FAYETTE COUNTY BROOM BLVD CULVERT REPLACEMENT PROJECT PROJECT NUMBER 6509L



1899 POWERS FERRY ROAD SE, SUITE 400 ATLANTA, GEORGIA 30339

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



www.tetratech.com

BROOM BLVD	
PROJECT SITE	CHAPPELL RD

	INDEX OF DRAWINGS
Sheet No.	Title
	GENERAL
G-001	COVER SHEET AND DRAWING INDEX
G-002	LEGEND AND ABBREVIATIONS
G-003	GENERAL NOTES
	CIVIL
C-101	EXISTING CONDITIONS
C-102	DEMOLITION PLAN
C-103	SITE PLAN
C-104	GRADING AND DRAINAGE PLAN
C-105	EROSION CONTROL PLAN
C-501	CONSTRUCTION DETAILS
C-502	CONSTRUCTION DETAILS
C-503	CONSTRUCTION DETAILS
C-504	CONSTRUCTION DETAILS
C-505	EROSION CONTROL DETAILS
C-506	ESPC PLAN

PROJECT LOCATION:

104-121 BROOM BLVD FAYETTEVILLE, GA 30215 CLIENT INFORMATION:

FAYETTE COUNTY

140 STONEWALL AVE W, STE 203

FAYETTEVILLE, GA 30214

Tt PROJECT No.:

CLIENT PROJECT No.:

200-01297-17020

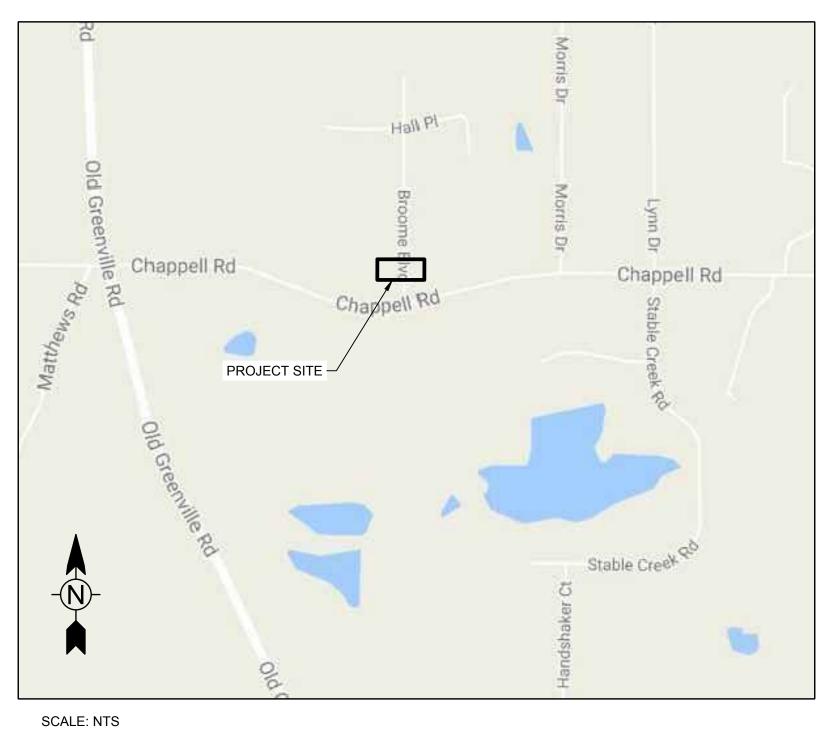
PROJECT DESCRIPTION / NOTES:

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

ISSUED:

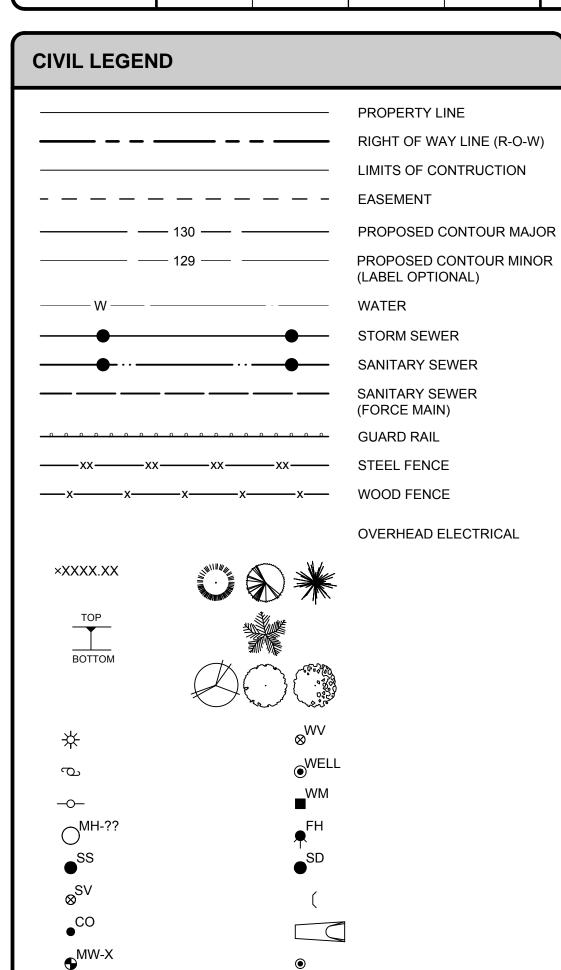
ISSUED FOR CONSTRUCTION - 04/27/2018

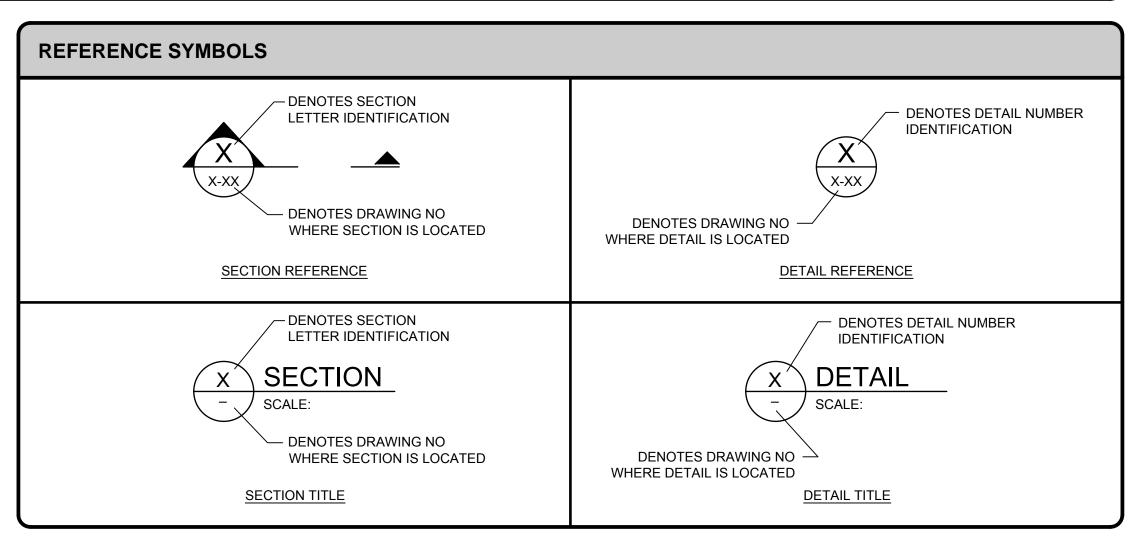
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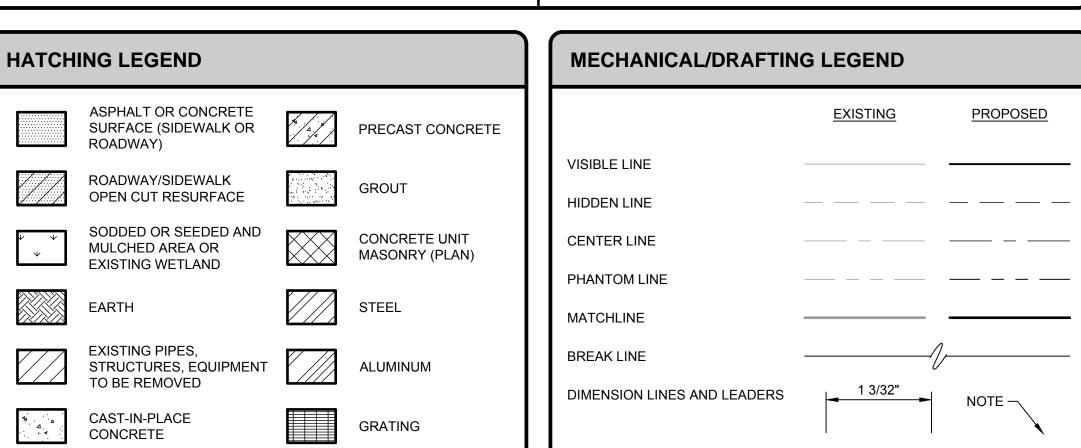




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GSWCC LEVEL II CERT. # 0000073529

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Bar Measures 1 inch

Project No.: 200-01297-1702

Designed By

Checked By:

Drawn By:

FAYETTE

- 3. THE DISTURBED ACREAGE FOR THE PROJECT IS 0.59 ACRES.
- 4. THE CULVERT REPLACEMENT PROJECT LOCATION (BEGINNING AND END) IS: 33.34685° -84.45400°

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, EXCEPT WHERE INDICATED IN PLANS.
- 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. 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, 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.
- 2. SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- 3. ALL MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE FAYETTE COUNTY DEVELOPMENT REGULATIONS, LATEST EDITION, UNLESS OTHERWISE WAIVED.
- 4. 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.
- 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: MAY 31, 2017.
- 14. ANY CONSTRUCTION BEYOND THE RIGHT-OF-WAY AND/OR ESTABLISHED EASEMENT LINES, ONTO ADJACENT PROPERTY, REQUIRES ADJACENT PROPERTY OWNER PERMISSION AND NECESSARY EASEMENTS PRIOR TO PERFORMING ANY WORK. THE CONTRACTOR IS TO VERIFY SUCH EASEMENTS AND PERMISSIONS PRIOR TO DISTURBING ANY OFF-SITE PROPERTY.
- 15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SITE CONDITIONS OF SOIL PRIOR TO N.T.P. CONSTRUCTION TO DETERMINE IF ANY OFF SITE MATERIALS WILL NEED TO BE IMPORTED TO ACHIEVE THE GRADES SPECIFIED ON THE PLANS.
- 16. 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.
- 17. 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.

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 916.1 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.

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

- 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.
- 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.
- 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.

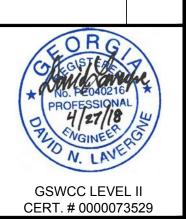
SPILL CONTROL NOTES:

- 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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0 04/27/18 ISSUED FOR CONSTRUCTION

MR

OM BLVD CULVERT REPLACEMENT
GENERAL NOTES

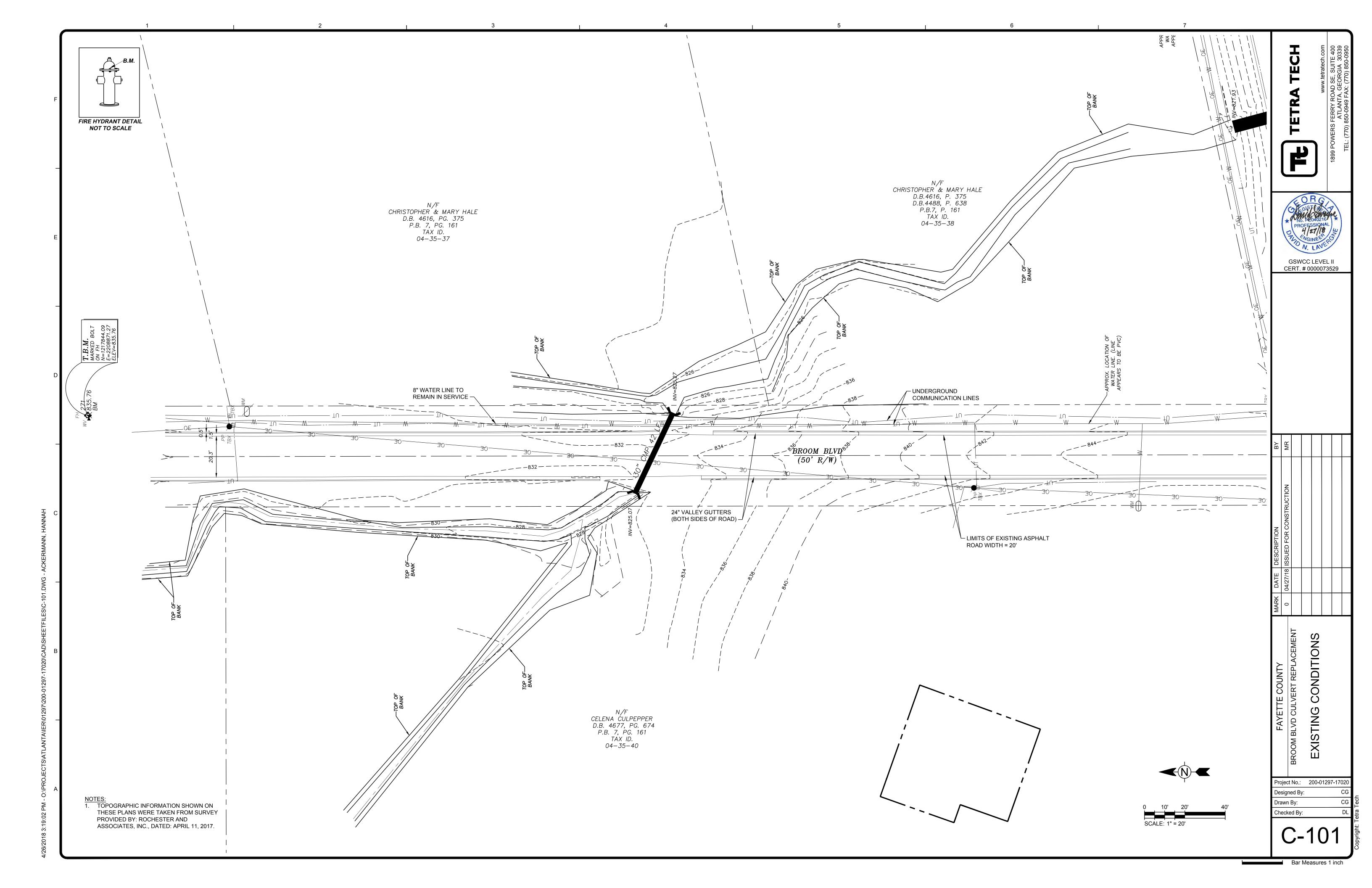
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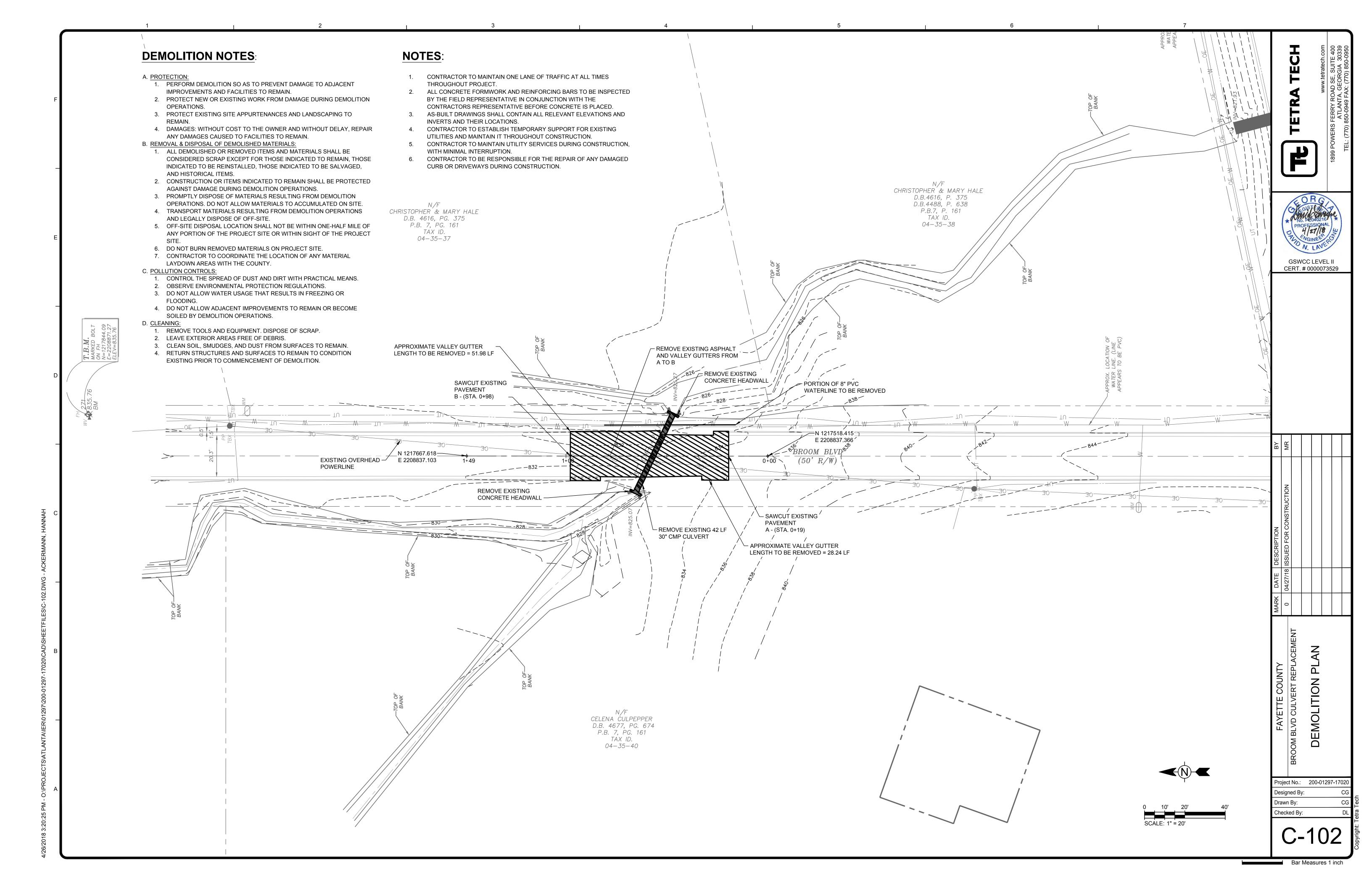
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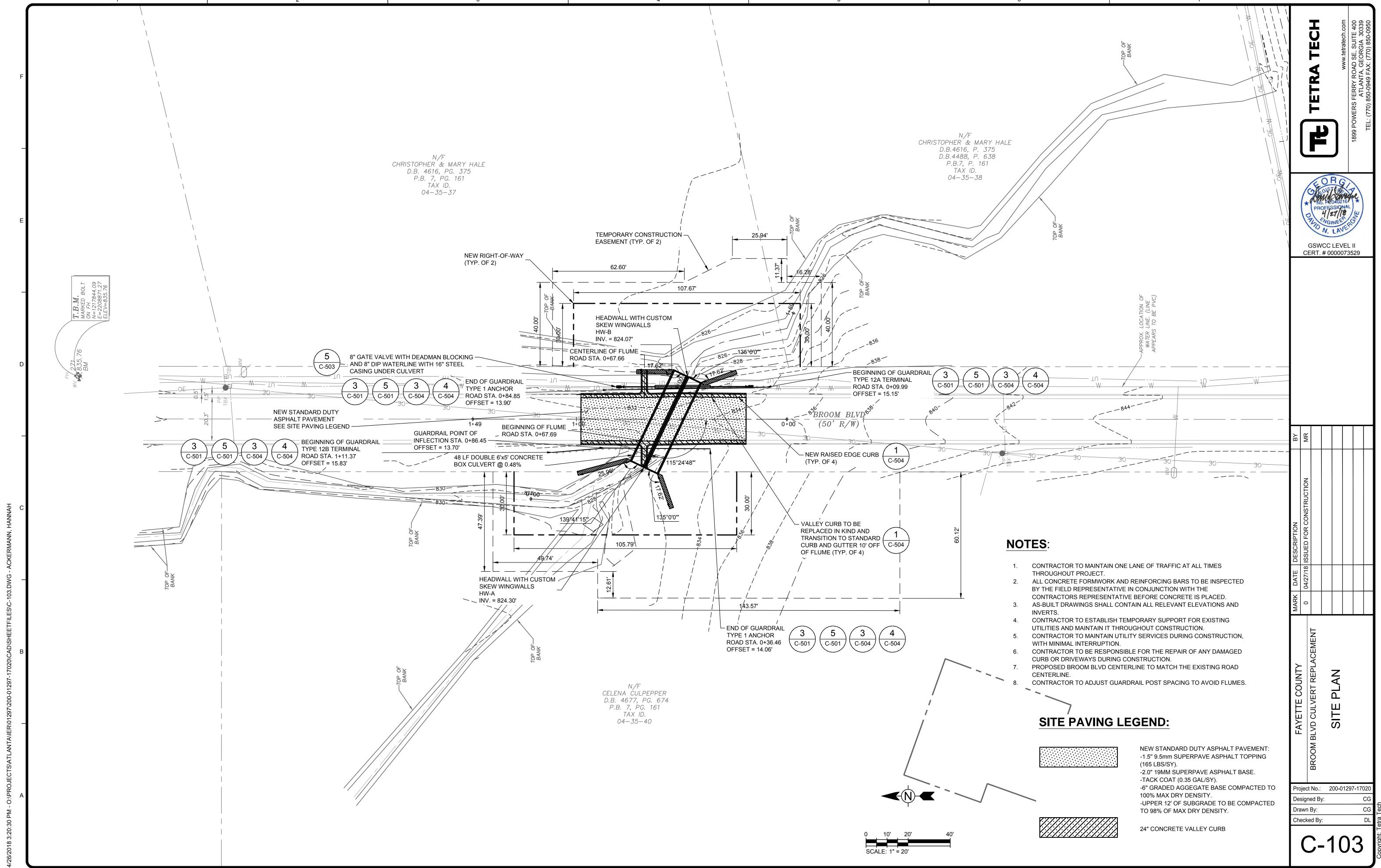
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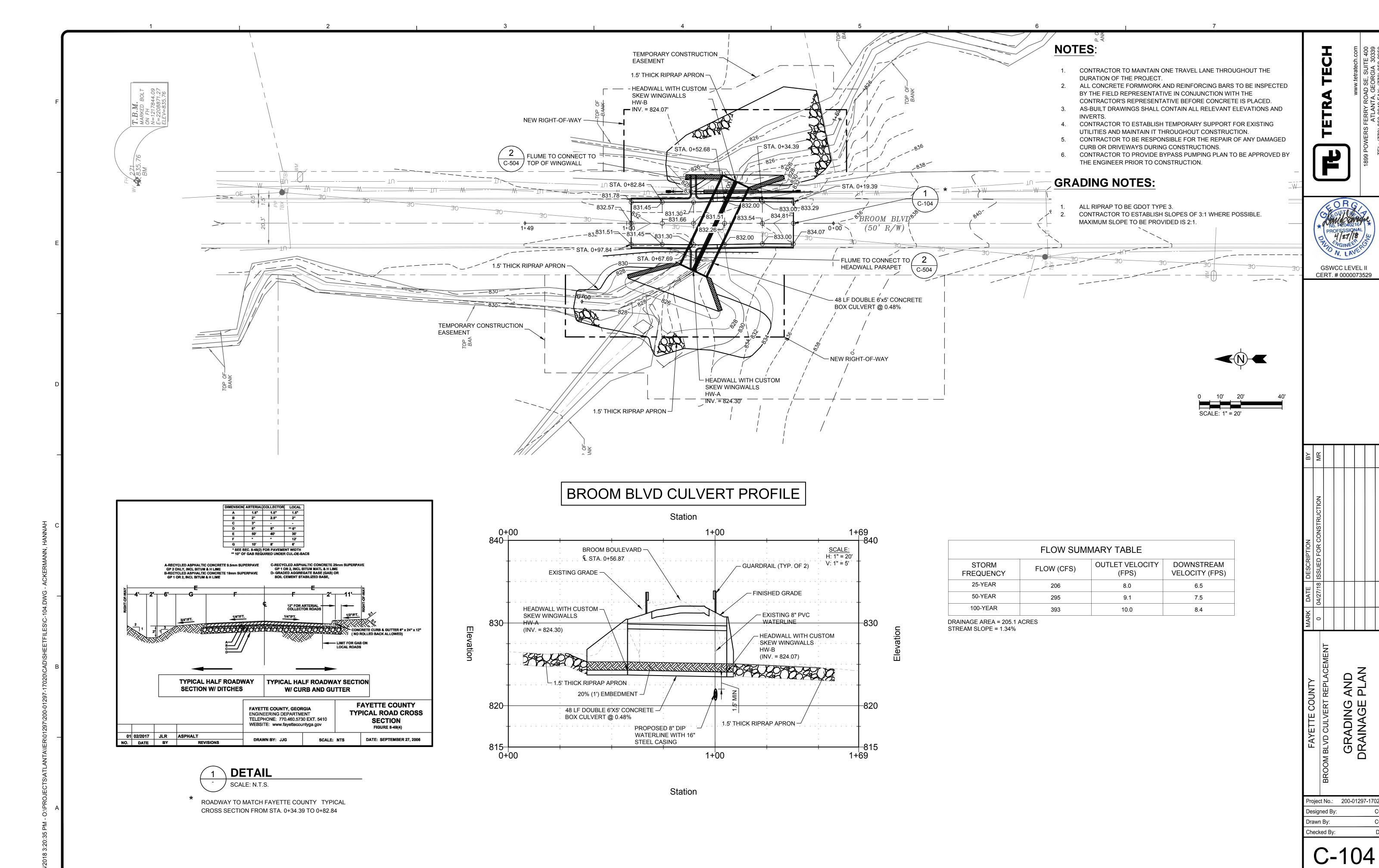
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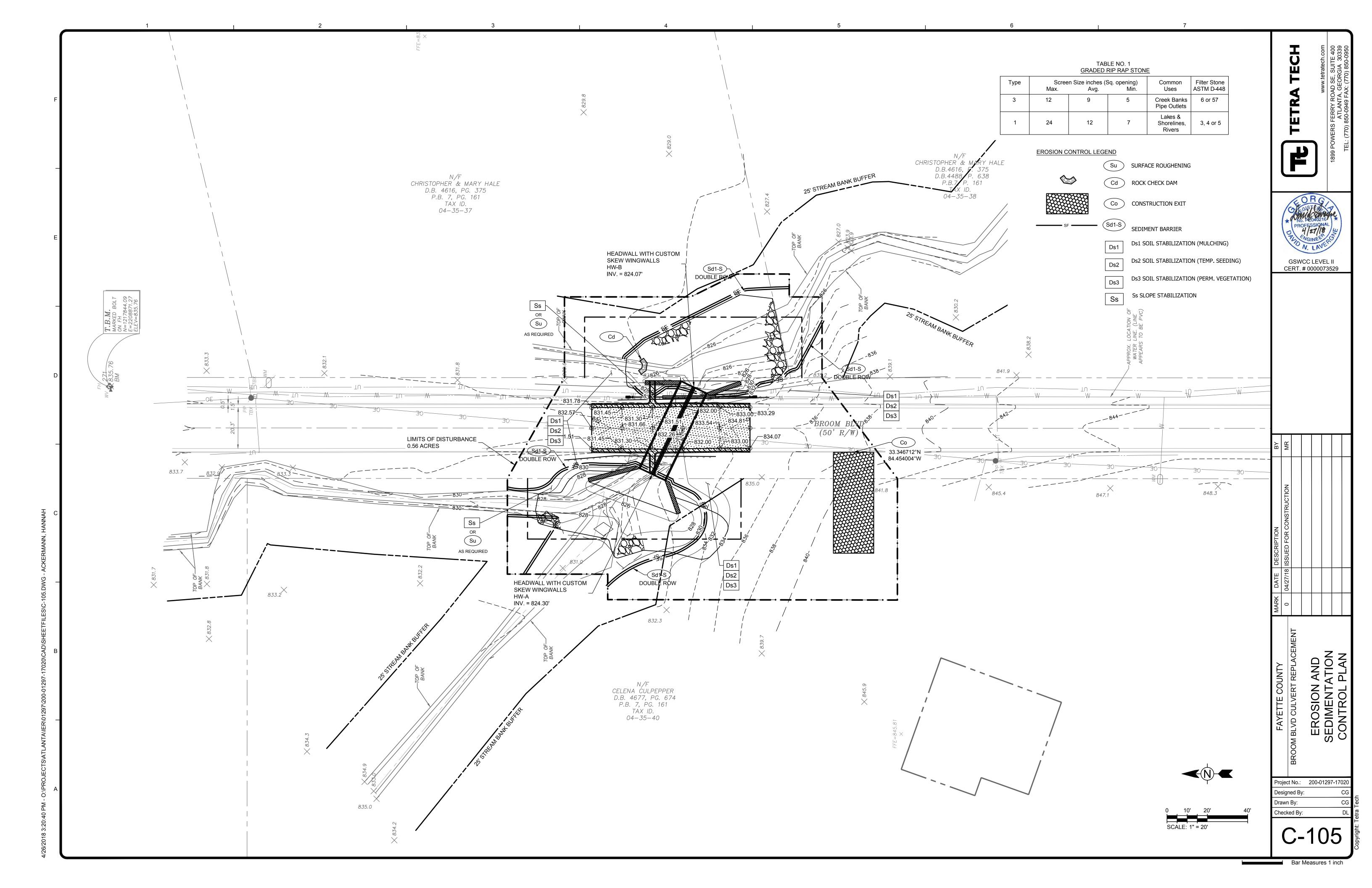
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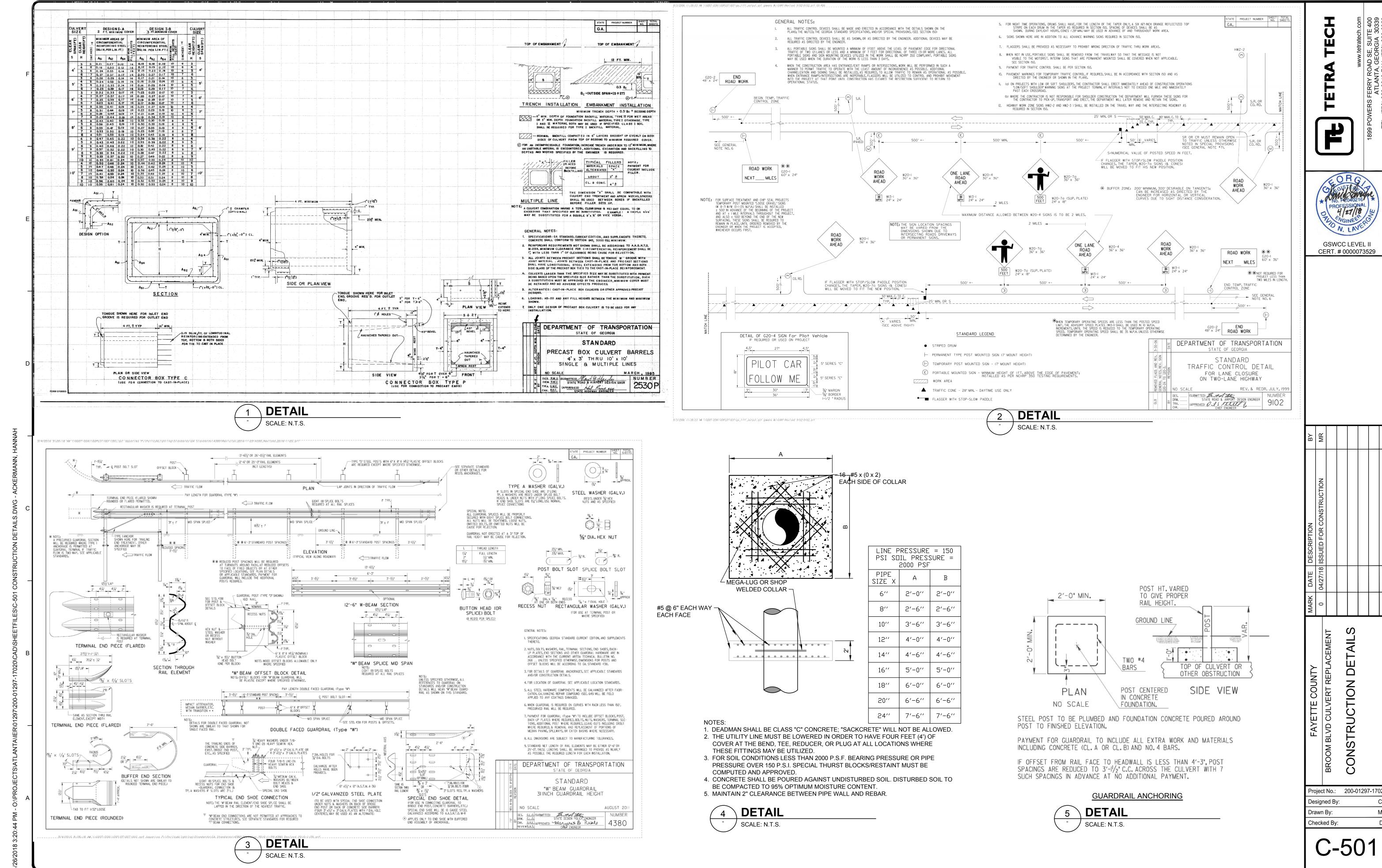


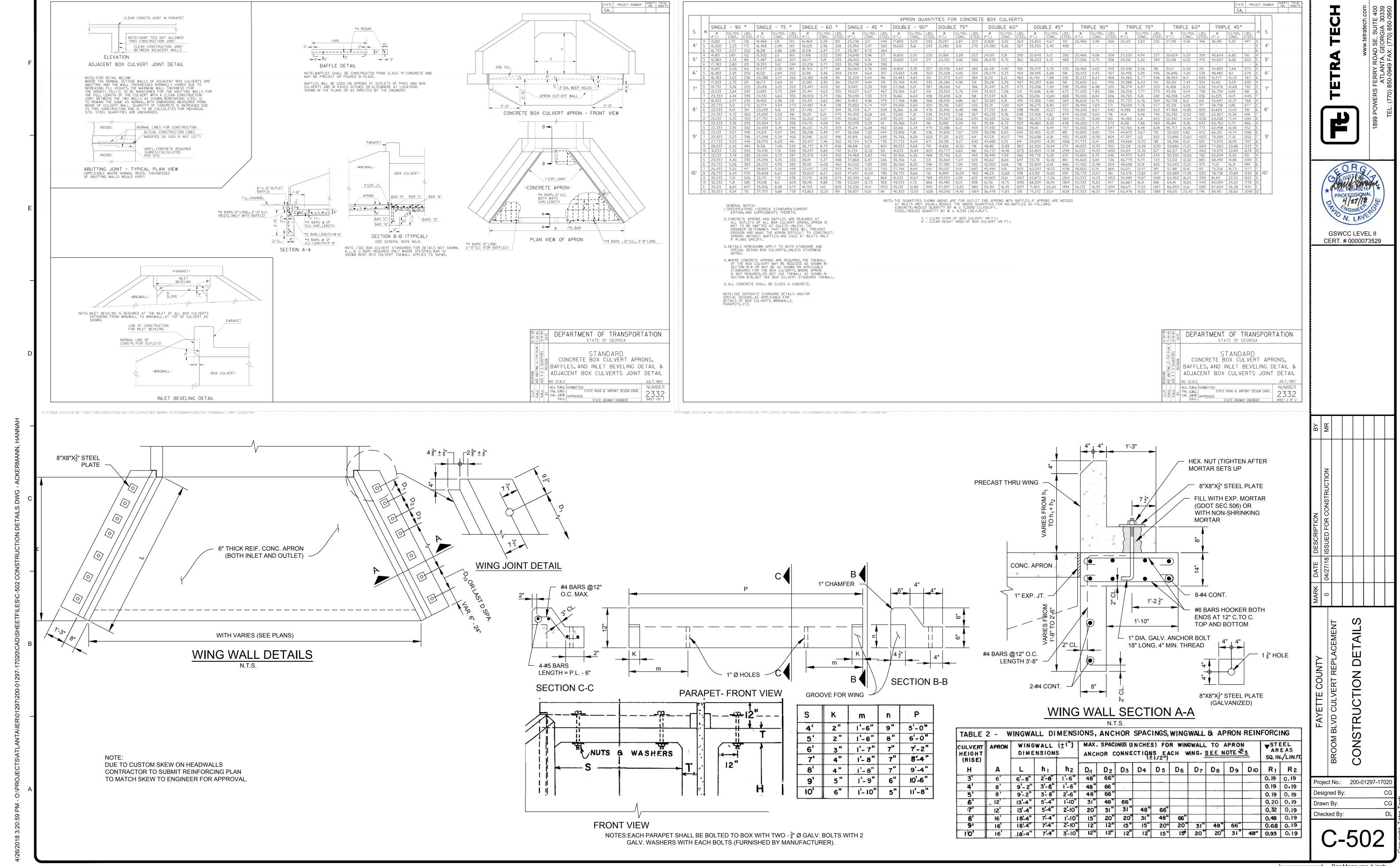


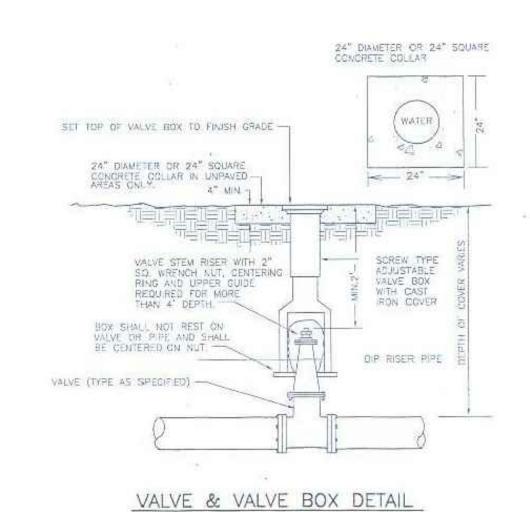


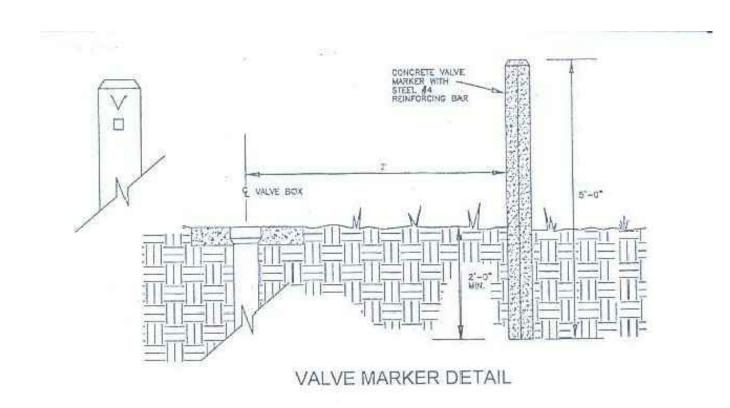






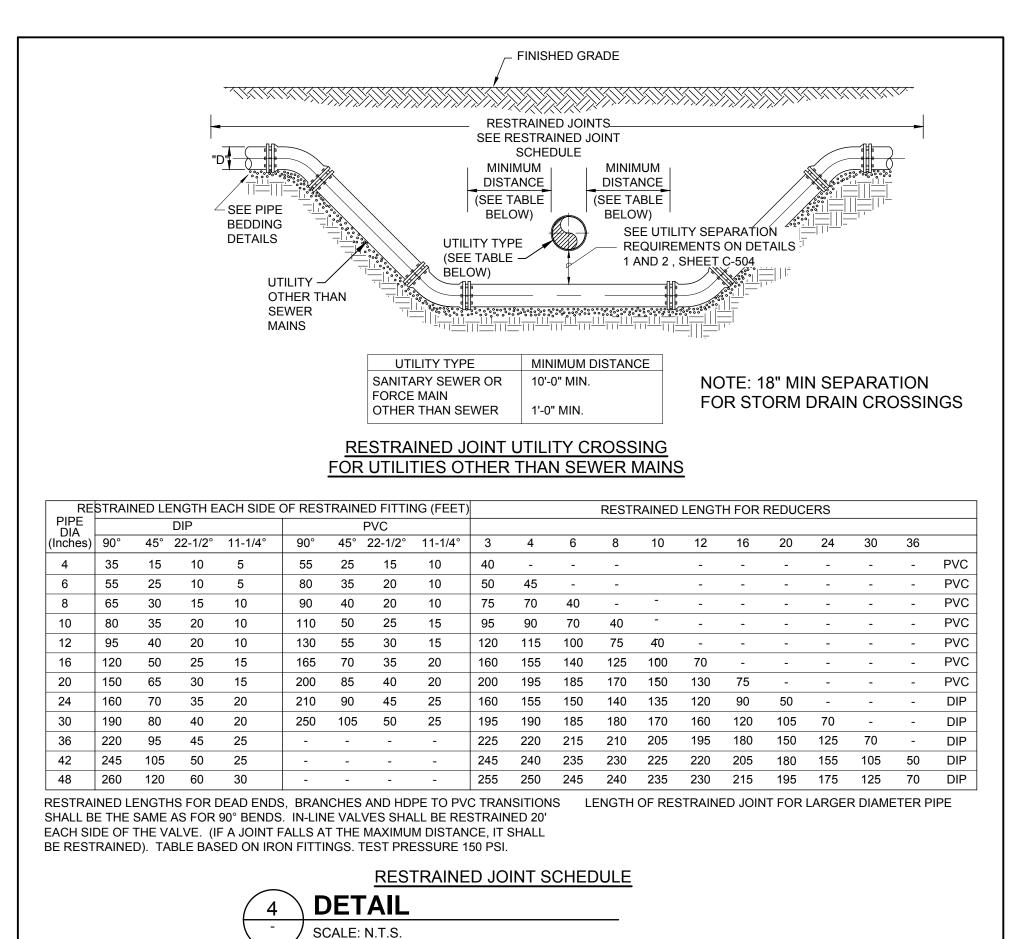


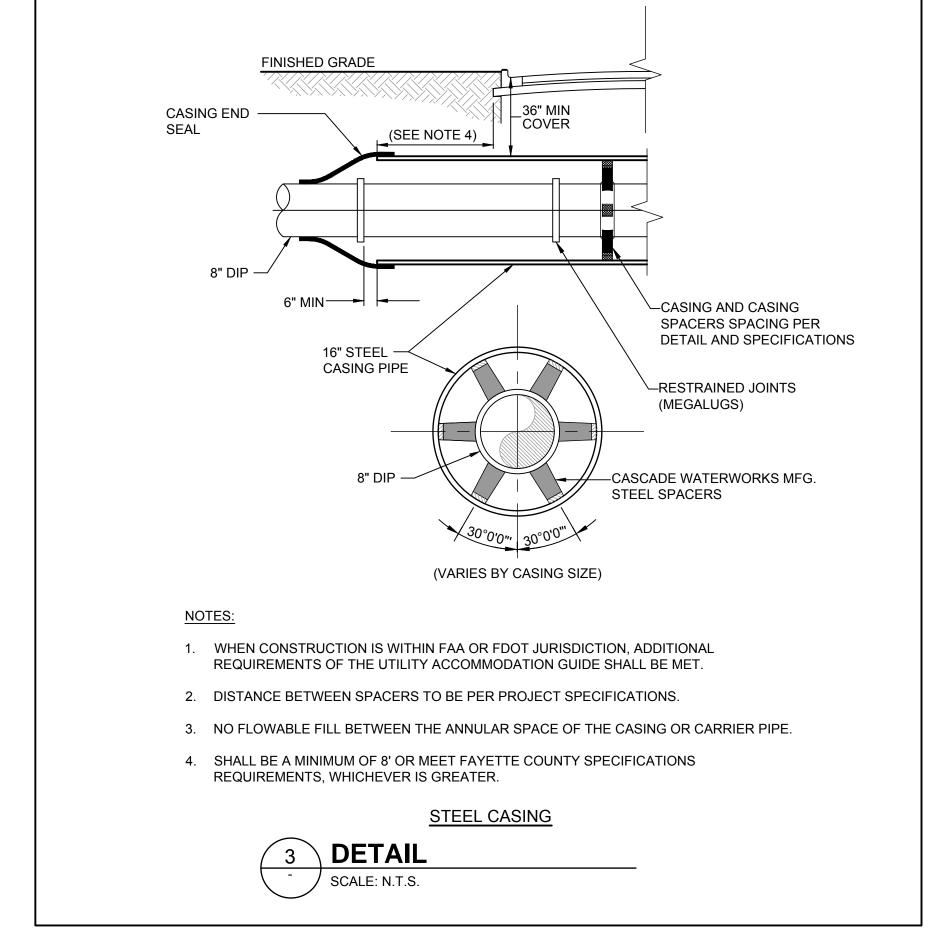


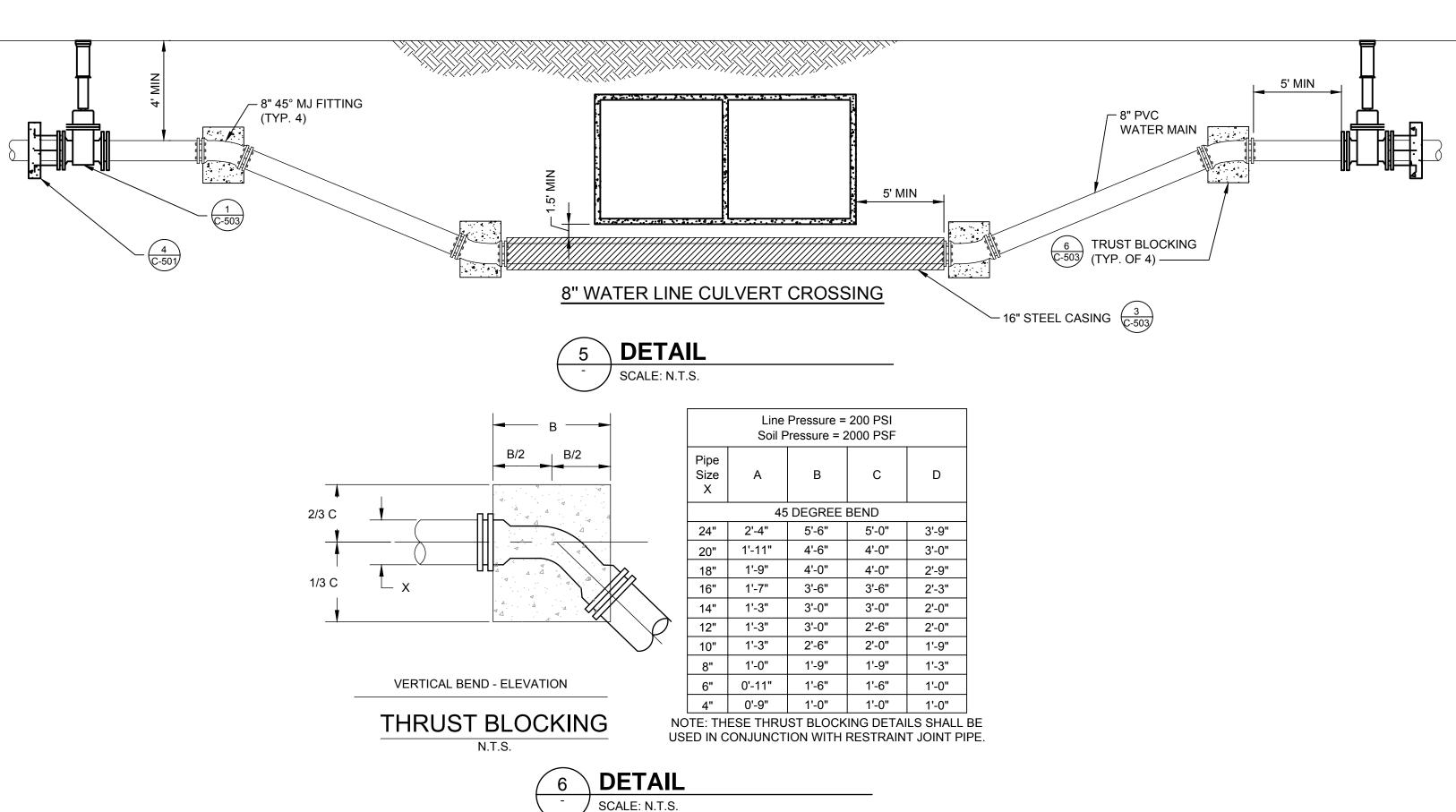


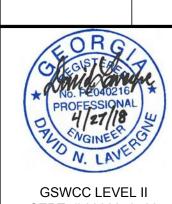
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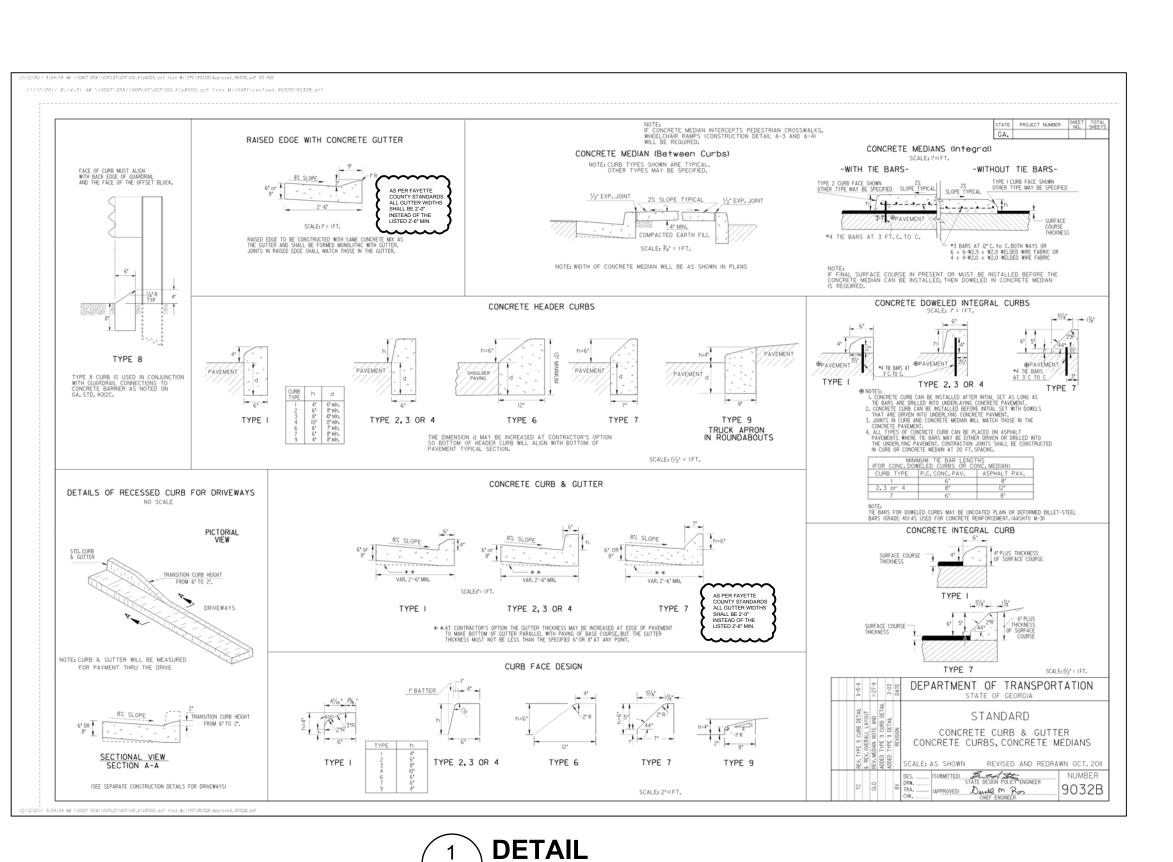


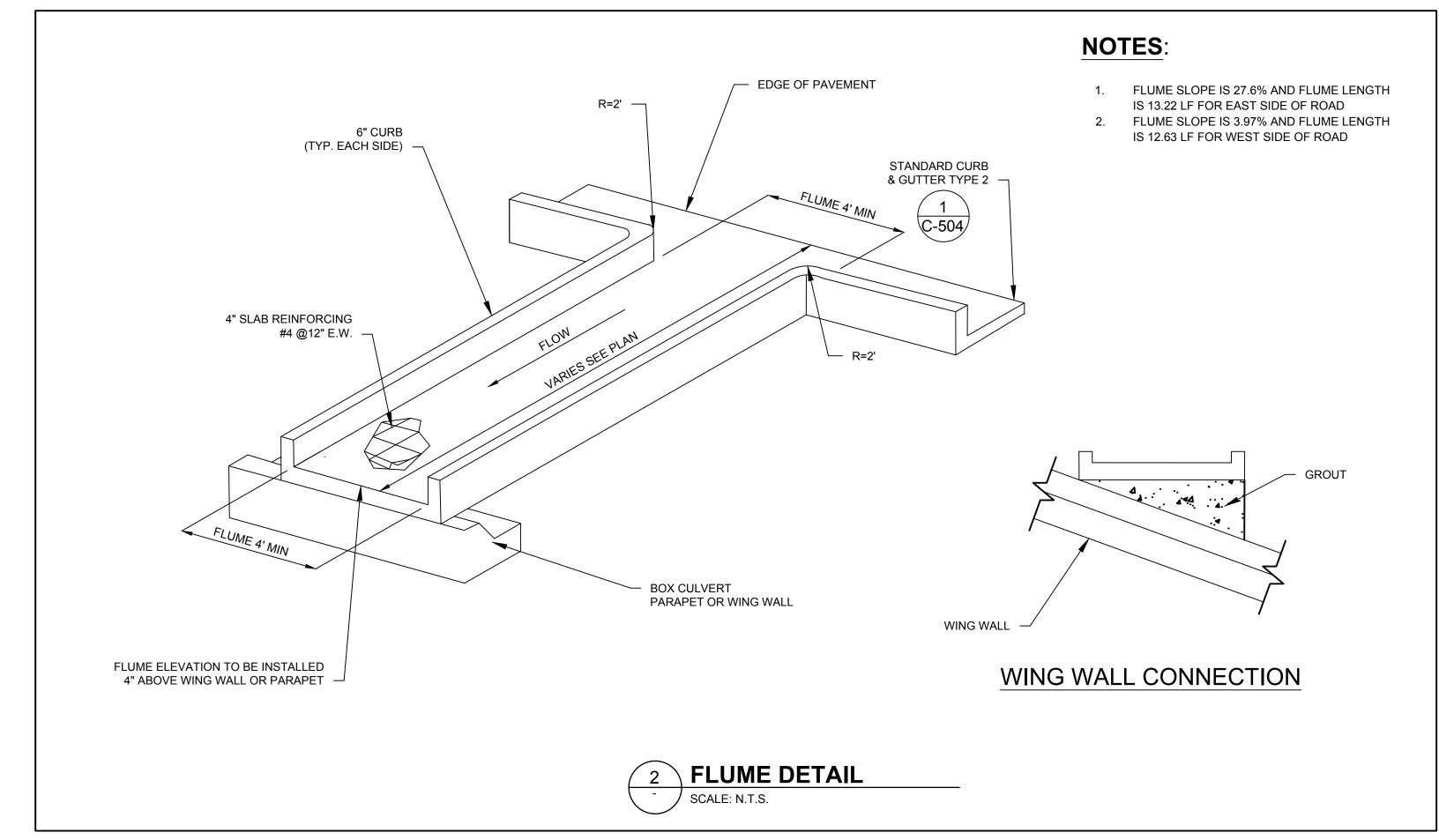
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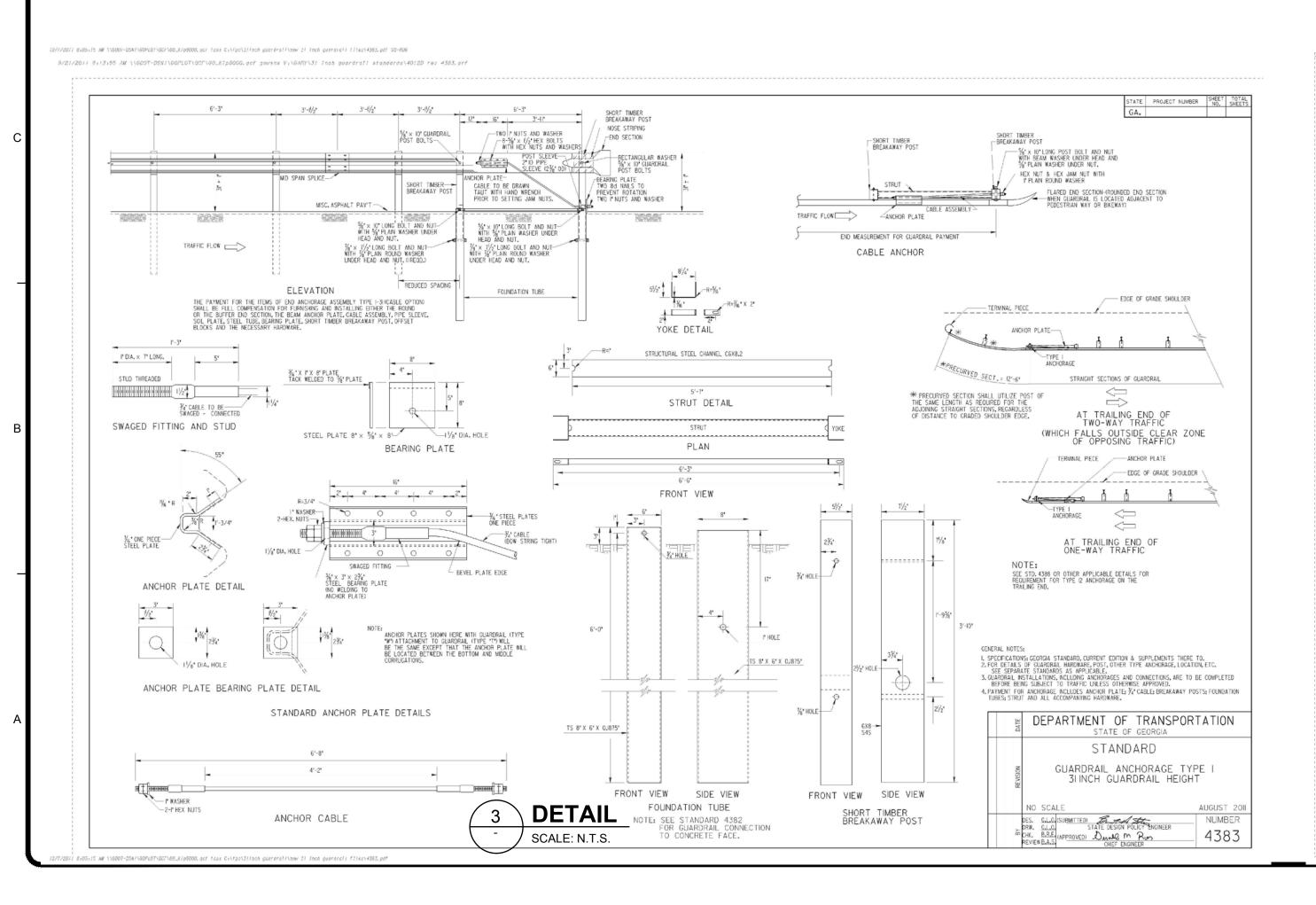
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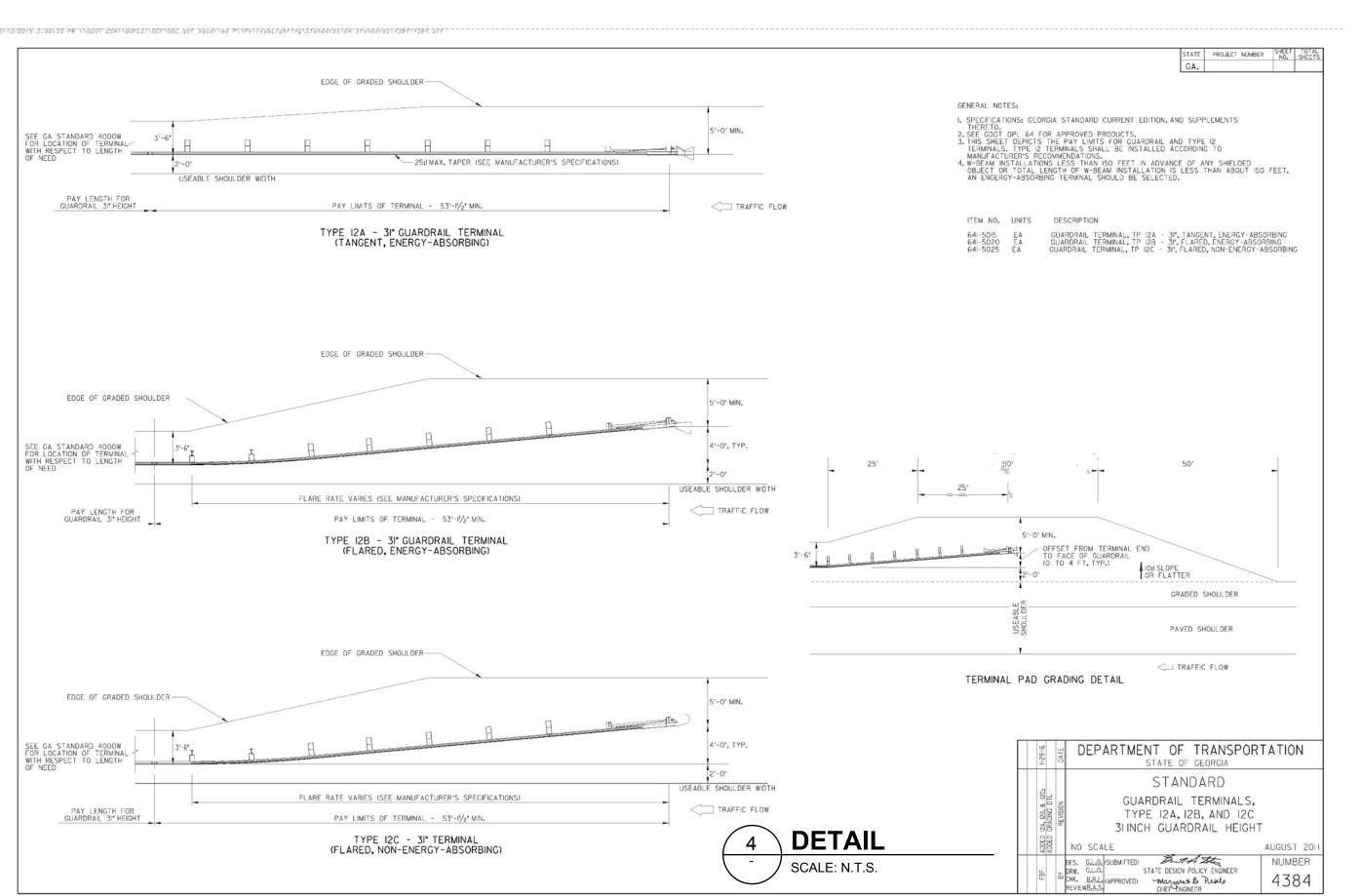
Project No.: 200-01297-1702 Designed By: Drawn By:

Checked By:









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TETRA TECH





FAYETTE COUNTY

0 04/27/18 ISSUED FOR CONSTRUCTION MR

BROOM BLVD CULVERT REPLACEMENT

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

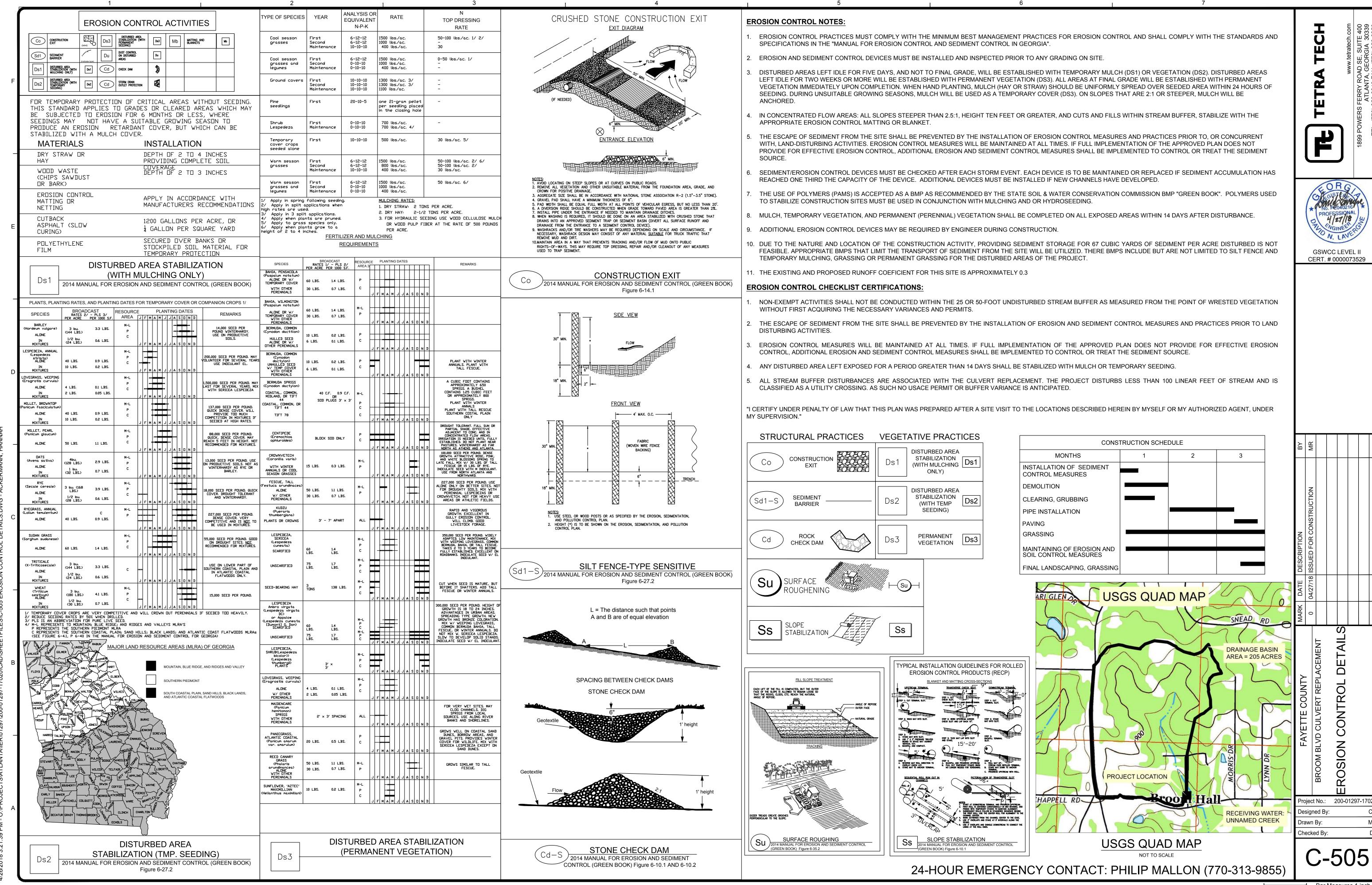
Bar Measures 1 inch

Project No.: 200-01297-1702

Designed By:

Checked By:

Drawn By:



Project Name: BROOM BLVD CULVERT REPLACEMENT Address: 104-121 BROOM BLVD, FAYETTEVILLE, GA 30215 City/County: FAYETTEVILLE/FAYETTE Date on Plans: 04/27/18

TO BE SHOWN ON ES&PC PLAN Page # C-506 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.

(The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)

2 Level II certification number issued by the Commission, signature and seal of the certified design professional.

(Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) 3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.

4 Provide the name, address and phone number of primary permittee.

8 Description of the nature of construction activity.

C-105 Y

C-505

G-003

G-003

C-505

5 Note total and disturbed acreage of the project or phase under construction. 6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in

7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. G-003

9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.

10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.

11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.

12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate

and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 15 of the permit.* N/A N/A 13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative

sampling as stated on page 26 of permit as applicable.* 14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins in accordance with part IV.A.5.

within 7 days after installation."* 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."

16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.

17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."*

N/A N/A 18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a

C-505 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."

20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."

21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."

N/A N/A 22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*

23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*

24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*

25 Provide BMPs for the remediation of all petroleum spills and leaks.

N/A 26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.*

27 Description of the practices that will be used to reduce the pollutants in storm water discharges.*

28 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).

29 Provide complete requirements of inspections and record keeping by the primary permittee.*

30 Provide complete requirements of sampling frequency and reporting of sampling results.*

31 Provide complete details for retention of records as per Part IV.F. of the permit.*

32 Description of analytical methods to be used to collect and analyze the samples from each location.*

N/A 33 Appendix B rationale for NTU values at all outfall sampling points where applicable.*

34 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is

discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.* 35 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final

BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*

36 Graphic scale and North arrow.

N/A

N/A

7 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Existing Contours USGS 1": 2000' Topographical Sheets Proposed Contours 1": 400' Centerline Profile

38 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation

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

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.*

C-105 Y 40 Delineation of the applicable 25-foot or 50-foot undisturbed 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. C-505

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

C-104 Y 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.

C-105 47 The limits of disturbance for each phase of construction. C-505

C-505

C-505 Y

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 volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justfication 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, permittees 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 feasable, a written justification explaining this decision must be included in the plan. C-105 Y 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 seeding will take place and for the appropriate geographic region of Georgia.

*If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the * checklist items would be N/A. Effective January 1, 2017

Soil Map—Clayton, Fayette, and Henry Counties, Georgia Map Scale: 1:512 if printed on A landscape (11" x 8.5") sheet Web Soil Survey 7/17/2017 National Cooperative Soil Survey

Map Unit Legend

Clayton, Fayette, and Henry Counties, Georgia (GA625)						
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI			
CA	Cartecay loam, 0 to 2 percent slopes, frequently flooded	0.7	72.6%			
PaE	Pacolet sandy loam, 10 to 25 percent slopes	0.3	27.4%			
Totals for Area of Interest	'	1.0	100.0%			

GSWCC LEVEL II CERT. # 0000073529 Project No.: 200-01297-1702 Designed By

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Drawn By: Checked By: