CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT OFFICE OF ENGINEERING SERVICES

CITY OF ATLANTA KASIM REED MAYOR



LOCATION MAP



CONSTRUCTION PLANS FOR TERRELL CREEK SEWER IMPROVEMENTS SEPTEMBER 22, 2017

100% REVIEW DOCUMENTS

DEPARTMENT OF WATERSHED MANAGEMENT KISHIA L. POWELL COMMISSIONER

<u>SHT</u> #	<u>DWG</u> #	<u>TITLE</u>	<u>SHT</u> #	<u>DWG</u> #	<u>TITLE</u>
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STANDARD DETAILS

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EROSION NOTE:

EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) WILL BE EMPLOYED AND ENFORCED PURSUANT TO AN EROSION AND SEDIMENT CONTROL PLAN PREPARED BY A GEORGIA SOIL AND WATER CONSERVATION COMMISSION LEVEL-2 DESIGN PROFESSIONAL. PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA EROSION CONTROL INSPECTOR CALL (404) 546-1300 TO CONTACT THE INSPECTOR.

EROSION NOTE

"I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER
A SITE VISIT TO THE LOCATION DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED
AGENT, UNDER MY DIRECT SUPERVISION"

LEVEL II CERTIFIED DESIGN PROFESSIONAL CERTIFICATION NUMBER

ISSUED: _____ EXPIRES: __

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GENERAL NOTES:

- THE EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE UTILITIES SHOWN ON THESE DRAWINGS HAVE BEEN COMPILED FROM INFORMATION FURNISHED BY THE UTILITY OWNERS AND BY SURVEY. ACCURACY AND COMPLETENESS ARE NOT GUARANTEED. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA AND FOR COORDINATING ANY NECESSARY RELOCATIONS OR TIE—INS. UTILITIES SHOWN ARE APPROXIMATE. GEORGIA LAW REQUIRES THE CONTRACTOR TO NOTIFY THE UTILITIES PROTECTION CENTER MINIMUM 3 WORKING DAYS BUT NOT MORE THAN 10 DAYS BEFORE BEGINNING CONSTRUCTION. THIS NOTICE WILL REMAIN IN EFFECT FOR 30 WORKING DAYS FROM THE DATE UTILITIES PROTECTION CENTER IS NOTIFIED. IN THE ATLANTA AREA, THE CONTRACTOR IS TO CALL THE UTILITIES PROTECTION CENTER AT 770-623-4344.
- 2. CONTRACTOR SHALL RETAIN A LAND SURVEYOR REGISTERED IN THE STATE OF GEORGIA TO REPLACE ANY PROPERTY PINS REMOVED DURING CONSTRUCTION. A COPY OF THE FIELD NOTES SHOWING PINS RESET SHALL BE SENT TO NOLTON JOHNSON, DIRECTOR — BUREAU OF ENGINEERING SERVICES, WATERSHED MANAGEMENT, CITY OF ATLANTA, 72 MARIETTA ST, 5th FLOOR, ATLANTA GA. 30303—0330.
- 3. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE LATEST CITY OF ATLANTA STANDARDS.
- 4. SEWER DISTANCES SHOWN ON THE PROFILE DRAWINGS ARE FROM CENTER-TO-CENTER OF THE MANHOLE STRUCTURES AND ARE FOR LAYOUT PURPOSES ONLY. THE INVERTS SHOWN ARE THE THEORETICAL PIPE INVERTS AT THE CENTER OF THE STRUCTURE.
- 5. ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM-C76 CLASS III OR AS OTHERWISE NOTED ON THE CONTRACT DRAWINGS.
- 6. ALL PIPES ENTERING A MANHOLE WILL BE SEPARATED FROM THE MANHOLE WALL BY AN APPROVED MANUFACTURER'S BUTYL RUBBER GASKET WHICH COMPLETELY SURROUNDS THE PIPE, SEALS THE MANHOLE AND PERMITS DIFFERENTIAL MOVEMENT.
- 7. CLASS "B" PIPE BEDDING SHALL BE USED IN PUBLIC RIGHT-OF-WAY UNLESS OTHERWISE NOTED ON THE CONTRACT DRAWINGS. CLASS "C" PIPE BEDDING SHALL BE USED IN ALL OTHER AREAS UNLESS OTHERWISE NOTED ON THE CONTRACT DRAWINGS.
- 8. THE CONTRACTOR SHALL COORDINATE WORK WITH CITY OF ATLANTA.
 CONTRACTOR SHALL PROVIDE SUFFICIENT ADVANCE NOTICES OF PROPOSED WORK SCHEDULE.
- 9. ALL AREAS DISTURBED AND DAMAGED BY THE CONTRACTOR, INCLUDING CURB AND GUTTER, AND TRENCH SETTLEMENT RELATED AREAS, SHALL BE RESTORED TO THE ORIGINAL CONDITIONS TO THE SATISFACTION OF THE CITY OF ATLANTA AND AT NO ADDITIONAL COST TO THE CITY.
- 10. CONTRACTOR SHALL INSTALL 6 FOOT HIGH TEMPORARY CHAIN LINK FENCE TO PROVIDE FOR TEMPORARY ENCLOSURE OF YARDS FOR SECURITY OF PETS, DOMESTIC ANIMALS, AND THE PROPERTY WHEN PERMANENT FENCES MUST BE REMOVED DUE TO CONSTRUCTION OF STORM OR SANITARY SEWER LINES.
- 11. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH "THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION.
- 12. THE CONTRACTOR SHALL REPLACE ALL FENCING DAMAGED BY CONSTRUCTION. FENCING SHALL BE REPLACED TO ORIGINAL SIZE, QUALITY AND CONDITION, AND TO THE APPROVAL OF THE CITY OF ATLANTA OR ITS AUTHORIZED REPRESENTATIVE.
- 13. PRIOR TO FINAL ACCEPTANCE OF WORK, CONTRACTOR SHALL PROVIDE "AS-BUILT" MARK-UP PLANS TO THE CITY OF ATLANTA ASSIGNED INSPECTOR FOR FINAL INSPECTION OF ALL NEWLY INSTALLED STORM AND SANITARY SEWERS. AFTER THE FINAL INSPECTION APPROVAL, CONTRACTOR SHALL PROVIDE "AS—BUILT" DRAWINGS TO THE BUREAU OF ENGINEERING SERVICES, UTILITY DESIGN GROUP, PROJECT DESIGN ENGINEER.
- 14. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM THE CITY OF ATLANTA DEPARTMENT OF PUBLIC WORKS AND IF APPLICABLE, FROM THE GEORGIA DEPARTMENT OF TRANSPORTATION PRIOR TO ANY REQUIRED LANE CLOSURES.
- 15. INSTALLATION OF NEW STORM AND SANITARY SEWERS, INCLUDING TRENCH EXCAVATION, SHOULD BE FINISHED BY CLOSE OF DAY, OR ADEQUATELY COVERED FOR SAFETY.
- 16. CONTRACTOR SHALL INSTALL STEEL COVER PLATES TO PROTECT AREAS, INCLUDING DRIVEWAYS LEFT OPEN AT THE END OF EACH DAY'S WORK. CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS AND MAILBOXES AT ALL TIMES.
- 17. THE LENGTH OF PIPE FOR PAYMENT PURPOSE WILL BE CONSIDERED THE DISTANCE FROM THE CENTER OF MANHOLE TO CENTER OF MANHOLE, SUBTRACTED BY THE WIDTH OF THE MANHOLE.
- 18. CONTRACTOR SHALL ENTER UPON PRIVATE PROPERTY ONLY AFTER OBTAINING RIGHT OF ENTRY LETTER FROM THE CITY OF ATLANTA AND NOTIFYING HOMEOWNER IN ADVANCE.
- 19. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING ALL UTILITIES WITHIN THE EXCAVATION LIMITS DURING CONSTRUCTION
- 20. CONTRACTOR SHALL LOCATE AND REFERENCE ALL WATER METERS AND VALVES WITHIN THE CONSTRUCTION LIMITS. THE REFERENCE POINTS SHALL BE LOCATED SO THAT THE REFERENCE WILL NOT BE DISTURBED AND THE LOCATION OF THE METERS AND VALVES CAN BE RE-ESTABLISHED. A PERMANENT WRITTEN RECORD OF THE REFERENCE POINTS WILL BE FURNISHED TO THE CITY OF ATLANTA. ACCESS TO FIRE HYDRANTS WILL BE MAINTAINED AT ALL TIMES.
- 21. ALL TRENCHING AND BACKFILL SHALL BE IN ACCORDANCE WITH CITY OF ATLANTA DETAILS. TEMPORARY TRENCH EXCAVATION SHALL AT ALL TIMES CONFORM TO THE SAFETY REQUIREMENTS OF OSHA.
- 22. THE SURVEY INFORMATION SHOWN HEREIN IS BASED ON DATABASE FURNISHED BY THE CITY OF ATLANTA WITH AUGMENTATION BY FIELD SURVEYS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STAKEOUT ALL PROPOSED WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
- 23. AT COMPLETION OF SEWER AND WATER CONSTRUCTION SET ALL MANHOLES, VALVE BOXES, METERS, AND APPURTENANCES FOR PROPER FINAL GRADE. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE ABOVE ITEMS UNTIL SYSTEM IS ACCEPTED BY THE CITY.
- 24. TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY FOR THE SOIL AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D-698 AND AASHTO T-99) RESULTS. A REPORT MAY BE REQUIRED BY THE CONSTRUCTION INSPECTOR OR THE CITY'S ENGINEER FOR ALL FILL AREAS. BACKFILL MATERIAL SHALL BE FREE OF ROOTS, ROCKS AND OTHER DELETERIOUS MATTER.
- 25. ALL NEW MANHOLES ARE PROJECTED. CONTRACTOR MUST VERIFY SEWER ELEVATIONS AT APPROPRIATE LOCATIONS THROUGH VACUUM EXCAVATION.
- 26. CONTRACTOR SHALL FIELD VERIFY ALL INVERT ELEVATIONS, ANGLES, AND SERVICE STATUS.
- 27. MANHOLES WITHIN PUBLIC RIGHT-OF-WAY TO BE ABANDONED IN PLACE IN ACCORDANCE WITH ATLANTA
- 28. CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS AND SPECIFICATIONS ON SITE AT ALL TIMES.
- 29. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SECURITY OF ANY OFFICES OR ANY TEMPORARY STAGING AREAS UTILIZED BY THE CONTRACTOR. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE SECURITY OF HIS MATERIALS, TOOLS, VEHICLES AND EQUIPMENT ON-SITE AT ALL OF THE VARIOUS WORK LOCATIONS THROUGHOUT THE CITY.

LEGEND DESCRIPTION **EXISTING** PROPOSED RIGHT OF WAY LAND LOT LINE PROPERTY LINE CENTER LINE/BASE LINE EASEMENT (DRAINAGE, SANITARY) EASEMENT (TEMPORARY) DEMOLITION AREA EDGE OF PAVEMENT CENTER LINE OF SWALE/CREEK 900 CONTOUR UNDERGROUND POWER OVERHEAD POWER UNDERGROUND TELEPHONE UNDERGROUND TV CABLE GAS LINE WATER LINE SANITARY SEWER LINE (TO REMAIN) SANITARY SEWER LINE (NEW) SANITARY SEWER LINE (REPLACE) SANITARY SEWER LINE (ABANDON) STORM DRAIN LINE UTILITY POLE (T=TELEPHONE, P=POWER, L=LIGHT) UNDERGROUND TELEPHONE BOX TELEPHONE MANHOLE METER BOX (W=WATER, G=GAS) CATCH BASIN DROP INLET HEADWALL CITY OF ATLANTA CONTROL POINT PROPERTY MARKER (IPF=IRON PIN FOUND) RETAINING WALL CLEANOUT

TREE

UTILITY COMPANIES

SIDEWALK

CURB AND GUTTER

SIGNIFICANT TREES

BORING LOCATIONS

WATER VALVE

WATER METER FIRE HYDRANT

LIMITS OF CONSTRUCTION

SANITARY SEWER MANHOLE (To Remain)

SANITARY SEWER MANHOLE (Replace)

SANITARY SEWER MANHOLE (Abandon)

SANITARY SEWER MANHOLE (NEW)

A.G. ATLANTA GAS LIGHT COMPANY B.D.W. BUREAU OF DRINKING WATER GEORGIA POWER COMPANY

UNDERGROUND CABLE COMPANIES UNDERGROUND TELEPHONE COMPANIES

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Know what's below.

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ABBREVIATIONS

ABANDONE

APPROXIMATE

CATCH BASIN

CIRCUMFERENCE

CLEAN OUT

COMBINED

CONCRETE

CLAY PIPE

CONDUIT

CULVERT

DIAGONAL

DIAMETER

DIMENSION

DRAWING

DRIVEWAY

DROP INLET

ELEVATION

FIRE HYDRANT

FOOT OR FEET

GAS VALVE

HORIZONTAL

INVERT

INSIDE DIAMETER

LINEAR FEET LOCATION

NOT TO SCALE

PROPERTY LINE

RIGHT-OF-WAY

SPECIFICATION (S)

SANITARY SEWER

STORM DRAIN SEWER

VITRIFIED CLAY PIPE

WATER VALVE LIMITS OF CONSTRUCTION

PROPOSED RADIUS

REQUIRED

RIGHT

SECTION

STREET

TYPICAL

VERTICAL WATER

TELEPHONE

UNDERGROUND

WATER METER

OUTSIDE DIAMETER

REVISED OR REVISION

MANHOLE

MAXIMUM

MINIMUM

NUMBER

EXISTING

GAS GAS METER

DUCTILE IRON PIPE

EDGE OF PAVEMENT

HORIZONTAL ELLIPTICAL

CLASS

CENTER TO CENTER

CLOSED CIRCUIT TELEVISION

CORRUGATED METAL PIPE

ABAND

CC

CL

CO

CCTV

COMB

CONC

CP

CMP

CULV

DIAG

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DW

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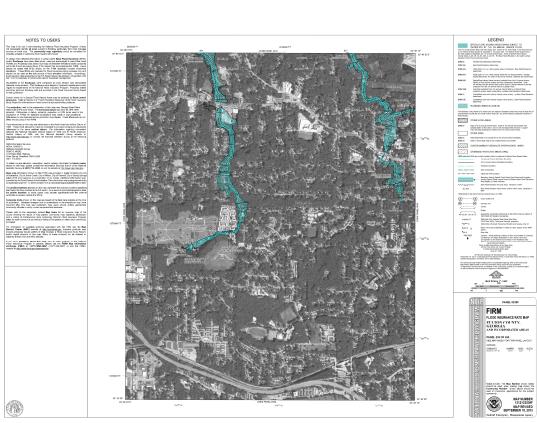
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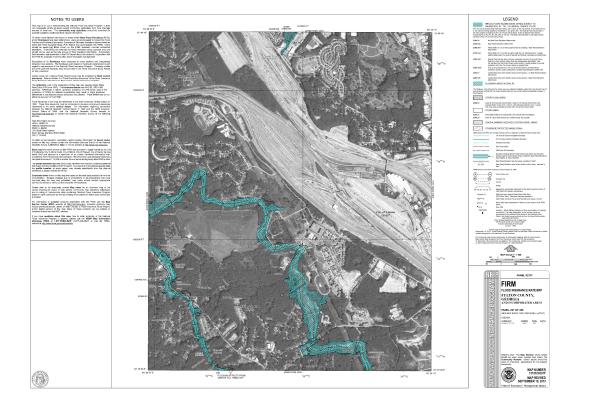
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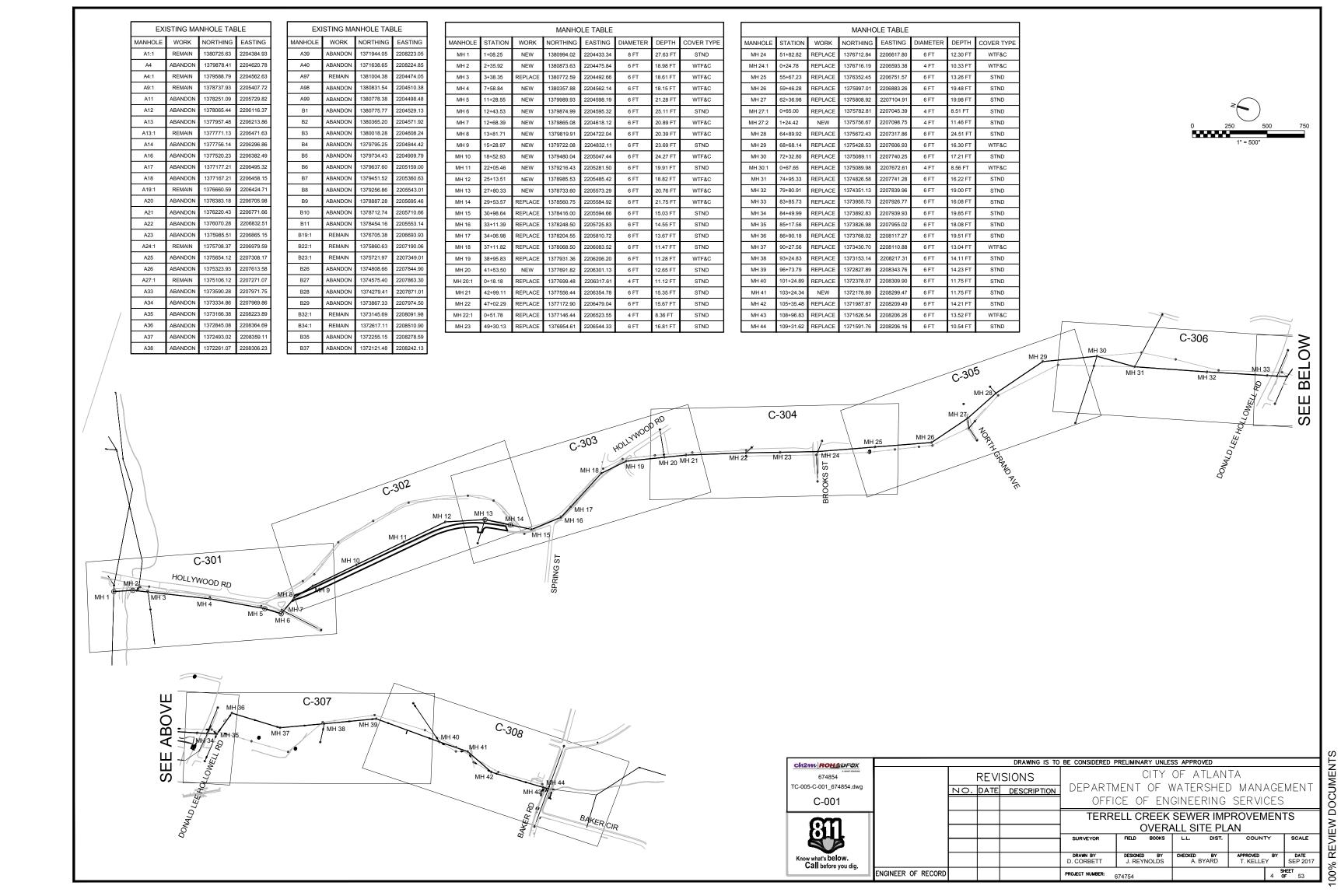


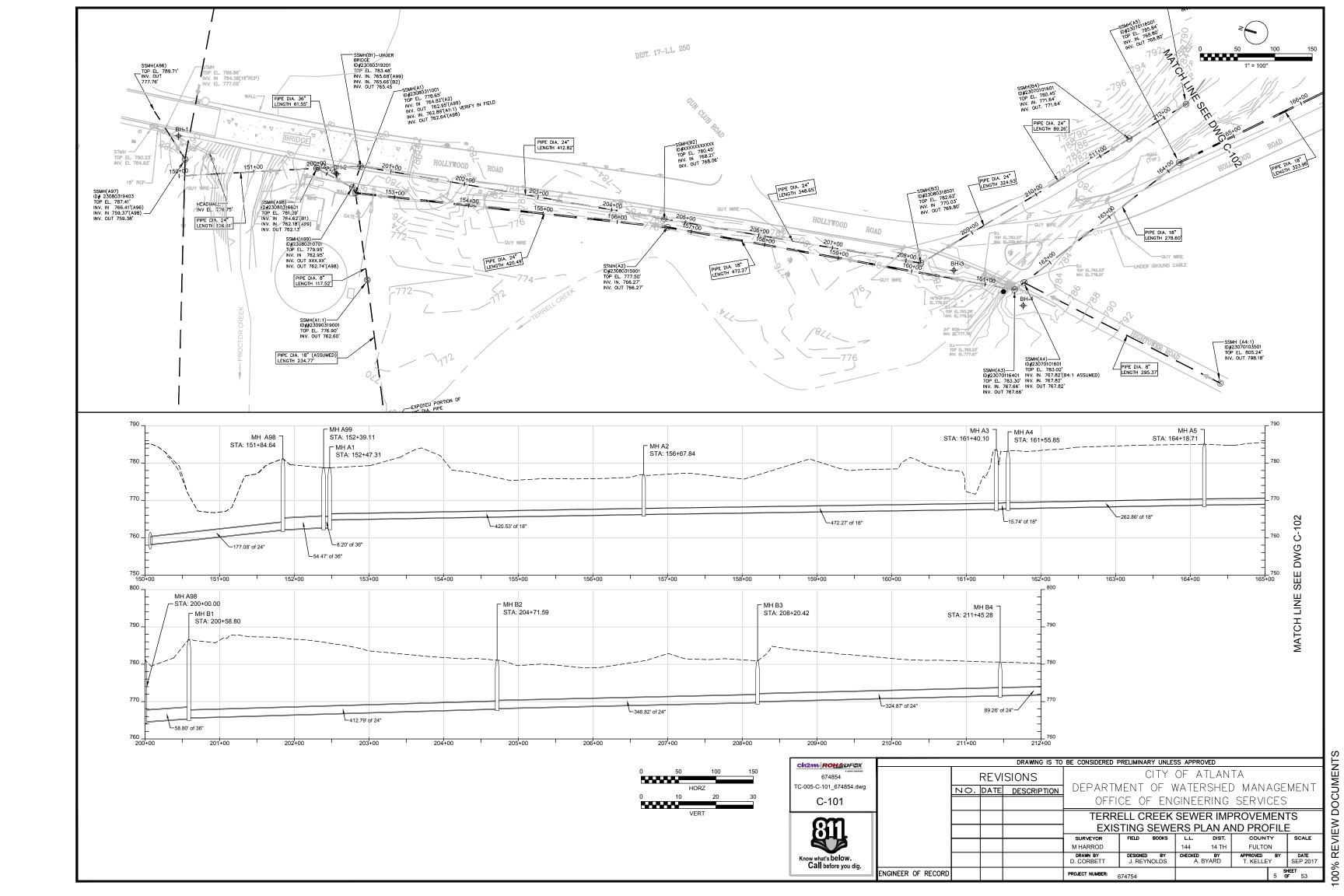
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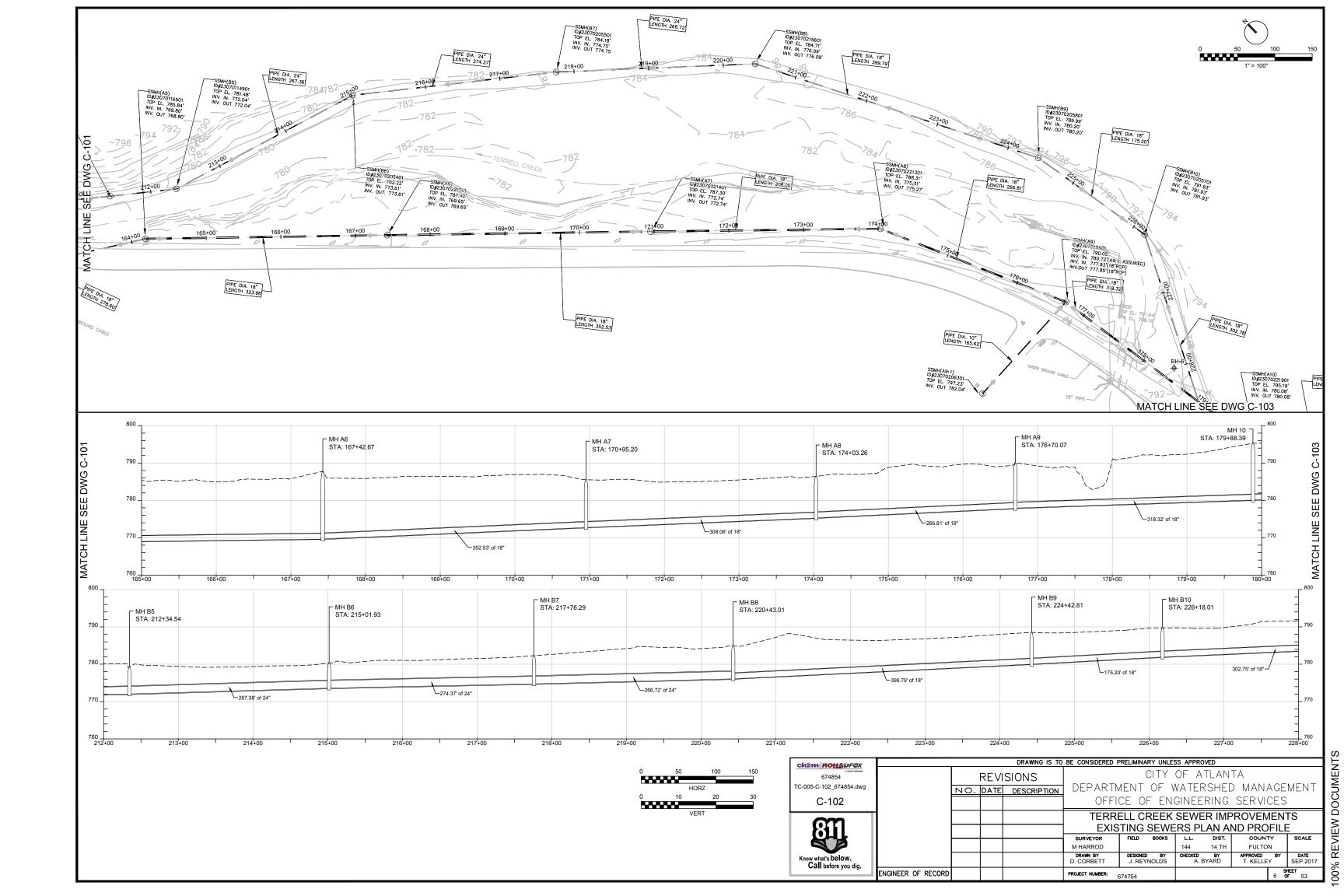
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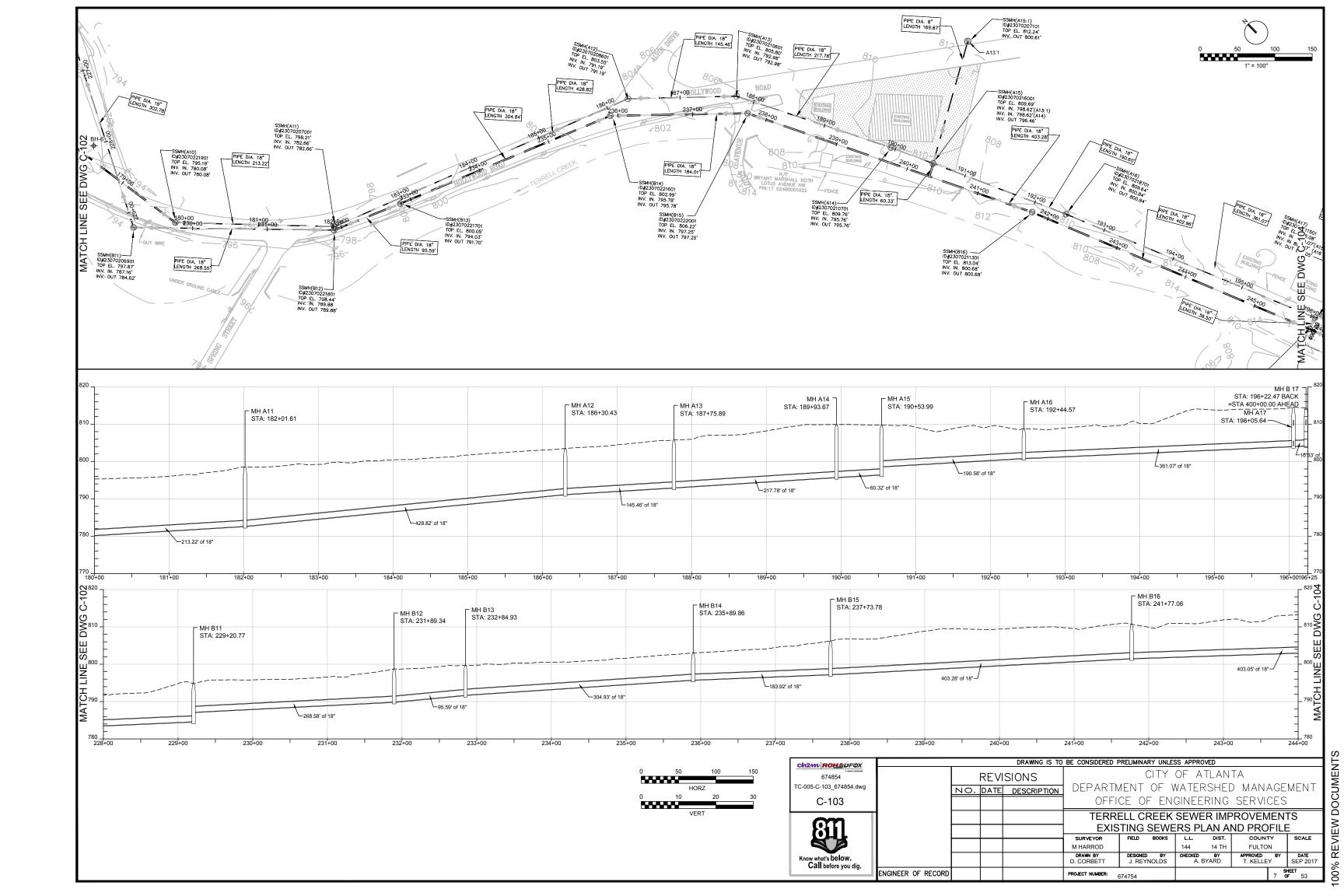


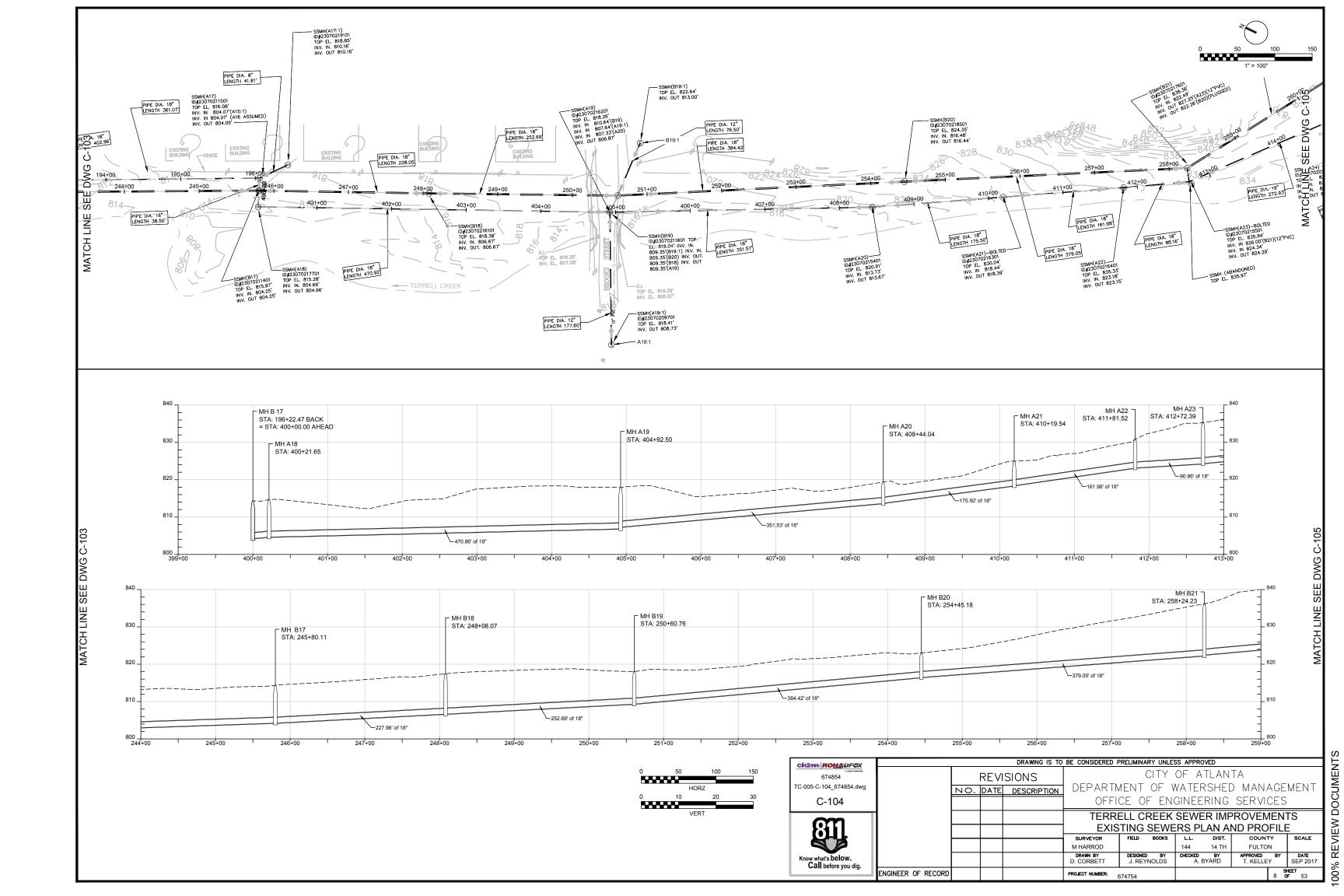
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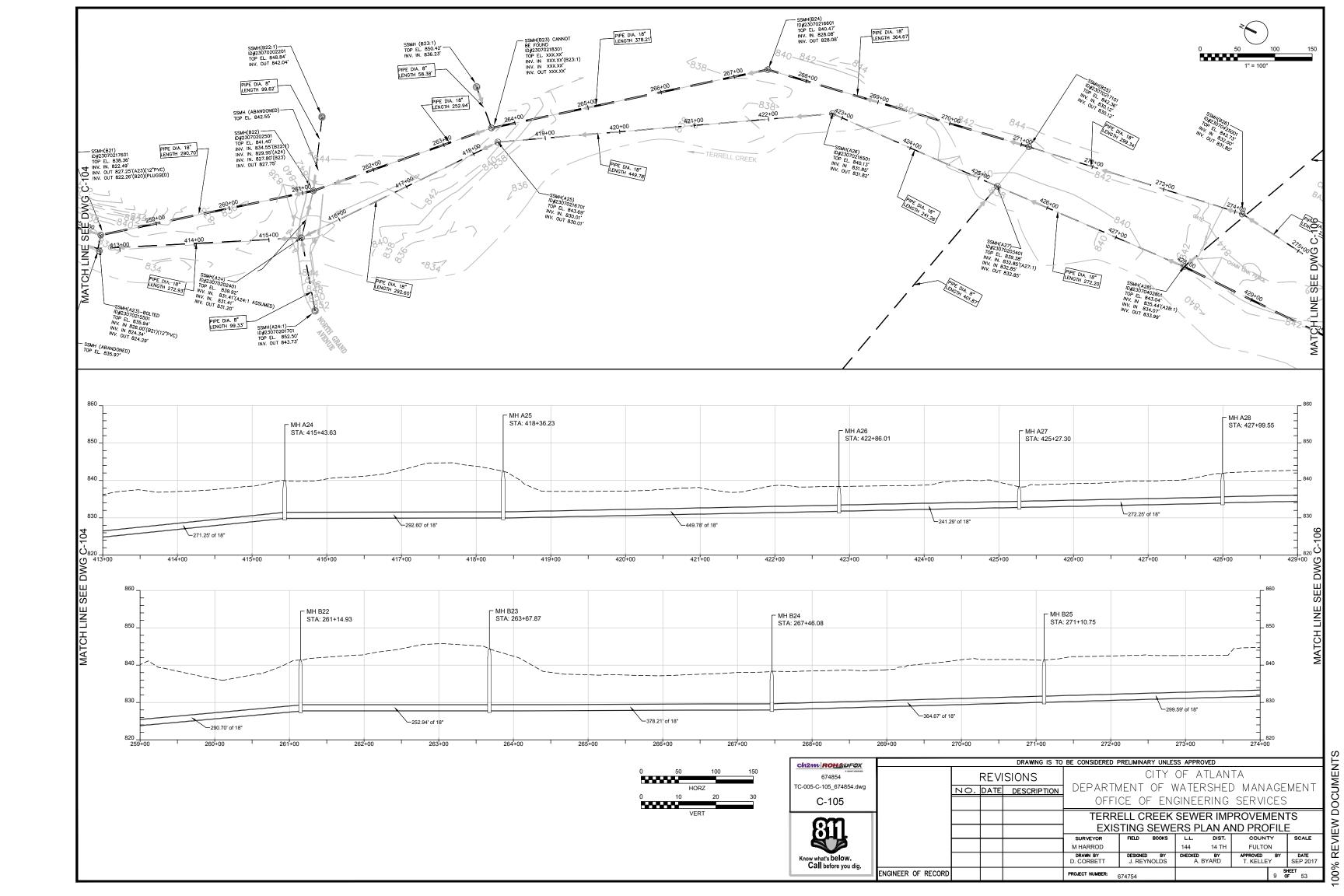


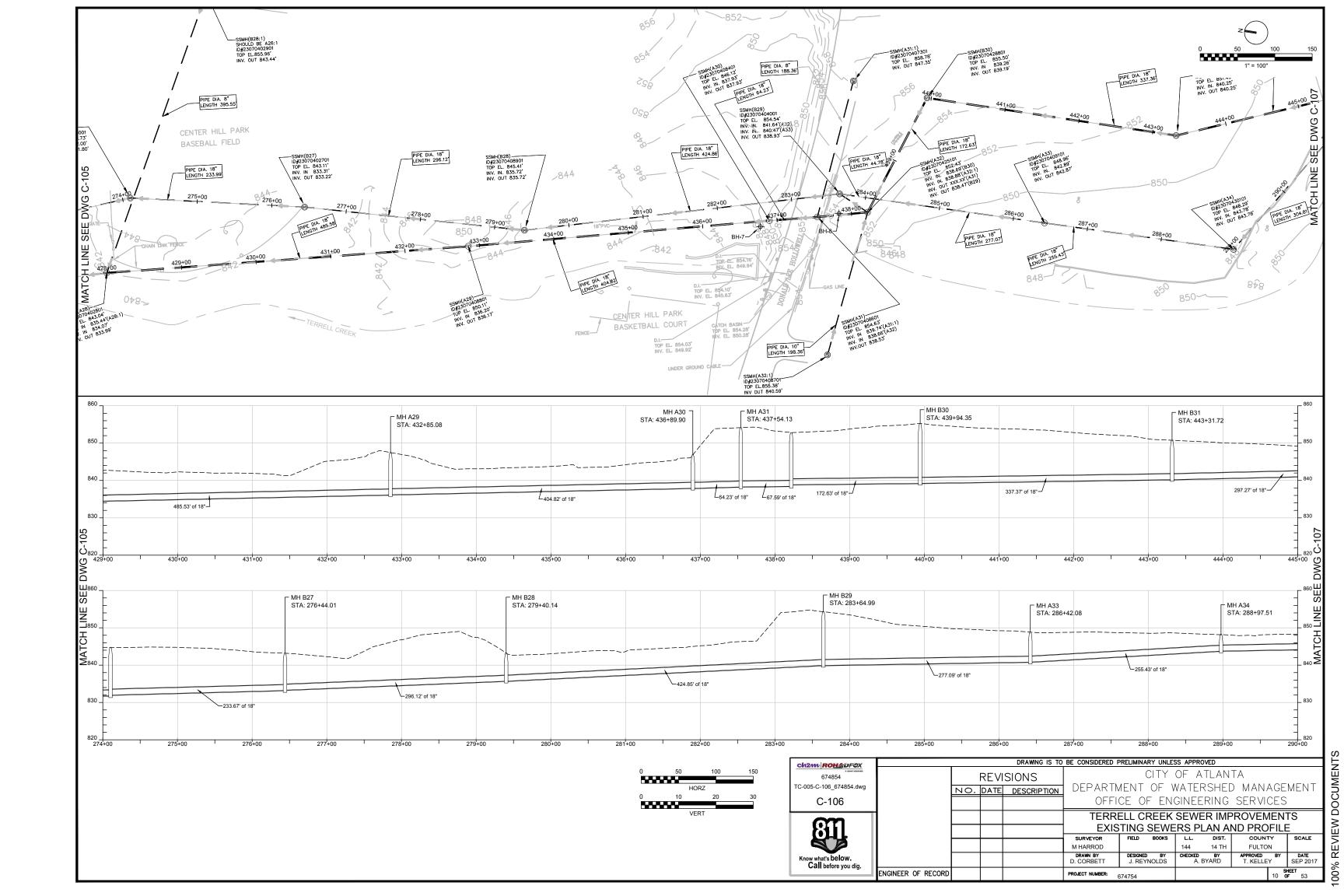


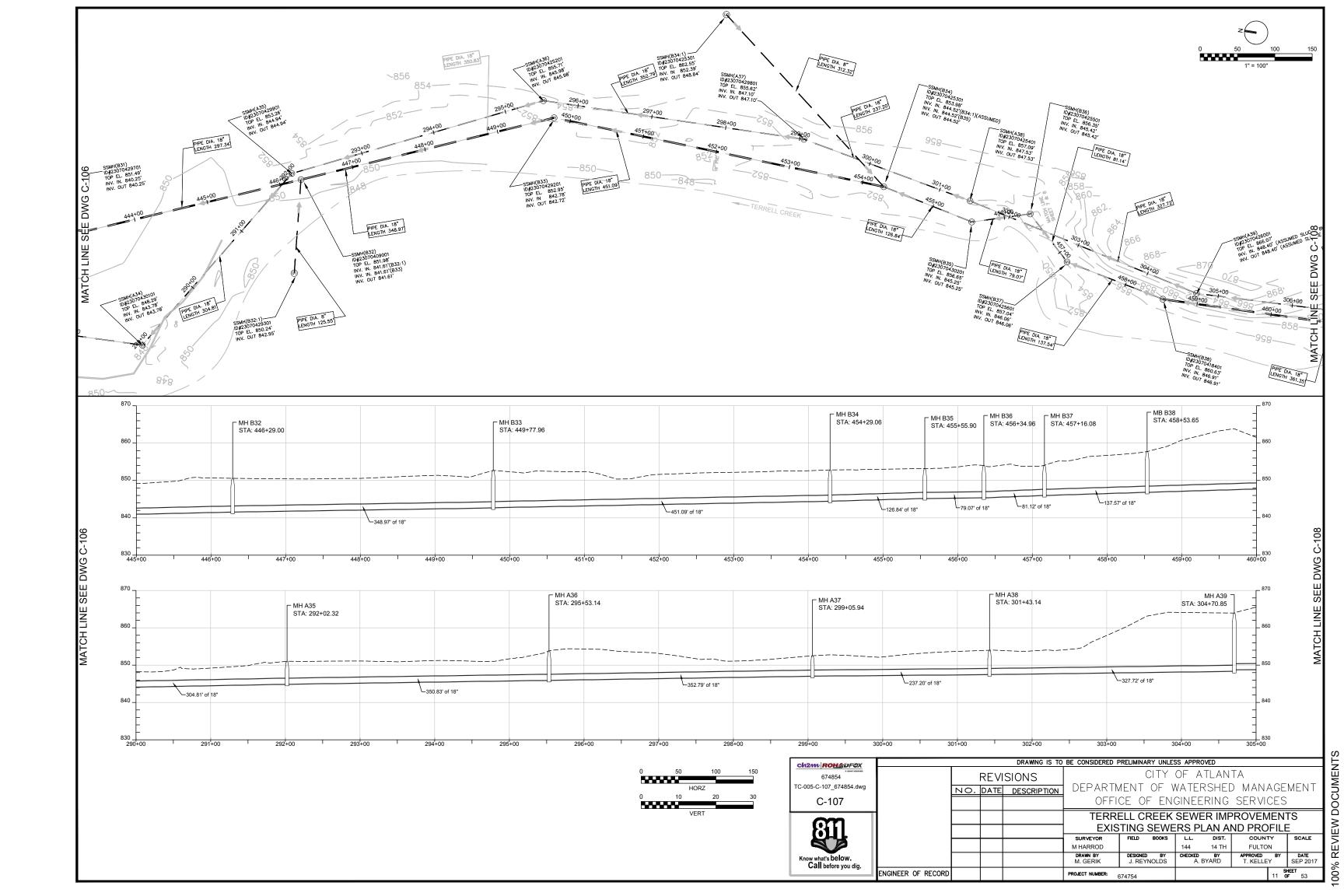


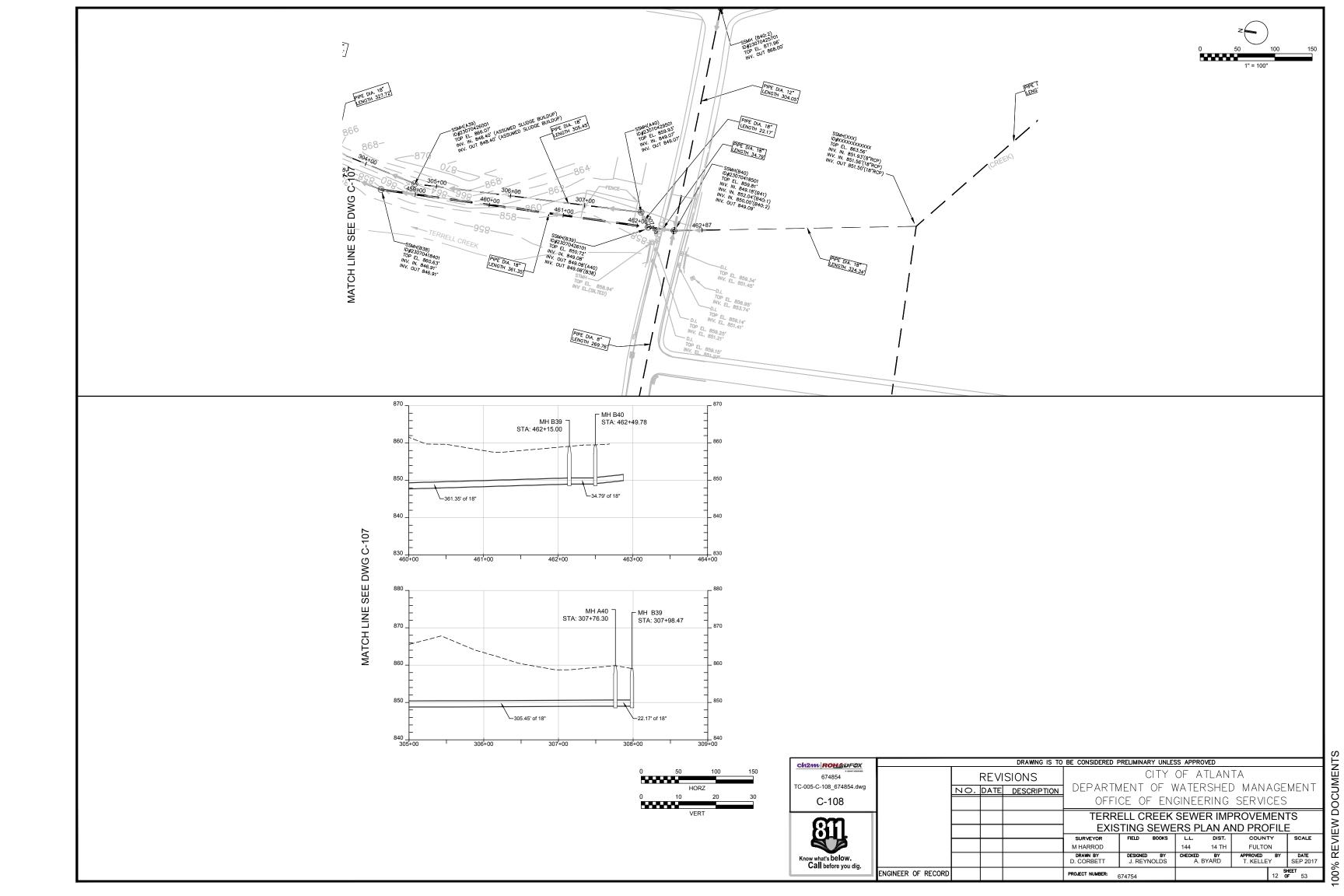


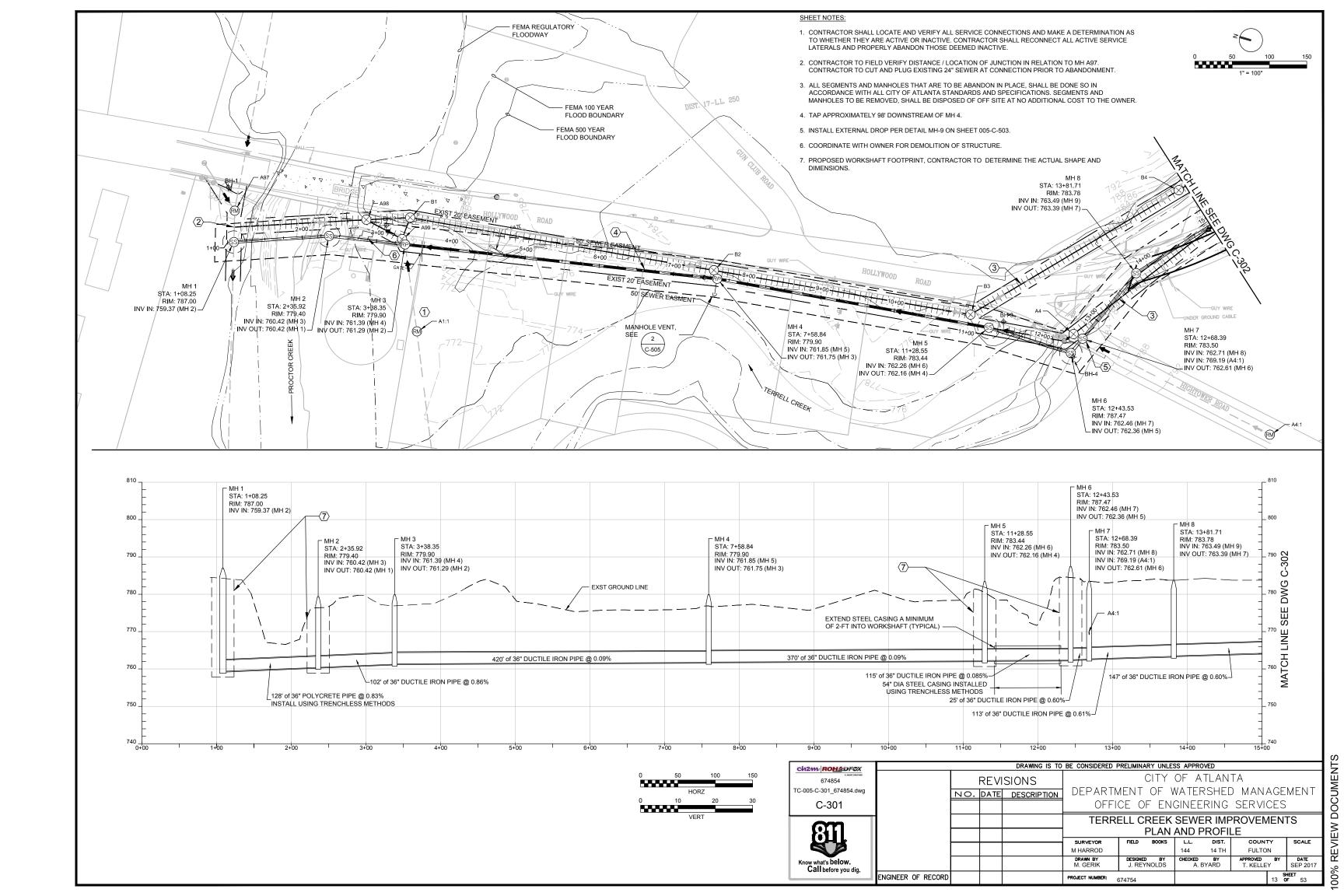








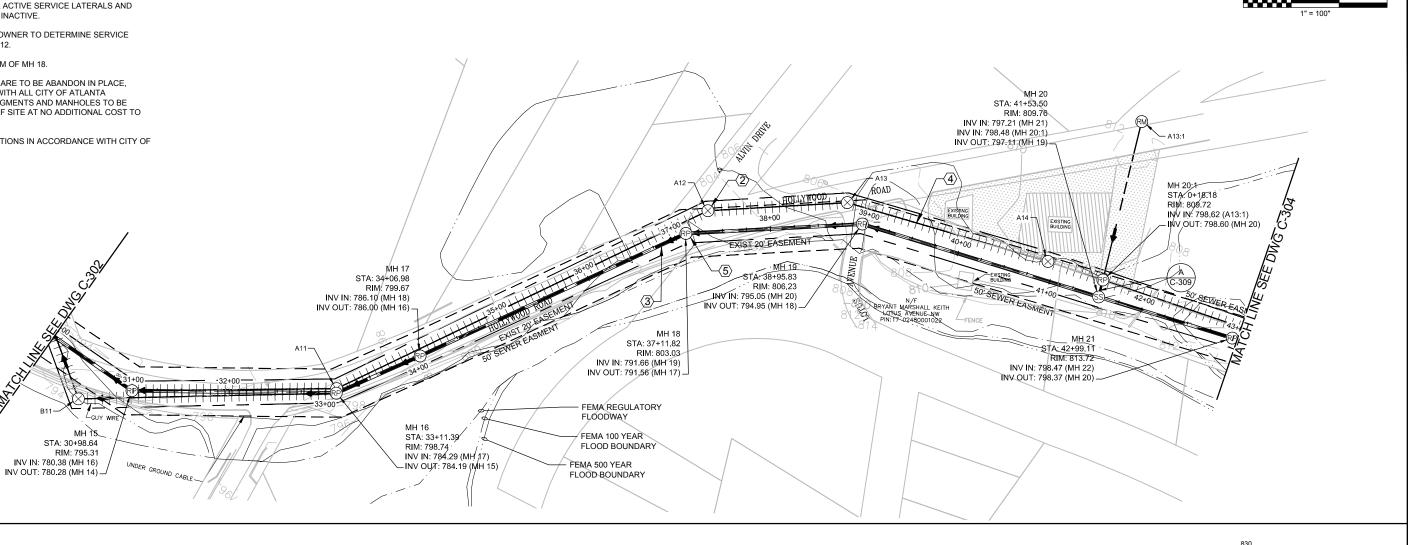


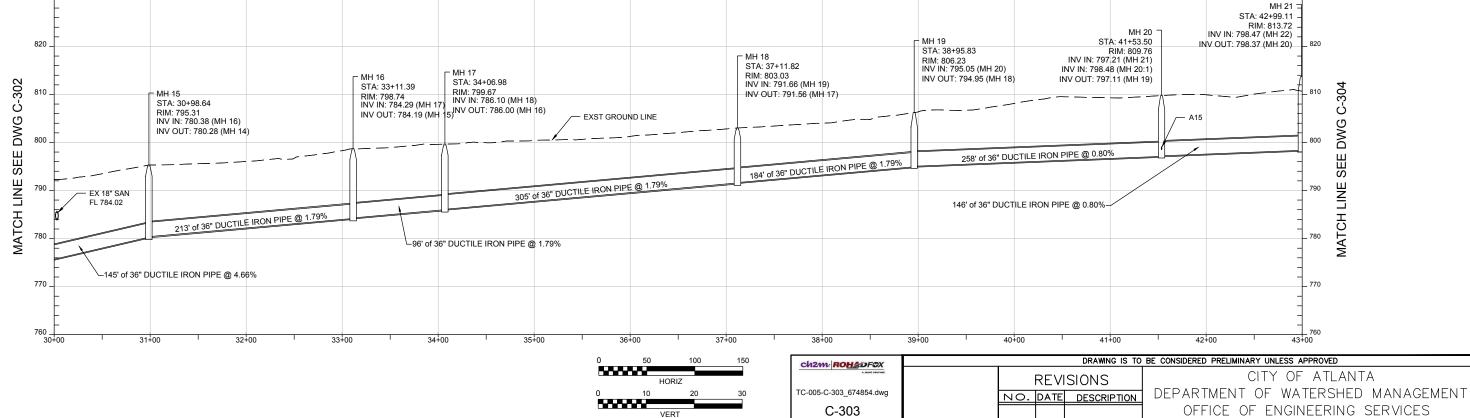


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SHEET NOTES: 1. CONTRACTOR SHALL LOCATE AND VERIFY ALL SERVICE CONNECTIONS AND MAKE A DETERMINATION AS TO WHETHER THEY ARE ACTIVE OR INACTIVE. CONTRACTOR SHALL RECONNECT ALL ACTIVE SERVICE LATERALS AND PROPERLY ABANDON THOSE DEEMED INACTIVE. 2. CONTRACTOR TO COORDINATE WITH OWNER TO DETERMINE SERVICE STATUS OF 8"-10" SEWER LINE IN MH A12. 3. TAP APPROXIMATELY 43' DOWNSTREAM OF MH 18. 4. ALL SEGMENTS AND MANHOLES THAT ARE TO BE ABANDON IN PLACE, SHALL BE DONE SO IN ACCORDANCE WITH ALL CITY OF ATLANTA STANDARDS AND SPECIFICATIONS. SEGMENTS AND MANHOLES TO BE REMOVED, SHALL BE DISPOSED OF OFF SITE AT NO ADDITIONAL COST TO 5. INSTALL ALL INTERNAL DROP CONNECTIONS IN ACCORDANCE WITH CITY OF ATLANTA SPECIFICATION 02730.

830





DOCUME REVIEW DATE SEP 2017

SCALE

TERRELL CREEK SEWER IMPROVEMENTS

PLAN AND PROFILE

CHECKED BY A. BYARD

144

DESIGNED BY J. REYNOLDS

674754

M HARROD

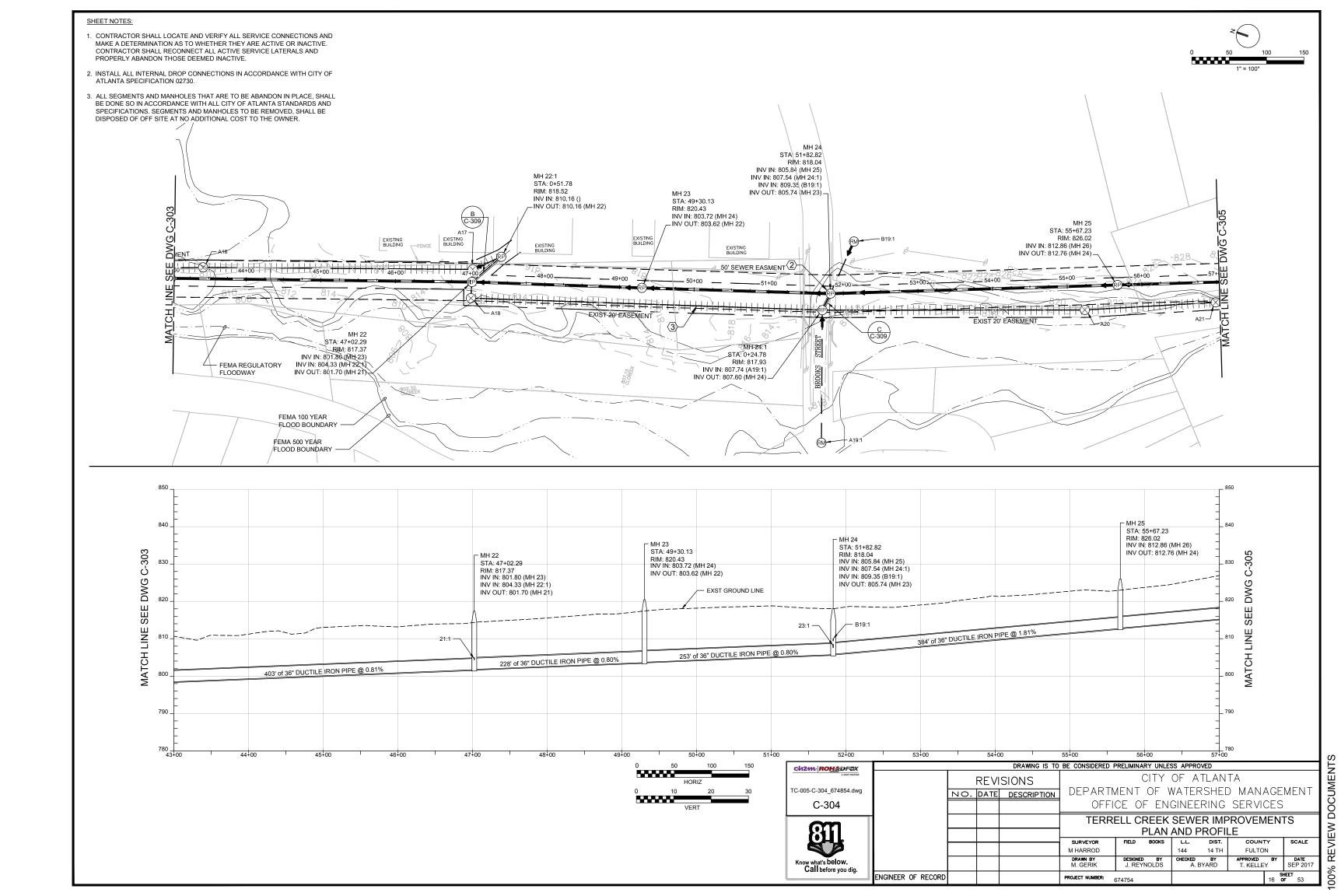
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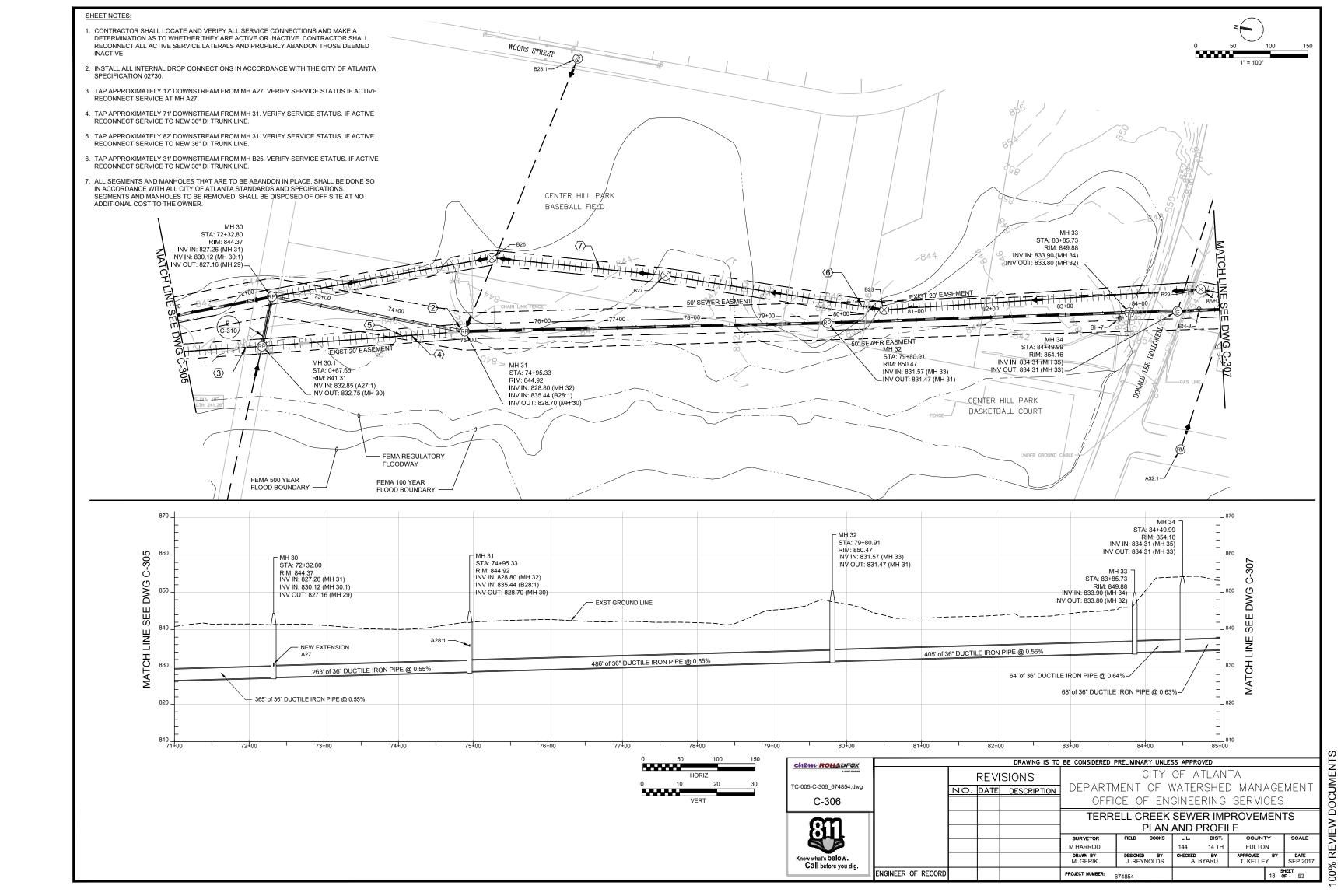
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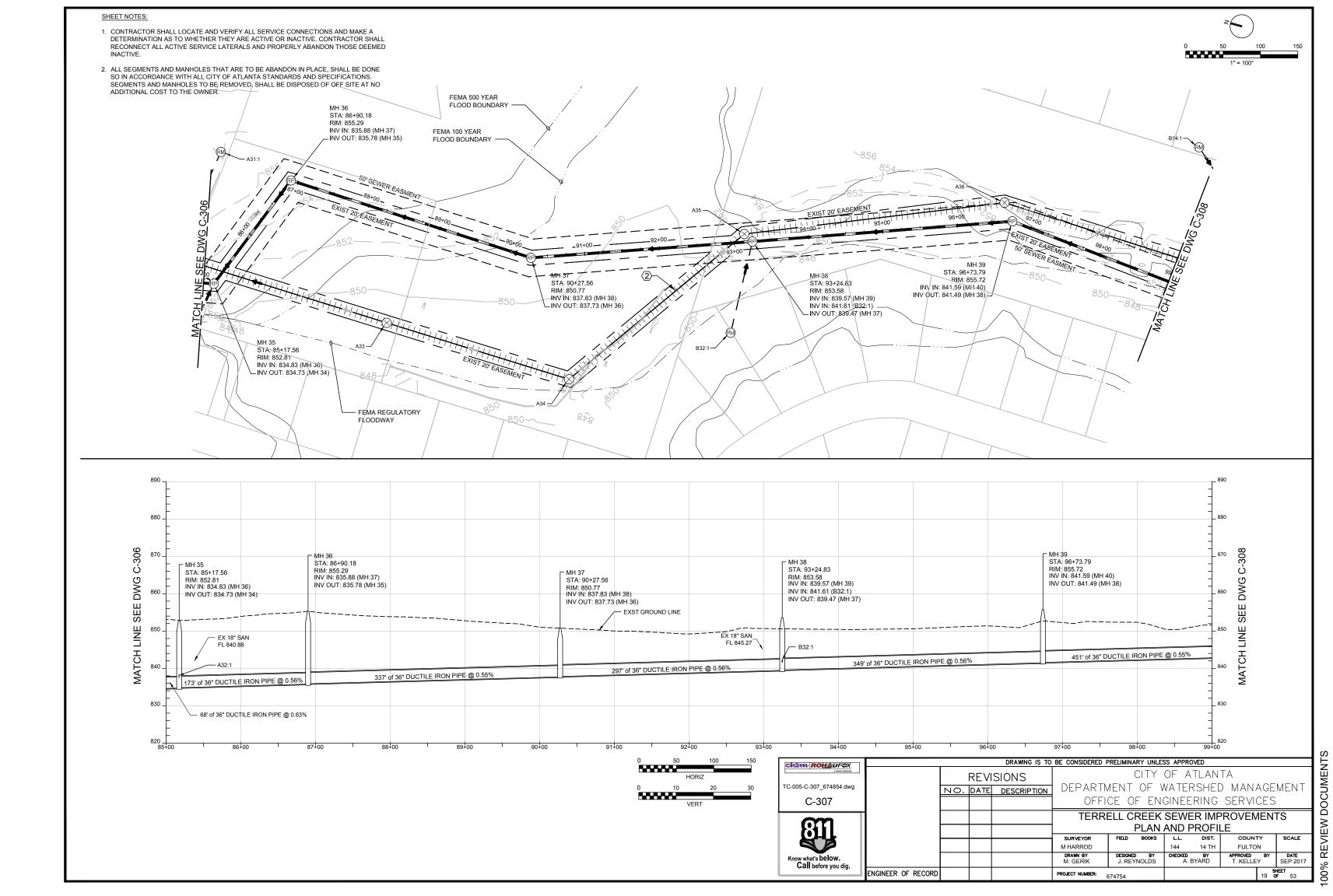
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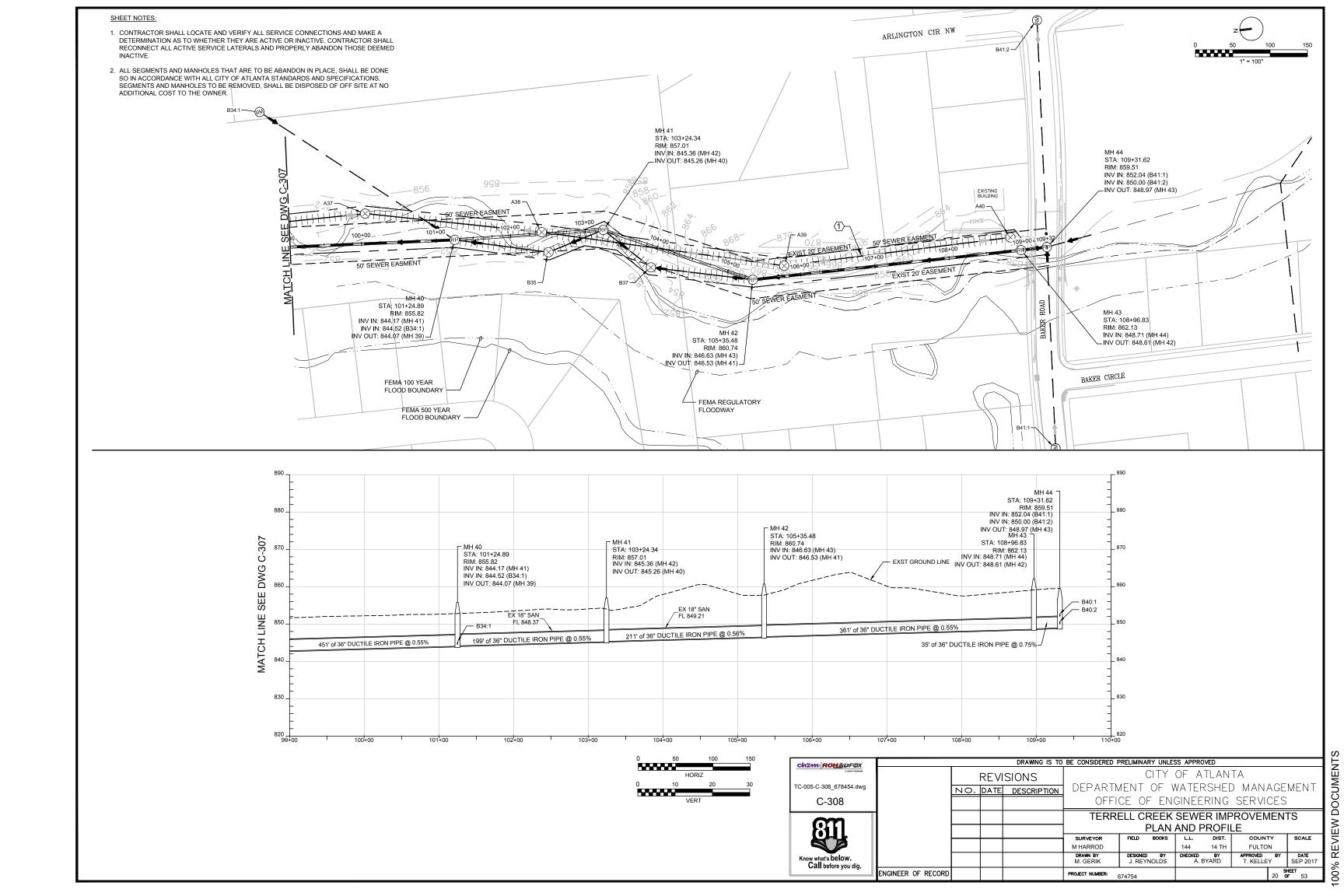
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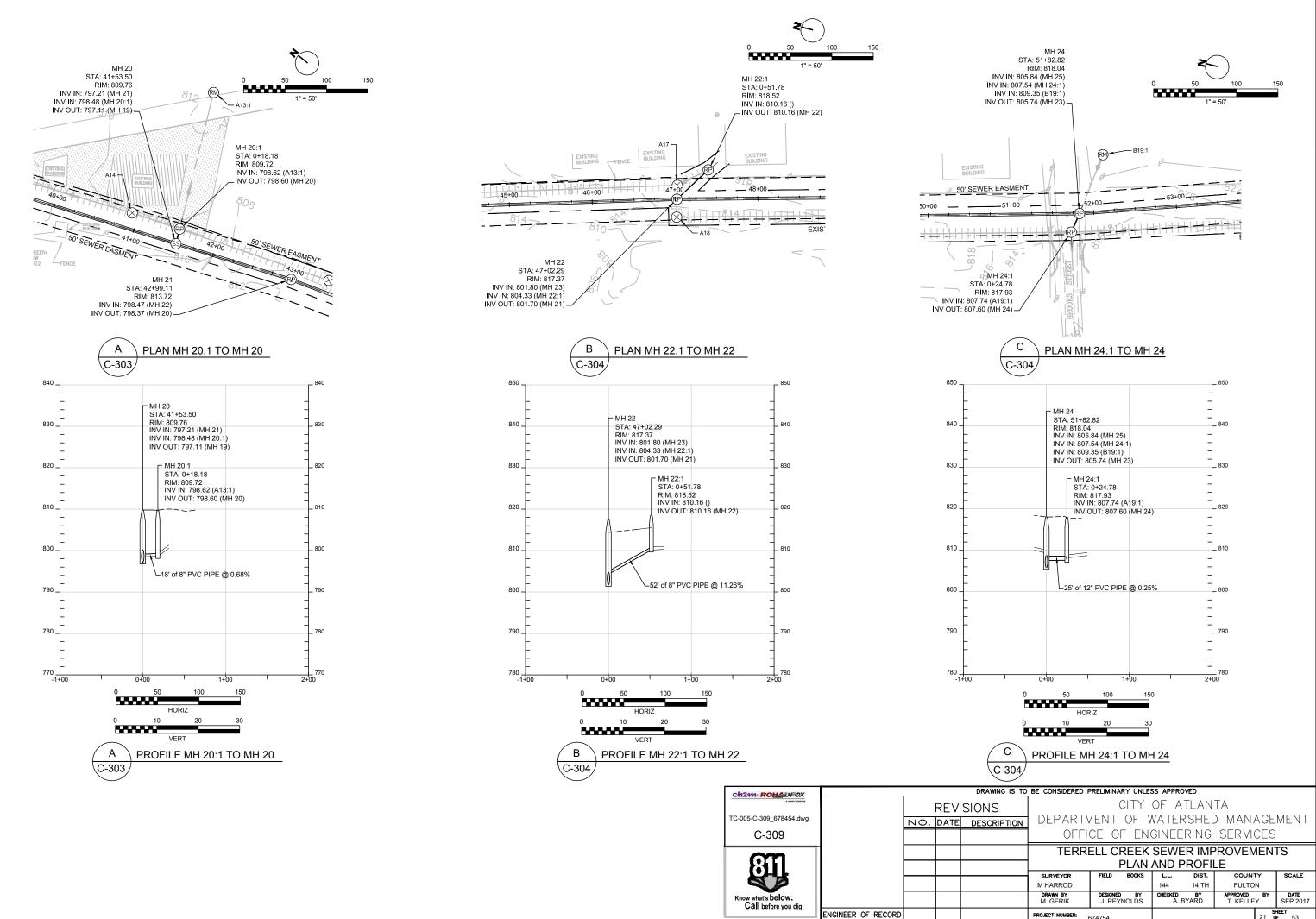
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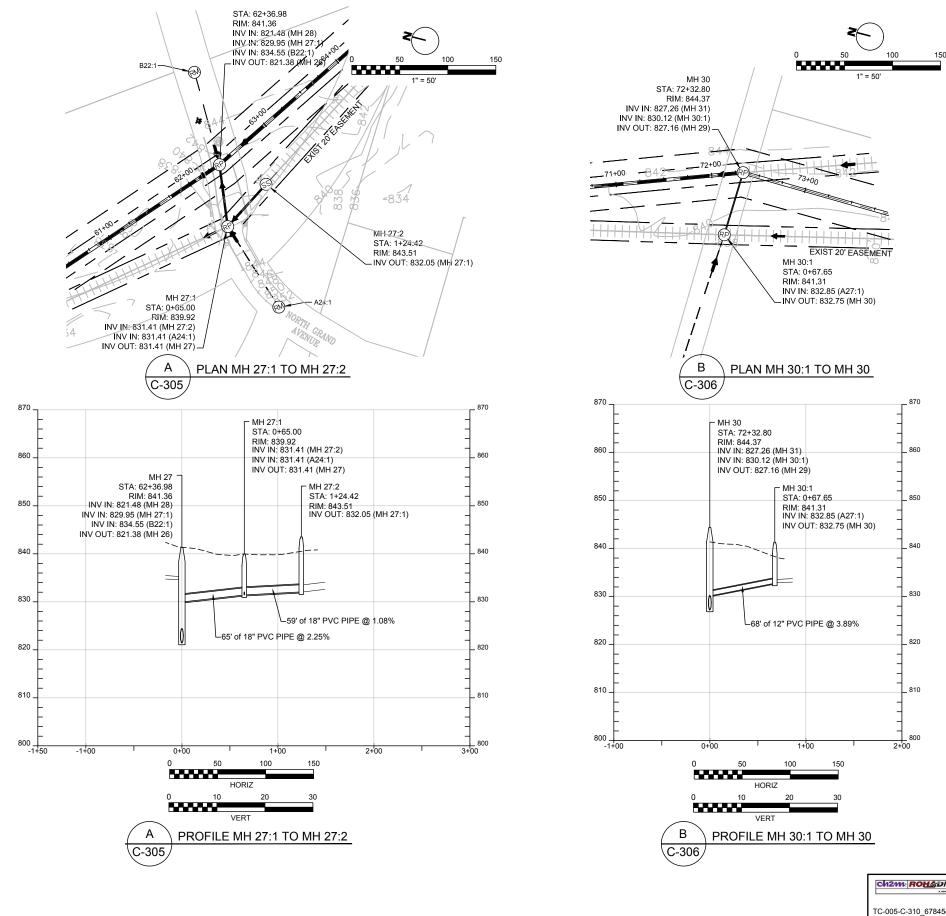






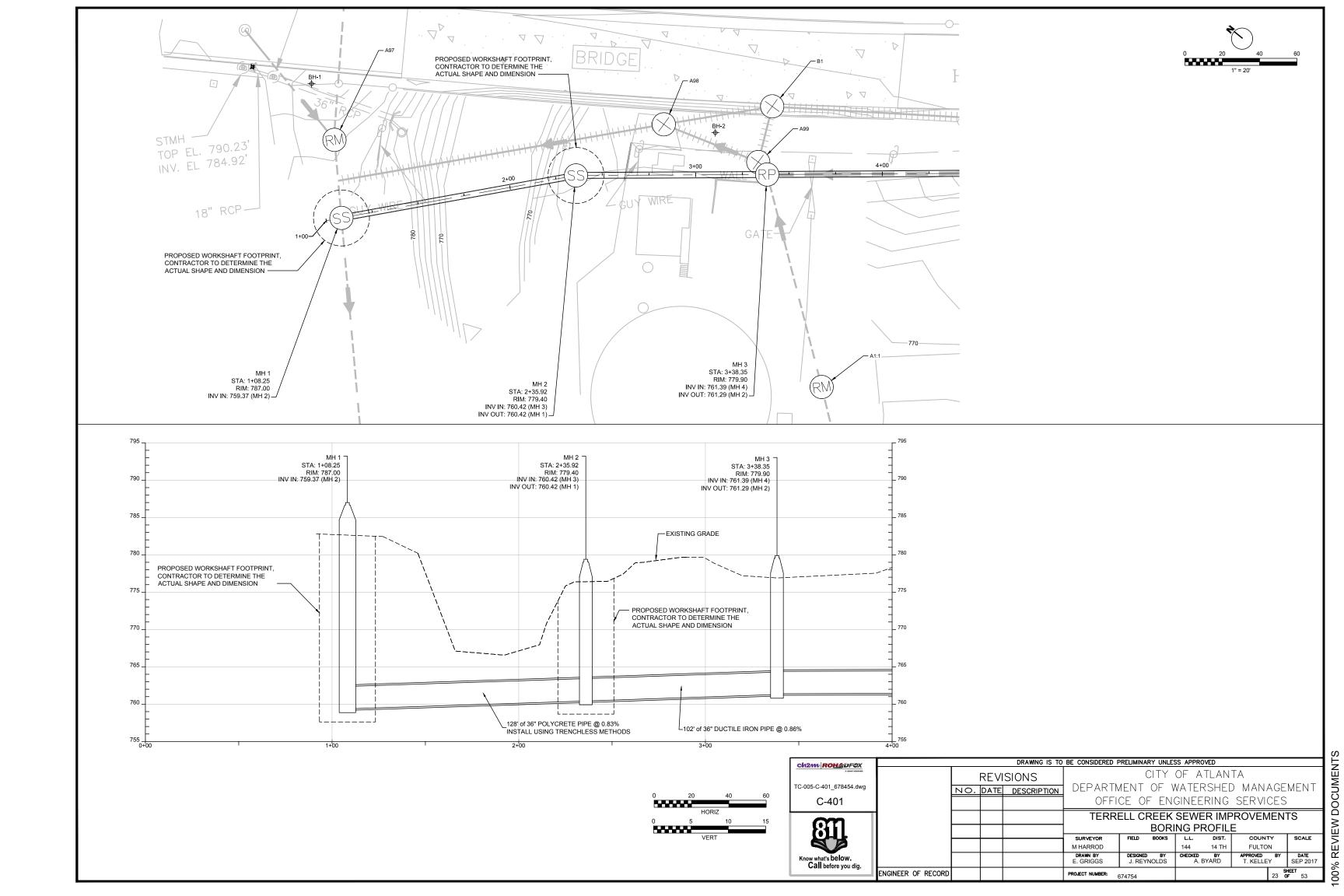


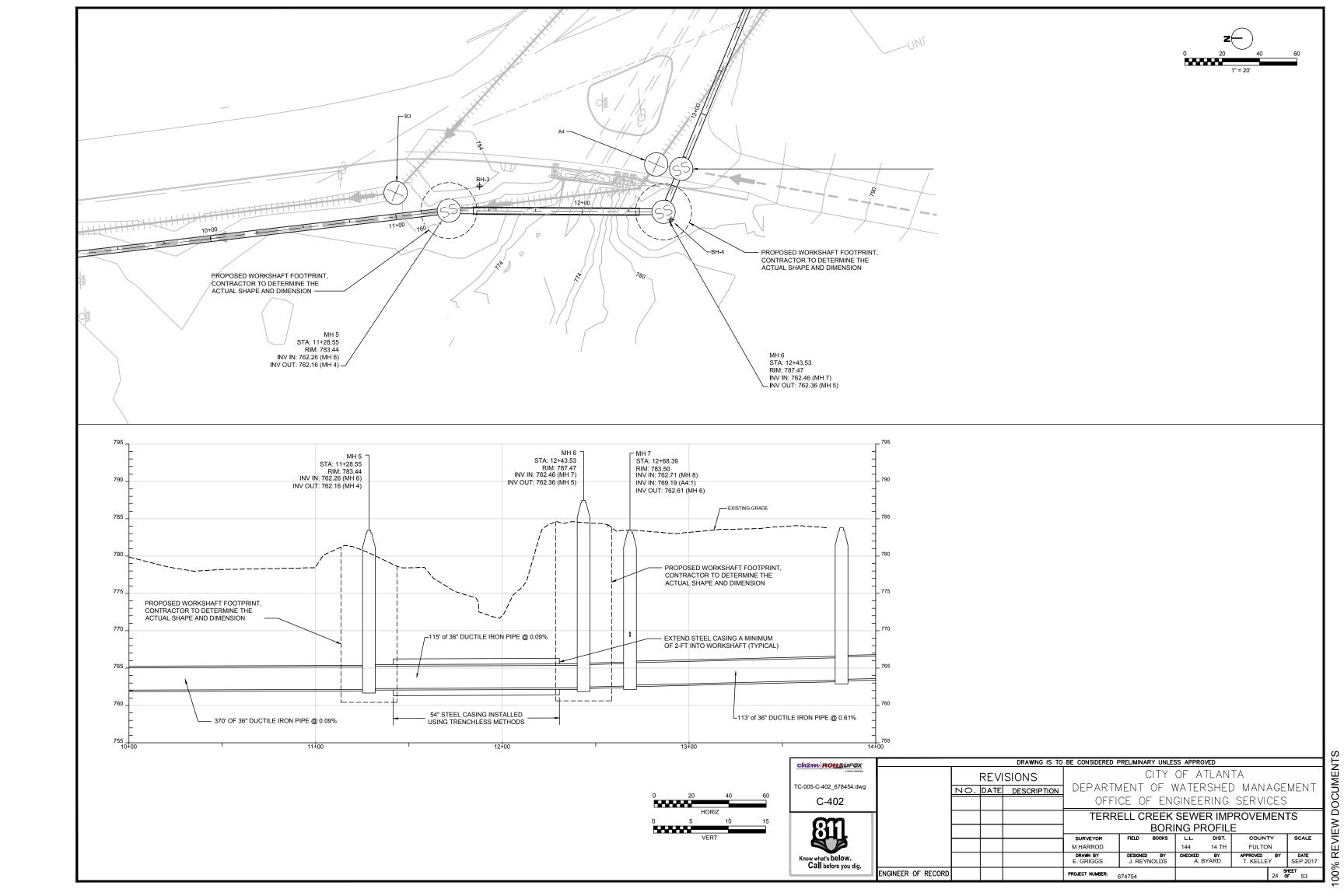
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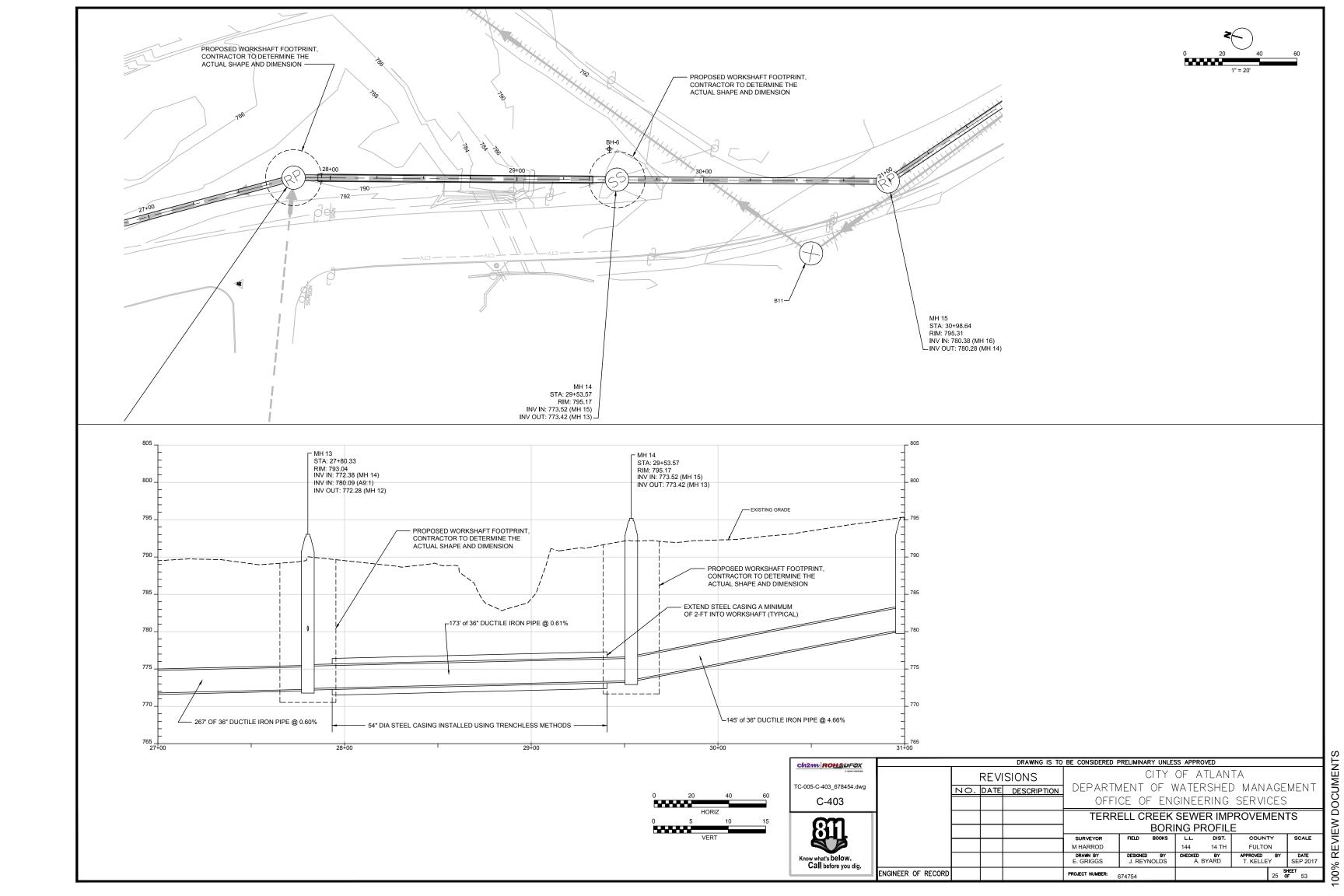


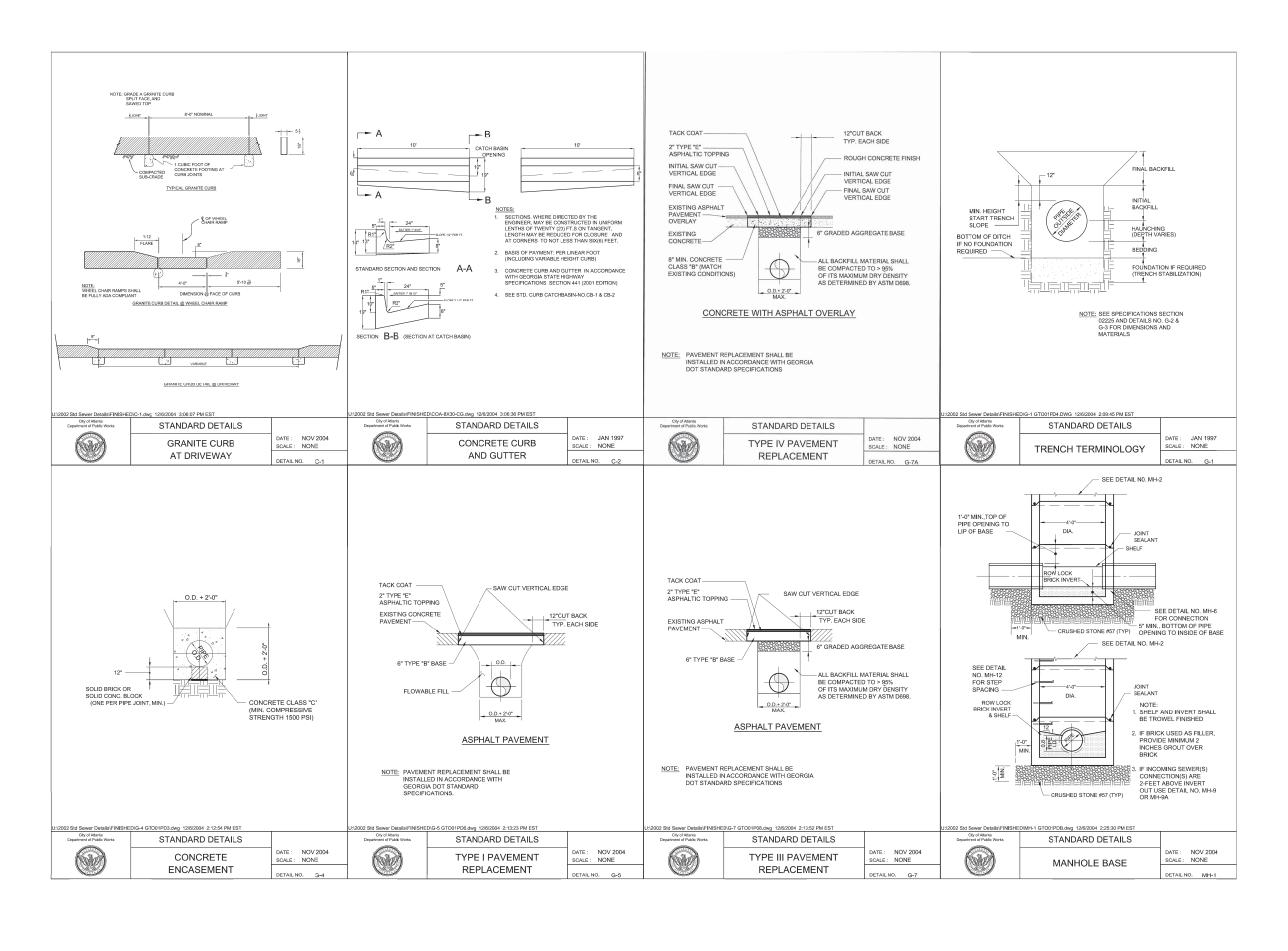
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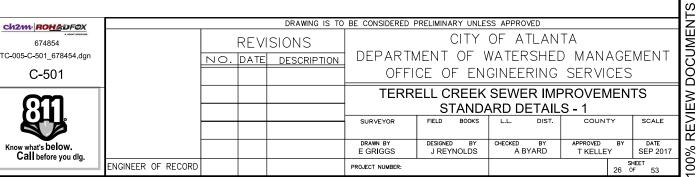
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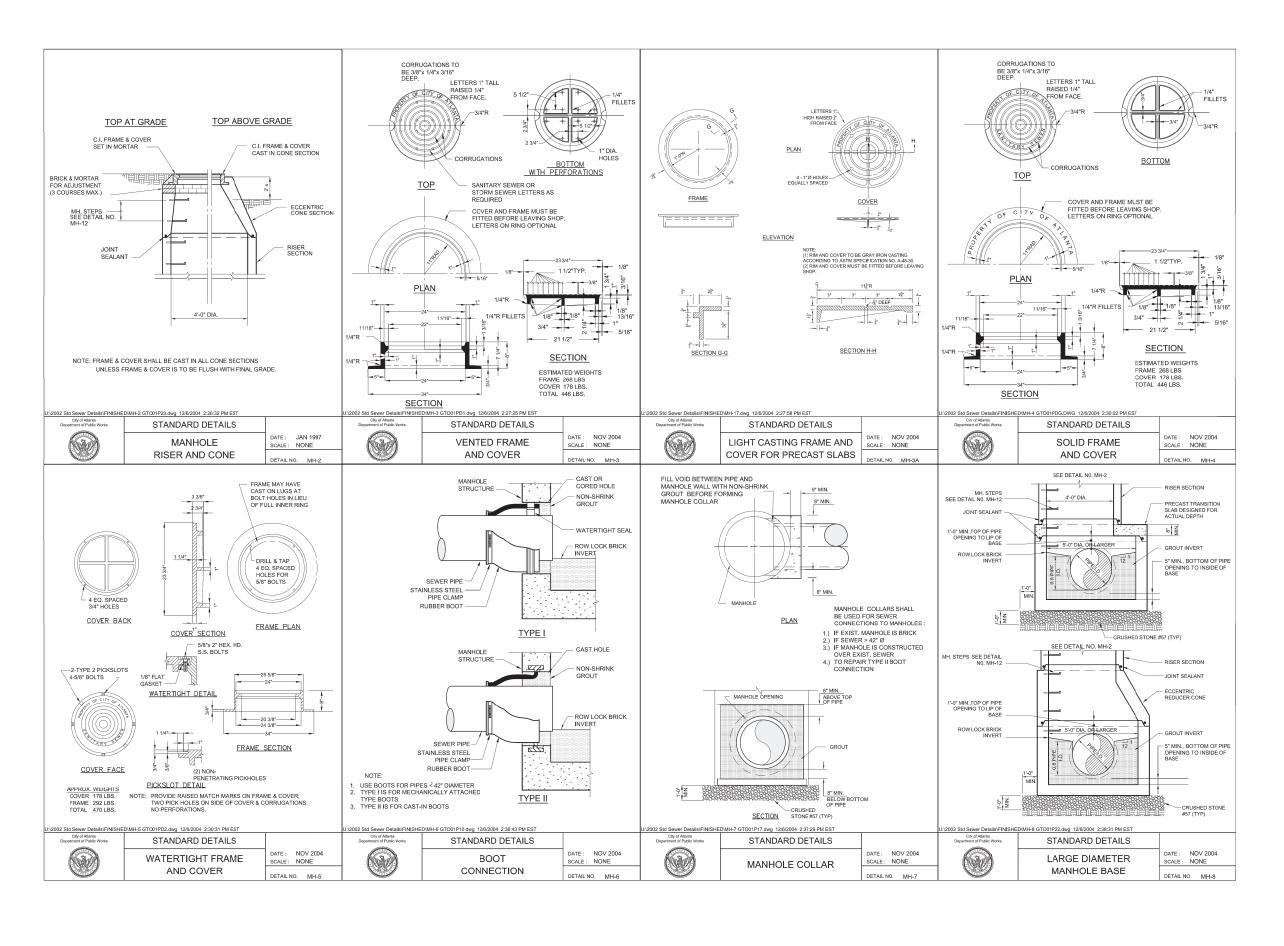




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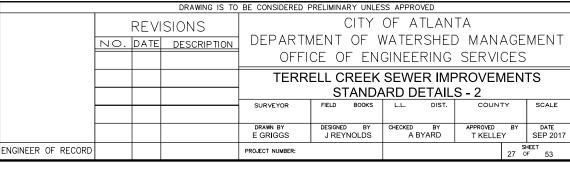
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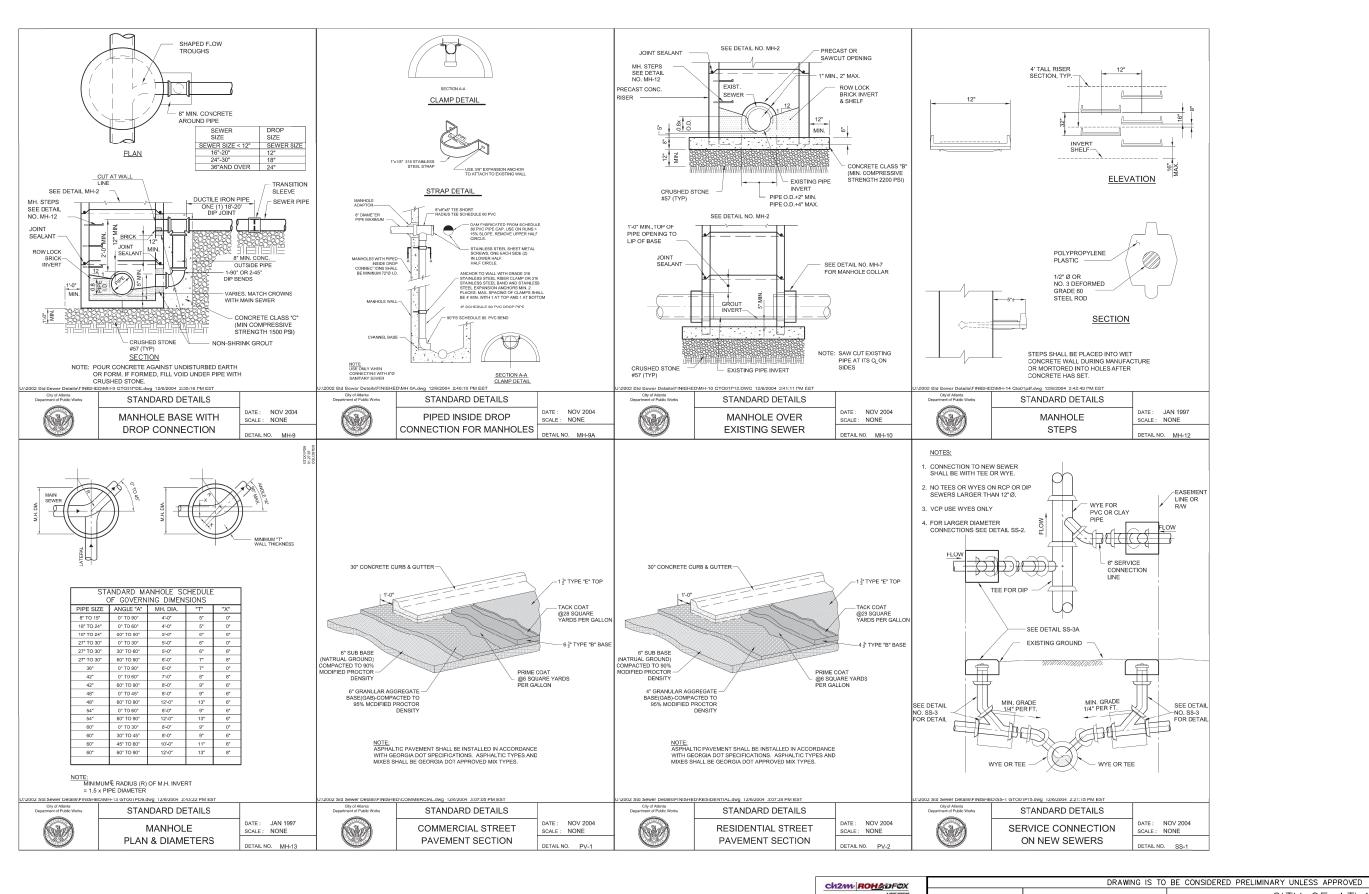
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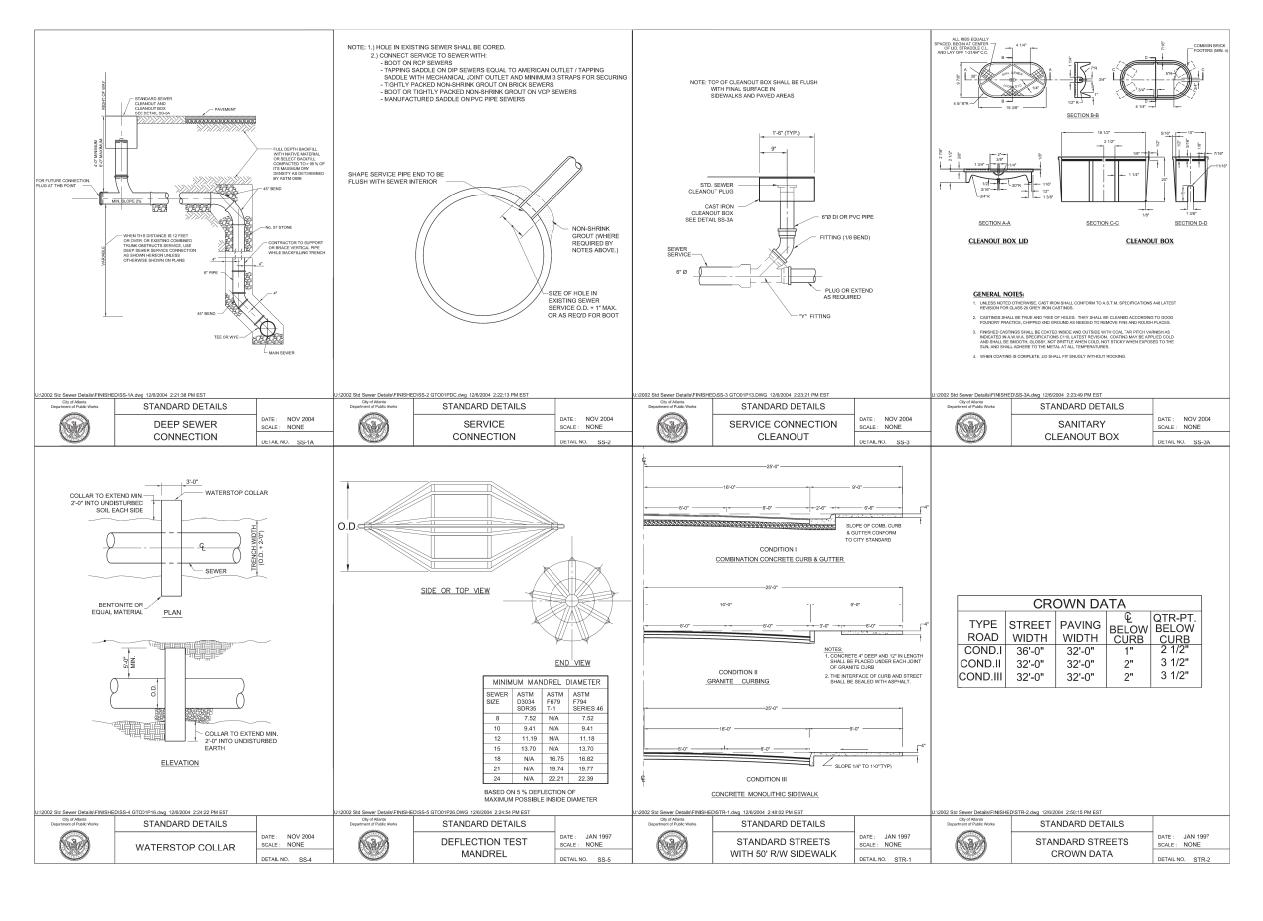
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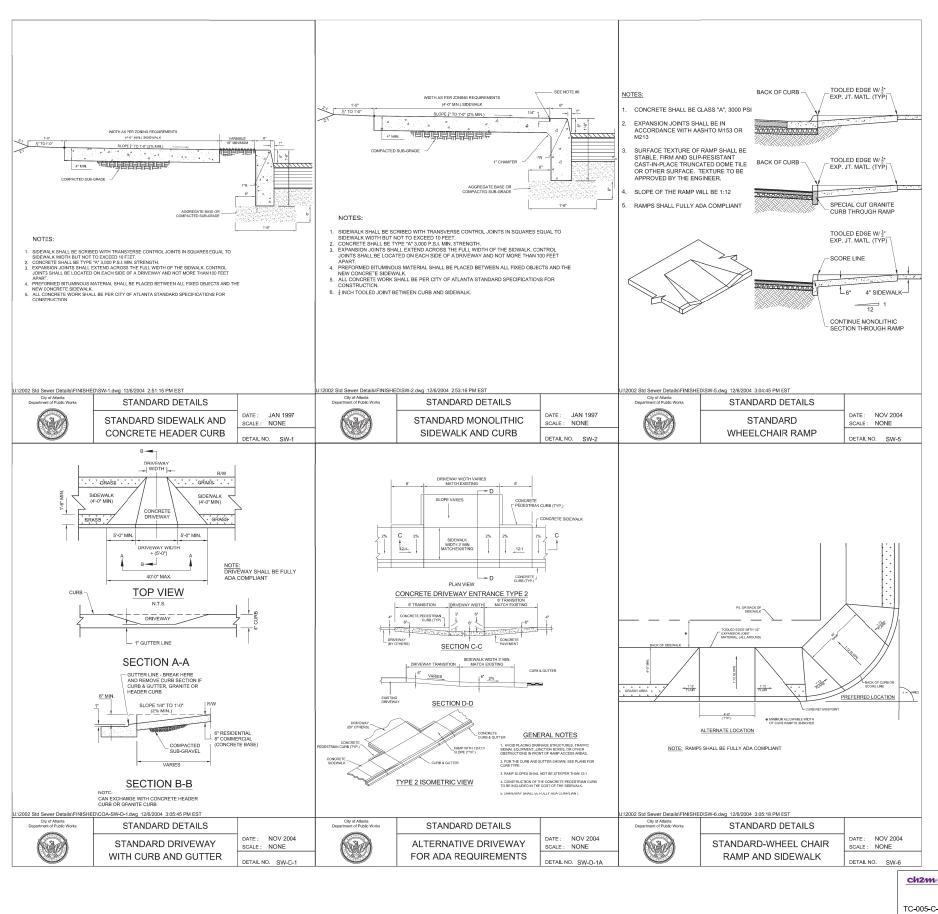
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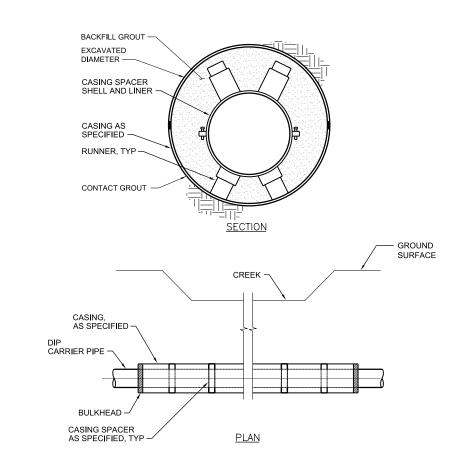
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REVISIONS DEPARTMENT OF WATERSHED MANAGEMENT NO. DATE DESCRIPTION OFFICE OF ENGINEERING SERVICES TERRELL CREEK SEWER IMPROVEMENTS SURVEYOR FIELD BOOKS JREYNOLDS E GRIGGS ENGINEER OF RECORD PROJECT NUMBER:

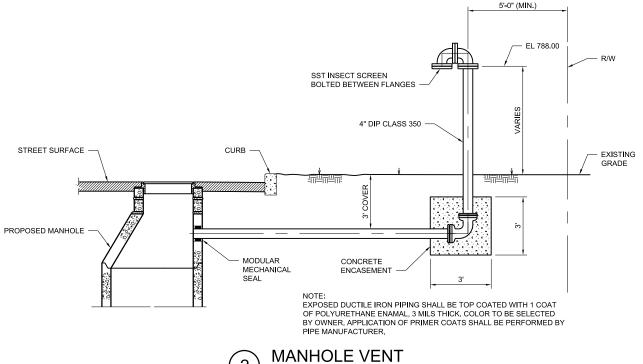


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CERTIFICATION STATEMENTS

DESIGN PROFESSIONAL

1. I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT. LINDER MY SUPERVISION.

I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002.

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STEAMS AND OTHER WATER BODIES, OR (B) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODIES, ON (B) WHERE ANY 300H SPECIFIC IDENTIFIED FEREINIAL OR INTERMITTENT SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO. GAR 100002, THAT T INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING

4. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.

NAME: CHRISTOPHER S. HAMBLEN, P.E.

GEORGIA REGISTERED ENGINEER NO: 038034

LEVEL II CERTIFIED DESIGN PROFESSIONAL NO: 0000069253

PRIMARY PERMITTEE

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND. BELIEF, TRUE. ACCURATE. AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

NAME: REGINALD CRAYTON

COMPANY: CITY OF ATLANTA, DEPARTMENT OF WATERSHED MANAGMENT

ADDRESS: 72 MARIETTA STREET NW CITY/ST/ZIP: ATLANTA, GA 30303

PHONE: (404) 798-5612

PROJECT INFORMATION

24-HOUR CONTACT
NAME: REGINALD CRAYTON
PHONE NUMBER: (404) 798-5612 **√** 3 1.

GPS LOCATIONS OF PROJECT (WGS84) BEGINNING: (33.77026556360, -84.45749342030) END: (33.79610368460, -84.46992767000)

4 5 3. AREAS: PROJECT AREA: ANTICIPATED AREA TO BE DISTURBED: INITIAL PHASE 9.5 ACRES
CONSTRUCTION (INTERMEDIATE PHASE) 9.5 ACRES

PROJECT DESCRIPTION:
TERRELL CREEK IS A SANITARY SEWER REHABILITATION PROJECT IN ATLANTA, GA THAT IS INTENDED TO RELIEF
SURCHARGING IN THE EXISTING SEWER LINES, WHICH CONSISTS OF TWO 18-INCH LINES. THIS WILL BE ACCOMPLISHED BY
REPLACING AND PARTIALLY REALIGNING THE EXISTING SEWER ALIGNMENT WITH APPROXIMATELY 10,830 LF OF 36-INCH
DUCTILE IRON PIPE, 43 MAINLINE MANHOLES, AND SEVERAL CONNECTING SEWER MAIN COMPONENTS. THE PROJECT IS
LOCATED IN BOTH PUBLIC RIGHT-OF-WAY AND SEWER EASEMENTS, BEGINNING AT THE MOST UPSTREAM MANHOLE IN BAKER
ROAD, AND FOLLOWS TERRELL CREEK TO ITS CONFLUENCE AT PROCTOR CREEK WHERE IT JOINS AN EXISTING 54-INCH
CONCRETE TRUNK SEWER LINE. THE 36-INCH SEWER TRUNK LINE WILL BE INSTALLED USING A TRENCH OR OPEN CUT METHOD
FOR THE FULL LENGTH, EXCEPT FOR APPROXIMATELY 400 LF, WHICH WILL BE INSTALLED USING A TRENCH OR OPEN CUT METHOD
CROSS UNDER CREEKS AND DONALD LEE HOWELL PKWY. INCLUDED IN THIS PROJECT IS THE ABANDONMENT OF THE TWO
EXISTING SEWER LINES AND ALL THEIR COMPONENTS THAT WILL NO LONGER BE IN USE AFTER THE NEW SEWER IS PUT IN
SERVICE. THIS INCLUDES, BUT IS NOT LIMITED TO, APPROXIMATELY 100 MANHOLES, 22,000 LF OF 18-INCH OR 24-INCH SANITARY
SEWER TRUNK LINE, AND ANY CONNECTED COMPONENTS.

SEWER TRUNK LINE, AND ANY CONNECTED COMPONENTS ✓ 10 4. RECEIVING WATERS ECCIVING WAITERS THE RECEIVING WATERS OF THIS PROJECT ARE TERRELL CREEK AND PROCTOR CREEK, WHICH ARE A PART OF THE UPPER 1 HE RECEIVING WATERS OF THIS PROJECT ARE TERRELL CREEK AND PROCTOR CREEK, WHICH ARE A PART OF THE OPPER CHATTAHOCHEE WATERSHED (HUC-03130001).

 TERRELL CREEK IS NOT AN IMPAIRED STREAM SEGMENT AS DEFINED IN THE GEORGIA EPD 305(B)/303(D) LIST. STORMWATER DISCHARGES FROM THIS PROJECT DO NOT DISCHARGE INTO AN IMPAIRED STREAM SEGMENT.

 ATMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS NOT BEEN DEVELOPED FOR TERRELL CREEK.

 PPOCTOR CREEK IS AN IMPAIRED STREAM SEGMENT AS DEFINED IN THE GEORGIA EPD 305(B)/303(D) LIST. A TMOL IMPLEMENTATION PLAN FOR FECAL COLLEGRIM WAS DEVELOPED FOR PROCTOR CREEK IN 2003, REVISED 2008.

• A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS NOT BEEN DEVELOPED FOR PROCTOR CREEK.

BASE FLOOD INFORMATION:

. SEPTEMBER 18.2013

SOILS TYPE:
AS PER NRCS SOIL DATA MART, SOIL TYPES FOR THIS PROJECT ARE DELINEATED ON SHEETS CE-201 THROUGH CE-208. SOIL TYPE LEGEND, WITH DESCRIPTIONS, IS PROVIDED ON SHEET CE-231.

WETLANDS THE PRESENCE OF ON-SITE WETLANDS HAS BEEN INVESTIGATED AND IT WAS DETERMINED THAT THERE ARE WETLANDS PRESENT WITHIN THE PROJECT AREA. CH2M DELINEATED WETLANDS ARE SHOWN ON SHEETS C-206 THROUGH C-208.

STATE WATERS
ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE HAVE BEEN IDENTIFIED AND WILL BE PROTECTED BY ASSOCIATED STATE AND COUNTY PROTECTION REGULATIONS AND BUFFERS. PLEASE REFER TO SHEETS CE-201 THROUGH CE-208 FOR STATE WATERS OVERVIEW.

BUFFERING REQUIREMENTS:
AN UNDISTURBED NATURAL VEGETATIVE BUFFER OF 75 FEET MEASURED FROM THE POINT OF WRESTED VEGETATION ALONG STREAM BANKS AND 25 FEET FROM THE POINT OF WRESTED VEGETATION ALONG BODIES OF WATER (PONDS, LAKES). **4**1 9.

10. RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOWS OF THE SITE PRIOR TOAND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED SHALL STAY THE SAME. THE PROPOSED WORK DOES NOT ALTER THE HYDROLOGY OF THE SITE.

THE TOPOGRAPHY OF THE SITE, AS WELL CONSTRUCTION TECHNIQUES, LIMITS THE LAND DISTURBANCE ACTIVITIES TO A NARROW AND NON-CONTINUOUS LINEAR AREAS. THIS ELIMINATES THE OPPORTUNITY TO USE A CENTRALIZED SEDIMENT STORAGE BMP TO ADEQUATELY TREAT SEDIMENT POLLUTION. TO MEET THE GOALS OF LIMITING SEDIMENT POLLUTION, THE SEDIMENT CONTROL PROGRAM WILL BE EXECUTED BY THE CONTRACTOR IN COORDINATION WITH LIMITING LAND DISTURBANCE.

GENERAL NOTES:

- ALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES AND ORANGE ALL PERIMETER EROSION AND SEMIMENT CONTROL DEVICES AND ORANGE BARRIER FENCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF SITE WORK AND REMAIN UNTIL COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE DAMAGED ITEMS. THE CONTRACTOR SHALL INSPECT FENCE DAILY AND AFTER EVERY RAIN EVENT. ACCUMULATED SILT SHALL BE REMOVED AS SOON AS PRACTICAL, BUT NO LATER THAN WHEN FENCE IS HALF FULL.
- EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- SOIL DISTURBING ACTIVITIES WILL INCLUDE: PLACEMENT OF EROSION AND SEDIMENT CONSTRUCTION, TRENCH
- 4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES INSTALLED IN GOOD WORKING
- EROSION, SEDIMENT AND POLLUTION CONTROL MEASURES SHALL BE PROVIDED AS SHOWN AND ARE THE MINIMUM REQUIRED, ADDITIONAL DEVICES MAY BE REQUIRED AS NECESSARY DURING CONSTRUCTION.
- 6. CONTRACTOR SHALL INSTALL AND ADD TO EROSION CONTROL MEASURES AS DETERMINED BY THE ENGINEER, OWNER
- PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM. IN CONFORMANCE WITH THE REQUIREMENTS OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, CURRENT EDITION. THIS DESIGN SHALL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THIS PUBLICATION
- CONSTRUCTION EXITS (Co) SHALL BE REQUIRED AT ALL LOCATIONS USED FOR INGRESS/EGRESS FROM THE CONSTRUCTION AREA. CONSTRUCTION MATERIAL STORAGE AREAS WILL REQUIRE THE INSTALLATION OF A CONSTRUCTION EXIT TO REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE AREA. SILT FENCE SHALL ALSO BE OR THE SILT FENCE SHALL REMAIN UNTIL THE AREA IS PERMANENTLY STABILIZED. AFTER DEMOBILIZATION, THE MATERIAL STORAGE AREA SHALL BE SEEDED AND MULCHED, AND INSTALLED TO PREVENT SEDIMENT FROM LEAVING THE MATERIAL STORAGE AREA.
- 9 CONSTRUCTION DEBRIS (INCLUDING CONCRETE WASHOUT) SHALL BE PROPERY DISPOSED OF OFESITE IN LICENSED. LANDFILLS OR LOCATIONS THAT ARE APPROVED BY FEDERAL, STATE, AND LOCAL AUTHORITIES. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- 10. NO BURN OR BURY PITS SHALL BE PERMITTED ON THE SITE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF THE SITE OWNER AND/OR THE ENGINEER OF RECORD
- 11. A TEMPORARY COVER OF HEAVY MULCH OR MULCH WITH TEMPORARY SEEDING SHALL BE PLACED ON ALL AREAS WHERE PERMANENT COVER CAN NOT BE ESTABLISHED IMMEDIATELY DUE TO SEASONAL LIMITATIONS
- 12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT UNDER NO CIRCUMSTANCES ANY SEDIMENT, TRASH, OR DEBRIS BE ALLOWED ONTO ADJACENT PROPERTIES. PUBLIC LANDS, OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- 13. ALL EROSION CONTROL DEVICES, THAT ARE NOT DIRECTLY SPECIFIED AS TO INSTALLATION AND MATERIALS, SHALL MEET THE REQUIREMENTS OF THE GA. DEPT. OF TRANSPORTATION. SPECIFICATIONS FOR THE CONSTRUCTION OF ROADS AND BRIDGES, CURRENT EDITION, AND LATEST SUPPLEMENT IN EFFECT AT THE TIME OF BID OPENING OR THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, CURRENT EDITION
- 14. ACCEPTANCE AND/OR SUBSEQUENT ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY COA OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS, JURISDICTIONAL WATERS OF THE STATE, AREAS OF THREATENED/ENDANGERED SPECIES, OR AREAS OF HISTORICAL SIGNIFICANCE. IT IS THE OWNER'S RESPONSIBILITY CONTACT THE APPROPRIATE REGULATORY AGENCY FOR ANY REQUIRED APPROVALS.
- 15. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

▶28 ANTICIPATED CONSTRUCTION SCHEDULE

START:	TO BE DETERMINED																		
COMPLETION:	18-24 MONTHS FROM NOTICE TO P	ROCEED																	
	ACTIVITY*									MO	NTH								
	ACTIVIT		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CLEARING & GRU	JBBING		1																
TEMPORARY VEG	SETATION		-		_	_					-					_			_
INFRASTRUCTUR	RE CONSTRUCTION (INCL. UTILITIES)								_		_						_	_	
FINE GRADING &	LANDSCAPING						_												_
REMOVAL OR TE	MPORARY EROSION CONTROL																	_	
MAINTENANCE O	OF BMP'S				_														_
	* CONTRACTOR TO PHASE CONSTRUCTION ACCORDINGLY TO REDUCE BARE SOIL CONDITIONS.																		

NOTIFICATIONS

- 1. NOTIFY ENGINEER AND OWNER 72 HOURS PRIOR TO THE BEGINNING OF EVERY PHASE OF CONSTRUCTION
- 2. PROVIDE BMP'S FOR REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS

REQUIRED NOTES

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

√ 16 2. BUFFER ENCROACHMENTS

- 2.1. DESCRIPTION OF BUFFER ENCROACHMENT CONSTRUCTION OF THE PROJECT REQUIRES PERFORMING WORK WITHIN THE DELINEATED, 25 FOOT STREAM BUFFER. THE PROJECT INVOLVES DIRECT REPLACEMENT AND REALIGNMENT OF A SANITARY SEWER TRUNK THAT RUNS PARALLEL TO TERRELL CREEK.
- 2.2. PERMITS FOR ENCROACHMENT THE FOLLOWING PERMITS ARE REQUIRED FOR CONSTRUCTION OF THIS PROJECT: GEORGIA EPD STREAM BUFFER VARIANCE (PERMIT APPLICATION IN DEVLEOPMENT) USACE
- ₹ 17 3. AMMENDMENTS / REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
 - 3.1. THE PRIMARY, SECONDARY OR TERTIARY PERMITTEES, AS APPLICABLE, SHALL AMEND THEIR PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT.
 - 3.2. ALL REVISIONS OR AMENDMENTS SHALL BE SUBMITTED TO THE LOCAL ISSUING AUTHORITY FOR REVIEW.
- WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION
 - 4.1. INCLUDING BUT NOT LIMITED TO WASTE BUILDING MATERIALS, CONSTRUCTION AND DEMOLITION DEBRIS, CONCRETE WASHOUT OR EXCAVATED SEDIMENT.
- ₹19 5. 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.
- FROSION 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.
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR



MAD VICINITY MAD

DOCUMENTS

REVIEW

100%

Georgia Soil and Water Conservation Commission GSWCC Christopher Hamblen Level II Certified Design Professional Certification Number: 0000069253 Expires: 08/21/2019 sued: 08/21/2015

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ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR INFRASTRUCTURE PROJECTS.

MANAGEMENT PRACTICES AND PERMIT VIOLATIONS (PART III.D.):

B.1. BEST MANAGEMENT PRACTICES ARE REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AND MUST BE IMPLEMENTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS CONTAINED IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF GEORGIA, PROPER DESIGN, INSTALLATION, AND MAINTENANCE OF BMPS SHALL CONSTITUTE A COMPLETE DEFENSE TO ANY ACTION BY THE DIRECTOR OR TO ANY OTHER ALLEGATION OF NONCOMPLIANCE WITH PART III.D. 3 AND PART III.D. 4.

B.2. FAILURE TO PROPERLY DESIGN, INSTALL, OR MAINTAIN BMPS SHALL CONSTITUTE A VIOLATION OF THE PERMIT ROUTINE INSPECTIONS SHALL NOT BE CONSIDERED A VIOLATION. IF DURING THE COURSE OF THE PERMITTEE'S ROUTINE INSPECTIONS BMP FAILURES ARE OBSERVED WHICH HAVE RESULTED IN SEDIMENT DEPOSITION INTO WATERS OF THE STATE, THE PERMITTEE'S ROUTINE IN ACCORDANCE WITH PART V.A.2 OF THE PERMIT.

B.3. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BMP'S HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH DISCHARGE RESULTS IN THE TURBIDITY OF RECEIVING WATER(S) BEING INCREASED BY MORE THAN TEN (10) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS SUPPORTING WARM WATER FISHERIES, REGARDLESS OF A PERMITTEE'S CERTIFICATION UNDER PART II.B.1, AND PART II.B.3). B.3.

C.2.

AUTHORIZED DISCHARGES (PART I.C):

ALL DISCHARGES (PART I.C):

ALL DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART I.C. 1.a.

ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORM WATER EXCEPT AS PROVIDED IN PART II.C. 2 AND PART III.A. 2 OF THE PERMIT. PART III.A. 1.

ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORM WATER EXCEPT AS PROVIDED IN PART II.C. 2 AND PART III.A. 2 OF THE PERMIT. PART III.A. 1.

ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORM WATER EXCEPT AS PROVIDED IN PART II.C. 2 AND PART III.A. 2 OF THE PERMIT. PART III.A. 2.

AUTHORIZED MIXED STORM WATER DISCHARGES. PART I.C. 2.

C.3.1. THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY.

C.3.2. THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY STORM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ARE OCCURING ARE COVERED BY A DIFFERENT NPDES GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SULP DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.

THE FOLLOWING NON-STORM WATER DISCHARGES MAY BE AUTHORIZED BY THIS PERMIT PROVIDED THE NON-STORM WATER COMPONENT OF THE DISCHARGE IS EXPLICITLY IN THE PLAN AND IS IN COMPLIANCE WITH PART IV.D.7: PART III.A.2.

C.4.1. FIRE FIGHTING ACTIVITIES;

C.4.2. FIRE HYDRANT FLUSHING;

C.4.3. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING;

C.4.4. IRRIGATION DRAINING:

C.4.5. AIR CONDITIONING CONDENSATE;

SPRINGS;

C.4.6. SPRINGS;

C.4.7. UNCONTAMINATED GROUND WATER; AND

LIMITATIONS ON COVERAGE PART I.C.3 C.3. C.3.1. C.3.2. C.3.3.

C.4.

C.4.1. C.4.2. C.4.3. C.4.4. C.4.5. C.4.6. C.4.7. C.4.8.

D.1. LIMITATIONS ON COVERAGE PART I.C.3

D.1. THE FOLLOWING STORM WATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:
D.1.1. STORM WATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATE FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION;
D.1.2. DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORM WATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART III.A.2. OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.7. (NON-STORM WATER DISCHARGES) OF THIS PERMIT.

D.1.3. STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES; AND

AND.

STORM WATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE OR MAY REASONABLY BE EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.

COMPLIANCE WITH WATER QUALITY PART I.C.4

1. NO DISCHARGES AUTHORIZED BY THIS PERMIT SHALL CAUSE VIOLATIONS OF GEORGIA'S IN-STREAM WATER QUALITY STANDARDS AS PROVIDED BY THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6-03.

INSPECTIONS **₹**29

PROJECT SITE SOILS 🕡 46

	SOIL SURVEY DATA	
UNIT	NAME	SLOPE (%)
AaB	Altavista sandy loam	2 to 6
AaC	Altavista sandy loam	6 to 10
AgC	Appling-Hard Labor complex	6 to 10
BaA	Buncombe loamy sand	0 to 3
CaA	Cartecay-Toccoa complex	0 to 2
CeC2	Cecil sandy laom	6 to 10
СрА	Congaree sandy loam	0 to 2
ReD	Rion sandy loam	10 to 15
ReE	Rion sandy loam	15 to 25
Ub	Urban land	N/A
UdC	Urban land-Appling-Hard Labor complex	2 to 10
UeE	Urban land-Ashlar-Rion complex	10 to 25
UfC2	Urban land-Cecil complex	2 to 10
UgE	Urban land-Grover-Mountain Park complex	10 to 25
UmC2	Urban land-Madison-Bethlehem complex	2 to 10
UrE	Urban land-Rion complex	10 to 25
14/	Mator	NI/A

SAMPLING **3**0

STORMWATER SAMPLING SHALL BE IN ACCORDANCE WITH THE METHODOLOGY IN THE NPDES STORMWATER SAMPLING GUIDANCE DOCUMENT. EPA 833-B-98-001, AND THE NPDES GENERAL CONSTRUCTION NO. GART 100001 PREPARED BY THE STATE OF GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION.

FREQUENCY
A.1. THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT SAMPLES MUST BE TAKEN WITHIN FORTY-FIVE (45) MINUTES OF:
A.1.1 THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT IF THE STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OBSCHARGE TO A MONITORED RECEIVING WATER OBSCHARGE TO A MONITORED OUTFALL HAS BEGUN AT OR PRIOR TO THE ACCUMULATION, OR
A.1.2. THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL, IF THE DISCHARGE BEGINS AFTER THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE OUALIFYING EVENT.
A.2. HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL. THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
A.3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS:
FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM. THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS' (MONDAY THRU FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM EXCLEDING ALL ON-WORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE; I THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;

A.3.2. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM. THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS' THAT OCCURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST. THAT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND BE FERSTET THAT.

A.3.3.

COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST:

AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS ARE FOUND TO BE PROPERLY DESIGNED. INSTALLED AND MAINTAINED, NO FURTHER ACTION IS REQUIRED. IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM ARE NOT PROPERLY DESIGNED. INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS' UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE). THE PERMITTEE IN ACCORDANCE WITH PART IV. D. 4., (6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING ON OR BEFORE HE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES, LE. THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING THER THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING THE THAN AS REQUIRED BY (C) ABOVE. A.3.4 A.3.5.

*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE

SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

8. SAMPLING REQUIREMENTS.

8. 1. THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THIS SECTION IS APPLICABLE TO PRIMARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE AND TERTIARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE AND TERTIARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN FIVE (5) ACRES. THIS SECTION IS NOT APPLICABLE TO SECONDARY PERMITTEES. THE FOLLOWING PORCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

6. A. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

6. A. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

6. C.1. A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE COMMON DEVELOPMENT;

6. C.1. THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE STORM WATER IS DISCHARGED AND

6. C.1. THE RECEIVING WATER AND THE RECEIVING WATER SOLES AS SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER SOLED AND THE LOCATION OF THE RECEIVING WATER SOLED AND THE SOLED AND TH

D. SAMPLE TYPE.

D.1. ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED): THE GUIDANCE DOCUMENT TITLED 'NDPDES STORM WATER SAMPLING GUIDANCE DOCUMENT FOR 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

D.1.1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.

D.1.2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

D.1.3. LARGE MOUTH, CLEAN AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAININATION.

D.1.4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLESS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSES IN UTILIZED. BUT IN THE ROCUMULATION BE ANALYZED IMMEDIATELY, BUT IN SECONDARY CONTAININATION.

D.1.4. SAMPLES SHOULD BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. BUT INTO CASMPLES SIN OT REQUIRED SAMPLES MAY BE ANALYZED USING A DIRECT READING, PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.

COOLED.
SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E. D.1.5.

E. SAMPLING POINTS.

E.1. FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL (S), SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER (S) AND/OR THE STORM WATER OUTFALL SUSING THE FOLLOWING MINIMUM GUIDELINES:

E.1.a. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER (S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FROM WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE LOST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY. WHERE ACH RECEIVING WATER (S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY. WHERE ACH RECEIVING WATER (S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM DISCHARGE FROM THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SHOWLD STREAM OF ANY OTHER STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SHOWLD STREAM OF THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SHOWLD STREAM OF THE RECEIVING WATER SIGN OF THE SAMPLES SHOULD BE TAKEN TO AVOID STIRRING THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER SHOWLD BE TAKEN TO AVOID STIRRING THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER STORM WATER OUTFALL CHANNEL (S).

E.1.d. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER OUTFALL CHANNEL (S).

E.1.d. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.

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Know what's below. Call before you dig.

sued: 08/21/2015

PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAYED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY PEP FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF FIP RAP, GABIONS, PERMANENT MULCHES OR GEOTEXTILES) HAVE BEEN USED, PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES: A CROP OF PERENNIAL VICETATION APPORTATE FOR THE TIME OF YEAR AND REGION: OR A CROP OF ANNUAL VEGETATION APPORTATE FOR THE TIME OF YEAR AND REGION: OR A CROP OF ANNUAL VEGETATION APPLIES TO EACH PHASE OF CONSTRUCTION.

ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE. E.1.g.

REPORTING **₹**30

A. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD.

B. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT.

C. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS.

D. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD.

E. THE SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART V.G. 2.

F. SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

G. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

G.1. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;

G.3. THE DATE(S) ANALYSES WERE PERFORMED;

G.4. HE TIME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING MEASUREMENTS;

G.5. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES:

G.6. REFERENCES AND WRITTEN PROCEDURES. WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED:

G.6. REFERENCES AND WRITTEN PROCEDURES. WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED:

G.7. THE RESULTS OF SUCH ANALYSES. INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC. USED TO DETERMINE THESE RESULTS:

G.8. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU." AND CONTRIBUTION STATEMENT THE PROOF OF SUBMITTAL AT THE CONSTRUCTION STATEMENT THE SHALL REPORTED AS "EXCEEDS 1000 NTU." AND CONTRIBUTION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN

H. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION STITLE OR THE PROOF OF SUBMIT

RETENTION OF RECORDS [31]

A. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VIT.

A.1 A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD:
A.2 A COPY OF THE EROSION. SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT:
A.3. THE DESIGN PROFESSIONALS REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT:
A.4. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT:
A.5. A COPY OF ALL NOTICES OF INTENTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT:
A.6. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT.
A.6. A COPY OF ALL INSPECTION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT.
A.7. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A. (2). OF THIS PERMIT.
B. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION) AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

₹34 NPDES Monitoring Sites

See sheets for site locations

	MONITORING SITE EVALUATIONS AND RECOMMENDATIONS												
SITE NAME	SITE TYPE ¹	LAT	LONG	TOTAL BASIN	MONITORING SITE	NTU LIMIT	RECEIVING						
SITE NAIVIE		LAI	LONG	AREA (acres)	RECOMMENDED	FROM PERMIT ²	WATERS TYPE						
TC-01	IN	33.769932	-84.457627	768	YES	N/A	WARM						
TC-02	IN	33.770115	-84.458289	109	YES	N/A	WARM						
TC-03	IN	33.784493	-84.463657	218	YES	N/A	WARM						
TC-04	OUT	33.795324	-84.471055	1984	YES	< MS-1 +25	WARM						
PC-01	RW-U	33.795438	-84.469125	6464	YES	N/A	WARM						
PC-02	RW-M	33.795802	-84.470182	6464	YES	< MS-1 +25	WARM						
PC-03	RW-D	33.795354	-84.471751	8448	YES	< MS-1 +25	WARM						

1 LEGEND

Inflow to Site Outfall from Site Receiving Water - Downstream of Site Receiving Water - Upstream of Site Receiving Water - Midstream of Site OUT RW-D RW-U RW-M

Per NPDES Permit Appendix B. NTU Limits for Outfalls
Waters Supporting Warm Water Fisheries
< 5 Sq.Mi. Surface Water Drainage Area
Site Area < 10 acres = 75 NTUs.
Site Area > 10 acres = 50 NTUs

Per the Erosion and Sedimentation Act of 1975 (OCGA 12-7), the allowable increase in turbidity (NTUs) between the downstream and upstream sampling points in the receiving waters. As there are three upstream sampling locations, the Primary Permittee shall calculate baseline, upstream NTUs based upon a drainage area weighted average for each incoming tributary to Terrell Creek:

Warm Waters 25 NTU

Trout Waters 10 NTU

< 5 Sq.Mi. Surface Water Drainage Area Site Area < 50 acres = 25 NTUs. Site Area > 50 acres = 20 NTUs

GSWCC	Ge Co	orgia Soil and Water nservation Commission						
	<u>Christopher Hamblen</u> Level II Certified Design Professional							
Certification Number:	0000069253	Expires: 08/21/2019						

·			DRAWING IS TO	BE CONSIDERED F	PRELIMINARY UNLE	SS APPROVED)			
		REVI	SIONS		CITY	OF ATL	.AN	TA		
	NO.	DATE	DESCRIPTION	DEPARTI	MENT OF V	WATERS	HED	MAN.	AGE	MENT
				OFFI	CE OF EN	GINEERI	NG	SERVI	CES	
				TERRI	ELL CREEK	SEWER	IMF	ROVEN	/EN	TS
					ES	&PC NOT	ES			
				SURVEYOR	FIELD BOOKS	L.L. [DIST.	COUN	TY	SCALE
				DRAWN BY	DESIGNED BY	CHECKED	BY	APPROVED	BY	DATE
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DOCUMENTS REVIEW 100%

EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES CONTINUED

- ITY OF ATLANTA REQUIRED NOTES . THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT
- CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
 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.
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH AND TEMPORARY SEEDING
- ANY DISTURBED AREAS REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN, AND REPAIRED
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON-SITE
- SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171 TYPE C TEMPORARY SILT FENCE, OF THE GEORGIA
- DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 1993 EDITION, AND BE WIRE REINFORCED. THE PROPERTY OWNER AND CONTRACTOR ARE EQUALLY RESPONSIBLE FOR ALL EROSION CONTROL ACTIVITIES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL DEVICES, NOT THE CITY OF ATLANTA. ALL TEMPORARY AND PERMANENT SEEDING MUST BE PERFORMED AT THE APPROPRIATE SEASON. IN SUCH INSTANCES
- WHERE THE ESTABLISHMENT OF VEGETATION IS INOPPORTUNE DUE TO SEASON OR DROUGHT, DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED USING 2"-4" OF MULCH (DS1). ADDITIONAL PLANTINGS WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.
- THE CITY'S DESIGNEE WILL VERIFY ADEQUATE COVER (100% COVER, 70% DENSITY) OF PERMANENT STABILIZATION (DS3,
- SILT FENCES SHALL NOT BE PLACED IN STREAM BUFFER OR FLOODPLAINS, UNLESS UTILIZED FOR THE CONSTRUCTION OF AN EXEMPT ACTIVITY (I.E. ROADWAY DRAINAGE STRUCTURES, SEWER/WATER CROSSINGS, OR DRAINAGE STRUCTURES) PER THE APPROVED PLANS. FOR SUCH DISTURBANCES WITHIN THE BUFFER, THE AREA SHALL BE IMMEDIATELY STABILIZED USING FROSION CONTROL MATTING AND/OR BLANKETS ONCE THE ACTIVITY IS COMPLETE
- SUBCONTRACTORS INVOLVED WITH LAND DISTURBANCE ACTIVITIES SHALL MEET THE EDUCATION REQUIREMENTS (LEVEL 1) DESCRIBED IN O.C.G.A 12-7-19.

PHASE I – INITIAL PHASE: SITE PREPARATION AND PRE-CONSTRUCTION OPERATIONS stall / Construct all BMPs as provided on Sheet CE-03.

- PRIOR TO LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

 THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF IT'S NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.

 THE OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.

 NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURNING AND BURIAL HOLES SHALL BE LOCATED WITHIN 500 FEET OF DESIGNATED TREE PROTECTION AREAS.

 A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, LIMITS OF LAND DISTURBANCE SHALL CLEARLY AND ACCURATELY BE DEMARCATED WITH STAKES, RIBBONS OR OTHER APPROPRIATE MEANS, AND SHALL BE DEMACATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY, NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE APPROVED PLANS. PRIOR TO ANY OTHER CONSTRUCTION A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

 THE FOLLOWING INITIAL EROSION CONTOL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY:

 1. THE CONSTRUCTION EXIT SHALL BE PLACED AS SHOWN ON THE PLANS.

 MIMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXIT ALL PERIMETED EROSION CONTROL AND STORMS.

- ENIRY TO ONE SAIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.
 THE FOR YOUNG NITTAL EROSION CONTROL MEASURES SHALE BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION

 8.1 THE CONSTRUCTION EXIT SHALL BE PLACED AS SHOWN ON THE PLANS.

 8.2 IMPLICATION EXIT SHALL BE PLACED AS SHOWN ON THE PLANS.

 8.3 IMPLICATION EXIT SHALL BE PLACED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

 8.3 INTER PROTECTION FERDING SHALL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES.

 8.4 INTER PROTECTION FROM SHALL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES.

 8.5 INTER PROTECTION FROM SHALL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES.

 8.6 INTERPROTECTION OF INTIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR WAST ON THE STALL BE PRIOR OF ANY LAND DISTURBING ACTIVITIES.

 8.6 INTERPROTECTION OF INTIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR WAST ON THE START OF ANY LAND SHALL BE PROJECT PROFESSIONAL DURING THE CONTRACTOR OF INTIAL EROSION CONTROL MASSURES. THE CONTRACTOR WAST ON THE START ON THE CONTROL TO THE CONTROL THE PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES THAT WAY BE INSTALLATION. THE CONTROL TO THE CONTROL THE PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES THAT WAY BE INSTALLATION. THE CONTRACTOR SHALL CONSTRUCT SEMBLY PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES THAT WAY BE INSTALLATION OF SHALL BE PLACED TO SHALL THE PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES SHALL BE PLACED TO SHALL THE PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES THAT WAY BE INSTALLATION OF SHALL BE PLACED TO SHALL CONTROL THE PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES THAT WAY BE INSTALLATION OF SHALL BE PLACED TO SHALL THE PROJECT PROFESSIONAL DURING THE FOLLOWING IS A DESCRIPTION OF MEASURES WITHOUT ANY DEVELOPMENT OF THE PROJECT PROFESSIONAL DURING THE FOLLOWING THE PROJECT PROFESSIONAL DURING THE PROJECT PROFESSIONAL DURING THE

PHASE II - INTERMEDIATE PHASE: CONSTRUCTION ACTIVITIES

stall / Construct all BMPs as provided on Sheet CE-04.

- tall / Construct all BMPs as provided on Sheet CE-04.

 DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF IT'S NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.

 EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.

 EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION, AND ALTER THE LOCATION OF EROSION CONTROL DEVICES ACCORDINGLY, ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
- IDIATELY. CONTRACTOR SHALL ESTABLISH BARRIERS AT THE TOP OF ALL SLOPES UNDER CONSTRUCTION. CUT AND FILL SLOPES
- IMMEDIATELY.
 THE CONTRACTOR SHALL ESTABLISH BARRIERS AT THE TOP OF ALL SLOPES UNDER CONSTRUCTION. CUT AND FILL SLOPE
 SHALL NOT EXCEED 2:1
 STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS
 CONSTRUCTED.
 ALL DRAINAGE SWALES AND GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS
 ACHIEVED. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND
 DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY
 GRASSING.

- DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

 THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUNDCOVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE POND WHEN IT REACHES ONE THIRD OF THE DEPT OF THE BASIN. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING. SEDIMENT AND ERSOSION CONTROL MEASURES MUST BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED. CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

 FUNCTIONING PROPERLY.

 THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH "3" OF STONE, AS CONDITIONS DRAMAND, ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

 FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES, WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

PHASE III - FINAL PHASE: CONSTRUCTION COMPLETION AND FINAL STABILIZATION

Install / Construct all BMPs as provided on Sheets CE-05. Submit Notice of Termination.

- THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUNDCOVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE POND WHEN IT REACHES ONE THIRD OF THE DEPT OF THE BASIN.
 ALL ROADWAY AND PARKING SHOULDER'S SHOULD BE GRASSED AS SOON AS FINAL GRADE IS ACHIEVED.
 SEDIMENT AND EROSION CONTROL MEASURES SHALL BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
 FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.
 UPON COMPLETION OF THE PROJECT AND RECEIPT OF THE CERTIFICATE OF COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED OTHERWISE ON PLANS.

POLLUTION CONTROL

- THE MOST EFFICIENT METHOD OF DUST CONTROL FOR THE SITE SHALL BE DETERMINED EXPERIMENTALLY AND MAY CONSIST OF TEMPORARY MEASURES SUCH AS MULCHES, VEGETATIVE COVER, SPRAY-ON ADHESIVES, TILLAGE, IRRIGATION, BARRIERS AND/OR THE APPLICATION OF CALCIUM CHLORIDE.
 LIKEWISE, IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL CONSTRUCTION EXIT PAD DOES NOT SUFFICIENTLY REMOVE THE MUD FROM VEHICLE TIRES. THE TIRES SHOULD BE WASHED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.

 A. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND PROVISIONS THAT INTERCEPT THE SEDIMENT-LADEN RUNOFF AND DIRECT IT INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. WASHOUT OF THE DRUM OF A CONCRETE TRUCK AT THE CONSTRUCTION SITE IS PROHIBITED.
 CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES WILL ONLY BE ALLOWED IN A DESIGNATED AREA PROVIDED FOR THIS PURPOSE, AS SHOWN ON THE DRAWINGS.

 A. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE FOLLOWED.

 4.A.1. CONTAIN ALL WASH WATER RON SOIL, IN A BOWL SHAPED AREA CREATED IN THE DESIGNATED WASH AREA TO PREVENT. THE WASH WATER FROM FLOWING FROM THE WASHOUT AREA.

 4.A.2. USE THE MINIMUM AMOUNT OF WATER TO WASH DOWN THE TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES;

 4.A.3. REMOVE ANY CONCRETE SEDIMENT FROM THE AREA SURROUNDING THE WASHOUT AREA BEFORE IT HARDENS; AND THE PROMOVE ANY CONCRETE SEDIMENT FROM THE DESIGNATED AREA ONCE IT HAS HARDENED.
- 4.A.1

▼27 STORMWATER DISCHARGE POLLUTANT REDUCTION

- ALL POLLUTANTS FROM WASTE DISPOSAL PRACTICES. SOIL ADDITIVES, REMEDIATION OF SPILLS AND LEAKS OF PETROLEUM PRODUCTS CONCRETE TRUCK WASHOUT, ETC., SHOULD ANY OF THESE OCCUR, WILL BE CONTROLLED BY THE IMPLEMENTATION OF APPROPRIATE BEST MANAGEMENT PRACTICES.
 THE SITE WILL BE IN COMPLIANCE WITH ALL APPLICABLE STATE AND LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.
 PRODUCT SPECIFIC PRACTICES:

 A. PETROLEUM BASED PRODUCTS CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED 1.

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 A. PETROLEUM BASED PRODUCTS CONTAINERS FOR PRODUCTS WILL BE SUFFICION TO PREVENTIVE MANAGE INC.

 BY AND THE SECONDARY CONTAINMENT LINER TO PREVENTIVE MINIMIZE SITE CONTAINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

 B. PAINTS/FINISHES/SOLVENTS ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE EXCESS PRODUCT WASTER DESPONANCE OF THE STORMWATER COLLECTION SYSTEM. EXCESS PRODUCT MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

 C. CONCRETE TRUCK WASHING NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

 C. CONCRETE TRUCK WASHING NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

 E. FERTILIZER/HERBICIDES THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUF

- 3.D.
- CONTAINERS.

 CONTA

THE FOLLOWING IS A DESCRIPTION OF MEASURES THAT MAY BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER DISCHARGES THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

- STORM WATER DISCHARGES THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

 STORMWATER RETENTION / DETENTION STRUCTURES
 FLOW ATTENUATION BY USE OF OPEN VEGETATED SWALES AND NATURAL DEPRESSIONS
 INFILTRATION OF RUNOFF ON-SITE
 VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL FOR
 THE PURPOSE PROVIDING A NON-EROSIVE VELOCITY FLOW FROM THE STRUCTURE TO A WATER COURSE SO THAT THE NATURAL PHYSICAL
 AND PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS ARE MAINTAINED AND PROTECTED [E.G. NO SIGNIFICANT CHANGES IN
 THE HYDROL OGICAL REGIME OF THE RECEIVING WATER(S).]
 SCOUENTIAL SYSTEMS (WHICH COMBINE SEVERAL PRACTICES)
 STRUCTURAL MEASURES SHOULD BE PLACED ON UPLAND SOILS TO THE DECRETAIN AND NOT THE ULTIMATE OPERATION AND
 THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CWA
 THE ESPCP ONLY ADDRESSES THE INSTALLATION OF STORMWATER MANAGEMENT MEASURES, AND NOT THE ULTIMATE OPERATION AND
 AND MAINTENANCE OF SUCH STRUCTURES AFTER THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS
 UNDERGONE FINAL STABILIZATION.
 OPERATORS ARE ONLY RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE AFTER STORM WATER MANAGEMENT MEASURES ASSOCIATED WITH
 CONSTRUCTION ACTIVITY HAVE BEEN ELIMINATED FROM THE SITE.

 PILL OF AN ID PAND CONTROL PRACTICES.

GSWCC

Certification Number:

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND
- MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
- SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
- 4.A. FOR SPILLS OF AN UNKNOWN AMOUNT. THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT
- 4.B. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED
- WITHIN 24 HOURS.
 4.C. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL
- AGENCIES WILL BE CONTACTED AS REQUIRED.
 THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1,320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF FOLIPMENT) OR IF ANYONE PIECE OF FOLIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.
- 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.
- 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.
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING, ANY DISTURBED AREAS REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT

Georgia Soil and Water

0000069253 Expires: 08/21/2019

Christopher Hamblen Level II Certified Design Professional

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9. PERIMETER EROSION AND SEDIMENT CONTROL DEVICES AND ORANGE BARRIER FENCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF SITE WORK AND REMAIN UNTIL COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE DAMAGED ITEMS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN, AND REPAIRED AS NECESSARY ACCUMULATED SILT SHALL BE REMOVED AS SOON AS PRACTICAL, BUT NO LATER THAN WHEN

HAZARDOUS WASTES

- ALARDOUS WASTES

 AL HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED WHILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES, WATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AND MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPCIFIC INFORMATION.

 IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES. THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THIS ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SILLED MATERIALS.

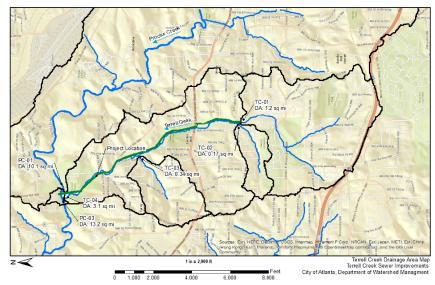
 NO SPILLED HAZARDOUS MATERIAL OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTRACT WITH STORMWATER STORMWATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MASURES IN COMPLIANCE WITH STATE AND DISCHARGES. IF SUCH CONTAINCAT OCCURS, THE FEDERAL REQUILATIONS ARE TASKEN TO DISPOSE OF SUCH CCONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

SANITARY WASTES

- A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED TO EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.
 ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR
- SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES
- FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED. SANITARY SEWER WILL BE PROVIDED BY MUNICIPAL AUTHORITY AT THE COMPLETION OF THE PROJECT.

SAFETY PROTECTION

CONSTRUCTION ACTIVITIES WILL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE LAWS, RULES, AND REGULATIONS GOVERNING HEALTH AND SAFETY OF HUMAN BEINGS AND THE ENVIRONMENT.



2 4 4 3 DRAINAGE AREA MAP

BMP's FOR PETROLEUM CHEMICAL SPILLS AND LEAKS:
PAINT AND/OR OTHER CHEMICALS SHALL BE STORED IN SECURED FACILITIES WITH RESTRICTED ACCESS TO EMPLOYEES ONLY.
CLEANUP AND DISPOSAL OF THIS MATERIAL SHALL BE IN ACCORDANCE WITH ALL RECOGNIZED LOCAL AND FEDERAL
REQUIREMENTS. ALL DISPOSAL SHALL BE TO APPROVED OFF-SITE WASTE FACILITIES CLASSIFIED TO ACCEPT THAT MATERIAL.

ALL PETROLEUM PRODUCTS SHALL BE STORED AND USED IN AN AREA WITH THE LEAST FORESEEABLE IMPACT IF A CATASTROPHIC EVENT SHOULD OCCUR. EMERGENCY CONTACT NUMBERS AND PROCEDURES FOR SPILLS SHALL BE AVAILABLE

DRIP PANS WILL BE AVAILABLE FOR VEHICLES AND EQUIPMENT TO PREVENT OIL AND OTHER PETROLEUM PRODUCTS FROM SPILLING ONTO SOIL OR WATER.

SECONDARY CONTAINMENT IS REQUIRED FOR PETROLEUM AND OIL STORAGE TANKS.

INVENTORY OF PRODUCTS AND CORRESPONDING MATERIAL SAFETY DATA SHEETS (MSDS) WILL BE KEPT ON THE JOB SITE AT

NO PRODUCT WASTE OR EXCESS OF ANY KIND WILL BE DUMPED OR DISPOSED TO THE GROUND, INCLUDING BUT NOT LIMITED TO, PAINT, PAINT PRIMMER, PAINT STRIPPER, SOLVENTS, ACIDS, BASES, OILS, GREASES, ADHESIVES, GLUES, PASTES, SEALANTS, SOLDER, CAULKING, GROUT, PUTTY, WAXES, SHEET ROCK, INSULATION, ACETATE, COOLANT, CORROSION INHIBITOR, CLEANING COMPOUNDS, HERBICIDES, TERMITICITES, FUNGICIDE, WEED KILLERS, PESTICIDE, ETC.

DOCUMENT

REVIEW

%00

DRAWING IS TO BE CONSIDERED PRELIMINARY LINLESS APPROVED CITY OF ATLANTA REVISIONS DEPARTMENT OF WATERSHED MANAGEMENT NO. DATE DESCRIPTION OFFICE OF ENGINEERING SERVICES TERRELL CREEK SEWER IMPROVEMENTS **ES&PC NOTES** SURVEYOR FIELD BOOKS L.L. COUNTY SCALE DIST. F GRIGGS T SMITH K. HAMBLEN TKELLEY SEP 2017 33 OF NGINEER OF RECOR PROJECT NUMBER 53



DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DEFINITION

APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED.

MULCHING RATE

WOOD WASTE: CHIPS SAWDUST, BARK

Polyethylene Film

RATE

2.0 TON/ACR

Secure w/ soil and

MULCHING WITHOUT SEEDING
THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.

- SITE PREPARATION

 1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.

 2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.

 3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

- SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:

 1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY
- WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL.
- 3. CUTBACK ASPHALT (SLOW CURING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE (OR 1/4 GALLON PER SQ. YD.).
 4. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND

- WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
- DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICALEQUIPMENT.
 IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT
- SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.

 3. CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF TRACKING IN' OR DAMAGE TO SHOES, CLOTHING, ETC.
- APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

ANCHORING MULCH

- STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT, PLEASE REFER TO SPECIFICATION TO TACKIFERS AND BINDERS. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
- NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY
- Ds2 DISTURBED AREA STABILIZATION

(WITH TEMPORARYSEEDING)

THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

CONDITIONS

SPECIFICATIONS

GRADING AND SHAPING

EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS.

NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.

WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

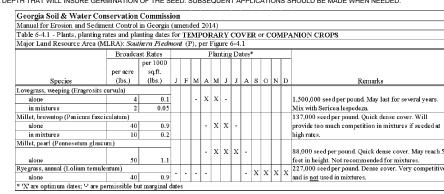
AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE! FERTILEZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL FERTILEZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY OF 700 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000 SG. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISELT.

SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER), DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND.

MULCHING

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH, MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DS1 - DISTURBED AREA STABLIZATION WINDLCHING ONLY).

DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.



DISTURBED AREA STABILIZATION Ds3 (WITH PERMANENT SEEDING)

DEFINITION

THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION..

CONDITIONS

PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS AND OTHER DENUDED AREAS.

- GRADING AND SHAPING
 1. GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED.
 VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.
 2. WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF
- THE VEGETATION
 CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.
- SEEDBED PREPARATION
 SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

- BROADCAST PLANTINGS

 1. TILLAGE AT A MINIMUM. SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER: SMOOTH AND FIRM THE SOIL: ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS: AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.

 2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT

 3. TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.

 4. ON SLOPES OO STEED FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

INDIVIDUAL PLANTS

1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.

2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.

3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

PLANTING

1. HYDRAULIC SEEDING
MIX THE SEED (INNOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

2. THE SEEDING SEEDING SEEDING USE A SEEDING USE

- MIXTURE IS MADE.

 2. CONVENTIONAL SEEDING
 SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A
 CULTIPACKER SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE
 THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR
 SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT. SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.

 3. NO-TILL SEEDING
 NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF
 THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE
 PERMANENT (PERENNIAL) SPECIES. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING
 EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

 4. INDIVIDUAL PLANTS.
- IVIDUAL PLANTS
 SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHALL BE
 PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING
 THE ROOTS. NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY
 GREW AT THE NURSERY. THE TIPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE.
 WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF
 SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.

- MULCHING

 1. MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:

 2. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.

 3. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRYSTRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE)
 AFTER HYDRAULIC SEEDING.

 4. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.

 5. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.

 6. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES, OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.

 7. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.

 8. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED ON THIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

 9. WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVERN APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION.

 SPECIFICATIONS.

APPLYING MULCH

1. STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.

2. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

- WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.
 ANCHORING MULCH
 ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:
 EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH HIMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.
 THE COMBINATION OF ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF GRADE SS-1H OR CSS-1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
 CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS, AND ALL OTHER STRUCTURES FROM ASPHALT DISCOLORATION.
 HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL.
 SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB TACKIFIERS AND BINDERS.
 RYCOR WHEAT CAN BE INCLUDED WITH FAIL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE HALF BUSHEL PER ACRE.</

IRRIGATION IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF

Lime Application for PERMANENT COVER - DS3
Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicated the control of the control of

Georgia Soil & Water Cons	ervation (`ommissi	on	_	_	_	_			_				_	
	fanual for Erosion and Sediment Control in Georgia (amended 2000)														
	able 6-5.2 - Plants, planting rates and planting dates for PERMANENT COVER														
Major Land Resource Area (ML															
	Broadca	st Rates	Т			F	lan	ing I	Date	s*					
		per 1000	T					1	T	Τ	Т				
	peracre	sq.ft.													
Species	(lbs.)	(lbs.)	J	F	М	A	М	J .	J 2	١I:	3 0	0	N	D	Remarks
Bermuda, common (Cynodon dact	ed	Г						Т	Т	Т	Т				
alone	alone 10 0.]		-	Х	Х	-							1,787,000 see per pound. Quick cover. Low growing and sod forming. Full sun. Goo
with other perennials	6	0.1													for athletic fields.
Bermuda, common (Cynodon dact	ylon) - Unhu	ılled													
alone	10	0.2	Х	Х							- :	Χİ	Х	Х	Plant with winter annuals
with other perennials	6	0.1							\perp	\perp	4	\perp			Plant with Tall fescue.
Fescue, tall (festuca arundinacea)															227,000 seed per pound. Use alone only on better sites. Not for droughty soils. Mix
alone	50	1.1							-	- 2	0	Х			with perennial lespedezas or Crownvetch. Apply top dressing in spring following fall
with other perennials	30	0.7								\perp					plantings. Not for heavy use areas or athletic fields.
Lovegrass, weeping (Eragrosits cu	rvula)														
alone	4	0.1			-	Х	Х	-							1,500,000 seed per pound. May last for several years. Grows well with Sericea
in mixtures	2	0.05								\perp					lespedeza on road banks.
* 'X' are optimum dates: '-' are pen	missible but	marginal d	atr o												

DISTURBED AREA STABILIZATION Ds4 (WITH SODDING)

DEFINITION

A permanent vegetation using sods on highly erodible or critically eroded lands.

CONDITIONS

This application is appropriate for areas which require immediate vegetative covers, drop inlets, grass swales, and waterways with intermittent flow.

CONSTRUCTION SPECIFICATIONS INSTALLATION

- Soil Preparation

 Bring Soil Surface to final grade. Clear surface of trash, woody debris. stones and clods larger than 1". Apply sod to soil
- debris, stones and clods farger than 1". Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils. Topsoil properly applied will help guarantée stand. Don't use topsoil recently treated with herbicides or soil sterilatis. Mix fertilizer into soil surface. Fertilize based on soil tests or Table 6-6.1. For fall planting of warm season species, half the fertilizer should be applied at planting and the other half in the spring.
 - spring.
 Agricultural lime should be applied based on soil tests or at a rate of 1 to 2 tons per acre.

INSTALLATION

- Lay sod with tight joints and in straight lines. Don't overlap joints. Stagger joints and do not stretch sod. On slopes steeper than 31, sod should be anchored with wooden or biodegradable pins or other approved methods. Installed so should be rolled or tamped to provide good in the straight of the st

MATERIALS

- Sod selected should be certified. Sod grown in the general area of the project is desirable. Sod should be machine cut and contain 3/4" ±1/4" of soil, not including shoots or thatch. Sod should be cut to the desired size within ±5%. Torn or uneven pads should be rejected. Sod should be cut and installed within 36 hours of digging. Avoid planting when subject to frost heave or hot weather if the sold project of the plans or installed according to Table 6-6.2. See Figure 6-4.1 for your Resource Area.

MAINTENANCE

- Re-sod areas where an adequate stand of sod is not obtained. New sod should be mowed sparingly. Grass height should not be cut less than 2"-3" or as specified. Apply one ton of agricultural lime as indicated by soil test or every 4-6 years. Fertilize grasses in accordance with soil tests or Table 6-6.3.

Fertilizer Type	Fertilizer Rate	Fertilizer Rate	Season			
(lbs./acre)	(lbs./acre)	(lbs./sq.ft.)				
10-10-10	1000	.025	Fall			

Table 6-6.2 Sod Planting Regi

Grass	Varieties	Resource Area	Growing Season		
Bermudagrass	Common Tifway Tifgreen Tiflawn	M-L,P,C P,C P,C P,C	Warm Weather		
Bahiagrass	Pensacola	P,C	Warm Weather		
Centipede	-	P,C	Warm Weather		
St. Augustine	Common Bitterblue Raleigh	С	Warm Weather		
Zoysia	Emerald Myer	P,C	Warm Weather		
Tall Fescue	Kentucky	M-L,P	Cool Weather		

Table 6-6.3 Fertilizer Requirements for Soc

					(lbs./acre)
ıl not	Cool Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 - 30
if _	Warm Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

Georgia Soil and Water Conservation Commission Christopher Hamblen Certification Number: <u>0000069253</u> Expires: <u>08-21-2019</u> (ssued: <u>08-21-2015</u>

GSWCC

Ch2m: ROH&DFOX 676886 C-005-CE-233_674584.dwg CE-233 Know what's below Call before you dig.

DRAWING IS TO BE CONSIDERED PRELIMINARY UNLESS APPROVED CITY OF ATLANTA **REVISIONS** DEPARTMENT OF WATERSHED MANAGEMENT NO. DATE DESCRIPTION OFFICE OF ENGINEERING SERVICES TERRELL CREEK SEWER IMPROVEMENTS **ES&PC DETAILS** BOOKS L.L. SCALE FULTON NTS PPROVED R DATE CKED BY C HAMBLEN T SMITH TKFLIFY SEP 2017 FNGINFER OF RECOR PROJECT NUMBER



DEFINITION

CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

- A. TEMPORARY METHODS

 MULCHES. SEE STANDARD DS1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURERS RECOMMENDATIONS. VEGETATIVE COVER. SEE STANDARD DS2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING). SPRAY-ON ADHESIVES. THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

- REFER TO STANDARD TB-TACKIFIERS AND BINDERS.
 TILLAGE. THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS
- IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS STRINGLED WITH WATER OWNER THE CONTROL OF WET. REPEAT AS NEEDED.

 BARRIERS. SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

 CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

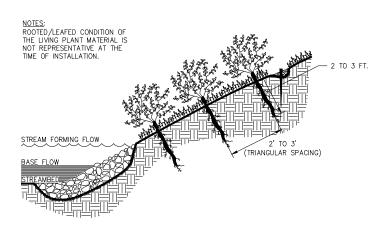
- PERMANENT VEGETATION: SEE STANDARD DS3 -DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING: THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE STANDARD TP TOPSOILING. STONE: COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR-CONSTRUCTION ROAD STABILIZATION

Manual for Erosion and Sediment Cont	rol in Georgia (amen	ded 2014)		
Table 6-5.1 - Fertilizer Requirements				
Species	Year	N-P-K	Rate (lbs./acre)	N Top-Dressing Rate (lbs/acre)
	First	6-12-12	1500	50-10
Cool season grasses	Second	6-12-12	1000	
	Maintenance	10-10-10	400	3
	First	6-12-12	1500	0-5
Cool season grasses & legumes	Second	0-10-10	1000	
	Maintenance	0-10-10	400	
	First	10-10-10	1300	
Ground covers	Second	10-10-10	1300	
	Maintenance	10-10-10	1100	
Pine Seedlings	First	20-10-5	*	
Shrub Lespedeza	First	0-10-10	700	
Sili do Despedeza	Maintenance	0-10-10	700	
Temporary cover crops seeded alone	First	10-10-10	500	31
	First	6-12-12	1500	50-10
Warm season grasses	Second	6-12-12	800	50-10
	Maintenance	10-10-10	400	3
	First	6-12-12	1500	5
Warm season grasses and legumes	Second	0-10-10	1000	
	Maintenance	0-10-10	400	

Sb

STREAM STABILIZATION

LIVE STAKING CROSS-SECTION

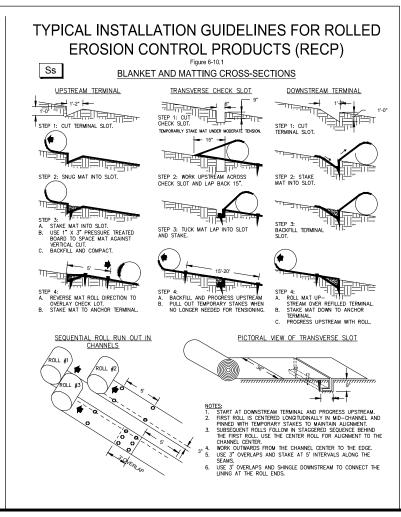


- NOTES:

 1. ALL LIVE STAKES SHALL ARRIVE ON THE JOBSITE WITHIN 8 HOURS OF CUTTING AND BE INSTALLED A MAXIMUM OF 2 DAYS AFTER THEY ARRIVE.

 2. LIVE STAKES SHALL HAVE A MINIMUM DIAMETER OF 1/2 INCH AND A MAXIMUM DIAMETER OF 1 INCH.
- JULY STAKES SHALL BE HAMMERED INTO THE GROUND THROUGH INSTALLED COIR FABRIC.

 THE LIVE STAKES SHALL PROTRUDEFROM THE FINISHED GROUND ELEVATION 1 TO 2 FEET.



GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM	THE STATE OF THE S	J	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
©	CONSTRUCTION EXIT		(A)	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Rd	ROCK FILTER DAM		1	A permanent or temporary stone filter dam installed across small streams or drainageways.
Sd1)	SEDIMENT BARRIER		(NOCATE TIME)	
Sd2	INLET SEDIMENT TRAP		(Z)	An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Tr	TREE PROTECTION	0	J	To protect desirable trees from injury during construction activity.

VEGETATIVE PRACTICES

V2021/(11V211V(011020												
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION								
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.								
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.								
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)	Salar Concession	Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.								
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.								
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.								
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.								
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.								



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676886			REV	SIONS			OF A					
TC-005-CE-234_674584.dwg		νо.	DATE	DESCRIPTION	DEPARTMENT OF WATERSHED MANAGEMENT							
CE-234					OFFI	CE OF EN	IGINEE	RING	SERVI	CES		
<u> </u>		TERRELL CREEK SEWE										
3241						ES8	RPC DE	TAILS	3			
					SURVEYOR	FIELD BOOKS	L.L.	DIST.	COUN.	TY	SCALE	
									FULTO	N	NTS	
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Can sciole you dig.	ENGINEER OF RECORD				PROJECT NUMBER:					35 C	HEET F 53	

REVIEW DOCUMENTS

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST INFRASTRUCTURE CONSTRUCTION PROJECTS

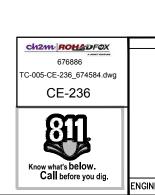
	SWCD: Fulton County - Region 1										
Project Name: TER		-									
City/County: Atlan		Date on Plans: <u>SEPTEMBER 2017</u>									
Plan	Included	TO BE SHOWN ON ES&PC PLAN									
Page #	¬ √ ¬	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January									
INCLUDED		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)									
CE & LE SERIES	Υ	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)									
CE-230	Υ	3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.									
CE-230	Υ	4 Provide the name, address and phone number of primary permittee.									
CE-230	Y	5 Note total and disturbed acreage of the project or phase under construction.									
CE-230		6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in									
32 233	ــــا ـــا	decimal degrees.									
CE-230	Υ	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.									
CE-230	Y	8 Description of the nature of construction activity.									
CE-232	T V	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.									
CE-230		10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas,									
CE 250	لـــناك	wetands, marshlands, etc. which may be affected.									
CE-230	Υ	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									
CE-230	Υ	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*									
CE-230	Υ	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.*									
CE-230	Υ	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the									
		inital sediment storage requirements, perimeter control BMPs, and sediment basins in accordance with part IV.A.5. within 7 days after installation.**									
CE-230	T V	15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream									
CE-230	سنا ل	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."									
CE-230	Υ	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.									
CE-230	Υ	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."*									
CE-230	Υ	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a									
		section 404 permit**									
CE-230	Υ	19 Clearly note statement hat "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."									
		sediment control measures and practices pilot to fail diductioning activities.									
CE-230	Υ	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."									
CE-230	Υ	21 Clearly note the statement Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulci-									
		or temporary seeding."									
CE-230	Υ	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.*									
CE-230	Υ	23 If a TMDL Implementation Plan for sedimenthas 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.*									
CE-232	Υ	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum									
ı		at the construction site is prohibited.*									
CE-232	Υ	25 Provide BMPs for the remediation of all petroleum spills and leaks.									

CE-232 Y	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.*
CE-232 Y	27 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
CE-232 Y	28 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of
CE-230 Y	the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility
	activities, temporary and final stabilization).
CE-231 Y	29 Provide complete requirements of inspections and record keeping by the primary permittee.*
CE-231 Y	30 Provide complete requirements of sampling frequency and reporting of sampling results.*
CE-231 Y	31 Provide complete details for retention of records as per Part IV.F. of the permit*
CE-231 Y	32 Description of analytical methods to be used to collect and analyze the samples from each location.*
CE-231 Y	33 Appendix B rationale for NTU values at all outfall sampling points where applicable.*
CE-231 Y	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.*
CE SERIES	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.*
CE-201-208, LE-241-	1
48 Y	36 Graphic scale and North arrow.
CE-201-208, LE-241-]
48 Y	37 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 Coniburs 1": 400" Centerline Profile
N/A N	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
	as certified by a Design Professional (unless disapproved by EPD of the Georgia Soil and water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.
	- Commonly, Frodo tool with radiation of the common of the
N/A N	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.*
CE-201-208 Y	40 Delineaton 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.
CE-230 Y	Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.
CE-232 Y	42 Delineation and acreage of contributing drainage basins on the project site.
CE-232 Y	43 Delineate on-site drainage and off-site watersheds using USGS 1":2000' lopographical sheets.
CE-230 Y	44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
N/A N	45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion.
in In	Identify/Delineate all storm water discharge points.
CE-231 Y	46 Soil series for the project site and their delineation.
CE-201-208 Y	47 The limits of disturbance for each phase of construction.
CE-230 Y	48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin,
0.250	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 justication 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.
CE-233, CE-210-208	49 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and
CE-234-235 Y	Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend. 1 50 Decide detailed decides for all chapters are considered as a resident and a minimum model to a middle and the control of the con
CE-234-235 Y	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.
CE-233, CE-234, CE-	Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and
201 - CE-208	seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding
	will hive place and for the appropriate goographic region of Goorgia

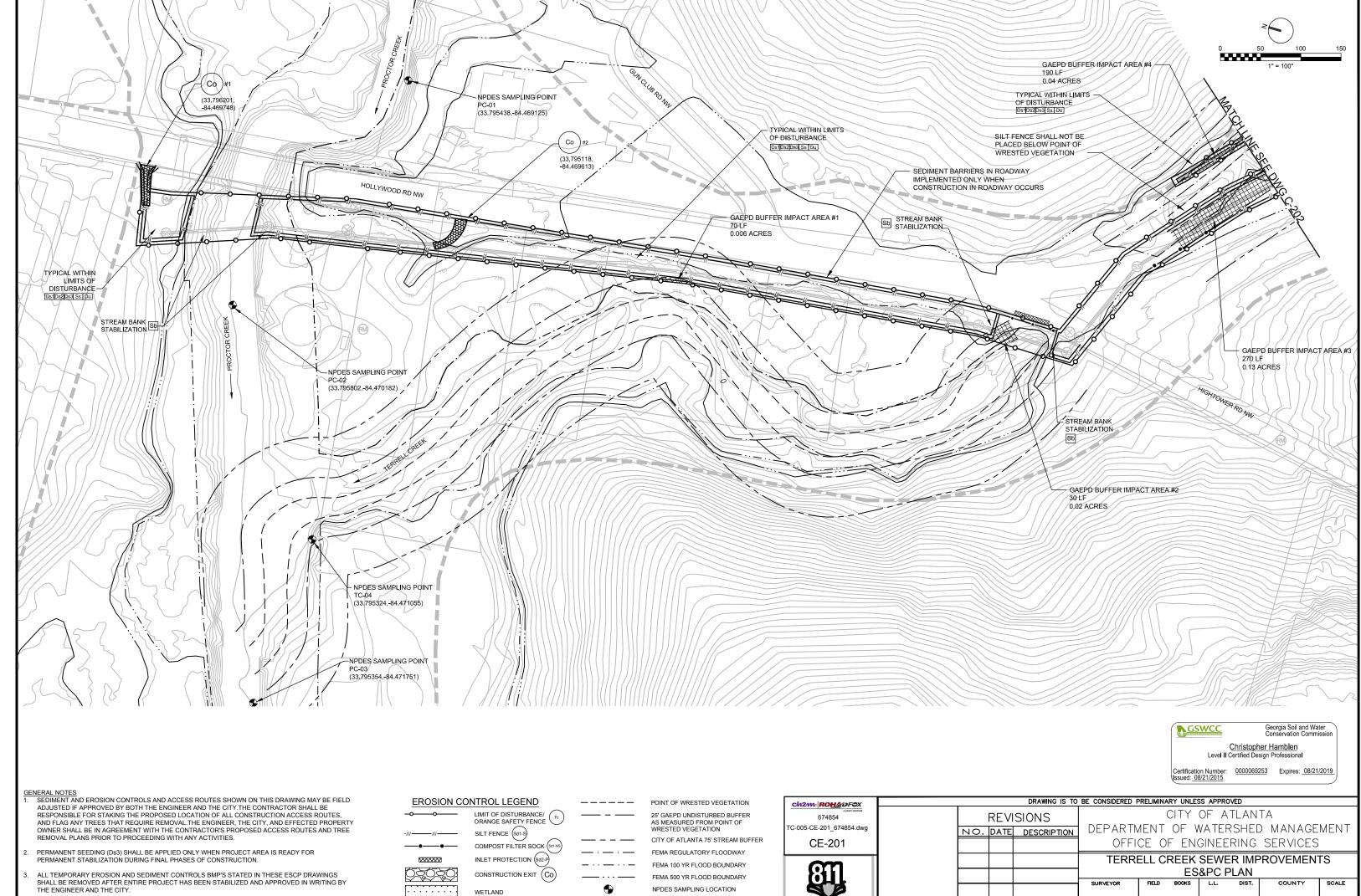
"If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the "checklist items would be N/A.

Effective January 1, 2016





DRAWING IS TO BE CONSIDERED PRELIMINARY UNLESS APPROVED													
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SOIL TYPE BOUNDARY

SOIL TYPE

Know what's below.

Call before you dig.

ENGINEER OF RECORD

CpA

GAEPD BUFFER IMPACT

SEDIMENT BARRIERS HAVE BEEN DELIBERATELY OFFSET FROM THE LIMITS OF DISTURBANCE FOR VISUALIZATION PURPOSES. SILT FENCE AND COMPOST FILTER STOCK SHALL BE PLACED 2' INSIDE OF LIMITS OF DISTURBANCE OR 1' INSIDE EDGE OF PAVEMENT AS NEEDED TO PROTECT FROM RUNOFF.

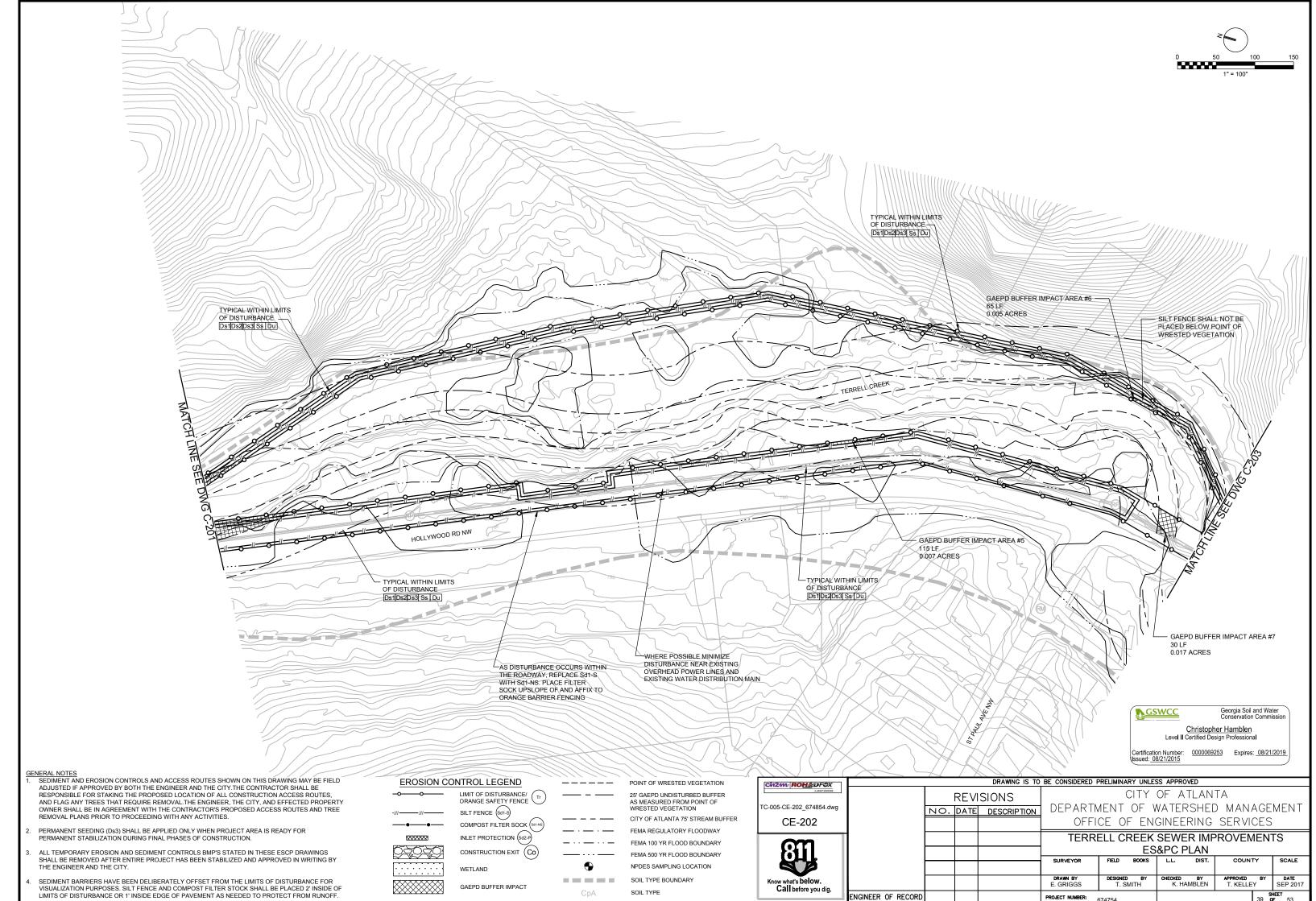
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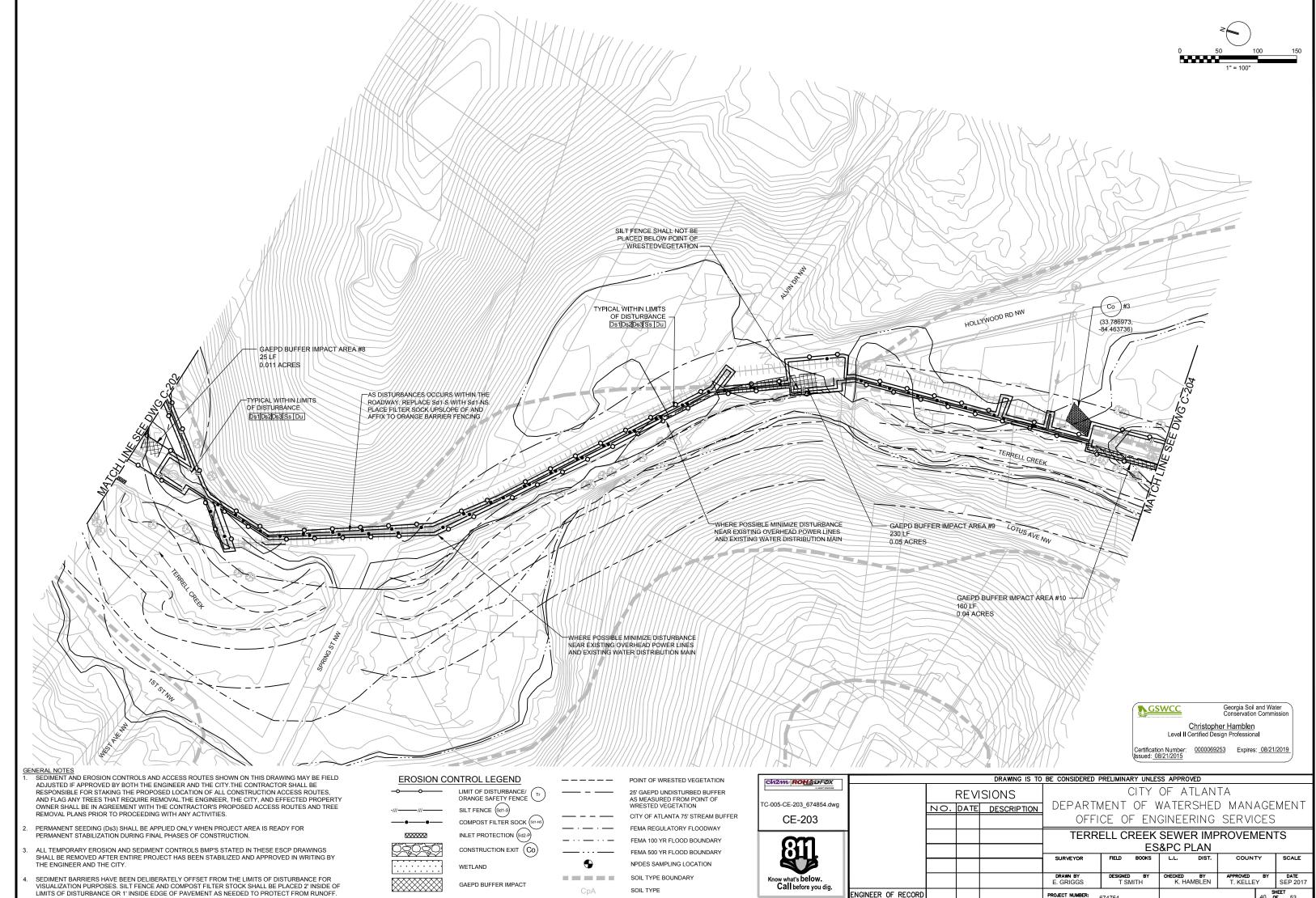
DATE SEP 2017

APPROVED BY T. KELLEY

CHECKED BY K. HAMBLEN

PROJECT NUMBER:





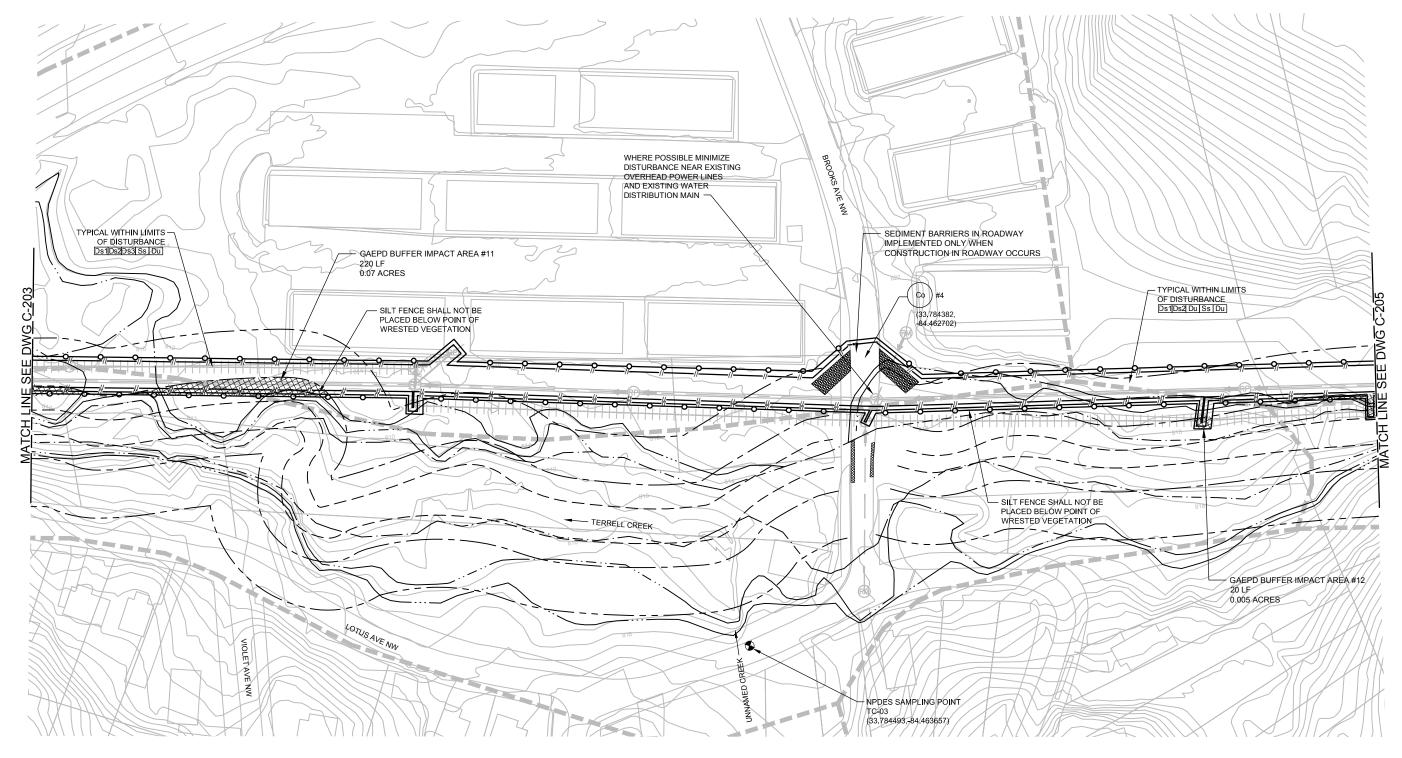
GAEPD BUFFER IMPACT

CpA

SOIL TYPE

ENGINEER OF RECORD

PROJECT NUMBER:



Georgia Soil and Water Conservation Commission Christopher Hamblen
Level II Certified Design Professional Certification Number: 0000069253 Expires: 08/21/2019

GENERAL NOTES

1. SEDIMENT AND EROSION CONTROLS AND ACCESS ROUTES SHOWN ON THIS DRAWING MAY BE FIELD ADJUSTED IF APPROVED BY BOTH THE ENGINEER AND THE CITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING THE PROPOSED LOCATION OF ALL CONSTRUCTION ACCESS ROUTES, AND FLAG ANY TREES THAT REQUIRE REMOVAL. THE ENGINEER, THE CITY, AND EFFECTED PROPERTY OWNER SHALL BE IN AGREEMENT WITH THE CONTRACTOR'S PROPOSED ACCESS ROUTES AND TREE REMOVAL PLANS PRIOR TO PROCEEDING WITH ANY ACTIVITIES.

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EROSION CONTROL LEGEND

LIMIT OF DISTURBANCE/ ORANGE SAFETY FENCE SILT FENCE (Sd1-S) COMPOST FILTER SOCK (Sd1-NS) INLET PROTECTION (Sd2-P)

GAEPD BUFFER IMPACT

CONSTRUCTION EXIT (Co) WETLAND

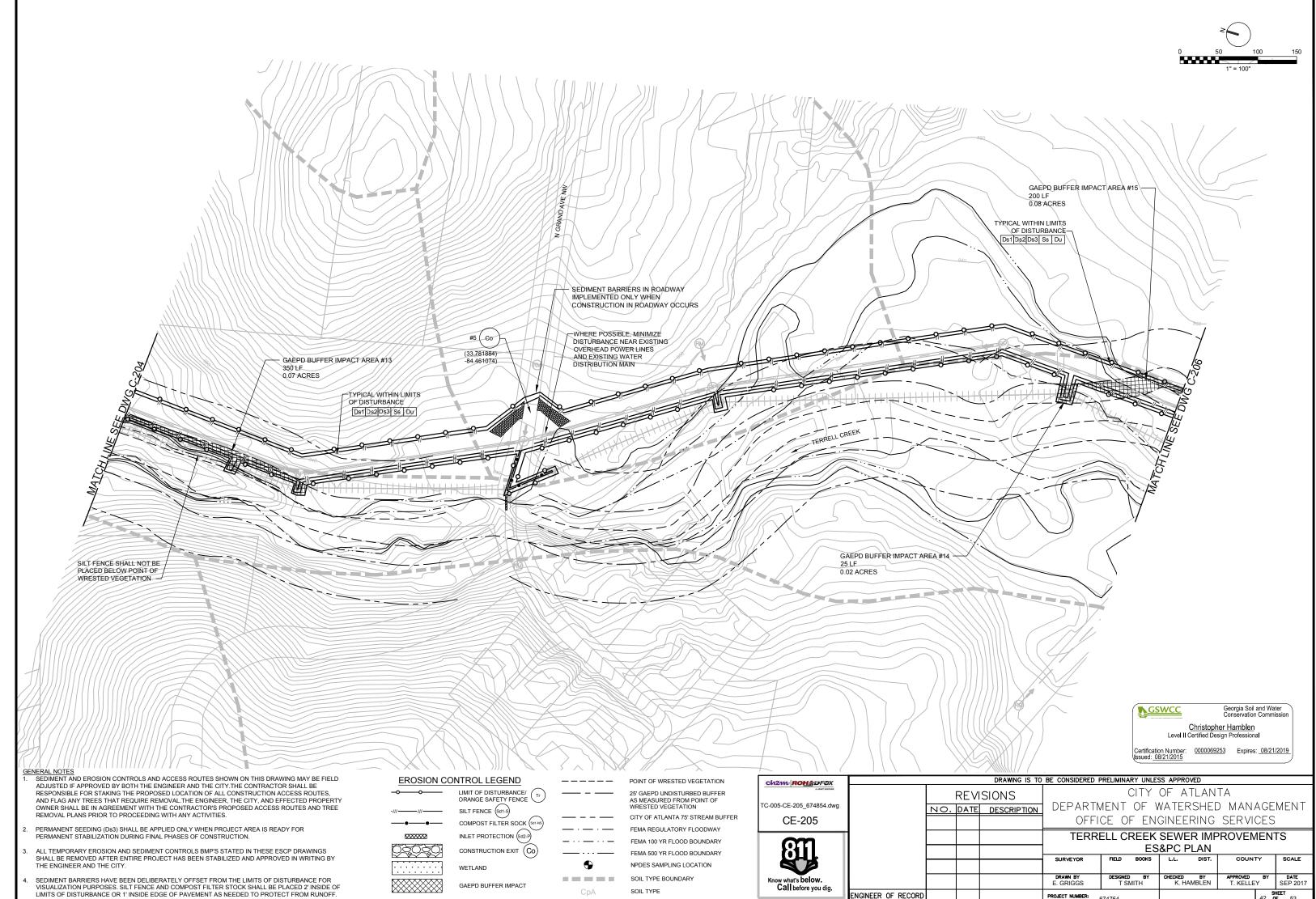
25' GAEPD UNDISTURBED BUFFER AS MEASURED FROM POINT OF WRESTED VEGETATION CITY OF ATLANTA 75' STREAM BUFFER FEMA REGULATORY FLOODWAY FEMA 100 YR FLOOD BOUNDARY FEMA 500 YR FLOOD BOUNDARY NPDES SAMPLING LOCATION SOIL TYPE BOUNDARY SOIL TYPE СрА

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ENGINEER OF RECORD PROJECT NUMBER: 674754 SHEET 41 OF 53	8



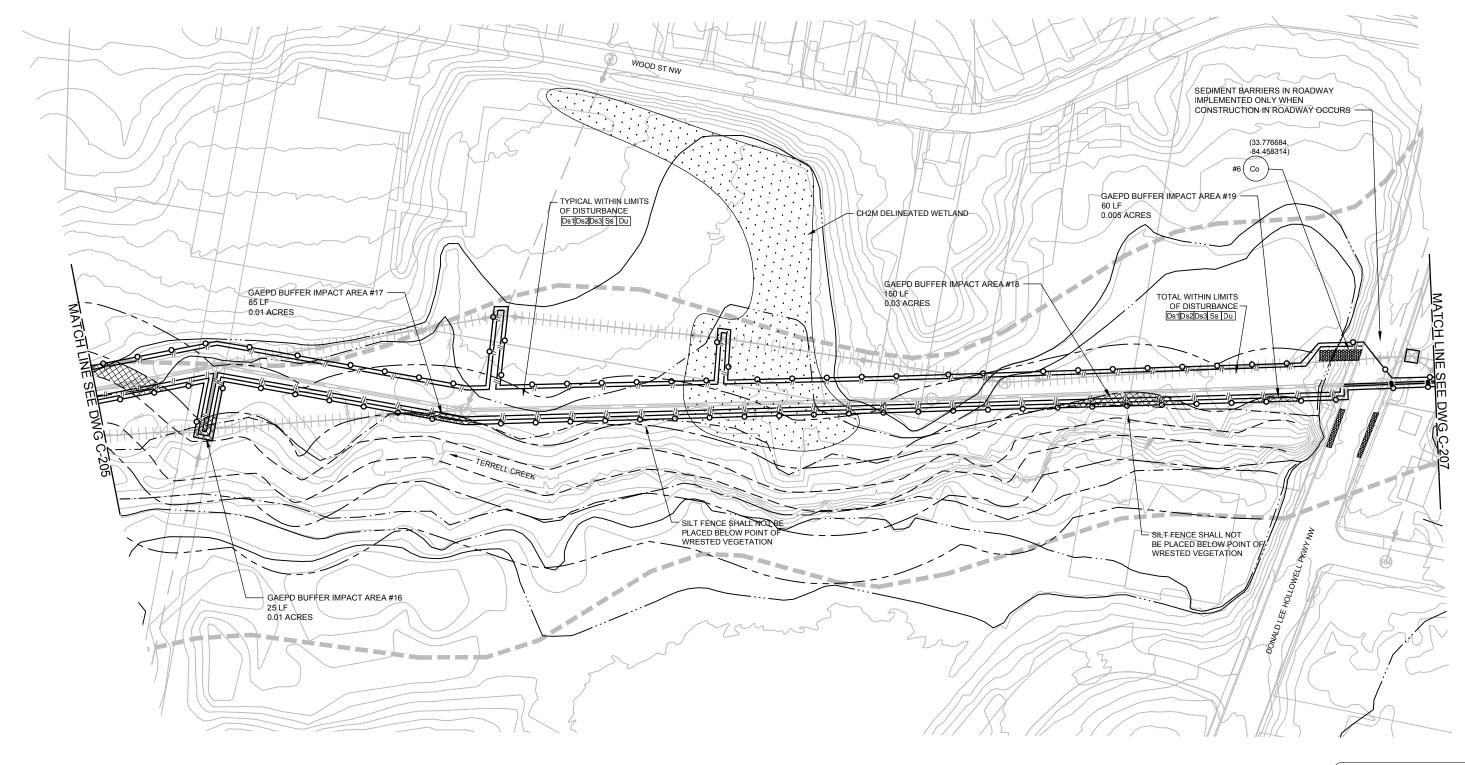
GAEPD BUFFER IMPACT

CpA

SOIL TYPE

ENGINEER OF RECORD

PROJECT NUMBER:



Georgia Soil and Water Conservation Commissio <u>Christopher Hamblen</u> Level **II** Certified Design Professional

GENERAL NOTES

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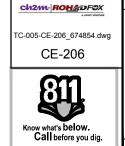
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EROSION CONTROL LEGEND							
──	LIMIT OF DISTURBANCE/ ORANGE SAFETY FENCE						
/////////	SILT FENCE (Sd1-S)						
-•	COMPOST FILTER SOCK (Sd1-NS)						
	INLET PROTECTION (Sd2-P)						
	CONSTRUCTION EXIT						

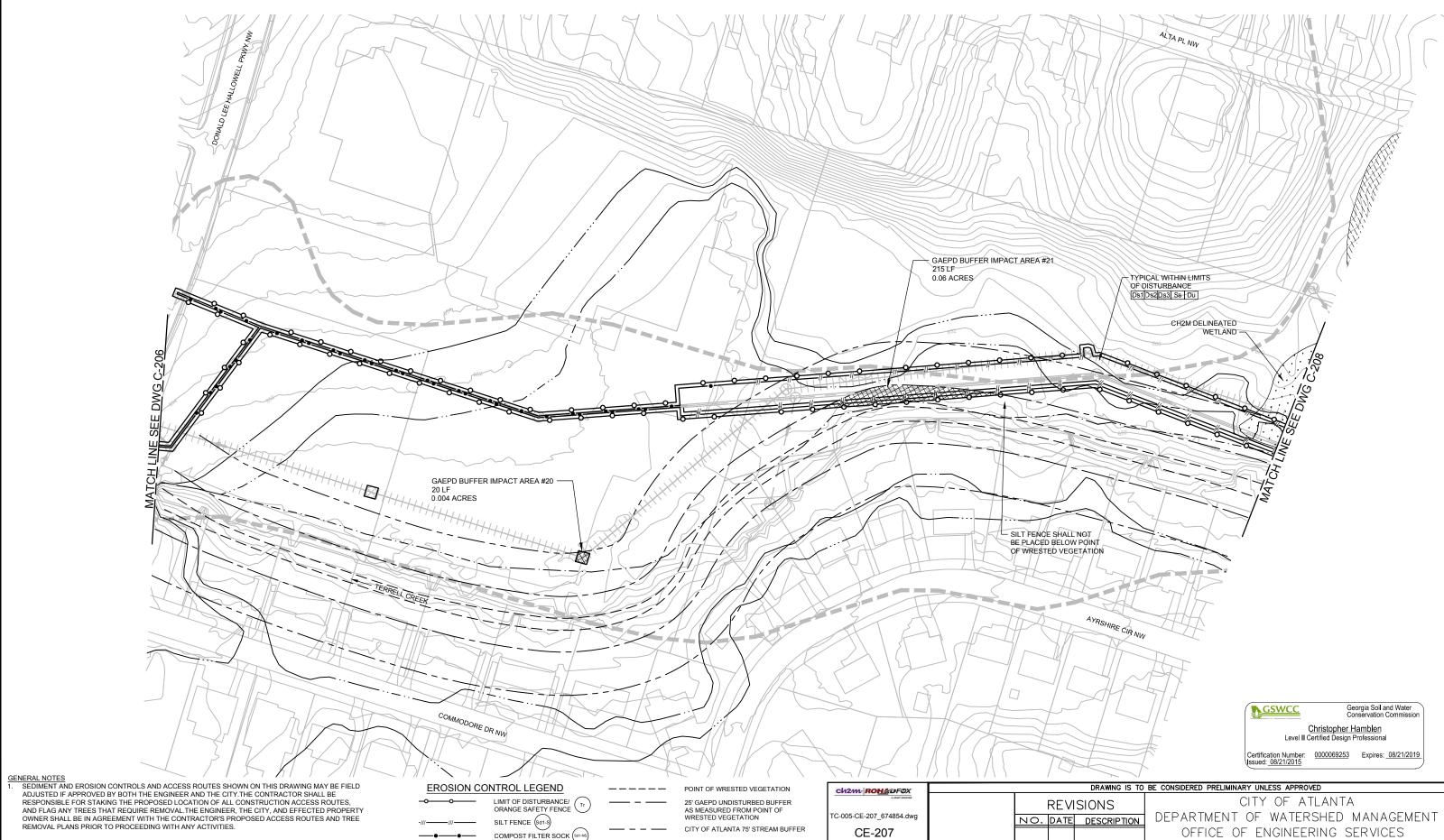
WETLAND

GAEPD BUFFER IMPACT

25' GAEPD UNDISTURBED BUFFER AS MEASURED FROM POINT OF WRESTED VEGETATION CITY OF ATLANTA 75' STREAM BUFFER FEMA REGULATORY FLOODWAY FEMA 100 YR FLOOD BOUNDARY FEMA 500 YR FLOOD BOUNDARY NPDES SAMPLING LOCATION SOIL TYPE BOUNDARY СрА SOIL TYPE



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ENGINEER OF RECORD				PROJECT NUMBER:	674854					43 C	HEET F 53



PERMANENT SEEDING (Ds3) SHALL BE APPLIED ONLY WHEN PROJECT AREA IS READY FOR PERMANENT STABILIZATION DURING FINAL PHASES OF CONSTRUCTION. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS BMP'S STATED IN THESE ESCP DRAWINGS SHALL BE REMOVED AFTER ENTIRE PROJECT HAS BEEN STABILIZED AND APPROVED IN WRITING BY THE ENGINEER AND THE CITY.

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SILT FENCE Sd1-S COMPOST FILTER SOCK (Sd1-NS) INLET PROTECTION (Sd2-P)

GAEPD BUFFER IMPACT

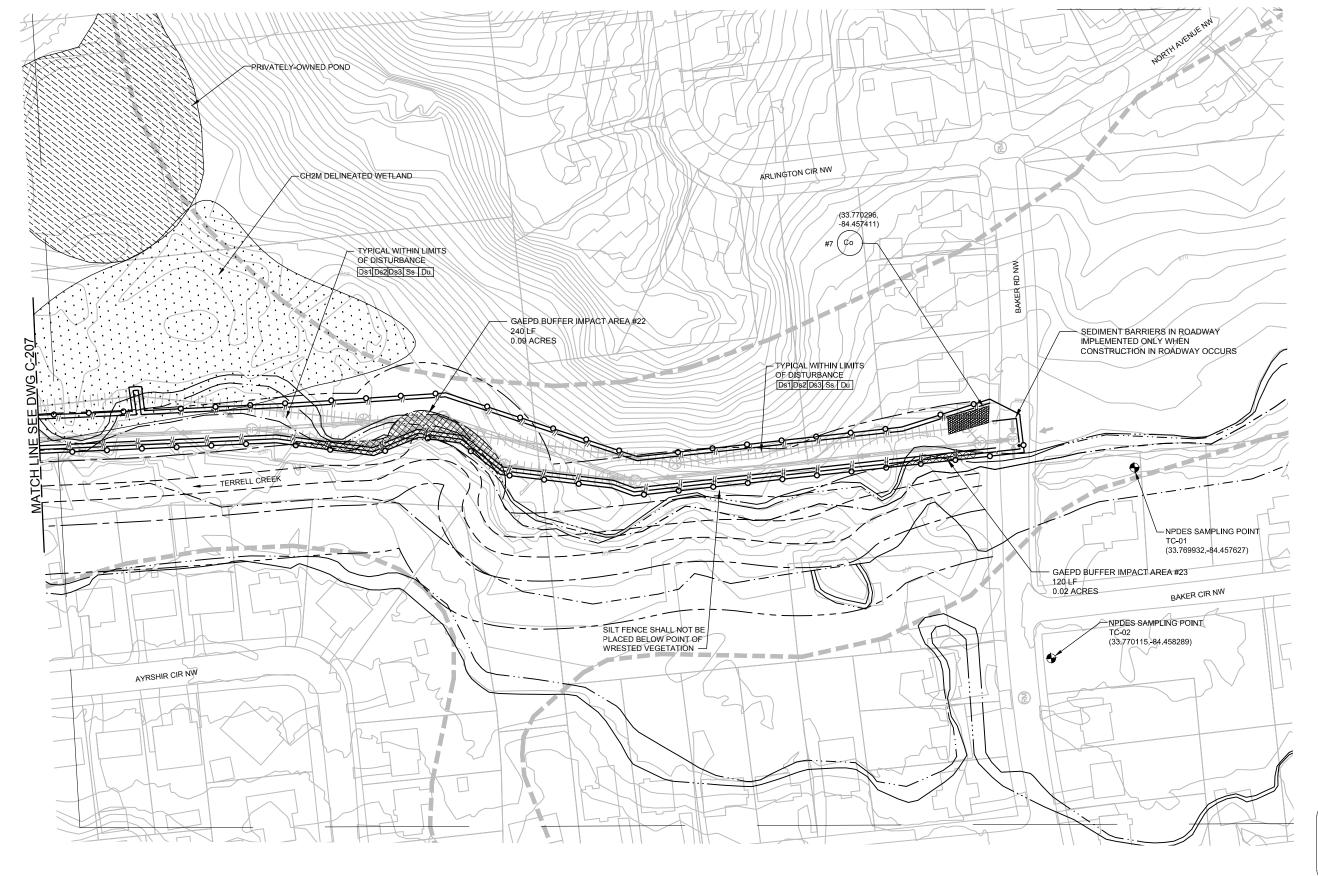
CONSTRUCTION EXIT (Co)

25' GAEPD UNDISTURBED BUFFER AS MEASURED FROM POINT OF WRESTED VEGETATION CITY OF ATLANTA 75' STREAM BUFFER FEMA REGULATORY FLOODWAY FEMA 100 YR FLOOD BOUNDARY FEMA 500 YR FLOOD BOUNDARY SOIL TYPE BOUNDARY

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ENGINEER OF RECORD				PROJECT NUMBER:	674754	VIIIII	IX. HAI	VIDELIN	I. KELLE	s	HEET DF 53



Georgia Soil and Water Conservation Commission <u>Christopher Hamblen</u> Level **II** Certified Design Professional Certification Number: 0000069253 Expires: 08/21/2019 |

GENERAL NOTES

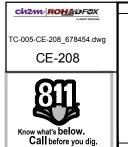
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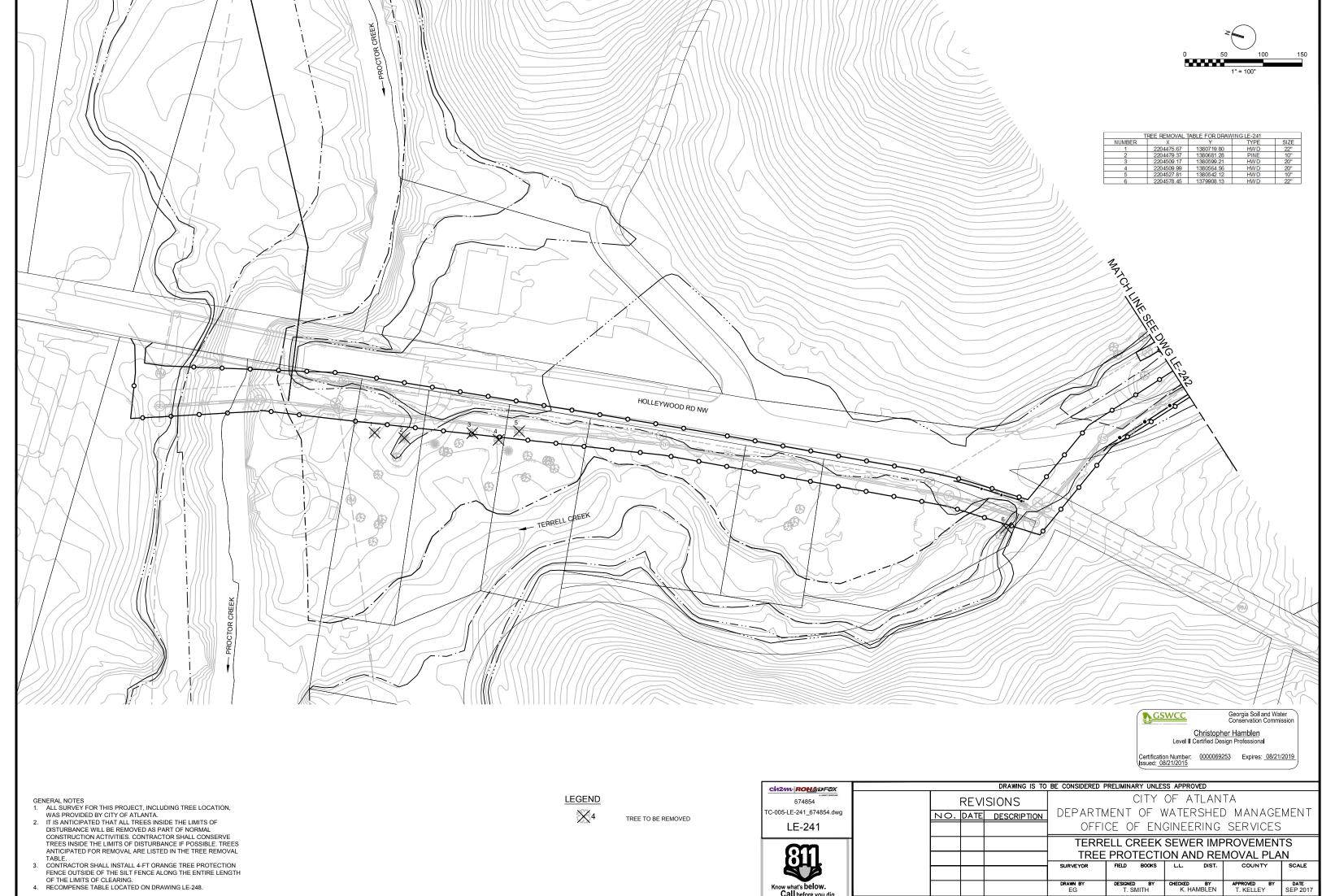
EROSION CO	NTROL LEGEND
·	LIMIT OF DISTURBANCE/ ORANGE SAFETY FENCE
	SILT FENCE (Sd1-S)
-•	COMPOST FILTER SOCK (Sd1-NS)
	INLET PROTECTION (Sd2-P)

CONSTRUCTION EXIT (Co) GAEPD BUFFER IMPACT

25' GAEPD UNDISTURBED BUFFER AS MEASURED FROM POINT OF WRESTED VEGETATION CITY OF ATLANTA 75' STREAM BUFFER FEMA REGULATORY FLOODWAY FEMA 100 YR FLOOD BOUNDARY FEMA 500 YR FLOOD BOUNDARY NPDES SAMPLING LOCATION SOIL TYPE BOUNDARY СрА SOIL TYPE



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				E. GRIGGS	T SMITH	K. HAMB		T. KELLE		SEP 2017
NGINEER OF RECORD				PROJECT NUMBER:	674754				45 C	HEET DF 53



ENGINEER OF RECORD

PROJECT NUMBER:

674754

100% REVIEW DOCUMENTS



GENERAL NOTES

1. ALL SURVEY FOR THIS PROJECT, INCLUDING TREE LOCATION, WAS PROVIDED BY CITY OF ATLANTA.

2. IT IS ANTICIPATED THAT ALL TREES INSIDE THE LIMITS OF DISTURBANCE WILL BE REMOVED AS PART OF NORMAL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL CONSERVE TREES INSIDE THE LIMITS OF DISTURBANCE IF POSSIBLE. TREES ANTICIPATED FOR REMOVAL ARE LISTED IN THE TREE REMOVAL TABLE

ANTICIPALED FOR REMOVAL ARE LISTED IN THE TREE REMOVAL
TABLE.

CONTRACTOR SHALL INSTALL 4-FT ORANGE TREE PROTECTION
FENCE OUTSIDE OF THE SILT FENCE ALONG THE ENTIRE LENGTH
OF THE LIMITS OF CLEARING.

RECOMPENSE TABLE LOCATED ON DRAWING LE-248.

<u>LEGEND</u>

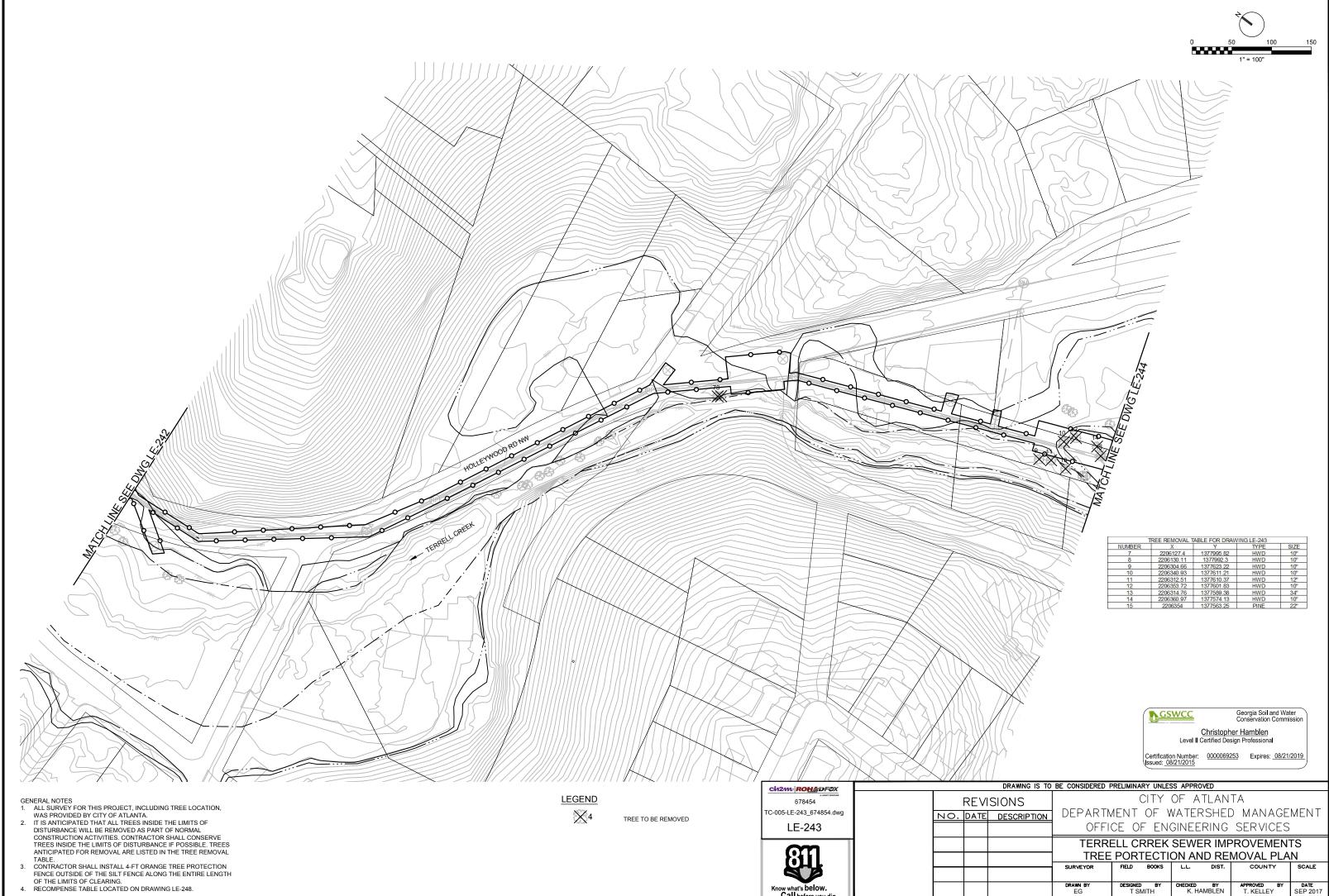


TREE TO BE REMOVED

ch2m. ROHADFOX 674854 TC-005-LE-242_674854.dwg LE-242

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Know what's below. Call before you dig.

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ı					drawn by MG	DESIGNED BY T. SMITH	CHECKED K. HAI	BY MBLEN	APPROVED T. KELLE	BY Y	DATE SEP 2017
	ENGINEER OF RECORD				PROJECT NUMBER: 674754					47 C	HEET F 53



100% REVIEW DOCUMENTS

DATE SEP 2017

APPROVED BY T. KELLEY

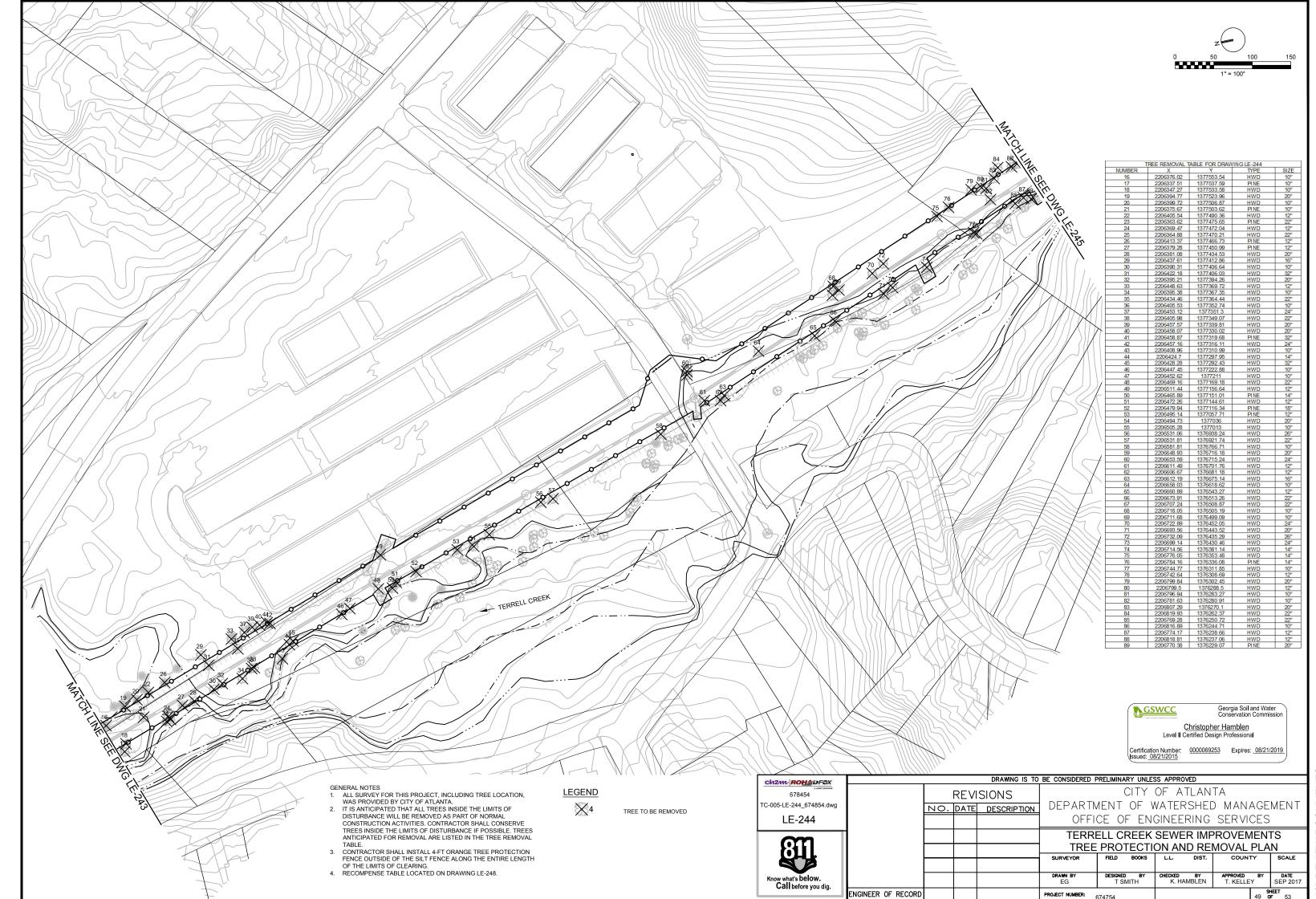
CHECKED BY K. HAMBLEN

DESIGNED BY T SMITH

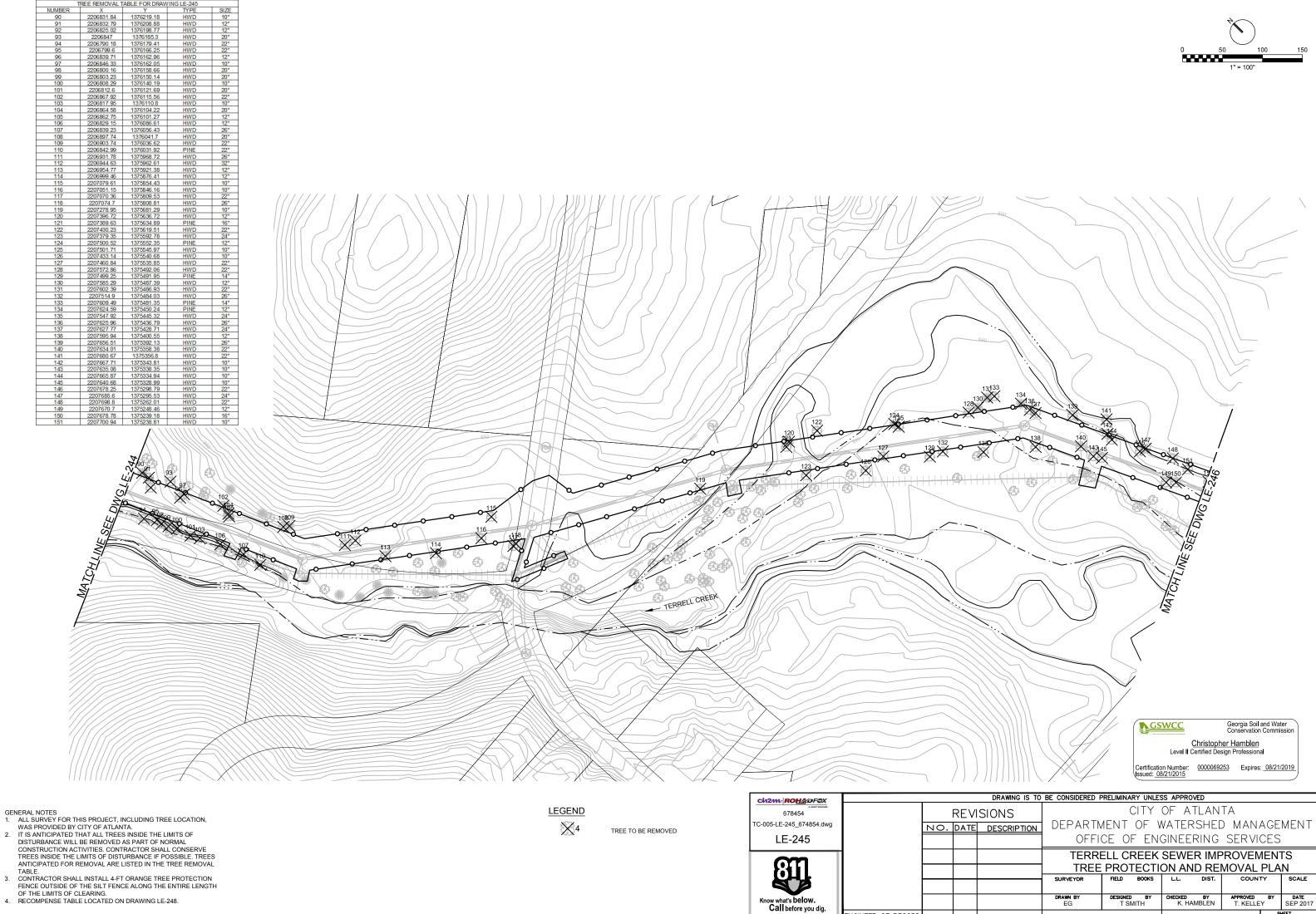
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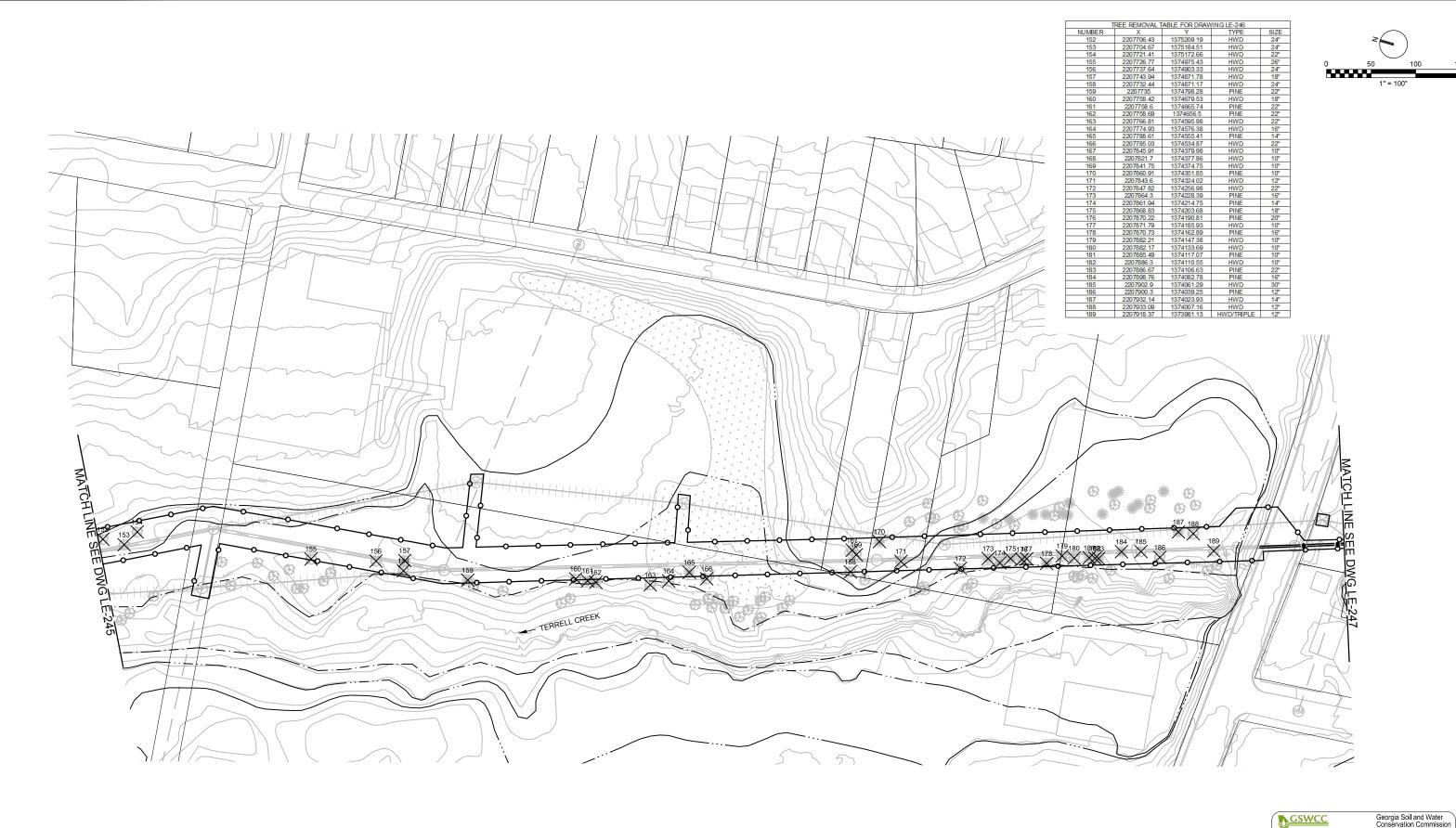
ENGINEER OF RECORD

PROJECT NUMBER:

674754

RECOMPENSE TABLE LOCATED ON DRAWING LE-248.

REVIEW DOCUMENTS



GSWCC

Christopher Hamblen
Level II Certified Design Professiona

Certification Number: 0000069253 Expires: 08/21/2019 Expires: 08/21/2019

GENERAL NOTES

1. ALL SURVEY FOR THIS PROJECT, INCLUDING TREE LOCATION, WAS PROVIDED BY CITY OF ATLANTA.

2. IT IS ANTICIPATED THAT ALL TREES INSIDE THE LIMITS OF DISTURBANCE WILL BE REMOVED AS PART OF NORMAL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL CONSERVE TREES INSIDE THE LIMITS OF DISTURBANCE IF POSSIBLE. TREES ANTICIPATED FOR REMOVAL ARE LISTED IN THE TREE REMOVAL TABLE.

TABLE
CONTRACTOR SHALL INSTALL 4-FT ORANGE TREE PROTECTION
FENCE OUTSIDE OF THE SILT FENCE ALONG THE ENTIRE LENGTH
OF THE LIMITS OF CLEARING.

RECOMPENSE TABLE LOCATED ON DRAWING LE-248.

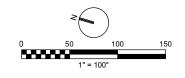


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LE-246	
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Call before you dig.	ENCINEED

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l	ENGINEER OF RECORD				PROJECT NUMBER:	674854						HEET DF 53	٤

DRAWING IS TO BE CONSIDERED PRELIMINARY UNLESS APPROVED





GSWCC

Georgia Soil and Water Conservation Commission

Christopher Hamblen
Level II Certified Design Professiona

Certification Number: 0000069253 Expires: 08/21/2019

- GENERAL NOTES

 1. ALL SURVEY FOR THIS PROJECT, INCLUDING TREE LOCATION, WAS PROVIDED BY CITY OF ATLANTA.

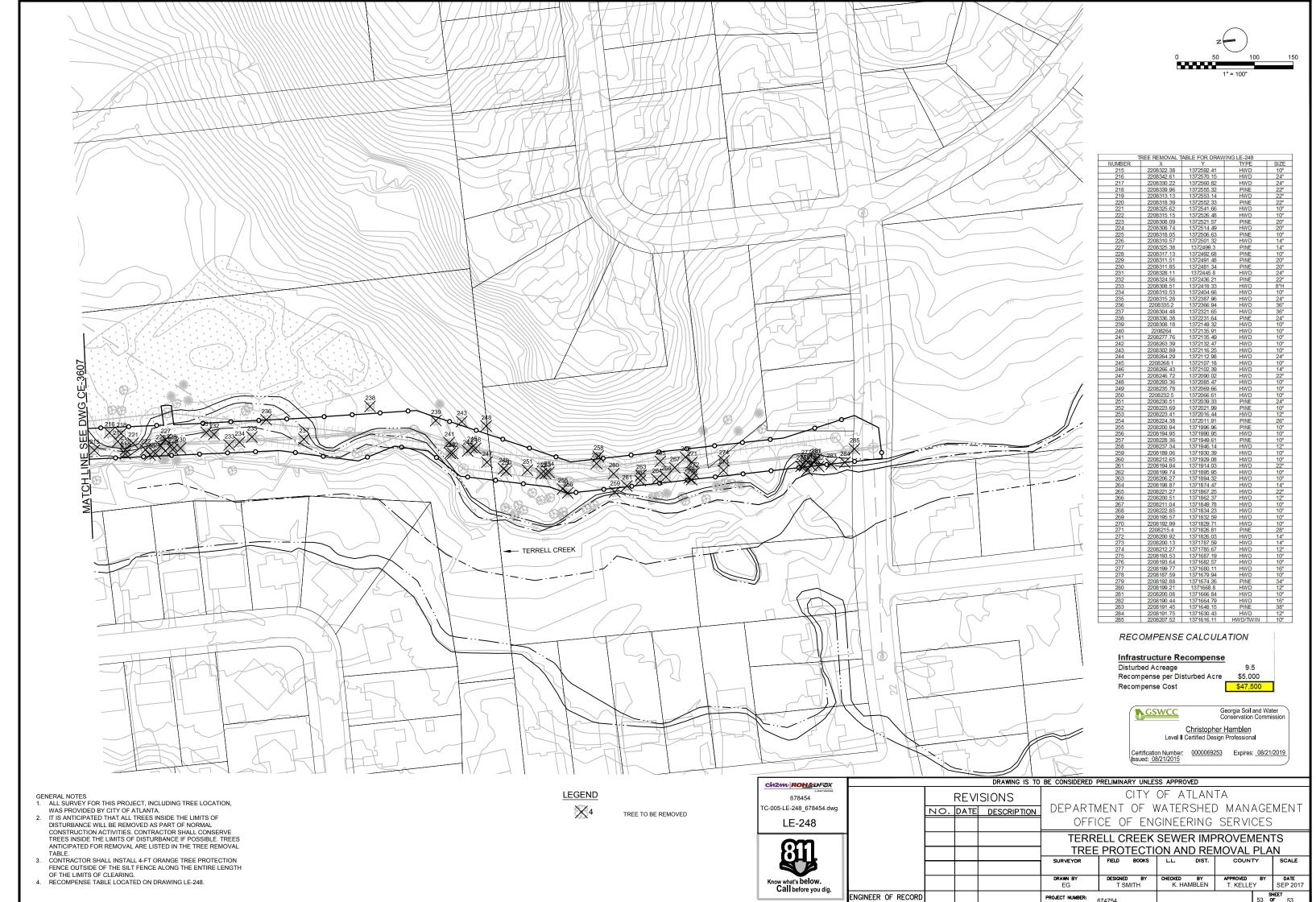
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 RECOMPENSE TABLE LOCATED ON DRAWING LE-248.

<u>EGEND</u>	
X 4	TREE TO BE REMOVED

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Know what's below. Call before you dig.

		REVISIONS				CITY OF ATLANTA							
		νо.	DATE	DESCRIPTION									
					OFFICE OF ENGINEERING SERVICES								
П					TERRELL CREEK SEWER IMPROVEMENTS								
Ш	TREE PROTECTION AND REMOVAL										AL		
П					SURVEYOR	FIELD	BOOKS	L.L.	DIST.	COUN	TY	SCALE	
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Ш					EG EG		MITH		MBLEN	T. KELLE		SEP 2017	
l	ENGINEER OF RECORD				PROJECT NUMBER:					HEET DF 53			

DRAWING IS TO BE CONSIDERED PRELIMINARY UNLESS APPROVED



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