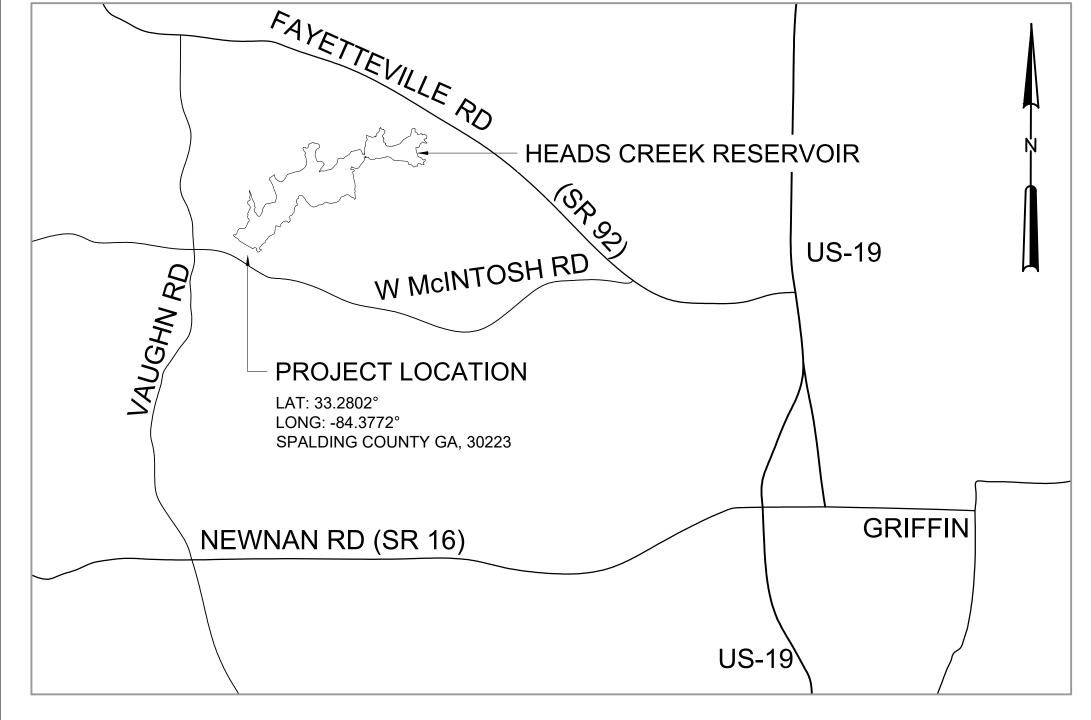
HEADS CREEK RESERVOIR DAM REHABILITATION SPALDING COUNTY, GA

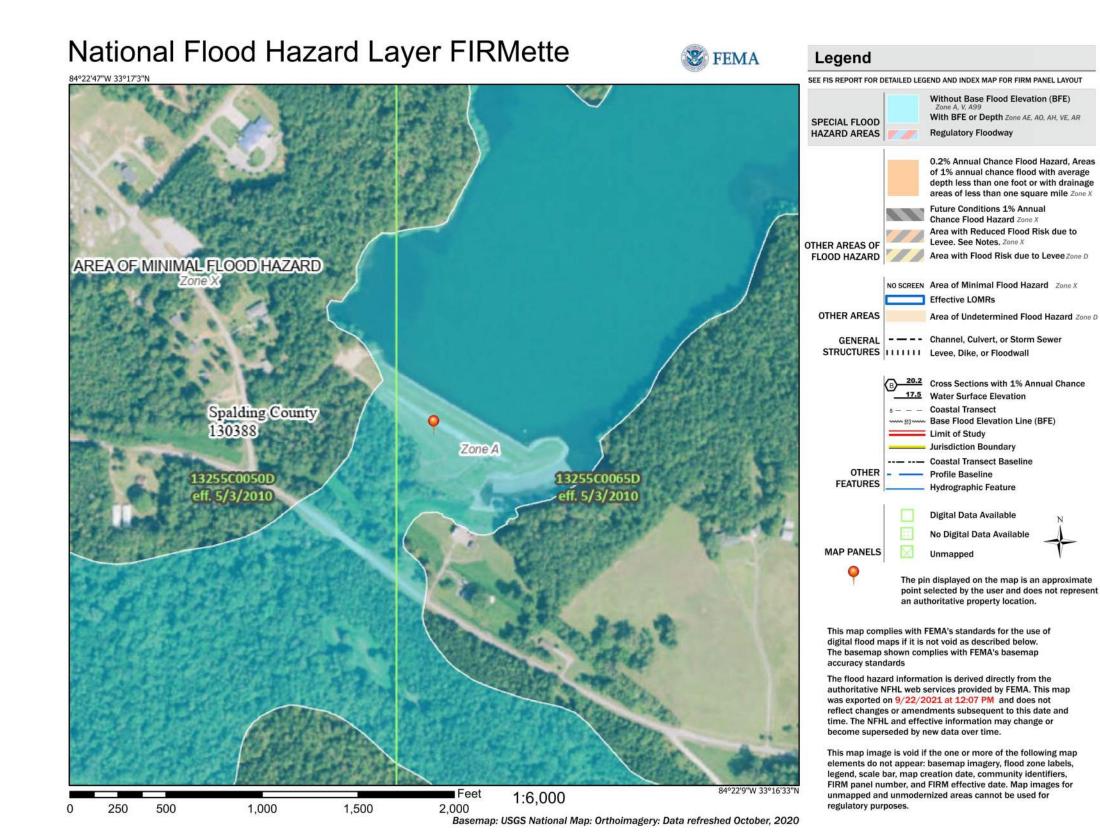


EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLANS **MARCH 2022**

DATE	SUBMITTAL / REVISION NOTES
01/11/2022	SPALDING COUNTY SUBMITTAL
03/14/2022	SPALDING COUNTY RESUBMITTAL



LOCATION MAP NOT TO SCALE





HAZEN PROJECT NO.: 31252-015

HAZEN AND SAWYER 1300 ALTMORE AVENUE SUITE 520 ATLANTA, GEORGIA 30342

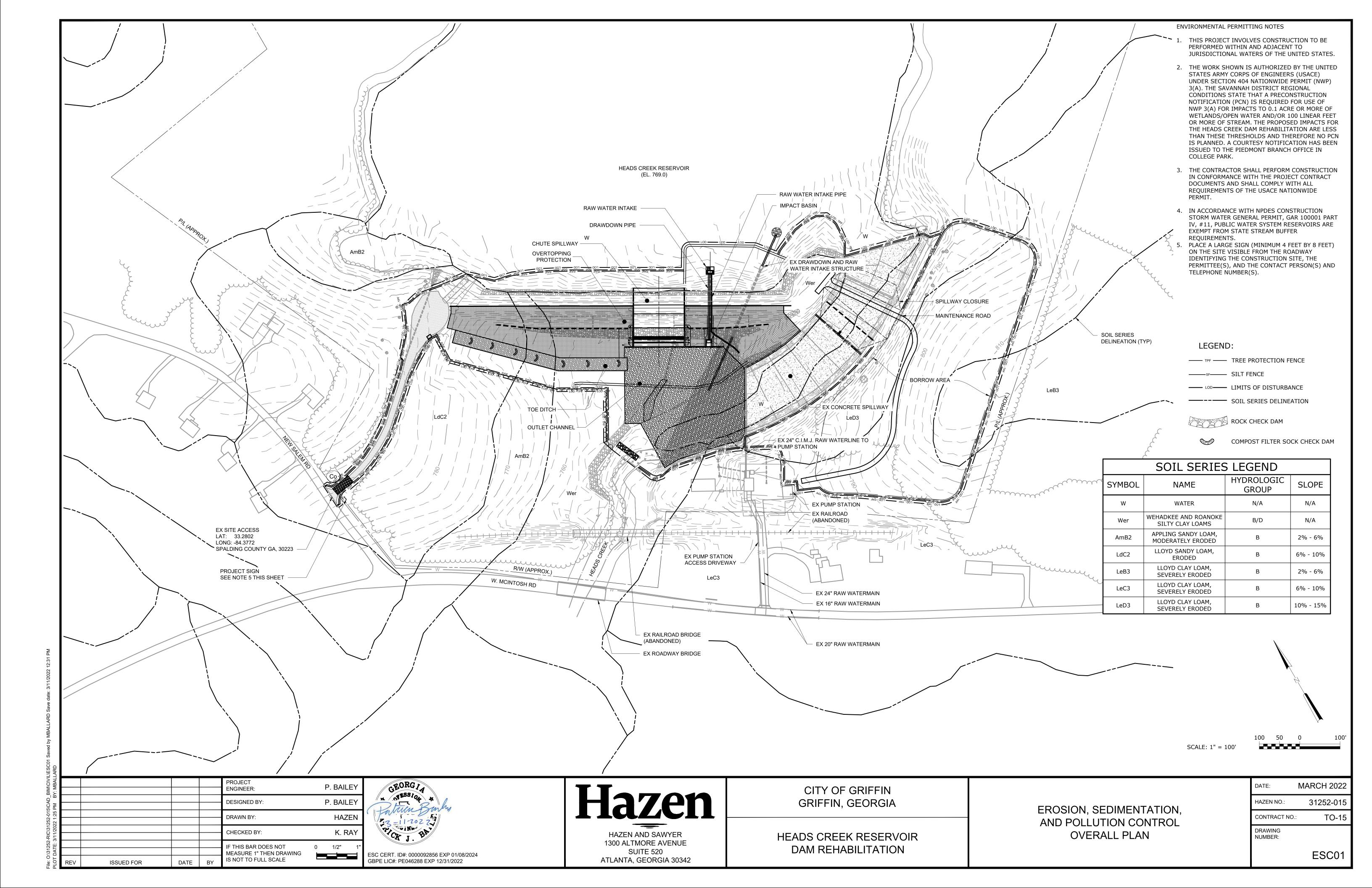


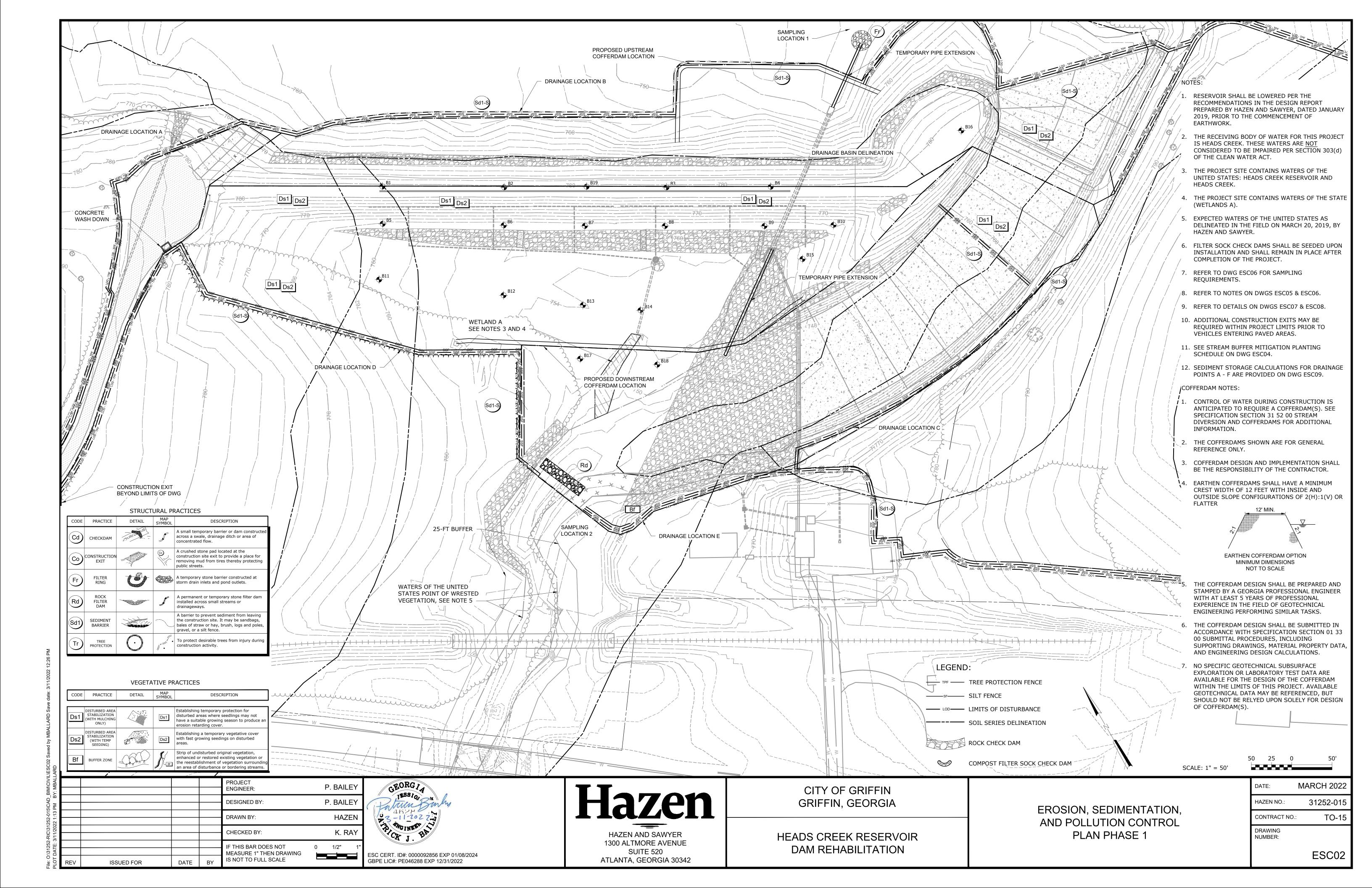
OWNER: CITY OF GRFFIN 100 S. HILL STREET GRIFFIN, GEORGIA 30223 24-HOUR CONTACT: BRANT KELLER, PE, PhD WATERSHED MANAGEMENT DIRECTOR CITY OF GRIFFIN 770-229-6400

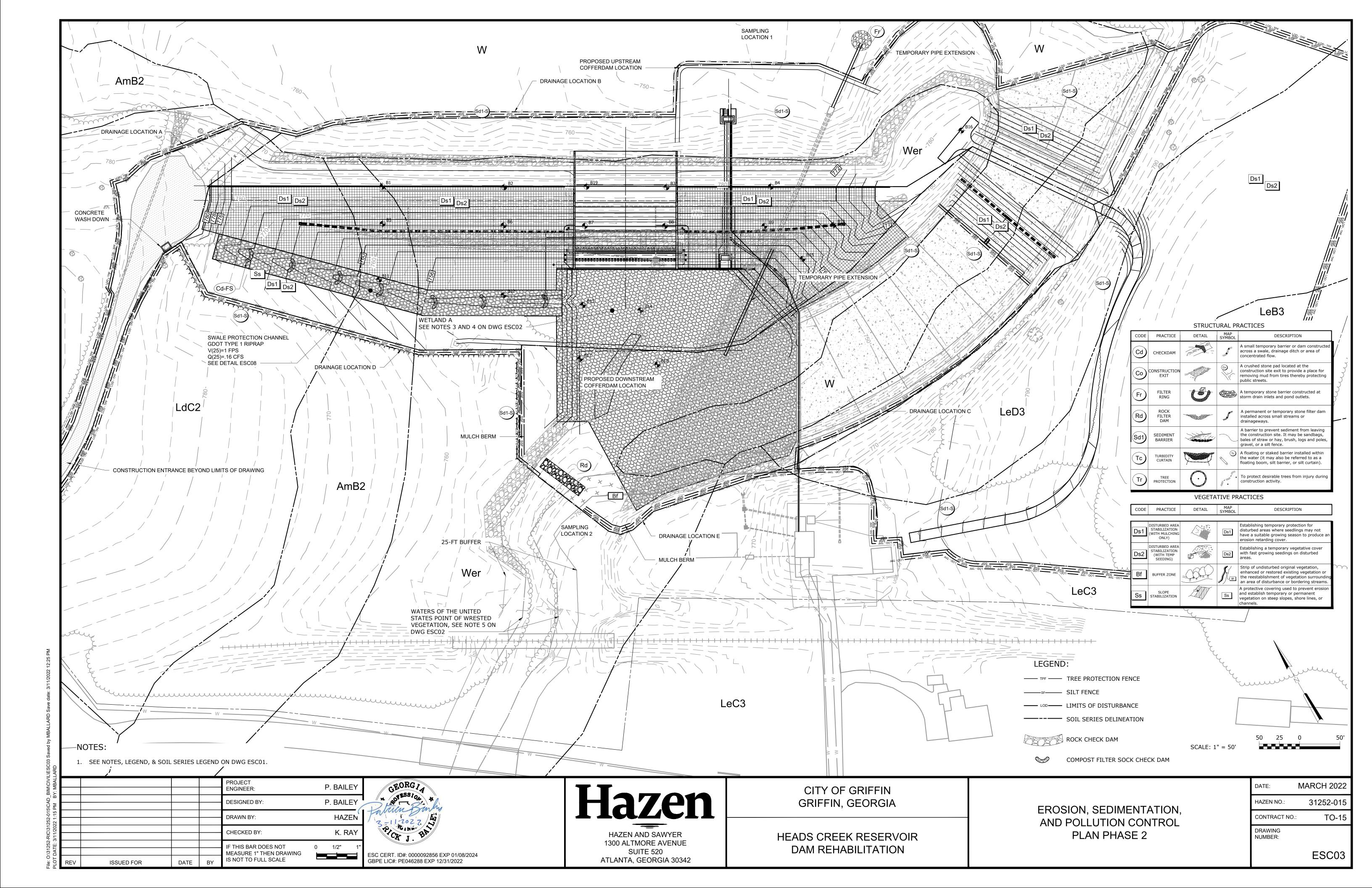
DESIGN ENGINEER CONTACTS: HAZEN AND SAWYER JEFFERY G. POWERS, PE

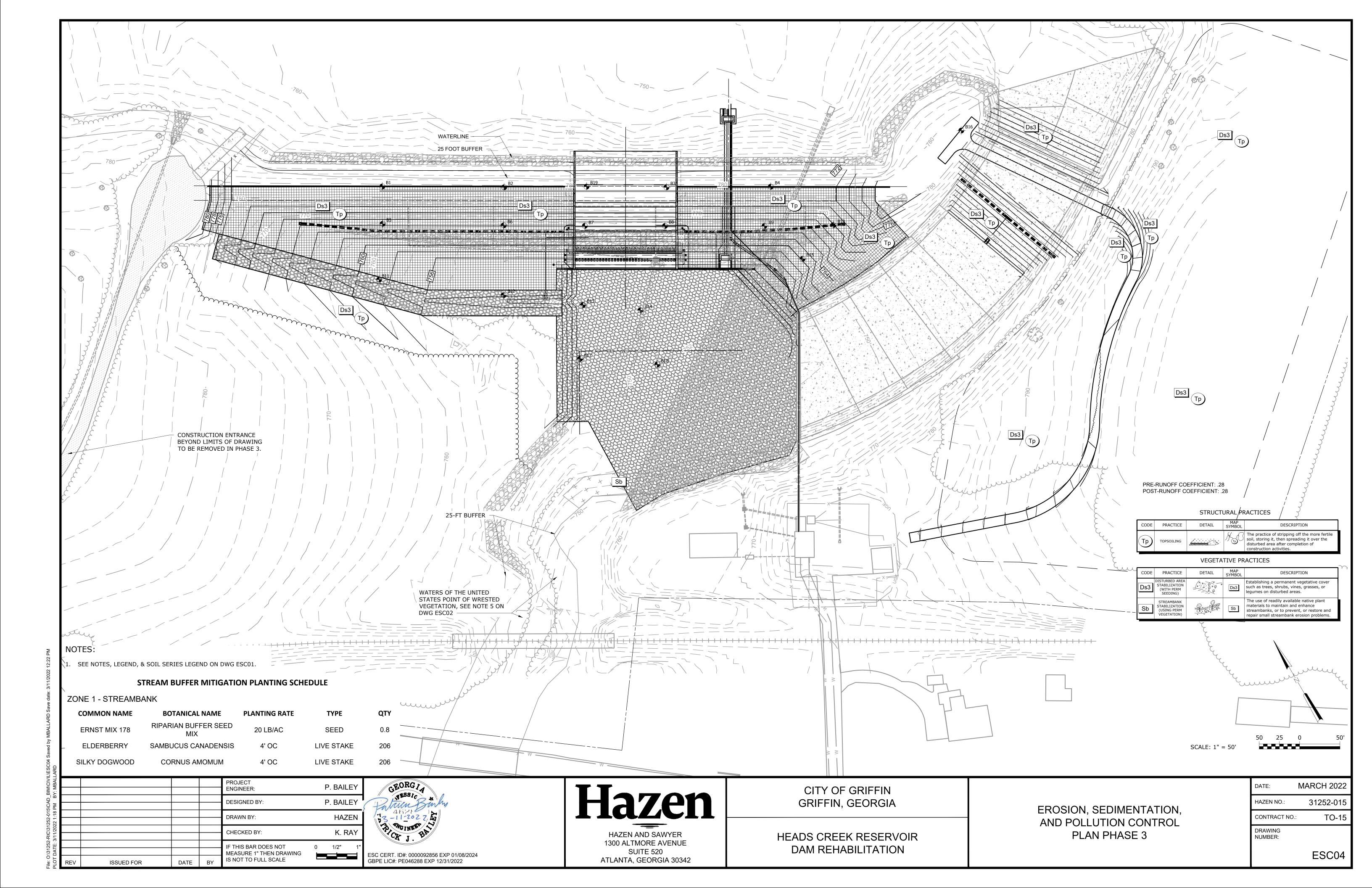
678-313-3473 H. CRAIG ROBINSON, PE 678-758-3234

E S&PC 24-HOUR CONTACT:









GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
		3		A small tomograpy barrier or day acceptual of
Cd	CHECKDAM		1	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION	P		Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT		9	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		Cr & Si	A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL		*	A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1)	TEMPORARY DOWNDRAIN STRUCTURE		(Dn1)	A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		Dn2	A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		(g)	Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER	A STATE OF THE STA		A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL		Re	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING		Rt	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1)	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP	*		An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN		\$33	A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			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.
Sk	FLOATING SURFACE SKIMMER		Sk)~~	A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Spb	SEEP BERM		Spb	Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.

CERTIFICATIONS

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

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



LEVAL II CERTIFIED DESIGN PROFESSIONAL #0000092856

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING		(5)	A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION		(St)	A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING		⊢(Su)	A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN		To	A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
Тр	TOPSOILING		// _{Tp} ()	The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Tr	TREE PROTECTION	0	1.	To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL)	Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		S Bf	Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surround an area of disturbance or bordering streams
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)	369434 并并是	Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)	10,000 B	Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods of highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
FI-Co	FLOCCULANTS AND COAGULANTS	(a)	FI-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosic and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Тас	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

OWNER AND 24-HOUR CONTACT INFORMATION

CITY OF GRIFFIN, GEORGIA BRANT KELLER WATERSHED MANAGEMENT DIRECTOR 100 SOUTH HILL STREET GRIFFIN, GA 30223

PHONE: 770-229-6400 EMAIL: BKELLER@CITYOFGRIFFIN.COM

PRIMARY PERMITTEE & 24HR ES&PC CONTACT I CERTIFY THAT THE RECEIVING WATER(S) OR THE OUTFALL(S) OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S) WILL BE MONITORED

IN ACCORDANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION

CONTROL PLAN.	
OPERATOR'S PRINTED NAME:	
SIGNATURE:	DATE:
ADDRESS:	

CONSTRUCTION SCHEDULE

ACTIVITY	MONTH											
	1	2	3	4	5	6	7	8	9	10	11	12
NOTICE TO PROCEED												
INSTALLATION OF EROSION CONTROL												
MAINTENANCE OF EROSION CONTROL												
INSTALLATION OF TREE PROTECTION DEVICES												
MAINTENANCE OF TREE PROTECTION DEVICES												
EARTHMOVING OPERATIONS												
TEMPORARY AND PERMANENT GRASSING												
CLEAN-UP												

P. BAILEY

P. BAILEY

1/2"

HAZEN

CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN FEBRUARY, 2022.

EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

- THIS PROJECT LIES WITHIN ZONE A, A FEMA FLOODPLAIN AREA, PER FEMA FIRM PANEL 13255C0065D, DATED MAY 3, 2010.
- EXISTING SITE INFORMATION SOURCED FROM SURVEY BY LAND ENGINEERING DATED FEBRUARY 2021. ACCEPTANCE AND/OR SUBSEQUENT ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY SPALDING COUNTY OF ANY LAND DISTURBING ACTIVITIES WITHIN
- WETLAND AREAS, JURISDICTIONAL WATERS OF THE STATE, AREAS OF THREATENED/ENDANGERED SPECIES, OR AREAS OF HISTORICAL SIGNIFICANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR ANY REQUIRED APPROVALS. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM WITH THE GUIDELINES OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL", LATEST EDITION.
- MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR
- PRIMARY PERMITTEE MUST SUBMIT NPDES NOTICE OF INTENT (NOII) AT LEAST 14 DAYS PRIOR TO BEGINNING OF LAND DISTURBANCE ACTIVITIES.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT UNDER NO CIRCUMSTANCES ANY SEDIMENT, TRASH, OR DEBRIS BE ALLOWED ONTO ADJACENT PROPERTIES, PUBLIC LANDS, OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- THE PRIMARY PERMITTEE AND TERTIARY PERMITTEE(S) MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (ES&PC), EXCEPT WHEN THE PERMITTEE HAS REQUESTED IN WRITING AND EPD HAS AGREED TO AN ALTERNATE DESIGN PROFESSIONAL, TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WHICH THE DESIGN PROFESSIONAL DESIGNED WITHIN SEVEN (7) DAYS AFTER INSTALLATION. THE DESIGN PROFESSIONAL SHALL DETERMINE IF THESE BMPS HAVE BEEN INSTALLED AND ARE BEING MAINTAINED AS DESIGNED. THE DESIGN PROFESSIONAL SHALL REPORT THE RESULTS OF THE INSPECTION TO THE PERMITTEE WITHIN SEVEN (7) DAYS AND THE PERMITTEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF RECEIPT OF THE INSPECTION REPORT FROM THE DESIGN PROFESSIONAL UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED.
- 10. EROSION AND SEDIMENT CONTROL WILL BE PERFORMED IN ACCORDANCE WITH THE BMPS SHOWN IN THESE PLANS. 11 FROSION AND SEDIMENT CONTROL DEVICES SHOWN ARE THE MINIMUM REQUIRED. ADDITIONAL DEVICES MAY BE REQUIRED AS NECESSARY
- 12. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED. 13. LAND DISTURBING WILL BE SCHEDULED TO LIMIT EXPOSURE OF BARE SOIL TO EROSIVE ELEMENTS.
- 14. CONSTRUCTION ROAD SHALL BE TOP DRESSED WITH ADDITIONAL GRAVEL PERIODICALLY TO MAINTAIN GRAVEL DEPTH OF 6 INCHES. 15. MAXIMUM SLOPE FOR PROPOSED GRADING AT DOWNSTREAM SIDE OF DAM SHALL BE 3(H):1(V). MAXIMUM SLOPE FOR STILLING BASIN SHALL BE 2(H):1(V).
- 16. A SPALDING COUNTY LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET. 17. THE APPLICABLE PORTION OF THE ES&PC PLAN SHALL BE PROVIDED TO EACH SECONDARY PERMITTEE PRIOR TO THE SECONDARY CONDUCTING ANY CONSTRUCTION ACTIVITY. EACH SECONDARY PERMITTEE SHALL SIGN THE PLAN OR ANY PORTION OF THE PLAN APPLICABLE TO THEIR SITE. A LIST OF NAMES AND ADDRESSES OF ANY SECONDARY PERMITTEES SHALL BE PROVIDED TO HARRIS COUNTY PRIOR TO THE SECONDARY PERMITTEE CONDUCTING ANY CONSTRUCTION ACTIVITY.

POLLUTION CONTROL

- OFF-SITE VEHICLE TRACKING DIRT, SOILS, AND SEDIMENTS, AND THE GENERATION OF DUST SHALL BE MINIMIZED OR ELIMINATED TO THE MAXIMUM EXTENT PRACTICAL. THE FOLLOWING BMPS SHALL BE IMPLEMENTED AS APPROPRIATE: CONSTRUCTION EXIT (CO), MULCH (DS1), VEGETATIVE COVER (DS2 / DS3), SPRAY-ON ADHESIVES (TAC), TOPSOILING (TP) AND/OR CONSTRUCTION ROAD STABILIZATION (CR).
- CONTRACTOR SHALL SELECT A DESIGNATED WASTE COLLECTION AREA AND PROVIDE LIDS FOR WASTE CONTAINMENT. SOLID WASTE SHALL BE REMOVED AND DISPOSED OFFSITE ALL WASTEWATER AND FROM CONSTRUCTION ACTIVITIES AND OR CLEANING OPERATIONS SHALL NOT BE DISCHARGED ON THE GROUND OR IN THE STORMWATER SYSTEM.
- OFF-SITE VEHICLE TRACKING OF SEDIMENT: 4.A. A STABILIZED STONE PAD WILL BE LOCATED AT THE CONSTRUCTION ENTRANCE TO REDUCE TRANSPORT OF MUD FROM THE CONSTRUCTION SITE.
- 4.B. THE STONE PAD WILL BE PERIODICALLY DRESSED. MUD AND DEBRIS TRACKED OR SPILLED ONTO ROADWAYS WILL BE REMOVED IMMEDIATELY.
- 4.C. CONTRACTOR WILL CONTROL SURFACE AND AIR MOVEMENT OF DUST BY SPRAYING WATER ONTO DISTURBED SOIL. CONCRETE WASH-DOWN
- 5.A. CONCRETE WASH-DOWN AREA(S) WILL BE PROVIDED FOR CONTRACTOR TO WASH TOOLS. MIXERS. AND HOPPERS. 5.B. CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES WILL ONLY BE ALLOWED IN A DESIGNATED AREA PROVIDED FOR THIS
- 5.C. CONCRETE WILL NOT BE ALLOWED TO BE DUMPED ONSITE.
- 5.D. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.
- SEE CONCRETE WASHDOWN DETAIL MATERIALS HANDLING/STORAGE:

PURPOSE. AS SHOWN ON THE DRAWINGS

- 6.A. ALL BUILDING MATERIALS AND PRODUCTS STORED ON-SITE SHALL BE TIED DOWN AND/OR COVERED TO PROVIDE PROTECTION FROM UV DAMAGE, WIND, AND RAIN. SANITARY WASTES
- 7.A. ONE PORTABLE SANITARY UNIT WILL BE PROVIDED TO EVERY TEN (10) WORKERS ON THE SITE (MINIMUM). ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS ONE TIME PER WEEK (MINIMUM) BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.
- 7.B. ALL SANITARY WASTE UNITS WILL BE LOCATED WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES.

PHASE I - INITIAL PHASE: SITE PREPARATION AND PRE-CONSTRUCTION OPERATIONS

CONTROL DEVICES DEEMED NECESSARY BY THE PROJECT PROFESSIONAL DURING THE SITE INSPECTION.

INSTALL / CONSTRUCT ALL BMPS AS PROVIDED ON SHEET ESC02.

- THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY: (ABC OR 123) THE CONSTRUCTION EXIT SHALL BE PLACED AS SHOWN ON THE PLANS.
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXIT, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS
- 8.3. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY. WITHIN SEVEN (7) DAYS AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES, THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN
- PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORSEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION
- 10. AFTER APPROVAL OF INITIAL FROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. 11. THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR
- 12. ALL SILT FENCES MUST MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS 1983 EDITION
- 13. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED MORE THAN 30
- DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION 14. SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS
- REACHED HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED. 15. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP
- DRESSING WITH 1"-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY
- 6. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE PROPER FUNCTIONING.

PHASE II - INTERMEDIATE PHASE: CONSTRUCTION ACTIVITIES

INSTALL / CONSTRUCT ALL BMPS AS PROVIDED ON SHEET ESC03

- 1. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF IT'S NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND LIMITED DURATIONS BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
- EARTHWORK NEAR STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION, AND ALTER THE LOCATION OF EROSION CONTROL DEVICES ACCORDINGLY.
- THE CONTRACTOR SHALL ESTABLISH BARRIERS AT THE TOP OF ALL SLOPES UNDER CONSTRUCTION. CUT AND FILL SLOPES SHALL NOT EXCEED 2:1 STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS CONSTRUCTED.
- ALL DRAINAGE SWALES AND GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH
- TEMPORARY GRASSING MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30
- DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP
- DRESSING WITH 1"-3" OF STONE. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED

PHASE III - FINAL PHASE: CONSTRUCTION COMPLETION AND FINAL STABILIZATION

INSTALL / CONSTRUCT ALL BMPS AS PROVIDED ON SHEETS ESC04. SUBMIT NOTICE OF TERMINATION.

- ALL DISTURBED AREAS TO RECEIVE PERMANENT GRASS SHOULD BE GRASSED AS SOON AS FINAL GRADE IS ACHIEVED.
- A TEMPORARY COVER OF HEAVY MULCH, MULCH WITH TEMPORARY SEEDING, OR TEMPORARY SEEDING, SHALL BE PLACED ON ALL AREAS WHERE PERMANENT COVER CAN NOT IMMEDIATELY BE ESTABLISHED DUE TO SEASONAL LIMITATIONS.
- WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREAS WITHIN 24 HOURS OF SEEDING.
- UPON COMPLETION OF THE PROJECT AND RECEIPT OF THE CERTIFICATE OF COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED OTHERWISE ON PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF A STRONG STAND OF GRASS BEFORE BEING RELEASED FROM CONTRACTUAL OBLIGATIONS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR A PERIOD OF TWELVE MONTHS AFTER ACCEPTANCE OF THE PROJECT TO REPAIR ANY WASHOUT AREAS OR AREAS OF VEGETATIVE COVER NOT CONSIDERED TO BE GOOD (<75% COVFRAGE)
- 6. CONTRACTOR SHALL REFER TO SPECIFICATION SECTION 02936 GRASSING FOR REQUIREMENTS OF GRASSING THE DAM EMBANKMENT AND EARTHEN SPILLWAY.

STORMWATER DISCHARGE POLLUTANT REDUCTION

- ALL POLLUTANTS FROM WASTE DISPOSAL PRACTICES, SOIL ADDITIVES, REMEDIATION OF SPILLS AND LEAKS OF PETROLEUM PRODUCTS, CONCRETE TRUCK WASHOUT, ETC.,
- SHOULD ANY OF THESE OCCUR, WILL BE CONTROLLED BY THE IMPLEMENTATION OF APPROPRIATE BEST MANAGEMENT PRACTICES.
- THE SITE WILL BE IN COMPLIANCE WITH ALL APPLICABLE STATE AND LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS. 3. PRODUCT SPECIFIC PRACTICES:
- 3.A. PETROLEUM BASED PRODUCTS CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ONSITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORMWATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
- 3.B. PAINTS/FINISHES/SOLVENTS ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCTS WILL NOT BE DISCHARGED TO THE STORMWATER COLLECTION SYSTEM. EXCESS PRODUCT MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- 3.C. CONCRETE TRUCK WASHING NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE. 3.D. FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET

FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER

ROOF IN SEALED CONTAINERS. 3.E. BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

STORMWATER MANAGEMENT

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

- 1. FLOW ATTENUATION BY USE OF OPEN VEGETATED SWALES AND NATURAL DEPRESSIONS
- 2. INFILTRATION OF RUNOFF ON-SITE
- VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL FOR THE PURPOSE OF PROVIDING A NON-EROSIVE VELOCITY FLOW FROM THE STRUCTURE TO A WATER COURSE.

SPILL CLEANUP AND CONTROL PRACTICES

- 1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE
- 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. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS. ALL SPILLS WILL BE CLEANED
- UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
- 4.A. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT
- 1-800-424-8802. 4.B. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
- 4.C. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS. 4.D. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS. THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.
- THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1,320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL

PROJECT NARRATIVE

THE PROJECT CONSISTS OF THE REHABILITATION OF THE EXISTING DAM WHICH IMPOUNDS A RAW WATER SUPPLY RESERVOIR AND CONTROLS STORMWATER OUTFLOW FROM HEADS CREEK RESERVOIR IN SPALDING COUNTY, GEORGIA, APPROXIMATELY 7 MILES WEST OF THE CITY OF GRIFFIN. THE DAM AND RESERVOIR ARE OWNED AND OPERATED BY THE CITY OF GRIFFIN. SURROUNDING PROPERTIES ADJACENT TO AND DOWNSTREAM OF THE PROJECT SITE ARE CLASSIFIED AS CONSERVATIONAL USE, AGRICULTURAL, AND RESIDENTIAL AREAS. NO WORK WILL BE CONDUCTED OUTSIDE OF THE PROPERTY LIMITS, SO EASEMENTS WILL NOT BE REQUIRED. PUBLIC WATER SYSTEM RESERVOIRS ARE EXEMPT FROM STATE STREAM BUFFER REQUIREMENTS AND THEREFORE A STREAM BUFFER VARIANCE IS NOT REQUIRED.

THE DAM IS AN EARTHEN EMBANKMENT AND ITS PRINCIPAL SPILLWAY IS A TRAPEZOIDAL CONCRETE SPILLWAY. AN OGEE WEIR ALLOWS FOR CONTROLLED OUTFLOWS THROUGH THE PRINCIPAL SPILLWAY. PROPOSED MODIFICATIONS INCLUDE LOWERING A SIGNIFICANT PORTION OF THE EARTHEN EMBANKMENT AND CONSTRUCTING A NEW CONCRETE CHUTE SPILLWAY OVER THE LOWERED EMBANKMENT. THE LOWERED PORTION OF THE EMBANKMENT WILL BE ARMORED WITH ARTICULATED CONCRETE BLOCK (ACB) FOR OVERTOPPING PROTECTION. THE EARTHEN EMBANKMENT WILL BE EXTENDED OVER THE EXISTING PRINCIPAL SPILLWAY CHANNEL TO REMOVE IT FROM SERVICE. ADDITIONALLY, THE EXISTING RAW WATER INTAKE DRAWDOWN STRUCTURE WILL BE REPLACED, INCLUDING THE INTAKE STRUCTURE, PIPES, AND GATES.

EIGHT (8) TYPES OF EROSION CONTROL MEASURES WILL BE UTILIZED IN THE CONSTRUCTION OF THE PROJECT. ALL EROSION CONTROL MEASURES SHALL MEET REQUIREMENTS OUTLINED IN TEH GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECFICATIONS, 1983 EDITION.

- 1. SILT FENCE FOR SENSITIVE AREAS (Sd1-S) SHALL BE INSTALLED AT APPROPRIATE LOCATIONS TO PREVENT SEDIMENT FROM BEING WASHED OFF OF THE SITE. THESE LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO, THE BASE OF ALL STOCKPILES, THE TOE OF FILL SLOPES, AND THE SITE PERIMETER.
- 2. SEDIMENT BARRIERS IN THE FORM OF COMPOST FILTER SOCKS FOR NON-SENSITIVE AREAS (Sd1-S) SHALL BE INSTALLED AT APPROPRIATE LOCATIONS TO PREVENT SEDIMENT FROM BEING WASHED OFF OF THE SITE. THESE LOCATIONS SHALL BE AT MINIMUM ALONG THE CREST OF THE DAM NEAR THE UPSTREAM SIDE.
- 3. FILTER SOCK CHECKDAMS (Cd-FS) SHALL BE INSTALLED ALONG THE GROIN OF THE DOWNSTREAM SLOPE TO PREVENT SEDIMENT FROM BEING WASHED OFF THE SITE OR INTO STREAM CHANNEL. THE CHECKDAMS SHALL BE SEEDED UPON INSTALLATION AND SHALL REMAIN IN PLACE AFTER PROJECT COMPLETION.
- 4. MULCHING, TEMPORARY GRASSING, AND PERMANENT GRASSING (Ds1, Ds2 & Ds3) SHALL BE USED TO RE-ESTABLISH VEGETATION ON THE DISTURBED AREAS AS CONSTRUCTION PROCEEDS AND AT PROJECT COMPLETION.
- 5. TOPSOILING (Tp) SHALL BE USED PRIOR TO INSTALLATION OF PERMANENT GRASSING. 6. CONSTRUCTION EXITS (Co) SHALL BE USED TO PREVENT SEDIMENT FROM LEAVING THE SITE VIA THE TIRES OF TRUCKS AND CONSTRUCTION EQUIPMENT.
- 7. TREE PROTECTION FENCING (Tr) SHALL BE INSTALLED ALONG TREE LINES ADJACENT TO CONSTRUCTION AREAS WHERE CONSTRUCTION ACTIVITIES MAY DAMAGE FXISTING TREES. 8. STORM DRAIN OUTLET PROTECTION (St) SHALL BE INSTALLED AT THE STORM DRAIN OUTLETS TO CAPTURE AND RETAIN ANY SEDIMENT FROM THE STORM DRAIN
- OUTLET. ROCK FILTER DAM (Rd)

A STREAM BUFFER MITIGATION PLAN WILL BE IMPLEMENTED WITHIN THE PROJECT LIMITS OF DISTURBANCE FOR AREAS WITHIN THE EXISTING STREAM CHANNEL BUFFER. SEE STREAM BUFFER MITIGATION PLANTING SCHEDULE ON DWG ESC04.

EROSION CONTROL NOTES

- TOTAL PROJECT AREA:
- DISTURBED AREA, ALL PHASES: 14.07 ACRES
- 2. CONSTRUCTION EXIT COORDINATES LONGITUDE: -84.3772º LATITUDE: 33.2802°
- 3. SOILS TYPE: AS PER NRCS WEB SOIL SURVEY, SOIL TYPES FOR THIS PROJECT ARE DELINEATED ON SHEETS ESC01 THROUGH ESC03. A SOIL TYPE LEGEND, WITH DESCRIPTIONS, IS PROVIDED ON SHEET ESC01
- 4. ON-SITE WETLANDS ARE PRESENT. SEE DWGS ESC02 ESC04 FOR LOCATION AND DELINEATION. 5. ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE HAVE BEEN IDENTIFIED AND WILL BE PROTECTED BY APPROPRIATE EROSION CONTROL
- MEASURES. SEE DWGS ESC02 ESC04 FOR DELINEATION.
- 6. A 25-FOOT BUFFER VARIANCE SHALL BE REQUIRED FOR WORK CONDUCTED WTIHIN THE 25-FOOT BUFFER ZONE. BUFFER ENCROACHMENT ACTIVITIES INCLUDE CONSTRUCTION ACCESS TO PLACE ROCK WITHIN THE PROPOSED PLUNGE POOL DOWNSTREAMOF THE DAM EMBANKMENT AND AUXILLARY SPILLWAY. 7. PRE-CONSTRUCTION TO POST-CONSTRUCTION RUNOFF: THIS PROJECT DOES NOT INCLUDE ANY LAND DEVELOPMENT ACTIVITIES; THEREFORE, THERE WILL BE NO INCREASE
- IN RUNOFF AS A RESULT OF THIS PROJECT 8. CONTRIBUTING DRAINAGE AREA TO HEADS CREEK RESERVOIR DAM IS 12,752 AC. SEE BASIN DELINEATION ON DWG ESC06.
- 9. RECEIVING WATERS AND SENSITIVE AREAS: THE RECEIVING WATERS OF THIS PROJECT ARE HEADS CREEK, A TRIBUTARY OF THE FLINT RIVER AND THE HEAD'S CREEK RESERVOUR, A WATER SUPPLY RESERVOIR FOR THE CITY OF GRIFFIN. RECEIVING WATERS ARE NOT IMPAIRED.
- PROTECTED FROM SEDIMENT EROSION BY THE BMPs SHOWN ON THE PLANS NO SIGNIFICANT TOPOGRAPHIC CHANGES ARE EXPECTED FOR THE PROPOSED PROJECT: PROPOSED GRADING AND DRAINAGE WILL MAINTAIN THE EXISTING GENERAL DRAINAGE PATTERN. NO ADDITIONAL IMPERVIOUS AREAS ARE PROPOSED TO BE ADDED TO THE SITE. THE STORMWATER FACILITIES SHALL BE PROTECTED FROM SEDIMENT

AND EROSION DURING CONSTRUCTION ACTIVITIES HEADS CREEK RESERVOIR SERVES AS WATER SUPPLY SOURCE AND A RECREATIONAL AREA FOR BOATING AND FISHING. DUE TO THE HIGH VOLUME OF

10. BASED ON THE NATURE OF THIS PROJECT AND THE PROXIMITY TO STATE WATERS, A SEDIMENT BASIN WAS NOT PROVIDED FOR EROSION CONTROL. THE WATERS WILL BE

PEDESTRIAN/EQUESTRIAN TRAFFIC, THE ENTIRE SITE IS CONSIDERED A CRITICAL AREA. THEREFORE, THE CONTRACTOR SHALL MINIMIZE THE DURATION OF DISRUPTION TO RECREATIONAL USE

REQUIRED NOTES

- 1. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION.
- NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
- 3. AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

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

- 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.

7. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

HAZEN NO. EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES (1 OF 2)

PROJECT ENGINEER DESIGNED BY DRAWN BY: CHECKED BY: F THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE **ISSUED FOR** DATE



Hazen HAZEN AND SAWYER

1300 ALTMORE AVENUE

SUITE 520

ATLANTA, GEORGIA 30342

HEADS CREEK RESERVOIR DAM REHABILITATION

CITY OF GRIFFIN

GRIFFIN, GEORGIA

CONTRACT NO .: TO-15 DRAWING NUMBER: ESC05

MARCH 2022

31252-01

THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EPD), GENERAL PERMIT NO. GAR100001 FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR STAND ALONE DEVELOPMENTS.

MANAGEMENT PRACTICES AND PERMIT VIOLATIONS (PART III.D)

- A.1. BEST MANAGEMENT PRACTICES ARE REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AND MUST BE IMPLEMENTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS CONTAINED IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF GEORGIA. PROPER DESIGN, INSTALLATION, AND MAINTENANCE OF BMP'S SHALL CONSTITUTE A COMPLETE DEFENSE TO ANY ACTION BY THE DIRECTOR OR TO ANY OTHER ALLEGATION OF NONCOMPLIANCE WITH PART III.D.3 AND PART III.D.4.
- FAILURE TO PROPERLY DESIGN, INSTALL, OR MAINTAIN BMP'S SHALL CONSTITUTE A VIOLATION OF THE PERMIT ROUTINE INSPECTIONS SHALL NOT BE CONSIDERED A VIOLATION. IF DURING THE COURSE OF THE PERMITTEE'S ROUTINE INSPECTIONS BMP FAILURES ARE OBSERVED WHICH HAVE RESULTED IN SEDIMENT DEPOSITION INTO WATERS OF THE STATE, THE PERMITTEE SHALL CORRECT THE BMP FAILURES AND SHALL SUBMIT A SUMMARY OF THE VIOLATIONS TO EPD IN ACCORDANCE WITH PART V.A.2 OF THE PERMIT.
- A DISCHARGE OF STORMWATER RUNOFF FROM DISTURBED AREAS WHERE BMP'S HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH DISCHARGE RESULTS IN THE TURBIDITY OF RECEIVING WATER(S) BEING INCREASED BY MORE THAN TEN (10) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS 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.J. AND PART II.B.3.J.

- B.1. ALL DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART I.C.1.A.
- B.2. ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER EXCEPT AS PROVIDED IN PART I.C.2 AND PART III.A.2 OF THE PERMIT. PART III.A.1.
- B.3. AUTHORIZED MIXED STORMWATER DISCHARGES: PART I.C.2.
- THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY;
- THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THE PERMIT;
- STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ARE OCCURRING ARE COVERED BY A DIFFERENT NPDES GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.
- THE FOLLOWING NON-STORMWATER DISCHARGES MAY BE AUTHORIZED BY THIS PERMIT PROVIDED THE NON-STORMWATER COMPONENT OF THE DISCHARGE IS EXPLICITLY IN THE PLAN AND IS IN COMPLIANCE WITH PART IV.D.7: PART III.A.2.
- FIRE FIGHTING ACTIVITIES;
- FIRE HYDRANT FLUSHING:
- B.4.3. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING;
- IRRIGATION DRAINING; B.4.4.
- B.4.5. AIR CONDITIONING CONDENSATE;
- B.4.6. SPRINGS;
- B.4.7. UNCONTAMINATED GROUND WATER; AND
- B.4.8. FOUNDATION OR FOOTING DRAINS WHERE THE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS.

- C.1. THE FOLLOWING STORMWATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:
- C.1.1. STORMWATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATE FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION;
- DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORMWATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART III.A.2. OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.7. (NON-STORMWATER DISCHARGES) OF THIS PERMIT
- STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING
- PERMIT DID NOT ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES; AND C.1.4. STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE OR MAY REASONABLY BE EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.

COMPLIANCE WITH WATER QUALITY PART I.C.4

- D.1. NO DISCHARGES AUTHORIZED BY THIS PERMIT SHALL CAUSE VIOLATIONS OF GEORGIA'S IN-STREAM WATER QUALITY STANDARDS AS PROVIDED BY THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6-.03.
- IF A TDML IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT SIX MONTHS PRIOR TO THE SUBMITTAL OF NOI, PLEASE ADDRESS ANY SITE-SPECIFIC CONDITIONS OR REQUIREMENTS INCLUDED IN THE TMDL IMPLEMENTATION PLAN.

INSPECTIONS (PART IV.D.4)

PERMITTEE REQUIREMENTS.

- (1). 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.
- (2). MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. 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 APPROPRIATE FOR THE REGION
- (3). 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 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY ON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): 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 HAS BEEN SUBMITTED) 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.
- (6). A REPORT OF EACH INSPECTION THAT INCLUDES 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 SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALI 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.

SAMPLING (PART IV.D.6)

STORMWATER SAMPLING SHALL BE IN ACCORDANCE WITH THE METHODOLOGY IN THE NPDES STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-98-001, AND THE NPDES GENERAL CONSTRUCTION NO. GAR100001 PREPARED BY THE STATE OF GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION.

THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT THIS SECTION IS APPLICABLE TO PRIMARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE AND TERTIARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN FIVE (5) ACRES. THIS SECTION IS NOT APPLICABLE TO SECONDARY PERMITTEES. TURBIDITY SAMPLING SHALL BE PERFORMED AFTER EVERY RAIN EVENT OF 0.5 INCH OR GREATER WITHIN ANY 24-HOUR PERIOD AS SPECIFIED IN PART IV.D.6.d OF THE CURRENT NPDES PERMIT. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING

A. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

- (1) A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE STAND ALONE CONSTRUCTION;
- (A) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE
- (B) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORMWATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP;
- (2). A WRITTEN NARRATIVE OF SITE SPECIFIC ANALYTICAL METHODS USED TO COLLECT, HANDLE AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING
- (3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE SAMPLED, A RATIONALE MUST BE INCLUDED ON THE PLAN FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES); AND
- (4). ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE TIME LINE FOR SUBMITTAL.
- B. SAMPLE TYPE. 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 STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.
- (1). SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
- (2). SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER
- (3). LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE
- CLEANED THOROUGHLY TO AVOID CONTAMINATION. (4). MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC 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. (5). SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

- (1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORMWATER 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 STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORMWATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
- (B). THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORMWATER 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 STORMWATER OUTFALL CHANNEL(S).
- (D). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORMWATER
- (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 LANDSCAPED 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 STORMWATER 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

D. SAMPLING FREQUENCY.

- (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 STORMWATER 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 STORMWATER 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 STORMWATER 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 STORMWATER 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.

* 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.

REPORTING (PART IV.E)

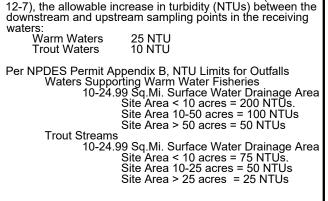
- 1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL 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 STORMWATER 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 USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. 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.

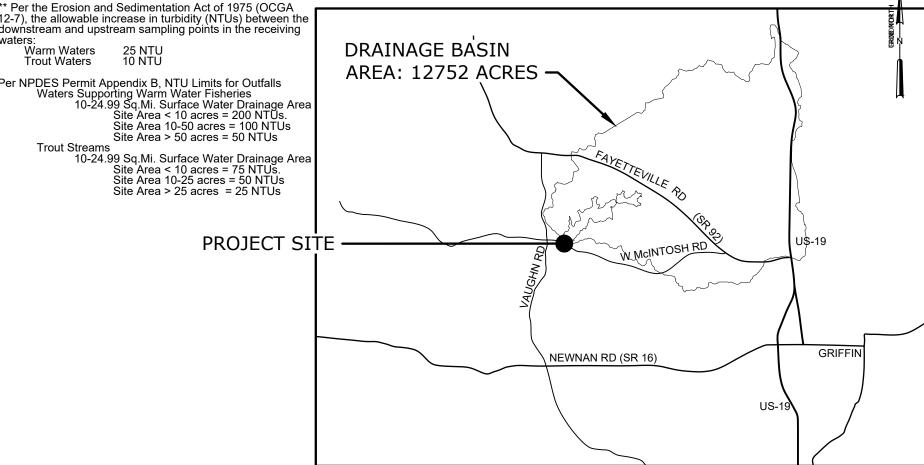
RETENTION OF RECORDS (PART IV. F)

- A. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH
- A.1. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
- A.2. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
- A.3. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
- A.4. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
- A.5. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT; A.6. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT;
- A.7. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT
- B. EACH SECONDARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN
- ACCORDANCE WITH PART VI:
- B.1. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD; B.2. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT OR THE APPLICABLE PORTION OF THE
- EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN FOR THEIR ACTIVITIES AT THE CONSTRUCTION SITE REQUIRED BY THIS PERMIT; B.3. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.B. OF THIS PERMIT; AND
- B.4. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT. C. EACH TERTIARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE
- C.1. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
- C.2. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
- THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT C.4. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
- C.5. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.C. OF THIS PERMIT;
- C.6. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT;
- C.7. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.C.(2). OF THIS PERMIT
- D. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS 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

NPDES Monitoring Sites

See sheets ESC01- ESC03 for site locations





DRAINAGE BASIN DELINEATION

PROJECT P. BAILEY ENGINEER P. BAILEY DESIGNED BY HAZEN DRAWN BY: K. RAY CHECKED BY: F THIS BAR DOES NOT 1/2" MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE **ISSUED FOR** DATE

GEORG! 48810A nun +4266 2-11-202 SY CK 1. ESC CERT. ID#: 0000092856 EXP 01/08/2024 GBPE LIC#: PE046288 EXP 12/31/2022

Hazen HAZEN AND SAWYER

1300 ALTMORE AVENUE

SUITE 520

ATLANTA, GEORGIA 30342

CITY OF GRIFFIN GRIFFIN, GEORGIA

HEADS CREEK RESERVOIR DAM REHABILITATION

EROSION SEDIMENTATION AND POLLUTION CONTROL NOTES (2 OF 2)

MARCH 2022 31252-015 HAZEN NO CONTRACT NO .: TO-15 **DRAWING** NUMBER: ESC06 MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATION TECHNIQUES SHALL BE EMPLOYED.

- GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
 INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSION BERMS, TERRACES, AND
- 3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.

- DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL UNIFORMLY BE APPLIED BY HAND OR BY MECHANICAL EQUIPMENT. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.
- 3. CUTBACK ASPHALT SHALL UNIFORMLY BE APPLIED. CARE SHALL BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF TRACKING IN, OR DAMAGE TO SHOES, CLOTHING, ETC.
- 4. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

- STRAW OR HAY MULCH SHALL 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 SHALL BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHALL 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 IMMEDIATELY BE ANCHORED AFTER APPLICATION.
- STRAW OR HAY SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFIERS AND BINDERS MAY BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLASTIC MESH OR NETTING WITH A MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE
- 4. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AND INCREMENTALLY AS NECESSARY

VEGETATIVE COVERS										
				RATES/1,000 SQ	. FT.			RATES/1,000 SQ. FT.		
	MONTH	TEMPORARY SEED	RATE/ACRE	FERTILIZER	LIME STONE	PERMANENT SEED	RATE/ACRE	FERTILIZER	LIME STONE	MAINTENANCE
1)	JANUARY	RYE WHEAT	2 - 3 BU. 2 - 3 BU.	12 LB (10-10-10) 12 LB (10-10-10)	45 LB. 45 LB.	UNHULLED BERMUDA	30 LB.	12 LB (10-10-10)	45 LB.	10 LB (10-10-10)
2)	FEBRUARY	RYE WHEAT	2 - 3 BU. 2 - 3 BU.	12 LB (10-10-10) 12 LB (10-10-10)	45 LB. 45 LB.	UNHULLED BERMUDA	30 LB.	12 LB (10-10-10)	45 LB.	10 LB (10-10-10)
3)	MARCH	RYE	2 - 3 BU.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA Ky-31 TALL FESCUE	30 LB.	12 LB (10-10-10) 12 LB (10-10-10)	45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10)
4)	APRIL	RYE SUDAN GRASS	2 - 3 BU. 60 LB.	12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB.	Ky-31 TALL FESCUE	50 LB.	35 LB (6-12-12)	45 LB.	10 LB (10-10-10)
5)	MAY	SUDAN GRASS	60 LB.	35 LB (6-12-12)	45 LB. 45 LB.	THE CONTRACTOR SHALL CONTACT THE ENGINEER IF THE CONSTRUCTION SCHEDULE CHANGES AND PERMANENT GRASSING IS REQUIRED.				
6)	JUNE	SUDAN GRASS	60 LB.	35 LB (6-12-12)	45 LB.	THE CONTRACTOR SHALL CONTACT THE ENGINEER IF THE CONSTRUCTION SCHEDULE CHANGES AND PERMANENT GRASSING IS REQUIRED.				
7)	JULY	SUDAN GRASS	60 LB.	35 LB (6-12-12)	45 LB.			CT THE ENGINEER IF . NENT GRASSING IS R		RUCTION
8)	AUGUST	RYE	2 - 3 BU.	35 LB (6-12-12)	45 LB.	Ky-31 TALL FESCUE	50 LB.	12 LB (10-10-10)	45 LB.	10 LB (10-10-10)
9)	SEPTEMBER	RYE	2 - 3 BU.	35 LB (6-12-12)	45 LB.	Ky-31 TALL FESCUE	50 LB.	12 LB (10-10-10)	45 LB.	10 LB (10-10-10)
10)	OCTOBER	WHEAT	2 - 3 BU.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA Ky-31 TALL FESCUE	30 LB. 50 LB.	12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10)
11)	NOVEMBER	WHEAT	2 - 3 BU.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA	30 LB.	12 LB (10-10-10)	45 LB.	10 LB (10-10-10)
12)	DECEMBER	RYE WHEAT	2 - 3 BU. 2 - 3 BU.	12 LB (10-10-10) 12 LB (10-10-10)	45 LB. 45 LB.	UNHULLED BERMUDA	30 LB.	12 LB (10-10-10)	45 LB.	10 LB (10-10-10)

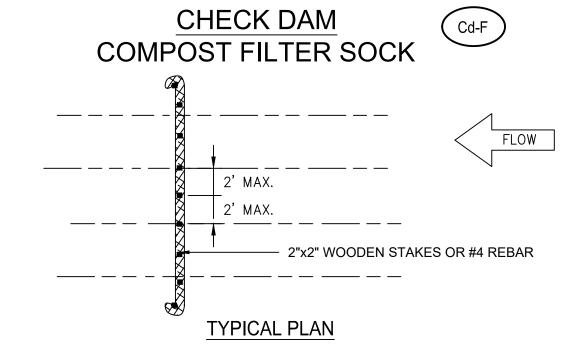
THE ABOVE SEEDING CHART LISTS ALL POTENTIAL OPTIONS. CONTRACTOR SHALL SUBMIT THE SCHEDULE AND PROPOSED SEED MIXTURE FOR THIS PROJECT FOR ENGINEER'S

THE CONTRACTOR SHALL REFER TO SPECIFICATION SECTION 32 90 00 FINAL GRADING AND LANDSCAPING FOR THE PERMANENT GRASSING REQUIREMENTS FOR THE DAM EMBANKMENT





Ds3 TEMPORARY & PERMANENT GRASSING



- . ALL MATERIAL TO MEET SPECIFICATIONS.
- 2. PLACE ONE STAKE AT THE CENTER OF THE DITCH/CHANNEL ALSO PLACE STAKES AT THE BED/BANK JUNCTION AND AT END OF THE DEVICE NOT SPACED MORE THAN 4 FEET APART.

MULCHING RATE

RATE

2.0 TON/ACRE

2.5 TON/ACRE

Secure w/ soil and

anchors

MATERIAL

STRAW

HAY

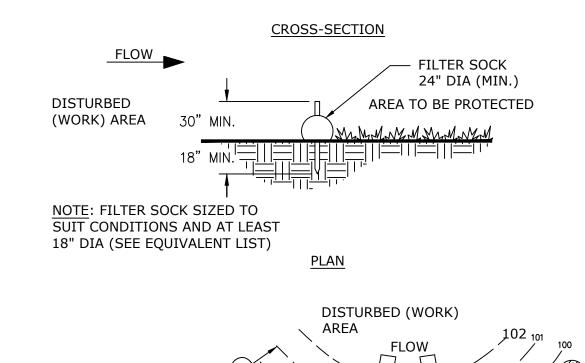
WOOD WASTE: CHIPS SAWDUST, BARK

Polyethylene Film

- SEDIMENT SHALL BE REMOVED FROM BEHIND THE CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS REACHED ONE-HALF THE HEIGHT OF THE CHECK DAM.
- 4. CHECK DAMS CAN BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
- 5. MINIMUM STAKING DEPTH FOR SAND, SILT, AND CLAY SHALL
- 6. COMPOST FILTER SOCK SHALL BE AT LEAST 18" DIAMETER.

SEDIMENT BARRIER (CD1-FS) COMPOST FILTER SOCK

TYPE B COMPOST FILTER SOCK



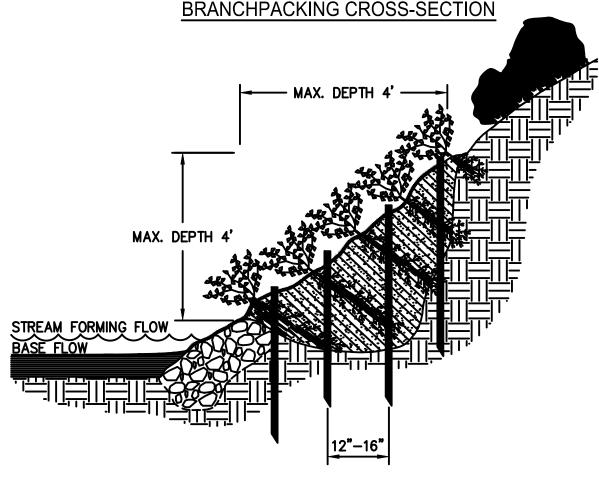
EXISTING CONTOURS

WOODEN STAKES (2' O.C. FOR TYPE NS)

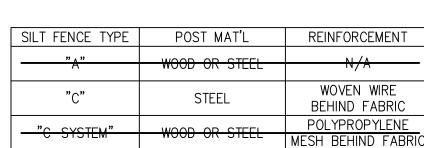
COMPOST FILTER SOCK

AREA TO BE PROTECTED

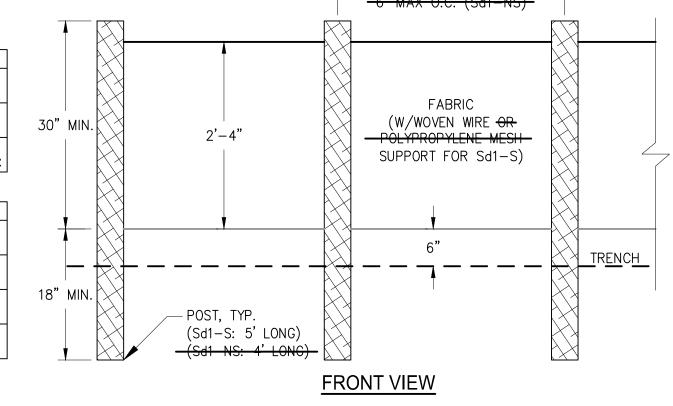
STREAMBANK STABILIZATION

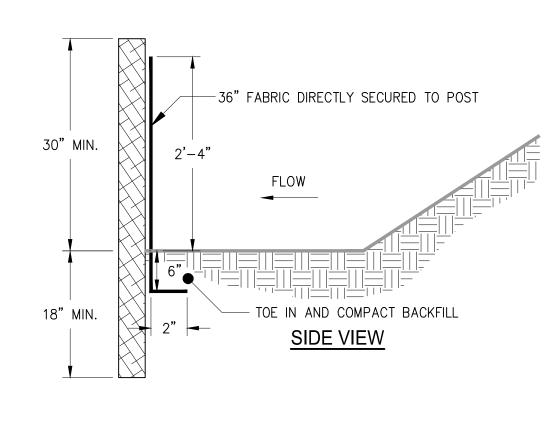


- 1. ROOT/LEAFED CONDITION OF THE LIVING PLANT MATERIAL IS NOT REPRESENTATIVE OF THE TIME OF
- 2. STARTING AT THE LOWEST POINT, DRIVE THE WOODEN POSTS VERTICALLY 3' TO 4' INTO THE GROUND AND SET THEM 12"-16" APART.
- 3. A LAYER OF LIVING BRANCHES (4"-6" THICK) IS PLACED IN THE BOTTOM OF THE HOLE, BETWEEN THE VERTICAL POSTS. THEY SHALL BE PLACED IN A CRISSCROSS CONFIGURATION.
- 4. THE FINAL INSTALLATION SHALL MATCH THE EXISTING SLOPE. BRANCHES SHOULD PROTRUDE ONLY
- SLIGHTLY FROM THE FILLED FACE. 5. EACH LAYER OF BRANCHES SHALL BE FOLLOWED BY A 12" LAYER OF SOIL HAND TAMPED TO ENSURE CONTACT WITH THE BRANCH CUTTINGS.
- 6. THE SOIL SHALL BE MOIST OR MOISTENED TO ENSURE THAT LIVE BRANCHES DO NOT DRY OUT.
- 7. WHERE SPECIFIED, LIVE STAKES SHALL BE USED IN PLACE OF POSTS.



POST MAT'L	MIN POST SIZE	MIN POST WEIGHT
STEEL	"U", "T", OR "C"	1.3 LB/FT
SOFT WOOD	3" DIA OR	
- 301 1 WOOD	2" X 4"	_
HARD WOOD	1.5" X 1.5" (-0.375")	
(TYPE "A")	AND 2.15 SQ IN	_
HARD WOOD	2" X 2" (-0.25")	
(TYPE "C-SYSTEM"	AND 3.28 SQ IN	_

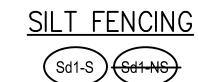




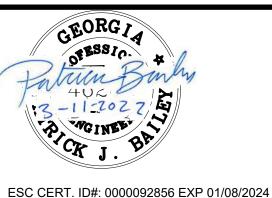
1. Sd1-S SILT FENCING FOR SENSITIVE AREAS SHALL BE TYPE "C" OR TYPE "C-SYSTEM". Sd1-NS SILT FENCING FOR NON-SENSITIVE AREAS SHALL BE TYPE "A".

4' MAX. O.C. (Sd1-S)

- 2. FILTER FABRIC, SUPPORT FENCE/MESH, POSTS, AND FASTENERS SHALL BE IN ACCORDANCE WITH GDOT STANDARD SPECIFICATIONS.
- 3. WHERE DOUBLE ROWS OF Sd1-S SILT FENCING ARE SPECIFIED OR ORDERED BY ENGINEER, CONTRACTOR SHALL SPACE ROWS A MINIMUM OF 36" APART.



Š							
Y: MBAL				PROJECT ENGINEER:	Р.	. BAILE	Y
PM BY				DESIGNED BY:	Р.	. BAILE	Y
1:20				DRAWN BY:		HAZE	N
3/11/2022				CHECKED BY:		K. RA	·Υ
DATE: 3				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING	0	1/2"	1" —
PE RE	V ISSUED FO	OR DAT	E BY	IS NOT TO FULL SCALE			-



GBPE LIC#: PE046288 EXP 12/31/2022

Hazen

HAZEN AND SAWYER
1300 ALTMORE AVENUE

SUITE 520

ATLANTA, GEORGIA 30342

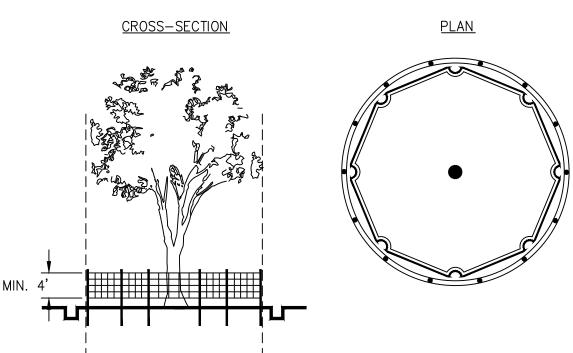
CITY OF GRIFFIN GRIFFIN, GEORGIA

HEADS CREEK RESERVOIR DAM REHABILITATION

EROSION, SEDIMENTATION, AND POLLUTION CONTROL DETAILS (1 OF 2)

DATE:	MARCH 2022
HAZEN NO.:	31252-015
CONTRACT NO.:	TO-15
DRAWING NUMBER:	
	ESC07

TREE PROTECTION "SNOW" FENCE

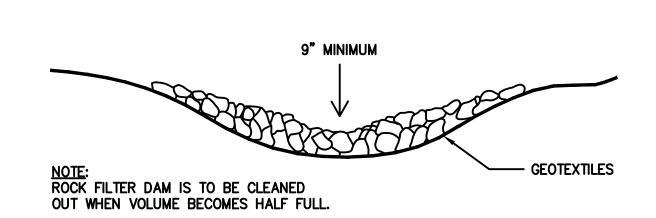


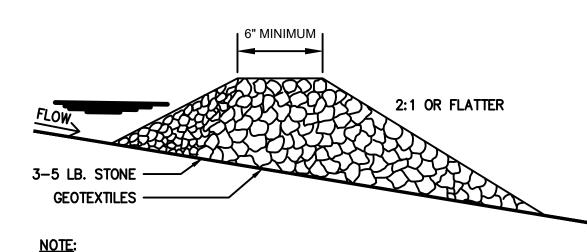
1. USE TRENCHER (I.E. DITCH WHICH) TO CUT A 4"-5" W X 18" D TRENCH ALONG DRIP LINE (LIMIT OF CLEARING) AND BACKFILL WITH SAND AND LIGHTLY COMPACT. 2. SPACE STAKES AT INTERVALS SUFFICIENT TO MAINTAIN ALL FENCING OUT OF DRIP LINE OR AS SHOWN BY ENGINEER (SET STAKES NO GREATER THAN 6 FEET ON CENTER-REBAR IS NOT TO BE

3. MAINTAIN FENCE BY REPAIRING AND/OR REPLACING DAMAGED FENCE. DO NOT REMOVE FENCING PRIOR TO LANDSCAPING OPERATIONS.

4. DO NOT STORE OR STACK MATERIALS, EQUIPMENT, OR VEHICLES WITHIN FENCED AREA. 5. FENCE SHALL BE ORANGE VINYL "SNOW FENCE" 4' HIGH MINIMUM.

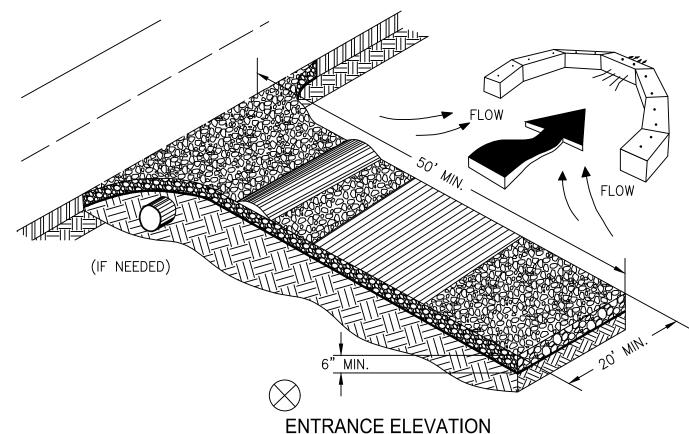
ROCK FILTER DAM



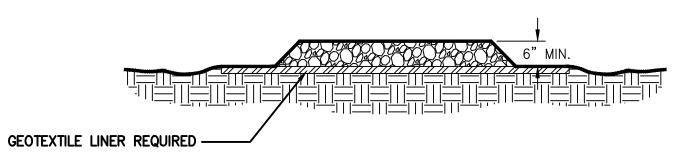


NOTE:
ROCK SIZE DETERMINED ACCORDING TO
SPECIFICATIONS SET FORTH IN APPENDIX C.

CRUSHED STONE CONSTRUCTION EXIT (Co)



EXIT DIAGRAM



OUTLET STRUCTURE

STONE FILTER RING

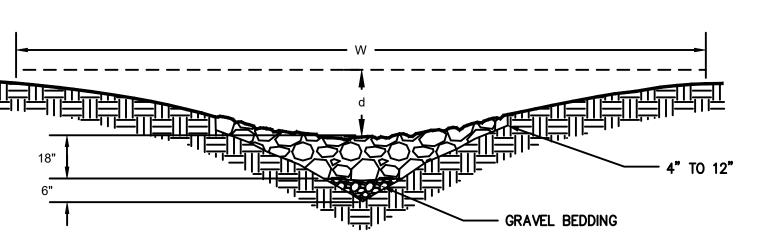
PERSPECTIVE VIEW

PLAN VIEW (NOT TO SCALE)

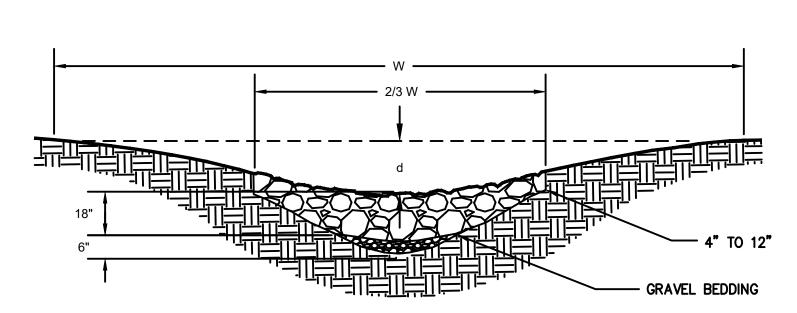
- 1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
- 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
- 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
- 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS
- 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS
- 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER
- 7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
- . WHEN WASHING IS REQUIRED, IT SHALL 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 SUITABLE FOR TRUCK TRAFFIC THAT REMOVES 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.

STONE CENTER WATERWAYS

WATERWAY WITH STONE CENTER DRAIN AND V—SECTION SHAPED BY MOTOR GRADER

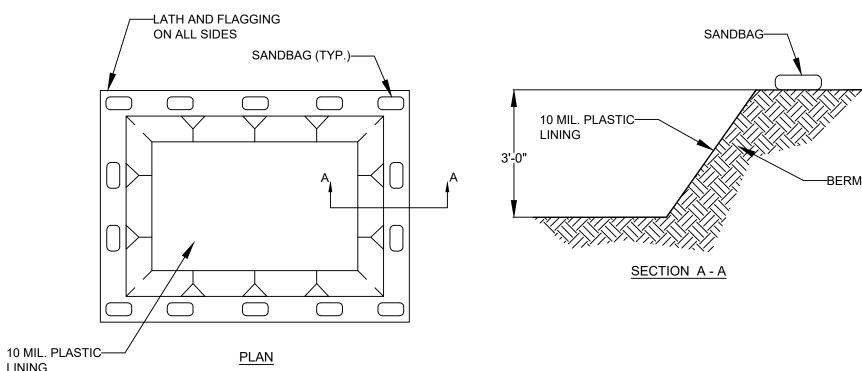


WATERWAY WITH STONE CENTER DRAIN AND ROUNDED SECTION SHAPED BY BULLDOZER



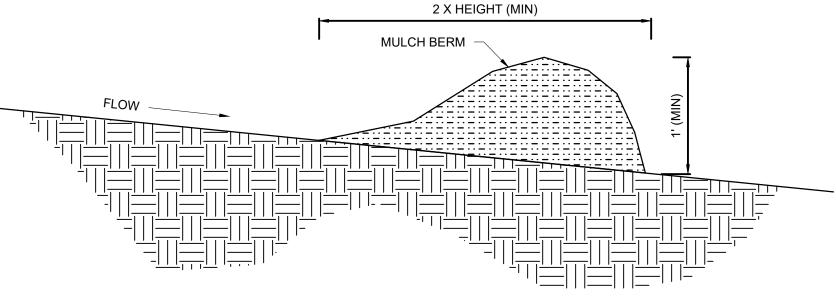
LINING

- THE CONTRACTOR SHALL PROVIDE A DESIGNATED AREA FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS, AND THE REAR OF THE VEHICLES. THIS AREA MUST HAVE A CONCRETE WASHOUT FACILITY AND SHALL BE CONSTRUCTED ACCORDING TO THE DETAIL SHOWN
- 2. THE CONCRETE WASHOUT FACILITY SHALL BE LOCATED A MINIMUM OF 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
- 3. WASHOUT DISCHARGE FROM THE CLEANING OF CONCRETE TRUCKS, TOOLS, AND OTHER EQUIPMENT SHALL NOT BE DISCHARGED INTO STORM DRAINS, OPEN DITCHES, STREETS, OR
- EXCESS CONCRETE SHALL NOT BE DISPOSED OF ONSITE. ALL EXCESS CONCRETE SHALL BE TRANSPORTED OFFSITE AND PROPERLY DISPOSED OF.
 IT IS PROHIBITED TO WASH OUT THE MIXING DRUM OF CONCRETE TRUCKS ONSITE.



CONCRETE WASH DOWN

MULCH BERM



CROSS SECTION (NOT TO SCALE)

				PROJECT		GEORG / A
				ENGINEER:	P. BAILEY	GBESS/C
				DESIGNED BY:	P. BAILEY	Parket Brown
						(favuing on "
				DRAWN BY:	HAZEN	72-11-2027.67
						3 52
				CHECKED BY:	K. RAY	S AGINES
				onzones sin	11. 1011	CK 1. D
				IF THIS BAR DOES NOT	0 1/2" 1"	
				MEASURE 1" THEN DRAWING	· · · · · · · · · · · · · · · · · · ·	ESC CERT. ID#: 0000092856 EXP 01/08/2
REV	ISSUED FOR	DATE	BY	IS NOT TO FULL SCALE		GBPE LIC#: PE046288 EXP 12/31/2022



NATURAL GROUND -OUTLET STRUCTURE -

50# - 150# STONE RIP-RAP

STONE FILTER RING



ATLANTA, GEORGIA 30342

CITY OF GRIFFIN GRIFFIN, GEORGIA

HEADS CREEK RESERVOIR DAM REHABILITATION

EROSION, SEDIMENTATION, AND POLLUTION CONTROL DETAILS (2 OF 2)

DATE:	MARCH 2022
HAZEN NO.:	31252-015
CONTRACT NO.	TO-15
DRAWING NUMBER:	

ESC08

	THE ES&PC PLAN MUST INCLUDE AT LEAST FOUR (4) OF THE FOLLOWING BMPS FOR THOSE AREAS OF	
	THE SITE WHICH DISCHARGE TO AN IMPAIRED STREAM SEGMENT AND FOR SITES WHICH EPD HAS APPROVED IN WRITING A REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME.	EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST STAND ALONE CONSTRUCTION PROJECTS
Plan Includ	The four items chosen must be appropriate for the site conditions.	SWCD: TOWALIGA (REGION 4)
Page # Y/N	a During construction activities, double the width of the 25 feet undicturbed vegetated buffer clong all	Project Name: HEADS CREEK RESERVOUR DAM REHABILITATION Address: 40 NEW SALEM ROD, GRIFFIN, GA 30223 City/County: SPALDING COUNTY Date on Plans: DECEMBER 2021
	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	Name & email of person filling out checklist: PATRICK BAILEY, PBAILEY@HAZENANDSAWYER.COM
	variances to any such buffers that are increased in width.	Plan Included Page # Y/N TO BE SHOWN ON ES&PC PLAN
L N	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.	ESC 09 Y 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission
N	c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at	as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
ESC01 Y	least double the conventional flow path length to the outlet structure. d. A large sign (minimum 4 feet x 8 feet) must be posted on site by the actual start date of	ESC01-ESC09 Y 2 Level II certification number issued by the Commission, signature and seal of the certified design professional.
	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	(Signature, seal and Level II number must be on each sheet pertaining to ES&PC plan or the Plan will not be reviewed)
	(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	N/A N 3 Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from
	NOT has been submitted.	the GAEPD District Office. If GAEPD approves the request to disturb 50 acres or more at any one time, the Plan must
ESC05 Y	e. Use flocculants or coagulants and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days in accordance with Part III. D.1. of the current NPDES Permits.	include at least 4 of the BMPs listed in Appendix 1 of this checklist and the GAEPD approval letter. * (A copy of the written approval by GAEPD must be attached to the plan for the Plan to be reviewed.)
ESC06 Y	f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24-hour period, recognizing the exceptions specified in Part IV.D.6.d. of the current NPDES Permits.	ESC 05 Y 4 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
N	g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as	ESC 05 Y 5 Provide the name, address, email address, and phone number of primary permittee.
□ N	provided for in O.C.G.A. 12-7-6 (a)(1). h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any	ESC 05 Y 6 Note total and disturbed acreages of the project or phase under construction.
	State-mandated buffer areas from such calculations). All calculations must be included on the Plan.	ESC 05 Y 7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees. ESC01-ESC09 Y 8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
N	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.	ESC 05 Y 9 Description of the nature of construction activity and existing site conditions.
		ESC 00 Y 10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
L N	water runoff (including sheet flow). All calculations must be included on the Plan. (https://epd.georgia.gov/erosion-and-sedimentation)	ESC 05 Y 11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes,
N	L. Add assessment and a second	residential areas, wetlands, marshlands, etc. which may be affected. ESC 05 Y 12 Design professional's certification statement and signature that the site was visited prior to development of the
FSC02	stabilization of the construction site. I. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm	ES&PC Plan as stated on Part IV page 19 of the permit.
ESC03 Y	water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.	ESC 05 Y 13 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 19 of the permit
ESC03 Y	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.	ESC 05 Y 14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation."
□ N	n. Use flocculants or coagulants under a passive dosing method (e.g., flocculant blocks) within	in accordance with Part IV.A.5 page 25 of the permit. *
	construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.	ESC 05 Y 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal
N	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.	marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary
N	p. Conduct soil tests to identify and to implement site-specific fertilizer needs.	variances and permits." ESC 05 Y 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
	q. Certified personnel for primary permittees shall conduct inspections at least twice every seven (7)	ESC 05 Y 17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on
	calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3)(a) – (c); secondary permittees, Part IV.D.4.b.(3)(a) – (c); and tertiary permittees Part IV.D.4.c.(3)(a) – (c) *	BMPs with a hydraulic component must be certified by the design professional." *
N	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	SEDIMENT STORAGE VOLUME CHECK
<u>N</u>	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	DRAINAGE LOCATION A
	document found at www.gaswcc.georgia.gov)	<u>DRAINAGE LOCATION A:</u> 1. TOTAL DISTURBED AREA: 63 AC
L N	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.	2. REQUIRED STORAGE AREA: <u>.63 AC x 67 CY/AC = 42.21 CY</u>
	u. Conduct inspections during the intermediate grading and drainage BMP phase and during the final	3. BMP TYPE: Sd1-S (SILT FENCE, TYPE C)
L N	BMP phase of the project by the design professional who prepared the Plan in accordance with Part	3.1. TOTAL LENGTH OF Sd1-S: <u>1248 LF</u> 3.2. THE TYPE C SILT FENCE (DOUBLE ROW) HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY
	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	0.2 CY PER LINEAR FOOT, BASED ON 15 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 30" TYPE C
	to conduct inspections during the intermediate grading and drainage BMP phase and during the final BMP phase.	SILT FENCE ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS <u>1248 LF</u> ALONG THE DOWNSTREAM PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT A.
N	the Georgia Stormwater Management Manual known as the Blue Book or an equivalent or more	PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT A.
	stringent design manual. Effective January 1, 2022	Sd1-S STORAGE VOLUME: 1248 LF x 0.2 CY/LF = 249.6 CY
	* This requirement is different for infrastructure projects: Certified personnel for primary permittees shall conduct inspections at least once every seven	DOES CAPACITY MEET OR EXCEED REQUIRED STORAGE VOLUME? YES
	(7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or	DRAINAGE LOCATION B:
	greater in accordance with Part IV.D.4.a.(3)(a) – (c) of the permit.	1. TOTAL DISTURBED AREA:3.00 AC
		2. REQUIRED STORAGE AREA: 3.00 AC x 67 CY/AC = 201 CY
		3. BMP TYPE 1: Sd1-S (SILT FENCE, TYPE C) 3.1. TOTAL LENGTH OF Sd1-S: 1163 LF
		3.2. THE TYPE C SILT FENCE (DOUBLE ROW) HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY
		0.2 CY PER LINEAR FOOT, BASED ON 15 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 30" TYPE C
		SILT FENCE ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS <u>1163 LF</u> ALONG THE DOWNSTREAM PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT B.
		Sd1-S STORAGE VOLUME: 1163 LF x 0.2 CY/LF = 232.6 CY
		DOES CAPACITY MEET OR EXCEED REQUIRED STORAGE VOLUME? <u>YES</u>
		DRAINAGE LOCATION C:
		 TOTAL DISTURBED AREA: <u>5.4 AC</u> REQUIRED STORAGE AREA: <u>5.4 AC</u> X 67 CY/AC = 361.8 CY
		2. NEGOTILE OF OFFICE AND A OFFICE OF OTHER OFFICE OF OTHER OFFICE OFFIC

ESC 05 Y	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
ESC 05 Y	19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
ESC 05 Y	20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
ESC 05 Y	21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
ESC 06 Y	22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of a Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *
ESC 06 Y	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in Item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. *
ESC 08 Y	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. *
ESC 06 Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.
ESC 05 Y	26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. *
ESC 05 Y	27 Description of practices to provide cover for building materials and building products on site. *
ESC 06 Y	28 Description of the practices that will be used to reduce the pollutants in storm water discharges. *
ESC 06 Y	29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
ESC 06 Y	30 Provide complete requirements of Inspections and record keeping by the primary permittee. *
ESC06 Y	31 Provide complete requirements of Sampling Frequency and Reporting of sampling results. *
ESC 06 Y	32 Provide complete details for Retention of Records as per Part IV.F. of the permit. *
ESC 06 Y	33 Description of analytical methods to be used to collect and analyze the samples from each location. *
ESC 06 Y	34 Appendix B rationale for NTU values at all outfall sampling points where applicable. *
ESC01-ESC04	35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged. *
ESC06 Y	36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase. *

Y			drawn at an interval in accordance with the follow	ing:
01-ESC04	Map Sc 1 inch = 10		Contour Intervals, ft. 0.5 or 1	
	larger sca		1 or 2	
	langer eet	Steep 8% +	2,5 or 10	
N/A N/A	39 Use of alterna	tive BMPs whose performance has been	documented to be equivalent to or superior to	
, , ,	and Water Col www.gaswcc.g	nservation Commission). Please refer to georgia.gov.	al (unless disapproved by GAEPD or the Georgia the Alternative BMP Guidance Document found a	at
N/A N/A		tive BMP for application to the Equivalent Sediment Control in Georgia 2016 Edition	BMP List. Please refer to Appendix A-2 of the M . *	anual
CO1-ESCO4		the applicable 25-foot or 50-foot undistured by the Local Issuing Authority. Clearly	bed buffers adjacent to state waters and any add note and delineate all areas of impact.	itional
ESC01 Y	42 Delineation of	on-site wetlands and all state waters loca	ated on and within 200 feet of the project site.	
ESC02 Y	43 Delineation an	nd acreage of contributing drainage basing	s on the project site.	
ESC05 Y	44 Provide hydrol	logy study and maps of drainage basins f	or both the pre- and post-developed conditions.	*
ESC05 Y	45 An estimate of completed.	f the runoff coefficient or peak discharge f	flow of the site prior to and after construction activ	rities are
ESC02		pe and weir velocities with appropriate ou ify/Delineate all storm water discharge po	utlet protection to accommodate discharges witho pints.	ut
C01-ESC04	47 Soil series for	the project site and their delineation.		
ESC 01 Y	48 The limits of d	isturbance for each phase of construction	l.	
ESC 09 Y	retrofitted dete storage volum site has been sediment bas sediment bas also be given storage design from sediment from the surface	ention pond, and/or excavated inlet sedimine must be in place prior to and during all achieved. A written justification explaining in is not attainable must be included in the in is not provided. A written justification as worksheets from the Manual included for professional to obtain the required sedir to basins and impoundments, permittees a	ge per acre drained using a temporary sediment ent traps for each common drainage location. Se land disturbance activities until final stabilization g the decision to use equivalent controls when a e Plan for each common drainage location in which to why 67 cubic yards of storage is not attainable or structural BMPs and all calculations used by the ment when using equivalent controls. When dischare required to utilize outlet structures that withdrathat withdraw water from the surface are not feasil cluded in the Plan.	ediment of the ch a le must ne arging w water
C01-ESC04		•	tent with and no less stringent than the Manual for coding symbols from the Manual, Chapter 6, with	
7 07-ESC08		ed drawings for all structural practices. S nual for Erosion and Sediment Control in	pecifications must, at a minimum, meet the guide Georgia.	lines set
ESC 04	dates and see		anent vegetative practices. Include species, plan Vegetative plan shall be site specific for appropria opriate geographic region of Georgia.	_
	* If using this che but within 200 ft of	cklist for a project that is less than 1 acre		

DRAINAGE LOCATION D:

TOTAL DISTURBED AREA: 3.50 AC

REQUIRED STORAGE AREA: 3.50 AC x 67 CY/AC = 234.5 CY

BMP TYPE 1: Sd1-S (SILT FENCE, TYPE C)

3.1. TOTAL LENGTH OF Sd1-S: 468 LF

THE TYPE C SILT FENCE (DOUBLE ROW) HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY 0.2 CY PER LINEAR FOOT, BASED ON 15 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 30" TYPE C SILT FENCE ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS 468 LF ALONG THE DOWNSTREAM PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT D.

4. BMP TYPE 2: Cd-F (FILTER SOCK CHECK DAM)

TOTAL LENGTH OF Cd-F: 105 LF

EACH CHECKDAM HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY 0.05 CY PER LINEAR FOOT, BASED ON 12 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 24" FILTER SOCK CHECK DAM ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS 105 LF ALONG THE RIGHT DOWNSTREAM GROIN IN THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT D.

BMP TYPE 3: Rd (ROCK DAM)

5.1. TOTAL LENGTH OF Rd: 250 LF

THE ROCK DAM HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY .83 CY PER LINEAR FOOT, BASED ON 36 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 6' ROCK DAM ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS 250 LF ALONG THE DOWNSTREAM PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT D.

Sd1-S STORAGE VOLUME: 468 LF x 0.2 CY/LF = 93.6 CY Cd-F STORAGE VOLUME: 105 LF x 0.05 CY/LF = 5.25 CY Rd STORAGE VOLUME: 250 LF X .83 CY/LF = 207.5 CY DOES CAPACITY MEET OR EXCEED REQUIRED STORAGE VOLUME? YES

DRAINAGE LOCATION E:

TOTAL DISTURBED AREA: <u>1.54</u> AC

REQUIRED STORAGE AREA: $1.54AC \times 67 \text{ CY/AC} = 103.2CY$

BMP TYPE: Sd1-S (SILT FENCE, TYPE C)

TOTAL LENGTH OF Sd1-S: 304 LF

THE TYPE C SILT FENCE (DOUBLE ROW) HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY 0.2 CY PER LINEAR FOOT, BASED ON 15 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 30" TYPE C SILT FENCE ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS 304 LF ALONG THE

OBSERVATION POINT E.

BMP TYPE 3: Rd (ROCK DAM) 4.1. TOTAL LENGTH OF Rd: 60 LF

THE ROCK DAM HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY .83 CY PER LINEAR FOOT, BASED ON 36 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 6' ROCK DAM ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS 60 LF ALONG THE DOWNSTREAM PERIMETER OF THE AREA

DOWNSTREAM PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO

CONTRIBUTING DRAINAGE TO OBSERVATION POINT E.

Sd1-S STORAGE VOLUME: 304 LF x 0.2 CY/LF = 60.8CY Rd STORAGE VOLUME: 60LF x .83CY/LF = 50CY DOES CAPACITY MEET OR EXCEED REQUIRED STORAGE VOLUME? YES

LAR L							
Y: MBAL					PROJECT ENGINEER:	P. BAILEY	GEORGIA
PM BY					DESIGNED BY:	P. BAILEY	# OF ESSION #
22 1:48					DRAWN BY:	HAZEN	(falling 3 7 7
3/11/2022					CHECKED BY:	K. RAY	CK J. Br.
DATE:					IF THIS BAR DOES NOT	0 1/2" 1"	
⊢ ▮	REV	ISSUED FOR	DATE	BY	MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE		ESC CERT. ID#: 0000092856 EXP 01/08/2 GBPE LIC#: PE046288 EXP 12/31/2022



BMP TYPE: Sd1-S (SILT FENCE, TYPE C)

Sd1-S STORAGE VOLUME: 2410 LF x .2 CY/LF = 428

TOTAL LENGTH OF Sd1-S: 2140 LF

DOES CAPACITY MEET OR EXCEED REQUIRED STORAGE VOLUME? YES

THE TYPE C SILT FENCE (DOUBLE ROW) HAS A SEDIMENT STORAGE CAPACITY OF APPROXIMATELY

SILT FENCE ON A 5(H):1(V) SLOPE. THE ES&PC PLAN SHOWS 2140 LF ALONG THE DOWNSTREAM

PERIMETER OF THE AREA CONTRIBUTING DRAINAGE TO OBSERVATION POINT C.

0.2 CY PER LINEAR FOOT, BASED ON 15 INCHES OF SEDIMENT STORAGE DEPTH FOR THE 30" TYPE C

3.1.

Hazen HAZEN AND SAWYER

1300 ALTMORE AVENUE

SUITE 520

ATLANTA, GEORGIA 30342

CITY OF GRIFFIN GRIFFIN, GEORGIA

HEADS CREEK RESERVOIR DAM REHABILITATION

EROSION, SEDIMENTATION
AND POLLUTION CONTROL
CHECKLIST

DATE:	MARCH 2022
HAZEN NO.:	31252-015
CONTRACT NO.:	TO-15
DRAWING NUMBER:	

ESC09