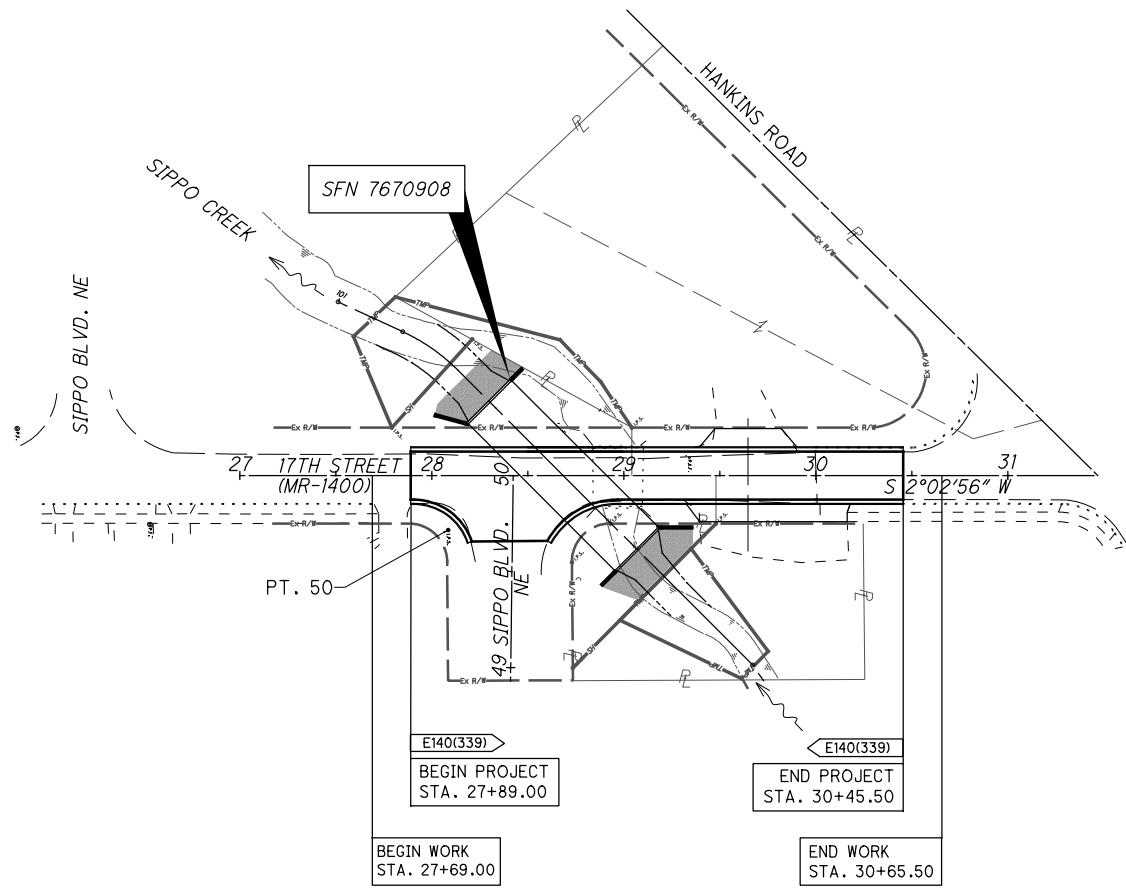
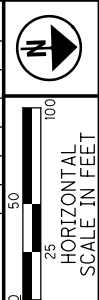


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PT. 51



PROJECT CONTROL POINTS						
POINT	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET	ELEVATION
50	IRON PIN SET W/ CT CAP	417,496.705	2,244,600.803	28+08.53	28.40' RT	1009.99
51	IRON PIN SET W/ CT CAP	417,224.350	2,244,171.305	25+20.99	391.09' LT	1007.78

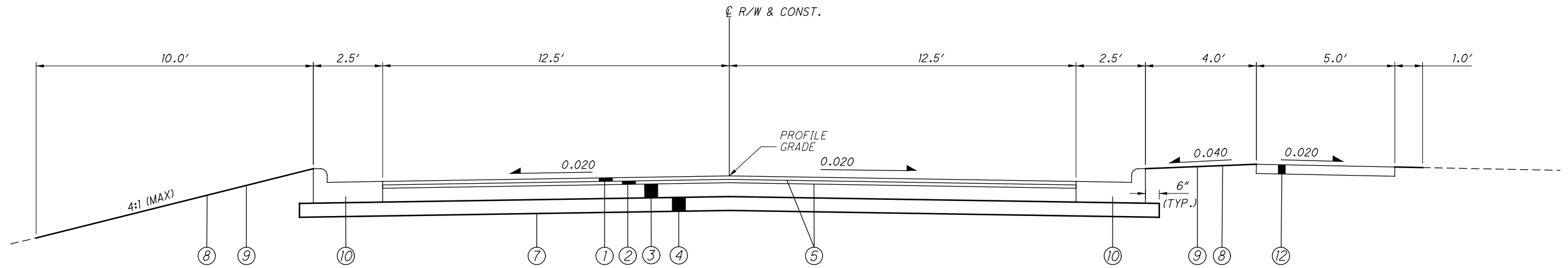


SCHEMATIC PLAN

STA - OBPP - FY 2016

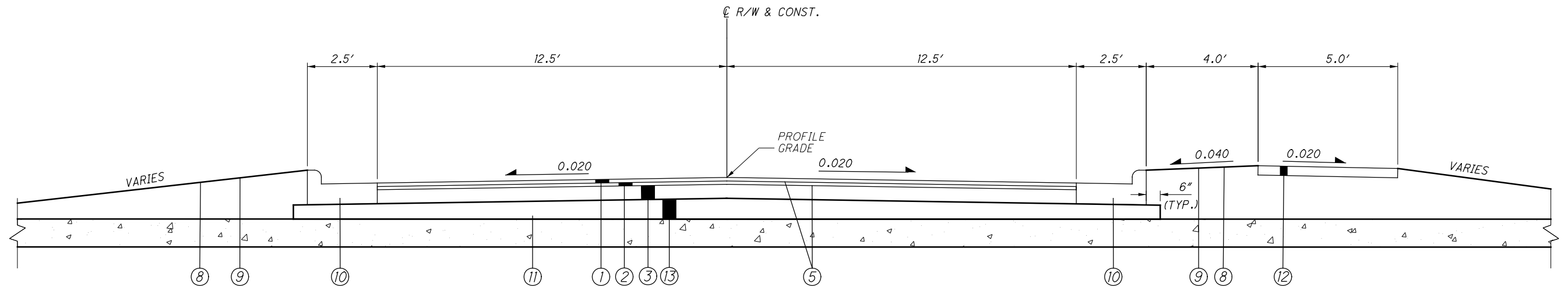
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NORMAL CURB SECTION

STA. 27+89.00 TO STA. 30+45.50 = 256.5 L.F.



PAVEMENT OVER BOX CULVERT

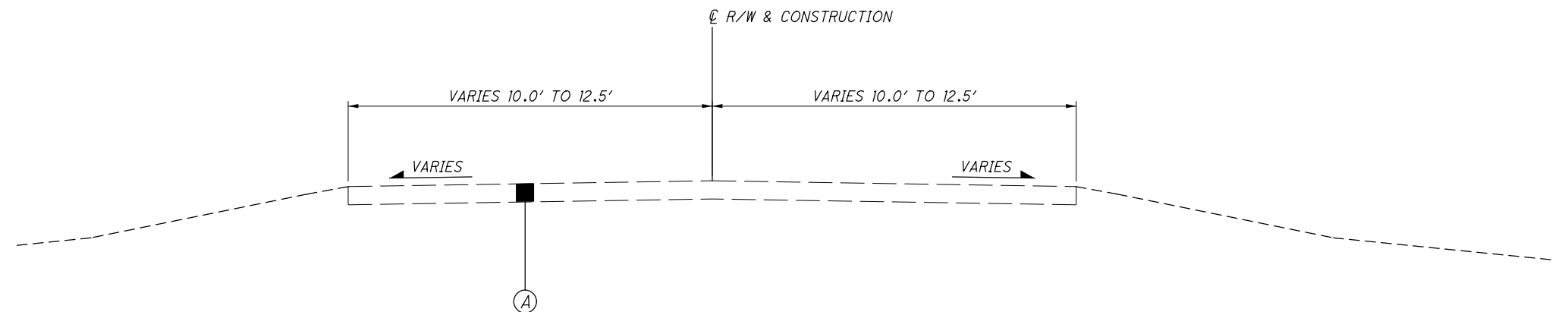
(STA. 28+33.67 TO STA. 29+03.60)

LEGEND

- ① ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN
- ② ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN
- ③ ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22
- ④ ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
- ⑤ ITEM SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE (0.04 GAL/SY)
- ⑦ ITEM 204 - SUBGRADE COMPACTION
- ⑧ ITEM 653 - 3" TOPSOIL FURNISHED AND PLACED
- ⑨ ITEM 659 - SEEDING AND MULCHING
- ⑩ ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2
- ⑪ ITEM 512 - TYPE 3 WATERPROOFING
- ⑫ ITEM 608 - 4" CONCRETE WALK
- ⑬ ITEM 301 - VARIABLE DEPTH ASPHALT CONCRETE BASE, PG64-22

EXISTING LEGEND

- ④ 5" ASPHALT CONCRETE



EXISTING NORMAL SECTION

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UTILITIES

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

AQUA OHIO ATTN: JACOB FLANARY 870 3RD STREET, NW MASSILLON, OHIO 44647 330-832-5764 EXT. 50650	DOMINION EAST OHIO ATTN: BRYAN D. DAYTON 320 SPRINGSIDE DRIVE AKRON, OHIO 44333 OFFICE: 330-664-2409
AT&T THE OHIO BELL TELEPHONE COMPANY ATTN: CINDY ZUCHEGNO 50 W. BOWERY ST. 4TH FLOOR AKRON OHIO 44308 330-384-3561	MASSILLON CABLE ATTN: JEFF CAMBELL 814 CABLE COURT NW MASSILLON, OHIO 44648 330-833-0202 330-833-7522 FAX
OHIO EDISON ATTN: KEVIN MCCLUSKY 2600 S. ERIE ST. MASSILLON OHIO 44646 330-830-7083	OHIO EDISON (TRANSMISSION) ATTN: ALLISON OULTON 76 SOUTH MAIN STREET AKRON, OHIO 44308-1890 330-761-4487

STARK COUNTY METRO SEWER DISTRICT
ATTN: JAMES F. TROIKE, P.E.
P.O. BOX 9972
CANTON, OHIO 44711-0972
330-451-2314
330-453-9044 FAX

CITY OF MASSILON - SANITARY
ATTN: TONY ULRICH
100 BIG INDIAN DR. SW
MASSILON, OH 44646
330-833-3304
330-830-3646 FAX

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF DOMINION'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION AND SHORING). ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DOMINION EAST OHIO'S (DEO) EXISTING PIPELINE(S) AND ALL OTHER IMPROVEMENTS. EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY DEO FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES AND DEVICES, VALVE BOXES, ETC.) DEO FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL DEO EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF DEO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING DEO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (330-266-2121), RICK McDONALD (330-266-2122), OR AL HUMRICHOUSER (330-478-3757). DEO = THE EAST OHIO GAS COMPANY, DBA DOMINION EAST OHIO, 1-800-362-7557.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION. USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
POSITIONING METHOD: GPS/RTK (OHIO VRS)
MONUMENT TYPE: 5/8" x 30" STEEL REINFORCING BAR

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 2012A

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011) 2010.0 EPOCH
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: SEE PARAGRAPH BELOW
COMBINED SCALE FACTOR: SEE PARAGRAPH BELOW
ORIGIN OF COORDINATE SYSTEM: 0,0

SURVEYING PARAMETERS (CONTINUED)

THE HORIZONTAL COORDINATES EXPRESSED HEREIN HAVE BEEN COMPUTED IN ACCORDANCE WITH PROCEDURES DETAILED IN CHAPTER 303.52 OF THE OHIO DEPARTMENT OF TRANSPORTATION SURVEY MANUAL (1995). PROJECT COORDINATES HAVE BEEN DETERMINED BY MULTIPLYING OHIO (NORTH ZONE) STATE PLANE NAD83 (2011) COORDINATES DERIVED FROM VRS/RTK OBSERVATIONS BY A SPECIFIED CONSTANT PROJECT ADJUSTMANT FACTOR OF 1.00000000.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623. UNITS ARE IN U.S. SURVEY FEET.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. COMPACT THE SUBGRADE ACCORDING TO 204.03.
3. THERE IS NO UNSTABLE SUBGRADE SHOWN AND LABELED ON THE CROSS SECTIONS. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.
4. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
5. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
6. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS DO NOT INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

FURNAS PARK AND HAAG PARK-
17TH STREET BRIDGE (STA-MR1400-0.55)

NO EXCAVATION, GRADING OR FILLING OPERATIONS AND STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT AND/OR MATERIALS SHALL OCCUR OUTSIDE OF THE PROJECT CONSTRUCTION AREA WITHIN FURNAS PARK AND/OR HAAG PARK AT THE 17TH STREET BRIDGE (STA-MR1400-0.55) LOCATION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR OTHERWISE IMPACT FURNAS PARK AND/OR HAAG PARK PROPERTY BEYOND THE ESTABLISHED PROJECT CONSTRUCTION AREA LIMITS AS INDICATED IN THE PLAN. ANY TEMPORARILY DISTURBED EARTHEN AREAS AT FURNAS PARK AND HAAG PARK SHALL BE RESTORED TO A CONDITION AT LEAST AS GOOD AS OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION ACTIVITIES.

PUBLIC USE OF FURNAS PARK AND HAAG PARK SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. AT A MINIMUM, TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED ALONG PROPOSED PROJECT LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT THE PUBLIC AND REMAINING PARK PROPERTIES. ADVANCE NOTICE OF THE 17TH STREET BRIDGE (STA-MESTH-0000) CONSTRUCTION SCHEDULE SHALL BE PROVIDED TO THE PROJECT ENGINEER AND THE CITY OF MASSILLON ENGINEER BY THE CONTRACTOR NO LESS THAN 24-HOURS PRIOR TO CONSTRUCTION ACTIVITIES. NOTICES SHALL ALSO BE POSTED IN AREAS THAT CAN BE EASILY SEEN BY USERS OF THE PARK FACILITIES AND THE CONTRACTOR SHALL CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH THE CITY OF MASSILLON PARKS AND RECREATION DEPARTMENT.

THE PROPOSED NEW 17TH STREET BRIDGE DESIGN SHALL PROVIDE ADEQUATE BRIDGE DECK WIDTH FOR NEW SIDEWALK ON THE EAST SIDE OF 17TH STREET.

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS.

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PAVEMENT

ITEM 304 – AGGREGATE BASE, AS PER PLAN

GRANULATED SLAG (GS) SHALL NOT BE PERMITTED FOR THIS ITEM. ALL OTHER REQUIREMENTS OF SECTIONS 304 AND 703.17 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL STILL BE APPLICABLE.

ITEM 617 – COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2 "	100
3/4 "	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 441 – ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED "SR" OR "SRH" ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM SPECIAL –TACK COAT, TRACKLESS TACK
ITEM SPECIAL – TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION.

FURNISH MATERIALS ACCORDING TO THE DEPARTMENT’S APPROVED LIST.

MEET ALL REQUIREMENTS OF ITEM 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.
MATERIAL: MEET ALL PROPERTIES OF THE APPROVED MANUFACTURER’S TRACKLESS TACK SPECIFICATION REQUIREMENTS ON FILE WITH THE LABORATORY AT TIME OF PLACEMENT.
ACCEPTANCE AND SAMPLING OF MATERIALS: SUPPLY CERTIFIED TEST DATA TO THE ENGINEER AND TO THE DISTRICT LABORATORY DEMONSTRATING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS ALL MATERIAL PROPERTIES SHOWN ON THE DEPARTMENT’S APPROVED LIST.

DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE FROM THE DISTRIBUTOR AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF ONE QUART OF TRACKLESS TACK FOR EVERY 25,000 GALLONS USED ON THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE PROPER PLASTIC QUART SAMPLING CONTAINER. CLEARLY MARK ON THE SAMPLE WITH THE MANUFACTURER’S NAME, PROJECT NUMBER, AND THE WORDS “TRACKLESS TACK”.

EQUIPMENT: FOLLOW MANUFACTURER’S RECOMMENDATIONS FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR ACCORDING TO THE MANUFACTURER’S INSTRUCTIONS. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER’S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.1 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACKLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180°F. DO NOT EXCEED 180°F. THE ENGINEER WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

PERFORMANCE OF TRACKLESS TACK: DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DISTRICT TESTING ENGINEER AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY ANOTHER APPROVED TRACKLESS TACK PRODUCT FOR THE REMAINDER OF THE PROJECT AT NO ADDITIONAL COST TO THE DEPARTMENT.

ANY FAILING TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE DEPARTMENT’S APPROVED LIST.

EROSION CONTROL

SOIL EROSION AND SEDIMENT CONTROL

BEST MANAGEMENT PRACTICES/SOIL EROSION AND SEDIMENTATION CONTROL – WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL. ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER. THESE SHALL COMPLY WITH ODOT’S HANDBOOK FOR SEDIMENT AND EROSION CONTROL, WHICH MAY BE FOUND AT: HTTP://WWW.DOT.STATE.OH.US/DRRC/.

REMOVAL OF TEMPORARY EROSION CONTROL ITEMS

ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BEFORE THE PROJECT IS ACCEPTED. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE APPROPRIATE C&MS SPECIFICATIONS.

ENVIRONMENTAL

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

PRIOR TO ANY BRIDGE REPLACEMENT ACTIVITIES, THE UNDERSIDE OF BRIDGE STRUCTURE NO. STA-T0118-PA 22-13 (SFN: 7633904), STA-017ST-0078 (SFN: 7666187) AND STA-MESTH-0000 (SFN: 7670907) SHALL BE CAREFULLY EXAMINED FOR THE PRESENCE OF BATS, ESPECIALLY FROM APRIL 1 TO SEPTEMBER 30. IF ANY BATS ARE FOUND ROOSTING ON THE UNDERSIDE OF THE BRIDGE, THE USFWS, ECOLOGICAL SERVICES DIVISION (614-416-8993), ODOT OFFICE OF ENVIRONMENTAL SERVICES (614-466-7880) AND ODOT DISTRICT 4 ENVIRONMENTAL SECTION (330-786-4930) SHALL BE CONTACTED TO PROVIDE THIS INFORMATION. SHOULD ADDITIONAL INFORMATION ON LISTED ENDANGERED/THREATENED/POTENTIALLY THREATENED SPECIES OR THEIR CRITICAL HABITAT BECOME AVAILABLE, OR IF NEW INFORMATION REVEALS EFFECTS OF THIS PROJECT THAT WERE NOT PREVIOUSLY CONSIDERED, ODOT WILL REINITIATE CONSULTATION WITH THE USFWS AND ODNR TO ASSESS WHETHER THE PROJECT DETERMINATIONS ARE STILL VALID.

BEST MANAGEMENT PRACTICES

WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER. SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT’S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL AND STANDARD DRAWINGS SHALL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.

WATERWAY PERMIT DETERMINATION (404/401) ODOT PROJECTS

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. IT HAS BEEN DETERMINED BY OES-WPU THAT THIS PROJECT MEETS THE CRITERIA OF SECTION B (MAINTENANCE) OF THE REGIONAL GENERAL PERMIT (RGP). THE WATERWAY PERMITS CONDITIONS VERIFIED FOR THE PROJECT SHALL BE INCORPORATED INTO THE PROJECT CONSTRUCTION PLAN AS SPECIAL PROVISIONS. THE PROJECT CONTRACTOR SHALL ADHERE TO ALL WATERWAY PERMIT TERMS AND CONDITIONS THROUGHOUT PROJECT CONSTRUCTION.

ONLY CLEAN, NON ERODIBLE MATERIALS SHALL BE USED FOR TEMPORARY CONSTRUCTION ACCESS FILLS IN STREAMS. ANY TEMPORARY FILLS BELOW ORDINARY HIGH WATER MARK (OHWM) SHALL BE REMOVED FOLLOWING COMPLETION OF THE AUTHORIZED ACTIVITY AND THE AREA OF STREAM WHERE TEMPORARY FILL WAS LOCATED SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION. THE OHWM IS THE LINE ON THE SHORES ESTABLISHED BY THE FLUCTUATIONS OF WATER AND INDICATED BY PHYSICAL CHARACTERISTICS SUCH AS A CLEAR, NATURAL LINE IMPRESSED ON THE BANK; SHELVEING; CHANGES IN THE CHARACTER OF THE SOIL; DESTRUCTION OF TERRESTRIAL VEGETATION; THE PRESENCE OF LITTER AND DEBRIS; OR THE APPROPRIATE MEANS THAT CONSIDER THE CHARACTERISTICS OF THE SURROUNDING AREAS.

PLEASE NOTE THAT FORDING OF WATERWAYS IS NOT ALLOWED PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS 2002, ITEM 207.03.

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ENVIRONMENTAL (CONT'D)

MATERIALS REMOVED FROM DITCHES, STREAMS AND/OR WETLANDS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM DITCHES, STREAMS OR WETLANDS. THIS PERTAINS TO ANY EXCAVATION OPERATION SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEAN OUT, EXCAVATION FOR ROCK CHANNEL PROTECTION. ALL MATERIALS REMOVED FROM THE DITCHES, STREAMS OR WETLANDS MUST BE IMMEDIATELY REMOVED TO AN UPLAND SITE AND STABILIZED (I.E. SEEDED) TO PREVENT REDISTRIBUTION INTO ANY WATERS OF THE UNITED STATES. IMMEDIATE REMOVAL IS DEFINED BY THE UNITED STATES ARMY CORPS OF ENGINEERS AS DEPOSITING THE REMOVED MATERIALS DIRECTLY INTO A TRUCK AND REMOVING THE MATERIAL FROM THE SITE. PLACEMENT OF REMOVED MATERIALS INTO A WETLAND OR ON THE BANKS OF A STREAM EVEN TEMPORARILY IS CONSIDERED A FILL AND REQUIRES A PERMIT ACTION.

STAGING AREAS

NATURAL BUFFERS ADJACENT TO STREAMS AND WETLANDS SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE. EXISTING RIPARIAN HABITATS SHOULD BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICABLE AND EQUIPMENT STAGING AREAS SHALL BE KEPT WELL AWAY FROM STREAMS AND WETLANDS TO THE EXTENT PRACTICABLE. AREAS DISTURBED BY THE PROJECT SHALL BE SEEDED/REVEGETATED WITH NATIVE PLANT SPECIES AND MULCHED DURING CONSTRUCTION TO ENCOURAGE ESTABLISHMENT OF VEGETATION COVER, DECREASE EROSION AND PREVENT EROSION OF SEDIMENTS INTO WATERS OF THE UNITED STATES.

ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBITS THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS/WETLANDS.

CONSTRUCTION AND DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT CONSTRUCTION AND DEMOLITION DEBRIS FROM ENTERING WETLANDS AND STREAMS. ANY DEBRIS THAT DOES FALL INTO WETLANDS AND/OR STREAMS SHALL BE REMOVED AS SOON AS POSSIBLE WITHIN 72 HOURS.

MECHANICAL OPERATION AT THE STREAM CHANNEL

THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK AUTHORIZED HEREIN SHALL BE OPERATED IN SUCH A WAY AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.

PAINTING AND SEALING OPERATIONS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT OR OTHER MATERIALS USED TO REPAIR, CLEAN, PAINT, SEAL OR TREAT ANY STRUCTURE FROM ENTERING ANY STREAMS, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

REMOVAL OF TEMPORARY EROSION CONTROL ITEMS

ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BEFORE THE PROJECT IS ACCEPTED. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE APPROPRIATE C&MS SPECIFICATIONS.

PROJECT NOTIFICATION OF EMERGENCY SERVICES AND THE PUBLIC

THE CONTRACTOR WILL ADVISE THE ODOT PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST ALSO PROVIDE NOTIFICATION TO THE ODOT PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO ANY LANE RESTRICTIONS AND ROAD CLOSURES. THE ODOT PROJECT ENGINEER WILL FORWARD THE INFORMATION TO THE ODOT DISTRICT PUBLIC INFORMATION OFFICER FOR USE TO NOTIFY EMERGENCY SERVICES AND THE PUBLIC A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF PROJECT CONSTRUCTION. INCLUDED IN THIS NOTIFICATION WILL BE THE PROPOSED LANE RESTRICTIONS/ROAD CLOSURES REQUIRED BY THE PROJECT.

APPROVED FOR
CONSTRUCTION
8 / 17 / 2016

GENERAL NOTES

STA - OBPP - FY2016

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MAINTENANCE OF TRAFFIC

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 28 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 8. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 2500.00 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. ACCESS FOR DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST 1 WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD TO BE CLOSED, FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. THE SIGNS SHALL BE ERECTED ON 17TH STREET AT THE INTERSECTION OF 17TH AND HANKIN; AND THE INTERSECTION OF 17TH AND SIPPO BLVD.

17th Street WILL BE
CLOSED MM/DD/YYYY
FOR 28 DAYS
OHIO DEPT OF TRANSPORTATION

W20-H14-60

PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES WITH THE USE OF ITEM 410 TRAFFIC COMPACTED SURFACE AT THE FOLLOWING LOCATIONS:

1621 HANKINS ROAD
930 17TH STREET (L.J. SMITH ELEMENTARY SCHOOL)
970 17TH STREET
FURNAS DOG PARK

ALL WORK AT THE STRUCTURE AND ASSOCIATED ROADWAY WORK SHALL BE COMPLETED DURING THE DETOUR PERIOD.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DETOUR NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND CITY OF MASSILLON (330-830-1722) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

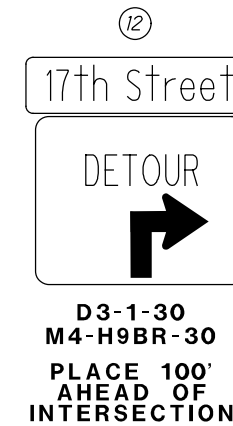
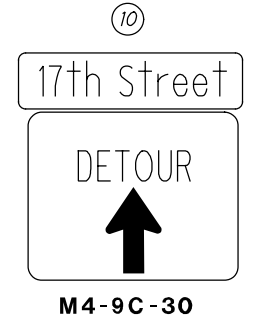
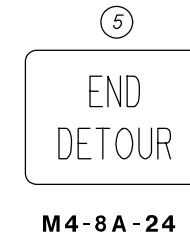
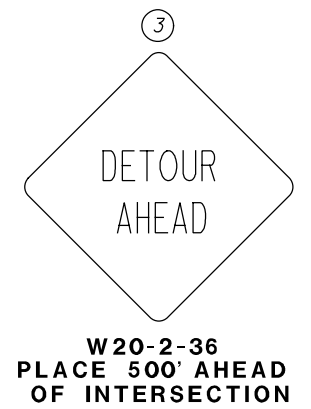
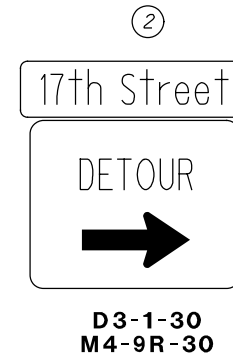
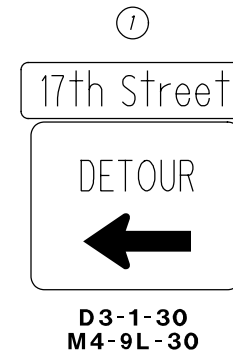
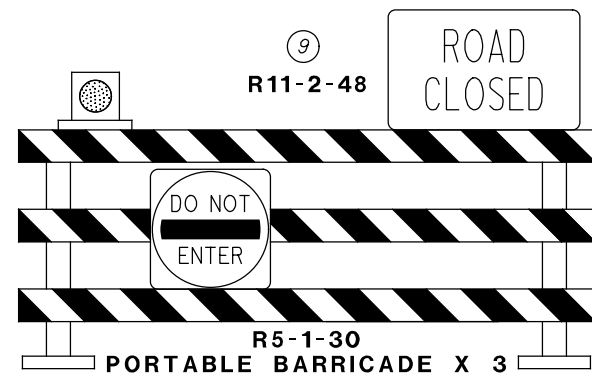
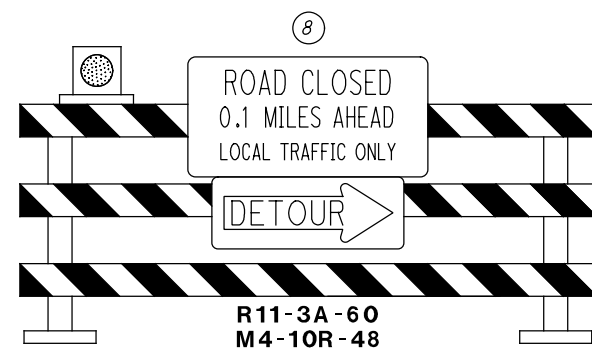
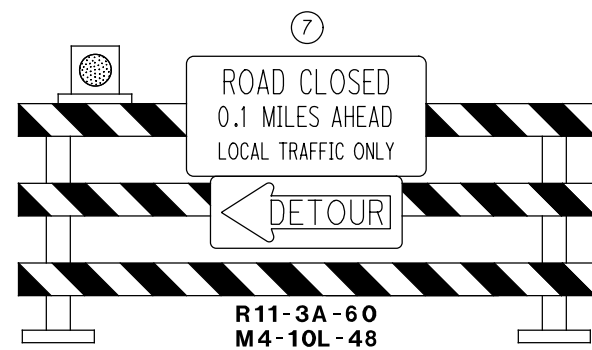
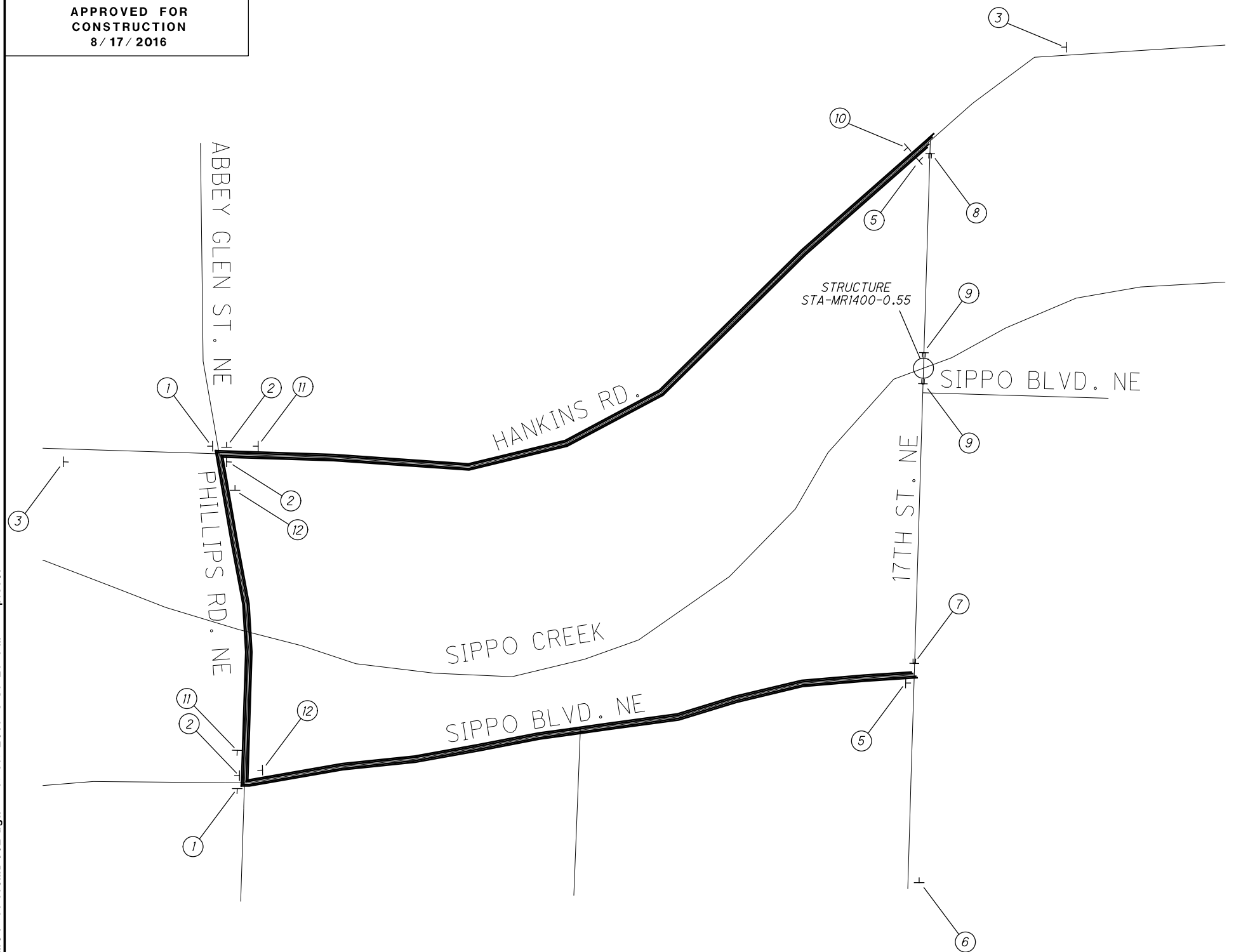
TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

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CALCULATED
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DETOUR PLAN

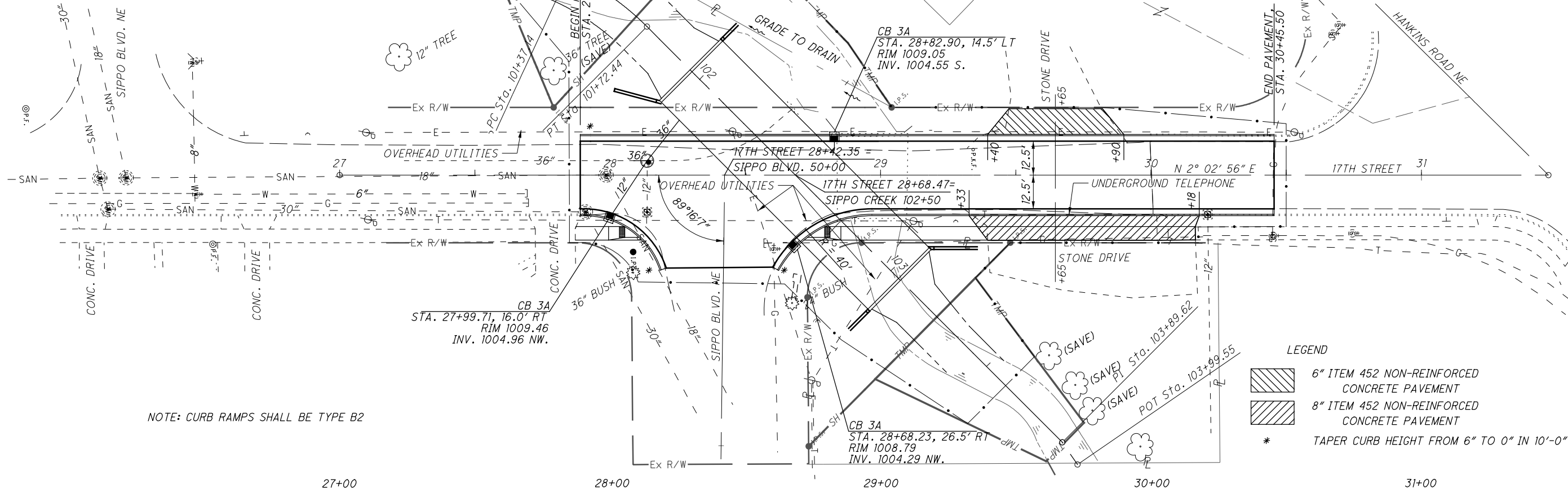
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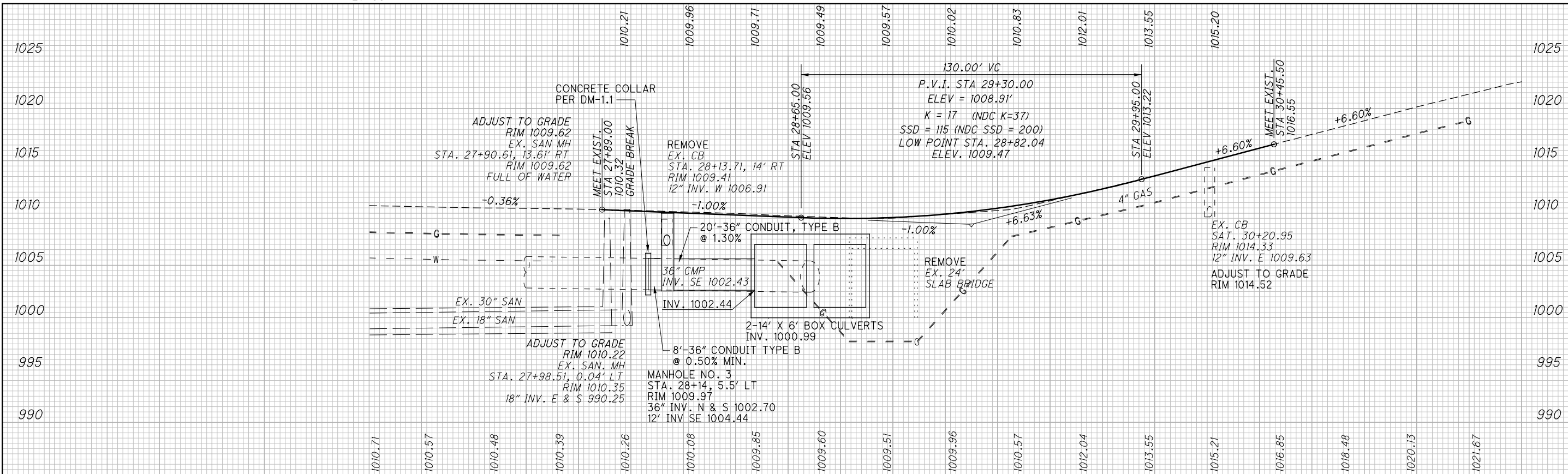
PLAN AND PROFILE
STA. 27+00 TO STA. 31+00

STA-OBPP-FY2016



NOTE: CURB RAMPS SHALL BE TYPE B2

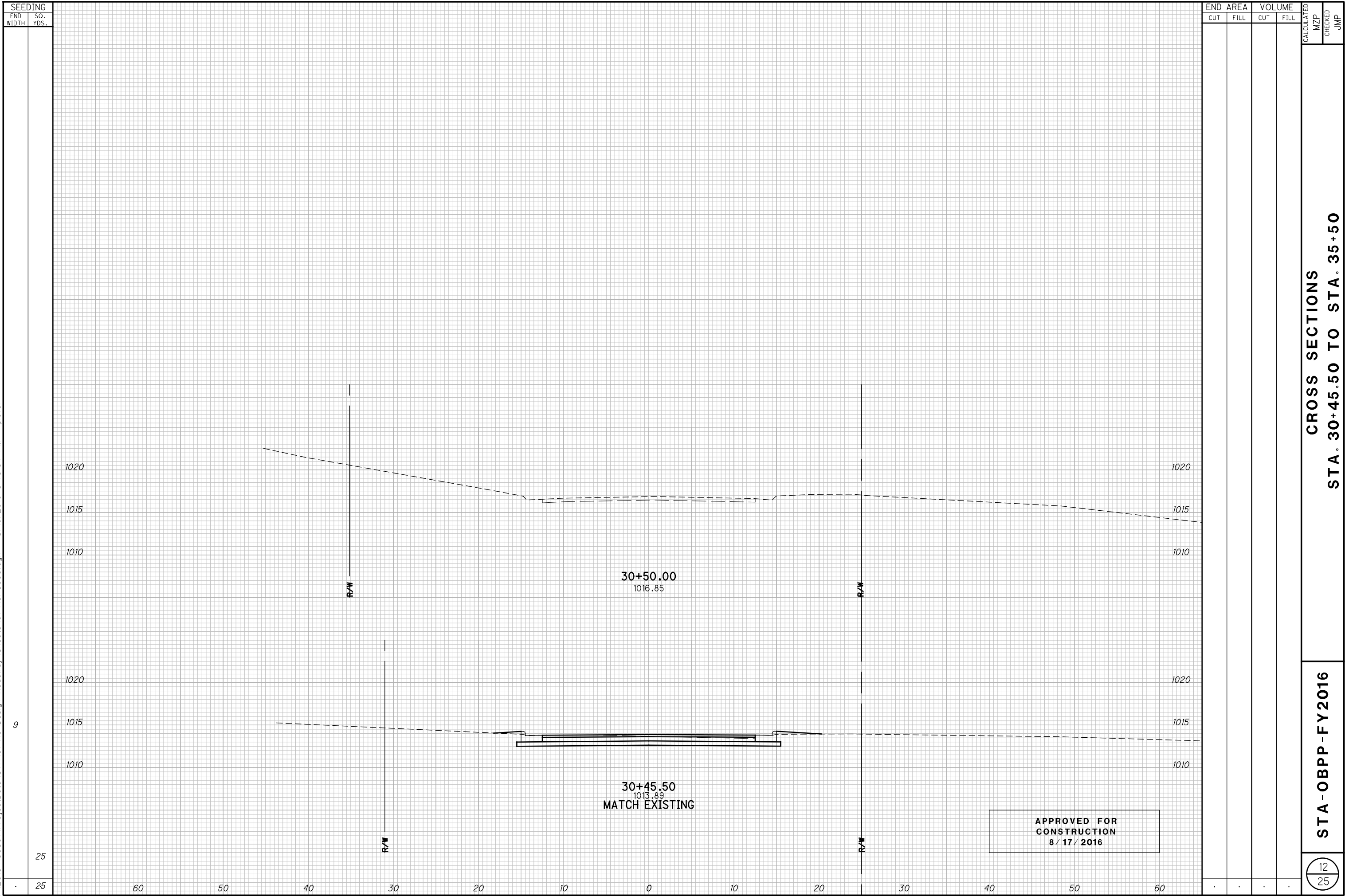
- LEGEND
- 6" ITEM 452 NON-REINFORCED CONCRETE PAVEMENT
 - 8" ITEM 452 NON-REINFORCED CONCRETE PAVEMENT
 - * TAPER CURB HEIGHT FROM 6" TO 0" IN 10'-0"





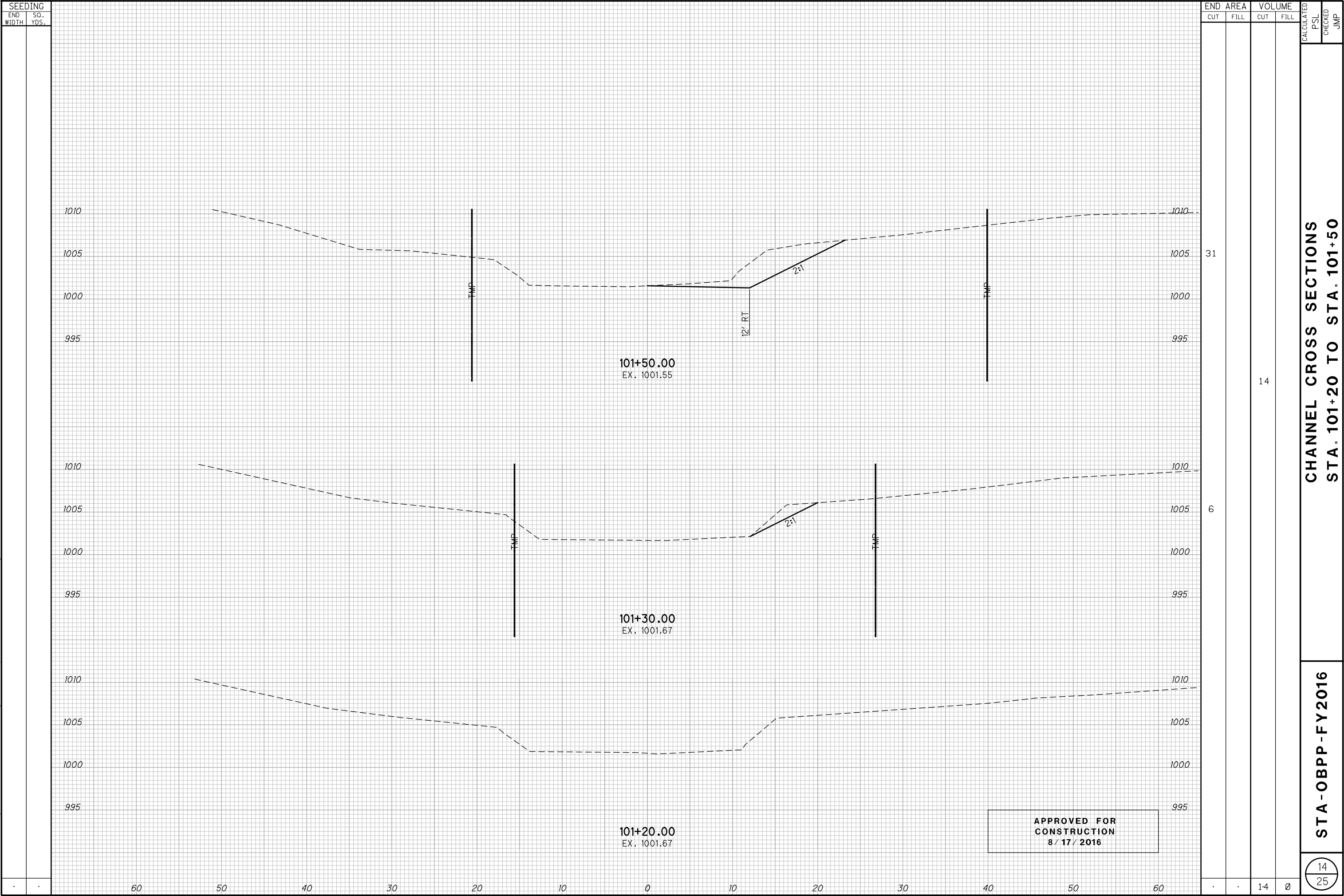


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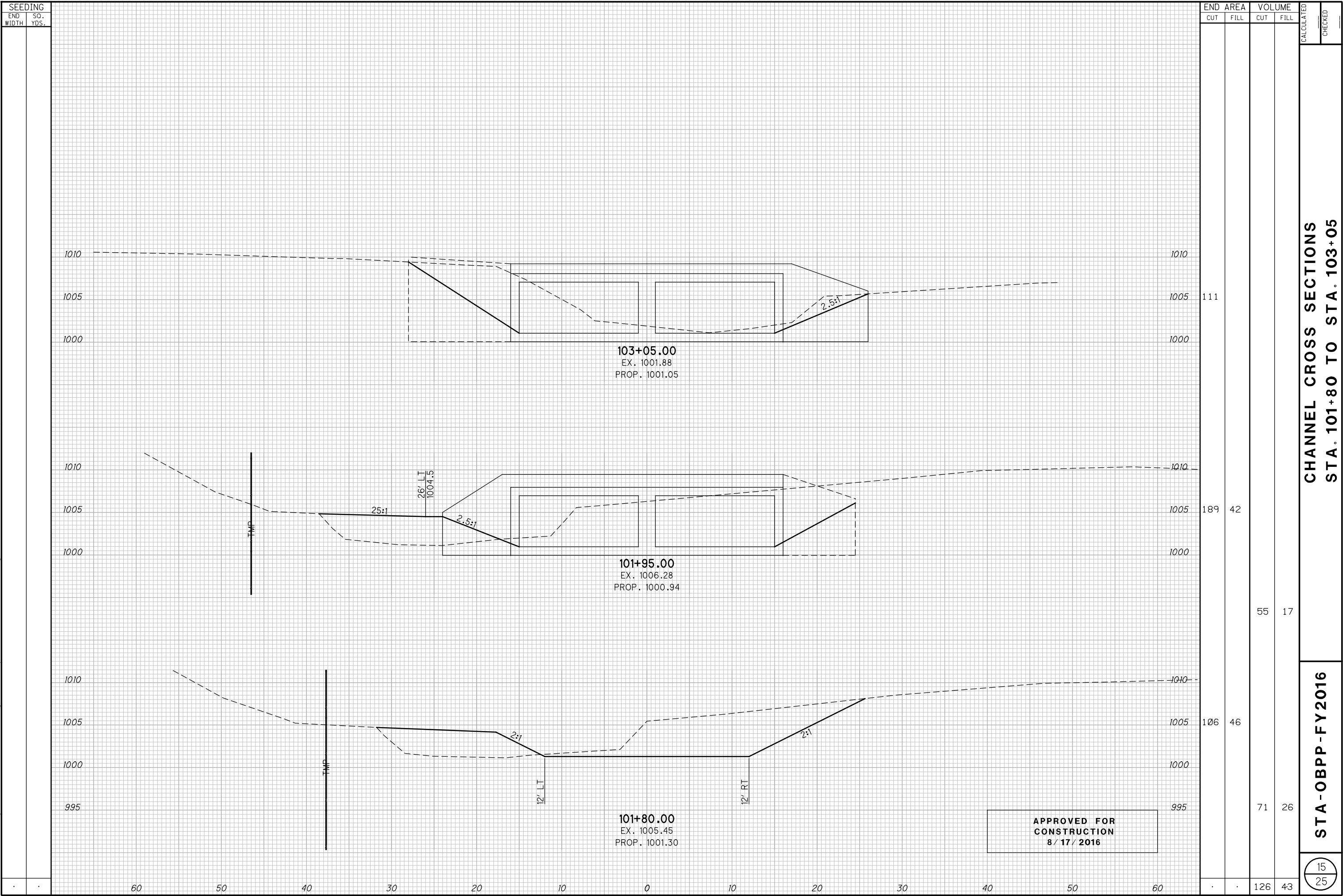




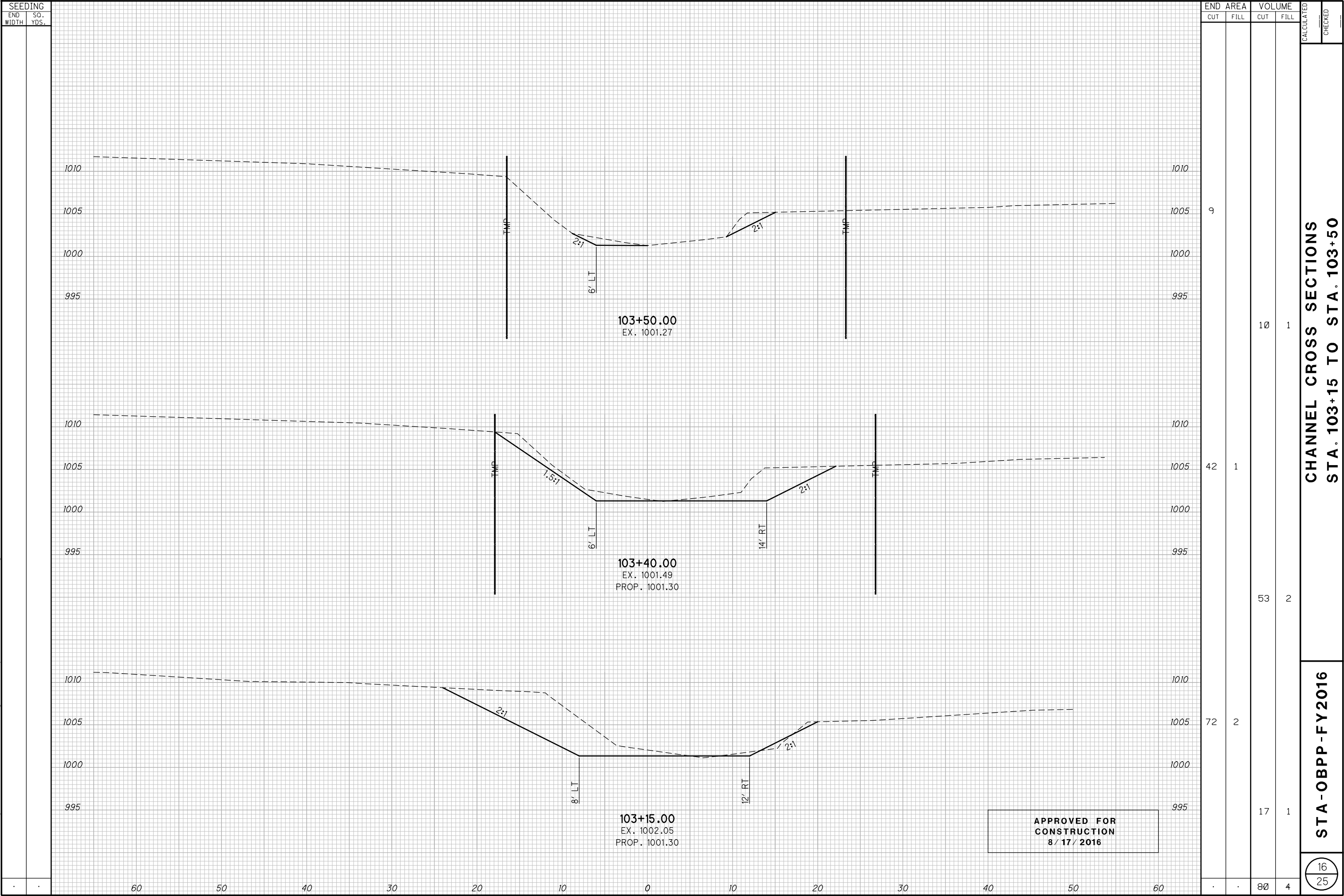
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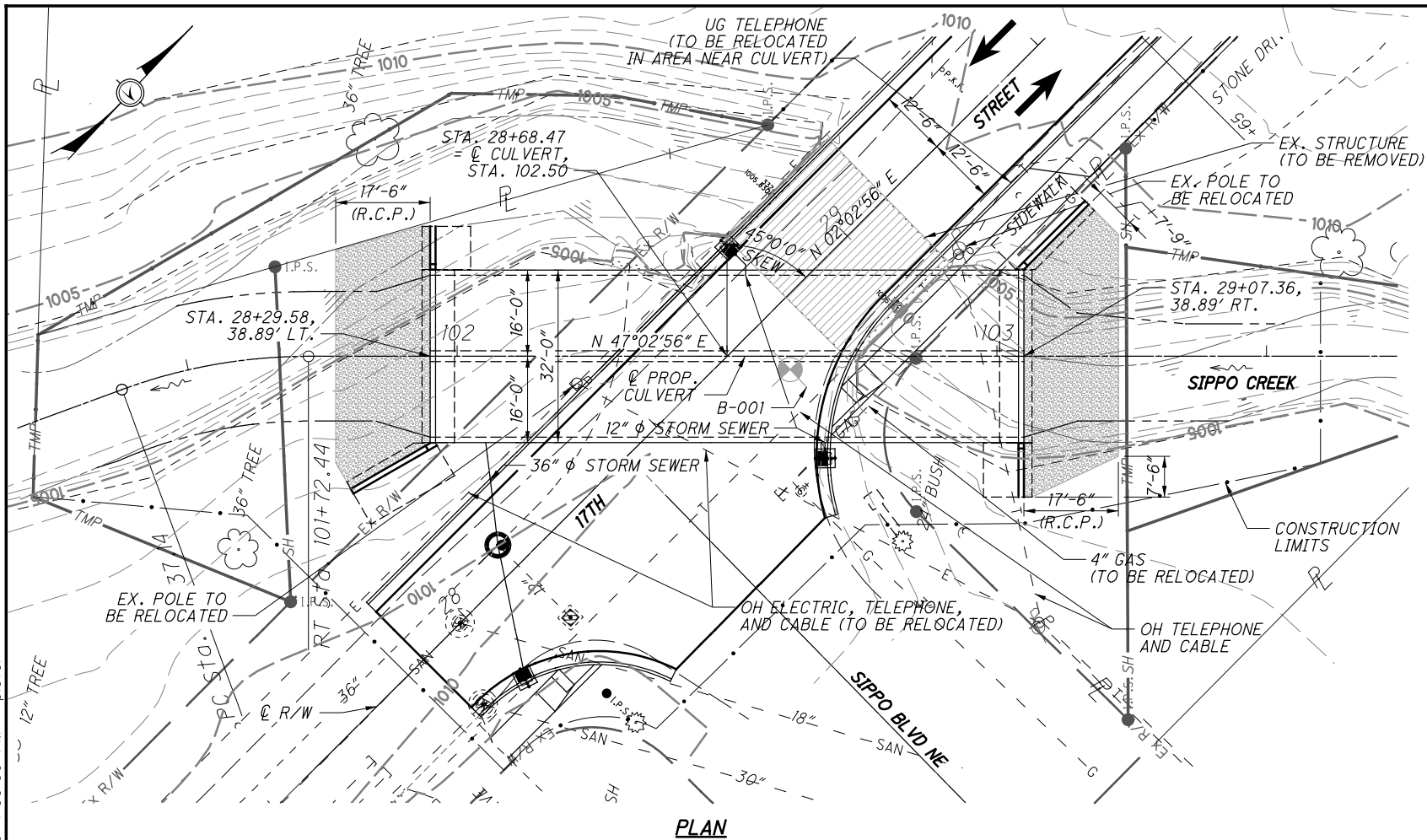
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BORING LOCATIONS			
BORING	STATION	OFFSET	TOP OF ROCK ELEV.
B-001-0-15	28+75.00	10' RT.	980.7

BENCHMARK DATA	
BM #1 - STA. 28+08.53, ELEV. 1009.99, OFFSET 28.40' RT. (IRON PIN SET W/ CT CAP)	

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 2/25

LEGEND

- BORING LOCATION - EXISTING STRUCTURE REMOVAL

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES CONFORM TO PLAN CROSS SECTIONS.

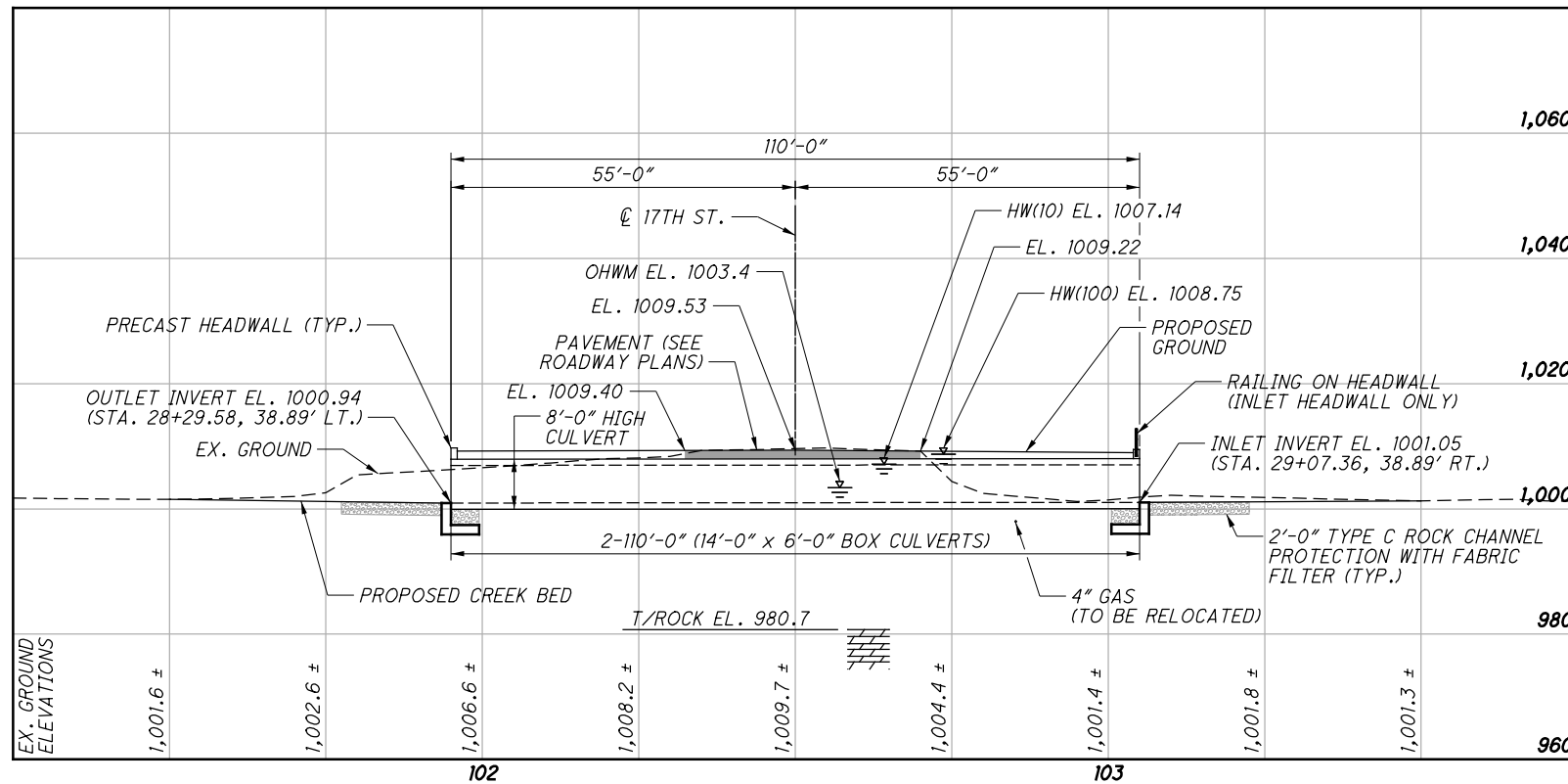
THE PROPOSED PROFILE GRADE IS WITHIN THE BRIDGE LIMITS. SEE ROADWAY PLANS FOR PAVEMENT ELEVATIONS BEYOND BRIDGE LIMITS.

HYDRAULIC DATA

DRAINAGE AREA = 16.9 SQ. MILES
Q (10) = 759 CFS V (10) = 4.04 FT/S
Q (100) = 1,100 CFS V (100) = 4.92 FT/S
HW (10) = 1007.14 HW (100) = 1008.75

DESIGN TRAFFIC	
ADT 2013	1,300
ADT 2035	1,365

APPROVED FOR CONSTRUCTION
8/17/2016



EXISTING STRUCTURE	
TYPE: CONCRETE TEE BEAM ON SOLID WALL CONCRETE ABUTMENTS WITH C.I.P. CONCRETE PILES	
SPANS: 24'-0" $\pm$ 0/0	
ROADWAY: 28'-0" $\pm$ 0/0	
LOADING: HS15	
SKEW: N/A	
APPROACH SLABS: UNKNOWN	
ALIGNMENT: TANGENT	
CROWN: UNKNOWN	
STRUCTURAL FILE NUMBER: 7666187	
DATE BUILT: 1928	
WEARING SURFACE: N/A	
DISPOSITION: TO BE REPLACED	

PROPOSED STRUCTURE	
TYPE: DOUBLE (14'-0" x 6'-0") BOX CULVERT WITH PRECAST WINGWALLS	
SPAN: 14'-0" 0/0 (EACH CULVERT OPENING)	
ROADWAY: VARIES	
LOADING: HL-93 WITH 60 PSF FUTURE WEARING SURFACE	
SKEW: 45°00'00" RIGHT FORWARD	
APPROACH SLABS: N/A	
WEARING SURFACE: N/A	
ALIGNMENT: TANGENT	
CROWN: 0.016 FT/FT	
COORDINATES: LATITUDE N40°48'31" LONGITUDE W81°30'10"	
STRUCTURE FILE NUMBER: 7666188	

DESIGN AGENCY
CT Consultants
engineers | architects | planners
7965 N. High Street, Suite 300 Columbus, OH 43235
614.885.7700 www.ctconsultants.com

DATE
03/2016
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STRUCTURE FILE NUMBER
7666188

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REVIEWED
MLF
REVISED

STARK COUNTY
STA. 28+29.58
STA. 29+07.36

SITE PLAN
BRIDGE NO. STA - MR1400 - 0.155
17TH STREET OVER SIPPO CREEK

STA - OBPP - FY2016
PID No. 97410

1/6
19/25

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GENERAL NOTES:

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 6TH EDITION, INCLUDING THE 2013 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

DESIGN LOADING:

BRIDGE UNITS: HL93 + 60 PSF FUTURE WEARING SURFACE.
HEADWALLS: EARTH PRESSURE + LIVE LOAD SURCHARGE.
WINGWALLS: EARTH PRESSURE + LIVE LOAD SURCHARGE.

DESIGN FILL HEIGHT: 2'-0" MAX.

DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI
(CAST-IN-PLACE CONCRETE SUBSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 5.0 KSI @ 28 DAYS
(PRECAST HEADWALLS & WINGWALLS)
REINFORCING STEEL - ASTM A615 OR A996, GRADE 60 MINIMUM
YIELD STRENGTH 60,000 PSI

EXISTING STRUCTURE VERICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

STRUCTURE REMOVED. OVER 20 FOOT SPAN. AS PER PLAN

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE EXISTING STRUCTURE SHALL BE REMOVED UPON RECEIVING PERMISSION FROM THE ENGINEER.

CONTAINMENT OF POLLUTANTS:

THE CONTRACTOR SHALL PROVIDE A PLAN AND METHOD TO CONTAIN ALL POTENTIAL POLLUTANTS INCLUDING SOLVENTS, PAINTS, SEALERS, OILS, GREASE, ETC. ENTERING THE WATER. THE PROPOSED CONTAINMENT PLAN SHALL BE SUBMITTED IN WRITING TO THE ENGINEER NO LESS THAN 14 DAYS PRIOR TO BEGINNING CONSTRUCTION. WORK SHALL NOT BEGIN UNTIL THE ENGINEER APPROVES THE PLAN IN WRITING.

UNSUITABLE SOILS:

THE FOLLOWING ITEMS ARE TO BE USED AS DIRECTED BY THE ENGINEER TO ADDRESS UNSUITABLE SOILS ENCOUNTERED IN THE AREA UNDER THE PROPOSED BOX CULVERT. THE MATERIAL TO BE REPLACED WILL BE BASED UPON A THICKNESS OF 18" AND AN AREA EQUAL TO THE AREA OF THE BEDDING MATERIAL REQUIRED UNDER THE BOX CULVERT SPECIFICATIONS.
ITEM 203 - EXCAVATION
ITEM 203 - GRANULAR MATERIAL, TYPE C (703.16)
ITEM 204 - GEOTEXTILE FABRIC, TYPE D

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

SEAL ALL EXPOSED CONCRETE SURFACES AND 2'-0" INSIDE THE PREFABRICATED STRUCTURE USING EPOXY-URETHANE.

ITEM 512 - TYPE 2 WATERPROOFING:

TYPE 2 WATERPROOFING, PER CMS 512.08 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512, TYPE 2 WATERPROOFING.

IF PAVEMENT IS NOT PLACED DIRECTLY ON THE TOP OF THE CULVERT, TYPE 2 WATERPROOFING, PER CMS 512.08 AND 711.25 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512, TYPE 2 WATERPROOFING.

IF PAVEMENT IS TO BE USED DIRECTLY ON TOP OF THE CULVERT, TYPE 3 WATERPROOFING, PER CMS 512.08 AND 711.29 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE PAVEMENT. THE WATERPROOFING SHALL ALSO EXTEND UP THE INSIDE OF THE FORESLOPE WALL THAT WILL BE IN CONTACT WITH THE PAVEMENT. THE WATERPROOFING SHALL ALSO EXTEND UP THE INSIDE OF THE FORESLOPE WALL THAT WILL BE IN CONTACT WITH THE PAVEMENT. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512, TYPE 3 WATERPROOFING.

ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE 17th Street BRIDGE (Structure No. STA-MR1400-0.55) SCHEDULED FOR REPLACEMENT WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO:

TERRI DZIENIS, ADMINISTRATOR
DIVISION OF AIR POLLUTION CONTROL
420 MARKET AVENUE N.
CANTON, OH 44702-1544
ATTN: JACLYN HUPP
(330) 489-3385

AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION. THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER. INFORMATION REQUIRED ON THE FORM WILL INCLUDE:1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 4 OFFICE, 2088 SOUTH ARLINGTON, AKRON, OHIO 44306

ASBESTOS NOTIFICATION (CONTINUED)

BASIS FOR PAYMENT-THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202-PORIONS OF STRUCTURE REMOVED, AS PER PLAN.

PRECAST WINGWALLS:

AT THE OPTION OF THE CONTRACTOR, CAST-IN-PLACE (C.I.P.) WINGWALLS MAY BE FURNISHED PER ITEM 509 & 511 USING QC1 CONCRETE. THE C.I.P. OPTION FURNISHED WILL MEET THE C.I.P. STRENGTH DESIGN HEIGHT, LENGTH, AND DIMENSIONS SHOWN IN THESE PLANS.

FOUNDATION BEARING RESISTANCE:

WINGWALL FOOTING AS DESIGNED, PRODUCES A MAXIMUM SERVICE LOAD PRESSURE OF 1.71 KIPS PER SQUARE FOOT (KSF) AND A MAXIMUM STRENGTH LOAD OF 2.47 KSF. THE FACTORED BEARING RESISTANCE IS 5.5 KSF.

ABBREVIATIONS:

@ - AT
CL - CENTERLINE
φ - DIAMETER
C.I.P. - CAST-IN-PLACE
E.F. - EACH FACE
EL./ELEV. - ELEVATION
EX. - EXISTING
LT. - LEFT
MAX. - MAXIMUM
MIN. - MINIMUM
o/o - OUT-TO-OUT
OH - OVERHEAD
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PROP. - PROPOSED
PSF - POUNDS PER SQUARE FOOT
PSI - POUNDS PER SQUARE INCH
R/W - RIGHT OF WAY
RT. - RIGHT
STA. - STATION
TYP. - TYPICAL
UG - UNDERGROUND

APPROVED FOR
CONSTRUCTION
8 / 17 / 2016

DESIGN AGENCY

CT Consultants
engineers | architects | planners
7965 N. High Street, Suite 340 Columbus, OH 43215
614.885.1700 www.ctconsultants.com

DATE	03/16
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DRAWN	JFM
DESIGNED	JFM
CHECKED	TAB
STRUCTURE FILE NUMBER	7666188

GENERAL NOTES 1 OF 2

BRIDGE NO. STA - MR1400 - 0.55
17TH STREET OVER SIPPO CREEK

STA - OBPP - FY2016

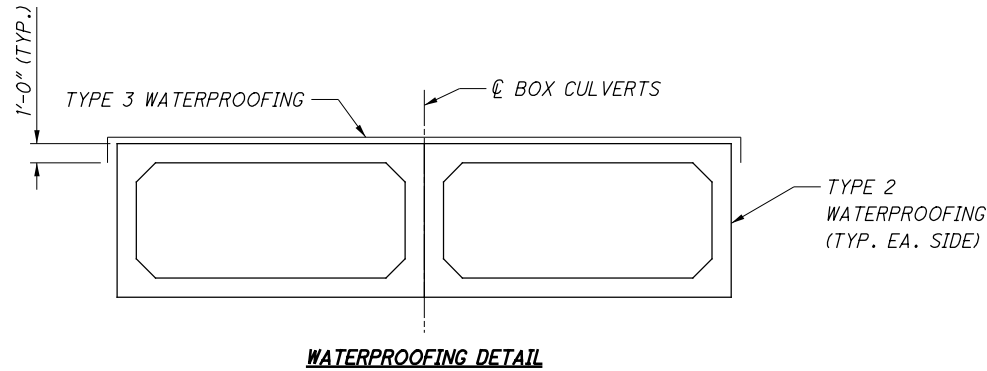
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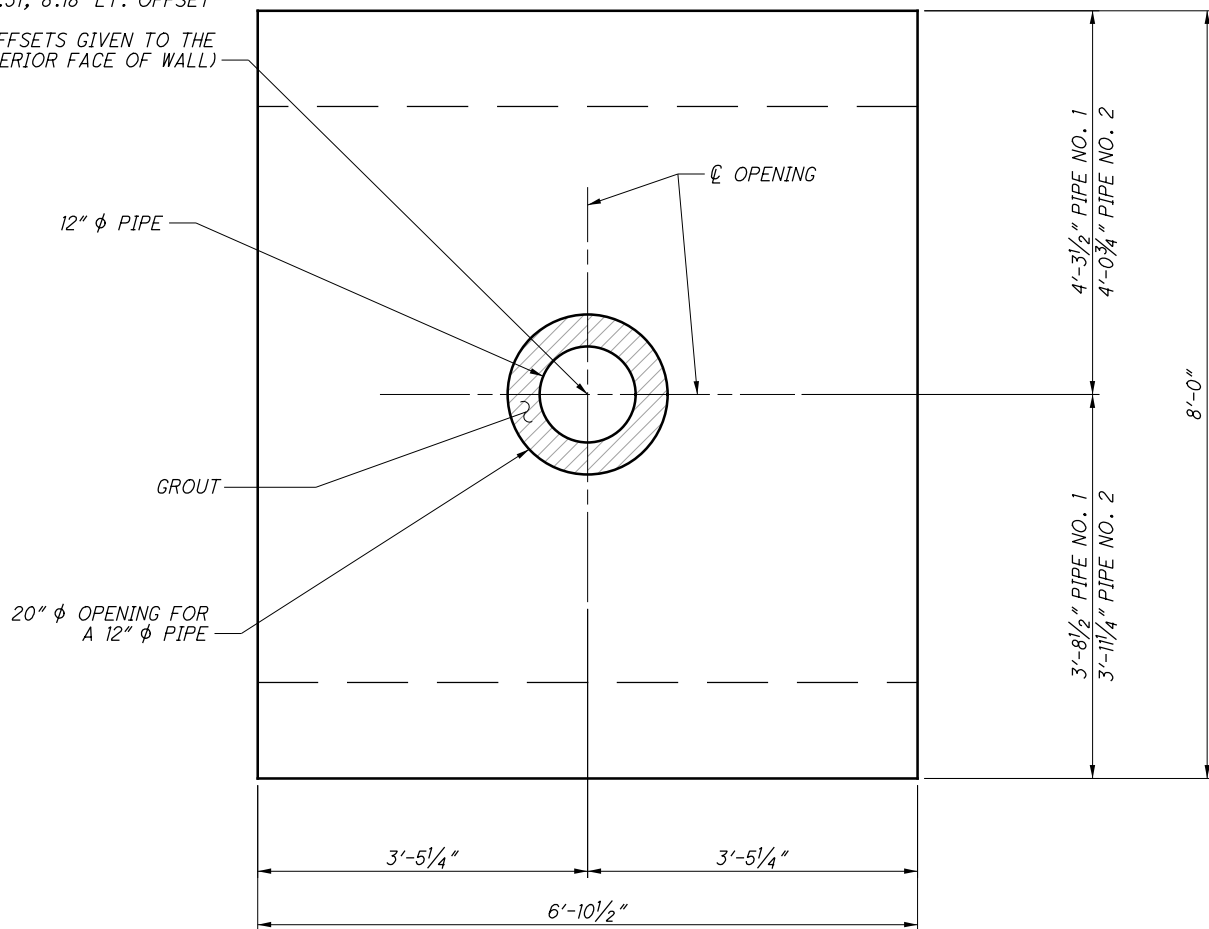
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APPROVED FOR
CONSTRUCTION
8/17/2016



PIPE NO. 1
STA. 28+70.02, 22.76' RT. OFFSET

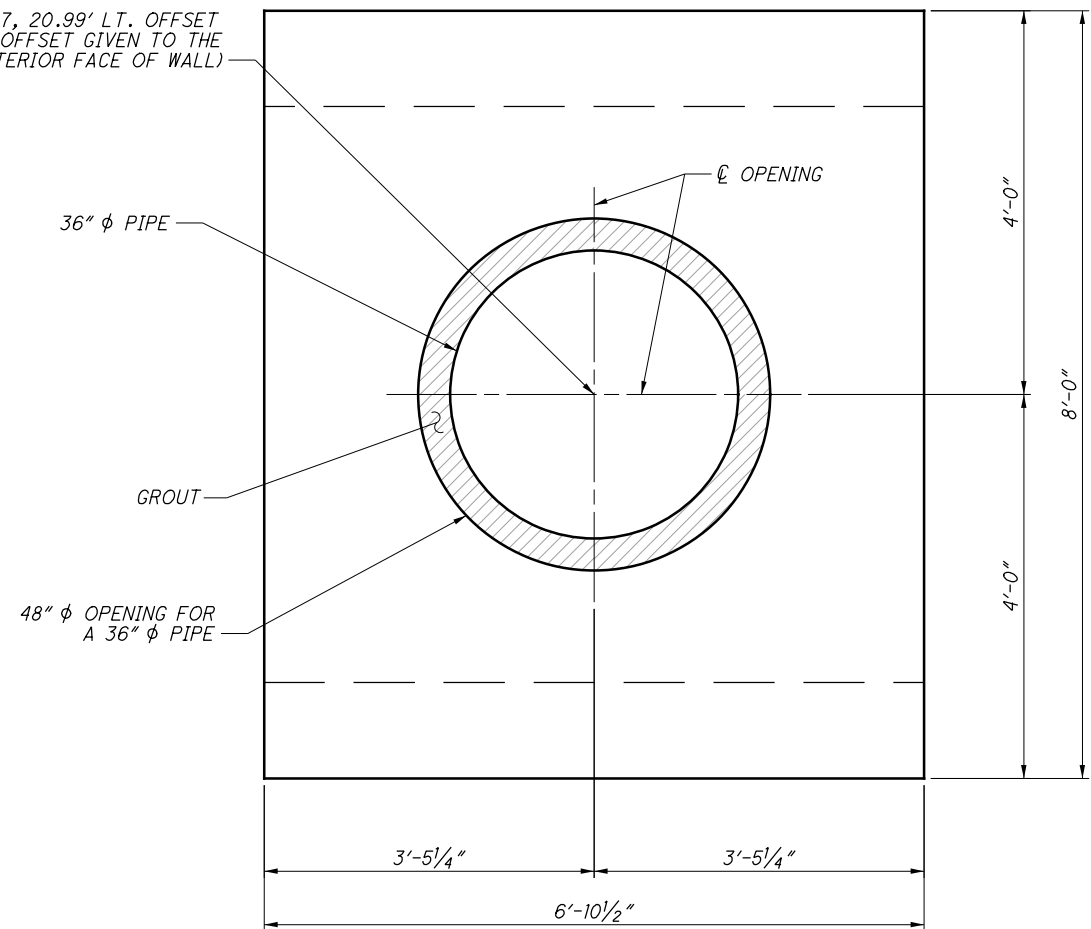
PIPE NO. 2
STA. 28+81.51, 8.18' LT. OFFSET
(STATIONS AND OFFSETS GIVEN TO THE
INTERIOR FACE OF WALL)



ELEVATION VIEW OF OPENING IN CULVERT SECTION
(FOR LOCATION OF ELEVATION VIEW, SEE SHEET 4 OF 6)

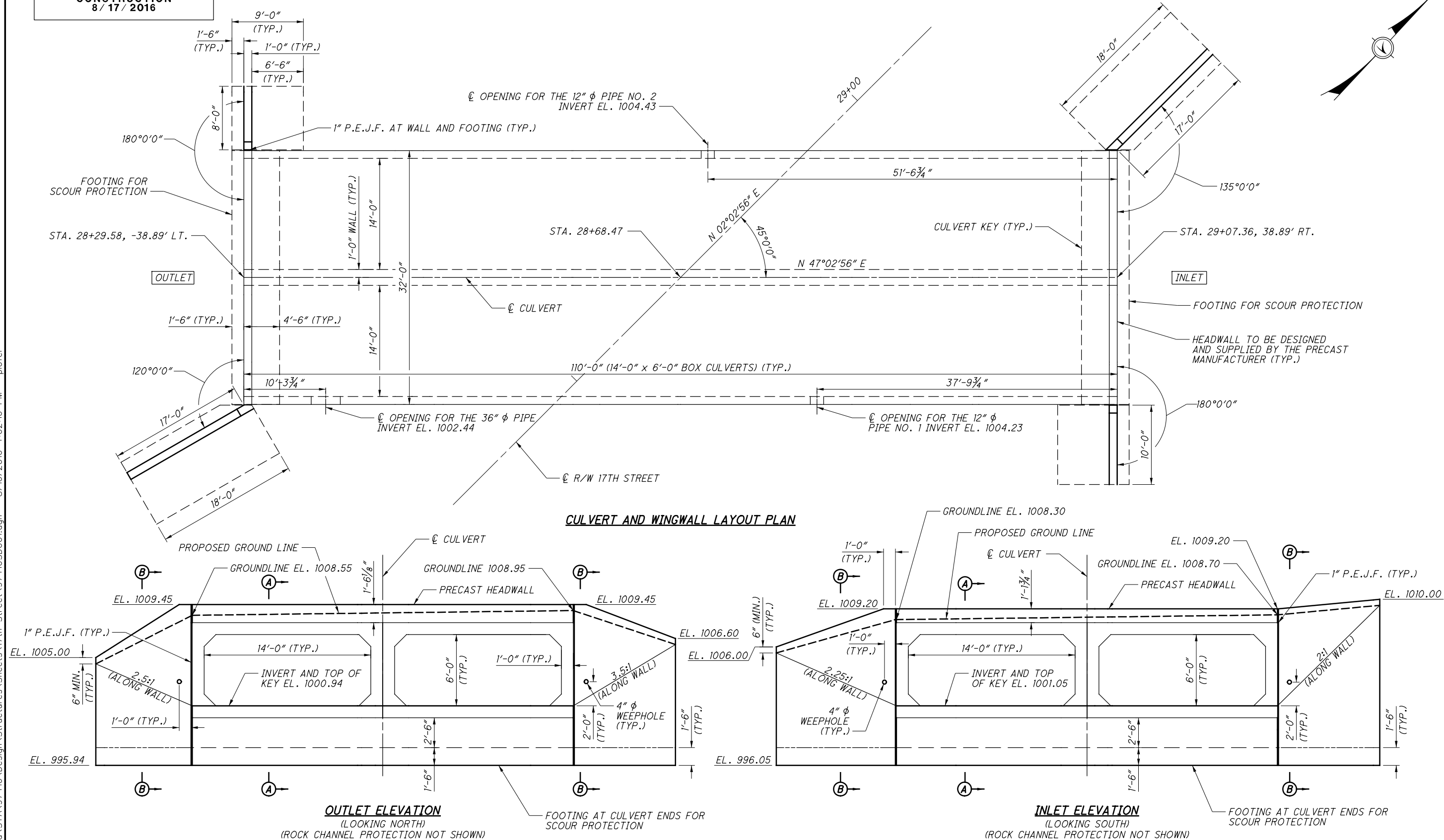
ESTIMATED QUANTITIES					CALCULATED BY: JFM 03/16 CHECKED BY: MLF 03/16
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	
202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	
202	23500	113	SY	WEARING COURSE REMOVED	
204	30021	261	CY	GRANULAR MATERIAL, TYPE C, AS PER PLAN	
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
503	21300	LS		UNCLASSIFIED EXCAVATION	
509	10000	2973	LB	EPOXY COATED REINFORCING STEEL	
511	53010	34	CY	CLASS QC1 CONCRETE, MISC.: CUTOFF WALLS	
512	10100	77	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33000	408	SY	TYPE 2 WATERPROOFING	
512	33010	179	SY	TYPE 3 WATERPROOFING	
516	13600	31	SF	1" PREFORMED EXPANSION JOINT FILLER	
517	76300	59	FT	RAILING, MISC.: 1 1/2" NOMINAL DIAMETER PIPE RAILING	
518	21200	47	CY	POROUS BACKFILL WITH FILTER FABRIC	
SPECIAL	530E00200	LS		SPECIAL - PRECAST WINGWALLS	
SPECIAL	530E00200	LS		SPECIAL - PRECAST HEADWALL	
611	96314	220	FT	14' X 6' CONDUIT, TYPE A, 706.05	

STA. 28+26.27, 20.99' LT. OFFSET
(STATION AND OFFSET GIVEN TO THE
INTERIOR FACE OF WALL)



ELEVATION VIEW OF OPENING IN CULVERT SECTION
(FOR LOCATION OF ELEVATION VIEW, SEE SHEET 4 OF 6)

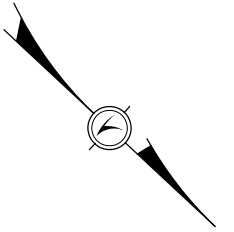
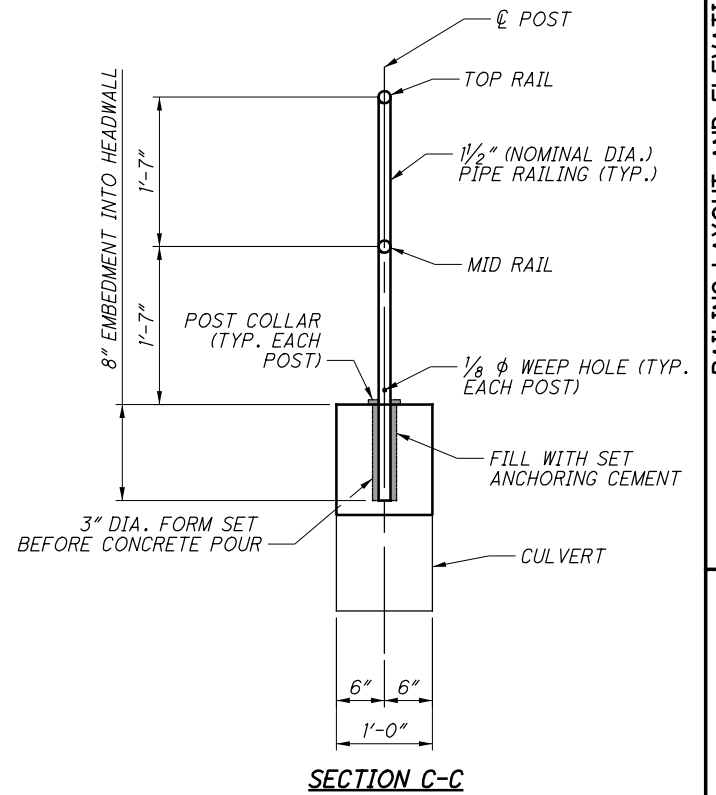
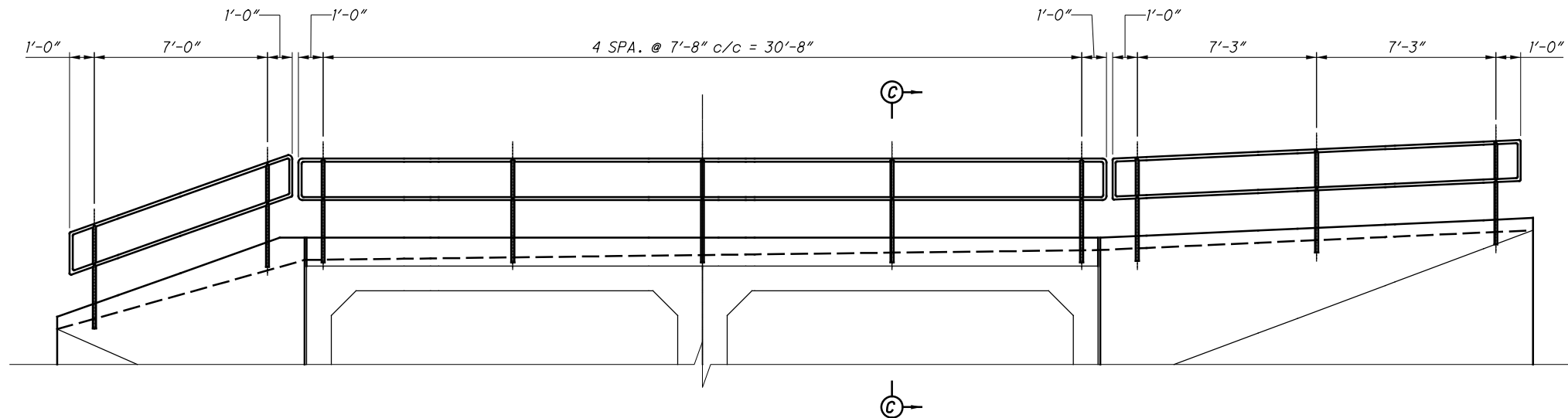
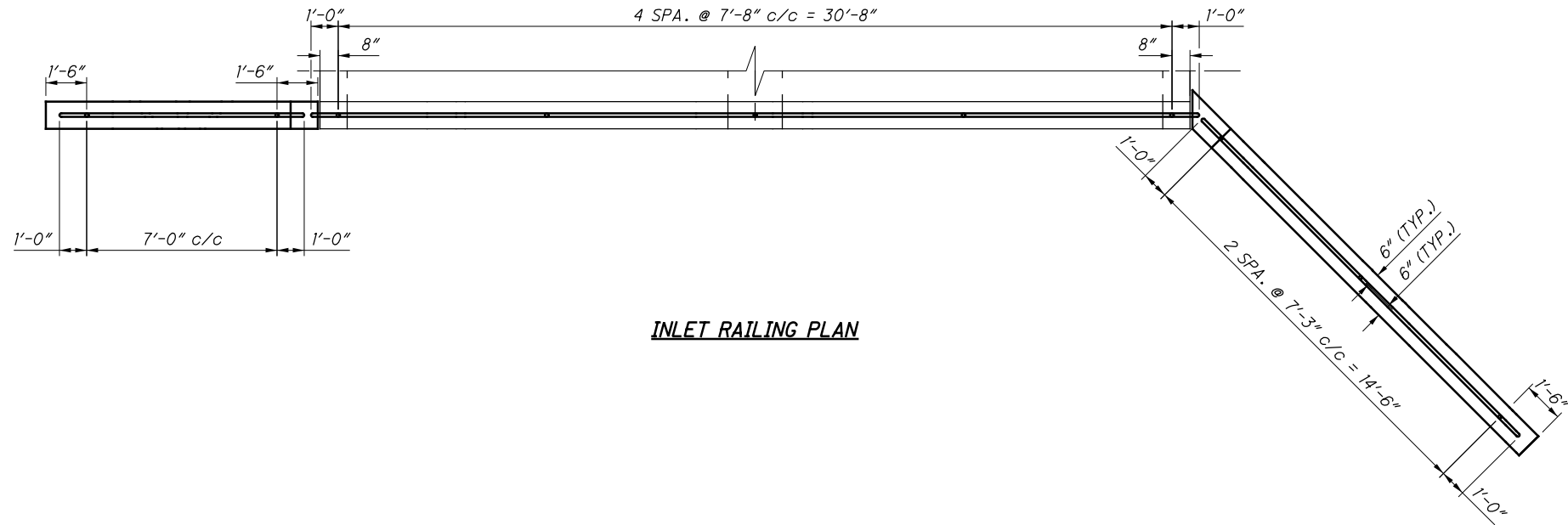
APPROVED FOR
CONSTRUCTION
8 / 17 / 2016



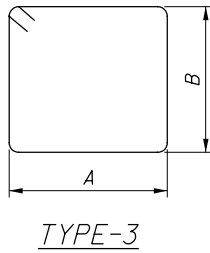
NOTES:

1. FOR SECTIONS A-A AND B-B SEE SHEET 6 OF 6.
2. 2'-0" POROUS BACKFILL SHALL BE PLACED BEHIND THE WINGWALLS AND EXTEND FROM A HEIGHT OF 1'-0" BELOW THE PROPOSED GROUND TO AT LEAST 6" BELOW THE WEEP HOLES FOR THE LENGTH OF EACH WALL.
4. ALL EXPOSED SURFACES OF THE HEADWALL AND WINGWALL CONCRETE SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER. 2'-0" INSIDE THE BOX CULVERT FOR ALL FACES FOR BOTH THE INLET AND OUTLET SHOULD ALSO BE SEALED WITH AN EPOXY-URETHANE SEALER.
5. RAILING ON TOP OF HEADWALL AND WINGWALLS NOT SHOWN FOR CLARITY. FOR RAILING DETAILS, SEE SHEET 5 OF 6.

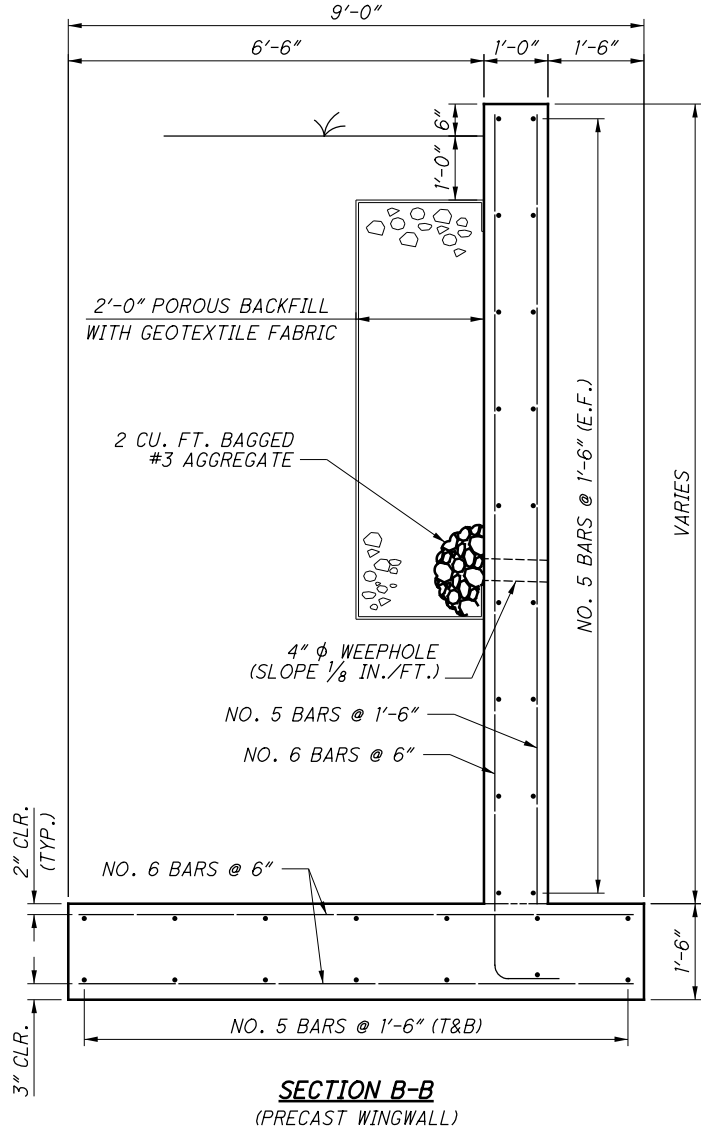
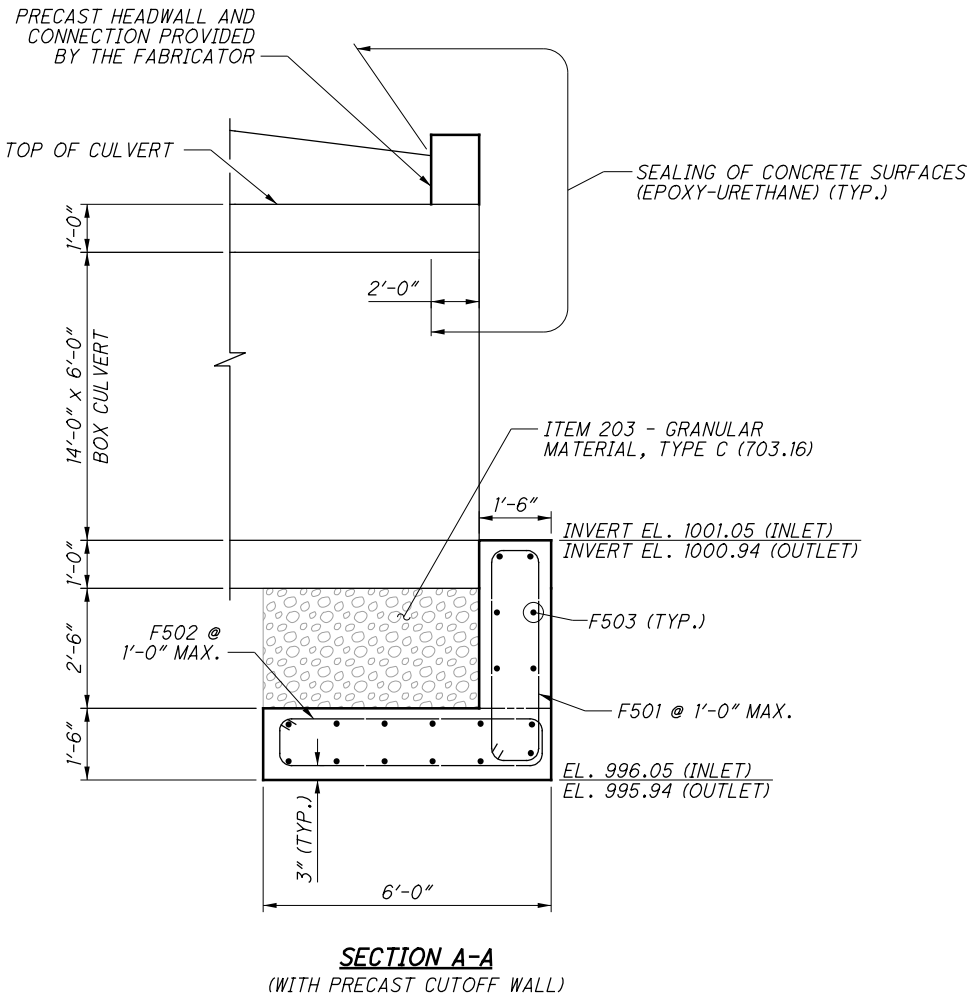
APPROVED FOR
CONSTRUCTION
8 / 17 / 2016



APPROVED FOR
CONSTRUCTION
8/17/2016



MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	INLET	OUTLET	TOTAL				A	B	C	D	E	R	INC
FOOTING													
F501	33	33	66	12'-0"	826	3	1'-2"	4'-6"					
F502	33	33	66	14'-0"	964	3	1'-2"	5'-6"					
F503	18	18	36	31'-6"	1183	STR							
SUB-TOTAL					2973	LBS							



NOTES:

1. FOR LOCATION OF SECTIONS A-A AND B-B, SEE SHEET 3 OF 4.
2. ALL REINFORCING BARS SHALL BE EPOXY COATED.
3. THE BAR NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, A401 IS A NUMBER 4 BAR. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE NOTED.

CITY OF MASSILLON
17TH STREET
STARK COUNTY, OHIO

BASIS FOR BEARINGS:
NAD83(2011) EPOCH 2010.000
PROJECT DESCRIPTION:
REPLACEMENT OF BRIDGE STRUCTURE



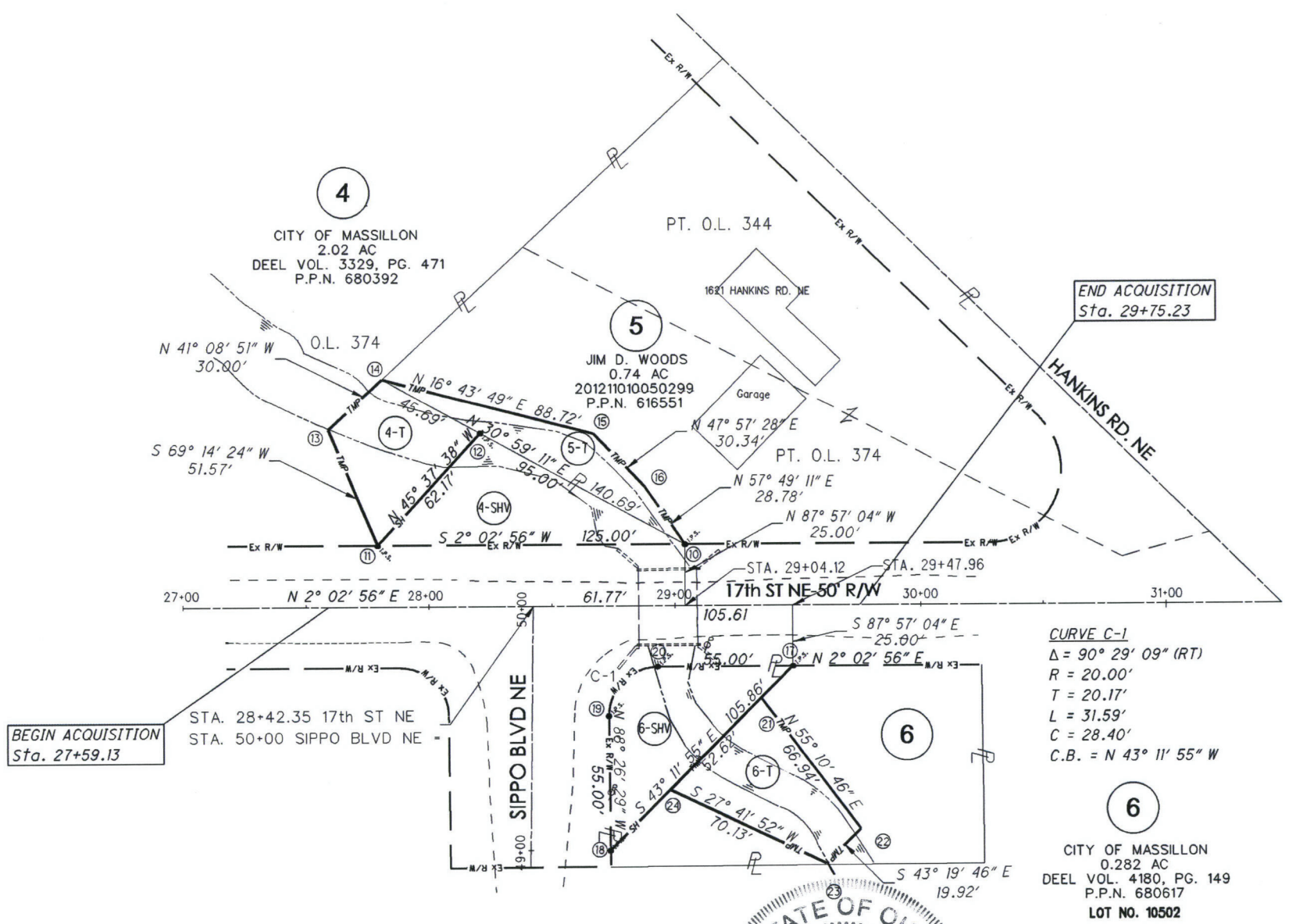
PID NO.
97410

R/W DESIGNER
TWW
R/W REVIEWER
BWH

RIGHT OF WAY PLAN

STA-OBPP-FY2016

- MONUMENT LEGEND**
- EXISTING R/W MONUMENT BOX
 - PROPOSED R/W MONUMENT BOX
 - EXISTING CONCRETE MONUMENT
 - PROPOSED CONCRETE MONUMENT
 - RAILROAD SPIKE FOUND
 - RAILROAD SPIKE SET
 - IRON PIN FOUND
 - IRON PIN FOUND W/ ID CAP
 - IRON PIN SET W/ ID CAP
 - IRON PIPE FOUND
 - IRON PIPE SET
 - P.K. NAIL FOUND
 - P.K. NAIL SET



STATION/OFFSET		
	STATION	OFFSET
10	29+04.12	25.00 LT.
11	27+79.12	25.00 LT.
12	28+20.98	70.97 LT.
13	27+59.13	72.54 LT.
14	27+81.00	93.07 LT.
15	28+66.82	70.59 LT.
16	28+87.93	48.80 LT.
17	29+47.96	25.00 RT.
18	28+73.43	100.17 RT.
19	28+72.96	45.17 RT.
20	28+92.96	25.00 RT.
21	29+35.07	37.99 RT.
22	29+75.24	91.54 RT.
23	29+61.24	105.72 RT.
24	28+98.02	75.36 RT.

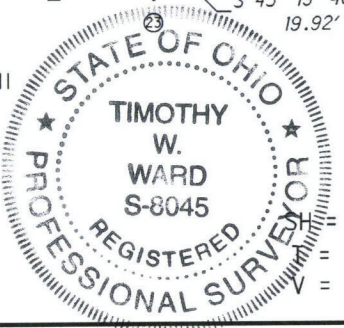
I, Tim Ward, P. S. have calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire these parcels as shown herein.

All of my work contained herein was conducted in accordance with Ohio Administrative Code 4733-37 commonly known as "A Minimum Standards for Boundary Surveys in the State of Ohio" unless noted.

The words I and my as used herein are to mean either myself or someone working under my direct supervision.

Tim W. Ward
Tim Ward, Professional Land Surveyor 8045

Date: 1-06-15



SH = STANDARD HIGHWAY EASEMENT
T = TEMPORARY EASEMENT
V = ACQUIRE IN NAME OF CITY OF MASSILLON

* DENOTES RIGHT OF WAY ENCROACHMENT

REV. BY	DATE	DESCRIPTION

TOTAL NUMBER OF :

3 OWNERSHIPS	TOTAL TAKES
5 PARCELS	OWNERSHIPS W/ STRUCTURES INVOLVED

NOTE: ALL TEMPORARY PARCELS TO BE OF 12 MONTH DURATION.

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION UNLESS OTHERWISE SHOWN.

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK / PAGE or IMAGE No.	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED IMAGE No.
4-SHV	CITY OF MASSILLON	1	VOL. 3329, PG. 471	680392	2.02	0.00	0.066	0.000	0.066		1.954		LOCAL		
4-T		1					0.048	0.000	0.048					TO GRADE AND SEED	
5-T	JIM D. WOODS	1	201211010050299	616551	0.74	0.00	0.037	0.000	0.037					TO GRADE AND SEED	
6-SHV	CITY OF MASSILLON	1	VOL. 4180, PG. 149	680617	0.282	0.00	0.063	0.000	0.063			0.219			
6-T		1					0.055	0.000	0.055				LOCAL	TO GRADE AND SEED	

2 / 3

25
25