

FAYETTE COUNTY MERCEDES TRAIL CULVERT REPLACEMENT PROJECT PROJECT NUMBER 17SAI



1899 POWERS FERRY ROAD SE, SUITE 400
ATLANTA, GEORGIA 30339
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www.tetrattech.com



PROJECT LOCATION:

120 MERCEDES TRAIL
FAYETTEVILLE, GA 30215

CLIENT INFORMATION:

FAYETTE COUNTY
140 STONEWALL AVE W, STE 203
FAYETTEVILLE, GA 30214

Tt PROJECT No.:

200-01297-17037

CLIENT PROJECT No.:

17SAI

PROJECT DESCRIPTION / NOTES:

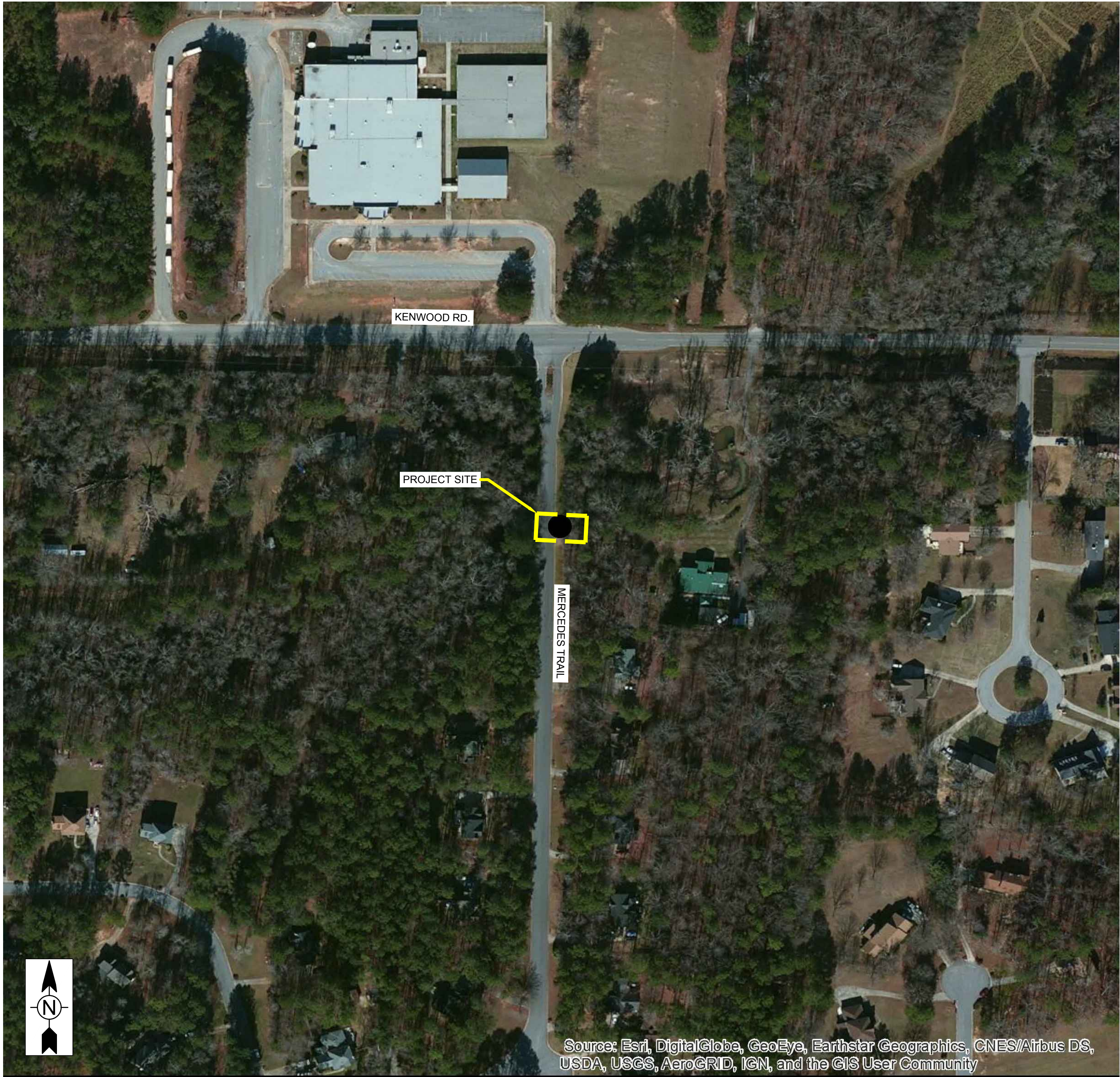
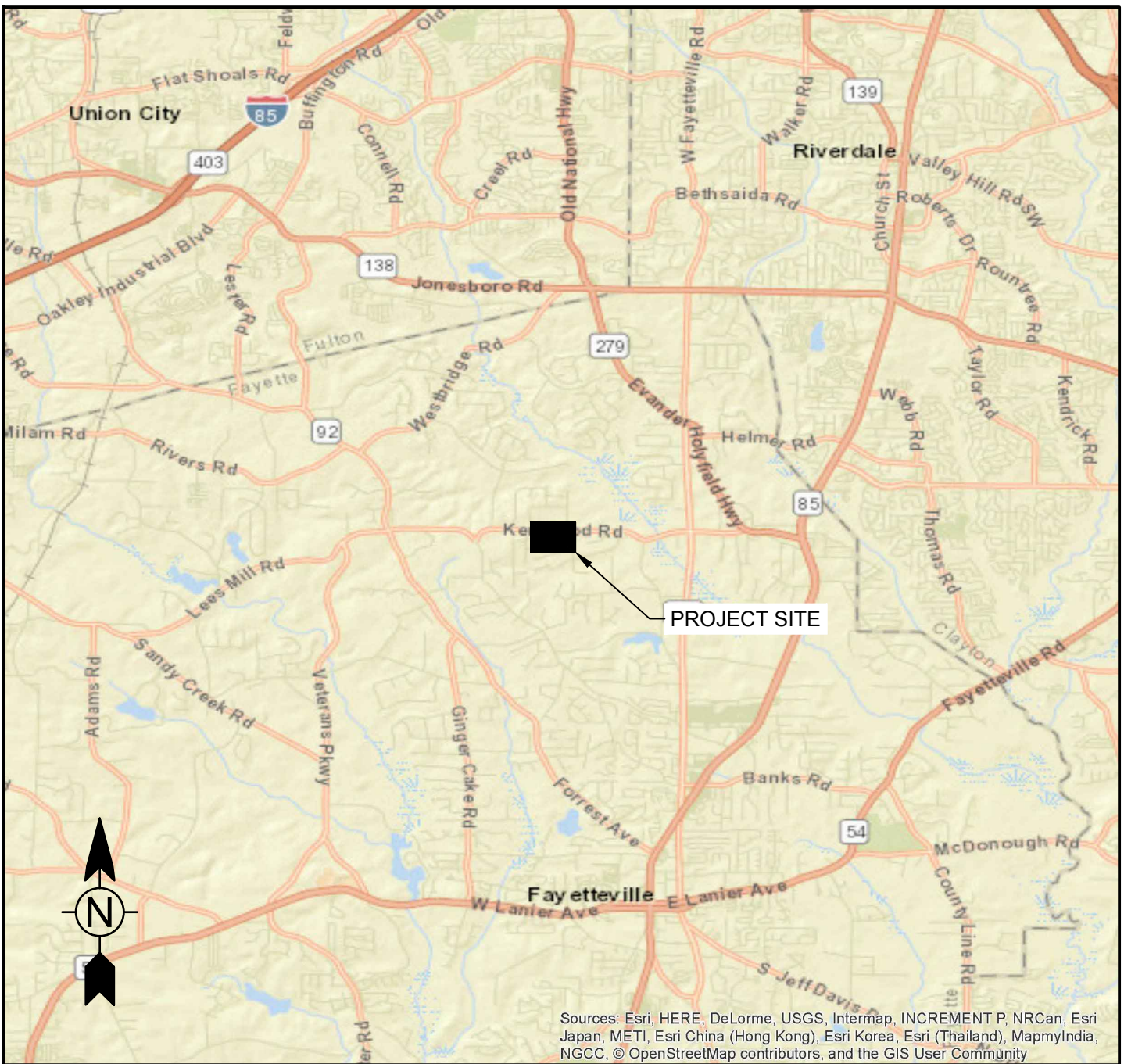
REFERENCE DATUM: NAD83 GEORGIA STATE PLANE, WEST ZONE, US FOOT

PROJECT SITE LOCATED 350 FEET SOUTH ON MERCEDES TRAIL FROM THE
INTERSECTION WITH KENWOOD ROAD

ISSUED:

ISSUED FOR CONSTRUCTION - 05/18/18
ISSUED FOR CONSTRUCTION REV 1 - 07/27/2018

VICINITY MAP:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

NOT TO SCALE



GSWCC LEVEL II
CERT. # 0000073529

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LIST OF STANDARD ABBREVIATIONS

| | | | |
|--|--|--|--|
| A AAP ALARM ANNUNCIATOR PANEL AARV AUTOMATIC AIR RELEASE AAV VALVE AAV AUTOMATIC AIR VENT AB ANCHOR BOLT ABAN ABANDON(ED) ABRSV ABRASIVE ABS ACRYLONITRILE BUTADIENE STYRENE ABV ABOVE AC ALTERNATING CURRENT ACOMP ASPHALT-COATED CORRUGATED METAL PIPE ACP ASBESTOS CEMENT PIPE ADDM ADDENDUM ADH ADHESIVE AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AFS ABOVE FINISHED SLAB AHD AHEAD AL ALUMINUM ALT ALTERNATE AMP AMPERE AMT AMOUNT APRX APPROXIMATE(LY) ARCH ARCHITECT(URAL) AS ALUM SOLUTION ASPH ASPHALT ASSY ASSEMBLY AVE AVENUE A/C AIR CONDITIONING A/VV AIR/VACUUM AIR VALVE B BAF BAFFLE BCV BALL CHECK VALVE BF BLIND FLANGE BFV BUTTERFLY VALVE BHP BRAKE HORSEPOWER BI BLACK IRON BITUM BITUMINOUS OR BITUMASTIC BL BASELINE BLDG BUILDING BLK BLOCK BM BENCH MARK BOC BACK OF CURB BOT BOTTOM BP BASE PLATE BRG BEARING BRG BLACK STEEL PIPE BV BALL VALVE BW BOTH WAYS BWW BACKWASH WATER C CAP CAPACITY CA COMPRESSED AIR CAV COMBINATION AIR VALVE CB CATCH BASIN CCC CHLORINE CONTACT CHAMBER CE CHLORINATED EFFLUENT CFM CUBIC FEET PER MINUTE CFS CUBIC FEET PER SECOND CV CHECK VALVE CI CAST IRON CIP CAST IRON PIPE CISP CAST IRON SOIL PIPE CJ CONSTRUCTION JOINT CKT CIRCUIT CL CENTER LINE CL2 CHLORINE GAS CLF CHAIN LINK FENCE CLR CLEAR OR CLEARANCE CLVT CULVERT CMP CORRUGATED METAL PIPE CMPA CORRUGATED METAL PIPE ARCH CMU CONCRETE MASONRY UNIT CND CONDUIT CNR CORNER CO CLEAN OUT CO2 CARBON DIOXIDE COAG COAGULANT COL COLUMN COM COMMON CONC CONCRETE CONN CONNECTION CONSTR CONSTRUCTION(ION) CONT CONTINUOUS CONTR CONTRACTION(OR) COORD COORDINATE CO COMPANY CP CONCRETE PIPE CPA CONCRETE PIPE ARCH CPLG COUPLING CPVC CHLORINATED POLYVINYL CHLORIDE CR CONCENTRIC REDUCER CS CHLORINE SOLUTION CSG CASING CTV CABLE TELEVISION CY CUBIC YARD CYL CYLINDER C&G CURB AND GUTTER C/C CENTER TO CENTER D DAT DATUM DBL DOUBLE DC DIRECT CURRENT DEMO DEMOLITION DEPT DEPARTMENT DESC DESCRIPTION DET DETAIL DF DIESEL FUEL DI DUCTILE IRON DIA DIAMETER DIFF DIFFUSER DIM DIMENSION DIP DUCTILE IRON PIPE DISCH DISCHARGE DIR DIRECTION DMH DROP MANHOLE DN DOWN DR DRAIN DV DIAPHRAGM VALVE DW DRIVEWAY DWG DRAWING DWV DRAIN, WASTE, AND VENT | E E EAST EA EACH ECC ECCENTRIC EF EACH FACE EFF EFFLUENT E/L EASEMENT LINE EL ELEVATION ELAST ELASTOMERIC ELEC ELECTRICAL EMER EMERGENCY EMC ENCASE(MENT) ENGR ENGINEER EP EDGE OF PAVEMENT EPDM ETHYLENE PROPYLENE DIENE MONOMER EPRF EXPLOSION PROOF EQUIPMENT ER ECCENTRIC REDUCER ESTM EASEMENT EST ESTIMATED(D) EW EACH WAY EXC EXCAVATE EXP EXPANSION EXST EXISTING EXST GR EXISTING GRADE EXT EXTERIOR EXTN EXTENSION F FAB FABRICATE(D) FCA FLANGED COUPLING ADAPTER FB FLAT BAR FCV FLOW-CONTROL VALVE FD FLOOR DRAIN FDN FOUNDATION FE FILTER(ED) EFFLUENT FHY FIRE HYDRANT FIG FIGURE FIN FINISH(ED) FIN FLR FINISH FLOOR FIN GR FINISH GRADE FL FLUORIDE FLG FLANGE(D) FLW FLOW LINE FLTR FILTER FM FORCE MAIN FPM FEET PER MINUTE FPS FEET PER SECOND FRP FIBERGLASS REINFORCED PLASTIC FT FOOT OR FEET FUT FUTURE FV FOOT VALVE FW FINISHED WATER FWP FACTORY WIRED PANEL F/F FACE TO FACE G GA GAUGE GAL GALLON(S) GALV GALVANIZED GIP GALVANIZED IRON PIPE GJ GROOVE JOINT GND GROUND GPD GALLONS PER DAY GPH GALLONS PER HOUR GPM GALLONS PER MINUTE GPS GALLONS PER SECOND GR GRADE GRTG GRATING GS GALVANIZED STEEL GSP GALVANIZED STEEL PIPE GSR GROUND STORAGE RESERVOIR GST GROUND STORAGE TANK GT GROUT GV GATE VALVE H HB HOSE BIBB HD HEAVY-DUTY HDPE HIGH-DENSITY POLYETHYLENE HDR HYDRAULIC HFA HYDROFLUOSILICIC ACID HGR HANGER HGT HEIGHT HNDRL HAND RAIL HOA HAND-OFF-AUTO HORIZ HORIZONTAL HP HORSEPOWER HPA HIGH PRESSURE AIR HR HOUR HVAC HEATING, VENTILATION, AND AIR CONDITIONING HWL HIGH WATER LEVEL HWY HIGHWAY HZ HERTZ I ID INSIDE DIAMETER IN INCH(ES) INF INFLUENT INT INTERSECTION INTR INTERIOR INV INVERT IP IRON PIPE IPS INTERNATIONAL PIPE STANDARD IR INTERNAL RECYCLE IW IRRIGATION WATER J JB JUNCTION BOX JT JOINT K K KIP (1,000 LB) KPL KICK PLATE KV KILOVOLT KVA KILOVOLT-AMPERE KW KILOWATT KWH KILOWATT-HOUR L L LEFT LAB LABORATORY LAM LAMINATE OR LAMINATION LATL LATERAL LAV LAVATORY | LEN LENGTH LB POUND(S) LF LINEAR FEET LP LIGHT POLE LS LINE SLURRY LSS LIME STABILIZED SLUDGE LVR LOUVER LWL LOW WATER LEVEL M M METER MAINT MAINTAIN OR MAINTENANCE MAN MANUAL(LY) MAS MASONRY MATL MATERIAL MAX MAXIMUM MCC MOTOR CONTROL CENTER ME MITERED END MECH MECHANICAL MEG MATCH EXISTING GRADE MFR MILLION GALLONS MGD MILLION GALLONS PER DAY MH MANHOLE MI MILE(S) MIN MINIMUM, MINUTE(S) MISC MISCELLANEOUS MJ MECHANICAL JOINT ML MIXED LIQUOR MO MASONRY OPENING MON MONUMENT MPH MILES PER HOUR MPT MALE PIPE THREAD MS MOTOR STARTER MSP MOTOR STARTER PANEL MTD MOUNTED MV MOTORIZED VALVE MW MANWAY MWL MEAN WATER LEVEL MWP MAXIMUM WORKING PRESSURE N N NORTH NaOCI SODIUM HYPOCHLORITE NE NORTH-EAST NIC NOT IN CONTRACT NO NUMBER NOM NOMINAL NPF NATIONAL PIPE THREAD NPT NATIONAL PIPE TAPER (THREAD) NPW NON-POTABLE WATER NRS NON-RISING SYSTEM NTS NOT TO SCALE NW NORTHWEST N/A NOT APPLICABLE O O2 OXYGEN OC ON CENTER OD OUTSIDE DIAMETER ODP OPEN DRIP PROOF OF OUTSIDE FACE OH OVER HEAD OHV OVER HEAD WIRE OPP OPPOSITE OPT OPTIONAL OR OFFICIAL RECORDS OSY OUTSIDE SCREW AND YOKE O&M OPERATION AND MAINTENANCE P P PROCESS AIR PC POINT OF CURVE PCM PERMANENT CONTROL MONUMENT PE PLAIN END PG PRESSURE GAGE PI POINT OF INTERSECTION PL PLATE PL PROPERTY LINE PNV PINCH VALVE POB POINT OF BEGINNING POJ PUSH-ON JOINT POL POLYMER PP POWER POLE PPD POUNDS PER DAY PPM PARTS PER MILLION PREFAB PREFABRICATED PRESS PRESSURE PRV PRESSURE REDUCING VALVE PRW PROCESS WATER PSF POUNDS PER SQUARE FOOT PSI POUNDS PER SQUARE INCH PSIA POUNDS PER SQUARE INCH ABSOLUTE PSIG POUNDS PER SQUARE INCH GAGE PT POINT OF TANGENCY PV PLUG VALVE PVC POLYVINYL CHLORIDE PVMT PAVEMENT PW POTABLE WATER PWR POWER Q Q FLOW QTY QUANTITY R RAD RADIUS RAS RETURN ACTIVATED SLUDGE RC REINFORCED CONCRETE RCB REINFORCED CONCRETE BOX RCP REINFORCED CONCRETE PIPE RCPA REINFORCED CONCRETE PIPE ARCH RD ROAD RDCR REDUCER REBAR REINFORCING STEEL REF REFERENCE REINF REINFORCE(D)(ING)(MENT) REM REMOVE(ABLE) REQ'D REQUIRED RF RAISED FACE RJ RESTRAINED JOINT RM ROOM RBPB REDUCED PRESSURE BACKFLOW PREVENTER RPM REVOLUTIONS PER MINUTE | RR RAILROAD RT RIGHT RVT RIVETED RW RAW WATER RWW RAW WASTEWATER R/W RIGHT-OF-WAY S S SOUTH SA SAMPLE LINE SAN SANITARY SCHED SCHEDULE SD STORM DRAIN SE SOUTHEAST SECT SECTION SEFF SECONDARY EFFLUENT SF SQUARE FOOT OR FEET SHEET(ED)(ING) SIGNAL SIM SIMILAR SL SLUDGE SLEV SLEEVE SM SHEET METAL SOLN SOLUTION SP SOIL PIPE, SPACE(ING) SPEC SPECIFICATION SPRT SUPPORT SQ SQUARE SS SANITARY SEWER SSE SUBSTANDARD EFFLUENT SST STAINLESS STEEL ST STREET STA STATION STD STANDARD STK STAKE STL STEEL STR STRAIGHT STRUCT STRUCTURAL SURF SURFACE SV SILENOID VALVE SVCE SERVICE SWW SERVICE WATER SW SOUTHWEST SWD SIDEWATER DEPTH SWSH SURFACE WASH SYM SYMBOL SYM METRICAL SYMMETRICAL SIDEWALK T TAN TANGENT TB TOP OF BEAM TBM TEMPORARY BENCH MARK TB-xx TEST BORING-xx (e.g. TB-1) TD TRENCH DRAIN TDH TOTAL DYNAMIC HEAD TE TOTALLY ENCLOSED TEFC TOTALLY ENCLOSED FAN COOLED TEL TELEPHONE TENV TOTALLY ENCLOSED NON-VENTILATED THD THREADED THK THICK(NESS) TLM TELEMETRY TOB TOP OF BANK TOC TOP OF CURB TOS TOE OF SLOPE TOT TOTAL TP TELEPHONE POLE TS THICKENED SLUDGE TV TELEVISION TYP TYPICAL TAB TOP AND BOTTOM U UD UNDERDRAIN UG UNDERGROUND ULT ULTIMATE UN UNION UN UNLESS OTHERWISE NOTED UGE UNDERGROUND ELECTRIC UTC UNDERGROUND TELEPHONE CABLE UTIL UTILITY V V VOLT(S) VAC VACUUM VAR VARIES VC VERTICAL CURVE VCP VITRIFIED CLAY PIPE VEL VELOCITY VERT VERTICAL VFD VARIABLE FREQUENCY DRIVE VOL VOLUME W W WATT, WEST WAS WASTE ACTIVATED SLUDGE WCO WALL CLEAN OUT WF WIDE FLANGE WH WALL HYDRANT WL WATER LINE WM WATER MAIN WP WATER PROOF(ING), WORKING POINT WPR WORKING PRESSURE WS WATER SURFACE WSP WELDED STEEL PIPE WT WEIGHT WTP WATER TREATMENT PLANT WW WASH WATER WWF WELDED WIRE FABRIC WWM WELDED WIRE MESH WWTP WASTEWATER TREATMENT PLANT W/ WITH W/O WITHOUT X XFER TRANSFER Y YD YARD(S) YH YARD HYDRANT YR YEAR(S) YR |
|--|--|--|--|

PIPING LEGEND

| FITTING/ APPURTENANCE | FLANGED | | | | MECHANICAL JOINT | | | | GROOVE JOINT | | | | SOLVENT WELD | | | |
|-------------------------|-------------|----------|-------------|----------|------------------|----------|-------------|----------|--------------|----------|-------------|----------|--------------|----------|-------------|----------|
| | SINGLE-LINE | | DOUBLE-LINE | | SINGLE-LINE | | DOUBLE-LINE | | SINGLE-LINE | | DOUBLE-LINE | | SINGLE-LINE | | DOUBLE-LINE | |
| | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED |
| BEND | | | | | | | | | | | | | | | | |
| TEE | | | | | | | | | | | | | | | | |
| WYE | | | | | | | | | | | | | | | | |
| REDUCER | | | | | | | | | | | | | | | | |
| CAP/ BLIND FLANGE | | | | | N/A | N/A | N/A | N/A | | | | | | | | |
| PLUG | N/A | N/A | N/A | N/A | | | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| BUTTERFLY VALVE | | | | | | | | | | | | | | | | |
| BALL VALVE | | | | | N/A | N/A | N/A | N/A | | | | | | | | |
| CHECK VALVE | | | | | N/A | N/A | N/A | N/A | | | | | | | | |
| GATE VALVE | | | | | | | | | | | | | | | | |
| PLUG VALVE | | | | | | | | | | | | | | | | |
| AUTOMATIC CONTROL VALVE | | | | | N/A | N/A | N/A | N/A | | | | | | | | |
| PINCH VALVE | | | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |

CIVIL LEGEND

| | |
|--|---|
| | PROPERTY LINE |
| | RIGHT OF WAY LINE (R-O-W) |
| | LIMITS OF CONSTRUCTION |
| | EASEMENT |
| | PROPOSED CONTOUR MAJOR |
| | PROPOSED CONTOUR MINOR (LABEL OPTIONAL) |
| | WATER |
| | STORM SEWER |
| | SANITARY SEWER |
| | SANITARY SEWER (FORCE MAIN) |
| | GUARD RAIL |
| | STEEL FENCE |
| | WOOD FENCE |
| | OVERHEAD ELECTRICAL |
| | XXXX-XX |
| | TOP |
| | BOTTOM |
| | WELL |
| | MANHOLE |
| | VALVE |
| | SEWER |
| | WATER MAIN |
| | WATER PROOF(ING), WORKING POINT |
| | WORKING PRESSURE |
| | WATER SURFACE |
| | WELDED STEEL PIPE |
| | WEIGHT |
| | WATER TREATMENT PLANT |
| | WASH WATER |
| | WELDED WIRE FABRIC |
| | WELDED WIRE MESH |
| | WASTEWATER TREATMENT PLANT |
| | WITH |
| | WITHOUT |
| | TRANSFER |
| | YARD(S) |
| | YARD HYDRANT |
| | YEAR(S) YR |

REFERENCE SYMBOLS

| | | | |
|--|---|--|--|
| | DENOTES SECTION LETTER IDENTIFICATION | | DENOTES DETAIL NUMBER IDENTIFICATION |
| | DENOTES DRAWING NO WHERE SECTION IS LOCATED | | DENOTES DRAWING NO WHERE DETAIL IS LOCATED |
| | SECTION REFERENCE | | DETAIL REFERENCE |
| | DENOTES SECTION LETTER IDENTIFICATION | | DENOTES DETAIL NUMBER IDENTIFICATION |
| | SECTION | | DETAIL |
| | SCALE: | | SCALE: |
| | DENOTES DRAWING NO WHERE SECTION IS LOCATED | | DENOTES DRAWING NO WHERE DETAIL IS LOCATED |
| | SECTION TITLE | | DETAIL TITLE |

HATCHING LEGEND

| | | | |
|--|--|--|------------------------------|
| | ASPHALT OR CONCRETE SURFACE (SIDEWALK OR ROADWAY) | | PRECAST CONCRETE |
| | ROADWAY/SIDEWALK OPEN CUT RESURFACE | | GROUT |
| | SODDED OR SEEDDED AND MULCHED AREA OR EXISTING WETLAND | | CONCRETE UNIT MASONRY (PLAN) |
| | EARTH | | STEEL |
| | EXISTING PIPES, STRUCTURES, EQUIPMENT TO BE REMOVED | | ALUMINUM |
| | CAST-IN-PLACE CONCRETE | | GRATING |

MECHANICAL/DRAFTING LEGEND

| | | |
|-----------------------------|----------|----------|
| | EXISTING | PROPOSED |
| VISIBLE LINE | | |
| HIDDEN LINE | | |
| CENTER LINE | | |
| PHANTOM LINE | | |
| MATCHLINE | | |
| BREAK LINE | | |
| DIMENSION LINES AND LEADERS | | |
| | 1/32" | NOTE |

TETRA TECH



GSWCC LEVEL II
CERT. # 0000073529

| MARK | DATE | DESCRIPTION | BY | HA | CG |
|------|----------|---------------------------------|----|----|----|
| 0 | 05/18/18 | ISSUED FOR CONSTRUCTION | | | |
| 0 | 07/27/18 | ISSUED FOR CONSTRUCTION - REV 1 | | | |

FAYETTE COUNTY
MERCEDES TRAIL CULVERT REPLACEMENT
LEGEND AND ABBREVIATIONS

Project No.: 200-01297-17037
Designed By: CG
Drawn By: MR
Checked By: DL

G-001

Bar Measures 1 inch

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GENERAL NOTES

PROJECT INFORMATION:

1. THE PROJECT SHALL CONSIST OF THE DEMOLITION OF THE EXISTING CMP CULVERTS UNDER MERCEDES TRAIL AND THE INSTALLATION OF TWO 8'X6' CONCRETE BOX CULVERTS, ONE OF 74 LF AND ONE OF 67 LF, ALONG WITH THE RELOCATION OF THE EXISTING UTILITIES IN THE AREA.
2. THE ORDER OF MAJOR LAND DISTURBING ACTIVITIES IS INDICATED IN THE ACTIVITY SCHEDULE LOCATED ON SHEET C-505.
3. THE DISTURBED ACREAGE FOR THE PROJECT IS 0.72 ACRES.
4. THE CULVERT REPLACEMENT PROJECT LOCATION IS:
33.509719° -84.469972°

FAYETTE COUNTY WATER SYSTEM NOTES:

1. FAYETTE COUNTY WATER SYSTEM SPECIFICATIONS AND DETAILS SHALL GOVERN ALL WATER MAIN CONSTRUCTION.
2. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH FAYETTE COUNTY WATER SYSTEM AND AWWA STANDARDS AND SPECIFICATIONS.
3. DUCTILE IRON PIPE (D.I.P.) SHALL BE MINIMUM PRESSURE CLASS 300 CEMENT MORTAR LINED, PER ANSI C151/A21.51. ALL FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON PER ANSI A21.10 OR A21.53. ALL SERVICE PIPING SHALL BE COPPER.
4. PROVIDE THRUST RESTRAINT (THRUST BLOCKS OR RESTRAINED JOINTS) AT ALL BENDS, TEES, CROSSES AND END OF LINES. (EOL) SIDE FORMS SHALL BE USED TO PREVENT ENCASEMENT OF BOLTS. SERVICE TAPS SHALL NOT BE LOCATED BENEATH PAVEMENT.
5. MAINTAIN 24" MINIMUM CLEARANCE BETWEEN WATERLINE AND OTHER STRUCTURES.
6. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4' OVER ALL WATER LINES.
7. CONTRACTOR SHALL FLAG WATER LINE AND SERVICE LOCATIONS TO PREVENT DAMAGE BY OTHER UTILITY CONTRACTORS.
8. PROPER COMPACTION IS REQUIRED THROUGHOUT THE PROJECT. (95% PERVIOUS, 98% IMPERVIOUS)
9. UNSUITABLE SOIL MATERIALS SHALL BE REPLACED WITH SUITABLE MATERIALS.
10. NEW WATER LINE SHALL BE PRESSURE TESTED FOR 2 HOURS AT 200 P.S.I. UNACCEPTABLE LEAKAGE SHALL BE REPAIRED AND WATER LINE SHALL BE RETESTED PRIOR TO ACCEPTANCE BY FAYETTE COUNTY WATER SYSTEM. MAIN MUST BE DISINFECTED PRIOR TO BEING PLACED IN SERVICE.
11. TOP OF CURBS SHALL BE PERMANENTLY MARKED AND PAINTED BLUE AT MAIN AND SERVICE CROSSINGS, AS WELL AS, VALVE AND METER LOCATIONS.
12. WATERLINE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING SIGNAGE AND FLAGMEN, WHILE WORKING WITHIN THE RIGHT OF WAY OF ANY EXISTING ROAD.
13. WATERLINE CONTRACTOR PERFORMING ANY WORK WITHIN AN EXISTING RIGHT OF WAY MUST COMPLY WITH THE MUTCD 2003 EDITION WITH REVISIONS NUMBER 1 AND 2 INCORPORATED, DATED DECEMBER 2007. FLAGGERS MUST POSSESS A CURRENT CERTIFICATION CARD. DOCUMENTATION SHALL BE AVAILABLE UPON REQUEST BY ANY COUNTY EMPLOYEE.
14. WATER TO BE PROVIDED BY FAYETTE COUNTY WATER SYSTEM.
15. ALL TIE-INS SHALL BE COORDINATED WITH FAYETTE COUNTY WATER SYSTEM. EXISTING VALVES SHALL BE OPERATED BY COUNTY PERSONNEL ONLY.
16. CONTRACTOR MUST NOTIFY FAYETTE COUNTY WATER SYSTEM 24 HOURS PRIOR TO BEGINNING CONSTRUCTION OR REQUESTING INSPECTIONS. ALL WORK MUST BE INSPECTED PRIOR TO BACKFILL AND COMPACTION. ANY WORK COVERED PRIOR TO INSPECTION IS SUBJECT TO REJECTION UNTIL IT HAS BEEN EXPOSED AND INSPECTED BY FAYETTE COUNTY WATER PERSONNEL.
17. NO TRENCHES OR PITS ARE TO BE LEFT OPEN OVERNIGHT OR THROUGH A WEEKEND. IF CREW VACATES JOB SITE DURING DAYTIME HOURS, A PROPERLY CONSTRUCTED, HIGHLY VISIBLE BARRICADE MUST BE ERECTED.
18. WHILE THE EXCAVATION IS OPEN, UNDERGROUND INSTALLATIONS SHALL BE PROTECTED, SUPPORTED OR REMOVED AS NECESSARY TO SAFEGUARD EMPLOYEES.
19. MEANS OF EGRESS FROM TRENCH EXCAVATIONS, A STAIRWAY, LADDER, RAMP OR OTHER SAFE MEANS OF EGRESS SHALL BE LOCATED IN TRENCH EXCAVATIONS THAT ARE 4 FEET OR MORE IN DEPTH SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL FOR EMPLOYEES.
20. CONTACT MATT BERGEN AT THE FAYETTE COUNTY WATER SYSTEM TO SCHEDULE A PRECONSTRUCTION MEETING PRIOR TO BEGINNING ANY WORK. PHONE: 770-320-6020 FAX: 770-719-5576
21. ALL CONTRACTORS MUST HAVE A CERTIFIED COMPETENT PERSON ON SITE WHILE WORK IS BEING PERFORMED. DOCUMENTATION SHALL BE AVAILABLE UPON REQUEST BY ANY COUNTY EMPLOYEE.
22. ALL CONTRACTORS PERFORMING ANY LAND DISTURBING ACTIVITY SHALL HAVE ATTENDED THE GSWCC SUB CONTRACTOR AWARENESS COURSE WHEN WORKING IN A COMMON DEVELOPMENT WHERE THE PRIMARY PERMITTEE HAS OBTAINED A LEVEL 1A CERTIFICATION. THE PRIMARY PERMITTEE IS REQUIRED TO HAVE A LEVEL 1A CERTIFIED REPRESENTATIVE ON SITE AT ALL TIMES. DOCUMENTATION SHALL BE AVAILABLE UPON REQUEST BY ANY COUNTY EMPLOYEE.
23. ANY CONTRACTOR PERFORMING ANY LAND DISTURBING ACTIVITY UNDER CONTRACT FOR FAYETTE COUNTY WATER SYSTEM SHALL BE CONSIDERED THE SECONDARY PERMITTEE FOR EACH PROJECT. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A GSWCC LEVEL 1A CERTIFIED REPRESENTATIVE ON SITE AT ALL TIMES. DOCUMENTATION SHALL BE AVAILABLE UPON REQUEST BY ANY COUNTY EMPLOYEE.
24. BEFORE RELEASE OF THE WATER LINES, 2 CERTIFIED AS - BUILTS (24 X 36) MUST BE SUBMITTED ALONG WITH 2 SIGNED FINAL PLATS OR FINAL SITE PLANS. ONE ELECTRONIC COPY OF EACH DOCUMENT SHOULD BE SENT TO THE INSPECTOR UPON ACCEPTANCE.

GENERAL:

1. BENCHMARK FOR CONSTRUCTION HAS BEEN PROVIDED ON SHEET C-101 .
2. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY FAYETTE COUNTY. WHERE CONFLICTS OR OMISSIONS EXIST, THE FAYETTE COUNTY STANDARDS SHALL DICTATE. SUBSTITUTIONS AND DEVIATION FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
3. SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
4. ALL MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE FAYETTE COUNTY DEVELOPMENT REGULATIONS, LATEST EDITION, UNLESS OTHERWISE WAIVED.
5. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND IN HAND BEFORE BEGINNING ANY CONSTRUCTION. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. ANY PENALTIES, STOP WORK ORDERS OR ADDITIONAL WORK RESULTING FROM THE CONTRACTOR BEING IN VIOLATION OF THE REQUIREMENTS ABOVE, SHALL BE FULLY BORNE BY THE CONTRACTOR.

GENERAL (CONTINUED):

6. THE LOCATION OF ALL EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING UNDERGROUND UTILITIES, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FIRST. ANY FEES ASSOCIATED WITH UTILITY RELOCATIONS SHALL BE BORNE IN ACCORDANCE WITH RESPECTIVE UTILITY COMPANY STANDARDS. IT IS REQUESTED UTILITY COMPANIES MOVE THEIR PARTICULAR UTILITIES. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
7. THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING TO BE HELD BETWEEN FAYETTE COUNTY, UTILITIES, ENGINEER OF RECORD, AND CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.
8. THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND, INCLUDING LANDSCAPE SPRINKLERS, SHALL BE PLACED BENEATH THE PAVEMENT AND ITS EDGES PRIOR TO THE CONSTRUCTION OF THE PAVEMENT. THE PAVEMENT SHALL NOT BE CUT WITHOUT PRIOR APPROVAL OF THE ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND AT LEAST 48 HOURS HOURS BEFORE REQUIRED INSPECTION ON EACH AND EVERY PHASE OF WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS NOTICE PRIOR TO ANY SCHEDULED TESTING. NO PRESSURE TESTING, OR FINAL TESTING WILL BE ACCEPTED UNLESS WITNESSED BY THE ENGINEER'S REPRESENTATIVE.
10. ALL CONTRACTORS, CITY REPRESENTATIVES, COUNTY REPRESENTATIVES, AND UTILITY COMPANIES ARE RESPONSIBLE FOR THEIR RESPECTIVE SURVEYING AND LAYOUT FROM BENCHMARK PROVIDED ON CONSTRUCTION PLANS. ANY SURVEY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED UPON COMPLETION OF THE WORK BY A REGISTERED LAND SURVEYOR.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING ANY CONSTRUCTION ACTIVITIES FROM TAKING PLACE OUTSIDE OF THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS. ANY ON-SITE OR OFFSITE AREAS DISTURBED SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER.
12. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS AND ALL PERMITS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS TO THE ENGINEER OF RECORD WITHIN TWO (2) WEEKS AFTER CONSTRUCTION HAS BEEN COMPLETED ON EACH PHASE.
13. TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WERE TAKEN FROM SURVEY PROVIDED BY: ROCHESTER AND ASSOCIATES, INC., DATED: AUGUST 4, 2017.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SITE CONDITIONS OF SOIL PRIOR TO N.T.P. FOR CONSTRUCTION TO DETERMINE IF ANY OFF SITE MATERIALS WILL NEED TO BE IMPORTED TO ACHIEVE THE GRADES SPECIFIED ON THE PLANS.
15. CLEAR AREAS INDICATED SHALL BE COMPLETELY CLEAR OF ALL TIMBER, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH, AND ALL OTHER DEBRIS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE GROUND.
16. PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC SILT PEAT AREAS, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFFSITE, AND MATERIALS TO BE DISPOSED OF OFFSITE, ALL OF WHICH WILL AFFECT HIS PRICING. ANY DELAY, INCONVENIENCE, OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT, AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL, AND THE CONTRACTOR MAY HAVE TO IMPORT MATERIALS, AT NO EXTRA COST, FROM OFFSITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.

DEMOLITION:

1. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND LICENSES FOR PERFORMING THE DEMOLITION WORK AND SHALL FURNISH A COPY OF THESE ITEMS TO THE ENGINEER PRIOR TO COMMENCING THE WORK. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE PERMITS.
2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OR LOCAL AUTHORITIES FURNISHING GAS, WATER, ELECTRICAL, TELEPHONE, OR SEWER SERVICE SO THEY CAN REMOVE, RELOCATE, DISCONNECT, CAP OR PLUG THEIR EQUIPMENT IN ORDER TO FACILITATE DEMOLITION.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL TREES, STRUCTURES, AND UTILITIES NOT MARKED FOR REMOVAL OR DEMOLITION AND SHALL PROMPTLY REPAIR ANY DAMAGE AS DIRECTED BY THE ENGINEER AT NO COST TO THE OWNER.
4. THE CONTRACTOR SHALL REMOVE PAVING MARKED FOR DEMOLITION WHICH INCLUDES ALL ASPHALT, CONCRETE, BASE, AND RETAINING WALLS (INCLUDING THE FOOTERS).
5. THE CONTRACTOR SHALL REMOVE TREES MARKED FOR REMOVAL WHICH INCLUDES THE ROOTS ASSOCIATED WITH THE TREE. TREES NOT MARKED FOR REMOVAL SHALL BE PROTECTED IN ACCORDANCE WITH THE FAYETTE COUNTY REGULATIONS.
6. THE CONTRACTOR SHALL REMOVE UNSALVAGEABLE MATERIALS AND YARD WASTE FROM THE SITE IMMEDIATELY AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
7. THE CONTRACTOR SHALL SAW-CUT A SMOOTH STRAIGHT EDGE ON ANY PAVEMENT PROPOSED FOR DEMOLITION PRIOR TO ITS REMOVAL. PRIOR TO CONNECTING PROPOSED PAVEMENT TO EXISTING PAVEMENT, THE CONTRACTOR SHALL ENSURE THAT THE EDGE OF THE EXISTING PAVEMENT IS STRAIGHT AND UNIFORM.
8. THE DEMOLITION SHALL BE PHASED TO PROVIDE 1 LANE OF TRAFFIC AT ALL TIMES.

EARTHWORK, GRADING, STABILIZATION, PAVING AND DRAINAGE:

1. COMPACT ALL UTILITY TRENCHES WITHIN ROADWAYS TO 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T - 180) AND TO 95% WITHIN OTHER AREAS.
2. ALL ORGANIC SOILS BELOW UTILITY TRENCHES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL AND COMPACTED TO NO LESS THAN 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T - 180).
3. STABILIZED SUBGRADE TO MEET SPECIFIED REQUIREMENTS.
4. ASPHALTIC CONCRETE TO GDOT STANDARD SPECIFICATION (LATEST EDITION) SECTION 400 AND FAYETTE COUNTY, WHICHEVER IS GREATER.
5. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
6. ALL CONCRETE FLUMES, WALKS, AND CURBS SHALL BE CONSTRUCTED WITH 3000 PSI CONCRETE.
7. ALL ON-SITE AREAS DISTURBED BY THE CONSTRUCTION SHALL BE STABILIZED WITH SOD (SAME AS SURROUNDING AREA OR BETTER) OR APPROVED EQUAL. CONTRACTOR IS RESPONSIBLE FOR IRRIGATION OF PERMANENT GRASSING.
8. THE REINFORCED CONCRETE PIPE SHALL BE CLASS III WITH WALL THICKNESS "B" CONFORMING TO ASTM C - 76 OR AWWA 302 - 74 AND GASKETS SHALL BE IN ACCORDANCE WITH ASTM C - 443 OR ASTM D - 412.
9. ALL PIPE CALL OUTS ARE MEASURED CENTER LINE TO CENTER LINE FOR MANHOLES AND INLETS AND FROM THE END OF THE PIPE FOR MITERED END SECTIONS.
10. ALL DEWATERING COSTS ASSOCIATED WITH THE INSTALLATION AND CONSTRUCTION OF THE UNDERGROUND UTILITIES; STORM WATER PIPES AND MANHOLES; SANITARY SEWER MAINS, FORCE MAINS, MANHOLES, AND LIFT STATIONS; AND STORM WATER MANAGEMENT SYSTEMS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION BID COSTS. THE CONTRACTOR SHALL SUBMIT FOR WATER USE PERMITS IF REQUIRED FOR DEWATERING ACTIVITIES.

EARTHWORK, GRADING, STABILIZATION, PAVING AND DRAINAGE (CONTINUED):

11. ALL PIPES SHALL HAVE 3 FEET MINIMUM COVER UNLESS OTHERWISE SPECIFIED IN PLANS, CONTRACTOR SHALL TAKE CARE TO PROVIDE PROPER GRADE ELEVATIONS AND ALIGNMENTS.
12. THE CONTRACTOR MUST INSTALL AND MAINTAIN GRASS OR SOD ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETED FINAL GRADES, AS NOTED ON PLANS, AND AT ANY OTHER TIME AS NECESSARY TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES TO ANY DOWNSTREAM WATER BODY, WETLAND, OR OFF-SITE PROPERTY. SODDING ON SLOPES 3:1 AND STEEPER SHALL BE STAKED.
13. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO CONTROL TURBIDITY AND SEDIMENT INCLUDING, BUT NOT LIMITED TO, THE INSTALLATION OF TURBIDITY BARRIERS AND SILT FENCES AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY AND SEDIMENT BARRIERS MUST BE MAINTAINED AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVING THE BARRIERS.

OTHER UTILITY INFORMATION:

1. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES WHICH MAY HAVE THEIR UTILITIES WITHIN THE CONSTRUCTION AREAS TO LOCATE THEIR FACILITIES IN THE FIELD FORTY- EIGHT (48) HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DUCTILE IRON PIPE SHALL BE ENCASED IN POLYETHYLENE TWENTY-FIVE (25) FEET ON EACH SIDE OF ANY PERPENDICULAR CROSSING OF METALLIC GAS MAINS OR ANY OTHER CATHODICALLY PROTECTED PIPELINE AND FOR LOCATIONS PARALLEL TO AND WITHIN TEN FEET OF METALLIC GAS MAINS OR OTHER CATHODICALLY PROTECTED PIPE AND THROUGH THE AREA OF INFLUENCE OF CATHODIC PROTECTION ANODE BED.

SPILL CONTROL NOTES:

1. IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS NOTES OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
 - a. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
 - b. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
 - c. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE.
 - d. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
 - e. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
2. PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATERS, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

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ATLANTA, GEORGIA 30339

TEL: (770) 850-0949 FAX: (770) 850-0950

GEORGIA

REGISTERED

Professional Engineer

7/27/18

DAVID N. LAVERGNE

GSWCC LEVEL II

CERT. #: 0000073529

| BY | HA | CG | | | |
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FAYETTE COUNTY

MERCEDES TRAIL CULVERT REPLACEMENT

GENERAL NOTES

Project No.: 200-01297-17037

Designed By: CG

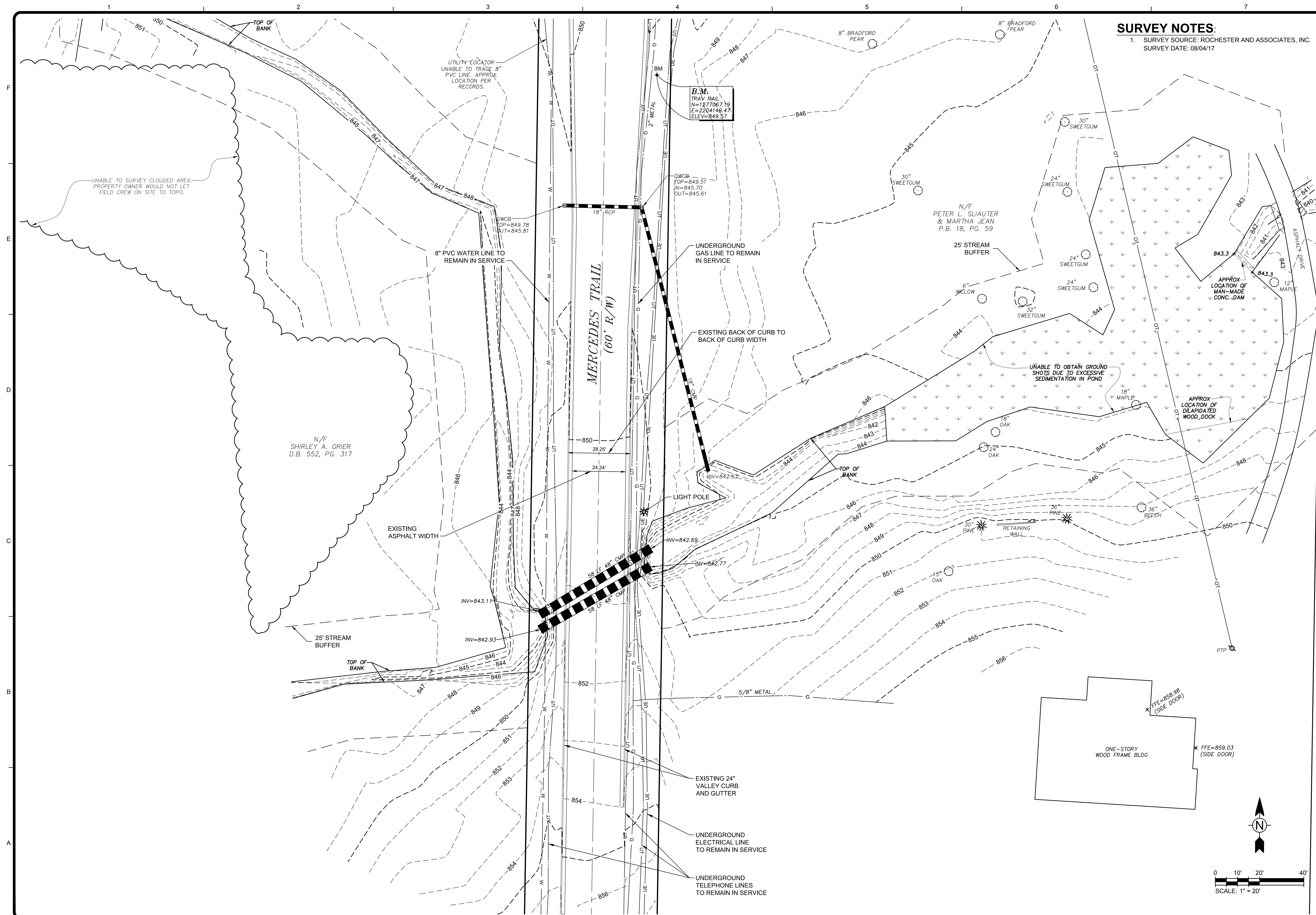
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Checked By: DL

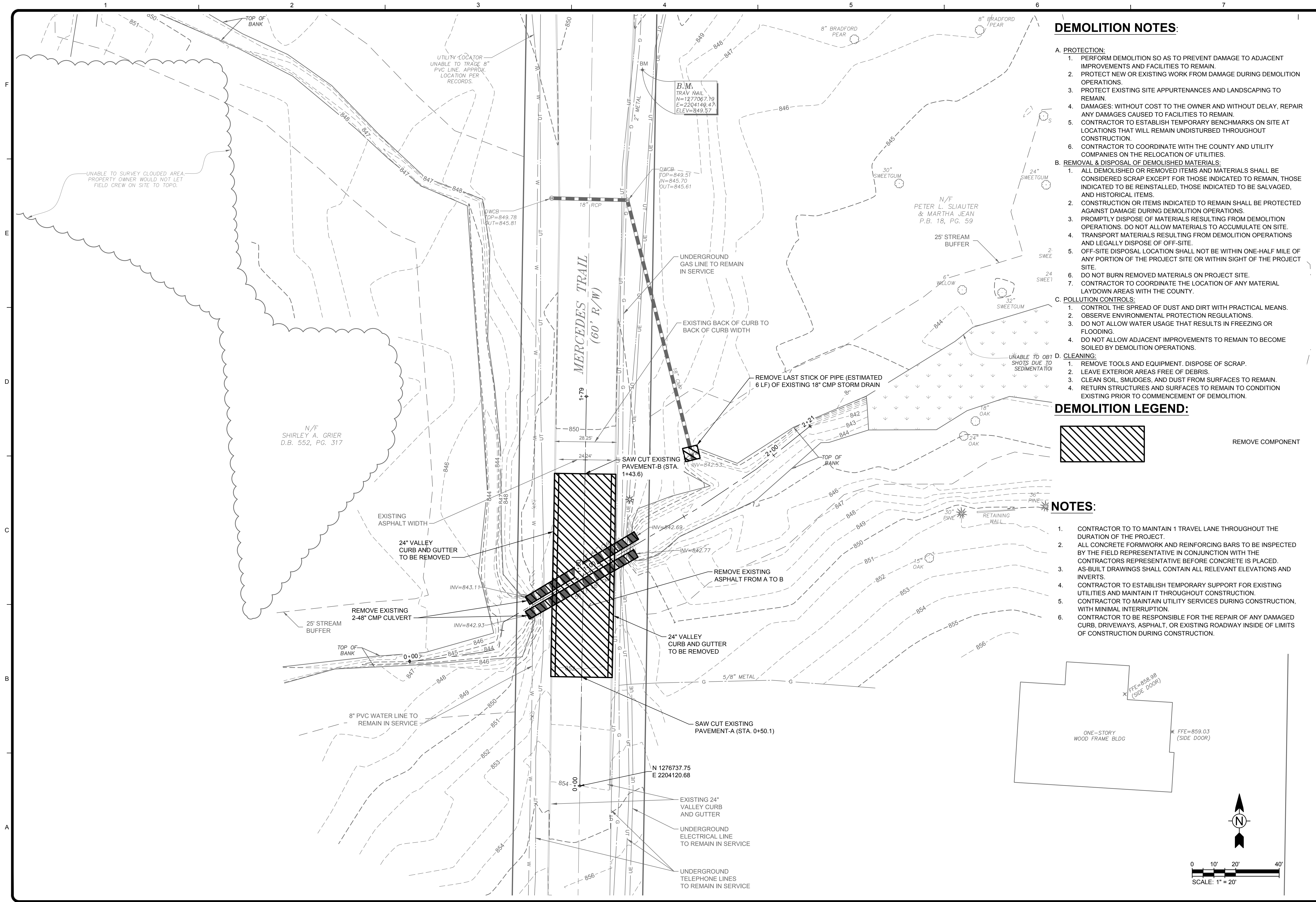
G-002

Bar Measures 1 inch

Copyright: Tetra Tech



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GSWCC LEVEL II
CERT. # 0000073529

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| 0 | 07/27/18 | ISSUED FOR CONSTRUCTION - REV 1 | CG |
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FAYETTE COUNTY
MERCEDES TRAIL CULVERT REPLACEMENT
DEMOLITION PLAN

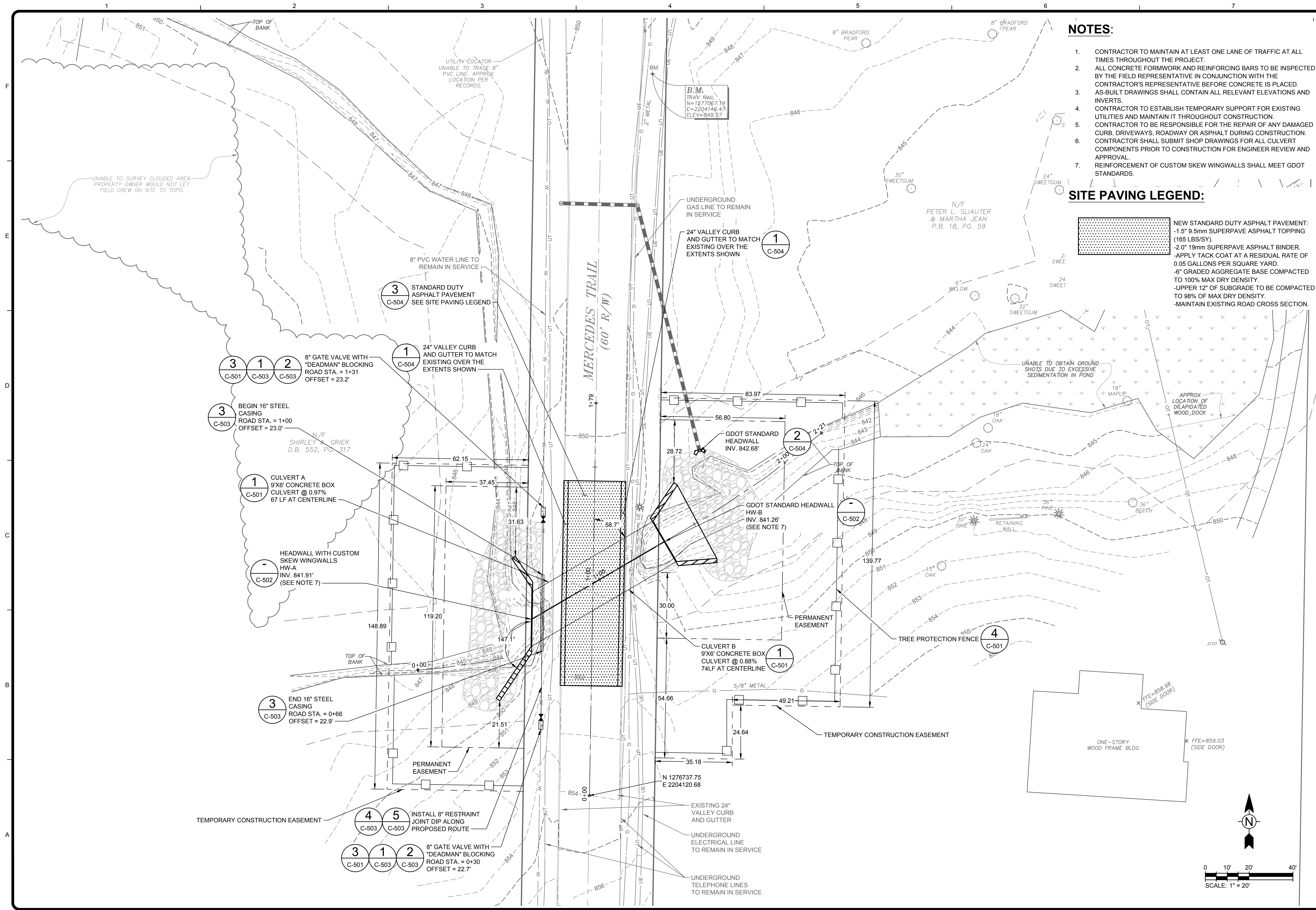
Project No.: 200-01297-17037
Designed By: CG
Drawn By: HA
Checked By: DL

C-102

Bar Measures 1 inch

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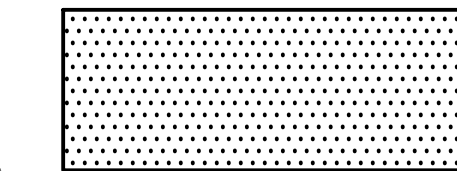
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NOTES:

1. CONTRACTOR TO MAINTAIN AT LEAST ONE LANE OF TRAFFIC AT ALL TIMES THROUGHOUT THE PROJECT.
2. ALL CONCRETE FORMWORK AND REINFORCING BARS TO BE INSPECTED BY THE FIELD REPRESENTATIVE IN CONJUNCTION WITH THE CONTRACTOR'S REPRESENTATIVE BEFORE CONCRETE IS PLACED. AS-BUILT DRAWINGS SHALL CONTAIN ALL RELEVANT ELEVATIONS AND INVERTS.
3. CONTRACTOR TO ESTABLISH TEMPORARY SUPPORT FOR EXISTING UTILITIES AND MAINTAIN IT THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGED CURB, DRIVEWAYS, ROADWAY OR ASPHALT DURING CONSTRUCTION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL CULVERT COMPONENTS PRIOR TO CONSTRUCTION FOR ENGINEER REVIEW AND APPROVAL.
5. REINFORCEMENT OF CUSTOM SKEW WINGWALLS SHALL MEET GDOT STANDARDS.

SITE PAVING LEGEND:



NEW STANDARD DUTY ASPHALT PAVEMENT:
-1.5" 9.5mm SUPERPAVE ASPHALT TOPPING (165 LBS/SY).
-2.0" 19mm SUPERPAVE ASPHALT BINDER.
-APPLY TACK COAT AT A RESIDUAL RATE OF 0.05 GALLONS PER SQUARE YARD.
-6" GRADED AGGREGATE BASE COMPACTED TO 100% MAX DRY DENSITY.
-UPPER 12" OF SUBGRADE TO BE COMPACTED TO 98% OF MAX DRY DENSITY.
-MAINTAIN EXISTING ROAD CROSS SECTION.

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REGISTERED PROFESSIONAL ENGINEER
No. PE040216
7/27/16
DAVID N. LAVERGNE

GSWCC LEVEL II
CERT. # 0000073529

| MARK | DATE | DESCRIPTION | BY | HA | CG |
|------|----------|---------------------------------|----|----|----|
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FAYETTE COUNTY

MERCEDES TRAIL CULVERT REPLACEMENT

SITE PLAN

Project No.: 200-01297-17037

Designed By: CG

Drawn By: HA

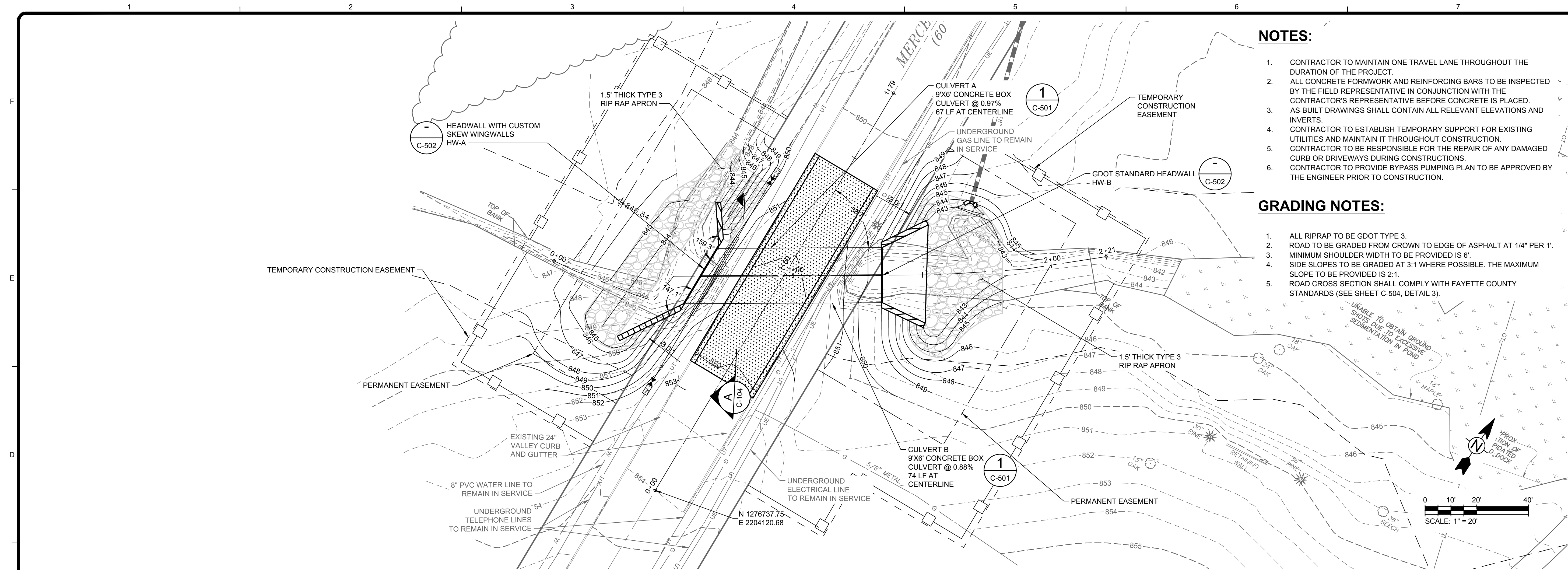
Checked By: DL

C-103

Bar Measures 1 inch

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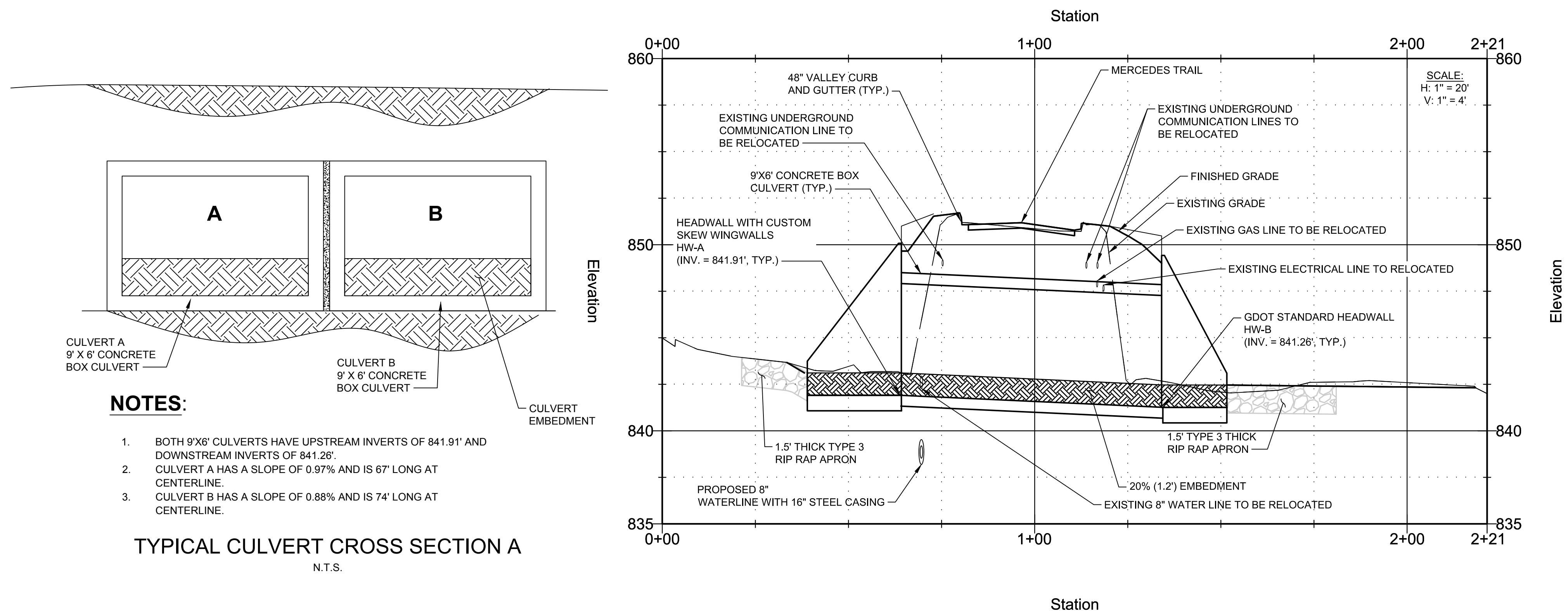
NOTES:

1. CONTRACTOR TO MAINTAIN ONE TRAVEL LANE THROUGHOUT THE DURATION OF THE PROJECT.
2. ALL CONCRETE FORMWORK AND REINFORCING BARS TO BE INSPECTED BY THE FIELD REPRESENTATIVE IN CONJUNCTION WITH THE CONTRACTOR'S REPRESENTATIVE BEFORE CONCRETE IS PLACED.
3. AS-BUILT DRAWINGS SHALL CONTAIN ALL RELEVANT ELEVATIONS AND INVERTS.
4. CONTRACTOR TO ESTABLISH TEMPORARY SUPPORT FOR EXISTING UTILITIES AND MAINTAIN IT THROUGHOUT CONSTRUCTION.
5. CONTRACTOR TO BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGED CURB OR DRIVEWAYS DURING CONSTRUCTIONS.
6. CONTRACTOR TO PROVIDE BYPASS PUMPING PLAN TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

GRADING NOTES:

1. ALL RIPRAP TO BE GDOT TYPE 3.
2. ROAD TO BE GRADED FROM CROWN TO EDGE OF ASPHALT AT 1/4" PER 1'.
3. MINIMUM SHOULDER WIDTH TO BE PROVIDED IS 6'.
4. SIDE SLOPES TO BE GRADED AT 3:1 WHERE POSSIBLE. THE MAXIMUM SLOPE TO BE PROVIDED IS 2:1.
5. ROAD CROSS SECTION SHALL COMPLY WITH FAYETTE COUNTY STANDARDS (SEE SHEET C-504, DETAIL 3).

MERCEDES TRL CULVERT CENTERLINE PROFILE



NOTES:

1. BOTH 9'X6' CULVERTS HAVE UPSTREAM INVERTS OF 841.91' AND DOWNSTREAM INVERTS OF 841.26'.
2. CULVERT A HAS A SLOPE OF 0.97% AND IS 67' LONG AT CENTERLINE.
3. CULVERT B HAS A SLOPE OF 0.88% AND IS 74' LONG AT CENTERLINE.

TYPICAL CULVERT CROSS SECTION A
N.T.S.

| FLOW SUMMARY TABLE | | | |
|--------------------|------------|-----------------------|---------------------------|
| STORM FREQUENCY | FLOW (CFS) | OUTLET VELOCITY (FPS) | DOWNSTREAM VELOCITY (FPS) |
| 25-YEAR | 383 | 4.4 | 1.0 |
| 50-YEAR | 428 | 5.5 | 1.2 |
| 100-YEAR | 717 | 5.5 | 1.0 |

DRAINAGE AREA = 184 ACRES
STREAM SLOPE = 0.50%

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TETRA TECH

REGISTERED PROFESSIONAL ENGINEER
DAVID N. LAVERGNE
7/27/16
GSWCC LEVEL II
CERT. # 0000073529

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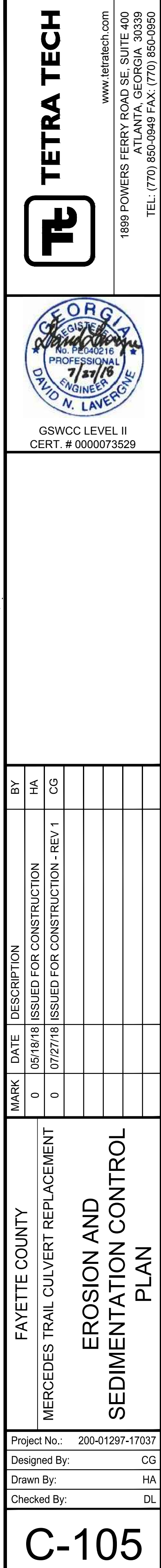
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| FAYETTE COUNTY | MERCEDES TRAIL CULVERT REPLACEMENT | GRADING & DRAINAGE PLAN |
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| Project No.: | 200-01297-17037 |
| Designed By: | CG |
| Drawn By: | HA |
| Checked By: | DL |

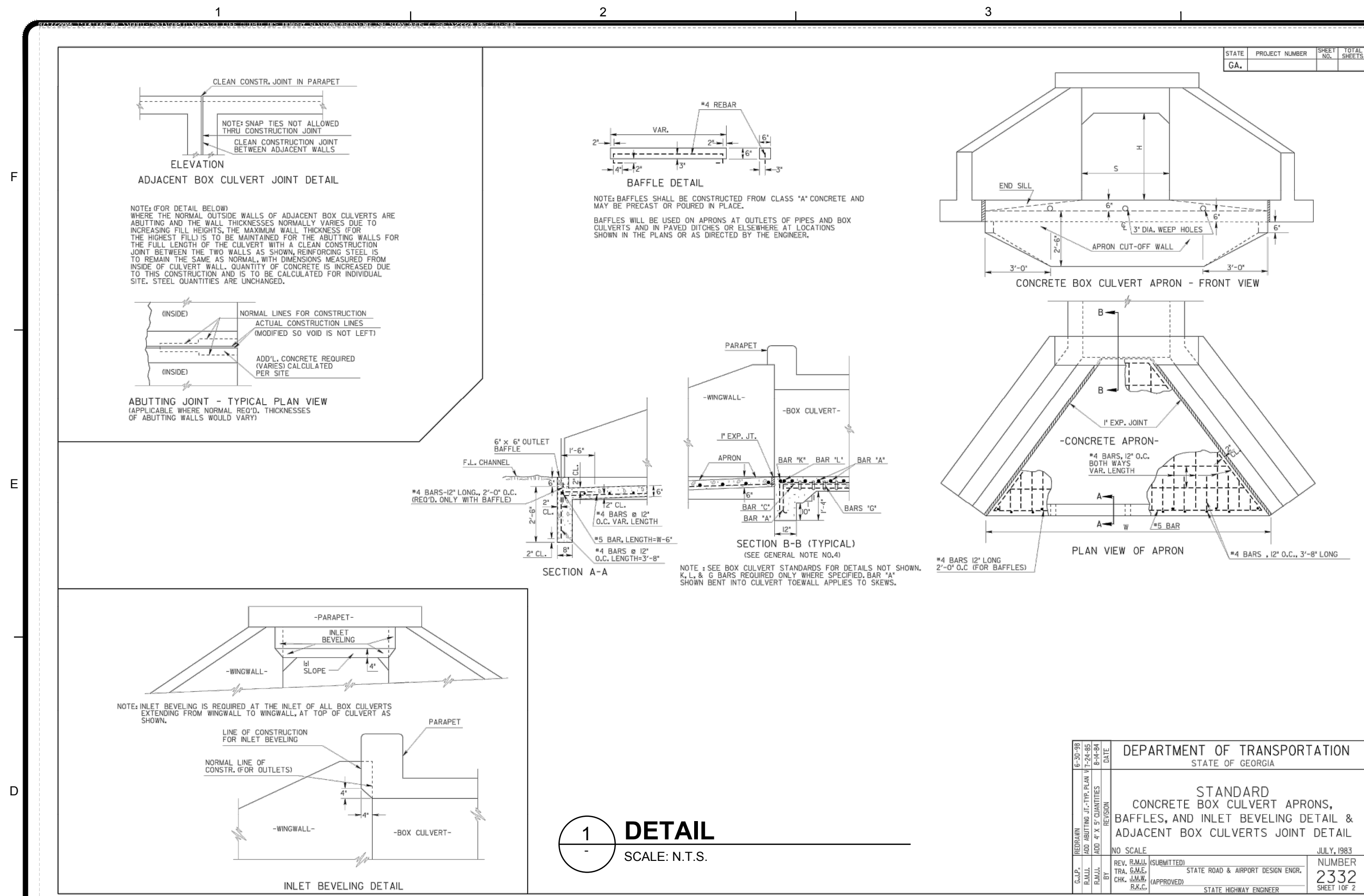
C-104

Bar Measures 1 inch

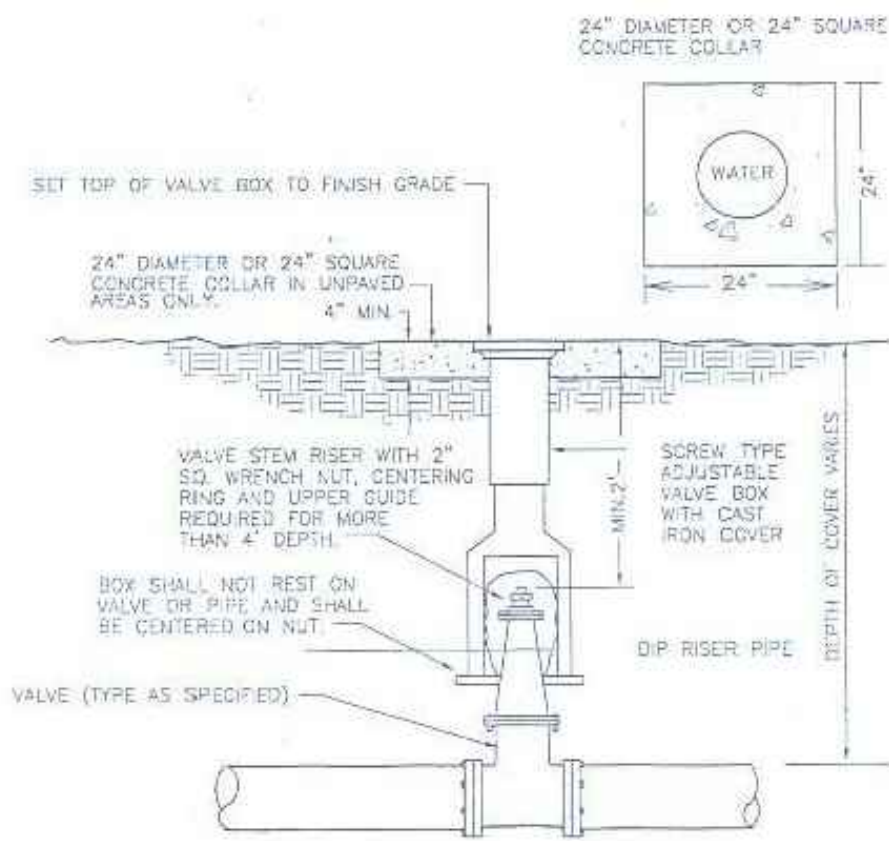
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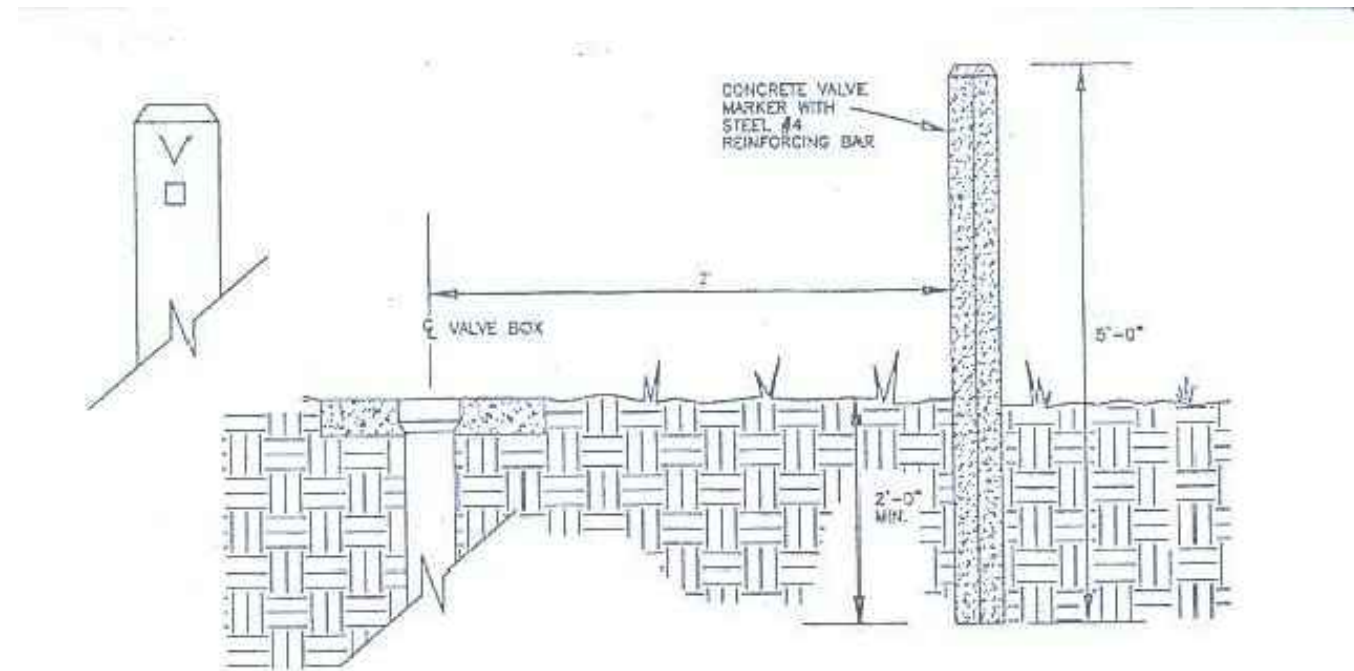


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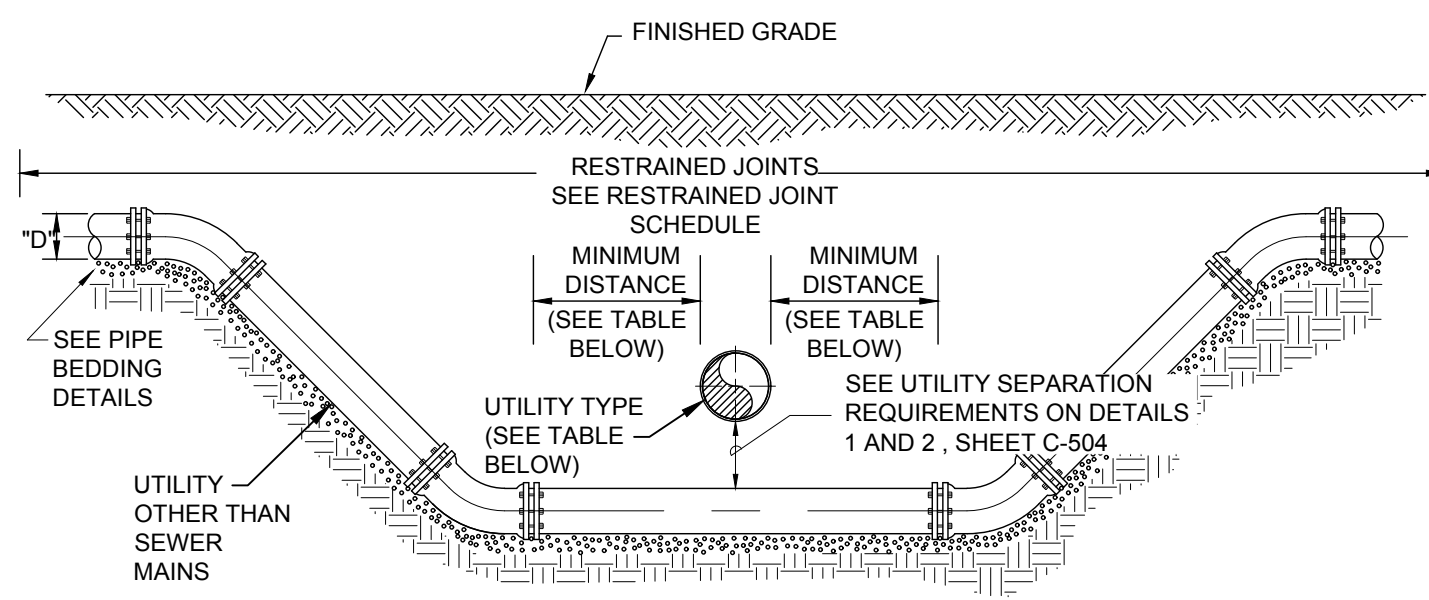
VALVE & VALVE BOX DETAIL

1
DETAIL
SCALE: N.T.S.



VALVE MARKER DETAIL

2
DETAIL
SCALE: N.T.S.



| UTILITY TYPE | MINIMUM DISTANCE |
|------------------------------|------------------|
| SANITARY SEWER OR FORCE MAIN | 10'-0" MIN. |
| OTHER THAN SEWER | 1'-0" MIN. |

NOTE: 18" MIN SEPARATION FOR STORM DRAIN CROSSINGS

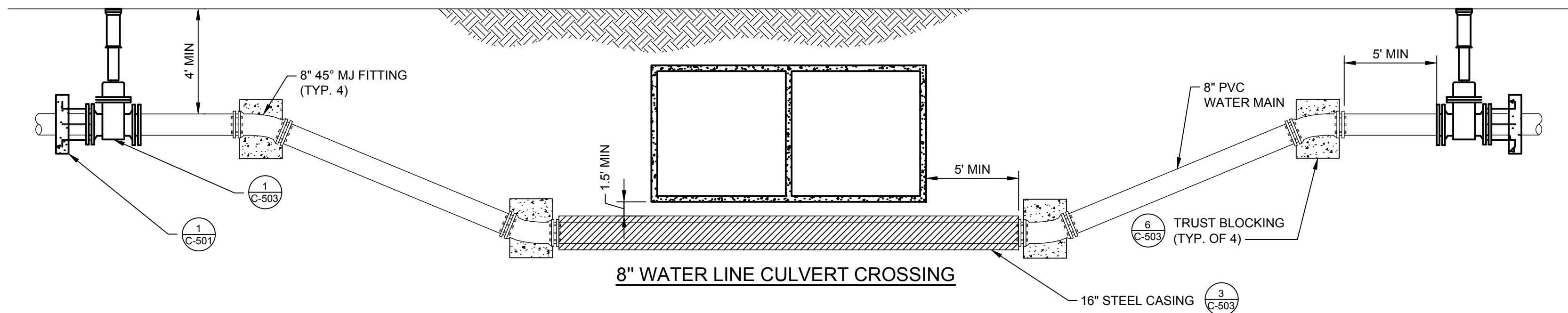
RESTRAINED JOINT UTILITY CROSSING FOR UTILITIES OTHER THAN SEWER MAINS

| PIPE DIA (Inches) | RESTRAINED LENGTH EACH SIDE OF RESTRAINED FITTING (FEET) | | | | | | | | RESTRAINED LENGTH FOR REDUCERS | | | | | | | | | | | |
|-------------------------|--|-----|---------|---------|-----|-----|---------|---------|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | DIP | | | | PVC | | | | | | | | | | | | | | | |
| | 90° | 45° | 22-1/2° | 11-1/4° | 90° | 45° | 22-1/2° | 11-1/4° | 3 | 4 | 6 | 8 | 10 | 12 | 16 | 20 | 24 | 30 | 36 | |
| 4 | 35 | 15 | 10 | 5 | 55 | 25 | 15 | 10 | 40 | - | - | - | - | - | - | - | - | - | PVC | |
| 6 | 55 | 25 | 10 | 5 | 80 | 35 | 20 | 10 | 50 | 45 | - | - | - | - | - | - | - | - | PVC | |
| 8 | 65 | 30 | 15 | 10 | 90 | 40 | 20 | 10 | 75 | 70 | 40 | - | - | - | - | - | - | - | PVC | |
| 10 | 80 | 35 | 20 | 10 | 110 | 50 | 25 | 15 | 95 | 90 | 70 | 40 | - | - | - | - | - | - | PVC | |
| 12 | 95 | 40 | 20 | 10 | 130 | 55 | 30 | 15 | 120 | 115 | 100 | 75 | 40 | - | - | - | - | - | PVC | |
| 16 | 120 | 50 | 25 | 15 | 165 | 70 | 35 | 20 | 160 | 155 | 140 | 125 | 100 | 70 | - | - | - | - | PVC | |
| 20 | 150 | 65 | 30 | 15 | 200 | 85 | 40 | 20 | 200 | 195 | 185 | 170 | 150 | 130 | 75 | - | - | - | PVC | |
| 24 | 160 | 70 | 35 | 20 | 210 | 90 | 45 | 25 | 160 | 155 | 150 | 140 | 135 | 120 | 90 | 50 | - | - | DIP | |
| 30 | 190 | 80 | 40 | 20 | 250 | 105 | 50 | 25 | 195 | 190 | 185 | 180 | 170 | 160 | 120 | 105 | 70 | - | DIP | |
| 36 | 220 | 95 | 45 | 25 | - | - | - | - | 225 | 220 | 215 | 210 | 205 | 195 | 180 | 150 | 125 | 70 | - | DIP |
| 42 | 245 | 105 | 50 | 25 | - | - | - | - | 245 | 240 | 235 | 230 | 225 | 220 | 205 | 180 | 155 | 105 | 50 | DIP |
| 48 | 260 | 120 | 60 | 30 | - | - | - | - | 255 | 250 | 245 | 240 | 235 | 230 | 215 | 195 | 175 | 125 | 70 | DIP |

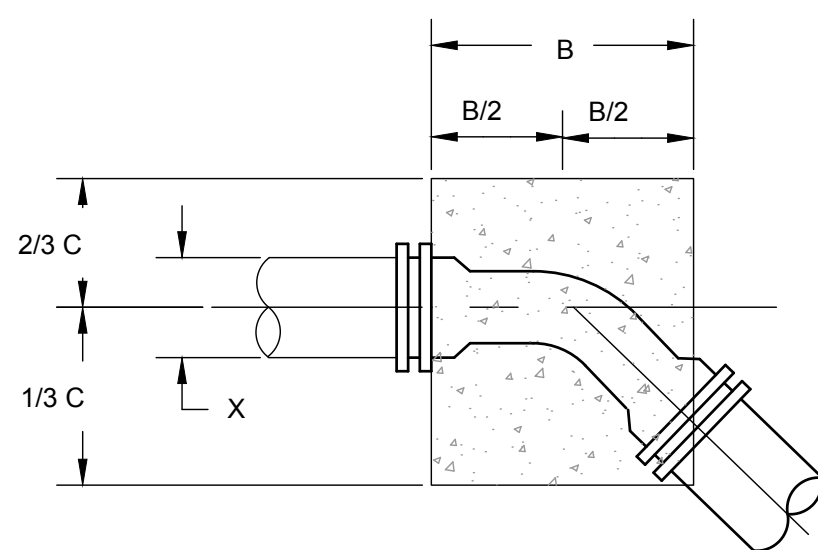
RESTRAINED LENGTHS FOR DEAD ENDS, BRANCHES AND HDPE TO PVC TRANSITIONS SHALL BE THE SAME AS FOR 90° BENDS. IN-LINE VALVES SHALL BE RESTRAINED 20' EACH SIDE OF THE VALVE. (IF A JOINT FALLS AT THE MAXIMUM DISTANCE, IT SHALL BE RESTRAINED). TABLE BASED ON IRON FITTINGS. TEST PRESSURE 150 PSI.

RESTRAINED JOINT SCHEDULE

4
DETAIL
SCALE: N.T.S.



5
DETAIL
SCALE: N.T.S.

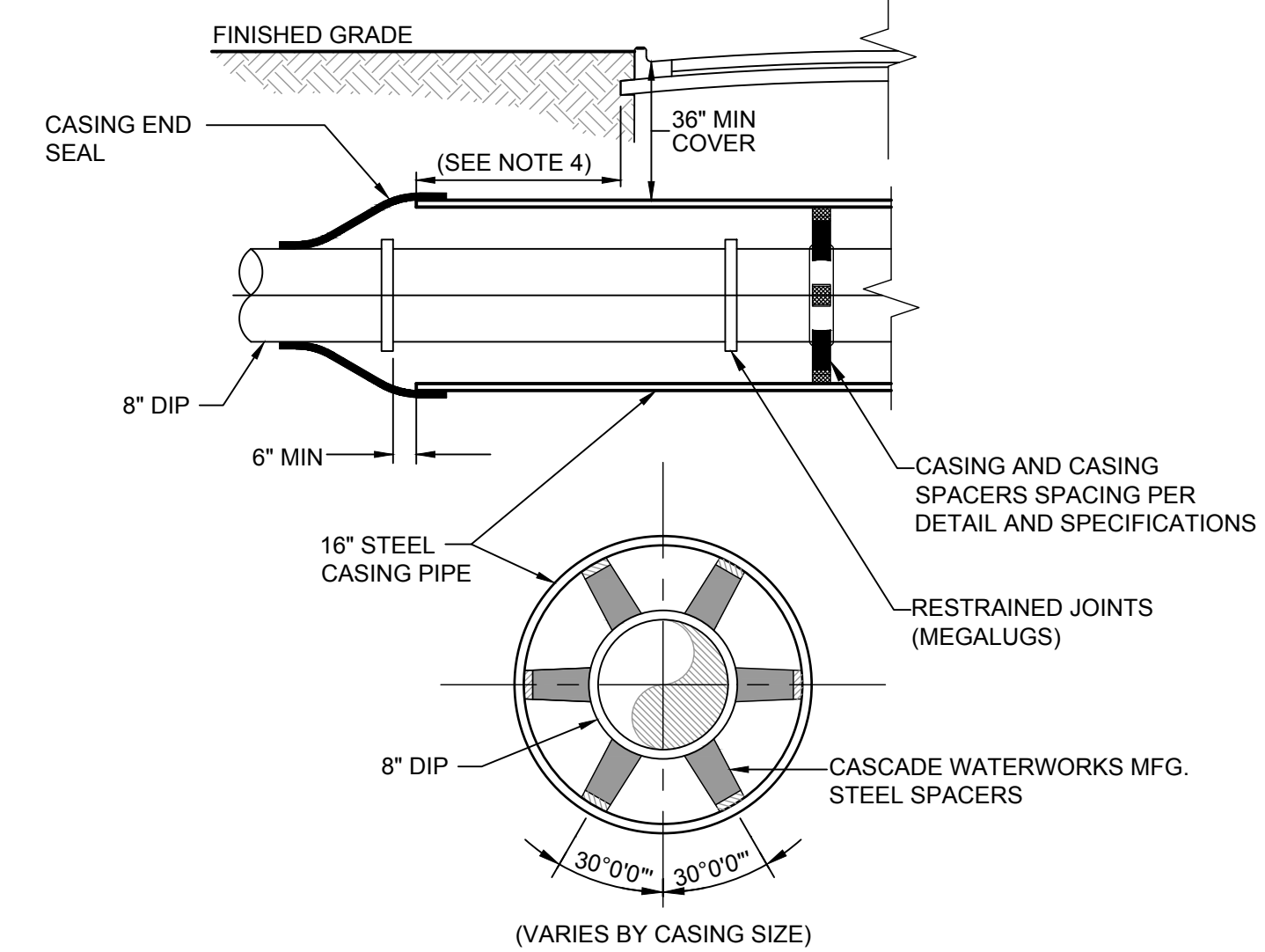


THRUST BLOCKING
N.T.S.

6
DETAIL
SCALE: N.T.S.

| Pipe Size X | Line Pressure = 200 PSI Soil Pressure = 2000 PSF | | | |
|----------------|---|-------|-------|-------|
| | A | B | C | D |
| 45 DEGREE BEND | | | | |
| 24" | 2'-4" | 5'-6" | 5'-0" | 3'-9" |
| 20" | 1'-11" | 4'-6" | 4'-0" | 3'-0" |
| 18" | 1'-9" | 4'-0" | 4'-0" | 2'-9" |
| 16" | 1'-7" | 3'-6" | 3'-6" | 2'-3" |
| 14" | 1'-3" | 3'-0" | 3'-0" | 2'-0" |
| 12" | 1'-3" | 3'-0" | 2'-6" | 2'-0" |
| 10" | 1'-3" | 2'-6" | 2'-0" | 1'-9" |
| 8" | 1'-0" | 1'-9" | 1'-9" | 1'-3" |
| 6" | 0'-11" | 1'-6" | 1'-6" | 1'-0" |
| 4" | 0'-9" | 1'-0" | 1'-0" | 1'-0" |

NOTE: THESE THRUST BLOCKING DETAILS SHALL BE USED IN CONJUNCTION WITH RESTRAINT JOINT PIPE.



- NOTES:
- WHEN CONSTRUCTION IS WITHIN FAA OR FDOT JURISDICTION, ADDITIONAL REQUIREMENTS OF THE UTILITY ACCOMMODATION GUIDE SHALL BE MET.
 - DISTANCE BETWEEN SPACERS TO BE PER PROJECT SPECIFICATIONS.
 - NO FLOWABLE FILL BETWEEN THE ANNULAR SPACE OF THE CASING OR CARRIER PIPE.
 - SHALL BE A MINIMUM OF 8" OR MEET FAYETTE COUNTY SPECIFICATIONS REQUIREMENTS, WHICHEVER IS GREATER.

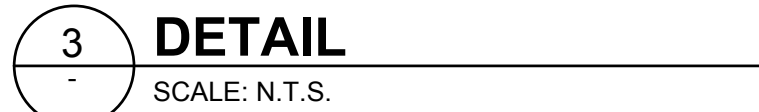
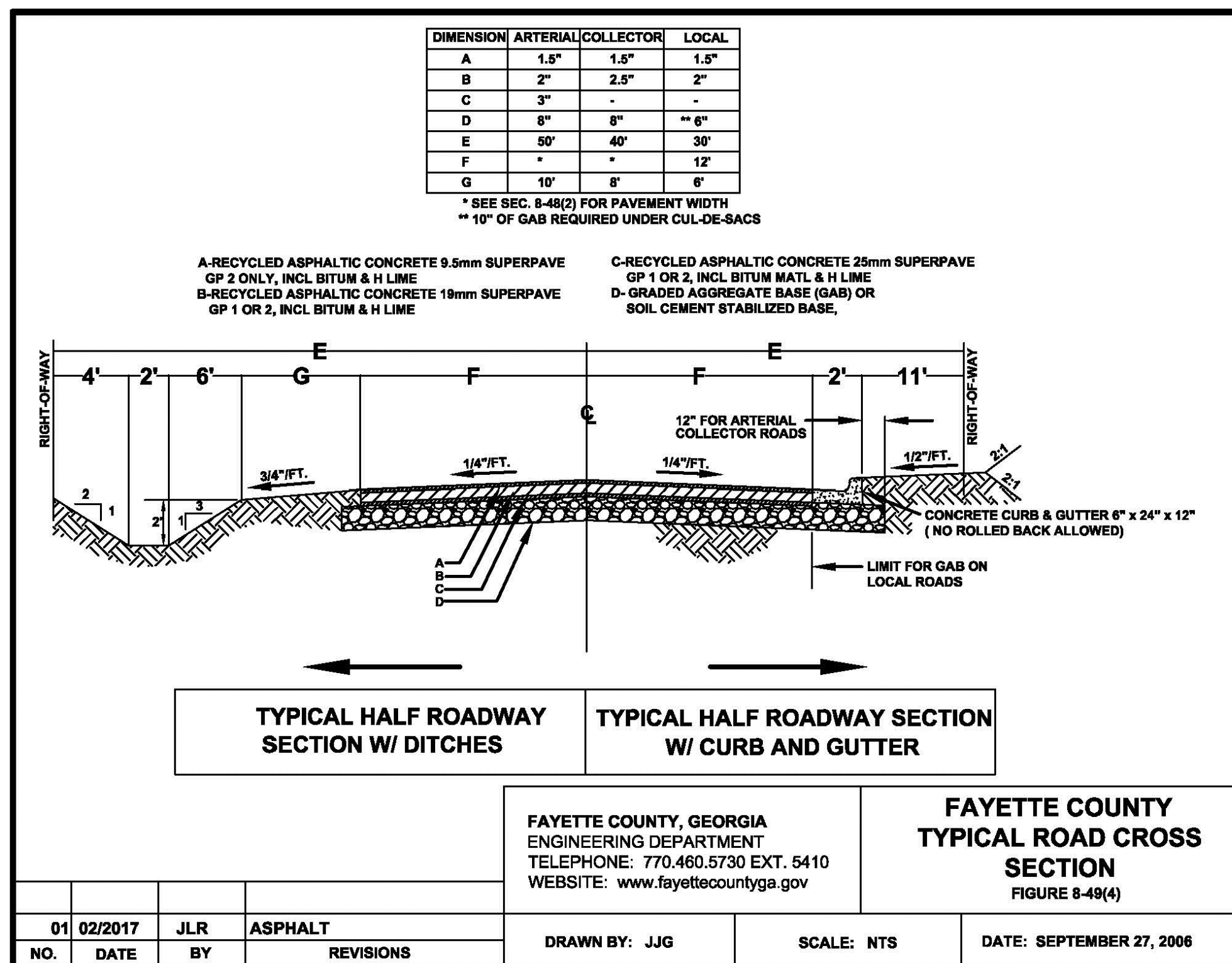
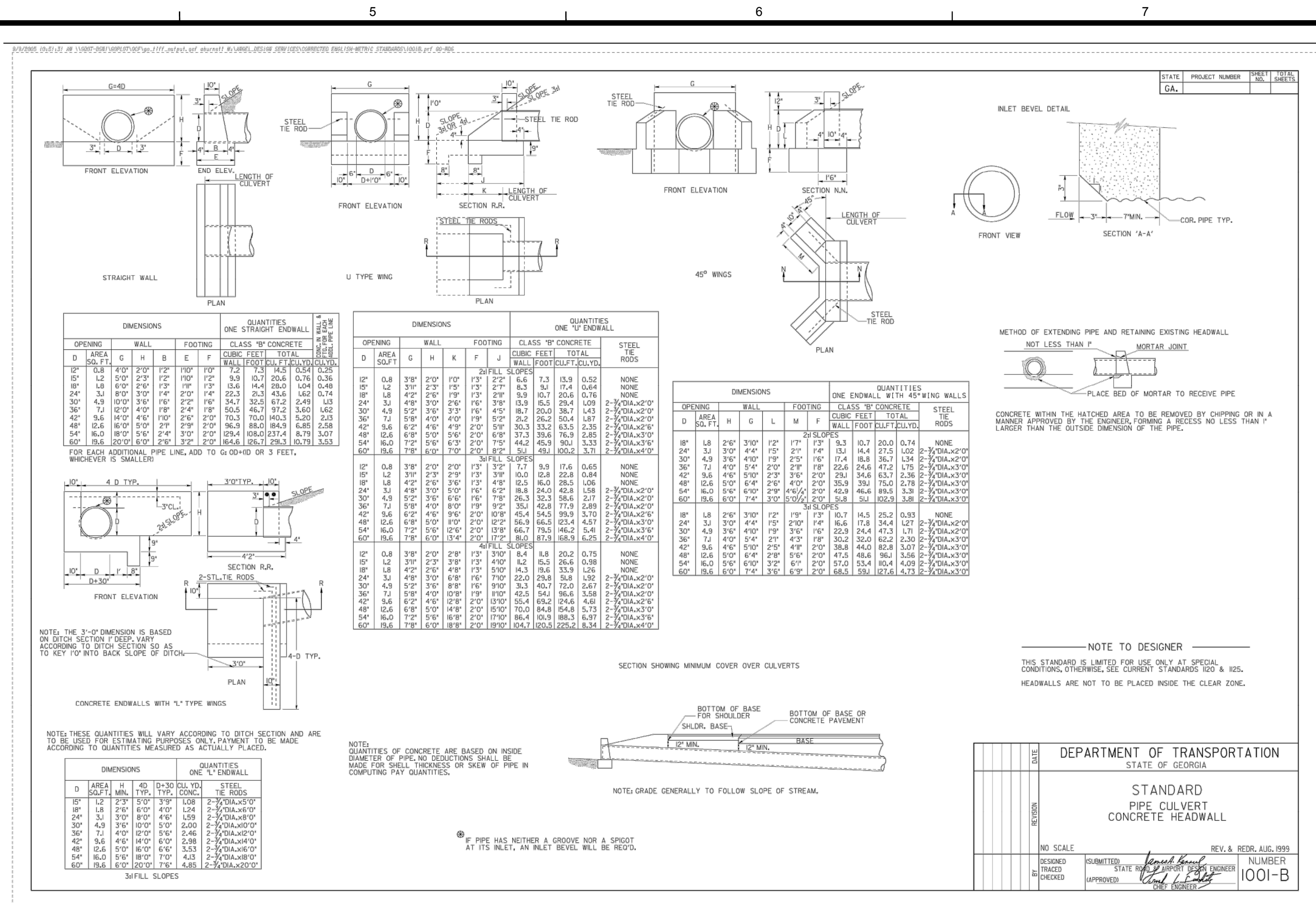
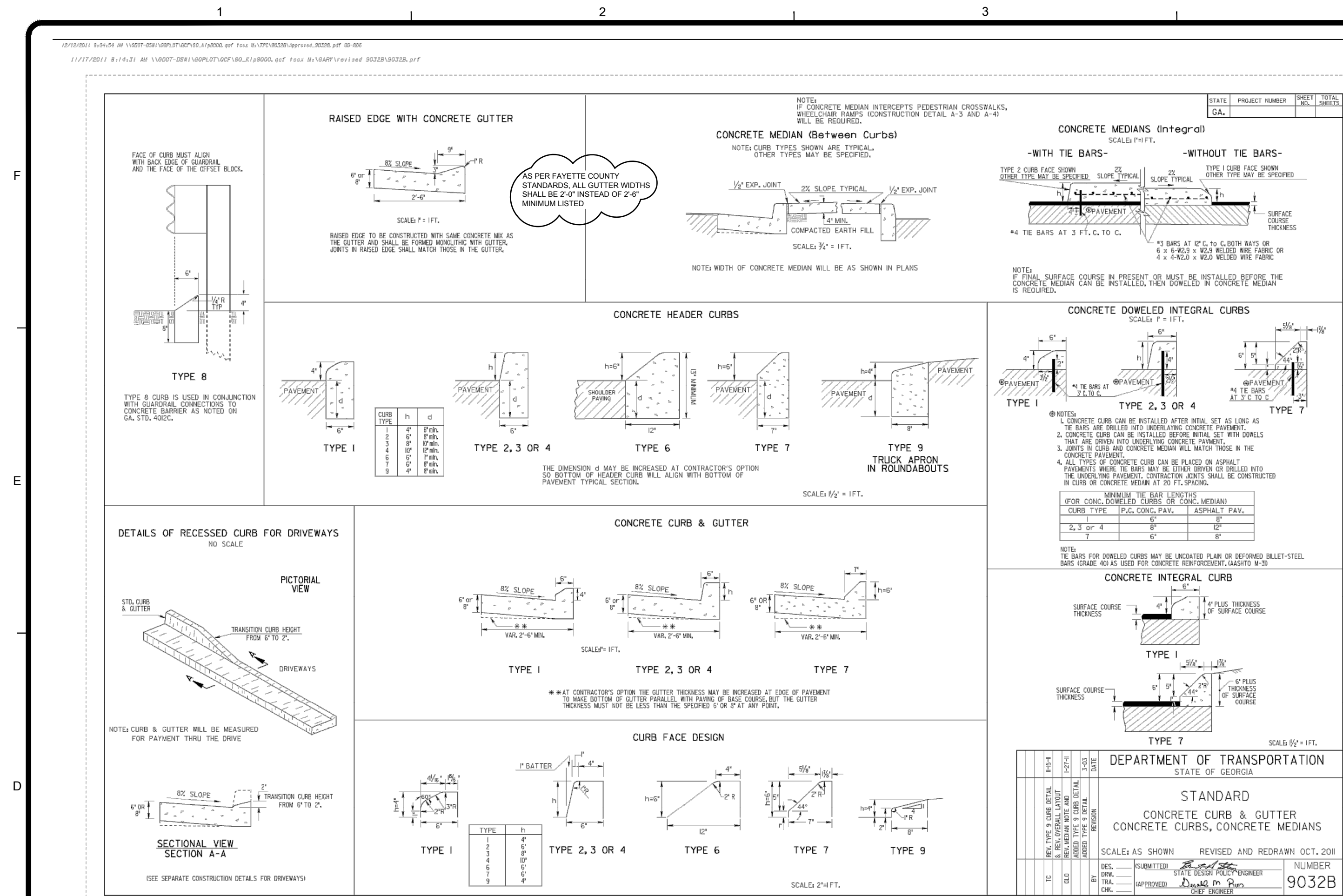
STEEL CASING

3
DETAIL
SCALE: N.T.S.

| MARK | DATE | DESCRIPTION | BY |
|------|----------|---------------------------------|----|
| 0 | 05/18/18 | ISSUED FOR CONSTRUCTION | HA |
| 0 | 07/27/18 | ISSUED FOR CONSTRUCTION - REV 1 | CG |

| | |
|----------------------|------------------------------------|
| FAYETTE COUNTY | MERCEDES TRAIL CULVERT REPLACEMENT |
| CONSTRUCTION DETAILS | |

| | |
|--------------|-----------------|
| Project No.: | 200-01297-17037 |
| Designed By: | CG |
| Drawn By: | HA |
| Checked By: | DL |



| MARK | DATE | DESCRIPTION | BY |
|------|----------|---------------------------------|----|
| 0 | 05/18/18 | ISSUED FOR CONSTRUCTION | HA |
| 0 | 07/27/18 | ISSUED FOR CONSTRUCTION - REV/1 | CG |
| | | | |
| | | | |
| | | | |
| | | | |

FAYETTE COUNTY

MERCEDES TRAIL CULVERT REPLACEMENT

CONSTRUCTION DETAILS

| | |
|--------------|-----------------|
| Project No.: | 200-01297-17037 |
| Designed By: | CG |
| Drawn By: | HA |
| Checked By: | DL |

C-504

[illegible]

Commission). Please refer to the Alternative BMP Guidance Document found at www.gascc.org.

| N/A | N/A |
|-------|-----|
| C-101 | Y |
| C-105 | Y |
| C-505 | Y |
| C-505 | Y |
| C-505 | Y |
| C-104 | Y |
| C-506 | Y |
| C-105 | Y |
| C-505 | Y |
| C-105 | Y |
| C-505 | Y |
| C-505 | Y |

39 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *

40 Delineation of the applicable 25-foot or 50-foot undisturbance buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

41 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.

42 Delineation and acreage of contributing drainage basins on the project site.

43 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.

44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.

45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.

46 Soil series for the project site and their delineation.

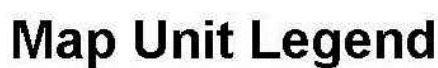
47 The limits of disturbance for each phase of construction.

48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permits are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.

49 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.

50 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

51 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seedlings will take place and for the appropriate geographic region of Georgia.



| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------------|----------------|
| CeC | Cecil sandy loam, 6 to 10 percent slopes | 0.2 | 11.8% |
| WH | Wehadkee soils, 0 to 2 percent slopes, frequently flooded | 1.2 | 88.2% |
| Totals for Area of Interest | | 1.3 | 100.0% |