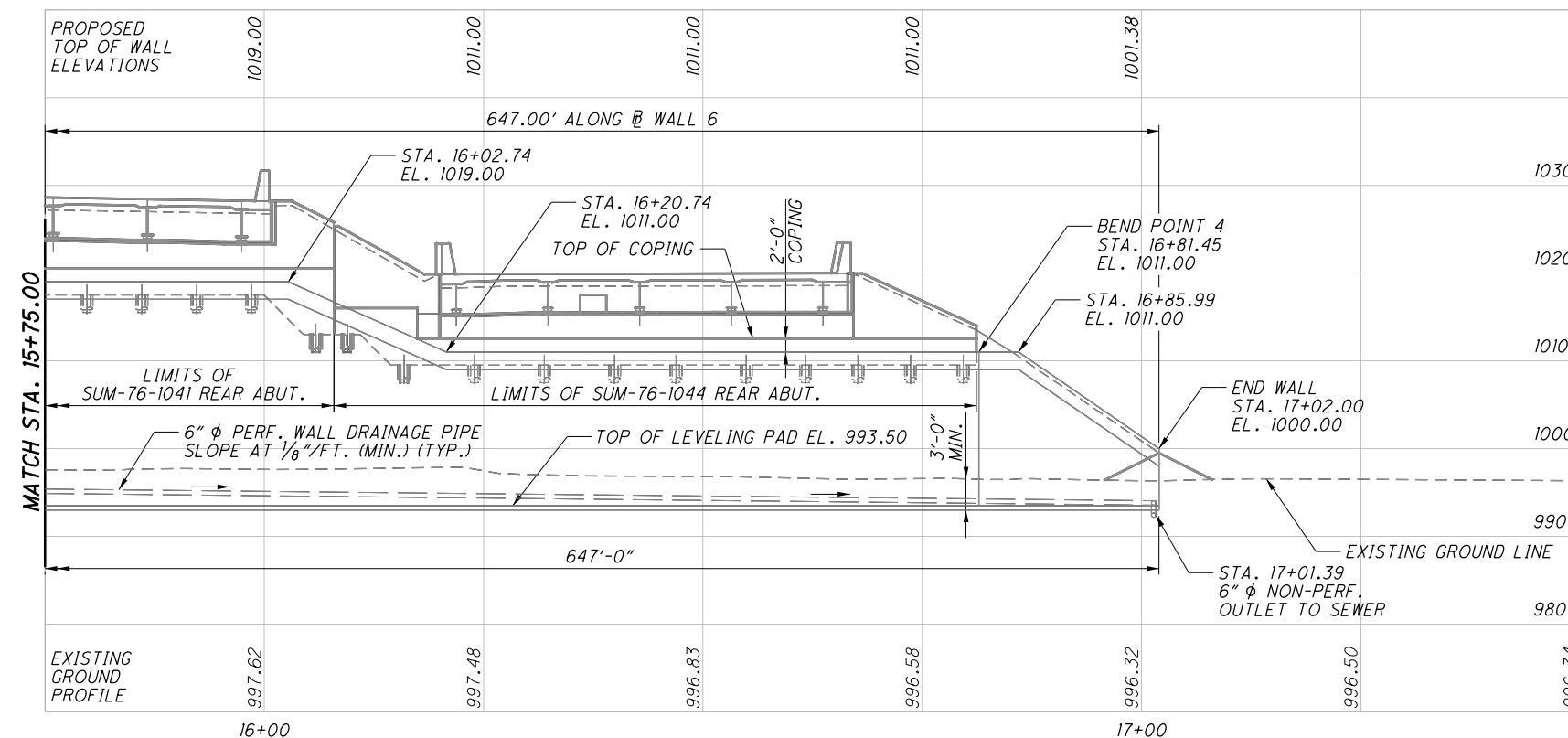


W WALL 6 CURVE 2 DATA
 P.I. Sta. 17+01.82
 $\Delta = 45^\circ 49' 25''$ (LT)
 $D_c = 180^\circ 00' 00''$
 $R = 50.00'$
 $T = 21.13'$
 $L = 25.46'$
 $E = 4.28'$
 $C = -38.93'$
 C.B. = N 9° 43' 57" W

LEGEND:

- PROJECT BORING LOCATION
- HISTORIC BORING LOCATION
- LIMITS OF CONCRETE SLOPE PROTECTION

PLAN



PROFILE

NOTES:

1. ALL TOP OF WALL ELEVATION ARE GIVEN TO THE TOP OF COPING.
2. WALL BASELINE IS LOCATED AT FRONT FACE OF MSE WALL.
3. SEE WALL GENERAL NOTES SHEET ¹⁶¹⁶1822 FOR ADDITIONAL NOTES.
4. MINIMUM DISTANCE FROM THE PROPOSED GROUND SURFACE TO THE TOP OF THE LEVELING PAD IS DETERMINED BASED ON A FROST DEPTH OF 3.0 FT.
5. FOR ADDITIONAL ABUTMENT DETAILS SEE SUM-76-1041, SUM-76-1043 AND SUM-76-1044 BRIDGE PLANS.
6. SUBBASE FILTER SHALL CONSIST OF ONE LAYER OF TYPE D GEOTEXTILE FABRIC PER CMS 712.09 ON TOP AND BOTTOM OF A 2'-0" THICK LAYER OF TYPE C SUBGRADE MATERIAL MEETING THE REQUIREMENTS OF CMS 204.03 AND 703.16 FOR COMPACTION AND MATERIAL GRADATION. THE TOP OF THE FILTER SHALL BE 1'-6" BELOW THE TOP OF LEVELING PAD ELEVATION.
7. COST OF EXCAVATION, FURNISHING AND INSTALLING IN PLACE, THE SUBBASE FILTER, SHALL BE INCLUDED IN ITEM 840, FOUNDATION PREPARATION, AS PER PLAN.
8. FOR PHASE CONSTRUCTION AND TEMPORARY MSE WALL DETAILS SEE SHEET ⁸8.

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| REV. BY | DATE | DESCRIPTION |
|---------|---------|----------------------------|
| KMK | 4/18/16 | ADDED EXCAVATION TO NOTE 7 |
| | | |
| | | |
| | | |
| | | |

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| WALL 9 STEEL PILING IN DRILLED SHAFTS TABLE | | | | | | | | | |
|---|--------------------------------|---------------------------------|------------------------|------------------------|------------------------|---------------------------------------|------------------------------|--------------------------------------|------------------------------|
| PILE NO. | STATION AND OFFSET FROM WALL 9 | DRILLED SHAFT DIAMETER (INCHES) | EMBEDDED STEEL SECTION | TOP OF STEEL ELEVATION | TOP OF SHAFT ELEVATION | MINIMUM SHAFT AND STEEL TIP ELEVATION | TOP OF OCI CONCRETE BACKFILL | ESTIMATED STEEL SECTION LENGTH (FT.) | ESTIMATED SHAFT LENGTH (FT.) |
| 1 | 10+97.92 1.24' RT | 36 | HP 10X42 | 1009.95 | 1002.25 | 991.25 | 999.25 | 18.70 | 11.00 |
| 2 | 11+04.94 1.24' RT | 36 | HP 10X42 | 1009.77 | 1002.25 | 991.25 | 999.25 | 18.52 | 11.00 |
| 3 | 11+11.95 1.24' RT | 36 | HP 10X42 | 1009.60 | 1002.25 | 991.25 | 999.25 | 18.35 | 11.00 |
| 4 | 11+18.95 1.24' RT | 36 | HP 10X42 | 1009.42 | 1002.25 | 991.25 | 999.25 | 18.17 | 11.00 |
| 5 | 11+25.96 1.24' RT | 36 | HP 10X42 | 1009.25 | 1000.25 | 989.25 | 997.25 | 20.00 | 11.00 |
| 6 | 11+32.96 1.24' RT | 36 | HP 10X42 | 1009.07 | 1000.25 | 989.25 | 997.25 | 19.82 | 11.00 |
| 7 | 11+39.97 1.24' RT | 36 | HP 10X42 | 1008.90 | 1000.25 | 989.25 | 997.25 | 19.65 | 11.00 |
| 8 | 11+46.98 1.24' RT | 36 | HP 10X42 | 1008.72 | 1000.25 | 989.25 | 997.25 | 19.47 | 11.00 |
| 9 | 11+53.98 1.24' RT | 36 | HP 10X42 | 1008.55 | 1000.25 | 989.25 | 997.25 | 19.30 | 11.00 |
| 10 | 11+60.99 1.40' RT | 36 | HP 14X73 | 1008.37 | 998.25 | 982.25 | 995.25 | 26.12 | 16.00 |
| 11 | 11+68.00 1.40' RT | 36 | HP 14X73 | 1008.19 | 998.25 | 982.25 | 995.25 | 25.94 | 16.00 |
| 12 | 11+75.00 1.40' RT | 36 | HP 14X73 | 1008.02 | 998.25 | 982.25 | 995.25 | 25.77 | 16.00 |
| 13 | 11+82.01 1.40' RT | 36 | HP 14X73 | 1007.84 | 996.25 | 980.25 | 993.25 | 27.59 | 16.00 |
| 14 | 11+89.02 1.40' RT | 36 | HP 14X73 | 1007.67 | 996.25 | 980.25 | 993.25 | 27.42 | 16.00 |
| 15 | 11+96.02 1.40' RT | 36 | HP 14X73 | 1007.49 | 996.25 | 980.25 | 993.25 | 27.24 | 16.00 |
| 16 | 12+03.03 1.40' RT | 36 | HP 14X73 | 1007.32 | 996.25 | 980.25 | 993.25 | 27.07 | 16.00 |
| 17 | 12+10.04 1.40' RT | 36 | HP 14X73 | 1007.14 | 994.25 | 978.25 | 991.25 | 28.89 | 16.00 |
| 18 | 12+17.05 1.40' RT | 36 | HP 14X73 | 1006.97 | 994.25 | 978.25 | 991.25 | 28.72 | 16.00 |
| 19 | 12+24.05 1.40' RT | 36 | HP 14X73 | 1006.79 | 994.25 | 978.25 | 991.25 | 28.54 | 16.00 |
| 20 | 12+31.06 1.40' RT | 36 | HP 14X73 | 1006.61 | 992.25 | 976.25 | 989.25 | 30.36 | 16.00 |
| 21 | 12+38.07 1.95' RT | 36 | W 27X84 | 1006.44 | 992.25 | 971.25 | 989.25 | 35.19 | 21.00 |
| 22 | 12+45.08 1.95' RT | 36 | W 27X84 | 1006.26 | 992.25 | 971.25 | 989.25 | 35.01 | 21.00 |
| 23 | 12+52.09 1.95' RT | 36 | W 27X84 | 1006.09 | 990.25 | 969.25 | 987.25 | 36.84 | 21.00 |
| 24 | 12+59.10 1.95' RT | 36 | W 27X84 | 1005.91 | 990.25 | 969.25 | 987.25 | 36.66 | 21.00 |
| 25 | 12+66.11 1.95' RT | 36 | W 27X84 | 1005.74 | 990.25 | 969.25 | 987.25 | 36.49 | 21.00 |
| 26 | 12+73.12 1.95' RT | 36 | W 27X84 | 1005.56 | 990.25 | 969.25 | 987.25 | 36.31 | 21.00 |
| 27 | 12+80.14 1.95' RT | 36 | W 27X84 | 1005.39 | 988.25 | 967.25 | 985.25 | 38.14 | 21.00 |
| 28 | 12+87.15 1.95' RT | 36 | W 27X84 | 1005.21 | 988.25 | 967.25 | 985.25 | 37.96 | 21.00 |
| 29 | 12+94.18 2.10' RT | 42 | W 30X132 | 1005.03 | 990.25 | 967.25 | 987.25 | 37.78 | 23.00 |
| 30 | 13+01.19 2.10' RT | 42 | W 30X132 | 1004.86 | 986.25 | 963.25 | 983.25 | 41.61 | 23.00 |
| 31 | 13+08.21 2.10' RT | 42 | W 30X132 | 1004.68 | 986.25 | 963.25 | 983.25 | 41.43 | 23.00 |
| 32 | 13+15.23 2.10' RT | 42 | W 30X132 | 1004.34 | 986.25 | 963.25 | 983.25 | 41.09 | 23.00 |
| 33 | 13+22.24 2.10' RT | 42 | W 30X132 | 1003.94 | 984.25 | 961.25 | 981.25 | 42.69 | 23.00 |
| 34 | 13+29.26 2.10' RT | 42 | W 30X132 | 1003.65 | 984.25 | 961.25 | 981.25 | 42.40 | 23.00 |
| 35 | 13+36.28 2.10' RT | 42 | W 30X132 | 1003.30 | 984.25 | 961.25 | 981.25 | 42.05 | 23.00 |
| 36 | 13+43.32 2.10' RT | 42 | W 30X132 | 1002.96 | 984.25 | 961.25 | 981.25 | 41.71 | 23.00 |
| 37 | 13+50.31 2.10' RT | 42 | W 30X132 | 1002.86 | 982.25 | 959.25 | 979.25 | 43.61 | 23.00 |
| 38 | 13+57.33 2.10' RT | 42 | W 30X132 | 1002.76 | 982.25 | 959.25 | 979.25 | 43.51 | 23.00 |
| 39 | 13+64.34 2.10' RT | 42 | W 30X132 | 1002.65 | 982.25 | 959.25 | 979.25 | 43.40 | 23.00 |
| 40 | 13+71.36 2.10' RT | 42 | W 30X132 | 1002.55 | 982.25 | 959.25 | 979.25 | 43.30 | 23.00 |
| 41 | 13+78.37 2.23' RT | 42 | W 33X152 | 1002.45 | 980.25 | 955.25 | 977.25 | 47.20 | 25.00 |
| 42 | 13+85.12 2.23' RT | 42 | W 33X152 | 1002.35 | 980.25 | 955.25 | 977.25 | 47.10 | 25.00 |
| 43 | 13+92.12 2.23' RT | 42 | W 33X152 | 1002.25 | 980.25 | 955.25 | 977.25 | 47.00 | 25.00 |
| 44 | 13+99.12 2.23' RT | 42 | W 33X152 | 1002.15 | 980.25 | 955.25 | 977.25 | 46.90 | 25.00 |
| 45 | 14+06.12 2.23' RT | 42 | W 33X152 | 1002.05 | 980.25 | 955.25 | 977.25 | 46.80 | 25.00 |

| WALL 9 DRILLED SHAFT TABLE | | | | | |
|----------------------------|--------------------------------|-------------------|------------------------|-----------------------------|------------------------|
| DRILLED SHAFT NO. | STATION AND OFFSET FROM WALL 9 | DIAMETER (INCHES) | TOP OF SHAFT ELEVATION | MINIMUM SHAFT TIP ELEVATION | ESTIMATED LENGTH (FT.) |
| 46 | 14+10.12 2.83' RT | 48 | 1001.24 | 955.25 | 45.99 |
| 47 | 14+14.37 2.83' RT | 48 | 1001.18 | 955.25 | 45.93 |
| 48 | 14+18.62 2.83' RT | 48 | 1001.12 | 955.25 | 45.87 |
| 49 | 14+22.97 2.83' RT | 48 | 1001.06 | 955.25 | 45.81 |
| 50 | 14+27.12 2.83' RT | 48 | 1001.00 | 955.25 | 45.75 |
| 51 | 14+31.37 2.83' RT | 48 | 1000.94 | 955.25 | 45.69 |
| 52 | 14+35.62 2.83' RT | 48 | 1000.88 | 955.25 | 45.63 |
| 53 | 14+39.87 2.83' RT | 48 | 1000.82 | 953.25 | 47.57 |
| 54 | 14+44.12 2.83' RT | 48 | 1000.75 | 953.25 | 47.50 |
| 55 | 14+48.37 2.83' RT | 48 | 1000.69 | 953.25 | 47.44 |
| 56 | 14+53.10 3.33' RT | 60 | 1000.62 | 938.25 | 62.37 |
| 57 | 14+58.35 3.33' RT | 60 | 1000.55 | 938.25 | 62.30 |
| 58 | 14+63.60 3.33' RT | 60 | 1000.47 | 938.25 | 62.22 |
| 59 | 14+68.85 3.33' RT | 60 | 1000.40 | 938.25 | 62.15 |
| 60 | 14+74.10 3.33' RT | 60 | 1000.32 | 936.25 | 64.07 |
| 61 | 14+79.35 3.33' RT | 60 | 1000.06 | 936.25 | 63.81 |
| 62 | 14+84.64 3.33' RT | 60 | 999.61 | 936.25 | 63.36 |
| 63 | 14+92.06 3.33' RT | 60 | 999.06 | 936.25 | 62.81 |
| 64 | 14+97.31 3.33' RT | 60 | 998.51 | 936.25 | 62.26 |
| 65 | 15+02.56 3.33' RT | 60 | 998.06 | 936.25 | 61.81 |
| 66 | 15+07.81 3.33' RT | 60 | 997.61 | 936.25 | 61.36 |
| 67 | 15+13.06 3.33' RT | 60 | 992.09 | 936.25 | 55.84 |

NOTES:

1. FOR NOTES SEE SHEET [3/11].

| | | |
|---------|---------|---|
| KMK | 4/18/16 | WALL NO.9 COLUMNS ADDED (SHAFT LENGTH, STEEL SECTION LENGTH), ELEV. REVISED |
| REV. BY | DATE | DESCRIPTION |
| | | |
| | | |
| | | |

WALL DETAILS
 WALL 09
 ALONG CONNECTOR ROAD AND GARAGE DRIVE

SUM-76-10.00
 PID No. 77269

4 / 11

1677
 1822

DESIGN AGENCY: AKRON, CLEVELAND, COLUMBUS
 584 WHITE POND DRIVE
 AKRON, OHIO 44310-1000
 (330) 356-9900
URS

DATE: 11/14
 REVIEWED: BKL
 DRAWN: ERM
 DESIGNED: DEB
 CHECKED: TES
 STRUCTURE FILE NUMBER: N/A