

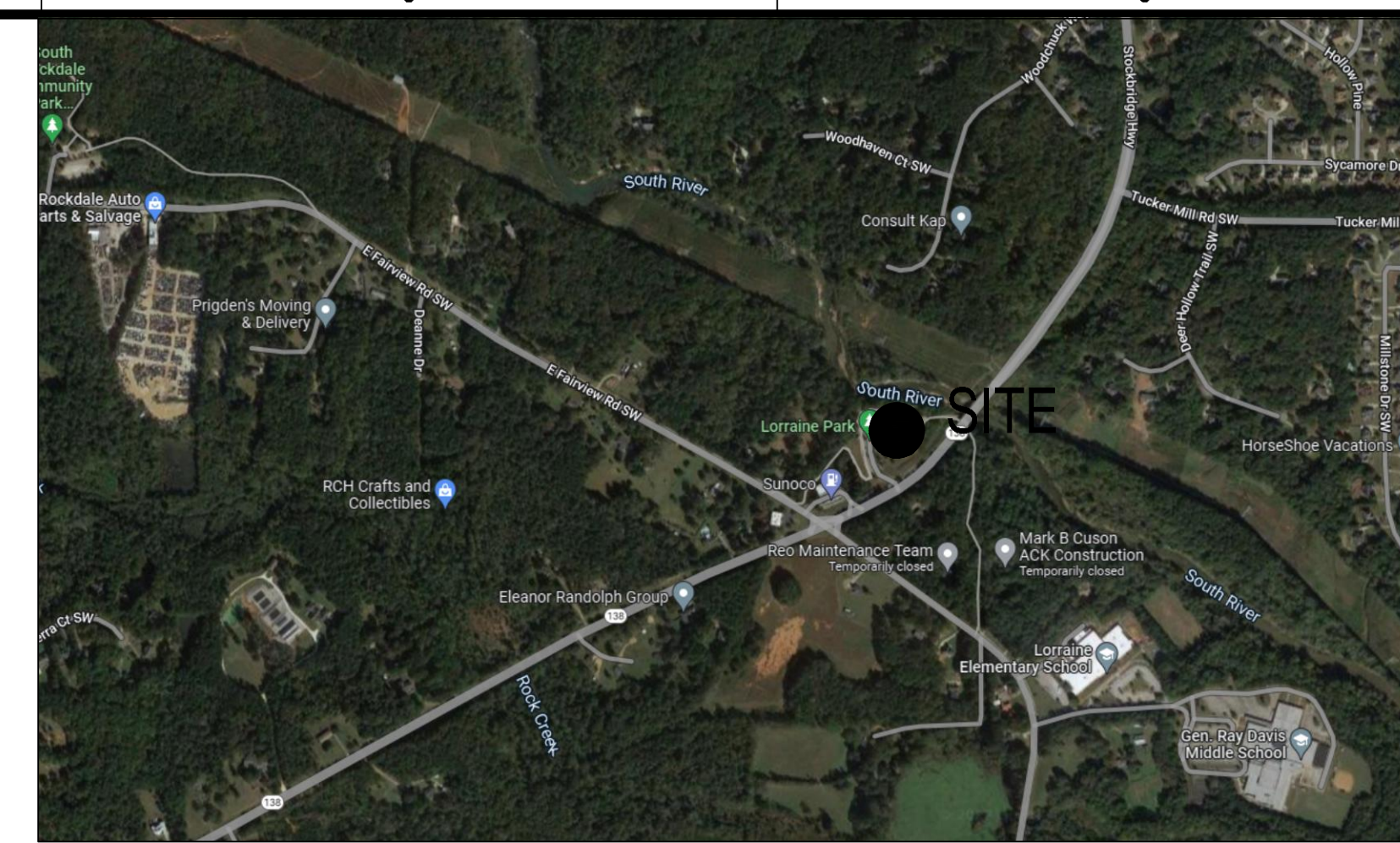
# SITE DEVELOPMENT PLANS FOR KAYAK LAUNCH - SOUTH RIVER WATER TRAIL SITE 3

014-003-0003  
3465 GA-138  
STOCKBRIDGE, GA 30281  
ZONING - AR

## SHEET INDEX

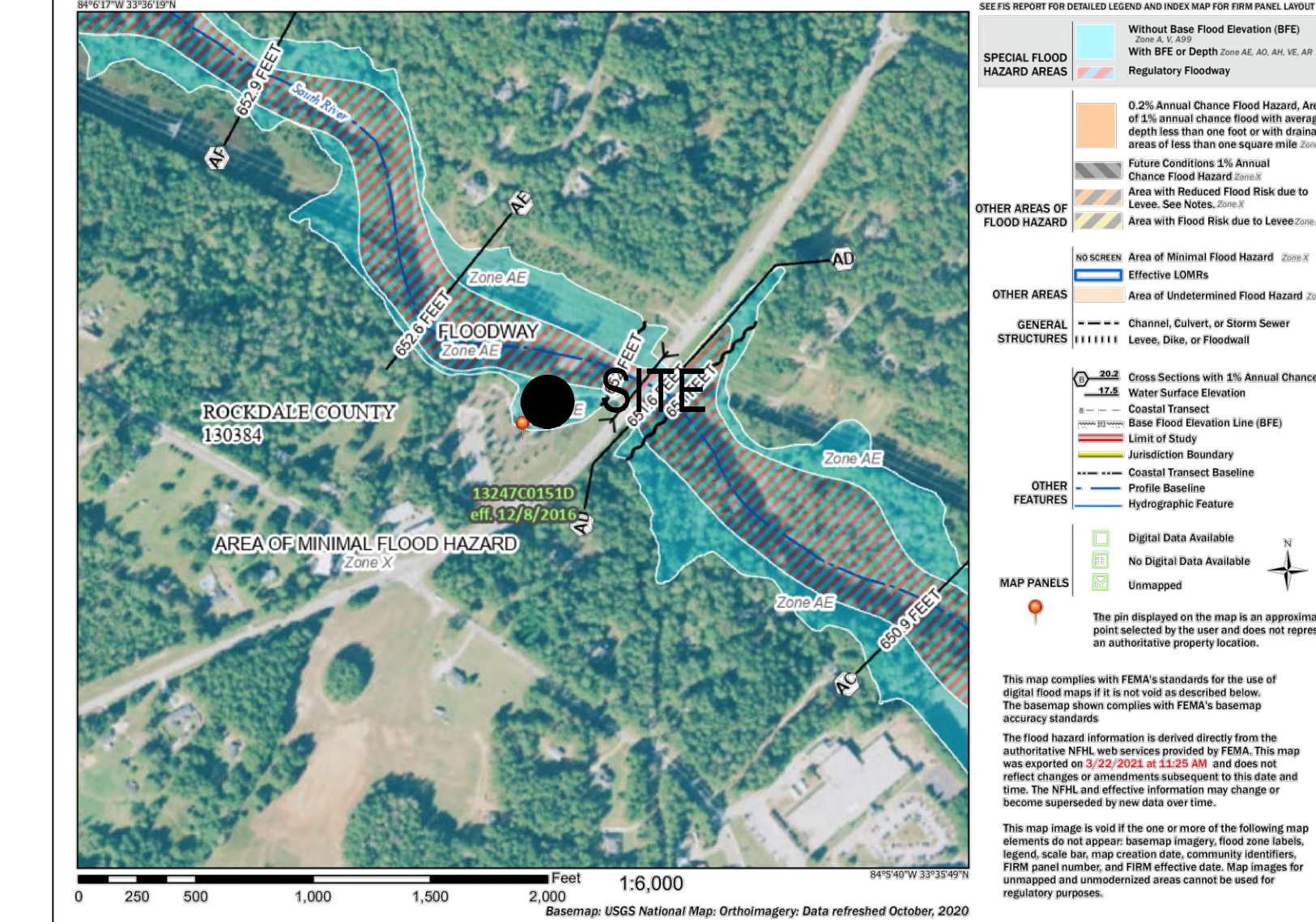
Sheet Number	Sheet Title
CV-1.0	COVER SHEET
C-1.1	GENERAL NOTES
C-2.1	LAYOUT AND STAKING PLAN
C-3.1	EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES
C-3.2	INITIAL EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN
C-3.3	EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS

VICINITY MAP  
NOT TO SCALE



GPS COORDINATES  
N 33°36'06.59" W 84°05'58.27"  
N 33.60183 W -84.09952

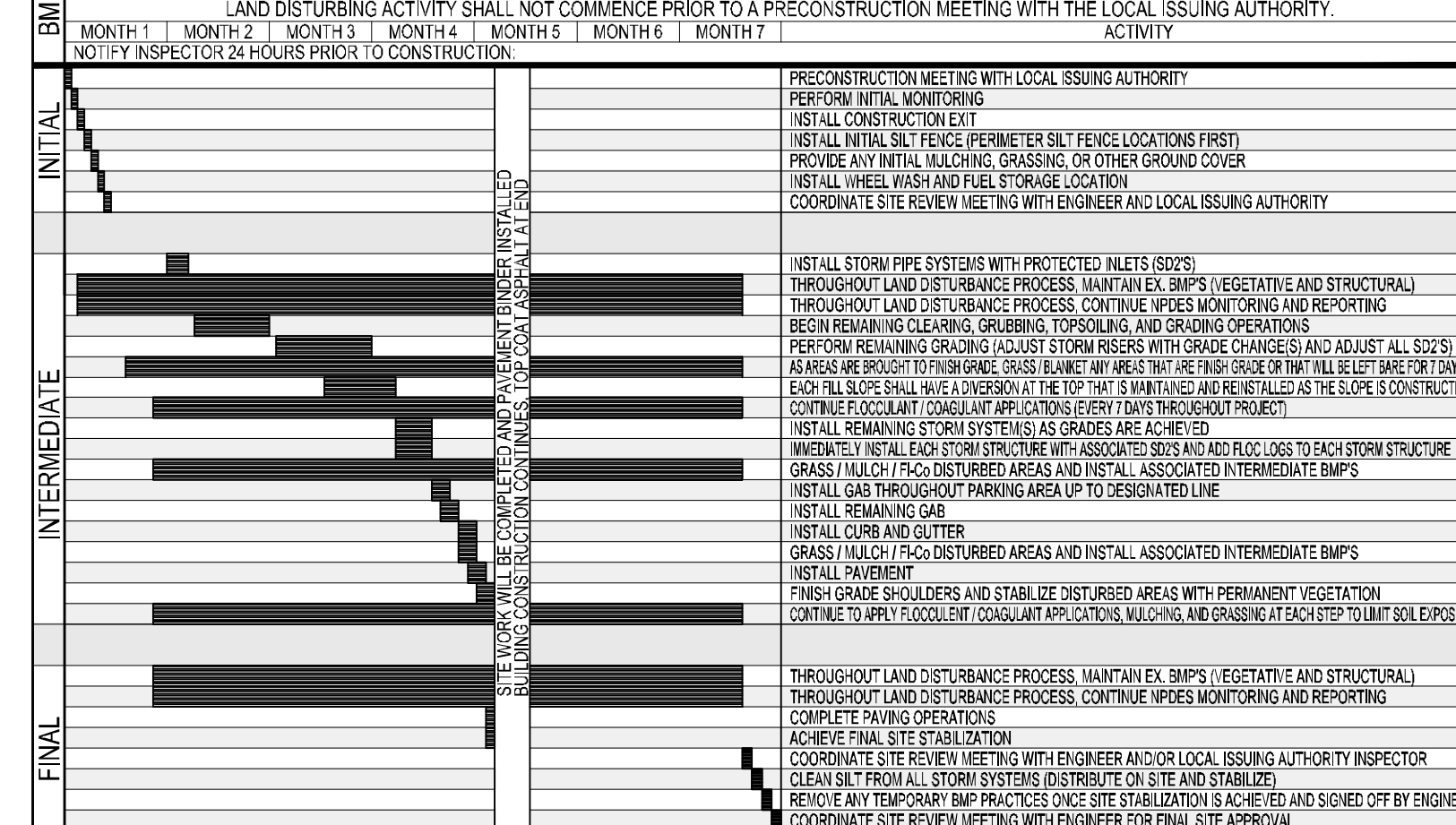
National Flood Hazard Layer FIRMette



FLOOD MAP  
NOT TO SCALE

STANDARD ABBREVIATIONS		LEGEND	
APPROX = APPROXIMATE	DA = DIAMETER	GM = GAS METER	OH = OVERHEAD POWER
BLED = BUILDING	DS = DOWNSPOUT	GP = GUY POLE	PB = PLAT BOOK
BM = BENCH MARK	DWPC = DOUBLE-WING CATCH BASIN	GV = GAS VALVE	PF = PILE
C&G = CURB AND GUTTER	ES&PC = EROSION, SEDIMENTATION AND POLLUTION CONTROL	ICV = IRRIGATION CONTROL VALVE	PL = PROPERTY LINE
CI = CURB INLET	FFC = FRESH FLOOR CONNECTION	IMP = INVERT ELEVATION	POB = POINT OF BEGINNING
CL = CHAIN LINK	FF = FRESH FLOOR ELEVATION	IP = INVERT	PT = POINT
CO = CORRUGATED METAL PIPE	FFH = FRESH FLOOR HEIGHT	IPF = IRON PIPE FOUND	PVC = POLY(VINYL CHLORIDE) PIPE
CS = CLEANOUT	FFH = FRESH FLOOR HEIGHT	IB = IRON BOX	RES = RESIN FLOOR
CCP = CORRUGATED PLASTIC PIPE	FF = FEET OPTIC	LA = LOCAL ISSUING AUTHORITY	RCP = REINFORCED CONCRETE PIPE
CF = CRAMP TOP FOUND	FF = FEET	LP = LIGHT POLE	RH = RIGHT OF WAY
DB = DEED BOOK	GI = GRATE INLET	NTS = NOT TO SCALE	SM = STORM MANHOLE

CONSTRUCTION SEQUENCE SCHEDULE



### SITE INFORMATION

A SMALL PORTION OF THE 4.37 ACRE EXISTING PARK SITE WILL BE DEVELOPED WITH AN ADA ACCESSIBLE RIVER ACCESS RAMP AND KAYAK LAUNCH SYSTEM.

ZONING - (AS PER ROCKDALE COUNTY ZONING)	AR
PROPERTY AREA	4.37
DISTURBED AREA	0.08 AC
MINIMUM LOT SIZE	NA
MINIMUM LOT WIDTH	NA
MINIMUM FRONT SETBACK	NA
MINIMUM SIDE SETBACK	NA
MINIMUM REAR SETBACK	NA
MINIMUM OPEN SPACE	NA
MAXIMUM IMPERVIOUS %	NA

### MISCELLANEOUS INFORMATION

SIGNAGE	SIGNAGE SHALL BE HANDLED UNDER A SEPARATE PERMIT
SITE LIGHTING	SITE LIGHTING IS NOT A PART OF THE CIVIL PLANS (SITE WORK CONSTRUCTION DRAWINGS), SIGN LIGHTING PROVIDED BY OTHERS UNDER SEPARATE COVER
SOIL SERIES	TCA-TACCOA AND CONGAREE SOILS (FREQUENTLY FLOODED)
FLOOD PLAIN	THERE IS FLOODPLAIN ON THIS PROPERTY AS PER FIRM PANEL 130384 DATED 12/01/06. WORKS BEING DONE WITHIN A FLOODPLAIN, THE PROPERTY'S DOWN SLOPE AREAS WITHIN ZONE AE AND PORTIONS ARE WITHIN A SPECIAL FLOOD HAZARD AREA.
STATE WATERS	THERE ARE STATE WATERS PRESENT ON THIS SITE. THERE ARE STATE WATERS PRESENT WITHIN 200' OF THIS SITE. THERE ARE STREAM BUFFERS ON THIS PROPERTY.
HYDROLOGY	NO HYDROLOGY STUDY REQUIRED
WETLAND	THERE ARE NO WETLANDS BEING DISTURBED ON THIS SITE. THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLANDS INVENTORY MAPS HAVE BEEN CONSULTED AND, WITH APPROPRIATE PLAN SHEET, DOES NOT SHOW WETLANDS AS SHOWN ON THE MAP AND 2) WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS APPROPRIATE FEDERAL WETLANDS ALTERATION (SECTION 404) PERMIT HAS BEEN OBTAINED. IF WETLANDS ARE IMPACTED BY THIS DEVELOPMENT, A CORPUS OF ENGINEERS PERMIT SHALL BE OBTAINED PRIOR TO DISTURBANCE. ONCE OBTAINED, A COPY OF THE WETLAND PERMIT SHALL BE KEPT ON-SITE AT ALL TIMES. THE CORPUS OF ENGINEERS APPROVAL, A SEPARATE COPY OF THE PERMIT SHALL BE SUBMITTED TO THE IJA.

**DEVELOPER**  
COMPANY: ROCKDALE COUNTY  
ADDRESS: 965 MILSTEAD AVE.  
CONYERS, GA 30012  
PHONE: 678-307-7081  
FAX: -  
CONTACT: ANDREW HAMMER  
EMAIL: ANDREW.HAMMER@ROCKDALECOUNTYGA.GOV

**CONTRACTOR**  
COMPANY: TBD  
ADDRESS: XXXXXX  
CONTACT: XXXXXX  
PHONE: XXXX-XXX-XXXX  
EMAIL: XXXXXXXX

**SURVEYOR**  
COMPANY: PATRICK & ASSOCIATES, INC.  
ADDRESS: 328 SOUTH BLACKLAWN RD  
CONYERS, GA 30094  
PHONE: 404-427-8745  
CONTACT: JAMES S. HULL, JR., RLS  
EMAIL: treylog@aol.com

**SITE DESIGNER**  
COMPANY: GEORGIA CIVIL, INC.  
ADDRESS: P.O. BOX 896  
MADISON, GA 30650  
PHONE: 706.342.1104

**JASON P. BROWN**  
LEVEL II CERTIFIED  
DESIGN PROFESSIONAL  
#53274 - EXP. 05.01.2023

**24-HOUR CONTACT**  
ANDREW HAMMER  
678-387-7081

**GEORGIA811**  
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Utilities shown are for Contractor's convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for utilities in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to locate and use the services of a public utility locator firm during the entire course of work and shall pay for such services. Contractor shall locate utilities prior to any subsurface marking. Field verification location and depth of utilities that are to be served and protected. Contractor shall verify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Agreement, relocation, etc. of utilities shall be coordinated with the respective utility company.



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KAYAK LAUNCH - SOUTH RIVER  
WATER TRAIL SITE 3  
3465 GA-138  
STOCKBRIDGE, GA 30281  
ZONING: AR

DRAWING DATE:	4.12.2022
DRAWN BY:	MSF
CHECKED BY:	JPB
REVISIONS	
DATE:	DESCRIPTION:

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Sheet 1 of 1  
COVER SHEET  
Sheet Number  
CV-1.0

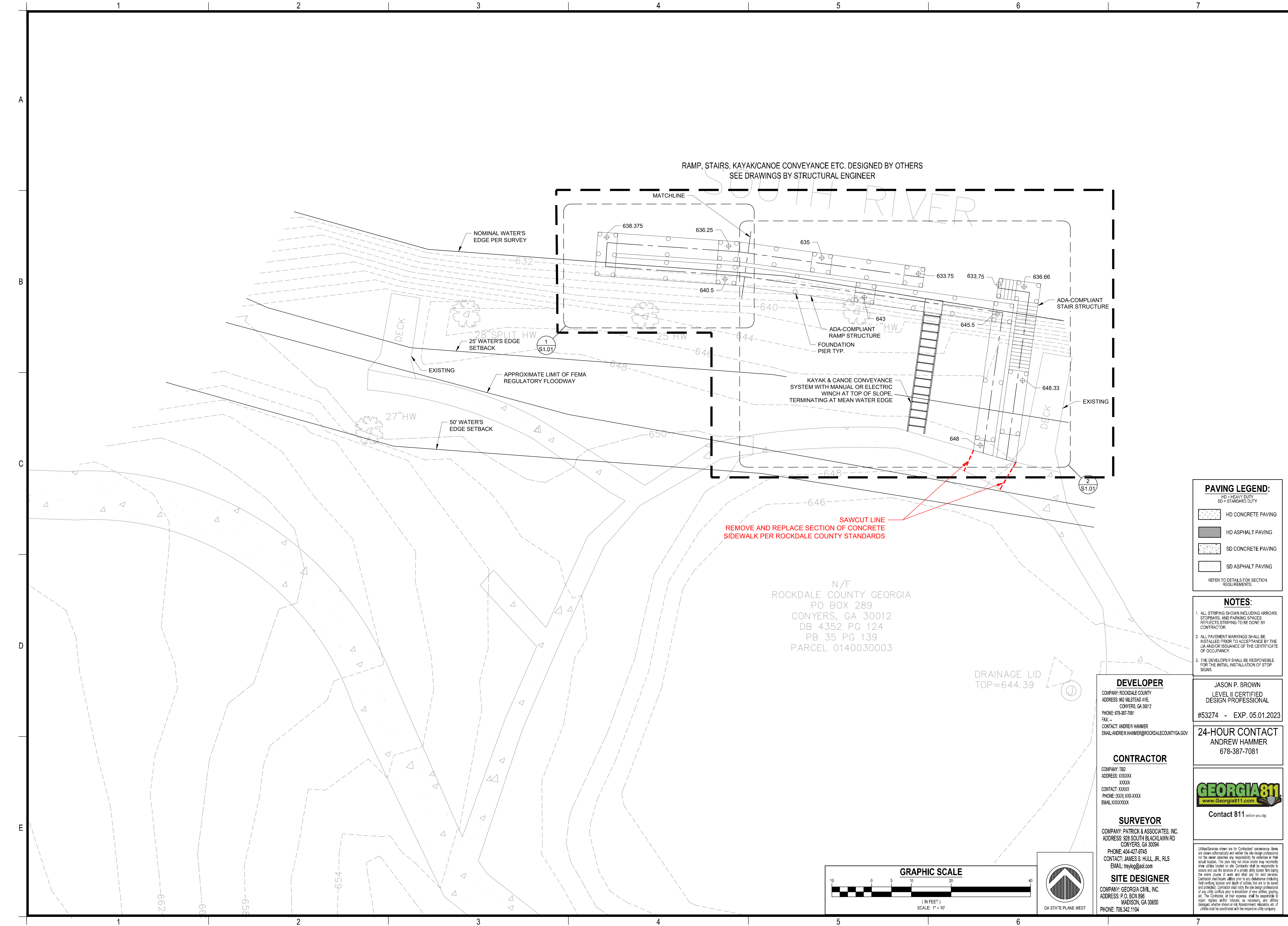




Project Information

**KAYAK LAUNCH - SOUTH RIVER**  
**WATER TRAIL SITE 3**  
 3465 GA-138  
 STOCKBRIDGE, GA 30281  
 ZONING: AR

DRAWING DATE:	4.12.2022
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DATE:	DESCRIPTION:



RAMP, STAIRS, KAYAK/CANOE CONVEYANCE ETC. DESIGNED BY OTHERS  
 SEE DRAWINGS BY STRUCTURAL ENGINEER

**SAWCUT LINE**  
 REMOVE AND REPLACE SECTION OF CONCRETE  
 SIDEWALK PER ROCKDALE COUNTY STANDARDS

N/F  
 ROCKDALE COUNTY GEORGIA  
 PO BOX 289  
 CONYERS, GA 30012  
 DB 4352 PG 124  
 PB 35 PG 139  
 PARCEL 0140030003

DRAINAGE LID  
 TOP=644.39

**PAVING LEGEND:**

HD = HEAVY DUTY  
 SD = STANDARD DUTY

	HD CONCRETE PAVING
	HD ASPHALT PAVING
	SD CONCRETE PAVING
	SD ASPHALT PAVING

REFER TO DETAILS FOR SECTION REQUIREMENTS.

- NOTES:**
- ALL STRIPING SHOWN INCLUDING ARROWS, STOPBARS, AND PARKING SPACES REFLECTS STRIPING TO BE DONE BY CONTRACTOR.
  - ALL PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO ACCEPTANCE BY THE UA AND/OR ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
  - THE DEVELOPER SHALL BE RESPONSIBLE FOR THE INITIAL INSTALLATION OF STOP SIGNS.

**DEVELOPER**  
 COMPANY: ROCKDALE COUNTY  
 ADDRESS: 962 MILSTEAD AVE.  
 CONYERS, GA 30012  
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 CONTACT: ANDREW HAMMER  
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 LEVEL II CERTIFIED  
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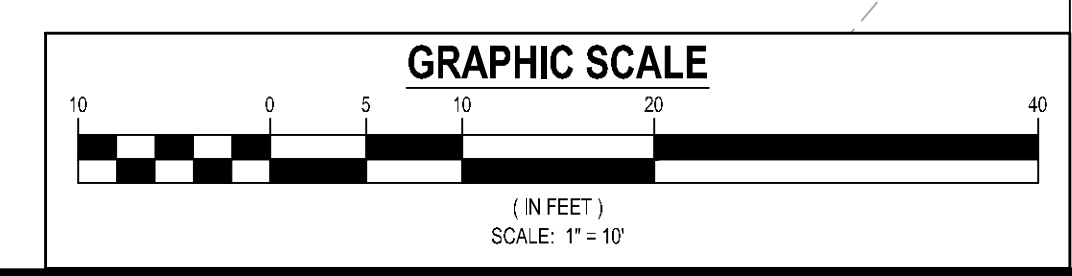
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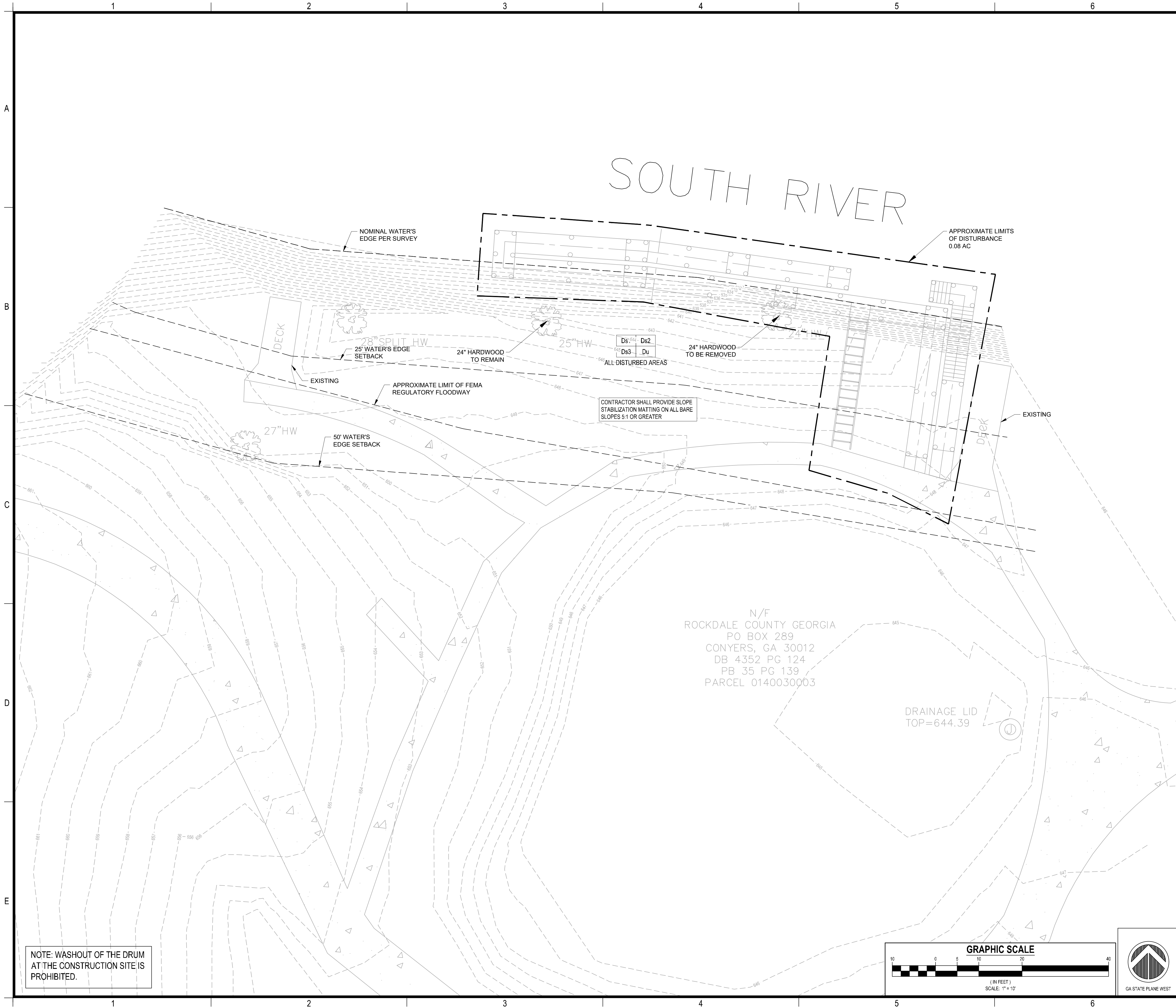
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 COMPANY: GEORGIA CIVIL, INC.  
 ADDRESS: P.O. BOX 896  
 MADISON, GA 30650  
 PHONE: 706.342.1104

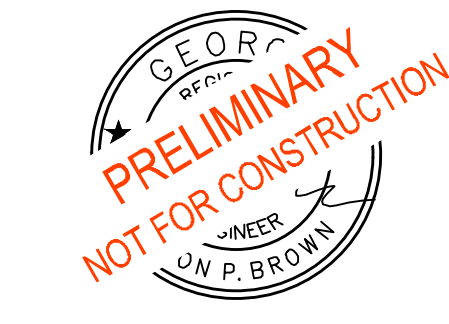






GEORGIA UNIFORM CODING SYSTEM SOIL EROSION & SEDIMENT CONTROL				
STRUCTURAL PRACTICES				
Code	Practice	Symbol	Code	Practice
S41-S	Compost Filter Sock	[Symbol]	S42-S	Inlet Sediment Trap (Gravel Drop Inlet Protection)
S41-B	Straw-Bale Check Dams	[Symbol]	S42-P	Inlet Sediment Trap (Curb Inlet Protection)
S41-D	Stone Check Dams	[Symbol]	S42-S	Inlet Sediment Trap (Soil Inlet Protection)
Ch-1	Channel Stabilization - Category 1 (Vegetative/Soc)	[Symbol]	S43	Temporary Sediment Basin
Ch-2	Channel Stabilization - Category 2 (Log-Rip, Trill)	[Symbol]	S44	Temporary Sediment Trap
Ch-3	Channel Stabilization - Category 3 (Concrete)	[Symbol]	Sk	Floating Filter Surface Sillener
Co	Construction Exit	[Symbol]	SjB	Seep Berm
C	Construction Road Stabilization	[Symbol]	St-B	Temporary Stream Crossing (Bridge)
DCA	Stream Diversion Channel (Concrete/Stone)	[Symbol]	St-C	Temporary Stream Crossing (Culvert)
DCB	Stream Diversion Channel (Concrete/Stone)	[Symbol]	St	Storm Drain Outlet Protection
DCC	Stream Diversion Channel (Class 1 Rip-Rap and Concrete)	[Symbol]	Su	Surface Roughening
Di	Diversion	[Symbol]	Tc-F	Turbidity Curtain (Floating)
Dn1	Temporary Downstream Structure	[Symbol]	Tc-S	Turbidity Curtain (Sillcock)
Dn2	Permanent Downstream Structure	[Symbol]	Tp	Tossing
Fi	Fiber Ring	[Symbol]	Wt	Vegetated Minorway or Stormwater Conveyance Channel
Gi	Gabion	[Symbol]	VEGETATIVE MEASURES	
G	Grade Stabilization Structure	[Symbol]	Bf	Buffer Zone
Lv	Level Spreader	[Symbol]	Cs	Coastal Dune Stabilization (w/ Vegetation)
Ra	Rock Filter Dam	[Symbol]	Dd1	Disturbed Area Stabilization (w/ Mulching/Grass)
Re	Retaining Wall	[Symbol]	Dd2	Disturbed Area Stabilization (w/ Temporary Seeding)
RB	Rollout (Stable Board Dam w/ Stone or Filter Fabric)	[Symbol]	Dd3	Disturbed Area Stabilization (w/ Permanent Vegetation)
RFP	Rollout (Perforated Round Pipe w/ Stone Filter)	[Symbol]	Dd4	Disturbed Area Stabilization (w/ Seeding)
RS	Rollout (St-Contour Gate)	[Symbol]	Du	Dust Control on Disturbed Areas
S1-BB	Sediment Barrier (Type = Brush Barrier)	[Symbol]	Fl-Co	Flocculants Coagulants
S1-NS	Sediment Barrier (Type = Non-Saline Areas)	[Symbol]	Sb	Streambank Stabilization (Using Permanent Vegetation)
S1-S	Sediment Barrier (Type = Saline Areas)	[Symbol]	Ss	Slope Stabilization (Using Erosion Control Products (RECPs))
S1-SO	Sediment Barrier (Type = Compost Filter Media Sock)	[Symbol]	Tac-1	Tackifiers: Type I (Synthetic Polymers)
S2-B	Inlet Sediment Trap (Baffle Box)	[Symbol]	Tac-2	Tackifiers: Type II (Organic Polymers)
S2-BB	Inlet Sediment Trap (Block & Gravel Drop Inlet Protection)	[Symbol]	Tac-3	Tackifiers: Type III (Synthetic Polymers)
S2-E	Inlet Sediment Trap (Curb Inlet Protection)	[Symbol]	Tac-4	Tackifiers: Type IV (Synthetic Polymers)
S2-F	Inlet Sediment Trap (Filter Fabric Supporting Frame)	[Symbol]	Tac-5	Tackifiers: Type V (Synthetic Polymers)

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 3465 GA-138  
 STOCKBRIDGE, GA 30281  
 ZONING: AR

N/F  
 ROCKDALE COUNTY GEORGIA  
 PO BOX 289  
 CONYERS, GA 30012  
 DB 4352 PG 124  
 PB 35 PG 139  
 PARCEL 0140030003

DRAINAGE LID  
 TOP=644.39

**REFER TO SHEET C-1.1 AND C-3.0 FOR EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES**

**Maintenance of all soil erosion and sedimentation control measures and practices, whether temporary or permanent, shall be at all times the responsibility of the property owner.**

**GSWCC EROSION CONTROL NOTES:**

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities.  
 Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.  
 Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.  
 Any amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional.

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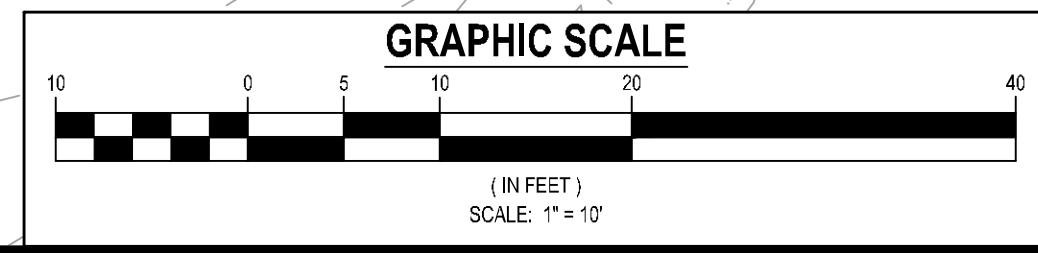
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 Sheet Title

EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

Sheet Number  
**C-3.2**

NOTE: WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.



**DS1**

NSWC 2016 Edition

Table 6-6.2-1: Temporary Cover Cross

REQUIREMENT FOR REGULATORY COMPLIANCE  
 Multiple temporary grassing shall be applied to all grassed areas within 14 days of disturbance. Much can be used as an irregular erosion control device for up to 6 months, but shall be applied at the appropriate depth, depending on the material used, anchored and have a continuous 50% cover 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 6 months.

If any area will remain undisturbed for greater than 6 months, permanent vegetation techniques shall be employed. Refer to Dd1-Dd4 Disturbed Area Stabilization (With Temporary Seeding), Dd3-Dd4 Disturbed Area Stabilization (With Permanent Seeding), and Dd4-Dd4 Disturbed Area Stabilization (With Seeding).

Specifications (Mulching Only Seeding):  
 The standard applies to covered or cleared areas where seedings may not have a suitable growing season to produce an erosion resistant cover but can be established with a mulch cover.

Site Preparation:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Mulching Materials: Select one of the following materials and apply to the depth indicated:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Applying Mulch (When mulch is used as seedbed, mulch shall be applied to provide for coverage of the erosion area)  
 1. Dry straw or mulch must not be used that has been treated with herbicide or insecticide.  
 2. The mulch must be evenly spread with general vegetation. 2-35 pounds of nitrogen per acre is the normal amount that shall be applied to offset the depletion of nitrogen caused by the decomposition of the organic mulches.  
 3. Apply polyethylene film over exposed areas.

Additional Notes:  
 1. Straw or mulch can be pressed to the soil with a disk harrow with the disk straight with a special "backer disk." Disks may be smooth or serrated and should be 22" or more in diameter and 8" to 12" apart. The edges of the disk should be cut through to cut the mulch or to press into the bedding of mulch if an erodible cover.  
 2. Straw or mulch should be applied in a continuous manner. Straw or mulch should be anchored immediately after application.  
 3. The mulch should be applied with special-blower equipment may be employed. Twigs, branches and hydro-mulch with mulch applicator equipped for blowing straw can be substituted for mulched straw. Please refer to specification Tack-1. Tackifiers should be applied with the mulch. The tackifier shall be applied according to manufacturer's specifications.  
 4. Seeding of the appropriate area shall be used to anchor weed. Seeding of the remaining shall be larger than the average size of the weed species.  
 5. Polyethylene film shall be anchor treated to the soil as well as recommended as necessary.

**DS3**

NSWC 2016 Edition

Table 6-6.2-2: Permanent Cover Cross

REQUIREMENT FOR REGULATORY COMPLIANCE  
 Multiple permanent grassing shall be applied to all grassed areas within 14 days of disturbance. Temporary grassing, instead of mulch, can be applied to rough grassed areas that will be exposed for less than 6 months. For areas to be exposed for longer than 6 months, permanent vegetation techniques shall be employed. Refer to Dd1-Dd4 Disturbed Area Stabilization (With Temporary Seeding), Dd3-Dd4 Disturbed Area Stabilization (With Permanent Seeding), and Dd4-Dd4 Disturbed Area Stabilization (With Seeding).

Specifications (Mulching Only Seeding):  
 The standard applies to covered or cleared areas where seedings may not have a suitable growing season to produce an erosion resistant cover but can be established with a mulch cover.

Site Preparation:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Mulching Materials: Select one of the following materials and apply to the depth indicated:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Applying Mulch (When mulch is used as seedbed, mulch shall be applied to provide for coverage of the erosion area)  
 1. Dry straw or mulch must not be used that has been treated with herbicide or insecticide.  
 2. The mulch must be evenly spread with general vegetation. 2-35 pounds of nitrogen per acre is the normal amount that shall be applied to offset the depletion of nitrogen caused by the decomposition of the organic mulches.  
 3. Apply polyethylene film over exposed areas.

Additional Notes:  
 1. Straw or mulch can be pressed to the soil with a disk harrow with the disk straight with a special "backer disk." Disks may be smooth or serrated and should be 22" or more in diameter and 8" to 12" apart. The edges of the disk should be cut through to cut the mulch or to press into the bedding of mulch if an erodible cover.  
 2. Straw or mulch should be applied in a continuous manner. Straw or mulch should be anchored immediately after application.  
 3. The mulch should be applied with special-blower equipment may be employed. Twigs, branches and hydro-mulch with mulch applicator equipped for blowing straw can be substituted for mulched straw. Please refer to specification Tack-1. Tackifiers should be applied with the mulch. The tackifier shall be applied according to manufacturer's specifications.  
 4. Seeding of the appropriate area shall be used to anchor weed. Seeding of the remaining shall be larger than the average size of the weed species.  
 5. Polyethylene film shall be anchor treated to the soil as well as recommended as necessary.

**DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) - (Ds1)**

**DS2**

NSWC 2016 Edition

Table 6-4.1: Temporary Cover Comparison Cross

REQUIREMENT FOR REGULATORY COMPLIANCE  
 Multiple temporary grassing shall be applied to all grassed areas within 14 days of disturbance. Temporary grassing, instead of mulch, can be applied to rough grassed areas that will be exposed for less than 6 months. For areas to be exposed for longer than 6 months, permanent vegetation techniques shall be employed. Refer to Dd1-Dd4 Disturbed Area Stabilization (With Temporary Seeding), Dd3-Dd4 Disturbed Area Stabilization (With Permanent Seeding), and Dd4-Dd4 Disturbed Area Stabilization (With Seeding).

Specifications (Mulching Only Seeding):  
 The standard applies to covered or cleared areas where seedings may not have a suitable growing season to produce an erosion resistant cover but can be established with a mulch cover.

Site Preparation:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Mulching Materials: Select one of the following materials and apply to the depth indicated:  
 1. Double permit the use of equipment for applying and installing mulch.  
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Applying Mulch (When mulch is used as seedbed, mulch shall be applied to provide for coverage of the erosion area)  
 1. Dry straw or mulch must not be used that has been treated with herbicide or insecticide.  
 2. The mulch must be evenly spread with general vegetation. 2-35 pounds of nitrogen per acre is the normal amount that shall be applied to offset the depletion of nitrogen caused by the decomposition of the organic mulches.  
 3. Apply polyethylene film over exposed areas.

Additional Notes:  
 1. Straw or mulch can be pressed to the soil with a disk harrow with the disk straight with a special "backer disk." Disks may be smooth or serrated and should be 22" or more in diameter and 8" to 12" apart. The edges of the disk should be cut through to cut the mulch or to press into the bedding of mulch if an erodible cover.  
 2. Straw or mulch should be applied in a continuous manner. Straw or mulch should be anchored immediately after application.  
 3. The mulch should be applied with special-blower equipment may be employed. Twigs, branches and hydro-mulch with mulch applicator equipped for blowing straw can be substituted for mulched straw. Please refer to specification Tack-1. Tackifiers should be applied with the mulch. The tackifier shall be applied according to manufacturer's specifications.  
 4. Seeding of the appropriate area shall be used to anchor weed. Seeding of the remaining shall be larger than the average size of the weed species.  
 5. Polyethylene film shall be anchor treated to the soil as well as recommended as necessary.

**DS3**

NSWC 2016 Edition

Table 6-4.1: Temporary Cover Comparison Cross

REQUIREMENT FOR REGULATORY COMPLIANCE  
 Multiple permanent grassing shall be applied to all grassed areas within 14 days of disturbance. Temporary grassing, instead of mulch, can be applied to rough grassed areas that will be exposed for less than 6 months. For areas to be exposed for longer than 6 months, permanent vegetation techniques shall be employed. Refer to Dd1-Dd4 Disturbed Area Stabilization (With Temporary Seeding), Dd3-Dd4 Disturbed Area Stabilization (With Permanent Seeding), and Dd4-Dd4 Disturbed Area Stabilization (With Seeding).

Specifications (Mulching Only Seeding):  
 The standard applies to covered or cleared areas where seedings may not have a suitable growing season to produce an erosion resistant cover but can be established with a mulch cover.

Site Preparation:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Mulching Materials: Select one of the following materials and apply to the depth indicated:  
 1. Double permit the use of equipment for applying and installing mulch.  
 2. Small mulch erosion control measures as required such as dikes, diversion, berms, terraces and sediment barriers.  
 3. Lower contour berms shall be spaced at 20 ft intervals.

Applying Mulch (When mulch is used as seedbed, mulch shall be applied to provide for coverage of the erosion area)  
 1. Dry straw or mulch must not be used that has been treated with herbicide or insecticide.  
 2. The mulch must be evenly spread with general vegetation. 2-35 pounds of nitrogen per acre is the normal amount that shall be applied to offset the depletion of nitrogen caused by the decomposition of the organic mulches.  
 3. Apply polyethylene film over exposed areas.

Additional Notes:  
 1. Straw or mulch can be pressed to the soil with a disk harrow with the disk straight with a special "backer disk." Disks may be smooth or serrated and should be 22" or more in diameter and 8" to 12" apart. The edges of the disk should be cut through to cut the mulch or to press into the bedding of mulch if an erodible cover.  
 2. Straw or mulch should be applied in a continuous manner. Straw or mulch should be anchored immediately after application.  
 3. The mulch should be applied with special-blower equipment may be employed. Twigs, branches and hydro-mulch with mulch applicator equipped for blowing straw can be substituted for mulched straw. Please refer to specification Tack-1. Tackifiers should be applied with the mulch. The tackifier shall be applied according to manufacturer's specifications.  
 4. Seeding of the appropriate area shall be used to anchor weed. Seeding of the remaining shall be larger than the average size of the weed species.  
 5. Polyethylene film shall be anchor treated to the soil as well as recommended as necessary.

**Table 6-5.1: Fertilizer Requirements**

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT	RATE	N	TOP DRESSING
1. Cool Season Grasses	First	8-2-7	1500 lb. ac.	50	50 lbs./ac.
	Second	8-2-7	1000 lb. ac.	30	30 lbs./ac.
2. Cool Season Legumes	First	6-12-12	1500 lb. ac.	50	50 lbs./ac.
	Second	6-12-12	1000 lb. ac.	30	30 lbs./ac.
3. Warm Season Grasses	First	8-2-7	1500 lb. ac.	50	50 lbs./ac.
	Second	8-2-7	1000 lb. ac.	30	30 lbs./ac.
4. Pines	First	20-0-0	1500 lb. ac.	50	50 lbs./ac.
	Second	20-0-0	1000 lb. ac.	30	30 lbs./ac.
5. Strub	First	9-4-10	700 lbs. ac.	25	25 lbs./ac.
	Second	9-4-10	700 lbs. ac.	25	25 lbs./ac.
6. Temporary Cover Seedbed	First	10-10-10	500 lbs. ac.	30	30 lbs./ac.
	Second	10-10-10	500 lbs. ac.	30	30 lbs./ac.
7. Warm Season Legumes	First	6-12-12	1500 lb. ac.	50	50 lbs./ac.
	Second	6-12-12	1000 lb. ac.	30	30 lbs./ac.
8. Warm Season Grasses	First	6-12-12	1500 lb. ac.	50	50 lbs./ac.
	Second	6-12-12	1000 lb. ac.	30	30 lbs./ac.
9. Legumes	First	6-12-12	1500 lb. ac.	50	50 lbs./ac.
	Second	6-12-12	1000 lb. ac.	30	30 lbs./ac.

1. Apply nitrogen before seeding.  
 2. Apply nitrogen after high rates are used.  
 3. Apply nitrogen after seeding.  
 4. Apply when plants are present.  
 5. Apply nitrogen after seeding.  
 6. Apply when plants are present.  
 7. Apply nitrogen after seeding.  
 8. Apply when plants are present.  
 9. Apply nitrogen after seeding.

**Table 6-5.2: Strub Shrub and Ground-Cover Plants for Permanent Cover**

COMMON NAME	SCIENTIFIC NAME	MATURE HEIGHT	PLANT SPACING	COMMENT
Amelia	Amelia grandiflora	3-4	5	Also a grasses plant. 2 in. high.
Catpaw	Commersonia	low	3	Very hardy, grows in wet places.
Caprot Blue	Agave reptans	2-4	3	Blue or white flowers.
Redbay	Commersonia	2-4	3	White flowers, red fruit.
Ground Cover	Commersonia	2-4	3	White flowers, red fruit.
Rock Crotalaria	Commersonia	1-2	5	Very hardy, grows in wet places.
Virginia Creeper	Pteris caudata	low	3	Red fruit, red fruit.
Daily	Hemerocallis	2-3	2	Maryland yellow, red fruit.
Compact Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Small Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Redbay	Commersonia	2-4	3	White flowers, red fruit.
Ground Cover	Commersonia	2-4	3	White flowers, red fruit.
Rock Crotalaria	Commersonia	1-2	5	Very hardy, grows in wet places.
Virginia Creeper	Pteris caudata	low	3	Red fruit, red fruit.
Daily	Hemerocallis	2-3	2	Maryland yellow, red fruit.
Compact Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Small Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Redbay	Commersonia	2-4	3	White flowers, red fruit.
Ground Cover	Commersonia	2-4	3	White flowers, red fruit.
Rock Crotalaria	Commersonia	1-2	5	Very hardy, grows in wet places.
Virginia Creeper	Pteris caudata	low	3	Red fruit, red fruit.
Daily	Hemerocallis	2-3	2	Maryland yellow, red fruit.
Compact Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Small Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Redbay	Commersonia	2-4	3	White flowers, red fruit.
Ground Cover	Commersonia	2-4	3	White flowers, red fruit.
Rock Crotalaria	Commersonia	1-2	5	Very hardy, grows in wet places.
Virginia Creeper	Pteris caudata	low	3	Red fruit, red fruit.
Daily	Hemerocallis	2-3	2	Maryland yellow, red fruit.
Compact Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Small Holly	Ilex	2-4	3	Very hardy, grows in wet places.
Redbay	Commersonia	2-4	3	White flowers, red fruit.
Ground Cover	Commersonia	2-4	3	White flowers, red fruit.
Rock Crotalaria	Commersonia	1-2	5	Very hardy, grows in wet places.
Virginia Creeper	Pteris caudata	low	3	Red fruit, red fruit.
Daily	Hemerocallis	2-3	2	Maryland yellow, red fruit.
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