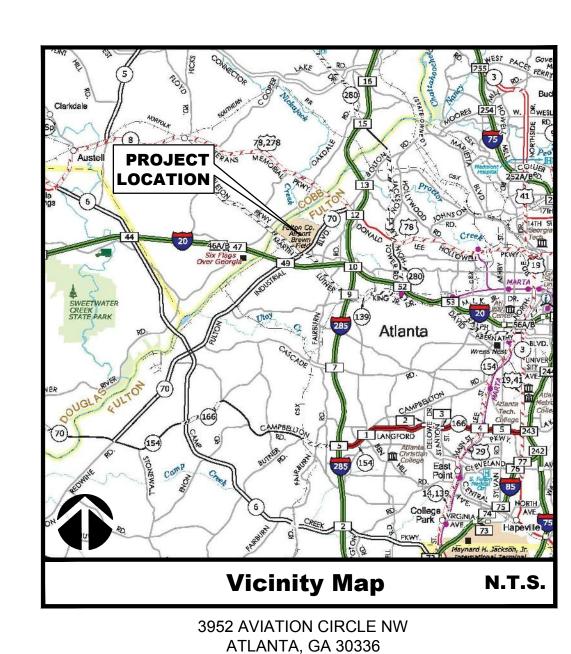
CONSTRUCTION PLANS

FOR

SANDY CREEK ROAD SANITARY SEWER **IMPROVEMENTS PROJECT**

AT FULTON COUNTY AIRPORT - BROWN FIELD



(404) 699-4200





DWG. No.

SHEET TITLE	DWG. No.
COVER SHEET	C-1
GENERAL NOTES-CIVIL	GN-1
SUMMARY OF QUANTITIES	SQ-1
PROJECT SAFETY AND PHASING PLAN NOTES	PSPN-1
PROJECT SAFETY AND PHASING PLAN LAYOUT	PSPL-1
PROJECT SAFETY AND PHASING PLAN	PSPP-1
PROJECT SAFETY AND PHASING PLAN DETAILS	PSPD-1
PERMIT SET	
PERMIT SET - COVER SHEET	C-0.0
PERMIT SET - GENERAL NOTES	C-0.1
EROSION AND SEDIMENT CONTROL NOTES	C-0.2 TO C-0.4
EXISTING CONDITIONS	C-1.0 TO C-1.1
UTILITY PLANS	C-2.0 TO C-2.1
PROFILES	C-3.0 TO C-3.1
EROSION & SEDIMENT CONTROL PLAN - INITIAL & INTERMEDIATE PHASES	C-4.0 TO C-4.1
EROSION & SEDIMENT CONTROL PLAN - FINAL PHASE	C-4.2 TO C-4.3
EROSION AND SEDIMENT CONTROL DETAILS	C-5.0 TO C-5.3
CONSTRUCTION DETAILS	(C-6.0 TO C-6.3)
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REVISION SET

8/07/2019

PREPARED FOR

FULTON COUNTY BOARD OF COMMISSIONERS

MARCH, 2019



SET NO.

C-1

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GENERAL NOTES

SAFETY AND SECURITY

- S-1. THE CONTRACTOR WILL OBTAIN, HAVE KNOWLEDGE OF, AND INCORPORATE THE FOLLOWING SAFETY PROVISIONS INTO THE CONSTRUCTION PROJECT:
 - OPERATIONAL SAFETY ON AIRPORTS DURING
 - CONSTRUCTION AC 150/5370-2G
 AIRPORT SAFETY SELF-INSPECTION AC 150/5200-18C
 - PAINTING, MARKING, AND LIGHTING OF VEHICLES USED ON AIRPORT AC 150/5210-5D
- S-2. CONTRACTORS SHALL MONITOR RADIO COMMUNICATION WITH AIRPORT GROUND CONTROL AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL HAVE WORKING RADIO(S) ON-SITE AT ALL TIMES DURING CONTRUCTION AND SHALL ASSIGN RESPONSIBLE PERSONNEL TO CONTINUOUSLY MONITOR THE GROUND CONTROL FREQUENCY (121.7 MHz). PROVIDE A RADIO AT EACH SEPARATE WORK LOCATION.
- S-3. NOTICE TO AIRMEN (NOTAMS) THE CONTRACTOR SHALL SCHEDULE AND PROVIDE THE NECESSARY INFORMATION ON CONSTRUCTION CONDITIONS SO THAT OWNER CAN ADVISE THE FLIGHT SERVICE STATION AND ISSUE NOTAM(S) IN ACCORDANCE WITH ESTABLISHED CRITERIA NO LESS THAN 72 HOURS PRIOR TO OPERATION BEGINNING.
- S-4. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE PROJECT AREA THROUGH THE PROJECT ACCESS GATES. CONTRACTOR WILL BE RESPONSIBLE FOR SECURITY OF ALL GATES IN ACCORDANCE WITH THE AIRPORT'S APPROVED SECURITY PROGRAM.
- S-5. CONTRACTOR SHALL UTILIZE EXISTING GATES AS TEMPORARY ACCESS FOR THE CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL MAN THESE GATES WITH PERSONNEL OR LOCK GATES AT ALL TIMES DURING CONSTRUCTION ACTIVITIES AND SHALL LOCK THESE GATES DURING NON-CONSTRUCTION HOURS. THE SECURITY GUARD SHALL HAVE A CELL PHONE AND OPERATIONAL RADIO. THE GUARD'S DUTIES SHALL INCLUDE MONITORING TRAFFIC IN AND OUT OF THE GATE AND PREVENTING UNAUTHORIZED PERSONNEL FROM ENTERING THE SECURITY AREA.
- S-6. AREAS OUTSIDE THE PROJECT LIMITS ARE DESIGNATED AS RESTRICTED AREAS. THE CONTRACTOR'S FORCES ARE PROHIBITED FROM ENTERING RESTRICTED AREAS AT ANY TIME, UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER OR AIRPORT OWNER. NO CONSTRUCTION MAY OCCUR WITHIN A SAFETY AREA WHILE THE ASSOCIATED RUNWAY OR TAXIWAY IS OPEN FOR AIRCRAFT OPERATIONS.
- S-7. ALL VEHICLES USED ON THE AIRFIELD SHALL MEET AIRPORT REQUIREMENTS FOR MARKING AND LIGHTING.
- S-8. FOR ADDITIONAL SAFETY AND SECURITY REQUIREMENTS, SEE SPECIFICATIONS (SECTION 01030).
- S-9. OPEN TRENCHES OR EXCAVATIONS ARE NOT PERMITTED WITHIN THE RSA OR TSA WHILE THE RUNWAY OR TAXIWAY IS OPEN. IF POSSIBLE, BACKFILL TRENCHES BEFORE THE RUNWAY OR TAXIWAY IS OPENED. IF THE RUNWAY OR TAXIWAY MUST BE OPENED BEFORE EXCAVATIONS ARE BACKFILLED, COVER THE EXCAVATIONS APPROPRIATELY. COVERING FOR OPEN TRENCHES MUST BE DESIGNED TO ALLOW THE SAFE OPERATION OF THE HEAVIEST AIRCRAFT OPERATING ON THE RUNWAY OR TAXIWAY ACROSS THE TRENCH WITHOUT DAMAGE TO THE AIRCRAFT.
- S-10. THE CONTRACTOR SHALL PROMINENTLY MARK OPEN TRENCHES AND EXCAVATIONS AT THE CONSTRUCTION SITE WITH RED OR ORANGE FLAGS, AS APPROVED BY THE ENGINEER, AND LIGHT THEM WITH RED LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.

HAUL ROUTES, STAGING AREAS, AND CONSTRUCTION ACTIVITIES

- C-1. THE CONTRACTOR SHALL CONDUCT HIS CONSTRUCTION OPERATIONS AS SHOWN ON THE PROJECT LAYOUT AND SAFETY PLAN AND HIS APPROVED PHASING PLAN. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE ENGINEER TO MINIMIZE DISRUPTION TO AIRPORT OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPLIANCE WITH SAFETY REQUIREMENTS AND TO MINIMIZE INTERFERENCE TO AIRCRAFT OPERATIONS DURING CONSTRUCTION.
- C-2. THE CONTRACTOR'S STAGING AREA AND HAUL ROUTES SHOWN ON THE PLANS ARE GENERAL AND FOR INFORMATION PURPOSES ONLY. THE ACTUAL SIZE AND LOCATION OF STAGING AREAS AND HAUL ROUTES WILL BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.
- C-3. ALL EXISTING GRASSED AREAS WHICH ARE DISTURBED AS PART OF THE CONTRACTOR'S ACCESS ROAD, CONTRACTOR'S STAGING AREA, AND HAUL ROUTES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AFTER COMPLETION OF THE PROJECT. IN ADDITION, ALL EXISTING ROADS, APRONS AND TAXIWAYS THAT WILL BE USED AS THE CONTRACTOR'S HAUL ROUTE SHALL BE MAINTAINED DURING CONSTRUCTION AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS ITEM.
- C-4. EXCEPT WHERE DESIGNATED ON PLANS OR AS AUTHORIZED BY ENGINEER, CONTRACTOR WILL NOT BE ALLOWED TO USE ANY OF THE EXISTING RUNWAYS, TAXIWAYS, OR RAMPS AS PART OF THE HAUL ROAD.
- C-5. ALL EQUIPMENT MUST BE RETURNED TO THE STAGING AREA AT THE END OF EACH WORK DAY AND WHEN NOT ENGAGED IN THE CONSTRUCTION DURING NON-WORKING DAYS AND NIGHTS. OWNER WILL DESIGNATE AREAS FOR CONTRACTOR'S EMPLOYEES' AUTO PARKING.
- C-6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PROVIDING ALL PERMANENT AND TEMPORARY UTILITY CONNECTIONS TO THE STAGING AREA.
- C-7. CONTRACTOR SHALL MAINTAIN ALL AIRFIELD SAFETY DEVICES, SUCH AS STAKED LIMIT LINES, FOR THE DURATION OF THE PROJECT AS REQUIRED. DAMAGED STAKES OR FLAGGING SHALL BE REPLACED IMMEDIATELY. CONTRACTOR TO SUBMIT PLAN SHOWING LOCATION OF LIMIT LINES FOR EACH PHASE AND FOR PROJECT DURATION TO THE ENGINEER FOR APPROVAL.
- C-8. BURNING OF DEBRIS WILL NOT BE ALLOWED ON AIRPORT
- C-9. CONTRACTOR SHALL CONTROL DUST AT AN ACCEPTABLE LEVEL. THE CONTRACTOR SHALL BE REQUIRED TO KEEP A WATER TRUCK AT THE PROJECT SITE DURING HAULING OPERATIONS. IF ONE WATER TRUCK IS INADEQUATE TO CONTROL DUST PROPERLY, THE CONTRACTOR SHALL FURNISH THE PROPER NUMBER OF TRUCKS OR OTHER SUITABLE MEANS TO ACCOMPLISH THIS ITEM.
- C-10. CONTRACTOR MUST COORDINATE WITH OWNER AND OTHERS INVOLVED WITH ALL CONSTRUCTION PROJECTS AT THE AIRPORT.
- C-11. CONTRACTOR IS SOLEY RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR THE PROJECT PRIOR TO ANY CONSTRUCTION ACTIVITIES.

EXISTING CONDITIONS/UNDERGROUND AND CONCEALED FACILITIES

- E-1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION AND REPORT TO ENGINEER ANY VARIATIONS FROM THE INFORMATION SHOWN ON CONSTRUCTION PLANS.
- E-2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND IDENTIFICATION OF ALL EXISTING UTILITIES AND PIPELINES IN THE CONSTRUCTION AREA. ANY EXISTING UTILITIES OR PIPELINES (ON OR OFF AIRPORT PROPERTY) DAMAGED BY CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR ALL UTILITIES/PIPELINES DAMAGED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL BE ASSESSED A CABLE CUT PENALTY OF \$1,000 PER OCCURRENCE.
- E-3. FAA CABLES WILL BE LOCATED AND MARKED BY FAA PRIOR TO CONSTRUCTION. CONTRACTOR IS TO NOTIFY FAA 30 DAYS IN ADVANCE SO THAT FAA CAN SCHEDULE THE REQUIRED MARKING TO PROTECT CABLES DURING CONSTRUCTION. ANY CABLES DAMAGED DURING CONSTRUCTION WILL BE REPLACED BY CONTRACTOR. CONTRACTOR SHALL PAY ALL COSTS ASSOCIATED WITH THE REPAIR OF DAMAGED CABLES AT NO COST TO OWNER.
- E-4. CONTRACTOR SHALL PROTECT ALL EXISTING LIGHTING SYSTEMS THAT ARE TO REMAIN, OR IF TO BE REMOVED, UNTIL THEY ARE DESIGNATED FOR REMOVAL.
- E-5. ANY UNPLANNED, UNAPPROVED, OR ACCIDENTAL SHUTDOWN OR INTERRUPTION OF SERVICE TO ANY LIGHTING CIRCUIT OR NAVIGATIONAL AID REQUIRES IMMEDIATE NOTIFICATION OF THE AIRPORT MANAGER AND ENGINEER BY THE CONTRACTOR. ALL NECESSARY REPAIRS WILL BE MADE IMMEDIATELY AND AT CONTRACTOR'S EXPENSE.
- E-6. THE CONTRACTOR WILL BE RESPONSIBLE FOR STAKING AND GRADE CONTROL OF ALL ELEMENTS OF THE CONSTRUCTION.

TEMPORARY MARKINGS, BARRICADES, TRAFFIC CONTROL

T-1. SEE SPECIFICATION SECTION 01030 AND 01530.

SPILL PREVENTION

ANY LEAKS OR SPILLS OF PETROLEUM PRODUCTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTAIN, CONTROL, AND REMEDIATE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ORDINANCES. AND LAWS.

CONTROL OF POLLUTANTS: POLLUTANTS OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS FUELS, LUBRICANTS, LEAD PAINT, CHEMICALS OR BATTERIES, SHALL BE TRANSPORTED, STORED AND UTILIZED IN A MANNER TO PREVENT LEAKAGE OR SPILLAGE INTO THE ENVIRONMENT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROPER AND LEGAL DISPOSAL OF ALL SUCH MATERIALS. EQUIPMENT, ESPECIALLY CONCRETE OR ASPHALT TRUCKS, SHALL NOT BE WASHED OR CLEANED OUT ON THE PROJECT EXCEPT IN AREAS WHERE UNUSED PRODUCT CONTAMINANTS CAN BE PREVENTED FROM ENTERING WATERWAYS.

AN SPCC PLAN WILL BE DEVELOPED BY THE CONTRACTOR AND APPROVED PRIOR TO INSTALLATION OF FUEL TANKS. THIS PLAN WILL REQUIRE THE FOLLOWING:

- 1. ALL BARE SOIL AROUND FUELING AREA LINED TO PREVENT SEEPAGE INTO SOIL. IN ADDITION, A SPILL KIT WILL BE KEPT ON SITE IN CASE OF LEAKS.
- 2. TERTIARY CONTAINMENT WILL BE PROVIDED IN THE MOBILE TRUCK AREA.
- 3. SECONDARY CONTAINMENT WILL BE PROVIDED IN THE FORM OF A CONTAINMENT PAD WITH A VALVE SIZED (OR APPROVED EQUAL) FOR THE APPROPRIATE REFUELING TRUCK.



FULTON COUNTY AIRPORT BROWN FIELD

ATLANTA, GEORGIA



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SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

GENERAL NOTES
CIVIL

FULTON COUNTY PROJECT NUMBER:				
195-031				
Date: Sheet Number:				
MARCH, 2019	1	of	1	
Scale:	Drawing Number:			

GN-1

N.T.S.

SUMMARY OF QUANTITIES

ITEM	SPEC	ITEM			
NO	NO.	DESCRIPTION	UNIT	PLAN	FINAL
1	GDOT-151	MOBILIZATION	L. SUM	1	İ
2	33 05 13.16	AIRCRAFT RATED MANHOLE	EACH	8	
3	22 1313	8 IN CLASS 53 DUCTILE IRON PIPE	LIN. FT.	1,542	
4	22 1313	8 IN CLEANOUT	EACH	8	·



FULTON COUNTY AIRPORT BROWN FIELD

ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

Designer:	
RKK	EORG
Technician:	GREGISTER T
RKK	No. PE040077
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SANDY CREEK ROAD
SANITARY SEWER
IMPROVEMENTS PROJECT

Drawing Name:

SUMMARY OF QUANTITIES

\	FULTON COUNTY PROJECT N	NUMBER:
	195-031	~~ <u>/1</u>
	Date:	Sheet Number:
	MARCH, 2019	1 of 1
	Scale:	Drawing Number:
	NONE	SQ-1

OF FAA ADVISORY CIRCULAR 150/5370-2G AND IS CONSIDERED AN INTEGRAL PART TO THE CONTRACTOR'S WORK. THE FOLLOWING DRAWINGS ARE CONSIDERED PART OF THE CSPP:

• GN-1 **GENERAL NOTES** PSPN-1 PROJECT SAFETY & PHASING PLAN NOTES PROJECT SAFETY & PHASING PLAN LAYOUT PSPL-1 PROJECT SAFETY & PHASING PLAN PSPP-1 PROJECT SAFETY & PHASING PLAN DETAILS PSPD-1

2. THE CSPP FOR THIS PROJECT WAS SUBMITTED TO THE FAA ON xxx xx, 2019 AND APPROVED BY THE FAA ON

3. THE CONTRACTOR SHALL PREPARE AND SUBMIT FAA FORM 7460-1 DETAILING CONSTRUCTION EQUIPMENT AND PROPOSED PARKING AREAS FOR THIS EQUIPMENT (SUCH AS CRANES AND GRADING MACHINES). THE CONTRACTOR SHOULD SUBMIT THIS FORM AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE OR SUFFICIENTLY IN ADVANCE OF THE WORK TO ALLOW FOR FAA REVIEW AND APPROVAL

4. THE CONTRACTOR SHALL SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) FOR REVIEW AND APPROVAL PRIOR TO NOTICE-TO-PROCEED. FOR INFORMATION PERTAINING TO THE REQUIREMENTS OF THIS DOCUMENT, REFER TO THE SECTION "CONTRACTOR RESPONSIBILITIES".

5. CONTACT INFORMATION

• AIRPORT OWNER: TIM BEGGERLY

AIRPORT MANAGER 404-699-4200

• ENGINEER: MICHAEL BAKER INTERNATIONAL

JAMES MIORIN, PROJECT MANAGER 770-263-9118

• CONTRACTOR:

AIRPORT OPERATOR'S RESPONSIBILITIES:

THE AIRPORT OPERATOR WILL:

- DEVELOP A CSPP THAT COMPLIES WITH THE SAFETY GUIDELINES OF FAA ADVISORY CIRCULAR 150/5370-2G.
- 2. REQUIRE THE REVIEW AND APPROVAL OF THE SPCD PROVIDED BY THE CONTRACTOR. THIS SPCD SHALL INDICATE HOW THE CONTRACTOR WILL COMPLY WITH THE CSPP AND PROVIDE DETAILS THAT CANNOT BE DETERMINED BEFORE CONTRACT AWARD.
- 3. CONVENE A PRECONSTRUCTION MEETING WITH THE CONSTRUCTION CONTRACTOR, ENGINEER, ATC PERSONNEL AIRPORT EMPLOYEES AND TENANT REPRESENTATIVES (IF APPROPRIATE) TO REVIEW AND DISCUSS PROJECT SAFETY BEFORE BEGINNING CONSTRUCTION ACTIVITY. THE FAA WILL BE INVITED TO ATTEND THIS MEETING.
- 4. ENSURE CONTACT INFORMATION IS ACCURATE FOR EACH REPRESENTATIVE/POINT OF CONTACT IDENTIFIED IN THE CSPP.
- 5. HOLD WEEKLY OR, IF NECESSARY, DAILY SAFETY MEETINGS WITH ALL AFFECTED PARTIES TO COORDINATE ACTIVITIES.
- NOTIFY USERS, ARFF PERSONNEL, AND FAA ATO PERSONNEL OF CONSTRUCTION AND CONDITIONS THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OF THE AIRPORT VIA NOTICES TO AIRMEN (NOTAM) AND OTHER METHODS, AS APPROPRIATE. CONVENE A MEETING FOR REVIEW AND DISCUSSION IF NECESSARY.
- 7. ENSURE CONSTRUCTION PERSONNEL KNOW OF ANY APPLICABLE AIRPORT PROCEDURES AND OF CHANGES TO THOSE PROCEDURES THAT MAY AFFECT THEIR WORK
- 8. ENSURE CONSTRUCTION CONTRACTORS AND SUBCONTRACTORS UNDERGO TRAINING REQUIRED BY THE CSPP AND SPCD.
- 9. ENSURE VEHICLE AND PEDESTRIAN OPERATIONS ADDRESSED IN THE CSPP AND SPCD ARE COORDINATED WITH AIRPORT TENANTS, AIRPORT OPERATIONS, AND CONSTRUCTION CONTRACTORS.
- 10. AT CERTIFICATED AIRPORTS, ENSURE EACH CSPP AND SPCD IS CONSISTENT WITH PART 139.
- 11. CONDUCT INSPECTIONS SUFFICIENTLY FREQUENTLY TO ENSURE CONSTRUCTION CONTRACTORS AND TENANTS COMPLY WITH THE CSPP AND SPCD AND THAT THERE ARE NO ALTERED CONSTRUCTION ACTIVITIES THAT COULD CREATE POTENTIAL SAFETY HAZARDS.
- 12. RESOLVE SAFETY DEFICIENCIES IMMEDIATELY. AT AIRPORTS SUBJECT TO 49 CFR PART 1542, AIRPORT SECURITY, ENSURE CONSTRUCTION ACCESS COMPLIES WITH THE SECURITY REQUIREMENTS OF THAT REGULATION.
- 13. NOTIFY APPROPRIATE PARTIES WHEN CONDITIONS EXIST THAT INVOKE PROVISIONS OF THE CSPP AND SPCD (FOR EXAMPLE, IMPLEMENTATION OF LOW-VISIBILITY OPERATIONS).
- 14. ENSURE PROMPT SUBMITTAL OF A NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION (FORM 7460-1) FOR CONDUCTING AN AERONAUTICAL STUDY OF POTENTIAL OBSTRUCTIONS SUCH AS TALL EQUIPMENT (CRANES, CONCRETE PUMPS, ETC.), STOCK PILES, AND HAUL ROUTES. A SEPARATE FORM MAY BE FILED FOR EACH POTENTIAL OBSTRUCTION, OR ONE FORM MAY BE FILED DESCRIBING THE ENTIRE CONSTRUCTION AREA AND MAXIMUM EQUIPMENT HEIGHT. IN THE LATTER CASE, A SEPARATE FORM MUST BE FILED FOR ANY OBJECT BEYOND OR HIGHER THAN THE ORIGINALLY EVALUATED AREA/HEIGHT.
- 15. PROMPTLY NOTIFY THE ENGINEER OF ANY PROPOSED CHANGES TO THE CSPP PRIOR TO IMPLEMENTATION OF THE CHANGE. CHANGES TO THE CSPP REQUIRE REVIEW AND APPROVAL BY THE ENGINEER.

CONTRACTOR RESPONSIBILITIES:

THE CONTRACTOR SHALL:

- 1. SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE AIRPORT OPERATOR DESCRIBING HOW IT WILL COMPLY WITH THE REQUIREMENTS OF THE CSPP AND SUPPLYING ANY DETAILS THAT COULD NOT BE DETERMINED BEFORE CONTRACT AWARD. THE SPCD MUST INCLUDE A CERTIFICATION STATEMENT BY THE CONTRACTOR THAT INDICATES IT UNDERSTANDS THE OPERATIONAL SAFETY REQUIREMENTS OF THE CSPP AND IT ASSERTS IT WILL NOT DEVIATE FROM THE APPROVED CSPP AND SPCD UNLESS WRITTEN APPROVAL IS GRANTED BY THE AIRPORT OPERATOR. ANY CONSTRUCTION PRACTICE PROPOSED BY THE CONTRACTOR THAT DOES NOT CONFORM TO THE CSPP AND SPCD MAY IMPACT THE AIRPORT'S OPERATIONAL SAFETY AND WILL REQUIRE A REVISION TO THE CSPP AND SPCD AND RE-COORDINATION WITH THE AIRPORT OPERATOR AND THE FAA IN ADVANCE.
- 2. HAVE AVAILABLE AT ALL TIMES COPIES OF THE CSPP AND SPCD FOR REFERENCE BY THE AIRPORT OPERATOR AND ITS REPRESENTATIVES AND BY SUBCONTRACTORS AND CONTRACTOR EMPLOYEES
- ENSURE THAT CONSTRUCTION PERSONNEL ARE FAMILIAR WITH SAFETY PROCEDURES AND REGULATIONS ON THE AIRPORT. PROVIDE A POINT OF CONTACT WHO WILL COORDINATE AN IMMEDIATE RESPONSE TO CORRECT ANY CONSTRUCTION-RELATED ACTIVITY THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OF THE AIRPORT. MANY PROJECTS WILL REQUIRE 24-HOUR COVERAGE
- IDENTIFY IN THE SPCD THE CONTRACTOR'S ON-SITE EMPLOYEES RESPONSIBLE FOR MONITORING COMPLIANCE WITH THE CSPP AND SPCD DURING CONSTRUCTION. AT LEAST ONE OF THESE EMPLOYEES MUST BE ON-SITE WHENEVER ACTIVE CONSTRUCTION IS TAKING PLACE.

CONDUCT INSPECTIONS SUFFICIENTLY FREQUENTLY TO ENSURE CONSTRUCTION PERSONNEL COMPLY WITH THE CSPP AND SPCD AND THAT THERE ARE NO ALTERED CONSTRUCTION ACTIVITIES THAT COULD CREATE POTENTIAL SAFETY HAZARDS

- RESTRICT MOVEMENT OF CONSTRUCTION VEHICLES AND PERSONNEL TO PERMITTED CONSTRUCTION AREAS BY FLAGGING, BARRICADING, ERECTING TEMPORARY FENCING, OR PROVIDING ESCORTS, AS APPROPRIATE AND AS SPECIFIED IN THE CSPP AND SPCD
- 7. ENSURE THAT NO CONTRACTOR EMPLOYEES, EMPLOYEES OF SUBCONTRACTORS OR SUPPLIERS, OR OTHER PERSONS ENTER ANY PART OF THE AIR OPERATIONS AREA (AOA) FROM THE CONSTRUCTION SITE UNLESS AUTHORIZED.
- ENSURE PROMPT SUBMITTAL THROUGH THE AIRPORT OPERATOR OF FORM 7460-1 FOR THE PURPOSE OF CONDUCTING AN AERONAUTICAL STUDY OF CONTRACTOR EQUIPMENT SUCH AS TALL EQUIPMENT (CRANES, CONCRETE PUMPS, AND OTHER EQUIPMENT), STOCK PILES, AND HAUL ROUTES WHEN DIFFERENT FROM CASES PREVIOUSLY FILED BY THE AIRPORT OPERATOR.

THE CONTRACTOR'S SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) SHALL INCLUDE A STATEMENT BY THE CONSTRUCTION CONTRACTOR THAT HE/SHE HAS READ AND WILL ABIDE BY THE CSPP. IN ADDITION, THE SPCD MUST INCLUDE ALL SUPPLEMENTAL INFORMATION THAT COULD NOT BE INCLUDED IN THE CSPP PRIOR TO THE CONTRACT AWARD. THE CONTRACTOR STATEMENT SHOULD INCLUDE THE NAME OF THE CONTRACTOR, THE TITLE OF THE PROJECT CSPP, THE APPROVAL DATE OF THE CSPP, AND A REFERENCE TO ANY SUPPLEMENTAL INFORMATION (THAT IS. "I. NAME OF CONTRACTOR. HAVE READ THE TITLE OF PROJECT CSPP, APPROVED ON DATE, AND WILL ABIDE BY IT AS WRITTEN AND WITH THE FOLLOWING ADDITIONS AS NOTED:"). THE SUPPLEMENTAL INFORMATION IN THE SPCD SHOULD BE WRITTEN TO MATCH THE FORMAT OF THE CSPP INDICATING EACH SUBJECT BY CORRESPONDING CSPP SUBJECT NUMBER AND TITLE. IF NO SUPPLEMENTAL INFORMATION IS NECESSARY FOR ANY SPECIFIC SUBJECT. THE STATEMENT. "NO SUPPLEMENTAL INFORMATION." SHOULD BE WRITTEN AFTER THE CORRESPONDING SUBJECT TITLE. THE SPCD SHOULD NOT DUPLICATE INFORMATION IN THE CSPP:

THE CONTRACTOR'S SAFETY PLAN COMPLIANCE DOCUMENT SHALL CONFORM TO THE FOLLOWING FORMAT:

- COORDINATION. DISCUSS DETAILS OF PROPOSED SAFETY MEETINGS WITH THE AIRPORT OPERATOR AND WITH CONTRACTOR EMPLOYEES AND SUBCONTRACTORS.
- 2. PHASING. DISCUSS PROPOSED CONSTRUCTION SCHEDULE ELEMENTS, **INCLUDING:**
 - A. DURATION OF EACH PHASE.
 - B. DAILY START AND FINISH OF CONSTRUCTION, INCLUDING "NIGHT ONLY" CONSTRUCTION.
 - C. DURATION OF CONSTRUCTION ACTIVITIES DURING NORMAL RUNWAY OPERATIONS, CLOSED RUNWAY OPERATIONS AND MODIFIED RUNWAY "AIRCRAFT REFERENCE CODE" USAGE.
- 3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY. THESE AREAS ARE SHOWN ON THE CSPP.
- 4. PROTECTION OF NAVAIDS. DISCUSS SPECIFIC METHODS PROPOSED TO PROTECT OPERATING NAVAIDS.
- 5. CONTRACTOR ACCESS. PROVIDE THE FOLLOWING:
- A. DETAILS ON HOW THE CONTRACTOR WILL MAINTAIN THE INTEGRITY OF THE AIRPORT SECURITY FENCE (GATE GUARDS, DAILY LOG OF CONSTRUCTION PERSONNEL, AND OTHER).
- B. LISTING OF INDIVIDUALS REQUIRING DRIVER TRAINING (FOR CERTIFICATED AIRPORTS AND AS REQUESTED)
- C. RADIO COMMUNICATIONS INCLUDING: TYPES OF RADIOS AND BACKUP CAPABILITIES; WHO WILL BE MONITORING RADIOS; WHOM TO CONTACT IF THE ATCT CANNOT REACH THE CONTRACTOR'S DESIGNATED PERSON BY RADIO.
- D. DETAILS ON HOW THE CONTRACTOR WILL ESCORT MATERIAL DELIVERY VEHICLES.
- 6. WILDLIFE MANAGEMENT. DISCUSS THE FOLLOWING:
- A. METHODS AND PROCEDURES TO PREVENT WILDLIFE ATTRACTION.
- B. WILDLIFE REPORTING PROCEDURES.
- 7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT. DISCUSS EQUIPMENT AND METHODS FOR CONTROL OF FOD, INCLUDING CONSTRUCTION DEBRIS AND DUST.
- 8. HAZARDOUS MATERIAL (HAZMAT) MANAGEMENT. DISCUSS EQUIPMENT AND METHODS FOR RESPONDING TO HAZARDOUS SPILLS.
- NOTIFICATION OF CONSTRUCTION ACTIVITIES. PROVIDE THE FOLLOWING:
- A. CONTRACTOR'S POINTS OF CONTACT. CONTRACTOR'S EMERGENCY CONTACT.
- C. LISTING OF TALL OR OTHER REQUESTED EQUIPMENT PROPOSED FOR USE ON THE AIRPORT AND THE TIMEFRAME FOR SUBMITTING 7460-1 FORMS NOT PREVIOUSLY SUBMITTED BY THE AIRPORT OPERATOR.
- D. BATCH PLANT DETAILS, INCLUDING 7460-1 SUBMITTAL.
- 10. INSPECTION REQUIREMENTS. DISCUSS DAILY (OR MORE FREQUENT) INSPECTIONS AND SPECIAL INSPECTION PROCEDURES
- 11. UNDERGROUND UTILITIES. DISCUSS PROPOSED METHODS OF IDENTIFYING AND PROTECTING UNDERGROUND UTILITIES.
- 12. PENALTIES. PENALTIES SHOULD BE IDENTIFIED IN THE CSPP AND SHOULD NOT REQUIRE AN ENTRY IN THE SPCD.
- 13. SPECIAL CONDITIONS. DISCUSS PROPOSED ACTIONS FOR EACH SPECIAL CONDITION IDENTIFIED IN THE CSPP.
- 14. RUNWAY AND TAXIWAY VISUAL AIDS. INCLUDING MARKING, LIGHTING, SIGNS. AND VISUAL NAVAIDS. DISCUSS PROPOSED VISUAL AIDS INCLUDING THE FOLLOWING:
- A. EQUIPMENT AND METHODS FOR COVERING SIGNAGE AND AIRFIELD LIGHTS.
- B. EQUIPMENT AND METHODS FOR TEMPORARY CLOSURE MARKINGS (PAINT, FABRIC, OTHER).
- C. TYPES OF TEMPORARY VISUAL GUIDANCE SLOPE INDICATORS
- 15. MARKING AND SIGNS FOR ACCESS ROUTES. DISCUSS PROPOSED METHODS OF DEMARCATING ACCESS ROUTES FOR VEHICLE DRIVERS. 16. HAZARD MARKING AND LIGHTING, DISCUSS PROPOSED EQUIPMENT AND
- METHODS FOR IDENTIFYING EXCAVATION AREAS. 17. PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS INCLUDING
- OBJECT FREE AREAS, OBSTACLE FREE ZONES, AND APPROACH/DEPARTURE SURFACES. DISCUSS PROPOSED METHODS OF IDENTIFYING. DEMARCATING. AND PROTECTING AIRPORT SURFACES **INCLUDING:**
- A. EQUIPMENT AND METHODS FOR MAINTAINING TAXIWAY SAFETY AREA STANDARDS.
- B. EQUIPMENT AND METHODS FOR SEPARATION OF CONSTRUCTION OPERATIONS FROM AIRCRAFT OPERATIONS, INCLUDING DETAILS OF BARRICADES.
- 18. OTHER LIMITATIONS ON CONSTRUCTION SHOULD BE IDENTIFIED IN THE CSPP AND SHOULD NOT REQUIRE AN ENTRY IN THE SPCD.



FULTON COUNTY AIRPORT BROWN FIELD

ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

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Note

REVISIONS Date Description REVISION SET 8/07/2019 CPC

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

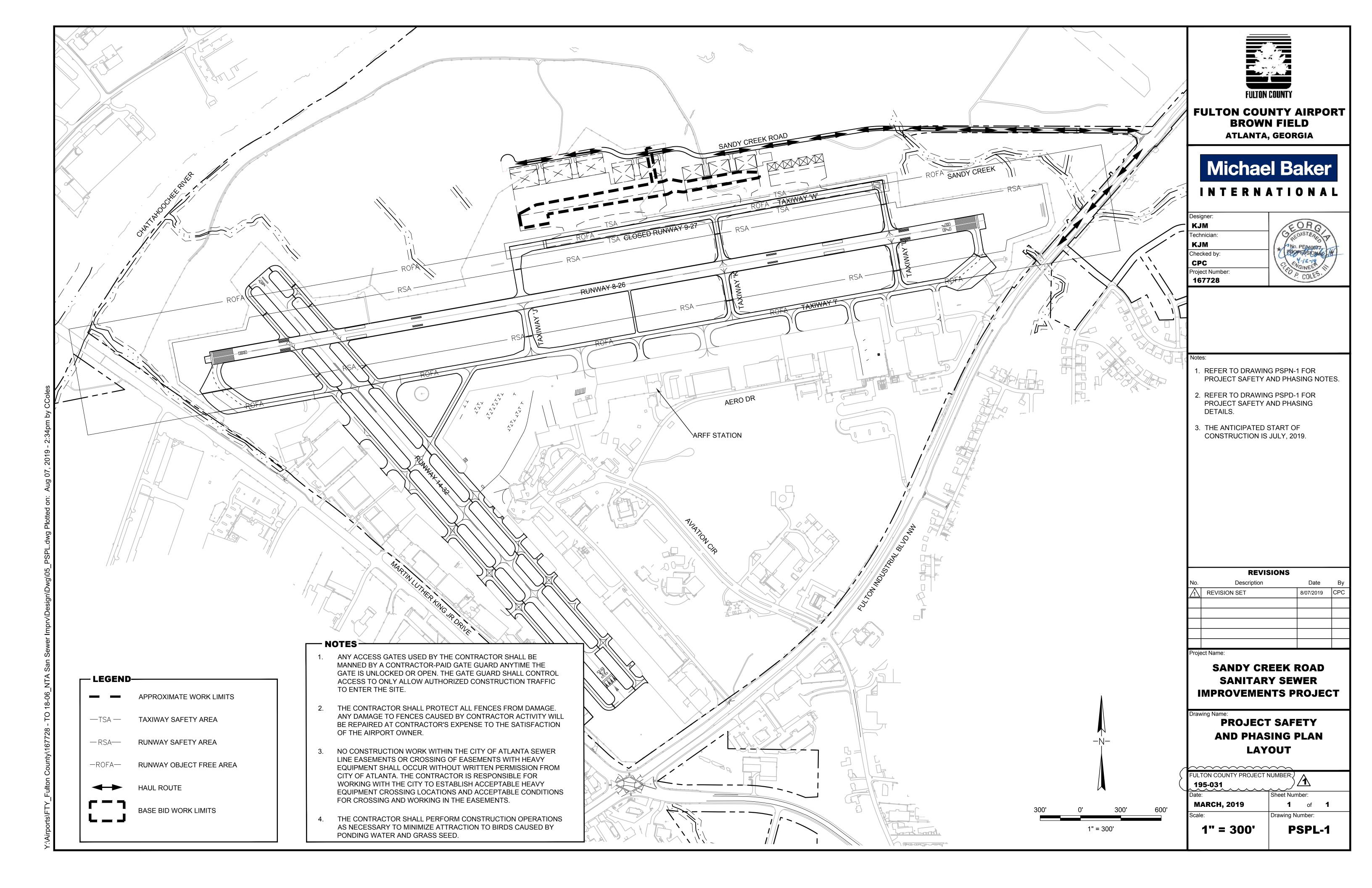
PROJECT SAFETY **AND PHASING PLAN** NOTES

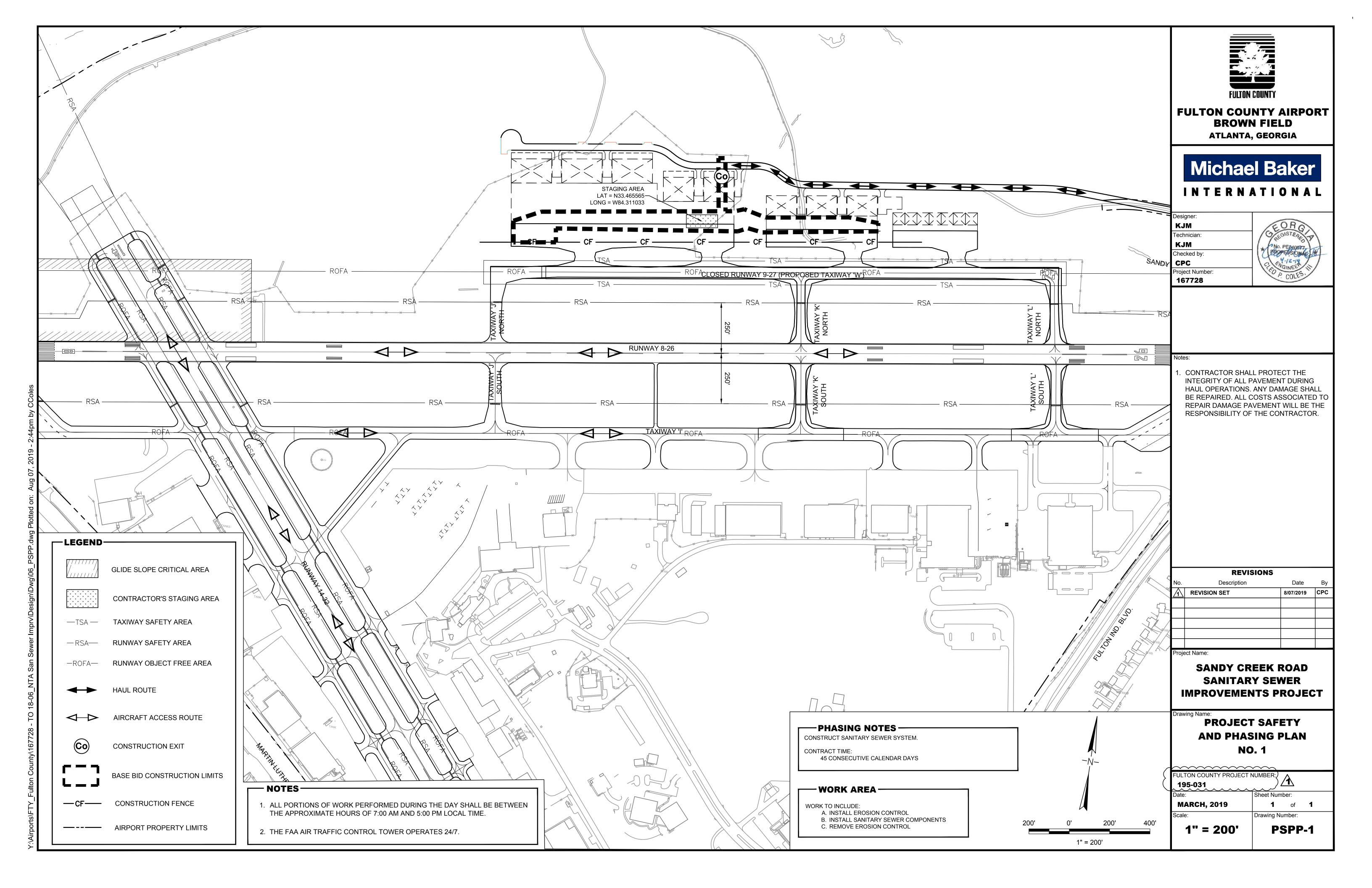
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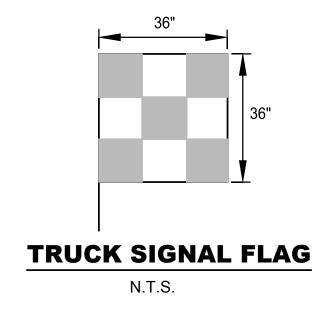
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Drawing Number:







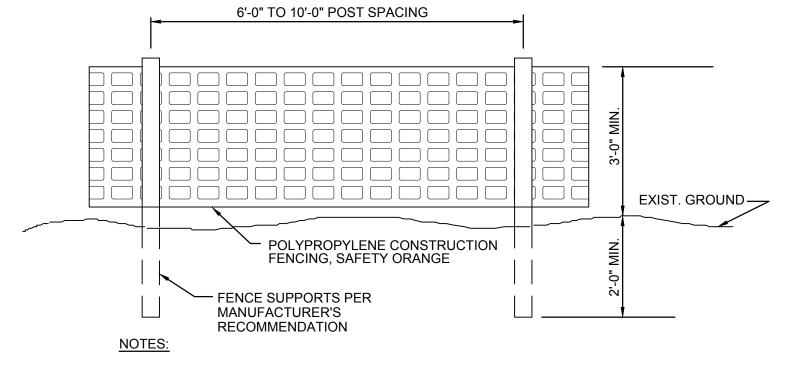
NOTES:

1. <u>VEHICULAR MARKINGS:</u> CONTRACTOR VEHICLES AND EQUIPMENT SHALL BE MARKED WITH CHECKERED FLAGS AND LIGHTED WITH FLASHING BEACONS TO COMPLY WITH REQUIREMENTS OF FAA AC 150/5210-5D.

A) ALL CONSTRUCTION EQUIPMENT, SUCH AS DOZERS, BACKHOES, GRADERS, END LOADERS, PANS, OFF-ROAD ARTICULATED DUMP TRUCKS, TRADITIONAL DUMP TRUCKS STATIONED ON-SITE, PAVING TRAIN EQUIPMENT, MILLING EQUIPMENT, AND SIMILAR EQUIPMENT, SHALL BE MARKED WITH AN ORANGE/WHITE CHECKERED FLAG ATTACHED TO THE HIGHEST STATIONARY PART OF THE PIECE OF **EQUIPMENT**;

B) ALL OTHER CONSTRUCTION-RELATED VEHICLES, SUCH AS SUPERVISOR'S VEHICLES, EQUIPMENT MAINTENANCE AND SUPPORT VEHICLES (STEP VANS, ONE-TON PICK-UPS, ETC.), DUMP TRUCKS THAT TRANSPORT MATERIALS BETWEEN OFF-SITE AND ON-SITE LOCATIONS, AND SIMILAR EQUIPMENT, SHALL BE LIGHTED WITH A YELLOW FLASHING BEACON THAT IS VISIBLE DURING BOTH LOW VISIBILITY AND DAYLIGHT CONDITIONS AND MARKED WITH PERMANENT OR MAGNETIC PLACARDS IDENTIFYING THE COMPANY NAME ON BOTH SIDES OF THE VEHICLE.

- 2. THE FLAG SHALL BE A 3 FOOT SQUARE HAVING A CHECKERED PATTERN OF ORANGE AND WHITE SQUARES AT LEAST 1 FOOT ON EACH SIDE.
- 3. NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR TRUCK SIGNAL FLAGS OR FLASHING BEACONS. PAYMENT WILL BE MADE UNDER THE UNIT PRICE FOR MOBILIZATION.



1. NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR CONSTRUCTION FENCE. PAYMENT WILL BE MADE UNDER THE UNIT PRICE FOR MOBILIZATION.

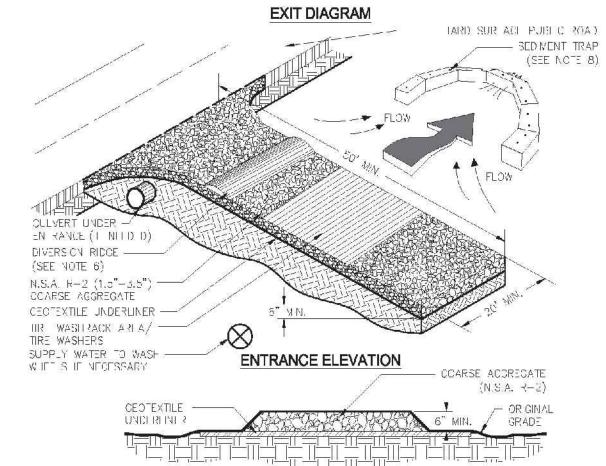
CONSTRUCTION FENCE

MAINTENANCE

The exit shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 1.5-3.5 inch stone, as conditions demand, and repair and/or cleanout of any structures to trap sediment. All materials spilled,

dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed immediately.

CRUSHED STONE CONSTRUCTION EXIT



NOTE:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.

2. REMOVE AT VEGE ATION AND OTHER UNSUITABLE MATERIAL FROM THE ECUNDATION AREA, GRADE, AND RESERVE OF THE PROVINCE.

3. ADDRECATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R 2 (1.5" 3.5" STONE).

4. GRAVEL PAC SHALL HAVE A MINIMUM HICKNESS OF 6". 5. PAD WIDT IS IALL BEITGLIAL FULL WIDTH AT ALL POINTS OF VEHICLIAR EGRESS, BUT NO LESS THAN 20'. 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN CRADE TOWARD PAVED AREA IS GREATER THAN 2%. 7. INSTALL PIPE UNDER THE ENTRANCE ENTEDTO TO MAINTAIN DRAINAGE DITCLES.

8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERTIALL SURFACE RUNOFF AND

DRAINAG TROM IT INTRANC TO A SEDIMENT CONTROL DEVICE). 9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL <u>SUITABLE</u> FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.

10. MAINTAIN AREA NIA WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUDIONTO PUBLIC RIGHTS OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP STDIMENT

Figure 6-14.1

6-142 GSWCC (Amended - 2013)

CONSTRUCTION EXIT

N.T.S.



FULTON COUNTY AIRPORT BROWN FIELD

ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

CPC Technician: RKK Checked by: RKK Project Number: 167728

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE LOW PROFILE BARRICADES REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOVING THE BARRICADES TO LOCATIONS DESIGNATED BY THE AIRPORT.
- THE CONTRACTOR SHALL HAVE FLASHING YELLOW LIGHTS ON ALL VEHICLES AND **EQUIPMENT THAT ARE OPERATING ON** THE AIRPORT DURING TIMES OF LOW VISIBILITY AND AT NIGHT THAT MEET THE REQUIREMENTS OF FAA AC 150/5210-5

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No.	Description	Date	Ву											
Λ	REVISION SET	8/07/2019	CPC											

Project Name:

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

PROJECT SAFETY AND **PHASING PLAN DETAILS**

FULTON COUNTY PROJECT	CT NUMBER:
195-031	<u></u>
Date:	Sheet Number:
MARCH, 2019	1 of 1
Scale:	Drawing Number:

N.T.S.

PSPD-1

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

ALL EROSION AND SEDIMENTATION CONTROLS MEASURES SHALL BE INSTALLED PRIOR TO GRADING.

PRIOR TO LAND DISTURBING-ACTIVITIES, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA EROSION CONTROL INSPECTOR.

WASTEWATER SERVICES PROVIDED BY FULTON COUNTY.

	Sheet List Table
Sheet Number	Sheet Title
C-0.0	COVER
C-0.1	GENERAL NOTES
C-0.2	EROSION & SEDIMENT CONTROL NOTES
C-0.3	EROSION & SEDIMENT CONTROL NOTES
C-0.4	EROSION & SEDIMENT CONTROL NOTES
C-1.0	EXISTING CONDITIONS
C-1.1	EXISTING CONDITIONS
C-2.0	UTILITY PLAN
C-2.1	UTILITY PLAN
C-3.0	PROFILES
C-3.1	PROFILES
C-4.0	EROSION & SEDIMENT CONTROL PLAN - INITIAL & INTERMEDIATE PHASES
C-4.1	EROSION & SEDIMENT CONTROL PLAN - INITIAL & INTERMEDIATE PHASES
C-4.2	EROSION & SEDIMENT CONTROL PLAN - FINAL PHASE
C-4.3	EROSION & SEDIMENT CONTROL PLAN - FINAL
C-5.0	EROSION & SEDIMENT CONTROL DETAILS
C-5.1	EROSION & SEDIMENT CONTROL DETAILS
C-5.2	EROSION & SEDIMENT CONTROL DETAILS
C-5.3	EROSION & SEDIMENT CONTROL DETAILS
C-6.0	CONSTRUCTION DETAILS



LOCATION MAP

STREET ADDRESS: 700 FULTON INDUSTRIAL BOULEVARD LAND LOT 14F, 21ST DISTRICT **FULTON COUNTY, GA** TAX PARCEL I.D. #14F0021 LL0084

CIVIL ENGINEER



2550 Heritage Ct. Suite 250 Atlanta, Georgia 30339 www.longeng.com

Tel 770.951.2495 Fax 770.951.2496

LEI PROJECT NO. 0452-0160

ISSUE DATE: 07/24/2019

ZONING: M2; CLASS R-5 (FULTON INDUSTRIAL OVERLAY) FULTON COUNTY PROJECT NUMBER 195-031

> OWNER/DEVELOPER FULTON COUNTY BOARD OF COMMISSIONERS, TIM BEGGERLY- AIRPORT MANAGER

> > **3925 AVIATION CIRCLE NW** ATLANTA, GA 30336 (404) 699-4200

24-HOUR EMERGENCY CONTACT TO BE DETERMINED

ABBREVIATIONS ABANDONED APPROX APPROXIMATE LANDSCAPE STRIP BACK LEFT BASE LINE LINFAR FFFT BEARING LOC LOCATION BOTTOM OF CURB MANHOLE BOTTOM OF WALL (AT GRADE MATERIAL BRICK MAXIMUM BLDG BUILDING MSL MEAN SEA LEVEL CAST IRO MINIMUM CATCH BASI MISC MISCELLANEOUS CENTER LIN MONUMENT CENTER TO CENTE NORTH CIRCUM CIRCUMFERENCE N/A NOT APPLICABLE CLASS NOT TO SCALE CO CLEAN OU CLR CLEAR OUTSIDE DIAMETER COL PAVFMFN COMBINED SEWER POLYVINYL CHLORIDE PROPERTY LINE COMPUTED POIN PROPOSED CONC CONCRETE CONSTRUCTION EASEMEN REFERENCE POINT CORRUGATED METAL PIPE REINFORCED CONCRETE CULV CUI VFRT REINFORCED CONCRETE PIP C&G CURB AND GUTTER ROD REQUIRED DIAG DIAMETER REVISED OR REVISION RIGHT DIMENSIO RIGHT-OF-WAY DRIVEWA' SANITARY SEWER DWG DRAWING DROP INLE SHEET DUCTILE IRON PIP SIDEWALK **ESMT** EASEMENT SPECIFICATION STEAM EDGE OF PAVEMENT STEEL ELEV STORM DRAI EXIST EXISTING STREET FACE TO FACE STATION FINISHED FLOOR ELEVATION STANDARD FINISHED GRADE TELEPHONE FIRE HYDRAN TEMPORARY FLOW LINE TOP OF CURE FOOT OR FEE TOP OF WALI TYP TYPICAL GAS METER UNDERDRAIN GAS VALVE UNDERGROUND GRANITE CUR VERT VERTICAL GRT GRATE VITRIFIED CLAY PIP HEADER CUR WATER HIGH POINT WM WATER METER HORIZ HORIZONTAL WT WATER TABLE WV WATER VALVE INSIDE DIAMETER INVERT

LEGEND EXISTING DESCRIPTION PROPOSED SANITARY SEWER w/SIZE & TYP _____ x"ss ______ X"SS CLEANOUT SANITARY SEWER MANHOL SIZE" SD TYPE STORM DRAIN PIPE SIZE SDITTE STORM DRAIN MANHOLE ____ STORM DRAIN DOUBLEWING CATCHBASIN STORM DRAIN SINGLEWING CATCHBASIN STORM DRAIN INLET STEAM MANHOLE —— —— ST —— — STEAM LINE ------ ST -----____ UT___ __ _____ AT ____ AERIAL TELEPHONE _____AT____ —— —UC—— —— _____UC____ UNDERGROUND CABLE _____ OE _____ ____ OE ____ OVERHEAD ELECTRIC _____ CTV _____ ____ CTV ___ _ UNDERGROUND CABLE TELEVISION _____ACTV_____ -----ACTV ------AERIAL CABLE TELEVISION ____ 2"G ____ _____ 2"G _____ GAS MAIN W/SIZE WATER MAIN W/SIZE ----- 8"w -----CURB AND GUTTER CURB EDGE OF PAVEMENT HIGH POINT LOW POINT ELECTRIC BOX TRANSFORMER ELECTRIC MANHOLE (Ŧ) TELEPHONE MANHOLE STREET LIGHT Ø—ф TRAFFIC SIGNAL POLE $\phi \longrightarrow$ $\leftarrow \sim$ POWER POLE W/GUY WIRE MAST ARM w/TRAFFIC SIGNAL ø—\$ \$—Ø POWER POLE W/LIGHT POWER POLE WATER METER WATER VALVE FIRE HYDRAN FIRE DEPARTMENT CONNECTION GAS METER GAS VALVE TREE w/SIZE AND TYPE 34"0 _X---X--X--X-FENCE —x—x—x—x— ______ SILT FENCE \longrightarrow TREE PROTECTION FENCE _ — — 960— — _ _____960____ CONTOUR LINE W/ELEVATION SPOT ELEVATION 1004.9 x 1004.90 x CONCRETE

NOTE: PLANEMETRICS SHOWN ON THE EXISTING CONDITIONS SHEET WILL APPEAR NON-SCREENED

CLEARING NOTES

- 1. UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATE WITH UTILITY COMPANIES TO HAVE THEM RELOCATED AND/OR ADAPTED FOR THE TIE-INS. IN ADDITION, CONTRACTOR IS REQUIRED TO CONTACT THE UTILITIES PROTECTION CENTER OF GEORGIA AT 1-800-282-7411 (770-623-4344 IN METRO ATLANTA) PRIOR TO ANY EXCAVATION.
- 2. CONTRACTOR SHALL CLEARLY MARK AND MAINTAIN PROPERTY CORNER MONUMENTATION AND BENCHMARKS WHENEVER POSSIBLE AND WILL BE RESPONSIBLE FOR THE COST OF REPLACING THEM IF DISTURBED OR DESTROYED.
- 3. ALL VEGETATION (UNLESS OTHERWISE NOTED), EXISTING ASPHALT PAVEMENT, ORGANICS AND UNSUITABLE BEARING SOILS SHALL BE STRIPPED FROM THE SURFACE WITHIN THE CONSTRUCTION LIMITS AND DISPOSED OF LEGALLY OFFSITE. ALL WASTE FROM DEMOLITION OPERATIONS SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
- 4. PRIOR TO CLEARING, THE CONTRACTOR SHALL OBTAIN WRITTEN VERIFICATION FROM ALL UTILITY COMPANIES THAT ALL UTILITIES HAVE BEEN REMOVED. IF UTILITIES HAVE NOT BEEN REMOVED BUT HAVE BEEN ABANDONED, THE VERIFICATION LETTER SHALL STATE THAT THEIR FACILITIES LEFT ON-SITE HAVE BEEN ISOLATED FROM THEIR SOURCE AND MAY BE REMOVED BY THE CONTRACTOR. IF UTILITIES ARE TO REMAIN AND HAVE BEEN LEFT ACTIVE, THE CONTRACTOR SHALL CAREFULLY PROTECT THEM AND IS RESPONSIBLE FOR RESTORING THEM TO THEIR PREVIOUS CONDITION OR BETTER IF DAMAGED.
- 5. THE CONTRACTOR SHALL LEAVE THE SITE IN A CLEAN AND NEAT CONDITION. ALL DEBRIS, VEGETATION WHICH HAS BEEN REMOVED, LUMBER, CONCRETE, ETC., SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- 6. CONTRACTOR SHALL HAVE THE LIMITS OF CLEARING AND ALL BUFFERS STAKED WITH FLAGGING STRUNG AT CLEARING LIMITS TO ENSURE THE PROPER LOCATION OF TREE SAVE FENCE AND PROPOSED IMPROVEMENTS.
- FENCE AND PROPOSED IMPROVEMENTS.

 7. ALL VEGETATION, ROOT SYSTEMS, TOPSOIL, REFUSE AND OTHER DELETERIOUS, NON-SOIL MATERIAL SHALL BE STRIPPED FROM THE PROPOSED CONSTRUCTION AREAS. CLEAN TOPSOIL
- MAY BE STOCKPILED AND REUSED LATER IN LANDSCAPED AREAS.

 8. DISCONNECT AND SEAL OFF ABANDONED UTILITIES AND UTILITIES TO BE REMOVED PRIOR TO START OF DEMOLITION. UTILITIES SHALL BE DISCONNECTED BELOW EXISTING GRADE OR OUTSIDE OF CONTRACT LIMITS BY THE APPLICABLE PUBLIC UTILITY. ALL COSTS FOR THIS WORK SHALL BE BORNE BY THE CONTRACTOR.
- 9. ALL STRUCTURES TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED ABOVE AND BELOW GRADE. ABANDONED SERVICE LINES TO THE STRUCTURES SHALL ALSO BE REMOVED.
- ALL NECESSARY PERMITS FOR DEMOLITION SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.
- 11. CONTRACTOR SHALL PROTECT ALL ADJACENT LANDS FROM DAMAGE DURING DEMOLITION WORK. ANY OFF-SITE AREAS DISTURBED SHALL BE RETURNED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.
- 12. NO DEMOLITION MATERIALS SHALL BE DISPOSED OF ON-SITE. ALL DEBRIS SHALL BE HAULED OFF-SITE TO A DISPOSAL AREA APPROVED BY FULTON COUNTY FOR THE HANDLING OF DEMOLITION DEBRIS.

CONSTRUCTION NOTES

- 1. DIRT FOR FILL SHALL BE CLEAN, COHESIVE CLAY OR SANDY CLAY FREE OF DEBRIS, ORGANICS, DELETERIOUS MATERIAL AND ROCKS GREATER THAN 3" DIA.
- 2. MAX CUT OR FILL SLOPES SHALL BE 2:1 (H:V).
- 3. EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER. CONSTRUCTION AND STORAGE AREAS SHALL BE KEPT NEAT AND CLEAN. TREE SAVE AREAS SHALL NOT BE USED FOR STORAGE OR PARKING.
- 4. ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS OTHERWISE NOTED.
 CORRUGATED METAL PIPE SHALL BE 16 GA. MIN. AND ASPHALT OR ALUMINUM COATED.

 5. ALL CATCH BASINS SHALL BE FLUSH WITH THE NEW CURB.
- ALL CATCH BASINS SHALL BE FLUSH WITH THE NEW CURB.
 ALL MANHOLE TOPS SHALL BE SET FLUSH WITH FINISHED GRADE IN LANDSCAPED AND PAVED
- AREAS.
 7. CONTRACTOR TO VERIFY THE ELEVATIONS OF ALL TIE-IN POINTS FOR INSTALLATION OF UTILITIES, CURB & GUTTER, SIDEWALK AND PAVING.
- 8. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM COMPACTION OR AS REQUIRED IN EARTHWORK SPECIFICATION FOR ANY SOIL CLASSIFICATION AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-180 METHOD "A". BACKFILL MATERIAL SHALL BE CLEAN AND FREE OF ROOTS, ROCK OR DELETERIOUS MATTER. CONTRACTOR SHALL CORRECT ANY DAMAGE TO CURBING OR PAVING CAUSED BY TRENCH SETTLEMENT WHICH OCCURS WITHIN 12 MONTHS OF PROJECT ACCEPTANCE. REFER
- TO GEOTECH REPORT.

 9. MANHOLES & DROP INLETS ARE DIMENSIONED TO THE CENTER OF THE RISER. CATCH BASINS ARE DIMENSIONED TO THE CENTER OF THE CATCH BASIN AT THE FACE OF CURB. LAYOUT DIMENSIONS ARE TO FACE OF CURB. FACE OF WALL, CENTERLINE OF PIPE, UNLESS OTHERWISE NOTED.
- 10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PROMPTLY UPON DISCOVERY. ANY CONFLICT OR DISCREPANCIES DISCOVERED WITHIN THE CONSTRUCTION PLANS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REP AND ENGINEER OF RECORD FOR CLARIFICATION. FAILURE TO DO SO SHALL RESULT IN CONTRACTOR'S LIABILITY FOR ISSUES ARISING FROM SUCH CONFLICTS OR
- DISCREPANCIES.

 11. ALL EXISTING ELECTRICAL BOXES, WATER METER BOXES, AND VALVE BOXES, WHICH ARE TO REMAIN SHALL BE SET FLUSH WITH THE TOP OF THE PROPOSED GRADE.
- 12. AREAS INTENDED TO SUPPORT PAVEMENT OR NEW FILL SHALL BE PROOFROLLED WITH A 20 TO 30 TON LOADED TRUCK OR OTHER PNEUMATIC-TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER TO LOCATE WEAK, SOFT OR EXCESSIVELY WET MATERIALS. AREAS WHICH PUMP WHILE PROOFROLLED SHALL BE UNDERCUT AND BACK-FILLED IN ACCORDANCE WITH CSI STANDARD EARTHWORK
- SPECIFICATIONS.

 13. CRUSHED STONE AGGREGATE IN ROADWAY/PARKING AREA PAVEMENT BASE SHALL CONFORM WITH SECTION 815 OF THE STATE OF GEORGIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL ASPHALT MATERIAL AND PAVING OPERATIONS SHALL MEET APPLICABLE SPECIFICATIONS OF THE ASPHALT INSTITUTE AND GEORGIA DEPARTMENT OF TRANSPORTATION.
- 14. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM THE DETENTION PONDS AND RESTORE THE PONDS TO THEIR PROPOSED FINISHED GRADE. ALL STORM DRAIN PIPES ARE ALSO TO BE COMPLETELY CLEANED OF ALL SILT AND DEBRIS AT THE COMPLETION OF CONSTRUCTION.
- 15. CONDUITS FOR SITE LIGHTING AND IRRIGATION SHALL BE INSTALLED, BACKFILLED AND PROPERLY COMPACTED PRIOR TO THE PLACEMENT OF BASE, PAVEMENT, AND CURB & GUTTER.

REFERENCES

- I. A PORTION OF THE DISTURBED AREA IS WITHIN A FLOOD HAZARD ZONE (REFERENCE FLOOD INSURANCE RATE MAP FOR CITY OF ATLANTA, FULTON COUNTY, GEORGIA PANEL 217 OF 490, REVISED 09-18-13)
- A PORTION OF THE DISTURBED AREA IS WITHIN A FLOOD HAZARD ZONE (REFERENCE FLOOD INSURANCE RATE MAP FOR CITY OF ATLANTA, FULTON COUNTY, GEORGIA PANEL 219 OF 490, REVISED 09-18-13)
- NOTE: SIGNIFICANT GRADING HAS OCCURED IN THE FLOODPLAIN AS PART OF THE CONSTRUCTION OF SANDY CREEK ROAD. THE FLOOD HAZARD MAP HAS NOT BEEN UPDATED TO ACCOUNT FOR THESE CHANGES. THE HIGHEST FLOOD ELEVATION IN THE AREA OF INTEREST (ACCORDING TO THE REFERENCED 2013 FEMA MAP) IS 768, WHILE THE LOWEST GRADE ELEVATION WITHIN THIS PROJECT IS 800. THEREFORE, IT IS ASSUMED THAT NO WORK SHALL BE PERFORMED WITHIN THE NEW FLOOD ZONES.

GENERAL NOTES

1. PROJECT 700 FULTON INDUSTRIAL BLVD. NW ADDRESS: ATLANTA, GA 30336

OWNER: FULTON COUNTY BOARD OF COMMISSIONERS, TIM BEGGERLY- AIRPORT MANAGER

3925 AVIATION CIRCLE NW ATLANTA, GA 30336 (404) 699-4200

ENGINEER: LONG ENGINEERING, INC.
2550 HERITAGE COURT, SUITE 250
ATLANTA, GEORGIA 30339
770-951-2495

- 2. ZONING: M2; CLASS R-5 (FULTON INDUSTRIAL OVERLAY)
- 3. THE PROPOSED PROJECT CONSISTS OF INSTALLATION OF SEWER LINE TO SERVICE FUTURE HANGARS. THE TOTAL SITE AREA IS 360+ ACRES. THE APPROXIMATE DISTURBED AREA IS 3.62 ACRES.
- 4. UPON DISCOVERING ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND THE ENGINEERING PLANS, CONTRACTOR TO STOP WORK IMMEDIATELY AND NOTIFY THE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS SHOWN HEREON WITH THE ARCHITECTURAL DRAWINGS AND EXISTING BUILDINGS PRIOR TO ANY CONSTRUCTION AND SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- 6. LANDSCAPING AND IRRIGATION TO BE COMPLETED AT THE DIRECTION OF THE
- 7. PROPOSED ELEVATIONS ALONG CURB LINE ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED.
- 8. ALL CONSTRUCTION MUST CONFORM TO THE FULTON COUNTY STANDARDS, SPECIFICATIONS AND DETAILS WHETHER OR NOT REVIEW COMMENTS WERE MADE. THE CONTRACTOR SHALL OBTAIN THESE DOCUMENTS, BECOME FAMILIAR WITH THEM AND HAVE THEM ON THE JOB SITE AT ALL TIMES.
- PROPOSED BUILDING LOCATIONS SHOWN ARE PROVIDED FOR GENERAL INFORMATION ONLY
 BASED ON PLANS REFERENCED (SEE THIS SHEET). CONTRACTOR IS RESPONSIBLE FOR
 VERIFYING ALL DIMENSION SHOWN ON THE PLANS FOR ALL STRUCTURES AS WELL AS ALL
 UTILITY LOCATIONS WITH CURRENT ARCHITECTURAL, STRUCTURAL, AND PLUMBING PLANS
 AND ENSURING THERE ARE NO CONFLICTS.
 CONTRACTOR'S VEHICLES SHALL ONLY USE THE LOCAL ROADWAYS IN THE DIRECTION OF
- EXISTING TRAVEL. NO WORK SHALL BE CONDUCTED DURING THE HOURS OF 6:30 TO 9:30 AM AND 4:00 TO 7:00 PM WHICH RESTRICT TRAFFIC FLOW ON THE HIGHWAY SYSTEM DURING THESE HOURS OR DURING SPECIAL EVENTS REQUIRING THE MAXIMUM ROADWAY CAPACITY.

 11 NOTIFY FULLTON COUNTY INSPECTOR 24 HOURS PRIOR TO REGINNING OF CONSTRUCTION
- 11. NOTIFY FULTON COUNTY INSPECTOR 24 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.

 12. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE MANUAL ON LINESPANTED CONTROL DEVICES. CURRENT EDITION WITH ALL PRIVISIONS INCLUDED.
- ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION WITH ALL REVISIONS INCLUDED.

 13. ALL CONSTRUCTION VEHICLES SHALL PARK IN AREAS DESIGNATED BY THE OWNER.
- OFF-STREET PARKING SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
 NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL DEVICES
 AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE
 PROVIDED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES,

CURRENT EDITION AND MAINTAINED WHEN WORKING IN CLOSE PROXIMITY TO PUBLIC

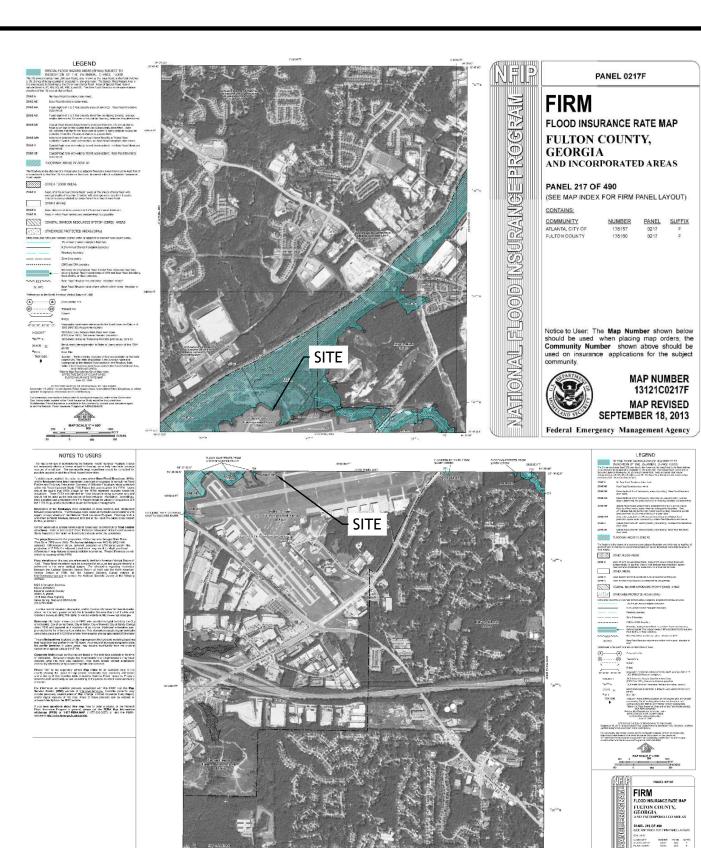
- 16. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN ENTERING MANHOLES, PIPES OR OTHER STRUCTURES SHOWN ON THE PLANS. AT A MINIMUM, THESE PIPES AND STRUCTURES SHALL BE PROPERLY VENTILATED AND ENTRY SHALL CONFORM TO OSHA
- 17. IF APPLICABLE, CONTRACTOR TO REMOVE THE EXISTING WASTEWATER LATERAL BACK TO THE TEE-WYE AT THE 8-INCHES WASTEWATER LINE. PROVIDE A PLUG AT THE TEE-WYE. POUR CONCRETE AROUND THE PLUG AND THE TEE-WYE. THE CONTRACTOR HAS THE OPTION OF ABANDONING THE LATERAL IN PLACE AND SLIP LINING THE 8-INCHES WASTEWATER LINE FROM MANHOLE TO MANHOLE. THE OPENINGS OF ALL LATERALS WOULD BE CUT OUT AS NORMAL EXCEPT FOR THE ABANDONED LATERAL. SLIP LINING TO BE IN ACCORDANCE WITH CURRENT FULTON COUNTY STANDARDS AND SPECIFICATIONS. IF THE LINE HAS ALREADY BEEN SLIP-LINED, THE CONTRACTOR HAS THE OPTIONS TO EITHER BURST THE LINE IN ACCORDANCE WITH CURRENT FULTON COUNTY STANDARDS AND SPECIFICATIONS OR REMOVE THE EXISTING LATERAL BACK TO THE TEE-WYE. ALL EXISTING ACTIVE LATERALS SHALL BE RESTORED TO FULL SERVICE.

FULTON CO. REQUIRED WASTEWATER NOTES

- 1. ALL WASTEWATER PIPE CONSTRUCTION SHOWN ON THESE PLANS MUST CONFORM TO FULTON COUNTY'S STANDARDS AND SPECIFICATIONS, INCLUDING SANITARY SEWER REGULATIONS LATEST COPY.
- NO SANITARY SEWER SHALL BE ACCEPTED BY THE COUNTY WITHOUT AN
 AS-BUILT DRAWING SHOWING THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE
 SEWER SYSTEM, THE LOCATION OF ALL MANHOLES, SEWER CONNECTIONS, PIPING
 MATERIALS, REQUIRED EASEMENT LIMITS AND JUNCTIONS, AND PROPERTY LINES.
 CONTRACTOR MUST FIELD VERIFY THE LOCATION AND ELEVATION OF ALL
 KNOWN AND UNKNOWN UNDERGROUND UTILITIES.
- 4. ALL TEMPORARY AND PERMANENT WASTEWATER EASEMENTS MUST BE DRESSED AND GRASSED TO CONTROL EROSION PRIOR TO ACCEPTANCE. TREES SHALL NOT BE PLANTED IN THE PERMANENT EASEMENT AREA, OR WITHIN 10-FEET OF A FULTON COUNTY SEWER MAIN.
- 5. AS-BUILT DRAWINGS AND MAINTENANCE BOND(S) MUST BE SUBMITTED AND ARE REQUIRED PRIOR TO INSPECTION AND ACCEPTANCE. DIGITAL AS-BUILT WILL BE REQUIRED. NOTE THAT DIGITAL AS-BUILTS WILL BE REQUIRED AT THE COMPLETION OF THE PROJECT. PLEASE SEE:
- HTTP://WWW.FULTONCOUNTYGA.GOV/IMAGES/STORIES/WR/DEVELOPMENT/CAD_STANDARDS.PDF FOR THE REQUIREMENTS. MAINTENANCE BONDS ARE DUE AT FINAL APPROVAL OF THE AS-BUILTS.
- 6. NEOPRENE COUPLINGS WITH STAINLESS STEEL BANDS AND SHEAR RINGS ARE REQUIRED FOR JOINING DIFFERENT TYPES OF SANITARY SEWER PIPES.
- 7. POOLS SHALL NOT DRAIN INTO WASTEWATER PIPE SYSTEMS. POOLS SHALL DRAIN INTO AN APPROVED INDIVIDUAL ONSITE WASTEWATER MANAGEMENT SYSTEM.
- LOW PRESSURE AIR TESTING REQUIRED FOR ALL WASTEWATER PIPE SYSTEMS.
 THIS TEST MUST MEET ALL REQUIREMENTS AS OUTLINED IN UNI-B-06 OR CURRENT
 REVISION. A FULTON COUNTY INSPECTOR MUST BE PRESENT DURING TESTING.
 CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERT ELEVATIONS OF
 WASTEWATER PIPES FOR A CONNECTION TO EXISTING WASTEWATER SYSTEMS.
 CONTRACTOR IS TO CUT AND REMOVE THE PIPE ONLY UPON FINAL APPROVAL
- 11. ALL WASTEWATER LINES AND LATERALS WITH LESS THAN ONE-FOOT OF CLEARANCE TO ANOTHER UTILITY LINE SHALL BE CONSTRUCTED WITH A CONCRETE SADDLE TO MAINTAIN SEPARATION.

BY THE FULTON COUNTY INSPECTOR.

- 12. NO FILL SHALL BE PLACED ON A SANITARY SEWER EASEMENT WITHOUT APPROVAL BY THE DIRECTOR OF PW. ALL SANITARY MANHOLES MUST EXTEND TO THE GROUND SURFACE.
- FOR ALL PROJECTS UTILIZING INDIVIDUAL ONSITE WASTEWATER
 MANAGEMENT SYSTEMS DESIGN AND PROVISIONS SHALL BE IN CONFORMANCE WITH
 FULTON COUNTY DEPARTMENT OF HEALTH AND WELLNESS REGULATIONS.
 EIGHT-INCHES (8") OR LARGER PIPE LINES SHALL BE TV INSPECTED. A VIRUS
 FREE PORTABLE STORAGE DRIVE (USB FLASH DRIVE) AND WRITTEN INSPECTION LOG
 IN COMPLIANCE WITH NASSCO REQUIREMENTS AND CERTIFIED BY A GEORGIA
 REGISTERED ENGINEER OR REGISTERED LAND SURVEYOR SHALL BE PROVIDED WHEN
 AS-BUILTS ARE SUBMITTED. ALL VIDEOS SHALL INCLUDE PACP AND MACP COMPLETED
 FORMS. A COPY OF THE OPERATOR'S CURRENT NASSCO CERTIFICATION SHALL BE
 SUBMITTED.



24 HOUR EMERGENCY CONTACT: TO BE DETERMINED TO BE DETERMINED

ALL EROSION & SEDIMENT CONTROLS, AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO GRADING.

- 15. USF 7635 BOX REQUIRED FOR WASTEWATER CLEANOUTS IN PAVED AREA PER FULTON COUNTY STANDARD DETAIL 709.
- 16. COMPACTION OF THE BACK FILL OF ALL TRENCHES SHALL BE COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS, AND SHALL BE PLACED AT OR NEAR OPTIMUM MOISTURE CONTENT. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. COMPACTION OF THE BACK FILL OF ALL TRENCHES LOCATED UNDER PAVEMENT SHALL BE
- COMPACTED TO AT LEAST 95% STANDARD PROCTOR DENSITY.

 17. SANITARY SEWER LATERALS SHOULD BE MARKED WITH 4"X4"POST WITH MIN. 4-FEET ABOVE GROUND.

 THE TOP 1' SHOULD BE PAINTED GREEN. EACH LATERAL IS TO BE BROUGHT TO THE GROUND SURFACE IN

 ACCORDANCE WITH FULTON COUNTY STANDARD 909.
- 18. ALL REQUIRED OFFSITE EASEMENTS SHALL BE DEDICATED TO FULTON COUNTY PRIOR TO UTILITY PERMITTING. ALL PUBLIC ON- SITE EASEMENTS FOR OTHER THAN SINGLE FAMILY RESIDENTIAL PROJECTS THAT WILL BE FINAL PLATTED SHALL BE DEDICATED TO FULTON COUNTY PRIOR TO WATER RESOURCES PERMIT APPROVAL.
- 19. FOR RESIDENTIAL PROJECTS WHERE ONSITE SANITARY SEWER EASEMENTS ARE TO BE DEDICATED TO FULTON COUNTY, THE FOLLOWING APPLIES: SANITARY SEWER EASEMENT INSIDE PROPERTY LINE TO BE SHOWN IN FINAL DIATEOR RECORDING.
- IN FINAL PLAT FOR RECORDING.

 20. FOR ALL PROJECTS CONTAINING PVC WASTEWATER PIPES, ALSO INCLUDE THE FOLLOWING NOTES: (SEE
- ATTACHED CONDITION FOR PVC).

 A. PIPE SHALL BE ASTM D3034, SDR35 IN 12.5 FOOT LAYING LENGTHS WITH ELASTOMERIC SEALED JOINTS IN ACCORDANCE WITH ASTM D3212.
- B. PIPE BEDDING SHALL BE #57, SHARP, ANGULAR, CRUSHED STONE. BEDDING SHALL EXTEND A MINIMUM OF 4"
 BELOW THE PIPE AND EXTEND TO THE TOP OF THE PIPE. THE BEDDING SHALL BE COMPACTED BY "SLICING WITH
 A FLAT SHOVEL". THE WIDTH OF THE DITCH MUST BE IN ACCORDANCE WITH OSHA SAFETY STANDARDS.
- C. INITIAL BACKFILL: AFTER BEDDING, COMPLETE INITIAL BACKFILL WITH #57 STONE. IF NO ROCK IS ENCOUNTERED, INITIAL BACKFILL SHALL EXTEND TO A HEIGHT 6" ABOVE OF THE TOP OF THE PIPE, OTHERWISE INITIAL BACKFILL SHALL EXTEND TO 12" ABOVE THE TOP OF THE PIPE.
- D. FITTINGS FOR LATERAL CONNECTIONS SHALL BE 45° WYES AND BENDS. PROVIDE PVC PIPE STOPPERS FOR EACH LATERAL. PROVIDE SPECIAL WATERTIGHT CONNECTIONS AT MANHOLES AND TRANSITIONS TO DUCTILE IRON PIPE AS RECOMMENDED BY THE PIPE MANUFACTURER. E.
- E. AFTER INSTALLATION, A DEFLECTION TEST IS REQUIRED. INITIAL DEFLECTION SHALL BE LIMITED TO 3% OF THE UNDEFLECTED DIAMETER. A SECOND TEST SHALL BE MADE AT LEAST 8 MONTHS AFTER THE INSTALLATION BUT BEFORE FINAL ACCEPTANCE. AT THAT TIME DEFLECTION SHALL BE LIMITED TO 5% OF THE UNDEFLECTED DIAMETER.
- 21. ALL MANHOLES LOCATED WITHIN A PAVED AREA SHALL HAVE CONCENTRIC CONE SECTIONS AND FLANGE DOWN FRAMES AND COVERS. ALL MANHOLES LOCATED WITHIN AN UNPAVED AREA SHALL HAVE ECCENTRIC CONE SECTIONS WITH BOLT DOWN FLANGE UP FRAME AND COVERS, OR HINGED CAST IN PLACE LOCKABLE COVERS. ALL MANHOLES LOCATED WITHIN A FLOOD PRONE AREA SHALL HAVE ECCENTRIC CONE SECTIONS WITH BOLT DOWN GASKETED FLANGE UP FRAME AND COVERS. RAISE TOP OF MANHOLES IN LANDSCAPE AREAS TO 0.5-FEET ABOVE GRADE.
- 22. ISSUANCE OF THIS PERMIT DOES NOT IN ANY WAY IMPLY THAT WASTEWATER TAPS FOR BUILDING PERMITS WILL BE ISSUED. CONTACT THE DEPARTMENT OF PUBLIC WORKS, WATER RESOURCES DIVISION AT (404) 612-7400 FOR FURTHER INFORMATION.
- 23. ANY CHANGES TO THE SEWER DRAWINGS MUST BE APPROVED BY FULTON COUNTY.
- 24. NOTIFY FULTON COUNTY INSPECTOR 24-HOURS PRIOR TO CONSTRUCTION.



FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

Designer:

MBC

Technician:

Checked by:

MDJ

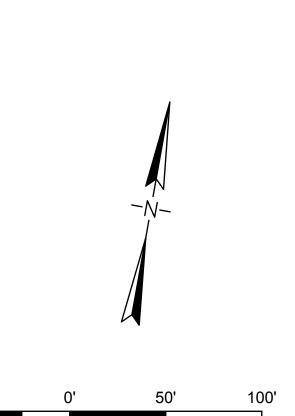
Project Number:

167728



2550 HERITAGE CT. SUITE 250 FAX 770.951.2496 ATLANTA, GA 30339 LEI PROJECT #0452-0160

Notes:



REVISIONS

No. Description Date By

1 REVISION SET 7/24/19 MC

1" = 50'

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

roject Name:

GENERAL NOTES

FULTON COUNTY PROJECT NUMBER:

195-031

Date: Sheet Number:

2 of 20

Scale: Drawing Number:

C-0.1

(1)		
EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST INFRASTRUCTURE CONSTRUCTION PROJECTS	C-0.3 Y	27 Description of practices to provide cover for building materials and building products on site.*
SWCD: FULTON COUNTY	C-0.3 Y	28 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
Project Name: Sandy Creek Road Sanitary Sewer Improvements Address: 700 Fulton Industrial Boulevard NW	C-0.3 Y	29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of
City/County: Atlanta, Fulton Date on Plans: 2/28/2019		the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility
Name & email of person filling out checklist:_ Rick Menchaca - Rmenchaca@longeng.com Plan Included		activities, temporary and final stabilization).
Plan Included TO BE SHOWN ON ES&PC PLAN Page # Y/N	C-0.3 Y	30 Provide complete requirements of inspections and record keeping by the primary permittee.*
C-0.2 Y 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1	C-0.4 Y	31 Provide complete requirements of sampling frequency and reporting of sampling results.*
of the year in which the land-disturbing activity was permitted.	C-0.3 Y	32 Provide complete details for retention of records as per Part IV.F. of the permit.*
(The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)	C-0.4 Y	33 Description of analytical methods to be used to collect and analyze the samples from each location.*
C-0.2 Y 2 Level II certification number issued by the Commission, signature and seal of the certified design professional.	C-0.3 Y	34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*
(Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) C-0.2 Y 3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.	C-4.1 Y	35 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.*
	ALL Y	36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial
C-0.2 Y 5 Note total and disturbed acreage of the project or phase under construction.		sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final
C-0.2 Y 6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.		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
C-0.2 Y 7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.		phase.*
C-0.2 Y 8 Description of the nature of construction activity.	ALL Y	37 Graphic scale and North arrow.
C-0.2 Y 9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.	ALL Y	38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:
C-0.2 Y 10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas,		Existing Contours USGS 1": 2000' Topographical Sheets
wetlands, marshlands, etc. which may be affected.		Proposed Contours 1": 400' Centerline Profile
C-0.2 Y 11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC	C-0.3 Y	39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs
Plan as stated on Part IV page 21 of the permit		as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation
C-0.2 Y 12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate		Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.
and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 20 of the permit.*	C-0.3 Y	40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for
C-0.2 Y 13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on Part IV.D.6.c.(3) page 37 of the permit as applicable.*	N/A	Erosion & Sediment Control in Georgia 2016 Edition.* 41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers
C-0.2 Y 14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the	N/A	required by the Local Issuing Authority. Clearly note and delineate all areas of impact
initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation."	N/A	42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.
in accordance with Part IV.A.5 page 26 of the permit*	C-4.0	
C-0.3 Y 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream	C-4.1 Y	43 Delineation and acreage of contributing drainage basins on the project site.
buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured	C-0.4 Y	44 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.
from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."	C-0.3 Y	45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are
N/A 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.	C 0.5	completed.
C-0.3 Y 17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."*	N/A	46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion.
C-0.3 Y 18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a		Identify/Delineate all storm water discharge points.
Section 404 permit "*	C-4.0 Y	47 Soil series for the project site and their delineation.
C-0.3 Y 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and	ALL Y	48 The limits of disturbance for each phase of construction.
sediment control measures and practices prior to land disturbing activities."	C-4.0 Y	49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin,
C-0.3 Y 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved		retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage
Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."		volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been
C-0.3 Y 21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch		achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written
or temporary seeding."		justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be
C-0.4 Y 22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream		included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage
of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the		when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to
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*		utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.
ALL Y 23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22	ALL Y	50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and
above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or	ALL I	Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
requirements included in the TMDL Implementation Plan.*	ALL Y	51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in
C-0.4 Y 24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum		the Manual for Erosion and Sediment Control in Georgia.
at the construction site is prohibited.*	ALL Y	52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and
C-0.4 Y 25 Provide BMPs for the remediation of all petroleum spills and leaks.		seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding
C-0.3 Y 26 Description of the measures that will be installed during the construction process to control pollutants in storm water that		will take place and for the appropriate geographic region of Georgia.
will occur after construction operations have been completed.*		*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, 2019
	Г	
DESCRIPTION OF THE CONSTRUCTION ACTIVITY	(12)	NPDES PROFESSIONAL CERTIFICATION
	$\widetilde{}$	"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN
THE PROPOSED PROJECT CONSISTS OF INSTALLATION OF SEWER LINE TO SERVICE FUTURE HANGARS.	(13)	PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT
(10) RECEIVING WATER (WARM WATER & FISHERIES STREAM): SANDY CREEK (AKA COOPER SANDY CREEK)		"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
22) STREAM STATUS: CRITERION VIOLATED: FC; POTENTIAL CAUSE: UR; CATEGORY: 4a		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

EPD DISTRICT OFFICE MOUNTAIN DISTRICT - ATLANTA OFFICE

4244 INTERNATIONAL PKWY

ATLANTA, GEORGIA 30354

PHONE 404.362.2671

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC (11)

PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL

SEDIMENT STORAGE REQUIREMENTS AND PERIMETER

CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION.

MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001."

SITE VISIT CERTIFICATION

"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, UNDER MY DIRECT SUPERVISION."

MELISSA JOHNSON, PE (CERT.# 69256)

MELISSA JOHNSON, PE (CERT.# 69256)

GENERAL NOTES

- 1. THE EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL BE SIGNED IN ACCORDANCE WITH PART IV., AND BE RETAINED ON THE SITE (OR, IF NOT POSSIBLE, AT A READILY ACCESSIBLE LOCATION) WHICH GENERATES THE STORM WATER DISCHARGE IN ACCORDANCE WITH PART IV.F. OF THIS PERMIT.
- 2. THE PRIMARY PERMITTEE SHALL MAKE PLANS AVAILABLE UPON REQUEST TO THE EPD; TO DESIGNATED OFFICIALS OF THE LOCAL GOVERNMENT REVIEWING SOIL EROSION AND SEDIMENT CONTROL PLANS, GRADING PLANS, OR STORM WATER MANAGEMENT PLANS; OR IN THE CASE OF A STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY WHICH DISCHARGES THROUGH A MUNICIPAL SEPARATE STORM SEWER SYSTEM WITH AN NPDES PERMIT, TO THE LOCAL GOVERNMENT OPERATING THE MUNICIPAL SEPARATE STORM SEWER SYSTEM.
- 3. EPD MAY NOTIFY THE PRIMARY PERMITTEE AT ANY TIME THAT THE PLAN DOES NOT MEET ONE OR MORE OF THE MINIMUM REQUIREMENTS OF THIS PART. WITHIN SEVEN (7) DAYS OF SUCH NOTIFICATION (OR AS OTHERWISE PROVIDED BY EPD), THE PRIMARY PERMITTEE SHALL MAKE THE REQUIRED CHANGES TO THE PLAN AND SHALL SUBMIT TO EPD EITHER THE AMENDED PLAN OR A WRITTEN CERTIFICATION THAT THE REQUESTED CHANGES HAVE BEEN MADE.
- 4. THE PRIMARY PERMITTEE(S), AS APPLICABLE, SHALL AMEND THEIR PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT, I.E., THOSE BMPS WHERE THE DESIGN IS BASED UPON RAINFALL INTENSITY, DURATION AND RETURN FREQUENCY OF STORMS OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM SOURCES IDENTIFIED UNDER PART IV.D.3. AMENDMENTS TO THE PLAN MUST BE CERTIFIED BY A DESIGN PROFESSIONAL AS PROVIDED IN THIS PERMIT.
- 5. THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL INCLUDE, AS A MINIMUM, BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION, WHICH ARE CONSISTENT WITH, AND NO LESS STRINGENT THAN, THOSE PRACTICES CONTAINED IN THE "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.
- 6. 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 EPD. THE PERMITES SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A N.O.T. IS SUBMITTED IN ACCORDANCE WITH PART IV. IF AN ELECTRONIC SUBMITTAL IS PROVIDED BY EPD, THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.
- 7. EACH PERMITTEE MUST COMPLY WITH ALL APPLICABLE CONDITIONS OF THIS PERMIT. ANY PERMIT NONCOMPLIANCE CONSTITUTES A VIOLATION OF THE GEORGIA WATER QUALITY CONTROL ACT AND IS GROUNDS FOR ENFORCEMENT ACTION; FOR PERMIT TERMINATION; OR FOR DENIAL OF A PERMIT RENEWAL APPLICATION. FAILURE OF A PRIMARY PERMITTEE TO COMPLY WITH ANY APPLICABLE TERM OR CONDITION OF THIS PERMIT SHALL NOT RELIEVE ANY OTHER PRIMARY PERMITTEE FROM COMPLIANCE WITH THEIR APPLICABLE TERMS AND CONDITIONS OF THIS PERMIT.
- 8. EACH PERMITTEE MUST DOCUMENT IN THEIR RECORDS ANY AND ALL KNOWN VIOLATIONS OF THIS PERMIT AT HIS/HER SITE WITHIN SEVEN (7) DAYS OF HIS/HER KNOWLEDGE OF THE VIOLATION. A SUMMARY OF THESE VIOLATIONS MUST BE SUBMITTED TO EPD BY THE PERMITTEE WITHIN FOURTEEN (14) DAYS OF HIS/HER DISCOVERY OF THE VIOLATION.
- 9. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS. THE FEDERAL CLEAN WATER ACT AND THE GEORGIA WATER QUALITY CONTROL ACT (O.C.G.A. 12-5-20, ET SEQ.) PROVIDE THAT ANY PERSON WHO FALSIFIES, TAMPERS WITH, OR KNOWINGLY RENDERS INACCURATE ANY MONITORING DEVICE OR METHOD REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, MAKES ANY FALSE STATEMENT, REPRESENTATION, OR CERTIFICATION IN ANY RECORD OR OTHER DOCUMENT SUBMITTED OR REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, INCLUDING MONITORING REPORTS OR REPORTS OF COMPLIANCE OR NONCOMPLIANCE SHALL, UPON CONVICTION BE PUNISHED BY A FINE OR BY IMPRISONMENT, OR BY BOTH. THE FEDERAL CLEAN WATER ACT AND THE GEORGIA WATER QUALITY CONTROL ACT ALSO PROVIDE PROCEDURES FOR IMPOSING CIVIL PENALTIES WHICH MAY BE LEVIED FOR VIOLATIONS OF THE ACTS, ANY PERMIT CONDITION OR LIMITATION ESTABLISHED PURSUANT TO THE ACTS, OR NEGLIGENTLY OR INTENTIONALLY FAILING OR REFUSING TO COMPLY WITH ANY FINAL OR EMERGENCY ORDER OF THE DIRECTOR.
- 10. THE NOTES PRESENTED HEREIN SUMMARIZE THE PERTINENT POINTS IN GENERAL PERMIT #GAR 100001. THE PRIMARY PERMITTEE IS RESPONSIBLE FOR COMPLYING WITH ALL PROVISIONS OF THE PERMIT.

LOCATION MAP

N.T.S.



PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION OF THE PROJECT INFORMATION O

PRIMARY PERMITEE:
NAME: FULTON COUNTY BOARD OF COMMISSIONERS, TIM BEGGERLY- AIRPORT MANAGER
ADDRESS: 3925 AVIATION CIRCLE NW ATLANTA, GA 30336

PHONE: (404) 699-4200

E-MAIL: Timothy.Beggerly@fultoncountyga.gov

SITE INFORMATION

TOTAL SITE AREA: 360+ ACRES, DISTURBED AREA: 3.62 ACRES

ADDRESS: 700 FULTON INDUSTRIAL BLVD. NW, ATLANTA, GA 30336-FULTON COUNTY

PROJECT NAME: SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

6 GPS LOCATION (DEGREES): 33.782008, -84.518051

OWNER: FULTON COUNTY BOARD OF COMMISSIONERS, TIM BEGGERLY- AIRPORT MANAGER 3925 AVIATION CIRCLE NW, ATLANTA, GA 30336 (404) 699-4200

24-HOUR EMERGENCY CONTACT:

TO BE DETERMINED

TO BE DETERMINED



FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

Designer:

MBC

Technician:

Checked by:

Checked by:

MDJ

Project Number:



LONG

2550 HERITAGE CT. SUITE 250 FAX 770.951.2496 ATLANTA, GA 30339 Www.longeng.com

LEI PROJECT #0452-0160

Notes:

167728



1" = 50'

	REVISIONS		
No.	Description	Date	Ву
1	REVISION SET	7/24/19	MC
Proje	ect Name:		

SANDY CREEK ROAD
SANITARY SEWER
IMPROVEMENTS PROJECT

Drawing Name:

EROSION & SEDIMENT CONTROL NOTES

FULTON COUNTY PROJECT NUMBER:

195-031

Date: Sheet Number: 3 of 20
Scale: Drawing Number:

C-0.2

HAZARDOUS PRODUCT

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS

- A. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT INFORMATION.
- C. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL PREVENTION PRACTICES

- 1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- 2. 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.
- 3. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE
- 4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS.
- 5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER) THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- 6. FOR SPILLS OF UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- 7. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE GEORGIA E.P.D. WILL BE CONTACTED WITHIN 24
- 8. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THE THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURERS PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

APPROXIMATE ACTIVITY SCHEDULE

	MONTH																									
DESCRIPTION		1		2	3	3	_		5		6		7		8	3	9	•	1	0	1	11		12		13
INITIAL PHASE E&SC INSTALLATION		\prod		П		\bot	Ш		П	\prod	\prod	П	П	\prod		\blacksquare	-		1			\prod	\parallel	П	\downarrow	
7-DAY VISIT CERTIFICATION				H		‡			\parallel	╽		\parallel	\parallel				†					\sharp	∄	\parallel		
SEDIMENT CONTROL						$\frac{1}{4}$		\parallel		\parallel	\parallel		\parallel				$^{+}$					\sharp	\coprod	\parallel		
DEMOLITION OF INFRASTRUCTURE	$\downarrow \downarrow$	H						\parallel	\parallel		\parallel	\parallel	\sharp				$^{+}$					\sharp	\coprod	\parallel		
CLEARING & GRUBBING	\parallel	\parallel		\parallel		+		\parallel	\parallel	\parallel	\parallel	\parallel	\parallel	$\downarrow \downarrow$			$^{+}$					\sharp	\coprod	\parallel		
GRADING			Ħ			+		$\frac{1}{1}$	\parallel	\parallel	#	\parallel	\parallel	\parallel	\perp		$^{+}$					#	H	\parallel	\parallel	+
MULCHING - TEMPORARY GRASSING	\parallel					+		\parallel	\parallel	\parallel	#	\parallel	\sharp	\parallel	\pm		$^{+}$		#			\ddagger	\coprod	\parallel	\parallel	$^{+}$
UTILITY INSTALLATION	\parallel			Ħ		$\frac{1}{2}$		$\frac{1}{1}$	\parallel	\parallel	\ddagger	\parallel	\parallel				+					\ddagger	\sharp	\parallel		
BUILDING CONSTRUCTION	\parallel			Ħ		+		\parallel	\parallel	\parallel	#	\parallel	\sharp	\parallel	\pm		$^{+}$					\ddagger	H	\parallel	\parallel	$^{+}$
FINAL PAVING	\parallel	\parallel						\parallel	\parallel	\parallel	\parallel	\parallel	#				\downarrow			\parallel		\sharp	\sharp	\parallel		
MAINT. OF EROSION CONTROL DEVICES						+		\parallel	\parallel	\parallel	\parallel	\parallel	#	\parallel	$\frac{1}{2}$		+			\parallel		\sharp	H	\parallel	\parallel	+
FINAL LANDSCAPING	\parallel	\parallel	\parallel	\parallel		$^{+}$		\parallel	\parallel	\parallel	#	\parallel	#	\parallel	\perp		\pm		+	\parallel		\sharp	#	\parallel	\parallel	$^{+}$
DISPOSITION OF SEDIMENT DEVICES	$+\!\!+$	$+\!\!+$	$oxed{+}$	Н	Н	+	HH	+	\mathbb{H}	+	$+\!\!+$	H	+	+	\perp	\dashv	+	\mathbb{H}	H	\vdash	${\mathbb H}$	$+\!\!+$	$oldsymbol{H}$	$+\!\!+\!\!\!+$	H	+

ADDITIONAL ES&PC NOTES

- USE OF ALTERNATIVE BMP'S WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMP'S AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT WWW.GASWCC.ORG.
- USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA 2016 EDITION.
- 3. STATE WATERS ARE PRESENT WITHIN THE SITE. STATE WATERS EXIST WITHIN 200 FEET OF THE SITE AS DEPICTED ON SHEETS C-0.1.
- 4. NO WETLANDS ARE PRESENT WITHIN THE SITE.
- CURVE NUMBER: EXISTING CONDITIONS CN = 77, PROPOSED CONDITIONS CN = 77
- 6. SOILS:Ub, RoF, CpA

	\underline{W}	ATERS	SUPP	ORTING	G WAR	M WAT	ER FIS	<u>HERIES</u>	
				SURFAC	E WATER DR	AINAGE ARE	A, (SQ. MILES)	
		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
	1.00-10	75	150	200	400	750	750	750	750
(Ac)	10.01-25	50	100	100	200	300	500	750	750
E SIZE	25.01-50	50	50	100	100	200	300	750	750
SI	50.01-100	50	50	50	100	100	150	300	600
	100.01+	50	50	50	50	50	100	200	100

BEST MANAGEMENT PRACTICES

- 1. BEST MANAGEMENT PRACTICES, AS SET FORTH IN THIS PERMIT, 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" (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 TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF GEORGIA. PROPER DESIGN, INSTALLATION, AND MAINTENANCE OF BEST MANAGEMENT PRACTICES SHALL CONSTITUTE A COMPLETE DEFENSE TO ANY ACTION BY THE DIRECTOR OR TO ANY OTHER ALLEGATION OF NONCOMPLIANCE WITH PART 111.D.3 AND PART 111.D.4 OF PERMIT #GAR 100001.
- EXCEPT AS REQUIRED TO INSTALL THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS AS DESCRIBED IN PART IV.D.3., THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS MUST BE INSTALLED AND IMPLEMENTED PRIOR TO CONDUCTING ANY OTHER CONSTRUCTION ACTIVITIES (E.G., CLEARING, GRUBBING AND GRADING) WITHIN THE CONSTRUCTION SITE OR WHEN APPLICABLE, WITHIN PHASED SUB-PARTS OR SEGMENTS OF THE CONSTRUCTION SITE. FAILURE TO COMPLY SHALL CONSTITUTE A VIOLATION OF THIS PERMIT FOR EACH DAY ON WHICH CONSTRUCTION ACTIVITIES OCCUR. THE DESIGN PROFESSIONAL WHO PREPARED THE PLAN MUST INSPECT THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS IN ACCORDANCE WITH PART IV.A.5. WITHIN SEVEN (7) DAYS AFTER INSTALLATION.
- FAILURE TO PROPERLY DESIGN, INSTALL, OR MAINTAIN BEST MANAGEMENT PRACTICES SHALL CONSTITUTE A VIOLATION OF THIS PERMIT FOR EACH DAY ON WHICH SUCH FAILURE OCCURS. BMP MAINTENANCE AS A RESULT OF THE PERMITTEE'S ROUTINE INSPECTIONS SHALL NOT BE CONSIDERED A VIOLATION FOR THE PURPOSES OF THIS PARAGRAPH. IF DURING THE COURSE OF THE PERMITTEES ROUTINE INSPECTION BMP FAILURES ARE OBSERVED WHICH HAVE RESULTED IN SEDIMENT DEPOSITION INTO WATERS OF THE STATE, THE PERMITTEE SHALL CORRECT THE BMP FAILURES AND SHALL SUBMIT A SUMMARY OF THE VIOLATIONS TO EPD, IN ACCORDANCE WITH PART V.A.2 OF PERMIT #GAR100001
- 4. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES 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 CLASSIFIED AS TROUT STREAMS OR MORE THAN TWENTY-FIVE (25) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS SUPPORTING WARM , WATER FISHERIES, REGARDLESS OF A PERMITTEE'S CERTIFICATION, UNDER PART II.B.1.i OF PERMIT #GAR10001
- WHEN THE PERMITTEE HAS ELECTED TO MONITOR OUTFALL(S), THE DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING THE VALUE SELECTED FROM APPENDIX B APPLICABLE TO THE CONSTRUCTION SITE. AS SET FORTH THEREIN, THE NEPHELOMETRIC TURBIDITY UNIT (NTU) VALUE SHALL BE SELECTED FROM APPENDIX B BASED UPON THE SIZE OF THE CONSTRUCTION SITE, THE SURFACE WATER DRAINAGE AREA AND WHETHER THE RECEIVING WATER(S) SUPPORTS WARM WATER FISHERIES OR IS A TROUT STREAM AS INDICATED IN THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6 AT WWW.GAEPD.ORG

DESCRIPTION OF EROSION CONTROL BMP'S BY PHASE

NITIAL PHASE - INSTALL PERIMETER SILT FENCE, TEMPORARY SEDIMENT BASIN AND CONSTRUCTION EXIT PRIOR TO REMOVING EXISTING PAVEMENT THROUGHOUT SITE AND PRIOR TO STRIPPING TOPSOIL. UPON REMOVAL OF PAVEMENT, ESTABLISH DIVERSIONS TO TEMPORARY SEDIMENT BASIN.

INTERMEDIATE PHASE - INSTALLATION OF MAIN STORM SEWER LINE AND INSTALLATION OF INLET SEDIMENT TRAPS. MONITOR PREVIOUSLY NSTALLED PERIMETER SILT FENCE AND SEDIMENT BASIN. AFTER SEDIMENT TRAPS ARE INSTALLED AND FUNCTIONING, REMOVE SEDIMENT BASIN

FINAL PHASE - BUILDING CONSTRUCTION, INSTALLATION OF HARDSCAPES AND FINAL GRADING AND STABILIZATION. DISPOSITION OF ALL TEMPORARY SEDIMENT BMPS.

DESIGN PROFESSIONAL 7-DAY VISIT CERT. DATE OF INSPECTION:

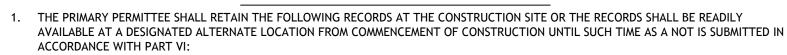
	MELISSA JOHNSON, PE	CERTIFICATION #69256	
INSPECTION	REVEALED THE FOLLOWING DIS	CREPANCIES FROM THE ES&PC PLAN:	

(30) INSPECTIONS (PERMITTEE REQUIREMENTS)

SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

- EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- MEASURE RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS
- CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASSE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- 4. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS RECEIVED BY EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
- 5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
- A REPORT OF EACH INSPECTION AND THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5) OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

RECORDING AND RECORDS



A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD:

(32)

B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;

C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS

D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;

E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT: F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS

G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT.

- 2. 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 THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.
- 3. OWNERS OR OPERATORS OR BOTH WHO INTEND TO OBTAIN COVERAGE UNDER THIS GENERAL PERMIT FOR STORM WATER DISCHARGES FROM A CONSTRUCTION SITE, SHALL SUBMIT A NOTICE OF INTENT (NOI) IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PART AT LEAST FOURTEEN (14) DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 4. NOI'S ARE TO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO BOTH THE DISTRICT OFFICE OF THE EPD AND TO THE LOCAL ISSUING AUTHORITY
- 5. WHERE AN OWNER OR AN OPERATOR OR BOTH CHANGES AFTER AN NOI HAS BEEN FILED, THE SUBSEQUENT OWNER OR OPERATOR OR BOTH MUST FILE A NEW NOI AT LEAST SEVEN (7) DAYS BEFORE BEGINNING OF WORK AT THE FACILITY/SITE.

STORMWATER MONITORING RATIONALE

PERMIT: AND

HE FOLLOWING FACTORS WERE CONSIDERED WHEN DETERMINING THE STORMWATER MONITORING POINT LOCATIONS MONITORING POINTS CHOSEN WHERE MAJORITY OF SITE RUNOFF ENTERS CONVEYANCE LEAVING SITE AND AT LOCATION WITHIN RECEIVING

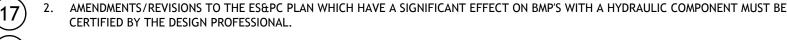
CONVEYANCE JUST UPSTREAM OF WHERE THE MAJORITY OF SITE RUNOFF ENTERS THE CONVEYANCE, MONITORING POINT LOCATION ADJUSTED AS SHOWN ON PLAN AS CHANGES ARE MADE TO WHERE SITE RUNOFF ENTERS RECEIVING CONVEYANCE.

SAMPLING OF (OUTFALL/RECEIVING WATER) NUMBER OF OUTFALLS: 1

APPENDIX B NTU VALUE: 75

SURFACE WATER DRAINAGE AREA (SQ MILES): 0.13





(18) WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

(19)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. EROSION AND SILTATION CONTROL DEVICES MUST BE INSTALLED PRIOR TO START OF OTHER CONSTRUCTION AND MAINTAINED UNTIL

PERMANENT GROUND COVER IS ESTABLISHED. 8. ANY FAILURE OF ANY EROSION CONTROL DEVICE TO FUNCTION AS INTENDED FOR ANY REASON SHALL BE REPORTED TO THE ENGINEER

9. ALL DISTURBED AREAS ARE TO BE GRASSED AS SOON AS CONSTRUCTION PHASE PERMITS. TEMPORARY MULCHING SHALL BE UTILIZED

DURING THE PERIOD OF GERMINATION OF GRASS SEEDINGS USING STRAW OR HAY MULCH, JUTE MATTING OR SYNTHETIC FIBERS. 10. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL CONFORM TO THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA AND

ANY APPLICABLE LOCAL REGULATIONS 11. EROSION CONTROL DEVICES WILL BE PROPERLY INSTALLED PRIOR TO SITE DISTURBANCE, MAINTAINED IN GOOD WORKING CONDITION UNTIL COMPLETION OF PROJECT, AND REPLACED WHEN EFFECTIVENESS IS REDUCED TO 50%.

12. ALL DISTURBED AREAS ARE TO BE STABILIZED WITH SUITABLE PERENNIAL VEGETATION, ACCORDING TO SOIL CONSERVATION SERVICE OR GEORGIA EXTENSION SERVICE SPECIFICATIONS, IMMEDIATELY FOLLOWING THE COMPLETION OF GRADING.

13. STRIPPING OF VEGETATION, GRADING OR OTHER DEVELOPMENT ACTIVITIES SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE

14. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.

15. ALL SEDIMENT COLLECTED DURING MAINTENANCE OF EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED FROM THE SITE OR SPREAD IN LANDSCAPED OR NATURALLY VEGETATED AREAS, SEEDED AND COVERED WITH STRAW.

16. DETENTION FACILITIES AND EROSION AND SILTATION CONTROL DEVICES MUST BE INSTALLED PRIOR TO START OF OTHER CONSTRUCTION AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE DEVICES SHALL BE MOVED AND ADJUSTED AS NEEDED TO KEEP A FUNCTIONING SYSTEM THROUGHOUT CONSTRUCTION. EROSION CONTROL MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO CONSTRUCTION EXITS, SILT FENCE, STORM INLET/OUTLET PROTECTION, DIVERSION DIKE OR DOWNDRAINS ON LONG STEEP SLOPES AND TEMPORARY GRASSING.

17. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 🚦 FULL

18. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.

19. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.

20. SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

21. SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171 TEMPORARY SILT FENCE, OF THE GEORGIA STANDARD SPECIFICATIONS, 1993 EDITION AND BE WIRE REINFORCED.

22. THE PROPERTY OWNER AND CONTRACTOR ARE EQUALLY RESPONSIBLE FOR ALL EROSION CONTROL ACTIVITIES.

23. ALL TEMPORARY AND PERMANENT SEEDING MUST BE PREFORMED AT THE APPROPRIATE SEASON. IN SUCH INSTANCES WHERE THE ESTABLISHMENT OF VEGETATION IS INOPPORTUNE DUE TO SEASON OR DROUGHT, DISTURBED AREAS SHALL BE TEMPORARY STABILIZED USING 2"-4" OF MULCH (Ds1). ADDITIONAL PLANTINGS WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.

24. THE CITY'S DESIGNEE WILL VERIFY ADEQUATE COVER (100% COVER, 70% DENSITY) OF PERMANENT STABILIZATION (Ds3, Ds4).

25. SEDIMENT STORAGE VOLUME @ 67 CY/ACRE MUST BE INSTALLED PRIOR TO ANY OTHER LAND DISTURBANCE ACTIVITY AND IN PLACE UNTIL FINAL STABILIZATION OCCURS.

26. ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III. C. OF THE PERMIT. INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMP'S THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT.



FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

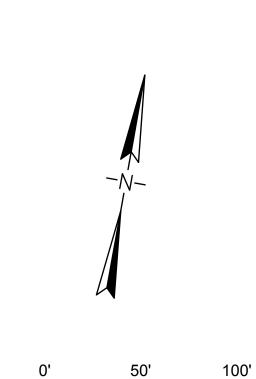
Michael Baker INTERNATIONAL

Designer: Technician: Checked by: MDJ roject Number:



2550 HERITAGE CT. TEL 770.951.2495 ATLANTA, GA 30339 www.longeng.com **LEI PROJECT #0452-0160**

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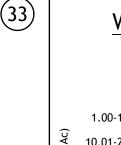
SANDY CREEK ROAD SANITARY SEWER **IMPROVEMENTS PROJECT**

Drawing Name:

EROSION & SEDIMENT CONTROL NOTES

FULTON COUNTY PROJECT NUMBER: 195-031 Sheet Number: 08/06/2019 4 of 20 Scale: Drawing Number:





SAMPLE TYP

- 2. 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 "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.
- 3. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES. LABELING SHOULD INCLUDE: PROJECT NAME, SAMPLE LOCATION. SAMPLE NO., DATE COLLECTED, TIME COLLECTED
- 4. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
- 5. LARGE MOUTH, WELL CLEANED AND REUSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
- 6. 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 SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
- 7. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD.

SAMPLING POINTS

- 8. 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 OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
- 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 FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVINGWATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY
- OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.

 B. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM 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 DOWNSTREAM TURBIDITY VALUE.
- C. IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM
- WATER OUTFALL CHANNEL(S).

 D. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
- E. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- F. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
- G. 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 UNPAVED 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 EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPE AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION).
- H. 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.

31) SAMPLING FREQUENCY (GAR 100001 IV.D.6.d)

- 1. THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.
- 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.
- 3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:
- A. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;
- B. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST:
- C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL 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 MAINTAINED;
- D. 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.A.(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 OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND
- E. EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING 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 THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

*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 SAMPLING AT ANY TIME OF THE DAY OR WEEK.

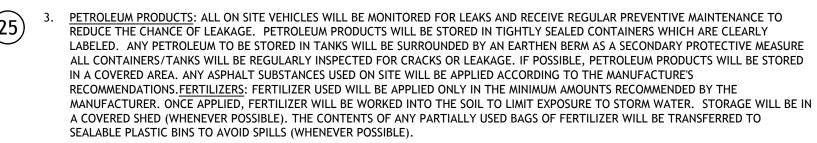
4. NON-STORM WATER DISCHARGES. EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORM WATER LISTED IN PART 111.A.2. OF THIS PERMIT THAT ARE COMBINED WITH STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MUST BE IDENTIFIED IN THE PLAN. THE PLAN SHALL IDENTIFY AND ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORM WATER COMPONENT(S) OF THE DISCHARGE.

REPORTING (GAR 100001 IV.E.)

- 1. 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. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. 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. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.
- 2. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
- A. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;B. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
- C. THE DATE(S) ANALYSES WERE PERFORMED;
- D. THE TIME(S) ANALYSES WERE INITIATED;
- E. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;F. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
- G. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
- H. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND
- I. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.
- 3. 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 EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. IF AN ELECTRONIC SUBMITTAL IS PROVIDED BY EPD THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.

(27) PRODUCT SPECIFIC PRACTICES

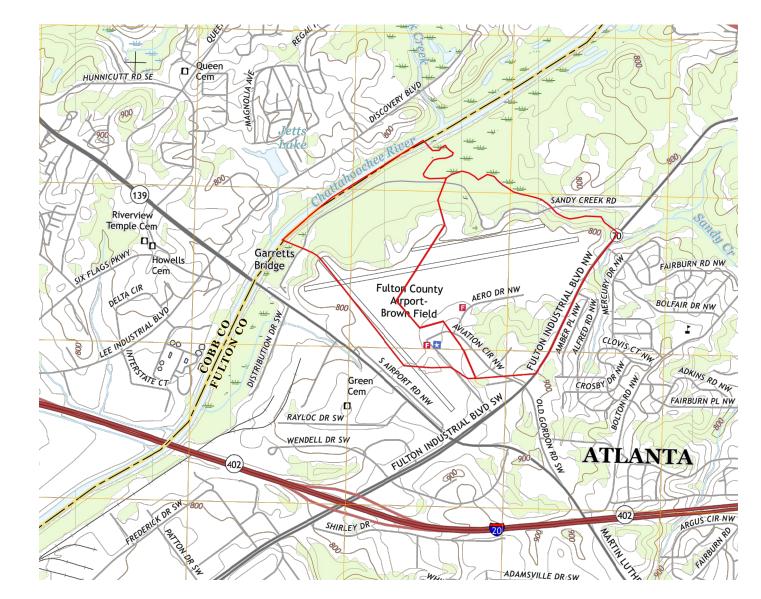
- 1. CONCRETE TRUCKS: CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASHOUT OR DISCHARGE SURPLUS CONCRETE DRUM WASH ON SITE. WASH AREAS, IF CONSTRUCTED, WILL CONSIST OF AN ENCLOSED WASTE COLLECTION AREA THAT WILL CONTAIN THE CONCRETE WASH UNTIL IT HARDENS.
- 2. <u>PAINTS</u>: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM OR SURFACE WATERS BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURE'S INSTRUCTIONS AND FEDERAL, STATE AND LOCAL REGULATIONS.



- 4. <u>SANITARY/SEPTIC WASTES</u>: ALL SANITARY WASTE FACILITIES WILL BE SERVICED BY A QUALIFIED DOMESTIC WASTE HAULER. FACILITIES WILL BE PLACED OUT OF HIGH FLOW AREAS, AND WILL BE KEPT AWAY FROM, AND NOT RINSED INTO, STORM DRAIN INLETS AND RECEIVING BODIES OF WATER.
- MULCH: MULCH STORAGE MUST COMPLY WITH THE FOLLOWING SECTION OF THE STANDARD FIRE PREVENTION CODE: SECTION 502.3.1 NO PERSON SHALL STORE IN ANY BUILDING OR UPON ANY PREMISES IN EXCESS OF 2,500 CU.FT. GROSS VOLUME OF COMBUSTIBLE EMPTY PACKING CASES, BOXES, BARRELS OR SIMILAR CONTAINERS, OR RUBBER TIRES, OR RUBBER OR OTHER SIMILARLY COMBUSTIBLE MATERIALS WITHOUT A PERMIT.
- 6. <u>SANDBLASTING GRITS</u>: NO SANDBLASTING GRIT WILL BE DISPOSED OF ON SITE. ITS DISPOSAL WILL BE COORDINATED WITH A LICENSED WASTE MANAGEMENT OR TRANSPORT AND DISPOSAL FIRM.
- 7. CONSTRUCTION WASTES: ALL CONSTRUCTION WASTE, FOR EXAMPLE: RUBBLE, PACKAGING MATERIALS, SCRAP BUILDING SUPPLIES, AND TREES AND SHRUBS REMOVED DURING GRUBBING, WILL BE COLLECTED AT A DESIGNATED ON-SITE LOCATION. IF POSSIBLE THE WASTE ACCUMULATION AREA WILL BE LOCATED IN A COVERED AREA. ALL CONSTRUCTION WASTES WILL BE REMOVED REGULARLY ON A CONSISTENT SCHEDULE AND DISPOSED OF AT AUTHORIZED DISPOSAL SITES.
- 8. <u>DETERGENTS</u>: THE USE OF DETERGENTS WILL BE LIMITED ON SITE, AND NO WASH WATER CONTAINING DETERGENTS WILL BE DISCHARGED TO STORM DRAIN INLETS OR RECEIVING BODIES OF WATER.

(44)

SITE WATERSHEDS



		.,	HE SITE WHICH DISCHARGE TO A IMPAIRED STREAM SEGMENT AND FOR SITES WHICH EPD HAS APPROVED IN WRITING A REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME. The four items chosen must be appropriate for the site conditions.
Plan	Include	ed	тте юш петь спорен ниргие арргорнате юн ше впетсонишонь.
Page#	Y/N	•	
] a.	During construction activities, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width.
C-5.3	Υ] b.	Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.
		C.	Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.
C-4.1	Υ] d.	A large sign (minimum 4 feet x 8 feet) must be posted on site by the actual start date of construction. The sign must be visible from a public roadway. The sign must identify the following: (1) construction site, (2) the permittee(s), (3) the contact person(s) and telephone number(s), and (4) the permittee-hosted website where the Plan can be viewed must be provided on the submitted NOI. The sign must remain on site and the Plan must be available on the provided website until a NOT has been submitted.
] e.	Use flocculants or coagulants and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days in accordance with Section III. D.1. of the NPDES Permit.
		f.	Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Section IV.D.6.d. of the NPDES Permits.
		g.	Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6 (a)(1).
C-0.4	Υ] h.	Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan.
N/A	Υ] i.	Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the Plan.
] j.	Use "Dirt II" techniques available on the EPD website to model and manage construction storm water runoff (including sheet flow). All calculations must be included on the Plan. (https://epd.georgia.gov/erosion-and-sedimentation)
		k.	Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of six (6) inches to document improved levels of soil carbon after final stabilization of the construction site.
		l.	Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.
] m	. Use appropriate erosion control slope stabilization instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.
] n.	Use flocculants or coagulants under a passive dosing method (e.g., flocculant blocks) within construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.
] o.	Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever storm water (including sheet flow) may be discharged.
] p.	Conduct soil tests to identify and to implement site-specific fertilizer needs.
] q.	Certified personnel for primary permittees shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Section IV.D.4.a.(3)(a) $-$ (c); secondary permittees, Section IV.D.4.b.(3)(a) $-$ (c); and tertiary permittees Section IV.D.4.c.(3)(a) $-$ (c) *
] r.	Apply the appropriate compost blankets (minimum depth 1.5 inches) to protect soil surfaces until vegetation is established during the final stabilization phase of the construction activity.
		s.	Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). (If using this item please refer to the Alternative BMP guidance document found at www.gaswcc.georgia.gov)
] t	Limit the total planned site disturbance to less than 15% impervious surfaces (excluding any state mandated buffer areas from such calculations). All calculations must be included in the Plan.
] u.	Conduct inspections during the intermediate grading and drainage BMP phase and during the final BMP phase of the project by the design professional who prepared the Plan in accordance with Section IV.A.5 of the permit. The Plan must include a statement that the primary permittee must retain the design professional who prepared the Plan to conduct inspections during the intermediate grading and drainage BMP phase and during the final BMP
] v.	phase. Install Post Construction BMPs (e.g., runoff reduction BMPs) which remove 80% TSS as
_ -			outlined in the Georgia Stormwater Management Manual known as the Blue Book or an equivalent or more stringent design manual. Effective January 1, 2019
			* This requirement is different for infrastructure projects:
			Certified personnel for primary permittees shall conduct inspections at least once every fourteen (14) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or
			greater in accordance with Section IV.D.4.a.(3)(a) – (c) of this permit

APPENDIX 1

ITEM H CALCULATION

APPROXIMATE SITE AREA=360+ ACRES
PERCENT IMPERVIOUS = 25%
APPROXIMATE IMPERVIOUS ON SITE BEFORE PROJECT: 90 ACRES
APPROXIMATE IMPERVIOUS ON SITE AFTER PROJECT: 90 ACRES
NOTE: NO NEW IMPERVIOUS AREA IS BEING PROPOSED FOR THIS PROJECT



FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

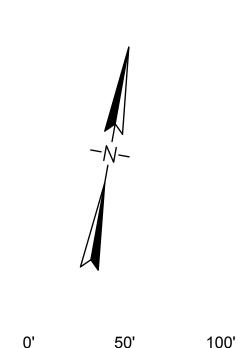
Michael Baker INTERNATIONAL

esigner:	МВС	EORG
echnician:		No. PERSONS
Checked by:	MDJ	No. PERSOSS PROFESSIONA 2 · 2 8 · 20
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Notes.



1" = 50'

REVISIONS

No. Description Date By

1 REVISION SET 7/24/19 MC

Project Name:

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

EROSION & SEDIMENT CONTROL NOTES

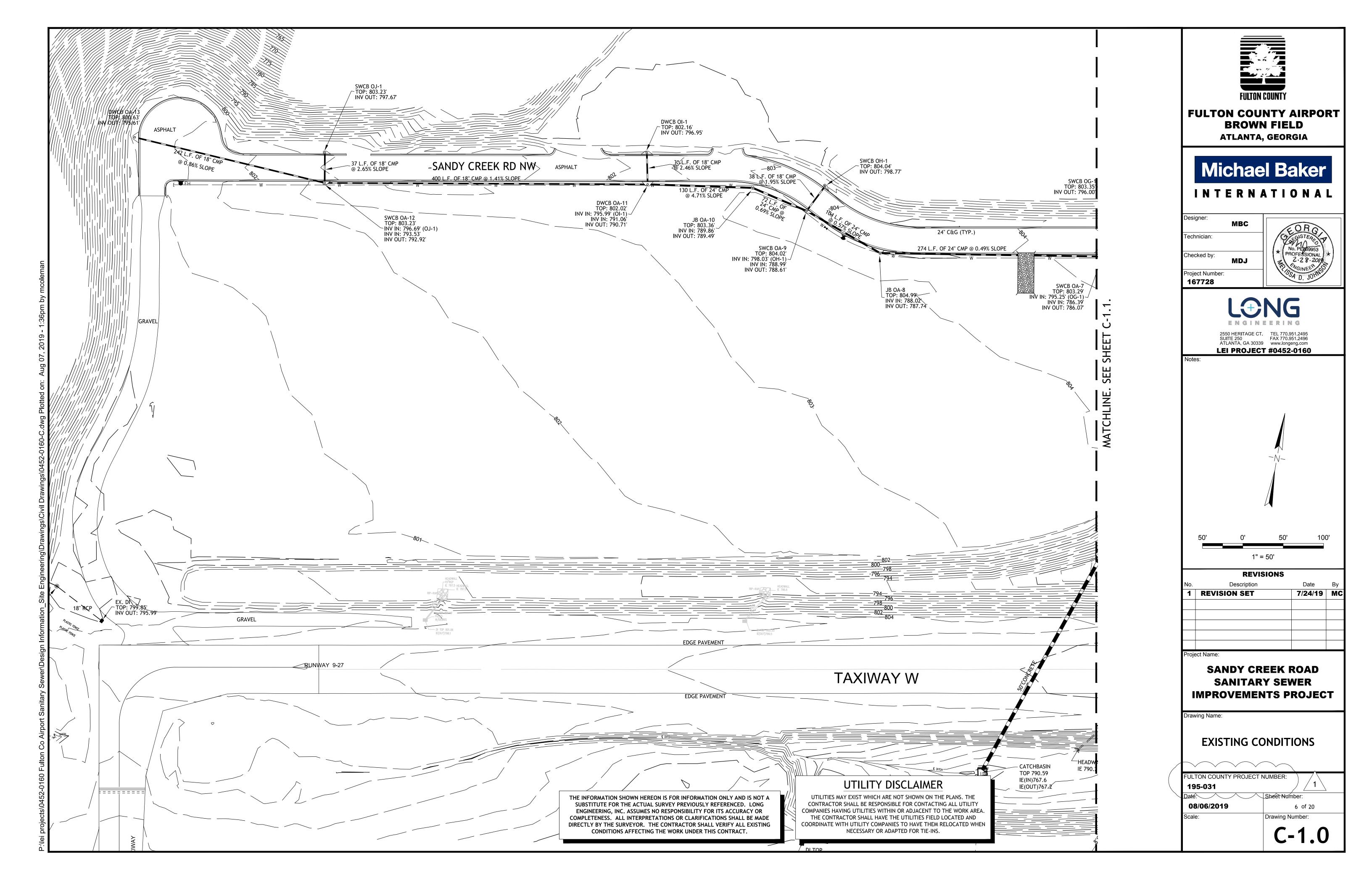
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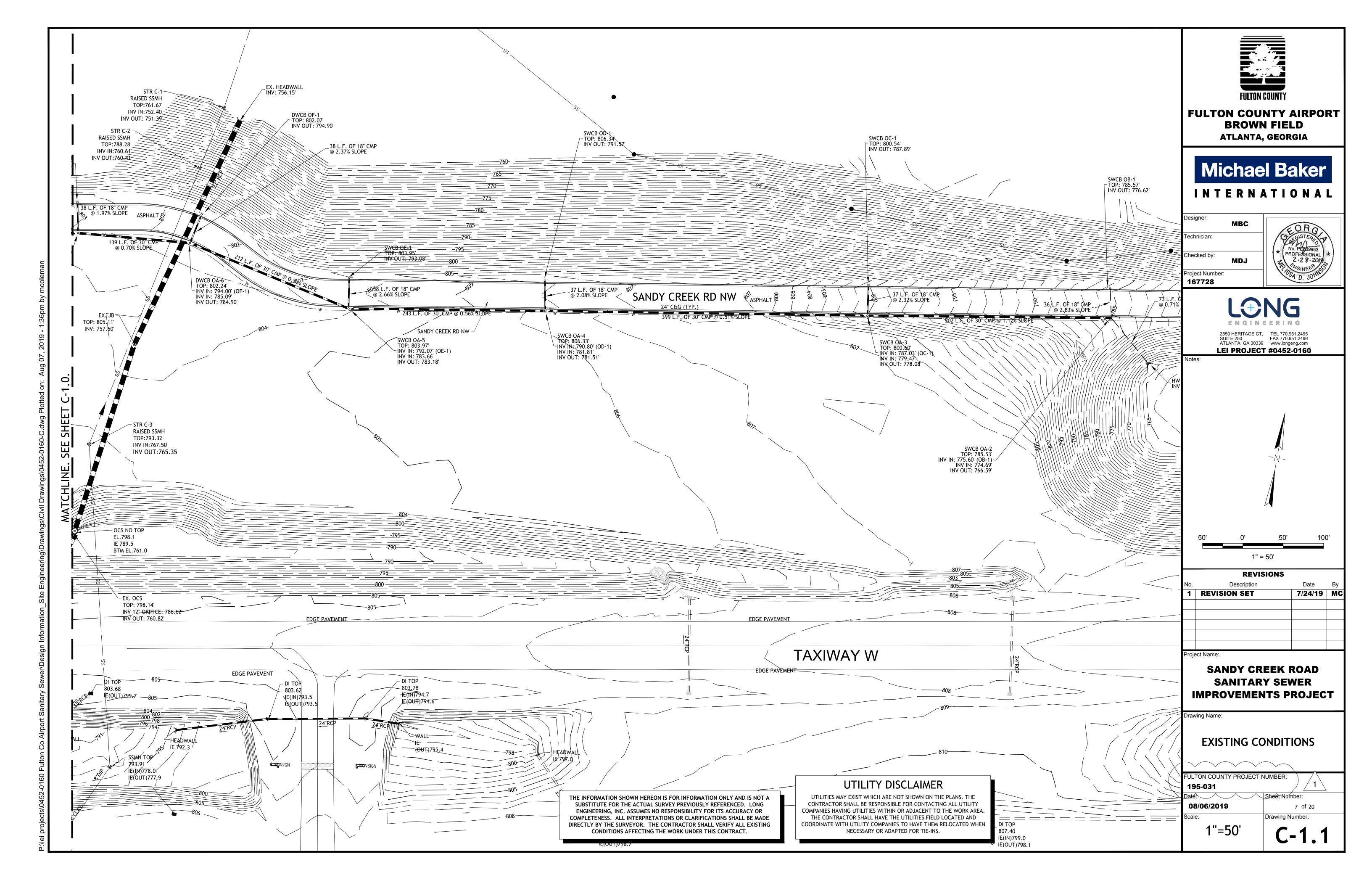
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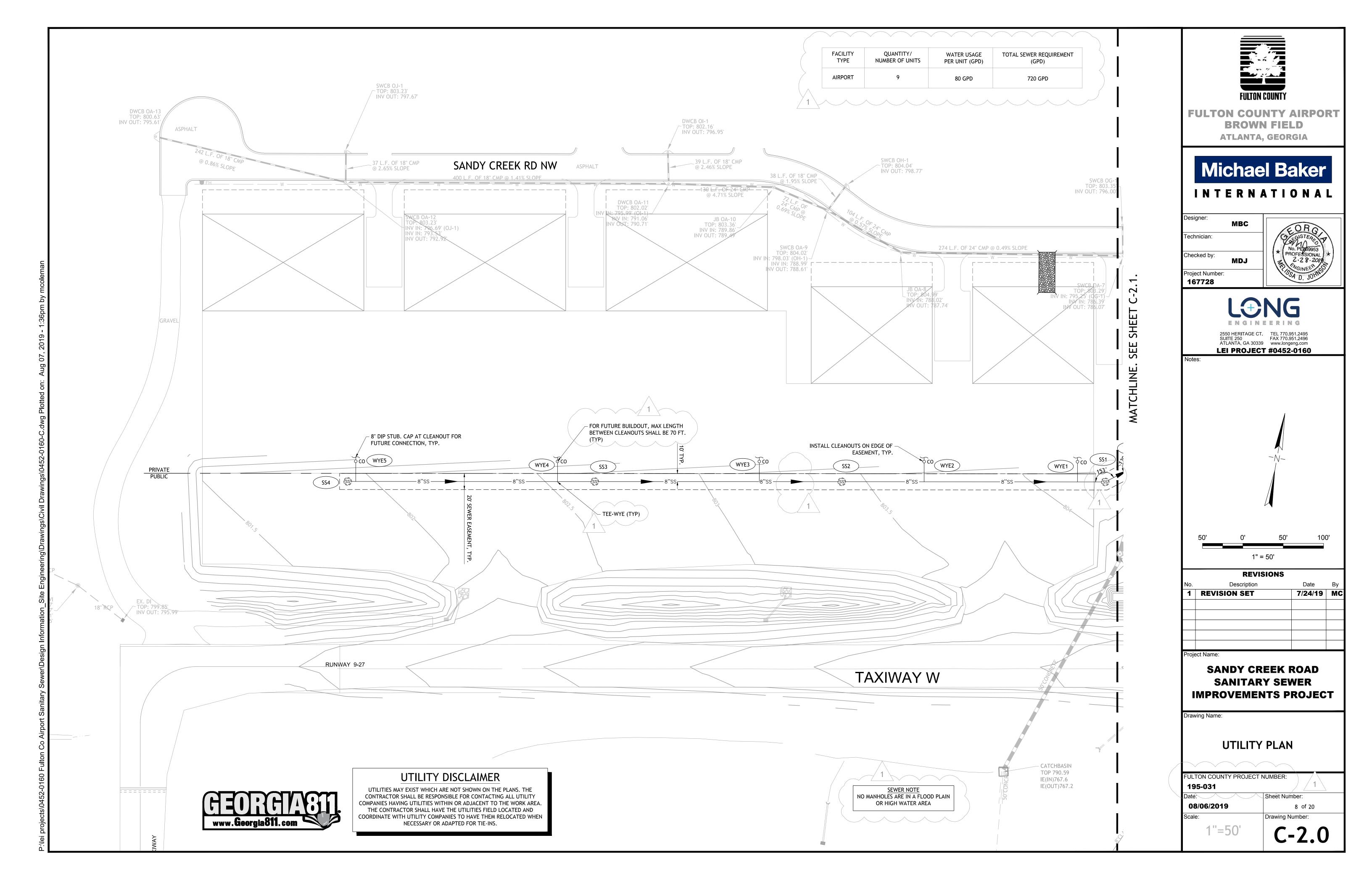
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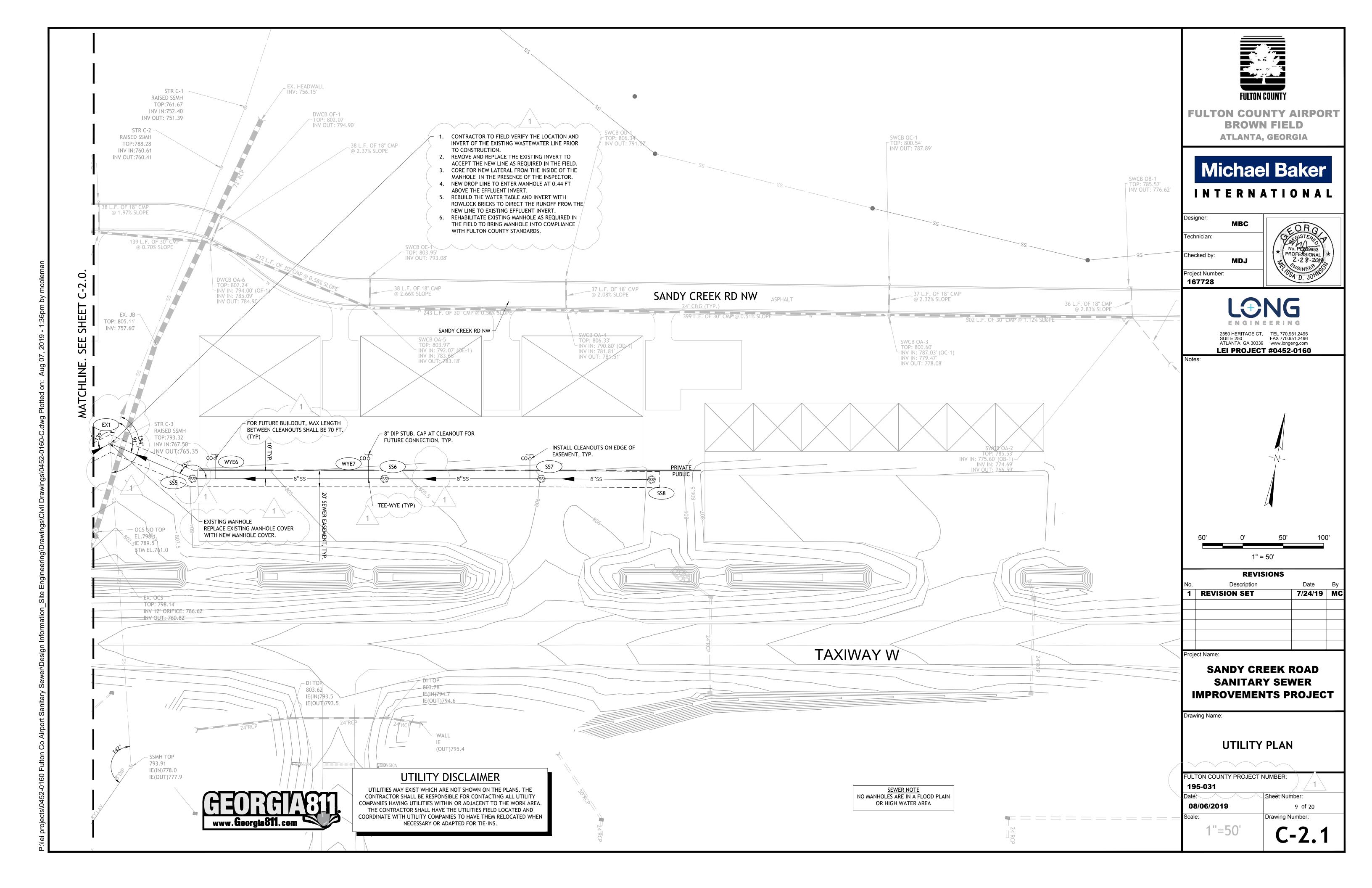
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SEWER INSTALLATION NOTE
A PROFESSIONAL ENGINEER SHALL
BE ON SITE DURING CONSTRUCTION
TO CERTIFY THE BEDDING AND
COMPACTED FILL AS ACCORDING TO
DIPRA INSTALLATION REQUIREMENTS



FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

Designer:

MBC

Technician:

Checked by:

MDJ

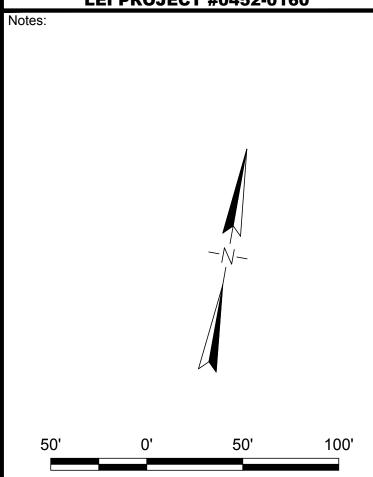
Project Number:

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1" = 50'

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

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Designer:

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No.	Description	Date	В				
1	REVISION SET	7/24/19	N				

1" = 50'

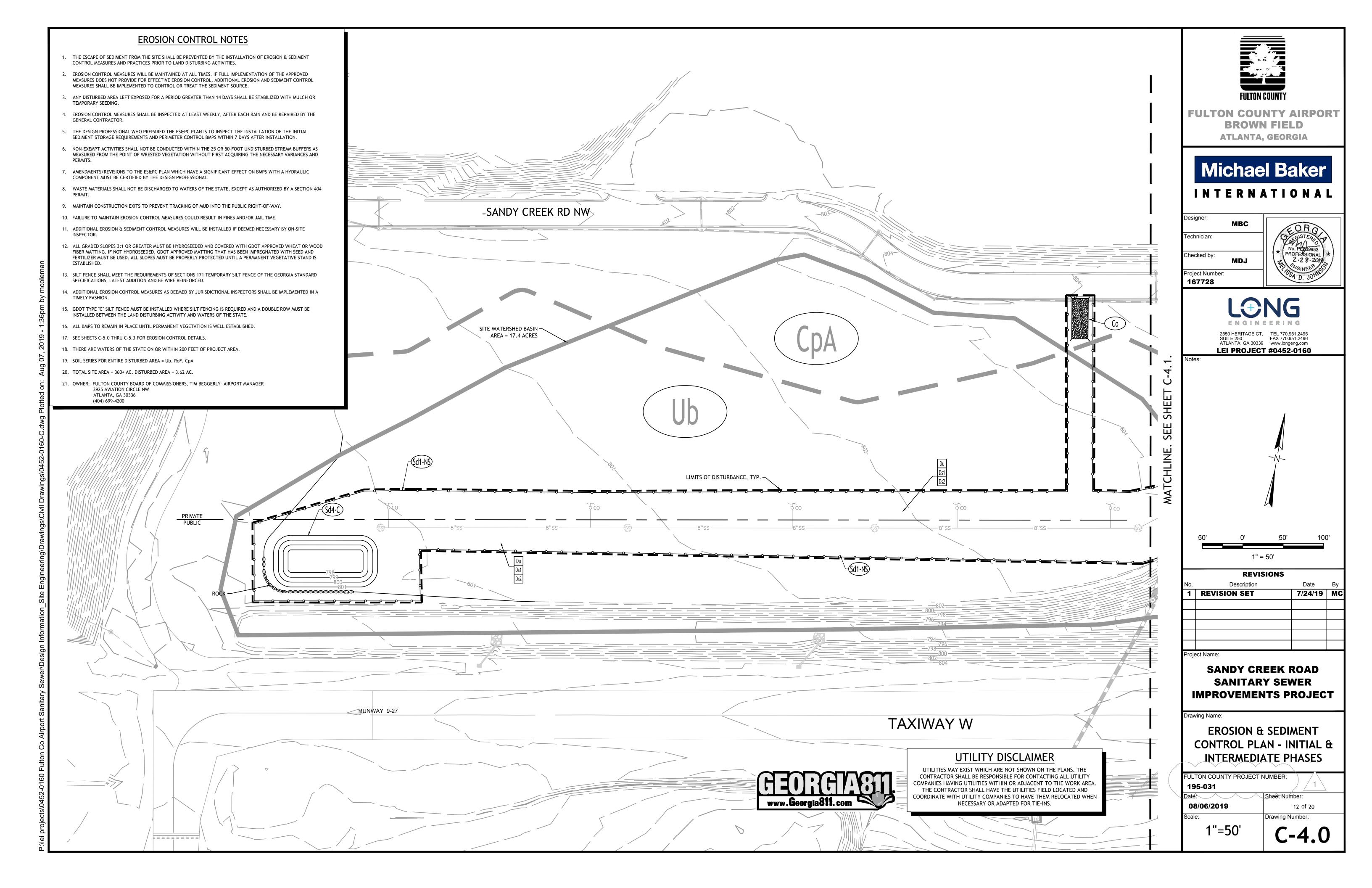
SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

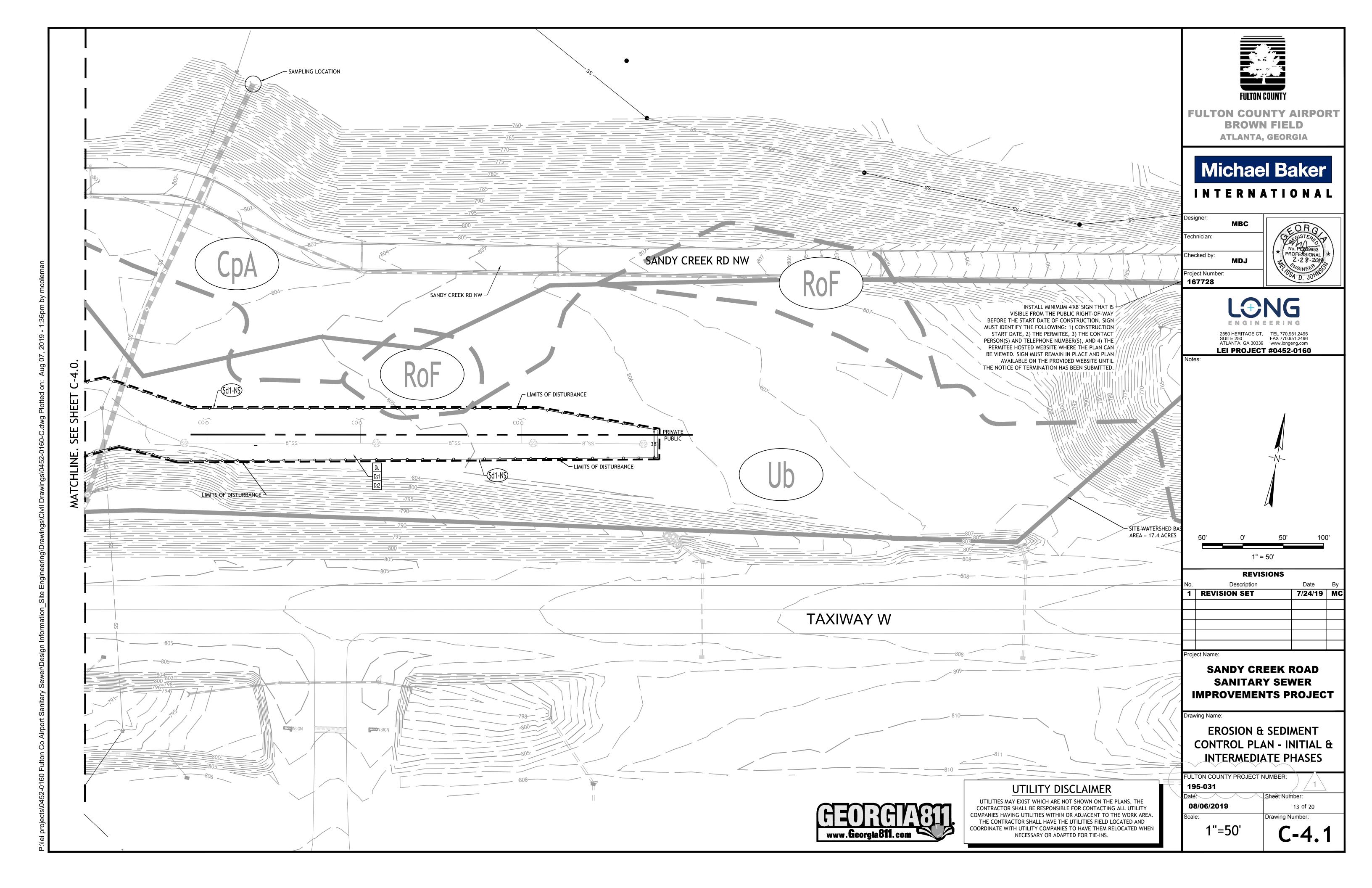
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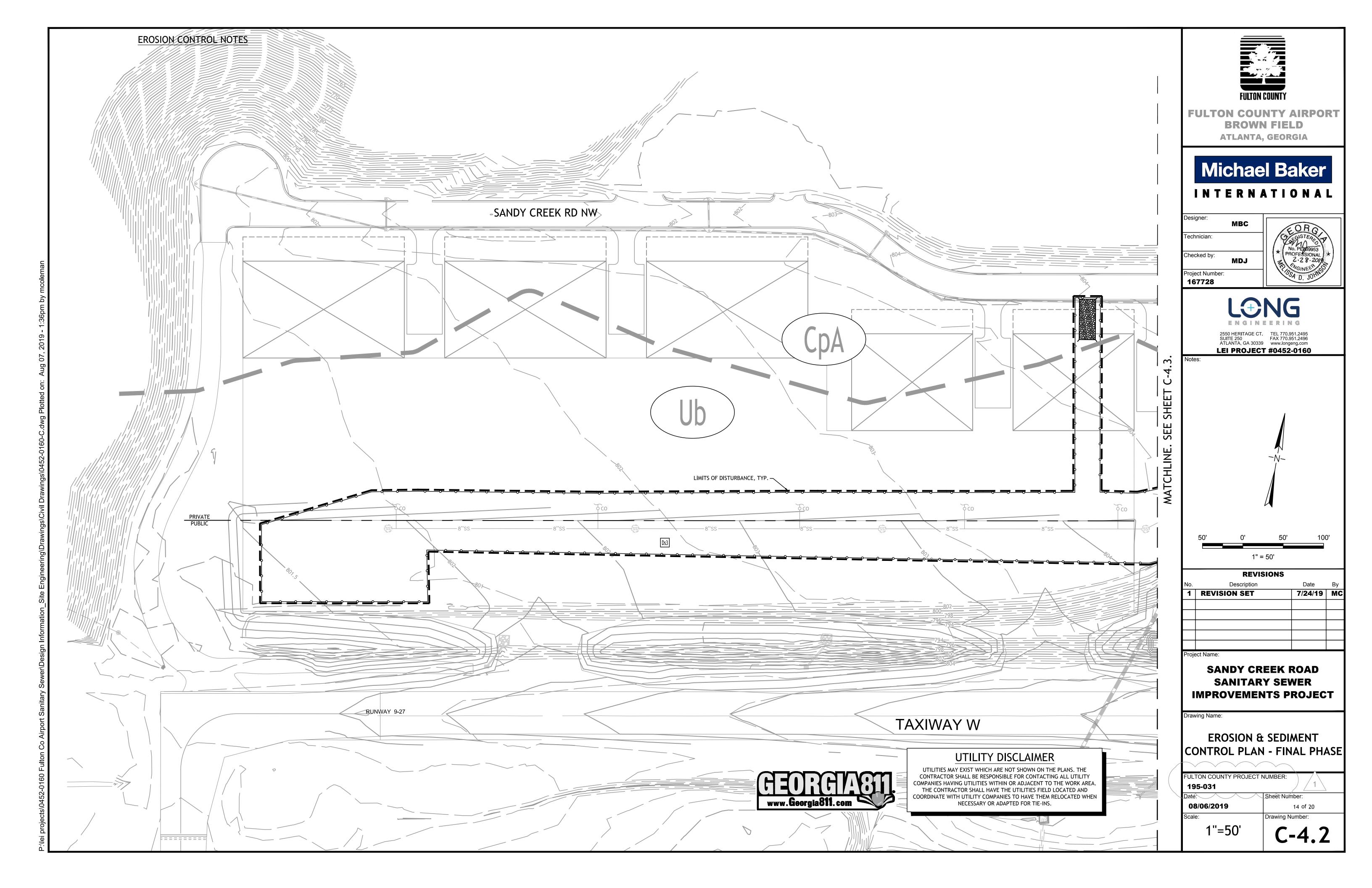
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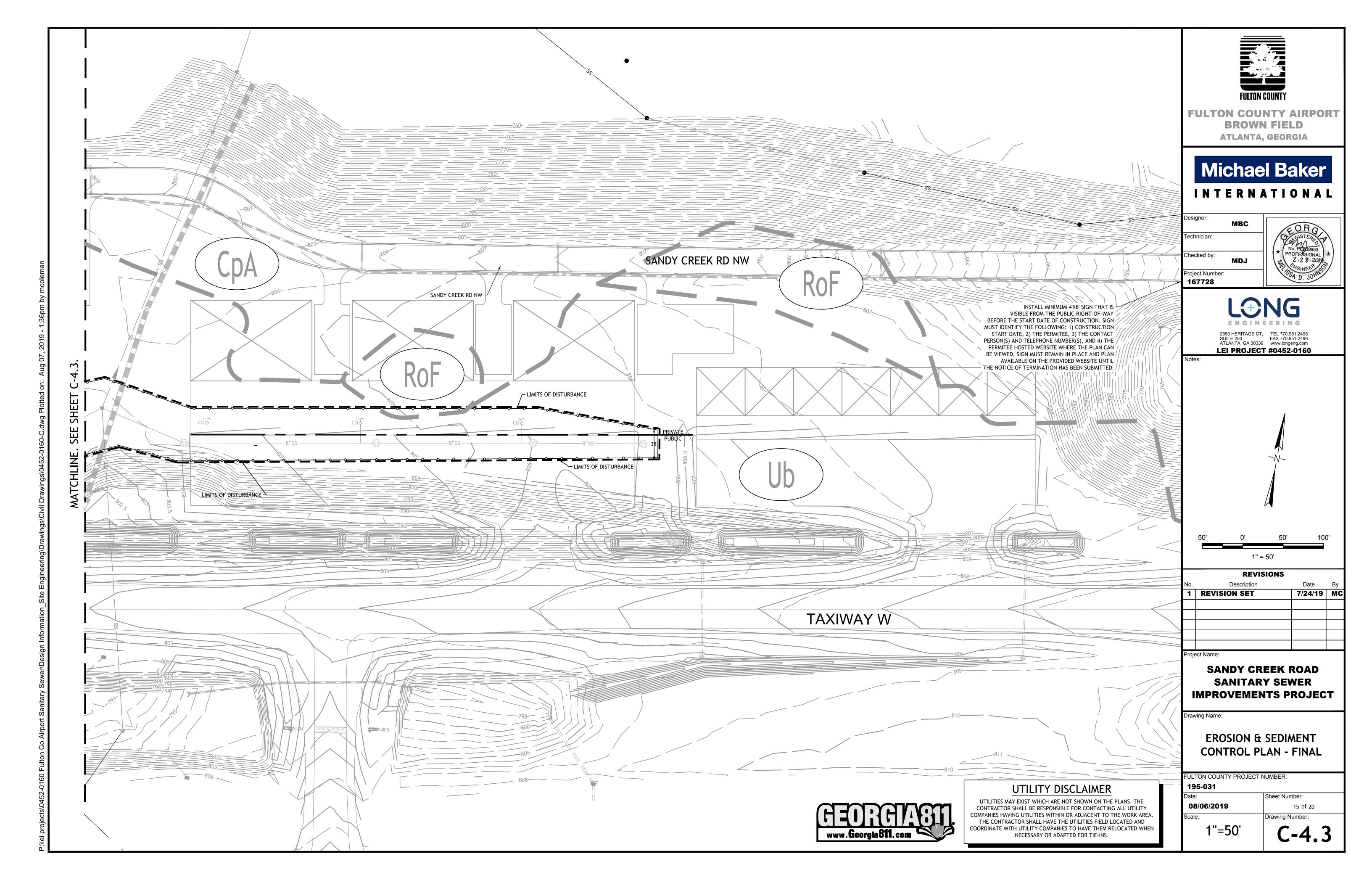
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195-031	/ / 1
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08/06/2019	11 of 20
Scale:	Drawing Number:

C-3.1









0.7 LBS.

3.9 LBS.

0.6 LBS.

0.9 LBS.

1.4 LBS.

3.3 LBS.

0.6 LBS.

4.1 LBS.

0.7 LBS.

137,000 SEED PER POUND, OUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES. 88,000 SEED PER POUND, QUICK, DENSE NOT RECOMMENDED FOR MIXTURES. AMJJA S O N 13,000 SEED PER POUND, USE ON

REMARKS

14,000 SEED PER POUND

WINTERHARDY, USE ON

PRODUCTIVE SOILS.

200,000 SEED PER POUND. MAY VOLUNTEER

FOR SEVERAL YEARS. USE INOCULANT EL.

,500,000 SEED PER POUND. MAY LAST FOR

SEVERAL YEARS. MIX WITH SERICEA

LESPEDEZA

PRODUCTIVE SOILS. NOT AS

WINTERHARDY AS RYE OR BARLEY.

DROUGHT TOLERANT AND

WINTERHARDY.

227 000 SEED PER POLIND DENSE COVER

VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.

55,000 SEED PER POUND, GOOD ON

DROUGHTY SITES. <u>NOT</u> RECOMMENDED FOR MIXTURES.

USE ON LOWER PART OF SOUTHERN

COASTAL PLAIN AND IN ATLANTIC

COASTAL FLATWOODS ONLY.

15,000 SEED PER POUND. WINTERHARDY.

APPLIED BY HAND. PROVIDE WATER AS REQUIRED TO GERMINATE AND MAINTAIN A 18,000 SEED PER POUND. QUICK COVER. HEALTHY, THICK COVER OF GRASS.

CUI TIPACKER-SEEDER OR

APPLY TO ALL EXPOSED AREAS

IF DISTURBED AREAS ARE TO BE

6 MONTHS USE TEMPORARY

GRASSING, OTHERWISE USE

THE SEED TO LODGE AND

PERMANENT GRASSING.

GERMINATE.

OR CHISEL.

SEEDER, DRILL

WITHIN 14 DAYS OF DISTURBANCE

LEFT UNDISTURBED FOR LESS THAN

SOIL TO RECEIVE GRASSING IS TO BE

SCARIFIED TO PROVIDE A PLACE FOR

APPLY AGRICULTURAL LIME AT A

FOR LOW FERTILITY SOILS, APPLY

BEFORE LAND PREPARATION AND

APPLY SEED BY HAND, CYCLONE

HYDRAULIC SEEDER. RAKE SOIL

LIGHTLY TO COVER SEED WHEN

INCORPORATE WITH A DISK, RIPPER

RATE OF ONE TON PER ACRE.

500-700 LBS. OF 10-10-10

FERTILIZER PER ACRE. APPLY

MAINTENANCE REQUIREMENTS: INSPECT ALL AREAS WHERE TEMPORARY GRASSING HAS BEEN APPLIED. WHERE COVER IS SPARSE

SCARIFY THE AREA, TEST SOIL FERTILITY, APPLY FERTILIZER AS NECESSARY AND RESEED. WHERE EROSION HAS OCCURRED, REGRADE PRIOR TO ABOVE STEPS.

/ TEMPORARY COVER CROPS ARE VERY COMPETITIVE AND WILL CROWN OUT PERENNIALS IF SEEDED TOO HEAVILY. 2/ REDUCE SEEDING RATES BY 50% WHEN DRILLED.

3/ PLS IS AN ABBREVIATION FOR PURE LIVE SEED. 4/ M-L REPRESENTS THE MOUNTAIN; BLUE RIDGE; AND RIDGES AND VALLEYS MLRA'S

P REPRESENTS THE SOUTHERN PIEDMONT MLRA C REPRESENTS THE SOUTHERN COASTAL PLAIN; SAND HILLS; BLACK LANDS; AND ATLANTIC COAST FLATWOODS MLRAS

TEMPORARY GRASSING

REFER TO THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR FURTHER DETAILS AND SPECIFICATIONS.

Disturbed Area Stabilization (With Temporary Seeding)



DEFINITION

The establishment of temporary vegetative cover with fast growing seedings for seasonal protection on disturbed or denuded areas.

•To reduce runoff and sediment damage of

down stream resources •To protect the soil surface from erosion

- To improve wildlife habitat
- To improve aesthetics
- •To improve tilth, infiltration and aeration as well as organic matter for permanent plantings

REQUIREMENT FOR REGULATORY COMPLIANCE

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. If an area is expected to be undisturbed for longer than six months, permanent perennial vegetation shall be used. If optimum planting conditions for temporary grassing is lacking, mulch can be used as a singular erosion control device for up to six months but it shall be applied at the appropriate depth, anchored, and have a continuous 90% cover or greater of the soil surface. Refer to specification **Ds1-Disturbed Area Stabilization** (With Temporary Seeding).

CONDITIONS

Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established. Note: Some species of temporary vegetation are not appropriate for companion crop plantings because of their potential to out-compete the desired species (e.g. annual ryegrass). Contact NRCS or the local SWCD for more information.

IN MIXTURES

RYE

(Secale cereale)

IN MIXTURES

RYEGRASS, ANNUAL (Loliu

AI ONF

(Sorghum sudanese)

ALONE

TRITICALE

IN MIXTURES

IN MIXTURES

32 LBS.

168 LBS.

28 LBS.

40 LBS.

60 LBS.

144 LBS.

24 LBS.

30 LBS.

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.

PG 1

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

Seedbed Preparation

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.

Lime and Fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed and some hydraulic mulch, then topped with the

remaining required application rate.

Select a grass or grass-legume mixture suitseeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally to cover seed with soil if seeded by hand. See Table 6-4.1

established without the use of mulch, provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching 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.

(With Mulching Only) Ds1

able to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, culti-packer-seeder, or hydraulic place seed one-quarter to one-half inch deep Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly

Temporary vegetation can, in most cases. be

Subsequent applications should be made when

Disturbed Area Stabilization

DEFINITION Applying plant residues or other suitable

materials, produced on the site if possible, to the soil surface.

PURPOSE •To reduce runoff and erosion

•To conserve moisture

•To prevent surface compaction or crusting

•To control undesirable vegetation •To modify soil temperature

•To increase biological activity in the soil REQUIREMENT FOR REGULATORY

COMPLIANCE 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 any area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed. Refer to Ds2 -Dis-

turbed Area Stabilization (With Temporary Seeding), Ds3 - Disturbed Area Stabilization (With Permanent Seeding), and Ds4 - Disturbed Area Stabilization (With Sodding).

SPECIFICATIONS Mulching Without Seeding

This standard applies to graded 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,

3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials Select one of the following materials and apply at the depth indicated:

terraces and sediment barriers.

- 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
- 2. 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 costs.

3. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and re-used.

Applying Mulch When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.

mechanical equipment.

1. Dry straw or hay mulch and wood chips

shall be applied uniformly by hand or by

2. 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.

CODE

(Cd)

(Ch)

Co

Cr

(Dc)

Di `

Fr

Ga

Lv

(Rd)

(Re)

Rt

(Sd1)

Sd3

Sd4

(Sk)

PRACTICE

CHECKDAM

CHANNEL

STABILIZATION

ONSTRUCTION

EXIT

CONSTRUCTION

ROAD

STREAM

DIVERSION

DIVERSION

TEMPORARY

STRUCTURE

FILTER

RING

GABION

GRADE

STRUCTURE

LEVEL

SPREADER

ROCK

FILTER

DAM

RETAINING

WALL

SEDIMENT

BARRIER

SEDIMENT

BASIN,

TEMPORARY

SEDIMENT

TRAP.

TEMPORARY

FLOATING

SURFACE

SKIMMER

Sd2 SEDIMENT TRAIT TEMPORARY

Gr STABILIZATION

(Dn1) DOWNDRAIN

PERMANEN I DOWNDRAIN STRUCTURE

CHANNEL

STABILIZATION

DETAIL

SYMBOL

A

DESCRIPTION

small temporary barrie

dam constructed across

swale, drainage ditch or

rea of concentrated flow

tabilizing an open channel

ting stream, or ditch.

rushed stone pad located

the construction exit to

cting public streets.

velway constructed as par

a construction plan including

ccess roads, sub- division roads

arking areas and other on-site

nicle transportation routes.

emporary channel coi

round a construction site

earth channel or dike

ay be a temporary or

anent structure.

exible conduit of heavy

lesigned to safely conduct

ırface runoff down a slope

emporary, and inexpensive

paved chute, sectional

nduit, pipe or similar

esigned to safely conduct

urface runoff down a slope

nstructed at storm drain inlets

otect natural or artificial channe

lope would be sufficient for the

ning water to form gullies.

ntrated flow of waters

to less erosive sheet flow

is should be constructed

v on undisturbed soils

tone filter dam installed

cross small streams or

and fill slopes where maximum

missible slopes are not

obtainable. Each situation will

device or structure placed in

front of a permanent stormwater

tention pond outlet structure

serve as a temporary sediment

barrier to prevent sediment

ales of straw or hay, grave

impounding area created by

cavating around a storm drain

let. The excavated area will be

nstruction activities.

am across a waterway. The

rface water runoff is temp-

ly stored allowing the bulk of

small temporary pond that drains

tinguishing a temporary sedime

settle out. The principle feature

rap from a temporary sediment

lled and stabilized on completion

site. It may be sandbags,

a sediment fence.

nageways.

waterways where otherwise the

material designed to

ond outlets.

e hand-placed into

ck filter baskets which

n forming soil

ilizing structures.

y fabric or other ma- terial

ated above, below or across

slope to divert runoff. This

being constructed.

ted to convey flow

nile a permanent stucture

mud from tires thereby

ovide a place for removing

CODE PRACTICE

STEP

BERM

TEMPORARY

STREAM

CROSSING

STORMDRAIN

INLET/OUTLET

PROTECTION

SURFACE

ROUGHING

TURBIDITY

CURTAIN

TOPSOILING

TREE

STORMWATER CONVEYANCE CHANNEL

AREAS

FLOCCULANTS

COAGULANTS

STREAMBANK

STABILIZATION

VEGETATION)

SLOPE

STABILIZATION

INCREMENTALLY AS NECESSARY

(WITH PERMANEN

|FI-Co||

Ss

PROTECTION

(Spb)

Su)

(Wt)

DETAIL

0

YMBOL

DESCRIPTION

linear control device construct

direction of the runoff to enhance

dissipation and infiltration of run-

f, while creating multiple sedioyment of intremediate dikes.

lvert-type structure protecting

a stream or watercourse from

paved or short section of

storm drain system preventing

rosion from the concentrated

A rough soil surface with

ontour or slopes left in a

floating or staked barrier in-

also be referred to as a floating

The practice of stripping off the more fertile soil, storing it, then

To protect desirable trees

aved or vegetative water

terraces, berms, dikes, or

the solids/liquid separation of

tance formulated to assist in

spended particles in solution.

olant materials to maintain and

prevent, or restore and repair sma

protective covering used to

vegetation on steep slopes, shore

hay mulch by causing the

organic material to bind

ance used to anchor straw

emporary or permanent

lines, or channels.

ambank erosion problems.

enhance streambanks, or to

similar sites.

from injury during

nstruction activity.

outlets for diversions,

spreading it over the disturbed

damage by crossing construction

3. Apply polyethylene film on exposed areas.

Anchoring Mulch 1. 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. Tackifers, binders and hydraulic mulch with tackifier specifically desgined for tacking straw can be substituted for emulsified asphalt. Please refer to specification Tac-Tackifers. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.

2. Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.

3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

Bf	BUFFER ZONE		Bf	An undisturbed natural "green belt" separating the land-disturbing site from surrounding property and bordering stream It serves to reduce water velocity and remove some sediment. It is also at times a noise or 'vision pollution' barrier.
Cs	COASTAL DUNE STABILIZATION	HHHHHHH	Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished. retarding cover.
Ds1	DISTURBED AREA STABILIZATION (W/MULCHING ONLY)	full in	Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion.
Ds2	DISTURBED AREA STABILIZATION (w/TEMPORARY SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (w/PERMANENT SEEDING)		Ds3	Establishing permanent vegetative cover such as trees, shrubs, vines, sod, grasses or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)		Ds4	A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Du	Controlling surface and air movement of dust on construction site, roadways and

VEGETATIVE MEASURES

TACKIFIERS ouoyant device that releases/ ||Tac|| AND Tac ains water from the surface of Sk **BINDERS** ediment ponds, traps, or basins at rolled rate of flow.

GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

FOR TEMPORARY PROTECTION OF CRITICAL AREAS WITHOUT SEEDING. THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHICH

MATERIALS	RATE	APPLICATION
DRY STRAW OR HAY	2"-4" DEEP	APPLY UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT. ANCHOR HAY DISK HARROW OR PACKER DISK OR WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1)AT A RATE OF 100 GAL. PER 100 GAL. WATER FOR EACH TON OF MULCH
WOOD WASTE, CHIPS, SAWDUST OR BARK	2" TO 3" THICK	ANCHOR WITH NETTING OF THE APPROPRIATE SIZE. OPENING IN THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS
EROSION CONTROL MATTING OR NETTING	APPLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS	APPLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
CUTBACK ASPHALT (SLOW CURING)	1200 GALLONS PER ACRE, OR 4 GALLON PER SQUARE YARD	APPLY UNIFORMLY
POLYETHYLENE FILM	SECURED OVER BANKS OR	ANCHOR TRENCH AT THE TOP OF SLOPE AS WELL AS

MAINTENANCE REQUIREMENTS:
INSPECT ALL MULCHED AREAS ON A DAILY BASIS AND AFTER EACH RAINFALL EVENT, REGRADE ERODED AREAS AND REMULCH AREAS IN WHICH THE COVER IS NO LONGER GREATER THAN 90% CONTINUOUS.

STOCKPILED SOIL MATERIAL

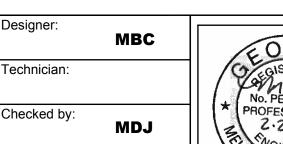
TEMPORARY MULCHING

REFER TO THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR FURTHER DETAILS AND SPECIFICATIONS.



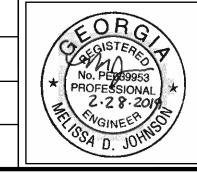
FULTON COUNTY AIRPORT **BROWN FIELD** ATLANTA, GEORGIA

Michael Baker INTERNATIONAL



Project Number:

167728





2550 HERITAGE CT. TEL 770.951.2495 ATLANTA, GA 30339 www.longeng.com **LEI PROJECT #0452-0160**

100' 1" = 50'

REVISIONS Description Date 1 \parallel REVISION SET 7/24/19 MC roject Name:

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

EROSION & SEDIMENT CONTROL DETAILS

FULTON COUNTY PROJECT NUMBER: 195-031 Sheet Number: 08/06/2019 16 of 20 Scale: Drawing Number:

PG 1 PG 2 PG 2

Disturbed Area Stabilization (With Permanent **Vegetation**)



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.

•To protect the soil surface from erosion

•To reduce damage from sediment and runoff to down-stream areas

REQUIREMENT FOR REGULATORY

To improve wildlife habitat and visual

To improve aesthetics

COMPLIANCE

This practice shall be applied immediately to rough graded areas that will be undisturbed for longer than six months. This practice or sodding shall be applied immediately to all areas at final grade. Final Stabilization means that all soil disturbing activities at the site have been com pleted, and that for unpaved 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 the GA EPD for waste disposal, 100% of the soil surface is uniformlycovered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas),

or equivalent permanent stabilization measures.

Permanent vegetation shall consist of, planted trees, shrubs, perennial vines; or a crop of perennial vegetation appropriate for the region, such that within the growing season a 70% coverage by perennial vegetation shall be achieved. Final stabilization applies to each phase of construction. For linear construction projects on land used for agricultural or silvicultural purposes. final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use. Until this standard is satisfied and permanent control measures and facilities are operational, interim stabilization measures and temporary erosion and sedimentation control measures shall not be removed.

CONDITIONS

Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded

PLANNING CONSIDERATIONS

1. Use conventional planting methods where

2. When mixed plantings are done during marginal planting periods, companion crops shall

3. No-till planting is effective when planting is done following a summer or winter annual

into stands of rye is an excellent procedure. 4. Block sod provides immediate cover. It is especially effective in controlling erosion adjacent to concrete flumes and other structures. Refer to Specification Ds4-Disturbed

cover crop. Sericea lespedeza planted no-till

Area Stabilization (With Sodding). 5. Irrigation should be used when the soil is dry

or when summer plantings are done. 6. Low maintenance plants, as well as natives, should be used to ensure long-lasting ero-

7. Mowing should not be performed during the quail nesting season (May to September).

8. Wildlife plantings should be included in critical area plantings.

Wildlife Plantings Commercially available plants beneficial to

wildlife species include the following:

Mast Bearing Trees

Beech, Black Cherry, Blackgum, Chestnut, Chinkapin, Hackberry, Hickory, Honey Locust, Native Oak, Persimmon, Sawtooth Oak and Sweetgum.

All trees that produce nuts or fruits are favored by many game species. Hickory provides nuts used mainly by squirrels and bear.

Shrubs and Small Trees

Bayberry, Bicolor Lespedeza, Crabapple, Dogwood, Huckleberry or Native Blueberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry, Sumac, Wax Myrtle, Wild Plum and Blackberry.

Plant in patches without tall trees to develop stable shrub communities. All produce fruits used by many kinds of wildlife, except for lespedeza which produces seeds used by quail and songbirds.

Grasses, Legumes, Vines and Temporary Cover

Bahiagrass, Bermudagrass, Grass-Legume mixtures, Partridge Pea, Annual Lespedeza, Orchardgrass (for mountains), Browntop Millet (for temporary cover), and Native grapes.

Provides herbaceous cover in clearings for a game bird brood-rearing habitat. Appropriate legumes such as vetches, clovers, and lespedezas may be mixed with grass, but they may die out after a few years.

CONSTRUCTION SPECIFICATIONS Grading and Shaping

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.

> ing, mulching and maintenance of the vegetation. Concentrations of water that will cause excessive

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, seed-

hvdroseeder

Finely ground limestone can be applied in the with the appropriate standards and specifications mulch slurry or in combination with the top dressing.

> When conventional planting is to be done, lime and fertilizer shall be applied uniformly in one of the following ways:

1. Apply before land preparation so that it will be mixed with the soil during seedbed prepara-

2. Mix with the soil used to fill the holes, distribute in furrows.

3. Broadcast after steep surfaces are scarified,

pitted or trenched. 4. A fertilizer pellet shall be placed at root depth in the closing hole beside each pine tree

Plant Selection

Refer to Tables 6-4.1, 6-5.2, 6-5.3 and 6-5.4 for approved species. Species not listed shall be approved by the State Resource Conservationist of the Natural Resources Conservation Service before they are used.

Plants shall be selected on the basis of species characteristics, site and soil conditions, planned use and maintenance of the area; time of year of planting, method of planting; and the needs and desires of the land user.

Some perennial species are easily established and can be planted alone. Examples of these are Common Bermuda, Tall Fescue, and Weeping Lovegrass.

Other perennials, such as Bahia Grass and Sericea Lespedeza, are slow to become established and should be planted with another perennial spe cies. The additional species will provide quick cover and ample soil protection until the target perennial species become established. For example, Common seeding combinations are 1) Weeping Lovegrass with Sericea Lespedeza (scarified) and 2) Tall Fescue with Sericea Lespedeza (unscarified).

Plant selection may also include annual companion crops. Annual companion crops should be used only when the perennial species are not planted during their optimum planting period. A common

mixture is Brown Top Millet with Common Bermuda in mid-summer. Care should be taken in selecting companion crop species and seeding rates because annual crops will compete with perennial species for water, nutrients, and growing space. A high seeding rate of the companion crop may prevent the establishment of perennial species.

Ryegrass shall not be used in any seeding mixtures containing perennial species due to its ability to out-compete desired species chosen for permanent perennial cover.

Seed Quality

The term "pure live seed" is used to express the quality of seed and is not shown on the label. Pure live seed, PLS, is expressed as a percentage of the seeds that are pure and will germinate. Information on percent germination and purity can be found on seed tags. PLS is determined by multiplying the percent of pure seed with the percent of germination; i.e.,

(PLS = % germination x % purity)

Common Bermuda seed

70% germination, 80% purity

PLS = 70% germination x 80% purity

PLS = 56%

The percent of PLS helps you determine the amount of seed you need. If the seeding rate is 10 pounds PLS and the bulk seed is 56 % PLS, the bulk seeding rate is:

<u>10 lbs. PLS/acre</u> = 17.9 lbs/acre

You would need to plant 17.9 lbs/acre to provide 10 lbs/acre of pure live seed.

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used (but is strongly recommended for any seeding process, when possible). When conventional seeding is to be used, seedbed preparation will be done as follows:

PG 3

1. Tillage, at a minimum, shall adequately

PG 1

PG 2

fertilizer: smooth and firm the soil: allow for the proper placement of seed, sprigs, o plants; and allow for the anchoring of straw

2. Tillage may be done with any suitable

3. Tillage should be done on the contour where 4. On slopes too steep 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

or hay mulch if a disk is to be used.

loosen the soil to a depth of 4 to 6 inches;

alleviate compaction; incorporate lime and

Individual Plants

be used.

1. Where individual plants are to be set, the opening furrows, or dibble planting.

2. For nursery stock plants, holes shall be large enough to accommodate roots without 3. Where pine seedlings are to be planted,

contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria. The innoculant shall be a pure culture prepared specifically for the seed species and used within the dates on

the container. A mixing medium recommended by the manufacturer shall be used to bond the innoculant to the seed. For conventional seeding, use twice the amount of innoculant recommended by the

All inoculated seed shall be protected from the

the amount of innoculant recommended by the

the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

Hydraulic Seeding 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

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a culti-packer-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 equip-

soil shall be prepared by excavating holes,

subsoil under the row 36 inches deep on the

the nursery. The tips of vines and sprigs must be at or slightly above the ground surface.

manufacturer. For hydraulic seeding, four times

manufacturer shall be used. sun and high temperatures and shall be planted consider the mulch's functional longevity, vegeta-

PG 4

Mix the seed (innoculated if needed), fertilizer the mixture is made.

Conventional Seeding

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.

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

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.

Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should

tion establishment enhancement, and erosion control effectiveness. Select the mulching mate-

> 1. 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

rial from the following and apply as indicated:

2. 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. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.

3. 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

4. Sericea Lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.

5. 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.

6. When using temporary erosion control blankets or block sod, mulch is not required.

7. Bituminous treated roving may be applied on planted areas, slopes, in ditches or dry waterways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seedina.

Applying Mulch 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%

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

the ground without cutting it, leaving much of it in an erect position. Mulch shall not be

verified nontoxic through EPA 2021.0 testing.

Refer to Tackifiers-Tac one-half bushel per acre.

4. Plastic mesh or netting with mesh no larger

than one inch by one inch may be needed to anchor straw or hav mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Grass Hay

Irrigation will be applied at a rate that will not cause runoff..

Topdressing will be applied on all temporary or in mixtures with other species. Recommended rates of application are listed in Table 6-5.1.

Second Year and Maintenance Fertilization Second year fertilizer rates and maintenance fertilizer rates are listed in Table 6-5.1.

Use and Management Mow Sericea Lespedeza only after frost to ensure that the seeds are mature. Mow between

Apply one ton of agricultural lime every 4 to

Bermudagrass, Bahiagrass and Tall Fescue may be mowed as desired. Maintain at least 6 inches of top growth under any use and management. Moderate use of top growth is beneficial after establishment.

Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place between May and September.

soil erosion shall be diverted to a safe outlet. Diver-

sions and other treatment practices shall conform

Agricultural lime is required at the rate of one

otherwise. Graded areas require lime application.

Lime and Fertilizer Rates and Analysis

to two tons per acre unless soil tests indicate

If lime is applied within six months of planting

permanent perennial vegetation, additional lime

is not required. Agricultural lime shall be within

the specifications of the Georgia Department of

Lime spread by conventional equipment shall be

"ground limestone." Ground limestone is calcitic or

dolomitic limestone ground so that 90 percent of

the material will pass through a 10-mesh sieve, no

less than 50 percent will pass through a 50-mesh

sieve and not less than 25 percent will pass through

Fast-acting lime spread by hydraulic seeding

equipment should be "finely ground limestone"

spanning from the 180 micron size to the 5 micron

size. Finely ground limestone is calcitic or dolomitic

limestone ground so that 95 percent of the material

It is desirable to use dolomitic limestone in the

Agricultural lime is generally not required where

Initial fertilization, nitrogen, topdressing, and

maintenance fertilizer requirements for each spe-

cies or combination of species are listed in Table

When hydraulic seeding equipment is used,

the initial fertilizer shall be mixed with seed.

innoculant (if needed), and wood cellulose or

wood pulp fiber mulch and applied in a slurry.

The innoculant, if needed, shall be mixed with

the seed prior to being placed into the hydraulic

application to keep the ingredients thoroughly

mixed. The mixture will be spread uniformly over

the area within one hour after being placed in the

seeder. The slurry mixture will be agitated during

Sand Hills, Southern Coastal Plain and Atlantic

Coast Flatwoods MLRAs. (See Figure 6-4.1)

will pass through a 100-mesh sieve.

Aariculture.

a 100-mesh sieve.

only trees are planted.

Lime and Fertilizer Application

Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods: 1. 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

plowed into the soil. 2. Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw, 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. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be

3. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to

Mulch is used as a bedding material to con-

serve moisture and control weeds in nurseries.

ornamental beds, around shrubs, and on bare

4" to 6" Grain straw

Pine needles Wood waste 4" to 6'

and permanent (perennial) species planted alone

4" to 6'

6 years or as indicated by soil tests. Soil tests can be conducted to determine more accurate

requirements. if desired.

Lime Maintenance Application

November and March.



FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

Designer: Technician: Checked by: Project Number: 167728

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LEI PROJECT #0452-0160

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

surface moist. May need retreatment.

B. Permanent Methods

Permanent Vegetation. See specification Ds3 -Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may

Tp - Topsoiling.

with less erosive soil material. See specification

their height are effective in controlling wind erosion. Calcium Chloride. Apply at rate that will keep

afford valuable protection if left in place. Topsoiling. This entails covering the surface

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed. Barriers. Solid board fences, snowfences.

and bring clods to the surface. It is an emergency

measure which should be used before wind ero-

sion 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.

Dust Control on

Disturbed Areas

Controlling surface and air movement of dust

on construction sites, roads, and demolition sites.

To prevent surface and air movement of dust

injurious to human health, welfare, or safety,

This practice is applicable to areas subject to

Mulches. See standard Ds1 - Disturbed Area

Stabilization (With Mulching Only). Synthetic

resins may be used instead of asphalt to bind mulch

material. Refer to specification Tac - Tackifiers.

Resins such as Curasol or Terratack should be

used according to manufacturer's recommenda-

Vegetative Cover. See specification Ds2 -

Disturbed Area Stabilization (With Temporary

Spray-on Adhesives. These are used on miner-

al soils (not effective on muck soils). Keep traffic off

these areas. Refer to specification **Tac - Tackifiers**.

Tillage. This practice is designed to roughen

surface and air movement of dust where on and

off-site damage may occur without treatment.

from exposed soil surfaces.

or to animals or plant life.

METHOD AND MATERIALS

A. Temporary Methods

•To reduce the presence of airborne

substances which may be harmful or

DEFINITION

CONDITIONS

Du

Stone. Cover surface with crushed stone or coarse gravel. See specification Cr-Construction **Road Stabilization**

> 1" = 50' **REVISIONS**

Description

Drawing Name:

SANDY CREEK ROAD **SANITARY SEWER IMPROVEMENTS PROJECT**

EROSION & SEDIMENT

CONTROL DETAILS

FULTON COUNTY PROJECT NUMBER: 195-031 Sheet Number: 08/06/2019 17 of 20 Drawing Number:

PG 5

areas on lawns.

PG 6

100'

Date

7/24/19 | MC

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SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 1/ 2/ - 30
COOL SEASON GRASSES AND LEGUMES		6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac. 1/ - -
GROUND COVERS		10-10-10 10-10-10 10-10-10	1300 lbs./ac. 3/ 1300 lbs./ac. 3/ 1100 lbs./ac.	- - -
PINE SEEDLINGS	FIRST	20-10-5	ONE 21-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	-
SHRUB LESPEDEZA	FIRST MAINTENANCE	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac. 4/	-
TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 lbs./ac.	30 lbs./ac. 5/
WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 2/ 6/ 50-100 lbs./ac. 2/ 30 lbs./ac.
WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50 lbs./ac. 6/

1/ Apply in spring following seeding. 2/ Apply in split applications when high rates are used.

75 LBS.

UNSCARIFIED

- 3/ Apply in 3 split applications. 4/ Apply when plants are pruned.
- 5/ Apply to grass species only.
- 6/ Apply when plants grow to a height of 2 to 4 inches.

IS ESTABLISHED. MOW AS REQUIRED.

PERMANENT GRASSING REFER TO THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR FURTHER DETAILS AND SPECIFICATIONS.

MAINTENANCE REQUIREMENTS:

PROVIDE PERIODIC INSPECTIONS AND AFTER EACH RAINFALL EVENT AND REGRASS AREAS THAT ARE BARE OR HAVE ERODED. EXCLUDE TRAFFIC ON GRASSED AREAS UNTIL GRASS

Construction Exit



DEFINITION

REMARKS

INOCULATE SEED W/ EL INOCULANT

AIX WITH TALL FESCUE OR WINTER ANNUALS.

TTERS. ADD TALL FESCUE OR WINTER ANNU

PROVIDE WILDLIFE FOOD AND COVER.

1.500,000 SEED PER POUND. OUICK COVE

FOR VERY WET SITES. MAY CLOG CHANNELS. DIG SPRIGS FROM LOCAL SOURCES. USE ALONG RIVER BANKS AND SHORELINES.

GROWS SIMILAR TO TALL FESCUE.

27,000 SEED PER POUND. MIX WITH WEEPIN

EGRASS OR OTHER LOW-GROWING GRASSE

LEGUMES.

1. PERMANENT GRASSING SHALL BE APPLIED TO GRADED

2. APPLY TO ALL AREAS IMMEDIATELY AFTER THEY HAVE

3. APPLY AGRICULTURAL LIME AT A RATE OF 1-2 TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE.

MIXTURE CONTAINING PERENNIAL SPECIES DUE TO ITS

WOOD CELLULOSE OR WOOD PULP FIBER WITH WATER

AND APPLY IN SLURRY UNIFORMLY OVER THE TREATED

AREA. APPLY WITHIN 1 HOUR OF MIXING. MULCH IS TO

CULTIPACKER-SEEDER, DRILL, ROTARY SEEDER, OTHER

MECHANICAL SEEDER OR HAND SEED UNIFORMLY OVER

THE TREATED AREA. LIGHTLY COVER THE SEED WITH $\frac{1}{8}$ " TO ¹/₄" OF SOIL. PROVIDE TEMPORARY MULCHING WITHIN 24 HOURS OF SPREADING SEED. MULCH SHALL COVER

5. FOR HYDRAULIC SEEDING, MIX SEED, FERTILIZER AND

BE APPLIED AT A RATE OF 400 LBS. PER ACRE.

ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR

4. RYE GRASS SHALL NOT BE USED IN ANY SEEDING

PERMANENT PERENNIAL COVER.

6. FOR CONVENTIONAL SEEDING USE A

75% OF THE SOIL SURFACE.

REACHED FINAL GRADE.

AREAS THAT WILL BE UNDISTURBED FOR MORE THAN 6

NOTES:

A stone stabilized pad located at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk or parking area or any other area where there is a transition from bare soil to a paved area.

PURPOSE To reduce or eliminate the transport of mud from the construction area onto public rights-of-

way by motor vehicles or by runoff. This practice is applied at appropriate points of construction egress. Geotextile underliners are

required to stabilize and support the pad aggre-

Formal design is not required. The following

standards shall be used: Aggregate Size

Stone will be in accordance with National Stone Association R-2 (1.5 to 3.5 inch stone). Pad Thickness The gravel pad shall have a minimum thickness

of 6 inches.

less than 20 feet wide.

Pad Width At a minimum, the width should equal full width of all points of vehicular egress, but not

Pad Length

The gravel pad shall have a minimum length

of 50 feet. When the construction is less than 50' from the paved access, the length shall be from the edge of existing pavement to the permitted building being constructed.

If the action of the vehicle traveling over the gravel pad does not sufficiently remove the mud, the tires should be washed prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with crushed stone and provisions that intercept the sedimentladen runoff and direct it into an approved sediment trap or sediment basin.

Location The exit shall be located or protected to prevent sediment from leaving the site.

CONSTRUCTION SPECIFICATIONS It is recommended that the egress area be excavated to a depth of 3 inches and be cleared of all vegetation and roots.

Diversion Ridge

On sites where the grade toward the paved area is greater than 2%, a diversion ridge 6 to 8 inches high with 3:1 side slopes shall be constructed across the foundation approximately 15 feet above the road.

The geotextile underliner must be placed the full length and width of the entrance. Geotextile selection shall be based on AASHTO M288-98 specification:

1. For subgrades with a CBR greater than or equal to 3 or shear strength greater than 90 kPa, geotextile must meet requirements of section AASHTO M288-96 Section 7.3, Separation Requirements.

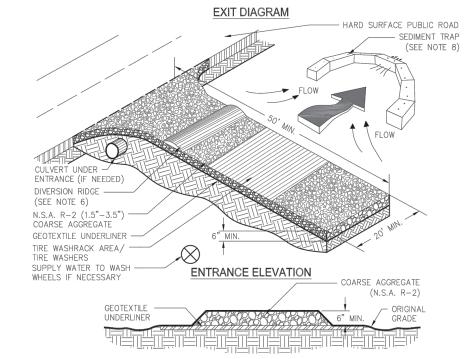
2. For subgrades with a CBR between 1 and 3 or sheer strength between 30 and 90 kPa, geotextile must meet requirements of section AASHTO M288-96 Section 7.4, Stabilization Requirements.

MAINTENANCE The exit shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic

site onto roadways or into storm drains must be removed immediately. top dressing with 1.5-3.5 inch stone, as conditions demand, and repair and/or cleanout of any structures to trap sediment. All materials spilled,

CRUSHED STONE CONSTRUCTION EXIT

dropped, washed, or tracked from vehicles or



NOTES:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.

2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.

CROWN FOR CITAL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE). 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6". 4. GRAVEL PAU SHALL HAVE A MINIMUM IHICKNESS OF 6.

5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.

6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%..

7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.

8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).

9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL <u>SUITABLE</u> FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT. 10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Figure 6-14.1

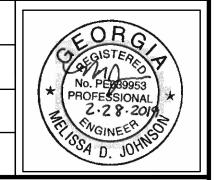
FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

Michael Baker INTERNATIONAL

Designer: Technician: Checked by:

Project Number:

167728





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100'

	REVISIONS						
No.	Description	Date	Ву				
1	REVISION SET	7/24/19	МС				

1" = 50'

SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

Project Name:

EROSION & SEDIMENT CONTROL DETAILS

FULTON COUNTY PROJECT NUMBER: 195-031 Sheet Number: 08/06/2019 18 of 20 Drawing Number:



DEFINITION

Sediment Barriers are temporary structures made up of a porous material typically supported by steel or wood posts. Types of sediment barriers may include silt fence, brush piles, mulch berms, compost filter socks or other filtering material.

To minimize and prevent sediment carried by sheet flow from leaving the site and entering natural drainage ways or storm drainage systems by slowing storm water runoff and causing the deposition and/or filtration of sediment at the structure. The barriers retain the soil on the disturbed land until the activities disturbing the land are completed and vegetation is established.

CONDITIONS

Barriers should be installed where runoff can be stored behind the barrier without damaging the submerged area behind the barrier or the structure itself. Sediment barriers shall not be installed across streams, ditches, waterways, or other concentrated flow areas.

DESIGN CRITERIA

Sediment barriers are designed to retain sediment transported by sheet flow from disturbed areas. It is important for the design professional to take into account the profile of the product for use on the site.

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Sediment Barriers should also provide a riprap splash pad or other outlet protection device for any point where flow may overtop the sediment barrier. Ensure that the maximum height of the barrier at a protected, reinforced outlet does not exceed 1 foot and that the support spacing does not exceed 4 feet.

Where all runoff is to be stored behind the sediment barrier (where no storm water disposal system is present), maximum continuous slope length behind a sediment barrier shall not exceed those shown in Table 6-27.1. For longer slope lengths, slope interrupters must be used. The drainage area shall not exceed 1/4 acre for every 100 feet of sediment barrier.

Table 6-27.1 Criteria for Sediment Barrier

e Fend
:

*In areas where the slope is greater than 20%. a flat area length of 10 feet between the toe of slope to the barrier should be provided.

The type of sediment barrier depends on whether the area is sensitive or nonsensitive. Sensitive areas can be defined as any area that needs additional protection, these areas include but are not limited to, state waters, wetlands, or any area the design professional designates as

When using multiple types of sediment barriers on a site in a single run, the barriers must be overlapped 18 inches or as specified by design professional. See Figure 6-27.5

CONSTRUCTION SPECIFICATIONS

Non-sensitive Areas * (Sd1-NS

Sediment barriers being used as Type NS shall have a support spacing of no greater than 6 feet on center, with each being driven into the ground a minimum of 18 inches.

Sediment barriers being used as Type S shall have a support spacing of no greater than 4 feet on center, with each being driven into the ground a minimum of 18 inches.

*As of January 1 2016, in the existing Georgia Department of Transportation Qualified Products list #36 (QPL- 36), Type A, B, or C will fall under sensitive and non-sensitive applications. Type C will be classified as sensitive and Type A and **B** as non-sensitive. Refer to Appendix A-2 and the Equivalent BMP List.

PRACTICE CLASSIFICATIONS

For silt fence Type A, B, or C, refer to Table

This 36-inch wide filter fabric shall be used on developments where the life of the project classified as non-sensitive application.

allows the same flow rate as Type A silt fence. Type B silt fence shall be limited to use on minor projects, such as residential home sites or small commercial developments where permanent stabilization will be achieved in less than six months. Type B is classified as non-sensitive application.

Type C fence is 36-inches wide with wire reinforcement or equivalent. The wire reinforcement is necessary because this fabric allows almost three times the flow rate as Type A silt fence. Type C silt fence shall be used where runoff flows or velocities are particularly high or where slopes exceed a vertical height of 10 feet. Type

Filter Media Sock Specifications

Sensitive Areas* (Sd1-S

process meeting CFR 503 regulations including time and temperature data. The compost shall be free of any refuse, contaminants or other materials toxic to plant growth. Non-composted products will not be accepted without applicable water quality test results. Test methods for the items below should follow US Composting Council Test Methods for the Examination of Composting and

B. Particle size – 99% passing a 2 inch

TMECC 02.02-B, "Sample Sieving for Aggregate

commonly is between ½ in./12.5mm and 2 in./50

C. Moisture content of less than 60% in

D. Material shall be relatively free (<1% by

dry weight) of inert or foreign manmade materials

E. Sock containment system for compost

filter media shall be a photodegradable or biode-

gradable knitted mesh material and should have

(Only during timber clearing operations)

Brush obtained from clearing and grubbing

operations may be piled in a row along the pe-

rimeter of disturbance at the time of clearing and

grubbing. Brush barriers should not be used in

developed areas or locations where aesthetics

Brush should be wind-rowed on the contour as

nearly as possible and may require compaction.

The minimum base width of the brush barrier

shall be 5 feet and should be no wider 10 feet.

The height of the brush barrier should be be-

Construction equipment may be utilized to satisfy

accordance with standardized test methods for

(50mm) sieve and a maximum of 40% passing

a 3/8 inche (9.5mm) sieve, in accordance with

Compost guidelines for laboratory procedures: A. pH – 5.0-8.0 in accordance with TMECC 04.11-A, "Electrometric pH Determinations for

mm in particle size.)

moisture determination.

1/8 in. to 3/8 in., openings.

are a concern.

tween 3 and 5 feet tall.

Brush Barrier (Sd1-BB

Size Classification". (Note: In the field, product

Type A Silt Fence

is great than or equal to six months. Type A is Type B Silt Fence Though only 22-inches wide, this filter fabric

Type C Silt Fence

C is classified as sensitive application.

Compost filter media used for sediment bar-

rier filler material shall be weed free and derived from a well-decomposed source of organic matter. Filter Media Sock is classified as a Type B, non-sensitive application. The compost shall be produced using an aerobic composting GSWCC 2016 Edition

A brush barrier is a good tool to use in developing pasture in an agricultural situation to prevent sediment from leaving the site until the pasture is

If greater filtering capacity is required, a commercially available sediment barrier may be placed on the side of the brush barrier receiving the sediment-laden runoff. The lower edge of the fabric must be buried in a 6-inch deep trench immediately uphill from the barrier. The upper edge must be stapled, tied or otherwise fastened to the brush barrier. Edges of adjacent fabric pieces must overlap each other. See Figure 6-27.5.

Sediment barriers should be installed along

the contour. Temporary sediment barriers shall be installed according to the following specifications as shown on the plans or as directed by the design

For installation of the barriers, See Figures 6-27.1, 6-27.2, 6-27.3 and 6-27.4, respectively. It is important to remember that not all sediment barriers need to be trenched into the ground but most taller sediment barriers do.

Post installation shall start at the center of a low point (if applicable) with the remaining posts spaced no greater than 6 feet apart for Type NS sediment barriers and no greater than 4 feet apart for Type C sediment barriers. For post size requirements, see Table 6-27.2. Fasteners for wood posts are listed in Table 6-27.3.

Static Slicing Method

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FIRMLY "KEY" EMBANKMENT ---

INTO NATURAL GROUND

The static slicing machine pulls a narrow blade through the ground to create a slit 12" deep, and simultaneously inserts the silt fence fabric into this slit behind the blade. The blade is designed to slightly disrupt soil upward next to the slit and to minimize horizontal compaction, thereby creating an optimum condition for compacting the soil vertically on both sides of the fabric. Compaction is achieved by rolling a tractor wheel along both sides of the slit in the ground 2 to 4 times to achieve nearly the same or greater compaction as the original undisturbed soil. This vertical compaction reduces the air spaces between soil particles, which minimizes infiltration. Without this compaction infiltration can saturate the soil, and water may find a pathway under the fence. When a silt fence is holding back several tons of accumulated water and sediment, it needs to be supported by posts that are driven 18 inches into the soil. Driving in the

posts and attaching the fabric to them completes

Trenching Method

Trenching machines have been used for over twenty-five years to dig a trench for burying part of the filter fabric underground. Usually the trench is about 2-"6" wide with a 6" excavation. Post setting and fabric installation often precede compaction, which make effective compaction more difficult to achieve. EPA supported an independent technology evaluation (ASCE 2001), which compared three progressively better variations of the trenching method with static slicing method. The static slicing method performed better than two lower performance levels of the trenching method, and was as good as or better than the trenching method's highest performance level. The best trenching method typically required nearly triple the time and effort to achieve results comparable to the static slicing method.

Along all state waters and other sensitive areas, two rows of Type S sediment barriers shall be used. The two rows of Type S should be placed a minimum of 36 inches apart.

MAINTENANCE Sediment shall be removed once it has accumulated to one-half the original height of the barrier.

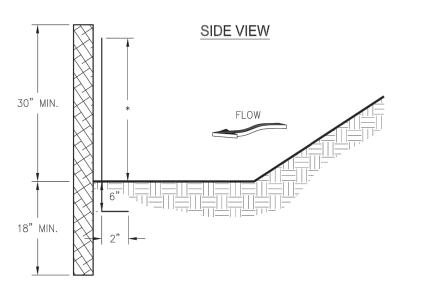
Sediment barriers shall be replaced whenever they have deteriorated to such an extent that the effectiveness of the product is reduced (approximately six months) or the height of the product is not maintaining 80% of its properly installed

Temporary sediment barriers shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulated at the barrier shall be removed and properly disposed of before the barrier is removed.

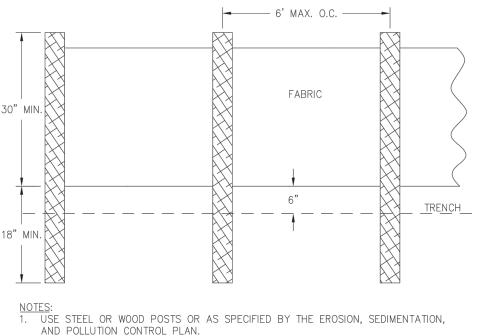
> - EXCAVATED MATERIAL WILL INCREASE STORAGE VOLUME AND PROVIDE FILL

TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN Nhen a SEDIMENT BARRIER is used, show the product height in inches for each barrier being used on site

SILT FENCE - TYPE A and B



FRONT VIEW



AND POLLUTION CONTROL PLAN. 2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Figure 6-27.1 6-141 GSWCC 2016 Edition

Temporary



A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.

PURPOSE

To collect and store sediment from uphill sites cleared and or graded during construction. Intended for use on small tributary areas with no unusual drainage features. Effective against coarse sediment, but not against silt or clay particles that remain suspended.

CONDITIONS

Temporary sediment traps are constructed early in the construction process at locations that will require minimal clearing and grading. Natural draws or swells are favorable locations to build the traps. They should be easily accessible for frequent maintenance and inspections. Temporary sediment traps shall never be placed in live streams.

laws, ordinances, rules and regulations on the local, state and federal level.

The total drainage area of a temporary sediment trap is up to 5 acres, depending on type of construction.

at least as wide as the height of the sediment trap embankment, with a minimum width of 3

Maximum pond depth of a sediment trap is 4 feet as measured from the bottom of the trap to the invert of the emergency spillway. Slopes shall not exceed 2:1 (H:V) for excavated areas and for compacted embankments. Side slopes should be (3:1) or flatter allowing people and equipment to safely negotiate slopes or to enter the sediment trap.

prevent short-circuiting of the flow.

A typical baffle design uses 4'x8' sheets of exterior grade plywood 1/2 inch thick, mounted on 4"x4" hardwood posts.

acre drained, which is dewatered using one of wet zone for sediment storage and settling.

the volume of traps using a natural draw is:

V = Sediment storage volume (below invert of emergency spillway) A = Surface area (at level of emerency

trap is 1/3 of the total storage volume. Cleanout volume shall be calculated and marked with a stake at the outlet of the trap.

CONSTRUCTION SPECIFICATIONS

The basic design guidlines are applicable to the type of temporary sediment trap constructed. The main differences are with regards to the type of outlet structures. The following types of construction are acceptable under the designated conditions:

Overflow (Sd4-A)

An overflow temporary sediment trap is limited to small areas less than 1 acre, typically with gentle slopes (1 or 2 percent) and without major grading operations. The maximum life span of an overflow trap is 6 months. If water enters the trap with very low velocities, the same amount of water will be slowly displaced and leave the other end of the sediment trap. Silt fence, straw bale barriers or grass filter strips are used to "polish" the overflow water as it leaves the sediment trap. See Figure 6-30.1

Combination Straw Bale and Silt Fence Outlet (Sd4-B)

The combination outlet uses straw bales and silt fence to dewater the sediment trap. Proper installation and staking of the straw bales, and wire backing on the silt fence are required for the materials to resist 1 foot or more of ponded water. The combination straw bale and silt fence outlet is limited to 1 acre total drainage area, and has a life span of less than 1 year. This type of outlet requires frequent maintenance and adjustments to ensure the released stormwater is free from sediment. See Figure 6-30.2

Rock Outlet (Sd4-C)

The rock outlet relies on filtering through layers of aggregate, rock or riprap material to dewater the sediment trap. It is the sturdiest of the sediment trap designs and generally requires less maintenance. It can be used for drainage area up to 5 acres and has a life span of 1 year. See Figure 6-30.3

Emergency Spillway

The emergency overflow outlet of a temporary sediment trap must be stabilized with rock, geotextile, vegetation, or another suitable material that is resistant to erosion. It must be installed to safely convey stormwater runoff for the 10-year storm event.

REFERENCE:

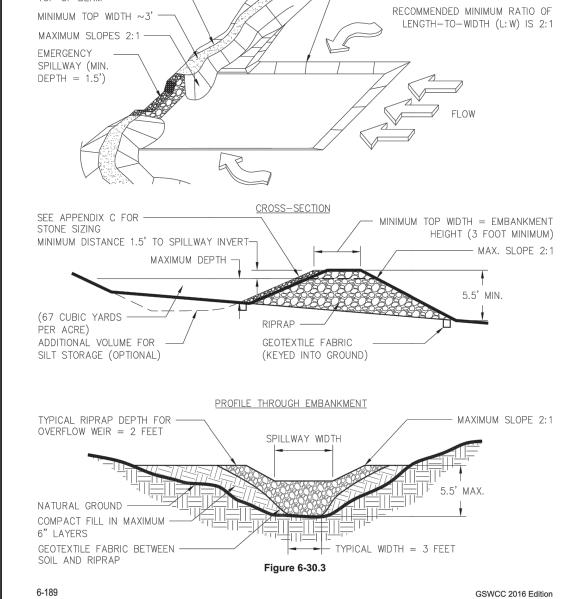
City of Knoxville BMP Manual Best Management Practices, Knoxville, TN, May 2003

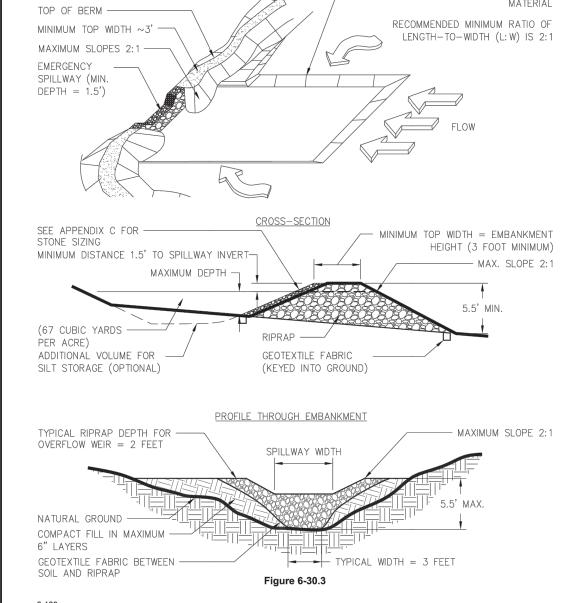
APPENDIX 1 ITEM B: SEDIMENT STORAGE CALCULATION QUIRED SEDIMENT STORAGE 3.62 ACRES X 134 CY/ACRE = 485.1 CY

PROVIDED SEDIMENT STORAGE STORAGE POND 1 = <u>559.5 CY</u>

GSWCC 2016 Edition

TEMPORARY SEDIMENT TRAP **ROCK OUTLET**

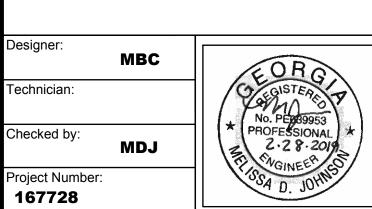




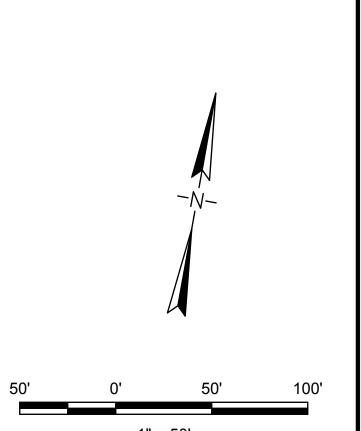


FULTON COUNTY AIRPORT BROWN FIELD ATLANTA, GEORGIA

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SANDY CREEK ROAD SANITARY SEWER IMPROVEMENTS PROJECT

Drawing Name:

Project Name:

EROSION & SEDIMENT CONTROL DETAILS

195-031 Sheet Number: 08/06/2019 19 of 20 Drawing Number:

FULTON COUNTY PROJECT NUMBER:

DESIGN CRITERIA Design and construction shall comply with

The height of a temporary sediment trap embankment shall not exceed 5.5 feet as measured from the downstream toe of slope to the top of

the berm. Top width of an embankment shall be GSWCC 2016 Edition

The length to width ratio must be greater than (2:1) (L:W) for the principal flowpaths in order to maximize residence time of stormwater within

Minimum volume of a temporary sediment trap shall be 67 cubic yards per acre for the total drainage area. The volume shall be measured at an elevation equivalent to the spillway invert.

Volume of a temporary sediment trap in heavily disturbed areas should be 134 cubic yards per acre for the total drainage area. This includes an upper area with a minimum of 67 cubic yards per the outlet design methods provided, and a lower

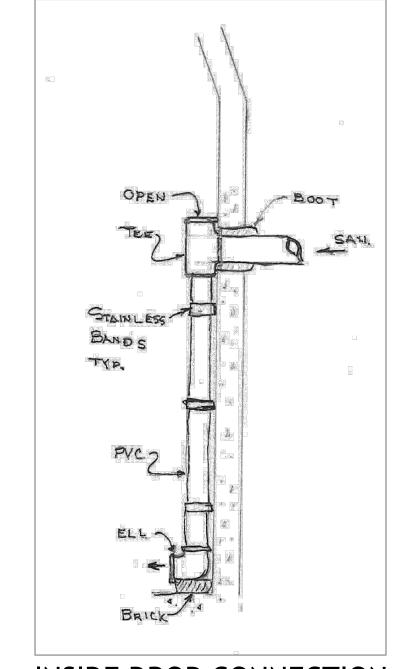
The volume should be calculated from existing and proposed contours, or by measured cross sections. An approximate method for calculating

$V = 0.4 \times A \times D$

D = Maximum depth (from emergency spillway invert) The cleanout volume for a temporary sediment

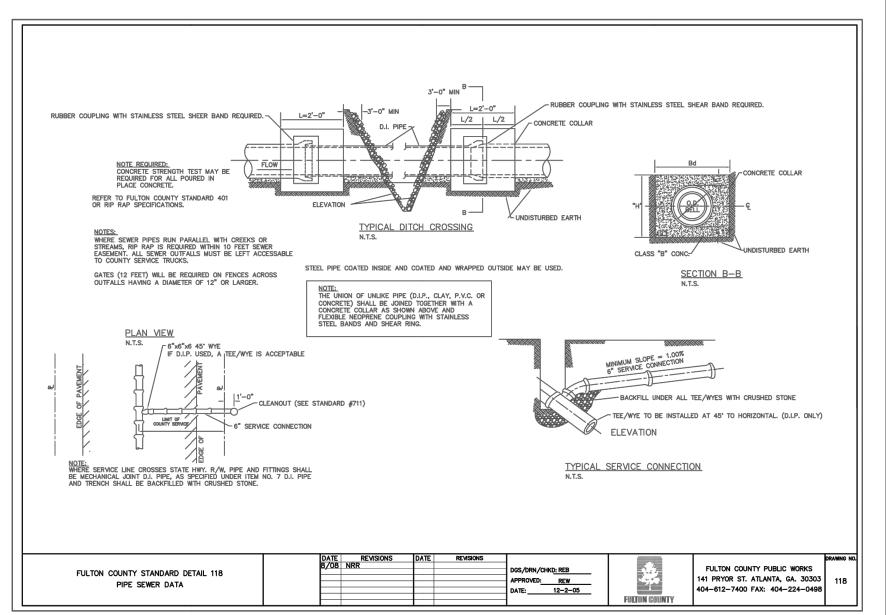
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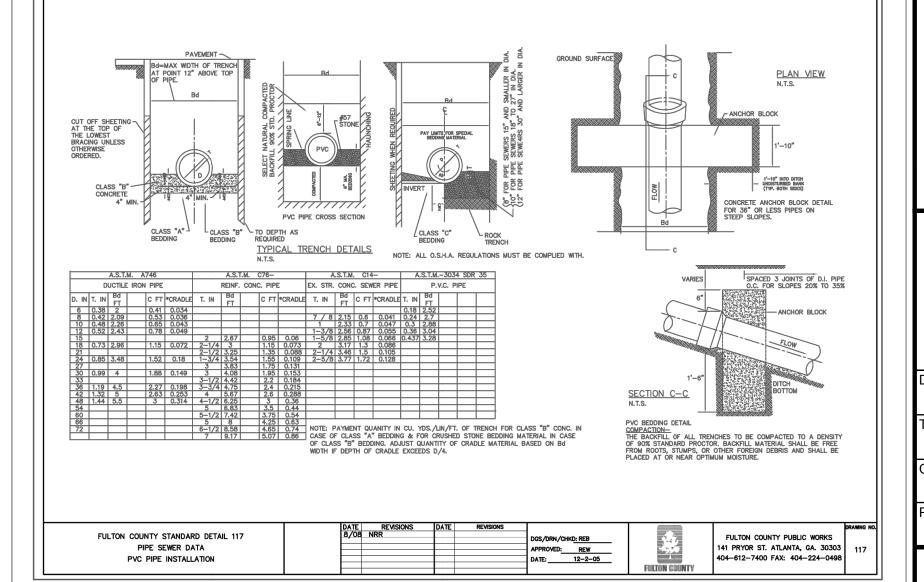
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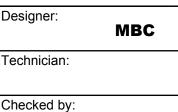






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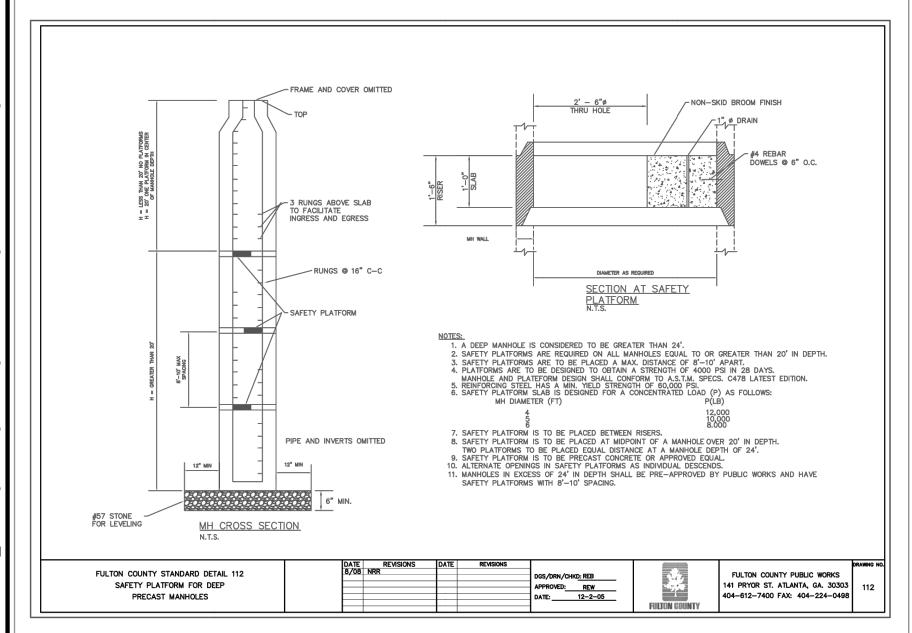
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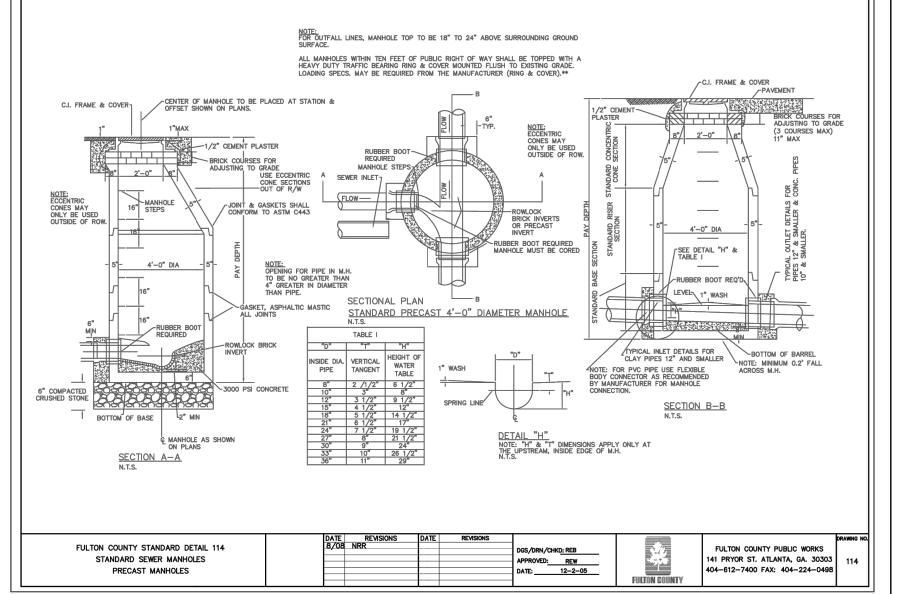


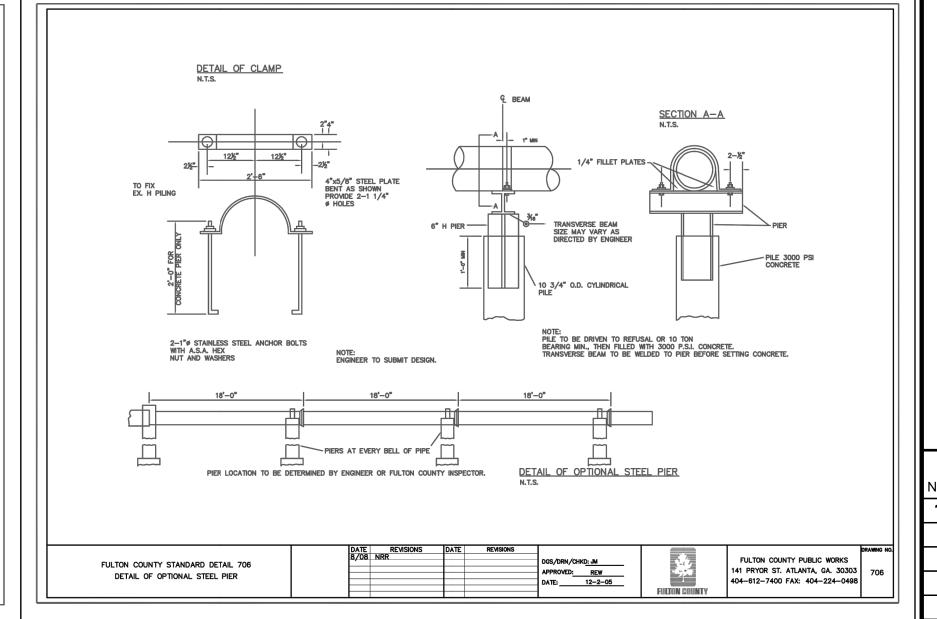


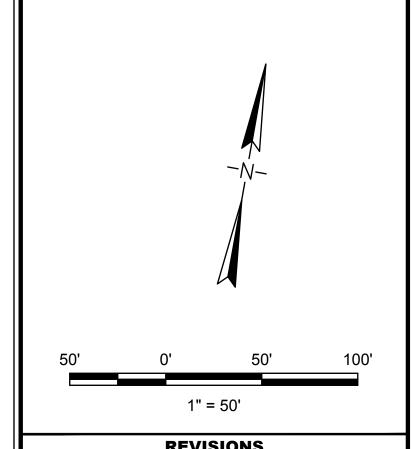


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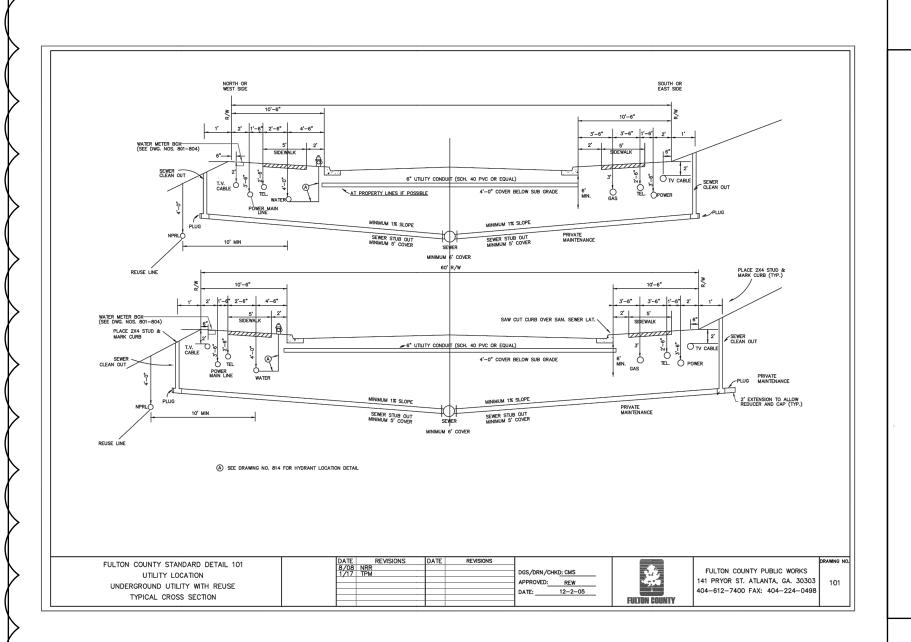
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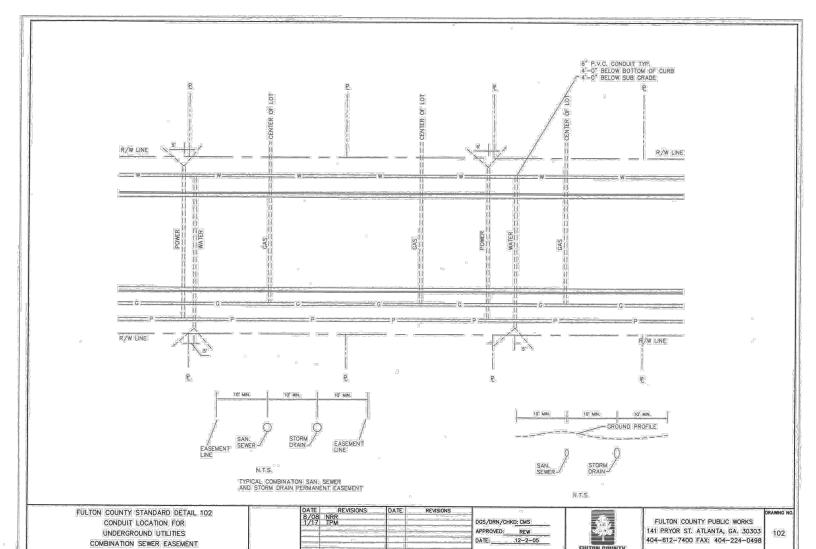
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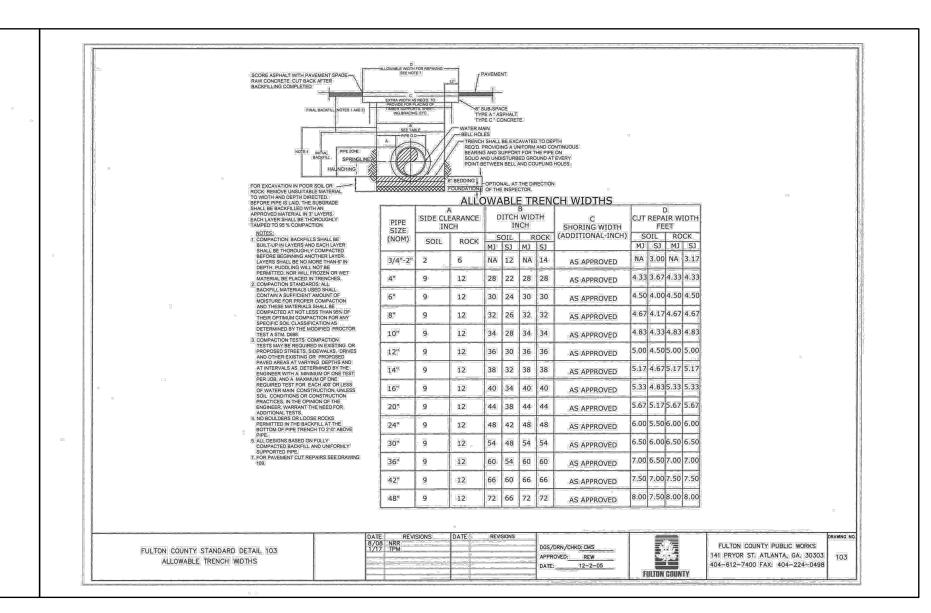
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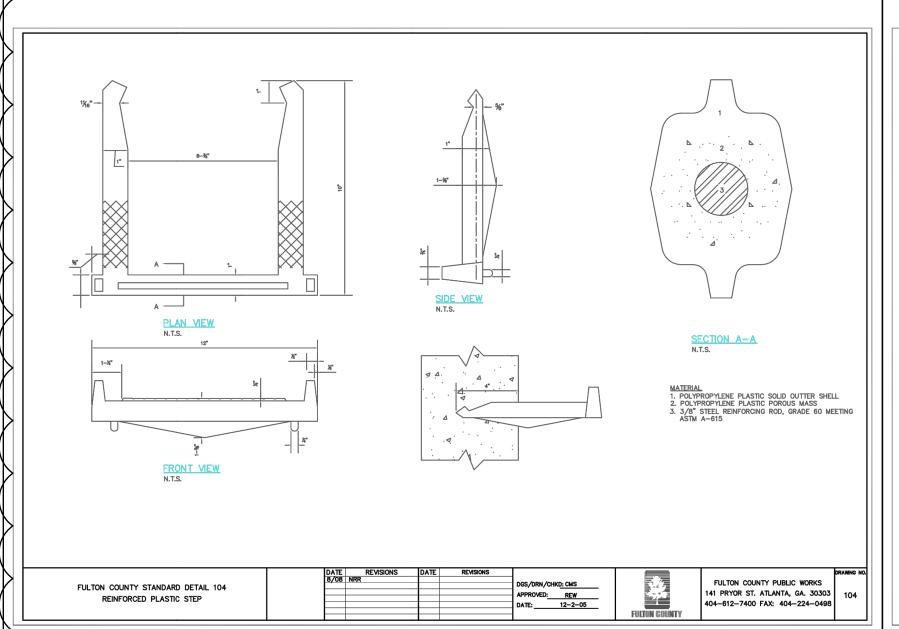
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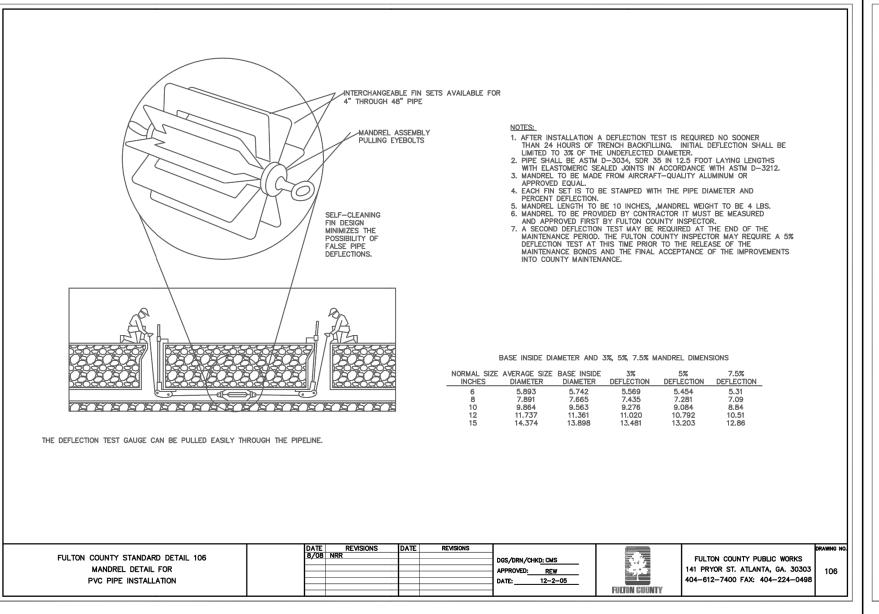
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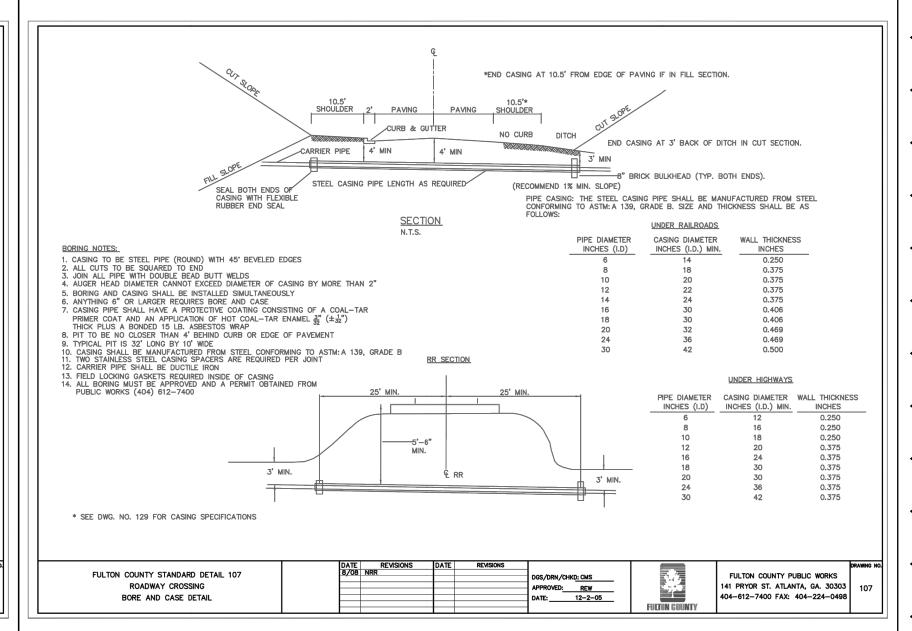














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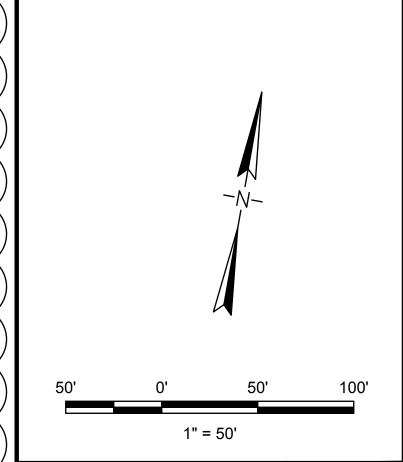
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Designer: Technician: Checked by:

No. PE989953 PROFESSIONAL Z.28.2019 MDJ Project Number: 167728



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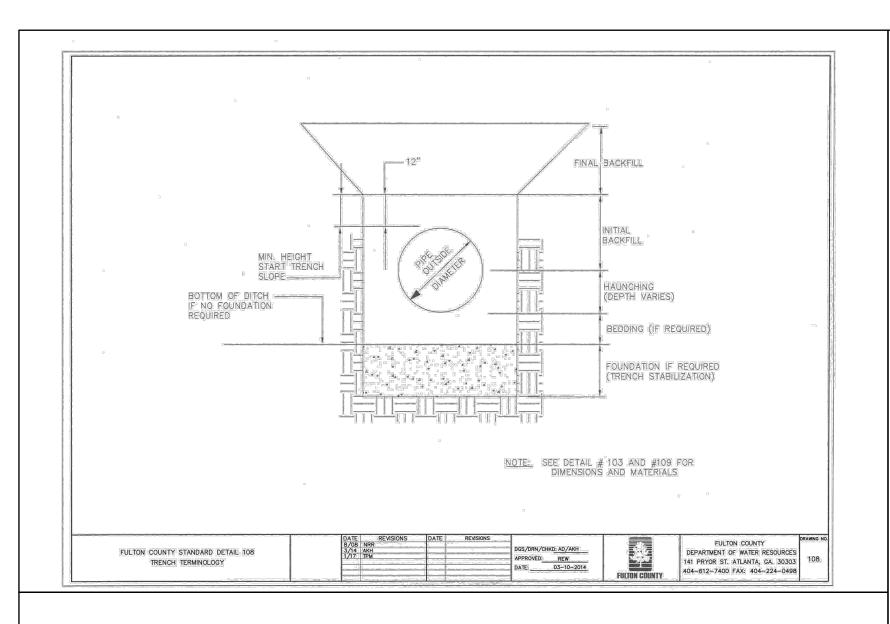


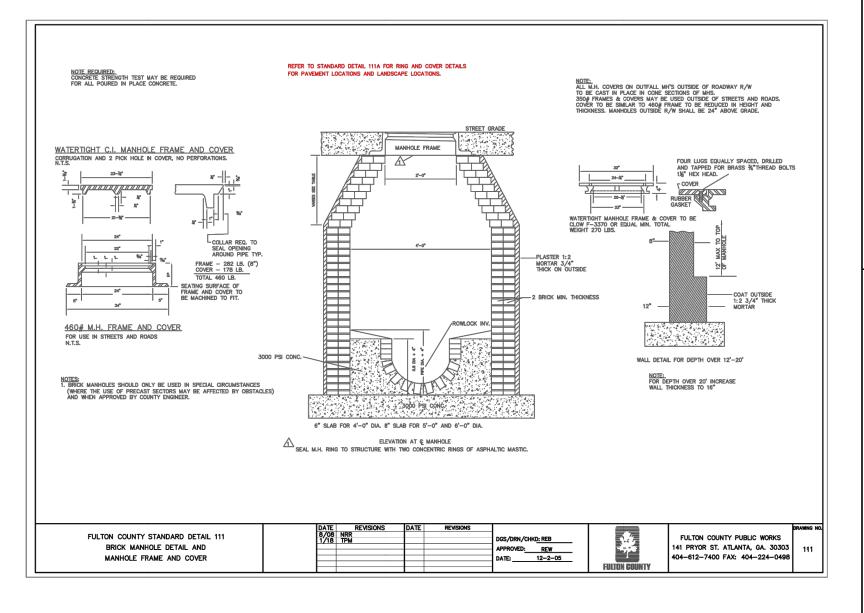
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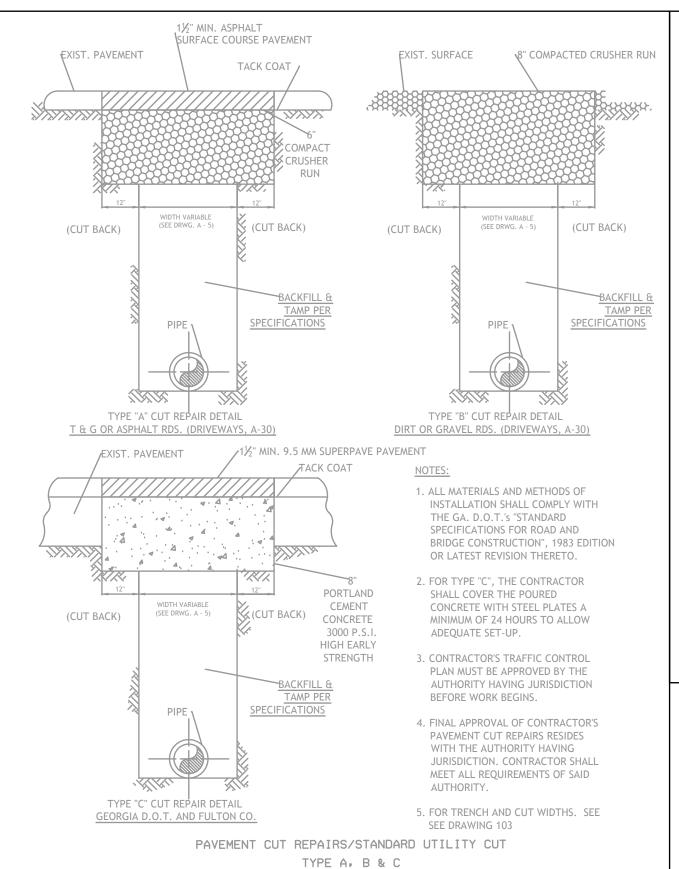
SANDY CREEK ROAD SANITARY SEWER **IMPROVEMENTS PROJECT**

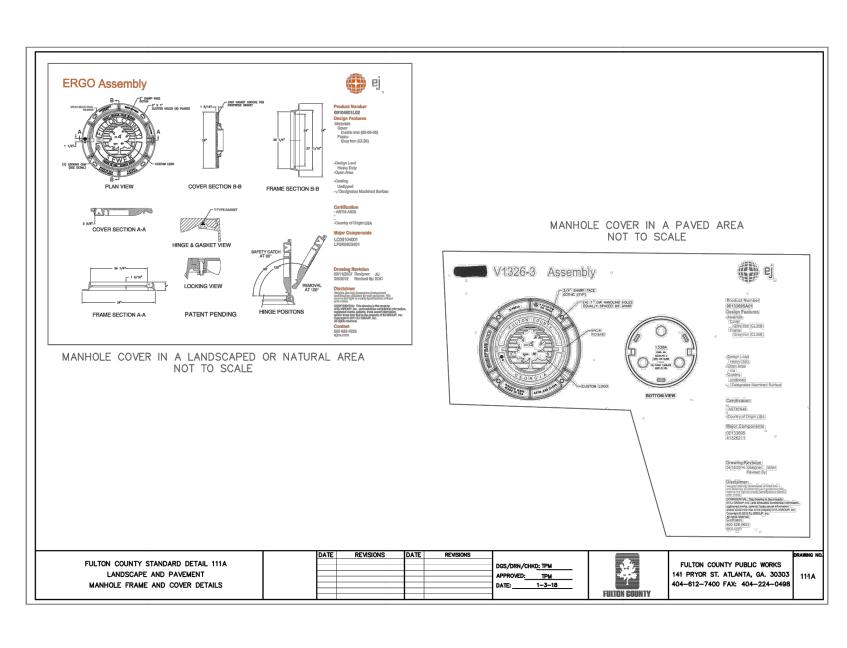
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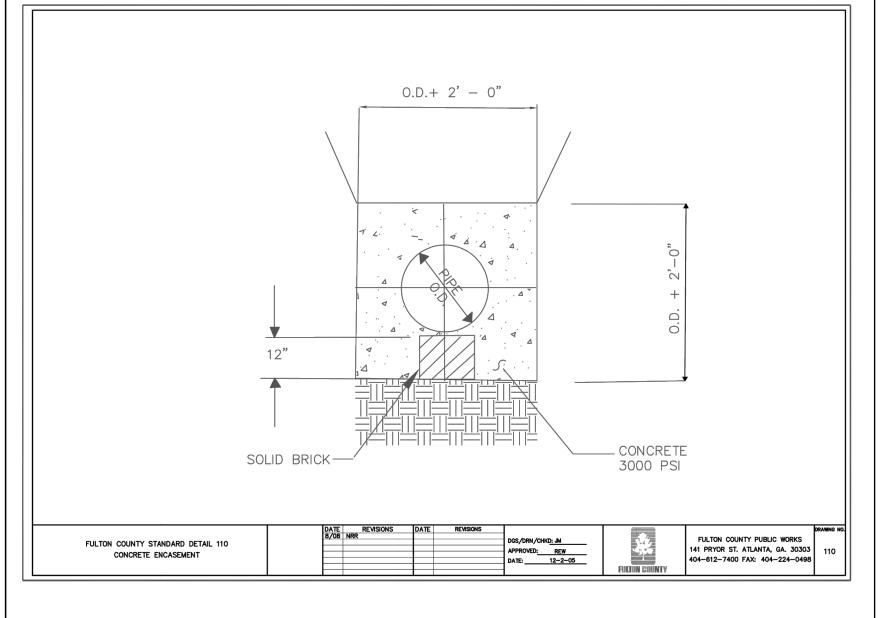
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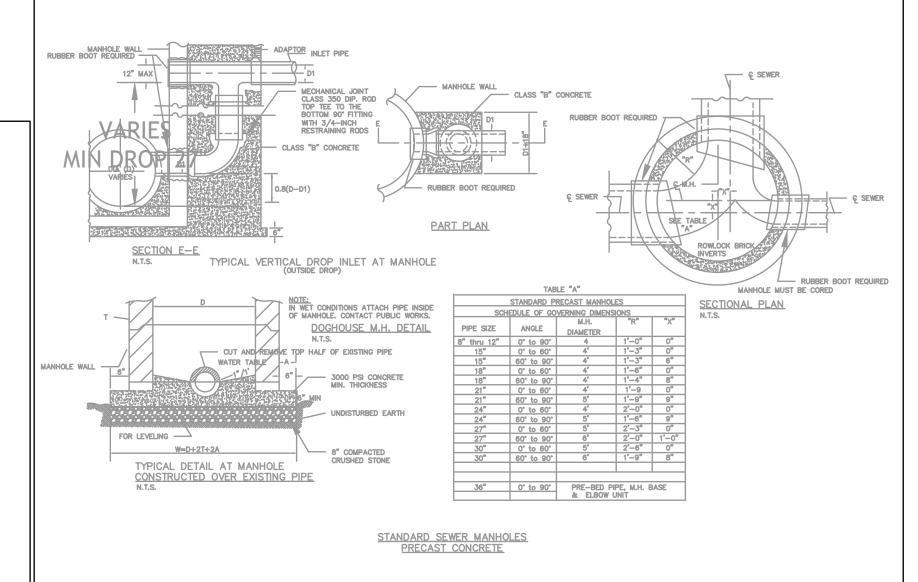














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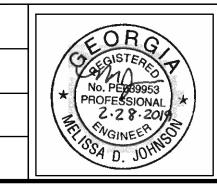
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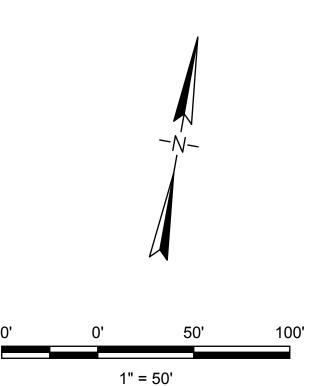
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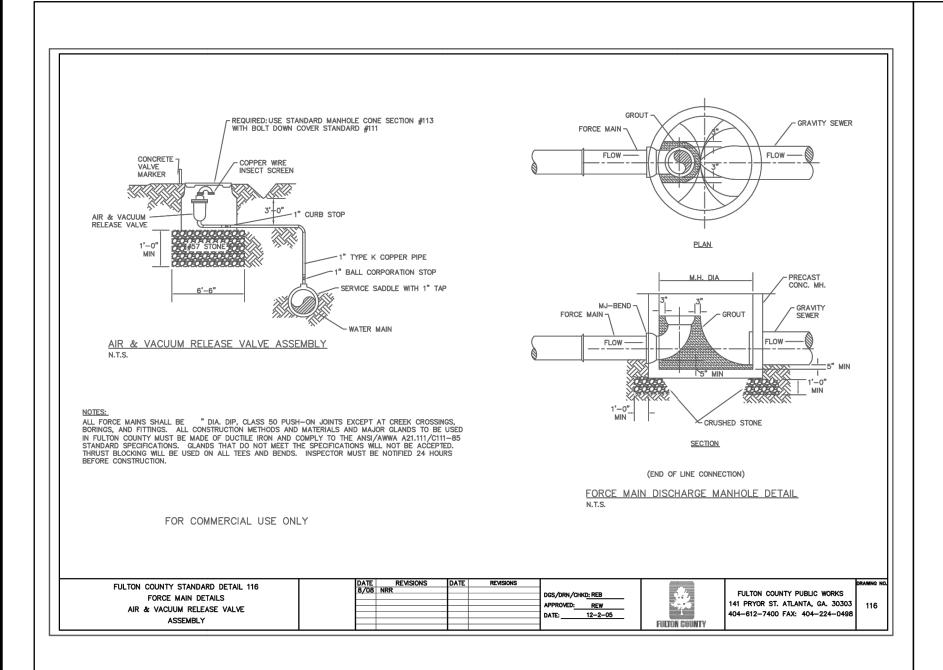
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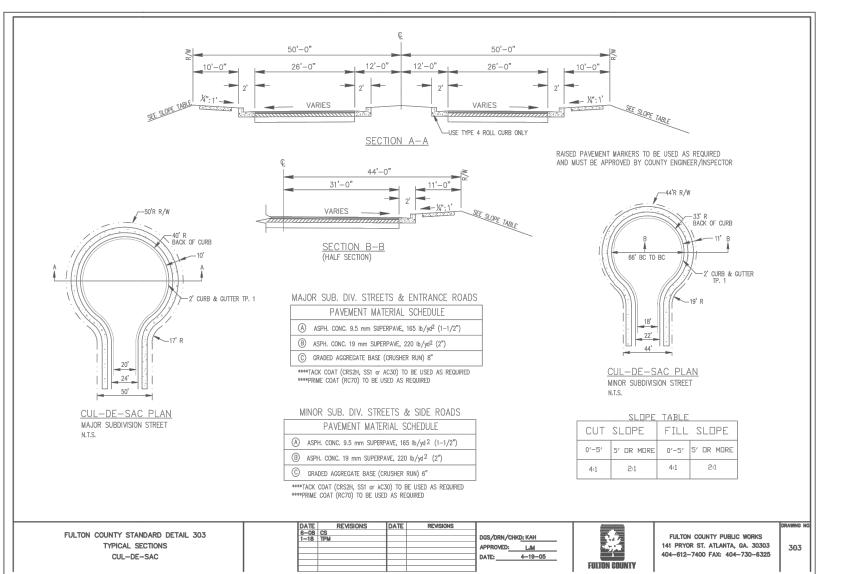
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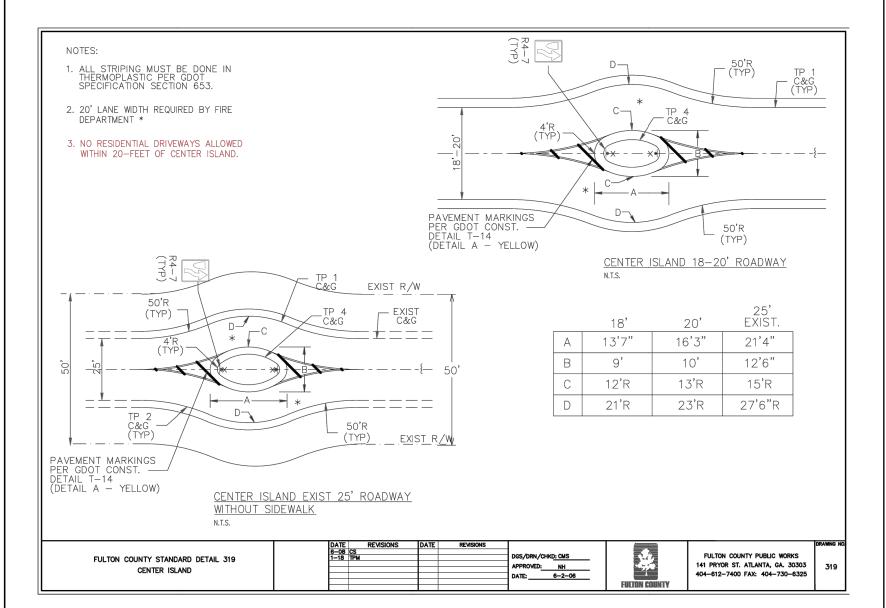
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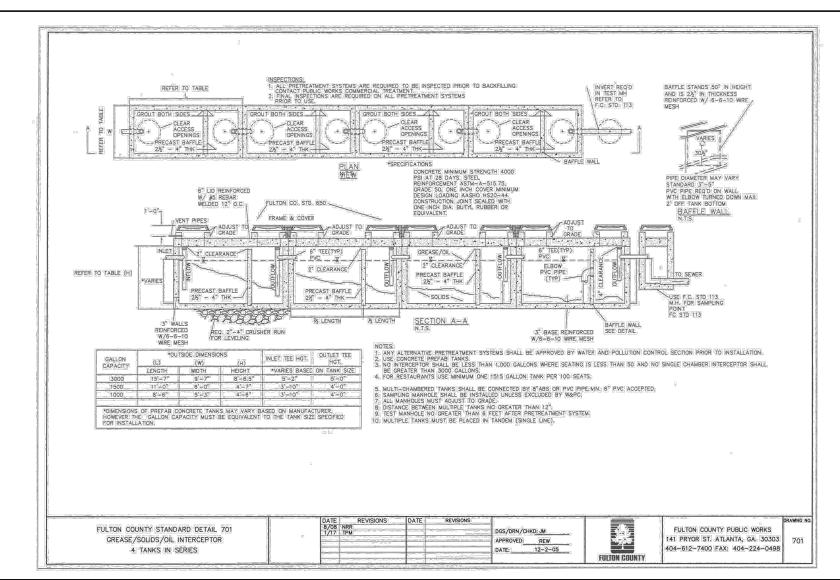
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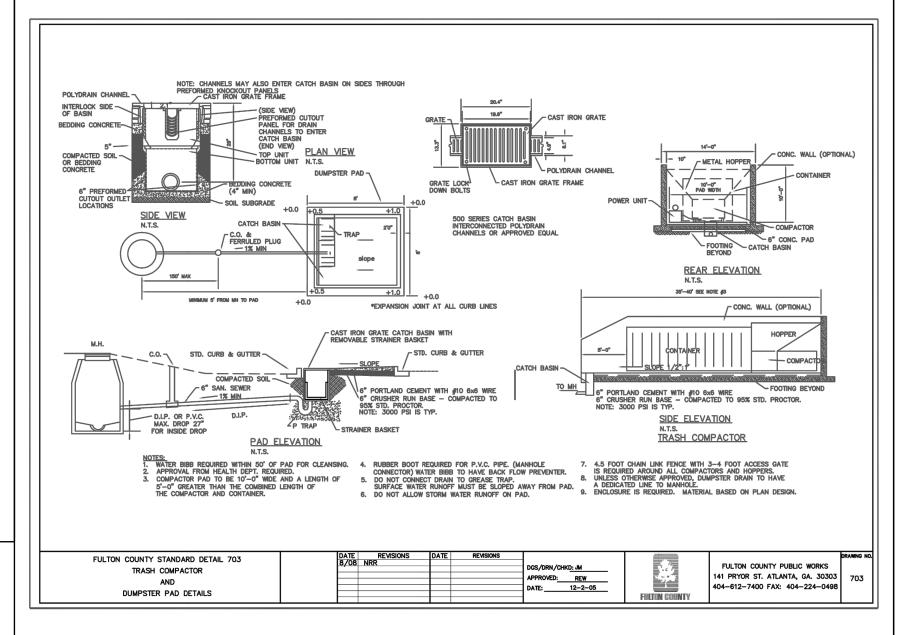
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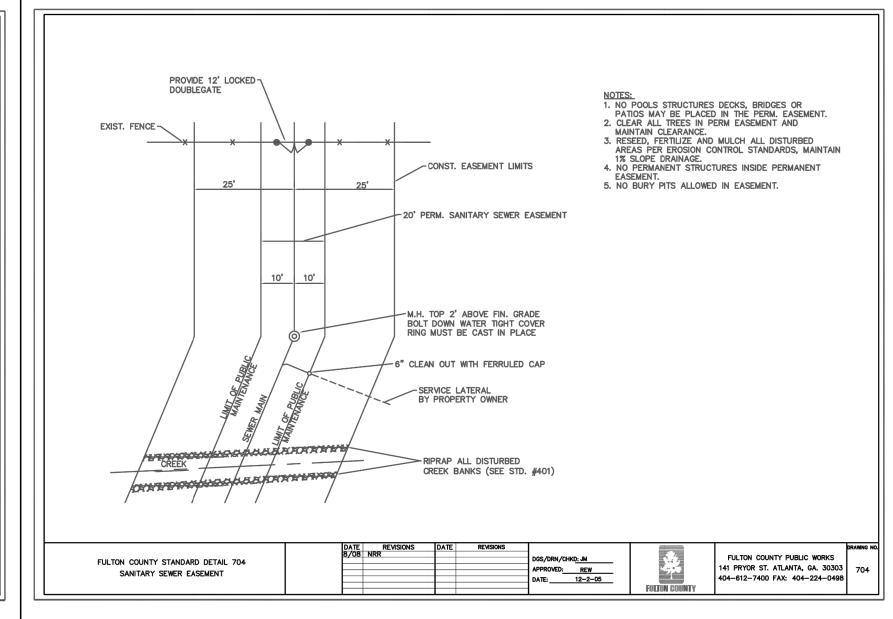














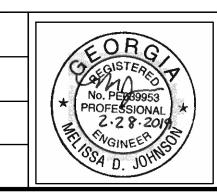
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